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TMAC USERS MANUAL<br>VOLUME II<br>SPECIAL TEST

# COMMUNICATIONS SERVICE MONITOR DUAL MODE / TRI-BAND CELLULAR SYSTEM ANALYZER 

## IFR-1900 CSA

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11-63 RACH - R-DATA REJECT ..... 11-76
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## SECTION 7 - INTRODUCTION TO VOLUME II

## 7-1 ORGANIZATION OF VOLUME II

The IFR-1900 CSA TMAC Users Manual, Volume II is composed of the following sections:
SECTION 7-INTRODUCTION TO VOLUME II
SECTION 8 - SPECIAL TEST SPECIFIC TMAC QUICK REFERENCE LIST
Briefly lists the IFR-1900 CSA Special Test Specific TMAC commands in alphabetical order.

## SECTION 9-SPECIAL TEST SPECIFIC TMAC COMMANDS

Lists and details the Specific TMAC commands for the IFR-1900 CSA Special Test. Commands are arranged by Operation Mode for convenience.

## SECTION 10-SPECIAL TEST PROGRAM EXAMPLES

Provides functional Special Test program examples.
SECTION 11-IS-136 COMMAND REFERENCE
Provides tables showing the relationship between IS-136 Layer 3 Messages and associated IFR-1900 CSA Special Test TMAC commands.

## SECTION 12 - SPECIAL TEST KEY WORD INDEX

Provides a permuted index of all of the Special Test commands in the IFR-1900 CSA TMAC Users Manual. Bold words in the center column are the particular key words being indexed. Each full command is indexed by each word in the command.

## 7-2 VERSION OF FIRMWARE SUPPORTED

| FUNCTION | VERSION |
| :---: | :---: |
| Special Test | 1.08 |

## 7-3 NOMENCLATURE USED IN VOLUME II

The IFR-1900 CSA Test Set consists of the following:

| FUNCTION | NAME |
| :--- | :---: |
| Communication Service Monitor | HOST |
| Tri-Band/Dual Mode Cellular <br> System Analyzer | SPECIAL TEST or Sp Tst |

The Special Test (Tri-Band/Dual Mode Cellular System Analyzer) utilizes the test equipment contained in the Communication Service Monitor portion of the IFR-1900 CSA, thus the Communication Service Monitor acts as HOST to the Special Test.
For remote communications and uploading of variables and TMAC programs via RS-232, two separate Rear Panel RS-232 Connectors are utilized on the IFR-1900 CSA. The HOST utilizes the RS-232 Connector labeled HOST, and the Sp Tst employs the connector labeled OPT.

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## SECTION 8 - SPECIAL TEST SPECIFIC TMAC QUICK REFERENCE LIST

The Special Test ("Sp Tst") Specific TMAC Quick Reference List is a brief listing of the Specific commands used with the Sp Tst. The Quick Reference List is an aid to the experienced TMAC user. If more detailed information is needed, refer to the specified page.
COMMAND RANGE PAGE DESCRIPTION

## BER COMMANDS

## BER:

RDTC:
BER?
BITS?
CHANnel $n$ 0 to 2047
CLEAR
DATA:
45MHZ_OFFset
PAGE
DESCRIPTION

LOOPBACK
PSeudo
USER
ERRORS?
GO
RFLVL $n$
-127.0 to -20.0
SETup
SLOT $n$
STATUS?
STOP
CELL SITE SIMULATION COMMANDS
CSS:
CALL:

| CHANnel $n$ | 1 to 1023 |
| :--- | :--- |
| CHANnel? |  |
| DEViation $n$ | 0.0 to 4.0 |
| DEViation? | 0 to 7 |
| DMAC $n$ |  |
| DMAC? | 0 to 255 |
| DVCC $n$ | 1 or 0 |
| DVCC? |  |
| EF $n$ |  |
| EF? |  |
| MEM $n$ | 1 or 0 |
| MEM? | "123/456-7890" |
| MIN" " |  |
| MIN? |  |
| PM $n$ |  |
| PM? |  |
| PROCess: 0 |  |
| ASSIGNment |  |
| FDTC: |  |
| HANDoff? |  |
| FVC: |  |
| HANDoff |  |
| SLOT1 |  |
| SLOT2 |  |
| SLOT3 |  |
| MOBINIT |  |
| PAGE |  |
| REGistration |  |

REGistration

| 9-448 | Returns Bit Error Rate in percent. |
| :---: | :---: |
| 9-448 | Returns number of bits. |
| 9-447 | Specifies RF Channel. |
| 9-448 | Clears current results. |
| 9-447 | Down-converts frequency 45 MHz and retransmits data. |
| 9-447 | Re-sends data received on FDTC to Base Station in RDTC Slot format. |
| 9-447 | Sends pseudo-random data. |
| 9-447 | Sends user-defined data specified prior to initiating this command. |
| 9-448 | Returns number of bit errors. |
| 9-447 | Starts Base Station Digital Traffic BER test. |
| 9-447 | Specifies RF Level in dBm. |
| 9-447 | Sets up Sp Tst as when entering Base Station Digital Traffic BER screen, except screen is not displayed. |
| 9-447 | Specifies Digital Traffic Timeslot. |
| 9-448 | Returns synchronous data status. (1 if Base Station cannot sync up to the data; 0 otherwise.) |
| 9-447 | Stops Base Station Digital Traffic BER test. |

9-186
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9-188
9-188 Prompts Mobile Station to send Registration message.

| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| CALL |  |  |  |
| SAT $n$ | 5965 to 6035 | 9-187 | Specifies Supervisory Audio Tone in Hz . |
| SAT? |  | 9-187 | Returns Supervisory Audio Tone. |
| SLOT $n$ | 1 to 3 | 9-187 | Specifies Timeslot. |
| SLOT? |  | 9-187 | Returns Timeslot. |
| TYPE $n$ | 1 or 0 | 9-187 | Selects channel type (1 [Digital] or 0 [Analog]). |
| TYPE? |  | 9-187 | Returns channel type. |
| VC $n$ | $\begin{aligned} & 1=V S E L P \\ & 2=A C E L P \end{aligned}$ | 9-187 | Selects Vocoder type. |
| VC ? |  | 9-187 | Returns Vocoder type. |
| VMAC $n$ | 0 to 7 | 9-188 | Specifies Voice Mobile Attenuation Code. |
| VMAC? |  | 9-188 | Returns Voice Mobile Attenuation Code. |
| CHANnel $n$ | 1 to 333 (U4), <br> 1 to 1023 (U8), | 9-176 | Selects Forward Control Channel for sending Overhead Messages. |
| CHANnel? |  | 9-176 | Returns current value of CHANnel. |
| CONFigure: |  |  |  |
| NONE |  | 9-176 | Same as CSS:SETup, except does not select screen. |
| USER |  | 9-176 | Same as CSS:SETup, except selects User screen. |
| EBCCH: |  |  |  |
| ALT_SOC: |  |  |  |
| MAP |  |  |  |
| PSID_RSID $n, m$ | 0 to 15 , <br> 0 to \#hFFFF | 9-321 | Specifies selected SOC PSID/RSID Map (m). |
| PSID_RSID? $n$ | 0 to 15 | 9-321 | Returns selected SOC PSID/RSID Map. |
| NUMBer $n$ | 0 to 15 | 9-321 | Specifies Number of Alternate SOCs. |
| NUMBer? |  | 9-321 | Returns Number of Alternate SOCs. |
| SOC $n, m$ | 0 to 15, 0 to \#hFFF | 9-321 | Specifies selected SOC (m). |
| SOC $n$ | 0 to 15 | 9-321 | Returns selected SOC. |
| AUTO: |  |  |  |
| PROGRAM $n$ | 1 or 0 | 9-279 | Enables/disables auto program of EBCCH portion of superframe. |
| BSMC $n$ | 0 to 255 | 9-314 | Specifies Base Station Manufacture Code. |
| BSMC? |  | 9-314 | Returns Base Station Manufacture Code. |
| BUILD |  | 9-278 | Builds data comprising the E-BCCH. |
| CHAN $n$ | 0 to 2047 | 9-323 | Specifies E-BCCH CHAN. |
| CHAN? |  | 9-323 | Returns CHAN. |
| CHANnel: |  |  |  |
| GROUP: |  |  |  |
| FIRST $n, m$ | 0 to 63, 0 to 2047 | 9-314 | Specifies selected First Channel (m). |
| FIRST? $n$ | 0 to 63 | 9-314 | Returns selected First Channel. |
| LAST $n$, m | 0 to 63, 0 to 2047 | 9-314 | Specifies selected Last Channel ( $m$ ). |
| LAST? $n$ | 0 to 63 | 9-314 | Returns selected Last Channel. |
| Number $n$ | 0 to 63 | 9-313 | Specifies Number of Channel Groups. |
| NuMber? |  | 9-313 | Returns Number of Channel Groups. |
| CUSTOM: |  |  |  |
| CONTrol $n$, m | 0 to 252, 0 to 255 | 9-315 | Specifies selected Custom Control (m). |
| CONTrol? $n$ | 0 to 63 | 9-315 | Returns selected Custom Control. |
| LENGth $n$ | 1 to 64 | 9-314 | Specifies Length of Custom Control in octets. |
| LENGth? |  | 9-314 | Returns Length of Custom Control in octets. |
| DATA? n,m | 0 to 255, 0 to 6 | 9-278 | Returns E-BCCH data that has been built. Returns selected 16 bit word in slot ( $n$ ). |
| ECL $n$ | 0 to 255 | 9-279 | Specifies Extended Broadcast Control Channel Cycle Length. |
| ECL? |  | 9-279 | Returns Extended Broadcast Control Channel Cycle Length. |
| ENABLE: |  |  |  |
| ALT_SOC_LIST $n$ | 1 or 0 | 9-327 | Enables/disables alternate SOC information. |
| ALT_SOC LIST? |  | 9-327 | Returns state of alternate SOC information. |
| CHANnel $n$ | 1 or 0 | 9-326 | Enables/disables RF Channel Allocation optional info. element. |
| CHANnel? |  | 9-326 | Returns state of RF Channel Allocation optional info. element. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| EBCCH: |  |  |  |
| ENABLE: |  |  |  |
| HYPERband: |  |  |  |
| INFO $n$ | 1 or 0 | 9-327 | Enables/disables Hyperband Information optional info. element. |
| INFO? |  | 9-327 | Returns state of Hyperband Information optional info. element. |
| MACA: |  |  |  |
| EIGHT: |  |  |  |
| CONTrol $n$ | 1 or 0 | 9-326 | Enables/disables MACA_8_CONTROL optional info. element. |
| CONTrol? |  | 9-326 | Returns state of MACA 8_CONTROL optional info. element. |
| LIST.n | 1 or 0 | 9-326 | Enables/disables MACA_LIST optional info. element. |
| LIST: |  |  |  |
| OTHER $n$ | 1 or 0 | 9-326 | Enables/disables Other Hyperband MACA_LIST optional info. element. |
| OTHER? |  | 9-326 | Returns state of Other Hyperband MACA LIST optional info. element. |
| LIST? |  | 9-326 | Returns state of MACA LIST optional info. element. |
| MCC $n$ | 1 or 0 | 9-327 | Enables/disables Mobile Country Code optional info. element. |
| NEIGHbor: $\quad 9-327$ Returns state of Mobile Country Code optional info. element. |  |  |  |
|  |  |  |  |
| ANALOG $n$ | 1 or 0 | 9-324 | Enables/disables Analog Neighbor Cell List optional info. element. |
| ANALOG? |  | 9-324 | Returns state of Analog Neighbor Cell List optional info. element. |
| MULti: |  |  |  |
| ANALOG $n$ | 1 or 0 | 9-325 | Enables/disables Analog Neighbor Cell List (Multi Hyperband). |
| ANALOG? |  | 9-325 | Returns state of Analog Neighbor Cell List (Multi Hyperband). |
| OTHER $n$ | 1 or 0 | 9-325 | Enables/disables Other Hyperband Neighbor Cell List (Multi Hyperband). |
| OTHER? |  | 9-325 | Returns state of Other Hyperband Neighbor Cell List (Multi Hyperband). |
| TDMA $n$ | 1 or 0 | 9-325 | Enables/disables Neighbor Cell List (TDMA) (Multi Hyperband). |
| TDMA? |  | 9-325 | Returns state of Neighbor Cell List (TDMA) (Multi Hyperband). |
| OTHER: |  |  |  |
| INFO $n$ | 1 or 0 | 9-325 | Enables/disables Other Hyperband TDMA Service Info optional info. element. |
| INFO? |  | 9-325 | Returns state of Other Hyperband TDMA Service Info optional info. element. |
| TDMA $n$ | 1 or 0 | 9-324 | Enables/disables TDMA Neighbor Cell List optional info. element. |
| TDMA: |  |  |  |
| INFO $n$ | 1 or 0 | 9-324 | Enables/disables TDMA Service Info optional info. element. |
| INFO? |  | 9-324 | Returns state of TDMA Service Info optional info. element. |
| TDMA? |  | 9-324 | Returns state of TDMA Neighbor Cell List optional info. element. |
| NONPublic $n$ | 1 or 0 | 9-324 | Enables/disables Non-Public Probability Blocks optional info. element. |
| NONPublic? |  | 9-324 | Returns state of Non-Public Probability Blocks optional info. element. |
| SIGnal $n$ | 1 or 0 | 9-326 | Enables/disables Signal optional info. element. |
| SIGnal? |  | 9-326 | Returns state of Signal optional info. element. |
| HYPERband: |  |  |  |
| INFO $n$ | 0 to 3 | 9-323 | Specifies Hyperband Info. |
| INFO? |  | 9-323 | Returns Mobile Country Code. |
| IRA $n$ | 1 or 0 | 9-320 | Enables/disables support for International Reference Alphabet. |
| IRA? |  | 9-320 | Returns state of support for International Reference Alphabet. |
| LENGth? |  | 9-278 | Returns length of $\mathrm{E}-\mathrm{BCCH}$ in slots after executing Build command. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| css: |  |  |  |
| EBCCH: |  |  |  |
| MACA: |  |  |  |
| EIGHT |  |  |  |
| CONTrol $n$ | 1 or 0 | 9-317 | Enables/disables MACA_8_CONTROL of Mobile Assisted Channel Allocation message. |
| CONTrol? |  | 9-317 | Returns state of MACA_8_CONTROL. |
| LIST: |  |  |  |
| CHAN $n$, m | 0 to 15, 0 to 2047 | 9-317 | Specifies selected CHAN (m) of MACA LIST. |
| CHAN? $n$ | 0 to 15 | 9-317 | Returns selected CHAN of MACA_LIST. |
| NuMber $n$ | 0 to 15 | 9-317 | Specifies Number of MACA Channels of MACA LIST. |
| NuMber? |  | 9-317 | Returns Number of MACA Channels of MACA_LIST. |
| OTHER: |  |  |  |
| CHAN $n, m$ | 0 to 15, 0 to 2047 | 9-318 | Specifies selected Channel ( $m$ ) of MACA_LIST (Other Hyperband). |
| CHAN? $n$ | 0 to 15 | 9-318 | Returns selected Channel of MACA LIST (Other Hyperband). |
| HYPERband $n$ | 0 to 3 | 9-317 | Specifies Hyperband of MACA LIST (Other Hyperband). |
| HYPERband? |  | 9.317 | Returns Hyperband of MACA_LIST (Other Hyperband). |
| NUMber $n$ | 0 to 15 | 9-318 | Specifies Number of MACA Channels of MACA_LIST (Other Hyperband). |
| NuMber? |  | 9-318 | Returns Number of MACA Channels of MACA_LIST (Other Hyperband). |
| STATus $n$ | 0 to 3 | 9-316 | Specifies MACA_STATUS of Mobile Assisted Channel Allocation message. |
| STATus? |  | 9-316 | Returns MACA_STATUS. |
| TYPE $n$ | 0 to 15 | 9-316 | Specifies MACA TYPE of Mobile Assisted Channel Allocation message. |
| TYPE? |  | 9-316 | Returns MACA_TYPE. |
| MAP: |  |  |  |
| ARQ $n$ | 1 or 0 | 9-320 | Enables/disables FACCH/SACCH ARQ (Automatic Retransmission Request) Map. |
| ARQ? |  | 9-320 | Returns state of FACCH/SACCH ARQ. |
| CODER $n$ | 0 to 63 | 9-318 | Specifies Voice Coder Map. |
| CODER? |  | 9-318 | Returns Voice Coder Map. |
| DPM $n$ | 0 to 15 | 9-318 | Specifies Data Privacy Mode Map. |
| DPM? |  | 9-318 | Returns Data Privacy Mode Map. |
| MEA: |  |  |  |
| ALGORithms $n, m$ | 0 to 7,0 to 15 | 9-319 | Specifies selected Message Encryption Algorithms Map (m). |
| ALGORithms? $n$ | 0 to 7 | 9-319 | Returns selected Message Encryption Algorithms Map. |
| DOMAIN $n$ | 0 to 255 | 9-319 | Specifies Message Encryption Algorithm Domain Map. |
| DOMAIN? |  | 9-319 | Returns Message Encryption Algorithm Domain Map. |
| MEK $n$ | 0 to 15 | 9-319 | Specifies Message Encryption Key Map. |
| MEK? |  | 9-319 | Returns Message Encryption Key Map. |
| MENU $n$ | 0 to \#h3FF | 9-319 | Specifies Menu Map. |
| MENU? |  | 9-319 | Returns Menu Map. |
| SMS $n$ | 0 to 3 | 9-320 | Specifies Short Message Service Map. |
| SMS? |  | 9-320 | Returns Short Message Service Map. |
| USER $n$ | 1 or 0 | 9-320 | Enables/disables User Group Map. |
| USER? |  | 9-320 | Returns state of User Group Map. |
| VPM $n$ | 0 to 15 | 9-318 | Specifies Voice Privacy Mode Map. |
| VPM? |  | 9-318 | Returns Voice Privacy Mode Map. |
| MCC $n$ | 0 to 1023 | 9-323 | Specifies Mobile Country Code. |
| MCC? |  | 9-323 | Returns Mobile Country Code. |
| MSGtype: |  |  |  |
| ALTrci $n$ | 1 or 0 | 9-283 | Enables/disables Alternate Regulatory Configuration Information message. |
| ALTrci? |  | 9-283 | Returns state of Alternate Regulatory Configuration Information message. |
| BSMC $n$ | 1 or 0 | 9-281 | Enables/disables Base Station Manufacture Code Message Delivery message. |
| BSMC? |  | 9-281 | Returns state of Base Station Manufacture Code Message Delivery message. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
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| css: |  |  |  |
| EBCCH: |  |  |  |
| MSGtype: |  |  |  |
| EMERGency $n$ | 1 or 0 | 9-281 | Enables/disables Emergency Information Broadcast message. |
| EMERGency? |  | 9-281 | Returns state of Emergency Information Broadcast message. |
| MACA $n$ | 1 or 0 | 9-281 | Enables/disables Mobile Assisted Channel Allocation message. |
| MACA? |  | 9-281 | Returns state of Mobile Assisted Channel Allocation message. |
| MACA MULti $n$ | 1 or 0 | 9-281 | Enables/disables Mobile Assisted Channel allocation (Multi Hyperband) message. |
| MACA_MULti? |  | 9-281 | Returns state of Mobile Assisted Channel allocation (Multi Hyperband) message. |
| NEIGHbor: |  |  |  |
| CELL $n$ | 1 or 0 | 9-280 | Enables/disables Neighbor Cell message. |
| CELL: |  |  |  |
| MULtin | 1 or 0 | 9-280 | Enables/disables Neighbor Cell (Multi Hyperband) message. |
| MULti? |  | 9-280 | Returns state of Neighbor Cell (Multi Hyperband) message. |
| CELL? |  | 9-280 | Returns state of Neighbor Cell message. |
|  | 1 or 0 | 9-280 | Enables/disables Neighbor Service Info message. |
| SERVice: |  |  |  |
| MULit $n$ | 1 or 0 | 9-280 | Enables/disables Neighbor Service Info (Multi Hyperband) message. |
| MULti? |  | 9-280 | Returns state of Neighbor Service Info (Multi Hyperband) message. |
| SERVice? |  | 9-280 | Returns state of Neighbor Service Info message. |
| $\mathrm{RC}, 7$ | 1 or 0 | 9-280 | Enables/disables Regulatory Configuration message. |
| RCl ? |  | 9-280 | Returns state of Regulatory Configuration message. |
| SERVice $n$ | 1 or 0 | 9-282 | Enables/disables Service Menu message. |
| SERVice? |  | 9-282 | Returns state of Service Menu message. |
| SOC $n$ | 1 or 0 | 9-282 | Enables/disables System Operator Code Message Delivery message. |
| SOC? |  | 9-282 | Returns state of System Operator Code Message Delivery message. |
| SOC_-BSMC $n$ | 1 or 0 | 9-282 | Enables/disables System Operator Code/Base Station Manufacture Code Message Delivery message. |
| SOC_BSMC? |  | 9-282 | Returns state of System Operator Code/Base Station Manufacture Code Message Delivery message. |
| TIME $n$ | 1 or 0 | 9-282 | Enables/disables Time and Date message type. |
| TIME? |  | 9-282 | Returns state of Time and Date message type. |
| MULti: |  |  |  |
| SERV SS $n$ | 0 to 15 | 9-323 | Specifies SERV SS for Multi Hyperband. |
| SERV_SS? |  | 9-323 | Returns SERV_SS for Multi Hyperband. |
| NEIGHbor: ANAlog: |  |  |  |
| CELL |  |  |  |
| ACCess: |  |  |  |
| MS_PWR $n, m$ | 0 to 31, 0 to 15 | 9-293 | Specifies selected MS_ACC_PWR (Mobile Station/Analog Control Channel Power) ( $m$ ) of Analog Neighbor Cell List. |
| MS_PWR? $n$ | 0 to 31 | 9-293 | Returns selected MS_ACC_PWR of Analog Neighbor Cell List. |
| RSS_MIN n,m | 0 to 31,0 to 31 | 9-293 | Specifies selected RSS_ACC_MIN (Received Signal Strength/Analog Control Channel Minimum) ( $m$ ) of Analog Neighbor Cell List. |
| RSS_MIN? $n$ | 0 to 31 | 9-293 | Returns selected RSS_ACC_MIN of Analog Neighbor Cell List. |
| CHAN $n, m$ | 0 to 31, 0 to 2047 | 9-290 | Specifies selected CHAN (m) of Analog Neighbor Cell List. |
| CHAN? $n$ | 0 to 31 | 9-290 | Returns selected CHAN of Analog Neighbor Cell List. |
| DCC $n, m$ | 0 to 31, 0 to 3 | 9-290 | Specifies selected Digital Color Code ( $m$ ) of Analog Neighbor Cell List. |
| DCC? $n$ | 0 to 31 | 9-290 | Returns selected Digital Color Code of Analog Neighbor Cell List. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
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| CSS: <br> EBCCH: NEIGHbor: ANAlog: CELL |  |  |  |
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| DELAY $n, m$ | 0 to 31, 0 to 15 | 9-291 | Specifies selected DELAY ( $m$ ) of Analog Neighbor Cell List. |
| DELAY? $n$ | 0 to 31 | 9-291 | Returns selected DELAY of Analog Neighbor Cell List. |
| HL_FREQ $n, m$ | 0 to 31, 1 or 0 | 9-291 | Enables/disables selected HL_FREQ of Analog Neighbor Cell List. |
| HL_FREQ? $n$ | 0 to 31 | 9-291 | Returns state of selected HL_FREQ of Analog Neighbor Cell List. |
| OFFset $n, m$ | 0 to 31, 0 to 127 | 9-291 | Specifies selected RESEL_OFFSET ( $m$ ) of Analog Neighbor Cell List. |
| OFFset? $n$ | 0 to 31 | 9-291 | Returns selected RESEL_OFFSET of Analog Neighbor Cell List. |
| PROTOCOL $n, m$ | 0 to 31, 0 to 15 | 9-290 | Specifies selected Protocol Version (m) of Analog Neighbor Cell List. |
| PROTocol? $n$ | 0 to 31 | 9-290 | Returns selected Protocol Version of Analog Neighbor Cell List. |
| RETRY n,m | 0 to 31, 1 or 0 | 9-292 | Enables/disables selected Directed Retry Channel of Analog Neighbor Cell List. |
| RETRY? $n$ | 0 to 31 | 9-292 | Returns state of selected Directed Retry Channel of Analog Neighbor Cell List. |
| SS_SUFF $n, m$ | 0 to 31, 0 to 31 | 9-291 | Specifies selected SS_SUFF (signal strength sufficient) ( $m$ ) of Analog Neighbor Cell List. |
| SS SUFF? $n$ TYPE: | 0 to 31 | 9-291 | Returns selected SS_SUFF of Analog Neighbor Cell List. |
| CELL $n, m$ | 0 to 31, 0 to 3 | 9-292 | Specifies selected CELLTYPE ( $m$ ) of Analog Neighbor Cell List. |
| CELL? $n$ | 0 to 31 | 9-292 | Returns selected CELLTYPE of Analog Neighbor Cell List. |
| NETwork $n, m$ | 0 to 31, 0 to 7 | 9-292 | Specifies selected Network Type ( $m$ ) of Analog Neighbor Cell List. |
| NETwork? n | 0 to 31 | 9-292 | Returns selected Network Type of Analog Neighbor Cell List. |
| MULti: |  |  |  |
| MS PWR $n, m$ | 0 to 23, 0 to 15 | 9-303 | Specifies selected MS ACC PWR (m). |
| MS_PWR? $n$ | 0 to 23 | 9-303 | Returns selected MS_ACC_PWR. |
| RSS_MIN $n, m$ | 0 to 23, 0 to 31 | 9-303 | Specifies selected R $\bar{S}$ S_ACDC_MIN (m). |
| RSS_MIN? $n$ | 0 to 23 | 9-303 | Returns selected RSS_ACC_MIN. |
| CHAN $n, m$ | 0 to 23, 0 to 2047 | 9-300 | Specifies selected CHAN (m). |
| CHAN $n$ | 0 to 23 | 9-300 | Returns selected CHAN. |
| DCC $n, m$ | 0 to 23, 0 to 3 | 9-300 | Specifies selected Digital Color Code (m). |
| DCC? $n$ | 0 to 23 | 9-300 | Returns selected Digital Color Code. |
| DELAY $n, m$ | 0 to 23, 0 to 15 | 9-301 | Specifies selected DELAY (m). |
| DELAY? $n$ | 0 to 23 | 9-301 | Returns selected DELAY. |
| HL_FREQ n,m | 0 to 23, 1 or 0 | 9-301 | Enables/disables selected HL_FREQ. |
| HL FREQ $n$ | 0 to 23 | 9-301 | Returns state of selected HL_FREQ. |
| Number $n$ | 0 to 23 | 9-300 | Specifies Number of Analog Neighbor Cells. |
| NUMBer? |  | 9-300 | Returns Number of Analog Neighbor Cells. |
| OFFset $n, m$ | 0 to 23, 0 to 127 | 9-301 | Specifies selected RESEL OFFSET (m). |
| OFFset? $n$ | 0 to 23 | 9-301 | Returns selected RESEL_OFFSET. |
| PROTocol $n, m$ | 0 to 23, 0 to 15 | 9-300 | Specifies selected Protocol Version (m). |
| PROTOCOI? $n$ | 0 to 23 | 9-300 | Returns selected Protocol Version. |
| RETRY $n, m$ | 0 to 23, 1 or 0 | 9-302 | Enables/disables selected Directed Retry Channel. |
| RETRY? $n$ | 0 to 23 | 9-302 | Returns state of selected Directed Retry Channel. |
| SS_SUFF $n, m$ | 0 to 23, 0 to 31 | 9-301 | Specifies selected SS_SUFF (m). |
| SSSSUFF? $n$ | 0 to 23 | 9-301 | Returns selected SS_SUFF. |
| TYPE: |  |  |  |
| CELL $n$, m | 0 to 23, 0 to 3 | 9-302 | Specifies selected CELLTYPE ( $m$ ). |
| CELL? $n$ | 0 to 23 | 9-302 | Returns selected CELLTYPE. |
| NETwork n,m | 0 to 23, 0 to 7 | 9-302 | Specifies selected Network Type (m). |
| NETwork? $n$ | 0 to 23 | 9-302 | Returns selected Network Type. |
| NuMber $n$ | 0 to 31 | 9-290 | Specifies Number of Analog Neighbor Cells of Analog Neighbor Cell List. |
| NUMber? |  | 9-290 | Returns Number of Analog Neighbor Cells. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
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| CSS: <br> EBCCH: NEIGHbor: OTHER: |  |  |  |
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| HYPERband $n$ | 0 to 3 | 9-305 | Specifies Hyperband. |
| HYPERband? |  | 9-305 | Returns Hyperband. |
| INFO: |  |  |  |
| count $n$ | 0 to 31 | 9-312 | Specifies TDMA Neighbor Count of TDMA Service Info (Other Hyperband). |
| COUNT? |  | 9-312 | Returns TDMA Neighbor Count of TDMA Service Info (Other Hyperband). |
| HYPERband $n$ | 0 to 3 | 9-312 | Specifies service attribute information for Other Hyperband <br> TDMA neighbors. |
| HYPERband? |  | 9-312 | Returns service attribute information for Other Hyperband TDMA neighbors. |
| SERVice: TDMA neighbors. |  |  |  |
| INDicator n,m | 0 to 31, 1 or 0 | 9-312 | Enables/disables selected Service Map Indicator of TDMA Service Info (Other Hyperband). |
| INDicator? $n$ | 0 to 31 | 9-312 | Returns state of selected Service Map Indicator of TDMA Service Info (Other Hyperband). |
| MAP n,m | 0 to 31, 0 to 1023 | 9-313 | Specifies selected Service Map (m) of TDMA Service Info (Other Hyperband). |
| MAP? $n$ | 0 to 31 | 9-313 | Returns selected Service Map of TDMA Service Info (Other Hyperband). |
|  |  |  |  |
| MS_PWR n,m | 0 to 31,0 to 15 | 9-309 | Specifies selected MS_ACC_PWR (Mobile Station/Analog Control Channel Power) (m) of Other Hyperband Neighbor Cell List. |
| MS_PWR? $n$ | 0 to 31 | 9-309 | Returns selected MS_ACC_PWR of Other Hyperband Neighbor Cell List. |
| RSS_MIN $n, m$ | 0 to 31, 0 to 31 | 9-309 | Specifies selected RSS_ACC_MIN (Received Signal Strength/Analog Control Channel Minimum) ( $m$ ) of Other Hyperband Neighbor Cell List. |
| RSS MIN? $n$ | 0 to 31 | 9-309 | Returns selected RSS_ACC_MIN of Other Hyperband Neighbor Cell List. |
| CHAN $n, m$ | 0 to 31,0 to 2047 | 9-306 | Specifies selected CHAN (m) of Other Hyperband Neighbor Cell List. |
| CHAN? $n$ | 0 to 31 | 9-306 | Returns selected CHAN of Other Hyperband Neighbor Cell List. |
| DELAY $n, m$ | 0 to 31, 0 to 15 | 9-307 | Specifies selected DELAY ( $m$ ) of Other Hyperband Neighbor Cell List. |
| DELAY? $n$ | 0 to 31 | 9-307 | Returns selected DELAY of Other Hyperband Neighbor Cell List. |
| DVCC $n, m$ | 0 to 31, 0 to 255 | 9-306 | Specifies selected Digital Verification Color Code ( $m$ ) of Other Hyperband Neighbor Cell List. |
| DVCC? $n$ | 0 to 31 | 9-306 | Returns selected Digital Verification Color Code of Neighbor Cell List. |
| HL_FREQ $n, m$ | 0 to 31, 0 or 1 | 9-307 | Specifies selected HL FREQ $(m)$ of Other Hyperband Neighbor Cell List. |
| HL_FREQ? $n$ | 0 to 31 | 9-307 | Returns state of selected HL FREQ of Other Hyperband Neighbor Cell List. |
| OFFset $n, m$ | 0 to 31, 0 to 127 | 9-306 | Specifies selected RESEL_OFFSET ( $m$ ) of Other Hyperband Neighbor Cell List. |
| OFFset? $n$ | 0 to 31 | 9-306 | Returns selected RESEL_OFFSET of Other Hyperband Neighbor Cell List. |
| PROTocol $n, m$ | 0 to 31, 0 to 15 | 9-306 | Specifies selected Protocol Version ( $m$ ) of Other Hyperband Neighbor Cell List. |
| PROTocol? $n$ | 0 to 31 | 9-306 | Returns selected Protocol Version of Other Hyperband Neighbor Cell List. |

## CSS:EBCCH:NEIGHbor:OTHER:MULti:PSID_RSID:INDicator

| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
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| OTHER: |  |  |  |
| MULti: |  |  |  |
| PSID RSID: |  |  |  |
| INDicator n,m | 0 to 31, 1 or 0 | 9-310 | Enables/disables selected PSID/RSID Indicator of Other Hyperband Neighbor Cell List. |
| INDicator? $n$ | 0 to 31 | 9-310 | Returns state of selected PSID/RSID Indicator of Other Hyperband Neighbor Cell List. |
| LENGth $n, m$ | 0 to 31,0 to 15 | 9-310 | Specifies selected PSID/RSID Support Length ( $m$ ) of Other Hyperband Neighbor Cell List. |
| LENGth? $n$ | 0 to 31 | 9-310 | Returns selected PSID/RSID Support Length of Other Hyperband Neighbor Cell List. |
| SUPport $n, m$ | 0 to 31, | 9-311 | Specifies selected PSID/RSID Support ( $m$ ) of Other |
|  | 1 to \#hFFFF |  | Hyperband Neighbor Cell List. |
| SUPport? $n$ | 0 to 31 | 9-311 | Returns selected PSID/RSID Support of Other Hyperband Neighbor Cell List. |
| RETRY $n, m$ | 0 to 31, 1 or 0 | 9-308 | Enables/disables selected Directed Retry Channel of Other Hyperband Neighbor Cell List. |
| RETRY? $n$ | 0 to 31 | 9-308 | Returns state of selected Directed Retry Channel of Other Hyperband Neighbor Cell List. |
| SS_SUFF $n, m$ | 0 to 31, 0 to 31 | 9-307 | Specifies selected Signal Strength Sufficient (m) of Other Hyperband Neighbor Cell List. |
| SS_SUFF? $n$ | 0 to 31 | 9-307 | Returns selected Signal Strength Sufficient of Neighbor Cell List. |
| SYNC $n, m$ | 0 to 31, 1 or 0 | 9-307 | Enables/disables selected CELL_SYNC of Other Hyperband Neighbor Cell List. |
| SYNC? $n$ | 0 to 31 | 9-307 | Returns state of selected CELL_SYNC of Other Hyperband Neighbor Cell List. |
| TYPE: Neignbor Cell List. |  |  |  |
| CELL $n, m$ | 0 to 31,0 to 3 | 9-308 | Specifies selected CELLTYPE ( $m$ ) of Other Hyperband Neighbor Cell List. |
| CELL? $n$ | 0 to 31 | 9-308 | Returns selected CELLTTYPE of Other Hyperband Neighbor Cell List. |
| NETwork n,m | 0 to 31,0 to 7 | 9-308 | Specifies selected Network Type ( $m$ ) of Other Hyperband Neighbor Cell List. |
| NETwork? n | 0 to 31 | 9-308 | Returns selected Network Type of Other Hyperband Neighbor Cell List. |
| NUMber $n$ | 0 to 31 | 9-305 | Specifies Number of Neighbor Cells of Other Hyperband Neighbor Cell List. |
| NUMber? |  | 9-305 | Returns Number of Neighbor Cells of Other Hyperband Neighbor Cell List. |
| TDMA: <br> CELL: |  |  |  |
| ACCess: |  |  |  |
| MS_PWR n,m | 0 to 31, 0 to 15 | 9-287 | Specifies selected MS_ACC_PWR (Mobile Station/Analog Control Channel Power) ( $m$ ) of TDMA Neighbor Cell List. |
| MS_PWR? $n$ | 0 to 31 | 9-287 | Returns selected MS_ACC_PWR of TDMA Neighbor Cell List. |
| RSS_MIN $n, m$ | 0 to 31, 0 to 31 | 9-287 | Specifies selected RSS_ACC_MIN (Received Signal Strength/Analog Control Channel Minimum) (m) of TDMA Neighbor Cell List. |
| RSS_MIN? $n$ | 0 to 31 | 9-287 | Returns selected RSS_ACC_MIN of TDMA Neighbor Cell List. |
| CHAN $n, m$ | 0 to 31, 0 to 2047 | 9-284 | Specifies selected CHAN (m) of TDMA Neighbor Cell List. |
| CHAN? $n$ | 0 to 31 | 9-284 | Returns selected CHAN of TDMA Neighbor Cell List. |
| DELAY n,m | 0 to 31,0 to 15 | 9-285 | Specifies selected DELAY ( $m$ ) of TDMA Neighbor Cell List. |
| DELAY? $n$ | 0 to 31 | 9-285 | Returns selected DELAY of TDMA Neighbor Cell List. |
| DVCC $n, m$ | 0 to 31, 0 to 255 | 9-284 | Specifies selected Digital Verification Color Code ( $m$ ) of TDMA Neighbor Cell List. |
| DVCC? $n$ | 0 to 31 | 9-284 | Returns selected Digital Verification Color Code of Neighbor Cell List. |
| HL_FREQ $n, m$ | 0 to 31, 0 or 1 | 9-285 | Specifies selected HL_FREQ ( $m$ ) of TDMA Neighbor Cell List. |
| HL FREQ? $n$ | 0 to 31 | 9-285 | Returns state of selected HL_FREQ of TDMA Neighbor Cell List. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
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| css: |  |  |  |
| EBCCH: |  |  |  |
| NEIGHbor: |  |  |  |
| TDMA: |  |  |  |
| CELL: |  |  |  |
| OFFset $n, m$ | 0 to 31, 0 to 127 | 9-285 | Specifies selected RESEL_OFFSET ( $m$ ) of TDMA Neighbor Cell List. |
| OFFset? $n$ | 0 to 31 | 9-285 | Returns selected RESEL_OFFSET of TDMA Neighbor Cell List. |
| PROTocol $n, m$ | 0 to 31, 0 to 15 | 9-284 | Specifies selected Protocol Version ( $m$ ) of TDMA Neighbor Cell List. |
| PROTocol? $n$ | 0 to 31 | 9-284 | Returns selected Protocol Version of TDMA Neighbor Cell List. |
| PSID_RSID: List. |  |  |  |
| INDicator n,m | 0 to 31, 1 or 0 | 9-288 | Enables/disables selected PSID/RSID Indicator of TDMA Neighbor Cell List. |
| INDicator? $n$ | 0 to 31 | 9-288 | Returns state of selected PSID/RSID Indicator of TDMA Neighbor Cell List. |
| LENGth n,m | 0 to 31, 0 to 15 | 9-288 | Specifies selected PSID/RSID Support Length ( $m$ ) of TDMA |
| LENGth? n | 0 to 31 | 9-288 | Returns selected PSID/RSID Support Length of TDMA Neighbor Cell List. |
| SUPport $n, m$ | 0 to 31, <br> 1 to \#hFFFF | 9-289 | Specifies selected PSID/RSID Support ( $m$ ) of TDMA Neighbor Cell List. |
| SUPport? $n$ | 0 to 31 | 9-289 | Returns selected PSID/RSID Support of TDMA Neighbor Cell List. |
| RETRY $n, m$ | 0 to 31,1 or 0 | 9-287 | Enables/disables selected Directed Retry Channel of TDMA Neighbor Cell List. |
| RETRY? $n$ | 0 to 31 | 9-287 | Returns state of selected Directed Retry Channel of TDMA Neighbor Cell List. |
| SS_SUFF $n, m$ | 0 to 31, 0 to 31 | 9-285 | Specifies selected Signal Strength Sufficient (m) of TDMA Neighbor Cell List. |
| SS_SUFF? $n$ | 0 to 31 | 9-285 | Returns selected Signal Strength Sufficient of Neighbor Cell List. |
| SYNC $n, m$ | 0 to 31,1 or 0 | 9-286 | Enables/disables selected CELL_SYNC of TDMA Neighbor Cell List. |
| SYNC? $n$ | 0 to 31 | 9-286 | Returns state of selected CELL_SYNC of TDMA Neighbor Cell List. |
| TYPE: |  |  |  |
| CELL $n, m$ | 0 to 31, 0 to 3 | 9-286 | Specifies selected CELLTYPE ( $m$ ) of TDMA Neighbor Cell List. |
| CELL? $n$ | 0 to 31 | 9-286 | Returns selected CELLTYPE of TDMA Neighbor Cell List. |
| NETwork n,m | 0 to 31, 0 to 7 | 9-286 | Specifies selected Network Type ( $m$ ) of TDMA Neighbor Cell List. |
| NETwork? $n$ | 0 to 31 | 9-286 | Returns selected Network Type of TDMA Neighbor Cell List. |
| INFO: |  |  |  |
| count $n$ | 0 to 31 | 9-304 | Specifies TDMA Neighbor Count of TDMA Service Info. |
| COUNT? |  | 9-304 | Returns TDMA Neighbor Count of TDMA Service Info. |
| SERVice: INDicator n,m |  |  |  |
| INDicator $n, m$ | 0 to 31 | 9-304 | Enables/disables selected Service Map Indicator of TDMA Service Info. |
| INDicator? $n$ | 0 to 31 | 9-304 | Returns state of selected Service Map Indicator of TDMA Service Info. |
| MAP $n, m$ | 0 to 31, 0 to 1023 | 9-304 | Specifies selected Service Map (m) of TDMA Service Info. |
| MAP? $n$ | 0 to 31 | 9-304 | Returns selected Service Map of TDMA Service Info. |
| MULti: |  |  |  |
| ACCess: |  |  |  |
| MS PWR n,m | 0 to 23, 0 to 15 | 9-297 | Specifies selected MS_ACC_PWR (m). |
| MS_PWR? $n$ | 0 to 23 | 9-297 | Returns selected MS_ACC_PWR. |
| RSS_MIN $n, m$ | 0 to 23, 0 to 31 | 9-297 | Specifies selected RSS ACC MIN (m). |
| RSS_MIN? $n$ | 0 to 23 | 9-297 | Returns selected RSS_ACC_MIN. |
| CHAN $n, m$ | 0 to 23, 0 to 2047 | 9-294 | Specifies selected CHAN (m). |
| CHAN? $n$ | 0 to 23 | 9-294 | Returns selected CHAN. |
| DELAY n.m | 0 to 23, 0 to 15 | 9-295 | Specifies selected DELAY (m). |
| DELAY? $n$ | 0 to 23 | 9-295 | Returns selected DELAY |


| COMMAND | RANGE | PAGE | DESCRIPTION |
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| CSS: |  |  |  |
| EBCCH: <br> NEIGHbor: TDMA: |  |  |  |
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| DVCC $n, m$ | 0 to 23, 0 to 255 | 9-294 | Specifies selected Digital Verification Color Code (m). |
| DVCC? $n$ | 0 to 23 | 9-294 | Returns selected Digital Verification Color Code. |
| HL_FREQ $n, m$ | 0 to 23, 1 or 0 | 9-295 | Enables/disables selected HL_FREQ. |
| HL_FREQ? $n$ | 0 to 23 | 9-295 | Returns state of selected HL_FREQ. |
| NUMBer $n$ | 0 to 23 | 9-294 | Specifies Number of TDMA Neighbor Cells. |
| NUMBer? |  | 9-294 | Returns Number of TDMA Neighbor Cells. |
| OFFset $n, m$ | 0 to 23, 0 to 127 | 9-295 | Specifies selected RESEL OFFSET (m). |
| OFFset? $n$ | 0 to 23 | 9-295 | Returns selected RESEL_OFFSET. |
| PROTocol $n, m$ | 0 to 23, 0 to 15 | 9-294 | Specifies selected Protocol Version (m). |
| PROTocol? $n$ | 0 to 23 | 9-294 | Returns selected Protocol Version. |
| PSID_RSID: |  |  |  |
| INDicator n,m | 0 to 23, 1 or 0 | 9-298 | Enables/disables selected PSID/RSID Indicator. |
| INDicator? $n$ | 0 to 23 | 9-298 | Returns state of selected PSID/RSID Indicator. |
| LENGTh $n, m$ | 0 to 23, 0 to 15 | 9-298 | Specifies selected PSID/RSID Support Length (m). |
| LENGth? $n$ | 0 to 23 | 9-298 | Returns selected PSID/RSID Support Length. |
| SUPport $n, m$ | 0 to 23, <br> 1 to \#hFFFF | 9-299 | Specifies selected PSID/RSID Support (m). |
| SUPport? $n$ | 0 to 23 | 9-299 | Returns selected PSID/RSID Support. |
| RETRY $n, m$ | 0 to 23, 1 or 0 | 9-297 | Enables/disables selected Directed Retry Channel. |
| RETRY? $n$ | 0 to 23 | 9-297 | Returns state of selected Directed Retry Channel. |
| SS_SUFF $n, m$ | 0 to 23, 0 to 31 | 9-295 | Specifies selected SS SUFF (m). |
| SS_SUFF? $n$ | 0 to 23 | 9-295 | Returns selected SS_SUFF. |
| SYṄC $n, m$ | 0 to 23, 1 or 0 | 9-296 | Enables/disables selected CELL_SYNC (m). |
| SYNC? $n$ | 0 to 23 | 9-296 | Returns state of selected CELL_SYNC. |
| TYPE: |  |  |  |
| CELL $n, m$ | 0 to 23, 0 to 3 | 9-296 | Specifies selected CELLTYPE (m). |
| CELL? $n$ | 0 to 23 | 9-296 | Returns selected CELLTYPE. |
| NETwork $n, m$ | 0 to 23, 0 to 7 | 9-296 | Specifies selected Network Type ( $m$ ). |
| NETwork? $n$ | 0 to 23 | 9-296 | Returns selected Network Type. |
| NuMber $n$ | 0 to 31 | 9-284 | Specifies Number of TDMA Neighbor Cells. |
| NUMber? |  | 9-284 | Returns Number of TDMA Neighbor Cells. |
| NONPublic: |  |  |  |
| BLOCK $n$ | 0 to \#hFFFF | 9-283 | Specifies Non-Public Block Map. |
| BLOCK? |  | 9-283 | Returns Non-Public Block Map. |
| LENGth $n$ | 0 to 15 | 9-283 | Specifies Non-Public Map Length. |
| LENGth? |  | 9-283 | Returns Non-Public Map Length. |
| OATS $n$ | 1 or 0 | 9-320 | Enables/disables OATS Support. |
| OATS? |  | 9-320 | Returns state of OATS Support. |
| OPTional: |  |  |  |
| DATA index, word, data | $\begin{aligned} & 0 \text { to } 7, \\ & 0 \text { to } 15, \\ & 0 \text { to \#hFFFF } \end{aligned}$ | 9-335 | Specifies 16 bit data selected by word used in user-defined optional info. element of selected message type. |
| DATA? index,word | 0 to 7, 0 to 15 | 9-335 | Returns 16 bit user-defined data selected by word of userdefined optional info. element of selected message type. |
| LENGth index, $n$ | 0 to 7,0 to 255 | 9-335 | Specifies length in bits ( $n$ ) of user-defined optional info. element of selected message type |
| LENGth? index | 0 to 7 | 9-335 | Returns length in bits of user-defined optional info. element of selected message type. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| EBCCH : OPTional: |  |  |  |
| MSGtype index, type | 0 to 7, 0 to 11 | 9-334 | Appends an optional field to a selected message type (up to 8 at a time). |
|  |  |  |  |
|  |  |  |  |
|  | Channel Alloca |  |  |
|  | $2 \text { = Neighbor Cell, }$ |  |  |
|  | $3=$ Regulatory Configuration, |  |  |
|  |  |  |  |
|  | $4=$ Alternate RCI Info, |  |  |
|  | 5 = BSMC Message |  |  |
|  |  |  |  |
|  | $6=$ Emergency Information Broadcast, |  |  |
|  |  |  |  |
|  | 7 = Neighbor Service |  |  |
|  |  |  |  |
|  | $8=$ Service Menu,$9=$ SOC/BSMC |  |  |
|  |  |  |  |
|  | Identification,$10=$ SOC Message |  |  |
|  |  |  |  |
|  | 11 = Time and Date |  |  |
|  |  |  |  |
|  | $12=$ MACA (Multi-Hyperband) |  |  |
|  | $13=$ Neighbor Cell (Multi-Hyperband) |  |  |
|  | $14=$ Neighbor Service Info (Multi-Hyperband) |  |  |
| MSGtype? index | 0 to 7 | 9-335 | Returns selected Message Type. |
| PD $n$ | 0 to 3 | 9-279 | Specifies Protocol Discriminator. |
| PD? |  | 9-279 | Returns Protocol Discriminator. |
| PROGram dest,source,length | 0 to 31, 9-279 |  | Programs slots in superframe with data constructed by |
|  | 0 to 255, |  | Build command. dest is location in superframe; |
|  | 0 to 8 |  | source is start location in EBCCH buffer; length is number |
|  |  |  | of frames of data moved from EBCCH buffer to |
|  |  |  | superframe. |
| $\mathrm{RCl} n$ | 0 to 3 | 9-313 | Specifies Regulatory Configuration. |
| RCl ? |  | 9-313 | Returns Regulatory Configuration. |
| SERV SS $n$ | 0 to 15 | 9-283 | Specifies Service Signal Strength. |
| SERV_SS? |  | 9-283 | Returns Service Signal Strength. |
| SID $n$ | 0 to 32767 | 9-323 | Specifies System ID. |
| SID? |  | 9-323 | Returns System ID. |
| SIGnal: |  |  |  |
| CADence $n$ | 0 to 63 | 9-316 | Specifies Signal Cadence. |
| CADence? |  | 9-316 | Returns Signal Cadence. |
| DURation $n$ | 0 to 15 | 9-316 | Specifies Signal Duration. |
| DURation? |  | 9-316 | Returns Signal Duration. |
| PITCH $n$ | 0 to 3 | 9-316 | Specifies Signal Pitch. |
| PITCH? |  | 9-316 | Returns Signal Pitch. |
| SOC $n$ | 0 to 4095 | 9-321 | Specifies System Operator Code. |
| SOC? |  | 9-321 | Returns SOC. |
| TEXT: |  |  |  |
| CHARacter $n$, m | 0 to 255, 0 to 255 9-315 |  | Specifies selected Short Message Character (m). |
| CHARacter? $n$ | $\begin{aligned} & 0 \text { to } 255 \\ & 0 \text { to } 31 \end{aligned}$ | 9-315 | Returns selected Short Message Character. |
| ENCoding $n$ |  | 9-315 | Specifies Encoding Identifier. |
| ENCoding? |  | 9-315 | Returns Encoding Identifier. |
| LENGth $n$ | 0 to 255 | 9-315 | Specifies Length Indicator. |
| LENGth? |  | 9-315 | Returns Length Indicator. |
| REServed $n$ | 0 to 7 | 9-315 | Specifies Reserved. |
| REServed? |  | 9-315 | Returns Reserved. |
| TIME $n$ | 0 to \#hFFFFFFFFF | 9-321 | Specifies Time from Jan 1, 1980. |
| TIME? |  | 9-321 | Returns TIME. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| EBCCH: |  |  |  |
| DATA index, word, data | $\begin{aligned} & 0 \text { to } 7, \\ & 0 \text { to } 15, \\ & 0 \text { to \#hFFFF } \end{aligned}$ | 9-333 | Specifies 16 bit data selected by word used in selected userdefined message type. |
| DATA? index, word | 0 to 7,0 to 15 | 9-333 | Returns 16 bit user-defined data selected by word of selected user-defined message type. |
| LENGth index, $n$ | 0 to 7,0 to 255 | 9-332 | Specifies length in bits of selected user-defined message type. |
| LENGth? index | 0 to 7 | 9-332 | Returns length of selected user-defined message type. |
| MSGtype index,n | 0 to 7, 0 to 63 | 9-332 | Specifies selected user-defined message types. |
| MSGtype? index | 0 to 7 | 9-332 | Returns value of selected Message Type. |
| PD index, $n$ | 0 to 7, 0 to 3 | 9-332 | Specifies Protocol Discriminator of selected user-defined message. |
| PD? index | 0 to 7 | 9-332 | Returns Protocol Discriminator of selected user-defined message. |
| ZONE: |  |  |  |
| DIRection $n$ | 1 or 0 | 9-322 | Enables/disables Time Zone Offset Direction. |
| DIRection? |  | 9-322 | Returns state of Time Zone Offset Direction. |
| DST $n$ | 1 or 0 | 9-322 | Enables/disables Time Zone Offset Daylight Savings Indicator. |
| DST? |  | 9-322 | Returns state of Time Zone Offset Daylight Savings Indicator. |
| MINutes $n$ | 0 to 1023 | 9-322 | Specifies Minutes. |
| MINutes? |  | 9-322 | Returns Minutes. |
| ENABLE: |  |  |  |
| DCCH $n$ | 1 or 0 | 9-245 | Enables/disables DCCH information word. |
| REGID $n$ | 1 or 0 | 9-245 | Enables/disables Registration ID word. |
| FBCCH: |  |  |  |
| AcCess: |  |  |  |
| BURSTsize $n$ | 1 or 0 | 9-259 | Enables/disables Access Burst Size. |
| BURSTsize? |  | 9-259 | Returns state of Access Burst Size. |
| MS_PWR $n$ | 0 to 15 | 9-259 | Specifies MS_ACC_PWR (Mobile Station Analog Control Channel Power). |
| MS_PWR? |  | 9-259 | Returns MS_ACC_PWR. |
| RSS_MIN $n$ | 0 to 31 | 9-259 | Specifies RSS_ACC_MIN (Received Signal Strength Analog Control Channel Minimum). |
| RSS_MIN? |  | 9-259 | Returns RSS_ACC_MIN. |
| ADDitional: |  |  |  |
| DCCH: |  |  |  |
| CHANnel $n$.m | 0 to 7,0 to 2047 | 9-263 | Specifies selected DCCH Channel (m). |
| CHANnel? $n$ | 0 to 7 | 9-263 | Returns selected DCCH Channel. |
| SLOT $n, m$ | 0 to 7, 0 to 3 | 9-263 | Specifies selected Slot Configuration (m). |
| SLOT? $n$ | 0 to 7 | 9-263 | Returns selected Slot Configuration. |
| NuMber $n$ | 0 to 7 | 9-263 | Specifies Number of additional DCCH Channels. |
| NUMber? |  | 9-263 | Returns Number of additional DCCH Channels. |
| ALPHA: |  |  |  |
| SID " $n$ " | ASCII String | 9-267 | Specifies Alphanumeric System ID. |
| SID? |  | 9-267 | Returns Alphanumeric System ID. |
| ALT_SOC: |  |  |  |
| MAP: |  |  |  |
| PSID_RSID $n, m$ | 0 to 15, <br> 0 to \#hFFFF | 9-273 | Species SOC PSID/RSID Map (m) for selected SOC value. |
| PSID_RSID? $n$ | 0 to 15 | 9-273 | Returns SOC PSID/RSID Map for selected SOC value. |
| NUMBer $n$ | 0 to 15 | 9-273 | Specifies Number of Alternate SOCs. |
| NUMBer? |  | 9-273 | Returns Number of Alternate SOCs. |
| SOC $n, m$ | 0 to 15, 0 to \#hFFF | 9-273 | Specifies selected SOC (m). |
| SOC? $n$ | 0 to 15 | 9-273 | Returns selected SOC. |
| AUTH $n$ | 1 or 0 | 9-258 | Enables/disables AUTH. |
| AUTH? |  | 9-258 | Returns state of AUTH. |
| BARred $n$ | 0 to 31 | 9-261 | Specifies Cell Barred. |
| BARred? |  | 9-261 | Returns Cell Barred. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| FBCCH: |  |  |  |
| BSMC $n$ | 0 to 255 | 9-267 | Specifies assigned manufacturers code (Base Station Manufacture Code). |
| BSMC? |  | 9-267 | Returns BSMC. |
| BUILD |  | 9-251 | Builds data that makes up F-BCCH. |
| CAPability $n$ | 1 or 0 | 9-265 | Enables/disables Capability Request. |
| CAPability? |  | 9-265 | Returns state of Capability Request. |
| CBN: |  |  |  |
| HIGH $n$ | 0 to \#hFFFF | 9-257 | Specifies CBN_High. |
| HIGH? |  | 9-257 | Returns CBN_High. |
| CONfiguration $n$ | 0 to 3 | 9-256 | Specifies Slot Configuration. |
| CONfiguration? |  | 9-256 | Returns CONfiguration. |
| COUNTRY: |  |  |  |
| CODE $n$ | 0 to 1023 | 9-267 | Specifies Mobile Country Code of current DCCH. |
| CODE? |  | 9-267 | Returns Mobile Country Code of current DCCH. |
| CUSTOM: |  |  |  |
| CONTrol $n, m$ | 0 to 63, 0 to 255 | 9-268 | Specifies selected Custom Control (m). |
| CONTrol? $n$ | 0 to 63 | 9-268 | Returns selected Custom Control. |
| LENGth $n$ | 1 to 64 | 9-268 | Specifies Length of Custom Control. |
| LENGth? |  | 9-268 | Returns Length of Custom Control. |
| DATA? n,m | 0 to 10, 0 to 6 | 9-251 | Returns 16 bit word indexed by $m$ from slot ( $n$ ) of F-BCCH data built. |
| DELay $n$ | 0 to 15 | 9-262 | Specifies Delay. |
| DELay? |  | 9-262 | Returns Delay. |
| DEREG $n$ | 1 or 0 | 9-264 | Enables/disables De-Registration. |
| DEREG? |  | 9-264 | Returns state of De-Registration. |
| DIC $n$ | 1 or 0 | 9-261 | Enables/disables Delay Interval Compensation Mode. |
| DIC? |  | 9-261 | Returns Delay Interval Compensation Mode. |
| DVCC $n$ | 0 to 255 | 9-256 | Specifies Digital Verification Color Code. |
| DVCC? |  | 9-256 | Returns DVCC. |
| EC $n$ | 1 or 0 | 9-252 | Enables/disables Extended Broadcast Control Channel Change Flag. |
| EC? |  | 9-252 | Returns state of EC. |
| ENABLE: ${ }^{\text {a }}$ ( 252 Returns state or |  |  |  |
| ADDitional: |  |  |  |
| $\mathrm{DCCH} n$ | 1 or 0 | 9-274 | Enables/disables Additional DCCH information optional info. element. |
| DCCH ? |  | 9-274 | Returns state of Additional DCCH information optional info. element. |
| ALPHA: |  |  |  |
| SID $n$ | 1 or 0 | 9-274 | Enables/disables Alphanumeric System ID optional info. element. |
| SID? |  | 9-274 | Returns state of Alphanumeric System ID optional info. element. |
| ALT_SOC_LIST $n$ | 1 or 0 | 9-274 | Enables/disables alternate SOC information. |
| ALT_SOC_LIST? |  | 9-274 | Returns state of alternate SOC information. |
| CBN: |  |  |  |
| HIGH $n$ | 1 or 0 | 9-274 | Enables/disables CBN_High optional info. element. |
| HIGH? |  | 9-274 | Returns state of CBN_High optional info. element. |
| COUNTRY: |  |  |  |
| CODE $n$ | 1 or 0 | 9-274 | Enables/disables Mobile Country Code optional info. element. |
| CODE? |  | 9-274 | Returns state of Mobile Country Code optional info. element. |
| EXTENDED $n$ | 1 or 0 | 9-275 | Enables/disables Extended Hyperframe Counter optional info. element. |
| EXTENDED? |  | 9-275 | Returns state of Extended Hyperframe Counter optional info. element. |
| MACA: |  |  |  |
| EIGHT: |  |  |  |
| CONTrol $n$ | 1 or 0 | 9-275 | Enables/disables MACA 8 CONTROL optional info. element. |
| CONTrol? |  | 9-275 | Returns state of MACA_ 8_CONTROL optional info. element. |



| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| FBCCH |  |  |  |
| MACA: |  |  |  |
| LIST |  |  |  |
| OTHER: |  |  |  |
| CHAN $n$, m | 0 to 15, 0 to 2047 | 9-269 | Specifies selected Channel (m). |
| CHAN? $n$ | 0 to 15 | 9-269 | Returns selected Channel. |
| HYPERband $n$ | 0 to 3 | 9-269 | Specifies Other Hyperband for MACA_LIST. |
| HYPERband? |  | 9-269 | Returns Other Hyperband for MACA_LIST. |
| NuMber $n$ | 0 to 15 | 9-269 | Specifies Number of MACA Channels. |
| NuMber? |  | 9-269 | Returns Number of MACA Channels. |
| STATus $n$ | 0 to 3 | 9-268 | Specifies MACA_STATUS. |
| STATus? |  | 9-268 | Returns MACA STATUS. |
| TYPE $n$ | 0 to 15 | 9-268 | Specifies MACA_TYPE. |
| TYPE? |  | 9-268 | Returns MACA_TYPE. |
| MAP: |  |  |  |
| ARQ $n$ | 1 or 0 | 9-272 | Enables/disables FACCH/SACCH Automatic Retransmission Request Map. |
| ARQ? |  | 9-272 | Returns state of $\operatorname{FACCH} / \mathrm{SACCH}$ Automatic Retransmission Request Map. |
| AUTH $n$ | 00 to \#h3F | 9-271 | Specifies AUTH Map. |
| AUTH? |  | 9-271 | Returns AUTH Map. |
| CODER $n$ | 0 to 63 | 9-270 | Specifies Voice Coder Map. |
| CODER? |  | 9-270 | Returns Voice Coder Map. |
| DPM $n$ | 0 to 15 | 9-270 | Specifies Data Privacy Mode Map. |
| DPM? |  | 9-270 | Returns Data Privacy Mode Map. |
| MEA: |  |  |  |
| ALGORithms $n, m$ | 0 to 7,0 to 15 | 9-271 | Specifies selected Message Encryption Algorithms (m). |
| ALGORithms? $n$ | 0 to 7 | 9-271 | Returns selected Message Encryption Algorithms. |
| DOMAIN $n$ | 0 to 255 | 9-271 | Specifies Message Encryption Algorithms Domain Map. |
| DOMAIN? |  | 9-271 | Returns Message Encryption Algorithms Domain Map. |
| MEK $n$ | 0 to 15 | 9-271 | Specifies Message Encryption Key Map. |
| MEK? |  | 9-271 | Returns Message Encryption Key Map. |
| MENU $n$ | 0 to \#h3FF | 9-272 | Specifies Menu Map. |
| MENU? |  | 9-272 | Returns Menu Map. |
| REG_INFO $n$ | 0 to 15 | 9-271 | Specifies Reg-Info Map. |
| REG_INFO? |  | 9-271 | Returns Reg-Info Map. |
| SMS $n$ | 0 to 3 | 9-272 | Specifies Short Message Service Map. |
| SMS? |  | 9-272 | Returns Short Message Service Map. |
| USER $n$ | 1 or 0 | 9-272 | Enables/disables User Group Map. |
| USER? |  | 9-272 | Returns state of User Group Map. |
| VPM $n$ | 0 to 15 | 9-270 | Specifies Voice Privacy Mode Map. |
| VPM? |  | 9-270 | Returns Voice Privacy Mode Map. |
| MAX: |  |  |  |
| BUSY $n$ | 1 or 0 | 9-260 | Enables/disables Max Busy/Reserved. |
| BUSY? |  | 9-260 | Returns state of Max Busy/Reserved. |
| REPetitions $n$ | 0 to 3 | 9-260 | Specifies Max Repetitions. |
| REPetitions? |  | 9-260 | Returns Max Repetitions. |
| RETries n | 0 to 7 | 9-260 | Specifies Max Retries. |
| RETries? |  | 9-260 | Returns Max Retries. |
| STOP $n$ | 1 or 0 | 9-260 | Enables/disables Max Stop Counter. |
| STOP? |  | 9-260 | Returns Max Stop Counter. |
| MSGtype: |  |  |  |
| ACCess $n$ | 1 or 0 | 9-252 | Enables/disables) Access Parameters message. |
| ACCess? |  | 9-252 | Returns state of Access Parameters message enable. |
| BSMC $n$ | 1 or 0 | 9-253 | Enables/disables Base Station Manufacture Code message. |
| BSMC? |  | 9-253 | Returns state of Base Station Manufacture Code message enable. |
| MACA $n$ | 1 or 0 | 9-253 | Enables/disables Mobile Assisted Channel Allocation message. |
| MACA ? |  | 9-253 | Returns state of Mobile Assisted Channel Allocation message enable. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| FBCCH: |  |  |  |
| MSGtype: |  |  |  |
| MACA_MULti $n$ | 1 or 0 | 9-254 | Enables/disables Mobile Assisted Channel Allocation (Multi Hyperband) message. |
| MACA_MULTi? |  | 9-254 | Returns state of Mobile Assisted Channel Allocation (Multi Hyperband) message enable. |
| OLC $n$ | 1 or 0 | 9-253 | Enables/disables Overload Class message. |
| OLC? |  | 9-253 | Returns state of Overload Class message enable. |
| REGistration $n$ | 1 or 0 | 9-253 | Enables/disables Registration parameters message. |
| REGistration? |  | 9-253 | Returns state of Registration parameters message enable. |
| SELection $n$ | 1 or 0 | 9-252 | Enables/disables Control Channel Selection Parameters message. |
| SELection? |  | 9-252 | Returns state of Control Channel Selection Parameters message enable. |
| SERVice $n$ | 1 or 0 | 9-254 | Enables/disables Service Menu message. |
| SERVice? |  | 9-254 | Returns state of Service Menu message enable. |
| SOC $n$ | 1 or 0 | 9-254 | Enables/disables Message Delivery message. |
| SOC? |  | 9-254 | Returns state of Message Delivery message enable. |
| SOC_BSMC $n$ | 1 or 0 | 9-254 | Enables/disables System Operator Code/Base Station Manufacture Code message. |
| SOC_BSMC? |  | 9-254 | Returns state of System Operator Code/Base Station Manufacture Code message enable. |
| STRUCTure $n$ | 1 or 0 | 9-252 | Enables/disables DCCH Structure message. |
| STRUCTure |  | 9-252 | Returns state of DCCH Structure message enable. |
| SYSID $n$ | 1 or 0 | 9-253 | Enables/disables System ID message. |
| SYSID? |  | 9-253 | Returns state of System ID message enable. |
| NETwork n | 0 to 7 | 9-266 | Specifies Network Types supported on control channel. |
| NETwork? |  | 9-266 | Returns Network Types supported on control channel. |
| NONPublic: |  |  |  |
| PROBability: |  |  |  |
| BLOCK $n$ | 0 to \#hFFFF | 9-257 | Specifies Non-Public Block Map. |
| BLOCk? |  | 9-257 | Returns Non-Public Block Map. |
| LENGth $n$ | 0 to 15 | 9-257 | Specifies Non-Public Map Length. |
| LENGth? |  | 9-257 | Returns Non-Public Map Length. |
| REGistration: |  |  |  |
| CONTrol $n$ | 0 to 3 | 9-258 | Specifies Non-Public Registration Control. |
| CONTrol? |  | 9-258 | Returns Non-Public Registration Control. |
| NUMber: |  |  |  |
| EBCCH $n$ | 0 to 7 | 9-255 | Specifies Number of EBCCH. |
| EBCCH ? |  | 9-255 | Returns EBCCH. |
| FBCCH $n$ | 0 to 7 | 9-255 | Specifies Number of FBCCH. |
| FBCCH ? |  | 9-255 | Returns FBCCH. |
| NON_PCH $n$ | 0 to 3 | 9-255 | Specifies Number of Non-Paging Channel Subchannel Slots. |
| NON_PCH? |  | 9-255 | Returns NON_PCH. |
| REServed $n$ | 0 to 7 | 9-255 | Specifies Number of Reserved Slots. |
| REServed? |  | 9-255 | Returns REServed. |
| SBCCH $n$ | 0 to 15 | 9-255 | Specifies Number of SBCCH. |
| SBCCH ? |  | 9-255 | Returns SBCCH. |
| OATS $n$ | 1 or 0 | 9-273 | Enables/disables OATS Support. |
| OATS? |  | 9-273 | Returns OATS Support. |
| OLC $n$ | 0 to \#hFFFF | 9-270 | Specifies Overload Class. |
| OLC? |  | 9-270 | Returns Overload Class. |
| OPTional: |  |  |  |
| DATA index,word, data | 0 to 7 , <br> 0 to 15, <br> 0 to \#hFFFF | 9-331 | Specifies 16 bit data selected by word in user-defined optional info. element of selected message type. |
| DATA? index, word | 0 to 7,0 to 15 | 9-331 | Returns user-defined data selected by word of user-defined optional info. element of selected message type. |
| LENGth index, $n$ | 0 to 7, 0 to 255 | 9-331 | Specifies length in bits ( $n$ ) of user-defined optional info. element of selected message type. |
| LENGth? index | 0 to 7 | 9-331 | Returns length in bits of user-defined optional info. element of selected message type. |



| CSS: |  |  |  |
| :---: | :---: | :---: | :---: |
| FBCCH: |  |  |  |
| REGPER $n$ | 0 to 511 | 9-265 | Specifies Registration Period. |
| REGPER? |  | 9-265 | Returns Registration Period. |
| REGR $n$ | 1 or 0 | 9-263 | Enables/disables Registration for Roaming Mobile Stations. |
| REGR? |  | 9-263 | Returns state of Roaming Mobile Stations. |
| RNUM $n$ | 0 to 1023 | 9-265 | Specifies Present RNUM. |
| RNUM? |  | 9-265 | Returns RNUM. |
| S $n$ | 1 or 0 | 9-258 | Enables/disables Serial number. |
| S? |  | 9-258 | Returns state of S . |
| SCAN: |  |  |  |
| INTerval $n$ | 0 to 15 | 9-262 | Specifies SCANINTERVAL. |
| INTerval? |  | 9-262 | Returns SCANINTERVAL. |
| OPTION $n$ | 1 or 0 | 9-262 | Enables/disables Scanning Option Indicator. |
| OPTION? |  | 9-262 | Returns state of Scanning Option Indicator. |
| SID $n$ | 0 to 32767 | 9-266 | Specifies System ID. |
| SID? |  | 9-266 | Returns System ID. |
| SOC $n$ | 0 to 4095 | 9-273 | Specifies System Operator Code. |
| SOC? |  | 9-273 | Returns System Operator Code. |
| SS SUFF $n$ | 0 to 31 | 9-261 | Specifies Signal Strength Sufficient. |
| SS_SUFF? |  | 9-261 | Returns Signal Strength Sufficient. |
| SUBaddressing $n$ | 1 or 0 | 9-261 | Enables/disables Subaddressing Support. |
| SUBaddressing? |  | 9-261 | Returns state of Subaddressing Support. |
| SUPERframe $n$ | 1 or 0 | 9-256 | Enables/disables Primary Superframe Indicator. |
| SUPERframe? |  | 9-256 | Returns state of SUPERtrame. |
| SYREG $n$ | 1 or 0 | 9-264 | Enables/disables system identification registration. |
| SYREG? |  | 9-264 | Returns state of system identification registration. |
| USER: |  |  |  |
| DATA index,word,data | $\begin{aligned} & 0 \text { to } 7, \\ & 0 \text { to } 15, \\ & 0 \text { to \#hFFFF } \end{aligned}$ | 9-329 | Specifies data selected by word used in selected user-defined message. |
| DATA? index,word | 0 to 7,0 to 15 | 9-329 | Returns data in selected set of 16 bits (word) of user-defined message referenced by index. |
| LENGth index, $n$ | 0 to 7, 0 to 255 | 9-328 | Specifies length ( $n$ ) of selected user-defined message. |
| LENGth? index | 0 to 7 | 9-328 | Returns length of selected user-defined message. |
| MSGtype index,n | 0 to 7, 0 to 63 | 9-328 | Specifies selected user-defined message types ( $n$ ). |
| MSGtype? index | 0 to 7 | 9-328 | Returns selected user-defined message types. |
| PD index, $n$ | 0 to 7,0 to 3 | 9-328 | Specifies Protocol Discriminator ( $n$ ) of selected user-defined message. |
| PD? index | 0 to 7 | 9-328 | Returns Protocol Discriminator of selected user-defined message. |
| FDCCH: |  |  |  |
| ACCess: |  |  |  |
| PE $n$ | 0 to 127 | 9-249 | Programs Partial Echo used during a Random or Reserved access. |
| PE? |  | 9-249 | Returns Partial Echo used during a Random or Reserved access. |
| SCF $n, m$ | 0 to 79,0 to 11 | 9-250 | Pre-programs Shared Channel Feedback response (m) in selected frame of a RACH. |
| SCF? $n$ | 0 to 31 | 9-250 | Returns selected SCF indexed by $n$. |
| ACCess: TYPE: |  |  |  |
| NONE |  | 9-249 | Prevents SCF from changing when an access occurs. |
| PROGram |  | 9-249 | Configures SCF as pre-programmed by CSS:FDCCH:SUPERframe:ACCess:SCF |
| RANDom |  | 9-248 | Programs Sp Tst to allow mobile station to make Random access. |
| REServed |  | 9-248 | Programs Sp Tst to allow mobile station to make Reserved access. |
| TYPE? |  | 9-249 | Returns TYPE. |
| $\mathrm{BR} \mid n, m$ | 0 to 31, 0 to 63 | 9-245 | Specifies Busy/Idle/Reserved (m) within selected Superframe slot being programmed |
| $B R 1 ? n$ | 0 to 31 | 9-245 | Returns Busy/Ide/Reserved within selected Superframe slot being programmed. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| css: |  |  |  |
| FDCCH: |  |  |  |
| DATA $n, x$ word | 0 to 31, | 9-246 | Specifies data word selected by $x$ transmitted per selected |
|  | 0 to 6, |  | Superframe slot. |
|  | 0 to \#hFFFF |  |  |
| DATA? $n, x$ | 0 to 31, 0 to 6 | 9-247 | Returns data word selected by $x$ per selected Superframe slot. |
| DVCC $n$ | 0 to 255 | 9-247 | Specifies Digital Verification Color Code. |
| DVCC? | 0 to 31 | 9-247 | Returns DVCC. |
| increment $n$ | 1 or 0 | 9-250 | Enables/disables auto-incrementing of hyperframe counter and toggling of superframe indicator. |
| NUMber? |  | 9-250 | Returns current number of selected slot in superframe being transmitted. |
| PE $n, m$ | 0 to 31, 0 to 127 | 9-246 | Specifies Partial Echo (m) within selected Superframe slot being programmed. |
| PE? $n$ | 0 to 31 | 9-246 | Returns Partial Echo within selected Superframe slot being programmed. |
| RN $n, m$ | 0 to 31, 0 to 31 | 9-246 | Specifies Received/Not Received (m) within selected Superframe slot being programmed. |
| RN? $n$ | 0 to 31 | 9-246 | Returns Received/Not Received within selected Superframe slot being programmed. |
| SFP $n, m$ | 0 to 31, 0 to 255 | 9-245 | Specifies Super Frame Phase ( $m$ ) within selected Superframe slot being programmed. |
| SFP? $n$ | 0 to 31 | 9-245 | Returns Super Frame Phase within selected Superframe slot being programmed. |
| STARt |  | 9-247 | Starts superframe generating task. |
| STOP |  | 9-247 | Stops superframe generating task. |
| TYPE $n, m$ | $\begin{aligned} & 0 \text { to } 31 ; \\ & 0=\mathrm{F}-\mathrm{BCCH}, \\ & 1=\mathrm{E}-\mathrm{BCCH}, \\ & 2=\mathrm{S}-\mathrm{BCCH}, \\ & 3=\text { SPACH, } \\ & 4=\text { RESERVED } \end{aligned}$ | 9-247 | Specifies Type ( $m$ ) of data in selected Superframe slot. |
| TYPE? $n$ | 0 to 31 | 9-247 | Returns Type of data in selected Superframe slot. |
| ZERO |  | 9-250 | Removes all data from current superframe. |
| FDTC: |  |  |  |
| AMT: |  |  |  |
| CONNect |  | 9-202 | Acknowledges Connect message from Mobile Station. |
| RELease |  | 9-202 | Acknowledges Release message from Mobile Station. |
| SERVice: |  |  |  |
| REQuest |  | 9-202 | Acknowledges a Service Request message from Mobile Station. |
| STATus |  | 9-202 | Acknowledges Status message from Mobile Station. |
| AMT? |  | 9-202 | Returns Acknowledge Message Type. |
| ATS $n$ | 0 to 15 | 9-202 | Specifies Assigned Time Slot. |
| ATS? |  | 9-202 | Returns ATS. |
| AUTHBS $n$ | 0 to 262143 | 9-203 | Specifies AUTHBS. |
| AUTHBS? |  | 9-203 | Returns AUTHBS |
| BSMC $n$ | 1 or 0 | 9-203 | Enables/disables Base Station Manufacturer Code. |
| BSMC? |  | 9-203 | Returns state of BSMC. |
| CALLING: |  |  |  |
| NAMe "string" | "Happy Anniversary" | 9-204 | Specifies string of Calling Party Name Characters. |
| NAMe: |  |  |  |
| Pln | 0 to 3 | 9-204 | Specifies Calling Party Name Presentation Indicator. |
| Pl? |  | 9-204 | Returns Calling Party Name Presentation Indicator. |
| REServed $n$ | 0 to 15 | 9-204 | Specifies Caling Paty Name Reserved field. |
| REServed? |  | 9-204 | Returns Caling Paty Name Reserved field. |
| SI $n$ | 0 to 3 | 9-205 | Specifies Calling Party Name Screening Indicator. |
| SI? |  | 9-205 | Returns Calling Party Name Screening Indicator. |
| NAMe? |  | 9-204 | Returns string of Calling Party Name Characters. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| FDTC: |  |  |  |
| CALLING: |  |  |  |
| NUM "n" | "123/456-7890" | 9-203 | Specifies Calling Party Number. |
| NUM? |  | 9-203 | Returns Calling Party Number. |
| Pln | 0 to 3 | 9-204 | Specifies Calling Party Number Presentation Indicator. |
| PI? |  | 9-204 | Returns Calling Party Number Presentation Indicator. |
| PLANid $n$ | 0 to 15 | 9-203 | Specifies Calling Party Numbering Plan ID. |
| PLANid? |  | 9-203 | Returns Calling Party Numbering Plan ID. |
| REServed $n$ | 0 to 31 | 9-203 | Specifies Calling Party Number Reserved field. |
| REServed? |  | 9-203 | Returns Calling Party Number Reserved field. |
| SIn | 0 to 3 | 9-204 | Specifies Calling Party Screening Indicator. |
| Si? |  | 9-204 | Returns Calling Party Screening Indicator. |
| TYpen | 0 to 7 | 9-203 | Specifies Calling Party Type. |
| TYpe? |  | 9-203 | Returns Calling Party Type. |
| CDL? |  | 9-205 | Returns Coded Digital Control Channel Locator. |
| CHANGE: |  |  |  |
| BSMC $n$ | 1 or 0 | 9-205 | Enables/disables Base Station Manufacturer Code Change Indicator. |
| BSMC? |  | 9-205 | Returns state of BSMC. |
| SOC $n$ | 1 or 0 | 9-205 | Enables/disables System Operator Code Change Indicator. |
| SOC? |  | 9-205 | Returns state of SOC. |
| CONTROL $n$ | 0 to 31 | 9-205 | Specifies Local Control in Local Control message. |
| CONTROL? |  | 9-205 | Returns Local Control. |
| CUSTOM: |  |  |  |
| CONTrol $n, m$ | 0 to 255, 0 to 255 | 9-206 | Specifies selected Custom Control (m). |
| CONTrol? $n$ | 0 to 255 | 9-206 | Returns selected Custom Control. |
| LENGth $n$ | 1 to 255 | 9-206 | Specifies Length of Custom Control in octets. |
| LENGth? |  | 9-206 | Returns LENGth. |
| DCCHinfo: |  |  |  |
| CHANnel $n, m$ | 0 to 2, 0 to 2047 | 9-206 | Specifies selected Digital Control Channel Information (m). |
| CHANnel? $n$ | 0 to 2 | 9-206 | Returns selected CHANnel. |
| DVCC $n, m$ | 0 to 2, 0 to 255 | 9-206 | Specifies selected Digital Verification Color Code ( $m$ ). |
| DVCC? $n$ | 0 to 2 | 9-206 | Returns selected DVCC. |
| HYPERband $n, m$ | 0 to 2, 0 to 3 | 9-206 | Specifies selected Hyperband (m). |
| HYPERband? $n$ | 0 to 2 | 9-206 | Returns selected HYPERband. |
| NuMBer $n$ | 0 to 2 | 9-207 | Specifies Length of DCCH Info. |
| NUMBer? |  | 9-207 | Returns NUMBer. |
| DELTA: |  |  |  |
| TIME $n$ | 0 to 2047 | 9-207 | Specifies Delta Time. |
| TIME? |  | 9-207 | Returns TIME. |
| DIC $n$ | 1 or 0 | 9-207 | Enables/disables Delay Interval Compensation. |
| DIC? |  | 9-207 | Returns state of Delay Interval Compensation. |
| DL $n$ | 0 to 127 | 9-207 | Specifies DCCH Locator used on FDTC. |
| DL? |  | 9-207 | Returns DCCH Locator used on FDTC. |
| DMAC $n$ | 0 to 10 | 9-207 | Specifies Digital Mobile Attenuation Code. |
| DMAC? |  | 9-207 | Returns Digital Mobile Attenuation Code. |
| DPM $n$ | 1 or 0 | 9-208 | Enables/disables Data Privacy Mode. |
| DPM? |  | 9-208 | Returns state of DPM. |
| DTX $n$ | 1 or 0 | 9-208 | Enables/disables Discontinuous Transmission. |
| DTX? |  | 9-208 | Returns state of Discontinuous Transmission. |
| DTXControl $n$ | 1 or 0 | 9-208 | Enables/disables DTX Control. |
| DTXControl? |  | 9-208 | Returns state of DTXControl. |
| DVCC $n$ | 0 to 255 | 9-208 | Specifies Digital Verification Color Code. |
| DVCC? |  | 9-208 | Returns Digital Verification Color Code. |
| ENABLE: |  |  |  |
| CALLING: |  |  |  |
| NAMe $n$ | 1 or 0 | 9-209 | Enables/disables Calling Party Name optional info. element. |
| NAMe? |  | 9-209 | Returns state of Calling Party Name optional info. element. |
| NUM $n$ | 1 or 0 | 9-209 | Enables/disables Calling Party Number optional info. element. |
| NUM? |  | 9-209 | Returns state of Calling Party Number optional info. element. |
| CAUSe $n$ | 1 or 0 | 9-209 | Enables/disables Cause optional info. element. |
| cause? |  | 9-209 | Returns state of Cause optional info. element. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| FDTC: |  |  |  |
| ENABLE: |  |  |  |
| DCCHinfo $n$ | 1 or 0 | 9-209 | Enables/disables Digital Control Channel Information optional info. element. |
| DCCHinfo? |  | 9-209 | Returns state of DCCHinfo optional info. element. |
| DELTA: |  |  |  |
| TIME $n$ | 1 or 0 | 9-209 | Enables/disables Delta Time optional into. element. |
| TIME? |  | 9-209 | Returns state of Delta Time optional info. element. |
| DIC $n$ | 1 or 0 | 9-210 | Enables/disables Delay Interval Compensation optional info. element. |
| DIC? |  | 9-210 | Returns state of Delay Interval Compensation optional info. element. |
| DMAC $n$ | 1 or 0 | 9-210 | Enables/disables Digital Mobile Attenuation Code optional info. element. |
| DMAC? |  | 9-210 | Returns state of Digital Mobile Attenuation Code optional info. element. |
| DPM $n$ | 1 or 0 | 9-210 | Enables/disables Data Privacy Mode optional info. element. |
| DPM? |  | 9-210 | Returns state of Data Privacy Mode optional info. element. |
| DTX $n$ | 1 or 0 | 9-210 | Enables/disables Discontinuous Transmission optional info. element. |
| DTX? |  | 9-210 | Returns state of Discontinuous Transmission optional info. element. |
| HYPERband: |  |  |  |
| TARGet $n$ | 1 or 0 | 9-210 | Enables/disables Target Hyperband optional info. element. |
| LDP: |  |  |  |
|  |  |  |  |
| BSACK $n$ | 1 or 0 | 9-210 | Enables/disables Last Decoded Parameter optional info. element in Base Station Acknowledgment message. |
| BSACK? |  | 9-210 | Returns state of Last Decoded Parameter optional info. element for BSACK message. |
| FLASHACK $n$ | 1 or 0 | 9-211 | Enables/disables Last Decoded Parameter optional info. element in Flash Acknowledgment message. |
| FLASHACK? |  | 9-211 | Returns state of Last Decoded Parameter optional into. element for FLASHACK message. |
| SBDA $n$ | 1 or 0 | 9-211 | Enables/disables Last Decoded Parameter optional info. element in Send Burst DTMF Acknowledge message. |
| SBDA? |  | 9-211 | Returns state of Last Decoded Parameter optional info. element for SBDA message. |
| MEMC $n$ | 1 or 0 | 9-211 | Enables/disables Message Encryption Mode C optional info. element. |
| MEMC? |  | 9-211 | Returns state of MEMC optional info. element. |
| CENTer: |  |  |  |
| ADDRess $n$ | 1 or 0 | 9-211 | Enables/disables Message Center Address optional info. element. |
| ADDRess? |  | 9-211 | Returns state of Message Center Address optional info. element. |
| MSGWTG $n$ | 1 or 0 | 9.211 | Enables/disables Other Messages Waiting Info optional info. element. |
| MSGWTG? |  | 9-211 | Returns state of MSGWTG optional info. element. |
| NOMW $n$ | 1 or 0 | 9-212 | Enables/disables Number of Messages Waiting optional info. element. |
| NOMW? |  | 9-212 | Returns Number of Messages Waiting optional info. element. |
| RFCHAN $n, x$ | 0 to 11, 1 or 0 | 9-212 | Enables/disables selected RF Channel index optional info. element. |
| RFCHAN? $n$ | 0 to 11 | 9-212 | Returns state of selected RF Channel index optional info. element. |
| SIGNAL $n$ | 1 or 0 | 9-212 | Enables/disables Signal optional info. element. |
| SIGNAL? |  | 9-212 | Returns state of Signal optional info. element. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| FDTC: |  |  |  |
| ENABLE: |  |  |  |
| STATUS: |  |  |  |
| CMODE $n$ | 1 or 0 | 9-212 | Enables/disables Call Mode optional info. element in Status Request message. |
| CMODE? |  | 9-212 | Returns state of Call Mode optional info. element. |
| ESN $n$ | 1 or 0 | 9-212 | Enables/disables Electronic Serial Number optional info. element in Status Request message. |
| ESN? |  | 9-212 | Returns state of Electronic Serial Number optional info. element. |
| MEM $n$ | 1 or 0 | 9-212 | Enables/disables Message Encryption Mode optional info. element. |
| MEM? |  | 9-212 | Returns state of Message Encryption Mode optional info. element. |
| TASK $n$ | 1 or 0 | 9-213 | Enables/disables Task Status optional info. element. |
| TASK? |  | 9-213 | Returns state of Task Status optional info. element. |
| TIn | 1 or 0 | 9-213 | Enables/disables Terminal Information optional info. eiement. |
| TI? |  | 9-213 | Returns state of Terminal Information optional info. element. |
| VPM $n$ | 1 or 0 | 9-213 | Enables/disables Voice Privacy Mode optional info. element. |
| VPM? |  | 9-213 | Returns state of Voice Privacy Mode optional info. element. |
| TA $n$ | 1 or 0 | 9-213 | Enables/disables Time Alignment optional info. element. |
| TA? |  | 9-213 | Returns state of Time Alignment optional info. element. |
| USER: |  |  |  |
| ADDRess $n$ | 1 or 0 | 9-213 | Enables/disables User Destination Address optional info. element. |
| ADDRess? |  | 9-213 | Returns state of User Destination Address optional info. element. |
| SUBaddress $n$ | 1 or 0 | 9-213 | Enables/disables User Destination Subaddress optional info. element. |
| SUBaddress? |  | 9-213 | Returns state of User Destination Subaddress optional info. element. |
| ORIG: |  |  |  |
| ADDRess $n$ | 1 or 0 | 9-214 | Enables/disables User Originating Address optional info. element. |
| ADDRess? |  | 9-214 | Returns state of User Originating Address optional info. element. |
| PRESentation $n$ | 1 or 0 | 9-214 | Enables/disables User Originating Address Presentation Indicator optional info. element. |
| PRESentation? |  | 9-214 | Returns state of User Originating Address Presentation Indicator optional info. element. |
| SUBaddress $n$ | 1 or 0 | 9-214 | Enables/disables User Originating Subaddress optional info. element. |
| SUBaddress? |  | 9-214 | Returns state of User Originating Subaddress optional info. element. |
| VMI $n$ | 1 or 0 | 9-214 | Enables/disables Voice Mode optional info. element. |
| VMI? |  | 9-214 | Returns state of Voice Mode optional info. element. |
| FACCH: or SACCH: |  |  |  |
| ALERT |  | 9-199 | Sends Alert with Information message. |
| AUDIT |  | 9-199 | Sends Audit message. |
| BSACK |  | 9-199 | Sends Base Station Acknowledgment message. |
| BSCHALCON |  | 9-199 | Sends Base Station Challenge Contirmation message. |
| BSMC |  | 9-199 | Sends BSMC Message Delivery message. |
| CAPability: |  |  |  |
| REQuest |  | 9-200 | Sends Capability Update Request message. |
| RESPonse |  | 9-200 | Sends Capability Update Response message. |
| DEDicated: |  |  |  |
| HANDoff |  | 9-200 | Sends Dedicated DTC Handoff message. |
| FLASH |  | 9-200 | Sends Flash with Information message. |
| FLASHACK |  | 9.200 | Sends Flash Acknowledgment message. |
| HANDoff |  | 9-200 | Sends Handoff message. |
| HYPERband: MEASure |  | 9-200 | Sends Hyperband Measurement message. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| css: |  |  |  |
| FDTC: |  |  |  |
| FACCH: or SACCH: |  |  |  |
| LC |  | 9-200 | Sends Local Control message. |
| MAINTenance |  | 9-200 | Sends Maintenance message. |
| MEASure |  | 9-200 | Sends Measurement message. |
| PLC |  | 9-200 | Sends Physical Layer Control message. |
| PU |  | 9-200 | Sends Parameter Update message. |
| RAW $x_{1}, x_{2}, x_{3}, x_{4}, x_{5}, x_{6}, \ldots, x_{n}$ RDATA: | $x=0$ to 255 | 9-201 | Generates user-defined message. |
| ACCept |  | 9-201 | Sends R-DATA ACCEPT message. |
| MESSage |  | 9-201 | Sends R-DATA message. |
| REJect |  | 9-201 | Sends R-DATA REJECT message. |
| REAUTHentication |  | 9-201 | Sends Re-Authentication message. |
| RELease |  | 9-201 | Sends Release message. |
| SBDA |  | 9-201 | Sends Send Burst DTMF Acknowledge message. |
| SCDA |  | 9-201 | Sends Send Continuous DTMF Acknowledge message. |
| SERVice: |  |  |  |
| RESPonse |  | 9-201 | Sends Service Response message. |
| SMEASure |  | 9-201 | Sends Stop Measurement message. |
| SOC |  | 9-202 | Sends SOC Message Delivery message. |
| SR |  | 9-202 | Sends Status Request message. |
| SSDUP |  | 9-202 | Sends Shared Secret Data Update message. |
| UCHAL |  | 9-202 | Sends Unique Challenge message. |
| HANDoff: 0 l |  |  |  |
| CHANnel $n$ | 0 to 2047 | 9-214 | Specifies Analog Voice or Digital Traffic Channel for Handoff. |
| CHANnel? |  | 9-214 | Returns Channel for Handoff. |
| HYPERband: |  |  |  |
| BAND $n, m$ | 0 to 23, 0 to 3 | 9-215 | Specifies the selected Hyperband (m). |
| BAND? $n$ | 0 to 23 | 9-215 | Returns selected Hyperband. |
| CHANnel $n$,m | 0 to 23, 0 to 2047 | 9-215 | Specifies selected Hyperband channels ( $m$ ). |
| CHANnel? $n$ | 0 to 23 | 9-215 | Returns selected Hyperband channels. |
| NUMBer $n$ | 0 to 24 | 9-215 | Specifies Number of Hyperband channeis. |
| NUMBer? |  | 9-215 | Returns Number of Hyperband channels. |
| TARGet $n$ | 0 to 3 | 9-215 | Specifies Target Hyperband. |
| TARGet? |  | 9-215 | Returns Target Hyperband. |
| LDP $n$ | 0 to 15 | 9-215 | Specifies Last Decoded Parameter. |
| LDP? |  | 9-215 | Returns Last Decoded Parameter. |
| MAP: |  |  |  |
| ARQ $n$ | 1 or 0 | 9-217 | Enables/disables FACCH/SACCH ARQ Map. |
| ARQ? |  | 9-217 | Returns state of FACCH/SACCH ARQ Map. |
| CODER $n$ | 0 to 63 | 9-216 | Specifies Voice Coder Map. |
| CODER? |  | 9-216 | Returns Voice Coder Map. |
| MEA: |  |  |  |
| ALGORithms $n, m$ | 0 to 7,0 to 15 | 9-216 | Specifies selected Message Encryption Algorithm Map (m) indexed by n . |
| ALGORithms? $n$ |  | 9-216 | Returns Message Encryption Algorithm Map. |
| DOMAIN $n$ | 0 to 255 | 9-216 | Specities Message Encryption Algorithm Map Domain. |
| DOMAIN? |  | 9-216 | Returns Message Encryption Algorithm Map Domain. |
| MEK $n$ | 0 to 15 | 9-216 | Specifies Message Encryption Key Map. |
| MEK? |  | 9-216 | Returns Message Encryption Key Map. |
| SMS $n$ | 0103 | 9-217 | Specifies SMS Map. |
| SMS? |  | 9-217 | Returns SMS Map. |
| VPM $n$ | 0 to 15 | 9-216 | Specifies Voice Privacy Mode Map. |
| VPM? |  | 9-216 | Returns Voice Privacy Mode Map. |
| MEM $n$ | 1 or 0 | 9-217 | Enables/disables Message Encryption Mode. |
| MEM? |  | 9-217 | Returns state of Message Encryption Mode. |
| MEMC: |  |  |  |
| MEA $n$ | 0 to 3 | 9-217 | Specifies Message Encryption Mode C Algorithm. |
| MEA ? |  | 9-217 | Returns Message Encryption Mode C Algorithm. |
| MED $n$ | 0 to 3 | 9-217 | Specifies Message Encryption Mode C Domain. |
| MED? |  | 9-217 | Returns Message Encryption Mode C Domain. |
| MEK $n$ | 0 to 3 | 9-217 | Specifies Message Encryption Mode C Key. |
| MEK? |  | 9-217 | Returns Message Encryption Mode C Key. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| FDTC: <br> MESSage: |  |  |  |
|  |  |  |  |
| CENTer: |  |  |  |
| ADDRess " $n$ " |  | 9-218 | Specifies Address. |
| ADDRess? |  | 9-218 | Returns ADDRess. |
| ENCoding $n$ | 1 or 0 | 9-218 | Enables/disables Address Encoding. |
| ENCoding? |  | 9-218 | Returns state of Address Encoding. |
| PLANid $n$ | 0 to 15 | 9-218 | Specifies Numbering Plan ID. |
| PLANid? |  | 9-218 | Returns Numbering Plan ID. |
| TYPE $n$ | 0 to 7 | 9-218 | Specifies Type of Number. |
| TYPE? |  | 9-218 | Returns Type of Number. |
| MSGWTG: |  |  |  |
| MESSage: |  |  |  |
| NUMBer $n, m$ | 0 to 15, 0 to 63 | 9-218 | Specifies selected Number of Messages Waiting ( $m$ ). |
| NUMBer? $n$ | 0 to 15 | 9-218 | Returns selected Number of Messages Waiting. |
| TYPE $n, m$ | 0 to 15, 0 to 15 | 9-219 | Specifies selected Messages Waiting Type (m). |
| TYPE? $n$ | 0 to 15 | 9-219 | Returns selected Messages Waiting Type. |
| NUMBer $n$ | 1 to 16 | 9-219 | Specifies Length of Message Waiting info. |
| NUMBer? |  | 9-219 | Returns Length of Message Waiting info. |
| NOMW $n$ | 0 to 63 | 9-219 | Specifies Number of Messages Waiting. |
| NOMW? |  | 9-219 | Returns Number of Messages Waiting. |
| PV $n$ | 0 to 15 | 9-219 | Specifies Protocol Version. |
| PV? |  | 9-219 | Returns Protocol Version. |
| PVI $n$ | 1 or 0 | 9-219 | Enables/disables Protocol Version Indicator. |
| PVI? |  | 9-219 | Returns state of Protocol Version Indicator. |
| RANDRA $n$ | 0 to \#hFFFFFFFFF | 9-220 | Specifies RANDRA. |
| RANDRA? ${ }^{\text {RANDSSD }}$ " ${ }^{\text {" }}$ |  | 9-220 | Returns RANDRA. |
| RANDSSD " $n$ " | Example: <br> "4A59BE232F9C26" | 9-220 | Specifies 56 bit Random Number sent in Shared Secret Data |
|  |  | 9-220 | Update message. |
| RANDSSD? |  | 9-220 | Returns Shared Secret Data 56 bit Random Number. |
| RANDU $n$ | 0 to 16777215 | 9-220 | Sets 24 bit Random Number sent in Unique Challenge message. |
| RANDU? |  | 9-220 | Returns Unique Challenge 24 bit Random Number. |
| RATe $n$ | 0 = Full, 1 = Half | 9-220 | Sets Channel Rate. |
| RATe? |  | 9-220 | Returns Channel Rate. |
| RCAUSen | 0 to 255 | 9-221 | Specifies R-Cause. |
| RCAUSe: |  |  |  |
| REServed $n$ | 1 or 0 | 9-221 | Specifies R-Cause Reserved field. |
| REServed? |  | 9-221 | Returns R-Cause Reserved field. |
| RCAUSe? |  | 9-221 | Returns RCAUSE. |
| RDATA UNIT: |  |  |  |
| HLP: |  |  |  |
| DATA $n, m$ | 0 to 253, 0 to 253 | 9-221 | Specifies selected Higher Layer Protocol Data Unit ( $m$ ). |
| DATA? $n$ | 0 to 253 | 9-221 | Returns selected Higher Layer Protocol Data Unit. |
| IDentifier $n$ | 0 to 255 | 9-221 | Specifies Higher Layer Protocol Identifier. |
| IDentifier? |  | 9-221 | Returns Higher Layer Protocol Identifier. |
| LENGth $n$ | 1 to 255 | 9-221 | Specifies Length of R-Data Unit info content. |
| LENGth? |  | 9-221 | Returns Length of R-Data Unit info content. |
| RFCHAN $n$,m | 0 to 23, 0 to 2047 | 9-222 | Specifies selected RF Channel Number (m). |
| RFCHAN? $n$ | 0 to 23 | 9-222 | Returns selected RF Channel Number. |
| RN $n$ | 0 to 15 | 9-222 | Specifies Request Number. |
| RN? |  | 9-222 | Returns Request Number. |
| RTRANSaction $n$ | 0 to 255 | 9-222 | Specifies R-Transaction Identifier. |
| RTRANSaction? |  | 9-222 | Returns R-Transaction Identifier. |
| SBI $n$ | 0 to 3 | 9-222 | Specifies Shortened Burst Indicator. |
| SBI? |  | 9-222 | Returns Shortened Burst Indicator. |
| SERVice: |  |  |  |
| CAUSe $n, m$ | 0 to 9,0 to 255 | 9-223 | Specifies selected Cause (m). |
| CAUSe: |  |  |  |
| NUMBer $n$ | 0 to 10 | 9-223 | Specifies number of instances of Cause. |
| NUMBer? |  | 9-223 | Returns number of instances of Cause. |
| cause?n | 0 to 9 | 9-223 | Returns selected Cause. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| FDTC: |  |  |  |
| SERVice: |  |  |  |
| CODE $n$ | 0 to 15 | 9-223 | Specifies Service Code. |
| CODE? |  | 9-223 | Returns Service Code. |
| SET: |  |  |  |
| TA $n$ | 0 to 60 | 9-199 | Specifies time alignment from SOR in half symbols. |
| SIGNAL: |  |  |  |
| CADENCE $n$ | 0 to 63 | 9-224 | Sets on-off pattern of Alert tone. |
| CADENCE? |  | 9-224 | Returns Alert tone on-off pattern. |
| PITCH $n$ | 0 to 3 | 9-224 | Sets Pitch of Alert tone. |
| PITCH? |  | 9-224 | Returns Alert tone Pitch. |
| SLOT $n$ | 1 to 3 | 9-224 | Specifies Timeslot. |
| SLOT? |  | 9-224 | Returns Timeslot. |
| SOC $n$ | 1 or 0 | 9-224 | Enables/disables System Operator Code. |
| SOC? |  | 9-224 | Returns state of System Operator Code. |
| STARt |  | 9-199 | Starts Sp Tst transmitting on Forward Digital Traffic Channel. |
| STOP |  | 9-199 | Stops Forward Digital Traffic Channel. |
| SUPPort: |  |  |  |
| IRA $n$ | 1 or 0 | 9-224 | Enables/disables IRA Support. |
| IRA? |  | 9-224 | Returns state of IRA Support. |
| TA $n$ | 0 to 31 | 9-225 | Specifies Time Alignment. |
| TA? |  | 9-225 | Returns Time Alignment. |
| TALK: |  |  |  |
| DELAY $n$ | 0 to 250 | 9-231 | Specifies Delay added between receiving and transmitting 20 ms intervals. |
| START |  | 9-231 | Starts Talkback operation. |
| STOP |  | 9-231 | Stops Talkback operation. |
| TASK $n$ | 0 to 7 | 9-225 | Specifies Task Status. |
| TASK? |  | 9-225 | Returns Task Status. |
| TIn | 0 to 6 | 9-225 | Specifies Timeslot Indicator (0 is analog). |
| TI? |  | 9-225 | Returns Timeslot Indicator. |
|  |  |  |  |
| DEST: |  |  |  |
| ADDRess " $n$ " |  | 9-226 | Specifies Address. |
| ADDRess? |  | 9-226 | Returns ADDRess. |
| ENCoding $n$ | 1 or 0 | 9-226 | Enables/disables Address Encoding. |
| ENCoding? |  | 9-226 | Returns state of Address Encoding. |
| PLANid $n$ | 0 to 15 | 9-226 | Specifies Numbering Plan ID. |
| PLANid? |  | 9-226 | Returns Numbering Plan ID. |
| SUBaddress: |  |  |  |
| ADDRess $n, m$ | 0 to 19, 0 to 255 | 9-227 | Specifies selected Subaddress (m). |
| ADDRess? $n$ | 0 to 19 | 9-227 | Returns selected Subaddress. |
| LENGth $n$ | 0 to 21 | 9-227 | Specifies Length of subaddress info content. |
| LENGth? |  | 9-227 | Returns Length of subaddress info content. |
| ODD_EVEN $n$ | 1 or 0 | 9-227 | Enables/disables Odd/Even Indicator. |
| ODD_EVEN? |  | 9-227 | Returns state of Odd/Even Indicator. |
| REServed $n$ | 0 to 15 | 9-227 | Specifies number of Subaddress Reserved fields. |
| REServed? |  | 9-227 | Returns number of Subaddress Reserved fields. |
| TYPE $n$ | 0 to 7 | 9-227 | Specifies Type of Subaddress. |
| TYPE? |  | 9-227 | Returns Type of Subaddress. |
| TYPE $n$ | 0 to 7 | 9-226 | Specifies Type of Number. |
| TYPE? |  | 9-226 | Returns Type of Number. |
| ORIG: |  |  |  |
| ADDRess " $n$ " |  | 9-228 | Specifies Address. |
| ADDRess? |  | 9-228 | Returns ADDRess. |
| ENCoding $n$ | 1 or 0 | 9-228 | Enables/disables Address Encoding. |
| ENCoding? |  | 9-228 | Returns state of Address Encoding. |
| PLANid $n$ | 0 to 15 | 9-228 | Specifies Numbering Plan ID. |
| PLANid? |  | 9-228 | Returns Numbering Plan ID. |

CSS:
FDTC:
TC:
USER:
ORIG:
PRESentation:
PI $n$
P|?
REServed $n$
REServed?
SI $n$
SI?
SUBaddress:
ADDRess $n$
$P \mid n \quad 0$ to 3
PRESentation:
PI $n$
P|?
REServed $n$
REServed?
SI $n$
SI?
SUBaddress:
ADDRess $n$
0 to 15
0 to 3
PRESentation:
PI $n$
P|?
REServed $n$
REServed?
SI $n$
SI?
SUBaddress:
ADDRess $n$
ADDRess n,m
ADDRess? $n$
LENGth $n$
LENGth?
ODD EVEN $n$
ODD EVEN?
ODD EVEN $n$
ODD EVEN?
REServed $n$
REServed?
TYPE $n$
TYPE?
TYPE $n$
TYPE?
VMI:
PM_Vn 0 to 7
PM_V?
$\mathrm{VC} n$
VC?
VPM $n \quad 1$ or 0
VPM?
FOCC:
$\begin{array}{ll}\text { ASYNC } n & 1 \text { or } 0 \\ \text { ASYNC? }\end{array}$
ASYNC $n$
ASYNC?
AUTH $n \quad 1$ or 0
AUTH?
B_In
1 or 0
CMAC $n$
CMAC?
CMAX $n$
CMAX?
DCC $n$
DCC?
DCCHan $n$
DCCHan?
DPRIVacy $n$
REServed $n \quad 0$ to 15
PRESentation:
PI $n$
P|?
REServed $n$
REServed?
SI $n$
SI?
SUBaddress:
ADDRess $n$
PRESentation:
PI $n$
P|?
REServed $n$
REServed?
SI $n$
SI?
SUBaddress:
ADDRess $n$
PRESentation:
PI $n$
P|?
REServed $n$
REServed?
SI $n$
SI?
SUBaddress:
ADDRess $n$
0 to 19,0 to 255
0 to 19
0 to 21
1 or 0
0 to 15
0 to 7
0 to 7
0 to 7
VPM $n \quad 1$ or 0
AUTH $n \quad 1$ or 0
0 to 7
1 to 32
0 to 3
1 to 1023
1 or 0
DPRIVacy?
E $n$
1 or 0
E?
EP $n$
1 or 0
EP?
G3FAX $n$
1 or 0
G3FAX?
HYPERband $n$
00 or 01
HYPERband?
N $n$
N ?
OVER:
BUILD
LENGth $n, m$
NUMber $n$
RATio n.m
0 to 4,11 to 21
- 80
9-180
9-180 Enables/disables Authentication.
9-228 Specifies Presentation Indicator.
0 to 3
0 to 3
1 to 32
9-180 Sets Enables/disables Busy-Idle bit.
9-180
Specifies Control Mobile Attenuation Code
9-180
Returns Control Mobile Attenuation Code.
$\begin{array}{ll}\text { 9-180 } & \text { Specifies Control Mobile Attenuation Code. } \\ \text { 9-180 } & \text { Returns Control Mobile Attenuation Code. }\end{array}$
$\begin{array}{ll}\text { 9-180 } & \text { Specifies Control Mobile Attenuation Code } \\ \text { 9-180 } & \text { Returns Control Mobile Attenuation Code. }\end{array}$
9-180 Specifies Maximum Number of Channels scanned.
9-180 Returns Maximum Number of Channels scanned.
9-180 Specifies Digital Color Code.
9-180 Returns Digital Color Code.
0 to 4
1 to 4, 1 to 65535


Specifies Presentation Indicator.
9-228 Returns Presentation Indicator.
9-229 Specifies number of Reserved fields.
9-229 Returns number of Reserved fields
$\begin{array}{ll}\text { 9-229 } & \text { Returns number of Reserved } \\ \text { 9-229 } & \text { Specifies Screening Indicator. }\end{array}$
9-229 Returns Screening Indicator.
9-230
9-230
Specifies selected User Originating Subaddress ( $m$ ).
Returns selected User Originating Subaddress.
9-229 Specifies Length of User Originating subaddress info content.
9-229 Returns Length of User Originating subaddress info content.
9-229 Enables/disables Odd/Even Indicator.
9-229 Returns state of Odd/Even Indicator.
9-230 Specifies number of subaddress Reserved fields.
9-230
9-230 Returns number of subaddress Reserved fields.
9-229 Specifies Type of subaddress.
9-229 Returns Type of subaddress.
9-228 Specifies Type of Number.
9-228 Returns Type of Number.
9-230

Specifies Voice Privacy Mode.

Enables/disables Voice Privacy Mode.
9-230 Returns state of Voice Privacy Mode.
9-180
9-180
Sets ASYNC bit in the DCCH information word.
9-180 Returns state of Authentication.
9-181
9-182 Specifies Number of Paging Channels scanned
9-181 Specifies Channel Number in DCCH information word.
9-181 Returns Channel Number in DCCH information word.
9-181 Enables/disables Data Privacy in DCCH information word
9-181 Returns state of DPRIVacy in DCCH information word.
9-181 Returns state of DPRIVacy in DCCH information word.
9-181 Enables/disables Extended Address.
9-181 Returns state of Extended Address.
9-181 Enables/disables Extended Protocol.
9-181 Returns state of Extended Protocol.
9-181 Enables/disables G3 Fax in DCCH information word.
9-181 Returns state of G3FAX setting in DCCH information word.
9-181 $\quad$ Returns state of G3FAX setting in DCCH information
$(00=800 \mathrm{MHz} ; 01=1900 \mathrm{MHz})$.
Returns Hyperband in DCCH information word
Specifies Number of Paging Channels scanned.
9-182 Returns Number of Paging Channels scanned.
9-182 Constructs Primary and Secondary cycles.
9-183
Specifies length ( $m$ ), in word slots, of selected cycle.
9-182 Specifies number of secondary cycles programmed.
9-183

- +81
$9-181$
$+81$
9-181 Returns state of DPRIVacy in DCCH information word.
9-181 Enables/disables Extended Address.
9-181 Returns state of Extended Address.
9-181 Enables/disables Extended Protocol.
9-181 Returns state of Extended Protocol.
9-181 Enables/disables G3 Fax in DCCH information word.
9-181 Returns state of G3FAX setting in DCCH information word.
9-181 Specifies Hyperband in DCCH information word $(00=800 \mathrm{MHz} ; 01=1900 \mathrm{MHz}$ ).
Returns Hyperband in DCCH information word.
Specifies Number of Paging Channels scanned.
Returns Number of Paging Channels scanned.

Specifies number of secondary cycles programmed.
9-183 Specifies number ( $m$ ) of primary cycles to transmit for selected secondary cycle.

| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| FOCC: |  |  |  |
| OVER: |  |  |  |
| SELect $n$ | $0=$ Primary, | 9-183 | Selects cycle to be built. |
|  | $1=1$ st Secondary, |  |  |
|  | $2=2 \mathrm{nd}$ Secondary, |  |  |
|  | 3 = 3rd Secondary, |  |  |
|  | $4=4$ th Secondary |  |  |
| $\mathrm{PCl} n$ | 1 or 0 | 9-183 | Enables/disables Protocol Capability Indicator. |
| PCl ? |  | 9-183 | Returns state of Protocol Capability Indicator. |
| RAW $n, x$ | 0 to 21, | 9-183 | Programs RAW word ( $x$ ) into selected word slot ( $n$ ) in |
|  | 0 to \#hFFFFFFFF |  | selected cycle. |
| RCF $n$ | 1 or 0 | 9-183 | Enables/disables Read Control Filler. |
| RCF? |  | 9-183 | Returns state of Read Control Filler. |
| REGH $n$ | 1 or 0 | 9-184 | Enables/disables Home Registration. |
| REGH? |  | 9-184 | Returns state of Home Registration. |
| REGID $n$ | 0 to \#hFFFFF | 9-184 | Specifies REGID in Registration ID message. |
| REGID? |  | 9-184 | Returns REGIDin Registration ID message. |
| REGR $n$ | 1 or 0 | 9-184 | Enables/disables Roaming Registration. |
| REGR? |  | 9-184 | Returns state of Roaming Registration. |
| S $n$ | 1 or 0 | 9-184 | Enables/disables Serial Number. |
| S? |  | 9-184 | Returns state of Serial Number. |
| SDCC1 $n$ | 0 to 3 | 9-184 | Specifies Supplementary Digital Color Code 1. |
| SDCC1? |  | 9-184 | Returns Supplementary Digital Color Code 1. |
| SDCC2 $n$ | 0 to 3 | 9-184 | Specifies Supplementary Digital Color Code 2. |
| SDCC2? |  | 9-184 | Returns Supplementary Digital Color Code 2. |
| SID $n$ | 0 to 32767 | 9-185 | Specifies System ID Number (14 most significant digits). |
| SID? |  | 9-185 | Returns System ID Number. |
| WFOM $n$ |  | 9-185 | Enables/disables Wait For Overhead Message. |
| WFOM? |  | 9-185 | Returns state of Wait For Overhead Message. |
| FVC: |  |  |  |
| AUTHBS $n$ | 0 to 262143 | 9-194 | Specifies AUTHBS value. |
| AUTHBS? |  | 9-194 | Returns AUTHBS |
| CALLING: |  |  |  |
| NUM "n" | "123/456-7890" | 9-194 | Specifies Calling Party Number. |
| NUM? |  | 9-194 | Returns Calling Party Number. |
| Pln | 0 to 3 | 9-194 | Specifies Calling Party Number Presentation Indicator. |
| PI? |  | 9-194 | Returns Calling Party Number Presentation Indicator. |
| SI $n$ | 0 to 3 | 9-194 | Specifies Calling Party Screening Indicator. |
| SI? |  | 9-194 | Returns Calling Party Screening Indicator. |
| DMAC $n$ | 0 to 10 | 9-194 | Specifies Digital Mobile Attenuation Code. |
| DMAC? |  | 9-194 | Returns Digital Mobile Attenuation Code. |
| DVCC $n$ | 1 to 255 | 9-194 | Specifies Digital Verification Color Code. |
| DVCC? |  | 9-194 | Returns Digital Verification Color Code. |
| EF $n$ | 1 or 0 | 9-195 | Enables/disables Extended Protocol Forward Channel Indicator. |
| EF? |  | 9-195 | Returns Extended Protocol Forward Channel Indicator. |
| ENABLE: |  |  |  |
| VOICEPrivacy $n$ | 1 or 0 | 9-195 | Enables/disables Voice Privacy in the Call Mode Acknowledgment message. |
| VOICEPrivacy? |  | 9-195 | Returns state of Voice Privacy. |
| HANDoff: |  |  |  |
| CHANnel $n$ | 0 to 2047 | 9-195 | Specifies Analog Voice or Digital Traffic Channel for Handoff. |
| CHANnel? |  | 9-195 | Returns Channel for Handoff. |
| HYPERband $n$ | 0 to 3 | 9-195 | Specifies Hyperband. |
| HYPERband? |  | 9.195 | Returns Hyperband. |
| LOCAL $n$ | 0 to 31 | 9-195 | Specifies Local Control in Local Control message. |
| LOCAL? |  | 9-195 | Returns Local Control. |
| MEM $n$ | 1 or 0 | 9-195 | Enables/disables Message Encryption Mode. |
| MEM? |  | 9-195 | Returns state of Message Encryption Mode. |
| MT $n$ | 0 to 31 | 9-196 | Specifies Message Type. |
| MT? |  | 9-196 | Returns Message Type. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| FVC |  |  |  |
| ORDER: |  |  |  |
| ALERT |  | 9-190 | Sends Alert order. |
| ALERTWinfo |  | 9-190 | Sends Alert with Information order. |
| ASYNC_PAGE |  | 9-190 | Sends Page order (Async Data). |
| AUDIT |  | 9-190 | Sends Audit order. |
| BSCHALCON |  | 9-190 | Sends Base Station Challenge Confirmation order. |
| CALLMODEACK |  | 9-190 | Sends Call Mode Acknowledgment order. |
| DISDTMF |  | 9-190 | Sends Disable DTMF order. |
| DISMEM |  | 9-190 | Sends Message Encryption Mode order with disable indication. |
| ENAMEM |  | 9-190 | Sends Message Encryption Mode order with enable indication. |
| FLASHWinto |  | 9-191 | Sends Flash with information order. |
| G3_MSG_WTG |  | 9-191 | Sends G3-Fax Message Waiting order. |
| G3_PAGE |  | 9-191 | Sends Page order (Group 3 Fax). |
| HANDoff |  | 9-191 | Sends Handoff order. |
| IS641 |  |  |  |
| SLOT1 |  | 9-191 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 1, Full-Rate message type (VSELP). |
| SLOT2 |  | 9-191 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 2, Full-Rate message type (VSELP). |
| SLOT3 |  | 9-191 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 3, Full-Rate message type (VSELP). |
| SLOT1 |  | 9-191 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 1, Full-Rate message type (ACELP). |
| SLOT2 |  | 9-191 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 2, Full-Rate message type (ACELP). |
| SLOT3 |  | 9-191 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 3 , Full-Rate message type (ACELP). |
| LC |  | 9-192 | Sends Local Control order. |
| MAINTenance |  | 9-192 | Sends Maintenance order. |
| MSGWTG |  | 9-192 | Sends Message Waiting order. |
| PAGE |  | 9-192 | Sends Page order. |
| PU |  | 9-192 | Sends Parameter Update order. |
| PWRLVL |  | 9-192 | Sends Power Level order. |
| RELease |  | 9-192 | Sends Release order. |
| RELEASE_COMPlete |  | 9-192 | Send Release Complete with Information order. |
| RELEASE_Winfo |  | 9-192 | Sends Release with DCCH Information order. |
| SALERT |  | 9-192 | Sends Stop Alert order. |
| SLOT1 |  | 9-193 | Sends Handoff to Digital Traffic Channel on Timeslot 1 order. |
| SLOT2 |  | 9-193 | Sends Handoff to Digital Traffic Channel on Timeslot 2 order. |
| SLOT3 |  | 9-193 | Sends Handoff to Digital Traffic Channel on Timeslot 3 order. |
| SMS_MSG_WTG |  | 9-193 | Sends SMS Message Waiting order. |
| SNDAddr |  | 9-193 | Sends Send Called Address order. |
| SNRreq |  | 9-193 | Sends Serial Number Request order. |
| SSDUP |  | 9-193 | Sends Shared Secret Data Update order. |
| UCHAL |  | 9-193 | Sends Unique Challenge order. |
| VOICE_MSG_WTG |  | 9-193 | Sends Voice Message Waiting order. |
| PM $n$ | 1 or 0 | 9-196 | Enables/disables Privacy Mode. |
| PM? |  | 9-196 | Returns state of Privacy Mode. |
| PSCC $n$ | 0 to 2 | 9-196 | Specifies Present SAT Color Code. |
| PSCC? |  | 9-196 | Returns Present SAT Color Code. |
| PVIn | 1 or 0 | 9-196 | Enables/disables Protocol Version Indicator. |
| PVI? |  | 9-196 | Returns state of PVI. |
| PWRLVL $n$ | 0 to 7 | 9-196 | Specifies requested Mobile Station Power Level in Power Level message. |
| PWRLVL? |  | 9-196 | Returns requested Power Level. |
| RANDSSD " $n$ " | Example: <br> "4A59BE232F9C26" | 9-196 | Specifies 56 bit Random Number sent in Shared Secret Data Update message. |
| RANDSSD? |  | 9-196 | Returns Shared Secret Data 56 bit Random Number. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| FVC: |  |  |  |
| RANDU $n$ | 0 to 16777215 | 9-197 | Specifies 24 bit Random Number sent in Unique Challenge message. |
| RANDU? |  | 9-197 | Returns Unique Challenge 24 bit Random Number. |
| SAT $n$ | 0 or 5965 to 6035 | 9-197 | Specifies SAT frequency on FVC. |
| SAT? |  | 9-197 | Returns SAT. |
| SBI $n$ | 0 to 3 | 9-197 | Specifies Shortened Burst Indicator. |
| SBI? |  | 9-197 | Returns Shortened Burst Indicator. |
| SCC $n$ | 0 to 2 | 9-197 | Specifies Supervisory Audio Tone Color Code. |
| SCC? |  | 9-197 | Returns Supervisory Audio Tone Color Code. |
| SIGNAL: |  |  |  |
| CADENCE $n$ | 0 to 63 | 9-197 | Specifies on-off pattern of Alert tone. |
| CADENCE? |  | 9-197 | Returns Alert tone on-off pattern. |
| PITCH $n$ | 0 to 3 | 9-197 | Specifies Pitch of Alert tone. |
| PITCH? |  | 9-197 | Returns Alert tone pitch. |
| STARt |  | 9-190 | Starts Sp Tst transmitting on Forward Voice Channel. |
| STOP |  | 9-190 | Stops Forward Voice Channel. |
| TA $n$ | 0 to 31 | 9-198 | Specifies Time Alignment. |
| TA? |  | 9-198 | Returns Time Alignment. |
| VMAC $n$ | 0 to 7 | 9-198 | Specifies Voice Mobile Attenuation Code. |
| VMAC? |  | 9-198 | Returns Voice Mobile Attenuation Code. |
| GLACT: |  |  |  |
| ACTion: |  |  |  |
| ACCess $n$ | 1 or 0 | 9-232 | Enables/disables Access Attempt Parameters. |
| ACCess? |  | 9-232 | Returns state of Access Attempt Parameters message Enable. |
| BIS $n$ | 1 or 0 | 9-232 | Enables/disables Access Type Parameters message. |
| BIS? |  | 9-232 | Returns state of Access Type Parameters message Enable. |
| LOCAID $n$ | 1 or 0 | 9-232 | Enables/disables Location Area message. |
| LOCAID? |  | 9-232 | Returns state of Location Area message Enable. |
| Localin | 1 or 0 | 9-232 | Enables/disables Local Control 1 message. |
| LOCAL1? |  | 9-232 | Returns state of Local Control 1 message Enable. |
| LOCAL2 $n$ | 1 or 0 | 9-232 | Enables/disables Local Control 2 message. |
| LOCAL2? |  | 9-232 | Returns state of Local Control 2 message Enable. |
| NEWACC $n$ | 1 or 0 | 9-232 | Enables/disables New Access Channel Set message. |
| NEWACC? |  | 9-232 | Returns state of New Access Channel Set message Enable. |
| OLC $n$ | 1 or 0 | 9-233 | Enables/disables Overload Control message. |
| OLC? |  | 9.233 | Returns state of Overload Control message Enable. |
| RANDA $n$ | 1 or 0 | 9-233 | Enables/disables Random Challenge A message. |
| RANDA? |  | 9-233 | Returns state of Random Challenge A message Enable. |
| RANDB $n$ | 1 or 0 | 9-233 | Enables/disables Random Challenge B message. |
| RANDB? |  | 9-233 | Returns state of Random Challenge B message Enable. |
| REGINCR $n$ | 1 or 0 | 9-233 | Enables/disables Registration Increment message. |
| REGINCR? |  | 9-233 | Returns state of Registration Increment message Enable. |
| RESCAN $n$ | 1 or 0 | 9-233 | Enables/disables Rescan message. |
| RESCAN? |  | 9-233 | Returns state of Rescan message Enable. |
| BIS $n$ | 1 or 0 | 9-233 | Enables/disables Busy-Idle Status. |
| BIS? |  | 9-233 | Returns state of Busy-Idle Status. |
| LOCAID $n$ | 0 to 4095 | 9-234 | Specifies Cell Site Location Area ID. |
| LOCAID? |  | 9-234 | Returns Cell Site Location Area ID. |
| LOCALentl $n$ | 0 to 65535 | 9-234 | Specifies Local Control bits. |
| LOCALentl? |  | 9-234 | Returns Local Control. |
| LREG $n$ | 1 or 0 | 9-234 | Enables/disables Local Area ID Registration. |
| LREG? |  | 9-234 | Returns state of Local Area ID Registration. |
| MAXBusy: |  |  |  |
| OTHer $n$ | 0 to 15 | 9-234 | Specifies Maximum number of Busy occurrences allowed for Other than Page responses. |
| OTHer? |  | 9-234 | Returns Maximum number of Busy occurrences allowed for Other than Page responses. |
| PGR $n$ | 0 to 15 | 9-234 | Specifies Maximum number of Busy occurrences allowed for Page responses. |
| PGR? |  | 9-234 | Returns Maximum number of Busy occurrences allowed for Page responses. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| GLACT: |  |  |  |
| OTHer $n$ | 0 to 15 | 9-235 | Specifies Maximum number of Seizure Tries allowed for Other than Page responses. |
| OTHer? |  | 9-235 | Returns Maximum number of Seizure Tries allowed for Other than Page responses. |
| PGR $n$ | 0 to 15 | 9-235 | Specifies Maximum number of Seizure Tries for Page responses. |
| PGR? |  | 9-235 | Returns Maximum number of Busy occurrences allowed for Page responses. |
| NEWACC $n$ | 0 to 2047 | 9-235 | Specifies New Access Channel starting point. |
| NEWACC? |  | 9-235 | Returns New Access Channel starting point. |
| OLC $n$ | 0 to 32767 | 9-235 | Specifies Overhead Class. |
| OLC? |  | 9-235 | Returns Overhead Class. |
| PDREG $n$ | 1 or 0 | 9-235 | Enables/disables Power Down Registration. |
| PDREG? |  | 9-235 | Returns state of Power Down Registration. |
| PUREG $n$ | 1 or 0 | 9-235 | Enables/disables Power Up Registration. |
| PUREG? |  | 9-235 | Returns state of Power Up Registration. |
| RAND1 A $n$ | 0 to 32767 | 9-236 | Specifies 16 most significant bits of RAND. |
| RAND1_A? |  | 9-236 | Returns 16 most significant bits of RAND. |
| RAND1 $\mathrm{B} \cap$ | 0 to 32767 | 9-236 | Specifies 16 least significant bits of RAND. |
| RAND1_B? |  | 9-236 | Returns 16 least significant bits of RAND. |
| REGINC̄R $n$ | 0 to 4095 | 9-236 | Specifies Registration Increment. |
| REGINCR? |  | 9-236 | Returns Registration Increment field setting. |
| REPEAT: |  |  |  |
| OFF |  | 9-231 | Sends Global Action Overhead message in primary Overhead Message Train (OMT) once after starting. |
| ON |  | 9-231 | Sends Global Action Overhead message in primary OMT continuously after starting. |
| SEND |  | 9-231 | Starts Sending Global Action as part of primary OMT. |
| STOP |  | 9-231 | Stops sending Global Action as part of primary OMT. |
| MSCM: |  |  |  |
| AUTHBS $n$ | 0 to 262143 | 9-241 | Specifies AUTHBS. |
| AUTHBS? |  | 9-241 | Returns AUTHBS. |
| CHAN $n$ | 0 to 2047 | 9-24 | Specifies RF Channel. |
| CHAN? |  | 9-241 | Returns RF Channel. |
| CHANPos $n, x$ | 0 to 5,0 to 127 | 9-241 | Specifies selected Channel Position sent in Directed-Retry message. $n$ indicates Channel Positions 1 to 6 . |
| CHANPos? $n$ | 0 to 5 | 9-241 | Returns selected Channel Position. |
| DMAC $n$ | 0 to 10 | 9-242 | Specifies Digital Mobile Attenuation Code. |
| DMAC? |  | 9-242 | Returns Digital Mobile Attenuation Code. |
| DVCC $n$ | 0 to 255 | 9-242 | Specifies Digital Verification Color Code. |
| DVCC? |  | 9-242 | Returns Digital Verification Color Code. |
| EF $n$ | 1 or 0 | 9-242 | Enables/disables Extended Protocol Forward Channel Indicator. |
| EF? |  | 9-242 | Returns state of Extended Protocol Forward Channel Indicator. |
| LOCAL $n$ | 0 to 31 | 9-242 | Specifies Local Control/Message Type. |
| LOCAL? |  | 9-242 | Returns Local Control/Message Type. |
| MEM $n$ | 1 or 0 | 9-242 | Enables/disables Message Encryption Mode. |
| MEM? |  | 9-242 | Returns state of Message Encryption Mode. |
| MIN "n" | "123/456-7890" | 9-243 | Specifies Mobile ID Number. |
| MIN? |  | 9-243 | Returns Mobile ID Number. |
| ORDER: |  |  |  |
| A_ALERT |  | 9-237 | Selects Abbreviated Alert message. |
| ANA_VC_DES |  | 9-237 | Selects Analog Voice Channel Assignment message. |
| ASYNC_PAGE |  | 9-237 | Selects Page (Async Data) message. |
| AUDIT |  | 9-237 | Selects Audit message. |
| BSCHALCON |  | 9-238 | Selects Base Station Challenge Confirmation message. |
| DIR_RTRY |  | 9-238 | Selects Directed-Retry message. |
| G3_MSG_WTG |  | 9-238 | Selects G3-Fax Message Waiting message. |
| G3_PAGE |  | 9-238 | Selects Page (Group 3 Fax) message. |
| INTRCPT |  | 9-238 | Selects intercept message. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| MSCM: |  |  |  |
|  |  |  |  |
| IS136: |  |  |  |
| FAXdata: |  |  |  |
| SLOT1 |  | 9-239 | Sends DTC Assignment for 1S-136 order with Assigned to Timeslot 1, Full-Rate message (Fax/Data). |
| SLOT1_2 |  | 9-239 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 1 \& 2, Double-Rate message (Fax/Data). |
| SLOT1_2_3 |  | 9-240 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 1,2 \& 3. Triple-Rate message (Fax/Data). |
| SLOT1_3 |  | 9-239 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 1 \& 3, Double-Rate message (Fax/Data). |
| SLOT2 |  | 9-239 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 2, Full-Rate message (Fax/Data). |
| SLOT2_3 |  | 9-239 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 2 \& 3, Double-Rate message (Fax/Data). |
| SLOT3 |  | 9-239 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 3, Full-Rate message (Fax/Data). |
| IS641: |  |  |  |
| SLOT1 |  | 9-239 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 1, Full-Rate message (ACELP). |
| SLOT2 |  | 9-239 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 2, Full-Rate message (ACELP). |
| SLOT3 |  | 9-239 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 3, Full-Rate message (ACELP). |
| SLOT1 |  | 9-238 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 1, Full-Rate message (VSELP). |
| SLOT2 |  | 9-238 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 2, Full-Rate message (VSELP). |
| SLOT3 |  | 9-238 | Sends DTC Assignment for IS-136 order with Assigned to Timeslot 3, Full-Rate message (VSELP). |
| LC |  | 9-240 | Selects Local Control message. |
| MSG_WTG |  | 9-240 | Selects Message Waiting message. |
| PAGE |  | 9-240 | Selects Page message. |
| REG_AUTH_CNF |  | 9-240 | Selects Autonomous Registration (with Authentication Word C) Confirmation message. |
| REG_CNF |  | 9-240 | Selects Registration Confirmation message. |
| RELease |  | 9-240 | Selects Release message. |
| REORDER |  | 9-240 | Selects Reorder message. |
| SLOT 1 |  | 9-240 | Selects Digital Channel Assignment to Timeslot 1 message. |
| SLOT2 |  | 9-240 | Selects Digital Channel Assignment to Timeslot 2 message. |
| SLOT3 |  | 9-240 | Selects Digital Channel Assignment to Timeslot 3 message. |
| SMS_MSG_WTG |  | 9-241 | Selects SMS Message Waiting message. |
| SSD_UP |  | 9-241 | Selects Shared Secret Data Update message. |
| UCHAL |  | 9-241 | Selects Unique Challenge message. |
| VC_DES |  | 9-241 | Selects Voice Channel Designation message. |
| VOICE_MSG_WTG |  | 9-241 | Selects Voice Message Waiting message. |
| ORDQ $n$ | 0 to 7 | 9-243 | Specifies Order Qualifier. |
| ORDQ? |  | 9-243 | Returns Order Qualifier. |
| PM $n$ | 1 or 0 | 9-243 | Enables/disables Privacy Mode Indicator. |
| PM? |  | 9-243 | Returns state of Privacy Mode Indicator. |
| PVIn | 1 or 0 | 9-243 | Enables/disables Protocol Version Indicator. |
| PVI? |  | 9-243 | Returns state of Protocol Version Indicator. |
| RANDSSD1 $n$ | 0 to 16777215 | 9-243 | Specifies 24 most significant bits of Random Number sent in SSD Update message (first order word). |
| RANDSSD1? |  | 9-243 | Returns 24 most significant bits of Random Number sent in SSD Update message. |
| RANDSSD2 $n$ | 0 to 16777215 | 9-244 | Specifies 24 intermediate bits of Random Number sent in SSD Update message (second order word). |
| RANDSSD2? |  | 9-244 | Returns 24 intermediate bits of Random Number sent in SSD Update message. |
| RANDSSD3 $n$ | 0 to 255 | 9-244 | Specifies eight least significant bits of Random Number sent in SSD Update message (third order word). |
| RANDSSD3? |  | 9-244 | Returns eight least significant bits of Random Number sent in SSD Update message. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| MSCM: |  |  |  |
| RANDU $n$ | 0 to 16777215 | 9-244 | Specifies 24 bit Random Number sent in Unique Challenge message. |
| RANDU? |  | 9-244 | Returns Unique Challenge 24 bit Random Number. |
| REPEAT: |  |  |  |
| OFF |  | 9-237 | Sends MSCM in selected OMTs (primary or one of the four secondary OMTs) once after starting. |
| ON |  | 9-237 | Sends MSCM continuously in the selected OMTs (primary or one of the four secondary OMTs). |
| $\operatorname{SCC} n$ | 0 to 2 | 9-244 | Specifies Supervisory Audio Tone Color Code. |
| SCC? |  | 9-244 | Returns Supervisory Audio Tone Color Code. |
| SEND |  | 9-237 | Starts sending Mobile Station Control Message (MSCM) in selected Overhead Message Train (OMT) (primary or one of the four secondary OMTs). |
| STOP |  | 9-237 | Stops sending MSCM. |
| VMAC $n$ | 0 to 7 | 9-244 | Specifies Voice Mobile Attenuation Code. |
| VMAC? |  | 9-244 | Returns Voice Mobile Attenuation Code. |
| RATE $n$ | $0=$ full, $\mathbf{1}=$ half | 9-176 | Selects Rate. |
| RATE? |  | 9-176 | Returns state of RATE. |
| RECC: |  |  |  |
| STATus? |  | 9-189 | Returns access with Mobile Station status ( $0=$ no access occurred, 1 = access occurred). |
| RFLVL $n$ | -127.0 to -20.0 | 9-177 | Specifies RF output level in dBm. |
| RFLVL? |  | 9-177 | Returns RF Level. |
| SETup |  | 9-176 | Sets up the Sp Tst as when entering the first Analog Control Channel (ACC) Cell Site Simulation screen, except screen is not displayed and Sp Tst is not transmitting at this point. |
| SLOT $n$ | 1 to 6 | 9-177 | Specifies full rate pair or half rate slot in which to transmit. |
| SLOT? |  | 9-177 | Returns SLOT. |
| SPACH: |  |  |  |
| ALPHA: |  |  |  |
| PSID RSID:NAME. |  |  |  |
|  |  |  |  |
| CHARacter $n, " m "$ | 0 to 16 , ASCII String | 9-375 | Specifies selected Display Character ( $m$ ). |
| CHARacter? $n$ | 0 to 16 | 9-375 | Returns selected Display Character. |
| NUMBer $n$ | 0 to 16 | 9-375 | Specifies Length of Alphanumeric PSID/RSID List. |
| NUMBer? |  | 9-375 | Returns Length of Alphanumeric PSID/RSID List. |
| SID " $n$ " | '123/456-7890" | 9-375 | Specifies Alphanumeric System ID. |
| SID? |  | 9-375 | Returns Alphanumeric System ID. |
| ARM $n$ | 1 or 0 | 9-343 | Enables/disables ARQ Response Mode. |
| ARM? |  | 9-343 | Returns state of ARM. |
| ATS $n$ | 0 to 15 | 9-349 | Specifies Assigned Time Slot. |
| ATS? |  | 9-349 | Returns ATS. |
| AUTH $n$ | tor 0 | 9-352 | Enables/disables Authentication information. |
| AUTH? |  | 9-352 | Returns state of Authentication information. |
| AUTHBS $n$ | 0 to \#hFFFF | 9-348 | Specifies AUTHBS. |
| AUTHBS? |  | 9-348 | Returns AUTHBS. |
| BCN $n$ | 1 or 0 | 9-339 | Enables/disables Broadcast Channel Change Notification Flag. |
| BCN? |  | 9-339 | Returns state of Broadcast Channel Change Notification Flag. |
| BSMC $n$ | 0 to 255 | 9-348 | Specifies Base Station Manufacture Code. |
| BSMC? |  | 9-348 | Returns BSMC. |
| BT $n$ | 0 to 7 | 9-339 | Specifies Burst Type. |
| BT? |  | 9-339 | Returns BT |
| BU $n$ | 0 to 7 | 9-338 | Specifies Burst Usage. |
| BU? |  | 9-338 | Returns Burst Usage. |
| BUILD: |  |  |  |
| ARQ |  | 9-337 | Builds ARQ SPACH Message of any type. |
| HARD |  | 9-337 | Builds Hard Page of any type. |
| NONARQ |  | 9-337 | Builds Non ARQ SPACH Message. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| cSS: <br> SPACH: CALLED |  |  |  |
|  |  |  |  |
|  |  |  |  |
| ADDRess " $n$ " | ASCII String | 9-355 | Specifies Called Address. |
| ADDRess? |  | 9-355 | Returns Called Address. |
| ENCoding $n$ | 1 or 0 | 9-355 | Enables/disables Called Party Address Encoding. |
| ENCoding? |  | 9-355 | Returns state of Called Party Address Encoding. |
| PLANid $n$ | 0 to 15 | 9-355 | Specifies Called Party Numbering Plan ID. |
| PLANid? |  | 9-355 | Returns Called Party Numbering Plan ID. |
| SUBaddress: |  |  |  |
| ADDRess $n$, m | 0 to 19, 0 to 255 | 9-356 | Specifies selected Subaddress (m). |
| ADDRess? $n$ | 0 to 19 | 9-356 | Returns selected Subaddress. |
| LENGth n | 0 to 255 | 9-356 | Specifies Length of Subaddress Info. |
| LENGth? |  | 9-356 | Returns Length of Subaddress Info. |
| ODD_EVEN $n$ | 1 or 0 | 9-356 | Enables/disables Odd/Even Indicator. |
| ODD_EVEN? |  | 9-356 | Returns state of Odd/Even Indicator. |
| REServed $n$ | 0 to 15 | 9-356 | Specifies number of subaddress Reserved fields. |
| REServed? |  | 9-356 | Returns number of subaddress Reserved fields. |
| TYPE $n$ | 0 to 7 | 9-356 | Specifies Type of Subaddress. |
| TYPE? |  | 9-356 | Returns Type of Subaddress. |
| TYPE $n$ | 0 to 7 | 9-355 | Specifies Type of Number. |
| TYPE? |  | 9-355 | Returns Type of Number. |
| CALLING: |  |  |  |
| ADDRess " $n$ " | 0 to 255 | 9-357 | Specifies Calling Party Address. |
| ADDRess? |  | 9-357 | Returns Calling Party Address. |
| ENCoding $n$ | 1 or 0 | 9-357 | Enables/disables Calling Party Address Encoding. |
| ENCoding? |  | 9-357 | Returns state of Calling Party Address Encoding. |
| PLANid $n$ | 0 to 15 | 9-357 | Specifies Calling Party Numbering Plan Identification. |
| PLANid? |  | 9-357 | Returns Calling Party Numbering Plan Identification. |
| PRESentation: |  |  |  |
| Pln | 0 to 3 | 9-359 | Specifies Calling Party Number Presentation Indicator. |
| PI ? |  | 9-359 | Returns Calling Party Number Presentation Indicator. |
| SIn | 0 to 3 | 9-359 | Specifies Calling Party Screening Indicator. |
| SI? |  | 9-359 | Returns Calling Party Screening Indicator. |
| SUBaddress: |  |  |  |
| ADDRess $n, m$ | 0 to 19, 0 to 255 | 9-358 | Specifies selected Subaddress ( $m$ ). |
| ADDRess? $n$ | 0 to 19 | 9-358 | Returns selected Subaddress. |
| LENGth n | 0 to 255 | 9-358 | Specifies Length of Subaddress Info content. |
| LENGth? |  | 9-358 | Returns Length of Subaddress Info content. |
| ODD_EVEN $n$ | 1 or 0 | 9-358 | Enables/disables Odd/Even Indicator. |
| ODD_EVEN? |  | 9-358 | Returns state of Odd/Even Indicator. |
| REServed $n$ | 0 to 15 | 9-358 | Specifies number of subaddress Reserved fields. |
| REServed? |  | 9-358 | Returns number of subaddress Reserved fields. |
| TYPE $n$ | 0 to 7 | 9-358 | Specifies Type of Subaddress. |
| TYPE? |  | 9-358 | Returns Type of Subaddress. |
| TYPE $n$ | 0 to 7 | 9-357 | Specifies Calling Party Type of Number. |
| TYPE? |  | 9-357 | Returns Calling Party Type of Number. |
| CHAN $n$ | 0 to 2047 | 9-345 | Specifies Channel used in Digital or Analog channel assignment. |
| CHAN? |  | 9-345 | Returns Channel. |
| CUSTOM: |  |  |  |
| CONTrol $n, m$ | 0 to 63, 0 to 255 | 9-348 | Specifies selected Custom Control (m). |
| CONTrol? $n$ | 0 to 63 | 9-348 | Returns selected Custom Control. |
| LENGth $n$ | 1 to 64 | 9-348 | Specifies Length of Custom Control in octets. |
| LENGth? |  | 9-348 | Returns Length of Custom Control in octets. |
| DATA: |  |  |  |
| ARQ? $n, m$ | 0 to 255, 0 to 6 | 9-338 | Returns selected 16 bit word within selected frame ( $n$ ) of ARQ SPACH message. |
| HARD? $n$ | 0 to 6 | 9-338 | Returns selected 16 bit word within hard page. |
| NONARQ? n,m | 0 to 255,0 to 6 | 9-338 | Returns selected 16 bit word within selected frame ( $n$ ) of NONARQ SPACH message. |
| DEBUG $n$ | 1 or 0 | 9-347 | Enables/disables Debug Display Allowed. |
| DEBUG? |  | 9-347 | Returns state of Debug Display Allowed. |

PAGE
DESCRIPTION
CSS:
SPACH:
DIRectory:

ADDRess
ADDRess?
ENCoding n
ENCoding?
PLANid $n$
PLANid?
SUBaddress:
ADDRess $n$ m
ADDRess? $n$
LENGth $n$
LENGth?
ODD EVEN $n$
ODD EVEN?
REServed $n$
REServed?
TYPE $n$ TYPE?
TYPE $n$
TYPE?
DISPlay:
CHARacter n.m
CHARacter? $n$
LENGth $n$
LENGth?
DMAC $n$
DMAC?
DTX:
SUPport n
SUPport?
DVCC $n$
DVCC?
EHI $n$
EHI?
ENABLE:
ALPHA:
PSID RSID
PSID RSID?
SID $n$
SID?
CALLED:
ADDRess n
ADDRess?
SUBaddress $n$
SUBaddress?
CALLING:

| ADDRess $n$ | 1 or 0 |
| :--- | :---: |
| ADDRess? |  |
| PRESentation $n$ | 1 or 0 |
| PRESentation?  <br> SUBaddress $n$ 1 or 0 |  |

SUBaddress?

0 to 255
to 15

0 to 19,0 to 255
0 to 19
0 to 255
1 or 0
0 to 15
0 to 7
0 to 7

0 to 255, 0 to 255
0 to 255
0 to 81
0 to 15

0 to 3
0 to 255
1 or 0

1 or 0

1 or 0

1 or 0
1 or 0

1 or 0

| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| SPACH: |  |  |  |
| ENABLE: |  |  |  |
| DIRectory: |  |  |  |
| ADDRess $n$ | 1 or 0 | 9-383 | Enables/disables Directory Address optional info. element. |
| ADDRess? |  | 9-383 | Returns state of Directory Address optional info. element. |
| SUBaddress $n$ | 1 or 0 | 9-383 | Enables/disables Directory Subaddress optional info. element. |
| SUBaddress? |  | 9-383 | Returns state of Directory Subaddress optional info. element. |
| DISPlay $n$ | 1 or 0 | 9-377 | Enables/disables Display optional info. element. |
| DISPlay? |  | 9-377 | Returns state of Display optional info. element. |
| DTX $n$ | 1 or 0 | 9-377 | Enables/disables DTX Support optional info. element. |
| DTX? |  | 9-377 | Returns state of DTX Support optional info. element. |
| HYPERband: |  |  |  |
| INFO $n$ | 1 or 0 | 9-378 | Enables/disables Hyperband Info optional info. element. |
| INFO? |  | 9-378 | Returns state of Hyperband Info optional info. element. |
| MACA: |  |  |  |
| LIST $n$ | 1 or 0 | 9-384 | Enables/disables MACA_LIST optional info. element. |
| LIST: |  |  |  |
| OTHER $n$ | 1 or 0 | 9-384 | Enables/disables MACA LIST (Other Hyperband) optional info. element. |
| OTHER? |  | 9-384 | Returns state of MACA_LIST (Other Hyperband) optional info. element. |
| LIST? |  | 9-384 | Returns state of MACA_LIST optional info. element. |
| MESSage: |  |  |  |
| CENTer: |  |  |  |
| ADDRess $n$ | 1 or 0 | 9-380 | Enables/disables Message Center Address optional info. element. |
| ADDRess? |  | 9-380 | Returns state of Message Center Address optional info. element. |
| MODE: |  |  |  |
| MEM $n$ | 1 or 0 | 9-378 | Enables/disables Message Encryption Mode optional info. element. |
| MEM? |  | 9-378 | Returns state of Message Encryption Mode optional info. element. |
| VOICE $n$ | 1 or 0 | 9-378 | Enables/disables Voice Mode optional info. element. |
| VOICE? |  | 9-378 | Returns state of Voice Mode optional info. element. |
| MSID: |  |  |  |
| ASSIGNment $n$ | 1 or 0 | 9-382 | Enables/disables MSID Assignment optional info. element. |
| ASSIGNment? |  | 9-382 | Returns state of MSID Assignment optional info. element. |
| PFC: |  |  |  |
| ASSIGNment $n$ | 1 or 0 | 9-382 | Enables/disables PFC Assignment optional info. element. |
| ASSIGNment? |  | 9-382 | Returns state of PFC Assignment optional info. element. |
| PSID_RSID: |  |  |  |
| AVAILable $n$ | 1 or 0 | 9-382 | Enables/disables PSID/RSID Available optional info. element. |
| AVAILable? |  | 9-382 | Returns state of PSID/RSID Available optional info. element. |
| QUEue: |  |  |  |
| POSition $n$ | 1 or 0 | 9-384 | Enables/disables Queue Position optional info. element. |
| POSition? |  | 9-384 | Returns state of Queue Position optional info. element. |
| RCF_AUTH $n$ | 1 or 0 | 9-378 | Enables/disables RCF and AUTH optional info. element. |
| RCF_AUTH? |  | 9-378 | Returns state of RCF and AUTH optional info. element. |
| RDATA: |  |  |  |
| DELAY $n$ | 1 or 0 | 9-381 | Enables/disables R-DATA Delay optional info. element. |
| DELAY? |  | 9-381 | Returns state of R-DATA Delay optional info. element. |
| REJect: |  |  |  |
| TIME $n$ | 1 or 0 | 9-383 | Enables/disables Reject Time optional info. element. |
| TIME? |  | 9-383 | Returns state of Reject Time optional info. element. |
| RETRY: |  |  |  |
| CHANnel $n$ | 1 or 0 | 9-378 | Enables/disables Retry Channel optional info. element. |
| CHANnel? |  | 9-378 | Returns state of Retry Channel optional info. element. |
| RNUM: |  |  |  |
| LIST $n$ | 1 or 0 | 9-382 | Enables/disables RNUM List optional info. element. |
| LIST? |  | 9-382 | Returns state of RNUM List optional info. element. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| SPACH: |  |  |  |
| ENABLE: |  |  |  |
| SIGnal $n$ | 1 or 0 | 9-378 | Enables/disables Signal optional info. element. |
| SIGnal? |  | 9-378 | Returns state of Signal optional info. element. |
| SUBaddress $n$ | 1 or 0 | 9-377 | Enables/disables Subaddress optional info. element. |
| SUBaddress? |  | 9-377 | Returns state of Subaddress optional info. element. |
| USER: |  |  |  |
| DEST: |  |  |  |
| ADDRess $n$ | 1 or 0 | 9-380 | Enables/disables User Destination Address optional info. element. |
| ADDRess? |  | 9-380 | Returns state of User Destination Address optional info. element. |
| SUBaddress $n$ | 1 or 0 | 9-380 | Enables/disables User Destination Subaddress optional info. element. |
| SUBaddress? |  | 9-380 | Returns state of User Destination Subaddress optional info. element. |
| GROUP $n$ | 1 or 0 | 9-381 | Enables/disables User Group optional info. element. |
| GROUP? |  | 9-381 | Returns state of User Group optional info. element. |
| ORIG: |  |  |  |
| ADDRess $n$ | 1 or 0 | 9-381 | Enables/disables User Originating Address optional info. element. |
| ADDRess? |  | 9-381 | Returns state of User Originating Address optional info. element. |
| PRESentation $n$ | 1 or 0 | 9-381 | Enables/disables User Originating Address Presentation Indicator optional info. element. |
| PRESentation? |  | 9-381 | Returns state of User Originating Address Presentation Indicator optional info. element. |
| SUBaddress $n$ | 1 or 0 | 9-381 | Enables/disables User Originating Subaddress optional info. element. |
| SUBaddress? |  | 9-381 | Returns state of User Originating Subaddress optional info. element. |
| FRNO $n$, m | 0 to 79,0 to 31 | 9-343 | Specifies selected Frame Number (m). |
| FRNO? $n$ | 0 to 79 | 9-343 | Returns selected FRNO. |
| GA $n$ | 1 or 0 | 9-343 | Enables/disables Go Away. |
| GA? |  | 9-343 | Returns state of GA. |
| IDT $n$ | 0 to 3 | 9-339 | Specifies Identity Type. |
| IDT? |  | 9-339 | Returns IDT. |
| LENGth: |  |  |  |
| ARQ? |  | 9-337 | Returns ARQ SPACH message length. |
| HARD? |  | 9-337 | Returns hard page length. |
| NONARQ? |  | 9-338 | Returns NONARQ SPACH message length. |
| LT $n$ | 1 or 0 | 9-352 | Enables/disables Last Try. |
| LT? |  | 9-352 | Returns state of LT. |
| MACA: LIST |  |  |  |
| CHAN $n, m$ | 0 to 15, 1 to 2047 | 9-376 | Specifies CHAN (m) of selected MACA Channel. |
| CHAN? $n$ | 0 to 15 | 9-376 | Returns CHAN of selected MACA Channel. |
| NuMBer $n$ | 0 to 15 | 9-376 | Specifies Number of MACA Channels. |
| NUMBer? |  | 9-376 | Returns Number of MACA Channels. |
| OTHER: |  |  |  |
| CHAN $n, m$ | 0 to 15,1 to 2047 | 9-377 | Specifies CHAN ( $m$ ) of selected MACA Channel for MACA LIST (Other Hyperband). |
| CHAN? $n$ | 0 to 15 | 9-377 | Returns CHAN of selected MACA Channel for MACA_LIST (Other Hyperband). |
| HYPERband $n$ | 0 to 3 | 9-376 | Specifies Hyperband for MACA_LIST (Other Hyperband). |
| HYPERband? |  | 9-376 | Returns Hyperband for MACA_LIST (Other Hyperband). |
| NuMBer $n$ | 0 to 15 | 9-376 | Specifies Number of MACA Channel for MACA _LIST (Other Hyperband). |
| NuMBer? |  | 9-376 | Returns Number of MACA Channel for MACA_LIST (Other Hyperband). |
| MEA $n$ | 0 to 3 | 9-342 | Specifies Message Encryption Algorithm. |
| MEA? |  | 9-342 | Returns MEA. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| css: |  |  |  |
| SPACH: |  |  |  |
| MEK $n$ | 0 to 3 | 9-342 | Specifies Message Encryption Key. |
| MEK? |  | 9-342 | Returns MEK. |
| MEM $n$ | 1 or 0 | 9-344 | Enables/disables Message Encryption Mode. |
| MEM? |  | 9-344 | Returns state of MEM. |
| MESSage:CENTer: |  |  |  |
|  |  |  |  |
| ADDRess " $n$ " | 0 to 255 | 9-361 | Specifies Message Center Address. |
| ADDRess? |  | 9-361 | Returns Message Center Address. |
| ENCoding $n$ | 1 or 0 | 9-361 | Enables/disables Message Center Address Encoding. |
| ENCoding? |  | 9-361 | Returns state of Message Center Address Encoding. |
| PLANid $n$ | 0 to 15 | 9-361 | Specifies Message Center Address Numbering Plan ID. |
| PLANid? |  | 9-361 | Returns Message Center Address Numbering Plan ID. |
| TYPE $n$ | 0 to 7 | 9-361 | Specifies Message Center Address Type of Number. |
| TYPE? |  | 9-361 | Returns Message Center Address Type of Number. |
| MIN1 "n" | "123/456-7890" | 9-340 | Specities MIN1 used in SPACH Message. |
| MIN1? |  | 9-340 | Returns MIN1 used in SPACH Message. |
| MIN2 "n" | "123/456-7890" | 9-340 | Specifies MIN2 used in SPACH Message. |
| MIN2? |  | 9-340 | Returns MIN2 used in SPACH Message. |
| MIN3 "n" | "123/456-7890" | 9-340 | Specifies MIN3 used in SPACH Message. |
| MIN3? |  | 9-340 | Returns MIN3 used in SPACH Message. |
| MM $n$ | 1 or 0 | 9-341 | Enables/disables Message Mapping. |
| MM ? |  | 9-341 | Returns state of Message Mapping. |
| MODE: |  |  |  |
| DIC $n$ | 1 or 0 | 9-350 | Enables/disables Delay Interval Compensation Mode. |
| DIC? |  | 9-350 | Returns state of DIC. |
| HYPERband: |  |  |  |
| INFO $n$ | 0 to 3 | 9-351 | Specifies Hyperband Info. |
| INFO? |  | 9-351 | Returns Hyperband Info. |
| MEM: |  |  |  |
| MEA $n$ | 0 to 7 | 9-351 | Specifies Message Encryption Algorithm. |
| MEA? |  | 9-351 | Returns MEA. |
| MED $n$ | 0 to 7 | 9-351 | Specifies Message Encryption Domain. |
| MED? |  | 9-351 | Returns MED. |
| MEK $n$ | 0 to 7 | 9-351 | Specifies Message Encryption Key. |
| MEK? |  | 9-351 | Returns MEK. |
| VOICE: |  |  |  |
| PM_V $n$ | 0 to 7 | 9-350 | Specifies Voice Privacy. |
| PM_V? |  | 9-350 | Returns PM_V. |
| VC $n$ | 0 to 7 | 9-350 | Specities Voice Coder. |
| VC? |  | 9-350 | Returns VC. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| MSGtypen:xxx | $n=1 \text { to } 4$ <br> ANALOG | 9-344 | Specifies message type $n$ used in SPACH message. |
|  | AUDIT |  |  |
|  | BSCHALcon |  |  |
|  | BSMC |  |  |
|  | CAPability |  |  |
|  | DIGital |  |  |
|  | DRETRY |  |  |
|  | MSGWTG |  |  |
|  | PAGE |  |  |
|  | PU |  |  |
|  | QDISC_ACK |  |  |
|  | QUPDate |  |  |
|  | RDATA |  |  |
|  | RDATA ACCept |  |  |
|  | RDATA REJect |  |  |
|  | REG ACCept |  |  |
|  | REG_REJect |  |  |
|  | RELease |  |  |
|  | REORDer |  |  |
|  | SOC |  |  |
|  | SPACHnotification |  |  |
|  | SSDUP |  |  |
|  | TESTreg |  |  |
|  | UCHAL |  |  |
|  | USERalert |  |  |
| MSGWTG: |  |  |  |
| NUMber $n, m$ | 0 to 15, 0 to 63 | 9-353 | Specifies selected Number of Messages Waiting (m). |
| NUMber? $n$ | 0 to 15 | 9-353 | Returns selected Number of Messages Waiting. |
| NV $n$ | 0 to 15 | 9-353 | Specifies Message Waiting Info Number of Values. |
| NV? |  | 9-353 | Returns Message Waiting Info Number of Values. |
| TYPE $n, m$ | 0 to 15, 0 to 15 | 9-353 | Specifies selected Type of Message Waiting (m). |
| TYPE? $n$ | 0 to 15 | 9-353 | Returns selected Type of Message Waiting. |
| MSID: |  |  |  |
| ASSIGNment $n$ | 0 to \#hFFFFFF | 9-368 | Specifies MSID Assignment. |
| ASSIGNment? |  | 9-368 | Returns MSID Assignment. |
| IDT $n$ | 0 to 3 | 9-368 | Specifies Identity Type. |
| IDT? |  | 9-368 | Returns IDT. |
| LS $n, m$ | 0 to 4, <br> 0 to \#hFFFFFFFF | 9-340 | Specifies 32 Least Significant Bits (m) of selected Mobile Station ID. |
| LS? $n$ | 0 to 4 | 9-340 | Returns 32 Least Significant Bits of selected Mobile Station ID. |
| MS $n, m$ | 0 to 4, | 9-340 | Specifies 18 Most Significant Bits (m) of selected Mobile |
|  | 0 to \#h3FFFF |  | Station ID. |
| MS? $n$ | 0 to 4 | 9-340 | Returns 18 Most Significant Bits of selected Mobile Station ID. |
| NOTification $n$ | 0 to 63 | 9-374 | Specifies SPACH Notification Type. |
| NOTification? |  | 9-374 | Returns SPACH Notification Type. |
| PCON $n$,m | 1 or 0,0 or 1 | 9-339 | Enables/disables selected Paging Channel Continuation. |
| PCON? $n$ | 0 or 1 | 9-339 | Returns selected PCON |
| PD $n$ | 0 to 3 | 9-343 | Specifies Protocol Discriminator. |
| PD? |  | 9-343 | Returns Protocol Discriminator. |
| PEA $n$ | 0 to 127 | 9-341 | Specifies Partial Echo Assigned. |
| PEA? |  | 9-341 | Returns PEA. |
| PFC: |  |  |  |
| ASSIGNment $n$ | 0 to 3 | 9-367 | Specifies PFC Assignment. |
| ASSIGNment? |  | 9-367 | Returns PFC Assignment. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| SPACH: |  |  |  |
| PFM $n$ | 1 or 0 | 9-339 | Enables/disables Paging Frame Modifier. |
| PFM? |  | 9-339 | Returns state of PFM. |
| PI $n, m$ | 0 to 79,1 or 0 | 9-341 | Enables/disables selected Polling Indicator. |
| Pl? $n$ | 0 to 79 | 9-341 | Returns state of selected PI. |
| PROGRAM: |  |  |  |
| ARQ dest, source,length | 0 to 31, | 9-338 | Copies ARQ message into Superframe. Location in |
|  | 0 to 255, |  | Superframe is selected by dest. source selects frame from |
|  | 0 to 32 |  | ARQ buffer. Number of frames moved is selected by length. |
| HARD dest | 0 to 31 | 9-338 | Copies hard page into selected Superframe. |
| NONARQ dest,source,length | 0 to 31, | 9-338 | Copies NONARQ message into superframe. Location in |
|  | 0 to 255, |  | Superframe is selected by dest. source selects frame from |
|  | 0 to 32 |  | NONARQ buffer. Number of frames moved is selected by length. |
| PROTocol $n$ | 0 to 15 | 9-345 | Specifies Protocol Version. |
| PROTocol? |  | 9-345 | Returns Protocol Version. |
| PSID RSID: |  |  |  |
| AVAlLable: |  |  |  |
| NUMBer $n$ | 0 to 15 | 9-369 | Specifies Number of PSID/RSID. |
| NUMBer? |  | 9-369 | Returns Number of PSID/RSID. |
| TYPE $n, m$ | 0 to 15, 1 or 0 | 9-369 | Enables/disables selected PSID/RSID Type Indicator. |
| TYPE? $n$ | 0 to 15 | 9-369 | Returns state of selected PSID/RSID Type Indicator. |
| VALUE $n, m$ | 0 to 15, <br> 0 to \#hFFFF | 9-369 | Specifies selected PSID/RSID Value (m). |
| VALUE? $n$ | 0 to 15 | 9-369 | Returns selected PSID/RSID Value. |
| MAP $n$ | 0 to \#hFFFFF | 9-369 | Specifies PSID/RSID Map. |
| MAP? |  | 9-369 | Returns PSID/RSID Map. |
| QUEue: |  |  |  |
| POSition $n$ | 0 to 15 | 9-376 | Specifies Queue Position. |
| POSition? |  | 9-376 | Returns Queue Position. |
| RANDSSD1 $n$ | 0 to \#hFFFFFFF | 9-374 | Specifies RANDSSD1. |
| RANDSSD1? |  | 9-374 | Returns RANDSSD1. |
| RANDSSD2 $n$ | 0 to \#hFFFFFFFF | 9-374 | Specifies RANDSSD2. |
| RANDSSD2? |  | 9-374 | Returns RANDSSD2. |
| RANDU $n$ | 0 to \#hFFFFFFF | 9-375 | Specifies RANDU. |
| RANDU? |  | 9-375 | Returns RANDU. |
| RCF $n$ | 1 or 0 | 9-352 | Enables/disables Read Control Filler information. |
| RCF? |  | 9-352 | Returns state of Read Control Filler information. |
| RDATA: |  |  |  |
| DELAY $n$ | 0 to 15 | 9-373 | Specifies R-DATA DELAY. |
| DELAY? |  | 9-373 | Returns R-DATA DELAY. |
| RDATA_UNIT: |  |  |  |
| HLP: |  |  |  |
| DATA $n, m$ | 0 to 255, 0 to 255 | 9-360 | Specifies selected R-Data Unit Higher Layer Protocol Data Unit ( $m$ ). |
| DATA? $n$ | 0 to 255 | 9-360 | Returns selected R-Data Unit Higher Layer Protocol Data Unit. |
| IDentifier $n$ | 0 to 255 | 9-360 | Specifies R-Data Unit Higher Protocol Identifier. |
| IDentifier? |  | 9-360 | Returns R-Data Unit Higher Protocol Identifier. |
| LENGth $n$ | 0 to 255 | 9-360 | Specifies R-Data Unit Length Indicator. |
| LENGth? |  | 9-360 | Returns R-Data Unit Length Indicator. |
| REJect: |  |  |  |
| RDATA: |  |  |  |
| CAUSE $n$ | 0 to 127 | 9-372 | Specifies Cause for R-DATA Reject. |
| CAUSE? |  | 9.372 | Returns Cause for R-DATA Reject. |
| SPARE $n$ | 1 or 0 | 9-372 | Enables/disables R-Cause Reserved. |
| SPARE? |  | 9-372 | Returns state of R-Cause Reserved. |
| REGistration: |  |  |  |
| CAUSE $n$ | 0 to 15 | 9-372 | Specifies Cause for Registration Reject. |
| CAUSE? |  | 9-372 | Returns Cause for Registration Reject. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| cSS |  |  |  |
| SPACH: |  |  |  |
| REJect: |  |  |  |
| REGistration: |  |  |  |
| TIME: |  |  |  |
| LOWer $n$ | 0 to 15 | 9-372 | Specifies Lower time boundary in 100 Superframe (SF). |
| LOWer? |  | 9-372 | Returns Lower time boundary in 100 Superframe (SF). |
| UPPer $n$ | 0 to 15 | 9-372 | Specifies Upper time boundary in 100 Superframe (SF). |
| UPPer? |  | 9-372 | Returns Upper time boundary in 100 Superframe (SF). |
| RELease: |  |  |  |
| CAUSE $n$ | 0 to 15 | 9-373 | Specifies Cause for Release. |
| CAUSE? |  | 9-373 | Returns Cause for Release. |
| REorder: |  |  |  |
| CAUSE $n$ | 0 to 15 | 9-373 | Specifies Cause for Reorder/Intercept. |
| CAUSE? |  | 9-373 | Returns Cause for Reorder/Intercept. |
| TONE $n$ | 0 to 3 | 9-373 | Specifies Tone Indicator. |
| TONE? |  | 9-373 | Returns Tone Indicator. |
| REREG $n$ | 1 or 0 | 9-347 | Enables/disables Forced Re-registration. |
| REREG? |  | 9-347 | Returns state of REREG. |
| RETRY: |  |  |  |
| CHANnel $n$, m | 0 to 5, 1 to 2047 | 9-353 | Specifies CHAN (m) for selected Retry Channel. |
| CHANnel? $n$ | 0 to 5 | 9-353 | Returns CHAN for selected Retry Channel. |
| HYPERband $n, m$ | 0 to 5, 0 to 3 | 9-353 | Specifies Hyperband ( $m$ ) for selected Retry Channel. |
| HYPERband? $n$ | 0 to 5 | 9-353 | Returns Hyperband for selected Retry Channel. |
| NUMBer $n$ | 0 to 5 | 9-352 | Specifies Number of instances of Retry Channel. |
| NuMBer? |  | 9-352 | Returns Number of instances of Retry Channel. |
| RN $n$ | 0 to 15 | 9-359 | Specifies Request Number. |
| RN? |  | 9-359 | Returns Request Number. |
| RNUM: |  |  |  |
| LIST $n, m$ | 0 to 49, 0 to 1023 | 9-368 | Specifies selected RNUM List (m). |
| LIST? $n$ | 0 to 49 | 9-368 | Returns selected RNUM List. |
| NUMber $n$ | 1 to 50 | 9-368 | Specifies Number of RNUMs. |
| NuMber? |  | 9-368 | Returns Number of RNUMs. |
| RSVD: |  |  |  |
| ARQ $n$ | 0 to 3 | 9-343 | Specifies Automatic Retransmission Request. |
| ARQ? |  | 9-343 | Returns ARQ. |
| HEADER $n$ | 1 or 0 | 9-342 | Enables/disables reserved field in SPACH Header A. |
| HEADER? |  | 9-342 | Returns state of reserved field in SPACH Header A. |
| RTRANSaction $n$ | 0 to 255 | 9-359 | Specifies R-Transaction Identifier. |
| RTRANSaction? |  | 9-359 | Returns R-Transaction Identifier. |
| SB $n$ | 1 or 0 | 9-349 | Enables/disables Shortened Burst. |
| SB? |  | 9-349 | Returns state of SB. |
| SCC $n$ | 0 to 3 | 9-345 | Specifies SAT Color Code. |
| SCC? |  | 9-345 | Returns SCC. |
| SEND_ARCH $n$ | 0 to 31 | 9-337 | Builds current SPACH message and sends message in one superframe. $n$ is Superframe Phase of start of message. |
| SEND_HARD $n$ | 0 to 31 | 9-337 | Builds message and sends message in both the primary and secondary superframes. $n$ is Superframe Phase of start of message. |
| SEND_PCH $n$ | 0 to 31 | 9-337 | Builds current SPACH message and sends message in both the primary and secondary superframes. $n$ is Superframe Phase of start of message. |
| SERVice $n$ | 0 to 15 | 9-354 | Specifies Service Code. |
| SERVice? |  | 9-354 | Returns Service Code. |
| SIGnal: |  |  |  |
| CADence $n$ | 0 to 63 | 9-354 | Specifies Signal Cadence. |
| CADence? |  | 9-354 | Returns Signal Cadence. |
| DURation $n$ | 0 to 15 | 9-354 | Specifies Signal Duration. |
| DURation? |  | 9-354 | Returns Signal Duration. |
| PITCH $n$ | 0 to 3 | 9-354 | Specifies Signal Pitch. |
| PITCH? |  | 9-354 | Returns Signal Pitch. |
| SOC $n$ | 0 to 4095 | 9-374 | Specifies System Operator Code. |
| SOC? |  | 9-374 | Returns SOC. |

SRM $n$
SRM?
SUBaddress:

ADDRess $n, m$
ADDRess? $n$
LENGth $n$
LENGth?
ODD EVEN $n$
ODD_EVEN?
REServed $n$
REServed?
TYPE $n$
TYPE?
TA $n$
TA?
UGID:
LS $n$
LS?
MS $n$
MS?
USER:
DEST:
ADDRess " $n$ "
ADDRess?
ENCoding $n$
ENCoding?
PLANid $n$
PLANid?
SUBaddress:

## ADDRess $n, m$

ADDRess? $n$
LENGth $n$
LENGth?
ODD EVEN $n$
ODD_EVEN?
REServed $n$
REServed?
TYPE $n$
TYPE?
TYPE $n$
TYPE?
GROUP:
ID:
LS $n$
LS?
MS $n$

MS?
STATUS $n$
STATUS?
TYPE $n$
TYPE?
ORIG:
ADDRess " $n$ "
ADDRess?
ENCoding $n$
ENCoding?
PLANid $n$
PLANid?
PRESentation:
$\mathrm{Pl} n$
$\mathrm{PI} ?$
$\mathrm{SI} n$

SI $n$
SI?

| 1 or 0 | 9-342 | Enables/disables SPACH Response Mode. |
| :---: | :---: | :---: |
|  | 9-342 | Returns state of SRM. |
| 0 to 19, 0 to 255 | 9-346 | Specifies selected Subaddress (m). |
| 0 to 19 | 9-346 | Returns selected Subaddress. |
| 0 to 255 | 9-345 | Specifies Length of Subaddress Info content. |
|  | 9-345 | Returns Length of Subaddress Info content. |
| 1 or 0 | 9-346 | Enables/disables Odd/Even Indicator. |
|  | 9-346 | Returns state of Odd/Even Indicator. |
| 0 to 15 | 9-346 | Specifies number of subaddress Reserved. |
|  | 9-346 | Returns number of subaddress Reserved fields. |
| 0 to 7 | 9-346 | Specifies Type of Subaddress. |
|  | 9-346 | Returns Type of Subaddress. |
| 0 to 31 | 9-349 | Specifies Time Alignment. |
|  | 9-349 | Returns TA. |
| 0 to \#hFFFFFFFFF | 9-341 | Specifies 32 Least Significant Bits of User Group ID. |
|  | 9-341 | Returns 32 Least Significant Bits of User Group ID. |
| 0 to \#h3FFFF | 9-341 | Specifies 18 Most Significant Bits of User Group ID. |
|  | 9-341 | Returns 18 Most Significant Bits of User Group ID. |
| 0 to 255 | 9-362 | Specifies User Destination Address. |
|  | 9-362 | Returns User Destination Address. |
| 1 or 0 | 9-362 | Enables/disables User Destination Address Encoding. |
|  | 9-362 | Returns state of User Destination Address Encoding. |
| 0 to 15 | 9-362 | Specifies User Destination Address Numbering Plan ID. |
|  | 9-362 | Returns User Destination Address Numbering Plan ID. |
| 0 to 19, 0 to 255 | 9-363 | Specifies selected Subaddress ( $m$ ). |
| 0 to 19 | 9-363 | Returns selected Subaddress. |
| 0 to 255 | 9-363 | Specifies Length of Subaddress Info content. |
|  | 9-363 | Returns Length of Subaddress Info content. |
| 1 or 0 | 9-363 | Enables/disables Odd/Even Indicator. |
|  | 9-363 | Returns state of Odd/Even Indicator. |
| 0 to 15 | 9-363 | Specifies number of subaddress Reserved fields. |
|  | 9-363 | Returns number of subaddress Reserved fields. |
| 0 to 7 | 9-363 | Specifies Type of Subaddress. |
|  | 9-363 | Returns Type of Subaddress. |
| 0 to 7 | 9-362 | Specifies User Destination Address Type of Number. |
|  | 9-362 | Returns User Destination Address Type of Number. |
| 0 to \#hFFFFFFFF | 9-364 | Specifies 32 Least Significant Bits of User Group ID. |
|  | 9-364 | Returns 32 Least Significant Bits of User Group ID. |
| 0 to \#h3FFFF | 9-364 | Specifies 18 Most Significant Bits of User Group ID. |
|  | 9-364 | Returns 18 Most Significant Bits of User Group ID. |
| 0 to 3 | 9-364 | Specifies User Group Status. |
|  | 9-364 | Returns User Group Status. |
| 0 to 3 | 9-364 | Specifies User Group Type. |
|  | 9-364 | Returns User Group Type. |
| 0 to 255 | 9-365 | Specifies User Originating Address. |
|  | 9-365 | Returns User Originating Address. |
| 1 or 0 | 9-365 | Enables/disables User Originating Address Encoding. |
|  | 9-365 | Returns state of User Originating Address Encoding. |
| 0 to 15 | 9-365 | Specifies User Originating Address Numbering Plan ID. |
|  | 9-365 | Returns User Originating Address Numbering Plan ID. |
| 0 to 3 | 9-367 | Specifies User Originating Address Presentation Indicator. |
|  | 9-367 | Returns User Originating Address Presentation Indicator. |
| 0 to 3 | 9-367 | Specifies User Originating Address Screening Indicator. |
|  | 9-367 | Returns User Originating Address Screening Indicator. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| CSS: |  |  |  |
| SPACH:USER: |  |  |  |
|  |  |  |  |
| ORIG: |  |  |  |
| SUBaddress: |  |  |  |
| ADDRess n,m | 0 to 19, 0 to 255 | 9-366 | Specifies selected Subaddress (m). |
| ADDRess? $n$ | 0 to 19 | 9-366 | Returns selected Subaddress. |
| LENGth $n$ | 0 to 255 | 9-366 | Specifies Length of Subaddress Info content. |
| LENGth? |  | 9-366 | Returns Length of Subaddress Info content. |
| ODD_EVEN $n$ | 1 or 0 | 9-366 | Enables/disables Odd/Even Indicator. |
| ODD EVEN? |  | 9-366 | Returns state of Odd/Even Indicator. |
| REServed $n$ | 0 to 15 | 9-366 | Specifies number of subaddress Reserved fields. |
| REServed? |  | 9-366 | Returns number of subaddress Reserved fields. |
| TYPE $n$ | 0 to 7 | 9-366 | Specifies Type of Subaddress. |
| TYPE? |  | 9-366 | Returns Type of Subaddress. |
| TYPE $n$ | 0 to 7 | 9-365 | Specifies User Originating Address Type of Number. |
| TYPE? |  | 9-365 | Returns User Originating Address Type of Number. |
| VMAC $n$ | 0 to 15 | 9-345 | Specifies Voice Mobile Attenuation Code. |
| VMAC? |  | 9-345 | Returns VMAC. |
| STARt |  | 9-177 | Starts Cell Site Simulation transmission (Overhead Message on FOCC). |
| STOP |  | 9-177 | Stops Cell Site Simulation transmission. |
| TMAC SPECIAL EDITING COMMANDS |  |  |  |
| EDIT: |  |  |  |
| ACTivity $n$ | 1 or 0 | 9-456 | Enables/disables Edit Activity Flag. |
| ACTivity? |  | 9-456 | Returns state of Edit Activity Flag. |
| BIN? key, old, $x, y, n v$ |  | 9-455 | Allows on-screen edit of an existing Binary Number. See Table 9-6 for details on each of the parameters. |
| DIGITS? key,digits, $x, y$ |  | 9-455 | Allows on-screen edit of an existing Number Field up to 30 digits long and returns the resulting Number Field in a string. See Table 9-6 for details on each parameter. |
| FLOAT? key,old, $x, y$, prec, min,max |  | 9-455 | Allows on-screen edit of an existing Floating Point Number. See Table 9-6 for details on each of the parameters. |
| HEX? key, old $, x, y, n v$ |  | 9-455 | Allows on-screen edit of an existing Hexadecimal Number. See Table 9-6 for details on each of the parameters. |
| INT? key, old, $x, y$, min,max |  | 9-455 | Allows on-screen edit of an existing Signed Number. See Table 9-6 for details on each of the parameters. |
| MIN? key, MIN, $x, y$, wild |  | 9-455 | Allows on-screen edit of an existing Mobile ID Number and returns the resulting MIN in a string. See Table 9-6 for details on each of the parameters. |
| TEXT? key, old, $x$, y, lines, char, mode |  | 9-456 | Allows on-screen edit of an existing variable length Text Message and returns the resulting Text Message in a string. See Table 9-6 for details on each of the parameters. |
| UINT? key,old, $x, y$, min, max |  | 9-454 | Allows on-screen edit of an existing Unsigned Number. See Table 9-6 for details on each of the parameters |

## FDCCH DATA MONITOR

Queries for received data, return -1 if data is not available or has already been read.

| FDCCH: |  |  |  |
| :---: | :---: | :---: | :---: |
| BRI? |  | 9-78 | Returns Busy/Reserved/Idle. |
| CHANnel $n$ | $\begin{aligned} & 1 \text { to } 333(\mathrm{U} 4), \\ & 1 \text { to } 1023(\mathrm{UB}), \\ & 1 \text { to } 1999(\mathrm{HY}) \end{aligned}$ | 9-66 | Selects Forward Digital Control Channel to monitor. |
| CHANnel? |  | 9-66 | Returns Channel. |
| CONFigure: |  |  |  |
| NONE |  | 9-66 | Same as FDCCH:SETup, except does not select screen. |
| USER |  | 9-66 | Same as FDCCH:SETup, exept selects user screen. |
| CPE? |  | 9-78 | Returns Coded Partial Echo. |
| CRC? |  | 9-78 | Returns CRC. |
| CSFP? |  | 9-78 | Returns Coded Super Frame Phase. |
| DVCC $n$ | 0 to 255 | 9-66 | Specities Digital Verification Color Code. |
| DVCC? |  | 9-66 | Returns DVCC. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { FDCCH: } \\ & \text { EBCCH: } \end{aligned}$ |  |  |  |
| ALT_SOC: |  |  |  |
| MAP: |  |  |  |
| PSID_RSID? $n$ | 0 to 15 | 9-119 | Returns selected SOC PSID/RSID Map. |
| NUMBer? |  | 9-119 | Returns Number of Alternate SOCs. |
| SOC? $n$ | 0 to 15 | 9-119 | Returns selected SOC. |
| $B C$ ? |  | 9-94 | Returns state of Begin/Continue. |
| BI? |  | 9-94 | Returns state of Begin Indicator. |
| BSMC? |  | 9-114 | Returns Base Station Manufacture Code. |
| CHAN? |  | 9-120 | Returns CHAN. |
| CHANnel: |  |  |  |
| GROUP: |  |  |  |
| FIRST? $n$ | 0 to 63 | 9-114 | Returns selected RF Channel Allocation Channel Group First Channel. |
| LAST? $n$ | 0 to 63 | 9-114 | Returns selected RF Channel Allocation Channel Group Last Channel. |
| NUMber? |  | 9-114 | Returns RF Channel Allocation Number of Channel Groups. |
| PT? |  | 9-114 | Returns RF Channel Allocation Parameter Type. |
| CLI? |  | 9-94 | Returns Continuation Length Indicator. |
| CUSTOM: |  |  |  |
| CONTrol? $n$ | 0 to 255 | 9-114 | Returns selected Custom Control. |
| LENGth? |  | 9-114 | Returns Length of Custom Control in octets. |
| ECL? |  | 9-94 | Returns E-BCCH Cycle Length. |
| HYPERband: |  |  |  |
| INFO? |  | 9-120 | Returns Hyperband Info. |
| PT? |  | 9-120 | Returns Hyperband Info Parameter Type. |
| IRA? |  | 9-118 | Returns state of IRA Support. |
| L3LI? |  | 9-94 | Returns Layer 3 Length Indicator. |
| MACA: |  |  |  |
| EIGHT: |  |  |  |
| CONTrol? |  | 9-116 | Returns state of MACA 8_CONTROL. |
| PT? |  | 9-116 | Returns MACA_8_CONTROL Parameter Type. |
| LIST: |  |  |  |
| CHAN? $n$ | 0 to 15 | 9-116 | Returns selected MACA_LIST CHAN. |
| NUMber? |  | 9-116 | Returns Number of MACA Channels. |
| OTHER: |  |  |  |
| HYPERband? | 0 to 15 | $\begin{aligned} & 9-117 \\ & 9-117 \end{aligned}$ | Returns Hyperband. |
| NuMber? |  | 9-117 | Returns Number of MACA Channels. |
| PT? |  | 9-117 | Returns MACA LIST (Other Hyperband) Parameter Type. |
| PT? |  | 9-116 | Returns MACA LIST Parameter Type. |
| STATus? |  | 9-116 | Returns MACA_STATUS. |
| TYPE? |  | 9-116 | Returns MACA_TYPE. |
| MAP: |  |  |  |
| ARQ? |  | 9-118 | Returns state of FACCH/SACCH ARQ Map. |
| CODER? |  | 9-117 | Returns Voice Coder Map. |
| DPM? |  | 9-117 | Returns Data Privacy Mode Map. |
| MEA: 0 |  |  |  |
| ALGORithms? $n$ | 0 to 7 | 9-118 | Returns selected Message Encryption Algorithm. |
| DOMAIN? |  | 9-118 | Returns Message Encryption Algorithm Domain Map. |
| MEK? |  | 9-118 | Returns Message Encryption Key Map. |
| MENU? |  | 9-118 | Returns Menu Map. |
| SMS? |  | 9-118 | Returns SMS Map. |
| USER? |  | 9.118 | Returns state of User Group Map. |
| VPM? |  | 9-117 | Returns Voice Privacy Mode Map. |
| MCC: |  |  |  |
| CODE? |  | 9-120 | Returns Mobile Country Code. |
| PT? |  | 9-120 | Returns Mobile Country Code Parameter Type. |
| MSGtype? |  | 9-94 | Returns Message Type. |
| MULti: ${ }_{\text {SERV SS? }}$ |  |  |  |
| SERV_SS? |  | 9.120 | Returns SERV_SS for Multi Hyperband. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| FDCCH: <br> EBCCH: <br> NEIGHbor: <br> ANAlog: CELL: |  |  |  |
|  |  |  |  |
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|  |  |  |  |
|  |  |  |  |
| ACCess: |  |  |  |
| MS_PWR? $n$ | 0 to 31 | 9-101 | Returns selected Neighbor Cell List (Analog) MS_ACC_PWR. |
| RSS̄_MIN? $n$ | 0 to 31 | 9-101 | Returns selected Neighbor Cell List (Analog) RS_ACC_MIN. |
| CHAN? $n$ | 0 to 31 | 9-99 | Returns selected Neighbor Cell List (Analog) CHAN |
| DCC? $n$ | 0 to 31 | 9-100 | Returns selected Neighbor Cell List (Analog) DCC. |
| DELay? $n$ | 0 to 31 | 9-100 | Returns selected Neighbor Cell List (Analog) DELAY. |
| HL FREQ? $n$ | 0 to 31 | 9-100 | Returns state of selected Neighbor Cell List (Analog) HL_FREQ. |
| OFFset? $n$ | 0 to 31 | 9-100 | Returns selected Neighbor Cell List (Analog) RESEL OFFSET. |
| PROTocol? $n$ | 0 to 31 | 9-99 | Returns selected Neighbor Cell List (Analog) Protocol Version. |
| RETRY? $n$ | 0 to 31 | 9-101 | Returns state of selected Neighbor Cell List (Analog) Directed Retry Channel. |
| SS SUFF? $n$ TYPE: | 0 to 31 | 9-100 | Returns selected Neighbor Cell List (Analog) SS_SUFF. |
| CELL? $n$ | 0 to 31 | 9-100 | Returns selected Neighbor Cell List (Analog) CELLTYPE. |
| NETwork? $n$ | 0 to 31 | 9-100 | Returns selected Neighbor Cell List (Analog) Network Type. |
| MULti: |  |  |  |
| ACCess: |  |  |  |
| MS_PWR? $n$ | 0 to 23 | 9-109 | Returns selected Neighbor Cell List (Analog) MS ACC_PWR. |
| RSS_MIN? $n$ | 0 to 23 | 9-109 | Returns selected Neighbor Cell List (Analog) RS_ACC_MIN. |
| CHAN? $n$ | 0 to 23 | 9-107 | Returns selected Neighbor Cell List (Analog) CHAN |
| DCC? $n$ | 0 to 23 | 9-108 | Returns selected Neighbor Cell List (Anaiog) DCC. |
| DELay? $n$ | 0 to 23 | 9-108 | Returns selected Neighbor Cell List (Analog) DELAY. |
| HL_FREQ? $n$ | 0 to 23 | 9-108 | Returns selected Neighbor Cell List (Analog) HL_FREQ. |
| NUMBer? |  | 9-107 | Returns Number of Analog Neighbor Cells. |
| OFFset? $n$ | 0 to 23 | 9-108 | Returns selected Neighbor Cell List (Analog) RESEL_OFFSET. |
| PROTocol? $n$ | 0 to 23 | 9-107 | Returns selected Neighbor Cell List (Analog) Protocol Version. |
| PT? |  | 9-107 | Returns Neighbor Cell List (Analog) Parameter Type. |
| RETRY? $n$ | 0 to 23 | 9-109 | Returns selected Neighbor Cell List (Analog) Directed Retry Channel. |
| SS_SUFF? $n$ TYPE: | 0 to 23 | 9-108 | Returns selected Neighbor Cell List (Analog) SS_SUFF. |
| CELL? $n$ | 0 to 23 | 9-108 | Returns selected Neighbor Cell List (Analog) CELLTYPE. |
| NETwork? $n$ | 0 to 23 | 9-108 | Returns selected Neighbor Cell List (Analog) Network Type. |
| OTHER: |  |  |  |
| HYPERband? <br> INFO: |  | 9-109 | Returns Neighbor Cell List (Other Hyperband). |
| COUNT? |  | 9-113 | Returns TDMA Service Info (Other Hyperband) Neighbor Count. |
| HYPERband? |  | 9-113 | Returns TDMA Service Info (Other Hyperband). |
| PT? |  | 9-113 | Returns TDMA Service Info (Other Hyperband) Parameter Type. |
| SERVice: |  |  |  |
| INDicator? $n$ | 0 to 31 | 9-113 | Returns state of selected TDMA Service Info (Other Hyperband) Service Map Indicator. |
| MAP? $n$ | 0 to 31 | 9-113 | Returns selected TDMA Service Info (Other Hyperband) Service Map. |
| MULti: |  |  |  |
| MS_PWR? $n$ | 0 to 31 | 9-112 | Returns selected Neighbor Cell List (Other Hyperband) MS_ACC_PWR. |
| RSS_MIN? $n$ | 0 to 31 | 9-112 | Returns selected Neighbor Cell List (Other Hyperband) RSS ACC MIN. |

$\left.\begin{array}{llll}\text { COMMAND } & & \text { RANGE } & \text { PAGE }\end{array} \quad \begin{array}{c}\text { DESCRIPTION }\end{array}\right]$

| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| FDCCH: $\mathrm{EBCCH}:$ <br> NEIGHbor: TDMA: INFO |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| COUNt? |  | 9-102 | Returns TDMA Neighbor Count. |
| PT? |  | 9-102 | Returns TDMA Service Info Parameter Type. |
| SERVice: |  |  |  |
| INDicator? $n$ | 0 to 31 | 9-102 | Returns state of selected TDMA Service Map Indicator. |
| MAP? $n$ | 0 to 31 | 9-102 | Returns selected TDMA Service Map. |
| MULti: |  |  |  |
| ACCess: |  |  |  |
| MS_PWR? $n$ | 0 to 23 | 9-105 | Returns selected TDMA Neighbor Cell MS_ACC_PWR. |
| RSS _MIN? $n$ | 0 to 23 | 9-105 |  |
| CHAN? $n$ | 0 to 23 | 9-103 | Returns selected TDMA Neighbor Cell CHAN. |
| DELay? $n$ | 0 to 23 | 9-104 | Returns selected TDMA Neighbor Cell DELAY. |
| DVCC? $n$ | 0 to 23 | 9-104 | Returns selected TDMA Neighbor Cell DVCC. |
| HL_FREQ? $n$ | 0 to 23 | 9-104 | Returns selected TDMA Neighbor Cell HL_FREQ. |
| NUMBer? |  | 9-103 | Returns Number of TDMA Neighbor Cells. |
| OFFset? $n$ | 0 to 23 | 9-104 | Returns selected TDMA Neighbor Cell RESEL_OFFSET. |
| PSID_RSID: |  |  |  |
| INDicator? $n$ | 0 to 23 | 9-106 | Returns selected TDMA Neighbor Cell PSID/RSID Indicator. |
| LENGth? $n$ | 0 to 23 | 9-106 | Returns selected TDMA Neighbor Cell Support Length. |
| SUPport? $n$ | 0 to 23 | 9-106 | Returns selected TDMA Neighbor Cell Support. |
| PT? |  | 9-103 | Returns Neighbor Cell List (TDMA) Parameter Type. |
| RETRY? $n$ | 0 to 23 | 9-105 | Returns selected TDMA Neighbor Cell Directed Retry Channel. |
| SS_SUFF? $n$ | 0 to 23 | 9-104 | Returns selected TDMA Neighbor Cell SS SUF. |
| SYNC? $n$ | 0 to 23 | 9-104 | Returns selected TDMA Neighbor Cell SYNC. |
| TYPE: |  |  |  |
| CELL? $n$ | 0 to 23 | 9-105 | Returns selected TDMA Neighbor Cell CELLTYPE. |
| NETwork? $n$ | 0 to 23 | 9-105 | Returns selected TDMA Neighbor Cell Network Type. |
| NuMber? |  | 9-95 | Returns Number of TDMA Neighbor Cells. |
| PT? |  | 9-95 | Returns Neighbor Cell List (TDMA) Parameter Type. |
| NONPublic: |  |  |  |
| PROBability: |  |  |  |
| BLOCk? |  | 9-95 | Returns Non-Public Probability Block. |
| LENGth? |  | 9-95 | Returns Non-Public Probability Block Length. |
| PT? |  | 9-95 | Returns Non-Public Probability Block Parameter Type. |
| OATS? |  | 9-118 | Returns OATS Support. |
| PD? |  | 9-94 | Returns Protocol Discriminator. |
| RCl ? |  | 9-113 | Returns RCI. |
| SERV_SS? |  | 9-94 | Returns SERV_SS. |
| SID? |  | 9-120 | Returns System ID. |
| SIGnal: |  |  |  |
| CADence? |  | 9-115 | Returns Signal Cadence. |
| DURation? |  | 9-115 | Returns Signal Duration. |
| PITCH? |  | 9-115 | Returns Signal Pitch. |
| PT? |  | 9-115 | Returns Signal Parameter Type. |
| SOC? |  | 9-119 | Returns System Operator Code. |
| TEXT: |  |  |  |
| CHARacter? $n$ | 0 to 251 | 9-115 | Returns selected Text Message Data Unit Short Message Character. |
| ENCoding? |  | 9-115 | Returns Text Message Data Unit Encoding Identifier. |
| LENGth? |  | 9-115 | Returns Length of Text Message Data Unit in octets. |
| REServed? |  | 9-115 | Returns Text Message Data Unit Reserved. |
| TIME? |  | 9-119 | Returns Time from Jan 1, 1980 (32 bit value). |
| ZONE: |  |  |  |
| DIRection? |  | 9-119 | Returns state of Time Zone Offset Direction. |
| DST? |  | 9-119 | Returns state of Time Zone Offset Daylight Savings Indicator. |
| MINutes? |  | 9-119 | Returns Time Zone Offset Minutes. |

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FDCCH:
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    FBCCH:
        ACCess:
            BURSTsize? 9-84
            MS_PWR?
            RSS MIN?
        ADDitional:
            CHAN
            NUMber?
            PT?
            SLOT? \(n\)
        ALPHA:
            SID:
                CHARacters? 9-89
                LENGth?
                PT?
        ALT SOC:
            MAP:
                    PSID RSID?
            NUMBer?
            SOC? \(n\)
        AUTH?
        BARred?
        \(B C\) ?
        BI ?
        BSMC?
        CAPability?
        CBN:
            HIGH?
            PT?
        CLI?
        CONfiguration?
        CUSTOM:
            CONTrol? n
            LENGth?
        DELay?
        DEREG?
        DIC?
        DVCC?
        EC?
        EXTended:
            COUNt?
            PT?
        FC?
        FOREG?
        HYPERframe?
        INITial?
        IRA?
        L3LI?
        LAREG?
        MACA:
        EIGHT:
            CONTrol?
            PT?
        LIST:
            CHAN? \(n\)
            NUMber?
            OTHER:
                CHAN? \(n\)
                    HYPERband?
                    NUMber?
                    PT?
                PT?
            9.84
            9-84
                0 to 7 9-86
                    9-89
                            9-89
                            9-85
                            \(9-85\)
                            9-85
                            9-86
    0 to $15 \quad 9-93$9-93
$9-93$9-93
9-83
9-84
9-80
9-90
0 to $15 \quad 9.90$
$9-90$
$9-90$
9-91
9-91
Returns state of Access Burst Size.
Returns MS_ACC_PWR (Mobile Station Access Power).
Returns RSS_ACC_MIN (Minimum Access Received Signal
Strength).
Returns selected Additional DCCH Channel Information.
Returns Number of Additional DCCH Channels.
Returns Additional DCCH Information Parameter Type.
Returns selected Additional Slot Information.

Returns selected Alphanumeric SID.
Returns Length of Alphanumeric System ID.
Returns Alphanumeric SID Parameter Type.
Returns selected SOC PSID/RSID Map
Returns Number of Alternate SOCs.
Returns selected SOC.
Returns state of AUTH
Returns Cell Barred.
Returns Begin/Continue.
Returns Begin Indicator.
Returns Base Station Manufacture Code
Returns state of Capability Request.
Returns CBN_High
Returns CBN High Parameter Type.
Returns Continuation Length Indicator
Returns Slot Configuration.
Returns selected Custom Control,
Returns Length of Custom Control.
Returns DELAY
Returns state of DEREG
Returns state of Delay Interval Compensation Mode.
Returns Digital Verification Color Code.
Returns E-BCCH Change.
Returns Extended Hyperframe Counter.
Returns Extended Hyperframe Counter Parameter Type.
Returns F-BCCH Change.
Returns state of FOREG.
Returns Hyperframe Counter.
Returns state of Initial Selection Control.
Returns state of IRA Support.
Returns Layer 3 Length Indicator.
Returns state of LAREG.
9-90 Returns state of MACA 8 CONTROL

Returns state of Access Burst Size
Returns MS_ACC_PWR (Mobile Station Access Power).
Returns RSS Strength).

Returns selected Additional DCCH Channel Information.
Returns Number of Additional DCCH Channels.
Returns Additional DCCH Information Parameter Type.
Returns selected Additional Slot Information.

Returns selected SOC PSID/RSID Map.
Returns Number of Alternate SOCs.
Returns selected SOC.
Returns state of AUTH.
Returns Cell Barred.
Returns Begin/Continue.
Returns Base Station Manufacture Code
Returns state of Capability Request.
Returns CBN_High.
Returns Continuation Length Indicator
Returns Slot Configuration.
Returns selected Custom Control,
Returns Length of Custom Control.
Returns DELAY
Returns state of Delay Interval Compensation Mode.
Returns Digital Verification Color Code.
Returns E-BCCH Change.
Returns Extended Hyperframe Counter.
Returns Extended Hyperframe Counter Parameter Type.
Returns F-BCCH Change.
Returns Hyperframe Counter
Returns state of Initial Selection Control.
Returns Layer 3 Length Indicator.
Returns state of LAREG

Returns state of MACA 8 CONTROL
Returns MACA 8 CONTROL Parameter Type.
Returns selected MACA LIST CHAN.
Returns Number of MACA Channels.
Returns selected MACA_LIST (Other Hyperband) CHAN .
Returns Hyperband (Other Hyperband).
Returns Number of MACA Channels (Other Hyperband).
Returns MACA_LIST (Other Hyperband) Parameter Type.
Returns MACA LIST Parameter Type.

| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { FDCCH: } \\ & \text { FBCCH: } \end{aligned}$ |  |  |  |
| MACA: |  |  |  |
| STATus? |  | 9-90 | Returns MACA STATUS. |
| TYPE? |  | 9-90 | Returns MACA_TYPE. |
| MAP: |  |  |  |
| ARQ? |  | 9-92 | Returns state of FACCH/SACCH ARQ Map. |
| AUTH? |  | 9-91 | Returns AUTH Map. |
| CODER? |  | 9-92 | Returns Voice Coder Map. |
| DPM? |  | 9-92 | Returns Data Privacy Mode Map. |
| MEA: 0 |  |  |  |
| ALGORithms? $n$ | 0 to 7 | 9-92 | Returns selected Message Encryption Algorithm. |
| DOMAIN? |  | 9-92 | Returns Message Encryption Algorithm Domain Map. |
| MEK? |  | 9-92 | Returns Message Encryption Key Map. |
| MENU? |  | 9-92 | Returns Menu Map. |
| REG_INFO? |  | 9-93 | Returns Reg-Info Map. |
| SMS? |  | 9-93 | Returns SMS Map. |
| USER? |  | 9-92 | Returns state of User Group Map. |
| VPM? |  | 9-91 | Returns Voice Privacy Mode Map. |
| MAX: |  |  |  |
| BUSY? |  | 9-84 | Returns state of Max Busy/Reserved. |
| REPetitions? |  | 9-84 | Returns Max Repetitions. |
| RETries? |  | 9-84 | Returns Max Retries. |
| STOP? |  | 9-84 | Returns state of Max Stop Counter. |
| MCC: |  |  |  |
| CODE? |  | 9-89 | Returns Mobile Country Code. |
| PT? |  | 9-89 | Returns Mobile Country Code Parameter Type. |
| MSGtype? |  | 9-80 | Returns Message Type. |
| NETwork? |  | 9-88 | Returns Network Type. |
| NONPublic: |  |  |  |
| PROBability: |  |  |  |
| BLOCk? |  | 9-83 | Returns Non-Public Block Map. |
| LENGth? |  | 9-83 | Returns Non-Public Map Length. |
| PT? |  | 9-83 | Returns Non-Public Probability Block Parameter Type. |
| REGistration: |  |  |  |
| CONTrol? |  | 9-83 | Returns Non-Public Registration Control. |
| PT? |  | 9-83 | Returns Non-Public Registration Control Parameter Type. |
| NUMber: |  |  |  |
| EBCCH? |  | 9-81 | Returns Number of E-BCCH. |
| FBCCH ? |  | 9-81 | Returns Number of F-BCCH. |
| NON_PCH? |  | 9-81 | Returns Number of Non-PCH Subchannel Slots. |
| REServed? |  | 9-81 | Returns Number of Reserved Slots. |
| SBCCH? |  | 9-81 | Returns Number of S-BCCH. |
| OATS? |  | 9-93 | Returns state of OATS Support. |
| OLC? |  | 9-91 | Returns Overload Control. |
| PCH ? |  | 9.82 | Returns Paging Channel Displacement. |
| PD? |  | 9-80 | Returns Protocol Discriminator. |
| PDREG? |  | 9-86 | Returns state of PDREG. |
| PFC? |  | 9-82 | Returns Maximum Supported Paging Frame Class. |
| PFM? |  | 9-82 | Returns state of Paging Frame Modifier Direction. |
| PROTocol? |  | 9-88 | Returns Protocol Version. |
| PSID_RSID: |  |  |  |
| NUMber? |  | 9-88 | Returns Number of PSID/RSID. |
| PT? |  | 9-88 | Returns PSID/RSID Set Parameter Type. |
| SOC? |  | 9-88 | Returns PSID/RSID SOC. |
| TYPE? $n$ | 0 to 15 | 9-88 | Returns state of selected TYPE of PSID/RSID. |
| VALUE? $n$ | 0 to 15 | 9-88 | Returns selected VALUE of PSID/RSID. |
| PUREG? |  | 9-86 | Returns state of PUREG. |
| RAND? |  | 9-83 | Returns 32 bit RAND. |
| RDATA: |  |  |  |
| LENGth? |  | 9-84 | Returns R-DATA Message Length. |
| REGH? |  | 9-86 | Returns state of REGH. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| FDCCH: <br> FBCCH: |  |  |  |
|  |  |  |  |
| ID? |  | 9-87 | Returns REGID. |
| PER? |  | 9-87 | Returns Registration ID Period. |
| PT? |  | 9-87 | Returns REGID Parameter Type. |
| REGistration: |  |  |  |
| PERiod? |  | 9-87 | Returns Registration Period. |
| PT? |  | 9-87 | Returns Registration Period Parameter Type. |
| REGR? |  | 9-86 | Returns state of REGR. |
| RNUM: |  |  |  |
| NUMber? |  | 9-87 | Returns Present RNUM. |
| PT? |  | 9-87 | Returns Present RNUM Parameter Type. |
| S? |  | 9-83 | Returns state of $S$. |
| SCAN: |  |  |  |
| INTerval? |  | 9-85 | Returns SCANINTERVAL. |
| OPTion? |  | 9-85 | Returns state of Scanning Option Indicator. |
| SID? |  | 9-88 | Returns System ID. |
| SOC? |  | 9-93 | Returns System Operator Code. |
| SS_SUFF? |  | 9-85 | Returns Signal Strength Sufficient. |
| SUBaddressing? |  | 9-85 | Returns state of Subaddressing Support. |
| SUPERtrame? |  | 9-81 | Returns state of Primary Superframe indicator. |
| SYREG? |  | 9-86 | Returns state of SYREG. |
| LAYER2: |  |  |  |
| DECode $n$ | 0 to 99 | 9-70 | Decodes frame of data in selected raw buffer. |
| EBCCH: |  |  |  |
| $B C$ ? |  | 9-72 | Returns state of Begin/Continue. |
| BI? $n$ | 0 to 3 | 9-72 | Returns state of selected Begin Indicator. |
| CLI? |  | 9-72 | Returns Continuation Length Indicator. |
| CRC? |  | 9-72 | Returns Cyclic Redundancy Code. |
| ECL? |  | 9-72 | Returns E-BCCH Cycle Length. |
| L3DATA? $n, x$ | 0 to 3, 0 to 15 | 9.73 | Returns selected byte (x) of selected Layer 3 Data message. |
| L3LI? $n$ | 0 to 3 | 9-73 | Returns selected Layer 3 Length Indicator. |
| RSVD? |  | 9.73 | Returns state of E-BCCH Layer 2 Reserved. |
| FBCCH: |  |  |  |
| $B C$ ? |  | 9.71 | Returns state of Begin/Continue. |
| BI? $n$ | 0 to 3 | 9-71 | Returns state of selected Begin Indicator. |
| CLI? |  | 9-71 | Returns Continuation Length Indicator. |
| CRC? |  | 9.71 | Returns Cyclic Redundancy Code. |
| EC? |  | 9-71 | Returns state of E-BCCH Change. |
| FC? |  | 9.71 | Returns state of F-BCCH Change. |
| L3DATA? $n, x$ | 0 to 3, 0 to 15 | 9-71 | Returns selected byte (x) of selected Layer 3 Data message. |
| L3LI? $n$ | 0 to 3 | 9.72 | Returns selected Layer 3 Length Indicators. |
| SPACH: |  |  |  |
| ARM? |  | 9-74 | Returns state of ARQ Response Mode. |
| ARQ RSVD? |  | 9.74 | Returns ARQ Layer 2 frame RSVD. |
| BCN? |  | 9-74 | Returns state of BCCH Change Notification. |
| BT? |  | 9.74 | Returns Burst Type. |
| BU? |  | 9-74 | Returns Burst Usage. |
| CRC? |  | 9.74 | Returns Cyclic Redundancy Code. |
| EH_RSVD? |  | 9-74 | Returns state of Extended Header RSVD. |
| FRNO? |  | 9-74 | Returns Frame Number. |
| GA? |  | 9-74 | Returns state of Go Away. |
| HA RSVD? |  | 9-74 | Returns state of SPACH Header A_RSVD. |
| IDT? |  | 9-74 | Returns Identity Type. |
| L3DATA? $n, x$ | 0 to 3, 0 to 15 | 9-75 | Returns selected byte ( x ) of selected Layer 3 Data message. |
| L3LENGTH? $n$ | 0 to 3 | 9-75 | Returns selected Layer 3 Length. |
| L3LI? $n$ | 0 to 3 | 9-75 | Returns selected Layer 3 Length Indicator. |
| MEA? |  | 9.75 | Returns Message Encryption Mode. |
| MEK? |  | 9-75 | Returns Message Encryption Key. |
| MM ? |  | 9.75 | Returns state of Message Mapping. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| FDCCH: <br> LAYER2 |  |  |  |
|  |  |  |  |
| SPACH: |  |  |  |
| MSID: |  |  |  |
| LS? $n$ | 0 to 4 | 9-76 | Returns 32 Least Significant bits of selected Mobile Station ID. |
| MS? $n$ | 0 to 4 | 9-76 | Returns 18 Most Significant bits of selected Mobile Station ID. |
| MSID? $n, x$ | $\begin{aligned} & n=0 \text { to } 4, \\ & x=0 \text { to } 2,4 \text { or } 6 \end{aligned}$ | 9-76 | Returns selected byte ( x ) of selected Mobile Station identity. |
| PCON? |  | 9-76 | Returns state of PCH Continuation. |
| PEA? |  | 9-76 | Returns Partial Echo Assigned. |
| PFM? |  | 9-76 | Returns state of Paging Frame Modifier. |
| PI? |  | 9-76 | Returns state of Polling Indicator. |
| SRM? |  | 9-76 | Returns state of SPACH Response Mode. |
| UGID: |  |  |  |
| LS? |  | 9-77 | Returns 32 Least Significant bits of User Group ID. |
| MS? |  | 9-77 | Returns 18 Most Significant bits of User Group ID. |
| UGID? $n, x$ | $\begin{aligned} & n=0 \text { to } 4, \\ & x=0 \text { to } 2,4 \text { or } 6 \end{aligned}$ | 9-77 | Returns selected byte ( x ) of selected User Group Identity. |
| TYPE? |  | 9-70 | Returns type of data decoded. |
| R_N? |  | 9-78 | Returns Received/Not received. |
| RATE $n$ | $0=$ Full, 1 = Half | 9-67 | Selects TDMA transmission rate. |
| RATE? |  | 9-67 | Returns setting of Rate. |
| RAW: |  |  |  |
| CSFP? $n$ | 0 to 99 | 9-69 | Returns Coded Super Frame Phase in selected raw data frame. |
| DATA? $n, x$ | 0 to 99,0 to 15 | 9-69 | Returns selected raw data byte ( $x$ ) in selected raw data frame. |
| FULL? |  | 9-69 | Returns state of raw buffer: $1=$ full, $0=$ not full. |
| SCF? $n$ | 0 to 99 | 9-69 | Returns Shared Channel Feedback in selected raw data frame. |
| STARt |  | 9-69 | Starts capturing raw data on FDCCH. |
| STOP |  | 9-69 | Stops capturing raw data on FDCCH. |
| SYNC? $n$ | 0 to 99 | 9-69 | Returns Sync word in selected raw data frame. |
| TS? $n$ | 0 to 99 | 9-69 | Returns Time Stamp in ms of selected raw data frame. |
| REMote: |  |  |  |
| RAW: |  |  |  |
| DVCC $n$ | 1 to 255 | 9-68 | Specifies Digital Verification Color Code. |
| STARt |  | 9-68 | Starts sending received, de-interleaved and decoded data out OPT. RS-232 Connector. |
| STOP |  | 9-68 | Stops sending data out OPT. RS-232 Connector. |
| TIMEslot: |  |  |  |
| STARt |  | 9-67 | Starts sending received Timeslot data out OPT. RS-232 Connector. |
| STOP |  | 9-67 | Stops sending received Timeslot data out OPT. RS-232 Connector. |
| SYNC $n$ | 1 or 0 | 9-67 | Enables/disables sync word. |
| SCF? |  | 9-78 | Returns Share Channel Feedback (22 bit value). |
| SETup |  | 9-66 | Configures Sp Tst to receive on the FDCCH. |
| SLOT $n$ | 1 to 3 | 9-67 | Selects the full or half rate SLOT on which to receive. |
| SLOT? |  | 9-67 | Returns Slot. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { FDCCH: } \\ & \text { SPACH: } \end{aligned}$ |  |  |  |
| Data returned from the SPACH portion of the FDCCH Data Monitor is retrieved from the selected L3DATA Message. |  |  |  |
| ALPHA: |  |  |  |
| PSID_RSID: |  |  |  |
| LENGth? NAME: |  | 9-149 | Returns Length of Alphanumeric PSID/RSID List. |
| CHARacters? $n$ | 0 to 15 | 9-149 | Returns selected Alphanumeric PSID/RSID Display Characters. |
| LENGth? $n$ | 0 to 15 | 9-149 | Returns selected Length of PSID/RSID Alphanumeric Name. |
| PT? |  | 9-149 | Returns Alphanumeric PSID/RSID List Parameter Type. |
| SID: |  |  |  |
| SID: ${ }^{\text {CHARacters? }}$ |  | 9-149 | Returns Alphanumeric System ID. |
| SID LENGth? |  | 9-149 | Returns Length of Alphanumeric System ID. |
| SID: |  |  |  |
| PT? |  | 9-149 | Returns Alphanumeric System ID Parameter Type |
| ARM? |  | 9-123 | Returns state of ARQ Response Mode. |
| ATS? |  | 9-127 | Returns ATS. |
| AUTHBS? |  | 9-126 | Returns AUTHBS. |
| BCN? |  | 9-121 | Returns state of BCCH Change Notification. |
| BSMC? |  | 9-127 | Returns Base Station Manufacture Code. |
| BT? |  | 9-121 | Returns Burst Type. |
| BU? |  | 9-121 | Returns Burst Usage. |
| CALLED: |  |  |  |
| ADDRess? |  | 9-132 | Returns Called Party Address. |
| ENCoding? |  | 9-132 | Returns state of Called Party Address Encoding. |
| LENGth? |  | 9-132 | Returns Called Party Length of Address Info. |
| PLANid? |  | 9-132 | Returns Called Party Numbering Plan ID. |
| PT? |  | 9-132 | Returns Called Party Parameter Type. |
| SUBaddress: |  |  |  |
| ADDRess? $n$ | 0 to 19 | 9-133 | Returns selected Called Party Subaddress. |
| LENGth? |  | 9-133 | Returns Length of Called Party Subaddress Info. |
| ODD_EVEN? |  | 9-133 | Returns state of Called Party Subaddress Odd/Even Indicator. |
| PT? |  | 9-133 | Returns Called Party Subaddress Parameter Type. |
| REServed? |  | 9-133 | Returns combination of two Called Party Subaddress Reserved fields. |
| TYPE? |  | 9-133 | Returns Type of Called Party Subaddress. |
| TYPE? |  | 9-132 | Returns Called Party Type of Number. |
| CALLING: |  |  |  |
| ADDRess? |  | 9-134 | Returns Calling Party Number Address. |
| ENCoding? |  | 9-134 | Returns state of Calling Party Address Encoding. |
| LENGth? |  | 9-134 | Returns Calling Party Length of Address Info. |
| PLANid? |  | 9-134 | Returns Calling Party Number Plan ID. |
| PRESentation: |  |  |  |
| PI? |  | 9-136 | Returns Presentation Indicator. |
| PT? |  | 9-136 | Returns Calling Party Presentation Indicator Parameter Type. |
| SI? |  | 9-136 | Returns Screening Indicator. |
| PT? |  | 9-134 | Returns Calling Party Number Parameter Type available. |
| SUBaddress: |  |  |  |
| ADDRess? $n$ | 0 to 19 | 9-135 | Returns selected Calling Party Subaddress. |
| LENGth? |  | 9-135 | Returns Calling Party Length of Subaddress Info. |
| ODD EVEN? |  | 9-135 | Returns state of Calling Party Subaddress Odd/Even Indicator. |
| PT? |  | 9-135 | Returns Calling Party Subaddress Parameter Type. |
| REServed? |  | 9-135 | Returns combination of two Calling Party Subaddress Reserved fields. |
| TYPE? |  | 9-135 | Returns Calling Party Type of Subaddress. |
| TYPE? |  | 9.134 | Returns Type of Calling Party Number. |
| CHAN? |  | 9-125 | Returns CHAN. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| FDCCH: SPACH |  |  |  |
| CUSTOM: |  |  |  |
| CONTrol? $n$ | 0 to 255 | 9-127 | Returns selected Custom Control. |
| LENGth? |  | 9-127 | Returns Length of Custom Control in octets. |
| DEBUG? |  | 9-126 | Returns state of Debug Display Allowed. |
| DIRectory: |  |  |  |
| ADDRess? |  | 9-145 | Returns Directory Address. |
| ENCoding? |  | 9-145 | Returns state of Directory Address Encoding. |
| LENGth? |  | 9-145 | Returns Director Length of Address Info. |
| PLANid? |  | 9-145 | Returns Directory Address ID Plan. |
| PT? |  | 9-145 | Returns Directory Address Parameter Type. |
| SUBaddress: |  |  |  |
| ADDRess? $n$ | 0 to 19 | 9-146 | Returns selected Directory Subaddress. |
| LENGth? |  | 9-146 | Returns Directory Length of Subaddress Into. |
| ODD_EVEN? |  | 9-146 | Returns state of Directory Subaddress Odd/Even Indicator. |
| PT? |  | 9-146 | Returns Directory Subaddress Parameter Type. |
| REServed? |  | 9-146 | Returns combination of two Directory Subaddress Reserved fields. |
| TYPE? |  | 9-146 | Returns Directory Type of Subaddress. |
| TYPE? |  | 9-145 | Returns Directory Address Type of Number. |
| DISPlay: |  |  |  |
| CHARacter? $n$ | 0 to 81 | 9-126 | Returns selected Display Character. |
| LENGth? |  | 9-126 | Returns Length of Display Info. |
| PT? |  | 9-126 | Returns Display Parameter Type. |
| DMAC? |  | 9-127 | Returns DMAC. |
| DTX: |  |  |  |
| PT? |  | 9-126 | Returns DTX Support Parameter Type. |
| SUPport? |  | 9-126 | Returns DTX Support. |
| DVCC? |  | 9-127 | Returns DVCC. |
| EHI? |  | 9-123 | Returns state of Extended Header Information. |
| FLAG: |  |  |  |
| AUTH? |  | 9-129 | Returns state of AUTH flag. |
| PT? |  | 9-129 | Returns RCF and AUTH flags Parameter Type. |
| RCF? |  | 9-129 | Returns state of RCF flag. |
| FRNO? |  | 9-123 | Returns Frame Number. |
| GA? |  | 9-123 | Returns state of Go Away. |
| HYPERband: |  |  |  |
| INFO? |  | 9-129 | Returns Hyperband Info. |
| PT? |  | 9-129 | Returns Hyperband Info Parameter Type. |
| IDT? |  | 9-121 | Returns Identity Type. |
| L3DATA: 0 a |  |  |  |
| SELect $n$ | 0 to 3 | 9-124 | Returns selected MIN. |
| SELect? |  | 9-124 | Returns number of selected L3DATA Message. |
| L3LI? |  | 9-123 | Returns Layer 3 Length Indicator. |
| LT? |  | 9-129 | Returns state of Last Try. |
| MACA:LIST: |  |  |  |
| CHAN? $n$ | 0 to 15 | 9.150 | Returns CHAN for selected MACA Channel. |
| NuMBer? |  | 9-150 | Returns Number of MACA Channels. |
| OTHER: |  |  |  |
| CHAN? $n$ | 0 to 15 | 9-150 | Returns CHAN of selected MACA Channel for MACA_LIST (Other Hyperband). |
| HYPERband? |  | 9-150 | Returns Hyperband for MACA LIST (Other Hyperband). |
| NUMBer? |  | 9-150 | Returns Number of MACA Channel for MACA LIST (Other Hyperband). |
| MEA? |  | 9-123 | Returns Message Encryption Algorithm. |
| MEK? |  | 9-123 | Returns Message Encryption Key. |
| MEM ? |  | 9-124 | Returns state of Message Encryption Mode. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| FDCCH: SPACH: |  |  |  |
| MESSage: |  |  |  |
| CENTer: |  |  |  |
| ADDRess? |  | 9-138 | Returns Message Center Address. |
| ENCoding? |  | 9-137 | Returns state of Message Center Address Encoding. |
| LENGth? |  | 9-137 | Returns Message Center Length of Address Info. |
| PLANid? |  | 9-137 | Returns Message Center Numbering Plan ID. |
| PT? |  | 9-137 | Returns Message Center Address Parameter Type. |
| TYPE? |  | 9-137 | Returns Message Center Address Type of Number. |
| MM ? |  | 9-122 | Returns state of Message Mapping. |
| MODE: |  |  |  |
| DIC? |  | 9-128 | Returns state of Delay Interval Compensation Mode. |
| MEM |  |  |  |
| MEA? |  | 9-128 | Returns Message Encryption Algorithm. |
| MED? |  | 9-128 | Returns Message Encryption Domain. |
| MEK? |  | 9-128 | Returns Message Encryption Key. |
| PT? |  | 9-128 | Returns Message Encryption Mode Parameter Type. |
| VOICE: |  |  |  |
| PM_V? |  | 9-128 | Returns Voice Privacy Mode. |
| PT? |  | 9-128 | Returns Voice Mode Parameter Type. |
| VC? |  | 9-128 | Returns Voice Coder. |
| MSGtype? |  | 9-124 | Returns Message Type. |
| MSGWTG: |  |  |  |
| NUMber? $n$ | 0 to 15 | 9-130 | Returns selected Number of Messages Waiting. |
| NV? |  | 9-130 | Returns Message Waiting Info Number of Values. |
| TYPE? $n$ | 0 to 15 | 9-130 | Returns selected Type of Message Waiting. |
| MSID: |  |  |  |
| ASSIGNment? |  | 9-121 | Returns MSID Assignment. |
| IDT? |  | 9-121 | Returns MSID Assignment IDT. |
| LS? $n$ | 0 to 4 | 9-122 | Returns selected 32 Least Significant bits of Mobile Station ID. |
| MIN? $n$ | 0 to 3 | 9-122 | Returns selected MIN. |
| MS? n | 0 to 4 | 9-122 | Returns selected 18 Most Significant bits of Mobile Station ID. |
| PT? |  | 9-121 | Returns MSID Assignment Parameter Type. |
| NOTification? |  | 9-148 | Returns SPACH Notification. |
| PCON? |  | 9-121 | Returns state of PCH Continuation. |
| PD? |  | 9-124 | Returns Protocol Discriminator. |
| PEA? |  | 9-122 | Returns Partial Echo Assigned. |
| PFC: |  |  |  |
| ASSIGNment? |  | 9-143 | Returns PFC Assignment. |
| PFC: |  |  |  |
| PT? |  | 9-143 | Returns PFC Assignment Parameter Type. |
| PFM? |  | 9-121 | Returns state of Paging Frame Modifier. |
| PI? |  | 9-122 | Returns state of Polling Indicator. |
| PROTocol? |  | 9-125 | Returns Protocol Version. |
| PSID RSID: |  |  |  |
| AVAILable: |  |  |  |
| NuMber? |  | 9-144 | Returns Number of PSID/RSID. |
| PT? |  | 9-144 | Returns PSID/RSID Available Parameter Type. |
| TYPE? $n$ | 0 to 15 | 9-144 | Returns state of selected PSID/RSID Type Indicator. |
| VALUE? $n$ | 0 to 15 | 9-144 | Returns state of selected PSID/RSID Value |
| MAP? |  | 9-144 | Returns PSID/RSID Map. |
| QUEue: |  |  |  |
| POSition? |  | 9-150 | Returns Queue Position. |
| RANDSSD1? |  | 9-148 | Returns 24 most significant bits of RANDSSD. |
| RANDSSD2? |  | 9-148 | Returns 32 least significant bits of RANDSSD. |
| RANDU? |  | 9-150 | Returns RANDU (24 bit value). |
| RDATA: |  |  |  |
| DELAY? |  | 9-143 | Returns R-DATA Delay. |

FDCCH:
SPACH:
RDATA_UNIT: HLP:

DATA? $n$
IDentifier? LENGth?
REJect:
RDATA:
CAUSE?
RDATA:
SPARE?
REGistration: CAUSE? TIME:

LOWer?
PT?
UPPer?
RELease:
CAUSE?
REorder:
CAUSE?
TONE?
REREG?
RETRY:
CHANnel? $n \quad 0$ to 5

HYPERband? n
NUMBer?
RN?
RNUM:
LIST? $n$
NuMber? PT?
RTRANSaction?
SB?
SCC?
SERVice?
SFP?
SIGnal:
CADence?
DURation?
PITCH?
PT?
SOC?
SRM?
SUBaddress:
ADDRess? $n$
LENGth?
ODD_EVEN?
PT?
REServed?
TYPE?
TA?
UGID:
LS?
MIN?
MS?

| 0 to 254 | $\begin{aligned} & 9-137 \\ & 9-137 \\ & 9.136 \end{aligned}$ | Returns selected Higher Layer Protocol Data Unit. Returns R-Data Unit Higher Layer Protocol Identifier. Returns R-Data Unit Length. |
| :---: | :---: | :---: |
|  | 9-147 | Returns R-CAUSE. |
|  | 9-147 | Returns state of R-CAUSE Spare. |
|  | 9.147 | Returns Registration Reject Cause. |
|  | 9-147 | Returns Reject Lower Time Boundary in 100 SF . |
|  | 9-147 | Returns Reject Time Parameter Type. |
|  | 9-147 | Returns Reject Upper Time Boundary in 100 SF. |
|  | 9-147 | Returns Release Cause. |
|  | 9-148 | Returns Reorder/Intercept Cause. |
|  | 9-148 | Returns Tone Indicator. |
|  | 9-126 | Returns state of Forced Re-registration. |
| 0 to 5 | 9-130 | Returns CHAN for selected Retry Channel. |
| 0 to 5 | 9-130 | Returns Hyperband for selected Retry Channel. |
|  | 9-130 | Returns Number of instances of Retry Channel. |
|  | 9-136 | Returns Request Number. |
| 0 to 49 | 9-143 | Returns selected RNUM. |
|  | 9-143 | Returns Number of RNUMs. |
|  | 9-143 | Returns RNUM List Parameter Type. |
|  | 9-136 | Returns R-Transaction Identifier. |
|  | 9-127 | Returns selected SB. |
|  | 9-124 | Returns SAT Color Code. |
|  | 9-130 | Returns Service Code. |
|  | 9-123 | Returns Superframe Phase. |
|  | 9-131 | Returns Signal Cadence. |
|  | 9-131 | Returns Signal Duration. |
|  | 9-131 | Returns Signal Pitch. |
|  | 9-131 | Returns Signal Parameter Type. |
|  | 9-148 | Returns System Operator Code. |
|  | 9-122 | Returns state of SPACH Response Mode. |
| 0 to 19 | 9-125 | Returns selected Subaddress. |
|  | 9-125 | Returns Length of Subaddress Info content. |
|  | 9-125 | Returns state of Subaddress Odd/Even indicator. |
|  | 9-125 | Returns Subaddress Parameter Type. |
|  | 9-125 | Returns combination of two Subaddress Reserved fields. |
|  | 9-125 | Returns Type of Subaddress. |
|  | 9-127 | Returns Time Alignment. |
|  | 9-122 | Returns 32 Least Significant bits of UGID. |
|  | 9-123 | Returns MIN. |
|  | 9-122 | Returns 18 Most Significant bits of UGID. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { FDCCH: } \\ & \text { SPACH: } \end{aligned}$ <br> USER: DEST: |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| ADDRess? |  | 9-138 | Returns User Destination Address. |
| ENCoding? |  | 9.138 | Returns state of User Destination Address Encoding. |
| LENGth? |  | 9-138 | Returns User Destination Length of Address Info. |
| PLANid? |  | 9.138 | Returns User Destination Address ID Plan. |
| PT? |  | 9-138 | Returns User Destination Address Parameter Type. |
| SUBaddress: |  |  |  |
| ADDRess? $n$ | 0 to 19 | 9-139 | Returns selected Subaddress. |
| LENGth? |  | 9-139 | Returns Length of Subaddress Info. |
| ODD_EVEN? |  | 9-139 | Returns state of Subaddress Odd/Even indicator. |
| PT? |  | 9-139 | Returns Subaddress Parameter Type. |
| REServed? |  | 9-139 | Returns combination of two Subaddress Reserved fields. |
| TYPE? |  | 9-139 | Returns Type of Subaddress. |
| TYPE? |  | 9-138 | Returns User Destination Type of Number. |
| GROUP: |  |  |  |
| ID: |  |  |  |
| LS? |  | 9-140 | Returns 32 Least Significant bits of User Group ID. |
| MS? |  | 9-140 | Returns 18 Most Significant bits of User Group ID. |
| PT? |  | 9-140 | Returns User Group Parameter Type. |
| STATus? |  | 9-140 | Returns User Group Status. |
| TYPE? |  | 9-140 | Returns User Group Type. |
| ORIG: |  |  |  |
| ADDRess? |  | 9-141 | Returns User Originating Address. |
| ENCoding? |  | 9-141 | Returns state of User Originating Address Encoding. |
| LENGth? |  | 9-140 | Returns User Originating Length of Address Info. |
| PLANid? |  | 9-141 | Returns User Originating Address ID Plan. |
| PRESentation: |  |  |  |
| Pl? |  | 9-141 | Returns Presentation Indicator. |
| SI? |  | 9-141 | Returns Screening Indicator. |
| PT? |  | 9-140 | Returns User Originating Address Parameter Type. |
| SUBaddress: |  |  |  |
| ADDRess? $n$ | 0 to 19 | 9-142 | Returns selected Subaddress. |
| LENGth? |  | 9-142 | Returns Length of Subaddress Info. |
| ODD EVEN? |  | 9-142 | Returns state of Subaddress Odd/Even Indicator. |
| PT? |  | 9-142 | Returns Subaddress Parameter Type. |
| REServed? |  | 9-142 | Returns combination of two Subaddress Reserved fields. |
| TYPE? |  | 9-142 | Returns Type of Subaddress. |
| TYPE? |  | 9-140 | Returns User Originating Type of Address. |
| VMAC? |  | 9-125 | Returns Voice Mobile Attenuation Code. |
| STARt |  | 9-78 | Starts decoding FDCCH. |
| STOP |  | 9.78 | Stops decoding FDCCH. |
| SYNC? |  | 9-79 | Returns sync word (28 bit value). |
| TYPE? |  | 9-79 | Returns type of data of the last decoded frame. |
| FORWARD DIGITAL TRAFFIC CHANNEL (FDTC) MONITOR COMMANDS |  |  |  |
| Queries for received data, return -1 if data is not available or has already been read. |  |  |  |
| FDTC: |  |  |  |
| CHANnel $n$ | $\begin{aligned} & 1 \text { to } 333(\mathrm{U} 4), \\ & 1 \text { to } 1023(\mathrm{U}), \\ & 1 \text { to } 1999(\mathrm{HY}) \end{aligned}$ | 9-26 | Selects Forward Digital Traffic Channel to monitor. |
| CONFigure: |  |  |  |
| NONE |  | 9-26 | Same as FDTC:SETup, except does not select a screen. |
| USER |  | 9-26 | Same as FDTC:SETup, except selects the USER screen. |
| DVCC? |  | 9-26 | Returns Digital Verification Color Code. |
| FACCH: or SACCH: |  |  |  |
| AMT? |  | 9-28 | Returns Acknowledge Message Type. |
| ATS? |  | 9-28 | Returns ATS. |
| AUTHBS? |  | 9-28 | Returns AUTHBS. |
| BSMC? |  | 9-28 | Returns BSMC. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| FDTC: <br> FACCH: or SACCH: CALLING: |  |  |  |
|  |  |  |  |
|  |  |  |  |
| NAMe: |  |  |  |
| PI? |  | 9-29 | Returns Calling Party Name Presentation Indicator. |
| REServed? |  | 9-29 | Returns Calling Party Name Reserved field. |
| SI? |  | 9-29 | Returns Calling Party Name Screening Indicator. |
| NAMe? |  | 9-29 | Returns Character string value of Calling Party Name. |
| NUM? |  | 9-29 | Returns number of calling party. |
| NUM1? |  | 9-29 | Returns first 15 characters of number of calling party (string). |
| NUM2? |  | 9-29 | Returns last 15 characters of number of calling party (string). |
| PI? |  | 9-30 | Returns Calling Party Presentation Indicator. |
| PLANid? |  | 9-30 | Returns Calling Party Numbering Plan ID. |
| REServed? |  | 9-30 | Returns Calling Party Number Reserved field. |
| SI? |  | 9-30 | Returns Calling Party Screening Indicator. |
| SPare? |  | 9-30 | Returns Calling Party Number spare bits. |
| TYpe? |  | 9-29 | Returns Calling Party Number Type. |
| CHANGE: |  |  |  |
| BSMC? |  | 9-30 | Returns state of BSMC Change Indicator. |
| SOC? |  | 9-30 | Returns state of SOC Change Indicator. |
| CNPC? |  | 9-30 | Returns Calling Number Presentation Code. |
| CUSTOM: |  |  |  |
| CONTrol? $n$ | 0 to 255 | 9-30 | Returns selected Custom Control. |
| LENGth? |  | 9-30 | Returns Length of Custom Control. |
| DCCHinfo: |  |  |  |
| CHANnel? $n$ | 0 to 2 | 9-31 | Returns selected DCCH info Channel. |
| DVCC? $n$ | 0 to 2 | 9-31 | Returns selected DCCH info DVCC. |
| HYPERband? $n$ | 0 to 2 | 9-31 | Returns selected DCCH Info Hyperband. |
| DELTA: |  |  |  |
| TIME? |  | 9-31 | Returns Delta Time. |
| DIC? |  | 9-31 | Returns Delay Interval Compensation. |
| DIGits? $n$ | 0 to 2 | 9-31 | Returns selected digit set. |
| DMAC? |  | 9-31 | Returns Digital Mobile Attenuation Code. |
| DPM? |  | 9-31 | Returns state of Data Privacy Mode. |
| DTX? |  | 9-31 | Returns Discontinuous Transmission. |
| DTXControl? |  | 9-31 | Returns state of DTX Control. |
| HDVCC? |  | 9-31 | Returns Handoff Digital Verification Color Code. |
| HYPERband: |  |  |  |
| BAND? $n$ | 0 to 23 | 9-32 | Returns Band of selected RF Channel and Hyperband. |
| CHANnel? $n$ | 0 to 23 | 9-32 | Returns Channel of selected RF Channel and Hyperband. |
| NuMBer? |  | 9-32 | Returns Number of Hyperband channels of RF Channel and Hyperband. |
| TARGet? |  | 9-32 | Returns Target Hyperband. |
| LC? |  | 9-32 | Returns Local Control. |
| LDP? |  | 9-32 | Returns Last Decoded Parameter. |
| MAP: |  |  |  |
| ARQ? |  | 9-33 | Returns state of FACCH/SACCH ARQ Map. |
| CODER? |  | 9-32 | Returns Voice Coder Map. |
| MEA: |  |  |  |
| ALGORithms? $n$ | 0 to 7 | 9-32 | Returns selected Message Encryption Algorithm Map. |
| DOMAIN? |  | 9-32 | Returns Message Encryption Algorithm Map Domain. |
| MEK? |  | 9-33 | Returns Message Encryption Key Map. |
| SMS? |  | 9-33 | Returns SMS Map. |
| VPM? |  | 9-32 | Returns Voice Privacy Mode Map. |
| MEM ? |  | 9-33 | Returns Message Encryption Mode. |
| MEMA? |  | 9-33 | Returns state of Message Encryption Mode A. |
| MEMB? |  | 9-33 | Returns state of Message Encryption Mode B. |
| MEMC: |  |  |  |
| MEA? |  | 9-33 | Returns Message Encryption Mode C Algorithm. |
| MED? |  | 9-33 | Returns Message Encryption Mode C Domain. |
| MEK? |  | 9-33 | Returns Message Encryption Mode C Key. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| FDTC: |  |  |  |
| FACCH: or SACCH: |  |  |  |
| MESSage: |  |  |  |
| CENTer: |  |  |  |
| ADDRess? |  | 9-34 | Returns Message Center Address. |
| ENCoding? |  | 9-34 | Returns state of Message Center Address Encoding. |
| LENGth? |  | 9-34 | Returns Message Center Address Extended Remaining Length. |
| PLANid? |  | 9-34 | Returns Message Center Address Number Plan ID. |
| TYPE? |  | 9-34 | Returns Message Center Address Type of Number. |
| MSGtype? |  | 9-28 | Returns Message Type. |
| MSGWTG: |  |  |  |
| NUMBer? $n$ | 0 to 15 | 9-34 | Returns selected Number of Other Messages Waiting. |
| TYPE? $n$ | 0 to 15 | 9-34 | Returns selected Other Messages Waiting Info Type. |
| NOMW? |  | 9-34 | Returns Number of Messages Waiting. |
| NV? $n$ | 0 to 5 | 9-34 | Returns Number of Values for selected optional info. element. |
| PD? |  | 9-34 | Returns Protocol Discriminator. |
| PT? $n$ | 0 to 5 | 9-35 | Returns Parameter Type for selected optional info. element. |
| PV? |  | 9-35 | Returns Protocol Version. |
| PVI? |  | 9-35 | Returns state of Protocol Version Indicator. |
| RANDRA? |  | 9-35 | Returns RANDRA. |
| RANDSSD1? |  | 9-35 | Returns 24 most significant bits of RANDSSD (24 bit value). |
| RANDSSD2? |  | 9-35 | Returns bits 0 through 31 of RANDSSD ( 32 bit value). |
| RANDU? |  | 9-35 | Returns RANDU received in Unique Challenge message (24 bit value). |
| RATE? |  | 9-35 | Returns state of Channel Rate. |
| RCAUSe: |  |  |  |
| REServed? |  | 9-35 | Returns R-Cause Reserved field. |
| RCAUSE? |  | 9-35 | Returns R-Cause. |
| RDATA UNIT: |  |  |  |
| HLP: |  |  |  |
| DATA? $n$ | 0 to 253 | 9-36 | Returns selected R-Data Unit Higher Layer Data Unit. |
| IDentifier? |  | 9-36 | Returns R-Data Unit Higher Layer Protocol Identifier. |
| LENGth? |  | 9-36 | Returns R-Data Unit Extended Remaining Length. |
| RFCHAN? $n$ | 0 to 23 | 9-36 | Returns selected RFCHAN. |
| RL? $n$ | 0 to 2 | 9-36 | Returns Remaining Length as number of octets (six bit value) remaining in selected message segment. |
| RN? |  | 9-36 | Returns Request Number. |
| RTRANSaction? |  | 9-36 | Returns R-Transaction Identifier. |
| SBI? |  | 9-36 | Returns Shortened Burst Indicator. |
| SERVice: |  |  |  |
| CAUSe: |  |  |  |
| NUMBer? |  | 9-37 | Returns number of instances of Cause. |
| CAUSe? $n$ | 0 to 9 | 9-37 | Returns selected Cause. |
| CODE? |  | 9-36 | Returns Service Code. |
| SIGnal? |  | 9-37 | Returns Signal. |
| SOC? |  | 9-37 | Returns SOC. |
| SPMA? |  | 9-37 | Returns state of Service Privacy Mode A. |
| SPMB? |  | 9-37 | Returns state of Service Privacy Mode B. |
| SUPPort: |  |  |  |
| IRA? |  | 9-37 | Returns state of RA Support. |
| TA? |  | 9-37 | Returns Time Alignment. |
| TASK? |  | 9-37 | Returns Task Status. |
| TI? |  | 9-38 | Returns Timeslot Indicator (0 is analog). |
| USER: |  |  |  |
| DEST: |  |  |  |
| ADDRess? |  | 9-38 | Returns User Destination Address. |
| ENCoding? |  | 9-38 | Returns state of User Destination Address Encoding. |
| LENGth? |  | 9-38 | Returns User Destination Address Extended Remaining Length. |
| PLANid? |  | 9-38 | Returns User Destination Address Number Plan ID. |

FDTC:
FACCH: or SACCH: USER: DEST: SUBaddress: ADDRs?
ADDRess? $n \quad 0$ to $19 \quad 9.39$

LENGth? ODD_EVEN?
RESérved?
TYPE? TYPE? ORIG: ADDRess? ENCoding? LENGth? PLANid? PRESentation:

LENGth?
PI?
REServed?
SI?
ORIG:
SUBaddress:
ADDRess? n 0 to $19 \quad 9-40$
LENGth? ODD_EVEN?
REServed? TYPE? TYPE?
VMI:
PM V?
VC?
VPM?
IS54:
CDVCC? $n$
COUNt?
DATA? $n, x$
SACCH? $n$
START
STOP
SYNC? $n \quad 0$ to 99
TIME? $n$
R0?
RAW:
CF? $n$
COUNt?
DEPTH $n$
DVCC?n
MESSage? $n, x$
RSVD? $n$
SELect:
FACCH
SACCH
START
STOP
TIME? n

| 0 to 19 | $9-39$ |
| :--- | :--- |
| $9-38$ |  |
| $9-38$ |  |
|  | $9-39$ |
| $9-38$ |  |
|  | $9-38$ |
|  | $9-39$ |
|  | $9-39$ |
| $9-39$ |  |
|  | $9-39$ |
|  | $9-40$ |

9-40

Returns selected Subaddress.
Returns Subaddress Extended Remaining Length.
Returns state of Subaddress Odd/Even Indicator.
Returns Subaddress Reserved bits.
Returns Type of Subaddress.
Returns User Destination Address Type of Number.
Returns User Originating Address.
Returns state of User Originating Address Encoding.
Returns User Originating Address Extended Remaining Length.
Returns User Originating Address Number Plan ID.
Returns User Originating Address Presentation Indicator Extended Remaining Length.
Returns User Originating Address Presentation Indicator.
Returns User Originating Address Presentation Indicator Reserved bits.
Returns User Originating Address Screening Indicator.

Returns selected Subaddress.
Returns Subaddress Extended Remaining Length.
Returns state of Subaddress Odd/Even Indicator.
Returns Subaddress Reserved bits.
Returns Type of Subaddress.
Returns User Originating Address Type of Number.
Returns Voice Privacy Mode.
Returns Voice Mode Voice Coder.
Returns state of Voice Privacy Mode.
Returns Coded Digital Color Code from selected data word.
Returns number of data words received (increments with each new data word).
Returns SACCH character data from selected data word ( $x$ is character).
Returns SACCH message in selected data word.
Starts IS-54 timeslot raw data Capture
Stops is-54 timeslot raw data Capture.
Returns Synchronization bits from selected data word.
Returns Time Stamp in ms of selected data word.
Returns VSELP frame energy value.
Returns Continuation Flag bit from selected data word.
Returns number of data words received (increments with each new data word).
Selects number of data words of data buffer.
Returns Digital Verification Color Code from selected data word.
Returns selected message byte ( $x$ ) from selected data word.
Returns Reserved for Future Use bits from selected data word.

Selects Fast Associated Control Channel for raw data.
Selects Slow Associated Control Channel for raw data.
Starts raw data Capture.
Stops raw data Capture.
Returns Time Stamp in ms of selected data word.

| COMMAND | RANGE | PAGE | DESCRIPTION |
| :--- | :--- | :--- | :--- |
| FDTC: |  |  |  |
| SETup | 1 to 3 | $9-26$ | Sets up the Sp Tst as when entering the Forward Digital |
| SLOT $n$ |  | $9-26$ | Traftic Channel screen (screen is not displayed). |
| STARt |  | $9-26$ | Starts decoding Forward Digital Traffic Channel data. |
| STOP |  | $9-26$ | Stops decoding Forward Digital Traffic Channel data. |
| VOCODER: |  | $9-27$ | Selects ACELP vocoder. |
| ACELP |  | $9-27$ | Selects VSELP vocoder. |

FORWARD CONTROL CHANNEL (FOCC) MONITOR COMMANDS
Queries for received data, return -1 if data is not available or has already been read

FOCC:
ACT?
ASYNC?
AUTH?
AUTHBS?
Bldle?
BIS?

CAPTure:
A_ALERT
AUDIT
AUT_REG
BSCHALCON
CLEAR
DIR_RTRY
INTRCPT
LC
MIN " $n$ "
MIN?
MODE?
MSG_WTG
N_AUT REG
ORDer?
PAGE
RELease
REORDER
SELect:
BOTH
MIN
NONE ORDER
SLOT 1
SLOT_2
SLOT_3
SSD UPdate
UCHAL
VC DES
CAPTure?
CHAN?
CHANnel n

1 to 333 (U4),
1 to 1023 (U8),
1 to 1999 (HY)

Returns Global Action field value.
Returns state of Async Data field in DCCH Information word.
Returns Authentication.
Returns AUTHBS
Returns Busy-Idle bit.
Returns Busy-Idle Status bit from the Access Type Parameters Global Action message.

Selects Abbreviated Alert order for Capture.
Selects Audit order for Capture
Selects Autonomous Registration Confirmation order for Capture.
Selects Base Station Challenge Confirmation order for Capture.
Restarts Capture function.
Selects Directed-Retry order for Capture.
Selects Intercept order for Capture.
Selects Local Control order for Capture.
Selects Mobile ID Number to Capture.
Returns MIN selected for Capture.
Returns Capture Mode setting ( 0 for NONE, 1 for ORDER, 2 for MIN or 3 for BOTH [MIN and ORDER]).
Selects Message Waiting order for Capture.
Selects Non-Autonomous Registration Confirmation order for Capture.
Returns name of order selected for Capture.
Selects Page order for Capture.
Selects Release order for Capture.
Selects Reorder order for Capture.
Sets Capture Mode to BOTH (MIN and ORDER) to capture specific order from specific Mobile Station.
Sets Capture Mode to MIN to capture communication with specific Mobile Station.
Sets Capture Mode to NONE
Sets Capture Mode to ORDER to capture a specific order.
Selects Slot 1 Handoff order for Capture.
Selects Slot 2 Handoft order for Capture.
Selects Slot 3 Handoff order for Capture.
Selects Shared Secret Data Update order for Capture.
Selects Unique Challenge order for Capture.
Selects Voice Channel Designation order for Capture.
Returns Capture condition (1 [occurred] or 0.
Returns Channel Number.
Selects Forward Control Channel to monitor.

| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| FOCC: |  |  |  |
| CHANPOS1? |  | 9-11 | Returns Channel Position 1. |
| CHANPOS2? |  | 9-11 | Returns Channel Position 2. |
| CHANPOS3? |  | 9-11 | Returns Channel Position 3. |
| CHANPOS4? |  | 9-11 | Returns Channel Position 4. |
| CHANPOS4? |  | 9-11 | Returns Channel Position 5. |
| CHANPOS6? |  | 9-11 | Returns Channel Position 6. |
| CMAC? |  | 9-11 | Returns Control Mobile Attenuation Code. |
| CMAX 1 ? |  | 9-11 | Returns number of Access Channels minus one. |
| CONFigure: |  |  |  |
| NONE |  | 9-4 | Same as FOCC:SETup command, except does not select a screen. |
| USER |  | 9-4 | Same as FOCC:SETup command, except selects the USER screen. |
| CPA? |  | 9-11 | Returns state of Combined Paging/Access. |
| DCC? |  | 9-11 | Returns Digital Color Code. |
| DCCHan? |  | 9-11 | Returns Channel field in DCCH Information word. |
| DMAC? |  | 9-12 | Returns Digital Mobile Attenuation Code. |
| DTX? |  | 9-12 | Returns state of Discontinuous Transmission. |
| DVCC? |  | 9-12 | Returns Digital Verification Color Code. |
| E? |  | 9-12 | Returns state of Extended Address. |
| EF? |  | 9-12 | Returns state of Extended Protocol Forward Channel Indicator. |
| END? |  | 9-12 | Returns state of End Indication. |
| EP? |  | 9-12 | Returns state of Extended Protocol. |
| G3FAX? |  | 9-12 | Returns state of G3 Fax field in DCCH Information word. |
| HYPERband? |  | 9-12 | Returns Hyperband field in DCCH Information word. |
| LOC_CONTrol? |  | 9-12 | Returns Local Control message. |
| LOCAID? |  | 9-12 | Returns Location Area Identity. |
| LOCAL_MT? |  | 9-12 | Returns Local Control (Local Control message)/Message Type field. |
| LREG? |  | 9-12 | Returns state of Location Registration. |
| MBUSY: |  |  |  |
| OTH? |  | 9-13 | Returns Maximum Number of Busy Occurrences Allowed for Other Accesses. |
| PGR? |  | 9-13 | Returns Maximum Number of Busy Occurrences Allowed for Page Responses. |
| MEM? |  | 9-13 | Returns state of Message Encryption Mode. |
| MIN? |  | 9-13 | Returns Mobile ID Number. |
| MSZTR: |  |  |  |
| OTH? |  | 9-13 | Returns Maximum Number of Seizure Attempts Allowed for Other Accesses. |
| PGR? |  | 9-13 | Returns Maximum Number of Seizure Attempts Allowed for Page Responses. |
| N_1? |  | 9-13 | Returns number of Paging Channels minus one. |
| NAWC? |  | 9-13 | Returns Number of Additional Words Coming. |
| NEWACC? |  | 9-13 | Returns New Access Channel Starting Point. |
| OLC? |  | 9-13 | Returns Overload Control Class. |
| ORDER? |  | 9-10 | Returns received order. |
| ORDERCD? |  | 9-13 | Returns Order Code. |
| ORDQ? |  | 9-13 | Returns Order Qualifier. |
| PCl ? |  | 9-14 | Returns state of Protocol Capability Indicator. |
| PDREG? |  | 9-14 | Returns state of Power Down Registration. |
| PM? |  | 9-14 | Returns state of Privacy Mode. |
| PRIVacy? |  | 9-14 | Returns state of Data Privacy field in DCCH Information word. |
| PUREG? |  | 9-14 | Returns state of Power Up Registration. |
| PVI? |  | 9-14 | Returns state of Protocol Version Indicator. |
| RAND1_A? |  | 9-14 | Returns 16 most significant bits of RAND. |
| RAND1-B? |  | 9-14 | Returns 16 least significant bits of RAND. |
| RANDSSD_1? |  | 9-14 | Returns 24 most significant bits of RANDSSD. |
| RANDSSD 2? |  | 9-14 | Returns bits 8 through 31 of RANDSSD. |
| RANDSSD_3? |  | 9-14 | Returns eight least significant bits of RANDSSD. |
| RANDU? |  | 9-14 | Returns RANDU received in Unique Challenge message. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| FOCC: <br> RAW: A: |  |  |  |
|  |  |  |  |
|  |  |  |  |
| CHECK? $n$ | 0 to 99 | 9-18 | Returns CRC Check result for selected data word from Stream A (0 [good], 1 [bad]). |
| DATA? $n$ |  | 9-18 | Returns selected raw data word from Stream A. |
| PARITY? $n$ | 0 to 99 | 9-18 | Returns Parity for selected data word from Stream A. |
| B: ${ }^{\text {a }}$ ( |  |  |  |
| CHECK? $n$ | 0 to 99 | 9-19 | Returns CRC Check result for selected data word from Stream B (0 [good], 1 [bad]). |
| DATA? $n$ | 0 to 99 | 9-19 | Returns selected Raw Data word from Stream B. |
| PARITY? $n$ | 0 to 99 | 9-19 | Returns Parity for selected data word from Stream B. |
| B I? $n$ | 0 to 99 | 9-19 | Returns Busy-Idle bit for selected data word. |
| CAPTure: |  |  |  |
| A_ALERT |  | 9-16 | Selects Abbreviated Alert order for Capture. |
| AUDIT |  | 9-16 | Selects Audit order for Capture. |
| AUT_REG |  | 9-16 | Selects Autonomous Registration Confirmation order for Capture. |
| BSCHALCON |  | 9-16 | Selects Base Station Challenge Confirmation order for Capture. |
| DIR_RTRY |  | 9-16 | Selects Directed-Retry order for Capture. |
| INDex? |  | 9-18 | Returns position of Captured Order in data buffer. |
| INTRCPT |  | 9-16 | Selects intercept order for Capture. |
| LC |  | 9-17 | Selects Local Control order for Capture. |
| MSG WTG |  | 9-17 | Selects Message Waiting order for Capture. |
| N_AUT_REG |  | 9-17 | Selects Non-Autonomous Registration Confirmation order for Capture. |
| NONE |  | 9-16 | Sets Capture Mode to NONE. |
| ORDer? |  | 9-17 | Returns order selected for Capture. |
| PAGE |  | 9-17 | Selects Page order for Capture. |
| RELease |  | 9-17 | Selects Release order for Capture. |
| REORDER |  | 9-17 | Selects Reorder order for Capture. |
| SLOT_1 |  | 9-17 | Selects Slot 1 Handoff order for Capture. |
| SLOT-2 |  | 9-17 | Selects Slot 2 Handoff order for Capture. |
| SLOT_3 |  | 9-17 | Selects Slot 3 Handoff order for Capture. |
| SSD_UPdate |  | 9-17 | Selects Shared Secret Data Update order for Capture. |
| UCHAL |  | 9-17 | Selects Unique Challenge order for Capture. |
| VC_DES |  | 9-17 | Selects Voice Channel Designation order for Capture. |
| CAPTure? |  | 9-18 | Returns Capture condition (1 [occurred] or 0 ). |
| FULL? |  | 9-18 | Returns 1 if word data buffer is full; 0 otherwise. |
| STARt |  | 9-18 | Starts raw data Capture. |
| STOP |  | 9-18 | Stops raw data Capture. |
| TRIGger $n$ | 0 to 4 | 9-18 | Selects position of Captured Order in data buffer. |
| TS? $n$ | 0 to 99 | 9-19 | Returns Time Stamp in ms of selected data word. |
| WORD: |  |  |  |
| A |  | 9-16 | Selects raw data from Stream A to monitor. |
| B |  | 9-16 | Selects raw data from Stream B to monitor. |
| BOTH |  | 9-16 | Selects raw data from Streams A and B to monitor. |
| RCF? |  | 9-14 | Returns state of Read Control-Filler. |
| REGH? |  | 9-15 | Returns state of Registration for Home Mobile Stations. |
| REGID? |  | 9-15 | Returns Registration ID. |
| REGINCR? |  | 9-15 | Returns Registration Increment field. |
| REGR? |  | 9-15 | Returns state of Registration for Roaming Mobile Stations. |
| REMote: |  |  |  |
| STARt |  | 9-4 | Stops decoding and redirects received Forward Control Channel data out OPT. RS-232 Connector. |
| STOP |  | 9-4 | Stops redirection of Forward Control Channel data out OPT. RS-232 Connector. |
| S? |  | 9-15 | Returns state of Serial Number. |
| SCC? |  | 9-15 | Returns Supervisory Audio Tone Color Code. |
| SDCC1? |  | 9-15 | Returns Supplementary Digital Color Code 1. |
| SDCC2? |  | 9-15 | Returns Supplementary Digital Color Code 2. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| FOCC: |  |  |  |
| SETup |  | 9-4 | Sets up the Sp Tst as when entering the Forward Control Channel screen, except screen is not displayed. |
| SID? |  | 9-15 | Returns System ID Number. |
| STARt |  | 9-4 | Starts decoding Forward Control Channel data. |
| STOP |  | 9-4 | Stops decoding Forward Control Channel data. |
| STREAM: |  |  |  |
| A |  | 9-5 | Selects data from Stream A. See FOCC:WORD:BOTH. |
| B |  | 9-5 | Selects data from Stream B. See FOCC:WORD:BOTH. |
| VMAC? |  | 9-15 | Returns Voice Mobile Attenuation Code. |
| WFOM? |  | 9-15 | Returns state of Wait For Overhead Message. |
| WORD: |  |  |  |
| A |  | 9-5 | Selects Stream A to decode. |
| B |  | 9-5 | Selects Stream B to decode. |
| BOTH |  | 9-5 | Selects Streams A and B to decode. Responses come randomly from either Stream $A$ or $B$, unless the FOCC:STREAM command is used. |
| FREQ:BAND COMMAND |  |  |  |
| FREQuency: |  |  |  |
| BAND $n$ | $\begin{aligned} & 0=U 4, \\ & 1=U 8 \text { or } \end{aligned}$ | 9-3 | Selects frequency band. |
| BAND? | $2 \text { = HY (PCS) }$ | 9-3 | Returns frequency band. |
| FORWARD VOICE CHANNEL (FVC) MONITOR COMMANDS |  |  |  |

Queries for received data, return - 1 if data is not available or has already been read.

FVC:

| AUTHBS? |  | 9-22 |
| :---: | :---: | :---: |
| CHAN? |  | 9-22 |
| CHANnel $n$ | 1 to 333 (U4), <br> 1 to 1023 (U8), <br> 1 to 1999 (HY) | 9-20 |
| CHAR1? |  | 9-22 |
| CHAR2? |  | 9-22 |
| CONFigure: |  |  |
| NONE |  | 9-20 |
| USER |  | 9-20 |
| CPN_RL? |  | 9-23 |
| DMAC? |  | 9.23 |
| DVCC? |  | 9-23 |
| EF? |  | 9-23 |
| HYPERband? |  | 9-23 |
| LOCAL_MT? |  | 9-23 |
| MEM? |  | 9-23 |
| ORDER? |  | 9-22 |
| ORDERCD? |  | 9-23 |
| ORDQ? |  | 9-23 |
| PI? |  | 9-23 |
| PM? |  | 9-23 |
| PSCC? |  | 9-23 |
| PVI? |  | 9-23 |
| PWRL? |  | 9-24 |
| RANDSSD1? |  | 9-24 |
| RANDSSD2? |  | 9-24 |
| RANDSSD3? |  | 9-24 |
| RANDU? |  | 9-24 |

Returns Output Response of Base Station Authentication Algorithm.
Returns Channel Number.
Selects Forward Voice Channel to monitor.

Returns first characters in Called Party Number message or Calling Party Number message.
Returns last characters in Called Party Number message or Calling Party Number message.

Same as FVC:SETup, except does not select a screen.
Same as FVC:SETup, except selects the USER screen.
Returns Calling Party Number Remaining Length.
Returns Digital Mobile Attenuation Code.
Returns Digital Verification Color Code.
Returns state of Extended Protoco Forward Channel Indicator.
Returns Hyperband.
Returns Local Control/Message Type.
Returns state of Message Encryption Mode.
Returns received Order.
Returns Order Code.
Returns Order Qualifier.
Returns Calling Party Number Presentation Indicator.
Returns state of Privacy Mode.
Returns Present SAT Color Code.
Returns state of Protocol Version Indicator.
Returns requested Power Level.
Returns 24 most significant bits of RANDSSD.
Returns bits 8 through 31 of RANDSSD.
Returns eight least significant bits of RANDSSD.
Returns RANDU received in the Unique Challenge message.

| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| FVC: |  |  |  |
| RAW: |  |  |  |
| CHECK? $n$ | 0 to 99 | 9-25 | Returns CRC Check result for selected data word ( 0 [good], 1 [bad]). |
| COUNT? |  | 9-25 | Returns number of data words received. |
| DATA? $n$ | 0 to 99 | 9-25 | Returns selected raw data word. |
| DEPTH $n$ | 1 to 100 | 9-25 | Selects size of data buffer in data words. |
| PARITY? $n$ | 0 to 99 | 9-25 | Returns Parity for selected data word. |
| STARt |  | 9-25 | Starts receiving raw data capture. |
| STOP |  | 9-25 | Stops receiving raw data capture. |
| TS? $n$ | 0 to 99 | 9-25 | Returns Time Stamp of selected data word in sec. from 0 data word. |
| RL_W? |  | 9-24 | Returns Remaining Length in Words. |
| SBI? |  | 9-24 | Returns Shortened Burst Indicator. |
| SCC $n$ | 5955 to 6044 | 9-21 | Specifies the SCC with corresponding SAT frequency in Hz . |
| SCC? |  | 9-24 | Returns Supervisory Audio Tone Color Code. |
| SETup |  | 9-20 | Sets up Sp Tst as when entering the Forward Voice Channel screen, except screen is not displayed. |
| SI? |  | 9-24 | Returns Calling Party Screening Indicator. |
| SIGnal? |  | 9-24 | Returns Signal field. |
| STARt |  | 9-20 | Starts decoding Forward Voice Channel data. |
| STOP |  | 9-20 | Stops decoding Forward Voice Channel data. |
| TA? |  | 9-24 | Returns Time Alignment offset. |
| VMAC? |  | 9-24 | Returns Voice Mobile Attenuation Code. |
| HOST COMMANDS |  |  |  |
| HOST "string" |  | 9-2 | Issues commands, as strings, to the HOST. |
| HOST? "string?" |  | 9-2 | Issues queries, as strings, to the HOST. |
| GENERIC MEASURE COMMANDS |  |  |  |
| MEASure: |  |  |  |
| SAT? |  | 9-451 | Returns Supervisory Audio Tone frequency reading in Hz . |
| ST? |  | 9-451 | Returns Signal Tone frequency reading in Hz . |
| FLASH MEMORY COMMANDS (MASS MEMORY) |  |  |  |
| MMEMory: |  |  |  |
| CATalog: |  |  |  |
| ENTRY? $n$ | 0 to 512 | 9-451 | Returns file entry (file name, file type,file size) for given index. Returns $\$ \$ \$$ if past end of directory or - - for deleted file. $n$ is line number (index) in Flash Files Directory. |
| FREE? |  | 9-451 | Returns available file space in bytes. |
| USED? |  | 9-451 | Returns file space used in bytes. |
| CATalog? |  | 9-451 | Returns Flash Memory status. (memory space used in bytes,memory space available in bytes, file name1, file type1, file size1,file name2, file type2, file size2, |
| DELete "f" | "file name" | 9-451 | Deletes file without freeing memory (see MMEM:PACK). |
| INITialize |  | 9-452 | Erases all files stored in Flash Memory. |
| INITialize? |  | 9-452 | Returns 1 if file system has been initialized, 0 otherwise. |
| LOAD: |  |  |  |
| MACRo "m", "f" |  | 9-452 | Loads macros and variables stored as tile name $f$ from Flash to Sp Tst memory, executing macro m . |
| PACK |  | 9-452 | Packs Flash Memory and frees memory space from deleted files. |
| STORe: |  |  |  |
| MACRo "m", "f" |  | 9-452 | Stores currently loaded macros and variables as file name $f$ in Flash Memory with designated macro $m$ to be activated from Flash Files Directory |
| MISCELLANEOUS COMMANDS |  |  |  |
| KCLAIM |  | 9-453 | Claims HOST keypad. |
| KUNCLAIM |  | 9-453 | Unclaims HOST keypad. |
| SPRINTF? format,... |  | 9-453 | Performs a formatted print into a string. |
| TICKs? |  | 9-453 | Returns millisecond tick count. |

## MODULATION ACCURACY COMMANDS

## MODacc:

FDTC:

CHANnel $n$<br>COMPlete?<br>EVM?<br>FREQ_ERRor?<br>IQ OFFset?<br>MAG_ERRor?<br>PHASE ERRor?<br>RUN?<br>SETup

0 to 2047
9-449 Specifies RF Channel.
9-449 Returns test status ( 1 if complete, or 0 if incomplete).
9-449 Returns RMS Error Vector Magnitude in percent.
9-449 Returns Frequency Error in Hz .
9-449 Returns I/Q Offset in dB.
9-449 Returns RMS Magnitude Error in percent.
9-449 Returns RMS Phase Error in degrees.
9-449 Starts Modulation Accuracy measurements and returns adjusted AGC value.
9-449 Sets up Sp Tst as when entering the Modulation Accuracy screen, except screen is not displayed.
MOBILE STATION SIMULATION (DCCH) COMMANDS
MSS:

| CHANnel $n$ | $\begin{aligned} & 1 \text { to } 333 \text { (U4), } \\ & 1 \text { to } 1023 \text { (U8) } \\ & 1 \text { to } 1999 \text { (HY) } \end{aligned}$ | 9-389 | Selects Reverse Channel on which to transmit. |
| :---: | :---: | :---: | :---: |
| CHANnel?CONFigure: |  |  |  |
|  |  |  |  |
| NONE |  | 9-389 | Same as MSS:SETup, except does not select screen. |
| USER |  | 9-389 | Same as MSS:SETup, except selects User screen. |
| RATE $n$ | $0=$ Full, $1=$ Halt | 9-390 | Selects TDMA transmission rate. |
| RATE? |  | 9-390 | Returns state of TDMA transmission rate. |
| RDCCH: |  |  |  |
| AUTHR $n$ | 0 to \#h3FFFF | 9-409 | Specifies AUTHR used in Authentication process. |
| AUTHR? |  | 9-409 | Returns AUTHR. |
| AUTHU $n$ | 0 to \#h3FFFF | 9-436 | Specifies AUTHU. |
| AUTHU? |  | 9-436 | Returns AUTHU. |
| BANDWidth $n$ | 0 to 7 | 9-421 | Specifies Bandwidth. |
| BANDWidth? |  | 9-421 | Returns Bandwidth. |
| BSMC $n$ | 0 to 255 | 9-410 | Specifies Base Station Manufacture Code. |
| BSMC? |  | 9-410 | Returns Base Station Manufacture Code. |
| BUILD |  | 9-443 | Builds data composing RACH message. |
| CALLED: |  |  |  |
| ADDRess " $n$ " |  | 9-422 | Specifies Address. |
| ADDRess: ${ }^{\text {a }}$ |  |  |  |
| ENCoding $n$ | 1 or 0 | 9-422 | Enables/disables Called Address Encoding. |
| ENCoding? |  | 9-422 | Returns state of Called Address Encoding. |
| ADDRess? |  | 9-422 | Returns Address. |
| PLANid $n$ | 0 to 15 | 9-422 | Specifies Called Address Numbering Plan ID. |
| PLANid? |  | 9-422 | Returns Called Address Numbering Plan ID. |
| SUBaddress: |  |  |  |
| ADDRess $n, m$ | 0 to 19, 0 to 255 | 9-423 | Specifies selected Subaddress ( $m$ ). |
| ADDRess? $n$ | 0 to 19 | 9.423 | Returns selected Subaddress. |
| ODD_EVEN $n$ | 1 or 0 | 9-423 | Enables/disables Subaddress Odd/Even indicator. |
| ODD_EVEN? |  | 9-423 | Returns state of Subaddress Odd/Even indicator. |
| REServed $n$ | 0 to 15 | 9-423 | Specifies number of Called Party Subaddress Reserved fields. |
| REServed? |  | 9-423 | Returns number of Called Party Subaddress Reserved fields |
| TYPE $n$ | 0 to 3 | 9-423 | Specifies Subaddress Type of Subaddress. |
| TYPE? |  | 9-423 | Returns Subaddress Type of Subaddress. |
| TYPE $n$ | 0 to 7 | 9.422 | Specifies Called Address Type of Number. |
| TYPE? |  | 9.422 | Returns Called Address Type of Number. |
| CALLING: |  |  |  |
| ADDRess " $n$ " |  | 9.424 | Specifies Address. |
| ADDRess: |  |  |  |
| ENCoding $n$ | 1 or 0 | 9-424 | Enables/disables Calling Address Encoding. |
| ENCoding? |  | 9-424 | Returns state of Calling Address Encoding. |
| ADDRess? |  | 9-424 | Returns Address. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| MSS: |  |  |  |
| RDCCH: |  |  |  |
| CALLING: |  |  |  |
| PLANid $n$ | 0 to 15 | 9-424 | Specifies Calling Address Numbering Plan ID. |
| PLANid? |  | 9-424 | Returns Calling Address Numbering Plan ID. |
| PRESentation: |  |  |  |
| PIn | 0 to 3 | 9-424 | Specifies Calling Address Presentation Indicator. |
| PI? |  | 9-424 | Returns Calling Address Presentation Indicator. |
| SI $n$ | 0 to 3 | 9-424 | Specifies Calling Address Screening Indicator. |
| SI? |  | 9-424 | Returns Calling Address Screening Indicator. |
| SUBaddress: |  |  |  |
| ADDRess $n, m$ | 0 to 19, 0 to 255 | 9-425 | Specifies selected Subaddress (m). |
| ADDRess? $n$ | 0 to 19 | 9-425 | Returns selected Subaddress. |
| LENGth $n$ | 1 to 21 | 9-425 | Specifies Subaddress Length. |
| LENGth? |  | 9-425 | Returns Subaddress Length. |
| ODD EVEN $n$ | 1 or 0 | 9-425 | Enables/disables Subaddress Odd/Even indicator. |
| ODD EVEN? |  | 9.425 | Returns state of Subaddress Odd/Even indicator. |
| REServed $n$ | 0 to 15 | 9-425 | Specifies number of Calling Party Subaddress Reserved fields. |
| REServed? |  | 9-425 | Returns number of Calling Party Subaddress Reserved fields. |
| TYPE $n$ | 0 to 3 | 9-425 | Specifies Subaddress Type of Number. |
| TYPE? |  | 9-425 | Returns Subaddress Type of Number. |
| TYPE $n$ | 0 to 7 | 9-424 | Specifies Calling Address Type of Number. |
| TYPE? |  | 9-424 | Returns Calling Address Type of Number. |
| CNUMber: |  |  |  |
| ADDRess " $n$ " |  | 9-434 | Specifies C-Number Address. |
| ADDRess: |  |  |  |
| ENCoding $n$ |  | 9-434 | Enables/disables C-Number Address Encoding. |
| ENCoding? |  | 9-434 | Returns state of the C-Number Address Encoding. |
| ADDRess? |  | 9-434 | Returns C-Number Address. |
| PLANid $n$ | 0 to 15 | 9-434 | Specifies C-Number ID Plan. |
| PLANid? |  | 9-434 | Returns C-Number ID Plan. |
| TYPE $n$ | 0 to 7 | 9-434 | Specifies C-Number Type of Number. |
| TYPE? |  | 9-434 | Returns the C-Number Type of Number. |
| CONFirmed: $\quad 0$ |  |  |  |
| MSGtype $n$ | 0 to 63 | 9-436 | Specifies Confirmed Message Type. |
| MSGtype? |  | 9-436 | Returns Confirmed Message Type. |
| count $n$ | 0 to 63 | 9-409 | Specifies COUNT used for Authentication process. |
| COUNT? |  | 9-409 | Returns COUNT. |
| CUSTOM: |  |  |  |
| CONTrol $n, x$ | 0 to 252; 0 to 255 | 9-410 | Specifies selected Custom Control word (x). |
| CONTrol? $n$ | 0 to 252 | 9-410 | Returns selected Custom Control word. |
| LENGth $n$ | 1 to 253 | 9-410 | Specifies Custom Control Length. |
| LENGth? |  | 9-410 | Returns Custom Control Length. |
| DATA? $n, m$ | 0 to 319,0 to 6 | 9-443 | Returns built RDCCH data. Returns 16 bit word $(m)$ in selected slot. |
| DCCH MEM: |  |  |  |
| ALGORithm $n$ | 0 to 7 | 9-435 | Specifies DCCH Message Encryption Algorithm. |
| ALGORithm? |  | 9-435 | Returns DCCH Message Encryption Algorithm |
| DOMAIN $n$ | 0 to 7 | 9-435 | Specifies DCCH Message Encryption Domain. |
| DOMAIN? |  | 9-435 | Returns DCCH Message Encryption Domain. |
| KEY $n$ | 0 to 7 | 9-435 | Specifies DCCH Message Encryption Key. |
| KEY? |  | 9-435 | Returns DCCH Message Encryption Key. |
| DEST: |  |  |  |
| ADDRess " $n$ " |  | 9-429 | Specifies Address |
| ADDRess: |  |  |  |
| ENCoding $n$ | 1 or 0 | 9-429 | Enables/disables User Destination Address Encoding. |
| ENCoding? |  | 9-429 | Returns state of User Destination Address Encoding. |
| ADDRess? |  | 9-429 | Returns Address. |
| PLANid $n$ | 0 to 15 | 9-429 | Specifies User Destination ID Plan. |
| PLANid? |  | 9-429 | Returns the User Destination ID Plan. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| MSS: |  |  |  |
| $\mathrm{RDCCH}:$ DEST |  |  |  |
| SUBaddress: |  |  |  |
| ADDRess n,m | 0 to 19, 0 to 255 | 9-430 | Specifies selected Subaddress ( $m$ ). |
| ADDRess? $n$ | 0 to 19 | 9-430 | Returns selected Subaddress. |
| LENGth $n$ | 1 to 21 | 9-430 | Specifies Subaddress Length. |
| LENGth? |  | 9-430 | Returns Subaddress Length. |
| ODD_EVEN $n$ | 1 or 0 | 9-430 | Enables/disables Subaddress Odd/Even indicator. |
| ODD_EVEN? |  | 9-430 | Returns state of Subaddress Odd/Even indicator. |
| REServed $n$ | 0 to 15 | 9-430 | Specifies number of User Destination Subaddress Reserved fields. |
| REServed? |  | 9-430 | Returns number of User Destination Subaddress Reserved fields. |
| TYPE $n$ | 0 to 3 | 9-430 | Specifies Subaddress Type of Number. |
| TYPE? |  | 9-430 | Returns Subaddress Type of Number. |
| TYPE $n$ | 0 to 7 | 9-429 | Specifies User Destination Type of Number. |
| TYPE? |  | 9-429 | Returns User Destination Type of Number. |
| DISPlay: |  |  |  |
| CHARacter $n$,m | 0 to 81,0 to 255 | 9-409 | Specifies selected Display Character (m). |
| CHARacter? $n$ | 0 to 81 | 9-409 | Returns selected Display Character. |
| LENGth $n$ | 0 to 81 | 9-409 | Specifies Length of Display Information. |
| LENGth? |  | 9-409 | Returns Length of Display Information. |
| DVCC $n$ | t to 255 | 9-392 | Specifies Digital Verification Color Code. |
| DVCC? |  | 9-392 | Returns Digital Verification Color Code. |
| EMERgency $n$ | 1 or 0 | 9-417 | Enables/disables Emergency Call. |
| EMERgency? |  | 9-417 | Returns state of Emergency Call. |
| ENABle: |  |  |  |
| BANDWidth $n$ | 1 or 0 | 9-439 | Enables/disables Bandwidth optional info. element. |
| BANDWidth? |  | 9-439 | Returns state of Bandwidth optional info. element. |
| CALLED: |  |  |  |
| SUBaddress $n$ | 1 or 0 | 9-440 | Enables/disables Called Party Subaddress optional info. element. |
| SUBaddress? |  | 9-440 | Returns state of Called Party Subaddress optional info. element. |
| CALLING: |  |  |  |
| ADDRess $n$ | 1 or 0 | 9-439 | Enables/disables Calling Party Number optional info. element. |
| ADDRess? |  | 9-439 | Returns state of Calling Party Number optional info. element. |
| PRESentation $n$ | 1 or 0 | 9-439 | Enables/disables Calling Party Number Presentation Indicator optional info. element. |
| PRESentation? |  | 9-439 | Returns state of Calling Party Number Presentation Indicator optional info. element. |
| SUBaddress $n$ | 1 or 0 | 9-439 | Enables/disables Calling Party Subaddress optional info. element. |
| SUBaddress? |  | 9-439 | Returns state of Calling Party Subaddress optional info. element. |
| CNUMber $n$ | 1 or 0 | 9-441 | Enables/disables C-Number optional info. element. |
| CNUMber? |  | 9.441 | Returns state of C-Number field optional info. element. |
| DCCH: |  |  |  |
| MEM $n$ | 1 or 0 | 9-442 | Enables/disables DCCH MEM optional info. element. |
| MEM? |  | 9-442 | Returns state of DCCH MEM optional info. element. |
| DISPlay $n$ | 1 or 0 | 9-437 | Enables/disables Display optional info. element. |
| DISPlay? |  | 9-437 | Returns state of Display optional info. element. |
| MEASurement: |  |  |  |
| LTM $n$ | 1 or 0 | 9-438 | Enables/disables LTM Measurement optional info. element. |
| LTM? |  | 9-438 | Returns state of LTM Measurement optional info. element. |
| OTHER: |  |  |  |
| STM $n$ | 1 or 0 | 9-438 | Enables/disables STM Measurement (Other Hyperband) optional info. element. |
| STM? |  | 9-438 | Returns state of STM Measurement (Other Hyperband) optional info. element. |
| STM $n$ | 1 or 0 | 9-438 | Enables/disables STM Measurement optional info. element. |
| STM? |  | 9-438 | Returns state of STM Measurement optional info. element. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| MSS: |  |  |  |
| RDCCH: |  |  |  |
| MEM $n$ | 1 or 0 | 9-439 | Enables/disables Message Encryption Mode optional info. element. |
| MEM? |  | 9-439 | Returns state of Message Encryption Mode optional info. element. |
| MESSage: |  |  |  |
| ADDRess $n$ | 1 or 0 | 9-440 | Enables/disables Message Center Address optional info element. |
| ADDRess? |  | 9-440 | Returns state of Message Center Address optional info. element. |
| MODE: |  |  |  |
| DATA $n$ | 1 or 0 | 9-438 | Enables/disables Data Mode optional info. element. |
| DATA? |  | 9-438 | Returns state of Data Mode optional info. element. |
| VOICen | 1 or 0 | 9-438 | Enables/disables Voice Mode optional info. element. |
| VOICe? |  | 9-438 | Returns state of Voice Mode optional info. element. |
| PFC: |  |  |  |
| REQuest $n$ | 1 or 0 | 9-442 | Enables/disables PFC Request optional info. element. |
| REQuest? PSID RSID: |  | 9-442 | Returns state of PFC Request optional info. element. |
| SELLect $n$ | 1 or 0 | 9-437 | Enables/disables Selected PSID/RSID optional info. element. |
| SELect? |  | 9-437 | Returns state of Selected PSID/RSID optional info. element. |
| RDATA: |  |  |  |
| DELay $n$ | 1 or 0 | 9-441 | Enables/disables R-DATA Delay optional info. element. |
| DELay? |  | 9-441 | Returns state of R-DATA Delay optional info. element. |
| SID_REPort $n$ | 1 or 0 | 9-442 | Enables/disablesSID Report optional info. element. |
| SID_REPort? |  | 9-442 | Returns state of SID Report optional info. element. |
| SUBaddress $n$ | 1 or 0 | 9-437 | Enables/disables Subaddress optional info. element. |
| SUBaddress? |  | 9-437 | Returns state of Subaddress optional info. element. |
| SUPPort: |  |  |  |
| ALT_SOC $n$ | 1 or 0 | 9-437 | Enables/disables ALT_SOC_Support optional info. element. |
| ALT_SOC? |  | 9-437 | Returns state of ALT_SOC_Support optional info. element. |
| USER: ${ }^{\text {- }}$ |  |  |  |
| DEST: |  |  |  |
| ADDRess $n$ | 1 or 0 | 9-440 | Enables/disables User Destination Address optional info. element. |
| ADDRess? |  | 9-440 | Returns state of User Destination Address optional info. element. |
| SUBaddress $n$ | 1 or 0 | 9-440 | Enables/disables User Destination Subaddress optional info. element. |
| SUBaddress? |  | 9-440 | Returns state of User Destination Subaddress optional info. eiement. |
| GROUP $n$ | 1 or 0 | 9-440 | Enables/disables User Group optional info. element. |
| GROUP? |  | 9-440 | Returns state of User Group optional info. element. |
| ORIG: |  |  |  |
| ADDRess $n$ | 1 or 0 | 9-441 | Enables/disables User Originating Address optional info. element. |
| ADDRess? |  | 9-441 | Returns state of User Originating Address optional info. element. |
| PRES: |  |  |  |
| PIn | 1 or 0 | 9-441 | Enables/disables User Originating Address Presentation Indicator optional info. element. |
| PI? |  | 9-441 | Returns state of User Originating Address Presentation Indicator optional info. element. |
| SUBaddress $n$ | 1 or 0 | 9-441 | Enables/disables User Originating Subaddress optional info. element. |
| SUBaddress? |  | 9-441 | Returns state of User Originating Subaddress optional info. element. |
| VC_MAP $n$ | 1 or 0 | 9-437 | Enables/disables Voice Coder Map info optional info. element. |
| VC_MAP? |  | 9-437 | Returns state of Voice Coder Map Info optional info. element. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| MSS: |  |  |  |
| RDCCH: |  |  |  |
| ESN $n$ | 0 to \#hFFFFFFFF | 9-436 | Specifies Electronic Serial Number. |
| ESN? |  | 9-436 | Returns Electronic Serial Number. |
| LAYER2: |  |  |  |
| ARQ $n$ | 1 or 0 | 9-402 | Enables/disables ARQ status frame. |
| ARQ? |  | 9-402 | Returns state of ARQ status frame. |
| EHI $n$ | 1 or 0 | 9-400 | Enables/disables Extended Header Information. |
| EHI? |  | 9-400 | Returns state of Extended Header Information. |
| FRNO $n$ | 0 to \#hFFFFFFFF | 9-402 | Specifies Frame Number Map. |
| FRNO? |  | 9-402 | Returns Frame Number Map. |
| IDT $n$ | 0 to 3 | 9-400 | Specifies Identity Type. |
| IDT? |  | 9-400 | Returns Identity Type. |
| MEA $n$ | 0 to 3 | 9-400 | Specifies Message Encryption Algorithm. |
| MEA? |  | 9-400 | Returns Message Encryption Algorithm. |
| MEK $n$ | 0 to 3 | 9-400 | Specifies Message Encryption Key. |
| MEK? |  | 9-400 | Returns Message Encryption Key. |
| MIN " $n$ " | "123/456-7890" | 9-401 | Specifies Mobile ID Number. |
| MIN? |  | 9-401 | Returns Mobile ID Number. |
| MSID: |  |  |  |
| LS $n$ | 0 to \#hFFFFFFFF | 9-401 | Sets 32 Least Significant Bits of Mobile Station ID. |
| LS? |  | 9-401 | Returns 32 Least Significant Bits of Mobile Station ID. |
| MS $n$ | 0 to \#h3FFFF | 9-401 | Specifies 18 Most Significant Bits of Mobile Station ID. |
| MS? |  | 9-401 | Returns 18 Most Significant Bits of Mobile Station ID. |
| NL3M $n$ | 0 to 7 | 9-401 | Specifies Number Layer 3 Messages. |
| NL3M? |  | 9-401 | Returns Number Layer 3 Messages. |
| PEA $n$ | 0 to 63 | 9-402 | Specifies Partial Echo Assigned. |
| PEA? |  | 9-402 | Returns Partial Echo Assigned. |
| RSVD: |  |  |  |
| ARQ $n$ | 0 to 3 | 9-402 | Specifies Automatic Retransmission Request RSVD. |
| ARQ? |  | 9-402 | Returns ARQ. |
| EHI $n$ | 1 or 0 | 9-402 | Enables/disables Extended Header Indicator RSVD. |
| EHI? |  | 9-402 | Returns state of Extended Header Indicator RSVD. |
| END $n$ | 1 or 0 | 9-402 | Enables/disables END frame RSVD. |
| END? |  | 9-402 | Returns state of END frame RSVD. |
| LENGth: |  |  |  |
| ABBREViated |  | 9-391 | Selects Abbreviated length transmission bursts on RDCCH. |
| NORMal |  | 9-391 | Selects Normal length transmission bursts on RDCCH. |
| LENGth? |  | 9-443 | Returns Length of RDCCH in number of slots after execution of Build command. |
| LT $n$ | 1 or 0 | 9-417 | Enables/disables Last Try flag. |
| LT? |  | 9-417 | Returns state of Last Try flag. |
| MANufacture $n$ |  | 9-411 | Specifies Manufacture Code. Range of $n$ is 0 to 255. |
| MANufacture? |  | 9-411 | Returns Manufacture Code. |
| MEASurement: |  |  |  |
| LTM: |  |  |  |
| BER $n$ | 0 to 7 | 9-415 | Specifies Word Error Rate LTM Measurement Bit Error Rate. |
| BER? |  | 9-415 | Returns LTM Measurement Bit Error Rate. |
| FULL $n$ | 1 or 0 | 9-415 | Enables/disables LTM Measurement Full Measurement Indicator. |
| FULL? |  | 9-415 | Returns state of LTM Measurement Full Measurement Indicator. |
| RSS $n$ | 0 to 7 | 9-415 | Specifies LTM Measurement Receive Signal Strength. |
| RSS? |  | 9-415 | Returns LTM Measurement Receive Signal Strength. |
| WER $n$ | 0 to 7 | 9-415 | Specifies LTM Measurement Word Error Rate. |
| WER? |  | 9-415 | Returns LTM Measurement Word Error Rate. |
| OTHER: |  |  |  |
| STM: |  |  |  |
| LENGth $n$ | 1 to 15 | 9-416 | Specifies STM Measurement (Other Hyperband) Report Map Length. |
| LENGth? |  | 9-416 | Returns STM Measurement (Other Hyperband) Report Map Length. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| MSS |  |  |  |
| RDCCH: |  |  |  |
| MEASurement: |  |  |  |
| OTHER: |  |  |  |
| STM: |  |  |  |
| REPort $n$ | 1 to \#h7FFF | 9-416 | Specifies STM Measurement (Other Hyperband) Report Map. |
| REPort? |  | 9-416 | Returns STM Measurement (Other Hyperband) Report Map. |
| RSS $n, m$ | 0 to 14,0 to 31 | 9-417 | Specifies STM Measurement (Other Hyperband) ST_RSS (m) for selected bit position of Report Map. |
| RSS? $n$ | 0 to 14 | 9-417 | Returns STM Measurement (Other Hyperband) ST_RSS for selected bit position of Report Map. |
| STM: |  |  |  |
| NV $n$ | 0 to 15 | 9-416 | Specifies STM Measurement Number of Values. |
| NV? |  | 9-416 | Returns STM Measurement Number of Values. |
| RSS n,m | 0 to 31, 0 to 15 | 9-416 | Specifies selected STM Measurement Receive Signal Strength ( m ). |
| RSS? $n$ | 0 to 31 | 9-416 | Returns selected ST_RSS. |
| MEM: |  |  |  |
| MEA $n$ | 0 to 7 | 9-421 | Specifies Message Encryption Algorithm. |
| MEA ? |  | 9-421 | Returns Message Encryption Algorithm. |
| MED $n$ | 0 to 7 | 9-421 | Specifies Message Encryption Domain. |
| MED? |  | 9-421 | Returns Message Encryption Domain. |
| MEK $n$ | 0 to 7 | 9-421 | Specifies Message Encryption Key. |
| MEK? |  | 9-421 | Returns Message Encryption Key. |
| MESSage: |  |  |  |
| SFP $n$ | 0 to 31 | 9-394 | Selects Superframe Phase for transmission of user-defined message. |
| SFP? |  | 9-394 | Returns Superframe Phase. |
| ACCESS: |  |  |  |
| TYPE: |  |  |  |
| NONE |  | 9-398 | Selects no synchronization. |
| SFP |  | 9.398 | Selects Superframe Phase synchronization. |
| TYPE? |  | 9-398 | Returns Type of Access. |
| CENTer: |  |  |  |
| ADDRess " $n$ " |  | 9-427 | Specifies Address. |
| ADDRess: |  |  |  |
| ENCoding $n$ ENCoding? | 1 or 0 | $\begin{aligned} & 9-427 \\ & 9-427 \end{aligned}$ | Enables/disables Message Center Address Encoding. Returns state of Message Center Address Encoding. |
| ADDRess? |  | 9-427 | Returns Address. |
| PLANid $n$ | 0 to 15 | 9-427 | Specifies Message Center ID Plan. |
| PLANid? |  | 9-427 | Returns Message Center ID Plan. |
| TYPE $n$ | 0 to 7 | 9-427 | Specifies Message Center Type of Number. |
| TYPE? |  | 9-427 | Returns Message Center Type of Number. |
| CORRUPT $n$ | 0 to 320 | 9-399 | Selects frame of RACH message to corrupt. |
| CORRUPT? |  | 9-399 | Returns corrupted frame. |
| DATA m,n,word | 0 to 319, <br> 0 to 6 , <br> 0 to \#hFFFF | 9-395 | Specifies selected 16 bit data word in selected transmission burst ( $m$ ). |
| LENGth $n$ | 1 to 320 | 9-394 | Specifies length (number of transmission bursts) of RDCCH message. |
| LENGth? |  | 9-394 | Returns RDCCH message length. |
| REPeat: |  |  |  |
| OFF |  | 9-399 | Sends RACH message once after initial transmission. |
| ON |  | 9-399 | Sends RACH message at Repeat Rate after initial transmission. |
| SYNC $n$ | 1 or 0 | 9-399 | Enables/disables Repeat Synchronizing. |
| SYNC? |  | 9-399 | Returns state of Repeat Synchronizing. |
| SEND |  | 9-398 | Sends RACH message once (Repeat is disabled) or repeatedly (Repeat is enabled). |
| STOP |  | 9-398 | Stops sending RACH message (when Repeat is turned on). |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| MSS: |  |  |  |
| RDCCH: |  |  |  |
| MODE: |  |  |  |
| CONTiguous |  | 9-391 | Selects transmission in Full-Rate TDMA Channel. |
| DATA: |  |  |  |
| ACKED $n$ | 1 or 0 | 9-418 | Enables/disables Data Mode Acked Data. |
| ACKED? |  | 9-418 | Returns state of Data Mode Acked Data. |
| CRC $n$ | 1 or 0 | 9-419 | Enables/disables Data Mode CRC. |
| CRC? |  | 9-419 | Returns state of Data Mode CRC. |
| PART $n$ | 1 or 0 | 9-419 | Enables/disables Data Mode Data Part. |
| PART? |  | 9-419 | Returns Data Mode Data Part. |
| PM $n$ | 0 to 7 | 9-418 | Specifies Data Privacy. |
| PM? |  | 9-418 | Returns Data Privacy. |
| RLP $n$ | 0 to 3 | 9-419 | Specifies Data Mode RLP. |
| RLP? |  | 9-419 | Returns Data Mode RLP. |
| SAP $n$ | 1 or 0 | 9-418 | Enables/disables Data Mode SAP. |
| SAP? |  | 9-418 | Returns state of Data Mode SAP. |
| SUBCHANnel |  | 9-391 | Selects transmission in RACH Sub Channel. |
| VOICe: |  |  |  |
| PM $n$ | 0 to 7 | 9-418 | Specifies Voice Privacy. |
| PM? |  | 9-418 | Returns Voice Privacy. |
| VC $n$ | 0 to 7 | 9-418 | Specifies Voice Coder. |
| VC? |  | 9-418 | Returns Voice Coder. |
| MODEL $n$ | 0 to 15 | 9-411 | Specifies Model Number. |
| MODEL? |  | 9-411 | Returns Model Number. |
| MSGtype: |  |  |  |
| The user may specify from 1 to 8 Message Types. |  |  |  |
| AUDITcon $n$ | 0 to 7 | 9-404 | Selects Audit Confirmation message in position $n$. |
| AUTHentication $n$ | 0 to 7 | 9-404 | Selects Authentication message in position $n$. |
| BSCHAL $n$ | 0 to 7 | 9-404 | Selects Base Station Challenge Order message in position $n$. |
| BSMC $n$ | 0 to 7 | 9-404 | Selects BSMC Message Delivery message in position $n$. |
| CAPability $n$ | 0 to 7 | 9-404 | Selects Capability Report message in position $n$. |
| MACA $n$ | 0 to 7 | 9-404 | Selects MACA Report message in position $n$. |
| ORIGination $n$ | 0 to 7 | 9-404 | Selects Origination message in position $n$. |
| PAGE_RESPonse $n$ | 0 to 7 | 9-405 | Selects Page Response message in position $n$. |
| QDISConnect $n$ | 0 to 7 | 9-405 | Selects Queue Disconnect message in position $n$. |
| RDATA $n$ | 0 to 7 | 9-405 | Selects R-DATA message in position $n$. |
| RDATA: |  |  |  |
| ACCept $n$ | 0 to 7 | 9-405 | Selects R-DATA ACCEPT message in position $n$. |
| REJect $n$ | 0 to 7 | 9-405 | Selects R-DATA REJECT message in position $n$. |
| REGistration $n$ | 0 to 7 | 9-405 | Selects Registration message in position $n$. |
| SERial $n$ | 0 to 7 | 9-405 | Selects Serial Number message in position $n$. |
| SOC $n$ | 0 to 7 | 9-405 | Selects SOC Message Delivery message in position $n$. |
| SPACHCon $n$ | 0 to 7 | 9-405 | Selects SPACH Confirmation message in position $n$. |
| SSDUPcon $n$ | 0 to 7 | 9-406 | Selects SSD Update Order Confirmation message in position $n$. |
| TEST $n$ | 0 to 7 | 9-406 | Selects Test Registration message in position $n$. |
| UCHALcon $n$ | 0 to 7 | 9-406 | Selects Unique Challenge Order Confirmation message in position $n$. |
| ORIG: |  |  |  |
| ADDRess " $n$ " |  | 9-431 | Specifies Address. |
| ADDRess: |  |  |  |
| ENCoding $n$ | 1 or 0 | 9-431 | Enables/disables User Originating Address Encoding. |
| ENCoding? |  | 9-431 | Returns state of User Originating Address Encoding. |
| ADDRess? |  | 9-431 | Returns Address. |
| PLANid $n$ | 0 to 15 | 9-431 | Specifies User Originating Address ID Plan. |
| PLANid? |  | 9-431 | Returns User Originating Address ID Plan. |
| PRESentation: 0 |  |  |  |
| Pl $n$ | 0 to 3 | 9-433 | Specifies Presentation Indicator. |
| Pl ? |  | 9-433 | Returns Presentation Indicator. |
| SIn | 0 to 3 | 9-433 | Specifies Screen Indicator. |
| SI? |  | 9-433 | Returns Screen Indicator. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| MSS: |  |  |  |
| RDCCH: |  |  |  |
| ORIG: |  |  |  |
| SUBaddress: |  |  |  |
| ADDRess n,m | 0 to 19, 0 to 255 | 9-432 | Specifies selected Subaddress ( $m$ ). |
| ADDRess? $n$ | 0 to 19 | 9.432 | Returns selected Subaddress. |
| LENGth $n$ | 1 to 21 | 9-432 | Specifies Subaddress Length. |
| LENGth? |  | 9.432 | Returns Subaddress Length. |
| ODD EVEN $n$ | 1 or 0 | 9-432 | Enables/disables Subaddress Odd/Even indicator. |
| ODD_EVEN? |  | 9-432 | Returns state of Subaddress Odd/Even indicator. |
| REServed $n$ | 01015 | 9-432 | Specifies number of User Originating Subaddress Reserved fields. |
| REServed? |  | 9-432 | Returns number of User Originating Subaddress Reserved fields. |
| TYPE $n$ | 0 to 3 | 9-432 | Specifies Subaddress Type of Number. |
| TYPE? |  | 9-432 | Returns Subaddress Type of Number. |
| TYPE $n$ | 0 to 7 | 9-431 | Specifies User Originating Address Type of Number. |
| TYPE? |  | 9-431 | Returns User Originating Address Type of Number. |
| PD $n$ | 0 to 3 | 9-407 | Specifies Protocol Discriminator. |
|  |  | 9-407 | Returns Protocol Discriminator. |
| PFC: |  |  |  |
| REQuest $n$ | 0 to 7 | 9-435 | Specifies Paging Frame Class Request. |
| REQuest? |  | 9-435 | Returns Paging Frame Class Request. |
| PFC_1 $n$ | 0 to 7 | 9-407 | Specifies Paging Frame Class Minus One. |
| PFC 1 ? |  | 9-407 | Returns Paging Frame Class. |
| PROGram |  | 9-444 | Programs RACH Message Generator with data constructed by Build command. |
| PROTocol: |  |  |  |
| VERsion $n$ | 0 to 15 | 9-410 | Specifies Protocol Version. |
| VERsion? |  | 9-410 | Returns Protocol Version. |
| PSID_RSID: |  |  |  |
| MAP $n$ | 0 to \#hFFFF | 9-407 | Specifies PSID/RSID Map. |
| MAP? |  | 9-407 | Returns PSID/RSID Map. |
| SELect $n$ | 0 to 15 | 9-407 | Specifies Selected PSID/RSID (Private System ID/Residential System ID). |
| SELect? |  | 9-407 | Returns Selected PSID/RSID. |
| RANDBS $n$ | 0 to \#hFFFFFFFF | 9-409 | Specifies RANDBS used in Authentication process. |
| RANDBS? |  | 9-409 | Returns RANDBS. |
| RANDC $n$ | 0 to 255 | 9-409 | Specifies RANDC used in Authentication process. |
| RANDC? |  | 9-409 | Returns RANDC. |
| RCAUSe $n$ | 0 to 127 | 9-433 | Specifies R-CAUSE. |
| RCAUSe: |  |  |  |
| REServed $n$ | 1 or 0 | 9-433 | Specifies Reserved field of R-Cause. |
| REServed? |  | 9-433 | Returns Reserved field of R-Cause. |
| RCAUSe? |  | 9-433 | Returns R-CAUSE. |
| RDATA: |  |  |  |
| DELay $n$ | 0 to 15 | 9-433 | Specifies R-DATA DELAY. |
| DELay? |  | 9-433 | Returns R-DATA DELAY. |
| RDATA_UNIT: |  |  |  |
| HLP: |  |  |  |
| DATA $n, m$ | 0 to 255, 0 to 255 | 9-426 | Specifies selected R-Data Higher Layer Protocol Data Unit ( $m$ ). |
| DATA? $n$ | 0 to 255 | 9-426 | Returns selected Higher Layer Protocol Data Unit. |
| IDentifier $n$ | 0 to 255 | 9-426 | Specifies R-Data Unit Higher Protocol Identifier. |
| IDentifier? |  | 9-426 | Returns R-Data Unit Higher Protocol Identifier. |
| LENGth n | 0 to 255 | 9-426 | Specifies R-Data Unit Length Indicator. |
| LENGth? |  | 9-426 | Returns R-Data Unit Length Indicator. |
| REG: |  |  |  |
| TYPE $n$ | 0 to 15 | 9-434 | Specifies Registration Type. |
| TYPE? |  | 9.434 | Returns Registration Type. |
| RTRANSaction $n$ | 0 to 255 | 9-426 | Specifies R-Transaction Identifier. |
| RTRANSaction? |  | 9-426 | Returns R-Transaction Identifier. |
| SCM $n$ | 0 to 31 | 9-410 | Specifies Station Class Mark. |
| SCM? |  | 9-410 | Returns Station Class Mark. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| MSS: |  |  |  |
| RDCCH: |  |  |  |
| SELect: |  |  |  |
| RANDom |  | 9-392 | Selects Random Data for data field in transmission bursts on RDCCH. |
| USER |  | 9-392 | Selects a user-defined data pattern for data field in transmission bursts on RDCCH. |
| SERVice $n$ | 0 to 15 | 9-417 | Specifies Service Code. |
| SERVice? |  | 9-417 | Returns Service Code. |
| SID_REPort $n$ | 0 to \#h7FFF | 9-435 | Specities SIDs-p. |
| SID REPort? |  | 9-435 | Returns SIDs-p. |
| SOC $n$ | 0 to 4095 | 9-435 | Specifies System Operator Code. |
| SOC? |  | 9-435 | Returns SOC. |
| SSDUP: |  |  |  |
| STATus $n$ | 0 to 3 | 9-436 | Specifies SSD Update Status. |
| STATus? |  | 9-436 | Returns SSD Update Status. |
| STARt |  | 9-393 | Starts transmission in RDCCH. |
| STOP |  | 9-393 | Stops transmission in RDCCH. |
| SUBaddress: |  |  |  |
| ADDRess $n$, m | 0 to 19,0 to 255 | 9-408 | Specifies selected Subaddress (m). |
| ADDRess? $n$ | 0 to 19 | 9-408 | Returns selected Subaddress. |
| LENGth n | 1 to 21 | 9-408 | Specifies Subaddress Length. |
| LENGth? |  | 9-408 | Returns Subaddress Length. |
| ODD_EVEN $n$ | 1 or 0 | 9-408 | Enables/disables Subaddress Odd/Even indicator. |
| ODD_EVEN? |  | 9-408 | Returns state of Subaddress Odd/Even indicator. |
| REServed $n$ | 0 to 15 | 9-408 | Specifies number of subaddress Reserved fields. |
| REServed? |  | 9-408 | Returns number of subaddress Reserved fields. |
| TYPE $n$ | 0 to 3 | 9-408 | Specifies Type of subaddress. |
| TYPE? |  | 9-408 | Returns Type of subaddress. |
| SUPPort: |  |  |  |
| ALT_SOC $n$ | 0 to \#nFFF | 9-414 | Specifies ALT SOC_Support. |
| ALT_SOC? |  | 9-414 | Returns ALT_SOC_Support. |
| ANA800 $n$ | 1 or 0 | 9-413 | Enables/disables 800 MHz Analog Speech Support. |
| ANA800? |  | 9-413 | Returns state of ANA800. |
| ASYNC $n$ | 1 or 0 | 9-412 | Enables/disables Async Data Support. |
| ASYNC? |  | 9-412 | Returns state of Async Data Support. |
| BSMC $n$ | 1 or 0 | 9-412 | Enables/disables BSMC Support. |
| BSMC? |  | 9-412 | Returns state of BSMC Support. |
| DOUBle $n$ | 1 or 0 | 9-413 | Enables/disables Double Rate DTC Support. |
|  |  |  |  |
|  |  |  |  |
| BANDS $n$ | 0 to 255 | 9-412 | Specifies Supported Frequency Bands. |
| BANDS? |  | 9-412 | Returns Supported Frequency Bands. |
| G3fax $n$ | 1 or 0 | 9-412 | Enables/disables G3-Fax Support. |
| G3fax? |  | 9-412 | Returns state of G3-Fax Support. |
| HALF $n$ | 1 or 0 | 9-413 | Enables/disables Half-Rate DTC Support. |
| HALF? |  | 9-413 | Returns state of Half-Rate DTC Support. |
| IRA $n$ | 1 or 0 | 9-413 | Enables/disables International Reference Alphabet Support. |
| IRA? |  | 9-413 | Returns state of IRA Support. |
| MAX: 0 |  |  |  |
| PFC $n$ | 0 to 7 | 9-411 | Specifies MAX SUPPORTED_PFC. |
| PFC? |  | 9-411 | Returns MAX SUPPORTED_PFC. |
| SMS $n$ | 1 or 0 | 9-412 | Enables/disables SMS Broadcast Support. |
| SMS? |  | 9-412 | Returns state of SMS Broadcast Support. |
| SOC $n$ | 1 or 0 | 9-411 | Enables/disables SOC Support. |
| SOC? |  | 9-411 | Returns state of SOC Support. |
| STU_IIIn | 1 or 0 | 9-414 | Enables/disables STU-III Support. |
| STU-III? |  | 9-414 | Returns state of STU-III Support. |
| SUBaddress $n$ | 1 or 0 | 9-412 | Enables/disables Subaddressing Support. |
| SUBaddress? |  | 9.412 | Returns state of Subaddressing Support. |
| TRIPle $n$ | 1 or 0 | 9-414 | Enables/disables Triple Rate DTC Support. |
| TRIPle? |  | 9-414 | Returns state of Triple Rate DTC Support. |
| USER $n$ | 1 or 0 | 9-413 | Enables/disables User Group Support. |
| USER? |  | 9-413 | Returns state of User Group Support. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| MSS: |  |  |  |
| RDCCH: |  |  |  |
| TA $n$ | -10 to 60 | 9-392 | Specifies time alignment adjustment from Standard Offset Reference in half symbols. |
| TA? |  | 9-392 | Returns time alignment adjustment from Standard Offset Reference in half symbols. |
| USER n,word USER: | 0 to 6, 0 to \#hFFFF | 9-393 | Specifies selected 16 bit word. |
| GROUP: |  |  |  |
| STATus $n$ | 0 to 3 | 9-427 | Specifies User Group Status. |
| STATus? |  | 9-427 | Returns User Group Status. |
| TYPE $n$ | 0 to 3 | 9-428 | Specifies User Group Type. |
| TYPE? |  | 9-428 | Returns User Group Type. |
| UGID: 0 |  |  |  |
| LS $n$ | 0 to \#hFFFFFFFF | 9-428 | Specifies 32 least significant bits of User Group ID. |
| LS? |  | 9-428 | Returns 32 least significant bits of User Group ID. |
| MS $n$ | 0 to \#h3FFFF | 9-428 | Specifies 18 most significant bits of User Group ID. |
| MS? |  | 9-428 | Returns 18 most significant bits of User Group ID. |
| MIN " $n$ " | "123/456-7890" | 9-428 | Specifies MIN. |
| MIN? |  | 9-428 | Returns MIN. |
| VC_MAP $n$ | 0 to \#h3F | 9-414 | Specifies Voice Coder Map Info. |
| VC_MAP? |  | 9-414 | Returns Voice Coder Map Info. |
| VINtage: |  |  |  |
| FIRMware $n$ | 0 to 63 | 9-411 | Specifies Firmware Vintage. |
| FIRMware? |  | 9-411 | Returns Firmware Vintage. |
| SOFTware $n$ | 0 to 63 | 9-411 | Specifies Software Vintage. |
| SOFTware? |  | 9-411 | Returns Software Vintage. |
| VOICEMode: |  |  |  |
| NUMBer $n$ | 0 to 7 | 9-420 | Specifies the Number of instances of Voice Mode. |
| NUMBer? |  | 9-420 | Returns the Number of instances of Voice Mode. |
| PM $n, m$ | 0 to 7,0 to 7 | 9-420 | Specifies PM V ( $m$ ) for selected instance of Voice Mode. |
| PM? $n$ | 0 to 7 | 9-420 | Returns PM_V for selected instance of Voice Mode. |
| VC $n, m$ | 0 to 7, 0 to 7 | 9-420 | Specifies VC ( $m$ ) for selected instance of Voice Mode. |
| VC? $n$ | 0 to 7 | 9-420 | Returns VC for selected instance of Voice Mode. |
| RDTC: |  |  |  |
| DVCC $n$ | 1 to 255 | 9-445 | Specifies DVCC transmitted on RDTC. |
| DVCC? |  | 9-445 | Returns DVCC. |
| FACCH: or SACCH: |  |  |  |
| RAW $n 1, n 2, n 3, n 4, n 5, n 6 \ldots$ |  | 9-446 | Sends RAW message on RDTC. Number of arguments must be a multiple of 6 . |
| LENGth: |  |  |  |
| NORMal |  | 9-445 | Selects Normal length burst. |
| SHORTened |  | 9-445 | Selects Shortened length burst. |
| START |  | 9-445 | Starts transmitting on RDTC. |
| STOP |  | 9-445 | Stops transmitting on RDTC. |
| TA $n$ | -10 to 60 | 9-445 | Specifies time alignment adjustment from Standard Offset Reference in halt symbols. |
| TA? |  | 9-445 | Returns time alignment adjustment from Standard Offset Reference in half symbols. |
| VOCoder: |  |  |  |
| ACELP |  | 9-445 | Selects ACELP vocoder. |
| VSELP |  | 9-445 | Selects VSELP vocoder. |
| RFLVL $n$ | -127.0 to -20.0 | 9-390 | Specifies RF output level in dBm . |
| RVC: |  |  |  |
| SAT $n$ | $\begin{aligned} & 0(\mathrm{Off}), \\ & 5965 \text { to } 6035 \end{aligned}$ | 9-446 | Specifies Supervisory Audio Tone used on RVC. |
| SAT? |  | 9-446 | Returns SAT. |
| START |  | 9-446 | Starts transmitting on RVC. |
| STOP |  | 9-446 | Stops transmitting on RVC. |
| SETup |  | 9-389 | Configures Sp Tst to simulate a Mobile Station. |
| SLOT $n$ | 1 to 3 | 9-390 | Specifies DCCH Full Rate Slot. |
| SLOT? |  | 9-390 | Returns DCCH slot selection. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| POWER MEASURE COMMANDS |  |  |  |
| POWer: |  |  |  |
| FDTC: |  |  |  |
| CABLE: |  |  |  |
| LOSS $n$ | -50.0 to 50.0 | 9-450 | Specifies loss (+) or gain (-) in dB between signal source and T/R Connector. |
| MEASLow? n | 1 or 0 | 9-450 | Returns TDMA power ( dBm ) on a DTC applied to the Antenna Connector. ( $n=1$ ) Low power initialization of Power Meter prior to measurement. ( $n=0$ ) Power measurement only. |
| FDTC: or RDTC: |  |  |  |
| CHANnel $n$ | 1 to 1999 | 9-450 | Specifies DTC channel on which to perform TDMA power measurement. |
| MEASure? |  | 9-450 | Returns TDMA power (mW) on a DTC applied to T/R Connector. |
| SETup |  | 9-450 | Configures Sp Tst to measure TDMA power on a DTC. |
| ZERO |  | 9-450 | Sets the TDMA Power Meter to a zero power reference at the T/R Connector. |

## RDCCH DATA MONITOR

Queries for received data, return - 1 if data is not available or has already been read.

| RDCCH: |  |  |  |
| :---: | :---: | :---: | :---: |
| AUTHR? |  | 9-161 | Returns AUTHR (18 bit value). |
| AUTHU? |  | 9-175 | Returns AUTHU (18 bit value). |
| BANDWidth? |  | 9-167 | Returns Bandwidth. |
| BSMC? |  | 9-162 | Returns Base Station Manufacture Code. |
| BT? |  | 9-158 | Returns Burst Type. |
| CALLED: |  |  |  |
| ADDRess? |  | 9-167 | Returns ADDRess. |
| ENCoding? |  | 9-167 | Returns state of ENCoding. |
| LENGth? |  | 9-167 | Returns LENGth. |
| PLANid? |  | 9-167 | Returns PLANid. |
| SUBaddress: |  |  |  |
| ADDRess? $n$ | 0 to 19 | 9-168 | Returns Called Subaddress from selected L3DATA Message. |
| LENGth? |  | 9-168 | Returns LENGth. |
| ODD_EVEN? |  | 9-168 | Returns state of ODD_EVEN. |
| REServed? |  | 9-168 | Returns Called Party Subaddress Reserved fields. |
| TYPE? |  | 9-168 | Returns TYPE. |
| TYPE? |  | 9-167 | Returns TYPE. |
| CALLING: |  |  |  |
| ADDRess? |  | 9-168 | Returns ADDRess. |
| ENCoding? |  | 9-168 | Returns state of ENCoding. |
| LENGth? |  | 9-168 | Returns LENGth. |
| PLANid? |  | 9-168 | Returns PLANid. |
| PRESentation: |  |  |  |
| PI? |  | 9-169 | Returns Presentation Indicator. |
| SI? |  | 9-169 | Returns Screening Indicator. |
| SUBaddress: |  |  |  |
| ADDRess? $n$ | 0 to 19 | 9-169 | Returns Calling Subaddress from selected L3DATA Message. |
| LENGth? |  | 9-169 | Returns LENGth. |
| ODD_EVEN? |  | 9-169 | Returns state of ODD_EVEN. |
| REServed? |  | 9-169 | Returns Calling Party Subaddress Reserved fields. |
| TYPE? |  | 9-169 | Returns TYPE. |
| TYPE? |  | 9-168 | Returns TYPE. |
| CHANnel $n$ | $\begin{aligned} & 1 \text { to } 333 \text { (U4), } \\ & 1 \text { to } 1023 \text { (U8), } \\ & 1 \text { to } 1999 \text { (HY) } \end{aligned}$ | 9-151 | Specifies Reverse Channel to monitor. |
| CHANnel? |  | 9-151 | Returns current value of CHANnel. |
| Cl ? |  | 9-158 | Returns state of Change Indicator. |
| CNUMBer: |  |  |  |
| ADDRess? |  | 9-174 | Returns C-Number Address. |
| ENCoding? |  | 9-174 | Returns state of C-Number Address Encoding. |
| LENGth? |  | 9-174 | Returns LENGth. |
| PLANid? |  | 9-174 | Returns C-Number ID Plan (4 bit value). |
| TYPE? |  | 9-174 | Returns C-Number Type of Number. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| RDCCH: |  |  |  |
| CONFigure: |  |  |  |
| NONE |  | 9-151 | Same as RDCCH:SETup, except does not select screen. |
| USER |  | 9-151 | Same as RDCCH:SETup, except selects user screen. |
| CONFIRMed: |  |  |  |
| MSGtype? |  | 9-175 | Returns Confirmed Message Type. |
| COUNT? |  | 9-161 | Returns COUNt. |
| CRC? |  | 9-160 | Returns Cyclic Redundancy Code. |
| CUSTOM: |  |  |  |
| CONTrol? $n$ | 0 to 252 | 9-162 | Returns selected Custom Control. |
| LENGth? |  | 9-162 | Returns Custom Control Length. |
| DISPlay: |  |  |  |
| CHARacter? $n$ | 0 to 81 | 9-161 | Returns selected Display Character. |
| LENGth? |  | 9-161 | Returns Length of Display Information. |
| DVCC $n$ | 0 to 255 | 9-152 | Specifies Digital Verification Color Code. |
| DVCC? |  | 9-152 | Returns DVCC. |
| EHI? |  | 9-158 | Returns state of Extension Header Indicator. |
| EMERgency? |  | 9-165 | Returns state of Emergency Call. |
| ESN? |  | 9-175 | Returns Electronic Serial Number (32 bit value). |
| FRNO_MAP? |  | 9-159 | Returns Frame Number Map. |
| IDT? |  | 9-158 | Returns Identity Type. |
| L3DATA: |  |  |  |
| SELect $n$ | 0 to 7 | 9-159 | Selects Layer 3 data message from which to access data. |
| SELect? |  | 9-159 | Returns SELect. |
| L3LI? $n$ | 0 to 7 | 9-159 | Returns selected 8 bit Layer 3 Length Indicator. |
| LAYER2: |  |  |  |
| DECode $n$ | 0 to 99 | 9-155 | Decodes selected frame of data in raw buffer. |
| RACH: |  |  |  |
| ARQ_RSVD? |  | 9-155 | Returns Automatic Retransmission Request RSVD. |
| BT? |  | 9-155 | Returns Burst Type. |
| Cl ? |  | 9-155 | Returns state of Change Indicator. |
| EH_RSVD? |  | 9-155 | Returns state of Extended Header RSVD. |
| EHI? |  | 9-155 | Returns state of Extension Header Indicator. |
| END_RSVD? |  | 9-155 | Returns state of END frame RSVD. |
| FRNO_MAP? |  | 9-155 | Returns Frame Number Map. |
| IDT? |  | 9-155 | Returns Identity Type. |
| L3DATA? $n, x$ | 0 to 7,0 to 15 | 9-156 | Returns selected 8 bit word ( $x$ ) of selected Layer 3 Data message. |
| L3LENGTH? $n$ | 0 to 7 | 9-156 | Returns selected 8 bit value of Length in Layer 3 data field. |
| L3LI? $n$ | 0 to 7 | 9-156 | Returns selected 8 bit value of Layer 3 Length Indicator. |
| MEA? |  | 9-156 | Returns Message Encryption Algorithm. |
| MEK? |  | 9-156 | Returns Message Encryption Key. |
| MIN? |  | 9-156 | Returns Mobile ID Number. |
| MSID? $n$ | 0 to 6 | 9-157 | Returns the selected 8 bit word of Mobile Station ID. ( $0=$ Least significant, $6=$ Most significant). |
| NL3M? |  | 9-157 | Returns Number of Layer 3 Messages. |
| PEA? |  | 9-157 | Returns Partial Echo Assigned. |
| LENGth: |  |  |  |
| ABBREViated |  | 9-152 | Configures the Sp Tst to decode abbreviated length bursts on RDCCH. |
| NORMal |  | 9-152 | Configures Sp Tst to decode normal length bursts on RDCCH. |
| LENGth? |  | 9-152 | Returns state of LENGth: $0=$ Normal, $1=$ Abbreviated . |
| LT? |  | 9-165 | Returns state of Last Try. |
| MANufacture? |  | 9-162 | Returns Manufacture Code. |
| MEA? |  | 9-159 | Returns Message Encryption Algorithm. |
| MEASurement: |  |  |  |
| LTM: |  |  |  |
| BER? FULL? |  | 9-164 9.164 | Returns state of LTM Measurement Full Measurement |
|  |  |  | Indicator. |
| RSS? |  | 9-164 | Returns LTM Measurement Receive Signal Strength. |
| WER? |  | 9-164 | Returns Word Error Rate. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| RDCCH: |  |  |  |
|  |  |  |  |
| OTHER: |  |  |  |
| STM: |  |  |  |
| LENGth? |  | 9-165 | Returns STM Measurement (Other Hyperband) Report Map Length. |
| REPort? |  | 9-165 | Returns STM Measurement (Other Hyperband) Report Map. |
| RSS? $n$ | 0 to 14 | 9-165 | Returns STM Measurement (Other Hyperband) ST_RSS of selected bit position. |
| STM: |  |  |  |
| NV? |  | 9-164 | Returns STM Measurement Number of Values. |
| RSS? $n$ | 0 to 15 | 9-164 | Returns selected STM Measurement Receive Signal Strength. |
| MEK? |  | 9-159 | Returns Message Encryption Key. |
| MEM: |  |  |  |
| MEA? |  | 9-167 | Returns Message Encryption Algorithm. |
| MED? |  | 9-167 | Returns Message Encryption Domain. |
| MEK? |  | 9-167 | Returns Message Encryption Key. |
| MESSage: |  |  |  |
| CENTer: |  |  |  |
| ADDRess? |  | 9-170 | Returns ADDRess. |
| ENCoding? |  | 9-170 | Returns state of ENCoding. |
| LENGth? |  | 9-170 | Returns LENGth. |
| PLANid? |  | 9-170 | Returns PLANid. |
| TYPE? |  | 9-170 | Returns TYPE. |
| MIN? |  | 9-158 | Returns Mobile ID Number associated with a 34 bit Mobile Station Identity. |
| MODE: |  |  |  |
| DATA: |  |  |  |
| ACKED? |  | 9-166 | Returns state of Data Mode Acked Data. |
| CRC? |  | 9-166 | Returns Data Mode CRC. |
| PART? |  | 9-166 | Returns Data Mode Data Part. |
| PM? |  | 9-166 | Returns Data Mode PM D. |
| RLP? |  | 9-166 | Returns Data Mode RLP. |
| SAP? |  | 9-166 | Returns state of Data Mode SAP. |
| VOICe: |  |  |  |
| PM? |  | 9-165 | Returns Voice Mode PM_V. |
| VC? |  | 9-165 | Returns Voice Mode VC. |
| MODEL? |  | 9-162 | Returns Model Number. |
| MSGtype? |  | 9-160 | Returns Message Type. |
| MSID: |  |  |  |
| LS? |  | 9-158 | Returns 32 Least Significant bits of Mobile Station ID. |
| MS? |  | 9-158 | Returns 18 Most Significant bits of Mobile Station ID. |
| NL3M? |  | 9-159 | Returns Number of Layer 3 Messages. |
| PD? |  | 9-160 | Returns Protocol Discriminator. |
| PEA? |  | 9-159 | Returns Partial Echo Assigned. |
| PFC: |  |  |  |
| REQuest? |  | 9-175 | Returns Paging Frame Class Request. |
| PFC_1? |  | 9-160 | Returns Paging Frame Class. |
| PROTocol: |  |  |  |
| VERsion? |  | 9-162 | Returns Protocol Version. |
| PSID_RSID: |  |  |  |
| MAP? |  | 9-160 | Returns PSID/RSID Map. |
| SELect? |  | 9-160 | Returns Selected PSID/RSID. |
| RANDBS? |  | 9-161 | Returns 32 bit RANDBS. |
| RANDC? |  | 9-161 | Returns 8 bit RANDC. |
| RATE $n$ | $0=$ Full, 1 = Half | 9-151 | Selects Transmission Rate. |
| RATE? |  | 9-151 | Returns state of RATE. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| RDCCH: |  |  |  |
| RAW: |  |  |  |
| COUNT? |  | 9-154 | Returns number of frames received and stored into raw buffer. |
| DATA? $n, x$ | 0 to 99, 0 to 15 | 9-154 | Returns raw data byte ( $x$ ) in selected raw data frame. |
| DEPTH $n$ | 0 to 99 | 9-154 | Specifies depth of raw buffer. |
| PREAMble? $n$ | 0 to 99 | 9-154 | Returns Preamble (16 bit value) in selected raw data frame. |
| STARt |  | 9-154 | Starts capturing raw data on RDCCH. |
| STOP |  | 9-154 | Stops capturing raw data on RDCCH. |
| SYNC? $n$ | 0 to 99 | 9-154 | Returns SYNC in selected raw data frame. |
| SYNCPLUS? $n$ | 0 to 99 | 9-154 | Returns SYNC+ in selected raw data frame. |
| TS? $n$ | 0 to 99 | 9-154 | Returns Time Stamp in ms of selected raw data frame. |
| RCAUSe: |  |  |  |
| REServed? |  | 9-174 | Returns Reserved field of R-Cause from selected L3DATA Message. |
| RCAUSE? |  | 9-174 | Returns RCAUSE. |
| RDATA: |  |  |  |
| DELay? |  | 9-174 | Returns R-DATA Delay from selected L3DATA Message. |
| RDATA_UNIT: |  |  |  |
| HLP: |  |  |  |
| DATA? $n$ | 0 to 255 | 9-170 | Returns selected Higher Layer Protocol DATA unit. |
| IDentifier? |  | 9-170 | Returns Higher Layer Protocol IDentifier. |
| LENGth? |  | 9-170 | Returns LENGth. |
| REG: |  |  |  |
| TYPE? |  | 9-174 | Returns Registration Type. |
| REMote: |  |  |  |
| RAW: |  |  |  |
| DVCC $n$ | 1 to 255 | 9-153 | Specifies Digital Verification Color Code. |
| LENGth: |  |  |  |
| ABBREViated |  | 9-153 | Configures Sp Tst to decode abbreviated length bursts on RDCCH. |
| NORMal |  | 9-153 | Configures Sp Tst to decode normal length bursts on RDCCH. |
| STARt |  | 9-153 | Starts sending received, de-interleaved and decoded data out OPT. RS-232 Connector. |
| STOP |  | 9-153 | Stops sending received data out OPT. RS-232 Connector. |
| TIMEslot: |  |  |  |
| STARt |  | 9-152 | Starts sending received data out OPT. RS-232 Connector. |
| STOP |  | 9-152 | Stops sending received data out OPT. RS-232 Connector. |
| RSVD: |  |  |  |
| ARQ? |  | 9-150 | Returns ARQ RSVD. |
| EHI? |  | 9-160 | Returns state of Extended Header Indicator RSVD. |
| END? |  | 9-160 | Returns state of END frame RSVD. |
| RTRANSaction? |  | 9-170 | Returns RTRANSaction. |
| SCM? |  | 9-162 | Returns Station Class Mark. |
| SERVice? |  | 9-165 | Returns Service Code. |
| SETup |  | 9-151 | Contigures Sp Tst to receive on RDCCH. |
| SID REPort? |  | 9-175 | Returns SIDs-p. |
| SLOT $n$ | 1 to 3 | 9-151 | Specifies SLOT pair on which to receive. |
| SOC? |  | 9-175 | Returns SOC. |
| SSDUP: |  |  |  |
| STATus? |  | 9-175 | Returns SSD Update Status. |
| START |  | 9-158 | Starts background task running decoding RDCCH message information elements. |
| STOP |  | 9-158 | Stops background RDCCH decode task. |
| SUBaddress: |  |  |  |
| ADDRess? $n$ | 0 to 19 | 9-161 | Returns Subaddress from selected L3DATA Message. |
| LENGth? |  | 9-161 | Returns LENGth. |
| ODD_EVEN? |  | 9-161 | Returns state of ODD_EVEN. |
| REServed? |  | 9-161 | Returns state of REServed. |
| TYPE? |  | 9-161 | Returns TYPE. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| RDCCH: |  |  |  |
| SUPPort: |  |  |  |
| ALT_SOC? |  | 9-164 | Returns ALT_SOC_Support. |
| ANA $\overline{8} 00$ ? |  | 9-163 | Returns state of 800 MHz Analog Speech Support. |
| ASYNC? |  | 9-163 | Returns state of Async Data Support. |
| BSMC? |  | 9-163 | Returns state of BSMC Support. |
| DOUBle? |  | 9-163 | Returns state of Double Rate DTC Support. |
| FREQuency: |  |  |  |
| BANDS? |  | 9-163 | Returns Supported Frequency Bands. |
| G3fax? |  | 9-163 | Returns state of G3-Fax Support. |
| HALF? |  | 9-163 | Returns state of Half-Rate DTC Support. |
| IRA? |  | 9-163 | Returns state of IRA Support. |
| MAX: |  |  |  |
| PFC? |  | 9-162 | Returns MAX_SUPPORTED_PFC. |
| SMS? |  | 9-163 | Returns state of SMS Broadcast Support. |
| SOC? |  | 9-162 | Returns state of SOC Support. |
| STU_III? |  | 9-164 | Returns state of STU-III Support. |
| SUBaddress? |  | 9-163 | Returns state of Subaddressing Support. |
| TRIPle? |  | 9-163 | Returns state of Triple Rate DTC Support. |
| USER? |  | 9-163 | Returns state of User Group Support. |
| SYNC? |  | 9-158 | Returns RDCCH sync word. |
| SYNCPlus? |  | 9-158 | Returns RDCCH sync plus word. |
| USER: |  |  |  |
| DEST: |  |  |  |
| ADDRess? |  | 9-171 | Returns ADDRess. |
| ENCoding? |  | 9-171 | Returns state of ENCoding. |
| LENGth? |  | 9-171 | Returns LENGth. |
| PLANid? |  | 9-171 | Returns PLANid. |
| SUBaddress: |  |  |  |
| ADDRess? $n$ | 0 to 19 | 9-172 | Returns User Destination Subaddress from selected L3DATA Message. |
| LENGth? |  | 9-172 | Returns LENGth. |
| ODD_EVEN? |  | 9-172 | Returns state of ODD_EVEN. |
| REServed? |  | 9-172 | Returns User Destination Subaddress Reserved fields. |
| TYPE? |  | 9-172 | Returns TYPE. |
| TYPE? |  | 9-171 | Returns TYPE. |
| GROUP: |  |  |  |
| STATUS? |  | 9-171 | Returns STATUS. |
| TYPE? |  | 9-171 | Returns TYPE. |
| UGID: |  |  |  |
| LS? |  | 9-171 | Returns 32 Least Significant Bits of User Group ID. |
| MS ? |  | 9-171 | Returns 18 Most Significant Bits of User Group ID. |
| ORIG: |  |  |  |
| ADDRess? |  | 9-172 | Returns ADDRess. |
| ENCoding? |  | 9-172 | Returns state of ENCoding. |
| LENGth? |  | 9-172 | Returns LENGth. |
| PLANid? |  | 9-172 | Returns PLANid. |
| PRESentation: |  |  |  |
| PI? |  | 9-173 | Returns Presentation Indicator. |
| SI? |  | 9-173 | Returns Screening Indicator. |
| SUBaddress: |  |  |  |
| ADDRess? $n$ | 0 to 19 | 9-173 | Returns User Origination Subaddress from selected L3DATA Message. |
| LENGth? |  | 9-173 | Returns LENGth. |
| ODD_EVEN? |  | 9-173 | Returns state of ODD_EVEN. |
| REServed? |  | 9-173 | Returns User Originating Subaddress Reserved fields. |
| TYPE? |  | 9-173 | Returns TYPE. |
| TYPE? |  | 9-173 | Returns TYPE. |
| VC_MAP? |  | 9-164 | Returns Voice Coder Map Info. |
| VINtage: |  |  |  |
| FIRMware? |  | 9-162 | Returns Firmware Vintage. |
| SOFTware? |  | 9-162 | Returns Software Vintage. |


| COMMAND | RANGE | PAGE | DESCRIPTION |
| :--- | :--- | :--- | :--- |
| RDCCH: <br> VOICEMode: <br> NUMBer? | 0 to 7 | $9-166$ | Returns Number of instances of Voice Mode in selected <br> L3DATA Message. |
| PM?n | 0 to 7 | $9-166$ | Returns PM V from selected instance of Voice Mode in <br> selected L3DATA Message. |
| VC? $n$ | $9-166$ | Returns VC from selected instance of Voice Mode in selected <br> L3DATA Message. |  |

## REVERSE DIGITAL TRAFFIC CHANNEL (RDTC) MONITOR COMMANDS

Queries for received data, return -1 if data is not available or has already been read.


RDTC:
FACCH: or SACCH:

MAP:
ARQ?
CODER?
MEA:
ALGORithms? n
DOMAIN?
MEK?
SMS?
VPM?
MEM?
MESSage:
CENTer:
ADDRess?
ENCoding?
LENGth?
PLANid?
TYPE?
MODe:
DATA:
ACKED?
CRC?
PART?
PM ?
REServed
RLP?
SAP?
VOICe:
PM V?
VC?
MSGtype?
NV?
PD?
PT?
PV?
RANDBS?
RCAUSe:
REServed?
RCAUSE?
RDATA_UNIT: HLP:

DATA? $n$
0 to 253
IDentifier?
LENGth?
RFCHAN? $n$
RL?
RN?
RR?
RSSI? $n$
RSSIC?
RTRANSaction?
SERVice:
CODE?
SOC?
SSDUP?
SUPPort:
ANAlog?
FREQuency: BANDS?
IRA?
0 to 7

| 9-57 | Returns state of FACCH/SACCH ARQ Map. |
| :---: | :---: |
| 9-57 | Returns Voice Coder Map. |
| 9-57 | Returns selected Message Encryption Algorithms. |
| 9-57 | Returns Message Encryption Algorithm Map Domain. |
| 9-57 | Returns Message Encryption Key Map. |
| 9-57 | Returns SMS Map. |
| 9-57 | Returns Voice Privacy Mode Map. |
| 9-57 | Returns state of Memory Encryption Mode. |
| 9-58 | Returns Message Center Address. |
| 9-58 | Returns state of Message Center Address Encoding. |
| 9-58 | Returns Message Center Address Extended Remaining Length. |
| 9-58 | Returns Message Center Address Number Plan ID. |
| 9-58 | Returns Message Center Address Type of Number. |
| 9-59 | Returns Acked Data. |
| 9-59 | Returns CRC. |
| 9-59 | Returns Data Part. |
| 9-59 | Returns PM_D (data privacy mode). |
| 9-59 | Returns Reserved field of Data Mode information element. |
| 9-59 | Returns RLP (radio link protocol). |
| 9-59 | Returns SAP. |
| 9-58 | Returns PM_V (voice privacy mode information). |
| 9-58 | Returns VC (voice coder information). |
| 9-53 | Returns Message Type received from Mobile Station. |
| 9-60 | Returns Numbers of Values. |
| 9-60 | Returns Protocol Discriminator. |
| 9-60 | Returns Parameter Types. |
| 9-60 | Returns Protocol Version. |
| 9-60 | Returns RANDBS used in the Base Station Challenge Order. |
| 9-60 | Returns R-Cause Reserved field. |
| 9-60 | Returns R-Cause. |
| 9-61 | Returns selected R-Data Unit Higher Layer Protocol Data Unit. |
| 9-61 | Returns R-Data Unit Higher Layer Protocol Identifier. |
| 9-61 | Returns R-Data Unit Extended Remaining Length. |
| 9-61 | Returns selected RFCHAN. |
| 9-61 | Returns Remaining Length. |
| 9-61 | Returns Request Number. |
| 9-61 | Returns Release Reason. |
| 9-61 | Returns selected Received Signal Strength Indicator. |
| 9-61 | Returns Received Signal Strength Indicator of Current RF Channel. |
| 9-62 | Returns R-Transaction Identifier. |
| 9-62 | Returns Service Code. |
| 9-62 | Returns SOC. |
| 9-62 | Returns state of Shared Secret Data Update. |
| 9-62 | Returns state of 800 MHz Analog Speech Support. |
| 9-62 | Returns Supported Frequency Bands. |
| 9-62 | Returns state of IRA Support. |

Returns selected Message Encryption Algorithms
ap Domain
9-57 Returns SMS Map.
9-57 Returns Voice Privacy Mode Map.
9-57 Returns state of Memory Encryption Mode

Returns Message Center Address
Returns state of Message Center Address Encoding.
Returns Message Center Address Extended Remaining Length

Returns Message Center Address Number Plan ID

Returns Acked Data.
Returns CRC
Returns Data Part.
Returns PM D (data privacy mode)
Returns RLP (radio link protocol).
Returns SAP.
Returns PM_V (voice privacy mode information).
Returns VC (voice coder information)
Returns Message Type received from Mobile Station.
Returns Numbers of Values.

Returns Parameter Types
Returns Protocol Version.
Returns RANDBS used in the Base Station Challenge Order.
Returns R-Cause Reserved field.

Returns selected R-Data Unit Higher Layer Protocol Data

Returns R-Data Unit Extended Remaining Length
Returns selected RFCHAN
Returns Remaining Length
Returns Release Reason
Returns selected Received Signal Strength Indicator. RF Channel.
Returns R-Transaction Identifier
Returns Service Code
Returns SOC.
Returns state of Shared Secret Data Update.

Returns Supported Frequency Bands
Returns state of IRA Support.
,

| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| RDTC: |  |  |  |
| FACCH: or SACCH: |  |  |  |
| TA? |  | 9-62 | Returns Time Alignment offset. |
| TASK? |  | 9-62 | Returns Task Status. |
| TERMinf? |  | 9-62 | Returns Terminal Information of Mobile Station. |
| USER: |  |  |  |
| DEST: |  |  |  |
| ADDRess? |  | 9-63 | Returns User Destination Address. |
| ENCoding? |  | 9-63 | Returns state of User Destination Address Encoding. |
| LENGth? |  | 9-63 | Returns User Destination Address Extended Remaining Length. |
| PLANid? |  | 9.63 | Returns User Destination Address Number Plan ID. |
| SUBaddress: |  |  |  |
| ADDRess? | 0 to 19 | 9-63 | Returns selected User Destination Subaddress. |
| LENGth? |  | 9-63 | Returns User Destination Subaddress Extended Remaining Length. |
| ODD_EVEN? |  | 9-63 | Returns state of User Destination Subaddress Odd/Even Indicator. |
| REServed? |  | 9-63 | Returns User Destination Subaddress Reserved bits. |
| TYPE? |  | 9-63 | Returns User Destination Type of Subaddress. |
| TYPE? |  | 9-63 | Returns User Destination Address Type of Number. |
| ORIG: |  |  |  |
| ADDRess? |  | 9-64 | Returns User Originating Address. |
| ENCoding? |  | 9-64 | Returns state of User Originating Address Encoding. |
| LENGth? |  | 9-64 | Returns User Originating Address Extended Remaining Length. |
| PLANid? |  | 9-64 | Returns User Originating Address Number Plan ID. |
| PRESentation: |  |  |  |
|  |  |  | Extended Remaining Length. |
| PI? |  | 9-65 | Returns User Originating Address Presentation Indicator. |
| REServed? |  | 9-65 | Returns User Originating Address Presentation Indicator Reserved bits. |
| SI? |  | 9-65 | Returns User Originating Address Screening Indicator. |
| SUBaddress: |  |  |  |
| ADDRess? | 0 to 19 | 9-64 | Returns selected User Originating Subaddress. |
| LENGth? |  | 9-64 | Returns User Originating Subaddress Extended Remaining Length. |
| ODD EVEN? |  | 9-64 | Returns state of User Originating Subaddress Odd/Even Indicator. |
| REServed? |  | 9-64 | Returns User Originating Subaddress Reserved bits. |
| TYPE? |  | 9-64 | Returns User Originating Type of Subaddress. |
| TYPE? |  | 9-64 | Returns User Originating Address Type of Number. |
| VPM? |  | 9-65 | Returns state of Voice Privacy Mode. |
| R0? |  | 9-52 | Returns VSELP frame energy value. |
| REMote: |  |  |  |
| STARt |  | 9-51 | Stops decoding RDTC and redirects VSELP data out OPT. RS-232 Connector. |
| STOP |  | 9-51 | Stops redirection of VSELP data out OPT. RS-232 Connector. |
| SETup |  | 9-50 | Sets up Sp Tst as when entering the Reverse Digital Traffic Channel Screen, except screen is not displayed. |
| SLOT $n$ | 1 to 3 | 9-50 | Selects Timesiot. |
| STARt |  | 9-50 | Starts decoding Reverse Digital Traffic Channel data. |
| STOP |  | 9-50 | Stops decoding Reverse Digital Traffic Channel data. |
| VOCoder: |  |  |  |
| ACELP |  | 9-51 | Selects ACELP vocoder. |
| VSELP |  | 9-51 | Selects VSELP vocoder. |

COMMAND RANGE PAGE DESCRIPTION

## REVERSE CONTROL CHANNEL (RECC) MONITOR COMMANDS

Queries for received data, return -1 if data is not available or has already been read.

RECC:

| AUTHR? |  | $9-45$ |
| :--- | :--- | :--- |
| AUTHU? |  | $9-45$ |
| CHANnel $n$ | 1 to 333 (U4), <br> 1 to 1023 (U8), | $9-44$ |
|  | 1 to 1999 (HY) |  |
| CONFigure: |  |  |

CONFigure: NONE USER
COUNt?
CRC?
DATA:
ACKED?
PART?
DCC?
DIGITS1?
DIGITS2?
E?
EP?
ER?
ESN?
LOCAL_MT?
LT?
MIN?
MPCI?
ORDERCD?
ORDQ?
PM D?
RANDBS?
RANDC?
RLP?
S?
SAP?
SCM?
SDCC1?
SDCC2?
SERVice?
SETup
STARt
STOP
TORDer?

1 to 1023 (U8),
1 to 1999 (HY)

9-45
9-45
9-45
9-45
9-45
9-45
9-46
9-46
9-46
9-46
9-46
9-46
9-46
9-46
9.46

9-46
9-46
9-46
9-46
9-47
9-4
$9-47$
9.4
$9-47$
9.47

9-47
9-4
9-44
9-44
9-45

Returns AUTHR from Mobile Station Authentication Algorithms.
Returns AUTHU used in Unique Challenge Order
Confirmation.
Selects Reverse Control Channel to monitor.

9-44 Same as RECC:SETup, except does not select a screen.
9-44 Same as RECC:SETup, except selects the USER screen.
9-45 Returns modulo-64 count sent from Mobile Station.

Returns state of 16 or 24 bit CRC for data/fax call.
Returns state of Acked Data.
Returns Data Part.
Returns Digital Color Code.
Returns up to 16 digits.
Returns up to 16 digits.
Returns state of Extended Address.
Returns state of Extended Protocol.
Returns state of Extended Protocol Reverse Channel Indicator.
Returns Electronic Serial Number.
Returns Local Control (Local Control message)/Message Type.
Returns state of Last Try.
Returns Mobile ID Number of Mobile Station.
Returns state of Mobile Protocol Capability Indicator.
Returns Order Code.
Returns Order Qualifier.
Returns Selected Privacy Mode.
Returns RANDBS used in Base Station Challenge Order.
Returns RANDC.
Returns Layer 2 Radio Link Protocol.
Returns state of Serial Number.
Returns state of Service Access Point.
Returns Station Class Mark.
Returns Supplementary Digital Color Code 1.
Returns Supplementary Digital Color Code 2.
Returns Service code.
Sets up Sp Tst as when entering the Reverse Control
Channel screen, except screen is not displayed.
Starts monitoring Reverse Control Channel data.
Stops monitoring Reverse Control Channel data.
Returns combination of $T$ and Order Fields.

REVERSE VOICE CHANNEL (RVC) MONITOR COMMANDS
Queries for received data, return - 1 if data is not available or has already been read.
RVC:

| AUTHu? |  | $9-49$ |
| :--- | :--- | :--- |
|  |  |  |
| CHANnel $n$ | 1 to $333(\mathrm{U} 4)$, <br> 1 to $1023(\mathrm{U} 8)$, | $9-48$ |
|  | 1 to $1999(\mathrm{HY})$ |  |
| CONFigure: |  | $9-48$ |
| NONE |  | $9-48$ |

Returns AUTHU used in Unique Challenge Order Confirmation.
Selects Reverse Voice Channel to monitor.

9-48 Same as RVC:SETup, except does not select a screen.
9-48 Same as RVC:SETup except selects the USER screen.

| COMMAND | RANGE | PAGE | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| RVC: |  |  |  |
| DIGITS? |  | 9-49 | Returns up to 32 digits. |
| ESN? |  | 9-49 | Returns Electronic Serial Number. |
| LOCAL_MT? |  | 9-49 | Returns Local Control/Message Type. |
| ORDERCD? |  | 9-49 | Returns Order Code. |
| ORDQ? |  | 9-49 | Returns Order Qualifier. |
| RANDbs? |  | 9-49 | Returns RANDBS used in Base Station Challenge Order. |
| SETup |  | 9-48 | Sets up Sp Tst as when entering the Reverse Voice Channel screen, except screen is not displayed. |
| STARt |  | 9-48 | Starts decoding Reverse Voice Channel data. |
| STOP |  | 9-48 | Stops decoding Reverse Voice Channel data. |
| TORDer? |  | 9-49 | Returns combination of T and Order Fields. |

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## SECTION 9 - SPECIAL TEST SPECIFIC TMAC COMMANDS

## 9-1 GENERAL

This Section lists the Special Test ("Sp Tst") specific commands by Operation Mode. Commands are used remotely through GPIB or RS-232 (as applicable) or as part of a TMAC program downloaded to the Sp Tst.

There are twelve major modes of operation:

| Monitor | FOCC | Forward Control Channel Monitor |
| :---: | :---: | :---: |
|  | FVC | Forward Voice Channel Monitor |
|  | FDTC | Forward Digital Traffic Channel Monitor |
|  | RECC | Reverse Control Channel Monitor |
|  | RVC | Reverse Voice Channel Monitor |
|  | RDTC | Reverse Digital Traffic Channel Monitor |
|  | FDCCH | Forward Digital Control Channel Monitor |
|  | RDCCH | Reverse Digital Control Channel Monitor |
| Simulation | CSS | Cell Site Simulation (ACC/DCCH) |
|  | MSS | Mobile Station Simulation ( DCCH only) |
| Measurement | BER | Bit Error Rate for RDTC |
|  | MODacc | Modulation Accuracy for FDTC |

Additionally, there are two utility modes of operation:

- EDIT - Build an edit field on the display of the HOST.
- MMEMory - Mass Memory system used to operate the Sp Tst Flash files directory.

Most of the commands can be entered using a short form or a long form. The short form is shown in upper case, while the remainder of the long form is shown in lower case. Upper and lower case letters are used only in this manual to differentiate between the long and short form of commands. TMAC executes any valid command (short or long form) whether in upper and lower case letters or a combination of upper and lower case letters.
Commands in each subsection are presented in logical operating order. Values are in decimal unless specified otherwise.
For remote operation of the Special Test functions, the Test Set must be in one of the HOST operation modes (i.e., the user must enter one the operation modes selectable front the Front Panel of the IFR-1900 CSA). Refer to Section 10 for programming examples.
Monitor commands, used to monitor forward channels from a Cell Site (Base Station) or reverse channels from a Mobile Phone (Station), implement the same functions available in the screens entered under Cell Site Data Monitor. CSS: commands, used to simulate a Cell Site, implement many of the same functions available in the screens entered under Cell Site Simulation.
BER: commands implement the same functions available in the Base Station Digital Traffic BER screen. MODacc: commands implement the modulation accuracy functions available in the Modulation Accuracy screen.

## 9-2 HOST COMMANDS

HOST commands allow execution of HOST specific commands and general commands limited to HOST remote operation, when operating as the Sp Tst.

HOST "string"
[HOST "string"]
Issues commands, as strings, to the HOST.
Example: HOST "SETUP:DUPL" $\begin{aligned} \text { // Passes the SETUP:DUPL command to the HOST. } \\ \text { HOST configures Test set routing and displays } \\ \text { // screen for Duplex operation. }\end{aligned}$
HOST? "string?"
[HOST? "string?"]
Issues queries, as strings, to the HOST.
Example: HOST? "MEAS:POW?" // Passes the MEAS:POW? query to the HOST.
// HOST returns a power meter reading (if
// configured to take power meter readings)

## 9-3 FREQ:BAND COMMAND

The Sp Tst operates within three bands: U4 (NT400-400 MHz), U8 (AMPS - 800 MHz ) and HY (Hyperband or PCS - 1900 MHz ). The FREQuency:BAND command does not change the frequency of the Sp Tst, but must be used in conjunction with one of the CHANnel commands (see note in box below).

FREQuency:BAND $n$
[FREQuency:BAND n]
Selects frequency band in which to operate the Sp Tst.

| $n$ | BAND |
| :---: | :---: |
| 0 | U4 (NT400 $-400 \mathrm{MHz})$ |
| 1 | U8 (AMPS $-800 \mathrm{MHz})$ |
| 2 | HY (Hyperband or PCS $-1900 \mathrm{MHz})$ |

The following commands select the channel in the band specified by FREQ:BAND $n$ :

| BER:RDTC:CHAN | CSS:CHAN | FDCCH:CHAN | FDTC:CHAN |
| :--- | :--- | :--- | :--- |
| FOCC:CHAN | FVC:CHAN | MOD:FDTC:CHAN | MSS:CHAN |
| RDCCH:CHAN | RDTC:CHAN | RECC:CHAN | RVC:CHAN |

FREQuency:BAND?
[FREQuency:BAND?]
Returns the current value of frequency band.

## 9-4 FORWARD CONTROL CHANNEL (FOCC) MONITOR COMMANDS <br> 9-4-1 FORWARD CONTROL CHANNEL CONTROL

## FOCC:

## SETup

[FOCC:SETUP]
Sets up the Sp Tst as when entering the Forward Control Channel screen (screen is not displayed). The HOST is forced into Duplex Mode through selection of Duplex screen.
The Antenna is selected as the input source.

## CONFigure:

## USER

[FOCC:CONFigure:USER]
This command is identical to the FOCC:SETup command except that the USER screen is selected.

## NONE

[FOCC:CONFigure:NONE]
This command is identical to the FOCC:SETup command except that the Test Set remains in the screen currently displayed.

CHANnel $n$
[FOCC:CHANnel n]
Selects Forward Control Channel to monitor.

| FREQuency:BAND (See 9-3) | RANGE OF $\boldsymbol{n}$ |
| :---: | :---: |
| 0 | 1 to 333 |
| 1 | 1 to 1023 |
| 2 | 1 to 1999 |

## STARt

[FOCC:STARt]
Starts background task which decodes Forward Control Channel data. Decoded data is stored internally by the Sp Tst and is returned by the TMAC commands in 9-4-2.

## STOP

[FOCC:STOP]
Stops background task decoding Forward Control Channel data started by FOCC:STARt.
REMote:
STARt
[FOCC:REMote:STARt]
Stops decoding and redirects the received Forward Control Channel data (10 kbit) as ASCll characters out the RS-232 Connector. Each character represents one nibble ( 4 bits) of data. (Set Baud Rate to 38400 prior to command execution to allow RS-232 to maintain pace with the data received.)

## STOP

[FOCC:REMote:STOP]
Stops redirection of Forward Control Channel data out the RS-232 Connector.

## FOCC:

## WORD:

The following WORD:xxx commands select Stream A or B or both of the FOCC to be decoded by the background task started by FOCC:STARt command. Each command is to be used only after issuing the FOCC:STARt command.

## A

[FOCC:WORD:A]
Selects Stream A to decode.

## B

[FOCC:WORD:B]
Selects Stream B to decode.

## BOTH

[FOCC:WORD:BOTH]
Selects Streams A and B to decode.

## STREAM:

## A

[FOCC:STREAM:A]
Used prior to a decode data query (9-4-2), to select data from Stream A when both streams are being decoded (FOCC:WORD:BOTH).

## B

[FOCC:STREAM:B]
Used prior to a decode data query (9-4-2), to select data from Stream B when both streams are being decoded (FOCC:WORD:BOTH).

## CAPTure?

[FOCC:CAPTure?]
Used with Capture commands to test if a specific message (ORDER) and/or communication to specific Mobile Station (MIN) has occurred (returns 1). Returns 0 otherwise.

## CAPTure:

## CLEAR

[FOCC:CAPTure:CLEAR]
Restarts Capture Function (same as RECAP from front panel).

## FOCC:

CAPTure:

## SELect:

BOTH
[FOCC:CAPTure:SELect:BOTH]
Sets Capture Mode to BOTH (MIN and ORDER) to capture a specific message from communication with specific Mobile Station.

MIN
[FOCC:CAPTure:SELect:MIN]
Sets Capture Mode to MIN to capture communication with specific Mobile Station.
NONE
[FOCC:CAPTure:SELect:NONE]
Sets Capture Mode to NONE.
ORDER
[FOCC:CAPTure:SELect:ORDER]
Sets Capture Mode to ORDER to capture a specific message.
MODE?
[FOCC:CAPTURE:MODE?]
Returns current Capture Mode setting ( 0 for NONE, 1 for ORDER, 2 for MIN or 3 for BOTH [MIN and ORDER]).

Messages (Orders) for capture (used when FOCC:CAPTure:SELect: command is set to ORDER or BOTH):

## FOCC:

CAPTure:
A ALERT
[FOCC:CAPTure:A_ALERT]
Selects Abbreviated Alert message as order for Capture.

## AUDIT

[FOCC:CAPTure:AUDIT]
Selects Audit message as order for Capture.

## AUT_REG

[FOCC C:CAPTURE:AUT_REG]
Selects Autonomous Registration Confirmation message as order for Capture.

## BSCHALCON

[FOCC:CAPTure:BSCHALCON]
Selects Base Station Challenge Confirmation Message as order for Capture.
DIR_RTRY
[FOCC:CAPTure:DIR_RTRY]
Selects Directed-Retry message as order for Capture.
INTRCPT
[FOCC:CAPTURe:INTRCPT]
Selects Intercept message as order for Capture.

## LC

[FOCC:CAPTURE:LC]
Selects Local Control message as order for Capture.

## MSG WTG

[FOC $\bar{C}:$ CAPTure:MSG_WTG]
Selects Message Waiting message as order for Capture.

## N_AUT_REG

[FOCC:CAPTure:N_AUT_REG]
Selects Non-autonomous Registration Confirmation message as order for Capture.

## PAGE

[FOCC:CAPTure:PAGE]
Selects Page as order for Capture.

## RELease

[FOCC:CAPTure:RELease]
Selects Release message as order for Capture.

## FOCC:

CAPTure:

## REORDER

[FOCC:CAPTURE:REORDER]
Selects Reorder message as order for Capture.
SLOT_1
[FOCC:CAPTURe:SLOT_1]
Selects Slot 1 Handoff message as order for Capture.
SLOT_2
[FOCC:CAPTure:SLOT_2]
Selects Slot 2 Handoff message as order for Capture.
SLOT_3
[FOCC:CAPTURE:SLOT_3]
Selects Slot 3 Handoff message as order for Capture.

## SSD_UPdate

[FOCC:CAPTure:SSD_UPdate]
Selects Shared Secret Data Update as order for Capture.

## UCHAL

[FOCC:CAPTURE:UCHAL]
Selects Unique Challenge message as order for Capture.
VC_DES
[FOCC:CAPTURE:VC_DES]
Selects Voice Channel Designation message as order for Capture.
ORDer?
[FOCC:CAPTure:ORDer?]
Returns name (string) of order currently selected for Capture.

Communication to specific Mobile Station for capture (used when FOCC:CAPTure:SELect: command is set to MIN or BOTH):

## FOCC:

## CAPTure:

MIN " $n$ "
[FOCC:CAPTure:MIN "n"]
Selects Mobile Identification Number to Capture. The Mobile Identification Number ( $n$ ) is entered as a string, with quotation marks. Wild cards are indicated using a tilde (~).

Examples: FOCC:CAPTure:MIN "316/522-4981"
FOCC:CAPTure:MIN "~ ~ ~/522-~9~1"
MIN?
[FOCC:CAPTure:MIN?]
Returns MIN currently selected for Capture.

## 9-4-2 FORWARD CONTROL CHANNEL DECODE DATA

The FOCC decode data queries return the specific monitored data items. Prior to initiating FOCC decode data queries, set Sp Tst to FOCC initial setup (FOCC:SET) and start decoding
(FOCC:STAR). If the queries are used as part of a TMAC Program, a TPAUSE command in conjunction with the queries may be needed to allow the background data processing to take place. Refer to 10-2-1.

- Each query command returns the last decoded value.

If the specific data item is not available or has already been read, the query returns -1 .

## FOCC:

## ORDER?

[FOCC:ORDER?]
Returns name (string) of received order. Returns the following orders:

| A ALERT | ANA VC DES | ASYNC PAG |
| :--- | :--- | :--- |
| AUDIT | AUT REG | AUTORG PD |
| BSCHALCON | DIR RTRY | G3 PAGE |
| G3FAX WTG | INTRCPT | LC |
| MSGWTG | NAUT REG | PAGE |
| RELEASE | REORDER | SLOT 1 |
| SLOT 2 | SLOT 3 | SLOT 1,136 |
| SLOT 2,136 | SLOT 3,136 | SMS WTG |
| SSD UP | UCHAL | VC DES |

ACT?
[FOCC:ACT?]
Returns Global Action field value (4 bit value).
ASYNC?
[FOCC:ASYNC?]
Returns the state of the Async Data field in the DCCH Information word (1 bit value).

## AUTH?

[FOCC:AUTH?]
Returns Authentication (1 bit value).
AUTHBS?
[FOCC:AUTHBS?]
Returns AUTHBS (18 bit value).
BIdle?
[FOCC:BIdle?]
Returns Busy-Idle bit. Busy-Idle bit, multiplexed in with FOCC data, is 0 if Reverse Control Channel is busy or 1 if Reverse Control Channel is idle.

## FOCC:

## BIS?

[FOCC:BIS?]
Returns Busy-Idle Status bit from the Access Type Parameters Global Action message.
(Busy-Idle Status bit is 0 if monitoring the Busy-Idle bit is not required by the Mobile Station, otherwise 1.)

## CHAN?

[FOCC:CHAN?]
Returns Channel Number field indicating designated RF channel (1 to 1999).

## CHANPOS1?

[FOCC:CHANPOS1?]
Returns Channel Position 1 ( 7 bit value).
CHANPOS2?
[FOCC:CHANPOS2?]
Returns Channel Position 2 ( 7 bit value).

## CHANPOS3?

[FOCC:CHANPOS3?]
Returns Channel Position 3 (7 bit value).

## CHANPOS4?

[FOCC:CHANPOS4?]
Returns Channel Position 4 ( 7 bit value).

## CHANPOS5?

[FOCC:CHANPOS4?]
Returns Channel Position 5 ( 7 bit value).

## CHANPOS6?

[FOCC:CHANPOS6?]
Returns Channel Position 6 ( 7 bit value).

## CMAC?

[FOCC:CMAC?]
Returns Control Mobile Attenuation Code (3 bit value).

## CMAX_1?

[FOCC:CMAX_1?]
Returns number of Access Channels minus one.

## CPA?

[FOCC:CPA?]
Returns Combined Paging/Access (1 bit value).

## DCC?

[FOCC:DCC?]
Returns Digital Color Code (2 bit value).

## DCCHan?

[FOCC:DCCHan?]
Returns the value for the Channel field in the DCCH Information word (11 bit value).

## FOCC:

## DMAC?

[FOCC:DMAC?]
Returns Digital Mobile Attenuation Code (4 bit value).
DTX?
[FOCC:DTX?]
Returns Discontinuous Transmission (1 bit value).

## DVCC?

[FOCC:DVCC?]
Returns Digital Verification Color Code ( 8 bit value).

## $E ?$

[FOCC:E?]
Returns Extended Address (1 bit value).

## EF?

[FOCC:EF?]
Returns Extended Protocol Forward Channel Indicator (1 bit value).

## END?

[FOCC:END?]
Returns End Indication (1 bit value).

## EP?

[FOCC:EP?]
Returns Extended Protocol (1 bit value).

## G3FAX?

[FOCC:G3FAX?]
Returns the state of the G3 Fax field in the DCCH Information word (1 bit value).

## HYPERband?

[FOCC:HYPERband?]
Returns the value of the Hyperband field in the DCCH Information word (2 bit value).

## LOC CONTrol?

[FOCC:LOC_CONTrol?]
Returns Local Control message ( 16 bit value).

## LOCAID?

[FOCC:LOCAID?]
Returns Location Area Identity (12 bit value).

## LOCAL_MT?

[FOCC:LOCAL_MT?]
Returns Local Control (Local Control message)/Message Type field ( 5 bit value).

## LREG?

[FOCC:LREG?]
Returns Location Registration (1 bit value).

## FOCC:

## MBUSY:

OTH?
[FOCC:MBUSY:OTH?]
Returns Maximum Number of Busy Occurrences Allowed for Other Accesses (4 bit value).

## PGR?

[FOCC:MBUSY:PGR?]
Returns Maximum Number of Busy Occurrences Allowed for Page Responses (4 bit value).

## MEM?

FOCC:MEM?
Returns Message Encryption Mode (1 bit value).

## MIN?

FOCC:MIN?
Returns Mobile Identification Number (string).

## MSZTR:

OTH?
FOCC:MSZTR:OTH?
Returns Maximum Number of Seizure Attempts Allowed for Other Accesses ( 4 bit value).

## PGR?

FOCC:MSZTR:PGR?
Returns Maximum Number of Seizure Attempts Allowed for Page Responses (4 bit value).

## N 1?

[FOCC:N_1?]
Returns number of Paging Channels minus one, to be scanned by the Mobile Station (5 bit value).

## NAWC?

[FOCC:NAWC?]
Returns Number of Additional Words Coming (4 bit value).

## NEWACC?

[FOCC:NEWACC?]
Returns New Access Channel Starting Point (11 bit value).

## OLC?

[FOCC:OLC?]
Returns Overload Control Class ( 15 bit value).

## ORDERCD?

[FOCC:ORDERCD?]
Returns Order Code (5 bit value).

## ORDQ?

[FOCC:ORDQ?]
Returns Order Qualifier (3 bit value).

## FOCC:

PCl ?
[FOCC:PCI?]
Returns Protocol Capability Indicator (1 bit value).

## PDREG?

[FOCC:PDREG?]
Returns Power Down Registration (1 bit value).

## PM?

[FOCC:PM?]
Returns Privacy Mode (1 bit value).

## PRIVacy?

[FOCC:PRIVacy?]
Returns the state of the Data Privacy field in the DCCH Information word (1 bit value).

## PUREG?

[FOCC:PUREG?]
Returns Power Up Registration (1 bit value).

## PVI?

[FOCC:PVI?]
Returns current state of Protocol Version Indicator (1 bit value).
RANDSSD_1?
[FOCC:RANDSSD_1?]
Returns value of 24 most significant bits of RANDSSD (24 bit value).

## RANDSSD_2?

[FOCC:RANDSSD_2?]
Returns value of bits 8 through 31 of RANDSSD ( 24 bit value).

## RANDSSD_3?

[FOCC:RANDSSD_3?]
Returns value of eight least significant bits of RANDSSD ( 8 bit value).

## RANDU?

[FOCC:RANDU?]
Returns RANDU received in the Unique Challenge message (24 bit value).

## RAND1 A?

[FOCC:RAND1_A?]
Returns value of 16 most significant bits of RAND (16 bit value).
RAND1 B?
[FOCC:RAND1_B?]
Returns value of 16 least significant bits of RAND (16 bit value).

## RCF?

[FOCC:RCF?]
Returns Read Control-Filler (1 bit value).

## FOCC:

## REGH?

[FOCC:REGH?]
Returns Registration for Home Mobile Stations (1 bit value).

## REGID?

[FOCC:REGID?]
Returns Registration Identification (20 bit value).

## REGINCR?

[FOCC:REGINCR?]
Returns Registration Increment field (12 bit value).

## REGR?

[FOCC:REGR?]
Returns Registration for Roaming Mobile Stations (1 bit value).

## S?

[FOCC:S?]
Returns Serial Number (1 bit value).

## SCC?

[FOCC:SCC?]
Returns Supervisory Audio Tone Color Code (2 bit value).

## SDCC1?

[FOCC:SDCC1?]
Returns Supplementary Digital Color Code 1 (2 bit value).

## SDCC2?

[FOCC:SDCC2?]
Returns Supplementary Digital Color Code 2 (2 bit value).

## SID?

[FOCC:SID?]
Returns System Identification Number (14 bit value).

## VMAC?

[FOCC:VMAC?]
Returns Voice Mobile Attenuation Code (3 bit value).

## WFOM?

[FOCC:WFOM?]
Returns Wait For Overhead Message (1 bit value).

## 9-4-3 FORWARD CONTROL CHANNEL RAW DATA

The Sp Tst contains a 100 word data buffer to capture raw data (undecoded bit streams) received on the Forward Control Channel. Prior to initiating FOCC raw data queries, set the Sp Tst to initial FOCC setup (FOCC:SET) and select the RF Channel (FOCC:CHAN $n$ ). Refer to 10-2-2.

## FOCC:RAW:

## WORD:

## A

[FOCC:RAW:WORD:A]
Selects raw data from Stream A to monitor.
B
[FOCC:RAW:WORD:B]
Selects raw data from Stream B to monitor.

## BOTH

[FOCC:RAW:WORD:BOTH]
Selects raw data from Streams $A$ and $B$ to monitor.
CAPTure:
Messages (Orders) for raw data capture:

## NONE

[FOCC:RAW:CAPTURE:NONE]
Sets Capture Mode to NONE.

## A ALERT

[FOCC:RAW:CAPTure:A_ALERT]
Selects Abbreviated Alert Message as order for Capture.

## AUDIT

[FOCC:RAW:CAPTure:AUDIT]
Selects Audit Message as order for Capture.

## AUT_REG

[FOC $\bar{C}: R A W: C A P T u r e: A U T$ _. REG]
Selects Autonomous Registration Confirmation message as order for Capture.

## BSCHALCON

[FOCC:RAW:CAPTure:BSCHALCON]
Selects Base Station Challenge Confirmation Message as order for Capture.

## DIR_RTRY

[FOCC:RAW:CAPTure:DIR_RTRY]
Selects Directed-Retry message as order for Capture.

## INTRCPT

[FOCC:RAW:CAPTure:INTRCPT]
Selects Intercept message as order for Capture.

## FOCC:RAW:

## CAPTure:

LC
[FOCC:RAW:CAPTURE:LC]
Selects Local Control Message as order for Capture.
MSG_WTG
[FOCC:RAW:CAPTure:MSG_WTG]
Selects Message Waiting message as order for Capture.

## N_AUT_REG

[FOCC:RAW:CAPTure:N_AUT_REG]
Selects Non-autonomous Registration Confirmation message as order for Capture.
PAGE
[FOCC:RAW:CAPTURE:PAGE]
Selects Page as order for Capture.

## RELease

[FOCC:RAW:CAPTure:RELease]
Selects Release message as order for Capture.

## REORDER

[FOCC:RAW:CAPTure:REORDER]
Selects Reorder message as order for Capture.

## SLOT_1

[FOCC:RAW:CAPTure:SLOT_1]
Selects Slot 1 Handoff message as order for Capture.

## SLOT_2

[FOCC:RAW:CAPTure:SLOT_2]
Selects Slot 2 Handoff message as order for Capture.

## SLOT_3

[FOCC:RAW:CAPTure:SLOT_3]
Selects Slot 3 Handoff message as order for Capture.

## SSD UPdate

[FOC $\left.\bar{C}: R A W: C A P T u r e: S S D_{-} U P d a t e\right]$
Selects Shared Secret Data Update as order for Capture.

## UCHAL

[FOCC:RAW:CAPTure:UCHAL]
Selects Unique Challenge message as order for Capture.

## VC DES

[FOCC:RAW:CAPTure:VC_DES]
Selects Voice Channel Designation message as order for Capture.

## ORDer?

[FOCC:RAW:CAPTure:ORDer?]
Returns name (string) of order currently selected for Capture.

## FOCC:RAW:

## CAPTure:

INDex?
[FOCC:RAW:CAPTURE:INDex?]
Returns position (0 to 99) of Captured Order in the 100 word data buffer.
TRIGger $n$
[FOCC:RAW:TRIGger n]
Selects position of Captured Order in the 100 word data buffer. Range of $n$ is 0 to 4 .

| $n$ | POSITION |
| :---: | :---: |
| 0 | Start |
| 1 | $1 / 4$ |
| 2 | $1 / 2$ |
| 3 | $3 / 4$ |
| 4 | End |

## STARt

[FOCC:RAW:STARt]
Starts raw data Capture.

## STOP

[FOCC:RAW:STOP]
Stops raw data Capture.
After Capture condition has occurred (FOCC:RAW:CAPT? = 1), raw data capture ends when 100 word data buffer is full (FOCC:RAW:FULL? = 1).

## CAPTure?

[FOCC:RAW:CAPTure?]
Returns 1 if Capture condition has occurred; 0 otherwise.

## FULL?

[FOCC:RAW:FULL?]
Returns 1 if 100 word data buffer is full; 0 otherwise.
A:

## CHECK? $n$

[FOCC:RAW:A:CHECK?n]
Returns CRC Check result for selected data word from Stream A (0 [good], 1 [bad]).
Range of $n$ is 0 to 99 .
DATA? $n$
[FOCC:RAW:A:DATA?n]
Returns selected raw data word from Stream A. Range of $n$ is 0 to 99 .
PARITY? $n$
[FOCC:RAW:A:PARITY? n]
Returns Parity for selected data word from Stream A. Range of $n$ is 0 to 99 .

## FOCC:RAW:

B:
CHECK? $n$
[FOCC:RAW:B:CHECK? n]
Returns CRC Check result for selected data word from Stream B (0 [good], 1 [bad]). Range of $n$ is 0 to 99 .

DATA? $n$
[FOCC:RAW:B:DATA? n]
Returns Raw Data word from Stream B. Range of $n$ is 0 to 99 .
PARITY? $n$
[FOCC:RAW:B:PARITY? n]
Returns Parity for selected data word from Stream B. Range of $n$ is 0 to 99 .
B I? $n$
[FOCC:RAW:B_I? n]
Returns Busy-Idle bit for selected data word. Range of $n$ is 0 to 99 .
TS? $n$
[FOCC:RAW:TS?n]
Returns Time Stamp in ms of selected data word. Range of $n$ is 0 to 99 .

## 9-5 FORWARD VOICE CHANNEL (FVC) MONITOR COMMANDS

## 9-5-1 FORWARD VOICE CHANNEL CONTROL

FVC:

## SETup

[FVC:SETup]
Sets up the Sp Tst as when entering the Forward Voice Channel screen (screen is not displayed). The HOST is forced into Duplex Mode through selection of Duplex screen.

## CONFigure:

## USER

[FVC:CONFigure:USER]
This command is identical to the FVC:SETup command except that the USER screen is selected.

## NONE

[FVC:CONFigure:NONE]
This command is also identical to the FVC:SETup command except that the Test Set remains in the screen currently displayed.

## STARt

[FVC:STARt]
Starts background task which decodes Forward Voice Channel data. Decoded data is stored internally by the Sp Tst and is returned by the TMAC commands in 9-5-2.

## STOP

[FVC:STOP]
Stops decoding Forward Voice Channel data.

## CHANnel $n$

[FVC:CHANnel n]
Selects Forward Voice Channel to monitor.

| FREQuency:BAND (See 9-3) | RANGE OF n |
| :---: | :---: |
| 0 | 1 to 333 |
| 1 | 1 to 1023 |
| 2 | 1 to 1999 |

FVC:
SCC $n$
[FVC:SCC n]
Specifies the SCC by providing the SAT frequency in $\mathrm{Hz}(n)$ corresponding to the SAT Color Code (SCC). Range of $n$ is 5955 to 6044.

| $\boldsymbol{n}$ | SCC |
| :---: | :---: |
| 5955 to 5984 | 0 |
| 5985 to 6014 | 1 |
| 6015 to 6044 | 2 |

The FVC decode task only decodes messages having a specified SCC; therefore, only messages on the selected channel are decoded. Messages on adjacent channels are ignored.

Tip:

- Sending the command as FVC:SCC :MEAS:SAT? insures the SCC matches the SAT frequency on the channel being monitored. The MEAS:SAT? query returns the SAT frequency in Hz .

However, if SAT is not received, the :MEAS:SAT? command returns a -1 causing the decoding to fail.

## 9-5-2 FORWARD VOICE CHANNEL DECODE DATA

Prior to initiating FVC decode data queries, set Sp Tst to FVC initial setup (FVC:SET) and start decoding data (FVC:STAR). If queries are used as part of a TMAC Program, a TPAUSE command in conjunction with the queries may be needed to allow the background decoding task time to run. Refer to 10-3-1.

- Each query command returns the last decoded value.
- If the specific data item is not available or has already been read, the query returns -1.


## FVC:

## ORDER?

[FVC:ORDER?]
Returns name (string) of received Order. Returns the following orders:

| ALERT | ALERT W/INFO | ASYNC PAG |
| :--- | :--- | :--- |
| AUDIT | BSCHALCON | CALL MODE ACK |
| DIS DTMF | DISMEM | ENA MEM |
| FLASH W/INFO | G3 PAGE | G3FAX WTG |
| HANDOFF | LC | MAINTNC |
| MSG WTG | PAGE | PU |
| PWR LVL | RELEASE | RELEASE COMPLETE |
| RELEASE W/INFO | SALERT | SLOT1 |
| SLOT2 | SLOT3 | SLOT1,136 |
| SLOT2,136 | SLOT3,136 | SMS WTG |
| SNDADDR | SNR REQ | SSD UP |
| UCHAL |  |  |

## AUTHBS?

[FVC:AUTHBS?]
Returns Output Response of Base Station Authentication Algorithm (18 bit value).

## CHAN?

[FVC:CHAN?]
Returns Channel Number field indicating designated RF channel (1 to 1999).

## CHAR1?

[FVC:CHAR1?]
Returns first Characters in Called Party Number message (Flash with Information) or Calling Party Number message (Alert with Information or Flash with Information) (up to 16 digits).

## CHAR2?

[FVC:CHAR2?]
Returns last Characters in Called Party Number message (Flash with Information) or Calling Party Number message (Alert with Information or Flash with Information) (up to 16 digits).

## FVC:

## CPN RL?

[FVC:CPN_RL?]
Returns Calling Party Number Remaining Length (6 bit value).

## DMAC?

[FVC:DMAC?]
Returns Digital Mobile Attenuation Code (4 bit value).

## DVCC?

[FVC:DVCC?]
Returns Digital Verification Color Code (eight bit value).

```
EF?
[FVC:EF?]
Returns Extended Protocol Forward Channel Indicator (1 bit value).
HYPERband?
[FVC:HYPERband?]
Returns current value of Hyperband (2 bit value).
```

LOCAL_MT?
[FVC:LOC̄AL_MT?]
Returns Local Control (Local Control message)/Message Type field ( 5 bit value).

## MEM?

[FVC:MEM?]
Returns Message Encryption Mode (1 bit value).

## ORDERCD?

[FVC:ORDERCD?]
Returns Order Code (5 bit value).

## ORDQ?

[FVC:ORDQ?]
Returns Order Qualifier (3 bit value).

```
PI?
[FVC:Pl?]
```

Returns Calling Party Number Presentation Indicator (2 bit value).
PM?
[FVC:PM?]
Returns Privacy Mode (1 bit value).

## PSCC?

[FVC:PSCC?]
Returns Present SAT Color Code (2 bit value).
PVI?
[FVC:PVI?]
Returns current state of Protocol Version Indicator (1 bit value).

## FVC:

## PWRL?

[FVC:PWRL?]
Returns Power Level requested of Mobile Station in Power Level message (same as ORDQ).
RANDSSD1?
[FVC:RANDSSD1?]
Returns value of 24 most significant bits of RANDSSD (24 bit value).

## RANDSSD2?

[FVC:RANDSSD2?]
Returns value of bits 8 through 31 of RANDSSD ( 24 bit value).

## RANDSSD3?

[FVC:RANDSSD3?]
Returns eight least significant bits of RANDSSD (eight bit value).

## RANDU?

[FVC:RANDU?]
Returns RANDU received in the Unique Challenge message (24 bit value).
RL_W?
[FVC:RL_W?]
Returns Remaining Length in Words (5 bit value).

## SBI?

[FVC:SBI?]
Returns Shortened Burst Indicator (2 bit value).

## SCC?

[FVC:SCC?]
Returns Supervisory Audio Tone Color Code (2 bit value).

## SI?

[FVC:SI?]
Returns Calling Party Screening Indicator (2 bit value).

## SIGnal?

[FVC:SIGnal?]
Returns Signal field (eight bit value).

## TA?

[FVC:TA?]
Returns Time Alignment offset ( 5 bit value).

## VMAC?

[FVC:VMAC?]
Returns Voice Mobile Attenuation Code (3 bit value).

## 9-5-3 FORWARD VOICE CHANNEL RAW DATA

The Sp Tst contains a variable capacity data buffer to capture raw data (undecoded bit stream) received on the Forward Voice Channel. Prior to initiating FVC raw data commands, set the FOCC Capture Mode to NONE (FOCC:CAPT:SEL:NONE) and set Sp Tst to initial FVC setup (FVC:SET). Obtain new data information by setting $n$ from 0 to current FVC:RAW:DEPTH setting minus one, when using raw data information queries. Refer to 10-3-2.

## FVC:RAW:

## DEPTH $n$

[FVC:RAW:DEPTH n]
Selects size of data buffer in data words. Range of $n$ is 1 to 100 data words.

## STARt

[FVC:RAW:STARt]
Starts receiving raw data into data buffer.

## STOP

[FVC:RAW:STOP]
Stops receiving raw data into data buffer.

## COUNT?

[FVC:RAW:COUNT?]
Returns number of data words received (increments with each new data word). Used to know when to query for new data information.

## DATA? $n$

[FVC:RAW:DATA? n]
Returns selected raw data word ( 28 bits). Range of $n$ is 0 to 99 .

## PARITY? $n$

[FVC:RAW:PARITY?n]
Returns Parity for selected data word (12 bits). Range of $n$ is 0 to 99 .

## CHECK? $n$

[FVC:RAW:CHECK? n]
Returns CRC Check result for selected data word (0 [good], 1 [bad]). Range of $n$ is 0 to 99.
TS? n
[FVC:RAW:TS? n]
Returns Time Stamp of selected data word in seconds from 0 data word. Range of $n$ is 0 to 99 .

## 9-6 FORWARD DIGITAL TRAFFIC CHANNEL (FDTC) MONITOR COMMANDS

9-6-1 FORWARD DIGITAL TRAFFIC CHANNEL CONTROL
FDTC:

## SETup

[FDTC:SETUP]
Sets up the Sp Tst as when entering the Forward Digital Traffic Channel screen (screen is not displayed). The HOST is forced into Duplex Mode through selection of Duplex screen.

## CONFigure:

USER
[FDTC:CONFigure:USER]
This command is identical to the FDTC:SETup command except that the USER screen is selected.

## NONE

[FDTC:CONFigure:NONE]
This command is also identical to the FDTC:SETup command except that the Test Set remains in the screen currently displayed.

## CHANnel $n$

[FDTC:CHANnel n]
Selects Forward Digital Traffic Channel to monitor.

| FREQuency:BAND (See 9-3) | RANGE OF $\boldsymbol{n}$ |
| :---: | :---: |
| 0 | 1 to 333 |
| 1 | 1 to 1023 |
| 2 | 1 to 1999 |

## SLOT $n$

[FDTC:SLOT n]
Selects Digital Traffic Channel Timeslot. Range of $n$ is 1 to 3 .

## STARt

[FDTC:STARt]
Starts background task which decodes Forward Digital Traffic Channel data. Decoded data is stored internally by the Sp Tst and is returned by the TMAC commands in 9-6-2.

STOP
[FDTC:STOP]
Stops decoding Forward Digital Traffic Channel data.

## DVCC?

[FDTC:DVCC?]
Returns Digital Verification Color Code.
RO?
[FDTC:RO?]
Returns VSELP frame energy value (0 to 31).

## FDTC:

## VOCODER:

The following VOCODER: commands select vocoder while monitoring a call.

## ACELP

[FDTC:VOCODER:ACELP]
Selects ACELP vocoder.
VSELP
[FDTC:VOCODER:VSELP]
Selects VSELP vocoder.

## 9-6-2 FORWARD DIGITAL TRAFFIC CHANNEL DECODE DATA

FDTC:FACCH: queries pertain to the blank and burst Fast Associated Control Channel (FACCH). FDTC:SACCH: queries pertain to the continuous Slow Associated Control Channel (SACCH).

- Each query command returns the last decoded value.
- If the specific data item is not available or has already been read, the query returns -1 .

FDTC:
FACCH: or SACCH:
MSGtype?
[FDTC:FACCH: or SACCH:MSGtype?]
Returns Message Type (string):

| ALERT | AUDIT | BS ACK |
| :--- | :--- | :--- |
| BSCHALCON | BSMC | CAPABILITY REQ |
| CAPABILITY RESP | DEDICATED HANDOFF | FLASH |
| FLASH ACK | HANDOFF | HYPERBAND MEAS |
| LC | MAINT | MEAS |
| PLC | PU | R-DATA |
| R-DATA ACCEPT | R-DATA REJECT | REAUTH |
| RELEASE | SBDA | SCDA |
| SMEAS | SERVICE RESP | SOC |
| SR | SSD UP | UCHAL |

AMT?
[FDTC:FACCH: or SACCH:AMT?]
Returns Acknowledge Message Type (string).
ATS?
[FDTC:FACCH: or SACCH:ATS?]
Returns current value of ATS (4 bit value).

## AUTHBS?

[FDTC:FACCH: or SACCH:AUTHBS?]
Returns AUTHBS (18 bit value).

## BSMC?

[FDTC:FACCH: or SACCH:BSMC?]
Returns current value of BSMC (8 bit value).

## FDTC:

FACCH: or SACCH:

## CALLING:

NAMe?
[FDTC:FACCH: or SACCH:CALLING:NAMe?]
Returns the last decoded Character string value of Calling Party Name. Returns -1 if already returned or not available.

- Character string example: Happy Anniversary.
- Maximum number of string characters returned: 62.
- Used with the following FDTC:FACCH: or SACCH:CALLING:NAMe:xxx commands.


## NAMe:

## REServed?

[FDTC:FACCH: or SACCH:CALLING:NAMe:REServed?]
Returns the last decoded value of Calling Party Name Reserved field. Returns - 1 if already returned or not available.

PI?
[FDTC:FACCH: or SACCH:CALLING:NAMe:PI?]
Returns the last decoded value of Calling Party Name Presentation Indicator.
Returns - 1 if already returned or not available.
SI?
[FDTC:FACCH: or SACCH:CALLING:NAMe:SI?]
Returns the last decoded value of Calling Party Name Screening Indicator. Returns -1 if already returned or not available.

## NUM?

[FDTC:FACCH: or SACCH:CALLING:NUM?]
Returns number of the calling party (string - 0 to 30 characters). See FDTC:FACCH: or SACCH:CALLING:NUM1? and NUM2?

The following NUM1? and NUM2? commands are used in the Alert With Info and the Flash With Info messages to return the 0 to 15 instances of characters.

## NUM1?

[FDTC:FACCH: or SACCH:CALLING:NUM1?]
Returns last decoded value of first 15 characters of the number of the calling party (string). See FDTC:FACCH: or SACCH:CALLING:NUM?.

## NUM2?

[FDTC:FACCH: or SACCH:CALLING:NUM2?]
Returns last decoded value of last 15 characters of the number of the calling party (string). See FDTC:FACCH: or SACCH:CALLING:NUM?.

TYpe?
[FDTC:FACCH: or SACCH:CALLING:TYpe?]
Returns Calling Party Number Type (3 bit value).

## FDTC:

FACCH: or SACCH:

## CALLING:

## PLANid?

[FDTC:FACCH: or SACCH:CALLING:PLANid?]
Returns Calling Party Numbering Plan Identification (4 bit value).

## SPare?

[FDTC:FACCH: or SACCH:CALLING:SPare?]
Returns last decoded value of Calling Party Number Reserved field (5 bit value). Returns -1 if already returned or not available.

## REServed?

[FDTC:FACCH: or SACCH:CALLING:REServed?]
Returns last decoded value of Calling Party Number Reserved field (5 bit value).
Returns -1 if already returned or not available.

## Same as FDTC:FACCH: or SACCH:CALLING:SPare?.

## PI?

[FDTC:FACCH: or SACCH:CALLING:PI?]
Returns Calling Party Presentation Indicator (2 bit value).

## SI?

[FDTC:FACCH: or SACCH:CALLING:SI?]
Returns Calling Party Screening Indicator (2 bit value).

## CHANGE:

## SOC?

[FDTC:FACCH: or SACCH:CHANGE:SOC?]
Returns current state of SOC Change Indicator (1 bit value).

## BSMC?

[FDTC:FACCH: or SACCH:CHANGE:BSMC?]
Returns current state of BSMC Change Indicator (1 bit value).

## CNPC?

[FDTC:FACCH: or SACCH:CNPC?]
Returns the Calling Number Presentation Code ( 4 bit value).

## CUSTOM:

## LENGth?

[FDTC:FACCH: or SACCH:CUSTOM:LENGth?]
Returns current value of Length of Custom Control (8 bit value)
CONTrol? $n$
[FDTC:FACCH: or SACCH:CUSTOM:CONTrol? n]
Returns current value of Custom Control ( 8 bit value) indexed by $n$. Range of $n$ is 0 to 255.

## FDTC:

FACCH: or SACCH:

## DCCHinfo:

HYPERband? $n$
[FDTC:FACCH: or SACCH:DCCHinfo:HYPERband? n]
Returns current value of DCCH Info Hyperband (2 bit value) indexed by $n$. Range of $n$ is 0 to 2 .

CHANnel? $n$
[FDTC:FACCH: or SACCH:DCCHinfo:CHANnel? n]
Returns current value of DCCH info Channel ( 8 bit value) indexed by $n$. Range of $n$ is 0 to 2.

DVCC? $n$
[FDTC:FACCH: or SACCH:DCCHinfo:DVCC? n]
Returns current value of DCCH info DVCC ( 8 bit value) indexed by $n$. Range of $n$ is 0 to 2.

## DELTA:TIME?

[FDTC:FACCH: or SACCH:DELTA:TIME?]
Returns current value of Delta Time (11 bit value).

## DIC?

[FDTC:FACCH: or SACCH:DIC?]
Returns Delay Interval Compensation (1 bit value).
DIGits? $n$
[FDTC:FACCH: or SACCH:DIGits? n]
Returns the 11 digits (string) of the selected digit set. Setting for $n$ is 0 (DIGITS1), 1 (DIGITS2) or 2 (DIGITS3).

## DMAC?

[FDTC:FACCH: or SACCH:DMAC?]
Returns Digital Mobile Attenuation Code (4 bit value).

## DPM?

[FDTC:FACCH: or SACCH:DPM?]
Returns current state of Data Privacy Mode (1 bit value).

## DTX?

[FDTC:FACCH: or SACCH:DTX?]
Returns Discontinuous Transmission (1 bit value).

## DTXControl?

[FDTC:FACCH: or SACCH:DTXControl?]
Returns current state of DTX Control (1 bit value).

## HDVCC?

[FDTC:FACCH: or SACCH:HDVCC?]
Returns Handoff Digital Verification Color Code (eight bit value).

## FDTC:

FACCH: or SACCH:

## HYPERband:

NUMBer? -or- NUM?
[FDTC:FACCH: or SACCH:HYPERband:NUMBer?]
Returns current value of RF Channel and Hyperband, Number of Hyperband channels (5 bit value).

BAND? $n$
[FDTC:FACCH: or SACCH:HYPERband:BAND? n]
Returns current value of RF Channel and Hyperband, Hyperband (2 bit value) indexed by $n$. Range of $n$ is 0 to 23 .

CHANnel? $n$
[FDTC:FACCH: or SACCH:HYPERband:CHANnel? n]
Returns current value of RF Channel and Hyperband, Channel (11 bit value) indexed by $n$. Range of $n$ is 0 to 23 .

## TARGet?

[FDTC:FACCH: or SACCH:HYPERband:TARGet?]
Returns current value of Target Hyperband (2 bit value).

## LC?

[FDTC:FACCH: or SACCH:LC?]
Returns Local Control (5 bit value).

## LDP?

[FDTC:FACCH: or SACCH:LDP?]
Returns Last Decoded Parameter (4 bit value).

## MAP:

## VPM?

[FDTC:FACCH: or SACCH:MAP:VPM?]
Returns current value of Voice Privacy Mode Map (4 bit value).

## CODER?

[FDTC:FACCH: or SACCH:MAP:CODER?]
Returns current value of Voice Coder Map ( 6 bit value).

## MEA :

## DOMAIN?

[FDTC:FACCH: or SACCH:MAP:MEA:DOMAIN?]
Returns current value of Message Encryption Algorithm Map Domain (8 bit value).

## ALGORithms? $n$

[FDTC:FACCH: or SACCH:MAP:MEA:ALGORithms? n]
Returns current value of Message Encryption Algorithm Map (4 bit value) indexed by $n$. Range of $n$ is 0 to 7 .

## FDTC:

FACCH: or SACCH:

## MAP:

## MEK?

[FDTC:FACCH: or SACCH:MAP:MEK?]
Returns current value of Message Encryption Key Map (4 bit value).

## ARQ?

[FDTC:FACCH: or SACCH:MAP:ARQ?]
Returns current state of FACCH/SACCH ARQ Map (1 bit value).
SMS?
[FDTC:FACCH: or SACCH:MAP:SMS?]
Returns current value of SMS Map (2 bit value).

## MEM?

[FDTC:FACCH: or SACCH:MEM?]
Returns Message Encryption Mode (1 bit value).

## MEMA?

[FDTC:FACCH: or SACCH:MEMA?]
Returns the state of Message Encryption Mode A (1 bit value).

## MEMB?

[FDTC:FACCH: or SACCH:MEMB?]
Returns the state of Message Encryption Mode B (1 bit value).

## MEMC:

MEA?
[FDTC:FACCH: or SACCH:MEMC:MEA?]
Returns current value of Message Encryption Mode C Algorithm (3 bit value).

## MED?

[FDTC:FACCH: or SACCH:MEMC:MED?]
Returns current value of Message Encryption Mode C Domain (3 bit value).

## MEK?

[FDTC:FACCH: or SACCH:MEMC:MEK?]
Returns current value of Message Encryption Mode C Key (3 bit value).

## FDTC:

FACCH: or SACCH:

## MESSage:CENTer:

## LENGth?

[FDTC:FACCH: or SACCH:MESSage:CENTer:LENGth?]
Returns current value of Message Center Address Extended Remaining Length (8 bit value).

TYPE?
[FDTC:FACCH: or SACCH:MESSage:CENTer:TYPE?]
Returns current value of Message Center Address Type of Number (3 bit value).

## PLANid?

[FDTC:FACCH: or SACCH:MESSage:CENTer:PLANid?]
Returns current value of Message Center Address Number Plan Identification (4 bit value).

## ENCoding?

[FDTC:FACCH: or SACCH:MESSage:CENTer:ENCoding?]
Returns current state of Message Center Address Encoding (1 bit value).

## ADDRess?

[FDTC:FACCH: or SACCH:MESSage:CENTer:ADDRess?]
Returns current string value of Message Center Address (ASCII string).

## MSGWTG:

TYPE? $n$
[FDTC:FACCH: or SACCH:MSGWTG:TYPE? n]
Returns current value of Other Messages Waiting Info Type ( 4 bit value) indexed by $n$. Range of $n$ is 0 to 15 .

## NUMBer? $n$-or- NUM? $n$

[FDTC:FACCH: or SACCH:MSGWTG:NUMBer? n]
Returns current value of Number of Other Messages Waiting (6 bit value) indexed by $n$. Range of $n$ is 0 to 15 .

## NOMW?

[FDTC:FACCH: or SACCH:NOMW?]
Returns Number of Messages Waiting (six bit value).
NV? $n$
[FDTC:FACCH: or SACCH:NV? n]
Returns Number of Values (six bit value) for selected optional information element. Range of $n$ is 0 ( 1 st element) to 5 (6th element).

PD?
[FDTC:FACCH: or SACCH:PD?]
Returns Protocol Discriminator (2 bit value).

## FDTC:

FACCH: or SACCH:
PT? $n$
[FDTC:FACCH: or SACCH:PT? n]
Returns Parameter Type ( 4 bit value) for selected optional information element. Range of $n$ is 0 (1st element) to 5 (6th element).

## PV?

[FDTC:FACCH: or SACCH:PV?]
Returns current value of Protocol Version (4 bit value).
PVI?
[FDTC:FACCH: or SACCH:PVI?]
Returns current state of Protocol Version Indicator (1 bit value).

## RANDSSD1?

[FDTC:FACCH: or SACCH:RANDSSD1?]
Returns value of 24 most significant bits of RANDSSD (24 bit value).
RANDSSD2?
[FDTC:FACCH: or SACCH:RANDSSD2?]
Returns value of bits 0 through 31 of RANDSSD ( 32 bit value).

## RANDRA?

[FDTC:FACCH: or SACCH:RANDRA?]
Returns the last decoded value of RANDRA. Returns - 1 if already returned or not available.

```
Used in conjunction with Re-Authentication message (see CSS:FDTC:FACCH: or
SACCH:REAUTHentication and CSS:FDTC:RANDRA).
```


## RANDU?

[FDTC:FACCH: or SACCH:RANDU?]
Returns RANDU received in Unique Challenge message (24 bit value).
RATE?
[FDTC:FACCH: or SACCH:RATE?]
Returns Channel Rate (1 bit value).
RCAUSe?
[FDTC:FACCH: or SACCH:RCAUSe?]
Returns last decoded value of R-Cause ( 7 bit value - 1 to 127). Returns -1 if already returned or not available.

RCAUSe:REServed?
[FDTC:FACCH: or SACCH:RCAUSe:REServed?]
Returns last decoded value of R-Cause Reserved field (1 bit value). Returns - 1 if already returned or not available.

## FDTC:

FACCH: or SACCH:

## RDATA_UNIT:

## LENGth?

[FDTC:FACCH: or SACCH:RDATA_UNIT:LENGth?]
Returns current value of R-Data Unit Extended Remaining Length (8 bit value).

## HLP:

## IDentifier?

[FDTC:FACCH: or SACCH:RDATA_UNIT:HLP:IDentifier?]
Returns current value of R-Data Unit Higher Layer Protocol Identifier ( 8 bit value).
DATA? $n$
[FDTC:FACCH: or SACCH:RDATA_UNIT:HLP:DATA? n]
Returns current value of R-Data Unit Higher Layer Data Unit ( 8 bit value) indexed by $n$. Range of $n$ is 0 to 253.

RFCHAN? $n$
[FDTC:FACCH: or SACCH:RFCHAN? n]
Returns current value of RFCHAN (11 bit value) indexed by $n$. Range of $n$ is 0 to 23 .
RL? $n$
[FDTC:FACCH: or SACCH:RL? n]
Returns Remaining Length as number of octets (six bit value) remaining in selected message segment. Range of $n$ is 0 to 2. (Segments pertain to the 0 to 2 instances the Calling Party Number may be sent in the Alert with Information or Flash with Information messages.)

## RN?

[FDTC:FACCH: or SACCH:RN?]
Returns Request Number (4 bit value).
RTRANSaction?
[FDTC:FACCH: or SACCH:RTRANSaction?]
Returns current value of R-Transaction Identifier (8 bit value).

## SBI?

[FDTC:FACCH: or SACCH:SBI?]
Returns Shortened Burst Indicator (2 bit value).

## SERVice:CODE?

[FDTC:FACCH: or SACCH:SERVICe:CODE?]
Returns the last decoded value of Service Code ( 4 bit value). Returns -1 if already returned or not available.

## FDTC:

FACCH: or SACCH:

## SERVice:

CAUSe? $n$
[FDTC:FACCH: or SACCH:SERVice:CAUSe? n]
Returns the last decoded value of Cause ( 8 bit value) of the designated instance ( $n$ ).
Range of $n$ is 0 to 9 . Returns -1 if already returned or not available.

## CAUSe:NUMBer? -or- CAUSe:NUM?

[FDTC:FACCH: or SACCH:SERVICe:CAUSe:NUMBer?]
Returns the last decoded value of number of instances of Cause ( 4 bit value - 0 to 10 ).

## SIGnal?

[FDTC:FACCH: or SACCH:SIGnal?]
Returns Signal field (eight bit value).

## SOC?

[FDTC:FACCH: or SACCH:SOC?]
Returns current value of SOC ( 12 bit value).

## SPMA?

[FDTC:FACCH: or SACCH:SPMA?]
Returns the state of Service Privacy Mode A (1 bit value).

## SPMB?

[FDTC:FACCH: or SACCH:SPMB?]
Returns the state of Service Privacy Mode B (1 bit value).

## SUPPort:IRA?

[FDTC:FACCH: or SACCH:SUPPort:IRA?]
Returns current state of RA Support (1 bit value).
TA?
[FDTC:FACCH: or SACCH:TA?]
Returns Time Alignment ( 5 bit value).
TASK?
[FDTC:FACCH: or SACCH:TASK?]
Returns current value of Task Status (3 bit value).

## FDTC:

FACCH: or SACCH:
TI?
[FDTC:FACCH: or SACCH:TI?]
Returns Timeslot Indicator (0 to 6). (0 is analog.)

## USER:

DEST:
LENGth?
[FDTC:FACCH: or SACCH:USER:DEST:LENGTh?]
Returns current value of User Destination Address Extended Remaining Length (8 bit value).

TYPE?
[FDTC:FACCH: or SACCH:USER:DEST:TYPE?]
Returns current value of User Destination Address Type of Number (3 bit value).

## PLANid?

[FDTC:FACCH: or SACCH:USER:DEST:PLANId?]
Returns current value of User Destination Address Number Plan Identification (4 bit value).

## ENCoding?

[FDTC:FACCH: or SACCH:USER:DEST:ENCoding?]
Returns current state of User Destination Address Encoding (1 bit value).

## ADDRess?

[FDTC:FACCH: or SACCH:USER:DEST:ADDRess?]
Returns current string value of User Destination Address (ASCII string).

## SUBaddress:

## LENGth?

[FDTC:FACCH: or SACCH:USER:DEST:SUBaddress:LENGth?]
Returns current value of User Destination Subaddress Extended Remaining length (8 bit value).

## ODD EVEN?

[FDTC:FACCH: or SACCH:USER:DEST:SUBaddress:ODD_EVEN?]
Returns current state of User Destination Subaddress Odd/Even Indicator (1 bit value).

TYPE?
[FDTC:FACCH: or SACCH:USER:DEST:SUBaddress:TYPE?]
Returns current value of User Destination Type of Subaddress (3 bit value).

## FDTC:

FACCH: or SACCH:
USER:
DEST:

## SUBaddress:

## REServed?

[FDTC:FACCH: or SACCH:USER:DEST:SUBaddress:REServed?]
Returns current value of User Destination Subaddress Reserved bits (4 bit value).

ADDRess? $n$
[FDTC:FACCH: or SACCH:USER:DEST:SUBaddress:ADDRess? n]
Returns current value of User Destination Subaddress (8 bit value) indexed by $n$. Range of $n$ is 0 to 19 .

## ORIG:

## LENGth?

[FDTC:FACCH: or SACCH:USER:ORIG:LENGth?]
Returns current value of User Originating Address Extended Remaining Length (8 bit value).

## TYPE?

[FDTC:FACCH: or SACCH:USER:ORIG:TYPE?]
Returns current value of User Originating Address Type of Number (3 bit value).

## PLANid?

[FDTC:FACCH: or SACCH:USER:ORIG:PLANId?]
Returns current value of User Originating Address Number Plan Identification (4 bit value).

## ENCoding?

[FDTC:FACCH: or SACCH:USER:ORIG:ENCoding?]
Returns current state of User Originating Address Encoding (1 bit value).

## ADDRess?

[FDTC:FACCH: or SACCH:USER:ORIG:ADDRess?]
Returns current value of User Originating Address (ASCII string).
SUBaddress:
LENGth?
[FDTC:FACCH: or SACCH:USER:ORIG:SUBaddress:LENGth?]
Returns current value of User Originating Subaddress Extended Remaining length (8 bit value).

## ODD EVEN?

[FDTC:FACCH: or SACCH:USER:ORIG:SUBaddress:ODD_EVEN?]
Returns current state of User Originating Subaddress Odd/Even Indicator (1 bit value).

FDTC:
FACCH: or SACCH:
USER:
ORIG:

## SUBaddress:

TYPE?
[FDTC:FACCH: or SACCH:USER:ORIG:SUBaddress:TYPE?]
Returns current value of User Originating Type of Subaddress (3 bit value).
REServed?
[FDTC:FACCH: or SACCH:USER:ORIG:SUBaddress:REServed?]
Returns current value of User Originating Subaddress Reserved bits (4 bit value).

ADDRess? $n$
[FDTC:FACCH: or SACCH:USER:ORIG:SUBaddress:ADDRess? n]
Returns current value in hexadecimal of User Originating Subaddress (8 bit value) indexed by $n$. Range of $n$ is 0 to 19 .

PRESentation:

## LENGth?

[FDTC:FACCH: or SACCH:USER:ORIG:PRESentation:LENGth?]
Returns current value of User Originating Address Presentation Indicator Extended Remaining Length ( 8 bit value).

PI?
[FDTC:FACCH: or SACCH:USER:ORIG:PRESentation:PI?]
Returns current value of User Originating Address Presentation Indicator (2 bit value).

SI?
[FDTC:FACCH: or SACCH:USER:ORIG:PRESentation:SI?]
Returns current value of User Originating Address Screening Indicator (2 bit value).

REServed?
[FDTC:FACCH: or SACCH:USER:ORIG:PRESentation:REServed?]
Returns current value of User Originating Address Presentation Indicator reserved bits (4 bit value).

VMI:
VC?
[FDTC:FACCH: or SACCH:VMI:VC?]
Returns current value of Voice Mode Voice coder (3 bit value).
PM V?
[FDT̄C:FACCH: or SACCH:VMI:PM_V?]
Returns current value of Voice Privacy Mode (3 bit value).

FDTC:
FACCH: or SACCH:
VPM?
[FDTC:FACCH: or SACCH:VPM?]
Returns Voice Privacy Mode (1 bit value).

## 9-6-3 FORWARD DIGITAL TRAFFIC CHANNEL RAW DATA

The $S p$ Tst contains a variable capacity data buffer to capture raw data (undecoded bit stream) received on the Forward Digital Traffic Channel. Prior to initiating FDTC raw data commands, set Sp Tst to initial FDTC setup (FDTC:SET). Obtain new data information by setting $n$ from 0 to current FDTC:RAW:DEPTH setting minus one, when using raw data information queries. Refer to 10-4-2.

## FDTC:RAW:

## SELect:

## FACCH

[FDTC:RAW:SELect:FACCH]
Selects Fast Associated Control Channel for raw data.

## SACCH

[FDTC:RAW:SELect:SACCH]
Selects Slow Associated Control Channel for raw data.

## DEPTH $n$

[FDTC:RAW:DEPTH n]
Selects size (number of data words) of data buffer. Range of $n$ is 1 to 100 .

## START

[FDTC:RAW:START]
Starts raw data Capture.

## STOP

[FDTC:RAW:STOP]
Stops raw data Capture.
CF? $n$
[FDTC:RAW:CF?n]
Returns Continuation Flag bit from selected data word. Range of $n$ is 0 to 99 .

## COUNt?

[FDTC:RAW:COUNt?]
Returns number of data words received (increments with each new data word). Used to determine when to query for new data information.

## DVCC? $n$

[FDTC:RAW:DVCC?n]
Returns Digital Verification Color Code from selected data word. Range of $n$ is 0 to 99 .
MESSage? $n, x$
[FDTC:RAW:MESSage? n, x]
Returns selected message byte from selected data word. Range of $n$ is 0 to 99 . Range of $x$ (byte) is 0 to 5.

RSVD? $n$
[FDTC:RAW:RSVD?n]
Returns Reserved for Future Use bits from selected data word. Range of $n$ is 0 to 99 .
TIME? $n$
[FDTC:RAW:TIME? n]
Returns Time Stamp in ms of selected data word. Range of $n$ is 0 to 99.

## 9-6-4 IS-54 RAW DATA

The Sp Tst contains a fixed capacity data buffer ( 100 data words) to capture raw timeslot data (undecoded bit streams) received on the Forward Digital Traffic Channel. Prior to initiating FDTC raw data commands, set Sp Tst to initial FDTC setup (FDTC:SET). Refer to 10-4-3.

## FDTC:IS54:

## START

[FDTC:IS54:START]
Starts IS-54 timeslot raw data Capture

## STOP

[FDTC:IS54:STOP]
Stops IS-54 timeslot raw data Capture.

## CDVCC? $n$

[FDTC:IS54:CDVCC? n]
Returns the 12 bit Coded Digital Color Code from selected data word. Range of $n$ is 0 to 99 .

## COUNt?

[FDTC:IS54:COUNT?]
Returns number of data words received (increments with each new data word). Used to determine when to query for new data information.

DATA? $n, x$
[FDTC:IS54:DATA? n, x]
Returns selected character data from selected data word. Range of $n$ is 0 to 99 . Range of $x$ (character) is 1 to 65.

## SACCH? $n$

[FDTC:IS54:SACCH? n]
Returns 12 bits of the SACCH message in selected data word. Range of $n$ is 0 to 99 .

## SYNC? $n$

[FDTC:IS54:SYNC?n]
Returns the 28 Synchronization bits from selected data word. Range of $n$ is 0 to 99 .
TIME? $n$
[FDTC:IS54:TIME?n]
Returns Time Stamp in ms of selected data word. Range of $n$ is 0 to 99.

## 9-7 REVERSE CONTROL CHANNEL (RECC) MONITOR COMMANDS

## 9-7-1 REVERSE CONTROL CHANNEL CONTROL

## RECC:

## SETup

[RECC:SETup]
Sets up the Sp Tst as when entering the Reverse Control Channel screen (screen is not displayed). The HOST is forced into Duplex Mode through selection of Duplex screen.

CONFigure:
USER
[RECC:CONFigure:USER]
This command is identical to the RECC:SETup command except that the USER screen is selected.

## NONE

[RECC:CONFigure:NONE]
This command is also identical to the RECC:SETup command except that the Test Set remains in the screen currently displayed.

## CHANnel $n$

[RECC:CHANnel n]
Selects Reverse Control Channel to monitor.

| FREQuency:BAND (See 9-3) | RANGE OF $\boldsymbol{n}$ |
| :---: | :---: |
| 0 | 1 to 333 |
| 1 | 1 to 1023 |
| 2 | 1 to 1999 |

STARt
[RECC:STARt]
Starts background task which decodes Reverse Control Channel data. Decoded data is stored internally by the Sp Tst and is returned by the TMAC commands in 9-7-2.

## STOP

[RECC:STOP]
Stops decoding Reverse Control Channel data.

## 9-7-2 REVERSE CONTROL CHANNEL DECODE DATA

- Each query command returns the last decoded value.
- If the specific data item is not available or has already been read, the query returns -1 .


## RECC:

TORDer?
[RECC:TORDer?]
Returns combination of the $T$ and Order Fields (string):

| AUDIT | BSCHAL | ORDER CONF |
| :--- | :--- | :--- |
| ORIGIN | ORIGIN W/SERVICE | PAGE RESP |
| PAGE RESP WISERVICE | REG | UCHALCON |

## AUTHR?

[RECC:AUTHR?]
Returns AUTHR from Mobile Station Authentication Algorithms (18 bit value).

## AUTHU?

[RECC:AUTHU?]
Returns AUTHU used in Unique Challenge Order Confirmation (18 bit value).

## COUNT?

[RECC:COUNt?]
Returns modulo-64 count sent from Mobile Station.

## CRC?

[RECC:CRC?]
Returns 16 bit CRC, 24 bit CRC or no CRC setting on data/fax call (2 bit value).

## DATA:

## ACKED?

[RECC:DATA:ACKED?]
Returns current state of Acked Data (1 bit value).

## PART?

[RECC:DATA:PART?]
Returns current value of Data Part (3 bit value).

## DCC?

[RECC:DCC?]
Returns Digital Color Code (seven bit value).

## DIGITS1?

[RECC:DIGITS1?]
Returns up to 16 digits (string).

## DIGITS2?

[RECC:DIGITS2?]
Returns up to 16 digits (string).

## RECC:

E?
[RECC:E?]
Returns Extended Address (1 bit value).

## EP?

[RECC:EP?]
Returns Extended Protocol (1 bit value).

## ER?

[RECC:ER?]
Returns Extended Protocol Reverse Channel Indicator (1 bit value).

## ESN?

[RECC:ESN?]
Returns Electronic Serial Number (32 bit value).

## LOCAL_MT?

[RECC:LOCAL_MT?]
Returns Local Control (Local Control message)/Message Type (5 bit value).

## LT?

[RECC:LT?]
Returns Last Try (1 bit value).

## MIN?

[RECC:MIN?]
Returns Mobile Identification Number (string) of Mobile Station.

## MPCI?

[RECC:MPCI?]
Returns Mobile Protocol Capability Indicator (1 bit value).

## ORDERCD?

[RECC:ORDERCD?]
Returns Order Code (5 bit value).

## ORDQ?

[RECC:ORDQ?]
Returns Order Qualifier (3 bit value).
PM_D?
[RECC:PM_D?]
Returns current value of Selected Privacy Mode (3 bit value).

## RANDBS?

[RECC:RANDBS?]
Returns RANDBS used in Base Station Challenge Order (32 bit value).

## RANDC?

[RECC:RANDC?]
Returns RANDC (eight bit value).

## RECC:

RLP?
[RECC:RLP?]
Returns current value of Layer 2 Radio Link Protocol used for a data/fax call (2 bits value).
S?
[RECC:S?]
Returns Serial Number (1 bit value).
SAP?
[RECC:SAP?]
Returns current state of Service Access Point for data/fax call ( 1 bit value).

## SCM?

[RECC:SCM?]
Returns Station Class Mark (4 bit value).

## SDCC1?

[RECC:SDCC1?]
Returns Supplementary Digital Color Code 1 (2 bit value).

## SDCC2?

[RECC:SDCC2?]
Returns Supplementary Digital Color Code 2 (2 bit value).

## SERVice?

[RECC:SERVice?]
Returns current value of Service code ( 4 bit value).

## 9-8 REVERSE VOICE CHANNEL (RVC) MONITOR COMMANDS

## 9-8-1 REVERSE VOICE CHANNEL CONTROL

RVC:

## SETup

[RVC:SETup]
Sets up the Sp Tst as when entering the Reverse Voice Channel screen (screen is not displayed). The HOST is forced into Duplex Mode through selection of Duplex screen.

CONFigure:
USER
[RVC:CONFigure:USER]
This command is identical to the RVC:SETup command except that the USER screen is selected.

## NONE

[RVC:CONFIGURE:NONE]
This command is also identical to the RVC:SETup command except that the Test Set remains in the screen currently displayed.

## CHANnel $n$

[RVC:CHANnel n]
Selects Reverse Voice Channel to monitor.

| FREQuency:BAND (See 9-3) | RANGE OF $\boldsymbol{n}$ |
| :---: | :---: |
| 0 | 1 to 333 |
| 1 | 1 to 1023 |
| 2 | 1 to 1999 |

## STARt

[RVC:STARt]
Starts background task which decodes Reverse Voice Channel data. Decoded data is stored internally by the Sp Tst and is returned by the TMAC commands in 9-8-2.

STOP
[RVC:STOP]
Stops decoding Reverse Voice Channel data.

## 9-8-2 REVERSE VOICE CHANNEL DECODE DATA

- Each query command returns the last decoded value.
- If the specific data item is not available or has already been read, the query returns -1 .


## RVC:

## TORDer?

[RVC:TORDer?]
Returns combination of the $T$ and Order Fields (string):

| BSCHAL | CALLED ADDR | ORDER CONFIRM |
| :--- | :--- | :--- |
| PAGE RESP | RELEASE | SN RESPONSE |

UCHALCON

## AUTHu?

[RVC:AUTHu?]
Returns AUTHU used in Unique Challenge Order Confirmation (18 bit value).

## DIGITS?

[RVC:DIGITS?]
Returns up to 32 digits (string).

## ESN?

[RVC:ESN?]
Returns Electronic Serial Number (32 bit value).

## LOCAL_MT?

[RVC:LOCAL_MT?]
Returns Local Control (Local Control message)/Message Type (5 bit value).

## ORDERCD?

[RVC:ORDERCD?]
Returns Order Code (5 bit value).

## ORDQ?

[RVC:ORDQ?]
Returns Order Qualifier (3 bit value).

## RANDbs?

[RVC:RANDbs?]
Returns RANDBS used in Base Station Challenge Order (32 bit value).

## 9-9 REVERSE DIGITAL TRAFFIC CHANNEL (RDTC) MONITOR COMMANDS

## 9-9-1 REVERSE DIGITAL TRAFFIC CHANNEL CONTROL

## RDTC:

## SETup

[RDTC:SETup]
Sets up the Sp Tst as when entering the Reverse Digital Traffic Channel screen (screen is not displayed). The HOST is forced into Duplex Mode through selection of Duplex screen.

CONFigure:
USER
[RDTC:CONFigure:USER]
This command is identical to the RDTC:SETup command except that the USER screen is selected.

NONE
[RDTC:CONFigure:NONE]
This command is also identical to the RDTC:SETup command except that the Test Set remains in the screen currently displayed.

## CHANnel $n$

[RDTC:CHANnel n]
Selects Reverse Digital Traffic Channel to monitor.

| FREQuency:BAND (See 9-3) | RANGE OF $\boldsymbol{n}$ |
| :---: | :---: |
| 0 | 1 to 333 |
| 1 | 1 to 1023 |
| 2 | 1 to 1999 |

## SLOT $n$

[RDTC:SLOT n]
Selects Timeslot. Range of $n$ is 1 to 3 .

## STARt

[RDTC:STARt]
Starts background task which decodes Reverse Digital Traffic Channel data. Decoded data is stored internally by the Sp Tst and is returned by the TMAC commands in 9-9-2.

STOP
[RDTC:STOP]
Stops decoding Reverse Digital Traffic Channel data.

RDTC:
VOCoder:
ACELP
[RDTC:VOCoder:ACELP]
Selects ACELP vocoder.
VSELP
[RDTC:VOCoder:VSELP]
Selects VSELP vocoder.

## AUTO:ACKnowledge:

## ENABIe $n$

[RDTC:AUTO:ACKnowledge:ENABIe n]
Enables ( $n=1$ ) or disables ( $n=0$ ) automatic message acknowledgment on the RDTC.
ENABIe?
[RDTC:AUTO:ACKnowledge:ENABle?]
Returns current state of automatic message acknowledgment on the RDTC.

## REMote:

STARt
[RDTC:REMote:STARt]
Stops monitoring RDTC, and VSELP data is redirected as ASCII characters out RS-232 Connector.

- Baud Rate should be set to 38400 prior to command execution to allow RS-232 to maintain pace with the data received.
- Each line contains 54 ASCII Characters representing 27 bytes, followed by a carriage return.
- Refer to Table 9-1.

STOP
[RDTC:REMote:STOP]
Stops redirection of VSELP data out RS-232 Connector.

## RDTC:

R0?
[RDTC:RO?]
Returns the VSELP frame energy value (0 to 31).

| BYTE |  | DESCRIPTION |
| :--- | :--- | :--- |
| $\# 1$ | R0 | Frame Energy |
| $\# 2$ | PC1 | 1st Reflection Coefficient |
| $\# 3$ | PC2 | 2nd Reflection Coefficient |
| $\# 4$ | PC3 | 3rd Reflection Coefficient |
| $\# 5$ | PC4 | 4th Reflection Coefficient |
| $\# 6$ | PC5 | 5th Reflection Coefficient |
| $\# 7$ | PC6 | 6th Reflection Coefficient |
| $\# 8$ | PC7 | 7th Reflection Coefficient |
| $\# 9$ | PC8 | 8th Reflection Coefficient |
| $\# 10$ | LPC9 | 9th Reflection Coefficient |
| $\# 11$ | LPC10 | 10th Reflection Coefficient |
| $\# 12$ | LAG_1 | Lag,1st Subframe |
| $\# 13$ | LAG_2 | Lag,2nd Subframe |
| $\# 14$ | LAG_3 | Lag,3rd Subframe |


| BYTE |  | DESCRIPTION |
| :--- | :--- | :--- |
| $\# 15$ | LAG_4 | Lag,4th Subframe |
| $\# 16$ | CODE1_1 | 1st Code,I,1st Subframe |
| $\# 17$ | CODE1_2 | 1st Code,I,2nd Subframe |
| $\# 18$ | CODE1_3 | 1st Code,I,3rd Subframe |
| $\# 19$ | LPC9 | 9th Reflection Coefficient |
| $\# 20$ | LPC10 | 10th Reflection Coefficient |
| $\# 21$ | LAG_1 | Lag,1st Subframe |
| $\# 22$ | LAG_2 | Lag,2nd Subframe |
| $\# 23$ | LAG_3 | Lag,3rd Subframe |
| $\# 24$ | LAG_4 | Lag,4th Subframe |
| $\# 25$ | CODE1_1 | 1st Code,I,1st Subframe |
| $\# 26$ | CODE1_2 | 1st Code,I,2nd Subframe |
| $\# 27$ | CODE1_3 | 1st Code,I,3rd Subframe |

Table 9-1 Speech Parameter (27 bytes)

## 9-9-2 REVERSE DIGITAL TRAFFIC CHANNEL DECODE DATA

RDTC:FACCH: queries pertain to the blank and burst Fast Associated Control Channel (FACCH). RDTC:SACCH: queries pertain to the continuous Slow Associated Control Channel (SACCH).

- Each query command returns the last decoded value.
- If the specific data item is not available or has already been read, the query returns - 1 .


## RDTC:

FACCH: or SACCH:

## MSGtype?

[RDTC:FACCH: or SACCH:MSGtype?]
Returns Message Type received from Mobile Station (string):

| BSCHAL | BSMC | CAPABILITY REQ | CAPABILITY RESP |
| :--- | :--- | :--- | :--- |
| CHAN QUAL1 | CHAN QUAL2 | CHAN QUAL3 | CHAN QUAL4 |
| CONNECT | FLASH | FLASHACK | HYPERMEAS ACK |
| MEASACK | MOBILE ACK | PLCACK | PUACK |
| R-DATA | R-DATA ACCEPT | R-DATAREJECT | REAUTH CONF |
| RELEASE | SBDTMF | SCDTMF | SERVICEREQ |
| SOC | SSD UP CON | STATUS | UCHALCON |

## AMT?

[RDTC:FACCH: or SACCH:AMT?]
Returns Acknowledge Message Type (string):

| ALERT | AUDIT | DTC HANDOFF |
| :--- | :--- | :--- |
| HANDOFF | LOC CONT | MAINTNCE |
| RELEASE | STOP MEAS |  |

## AUTHRA?

[RDTC:FACCH: or SACCH:AUTHRA?]
Returns the last decoded value of AUTHRA (18 bit value) used in Re-Authentication Order Confirmation. Returns - 1 if already returned or not available.

## AUTHU?

[RDTC:FACCH: or SACCH:AUTHU?]
Returns AUTHU used in Unique Challenge Order Confirmation (18 bit value).

## BANDWidth?

[RDTC:FACCH: or SACCH:BANDWidth?]
Returns the last decoded value of Bandwidth ( 3 bit value). Returns -1 if already returned or not available.

## RDTC:

FACCH: or SACCH:
BER?
[RDTC:FACCH: or SACCH:BER?]
Returns Bit Error Rate (3 bit value). Refer to Table 9-2.

| BIT VALUE | BER INTERVAL (\%) |  |  |
| :---: | :---: | :---: | :---: |
| 0 | 0.00 | to | 0.01 |
| 1 | 0.01 | to | 0.1 |
| 2 | 0.1 | to | 0.5 |
| 3 | 0.5 | to | 1.0 |


| BIT VALUE | BER INTERVAL (\%) |  |  |
| :---: | :---: | :---: | :---: |
| 4 | 1.0 | to | 2.0 |
| 5 | 2.0 | to | 4.0 |
| 6 | 4.0 | to | 8.0 |
| 7 | $\geq 8.0$ |  |  |

Table 9-2 BER Bit Definition

## BSMC?

[RDTC:FACCH: or SACCH:BSMC?]
Returns current value of BSMC (8 bit value).

## CALLED:

TYpe?
[RDTC:FACCH: or SACCH:CALLED:TYpe?]
Returns Called Party Number Type (3 bit value).
PLANid?
[RDTC:FACCH: or SACCH:CALLED:PLANid?]
Returns Called Party Numbering Plan Identification (4 bit value).

## SPare?

[RDTC:FACCH: or SACCH:CALLED:SPare?]
Returns value of Called Party Number spare bit ( 1 bit value).

## NUM?

[RDTC:FACCH: or SACCH:CALLED:NUM?]
Returns number of Called Party (string).

## RDTC:

## FACCH: or SACCH:

## CALLING:

TYpe?
[RDTC:FACCH: or SACCH:CALLING:TYpe?]
Returns Calling Party Number Type (3 bit value).
PLANid?
[RDTC:FACCH: or SACCH:CALLING:PLANid?]
Returns Calling Party Numbering Plan Identification (4 bit value).
SPare?
[RDTC:FACCH: or SACCH:CALLING:SPare?]
Returns value of Calling Party Number spare bits ( 5 bit value).
PI?
[RDTC:FACCH: or SACCH:CALLING:PI?]
Returns the value of Calling Party Number Presentation Indicator (2 bit value).
SI?
[RDTC:FACCH: or SACCH:CALLING:SI?]
Returns the value of Calling Party Number Screening Indicator (2 bit value).
NUM?
[RDTC:FACCH: or SACCH:CALLING:NUM?]
Returns number of Calling Party (string).

## CM?

[RDTC:FACCH: or SACCH:CM?]
Returns Call Mode (5 bit value).

## RDTC:

FACCH: or SACCH:

## CUSTOM:

## LENGth?

[RDTC:FACCH: or SACCH:CUSTOM:LENGTh?]
Returns current value of Length of custom control in octets ( 8 bit value).
CONTrol? $n$
[RDTC:FACCH: or SACCH:CUSTOM:CONTrol? n]
Returns current value of Custom Control ( 8 bit value) indexed by $n$. Range of $n$ is 0 to 255.

DIC?
[RDTC:FACCH: or SACCH:DIC?]
Returns the Delay Interval Compensation (1 bit value).
DIGits?
[RDTC:FACCH: or SACCH:DIGits?]
Returns up to 32 digits (string).

## DMAC?

[RDTC:FACCH: or SACCH:DMAC?]
Returns Digital Mobile Attenuation Code (4 bit value).

## DTX?

[RDTC:FACCH: or SACCH:DTX?]
Returns Discontinuous Transmission (1 bit value).

## ESN?

[RDTC:FACCH: or SACCH:ESN?]
Returns Electronic Serial Number (32 bit value).

## FI?

[RDTC:FACCH: or SACCH:FI?]
Returns Feature Indicator (4 bit value).

## HYPERband:

## NUMBer? -or- NUM?

[RDTC:FACCH: or SACCH:HYPERband:NUMBer?]
Returns current value of Number of Hyperband Channels (5 bit value).
BAND? $n$
[RDTC:FACCH: or SACCH:HYPERband:BAND? n]
Returns current value of Hyperband band (2 bit value) indexed by $n$. Range of $n$ is 0 to 23.

CHANnel? $n$
[RDTC:FACCH: or SACCH:HYPERband:CHANnel? n]
Returns current value of Hyperband Channel (11 bit value) indexed by $n$. Range of $n$ is 0 to 23 .

## RDTC:

FACCH: or SACCH:
KF?
[RDTC:FACCH: or SACCH:KF?]
Returns Keypad Facility (32 digits).
LDP?
[RDTC:FACCH: or SACCH:LDP?]
Returns Last Decoded Parameter (4 bit value).
MAP:

## VPM?

[RDTC:FACCH: or SACCH:MAP:VPM?]
Returns current value of Voice Privacy Mode Map (4 bit value).

## CODER?

[RDTC:FACCH: or SACCH:MAP:CODER?]
Returns current value of Voice Coder Map (6 bit value).

## MEA:

DOMAIN?
[RDTC:FACCH: or SACCH:MAP:MEA:DOMAIN?]
Returns current value of Message Encryption Algorithm map domain (8 bit value).

## ALGORithms? n

[RDTC:FACCH: or SACCH:MAP:MEA:ALGORithms?n]
Returns current value of Message Encryption Algorithms (4 bit value) indexed by $n$. Range of $n$ is 0 to 7 .

## MEK?

[RDTC:FACCH: or SACCH:MAP:MEK?]
Returns current value of Message Encryption Key Map (4 bit value).

## ARQ?

[RDTC:FACCH: or SACCH:MAP:ARQ?]
Returns current state of FACCH/SACCH ARQ Map (1 bit value).

## SMS?

[RDTC:FACCH: or SACCH:MAP:SMS?]
Returns current value of SMS Map (2 bit value).
MEM?
[RDTC:FACCH: or SACCH:MEM?]
Returns Memory Encryption Mode (1 bit value).

## RDTC:

FACCH: or SACCH:

## MESSage:CENTer:

## LENGth?

[RDTC:FACCH: or SACCH:MESSage:CENTer:LENGth?]
Returns current value of Message Center Address Extended Remaining Length (8 bit value).

TYPE?
[RDTC:FACCH: or SACCH:MESSage:CENTer:TYPE?]
Returns current value of Message Center Address Type of Number (3 bit value).

## PLANid?

[RDTC:FACCH: or SACCH:MESSage:CENTer:PLANid?]
Returns current value of Message Center Address Number Plan Identification (4 bit value).

## ENCoding?

[RDTC:FACCH: or SACCH:MESSage:CENTer:ENCoding?]
Returns current state of Message Center Address Encoding (1 bit value).

## ADDRess?

[RDTC:FACCH: or SACCH:MESSage:CENTer:ADDRess?]
Returns current string value of Message Center Address (ASCII string).

## MODe:

## VOICe:

VC?
[RDTC:FACCH: or SACCH:MODe:VOICe:VC?]
Returns the last decoded value of VC (voice coder information) (3 bit value).
Returns -1 if already returned or not available.
PM V?
[RDTC:FACCH: or SACCH:MODe:VOICe:PM_V?]
Returns the last decoded value of $P M_{-} V$ (voice privacy mode information) (3 bit value). Returns - 1 if already returned or not available.

## RDTC:

## FACCH: or SACCH:

MODe:
DATA:

## PM?

[RDTC:FACCH: or SACCH:MODe:DATA:PM?]
Returns the last decoded value of PM_D (data privacy mode) (3 bit value). Returns - 1 if already returned or not available.

## SAP?

[RDTC:FACCH: or SACCH:MODe:DATA:SAP?]
Returns the last decoded state of SAP (1 bit value). Returns -1 if already returned or not available.

Indicates if the link layer provides one or two logical links.

## ACKED?

[RDTC:FACCH: or SACCH:MODe:DATA:ACKED?]
Returns the last decoded state of Acked Data (1 bit value). Returns - 1 if already returned or not available.

CRC?
[RDTC:FACCH: or SACCH:MODe:DATA:CRC?]
Returns the last decoded value of CRC (2 bit value). Returns -1 if already returned or not available.

Identifies if a 16 bit CRC, 24 bit CRC or no CRC is used.

## PART?

[RDTC:FACCH: or SACCH:MODe:DATA:PART?]
Returns the last decoded value of Data Part (3 bit value). Returns -1 if already returned or not available.

## RLP?

[RDTC:FACCH: or SACCH:MODe:DATA:RLP?]
Returns the last decoded value of RLP (radio link protocol) (2 bit value). Returns -1 if already returned or not available.

## REServed

[RDTC:FACCH: or SACCH:MODe:DATA:REServed]
Returns the last decoded value of the Reserved field (4 bit value) of the Data Mode information element. Returns - 1 if already returned or not available.

## RDTC:

FACCH: or SACCH:

## NV?

[RDTC:FACCH: or SACCH:NV?]
Returns Numbers of Values (string of numbers, one for each optional information element in the message, with each number derived from the corresponding six bit value).

## PD?

[RDTC:FACCH: or SACCH:PD?]
Returns the Protocol Discriminator (2 bit value).

## PT?

[RDTC:FACCH: or SACCH:PT?]
Returns Parameter Types (string of numbers, one for each optional information element in the message, with each number derived from the corresponding six bit value).

## PV?

[RDTC:FACCH: or SACCH:PV?]
Returns current value of Protocol Version ( 8 bit value).

## RANDBS?

[RDTC:FACCH: or SACCH:RANDBS?]
Returns RANDBS used in the Base Station Challenge Order ( 32 bit value).

## CAUSe?

[RDTC:FACCH: or SACCH:RCAUSe?]
Returns current value of R-Cause ( 8 bit value).

## RCAUSe:REServed?

[RDTC:FACCH: or SACCH:RCAUSe:REServed?]
Returns the last decoded value of the R-Cause Reserved field (1 bit value).

## RDTC:

FACCH: or SACCH:

## RDATA_UNIT:

## LENGth?

[RDTC:FACCH: or SACCH:RDATA_UNIT:LENGth?]
Returns current value of R-Data Unit Extended Remaining Length (8 bit value).

## HLP:

## IDentifier?

[RDTC:FACCH: or SACCH:RDATA_UNIT:HLP:IDentifier?]
Returns current value of R-Data Unit Higher Layer Protocol Identifier (8 bit value).
DATA? $n$
[RDTC:FACCH: or SACCH:RDATA_UNIT:HLP:DATA? n]
Returns current value of R-Data Unit Higher Layer Protocol Data Unit (8 bit value) indexed by $n$. Range of $n$ is 0 to 253 .

RFCHAN? $n$
[RDTC:FACCH: or SACCH:RFCHAN? n]
Returns current value of RFCHAN (8 bit value) indexed by $n$. Range of $n$ is 0 to 23 .
RL?
[RDTC:FACCH: or SACCH:RL?]
Returns Remaining Length (six bit value).

## RN?

[RDTC:FACCH: or SACCH:RN?]
Returns Request Number (4 bit value).

## RR?

[RDTC:FACCH: or SACCH:RR?]
Returns Release Reason (4 bit value).

## RSSI? $n$

[RDTC:FACCH: or SACCH:RSSI? n]
Returns Received Signal Strength Indicator (5 bit value) for selected index. (0 indicates -113 dBm and 31 indicates -51 dBm .) Range of $n$ (index) is 0 to 11 .

## RSSIC?

[RDTC:FACCH: or SACCH:RSSIC?]
Returns Received Signal Strength Indicator (5 bit value) of Current RF Channel.
( 0 indicates -113 dBm and 31 indicates -51 dBm .)

## RDTC:

FACCH: or SACCH:

## RTRANSaction?

[RDTC:FACCH: or SACCH:RTRANSaction?]
Returns current value of R-Transaction Identifier ( 8 bit value).

## SERVice:CODE?

[RDTC:FACCH: or SACCH:SERVICe:CODE?]
Returns the last decoded value of Service Code (4 bit value). Returns - 1 if already returned or not available.

SOC?
[RDTC:FACCH: or SACCH:SOC?]
Returns current value of SOC (12 bit value).

## SSDUP?

[RDTC:FACCH: or SACCH:SSDUP?]
Returns Shared Secret Data Update (1 bit value).

## SUPPort:

## IRA?

[RDTC:FACCH: or SACCH:SUPPort:IRA?]
Returns current state of IRA Support (1 bit value).

## FREQuency:BANDS?

[RDTC:FACCH: or SACCH:SUPPort:FREQuency:BANDS?]
Returns current value of Supported Frequency Bands (8 bit value).

## ANAlog?

[RDTC:FACCH: or SACCH:SUPPort:ANAlog?]
Returns current state of 800 MHz Analog Speech Support (1 bit value).

## TA?

[RDTC:FACCH: or SACCH:TA?]
Returns Time Alignment offset ( 5 bit value).
TASK?
[RDTC:FACCH: or SACCH:TASK?]
Returns current value of Task Status (3 bit value).

## TERMinf?

[RDTC:FACCH: or SACCH:TERMint?]
Returns Terminal Information of Mobile Station (32 bit value).

## RDTC:

FACCH: or SACCH:

## USER:

## DEST:

## LENGth?

[RDTC:FACCH: or SACCH:USER:DEST:LENGth?]
Returns current value of User Destination Address Extended Remaining Length (8 bit value).

TYPE?
[RDTC:FACCH: or SACCH:USER:DEST:TYPE?]
Returns current value of User Destination Address Type of Number (3 bit value).

## PLANid?

[RDTC:FACCH: or SACCH:USER:DEST:PLANId?]
Returns current value of User Destination Address Number Plan Identification (4 bit value).

ENCoding?
[RDTC:FACCH: or SACCH:USER:DEST:ENCoding?]
Returns current state of User Destination Address Encoding (1 bit value).

## ADDRess?

[RDTC:FACCH: or SACCH:USER:DEST:ADDRess?]
Returns current string value of User Destination Address (ASCII string).

## SUBaddress:

## LENGth?

[RDTC:FACCH: or SACCH:USER:DEST:SUBaddress:LENGTh?]
Returns current value of User Destination Subaddress Extended Remaining length (8 bit value).

## ODD_EVEN?

[RDT $\overline{\text { :FACCH: or SACCH:USER:DEST:SUBaddress:ODD_EVEN?] }}$
Returns current state of User Destination Subaddress Odd/Even Indicator (1 bit value).

TYPE?
[RDTC:FACCH: or SACCH:USER:DEST:SUBaddress:TYPE?]
Returns current value of User Destination Type of Subaddress (3 bit value).

## REServed?

[RDTC:FACCH: or SACCH:USER:DEST:SUBaddress:REServed?]
Returns current value of User Destination Subaddress Reserved bits (4 bit value).

ADDRess? $n$
[RDTC:FACCH: or SACCH:USER:DEST:SUBaddress:ADDRess?]
Returns current value of User Destination Subaddress (8 bit value) indexed by $n$. Range of $n$ is 0 to 19 .

FACCH: or SACCH:
USER:
ORIG:

## LENGth?

[RDTC:FACCH: or SACCH:USER:ORIG:LENGth?]
Returns current value of User Originating Address Extended Remaining Length (8 bit value).

TYPE?
[RDTC:FACCH: or SACCH:USER:ORIG:TYPE?]
Returns current value of User Originating Address Type of Number ( 3 bit value).

## PLANid?

[RDTC:FACCH: or SACCH:USER:ORIG:PLANId?]
Returns current value of User Originating Address Number Plan Identification (4 bit value).

ENCoding?
[RDTC:FACCH: or SACCH:USER:ORIG:ENCoding?]
Returns current state of User Originating Address Encoding (1 bit value).

## ADDRess?

[RDTC:FACCH: or SACCH:USER:ORIG:ADDRess?]
Returns current string value of User Originating Address (ASCII string).

## SUBaddress:

LENGth?
[RDTC:FACCH: or SACCH:USER:ORIG:SUBaddress:LENGth?]
Returns current value of User Originating Subaddress Extended Remaining length (8 bit value).

## ODD_EVEN?

[RDT $\bar{C}: F A C C H:$ or SACCH:USER:ORIG:SUBaddress:ODD_EVEN?]
Returns current state of User Originating Subaddress Odd/Even Indicator (1 bit value).

TYPE?
[RDTC:FACCH: or SACCH:USER:ORIG:SUBaddress:TYPE?]
Returns current value of User Originating Type of Subaddress (3 bit value).

## REServed?

[RDTC:FACCH: or SACCH:USER:ORIG:SUBaddress:REServed?]
Returns current value of User Originating Subaddress Reserved bits (4 bit value).

## ADDRess? $n$

[RDTC:FACCH: or SACCH:USER:ORIG:SUBaddress:ADDRess?]
Returns current value of User Originating Subaddress ( 8 bit value) indexed by $n$. Range of $n$ is 0 to 19 .

## RDTC:

FACCH: or SACCH:

## USER:

## ORIG:

## PRESentation:

## LENGth?

[RDTC:FACCH: or SACCH:USER:ORIG:PRESentation:LENGth?]
Returns current value of User Originating Address Presentation Indicator Extended Remaining Length (8 bit value).

PI?
[RDTC:FACCH: or SACCH:USER:ORIG:PRESentation:PI?]
Returns current value of User Originating Address Presentation Indicator (2 bit value).

SI?
[RDTC:FACCH: or SACCH:USER:ORIG:PRESentation:SI?]
Returns current value of User Originating Address Screening Indicator (2 bit value).

REServed?
[RDTC:FACCH: or SACCH:USER:ORIG:PRESentation:REServed?]
Returns current value of User Originating Address Presentation Indicator reserved bits (4 bit value).

VPM?
[RDTC:FACCH: or SACCH:VPM?]
Returns Voice Privacy Mode (1 bit value).

## 9-10 FDCCH DATA MONITOR

This section contains the TMAC commands to monitor the FDCCH. The FDCCH Data Monitor consists of the TMAC commands necessary to monitor the Forward Digital Control Channel.
9-10-1 SETUP COMMANDS
The FDCCH Setup commands configure the Sp Tst to receive and decode data on the FDCCH.

## FDCCH:

## SETup

[FDCCH:SETUp]
Sets up the Sp Tst as when entering the Forward Digital Control Channel screen (screen is not displayed). The HOST is forced into Duplex Mode through selection of Duplex screen.

This command also sets the HOST to receive through the Antenna Connector.

## CONFigure:

## USER

[FDCCH:CONFigure:USER]
This command is identical to the FDCCH:SETup command except that the USER screen is selected.

## NONE

[FDCCH:CONFigure:NONE]
This command is identical to the FDCCH:SETup command except that the Test Set remains in the screen currently displayed.

## CHANnel $n$

[FDCCH:CHANnel n]
Selects the Forward channel to monitor.

| FREQuency:BAND (See 9-3) | RANGE OF $\boldsymbol{n}$ |
| :---: | :---: |
| 0 | 1 to 333 |
| 1 | 1 to 1023 |
| 2 | 1 to 1999 |

## CHANnel?

[FDCCH:CHANnel?]
Returns current value of Channel.
DVCC $n$
[FDCCH:DVCC n]
Specifies Digital Verification Color Code. Range of $n$ is 0 to 255 .

## DVCC?

[FDCCH:DVCC?]
Returns current value of DVCC.
DVCC must be specified for Real Time Data Monitor (9-10-6) to operate properly.

## FDCCH:

RATE $n$
[FDCCH:RATE n]
Selects TDMA transmission rate: Full $(n=0)$ or Half $(n=1)$.

## RATE?

[FDCCH:RATE?]
Return current setting of Rate.
SLOT $n$
[FDCCH:SLOT n]
Selects the full rate pair or half rate Slot in which to receive. Range of $n$ is 1 to 3 (full) or 1 to 6 (half).

## SLOT?

[FDCCH:SLOT?]
Returns current value of Slot.

## 9-10-2 CONTINUOUS REMOTE RAW TIMESLOT DATA

The following commands Start or Stop the transmission of data received in an IS-136 DCCH timeslot out the RS-232 Connector and specify if a Sync word is included. The data is retransmitted exactly as received without being de-interleaved, corrected for errors or formatted.

Before entering this mode of operation, the baud rate should be set 57600 (for the Sp Tst and remote terminal). Each Timeslot consists of 324 bits, which corresponds to 81 ASCll characters when displayed in hexadecimal. The 81 characters representing each Timeslot is separated by a newline character. If less than 80 characters/line is desirable, the sync portion of the data may be omitted (sync portion of data is redundant), reducing the bit count to 296 and the character count to 74. An extra character preceding the data indicates the Timeslot (75 total characters).

## FDCCH:REMote:TIMEsIot:

## STARt

[FDCCH:REMote:TIMEslot:STARt]
Starts sending the received Timeslot data out the RS-232 Connector.

## STOP

[FDCCH:REMote:TIMEsIot:STOP]
Stops sending the received Timeslot data out the RS-232 Connector.
SYNC $n$
[FDCCH:REMote:TIMEslot:SYNC n]
Enables $(n=1)$ or disables $(n=0)$ sync word.
Directs that Sync word be transmitted with the data out the RS-232 Connector.

## 9-10-3 CONTINUOUS REMOTE RAW DATA

This mode differs from Section 9-10-2. This mode de-interleaves the data and performs forward error correction before presenting the data. Only slots that contain a valid CRC are displayed. The Timeslot is broken up into the various data fields and continuously transmitted out the RS-232 Connector. Following the data is a millisecond time stamp which provides relative time between slots of data.

The data is presented in hexadecimal out the RS-232 Connector with each frame of data being separated by a newline character. The data is formatted as follows:

- The first 7 characters represent the 28 bits of the SYNC word.
- The next 3 characters are the hexadecimal value of the 12 bits of the Coded Superframe Phase (CSFP).
- The next 6 characters are the hexadecimal value (left justified) of the 22 bits of the Shared Channel Feedback (SCF).
- The next 32 characters are the hexadecimal value (left justified) of the 125 bits of data.
- The data is followed by a CRC check flag, $1=\operatorname{good}, 0=$ bad.
- The flag is followed by a millisecond time stamp.

The following TMAC commands are used to start and stop this operation.

## FDCCH:REMote:RAW:

## STARt

[FDCCH:REMote:RAW:STARt]
Starts sending the received, de-interleaved and decoded data out RS-232 Connector.

## STOP

[FDCCH:REMote:RAW:STOP]
Stops sending the received data out RS-232 Connector.
DVCC $n$
[FDCCH:REMote:RAW:DVCC n]
Specifies Digital Verification Color Code. Range of $n$ is 1 to 255.
A DVCC, which is used when calculating the CRC, must be specified to decode the message.

An embedded macro named FRAW initiates the START when executed and sends a STOP when any key on the RS-232 terminal is pressed. To use this macro, type in the command FRAW at the RS-232 terminal.

## 9-10-4 BUFFERED RAW DATA

The FDCCH Raw Data commands consist of the TMAC commands used for Layer 1 raw data buffering. Up to 100 frames of raw data can be captured. (Similar to FOCC raw data TMAC commands.) The following commands are used for this operation.

## FDCCH:RAW:

## STARt

[FDCCH:RAW:STARt]
Starts capturing raw data on FDCCH.

## STOP

[FDCCH:RAW:STOP]
Stops capturing raw data on FDCCH.
STOP occurs automatically when the buffer is full.

## FULL?

[FDCCH:RAW:FULL?]
Returns current state of raw buffer: $1=$ full, $0=$ not full.
SYNC? $n$
[FDCCH:RAW:SYNC?n]
Returns current value of Sync word (22 bit value) in selected raw data frame ( $n$ ). Range of $n$ is 0 to 99 .

SCF? $n$
[FDCCH:RAW:SCF?n]
Returns current value of Shared Channel Feedback (22 bit value) in selected raw data frame. Range of $n$ is 0 to 99 .

CSFP? $n$
[FDCCH:RAW:CSFP? n]
Returns the Coded Super Frame Phase (12 bit value) in the selected raw data frame ( $n$ ).
Range of $n$ is 0 to 99 .
DATA? $n, x$
[FDCCH:RAW:DATA? n, x]
Returns the 16 bit value of the selected raw data byte $(x)$ in the selected raw data frame ( $n$ ). Range of $n$ is 0 to 99 ; range of $x$ is 0 to 15 .

TS? $n$
[FDCCH:RAW:TS? n]
Returns the Time Stamp (in milliseconds) (32 bit value) of selected raw data frame ( $n$ ). Range of $n$ is 0 to 99 .

## 9-10-5 LAYER 2 DATA MONITOR

The FDCCH Layer 2 Data Monitor consists of the TMAC commands necessary to decode a Layer 2 message. Up to 100 frames can be captured into a buffer for non real-time decoding into Layer 2 data fields.
The process of decoding FDCCH data into Layer 2 consists of two steps:

1. Use the FDCCH Buffered Raw Data commands defined in Section 9-10-4 to capture 100 words into the raw data buffer.
2. Select one frame of raw data from the Raw Buffer and decode the frame into Layer 2 fields.

## FDCCH:LAYER2:

DECode $n$
[FDCCH:LAYER2:DECode n]
Decodes the frame of data in selected raw buffer ( $n$ ). Range of $n$ is 0 to 99 .
TYPE?
[FDCCH:LAYER2:TYPE?]
Returns value of the type of data in the frame that had been previously decoded.

| VALUE | TYPE |
| :---: | :--- |
| 1 | F-BCCH |
| 2 | E-BCCH |
| 3 | SPACH |
| 4 | S-BCCH |
| 5 | RESERVED |

The specific commands used to access the Layer 2 data fields are determined by the TYPE of data.

The following commands are used to access the Layer 2 data fields when TYPE of data is FBCCH:

## FDCCH:LAYER2:

FBCCH:
BC?
[FDCCH:LAYER2:FBCCH:BC?]
Returns current state of Begin/Continue ( 1 bit value). Returns - 1 if not available.
BI? $n$
[FDCCH:LAYER2:FBCCH:BI? n]
Returns current state of Begin Indicator (1 bit value) selected by $n$. Returns -1 if not available. The range of $n$ is 0 to 3 .

A Begin Indicator may follow any of the four Layer 3 data fields.

## CLI?

[FDCCH:LAYER2:FBCCH:CLI?]
Returns current value of Continuation Length Indicator (7 bit value). Returns - 1 if not available.

$$
\text { CLI indicates length of first block of Layer } 3 \text { data in a continuation frame. }
$$

## CRC?

[FDCCH:LAYER2:FBCCH:CRC?]
Returns current value of Cyclic Redundancy Code (16 bit value). Returns -1 if not available.

## EC?

[FDCCH:LAYER2:FBCCH:EC?]
Returns current state of E-BCCH Change (1 bit value). Returns - 1 if not available.

## FC?

[FDCCH:LAYER2:FBCCH:FC?]
Returns current state of $\mathrm{F}-\mathrm{BCCH}$ Change ( 1 bit value). Returns -1 if not available.
L3DATA? $n, x$
[FDCCH:LAYER2:FBCCH:L3DATA? n, X]
Returns the 8 bit value of the selected byte ( $x$ ) of the selected Layer 3 data message ( $n$ ). Returns -1 if not available. Range of $n$ is 0 to 3 ; range of $x$ is 0 to 15 .
The number of Layer 3 data messages embedded within a Layer 2 frame can be anywhere from a portion of single data message to 4 full data messages. The maximum number of bytes in a Layer 2 frame is 16 bytes.

The L3LI and CLI may be used to determine the number of 8 bit "words" in a Layer 3 message.

FDCCH:LAYER2:
FBCCH:
L3LI? $n$
[FDCCH:LAYER2:FBCCH:L3LI? n]
Returns one of four Layer 3 Length Indicators ( 8 bit value). Returns -1 if not available. Range of $n$ is 0 to 3 .

If returned from a continuation frame, the range of $n$ is 1 to 3 because the length of the first block of Layer 3 data is specified by CLI.

The following commands are used to access the Layer 2 data fields when TYPE of data is E-BCCH:

FDCCH:LAYER2:
EBCCH:
$B C ?$
[FDCCH:LAYER2:EBCCH:BC?]
Returns current state of Begin/Continue (1 bit value). Returns -1 if not available.
Bl? $n$
[FDCCH:LAYER2:EBCCH:BI?n]
Returns current state of Begin Indicator (1 bit value) selected by $n$. Returns - 1 if not available. The range of $n$ is 0 to 3 .

A Begin Indicator may follow any of the four Layer 3 data fields.

CLI?
[FDCCH:LAYER2:EBCCH:CLI?]
Returns current value of Continuation Length Indicator (7 bit value). Returns -1 if not available.

CLI specifies length of first block of Layer 3 data in a continuation frame.

## CRC?

[FDCCH:LAYER2:EBCCH:CRC?]
Returns current value of Cyclic Redundancy Code (16 bit value). Returns -1 if not available.

## ECL?

[FDCCH:LAYER2:EBCCH:ECL?]
Returns current value of E-BCCH Cycle Length ( 8 bit value). Returns -1 if not available.

## FDCCH:LAYER2:

## EBCCH:

## L3DATA? n.x

[FDCCH:LAYER2:EBCCH:L3DATA? n,x]
Returns the 8 bit value of the selected byte $(x)$ of the selected Layer 3 data message ( $n$ ). Returns - 1 if not available. Range of $n$ is 0 to 3 ; range of $x$ is 0 to 15 .

The number of Layer 3 data messages embedded within a Layer 2 frame can consist of a portion of a single data message on up to 4 full data messages. The maximum number of bytes in a Layer 2 frame is 16 bytes. The data returned is left justified.

The L3LI and CLI may be used to determine the number of 8 bit "words" in a Layer 3 message.

L3LI? $n$
[FDCCH:LAYER2:EBCCH:L3LI? n]
Returns one of four Layer 3 Length Indicators (8 bit value). Returns -1 if not available. Range of $n$ is 0 to 3 .

If returned from a continuation frame, the range of $n$ is 1 to 3 because the length of the first block of Layer 3 data is specified by CLI.

## RSVD?

[FDCCH:LAYER2:EBCCH:RSVD?]
Returns current state of E-BCCH Layer 2 Reserved (1 bit value). Returns -1 if not available.

The following commands are used to access the Layer 2 data fields when TYPE of data is SPACH:

FDCCH:LAYER2:

## SPACH:

## ARM?

[FDCCH:LAYER2:SPACH:ARM?]
Returns current state of ARQ Response Mode (1 bit value). Returns -1 if not available.
ARQ_RSVD?
[FDCCH:LAYER2:SPACH:ARQ_RSVD?]
Returns current value of ARQ Layer 2 frame RSVD (2 bit value). Returns -1 if not available.

## BCN?

[FDCCH:LAYER2:SPACH:BCN?]
Returns current state of BCCH Change Notification (1 bit value). Returns -1 if not available.

## BT?

[FDCCH:LAYER2:SPACH:BT?]
Returns current value of Burst Type ( 3 bit value). Returns -1 if not available.
BU?
[FDCCH:LAYER2:SPACH:BU?]
Returns current value of Burst Usage (3 bit value). Returns -1 if not available.
CRC?
[FDCCH:LAYER2:SPACH:CRC?]
Returns current value of Cyclic Redundancy Code (16 bit value). Returns -1 if not available.

## EH_RSVD?

[FDC̄CH:LAYER2:SPACH:EH_RSVD?]
Returns current state of Extended Header RSVD (1 bit value). Returns -1 if not available.
FRNO?
[FDCCH:LAYER2:SPACH:FRNO?]
Returns current value of Frame Number ( 5 bit value). Returns -1 if not available.

## GA?

[FDCCH:LAYER2:SPACH:GA?]
Returns current state of Go Away (1 bit value). Returns - 1 if not available.

## HA_RSVD?

[FD $\left.\bar{C} C H: L A Y E R 2: S P A C H: H A \_R S V D ?\right] ~$
Returns SPACH Header A_RSVD field setting (1 bit value). Returns -1 if not available.
IDT?
[FDCCH:LAYER2:SPACH:IDT?]
Returns current value of Identity Type (2 bit value). Returns - 1 if not available.

## FDCCH:LAYER2:

## SPACH:

L3DATA? $n, x$
[FDCCH:LAYER2:SPACH:L3DATA? $n, x$ ]
Returns the 8 bit value of the selected byte $(x)$ of the selected Layer 3 Data message ( $n$ ). Returns -1 if not available. Range of $n$ is 0 to 3 ; range of $x$ is 0 to 15 .

The number of Layer 3 data messages embedded within a Layer 2 frame can consist of a portion of a single data message on up to 4 full data messages. The maximum number of bytes in a Layer 2 frame is 16 bytes. The data returned is left justified.

The L3LENGTH command may be used to determine how many 8 bit "words" make up the Layer 3 data field in the frame currently being decoded.

## L3LENGTH? $n$

[FDCCH:LAYER2:SPACH:L3LENGTH? n]
Returns current value of Layer 3 data field length ( 8 bit value) selected by $n$. Returns -1 if not available. Range of $n$ is 0 to 3 .
This is the length of the Layer 3 data field in the SPACH Layer 2 frame currently being decoded.

This is necessary because the L3LIs are all contained in the first frame of a multiframe SPACH message and subsequent frames do not have the information specifying the length of the Layer 3 data field.

## L3LI? $n$

## [FDCCH:LAYER2:SPACH:L3LI? n]

Returns current value of Layer 3 Length Indicator ( 8 bit value) selected by $n$. Returns -1 if not available. Range of $n$ is 0 to 3 .

A SPACH Layer 2 frame may contain up to four Layer 3 Length Indicators.

## MEA?

[FDCCH:LAYER2:SPACH:MEA?]
Returns current value of Message Encryption Mode (2 bit value). Returns - 1 if not available.

## MEK?

[FDCCH:LAYER2:SPACH:MEK?]
Returns current value of Message Encryption Key (2 bit value). Returns - 1 if not available.

## MM?

[FDCCH:LAYER2:SPACH:MM?]
Returns current state of Message Mapping (1 bit value). Returns - 1 if not available.

## FDCCH:LAYER2:

## SPACH:

MSID:
LS? $n$
[FDCCH:LAYER2:SPACH:MSID:LS?n]
Returns the 32 Least Significant bits of Mobile Station Identification selected by $n$. Range of $n$ is 0 to 4 .

MS? $n$
[FDCCH:LAYER2:SPACH:MSID:MS? n]
Returns the 18 Most Significant bits of Mobile Station Identification selected by $n$.
Range of $n$ is 0 to 4 .
MSID? $n, x$
[FDCCH:LAYER2:SPACH:MSID? n, X]
Returns the 8 bit value of selected byte ( $x$ ) of the selected Mobile Station Identity ( $n$ ).
Returns -1 if not available. Range of $n$ is 0 to 4 ; range of $x$ is 0 to 2, 4 or 6 .
A Layer 2 frame may contain up to 5 mobile station identities. Each MSID is 20, 24, 34 or 50 bits long and is accessed 8 bits at a time with this command. The data returned is left justified.

## PCON?

[FDCCH:LAYER2:SPACH:PCON?]
Returns current state of PCH Continuation (1 bit value). Returns -1 if not available.

## PEA?

[FDCCH:LAYER2:SPACH:PEA?]
Returns current value of Partial Echo Assigned ( 7 bit value). Returns -1 if not available.
PFM?
[FDCCH:LAYER2:SPACH:PFM?]
Returns current state of Paging Frame Modifier (1 bit value). Returns -1 if not available.

## PI?

[FDCCH:LAYER2:SPACH:PI?]
Returns current state of Polling Indicator (1 bit value). Returns -1 if not available.

## SRM?

[FDCCH:LAYER2:SPACH:SRM?]
Returns current state of SPACH Response Mode (1 bit value). Returns - 1 if not available.

## FDCCH:LAYER2:

## SPACH:

UGID:
LS?
[FDCCH:LAYER2:SPACH:UGID:LS?]
Returns the 32 Least Significant bits of User Group Identification.

## MS?

[FDCCH:LAYER2:SPACH:UGID:MS?]
Returns the 18 Most Significant bits of User Group Identification.
UGID? $n, x$
[FDCCH:LAYER2:SPACH:UGID? $n, x]$
Returns the 8 bit value of the selected byte $(x)$ of the selected User Group Identity ( $n$ ).
Returns -1 if not available. Range of $n$ is 0 to 4 ; range of $x$ is 0 to 2,4 or 6 .
Each UGID is $20,24,34$ or 50 bits long and is accessed 8 bits at a time with this command. The data returned is left justified

## 9-10-6 FDCCH REAL TIME DATA MONITOR

In this mode of operation, the data returned is the last data decoded for that data field. Once a data field item is returned, -1 is returned until a new value for that data field is decoded.

Issue setup commands (9-10-1) prior to utilizing the commands this section.
A. Layer 1 Data

With the exception of the first two, the following TMAC commands return the data fields defined on the physical layer.

## FDCCH:

## STARt

[FDCCH:STARt]
Starts background task which decodes Forward Digital Control Channel data. Decoded data is stored internally by the Sp Tst and returned by query commands in this section.

STOP
[FDCCH:STOP]
Stops decoding the FDCCH.

## BRI?

[FDCCH:BRI?]
Returns the value of the last decoded Busy/Reserved/Idle ( 6 bit value). Returns -1 if already returned or not available.

## CPE?

[FDCCH:CPE?]
Returns the value of the last decoded Coded Partial Echo (11 bit value). Returns -1 if already returned or not available.

## CRC?

[FDCCH:CRC?]
Returns the value of the last decoded CRC (16 bit value). Returns -1 if already returned or not available.

## CSFP?

[FDCCH:CSFP?]
Returns the value of the last decoded Coded Super Frame Phase (12 bit value).
Returns - 1 if already returned or not available.
R_N?
[FDCCH:R_N?]
Returns the value of the last decoded Received/Not received (5 bit value).
Returns -1 if already returned or not available.

## SCF?

[FDCCH:SCF?]
Returns the value of the last decoded Share Channel Feedback (22 bit value). Returns -1 if already returned or not available.

## FDCCH:

## SYNC?

[FDCCH:SYNC?]
Returns the value of the last decoded sync word (28 bit value). Returns -1 if already returned or not available.

TYPE?
[FDCCH:TYPE?]
Returns value of the type of data of the last decoded frame. Returns -1 if already returned or not available. This command returns the following values:

| VALUE | TYPE |
| :---: | :--- |
| 1 | F-BCCH |
| 2 | E-BCCH |
| 3 | SPACH |
| 4 | S-BCCH |
| 5 | RESERVED |

B. F-BCCH Frames

The next set of commands return data from the $\mathrm{F}-\mathrm{BCCH}$ frames.

## FDCCH:

## FBCCH:

## BC?

[FDCCH:FBCCH:BC?]
Returns the last decoded value of Begin/Continue (1 bit value). Returns -1 if already returned or not available.

FC?
[FDCCH:FBCCH:FC?]
Returns the last decoded value of F-BCCH Change (1 bit value). Returns - 1 if already returned or not available.

## EC?

[FDCCH:FBCCH:EC?]
Returns the last decoded value of E-BCCH Change (1 bit value). Returns-1 if already returned or not available.

## CLI?

[FDCCH:FBCCH:CLI?]
Returns the last decoded value of Continuation Length Indicator ( 7 bit value).
Returns - 1 if already returned or not available.

## L3LI?

[FDCCH:FBCCH:L3LI?]
Returns the last decoded value of Layer 3 Length Indicator ( 8 bit value). Returns -1 if already returned or not available.

## BI?

[FDCCH:FBCCH:BI?]
Returns the last decoded value of Begin Indicator (1 bit value). Returns - 1 if already returned or not available.

## PD?

[FDCCH:FBCCH:PD?]
Returns the last decoded value of Protocol Discriminator (2 bit value). Returns - 1 if already returned or not available.

MSGtype?
[FDCCH:FBCCH:MSGtype?]
Returns the last decoded Message Type. Returns -1 if already returned or not available. This command returns the following valid message types:

| ACCESS PARAM | BSMC | DCCH STRUCT | MACA |
| :--- | :--- | :--- | :--- |
| MACA (MULTI) | OLC | REG PARAM | SELECT PARAM |
| SERVICE MENU | SOC | SOC BSMCID | SYSID |

## FDCCH:

## FBCCH:

## NUMber:

FBCCH ?
[FDCCH:FBCCH:NUMber:FBCCH?]
Returns the last decoded value of Number of F-BCCH (3 bit value). Returns -1 if already returned or not available.

EBCCH?
[FDCCH:FBCCH:NUMber:EBCCH?]
Returns the last decoded value of Number of E-BCCH (3 bit value). Returns - 1 if already returned or not available.

## SBCCH?

[FDCCH:FBCCH:NUMber:SBCCH?]
Returns the last decoded value of Number of S-BCCH (4 bit value). Returns - 1 if already returned or not available.

## REServed?

[FDCCH:FBCCH:NUMber:REServed?]
Returns the last decoded value of Number of Reserved Slots (3 bit value). Returns - 1 if already returned or not available.

## NON PCH?

[FDCCH:FBCCH:NUMber:NON_PCH?]
Returns the last decoded value of Number of Non-PCH Subchannel Slots (2 bit value). Returns - 1 if already returned or not available.

## HYPERframe?

[FDCCH:FBCCH:HYPERframe?]
Returns the last decoded value of Hyperframe Counter (4 bit value). Returns -1 if already returned or not available.

## EXTended:

PT?
[FDCCH:FBCCH:EXTended:PT?]
Returns the last decoded value of Extended Hyperframe Counter Parameter Type. Returns - 1 if already returned or not available

## COUNT?

[FDCCH:FBCCH:EXTended:COUNt?]
Returns the last decoded value of Extended Hyperframe Counter (4 bit value). Returns - 1 if already returned or not available.

## SUPERframe?

[FDCCH:FBCCH:SUPERframe?]
Returns the last decoded value of Primary Superframe indicator (1 bit value).
Returns - 1 if already returned or not available.

## FDCCH:

## FBCCH:

## CONfiguration?

[FDCCH:FBCCH:CONfiguration?]
Returns the last decoded value of Slot Configuration (2 bit value). Returns -1 if already returned or not available.

DVCC?
[FDCCH:FBCCH:DVCC?]
Returns the last decoded value of Digital Verification Color Code (8 bit value). Returns - 1 if already returned or not available.

PFC?
[FDCCH:FBCCH:PFC?]
Returns the last decoded value of Maximum Supported PFC (Paging Frame Class) (3 bit value). Returns - 1 if already returned or not available.

PCH ?
[FDCCH:FBCCH:PCH?]
Returns the last decoded value of PCH (Paging Channel) Displacement (3 bit value). Returns - 1 if already returned or not available.

PFM?
[FDCCH:FBCCH:PFM?]
Returns the last decoded value of PFM (Paging Frame Modifier) Direction (1 bit value). Returns - 1 if already returned or not available.

## CBN:

PT?
[FDCCH:FBCCH:CBN:PT?]
Returns the last decoded value of CBN High Parameter Type (4 bit value). Returns - 1 if already returned or not available.

HIGH?
[FDCCH:FBCCH:CBN:HIGH?]
Returns the last decoded value of CBN_High (16 bit value). Returns - 1 if already returned or not available.

## FDCCH:

FBCCH :

## NONPublic:

## PROBability:

## PT?

[FDCCH:FBCCH:NONPublic:PROBability:PT?]
Returns the last decoded value of Non-Public Probability Block Parameter
Type ( 4 bit value). Returns - 1 if already returned or not available.

## LENGth?

[FDCCH:FBCCH:NONPublic:PROBability:LENGth?]
Returns the last decoded value of Non-Public Map Length (4 bit value).
Returns -1 if already returned or not available.

## BLOCK?

[FDCCH:FBCCH:NONPublic:PROBability:BLOCk?]
Returns the last decoded value of Non-Public Block Map (1 to 16 bit value).
Returns -1 if already returned or not available.

## REGistration:

## PT?

[FDCCH:FBCCH:NONPublic:REGistration:PT?]
Returns the last decoded value of Non-Public Registration Control Parameter Type ( 4 bit value). Returns -1 if already returned or not available.

CONTrol?
[FDCCH:FBCCH:NONPublic:REGistration:CONTrol?]
Returns the last decoded value of Non-Public Registration Control (2 bit value). Returns - 1 if already returned or not available.

AUTH?
[FDCCH:FBCCH:AUTH?]
Returns the last decoded value of AUTH (1 bit value). Returns -1 if already returned or not available.

## S?

[FDCCH:FBCCH:S?]
Returns the last decoded value of $S$ (1 bit value). Returns - 1 if already returned or not available.

RAND?
[FDCCH:FBCCH:RAND?]
Returns the last decoded value of RAND (32 bit value). Returns - 1 if already returned or not available.

## FDCCH:

## $\mathrm{FBCCH}:$

## ACCess:

## BURSTsize?

[FDCCH:FBCCH:ACCess:BURSTsize?]
Returns the last decoded value of Access Burst Size (1 bit value). Returns -1 if already returned or not available.

MS_PWR?
[FDCCH:FBCCH:ACCess:MS_PWR?]
Returns the last decoded value of MS_ACC_PWR (Mobile Station Access Power) ( 4 bit value). Returns -1 if already returned or not available.

RSS_MIN?
[FDCCH:FBCCH:ACCess:RSS_MIN?]
Returns the last decoded value of RSS_ACC_MIN (Minimum Access Received
Signal Strength) (5 bit value). Returns -1 if already returned or not available.

## MAX:

## RETries?

[FDCCH:FBCCH:MAX:RETries?]
Returns the last decoded value of Max Retries (3 bit value). Returns -1 if already returned or not available.

## BUSY?

[FDCCH:FBCCH:MAX:BUSY?]
Returns the last decoded value of Max Busy/Reserved (1 bit value). Returns - 1 if already returned or not available.

## REPetitions?

[FDCCH:FBCCH:MAX:REPetitions?]
Returns the last decoded value of Max Repetitions (2 bit value). Returns -1 if already returned or not available.

## STOP?

[FDCCH:FBCCH:MAX:STOP?]
Returns the last decoded value of Max Stop Counter (1 bit value). Returns - 1 if already returned or not available.

## RDATA:LENGth?

[FDCCH:FBCCH:RDATA:LENGth?]
Returns the last decoded value of R-DATA Message Length (3 bit value). Returns -1 if already returned or not available.

## BARred?

[FDCCH:FBCCH:BARred?]
Returns the last decoded value of Cell Barred (5 bit value). Returns - 1 if already returned or not available.

## FDCCH:

## FBCCH:

## SUBaddressing?

[FDCCH:FBCCH:SUBaddressing?]
Returns the last decoded value of Subaddressing Support (1 bit value). Returns - 1 if already returned or not available.

## DIC?

[FDCCH:FBCCH:DIC?]
Returns the last decoded value of Delay Interval Compensation Mode (1 bit value). Returns - 1 if already returned or not available.

SS_SUFF?
[FDCCH:FBCCH:SS_SUFF?]
Returns the last decoded value of SS_SUFF (Signal Strength Sufficient) (5 bit value). Returns -1 if already returned or not available.

SCAN:

## INTerval?

[FDCCH:FBCCH:SCAN:INTerval?]
Returns the last decoded value of SCANINTERVAL (4 bit value). Returns - 1 if already returned or not available.

OPTion?
[FDCCH:FBCCH:SCAN:OPTIOn?]
Returns the last decoded value of Scanning Option Indicator (1 bit value).
Returns - 1 if already returned or not available.

## INITial?

[FDCCH:FBCCH:INITial?]
Returns the last decoded value of Initial Selection Control (1 bit value). Returns -1 if already returned or not available.

## DELay?

[FDCCH:FBCCH:DELay?]
Returns the last decoded value of DELAY (4 bit value). Returns - 1 if already returned or not available.

## ADDitional:

PT?
[FDCCH:FBCCH:ADDitional:PT?]
Returns the last decoded value of Additional DCCH Information Parameter Type ( 4 bit value). Returns -1 if already returned or not available.

NUMBer? -or- NUM?
[FDCCH:FBCCH:ADDitional:NUMBer?]
Returns the last decoded value of Number of Additional DCCH Channels (3 bit value). Returns - 1 if already returned or not available.

## FDCCH:

FBCCH:

## ADDitional:

CHANnel? $n$
[FDCCH:FBCCH:ADDitional:CHANnel? n]
Returns the last decoded value of Additional DCCH Channel Information (11 bit value) selected by $n$. Up to 8 instances can be returned. Range of $n$ is 0 to 7 . Returns - 1 if already returned or not available.

SLOT? $n$
[FDCCH:FBCCH:ADDitional:SLOT?n]
Returns the last decoded value of Additional Slot Information (2 bit value) selected by $n$. Up to 8 instances can be returned. Range of $n$ is 0 to 7. Returns -1 if already returned or not available.

## REGH?

[FDCCH:FBCCH:REGH?]
Returns the last decoded value of REGH (1 bit value). Returns - 1 if already returned or not available.

## REGR?

[FDCCH:FBCCH:REGR?]
Returns the last decoded value of REGR (1 bit value). Returns - 1 if already returned or not available.

## PUREG?

[FDCCH:FBCCH:PUREG?]
Returns the last decoded value of PUREG (1 bit value). Returns -1 if already returned or not available.

## PDREG?

[FDCCH:FBCCH:PDREG?]
Returns the last decoded value of PDREG (1 bit value). Returns -1 if already returned or not available.

## SYREG?

[FDCCH:FBCCH:SYREG?]
Returns the last decoded value of SYREG (1 bit value). Returns - 1 if already returned or not available.

LAREG?
[FDCCH:FBCCH:LAREG?]
Returns the last decoded value of LAREG (1 bit value). Returns - 1 if already returned or not available.

## DEREG?

[FDCCH:FBCCH:DEREG?]
Returns the last decoded value of DEREG (1 bit value). Returns - 1 if already returned or not available.

## FDCCH:

FBCCH:
FOREG?
[FDCCH:FBCCH:FOREG?]
Returns the last decoded value of FOREG (1 bit value). Returns -1 if already returned or not available.

CAPability?
[FDCCH:FBCCH:CAPability?]
Returns the last decoded value of Capability Request (1 bit value). Returns - 1 if already returned or not available.

## RNUM:

PT?
[FDCCH:FBCCH:RNUM:PT?]
Returns the last decoded value of Present RNUM Parameter Type (4 bit value). Returns - 1 if already returned or not available.

## NUMBer? -or- NUM?

[FDCCH:FBCCH:RNUM:NUMBer?]
Returns the last decoded value of Present RNUM (10 bit value). Returns -1 if already returned or not available.

## REGistration:

## PT?

[FDCCH:FBCCH:REGistration:PT?]
Returns the last decoded value of Registration Period Parameter Type (4 bit value). Returns - 1 if already returned or not available.

PERiod?
[FDCCH:FBCCH:REGistration:PERiod?]
Returns the last decoded value of REGPER (Registration Period) (9 bit value). Returns - 1 if already returned or not available.

## REGID:

PT?
[FDCCH:FBCCH:REGID:PT?]
Returns the last decoded value of REGID Parameter Type (4 bit value).
Returns -1 if already returned or not available.
ID?
[FDCCH:FBCCH:REGID:ID?]
Returns the last decoded value of REGID (20 bit value). Returns - 1 if already returned or not available.

## PER?

[FDCCH:FBCCH:REGID:PER?]
Returns the last decoded value of REGID PER (Registration ID Period) (4 bit value). Returns - 1 if already returned or not available.

## FDCCH:

## FBCCH:

## SID?

[FDCCH:FBCCH:SID?]
Returns the last decoded value of SID (System Identification) (15 bit value).
Returns - 1 if already returned or not available.

## NETwork?

[FDCCH:FBCCH:NETwork?]
Returns the last decoded value of Network Type (3 bit value). Returns - 1 if already returned or not available.

PROTocol?
[FDCCH:FBCCH:PROTocol?]
Returns the last decoded value of Protocol Version (4 bit value). Returns -1 if already returned or not available.

## PSID_RSID:

PT?
[FDCCH:FBCCH:PSID_RSID:PT?]
Returns the last decoded value of PSID/RSID Set Parameter Type (4 bit value).
Returns -1 if already returned or not available.

## SOC?

[FDCCH:FBCCH:PSID_RSID:SOC?]
Returns the last decoded value of PSID/RSID SOC (12 bit value). Returns -1 if already returned or not available.

## NUMBer? -or- NUM?

[FDCCH:FBCCH:PSID_RSID:NUMBer?]
Returns the last decoded value of Number of PSID/RSID (4 bit value).
Returns -1 if already returned or not available.
TYPE? $n$
[FDCCH:FBCCH:PSID RSID:TYPE?n]
Returns the last decoded state of TYPE (1 bit value) of PSID/RSID. Range of $n$ is 0 to 15 .

VALUE? $n$
[FDCCH:FBCCH:PSID_RSID:VALUE?n]
Returns the last decoded value of VALUE (16 bit value) of PSID/RSID. Range of $n$ is 0 to 15.

## FDCCH:

## FBCCH :

## MCC:

PT?
[FDCCH:FBCCH:MCC:PT?]
Returns the last decoded value of Mobile Country Code Parameter Type (4 bit value). Returns - 1 if already returned or not available.

## CODE?

[FDCCH:FBCCH:MCC:CODE?]
Returns the last decoded value of Mobile Country Code (10 bit value). Returns - 1 if already returned or not available.

## ALPHA:SID:

PT?
[FDCCH:FBCCH:ALPHA:SID:PT?]
Returns the last decoded value of Alphanumeric SID Parameter Type ( 4 bit value). Returns - 1 if already returned or not available.

LENGth?
[FDCCH:FBCCH:ALPHA:SID:LENGth?]
Returns the last decoded value of Length of Alphanumeric System ID (8 bit value). Returns -1 if already returned or not available.

CHARacters?
[FDCCH:FBCCH:ALPHA:SID:CHARacters?]
Returns the selected last decoded value of Alphanumeric SID (ASCII String). Returns - 1 if already returned or not available.

## BSMC?

[FDCCH:FBCCH:BSMC?]
Returns the last decoded value of BSMC (Base Station Manufacture Code) (8 bit value). Returns -1 if already returned or not available.

## CUSTOM:

LENGth?
[FDCCH:FBCCH:CUSTOM:LENGth?]
Returns the last decoded value of the Length of the Custom Control ( 8 bit value) in octets. Returns or -1 if already returned or not available.

CONTrol? $n$
[FDCCH:FBCCH:CUSTOM:CONTrol? n]
Returns the last decoded value of Custom Control ( 8 bit value) selected by $n$. Up to 256 instances can be returned. Range of $n$ is 0 to 255,

[^0]
## FDCCH:

## FBCCH:

## MACA:

STATus?
[FDCCH:FBCCH:MACA:STATus?]
Returns the last decoded value of MACA_STATUS (2 bit value). Returns - 1 if already returned or not available.

## TYPE?

[FDCCH:FBCCH:MACA:TYPE?]
Returns the last decoded value of MACA_TYPE (4 bit value). Returns -1 if already returned or not available.

## EIGHT:

PT?
[FDCCH:FBCCH:MACA:EIGHT:PT?]
Returns the last decoded value of MACA_8_CONTROL Parameter Type (4 bit value). Returns - 1 if already returned or not available.

## CONTrol?

[FDCCH:FBCCH:MACA:EIGHT:CONTrol?]
Returns the last decoded value of MACA_8_CONTROL (1 bit value).
Returns - 1 if already returned or not available.
LIST:
PT?
[FDCCH:FBCCH:MACA:LIST:PT?]
Returns the last decoded value of MACA_LIST Parameter Type (4 bit value).
Returns - 1 if already returned or not available.

## NUMBer? -or- NUM?

[FDCCH:FBCCH:MACA:LIST:NUMBer?]
Returns the last decoded value of Number of MACA Channels ( 4 bit value).
Returns - 1 if already returned or not available.
CHAN? $n$
[FDCCH:FBCCH:MACA:LIST:CHAN?n]
Returns the last decoded value of MACA_LIST CHAN (11 bit value) selected by $n$. Up to 16 instances can be returned. Range of $n$ is 0 to 15 .

[^1]
## FDCCH:

FBCCH:
MACA:
LIST:

## OTHER:

PT?
[FDCCH:FBCCH:MACA:LIST:OTHER:PT?]
Returns the last decoded value of MACA_LIST (Other Hyperband) Parameter Type ( 4 bit value). Returns -1 if already returned or not available.

## HYPERband?

[FDCCH:FBCCH:MACA:LIST:OTHER:HYPERband?]
Returns the last decoded value of Hyperband (Other Hyperband) (2 bit value). Returns - 1 if already returned or not available.

NUMBer? -or- NUM?
[FDCCH:FBCCH:MACA:LIST:OTHER:NUMBER?]
Returns the last decoded value of Number of MACA Channels (Other Hyperband) ( 4 bit value). Returns -1 if already returned or not available.

CHAN? $n$
[FDCCH:FBCCH:MACA:LIST:OTHER:CHAN?n]
Returns the selected last decoded value of MACA_LIST (Other Hyperband) CHAN (11 bit value) selected by $n$. Up to 16 instances can be returned. Range of $n$ is 0 to 15 .

## Validity is determined by FDCCH:FBCCH:MACA:LIST:OTHER:NUMBer?.

## OLC?

[FDCCH:FBCCH:OLC?]
Returns the last decoded value of Overload Control (16 bit value). Returns - 1 if already returned or not available.

## MAP:

AUTH?
[FDCCH:FBCCH:MAP:AUTH?]
Returns the last decoded value of AUTH Map ( 6 bit value). Returns -1 if already returned or not available.

VPM?
[FDCCH:FBCCH:MAP:VPM?]
Returns the last decoded value of Voice Privacy Mode Map (4 bit value).
Returns - 1 if already returned or not available.

## FDCCH:

## FBCCH:

## MAP:

DPM?
[FDCCH:FBCCH:MAP:DPM?]
Returns the last decoded value of Data Privacy Mode Map (4 bit value). Returns -1 if already returned or not available.

## CODER?

[FDCCH:FBCCH:MAP:CODER?]
Returns the last decoded value of Voice Coder Map ( 6 bit value). Returns - 1 if already returned or not available.

## MEA:

DOMAIN?
[FDCCH:FBCCH:MAP:MEA:DOMAIN?]
Returns the last decoded value of Message Encryption Algorithm Domain Map ( 8 bit value). Returns - 1 if already returned or not available.

ALGORithms? $n$
[FDCCH:FBCCH:MAP:MEA:ALGORithms? n]
Returns the selected last decoded value of Message Encryption Algorithm ( 4 bit value) selected by $n$. Up to 8 instances can be returned. Range of $n$ is 0 to 7.

## Validity is determined by FDCCH:FBCCH:MAP:MEA:DOMAIN?

## MEK?

[FDCCH:FBCCH:MAP:MEK?]
Returns the last decoded value of Message Encryption Key Map (4 bit value).
Returns - 1 if already returned or not available.

## MENU?

[FDCCH:FBCCH:MAP:MENU?]
Returns the last decoded value of Menu Map (10 bit value). Returns - 1 if already returned or not available.

## ARQ?

[FDCCH:FBCCH:MAP:ARQ?]
Returns the last decoded value of FACCH/SACCH ARQ Map (1 bit value).
Returns - 1 if already returned or not available.
USER?
[FDCCH:FBCCH:MAP:USER?]
Returns the last decoded value of User Group Map (1 bit value). Returns -1 if already returned or not available.

## FDCCH:

FBCCH:

## MAP:

## SMS?

[FDCCH:FBCCH:MAP:SMS?]
Returns the last decoded value of SMS Map (2 bit value). Returns -1 if already returned or not available.

REG_INFO?
[FDCCH:FBCCH:MAP:REG_INFO?]
Return the last decoded value of Reg-Info Map ( 4 bit value). Returns -1 if already returned or not available.

## IRA?

[FDCCH:FBCCH:IRA?]
Returns the last decoded state of IRA Support (1 bit value). Returns -1 if already returned or not available.

## OATS?

[FDCCH:FBCCH:OATS?]
Returns the last decoded state of OATS Support (1 bit value). Returns - 1 if already returned or not available.

SOC?
[FDCCH:FBCCH:SOC?]
Returns the last decoded value of SOC (System Operator Code) (12 bit value).
Returns - 1 if already returned or not available.
ALT_SOC:
NUMBer? -or- NUM?
[FDCCH:FBCCH:ALT_SOC:NUMBer?]
Returns the last decoded value of Number of Alternate SOCs (4 bit value).
Returns - 1 if already returned or not available.
SOC? $n$
[FDCCH:FBCCH:ALT_SOC:SOC?n]
Returns the last decoded value of SOC (12 bit value) indexed by $n$. Range of $n$ is 0 to 15. Returns - 1 if already returned or not available.

MAP:PSID_RSID? $n$
[FDCCH:FBCCH:ALT_SOC:MAP:PSID_RSID?n]
Returns the last decoded value of the SOC PSID/RSID Map ( 16 bit value) indexed by $n$. Range of $n$ is 0 to 15. Returns -1 if already returned or not available.

## C. E-BCCH Frames

The following set of commands return the data fields in E-BCCH Messages.

## FDCCH:

## EBCCH:

## BC?

## [FDCCH:EBCCH:BC?]

Returns the last decoded value of Begin/Continue (1 bit value). Returns -1 if already returned or not available.

## CLI?

[FDCCH:EBCCH:CLI?]
Returns the last decoded value of Continuation Length Indicator (7 bit value).
Returns - 1 if already returned or not available.

## L3LI?

## [FDCCH:EBCCH:L3LI?]

Returns the last decoded value of Layer 3 Length Indicator (8 bit value).
Returns - 1 if already returned or not available.

## BI?

[FDCCH:EBCCH:Bl?]
Returns the last decoded value of Begin Indicator (1 bit value). Returns -1 if already returned or not available.

## ECL?

[FDCCH:EBCCH:ECL?]
Returns the last decoded value of E-BCCH Cycle Length (8 bit value). Returns -1 if already returned or not available.

## PD?

[FDCCH:EBCCH:PD?]
Returns the last decoded value of Protocol Discriminator (2 bit value). Returns -1 if already returned or not available.

## MSGtype?

[FDCCH:EBCCH:MSGtype?]
Returns the last decoded value of Message Type. Returns - 1 if already returned or not available. This command returns the following valid message types:

| ALT RCI | BSMC | EMERG INFO | MACA |
| :--- | :--- | :--- | :--- |
| NCELL (MULTI) | N INFO (MULTI) | NEIGHBOR CELL | NEIGHBOR INFO |
| RCI | SERVICE MENU | SOC | SOC BSMC ID |
| TIME DATE |  |  |  |

## SERV_SS?

[FDCCH:EBCCH:SERV_SS?]
Returns the last decoded value of SERV_SS (4 bit value). Returns - 1 if already returned or not available.

## FDCCH:

## EBCCH:

## NONPublic:PROBability:

PT?
[FDCCH:EBCCH:NONPublic:PROBability:PT?]
Returns the last decoded value of Non-Public Probability Block Parameter Type ( 4 bit value). Returns - 1 if already returned or not available.

## LENGth?

[FDCCH:EBCCH:NONPublic:PROBability:LENGth?]
Returns the last decoded value of Non-Public Probability Block Length ( 4 bit value). Returns -1 if already returned or not available.

## BLOCk?

[FDCCH:EBCCH:NONPublic:PROBability:BLOCk?]
Returns the last decoded value of Non-Public Probability Block (16 bit value). Returns - 1 if already returned or not available.

## NEIGHbor:

TDMA:
TDMA Neighbor Cells.

PT?
[FDCCH:EBCCH:NEIGHbor:TDMA:PT?]
Returns the last decoded value of Neighbor Cell List (TDMA) Parameter Type ( 4 bit value). Returns -1 if already returned or not available.

NUMBer? -or- NUM?
[FDCCH:EBCCH:NEIGHbor:TDMA:NUMBer?]
Returns the last decoded value of Number of TDMA Neighbor Cells (5 bit value). Returns -1 if already returned or not available.

## CELL:

CHAN? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:CELL:CHAN?n]
Returns the last decoded value of TDMA Neighbor Cell CHAN (11 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

PROTocol? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:CELL:PROToCOI?n]
Returns the last decoded value of TDMA Neighbor Cell Protocol Version ( 4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## FDCCH:

EBCCH :

## NEIGHbor:

## TDMA:

## CELL:

DVCC? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:CELL:DVCC? n]
Returns the last decoded value of TDMA Neighbor Cell DVCC ( 8 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23 . Returns -1 if already returned or not available.

OFFset? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:CELL:OFFset? n]
Returns the last decoded value of TDMA Neighbor Cell RESEL_OFFSET ( 7 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

## SS_SUFF? $n$

[FDCCH:EBCCH:NEIGHbor:TDMA:CELL:SS_SUFF? n]
Returns the last decoded value of TDMA Neighbor Cell SS_SUFF (5 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

DELay? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:CELL:DELay? n]
Returns the last decoded value of TDMA Neighbor Cell DELAY (4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

HL_FREQ? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:CELL:HL_FREQ? n]
Returns the last decoded value of TDMA Neighbor Cell HL_FREQ (1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23 . Returns -1 if already returned or not available.

SYNC? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:CELL:SYNC? n]
Returns the last decoded value of TDMA Neighbor Cell SYNC (1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23 . Returns - 1 if already returned or not available.

## FDCCH:

## EBCCH:

## NEIGHbor:

TDMA:
CELL:
TYPE:
CELL? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:CELL:TYPE:CELL? n]
Returns the last decoded value of TDMA Neighbor Cell CELLTYPE (2 bit value) selected by $n$. Up to 24 instances can be returned.
Range of $n$ is 0 to 23. Returns -1 if already returned or not available.
NETwork? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:CELL:TYPE:NETwork? n]
Returns the last decoded value of TDMA Neighbor Cell Network Type (3 bit value) selected by $n$. Up to 24 instances can be returned.
Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.
RETRY? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:CELL:RETRY? n]
Returns the last decoded value of TDMA Neighbor Cell Directed Retry Channel ( 1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## ACCess:

MS_PWR? $n$
[FD $\bar{C} C H: E B C C H: N E I G H b o r: T D M A: C E L L: A C C e s s: M S$ _PWR? n]
Returns the last decoded value of TDMA Neighbor Cell MS_ACC PWR ( 4 bit value) selected by $n$. Up to 24 instances can be returned.
Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.
RSS MIN? $n$
[FDC $\left.\bar{C} H: E B C C H: N E / G H b o r: T D M A: C E L L: A C C e s s: R S S \_M I N ? n\right]$
Returns the last decoded value of TDMA Neighbor Cell RSS_ACC_MIN ( 5 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

## FDCCH:

## EBCCH:

## NEIGHbor:

## TDMA:

## CELL:

## PSID_RSID:

## INDicator? $n$

[FDCCH:EBCCH:NEIGHbor:TDMA:CELL:PSID_RSID:INDicator? n]
Returns the last decoded value of TDMA Neighbor Cell PSID/RSID Indicator ( 1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

LENGth? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:CELL:PSID_RSID:LENGth?n]
Returns the last decoded value of TDMA Neighbor Cell PSID/RSID Support Length ( 4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## SUPport? $n$

[FDCCH:EBCCH:NEIGHbor:TDMA:CELL:PSID_RSID:SUPport?n]
Returns the last decoded value of TDMA Neighbor Cell PSID/RSID Support ( 16 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

## FDCCH:

## EBCCH:

## NEIGHbor:

## ANAlog:

Analog Neighbor Cells.
PT?
[FDCCH:EBCCH:NEIGHbor:ANAlog:PT?]
Returns the last decoded value of Neighbor Cell List (Analog) Parameter Type ( 4 bit value). Returns - 1 if already returned or not available.

## NUMBer? -or- NUM?

[FDCCH:EBCCH:NEIGHbor:ANAlog:NUMBer?]
Returns the last decoded value of Number of Analog Neighbor Cells (5 bit value - 0 to 23). Returns - 1 if already returned or not available.

## CELL:

CHAN? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:CELL:CHAN? n]
Returns the last decoded value of Neighbor Cell List (Analog) CHAN (11 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23 . Returns -1 if already returned or not available.

PROTocol? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:CELL:PROTocol? n]
Returns the last decoded value of Neighbor Cell List (Analog) Protocol
Version ( 4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## FDCCH:

## EBCCH:

## NEIGHbor:

## ANAlog:

CELL:
DCC? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:CELL:DCC? n]
Returns the last decoded value of Neighbor Cell List (Analog) DCC (2 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

OFFset? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:CELL:OFFset? n]
Returns the last decoded value of Neighbor Cell List (Analog)
RESEL_OFFSET ( 7 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

## SS SUFF? $n$

[FDCCH:EBCCH:NEIGHbor:ANAlog:CELL:SS_SUFF? n]
Returns the last decoded value of Neighbor Cell List (Analog) SS_SUFF ( 5 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

DELay? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:CELL:DELay? n]
Returns the last decoded value of Neighbor Cell List (Analog) DELAY ( 4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

HL_FREQ? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:CELL:HL_FREQ? n]
Returns the last decoded value of Neighbor Cell List (Analog) HL_FREQ ( 1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## TYPE:

CELL? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:CELL:TYPE:CELL?n]
Returns the last decoded value of Neighbor Cell List (Analog) CELLTYPE ( 2 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

NETwork? n
[FDCCH:EBCCH:NEIGHbor:ANAlog:CELL:TYPE:NETwork? n]
Returns the last decoded value of Neighbor Cell List (Analog) Network Type ( 3 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

## FDCCH:

## EBCCH:

## NEIGHbor:

ANAlog:

## CELL:

## RETRY? $n$

[FDCCH:EBCCH:NEIGHbor:ANAlog:CELL:RETRY? n]
Returns the last decoded value of Neighbor Cell List (Analog) Directed Retry Channel ( 1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## ACCess:

MS_PWR? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:CELL:ACCess:MS_PWR?n]
Returns the last decoded value of Neighbor Cell List (Analog)
MS_ACC_PWR (4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

RSS_MIN? $n$

Returns the last decoded value of Neighbor Cell List (Analog)
RS_ACC_MIN (5 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## FDCCH:

## EBCCH:

## NEIGHbor:

TDMA:
INFO:
PT?
[FDCCH:EBCCH:NEIGHbor:TDMA:INFO:PT?]
Returns the last decoded value of TDMA Service Info Parameter Type ( 4 bit value). Returns - 1 if already returned or not available.

COUNT?
[FDCCH:EBCCH:NEIGHbor:TDMA:INFO:COUNt?]
Returns the last decoded value of TDMA Neighbor Count (5 bit value - 0 to 23). Returns -1 if already returned or not available.

## SERVice:

## INDicator? $n$

[FDCCH:EBCCH:NEIGHbor:TDMA:INFO:SERVice:INDicator? n]
Returns the last decoded value of TDMA Service Map Indicator (1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

MAP? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:INFO:SERVice:MAP? n]
Returns the last decoded value of TDMA Service Map (10 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

## FDCCH:

## EBCCH:

## NEIGHbor:

TDMA:

## MULti:

TDMA Neighbor Cells (Multi Hyperband).

PT?
[FDCCH:EBCCH:NEIGHbor:TDMA:MULII:PT?]
Returns the last decoded value of Neighbor Cell List (TDMA) Parameter
Type ( 4 bit value). Returns -1 if already returned or not available.

## NUMBer? -or- NUM?

[FDCCH:EBCCH:NEIGHbor:TDMA:MULti:NUMBer?]
Returns the last decoded value of Number of TDMA Neighbor Cells (5 bit value). Returns - 1 if already returned or not available.

CHAN? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:MULti:CHAN? n]
Returns the last decoded value of TDMA Neighbor Cell CHAN (11 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

PROTOcol? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:MULti:PROTocol?n]
Returns the last decoded value of TDMA Neighbor Cell Protocol Version ( 4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## FDCCH:

## EBCCH:

## NEIGHbor:

## TDMA:

## MULti:

DVCC? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:MULti:DVCC? n]
Returns the last decoded value of TDMA Neighbor Cell DVCC (8 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23 . Returns - 1 if already returned or not available.

OFFset? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:MULti:OFFset? n]
Returns the last decoded value of TDMA Neighbor Cell RESEL_OFFSET ( 7 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## SS SUFF? $n$

[FDCCH:EBCCH:NEIGHbor:TDMA:MULti:SS_SUFF?n]
Returns the last decoded value of TDMA Neighbor Cell SS_SUFF ( 5 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

DELay? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:MULti:DELay? n]
Returns the last decoded value of TDMA Neighbor Cell DELAY (4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

HL_FREQ? n
[FDCCH:EBCCH:NEIGHbor:TDMA:MULTi:HL_FREQ? n]
Returns the last decoded value of TDMA Neighbor Cell HL_FREQ (1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

SYNC? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:MULTI:SYNC? n]
Returns the last decoded value of TDMA Neighbor Cell SYNC (1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23 . Returns - 1 if already returned or not available.

## FDCCH:

## EBCCH:

## NEIGHbor:

## TDMA:

## MULti:

TYPE:
CELL? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:MULIt:TYPE:CELL? n]
Returns the last decoded value of TDMA Neighbor Cell CELLTYPE (2 bit value) selected by $n$. Up to 24 instances can be returned.
Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## NETwork? $n$

[FDCCH:EBCCH:NEIGHbor:TDMA:MULti:TYPE:NETwork? n]
Returns the last decoded value of TDMA Neighbor Cell Network Type ( 3 bit value) selected by $n$. Up to 24 instances can be returned.
Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.
RETRY? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:MULti:RETRY?n]
Returns the last decoded value of TDMA Neighbor Cell Directed Retry Channel ( 1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

## ACCess:

MS PWR? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:MULTi:ACCess:MS_PWR?n]
Returns the last decoded value of TDMA Neighbor Cell MS_ACC_PWR ( 4 bit value) selected by $n$. Up to 24 instances can be returned.
Range of $n$ is 0 to 23. Returns -1 if already returned or not available.
RSS_MIN? $n$
[FDC言H:EBCCH:NEIGHbor:TDMA:MULti:ACCess:RSS_MIN? n]
Returns the last decoded value of TDMA Neighbor Cell RSS_ACC_MIN ( 5 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## FDCCH:

## EBCCH:

## NEIGHbor:

TDMA:
MULti:
PSID_RSID:
INDicator? $n$
[FDCCH:EBCCH:NEIGHbor:TDMA:MULti:PSID_RSID:INDicator? n]
Returns the last decoded value of TDMA Neighbor Cell PSID/RSID Indicator ( 1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## LENGth? n

[FDCCH:EBCCH:NEIGHbor:TDMA:MULti:PSID_RSID:LENGth? n]
Returns the last decoded value of TDMA Neighbor Cell PSID/RSID Support Length ( 4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

## SUPport? $n$

[FDCCH:EBCCH:NEIGHbor:TDMA:MULti:PSID_RSID:SUPport? n]
Returns the last decoded value of TDMA Neighbor Cell PSID/RSID Support ( 16 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## FDCCH:

## EBCCH:

## NEIGHbor:

ANAlog:
Analog Neighbor Cells

MULti:
Multi Hyperband
PT?
[FDCCH:EBCCH:NEIGHbor:ANAlog:MULti:PT?]
Returns the last decoded value of Neighbor Cell List (Analog) Parameter Type ( 4 bit value). Returns - 1 if already returned or not available.

## NUMBer? -or- NUM?

[FDCCH:EBCCH:NEIGHbor:ANAlog:MULti:NUMBer?]
Returns the last decoded value of Number of Analog Neighbor Cells ( 5 bit value - 0 to 23). Returns - 1 if already returned or not available.

CHAN? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:MULti:CHAN?n]
Returns the last decoded value of Neighbor Cell List (Analog) CHAN (11 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

PROTocol? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:MULti:PROTOCol? n]
Returns the last decoded value of Neighbor Cell List (Analog) Protocol Version (4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## FDCCH:

EBCCH:

## NEIGHbor:

ANAlog:

## MULti:

DCC? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:MULti:DCC? n]
Returns the last decoded value of Neighbor Cell List (Analog) DCC (2 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23 . Returns -1 if already returned or not available.

OFFset? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:MULti:OFFset? n]
Returns the last decoded value of Neighbor Cell List (Analog) RESEL_OFFSET ( 7 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## SS_SUFF? $n$

[FDCCH:EBCCH:NEIGHbor:ANAlog:MULti:SS_SUFF? n]
Returns the last decoded value of Neighbor Cell List (Analog) SS_SUFF ( 5 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## DELay? $n$

[FDCCH:EBCCH:NEIGHbor:ANAlog:MULti:DELay? n]
Returns the last decoded value of Neighbor Cell List (Analog) DELAY ( 4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## HL_FREQ? $n$

[FDCCH:EBCCH:NEIGHbor:ANAIog:MULti:HL_FREQ? n]
Returns the last decoded value of Neighbor Cell List (Analog) HL_FREQ (1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## TYPE:

CELL? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:MULti:TYPE:CELL? n]
Returns the last decoded value of Neighbor Cell List (Analog)
CELLTYPE (2 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

NETwork? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:MULti:TYPE:NETwork? n]
Returns the last decoded value of Neighbor Cell List (Analog) Network Type ( 3 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## FDCCH:

## EBCCH:

## NEIGHbor:

## ANAlog:

## muLti:

RETRY? $n$
[FDCCH:EBCCH:NEIGHbor:ANAlog:MULti:RETRY? n]
Returns the last decoded value of Neighbor Cell List (Analog) Directed Retry Channel (1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## ACCess:

MS_PWR? $n$
[FDC̄CH:EBCCH:NEIGHbor:ANAlog:MULti:ACCess:MS_PWR? n]
Returns the last decoded value of Neighbor Cell List (Analog)
MS_ACC_PWR (4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

RSS_MIN? $n$
[FDC $\left.\left.\bar{C} H: E B C C H: N E I G H b o r: A N A l o g: M U L t i: A C C e s s: R S S \_M I N ? n\right] ~\right] ~$
Returns the last decoded value of Neighbor Cell List (Analog)
RS_ACC_MIN ( 5 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23 . Returns -1 if already returned or not available.

## OTHER:

Other Hyperband Neighbor Cells.

## PT?

[FDCCH:EBCCH:NEIGHbor:OTHER:PT?]
Returns the last decoded value of Neighbor Cell List (Other Hyperband)
Parameter Type ( 4 bit value). Returns -1 if already returned or not available.

## HYPERband?

[FDCCH:EBCCH:NEIGHbor:OTHER:HYPERband?]
Returns the last decoded value of Neighbor Cell List (Other Hyperband)
Hyperband ( 2 bit value). Returns -1 if already returned or not available.

## NUMBer? -or- NUM?

[FDCCH:EBCCH:NEIGHbor:OTHER:NUMBer?]
Returns the last decoded value of Number of Neighbor Cells (Other Hyperband) (5 bit value - 0 to 23). Returns - 1 if already returned or not available.

## FDCCH:

## EBCCH:

## NEIGHbor:

## OTHER:

## MULti:

Multi Hyperband
CHAN? $n$
[FDCCH:EBCCH:NEIGHbor:OTHER:MULti:CHAN? n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband) CHAN ( 11 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

## PROTocol? n

[FDCCH:EBCCH:NEIGHbor:OTHER:MULti:PROTocol? n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband) Protocol Version ( 4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

DVCC? $n$
[FDCCH:EBCCH:NEIGHbor:OTHER:MULIt:DVCC?n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband) DVCC ( 8 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

OFFset? $n$
[FDCCH:EBCCH:NEIGHbor:OTHER:MULti:OFFset? n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband) RESEL_OFFSET ( 7 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## SS_SUFF? $n$

[FDCCH:EBCCH:NEIGHbor:OTHER:MULti:SS_SUFF? n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband)
SS_SUFF ( 5 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

DELay? $n$
[FDCCH:EBCCH:NEIGHbor:OTHER:MULIi:DELay? n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband)
DELAY ( 4 bit value) selected by $n$. Up to 24 instances can be returned.
Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## FDCCH:

## EBCCH :

## NEIGHbor:

## OTHER:

MULti:
HL FREQ? $n$
[FDC̄CH:EBCCH:NEIGHbor:OTHER:MULTi:HL_FREQ? n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband)
HL_FREQ (1 bit value) selected by $n$. Up to 24 instances can be
returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

SYNC? $n$
[FDCCH:EBCCH:NEIGHbor:OTHER:MULTi:SYNC?n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband) SYNC (1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

TYPE:
CELL? $n$
[FDCCH:EBCCH:NEIGHbor:OTHER:MULti:TYPE:CELL?n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband)
CELLTYPE (2 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

NETwork? $n$
[FDCCH:EBCCH:NEIGHbor:OTHER:MULti:TYPE:NETwork?n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband) Network Type (3 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

RETRY? $n$
[FDCCH:EBCCH:NEIGHbor:OTHER:MULti:RETRY? n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband) Directed Retry Channel (1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23 . Returns -1 if already returned or not available.

## FDCCH:

## EBCCH:

## NEIGHbor:

## OTHER:

MULti:

## ACCess:

MS_PWR? $n$
[FDC̄CH:EBCCH:NEIGHbor:OTHER:MULTi:ACCess:MS_PWR?n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband) MS_ACC_PWR (4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

RSS_MIN? $n$
[FDCCH:EBCCH:NEIGHbor:OTHER:MULti:ACCess:RSS_MIN? n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband) RSS_ACC_MIN (5 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## PSID_RSID:

## INDicator? n

[FDCCH:EBCCH:NE/GHbor:OTHER:MULti:PSID_RSID:INDicator? n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband) PSID/RSID Indicator (1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## LENGth? $n$

[FDCCH:EBCCH:NEIGHbor:OTHER:MULti:PSID_RSID:LENGTh? n]
Returns the last decoded value of Neighbor Cell List (Other Hyperband) PSID/RSID Support Length (4 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23 . Returns -1 if already returned or not available.

## SUPport? $n$

[FDCCH:EBCCH:NEIGHbor:OTHER:MULti:PSID_RSID:SUPport? n]
Returns the last decoded value of Neighbor Cell List (Other
Hyperband) PSID/RSID Support ( 16 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns - 1 if already returned or not available.

```
Validity is determined by FDCCH:EBCCH:NEIGHbor:OTHER:MULti:
PSID RSID:LENGth?
```


## FDCCH:

## EBCCH:

## NEIGHbor:

## OTHER:

## INFO:

PT?
[FDCCH:EBCCH:NEIGHbor:OTHER:INFO:PT?]
Returns the last decoded value of TDMA Service Info (Other Hyperband) Parameter Type ( 4 bit value). Returns - 1 if already returned or not available.

HYPERband?
[FDCCH:EBCCH:NEIGHbor:OTHER:INFO:HYPERband?]
Returns the last decoded value of TDMA Service Info (Other Hyperband)
(2 bit value). Returns - 1 if already returned or not available.

## COUNt?

[FDCCH:EBCCH:NEIGHbor:OTHER:INFO:COUNt?]
Returns the last decoded value of TDMA Service Info (Other Hyperband) Neighbor Count ( 5 bit value - 0 to 24). Returns - 1 if already returned or not available.

## SERVice:

INDicator? $n$
[FDCCH:EBCCH:NEIGHbor:OTHER:INFO:SERVice:INDicator? n]
Returns the last decoded value of TDMA Service Info (Other
Hyperband) Service Map Indicator (1 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

MAP? $n$
[FDCCH:EBCCH:NEIGHbor:OTHER:INFO:SERVice:MAP? n]
Returns the last decoded value of TDMA Service Info (Other Hyperband) Service Map (10 bit value) selected by $n$. Up to 24 instances can be returned. Range of $n$ is 0 to 23. Returns -1 if already returned or not available.

## RCl ?

[FDCCH:EBCCH:RCI?]
Returns the last decoded value of RCI (2 bit value). Returns - 1 if already returned or not available.

## FDCCH:

EBCCH:

## CHANnel:

PT?
[FDCCH:EBCCH:CHANnel:PT?]
Returns the last decoded value of RF Channel Allocation Parameter Type (4 bit value). Returns - 1 if already returned or not available.

NUMBer? -or- NUM?
[FDCCH:EBCCH:CHANnel:NUMBer?]
Returns the last decoded value of RF Channel Allocation Number of Channel Groups ( 6 bit value). Returns -1 if already returned or not available.

## GROUP:

FIRST? $n$
[FDCCH:EBCCH:CHANnel:GROUP:FIRST? n]
Returns the last decoded value of RF Channel Allocation Channel Group First Channel ( 11 bit value) selected by $n$. Up to 64 instances can be returned. Range of $n$ is 0 to 63. Returns -1 if already returned or not available.

LAST? $n$
[FDCCH:EBCCH:CHANnel:GROUP:LAST? n]
Returns the last decoded value of RF Channel Allocation Channel Group Last Channel ( 11 bit value) selected by $n$. Up to 64 instances can be returned. Range of $n$ is 0 to 63. Returns -1 if already returned or not available.

BSMC?
[FDCCH:EBCCH:BSMC?]
Returns the last decoded value of BSMC (Base Station Manufacture Code) (8 bit value). Returns - 1 if already returned or not available.

## CUSTOM:

## LENGth?

[FDCCH:EBCCH:CUSTOM:LENGth?]
Returns the last decoded value of Length of Custom Control in octets (8 bit value). Returns - 1 if already returned or not available.

## CONTrol? $n$

[FDCCH:EBCCH:CUSTOM:CONTrol? n]
Returns the last decoded value of Custom Control ( 8 bit value) selected by $n$. Up to 256 instances can be returned. Range of $n$ is 0 to 255. Returns - 1 if already returned or not available.

## Validity is determined by FDCCH:EBCCH:CUSTOM:LENGth?

## FDCCH:

## EBCCH:

## TEXT:

## LENGth?

[FDCCH:EBCCH:TEXT:LENGTh?]
Returns the last decoded value of Length of Text Message Data Unit in octets ( 8 bit value). Returns -1 if already returned or not available.

## ENCoding?

[FDCCH:EBCCH:TEXT:ENCoding?]
Returns the last decoded value of Text Message Data Unit Encoding Identifier ( 5 bit value). Returns -1 if already returned or not available.

## REServed?

[FDCCH:EBCCH:TEXT:REServed?]
Returns the last decoded value of Text Message Data Unit Reserved (3 bit value). Returns-1 if already returned or not available.

CHARacter? n [FDCCH:EBCCH:TEXT:CHARacter? n]
Returns the last decoded value of Text Message Data Unit Short Message Character ( 8 bit value) selected by $n$. Up to 252 instances can be returned. Range of $n$ is 0 to 251. Returns - 1 if already returned or not available.

## Validity is determined by FDCCH:EBCCH:TEXT:LENGth?.

## SIGnal:

## PT?

[FDCCH:EBCCH:SIGnal:PT?]
Returns the last decoded value of Signal Parameter Type ( 4 bit value).
Returns-1 if already returned or not available.

## PITCH?

[FDCCH:EBCCH:SIGnal:PITCH?]
Returns the last decoded value of Signal Pitch (2 bit value). Returns -1 if already returned or not available.

CADence?
[FDCCH:EBCCH:SIGnal:CADence?]
Returns the last decoded value of Signal Cadence ( 6 bit value). Returns -1 if already returned or not available.

## DURation?

[FDCCH:EBCCH:SIGnal:DURation?]
Returns the last decoded value of Signal Duration (4 bit value). Returns -1 if already returned or not available.

## FDCCH:

## EBCCH:

## MACA:

## STATus?

[FDCCH:EBCCH:MACA:STATus?]
Returns the last decoded value of MACA_STATUS (2 bit value). Returns -1 if already returned or not available.

TYPE?
[FDCCH:EBCCH:MACA:TYPE?]
Returns the last decoded value of MACA_TYPE (4 bit value). Returns -1 if already returned or not available.

## EIGHT:

## PT?

[FDCCH:EBCCH:MACA:EIGHT:PT?]
Returns the last decoded value of MACA 8_CONTROL Parameter Type ( 4 bit value). Returns -1 if already returned or not available.

## CONTrol?

[FDCCH:EBCCH:MACA:EIGHT:CONTrol?]
Returns the last decoded value of MACA_8_CONTROL (1 bit value). Returns - 1 if already returned or not available.

## LIST:

## PT?

[FDCCH:EBCCH:MACA:LIST:PT?]
Returns the last decoded value of MACA LIST Parameter Type (4 bit value). Returns - 1 if already returned or not available.

## NUMBer? -or- NUM?

[FDCCH:EBCCH:MACA:LIST:NUMBer?]
Returns the last decoded value of Number of MACA Channels (4 bit value).
Returns -1 if already returned or not available.
CHAN? $n$
[FDCCH:EBCCH:MACA:LIST:CHAN? n]
Returns the last decoded value of MACA_LIST CHAN (11 bit value) selected by $n$. Up to 16 instances can be returned. Range of $n$ is 0 to 15 . Returns -1 if already returned or not available.

Validity is determined by FDCCH:EBCCH:MACA:LIST:NUMBer?.

## FDCCH:

## EBCCH:

## MACA:

LIST:

## OTHER:

PT?
[FDCCH:EBCCH:MACA:LIST:OTHER:PT?]
Returns the last decoded value of MACA_LIST (Other Hyperband) Parameter Type ( 4 bit value). Returns - 1 if already returned or not available.

HYPERband?
[FDCCH:EBCCH:MACA:LIST:OTHER:HYPERband?]
Returns the last decoded value of Hyperband (2 bit value). Returns -1 if already returned or not available.

NUMBer? -or- NUM?
[FDCCH:EBCCH:MACA:LIST:OTHER:NUMBer?]
Returns the last decoded value of Number of MACA Channels ( 4 bit value). Returns - 1 if already returned or not available.

CHAN? $n$
[FDCCH:EBCCH:MACA:LIST:OTHER:CHAN? n]
Returns the last decoded value of MACA_LIST (Other Hyperband) CHAN (11 bit value) selected by $n$. Up to 16 instances can be returned. Range of $n$ is 0 to 15. Returns -1 if already returned or not available.

Validity is determined by FDCCH:EBCCH:MACA:OTHER:NUMBer?.
MAP:
VPM?
[FDCCH:EBCCH:MAP:VPM?]
Returns the last decoded value of Voice Privacy Mode Map (4 bit value).
Returns - 1 if already returned or not available.

## DPM?

[FDCCH:EBCCH:MAP:DPM?]
Returns the last decoded value of Data Privacy Mode Map (4 bit value). Returns -1 if already returned or not available.

## CODER?

[FDCCH:EBCCH:MAP:CODER?]
Returns the last decoded value of Voice Coder Map ( 6 bit value). Returns - 1 if already returned or not available.

## FDCCH:

## EBCCH:

MAP:

## MEA:

## DOMAIN?

[FDCCH:EBCCH:MAP:MEA:DOMAIN?]
Returns the last decoded value of Message Encryption Algorithm Domain Map ( 8 bit value). Returns -1 if already returned or not available.

## ALGORithms? $n$

[FDCCH:EBCCH:MAP:MEA:ALGORithms? n]
Returns the last decoded value of Message Encryption Algorithm (4 bit value) selected by $n$. Up to 8 instances can be returned. Range of $n$ is 0 to 7 . Returns - 1 if already returned or not available.

## Validity is determined by FDCCH:EBCCH:MAP:MEA:DOMAIN?

## MEK?

[FDCCH:EBCCH:MAP:MEK?]
Returns the last decoded value of Message Encryption Key Map (4 bit value).
Returns - 1 if already returned or not available.

## MENU?

[FDCCH:EBCCH:MAP:MENU?]
Returns the last decoded value of Menu Map (10 bit value). Returns - 1 if already returned or not available.

## ARQ?

[FDCCH:EBCCH:MAP:ARQ?]
Returns the last decoded value of FACCH/SACCH ARQ Map (1 bit value).
Returns - 1 if already returned or not available.

## USER?

[FDCCH:EBCCH:MAP:USER?]
Returns the last decoded value of User Group Map (1 bit value). Returns -1 if already returned or not available.

## SMS?

[FDCCH:EBCCH:MAP:SMS?]
Returns the last decoded value of SMS Map (2 bit value). Returns - 1 if already returned or not available.

## IRA?

[FDCCH:EBCCH:IRA?]
Returns the last decoded state of IRA Support (1 bit value). Returns -1 if already returned or not available.

OATS?
[FDCCH:EBCCH:OATS?]
Returns the last decoded state of OATS Support ( 1 bit value). Returns -1 if already returned or not available.

## FDCCH:

## EBCCH:

## SOC?

[FDCCH:EBCCH:SOC?]
Returns the last decoded value of SOC (System Operator Code) (12 bit value). Returns-1 if already returned or not available.

ALT_SOC:

## NUMBer? -or- NUM?

[FDCCH:EBCCH:ALT_SOC:NUMBer?]
Returns the last decoded value of Number of Alternate SOCs (4 bit value).
Returns - 1 if already returned or not available.

## SOC? $n$

[FDCCH:EBCCH:ALT_SOC:SOC? n]
Returns the last decoded value of SOC (12 bit value) indexed by $n$. Range of $n$ is 0 to 15. Returns -1 if already returned or not available.

## MAP:PSID RSID? n

[FDCCH:EBCCH:ALT_SOC:MAP:PSID_RSID? n]
Returns the last decoded value of the SOC PSID/RSID Map (16 bit value) indexed by $n$. Range of $n$ is 0 to 15. Returns -1 if already returned or not available.

## TIME?

[FDCCH:EBCCH:TIME?]
Returns the last decoded value of Time from Jan 1, 1980 (32 bit value). Returns -1 if already returned or not available.

## ZONE:

## DIRection?

[FDCCH:EBCCH:ZONE:DIRection?]
Returns the last decoded value of Time Zone Offset Direction (1 bit value). Returns - 1 if already returned or not available.

## MINutes?

[FDCCH:EBCCH:ZONE:MINutes?]
Returns the last decoded value of Time Zone Offset Minutes (10 bit value). Returns - 1 if already returned or not available.

## DST?

[FDCCH:EBCCH:ZONE:DST?]
Returns the last decoded value of Time Zone Offset Daylight Savings Indicator ( 1 bit value). Returns -1 if already returned or not available.

## FDCCH:

## EBCCH:

SID?
[FDCCH:EBCCH:SID?]
Returns the last decoded value of System Identification (15 bit value). Returns -1 if already returned or not available.

CHAN?
[FDCCH:EBCCH:CHAN?]
Returns the last decoded value of CHAN (11 bit value). Returns - 1 if already returned or not available.

MCC:

## CODE?

[FDCCH:EBCCH:MCC:CODE?]
Returns the last decoded value of Mobile Country Code (10 bit value).
Returns - 1 if already returned or not available.

## PT?

[FDCCH:EBCCH:MCC:PT?]
Returns the last decoded value of Mobile Country Code Parameter Type ( 4 bit value). Returns -1 if already returned or not available.

HYPERband:
INFO?
[FDCCH:EBCCH:HYPERband:INFO?]
Returns the last decoded value of Hyperband Info (2 bit value). Returns - 1 if already returned or not available.

PT?
[FDCCH:EBCCH:HYPERband:PT?]
Returns the last decoded value of Hyperband Info Parameter Type (4 bit value). Returns - 1 if already returned or not available.

## MULti:SERV_SS?

[FDCCH:EBCCH:MULti:SERV_SS?]
Returns the last decoded value of SERV_SS (4 bit value) for Multi Hyperband.
Returns - 1 if already returned or not available.
D. SPACH Frames

The next set of commands return data from SPACH frames.

## FDCCH:

SPACH:

## BU?

[FDCCH:SPACH:BU?]
Returns the last decoded value of Burst Usage (3 bit value). Returns -1 if already returned or not available.

## PCON?

[FDCCH:SPACH:PCON?]
Returns the last decoded value of PCH Continuation (1 bit value). Returns -1 if already returned or not available.

## BCN?

[FDCCH:SPACH:BCN?]
Returns the last decoded value of BCCH Change Notification (1 bit value).
Returns - 1 if already returned or not available.

## PFM?

[FDCCH:SPACH:PFM?]
Returns the last decoded value of Paging Frame Modifier ( 1 bit value). Returns - 1 if already returned or not available.

## BT?

[FDCCH:SPACH:BT?]
Returns the last decoded value of Burst Type ( 3 bit value). Returns -1 if already returned or not available.

## IDT?

[FDCCH:SPACH:IDT?]
Returns the last decoded value of Identity Type ( 2 bit value). Returns -1 if already returned or not available.

## MSID:

## PT?

[FDCCH:SPACH:MSID:PT?]
Returns the last decoded value of MSID Assignment Parameter Type ( 4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## IDT?

[FDCCH:SPACH:MSID:IDT?]
Returns the last decoded value of MSID Assignment IDT (2 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ASSIGNment?

[FDCCH:SPACH:MSID:ASSIGNment?]
Returns the last decoded value of MSID Assignment (24 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## FDCCH:

SPACH:
MSID :
MS? $n$
[FDCCH:SPACH:MSID:MS?n]
Returns the 18 Most Significant bits of MSID (Mobile Station Identification) selected by $n$. Range of $n$ is 0 to 4 .

LS? $n$
[FDCCH:SPACH:MSID:LS? n]
Returns the 32 Least Significant bits of MSID (Mobile Station Identification) selected by $n$. Range of $n$ is 0 to 4 .

MIN? $n$
[FDCCH:SPACH:MSID:MIN? n]
Returns the last decoded value of MIN (ASCII String) selected by $n$. Up to four instances can be returned. Range of $n$ is 0 to 3 . Returns -1 if already returned or not available.

If IDT indicates a 34 bit MSID then the value is also stored as a Mobile Identification Number.

## MM?

[FDCCH:SPACH:MM?]
Returns the last decoded value of Message Mapping (1 bit value). Returns -1 if already returned or not available.

## PEA?

[FDCCH:SPACH:PEA?]
Returns the last decoded value of Partial Echo Assigned ( 7 bit value). Returns - 1 if already returned or not available.

PI?
[FDCCH:SPACH:PI?]
Returns the last decoded value of Polling Indicator (1 bit value). Returns -1 if already returned or not available.

## SRM?

[FDCCH:SPACH:SRM?]
Returns the last decoded value of SPACH Response Mode (1 bit value). Returns -1 if already returned or not available.

UGID:
MS?
[FDCCH:SPACH:UGID:MS?]
Returns the 18 Most Significant bits of UGID (Mobile Station Identification).

## LS?

[FDCCH:SPACH:UGID:LS?]
Returns 32 Least Significant bits of UGID (Mobile Station Identification).

## FDCCH:

## SPACH:

UGID:

## MIN?

[FDCCH:SPACH:UGID:MIN?]
Returns the last decoded value of MIN (ASCII String). Returns - 1 if already returned or not available.

If IDT indicates a 34 bit MSID, the value is also stored as a Mobile Identification Number.

## EHI?

[FDCCH:SPACH:EHI?]
Returns the last decoded value of Extended Header Information (1 bit value).
Returns-1 if already returned or not available.

## MEA?

[FDCCH:SPACH:MEA?]
Returns the last decoded value of Message Encryption Algorithm (2 bit value).
Returns - 1 if already returned or not available.

## MEK?

[FDCCH:SPACH:MEK?]
Returns the last decoded value of Message Encryption Key (2 bit value).
Returns -1 if already returned or not available.

## ARM?

[FDCCH:SPACH:ARM?]
Returns the last decoded value of ARQ Response Mode (1 bit value). Returns -1 if already returned or not available.

FRNO?
[FDCCH:SPACH:FRNO?]
Returns the last decoded value of Frame Number ( 5 bit value). Returns - 1 if already returned or not available.

## GA?

[FDCCH:SPACH:GA?]
Returns the last decoded value of Go Away (1 bit value). Returns - 1 if already returned or not available.

## SFP?

[FDCCH:SPACH:SFP?]
Returns the last decoded value of Superframe Phase (5 bit value). Returns - 1 if already returned or not available.

## L3LI?

[FDCCH:SPACH:L3LI?]
Returns the last decoded value of Layer 3 Length Indicator ( 8 bit value). Returns - 1 if already returned or not available.

## FDCCH:

## SPACH:

## L3DATA:

SELect $n$
[FDCCH:SPACH:L3DATA:SELect n]
Returns the last decoded value of MIN (ASCII String) selected by $n$. (There may be up to four L3DATA messages in a SPACH message.) Range of $n$ is 0 to 3 . Returns - 1 if already returned or not available.

## SELect?

[FDCCH:SPACH:L3DATA:SELect?]
Returns the number of the selected L3DATA Message (2 bit value).

## MSGtype?

[FDCCH:SPACH:MSGtype?]
Returns the last decoded value of Message Type from the selected L3DATA
Message. Returns -1 if already returned or not available. This command returns the following message types:

| ANALOG | AUDIT | BSCHALCON |
| :--- | :--- | :--- |
| BSMC | CAPABILITY | DIGITAL |
| DRETRY | INVALID | MSGWTG |
| PAGE | PU | Q DISC ACK |
| Q UPDATE | R-DATA | R-DATA ACCEPT |
| R-DATA REJECT | REGACCEPT | REG REJECT |
| RELEASE | REORDER/INTER | SOC |
| SPACH NOTIF | SSDUP | TEST REG |
| UCHAL | USERALERT |  |

INVALID is returned if an illegal message code was decoded.

## PD?

[FDCCH:SPACH:PD?]
Returns the last decoded value of Protocol Discriminator (2 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## MEM?

[FDCCH:SPACH:MEM?]
Returns the last decoded value of Message Encryption Mode (1 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## SCC?

[FDCCH:SPACH:SCC?]
Returns the last decoded value of SAT Color Code ( 2 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## FDCCH:

## SPACH:

VMAC?
[FDCCH:SPACH:VMAC?]
Returns the last decoded value of Voice Mobile Attenuation Code (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

CHAN?
[FDCCH:SPACH:CHAN?]
Returns the last decoded value of CHAN (11 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## PROTocol?

[FDCCH:SPACH:PROTocol?]
Returns the last decoded value of Protocol Version (4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## SUBaddress:

PT?
[FDCCH:SPACH:SUBaddress:PT?]
Returns the last decoded value of Subaddress Parameter Type ( 4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## LENGth?

[FDCCH:SPACH:SUBaddress:LENGth?]
Returns the last decoded value of Length of Subaddress Info content (8 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ODD EVEN?

[FDCCH:SPACH:SUBaddress:ODD_EVEN?]
Returns the last decoded value of Subaddress Odd/Even indicator (1 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## TYPE?

## [FDCCH:SPACH:SUBaddress:TYPE?]

Returns the last decoded value of Type of Subaddress (3 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## REServed?

[FDCCH:SPACH:SUBaddress:REServed?]
Returns the last decoded value of the combination of the two Subaddress Reserved fields (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ADDRess? $n$

[FDCCH:SPACH:SUBaddress:ADDRess? n]
Returns the last decoded value of Subaddress ( 8 bit value) selected by $n$ from the selected L3DATA Message. Up to 20 instances can be returned. Range of $n$ is 0 to 19. Returns - 1 if already returned or not available.

## FDCCH:

SPACH:
DTX:
PT?
[FDCCH:SPACH:DTX:PT?]
Returns the last decoded value of DTX Support Parameter Type (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## SUPport?

[FDCCH:SPACH:DTX:SUPport?]
Returns the last decoded value of DTX Support (2 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## DISPlay:

PT?
[FDCCH:SPACH:DISPlay:PT?]
Returns the last decoded value of Display Parameter Type (4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## LENGth?

[FDCCH:SPACH:DISPlay:LENGth?]
Returns the last decoded value of Length of Display Info ( 8 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

CHARacter? n
[FDCCH:SPACH:DISPlay:CHARacter? n]
Returns the last decoded value Display Character ( 8 bit value) selected by $n$ from the selected L3DATA Message. Up to 82 instances can be returned. Range of $n$ is 0 to 81 . Returns -1 if already returned or not available.

## Validity is determined by FDCCH:SPACH:DISPlay:LENGth?.

## REREG?

[FDCCH:SPACH:REREG?]
Returns the last decoded value of Forced Re-registration (1 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## DEBUG?

[FDCCH:SPACH:DEBUG?]
Returns the last decoded value of Debug Display Allowed (1 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## AUTHBS?

[FDCCH:SPACH:AUTHBS?]
Returns the last decoded value of AUTHBS (18 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## FDCCH:

## SPACH:

## BSMC?

[FDCCH:SPACH:BSMC?]
Returns the last decoded value of BSMC (Base Station Manufacture Code) (8 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## CUSTOM:

## LENGth?

[FDCCH:SPACH:CUSTOM:LENGth?]
Returns the last decoded value of Length of Custom Control in octets (8 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

CONTrol? $n$
[FDCCH:SPACH:CUSTOM:CONTrol? n]
Returns the last decoded value of Custom Control ( 8 bit value) selected by $n$ from the selected L3DATA Message. Up to 256 instances can be returned. Range of $n$ is 0 to 255. Returns - 1 if already returned or not available.

Validity is determined by FDCCH:SPACH:CUSTOM:LENGth?.

## DVCC?

[FDCCH:SPACH:DVCC?]
Returns the last decoded value of DVCC (8 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## DMAC?

[FDCCH:SPACH:DMAC?]
Returns the last decoded value of DMAC (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ATS?

[FDCCH:SPACH:ATS?]
Returns the last decoded value of ATS (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## SB?

[FDCCH:SPACH:SB?]
Returns the last decoded value of SB (1 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## TA?

[FDCCH:SPACH:TA?]
Returns the last decoded value of Time Alignment ( 5 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## FDCCH:

## SPACH:

## MODE:

## DIC?

[FDCCH:SPACH:MODE:DIC?]
Returns the last decoded value of Delay Interval Compensation Mode (1 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## VOICE:

PT?
[FDCCH:SPACH:MODE:VOICE:PT?]
Returns the last decoded value of Voice Mode Parameter Type ( 4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

VC?
[FDCCH:SPACH:MODE:VOICE:VC?]
Returns the last decoded value of Voice Coder (3 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

PM_V?
[FDCCH:SPACH:MODE:VOICE:PM_V?]
Returns the last decoded value of Voice Privacy Mode (3 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## MEM:

## PT?

[FDCCH:SPACH:MODE:MEM:PT?]
Returns the last decoded value of Message Encryption Mode Parameter Type ( 4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## MEA?

[FDCCH:SPACH:MODE:MEM:MEA?]
Returns the last decoded value of Message Encryption Algorithm (3 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## MED?

[FDCCH:SPACH:MODE:MEM:MED?]
Returns the last decoded value of Message Encryption Domain (3 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## MEK?

[FDCCH:SPACH:MODE:MEM:MEK?]
Returns the last decoded value of Message Encryption Key (3 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## FDCCH:

SPACH:

## HYPERband:

## PT?

[FDCCH:SPACH:HYPERband:PT?]
Returns the last decoded value of Hyperband Info Parameter Type ( 4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## INFO?

[FDCCH:SPACH:HYPERband:INFO?]
Returns the last decoded value of Hyperband Info (2 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## LT?

[FDCCH:SPACH:LT?]
Returns the last decoded value of Last Try (1 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## FLAG:

PT?
[FDCCH:SPACH:FLAG:PT?]
Returns the last decoded value of the RCF and AUTH flags Parameter Type ( 4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

RCF?
[FDCCH:SPACH:FLAG:RCF?]
Returns the last decoded value of RCF flag (1 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## AUTH?

[FDCCH:SPACH:FLAG:AUTH?]
Returns the last decoded value of AUTH flag (1 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## FDCCH:

## SPACH:

## RETRY:

NUMBer? -or- NUM?
[FDCCH:SPACH:RETRY:NUMBEr?]
Returns the last decoded Number of instances (3 bit value - 0 to 5) of Retry Channel from the selected L3DATA Message. Returns - 1 if already returned or not available.

HYPERband? n
[FDCCH:SPACH:RETRY:HYPERband? n]
Returns the last decoded value of Hyperband (2 bit value) for the designated instance ( $n$ ) of Retry Channel from the selected L3DATA Message. Range of $n$ is 0 to 5 . Returns - 1 if already returned or not available.

CHANnel? $n$
[FDCCH:SPACH:RETRY:CHANnel? n]
Returns the last decoded value of CHAN (11 bit value - 1 to 2047) for the designated instance ( $n$ ) of Retry Channel from the selected L3DATA Message. Range of $n$ is 0 to 5 . Returns - 1 if already returned or not available.

## MSGWTG:

## NV?

[FDCCH:SPACH:MSGWTG:NV?]
Returns the last decoded value of Message Waiting Info Number of Values (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

TYPE? $n$
[FDCCH:SPACH:MSGWTG:TYPE? n]
Returns the last decoded value of Type of Message Waiting ( 4 bit value) selected by $n$ from the selected L3DATA Message. Up to 16 instances can be returned. Range of $n$ is 0 to 15. Returns - 1 if already returned or not available.

NUMBer? n-or- NUM? n [FDCCH:SPACH:MSGWTG:NUMBer? n]
Returns the last decoded value of Number of Messages Waiting ( 6 bit value) selected by $n$ from the selected L3DATA Message. Up to 16 instances can be returned. Range of $n$ is 0 to 15. Returns - 1 if already returned or not available.

## SERVice?

[FDCCH:SPACH:SERVICe?]
Returns the last decoded value of Service Code (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## FDCCH:

SPACH:

## SIGnal:

PT?
[FDCCH:SPACH:SIGnal:PT?]
Returns the last decoded value of Signal Parameter Type ( 4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

PITCH?
[FDCCH:SPACH:SIGnal:PITCH?]
Returns the last decoded value of Signal Pitch (2 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

CADence?
[FDCCH:SPACH:SIGnal:CADence?]
Returns the last decoded value of Signal Cadence ( 6 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

DURation?
[FDCCH:SPACH:SIGnal:DURation?]
Returns the last decoded value of Signal Duration (4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## FDCCH:

SPACH:
CALLED:

## PT?

[FDCCH:SPACH:CALLED:PT?]
Returns the last decoded value of Called Party Parameter Type ( 4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## LENGth?

[FDCCH:SPACH:CALLED:LENGth?]
Returns the last decoded value of Called Party Length of Address Info (8 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## TYPE?

[FDCCH:SPACH:CALLED:TYPE?]
Returns the last decoded value of Called Party Type of Number (3 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## PLANid?

[FDCCH:SPACH:CALLED:PLANid?]
Returns the last decoded value of Called Party Numbering Plan Identification ( 4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## ENCoding?

[FDCCH:SPACH:CALLED:ENCoding?]
Returns the last decoded value of Called Party Address Encoding (1 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ADDRess?

[FDCCH:SPACH:CALLED:ADDRess?]
Returns the last decoded value of Called Party Address (ASCII String) from the selected L3DATA Message. Returns -1 if already returned or not available.

## FDCCH:

## SPACH:

## CALLED:

## SUBaddress:

PT?
[FDCCH:SPACH:CALLED:SUBaddress:PT?]
Returns the last decoded value of Called Party Subaddress Parameter Type (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## LENGth?

[FDCCH:SPACH:CALLED:SUBaddress:LENGth?]
Returns the last decoded value of Length of Called Party Subaddress Info ( 8 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ODD EVEN?

[FDCCH:SPACH:CALLED:SUBaddress:ODD_EVEN?]
Returns the last decoded value of Called Party Subaddress Odd/Even Indicator (1 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

TYPE?
[FDCCH:SPACH:CALLED:SUBaddress:TYPE?]
Returns the last decoded value of Type of Called Party Subaddress (3 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## REServed?

[FDCCH:SPACH:CALLED:SUBaddress:REServed?]
Returns the last decoded value of the combination of the two Called Party Subaddress Reserved fields (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ADDRess? $n$

[FDCCH:SPACH:CALLED:SUBaddress:ADDRess? n]
Returns the last decoded value of Called Party Subaddress ( 8 bit value) selected by $n$ from the selected L3DATA Message. Up to 20 instances can be returned. Range of $n$ is 0 to 19. Returns -1 if already returned or not available.

## FDCCH:

SPACH:

## CALLING:

## PT?

[FDCCH:SPACH:CALLING:PT?]
Returns the last decoded value of Calling Party Number Parameter Type available ( 4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not.

## LENGth?

[FDCCH:SPACH:CALLING:LENGTh?]
Returns the last decoded value of Calling Party Length of Address Info (8 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

TYPE?
[FDCCH:SPACH:CALLING:TYPE?]
Returns the last decoded value of Type of Calling Party Number (3 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## PLANid?

[FDCCH:SPACH:CALLING:PLANid?]
Returns the last decoded value of Calling Party Number Plan Identification (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ENCoding?

[FDCCH:SPACH:CALLING:ENCoding?]
Returns the last decoded value of Calling Party Address Encoding (1 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## ADDRess?

[FDCCH:SPACH:CALLING:ADDRess?]
Returns the last decoded value of Calling Party Number Address (ASCII String) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## FDCCH:

SPACH:

## CALLING:

SUBaddress:
PT?
[FDCCH:SPACH:CALLING:SUBaddress:PT?]
Returns the last decoded value of Calling Party Subaddress Parameter Type (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## LENGth?

[FDCCH:SPACH:CALLING:SUBaddress:LENGth?]
Returns the last decoded value of Calling Party Length of Subaddress Info ( 8 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## ODD EVEN?

[FDCCH:SPACH:CALLING:SUBaddress:ODD_EVEN?]
Returns the last decoded value of Calling Party Subaddress Odd/Even Indicator (1 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## TYPE?

[FDCCH:SPACH:CALLING:SUBaddress:TYPE?]
Returns the last decoded value of Calling Party Type of Subaddress (3 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## REServed?

[FDCCH:SPACH:CALLING:SUBaddress:REServed?]
Returns the last decoded value of the combination of the two Calling Party Subaddress Reserved fields (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ADDRess? $n$

[FDCCH:SPACH:CALLING:SUBaddress:ADDRess? n]
Returns the last decoded value of Calling Party Subaddress ( 8 bit value) selected by $n$ from the selected L3DATA Message. Up to 20 instances can be returned. Range of $n$ is 0 to 19. Returns -1 if already returned or not available.

## FDCCH:

## SPACH:

## CALLING:

## PRESentation:

PT?
[FDCCH:SPACH:CALLING:PRESentation:PT?]
Returns the last decoded value of Calling Party Presentation Indicator Parameter Type ( 4 bit value) from the selected L3DATA Message.
Returns - 1 if already returned or not available.
PI?
[FDCCH:SPACH:CALLING:PRESentation:PI?]
Returns the last decoded value of Presentation Indicator (2 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

SI?
[FDCCH:SPACH:CALLING:PRESentation:SI?]
Returns the last decoded value of Screening Indicator (2 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## RN?

[FDCCH:SPACH:RN?]
Returns the last decoded value of Request Number ( 4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## RTRANSaction?

[FDCCH:SPACH:RTRANSaction?]
Returns the last decoded value of R-Transaction Identifier (8 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

RDATA_UNIT:

## LENGth?

[FDCCH:SPACH:RDATA_UNIT:LENGth?]
Returns the last decoded value of R-Data Unit Length (8 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## FDCCH:

## SPACH:

## RDATA_UNIT:

HLP:

## IDentifier?

[FDCCH:SPACH:RDATA_UNIT:HLP:IDentifier?]
Returns the last decoded value of R-Data Unit Higher Layer Protocol Identifier ( 8 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

DATA? $n$
[FDCCH:SPACH:RDATA_UNIT:HLP:DATA?n]
Returns the last decoded value of Higher Layer Protocol Data Unit (8 bit value) selected by $n$ from the selected L3DATA Message. Up to 255 instances can be returned. Range of $n$ is 0 to 254 .

## Validity is determined by FDCCH:SPACH:RDATA_UNIT:LENGth?.

## MESSage:CENTer:

## PT?

[FDCCH:SPACH:MESSage:CENTer:PT?]
Returns the last decoded value of Message Center Address Parameter Type ( 4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## LENGth?

[FDCCH:SPACH:MESSage:CENTer:LENGth?]
Returns the last decoded value of Message Center Length of Address Info ( 8 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

TYPE?
[FDCCH:SPACH:MESSage:CENTer:TYPE?]
Returns the last decoded value of Message Center Address Type of Number ( 3 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## PLANid?

[FDCCH:SPACH:MESSage:CENTer:PLANid?]
Returns the last decoded value of Message Center Numbering Plan Identification ( 4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ENCoding?

[FDCCH:SPACH:MESSage:CENTer:ENCoding?]
Returns the last decoded value of Message Center Address Encoding (1 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## FDCCH:

## SPACH:

## MESSage:CENTer:

ADDRess?
[FDCCH:SPACH:MESSage:CENTer:ADDRess?]
Returns the last decoded value of Message Center Address (ASCII String) from the selected L3DATA Message. Returns -1 if already returned or not available.

## USER:

DEST:
PT?
[FDCCH:SPACH:USER:DEST:PT?]
Returns the last decoded value of User Destination Address Parameter Type ( 4 bit value) from the selected L3DATA Message. Returns -1 if aiready returned or not available.

## LENGth?

[FDCCH:SPACH:USER:DEST:LENGTh?]
Returns the last decoded value of User Destination Length of Address Info ( 8 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

TYPE?
[FDCCH:SPACH:USER:DEST:TYPE?]
Returns the last decoded value of User Destination Type of Number (3 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## PLANid?

[FDCCH:SPACH:USER:DEST:PLANII?]
Returns the last decoded value of User Destination Address Identification Plan ( 4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## ENCoding?

[FDCCH:SPACH:USER:DEST:ENCoding?]
Returns the last decoded value of User Destination Address Encoding (1 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## ADDRess?

[FDCCH:SPACH:USER:DEST:ADDRess?]
Returns the last decoded value of User Destination Address (ASCII String) from the selected L3DATA Message. Returns -1 if already returned or not available.

## FDCCH:

SPACH:
USER:

## DEST:

## SUBaddress:

PT?
[FDCCH:SPACH:USER:DEST:SUBaddress:PT?]
Returns the last decoded value of User Destination Subaddress
Parameter Type ( 4 bit value) from the selected L3DATA Message.
Returns - 1 if already returned or not available.
LENGth?
[FDCCH:SPACH:USER:DEST:SUBaddress:LENGth?]
Returns the last decoded value of User Destination Length of Subaddress Info ( 8 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## ODD_EVEN?

[FDCCH:SPACH:USER:DEST:SUBaddress:ODD_EVEN?]
Returns the last decoded value of User Destination Subaddress Odd/Even Indicator (1 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

TYPE?
[FDCCH:SPACH:USER:DEST:SUBaddress:TYPE?]
Returns the last decoded value of User Destination Type of Subaddress (3 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

REServed?
[FDCCH:SPACH:USER:DEST:SUBaddress:REServed?]
Returns the last decoded value of the combination of the two User Destination Subaddress Reserved fields (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

ADDRess? $n$
[FDCCH:SPACH:USER:DEST:SUBaddress:ADDRess? n]
Returns the last decoded value of User Destination Subaddress
( 8 bit value) selected by $n$ from the selected L3DATA Message. Up to 20 instances can be returned. Range of $n$ is 0 to 19. Returns -1 if already returned or not available.

## FDCCH:

## SPACH:

USER:

## GROUP:

PT?
[FDCCH:SPACH:USER:GROUP:PT?]
Returns the last decoded value of User Group Parameter Type ( 4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

STATus?
[FDCCH:SPACH:USER:GROUP:STATUS?]
Returns the last decoded value of User Group Status (2 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

TYPE?
[FDCCH:SPACH:USER:GROUP:TYPE?]
Returns the last decoded value of User Group Type (2 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

ID:
MS?
[FDCCH:SPACH:USER:GROUP:ID:MS?]
Returns the 18 Most Significant bits of User Group Identification. Returns -1 if already returned or not available.

## LS?

[FDCCH:SPACH:USER:GROUP:ID:LS?]
Returns the 32 Least Significant bits of User Group Identification.
Returns -1 if already returned or not available.

## ORIG:

PT?
[FDCCH:SPACH:USER:ORIG:PT?]
Returns the last decoded value of User Originating Address Parameter Type (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## LENGth?

[FDCCH:SPACH:USER:ORIG:LENGth?]
Returns the last decoded value of User Originating Length of Address Info ( 8 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

TYPE?
[FDCCH:SPACH:USER:ORIG:TYPE?]
Returns the last decoded value of User Originating Type of Address (3 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## FDCCH:

SPACH:
USER:
ORIG:

## PLANid?

[FDCCH:SPACH:USER:ORIG:PLANId?]
Returns the last decoded value of User Originating Address Identification Plan ( 4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ENCoding?

[FDCCH:SPACH:USER:ORIG:ENCOding?]
Returns the last decoded value of User Originating Address Encoding (1 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ADDRess?

[FDCCH:SPACH:USER:ORIG:ADDRess?]
Returns the last decoded value of User Originating Address (ASCII String) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## PRESentation:

PI?
[FDCCH:SPACH:USER:ORIG:PRESentation:PI?]
Returns the last decoded value of Presentation Indicator (2 bit value)
from the selected L3DATA Message. Returns - 1 if already returned or not available.

SI?
[FDCCH:SPACH:USER:ORIG:PRESentation:SI?]
Returns the last decoded value of Screening Indicator (2 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## FDCCH:

## SPACH:

USER:

## ORIG:

## SUBaddress:

## PT?

[FDCCH:SPACH:USER:ORIG:SUBaddress:PT?]
Returns the last decoded value of User Originating Subaddress Parameter Type ( 4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

LENGth?
[FDCCH:SPACH:USER:ORIG:SUBaddress:LENGth?]
Returns the last decoded value of User Originating Length of Subaddress Info ( 8 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## ODD_EVEN?

[FDCCH:SPACH:USER:ORIG:SUBaddress:ODD_EVEN?]
Returns the last decoded value of User Originating Subaddress Odd/Even Indicator ( 1 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

TYPE?
[FDCCH:SPACH:USER:ORIG:SUBaddress:TYPE?]
Returns the last decoded value of User Originating Type of Subaddress (3 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## REServed?

[FDCCH:SPACH:USER:ORIG:SUBaddress:REServed?]
Returns the last decoded value of the combination of the two User Originating Subaddress Reserved fields (4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## ADDRess? $n$

[FDCCH:SPACH:USER:ORIG:SUBaddress:ADDRess? n]
Returns the last decoded value of User Originating Subaddress ( 8 bit value) selected by $n$ from the selected L3DATA Message. Up to 20 instances can be returned. Range of $n$ is 0 to 19. Returns - 1 if already returned or not available.

## FDCCH:

## SPACH:

## RDATA:DELAY?

[FDCCH:SPACH:RDATA:DELAY?]
Returns the last decoded value of R-DATA Delay (4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## PFC:

PT?
[FDCCH:SPACH:PFC:PT?]
Returns the last decoded value of PFC Assignment Parameter Type (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ASSIGNment?

[FDCCH:SPACH:PFC:ASSIGNment?]
Returns the last decoded value of PFC Assignment (3 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## RNUM:

## PT?

[FDCCH:SPACH:RNUM:PT?]
Returns the last decoded value of RNUM List Parameter Type (4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## NUMBer? -or- NUM?

[FDCCH:SPACH:RNUM:NUMBer?]
Returns the last decoded value of Number of RNUMs ( 6 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

LIST? $n$
[FDCCH:SPACH:RNUM:LIST? n]
Returns the last decoded value of RNUM (10 bit value) selected by $n$ from the selected L3DATA Message. Up to 50 instances can be returned. Range of $n$ is 0 to 49. Returns -1 if already returned or not available.

Validity is determined by FDCCH:SPACH:RNUM:NUMBer?.

## FDCCH:

SPACH:
PSID_RSID:

## AVAILable:

## PT?

[FDCCH:SPACH:PSID_RSID:AVAILable:PT?]
Returns the last decoded value of PSID/RSID Available Parameter Type (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## NUMBer? -or- NUM?

[FDCCH:SPACH:PSID_RSID:AVAILable:NUMBer?]
Returns the last decoded value of Number of PSID/RSID (4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

TYPE? $n$
[FDCCH:SPACH:PSID_RSID:AVAILable:TYPE?n]
Returns the last decoded value of PSID/RSID Type Indicator (1 bit value) selected by $n$ from the selected L3DATA Message. Up to 16 instances can be returned. Range of $n$ is 0 to 15. Returns -1 if already returned or not available.

Validity is determined by FDCCH:SPACH:PSID_RSID:AVAILable:NUMBer?.

## VALUE? $n$

[FDCCH:SPACH:PSID_RSID:AVAILable:VALUE?n]
Returns the last decoded value of PSID/RSID Value (1 bit value) selected by $n$ from the selected L3DATA Message. Up to 16 instances can be returned. Range of $n$ is 0 to 15. Returns -1 if already returned or not available.

> Validity is determined by FDCCH:SPACH:PSID_RSID:AVAILable:NUMBer?.

MAP?
[FDCCH:SPACH:PSID_RSID:MAP?]
Returns the last decoded value of PSID/RSID Map ( 16 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## FDCCH:

SPACH:

## DIRectory:

PT?
[FDCCH:SPACH:DIRectory:PT?]
Returns the last decoded value of Directory Address Parameter Type (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## LENGth?

[FDCCH:SPACH:DIRectory:LENGth?]
Returns the last decoded value of Director Length of Address Info (8 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

TYPE?
[FDCCH:SPACH:DIRectory:TYPE?]
Returns the last decoded value of Directory Address Type of Number (3 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## PLANid?

[FDCCH:SPACH:DIRectory:PLANid?]
Returns the last decoded value of Directory Address Identification Plan (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ENCoding?

[FDCCH:SPACH:DIRectory:ENCoding?]
Returns the last decoded value of Directory Address Encoding (1 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## ADDRess?

[FDCCH:SPACH:DIRectory:ADDRess?]
Returns the last decoded value of Directory Address (ASCII String) from the selected L3DATA Message. Returns -1 if already returned or not available.

## FDCCH:

SPACH:

## DIRectory:

## SUBaddress:

PT?
[FDCCH:SPACH:DIRectory:SUBaddress:PT?]
Returns the last decoded value of Directory Subaddress Parameter Type (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

LENGth?
[FDCCH:SPACH:DIRectory:SUBaddress:LENGth?]
Returns the last decoded value of Directory Length of Subaddress Info (8 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## ODD EVEN?

[FDCCH:SPACH:DIRectory:SUBaddress:ODD_EVEN?]
Returns the last decoded value of Directory Subaddress Odd/Even Indicator (1 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

TYPE?
[FDCCH:SPACH:DIRectory:SUBaddress:TYPE?]
Returns the last decoded value of Directory Type of Subaddress (3 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## REServed?

[FDCCH:SPACH:DIRectory:SUBaddress:REServed?]
Returns the last decoded value of the combination of the two Directory Subaddress Reserved fields (4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## ADDRess? $n$

[FDCCH:SPACH:DIRectory:SUBaddress:ADDRess? n]
Returns the last decoded value of Directory Subaddress ( 8 bit value) selected by $n$ from the selected L3DATA Message. Up to 20 instances can be returned. Range of $n$ is 0 to 19. Returns - 1 if already returned or not available.

## FDCCH:

SPACH:

## REJect:

## REGistration:

## CAUSE?

[FDCCH:SPACH:REJect:REGistration:CAUSE?]
Returns the last decoded value of Registration Reject Cause (4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

TIME:
PT?
[FDCCH:SPACH:REJect:REGistration:TIME:PT?]
Returns the last decoded value of Reject Time Parameter Type (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

LOWer?
[FDCCH:SPACH:REJect:REGistration:TIME:LOWer?]
Returns the last decoded value of Reject Lower Time Boundary in 100 SF ( 4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

UPPer?
[FDCCH:SPACH:REJect:REGistration:TIME:UPPer?]
Returns the last decoded value of Reject Upper Time Boundary in 100 SF ( 4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## RDATA:

CAUSE?
[FDCCH:SPACH:REJect:RDATA:CAUSE?]
Returns the last decoded value of R-CAUSE (7 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

SPARE?
[FDCCH:SPACH:REJect:RDATA:SPARE?]
Returns the last decoded value of the R-Cause Reserved field (1 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## RELease:CAUSE?

[FDCCH:SPACH:RELease:CAUSE?]
Returns the last decoded value of Release Cause ( 4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available

## FDCCH:

## SPACH:

## REorder:

CAUSE?
[FDCCH:SPACH:REorder:CAUSE?]
Returns the last decoded value of Reorder/Intercept Cause ( 4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

TONE?
[FDCCH:SPACH:REorder:TONE?]
Returns the last decoded value of Tone Indicator (2 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## SOC?

[FDCCH:SPACH:SOC?]
Returns the last decoded value of SOC (System Operator Code) (12 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## NOTification?

[FDCCH:SPACH:NOTification?]
Returns the last decoded value of SPACH Notification ( 6 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## RANDSSD1?

[FDCCH:SPACH:RANDSSD1?]
Returns the last decoded value of the 24 most significant bits of RANDSSD from the selected L3DATA Message. Returns -1 if already returned or not available.

## RANDSSD2?

[FDCCH:SPACH:RANDSSD2?]
Returns the last decoded value of the 32 least significant bits of RANDSSD from the selected L3DATA Message. Returns - 1 if already returned or not available.

## FDCCH:

## SPACH:

## ALPHA:

SID:

## PT?

[FDCCH:SPACH:ALPHA:SID:PT?]
Returns the last decoded value of Alphanumeric System ID Parameter Type (4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## LENGth?

[FDCCH:SPACH:ALPHA:SID:LENGth?]
Returns the last decoded value of Length of Alphanumeric System ID (8 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## CHARacters?

[FDCCH:SPACH:ALPHA:SID:CHARacters?]
Returns the last decoded value of Alphanumeric System ID (ASCII String) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## PSID_RSID:

PT?
[FDCCH:SPACH:ALPHA:PSID_RSID:PT?]
Returns the last decoded value of Alphanumeric PSID/RSID List Parameter Type ( 4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## LENGth?

[FDCCH:SPACH:ALPHA:PSID_RSID:LENGth?]
Returns the last decoded value of Length of Alphanumeric PSID/RSID List ( 8 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## NAME:

## LENGth? $n$

[FDCCH:SPACH:ALPHA:PSID_RSID:NAME:LENGTh? n]
Returns the last decoded value of Length of PSID/RSID Alphanumeric Name ( 4 bit value) selected by $n$ from the selected L3DATA Message. Up to 16 instances can be returned. Range of $n$ is 0 to 15. Returns - 1 if already returned or not available.

## CHARacters? $n$

[FDCCH:SPACH:ALPHA:PSID_RSID:NAME:CHARacters? n]
Returns the last decoded value of Alphanumeric PSID/RSID Display Characters (ASCII String) selected by $n$ from the selected L3DATA Message. Up to 16 instances can be returned. Range of $n$ is 0 to 15 . Returns - 1 if already returned or not available.

## FDCCH:

## SPACH:

RANDU?
[FDCCH:SPACH:RANDU?]
Returns the last decoded value of RANDU (24 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## QUEue:POSition?

[FDCCH:SPACH:QUEue:POSition?]
Returns the last decoded value of Queue Position (4 bit value) from the selected L3DATA Message. Returns -1 if already returned or not available.

## MACA:LIST:

## NUMBer? -or- NUM?

[FDCCH:SPACH:MACA:LIST:NUMBer?]
Returns the last decoded value of Number of MACA Channels (4 bit value) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## CHAN? $n$

[FDCCH:SPACH:MACA:LIST:CHAN? n]
Returns the last decoded value of CHAN (11 bit value - 1 to 2047) for designated MACA Channel ( $n$ ) from the selected L3DATA Message. Up to 16 instances can be returned. Range of $n$ is 0 to 15. Returns -1 if already returned or not available.

## OTHER:

HYPERband?
[FDCCH:SPACH:MACA:LIST:OTHER:HYPERband?]
Returns the last decoded value of Hyperband (2 bit value) for MACA_LIST
(Other Hyperband) from the selected L3DATA Message. Returns -1 if already returned or not available.

NUMBer? -or- NUM?
[FDCCH:SPACH:MACA:LIST:OTHER:NUMBer?]
Returns the last decoded value of Number of MACA Channels (4 bit value) for MACA_LIST (Other Hyperband) from the selected L3DATA Message.
Returns - 1 if already returned or not available.
CHAN? $n$
[FDCCH:SPACH:MACA:LIST:OTHER:CHAN? n]
Returns the last decoded value of CHAN (11 bit value - 1 to 2047) of designated MACA Channel for MACA_LIST (Other Hyperband) from the selected L3DATA Message. Range of $n$ is 0 to 15. Returns - 1 if already returned or not available.

## 9-11 RDCCH DATA MONITOR

## 9-11-1 SETUP COMMANDS

## RDCCH:

## SETup

[RDCCH:SETUP]
Sets up the Sp Tst as when entering the Reverse Digital Control Channel screen (screen is not displayed). The HOST is forced into Duplex Mode through selection of Duplex screen.

## CONFigure:

## USER

[RDCCH:CONFigure:USER]
This command is identical to the RDCCH:SETup command except that the USER screen is selected.

NONE
[RDCCH:CONFigure:NONE]
This command is identical to the RDCCH:SETup command except that the Test Set remains in the screen currently displayed.

## CHANnel $n$

[RDCCH:CHANnel n]
Specifies Reverse Channel to monitor.

| FREQuency:BAND (See 9-3) | RANGE OF $\boldsymbol{n}$ |
| :---: | :---: |
| 0 | 1 to 333 |
| 1 | 1 to 1023 |
| 2 | 1 to 1999 |

## CHANnel?

[RDCCH:CHANnel?]
Returns current value of CHANnel.

## RATE $n$

[RDCCH:RATE n]
Selects Transmission Rate: Full $(n=0)$ or Half $(n=1)$.

## RATE?

[RDCCH:RATE?]
Returns current setting of RATE.

## SLOT $n$

[RDCCH:SLOT n]
Specifies the full rate pair or half rate Slot in which to receive. Range of $n$ is 1 to 3 (full) or 1 to 6 (half).

## RDCCH:

## LENGth:

## ABBREViated

[RDCCH:LENGth:ABBREViated]
Configures the SP TST to decode abbreviated length bursts on the RDCCH.

## NORMaI

[RDCCH:LENGth:NORMal]
Configures the SP TST to decode normal length bursts on the RDCCH.

## LENGth?

[RDCCH:LENGth?]
Returns current setting of LENGth: $0=$ Normal, $1=$ Abbreviated.
DVCC $n$
[RDCCH:DVCC n]
Specifies Digital Verification Color Code. Range of $n$ is 0 to 255.
Digital Verification Color Code, which is used when calculating the CRC, must be specified to decode the message.

## DVCC?

[RDCCH:DVCC?]
Returns current value of DVCC.

## 9-11-2 CONTINUOUS REMOTE RAW TIMESLOT DATA

The RDCCH timeslot data is presented exactly as received with no de-interleaving, error correction or formatting of data. The number of bits in a timeslot is 312 for a normal slot and 274 for an abbreviated slot, corresponding to 78 ASCII characters. The data on the RDCCH is present only when the mobile station is accessing the system. The baud rate should be set to 57600 for both the SP TST and the RS-232 terminal. The following TMAC commands are used to start and stop this operation:

## RDCCH:REMote:TIMEslot:

## STARt

[RDCCH:REMote:TIMEslot:STARt]
Starts sending the received data out the RS-232 Connector.
STOP
[RDCCH:REMote:TIMEslot:STOP]
Stops sending the received data out the RS-232 Connector.

## 9-11-3 CONTINUOUS REMOTE RAW DATA

This mode differs from Continuous Remote Raw Timeslot Data in Section 9-11-2. This mode de-interleaves the data and performs forward error correction before presenting the data. The timeslot is broken into the various data fields and continuously transmitted out the RS-232 Connector. Following the data is a millisecond time stamp which provides relative time between slots of data.
The RDCCH data is presented in hexadecimal out the RS-232 Connector with each frame of data being separated by a newline character. The data is formatted as follows:

- The first 7 characters represent the 28 bits of the SYNC word.
- The next 6 characters are the hexadecimal value of the 24 bits of SYNC+.
- The next 30 characters are the hexadecimal value (left justified) of the 117 bits of data.
- The flag is followed by a millisecond time stamp.

The following TMAC commands are used to set up and start and stop this operation:

## RDCCH:REMote:RAW:

DVCC $n$
[RDCCH:REMOTe:RAW:DVCC n]
Specifies Digital Verification Color Code. Range of $n$ is 1 to 255 .
A DVCC, which is used when calculating the CRC, must be specified to decode the message.

## LENGth:

## ABBREViated

[RDCCH:REMote:RAW:LENGth:ABBREViated]
Configures the SP TST to decode abbreviated length bursts on the RDCCH.

## NORMaI

[RDCCH:REMOTe:RAW:LENGTh:NORMal]
Configures the SP TST to decode normal length bursts on the RDCCH.

## STARt

[RDCCH:REMote:RAW:STARt]
Starts sending the received, de-interleaved and decoded data out the RS-232 Connector.

## STOP

[RDCCH:REMOTE:RAW:STOP]
Stops sending the received data out the RS-232 Connector.
An embedded macro named RRAW initiates the START when executed and sends a STOP when any key on the RS-232 Terminal is pressed. To use this macro, type in the command RRAW at the RS-232 terminal.

## 9-11-4 BUFFERED RAW DATA

The RDCCH Buffered Raw Data commands consist of the TMAC commands used for Layer 1 raw data buffering. Up to 100 frames of raw data can be captured (similar to FOCC raw data TMAC commands). The following commands are used for this operation:

## RDCCH:RAW:

## DEPTH $n$

[RDCCH:RAW:DEPTH n]
Specifies depth of the raw buffer. Range of $n$ is 0 to 99 .
STARt
[RDCCH:RAW:STARt]
Starts capturing raw data on the RDCCH.
STOP
[RDCCH:RAW:STOP]
Stops capturing raw data on the RDCCH.
STOP occurs automatically when the buffer is full.

## COUNT?

[RDCCH:RAW:COUNT?]
Returns current number of frames ( 0 to 100 bit value) received and stored into the raw buffer.
When COUNT is equal to DEPTH, the raw buffer is full. Allows the user to access or decode the raw data as it is received instead of waiting until the raw buffer is completely full.

TS? $n$
[RDCCH:RAW:TS? n]
Returns Time Stamp (in milliseconds) of selected raw data frame ( $n$ ). Range of $n$ is 0 to 99 .

PREAMble? $n$
[RDCCH:RAW:PREAMble? n]
Returns current value of Preamble ( 16 bit value) in selected raw data frame ( $n$ ). Range of $n$ is 0 to 99 .

SYNC? $n$
[RDCCH:RAW:SYNC? n]
Returns current value of SYNC (28 bit value) in selected raw data frame ( $n$ ). Range of $n$ is 0 to 99 .

DATA? $n, x$
[RDCCH:RAW:DATA? $n, x]$
Returns current raw data byte ( 8 bit value) (indexed by $x$ ) in selected raw data frame ( $n$ ).
Range of $n$ is 0 to 99 ; range of $x$ is 0 to 15 .

## SYNCPLUS? $n$

[RDCCH:RAW:SYNCPLUS? n]
Returns current value of SYNC $+(24$ bit value) in selected raw data frame ( $n$ ). Range of $n$ is 0 to 99 .

## 9-11-5 LAYER 2 DATA MONITOR

The Layer 2 Data Monitor is made up of the TMAC commands necessary to decode a Layer 2 message.
The process involves the following steps:

1. Capture 1 to 100 words into the raw data buffer for non real-time decoding into Layer 2 data fields. Use the RDCCH Buffered Raw data commands described in Section 9-11-4.
2. Select one frame of raw data from the raw buffer and decode the frame into Layer 2 fields:

## RDCCH:LAYER2:DECode n

[RDCCH:LAYER2:DECode n]
Decodes selected frame of data $(n)$ in the raw buffer. Range of $n$ is 0 to 99 .

The decoded Layer 2 data (after issuing the RDCCH:LAYER2:DECode command) is accessed with the following commands:

## RDCCH:LAYER2:RACH:

## ARQ_RSVD?

[RDC $\left.\bar{C} H: L A Y E R 2: R A C H: A R Q \_R S V D ?\right]$
Returns current value of Automatic Retransmission Request RSVD (2 bit value). Returns -1 if not available.

BT?
[RDCCH:LAYERZ:RACH:BT?]
Returns current value of Burst Type ( 3 bit value). Returns -1 if not available.

## Cl ?

[RDCCH:LAYER2:RACH:CI?]
Returns current state of Change Indicator (1 bit value). Returns -1 if not available.

## EH_RSVD?

[RDCCH:LAYER2:RACH:EH_RSVD?]
Returns current state of Extended Header RSVD (1 bit value). Returns - 1 if not available.

## EHI?

[RDCCH:LAYER2:RACH:EHI?]
Returns current state of Extension Header Indicator (1 bit value). Returns - 1 if not available.

## END_RSVD?

[RDCCH:LAYER2:RACH:END RSVD?]
Returns current state of END frame RSVD (1 bit value). Returns - 1 if not available.

## FRNO_MAP?

[RDCCH:LAYER2:RACH:FRNO_MAP?]
Returns current value of Frame Number Map ( 32 bit value). Returns - 1 if not available.
IDT?
[RDCCH:LAYER2:RACH:IDT?]
Returns current value of Identity Type (2 bit value). Returns - 1 if not available.

## RDCCH:LAYER2:RACH:

## L3DATA? $n, x$

[RDCCH:LA YER2:RACH:L3DATA? $n, x$ ]
Returns current 8 bit word (indexed by $x$ ) of selected Layer 3 Data message ( $n$ ). Returns -1 if not available. Range of $n$ is 0 to 7 ; range of $x$ is 0 to 15.

The number of Layer 3 data messages embedded within a Layer 2 frame can be just a portion of single data message on up to 8 full data messages. The maximum number of bytes in a Layer 2 frame is 16 bytes. The data returned is left justified.

The L3LENGTH command may be used to determine how many 8 bit "words" make up the Layer 3 data field in the frame currently being decoded.

## L3LENGTH? $n$

[RDCCH:LAYER2:RACH:L3LENGTH? n]
Returns current 8 bit value of Length (indexed by $n$ ) in Layer 3 data field. Returns -1 if not available. Range of $n$ is 0 to 7 .

Length of the Layer 3 data field in the RACH Layer 2 frame currently being decoded. This is necessary because the L3LIs are all contained in the first frame of a multiframe RACH message and subsequent frames do not contain the information specifying the length of the Layer 3 data field.

L3LI? $n$
[RDCCH:LAYER2:RACH:L3LI? n]
Returns current 8 bit value of Layer 3 Length Indicator indexed by $n$. Returns -1 if not available. Range of $n$ is 0 to 7 .

A RACH Layer 2 frame may contain up to eight Layer 3 Length Indicators.

## MEA?

[RDCCH:LAYER2:RACH:MEA?]
Returns current value of Message Encryption Algorithm (2 bit value). Returns - 1 if not available.

## MEK?

[RDCCH:LAYER2:RACH:MEK?]
Returns current value of Message Encryption Key (2 bit value). Returns -1 if not available.

## MIN?

[RDCCH:LAYER2:RACH:MIN?]
Returns current value of Mobile Identification Number (ASCII string). Returns - 1 if not available.

This command is associated with a 34 bit Mobile Station Identity.

## RDCCH:LAYER2:RACH:

## MSID? $n$

[RDCCH:LAYER2:RACH:MSID? n]
Returns the selected 8 bit word of the Mobile Station I.D. Range of $n$ is 0 to 6 .
( $0=$ Least significant byte, $6=$ Most significant byte.) Returns -1 if not available.


Figure 9-1 Mobile Station MSID

## NL3M?

[RDCCH:LAYER2:RACH:NL3M?]
Returns current value of Number of Layer 3 Messages ( 3 bit value). Returns - 1 if not available.

PEA?
[RDCCH:LAYER2:RACH:PEA?]
Returns current value of Partial Echo Assigned ( 7 bit value). Returns - 1 if not available.

## 9-11-6 RDCCH REAL TIME DATA MONITOR

## RDCCH:

START
[RDCCH:START]
Starts a background task running that decodes the RDCCH message information elements. The decoded information elements are returned with corresponding query commands.

## STOP

[RDCCH:STOP]
Stops the RDCCH decode background task.

## SYNC?

[RDCCH:SYNC?]
Returns the last decoded value of the RDCCH sync word (28 bit value). Returns -1 if not available.

## SYNCPIus?

[RDCCH:SYNCPIus?]
Returns the last decoded value of the RDCCH sync plus word ( 24 bit value). Returns -1 if not available.

## BT?

[RDCCH:BT?]
Returns current value of Burst Type ( 3 bit value). Returns -1 if not available.
CI?
[RDCCH:Cl?]
Returns current state of Change Indicator (1 bit value). Returns-1 if not available.

## EHI?

[RDCCH:EHI?]
Returns current state of Extension Header Indicator (1 bit value). Returns -1 if not available.

## IDT?

[RDCCH:IDT?]
Returns current value of Identity Type (2 bit value). Returns -1 if not available.
MSID :

## MS?

[RDCCH:MSID:MS?]
Returns the 18 Most Significant bits of Mobile Station Identification. Returns - 1 if not available.

## LS?

[RDCCH:MSID:LS?]
Returns the 32 Least Significant bits of Mobile Station Identification. Returns - 1 if not available.

## MIN?

[RDCCH:MIN?]
Returns current Mobile Identification Number (ASCII String) associated with a 34 bit Mobile Station Identity. Returns - 1 if not available.

## RDCCH:

## NL3M?

[RDCCH:NL3M?]
Returns current value of Number of Layer 3 Messages ( 3 bit value). Returns -1 if not available.

L3LI? $n$
[RDCCH:L3LI?n]
Returns current 8 bit value of Layer 3 Length Indicator indexed by $n$. Returns - 1 if not available. Range of $n$ is 0 to 7 .

A RACH layer 2 frame may contain up to eight layer 3 length indicators.

## L3DATA:

SELect $n$
[RDCCH:L3DATA:SELect n]
Specifies Layer 3 data message from which to access data. Range of $n$ is 0 to 7 .
Up to eight Layer 3 messages can be included in one RDCCH message. Each message is decoded and stored. The following commands access the information elements from the selected layer 3 message.

## SELect?

[RDCCH:L3DATA:SELect?]
Returns current value of SELect.
Returns the last selection of eight Layer 3 messages.

## PEA?

[RDCCH:PEA?]
Returns current value of Partial Echo Assigned (7 bit value). Returns - 1 if not available.

## MEA?

[RDCCH:MEA?]
Returns current value of Message Encryption Algorithm (2 bit value). Returns -1 if not available.

## MEK?

[RDCCH:MEK?]
Returns current value of Message Encryption Key ( 2 bit value). Returns - 1 if not available.

## FRNO_MAP?

[RDCCH:FRNO_MAP?]
Returns current value of Frame Number Map (26 bit value). Returns -1 if not available.

## RDCCH:

RSVD:
EHI?
[RDCCH:RSVD:EHI?]
Returns current state of Extended Header Indicator RSVD (1 bit value). Returns -1 if not available.

ARQ?
[RDCCH:RSVD:ARQ?]
Returns current value of ARQ RSVD field (2 bit value). Returns - 1 if not available.

## END?

[RDCCH:RSVD:END?]
Returns current state of END frame RSVD field (1 bit value). Returns -1 if not available.

## CRC?

[RDCCH:CRC?]
Returns current value of Cyclic Redundancy Code (16 bit value). Returns -1 if not available.

## PD?

[RDCCH:PD?]
Returns current value of Protocol Discriminator (2 bit value). Returns - 1 if not available.

## MSGtype?

[RDCCH:MSGtype?]
Returns current Message Type.
The following are possible message types:

| AUDITCON | AUTHENTICATION | BSCHAL | BSMC |
| :--- | :--- | :--- | :--- |
| CAPABILITY | MACA | ORIGINATION | PAGE RESPONSE |
| QDISC | R-DATA | R-DATA ACCEPT | RDATA REJECT |
| REGISTRATION | SERIAL NUMBER | SOC | SPACHCON |
| SSD UPDATE | TEST | UCHAL |  |

PFC_1?
[RDC $\bar{C} H: P F C_{-} 1$ 1]
Returns current value of Paging Frame Class (3 bit value). Returns -1 if not available.
PSID_RSID:

## SELect?

[RDCCH:PSID_RSID:SELect?]
Returns current value of Selected PSID/RSID (4 bit value). Returns -1 if not available.

## MAP?

[RDCCH:PSID_RSID:MAP?]
Returns current value of PSID/RSID Map (16 bit value). Returns - 1 if not available.

## RDCCH:

## SUBaddress:

LENGth?
[RDCCH:SUBaddress:LENGth?]
Returns current value of LENGth ( 8 bit value). Returns -1 if not available.

## ODD_EVEN?

[RDCCH:SUBaddress:ODD_EVEN?]
Returns current value of ODD EVEN (1 bit value). Returns -1 if not available.

## TYPE?

[RDCCH:SUBaddress:TYPE?]
Returns current value of TYPE ( 3 bit value). Returns - 1 if not available.

## REServed?

[RDCCH:SUBaddress:REServed?]
Returns the last decoded value of the Subaddress Reserved fields (4 bit value). Returns -1 if already returned or not available.

## ADDRess? $n$

[RDCCH:SUBaddress:ADDRess? n]
Returns last decoded 8 bit value of Subaddress from selected L3DATA Message ( $n$ ).
Range of $n$ is 0 to 19. Returns - 1 if not available.

## DISPlay:

## LENGth?

[RDCCH:DISPlay:LENGth?]
Returns current value of Length of Display Information (8 bit value). Returns -1 if not available.

## CHARacter? $n$

[RDCCH:DISPlay:CHARacter? n]
Returns current 8 bit value of Display Character indexed by $n$. Range of $n$ is 0 to 81 .

## COUNt?

[RDCCH:COUNt?]
Returns current value of COUNt ( 6 bit value). Returns - 1 if not available.
RANDC?
[RDCCH:RANDC?]
Returns current value of RANDC (8 bit value). Returns - 1 if not available.

## AUTHR?

[RDCCH:AUTHR?]
Returns current value of AUTHR (18 bit value). Returns - 1 if not available.
RANDBS?
[RDCCH:RANDBS?]
Returns current value of RANDBS (32 bit value). Returns - 1 if not available.

## RDCCH:

## BSMC?

[RDCCH:BSMC?]
Returns current value of Base Station Manufacture Code (8 bit value). Returns -1 if not available.

## CUSTom:

## LENGth?

[RDCCH:CUSTom:LENGth?]
Returns current value of Custom Control Length ( 8 bit value). Returns -1 if not available.
CONTrol? $n$
[RDCCH:CUSTom:CONTrol? n]
Returns current 8 bit value of Custom Control indexed by $n$. Range of $n$ is 0 to 252 .
Returns - 1 if not available.
PROTocol:VERsion?
[RDCCH:PROTocol:VERsion?]
Returns current value of Protocol Version (4 bit value). Returns - 1 if not available.

## SCM?

[RDCCH:SCM?]
Returns current value of Station Class Mark (5 bit value). Returns - 1 if not available.

## VINtage:

## SOFTware?

[RDCCH:VINtage:SOFTware?]
Returns current value of Software Vintage ( 6 bit value). Returns - 1 if not available.

## FIRMware?

[RDCCH:VINtage:FIRMware?]
Returns current value of Firmware Vintage ( 6 bit value). Returns -1 if not available.
MODEL?
[RDCCH:MODEL?]
Returns current value of Model Number ( 4 bit value). Returns - 1 if not available.

## MANufacture?

[RDCCH:MANufacture?]
Returns current value of Manufacture Code ( 8 bit value). Returns - 1 if not available.
SUPPort:
MAX:PFC?
[RDCCH:SUPPort:MAX:PFC?]
Returns current value of MAX_SUPPORTED_PFC (3 bit value). Returns - 1 if not available.
SOC?
[RDCCH:SUPPort:SOC?]
Returns current value of SOC Support (1 bit value). Returns -1 if not available.

## RDCCH:

## SUPPort:

## BSMC?

[RDCCH:SUPPort:BSMC?]
Returns current value of BSMC Support (1 bit value). Returns - 1 if not available.
ASYNC?
[RDCCH:SUPPort:ASYNC?]
Returns current value of Async Data Support (1 bit value). Returns -1 if not available.

## G3fax?

[RDCCH:SUPPort:G3iax?]
Returns current value of G3-Fax Support (1 bit value). Returns-1 if not available.

## SMS?

[RDCCH:SUPPort:SMS?]
Returns current value of SMS Broadcast Support (1 bit value). Returns -1 if not available.

## SUBaddress?

[RDCCH:SUPPort:SUBaddress?]
Returns current value of Subaddressing Support (1 bit value). Returns -1 if not available.

## FREQuency:BANDS?

[RDCCH:SUPPort:FREQuency:BANDS?]
Returns current value of Supported Frequency Bands ( 8 bit value). Returns - 1 if not available.

## IRA?

[RDCCH:SUPPort:IRA?]
Returns current value of IRA Support (1 bit value). Returns - 1 if not available.

## USER?

[RDCCH:SUPPort:USER?]
Returns current value of User Group Support (1 bit value). Returns - 1 if not available.

## ANA800? <br> [RDCCH:SUPPort:ANA800?]

Returns current value of 800 MHz Analog Speech Support (1 bit value). Returns -1 if not available.

## HALF?

[RDCCH:SUPPort:HALF?]
Returns current value of Half-Rate DTC Support (1 bit value). Returns - 1 if not available.

## DOUBle?

[RDCCH:SUPPort:DOUBle?]
Returns current value of Double Rate DTC Support (1 bit value). Returns - 1 if not available.

## TRIPIe?

[RDCCH:SUPPort:TRIPIe?]
Returns current value of Triple Rate DTC Support (1 bit value). Returns -1 if not available.

## RDCCH:

## SUPPort:

## STU_III?

[RDC"H:SUPPort:STU_III?]
Returns current state of STU-III Support (1 bit value). Returns - 1 if already returned or not available.

## ALT SOC?

[RDCCH:SUPPort:ALT_SOC?]
Returns current value of ALT_SOC_Support (12 bit value). Returns - 1 if already returned or not available.

## VC_MAP?

[RDCCH:VC_MAP?]
Returns current value of Voice Coder Map Info ( 6 bit value). Returns - 1 if already returned or not available.

## MEASurement:

## LTM:

## WER?

[RDCCH:MEASurement:LTM:WER?]
Returns current value of Word Error Rate (3 bit value). Returns - 1 if not available.

## BER?

[RDCCH:MEASurement:LTM:BER?]
Returns current value of LTM Measurement Bit Error Rate (3 bit value). Returns - 1 if not available.

RSS?
[RDCCH:MEASurement:LTM:RSS?]
Returns current value of LTM Measurement Receive Signal Strength ( 5 bit value).
Returns-1 if not available.
FULL?
[RDCCH:MEASurement:LTM:FULL?]
Returns current value of LTM Measurement Full Measurement Indicator (1 bit value). Returns - 1 if not available.

## STM :

NV?
[RDCCH:MEASurement:STM:NV?]
Returns current value of STM Measurement Number of Values ( 4 bit value).
Returns-1 if not available.
RSS? $n$
[RDCCH:MEASurement:STM:RSS? n]
Returns current 5 bit value of STM Measurement Receive Signal Strength indexed by $n$. Range of $n$ is 0 to 15. Returns -1 if not available.

## RDCCH:

## MEASurement:

## OTHER:STM:

## LENGth?

[RDCCH:MEASurement:OTHER:STM:LENGth?]
Returns last decoded value of STM Measurement (Other Hyperband) Report Map Length ( 4 bit value -1 to 15 ). Returns -1 if already returned or not available.

## REPort?

[RDCCH:MEASurement:OTHER:STM:REPort?]
Returns last decoded value of STM Measurement (Other Hyperband) Report Map (15 bit value - 1 to \#h7FFF). Returns -1 if already returned or not available.

RSS? $n$
[RDCCH:MEASurement:OTHER:STM:RSS? n]
Returns last decoded value of STM Measurement (Other Hyperband) ST_RSS (5 bit value) of designated bit position ( $n$ ). Range of $n$ is 0 to 14. Returns - 1 if already returned or not available.

## EMERgency?

[RDCCH:EMERgency?]
Returns current value of Emergency Call (1 bit value). Returns -1 if not available.

## LT?

[RDCCH:LT?]
Returns current value of Last Try (1 bit value). Returns - 1 if not available.

## SERVice?

[RDCCH:SERVICe?]
Returns current value of Service Code (4 bit value). Returns -1 if not available.

## MODE:

## VOICe:

## VC?

[RDCCH:MODE:VOICe:VC?]
Returns current value of Voice Mode VC (3 bit value). Returns -1 if not available.

## PM?

[RDCCH:MODE:VOICe:PM?]
Returns current value of Voice Mode PM_V (3 bit value). Returns -1 if not available.

## RDCCH:

MODE:

## DATA:

## PM?

[RDCCH:MODE:DATA:PM?]
Returns current value of Data Mode PM_D (3 bit value). Returns - 1 if not available.

## SAP?

[RDCCH:MODE:DATA:SAP?]
Returns current value of Data Mode SAP (1 bit value). Returns - 1 if not available.

## ACKED?

[RDCCH:MODE:DATA:ACKED?]
Returns current value of Data Mode Acked Data (1 bit value). Returns - 1 if not available.

## CRC?

[RDCCH:MODE:DATA:CRC?]
Returns current value of Data Mode CRC (2 bit value). Returns -1 if not available.

## PART?

[RDCCH:MODE:DATA:PART?]
Returns current value of Data Mode Data Part (3 bit value). Returns -1 if not available.

## RLP?

[RDCCH:MODE:DATA:RLP?]
Returns current value of Data Mode RLP (2 bit value). Returns - 1 if not available.

## VOICEMode:

## NUMBer? -or- NUM?

[RDCCH:VOICEMode:NUMBer?]
Returns the last decoded Number of instances of Voice Mode ( 3 bit value) in the selected L3DATA Message. Returns - 1 if already returned or not available.
vC? $n$
[RDCCH:VOICEMode:VC?n]
Returns the last decoded value of VC from the designated instance of Voice Mode in the selected L3DATA Message. Range of $n$ is 0 to 7 . Returns - 1 if already returned or not available.

PM? $n$
[RDCCH:VOICEMode:PM? n]
Returns the last decoded value of $P M_{-} V$ from the designated instance of Voice Mode in the selected L3DATA Message. Range of $n$ is 0 to 7. Returns - 1 if already returned or not available.

## RDCCH:

## MEM :

Message Encryption Mode. Identifies the selected message encryption algorithm, key and domain.

## MEA?

[RDCCH:MEM:MEA?]
Returns current value of Message Encryption Algorithm (3 bit value). Returns - 1 if not available.

## MED?

[RDCCH:MEM:MED?]
Returns current value of Message Encryption Domain (3 bit value). Returns - 1 if not available.

## MEK?

[RDCCH:MEM:MEK?]
Returns current value of Message Encryption Key (3 bit value). Returns -1 if not available.

## BANDWidth?

[RDCCH:BANDWidth?]
Returns current value of Bandwidth (3 bit value). Returns -1 if not available.
CALLED:
Called Party - Identifies the called party associated with a mobile station.

## LENGth?

[RDCCH:CALLED:LENGTh?]
Returns current value of LENGth (8 bit value). Returns -1 if not available.

## TYPE?

[RDCCH:CALLED:TYPE?]
Returns current value of TYPE ( 3 bit value). Returns - 1 if not available.

## PLANid?

[RDCCH:CALLED:PLANid?]
Returns current value of PLANid (4 bit value). Returns -1 if not available.

## ENCoding?

[RDCCH:CALLED:ENCOding?]
Returns current value of ENCoding (1 bit value). Returns - 1 if not available.

## ADDRess?

[RDCCH:CALLED:ADDRess?]
Returns current string value of ADDRess (ASCll string). Returns - 1 if not available.

## RDCCH:

CALLED:

## SUBaddress:

Identifies the address of a called or calling party.
LENGth?
[RDCCH:CALLED:SUBaddress:LENGth?]
Returns current value of LENGth (8 bit value). Returns -1 if not available.

## ODD EVEN?

[RDCCH:CALLED:SUBaddress:ODD_EVEN?]
Returns current value of ODD_EVEN (1 bit value). Returns -1 if not available.
TYPE?
[RDCCH:CALLED:SUBaddress:TYPE?]
Returns current value of TYPE ( 3 bit value). Returns - 1 if not available.

## REServed?

[RDCCH:CALLED:SUBaddress:REServed?]
Returns the last decoded value of the Called Party Subaddress Reserved fields (4 bit value). Returns -1 if already returned or not available.

ADDRess? $n$
[RDCCH:CALLED:SUBaddress:ADDRess? n]
Returns last decoded 8 bit value of Called Subaddress from selected L3DATA Message ( $n$ ). Range of $n$ is 0 to 19. Returns -1 if not available.

CALLING:
Calling Party - Identifies the calling party associated with a mobile station.

## LENGth?

[RDCCH:CALLING:LENGTh?]
Returns current value of LENGth ( 8 bit value). Returns - 1 if not available.
TYPE?
[RDCCH:CALLING:TYPE?]
Returns current value of TYPE ( 3 bit value). Returns -1 if not available.

## PLANid?

[RDCCH:CALLING:PLANId?]
Returns current value of PLANid ( 4 bit value). Returns - 1 if not available.

## ENCoding?

[RDCCH:CALLING:ENCoding?]
Returns current value of ENCoding (1 bit value). Returns -1 if not available.

## ADDRess?

[RDCCH:CALLING:ADDRess?]
Returns current string value of ADDRess (ASCII string). Returns - 1 if not available.

## RDCCH:

## CALLING:

## PRESentation:

Identifies the presentation restrictions and screening related to the Calling Party information element.

## PI?

[RDCCH:CALLING:PRESentation:PI?]
Returns current value of Presentation Indicator (2 bit value). Returns -1 if not available.

SI?
[RDCCH:CALLING:PRESentation:SI?]
Returns current value of Screening Indicator (2 bit value). Returns - 1 if not available.

## SUBaddress:

Identifies the address of a called or calling party.
LENGth?
[RDCCH:CALLING:SUBaddress:LENGth?]
Returns current value of LENGth ( 8 bit value). Returns -1 if not available.
ODD_EVEN?
[RDCCH:CALLING:SUBaddress:ODD_EVEN?]
Returns current value of ODD_EVEN (1 bit value). Returns -1 if not available.

## TYPE?

[RDCCH:CALLING:SUBaddress:TYPE?]
Returns current value of TYPE ( 3 bit value). Returns -1 if not available.

## REServed?

[RDCCH:CALLING:SUBaddress:REServed?]
Returns the last decoded value of the Calling Party Subaddress Reserved fields (4 bit value). Returns - 1 if already returned or not available.

ADDRess? $n$
[RDCCH:CALLING:SUBaddress:ADDRess? n]
Returns last decoded 8 bit value of Calling Subaddress from selected L3DATA Message $(n)$. Range of $n$ is 0 to 19. Returns -1 if not available.

## RDCCH:

RTRANSaction?
[RDCCH:RTRANSaction?]
Returns current value of RTRANSaction ( 8 bit value). Returns - 1 if not available.
RDATA_UNIT:
Contains the Higher Layer Protocol Data Unit and is mandatory in an R-DATA message.

## LENGth?

[RDCCH:RDATA_UNIT:LENGth?]
Returns current value of LENGth ( 8 bit value). Returns -1 if not available.

## HLP:

## IDentifier?

[RDCCH:RDATA_UNIT:HLP:IDentifier?]
Returns current value of Higher Layer Protocol IDentifier ( 8 bit value). Returns - 1 if not available.

DATA? $n$
[RDCCH:RDATA_UNIT:HLP:DATA? n]
Returns current 8 bit value of Higher Layer Protocol DATA unit indexed by $n$. Range of $n$ is 0 to 255. Returns -1 if not available.

## MESSage:CENTer:

Identifies the Message Center Address for the message being sent.

## LENGth?

[RDCCH:MESSage:CENTer:LENGth?]
Returns current value of LENGth ( 8 bit value). Returns -1 if not available.

## TYPE?

[RDCCH:MESSage:CENTer:TYPE?]
Returns current value of TYPE (3 bit value). Returns -1 if not available.

## PLANid?

[RDCCH:MESSage:CENTer:PLANid?]
Returns current value of PLANid ( 4 bit value). Returns -1 if not available.

## ENCoding?

[RDCCH:MESSage:CENTer:ENCoding?]
Returns current value of ENCoding (1 bit value). Returns -1 if not available.

## ADDRess?

[RDCCH:MESSage:CENTer:ADDRess?]
Returns current string value of ADDRess (ASCII string). Returns - 1 if not available.

## RDCCH:

USER:

## GROUP:

Identifies the User Group ID that a mobile station has requested or has been allocated.

## STATus?

[RDCCH:USER:GROUP:STATUS?]
Returns current value of STATUS (2 bit value). Returns-1 if not available.

## TYPE?

[RDCCH:USER:GROUP:TYPE?]
Returns current value of TYPE (2 bit value). Returns -1 if not available.
UGID:
MS?
[RDCCH:USER:GROUP:UGID:MS?]
Returns the 18 Most Significant Bits of User Group Identification.

## LS?

[RDCCH:USER:GROUP:UGID:LS?]
Returns the 32 Least Significant Bits of User Group Identification.

## DEST:

## LENGth?

[RDCCH:USER:DEST:LENGTh?]
Returns current value of LENGth ( 8 bit value). Returns - 1 if not available.
TYPE?
[RDCCH:USER:DEST:TYPE?]
Returns current value of TYPE ( 3 bit value). Returns-1 if not available.

## PLANid?

[RDCCH:USER:DEST:PLANId?]
Returns current value of PLANid (4 bit value). Returns -1 if not available.

## ENCoding?

[RDCCH:USER:DEST:ENCoding?]
Returns current value of ENCoding (1 bit value). Returns -1 if not available.

## ADDRess?

[RDCCH:USER:DEST:ADDRess?]
Returns current string value of ADDRess (ASCII string). Returns -1 if not available.

## RDCCH:

USER:
DEST:

## SUBaddress:

Identifies the address of a called or calling party.

## LENGth?

[RDCCH:USER:DEST:SUBaddress:LENGth?]
Returns current value of LENGth ( 8 bit value). Returns -1 if not available.

## ODD_EVEN?

[RDC $\left.\bar{C} H: U S E R: D E S T: S U B a d d r e s s: O D D \_E V E N ?\right]$
Returns current value of ODD_EVEN (1 bit value). Returns - 1 if not available.
TYPE?
[RDCCH:USER:DEST:SUBaddress:TYPE?]
Returns current value of TYPE ( 3 bit value). Returns - 1 if not available.

## REServed?

[RDCCH:USER:DEST:SUBaddress:REServed?]
Returns the last decoded value of the User Destination Subaddress Reserved fields ( 4 bit value). Returns -1 if already returned or not available.

## ADDRess? $n$

[RDCCH:USER:DEST:SUBaddress:ADDRess? n]
Returns last decoded 8 bit value of User Destination Subaddress from selected L3DATA Message ( $n$ ). Range of $n$ is 0 to 19. Returns - 1 if not available.

## ORIG:

## LENGth?

[RDCCH:USER:ORIG:LENGth?]
Returns current value of LENGth (8 bit value). Returns - 1 if not available.

## TYPE?

[RDCCH:USER:ORIG:TYPE?]
Returns current value of TYPE (3 bit value). Returns - 1 if not available.

## PLANid?

[RDCCH:USER:ORIG:PLANId?]
Returns current value of PLANid (4 bit value). Returns -1 if not available.

## ENCoding?

[RDCCH:USER:ORIG:ENCoding?]
Returns current value of ENCoding (1 bit value). Returns - 1 if not available.
ADDRess?
[RDCCH:USER:ORIG:ADDRess?]
Returns current string value of ADDRess (ASCII string). Returns - 1 if not available.

## RDCCH:

USER:

## ORIG:

## PRESentation:

## PI?

[RDCCH:USER:ORIG:PRESentation:PI?]
Returns current value of Presentation Indicator (2 bit value). Returns -1 if not available.

SI?
[RDCCH:USER:ORIG:PRESentation:SI?]
Returns current value of Screening Indicator (2 bit value). Returns -1 if not available.

## SUBaddress:

Identifies the address of a called or calling party.

## LENGth?

[RDCCH:USER:ORIG:SUBaddress:LENGTh?]
Returns current value of LENGth (8 bit value). Returns -1 if not available.

## ODD EVEN?

[RDCC̄H:USER:ORIG:SUBaddress:ODD_EVEN?]
Returns current value of ODD_EVEN (1 bit value). Returns -1 if not available.
TYPE?
[RDCCH:USER:ORIG:SUBaddress:TYPE?]
Returns current value of TYPE ( 3 bit value). Returns - 1 if not available.

## REServed?

[RDCCH:USER:ORIG:SUBaddress:REServed?]
Returns the last decoded value of the User Originating Subaddress Reserved fields ( 4 bit value). Returns -1 if already returned or not available.

ADDRess? $n$
[RDCCH:USER:ORIG:SUBaddress:ADDRess? n]
Returns last decoded 8 bit value of User Origination Subaddress from selected L3DATA Message $(n)$. Range of $n$ is 0 to 19. Returns-1 if not available.

## RDCCH:

RDATA:DELay?
[RDCCH:RDATA:DELay?]
Returns the last decoded value of R-DATA Delay ( 4 bit value) from the selected L3DATA Message. Returns-1 if already returned or not available.

## RCAUSe?

[RDCCH:RCAUSe?]
Returns current value of R-Cause (7 bit value - 1 to 127) from the selected L3DATA Message. Returns - 1 if already returned or not available.

## RCAUSe:REServed?

[RDCCH:RCAUSe:REServed?]
Returns current value of the Reserved field (1 bit value) of R-Cause from the selected L3DATA Message. Returns -1 if already returned or not available.

## REG:TYPE?

[RDCCH:REG:TYPE?]
Returns current value of Registration Type ( 4 bit value). Returns -1 if not available.

## CNUMBer:

## LENGth?

[RDCCH:CNUMBer:LENGh??]
Returns current value of LENGth ( 8 bit value). Returns - 1 if not available.
TYPE?
[RDCCH:CNUMBer:TYPE?]
Returns current value of C-Number Type of Number (3 bit value). Returns -1 if not available.

## PLANid?

[RDCCH:CNUMBer:PLANid?]
Returns current value of C-Number Identification Plan (4 bit value). Returns -1 if not available.

## ENCoding?

[RDCCH:CNUMBer:ENCoding?]
Returns current value of C-Number Address Encoding (1 bit value). Returns -1 if not available.

## ADDRess?

[RDCCH:CNUMBer:ADDRess?]
Returns current string value of C-Number Address (ASCII string). Returns - 1 if not available.

## RDCCH:

## PFC:REQuest?

[RDCCH:PFC:REQuest?]
Returns current value of Paging Frame Class Request (3 bit value). Returns - 1 if not available.

## SID REPort?

[RDCCH:SID_REPort?]
Returns the last decoded value of SIDs-p (15 bit value). Returns - 1 if already returned or not available.

## SOC?

[RDCCH:SOC?]
Returns current value of SOC (12 bit value). Returns -1 if not available.

## ESN?

[RDCCH:ESN?]
Returns current value of Electronic Serial Number (32 bit value). Returns -1 if not available.

## CONFIRMed:MSGtype?

[RDCCH:CONFIRMed:MSGtype?]
Returns current value of Confirmed Message Type ( 6 bit value). Returns -1 if not available.

## SSDUP:STATus?

[RDCCH:SSDUP:STATus?]
Returns current value of SSD Update Status (2 bit value). Returns -1 if not available.

## AUTHU?

[RDCCH:AUTHU?]
Returns current value of AUTHU (18 bit value). Returns - 1 if not available.

## 9-12 CELL SITE SIMULATION COMMANDS

Refer to 10-8 for command guidelines and programming examples.

## 9-12-1 GENERAL

## CSS:

## SETup

[CSS:SETup]
Sets up the Sp Tst as when entering the first Cell Site Simulation screen (screen is not displayed). The Sp Tst is set up to transmit on Forward channels and receive on Reverse channels. The HOST is forced into Duplex Mode through selection of Duplex screen.
(The HOST is not transmitting at this point.)
Sets up the following default settings:

- No secondary cycles (equivalent command: CSS:FOCC:OVER:NUMBer 0).
- Length of primary cycle to 16 words (equivalent command: CSS:FOCC:OVER:LENGth 0,16).
- Select primary cycle (equivalent command: CSS:FOCC:OVER:SELect 0 ).


## CONFigure:

## USER

[CSS:CONFigure:USER]
This command is identical to the CSS:SETup command except that the USER screen is selected.

## NONE

[CSS:CONFigure:NONE]
This command is identical to the CSS:SETup command except that the Test Set remains in the screen currently displayed.

CHANnel $n$
[CSS:CHANnel n]
Selects Forward Control Channel for sending Overhead Messages.

| FREQuency:BAND (See 9-3) | RANGE OF $\boldsymbol{n}$ |
| :---: | :---: |
| 0 | 1 to 333 |
| 1 | 1 to 1023 |
| 2 | 1 to 1999 |

## CHANnel?

[CSS:CHANnel?]
Returns current value of CHANnel.
RATE $n$
[CSS:RATE n]
Selects Rate: full $(n=0)$ or half $(n=1)$.

## RATE?

[CSS:RATE?]
Returns current state of RATE.

## CSS:

RFLVL $n$
[CSS:RFLVL n]
Specifies RF output level in dBm at which to transmit. Range of $n$ is -127.0 to -20.0.

## RFLVL?

[CSS:RFLVL?]
Returns current value of RF Level.
SLOT $n$
[CSS:SLOT n]
Specifies the full rate pair or half rate slot in which to transmit. Range of $n$ is 1 to 3 (full) or 1 to 6 (half).

SLOT?
[CSS:SLOT?]
Returns current value of SLOT.

## STARt

[CSS:STARt]
Starts Cell Site Simulation transmission (Overhead Message on FOCC).

## STOP

[CSS:STOP]
Stops Cell Site Simulation transmission.

## 9-12-2 FOCC OVERHEAD MESSAGE PARAMETERS

## A. DEFINITIONS

Cycle: Time or all words between the beginning of a Overhead Message Train (OMT) to the beginning of the next OMT.

OMT: Portion of cycle containing system parameter words, global action words,
Registration ID word and/or DCCH information word.
Control Fillers: Words that occupy the unused portion of a cycle.
B. PROGRAMMING PROCEDURE FOR FOCC

- The Overhead Message parameters are transmitted within 11 to 21 word cycles. Each word is 463 bits long. The data rate is 10 kilobaud, making the length of each word 46.3 ms long.
- The length of an Overhead Message Train may be less than the length of the associated cycle. Control Fillers make up the difference.
- Up to five programmable cycles may be sent: 1 Primary and 4 Secondary (optional).

Each secondary cycle is sent at a independently specified ratio to the primary cycle. The range of the programmable ratio is $1: 1$ to $1: 65535$. (Example: Given that the ratio of a selected secondary cycle is $1: 3$, then the secondary cycle is sent along with every third Primary cycle.) See the examples in Figure 9-2. A Global Action message may be sent once or repeatedly in the primary cycle.

- Each cycle consists of the following:

1. Two System Parameter words. (The System Parameter words and Control Fillers are standard with each cycle.)
2. Enabled DCCH Information word.
3. Enabled Global Action messages.
4. Enabled Registration ID word.
5. Mobile Station Control Messages.
6. Control Fillers take the place of unused words.
7. RAW words. (After building an OMT, any word may be replaced with a RAW word. Rebuilding an OMT erases the RAW word.)

- The user builds an OMT using TMAC commands. To build an overhead message train use the following steps (refer to Section 10-8 for programming examples):


## Set up

1. Select the number of secondary cycles.
2. Select the ratio of each of the secondary cycles to the primary cycle.
3. Select the Length, in words, for each cycle.
4. Select the primary cycle.

## Select Contents and Build

5. Enable/disable DCCH Information word.
6. Enable/disable Registration ID word.
7. Program the data fields associated with the Overhead Messages.
8. Build the OMT.

## Secondary Cycles

9. Select each secondary OMT, then select the contents and build, as desired.

Given: 3 Secondary Cycles have been selected and built.
Secondary Cycle \#1 (S1) has a specified ratio to the Primary Cycle $(P)$ of $2: 1$.
Secondary Cycle \#2 (S2) has a ratio of 3:1.
Secondary Cycle \#3 (S3) has a ratio of 4:1.

Therefore, the FOCC Cell Site simulated transmission is as follows:

| \# of Occurrences <br> of Primary Cycle | 1 | 2 |  | 3 |  | 4 |  |  | 5 | 6 |  |  | 7 | 8 |  |  | 9 |  | 10 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cycle | P | P | S 1 | P | S 2 | P | S 1 | S 3 | P | P | S 1 | S 2 | P | P | S 1 | S 3 | P | S 2 | P | S 1 | S 3 |

## Example \#2:

Given: 4 Secondary Cycles have been selected and built.
$S 1$ ratio is $1: 1$.
S 2 ratio is $2: 1$.
S3 ratio is $5: 1$.
$S 4$ ratio is 10:1.
Therefore:

| 1 |  | 2 |  |  | 3 |  | 4 |  |  | 5 |  |  | 6 |  |  | 7 |  | 8 |  |  | 9 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P | S1 | P | S1 | S2 | P | S1 | P | S1 | S2 | P | S1 | S3 | P | S1 | S2 | P | S1 | P | S1 | S2 | P | S1 |

continued below


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Figure 9-2 Examples of Primary and Secondary Cycles
C. COMMANDS

## css:

FOCC:

## ASYNC $n$

[CSS:FOCC:ASYNC n]
Sets ASYNC bit in the DCCH information word. ( 0 indicates ASYNC data is not supported; 1 indicates ASYNC data is supported.)

## ASYNC?

[CSS:FOCC:ASYNC?]
Returns ASYNC setting (1 bit value) in the DCCH information word.
AUTH $n$
[CSS:FOCC:AUTH n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Authentication.

## AUTH?

[CSS:FOCC:AUTH?]
Returns current state of Authentication.
B_I $n$
[CSS:FOCC:B_I $n$ ]
Enables ( $n=1$ ) or disables ( $n=0$ ) Busy-Idle.
CMAC $n$
[CSS:FOCC:CMAC n]
Sets Control Mobile Attenuation Code. Range of $n$ is 0 to 7 .
CMAC?
[CSS:FOCC:CMAC?]
Returns Control Mobile Attenuation Code setting.
CMAX $n$
[CSS:FOCC:CMAX n]
Sets maximum Number of Channels to be scanned by Mobile Station when accessing a system. Range of $n$ is 1 to 32 .

CMAX?
[CSS:FOCC:CMAX?]
Returns maximum Number of Channels to be scanned by Mobile Station setting.
DCC $n$
[CSS:FOCC:DCC n]
Sets Digital Color Code. Range of $n$ is 0 to 3 .
DCC?
[CSS:FOCC:DCC?]
Returns Digital Color Code setting.

## CSS:

## FOCC:

DCCHan $n$
[CSS:FOCC:DCCHan n]
Sets Channel Number in the DCCH information word. Range of $n$ is 1 to 1023.

## DCCHan?

[CSS:FOCC:DCCHan?]
Returns Channel Number setting ( 9 bit value) in the DCCH information word.

## DPRIVacy $n$

[CSS:FOCC:DPRIVacy n]
Sets Data Privacy bit in the DCCH information word. (0 indicates data privacy not supported; 1 indicates data privacy supported.)

## DPRIVacy?

[CSS:FOCC:DPRIVacy?]
Returns DPRIVacy bit setting (1 bit value) in the DCCH information word.

## E $n$

[CSS:FOCC:E n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Extended Address.

## E?

[CSS:FOCC:E?]
Returns current state of Extended Address.
EP $n$
[CSS:FOCC:EP n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Extended Protocol.

## EP?

[CSS:FOCC:EP?]
Returns current state of Extended Protocol.

## G3FAX $n$

[CSS:FOCC:G3FAX n]
Sets G3 Fax bit in the DCCH information word. (0 indicates G3 Fax not supported; 1 indicates G3 Fax is supported.)

## G3FAX?

[CSS:FOCC:G3FAX?]
Returns G3FAX setting ( 1 bit value) in the DCCH information word.

## HYPERband $n$

[CSS:FOCC:HYPERband n]
Sets Hyperband field in the DCCH information word. (Indicates Hyperband:
$00=800 \mathrm{MHz} ; 01=1900 \mathrm{MHz}$.)
HYPERband?
[CSS:FOCC:HYPERband?]
Returns Hyperband setting (2 bit value) in the DCCH information word.

## CSS:

FOCC:
N $n$
[CSS:FOCC:N n]
Sets Number of Paging Channels to be scanned by Mobile Station. Range of $n$ is 1 to 32.
$N$ ?
[CSS:FOCC:N?]
Returns Number of Paging Channels to be scanned by Mobile Station setting.

## OVER:

## BUILD

[CSS:FOCC:OVER:BUILD]
This command is used to construct Primary and Secondary cycles. This command is required to construct the Primary cycle only when Secondary cycles are used.
Two System Parameter words are always present in the OMT. The DCCH information word, Global Action messages and/or a Registration ID message are optional in the OMT.

The build process first checks to see which of the optional overhead message types have been enabled.

- The optional Global Action messages are enabled by the CSS:GLACT:ACTion: (action name) $n$ command.
- The optional Registration ID message is enabled by the CSS:ENABLE:REGID $n$ command.
- The optional DCCH information word is enabled by the CSS:ENABLE:DCCH $n$ command.

After the enable messages are determined, the OMT can be built. The unused words in the cycle are filled with Control Filler words.

Any RAW words previously programmed in the OMT are overwritten by the BUILD command.

NUMBer $n$-or-NUM $n$
[CSS:FOCC:OVER:NUMBer n]
Selects the number of secondary cycles to be programmed. Range of $n$ is 0 to 4.

## CSS:

FOCC:

## OVER:

LENGth $n, m$
[CSS:FOCC:OVER:LENGth $n, m$ ]
Specifies the length $(m)$, in word slots, of the selected cycle $(n)$. Range of $n$ is 0 to 4 ; range of $m$ is 11 to 21 .

RATio n,m
[CSS:FOCC:OVER:RATIO n,m]
Specifies the number ( $m$ ) of primary cycles to transmit for the selected secondary cycle ( $n$ ). Range of $n$ is 1 to 4 ; range of $m$ is 1 to 65535.

## SELect $n$

[CSS:FOCC:OVER:SELect n]
Selects the cycle to be built.
$n=0$, Primary cycle is selected.
$n=1,1$ st Secondary cycle is selected.
$n=2$, 2nd Secondary cycle is selected.
$n=3$, 3rd Secondary cycle is selected.
$n=4$, 4th Secondary cycle is selected.
PCI $n$
[CSS:FOCC:PCIn]
Enables ( $n=1$ ) or disables ( $n=0$ ) Protocol Capability Indicator.
PCl ?
[CSS:FOCC:PCI?]
Returns current state of Protocol Capability Indicator.
RAW $n, x$
[CSS:FOCC:RAW $n, x$ ]
Programs a RAW word ( $x$ ) into the selected word slot $(n)$ in the selected cycle.
Range of $n$ is 0 to 21 ; range of $x$ is 0 to FFFFFFF (hexadecimal).
(FFFFFFF [hexadecimal] is entered as \#hFFFFFFFF.)
The cycle is selected by the CSS:FOCC:OVER:SELect $n$ command.
RCF $n$
[CSS:FOCC:RCF n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Read Control Filler.
RCF?
[CSS:FOCC:RCF?]
Returns current state Read Control Filler.

## CSS:

FOCC:

## REGH $n$

[CSS:FOCC:REGH n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Home Registration.

## REGH?

[CSS:FOCC:REGH?]
Returns current state of Home Registration.
REGID $n$
[CSS:FOCC:REGID n]
Sets the REGID field in the Registration ID message. Range of $n$ is 0 to \#hFFFFFF.
REGID?
[CSS:FOCC:REGID?]
Returns REGID setting (20 bit value) in the Registration ID message.

## REGR $n$

[CSS:FOCC:REGR n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Roaming Registration.

## REGR?

[CSS:FOCC:REGR?]
Returns current state of Roaming Registration.
S $n$
[CSS:FOCC:S n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Serial Number.
S?
[CSS:FOCC:S?]
Returns current state of Serial Number.

## SDCC1 $n$

[CSS:FOCC:SDCC1 n]
Sets Supplementary Digital Color Code 1. Range of $n$ is 0 to 3 .
SDCC1?
[CSS:FOCC:SDCC1?]
Returns Supplementary Digital Color Code 1 setting.
SDCC2 $n$
[CSS:FOCC:SDCC2 n]
Sets Supplementary Digital Color Code 2. Range of $n$ is 0 to 3 .

## SDCC2?

[CSS:FOCC:SDCC2?]
Returns Supplementary Digital Color Code 2 setting
css:
FOCC:
SID n
[CSS:FOCC:SID n]
Sets System Identification Number (14 most significant digits). Range of $n$ is 0 to 32767 .

SID?
[CSS:FOCC:SID?]
Returns System Identification Number setting.
WFOM $n$
[CSS:FOCC:WFOM n]
Enables ( $n=1$ ) or disables $(n=0)$ Wait For Overhead Message.
WFOM?
[CSS:FOCC:WFOM?]
Returns current state of Wait For Overhead Message.

## 9-12-3 CALLING SETUP

## CSS:CALL:

## CHANnel $n$

[CSS:CALL:CHANnel n]
Selects Digital Traffic Channel or Voice Channel the call to which the Mobile Station is assigned. Range of $n$ is 1 to 1023.

## CHANnel?

[CSS:CALL:CHANnel?]
Returns Digital Traffic Channel or Voice Channel the call to which the Mobile Station is assigned (1 to 1023).

DEViation $n$
[CSS:CALL:DEViation n]
Sets SAT Deviation in kHz . Range of $n$ is 0.0 to 4.0 .

## DEViation?

[CSS:CALL:DEViation?]
Returns SAT Deviation in kHz setting.

## DMAC $n$

[CSS:CALL:DMAC n]
Selects Digital Mobile Attenuation Code. Range of $n$ is 0 to 7 .

## DMAC?

[CSS:CALL:DMAC?]
Returns Digital Mobile Attenuation Code setting.
DVCC $n$
[CSS:CALL:DVCC n]
Selects Digital Verification Color Code. Range of $n$ is 0 to 255 .

## DVCC?

[CSS:CALL:DVCC?]
Returns Digital Verification Color Code setting.

## EF $n$

[CSS:CALL:EF n]
Sets Extended Protocol Forward Channel Indicator (1 or 0).

## EF?

[CSS:CALL:EF?]
Returns Extended Protocol Forward Channel Indicator setting.

## MEM n

[CSS:CALL:MEM n]
Sets Message Encryption Mode (1 or 0).

## MEM?

[CSS:CALL:MEM?]
Returns Message Encryption Mode setting.

## CSS:CALL:

MIN "n"
[CSS:CALL:MIN "n"]
Selects Mobile Identification Number to call. The Mobile Identification Number ( $n$ ) is entered as a string, with quotation marks.

Example: CSS:CALL:MIN "316/522-4981"

## MIN?

[CSS:CALL:MIN?]
Returns MIN currently selected.

## PM $n$

[CSS:CALL:PM n]
Sets Privacy Mode bit (1 or 0 ).

## PM?

[CSS:CALL:PM?]
Returns Privacy Mode bit setting.

## SAT $n$

[CSS:CALL:SAT n]
Sets Supervisory Audio Tone in Hz. Range of $n$ is 5965 to 6035.

## SAT?

[CSS:CALL:SAT?]
Returns Supervisory Audio Tone setting.

## SLOT $n$

[CSS:CALL:SLOT n]
Selects Timeslot. Range of $n$ is 1 to 3 .

## SLOT?

[CSS:CALL:SLOT?]
Returns Timeslot setting.

## TYPE $n$

[CSS:CALL:TYPE n]
Selects channel type. Valid selections: $0=$ Analog, $1=1 S-54,2=$ IS136.

## TYPE?

[CSS:CALL:TYPE?]
Returns current value of channel type.
VC $n$
[CSS:CALL:VC n]
Selects Vocoder type. Valid selections: $1=$ VSELP, $2=$ ACELP

## VC?

[CSS:CALL:VC?]
Returns current value of Vocoder type.

## VMAC $n$

[CSS:CALL:VMAC n]
Selects Voice Mobile Attenuation Code. Range of $n$ is 0 to 7 .

## VMAC?

[CSS:CALL:VMAC?]
Returns Voice Mobile Attenuation Code setting.

## 9-12-4 PROCESS AND HANDOFF

## CSS:

## CALL:PROCess:

## ASSIGNment

[CSS:CALL:PROCess:ASSIGNment]
Sends an initial channel designation command to the Mobile Station. After sending the channel designation, the SP TST changes the channel and mode to transmit and receive on the assigned channel.

The voice or traffic channel designation message is placed into the selected primary or secondary cycle. The user needs to be careful that the secondary cycle chosen is transmitted often enough to meet the timing requirements of the mobile system being tested. If the secondary cycle that is chosen is programmed to be transmitted at a very low ratio to the primary, the mobile system may time out before the message is sent.

This command times out if the message can not be sent out in less than 7 seconds.

## MOBINIT

[CSS:CALL:PROCess:MOBINIT]
Sets up the SP TST for a call initiated by the Mobile Station. The Busy-Idle bit changes from a 1 to a 0 at the correct time to enable the access to occur. An access sends an SRQ=1 on the GPIB (if GPIB:MASK 1 had been initiated before the CSS:CALL:PROCess:MOBINIT) and sets the status bit returned by the CSS:RECC:STATus? query.

## PAGE

[CSS:CALL:PROCess:PAGE]
Simulates a Base Station (Cell Site) initiated call.
The Page is placed into the selected primary or secondary cycle. The Page remains as a permanent part of the selected cycle until the cycle is rebuilt. The cycle is rebuilt with the CSS:FOCC:OVER:BUILD command.

## CSS:

## CALL:PROCess:

## REGistration

[CSS:CALL:PROCess:REGistration]
Causes the Mobile Station to send a Registration message. An access by the Mobile Station sends an SRQ=1 on the GPIB (if GPIB:MASK 1 had been initiated before the CSS:CALL:PROCess:REGistration) and sets the status bit returned by the CSS:RECC:STATus? query. The RECC:TORDer? query verifies the registration order was or was not received.

The selected cycle is rebuilt to contain an Overhead Message Train (OMT) that causes the phone to auto register. To change back to the previous OMT, use the
CSS:FOCC:OVER:BUILD command.
FVC:

## HANDoff

[CSS:CALL:PROCess:FVC:HANDoff]
Sends an analog to analog handoff order to the Mobile Station. The
CSS:FVC:HAND:CHAN $n$ command specifies the new analog Voice Channel.
After the handoff order, the SP TST changes to the specified Voice Channel.

## SLOT 1

[CSS:CALL:PROCess:FVC:SLOT1]
Sends an analog to digital handoff order (to Timeslot 1) to the Mobile Station.
The CSS:FVC:HAND:CHAN $n$ command specifies the new Digital Traffic Channel. After the handoff order, the SP TST changes to the specified Digital Traffic Channel.

## SLOT2

[CSS:CALL:PROCess:FVC:SLOT2]
Sends an analog to digital handoff order (to Timeslot 2) to the Mobile Station.
The CSS:FVC:HAND:CHAN $n$ command specifies the new Digital Traffic Channel. After the handoff order, the SP TST changes to the specified Digital Traffic Channel.

## SLOT3

[CSS:CALL:PROCess:FVC:SLOT3]
Sends an analog to digital handoff order (to Timeslot 3) to the Mobile Station.
The CSS:FVC:HAND:CHAN $n$ command specifies the new Digital Traffic Channel. After the handoff order, the SP TST changes to the specified Digital Traffic Channel.

## FDTC:HANDoff?

[CSS:CALL:PROCess:FDTC:HANDoff?]
Performs a digital to digital (CSS:FDTC:TI? $\neq 0$ ), or digital to analog (CSS:FDTC:TI? $=0$ ) handoff and returns a 1 if successful or a 0 if not successful. If successful, the SP TST changes to the channel specified by the CSS:FDTC:HAND:CHAN $n$ command.

## RECC:

## STATus?

[CSS:RECC:STATus?]
Returns access with the Mobile Station status (0 indicates no access has occurred; 1 indicates an access has occurred).

## 9-12-5 FORWARD VOICE CHANNEL (FVC)

## CSS:FVC:

## STARt

[CSS:FVC:STARt]
Starts the SP TST transmitting on the Forward Voice Channel.

## STOP

[CSS:FVC:STOP]
Stops the Forward Voice Channel.

Data commands set the data in the messages and order commands send the orders (messages).
A. FVC ORDERS

## CSS:FVC:

## ORDER:

## ALERT

[CSS:FVC:ORDER:ALERT]
Sends the Alert message.

## ALERTWinfo

[CSS:FVC:ORDER:ALERTWinfo]
Sends the Alert with Information message.

## ASYNC PAGE

[CSS:FVC:ORDER:ASYNC_PAGE]
Sends the Page message (Async Data).

## AUDIT

[CSS:FVC:ORDER:AUDIT]
Sends the Audit order.

## BSCHALCON

[CSS:FVC:ORDER:BSCHALCON]
Sends the Base Station Challenge Confirmation message.

## CALLMODEACK

[CSS:FVC:ORDER:CALLMODEACK]
Sends the Call Mode Acknowledgment message.
DISDTMF
[CSS:FVC:ORDER:DISDTMF]
Sends the Disable DTMF message.

## DISMEM

[CSS:FVC:ORDER:DISMEM]
Sends the Message Encryption Mode order with disable indication.

## ENAMEM

[CSS:FVC:ORDER:ENAMEM]
Sends the Message Encryption Mode order with enable indication.

## CSS:FVC:

## ORDER:

## FLASHWinfo

[CSS:FVC:ORDER:FLASHWinfo]
Sends the Flash with Information message.

## G3_MSG_WTG

[CSS:FVC:ORDER:G3_MSG_WTG]
Sends the G3-Fax Message Waiting message.

## G3_PAGE

[CSS:FVC:ORDER:G3_PAGE]
Sends the Page message (Group 3 Fax).

## HANDoff

## [CSS:FVC:ORDER:HANDoff]

Sends the Handoff message. (For complete handoff testing, use the CSS:CALL:PROCess commands.)

## IS136:

## SLOT1

[CSS:FVC:ORDER:IS136:SLOT1]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 1, Full-Rate message type (VSELP).

## SLOT2

[CSS:FVC:ORDER:IS136:SLOT2]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 2, Full-Rate message type (VSELP).

## SLOT3

[CSS:FVC:ORDER:IS136:SLOT3]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 3, Full-Rate message type (VSELP).

## IS641:

## SLOT1

[CSS:FVC:ORDER:IS136:IS641:SLOT1]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 1, FullRate message type (ACELP).

## SLOT2

[CSS:FVC:ORDER:IS136:IS641:SLOT2]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 2, FullRate message type (ACELP).

## SLOT3

[CSS:FVC:ORDER:IS136:IS641:SLOT3]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 3, FullRate message type (ACELP).

## CSS:FVC:

## ORDER:

## LC

CSS:FVC:ORDER:LC
Sends the Local Control message.
MAINTenance
[CSS:FVC:ORDER:MAINTenance]
Sends the Maintenance message.
MSGWTG
[CSS:FVC:ORDER:MSGWTG]
Sends the Message Waiting message.

## PAGE

[CSS:FVC:ORDER:PAGE]
Sends the Page order.
PU
[CSS:FVC:ORDER:PU]
Sends the Parameter Update message.

## PWRLVL

[CSS:FVC:ORDER:PWRLVL]
Sends the Power Level message.
RELease
[CSS:FVC:ORDER:RELease]
Sends the Release message.
RELEASE_COMPIete
[CSS:FVC:ORDER:RELEASE_COMPlete]
Send a Release Complete with Information message.
RELEASE_Winfo
[CSS:FVC:ORDER:RELEASE_Winfo]
Sends the Release with DCCH Information message.
SALERT
[CSS:FVC:ORDER:SALERT]
Sends the Stop Alert message.

## CSS:FVC:

## ORDER:

## SLOT1

[CSS:FVC:ORDER:SLOT1]
Sends the Handoff to Digital Traffic Channel on Timeslot 1 message. (For complete handoff testing, use the CSS:CALL:PROCess commands.)

## SLOT2

[CSS:FVC:ORDER:SLOT2]
Sends the Handoff to Digital Traffic Channel on Timeslot 2 message. (For complete handoff testing, use the CSS:CALL:PROCess commands.)

SLOT3
[CSS:FVC:ORDER:SLOT3]
Sends the Handoff to Digital Traffic Channel on Timeslot 3 message. (For complete handoff testing, use the CSS:CALL:PROCess commands.)

SMS_MSG_WTG
[CSS:FVC:ORDER:SMS_MSG_WTG]
Sends the SMS Message Waiting message.

## SNDAddr

[CSS:FVC:ORDER:SNDAddr]
Sends the Send Called Address message.

## SNRreq

[CSS:FVC:ORDER:SNRreq]
Sends the Serial Number Request message.

## SSDUP

[CSS:FVC:ORDER:SSDUP]
Sends the Shared Secret Data Update message.
UCHAL
[CSS:FVC:ORDER:UCHAL]
Sends the Unique Challenge message.
VOICE_MSG_WTG
[CSS:FVC:ORDER:VOICE_MSG_WTG]
Sends the Voice Message Waiting message.
B. FVC DATA FIELDS

## CSS:FVC:

## AUTHBS $n$

[CSS:FVC:AUTHBS n]
Sets the AUTHBS value. Range of $n$ is 0 to 262143.

## AUTHBS?

[CSS:FVC:AUTHBS?]
Returns AUTHBS value setting.

## CALLING:

NUM "n"
[CSS:FVC:CALLING:NUM "n"]
Sets Calling Party Number. The number $n$ is entered as a string, with quotation marks (i.e., "316/522-4981").

## NUM?

[CSS:FVC:CALLING:NUM?]
Returns Calling Party Number setting (string).
PI $n$
[CSS:FVC:CALLING:PI n]
Sets Calling Party Number Presentation Indicator. Range of $n$ is 0 to 3 .

## PI?

[CSS:FVC:CALLING:PI?]
Returns Calling Party Number Presentation Indicator setting.
SI $n$
[CSS:FVC:CALLING:SI n]
Sets Calling Party Screening Indicator. Range of $n$ is 0 to 3 .

## SI?

[CSS:FVC:CALLING:SI?]
Returns Calling Party Screening Indicator setting.
DMAC $n$
[CSS:FVC:DMAC n]
Sets Digital Mobile Attenuation Code. Range of $n$ is 0 to 10 .

## DMAC?

[CSS:FVC:DMAC?]
Returns Digital Mobile Attenuation Code setting.

## DVCC $n$

[CSS:FVC:DVCC n]
Sets Digital Verification Color Code. Range of $n$ is 1 to 255 .

## DVCC?

[CSS:FVC:DVCC?]
Returns Digital Verification Color Code setting.

## CSS:FVC:

```
EF n
```

[CSS:FVC:EF n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Extended Protocol Forward Channel Indicator.
EF?
[CSS:FVC:EF?]
Returns current state of Extended Protocol Forward Channel Indicator.

## ENABLE:

## VOICEPrivacy $n$

[CSS:FVC:ENABLE:VOICEPrivacy n]
Enables ( $n=1$ ) or disables ( $n=0$ ) the Voice Privacy in the Call Mode
Acknowledgment message.
VOICEPrivacy?
[CSS:FVC:ENABLE:VOICEPrivacy?]
Returns current state of Voice Privacy.

## HANDoff:

CHANnel $n$
[CSS:FVC:HANDoff:CHANnel n]
Sets analog Voice or Digital Traffic Channel for Handoff. Range of $n$ is 0 to 2047 .
(Use the CSS:CALL:PROCess commands to initiate Handoff.)

## CHANnel?

[CSS:FVC:HANDoff:CHANnel?]
Returns Channel for Handoff setting.

## HYPERband $n$

[CSS:FVC:HYPERband n]
Specifies Hyperband. Range of $n$ is 0 to 3 .

## HYPERband?

[CSS:FVC:HYPERband?]
Returns current value of Hyperband.

## LOCAL $n$

[CSS:FVC:LOCAL n]
Sets the Local Control field used in the Local Control message. Range of $n$ is 0 to 31 .

## LOCAL?

[CSS:FVC:LOCAL?]
Returns the Local Control field setting.

## MEM $n$

[CSS:FVC:MEM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Message Encryption Mode.

## MEM?

[CSS:FVC:MEM?]
Returns current state of Message Encryption Mode.

## CSS:FVC:

## MT $n$

[CSS:FVC:MT n]
Sets the Message Type field. Range of $n$ is 0 to 31 .

## MT?

[CSS:FVC:MT?]
Returns the Message Type field setting.
PM $n$
[CSS:FVC:PM n]
Enables ( $n=1$ ) or disables $(n=0)$ Privacy Mode.

## PM?

[CSS:FVC:PM?]
Returns current state of Privacy Mode.
PSCC $n$
[CSS:FVC:PSCC n]
Sets Present SAT Color Code. Range of $n$ is 0 to 2 .

## PSCC?

[CSS:FVC:PSCC?]
Returns Present SAT Color Code setting.

## PVI $n$

[CSS:FVC:PVI n]
Enables $(n=1)$ or disables $(n=0)$ Protocol Version Indicator.

## PVI?

[CSS:FVC:PVI?]
Returns current state of PVI.

## PWRLVL $n$

[CSS:FVC:PWRLVLn]
Sets Power Level requested of Mobile Station in the Power Level message. Range of $n$ is 0 to 7 .

## PWRLVL?

[CSS:FVC:PWRLVL?]
Returns requested Power Level setting.
RANDSSD "n"
[CSS:FVC:RANDSSD "n"]
Sets the 56 bit Random Number sent in the Shared Secret Data Update message.
The number $n$ is entered in hexadecimal as a string, with quotation marks (i.e.,
"4A59BE232F9C26").

## RANDSSD?

[CSS:FVC:RANDSSD?]
Returns the Shared Secret Data 56 bit Random Number setting (string).

## CSS:FVC:

RANDU $n$
[CSS:FVC:RANDU n]
Sets the 24 bit Random Number sent in the Unique Challenge message. Range of $n$ is 0 to 16777215.

RANDU?
[CSS:FVC:RANDU?]
Returns the Unique Challenge 24 bit Random Number setting.
SAT $n$
[CSS:FVC:SAT n]
Specifies the SAT frequency on the FVC. Range of $n$ is 0 or 5965 to 6035.

## SAT?

[CSS:FVC:SAT?]
Returns current value of SAT.
SBI $n$
[CSS:FVC:SBI n]
Sets Shortened Burst Indicator. Range of $n$ is 0 to 3 .

## SBI?

[CSS:FVC:SBI?]
Returns Shortened Burst Indicator setting.
SCC $n$
[CSS:FVC:SCC n]
Sets Supervisory Audio Tone Color Code. Range of $n$ is 0 to 2 .

## SCC?

[CSS:FVC:SCC?]
Returns Supervisory Audio Tone Color Code setting.
SIGNAL:

## PITCH $n$

[CSS:FVC:SIGNAL:PITCH n]
Sets the pitch of the Alert tone. Range of $n$ is 0 to 3 .
PITCH?
[CSS:FVC:SIGNAL:PITCH?]
Returns Alert tone pitch setting.
CADENCE $n$
[CSS:FVC:SIGNAL:CADENCE n]
Sets the on, off pattern of the Alert tone. Range of $n$ is 0 to 63 .

## CADENCE?

[CSS:FVC:SIGNAL:CADENCE?]
Returns the Alert tone on-off pattern setting.

## CSS:FVC:

TA $n$
[CSS:FVC:TA n]
Sets Time Alignment. Range of $n$ is 0 to 31 .
TA?
[CSS:FVC:TA?]
Returns Time Alignment setting.
VMAC $n$
[CSS:FVC:VMAC n]
Sets Voice Mobile Attenuation Code. Range of $n$ is 0 to 7 .
VMAC?
[CSS:FVC:VMAC?]
Returns Voice Mobile Attenuation Code setting.

## 9-12-6 FORWARD DIGITAL TRAFFIC CHANNEL (FDTC)

```
CSS:FDTC:
    STARt
    [CSS:FDTC:STARt]
    Starts the SP TST transmitting on the Forward Digital Traffic Channel.
STOP
[CSS:FDTC:STOP]
Stops the Forward Digital Traffic Channel.
```

SET:TA $n$
[CSS:FDTC:SET:TA n]
Specifies time alignment adjustment from Standard Offset Reference (SOR) in half symbols.
Range of $n$ is 0 to 60 .

```
Used to match the time alignment of the Mobile Station.
```

Data commands set the data in the messages and order commands send the orders (messages). CSS:FDTC:ENABLE commands enable or disable optional fields. CSS:FDTC:FACCH: commands pertain to the blank and burst Fast Associated Control Channel (FACCH). CSS:FDTC:SACCH: commands pertain to the continuous Slow Associated Control Channel (SACCH).
A. FDTC ORDERS

CSS:FDTC:
FACCH: or SACCH:
ALERT
[CSS:FDTC:FACCH: or SACCH:ALERT]
Sends the Alert with Information message.

## AUDIT

[CSS:FDTC:FACCH: or SACCH:AUDIT]
Sends the Audit message.

## BSACK

[CSS:FDTC:FACCH: or SACCH:BSACK]
Sends the Base Station Acknowledgment message.

## BSCHALCON

[CSS:FDTC:FACCH: or SACCH:BSCHALCON]
Sends the Base Station Challenge Confirmation message.
BSMC
[CSS:FDTC:FACCH: or SACCH:BSMC]
Sends BSMC Message Delivery message.

## CSS:FDTC:

FACCH: or SACCH:

## CAPability:

## REQuest

[CSS:FDTC:FACCH: or SACCH:CAPability:REQuest]
Sends Capability Update Request message.
RESPonse
[CSS:FDTC:FACCH: or SACCH:CAPability:RESPonse]
Sends Capability Update Response message.

## DEDicated:HANDoff

[CSS:FDTC:FACCH: or SACCH:DEDicated:HANDoff]
Sends Dedicated DTC Handoff message.

## FLASH

[CSS:FDTC:FACCH: or SACCH:FLASH]
Sends the Flash with Information message.

## FLASHACK

[CSS:FDTC:FACCH: or SACCH:FLASHACK]
Sends the Flash Acknowledgment message.
HANDoff
[CSS:FDTC:FACCH: or SACCH:HANDoff]
Sends the Handoff message. (For complete handoff testing, use the CSS:CALL:PROCess commands.)

HYPERband:MEASure
[CSS:FDTC:FACCH: or SACCH:HYPERband:MEASure]
Sends Hyperband Measurement message.
LC
[CSS:FDTC:FACCH: or SACCH:LC]
Sends the Local Control message.

## MAINTenance

[CSS:FDTC:FACCH: or SACCH:MAINTenance]
Sends the Maintenance message.

## MEASure

[CSS:FDTC:FACCH: or SACCH:MEASure]
Sends the Measurement message.
PLC
[CSS:FDTC:FACCH: or SACCH:PLC]
Sends the Physical Layer Control.
PU
[CSS:FDTC:FACCH: or SACCH:PU]
Sends the Parameter Update message

## CSS:FDTC:

FACCH: or SACCH:
RAW $x_{1}, x_{2}, x_{3}, x_{4}, x_{5}, x_{6}, \ldots, x_{n}$
[CSS:FDTC:FACCH: or SACCH:RAW $x_{1}, x_{2}, x_{3}, x_{4}, x_{5}, x_{6}, \ldots, x_{n}$ ]
Generates a user defined message. Each of the parameters used with this command make up 8 bits of the message. Since each word of a FACCH or SACCH message consists of 48 bits, 6 parameters are required to make 1 word, 12 to make 2 words,.. etc. Therefore, the number of parameters used with this message is variable, but must be a multiple of 6 .

## RDATA:

## MESSage

[CSS:FDTC:FACCH: or SACCH:RDATA:MESSage]
Sends R-DATA message.

## ACCept

[CSS:FDTC:FACCH: or SACCH:RDATA:ACCept]
Sends R-DATA ACCEPT message.

## REJect

[CSS:FDTC:FACCH: or SACCH:RDATA:REJect]
Sends R-DATA REJECT message.

## REAUTHentication

[CSS:FDTC:FACCH: or SACCH:REAUTHentication]
Sends the Re-Authentication message.

> The Re-Authentication message causes the mobile station to execute the Auth Signature procedure.

## RELease

[CSS:FDTC:FACCH: or SACCH:RELease]
Sends the Release message.

## SBDA

[CSS:FDTC:FACCH: or SACCH:SBDA]
Sends the Send Burst DTMF Acknowledge message.

## SCDA

[CSS:FDTC:FACCH: or SACCH:SCDA]
Sends the Send Continuous DTMF Acknowledge message.

## SERVice:RESPonse

[CSS:FDTC:FACCH: or SACCH:SERVice:RESPonse]
Sends the Service Response message.

## SMEASure

[CSS:FDTC:FACCH: or SACCH:SMEASure]
Sends the Stop Measurement message.

## CSS:FDTC:

FACCH: or SACCH:

## SOC

[CSS:FDTC:FACCH: or SACCH:SOC]
Sends SOC Message Delivery message.
SR
[CSS:FDTC:FACCH: or SACCH:SR]
Sends the Status Request message.
SSDUP
[CSS:FDTC:FACCH: or SACCH:SSDUP]
Sends the Shared Secret Data Update message.
UCHAL
[CSS:FDTC:FACCH: or SACCH:UCHAL]
Sends the Unique Challenge message.
B. FDTC DATA FIELDS

## CSS:FDTC:

## AMT:

## CONNect

[CSS:FDTC:AMT:CONNect]
Acknowledges a Connect message from the Mobile Station.

## RELease

[CSS:FDTC:AMT:RELease]
Acknowledges a Release message from the Mobile Station.

## SERVice:REQuest

[CSS:FDTC:AMT:SERVice:REQuest]
Acknowledges a Service Request message from the Mobile Station.
STATus
[CSS:FDTC:AMT:STATus]
Acknowledges a Status message from the Mobile Station.

## AMT?

[CSS:FDTC:AMT?]
Returns Acknowledge Message Type setting (string).
ATS $n$
[CSS:FDTC:ATS n]
Specifies Assigned Time Slot. Range of $n$ is 0 to 15 .

## ATS?

[CSS:FDTC:ATS?]
Returns current value of ATS.

## CSS:FDTC:

## AUTHBS $n$

[CSS:FDTC:AUTHBS n]
Sets the AUTHBS value. Range of $n$ is 0 to 262143.

## AUTHBS?

[CSS:FDTC:AUTHBS?]
Returns AUTHBS value setting.

## BSMC $n$

[CSS:FDTC:BSMC n]
Enables $(n=1)$ or disables $(n=0)$ Base Station Manufacturer Code.
BSMC?
[CSS:FDTC:BSMC?]
Returns current state of BSMC.

## CALLING:

TYpe $n$
[CSS:FDTC:CALLING:TYpe n]
Sets Calling Party Type. Range of $n$ is 0 to 7 .
TYpe?
ICSS:FDTC:CALLING:TYpe?]
Returns Calling Party Type setting.
PLANid $n$
[CSS:FDTC:CALLING:PLANid n]
Sets Calling Party Numbering Plan Identification. Range of $n$ is 0 to 15.
PLANid?
[CSS:FDTC:CALLING:PLANid?]
Returns Calling Party Numbering Plan Identification setting.

## REServed $n$

[CSS:FDTC:CALLING:REServed n]
Specifies value of Calling Party Number Reserved field. Range of $n$ is 0 to 31 .
REServed?
[CSS:FDTC:CALLING:REServed?]
Returns current value of Calling Party Number Reserved field.
NUM " $n$ "
[CSS:FDTC:CALLING:NUM "n"]
Sets Calling Party Number. The number $n$ is entered as a string, with quotation marks (i.e., "316/522-4981").

## NUM?

[CSS:FDTC:CALLING:NUM?]
Returns Calling Party Number setting (string).

## CSS:FDTC:

CALLING:
PI $n$
[CSS:FDTC:CALLING:PI n]
Sets Calling Party Number Presentation Indicator. Range of $n$ is 0 to 3 .

## PI?

[CSS:FDTC:CALLING:PI?]
Returns Calling Party Number Presentation Indicator setting.
SIn
[CSS:FDTC:CALLING:SI n]
Sets Calling Party Screening Indicator. Range of $n$ is 0 to 3 .
SI?
[CSS:FDTC:CALLING:SI?]
Returns Calling Party Screening Indicator setting.
NAMe "string"
[CSS:FDTC:CALLING:NAMe "string"]
Sets string of Calling Party Name Characters.

- String of 0 to 62 characters may be used.
- Example: css:fdtc:calling:nam "Happy Anniversary"
- This command is used with the following CSS:FDTC:CALLING:NAMe: $x x x$ commands.


## NAMe?

[CSS:FDTC:CALLING:NAMe?]
Returns current string of Calling Party Name Characters.

## NAMe:

REServed $n$
[CSS:FDTC:CALLING:NAMe:REServed n]
Specifies value of Calling Party Name Reserved field. Range of $n$ is 0 to 15 .

## REServed?

[CSS:FDTC:CALLING:NAMe:REServed?]
Returns current value of Calling Party Name Reserved field.
Pl $n$
[CSS:FDTC:CALLING:NAMe:PI n]
Specifies value of Calling Party Name Presentation Indicator. Range of $n$ is 0 to 3 .

PI?
[CSS:FDTC:CALLING:NAME:PI?]
Returns current value of Calling Party Name Presentation Indicator.

## CSS:FDTC:

## CALLING:

## NAMe:

SI $n$
[CSS:FDTC:CALLING:NAMe:SI n]
Specifies value of Calling Party Name Screening Indicator. Range of $n$ is 0 to 3 .
SI?
[CSS:FDTC:CALLING:NAMe:SI?]
Returns current value of Calling Party Name Screening Indicator.

## CDL?

[CSS:FDTC:CDL?]
Returns the value of CDL (Coded Digital Control Channel Locator) (11 bit value).
The value of CDL cannot be set. However, CDL is equal to the value set for DL (DCCH Locator) plus the 4 bit CRC. See CSS:FDTC:DL.

## CHANGE:

SOC $n$
[CSS:FDTC:CHANGE:SOC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) System Operator Code Change Indicator.
Indicates if the SOC associated with the current digital traffic channel is different from the BSMC associated with the digital traffic channel being assigned.

## soc?

[CSS:FDTC:CHANGE:SOC?]
Returns the value of SOC.
BSMC $n$
[CSS:FDTC:CHANGE:BSMC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Base Station Manufacturer Code Change Indicator.

Indicates if the BSMC associated with the current digital traffic channel is different from the BSMC associated with the digital traffic channel being assigned.

## BSMC?

[CSS:FDTC:CHANGE:BSMC?]
Returns current state of BSMC.
CONTROL $n$
[CSS:FDTC:CONTROLn]
Sets the Local Control field used in the Local Control message. Range of $n$ is 0 to 31 .

CONTROL?
[CSS:FDTC:CONTROL?]
Returns the Local Control field setting.

## CSS:FDTC:

## CUSTOM:

LENGth $n$
[CSS:FDTC:CUSTOM:LENGTh n]
Specifies Length of Custom Control in octets. Range of $n$ is 1 to 255 .
LENGth?
[CSS:FDTC:CUSTOM:LENGth?]
Returns current value of LENGth.
CONTrol n,m
[CSS:FDTC:CUSTOM:CONTrol n,m]
Specifies Custom Control (m) indexed by $n$. Range of $n$ is 0 to 255; range of $m$ is 0 to 255.

CONTrol? $n$
[CSS:FDTC:CUSTOM:CONTrol? n]
Returns current value of CONTrol indexed by $n$. Range of $n$ is 0 to 255 .

## DCCHinfo:

Digital Control Channel Information.
CHANnel $n, m$
[CSS:FDTC:DCCHinfo:CHANnel n,m]
Specifies Digital Control Channel Information (m) indexed by $n$. Range of $n$ is 0 to 2; range of $m$ is 0 to 2047.

CHANnel? $n$
[CSS:FDTC:DCCHinto:CHANnel? n]
Returns current value of CHANnel indexed by $n$. Range of $n$ is 0 to 2 .
DVCC $n, m$
[CSS:FDTC:DCCHinto:DVCC n,m]
Specifies Digital Verification Color Code ( $m$ ) indexed by $n$. Range of $n$ is 0 to 2; range of $m$ is 0 to 255 .

DVCC? $n$
[CSS:FDTC:DCCHinfo:DVCC?n]
Returns current value of DVCC indexed by $n$. Range of $n$ is 0 to 2 .

## HYPERBand $n, m$

[CSS:FDTC:DCCHinfo:HYPERband $n, m$ ]
Specifies Hyperband ( $m$ ) indexed by $n$. Range of $n$ is 0 to 2 ; range of $m$ is 0 to 3 .

## HYPERband? $n$

[CSS:FDTC:DCCHinfo:HYPERband? n]
Returns current value of HYPERband indexed by $n$. Range of $n$ is 0 to 2 .

## CSS:FDTC:

DCCHinfo:
NUMBer $n$-or- NUM $n$
[CSS:FDTC:DCCHinfo:NUMBer n]
Specifies Length of DCCH info content. Range of $n$ is 0 to 2 .
NUMBer? -or- NUM?
[CSS:FDTC:DCCHinfo:NUMBer?]
Returns current value of NUMBer.

## DELTA:

TIME $n$
[CSS:FDTC:DELTA:TIME n]
Specifies Delta Time. Range of $n$ is 0 to 2047 .
Indicates timing advance in half symbols that shall be applied, relative to the current mobile station transmit time, on the assigned digital traffic channel.

TIME?
[CSS:FDTC:DELTA:TIME?]
Returns current value of TIME.
DIC $n$
[CSS:FDTC:DIC n]
Enables $(n=1)$ or disables $(n=0)$ Delay Interval Compensation bit.
DIC?
[CSS:FDTC:DIC?]
Returns state of Delay Interval Compensation bit.
DL $n$
[CSS:FDTC:DL n]
Specifies the value of DCCH Locator used on the FDTC. Range of $n$ is 0 to 127.
The 4 bit CRC is calculated by the SP TST.

## DL?

[CSS:FDTC:DL?]
Returns the value of DCCH Locator used on the FDTC.
DMAC $n$
[CSS:FDTC:DMAC n]
Sets Digital Mobile Attenuation Code. Range of $n$ is 0 to 10.
DMAC?
[CSS:FDTC:DMAC?]
Returns Digital Mobile Attenuation Code setting.

## CSS:FDTC:

## DPM $n$

[CSS:FDTC:DPM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Data Privacy Mode.

## DPM?

[CSS:FDTC:DPM?]
Returns current state of DPM.
DTX $n$
[CSS:FDTC:DTX n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Discontinuous Transmission bit.
DTX?
[CSS:FDTC:DTX?]
Returns Discontinuous Transmission bit setting.
DTXControl $n$
[CSS:FDTC:DTXControl n]
Enables ( $n=1$ ) or disables ( $n=0$ ) DTX Control.
Indicates the DTX mode supported on the channel to which a handoff is occurring.

## DTXControl?

[CSS:FDTC:DTXControl?]
Returns current state of DTXControl.
DVCC $n$
[CSS:FDTC:DVCC n]
Sets Digital Verification Color Code. Range of $n$ is 0 to 255 .
DVCC?
[CSS:FDTC:DVCC?]
Returns Digital Verification Color Code setting.

## CSS:FDTC:

## ENABLE:

The following commands enable or disable the optional Information Elements.

## CALLING:

## NAMe $n$

[CSS:FDTC:ENABLE:CALLING:NAMe n]
Enables $(n=1)$ or disables $(n=0)$ Calling Party Name optional message.

## NAMe?

[CSS:FDTC:ENABLE:CALLING:NAMe?]
Returns current state of Calling Party Name optional message enable.
NUM $n$
[CSS:FDTC:ENABLE:CALLING:NUM n]
Enables $(n=1)$ or disables $(n=0)$ Calling Party Number field.

## NUM?

[CSS:FDTC:ENABLE:CALLING:NUM?]
Returns the Calling Party Number Enable setting.

## CAUSe $n$

[CSS:FDTC:ENABLE:CAUSe n]
Enables $(n=1)$ or disables $(n=0)$ Cause optional message. (This information element identifies the cause for rejecting a service request.)

## CAUSe?

[CSS:FDTC:ENABLE:CAUSe?]
Returns current state of Cause optional message enable.

## DCCHinfo $n$

[CSS:FDTC:ENABLE:DCCHinfo n]
Enables $(n=1)$ or disables $(n=0)$ Digital Control Channel Information.

## DCCHinfo?

[CSS:FDTC:ENABLE:DCCHinfo n]
Returns current state of DCCHinfo.

## DELTA:

TIME $n$
[CSS:FDTC:ENABLE:DELTA:TMME n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Delta Time.
TIME?
[CSS:FDTC:ENABLE:DELTA:TIME?]
Returns current state of TIME.

## CSS:FDTC:

## ENABLE:

DIC $n$
[CSS:FDTC:ENABLE:DIC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Delay Interval Compensation bit.
DIC?
[CSS:FDTC:ENABLE:DIC?]
Returns current state of Delay Interval Compensation.
DMAC $n$
[CSS:FDTC:ENABLE:DMAC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Digital Mobile Attenuation Code.
DMAC?
[CSS:FDTC:ENABLE:DMAC?]
Returns current state of Digital Mobile Attenuation Code Enable.

## DPM $n$

[CSS:FDTC:ENABLE:DPM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Data Privacy Mode.
DPM?
[CSS:FDTC:ENABLE:DPM?]
Returns current state of DPM.
DTX $n$
[CSS:FDTC:ENABLE:DTX n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Discontinuous Transmission bit.

## DTX?

[CSS:FDTC:ENABLE:DTX?]
Returns current state of Discontinuous Transmission bit Enable.

## HYPERband:

TARGet $n$
[CSS:FDTC:ENABLE:HYPERband:TARGet n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Target Hyperband.

## TARGet?

[CSS:FDTC:ENABLE:HYPERband:TARGet?]
Returns current state of TARGet.
LDP:
BSACK $n$
[CSS:FDTC:ENABLE:LDP:BSACK n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Last Decoded Parameter in Base Station Acknowledgment message.

## BSACK?

[CSS:FDTC:ENABLE:LDP:BSACK?]
Returns Last Decoded Parameter Enable setting for BSACK message.

## CSS:FDTC:

## ENABLE:

LDP:
FLASHACK $n$
[CSS:FDTC:ENABLE:LDP:FLASHACKn]
Enables ( $n=1$ ) or disables ( $n=0$ ) Last Decoded Parameter in Flash Acknowledgment message.

FLASHACK?
[CSS:FDTC:ENABLE:LDP:FLASHACK?]
Returns Last Decoded Parameter Enable setting for FLASHACK message.

## SBDA $n$

[CSS:FDTC:ENABLE:LDP:SBDA n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Last Decoded Parameter in Send Burst DTMF Acknowledge message.

## SBDA?

[CSS:FDTC:ENABLE:LDP:SBDA?]
Returns Last Decoded Parameter Enable setting for SBDA message.
MEMC $n$
[CSS:FDTC:ENABLE:MEMC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Message Encryption Mode C.

## MEMC?

[CSS:FDTC:ENABLE:MEMC?]
Returns current state of MEMC.

## MESSage:CENTer:

## ADDRess $n$

[CSS:FDTC:ENABLE:MESSage:CENTer:ADDRess n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Message Center Address.

## ADDRess?

[CSS:FDTC:ENABLE:MESSage:CENTer:ADDRess?]
Returns current state of ADDRess.
MSGWTG $n$
[CSS:FDTC:ENABLE:MSGWTG n]
Enables ( $n=1$ ) or disables $(n=0)$ Other Messages Waiting Info.

## MSGWTG?

[CSS:FDTC:ENABLE:MSGWTG?]
Returns current state of MSGWTG.

## CSS:FDTC:

## ENABLE:

## NOMW $n$

[CSS:FDTC:ENABLE:NOMW n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Number of Messages Waiting field.

## NOMW?

[CSS:FDTC:ENABLE:NOMW?]
Returns Number of Messages Waiting field Enable setting.
RFCHAN $n, x$
[CSS:FDTC:ENABLE:RFCHAN n,x]
Enables ( $n=1$ ) or disables ( $n=0$ ) selected RF Channel index. Range of $n$ is 0 to 11 (index).

RFCHAN? $n$
[CSS:FDTC:ENABLE:RFCHAN? n]
Returns selected RF Channel index Enable setting. Range of $n$ is 0 to 11 .

## SIGNAL $n$

[CSS:FDTC:ENABLE:SIGNAL n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Signal field.

## SIGNAL?

ICSS:FDTC:ENABLE:SIGNAL?]
Returns Signal field Enable setting.

## STATUS:

CMODE $n$
[CSS:FDTC:ENABLE:STATUS:CMODE n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Call Mode field in Status Request message.

## CMODE?

[CSS:FDTC:ENABLE:STATUS:CMODE?]
Returns Call Mode field Enable setting.

## ESN $n$

[CSS:FDTC:ENABLE:STATUS:ESN n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Electronic Serial Number field in Status Request message.

## ESN?

[CSS:FDTC:ENABLE:STATUS:ESN?]
Returns Electronic Serial Number field Enable setting.
MEM $n$
[CSS:FDTC:ENABLE:STATUS:MEM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Message Encryption Mode field.

## MEM?

[CSS:FDTC:ENABLE:STATUS:MEM?]
Returns Message Encryption Mode field Enable setting.

## CSS:FDTC:

## ENABLE:

## StATUS:

TASK $n$
[CSS:FDTC:ENABLE:STATUS:TASK n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Task Status.
TASK?
[CSS:FDTC:ENABLE:STATUS:TASK?]
Returns current state of TASK.
TIn
[CSS:FDTC:ENABLE:STATUS:TI n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Terminal Information field.
TI?
[CSS:FDTC:ENABLE:STATUS:TI?]
Returns Terminal Information field Enable setting.
VPM $n$
[CSS:FDTC:ENABLE:STATUS:VPM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Voice Privacy Mode bit.
VPM?
[CSS:FDTC:ENABLE:STATUS:VPM?]
Returns Voice Privacy Mode bit Enable setting.
TA $n$
[CSS:FDTC:ENABLE:TA n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Time Alignment field.
TA?
[CSS:FDTC:ENABLE:TA?]
Returns Time Alignment field Enable setting.
USER:
DEST:
ADDRess $n$
[CSS:FDTC:ENABLE:USER:DEST:ADDRess n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Destination Address.

## ADDRess?

[CSS:FDTC:ENABLE:USER:DEST:ADDRess?]
Returns current state of ADDRess.
SUBaddress $n$
[CSS:FDTC:ENABLE:USER:DEST:SUBaddress n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Destination Subaddress.

## SUBaddress?

[CSS:FDTC:ENABLE:USER:DEST:SUBaddress?]
Returns current state of SUBaddress.

## CSS:FDTC:

## ENABLE:

USER:
ORIG:
ADDRess $n$
[CSS:FDTC:ENABLE:USER:ORIG:ADDRess n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Originating Address.

## ADDRess?

[CSS:FDTC:ENABLE:USER:ORIG:ADDRess?]
Returns current state of ADDRess.
PRESentation $n$
[CSS:FDTC:ENABLE:USER:ORIG:PRESentation n]
Enables $(n=1)$ or disables $(n=0)$ User Originating Address Presentation Indicator.

PRESentation?
[CSS:FDTC:ENABLE:USER:ORIG:PRESentation?]
Returns current state of PRESentation.

## SUBaddress $n$

[CSS:FDTC:ENABLE:USER:ORIG:SUBaddress n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Originating Subaddress.

## SUBaddress?

[CSS:FDTC:ENABLE:USER:ORIG:SUBaddress?]
Returns current state of SUBaddress.
VMI $n$
[CSS:FDTC:ENABLE:VMIn]
Enables ( $n=1$ ) or disables ( $n=0$ ) Voice Mode.
VMI?
[CSS:FDTC:ENABLE:VMI?]
Returns current state of VMI.

## HANDoff:

## CHANnel $n$

[CSS:FDTC:HANDoff:CHANnel n]
Sets analog Voice or Digital Traffic Channel for Handoff. Range of $n$ is 0 to 2047. (Use the CSS:CALL:PROCess commands to initiate Handoff.)

## CHANnel?

[CSS:FDTC:HANDoff:CHANnel?]
Returns Channel for Handoff setting.

## CSS:FDTC:

## HYPERband:

BAND $n, m$
[CSS:FDTC:HYPERband:BAND n,m]
Specifies the Hyperband ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is
0 to 3.
BAND? $n$
[CSS:FDTC:HYPERband:BAND? n]
Returns current value of BAND.
CHANnel $n, m$
[CSS:FDTC:HYPERband:CHANnel n,m]
Specifies Hyperband channels $(m)$ indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is 0 to 2047.

CHANnel? n
[CSS:FDTC:HYPERband:CHANnel? n]
Returns current value of CHANnel indexed by $n$. Range of $n$ is 0 to 23 .
NUMBer $n$-or- NUM $n$
[CSS:FDTC:HYPERband:NUMBer n]
Specifies Number of Hyperband channels. Range of $n$ is 0 to 24 .
NUMBer? -or- NUM?
[CSS:FDTC:HYPERband:NUMBer?]
Returns current value of NUMBer.
TARGet $n$
[CSS:FDTC:HYPERband:TARGet n]
Specifies Target Hyperband. Range of $n$ is 0 to 3 .
Specifies the hyperband to which handoff is occurring.

## TARGet?

[CSS:FDTC:HYPERband:TARGet?]
Returns current value of TARGet.
LDP $n$
[CSS:FDTC:LDP n]
Sets Last Decoded Parameter. Range of $n$ is 0 to 15 .
LDP?
[CSS:FDTC:LDP?]
Returns Last Decoded Parameter setting.

## CSS:FDTC:

MAP:
Identifies the forms of voice privacy supported by the BMI.

## VPM $n$

[CSS:FDTC:MAP:VPM n]
Specifies Voice Privacy Mode Map. Range of $n$ is 0 to 15 .

## VPM?

[CSS:FDTC:MAP:VPM?]
Returns current value of VPM.
CODER $n$
[CSS:FDTC:MAP:CODER n]
Specifies Voice Coder Map. Range of $n$ is 0 to 63.

## CODER?

[CSS:FDTC:MAP:CODER?]
Returns current value of CODER.
MEA:
DOMAIN $n$
[CSS:FDTC:MAP:MEA:DOMAIN n]
Specifies Message Encryption Algorithm Map Domain. Range of $n$ is 0 to 255.

DOMAIN?
[CSS:FDTC:MAP:MEA:DOMAIN?]
Returns current value of DOMAIN.
ALGORithms n,m
[CSS:FDTC:MAP:MEA:ALGORithms n,m]
Specifies Message Encryption Algorithm Map ( $m$ ) indexed by $n$. Range of $n$ is 0 to 7 ; range of $m$ is 0 to 15 .

## ALGORithms? $n$

[CSS:FDTC:MAP:MEA:ALGORithms? n]
Returns current value of ALGORithms.
MEK $n$
[CSS:FDTC:MAP:MEK n]
Specifies Message Encryption Key Map. Range of $n$ is 0 to 15 .
MEK?
[CSS:FDTC:MAP:MEK?]
Returns current value of MEK.

## CSS:FDTC:

MAP:
ARQ $n$
[CSS:FDTC:MAP:ARQ n]
Enables ( $n=1$ ) or disables ( $n=0$ ) FACCH/SACCH ARQ Map.

## ARQ?

[CSS:FDTC:MAP:ARQ?]
Returns current state of ARQ.

## SMS $n$

[CSS:FDTC:MAP:SMS n]
Specifies SMS Map. Range of $n$ is 0 to 3 .
SMS?
[CSS:FDTC:MAP:SMS?]
Returns current value of SMS.

## MEM $n$

[CSS:FDTC:MEM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Message Encryption Mode.

## MEM?

[CSS:FDTC:MEM?]
Returns current state of Message Encryption Mode.
MEMC:
Identifies the message encryption mode of a mobile station.
MEA $n$
[CSS:FDTC:MEMC:MEA n]
Specifies Message Encryption Mode C Algorithm. Range of $n$ is 0 to 3 .

## MEA?

[CSS:FDTC:MEMC:MEA?]
Returns current value of MEA.
MED $n$
[CSS:FDTC:MEMC:MED n]
Specifies Message Encryption Mode C Domain. Range of $n$ is 0 to 3 .
MED?
[CSS:FDTC:MEMC:MED?]
Returns current value of MED.
MEK $n$
[CSS:FDTC:MEMC:MEK n]
Specifies Message Encryption Mode C Key. Range of $n$ is 0 to 3 .
MEK?
[CSS:FDTC:MEMC:MEK?]
Returns current value of MEK.

## CSS:FDTC:

## MESSage:CENTer:

TYPE $n$
[CSS:FDTC:MESSage:CENTer:TYPE n]
Specifies Type of Number. Range of $n$ is 0 to 7 .
TYPE?
[CSS:FDTC:MESSage:CENTer:TYPE?]
Returns current value of TYPE.
PLANid $n$
[CSS:FDTC:MESSage:CENTer:PLANid n]
Specifies Numbering Plan Identification. Range of $n$ is 0 to 15 .
PLANid?
[CSS:FDTC:MESSage:CENTer:PLANid?]
Returns current value of PLANid.
ENCoding $n$
[CSS:FDTC:MESSage:CENTer:ENCoding n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Address Encoding.

## ENCoding?

[CSS:FDTC:MESSage:CENTer:ENCoding?]
Returns current state of ENCoding.

```
ADDRess " \(n\) "
[CSS:FDTC:MESSage:CENTer:ADDRess " \(n\) "]
Specifies Address (ASCII string).
```

Up to 60 characters in this field.

## ADDRess?

[CSS:FDTC:MESSage:CENTer:ADDRess?]
Returns current string value of ADDRess.

## MSGWTG:

## MESSage:

NUMBer $n, m$-or- NUM $n, m$
[CSS:FDTC:MSGWTG:MESSage:NUMBer n,m]
Specifies Number of Messages Waiting ( $m$ ) indexed by $n$. Range of $n$ is 0 to 15; range of $m$ is 0 to 63 .

Indicates the number of messages associated to the Message Waiting Type.
NUMBer? $n$-or- NUM? n
[CSS:FDTC:MSGWTG:MESSage:NUMBer?n]
Returns current value of NUMBer indexed by $n$. Range of $n$ is 0 to 15 .

## CSS:FDTC:

MSGWTG:

## MESSage:

TYPE $n, m$
[CSS:FDTC:MSGWTG:MESSage:TYPE n,m]
Specifies Messages Waiting Type ( $m$ ) indexed by $n$. Range of $n$ is 0 to 15; range of $m$ is 0 to 15.

Indicates the type of messages that are waiting.
TYPE? $n$
[CSS:FDTC:MSGWTG:MESSage:TYPE?n]
Returns current value of TYPE indexed by $n$. Range of $n$ is 0 to 15 .
NUMBer $n$-or- NUM $n$
[CSS:FDTC:MSGWTG:NUMBer n]
Specifies Length of Message Waiting info content. Range of $n$ is 1 to 16 .
NUMBer? -or- NUM?
[CSS:FDTC:MSGWTG:NUMBer?]
Returns current value of NUMBer.
NOMW $n$
[CSS:FDTC:NOMW n]
Sets Number of Messages Waiting field. Range of $n$ is 0 to 63 .

## NOMW?

[CSS:FDTC:NOMW?]
Returns Number of Messages Waiting field setting.
PV n
[CSS:FDTC:PV n]
Specifies Protocol Version. Range of $n$ is 0 to 15 .
PV?
[CSS:FDTC:PV?]
Returns current value of PV.
PVI $n$
[CSS:FDTC:PVIn]
Enables ( $n=1$ ) or disables ( $n=0$ ) Protocol Version Indicator.
PVI?
[CSS:FDTC:PVI?]
Returns current state of PVI.

## CSS:FDTC:

RANDSSD " $n$ "
[CSS:FDTC:RANDSSD "n"]
Sets the 56 bit Random Number sent in the Shared Secret Data Update message. The number $n$ is entered in hexadecimal as a string, with quotation marks (i.e., "4A59BE232F9C26").

## RANDSSD?

[CSS:FDTC:RANDSSD?]
Returns the Shared Secret Data 56 bit Random Number setting (string).
RANDRA $n$
[CSS:FDTC:RANDRA n]
Specifies RANDRA. Range of $n$ is 0 to \#hFFFFFFFFF (4294967295).

```
Used in conjunction with Re-Authentication message (see CSS:FDTC:FACCH: or
SACCH:REAUTHentication).
```


## RANDRA?

[CSS:FDTC:RANDRA?]
Returns current value of RANDRA.

## RANDU $n$

[CSS:FDTC:RANDU n]
Sets the 24 bit Random Number sent in the Unique Challenge message. Range of $n$ is 0 to 16777215.

## RANDU?

[CSS:FDTC:RANDU?]
Returns the Unique Challenge 24 bit Random Number setting.
RATe $n$
[CSS:FDTC:RATE n]
Sets Channel Rate (0 [Full-Rate] or 1 [Half-Rate]).
RATe?
[CSS:FDTC:RATe?]
Returns Channel Rate setting.

## CSS:FDTC:

RCAUSe $n$
[CSS:FDTC:RCAUSe n]
Specifies R-Cause. Range of $n$ is 1 to 127.
Used to qualify an R-DATA REJECT message.

## RCAUSe?

[CSS:FDTC:RCAUSe?]
Returns current value of R-Cause.

## RCAUSe:

## REServed $n$

[CSS:FDTC:RCAUSe:REServed n]
Specifies value of R-Cause Reserved field. Range of $n$ is 0 to 1 .
REServed?
[CSS:FDTC:RCAUSe:REServed?]
Returns current value of R-Cause Reserved field.
RDATA_UNIT:
Used to carry the Higher Layer SMS protocol data unit.

## LENGth $n$

[CSS:FDTC:RDATA_UNIT:LENGTh n]
Specifies Length ( $n$ ) of the R-Data Unit info content. Range of $n$ is 1 to 255.

## LENGth?

[CSS:FDTC:RDATA_UNIT:LENGth?]
Returns current value of LENGth.

## HLP:

IDentifier $n$
[CSS:FDTC:RDATA_UNIT:HLP:IDentifier n]
Specifies Higher Layer Protocol Identifier. Range of $n$ is 0 to 255 .

## IDentifier?

[CSS:FDTC:RDATA_UNIT:HLP:IDentifier?]
Returns current value of IDentifier.

## DATA $n, m$

[CSS:FDTC:RDATA_UNIT:HLP:DATA n,m]
Specifies Higher Layer Protocol Data Unit ( $m$ ) indexed by $n$. Range of $n$ is 0 to 253; range of $m$ is 0 to 253 .

DATA? $n$
[CSS:FDTC:RDATA UNIT:HLP:DATA?n]
Returns current value of DATA. Range of $n$ is 0 to 253 .

## CSS:FDTC:

RFCHAN $n, m$
[CSS:FDTC:RFCHAN n,m]
Specifies RF Channel Number ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is 0 to 2047.

RFCHAN? $n$
[CSS:FDTC:RFCHAN? n]
Returns current value of RFCHAN indexed by $n$. Range of $n$ is 0 to 23 .
RN $n$
[CSS:FDTC:RN n]
Sets Request Number. Range of $n$ is 0 to 15 .
RN?
[CSS:FDTC:RN?]
Returns Request Number setting.
RTRANSaction $n$
[CSS:FDTC:RTRANSaction n]
Specifies R-Transaction Identifier. Range of $n$ is 0 to 255 .
Used to uniquely associate a R-DATA ACCEPT or a R-DATA REJECT message with a specific R-DATA message.

## RTRANSaction?

[CSS:FDTC:RTRANSaction?]
Returns current value of RTRANSaction.
SBI $n$
[CSS:FDTC:SBIn]
Sets Shortened Burst Indicator. Range of $n$ is 0 to 3 .
SBI?
[CSS:FDTC:SBI?]
Returns Shortened Burst Indicator setting.

## CSS:FDTC:

## SERVice:

CAUSe $n, m$
[CSS:FDTC:SERVICe:CAUSe n,m]
Specifies Cause $(m)$ for the designated instance ( $n$ ). Range of $n$ is 0 to 9 ; range of $m$ is 0 to 255 .

See CSS:FDTC:SERVice:CAUSe:NUMBer $n$ to specify number of instances of Cause.

CAUSe? $n$
[CSS:FDTC:SERVice:CAUSe? n]
Returns current value of Cause for the designated instance ( $n$ ). Range of $n$ is 0 to 9 .

CAUSe:
NUMBer $n$-or- NUM $n$
[CSS:FDTC:SERVICe:CAUSe:NUMBer n]
Specifies the number of instances (Remaining Length) of Cause (see
CSS:FDTC:SERVice:CAUSe). Range of $n$ is 0 to 10.
When $n$ is set to 0 , Cause (see CSS:FDTC:SERVice:CAUSe) is not sent.
NUMBer? -or- NUM?
[CSS:FDTC:SERVICe:CAUSe:NUMBer?]
Returns the current number of instances of Cause.
CODE $n$
[CSS:FDTC:SERVice:CODE n]
Specifies Service Code. Range of $n$ is 0 to 15 .
Indicates the requested service.

## CODE?

[CSS:FDTC:SERVICe:CODE?]
Returns the current value of Service Code.

## CSS:FDTC:

## SIGNAL:

## PITCH $n$

[CSS:FDTC:SIGNAL:PITCH n]
Sets the pitch of the Alert tone. Range of $n$ is 0 to 3 .

## PITCH?

[CSS:FDTC:SIGNAL:PITCH?]
Returns Alert tone pitch setting.
CADENCE $n$
[CSS:FDTC:SIGNAL:CADENCE n]
Sets the on-off pattern of the Alert tone. Range of $n$ is 0 to 63 .
CADENCE?
[CSS:FDTC:SIGNAL:CADENCE?]
Returns the Alert tone on-off pattern setting.

## SLOT $n$

[CSS:FDTC:SLOT n]
Sets Timeslot. Range of $n$ is 1 to 3 .

## SLOT?

[CSS:FDTC:SLOT?]
Returns Timeslot setting.
SOC $n$
[CSS:FDTC:SOC n]
Enables ( $n=1$ ) or disables $(n=0)$ System Operator Code.

## SOC?

[CSS:FDTC:SOC?]
Returns current state of SOC.

## SUPPort:

IRA $n$
[CSS:FDTC:SUPPort:IRA n]
Enables ( $n=1$ ) or disables ( $n=0$ ) IRA Support.
Indicates if a mobile station or BMI supports IRA address encoding in the address field in the Message Center Address.

IRA?
[CSS:FDTC:SUPPort:IRA?]
Returns current state of IRA.

## CSS:FDTC:

TA $n$
[CSS:FDTC:TA n]
Sets Time Alignment. Range of $n$ is 0 to 31 .
TA?
[CSS:FDTC:TA?]
Returns Time Alignment setting.
TASK $n$
[CSS:FDTC:TASK n]
Specifies Task Status. Range of $n$ is 0 to 7.
TASK?
[CSS:FDTC:TASK?]
Returns current value of TASK.
TI $n$
[CSS:FDTC:TIn]
Sets Timeslot Indicator. Range of $n$ is 0 to 6. ( 0 is analog.)
TI?
[CSS:FDTC:TI?]
Returns Timeslot Indicator setting.

## CSS:FDTC:

USER:
DEST:
Used to identify the user destination address of a MS originated short message.

## TYPE $n$

[CSS:FDTC:USER:DEST:TYPE n]
Specifies Type of Number. Range of $n$ is 0 to 7 .

## TYPE?

[CSS:FDTC:USER:DEST:TYPE?]
Returns current value of TYPE.
PLANid $n$
[CSS:FDTC:USER:DEST:PLANId n]
Specifies Numbering Plan Identification. Range of $n$ is 0 to 15 .
PLANid?
[CSS:FDTC:USER:DEST:PLANId?]
Returns current value of PLANid.

## ENCoding $n$

[CSS:FDTC:USER:DEST:ENCoding n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Address Encoding.

## ENCoding?

[CSS:FDTC:USER:DEST:ENCoding?]
Returns current state of ENCoding.
ADDRess " $n$ "
[CSS:FDTC:USER:DEST:ADDRess " $n$ "]
Specifies Address (ASCll string).
Up to 60 characters may be sent.

## ADDRess?

[CSS:FDTC:USER:DEST:ADDRess?]
Returns current string value of ADDRess.

## CSS:FDTC:

USER:
DEST:
SUBaddress:
Used to identify the subaddress of the destination user of a short message.
LENGth $n$
[CSS:FDTC:USER:DEST:SUBaddress:LENGth n]
Specifies Length of subaddress info content. Range of $n$ is 0 to 21 .

## LENGth?

[CSS:FDTC:USER:DEST:SUBaddress:LENGth?]
Returns current value of LENGth.
ODD_EVEN $n$
[CSS:FDTC:USER:DEST:SUBaddress:ODD_EVEN n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Odd/Even Indicator.

## ODD_EVEN?

[CSS:FDTC:USER:DEST:SUBaddress:ODD_EVEN?]
Returns current state of ODD_EVEN.
TYPE $n$
[CSS:FDTC:USER:DEST:SUBaddress:TYPE n]
Specifies Type of subaddress. Range of $n$ is 0 to 7 .
TYPE?
[CSS:FDTC:USER:DEST:SUBaddress:TYPE?]
Returns current value of TYPE.

## REServed $n$

[CSS:FDTC:USER:DEST:SUBaddress:REServed n]
Specifies number of subaddress Reserved fields. Range of $n$ is 0 to 15 .

## REServed?

[CSS:FDTC:USER:DEST:SUBaddress:REServed?]
Returns number of subaddress Reserved fields.
ADDRess $n, m$
[CSS:FDTC:USER:DEST:SUBaddress:ADDRess n,m]
Specifies User Destination Subaddress ( $m$ ) indexed by $n$. Range of $n$ is 0 to 19; range of $m$ is 0 to 255 .

ADDRess? $n$
[CSS:FDTC:USER:DEST:SUBaddress:ADDRess? n]
Returns current value of User Destination Subaddress indexed by $n$. Range of $n$ is 0 to 19 .

USER:
ORIG:
Used to identify the originating address of a short message.
TYPE $n$
[CSS:FDTC:USER:ORIG:TYPE n]
Specifies Type of Number. Range of $n$ is 0 to 7 .
TYPE?
[CSS:FDTC:USER:ORIG:TYPE?]
Returns current value of TYPE.
PLANid $n$
[CSS:FDTC:USER:ORIG:PLANIA n]
Specifies Numbering Plan Identification. Range of $n$ is 0 to 15 .
PLANid?
[CSS:FDTC:USER:ORIG:PLANId?]
Returns current value of PLANid.

## ENCoding $n$

[CSS:FDTC:USER:ORIG:ENCoding n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Address Encoding.

## ENCoding?

[CSS:FDTC:USER:ORIG:ENCoding?]
Returns current state of ENCoding.
ADDRess " $n$ "
[CSS:FDTC:USER:ORIG:ADDRess "n"]
Specifies Address (ASCII string).
Up to 60 characters may be sent.

## ADDRess?

[CSS:FDTC:USER:ORIG:ADDRess?]
Returns current string value of ADDRess.

## PRESentation:

PI $n$
[CSS:FDTC:USER:ORIG:PRESentation:PI n]
Specifies Presentation Indicator. Range of $n$ is 0 to 3 .
PI?
[CSS:FDTC:USER:ORIG:PRESentation:PI?]
Returns current value of PI .

## CSS:FDTC:

USER:
ORIG:

## PRESentation:

SI $n$
[CSS:FDTC:USER:ORIG:PRESentation:SI n]
Specifies Screening Indicator. Range of $n$ is 0 to 3 .
SI?
[CSS:FDTC:USER:ORIG:PRESentation:SI?]
Returns current value of $S I$.
REServed $n$
[CSS:FDTC:USER:ORIG:PRESentation:REServed n]
Specifies number of Reserved fields. Range of $n$ is 0 to 15 .

## REServed?

[CSS:FDTC:USER:ORIG:PRESentation:REServed?]
Returns number of Reserved fields.

## SUBaddress:

Used to identify the subaddress of the originating user of a short message.

LENGth n
[CSS:FDTC:USER:ORIG:SUBaddress:LENGth n]
Specifies Length of User Originating subaddress info content. Range of $n$ is
0 to 21 .
LENGth?
[CSS:FDTC:USER:ORIG:SUBaddress:LENGth?]
Returns current value of LENGth.

## ODD_EVEN $n$

[CSS:FDTC:USER:ORIG:SUBaddress:ODD_EVEN n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Odd/Even Indicator.
ODD_EVEN?
[CSS:FDTC:USER:ORIG:SUBaddress:ODD_EVEN?]
Returns current state of ODD EVEN.
TYPE n
[CSS:FDTC:USER:ORIG:SUBaddress:TYPE n]
Specifies Type of subaddress. Range of $n$ is 0 to 7 .
TYPE?
[CSS:FDTC:USER:ORIG:SUBaddress:TYPE?]
Returns the value of TYPE.

## CSS:FDTC:

USER:
ORIG:

## SUBaddress:

REServed $n$
[CSS:FDTC:USER:ORIG:SUBaddress:REServed n]
Specifies number of subaddress Reserved fields. Range of $n$ is 0 to 15 .

## REServed?

[CSS:FDTC:USER:ORIG:SUBaddress:REServed?]
Returns number of subaddress Reserved fields.
ADDRess $n, m$
[CSS:FDTC:USER:ORIG:SUBaddress:ADDRess n,m]
Specifies User Originating Subaddress ( $m$ ) indexed by $n$. Range of $n$ is 0 to 19; range of $m$ is 0 to 255 .

ADDRess? $n$
[CSS:FDTC:USER:ORIG:SUBaddress:ADDRess? n]
Returns current value of User Originating Subaddress indexed by $n$. Range of $n$ is 0 to 19 .

VMI:
Used to provide voice mode operation information for the assigned digital traffic channel.
vC $n$
[CSS:FDTC:VMI:VC n]
Specifies Voice Code. Range of $n$ is 0 to 7 .
vc?
[CSS:FDTC:VMI:VC?]
Returns current value of $V C$.
PM_V $n$
[CSS $\left.\bar{S}: F D T C: V M I: P M \_V n\right]$
Specifies Voice Privacy Mode. Range of $n$ is 0 to 7 .
PM_V?
[CSS:FDTC:VMI:PM_V?]
Returns current value of PM_V.
VPM $n$
[CSS:FDTC:VPM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Voice Privacy Mode bit.

## VPM?

[CSS:FDTC:VPM?]
Returns current state of Voice Privacy Mode.

## 9-12-7 TALKBACK

Talkback commands put data received on the RDTC into data fields of the FDTC. Data including VSELP loops back to the Mobile Station. The SP TST performs no decoding or error correction with this operation.

## CSS:FDTC:TALK:

DELAY $n$
[CSS:FDTC:TALK:DELAY n]
Adds delay between receiving and transmitting in 20 ms intervals. Range of $n$ is 0 to 250 .

## START

[CSS:FDTC:TALK:START]
Starts Talkback operation.

## STOP

[CSS:FDTC:TALK:STOP]
Stops Talkback operation.

## 9-12-8 GLOBAL ACTION OVERHEAD MESSAGES

Global Action Overhead Messages are appended to the System Parameter Overhead message increasing the length of the overhead message train. Action (CSS:GLACT:ACTion) commands enable specific Global Action messages. Other commands define data and control operation.

## CSS:GLACT:

## SEND

[CSS:GLACT:SEND]
Starts Sending the Global Action as part of the primary Overhead Message Train (OMT).
Any selected secondary OMTs that are to contain enabled Global Actions require the CSS:FOCC:OVER:BUILD command.

## STOP

[CSS:GLACT:STOP]
Stops sending the Global Action as part of the primary Overhead Message Train.

## REPEAT:

## OFF

[CSS:GLACT:REPEAT:OFF]
Sends the Global Action Overhead message in the primary OMT once after starting (CSS:GLACT:SEND).

ON
[CSS:GLACT:REPEAT:ON]
Sends the Global Action Overhead message in the primary OMT continuously after starting (CSS:GLACT:SEND) and stops when the CSS:GLACT:STOP command is initiated.

## CSS:GLACT:

## ACTion:

## ACCess $n$

[CSS:GLACT:ACTion:ACCess n]
Enables or disables Access Attempt Parameters message (1 or 0).

## ACCess?

[CSS:GLACT:ACTion:ACCess?]
Returns Access Attempt Parameters message Enable setting.

## BIS $n$

[CSS:GLACT:ACTion:BIS n]
Enables or disables Access Type Parameters message (1 or 0). The Access Type Parameters message contains the BIS bit.

## BIS?

[CSS:GLACT:ACTion:BIS?]
Returns Access Type Parameters message Enable setting.

## LOCAID n

[CSS:GLACT:ACTIOn:LOCAID n]
Enables or disables Location Area message (1 or 0).

## LOCAID?

[CSS:GLACT:ACTIOM:LOCAID?]
Returns Location Area message Enable setting.

## LOCAL1 n

[CSS:GLACT:ACTIOn:LOCAL1 n]
Enables or disables Local Control 1 message (1 or 0).

## LOCAL1?

[CSS:GLACT:ACTION:LOCAL1?]
Returns Local Control 1 message Enable setting.

## LOCAL2 n

[CSS:GLACT:ACTIon:LOCAL2 n]
Enables or disables Local Control 2 message (1 or 0).
LOCAL2?
[CSS:GLACT:ACTION:LOCAL2?]
Returns Local Control 2 message Enable setting.

## NEWACC $n$

[CSS:GLACT:ACTIOn:NEWACC n]
Enables or disables New Access Channel Set message (1 or 0).

## NEWACC?

[CSS:GLACT:ACTion:NEWACC?]
Returns New Access Channel Set message Enable setting.

## CSS:GLACT:

## ACTIon:

OLC $n$
[CSS:GLACT:ACTION:OLC n]
Enables or disables Overload Control message (1 or 0).
OLC?
[CSS:GLACT:ACTION:OLC?]
Returns Overload Control message Enable setting.
RANDA $n$
[CSS:GLACT:ACTion:RANDA n]
Enables or disables Random Challenge A message (1 or 0).
RANDA?
[CSS:GLACT:ACTIon:RANDA?]
Returns Random Challenge A message Enable setting.
RANDB $n$
[CSS:GLACT:ACTion:RANDB n]
Enables or disables Random Challenge $B$ message (1 or 0 ).
RANDB?
[CSS:GLACT:ACTion:RANDB?]
Returns Random Challenge B message Enable setting.

## REGINCR $n$

[CSS:GLACT:ACTIon:REGINCR n]
Enables or disables Registration Increment message (1 or 0).

## REGINCR?

[CSS:GLACT:ACTion:REGINCR?]
Returns Registration Increment message Enable setting.
RESCAN $n$
[CSS:GLACT:ACTIOn:RESCAN n]
Enables or disables Rescan message ( 1 or 0 ).

## RESCAN?

[CSS:GLACT:ACTIOn:RESCAN?]
Returns Rescan message Enable setting.
BIS $n$
[CSS:GLACT:BIS n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Busy-Idle Status.
BIS?
[CSS:GLACT:BIS?]
Returns current state of Busy-Idle Status.

## CSS:GLACT:

LOCAID $n$
[CSS:GLACT:LOCAID n]
Sets Cell Site Location Area Identification. Range of $n$ is 0 to 4095 .

## LOCAID?

[CSS:GLACT:LOCAID?]
Returns Cell Site Location Area Identification setting.
LOCALentI $n$
[CSS:GLACT:LOCALCnt/ n]
Sets Local Control bits. Range of $n$ is 0 to 65535.

## LOCALentI?

[CSS:GLACT:LOCALCntl?]
Returns value set for the Local Control bits.
LREG $n$
[CSS:GLACT:LREG n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Local Area Identification Registration.

## LREG?

[CSS:GLACT:LREG?]
Returns current state of Local Area Identification Registration.

## MAXBusy:

## OTHer $n$

[CSS:GLACT:MAXBusy:OTHer n]
Sets field indicating Maximum number of Busy occurrences allowed for Other than Page responses. Range of $n$ is 0 to 15 .

## OTHer?

[CSS:GLACT:MAXBusy:OTHer?]
Returns Maximum number of Busy occurrences allowed for Other than Page responses setting.

PGR n
[CSS:GLACT:MAXBusy:PGR n]
Sets field indicating Maximum number of Busy occurrences allowed for Page responses. Range of $n$ is 0 to 15 .

## PGR?

[CSS:GLACT:MAXBusy:PGR?]
Returns Maximum number of Busy occurrences allowed for Page responses field setting.

## CSS:GLACT:

## MAXSztr:

## OTHer $n$

[CSS:GLACT:MAXSztr:OTHer n]
Sets field indicating Maximum number of Seizure Tries allowed for Other than Page responses. Range of $n$ is 0 to 15 .

OTHer?
[CSS:GLACT:MAXSztr:OTHer?]
Returns Maximum number of Seizure Tries allowed for Other than Page responses field setting.

PGR $n$
[CSS:GLACT:MAXSztr:PGR n]
Sets field indicating Maximum number of Seizure Tries for Page responses. Range of $n$ is 0 to 15 .

## PGR?

[CSS:GLACT:MAXSztr:PGR?]
Returns Maximum number of Busy occurrences allowed for Page responses field setting.

## NEWACC $n$

[CSS:GLACT:NEWACC n]
Sets New Access Channel starting point field. Range of $n$ is 0 to 2047.

## NEWACC?

[CSS:GLACT:NEWACC?]
Returns New Access Channel starting point field setting.

## OLC $n$

[CSS:GLACT:OLC n]
Sets Overhead Class field. Range of $n$ is 0 to 32767 .

## OLC?

[CSS:GLACT:OLC?]
Returns Overhead Class field setting.

## PDREG $n$

[CSS:GLACT:PDREG n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Power Down Registration.

## PDREG?

[CSS:GLACT:PDREG?]
Returns current state of Power Down Registration.
PUREG $n$
[CSS:GLACT:PUREG n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Power Up Registration.

## PUREG?

[CSS:GLACT:PUREG?]
Returns current state of Power Up Registration.

## CSS:GLACT:

RAND1 A $n$
[CSS:GLACT:RAND1_A n]
Sets 16 most significant bits of RAND. Range of $n$ is 0 to 32767 .
RAND1_A?
[CSS:GLACT:RAND1_A?]
Returns value set for the 16 most significant bits of RAND.
RAND1_B $n$
[CSS:GLACT:RAND1_B n]
Sets 16 least significant bits of RAND. Range of $n$ is 0 to 32767 .
RAND1_B?
[CSS:GLACT:RAND1_B?]
Returns value set for the 16 least significant bits of RAND.
REGINCR n
[CSS:GLACT:REGINCR n]
Sets Registration Increment field. Range of $n$ is 0 to 4095.

## REGINCR?

[CSS:GLACT:REGINCR?]
Returns Registration Increment field setting.

## 9-12-9 MOBILE STATION CONTROL MESSAGES

Mobile Station Control messages, sent on the Forward Control Channel, replace the Overhead Message Train. CSS:MSCM:ORDER: commands select the Mobile Station Control Message.

## CSS:MSCM:

## SEND

[CSS:MSCM:SEND]
Starts sending the Mobile Station Control message in the selected Overhead Message Train (OMT) (primary or one of the four secondary OMTs).

If repeat is turned OFF, this command times out if the message cannot be sent out in 7 sec . This could happen if the message was sent as part of a secondary cycle that was repeated no more than every 7 sec .

## STOP

[CSS:MSCM:STOP]
Stops sending the Mobile Station Control message.

## REPEAT:

OFF
[CSS:MSCM:REPEAT:OFF]
Sends the Mobile Station Control message in the selected OMTs (primary or one of the four secondary OMTs) once after starting (CSS:MSCM:SEND).

ON
[CSS:MSCM:REPEAT:ON]
Sends the Mobile Station Control Message continuously in the selected OMTs (primary or one of the four secondary OMTs) after the CSS:MSCM:SEND command and stops when CSS:MSCM:STOP command is initiated.

## ORDER:

The following commands select a specific Mobile Station Control Message to be sent in the selected OMT. The selected messages may be sent in the OMT with the CSS:MSCM:SEND command.

```
A_ALERT
[CSS:MSCM:ORDER:A_ALERT]
Selects Abbreviated Alert message.
ANA_VC_DES
[CSS:MSCM:ORDER:ANA VC_DES]
Selects Analog Voice Channel Assignment message.
ASYNC_PAGE
[CSS:MS\overline{CM:ORDER:ASYNC_PAGE]}
Selects Page (Async Data) message.
AUDIT
[CSS:MSCM:ORDER:AUDIT]
Selects Audit message.
```


## CSS:MSCM:

## ORDER:

## BSCHALCON

[CSS:MSCM:ORDER:BSCHALCON]
Selects Base Station Challenge Confirmation message.

## DIR_RTRY

[CSS:MSCM:ORDER:DIR_RTRY]
Selects Directed-Retry message.

## G3_MSG_WTG <br> [CSS:MSCM:ORDER:G3_MSG_WTG]

Selects G3-Fax Message Waiting message.

## G3_PAGE

[CSS:MSCM:ORDER:G3_PAGE]
Selects Page (Group 3 Fax) message.

## INTRCPT

[CSS:MSCM:ORDER:INTRCPT]
Selects Intercept message.

## IS136:

## SLOT1

[CSS:MSCM:ORDER:IS136:SLOT1]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 1, Full-Rate message type (VSELP).

## SLOT2

[CSS:MSCM:ORDER:IS136:SLOT2]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 2, Full-Rate message type (VSELP).

## SLOT3

[CSS:MSCM:ORDER:IS136:SLOT3]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 3, Full-Rate message type (VSELP).
order:
IS136:
IS641:
SLOT1
[CSS:MSCM:ORDER:IS136:IS641:SLOT1]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 1, Full-Rate message type (ACELP).

SLOT2
[CSS:MSCM:ORDER:IS136:IS641:SLOT2]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 2, Full-Rate message type (ACELP).

SLOT3
[CSS:MSCM:ORDER:IS136:IS641:SLOT3]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 3, Full-Rate message type (ACELP).

FAXdata:
SLOT1
[CSS:MSCM:ORDER:IS136:FAXdata:SLOT1]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 1, full-rate order (Fax/Data).

## SLOT2

[CSS:MSCM:ORDER:IS136:FAXdata:SLOT2]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 2, full-rate (Fax/Data) message type.

## SLOT3

[CSS:MSCM:ORDER:IS136:FAXdata:SLOT3]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslot 3, full-rate (Fax/Data) message type.

SLOT1_2
[CSS:MSCM:ORDER:IS136:FAXdata:SLOT1_2]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslots $1 \& 2$, double rate (Fax/Data) message type.

SLOT1_3
[CSS:MSCM:ORDER:IS136:FAXdata:SLOT1_3]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslots $1 \& 3$, double rate (Fax/Data) message type.

SLOT2_3
[CSS:MSCM:ORDER:IS136:FAXdata:SLOT2_3]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslots $2 \& 3$, double rate (Fax/Data) message type.

## CSS:MSCM:

## ORDER:

## IS136:

FAXdata:
SLOT1_2_3
[CSS:MSCM:ORDER:IS136:FAXdata:SLOT1_2_3]
Sends a DTC Assignment for IS-136 order with Assigned to Timeslots 1, 2 \& 3, triple rate (Fax/Data) message type.

LC
[CSS:MSCM:ORDER:LC]
Selects Local Control message.
MSG_WTG
[CSS:MSCM:ORDER:MSG_WTG]
Selects Message Waiting message.

## PAGE

[CSS:MSCM:ORDER:PAGE]
Selects Page message.

## REG_AUTH_CNF

[CSS:MSCM:ORDER:REG_AUTH_CNF]
Selects Autonomous Registration (with Authentication Word C) Confirmation message.

## REG CNF

[CSS:MSCM:ORDER:REG_CNF]
Selects Registration Confirmation message.
RELease
[CSS:MSCM:ORDER:RELease]
Selects Release message.
REORDER
[CSS:MSCM:ORDER:REORDER]
Selects Reorder message.

## SLOT1

[CSS:MSCM:ORDER:SLOT1]
Selects Digital Channel Assignment to Timeslot 1 message.

## SLOT2

[CSS:MSCM:ORDER:SLOT2]
Selects Digital Channel Assignment to Timeslot 2 message.

## SLOT3

[CSS:MSCM:ORDER:SLOT3]
Selects Digital Channel Assignment to Timeslot 3 message.

## CSS:MSCM:

## ORDER:

SMS_MSG_WTG
[CSS:MSCM:ORDER:SMS_MSG_WTG]
Selects SMS Message Waiting message.

## SSD_UP

[CSS:MSCM:ORDER:SSD_UP]
Selects Shared Secret Data Update message.

## UCHAL

[CSS:MSCM:ORDER:UCHAL]
Selects Unique Challenge message.
VC_DES
[CSS:MSCM:ORDER:VC_DES]
Selects Voice Channel Designation message.
VOICE_MSG_WTG
[CSS:MSCM:OADDER:VOICE_MSG_WTG]
Selects Voice Message Waiting message.

## AUTHBS $n$

[CSS:MSCM:AUTHBS n]
Sets AUTHBS value. Range of $n$ is 0 to 262143.

## AUTHBS?

[CSS:MSCM:AUTHBS?]
Returns AUTHBS value setting.

## CHAN n

[CSS:MSCM:CHAN n]
Selects RF Channel. Range of $n$ is 0 to 2047.
CHAN?
[CSS:MSCM:CHAN?]
Returns RF Channel setting.
CHANPos $n, x$
[CSS:MSCM:CHANPos $n, x$ ]
Sets selected Channel Position field sent in Directed-Retry message. Range of $n$ is 0 to 5 (indicating Channel Positions 1 to 6). Range of $x$ is 0 to 127.
CHANPos? $n$
[CSS:MSCM:CHANPos? n]
Returns selected Channel Position field setting. Range of $n$ is 0 to 5 .

## CSS:MSCM:

DMAC n
[CSS:MSCM:DMAC n]
Sets Digital Mobile Attenuation Code. Range of $n$ is 0 to 10 .
DMAC?
[CSS:MSCM:DMAC?]
Returns Digital Mobile Attenuation Code setting.
DVCC $n$
[CSS:MSCM:DVCC n]
Sets Digital Verification Color Code. Range of $n$ is 0 to 255 .
DVCC?
[CSS:MSCM:DVCC?]
Returns Digital Verification Color Code setting.
EF $n$
[CSS:MSCM:EF n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Extended Protocol Forward Channel Indicator.

## EF?

[CSS:MSCM:EF?]
Returns current state of Extended Protocol Forward Channel Indicator.
LOCAL $n$
[CSS:MSCM:LOCAL n]
Sets the Local Control (Local Control message)/Message Type field. Range of $n$ is 0 to 31 .
LOCAL?
[CSS:MSCM:LOCAL?]
Returns the Local Control/Message Type field setting.
MEM $n$
[CSS:MSCM:MEM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Message Encryption Mode.

## MEM?

[CSS:MSCM:MEM?]
Returns current state of Message Encryption Mode.

## CSS:MSCM:

```
MIN "n"
[CSS:MSCM:MIN "n"]
```

Selects Mobile Identification Number. The Mobile Identification Number ( $n$ ) is entered as a string, with quotation marks (i.e., "316/522-4981").

## MIN?

[CSS:MSCM:MIN?]
Returns Mobile Identification Number string setting.

## ORDQ $n$

[CSS:MSCM:ORDQ n]
Sets Order Qualifier field. Range of $n$ is 0 to 7 .
ORDQ?
[CSS:MSCM:ORDQ?]
Returns Order Qualifier field setting.

## PM n

[CSS:MSCM:PM n]
Enables $(n=1)$ or disables $(n=0)$ Privacy Mode Indicator.

## PM?

[CSS:MSCM:PM?]
Returns current state of Privacy Mode Indicator.
PVI $n$
[CSS:MSCM:PVIn]
Enables $(n=1)$ or disables $(n=0)$ Protocol Version Indicator.

## PVI?

[CSS:MSCM:PVI?]
Returns current state of PVI.
RANDSSD1 $n$
[CSS:MSCM:RANDSSD1 n]
Sets the 24 most significant bits of the Random Number sent in the SSD Update message (first order word). Range of $n$ is 0 to 16777215.

RANDSSD1?
[CSS:MSCM:RANDSSD1?]
Returns the value set for the 24 most significant bits of the Random Number sent in the SSD Update message.

## CSS:MSCM:

RANDSSD2 $n$
[CSS:MSCM:RANDSSD2 n]
Sets the 24 intermediate bits of the Random Number sent in the SSD Update message (second order word). Range of $n$ is 0 to 16777215.

## RANDSSD2?

[CSS:MSCM:RANDSSD2?]
Returns the value set for the 24 intermediate bits of the Random Number sent in the SSD Update message.

RANDSSD3 $n$
[CSS:MSCM:RANDSSD3 n]
Sets the eight least significant bits of the Random Number sent in the SSD Update message (third order word). Range of $n$ is 0 to 255 .

## RANDSSD3?

[CSS:MSCM:RANDSSD3?]
Returns the value set for the eight least significant bits of the Random Number sent in the SSD Update message.

RANDU $n$
[CSS:MSCM:RANDU n]
Sets the 24 bit Random Number sent in the Unique Challenge message. Range of $n$ is 0 to 16777215 .

## RANDU?

[CSS:MSCM:RANDU?]
Returns the Unique Challenge 24 bit Random Number setting.
SCC $n$
[CSS:MSCM:SCC n]
Sets Supervisory Audio Tone Color Code. Range of $n$ is 0 to 2 .

## SCC?

[CSS:MSCM:SCC?]
Returns Supervisory Audio Tone Color Code setting.
VMAC $n$
[CSS:MSCM:VMAC n]
Sets Voice Mobile Attenuation Code. Range of $n$ is 0 to 7 .
VMAC?
[CSS:MSCM:VMAC?]
Returns Voice Mobile Attenuation Code setting.

## 9-12-10 OVERHEAD ENABLE COMMANDS

## CSS:ENABLE:

DCCH $n$
[CSS:ENABLE:DCOH n]
Enables ( $n=1$ ) or disables ( $n=0$ ) DCCH information word.
REGID $n$
[CSS:ENABLE:REGID n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Registration ID word.

The remaining portion of this section (9-12) contains the TMAC commands necessary to simulate the Forward Digital Control Channel (FDCCH) being transmitted from a Base Station.

## 9-12-11 SUPERFRAME SETUP

The FDCCH Generator has all the TMAC commands and operations needed to build and maintain a Superframe. Each phase of the Superframe can be changed as the Superframe is being transmitted. A TMAC command returns the Superframe phase currently being transmitted. This enables a TMAC program, that changes the data, to become synchronized with the Superframe cycle.

## CSS:FDCCH:SUPERframe:

SFP $n, m$
[CSS:FDCCH:SUPERframe:SFP n,m]
Selects a Super Frame Phase ( $m$ ) within a Superframe slot ( $n$ ) being programmed. Range of $n$ is 0 to 31 ; range of $m$ is 0 to 255 .

The CRC is performed by the Sp Tst.
SFP? $n$
[CSS:FDCCH:SUPERframe:SFP? n]
Returns current value of SFP indexed by $n$. Range of $n$ is 0 to 31 .
BRI $n, m$
[CSS:FDCCH:SUPERframe:BRI n,m]
Specifies Busy/Idle/Reserved ( $m$ ) within a selected Superframe slot ( $n$ ) being programmed.
Range of $n$ is 0 to 31 ; range of $m$ is 0 to 63 .
BRI? $n$
[CSS:FDCCH:SUPERframe:BRI? n]
Returns current value of BRI indexed by $n$. Range of $n$ is 0 to 31 .

## CSS:FDCCH:SUPERframe:

PE $n, m$
[CSS:FDCCH:SUPERframe:PE n,m]
Specifies Partial Echo ( $m$ ) within a Superframe slot ( $n$ ) being programmed. Range of $n$ is 0 to 31 ; range of $m$ is 0 to 127.

The CRC is performed by the Sp Tst.

PE? $n$
[CSS:FDCCH:SUPERframe:PE? n]
Returns current value of PE indexed by $n$. Range of $n$ is 0 to 31 .
RN $n, m$
[CSS:FDCCH:SUPERframe:RN n,m]
Specifies Received/Not Received ( $m$ ) within a Superframe slot $(n)$ being programmed. Range of $n$ is 0 to 31 ; range of $m$ is 0 to 31 .

RN? $n$
[CSS:FDCCH:SUPERframe:RN? n]
Returns current value of RN indexed by $n$. Range of $n$ is 0 to 31 .

## DATA $n, x$, word

## [CSS:FDCCH:SUPERframe:DATA $n, x$,word]

Specifies one of the 7 words (indexed by $x$ ) that comprise the data transmitted per selected Superframe slot $(n)$. Range of $n$ is 0 to 31 ; range of $x$ is 0 to 6 ; range of word is 0 to \#hFFFF.

The data transmitted in a Superframe slot consists of 109 bits. The data is divided into seven 16 bit words. $x=0$ selects the most significant word. $x=6$ selects the least significant word.

The CRC, convolutional encoding and interleaving processes are performed by the Sp Tst.


Figure 9-3 Superframe Data Message

## CSS:FDCCH:SUPERframe:

## DATA? $n, m$

[CSS:FDCCH:SUPERframe:DATA? $n, x]$
Returns current value of DATA indexed by $n$. Range of $n$ is 0 to 31 ; range of $x$ is 0 to 6 .
TYPE $n, m$
[CSS:FDCCH:SUPERARame:TYPE n,m]
Specifies Type $(m)$ of data in Superframe slot $(n)$. Range of $n$ is 0 to 31 , range of $m$ is 0 to 4 .

| $\boldsymbol{m}$ | TYPE |
| :--- | :--- |
| 0 | F-BCCH |
| 1 | E-BCCH |
| 2 | S-BCCH |
| 3 | SPACH |
| 4 | RESERVED |

TYPE? $n$
[CSS:FDCCH:SUPERframe:TYPE? n]
Returns current value of TYPE indexed by $n$. Range of $n$ is 0 to 31 .
DVCC $n$
[CSS:FDCCH:SUPERframe:DVCC n]
Specifies Digital Verification Color Code. Range of $n$ is 0 to 255 .
DVCC must be specified in order to calculate the CRC for each type except F-BCCH.

## DVCC?

[CSS:FDCCH:SUPERframe:DVCC?]
Returns current value of DVCC. Range of $n$ is 0 to 31 .

## STARt

[CSS:FDCCH:SUPERframe:STARt]
Starts the superframe generating task.

## STOP

[CSS:FDCCH:SUPERtrame:STOP]
Stops the superframe generating task.

## CSS:FDCCH:SUPERframe:

## ACCess:

## TYPE:

## RANDom

[CSS:FDCCH:SUPERframe:ACCess:TYPE:RANDom]
Programs the Sp Tst to allow a mobile station to make a Random access.
This command performs the following:

1. Sets BRI to Idle in all frames.
2. After an access from a Mobile Station, the following occurs in the frame corresponding to the RACH subchannel:

- BRI = Busy.
- $R / N=$ Received.
- CPE $=7$ Least Significant Bits of the MIN of Mobile Station which made the access plus the 4 bit CRC.

The values that make up the SCF (Shared Channel Feedback) (CSS:FDCCH:
SUPER:PE, CSS:FDCCH:SUPER:BRI and CSS:FDCCH:SUPER:RN) are overwritten when an access occurs.

## REServed

[CSS:FDCCH:SUPERframe:ACCess:TYPE:REServed]
Programs the Sp Tst to allow a mobile station to make a Reserved access.
This command performs the following:

1. Sets BRI to Reserved in all frames.
2. Sets CPE to value set by CSS:FDCCH:SUPER:ACCESS:PE plus the 4 bit CRC.
3. After an access from a Mobile Station, the following occurs in the frame corresponding to the RACH subchannel:

- BRI = Busy.
- R/N = Received.
- CPE remains unchanged.

The values that make up the SCF (Shared Channel Feedback) (CSS:FDCCH:
SUPER:PE, CSS:FDCCH:SUPER:BRI and CSS:FDCCH:SUPER:RN) are overwritten when an access occurs.

## CSS:FDCCH:SUPERframe:

## ACCess:

## TYPE:

## PROGram

[CSS:FDCCH:SUPERframe:ACCess:TYPE:PROGram]
Configures the values of SCF as pre-programmed by CSS:FDCCH:SUPERframe:
ACCess:SCF.
After each frame of the access from a Mobile Station, the following occurs in the frame corresponding to the RACH subchannel:

1. Sets R/N and BRI are set according to the selection of CSS:FDCCH:SUPER: ACCESS:SCF.
2. Sets CPE to value determined by CSS:FDCCH:SUPER:ACCESS:PE plus the 4 bit CRC.

## NONE

[CSS:FDCCH:SUPERframe:ACCess:TYPE:NONE]
The values that make up the SCF do not change when an access occurs.
TYPE?
[CSS:FDCCH:SUPERtrame:ACCess:TYPE?]
Returns current value of TYPE.
PE $n$
[CSS:FDCCH:SUPERframe:ACCess:PE n]
Programs the Partial Echo used during a Program or Reserved access. Range of $n$ is 0 to 127.

The CRC is performed by the Sp Tst.

## PE?

[CSS:FDCCH:SUPERirame:ACCess:PE?]
Returns current value of PE.

## CSS:FDCCH:SUPERframe:

## ACCess:

SCF $n, m$
[CSS:FDCCH:SUPERframe:ACCess:SCF n,m]
Pre-program the Shared Channel Feedback response ( $m$ ) in the selected frame ( $n$ ) of a RACH. Range of $n$ is 0 to 79 ; range of $m$ is $0,2,4,6,8$ or 10 .

| $\boldsymbol{m}$ | R/N | BRI |
| :---: | :---: | :---: |
| 0 | R | B |
| 2 | R | R |
| 4 | R | I |
| 6 | N | B |
| 8 | N | R |
| 10 | N | I |


| LEGEND |  |
| :---: | :---: |
| $R$ | Received |
| $N$ | Not Received |
| $B$ | Busy |
| $R$ | Reserved |
| I | Idle |

Table 9-3 Shared Channel Feedback Response
SCF? $n$
[CSS:FDCCH:SUPERframe:ACCess:SCF? n]
Returns current value of SCF indexed by $n$. Range of $n$ is 0 to 31 .
INCrement $n$
[CSS:FDCCH:SUPERframe:INCrement n]
Enables ( $n=1$ ) or disables ( $n=0$ ) the auto-incrementing of the hyperframe counter and the toggling of the superframe indicator.

The Extended hyperframe counter and/or CBN_High are also auto-incremented if enabled.

## NUMBer? -or- NUM?

[CSS:FDCCH:SUPERframe:NUMBer?]
Returns the current number of the selected slot in the superframe being transmitted.
The returned value of this command indicates which slot of the superframe is currently being transmitted. Using this information, a program or macro can change the data in the superframe without disturbing the slot currently being transmitted.

## ZERO

[CSS:FDCCH:SUPERframe:ZERO]
Removes all data from the current superframe.

## 9-12-12 F-BCCH COMMANDS

The F-BCCH commands are used to build data into the $\mathrm{F}-\mathrm{BCCH}$ slots of the superframe. These commands enable the user to construct the $\mathrm{F}-\mathrm{BCCH}$ by specifying the Layer 3 BCCH message types and data fields. The F-BCCH slots can be built and then, with the aid of the CSS:FDCCH: SUPERframe:NUMBer? command, be placed at the start of the superframe while the E-BCCH slots or SPACH slots are being transmitted. This enables the F-BCCH to be constantly updated, even as the superframe is being transmitted. In addition, any slot of the F-BCCH can be manually modified or distorted by the CSS:FDCCH:SUPERframe:DATA command.

## CSS:FBCCH:

## BUILD

[CSS:FBCCH:BUILD]
This command builds the data that makes up the $\mathrm{F}-\mathrm{BCCH}$. This data can then be returned by the CSS:FBCCH:DATA? command defined below. Before executing this command, the message types and data fields that make up the $\mathrm{F}-\mathrm{BCCH}$ should be programmed. This command then, takes that information and generates all the data that makes up the data field in each slot of the $F-B C C H$ section of the superframe. The superframe can then be programmed with the CSS:FBCCH:PROGram command defined below. Perform the following steps to build an F-BCCH:

1. Enable the desired Message Types.
2. Enable the desired optional fields associated with the selected message types.
3. Program the data fields associated with the enabled message types.
4. Build the F-BCCH.
5. Program the superframe.

## LENGth?

[CSS:FBCCH:LENGth?]
After the CSS:FBCCH:BUILD command has been executed, the Length of the F-BCCH in slots, can be returned. Knowing the length of the $\mathrm{F}-\mathrm{BCCH}$ aids the user in setting up the number of $F-B C C H$ data fields in the DCCH Structure.

DATA? $n, m$
[CSS:FBCCH:DATA?n,m]
This command returns the F-BCCH data that has been built. Returns the 16 bit word indexed by $m$ from slot $(n)$. Range of $n$ is 0 to 10 ; range of $m$ is 0 to 6 .
Each slots consist of 109 bits. The 16 most significant bits of the data are returned when $m=0$; the 13 least significant bits of data are returned when $m=6$. The data returned is left justified.

The above data format correlates with the data format used in the CSS:FDCCH:SUPER: DATA $n, \boldsymbol{x}$, word command.

## PROGram

[CSS:FBCCH:PROGram]
Programs the F-BCCH slots in the superframe with the data constructed by the
CSS:FBCCH:BUILD command.

## CSS:FBCCH:

EC $n$
[CSS:FBCCH:EC n]
Enables $(n=1)$ or disables $(n=0)$ Extended Broadcast Control Channel Change Flag.
EC?
[CSS:FBCCH:EC?]
Returns current state of EC.
FC $n$
[CSS:FBCCH:FC n]
Enables $(n=1)$ or disables $(n=0)$ Fast Broadcast Control Channel Change Flag.
FC?
[CSS:FBCCH:FC?]
Returns current state of $F C$.
PD $n$
[CSS:FBCCH:PD n]
Specifies the value of Protocol Discriminator. Range of $n$ is 0 to 3 .

## PD?

[CSS:FBCCH:PD?]
Returns the current value of Protocol Discriminator.

## MSGtype:

## STRUCTure $n$

[CSS:FBCCH:MSGtype:STRUCTure n]
Enables $(n=1)$ or disables $(n=0)$ DCCH Structure message.

## This message must always be sent first.

## STRUCTure?

[CSS:FBCCH:MSGtype:STRUCTure?]
Returns current state of the DCCH Structure message enable.

## ACCess n

[CSS:FBCCH:MSGtype:ACCess n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Access Parameters message.

## ACCess?

[CSS:FBCCH:MSGtype:ACCess?]
Returns current state of the Access Parameters message enable.

## SELection $n$

[CSS:FBCCH:MSGtype:SELection n]
Enables ( $n=1$ ) or disables $(n=0)$ Control Channel Selection Parameters message.

## SELection?

[CSS:FBCCH:MSGtype:SELection?]
Returns current state of the Control Channel Selection Parameters message enable.

## CSS:FBCCH:

## MSGtype:

REGistration $n$
[CSS:FBCCH:MSGtype:REGistration n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Registration parameters message.

## REGistration?

[CSS:FBCCH:MSGtype:REGistration?]
Returns current state of the Registration parameters message enable.

## SYSID $n$

[CSS:FBCCH:MSGtype:SYSID n]
Enables ( $n=1$ ) or disables ( $n=0$ ) System Identification message.

## SYSID?

[CSS:FBCCH:MSGtype:SYSID?]
Returns current state of the System Identification message enable.

## BSMC $n$

[CSS:FBCCH:MSGtype:BSMC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Base Station Manufacture Code message.

## BSMC?

[CSS:FBCCH:MSGtype:BSMC?]
Returns current state of the Base Station Manufacture Code message enable.

## MACA $n$

[CSS:FBCCH:MSGtype:MACA n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Mobile Assisted Channel Allocation message.
When enabled, orders the mobile station to report radio measurements on certain channels. Order consists of instructions regarding the channels the mobile station shall measure and when to report the measurements for the Mobile Assisted Channel Allocation.

## MACA?

[CSS:FBCCH:MSGtype:MACA?]
Returns current state of the Mobile Assisted Channel Allocation message enable.
OLC $n$
[CSS:FBCCH:MSGtype:OLC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Overload Class message.
Used to regulate originations and registrations on the RACH.

## OLC?

[CSS:FBCCH:MSGtype:OLC?]
Returns current state of the Overload Class message enable.

## CSS:FBCCH:

## MSGtype:

SERVice $n$
[CSS:FBCCH:MSGtype:SERVice n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Service Menu message.
Provides a list of services supported by the BMI.
SERVice?
[CSS:FBCCH:MSGtype:SERVice?]
Returns current state of the Service Menu message enable.
SOC_BSMC $n$
[CSS:FBCCH:MSGType:SOC_BSMC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) System Operator Code/Base Station Manufacture Code message.

SOC and BSMC value associated with the BMI.
SOC_BSMC?
[CSS:FBCCH:MSGtype:SOC_BSMC?]
Returns current state of the System Operator Code/Base Station Manufacture Code message enable.

SOC $n$
[CSS:FBCCH:MSGtype:SOC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Message Delivery message.
SOC?
[CSS:FBCCH:MSGtype:SOC?]
Returns current state of the Message Delivery message enable.

## MACA_MULti $n$

[CSS:FBCCH:MSGtype:MACA_MULtin]
Enables ( $n=1$ ) or disables ( $n=0$ ) Mobile Assisted Channel Allocation (Multi Hyperband) message.

MACA_MULti?
[CSS:FBCCH:MSGtype:MACA_MULti?]
Returns current state of the Mobile Assisted Channel Allocation (Multi Hyperband) message enable.

## CSS:FBCCH:

```
NUMber:
    FBCCH n
    [CSS:FBCCH:NUMber:FBCCH n]
    Specifies Number of FBCCH. Range of n is 0 to 7.
    FBCCH?
    [CSS:FBCCH:NUMber:FBCCH?]
    Returns current value of FBCCH.
    EBCCH n
    [CSS:FBCCH:NUMber:EBCCH n]
    Specifies Number of EBCCH. Range of n is 0 to 7.
    EBCCH?
    [CSS:FBCCH:NUMber:EBCCH?]
    Returns current value of EBCCH.
    SBCCH n
    [CSS:FBCCH:NUMber:SBCCH n]
    Specifies Number of SBCCH. Range of n is 0 to 15.
    SBCCH?
    [CSS:FBCCH:NUMber:SBCCH?]
    Returns current value of SBCCH.
    REServed n
    [CSS:FBCCH:NUMber:REServed n]
    Specifies Number of Reserved Slots. Range of n is 0 to 7.
    REServed?
    [CSS:FBCCH:NUMber:REServed?]
    Returns current value of REServed.
    NON_PCH n
    [CSS:FBCCH:NUMber:NON_PCH n]
    Specifies Number of Non-Paging Channel Subchannel Slots. Range of n is 0 to 3.
    NON_PCH?
    [CSS:\overline{FBCCH:NUMber:NON_PCH?]}
    Returns current value of NON_PCH.
HYPERframe n
[CSS:FBCCH:HYPERframe n]
Specifies Hyperframe Counter. Range of n is 0 to 15.
```


## HYPERframe?

```
[CSS:FBCCH:HYPERframe?]
Returns current value of HYPERframe.
```


## CSS:FBCCH:

## EXTended $n$

[CSS:FBCCH:EXTended n]
Specifies Extended Hyperframe Counter. Range of $n$ is 0 to 7 .

## EXTended?

[CSS:FBCCH:EXTended?]
Returns current value of EXTended.

## SUPERframe n

[CSS:FBCCH:SUPERframe n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Primary Superframe Indicator.

## SUPERframe?

[CSS:FBCCH:SUPERframe?]
Returns current state of SUPERframe.

## CONfiguration $n$

[CSS:FBCCH:CONfiguration n]
Specifies Slot Configuration. Range of $n$ is 0 to 3 .

## CONfiguration?

[CSS:FBCCH:CONfiguration?]
Returns current value of CONfiguration.
DVCC $n$
[CSS:FBCCH:DVCC n]
Specifies Digital Verification Color Code. Range of $n$ is 0 to 255 .
DVCC?
[CSS:FBCCH:DVCC?]
Returns current value of DVCC

PFC $n$
[CSS:FBCCH:PFC n]
Specifies MAX_SUPPORTED_PFC. Range of $n$ is 0 to 7 .
Maximum paging frame class supported by a DCCH or a mobile station.
PFC?
[CSS:FBCCH:PFC?]
Returns current value of PFC.
PCH $n$
[CSS:FBCCH: PCH n]
Specifies PCH_DISPLACEMENT (Paging Channel Displacement). Range of $n$ is 0 to 7 .
Number of additional SPACH Slots the mobile station reads when PCON (page continuation) is enabled.

## PCH?

[CSS:FBCCH:PCH?]
Returns the value of PCH.

## CSS:FBCCH:

## PFM $n$

[CSS:FBCCH:PFM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) PFM_DIRECTION.
Paging Frame Modifier defines whether the Layer 2 PFM flag is a pull-in (reduce the Paging Frame Class by one) or a push-out (increment by one) flag.

## PFM?

[CSS:FBCCH:PFM?]
Returns current state of PFM.

## CBN:

HIGH $n$
[CSS:FBCCH:CBN:HIGH n]
Specifies CBN_High. Range of $n$ is 0 to \#hFFFF.
Contains information to support message encryption on the forward and reverse DCCH and DTC.

## HIGH?

[CSS:FBCCH:CBN:HIGH?]
Returns the value of HIGH.

## NONPublic:

## PROBability:

Can be used to determine if each channel probability block for a given system configuration contains a DCCH for a non-public system in the current service area.

## LENGth $n$

[CSS:FBCCH:NONPublic:PROBability:LENGth n]
Specifies Non-Public Map Length. Range of $n$ is 0 to 15.

## LENGth?

[CSS:FBCCH:NONPublic:PROBability:LENGth?]
Returns current value of LENGth.
BLOCK $n$
[CSS:FBCCH:NONPublic:PROBability:BLOCK n]
Specifies Non-Public Block Map. Range of $n$ is 0 to \#hFFFF.

## BLOCk?

[CSS:FBCCH:NONPublic:PROBability:BLOCk?]
Returns current value of BLOCk.

## CSS:FBCCH:

## NONPublic:

## REGistration:

CONTrol $n$
[CSS:FBCCH:NONPublic:REGistration:CONTrol n]
Specifies Non-Public Registration Control. Range of $n$ is 0 to 3 .

## CONTrol?

[CSS:FBCCH:NONPublic:REGistration:CONTrol?]
Returns current value of CONTrol.

```
AUTH n
[CSS:FBCCH:AUTH n]
Enables ( }n=1\mathrm{ ) or disables ( }n=0\mathrm{ ) AUTH.
```

When enabled, mobile station sends the Authentication message along with a Registration, Origination, Page Response or SPACH Confirmation message due to SPACH Notification indicating R-DATA.

## AUTH?

[CSS:FBCCH:AUTH?]
Returns current state of AUTH.
S $n$
[CSS:FBCCH:S n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Serial number.
When enabled, the mobile station sends the Serial Number message along with a Registration, Origination, Page Response or SPACH Confirmation message due to SPACH Notification indicating R-DATA, Base Station Challenge Order or Unique Challenge Order Confirmation.

## S?

[CSS:FBCCH:S?]
Returns current state of $S$.
RAND $n$
[CSS:FBCCH:RAND n]
Specifies RAND. Range of $n$ is 0 to \#hFFFFFFFF.
Random number stored by a mobile station is used for selected authentication processes.
RAND?
[CSS:FBCCH:RAND?]
Returns current value of RAND.

## CSS:FBCCH:

## ACCess:

MS_PWR $n$
[CSS $\bar{S}: F B C C H: A C C e s s: M S$ _PWR n]
Specifies MS_ACC_PWR (Mobile Station Analog Control Channel Power). Range of $n$ is 0 to 15.
Maximum nominal output power that the mobile station shall use when accessing the BMI (Base Station, MSC and Interworking Function). MS_ACC_PWR is also used when determining criteria for control channel selection and reselection.

## MS_PWR?

[CSS $\bar{S}: F B C C H: A C C e s s: M S$ _PWR?]
Returns current value of MS_PWR.

## RSS_MIN n

[CSS:FBCCH:ACCess:RSS_MIN n]
RSS_ACC_MIN (Received Signal Strength Analog Control Channel Minimum). Range of $n$ is 0 to 31 .
Used for the cell (re)selection process. RSS_ACC_MIN is the minimum received signal strength required to access the cell.

## RSS_MIN?

[CSS:FBCCH:ACCess:RSS_MIN?]
Returns current value of RSS_MIN.

## BURSTsize $n$

[CSS:FBCCH:ACCess:BURSTsize n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Access Burst Size.
Informs the mobile station of which burst size to use on the RACH (Random Access Control Channel).

## BURSTsize?

[CSS:FBCCH:ACCess:BURSTsize?]
Returns current state of BURSTsize.

## CSS:FBCCH:

MAX :
RETries $n$
[CSS:FBCCH:MAX:RETries n]
Specifies Max Retries. Range of $n$ is 0 to 7 .
Maximum number of access attempts that Layer 2 can make before declaring the access to have failed.

## RETries?

[CSS:FBCCH:MAX:RETries?]
Returns current value of RETries.

## BUSY $n$

[CSS:FBCCH:MAX:BUSY n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Max Busy/Reserved.
Maximum number of times that BRI (Busy Reserved Idle) $\neq$ Idle can be detected during any given access attempt before Layer 2 declares an access attempt failure.

## BUSY?

[CSS:FBCCH:MAX:BUSY?]
Returns current state of BUSY.

## REPetitions n

[CSS:FBCCH:MAX:REPetitions n]
Specifies Max Repetitions. Range of $n$ is 0 to 3 .
Maximum number of times a specific burst within any given access attempt may be sent to the RACH before Layer 2 declares an access attempt failure.

## REPetitions?

[CSS:FBCCH:MAX:REPetitions?]
Returns current value of REPetitions.

## STOP $n$

[CSS:FBCCH:MAX:STOP n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Max Stop Counter.
Max Stop Counter identifies the maximum number of times either of the following conditions can be detected for any given access attempt before Layer 2 declares an access attempt failure:

- BRI set to Reserved or Idle after sending an intermediate burst of an access attempt.
- R/N set to Not Received along with BRI set to Reserved or Idle after sending the last burst of an access attempt.


## STOP?

[CSS:FBCCH:MAX:STOP?]
Returns current value of STOP.

## CSS:FBCCH:

## RDATA:

LENGth $n$
[CSS:FBCCH:RDATA:LENGth n]
Specifies R-DATA Message Length. Range of $n$ is 0 to 7 .

## LENGth?

[CSS:FBCCH:RDATA:LENGth?]
Returns current value of LENGth.

## BARred $n$

[CSS:FBCCH:BARred n]
Specifies Cell Barred. Range of $n$ is 0 to 31 .

## BARred?

[CSS:FBCCH:BARred?]
Returns current value of BARred.

## SUBaddressing $n$

[CSS:FBCCH:SUBaddressing n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Subaddressing Support.

## SUBaddressing?

[CSS:FBCCH:SUBaddressing?]
Returns current state of SUBaddressing.
DIC $n$
[CSS:FBCCH:DIC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Delay Interval Compensation Mode.
Controls the DIC mode application in the mobile station. When received in the access parameters message, the domain of DIC application shall be the DCCH. When received in the Digital Traffic Channel Designation message, the domain of DIC application shall be the DTC.

## DIC?

## [CSS:FBCCH:DIC?]

Returns current value of DIC.

## SS_SUFF $n$

[CSS:FBCCH:SS_SUFF n]
Specifies Signal Strength Sufficient. Range of $n$ is 0 to 31 .
Minimum Signal Strength Sufficient for a candidate control channel to be considered for control channel reselection. SS_SUFF is used, in some instances, to control cell reselection using an absolute threshold.

## SS_SUFF?

[CSS:FBCCH:SS_SUFF?]
Returns current value of SS_SUFF.

## CSS:FBCCH:

SCAN:
INTerval $n$
[CSS:FBCCH:SCAN:INTerval n]
Specifies SCANINTERVAL. Range of $n$ is 0 to 15 .
Basic interval, in Hyperframes, between consecutive signal strength measurements.
The basic interval is set to 1 plus the value of the field.

## INTerval?

[CSS:FBCCH:SCAN:INTerval?]
Returns current value of INTerval.
OPTION n
[CSS:FBCCH:SCAN:OPTION n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Scanning Option Indicator.
When enabled, mobile station can apply the optional enhancements to the signal strength measurement interval applicable to NL entries.

## OPTION?

[CSS:FBCCH:SCAN:OPTION?]
Returns current state of OPTION.

## INITial n

[CSS:FBCCH:INITial n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Initial Selection Control.
Used to discourage a mobile station executing the Control Channel Selection procedure (initial selection) from selecting a DCCH for camping purposes.

## INITial? <br> [CSS:FBCCH:INITial?]

Returns current state of INITial.

## DELay $n$

[CSS:FBCCH:DELay n]
Specifies Delay. Range of $n$ is 0 to 15 .
Used for Control Channel reselection purposes.

## DELay?

[CSS:FBCCH:DELay?]
Returns current value of DELay.

## CSS:FBCCH:

## ADDitional:

NUMBer $n$-or- NUM $n$
[CSS:FBCCH:ADDitional:NUMBer n]
Specifies Number of additional DCCH Channels. Range of $n$ is 0 to 7 .
NUMBer? -or- NUM?
[CSS:FBCCH:ADDitional:NUMBer?]
Returns current value of NUMBer.
DCCH:
CHANnel $n, m$
[CSS:FBCCH:ADDitional:DCCH:CHANnel $n, m]$
Specifies DCCH Channel ( $m$ ) indexed by $n$. Range of $n$ is 0 to 7 ; range of $m$ is 0 to 2047.

CHANnel? n
[CSS:FBCCH:ADDitional:DCCH:CHANnel? n]
Returns current value of CHANnel indexed by $n$. Range of $n$ is 0 to 7 .
SLOT $n, m$
[CSS:FBCCH:ADDitional:DCCH:SLOT n,m]
Specifies Slot Configuration ( $m$ ) indexed by $n$. Range of $n$ is 0 to 7 ; range of $m$ is 0 to 3.

Indicates the number of slots assigned to DCCHs on the channel in the DCCH Channel field.

## SLOT? $n$

[CSS:FBCCH:ADDitional:DCCH:SLOT? n]
Returns current value of SLOT indexed by $n$. Range of $n$ is 0 to 7 .

## REGH $n$

[CSS:FBCCH:REGH n]
Enables ( $n=1$ ) or disables ( $n=0$ ) REGH.
When enabled, a home mobile station is allowed to register.

## REGH?

[CSS:FBCCH:REGH?]
Returns current state of REGH.
REGR $n$
[CSS:FBCCH:REGR n]
Enables ( $n=1$ ) or disables ( $n=0$ ) REGR.
When enabled, a roaming mobile station is allowed to register.

## REGR?

[CSS:FBCCH:REGR?]
Returns current state of REGR.

## CSS:FBCCH:

## PUREG $n$

[CSS:FBCCH:PUREG n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Power Up Registration.

## PUREG?

[CSS:FBCCH:PUREG?]
Returns current state of PUREG.
PDREG $n$
[CSS:FBCCH:PDREG n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Power Down Registration.
PDREG?
[CSS:FBCCH:PDREG?]
Returns current state of PDREG.

## SYREG $n$

## [CSS:FBCCH:SyREG n]

Enables ( $n=1$ ) or disables ( $n=0$ ) SYREG.
When enabled, a mobile station is to register when it enters a new system identification area.

## SYREG?

[CSS:FBCCH:SYREG?]
Returns current state of SYREG.
LAREG $n$
[CSS:FBCCH:LAREG n]
Enables ( $n=1$ ) or disables ( $n=0$ ) LAREG.
When enabled, a mobile station is to register when the registration number of the current DCCH is not a part of its registration number list used to define its location area.

## LAREG?

[CSS:FBCCH:LAREG?]
Returns current state of LAREG.

## DEREG $n$

[CSS:FBCCH:DEREG n]
Enables ( $n=1$ ) or disables ( $n=0$ ) De-Registration.

## DEREG?

[CSS:FBCCH:DEREG?]
Returns current state of DEREG.

## FOREG $n$

```
[CSS:FBCCH:FOREG n]
```

Enables ( $n=1$ ) or disables ( $n=0$ ) forced registration.

## FOREG?

[CSS:FBCCH:FOREG?]
Returns current state of FOREG.

## CSS:FBCCH:

CAPability $n$
[CSS:FBCCH:CAPability n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Capability Request.
When enabled, a mobile station shall include a Capability Report message when sending a New System registration, Forced registration or Power-Up registration.

## CAPability?

[CSS:FBCCH:CAPability?]
Returns current state of CAPability.
RNUM $n$
[CSS:FBCCH:RNUM n]
Specifies Present RNUM. Range of $n$ is 0 to 1023.
Registration number that is used to define a particular mobile station's VMLA (Virtual Mobile Location Area).

## RNUM?

[CSS:FBCCH:RNUM?]
Returns current value of RNUM.
REGPER $n$
[CSS:FBCCH:REGPER n]
Specifies REG Period. Range of $n$ is 0 to 511 .
Identifies the registration periodically in number of 94 superframes. REGPER values are coded from 0 to 511 indicating 94 to 48128 superframes (approximately 1 minute to 8.5 hours).

## REGPER?

[CSS:FBCCH:REGPER?]
Returns current value of REGPER.

## REGID:

ID $n$
[CSS:FBCCH:REGID:ID n]
Specifies System clock. Range of $n$ is 0 to \#hFFFFF.

## ID?

[CSS:FBCCH:REGID:ID?]
Returns current value of ID.
PER $n$
[CSS:FBCCH:REGID:PER n]
Specifies how often ID is incremented. Range of $n$ is 0 to 15.

## PER?

[CSS:FBCCH:REGID:PER?]
Returns current value of PER.

## CSS:FBCCH:

SID $n$
[CSS:FBCCH:SID n]
Specifies System Identification. Range of $n$ is 0 to 32767 .
Digital identification associated with a cellular system where each system is assigned a unique number.

## SID?

[CSS:FBCCH:SID?]
Returns current value of SID.

## NETwork n

[CSS:FBCCH:NETwork n]
Specifies which Network Types are supported on a control channel. Range of $n$ is 0 to 7 .

## NETwork?

[CSS:FBCCH:NETwork?]
Returns current value of NETwork.
PROTocol n
[CSS:FBCCH:PROTOCOI n]
Specifies Protocol Version supported. Range of $n$ is 0 to 15 .

## PROTocol?

[CSS:FBCCH:PROTOCOI?]
Returns current value of PROTocol.
PSID_RSID:
Private/Residential System Identification.
SOC $n$
[CSS:FBCCH:PSID_RSID:SOC n]
Specifies System Operator Code. Range of $n$ is 0 to 4095.
Identifies which operator is providing service. If the mobile station receives a reserved SOC value, the value shall be considered an unknown system operator code.

## SOC?

[CSS:FBCCH:PSID_RSID:SOC?]
Returns current value of SOC.
NUMBer $n$-or- NUM $n$
[CSS:FBCCH:PSID_RSID:NUMBern]
Specifies Number of PSID/RSID. Range of $n$ is 0 to 15 .
NUMBer? -or-NUM?
[CSS:FBCCH:PSID_RSID:NUMBer?]
Returns current value of NUMBer.

## CSS:FBCCH:

PSID_RSID:
TYPE $n, m$
[CSS:FBCCH:PSID_RSID:TYPE $n, m$ ]
Enables $(m=1)$ or disables $(m=0)$ PSID/RSID Type Indicator indexed by $n$. Range of $n$ is 0 to 15

TYPE? $n$
[CSS:FBCCH:PSID_RSID:TYPE? n]
Returns current state of TYPE indexed by $n$. Range of $n$ is 0 to 15 .
VALUE $n, m$
[CSS:FBCCH:PSID_RSID:VALUE n,m]
Specifies PSID/RSID Value ( $m$ ) indexed by $n$. Range of $n$ is 0 to 15 ; range of $m$ is 0 to \#hFFFF.

VALUE? $n$
[CSS:FBCCH:PSID_RSID:VALUE?n]
Returns current value of VALUE indexed by $n$. Range of $n$ is 0 to 15 .

## COUNTRY:

CODE $n$
[CSS:FBCCH:COUNTRY:CODE n]
Specifies Mobile Country Code of the current DCCH. Range of $n$ is 0 to 1023.
CODE?
[CSS:FBCCH:COUNTRY:CODE?]
Returns current value of CODE.

## ALPHA:

SID "n"
[CSS:FBCCH:ALPHA:SID "n"]
Specifies Alphanumeric System Identification. $n$ is ASCII string.

## SID?

[CSS:FBCCH:ALPHA:SID?]
Returns current value of SID.
BSMC $n$
[CSS:FBCCH:BSMC n]
Specifies assigned manufacturers code (Base Station Manufacture Code). Range of $n$ is 0 to 255 .

The value of 0 is reserved and shall be considered an unknown base station manufacturer code by the receiving mobile station.

## BSMC?

[CSS:FBCCH:BSMC?]
Returns current value of BSMC.

## CSS:FBCCH:

## CUSTOM:

LENGth n
[CSS:FBCCH:CUSTOM:LENGth n]
Specifies Length. Range of $n$ is 1 to 64 .
LENGth?
[CSS:FBCCH:CUSTOM:LENGth?]
Returns current value of LENGth.
CONTrol n,m
[CSS:FBCCH:CUSTOM:CONTrol n,m]
Specifies Custom Control ( $m$ ) indexed by $n$. Range of $n$ is 0 to 63 ; range of $m$ is 0 to 255 .
CONTrol? $n$
[CSS:FBCCH:CUSTOM:CONTrol? n]
Returns current value of CONTrol indexed by $n$. Range of $n$ is 0 to 63 .
MACA:

## Mobile Assisted Channel Allocation.

## STATus $n$

[CSS:FBCCH:MACA:STATus n]
Specifies which MACA function combinations are enabled (MACA_STATUS). Range of $n$ is 0 to 3.

## STATus?

[CSS:FBCCH:MACA:STATus?]
Returns current value of STATus.
TYPE $n$
[CSS:FBCCH:MACA:TYPE n]
Specifies when MACA reporting is to take place (MACA_TYPE). Range of $n$ is 0 to 15 .
TYPE?
[CSS:FBCCH:MACA:TYPE?]
Returns current value of TYPE.

## EIGHT:

CONTrol $n$
[CSS:FBCCH:MACA:EIGHT:CONTrol n]
Enables ( $n=1$ ) or disables ( $n=0$ ) MACA_8 CONTROL.
This information element, together with MACA_TYPE and MACA_STATUS, determines the number of channels reported

## CONTrol?

[CSS:FBCCH:MACA:EIGHT:CONTrol?]
Returns current value of CONTrol.

## CSS:FBCCH:

## MACA:

LIST:
Contains information regarding the channels, other than the current DCCH, the mobile station shall measure for mobile assisted channel allocation.

NUMBer $n$-or- NUM $n$
[CSS:FBCCH:MACA:LIST:NUMBer n]
Specifies Number of MACA Channels. Range of $n$ is 0 to 15 .

## NUMBer? -or- NUM?

[CSS:FBCCH:MACA:LIST:NUMBer?]
Returns current value of NUMBer.
CHAN $n, m$
[CSS:FBCCH:MACA:LIST:CHAN n,m]
Specifies Channel ( $m$ ) indexed by $n$. Range of $n$ is 0 to 15 ; range of $m$ is 0 to 2047 .
CHAN? $n$
[CSS:FBCCH:MACA:LIST:CHAN? n]
Returns current value of CHAN indexed by $n$. Range of $n$ is 0 to 15 .

## OTHER:

Contains information regarding the channels other than the current DCCH. A mobile station that is not capable of performing measurements on a channel specified in this list shall report a RSS value of 00000 for that channel.

## HYPERband $n$

[CSS:FBCCH:MACA:LIST:OTHER:HYPERband n]
Specifies Frequency band information. Range of $n$ is 0 to 3 .

## HYPERband?

[CSS:FBCCH:MACA:LIST:OTHER:HYPERband?]
Returns current value of HYPERband.
NUMBer $n$-or- NUM $n$
ICSS:FBCCH:MACA:LIST:OTHER:NUMBer n]
Specifies Number of MACA Channels. Range of $n$ is 0 to 15 .
NUMBer? -or- NUM?
[CSS:FBCCH:MACA:LIST:OTHER:NUMBer?]
Returns current value of NUMBer.
CHAN $n, m$
[CSS:FBCCH:MACA:LIST:OTHER:CHAN n,m]
Specifies Channel ( $m$ ) indexed by $n$. Range of $n$ is 0 to 15 ; range of $m$ is 0 to 2047 .

## CHAN? $n$

[CSS:FBCCH:MACA:LIST:OTHER:CHAN? n]
Returns current value of CHAN indexed by $n$. Range of $n$ is 0 to 15 .

## CSS:FBCCH:

OLC $n$
[CSS:FBCCH:OLC n]
Specifies Overload Class. Range of $n$ is 0 to \#hFFFF.
Determines whether or not a mobile station can make an Origination, Registration or Originated Point-to-Point Teleservice. The mobile station must examine the value of the OLC bit map corresponding to internally stored access overload class assignment. If the bit in the OLC bit map is enabled, the mobile station shall continue with its access attempt. Otherwise, it shall not make an access attempt.

## OLC?

[CSS:FBCCH:OLC?]
Returns current value of OLC.

## MAP:

VPM $n$
[CSS:FBCCH:MAP:VPM n]
Specifies the forms of voice privacy supported by the BMI (Voice Privacy Mode Map).
Range of $n$ is 0 to 15 .
VPM?
[CSS:FBCCH:MAP:VPM?]
Returns current value of VPM.

## DPM $n$

[CSS:FBCCH:MAP:DPM n]
Specifies the forms of data privacy supported by the BMI (Data Privacy Mode Map). Range of $n$ is 0 to 15 .

## DPM?

[CSS:FBCCH:MAP:DPM?]
Returns current value of DPM.
CODER $n$
[CSS:FBCCH:MAP:CODER n]
Specifies the types of voice coders supported by the BMI (Voice Coder Map). Range of $n$ is 0 to 63 .

## CODER?

[CSS:FBCCH:MAP:CODER?]
Returns current value of CODER.

## CSS:FBCCH:

MAP:
AUTH $n$
[CSS:FBCCH:MAP:AUTH n]
Specifies AUTH Map. Range of $n$ is 00 to \#h3F ( 0 to 63).
Specifies for which conditions a Mobile Station must include the Authentication message as part of the access attempt by the Mobile Station.

## AUTH?

[CSS:FBCCH:MAP:AUTH?]
Returns current value of AUTH Map.

## REG_INFO $n$

[CSS:FBCCH:MAP:REG_INFO n]
Reg-Info Map. Specifies additional information to be used in the registration process.
Range of $n$ is 0 to 15 .

## REG INFO?

[CSS:FBCCH:MAP:REG_INFO?]
Returns current value of Reg-Info Map.

## MEA:

Message Encryption Algorithm Map - Identifies the message encryption algorithms, domain and keys supported by a DCCH or a DTC.

DOMAIN $n$
[CSS:FBCCH:MAP:MEA:DOMAIN n]
Specifies the number of instances and ordering of the Encryption Algorithms field (Domain Map). Range of $n$ is 0 to 255 .

DOMAIN?
[CSS:FBCCH:MAP:MEA:DOMAIN?]
Returns current value of DOMAIN.

## ALGORithms $n, m$

[CSS:FBCCH:MAP:MEA:ALGORithms n,m]
Specifies Encryption Algorithms ( $m$ ) indexed by $n$. Range of $n$ is 0 to 7; range of $m$ is 0 to 15 .

## ALGORithms? $n$

[CSS:FBCCH:MAP:MEA:ALGORithms? n]
Returns current value of ALGORithms indexed by $n$. Range of $n$ is 0 to 7 .

## MEK $n$

[CSS:FBCCH:MAP:MEK n]
Specifies the message encryption keys supported by the BMI (Message Encryption Key Map). Range of $n$ is 0 to 15 .

## MEK?

[CSS:FBCCH:MAP:MEK?]
Returns current value of MEK.

## CSS:FBCCH:

MAP:
MENU $n$
[CSS:FBCCH:MAP:MENU n]
Specifies the services supported by the BMI (Menu Map). Range of $n$ is 0 to \#h3FF.

## MENU?

[CSS:FBCCH:MAP:MENU?]
Returns current value of MENU.

## ARQ $n$

[CSS:FBCCH:MAP:ARQ n]
Enables ( $n=1$ ) or disables ( $n=0$ ) FACCH/SACCH ARQ (Automatic Retransmission Request) Map.

When enabled, the BMI supports FACCH/SACCH ARQ mode on the IS-136 digital traffic channels.

## ARQ?

```
[CSS:FBCCH:MAP:ARQ?]
```

Returns current state of ARQ.
USER $n$
[CSS:FBCCH:MAP:USER n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Group Map.
When enabled, the BMI supports User Group operation.

## USER?

[CSS:FBCCH:MAP:USER?]
Returns current state of USER.

## SMS $n$

[CSS:FBCCH:MAP:SMS n]
Specifies the extent to which the BMI supports the CMT teleservice (Short Message Service Map). Range of $n$ is 0 to 3 .

## SMS?

[CSS:FBCCH:MAP:SMS?]
Returns current value of SMS.
IRA $n$
[CSS:FBCCH:IRA n]
Enables ( $n=1$ ) or disables ( $n=0$ ) International Reference Alphabet.
When enabled, mobile station or BMI supports IRA address encoding in the Address Info information element.

IRA?
[CSS:FBCCH:IRA?]
Returns current state of IRA.

## CSS:FBCCH:

## OATS $n$

[CSS:FBCCH:OATS n]
Enables ( $n=1$ ) or disables ( $n=0$ ) OATS Support. When enabled, this flag indicates support for the Over-the-Air Activation Teleservice (OATS).

## OATS?

[CSS:FBCCH:OATS?]
Returns current state of the OAT Support flag.
SOC $n$
[CSS:FBCCH:SOC n]
Specifies which operator is providing service (System Operator Code). Range of $n$ is 0 to 4095 .

A received reserved SOC value shall be considered an unknown system operator code by the receiving mobile station.

## SOC?

[CSS:FBCCH:SOC?]
Returns current value of SOC.

## ALT_SOC:

## NUMBer $n$-or- NUM $n$

[CSS:FBCCH:ALT_SOC:NUMBer n]
Specifies Number of Alternate SOCs. Range of $n$ is 0 to 15 .

## NUMBer? -or- NUM?

[CSS:FBCCH:ALT_SOC:NUMBer?]
Returns current value of Number of Alternate SOCs.
SOC $n, m$
[CSS:FBCCH:ALT_SOC:SOC n,m]
Specifies SOC ( $m$ ) for 16 instances. Range of $n$ is 0 to 15 ; range of $m$ is 0 to \#hFFF.
SOC? $n$
[CSS:FBCCH:ALT_SOC:SOC?n]
Returns current value of indexed SOC. Range of $n$ is 0 to 15 .

## MAP:

PSID_RSID $n, m$
[CSS:FBCCH:ALT_SOC:MAP:PSID_RSID n,m]
Specifies SOC PSID/RSID Map ( $m$ ) which indicates the PSID/RSIDs associated with the indexed SOC value ( $n$ ). Range of $n$ is 0 to 15 ; range of $m$ is 0 to \#hFFFF.

PSID_RSID? $n$
[CSS:FBCCH:ALT_SOC:MAP:PSID_RSID?n]
Returns current value of SOC PSID/RSID Map of the indexed SOC. Range of $n$ is 0 to 15 .

## CSS:FBCCH:

## ENABLE:

## ADDitional:

DCCH $n$
[CSS:FBCCH:ENABLE:ADDitional:DCCH n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Additional DCCH information.
DCCH?
[CSS:FBCCH:ENABLE:ADDitional:DCCH?]
Returns current state of DCCH.

## ALPHA:

SID $n$
[CSS:FBCCH:ENABLE:ALPHA:SID n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Alphanumeric System Identification.

## SID?

[CSS:FBCCH:ENABLE:ALPHA:SID?]
Returns current state of SID.

## ALT_SOC LIST n

[CSS:FBCCH:ENABLE:ALT_SOC_LIST n]
Enables ( $n=1$ ) or disables ( $n=0$ ) alternate SOC information.

## ALT SOC LIST?

[CSS:FBCCH:ENABLE:ALT_SOC_LIST?]
Returns current state of alternate SOC information.

## CBN:

## HIGH $n$

[CSS:FBCCH:ENABLE:CBN:HIGH n]
Enables ( $n=1$ ) or disables ( $n=0$ ) CBN_High.

## HIGH?

[CSS:FBCCH:ENABLE:CBN:HIGH?]
Returns current state of HIGH.

## COUNTRY:

CODE $n$
[CSS:FBCCH:ENABLE:COUNTRY:CODE n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Mobile Country Code.

## CODE?

[CSS:FBCCH:ENABLE:COUNTRY:CODE?]
Returns current state of CODE.

## CSS:FBCCH:

## ENABLE:

EXTENDED $n$
[CSS:FBCCH:ENABLE:EXTENDED n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Extended Hyperframe Counter.

## EXTENDED?

[CSS:FBCCH:ENABLE:EXTENDED?]
Returns current state of EXTENDED.

## MACA:

Mobile Assisted Channel Allocation.
EIGHT:

## CONTrol $n$

[CSS:FBCCH:ENABLE:MACA:EIGHT:CONTrol n]
Enables ( $n=1$ ) or disables ( $n=0$ ) MACA_8_CONTROL.
CONTrol?
[CSS:FBCCH:ENABLE:MACA:EIGHT:CONTrol?]
Returns current state of CONTrol.
LIST $n$
[CSS:FBCCH:ENABLE:MACA:LIST n]
Enables ( $n=1$ ) or disables ( $n=0$ ) MACA_LIST.

## LIST?

[CSS:FBCCH:ENABLE:MACA:LIST?]
Returns current state of LIST.

## LIST:

## OTHER $n$

[CSS:FBCCH:ENABLE:MACA:LIST:OTHER n]
Enables ( $n=1$ ) or disables ( $n=0$ ) MACA_LIST (Other Hyperband).
OTHER?
[CSS:FBCCH:ENABLE:MACA:LIST:OTHER?]
Returns current state of OTHER.

## CSS:FBCCH:

## ENABLE:

## MAP:

AUTH $n$
[CSS:FBCCH:ENABLE:MAP:AUTH n]
Enables ( $n=1$ ) or disables ( $n=0$ ) AUTH Map.

## AUTH?

[CSS:FBCCH:ENABLE:MAP:AUTH?]
Returns current state of AUTH Map enable.

## REG_INFO $n$

[CSS:FBCCH:ENABLE:MAP:REG_INFO n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Reg-Info Map.
REG_INFO?
[CSS:FBCCH:ENABLE:MAP:REG_INFO?]
Returns current state of Reg-Info Map enable.

## NONPublic:

PROBability $n$
[CSS:FBCCH:ENABLE:NONPublic:PROBability n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Non-Public Probability Blocks.
PROBability?
[CSS:FBCCH:ENABLE:NONPublic:PROBability?]
Returns current state of PROBability.

## REGistration $n$

[CSS:FBCCH:ENABLE:NONPublic:REGistration n]
Enables ( $n=1$ ) or disables $(n=0)$ Non-Public Registration Control.

## REGistration?

[CSS:FBCCH:ENABLE:NONPublic:REGistration?]
Returns current state of REGistration.

## CSS:FBCCH:

## ENABLE:

## PSID_RSID $n$

[CSS:FBCCH:ENABLE:PSID_RSID n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Private/Residential System Identification.

## PSID_RSID?

[CSS:FBCCH:ENABLE:PSID_RSID?]
Returns current state of PSID_RSID.
REGID $n$
[CSS:FBCCH:ENABLE:REGID n]
Enables ( $n=1$ ) or disables ( $n=0$ ) REGID Parameters.
REGID?
[CSS:FBCCH:ENABLE:REGID?]
Returns current state of REGID.

## REGPER $n$

[CSS:FBCCH:ENABLE:REGPER n]
Enables ( $n=1$ ) or disables ( $n=0$ ) REG Period.
REGPER?
[CSS:FBCCH:ENABLE:REGPER?]
Returns current state of REGPER.

## RNUM $n$

[CSS:FBCCH:ENABLE:RNUM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Present Registration Number.

## RNUM?

[CSS:FBCCH:ENABLE:RNUM?]
Returns current state of RNUM.

## 9-12-13 E-BCCH COMMANDS

## CSS:EBCCH:

## BUILD

[CSS:EBCCH:BUILD]
This command builds the data that makes up the E-BCCH.
Before executing this command, the message types and data fields that make up the $\mathrm{E}-\mathrm{BCCH}$ should be programmed. This command takes that information and generates all of the slots in the E-BCCH cycle. Since an E-BCCH cycle may continue through several superframes, the length of the E-BCCH built may be longer than Number of E-BCCH allocated to a superframe. Therefore, each time after the E-BCCH slots have been sent, the CSS:EBCCH:PROGram $n$ command, defined below, can be used to transfer the appropriate number of slots of data into the superframe. The following, outlines the process involved in building a E-BCCH:

1. Enable the desired message types.
2. Enable the desired optional fields associated with the selected message types.
3. Program the data fields associated with the enabled message types.
4. Build the E-BCCH.
5. Program the superframe with the next section of the E-BCCH cycle.

The data built to make up the E-BCCH can be returned by the CSS:EBCCH:DATA? $\boldsymbol{n}, \boldsymbol{m}$ command defined below.

## LENGth?

[CSS:EBCCH:LENGTh?]
Returns current length of the E-BCCH in slots after the CSS:EBCCH:BUILD command has been executed.

This value is useful in programming the ECL Layer 2 field.
DATA? $n, m$
[CSS:EBCCH:DATA? n,m]
Returns the E-BCCH data that has been built.
Returns current 16 bit word (indexed by $m$ ) in slot $(n)$. Range of $n$ is 0 to 255 ; range of $m$ is 0 to 6 .

Each slot consists of 109 bits of data. The 16 most significant bits of the data are returned when $m=0$, and the 13 least significant bits of data are returned when $m=6$. All returned data is left justified.

This data format correlates with the data format used in the CSS:FDCCH:SUPER:DATA $n, x$, word command.

## CSS:EBCCH:

PROGram dest, source,length
[CSS:EBCCH:PROGram dest, source, length]
Programs the slots in the superframe with the data constructed by CSS:EBCCH:BUILD command. dest is the location in the superframe; source is the start location in the EBCCH buffer; length is the number of frames of data moved from the EBCCH buffer to the superframe. Range of dest is 0 to 31 ; range of source is 0 to 255 ; range of length is 0 to 8.

## AUTO:PROGRAM $n$

 [CSS:EBCCH:AUTO:PROGRAM n]Enables $(n=1)$ or disables $(n=0)$ auto program of the EBCCH portion of the superframe. When auto-programming is enabled, the auto-programming uses the information elements ECL and Number of EBCCH to determine how to program the EBCCH portion of the superframe. The ECL value indicates how long the EBCCH message is and the number of EBCCH indicates how much of the message is included in each superframe.
To use this command, perform the following steps:

1. Build the EBCCH Message.
2. Program the ECL to the length of the EBCCH.
3. Rebuild the EBCCH.
4. Set up the Number of EBCCH information element.
5. Build the FBCCH message.
6. Enable the auto-programming of the EBCCH.

## ECL $n$

[CSS:EBCCH:ECL n]
Specifies the total number of Layer 2 frames required for the current E-BCCH Cycle (Extended Broadcast Control Channel Cycle Length). Range of $n$ is 0 to 255.

## ECL?

[CSS:EBCCH:ECL?]
Returns current value of ECL.

## PD $n$

```
[CSS:EBCCH:PD n]
```

Specifies the value of Protocol Discriminator. Range of $n$ is 0 to 3 .

## PD?

[CSS:EBCCH:PD?]
Returns the current value of Protocol Discriminator.

## CSS:EBCCH:

## MSGtype:

## NEIGHbor:

CELL $n$
[CSS:EBCCH:MSGtype:NEIGHbor:CELL n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Neighbor Cell message.
CELL?
[CSS:EBCCH:MSGtype:NEIGHbor:CELL?]
Returns current state of the Neighbor Cell message enable.

## CELL:

MULti $n$
[CSS:EBCCH:MSGtype:NEIGHbor:CELL:MULti n]
Enables ( $n=1$ ) or disables ( $n=0$ ) the Neighbor Cell (Multi Hyperband) message.
MULti?
[CSS:EBCCH:MSGtype:NEIGHbor:CELL:MULti?]
Returns current state of the Neighbor Cell (Multi Hyperband) message enable.

## SERVice n

[CSS:EBCCH:MSGtype:NEIGHbor:SERVice n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Neighbor Service Info message.
Provides information regarding services support by a TDMA Neighbor.

## SERVice?

[CSS:EBCCH:MSGtype:NEIGHbor:SERVice?]
Returns current state of the Neighbor Service Info message enable.

## SERVice:

MULti $n$
[CSS:EBCCH:MSGtype:NEIGHbor:SERVice:MULti n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Neighbor Service Info (Multi Hyperband)
message.
MULti?
[CSS:EBCCH:MSGtype:NE/GHbor:SERVice:MULti?]
Returns current state of the Neighbor Service Info (Multi Hyperband) message enable.

RCI $n$
[CSS:EBCCH:MSGtype:RCI n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Regulatory Configuration message.
RCI?
[CSS:EBCCH:MSGtype:RCI?]
Returns current state of the Regulatory Configuration message enable.

## CSS:EBCCH:

## MSGtype:

BSMC n
[CSS:EBCCH:MSGtype:BSMC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Base Station Manufacture Code Message Delivery message.

Used to carry BSMC specific signaling information, the content of which is beyond the scope of this specification.

## BSMC?

[CSS:EBCCH:MSGtype:BSMC?]
Returns current state of the Base Station Manufacture Code Message Delivery message enable.

## EMERGency $n$

[CSS:EBCCH:MSGtype:EMERGency n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Emergency Information Broadcast message.
Provides emergency information to all mobile stations.

## EMERGency?

[CSS:EBCCH:MSGtype:EMERGency?]
Returns current state of the Emergency Information Broadcast message enable.
MACA $n$
[CSS:EBCCH:MSGtype:MACA n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Mobile Assisted Channel Allocation message.
Used to order the mobile station to report radio measurements on certain channels. Contains information regarding the channels the mobile station shall measure and when to report the measurements for the mobile assisted channel allocation.

## MACA?

[CSS:EBCCH:MSGtype:MACA?]
Returns current state of the Mobile Assisted Channel Allocation message enable.

## MACA_MULti $n$

[CSS:E $\left.\bar{B} C C H: M S G t y p e: M A C A \_M U L t i n\right]$
Enables ( $n=1$ ) or disables ( $n=0$ ) Mobile Assisted Channel Allocation (Multi Hyperband) message.

## MACA_MULti?

[CSS:E $\left.\bar{B} C C H: M S G t y p e: M A C A \_M U L t i ?\right]$
Returns current state of the Mobile Assisted Channel Allocation (Multi Hyperband) message enable.

## CSS:EBCCH:

## MSGtype:

## SERVice $n$

[CSS:EBCCH:MSGtype:SERVice n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Service Menu message.
Provides a list of services supported by the BMI.

## SERVice?

[CSS:EBCCH:MSGtype:SERVice?]
Returns current state of the Service Menu message enable.

## SOC_BSMC $n$

[CSS:EBCCH:MSGtype:SOC_BSMC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) System Operator Code/Base Station Manufacture Code Message Delivery message.

## Used to identify the SOC and BSMC value associated with the BMI.

## SOC_BSMC?

[CSS:EBCCH:MSGType:SOC_BSMC?]
Returns current state of the System Operator Code/Base Station Manufacture Code Message Delivery message enable.

SOC $n$
[CSS:EBCCH:MSGtype:SOC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) System Operator Code Message Delivery message.
Used to carry SOC specific signaling information, the content of which is beyond the scope of this specification.

## SOC?

[CSS:EBCCH:MSGtype:SOC?]
Returns current state of the System Operator Code Message Delivery message enable.
TIME $n$
[CSS:EBCCH:MSGtype:TIME n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Time and Date message.

## TIME?

[CSS:EBCCH:MSGtype:TIME?]
Returns current state of the Time and Date message enable.

## CSS:EBCCH:

## MSGtype:

ALTrcin
[CSS:EBCCH:MSGtype:ALTrcin]
Enables ( $n=1$ ) or disables ( $n=0$ ) Alternate Regulatory Configuration Information message.

Provides information regarding a DCCH associated with a regulatory configuration different from that of the current DCCH.

## ALTrci?

[CSS:EBCCH:MSGtype:ALTrci?]
Returns current state of the Alternate Regulatory Configuration Information message enable.

## SERV_SS $n$

[CSS:EBCCH:SERV_SS n]
Specifies SERV_SS. Range of $n$ is 0 to 15 .
Used in the control channel reselection process.

## SERV_SS?

[CSS:EBCCH:SERV_SS?]
Returns current value of SERV_SS.

## NONPublic:

## LENGth n

[CSS:EBCCH:NONPublic:LENGTh n]
Specifies Non-Public Map Length. Range of $n$ is 0 to 15 .
LENGth?
[CSS:EBCCH:NONPublic:LENGTh?]
Returns current value of LENGth.
BLOCK $n$
[CSS:EBCCH:NONPublic:BLOCK n]
Specifies Non-Public Block Map. Range of $n$ is 0 to \#hFFFF.

## BLOCK?

[CSS:EBCCH:NONPublic:BLOCK?]
Returns current value of BLOCK.

## CSS:EBCCH:

## NEIGHbor:

TDMA:
Time Division Multiple Access. This optional information element specifies the digital channels the mobile station shall measure with regard to the Control Channel Selection and Reselection procedures.

NUMBer $n$-or- NUM $n$
[CSS:EBCCH:NEIGHbor:TDMA:NUMBer n]
Specifies Number of TDMA Neighbor Cells. Range of $n$ is 0 to 23 .
NUMBer? -or- NUM?
[CSS:EBCCH:NE/GHbor:TDMA:NUMBer?]
Returns current Number of TDMA Neighbor Cells.

## CELL:

Provides neighbor DCCH specific information.
CHAN $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:CHAN n,m]
Specifies CHAN (m) select by index ( $n$ ). Range of $n$ is 0 to 23 ; range of $m$ is 0 to 2047.

CHAN? $n$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:CHAN? n]
Returns current value of CHAN indexed by $n$. Range of $n$ is 0 to 23 .
PROTocol n,m
[CSS:EBCCH:NEIGHbor:TDMA:CELL:PROTOCOI n,m]
Specifies Version ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 15 .

## Identifies the protocol version supported.

PROTOcol? n
[CSS:EBCCH:NEIGHbor:TDMA:CELL:PROTOCOI? n]
Returns current value of PROTocol indexed by $n$. Range of $n$ is 0 to 23 .
DVCC $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:DVCC n,m]
Specifies Digital Verification Color Code (m) indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is 0 to 255 .

DVCC? $n$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:DVCC?n]
Returns current value of DVCC indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

TDMA:
CELL:
OFFset $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:OFFset n,m]
Specifies RESEL_OFFSET $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 127.

Used to increase/decrease the preference of a new candidate cell being considered for control channel reselection.

## OFFset? $n$

[CSS:EBCCH:NEIGHbor:TDMA:CELL:OFFset? n]
Returns current value of RESEL_OFFSET indexed by $n$. Range of $n$ is 0 to 23 .

## SS_SUFF $n, m$

[CSS:EBCCH:NEIGHbor:TDMA:CELL:SS_SUFF n,m]
Specifies SS_SUFF $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 31 .
Identifies the minimum signal strength sufficient for a candidate control channel to be considered for control channel reselection. SS_SUFF is used, in some instances, to control cell reselection using an absolute threshold.

SS_SUFF? $n$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:SS_SUFF? n]
Returns current value of SS_SUFF indexed by $n$. Range of $n$ is 0 to 23 .
DELAY $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:DELAY n,m]
Specifies DELAY $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 15 .
Used for Control Channel Reselection purposes.
DELAY? $n$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:DELAY? n]
Returns current value of DELAY indexed by $n$. Range of $n$ is 0 to 23 .
HL_FREQ $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:HL_FREQ n,m]
Specifies HL_FREQ $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 or 1 .
Used to determine the frequency of channel measurements.
HL_FREQ? $n$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:HL_FREQ? n]
Returns current state of HL_FREQ indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## TDMA:

## CELL:

SYNC $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:SYNC n,m]
Enables $(m=1)$ or disables $(m=0)$ CELL_SYNC indexed by $n$. Range of $n$ is 0 to 23 .

When enabled, a candidate DCCH is superframe-synchronized with the current DCCH. If this flag is enabled, the maximum time offset between superframes sent on the candidate DCCH and current DCCH shall be no more than 7.5 symbols, i.e., a mobile station shall expect to find synchronization on a candidate DCCH within $+/-7.5$ symbols relative to its current DCCH superframe.

## SYNC? $n$

[CSS:EBCCH:NEIGHbor:TDMA:CELL:SYNC?n]
Returns current state of SYNC indexed by $n$. Range of $n$ is 0 to 23 .

## TYPE:

CELL $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:TYPE:CELL n,m]
Specifies CELLTYPE $(m)$ indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is 0 to 3.

Provides a relative distinction by an operator to bias mobile station control channel reselection decisions in order to insure traffic flows according to an operator's desires.

## CELL? $n$

[CSS:EBCCH:NEIGHbor:TDMA:CELL:TYPE:CELL?n]
Returns current value of CELL indexed by $n$. Range of $n$ is 0 to 23 .
NETwork $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:TYPE:NETwork n,m]
Specifies Network Type ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 7.

Identifies which Network Types are supported on a control channel.

## NETwork? n

[CSS:EBCCH:NEIGHbor:TDMA:CELL:TYPE:NETwork? n]
Returns current value of NETwork indexed by $n$. Range of $n$ is 0 to 23.

## CSS:EBCCH:

## NEIGHbor:

## TDMA:

## CELL:

RETRY $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:RETRY n,m]
Enables ( $m=1$ ) or disables ( $m=0$ ) Directed Retry Channel indexed by $n$. Range of $n$ is 0 to 23 .

Used to determine if the neighbor list is to be considered for Directed Retry purposes.

## RETRY? n

[CSS:EBCCH:NEIGHbor:TDMA:CELL:RETRY? n]
Returns current state of RETRY indexed by $n$. Range of $n$ is 0 to 23 .

## ACCess:

MS_PWR $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:ACCess:MS_PWR n,m]
Specifies MS_ACC_PWR $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 15.

Mobile Station/Analog Control Channel Power. Identifies the maximum nominal output power that the mobile station shall use when accessing the BMI (Base Station, MSC and Interworking Function). MS_ACC_PWR is also used when determining criteria for control channel selection and reselection.

MS_PWR? $n$
[CSS $\left.\bar{S}: E B C C H: N E / G H b o r: T D M A: C E L L: A C C e s s: M S \_P W R ? n\right]$
Returns current value of MS_PWR indexed by $n$. Range of $n$ is 0 to 23 .
RSS_MIN $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:ACCess:RSS_MIN n,m]
Specifies RSS_ACC_MIN ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is 0 to 31.

Received Signal Strength/Analog Control Channel Minimum. Used for the cell (re)selection process. RSS_ACC_MIN is the minimum received signal strength required to access the cell.

## RSS_MIN? $n$

[CSS:EBCCH:NEIGHbor:TDMA:CELL:ACCess:RSS_MIN? n]
Returns current value of RSS_MIN indexed by $n$. Range of $n$ is 0 to 23.

## CSS:EBCCH:

## NEIGHbor:

TDMA:
CELL:

> PSID_RSID:

Private/Residential System Identification.
INDicator $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:PSID_RSID:INDicator n,m]
Enables ( $m=1$ ) or disables ( $m=0$ ) PSID/RSID Indicator indexed by $n$. Range of $n$ is 0 to 23 .

Indicates whether or not the PSID/RSID related mapping fields are present for the associated DCCH neighbor. Specifically, if the PSID/RSID Indicator value is set to 1, the PSID/RSID Support Length and PSID/RSID Support fields are present, otherwise, not present.

INDicator? n
[CSS:EBCCH:NEIGHbor:TDMA:CELL:PSID_RSID:INDicator? n]
Returns current state of INDicator indexed by $n$. Range of $n$ is 0 to 23 .
LENGth $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:PSID_RSID:LENGth n,m]
Specifies PSID/RSID Support Length ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is 0 to 15 .
The PSID/RSID Support Length field is only present when the PSID/RSID Indicator field is set to 1. When present, this field is always 4 bits long and is used to determine the length of the PSID/RSID Support field. The value of PSID/RSID Support Length is 0 if not present.

LENGth? $n$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:PSID_RSID:LENGTh? n]
Returns current value of LENGth indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## TDMA:

## CELL:

## PSID_RSID:

SUPport $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:CELL:PSID_RSID:SUPport n,m]
Specifies PSID/RSID Support ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 1 to \#hFFFF.

The PSID/RSID Support field is only present when the PSID/RSID Indicator field is set to 1 . When present, the length of this is determined by adding 1 to the value of the PSID/RSID Support Length field. The value of PSID/RSID Support is 0 if not present.

The PSID/RSID Support field indicates which PSID/RSID values identified in the PSID/RSID Set information element of the System Identity message of the current DCCH are supported by the DCCH neighbor under consideration. The ordering of the bits in this field reflects the ordering of the PSID/RSID Set sent in the System Identity message in that the least significant bit is corresponds to the first PSID/RSID listed in the PSID/RSID Set. If a bit in this field is set to 1 , then the corresponding PSID/RSID entry in the PSID/RSID Set is supported by the neighbor cell under consideration. On the other hand, if a bit in this field is set to 0 , then the corresponding PSID/RSID entry in the PSID/RSID Set is not supported by the neighbor cell under consideration.

For example, if 16 PSID/RSIDs are listed in the System Identity message and the neighbor cell supports the 1 st, 2nd, 3rd, and 5th PSID/RSIDs in the PSID/RSID Set, the values of PSID/RSID Support Length and PSID/RSID Support shall be:

PSID/RSID Support length $=0100$
PSID/RSID Support = 10111
If 16 PSID/RSIDs are listed in the System Identity message and the neighbor cell supports 3rd and 16th PSID/RSID Set, the values of PSID/RSID Support Length and PSID/RSID Support shall be:

PSID/RSID Support length $=1111$
PSID/RSID Support $=1000000000000100$

## SUPport? $n$

[CSS:EBCCH:NEIGHbor:TDMA:CELL:PSID_RSID:SUPport?n]
Returns current value of SUPport indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## ANAlog:

This optional information element contains information regarding the analog channels the mobile station shall measure with regard to the Control Channel Selection and Reselection procedures. This information element always specifies analog neighbors in the 800 MHz hyperband.

NUMBer $n$-or- NUM $n$
[CSS:EBCCH:NEIGHbOr:ANAlog:NUMBer n]
Specifies Number of Analog Neighbor Cells. Range of $n$ is 0 to 23 .
NUMBer? -or- NUM?
[CSS:EBCCH:NEIGHbor:ANAlog:NUMBer?]
Returns current value of NUMBer.

## CELL:

CHAN $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:CHAN n,m]
Specifies CHAN ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is 0 to 2047 .
CHAN? $n$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:CHAN? n]
Returns current value of CHAN indexed by $n$. Range of $n$ is 0 to 23 .
PROTocol n,m
[CSS:EBCCH:NEIGHbor:ANAIOg:CELL:PROTocol n,m]
Specifies Protocol Version ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23; range of $m$ in 0 to 15 .

Identifies the protocol version supported.
PROTocol? $n$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:PROTocol? n]
Returns current value of PROTocol indexed by $n$. Range of $n$ is 0 to 23 .
DCC $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:DCC n.m]
Specifies Digital Color Code $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 3.

DCC? $n$
ICSS:EBCCH:NEIGHbor:ANAlog:CELL:DCC? n]
Returns current value of DCC indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## ANAlog:

CELL:
OFFset $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:OFFset n,m]
Specifies RESEL_OFFSET $(m)$ indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is 0 to 127.

Used to increase or decrease the preference of a new candidate cell being considered for control channel reselection.

OFFset? $n$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:OFFset? n]
Returns current value of OFFset indexed by $n$. Range of $n$ is 0 to 23 .
SS_SUFF $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:SS_SUFF n,m]
Specifies SS_SUFF $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 31 .
Identifies the minimum signal strength sufficient for a candidate control channel to be considered for control channel reselection. SS_SUFF is used, in some instances, to control cell reselection using an absolute threshold.

## SS_SUFF? $n$

[CSS:EBCCH:NEIGHbor:ANAlog:CELL:SS_SUFF? n]
Returns current value of SS_SUFF indexed by $n$. Range of $n$ is 0 to 23 .
DELAY $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:DELAYn,m]
Specifies DELAY ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 15 .

## Used for Control Channel Reselection purposes.

DELAY? $n$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:DELAY?n]
Returns current value of DELAY indexed by $n$. Range of $n$ is 0 to 23 .
HL_FREQ $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:HL_FREQ n,m]
Enables $(m=1)$ or disables $(m=0)$ HL_FREQ indexed by $n$. Range of $n$ is 0 to 23 .
Used to determine the frequency of channel measurements.
HL_FREQ? $n$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:HL_FREQ? n]
Returns current state of HL_FREQ indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

ANAlog:
CELL:
TYPE:
CELL $n, m$ [CSS:EBCCH:NEIGHbor:ANAlog:CELL:TYPE:CELL n,m]
Specifies CELLTYPE ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 3.

Provides a relative distinction by an operator to bias mobile station control channel reselection decisions in order to insure traffic flows according to an operator's desires.

CELL? $n$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:TYPE:CELL? n]
Returns current value of CELL indexed by $n$. Range of $n$ is 0 to 23 .
NETwork $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:TYPE:NETwork n,m]
Specifies Network Type ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 7.

Identifies which Network Types are supported on a control channel.
NETwork? $n$
ICSS:EBCCH:NEIGHbor:ANAlog:CELL:TYPE:NETwork? n]
Returns current value of NETwork indexed by $n$. Range of $n$ is 0 to 23 .
RETRY $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:RETRY n,m]
Enables ( $m=1$ ) or disables ( $m=0$ ) Directed Retry Channel indexed by $n$. Range of $n$ is 0 to 23 .

When enabled, the neighbor list is to be considered for Directed Retry purposes.

## RETRY? $n$

[CSS:EBCCH:NEIGHbor:ANAlog:CELL:RETRY? n]
Returns current state of RETRY indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## ANAlog:

## CELL:

## ACCess:

MS_PWR $n, m$
[CSS̄:EBCCH:NEIGHbor:ANAlog:CELL:ACCess:MS_PWR n,m]
Specifies MS_ACC_PWR $(m)$ indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is 0 to 15.

Mobile Station/Analog Control Channel Power. Identifies the maximum nominal output power that the mobile station shall use when accessing the BMI (Base Station, MSC and Interworking Function). MS_ACC PWR is also used when determining criteria for control channel selection and reselection.

## MS_PWR? $n$

[CSS̄:EBCCH:NEIGHbor:ANAlog:CELL:ACCess:MS_PWR?n]
Returns current value of MS_PWR indexed by $n$. Range of $n$ is 0 to 23 .
RSS_MIN $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:ACCess:RSS_MINn,m]
Specifies RSS_ACC_MIN ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 31.

Received Signal Strength/Analog Control Channel Minimum. Used for the cell (re)selection process. RSS_ACC_MIN is the minimum received signal strength required to access the cell.

RSS_MIN? $n$
[CSS:EBCCH:NEIGHbor:ANAlog:CELL:ACCess:RSS_MIN? n]
Returns current value of RSS_MIN indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

TDMA:

## MULti:

Provides neighbor DCCH specific information for Multi Hyperband.

## NUMBer $n$-or- NUM $n$

[CSS:EBCCH:NEIGHbor:TDMA:MULti:NUMBer n]
Specifies Number of TDMA Neighbor Cells. Range of $n$ is 0 to 23 .
NUMBer? -or- NUM?
[CSS:EBCCH:NEIGHbor:TDMA:MULAI:NUMBer?]
Returns current value of TDMA Neighbor Cells.
CHAN $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:MULti:CHAN n,m]
Specifies CHAN ( $m$ ) select by index ( $n$ ). Range of $n$ is 0 to 23 ; range of $m$ is 0 to 2047.

CHAN? $n$
[CSS:EBCCH:NEIGHbor:TDMA:MULIt:CHAN? n]
Returns current value of CHAN indexed by $n$. Range of $n$ is 0 to 23 .
PROTOCOI $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:MULti:PROTocol n,m]
Specifies Protocol Version ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is 0 to 15 .

Identifies the protocol version supported.
PROTOCOI? $n$
[CSS:EBCCH:NEIGHbor:TDMA:MULti:PROTocol? n]
Returns current value of PROTocol indexed by $n$. Range of $n$ is 0 to 23 .
DVCC $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:MULII:DVCC n,m] Specifies Digital Verification Color Code ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is 0 to 255 .

DVCC? $n$
ICSS:EBCCH:NEIGHbor:TDMA:MULti:DVCC? n]
Returns current value of DVCC indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## TDMA:

## MULti:

OFFset $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:MULti:OFFset n,m]
Specifies RESEL_OFFSET $(m)$ indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is 0 to 127.

Used to increase/decrease the preference of a new candidate cell being considered for control channel reselection.

## OFFset? $n$

[CSS:EBCCH:NEIGHbor:TDMA:MULti:OFFset? n]
Returns current value of RESEL_OFFSET indexed by $n$. Range of $n$ is 0 to 23 .

## SS_SUFF $n, m$

[CSS:EBCCH:NEIGHbor:TDMA:MULti:SS_SUFF n,m]
Specifies SS_SUFF ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 31 .
Identifies the minimum signal strength sufficient for a candidate control channel to be considered for control channel reselection. SS_SUFF is used, in some instances, to control cell reselection using an absolute threshold.

SS_SUFF? $n$
[CSS:EBCCH:NEIGHbor:TDMA:MULIt:SS_SUFF? n]
Returns current value of SS_SUFF indexed by $n$. Range of $n$ is 0 to 23 .
DELAY $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:MULti:DELAYn,m]
Specifies DELAY ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 15 .

## Used for Control Channel Reselection purposes.

## DELAY? $n$

[CSS:EBCCH:NEIGHbor:TDMA:MULTI:DELAY? n]
Returns current value of DELAY indexed by $n$. Range of $n$ is 0 to 23 .
HL_FREQ $n, m$
[CSS:EBCCH:NE/GHbor:TDMA:MULti:HL_FREQ n,m]
Specifies HL FREQ $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 or 1 .
Used to determine the frequency of channel measurements.
HL_FREQ? $n$
[CSS:EBCCH:NEIGHbor:TDMA:MULTi:HL_FREQ? n]
Returns current state of HL_FREQ indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

TDMA:

## MULti:

SYNC $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:MULti:SYNC n,m]
Enables $(m=1)$ or disables $(m=0)$ CELL_SYNC indexed by $n$. Range of $n$ is 0 to 23.

When enabled, a candidate DCCH is superframe-synchronized with the current DCCH. If this flag is enabled, the maximum time offset between superframes sent on the candidate DCCH and current DCCH shall be no more than 7.5 symbols, i.e., a mobile station shall expect to find synchronization on a candidate DCCH within +/- 7.5 symbols relative to its current DCCH superframe.

SYNC? $n$
[CSS:EBCCH:NEIGHbor:TDMA:MULti:SYNC?n]
Returns current state of SYNC indexed by $n$. Range of $n$ is 0 to 23 .

## TYPE:

CELL $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:MULti:TYPE:CELL n,m]
Specifies CELLTYPE ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 3.

Provides a relative distinction by an operator to bias mobile station control channel reselection decisions in order to insure traffic flows according to an operator's desires.

CELL? $n$
[CSS:EBCCH:NEIGHbor:TDMA:MULII:TYPE:CELL? n]
Returns current value of CELL indexed by $n$. Range of $n$ is 0 to 23 .
NETwork $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:MULti:TYPE:NETwork n.m]
Specifies Network Type $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 7 .

Identifies which Network Types are supported on a control channel.
NETwork? n
[CSS:EBCCH:NEIGHbor:TDMA:MULti:TYPE:NETwork? n]
Returns current value of NETwork indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## TDMA:

## MULti:

## RETRY $n, m$

[CSS:EBCCH:NEIGHbor:TDMA:MULti:RETRY n,m]
Enables ( $m=1$ ) or disables ( $m=0$ ) Directed Retry Channel indexed by $n$. Range of $n$ is 0 to 23.

Used to determine if the neighbor list is to be considered for Directed Retry purposes.

## RETRY? $n$

[CSS:EBCCH:NEIGHbor:TDMA:MULti:RETRY? n]
Returns current state of RETRY indexed by $n$. Range of $n$ is 0 to 23 .

## ACCess:

MS_PWR $n, m$
[CSS $\left.=E B C C H: N E I G H b o r: T D M A: M U L t i: A C C e s s: M S \_P W R n, m\right]$
Specifies MS_ACC_PWR ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 15.

Mobile Station/Analog Control Channel Power. Identifies the maximum nominal output power that the mobile station shall use when accessing the BMI (Base Station, MSC and Interworking Function). MS ACC PWR is also used when determining criteria for control channel selection and reselection.

MS_PWR? $n$
[CS $\left.\bar{S}: E B C C H: N E I G H b o r: T D M A: M U L I I: A C C e s s: M S \_P W R ? n\right]$
Returns current value of MS_PWR indexed by $n$. Range of $n$ is 0 to 23 .
RSS_MIN $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:MULit:ACCess:RSS_MIN n,m]
Specifies RSS_ACC_MIN $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 31.

Received Signal Strength/Analog Control Channel Minimum. Used for the cell (re)selection process. RSS_ACC_MIN is the minimum received signal strength required to access the cell.

RSS_MIN? $n$
[CSS:EBCCH:NEIGHbor:TDMA:MULti:ACCess:RSS_MIN? n]
Returns current value of RSS_MIN indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

TDMA:

## MULti:

## PSID_RSID:

Private/Residential System Identification.

## INDicator $n, m$

[CSS:EBCCH:NEIGHbor:TDMA:MULTi:PSID_RSID:INDicator n,m]
Enables ( $m=1$ ) or disables ( $m=0$ ) PSID/RSID Indicator indexed by $n$. Range of $n$ is 0 to 23 .

Indicates whether or not the PSID/RSID related mapping fields are present for the associated DCCH neighbor. Specifically, if the PSID/RSID Indicator value is set to 1, the PSID/RSID Support Length and PSID/RSID Support fields are present, otherwise, not present.

INDicator? n
[CSS:EBCCH:NEIGHbor:TDMA:MULII:PSID_RSID:INDicator? n]
Returns current state of INDicator indexed by $n$. Range of $n$ is 0 to 23 .
LENGth $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:MULti:PSID_RSID:LENG解n,m]
Specifies PSID/RSID Support Length ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is 0 to 15 .

The PSID/RSID Support Length field is only present when the PSID/RSID Indicator field is set to 1 . When present, this field is always 4 bits long and is used to determine the length of the PSID/RSID Support field. The value of PSID/RSID Support Length is 0 if not present.

LENGth? $n$
[CSS:EBCCH:NEIGHbor:TDMA:MULti:PSID_RSID:LENGTh? n]
Returns current value of LENGth indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

TDMA:

## MULti:

## PSID_RSID:

SUPport $n, m$
[CSS:EBCCH:NEIGHbor:TDMA:MULti:PSID_RSID:SUPport n,m]
Specifies PSID/RSID Support ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 1 to \#hFFFF.

The PSID/RSID Support field is only present when the PSID/RSID Indicator field is set to 1 . When present, the length of this is determined by adding 1 to the value of the PSID/RSID Support Length field. The value of PSID/RSID Support is 0 if not present.

The PSID/RSID Support field indicates which PSID/RSID values identified in the PSID/RSID Set information element of the System Identity message of the current DCCH are supported by the DCCH neighbor under consideration. The ordering of the bits in this field reflects the ordering of the PSID/RSID Set sent in the System Identity message in that the least significant bit is corresponds to the first PSID/RSID listed in the PSID/RSID Set. If a bit in this field is set to 1 , then the corresponding PSID/RSID entry in the PSID/RSID Set is supported by the neighbor cell under consideration. On the other hand, if a bit in this field is set to 0, then the corresponding PSID/RSID entry in the PSID/RSID Set is not supported by the neighbor cell under consideration.

For example, if 16 PSID/RSIDs are listed in the System Identity message and the neighbor cell supports the 1st, 2nd, 3rd, and 5th PSID/RSIDs in the PSID/RSID Set, the values of PSID/RSID Support Length and PSID/RSID Support shall be:

```
PSID/RSID Support length \(=0100\)
PSID/RSID Support = 10111
```

If 16 PSID/RSIDs are listed in the System Identity message and the neighbor cell supports 3rd and 16th PSID/RSID Set, the values of PSID/RSID Support Length and PSID/RSID Support shall be:

PSID/RSID Support length = 1111
PSID/RSID Support $=1000000000000100$
SUPport? $n$
[CSS:EBCCH:NEIGHbor:TDMA:MULTi:PSID_RSID:SUPport? n]
Returns current value of SUPport indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## ANAlog:

This optional information element contains information regarding the analog channels the mobile station shall measure with regard to the Control Channel Selection and Reselection procedures.

## MULti:

## Provides neighbor DCCH specific information for Multi Hyperband.

NUMBer $n$-or- NUM $n$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:NUMBer n]
Specifies Number of Analog Neighbor Cells. Range of $n$ is 0 to 23 .

## NUMBer? -or- NUM?

[CSS:EBCCH:NEIGHbor:ANAlog:MULti:NUMBer?]
Returns current value of NUMBer.
CHAN $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:CHAN n,m]
Specifies CHAN ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 2047 .
CHAN? $n$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:CHAN? n]
Returns current value of CHAN indexed by $n$. Range of $n$ is 0 to 23 .
PROTOcol n,m
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:PROTocol n,m]
Specifies Protocol Version ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23; range of $m$ in 0 to 15 .

## Identifies the protocol version supported.

## PROTOcol? n

[CSS:EBCCH:NEIGHbor:ANAlog:MULti:PROTocol? n]
Returns current value of PROTocol indexed by $n$. Range of $n$ is 0 to 23 .
DCC $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:DCC n,m]
Specifies Digital Color Code $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 3.

DCC? $n$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:DCC? n]
Returns current value of DCC indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## ANAlog:

## MULti:

OFFset $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:OFFset $n, m$ ]
Specifies RESEL_OFFSET ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 127.

Used to increase or decrease the preference of a new candidate cell being considered for control channel reselection.

## OFFset? $n$

[CSS:EBCCH:NEIGHbor:ANAlog:MULti:OFFset? n]
Returns current value of OFFset indexed by $n$. Range of $n$ is 0 to 23 .
SS_SUFF $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:SS_SUFF n,m]
Specifies SS_SUFF $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 31 .
Identifies the minimum signal strength sufficient for a candidate control channel to be considered for control channel reselection. SS_SUFF is used, in some instances, to control cell reselection using an absolute threshold.

SS_SUFF? $n$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:SS_SUFF? n]
Returns current value of SS_SUFF indexed by $n$. Range of $n$ is 0 to 23 .
DELAY $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:DELAY n,m]
Specifies DELAY ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 15 .

## Used for Control Channel Reselection purposes.

## DELAY? $n$

[CSS:EBCCH:NEIGHbor:ANAlog:MULtI:DELAY? n]
Returns current value of DELAY indexed by $n$. Range of $n$ is 0 to 23 .
HL_FREQ $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:HL_FREQ n,m]
Enables $(m=1)$ or disables $(m=0)$ HL FREQ indexed by $n$. Range of $n$ is 0 to 23 .
Used to determine the frequency of channel measurements.
HL_FREQ? $n$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:HL_FREQ? n]
Returns current state of HL_FREQ indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## ANAlog:

## MULti:

TYPE:
CELL $n, m$
[CSS:EBCCH:NEIGHbor:ANAIOg:MULti:TYPE:CELL n,m]
Specifies CELLTYPE $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 3.

Provides a relative distinction by an operator to bias mobile station control channel reselection decisions in order to insure traffic flows according to an operator's desires.

## CELL? $n$

[CSS:EBCCH:NEIGHbor:ANAlog:MULti:TYPE:CELL? n]
Returns current value of CELL indexed by $n$. Range of $n$ is 0 to 23 .
NETwork $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:TYPE:NETwork n,m]
Specifies Network Type ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 7.

Identifies which Network Types are supported on a control channel.

## NETwork? n

[CSS:EBCCH:NEIGHbor:ANAlog:MULti:TYPE:NETwork? n]
Returns current value of NETwork indexed by $n$. Range of $n$ is 0 to 23 .
RETRY $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:RETRY n,m]
Enables $(m=1)$ or disables $(m=0)$ Directed Retry Channel indexed by $n$. Range of $n$ is 0 to 23.

When enabled, the neighbor list is to be considered for Directed Retry purposes.
RETRY? $n$
[CSS:EBCCH:NEIGHbor:ANAIOg:MULti:RETRY? n]
Returns current state of RETRY indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## ANAlog:

## MULti:

## ACCess:

MS_PWR $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:ACCess:MS_PWR n,m]
Specifies MS_ACC_PWR $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 15.

Mobile Station/Analog Control Channel Power. Identifies the maximum nominal output power that the mobile station shall use when accessing the BMI (Base Station, MSC and Interworking Function). MS_ACC_PWR is also used when determining criteria for control channel selection and reselection.

## MS_PWR? $n$


Returns current value of MS_PWR indexed by $n$. Range of $n$ is 0 to 23 .
RSS_MIN $n, m$
[CSS:EBCCH:NEIGHbor:ANAlog:MULti:ACCess:RSS_MIN n,m]
Specifies RSS_ACC_MIN $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 31 .

Received Signal Strength/Analog Control Channel Minimum. Used for the cell (re)selection process. RSS_ACC_MIN is the minimum received signal strength required to access the cell.

RSS_MIN? $n$
[CSS:EBCCH:NEIGHbor:ANAIog:MULti:ACCess:RSS_MIN? n]
Returns current value of RSS_MIN indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

NEIGHbor:
TDMA:
INFO:
Service Info - Provides service attribute information for TDMA neighbors.

## COUNT $n$

[CSS:EBCCH:NEIGHbor:TDMA:INFO:COUNt n]
Specifies number of TDMA Service Map instances present in the Neighbor Service Info message (TDMA Neighbor Count). Range of $n$ is 0 to 23 .

Set to 1 plus the value in this field.

## COUNT?

[CSS:EBCCH:NEIGHbor:TDMA:INFO:COUNt?]
Returns current value of COUNt.

## SERVice:

Provides service information for one or more TDMA neighbors.
INDicator n,m
[CSS:EBCCH:NEIGHbor:TDMA:INFO:SERVice:INDicator n,m]
Enables $(m=1)$ or disables $(m=0)$ Service Map Indicator indexed by $n$. Range of $n$ is 0 to 23 .

Indicates, when enabled, that Service Map field is present.
INDicator? $n$
[CSS:EBCCH:NEIGHbor:TDMA:INFO:SERVice:INDicator? n]
Returns current state of INDicator indexed by $n$. Range of $n$ is 0 to 23 .
MAP $n, m$
[CSS:EBCCH:NEIGHDor:TDMA:INFO:SERVice:MAP n,m]
Specifies Service Map ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 1023.

This field, when present, provides service information.
MAP? n
ICSS:EBCCH:NEIGHbor:TDMA:INFO:SERVice:MAP? n]
Returns the value of MAP indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## OTHER:

Other Hyperband - This optional information element contains information specifying the digital channels the mobile station may measure in order to acquire service in an alternate frequency band.

HYPERband $n$
[CSS:EBCCH:NEIGHbor:OTHER:HYPERband n]
Specifies Hyperband. Range of $n$ is 0 to 3 .

## HYPERband?

[CSS:EBCCH:NEIGHbor:OTHER:HYPERband?]
Returns current value of HYPERband.

## NUMBer $n$-or- NUM $n$

[CSS:EBCCH:NEIGHbor:OTHER:NUMBer n]
Specifies Number of Neighbor Cells. Range of $n$ is 0 to 23 .
NUMBer? -or- NUM?
[CSS:EBCCH:NEIGHbOR:OTHER:NUMBEr?]
Returns current value of NUMBer.

## CSS:EBCCH:

## NEIGHbor:

## OTHER:

## MULti:

CHAN $n, m$ [CSS:EBCCH:NEIGHbor:OTHER:MULti:CHAN n,m]
Specifies channel ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 2047 .
CHAN? $n$
[CSS:EBCCH:NEIGHbor:OTHER:MULAI:CHAN? n]
Returns current value of CHAN indexed by $n$. Range of $n$ is 0 to 23 .
PROTocol $n, m$
[CSS:EBCCH:NEIGHDOR:OTHER:MULIt:PROTOCOI n,m]
Specifies Protocol Version ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23; range of $m$ is 0 to 15 .

Identifies the protocol version supported.
PROTocol? $n$
[CSS:EBCCH:NE/GHbor:OTHER:MULIi:PROTocol? n]
Returns current value of PROTocol indexed by $n$. Range of $n$ is 0 to 23 .
DVCC $n, m$
[CSS:EBCCH:NEIGHbor:OTHER:MULti:DVCC n,m]
Specifies Digital Verification Color Code ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23;
range of $m$ is 0 to 255 .

## DVCC? $n$

[CSS:EBCCH:NEIGHbor:OTHER:MULti:DVCC? n]
Returns current value of DVCC indexed by $n$. Range of $n$ is 0 to 23 .
OFFset $n, m$
[CSS:EBCCH:NEIGHbor:OTHER:MULti:OFFset n,m]
Specifies RESEL OFFSET ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 127.

Used to increase or decrease the preference of a new candidate cell being considered for control channel reselection.

OFFset? $n$
[CSS:EBCCH:NEIGHbor:OTHER:MULIt:OFFset? n]
Returns current value of OFFset indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## OTHER:

## MULti:

SS_SUFF $n, m$
[CSS:EBCCH:NEIGHbor:OTHER:MULti:SS_SUFF n,m]
Specifies SS_SUFF $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 31 .
Identifies the minimum signal strength sufficient for a candidate control channel to be considered for control channel reselection. SS_SUFF is used, in some instances, to control cell reselection using an absolute threshoid.

## SS_SUFF? $n$

[CSS:EBCCH:NEIGHbor:OTHER:MULti:SS_SUFF? n]
Returns current value of SS_SUFF indexed by $n$. Range of $n$ is 0 to 23 .
DELAY $n, m$
[CSS:EBCCH:NEIGHbor:OTHER:MULItiDELAY n,m]
Specifies DELAY $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 15 .
Used for Control Channel Reselection purposes.
DELAY? $n$
[CSS:EBCCH:NEIGHbor:OTHER:MULti:DELAY? n]
Returns current value of DELAY indexed by $n$. Range of $n$ is 0 to 23 .
HL_FREQ $n, m$
[CSS:EBCCH:NEIGHbor:OTHER:MULti:HL_FREQ n,m]
Enables $(m=1)$ or disables $(m=0)$ HL_FREQ indexed by $n$. Range of $n$ is 0 to 23 .
Used to determine the frequency of channel measurements.
HL_FREQ? $n$
[CSS:EBCCH:NEIGHbor:OTHER:MULti:HL_FREQ? n]
Returns current state of HL_FREQ indexed by $n$. Range of $n$ is 0 to 23 .
SYNC $n, m$
[CSS:EBCCH:NEIGHbor:OTHER:MULti:SYNC n,m]
Enables $(m=1)$ or disables $(m=0)$ CELL_SYNC indexed by $n$. Range of $n$ is 0 to 23.

Indicates if a candidate DCCH is superframe-synchronized with the current DCCH. If this flag is enabled, the maximum time offset between superframes sent on the candidate DCCH and current DCCH shall be no more than 7.5 symbols, i.e., a mobile station shall expect to find synchronization on a candidate DCCH within $\pm 7.5$ symbols relative to its current DCCH superframe.

SYNC? $n$
[CSS:EBCCH:NEIGHbor:OTHER:MULti:SYNC? n]
Returns current state of SYNC indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

OTHER:
MULti:
TYPE:
CELL $n, m$
[CSS:EBCCH:NEIGHbor:OTHER:MULit:TYPE:CELL n,m]
Specifies CELLTYPE $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 3.

Provides a relative distinction by an operator to bias mobile station control channel reselection decisions in order to insure traffic flows according to an operator's desires.

## CELL? $n$

[CSS:EBCCH:NEIGHbor:OTHER:MULTi:TYPE:CELL?n] Returns current value of CELL indexed by $n$. Range of $n$ is 0 to 23 .

NETwork $n, m$
[CSS:EBCCH:NEIGHbor:OTHER:MULti:TYPE:NETWOrk n,m]
Specifies Network Type ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 7 .

Identifies which Network Types are supported on a control channel.

## NETwork? n

[CSS:EBCCH:NEIGHbor:OTHER:MULti:TYPE:NETwork? n]
Returns current value of NETwork indexed by $n$. Range of $n$ is 0 to 23 .
RETRY $n, m$
[CSS:EBCCH:NEIGHbor:OTHER:MULTi:RETRY n,m]
Enables $(m=1)$ or disables $(m=0)$ Directed Retry Channel indexed by $n$. Range of $n$ is 0 to 23.

When enabled, the neighbor list is to be considered for Directed Retry purposes.
RETRY? $n$
[CSS:EBCCH:NEIGHDOR:OTHER:MULti:RETRY? n]
Returns current state of RETRY indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## OTHER:

## MULti:

## ACCess:

MS_PWR $n, m$
[CSS $\left.\bar{S}: E B C C H: N E / G H b o r: O T H E R: M U L t i: A C C e s s: M S \_P W R n, m\right]$
Specifies MS_ACC_PWR $(m)$ indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 15.

Mobile Station/Analog Control Channel Power. Identifies the maximum nominal output power that the mobile station shall use when accessing the BMI (Base Station, MSC and Interworking Function). MS_ACC PWR is also used when determining criteria for control channel selection and reselection.

## MS_PWR? $n$

[CSS̄:EBCCH:NEIGHbor:OTHER:MULti:ACCess:MS_PWR? n]
Returns current value of MS_PWR indexed by $n$. Range of $n$ is 0 to 23 .
RSS_MIN $n, m$
[CSS:EBCCH:NEIGHbor:OTHER:MULTi:ACCess:RSS_MIN n,m]
Specifies RSS_ACC_MIN ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 31.

Received Signal Strength/Analog Control Channel Minimum. Used for the cell (re)selection process. RSS_ACC_MIN is the minimum received signal strength required to access the cell.

RSS_MIN? $n$
[CSS:EBCCH:NEIGHbor:OTHER:MULIt:ACCess:RSS_MIN? n]
Returns current value of RSS_MIN indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

OTHER:
MULti:

## PSID_RSID:

Private/Residential System Identification.
INDicator $n, m$
[CSS:EBCCH:NEIGHbor:OTHER:MULTI:PSID_RSID:INDICatorn,m]
Enables $(m=1)$ or disables $(m=0)$ PSID/RSID Indicator indexed by $n$. Range of $n$ is 0 to 23 .

Indicates if the PSID/RSID related mapping fields are present for the associated DCCH neighbor. Specifically, if the PSID/RSID Indicator value is set to 1 , the PSID/RSID Support Length and PSID/RSID Support fields are present. If the PSID/RSID Indicator value is set to 0, the PSID/RSID Support Length and PSID/RSID Support fields are not present.

## INDicator? $n$

[CSS:EBCCH:NEIGHbor:OTHER:MULti:PSID_RSID:INDicator? n]
Returns current state of INDicator indexed by $n$. Range of $n$ is 0 to 23 .
LENGth $n, m$
[CSS:EBCCH:NEIGHbor:OTHER:MULti:PSID_RSID:LENGth n,m]
Specifies PSID/RSID Support Length ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23; range $m$ is 0 to 15 ( 1 to 15 if present, 0 if not present).

The PSID/RSID Support Length field is only present when the PSID/RSID Indicator field is set to 1 . When present, this field is always 4 bits long and is used to determine the length of the PSID/RSID Support field.

LENGth? $n$
[CSS:EBCCH:NEIGHbor:OTHER:MULti:PSID_RSID:LENGth? n]
Returns current value of LENGth indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## OTHER:

## MULti:

```
PSID_RSID:
```


## SUPport $n, m$

[CSS:EBCCH:NEIGHDOR:OTHER:MULti:PSID_RSID:SUPport n,m]
Specifies PSID/RSID Support ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to \#hFFFF ( 1 to \#hFFFF if present, 0 if not present).

The PSID/RSID Support field is only present when the PSID/RSID Indicator field is set to 1 . When present, the length is determined by adding 1 to the value of the PSID/RSID Support Length field.

The PSID/RSID Support field indicates which PSID/RSID values identified in the PSID/RSID Set information element of the System Identity message of the current DCCH are supported by the DCCH neighbor under consideration. The ordering of the bits in this field reflects the ordering of the PSID/RSID Set sent in the System Identity message in that the least significant bit is corresponds with the first PSID/RSID listed in the PSID/RSID Set. If a bit in this field is set to 1, then the corresponding PSID/RSID entry in the PSID/RSID Set is supported by the neighbor cell under consideration. If a bit in this field is set to 0 , then the corresponding PSID/RSID entry in the PSID/RSID Set is not supported by the neighbor cell under consideration..

For example if 16 PSID/RSIDs are listed in the System Identity message and the neighbor cell supports the 1st, 2nd, 3rd, and 5th PSID/RSIDs in the PSID/RSID Set, the values of PSID/RSID Support Length and PSID/RSID Support shall be:

PSID/RSID Support length $=0100$
PSID/RSID Support = 10111
If 16 PSID/RSIDs are listed in the System Identity message and the neighbor cell supports 3rd and 16th PSID/RSID Set, the values of PSID/RSID Support Length and PSID/RSID Support shall be:

PSID/RSID Support length = 1111
PSID/RSID Support $=1000000000000100$
SUPport? $n$
[CSS:EBCCH:NEIGHbor:OTHER:MULII:PSID_RSID:SUPport? n]
Returns current value of SUPport indexed by $n$. Range of $n$ is 0 to 23 .

## CSS:EBCCH:

## NEIGHbor:

## OTHER:

INFO:
Service Info - Provides service attribute information for TDMA neighbors.
HYPERband $n$
[CSS:EBCCH:NEIGHbor:OTHER:INFO:HYPERband n]
Specifies HYPERband. Range of $n$ is 0 to 3 .
Provides service attribute information for Other Hyperband TDMA neighbors.

## HYPERband?

[CSS:EBCCH:NEIGHbor:OTHER:INFO:HYPERband?]
Returns current value of HYPERband.
COUNt $n$
[CSS:EBCCH:NEIGHbor:OTHER:INFO:COUNt n]
Specifies TDMA Neighbor Count. Range of $n$ is 0 to 23.
Identifies the number of TDMA Service Map instances present in the Neighbor Service Info message. Set to 1 plus the value in this field.

## COUNT?

[CSS:EBCCH:NEIGHbor:OTHER:INFO:COUNt?]
Returns current value of COUNt.

## SERVice:

Provides service information for one or more TDMA neighbors.
INDicator $n, m$
[CSS:EBCCH:NEIGHbor:OTHER:INFO:SERVice:INDicator n,m]
Enables ( $m=1$ ) or disables ( $m=0$ ) Service Map Indicator indexed by $n$. Range of $n$ is 0 to 23 .

When enabled, indicates the Service Map field is present.
INDicator? n
[CSS:EBCCH:NEIGHbor:OTHER:INFO:SERVice:INDicator? n]
Returns current state of INDicator.

## CSS:EBCCH:

## NEIGHbor:

## OTHER:

INFO:

## SERVice:

## MAP $n, m$

[CSS:EBCCH:NEIGHbor:OTHER:INFO:SERVICe:MAP n,m]
Specifies Service Map ( $m$ ) indexed by $n$. Range of $n$ is 0 to 23 ; range of $m$ is 0 to 1023 (if present, 0 if not present).

This field, when present, provides service information.
MAP? $n$
[CSS:EBCCH:NEIGHbor:OTHER:INFO:SERVice:MAP?n]
Returns current value of MAP indexed by $n$. Range of $n$ is 0 to 23 .
RCI $n$
[CSS:EBCCH:RCI n]
Specifies Regulatory Configuration. Range of $n$ is 0 to 3 .

## RCl ?

[CSS:EBCCH:RCI?]
Returns current value of RCI.
CHANnel:
RF Channel Allocation - Indicates an RF channel allocation for system configurations that are not described in this standard.

NUMBer n-or- NUM n
[CSS:EBCCH:CHANnel:NUMBern]
Specifies Number of Channel Groups. Range of $n$ is 0 to 63 .
NUMBer? -or- NUM?
[CSS:EBCCH:CHANnel:NUMBer?]
Returns current value of NUMBer.

## CSS:EBCCH:

## CHANnel:

GROUP:
Channel Group is an ordered pair indicating the first/last RF Channel Numbers assigned to the Channel Group

FIRST $n, m$
[CSS:EBCCH:CHANnel:GROUP:FIRST n,m]
Specifies First Channel ( $m$ ) indexed by $n$. Range of $n$ is 0 to 63 ; range of $m$ is 0 to 2047.

FIRST? $n$
[CSS:EBCCH:CHANnel:GROUP:FIRST? n]
Returns current value of FIRST indexed by $n$. Range of $n$ is 0 to 63 .
LAST $n, m$
[CSS:EBCCH:CHANnel:GROUP:LAST n,m]
Specifies Last Channel ( $m$ ) indexed by $n$. Range of $n$ is 0 to 63 ; range of $m$ is 0 to 2047.

LAST? $n$
[CSS:EBCCH:CHANnel:GROUP:LAST? n]
Returns current value of LAST indexed by $n$. Range of $n$ is 0 to 63 .
BSMC $n$
[CSS:EBCCH:BSMC n]
Specifies Base Station Manufacture Code. Range of $n$ is 0 to 255 .
Identifies the assigned manufacture code. The BSMC value of 0 is reserved. A reserved BSMC value shall be considered an unknown base station manufacture code by the receiving mobile station.

## BSMC?

[CSS:EBCCH:BSMC?]
Returns current value of BSMC.

## CUSTOM:

## LENGth $n$

[CSS:EBCCH:CUSTOM:LENGTh n]
Specifies Length of Custom Control in octets. Range of $n$ is 1 to 64 .

## LENGth?

[CSS:EBCCH:CUSTOM:LENGTh?]
Returns current value of LENGth.

## CSS:EBCCH:

## CUSTOM:

CONTrol $n, m$
[CSS:EBCCH:CUSTOM:CONTrol n,m]
Specifies CONTrol (m) indexed by $n$. Range of $n$ is 0 to 252; range of $m$ is 0 to 255 .
CONTrol? $n$
[CSS:EBCCH:CUSTOM:CONTrol? n]
Returns current value of CONTrol indexed by $n$. Range of $n$ is 0 to 63 .

## TEXT:

## Text Message Data Unit - Contains the message to be broadcast.

LENGth $n$
[CSS:EBCCH:TEXT:LENGTh n]
Specifies Length Indicator. Range of $n$ is 0 to 255 .

## LENGth?

[CSS:EBCCH:TEXT:LENGth?]
Returns current value of LENGth.

## ENCoding $n$

[CSS:EBCCH:TEXT:ENCoding n]
Specifies Encoding Identifier. Range of $n$ is 0 to 31 .

## ENCoding?

[CSS:EBCCH:TEXT:ENCoding?]
Returns current value of ENCoding.
REServed $n$
[CSS:EBCCH:TEXT:REServed n]
Specifies Reserved. Range of $n$ is 0 to 7 .

## REServed?

[CSS:EBCCH:TEXT:REServed?]
Returns current value of REServed.
CHARacter n,m
[CSS:EBCCH:TEXT:CHARacter n,m]
Specifies Short Message Character ( $m$ ) indexed by $n$. Range of $n$ is 0 to 255 ; range of $m$ is 0 to 255 .

CHARacter? n
[CSS:EBCCH:TEXT:CHARacter? n]
Returns current value of CHARacter indexed by $n$. Range of $n$ is 0 to 255 .

## CSS:EBCCH:

## SIGnal:

Conveys alerting information to a mobile station.
PITCH $n$
[CSS:EBCCH:SIGnal:PITCH n]
Specifies Signal Pitch. Range of $n$ is 0 to 3 .

## PITCH?

[CSS:EBCCH:SIGnal:PITCH?]
Returns current value of PITCH.
CADence $n$
[CSS:EBCCH:SIGnal:CADence n]
Specifies Signal Cadence. Range of $n$ is 0 to 63 .

## CADence?

[CSS:EBCCH:SIGnal:CADence?]
Returns current value of CADence.
DURation $n$
[CSS:EBCCH:SIGnal:DURation n]
Specifies Signal Duration. Range of $n$ is 0 to 15 .

## DURation?

[CSS:EBCCH:SIGnal:DURation?]
Returns current value of DURation.
MACA:
Mobile Assisted Channel Allocation.
STATus $n$
[CSS:EBCCH:MACA:STATus n]
Specifies MACA_STATUS. Range of $n$ is 0 to 3 .
Determines which MACA function combinations are enabled.

## STATus?

[CSS:EBCCH:MACA:STATus?]
Returns current value of STATus.
TYPE $n$
[CSS:EBCCH:MACA:TYPE n]
Specifies MACA_TYPE. Range of $n$ is 0 to 15 .
Determines when MACA reporting is to take place.
TYPE?
[CSS:EBCCH:MACA:TYPE?]
Returns current value of TYPE.

## CSS:EBCCH:

## MACA:

## EIGHT:

## CONTral $n$

[CSS:EBCCH:MACA:EIGHT:CONTrol n]
Enables ( $n=1$ ) or disables ( $n=0$ ) CONTrol.
This information element, together with MACA_TYPE and MACA_STATUS, determines the number of channels reported.

## CONTrol?

[CSS:EBCCH:MACA:EIGHT:CONTrol?]
Returns current state of CONTrol.

## LIST:

Contains information regarding the channels (other than the current DCCH ) the mobile station shall measure for mobile assisted channel allocation.

NUMBer $n$-or- NUM $n$
[CSS:EBCCH:MACA:LIST:NUMBer n]
Specifies Number of MACA Channels. Range of $n$ is 0 to 15 .

## NUMBer? -or- NUM?

[CSS:EBCCH:MACA:LIST:NUMBer?]
Returns current value of NUMBer.
CHAN $n, m$
[CSS:EBCCH:MACA:LIST:CHAN n,m]
Specifies Channel (m) indexed by $n$. Range of $n$ is 0 to 15 ; range of $m$ is 0 to 2047 .
CHAN? $n$
[CSS:EBCCH:MACA:LIST:CHAN? n]
Returns current value of CHAN indexed by $n$. Range of $n$ is 0 to 15 .

## OTHER:

Contains information regarding the channels other than the current DCCH. A mobile station that is not capable of performing measurements on a channel specified in this list shall report an RSS value of 00000 for that channel.

## HYPERband $n$

[CSS:EBCCH:MACA:LIST:OTHER:HYPERband n]
Specifies Frequency band information. Range of $n$ is 0 to 3 .

## HYPERband?

[CSS:EBCCH:MACA:LIST:OTHER:HYPERband?]
Returns current value of HYPERband.

## CSS:EBCCH:

MACA:
LIST:

## OTHER:

NUMBer $n$-or- NUM $n$
[CSS:EBCCH:MACA:LIST:OTHER:NUMBer n]
Specifies Number of MACA Channels. Range of $n$ is 0 to 15 .
NUMBer? -or- NUM?
[CSS:EBCCH:MACA:LIST:OTHER:NUMBEr?]
Returns current value of NUMBer.
CHAN $n, m$
[CSS:EBCCH:MACA:LIST:OTHER:CHAN n,m]
Specifies Channel ( $m$ ) indexed by $n$. Range of $n$ is 0 to 15 ; range of $m$ is 0 to 2047 .
CHAN? $n$
[CSS:EBCCH:MACA:LIST:OTHER:CHAN? n]
Returns current value of CHAN indexed by $n$. Range of $n$ is 0 to 15 .
MAP:
VPM $n$
[CSS:EBCCH:MAP:VPM n]
Specifies Voice Privacy Mode Map. Range of $n$ is 0 to 15 .
Identifies the forms of voice privacy supported by the BMI.

## VPM?

[CSS:EBCCH:MAP:VPM?]
Returns current value of VPM.

## DPM $n$

[CSS:EBCCH:MAP:DPM n]
Specifies Data Privacy Mode Map. Range of $n$ is 0 to 15.
Identifies the forms of data privacy supported by the BMI.

## DPM?

[CSS:EBCCH:MAP:DPM?]
Returns current value of DPM.
CODER $n$
[CSS:EBCCH:MAP:CODER n]
Specifies Voice Coder Map. Range of $n$ is 0 to 63 .
Identifies the types of voice coders supported by the BMI.

## CODER?

[CSS:EBCCH:MAP:CODER?]
Returns current value of CODER.

## CSS:EBCCH:

MAP :

## MEA:

Message Encryption Algorithm Map - Identifies the message encryption algorithms, domain and keys supported by a DCCH or a DTC.

DOMAIN $n$
[CSS:EBCCH:MAP:MEA:DOMAIN n]
Specifies Domain Map. Range of $n$ is 0 to 255.
Identifies the number of instances and ordering of the Encryption Algorithms field.

## DOMAIN?

[CSS:EBCCH:MAP:MEA:DOMAIN?]
Returns current value of DOMAIN.
ALGORithms n,m
[CSS:EBCCH:MAP:MEA:ALGORithms n,m]
Specifies Encryption Algorithms $(m)$ indexed by $n$. Range of $n$ is 0 to 7; range of $m$ is 0 to 15 .

ALGORithms? $n$
[CSS:EBCCH:MAP:MEA:ALGORithms? n]
Returns current value of ALGORithms indexed by $n$. Range of $n$ is 0 to 7 .

## MEK $n$

[CSS:EBCCH:MAP:MEK n]
Specifies Message Encryption Key Map. Range of $n$ is 0 to 15.

```
Identifies the message encryption keys supported by the BMI.
```


## MEK?

[CSS:EBCCH:MAP:MEK?]
Returns current value of MEK.

## MENU $n$

[CSS:EBCCH:MAP:MENU n]
Specifies Menu Map. Range of $n$ is 0 to \#h3FF.
Identifies the services supported by the BMI.

## MENU?

[CSS:EBCCH:MAP:MENU?]
Returns current value of MENU.

## CSS:EBCCH:

MAP:

## ARQ $n$

[CSS:EBCCH:MAP:ARQ n]
Enables ( $n=1$ ) or disables $(n=0) \mathrm{FACCH} / \mathrm{SACCH}$ ARQ (Automatic Retransmission Request) Map.
Identifies if the BMI supports FACCH/SACCH ARQ mode on its IS-136 digital traffic channels.

## ARQ?

[CSS:EBCCH:MAP:ARQ?]
Returns current state of $A R Q$.

## USER n

```
[CSS:EBCCH:MAP:USER n]
```

Enables ( $n=1$ ) or disables ( $n=0$ ) User Group Map.
Identifies whether or not the BMI supports User Group operation.

## USER?

[CSS:EBCCH:MAP:USER?]
Returns current state of USER.

## SMS $n$

[CSS:EBCCH:MAP:SMS n]
Specifies Short Message Service Map. Range of $n$ is 0 to 3 .
Identifies the extent to which the BMI supports the CMT teleservice.

## SMS?

[CSS:EBCCH:MAP:SMS?]
Returns current value of SMS.
IRA $n$
[CSS:EBCCH:IRA n]
Enables ( $n=1$ ) or disables ( $n=0$ ) support for International Reference Alphabet.
When enabled, mobile station or BMI supports IRA address encoding in the Address Info information element.

## IRA?

[CSS:EBCCH:IRA?]
Returns current state of IRA.

## OATS $n$

[CSS:EBCCH:OATS n]
Enables ( $n=1$ ) or disables ( $n=0$ ) OATS Support. When enabled, this flag indicates support for the Over-the-Air Activation Teleservice (OATS).

OATS?
[CSS:EBCCH:OATS?]
Returns current state of the OAT Support flag.

## CSS:EBCCH:

SOC $n$
[CSS:EBCCH:SOC n]
Specifies System Operator Code. Range of $n$ is 0 to 4095.
Identifies which operator is providing service. A reserved SOC value shall be considered an unknown system operator code by a receiving mobile station.

## SOC?

[CSS:EBCCH:SOC?]
Returns current value of SOC.

## ALT_SOC:

## NUMBer $n$-or- NUM $n$

[CSS:EBCCH:ALT_SOC:NUMBern]
Specifies Number of Alternate SOCs. Range of $n$ is 0 to 15 .

## NUMBer? -or- NUM?

[CSS:EBCCH:ALT_SOC:NUMBer?]
Returns current value of Number of Alternate SOCs.
SOC $n, m$
[CSS:EBCCH:ALT_SOC:SOC n,m]
Specifies SOC (m) for 16 instances. Range of $n$ is 0 to 15 ; range of $m$ is 0 to \#hFFF.
SOC? $n$
[CSS:EBCCH:ALT_SOC:SOC? n]
Returns current value of indexed SOC. Range of $n$ is 0 to 15 .

## MAP:

PSID_RSID $n, m$
[CSS:EBCCCH:ALT_SOC:MAP:PSID_RSID n,m]
Specifies SOC PSID/RSID Map ( $m$ ) which indicates the PSID/RSIDs associated with the indexed SOC value ( $n$ ). Range of $n$ is 0 to 15 ; range of $m$ is 0 to \#hFFFF.

PSID_RSID? $n$
[CSS:EBCCH:ALT_SOC:MAP:PSID_RSID?n]
Returns current value of SOC PSID/RSID Map of the indexed SOC. Range of $n$ is 0 to 15.

TIME $n$
[CSS:EBCCH:TIME n]
Specifies TIME. Range of $n$ is 0 to \#hFFFFFFFF.
Time from Jan 1, 1980-This information element is a non-critical sequential time counter in seconds elapsed since January 1, 1980, 00:00 hour, 0 seconds using Greenwich Mean Time as the reference point.

## TIME?

[CSS:EBCCH:TIME?]
Returns current value of TIME.

## CSS:EBCCH:

ZONE:
Time Zone Offset - Used to identify the time zone offset in minutes relative to Greenwich Mean Time (GMT).

## DIRection $n$

[CSS:EBCCH:ZONE:DIRection n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Time Zone Offset Direction.
Specifies whether to add or subtract minutes from the GMT.

## DIRection?

[CSS:EBCCH:ZONE:DIRection?]
Returns current state of DIRection.

## MINutes $n$

[CSS:EBCCH:ZONE:MINutes n]
Specifies Minutes. Range of $n$ is 0 to 1023.
Specifies the number of minutes.

## MINutes?

[CSS:EBCCH:ZONE:MINutes?]
Returns currents value of MINutes.
DST $n$
[CSS:EBCCH:ZONE:DST n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Time Zone Offset Daylight Savings Indicator.
Indicates Standard or Daylight Savings Time.

## DST?

[CSS:EBCCH:ZONE:DST?]
Returns current state of DST.

## CSS:EBCCH:

SID $n$
[CSS:EBCCH:SID n]
Specifies System Identification. Range of $n$ is 0 to 32767 .
Provides a digital identification associated with a cellular system where each system is assigned a unique number.

## SID?

[CSS:EBCCH:SID?]
Returns current value of SID.
CHAN $n$
[CSS:EBCCH:CHAN n]
Specifies E-BCCH CHAN. Range of $n$ is 0 to 2047 .
CHAN?
[CSS:EBCCH:CHAN?]
Returns current value of CHAN.
MCC $n$
[CSS:EBCCH:MCC n]
Specifies Mobile Country Code. Range of $n$ is 0 to 1023.
Indicates the Mobile Country Code of the current DCCH.

## MCC?

[CSS:EBCCH:MCC?]
Returns current value of MCC.

## HYPERband:

## INFO $n$

[CSS:EBCCH:HYPERband:INFO n]
Specifies INFO. Range of $n$ is 0 to 3 .
Used to specify the Hyperband associated with the specified channel.

## INFO?

[CSS:EBCCH:HYPERband:INFO?]
Returns current value of INFO.

## MULti:

## SERV_SS $n$

[CSS:EBCCH:MULti:SERV_SS n]
Specifies SERV_SS for Multi Hyperband. Range of $n$ is 0 to 15.
Used in the control channel reselection process.

## SERV_SS?

[CSS:EBCCH:MULTi:SERV SS?]
Returns current value of SERV_SS for Multi Hyperband.

## CSS:EBCCH:

## ENABLE:

## NONPublic $n$

[CSS:EBCCH:ENABLE:NONPublic n]
Enables $(n=1)$ or disables $(n=0)$ Non-Public Probability Blocks.

## NONPublic?

[CSS:EBCCH:ENABLE:NONPublic?]
Returns current state of NONPublic.

## NEIGHbor:

TDMA $n$
[CSS:EBCCH:ENABLE:NE/GHbor:TDMA n]
Enables ( $n=1$ ) or disables ( $n=0$ ) TDMA Neighbor Cell List.
TDMA?
[CSS:EBCCH:ENABLE:NE/GHbor:TDMA?]
Returns current state of TDMA.
TDMA:
INFO n
[CSS:EBCCH:ENABLE:NEIGHbor:TDMA:INFO n]
Enables ( $n=1$ ) or disables ( $n=0$ ) TDMA Service Info.
INFO?
[CSS:EBCCH:ENABLE:NEIGHbor:TDMA:INFO?]
Returns current state of INFO.
ANALOG $n$
[CSS:EBCCH:ENABLE:NEIGHbor:ANALOG n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Analog Neighbor Cell List.
ANALOG?
[CSS:EBCCH:ENABLE:NEIGHbor:ANALOG?]
Returns current state of ANALOG.

## CSS:EBCCH:

## ENABLE:

## NEIGHbor:

## MULti:

## TDMA $n$

[CSS:EBCCH:ENABLE:NEIGHbor:MULII:TDMA n]

$$
\text { Enables }(n=1) \text { or disables }(n=0) \text { Neighbor Cell List (TDMA) (Multi Hyperband). }
$$

TDMA?
[CSS:EBCCH:ENABLE:NEIGHbor:MULTi:TDMA?]
Returns current state of Neighbor Cell List (TDMA) (Multi Hyperband) enable.

```
ANALOG \(n\)
[CSS:EBCCH:ENABLE:NEIGHbor:MULIt:ANALOG n]
Enables ( \(n=1\) ) or disables ( \(n=0\) ) Analog Neighbor Cell List (Multi Hyperband).
```

ANALOG?
[CSS:EBCCH:ENABLE:NEIGHbor:MULti:ANALOG?]
Returns current state of Analog Neighbor Cell List (Multi Hyperband) enable.
OTHER $n$
(CSS:EBCCH:ENABLE:NEIGHbor:MULti:OTHER nJ
Enables ( $n=1$ ) or disables ( $n=0$ ) Other Hyperband Neighbor Cell List (Multi Hyperband).

## OTHER?

[CSS:EBCCH:ENABLE:NEIGHbor:MULTi:OTHER?]
Returns current state of Other Hyperband Neighbor Cell List (Multi Hyperband) enable.

## OTHER:

INFO $n$
[CSS:EBCCH:ENABLE:NEIGHbor:OTHER:INFO n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Other Hyperband TDMA Service Info.
INFO?
[CSS:EBCCH:ENABLE:NEIGHbor:OTHER:INFO?]
Returns current state of INFO.

## CSS:EBCCH:

## ENABLE:

CHANnel $n$
[CSS:EBCCH:ENABLE:CHANnel n]
Enables ( $n=1$ ) or disables ( $n=0$ ) RF Channel Allocation.

## CHANnel?

[CSS:EBCCH:ENABLE:CHANnel?]
Returns current state of CHANnel.

## SIGnal n

[CSS:EBCCH:ENABLE:SIGnal n]
Enables $(n=1)$ or disables $(n=0)$ alerting information to a mobile station user.
SIGnal?
[CSS:EBCCH:ENABLE:SIGnal?]
Returns current state of SIGnal.

## MACA:

## EIGHT:

## CONTrol $n$

[CSS:EBCCH:ENABLE:MACA:EIGHT:CONTrol n]
Enables $(n=1)$ or disables $(n=0)$ MACA_8_CONTROL.
CONTrol?
[CSS:EBCCH:ENABLE:MACA:EIGHT:CONTrol?]
Returns current state of CONTrol.
LIST $n$
[CSS:EBCCH:ENABLE:MACA:LIST n]
Enables $(n=1)$ or disables $(n=0)$ MACA_LIST.
LIST?
[CSS:EBCCH:ENABLE:MACA:LIST?]
Returns current state of LIST.

## LIST:

OTHER $n$
[CSS:EBCCH:ENABLE:MACA:LIST:OTHER n]
Enables $(n=1)$ or disables $(n=0)$ Other Hyperband MACA_LIST.
OTHER?
[CSS:EBCCH:ENABLE:MACA:LIST:OTHER?]
Returns current state of OTHER.

## CSS:EBCCH:

## ENABLE:

ALT_SOC_LIST $n$
[CSS:EBCCH:ENABLE:ALT_SOC_LIST n]
Enables ( $n=1$ ) or disables ( $n=0$ ) alternate SOC information.
ALT_SOC_LIST?
[CSS:EBCCH:ENABLE:ALT_SOC_LIST?]
Returns current state of alternate SOC information.
MCC $n$
[CSS:EBCCH:ENABLE:MCC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Mobile Country Code.

## MCC?

[CSS:EBCCH:ENABLE:MCC?]
Returns current state of MCC.
HYPERband:
INFO $n$
[CSS:EBCCH:ENABLE:HYPERband:INFO n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Hyperband Information.

## INFO?

[CSS:EBCCH:ENABLE:HYPERband:INFO?]
Returns current state of INFO.

## 9-12-14 USER-DEFINED OPTIONAL MESSAGE TYPES AND INFORMATION ELEMENTS FOR THE F-BCCH AND E-BCCH

The IS-136 Standard defines 20 Message Types and numerous Information Elements that make up the Fast and Extended Broadcast Channel. Some of these Message Types and Information Elements are mandatory and must be included as part of the Broadcast Channel. Others, though, are optional and are only included when deemed necessary for specific applications. In future revisions of IS-136, there will be new Message Types and Optional Information elements added to cover applications not yet considered. Since the Message Types and Information Elements discussed are optional, their presence should not affect the operation of a Mobile Station designed and manufactured before the message types and information elements were defined.

In order to test the operation of additional features at the advent of future revisions in the IS-136 standard, the following commands enable the Sp Tst to build and transmit User-Defined Message Types and User-Defined Optional Informational Elements:

## A. FAST BROADCAST CHANNEL (F-BCCH) COMMANDS

## css:

FBCCH:
USER:
MSGtype index, $n$
[CSS:FBCCH:USER:MSGtype index,n]
Specifies the value ( $n$ ) of up to 8 user-defined message types selected by index. Range of index is 0 to 7 ; range of $n$ is 0 to 63 .

MSGtype? index
[CSS:FBCCH:USER:MSGtype? index]
Returns the value of Message Type selected by index. Range of index is 0 to 7 .
PD index,n
[CSS:FBCCH:USER:PD index,n]
Specifies the value ( $n$ ) of Protocol Discriminator of the user-defined message referenced by index. Range of index is 0 to 7 ; range of $n$ is 0 to 3 .

PD? index
[CSS:FBCCH:USER:PD? index]
Returns the value of Protocol Discriminator of the user-defined message referenced by index. Range of index is 0 to 7 .

LENGth index, $n$
[CSS:FBCCH:USER:LENGth index, $n$ ]
Sets the length ( $n$ ) in bits of the user-defined message type referenced by index. Range of index is 0 to 7 ; range of $n$ is 0 to 255 .

LENGth? index
[CSS:FBCCH:USER:LENGTh? index]
Returns the length in bits of the user-defined message type referenced by index. Range of index is 0 to 7 .

## CSS:

## FBCCH:

USER:
DATA index,word,data
[CSS:FBCCH:USER:DATA index, word,data]
Specifies the data used in the user-defined message type referenced by index.
The data (data) is programmed 16 bits at a time, each selected by word.
Range of index is 0 to 7 ; range of word is 0 to 15 ; range of data is 0 to \#hFFFF.
Example:
If Length $=72$ (bits) and Data $=\#$ h012345678901234567:

| word | data |
| :---: | :---: |
| 0 | \#h0123 |
| 1 | \#h4567 |
| 2 | \#h8901 |
| 3 | \#h2345 |
| 4 | \#h6700 |

DATA? index,word
[CSS:FBCCH:USER:DATA? index,word]
Returns the user-defined data in the selected set of 16 bits (word) of the message type referenced by index. Range of index is 0 to 7 ; range of word is 0 to 15 .

## css:

## FBCCH:

## OPTional:

MSGtype index,type
[CSS:FBCCH:OPTional:MSGtype index,type]
Appends an optional field to one of the message types listed in the table below. From 1 to 8 message types (specified by index) out of a possible 12 (13, if counting None) may be selected to receive an appended optional field. Range of index is 0 to 7 ; range of type is 0 to 12 .

Ensure that type for all unused index values are set to 0 (None).

| MESSAGE TYPE | type |
| :--- | :---: |
| None | 0 |
| DCCH Structure | 1 |
| Access Parameters | 2 |
| Control Channel Selection Parameters | 3 |
| Registration Parameters | 4 |
| System Identity | 5 |
| Overload Class | 6 |
| Mobile Assisted Channel Allocation | 7 |
| BSMC Message Delivery | 8 |
| Service Menu | 9 |
| SOC/BSMC Identification | 10 |
| SOC Message Delivery | 11 |
| MACA (Multi-Hyperband) | 12 |

Example: CSS:FBCCH:OPT:MSG D,1

```
// Append optional field to
// DCCH Structure message type
// Append optional field to
// System Identity message type.
// Append optional field to
/! Service Menu message type.
// apperided optioraz fields.
```

CSS:FBCCH:OPT:MSG 1,5
CSS:FBCCH:OPT:MSG 2,9
CSS:FBCCH:OPT:MSG 3, D $/ /$ No more message types to have
CSS:FBCCH:OPT:MSG 4.0
CSS: FECCH:UNT:MSG5,0
$C S S:$ FECCH:OPT:MSG 6,1
$C S S: F B C C H: O P T: M S G 7, ~$

MSGtype? index
[CSS:FBCCH:OPTional:MSGtype? index]
Returns the value of Message Type (see table above) for specified index. Range of index is 0 to 7 .

## css:

## FBCCH:

## OPTional:

LENGth index, $n$
[CSS:FBCCH:OPTional:LENGth index,n]
Specifies the length in bits ( $n$ ) of the user-defined optional information element referenced to the associated message type by index. Range of index is 0 to 7 ; range of $n$ is 0 to 255 .

LENGth? index
[CSS:FBCCH:OPTional:LENGth? index]
Returns length in bits of the user-defined optional information element referenced to the associated message type by index. Range of index is 0 to 7 .

DATA index,word,data
[CSS:FBCCH:OPTional:DATA index,word,data]
Specifies the data used in the user-defined optional information element referenced to the associated message type by index. The data is programmed 16 bits at a time, each selected by word. Range of index is 0 to 7 ; range of word is 0 to 15 ; range of data is 0 to \#hFFFF.
Example:
If Length $=68$ (bits) and Data $=\#$ h01234567890123456:

| word | data |
| :---: | :---: |
| 0 | \#h0123 |
| 1 | \#h4567 |
| 2 | \#h8901 |
| 3 | \#h2345 |
| 4 | \#h6000 |

DATA? index,word
[CSS:FBCCH:OPTional:DATA? index,word]
Returns the user-defined data in the selected set of 16 bits (word) of the userdefined optional information element referenced to the associated message type by index. Range of index is 0 to 7 ; range of word is 0 to 15 .
B. EXTENDED BROADCAST CHANNEL (E-BCCH) COMMANDS

## css:

## EBCCH:

## USER:

MSGtype index, $n$
[CSS:EBCCH:USER:MSGtype index,n]
Specifies the value ( $n$ ) of up to 8 user-defined message types selected by index. Range of index is 0 to 7 ; range of $n$ is 0 to 63 .

MSGtype? index
[CSS:EBCCH:USER:MSGtype? index]
Returns the value of Message Type selected by index. Range of index is 0 to 7 .
PD index, $n$
[CSS:EBCCH:USER:PD index,n]
Specifies the value ( $n$ ) of Protocol Discriminator of the user-defined message referenced by index. Range of index is 0 to 7 ; range of $n$ is 0 to 3 .

PD? index
[CSS:EBCCH:USER:PD? index]
Returns the value of Protocol Discriminator of the user-defined message referenced by index. Range of index is 0 to 7.

LENGth index, $n$
[CSS:EBCCH:USER:LENGTh index,n]
Sets the length ( $n$ ) in bits of the user-defined message type referenced by index. Range of index is 0 to 7 ; range of $n$ is 0 to 255 .

LENGth? index
[CSS:EBCCH:USER:LENGth? index]
Returns the length in bits of the user-defined message type referenced by index. Range of index is 0 to 7 .

## CSS:

## EBCCH:

USER:
DATA index,word,data
[CSS:EBCCH:USER:DATA index,word,data]
Specifies the data used in the user-defined message type referenced by index.
The data (data) is programmed 16 bits at a time, each selected by word.
Range of index is 0 to 7 ; range of word is 0 to 15 ; range of data is 0 to \#hFFFF.
Example:
If Length $=72$ (bits) and Data $=\#$ h012345678901234567:

| word | data |
| :---: | :---: |
| 0 | \#h0123 |
| 1 | \#h4567 |
| 2 | \#h8901 |
| 3 | \#h2345 |
| 4 | \#h6700 |

DATA? index, word
[CSS:EBCCH:USER:DATA? index,word]
Returns the user-defined data in the selected set of 16 bits (word) of the message type referenced by index. Range of index is 0 to 7 ; range of word is 0 to 15 .

## css:

## EBCCH:

## OPTional:

MSGtype index,type
[CSS:EBCCH:OPTional:MSGtype index,type]
Appends an optional field to one of the message types listed in the table below.
From 1 to 8 message types (specified by index) out of a possible 14 (15, if counting None) may be selected to receive an appended optional field. Range of index is 0 to 7 ; range of type is 0 to 14 .

Ensure that type for all unused index values is set to 0 (None).

| MESSAGE TYPE | type |
| :--- | :---: |
| None | 0 |
| Mobile Assisted Channel Allocation | 1 |
| Neighbor Cell | 2 |
| Regulatory Configuration | 3 |
| Alternate RCI Info | 4 |
| BSMC Message Delivery | 5 |
| Emergency Information Broadcast | 6 |
| Neighbor Service Info | 7 |
| Service Menu | 8 |
| SoC/BSMC Identification | 9 |
| SOC Message Delivery | 10 |
| Time and Date | 11 |
| MACA (Multi-Hyperband) | 12 |
| Neighbor Cell (Multi-Hyperband) | 13 |
| Neighbor Service Info (Multi-Hyperband) | 14 |

Example: CSS:EBCCH:OPT:MSG 0.2 // Append optional field to
// Neighbor Cell message type
CSS:EBCCH:OPT:MSG 1,5 // Append optional field
// to BSMC Message Delivery
// message type.
CSS:EECCH:OPT:MSG 2,8
// Appord optional fiela to
// Service Meru message type
CSS:EBCCH:OPT:MSG 3,0 // No more message types to have
/! appended optional ficids.

## css:

## EBCCH:

## OPTional:

MSGtype? index
[CSS:EBCCH:OPTional:MSGtype? index]
Returns the value of Message Type (see table above) for specified index. Range of index is 0 to 7 .

LENGth index, $n$
[CSS:EBCCH:OPTional:LENGth index,n]
Specifies the length in bits ( $n$ ) of the user-defined optional information element referenced to the associated message type by index. Range of index is 0 to 7; range of $n$ is 0 to 255 .

LENGth? index
[CSS:EBCCH:OPTional:LENGth? index]
Returns length in bits of the user-defined optional information element referenced to the associated message type by index. Range of index is 0 to 7 .

DATA index, word,data
[CSS:EBCCH:OPTional:DATA index,word,data]
Specifies the data used in the user-defined optional information element referenced to the associated message type by index. The data is programmed 16 bits at a time, each selected by word. Range of index is 0 to 7; range of word is 0 to 15 ; range of data is 0 to \#hFFFF.
Example:
If Length $=68$ (bits) and Data $=\#$ h01234567890123456:

| word | data |
| :---: | :---: |
| 0 | \#h0123 |
| 1 | \#h4567 |
| 2 | \#h8901 |
| 3 | \#h2345 |
| 4 | \#h6000 |

DATA? index,word
[CSS:EBCCH:OPTional:DATA? index,word]
Returns the user-defined data in the selected set of 16 bits (word) of the userdefined optional information element referenced to the associated message type by index. Range of index is 0 to 7 ; range of word is 0 to 15 .

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## 9-12-15 SPACH COMMANDS

## CSS:SPACH:

## BUILD:

HARD
[CSS:SPACH:BUILD:HARD]
Builds a Hard Page of any type.
ARQ
[CSS:SPACH:BUILD:ARQ]
Builds an ARQ SPACH Message of any type.

## NONARQ

[CSS:SPACH:BUILD:NONARQ]
Builds a Non ARQ SPACH Message.
The following SEND_XXXX $n$ commands control the process of sending the message and not the type of message. The Layer 2 and Layer 3 information must be specified before sending a message with these commands. The Layer 2 element, BU (Burst Usage), must be configured to insure that the correct type ( PCH , ARCH, HARD or SMS) message is built.

## SEND_PCH $n$

[CSS:SPACH:SEND_PCH n]
Builds the current SPACH message and sends message according to the rules of sending a PCH message (i.e. SPACH message is sent in both the primary and secondary superframes). $n$ is the Superframe Phase (SFP) of the start of the message. Range of $n$ is 0 to 31 .

## SEND_HARD $n$

[CSS:SPACH:SEND_HARD n]
Builds a message and sends message according to the rules of sending a HARD Page (i.e. message is sent in both the primary and secondary superframes). $n$ is the Superframe Phase (SFP) of the start of the message. Range of $n$ is 0 to 31 .

## SEND_ARCH n

[CSS:SPACH:SEND_ARCH n]
Builds the current SPACH message and sends message according to the rules of sending a Non-ARQ ARCH message (i.e. SPACH message is sent in one superframe). $n$ is the Superframe Phase (SFP) of the start of the message. Range of $n$ is 0 to 31 .

This command is also useful for sending Non-ARQ SMS messages.

## LENGth:

## HARD?

[CSS:SPACH:LENGth:HARD?]
Returns current value of hard page length (1 bit value).
ARQ?
[CSS:SPACH:LENGth:ARQ?]
Returns current value of ARQ SPACH message length (7 bit value).

## CSS:SPACH:

## LENGth:

## NONARQ?

[CSS:SPACH:LENGth:NONARQ?]
Returns current value of NONARQ SPACH message length (7 bit value).

## DATA:

## HARD? $n$

[CSS:SPACH:DATA:HARD?n]
Returns current 16 bit word (indexed by $n$ ) within a hard page. Range of $n$ is 0 to 6 .
ARQ? $n, m$
[CSS:SPACH:DATA:ARQ? n,m]
Returns current 16 bit word (indexed by $m$ ) within a selected frame ( $n$ ) of the ARQ SPACH message. Range of $n$ is 0 to 255 ; range of $m$ is 0 to 6 .

NONARQ? $n, m$
[CSS:SPACH:DATA:NONARQ? n,m]
Returns current 16 bit word (indexed by $m$ ) within a selected frame ( $n$ ) of the NONARQ SPACH message. Range of $n$ is 0 to 255 ; range of $m$ is 0 to 6 .

## PROGRAM:

HARD dest
[CSS:SPACH:PROGRAM:HARD dest]
Copies the hard page into the superframe. The location in the superframe is selected by dest. Range of dest is 0 to 31 .

ARQ dest,source,length
[CSS:SPACH:PROGRAM:ARQ dest, source,length]
Copies the $A R Q$ message into the superframe. The location in the superframe is selected by dest. The source selects the frame from the ARQ buffer. The number of frames moved is selected by length. Range of dest is 0 to 31 ; range of source is 0 to 255 ; range of length is 0 to 32.

NONARQ dest,source,length
[CSS:SPACH:PROGRAM:NONARQ dest,source,length]
Copies the NONARQ message into the superframe. The location in the superframe is selected by dest. The source selects the frame from the NONARQ buffer. The number of frames moved is selected by length. Range of dest is 0 to 31 ; range of source is 0 to 255; range of length is 0 to 32 .

BU $n$
[CSS:SPACH:BU n]
Specifies Burst Usage. Range of $n$ is 0 to 7 .
BU?
[CSS:SPACH:BU?]
Returns current value of BU.

## CSS:SPACH:

PCON $n, m$
[CSS:SPACH:PCON n,m]
Enables ( $m=1$ ) or disables ( $m=0$ ) Paging Channel Continuation indexed by $n$. Range of $n$ is 0 or 1.

## PCON? $n$

[CSS:SPACH:PCON?n]
Returns current value of PCON indexed by $n$. Range of $n$ is 0 or 1 .
BCN $n$
[CSS:SPACH:BCN n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Broadcast Channel Change Notification Flag.
BCN?
[CSS:SPACH:BCN?]
Returns current state of BCN.

## PFM $n$

[CSS:SPACH:PFM n]
Enables $(n=1)$ or disables $(n=0)$ Paging Frame Modifier.

## PFM?

[CSS:SPACH:PFM?]
Returns current state of PFM.
BT $n$
[CSS:SPACH:BT n]
Specifies Burst Type. Range of $n$ is 0 to 7 .
BT?
[CSS:SPACH:BT?]
Returns current value of $B T$.

## IDT n

[CSS:SPACH:IDT n]
Specifies Identity Type. Range of $n$ is 0 to 3.

## IDT?

[CSS:SPACH:IDT?]
Returns current value of IDT.

## CSS:SPACH:

MSID:
MS $n, m$
[CSS:SPACH:MSID:MS n,m]
Specifies the 18 Most Significant Bits ( $m$ ) of Mobile Station Identification indexed by $n$.
Range of $n$ is 0 to 4 ; range of $m$ is 0 to \#h3FFFF.
MS? $n$
[CSS:SPACH:MSID:MS?n]
Returns the 18 Most Significant Bits of Mobile Station Identification indexed by $n$. Range of $n$ is 0 to 4 .

LS $n, m$
[CSS:SPACH:MSID:LS n,m]
Specifies the 32 Least Significant Bits ( $m$ ) of Mobile Station Identification indexed by $n$. Range of $n$ is 0 to 4 ; range of $m$ is 0 to \#hFFFFFFFF.

LS? $n$
[CSS:SPACH:MSID:LS? n]
Returns the 32 Least Significant Bits of Mobile Station Identification indexed by $n$. Range of $n$ is 0 to 4 .

MIN1 " $n$ "
[CSS:SPACH:MIN1 "n"]
Specifies MIN1 used in a SPACH Message. (ASCII string).
(example: "316/522-4981")

## MIN1?

[CSS:SPACH:MIN1?]
Returns current value of MIN1.
MIN2 " $n$ "
[CSS:SPACH:MIN2 "n"]
Specifies MIN2 used in a SPACH Message. (ASCII string).
(example: "316/522-4981")

## MIN2?

[CSS:SPACH:MIN2?]
Returns current value of MIN2.
MIN3 " $n$ "
[CSS:SPACH:MIN3 "n")
Specifies MIN3 used in a SPACH Message. (ASCII string).

```
(example: "316/522-4981")
```


## MIN3?

[CSS:SPACH:MIN3?]
Returns current value of MIN3.

## CSS:SPACH:

UGID:
MS $n$
[CSS:SPACH:UGID:MS n]
Specifies the 18 Most Significant Bits of User Group Identification. Range of $n$ is 0 to \#h3FFFF.

MS?
[CSS:SPACH:UGID:MS?]
Returns the 18 Most Significant Bits of User Group Identification.
LS $n$
[CSS:SPACH:UGID:LS n]
Sets the 32 Least Significant Bits of User Group Identification. Range of $n$ is 0 to \#hFFFFFFFF.

## LS?

[CSS:SPACH:UGID:LS?]
Returns the 32 Least Significant Bits of User Group Identification.

## MM $n$

[CSS:SPACH:MM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Message Mapping.

## MM?

[CSS:SPACH:MM?]
Returns current state of MM.
PEA $n$
[CSS:SPACH:PEA n]
Specifies Partial Echo Assigned. Range of $n$ is 0 to 127 .
Partial Echo value used by a mobile station during an ARQ mode transaction.
PEA?
[CSS:SPACH:PEA?]
Returns current value of PEA.
PI n,m
[CSS:SPACH:PI n,m]
Enables $(m=1)$ or disables $(m=0)$ Polling Indicator indexed by $n$. Range of $n$ is 0 to 79 .
Indicates whether or not the BMI is soliciting a response (ARQ STATUS Frame) from the mobile station.

PI? $n$
[CSS:SPACH:PI?n]
Returns current state of Pl indexed by $n$. Range of $n$ is 0 to 79 .

## CSS:SPACH:

## SRM $n$

[CSS:SPACH:SRM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) SPACH Response Mode.
Indicates how a mobile station is to respond once it has received all frames associated with a given SPACH message.

## SRM?

[CSS:SPACH:SRM?]
Returns current state of SRM.
EHI $n$
[CSS:SPACH:EHI n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Extended Header Indicator.

## EHI?

[CSS:SPACH:EHI?]
Returns current state of EHI.
MEA $n$
[CSS:SPACH:MEA n]
Specifies Message Encryption Algorithm. Range of $n$ is 0 to 3 .

## MEA?

[CSS:SPACH:MEA?]
Returns current value of MEA.

## MEK $n$

[CSS:SPACH:MEK n]
Specifies Message Encryption Key. Range of $n$ is 0 to 3 .

## MEK?

[CSS:SPACH:MEK?]
Returns current value of MEK.

## RSVD:

## Reserved.

## HEADER $n$

[CSS:SPACH:RSVD:HEADER n]
Enables ( $n=1$ ) or disables ( $n=0$ ) reserved field in SPACH Header A.
HEADER?
[CSS:SPACH:RSVD:HEADER?]
Returns current state of HEADER.

## CSS:SPACH:

RSVD:
ARQ $n$
[CSS:SPACH:RSVD:ARQ n]
Specifies Automatic Retransmission Request. Range of $n$ is 0 to 3 .

## ARQ?

[CSS:SPACH:RSVD:ARQ?]
Returns current value of ARQ.
ARM $n$
[CSS:SPACH:ARM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) ARQ Response Mode.
Indicates how a mobile station is to respond once it has received an ARQ frame with Pl set to 1.

## ARM?

[CSS:SPACH:ARM?]
Returns current state of ARM.
FRNO $n, m$
[CSS:SPACH:FRNO n,m]
Specifies Frame Number ( $m$ ) indexed by $n$. Range of $n$ is 0 to 79 ; range of $m$ is 0 to 31 .
Uniquely identifies specific frames sent in support of an ARQ mode transaction.

## FRNO? $n$

[CSS:SPACH:FRNO?n]
Returns current value of FRNO indexed by $n$. Range of $n$ is 0 to 79 .
GA $n$
[CSS:SPACH:GA n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Go Away.

## Indicates if the DCCH is barred.

## GA?

[CSS:SPACH:GA?]
Returns current state of GA.
PD $n$
[CSS:SPACH:PD n]
Specifies the value of Protocol Discriminator. Range of $n$ is 0 to 3 .

## PD?

[CSS:SPACH:PD?]
Returns the current value of Protocol Discriminator.

## CSS:SPACH:

## MSGtype1:

<COMMAND FROM Table below>
[CSS:SPACH:MSGtype1:<COMMAND FROM Table below>]
Specifies message type 1 used in a SPACH message.

## MSGtype2:

<COMMAND FROM Table below
[CSS:SPACH:MSGtype2:<COMMAND FROM Table below>]
Specifies message type 2 used in a SPACH message.

## MSGtype3:

<COMMAND FROM Table below>
[CSS:SPACH:MSGtype3:<COMMAND FROM Table below>]
Specifies message type 3 used in a SPACH message.

## MSGtype4:

<COMMAND FROM Table below>
[CSS:SPACH:MSGtype4:<COMMAND FROM Table below>1
Specifies message type 4 used in a SPACH message.

| ANALOG | AUDIT | BSCHALcon | BSMC |  |
| :--- | :--- | :--- | :--- | :---: |
| CAPability | DIGital | DRETRY | MSGWTG |  |
| PAGE | PU | QDISC_ACK | QUPDate |  |
| RDATA | RDATA_ACCept | RDATA_REJect | REG_ACCept |  |
| REG_REJect | RELease | REORDer | SOC |  |
| SPACHnotification | SSDUP | TESTreg | UCHAL |  |
| USERalert |  |  |  |  |

## MEM $n$

[CSS:SPACH:MEM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Message Encryption Mode.
Indicates message encryption algorithm A and message encryption domain A are enabled on the assigned voice channel.

## MEM?

[CSS:SPACH:MEM?]
Returns current state of MEM.

## CSS:SPACH:

SCC $n$
[CSS:SPACH:SCC n]
Specifies SAT Color Code. Range of $n$ is 0 to 3.
Defines SAT Color Code used on the assigned analog voice channel.

SCC?
[CSS:SPACH:SCC?]
Returns current value of SCC.
VMAC $n$
[CSS:SPACH:VMAC n]
Specifies VMAC. Range of $n$ is 0 to 15.
Indicates the power level to be used on the assigned analog voice channel.

## VMAC?

[CSS:SPACH:VMAC?]
Returns current value of VMAC.

## CHAN $n$

[CSS:SPACH:CHAN n]
Specifies Channel used in a Digital or Analog channel assignment. Range of $n$ is 0 to 2047 .

## CHAN?

[CSS:SPACH:CHAN?]
Returns current value of CHAN.

## PROTocol n

[CSS:SPACH:PROTocol n]
Specifies Protocol version. Range of $n$ is 0 to 15.

## PROTOCOI?

[CSS:SPACH:PROTOCOI?]
Returns current value of PROTocol.

## SUBaddress:

Identifies the subaddress of a called or calling party.

## LENGth $n$

[CSS:SPACH:SUBaddress:LENGth n]
Specifies Length of Subaddress Info content. Range of $n$ is 0 to 255 .

## LENGth?

[CSS:SPACH:SUBaddress:LENGth?]
Returns current value of LENGth.

## CSS:SPACH:

## SUBaddress:

ODD_EVEN $n$
[CSS:SPACH:SUBaddress:ODD_EVEN n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Odd/Even Indicator.
ODD_EVEN?
[CSS:SPACH:SUBaddress:ODD_EVEN?]
Returns current state of ODD_EVEN.
TYPE $n$
[CSS:SPACH:SUBaddress:TYPE n]
Specifies Type of Subaddress. Range of $n$ is 0 to 7 .

## TYPE?

[CSS:SPACH:SUBaddress:TYPE?]
Returns current value of TYPE.
REServed $n$
[CSS:SPACH:SUBaddress:REServed n]
Specifies number of subaddress Reserved fields. Range of $n$ is 0 to 15 .

## REServed?

[CSS:SPACH:SUBaddress:REServed?]
Returns number of subaddress Reserved fields.
ADDRess $n, m$
[CSS:SPACH:SUBaddress:ADDRess n,m]
Specifies Subaddress $(m)$ indexed by $n$. Range of $n$ is 0 to 19 ; range of $m$ is 0 to 255 .

## ADDRess? $n$

[CSS:SPACH:SUBaddress:ADDRess? n]
Returns current value of Subaddress indexed by $n$. Range of $n$ is 0 to 19 .

## DTX:

SUPport $n$
[CSS:SPACH:DTX:SUPport n]
Specifies DTX Support. Range of $n$ is 0 to 3 .
Used to indicate DTX capabilities supported on the analog voice channel.

## SUPport?

[CSS:SPACH:DTX:SUPport?]
Returns current value of SUPport.

## CSS:SPACH:

DISPlay:
Used to supply display information that may be displayed to the mobile station user. The information contained in this information element is coded in IRA characters. If the mobile station receives this information element with a length exceeding the maximum length the mobile station supports, the information element should be truncated.

## LENGth n

[CSS:SPACH:DISPlay:LENGth n]
Specifies Length of Display info. Range of $n$ is 0 to 82 .

## LENGth?

[CSS:SPACH:DISPlay:LENGth?]
Returns current value of LENGth.
CHARacter $n, m$
[CSS:SPACH:DISPlay:CHARacter $n, m]$
Specifies Display Character $(m)$ indexed by $n$. Range of $n$ is 0 to 255; range of $m$ is 0 to 255 .

## Up to 82 characters may be sent.

## CHARacter? $n$

[CSS:SPACH:DISPlay:CHARacter? n]
Returns current value of CHARacter indexed by $n$. Range of $n$ is 0 to 255.

## REREG $n$

[CSS:SPACH:REREG n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Forced Re-registration.
Indicates if the mobile station is required to initiate a Registration attempt with Registration Type set to Forced.

## REREG?

[CSS:SPACH:REREG?]
Returns current state of REREG.
DEBUG $n$
[CSS:SPACH:DEBUG n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Debug Display Allowed.
When enabled, the mobile station is allowed to include a Display information element in the Audit Confirmation message.

## DEBUG?

[CSS:SPACH:DEBUG?]
Returns current state of DEBUG.

## CSS:SPACH:

## AUTHBS $n$

[CSS:SPACH:AUTHBS n]
Specifies AUTHBS. Range of $n$ is 0 to \#hFFFF.
Contains the output from the Authentication procedure.

## AUTHBS?

[CSS:SPACH:AUTHBS?]
Returns current value of AUTHBS.

## BSMC $n$

[CSS:SPACH:BSMC n]
Specifies Base Station Manufacture Code. Range of $n$ is 0 to 255 .
Identifies the assigned manufacture code. The BSMC value of 0 is reserved. A reserved BSMC value shall be considered an unknown base station manufacture code by the receiving mobile station.

## BSMC?

[CSS:SPACH:BSMC?]
Returns current value of BSMC.

## CUSTOM:

LENGth $n$
[CSS:SPACH:CUSTOM:LENGTh n]
Specifies Length of Custom Control in octets. Range of $n$ is 1 to 64 .

## LENGth?

[CSS:SPACH:CUSTOM:LENGth?]
Returns current value of LENGth.
CONTrol $n, m$
[CSS:SPACH:CUSTOM:CONTrol n,m]
Specifies Custom Control ( $m$ ) indexed by $n$. Range of $n$ is 0 to 63 ; range of $m$ is 0 to 255 .
CONTrol? n
[CSS:SPACH:CUSTOM:CONTrOI? n]
Returns current value of CONTrol indexed by $n$. Range of $n$ is 0 to 63 .

## DVCC $n$

[CSS:SPACH:DVCC n]
Specifies Digital Verification Color Code. Range of $n$ is 0 to 255 .
DVCC?
[CSS:SPACH:DVCC?]
Returns current value of DVCC.

## CSS:SPACH:

## DMAC $n$

[CSS:SPACH:DMAC n]
Specifies Digital Mobile Attenuation Code. Range of $n$ is 0 to 15 .
Indicates the power level to be used on the assigned digital traffic channel.

## DMAC?

[CSS:SPACH:DMAC?]
Returns current value of DMAC.

## ATS $n$

[CSS:SPACH:ATS n]
Specifies Assigned Time Slot. Range of $n$ is 0 to 15 .

## ATS?

[CSS:SPACH:ATS?]
Returns current value of ATS.

## SB $n$

[CSS:SPACH:SB n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Shortened Burst.
Defines whether the mobile station shall use the shortened burst initially on the assigned digital traffic channel.

## SB?

[CSS:SPACH:SB?]
Returns current state of SB.
TA $n$
[CSS:SPACH:TA n]
Specifies Time Alignment. Range of $n$ is 0 to 31 .
Indicates the absolute timing offset from the standard offset reference (SOR) position.

## TA?

[CSS:SPACH:TA?]
Returns current value of TA.

## CSS:SPACH:

## MODE:

DIC $n$
[CSS:SPACH:MODE:DIC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Delay Interval Compensation Mode.
Used to control the application of the DIC mode in the mobile station. When received in the access parameters message, the domain of DIC application shall be the DCCH. When received in the Digital Traffic Channel Designation message, the domain of DIC application shall be the DTC.

## DIC?

[CSS:SPACH:MODE:DIC?]
Returns current state of DIC.

## VOICE:

## Identifies the mode to be used for the requested Voice Call.

VC $n$
[CSS:SPACH:MODE:VOICE:VC n]
Specifies Voice Coder. Range of $n$ is 0 to 7 .
VC?
[CSS:SPACH:MODE:VOICE:VC?]
Returns current value of VC.
PM_V $n$
[CSS:SPACH:MODE:VOICE:PM_V n]
Specifies Voice Privacy. Range of $n$ is 0 to 7 .
PM_V?
[CSS:SPACH:MODE:VOICE:PM_V?]
Returns current value of PM_V.

## CSS:SPACH:

MODE:
MEM:
Message Encryption Mode-Identifies the selected message encryption algorithm, key and domain.

## MEA $n$

[CSS:SPACH:MODE:MEM:MEA n]
Specifies Message Encryption Algorithm. Range of $n$ is 0 to 7 .

## MEA?

[CSS:SPACH:MODE:MEM:MEA?]
Returns current value of MEA.

## MED n

[CSS:SPACH:MODE:MEM:MED n]
Specifies Message Encryption Domain. Range of $n$ is 0 to 7 .

## MED?

[CSS:SPACH:MODE:MEM:MED?]
Returns current value of MED.

## MEK $n$

[CSS:SPACH:MODE:MEM:MEK n]
Specifies Message Encryption Key. Range of $n$ is 0 to 7 .

## MEK?

[CSS:SPACH:MODE:MEM:MEK?]
Returns current value of MEK.

## HYPERband:

If present, this information element is used to specify the Hyperband associated with the specified channel.

INFO $n$
[CSS:SPACH:MODE:HYPERband:INFO n]
Specifies Hyperband Info. Range of $n$ is 0 to 3 .
Provides frequency band information.

## INFO?

[CSS:SPACH:MODE:HYPERband:INFO?]
Returns current value of INFO.

## CSS:SPACH:

LT $n$
[CSS:SPACH:LT n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Last Try.
If a mobile station receives a Directed Retry and attempts a new access on another DCCH, the mobile station shall set the Last Try flag in the Origination or the Page Response message to the value of the Last Try flag received in the Directed Retry message. Otherwise, the mobile station shall set the Last Try flag to 0 at system access.

LT?
[CSS:SPACH:LT?]
Returns current state of LT.
RCF $n$
[CSS:SPACH:RCF n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Read Control Filler information.
When enabled, the mobile station is to read Control Filler information.

## RCF?

[CSS:SPACH:RCF?]
Returns current state of RCF.

## AUTH $n$

[CSS:SPACH:AUTH n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Authentication information.
When enabled, Authentication information is sent when making an access on an ACC as a result of a Directed Retry received on the DCCH.

## AUTH?

[CSS:SPACH:AUTH?]
Returns current state of AUTH.

## RETRY:

Retry Channel - Specifies a channel to be considered for Directed Retry purposes.
NUMBer $n$-or- NUM $n$
[CSS:SPACH:RETRY:NUMBern]
Specifies Number of instances of Retry Channel. Range of $n$ is 0 to 5 .
NUMBer? -or- NUM?
[CSS:SPACH:RETRY:NUMBer?]
Returns current Number of instances of Retry Channel.

## CSS:SPACH:

## RETRY:

HYPERBand $n, m$
[CSS:SPACH:RETRY:HYPERband n,m]
Specifies Hyperband $(m)$ for designated instance ( $n$ ) of Retry Channel. Range of $n$ is 0 to 5 ; range of $m$ is 0 to 3 .

HYPERband? $n$
[CSS:SPACH:RETRY:HYPERband? n]
Returns current value of Hyperband for specified instance ( $n$ ) of Retry Channel. Range of $n$ is 0 to 5 .

CHANnel $n, m$
[CSS:SPACH:RETRY:CHANnel n,m]
Specifies CHAN for designated instance ( $n$ ) of Retry Channel. Range of $n$ is 0 to 5 ; range of $m$ is 1 to 2047.

CHANnel? n
[CSS:SPACH:RETRY:CHANnel? n]
Returns current value of CHAN for specified instance ( $n$ ) of Retry Channel. Range of $n$ is 0 to 5 .

## MSGWTG:

## Message Waiting Info.

NV $n$
[CSS:SPACH:MSGWTG:NV n]
Specifies Number of Values. Range of $n$ is 0 to 15 .

## NV?

[CSS:SPACH:MSGWTG:NV?]
Returns current value of NV.
TYPE n,m
[CSS:SPACH:MSGWTG:TYPE n,m]
Specifies Type of Message Waiting ( $m$ ) indexed by $n$. Range of $n$ is 0 to 15; range of $m$ is 0 to 15.

TYPE? $n$
[CSS:SPACH:MSGWTG:TYPE? n]
Returns current value of TYPE indexed by $n$. Range of $n$ is 0 to 15 .
NUMBer $n, m$-or- NUM $n, m$
[CSS:SPACH:MSGWTG:NUMBer n.m]
Specifies Number of Messages Waiting ( $m$ ) indexed by $n$. Range of $n$ is 0 to 15 ; range of $m$ is 0 to 63 .

Up to 16 instances of this field may be sent.
NUMBer? n-or- NUM? n
[CSS:SPACH:MSGWTG:NUMBer? n]
Returns current value of NUMBer indexed by $n$. Range of $n$ is 0 to 15 .

## CSS:SPACH:

## SERVice $n$

[CSS:SPACH:SERVice n]
Specifies Service Code. Range of $n$ is 0 to 15.
Indicates the requested service.

## SERVice?

[CSS:SPACH:SERVice?]
Returns current value of SERVice.

## SIGnal:

## PITCH $n$

[CSS:SPACH:SIGnal:PITCH n]
Specifies Signal Pitch. Range of $n$ is 0 to 3 .

## PITCH?

[CSS:SPACH:SIGnal:PITCH?]
Returns current value of PITCH.
CADence $n$
[CSS:SPACH:SIGnal:CADence n]
Specifies Signal Cadence. Range of $n$ is 0 to 63 .

## CADence?

[CSS:SPACH:SIGnal:CADence?]
Returns current value of CADence.

## DURation $n$

[CSS:SPACH:SIGnal:DURation n]
Specifies Signal Duration. Range of $n$ is 0 to 15 .

## DURation?

[CSS:SPACH:SIGnal:DURation?]
Returns current value of DURation.

## CSS:SPACH:

## CALLED:

Called Party - Identifies the called party associated with a mobile station.
TYPE $n$
[CSS:SPACH:CALLED:TYPE n]
Specifies Type of Number. Range of $n$ is 0 to 7 .
TYPE?
[CSS:SPACH:CALLED:TYPE?]
Returns current value of TYPE.

## PLANid $n$

[CSS:SPACH:CALLED:PLANid n]
Specifies Numbering Plan Identification. Range of $n$ is 0 to 15 .

## PLANid?

[CSS:SPACH:CALLED:PLANid?]
Returns current value of PLANid.

## ENCoding n

[CSS:SPACH:CALLED:ENCoding n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Address Encoding.

## ENCoding?

[CSS:SPACH:CALLED:ENCoding?]
Returns current state of ENCoding.
ADDRess " $n$ "
[CSS:SPACH:CALLED:ADDRess " $n$ "]
Specifies Called Address. (ASCII string).
ADDRess?
[CSS:SPACH:CALLED:ADDRess?]
Returns current string value of ADDRess.

## CSS:SPACH:

## CALLED:

## SUBaddress:

Identifies the address of a called party.

## LENGth $n$

[CSS:SPACH:CALLED:SUBaddress:LENGth n]
Specifies Length of Subaddress Info content. Range of $n$ is 0 to 255 .

## LENGth?

[CSS:SPACH:CALLED:SUBaddress:LENGth?]
Returns current value of LENGth.

## ODD EVEN $n$

[CSS:SPACH:CALLED:SUBaddress:ODD_EVEN n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Odd/Even Indicator.

## ODD_EVEN?

[CSS:SPACH:CALLED:SUBaddress:ODD_EVEN?]
Returns current state of ODD_EVEN.
TYPE $n$
[CSS:SPACH:CALLED:SUBaddress:TYPE n]
Specifies Type of Subaddress. Range of $n$ is 0 to 7 .

## TYPE?

[CSS:SPACH:CALLED:SUBaddress:TYPE?]
Returns current value of TYPE.

## REServed $n$

[CSS:SPACH:CALLED:SUBaddress:REServed n]
Specifies number of subaddress Reserved fields. Range of $n$ is 0 to 15 .

## REServed?

[CSS:SPACH:CALLED:SUBaddress:REServed?]
Returns number of subaddress Reserved fields.
ADDRess $n, m$
[CSS:SPACH:CALLED:SUBaddress:ADDRess n,m]
Specifies Called Subaddress ( $m$ ) indexed by $n$. Range of $n$ is 0 to 19 ; range of $m$ is 0 to 255 .

ADDRess? $n$
[CSS:SPACH:CALLED:SUBaddress:ADDRess?n]
Returns current value of ADDRess indexed by $n$. Range of $n$ is 0 to 19 .

## CSS:SPACH:

CALLING:
Calling Party - Identifies the calling party associated with a mobile station.
TYPE $n$
[CSS:SPACH:CALLING:TYPE n]
Specifies Type of Number. Range of $n$ is 0 to 7 .

## TYPE?

[CSS:SPACH:CALLING:TYPE?]
Returns current value of TYPE.
PLANid $n$
[CSS:SPACH:CALLING:PLANid n]
Specifies Numbering Plan Identification. Range of $n$ is 0 to 15 .

## PLANid?

[CSS:SPACH:CALLING:PLANId?]
Returns current value of PLANid.

## ENCoding $n$

[CSS:SPACH:CALLING:ENCoding n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Address Encoding.

## ENCoding?

[CSS:SPACH:CALLING:ENCoding?]
Returns current state of ENCoding.
ADDRess " $n$ "
[CSS:SPACH:CALLING:ADDRess "n"]
Specifies Address. Range of $n$ is 0 to 255 .
Up to 254 instances of this field may be sent.
ADDRess?
[CSS:SPACH:CALLING:ADDRess?]
Returns current value of ADDRess.

## CSS:SPACH:

## CALLING:

## SUBaddress:

Identifies the address of a calling party.
LENGth $n$
[CSS:SPACH:CALLING:SUBaddress:LENGth n]
Specifies Length of Subaddress Info content. Range of $n$ is 0 to 255 .

## LENGth?

[CSS:SPACH:CALLING:SUBaddress:LENGth?]
Returns current value of LENGth.

## ODD_EVEN $n$

[CSS:SPACH:CALLING:SUBaddress:ODD_EVEN n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Odd/Even Indicator.

## ODD_EVEN?

[CSS:-̄PACH:CALLING:SUBaddress:ODD_EVEN?]
Returns current state of ODD_EVEN.
TYPE $n$
[CSS:SPACH:CALLING:SUBaddress:TYPE n]
Specifies Type of Subaddress. Range of $n$ is 0 to 7 .

## TYPE?

[CSS:SPACH:CALLING:SUBaddress:TYPE?]
Returns current value of TYPE.

## REServed $n$

[CSS:SPACH:CALLING:SUBaddress:REServed n]
Specifies number of subaddress Reserved fields. Range of $n$ is 0 to 15 .

## REServed?

[CSS:SPACH:CALLING:SUBaddress:REServed?]
Returns number of subaddress Reserved fields.
ADDRess $n, m$
[CSS:SPACH:CALLING:SUBaddress:ADDRess n,m]
Specifies Calling Subaddress ( $m$ ) indexed by $n$. Range of $n$ is 0 to 19 ; range of $m$ is 0 to 255 .

ADDRess? $n$
[CSS:SPACH:CALLING:SUBaddress:ADDRess? n]
Returns current value of Calling Subaddress indexed by $n$. Range of $n$ is 0 to 19 .

## CSS:SPACH:

## CALLING:

PRESentation:
Identifies the presentation restrictions and screening related to the Calling Party information element.

```
PI n
[CSS:SPACH:CALLING:PRESentation:P/ n]
Specifies Calling Party Number Presentation Indicator. Range of n is 0 to 3.
PI?
[CSS:SPACH:CALLING:PRESentation:PI?]
Returns current value of PI.
SI n
[CSS:SPACH:CALLING:PRESentation:SI n]
Specifies Screening Indicator. Range of n is 0 to 3.
SI?
[CSS:SPACH:CALLING:PRESentation:SI?]
Returns current value of SI.
```

RN $n$
[CSS:SPACH:RN n]
Specifies Request Number. Range of $n$ is 0 to 15 .
Used in a Parameter Update message to allow the mobile station to recognize duplicate Parameter Update messages.

## RN?

[CSS:SPACH:RN?]
Returns current value of RN.

## RTRANSaction $n$

[CSS:SPACH:RTRANSaction n]
Specifies R-Transaction Identifier. Range of $n$ is 0 to 255 .
Used to associate a R-DATA ACCEPT or a R-DATA REJECT message to the R-DATA message being acknowledged.

## RTRANSaction?

[CSS:SPACH:RTRANSaction?]
Returns current value of RTRANSaction.

## CSS:SPACH:

## RDATA_UNIT:

Contains the Higher Layer Protocol Data Unit and is mandatory in an R-DATA message.
LENGth n
[CSS:SPACH:RDATA_UNIT:LENGth n]
Specifies Length Indicator. Range of $n$ is 0 to 255 .

## LENGth?

[CSS:SPACH:RDATA_UNIT:LENGth?]
Returns current value of LENGth.

## HLP:

IDentifier $n$
[CSS:SPACH:RDATA_UNIT:HLP:IDentifier n]
Specifies Higher Protocol Identifier. Range of $n$ is 0 to 255.
IDentifier?
[CSS:SPACH:RDATA_UNIT:HLP:IDentifier?]
Returns current value of IDentifier.
DATA $n, m$
[CSS:SPACH:RDATA UNIT:HLP:DATA n,m]
Specifies Higher Layer Protocol Data Unit (m) indexed by $n$. Range of $n$ is 0 to 255;
range of $m$ is 0 to 255 .
DATA? $n$
[CSS:SPACH:RDATA_UNIT:HLP:DATA?n]
Returns current value of DATA indexed by $n$. Range of $n$ is 0 to 255 .

## CSS:SPACH:

## MESSage:CENTer:

Identifies the Message Center Address for the message being sent.
TYPE $n$
[CSS:SPACH:MESSage:CENTer:TYPE n]
Specifies Type of Number. Range of $n$ is 0 to 7 .

## TYPE?

[CSS:SPACH:MESSage:CENTer:TYPE?]
Returns current value of TYPE.
PLANid $n$
[CSS:SPACH:MESSage:CENTer:PLANid n]
Specifies Numbering Plan Identification. Range of $n$ is 0 to 15 .

## PLANid?

[CSS:SPACH:MESSage:CENTer:PLANid?]
Returns current value of PLANid.

## ENCoding $n$

[CSS:SPACH:MESSage:CENTer:ENCoding n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Address Encoding.

## ENCoding?

[CSS:SPACH:MESSage:CENTer:ENCoding?]
Returns current state of ENCoding.
ADDRess " $n$ "
[CSS:SPACH:MESSage:CENTer:ADDRess " $n$ "]
Specifies Address. Range of $n$ is 0 to 255.
Up to 254 instances of this field may be sent.

## ADDRess?

[CSS:SPACH:MESSage:CENTer:ADDRess?]
Returns current value of ADDRess.

## CSS:SPACH:

## USER:

DEST:
User Destination Address.
TYPE $n$
[CSS:SPACH:USER:DEST:TYPE n]
Specifies Type of Number. Range of $n$ is 0 to 7 .

## TYPE?

[CSS:SPACH:USER:DEST:TYPE?]
Returns current value of TYPE.
PLANid $n$
[CSS:SPACH:USER:DEST:PLANid n]
Specifies Numbering Plan Identification. Range of $n$ is 0 to 15 .

## PLANid?

[CSS:SPACH:USER:DEST:PLANId?]
Returns current value of PLANid.

## ENCoding n

[CSS:SPACH:USER:DEST:ENCoding n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Address Encoding.

## ENCoding?

[CSS:SPACH:USER:DEST:ENCoding?]
Returns current state of ENCoding.

## ADDRess " $n$ "

[CSS:SPACH:USER:DEST:ADDRess " $n$ "]
Specifies Address. Range of $n$ is 0 to 255.
Up to 254 instances of this field may be sent.

## ADDRess?

[CSS:SPACH:USER:DEST:ADDRess?]
Returns current value of ADDRess.

## CSS:SPACH:

## USER:

DEST:
SUBaddress:
Identifies the address of a called or calling party.

## LENGth $n$

[CSS:SPACH:USER:DEST:SUBaddress:LENGth n]
Specifies Length of Subaddress Info content. Range of $n$ is 0 to 255 .

## LENGth?

[CSS:SPACH:USER:DEST:SUBaddress:LENGth?]
Returns current value of LENGth.

## ODD_EVEN $n$

[CSS:SPACH:USER:DEST:SUBaddress:ODD_EVEN n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Odd/Even Indicator.
ODD_EVEN?
[CSS:SPACH:USER:DEST:SUBaddress:ODD_EVEN?]
Returns current state of ODD_EVEN.
TYPE $n$
[CSS:SPACH:USER:DEST:SUBaddress:TYPE n]
Specifies Type of Subaddress. Range of $n$ is 0 to 7 .

## TYPE?

[CSS:SPACH:USER:DEST:SUBaddress:TYPE?]
Returns current value of TYPE.
REServed $n$
[CSS:SPACH:USER:DEST:SUBaddress:REServed n]
Specifies number of subaddress Reserved fields. Range of $n$ is 0 to 15 .
REServed?
[CSS:SPACH:USER:DEST:SUBaddress:REServed?]
Returns number of subaddress Reserved fields.
ADDRess $n, m$
[CSS:SPACH:USER:DEST:SUBaddress:ADDRess n,m]
Specifies User Destination Subaddress $(m)$ indexed by $n$. Range of $n$ is 0 to 19; range of $m$ is 0 to 255 .

ADDRess? $n$
[CSS:SPACH:USER:DEST:SUBaddress:ADDRess? n]
Returns current value of ADDRess indexed by $n$. Range of $n$ is 0 to 19 .

## CSS:SPACH:

USER:
GROUP:
Identifies the User Group ID that a mobile station has requested or has been allocated.

## STATus n

[CSS:SPACH:USER:GROUP:STATus n]
Specifies User Group Status. Range of $n$ is 0 to 3 .
STATUS?
[CSS:SPACH:USER:GROUP:STATUS?]
Returns current value of STATUS.
TYPE $n$
[CSS:SPACH:USER:GROUP:TYPE n]
Specifies User Group Type. Range of $n$ is 0 to 3 .
TYPE?
[CSS:SPACH:USER:GROUP:TYPE?]
Returns current value of TYPE.
ID:
MS $n$
[CSS:SPACH:USER:GROUP:ID:MS n]
Specifies the 18 Most Significant Bits of User Group Identification. Range of $n$ is 0 to \#h3FFFF.

MS?
[CSS:SPACH:USER:GROUP:ID:MS?]
Returns current value of MS.
LS $n$
[CSS:SPACH:USER:GROUP:ID:LS n]
Specifies 32 Least Significant Bits of User Group Identification. Range of $n$ is 0 to \#hFFFFFFFF.

LS?
[CSS:SPACH:USER:GROUP:ID:LS?]
Returns current value of $L S$.

## CSS:SPACH:

## USER:

## ORIG:

TYPE $n$
[CSS:SPACH:USER:ORIG:TYPE n]
Specifies Type of Number. Range of $n$ is 0 to 7 .
TYPE?
ICSS:SPACH:USER:ORIG:TYPE?]
Returns current value of TYPE.

## PLANid $n$

[CSS:SPACH:USER:ORIG:PLANId n]
Specifies Numbering Plan Identification. Range of $n$ is 0 to 15 .
PLANid?
[CSS:SPACH:USER:ORIG:PLANId?]
Returns current value of PLANid.
ENCoding $n$
[CSS:SPACH:USER:ORIG:ENCoding n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Address Encoding.

## ENCoding?

[CSS:SPACH:USER:ORIG:ENCoding?]
Returns current state of ENCoding.
ADDRess " $n$ "
[CSS:SPACH:USER:ORIG:ADDRess " $n$ "]
Specifies Address. Range of $n$ is 0 to 255.
Up to 254 instances of this field may be sent.

## ADDRess?

[CSS:SPACH:USER:ORIG:ADDRess?]
Returns current value of ADDRess.

## CSS:SPACH:

## USER:

ORIG:

## SUBaddress:

Identifies the address of a called or calling party.

## LENGth n

[CSS:SPACH:USER:ORIG:SUBaddress:LENGth n]
Specifies Length of Subaddress Info content. Range of $n$ is 0 to 255 .

## LENGth?

[CSS:SPACH:USER:ORIG:SUBaddress:LENGth?]
Returns current value of LENGth.

## ODD_EVEN $n$

[CSS:SPACH:USER:ORIG:SUBaddress:ODD_EVEN n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Odd/Even Indicator.
ODD EVEN?
[CSS:SPACH:USER:ORIG:SUBaddress:ODD_EVEN?]
Returns current state of ODD_EVEN.
TYPE $n$
[CSS:SPACH:USER:ORIG:SUBaddress:TYPE n]
Specifies Type of Subaddress. Range of $n$ is 0 to 7 .
TYPE?
[CSS:SPACH:USER:ORIG:SUBaddress:TYPE?]
Returns current value of TYPE.
REServed $n$
[CSS:SPACH:USER:ORIG:SUBaddress:REServed n]
Specifies number of subaddress Reserved fields. Range of $n$ is 0 to 15 .

## REServed?

[CSS:SPACH:USER:ORIG:SUBaddress:REServed?]
Returns number of subaddress Reserved fields.
ADDRess $n, m$
[CSS:SPACH:USER:ORIG:SUBaddress:ADDRess n,m]
Specifies User Origination Subaddress ( $m$ ) indexed by $n$. Range of $n$ is 0 to 19; range of $m$ is 0 to 255 .

## ADDRess? $n$

[CSS:SPACH:USER:ORIG:SUBaddress:ADDRess? n]
Returns current value of ADDRess indexed by $n$. Range of $n$ is 0 to 19 .

## CSS:SPACH:

USER:
ORIG:
PRESentation:
Identifies the presentation restrictions and screening related to the User Originating information element.

PI $n$
[CSS:SPACH:USER:ORIG:PRESentation:PI n]
Specifies User Originating Address Presentation Indicator. Range of $n$ is 0 to 3 .
PI?
[CSS:SPACH:USER:ORIG:PRESentation:PI?]
Returns current value of the User Originating Address Presentation Indicator.
SI $n$
[CSS:SPACH:USER:ORIG:PRESentation:SI n]
Specifies User Originating Address Screening Indicator. Range of $n$ is 0 to 3 .
SI?
[CSS:SPACH:USER:ORIG:PRESentation:SI?]
Returns current value of the User Originating Address Screening Indicator.
PFC:
ASSIGNment $n$
[CSS:SPACH:PFC:ASSIGNment n]
Specifies PFC Assignment. Range of $n$ is 0 to 3 .
Identifies the Paging Frame Class that a mobile station may be assigned at registration.

## ASSIGNment?

[CSS:SPACH:PFC:ASSIGNment?]
Returns current value of ASSIGNment.

## CSS:SPACH:

## RNUM:

Contains the registration number that is used to define a particular mobile station's VMLA (Virtual Mobile Location Area).

## NUMBer $n$-or- NUM $n$

[CSS:SPACH:RNUM:NUMBern]
Specifies Number of RNUMs. Range of $n$ is 1 to 50 .
NUMBer? -or- NUM?
[CSS:SPACH:RNUM:NUMBer?]
Returns current value of NUMBer.
LIST $n, m$
[CSS:SPACH:RNUM:LIST n,m]
Specifies RNUM List ( $m$ ) indexed by $n$. Range of $n$ is 0 to 49 ; range of $m$ is 0 to 1023 .
Up to 50 instances of this field may be sent.
LIST? $n$
[CSS:SPACH:RNUM:LIST? n]
Returns current value of LIST indexed by $n$. Range of $n$ is 0 to 49 .

## MSID:

Mobile Station Identification Assignment - Contains information specifying the MSID the mobile station shall use.

IDT $n$
[CSS:SPACH:MSID:IDT n]
Specifies Identity Type. Range of $n$ is 0 to 3 .
IDT?
[CSS:SPACH:MSID:IDT?]
Returns current value of IDT.

## ASSIGNment $n$

[CSS:SPACH:MSID:ASSIGNment n]
Specifies MSID Assignment. Range of $n$ is 0 to \#hFFFFFF.

## ASSIGNment?

[CSS:SPACH:MSID:ASSIGNment?]
Returns current value of ASSIGNment.

## CSS:SPACH:

PSID_RSID:
Private/Residential System Identification.

## AVAILable:

## PSID/RSID Available.

## NUMBer $n$-or- NUM $n$

[CSS:SPACH:PSID RSID:AVAILable:NUMBer n]
Specifies Number of PSID/RSID. Range of $n$ is 0 to 15.
NUMBer? -or- NUM?
[CSS:SPACH:PSID_RSID:AVAILable:NUMBer?]
Returns current value of NUMBer.
TYPE $n, m$
[CSS:SPACH:PSID_RSID:AVAILable:TYPE n,m]
Enables $(m=1)$ or disables $(m=0)$ PSID/RSID Type Indicator indexed by $n$. Range of $n$ is 0 to 15 .

TYPE? $n$
[CSS:SPACH:PSID_RSID:AVAILable:TYPE? n]
Returns current state of TYPE indexed by $n$. Range of $n$ is 0 to 15 .

## VALUE $n, m$

[CSS:SPACH:PSID_RSID:AVAILable:VALUE n,m]
Specifies PSID/RSID Value ( $m$ ) indexed by $n$. Range of $n$ is 0 to 15 ; range of $m$ is 0 to \#hFFFF.

## VALUE? $n$

[CSS:SPACH:PSID_RSID:AVAILable:VALUE?n]
Returns current value of VALUE indexed by $n$. Range of $n$ is 0 to 15 .
MAP $n$
[CSS:SPACH:PSID_RSID:MAP n]
Specifies PSID/RSID Map. Range of $n$ is 0 to \#hFFFF.
This information is included in the Test Registration message to indicate which private/residential systems have been queried by the mobile station. This information is included in the Test Registration Response message to indicate the private/residential systems on which the mobile station may receive service. The ordering of the PSID/RSID Map reflects the ordering of the PSID/RSID Set sent on the system identity message.

## MAP?

[CSS:SPACH:PSID_RSID:MAP?]
Returns current value of MAP.

## CSS:SPACH:

## DIRectory:

TYPE $n$
[CSS:SPACH:DIRectory:TYPE n]
Specifies Type of Number. Range of $n$ is 0 to 7 .
TYPE?
[CSS:SPACH:DIRectory:TYPE?]
Returns current value of TYPE.
PLANid $n$
[CSS:SPACH:DIRectory:PLANid n]
Specifies Numbering Plan Identification. Range of $n$ is 0 to 15 .

## PLANid?

[CSS:SPACH:DIRectory:PLANid?]
Returns current value of PLANid.

## ENCoding n

[CSS:SPACH:DIRectory:ENCoding n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Address Encoding.

## ENCoding?

[CSS:SPACH:DIRectory:ENCoding?]
Returns current state of ENCoding.
ADDRess " $n$ "
[CSS:SPACH:DIRectory:ADDRess " $n$ "]
Specifies Address. Range of $n$ is 0 to 255 .
Up to 254 instances of this field may be sent.

## ADDRess?

[CSS:SPACH:DIRectory:ADDRess?]
Returns current value of ADDRess.

## CSS:SPACH:

## DIRectory:

## SUBaddress:

Identifies the address of a called or calling party.

## LENGth $n$

[CSS:SPACH:DIRectory:SUBaddress:LENGth n]
Specifies Length of Subaddress Info content. Range of $n$ is 0 to 255 .

## LENGth?

[CSS:SPACH:DIRectory:SUBaddress:LENGth?]
Returns current value of LENGth.
ODD_EVEN $n$
[CSS:SPACH:DIRectory:SUBaddress:ODD_EVEN n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Odd/Even Indicator.

## ODD_EVEN?

[CSS:SPACH:DIRectory:SUBaddress:ODD EVEN?]
Returns current state of ODD EVEN.
TYPE $n$
[CSS:SPACH:DIRectory:SUBaddress:TYPE n]
Specifies Type of Subaddress. Range of $n$ is 0 to 7 .

## TYPE?

[CSS:SPACH:DIRectory:SUBaddress:TYPE?]
Returns current value of TYPE.

## REServed $n$

[CSS:SPACH:DIRectory:SUBaddress:REServed n]
Specifies number of subaddress Reserved fields. Range of $n$ is 0 to 15 .
REServed?
[CSS:SPACH:DIRectory:SUBaddress:REServed?]
Returns number of subaddress Reserved fields.

ADDRess $n, m$
[CSS:SPACH:DIRectory:SUBaddress:ADDRess n,m]
Specifies Directory Subaddress ( $m$ ) indexed by $n$. Range of $n$ is 0 to 19 ; range of $m$ is 0 to 255.

ADDRess? $n$
[CSS:SPACH:DIRectory:SUBaddress:ADDRess? n]
Returns current value of Directory Subaddress indexed by $n$. Range of $n$ is 0 to 19 .

## CSS:SPACH:

## REJect:

REGistration:
Registration Reject message.
CAUSE $n$
[CSS:SPACH:REJect:REGistration:CAUSE n]
Specifies Cause for Registration Reject. Range of $n$ is 0 to 15.

## CAUSE?

[CSS:SPACH:REJect:REGistration:CAUSE?]
Returns current value of CAUSE.
TIME:
Reject Time - Used by the system to indicate to a mobile station the interval of time when the mobile station is allowed to register, again.

LOWer $n$
[CSS:SPACH:REJect:REGistration:TIME:LOWer n]
Specifies Lower time boundary in 100 Superframe (SF). Range of $n$ is 0 to 15 .

## LOWer?

[CSS:SPACH:REJect:REGistration:TIME:LOWer?]
Returns current value of LOWer.
UPPer $n$
[CSS:SPACH:REJect:REGistration:TIME:UPPer n]
Specifies Upper time boundary in 100 Superframe (SF). Range of $n$ is 0 to 15.
UPPer?
[CSS:SPACH:REJect:REGistration:TIME:UPPer?]
Returns current value of UPPer.

## RDATA:

CAUSE $n$
[CSS:SPACH:REJect:RDATA:CAUSE n]
Specifies Cause for R-DATA Reject. Range of $n$ is 0 to 127.

## CAUSE?

[CSS:SPACH:REJect:RDATA:CAUSE?]
Returns current value of CAUSE.
SPARE $n$
[CSS:SPACH:REJect:RDATA:SPARE n]
Specifies value of R-Cause Reserved field. Range of $n$ is 1 or 0 .

## SPARE?

[CSS:SPACH:REJect:RDATA:SPARE?]
Returns current value of R-Cause Reserved field.

## CSS:SPACH:

## RDATA:

DELAY $n$
[CSS:SPACH:RDATA:DELAY n]
Specifies R-DATA DELAY. Range of $n$ is 0 to 15 .
DELAY?
[CSS:SPACH:RDATA:DELAY?]
Returns current value of R-DATA DELAY.

## RELease:

Used when the BMI (Base Station, MSC and Interworking Function) clears a mobile station terminated call.

CAUSE $n$
[CSS:SPACH:RELease:CAUSE n]
Specifies Cause for Release. Range of $n$ is 0 to 15 .

## CAUSE?

[CSS:SPACH:RELease:CAUSE?]
Returns current value of CAUSE.

## REorder:

Used when the BMI (Base Station, MSC and Interworking Function) rejects an Origination or a R-DATA message sent by the mobile station.

CAUSE $n$
[CSS:SPACH:REorder:CAUSE n]
Specifies Cause for Reorder/Intercept. Range of $n$ is 0 to 15 .
cause?
[CSS:SPACH:REorder:CAUSE?]
Returns current value of CAUSE.
TONE $n$
[CSS:SPACH:REOrder:TONE n]
Specifies Tone Indicator. Range of $n$ is 0 to 3 .
Used to indicate the type of tone to be generated by the mobile station.

## TONE?

[CSS:SPACH:REorder:TONE?]
Returns current value of TONE.

## CSS:SPACH:

SOC $n$
[CSS:SPACH:SOC n]
Specifies System Operator Code. Range of $n$ is 0 to 4095.
Identifies which operator is providing service. A reserved SOC value shall be considered an unknown system operator code by a receiving mobile station.

## SOC?

[CSS:SPACH:SOC?]
Returns current value of SOC.

## NOTification n

[CSS:SPACH:NOTification n]
Specifies SPACH Notification Type. Range of $n$ is 0 to 63 .
Contains the message type identifying the message that the BMI intends to deliver to the mobile station. The valid values for SPACH Notification Type shall be limited to the Message Type associated with Page, SSD Update and R-DATA.

## NOTification?

[CSS:SPACH:NOTification?]
Returns current value of NOTification.

## RANDSSD1 $n$

[CSS:SPACH:RANDSSD1 n]
Specifies Shared Secret Data. Range of $n$ is 0 to \#hFFFFFF.
Identifies a random number generated by the BMI that is used in the SSD (Shared Secret Data) Update procedure.

## RANDSSD1?

[CSS:SPACH:RANDSSD1?]
Returns the value of RANDSSD1.
RANDSSD2 $n$
[CSS:SPACH:RANDSSD2 n]
Specifies Shared Secret Data. Range of $n$ is 0 to \#hFFFFFFFFF.
Identifies a random number generated by the BMI that is used in the SSD (Shared Secret Data) Update procedure.

## RANDSSD2?

[CSS:SPACH:RANDSSD2?]
Returns current value of RANDSSD2

## CSS:SPACH:

## ALPHA:

SID "n"
[CSS:SPACH:ALPHA:SID "n"]
Specifies Alphanumeric System ID. $n$ is a phone number, e.g., 316/522-4981.
The purpose of the Alphanumeric System ID information element is to supply an alphanumeric system ID to each user. The information contained in this information element is coded in IRA characters.

## SID?

[CSS:SPACH:ALPHA:SID?]
Returns current value of SID.

## PSID_RSID:

Alphanumeric PSID/RSID List - The purpose of this information element is to supply an Alphanumeric PSID/RSID to the user. The ordering of the Alphanumeric PSID/RSID list reflects the ordering of the PSID/RSID Set sent to the System Identity message. The information contained in this information element is coded in IRA characters.

## NUMBer $n$-or- NUM $n$

ICSS:SPACH:ALPHA:PSID RSID:NUMBer n]
Specifies Length of Alphanumeric PSID/RSID List. Range of $n$ is 0 to 16 .
NUMBer? -or- NUM?
[CSS:SPACH:ALPHA:PSID_RSID:NUMBer?]
Returns current value of LENGth.

## NAME:

## CHARacter $n, " m$ "

[CSS:SPACH:ALPHA:PSID_RSID:NAME:CHARacter n,"m"]
Specifies Display Character ( $m$ ) indexed by $n$. Range of $n$ is 0 to $16 ; m$ is an ASCII string.

CHARacter? $n$
[CSS:SPACH:ALPHA:PSID_RSID:NAME:CHARacter? n]
Returns current value of CHARacter indexed by $n$. Range of $n$ is 0 to 16 .
RANDU $n$
[CSS:SPACH:RANDU n]
Specifies RANDU. Range of $n$ is 0 to \#hFFFFFF.
Identifies the random number generated by the BMI that is used in the Unique Challenge
Response procedure.

## RANDU?

[CSS:SPACH:RANDU?]
Returns current value of RANDU.

## CSS:SPACH:

## QUEue:

POSition $n$
[CSS:SPACH:QUEUe:POSition n]
Specifies Queue Position. Range of $n$ is 0 to 15 .
POSition?
[CSS:SPACH:QUEue:POSition?]
Returns current value of Queue Position.
MACA:LIST:
NUMBer $n$-or- NUM $n$
[CSS:SPACH:MACA:LIST:NUMBer n]
Specifies Number of MACA Channels. Range of $n$ is 0 to 15 .

## NUMBer? -or- NUM?

[CSS:SPACH:MACA:LIST:NUMBer?]
Returns current Number of MACA Channels.

## CHAN $n, m$

[CSS:SPACH:MACA:LIST:CHAN n,m]
Specifies CHAN $(m)$ of designated MACA Channel $(n)$. Range of $n$ is 0 to 15 ; range of $m$ is 1 to 2047.

## CHAN? $n$

[CSS:SPACH:MACA:LIST:CHAN? n]
Returns CHAN for designated MACA Channel $(n)$. Range of $n$ is 0 to 15.

## OTHER:

HYPERband $n$
[CSS:SPACH:MACA:LIST:OTHER:HYPERband n]
Specifies Hyperband for MACA_LIST (Other Hyperband). Range of $n$ is 0 to 3 .

## HYPERband?

[CSS:SPACH:MACA:LIST:OTHER:HYPERband?]
Returns current value of Hyperband for MACA_LIST (Other Hyperband).
NUMBer $n$-or- NUM $n$
[CSS:SPACH:MACA:LIST:OTHER:NUMBer n]
Specifies Number of MACA Channel for MACA_LIST (Other Hyperband). Range of $n$ is 0 to 15.

## NUMBer? -or- NUM?

[CSS:SPACH:MACA:LIST:OTHER:NUMBer?]
Returns current Number of MACA Channel for MACA LIST (Other Hyperband).

## CSS:SPACH:

## MACA:LIST:

## OTHER:

CHAN $n, m$
[CSS:SPACH:MACA:LIST:OTHER:CHAN n,m]
Specifies CHAN ( $m$ ) of designated MACA Channel ( $n$ ) for MACA_LIST (Other
Hyperband). Range of $n$ is 0 to 15; range of $m$ is 1 to 2047.
CHAN? $n$
[CSS:SPACH:MACA:LIST:OTHER:CHAN? n]
Returns current value of CHAN of designated MACA Channel ( $n$ ) for MACA_LIST (Other Hyperband). Range of $n$ is 0 to 15 .

## ENABLE:

The following commands enable optional message types.

## SUBaddress $n$

[CSS:SPACH:ENABLE:SUBaddress n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Subaddress optional message.

## SUBaddress?

[CSS:SPACH:ENABLE:SUBaddress?]
Returns current state of Subaddress optional message.

## DTX $n$

[CSS:SPACH:ENABLE:DTX n]
Enables $(n=1)$ or disables $(n=0)$ DTX Support optional message.
DTX?
[CSS:SPACH:ENABLE:DTX?]
Returns current state of DTX Support optional message.
DISPlay $n$
[CSS:SPACH:ENABLE:DISPlay n]
Enables $(n=1)$ or disables $(n=0)$ Display optional message.
DISPlay?
[CSS:SPACH:ENABLE:DISPlay?]
Returns current state of Display optional message.

## CSS:SPACH:

## ENABLE:

## MODE:

VOICE $n$
[CSS:SPACH:ENABLE:MODE:VOICE n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Voice Mode optional message.
VOICE?
[CSS:SPACH:ENABLE:MODE:VOICE?]
Returns current state of Voice Mode optional message.

## MEM $n$

[CSS:SPACH:ENABLE:MODE:MEM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Message Encryption Mode optional message.

## MEM ?

[CSS:SPACH:ENABLE:MODE:MEM?]
Returns current state of Message Encryption Mode optional message.

## HYPERband:

INFO n
[CSS:SPACH:ENABLE:HYPERband:INFO n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Hyperband Info optional message.
INFO?
[CSS:SPACH:ENABLE:HYPERband:INFO?]
Returns current state of Hyperband Info optional message.

## RCF_AUTH n

[CSS:SPACH:ENABLE:RCF_AUTH n]
Enables ( $n=1$ ) or disables ( $n=0$ ) RCF and AUTH optional message.
RCF_AUTH?
[CSS:SPACH:ENABLE:RCF_AUTH?]
Returns current state of RCF and AUTH optional message.

## RETRY:

## CHANnel $n$

[CSS:SPACH:ENABLE:RETRY:CHANnel n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Retry Channel optional message.
CHANnel?
[CSS:SPACH:ENABLE:RETRY:CHANnel?]
Returns current state of Retry Channel optional message.

## SIGnal n

[CSS:SPACH:ENABLE:SIGnal n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Signal optional message.

## SIGnal?

[CSS:SPACH:ENABLE:SIGnal?]
Returns current state of Signal optional message.

## CSS:SPACH:

## ENABLE:

CALLED:
ADDRess $n$
[CSS:SPACH:ENABLE:CALLED:ADDRess n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Called Party optional message.

## ADDRess?

[CSS:SPACH:ENABLE:CALLED:ADDRess?]
Returns current state of Called Party optional message.

## SUBaddress $n$

[CSS:SPACH:ENABLE:CALLED:SUBaddress n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Called Party Subaddress optional message.
SUBaddress?
[CSS:SPACH:ENABLE:CALLED:SUBaddress?]
Returns current state of Called Party Subaddress optional message.

## CALLING:

## ADDRess n

[CSS:SPACH:ENABLE:CALLING:ADDRess n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Calling Party Number optional message.

## ADDRess?

[CSS:SPACH:ENABLE:CALLING:ADDRess?]
Returns current state of Calling Party Number optional message.

## SUBaddress $n$

[CSS:SPACH:ENABLE:CALLING:SUBaddress n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Calling Party Subaddress optional message.
SUBaddress?
[CSS:SPACH:ENABLE:CALLING:SUBaddress?]
Returns current state of Calling Party Subaddress optional message.

## CSS:SPACH:

## ENABLE:

## CALLING:

## PRESentation $n$

[CSS:SPACH:ENABLE:CALLING:PRESentation n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Calling Party Number Presentation Indicator
optional message.

## PRESentation?

[CSS:SPACH:ENABLE:CALLING:PRESentation?]
Returns current state of Calling Party Number Presentation Indicator optional message.

## MESSage:CENTer:

ADDRess $n$
[CSS:SPACH:ENABLE:MESSage:CENTer:ADDRess n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Message Center Address optional message.
ADDRess?
[CSS:SPACH:ENABLE:MESSage:CENTer:ADDRess?]
Returns current state of Message Center Address optional message.

## USER:

DEST:

## ADDRess $n$

[CSS:SPACH:ENABLE:USER:DEST:ADDRess n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Destination Address optional message.

## ADDRess?

[CSS:SPACH:ENABLE:USER:DEST:ADDRess?]
Returns current state of User Destination Address optional message.
SUBaddress $n$
[CSS:SPACH:ENABLE:USER:DEST:SUBaddress n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Destination Subaddress optional message.
SUBaddress?
[CSS:SPACH:ENABLE:USER:DEST:SUBaddress?]
Returns current state of User Destination Subaddress optional message.

## CSS:SPACH:

## ENABLE:

## USER:

## ORIG:

## ADDRess n

[CSS:SPACH:ENABLE:USER:ORIG:ADDRess n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Originating Address optional message.

## ADDRess?

ICSS:SPACH:ENABLE:USER:ORIG:ADDRess?]
Returns current state of User Originating Address optional message.

## SUBaddress $n$

[CSS:SPACH:ENABLE:USER:ORIG:SUBaddress n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Originating Subaddress optional message.

## SUBaddress?

ICSS:SPACH:ENABLE:USER:ORIG:SUBaddress?]
Returns current state of User Originating Subaddress optional message.

## PRESentation $n$

[CSS:SPACH:ENABLE:USER:ORIG:PRESentation n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Originating Address Presentation Indicator optional message.

## PRESentation?

[CSS:SPACH:ENABLE:USER:ORIG:PRESentation?]
Returns current state of User Originating Address Presentation Indicator optional message.

## GROUP $n$

[CSS:SPACH:ENABLE:USER:GROUP n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Group optional message.

## GROUP?

[CSS:SPACH:ENABLE:USER:GROUP?]
Returns current state of User Group optional message.

## RDATA:

## DELAY $n$

[CSS:SPACH:ENABLE:RDATA:DELAY n]
Enables ( $n=1$ ) or disables ( $n=0$ ) R-DATA Delay optional message.

## DELAY?

[CSS:SPACH:ENABLE:RDATA:DELAY?]
Returns current state of R-DATA Delay optional message.

## CSS:SPACH:

## ENABLE:

PFC:

## Paging Frame Class.

ASSIGNment $n$
[CSS:SPACH:ENABLE:PFC:ASSIGNment n]
Enables ( $n=1$ ) or disables ( $n=0$ ) PFC Assignment optional message.

## ASSIGNment?

[CSS:SPACH:ENABLE:PFC:ASSIGNment?]
Returns current state of PFC Assignment optional message.

## RNUM:

Registration Number.
LIST $n$
[CSS:SPACH:ENABLE:RNUM:LIST n]
Enables ( $n=1$ ) or disables ( $n=0$ ) RNUM List optional message.
LIST?
[CSS:SPACH:ENABLE:RNUM:LIST?]
Returns current state of RNUM List optional message.
MSID:
Mobile Station Identification.
ASSIGNment $n$
[CSS:SPACH:ENABLE:MSID:ASSIGNment n]
Enables ( $n=1$ ) or disables ( $n=0$ ) MSID Assignment optional message.

## ASSIGNment?

[CSS:SPACH:ENABLE:MSID:ASSIGNment?]
Returns current state of MSID Assignment optional message.
PSID_RSID:
Private/Residential System Identification.
AVAILable $n$
[CSS:SPACH:ENABLE:PSID_RSID:AVAILable n]
Enables ( $n=1$ ) or disables ( $n=0$ ) PSID/RSID Available optional message.
AVAILable?
[CSS:SPACH:ENABLE:PSID_RSID:AVAILable?]
Returns current state of PSID/RSID Available optional message.

## CSS:SPACH:

## ENABLE:

## DIRectory:

ADDRess $n$
[CSS:SPACH:ENABLE:DIRectory:ADDRess n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Directory Address optional message.

## ADDRess?

[CSS:SPACH:ENABLE:DIRectory:ADDRess?]
Returns current state of Directory Address optional message.

## SUBaddress $n$

[CSS:SPACH:ENABLE:DIRectory:SUBaddress n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Directory Subaddress optional message.

## SUBaddress?

[CSS:SPACH:ENABLE:DIRectory:SUBaddress?]
Returns current state of Directory Subaddress optional message.

## REJect:

TIME $n$
[CSS:SPACH:ENABLE:REJect:TIME n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Reject Time optional message.

## TIME?

[CSS:SPACH:ENABLE:REJect:TIME?]
Returns current state of Reject Time optional message.

## ALPHA:

## SID $n$

[CSS:SPACH:ENABLE:ALPHA:SID n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Alphanumeric System ID optional message.

## SID?

[CSS:SPACH:ENABLE:ALPHA:SID?]
Returns current state of Alphanumeric System ID optional message.

## PSID_RSID $n$

[CSS:SPACH:ENABLE:ALPHA:PSID_RSID n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Alphanumeric PSID/RSID List optional message.
PSID_RSID?
ICSS:S̄PACH:ENABLE:ALPHA:PSID_RSID?]
Returns current state of Alphanumeric PSID/RSID List optional message.

## CSS:SPACH:

## ENABLE:

QUEue:
POSition $n$
[CSS:SPACH:ENABLE:QUEue:POSition n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Queue Position optional message.
POSition?
[CSS:SPACH:ENABLE:QUEue:POSition?]
Returns current state of Queue Position optional message.

## MACA:

LIST $n$
[CSS:SPACH:ENABLE:MACA:LIST n]
Enables ( $n=1$ ) or disables ( $n=0$ ) MACA_LIST optional message.
LIST?
[CSS:SPACH:ENABLE:MACA:LIST?]
Returns current state of MACA_LIST optional message.

## LIST:

OTHER $n$
[CSS:SPACH:ENABLE:MACA:LIST:OTHER n]
Enables ( $n=1$ ) or disables ( $n=0$ ) MACA_LIST (Other Hyperband) optional message.

## OTHER?

[CSS:SPACH:ENABLE:MACA:LIST:OTHER?]
Returns current state of MACA_LIST (Other Hyperband) optional message.

## 9-13 DCCH MOBILE STATION SIMULATION COMMANDS

This section contains the TMAC commands necessary to simulate the transmit portion of a mobile station operating on the Digital Control Channel (DCCH). These commands are to be used, primarily, as "tools" in applications.

The Sp Tst must be receiving data that contains valid sync words on the Forward Digital Control Channel (FDCCH) before it can transmit on the Reverse Digital Control Channel (RDCCH). The RDCCH transmitter waits for a sync word, in the slot to which it is assigned, before transmitting.

## 9-13-1 TDMA TRANSMISSION OVERVIEW

The type of TDMA Transmission (as discussed in each subsection of Section 9-13) is determined by three different factors figured in the setup:

- Length
- Mode
- Selection of type of data for data field

The Length can be Normal or Abbreviated. In a Normal length message, the User Data block is 101 bits long, while in an Abbreviated length message, the User Data block is only 79 bits long. In both cases the TDMA slot length is the same ( 324 bits); however, in the Abbreviated Length Message, extra Ramp Time bits and Guard Time bits are added that make up the difference. See Figure 9-4 for an illustration of a Normal Length Message. See Figure 9-5 for an illustration of an Abbreviated Length Message.
The Mode can be Contiguous or Sub Channel. In a Contiguous transmission mode, the Sp Tst transmits at a Full-Rate TDMA in the slot determined by the MSS:SLOT $n$ command discussed in 9-13-2. In a Sub Channel transmission mode, the Sp Tst transmits in a Sub Channel slot. See Figure 9-6 for an illustration of a Contiguous transmission and a Sub Channel transmission.

The data field can consist of either random data or user-defined data.


Figure 9-4 Normal Length Message in the RDCCH


Figure 9-5 Abbreviated Length Message in the RDCCH


Figure 9-6 Contiguous and Sub Channel Transmissions

## 9-13-2 SETUP COMMANDS

To set up the Sp Tst for Mobile Station Simulation (MSS), use the following TMAC commands:
$\left.\begin{array}{l}\text { - MSS:SETup } \\ \text { - MSS:CHANnel } n\end{array}\right\} \begin{aligned} & \text { These two are to be used first } \\ & \text { in setting up an application }\end{aligned}$

- MSS:RFLVL $n$
- MSS:SLOT $n$


## MSS:

## SETup

[MSS:SETUP]
Configures the Sp Tst to simulate a Mobile Station. The HOST is forced into Duplex Mode through selection of Duplex screen.

## CONFigure:

## USER

[MSS:CONFigure:USER]
This command is identical to the MSS:SETup command except that the USER screen is selected.

## NONE

[MSS:CONFigure:NONE]
This command is identical to the MSS:SETup command except that the Test Set remains in the screen currently displayed.

## CHANnel $n$

[MSS:CHANnel n]
Selects Reverse Channel on which to transmit.

| FREQuency:BAND (See 9-3) | RANGE OF $\boldsymbol{n}$ |
| :---: | :---: |
| 0 | 1 to 333 |
| 1 | 1 to 1023 |
| 2 | 1 to 1999 |

When setting up the channel, the Duplex Operation screen frequencies do not change. In addition, if the Duplex Operation is in Channel Mode and the screen is reselected (using the Front Panel of the HOST), then the HOST Channel Mode overrides these channel settings.

## CHANnel?

[MSS:CHANnel?]
Returns current mobile simulation channel.

## MSS:

RATE $n$
[MSS:RATE n]
Selects TDMA transmission rate: full ( $n=0$ ) or half $(n=1)$.
RATE?
[MSS:RATE?]
Returns current state of TDMA transmission RATE.
RFLVL $n$
[MSS:RFLVL n]
Specifies RF output level in dBm at which to transmit. Range of $n$ is -127.0 to -20.0.
SLOT $n$
[MSS:SLOT n]
Specifies DCCH full rate pair or half rate Slot in which to transmit. Range of $n$ is 1 to 3 (full) or 1 to 6 (half).

## SLOT?

[MSS:SLOT?]
Returns current value of DCCH slot selection.

## 9-13-3 RDCCH RAW GENERATOR

The following commands direct the RDCCH Raw Generator to transmit data on the RDCCH synchronous to the FDCCH. The RDCCH Raw Generator transmits user data in the following methods as specified by the MSS:RDCCH:DVCC, MSS:RDCCH:LENGth, MSS:RDCCH:MODE and MSS:RDCCH:SELect commands:

1. Full-Rate TDMA Channel as Normal or Abbreviated transmission bursts

- Random Data
- User-Defined Data

2. Within a Random Access Channel (RACH) Sub-Channel as Normal or Abbreviated transmission bursts

- Random Data
- User-Defined Data

The setup commands specified in section 9-13-2 are critical and must be taken into consideration when using this function.

The preamble, sync words, and sync+ as specified in IS-136 as well as the Cyclic Redundancy Check (CRC), convolutional encoding and interleaving are performed by the Sp Tst.

The data in the DATA field is set up by the user as user-defined pattern or random data.
Use the following commands to specify the Length and Mode of the Reverse Digital Control Channel:

## MSS:RDCCH:

## LENGth:

## ABBREViated

[MSS:RDCCH:LENGTh:ABBREViated]
Selects Abbreviated length transmission bursts on RDCCH.
NORMaI
[MSS:RDCCH:LENGth:NORMal]
Selects Normal length transmission bursts on RDCCH.
MODE:

## CONTiguous

[MSS:RDCCH:MODE:CONTiguous]
Selects transmission in Full-Rate TDMA Channel.

## SUBCHANnel

[MSS:RDCCH:MODE:SUBCHANnel]
Selects transmission in RACH Sub Channel.

## MSS:RDCCH:

## SELect:

## RANDom

[MSS:RDCCH:SELect:RANDom]
Selects Random Data for DATA Field in transmission bursts on RDCCH.

## USER

[MSS:RDCCH:SELect:USER]
Selects a user-defined data pattern for DATA Field (See MSS:RDCCH:USER) in transmission bursts on RDCCH.

DVCC $n$
[MSS:RDCCH:DVCC n]
Specifies Digital Verification Color Code. Range of $n$ is 1 to 255.
DVCC is required to calculate the correct CRC.

## DVCC?

[MSS:RDCCH:DVCC?]
Returns current value of Digital Verification Color Code.
TA $n$
[MSS:RDCCH:TA n]
Specifies time alignment adjustment from Standard Offset Reference (SOR) in half symbols. Range of $n$ is -10 to $60 . n=0$ specifies no time alignment adjustment.

TA?
[MSS:RDCCH:TA?]
Returns current value of time alignment adjustment from Standard Offset Reference (SOR) in half symbols.

If the data selected is USER, then the data is specified by the following command:

## MSS:RDCCH:

USER $n$, word
[MSS:RDCCH:USER n,word]
Specifies each 16 bit word indexed by $n$. Range of $n$ is 0 to 6 ; range of word is 0 to \#hFFFF.
USER data consists of 7 words (Normal Length) or 5 words (Abbreviated Length). Each word $(n)$ consists of 16 bits. $n=0$ selects the most significant word; $n=6$ selects the least significant word. The first bit of word is the most significant bit, the last bit of word is the least significant bit (left justified).


9110020

Figure 9-7 User Data Message Diagram
Data left justified is defined as bits aligned such that the most significant bit occurs first, followed by successively less significant bits.

Use the following commands to Start and Stop the data:

## STARt

[MSS:RDCCH:STARt]
Starts transmission in RDCCH.

## STOP

[MSS:RDCCH:STOP]
Stops transmission in RDCCH.

## 9-13-4 RANDOM ACCESS CONTROL CHANNEL (RACH) MESSAGE GENERATOR

To simulate a mobile access on the DCCH, the following commands direct the RACH Message Generator to transmit a fixed length, user-defined message as Normal or Abbreviated transmission bursts in a Full-Rate TDMA Channel or within a RACH Sub-channel on the RDCCH synchronous to the FDCCH (See Figure 9-9 and Figure 9-10).

The MSS:RDCCH:MODE, MSS:RDCCH:DVCC, MSS:RDCCH:LENGth and
MSS:RDCCH:MESSage:LENGth commands are used to specify the type of transmission

The setup commands specified in Section 9-13-2 are critical and must be taken into consideration when using this function.

## MSS:RDCCH:

MESSage:
LENGTh $n$
[MSS:RDCCH:MESSage:LENGth n]
Specifies the length (number of transmission bursts) of RDCCH message. Range of $n$ is 1 to 320.

## LENGth?

[MSS:RDCCH:MESSage:LENGth?]
Returns current RDCCH message length.
SFP $n$
[MSS:RDCCH:MESSage:SFP n]
Selects the Superframe Phase reference for transmission of user-defined message (See MSS:RDCCH:MESSage:DATA). Range of $n$ is 0 to 31 .

The first transmission burst of the RACH message is transmitted synchronous to the slot of the Superframe contained in the Superframe Phase selected by this command.

## SFP?

[MSS:RDCCH:MESSage:SFP?]
Returns current Superframe Phase reference.

MSS:RDCCH:

## MESSage:

DATA m,n,word
[MSS:RDCCH:MESSage:DATA m,n,word]
Specifies a 16 bit data word (indexed by $n$ ) in selected transmission burst ( $m$ ). The range of $m$ is 0 to 319 ; range of $n$ is 0 to 6 ; range of word is 0 to \#hFFFF.

USER data consists of 1 to 320 transmission bursts. Each burst consists of 7 words (Normal Length) or 5 words (Abbreviated Length). $n=0$ selects the most significant word; $n=6$ selects the least significant word. The first bit of word is the most significant bit, the last bit of word is the least significant bit.

The MSS:RDCCH:MESSage:DATA and the MSS:RDCCH:MESSage:LENGth commands need to be used to fully define a RACH message.


Figure 9-8 RDCCH Message Diagram


Figure 9-9 RACH Message Transmission (Contiguous)


RDCCH

Figure 9-10 RACH Message Transmission (Sub Channel)

## MSS:RDCCH:

## MESSage:

## ACCESS:

TYPE:

## SFP

[MSS:RDCCH:MESSage:ACCESS:TYPE:SFP]
Selects Superframe Phase synchronization.
NONE
[MSS:RDCCH:MESSage:ACCESS:TYPE:NONE]
Selects no synchronization.
TYPE?
[MSS:RDCCH:MESSage:ACCESS:TYPE?]
Returns current value of Type of Access.
SEND
[MSS:RDCCH:MESSage:SEND]
Sends RACH message once (Repeat is disabled) or repeatedly (Repeat is enabled).
See MSS:RDCCH:MESSage:REPeat and MSS:RDCCH:TA.
STOP
[MSS:RDCCH:MESSage:STOP]
Stops sending RACH message.
Applicable only when Repeat is turned on (See MSS:RDCCH:MESSage:REPeat:ON).

## MSS:RDCCH:

MESSage:
REPeat:
ON
[MSS:RDCCH:MESSage:REPeat:ON]
Sends RACH message at Repeat Rate after initial transmission.
Each repeat of the RACH message is synchronized to the selected Superframe Phase (SFP). See MSS:RDCCH:MESSage:SFP command.

## OFF

[MSS:RDCCH:MESSage:REPeat:OFF]
Sends RACH message once after initial transmission.
SYNC $n$
[MSS:RDCCH:MESSage:REPeat:SYNC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Repeat Synchronizing.
If repeat synchronizing is enabled, then each repeat of the RACH message is synchronized to the designated superframe phase (SFP).

## SYNC?

[MSS:RDCCH:MESSage:REPeat:SYNC?]
Returns current state of Repeat Synchronizing.
CORRUPT $n$
[MSS:RDCCH:MESSage:CORRUPT n]
Selects the frame of the RACH message to corrupt. Range of $n$ is 0 to 320.
If 0 is selected, then none of the frames of the message are corrupted.

## CORRUPT?

[MSS:RDCCH:MESSage:CORRUPT?]
Returns current corrupted frame.

## 9-13-5 RACH LAYER 3 MESSAGE BUILDER

The messages that are sent by the RACH Message Generator can be created with the RACH Layer 3 message builder. The process of building a RACH message can be broken down into five steps.

- Setup the Layer 2 data fields that cannot be determined from the layer 3 messages being sent.
- Select the Message Types that are to be included in the Layer 3 message ( 1 to 8 ).
- Set up the Elements that make up the specified messages.
- Enable or disable the optional fields.
- Build the RACH message.


## A. LAYER 2 DATA FIELDS

Some of the Layer 2 data fields are determined by the Layer 3 message being sent. The remaining Layer 2 data fields are set up by the following commands.

## MSS:RDCCH:

## LAYER2:

```
IDT n
[MSS:RDCCH:LAYER2:IDT n]
Specifies Identity Type. Range of n is 0 to 3.
IDT?
[MSS:RDCCH:LAYER2:IDT?]
Returns current value of Identity Type.
EHI \(n\)
[MSS:RDCCH:LAYER2:EHI n]
Enables ( }n=1\mathrm{ ) or disables ( }n=0\mathrm{ ) Extended Header Information.
```


## EHI?

```
[MSS:RDCCH:LAYER2:EHI?]
Returns current state of Extended Header Information.
MEA \(n\)
[MSS:RDCCH:LAYER2:MEA n]
Specifies Message Encryption Algorithm. Range of \(n\) is 0 to 3 .
```


## MEA?

```
[MSS:RDCCH:LAYER2:MEA?]
Returns current value of Message Encryption Algorithm.
MEK \(n\)
[MSS:RDCCH:LAYER2:MEK n]
Specifies Message Encryption Key. Range of \(n\) is 0 to 3 .
```


## MEK?

```
[MSS:RDCCH:LAYER2:MEK?]
Returns current value of Message Encryption Key.
```


## MSS:RDCCH:

## LAYER2:

MSID:
MS $n$
[MSS:RDCCH:LAYER2:MSID:MS n]
Specifies the 18 Most Significant Bits of Mobile Station Identification. Range of $n$ is 0 to \#h3FFFF.

MS?
[MSS:RDCCH:LAYER2:MSID:MS?]
Returns the 18 Most Significant Bits of Mobile Station Identification.
LS $n$
[MSS:RDCCH:LAYER2:MSID:LS n]
Sets the 32 Least Significant Bits of Mobile Station Identification. Range of $n$ is 0 to \#hFFFFFFFF.

## LS?

[MSS:RDCCH:LAYER2:MSID:LS?]
Returns the 32 Least Significant Bits of Mobile Station Identification.
MIN " $n$ "
[MSS:RDCCH:LAYER2:MIN "n"]
Specifies Mobile Identification Number. $n$ is an ASCII string e.g. "316/522-4981".
This MIN is used to set up the MSID field when the Identity Type (IDT) is equal to 2.
This is for the convenience of the user since the MIN of the phone, and not the MSID, is usually known.

## MIN?

[MSS:RDCCH:LAYER2:MIN?]
Returns current Mobile Identification Number (ASCII string).

## NL3M $n$

[MSS:RDCCH:LAYER2:NL3M n]
Specifies Number Layer 3 Messages. Range of $n$ is 0 to 7 .
Besides being part of the Layer 2 frame, this command specifies the number of Layer 3 messages that are built into the RACH message by the MSS:RDCCH:
BUILD command.

## NL3M?

[MSS:RDCCH:LAYER2:NL3M?]
Returns current value of Number Layer 3 Messages.

## MSS:RDCCH:

LAYER2:
ARQ $n$
[MSS:RDCCH:LAYER2:ARQ n]
Enables ( $n=1$ ) or disables ( $n=0$ ) ARQ status frame.
If ARQ is enabled, then the message built is a Layer 2 ARQ status frame.

## ARQ?

[MSS:RDCCH:LAYER2:ARQ?]
Returns current state of $A R Q$ status frame.
PEA $n$
[MSS:RDCCH:LAYER2:PEA n]
Specifies Partial Echo Assigned. Range of $n$ is 0 to 63.

## PEA?

[MSS:RDCCH:LAYER2:PEA?]
Returns current value of Partial Echo Assigned.
FRNO $n$
[MSS:RDCCH:LAYER2:FRNO n]
Specifies Frame Number Map. Range of $n$ is 0 to \#hFFFFFFFF.

## FRNO?

[MSS:RDCCH:LAYER2:FRNO?]
Returns current value of Frame Number Map.
RSVD:
ARQ $n$
[MSS:RDCCH:LAYER2:RSVD:ARQ n]
Specifies Automatic Retransmission Request RSVD. Range of $n$ is 0 to 3 .

## ARQ?

[MSS:RDCCH:LAYER2:RSVD:ARQ?]
Returns current value of $A R Q$. Returns -1 if not available.

## EHI $n$

[MSS:RDCCH:LAYER2:RSVD:EHI n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Extended Header Indicator RSVD.

## EHI?

[MSS:RDCCH:LAYER2:RSVD:EHI?]
Returns current state of Extended Header Indicator RSVD. Returns -1 if not available.

## END $n$

[MSS:RDCCH:LAYER2:RSVD:END n]
Enables $(n=1)$ or disables $(n=0)$ END frame RSVD.

## END?

[MSS:RDCCH:LAYER2:RSVD:END?]
Returns current state of END frame RSVD. Returns -1 if not available.

The other Layer 2 data fields are set up as determined by the messages being sent in the Layer 3 data field.

BT If the messages can be sent in one frame then $B T=3$ for a BEGIN and END frame. For a multi-frame message, $B T=0$ for the BEGIN frame, $B T=1$ for the CONTINUE frame, and BT $=2$ for the END frame. If the message is an ARQ status frame then $B T=4$.
$\mathrm{Cl} \quad$ The first CONTINUE frame sent has its Cl field set to 0 and toggles for each additional CONTINUE frame. If the SCF information received on the FDCCH determines that a CONTINUE frame needs to be resent, then the Cl field remains the same for that frame.
L3LI This is determined by the length of the specified layer 3 message in octets.
RSVD All reserved fields are set to zero.

## B. RACH MESSAGE TYPES.

A RACH may include from 1 to 8 Layer 3 messages. The NL3M field determines the number of Layer 3 messages included in the RACH. The following commands select the message types sent as Layer 3 messages. The parameter $n$ in each case determines the order and the selected messages types. As an example, if three messages are to be sent (NL3M = 2), then the message types selected with $n=0, n=1$ and $n=2$ would be the messages built into the RACH message. These selected messages would be positioned in the RACH message, starting with the message type selected with $n=0$.

## MSS:RDCCH:

## MSGtype:

The user may specify from 1 to 8 Message Types.
AUDITcon $n$
[MSS:RDCCH:MSGType:AUDITcon n]
Selects Audit Confirmation to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

AUTHentication n
[MSS:RDCCH:MSGtype:AUTHentication n]
Selects Authentication to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

BSCHAL $n$
[MSS:RDCCH:MSGtype:BSCHAL n]
Selects Base Station Challenge Order to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

## BSMC $n$

[MSS:RDCCH:MSGtype:BSMC n]
Selects BSMC Message Delivery to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

## CAPability $n$

[MSS:RDCCH:MSGtype:CAPability n]
Selects Capability Report to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

MACA $n$
[MSS:RDCCH:MSGtype:MACA n]
Selects MACA Report to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

## ORIGination $n$

[MSS:RDCCH:MSGtype:ORIGination n]
Selects Origination to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

## MSS:RDCCH:

## MSGtype:

The user may specify from 1 to 8 Message Types.

## PAGE_RESPonse $n$

[MSS:- $\overline{D C C C H: M S G t y p e: P A G E-R E S P o n s e ~ n] ~}$
Selects Page Response to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

## QDISConnect $n$

[MSS:RDCCH:MSGtype:QDISConnect n]
Selects Queue Disconnect to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

RDATA $n$
[MSS:RDCCH:MSGtype:RDATA n]
Selects R-DATA to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

## RDATA:

## ACCept $n$

[MSS:RDCCH:MSGtype:RDATA:ACCept n]
Selects R-DATA ACCEPT to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

REJect $n$
[MSS:RDCCH:MSGtype:RDATA:REJect n]
Selects R-DATA REJECT to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

## REGistration $n$

[MSS:RDCCH:MSGtype:REGistration n]
Selects Registration to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

## SERial $n$

[MSS:RDCCH:MSGtype:SERial n]
Selects Serial Number to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

SOC $n$
[MSS:RDCCH:MSGtype:SOC n]
Selects SOC Message Delivery to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

## SPACHcon n

[MSS:RDCCH:MSGtype:SPACHCon n]
Selects SPACH Confirmation to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

## MSS:RDCCH:

## MSGtype:

The user may specify from 1 to 8 Message Types

## SSDUPcon $n$

[MSS:RDCCH:MSGtype:SSDUPcon n]
Selects SSD Update Order Confirmation to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

TEST $n$
[MSS:RDCCH:MSGtype:TEST n]
Selects Test Registration to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

UCHALcon $n$
[MSS:RDCCH:MSGtype:UCHALcon n]
Selects Unique Challenge Order Confirmation to be transmitted as a Message Type. The position of the message is determined by $n$. Range of $n$ is 0 to 7 .

## C. RACH LAYER 3 DATA FIELDS

The values of the elements that make up the Layer 3 messages are determined by the commands in this section. Generally, the name of each command closely matches or is an abbreviation or acronym of the associated data element specified in IS-136.

## MSS:RDCCH:

PD $n$
[MSS:RDCCH:PD n]
Specifies Protocol Discriminator. Range of $n$ is 0 to 3 .

## PD?

[MSS:RDCCH:PD?]
Returns current value of Protocol Discriminator.
PFC_1 $n$
[MSS:RDCCH:PFC_1 n]
Specifies Paging Frame Class Minus One. Range of $n$ is 0 to 7 .
PFC 1?
[MSS:RDCCH:PFC_1?]
Returns current value of Paging Frame Class.

## PSID_RSID:

SELect $n$
[MSS:RDCCH:PSID_RSID:SELect n]
Specifies Selected PSID/RSID (Private System Identification/Residential System Identification). Range of $n$ is 0 to 15.

SELect?
[MSS:RDCCH:PSID_RSID:SELect?]
Returns current value of Selected PSID/RSID.
MAP $n$
[MSS:RDCCH:PSID_RSID:MAP n]
Specifies PSID/RSID Map. Range of $n$ is 0 to \#hFFFF.
MAP?
[MSS:RDCCH:PSID_RSID:MAP?]
Returns current value of PSID/RSID Map.

## MSS:RDCCH:

## SUBaddress:

LENGth $n$
[MSS:RDCCH:SUBaddress:LENGth n]
Specifies Subaddress Length. Range of $n$ is 1 to 21 .

## LENGth?

[MSS:RDCCH:SUBaddress:LENGth?]
Returns current value of Subaddress Length.
ODD_EVEN $n$
[MSS:RDCCH:SUBaddress:ODD_EVEN n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Subaddress Odd/Even indicator.

## ODD EVEN?

[MSS:RDCCH:SUBaddress:ODD_EVEN?]
Returns current state of Subaddress Odd/Even indicator.
TYPE $n$
[MSS:RDCCH:SUBaddress:TYPE n]
Specifies Type of subaddress. Range of $n$ is 0 to 3 .
TYPE?
[MSS:RDCCH:SUBaddress:TYPE?]
Returns current value of Type of subaddress.
REServed $n$
[MSS:RDCCH:SUBaddress:REServed n]
Specifies number of subaddress Reserved fields. Range of $n$ is 0 to 15 .
REServed?
[MSS:RDCCH:SUBaddress:REServed?]
Returns current number of subaddress Reserved fields.

## ADDRess $n, m$

[MSS:RDCCH:SUBaddress:ADDRess $n, m$ ]
Specifies Subaddress ( $m$ ) selected by $n$. Range of $n$ is 0 to 19 ; range of $m$ is 0 to 255.

ADDRess? $n$
[MSS:RDCCH:SUBaddress:ADDRess? n]
Returns current value of Subaddress selected by $n$. Range of n is 0 to 19 .

## MSS:RDCCH:

## DISPlay:

LENGth n
[MSS:RDCCH:DISPlay:LENGth n]
Specifies Length of Display Information. Range of $n$ is 0 to 82 .

## LENGth?

[MSS:RDCCH:DISPlay:LENGth?]
Returns current value of Length of Display Information.

## CHARacter $n, m$

 [MSS:RDCCH:DISPlay:CHARacter n,m]Specifies Display Character (m) selected by Index ( $n$ ). Range of $n$ is 0 to 81; range of $m$ is 0 to 255 .

The characters are set up one at a time.

## CHARacter? $n$

[MSS:RDCCH:DISPlay:CHARacter? n]
Returns current value of Display Character selected by $n$. Range of $n$ is 0 to 81 .

## COUNt $n$

[MSS:RDCCH:COUNt n]
Specifies COUNT used for the Authentication process. Range of $n$ is 0 to 63 .

## COUNt?

[MSS:RDCCH:COUNt?]
Returns current value of COUNt.
RANDC $n$
[MSS:RDCCH:RANDC n]
Specifies RANDC used in the Authentication process. Range of $n$ is 0 to 255 .

## RANDC?

[MSS:RDCCH:RANDC?]
Returns current value of RANDC.

## AUTHR $n$

[MSS:RDCCH:AUTHR n]
Specifies AUTHR used in the Authentication process. Range of $n$ is 0 to \#h3FFFF.
AUTHR?
[MSS:RDCCH:AUTHR?]
Returns current value of AUTHR.
RANDBS $n$
[MSS:RDCCH:RANDBS n]
Specifies RANDBS used in the Authentication process. Range of $n$ is 0 to \#hFFFFFFFF.

## RANDBS?

[MSS:RDCCH:RANDBS?]
Returns current value of RANDBS.

## MSS:RDCCH:

BSMC $n$
[MSS:RDCCH:BSMC n]
Specifies Base Station Manufacture Code. Range of $n$ is 0 to 255 .

## BSMC?

[MSS:RDCCH:BSMC?]
Returns current value of Base Station Manufacture Code.

## CUSTom:

LENGth n
[MSS:RDCCH:CUSTom:LENGTh n]
Specifies Custom Control Length. Range of $n$ is 1 to 253 .

## LENGth?

[MSS:RDCCH:CUSTom:LENGth?]
Returns current value of Custom Control Length.
CONTrol $n, x$
[MSS:RDCCH:CUSTom:CONTrol $n, x$ ]
Specifies Custom Control byte ( $x$ ) selected by $n$. Range of $n$ is 0 to 252; range of $x$ is 0 to 255 .

CONTrol? $n$
[MSS:RDCCH:CUSTOm:CONTrol? n]
Returns current byte value of Custom Control selected by $n$. Range of $n$ is 0 to 252.

PROTocol:
VERsion $n$
[MSS:RDCCH:PROTocol:VERsion n]
Specifies Protocol Version. Range of $n$ is 0 to 15 .

## VERsion?

[MSS:RDCCH:PROTOcol:VERsion?]
Returns current value of Protocol Version.
SCM $n$
[MSS:RDCCH:SCM n]
Specifies Station Class Mark. Range of $n$ is 0 to 31 .
SCM?
[MSS:RDCCH:SCM?]
Returns current value of Station Class Mark.

## MSS:RDCCH:

## VINtage:

## SOFTware $n$

[MSS:RDCCH:VINtage:SOFTware n]
Specifies Software Vintage. Range of $n$ is 0 to 63 .

## SOFTware?

[MSS:RDCCH:VINtage:SOFTware?]
Returns current value of Software Vintage.
FIRMware $n$
[MSS:RDCCH:VINtage:FIRMware n]
Specifies Firmware Vintage. Range of $n$ is 0 to 63 .
FIRMware?
[MSS:RDCCH:VINtage:FIRMware?]
Returns current value of Firmware Vintage.

## MODEL $n$

[MSS:RDCCH:MODEL n]
Specifies Model Number. Range of $n$ is 0 to 15 .

## MODEL?

[MSS:RDCCH:MODEL?]
Returns current value of Model Number.

## MANufacture n

[MSS:RDCCH:MANufacture n]
Specifies Manufacture Code. Range of $n$ is 0 to 255 .

## MANufacture?

[MSS:RDCCH:MANufacture?]
Returns current value of Manufacture Code.

## SUPPort:

## MAX:

PFC $n$
[MSS:RDCCH:SUPPort:MAX:PFC n]
Specifies MAX_SUPPORTED_PFC. Range of $n$ is 0 to 7 .
PFC?
[MSS:RDCCH:SUPPort:MAX:PFC?]
Returns current value of MAX_SUPPORTED_PFC.
SOC n
[MSS:RDCCH:SUPPort:SOC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) SOC Support.
SOC?
[MSS:RDCCH:SUPPort:SOC?]
Returns current state of SOC Support.

## MSS:RDCCH:

## SUPPort:

BSMC $n$
[MSS:RDCCH:SUPPort:BSMC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) BSMC Support.
BSMC?
[MSS:RDCCH:SUPPort:BSMC?]
Returns current state of BSMC Support.
ASYNC $n$
[MSS:RDCCH:SUPPort:ASYNC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Async Data Support.
ASYNC?
[MSS:RDCCH:SUPPort:ASYNC?]
Returns current state of Async Data Support.
G3fax $n$
[MSS:RDCCH:SUPPort:G3fax n]
Enables ( $n=1$ ) or disables ( $n=0$ ) G3-Fax Support.

## G3fax?

[MSS:RDCCH:SUPPort:G3fax?]
Returns current state of G3-Fax Support.
SMS $n$
[MSS:RDCCH:SUPPort:SMS n]
Enables ( $n=1$ ) or disables ( $n=0$ ) SMS Broadcast Support.
SMS?
[MSS:RDCCH:SUPPort:SMS?]
Returns current state of SMS Broadcast Support.

## SUBaddress $n$

[MSS:RDCCH:SUPPort:SUBaddress n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Subaddressing Support.

## SUBaddress?

[MSS:RDCCH:SUPPort:SUBaddress?]
Returns current state of Subaddressing Support.

## FREQuency:

BANDS $n$
[MSS:RDCCH:SUPPort:FREQuency:BANDS n]
Specifies Supported Frequency Bands. Range of $n$ is 0 to 255 .

## BANDS?

[MSS:RDCCH:SUPPort:FREQuency:BANDS?]
Returns current value of Supported Frequency Bands.

## MSS:RDCCH:

## SUPPort:

IRA $n$
[MSS:RDCCH:SUPPort:IRA n]
Enables ( $n=1$ ) or disables ( $n=0$ ) International Reference Alphabet Support.
IRA?
[MSS:RDCCH:SUPPort:IRA?]
Returns current state of IRA Support.
USER $n$
[MSS:RDCCH:SUPPort:USER n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Group Support.
USER?
[MSS:RDCCH:SUPPort:USER?]
Returns current state of User Group Support.
ANA800 n
[MSS:RDCCH:SUPPort:ANA800 n]
Enables ( $n=1$ ) or disables $(n=0) 800 \mathrm{MHz}$ Analog Speech Support.
Indicates if mobile station supports analog speech in the $800 \mathrm{MHz} \mathrm{Hyperband}$.

## ANA800?

[MSS:RDCCH:SUPPort:ANA800?]
Returns current state of 800 MHz Analog Speech Support.
HALF $n$
[MSS:RDCCH:SUPPort:HALF n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Half-Rate DTC Support.
Indicates if mobile station supports half-rate Digital Traffic Channels.

## HALF?

[MSS:RDCCH:SUPPort:HALF?]
Returns current state of Half-Rate DTC Support.
DOUBIe $n$
[MSS:RDCCH:SUPPort:DOUBle n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Double Rate DTC Support.
Indicates if mobile station supports double rate Digital Traffic Channels.

DOUBIe?
[MSS:RDCCH:SUPPort:DOUBle?]
Returns current state of Double Rate DTC Support.

## MSS:RDCCH:

## SUPPort:

TRIPIe $n$
[MSS:RDCCH:SUPPort:TRIPIe n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Triple Rate DTC Support.
Indicates if the mobile station supports triple rate Digital Traffic Channels.

## TRIPle?

[MSS:RDCCH:SUPPort:TRIPle?]
Returns current state of Triple Rate DTC Support.
STU_III $n$
[MSS:RDCCH:SUPPort:STU_IIIn]
Enables ( $n=1$ ) or disables ( $n=0$ ) STU-III Support.
STU_III?
[MSS:RDCCH:SUPPort:STU_II?]
Returns current state of STU-III Support.

## ALT_SOC n

[MSS:RDCCH:SUPPort:ALT_SOC n]
Specifies ALT_SOC_Support. Range of $n$ is 0 to \#hFFF (0 to 4095).
ALT_SOC?
[MSS:RDCCH:SUPPort:ALT_SOC?]
Returns current value of ALT_SOC Support.
VC_MAP $n$
[MSS:RDCCH:VC_MAP n]
Specifies Voice Coder Map Info. Range of $n$ is 0 to \#h3F (0 to 63).
VC_MAP?
[MSS:RDCCH:VC_MAP?]
Returns current value of Voice Coder Map Info.

## MSS:RDCCH:

## MEASurement:

## LTM:

## WER $n$

[MSS:RDCCH:MEASurement:LTM:WER n]
Specifies LTM Measurement Word Error Rate. Range of $n$ is 0 to 7 .
WER?
[MSS:RDCCH:MEASurement:LTM:WER?]
Returns current value of LTM Measurement Word Error Rate.

## BER $n$

[MSS:RDCCH:MEASurement:LTM:BER n]
Specifies Word Error Rate LTM Measurement Bit Error Rate. Range of $n$ is 0 to 7.

## BER?

[MSS:RDCCH:MEASurement:LTM:BER?]
Returns current value of LTM Measurement Bit Error Rate.
RSS $n$
[MSS:RDCCH:MEASurement:LTM:RSS n]
Specifies LTM Measurement Receive Signal Strength. Range of $n$ is 0 to 7 .

## RSS?

[MSS:RDCCH:MEASurement:LTM:RSS?]
Returns current value of LTM Measurement Receive Signal Strength.
FULL $n$
[MSS:RDCCH:MEASurement:LTM:FULL n]
Enables ( $n=1$ ) or disables ( $n=0$ ) LTM Measurement Full Measurement Indicator.

FULL?
[MSS:RDCCH:MEASurement:LTM:FULL?]
Returns current state of LTM Measurement Full Measurement Indicator.

## MSS:RDCCH:

## MEASurement:

STM:
NV $n$
[MSS:RDCCH:MEASurement:STM:NV n]
Specifies STM Measurement Number of Values. Range of $n$ is 0 to 15.
NV?
[MSS:RDCCH:MEASurement:STM:NV?]
Returns current value of STM Measurement Number of Values.
RSS $n, m$
[MSS:RDCCH:MEASurement:STM:RSS n,m]
Specifies value of ST_RSS $(m)$ selected by $n$. Range of $n$ is 0 to 31 ; range of $m$ is 0 to 15 .

Specifies 1 of 16 STM Measurement Receive Signal Strengths.
RSS? $n$
[MSS:RDCCH:MEASurement:STM:RSS?n]
Returns current value of STM Measurement Receive Signal Strength selected by $n$. Range of $n$ is 0 to 31 .

## OTHER:STM:

LENGth $n$
[MSS:RDCCH:MEASurement:OTHER:STM:LENGth n]
Specifies STM Measurement (Other Hyperband) Report Map Length. Range of $n$ is 1 to 15 .

## LENGth?

[MSS:RDCCH:MEASurement:OTHER:STM:LENGth?]
Returns current value of STM Measurement (Other Hyperband) Report Map Length.

## REPort $n$

[MSS:RDCCH:MEASurement:OTHER:STM:REPort n]
Specifies STM Measurement (Other Hyperband) Report Map. Range of $n$ is 1 to \#h7FFF (32767).

REPort?
[MSS:RDCCH:MEASurement:OTHER:STM:REPort?]
Returns current value of STM Measurement (Other Hyperband) Report Map.

## MSS:RDCCH:

OTHER:STM:
RSS $n, m$
[MSS:RDCCH:MEASurement:OTHER:STM:RSS n,m]
Specifies STM Measurement (Other Hyperband) ST_RSS $(m)$ for the designated bit position ( $n$ ) of Report Map (see MSS:RDCCH:MEASurement:OTHER:STM:
LENGth and REPort). Range of $n$ is 0 to 14 ; range of m is 0 to 31 .
RSS? $n$
[MSS:RDCCH:MEASurement:OTHER:STM:RSS?n]
Returns current value of STM Measurement (Other Hyperband) ST_RSS for the designated bit position ( $n$ ) of Report Map.

## EMERgency $n$

[MSS:RDCCH:EMERgency n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Emergency Call.

## EMERgency?

[MSS:RDCCH:EMERgency?]
Returns current state of Emergency Call.

## LT $n$

[MSS:RDCCH:LT n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Last Try flag.

> | If a mobile station receives a Directed Retry and attempts a new access on another |
| :--- |
| DCCH, it shall set the Last Try flag in the Origination or the Page Response message |
| to the value of the Last Try flag received in the Directed Retry message. Otherwise, |
| the mobile station shall reset the Last Try flag at system access. |

## LT?

[MSS:RDCCH:LT?]
Returns current state of Last Try flag.

## SERVice $n$

[MSS:RDCCH:SERVice n]
Specifies Service Code. Range of $n$ is 0 to 15 .

## SERVice?

[MSS:RDCCH:SERVice?]
Returns current value of Service Code.

## MSS:RDCCH:

MODE:

## VOICe:

VC $n$
[MSS:RDCCH:MODE:VOICe:VC n]
Specifies Voice Mode VC. Range of $n$ is 0 to 7 .
VC?
[MSS:RDCCH:MODE:VOICe:VC?]
Returns current value of Voice Mode VC.
PM $n$
[MSS:RDCCH:MODE:VOICe:PM n]
Specifies Voice Mode PM_V. Range of $n$ is 0 to 7 .
PM?
[MSS:RDCCH:MODE:VOICe:PM?]
Returns current value of Voice Mode PM_V.

## DATA:

## PM $n$

[MSS:RDCCH:MODE:DATA:PM n]
Specifies Data Mode PM_D. Range of $n$ is 0 to 7 .

## PM?

[MSS:RDCCH:MODE:DATA:PM?]
Returns current value of Data Mode PM_D.

## SAP $n$

[MSS:RDCCH:MODE:DATA:SAP n]
Specifies Data Mode SAP. Valid values of $n$ are 0 (SAP 0 only) or 1 (SAP 0 and 1).

## SAP?

[MSS:RDCCH:MODE:DATA:SAP?]
Returns current value of Data Mode SAP.
ACKED $n$
[MSS:RDCCH:MODE:DATA:ACKED n]
Specifies Data Mode Acked Data. Valid values of $n$ are 0 or 1.

## ACKED?

[MSS:RDCCH:MODE:DATA:ACKED?]
Returns current state of Data Mode Acked Data.

## MSS:RDCCH:

## MODE:

## DATA:

CRC $n$
[MSS:RDCCH:MODE:DATA:CRC n]
Specifies Data Mode CRC. Range of $n$ is 0 to 3
CRC?
[MSS:RDCCH:MODE:DATA:CRC?]
Returns current state of Data Mode CRC.
PART $n$
[MSS:RDCCH:MODE:DATA:PART n]
Specifies Data Mode Data Part. Range of $n$ is 0 to 7 .
PART?
[MSS:RDCCH:MODE:DATA:PART?]
Returns current value of Data Mode Data Part.
RLP $n$
[MSS:RDCCH:MODE:DATA:RLP n]
Specifies Data Mode RLP. Range of $n$ is 0 to 3 .
RLP?
[MSS:RDCCH:MODE:DATA:RLP?]
Returns current value of Data Mode RLP.

## MSS:RDCCH:

VOICEMode:
The following commands are utilized for multiple instances of Voice Mode.
NUMBer $n$-or- NUM $n$
[MSS:RDCCH:VOICEMode:NUMBer n]
Specifies the Number of instances of Voice Mode. Range of $n$ is 0 to 7 .
Up to 8 instances of this field may be sent.
NUMBer? -or- NUM?
[MSS:RDCCH:VOICEMode:NUMBer?]
Return the current Number of instances of Voice Mode.
VC $n, m$
[MSS:RDCCH:VOICEMode:VC n,m]
Specifies the value of VC ( $m$ ) for the designated instance ( $n$ ) of Voice Mode. Range of $n$ is 0 to 7 ; range of $m$ is 0 to 7 .

VC? $n$
[MSS:RDCCH:VOICEMode:VC?n]
Returns the current value of VC for the designated instance ( $n$ ) of Voice Mode.
Range of $n$ is 0 to 7 .
PM $n, m$
[MSS:RDCCH:VOICEMode:PM n,m]
Specifies the value of PM_V $(m)$ for the designated instance $(n)$ of Voice Mode.
Range of $n$ is 0 to 7 ; range of $m$ is 0 to 7 .
PM? n
[MSS:RDCCH:VOICEMode:PM? n]
Returns the current value of PM_V for the designated instance ( $n$ ) of Voice Mode. Range of $n$ is 0 to 7 .

## MSS:RDCCH:

## MEM :

Message Encryption Mode - Identifies the selected message encryption algorithm, key and domain.

## MEA $n$

[MSS:RDCCH:MEM:MEA n]
Specifies Message Encryption Algorithm. Range of $n$ is 0 to 7 .

## MEA?

[MSS:ROCCH:MEM:MEA?]
Returns current value of Message Encryption Algorithm.
MED $n$
[MSS:RDCCH:MEM:MED n]
Specifies Message Encryption Domain. Range of $n$ is 0 to 7 .
MED?
[MSS:RDCCH:MEM:MED?]
Returns current value of Message Encryption Domain.
MEK $n$
[MSS:RDCCH:MEM:MEK n]
Specifies Message Encryption Key. Range of $n$ is 0 to 7 .
MEK?
[MSS:RDCCH:MEM:MEK?]
Returns current value of Message Encryption Key.

## BANDWidth n

[MSS:RDCCH:BANDWidth n]
Specifies Bandwidth. Range of $n$ is 0 to 7 .

## BANDWidth?

[MSS:RDCCH:BANDWidth?]
Returns current value of Bandwidth.

## MSS:RDCCH:

## CALLED:

TYPE $n$
[MSS:RDCCH:CALLED:TYPE n]
Specifies Called Address Type of Number. Range of $n$ is 0 to 7 .
TYPE?
[MSS:RDCCH:CALLED:TYPE?]
Returns current value of Called Address Type of Number.

## PLANid $n$

[MSS:RDCCH:CALLED:PLANid n]
Specifies Called Address Numbering Plan Identification. Range of $n$ is 0 to 15 .

## PLANid?

[MSS:RDCCH:CALLED:PLANid?]
Returns current value of Called Address Numbering Plan Identification.

## ADDRess:

ENCoding $n$
[MSS:RDCCH:CALLED:ADDRess:ENCoding n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Called Address Encoding.

## ENCoding?

[MSS:RDCCH:CALLED:ADDRess:ENCoding?]
Returns current state of Called Address Encoding.

## ADDRess " $n$ "

[MSS:RDCCH:CALLED:ADDRess "n"]
Specifies Called Address (ASCII String).

## ADDRess?

[MSS:RDCCH:CALLED:ADDRess?]
Returns current ASCII string value of Called Address.

## MSS:RDCCH:

## CALLED:

## SUBaddress:

ODD_EVEN $n$
[MSS:RDCCH:CALLED:SUBaddress:ODD_EVEN n]
Enables $(n=1)$ or disables $(n=0)$ Called Party Subaddress Odd/Even indicator.
ODD_EVEN?
[MSS:RDCCH:CALLED:SUBaddress:ODD_EVEN?]
Returns current state of Called Party Subaddress Odd/Even indicator.
TYPE $n$
[MSS:RDCCH:CALLED:SUBaddress:TYPE n]
Specifies Called Party Subaddress Type of Subaddress. Range of $n$ is 0 to 3 .
TYPE?
[MSS:RDCCH:CALLED:SUBaddress:TYPE?]
Returns current value of Called Party Subaddress Type of Subaddress.

## REServed $n$

[MSS:RDCCH:CALLED:SUBaddress:REServed n]
Specifies number of Called Party Subaddress Reserved fields. Range of $n$ is 0 to 15.

REServed?
[MSS:RDCCH:CALLED:SUBaddress:REServed?]
Returns current number of Called Party Subaddress Reserved fields.
ADDRess $n, m$
[MSS:RDCCH:CALLED:SUBaddress:ADDRess $n, m$ ]
Specifies Called Party Subaddress ( $m$ ) selected by $n$. Range of $n$ is 0 to 19;
range of $m$ is 0 to 255 .
ADDRess? $n$
[MSS:RDCCH:CALLED:SUBaddress:ADDRess? n]
Returns current value of Called Party Subaddress selected by $n$. Range of $n$ is 0 to 19 .

## MSS:RDCCH:

## CALLING:

TYPE $n$
[MSS:RDCCH:CALLING:TYPE n]
Specifies Calling Address Type of Number. Range of $n$ is 0 to 7 .

## TYPE?

[MSS:RDCCH:CALLING:TYPE?]
Returns current value of Calling Address Type of Number.

## PLANid $n$

[MSS:RDCCH:CALLING:PLANid n]
Specifies Calling Address Numbering Plan Identification. Range of $n$ is 0 to 15 .

## PLANid?

[MSS:RDCCH:CALLING:PLANid?]
Returns current value of Calling Address Numbering Plan Identification.

## ADDRess:

ENCoding $n$
[MSS:RDCCH:CALLING:ADDRess:ENCoding n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Calling Address Encoding.

## ENCoding?

[MSS:RDCCH:CALLING:ADDRess:ENCoding?]
Returns current state of Calling Address Encoding.

## ADDRess " $n$ "

[MSS:RDCCH:CALLING:ADDRess " $n$ "]
Specifies Calling Address (ASCII String).

## ADDRess?

[MSS:RDCCH:CALLING:ADDRess?]
Returns current ASCII string value of Calling Address.

## PRESentation:

PI $n$
[MSS:RDCCH:CALLING:PRESentation:PI n]
Specifies Calling Address Presentation Indicator. Range of $n$ is 0 to 3 .
PI?
[MSS:RDCCH:CALLING:PRESentation:PI?]
Returns current value of Calling Address Presentation Indicator.
SI $n$
[MSS:RDCCH:CALLING:PRESentation:SI n]
Specifies Calling Address Screening Indicator. Range of $n$ is 0 to 3 .
SI?
[MSS:RDCCH:CALLING:PRESentation:SI?]
Returns current value of Calling Address Screening Indicator.

## MSS:RDCCH:

## CALLING:

## SUBaddress:

LENGth $n$
[MSS:RDCCH:CALLING:SUBaddress:LENGth n]
Specifies Calling Address Subaddress Length. Range of $n$ is 1 to 21 .
LENGth?
[MSS:RDCCH:CALLING:SUBaddress:LENGth?]
Returns current value of Calling Address Subaddress Length.
ODD_EVEN $n$
[MSS:RDCCH:CALLING:SUBaddress:ODD_EVEN n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Calling Address Subaddress Odd/Even indicator.

## ODD EVEN?

[MSS:RDCCH:CALLING:SUBaddress:ODD_EVEN?]
Returns current state of Calling Address Subaddress Odd/Even indicator.
TYPE $n$
[MSS:RDCCH:CALLING:SUBaddress:TYPE n]
Specifies Calling Address Subaddress Type of Number. Range of $n$ is 0 to 3 .
TYPE?
[MSS:RDCCH:CALLING:SUBaddress:TYPE?]
Returns current value of Calling Address Subaddress Type of Number.
REServed $n$
[MSS:RDCCH:CALLING:SUBaddress:REServed n]
Specifies number of Calling Party Subaddress Reserved fields. Range of $n$ is 0 to 15.

## REServed?

[MSS:RDCCH:CALLING:SUBaddress:REServed?]
Returns current number of Calling Party Subaddress Reserved fields.
ADDRess $n, m$
[MSS:RDCCH:CALLING:SUBaddress:ADDRess n,m]
Specifies Calling Address Subaddress ( $m$ ) selected by $n$. Range of $n$ is 0 to 19; range of $m$ is 0 to 255 .

ADDRess? $n$
[MSS:RDCCH:CALLING:SUBaddress:ADDRess? n]
Returns current value of Calling Address Subaddress selected by $n$. Range of $n$ is 0 to 19 .

## MSS:RDCCH:

RTRANSaction $n$
[MSS:RDCCH:RTRANSaction n]
Specifies R-Transaction Identifier. Range of $n$ is 0 to 255 .

## RTRANSaction?

[MSS:RDCCH:RTRANSaction?]
Returns current value of R-Transaction Identifier.
RDATA_UNIT:
LENGth $n$
[MSS:RDCCH:RDATA_UNIT:LENGth n]
Specifies R-Data Unit Length Indicator. Range of $n$ is 0 to 255 .

## LENGth?

[MSS:RDCCH:RDATA_UNIT:LENGTh?]
Returns current value of R-Data Unit Length Indicator.
HLP:
Higher Layer Protocol.
IDentifier $n$
[MSS:RDCCH:RDATA_UNIT:HLP:IDentifier n]
Specifies R-Data Unit Higher Protocol Identifier. Range of $n$ is 0 to 255 .

## IDentifier?

[MSS:RDCCH:RDATA_UNIT:HLP:IDentifier?]
Returns current value of R-Data Unit Higher Protocol Identifier.
DATA $n, m$
[MSS:RDCCH:RDATA_UNIT:HLP:DATA n,m]
Specifies R-Data Higher Layer Protocol Data Unit (m) selected by $n$. Range of $n$ is 0 to 255 ; range of $m$ is 0 to 255 .

DATA? $n$
[MSS:RDCCH:RDATA_UNIT:HLP:DATA? n]
Returns current value of Higher Layer Protocol Data Unit selected by $n$. Range of $n$ is 0 to 255 .

## MSS:RDCCH:

## MESSage:CENTer:

## TYPE $n$

[MSS:RDCCH:MESSage:CENTer:TYPE n]
Specifies Message Center Type of Number. Range of $n$ is 0 to 7 .

## TYPE?

[MSS:RDCCH:MESSage:CENTer:TYPE?]
Returns current value of Message Center Type of Number.
PLANid $n$
[MSS:RDCCH:MESSage:CENTer:PLANId n]
Specifies Message Center Identification Plan. Range of $n$ is 0 to 15 .

## PLANid?

[MSS:RDCCH:MESSage:CENTer:PLANid?]
Returns current value of Message Center Identification Plan.

## ADDRess:

## ENCoding $n$

[MSS:RDCCH:MESSage:CENTer:ADDRess:ENCoding n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Message Center Address Encoding.

## ENCoding?

[MSS:RDCCH:MESSage:CENTer:ADDRess:ENCoding?]
Returns current state of Message Center Address Encoding.
ADDRess " $n$ "
[MSS:RDCCH:MESSage:CENTer:ADDRess "n"]
Specifies Message Center Address (ASCII String).

## ADDRess?

[MSS:RDCCH:MESSage:CENTer:ADDRess?]
Returns current ASCII string value of Message Center Address.

## USER:

## GROUP:

STATus $n$
[MSS:RDCCH:USER:GROUP:STATus n]
Specifies User Group Status. Range of $n$ is 0 to 3 .

## STATus?

[MSS:RDCCH:USER:GROUP:STATus?]
Returns current value of User Group Status.

## MSS:RDCCH:

## USER:

## GROUP:

TYPE n
[MSS:RDCCH:USER:GROUP:TYPE n]
Specifies User Group Type. Range of $n$ is 0 to 3.

## TYPE?

[MSS:RDCCH:USER:GROUP:TYPE?]
Returns current value of User Group Type.

## UGID:

MS $n$
[MSS:RDCCH:USER:GROUP:UGID:MS n]
Specifies the 18 most significant bits of User Group ID. Range of $n$ is 0 to \#h3FFFF.

MS?
[MSS:RDCCH:USER:GROUP:UGID:MS ?]
Returns the 18 most significant bits of User Group ID.
LS $n$
[MSS:RDCCH:USER:GROUP:UGID:LS n]
Specifies the 32 least significant bits of User Group ID. Range of $n$ is 0 to \#hFFFFFFFF.

LS?
[MSS:RDCCH:USER:GROUP:UGID:LS?]
Returns the 32 least significant bits of User Group ID.
MIN " $n$ "
[MSS:RDCCH:USER:MIN"n"]
Specifies MIN (ASCII String).
If the User Group type is 2 , signifying a 34 -bit UGID, then this command sets up the User Group ID with a Mobile Identification Number.

## MIN?

[MSS:RDCCH:USER:MIN?]
Returns current string value of MIN.

## MSS:RDCCH:

## DEST:

## TYPE $n$

[MSS:RDCCH:DEST:TYPE n]
Specifies User Destination Type of Number. Range of $n$ is 0 to 7 .

## TYPE?

[MSS:RDCCH:DEST:TYPE?]
Returns current value of User Destination Type of Number.
PLANid n
[MSS:RDCCH:DEST:PLANid n]
Specifies User Destination Identification Plan. Range of $n$ is 0 to 15 .
PLANid?
[MSS:RDCCH:DEST:PLANid?]
Returns current value of the User Destination Identification Plan.

## ADDRess:

## ENCoding $n$

[MSS:RDCCH:DEST:ADDRess:ENCoding n]
Enables $(n=1)$ or disables $(n=0)$ User Destination Address Encoding.

## ENCoding?

[MSS:RDCCH:DEST:ADDRess:ENCoding?]
Returns current state of User Destination Address Encoding
ADDRess " $n$ "
[MSS:RDCCH:DEST:ADDRess " $n$ "]
Specifies User Destination Address (ASCII String).

## ADDRess?

[MSS:RDCCH:DEST:ADDRess?]
Returns current string value of User Destination Address.

## MSS:RDCCH:

## DEST:

## SUBaddress:

LENGth $n$
[MSS:RDCCH:DEST:SUBaddress:LENGth n]
Specifies User Destination Subaddress Length. Range of $n$ is 1 to 21.
LENGth?
[MSS:RDCCH:DEST:SUBaddress:LENGth?]
Returns current value of User Destination Subaddress Length.

## ODD_EVEN $n$

[MSS:RDCCH:DEST:SUBaddress:ODD_EVEN n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Destination Subaddress Odd/Even
indicator.

## ODD_EVEN?

[MSS:RDCCH:DEST:SUBaddress:ODD_EVEN?]
Returns current state of User Destination Subaddress Odd/Even indicator.
TYPE $n$
[MSS:RDCCH:DEST:SUBaddress:TYPE n]
Specifies User Destination Subaddress Type of Number. Range of $n$ is 0 to 3 .
TYPE?
[MSS:RDCCH:DEST:SUBaddress:TYPE?]
Returns current value of User Destination Type of Number.
REServed $n$
[MSS:RDCCH:DEST:SUBaddress:REServed n]
Specifies number of User Destination Subaddress Reserved fields. Range of $n$ is 0 to 15 .

## REServed?

[MSS:RDCCH:DEST:SUBaddress:REServed?]
Returns current number of User Destination Subaddress Reserved fields.

```
ADDRess n,m
[MSS:RDCCH:DEST:SUBaddress:ADDRess n,m]
Specifies User Destination Subaddress (m) selected by n. Range of n is 0 to 19;
range of m is 0 to 255.
ADDRess? n
[MSS:RDCCH:DEST:SUBaddress:ADDRess? n]
Returns current value of User Destination Subaddress selected by \(n\). Range of \(n\) is 0 to 19 .
```


## MSS:RDCCH:

## ORIG:

TYPE $n$
[MSS:RDCCH:ORIG:TYPE n]
Specifies User Originating Type of Number. Range of $n$ is 0 to 7 .
TYPE?
[MSS:RDCCH:ORIG:TYPE?]
Returns current value of User Originating Type of Number.

## PLANid $n$

[MSS:RDCCH:ORIG:PLANid n]
Specifies User Originating Identification Plan. Range of $n$ is 0 to 15 .

## PLANid?

[MSS:RDCCH:ORIG:PLANid?]
Returns current value of User Originating Identification Plan.

## ADDRess:

## ENCoding $n$

[MSS:RDCCH:ORIG:ADDRess:ENCoding n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Originating Address Encoding.

## ENCoding?

[MSS:RDCCH:ORIG:ADDRess:ENCoding?]
Returns current state of User Originating Address Encoding.

## ADDRess " $n$ "

[MSS:RDCCH:ORIG:ADDRess "n"]
Specifies User Originating Address (ASCII String).

## ADDRess?

[MSS:RDCCH:ORIG:ADDRess?]
Returns current string value of User Originating Address.

## MSS:RDCCH:

ORIG:

## SUBaddress:

LENGth $n$
[MSS:RDCCH:ORIG:SUBaddress:LENGth n]
Specifies User Originating Subaddress Length. Range of $n$ is 1 to 21.

## LENGth?

[MSS:RDCCH:ORIG:SUBaddress:LENGth?]
Returns current value of User Originating Subaddress Length.
ODD_EVEN $n$
[MSS:RDCCH:ORIG:SUBaddress:ODD_EVEN n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Originating Subaddress Odd/Even indicator.

## ODD EVEN?

[MSS:RDCCH:ORIG:SUBaddress:ODD_EVEN?]
Returns current state of User Originating Subaddress Odd/Even indicator.
TYPE $n$
[MSS:RDCCH:ORIG:SUBaddress:TYPE n]
Specifies User Originating Subaddress Type of Number. Range of $n$ is 0 to 3 .

## TYPE?

[MSS:RDCCH:ORIG:SUBaddress:TYPE?]
Returns current value of User Originating Subaddress Type of Number.
REServed $n$
[MSS:RDCCH:ORIG:SUBaddress:REServed n]
Specifies number of User Originating Subaddress Reserved fields. Range of $n$ is 0 to 15.

## REServed?

[MSS:RDCCH:ORIG:SUBaddress:REServed?]
Returns current number of User Originating Subaddress Reserved fields.
ADDRess $n, m$
[MSS:RDCCH:ORIG:SUBaddress:ADDRess n,m]
Specifies User Originating Subaddress $(m)$ selected by $n$. Range of $n$ is 0 to 19 ; range of $m$ is 0 to 255 .

ADDRess? $n$
[MSS:RDCCH:ORIG:SUBaddress:ADDRess? n]
Returns current value of User Originating Subaddress selected by $n$. Range of $n$ is 0 to 19.

## MSS:RDCCH:

## ORIG:

## PRESentation:

Presentation Indicator - Used to identify the presentation restrictions and screening related to User Originating Address or the originating MSID.

PI $n$
[MSS:RDCCH:ORIG:PRESentation:PI n]
Specifies Presentation Indicator. Range of $n$ is 0 to 3.
PI?
[MSS:RDCCH:ORIG:PRESentation:Pl?]
Returns current value of Presentation Indicator.
SI $n$
[MSS:RDCCH:ORIG:PRESentation:SI n]
Specifies Screen Indicator. Range of $n$ is 0 to 3 .
SI?
[MSS:RDCCH:ORIG:PRESentation:SI?]
Returns current value of Screening Indicator.

## RDATA:

DELay $n$
[MSS:RDCCH:RDATA:DELay n]
Specifies R-DATA DELAY. Range of $n$ is 0 to 15 .

## DELay?

[MSS:RDCCH:RDATA:DELay?]
Returns current value of R-DATA DELAY.
RCAUSe $n$
[MSS:RDCCH:RCAUSe n]
Specifies R-CAUSE. Range of $n$ is 1 to 127.
Used to qualify a R-DATA REJECT message.

## RCAUSe?

[MSS:RDCCH:RCAUSe?]
Returns current value of R-CAUSE.

## RCAUSe:

## REServed $n$

[MSS:RDCCH:RCAUSe:REServed n]
Specifies Reserved field of R-Cause. Range of $n$ is 1 or 0 .

## REServed?

[MSS:RDCCH:RCAUSe:REServed?]
Returns current value of the Reserved field of R-Cause.

## MSS:RDCCH:

REG:
TYPE $n$
[MSS:RDCCH:REG:TYPE n]
Specifies Registration Type. Range of $n$ is 0 to 15 .
TYPE?
[MSS:RDCCH:REG:TYPE?]
Returns current value of Registration Type.

## CNUMber:

TYPE $n$
[MSS:RDCCH:CNUMber:TYPE n]
Specifies C-Number Type of Number. Range of $n$ is 0 to 7 .
TYPE?
[MSS:RDCCH:CNUMber:TYPE?]
Returns current value of the C-Number Type of Number.

## PLANid $n$

[MSS:RDCCH:CNUMber:PLANid n]
Specifies C-Number Identification Plan. Range of $n$ is 0 to 15 .

## PLANid?

[MSS:RDCCH:CNUMber:PLANid?]
Returns current value of the C-Number Identification Plan.

## ADDRess:

## ENCoding $n$

[MSS:RDCCH:CNUMber:ADDRess:ENCoding n]
Enables ( $n=1$ ) or disables ( $n=0$ ) C-Number Address Encoding.

## ENCoding?

[MSS:RDCCH:CNUMber:ADDRess:ENCoding?]
Returns current state of the C-Number Address Encoding.

## ADDRess " $n$ "

[MSS:RDCCH:CNUMber:ADDRess " $n$ "]
Specifies C-Number Address (ASCII String).

## ADDRess?

[MSS:RDCCH:CNUMber:ADDRess?]
Returns current string value of C-Number Address.

## MSS:RDCCH:

PFC:
REQuest $n$
[MSS:RDCCH:PFC:REQuest n]
Specifies Paging Frame Class Request. Range of $n$ is 0 to 7 .

## REQuest?

[MSS:RDCCH:PFC:REQuest?]
Returns current value of Paging Frame Class Request.

## DCCH_MEM:

## ALGORithm n

[MSS:RDCCH:DCCH_MEM:ALGORithm n]
Specifies DCCH Message Encryption Algorithm. Range of $n$ is 0 to 7 .

## ALGORithm?

[MSS:RDCCH:DCCH_MEM:ALGORithm?]
Returns current value of the DCCH Message Encryption Algorithm.

## DOMAIN $n$

[MSS:RDCCH:DCCH_MEM:DOMAIN n]
Specifies DCCH Message Encryption Domain. Range of $n$ is 0 to 7 .
DOMAIN?
[MSS:RDCCH:DCCH_MEM:DOMAIN?]
Returns current value of DCCH Message Encryption Domain.
KEY $n$
[MSS:RDCCH:DCCH_MEM:KEY n]
Specifies DCCH Message Encryption Key. Range of $n$ is 0 to 7 .

## KEY?

[MSS:RDCCH:DCCH_MEM:KEY?]
Returns current value of DCCH Message Encryption Key.

## SID REPort $n$

[MSS:RDCCH:SID_REPort n]
Specifies SIDs-p. Range of $n$ is 0 to \#h7FFF (32767).

## SID_REPort?

[MS $\left.\bar{S}: R D C C H: S I D \_R E P o r t ?\right]$
Returns current value of SIDs-p.
SOC $n$
[MSS:RDCCH:SOC n]
Specifies SOC. Range of $n$ is 0 to 4095.
SOC?
[MSS:RDCCH:SOC?]
Returns current value of SOC.

## MSS:RDCCH:

## ESN $n$

[MSS:RDCCH:ESN n]
Specifies Electronic Serial Number. Range of $n$ is 0 to \#hFFFFFFFFF.

## ESN?

[MSS:RDCCH:ESN?]
Returns current value of Electronic Serial Number.

## CONFirmed:

MSGtype $n$
[MSS:RDCCH:CONFirmed:MSGtype n]
Specifies Confirmed Message Type. Range of $n$ is 0 to 63 .
MSGtype?
[MSS:RDCCH:CONFirmed:MSGtype?]
Returns current value of Confirmed Message Type.

## SSDUP:

STATus $n$
[MSS:RDCCH:SSDUP:STATUS n]
Specifies SSD Update Status. Range of $n$ is 0 to 3 .
STATus?
[MSS:RDCCH:SSDUP:STATUS?]
Returns current value of SSD Update Status.

## AUTHU $n$

[MSS:RDCCH:AUTHU n]
Specifies AUTHU. Range of $n$ is 0 to \#h3FFFF.

## AUTHU?

[MSS:RDCCH:AUTHU?]
Returns current value of AUTHU.

## D. OPTIONAL DATA FIELDS

Some of the elements of RACH messages are optional. Optional elements can be enabled or disabled by the following commands.

## MSS:RDCCH:

## ENABle:

## PSID_RSID:

## SELect $n$

[MSS:RDCCH:ENABle:PSID_RSID:SELect n]
Enables $(n=1)$ or disables $(n=0)$ Selected PSID/RSID optional message.

## SELect?

[MSS:RDCCH:ENABIe:PSID_RSID:SELect?]
Returns current state of Selected PSID/RSID optional message.

## SUBaddress $n$

[MSS:RDCCH:ENABle:SUBaddress n]
Enables $(n=1)$ or disables $(n=0)$ Subaddress optional message.

## SUBaddress?

[MSS:RDCCH:ENABIe:SUBaddress?]
Returns current state of Subaddress optional message.

## DISPIay $n$

[MSS:RDCCH:ENABIe:DISPlay n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Display optional message.

## DISPlay?

[MSS:RDCCH:ENABle:DISPlay?]
Returns current state of Display optional message.

## VC MAP n

[MSS:RDCCH:ENABle:VC_MAP n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Voice Coder Map Info optional message.
VC_MAP?
[MSS:RDCCH:ENABle:VC_MAP?]
Return current state of Voice Coder Map Info optional message.

## SUPPort:

ALT SOC $n$
[MSS:RDCCH:ENABle:SUPPort:ALT_SOC n]
Enables ( $n=1$ ) or disables ( $n=0$ ) ALT_SOC_Support optional message.
ALT_SOC?
[MSS:RDCCH:ENABIe:SUPPort:ALT_SOC?]
Returns current state of ALT_SOC_Support optional message.

## MSS:RDCCH:

## ENABIe:

## MEASurement:

LTM $n$
[MSS:RDCCH:ENABle:MEASurement:LTM n]
Enables $(n=1)$ or disables $(n=0)$ LTM Measurement optional message.
LTM?
[MSS:RDCCH:ENABIe:MEASurement:LTM?]
Returns current state of LTM Measurement optional message.
STM $n$
[MSS:RDCCH:ENABle:MEASurement:STM n]
Enables $(n=1)$ or disables ( $n=0$ ) STM Measurement optional message.
STM?
[MSS:RDCCH:ENABle:MEASurement:STM?]
Returns current state of STM Measurement optional message.

## OTHER:

STM $n$
[MSS:RDCCH:ENABle:MEASurement:OTHER:STM n]
Enables $(n=1)$ or disables $(n=0)$ STM Measurement (Other Hyperband) optional message.

## STM?

[MSS:RDCCH:ENABle:MEASurement:OTHER:STM?]
Returns current state of STM Measurement (Other Hyperband) optional message.

## MODE:

VOICe $n$
[MSS:RDCCH:ENABIe:MODE:VOICe n]
Enables $(n=1)$ or disables $(n=0)$ Voice Mode optional message.
VOICe?
[MSS:RDCCH:ENABIe:MODE:VOICe?]
Returns current state of Voice Mode optional message.
DATA $n$
[MSS:RDCCH:ENABIe:MODE:DATA n]
Enables $(n=1)$ or disables $(n=0)$ Data Mode optional message.
DATA?
[MSS:RDCCH:ENABle:MODE:DATA?]
Returns current state of Data Mode optional message.

## MSS:RDCCH:

## ENABIe:

## MEM $n$

[MSS:RDCCH:ENABle:MEM n]
Enables ( $n=1$ ) or disables $(n=0)$ Message Encryption Mode optional message.

## MEM?

[MSS:RDCCH:ENABle:MEM?]
Returns current state of Message Encryption Mode optional message.

## BANDWidth n

[MSS:RDCCH:ENABle:BANDWidth n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Bandwidth optional message.

## BANDWidth?

[MSS:RDCCH:ENABle:BANDWidth?]
Returns current state of Bandwidth optional message.

## CALLING:

## PRESentation $n$

[MSS:RDCCH:ENABIe:CALLING:PRESentation n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Calling Party Number Presentation Indicator optional message.

## PRESentation?

[MSS:RDCCH:ENABIe:CALLING:PRESentation?]
Returns current state of Calling Party Number Presentation Indicator optional message.

ADDRess $n$
[MSS:RDCCH:ENABle:CALLING:ADDRess n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Calling Party Number optional message.

## ADDRess?

[MSS:RDCCH:ENABIe:CALLING:ADDRess?]
Returns current state of Calling Party Number optional message.

## SUBaddress n

[MSS:RDCCH:ENABIe:CALLING:SUBaddress n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Calling Party Subaddress optional message.

## SUBaddress?

[MSS:RDCCH:ENABIe:CALLING:SUBaddress?]
Returns current state of Calling Party Subaddress optional message.

## MSS:RDCCH:

## ENABIe:

## CALLED:

SUBaddress $n$
[MSS:RDCCH:ENABIe:CALLED:SUBaddress n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Called Party Subaddress optional message.

## SUBaddress?

[MSS:RDCCH:ENABIe:CALLED:SUBaddress?]
Returns current state of Called Party Subaddress optional message.

## MESSage:CENTer:

ADDRess $n$
[MSS:RDCCH:ENABle:MESSage:CENTer:ADDRess n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Message Center Address optional message.
ADDRess?
[MSS:RDCCH:ENABle:MESSage:CENTer:ADDRess?]
Returns current state of Message Center Address optional message.

## USER:

GROUP n
[MSS:RDCCH:ENABIE:USER:GROUP n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Group optional message.

## GROUP?

[MSS:RDCCH:ENABle:USER:GROUP?]
Returns current state of User Group optional message.
DEST:
ADDRess $n$
[MSS:RDCCH:ENABIe:USER:DEST:ADDRess n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Destination Address optional
message.
ADDRess?
[MSS:RDCCH:ENABIe:USER:DEST:ADDRess?]
Returns current state of User Destination Address optional message.
SUBaddress $n$
[MSS:RDCCH:ENABIe:USER:DEST:SUBaddress n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Destination Subaddress optional message.

## SUBaddress?

[MSS:RDCCH:ENABle:USER:DEST:SUBaddress?]
Returns current state of User Destination Subaddress optional message.

## MSS:RDCCH:

## ENABIe:

## USER:

ORIG:

## ADDRess n

[MSS:RDCCH:ENABIe:USER:ORIG:ADDRess n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Originating Address optional message.

## ADDRess?

[MSS:RDCCH:ENABIe:USER:ORIG:ADDRess?]
Returns current state of User Originating Address optional message.

## SUBaddress $n$

[MSS:RDCCH:ENABIe:USER:ORIG:SUBaddress n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Originating Subaddress optional message.

## SUBaddress?

[MSS:RDCCH:ENABIe:USER:ORIG:SUBaddress?]
Returns current state of User Originating Subaddress optional message.
PRES:
PI $n$
[MSS:RDCCH:ENABIe:USER:ORIG:PRES:PI n]
Enables ( $n=1$ ) or disables ( $n=0$ ) User Originating Address Presentation Indicator optional message.

PI?
[MSS:RDCCH:ENABIE:USER:ORIG:PRES:PI?]
Returns current state of User Originating Address Presentation Indicator optional message.

## RDATA:

DELay $n$
[MSS:RDCCH:ENABle:RDATA:DELay n]
Enables ( $n=1$ ) or disables ( $n=0$ ) R-DATA Delay optional message.

## DELay?

[MSS:RDCCH:ENABle:RDATA:DELay?]
Returns current state of R-DATA Delay optional message.

## CNUMber $n$

[MSS:RDCCH:ENABle:CNUMber n]
Enables ( $n=1$ ) or disables ( $n=0$ ) C-Number optional message.

## CNUMber?

[MSS:RDCCH:ENABle:CNUMber?]
Returns current state of C-Number optional message.

## MSS:RDCCH:

## ENABle:

## PFC:

REQuest $n$
[MSS:RDCCH:ENABle:PFC:REQuest n]
Enables ( $n=1$ ) or disables ( $n=0$ ) PFC Request optional message.
REQuest?
[MSS:RDCCH:ENABle:PFC:REQuest?]
Returns current state of PFC Request optional message.

## DCCH:

MEM $n$
[MSS:RDCCH:ENABIE:DCCH:MEM n]
Enables ( $n=1$ ) or disables ( $n=0$ ) Message Encryption Mode optional message for Registration message type.

MEM?
[MSS:RDCCH:ENABle:DCCH:MEM?]
Returns current state of Message Encryption Mode optional message for Registration message type.

SID_REPort $n$
[MSS:RDCCH:ENABIE:SID_REPort n]
Enables ( $n=1$ ) or disables ( $n=0$ ) SID Report optional message.

## SID_REPort?

[MSS:RDCCH:ENABIe:SID_REPort?]
Returns current state of SID Report optional message.
E. BUILDING A RACH MESSAGE

## MSS:RDCCH:

## BUILD

[MSS:RDCCH:BUILD]
Builds the data that makes up a RACH message.
Before executing this command, the message types and data fields that make up the RACH should be programmed. This command then takes the message types and data fields and generates all the data that makes up the data field in each slot of the RACH message.

After executing this command, the data can returned by the MSS:RDCCH:DATA? command defined below. The RACH message generator can then be programmed with the MSS:RDCCH:PROGRAM command defined below.

## LENGth?

## [MSS:RDCCH:LENGth?]

Returns Length of the RDCCH in number of slots.
Use this command after the build command (MSS:RDCCH:BUILD) has been executed.
DATA? $n, m$
[MSS:RDCCH:DATA? n,m]
Returns RDCCH data that has been built.
Returns current 16 bit value of selected word $(m)$ in selected slot ( $n$ ). Range of $n$ is 0 to 319 ; range of $m$ is 0 to 6 .

The length of each slot is 101 bits (normal) or 79 bits (abbreviated) long. The data in each slot may returned, 16 bits at a time. The data bits in each word are left justified. The 16 most significant bits of the data are returned when $m=0$. If the message is normal length, the 5 least significant bits of data are returned when $m=6$. If the message is abbreviated length, then the 15 least significant bits of data are returned when $m=4$.

This data format correlates with the data format used in the MSS:RDCCH:MESSAGE: DATA command. Therefore, the data in the message can be programmed by transferring the data, one word at a time, to the message generator. This enables the user to modify the data (i.e. scramble data, repeat a frame, change the Cl bit) before programming the message generator. If a straight transfer of data is desired, then use the MSS:RDCCH:PROGRAM command. If that command is not used, then set the length of the message with the MSS:RDCCH:LENGTH? command.

## MSS:RDCCH:

## PROGram

[MSS:RDCCH:PROGram]
Programs the RACH Message Generator with the data constructed by the MSS:RDCCH:BUILD command.

This command automatically determines the length of the RACH message built and overwrites the any length that may have been established by the
MSS:RDCCH:MESSAGE:LENGTH command.

The RACH message is not sent with this command, but is sent with the MSS:RDCCH:MESSAGE:SEND command.

## 9-13-6 REVERSE DIGITAL TRAFFIC CHANNEL (RDTC) MOBILE SIMULATION

## MSS:RDTC:

## START

[MSS:RDTC:START]
Starts transmitting on the RDTC.

## Sp Tst transmits on the RDTC only when receiving a valid FDTC signal.

## STOP

[MSS:RDTC:STOP]
Stops transmitting on the RDTC.
DVCC $n$
[MSS:RDTC:DVCC n]
Specifies the DVCC transmitted on the RDTC. Range of $n$ is 1 to 255 .

## DVCC?

[MSS:RDTC:DVCC?]
Returns current value of DVCC.
TA $n$
[MSS:RDTC:TA n]
Specifies time alignment adjustment from Standard Offset Reference (SOR) in half symbols.
Range of $n$ is -10 to 60 . $n=0$ specifies no time alignment adjustment.

## TA?

[MSS:RDTC:TA?]
Returns current value of time alignment adjustment from Standard Offset Reference (SOR) in half symbols.

## LENGth:

## NORMaI

[MSS:RDTC:LENGTh:NORMal]
Selects Normal length burst.

## SHORTened

[MSS:RDTC:LENGth:SHORTened]
Selects Shortened length burst.

## VOCoder:

## VSELP

[MSS:RDTC:VOCoder:VSELP]
Selects VSELP vocoder.
ACELP
[MSS:ROTC:VOCoder:ACELP]
Selects ACELP vocoder.

## MSS:RDTC:

## FACCH: or SACCH:

RAW n1,n2,n3,n4,n5,n6...
[MSS:RDTC:FACCH: or SACCH:RAW n1,n2,n3,n4,n5,n6...]
Sends a RAW message on the RDTC. Each $n x$ represents an argument.
The number of arguments is variable, but must be a multiple of 6 to operate properly.

## 9-13-7 REVERSE VOICE CHANNEL (RVC) MOBILE SIMULATION

MSS:RVC:

## START

[MSS:RVC:START]
Starts transmitting on the RVC.
STOP
[MSS:RVC:STOP]
Stops transmitting on the RVC.
SAT $n$
[MSS:RVC:SAT n]
Specify the value of Supervisory Audio Tone used on the RVC. The following are valid values for $n$ : 0 (to turn off SAT) and 5965 to 6035.

SAT?
[MSS:RVC:SAT?]
Returns the current value of SAT.

## 9-14 BER COMMANDS

BER commands measure the receive Bit Error Rate (BER) of a Base Station. BER is calculated for BER:RDTC:DATA:USER and BER:RDTC:DATA:PSEUDO. BER:RDTC:DATA:LOOPBACK and BER:RDTC:DATA:45MHZ_OFFset enable the Base Station to measure its own BER.

## BER:RDTC:

## SETup

## [BER:RDTC:SETUP]

Sets up the Sp Tst as when entering the Base Station Digital Traffic BER screen (screen is not displayed). The HOST is forced into Duplex Mode through selection of Duplex screen.

## CHANnel $n$

[BER:RDTC:CHANnel n]
Sets RF Channel. Range of $n$ is 0 to 2047.

## SLOT $n$

[BER:RDTC:SLOT n]
Selects Digital Traffic Timeslot. Range of $n$ is 1 to 3 .
RFLVL $n$
[BER:RDTC:RFLVL n]
Sets RF Level in dBm. Range of $n$ is -127.0 to -20.0.

## DATA:

## USER

[BER:RDTC:DATA:USER]
Sends user-selected data. (RDTC data is specified in the User Defined Data Field Setup screen).

RDTC data is specified in the User Defined Data Field Setup screen. Data must be set prior to initiating this command. See Operation Manual for details.

## PSeudo

[BER:RDTC:DATA:PSeudo]
Sends pseudo-random data.

## LOOPBACK

[BER:RDTC:DATA:LOOPBACK]
Sends data received from Base Station in the FDTC Slot format back to the Base Station in the RDTC Slot format (for Base Stations with self BER test capabilities).

## 45MHZ_OFFset

[BER:RDTC:DATA:45MHZ_OFFset]
Down-converts frequency 45 MHz and retransmits data.

## GO

[BER:RDTC:GO]
Starts Base Station Digital Traffic BER test.

## STOP

[BER:RDTC:STOP]
Stops Base Station Digital Traffic BER test.

## BER:RDTC:

## BITS?

[BER:RDTC:BITS?]
Returns number of bits.

## ERRORS?

[BER:RDTC:ERRORS?]
Returns number of bit errors.

## BER?

[BER:RDTC:BER?]
Returns Bit Error Rate (percentage).

## CLEAR

[BER:RDTC:CLEAR]
Clears current results.

## STATUS?

[BER:RDTC:STATUS?]
Returns synchronous data status (1 if Base Station cannot sync up to the data; 0 otherwise).

## 9-15 MODULATION ACCURACY COMMANDS

Modulation Accuracy commands measure the $\pi / 4$ DQPSK modulation of Base Station signals.

## MODacc:FDTC:

## SETup

[MODacc:FDTC:SETup]
Sets up the Sp Tst as when entering the Modulation Accuracy screen (screen is not displayed.). The HOST is forced into the Duplex Mode through selection of the Duplex Operation screen.

## CHANnel $n$

[MODacc:FDTC:CHANnel n]
Sets RF Channel. Range of $n$ is 0 to 2047.

## RUN?

[MODacc:FDTC:RUN?]
Starts Modulation Accuracy measurements and returns adjusted AGC value.

## COMPIete?

[MODacc:FDTC:COMPlete?]
Returns test status ( 1 if complete or 0 if not complete). (Test takes $\approx 25$ seconds.)

## EVM?

[MODacc:FDTC:EVM?]
Returns RMS Error Vector Magnitude in percent.

## FREQ_ERRor?

[MODacc:FDTC:FREQ_ERRor?]
Returns Frequency Error in hertz.

## IQ_OFFset?

[MODacc:FDTC:IQ_OFFset?]
Returns I/Q Offset in dB.
MAG_ERRor?
[MODacc:FDTC:MAG_ERRor?]
Returns RMS Magnitude Error in percent.

## PHASE_ERRor?

[MODacc:FDTC:PHASE_ERRor?]
Returns RMS Phase Error in degrees.

## 9-16 POWER AND GENERIC MEASURE COMMANDS

## POWer:

## FDTC: or RDTC

- FDTC is used when performing TDMA power measurements on a Base Station.
- RDTC is used when performing TDMA power measurements on a Mobile Station.


## SETup

[POWer:FDTC: or RDTC:SETUp]
Configures the Sp Tst to measure TDMA power on a Digital Traffic Channel (DTC).
CHANnel $n$
[POWer:FDTC: or RDTC:CHANnel n]
Specifies DTC channel on which to perform TDMA power measurement. Range of $n$ is 1 to 1999.

ZERO
[POWer:FDTC: or RDTC:ZERO]
Sets the Power Meter to a zero power reference at the T/R Connector.

## Remove any signal from the T/R Connector.

## MEASure?

[POWer:FDTC: or RDTC:MEASure?]
Returns TDMA power ( mW ) on a DTC applied to the T/R Connector.
The value returned by this command is the TDMA power measured at the T/R Connector plus the value specified in the POWer:FDTC:CABLE:LOSS command.

FDTC:
CABLE:LOSS $n$
[POWer:FDTC:CABLE:LOSS n]
Specifies loss (+) or gain (-) in dB between signal source and T/R Connector. Range of $n$ is -50.0 to 50.0 .

MEASLow? n
[POWer:FDTC:CABLE:MEASLow? n]
Returns TDMA power ( dBm ) on a DTC applied to the Antenna Connector. Range of $n$ is 0 to 1. For $\boldsymbol{n}=\mathbf{1}$, low power initialization of Power Meter is performed prior to returning measured value; $\boldsymbol{n}=\mathbf{0}$, no low power initialization is performed.

- Used for performing power measurements in the -40 to -10 dBm range.
- Low power initialization ( $n=1$ ) is required the first time this command is executed after any other Sp Tst TMAC function is performed; otherwise, using $n=0$ is recommended.
- Intended for Base Station measurements only.


## MEASure:

SAT?
[MEASure:SAT?]
Returns Supervisory Audio Tone frequency reading in Hz .

## ST?

[MEASure:ST?]
Returns Signal Tone frequency reading in Hz .

## 9-17 FLASH MEMORY COMMANDS

The mass memory (MMEMory) subsystem provides the Flash Memory storage capability of the Sp Tst. Memory files are displayed in the Flash Files Directory. 512 directory entries are available to store Test Set states, Macro programs, or Calibration data. File names are strings, limited to eight characters. The system promotes all lower case file name characters to upper case.
Files are stored in Flash Memory using remote commands only. Calibration Data Sets and Test Set States are recalled using remote commands or as part of executable macros.

The following remote commands used to operate the Flash Files Directory:

## MMEMory:

## CATalog?

[MMEMory:CATalog?]
Returns Flash Memory status. First number returned is memory space used in bytes. Second number returned is memory space available in bytes. Remainder data is returned in sets of 3 consisting of file name, file type and file size for each file stored in Flash Memory.

## CATalog:

## ENTRY? $n$

[MMEMory:CATalog:ENTRY?n]
Returns file entry (file name, file type, file size) for given index. Returns $\$ \$ \$$ if past end of directory or --- for deleted file. $n$ is line number (index) in Flash Files Directory.
Range of $n$ is 0 to 512 .
USED?
[MMEMory:CATalog:USED?]
Returns file space used in bytes.
FREE?
[MMEMory:CATalog:FREE?]
Returns available file space in bytes.

## DELete " $f$ "

[MMEMory:DELete "f"]
Deletes file but does not release memory space until Pack operation is done. fis file name.

## MMEMory:

## INITialize

[MMEMory:INITialize]
Erases all files stored in Flash Memory.

## INITialize?

[MMEMory:INITialize?]
Returns 1 if file system has been initialized, 0 otherwise.
LOAD:MACRo " $m$ ", " $f$ "
[MMEMory:LOAD:MACRo "m", "f"]
Loads macros and variables stored as the file name from Flash Memory into Test Set memory. $m$ is name of designated macro. $f$ is file name. If $m$ is *, designated macro is executed.
If $m$ is macro name, that macro is executed. If $m$ is omitted (""), no macro is executed.

## PACK

[MMEMory:PACK]
Packs Flash Memory and frees memory space from deleted files.
Powering off Test Set during Pack function may result in the loss of files.

STORe:MACRo " $m$ ", " $f$ "
[MMEMory:STORe:MACRo " $m$ ", " $f$ "]
Stores all loaded macros and variables (except free variables) into Flash Memory since power-up or last *PMC (Purge Macro) command. $m$ is name of macro designated as entry point for file ( $f$ ) executed from Flash Files Directory (see Appendix C of Operation Manual).

Error messages are returned to the HOST when they occur. Refer to Table 9-4 for a description of Flash Memory error messages.

| ERROR NUMBER | ERROR DEFINITION | DESCRIPTION |
| :---: | :--- | :--- |
| 220 | Parameter Error | Incorrect number of parameters were entered with <br> command. |
| 224 | Illegal Parameter Value | A parameter entered was not appropriate for command. |
| 225 | Out of Memory | Insufficient memory space to perform command. |
| 250 | Corrupt Media | Media Full |
| 253 | Indicates Flash Memory could not be erased or data <br> could not be stored in Flash Memory. |  |
| 254 | Indicates Flash Memory not properly initialized. <br> Initialize Flash Memory. |  |
| 255 | Indicates insufficient Flash Memory space to perform <br> command. |  |
| 256 | File Name Not Found | Indicates command not performed because 512 file <br> names have been used. |
| 257 | File Name Error | Specified file not stored in Flash Memory. <br> Indicates command attempted to create file name <br> already stored or file name syntax incorrect. |

Table 9-4 Flash Memory Error Messages

## 9-18 MISCELLANEOUS COMMANDS

TICKs?
[TICKs?]
Returns current millisecond tick count. This is a counter that increments every millisecond from the moment the Sp Tst is powered up.

## KCLAIM

[KCLAIM]
Claims the HOST keypad.

## Same as HOST ":KEYPAD:CLAIM".

## KUNCLAIM

[KUNCLAIM]
Unclaims the HOST keypad.

## Same as HOST ":KEYPAD:UNCLAIM"

Macros that executed from the Sp Tst Flash File directory do not need to claim the keypad. The keypad is already claimed upon entering special test (Sp Tst).

SPRINTF? format,...
[SPRINTF? format,...]
Performs a formatted print into a string. The number of parameters is variable. The first parameter always specifies the format of the SPRINTF. There must be a format for every parameter present.
Example: string str

```
    str = sprintf? ":04X",4096
```

    print str // Result: 1000
    str \(=\) sprintf? "-04x*04x", 4096,4095
    print str // Result: 10000fFF
    
## 9-19 TMAC SPECIAL EDITING COMMANDS

This section describes and provides examples of the various editing features of the Sp Tst. The commands in this section enable the user to build an edit field on the screen of the HOST and return a value into a variable.
For each to the following TMAC edit commands (except for EDIT:ACTivity), the first key pressed on the HOST keypad is used as the first parameter. Therefore, the first key must be pressed prior to calling the EDIT:XXX? command. This key is used as an input to the editing function, thus starting the editing process. The editing process continues until the ENTER Key or ESC softkey is pressed. (In each of these commands, the F6 softkey is labeled "ESC.")
A. TMAC COMMANDS.

## EDIT:

UINT? key,old, $x, y$, min, max
[EDIT:UINT? key, old, $x, y$, min, max]
Displays an existing Unsigned Number at a specified location on the HOST screen, accepts the edit (within the limits specified) of the existing number and returns the resulting Unsigned Number. See Table 9-5 for details on each of the parameters. (See macro EDITUINT in Example B1.)

| PARAMETER | DESCRIPTION |
| :---: | :---: |
| key | Value of the key pressed before this command is called. [Value returned with val(host? ":syst:key?") command.] See Appendix B, Front Panel Keys and Keycodes. |
| old | Previous or initial value of the edited field. |
| $x$ | Column number (in pixels) of the HOST screen. Screen is $640 \times 350$ pixels. Range of $x$ is 0 to 639 . |
| $y$ | Row number (in pixels) of the HOST screen. Screen is $640 \times 350$ pixels. Range of $y$ is 0 to 349 . |
| $\min$ | Minimum value allowed by the editing function. |
| $\max$ | Maximum value allowed by the editing function. |
| nv | Number of valid digits. Range of $n v$ is 1 to 32. |
| MIN | Mobile Identification Number. The format of the MIN is "123/456-7890." |
| wild | Allows (1) or does not allow (0) wild card placeholders. |
| prec | Precision. A floating point number which indicates the number of digits before and after the decimal point, as in <before>,<after> Example: 2.3 indicates 2 digits before and 3 digits after the decimal point. |
| digits | Previous or initial value of digits of the field to be edited. digits is a string consisting of 1 to 30 characters. |
| lines | Number of lines of text of the field to be edited. Range of lines is 1 to 14. |
| chars | Number of $W$ 's that fit on a single line. Range of chars is 1 to 25. (Note: The letter $W$ is the widest character in the character set used in the Test Set.) |
| mode | Edit mode: $0=$ Text or 1 = Digits Only. |

Table 9-5 Parameters for Sp Tst Editing Commands

## EDIT:

INT? key,old, $x, y$, min, max
[EDIT:INT? key,old, $x, y$, min, max]
Displays an existing Signed Number at a specified location on the HOST screen, accepts the edit (within the limits specified) of the existing number and returns the resulting Signed Number. See Table 9-5 for details on each of the parameters.
(See macro EDITINT in Example B2.)
HEX? key,old, $x, y, n v$
[EDIT:HEX? key,old, $x, y, n v$ ]
Displays an existing Hexadecimal Number at a specified location on the HOST screen, accepts the edit (within the maximum number of digits specified) of the existing number and returns the resulting Hexadecimal Number. See Table 9-5 for details on each of the parameters. (See macro EDITHEX in Example B3.)

BIN? key,old, $x, y, n v$
[EDIT:BIN? key, old, $x, y, n v$ ]
Displays an existing Binary Number at a specified location on the HOST screen, accepts the edit (within the maximum number of digits specified) of the existing number and returns the resulting Binary Number. See Table 9-5 for details on each of the parameters. (See macro EDITBIN in Example B4.)

MIN? key, MIN, $x, y$, wild
[EDIT:MIN? key,MIN, $x, y$, wild]
Displays an existing Mobile Identification Number at a specified location on the HOST screen, accepts the edit (with wild card characters if specified) of the existing MIN and returns the resulting MIN in a string. See Table 9-5 for details on each of the parameters. (See macro EDITMIN in Example B5.)

FLOAT? key,old,x,y,prec,min, max
[EDIT:FLOAT? key, old, $x, y$, prec, min, max]
Displays an existing Floating Point Number of a designated precision at a specified location on the HOST screen, accepts the edit (within the limits specified) of the existing number and returns the resulting Floating Point Number. See Table 9-5 for details on each of the parameters. (See macro EDITFLOAT in Example B6.)

DIGITS? key,digits, $x, y$
[EDIT:DIGITS? key,digits, $x, y$ ]
Displays an existing Number Field up to 30 digits long at a specified location on the HOST screen, accepts the edit (within the 30 digit limit) of the existing number field and returns the resulting Number Field in a string. See Table 9-5 for details on each of the parameters. (See macro EDITDIGITS in Example B7.)
The following special edit keys may be used:

| HOST KEY | FUNCTION |
| :--- | :--- |
| Data Scroll $\leftarrow$ | Moves Cursor to the Left within the Text Window. |
| Data Scroll $\rightarrow$ | Moves Cursor to the Right within the Text Window. |
| DEL | Deletes a Character. |
| CE | Deletes all Characters in the Text Window. |

## EDIT:

TEXT? key,old, $x, y$,lines,char,mode
[EDIT:TEXT? key, old, $x, y$, lines, char, mode]
Displays an existing variable length Text Message at a specified location on the HOST screen, accepts the edit of the existing Text Message and returns the resulting Text Message in a string. The edited Text Message can be specified to be text or digits only. See Table 9-5 for details on each of the parameters.
The same special edit keys allowed for EDIT:DIGITS? may be used plus the following:

| HOST KEY | FUNCTION |
| :---: | :---: |
| CAPS (softkey F1) | Toggles between Upper and Lower Case Mode. |

## Notes:

- The F1 (CAPS) and F6 (ESC) Softkeys is re-labeled by this command and are automatically restored to their original condition when the edit session is over.
- The edit activity flag can be checked (see EDIT:ACTivity?) to see if the text buffer was changed.

Only up to 128 characters can be included in the text buffer.
ACTivity $n$
[EDIT:ACTivity n]
Enables ( $n=1$ ) or disables ( $n=0$ ) the Edit Activity Flag.
Prior to executing any of the EDIT:XXX? commands, the Edit Activity Flag should be set to 0 with this command; the Edit Activity Flag can then be checked (with EDIT:ACTivity?) to determine if the edit routine changed anything.

## ACTivity?

[EDIT:ACTivity?]
Returns the current state of the Edit Activity Flag.
B. EXAMPLES.

1. Macro: EDITUINT

The macro EDITUINT illustrates the use of the TMAC command EDIT:UINT? to create an edit field on the screen of the HOST to edit an unsigned integer (an unsigned integer is defined as any integer that is greater than or equal to 0 ). In the following example, the value of the edit field is initialized to 100; the maximum value that can be edited is 1024. The following steps are performed:

- Calculates the pixel width of a 4 digit field.
- The user screen is selected, and the Front Panel Keypad is claimed.
- The initialize value is printed using a right justified print to the $x, y$ location 100,100.
- An edit box is created that is large enough to hold the largest number possible (1024).
- Wait until a key is pressed on the Front Panel on the HOST.
- After key is pressed, TMAC command, EDIT:ACT 0, initializes an internal flag that is used later to determine if any edit activity occurred or if "ESC" Soft Function Key F6 is pressed.
- TMAC command EDIT:UINT? is executed. This command opens up the edit activity at $x, y$ location 100,100 . The size of the editing window is based on the $\mathrm{min} / \mathrm{max}$ value. The $\mathrm{min} / \mathrm{max}$ value in this example is 0 to 1024 .
- a specifies the key that was just pressed on the Front Panel. b is the initial value of the field which is to be displayed if "ESC" Soft Function Key F6 is pressed.
- The TMAC command EDIT:UINT? continues to run until the user presses the ENTER Key or "ESC" Soft Function Key F6. During this time, the user may change the value of the field by using the Data Entry Keypad, Data Scroll Keys or Spinner.
- When the ENTER Key is pressed, the EDIT:UINT? command returns the new value. If the "ESC" Soft Function Key F6 is pressed, the initial value (100) is returned.
- The value returned is printed out the OPT. RS-232 Connector.
- If EDIT:ACT? returns a 1, indicating edit activity, the "ESC" label of Soft Function Key F6 is erased.
- The Front Panel Keypad is returned to normal IFR-1900 CSA operation (unclaimed).

```
*dmc "edituint", begin
    var width
    width = pixlen? "1234" // Width of field in pixels.
    host ":screen:user;*wai" // Select tne user screen.
    host ":keypad:claim"
    b}=10
    rjprint b,100,100,width
    // Claim the HOST
    // keypad.
    // Set initial value.
// Right justify print initial
// value.
    box 0,100-1,100-1,100+width+1,100+20,white // Create edit box.
    do
        a = val(host? ":syst:key?") // Wait for input from keypad.
    until a != -1
    :edit:act 0 // set edit activity to 0.
    b = :edit:uint? a,b,100,100,0,1024 // Perform unsigned integer
// editing.
    print b // Print result to RS-232.
    if (:edit:act?)
        label 5,'' // Erase ESC label.
    endif
    host ":keypad:unclaim" // Give the keypad back to
    // HOST
end
// End of macro EDITUINT.
```

2. Macro: EDITINT

The macro EDITINT operates identical to EDITUINT except for the type of number that can be edited. An integer can be a positive or negative number. In the following example, the number edited can be any integer from-1024 to 1024.

```
*dmc "editint", begin
    var width
    width = pixlen? "-1234" // Width of field in pixels.
    host ":screen:user;*wai" // Select the user screen.
    host ":keypad:claim"
    b=100
    rjprirtt b,100,100,width
// Right justify print initial
// value.
    box 0,100-1,100-1,100+width+1,100+20,white // create edit box.
    do
        a = val(host? ":syst:key?") // Wait for input from keypad.
    until a != - 1
    :edit:act 0 // Set edit activity to 0.
    b}=\mathrm{ :edit:int? a,b,100,100,-1024,1024// Perform signed integer
    // editing
    print b // Print result to RS-232
    if (:edit:act?)
        label 6,', // Erase ESC label.
    endif
    host ":keypad:unclaim" // Give the keypad back to
    // HOST
    // End of macro EDITINT.
```

3. Macro: EDITHEX

The macro EDITHEX demonstrates the editing of a number formatted in hexadecimal (also referred to base 16). This macro is very similar to EDITUINT. The main difference is that the number is now displayed and edited as a hexadecimal number instead of a decimal number.

The TMAC command EDIT:HEX? does not have a parameter that specifically identifies the $\mathrm{min} / \mathrm{max}$ value. Instead $n v$ is utilized that specifies the number values that make up the hexadecimal number field. In the following example, $n v=4$, which indicates that the range of edit is 0000 to FFFF.

```
*dmc "edithex", begin
    var width
    width = pixlen? "AAAA" // Widti Of field in pixels.
    host ":screen:user;*wai" // select the user screen.
    host ":keypad:claim" // Claim the HosT
    // keypad
    b=#h64
    xyprint 100,100,404h,b
    box 0,100-1,100-1,100+width+1,100+20,white// create edit box.
    do
            a = val(host? ":syst:key?") // wait for input from keypad.
    until a != -1
    :edit:act 0 // Set edit activity to 0
    b}=\mathrm{ :edit:hex? a,b,100,100,4 // Perform editing of a
    // number.
    // in hex format.
    // Print result to RS-232
    if (:edit:act?)
        label 6,', // Erase ESC iabel.
    endif
    host ":keypad:unclaim" // Give the keypad back to
    // HOST.
end // End of macro EIIMHEX.
```

4. Macro: EDITBIN

The macro EDITBIN is very similar to EDITHEX. The main difference being that the number is displayed and edited as a binary number instead of a hexadecimal number.
*dmc "editbin", begin
var width
width $=$ pixlen? "1100100" // Width of field in pixels.
host ":screen:user;*wai" // Select the user screen.
host ":keypad:claim"
// Claim the HOST
// keypad.
$\mathrm{b}=$ \#bl100100 // set initial vaiue
xyprint $100,100,407 \mathrm{~b}, \mathrm{~b} \quad / /$ Prirt initial value box $0,100-1,100-1,100+w i d t h+1,100+20$, white // Create edit box.
do
a = val(host? ":syst:key?") / / Wait for input from keypad.
until a ! = -
:edit:act $0 \quad / /$ Set edit activity to 0
$b=$ :edit:bin? $a, b, 100,100,7 \quad / /$ Perform editing of a number
// in binary format
print b
// Print result to RS-232.
if (:edit:act?)
label 6,', // Erase ESC label.
endif
host ":keypad:unclaim" // Give the keypad back to
// HOST.
end // End of macro EDITBIN.
5. Macro: EDITMIN

The macro EDITMIN demonstrates the use of TMAC command EDIT:MIN? to edit a Mobile Identification Number (MIN). The EDIT:MIN? command edits a MIN that is in the format: $X X X / X X X-X X X X$. The flow of the following example is the same as EDITUINT; the main difference being that the value returned from EDIT:MIN? is a string.

```
*dmc "editmin", begin
    var width
    string min
    width = pixien? "111/ili-0111" // Widtr of field in pixels.
    host ":screen:user;*wai" // select the user screen.
    host ":keypad:claim" // Claim the HOST
    // keypad.
    min= "111/111-0111" // set initial value.
    rjprint min, 100,100,width // Right justify print initial
// value.
    box 0,100-1,100-1,100+width+1,100+20,white // Create edit box.
    do
        a = val(host? ":syst:key?") // Wait for input from keypad,
    until a != -1
    :edit:act 0 // Set edit activity to 0
    min = edit:min? a,min, 100,100,0 // Perform editing of a MIN
    print min // Print result to RS-232.
    if (:edit:act?)
        label 6,', // Erase ESC label
    endif
    host ":keypad:unclaim" // Give the keypad back to
    // HOST.
end // End of macro EDITMIN
```

6. Macro: EDITFLOAT

The macro EDITFLOAT is the same as EDITUINT, except for the type of number that can be edited. A floating point number is defined as a positive or negative number that may include a fractional part. In the following example, the number edited can be any number from-128.0 to -30.0. The format of the floating point number is specified by prec of the EDIT:FLOAT? TMAC command. In the following example, prec is set to 3.1.

```
*dmc "editfloat", begin
    var widtr
    width = pixlen? "-128.0" // Width of field in p亡xels.
    host ":screen:user;*wai" // Select the user screen.
    host ":keypad:claim" // Claim the HOST
    // keypad.
    b - 30.0 // Set initial value
    xyprint 100,100, <6.1d,b // print initial value.
    box 0,100-1,100-1,100+width+i,100+20,white/// Create edit box.
    do
        a = val(host? ":syst:key?") // Wait for input from keypad
    until a != -1
    :edit:act 0 // set edit activity to 0.
    b = :edit:float? a,b,100,100,3.1,-128.0,-30.0 // Performediting
                                    // of a floating
                                    // number
    print b // Print result to RS-232.
    if (:edit:act?)
        label 5,', // Erase ESC label.
    endif
    host ":keypad:urclaim" // Give the keypad back to
    // HOST
end // End of miacro EDITELOAT.
```

7. Macro: EDITDIGITS

The macro EDITDIGITS is very similar to EDITMIN. In the following example, a string of digits is edited as in EDITMIN. The main difference being that the maximum number of digits is 30 and the slash (/) and dash (-) are not present. An edit box is created based on the width and depth of a string of up to 30 digits, consisting of 2 lines, each 15 digits long.

```
*dmc "editdigits", begin
    var width
    string digits
    width = pixlen? "012345678901234" // Width of field in pixels.
    host ":screen:user;*wai" // Select the user screen.
    host ":keypad:claim" // Claim the HOST
    // keypad.
    digits = "012345678901234" // Set initial value.
    rjprint digits,100,100,width // Right justify print initiai
    // value.
    box 0,100-1,100-1,100+width+1,100+20,white // Create edit box.
    do
        a = val(host? ":syst:key?") // wait for input from keypad.
    until a != - 1
    :edit:act 0 // set edit activity to 0.
    digits = :edit:digits? a,digits,100,100 // Perform editing of a
        // field containing up to
        // 30 digits.
    // in binary format.
    print digits // Print result to RS-232.
    if (:edit:act?)
        label 6,', // Erase ESC label
    endif
    host ":keypad:unclaim" // Give the keypad back to
    // HOST.
end // End of macro EDITDIGITS.
```


## SECTION 10 －SPECIAL TEST PROGRAM EXAMPLES

## 10－1 GENERAL

This Section provides some general guidelines and examples of remote operation and macro programs using Special Test（＂Sp Tst＂）specific commands．All macros are executed remotely through the OPT．RS－232 Connector．

Refer to Section 4，Creating and Uploading TMAC Programs，for any addtional instructions using the macros／programs in this section．

The following TMAC programs are available via the World Wide Web at http：／／www．ifrsys．com／download／download．html．The macros shown in Sections 10－2 through 10－11（except for 10－8－2 and 10－8－8）are contained in a self－extracting zip file named sample．exe， and the macros in Section 10－12 are contained in a self－extracting zip file named dcchcss．exe．

## 10－2 FORWARD CONTROL CHANNEL（FOCC）

## 10－2－1 MONITORING DECODED DATA

## MACRO NAME：focc＿page

SYNTAX：focc＿page $n$ （ $n=$ FOCC channel number， 1 to 1023．）
PURPOSE：Look for Page orders on the FOCC．
If and when found，print out the MIN and time of day for each occurrence．
（Macro continues until key is pressed on the RS－232 terminal．）
EXAMPLE：focc＿page 332
MACRO：

```
*dmc "focc_page",begin
focc:setup
focc:start
focc:chan $1
focc:word:both
do
    tpause
    focc:stream:a
    $=focc:order?
    f (&="PAGE")
        $=foce:min?
        print &," ",syst:=ime?
    endif
    tpause
    focc:stream:b
    S=foco:order?
    if (&="PAGE")
        s=Eoca:min?
        print s," ",syst:time?
    endiz
urt-1 key?
era
```

```
// Define macro named focc_page.
```

// Define macro named focc_page.
// Setup for receiving FocC.
// Setup for receiving FocC.
// Start decoding FOCC data.
// Start decoding FOCC data.
// Set RE Channel to value entered with macro.
// Set RE Channel to value entered with macro.
// Decode both Streams A arid B.
// Decode both Streams A arid B.
// Initiate do loop
// Initiate do loop
// Allow time for decoding
// Allow time for decoding
// Select Stream A for response
// Select Stream A for response
// Return order as string variable \$
// Return order as string variable \$
// Look for a Page order
// Look for a Page order
// Return MIN as string variable S
// Return MIN as string variable S
// Print MIN and time to OPT. RS-2?2 Connector
// Print MIN and time to OPT. RS-2?2 Connector
// Allow time for decoding.
// Allow time for decoding.
// Select Stream E for response
// Select Stream E for response
// Retirr orier as string variahie e
// Retirr orier as string variahie e
// Look for a Eage order
// Look for a Eage order
// Revurn MIN as strino variable \&
// Revurn MIN as strino variable \&
l frint VIN ard time =0 ufr. RS-Z32 Comreazor
l frint VIN ard time =0 ufr. RS-Z32 Comreazor
f/ Do unt\& key pressed or NS-こマ2 tezm\&raz.
f/ Do unt\& key pressed or NS-こマ2 tezm\&raz.
End mãro focc_page

```
End mãro focc_page
```


## 10－2－2 MONITORING RAW DATA

```
MACRO NAME: focc_raw
    SYNTAX: focc_raw n
    (n=FOCC channel number, 1 to 1023.)
```

    PURPOSE: Monitor FOCC until Page order is detected.
    If and when found, fill raw data buffer (100 words) and place Page order data at
    the \(50 \%\) point
    
## EXAMPLE：focc＿raw 332

MACRO：

```
*dmc "focc_raw",begin // Define macro named focc_raw.
focc:setup- // Setup for receiving Foc\overline{C}.
focc:chan $1 // Set RE Channel to value entered with macro.
focc:raw:word:both // Monitor Streams A and B.
focc:capt:sel:order // Select ORDER to capture on.
focc:raw:capt:page // Select Page as order for capture.
focc:raw:trig 2 // Select middle trigger position.
focc:raw:start // Start monitoring raw FOCC data.
print "WAITING FOR PAGE" // Print out through OPT. RS-232 Connector.
do // Initiate do loop.
    tpause // Allow time to capture PAGE order.
until key? or focc:raw:capt?// wait for capture condition to end do loop.
print "CAPTURED PAGE" // Indicate Page order was found.
do // Initiate do loop.
    tpause // Allow time to fill data buffer.
until key? or focc:raw:full?// wait for full data buffer before ending do loop.
print "CAPTURE BUFFER FULL" // Indicate data buffer is full.
i=focc:raw:capt:index? // Return Page order position in data buffer as i.
a=focc:raw:ts? i // Return time stamp of Page order as a.
print "A Data Parity Check B Data Parity Check Busy/Idle TS"
    /* Print out header for raw data. */
for i=0 to 99 // Print out raw data through OpT. RS-232 Connector.
    print :07h,focc:raw:a:data? i," ",
    print %O3h,focc:raw:a:parity? I," ",
    if ((focc:raw:a:check? i)}=0\mathrm{ )
        print "GOOD ",
    else
        print "BAD ",
    ericit
    Erint =07h,focc:r゙aw:b:data? i," ",
    print O3r,focc:raw:b:pari\pmy? 土."" "
    if ((focc:raw:b:check? i)=0)
        print "GOOD ",
    else
        Rrint "BAD ",
    endif
    prirt - 2d,focc:raw:b_亡? i,"",
    print Ed, (EOCC:raw:Es? 亡)-a
rext i
foこa:raw:stov // Stows raw da=a aantuve
er.i // Erd mE=ro&ocomaw.
```


## 10-3 FORWARD VOICE CHANNEL (FVC)

## 10-3-1 MONITORING DECODED DATA

Specify SAT Color Code (FVC:SCC) before requesting decoded data.
MACRO NAME: fvc_-char
SYNTAX: fvc_char $n$
( $n=$ FVC channel number, 1 to 1023.)
PURPOSE: Monitor FVC until Flash with Information order is detected.
If and when found, display the characters sent in the Flash with Infomation order message.
(Macro continues until key is pressed on the RS-232 terminal.)
EXAMPLE: fvc_char 3
MACRO:

```
* dmc "fvc_char",begin // Define macro named fvc_char.
fvc:setup- // Setup for receiving FVC
fvC:start // Start decoding FVC data.
fvc:chan $1 // Set RF Channel to variable entered with macro.
delay 1000 // Allow channel to settle.
meas:sat? // Throw away first SAT meas.
do
    a = meas:sat?
until key? or (abs(a-6000)<50)
if(k\iny?)
    print "Aborted"
endif
fvc:scc :meas:sat? // select sCC to match SAT.
do
    tpause
    $=fvc:order?
    if($="ELASH W/INFO")
        delay 3000
        $=fvc:char1?
        if($!='"-1')
            print S,
        eridif
        $=fvc:char2?
        if(S!="-1")
            primt S
        else
            print ""
        endif
    ericif
urtil key?
erd
// Initiate do loop.
// Allow time for Sp Tst tasks to run.
// Returrl last decoded order as string variable S.
// Compare order with Flash with Information.
// Allow time for order to complete first 16
// characters.
// When available, print first l }6\mathrm{ cinaracters
// out OPT. RS-232 Connector.
// Receive second set of 16 characters.
// When available, print second 16 characters
// out OPT. RS-232 Connector.
// If no second set of 16 characters received,
// send carriage return out OPP. RS-232 Connector
// Do urai工 key N上essed On RS-232 temmiraz
// End macro fvc_char.
```


## 10-3-2 MONITORING RAW DATA

Set the FVC Capture Mode to NONE (FVC:CAPT:SEL:NONE) prior to initiating raw data queries.
MACRO NAME: fvc_raw
SYNTAX: fvc_raw n
( $n=$ FVC channel number, 1 to 1023.)
PURPOSE: Collect raw data on the FVC.
Display five data words, starting with the first word as soon as received.
EXAMPLE: fvc_raw 3
MACRO:

```
*dmc "fvc_raw",begin // Define macro named fvc raw.
fvc:setup }\mp@subsup{}{}{-}// Setup for receiving FV\overline{C}
fvc:chan $1 // Set RF channel to value entered with macro.
focc:capt:sel:none // Eliminate FOCC capture interference.
fvc:raw:depth 5 // Set size of raw data buffer to 5 data words.
fvc:raw:start // Start collecting raw FVC data.
print "WAIT" // Indicate waiting out OPT. RS-232 Conmector.
a=0 // Set variable a to 0
do // Initiate do loop.
    tpause // Allow time for Sp Tst tasks to run.
    b=fvc:raw:count? // Return number of words in raw data buffer.
    if(a<b) // When new data is available, print data
        for i = a to b-1. // information out OPT. RS-232 connector.
            print *07h,fvc:raw:data? i," ",
            print *03h, fvc:raw:parity? i," ",
            a=fvc:raw:check? i
            if (a) // If a=1 (true), then CRC check is bad.
            print "BAD ", // Indicate bad CRC check out OPT. RS-232 Conmector.
            else // If a=0 (false), then CRC check is good.
                print "GOOD ", // Indicate good CRC check out OPT. RS-232 connector.
        endif
        print *5d,fvc:raw:ts? i // Indicate time of data word out OPT RS-232
    // Connector.
    // Show data information for all 5 aata words.
    // Preverit aisplaying same data twice.
    /* Do until key pressed or RS-232 terminal
    or raw data buffer is full. */
// End macro fvc raw.
```

```
10-4 FORWARD DIGITAL TRAFFIC CHANNEL (FDTC)
10-4-1 MONITORING DECODED DATA
MACRO NAME: fdtc_msg
    SYNTAX: fdtc_msg n,x
    ( n=FDTC channel number, 1 to 1023. x=timeslot, 1 to 3)
    PURPOSE: Monitor FDTC.
    Display FACCH and SACCH message types, each with respective DVCC.
    (Macro continues until key is pressed on the RS-232 terminal.)
    EXAMPLE: fdtc_msg 100,3
        MACRO:
```

```
*dmc "fdtc_msg",begin // Define macro named fdtc_msg.
```

*dmc "fdtc_msg",begin // Define macro named fdtc_msg.
fdtc:setup // Setup for receiving FDT\overline{C}
fdtc:setup // Setup for receiving FDT\overline{C}
fdtc:chan \$1 // Set RF Channel to lst value entered with macro.
fdtc:chan \$1 // Set RF Channel to lst value entered with macro.
fdtc:slot \$2 // Set Timeslot to 2nd value entered with macro.
fdtc:slot \$2 // Set Timeslot to 2nd value entered with macro.
fdtc:start // Start FDTC decoding
fdtc:start // Start FDTC decoding
do
do
// Initiate do loop
// Initiate do loop
tpause // Allow time for decoding
tpause // Allow time for decoding
\$=fdtc:facch:msg? // Return FACCH message type as string variable.
$=fdtc:facch:msg? // Return FACCH message type as string variable.
    if($!="-1") // When available, indicate FACCH message type.
if($!="-1") // When available, indicate FACCH message type.
        print "Facch Message type is ",$
print "Facch Message type is ",\$
print "DVCC is ",4.ld, fdtc:dvcc?
print "DVCC is ",4.ld, fdtc:dvcc?
endif
endif
\$=fdtc:sacch:msg? // Return SACCH message type as string variable.
$=fdtc:sacch:msg? // Return SACCH message type as string variable.
    if($!="-1") // When available, indicate SACCH message type.
if($!="-1") // When available, indicate SACCH message type.
        print "Sacch Message type is ",$
print "Sacch Message type is ",\$
print "DVCC is ",*ld,fdtc:dvcc?
print "DVCC is ",*ld,fdtc:dvcc?
endif
endif
until key? // Do until key pressed on RS-232 terminal..
until key? // Do until key pressed on RS-232 terminal..
end // End macro fdtc_msg.

```
end // End macro fdtc_msg.
```


## 10-4-2 MONITORING RAW DATA

Set size of data buffer (FDTC:RAW:DEPTH) prior to using raw data queries. Limit selected data word to a range from 0 to the FDTC:RAW:DEPTH setting minus one, for raw data queries.

MACRO NAME: fdtc_raw
SYNTAX: fdtc_raw $n, x$
( $n=$ FDTC channel number, 1 to 1023. $x=$ timeslot, 1 to 3 )
PURPOSE: Collect FACCH raw data from FDTC.
Display 20 FACCH raw data words, starting with the first word as soon as received.

EXAMPLE: fdtc_raw 100,3
MACRO:

```
*dmc "fdtc raw",begin // Define macro named fdtc raw
fdtc:setup // Setup for receiving FDTC
fdtc:chan $1 // Set RF Channei to Ist value entered with macro.
fdtc:slot $2 // Set Timeslot to 2nd value entered with macro.
fdtc:raw:sel:facch // Select FACCH raw data for data buffer 
fatc:raw:depth 20 // Set size of raw data buffer to 20 data words.
fdtc:raw:start // Start collecting raw FDTC data.
print "WAIT" // Indicate waiting out OPT. RS-232 Connector.
a=0 // Set variable a to 0.
do // Initiate do loop.
    tpause // Allow time for Sp Tst tasks to run.
    b=fdtc:raw:count?
    if(a<b)
        for i = a to b-1
        print 42d,fdtc:raw:cf? i," ",
        for j=0 to 5 // Set range of j to indicate message byte.
                print %02h,fdtc:raw:mess? i, j
            next j // Show data for all 5 bytes.
            print " ","4d,fatc:raw:dvcc? i, " ",
            print *3d,fdtc:r゙aw:time? i
        next i // Show data information for all 20 data words
        a=b // Frevent displaying same data twice.
    endif
until key? or b=20 /* Do until key pressed on RS-232 terminal
        or raw data buffer is full. */
end
// End macro fdtc raw.
```


## 10-4-3 MONITORING IS-54 RAW DATA

MACRO NAME: fdtc_is54
SYNTAX: fdtc_is54 $n, x$
( $n=$ FDTC channel number, 1 to 1023. $x=$ timeslot, 1 to 3 )
PURPOSE: Collect FDTC raw data corresponding to the IS-54B timeslot.
Display 100 raw data words when raw data buffer is full.
(Macro continues until key is pressed on the RS-232 terminal.)
EXAMPLE: fdtc_is54 100,3
MACRO:

```
*dmc "fdtc_is54",begin // Define macro named fdtc_is54.
fdtc:setup - // Setup for receiving FDT\overline{C}
fdtc:chan $1 // Set RF Channel to lst value entered with macro.
fdtc:slot $2 // Set Timeslot to 2nd value entered with macro.
do // Initiate do loop.
    fdtc:is54:start // Start collecting raw FDTC timeslot data
    do // Initiate internal do loop
    tpause // Allow time to fill data buffer.
    until (key? or (fdtc:is54:count?=100))
    if(!key?)
        for i=0 to 99
            print 007r,fdtc:is54:sync? i," ",
            print *03h,fdtc:is54:cdvcc? i," ",
            print %03h,fdtc:is54:sacch? i," ",
            print %5d,fdtc:is54:time? i
            for j=1 to 65
                print %01h,fdtc:is54:data? i,j,
            next j // Show all 65 characters
            print
            next i // Show data information for all 100 data words.
    endif
until key? // Do until key pressed on RS-232 terminal.
end // End macro fdtc_is54.
```


## 10-5 REVERSE CONTROL CHANNEL (RECC)

```
MACRO NAME: recc_min
SYNTAX: recc min n
                                    (n=RECC channel number, 1 to 1023.)
        PURPOSE: Monitor RECC.
                            Display the MIN of the Mobile Station.
                            (Macro continues until key is pressed on the RS-232 terminal.)
EXAMPLE: recc_min 100
MACRO:
```

```
*dmc "recc_min",begin // Define macro named recc_min.
```

*dmc "recc_min",begin // Define macro named recc_min.
recc:setup // Setup for receiving RECC.
recc:setup // Setup for receiving RECC.
recc:chan \$1 // Set RF Channel to value entered with macro
recc:chan \$1 // Set RF Channel to value entered with macro
recc:start // Start decoding RECC data
recc:start // Start decoding RECC data
do
do
// Initiate do loop
// Initiate do loop
// Allow time for Sp Tst tasks to run.
// Allow time for Sp Tst tasks to run.
// Return MIN as string variable \$.
// Return MIN as string variable $.
    if(S!="-1") // When available, indicate MIN out OPT. RS-232
    if(S!="-1") // When available, indicate MIN out OPT. RS-232
        print "MIN received is ",$// Connector
print "MIN received is ",\$// Connector
\$ = recc:torder?
\$ = recc:torder?
print "Order is ",S
print "Order is ",S
endif
endif
until key? // Do until key pressed on RS-232 terminal.
until key? // Do until key pressed on RS-232 terminal.
end // End macro recc_min.

```
end // End macro recc_min.
```


## 10-6 REVERSE VOICE CHANNEL (RVC)

```
MACRO NAME: rvc_order
```

            SYNTAX: rvc_order \(n\)
                            ( \(n=\) RVC channel number, 1 to 1023.)
        PURPOSE: Monitor RVC.
            Display name of each order received.
            (Macro continues until key is pressed on the RS-232 terminal.)
        EXAMPLE: rvc_order 100
        MACRO:
    ```
*dmc "rvc_order",begiri // Define macro named rvc order
rvc:setup // Setup for receiving RVC.
rvC:char $I /// Set RF Cnammel to value entered with macro
rvC:start // Start decoding RVC data.
do // Initiate do ioop.
    tpause // Allow time for Sp Ist tasks to rurı
    S=rvc:torder? // Rezurn last decoded order as string variable g.
    if(f!="-1") // Wher available, Indiaate Iast decoded order out
        Orirt "ORDER RECEIVED ON RVC IS ",S
    endif // OPT. RS-232 Connector.
until key? // DO until key pressea cri RS-2zz termaral.
end
```

```
    Er.d macro rvc_orger
```

```
    Er.d macro rvc_orger
```


## 10-7 REVERSE DIGITAL TRAFFIC CHANNEL (RDTC)

MACRO NAME: rdtc_maho
SYNTAX: rdtc_maho $n, x$
( $n=$ RDTC channel number, 1 to 1023. $x=$ timeslot, 1 to 3 )
PURPOSE: Monitor RDTC.
Display mobile assisted handoff information returned in Channel Quality messages.
(Macro continues until key is pressed on the RS-232 terminal.)
EXAMPLE: rdtc_maho 100,2
MACRO:

```
*dmc "rdtc_maho", begin // Define macro named rdtc_maho
var i, reading
rdtc:setup // Setup for receiving RDTC.
rdtc:chan $1 // Set RF Channel to lst value entered with macro.
rdtc:slot $2 // Set Timeslot to 2nd value entered with macro.
rdtc:start // Start decoding RDTC data
print "Mobile Assisted Handoff Information"
print "Press any key to stop."
do // Initiate do loop.
    tpause // Allow time for background decoding.
    i=0 // Set initial i value to 0.
    while(i< 12) // Phone measures RSSI on up to l2 channels.
        reading=rdtc:sacch:rssi? i// Return RSSI of selected channels.
        if(reading!=-1)
            print "RSSI", ld, i+I,"=",reading
        endif
        ++i
    wend
    reading=rdtc:sacch:rssic? // Report RSSI of current channel.
    if(reading!=-1)
        print "Current RSSI=",-1d,reading
    endif
    reading=rdtc:sacch:ber? // keport BER of curremt charnei
    if(reading!=-1)
        print "BER=",*1d,reading
    endif
until key? // Do until key pressed ori RS-232 terminal
end // End macrordtc_mano.
```


## 10-8 CELL SITE SIMULATION (CSS)

Using the SETup, STARt and STOP commands of the RECC, RDTC and RVC nodes will stop the Cell Site Simulation. The RECC, RDTC and RVC nodes are automatically set up by the Cell Site Simulation process at the appropriated time:

- Transmitting on the FOCC activates the RECC node.
- Assigning an Analog Voice Channel activates the RVC node.
- Assigning a Digital Voice Channel activates the RDTC node.

Cell Site Simulation starts with the Sp Tst transmitting on the FOCC.

## 10-8-1 OVERHEAD MESSAGE FOR FOCC

MACRO NAME: css_focc
SYNTAX: css focc $n, x$
( $n=$ FOCC channel number, 1 to 1023. $x=$ RF level in $\mathrm{dBm},-127.0$ to -20.0 )
PURPOSE: Transmit an overhead message on the FOCC.
EXAMPLE: css_focc $332,-55.0$
MACRO:

```
*dmc "css_focc",begin
css:setup // Setup for cell Site simulation
css:chan $1
css:rflvl &2
css:focc:dcc 0
css:focc:pci 1
css:focc:rcf l
css:focc:sid 30
css:focc:s 1
css:focc:e 1
css:focc:regh 1
css:focc:regr 1
css:focc:n 20
css:focc:auth 0
css:focc:ep 0
css:focc:cmac 2
css:focc:sdcc1 0
css:focc:sdce2 0
css:focc:wfom 1
css:focc:b_i 1
css:glact:s:op
css:sta゙と
end
```

```
// Define macro named css_focc.
```

// Define macro named css_focc.
// Set RF Channel to lst value entered with macro.
// Set RF Channel to lst value entered with macro.
// Set RF Output Level to 2nd value entered.
// Set RF Output Level to 2nd value entered.
// Set Digital Color Code to 0.
// Set Digital Color Code to 0.
// Set Protocol Capability Indicator to 1.
// Set Protocol Capability Indicator to 1.
// Activate Read Control Filler bit.
// Activate Read Control Filler bit.
// Set System Identification Number to 30.
// Set System Identification Number to 30.
// Activate Serial Number bit
// Activate Serial Number bit
// Activate Extended Address bit.
// Activate Extended Address bit.
// Activate Home Registration bit
// Activate Home Registration bit
// Activate Roaming Registration bit.
// Activate Roaming Registration bit.
/* Set Number of Paging Channels to be scanned
/* Set Number of Paging Channels to be scanned
by Mobile Station to 20. */
by Mobile Station to 20. */
/* Set Maximum Number of Access Channels to be
/* Set Maximum Number of Access Channels to be
scanned by Mobile Station to 20. *//
scanned by Mobile Station to 20. *//

```
// Setup for Cell Site Simulation.
```

// Setup for Cell Site Simulation.
// Deactivate Authentication bit
// Deactivate Authentication bit
// Deactivate Extended Protocol bit
// Deactivate Extended Protocol bit
/* Set Control Mobile Attenuation Code (Mobiie
/* Set Control Mobile Attenuation Code (Mobiie
Station Power Level [-2 dBW nominal]). */
Station Power Level [-2 dBW nominal]). */
// Set Supplementary Digital Color Code 1 to 0
// Set Supplementary Digital Color Code 1 to 0
// Set Supplementary Digitai Color Code 2 to 0
// Set Supplementary Digitai Color Code 2 to 0
// Act-vate Wait For Cverhead Message bit.
// Act-vate Wait For Cverhead Message bit.
// Activate Busy-Idle bit (RVC idle)
// Activate Busy-Idle bit (RVC idle)
// Deactivate any global action messages
// Deactivate any global action messages
// Start tranomitting overhead message
// Start tranomitting overhead message
// Era macro css_foce.

```
// Era macro css_foce.
```


## 10-8-2 OVERHEAD MESSAGE USING PRIMARY AND SECONDARY CYCLES

## See Figure 10-1 for example of possible setup of Overhead Message Trains for each cycle

MACRO NAME: css_prim_sec
PURPOSE: Transmit an overhead message using Primary and Secondary cycles.
MACRO:

```
*dmc "css_prim_sec", begin // Define macro named css_prim_sec.
css:setup
css:focc:over:number 4 // Specifies 4 secondary cycles.
for i=0 to 4
    css:focc:over:length i,16 // set cycle length to 16.
next i
css:focc:over:ratio 1,4 // Set ratio to 1:4.
css:focc:over:ratio 2,15 // Set ratio to 1:15.
css:focc:over:ratio 3,50 // Set ratio to 1:50.
css:focc:over:ratio 4,30 // Set ratio to 1:30.
css:focc:over:select 0 // Select primary cycle.
css:focc:over:build // Build primary cycle.
css:focc:over:select 1 // Select secondary l.
css:enable:dcch 1 // Enable DCCH info word.
css:focc:over:build // Build secondary 1.
css:focc:over:select 2 // Select secondary 2.
css:enable:dcch 0
css:glact:action:randa l
css:glact:action:randb l
    // Enable rand challenge a
    // Enable rand challenge b
    // Build secondary 2.
    // Select secondary 3.
    // Disable rand challenge a.
    // Disable rand challenge b.
    // Build secondary 3.
    // Program RAw word.
    // Program RAw word.
    // Select secondary 4.
    // Enable location area ID
    // Enable registration increment
    // Enable registration ID.
    // Euild secondary 4.
    // Leave TMAC program with
    // optional overhead message
    // types disabled
    // Start generating
    // End macro css_prim sec.
```

Primary Cycle

| System <br> Parameter <br> Word 1 | System <br> Parameter <br> Word 2 | 14 Control Fillers |
| :---: | :---: | :---: |

Secondary Cycle 1, duty cycle 1:4

| System |  |  |  |
| :---: | :---: | :---: | :---: |
| Parameter | System <br> Parameter <br> Word 2 | DCCH <br> INFO <br> Word | 13 Control Fillers |

## Secondary Cycle 2, duty cycle 1:15

\(\left.$$
\begin{array}{|c|c|c|c|c|}\hline \text { System } & \text { System } & \text { Random } & \text { Random } & \\
\begin{array}{c}\text { Rarameter } \\
\text { Word } 1\end{array} & \begin{array}{c}\text { Rarameter } \\
\text { Word } 2\end{array}
$$ \& \begin{array}{c}Challenge <br>

Challenge\end{array} \& \mathrm{B}\end{array}\right]\)|  |
| :---: |

## Secondary Cycle 3, duty cycle 1:50

| System | System <br> Parameter <br> Word 1 <br> Word 2 | RAW <br> Word 1 | RAW <br> Word2 |  |
| :---: | :---: | :---: | :---: | :---: |

Secondary Cycle 4, duty cycle 1:30

| System <br> Parameter <br> Word 1 | System <br> Parameter <br> Word 2 | Locaid <br> Global <br> Action | Reg Incr <br> Global <br> Action | Reg ID <br> Message | 11 Control Fillers |
| :---: | :---: | :---: | :---: | :---: | :---: |

Figure 10-1 OMT Examples

```
10-8-3 GLOBAL ACTION OVERHEAD MESSAGE
MACRO NAME: css_glact
    SYNTAX: css_glact n,x
    ( }n=F\mathrm{ FOCC channel number, }1\mathrm{ to 1023. x=RF level in dBm, -127.0 to -20.0)
PURPOSE: Transmit an overhead message on the FOCC (10-8-1).
Add two global action messages to the overhead message train.
EXAMPLE: css_glact 332,-55.0
MACRO:
```

```
*dmc "css_glact",begin // Define macro named css_glact.
css_focc $1,$2 // Run css_focc macro to send overhead message.
css:glact:action:locaid l // Enable Location Area ID global action message.
css:glact:pureg 0 // Disable Power Up Registration bit.
css:glact:pdreg 0 // Disable Power Down Registration bit.
css:glact:lreg 1 // Enable Local Area Registration bit.
css:glact:locaid 240 // Set Location Area ID.
css:glact:action:access 1 /* Enable Access Attempt Parameters global action
    message. */
css:glact:maxb:pgr 8 // Set Maximum Busy occurrences for Page responses.
css:glact:maxb:oth 8 /* Set Maximum Busy occurrences for other
        responses. */
css:glact:maxs:pgr 9 // Set Maximum Seizures for page responses.
css:glact:maxs:oth 10 // Set Maximum Seizures for other responses.
css:glact:repeat:on /* Set to send global action messages continuously
    as part of overhead message train. */
css:glact:send
// Start sending global actiori messages.
end
// End macro css_glact.
```


## 10-8-4 MOBILE STATION CONTROL

MACRO NAME: css mscm
SYNTAX: css_mscm
PURPOSE: Replace one instance of the system parameter overhead message with a Message Waiting command. (This macro assumes the Sp Tst is already transmitting an overhead message on the FOCC.)

MACRO:
*dmc "css_miscm", begiri
css:mscm:order:msg_wtg
css:mscm:Local 5
css:mscm:repeat:off
css:mscm:send
end
// Define macro named css_mscm.
// Select Message Waiting message.
// Set Message Type to iridicate 5 messages waiting
// Set to sena message orly once.
// Send Message waitirug message.
$/ /$ Erid m.acro ess_mscm.

## 10-8-5 MOBILE STATION INITIATED CALL

When assigning a Digital Voice Channel, sends a Physical Layer Control (PLC) message to successfully complete the Mobile Station initiated call.

MACRO NAME: minit
SYNTAX: minit $n, x$
( $n=$ FOCC channel number, 1 to 1023. $x=$ RF level in $\mathrm{dBm},-127.0$ to -20.0)
PURPOSE: Set Sp Tst to transmit an overhead message on the FOCC (10-8-1).
Prepare the Sp Tst to respond to an access from the Mobile Station.
If the access is an Origination, assign the Mobile Station to a digital channel.
EXAMPLE: minit 332,-55.0
MACRO:

```
*dmc "minit",begin // Define macro named minit.
varn
Css_foco $1,S2 // Run css_focc macro to send overhead message
css:call:type 1 // set for digital. channel assignment.
Css:call:chan 5 // Set for RF Channel 5 assiqnment.
recc:start
css:call:proc:mobinit // start mobile initiated call processing.
do
    delay 50 // Look for successful access by Mobile Station.
    $=recc:torder?
    if(S != "-1")
        print S
    endif
until key? or (S = "ORIGIN")// Look for successful access by Mobile Station.
if(S="ORIGIN") // See if Access was an Origination.
    S=recc:min? // Store MIN of Mobile Station (phone) as $.
    css:call:proc:assign // Assign to digital chanrel 5.
    delay 500 // Allow time for phone and Sp Tst to respond.
    n=3 // Set initial ri (count) value to 3.
    css:Edtc:enable:ta 1 // Enable time alignment.
    css:fdtc:ta 0 // set the time alignment to 0.
    do
        GSs:fdtc:facch:plc // Serd Physicai Layer Coritrol message s3 times
        delay 500
    until (! (--n) Ow (rdtc:facch:msgtype?="PLC ACK"))
    i.f(n)
        print "Completed mobile initiated call to ",$
    else
        Srint "Urisuccessful"
    endiz
else
    Frint "Aborted"
endif
end F/ End maこromirit
```


## 10-8-6 BASE STATION INITIATED CALL

When assigning a Digital Voice Channel, send a PLC message and an Alert message to complete the Base Station initiated call. When assigning an Analog Voice Channel, send an Alert message to complete the Base Station initiated call.
After an Analog or Digital Voice Channel has been assigned, any data field on the respective Reverse Channel can be decoded and any message on the respective Forward Channel can be sent.

MACRO NAME: page
SYNTAX: page $n, x$
( $n=$ FOCC channel number, 1 to 1023. $x=$ RF level in dBm, -127.0 to -20.0)
PURPOSE: Set Sp Tst to transmit a system parameter overhead message followed by a Page order.
Prepare the Sp Tst for an access from the Mobile Station. When a Page response is received from the Mobile Station, assign the Mobile Station to an analog channel and send an Alert message.
EXAMPLE: page 332,-55.0
MACRO:

```
*dmc "page",begin // Define macro named page.
var st,sat
css_focc $1,$2 // setup overhead message with entered values.
recc:start
css:call:proc:reg
do
    delay 50
    $ = recc:torder?
    if($!= "-1")
        print $
    endif
urtil key? or (S = "REG") // Look for successful access by mobile */
if(!key?)
    css:mscm:order:reg_onf // Select audio as order.
    css:mscm:ordq (recc:ordq?) // Echo back same order qualifier
    css:mscm:repeat:off // only send one time
    css:mscm:send // Send message waiting.
endif
css:call:type 0 // Set type for anaiog
css:call:char 600 // Set for RE Channel 600 (TX 888 MHz,RX 843 MFz)
css:call:sat 5970 // Setup for SAT on analog channel.
css:call:dev 2.0 // Setup for SAT deviation of 2.0 kjz.
css:cali:vmac 3 // Set Voice Mobile Attenuation Code (Mobile
    // Station Fower Level [-6 dBW nominal]).
    // Start processing for Fage
css:ca-1:proc:page "(/) S
css:fvc:calling:num
    (macro page continues on following page)
```

```
do
    delay 50 // Wait for access
    $=recc:torder? // Return last decoded order on RECC as variable $.
    if($!= "-1")
        print $
    endif
until key? or ($ = "PAGE RESP") // Look for successful access by Mobile
if(!key?)
    css:call:proc:assign // Assign to FVC 600 and set SAT to 5970 Hz.
    do
        sat=meas:sat? // Return the SAT frequency
    until key? or (abs(sat-6000) < 50)
    n=3 // Set initial n (count) value to 3.
    do
        css:fvc:order:alertw // Send an Alert message on the FVC.
        delay 300
        st=meas:st? // Measure the signalling tone frequency.
    until (!(--n) or (abs(st-10000) < 20))
    if(n)
        print "Call successfully completed!"
    else
        print "Unsuccessful!"
    endif
else
    print "Aborted"
endif
end // End macro page.
```


## 10-8-7 HANDOFF

## Analog to Digital Handoff Example:

MACRO NAME: ad_handoff
SYNTAX: ad handoff $n$
( $n=$ handoff channel number, 1 to 1023.)
PURPOSE: Send a handoff message to the Mobile Station, handing off the call to a digital channel. (This macro assumes the Sp Tst is on an analog channel with the Mobile Station.)
EXAMPLE: ad_handoff 5
MACRO:

```
*dmc "ad_handoff",begin // Define macro named ad_handoff.
css:fvc:hand:chan $1 // Set handoff charinel to value entered with macro.
css:fvc:ta 0 // Set Time Alignment offset.
css:fvc:sbi 2 /* Set Shortened Eurst Indicator for transmit
    shortened burst after cell-to-cell handoff. */
css:fvc:dvcc 225
css:fvc:dmac 2 /* Set Digital Mobile Attenuation Code (Mobile
    Station Power Level [-2 dBW nominal]). */
css:fvc:mem 0 // Set Memory Encryption Mode Off.
css:fvc:pm 0 // Set Privacy Mode off.
css:call:proc:fvc:slot1 // process cali handoff to digital channel.
delay 500
do
    css:fdtc:facch:plc // Send Physical Layer control message on FDTC.
    delay 500
until (!(--n) or (rdtc:facch:msgtype?="PLC ACK"))
end // End macro ad_handoff.
```


## Digital to Analog Handoff Example:

MACRO NAME: da_handoff
SYNTAX: da_handoff $n$
( $n=$ handoff channel number, 1 to 1023.)
PURPOSE: Send a handoff message to the Mobile Station, handing off the call to an analog channel. (This macro assumes the Sp Tst is on a digital channel with the Mobile Station.)
EXAMPLE: da_handoff 5

## MACRO:

```
*dmc "da_handoff",begin // Define macro named da_handoff.
css:fdtc:ti 0 // ti=0 means analog handoff.
css:fdtc:dvcc 2 // Set 6030 Hz SAT for SCC on analog handoff
css:fdtc:dmac 2 // Set VMAC for power level 2 on analog handoff.
css:fdtcihand:chan $I // Set handoff channel to value entered with macro.
css:fvC:psce 2 // set present SAT color code to match DVCC setup
css:fvc:Vmac 2 // set VMAC to match DMAC setup.
css:fvc:mem 0 // Set Memory Encryption Mode off.
css:fvc:pm 0 // Set Privacy Mode off
css:call:sat 6030 // Set SAT frequericy to correspond with SCE.
css:call:dev 2.0 // Set SAT deviation to 2.0 kHz.
a=css:call:proc:fdtc:handoff? // Perform handoff.
if(a) // Indicate nandoff status out OPT. RS-232
    // Connector.
    print "Handoff is successful!"
else
    print "Unsuccessful!"
endif
end // End macro da_handoff.
```


## 10-8-8 PAGE

Sending Mobile Station Control Messages (MSCMs) examples:
A. To send a two word page in the primary, use the following example (see Figure 10-2):

```
*dmc "send_page",begin
css:focc:over:select 0 // Select the primary cycle.
css:mscm:repeat:off
css:mscm:order:page
css:mscm:send
end
```

B. To send a Voice Channel Designation message in secondary cycle 1, use the following example (see Figure 10-2):

```
*dmc "send vcdes:,begin
css:focc:over:select 1 // Select the primary cycle.
css:mscm:repeat:off
css:mscm:order:vo des
css:mscm:send
end
```

C. To initiate the call processing procedures associated with a Page and with the Voice Channel Designation, use the following program:

```
/* assumes example macro program is currently running */
*dmc "page",begin
var time
css:focc:over:sel o
css:call:type 0
css:call:chan l
$ = recc:torder?
css:call:dmac 0
css:call:roc:page
time = ticks?
do
    tpause
until key? or (recc:torder? = "PAGE RESP") or ((ticks? - time) > 20000)
if (!key?)
    css:focc:over:sel 0
    css:call:proc:assign
    delay 1000
    css:fvc:order:alert
endif
end
```

A two word page sent in the Primary Cycle

| System <br> Parameter <br> Word 1 | System <br> Parameter <br> Word 2 | Page <br> Word 1 | Page <br> Word 2 |  |
| :---: | :---: | :---: | :---: | :---: |

A Voice Channel Designation message in Secondary Cycle 1

| System <br> Parameter <br> Word 1 | System <br> Parameter <br> Word 2 | DCCH <br> INFO <br> Word | VCDES <br> Word 1 | VCDES <br> Word 1 | 11 Control Fillers |
| :---: | :---: | :---: | :---: | :---: | :---: |

Figure 10-2 Examples of Page and VCDES Message in OMTs

## 10-9 BIT ERROR RATE (BER)

MACRO NAME: ber_rdtc
SYNTAX: ber_rdtc
PURPOSE: Perform BER test (measure BER of a Base Station receiver) on RDTC (RF Channel 1). (This macro assumes the UUT will loop back the data from the receiver to the transmitter.)

## MACRO:

```
*dmc "ber_rdtc",begin // Define macro mamed ber_rdtc.
ber:rdtc:setup // Setup for Digital Traffic BER.
ber:rdtc:slot 1 // set to Timeslot 1.
ber:rdtc:chan 1 // Set to RE Channel 1 (TX 825.030 MHz)
ber:rdtc:data:pseudo // Set to send pseudo-random data on RDTC.
do
    ber:rdtc:go // Send pseudo-random RDTC data and start BER test.
    delay 100 // Allow time for Ease station to sync up with data
until key? or ! (ber:rdtc:status?)
delay 2000 /* or until key is pressed on RS-232 Termirnal. */
ber:rdtc:clear // Clear current results.
while (!key?) // Display current results until key is pressed on
    tpause // RS-232 Terminal.
    a=ber:rdtc:ber?
    if(a!=-1)
    print "Bit Error Rate = ", 4.3d,a
wend //
ber:rdtc:stop // Stop RDTC data transmission and BER test.
end // End macro ber_rdtc.
```


## 10-10 MODULATION ACCURACY (MODACC)

MACRO NAME: $\bmod 1900$
SYNTAX: mod1900n
( $n=$ channel number, 1 to 1023.)
PURPOSE: Perform Modulation Accuracy test (measure accuracy of $\pi / 4$ DQPSK signal) on FDTC or DCCH. The EVM is continuously displayed on the same line.

MACRO:

```
* dmc "modl900",begin
var time
mod:fdtc:setup // Setup to monitor EDTC for modulation accuracy
mod:fdtc:chan $1 // Set to RF Channel 1 (monitor 870.030 MHz).
do
    a = mod: Idtc:run? // Run Modulation Accuracy test
    time = ticks?
    do
        tpause
    until (key? or (abs(time - ticks?) > 2000)) or mod:fdtc:comp?
    print mod:fdtc:evm?,"\r", // Indicate RMS Error vector Magnitude percentage.
until key?
    print
end // End macromoderr.
```


## 10-11 GPIB

## LANGUAGE: HPTM Basic

PURPOSE: Perform Cell Site Simulation testing across GPIB.

## FILE:

```
10 Dev=705
20 OUTPUT Dev;":GPIB:MASK 1"
30 ON INTR 7 GOSUB 620
40 ENABLE INTER 7;2
5 0 ~ C L E A R ~ S C R E E N
60 PRINT "START"
70 DIM COMMS[60]
80 OUTPUT DEv;"CSS:SETUP"
90 OUTPUT Dev;"CSS:CHAN 333"
100 OUTPUT DEv;"CSS:RFLVL - 60"
110 OUTPUT DEv;"CSS:FOCC:PCI 1"
120 OUTPUT Dev;"CSS:START"
130 OUTPUT Dev;"CSS:CALL:TYPE 1"
140 OUTPUT Dev;"CSS:CALL:CHAN 5"
150 OUTPUT DEv;"CSS:CALL:SLOT 2"
160 OUTPUT DEv;"CSS:FDTC:ENABLE:SIGNAT 1"
170 OUTPUT DEv;"CSS:EDTC:SIGNAL:PITCH 0;CADENCE 1"
180 OUTPUT DEv;"CSS:EDTC:ENABLE:CAILING:NUM 1"
190 OUTPUT DEv;"CSS:FDTC:CALIING:NUM '316/522-4981'"
200 OUTPUT Dev;"CSS:FDTC:CALIING:TYPE 0"
210 OUTPUT DEv;"CSS:FDTC:CALIING:PLANID O"
220 OUTPUT Dev;"CSS:FDTC:CALLING:PI 口"
230 OUTPUT DEv;"CSS:FDTC:CALIING:SI O"
240 OUTPUT DEV;"CSS:FDTC:ENABLE:DMAC 0;TA 1;DTX 0;DIC 0"
250 OUTPUT DEv;"CSS:FDTC:TA 2"
260 Srq_flag=0
270 REPEAT
280
290
300 UNTIL Srq_flag=1
310 PRINT "REGISTRATION COMPLETED"
320 OUTPUT DEv;"CSS:CALL:FROC:PAGE"
330 Srq_flag=0
340 REPEAT
350 WAIT .5
360 UNTIL Srq Elag=1
370 PRINT "PAGE RESPONSE RECEIVED"
380 OUPPUR DEv;"CSS:CALL:EROC:ASSIGN"
390 WAIT 2
400 PRINT "CALI ASSIGN TO DIGITAL TRAFEIC CHANNEL
40 REPEAT
420 OUTPUT DEv;"CSS:FDTC:FACCH:EDC"
430 WAIT E
440 OCTPET DEV;"RDTC:EACOH:MSG?"
S5 ENmER DEv;Comms
&GC [NTTE COmmG="PLC ACK"
```

(The GPIB example program continues on the next page.)

```
470 PRINT "PIC ACK RECEIVED"
480 REPEAT
4 9 0
500
510
520
530

\section*{10-12 DIGITAL CONTROL CHANNEL (DCCH) CELL SITE SIMULATION}

The following file consists of a TMAC program that demonstrates the DCCH Simulation capabilities of the Special Test to include the following:
- DCCH Superframe setup.
- Power Up Registration.
- BMI Originated call.
- Mobile Originated call.
- Release with DCCH Information.
- SMS on the DCCH.
- SMS on the DTC.
- Authentication on DCCH.

The entry point for this program is the dcch_css macro; therefore, use the following command to store the program into Flash Memory: mmem:stor:macr "dcch_css","dcch_css". This program can than be executed from the Front Panel of the HOST (see 4-7-2) or from the RS-232 terminal (see 4-7-1).

The following TMAC program is accessible via the world wide web at http://www.ifrsys.com/download/download.html. Download self-extracting zip file dcchcss.exe.
```

* pmc
/* Global Variables. */
var poh sub
string phnum
var Sernum
/* Variables for SMS. */
var data l, data enc, data res
string msg
var mti,mreff,pi,ui, dackreq
var manackreq,mup,viid,dtime
var mcts pt,mots time,mcts off
var sig_pt,sig_pit,sig_caa,sig_dur
var cbr_ pt,cbn_addr_1,cbn_addr_t,cbn_addr_id,con_addr_enc
string con_addr
var cbn_pi_pt,con_pi,cbn_si
var cbn_at_pt,con_at_1
string cbri_at
var cbrum,cbrum_pi, conum_at
var゙ rle_data[120]

```
(dcchcss.mac program file continues on following page.)
```

*dmc "sms_dcch",begin
mti=0
mreff=0
pi=0
ui=1
dackreq = 0
manackreq=0
mup = 1
vlid=0
dtime = 2
data_l = len(msg)+1
data_enc=1
data_res = 0
mcts_pt = 2
mcts_time=0
mcts_off= \#b001101001000
sig_pt = 3
sig_pit = 0
sig_cad = 1
sig_dur = 0
clon_pt = 4
cbn_addr_l = 11
cbn_addr_t = 2
cbn_addr_id = 1
cbn_addr_enc=0
con_addr = "2143339999"
con_pi_pt = 5
cbn_pi=0
cbn_si=0
cbn_at_pt = 6
cbn_at_l=9
cbn_at = "DCCH Test"
j=0
hlp_data [j++] = (mti<< < ) (mireff>> 8)
rlp_data[j++]=mreff \& \#hff
hlp_data[j++]=(pi<< 5) \ (ui << 3) (dackreq << 2) ! (manackreq << 1) ! mup
hlP_data [j++] = (vlid << 5) : (dtime << 3)
hlP_data[j++] = data_l
hlp_data[j++] = (data_enc << 3) (data_res)
for i = 0 to len (msg)-1
nMP_data[j++]=asc(msg[i][i])
next I

```
(dcchcss.mac program file and sms_dcch macro continues on following page.)
```

hlp_data[j++]=(mcts_pt << 4) (mots_time >> 28)
hlp-data[j++]=(mcts-time >> 20) \& \#h\overline{ff}
hlp_data[j++] = (mots_time >> 12) \& \#hff
hlp_data[j++] = (mcts_time >> 4) \& \#hff
hip_data[j++]=((mot\overline{s}time<< 4) \& \#hff) : (mcts_off >> 8)
h1p_data[j++] = mcts_off \& \#hff
hip_data[j++]=(sig_pt << 4) ; (sig_pit << 2): (sig_cad >> 4)
hlp data[j++] = ((sig__cad<< 4) \& \#hff) (sig_dur)
hlp_data[j++] = (con_\overline{pt<< 4) (cbn_adar_l >> 4)}
hlp_data[j++]=((cb\overline{n_addr_l << 4) \& \#hff) i (cbn_addr_t << 1)}
(cbn_addr_id >> 3)
nlp_data[j] = ((cbn__addr_id<< 5) \& \#hff) (con_addr_enc<<< 4)
for-i = 0 to 9
hip_data[j] = hlp_data[j] : (asc(cbn_addr[i][i]) >> 4)
++j
hlp_data[j]=(asc(cbn_addr[i][i])<<4) \& \#hff
next-i
hlp_data[j] = hlp_data[j] ( (cbn_pi_pt)
h+j_data[j++] = (cbn_pi<< 6) ( (con_si<<<4) (cbn_at_pt)
hlp_data[j++] = cbn_at_l
for-i = 0 to 8
hlp_data[j++] = asc(con_at[i][i])
next i
css:spach:msgtype1:rdata
css:spach:rtrans 22
css:spach:rdata_unit:length j+1
css:spach:rdata_unit:hlp:id I
for i = 0 to j
css:spach:rdata_unit:hlp:data i,hip_data[i]
next i
css:spach:bu 4
css:spach:bt 0
css:spach:build:nonarq
a = css:spach:length:nonarq?
print sid," SMS R-DATA Message length is ",a
send_arch 15
print *ld," R-TRANS ID is ",css:spach:rtrans?
print " The phone should display the message:"
print " ",msg
rdcch:l3data:sel 0
print " Serding R-DATA Message"
print " Waiting for R-DATA ACCEPT"
print "Hit any key to skip or Q to quit"

```
(dcchcss.mac program file and sms_dcch macro continues on following page.)
```

    do
    delay 100
    $ = rdcch:msgtype?
    if$!= "-1"
        print " Message type is ",$
    endif
    until key? or S = "R-DATA ACCEPT"
    if(key?)
        print " No R-DATA Accept"
        return
    endif
    print " Received R-DATA Accept"
    print " R-TRANSACTION ID from Mobile is ", la, rdcch:rtrans?
    end
*dmc "sms dtc",begin
mti=0
mreff=0
pi=0
ui = 1
dackreq = 0
manackreq=0
mup = 1
vlid = 0
dtime = 2
data enc = 1
data-res=0
data_l = len(msg)+1
mots-pt = 2
mcts_time=0
mcts-off= \#b001101001000
sig_pt=3
sig_pit = 0
sig-cad=1
sig_dur=0
con-ot=4
cbn_addr_l = 11
con addr t = 2
cbn-addr-id=1
cbn_addr_enc=0
con-addr-}="2143339999"
cbn_pi_pt=5
cbn pi=0
con-si = 0
cbn_at_pt=6
cbn-at-1 = 9
con_at = "Call Fome"
j=0

```
(dcchcss.mac program file and sms_dtc macro continues on following page.)
```

hlp_data[j++] = (mti<< 5) : (mreff >> 8)
hlp_data[j++] = mreff \& \#hff
hIp-data[j+%] = (pi << 5) (ui<< 3) : (dackreq << 2) : (manackreq << 1)
(mup)
nlp_data[j++] = (vlid << 5) : (dtime << 3)
hlp_data[j++] = data_l
hlp-data[j++] = (data_enc << 3) (data_res)
for-i = 0 to len(msg)-1
hlp_data[j++]= asc(msg[i][i])
next-i
hlp_data[j++] = (mcts pt << 4) : (mcts_time >> 28)
hlp_data[j++] = (mcts_time >> 20) \& \#n产立
hlp_data[j++] = (mcts_time >> 12) \& \#nff
hlp_data[j++] = (mcts_time >> 4) \& \#hff
hlp data[j++]=((mct\overline{s}time<<4) \& \#hff) (mcts_off>> 8)
hlp_data[j++] = mcts_off \& \#hff
h1p_data[j++] = (sig_pt << 4) (sig_pit << 2) (sig_cad >> 4)
hlp_data[j++] = ((sig_cad << 4) \& \#riff) (sig_dur)
hlp_data[j++] = (cbn_pt << 4) ! (cbn_addr_l >> 4)
hlp_data[j++] =((cb\overline{n_addr_l << 4) \& \#hff) (cbn_addr_t << 1) ;}
(cbn addr id >> 3)
hlp data[j]=((cbn_addr_id << 5) \& \#hff) : (cbn_addr_enc<< 4)
for i = 0 to 9
hlp_data[j] = hlp_datalj] (asc(con_addr[i][i]) >> 4)
++j

```

```

next-i
hlp_data[j] = hlp_data[j] : (cbn_pi_pt)
++j
hlp_data[j++]=(cbn_pi<< 6) : (cbn_si<<<4) (cbn_at_pt)
hlp_data[j++] = cbn_at_l
for-i = 0 to 8
hlp_data[j++] = asc(cbn_at[i][i])
next i
css:fdtc:rtrans 12
css:fdtc:rdata_unit:length j+1
css:fdtc:rdata-unit:hlp:id 1
for i = 0 to j
css:fdtc:rdata_unit:hlp:data i,hlp_data[i]
next i
print %1d," R-TRANS ID is ",css:fdtc:rtrans?
print " Sending R-DATA Message"
css:fdtc:sacch:rdata:mess
print " Waiting for R-DATA ACCEPT"
print " Hit any key to skip or Q to quit"

```
(dcchcss.mac program file and sms_dtc macro continues on following page.)
```

    do
        delay 100
        S = rdtc:facch:msgtype?
    until key? or S= "R-DATA ACCEPT"
    if(key?)
        print " No R-Data Accept"
        return
    endif
    print " Received R-DATA ACCEPT"
    print " The phone should display the following message:"
    print " ",msg
    print " R-TRANS ID from mobile is ",uld,rdtc:facch:rtrans?
    erid
/* Set AGC by DMAC setting. */
*dmc "set dig__agc",begin
a=\$1*7+120
host "dup:inp:agc:man "+str(a)
end
Var paid,ns,nfb,neb,nsb,nrs,nnp,nb,np
*dmc "calc_peh_sub",begin
paid=(c\overline{ss:s\overline{pach:msid:ls? 0) \& \#hffff}}\mathbf{|}=(\mp@code{log}
ns=2
nfb=(css:fbcch:number:fbcch?) + 3
neb = (css:fbcch:number:ebcch?) + 1
nsb=css:fbcch:number:sbcch?
nrs=css:fbcch:number:res?
nnp = css:fbcch:number:non pch?
nb=nfb+neb+nsb+nrs
np}=(32-nb)-(nnp*2
return ((paid/ns)+np)+nb
end
*dmc "disp auth",begin
print " Received Authentication message"
print %ld," RANDC is ",rdcch:randc?
print sld," COUNT is ",rdcch:count?
Print % 5h," AUTHR is Ox",rdcch:authr?
cave:esm Sernum
cave:min phnum
cave:rand (:css:fbcch:rand?)
print %5h," The Calculated Cave AUTHR is 0x",cave:authr:reg?
end

```
(dcchcss.mac program file continues on following page.)
```

*dmc "reg type",begin
string rE
case (:rdcch:reg:type?)
Of 0: rt = "Power Down"
Of 1:rt = "Power Up"
of 2: rt = "Location Area"
of 3: rt = "Forced"
of 4: rt = "Periodic"
of 5: rt = "Degeristration"
Of 6: re = "New System"
of 7: rt = "ACC to DCCH"
of 8: rt = "TMSI Time Out"
of 9: rt = "User Group"
Of 10: rt = "New Hyperband"
otherwise: rt = "Reserved"
endcase
return rt
end
*dmc "disp_reg",begin
print " Received Registration"
a = :rdcch:idt?
if(a != -1)
print -1d," IDT is ",a
print * ld," EHI is ",rdcch:ehi?
print " Mobile Station ID is Ox",
if a>1
print %lh,rdcch:msid:ms?,
endif
print *08h,rdcch:msid:ls?
endif
if (a=2)
prirt " MIN is ",phnum
endif
print " Registration type is ",reg_type
print - ld," SCM is ",rdcch:scm?
print "ld," Protocol Version is ",rdcch:prot:ver?
\$ = rdcch:cnumb:addr?
if $!= "-1"
        pririt " C-Number Address is ",$
prirt - d," C-Number Address Encoding is ",rdcch:cnumb:enc?
print {ld," C-Number゙ Address Identification Plan is ",rdcch:cnumb:plan?
print "Id," C-Number Address Type is ",rdcoh:cnumb:type?
endif

```
(dcchcss.mac program file and disp_reg macro continues on following page.)
```

a = rdcoh:pfc:req?
if a !=-1
print \&1d," PFC Request is ",a
endif
a = rdcch:mem:mea?
if a ! = - 1
print *ld," Message Encryption Mode Algoritnm is ",a
print \&1d," Message Encryption Mode domairi is ",rdcch:mem:med?
print *ld," Message Encryption Mode key is ",rdcch:mem:mek?
endif
a = rdcch:psid_rsid:sel?
if a ! = -1
print vld," Selected PSID/RSID is ",a
endif
a = rdcch:user:group:status?
if a != -1
print \&1d," User Group Status is ",a
print v1d," User Group Type is ",rdcch:user:group:type?
print tlh," User Group ID is Ox",rdcch:user:group:ugid:ms?,
print z08h,rdcch:user:group:ugid:ls?
endif
end
*dmc "disp_page_resp",begin
print " Received Page Response"
a = rdcch:idt?
orint sld," IDT is ",a
print <ld," EHI is ",rdcch:ehi?
print " Mobile Station ID is Ox",
if a>l
print \&1h,rdcch:msid:ms?,
endif
print to8h,rdcch:msid:ls?
print %ld, " Protocol version is ",rdcch:prot:ver?
print "1d, " Last Try is ",rdceh:lt?
print ld, " SCM is ",rdcch:scm?
print zld, " Service Code ",rdccr:service?
a = rdcch:mode:voice:vc?
if a ! = - 1
print ld, " Voice Coder Mode is ", a
print %1d," Voice Privacy Mode is ",rdcch:mode:voice:pm?
endif
a = rdcch:mode:data:Nmi?

```
(dcchcss.mac program file and disp_page_resp macro continues on following page.)
```

if a != - 1
print *ld, " Data Privacy Mode is ",a
print "ld," Data Mode SAP is ",rdccn:mode:data:sap?
print tld, " Data Mode Acked Data is ",rdcch:mode:data:acked?
print "ld," Data Mode CRC is ",rdcch:mode:data:crc?
print %ld, " Data Mode Data Part is ",rdcch:mode:data:part?
print <1d, " Data Mode RLP is ",rdccin:mode:data:rlp?
endif
a = rdcch:mem:mea?
if a! ! - 1
print "1d, " Message Encryption Algorithm is ",a
pririt -1d," Message Encryption Domain is ",rdcoh:mem:med?
print sid, " Message Encryption Key is ",rdcoh:mem:mek?
endif
a = racch:bandw?
亡亡 a ! = - 1
print sld, " Eandwidth is ",a
endif
a = rdcch:user:group:status?
if a != -1
print sld, " User Group Status is ",a
if (a=0)
print sld," User Group Type is ",rdcch:user:group:type?
print tlh," User Group ID is ox",rdcch:user:group:ugid:ms?,
print %08h,:rdcch:user:group:ugid:ls?
endif
endif
a = rdcch:sub:length?
if a != -1
print <1d," Subaddress Length is ",a
print *ld," Subaddress Odd/Even is ",rdcoh:sub:odd_even?
print \&1d," Subaddress Type is ",rdcch:sub:type?
for i = 0 to a-2
print "ld," Subaddress is ",i," is ",rdcch:sub:addr? i
next i
endif
end

```
(dcchcss.mac program file continues on following page.)
```

    *dmc "dcch setup",begin
    for i = 0 to 31
        css:fdcch:super:sfp i,i
        Css:fdcch:super:rn i,0
        css:fdcch:super:bri i,o
        css:fdcch:super:pe i,0
        css:fdcch:super:type i,3
    next i
    css:fdcch:super:ace:rand
    css:fdcch:super:acc:pe 0
    css:fdcoh:super:inc l
    css:fdcoh:super:zero
    end
*dmc "fbcch_setup",begin
css:fbcch:\overline{fc}1
css:fbcch:ec 1
css:fbcch:msg:struct I
css:fbcch:num:fbcch 0
css:fbcch:num:ebcch 0
css:fbcch:num:sbcch 0
css: Ebcch:num:res 0
css:fbcch:num:non_pch 0
css:fbcch:con 1
css:fbcch:dvce 0
css:fbcch:pfc 0
css:fbcoh:pch 0
css:fbcch:pfm 0
css:fbcch:enable:extended 0
css:fbcch:enaole:cbn:high 0
css: fbcch:enable:nonpublic:prob o
css:fbcch:msg:acc 1
css:fbcch:auth 0
css:fbcch:S 1
css:fbcch:rand 0
css:fbcch:acc:ms_pwr 0
css:fbcch:acc:bursst 1
css:fbcoh:max:ret 7
css:fbcch:max:busy 1
css:fbcch:max:rep 3
css:fbcch:max:stop 1
css:fbceh:rdata: length 0
css:fbcch:barred 0
css:fbcch:sub 0
css:fbcch:dic 0

```
(dcchcss.mac program file and fbcch_setup macro continues on following page.)
```

css:fbcch:msg:sel 1
css:fbcch:ss suff 0
css:fbcch:ac\vec{c}:rss min 0
css:fbcch:scan:int 0
css:fbcch:init 0
css:fbccr:delay 0
css:fbcch:scan:option 0
css:fbcch:enable:add:dcch 0
css:fbcch:msg:reg 1
css:fbcch:regh I
css:fbcch:regr I
css:fbcch:pureg 1
css:fbcch:pdreg 1
css:fbcch:syreg 1
css:fbcch:lareg 0
css:fbcch:dereg 1
css:fbcch:foreg 1
css:fbcch:cap 0
css:fbcch:enable:nonpublic:reg 0
css:fbcch:enable:rnum 0
css:fbcch:enable:regper 0
css:fbcch:enable:regid 0
css:fbcch:msg:sysid 1
css:fbcch:sid 0
css:fbcch:net 4
css:fbcch:prot 2
css:fbcch:enable:alpha:sid 0
css:fbcch:enable:psid rsid 0
css:fbcch:enable:country:code O
css:fbcch:msgtype:maca 0
css:fbcch:msgtype:olc 0
css:fbcch:msgtype:bsmc 0
css:fbcch:msgtype:service 0
css:fbcch:msgtype:soc_bsmc 0
css:fbech:msgtype:soc-0
end

```
(dcchcss.mac program file continues on following page.)
```

*dmc "ebcch_setup",begin
css:ebcch:m}mg:neigh:cell 1
css:ebcoh:serv_ss 0
css:ebcch:enable:nonp 0
css:ebcch:enable:neigh:tdma O
css:ebcch:enable:neigh:analog 0
css:ebcoh:enable:neigh:other 0
css:ebcch:msg:rci 1
css:ebcch:rci 1
css:ebcch:enable:chan 0
css:ebcch:msg:maca 0
css:ebcch:msg:neigh:serv 0
css:ebcch:msg:bsmc 0
css:ebcch:msg:emerg 0
css:ebcch:msg:serv 0
css:ebcch:msg:soc bsmc 0
css:ebcch:msg:soc-0
css:ebcch:msg:time 0
css:ebcch:msg:alt 0
end
*dmc "build bcch",begin
css:fbcch:build
a = css:fbcch:length? - 3
css:fbcch:number:fbcch a
css:ebcch:build
b = css:ebcch:length?
css:ebcch:ecl b
css:fbcch:number:ebcch 3
css:fbcch:build;program
css:ebcch:build
css:ebcch:auto:program 1 // requires version 5.1C

```
end
(dcchcss.mac program file continues on following page.)
```

*dmc "assignn avc",begin
var satf,satn
css:spach:bu 3
css:spach:bt 0
css:spach:mem 0
css:spach:soc 1
css:spach:vmac 3
css:spach:chan 222
css:spach:protocol 2
css:spach:enable:sub 0
css:spach:enable:dtx 0
css:spach:enable:display 0
css:spach:msgtypel:analog
send_arch 19
print " Assign to a Analog Voice Channel"
print %ld," AVC Channel is ",css:spach:chan?
print <ld," SAT is ",css:spach:scc?
print r1d," VMAC is ",css:spach:vmac?
case css:spach:scc?
of 0:
satf = 5970
of 1
satf=6000
of 2:
satf=6030
endcase
css:call:sat satf
css:chan (css:spach:chan?)
cs5:fdcch:super:stop
css:fvc:sat (css:call:sat?)
css:fvc:start
rvc:start
print " Waiting for SAT tone"
print " Hit any key to skip"
do
a = meas:sat?
tpause
until key? or (abs(a-satf)< < 5)
if(key?)
a = key
print " No SA? Tone"
eise
a = meas:sat?
print " SAT tone OF phone is ", ld,a
endif
satri = css:spach:sco?
css:fvc:ef 0
css:fve:psce (:css:spach:scc?)
print " Sending Alert and Waiting for Signaling Tone"
print " Hit ary key to skip or Q to quit"

```
(dcchcss.mac program file and assign_avc macro continues on following page.)
```

    do
        css:fvc:order:alert
        tpause
        a}=\mathrm{ meas:st?
    until key? or (abs(a-10000)<5)
    if(key?)
        print " No Signaling Tone"
        returr.
    endif
    print " Answer phone"
    print " waiting for connect"
    print " Hit any key to skip or Q to quit"
    do
        a = meas:st?
        tpause
    until key? or (abs(a - 10000) > 500)
    if(key?)
        return
    endif
    print " Thank you"
    end
*dmc "auth esn",begin
a = rdcch:nl3m?
do
delay 20
++i
if (i>7)
i=0
endif
rdcch:l3data:sel i
$=rdcch:msqtype?
        if S!="-1"
            --a
            print " Message type is ",$
endif
if S= "SERIAL NUMEER"
Sernum= rdcch:esn?
print" SERIAL \# is ", %03d, (Sernum>> 24)\&\#hff,to8d,Sernum \& \#hffffff
elif S = "AUTHENTICATION"
disp_auth
endif
until key? or (a=0)
end

```
(dcchcss.mac program file continues on following page.)
```

*dmc "reg_accept",begin
css:spach:bu 3
css:spach:bt 0
css:spach:idt 2
css:spacn:minl phnum
css:spach:icn
css:spach:pfm 0
css:spach:mm 0
css:spach:ehi 0
css:spach:enable:rnum:list o
css:spach:enable:pfc:assignment 0
css:spach:enable:msid:assignment 0
css:spach:enable:user:group 0
css:spach:enable:psid_rsid:avail 0
css:spach:enable:disp 0
css:spacn:enable:dir:addr D
css:spach:enable:dir:sub 0
css:spach:msgtype1:reg_accept
send_arch 18
disp-reg
print " Sending Registration Accept to Mobile"
end
*dmc "analog_vc_des",begin
var satf
Print " Assigning Analog Voice Chanriel"
css:spach:bu 3
css:spach:bt 0
css:spach:idt 2
css:spach:minl phnum
css:spach:bcn 0
css:spach:pfm 0
css:spach:mm 0
css:spach:ehi 0
css:spach:msgtype1:analog
css:spach:mem 0
css:spach:scc 2
csS:spach:vmac 5
css:spach:chan 200
css:spach:protocol 2
css:spach:enable:sub 0
css:spach:enable:dtx 0
css:spach:enable:dispiay 0
send arch 20
delay 32*20

```
(dcchcss.mac program file and analog_vc_des macro continues on following page.)
```

    case css:spach:scc?
        of 0:
        satf=5970
        Of 1:
        satf=6000
        of 2:
            satf}=603
    endcase
    css:fdcch:super:stop
    css:chan 200
    css:fvc:start
    css:fvc:sat satf
    rvc:stop
    rvc:start
    host "dup:inp:agc:auto"
    print " AVC Channel is 200"
    end
*dmc "conversation",begin
print " waiting Eor SAT Tone"
delay 3000
print " SAT Freq is ",咅d, meas:sat?
end
*dmc "restart dcch",begin
css:chan 1000
css:rate 0
css:slot 1
css:fdcch:super:dvcc (css:fbcch:dvcc?)
css: fdcch:super:start
css:rflv1 - 55
set_dig_agc (css:fbcch:acc:ms_pwr?)
if (css:fbcch:access:burst?)
rdcch:length:abbreviated
else
rdcch:length:rormal
endif
rdcch:l3data:sel 0
print " Restarting the DCCH"
end

```
(dcchcss.mac program file continues on following page.)
```

*dmc "assign_dtc",begin
css:spach:bu}
css:spach:bt 0
css:spach:dvcc 22
css:spach:dmac 3
css:spach:chan 25
css:spach:ats 3
css:spach:sb 0
css:spach:protocol 2
css:spach:ta 2
css:spach:mode:dic 0
css:spach:msgtypel:digital
send arch 19
print +1d," DTC Chanmel is ",css:spach:chan?
print *ld," Slot is ",css:spach:ats?
print zld," DVCC is ",css:spach:dvCc?
print t1d," DMAC is ",css:spach:dmac?
css:fdcch:super:stop
css:chan (css:spach:chan?)
css:fdtc:dvcc (css:spach:dvcc?)
css:fdtc:start
css:slot (css:spach:ats?)
rdtc:start
delay 500
css:fdtc:ta (css:spach:ta?)
css:fatc:enable:ta 1
print " Sending PLC and waiting for PLC Acknowledge"
print " Hit any key to skip"
do
css:fdtc:facch:plc
delay }50
\$ = rdtc:facch:msgtype?
until key? or (\$= "PLC ACK")
if(key?)
a=key
print " No PLC Acknowledge"
else
print " Received PLC Acknowledge"
endif
css:fdtc:signal:pitch 0
css:fdtc:signal:cadence 4
css:fdtc:calling:type 0
css:fdtc:calling:planid O
css:fdtc:calling:pi 0
css:fdtc:callirgg:si 0
css:fdtc:calling:rumm "316/522-4981"
css:fdtc:enabie:signal I
css:fdtc:enable:calling:numi l
print " Sending Alert and waiting for Mobile Acknowledge"
print " Hit any key to skip or Q to quit"

```
(dcchcss.mac program file and assign_dtc macro continues on following page.)
```

    do
        css:fdtc:facch:alert
        delay 500
        S = rdtc:facoh:msgtype?
    until key? or ($ = "MOBLLE ACK")
    if(key?)
        print " No Mobile Acknowledge"
        return
    endif
    print " Received Mobile Acknowledge"
    print " Please Answer the Phone"
    Print " Waiting for Cornect"
    print " Hit any key to skip or Q to quit"
    do
        delay 20
        S=rdtc:facch:msgtype?
    until key? or (S = "CONNECT")
    if(key?)
        return
    endif
    print " Thank You"
    print " Sending Base Station Acknowledge"
    css:fdtc:amt:connect
    css:fdtc:facch:bsack
    end
/*
*** Section 11 - BMI Originated SMS on DCCH
*/
*dmc "sms_on dcch",begin
print "<br>tilde{n\nSection 11 - BMI Originated SMS on DCCH\n"}
css:spach:bu 7
css:spach:bt 0
css:spach:msgtypel:spach
css:spach:not 26
rdcch:l3data:sel 0
pch_sub = calc_pch_sub
priñt " Sending
print " Waiting for Confirmation"
print " Hit any key to skip"

```
(dcchcss.mac program file and sms_on_dcch macro continues on following page.)
```

    do
        send pch pch sub
        delay 500
        $ = rdcon:msgtype?
        if S != "-1"
            print " Message type is ",$
        endif
    until key? or ($= "SPACHCON")
    if(key?)
        a=key
        print " No SPACH Confirmation"
    else
        print " Received Spach Confirmation"
        auth esn
    endif}\mp@subsup{}{}{-
    msg = "Digital Control Channel Test Message."
    sms_dcch
    end
/*
*** Section 10 - Unique Challenge on DCCH

* /
*dmc "uchal_on_dcch",bogin
print "\n<br>overline{nsection 10 - Unique Challenge on DCCH\n"}
css:spach:bu }
css:spach:bt 0
css:spach:randu \#h123456
css:spach:msgtype1:uchal
pch_sub=calc_pch_sub
send pch pch_süb
print " Sendíng Unique Challenge"
print *06h," RANDU is 0x",css:spach:randu?
rdcch:l3data:sel 0
print " Waiting for Confirmation"
print " Hit any key to skip or Q to quit"
do
delay 100
\$= rdcch:msgtype?
if \$!= "-1"
print " Message type is ",s
endif
until key? or ( \$= "UCHAL")
if(key?)
print " No Unique Challenge Confirmation"
return
endif

```
(dcchcss.mac program file and uchal_on_dcch macro continues on following page.)
```

    print " Received Unique Challenge Confirmation"
    delay 100
    cave:esn Sernum
    cave:min ohnum
    cave:randu (css:spach:randu?)
    print %05h," AUTHU returned is 0x",rdcch:authu?
    print %05h," Calculated Cave AUTHU is 0x",cave:authu?
    end
/*
*** Section 9 - BMI Release or the DTC
*/
*dmc "release from_dtc",begir
print "\n\nsection 9 - BMI Release on the DTC\n"
css:fdtc:enable:dcch 0
css:fdtc:facch:release
print " Sending release to Mooile"
print " Waiting for Mobile Acknowledge"
orint " Hit any key to skip"
do
delay 100
\$ = rdtc:facch:msgtype?
until (key?) or ( \$ = "MOBILE ACK")
css:chan 1000
css:slot 1
set dig agc (css:fbcch:acc:ms pwr?)
css:fdcch:super:dvcc (css:fbcch:dvcc?)
css:fdcch:super:start
css:rflvl - 55
if(k\iny?)
a=key
print " No Mobile Acknowledge"
else
print " Received Mobile Ack"
endif
print " DCCH Channel is 1000"
print " DVCC is ", +1d,css:fbcch:dvce?
if (css:fbcch:access:burst?)
rdcch:length:abbreviated
else
rdcch:length:normal
endif
rdcch:13data:sel 0
print " Hit any key when camping to contirue"

```
(dcchcss.mac program file and release_from_dtc macro continues on following page.)
```

    do
    delay 100
    S = rdcch:msgtype?
    if $!="-1"
        print " Message type is ",$
        endif
    until key? or (S = "REGISTRATION")
    if(key?)
        a = key
        return
    endif
    phnum = rdcch:min?
    print " The phone registered"
    reg_accept
    end
/*
*** Section 8 - SMS on the DTC

* /
*dmc "sms_on_dtc",begin
print "<br>r\n\overline{Section 8 - SMS on DTC\n"}
msg= "Digital Traffic Channel Test Message."
sms_dtc
end
/*** Section 7 - BMI Origination on DCCH with Authentication assigned to a DTC
*/
*dmc "page with_auth",begin
print "\n\nSection 7 - BMI Origination on DCCH\n"
css:spach:bu 5
css:spach:service 3
css:spach:minl phnum
pch_sub=calc_pch_sub
send_hard pch_sub
rdcch:13data:\overline{sel 0}
print " Sending Hard Page and waiting for page response"
print " Hit any key to skip or Q to quit"
do
delay 20
\$ = rdcch:msgtype?
if\& != "-1"
print " Message type is ",S
endif
until key? or S = "PAGE RESPONSE"

```
(dcchcss.mac program file and page_with_auth macro continues on following page.)
```

    if(key?)
        print " No Fage Response"
        return
    endif
    phnum = rdcch:min?
    disp_page_resp
    auth esn
    assig}n\textrm{n}dt
    end
/*
*** Section 6 - SSD Update on DCOH
*/
*dmc "ssd_update",begin
print "Tn\nSection 6 - SSD Update on DCCH\n"
css:spach:bu 7
css:spach:bt 0
css:spach:randssdl \#h123456
css:spach:randssd2 \#h789abcde
print " RANDSSD is 0x",
print %06h,css:spach:randssd1?.
print %08h,oss:spach:randssd2?
css:spach:msgtype1:ssdup
pch_sub=calc_pch_sub
rac\overline{ch:l 3data:sel 0}
print " Waiting for Base Station Challenge from mobile"
print " Hit ary key to skip or Q to quit"
do
send_pch pch_sub
dela\overline{y}100
\$ = rdcch:msgtype?
if \$ != "-1"
print " Message type is ",\$
endif
until key? or ( S= "BSCHAL")
if(key?)
print " No Base Station Challenge"
return
endif
delay 100
cave:randbs (rdcch:randbs?)
print %08r," RANDES is 0x",cave:randos?
cave:esm Sernum
print " SERIAL \# is ",%03d, (Sernum >> 24)\&\#hff,o8d, Sernum \& \#hffefff
Cave:mirn phmum
print " MIN is ",pnnum
cave:randssd:ms (css:spach:randssdl?)
cave:randssd:ls (css:spacn:randssd2?)
\$= "0"

```
(dcchcss.mac program file and ssd_update macro continues on following page.)
```

cave:akey:digits \$
print *06d," A-KEY is ",\$, cave:akey:check?
print -05h," AUTHBS is Ox",cave:authbs?
css:spach:bu 3
css:spach:bt 0
css:spach:authbs (cave:authbs?)
css:spach:msgtypel:bschalcon
send_arch 19
rdcc\overline{h:l3data:sel 0}
print " Waiting for SSD Update Confirmation"
print " Hit any key to skip or Q to quit"
do
delay 100
\$ = rdcch:msgtype?
if $!= "-1"
        print " Message type is ",s
        endif
    until key? or ($ = "SSD UPDATE")
if(key?)
print " No SSD Update Confirmation"
return
endif
c = rdcoh:confirm:ssdup:status?
if c=0
print " SSD UPDATE Successful"
else
print " SSD UPDATE Unsuccessful"
endif
end
/*
*** Section 10 - MS Release from DTC

* /
*dmc "ms release",begin
print "\n\nSection 10 - Mobile Release from DTC\n"
css:fdtc:enable:dochinfo 1
css:fdtc:dcchinfo:number 1
css:fdtc:dcchinfo:hyperband 0,0
css:fdtc:dcchinfo:channel 0,1000
css:fdtc:dcchinfo:dvcc 0, (css:fbcch:dvcc?)
css:fdtc:enable:ldp:bsack 0
print " Press the END key"
print " Release with info is to channel 1000"
print " waiting for Release"
print " Hit any key to skip or Q to quit"

```
(dcchcss.mac program file and ms_release macro continues on following page.)
```

    do
        tpause
        $ = rdtc:facch:msgtype?
    until key? or ($ ="RELEASE" )
    if(key?)
        print " No Release"
    eise
        print " Received Release"
        delay 50
    endif
    restart_dcch
    end
/*** Section 4 - Handoff from AVC to DTC
*/
*dmc "ad handoff", begin
print "Tn\nSection 4 - Handoff from AVC to DTC\n"
css:fvc:pscc (css:spach:scc?)
css:fvc:ef 0
css:fvc:dvcc 20
css:fvc:mem 0
css:fvc:pm 0
css:fvc:sbi 0
css:fvc:ta 3
css:fvc:dmac 3
css:fvc:handoff:channel 100
css:fvc:order:slot2
rvc:stop
css:chan (css:fvc:handoff:channel?)
css:fvc:sat 0
css:fdtc:start
css:slot 2
css:fdtc:dvcc (css:fvc:dvcc?)
print " DTC Channel is ", H1d, (css:fvc:handoff:channei?)
print " DVCC is ","ld,(css:fvc:dvcc?)
print " TA is ", ld,(css:fvc:ta?)
print " DMAC is ", %1d,(css:fvc:dmac?)
set_dig_agc(css:fvc:dmac?)
rdt\overline{c}:st\overline{Op}
rdtc:start
delay 1000
css:fdtc:ta 3
css:fdtc:enable:tá 1
Erint " Sending PLC"
print " Waiting for PIC Acknowledge"
print " Hit any key to skip or Q to quit"

```
(dcchcss.mac program file and ad_handoff macro continues on following page.)
```

    do
        css:fdtc:facch:plc
        delay 500
        $ = rdtc:facch:msgtype?
    until key? or ($= "PIC ACK")
    if(k\iny?)
        print " No PLC Acknowledge"
        return
    endif
    print " Received PLC Acknowledge"
    delay 1000
    end
/*
*** Section 3 - MS Origination on DCCH assigned to AVC
*/
*dmc "mob_orig_avc",begin
print "<br>overline{n}\nse\overline{ction 3 - Mobile Origination on DCCH\n"}
print " Enter a valid phone number and press send"
print " Waiting for origination"
print " Hit any key to skip or Q to quit"
rdcch:l3data:sel 0
do
delay 100
$=rdcch:msgtype?
        if S != "-1"
            print " Message type is ",$
endif
until key? or (\$ = "ORIGINATION")
if(key?)
print " Did not receive Origination"
return
endif
phnum = rdcch:min?
print " Thank you. Please wait."
print " Called address is ",rdcch:called:addr?
auth esn
analog_vc_des
conversation
end

```
(dcchcss.mac program file continues on following page.)
```

/*
*** Section 2 - Registration on DCCH
*/
*dmc "registration",begin
print "\n\nsectior 2 - Power Up Registration on DCCH\n"
rdcch:length:abbreviated
Print " Depress the ENTER key while at the same time turning on the PHONE"
while ! key?
tpause
wend
s = ticks?
a = key
rdcch:l3data:sel 0
print " Waiting for Registration"
print " Hit any key to skip or Q to quit"
do
delay 100
\$ = rdcoh:msgtype?
if $!= "-1"
            print " Message type is ",$
endif
until key? or (\$ = "REGISTRATION")
if(key?)
print " 'lhe phone did not register"
return
endif
print " The phone registered"
phnum = rdcoh:min?
q= ticks?
t=s-q
y=abs (t/1000)
print %ld," Time to register was ",y," seconds"
reg_accept
auth_esn
end

```
(dcchcss.mac program file continues on following page.)
```

/*
*** Section 1 - Build DCCH
*/
*dmc "build_dcch",begin
print "\n\nsection 1 - Euisd DCCH\n"
css:chan 1000
print zId," DCCH Channel is ",css:chan?
css:rate 0
CSs:slot 1
css:rflvl -55
dcoh_setup
fbcc\overline{h}}\mathrm{ setup
ebcch_setup
build-bcch
set d\overline{ig agc (css:fbcch:acc:ms_pwr?)}
css:fdcch:super:dvcc (css:fbc\overline{ch:dvcc?)}
css:fdcch:super:start
end
/*
*** Startup Macros

* /
*dmc "startup",begin
string ident
print "Setting up Sp Tst, please wait."
css:conf:user
ident = *idn?
if(strpos(ident,"1900") != -1)
interp "freq:band l" // this command is for the HosT only
print "1900Sp Tst"
endif
box 0,0,0,639,349
center "Cell Site Simulation Demonstration",0,150,640
end

```
(dcchcss.mac program file continues on following page.)
```

/*
*** DCCH Cell Site Simulation
*/
*dmc "dcch css",begin
var section,key_value
var done=0
key value=0
section=0
do
case section
of 0
startup
of 1:
build dcch
of 2:
registration
of 3:
mob_orig_avc
of 4:
ad_handoff
OE 5:
ms release
of 6
ssd update
of 7:
page with_auth
of 8:
sms_on_dtc
Of 9-
release_from_dtc
of 10:
uchal_on_dech
of 11:
sms on dcch
otherwise:
done = 1
endcase
++section
if key?
key_value=key
eridi\overline{E}
until (key_value=81) or (key_value=ll3) or (done=1)
print "\nTest Completed."
css:stop
end

```

\section*{SECTION 11-IS-136 COMMAND REFERENCE}

This section directs the IS-136 user to the Special Test ("Sp Tst") TMAC commands needed to build Layer 3 messages.
This section consists of tables containing the following:
- IS-136 Layer 3 Information Elements consisting of a Name, Type (column with shaded-in heading) and Length.
- Sp Tst TMAC Encode and Decode commands and Page numbers where command and description can be found.
\begin{tabular}{lll} 
REFERENCE & & PAGE \\
TABLE & REFERENCE TABLE TITLE & NO \\
\hline
\end{tabular}

F-BCCH LAYER 3 MESSAGES


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11-4 Registration Parameters
-
11-6
System Identity.
11-8






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E-BCCH LAYER 3 MESSAGES
11-13 Neighbor Cell.....................................................................................................................11-13

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SOC Message Delivery.
11-19
Time and Date

REFERENCE PAGE

\section*{E-BCCH LAYER 3 MESSAGES (cont)}
11-24 Neighbor Cell (Multi Hyperband) ..... 11-22
11.25 Neighbor Service Info (Multi Hyperband) ..... 11-26
1-26 ..... 11-27
Mobile Assisted Channel Allocation (Multi Hyperband)
Mobile Assisted Channel Allocation (Multi Hyperband)
SPACH LAYER 3 MESSAGES
11-27 Analog Voice Channel Designation ..... 11-28
11-28 Audit Order ..... 11-2911-2911-3011-311-32
Base Station Challenge Order Confirmation ..... 11-30
BSMC Message Delivery ..... 11-31
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R-DATA REJECT ..... 11-45
Registration Accept ..... 11-46
Registration Reject ..... 11-49
Release ..... 11-50
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SOC Message Delivery ..... 11-52
SPACH Notification ..... 11-53
SSD Update Order ..... 11-54
Test Registration Response ..... 11-55
Unique Challenge Order ..... 11-56
User Alert ..... 11-57
11-5 Queue Update ..... 11-59Queue Disconnect Ack11-58
\begin{tabular}{ll} 
REFERENCE & PAGE \\
TABLE & REFERENCE TABLE TITLE
\end{tabular}

RACH LAYER 3 MESSAGES
\begin{tabular}{|c|c|c|}
\hline 11-52 & Audit Confirmation & 60 \\
\hline 11.53 & Authentication & 11-61 \\
\hline 11 -54 & Base Station Challenge Order & 11-61 \\
\hline 11-55 & BSMC Message Delivery . & 11-62 \\
\hline 11-56 & Capability Report. & 11-63 \\
\hline 11.57 & MACA Report. & 11-65 \\
\hline 11-58 & Origination & 11-66 \\
\hline \(11-59\) & Page Response & 11-69 \\
\hline 11.60 & Queue Disconnect. & 11-71 \\
\hline 11-61 & R-DATA & 11-72 \\
\hline 11.62 & R-DATA ACCEPT & 11-75 \\
\hline 11-63 & R-DATA REJECT. & 11-76 \\
\hline 11-64 & Registration & 11-77 \\
\hline 11-65 & Serial Number & 11-78 \\
\hline 11-66 & SOC Message Delivery & 11-79 \\
\hline 11.67 & SPACH Confirmation & 11-79 \\
\hline 11-68 & SSD Update Order Confirmation & 11-80 \\
\hline 11-69 & Test Registration & 11-80 \\
\hline 11.70 & Unique Challenge Order Confirmation & 11-81 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:FBCCH:PD? & 9-80 \\
\hline Message Type & M & 6 & CSS:FBCCH:MSGtype:STRUCTure \(n\) & 9-252 & FDCCH:FBCCH:MSGtype? & 9.80 \\
\hline Number of F-BCCH & M & 3 & CSS:FBCCH:NUMber:FBCCH \(n\) & 9-255 & FDCCH:FBCCH:NUMber:FBCCH? & 9-81 \\
\hline Number of E-BCCH & M & 3 & CSS:FBCCH:NUMber:EBCCH \(n\) & 9-255 & FDCCH:FBCCH:NUMber:EBCCH? & 9-81 \\
\hline Number of S-BCCH & M & 4 & CSS:FBCCH:NUMber:SBCCH \(n\) & 9-255 & FDCCH:FBCCH:NUMber:SBCCH? & 9-81 \\
\hline Number of Reserved Slots & M & 3 & CSS:FBCCH:NUMber:REServed \(n\) & 9-255 & FDCCH:FBCCH:NUMber:REServed? & 9.81 \\
\hline Hyperframe Counter & M & 4 & CSS:FBCCH:HYPERframe \(n\) & 9-255 & FDCCH:FBCCH:HYPERframe? & 9-81 \\
\hline Primary Superframe Indicator & M & 1 & CSS:FBCCH:SUPERframe \(n\) & 9-256 & FDCCH:FBCCH:SUPERframe? & 9-81 \\
\hline Slot Configuration & M & 2 & CSS:FBCCH:CONfiguration \(n\) & 9-256 & FDCCH:FBCCH:CONfiguration? & 9-82 \\
\hline DVCC & M & 8 & CSS:FBCCH:DVCC \(n\) & 9-256 & FDCCH:FBCCH:DVCC? & 9-82 \\
\hline MAX SUPPORTED_PFC & M & 3 & CSS:FBCCH:PFC \(n\) & 9-256 & FDCCH:FBCCH:PFC? & 9-82 \\
\hline PCH_DISPLACEMENT & M & 3 & CSS:FBCCH:PCH \(n\) & 9-256 & FDCCH:FBCCH:PCH? & 9-82 \\
\hline PFM_DIRECTION & M & 1 & CSS:FBCCH:PFM \(n\) & 9-257 & FDCCH:FBCCH:PFM? & 9-82 \\
\hline Number of Non-PCH Subchannel Slots & M & 2 & CSS:FBCCH:NUMber:NON_PCH \(n\) & 9-255 & FDCCH:FBCCH:NUMber:NON_PCH? & 9-81 \\
\hline Extended Hyperframe Counter & 0 & 7 & CSS:FBCCH:ENABLE:EXTENDED \(n\) & 9-275 & N/A & - \\
\hline & & & CSS:FBCCH:EXTended \(n\) & 9-256 & FDCCH:FBCCH:EXTended:COUNt? & 9-81 \\
\hline CBN High & 0 & 20 & CSS:FBCCH:ENABLE:CBN:HIGH \(n\) & 9-274 & N/A & - \\
\hline & & & CSS:FBCCH:CBN:HIGH \(n\) & 9.257 & FDCCH:FBCCH:CBN:HIGH? & 9-82 \\
\hline Non-Public Probability Blocks & 0 & 9 to 24 & CSS:FBCCH:ENABLE:NONPublic: PROBability \(n\) & 9.276 & N/A & - \\
\hline & & & \begin{tabular}{l}
CSS:FBCCH:NONPublic:PROBability: \\
LENGth n
\end{tabular} & 9-257 & FDCCH:FBCCH:NONPublic: PROBability:LENGth? & 9-83 \\
\hline & & & CSS:FBCCH:NONPublic:PROBability: BLOCK n & 9.257 & FDCCH:FBCCH:NONPublic: PROBability:BLOCk? & 9-83 \\
\hline
\end{tabular}

Table 11-1 F-BCCH - DCCH Structure
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:FBCCH:PD? & 9-80 \\
\hline Message Type & M & 6 & CSS:FBCCH:MSGtype:ACCess \(n\) & 9-252 & FDCCH:FBCCH:MSGtype? & 9-80 \\
\hline AUTH & M & 1 & CSS:FBCCH:AUTH n & 9-258 & FDCCH:FBCCH:AUTH? & 9-83 \\
\hline S & M & 1 & CSS:FBCCH:S \(n\) & 9-258 & FDCCH:FBCCH:S? & 9.83 \\
\hline RAND & M & 32 & CSS:FBCCH:RAND \(n\) & 9-258 & FDCCH:FBCCH:RAND? & 9-83 \\
\hline MS ACC PWR & M & 4 & CSS:FBCCH:ACCess:MS_PWR \(n\) & 9-259 & FDCCH:FBCCH:ACCess:MS_PWR? & 9-84 \\
\hline Access Burst Size & M & 1 & CSS:FBCCH:ACCess:BURSTsize \(n\) & 9-259 & FDCCH:FBCCH:ACCess:BURSTsize? & 9-84 \\
\hline Max Retries & M & 3 & CSS:FBCCH:MAX:RETries \(n\) & 9-260 & FDCCH:FBCCH:MAX:RETries? & 9-84 \\
\hline Max Busy/Reserved & M & 1 & CSS:FBCCH:MAX:BUSY \(n\) & 9-260 & FDCCH:FBCCH:MAX:BUSY? & 9.84 \\
\hline Max Repetitions & M & 2 & CSS:FBCCH:MAX:REPetitions \(n\) & 9-260 & FDCCH:FBCCH:MAX:REPetitions? & 9-84 \\
\hline Max Stop Counter & M & 1 & CSS:FBCCH:MAX:STOP \(n\) & 9-260 & FDCCH:FBCCH:MAX:STOP? & 9-84 \\
\hline R-DATA Message Length & M & 3 & CSS:FBCCH:RDATA:LENGth \(n\) & 9-261 & FDCCH:FBCCH:RDATA:LENGth? & 9-84 \\
\hline Cell Barred & M & 5 & CSS:FBCCH:BARred \(n\) & 9-261 & FDCCH:FBCCH:BARred? & 9-84 \\
\hline Subaddressing Support & M & 1 & CSS:FBCCH:SUBaddressing \(n\) & 9-261 & FDCCH:FBCCH:SUBaddressing? & 9-85 \\
\hline Delay Interval Compensation Mode & M & 1 & CSS:FBCCH:DIC \(n\) & 9-261 & FDCCH:FBCCH:DIC? & 9-85 \\
\hline AUTH Map & 0 & 10 & CSS:FBCCH:ENABLE:MAP:AUTH \(n\) & 9-276 & N/A & - \\
\hline & & & CSS:FBCCH:MAP:AUTH \(n\) & 9-271 & FDCCH:FBCCH:MAP:AUTH? & 9-91 \\
\hline
\end{tabular}

Table 11-2 F-BCCH - Access Parameters
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:FBCCH:PD? & 9-80 \\
\hline Message Type & M & 6 & CSS:FBCCH:MSGtype:SELection \(n\) & 9-252 & FDCCH:FBCCH:MSGtype? & 9-80 \\
\hline SS SUFF & M & 5 & CSS:FBCCH:SS_SUFF \(n\) & 9-261 & FDCCH:FBCCH:SS_SUFF? & 9-85 \\
\hline RSS_ACC MIN & M & 5 & CSS:FBCCH:ACCess:RSS_MIN \(n\) & 9-259 & FDCCH:FBCCH:ACCess:RSS_MiN? & 9-84 \\
\hline SCANINTERVAL & M & 4 & CSS:FBCCH:SCAN:INTerval \(n\) & 9-262 & FDCCH:FBCCH:SCAN:INTerval? & 9.85 \\
\hline Initial Selection Control & M & 1 & CSS:FBCCH:INITial \(n\) & 9-262 & FDCCH:FBCCH:INITial? & 9-85 \\
\hline DELAY & M & 4 & CSS:FBCCH:DELay \(n\) & 9-262 & FDCCH:FBCCH:DELay? & 9-85 \\
\hline Scanning Option Indicator & M & 1 & CSS:FBCCH:SCAN:OPTION \(n\) & 9-262 & FDCCH:FBCCH:SCAN:OPTion? & 9-85 \\
\hline Additional DCCH Information & \(\bigcirc\) & 20 to 111 & CSS:FBCCH:ENABLE:ADDitional: DCCH \(n\) & 9-274 & N/A & - \\
\hline & & & CSS:FBCCH:ADDitional:NUMber \(n\) & 9-263 & FDCCH:FBCCH:ADDitional:NUMber? & 9-85 \\
\hline & & & \begin{tabular}{l}
CSS:FBCCH:ADDitional:DCCH: \\
CHANnel \(n, m\)
\end{tabular} & 9-263 & FDCCH:FBCCH:ADDitional: CHANnel? \(n\) & 9-86 \\
\hline & & & CSS:FBCCH:ADDitional:DCCH: SLOT \(n, m\) & 9-263 & FDCCH:FBCCH:ADDitional: SLOT? \(n\) & 9-86 \\
\hline
\end{tabular}

Table 11-3 F-BCCH - Control Channel Selection Parameters
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:FBCCH:PD? & 9-80 \\
\hline Message Type & M & 6 & CSS:FBCCH:MSGtype:REGistration \(n\) & 9-253 & FDCCH:FBCCH:MSGtype? & 9.80 \\
\hline REGH & M & 1 & CSS:FBCCH:REGH \(n\) & 9-263 & FDCCH:FBCCH:REGH? & 9-86 \\
\hline REGR & M & 1 & CSS:FBCCH:REGR \(n\) & 9-263 & FDCCH:FBCCH:REGR? & 9-86 \\
\hline PUREG & M & 1 & CSS:FBCCH:PUREG \(n\) & 9-264 & FDCCH:FBCCH:PUREG? & 9-86 \\
\hline PDREG & M & 1 & CSS:FBCCH:PDREG \(n\) & 9-264 & FDCCH:FBCCH:PDREG? & 9-86 \\
\hline SYREG & M & 1 & CSS:FBCCH:SYREG \(n\) & 9-264 & FDCCH:FBCCH:SYREG? & 9.86 \\
\hline LAREG & M & 1 & CSS:FBCCH:LAREG \(n\) & 9-264 & FDCCH:FBCCH:LAREG? & 9-86 \\
\hline DEREG & M & 1 & CSS:FBCCH:DEREG \(n\) & 9-264 & FDCCH:FBCCH:DEREG? & 9-86 \\
\hline FOREG & M & 1 & CSS:FBCCH:FOREG \(n\) & 9-264 & FDCCH:FBCCH:FOREG? & 9-87 \\
\hline Capability Request & M & 1 & CSS:FBCCH:CAPability \(n\) & 9-265 & FDCCH:FBCCH:CAPability? & 9-87 \\
\hline Present RNUM & 0 & 14 & CSS:FBCCH:ENABLE:RNUM \(n\) & 9-277 & N/A & - \\
\hline & & & CSS:FBCCH:RNUM \(n\) & 9-265 & FDCCH:FBCCH:RNUM:NUMber? & 9-87 \\
\hline REG Period & 0 & 13 & CSS:FBCCH:ENABLE:REGPER \(n\) & 9-277 & N/A & - \\
\hline & & & CSS:FBCCH:REGPER \(n\) & 9-265 & FDCCH:FBCCH:REGistration:PERiod? & 9-87 \\
\hline REGID Parameters & 0 & 28 & CSS:FBCCH:ENABLE:REGID \(n\) & 9-277 & N/A & - \\
\hline & & & CSS:FBCCH:REGID:ID \(n\) & 9-265 & FDCCH:FBCCH:REGID:ID? & 9-87 \\
\hline & & & CSS:FBCCH:REGID:PER \(n\) & 9-265 & FDCCH:FBCCH:REGID:PER? & 9-87 \\
\hline Non-Public Registration Control & 0 & 6 & CSS:FBCCH:ENABLE:NONPublic: REGistration \(n\) & 9-276 & N/A & - \\
\hline & & & CSS:FBCCH:NONPublic:REGistration: CONTral \(n\) & 9-258 & FDCCH:FBCCH:NONPublic: REGistration:CONTrol? & 9-83 \\
\hline Reg-Info Map & 0 & 8 & ```
CSS:FBCCH:ENABLE:MAP:
REG INFO n
``` & 9-276 & N/A & - \\
\hline & & & CSS:FBCCH:MAP:REG_INFO \(n\) & 9-271 & FDCCH:FBCCH:MAP:REG_INFO? & 9-93 \\
\hline
\end{tabular}

Table 11-4 F-BCCH - Registration Parameters
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:FBCCH:PD? & 9-80 \\
\hline Message Type & M & 6 & CSS:FBCCH:MSGtype:SYSID \(n\) & 9-253 & FDCCH:FBCCH:MSGtype? & 9-80 \\
\hline SID & M & 15 & CSS:FBCCH:SID \(n\) & 9-266 & FDCCH:FBCCH:SID? & 9-88 \\
\hline Network Type & M & 3 & CSS:FBCCH:NETwork \(n\) & 9-266 & FDCCH:FBCCH:NETwork? & 9-88 \\
\hline Protocol Version & M & 4 & CSS:FBCCH:PROTocol \(n\) & 9-266 & FDCCH:FBCCH:PROTocol? & 9-88 \\
\hline PSID/RSID Set & \(\bigcirc\) & \(37+17 * N\) & CSS:FBCCH:ENABLE:PSID_RSID \(n\) & 9-277 & N/A & - \\
\hline & & & CSS:FBCCH:PSID_RSID:SOC \(n\) & 9-266 & FDCCH:FBCCH:PSID_RSID:SOC? & 9-88 \\
\hline & & & CSS:FBCCH:PSID_RSID:NUMber \(n\) & 9-266 & FDCCH:FBCCH:PSID RSID:NUMber? & 9-88 \\
\hline & & & CSS:FBCCH:PSID_RSID:TYPE \(n, m\) & 9-267 & FDCCH:FBCCH:PSID_RSID:TYPE? \(n\) & 9-88 \\
\hline & & & CSS:FBCCH:PSID_RSID:VALUE \(n, m\) & 9-267 & FDCCH:FBCCH:PSID RSID:VALUE? \(n\) & 9-88 \\
\hline Mobile Country Code & 0 & 14 & CSS:FBCCH:ENABLE:COUNTRY: CODE \(n\) & 9-274 & N/A & - \\
\hline & & & CSS:FBCCH:COUNTRY:CODE \(n\) & 9-267 & FDCCH:FBCCH:MCC:CODE? & 9-89 \\
\hline Alphanumeric System ID & 0 & 12 to 132 & CSS:FBCCH:ENABLE:ALPHA:SID \(n\) & 9-274 & N/A & - \\
\hline & & & N/A & - & FDCCH:FBCCH:ALPHA:SID:LENGth? & 9-89 \\
\hline & & & CSS:FBCCH:ALPHA:SID "n" & 9-267 & FDCCH:FBCCH:ALPHA:SID: CHARacters? & 9-89 \\
\hline
\end{tabular}

Table 11-5 F-BCCH - System Identity
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:FBCCH:PD? & 9-80 \\
\hline Message Type & M & 6 & CSS:FBCCH:MSGtype:BSMC \(n\) & 9-253 & FDCCH:FBCCH:MSGtype? & 9-80 \\
\hline BSMC & M & 8 & CSS:FBCCH:BSMC \(n\) & 9-267 & FDCCH:FBCCH:BSMC? & 9-89 \\
\hline Custom Control & M & 1 to 512 & CSS:FBCCH:CUSTOM:LENGth \(n\) & 9-268 & FDCCH:FBCCH:CUSTOM:LENGth? & 9-89 \\
\hline & & & CSS:FBCCH:CUSTOM:CONTrol \(n, m\) & 9-268 & FDCCH:FBCCH:CUSTOM:CONTrol? \(n\) & 9-89 \\
\hline
\end{tabular}

Table 11-6 F-BCCH - BSMC Message Delivery
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:FBCCH:PD? & 9-80 \\
\hline Message Type & M & 6 & CSS:FBCCH:MSGtype:MACA \(n\) & 9-253 & FDCCH:FBCCH:MSGtype? & 9-80 \\
\hline MACA STATUS & M & 2 & CSS:FBCCH:MACA:STATus \(n\) & 9-268 & FDCCH:FBCCH:MACA:STATus? & 9-90 \\
\hline MACA TYPE & M & 4 & CSS:FBCCH:MACA:TYPE \(n\) & 9-268 & FDCCH:FBCCH:MACA:TYPE? & 9-90 \\
\hline MACA 8.CONTROL & O & 5 & CSS:FBCCH:ENABLE:MACA:EIGHT: CONTroln & 9-275 & N/A & - \\
\hline & & & CSS:FBCCH:MACA:EIGHT:CONTrol \(n\) & 9-268 & FDCCH:FBCCH:MACA:EIGHT: CONTrol? & 9-90 \\
\hline MACA LIST & 0 & \[
\begin{aligned}
& 19 \text { to } \\
& (19+ \\
& 11 \leqslant \mathrm{~N})
\end{aligned}
\] & CSS:FBCCH:ENABLE:MACA:LIST \(n\) & 9-275 & N/A & - \\
\hline & & & CSS:FBCCH:MACA:LIST:NUMber \(n\) & 9-269 & FDCCH:FBCCH:MACA:LIST:NUMber? & 9-90 \\
\hline & & & CSS:FBCCH:MACA:LIST:CHAN \(n, m\) & 9-269 & FDCCH:FBCCH:MACA:LIST:CHAN? \(n\) & 9-90 \\
\hline
\end{tabular}

Table 11-7 F-BCCH - Mobile Assisted Channel Allocation
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:FBCCH:PD? & 9-80 \\
\hline Message Type & M & 6 & CSS:FBCCH:MSGtype:OLC \(n\) & 9-253 & FDCCH:FBCCH:MSGtype? & 9-80 \\
\hline OLC & M & 16 & CSS:FBCCH:OLC \(n\) & 9-270 & FDCCH:FBCCH:OLC? & 9-91 \\
\hline
\end{tabular}

Table 11-8 F-BCCH - Overload Class
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:FBCCH:PD? & 9-80 \\
\hline Message Type & M & 6 & CSS:FBCCH:MSGtype:SERVice \(n\) & 9-254 & FDCCH:FBCCH:MSGtype? & 9-80 \\
\hline Voice Privacy Mode Map & M & 4 & CSS:FBCCH:MAP:VPM \(n\) & 9-270 & FDCCH:FBCCH:MAP:VPM? & 9.91 \\
\hline Data Privacy Mode Map & M & 4 & CSS:FBCCH:MAP:DPM \(n\) & \(9-270\) & FDCCH:FBCCH:MAP:DPM? & 9-92 \\
\hline Voice Coder Map & M & 6 & CSS:FBCCH:MAP:CODER \(n\) & 9-270 & FDCCH:FBCCH:MAP:CODER? & 9-92 \\
\hline Message Encryption & M & 8 to 40 & CSS:FBCCH:MAP:MEA:DOMAIN \(n\) & 9-271 & FDCCH:FBCCH:MAP:MEA:DOMAIN? & 9-92 \\
\hline & & & \begin{tabular}{l}
CSS:FBCCH:MAP:MEA: \\
ALGORithms \(n, m\)
\end{tabular} & 9-271 & FDCCH:FBCCH:MAP:MEA ALGORithms? \(n\) & 9-92 \\
\hline Message Encryption Key Map & M & 4 & CSS:FBCCH:MAP:MEK \(n\) & 9-271 & FDCCH:FBCCH:MAP:MEK? & 9-92 \\
\hline Menu Map & M & 10 & CSS:FBCCH:MAP:MENU \(n\) & 9-272 & FDCCH:FBCCH:MAP:MENU? & 9-92 \\
\hline FACCH/SACCH ARQ Map & M & 1 & CSS:FBCCH:MAP:ARQ \(n\) & 9-272 & FDCCH:FBCCH:MAP:ARQ? & 9-92 \\
\hline User Group Map & M & 1 & CSS:FBCCH:MAP:USER \(n\) & 9-272 & FDCCH:FBCCH:MAP:USER? & 9.92 \\
\hline SMS Map & M & 2 & CSS:FBCCH:MAP:SMS \(n\) & 9-272 & FDCCH:FBCCH:MAP:SMS? & 9-93 \\
\hline IRA Support & M & 1 & CSS:FBCCH:IRA \(n\) & 9-272 & FDCCH:FBCCH:IRA? & 9-93 \\
\hline OATS Support & M & 1 & CSS:FBCCH:OATS \(n\) & 9-273 & FDCCH:FBCCH:OATS? & 9-93 \\
\hline
\end{tabular}

Table 11-9 F-BCCH - Service Menu
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:FBCCH:PD? & 9-80 \\
\hline Message Type & M & 6 & CSS:FBCCH:MSGtype:SOC_BSMC \(n\) & 9-254 & FDCCH:FBCCH:MSGtype? & 9.80 \\
\hline SOC & M & 12 & CSS:FBCCH:SOC \(n\) & 9-273 & FDCCH:FBCCH:SOC? & 9-93 \\
\hline BSMC & M & 8 & CSS:FBCCH:BSMC \(n\) & 9-267 & FDCCH:FBCCH:BSMC? & 9-89 \\
\hline ALT_SOC_LIST & 0 & 28*S+8 & CSS:FBCCH:ENABLE: ALT_SOC LIST n & 9-274 & N/A & - \\
\hline & & & CSS:FBCCH:ALT_SOC:NUMBern & 9-273 & FDCCH:FBCCH:ALT_SOC:NUMBer? & 9-93 \\
\hline & & & CSS:FBCCH:ALT_SOC:SOC \(n, m\) & 9-273 & FDCCH:FBCCH:ALT_SOC:SOC? \(n\) & 9-93 \\
\hline & & & CSS:FBCCH:ALT _SOC:MAP: PSID...RSID n,m & 9-273 & FDCCH:FBCCH:ALT_SOC:MAP: PSID_RSID? \(n\) & 9-93 \\
\hline
\end{tabular}

Table 14-10 F-BCCH - SOC/BSMC Identification
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:FBCCH:PD? & 9-80 \\
\hline Message Type & M & 6 & CSS:FBCCH:MSGtype:SOC \(n\) & 9-254 & FDCCH:FBCCH:MSGtype? & 9-80 \\
\hline SOC & M & 12 & CSS:FBCCH:SOC \(n\) & 9-273 & FDCCH:FBCCH:SOC? & 9-93 \\
\hline Custom Control & M & 1 to 512 & CSS:FBCCH:CUSTOM:LENGth \(n\) & 9-268 & FDCCH:FBCCH:CUSTOM:LENGth? & 9-89 \\
\hline & & & CSS:FBCCH:CUSTOM:CONTrol n,m & \(9-268\) & FDCCH:FBCCH:CUSTOM:CONTrol? n & 9-89 \\
\hline
\end{tabular}

Table 11-11 F-BCCH - SOC Message Delivery
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:FBCCH:PD? & 9-80 \\
\hline Message Type & M & 6 & CSS:FBCCH:MSGtype:MACA_MULti \(n\) & 9-254 & FDCCH:FBCCH:MSGtype? & \(9-80\) \\
\hline MACA_STATUS & M & 2 & CSS:FBCCH:MACA:STATus \(n\) & 9-268 & FDCCH:FBCCH:MACA:STATus? & 9-90 \\
\hline MACA_TYPE & M & 4 & CSS:FBCCH:MACA:TYPE \(n\) & 9-268 & FDCCH:FBCCH:MACA:TYPE? & 9.90 \\
\hline MACA 8 CONTROL & \(\bigcirc\) & 5 & CSS:FBCCH:ENABLE:MACA:EIGHT CONTroln & 9-275 & N/A & - \\
\hline & & & CSS:FBCCH:MACA:EIGHT:CONTrol \(n\) & 9-268 & FDCCH:FBCCH:MACA:EIGHT: CONTrol? & 9-90 \\
\hline MACA LIST & 0 & \[
\begin{aligned}
& 19 \text { to } \\
& (19+ \\
& 11 * N)
\end{aligned}
\] & CSS:FBCCH:ENABLE:MACA:LIST \(n\) & 9-275 & N/A & - \\
\hline & & & CSS:FBCCH:MACA:LIST:NUMber \(n\) & 9-269 & FDCCH:FBCCH:MACA:LIST:NUMber? & 9-90 \\
\hline & & & CSS:FBCCH:MACA:LIST:CHAN \(n, m\) & 9-269 & FDCCH:FBCCH:MACA:LIST:CHAN? n & 9-90 \\
\hline MACA LIST (Other Hyperband) & O & \[
\begin{aligned}
& 21 \text { to } \\
& (21+ \\
& 11 \geqslant P)
\end{aligned}
\] & CSS:FBCCH:ENABLE:MACA:LIST: OTHER \(n\) & 9-275 & N/A & - \\
\hline & & & CSS:FBCCH:MACA:LIST:OTHER: HYPERband \(n\) & 9-269 & FDCCH:FBCCH:MACA:LIST:OTHER: HYPERband? & 9-91 \\
\hline & & & CSS:FBCCH:MACA:LIST:OTHER NUMber \(n\) & 9-269 & FDCCH:FBCCH:MACA:LIST:OTHER: NUMber? & 9-91 \\
\hline & & & ```
CSS:FBCCH:MACA:LIST:OTHER
CHAN n,m
``` & 9-269 & FDCCH:FBCCH:MACA:LIST:OTHER: CHAN? \(n\) & 9.91 \\
\hline
\end{tabular}

Table 11-12 F-BCCH - Mobile Assisted Channel Allocation (Multi Hyperband)


Table 11-13 E-BCCH - Neighbor Cell
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{9}{*}{Neighbor Cell List (TDMA) (cont)} & \multicolumn{2}{|l|}{\multirow[t]{9}{*}{}} & CSS:EBCCH:NEIGHbor:TDMA:CELL: SYNC \(n, m\) & 9-286 & FDCCH:EBCCH:NEIGHbor:TDMA: CELL:SYNC? \(n\) & 9-96 \\
\hline & & & \begin{tabular}{l}
CSS:EBCCH:NEIGHbor:TDMA:CELL: \\
TYPE:CELL \(n, m\)
\end{tabular} & 9-286 & FDCCH:EBCCH:NEIGHbor:TDMA: CELL:TYPE:CELL? \(n\) & 9-97 \\
\hline & & & \begin{tabular}{l}
CSS:EBCCH:NEIGHbor:TDMA:CELL: \\
TYPE:NETwork n,m
\end{tabular} & 9-286 & FDCCH:EBCCH:NEIGHbor:TDMA CELL:TYPE:NETwork? n & 9-97 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:CELL: RETRY \(n, m\) & 9-287 & FDCCH:EBCCH:NEIGHbor:TDMA: CELL:RETRY? \(n\) & 9.97 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:CELL: ACCess:MS_PWR n,m & 9-287 & FDCCH:EBCCH:NEIGHbor:TDMA CELL:ACCess:MS PWR? n & 9-97 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:CELL: ACCess:RSS MIN n,m & 9-287 & FDCCH:EBCCH:NEIGHbor:TDMA: CELL:ACCess:RSS_MIN? \(n\) & 9-97 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:CELL: PSID_RSID:INDicator \(n, m\) & \(9-288\) & FDCCH:EBCCH:NEIGHbor:TDMA: CELL:PSID_RSID:INDicator? \(n\) & 9-98 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:CELL: PSID_RSID:LENGth \(n, m\) & 9-288 & FDCCH:EBCCH:NEIGHbor:TDMA: CELL:PSID RSID:LENGth? n & 9-98 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:CELL PSID_RSID:SUPport \(n, m\) & 9-289 & FDCCH:EBCCH:NEIGHbor:TDMA: CELL:PSID_RSID:SUPport?n & 9-98 \\
\hline \multirow[t]{5}{*}{Neighbor Cell List (Analog)} & \multirow[t]{5}{*}{\(\bigcirc\)} & \multirow[t]{5}{*}{\(9+49 * M\)} & CSS:EBCCH:ENABLE:NEIGHbor: ANALOG \(n\) & 9-324 & N/A & - \\
\hline & & & CSS:EBCCH:NEIGHbor:ANAlog: NUMber \(n\) & 9-290 & FDCCH:EBCCH:NEIGHbor:ANAIog: NuMber? & 9-99 \\
\hline & & & CSS:EBCCH:NEIGHbor:ANAlog:CELL: CHAN n.m & 9-290 & FDCCH:EBCCH:NEIGHbor:ANAIog: CELL:CHAN? \(n\) & 9-99 \\
\hline & & & \begin{tabular}{l}
CSS:EBCCH:NEIGHbor:ANAlog:CELL: \\
PROTOCOI n,m
\end{tabular} & \(9-290\) & FDCCH:EBCCH:NEIGHbor:ANAIOg: CELL:PROTOCol? \(n\) & 9-99 \\
\hline & & & ```
CSS:EBCCH:NEIGHbor:ANAlog:CELL:
DCC n,m
``` & 9-290 & ```
FDCCH:EBCCH:NEIGHbor:ANAlog:
CELL:DCC? n
``` & 9-100 \\
\hline \multicolumn{3}{|l|}{Continued on Following Page} & \multicolumn{4}{|l|}{} \\
\hline
\end{tabular}

Table 11-13 E-BCCH - Neighbor Cell (cont)
\begin{tabular}{|c|c|c|c|c|c|}
\hline & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{6}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{9}{*}{Neighbor Cell List (Analog) (cont)} & \multirow[t]{9}{*}{} & CSS:EBCCH:NEIGHbor:ANAlog:CELL: OFFset n,m & 9-291 & FDCCH:EBCCH:NEIGHbor:ANAIog: CELL:OFFset? \(n\) & 9-100 \\
\hline & & CSS:EBCCH:NEIGHbor:ANAlog:CELL: SS_SUFF n,m & 9-291 & FDCCH:EBCCH:NEIGHbor:ANAlog: CELL:SS SUFF? \(n\) & 9.100 \\
\hline & & CSS:EBCCH:NEIGHbor:ANAlog:CELL: DELAY \(n, m\) & 9-291 & FDCCH:EBCCH:NEIGHbor:ANAlog: CELL:DELay? \(n\) & 9-100 \\
\hline & & CSS:EBCCH:NEIGHbor:ANAlog:CELL: HL FREQ \(n, m\) & 9-291 & FDCCH:EBCCH:NEIGHbor:ANAIog: CELL:HL_FREQ? \(n\) & \(9-100\) \\
\hline & & CSS:EBCCH:NEIGHbor:ANAlog:CELL: TYPE:CELL \(n, m\) & 9-292 & FDCCH:EBCCH:NEIGHbor:ANAlog: CELL:TYPE:CELL? \(n\) & 9-100 \\
\hline & & CSS:EBCCH:NEIGHbor:ANAlog:CELL: TYPE:NETwork n,m & 9-292 & FDCCH:EBCCH:NEIGHbor:ANAlog: CELL:TYPE:NETwork? n & 9-100 \\
\hline & & CSS:EBCCH:NEIGHbor:ANAlog:CELL: RETRY \(n, m\) & 9-292 & FDCCH:EBCCH:NEIGHbor:ANAlog: CELL:RETRY? \(n\) & 9-101 \\
\hline & & CSS:EBCCH:NEIGHbor:ANAlog:CELL: ACCess:MS PWR n,m & 9-293 & FDCCH:EBCCH:NEIGHbor:ANAlog: CELL:ACCess:MS_PWR?n & 9-101 \\
\hline & & CSS:EBCCH:NEIGHbor:ANAlog:CELL: ACCess:RSS MIN n,m & 9-293 & FDCCH:EBCCH:NEIGHbor:ANAlog: CELL:ACCess:RSS_MIN? n & 9-101 \\
\hline
\end{tabular}

Table 11-13 E-BCCH - Neighbor Cell (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:EBCCH:PD? & 9.94 \\
\hline Message Type & M & 6 & CSS:EBCCH:MSGtype:RCIn & 9-280 & FDCCH:EBCCH:MSGtype? & 9-94 \\
\hline RCl & M & 2 & CSS:EBCCH:RCI \(n\) & 9.313 & FDCCH:EBCCH:RCI? & 9-113 \\
\hline RF Channel Allocation & O & \[
\begin{aligned}
& \hline 32 \text { to } \\
& 1418
\end{aligned}
\] & CSS:EBCCH:ENABLE:CHANnel \(n\) & 9-326 & N/A & - \\
\hline & & & CSS:EBCCH:CHANnel:NUMber \(n\) & 9-313 & FDCCH:EBCCH:CHANnel:NUMber? & 9-114 \\
\hline & & & CSS:EBCCH:CHANnel:GROUP FIRST \(n, m\) & 9-314 & FDCCH:EBCCH:CHANnel:GROUP: FIRST? \(n\) & 9-114 \\
\hline & & & ```
CSS:EBCCH:CHANnel:GROUP:
``` & 9-314 & FDCCH:EBCCH:CHANnel:GROUP: LAST? n & 9-114 \\
\hline
\end{tabular}

Table 11-14 E-BCCH - Regulatory Configuration
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:EBCCH:PD? & 9-94 \\
\hline Message Type & M & 6 & CSS:EBCCH:MSGtype:BSMC \(n\) & 9-281 & FDCCH:EBCCH:MSGtype? & 9-94 \\
\hline BSMC & M & 8 & CSS:EBCCH:BSMC \(n\) & 9-314 & FDCCH:EBCCH:BSMC? & 9-114 \\
\hline Custom Control & M & 1 to 2024 & CSS:EBCCH:CUSTOM:LENGth \(n\) & 9-314 & FDCCH:EBCCH:CUSTOM:LENGth? & 9-114 \\
\hline & & & CSS:EBCCH:CUSTOM:CONTrol n,m & 9-315 & FDCCH:EBCCH:CUSTOM:CONTrol? \(n\) & 9-114 \\
\hline
\end{tabular}

Table 11-15 E-BCCH - BSMC Message Delivery
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:EBCCH:PD? & 9-94 \\
\hline Message Type & M & 6 & CSS:EBCCH:MSGtype:EMERGency \(n\) & 9-281 & FDCCH:EBCCH:MSGtype? & 9-94 \\
\hline Text Message Data Unit & M & 8 to 2016 & CSS:EBCCH:TEXT:LENGth \(n\) & 9-315 & FDCCH:EBCCH:TEXT:LENGth? & 9-115 \\
\hline & & & CSS:EBCCH:TEXT:ENCoding \(n\) & 9-315 & FDCCH:EBCCH:TEXT:ENCoding? & 9-115 \\
\hline & & & CSS:EBCCH:TEXT:REServed \(n\) & 9.315 & FDCCH:EBCCH:TEXT:REServed? & 9-115 \\
\hline & & & CSS:EBCCH:TEXT:CHARacter \(n, m\) & 9-315 & FDCCH:EBCCH:TEXT:CHARacter? \(n\) & 9-115 \\
\hline Signal & 0 & 16 & CSS:EBCCH:ENABLE:SIGnal \(n\) & 9-326 & N/A & - \\
\hline & & & CSS:EBCCH:SIGnal:PITCH \(n\) & 9-316 & FDCCH:EBCCH:SIGnal:PITCH? & 9-115 \\
\hline & & & CSS:EBCCH:SIGnal:CADence \(n\) & 9-316 & FDCCH:EBCCH:SIGnal:CADence? & 9-115 \\
\hline & & & CSS:EBCCH:SIGnal:DURation \(n\) & 9.316 & FDCCH:EBCCH:SIGnal:DURation? & 9-115 \\
\hline
\end{tabular}

Table 11-16 E-BCCH - Emergency Information Broadcast
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:EBCCH:PD? & 9-94 \\
\hline Message Type & M & 6 & CSS:EBCCH:MSGtype:MACA \(n\) & 9-281 & FDCCH:EBCCH:MSGtype? & 9-94 \\
\hline MACA_STATUS & M & 2 & CSS:EBCCH:MACA:STATus \(n\) & 9-316 & FDCCH:EBCCH:MACA:STATus? & 9-116 \\
\hline MACA TYPE & M & 4 & CSS:EBCCH:MACA:TYPE \(n\) & 9-316 & FDCCH:EBCCH:MACA:TYPE? & 9-116 \\
\hline MACA 8 CONTROL & O & 5 & CSS:EBCCH:ENABLE:MACA:EIGHT: CONTroln & 9-326 & N/A & - \\
\hline & & & CSS:EBCCH:MACA:EIGHT:CONTrol \(n\) & 9-317 & FDCCH:EBCCH:MACA:EIGHT: CONTrol? & 9-116 \\
\hline MACA LIST & 0 & \[
\begin{aligned}
& 19 \text { to } \\
& (19+ \\
& 11 \% \mathrm{~N})
\end{aligned}
\] & CSS:EBCCH:ENABLE:MACA:LIST \(n\) & 9-326 & N/A & - \\
\hline & & & CSS:EBCCH:MACA:LIST:NUMber \(n\) & 9-317 & FDCCH:EBCCH:MACA:LIST:NUMber? & 9-116 \\
\hline & & & CSS:EBCCH:MACA:LIST:CHAN \(n, m\) & 9-317 & FDCCH:EBCCH:MACA:LIST:CHAN? \(n\) & 9-116 \\
\hline
\end{tabular}

Table 11-17 E-BCCH - Mobile Assisted Channel Allocation
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:EBCCH:PD? & 9-94 \\
\hline Message Type & M & 6 & CSS:EBCCH:MSGtype:SERVice \(n\) & 9-282 & FDCCH:EBCCH:MSGtype? & 9-94 \\
\hline Voice Privacy Mode Map & M & 4 & CSS:EBCCH:MAP:VPM \(n\) & 9-318 & FDCCH:EBCCH:MAP:VPM? & 9-117 \\
\hline Data Privacy Mode Map & M & 4 & CSS:EBCCH:MAP:DPM \(n\) & 9-318 & FDCCH:EBCCH:MAP:DPM? & 9-117 \\
\hline Voice Coder Map & M & 6 & CSS:EBCCH:MAP:CODER \(n\) & 9-318 & FDCCH:EBCCH:MAP:CODER? & 9-117 \\
\hline Message Encryption & M & 8 to 40 & CSS:EBCCH:MAP:MEA:DOMAIN \(n\) & 9-319 & FDCCH:EBCCH:MAP:MEA:DOMAIN? & 9-118 \\
\hline & & & \begin{tabular}{l}
CSS:EBCCH:MAP:MEA: \\
ALGORithms \(n, m\)
\end{tabular} & 9-319 & FDCCH:EBCCH:MAP:MEA: ALGORithms? \(n\) & 9-118 \\
\hline Message Encryption Key Map & M & 4 & CSS:EBCCH:MAP:MEK \(n\) & 9-319 & FDCCH:EBCCH:MAP:MEK? & 9-118 \\
\hline Menu Map & M & 10 & CSS:EBCCH:MAP:MENU \(n\) & 9-319 & FDCCH:EBCCH:MAP:MENU? & 9-118 \\
\hline FACCH/SACCH ARQ Map & M & 1 & CSS:EBCCH:MAP:ARQ \(n\) & 9-320 & FDCCH:EBCCH:MAP:ARQ? & 9-118 \\
\hline User Group Map & M & 1 & CSS:EBCCH:MAP:USER \(n\) & 9.320 & FDCCH:EBCCH:MAP:USER? & 9-118 \\
\hline SMS Map & M & 2 & CSS:EBCCH:MAP:SMS n & 9-320 & FDCCH:EBCCH:MAP:SMS? & 9-118 \\
\hline IRA Support & M & 1 & CSS:EBCCH:IRA \(n\) & 9-320 & FDCCH:EBCCH:IRA? & 9-118 \\
\hline OATS Support & M & 1 & CSS:EBCCH:OATS \(n\) & 9-320 & FDCCH:EBCCH:OATS? & 9-118 \\
\hline
\end{tabular}

Table 11-18 E-BCCH - Service Menu
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:EBCCH:PD? & 9-94 \\
\hline Message Type & M & 6 & CSS:EBCCH:MSGtype:SOC_BSMC n & 9-282 & FDCCH:EBCCH:MSGtype? & 9-94 \\
\hline SOC & M & 12 & CSS:EBCCH:SOC \(n\) & 9-321 & FDCCH:EBCCH:SOC? & 9-119 \\
\hline BSMC & M & 8 & CSS:EBCCH:BSMC \(n\) & 9-314 & FDCCH:EBCCH:BSMC? & 9-114 \\
\hline ALT SOC LIST & O & \(28 * S+8\) & CSS:EBCCH:ENABLE: ALT_SOC_LIST n & 9-327 & N/A & - \\
\hline & & & CSS:EBCCH:ALT_SOC:NUMBer \(n\) & 9-321 & FDCCH:EBCCH:ALT_SOC:NUMBer? & 9-119 \\
\hline & & & CSS:EBCCH:ALT_SOC:SOC \(n, m\) & 9-321 & FDCCH:EBCCH:ALT SOC:SOC? \(n\) & 9-119 \\
\hline & & & ```
CSS:EBCCH:ALT_SOC:MAP:
PSID_RSID n,m
``` & 9-321 & ```
FDCCH:EBCCH:ALT_SOC:MAP:
PSID_RSID?n
``` & 9-119 \\
\hline
\end{tabular}

Table 11-19 E-BCCH - SOC/BSMC Identification
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:EBCCH:PD? & 9-94 \\
\hline Message Type & M & 6 & CSS:EBCCH:MSGtype:SOC \(n\) & 9-282 & FDCCH:EBCCH:MSGtype? & 9-94 \\
\hline SOC & M & 12 & CSS:EBCCH:SOC \(n\) & 9-321 & FDCCH:EBCCH:SOC? & 9-119 \\
\hline Custom Control & M & 1 to 2020 & CSS:EBCCH:CUSTOM:LENGth \(n\) & 9-314 & FDCCH:EBCCH:CUSTOM:LENGth? & 9-114 \\
\hline & & & CSS:EBCCH:CUSTOM:CONTral \(n, m\) & 9-315 & FDCCH:EBCCH:CUSTOM:CONTrol? \(n\) & 9-114 \\
\hline
\end{tabular}

Table 11-20 E-BCCH - SOC Message Delivery
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:EBCCH:PD? & 9-94 \\
\hline Message Type & M & 6 & CSS:EBCCH:MSGtype:TIME \(n\) & 9-282 & FDCCH:EBCCH:MSGtype? & 9-94 \\
\hline Time from Jan 1, 1980 & M & 32 & CSS:EBCCH:TIME \(n\) & 9-321 & FDCCH:EBCCH:TIME? & 9.119 \\
\hline Time Zone Offset & M & 12 & CSS:EBCCH:ZONE:DIRection \(n\) & 9-322 & FDCCH:EBCCH:ZONE:DIRection? & 9-119 \\
\hline & & & CSS:EBCCH:ZONE:MINutes \(n\) & 9-322 & FDCCH:EBCCH:ZONE:MINutes? & 9-119 \\
\hline & & & CSS:EBCCH:ZONE:DST \(n\) & 9-322 & FDCCH:EBCCH:ZONE:DST? & 9-119 \\
\hline
\end{tabular}

Table 11-21 E-BCCH - Time and Date
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:EBCCH:PD? & 9-94 \\
\hline Message Type & M & 6 & CSS:EBCCH:MSGtype:NEIGHbor: SERVicen & 9-280 & FDCCH:EBCCH:MSGtype? & 9-94 \\
\hline TDMA Service Info & 0 & \[
\begin{gathered}
20 \text { to } \\
(20+11:=
\end{gathered}
\] & CSS:EBCCH:ENABLE:NEIGHbor: TDMA:INFO n & 9-324 & N/A & - \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:INFO: COUNt \(n\) & 9-304 & FDCCH:EBCCH:NEIGHbor:TDMA INFO:COUNt? & 9-102 \\
\hline & & & \begin{tabular}{l}
CSS:EBCCH:NEIGHbor:TDMA:INFO: \\
SERVice:INDicator \(n, m\)
\end{tabular} & 9-304 & FDCCH:EBCCH:NEIGHbor:TDMA INFO:SERVice:INDicator? n & 9-102 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:INFO: SERVice:MAP \(n, m\) & 9-304 & FDCCH:EBCCH:NEIGHbor:TDMA: INFO:SERVice:MAP? \(n\) & 9-102 \\
\hline
\end{tabular}

Table 11-22 E-BCCH - Neighbor Service Info
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:EBCCH:PD? & 9-94 \\
\hline Message Type & M & 6 & CSS:EBCCH:MSGtype:ALTrCi \(n\) & 9-283 & FDCCH:EBCCH:MSGtype? & 9-94 \\
\hline SID & M & 15 & CSS:EBCCH:SID \(n\) & 9-323 & FDCCH:EBCCH:SID? & 9-120 \\
\hline CHAN & M & 11 & CSS:EBCCH:CHAN \(n\) & 9-323 & FDCCH:EBCCH:CHAN? & 9-120 \\
\hline RCI & M & 2 & CSS:EBCCH:RCI \(n\) & 9-313 & FDCCH:EBCCH:RCI? & 9-113 \\
\hline Mobile Country Code & \(\bigcirc\) & 14 & CSS:EBCCH:ENABLE:MCC \(n\) & 9-327 & N/A & - \\
\hline & & & CSS:EBCCH:MCC \(n\) & 9.323 & FDCCH:EBCCH:MCC:CODE? & 9-120 \\
\hline Hyperband Info & 0 & 6 & CSS:EBCCH:ENABLE:HYPERband: INFO n & 9-327 & N/A & - \\
\hline & & & CSS:EBCCH:HYPERband:INFO \(n\) & 9.323 & FDCCH:EBCCH:HYPERband:INFO? & 9-120 \\
\hline
\end{tabular}

Table 11-23 E-BCCH - Alternate RCI Info
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:EBCCH:PD? & 9-94 \\
\hline Message Type & M & 6 & CSS:EBCCH:MSGtype:NEIGHbor: CELL:MULIi \(n\) & 9-280 & FDCCH:EBCCH:MSGtype? & 9-94 \\
\hline SERV SS & M & 4 & CSS:EBCCH:MULti:SERV_SS \(n\) & 9-323 & FDCCH:EBCCH:MULti:SERV_SS? & 9-120 \\
\hline Neighbor Cell List (TDMA) & 0 & \[
\begin{gathered}
(9+ \\
57 * N) \text { to } \\
(9+ \\
77 * N)
\end{gathered}
\] & CSS:EBCCH:ENABLE:NEIGHbor: MULti:TDMA \(n\) & 9-325 & N/A & - \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:MULti: NuMber \(n\) & 9-294 & FDCCH:EBCCH:NEIGHbor:TDMA: MULti:NUMber? & 9-103 \\
\hline & & & \[
\begin{aligned}
& \text { CSS:EBCCH:NEIGHbor:TDMA:MULti: } \\
& \text { CHAN } n, m
\end{aligned}
\] & 9-294 & FDCCH:EBCCH:NEIGHbor:TDMA: MULti:CHAN? n & 9-103 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:MULti: PROTocal n,m & 9-294 & FDCCH:EBCCH:NEIGHbor:TDMA: MULti:PROTOCOI? n & 9-103 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:MULti: DVCC \(n, m\) & 9-294 & FDCCH:EBCCH:NEIGHbor:TDMA: MULti:DVCC? \(n\) & 9-104 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:MULti: OFFset \(n, m\) & 9-295 & FDCCH:EBCCH:NEIGHbor:TDMA: MULti:OFFset? \(n\) & 9-104 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:MULti: SS SUFF \(n, m\) & 9-295 & FDCCH:EBCCH:NE/GHbor:TDMA: MULti:SS_SUFF? \(n\) & 9-104 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:MULti: DELAY \(n, m\) & 9-295 & FDCCH:EBCCH:NEIGHbor:TDMA: MULti:DELay? n & 9-104 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:MULti: HL FREQ \(n, m\) & 9-295 & FDCCH:EBCCH:NEIGHbor:TDMA: MULii:HL_FREQ? n & 9-104 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:MULti: SYNC n,m & 9-296 & FDCCH:EBCCH:NEIGHbor:TDMA: MULti:SYNC? \(n\) & 9-104 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:MULti: TYPE:CELL \(n, m\) & 9-296 & FDCCH:EBCCH:NEIGHbor:TDMA: MULti:TYPE:CELL? n & 9-105 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:MULti: TYPE:NETwork n,m & 9-296 & FDCCH:EBCCH:NEIGHbor:TDMA: MULti:TYPE:NETwork? n & 9-105 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:MULti: RETRY \(n, m\) & 9-297 & FDCCH:EBCCH:NEIGHbor:TDMA: MULti:RETRY? n & 9-105 \\
\hline
\end{tabular}

\section*{Continued on Following Page}

Table 11-24 E-BCCH - Neighbor Cell (Multi Hyperband)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{5}{*}{Neighbor Cell List (TDMA) (cont)} & & \multirow[t]{5}{*}{} & CSS:EBCCH:NEIGHbor:TDMA:MULti: ACCess:MS PWR \(n, m\) & 9-297 & FDCCH:EBCCH:NEIGHbor:TDMA: MULti:ACCess:MS PWR? n & 9-105 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:MULti: ACCess:RSS_MIN \(n, m\) & 9-297 & FDCCH:EBCCH:NEIGHbor:TDMA MULti:ACCess:RSS_MIN? \(n\) & 9-105 \\
\hline & & & ```
CSS:EBCCH:NEIGHbor:TDMA:MULti:
PSID_RSID:INDicator n,m
``` & 9-298 & FDCCH:EBCCH:NEIGHbor:TDMA MULti:PSID_RSID:INDicator? n & 9-106 \\
\hline & & & ```
CSS:EBCCH:NEIGHbor:TDMA:MULti:
PSID_RSID:LENGth n,m
``` & 9-298 & FDCCH:EBCCH:NEIGHbor:TDMA MULti:PSID RSID:LENGth? n & 9-106 \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:MULti: PSID_RSID:SUPport n,m & 9-299 & FDCCH:EBCCH:NEIGHbor:TDMA MULti:PSID_RSID:SUPport? n & 9-106 \\
\hline \multirow[t]{9}{*}{Neighbor Cell List (Analog)} & \multirow[t]{9}{*}{0} & \multirow[t]{9}{*}{\(9+49 * M\)} & CSS:EBCCH:ENABLE:NEIGHbor: MULti:ANALOG n & 9-325 & N/A & - \\
\hline & & & CSS:EBCCH:NEIGHbor:ANAlog:MULti: NUMber \(n\) & 9-300 & FDCCH:EBCCH:NEIGHbor:ANAlog: MULti:NUMber? & 9-107 \\
\hline & & & CSS:EBCCH:NEIGHbor:ANAIOg:MULti: CHAN n,m & 9-300 & FDCCH:EBCCH:NEIGHbor:ANAlog: MULti:CHAN? \(n\) & 9-107 \\
\hline & & & CSS:EBCCH:NEIGHbor:ANAlog:MULti: PROTOCOI n,m & 9-300 & FDCCH:EBCCH:NEIGHbor:ANAlog: MULti:PROTocol? n & 9-107 \\
\hline & & & CSS:EBCCH:NEIGHbor:ANAlog:MULti: DCC \(n, m\) & 9-300 & FDCCH:EBCCH:NEIGHbor:ANAlog: MULti:DCC? \(n\) & 9-108 \\
\hline & & & CSS:EBCCH:NEIGHbor:ANAlog:MULti: OFFset \(n, m\) & 9-301 & FDCCH:EBCCH:NEIGHbor:ANAlog: MULti:OFFset? \(n\) & 9-108 \\
\hline & & & CSS:EBCCH:NEIGHbor:ANAlog:MULti: SS_SUFF \(n, m\) & 9-301 & FDCCH:EBCCH:NEIGHbor:ANAlog: MULti:SS SUFF? n & 9-108 \\
\hline & & & CSS:EBCCH:NEIGHbor:ANAlog:MULti: DELAY n,m & 9-301 & FDCCH:EBCCH:NEIGHbor:ANAlog: MULti:DELay? n & 9-108 \\
\hline & & & CSS:EBCCH:NEIGHbor:ANAlog:MULti: HL FREQ \(n, m\) & 9-301 & FDCCH:EBCCH:NEIGHbor:ANAlog: MULti:HL FREQ? n & 9-108 \\
\hline
\end{tabular}

Continued on Following Page
Table 11-24 E-BCCH - Neighbor Cell (Multi Hyperband) (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{5}{*}{Neighbor Cell List (Analog) (cont)} & \multicolumn{2}{|r|}{\multirow[t]{5}{*}{}} & CSS:EBCCH:NEIGHbor:ANAlog:MULti: TYPE:CELL \(n, m\) & 9-302 & FDCCH:EBCCH:NEIGHbor:ANAlog: MULti:TYPE:CELL? \(n\) & 9.108 \\
\hline & & & \begin{tabular}{l}
CSS:EBCCH:NEIGHbor:ANAlog:MULti: \\
TYPE:NETwork \(n, m\)
\end{tabular} & 9-302 & FDCCH:EBCCH:NEIGHbor:ANAlog: MULti:TYPE:NETwork? \(n\) & 9-108 \\
\hline & & & CSS:EBCCH:NEIGHbor:ANAIOg:MULti: RETRY \(n, m\) & 9-302 & FDCCH:EBCCH:NEIGHbor:ANAlog: MULti:RETRY? n & 9-109 \\
\hline & & & CSS:EBCCH:NEIGHbor:ANAlog:MULti: ACCess:MS_PWR \(n, m\) & 9-303 & FDCCH:EBCCH:NEIGHbor:ANAIog: MULti:ACCess:MS PWR? n & 9-109 \\
\hline & & & CSS:EBCCH:NEIGHbor:ANAlog:MULti: ACCess:RSS MIN \(n, m\) & 9-303 & FDCCH:EBCCH:NEIGHbor:ANAlog: MULti:ACCess:RSS_MIN? n & 9-109 \\
\hline \multirow[t]{9}{*}{Neighbor Cell List (Other Hyperband)} & \multirow[t]{9}{*}{0} & \multirow[t]{9}{*}{\[
\begin{gathered}
(11+ \\
57 * P) \text { to } \\
(11+ \\
77 \% P)
\end{gathered}
\]} & CSS:EBCCH:ENABLE:NEIGHbor: MULti:OTHER \(n\) & 9-325 & N/A & - \\
\hline & & & CSS:EBCCH:NEIGHbor:OTHER: HYPERband \(n\) & \(9 \cdot 305\) & FDCCH:EBCCH:NEIGHbor:OTHER: HYPERband? & 9-109 \\
\hline & & & CSS:EBCCH:NEIGHbor:OTHER: NUMBer n & 9-305 & FDCCH:EBCCH:NEIGHbor:OTHER: NUMBer? & 9-109 \\
\hline & & & CSS:EBCCH:NEIGHbor:OTHER:MULII CHAN \(n, m\) & 9-306 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:CHAN? n & 9-110 \\
\hline & & & CSS:EBCCH:NEIGHbor:OTHER:MULIi: PROTOCOI \(n, m\) & 9-306 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:PROTocol? n & 9-110 \\
\hline & & & CSS:EBCCH:NEIGHbor:OTHER:MULiti DVCC n,m & 9-306 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:DVCC? \(n\) & 9-110 \\
\hline & & & CSS:EBCCH:NEIGHbor:OTHER:MULti: OFFset \(n, m\) & 9-306 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:OFFset? \(n\) & 9-110 \\
\hline & & & CSS:EBCCH:NEIGHbor:OTHER:MULti: SS_SUFF \(n, m\) & 9-307 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:SS_SUFF? n & 9-110 \\
\hline & & & ```
CSS:EBCCH:NEIGHbor:OTHER:MULti:
DELAY n,m
``` & 9-307 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:DELay? \(n\) & 9-110 \\
\hline \multicolumn{3}{|l|}{Continued on Following Page} & \multicolumn{4}{|l|}{} \\
\hline
\end{tabular}

Table 11-24 E-BCCH - Neighbor Cell (Multi Hyperband) (cont)
\begin{tabular}{|c|c|c|c|c|c|}
\hline & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{2}{|l|}{Continued From Preceding Page} & & & & \\
\hline \multirow[t]{10}{*}{Neighbor Cell List (Other Hyperband) (cont)} & \multirow[t]{10}{*}{} & CSS:EBCCH:NEIGHbor:OTHER:MULti: HL_FREQ \(n, m\) & 9-307 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:HL_FREQ? n & 9-111 \\
\hline & & CSS:EBCCH:NEIGHbor:OTHER:MULti: SYNC \(n, m\) & 9-307 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:SYNC? n & 9-111 \\
\hline & & CSS:EBCCH:NEIGHbor:OTHER:MULti: TYPE:CELL \(n, m\) & 9-308 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:TYPE:CELL? n & 9-111 \\
\hline & & \begin{tabular}{l}
CSS:EBCCH:NEIGHbor:OTHER:MUL \(\ddagger\) i: \\
TYPE:NETwork \(n, m\)
\end{tabular} & 9-308 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:TYPE:NETwork? n & 9-111 \\
\hline & & CSS:EBCCH:NEIGHbor:OTHER:MULti: RETRY \(n, m\) & 9-308 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:RETRY? n & 9-111 \\
\hline & & CSS:EBCCH:NEIGHbor:OTHER:MULti: ACCess:MS_PWR \(n, m\) & 9-309 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:ACCess:MS PWR? n & 9-112 \\
\hline & & CSS:EBCCH:NEIGHBor:OTHER:MULti: ACCess:RSS MIN \(n, m\) & 9-309 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:ACCess:RSS MIN? n & 9-112 \\
\hline & & CSS:EBCCH:NEIGHbor:OTHER:MULti: PSID_RSID:INDicator \(n, m\) & 9-310 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:PSID_RSID:INDicator? n & 9-112 \\
\hline & & ```
CSS:EBCCH:NEIGHbor:OTHER:MULti:
PSID_RSID:LENGth n,m
``` & 9-310 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:PSID_RSID:LENGth? n & 9-112 \\
\hline & & CSS:EBCCH:NEIGHbor:OTHER:MULti: PSID_RSID:SUPport n,m & 9-311 & FDCCH:EBCCH:NEIGHbor:OTHER: MULti:PSID_RSID:SUPport?n & 9-112 \\
\hline
\end{tabular}

Table 11-24 E-BCCH - Neighbor Cell (Multi Hyperband) (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:EBCCH:PD? & 9-94 \\
\hline Message Type & M & 6 & CSS:EBCCH:MSGtype:NEIGHbor: SERVice:MULti \(n\) & 9-280 & FDCCH:EBCCH:MSGtype? & 9-94 \\
\hline TDMA Service Info & O & \[
\begin{gathered}
20 \text { to } \\
(20+ \\
11 \approx \mathrm{~N})
\end{gathered}
\] & \begin{tabular}{l}
CSS:EBCCH:ENABLE:NEIGHbor: \\
TDMA:INFO \(n\)
\end{tabular} & 9-324 & N/A & - \\
\hline & & & CSS:EBCCH:NEIGHbor:TDMA:INFO: COUNt \(n\) & 9-304 & FDCCH:EBCCH:NEIGHbor:TDMA: INFO:COUNt? & 9-102 \\
\hline & & & \begin{tabular}{l}
CSS:EBCCH:NEIGHbor:TDMA:INFO: \\
SERVice:INDicator \(n, m\)
\end{tabular} & 9-304 & FDCCH:EBCCH:NEIGHbor:TDMA INFO:SERVice:INDicator? n & 9-102 \\
\hline & & & ```
CSS:EBCCH:NEIGHbor:TDMA:INFO:
SERVice:MAP n,m
``` & 9-304 & FDCCH:EBCCH:NEIGHbor:TDMA INFO:SERVice:MAP? \(n\) & 9-102 \\
\hline TDMA Service Info (Other Hyperband) & \(\bigcirc\) & \[
\begin{gathered}
22 \text { to } \\
(22+ \\
11 \div \mathrm{P})
\end{gathered}
\] & CSS:EBCCH:ENABLE:NEIGHbor: OTHER:INFO n & 9-325 & N/A & - \\
\hline & & & CSS:EBCCH:NEIGHbor:OTHER:INFO HYPERband \(n\) & 9-312 & FDCCH:EBCCH:NEIGHbor:OTHER: INFO:HYPERband? & 9-113 \\
\hline & & & \[
\begin{aligned}
& \text { CSS:EBCCH:NEIGHbor:OTHER:INFO: } \\
& \text { COUNt } n
\end{aligned}
\] & 9-312 & FDCCH:EBCCH:NEIGHbor:OTHER: INFO:COUNt? & 9-113 \\
\hline & & & ```
CSS:EBCCH:NEIGHbor:OTHER:INFO
SERVice:INDicator n.m
``` & 9-312 & FDCCH:EBCCH:NEIGHbor:OTHER: INFO:SERVice:INDicator? \(n\) & 9-113 \\
\hline & & & \begin{tabular}{l}
CSS:EBCCH:NEIGHbor:OTHER:INFO: \\
SERVice:MAP \(n, m\)
\end{tabular} & 9-313 & FDCCH:EBCCH:NEIGHbor:OTHER: INFO:SERVice:MAP? \(n\) & 9-113 \\
\hline
\end{tabular}

Table 11-25 E-BCCH - Neighbor Service Info (Multi Hyperband)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:EBCCH:PD? & 9-94 \\
\hline Message Type & M & 6 & CSS:EBCCH:MSGtype:MACA_MULti \(n\) & 9-281 & FDCCH:EBCCH:MSGtype? & 9-94 \\
\hline MACA STATUS & M & 2 & CSS:EBCCH:MACA:STATus \(n\) & 9-316 & FDCCH:EBCCH:MACA:STATus? & 9-116 \\
\hline MACA TYPE & M & 4 & CSS:EBCCH:MACA:TYPE \(n\) & 9-316 & FDCCH:EBCCH:MACA:TYPE? & 9-116 \\
\hline MACA 8 CONTROL & O & 5 & CSS:EBCCH:ENABLE:MACA:EIGHT: CONTrol \(n\) & 9-326 & N/A & - \\
\hline & & & CSS:EBCCH:MACA:EIGHT:CONTrol \(n\) & 9-317 & FDCCH:EBCCH:MACA:EIGHT: CONTrol? & 9-116 \\
\hline MACA LIST & 0 & \[
\begin{aligned}
& 19 \text { to } \\
& (19+ \\
& 11 * N)
\end{aligned}
\] & CSS:EBCCH:ENABLE:MACA:LIST \(n\) & 9-326 & N/A & - \\
\hline & & & CSS:EBCCH:MACA:LIST:NUMber \(n\) & 9-317 & FDCCH:EBCCH:MACA:LIST:NUMber? & 9-116 \\
\hline & & & CSS:EBCCH:MACA:LIST:CHAN \(n, m\) & 9-317 & FDCCH:EBCCH:MACA:LIST:CHAN? n & 9-116 \\
\hline MACA LIST (Other Hyperband) & 0 & \[
\begin{aligned}
& 21 \text { to } \\
& (21+ \\
& 11 \mathrm{P})
\end{aligned}
\] & CSS:EBCCH:ENABLE:MACA:LIST: OTHER \(n\) & 9-326 & N/A & - \\
\hline & & & CSS:EBCCH:MACA:LIST:OTHER: HYPERband \(n\) & 9-317 & FDCCH:EBCCH:MACA:LIST:OTHER: HYPERband? & 9-117 \\
\hline & & & CSS:EBCCH:MACA:LIST:OTHER: NUMber \(n\) & 9-318 & FDCCH:EBCCH:MACA:LIST:OTHER NUMber? & 9-117 \\
\hline & & & \begin{tabular}{l}
CSS:EBCCH:MACA:LIST:OTHER: \\
CHAN \(n, m\)
\end{tabular} & 9-318 & FDCCH:EBCCH:MACA:LIST:OTHER: CHAN? \(n\) & 9-117 \\
\hline
\end{tabular}

Table 11-26 E-BCCH - Mobile Assisted Channel Allocation (Multi Hyperband)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multicolumn{3}{|l|}{} & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:ANALOG & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline MEM & M & 1 & CSS:SPACH:MEM \(n\) & 9-344 & FDCCH:SPACH:MEM? & 9-124 \\
\hline SCC & M & 2 & CSS:SPACH:SCC \(n\) & 9-345 & FDCCH:SPACH:SCC? & 9-124 \\
\hline VMAC & M & 4 & CSS:SPACH:VMAC \(n\) & 9-345 & FDCCH:SPACH:VMAC? & 9-125 \\
\hline CHAN & M & 11 & CSS:SPACH:CHAN \(n\) & 9-345 & FDCCH:SPACH:CHAN? & 9-125 \\
\hline Protocal Version & M & 4 & CSS:SPACH:PROTOCOI \(n\) & 9-345 & FDCCH:SPACH:PROTocol? & 9-125 \\
\hline Subaddress & \(\bigcirc\) & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & \begin{tabular}{l}
CSS:SPACH:SUBaddress: \\
ADDRess n,m
\end{tabular} & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline DTX Support & 0 & 6 & CSS:SPACH:ENABLE:DTX n & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:DTX:SUPport \(n\) & 9-346 & FDCCH:SPACH:DTX:SUPport? & 9-126 \\
\hline Display & 0 & 12 to 668 & CSS:SPACH:ENABLE:DISPlay \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:DISPlay:LENGth \(n\) & 9-347 & FDCCH:SPACH:DISPlay:LENGth? & 9-126 \\
\hline & & & CSS:SPACH:DISPlay:CHARacter \(n, m\) & 9-347 & FDCCH:SPACH:DISPlay: CHARacter? \(n\) & 9-126 \\
\hline
\end{tabular}

Table 11-27 SPACH - Analog Voice Channel Designation
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:AUDIT & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline Forced Re-registration & M & 1 & CSS:SPACH:REREG \(n\) & 9-347 & FDCCH:SPACH:REREG? & 9-126 \\
\hline Debug Display Allowed & M & 1 & CSS:SPACH:DEBUG \(n\) & 9-347 & FDCCH:SPACH:DEBUG? & 9-126 \\
\hline Subaddress & 0 & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD EVEN n & 9-346 & FDCCH:SPACH:SUBaddress: ODD EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline
\end{tabular}

Table 11-28 SPACH - Audit Order
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:BSCHALcon & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline AUTHBS & M & 18 & CSS:SPACH:AUTHBS \(n\) & 9.348 & FDCCH:SPACH:AUTHBS? & 9-126 \\
\hline Subaddress & \(\bigcirc\) & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGthn & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD_EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline
\end{tabular}

Table 11-29 SPACH - Base Station Challenge Order Confirmation
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:BSMC & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline BSMC & M & 8 & CSS:SPACH:BSMC \(n\) & 9-348 & FDCCH:SPACH:BSMC? & 9-127 \\
\hline Custom Control & M & 1 to 2024 & CSS:SPACH:CUSTOM:LENGth \(n\) & 9-348 & FDCCH:SPACH:CUSTOM:LENGth? & 9-127 \\
\hline & & & CSS:SPACH:CUSTOM:CONTrol \(n\), m & 9-348 & FDCCH:SPACH:CUSTOM:CONTrol? \(n\) & 9-127 \\
\hline Subaddress & \(\bigcirc\) & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth n & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD_EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress ADDRess? & 9-125 \\
\hline
\end{tabular}

Table 11-30 SPACH - BSMC Message Delivery
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:CAPability & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline \multirow[t]{6}{*}{Subaddress} & \multirow[t]{6}{*}{\(\bigcirc\)} & \multirow[t]{6}{*}{20 to 180} & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD_EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD_EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9.125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & \begin{tabular}{l}
CSS:SPACH:SUBaddress: \\
ADDRess \(n, m\)
\end{tabular} & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline
\end{tabular}

Table 11-31 SPACH - Capability Request
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Information Element} & & \multirow[b]{2}{*}{Length} & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline & & & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:DIGital & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline DVCC & M & 8 & CSS:SPACH:DVCC \(n\) & 9-348 & FDCCH:SPACH:DVCC? & 9-127 \\
\hline DMAC & M & 4 & CSS:SPACH:DMAC \(n\) & 9-349 & FDCCH:SPACH:DMAC? & 9-127 \\
\hline CHAN & M & 11 & CSS:SPACH:CHAN \(n\) & 9-345 & FDCCH:SPACH:CHAN? & 9-125 \\
\hline ATS & M & 4 & CSS:SPACH:ATS \(n\) & 9-349 & FDCCH:SPACH:ATS? & 9-127 \\
\hline SB & M & 1 & CSS:SPACH:SB \(n\) & 9.349 & FDCCH:SPACH:SB? & 9-127 \\
\hline Protocol Version & M & 4 & CSS:SPACH:PROTOCOI \(n\) & 9-345 & FDCCH:SPACH:PROTocol? & 9-125 \\
\hline Time Alignment & M & 5 & CSS:SPACH:TA \(n\) & 9-349 & FDCCH:SPACH:TA? & 9-127 \\
\hline Delay Interval Compensation Mode & M & 1 & CSS:SPACH:MODE:DIC \(n\) & 9-350 & FDCCH:SPACH:MODE:DIC? & 9-128 \\
\hline \multirow[t]{3}{*}{Voice Mode} & \multirow[t]{3}{*}{0} & \multirow[t]{3}{*}{10} & CSS:SPACH:ENABLE:MODE:VOICE \(n\) & 9-378 & N/A & - \\
\hline & & & CSS:SPACH:MODE:VOICE:VC \(n\) & 9.350 & FDCCH:SPACH:MODE:VOICE:VC? & 9-128 \\
\hline & & & CSS:SPACH:MODE:VOICE:PM_V \(n\) & 9-350 & FDCCH:SPACH:MODE:VOICE:PM_V? & 9-128 \\
\hline \multirow[t]{6}{*}{Subaddress} & \multirow[t]{6}{*}{0} & \multirow[t]{6}{*}{20 to 180} & CSS:SPACH:ENABLE:SUBaddress n & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:
ODD_EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline \multirow[t]{4}{*}{Message Encryption Mode} & \multirow[t]{4}{*}{0} & \multirow[t]{4}{*}{13} & CSS:SPACH:ENABLE:MODE:MEM \(n\) & 9-378 & N/A & - \\
\hline & & & CSS:SPACH:MODE:MEM:MEA \(n\) & 9-351 & FDCCH:SPACH:MODE:MEM:MEA? & 9-128 \\
\hline & & & CSS:SPACH:MODE:MEM:MED \(n\) & 9-351 & FDCCH:SPACH:MODE:MEM:MED? & 9-128 \\
\hline & & & CSS:SPACH:MODE:MEM:MEK \(n\) & 9-351 & FDCCH:SPACH:MODE:MEM:MEK? & 9.128 \\
\hline \multicolumn{3}{|l|}{Continued on Following Page} & & & & \\
\hline
\end{tabular}

Table 11-32 SPACH - Digital Traffic Channel Designation
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{2}{*}{Hyperband Info} & \multirow[t]{2}{*}{O} & \multirow[t]{2}{*}{6} & CSS:SPACH:ENABLE:HYPERband: INFO n & 9-378 & N/A & - \\
\hline & & & CSS:SPACH:MODE:HYPERband: INFO n & 9-351 & FDCCH:SPACH:HYPERband:INFO? & 9-129 \\
\hline \multirow[t]{3}{*}{Display} & \multirow[t]{3}{*}{\(\bigcirc\)} & \multirow[t]{3}{*}{12 to 668} & CSS:SPACH:ENABLE:DISPlay \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:DISPlay:LENGth \(n\) & 9-347 & FDCCH:SPACH:DISPlay:LENGth? & 9-126 \\
\hline & & & CSS:SPACH:DISPlay:CHARacter \(n, m\) & 9-347 & FDCCH:SPACH:DISPlay:
\[
\text { CHARacter? } n
\] & 9-126 \\
\hline
\end{tabular}

Table 11-32 SPACH - Digital Traffic Channel Designation (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:DRETRY & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline Last Try & M & 1 & CSS:SPACH:LT \(n\) & 9-352 & FDCCH:SPACH:LT? & 9-129 \\
\hline RCF and AUTH & 0 & 6 & CSS:SPACH:ENABLE:RCF_AUTH \(n\) & 9-378 & N/A & - \\
\hline & & & CSS:SPACH:RCF \(n\) & 9-352 & FDCCH:SPACH:FLAG:RCF? & 9-129 \\
\hline & & & CSS:SPACH:AUTH \(n\) & 9-352 & FDCCH:SPACH:FLAG:AUTH? & 9-129 \\
\hline DTX Support & 0 & 6 & CSS:SPACH:ENABLE:DTX \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:DTX:SUPport \(n\) & 9-346 & FDCCH:SPACH:DTX:SUPport? & 9-126 \\
\hline Retry Channel & 0 & \[
\begin{gathered}
17 \text { per } \\
\text { instance }
\end{gathered}
\] & CSS:SPACH:ENABLE:RETRY: CHANnel n & 9-378 & N/A & - \\
\hline & & & CSS:SPACH:RETRY:NUMBer \(n\) & 9-352 & FDCCH:SPACH:RETRY:NUMBer? & 9-130 \\
\hline & & & CSS:SPACH:RETRY:HYPERband \(n, m\) & 9-353 & FDCCH:SPACH:RETRY: HYPERband? n & 9-130 \\
\hline & & & CSS:SPACH:RETRY:CHANnel \(n, m\) & 9-353 & FDCCH:SPACH:RETRY:CHANnel? \(n\) & 9-130 \\
\hline Subaddress & 0 & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress n & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD_EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline
\end{tabular}

Table 11-33 SPACH - Directed Retry
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:MSGWTG & 9-344 & FDCCH:SPACH:MSGtype? & 9.124 \\
\hline Message Waiting Info & M & 14 to 164 & CSS:SPACH:MSGWTG:NV \(n\) & 9-353 & FDCCH:SPACH:MSGWTG:NV? & 9-130 \\
\hline & & & CSS:SPACH:MSGWTG:TYPE \(n, m\) & 9-353 & FDCCH:SPACH:MSGWTG:TYPE? \(n\) & 9-130 \\
\hline & & & CSS:SPACH:MSGWTG:NUMber \(n, m\) & 9-353 & FDCCH:SPACH:MSGWTG:NUMber? \(n\) & 9-130 \\
\hline Subaddress & 0 & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD_EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & \begin{tabular}{l}
CSS:SPACH:SUBaddress: \\
ADDRess n.m
\end{tabular} & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline Display & 0 & 12 to 668 & CSS:SPACH:ENABLE:DISPlay \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:DISPlay:LENGth \(n\) & 9.347 & FDCCH:SPACH:DISPlay:LENGth? & 9-126 \\
\hline & & & CSS:SPACH:DISPlay:CHARacter \(n, m\) & 9-347 & FDCCH:SPACH:DISPiay: CHARacter? n & 9-126 \\
\hline
\end{tabular}

Table 11-34 SPACH - Message Waiting
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:PAGE & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline Service Code & M & 4 & CSS:SPACH:SERVice \(n\) & 9-354 & FDCCH:SPACH:SERVice? & 9-130 \\
\hline \multirow[t]{6}{*}{Called Party Subaddress} & \multirow[t]{6}{*}{O} & \multirow[t]{6}{*}{20 to 180} & CSS:SPACH:ENABLE:CALLED: SUBaddress \(n\) & 9-379 & N/A & - \\
\hline & & & CSS:SPACH:CALLED:SUBaddress: LENGth n & 9-356 & FDCCH:SPACH:CALLED:SUBaddress: LENGth? & 9-133 \\
\hline & & & CSS:SPACH:CALLED:SUBaddress: ODD EVEN \(n\) & 9-356 & FDCCH:SPACH:CALLED:SUBaddress: ODD_EVEN? & 9.133 \\
\hline & & & CSS:SPACH:CALLED:SUBaddress: TYPE n & 9-356 & FDCCH:SPACH:CALLED:SUBaddress: TYPE? & 9-133 \\
\hline & & & CSS:SPACH:CALLED:SUBaddress: REServed \(n\) & 9-356 & FDCCH:SPACH:CALLED:SUBaddress: REServed? & 9-133 \\
\hline & & & CSS:SPACH:CALLED:SUBaddress: ADDRess \(n, m\) & 9-356 & FDCCH:SPACH:CALLED:SUBaddress: ADDRess? & 9-133 \\
\hline \multirow[t]{4}{*}{Signal} & \multirow[t]{4}{*}{O} & \multirow[t]{4}{*}{16} & CSS:SPACH:ENABLE:SIGnal \(n\) & 9-378 & N/A & - \\
\hline & & & CSS:SPACH:SIGnal:PITCH \(n\) & 9-354 & FDCCH:SPACH:SIGnal:PITCH? & 9.131 \\
\hline & & & CSS:SPACH:SIGnal:CADence \(n\) & 9-354 & FDCCH:SPACH:SIGnal:CADence? & 9-131 \\
\hline & & & CSS:SPACH:SIGnal:DURation \(n\) & 9-354 & FDCCH:SPACH:SIGnal:DURation? & 9-131 \\
\hline \multirow[t]{3}{*}{Calling Party Number Presentation Indicator} & \multirow[t]{3}{*}{0} & \multirow[t]{3}{*}{8} & CSS:SPACH:ENABLE:CALLING: PRESentation \(n\) & 9-380 & N/A & - \\
\hline & & & CSS:SPACH:CALLING:PRESentation: PI \(n\) & 9-359 & FDCCH:SPACH:CALLING: PRESentation:PI? & 9-136 \\
\hline & & & CSS:SPACH:CALLING:PRESentation: SI n & 9-359 & FDCCH:SPACH:CALLING: PRESentation: SI? & 9-136 \\
\hline
\end{tabular}

Continued on Following Page
Table 11-35 SPACH - Page
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{6}{*}{Calling Party Number} & \multirow[t]{6}{*}{O} & \multirow[t]{6}{*}{20 to *} & CSS:SPACH:ENABLE:CALLING: ADDRess \(n\) & 9-379 & N/A & - \\
\hline & & & N/A & - & FDCCH:SPACH:CALLING:LENGth? & 9-134 \\
\hline & & & CSS:SPACH:CALLING:TYPE \(n\) & 9-357 & FDCCH:SPACH:CALLING:TYPE? & 9-134 \\
\hline & & & CSS:SPACH:CALLING:PLANid \(n\) & 9-357 & FDCCH:SPACH:CALLING:PLANid? & 9-134 \\
\hline & & & CSS:SPACH:CALLING:ENCoding \(n\) & 9-357 & FDCCH:SPACH:CALLING:ENCoding? & 9.134 \\
\hline & & & CSS:SPACH:CALLING:ADDRess "n" & 9-357 & FDCCH:SPACH:CALLING:ADDRess? & 9-134 \\
\hline \multirow[t]{6}{*}{Calling Party Subaddress} & \multirow[t]{6}{*}{O} & \multirow[t]{6}{*}{20 to 180} & CSS:SPACH:ENABLE:CALLING: SUBaddress \(n\) & 9-379 & N/A & - \\
\hline & & & CSS:SPACH:CALLING:SUBaddress: LENGth n & 9-358 & FDCCH:SPACH:CALLING:SUBaddress :LENGth? & 9-135 \\
\hline & & & CSS:SPACH:CALLING:SUBaddress: ODD EVEN \(n\) & 9-358 & FDCCH:SPACH:CALLING:SUBaddress :ODD EVEN? & 9-135 \\
\hline & & & CSS:SPACH:CALLING:SUBaddress: TYPE \(n\) & 9-358 & FDCCH:SPACH:CALLING:SUBaddress :TYPE? & 9-135 \\
\hline & & & CSS:SPACH:CALLING:SUBaddress: REServed \(n\) & 9-358 & FDCCH:SPACH:CALLING:SUBaddress :REServed? & 9-135 \\
\hline & & & CSS:SPACH:CALLING:SUBaddress: ADDRess \(n, m\) & 9-358 & FDCCH:SPACH:CALLING:SUBaddress :ADDRess? n & 9-135 \\
\hline \multirow[t]{3}{*}{Display} & \multirow[t]{3}{*}{O} & \multirow[t]{3}{*}{\[
\begin{gathered}
12 \text { to } \\
668
\end{gathered}
\]} & CSS:SPACH:ENABLE:DISPlay \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:DISPlay:LENGth \(n\) & 9-347 & FDCCH:SPACH:DISPlay:LENGth? & 9-126 \\
\hline & & & CSS:SPACH:DISPlay:CHARacter n,m & 9-347 & \[
\begin{aligned}
& \text { FDCCH:SPACH:DISPlay: } \\
& \text { CHARacter? } n
\end{aligned}
\] & 9-126 \\
\hline \multicolumn{3}{|l|}{Continued on Following Page} & \multicolumn{4}{|l|}{} \\
\hline
\end{tabular}

Table 11-35 SPACH - Page (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multicolumn{3}{|l|}{} & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{6}{*}{Called Party} & \multirow[t]{6}{*}{\(\bigcirc\)} & \multirow[t]{6}{*}{20 to *} & CSS:SPACH:ENABLE:CALLED: ADDRess \(n\) & 9-379 & N/A & - \\
\hline & & & N/A & - & FDCCH:SPACH:CALLED:LENGth? & 9-132 \\
\hline & & & CSS:SPACH:CALLED:TYPE \(n\) & 9.355 & FDCCH:SPACH:CALLED:TYPE? & 9-132 \\
\hline & & & CSS:SPACH:CALLED:PLANid \(n\) & 9-355 & FDCCH:SPACH:CALLED:PLANid? & 9-132 \\
\hline & & & CSS:SPACH:CALLED:ENCoding \(n\) & 9-355 & FDCCH:SPACH:CALLED:ENCoding? & 9-132 \\
\hline & & & CSS:SPACH:CALLED:ADDRess " \(n\) " & 9-355 & FDCCH:SPACH:CALLED:ADDRess? & 9.132 \\
\hline
\end{tabular}

Table 11-35 SPACH - Page (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:PU & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline Request Number & M & 4 & CSS:SPACH:RN \(n\) & 9-359 & FDCCH:SPACH:RN? & 9-136 \\
\hline Subaddress & \(\bigcirc\) & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD_EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress ODD EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline
\end{tabular}

Table 11-36 SPACH - Parameter Update
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:RDATA & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline R-Transaction Identifier & M & 8 & CSS:SPACH:RTRANSaction \(n\) & 9-359 & FDCCH:SPACH:RTRANSaction? & 9-136 \\
\hline R-Data Unit & M & 16 to * & CSS:SPACH:RDATA_UNIT:LENGth \(n\) & 9-360 & FDCCH:SPACH:RDATA UNIT: LENGth? & 9-136 \\
\hline & & & CSS:SPACH:RDATA UNIT:HLP: IDentifier n & 9-360 & FDCCH:SPACH:RDATA_UNIT:HLP: IDentifier? & 9-137 \\
\hline & & & CSS:SPACH:RDATA UNIT:HLP: DATA \(n, m\) & 9.360 & FDCCH:SPACH:RDATA_UNIT:HLP: DATA? \(n\) & 9-137 \\
\hline Message Center Address & 0 & 20 to * & CSS:SPACH:ENABLE:MESSage: CENTer:ADDRess \(n\) & \(9-380\) & N/A & - \\
\hline & & & N/A & - & FDCCH:SPACH:MESSage:CENTer: LENGth? & 9-137 \\
\hline & & & CSS:SPACH:MESSage:CENTer:
\[
\text { TYPE } n
\] & 9-361 & FDCCH:SPACH:MESSage:CENTer: TYPE? & 9-137 \\
\hline & & & CSS:SPACH:MESSage:CENTer: PLANid \(n\) & 9-361 & FDCCH:SPACH:MESSage:CENTer: PLANid? & 9-137 \\
\hline & & & CSS:SPACH:MESSage:CENTer: ENCoding \(n\) & 9-361 & FDCCH:SPACH:MESSage:CENTer: ENCoding? & 9.137 \\
\hline & & & CSS:SPACH:MESSage:CENTer: ADDRess " \(n\) " & 9-361 & FDCCH:SPACH:MESSage:CENTer: ADDRess? & 9-138 \\
\hline User Destination Address & 0 & 20 to * & CSS:SPACH:ENABLE:USER:DEST: ADDRess n & 9-380 & N/A & - \\
\hline & & & N/A & - & FDCCH:SPACH:USER:DEST:LENGth? & 9-138 \\
\hline & & & CSS:SPACH:USER:DEST:TYPE \(n\) & 9-362 & FDCCH:SPACH:USER:DEST:TYPE? & 9-138 \\
\hline & & & CSS:SPACH:USER:DEST:PLANid \(n\) & 9-362 & FDCCH:SPACH:USER:DEST:PLANid? & 9-138 \\
\hline & & & CSS:SPACH:USER:DEST:ENCoding \(n\) & 9-362 & FDCCH:SPACH:USER:DEST: ENCoding? & 9-138 \\
\hline & & & \begin{tabular}{l}
CSS:SPACH:USER:DEST: \\
ADDRess " \(n\) "
\end{tabular} & 9-362 & FDCCH:SPACH:USER:DEST: ADDRess? & 9-138 \\
\hline
\end{tabular}

Continued on Following Page
Table 11-37 SPACH - R-DATA
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{6}{*}{User Destination Subaddress} & \multirow[t]{6}{*}{\(\bigcirc\)} & \multirow[t]{6}{*}{20 to 180} & CSS:SPACH:ENABLE:USER:DEST: SUBaddress \(n\) & 9.380 & N/A & - \\
\hline & & & CSS:SPACH:USER:DEST:SUBaddress :LENGth \(n\) & 9-363 & FDCCH:SPACH:USER:DEST: SUBaddress:LENGth? & 9-139 \\
\hline & & & CSS:SPACH:USER:DEST:SUBaddress ODD_EVEN \(n\) & 9-363 & FDCCH:SPACH:USER:DEST: SUBaddress:ODD_EVEN? & 9-139 \\
\hline & & & CSS:SPACH:USER:DEST:SUBaddress :TYPE \(n\) & 9-363 & FDCCH:SPACH:USER:DEST: SUBaddress:TYPE? & 9-139 \\
\hline & & & CSS:SPACH:USER:DEST:SUBaddress :REServed n & 9-363 & FDCCH:SPACH:USER:DEST: SUBaddress:REServed? & 9-139 \\
\hline & & & CSS:SPACH:USER:DEST:SUBaddress :ADDRess \(n, m\) & 9-363 & FDCCH:SPACH:USER:DEST: SUBaddress:ADDRess? & 9-139 \\
\hline \multirow[t]{6}{*}{User Originating Address} & \multirow[t]{6}{*}{0} & \multirow[t]{6}{*}{20 to *} & CSS:SPACH:ENABLE:USER:ORIG: ADDRess \(n\) & 9-381 & N/A & - \\
\hline & & & N/A & - & FDCCH:SPACH:USER:ORIG:LENGth? & 9-140 \\
\hline & & & CSS:SPACH:USER:ORIG:TYPE \(n\) & 9.365 & FDCCH:SPACH:USER:ORIG:TYPE? & 9-140 \\
\hline & & & CSS:SPACH:USER:ORIG:PLANId \(n\) & 9-365 & FDCCH:SPACH:USER:ORIG:PLANid? & 9-141 \\
\hline & & & CSS:SPACH:USER:ORIG:ENCoding \(n\) & 9-365 & FDCCH:SPACH:USER:ORIG: ENCoding? & 9-141 \\
\hline & & & CSS:SPACH:USER:ORIG: ADDRess " \(n\) " & 9-365 & FDCCH:SPACH:USER:ORIG: ADDRess? & 9-141 \\
\hline
\end{tabular}

Continued on Following Page
Table 11-37 SPACH - R-DATA (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multicolumn{3}{|l|}{} & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{6}{*}{User Originating Subaddress} & \multirow[t]{6}{*}{O} & \multirow[t]{6}{*}{20 to 180} & \begin{tabular}{l}
CSS:SPACH:ENABLE:USER:ORIG: \\
SUBaddress n
\end{tabular} & 9-381 & N/A & - \\
\hline & & & CSS:SPACH:USER:ORIG:SUBaddress :LENGth n & 9-366 & FDCCH:SPACH:USER:ORIG: SUBaddress:LENGth? & 9-142 \\
\hline & & & CSS:SPACH:USER:ORIG:SUBaddress :ODD_EVEN \(n\) & 9-366 & FDCCH:SPACH:USER:ORIG: SUBaddress:ODD_EVEN? & 9-142 \\
\hline & & & CSS:SPACH:USER:ORIG:SUBaddress :TYPE \(n\) & 9-366 & FDCCH:SPACH:USER:ORIG: SUBaddress:TYPE? & 9-142 \\
\hline & & & CSS:SPACH:USER:ORIG:SUBaddress :REServed \(n\) & 9-366 & FDCCH:SPACH:USER:ORIG: SUBaddress:REServed? & 9-142 \\
\hline & & & CSS:SPACH:USER:ORIG:SUBaddress :ADDRess n,m & 9-366 & FDCCH:SPACH:USER:ORIG: SUBaddress:ADDRess? \(n\) & 9-142 \\
\hline \multirow[t]{3}{*}{User Originating Address Presentation Indicator} & \multirow[t]{3}{*}{0} & \multirow[t]{3}{*}{8} & CSS:SPACH:ENABLE:USER:ORIG: PRESentation \(n\) & 9-381 & N/A & - \\
\hline & & & CSS:SPACH:USER:ORIG: PRESentation:PI n & 9-367 & FDCCH:SPACH:USER:ORIG: PRESentation:PI? & 9.141 \\
\hline & & & CSS:SPACH:USER:ORIG: PRESentation:SI n & 9-367 & FDCCH:SPACH:USER:ORIG: PRESentation:SI? & 9-141 \\
\hline
\end{tabular}

Table 11-37 SPACH - R-DATA (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen: RDATA ACCept & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline R-Transaction Identifier & M & 8 & CSS:SPACH:RTRANSaction \(n\) & 9-359 & FDCCH:SPACH:RTRANSaction? & 9-136 \\
\hline R-DATA Delay & O & 8 & CSS:SPACH:ENABLE:RDATA: DELAY \(n\) & 9-381 & N/A & - \\
\hline & & & CSS:SPACH:RDATA:DELAY \(n\) & 9-373 & FDCCH:SPACH:RDATA:DELAY? & 9-143 \\
\hline Subaddress & 0 & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth n & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD_EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress ADDRess? & 9-125 \\
\hline
\end{tabular}

Table 11-38 SPACH - R-DATA ACCEPT
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen: RDATA REJect & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline R-Transaction Identifier & M & 8 & CSS:SPACH:RTRANSaction \(n\) & 9-359 & FDCCH:SPACH:RTRANSaction? & 9-136 \\
\hline R-Cause & M & 8 & CSS:SPACH:REJect:RDATA:CAUSE \(n\) & 9-372 & FDCCH:SPACH:REJect:RDATA: CAUSE? & 9-147 \\
\hline & & & CSS:SPACH:REJect:RDATA:SPARE \(n\) & 9-372 & FDCCH:SPACH:REJect:RDATA: SPARE? & 9-147 \\
\hline R-DATA Delay & 0 & 8 & CSS:SPACH:ENABLE:RDATA: DELAY \(n\) & 9-381 & N/A & - \\
\hline & & & CSS:SPACH:RDATA:DELAY \(n\) & 9-373 & FDCCH:SPACH:RDATA:DELAY? & 9-143 \\
\hline Subaddress & 0 & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess n.m & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline
\end{tabular}

Table 11-39 SPACH - R-DATA REJECT
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:REG_ACCept & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline \multirow[t]{2}{*}{PFC Assignment} & \multirow[t]{2}{*}{0} & \multirow[t]{2}{*}{7} & \begin{tabular}{l}
CSS:SPACH:ENABLE:PFC: \\
ASSIGNment \(n\)
\end{tabular} & 9-382 & N/A & - \\
\hline & & & CSS:SPACH:PFC:ASSIGNment \(n\) & 9-367 & FDCCH:SPACH:PFC:ASSIGNment? & 9-143 \\
\hline \multirow[t]{3}{*}{RNUM List} & \multirow[t]{3}{*}{O} & \multirow[t]{3}{*}{10 to 510} & CSS:SPACH:ENABLE:RNUM:LIST \(n\) & 9-382 & N/A & - \\
\hline & & & CSS:SPACH:RNUM:NUMber \(n\) & 9-368 & FDCCH:SPACH:RNUM:NUMber? & 9-143 \\
\hline & & & CSS:SPACH:RNUM:LIST \(n, m\) & 9-368 & FDCCH:SPACH:RNUM:LIST? \(n\) & 9-143 \\
\hline \multirow[t]{3}{*}{MSID Assignment} & \multirow[t]{3}{*}{0} & \multirow[t]{3}{*}{\[
6,26,30
\]} & CSS:SPACH:ENABLE:MSID: ASSIGNment \(n\) & 9-382 & N/A & - \\
\hline & & & CSS:SPACH:MSID:IDT \(n\) & 9-368 & FDCCH:SPACH:MSID:IDT? & 9-121 \\
\hline & & & CSS:SPACH:MSID:ASSIGNment \(n\) & 9-368 & FDCCH:SPACH:MSID:ASSIGNment? & 9-121 \\
\hline \multirow[t]{5}{*}{User Group} & \multirow[t]{5}{*}{O} & \multirow[t]{5}{*}{\[
\begin{array}{|c}
\hline 6,28,32,4 \\
2,58
\end{array}
\]} & CSS:SPACH:ENABLE:USER:GROUP \(n\) & 9-381 & N/A & - \\
\hline & & & CSS:SPACH:USER:GROUP:STATus \(n\) & 9-364 & FDCCH:SPACH:USER:GROUP: STATus? & 9-140 \\
\hline & & & CSS:SPACH:USER:GROUP:TYPE \(n\) & 9-364 & FDCCH:SPACH:USER:GROUP:TYPE? & 9-140 \\
\hline & & & CSS:SPACH:USER:GROUP:ID:MS \(n\) & 9-364 & FDCCH:SPACH:USER:GROUP:ID:MS? & 9-140 \\
\hline & & & CSS:SPACH:USER:GROUP:ID:LS \(n\) & 9-364 & FDCCH:SPACH:USER:GROUP:ID:LS? & 9-140 \\
\hline \multirow[t]{4}{*}{PSID/RSID Available} & \multirow[t]{4}{*}{0} & \multirow[t]{4}{*}{25 to 280} & CSS:SPACH:ENABLE:PSID_RSID: AVAILable \(n\) & 9-382 & N/A & - \\
\hline & & & CSS:SPACH:PSID RSID:AVAILable: NUMBer n & 9-369 & FDCCH:SPACH:PSID RSID:AVAILable :NUMber? & 9.144 \\
\hline & & & \begin{tabular}{l}
CSS:SPACH:PSID_RSID:AVAILable: \\
TYPE \(n, m\)
\end{tabular} & 9-369 & FDCCH:SPACH:PSID_RSID:AVAILable :TYPE? \(n\) & 9-144 \\
\hline & & & \begin{tabular}{l}
CSS:SPACH:PSID_RSID:AVAILable: \\
VALUE \(n, m\)
\end{tabular} & 9-369 & FDCCH:SPACH:PSID_RSID:AVAILable :VALUE? \(n\) & 9-144 \\
\hline
\end{tabular}

Continued on Following Page
Table 11-40 SPACH - Registration Accept
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{3}{*}{Display} & \multirow[t]{3}{*}{\(\bigcirc\)} & \multirow[t]{3}{*}{12 to 668} & CSS:SPACH:ENABLE:DISPlay \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:DISPlay:LENGth \(n\) & 9-347 & FDCCH:SPACH:DISPlay:LENGth? & 9-126 \\
\hline & & & CSS:SPACH:DISPlay:CHARacter \(n, m\) & 9-347 & FDCCH:SPACH:DISPlay: CHARacter? n & 9-126 \\
\hline \multirow[t]{6}{*}{Directory Address} & \multirow[t]{6}{*}{\(\bigcirc\)} & \multirow[t]{6}{*}{20 to :} & CSS:SPACH:ENABLE:DIRectory: ADDRess n & 9-383 & N/A & - \\
\hline & & & N/A & - & FDCCH:SPACH:DIRectory:LENGth? & 9-145 \\
\hline & & & CSS:SPACH:DIRectory:TYPE \(n\) & 9-370 & FDCCH:SPACH:DIRectory:TYPE? & 9-145 \\
\hline & & & CSS:SPACH:DIRectory:PLANid \(n\) & 9-370 & FDCCH:SPACH:DIRectory:PLANid? & 9-145 \\
\hline & & & CSS:SPACH:DIRectory:ENCoding \(n\) & 9-370 & FDCCH:SPACH:DIRectory:ENCoding? & 9-145 \\
\hline & & & CSS:SPACH:DIRectory:ADDRess " \(n\) " & 9-370 & FDCCH:SPACH:DIRectory:ADDRess? & 9-145 \\
\hline \multirow[t]{6}{*}{Directory Subaddress} & \multirow[t]{6}{*}{0} & \multirow[t]{6}{*}{20 to 180} & CSS:SPACH:ENABLE:DIRectory: SUBaddress \(n\) & 9-383 & N/A & - \\
\hline & & & CSS:SPACH:DIRectory:SUBaddress: LENGth \(n\) & 9-371 & FDCCH:SPACH:DIRectory: SUBaddress:LENGth? & 9-146 \\
\hline & & & CSS:SPACH:DIRectory:SUBaddress: ODD_EVEN \(n\) & 9-371 & FDCCH:SPACH:DIRectory: SUBaddress:ODD EVEN? & 9-146 \\
\hline & & & CSS:SPACH:DIRectory:SUBaddress: TYPE \(n\) & 9-371 & FDCCH:SPACH:DIRectory: SUBaddress:TYPE? & 9-146 \\
\hline & & & CSS:SPACH:DIRectory:SUBaddress: REServed n & 9-371 & FDCCH:SPACH:DIRectory: SUBaddress:REServed? & 9-146 \\
\hline & & & CSS:SPACH:DIRectory:SUBaddress: ADDRess \(n, m\) & 9-371 & FDCCH:SPACH:DIRectory: SUBaddress:ADDRess? n & 9-146 \\
\hline \multicolumn{3}{|l|}{Continued on Following Page} & \multicolumn{4}{|l|}{} \\
\hline
\end{tabular}

Table 11-40 SPACH - Registration Accept (cont)
TMAC COMMANDS
\begin{tabular}{|l|l|} 
Information Element & Length \\
\hline
\end{tabular}
ENCODE \(\quad\) Page
DECODE
Page

\section*{Continued From Preceding Page}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{6}{*}{Subaddress} & \multirow[t]{6}{*}{\(\bigcirc\)} & \multirow[t]{6}{*}{20 to 180} & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD_EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline
\end{tabular}

Table 11-40 SPACH - Registration Accept (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:REG_REJect & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline Cause & M & 4 & CSS:SPACH:REJect:REGistration: CAUSE \(n\) & 9-372 & FDCCH:SPACH:REJect:REGistration: CAUSE? & 9-147 \\
\hline Reject Time & 0 & 12 & CSS:SPACH:ENABLE:REJect:TIME \(n\) & 9-383 & N/A & - \\
\hline & & & \begin{tabular}{l}
CSS:SPACH:REJect:REGistration: \\
TIME:LOWer \(n\)
\end{tabular} & 9-372 & FDCCH:SPACH:REJect:REGistration: TIME:LOWer? & 9-147 \\
\hline & & & CSS:SPACH:REJect:REGistration: TIME:UPPer \(n\) & 9-372 & FDCCH:SPACH:REJect:REGistration: TIME:UPPer? & 9-147 \\
\hline Subaddress & O & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD_EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress ADDRess? & 9-125 \\
\hline Display & 0 & 12 to 668 & CSS:SPACH:ENABLE:DISPlay \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:DISPlay:LENGth \(n\) & 9-347 & FDCCH:SPACH:DISPlay:LENGth? & 9-126 \\
\hline & & & CSS:SPACH:DISPlay:CHARacter \(n, m\) & 9-347 & FDCCH:SPACH:DISPlay: CHARacter? \(n\) & 9-126 \\
\hline
\end{tabular}

Table 11-41 SPACH - Registration Reject
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:RELease & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline Cause & M & 4 & CSS:SPACH:RELease:CAUSE \(n\) & 9-373 & FDCCH:SPACH:RELease:CAUSE? & 9-147 \\
\hline Signal & \(\bigcirc\) & 16 & CSS:SPACH:ENABLE:SIGnal n & 9-378 & N/A & - \\
\hline & & & CSS:SPACH:SIGnal:PITCH \(n\) & 9-354 & FDCCH:SPACH:SIGnal:PITCH? & 9-131 \\
\hline & & & CSS:SPACH:SIGnal:CADence \(n\) & 9-354 & FDCCH:SPACH:SIGnal:CADence? & 9-131 \\
\hline & & & CSS:SPACH:SIGnal:DURation \(n\) & 9-354 & FDCCH:SPACH:SIGnal:DURation? & 9-131 \\
\hline Subaddress & 0 & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress n & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD EVEN n & 9-346 & FDCCH:SPACH:SUBaddress: ODD_EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & \begin{tabular}{l}
CSS:SPACH:SUBaddress: \\
ADDRess \(n, m\)
\end{tabular} & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline Display & 0 & 12 to 668 & CSS:SPACH:ENABLE:DISPlay \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:DISPlay:LENGth \(n\) & 9-347 & FDCCH:SPACH:DISPlay:LENGth? & 9-126 \\
\hline & & & CSS:SPACH:DISPlay:CHARacter \(n, m\) & 9-347 & FDCCH:SPACH:DISPlay: CHARacter? n & 9-126 \\
\hline
\end{tabular}

Table 11-42 SPACH - Release
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:REORDer & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline Cause & M & 4 & CSS:SPACH:REorder:CAUSE \(n\) & 9-373 & FDCCH:SPACH:REorder:CAUSE? & 9-148 \\
\hline Tone Indicator & M & 2 & CSS:SPACH:REorder:TONE \(n\) & 9.373 & FDCCH:SPACH:REorder:TONE? & 9-148 \\
\hline Subaddress & \(\bigcirc\) & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & ```
CSS:SPACH:SUBaddress:
ODD EVEN n
``` & 9-346 & FDCCH:SPACH:SUBaddress: ODD EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline Display & 0 & 12 to 668 & CSS:SPACH:ENABLE:DISPlay \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:DISPlay:LENGth \(n\) & 9-347 & FDCCH:SPACH:DISPlay:LENGth? & 9-126 \\
\hline & & & CSS:SPACH:DISPlay:CHARacter \(n, m\) & 9-347 & FDCCH:SPACH:DISPlay: CHARacter? \(n\) & 9-126 \\
\hline
\end{tabular}

Table 11-43 SPACH - Reorder/Intercept
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:SOC & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline SOC & M & 12 & CSS:SPACH:SOC \(n\) & 9-374 & FDCCH:SPACH:SOC? & 9-148 \\
\hline Custom Control & M & 1 to 2024 & CSS:SPACH:CUSTOM:LENGth n & 9-348 & FDCCH:SPACH:CUSTOM:LENGth? & 9-127 \\
\hline & & & CSS:SPACH:CUSTOM:CONTrol \(n, m\) & 9-348 & FDCCH:SPACH:CUSTOM:CONTrol? \(n\) & 9-127 \\
\hline Subaddress & 0 & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & \(9-377\) & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth n & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD_EVEN \(n\) & 9.346 & FDCCH:SPACH:SUBaddress: ODD EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline
\end{tabular}

Table 11-44 SPACH - SOC Message Delivery
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocal Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen: SPACHnotification & 9-344 & FDCCH:SPACH:MSGtype? & 9.124 \\
\hline SPACH Notification Type & M & 6 & CSS:SPACH:NOTification \(n\) & 9-374 & FDCCH:SPACH:NOTification? & 9-148 \\
\hline Subaddress & \(\bigcirc\) & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth n & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD_EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD_EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline
\end{tabular}

Table 11-45 SPACH - SPACH Notification
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:SSDUP & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline RANDSSD & M & 56 & CSS:SPACH:RANDSSD1 \(n\) & 9-374 & FDCCH:SPACH:RANDSSD1? & 9-148 \\
\hline & & & CSS:SPACH:RANDSSD2 \(n\) & 9-374 & FDCCH:SPACH:RANDSSD2? & 9-148 \\
\hline Subaddress & 0 & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline
\end{tabular}

Table 11-46 SPACH - SSD Update Order
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:TESTreg & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline PSID/RSID Map & M & 16 & CSS:SPACH:PSID_RSID:MAP \(n\) & 9.369 & FDCCH:SPACH:PSID RSID:MAP? & 9-144 \\
\hline Subaddress & 0 & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9.345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD_EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9.125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline Alphanumeric System ID & 0 & 12 to 132 & CSS:SPACH:ENABLE:ALPHA:SID \(n\) & 9-383 & N/A & - \\
\hline & & & \[
N / A
\] & - & FDCCH:SPACH:ALPHA:SID:LENGth? & 9-149 \\
\hline & & & CSS:SPACH:ALPHA:SID "n" & 9-375 & FDCCH:SPACH:ALPHA:SID: CHARacters? & 9-149 \\
\hline Alphanumeric PSID/RSID List & 0 & \[
\begin{aligned}
& 1210 \\
& 1924
\end{aligned}
\] & \[
\begin{aligned}
& \text { CSS:SPACH:ENABLE:ALPHA: } \\
& \text { PSID_RSID } n
\end{aligned}
\] & 9-383 & N/A & - \\
\hline & & & CSS:SPACH:ALPHA:PSID_RSID: NUMBer \(n\) & 9-375 & FDCCH:SPACH:ALPHA:PSID RSID: LENGth? & 9-149 \\
\hline & & & CSS:SPACH:ALPHA:PSID RSID: NAME:CHARacter \(n, " m\) " & 9-375 & FDCCH:SPACH:ALPHA:PSID RSID: NAME:LENGth? \(n\) & 9-149 \\
\hline & & & & & FDCCH:SPACH:ALPHA:PSID RSID: NAME:CHARacters? \(n\) & \(9-149\) \\
\hline
\end{tabular}

Table 11-47 SPACH - Test Registration Response
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:UCHAL & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline RANDU & M & 24 & CSS:SPACH:RANDU \(n\) & 9-375 & FDCCH:SPACH:RANDU? & 9-150 \\
\hline Subaddress & 0 & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9.377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth n & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9.125 \\
\hline & & & CSS:SPACH:SUBaddress:
ODD_EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress ODD EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline
\end{tabular}

Table 11-48 SPACH - Unique Challenge Order
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:USERalert & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline \multirow[t]{4}{*}{Signal} & \multirow[t]{4}{*}{0} & \multirow[t]{4}{*}{16} & CSS:SPACH:ENABLE:SIGnal n & 9-378 & N/A & - \\
\hline & & & CSS:SPACH:SIGnal:PITCH \(n\) & 9-354 & FDCCH:SPACH:SIGnal:PITCH? & 9-131 \\
\hline & & & CSS:SPACH:SIGnal:CADence \(n\) & 9-354 & FDCCH:SPACH:SIGnal:CADence? & 9-131 \\
\hline & & & CSS:SPACH:SIGnal:DURation \(n\) & 9-354 & FDCCH:SPACH:SIGnal:DURation? & 9-131 \\
\hline \multirow[t]{6}{*}{Subaddress} & \multirow[t]{6}{*}{\(\bigcirc\)} & \multirow[t]{6}{*}{20 to 180} & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD EVEN n & 9-346 & FDCCH:SPACH:SUBaddress: ODD EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9.346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9.125 \\
\hline \multirow[t]{3}{*}{Display} & \multirow[t]{3}{*}{0} & \multirow[t]{3}{*}{1210668} & CSS:SPACH:ENABLE:DISPlay \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:DISPlay:LENGth \(n\) & 9-347 & FDCCH:SPACH:DISPlay:LENGth? & 9-126 \\
\hline & & & CSS:SPACH:DISPlay:CHARacter \(n, m\) & 9-347 & FDCCH:SPACH:DISPlay: CHARacter? \(n\) & 9-126 \\
\hline
\end{tabular}

Table 11-49 SPACH - User Alert
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:QDISC_ACK & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline Subaddress & \(\bigcirc\) & 20 to 180 & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth \(n\) & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress ODD_EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD_EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress ADDRess \(n, m\) & 9-346 & FDCCH:SPACH:SUBaddress: ADDRess? & 9-125 \\
\hline
\end{tabular}

Table 11-50 SPACH - Queue Disconnect Ack
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & FDCCH:SPACH:PD? & 9-124 \\
\hline Message Type & M & 6 & CSS:SPACH:MSGtypen:QUPDate & 9-344 & FDCCH:SPACH:MSGtype? & 9-124 \\
\hline \multirow[t]{2}{*}{Queue Position} & \multirow[t]{2}{*}{0} & \multirow[t]{2}{*}{8} & CSS:SPACH:ENABLE:QUEue: POSition n & 9-384 & N/A & - \\
\hline & & & CSS:SPACH:QUEue:POSition \(n\) & 9-376 & FDCCH:SPACH:QUEue:POSition? & 9-150 \\
\hline \multirow[t]{6}{*}{Subaddress} & \multirow[t]{6}{*}{0} & \multirow[t]{6}{*}{20 to 180} & CSS:SPACH:ENABLE:SUBaddress \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:SUBaddress:LENGth n & 9-345 & FDCCH:SPACH:SUBaddress:LENGth? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress: ODD_EVEN \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: ODD_EVEN? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:TYPE \(n\) & 9-346 & FDCCH:SPACH:SUBaddress:TYPE? & 9-125 \\
\hline & & & CSS:SPACH:SUBaddress:REServed \(n\) & 9-346 & FDCCH:SPACH:SUBaddress: REServed? & 9-125 \\
\hline & & & \begin{tabular}{l}
CSS:SPACH:SUBaddress \\
ADDRess n, m
\end{tabular} & 9-346 & FDCCH:SPACH:SUBaddress ADDRess? & 9-125 \\
\hline \multirow[t]{3}{*}{MACA LIST} & \multirow[t]{3}{*}{0} & \multirow[t]{3}{*}{\[
\begin{aligned}
& 19 \text { to } \\
& (19+ \\
& 11 \approx N)
\end{aligned}
\]} & CSS:SPACH:ENABLE:MACA:LIST \(n\) & 9-384 & N/A & - \\
\hline & & & CSS:SPACH:MACA:LIST:NUMBER \(n\) & 9-376 & FDCCH:SPACH:MACA:LIST:NUMBer? & 9-150 \\
\hline & & & CSS:SPACH:MACA:LIST:CHAN \(n, m\) & 9-376 & FDCCH:SPACH:MACA:LIST:CHAN? \(n\) & 9-150 \\
\hline \multirow[t]{4}{*}{MACA LIST (Other Hyperband)} & \multirow[t]{4}{*}{0} & \multirow[t]{4}{*}{\[
\begin{gathered}
21 \text { to } \\
(21+ \\
11 * P)
\end{gathered}
\]} & CSS:SPACH:ENABLE:MACA:LIST OTHER n & 9-384 & N/A & - \\
\hline & & & CSS:SPACH:MACA:LIST:OTHER HYPERband \(n\) & 9-376 & FDCCH:SPACH:MACA:LIST:OTHER HYPERband? & 9-150 \\
\hline & & & CSS:SPACH:MACA:LIST:OTHER NUMBer \(n\) & 9-376 & FDCCH:SPACH:MACA:LIST:OTHER: NuMBer? & 9-150 \\
\hline & & & CSS:SPACH:MACA:LIST:OTHER CHAN \(n, m\) & 9-377 & FDCCH:SPACH:MACA:LIST:OTHER: CHAN? \(n\) & 9-150 \\
\hline \multirow[t]{3}{*}{Display} & \multirow[t]{3}{*}{0} & \multirow[t]{3}{*}{12 to 668} & CSS:SPACH:ENABLE:DISPlay \(n\) & 9-377 & N/A & - \\
\hline & & & CSS:SPACH:DISPlay:LENGth \(n\) & 9-347 & FDCCH:SPACH:DISPlay:LENGth? & 9-126 \\
\hline & & & CSS:SPACH:DISPlay:CHARacter \(n, m\) & 9-347 & FDCCH:SPACH:DISPlay: CHARacter? \(n\) & 9-126 \\
\hline
\end{tabular}

Table 11-51 SPACH - Queue Update
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype:AUDITcon \(n\) & 9-404 & RDCCH:MSGtype? & 9-160 \\
\hline PFC Minus One & M & 3 & MSS:RDCCH:PFC_1 \(n\) & 9-407 & RDCCH:PFC_1? & 9-160 \\
\hline \multirow[t]{2}{*}{Selected PSID/RSID} & \multirow[t]{2}{*}{0} & \multirow[t]{2}{*}{8} & MSS:RDCCH:ENABIe:PSID_RSID: SELect \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:PSID_RSID:SELect \(n\) & 9-407 & RDCCH:PSID_RSID:SELect? & 9-160 \\
\hline \multirow[t]{5}{*}{User Group} & \multirow[t]{5}{*}{0} & \multirow[t]{5}{*}{\[
\begin{gathered}
28,32 \\
42,58
\end{gathered}
\]} & MSS:RDCCH:ENABIe:USER:GROUP \(n\) & 9-440 & N/A & - \\
\hline & & & MSS:RDCCH:USER:GROUP:STATus \(n\) & 9-427 & RDCCH:USER:GROUP:STATUS? & 9-171 \\
\hline & & & MSS:RDCCH:USER:GROUP:TYPE \(n\) & 9-428 & RDCCH:USER:GROUP:TYPE? & 9-171 \\
\hline & & & MSS:RDCCH:USER:GROUP:UGID: MS n & 9-428 & RDCCH:USER:GROUP:UGID:MS? & 9-171 \\
\hline & & & MSS:RDCCH:USER:GROUP:UGID: LS \(n\) & 9-428 & RDCCH:USER:GROUP:UGID:LS? & 9-171 \\
\hline \multirow[t]{6}{*}{Subaddress} & \multirow[t]{6}{*}{O} & \multirow[t]{6}{*}{20 to 180} & MSS:RDCCH:ENABIe:SUBaddress \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:SUBaddress:LENGth \(n\) & 9-408 & RDCCH:SUBaddress:LENGth? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ODD EVEN \(n\) & 9-408 & RDCCH:SUBaddress:ODD_EVEN? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:TYPE n & 9-408 & RDCCH:SUBaddress:TYPE? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:REServed \(n\) & \(9-408\) & RDCCH:SUBaddress:REServed? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ADDRess \(n, m\) & 9-408 & RDCCH:SUBaddress:ADDRess? \(n\) & 9-161 \\
\hline \multirow[t]{3}{*}{Display} & \multirow[t]{3}{*}{0} & \multirow[t]{3}{*}{12 to 668} & MSS:RDCCH:ENABIe:DISPlay \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:DISPlay:LENGth n & 9-409 & RDCCH:DISPlay:LENGth? & 9-161 \\
\hline & & & MSS:RDCCH:DISPlay:CHARacter \(n, m\) & 9-409 & RDCCH:DISPlay:CHARacter? \(n\) & 9-161 \\
\hline
\end{tabular}

Table 11-52 RACH - Audit Confirmation
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & \begin{tabular}{l}
MSS:RDCCH:MSGtype \\
AUTHentication n
\end{tabular} & 9-404 & RDCCH:MSGtype? & 9-160 \\
\hline COUNT & M & 6 & MSS:RDCCH:COUNT \(n\) & 9-409 & RDCCH:COUNt? & 9-161 \\
\hline RANDC & M & 8 & MSS:RDCCH:RANDC \(n\) & 9-409 & RDCCH:RANDC? & 9-161 \\
\hline AUTHR & M & 18 & MSS:RDCCH:AUTHR \(n\) & 9-409 & RDCCH:AUTHR? & 9-161 \\
\hline
\end{tabular}

Table 11-53 RACH - Authentication
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype:BSCHAL \(n\) & 9-404 & RDCCH:MSGtype? & 9-160 \\
\hline RANDBS & M & 32 & MSS:RDCCH:RANDBS \(n\) & 9-409 & RDCCH:RANDBS? & 9-161 \\
\hline Subaddress & 0 & 20 to 180 & MSS:RDCCH:ENABIe:SUBaddress \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:SUBaddress:LENGth \(n\) & 9-408 & RDCCH:SUBaddress:LENGth? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ODD_EVEN \(n\) & 9-408 & RDCCH:SUBaddress:ODD_EVEN? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:TYPE \(n\) & 9-408 & RDCCH:SUBaddress:TYPE? & 9.161 \\
\hline & & & MSS:RDCCH:SUBaddress:REServed \(n\) & 9-408 & RDCCH:SUBaddress:REServed? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress ADDRess \(n, m\) & 9-408 & RDCCH:SUBaddress:ADDRess? \(n\) & 9-161 \\
\hline
\end{tabular}

Table 11-54 RACH - Base Station Challenge Order
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype:BSMC \(n\) & 9-404 & RDCCH:MSGtype? & 9-160 \\
\hline BSMC & M & 8 & MSS:RDCCH:BSMC \(n\) & 9-410 & RDCCH:BSMC? & 9-162 \\
\hline Custom Control & M & 1 to 2024 & MSS:RDCCH:CUSTom:LENGth \(n\) & 9.410 & RDCCH:CUSTom:LENGth? & 9-162 \\
\hline & & & MSS:RDCCH:CUSTom:CONTrol \(n, x\) & 9-410 & RDCCH:CUSTom:CONTIOI? \(n\) & 9-162 \\
\hline Subaddress & \(\bigcirc\) & 20 to 180 & MSS:RDCCH:ENABIe:SUBaddress \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:SUBaddress:LENGth n & 9-408 & RDCCH:SUBaddress:LENGth? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ODD EVEN \(n\) & 9-408 & RDCCH:SUBaddress:ODD_EVEN? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:TYPE \(n\) & 9-408 & RDCCH:SUBaddress:TYPE? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:REServed \(n\) & 9.408 & RDCCH:SUBaddress:REServed? & 9-161 \\
\hline & & & \begin{tabular}{l}
MSS:RDCCH:SUBaddress: \\
ADDRess \(n, m\)
\end{tabular} & 9-408 & RDCCH:SUBaddress:ADDRess? \(n\) & 9-161 \\
\hline
\end{tabular}

Table 11-55 RACH - BSMC Message Delivery
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype:CAPability \(n\) & 9-404 & RDCCH:MSGtype? & 9-160 \\
\hline Protocol Version & M & 4 & MSS:RDCCH:PROTocol:VERsion \(n\) & 9-410 & RDCCH:PROTocol:VERsion? & 9-162 \\
\hline SCM & M & 5 & MSS:RDCCH:SCM \(n\) & 9-410 & RDCCH:SCM? & 9-162 \\
\hline Software Vintage & M & 6 & MSS:RDCCH:VINtage:SOFTware \(n\) & 9.411 & RDCCH:VINtage:SOFTware? & 9-162 \\
\hline Firmware Vintage & M & 6 & MSS:RDCCH:VINtage:FIRMware \(n\) & 9-411 & RDCCH:VINtage:FIRMware? & 9-162 \\
\hline Model Number & M & 4 & MSS:RDCCH:MODEL \(n\) & 9-411 & RDCCH:MODEL? & 9-162 \\
\hline Manufacturer Code & M & 8 & MSS:RDCCH:MANufacture n & 9.411 & RDCCH:MANufacture? & 9-162 \\
\hline MAX_SUPPORTED_PFC & M & 3 & MSS:RDCCH:SUPPort:MAX:PFC \(n\) & 9.411 & RDCCH:SUPPort:MAX:PFC? & 9-162 \\
\hline SOC Support & M & 1 & MSS:RDCCH:SUPPort:SOC \(n\) & 9-411 & RDCCH:SUPPort:SOC? & 9-162 \\
\hline BSMC Support & M & 1 & MSS:RDCCH:SUPPort:BSMC \(n\) & 9-412 & RDCCH:SUPPort:BSMC? & 9-163 \\
\hline Async Data Support & M & 1 & MSS:RDCCH:SUPPort:ASYNC \(n\) & 9-412 & RDCCH:SUPPort:ASYNC? & 9-163 \\
\hline G3-Fax Support & M & 1 & MSS:RDCCH:SUPPort:G3fax \(n\) & 9-412 & RDCCH:SUPPort:G3fax? & 9-163 \\
\hline SMS Broadcast Support & M & 1 & MSS:RDCCH:SUPPort:SMS \(n\) & 9.412 & RDCCH:SUPPort:SMS? & 9-163 \\
\hline Subaddressing Support & M & 1 & MSS:RDCCH:SUPPort:SUBaddress \(n\) & 9-412 & RDCCH:SUPPort:SUBaddress? & 9-163 \\
\hline Supported Frequency Bands & M & 8 & MSS:RDCCH:SUPPort:FREQuency: BANDS \(n\) & 9.412 & RDCCH:SUPPort:FREQuency:BANDS? & 9-163 \\
\hline IRA Support & M & 1 & MSS:RDCCH:SUPPort:IRA \(n\) & 9-413 & RDCCH:SUPPort:IRA? & 9-163 \\
\hline User Group Support & M & 1 & MSS:RDCCH:SUPPort:USER \(n\) & 9-413 & RDCCH:SUPPort:USER? & 9-163 \\
\hline 800 MHz Analog Speech Support & M & \(\dagger\) & MSS:RDCCH:SUPPort:ANA800 \(n\) & 9.413 & RDCCH:SUPPort:ANA800? & 9-163 \\
\hline Half-Rate DTC Support & M & 1 & MSS:RDCCH:SUPPort:HALF \(n\) & 9-413 & RDCCH:SUPPort:HALF? & 9-163 \\
\hline Double Rate DTC Support & M & 1 & MSS:RDCCH:SUPPort:DOUBle \(n\) & 9-413 & RDCCH:SUPPort:DOUBIe? & 9-163 \\
\hline Triple Rate DTC Support & M & 1 & MSS:RDCCH:SUPPort:TRIPIe \(n\) & 9-414 & RDCCH:SUPPort:TRIPIe? & 9-163 \\
\hline STU-III Support & M & 1 & MSS:RDCCH:SUPPort:STU_IIIn & 9-414 & RDCCH:SUPPort:STU_III? & 9-164 \\
\hline
\end{tabular}

\section*{Continued on Following Page}

Table 11-56 RACH Capability Report
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{6}{*}{Subaddress} & \multirow[t]{6}{*}{0} & \multirow[t]{6}{*}{20 to 180} & MSS:RDCCH:ENABIe:SUBaddress \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:SUBaddress:LENGth n & 9-408 & RDCCH:SUBaddress:LENGth? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ODD EVEN n & 9-408 & RDCCH:SUBaddress:ODD_EVEN? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:TYPE \(n\) & 9-408 & RDCCH:SUBaddress:TYPE? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:REServed \(n\) & 9.408 & RDCCH:SUBaddress:REServed? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress ADDRess \(n, m\) & 9-408 & RDCCH:SUBaddress:ADDRess? \(n\) & 9-161 \\
\hline \multirow[t]{2}{*}{Voice Coder Map Info} & \multirow[t]{2}{*}{0} & \multirow[t]{2}{*}{10} & MSS:RDCCH:ENABIe:VC_MAP \(n\) & 9.437 & N/A & - \\
\hline & & & MSS:RDCCH:VC_MAP \(n\) & 9.414 & RDCCH:VC_MAP? & 9-164 \\
\hline \multirow[t]{2}{*}{ALT SOC Support} & \multirow[t]{2}{*}{0} & \multirow[t]{2}{*}{16} & ```
MSS:RDCCH:ENABIe:SUPPort:
ALT SOC n
``` & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:SUPPort:ALT_SOC \(n\) & 9-414 & RDCCH:SUPPort:ALT SOC? & 9-164 \\
\hline
\end{tabular}

Table 11-56 RACH - Capability Report (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype:MACA \(n\) & 9-404 & RDCCH:MSGtype? & 9-160 \\
\hline \multirow[t]{5}{*}{LTM Measurement} & \multirow[t]{5}{*}{0} & \multirow[t]{5}{*}{16} & MSS:RDCCH:ENABIe:MEASurement: LTM n & 9-438 & N/A & - \\
\hline & & & MSS:RDCCH:MEASurement:LTM: WER n & 9-415 & RDCCH:MEASurement:LTM:WER? & 9-164 \\
\hline & & & MSS:RDCCH:MEASurement:LTM: BER \(n\) & 9-415 & RDCCH:MEASurement:LTM:BER? & 9-164 \\
\hline & & & MSS:RDCCH:MEASurement:LTM: RSS \(n\) & 9-415 & RDCCH:MEASurement:LTM:RSS? & 9-164 \\
\hline & & & MSS:RDCCH:MEASurement:LTM FULL \(n\) & 9-415 & RDCCH:MEASurement:LTM:FULL? & 9-164 \\
\hline \multirow[t]{3}{*}{STM Measurement} & \multirow[t]{3}{*}{0} & \multirow[t]{3}{*}{\[
\begin{gathered}
8+ \\
(N+1) * 5
\end{gathered}
\]} & MSS:RDCCH:ENABIe:MEASurement: STM \(n\) & 9.438 & N/A & - \\
\hline & & & MSS:RDCCH:MEASurement:STM:NV \(n\) & 9-416 & RDCCH:MEASurement:STM:NV? & 9-164 \\
\hline & & & MSS:RDCCH:MEASurement:STM:
RSS \(n, m\) & 9-416 & RDCCH:MEASurement:STM:RSS? \(n\) & 9-164 \\
\hline \multirow[t]{4}{*}{STM Measurement (Other Hyperband)} & \multirow[t]{4}{*}{0} & \multirow[t]{4}{*}{14 to 93} & MSS:RDCCH:ENABIe:MEASurement: OTHER:STM n & 9-438 & N/A & - \\
\hline & & & MSS:RDCCH:MEASurement:OTHER STM:LENGth n & 9-416 & RDCCH:MEASurement:OTHER:STM LENGth? & 9-165 \\
\hline & & & MSS:RDCCH:MEASurement:OTHER: STM:REPort \(n\) & 9-416 & RDCCH:MEASurement:OTHER:STM: REPort? & 9-165 \\
\hline & & & MSS:RDCCH:MEASurement:OTHER: STM:RSS \(n, m\) & 9-417 & \[
\begin{aligned}
& \text { RDCCH:MEASurement:OTHER:STM: } \\
& \text { RSS? } n
\end{aligned}
\] & 9-165 \\
\hline
\end{tabular}

Table 11-57 RACH - MACA Report
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype:ORIGination \(n\) & 9.404 & RDCCH:MSGtype? & 9-160 \\
\hline Protocol Version & M & 4 & MSS:RDCCH:PROTocol:VERsion \(n\) & 9-410 & RDCCH:PROTocol:VERsion? & 9-162 \\
\hline Emergency Call & M & 1 & MSS:RDCCH:EMERgency \(n\) & 9-417 & RDCCH:EMERgency? & 9-165 \\
\hline Called Party Number & M & 16 to * & MSS:RDCCH:CALLED:TYPE \(n\) & 9-422 & RDCCH:CALLED:TYPE? & 9-167 \\
\hline & & & MSS:RDCCH:CALLED:PLANid \(n\) & 9-422 & RDCCH:CALLED:PLANid? & 9-167 \\
\hline & & & MSS:RDCCH:CALLED:ADDRess: ENCoding \(n\) & 9-422 & RDCCH:CALLED:ENCoding? & 9-167 \\
\hline & & & MSS:RDCCH:CALLED:ADDRess " \(n\) " & 9-422 & RDCCH:CALLED:ADDRess? & 9-167 \\
\hline Last Try & M & 1 & MSS:RDCCH:LT \(n\) & 9.417 & RDCCH:LT? & 9-165 \\
\hline SCM & M & 5 & MSS:RDCCH:SCM \(n\) & 9-410 & RDCCH:SCM? & 9-162 \\
\hline Service Code & M & 4 & MSS:RDCCH:SERVice \(n\) & 9-417 & RDCCH:SERVice? & 9-165 \\
\hline Voice Mode & 0 & 10 & MSS:RDCCH:ENABIe:MODE:VOICe \(n\) & 9.438 & N/A & - \\
\hline & & & MSS:RDCCH:VOICEMode:NUMBer \(n\) & 9.420 & RDCCH:VOICEMode:NUMBer? & 9-166 \\
\hline & & & MSS:RDCCH:VOICEMode:VC \(n, m\) & 9.420 & RDCCH:VOICEMode:VC? \(n\) & 9-166 \\
\hline & & & MSS:RDCCH:VOICEMode:PM \(n, m\) & 9-420 & RDCCH:VOICEMode:PM? n & 9-166 \\
\hline Data Mode & 0 & 16 & MSS:RDCCH:ENABIe:MODE:DATA \(n\) & 9-438 & N/A & - \\
\hline & & & MSS:RDCCH:MODE:DATA:PM \(n\) & 9-418 & RDCCH:MODE:DATA:PM? & 9-166 \\
\hline & & & MSS:RDCCH:MODE:DATA:SAP \(n\) & 9.418 & RDCCH:MODE:DATA:SAP? & 9-166 \\
\hline & & & MSS:RDCCH:MODE:DATA:ACKED \(n\) & 9.418 & RDCCH:MODE:DATA:ACKED? & 9-166 \\
\hline & & & MSS:RDCCH:MODE:DATA:CRC \(n\) & 9.419 & RDCCH:MODE:DATA:CRC? & 9-166 \\
\hline & & & MSS:RDCCH:MODE:DATA:PART \(n\) & 9-419 & RDCCH:MODE:DATA:PART? & 9-166 \\
\hline & & & MSS:RDCCH:MODE:DATA:RLP n & 9-419 & RDCCH:MODE:DATA:RLP? & 9-166 \\
\hline Message Encryption Mode & 0 & 13 & MSS:RDCCH:ENABIE:MEM \(n\) & 9-439 & N/A & - \\
\hline & & & MSS:RDCCH:MEM:MEA \(n\) & 9-421 & RDCCH:MEM:MEA? & 9-167 \\
\hline & & & MSS:RDCCH:MEM:MED \(n\) & 9.421 & RDCCH:MEM:MED? & 9-167 \\
\hline & & & MSS:RDCCH:MEM:MEK \(n\) & 9-421 & RDCCH:MEM:MEK? & 9-167 \\
\hline
\end{tabular}

Continued on Following Page
Table 11-58 RACH - Origination
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{2}{*}{Bandwidth} & \multirow[t]{2}{*}{0} & \multirow[t]{2}{*}{7} & MSS:RDCCH:ENABIe:BANDWidth \(n\) & 9-439 & N/A & - \\
\hline & & & MSS:RDCCH:BANDWidth n & 9-421 & RDCCH:BANDWidth? & 9-167 \\
\hline \multirow[t]{3}{*}{Calling Party Number Presentation Indicator} & \multirow[t]{3}{*}{0} & \multirow[t]{3}{*}{8} & MSS:RDCCH:ENABIe:CALLING PRESentation \(n\) & 9-439 & N/A & - \\
\hline & & & MSS:RDCCH:CALLING:PRESentation: PI \(n\) & 9-424 & RDCCH:CALLING:PRESentation:PI? & 9-169 \\
\hline & & & MSS:RDCCH:CALLING:PRESentation: SI \(n\) & 9-424 & RDCCH:CALLING:PRESentation:SI? & 9-169 \\
\hline \multirow[t]{5}{*}{Calling Party Number} & \multirow[t]{5}{*}{0} & \multirow[t]{5}{*}{20 to *} & MSS:RDCCH:ENABIe:CALLING ADDRess \(n\) & 9-439 & N/A & - \\
\hline & & & MSS:RDCCH:CALLING:TYPE \(n\) & 9-424 & RDCCH:CALLING:TYPE? & 9-168 \\
\hline & & & MSS:RDCCH:CALLING:PLANid \(n\) & 9-424 & RDCCH:CALLING:PLANid? & 9-168 \\
\hline & & & MSS:RDCCH:CALLING:ADDRess: ENCoding \(n\) & 9.424 & RDCCH:CALLING:ENCoding? & 9-168 \\
\hline & & & MSS:RDCCH:CALLING:ADDRess "n" & 9-424 & RDCCH:CALLING:ADDRess? & 9.168 \\
\hline \multirow[t]{6}{*}{Called Party Subaddress} & \multirow[t]{6}{*}{0} & \multirow[t]{6}{*}{20 to 180} & MSS:RDCCH:ENABIe:CALLED: SUBaddress \(n\) & 9-440 & N/A & - \\
\hline & & & N/A & - & RDCCH:CALLED:SUBaddress: LENGth? & 9-168 \\
\hline & & & MSS:RDCCH:CALLED:SUBaddress: ODD EVEN \(n\) & 9-423 & RDCCH:CALLED:SUBaddress: ODD_EVEN? & 9.168 \\
\hline & & & MSS:RDCCH:CALLED:SUBaddress TYPE \(n\) & 9-423 & RDCCH:CALLED:SUBaddress:TYPE? & 9-168 \\
\hline & & & MSS:RDCCH:CALLED:SUBaddress: REServed \(n\) & 9-423 & RDCCH:CALLED:SUBaddress: REServed? & 9-168 \\
\hline & & & MSS:RDCCH:CALLED:SUBaddress ADDRess \(n, m\) & 9.423 & RDCCH:CALLED:SUBaddress: ADDRess? \(n\) & 9-168 \\
\hline \multicolumn{3}{|l|}{Continued on Following Page} & \multicolumn{4}{|l|}{} \\
\hline
\end{tabular}

Table 11-58 RACH - Origination (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{6}{*}{Calling Party Subaddress} & \multirow[t]{6}{*}{\(\bigcirc\)} & \multirow[t]{6}{*}{20 to 180} & MSS:RDCCH:ENABIe:CALLING SUBaddress n & 9-439 & N/A & - \\
\hline & & & MSS:RDCCH:CALLING:SUBaddress: LENGth n & 9-425 & RDCCH:CALLING:SUBaddress: LENGth? & 9-169 \\
\hline & & & MSS:RDCCH:CALLING:SUBaddress: ODD EVEN n & 9-425 & RDCCH:CALLING:SUBaddress: ODD_EVEN? & 9-169 \\
\hline & & & MSS:RDCCH:CALLING:SUBaddress: TYPE \(n\) & 9-425 & RDCCH:CALLING:SUBaddress:TYPE? & 9-169 \\
\hline & & & MSS:RDCCH:CALLING:SUBaddress: REServed \(n\) & 9-425 & RDCCH:CALLING:SUBaddress: REServed? & 9-169 \\
\hline & & & \begin{tabular}{l}
MSS:RDCCH:CALLING:SUBaddress: \\
ADDRess \(n, m\)
\end{tabular} & 9-425 & RDCCH:CALLING:SUBaddress: ADDRess? \(n\) & 9.169 \\
\hline
\end{tabular}

Table 11-58 RACH - Origination (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype: PAGE_RESPonse n & 9-405 & RDCCH:MSGtype? & 9-160 \\
\hline Protocol Version & M & 4 & MSS:RDCCH:PROTocol:VERsion \(n\) & 9-410 & RDCCH:PROTocol:VERsion? & 9-162 \\
\hline Last Try & M & 1 & MSS:RDCCH:LT \(n\) & 9-417 & RDCCH:LT? & 9-165 \\
\hline SCM & M & 5 & MSS:RDCCH:SCM \(n\) & 9-410 & RDCCH:SCM? & 9-162 \\
\hline Service Code & M & 4 & MSS:RDCCH:SERVice \(n\) & 9-417 & RDCCH:SERVice? & 9-165 \\
\hline Voice Mode & O & 10 & MSS:RDCCH:ENABIe:MODE:VOICe \(n\) & 9-438 & N/A & - \\
\hline & & & MSS:RDCCH:VOICEMode:NUMBer \(n\) & 9-420 & RDCCH:VOICEMode:NUMBer? & 9-166 \\
\hline & & & MSS:RDCCH:VOICEMode:VC \(n, m\) & 9-420 & RDCCH:VOICEMode:VC? \(n\) & 9-166 \\
\hline & & & MSS:RDCCH:VOICEMode:PM \(n, m\) & 9-420 & RDCCH:VOICEMode:PM? \(n\) & 9-166 \\
\hline Data Mode & O & 16 & MSS:RDCCH:ENABIe:MODE:DATA \(n\) & 9-438 & N/A & - \\
\hline & & & MSS:RDCCH:MODE:DATA:PM \(n\) & 9-418 & RDCCH:MODE:DATA:PM? & 9-166 \\
\hline & & & MSS:RDCCH:MODE:DATA:SAP n & 9-418 & RDCCH:MODE:DATA:SAP? & 9-166 \\
\hline & & & MSS:RDCCH:MODE:DATA:ACKED \(n\) & 9-418 & RDCCH:MODE:DATA:ACKED? & 9-166 \\
\hline & & & MSS:RDCCH:MODE:DATA:CRC \(n\) & 9-419 & RDCCH:MODE:DATA:CRC? & 9-166 \\
\hline & & & MSS:RDCCH:MODE:DATA:PART n & 9-419 & RDCCH:MODE:DATA:PART? & 9-166 \\
\hline & & & MSS:RDCCH:MODE:DATA:RLP \(n\) & 9-419 & RDCCH:MODE:DATA:RLP? & 9-166 \\
\hline Message Encryption Mode & \(\bigcirc\) & 13 & MSS:RDCCH:ENABIe:MEM \(n\) & 9.439 & N/A & - \\
\hline & & & MSS:RDCCH:MEM:MEA \(n\) & 9-421 & RDCCH:MEM:MEA? & 9-167 \\
\hline & & & MSS:RDCCH:MEM:MED \(n\) & 9-421 & RDCCH:MEM:MED? & 9-167 \\
\hline & & & MSS:RDCCH:MEM:MEK \(n\) & 9-421 & RDCCH:MEM:MEK? & 9-167 \\
\hline Bandwidth & 0 & 7 & MSS:RDCCH:ENABIe:BANDWidth \(n\) & 9-439 & N/A & - \\
\hline & & & MSS:ROCCH:BANDWidth \(n\) & 9-421 & RDCCH:BANDWidth? & 9-167 \\
\hline
\end{tabular}

Continued on Following Page
Table 11-59 RACH - Page Response
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multicolumn{3}{|l|}{} & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{5}{*}{User Group} & \multirow[t]{5}{*}{O} & \multirow[t]{5}{*}{\[
\begin{gathered}
28,32, \\
42,58
\end{gathered}
\]} & MSS:RDCCH:ENABIe:USER:GROUP \(n\) & 9-440 & N/A & - \\
\hline & & & MSS:RDCCH:USER:GROUP:STATUS \(n\) & 9.427 & RDCCH:USER:GROUP:STATUS? & 9-171 \\
\hline & & & MSS:RDCCH:USER:GROUP:TYPE \(n\) & 9-428 & RDCCH:USER:GROUP:TYPE? & 9-171 \\
\hline & & & MSS:RDCCH:USER:GROUP:UGID: MS \(n\) & 9-428 & RDCCH:USER:GROUP:UGID:MS? & 9-171 \\
\hline & & & MSS:RDCCH:USER:GROUP:UGID: LS n & 9-428 & RDCCH:USER:GROUP:UGID:LS? & 9-171 \\
\hline \multirow[t]{6}{*}{Subaddress} & \multirow[t]{6}{*}{0} & \multirow[t]{6}{*}{20 to 180} & MSS:RDCCH:ENABIe:SUBaddress \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:SUBaddress:LENGth n & 9.408 & RDCCH:SUBaddress:LENGth? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ODD EVEN \(n\) & 9-408 & RDCCH:SUBaddress:ODD_EVEN? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:TYPE \(n\) & 9-408 & RDCCH:SUBaddress:TYPE? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:REServed \(n\) & 9-408 & RDCCH:SUBaddress:REServed? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ADDRess \(n, m\) & 9-408 & RDCCH:SUBaddress:ADDRess? \(n\) & 9-161 \\
\hline
\end{tabular}

Table 11-59 RACH - Page Response (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype:QDISConnect \(n\) & 9-405 & RDCCH:MSGtype? & 9-160 \\
\hline Subaddress & \(\bigcirc\) & 20 to 180 & MSS:RDCCH:ENABIe:SUBaddress \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:SUBaddress:LENGth \(n\) & 9-408 & RDCCH:SUBaddress:LENGth? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ODD_EVEN \(n\) & 9.408 & RDCCH:SUBaddress:ODD_EVEN? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:TYPE \(n\) & 9-408 & RDCCH:SUBaddress:TYPE? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:REServed \(n\) & 9-408 & RDCCH:SUBaddress:REServed? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ADDRess \(n, m\) & 9-408 & RDCCH:SUBaddress:ADDRess? \(n\) & 9-161 \\
\hline
\end{tabular}

Table 11-60 RACH - Queue Disconnect
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype:RDATA \(n\) & 9-405 & RDCCH:MSGtype? & 9-160 \\
\hline R-Transaction Identifier & M & 8 & MSS:RDCCH:RTRANSaction \(n\) & 9-426 & RDCCH:RTRANSaction? & 9.170 \\
\hline \multirow[t]{3}{*}{R-Data Unit} & \multirow[t]{3}{*}{M} & \multirow[t]{3}{*}{16 to *} & MSS:RDCCH:RDATA_UNIT:LENGTh \(n\) & 9-426 & RDCCH:RDATA_UNIT:LENGth? & 9.170 \\
\hline & & & MSS:RDCCH:RDATA_UNIT:HLP: IDentifier n & 9-426 & RDCCH:RDATA_UNIT:HLP:IDentifier? & 9-170 \\
\hline & & & MSS:RDCCH:RDATA_UNIT:HLP: DATA \(n, m\) & 9-426 & RDCCH:RDATA UNIT:HLP:DATA? \(n\) & 9-170 \\
\hline \multirow[t]{5}{*}{Message Center Address} & \multirow[t]{5}{*}{0} & \multirow[t]{5}{*}{20 to *} & MSS:RDCCH:ENABIe:MESSage: CENTer:ADDRess n & 9-440 & N/A & - \\
\hline & & & MSS:RDCCH:MESSage:CENTer: TYPE \(n\) & 9-427 & RDCCH:MESSage:CENTer:TYPE? & 9-170 \\
\hline & & & MSS:RDCCH:MESSage:CENTer: PLANid \(n\) & 9.427 & RDCCH:MESSage:CENTer:PLANid? & 9-170 \\
\hline & & & MSS:RDCCH:MESSage:CENTer: ADDRess:ENCoding \(n\) & 9-427 & RDCCH:MESSage:CENTer:ENCoding? & 9-170 \\
\hline & & & MSS:RDCCH:MESSage:CENTer: ADDRess " \(n\) " & 9-427 & RDCCH:MESSage:CENTer:ADDRess? & 9-170 \\
\hline \multirow[t]{5}{*}{User Destination Address} & \multirow[t]{5}{*}{0} & \multirow[t]{5}{*}{20 to *} & MSS:RDCCH:ENABIe:USER:DEST: ADDRess n & 9-440 & N/A & - \\
\hline & & & MSS:RDCCH:DEST:TYPE \(n\) & 9-429 & RDCCH:USER:DEST:TYPE? & 9-171 \\
\hline & & & MSS:RDCCH:DEST:PLANId \(n\) & 9-429 & RDCCH:USER:DEST:PLANid? & 9-171 \\
\hline & & & MSS:RDCCH:DEST:ADDRess: ENCoding \(n\) & 9-429 & RDCCH:USER:DEST:ENCoding? & 9-171 \\
\hline & & & MSS:RDCCH:DEST:ADDRess " \(n\) " & 9-429 & RDCCH:USER:DEST:ADDRess? & 9-171 \\
\hline
\end{tabular}

Continued on Following Page
Table 11-61 RACH-R-DATA
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multicolumn{3}{|l|}{} & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{3}{|l|}{Continued From Preceding Page} & & & & \\
\hline \multirow[t]{6}{*}{User Destination Subaddress} & \multirow[t]{6}{*}{\(\bigcirc\)} & \multirow[t]{6}{*}{20 to 180} & MSS:RDCCH:ENABIe:USER:DEST: SUBaddress \(n\) & 9-440 & N/A & - \\
\hline & & & MSS:RDCCH:DEST:SUBaddress: LENGTh n & 9-430 & RDCCH:USER:DEST:SUBaddress: LENGth? & 9-172 \\
\hline & & & MSS:RDCCH:DEST:SUBaddress: ODD EVEN \(n\) & 9-430 & RDCCH:USER:DEST:SUBaddress: ODD_EVEN? & 9-172 \\
\hline & & & MSS:RDCCH:DEST:SUBaddress: TYPE \(n\) & 9-430 & RDCCH:USER:DEST:SUBaddress: TYPE? & 9-172 \\
\hline & & & MSS:RDCCH:DEST:SUBaddress: REServed \(n\) & \(9-430\) & RDCCH:USER:DEST:SUBaddress: REServed? & 9-172 \\
\hline & & & MSS:RDCCH:DEST:SUBaddress: ADDRess \(n, m\) & \(9-430\) & RDCCH:USER:DEST:SUBaddress: ADDRess? n & 9-172 \\
\hline \multirow[t]{5}{*}{User Originating Address} & \multirow[t]{5}{*}{0} & \multirow[t]{5}{*}{20 to *} & MSS:RDCCH:ENABIe:USER:ORIG: ADDRess n & 9.441 & N/A & - \\
\hline & & & MSS:RDCCH:ORIG:TYPE \(n\) & 9-431 & RDCCH:USER:ORIG:TYPE? & 9-172 \\
\hline & & & MSS:RDCCH:ORIG:PLANid \(n\) & 9.431 & RDCCH:USER:ORIG:PLANid? & 9-172 \\
\hline & & & MSS:RDCCH:ORIG:ADDRess: ENCoding n & 9-431 & RDCCH:USER:ORIG:ENCoding? & 9-172 \\
\hline & & & MSS:RDCCH:ORIG:ADDRess " \(n\) " & 9-431 & RDCCH:USER:ORIG:ADDRess? & 9-172 \\
\hline \multicolumn{3}{|l|}{Continued on Following Page} & \multicolumn{4}{|l|}{} \\
\hline
\end{tabular}

Table 11-61 RACH - R-DATA (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{6}{*}{User Originating Subaddress} & \multirow[t]{6}{*}{\(\bigcirc\)} & \multirow[t]{6}{*}{20 to 180} & MSS:RDCCH:ENABIe:USER:ORIG: SUBaddress \(n\) & 9-441 & N/A & - \\
\hline & & & MSS:RDCCH:ORIG:SUBaddress: LENGth n & 9.432 & RDCCH:USER:ORIG:SUBaddress: LENGth? & 9-173 \\
\hline & & & MSS:RDCCH:ORIG:SUBaddress: ODD EVEN n & 9-432 & RDCCH:USER:ORIG:SUBaddress: ODD EVEN? & 9-173 \\
\hline & & & MSS:RDCCH:ORIG:SUBaddress: TYPE \(n\) & 9.432 & RDCCH:USER:ORIG:SUBaddress: TYPE? & 9-173 \\
\hline & & & MSS:RDCCH:ORIG:SUBaddress REServed \(n\) & 9-432 & RDCCH:USER:ORIG:SUBaddress: REServed & 9-173 \\
\hline & & & MSS:RDCCH:ORIG:SUBaddress ADDRess n,m & 9-432 & RDCCH:USER:ORIG:SUBaddress ADDRess? \(n\) & 9-173 \\
\hline \multirow[t]{3}{*}{User Originating Address Presentation Indicator} & \multirow[t]{3}{*}{0} & \multirow[t]{3}{*}{8} & MSS:RDCCH:ENABIe:USER:ORIG PRES:PIn & 9-441 & N/A & - \\
\hline & & & MSS:RDCCH:ORIG:PRESentation:PIn & 9-433 & RDCCH:USER:ORIG:PRESentation: PI? & 9-173 \\
\hline & & & MSS:RDCCH:ORIG:PRESentation:SI \(n\) & 9-433 & RDCCH:USER:ORIG:PRESentation: Si? & 9-173 \\
\hline
\end{tabular}

Table 11-61 RACH - R-DATA (cont)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGTYPE:RDATA: ACCept \(n\) & 9-405 & RDCCH:MSGtype? & 9-160 \\
\hline R-Transaction Identifier & M & 8 & MSS:RDCCH:RTRANSaction \(n\) & 9-426 & RDCCH:RTRANSaction? & 9-170 \\
\hline R-DATA Delay & \(\bigcirc\) & 8 & MSS:RDCCH:ENABIe:RDATA:DELay \(n\) & 9.441 & N/A & - \\
\hline & & & MSS:RDCCH:RDATA:DELay \(n\) & 9.433 & RDCCH:RDATA:DELay? & 9-174 \\
\hline Subaddress & 0 & 20 to 180 & MSS:RDCCH:ENABIe:SUBaddress n & 9.437 & N/A & - \\
\hline & & & MSS:RDCCH:SUBaddress:LENGth \(n\) & 9-408 & RDCCH:SUBaddress:LENGth? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ODD_EVEN \(n\) & 9-408 & RDCCH:SUBaddress:ODD_EVEN? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:TYPE n & 9-408 & RDCCH:SUBaddress:TYPE? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:REServed \(n\) & 9-408 & RDCCH:SUBaddress:REServed? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ADDRess n,m & 9-408 & RDCCH:SUBaddress:ADDRess? \(n\) & 9-161 \\
\hline
\end{tabular}

Table 11-62 RACH - R-DATA ACCEPT
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGTYPE:RDATA: REJect \(n\) & 9-405 & RDCCH:MSGtype? & 9-160 \\
\hline R-Transaction Identifier & M & 8 & MSS:RDCCH:RTRANSaction \(n\) & 9-426 & RDCCH:RTRANSaction? & 9.170 \\
\hline R-Cause & M & 8 & MSS:RDCCH:RCAUSe \(n\) & 9-433 & RDCCH:RCAUSe? & 9-174 \\
\hline & & & MSS:RDCCH:RCAUSe:REServed \(n\) & 9-433 & RDCCH:RCAUSe:REServed? & 9-174 \\
\hline R-DATA Delay & \(\bigcirc\) & 8 & MSS:RDCCH:ENABIe:RDATA:DELay \(n\) & 9-441 & N/A & - \\
\hline & & & MSS:RDCCH:RDATA:DELay \(n\) & 9-433 & RDCCH:RDATA:DELay? & 9-174 \\
\hline Subaddress & \(\bigcirc\) & 20 to 180 & MSS:RDCCH:ENABle:SUBaddress \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:SUBaddress:LENGth \(n\) & 9.408 & RDCCH:SUBaddress:LENGth? & 9-161 \\
\hline & & & \begin{tabular}{l}
MSS:RDCCH:SUBaddress: \\
ODD EVEN \(n\)
\end{tabular} & 9-408 & RDCCH:SUBaddress:ODD_EVEN? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:TYPE \(n\) & 9-408 & RDCCH:SUBaddress:TYPE? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:REServed \(n\) & 9-408 & RDCCH:SUBaddress:REServed? & 9-161 \\
\hline & & & \begin{tabular}{l}
MSS:RDCCH:SUBaddress: \\
ADDRess \(n, m\)
\end{tabular} & 9-408 & RDCCH:SUBaddress:ADDRess? \(n\) & 9-161 \\
\hline
\end{tabular}

Table 11-63 RACH - R-DATA REJECT
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype:REGistration \(n\) & 9-405 & RDCCH:MSGtype? & 9-160 \\
\hline Registration Type & M & 4 & MSS:RDCCH:REG:TYPE \(n\) & 9-434 & RDCCH:REG:TYPE? & 9-174 \\
\hline SCM & M & 5 & MSS:RDCCH:SCM \(n\) & 9-410 & RDCCH:SCM? & 9-162 \\
\hline Protocol Version & M & 4 & MSS:RDCCH:PROTocol:VERsion \(n\) & 9-410 & RDCCH:PROTocol:VERsion? & 9-162 \\
\hline C-Number & 0 & 20 to * & MSS:RDCCH:ENABIe:CNUMber \(n\) & 9-441 & N/A & - \\
\hline & & & MSS:RDCCH:CNUMber:TYPE \(n\) & 9-434 & RDCCH:CNUMBer:TYPE? & 9-174 \\
\hline & & & MSS:RDCCH:CNUMber:PLANid \(n\) & 9-434 & RDCCH:CNUMBer:PLANid? & 9-174 \\
\hline & & & MSS:RDCCH:CNUMber:ADDRess: ENCoding \(n\) & 9-434 & RDCCH:CNUMBer:ENCoding? & 9.174 \\
\hline & & & MSS:RDCCH:CNUMber:ADDRess " \(n\) " & 9-434 & RDCCH:CNUMBer:ADDRess? & 9-174 \\
\hline PFC Request & 0 & 7 & MSS:RDCCH:ENABIe:PFC:REQuest \(n\) & 9.442 & N/A & - \\
\hline & & & MSS:RDCCH:PFC:REQuest \(n\) & 9-435 & RDCCH:PFC:REQuest? & 9-175 \\
\hline Message Encryption Mode & 0 & 13 & MSS:RDCCH:ENABIe:DCCH:MEM \(n\) & 9-442 & N/A & - \\
\hline & & & MSS:RDCCH:MEM:MEA \(n\) & 9-421 & RDCCH:MEM:MEA? & 9-167 \\
\hline & & & MSS:RDCCH:MEM:MED \(n\) & 9-421 & RDCCH:MEM:MED? & 9-167 \\
\hline & & & MSS:RDCCH:MEM:MEK \(n\) & 9-421 & RDCCH:MEM:MEK? & 9-167 \\
\hline Selected PSID/RSID & 0 & 8 & MSS:RDCCH:ENABIe:PSID_RSID SELect \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:PSID_RSID:SELect \(n\) & 9-407 & RDCCH:PSID_RSID:SELect? & 9-160 \\
\hline User Group & 0 & \[
\begin{gathered}
28,32 \\
42,58
\end{gathered}
\] & MSS:RDCCH:ENABIe:USER:GROUP \(n\) & 9-440 & N/A & - \\
\hline & & & MSS:RDCCH:USER:GROUP:STATUS \(n\) & 9-427 & RDCCH:USER:GROUP:STATUS? & 9-171 \\
\hline & & & MSS:RDCCH:USER:GROUP:TYPE \(n\) & 9-428 & RDCCH:USER:GROUP:TYPE? & 9-171 \\
\hline & & & MSS:RDCCH:USER:GROUP:UGID: MS n & 9-428 & RDCCH:USER:GROUP:UGID:MS? & 9-171 \\
\hline & & & MSS:RDCCH:USER:GROUP:UGID: LS \(n\) & 9-428 & RDCCH:USER:GROUP:UGID:LS? & 9-171 \\
\hline
\end{tabular}

Continued on Following Page
Table 11-64 RACH - Registration
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multicolumn{3}{|l|}{} & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline \multicolumn{7}{|l|}{Continued From Preceding Page} \\
\hline \multirow[t]{6}{*}{Subaddress} & \multirow[t]{6}{*}{\(\bigcirc\)} & \multirow[t]{6}{*}{20 to 180} & MSS:RDCCH:ENABIe:SUBaddress \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:SUBaddress:LENGth n & 9-408 & RDCCH:SUBaddress:LENGth? & 9-161 \\
\hline & & & \begin{tabular}{l}
MSS:RDCCH:SUBaddress: \\
ODD_EVEN \(n\)
\end{tabular} & 9-408 & RDCCH:SUBaddress:ODD_EVEN? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:TYPE \(n\) & 9-408 & RDCCH:SUBaddress:TYPE? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:REServed \(n\) & 9-408 & RDCCH:SUBaddress:REServed? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ADDRess \(n, m\) & 9-408 & RDCCH:SUBaddress:ADDRess? \(n\) & 9-161 \\
\hline \multirow[t]{2}{*}{SID Report} & \multirow[t]{2}{*}{0} & \multirow[t]{2}{*}{23} & MSS:RDCCH:ENABIe:SID_REPort \(n\) & 9-442 & N/A & - \\
\hline & & & MSS:RDCCH:SID_REPort \(n\) & 9-435 & RDCCH:SID_REPort? & 9-175 \\
\hline
\end{tabular}

Table 11-64 RACH - Registration (cont)
\begin{tabular}{|l|c|c|c|c|c|c|}
\cline { 3 - 8 } \multicolumn{2}{c|}{} & \multicolumn{4}{c|}{ TMAC COMMANDS } \\
\hline \multicolumn{1}{c|}{ Information Element } & & Length & \multicolumn{1}{c|}{ ENCODE } & Page & \multicolumn{1}{c|}{ DECODE } & Page \\
\hline \hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & \(9-160\) \\
\hline Message Type & \(M\) & 6 & MSS:RDCCH:MSGtype:SERial \(n\) & \(9-405\) & RDCCH:MSGtype? & \(9-160\) \\
\hline ESN & M & 32 & MSS:RDCCH:ESN \(n\) & \(9-436\) & RDCCH:ESN? & \(9-175\) \\
\hline
\end{tabular}

Table 11-65 RACH - Serial Number
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype:SOC n & 9-405 & RDCCH:MSGtype? & 9-160 \\
\hline SOC & M & 12 & MSS:RDCCH:SOC \(n\) & 9-435 & RDCCH:SOC? & 9-175 \\
\hline Custom Control & M & 1 to 2024 & MSS:RDCCH:CUSTom:LENGth \(n\) & 9-410 & RDCCH:CUSTom:LENGth? & 9-162 \\
\hline & & & MSS:RDCCH:CUSTom:CONTrol \(n, x\) & 9-410 & RDCCH:CUSTom:CONTrol? \(n\) & 9-162 \\
\hline Subaddress & 0 & 20 to 180 & MSS:RDCCH:ENABle:SUBaddress \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:SUBaddress:LENGth \(n\) & 9.408 & RDCCH:SUBaddress:LENGth? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ODD EVEN \(n\) & 9-408 & RDCCH:SUBaddress:ODD_EVEN? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:TYPE \(n\) & 9-408 & RDCCH:SUBaddress:TYPE? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:REServed \(n\) & 9-408 & RDCCH:SUBaddress:REServed? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress ADDRess \(n, m\) & 9-408 & RDCCH:SUBaddress:ADDRess? \(n\) & 9-161 \\
\hline
\end{tabular}

Table 11-66 RACH - SOC Message Delivery
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocal Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype:SPACHcon \(n\) & 9-405 & RDCCH:MSGtype? & 9-160 \\
\hline Confirmed Message Type & M & 6 & MSS:RDCCH:CONFirmed:MSGtype \(n\) & 9-436 & RDCCH:CONFIRMed:MSGtype? & 9-175 \\
\hline Subaddress & 0 & 20 to 180 & MSS:RDCCH:ENABIe:SUBaddress \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:SUBaddress:LENGth \(n\) & 9-408 & RDCCH:SUBaddress:LENGth? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ODD EVEN \(n\) & 9-408 & RDCCH:SUBaddress:ODD_EVEN? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:TYPE \(n\) & 9.408 & RDCCH:SUBaddress:TYPE? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:REServed \(n\) & 9-408 & RDCCH:SUBaddress:REServed? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ADDRess n,m & 9-408 & RDCCH:SUBaddress:ADDRess? \(n\) & 9-161 \\
\hline
\end{tabular}

Table 11-67 RACH - SPACH Confirmation
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype:SSDUPcon \(n\) & 9-406 & RDCCH:MSGtype? & 9-160 \\
\hline SSD Update Status & M & 2 & MSS:RDCCH:SSDUP:STATus \(n\) & 9.436 & RDCCH:SSDUP:STATus? & 9-175 \\
\hline Subaddress & \(\bigcirc\) & 20 to 180 & MSS:RDCCH:ENABIe:SUBaddress \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:SUBaddress:LENGth \(n\) & 9-408 & RDCCH:SUBaddress:LENGth? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ODD_EVEN \(n\) & 9-408 & RDCCH:SUBaddress:ODD_EVEN? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:TYPE \(n\) & 9-408 & RDCCH:SUBaddress:TYPE? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:REServed \(n\) & 9-408 & RDCCH:SUBaddress:REServed? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ADDRess \(n, m\) & 9-408 & RDCCH:SUBaddress:ADDRess? \(n\) & 9-161 \\
\hline
\end{tabular}

Table 11-68 RACH - SSD Update Order Confirmation
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9-160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype:TEST \(n\) & 9-406 & RDCCH:MSGtype? & 9-160 \\
\hline PSID/RSID Map & M & 16 & MSS:RDCCH:PSID_RSID:MAP \(n\) & 9-407 & RDCCH:PSID_RSID:MAP? & 9-160 \\
\hline Subaddress & 0 & 20 to 180 & MSS:RDCCH:ENABle:SUBaddress \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:SUBaddress:LENGth \(n\) & 9-408 & RDCCH:SUBaddress:LENGth? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress: ODD EVEN n & 9-408 & RDCCH:SUBaddress:ODD_EVEN? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:TYPE \(n\) & 9-408 & RDCCH:SUBaddress:TYPE? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:REServed \(n\) & 9-408 & RDCCH:SUBaddress:REServed? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress ADDRess \(n, m\) & 9-408 & RDCCH:SUBaddress:ADDRess? \(n\) & 9-161 \\
\hline
\end{tabular}

Table 11-69 RACH - Test Registration
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & \multicolumn{4}{|c|}{TMAC COMMANDS} \\
\hline Information Element & & Length & ENCODE & Page & DECODE & Page \\
\hline Protocol Discriminator & M & 2 & N/A & - & RDCCH:PD? & 9.160 \\
\hline Message Type & M & 6 & MSS:RDCCH:MSGtype:UCHALcon \(n\) & 9-406 & RDCCH:MSGtype? & 9.160 \\
\hline AUTHU & M & 18 & MSS:RDCCH:AUTHU \(n\) & 9-436 & RDCCH:AUTHU? & 9-175 \\
\hline Subaddress & 0 & 20 to 180 & MSS:RDCCH:ENABIe:SUBaddress \(n\) & 9-437 & N/A & - \\
\hline & & & MSS:RDCCH:SUBaddress:LENGth \(n\) & 9-408 & RDCCH:SUBaddress:LENGth? & 9-161 \\
\hline & & & \begin{tabular}{l}
MSS:RDCCH:SUBaddress: \\
ODD_EVEN \(n\)
\end{tabular} & 9-408 & RDCCH:SUBaddress:ODD_EVEN? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:TYPE \(n\) & 9-408 & RDCCH:SUBaddress:TYPE? & 9-161 \\
\hline & & & MSS:RDCCH:SUBaddress:REServed \(n\) & 9-408 & RDCCH:SUBaddress:REServed? & 9-161 \\
\hline & & & \begin{tabular}{l}
MSS:RDCCH:SUBaddress: \\
ADDRess \(n, m\)
\end{tabular} & 9-408 & RDCCH:SUBaddress:ADDRess? \(n\) & 9-161 \\
\hline
\end{tabular}

Table 11-70 RACH - Unique Challenge Order Confirmation

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\section*{SECTION 12 - SPECIAL TEST KEY WORD INDEX}

The following is a permuted index of all of the Special Test commands in the IFR-1900 CSA TMAC Users Manual. The bold words in the center column are the particular key words being indexed. Each full command is indexed by each word in the command.

Due to space limitations, the words "FACCH: or SACCH:" has been reduced to "FACCH:"
COMMAND
PAGE NO.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{4}{|l|}{} & \multicolumn{8}{|l|}{B} \\
\hline \multicolumn{12}{|l|}{\begin{tabular}{l}
 \\

\end{tabular}} \\
\hline \multicolumn{12}{|l|}{} \\
\hline \multicolumn{12}{|l|}{} \\
\hline \multicolumn{12}{|l|}{} \\
\hline \multicolumn{12}{|l|}{\begin{tabular}{l}
 － \\

\end{tabular}} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & MSS: & \begin{tabular}{l}
MSS: \\
MSS: \\
MSS
\end{tabular} & \(\mathrm{ROCCH} ;\) RDCCH: RDCCH & \(\qquad\) & ADDRess ADDRess ADDRess & & 9.424
9.425
9.434
9.429
9.430 \\
\hline & MSS: & RDCCH: & DEST & SUBaddress:
CALING: & ADDRess
ADDRess & & 9-430
9.439 \\
\hline mss & RDCCH: & ENABIe: & MESSage: & CENTer: & ADDRess & & 9.440 \\
\hline Mss & \(\xrightarrow{\text { ROCCH:CH: }}\) & ENABIe: & USER & DEST: & ADDRess & & \({ }_{9}^{9.444}\) \\
\hline & MSS: & RDCCH: & MESSage: & CENTer: & ADDRess & & \({ }_{9}^{9.4427}\) \\
\hline & mSS & MDSCCH: & ROCIG: & ORIBaddress: &  & & \({ }_{9.432}^{9.431}\) \\
\hline & & MSS: & RDCCH: & SuBaddress: & ADDRess & & 9.408 \\
\hline & & Mss: & RDCCH: & CALLED: & ADDRess: & ENCoding & 9.422 \\
\hline & & Mss & RDCCH & CALLED: & ADDRess: & ENCoding? & 9.422 \\
\hline & & MSS: & RDCCH: & CALIING: & ADDRess: & ENCOCoding & 9.424 \\
\hline & & MSS: & RDCCH: & CALIING: & ADDRess: & ENCoding? & \({ }_{9.434}^{9.424}\) \\
\hline & & Mss: & Rocch: & CNumber: & ADDRess: & ENCooding? & \({ }_{9}^{9.434}\) \\
\hline & & MSS: & \(\xrightarrow{\mathrm{RDCCH}} \mathbf{}\) & DEST: & ADDRess: & ENCoding & \({ }^{9.429}\) \\
\hline & mss & RDCCH: & MESSage: & CENTer: & ADDRess: & ENCoding? & 9.427 \\
\hline & & MSS: & MESSage:
RDCCH: & CENTer: & ADDRess: & ENCodin? & 9.427 \\
\hline & & MSS & ROCCH: & ORIG: & ADDRess: & ENCoding? & 9.431 \\
\hline CSS: & FDTC, & ENABLE & MESSage: & CENTert & ADDRess? & & 9-213 \\
\hline css: & FDTC & ENABLE & USER: & ORIG: & ADDRess? & & 9-214 \\
\hline & Css & FDTC & MESSage: & CENTer: & ADDRess?
ADDRess? & & 9-226 \\
\hline Css & \({ }^{\text {FDSTC }}\) & USER: & DEST: & SUBaddress: & ADDRess? & & 9-227 \\
\hline css: & FDTC & USER: & OEIG: & SUBaddress & ADDRess? & & \({ }_{9}^{9-230}\) \\
\hline & & & SPACH: & CALLED: & ADDRess? & & 9-355 \\
\hline & css: & SPACH & CALLED: & SUBadoress: & ADDRess? & & -9-357 \\
\hline & css & CSS CSP & \({ }_{\text {CALLING }}^{\text {SPACH }}\) & SUBaddress: & ADDRess? & & \({ }_{9}^{9.3588}\) \\
\hline & css & SPACH: & DiRectory: & SUBaddiess & \({ }^{\text {ADPRess }}\) ? & & \({ }_{9}^{9.371}\) \\
\hline & CSS & SPACH: & ENABLE: & CALING: & ADDRess? & & \({ }_{9}^{9379}\) \\
\hline & Css. & SPACH: & ENABLE: & DiRectory: & ADDRess? & & 9-383 \\
\hline CSS & SPACH: & ENABLE & MESSSage: & CENTer: & ADDRess? & & \({ }_{\text {¢ }}^{\text {g-380 }}\) \\
\hline CSS: & SPACH: & ENABLE: & USER: & ORIG: & ADDPRess? & & \({ }^{9-381}\) \\
\hline & css: & SPACH: & MESSage: & CENTer & ADDRess? & & 9.361 \({ }_{\text {9.346 }}\) \\
\hline Css: & \({ }_{\text {SPACH: }}^{\text {CSPS }}\) & SPACH: & USER: & DEST: & \({ }_{\text {ADDRess? }}\) ADDR & & \({ }_{9}^{9-363}\) \\
\hline & \({ }_{\text {SPACH }}\) & SPACH: & USER: & ORIG: & \({ }^{\text {ADDRess? }}\) & & \({ }_{\substack{9.365 \\ 9.365}}\) \\
\hline Css: & & FDCCCH: & SPACH: & CALEED & ADDRess? & & \({ }_{9}^{9.1326}\) \\
\hline & FDCCH: & SPACH: & CALLED: & SUBaddess: & \({ }^{\text {ADPRess? }}\) & & 9.133 \\
\hline & FDCCH: & SPACH: & Calling: & SUBaddress: & ADDRess? & & 9.135 \\
\hline & & FDCCH: & SPACH: & Dinectory: & ADDRess? & & \({ }^{9-145}\) \\
\hline & FDCCH: & SPACH: & MESSage: & CENTeress & ADDRess? & & \({ }_{9}^{9.138}\) \\
\hline & & STPCH: & USER: & Sest & \({ }^{\text {AD }}\) ADDResss \({ }^{\text {Ald }}\) & &  \\
\hline FDCCH: & SPACH: & USER SPACH: & DEST: & SUBaddress: & ADDRess? & & \({ }_{9}^{9-141}\) \\
\hline FDCCH: & SPACH: & USER: & ORIG: & SUBaddress: & ADDRess?
ADDRess? & & \({ }_{\substack{\text { g.142 } \\ 9.34}}\) \\
\hline & FDTC & FACCH: & MESSage: & CEST: & ADDRess? & & ¢ 9 9-38 \\
\hline FDTC: & FACCH: & \(\triangle\) USER: & DEST: & Subacoress: & ADDRess? & & 9-39 \\
\hline FDTC & FACCH: & USER: & ORIG: & Subaidress: & ADDRess? & & \(9-40\) \\
\hline & MSS & \(\xrightarrow[\text { MSCCS }]{ }\) & \({ }_{\text {R }}^{\text {ROCCH: }}\) CALLED & CALLED & ADDRess? & & \({ }_{\text {9.422 }}\) \\
\hline & & mss: & RDCCH: & CALLING: & ADDRess? & & 9-424 \\
\hline & MSS: & & CDCCH: & CNUMDer: & ADpress & & \({ }_{9.434}\) \\
\hline & & MSS: & RECCH: & DEST: & ADDRess? & & 9.429 \\
\hline & Mss: & RDCCH: & ENABE: & CALINAS: & \({ }_{\text {ADPRess? }}\) & & 9.439 \\
\hline MSS:
MSs & R RDCCOCH : & ENable:
ENABIe: & MESSage: & CENTer:
DEST: & ADDRess?
ADDRess? & & ¢ \({ }_{\substack{9.440 \\ 9.440}}\) \\
\hline & RDCCH: & ENable: & USER. & & & & 9.440 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline MSS & RDCCH: & Enable: & USER: & ORIG: & ADORess? & & & \\
\hline & MSS: & RDCCH: & MESSage: & CENTer: & ADDRess? & & & \\
\hline & & MSS: & RDCCH: & ORIG: & ADDRess? & & & \\
\hline & MSS: & RDCCH: & ORIG: & SUBaddress: & ADDRess? & & & \\
\hline & & MSS: & RDCCH: & SUBaddress: & ADDRess? & & & \\
\hline & & ROCCH: & RDCCH: & CALLED: & ADDRess? & & & \\
\hline & & носен. & RDCCH: & CAILING: & ADDRess? & & & \\
\hline & & RDCCH : & CALLING: & SUBaddress: & ADDRess? & & & \\
\hline & & & RDCCH: & CNUMBer: & ADDRess? & & & \\
\hline & & RDCCH: & MESSage: & CENTer: & ADDRess? & & & \\
\hline & & & ROCCH: & SUBaddress: & ADDRess? & & & \\
\hline & & RDCCH: & USER: & DEST: & ADDRess? & & & \\
\hline & RDCCH: & RDCCH: & USER: & SUBIGdress: & ADDRess? & & & \\
\hline & RDCCH: & USER: & ORIG: & SUBaddress: & ADDRess? & & & \\
\hline & RDTC: & FACCH: & MESSage & CENTer: & ADDRess? & & & \\
\hline & RDTC: & FACCH: & USER: & DEST: & ADDRess? & & & \\
\hline RDTC: & FACCH: & USER: & DEST: & SUBaddress: & ADDRess? & & & \\
\hline & RDTC: & FACCH: & USER: & ORIG: & ADDRess? & & & \\
\hline RDTC: & FACCH: & USER: & ORIG: & SUBaddress: & ADDRess? & & & \\
\hline & & CSS: & FDTC & FACCH: & ALERT & & & \\
\hline & & CSS: & FVC: & ORDER: & ALERT & & & \\
\hline & & CSS: & FVC: & ORDER: & ALERTWinfo & & & \\
\hline & & MSS: & RDCCH: & DCCH_MEM: & ALGORithm & & & \\
\hline & & MSS: & RDCCH: & DCCH-MEM & ALGORithm? & & & \\
\hline & CSS: & EBCCH: & MAP: & MEA: & ALGORithms & & & \\
\hline & CSS: & FBCCH: & MAP & MEA: & ALGORithms & & & \\
\hline & CSS: & FDTC: & MAP: & MEA: & ALGORithms & & & \\
\hline & CSS: & EBCCH: & MAP: & MEA: & ALGORithms? & & & \\
\hline & CSS & FDTC: & MAP: & MEA: & ALGORithms? & & & \\
\hline & FDCCH: & EBCCH: & MAP: & MEA: & ALGORithms? & & & \\
\hline & FDCCH: & FBCCH: & MAP: & MEA: & ALGORithms? & & & \\
\hline & FDTC: & FACCH & MAP: & MEA: & ALGORithms? & & & \\
\hline & RDTC: & FACCH: & MAP: & MEA: & ALGORithms? & & & \\
\hline & & & CSS: & FBCCH: & ALPHA: & SID & & \\
\hline & & & CSS: & FBCCH: & ALPHA: & SID? & & \\
\hline & & CSS: & FBCCH: & ENABLE: & ALPHA: & SID & & \\
\hline & & CSS: & FBCCH: & ENABLE: & ALPHA: & SID? & & \\
\hline & & & CSS & SPACH: & ALPHA: & PSID_RSID: & & \\
\hline & & & CSS & SPACH: & ALPHA: & PSID \({ }^{-18 S I D}\) & NAME: & CHARacter? \\
\hline & & & CSS & SPACH: & ALPHA: & PSID RSID & NUMBer & \\
\hline & & & CSS: & SPACH: & ALPHA: & SID_RSID & Number? & \\
\hline & & & css & SPACH: & ALPHA: & SID? & & \\
\hline & & CSS & SPACH: & ENABLE: & ALPHA: & PSID_RSID & & \\
\hline & & CSS & SPACH: & ENABLE: & ALPHA: & PSID_RSID? & & \\
\hline & & CSS: & SPACH: & ENABLE: & ALPHA: & SID & & \\
\hline & & & & ENABLE: & ALPHA: & SID? & & \\
\hline & & & FDCCH: & FBCCH: & ALPHA: & SID & CHARacters? & \\
\hline & & & FDCCH: & FBCCH: & ALPHA: & SID: & LENGTh? & \\
\hline & & & FDCCH: & SPACH: & ALPHA: & PSID RSID & LENGth? & \\
\hline & & & FDCCH: & SPACH: & ALPHA: & PSID RSID & NAME: & CHARacters? \\
\hline & & & FDCCH: & SPACH: & ALPHA: & PSID RSID: & NAME: & LENGTt? \\
\hline & & & & & ALPHA: & PSID--RSID: & PT? & \\
\hline & & & FDCCH:
FDCCH: & SPACH: & ALPHA: & SID: & CHARacters? & \\
\hline & & & FDCCH: & SPACH: & ALPHA: & SID: & & \\
\hline & MSS & RDCCH: & ENABIE: & SUPPort: & ALT_SOC & & & \\
\hline & & MSS: & RDCCH: & SUPPort: & ALT SOC & & & \\
\hline & & & & EBCCH: & ALT SOC: & MAP: & PSID_RSID & \\
\hline & & & CSS: & EBCCH: & ALT SOC: & MAP: & PSID_RSID? & \\
\hline & & & CSS: & EBCCH: & ALT SOC: & NUMBer
NuMBer? & & \\
\hline & & & css: & EBCCH: & ALT Soc: & & & \\
\hline & & & CSS: & EBCCH: & ALT SOC: & SOC? & & \\
\hline & & & CSS: & FBCCH: & ALT SOC: & MAP: & PSID_RSID & \\
\hline & & & CSS: & FBCCH: & ALT SOC: & MAP: & PSID_RSID? & \\
\hline & & & CSS: & FBCCH: & ALT SOC: & NUMBEr
NuMBer? & & \\
\hline & & & CSS: & FBCCH: & ALT SOC: & & & \\
\hline & & & CSS: & FBCCH: & ALT SOC: & SOC? & & \\
\hline & & & FDCCH: & EBCCH: & ALT SOC: & MAP:
nUMBer? & PSID_RSID? & \\
\hline & & & FDCCH: & EBCCH: & ALT SOC: & SOC? & & \\
\hline & & & FDCCH: & FBCCH: & ALT-SOC: & MAP: & PSID_RSID? & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow{49}{*}{css} & \multirow[t]{12}{*}{MSS:} & \[
\begin{aligned}
& \text { RDCCH: } \\
& \text { MSS. }
\end{aligned}
\] & FDCCH: enable RDCCH RDCC & FBCCH: Support SUPPort & ALT SOC: ALT SOC? ALT SOC? ALT-SOC? & NUMBer?
SOC? & & \\
\hline & & css: & EBCCH & ENABLE & ALT SOC LIST & & & \\
\hline & & css & FBCCH: & ENABLE: & ALT-SOC-LST & & & \\
\hline & & css: & FECCH: & ENABLE: & ALTT-soc_List? & & & \\
\hline & & Css: & EBCCH: & MSGEtype: & \({ }^{\text {ALLTrci }}\) A & & & \\
\hline & & & CSS: & \({ }^{\text {FDTC }}\) & AMT: & CONNect & & \\
\hline & & & css: & FDTC & \({ }_{\text {AMT }}\) : & SERVice: & REQuest & \\
\hline & & & CSS: & FDTC & & Status & & \\
\hline & & & CSS: &  & \({ }_{\text {AMT }}\) AMT? & & & \\
\hline & & & RDTC: & FACCH & AMT? & & & \\
\hline & & CSS & MSCM & ORDER &  & & & \\
\hline & & & ADCCH & SUPPor: & ANABOO? & & & \\
\hline & \multirow[t]{37}{*}{\({ }_{\text {CSSCH: }}\)} & \multirow[t]{37}{*}{} & ENABLE: & NEIGHDOR: & analog & & & \\
\hline & & & NEIGHDOT: & Muthio & analog & & & \\
\hline & & & SPACH: & MSGGype2: & analog & & & \\
\hline & & & SPACH: & MSGGtype3:
MSGItyee4: & \({ }_{\text {analog }}^{\text {analog }}\) & & & \\
\hline & & & EBCCH: & NEIGHDor: & ANAlog: & CELL & ACCess: & MS_PWR \\
\hline & & & \({ }_{\text {EBCCH: }}\) EBCCH: & NEIGHbor:
NEIGHbor: & ANAlog: & CELL & \({ }^{\text {ACCoss: }}\) ACCess: & MS PWR? \\
\hline & & & EBCCH: & NEIGHbor & ANAlog: & CEII & AcCess: & RSS_M \({ }^{\text {R }}\) \\
\hline & & & EBCCH: & NEIGHbor:
NEIGHbor: & ANAlog: & CELL & \(\xrightarrow{\text { CHAN }}\) ? & \\
\hline & & & EBCCH: & NEIGHbor:
NEIGHbor & ANALOG: & CELL & \({ }^{\text {DCC }}\), & \\
\hline & & & \({ }_{\text {EBCCH}}\) & NEIGHbor: & ANAlog: & CELL & DELAY & \\
\hline & & & EBCCH: & NEIGHbor: & ANAlog: & CELL & DELAY?
HL FREO & \\
\hline & & & EBCCH: & NEIGHbor: & ANAlog: & CELL: & HL-FREQ? & \\
\hline & & & EBCCH: & NEIGHbor: & ANAlog: & CELI: & OFFset & \\
\hline & & & EBCCH: & NEIGHbor: & ANAlog: & CEIL & PROTocol & \\
\hline & & & EBCCH: & NEIGHDOR:
NEIGHbor: & ANAlog: & CELL: & PROTOCOI?
RETRY & \\
\hline & & & EBCCH: & NEIGHbor: & ANAlog: & CELL & RETRY? & \\
\hline & & & EBCCH: & NEIGHDOR: & AnAlog: & CELL & SS SUFF? & \\
\hline & & & EBCCH: & NEIGHDOR: & ANAlog: & CELL & & \(\stackrel{\text { CELL }}{\text { CELI }}\) \\
\hline & & & EBCCH: & NEIGHbor: & ANAlog: & CELL & TYPE & NETwork \\
\hline & & & EBCCH: & NEIGHbor: & ANAlog: & CELL: & & NETwork? \\
\hline & & & EBCCH: & NEIGHbor: & ANAlog: & MuLti: & \({ }_{\text {Access }}\) & MS PWR? \\
\hline & & & EBCCH: & NEIGHbor: & ANAlog: & MULti: & \({ }^{\text {ACCess: }}\) ACCess: & RSSEMN \\
\hline & & & EBCCH: & NEIGHbor: & ANAlog: & MULti: & Chan & \\
\hline & & & EBCCH: & NEIGHDOr: & ANAIOg: & MULti: & CHAN? & \\
\hline & & & EBCCH & NEIGHbor: & ANAlog: & Multi: & \(\mathrm{DCC}^{\text {P }}\) & \\
\hline & & & EBCCH: & NEIGHbor: & ANAlog: & Multio & DELAY & \\
\hline & & & EBCCH: & NEICHbor: & ANAlog: & MULti: & HLFREO & \\
\hline & & & EBCCH: & NEIGHoor: & ANAlog: & Mutil: & HuMber & \\
\hline & & & EBCCH: & NEIGHbor: & ANALOg: & MULti: & NUMBer? & \\
\hline & & & EBCCH: & NEIGHoor: & ANAIOG: & MULTi: & OFFset? & \\
\hline & & & EBCCH: & NEIGHbor: & ANALOG: & MULti: & PROTocol & \\
\hline & & & EBCCH & NEIGHbor: & ANAlog: & Mutio & RETRY & \\
\hline & & & \({ }_{\text {EBCCH }}\) & NEIGHbor: & ANAlog: & Mutri: & RETRY? & \\
\hline & & & ¢BCCH: & NEIGHbor: & ANAlog: & Multi: & SS SUFF? & \\
\hline & & & EBCCH: & NEIGHbor:
NEIGHbor: & ANAlog: & MULLit & TYPE: & CELL \\
\hline & & & EBCCH & NEIGHbor: & ANAlog: & Multi: & TYPE: & \\
\hline & & & EBCCH & NEIGHbor: & ANAlog: & Multi: & TYPE: & NETwo \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{5}{*}{} & & css:
FOCC & \[
\begin{aligned}
& \text { FOCC } \\
& \text { RAW }
\end{aligned}
\] & \[
\begin{aligned}
& \text { B-I } \\
& \text { B_I? }
\end{aligned}
\] & & & \\
\hline & css: & FDTC: & HYPERband: & BĀND & & & \\
\hline & & & FREQuency: & BAND & & & \\
\hline & \begin{tabular}{l}
CSS: \\
FDTC
\end{tabular} & FDTC FACCH & HYPERband HYPERband & BAND? & & & \\
\hline & & & HYPERband & BAND? & & & \\
\hline & RDTC: & FACCH: & HYPERband: & BAND? & & & \\
\hline MSS & RDCCH: & SUPPort: & FREQuency: & BANDS & & & \\
\hline MSS: & RDCCH: & SUPPort: & FREQuency: & BANDS? & & & \\
\hline \multirow[t]{17}{*}{RDTC} & RDCCH & SUPPort: & FREQuency: & BANDS? & & & \\
\hline & FACCH: & SUPPort & FREQuency: & BANDS? & & & \\
\hline & & MSS: & RDCCH: & BANDWidth & & & \\
\hline & MSS & RDCCH: & ENABIe: & BANDWidth & & & \\
\hline & \multirow[t]{8}{*}{MSS} & \multirow[t]{2}{*}{RDCCH:} & RDCCH: & BANDWidth? & & & \\
\hline & & & ENABIE ADCCH & BANDWidth? BANDWidth? & & & \\
\hline & & RDTC: & FACCH: & BANDWidth? & & & \\
\hline & & CSS: & FBCCH: & BARred & & & \\
\hline & & CSS: & FBCCH: & BARred? & & & \\
\hline & & FDCCH: & FBCCH: & BARred? & & & \\
\hline & & FDCCH: & EBCCH: & BC ? & & & \\
\hline & & FDCCH: & FBCCH: & BC ? & & & \\
\hline & \multirow[t]{4}{*}{FDCCH:
FDCCH:} & LAYER2: & EBCCH : & BC? & & & \\
\hline & & LAYER2: & FBCCH: & BC ? & & & \\
\hline & & CSS: & SPACH: & BCN & & & \\
\hline & & CSS: & SPACH: & BCN? & & & \\
\hline & FDCCH: & LAYER2: & SPACH: & BCN? & & & \\
\hline \multirow[t]{15}{*}{MSS} & \multirow[t]{15}{*}{RDCCH:} & \multirow[t]{14}{*}{MEASurement:} & \multirow[t]{14}{*}{LTM:} & BCN? & & & \\
\hline & & & & BER & & & \\
\hline & & & & BER: & RDTC: & BITS? & \\
\hline & & & & BER: & RDTC: & CHANnel & \\
\hline & & & & BER: & RDTC:
RDTC & CLEAR & \\
\hline & & & & BER: & RDTC: & DATA: & \begin{tabular}{l}
45 MHZ OFFset \\
LOOPBACK
\end{tabular} \\
\hline & & & & BER: & RDTC: & DATA: & PSeudo \\
\hline & & & & BER: & RDTC: & DATA: & USER \\
\hline & & & & BER: & RDTC: & ERRORS? & \\
\hline & & & & BER: & RDTC: & GO & \\
\hline & & & & BER: & RDTC: & SETup & \\
\hline & & & & BER: & RDTC: & SLOT & \\
\hline & & & & BER: & RDTC: & STATUS? & \\
\hline & & & & BER: & RDTC: & STOP & \\
\hline & & \begin{tabular}{l}
BER: \\
MEASurement:
\end{tabular} & RDTC & BER? & & & \\
\hline \multirow{12}{*}{MSS:} & \multirow[t]{3}{*}{RDCCH: RDCCH :} & MEASurement: & LTM: & BER? & & & \\
\hline & & RDTC. & FACCH: & BER? & & & \\
\hline & & FDCCH: & EBCCH & \({ }^{817}\) & & & \\
\hline & \multirow[t]{3}{*}{FDCCH FDCCH} & LAYER2: & EBCCH: & Bl? & & & \\
\hline & & \multirow[t]{2}{*}{LAYER2:} & FBCCH: & BI? & & & \\
\hline & & & FOCC: & Bidie? & & & \\
\hline & CSS: & GLACT: & EDIT: & BIN?
BIS & & & \\
\hline & & CSS: & GLACT: & BIS & & & \\
\hline & \multirow[t]{4}{*}{css} & GLACT: & ACTion: & BIS? & & & \\
\hline & & CSS: & GLACT: & BIS? & & & \\
\hline & & & FOCC: & BIS? & & & \\
\hline & & \begin{tabular}{l}
BER: \\
EBCCH
\end{tabular} & RDTC
NONPublic & BITS?
BLOCK & & & \\
\hline css: & FBCCH & NONP & PROBability: & BLOCK & & & \\
\hline \multirow{8}{*}{CSS:
FDCCH:
FDCCH:} & CSS: & EBCCH: & NONPublic: & BLOCK? & & & \\
\hline & FBCCH: & NONPubic: & PROBability: & BLOCk? & & & \\
\hline & EBCCH: & NONPublic: & PROBability: & BLOCk? & & & \\
\hline & FBCCH & NONPublic: & PROBability: & BLOCk? & & & \\
\hline & FOCC: FOCC & CAPTure: RAW: & SELect:
WORD: & BOTH вотн & & & \\
\hline & & FOCC: & WORD: & BOTH & & & \\
\hline & css: & FDCCH: & SUPERframe: & BRI & & & \\
\hline & CSS: & FDCCH : & SUPERframe: FDCCH: & \[
\begin{aligned}
& \text { BRI? } \\
& \text { BRI? }
\end{aligned}
\] & & & \\
\hline css: & FDIC: & ENABLE: & LDP: & BSACK & & & \\
\hline \multirow[t]{3}{*}{css:} & CSS: & FDTC: & FACCH: & BSACK & & & \\
\hline & MSS: & ENABLE: & MSGitype: & BSACK? & & & \\
\hline & CSS & FDTC: & FACCH: & BSCHALCON & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline css & FVC & ORDER: & ESCHALCON & \\
\hline CSS & MSCM: & ORDER: & bSCHALCON & \\
\hline css: & SPACH: & MSGtype 1 : & BSCHALCOn & \\
\hline css: & SPACH & MSGtype2: & BSCHALCOn & \\
\hline css: & SPACH: & MSGtype3: & BSCHALCon & \\
\hline CSS & SPACH: & MSGtype4: & BSCHALCOD & \\
\hline & FOCC: & CAPTure: & BSCHALCON & \\
\hline FOCC: & RAW: & CAPTure: & BSCHALCON & \\
\hline & CSS: & EBCCH: & BSMC & \\
\hline CSS: & EBCCH: & MSGIype: & BSMC & \\
\hline & CSS: & FBCCH: & BSMC & \\
\hline css: & FBCCH: & MSGtype: & BSMC & \\
\hline css & CSS: & FDTC: & BSMC & \\
\hline CSS & FDTC & FACCH: & BSMC & \\
\hline & CSS: & SPACH & BSMC & \\
\hline css: & SPACH: & MSGtype 1: & bSMC & \\
\hline CSS & SPACH: & MSGtype2: & BSMC & \\
\hline CSS & SPACH: & MSGtype3: & BSMC & \\
\hline CSS: & SPACH: & MSGtype 4 : & BSMC & \\
\hline & MSS & RDCCH: & BSMC & \\
\hline MSS & RDCCH & MSGtype: & BSMC & \\
\hline MSS & RDCCH : & SUPPort: & BSMC & \\
\hline & CSS: & EBCCH : & BSMC? & \\
\hline CSS: & EBCCH: & MSGtype: & BSMC? & \\
\hline & CSS: & FBCCH: & BSMC? & \\
\hline CSS: & FBCCH: & MSGIype: & BSMMC? & \\
\hline & CSS: & FDTC: & BSMC? & \\
\hline css: & FDTC: & CHANGE: & BSMC? & \\
\hline & \[
\begin{aligned}
& \text { CSS: } \\
& \text { FDCH }
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& \text { BSMC? } \\
& \text { BSMC? }
\end{aligned}
\] & \\
\hline & FDCCH: & FBCCH: & BSMC? & \\
\hline & FDCCH: & SPACH: & BSMC? & \\
\hline & FDTC: & FACCH: & BSMC? & \\
\hline FDTC: & FACCH: & CHANGE: & BSMC? & \\
\hline & MSS: & RDCCH: & BSMC? & \\
\hline MSS & RDCCH: & SUPPort: ADCCH & \[
\begin{aligned}
& \text { BSMC? } \\
& \text { BSMC? }
\end{aligned}
\] & \\
\hline & RDCCH: & SUPPort: & BSMC? & \\
\hline & RDTC: & FACCH: & BSMC? & \\
\hline & CSS: & SPACH: & BT & \\
\hline FDCCH . & & SPACH: & B1? & \\
\hline FDCCH: & FDCCH: & SPACH: & BT? & \\
\hline & & RDCCH: & BT? & \\
\hline RDCCH: & LAYER2: & RACH: & BT? & \\
\hline & CSS: & SPACH: & 时 & \\
\hline FDCCH: & LAYER2: & SPACH: & Bu? & \\
\hline & FDCCH: & SPACH: & Bu? & \\
\hline & CSS & EBCCH: & BUILD & \\
\hline & CSS: & FBCCH: & BUILD & \\
\hline css & FOCC: & OVER: & BUILD & \\
\hline & MSS: & RDCCH: & BUILD & \\
\hline & CSS: & SPACH: & BUILD: & ARO \\
\hline & CSS: & SPACH: & & NONARQ \\
\hline CSS: & FBCCH & ACCess: & BURSTsize & \\
\hline CSS: & FBCCH: & ACCess: & BURSTsize? & \\
\hline FDCCH: & FBCCH: & ACCess: & BURSTsize? & \\
\hline CSS: & FBCCH: & MAX: & BUSY & \\
\hline CSS: & FBCCH & MAX: & BUSY? & \\
\hline FDCCH: & FBCCH: & MAX: & BUSY? & \\
\hline S & POWer: & FDTC: & CABLE: & LOSS \\
\hline CSS & FDTC: & Signai & CADENCE & \\
\hline CSS & FVC: & SIGNAL & CADENCE & \\
\hline CSS. & SPACH: & SIGnal: & CADence & \\
\hline CSS & EBCCH:
FDTC & SIGnal: & CADence? & \\
\hline CSS: & FVC: & SIGNAL & CADENCE? & \\
\hline CSS: & SPACH: & SIGnal: & CADence? & \\
\hline FDCCH: & EBCCH: & SIGna: & CADence? & \\
\hline FDCCH: & SPACH: & SIGnal: & CADence? & \\
\hline & & CSS: & CALL: & \begin{tabular}{l}
CHANnel \\
CHANnel?
\end{tabular} \\
\hline & & CSS: & CALL: & DEViation \\
\hline & & CSS & CALL: & DEViation? \\
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\end{tabular}

\section*{}

\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{DMAC DMAC?}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{DVCC?} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{EF}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{MEM} \\
\hline \multicolumn{3}{|l|}{MEM?} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{MIN
\(M / N\) ?}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{PM} \\
\hline \multicolumn{3}{|l|}{PM?} \\
\hline PROCess: & ASSIGNment & \\
\hline PROCess: & FDTC: & HANDoff? \\
\hline PROCess: & FVC: & HANDoff \\
\hline PROCess: & FVC & SLOT 1 \\
\hline Process: & FVC: & SLOT2 \\
\hline PROCess: & FVC: & SLOT3 \\
\hline PROCess: & MOBINIT & \\
\hline process: & PAGE & \\
\hline process: & REGistration & \\
\hline \multicolumn{3}{|l|}{SAT} \\
\hline \multicolumn{3}{|l|}{SLOT} \\
\hline \multicolumn{3}{|l|}{SLOT?} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{TYPE}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{VC \({ }^{\text {VC? }}\)}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{\multirow[b]{2}{*}{VMAC?}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{ADDRess}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{ENCoding} \\
\hline \multicolumn{3}{|l|}{ENCoding?} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{PLANid}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{SUBaddress: ADDRess} \\
\hline SUBaddess: & ADDRess? & \\
\hline SuBaddress: & LENGth & \\
\hline SUBaddress SUBaddress: & LENGth?
ODD EVEN & \\
\hline SUBaddress: & ODDEVEN? & \\
\hline SUBaddress: & REServed & \\
\hline SUBaddress: & REServed? & \\
\hline SUBaddress: & TYPE, & \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{TYPE}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{TYPE?} \\
\hline \multicolumn{3}{|l|}{ADDRess?} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{SUBaddress}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{ADDRess?} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{ENCoding?
LENGth?}} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
LENGth? \\
PLANid?
\end{tabular}}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{PLANId?
PT} \\
\hline \multicolumn{3}{|l|}{SUBaddress: ADDRess?} \\
\hline SUBaddress: & LENGTh? & \\
\hline SUBaddress: & ODD_EVEN? & \\
\hline SUBaddress: & PT? & \\
\hline SUBaddress: & REServed? & \\
\hline SUBaddress: TYPE? & TYPE? & \\
\hline \multicolumn{3}{|l|}{ADDRess} \\
\hline ADDRess: & & \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{ADDRess: ENCoding?}} \\
\hline & & \\
\hline \multicolumn{2}{|l|}{PLANid} & PLANid? \\
\hline SuBaddress: & ADDRess & \\
\hline SUBaddress: & ADDRess? & \\
\hline SUBaddress: & ODDEVEN & \\
\hline SUBaddress: & ODD EVEN? & \\
\hline SUBaddress: & REServed & \\
\hline SUBaddress: & REServed? & \\
\hline SUBaddress: & TYPE & \\
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\end{tabular}

12-10

\(32 \pi 235\)
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CSS:
CSS:
CSS:

\begin{tabular}{|c|c|c|}
\hline CALLING: & ENCoding? & \\
\hline CALLING: & LENGth? & \\
\hline CALLING: & PLANid? & \\
\hline CALLING: & PRESentation: & PI? \\
\hline CALLING: & PRESentation: & PI? \\
\hline CALLING: & PRESentation: & SI? \\
\hline CALLING: & & \\
\hline CALLING: & SUEaddress: & ADDRess? \\
\hline CALLING: & SUBaddress: & LENGIth? \\
\hline CALLING: & SUEaddress: & ODD_EVEN? \\
\hline CALLING: & SuEaddress: & PT? \\
\hline CALLING: & SUBaddress: & REServed? \\
\hline CALLING: & SUBaddress: & TYPE? \\
\hline CALLING: & TYPE? & \\
\hline CALLING: & NAMe: & Pl ? \\
\hline CALLING: & NAMe: & REServed? \\
\hline CALLING: & NAMe: & \\
\hline CALLING: & NAMe? & \\
\hline CALLING: & NUM? & \\
\hline CALLING: & NUM 1 ? & \\
\hline CALLING: & NUM2? & \\
\hline CALLING: & PI? & \\
\hline CALLING: & PLANid? & \\
\hline CALLING: & REServed? & \\
\hline CALLING: & Si? & \\
\hline CALLING: & SPare? & \\
\hline CALLING: & TYpe? & \\
\hline CALLING: & ADDRess & \\
\hline CALLING: & ADDRess: & ENCoding \\
\hline CALLING: & ADDRess: & ENCoding? \\
\hline CALLING: & ADDRess? & \\
\hline CALLING: & PLANid & \\
\hline CALLING: & PLANid? & \\
\hline CALLING: & PRESentation: & Pl \\
\hline CALLING: & PRESentation: & P ? \\
\hline CALLING: & PRESentation: & S \\
\hline CALLING: & PRESentation: & \\
\hline CALLING: & SUBaddress: & ADDRess \\
\hline CALLING: & SUBaddress: & ADORess? \\
\hline CALLING: & SUBaddress: & LENGth \\
\hline CALLING: & SUBaddress: & LENGTh? \\
\hline CALLING: & SUBaddress: & ODD_EVEN \\
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\hline CALLING: & ADDRess & \\
\hline CALLING: & ADDRess? & \\
\hline CALLING: & PRESentation & \\
\hline CALLING: & PRESentation? & \\
\hline CALLING: & SUBaddress & \\
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\hline CALLING: & ADDRess? & \\
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\hline CAlling: & PLANid? & \\
\hline CALLING: & PRESentation: & PI ? \\
\hline CALLING: & PRESentation: & SI? \\
\hline CALLING: & SUBaddress: & ADDRess? \\
\hline CALLING: & SUBaddress: & LENGth? \\
\hline CALLING: & SUBaddress: & ODD_EVEN? \\
\hline CALLING: & SUBaddress: & RESEErved? \\
\hline CALLING: & Subaddress: & TYPE? \\
\hline CALLING: & TYPE? & \\
\hline CALLING: & NUM? & \\
\hline CALLING: & Pr? & \\
\hline CALLING: & PLANId? & \\
\hline CALLING: & & \\
\hline CALLING: & SPare? & \\
\hline CALLING: & TYpe? & \\
\hline CALLMODEACK & & \\
\hline CAPability & & \\
\hline CAPability & & \\
\hline CAPability & & \\
\hline CAPability & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & css: & SPACH: & MSGtype4: & CAPability & & & 9-344 \\
\hline & MSS:
CSS: & RDCCH:
FDTC: & MSGItype:
FACCH: & CAPability & REQuest & & 9.404
9.200 \\
\hline & CSS: & FDTC: & FACCH: & CAPability: & RESPonse & & \(9-200\) \\
\hline & & CSS: & FBCCH: & CAPability? & & & -9.265 \\
\hline & & FDCCH: & FBCCH:
FOCC: & CAPability? & A ALERT & & 9.7 \\
\hline & & & FOCC: & CAPTure: & AUDIT & & 9-7 \\
\hline & & & FOCC: & CAPTure: & AUT REG & & \(9 \cdot 7\) \\
\hline & & & FOCC: & CAPTure: & ESCHALCON & & 9-7 \\
\hline & & & FOCC: & CAPTure: & CLEAR & & 9.5 \\
\hline & & & FOCC: & CAPTure: & DIR RTRY & & 9.7
9.7 \\
\hline & & & FOCC: & CAPTure: & INTRTCPT & & 9.7
9.7 \\
\hline & & & FOCC: & CAPTure: & LC & & \(9 \cdot 7\) \\
\hline & & & FOCC: & CAPTure: & MIN & & 9.9 \\
\hline & & & FOCC: & CAPTure: & MIN? & & 9-9 \\
\hline & & & FOCC: & CAPTure: & MODE? & & \(9-6\)
9 \\
\hline & & & FOCC: & CAPTure: & MSGWTG & & 9-7 \\
\hline & & & FOCC: & CAPTure: & ORDDer? & & 9-8 \\
\hline & & & FOCC: & CAPTure: & PAGE & & 9-7 \\
\hline & & & FOCC: & CAPTure: & RELease & & 9-7 \\
\hline & & & FOCC: & CAPTure: & REORDER & & \(9-8\) \\
\hline & & & FOCC: & CAPTure: & SELect: & BOTH & 9-6 \\
\hline & & & FOCC: & CAPTure: & SELect: & & -9-6 \({ }_{9}^{9-6}\) \\
\hline & & & FOCC: & CAPTure: & SELect: & NONE & \(9-6\)
9 \\
\hline & & & FOCC: & CAPTure: & SELect: & ORDER & \\
\hline & & & FOCC:
FOCC & CAPTure: & SLOT- \({ }^{\text {S }}\) & & \(9-8\)
9.8 \\
\hline & & & FOCC: & CAPTure: & SLor 3 & & 98 \\
\hline & & & FOCC: & CAPTure: & SSD UPdate & & 9-8 \\
\hline & & & FOCC: & CAPTure: & UCHAL & & \(9-8\)
9.8 \\
\hline & & & FOCC: & CAPTure: & VC_DES & & 9-8
\(9-16\) \\
\hline & & & RAW: & CAPTure: & A ALEERT & &  \\
\hline & & \[
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& \text { FOCC } \\
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\end{aligned}
\] & RAW:
RAW: & CAPTure: & AUDIT & & 9-16 \\
\hline & & FOCC: & RAW: & CAPTure: & bSCHALCON & & 9-16 \\
\hline & & FOCC: & RAW: & CAPTure: & DIR RTRY & & 9-16 \\
\hline & & FOCC: & RAW: & CAPTure: & index? & & 9-18 \\
\hline & & FOCC: & RAW: & CAPTure: & 1 NTRCPT & & 9-15 \\
\hline & & FOCC: & RAW: & CAPTure: & & & 9-17 \\
\hline & & FOCC: & RAW & CAPTure: & MSG WTG & & 9-17 \\
\hline & & FOCC & RAW: & CAPTure: & NONE & & 9-16 \\
\hline & & FOCC: & RAW: & CAPTure: & ORDer? & & 917 \\
\hline & & FOCC & RAW: & CAPTure: & PAGE & & 9-17 \\
\hline & & FOCC & RAW: & CAPTure: & RELease & & 9-17 \\
\hline & & FOCC & RAW: & CAPTure: & REORDER & & 9-17 \\
\hline & & FOCC & RAW & CAPTure: & SLOT-1 & & 9-17 \\
\hline & & FOCC
FOCC: & RAW:
RAW: & CAPTure:
CAPTure: & SLOT \({ }^{2}\) & & -9-17 \({ }_{9}\) \\
\hline & & FOCC & RAW: & CAPTure: & SSD UPdate & & 9-17 \\
\hline & & FOCC & RAW: & CAPTure: & UCHAL & & 9.17 \\
\hline & & FOCC & RAW:
FOCC: & CAPTure: & VC_DES & & 9-17 \({ }_{9}^{9.5}\) \\
\hline & & FOCC: & RAW & CAPTure? & & & \({ }_{9}^{9-451}\) \\
\hline & & & MMEMory:
MMEMory: & CATalog: & ENTRY?
FREE? & & 9-451 \\
\hline & & & MMEMory: & CATalog: & USED? & & 9-451 \\
\hline & & & MMEMory & CATalog? & & & 9-451 \\
\hline & CSS & FDTC: & ENABLE: & Cause & & & 9-209 \\
\hline CSS & SPACH: & FDIC:
REJect: & SERVICe:
RDATA: & CAUSE & & & \(9-372\) \\
\hline CSS & SPACH: & REJect: & REGistration: & CAUSE & & & \(9 \cdot 372\) \\
\hline & CSS: & SPACH: & RELease: & CAUSE & & & 9-373 \\
\hline & CSS & SPACH: & REorder: & CAUSE & & & 9-373
9.223 \\
\hline & CSS: & FDTC:
FDTC: & SERVICe: & CAUSe: & NuMBer? & & \(9-223\) \\
\hline & FDTC: & FACCH: & SERVice: & cause: & NUMBer? & & \(9-37\) \\
\hline & CSS & FDIC: & ENABLE: & CAUSe? & & & 9-209 \\
\hline & CSS: & FDTC: & SERVice: & CAUSe? & & & 9.223 \\
\hline CSS: & SPACH: & REJect: & REGistration: & CAUSE? & & & \(9 \cdot 372\) \\
\hline & CSS: & SPACH: & RELease: & CAUSE? & & & \(9 \cdot 373\) \\
\hline & CSS: & SPACH: & REorder: & cause? & & & 9-373 \\
\hline FDCCH: & & REJect: & RDATA: & & & & ¢9-147 \\
\hline FDCCH: & SPACH:
FDCCH: & REJect:
SPACH: & REGistration:
RELease: & CAUSE? & & & ¢ \({ }_{9}^{9-147}\) \\
\hline
\end{tabular}



\begin{tabular}{|c|c|c|}
\hline CELL: & DELay? & \\
\hline CELL: & HL FREQ? & \\
\hline CELL: & OFFsset? & \\
\hline CELL: & PROTocol? & \\
\hline CELL: & RETRY? & \\
\hline CELL: & SS SUFF? & \\
\hline CELL: & TYPE & CELL? \\
\hline CELL: & TYPE & NETwork? \\
\hline CELL: & ACCess: & MS PWR? \\
\hline CELL: & ACCess: & RSS̄_MIN? \\
\hline CELL: & CHAN? & \\
\hline CELL: & DELay? & \\
\hline CELL: & DVCC? & \\
\hline CELL: & HL FREO? & \\
\hline CELLL & OFFset? & \\
\hline CELL: & PROTocol? & \\
\hline CELL: & PSID_RSID: & 1NDicator? \\
\hline CELL: & PSID \({ }^{-}\)SSID: & LENGth? \\
\hline CELL: & PSID RSID: & Support? \\
\hline CELL: & RETRY? & \\
\hline CELL: & SS_SUFF? & \\
\hline CELL: & SYMC? & \\
\hline CELL: & TYPE: & CELL? \\
\hline CELL: & TYPE: & NETwork? \\
\hline CELL? & & \\
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\hline CENTer: & ADDRess & \\
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\hline CENTer: & ADDRess? & \\
\hline CENTer: & ENCoding & \\
\hline CENTer: & ENCoding? & \\
\hline CENTer: & PLANid & \\
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\hline CENTer: & TYPE & \\
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\hline CENTer: & ADDRess & \\
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\hline CENTer: & ADDRess? & \\
\hline CENTer: & ENCoding & \\
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\hline CENTer: & TYPE? & \\
\hline CENTer; & ADDRess? & \\
\hline CENTer: & ENCoding? & \\
\hline CENTer: & LENGth? & \\
\hline CENTer: & PLANid? & \\
\hline CENTer: & PY? & \\
\hline CENTer: & TYPE? & \\
\hline CENTer: & ADDRess? & \\
\hline CENTer: & ENCoding? & \\
\hline CENTer: & LENGth? & \\
\hline CENTer: & PLANid? & \\
\hline CENTer: & TYPE? & \\
\hline CENTer: & ADORess & \\
\hline CENTer: & ADDRess? & \\
\hline CENTer: & ADDRess & \\
\hline CENTer: & ADDRess: & ENCoding \\
\hline CENTer: & ADDRess: & ENCoding? \\
\hline CENTer: & \begin{tabular}{l}
ADDRess? \\
PLANid
\end{tabular} & \\
\hline CENTer: & PLANid? & \\
\hline CENTer: & TYPE & \\
\hline CENTer: & TYPE? & \\
\hline CENTer: & ADDRess? & \\
\hline CENTer: & ENCoding? & \\
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\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & & & & RECC & CHANnel & & & \\
\hline & & & & RVC: & CHANnel & & & 9-48 \\
\hline & & & css & EBCCH: & CHANnel: & GROUP: & FIRST & 9-314 \\
\hline & & & CSS & EBCCH: & CHANnel: & GROUP: & FIRST? & 9-314 \\
\hline & & & css: & EBCCH: & CHANnel: & GROUP: & LAST & 9-314 \\
\hline & & & CSS: & EBCCH: & CHANnel: & GROUP: & LAST? & 9-314 \\
\hline & & & CSS & EBCCH: & CHANnel: & NUMBer & & 9-313 \\
\hline & & & CSS: & EBCCH: & CHANnel: & NUMBer? & & 9.313 \\
\hline & & & FDCCH: & EBCCH: & CHANnel: & GROUP: & FIRST? & 9-114 \\
\hline & & & FDCCH: & EBCCH: & CHANnel: & GROUP: & LAST? & 9-114 \\
\hline & & & FDCCH: & EBCCH: & CHANEI: & NumBer? & & 9-114 \\
\hline & & & FDCCH : & EBCCH: & CHANnel: & PT? & & 9-114 \\
\hline & & & CSS. & CALL & CHANMEI? & & & 9-186 \\
\hline & & & & CSS: & CHANnel? & & & 9-176 \\
\hline & & CSS: & EBCCH: & ENABLE: & CHANnel? & & & 9-326 \\
\hline & CSS & FBCCH: & ADDitional: & DCCH: & CHANnel? & & & 9-263 \\
\hline & & CSS: & FDTC: & DCCHinfo: & CHANnel? & & & 9-206 \\
\hline & & css: & FDTC & HANDoff: & CHANnel? & & & 9-214 \\
\hline & & CSS: & FDTC & HYPERband: & CHANnel? & & & 9-215 \\
\hline & & CSS: & FVC: & HANDoft: & CHANnel? & & & 9-195 \\
\hline & CSS: & SPACH: & ENABLE & RETAY: & CHANnel? & & & 9-378 \\
\hline & & CSS: & SPACH: & RETRY: & CHANnel? & & & 9-353 \\
\hline & & & & FDCCH: & CHANDEI? & & & 9-66 \\
\hline & & FDCCH: & FBCCH: & ADDitional: & CHANMEI? & & & 9-86 \\
\hline & & FOCCH: & SPACH: & RETRY: & CHANnel? & & & 9-130 \\
\hline & & FDTC & FACCH: & DCCHinto: & CHANnel? & & & 9-31 \\
\hline & & FDTC: & FACCH: & HYPERband: & CHANnel? & & & 9-32 \\
\hline & & & & & CHANRel? & & & 9-389 \\
\hline & & & & RDCCH: & CHANREI? & & & 9-151 \\
\hline & & RDTC: & FACCH: & HYPERband: & CHANNel? & & & 9 9-56 \\
\hline & & & \[
\begin{aligned}
& \text { CSS: } \\
& \text { CSS: }
\end{aligned}
\] & MSCM: & CHANPOS & & & 9-241 \\
\hline & & & & MSCM:
FOCC: & CHANPOS? & & & \({ }_{9-11}^{9-241}\) \\
\hline & & & & FOCC: & CHANPOS2? & & & 9-11 \\
\hline & & & & FOCC: & CHANPOS3? & & & 9-11 \\
\hline & & & & FOCC: & CHANPOS4? & & & 9-11 \\
\hline & & & & FOCC: & CHANPOS4? & & & 9-11 \\
\hline & & & & FOCC: & CHANPOS6? & & & 9-11 \\
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\hline & & & EBCCH: & FVC: & CHAR2?
CHARacter & & & 9-22 \({ }^{9-315}\) \\
\hline css & SPACH: & & PSID ASID & NAME: & CHARacter & & & 9 e 375 \\
\hline & & CSS: & SPACH: & DISPlay: & CHARacter & & & 9-347 \\
\hline & & MSS: & RDCCH: & DISPlay: & CHARacter & & & 9-409 \\
\hline css & SPACH: & CSS: & EBCCH: & TEXT: & CHARacter? & & & 9-315 \\
\hline css & SPACH: & ALPHA:
CSS: & PSID RSID
SPACH: & NAME: & CHARacter? & & & 9-375
\(9-347\) \\
\hline & & FDCCH: & EBCCH: & TEXT: & CHARacter? & & & 9-115 \\
\hline & & FDCCH: & SPACH: & Display: & CHARacter? & & & 9-126 \\
\hline & & MSS: & RDCCH: & Display & CHARacter? & & & \(9-409\) \\
\hline & & FBCCH & RDCCH
AlPHA & DISPlay & CHARacter? & & & 9-161 \\
\hline FDCCH & SPACH: & ALPHA: & PSID RSID & NAME & CHARacters? & & & \(9-89\)
9.149 \\
\hline & FDCCH: & SPACH: & ALPHA: & SID: & CHARacters? & & & 9.149 \\
\hline & & FOCC: & RAW: & A: & CHECK? & & & 9-18 \\
\hline & & FOCC: & RAW:
FVC: & B: & CHECK? & & & 9-19 \\
\hline & & & & RDCCH: & Cl ? & & & \({ }^{\text {9-158 }}\) \\
\hline & & RDCCH: & & & & & & \\
\hline & & & \begin{tabular}{l}
BER: \\
FOCC
\end{tabular} & RDTC: & CLEAR & & & \({ }_{9-5}^{9-448}\) \\
\hline & & & FDCCH: & EBCCH: & CLI? & & & 9-94 \\
\hline & & & FDCCH: & FBCCH: & CLI? & & & 9-80 \\
\hline & & FDCCH:
FDCCH: & LAYER2: & EBCCH: & \(\stackrel{\mathrm{CLI}}{\text { CLI? }}\) & & & 9.72
971 \\
\hline & & & RDTC: & FACCH: & CM? & & & 9-55 \\
\hline & & & CSS: & FOCC: & CMAC & & & 9-180 \\
\hline & & & CSS: & FOCC: & CMAC?
CMAC? & & & \({ }_{9}^{9-180}\) \\
\hline & & & css: & FOCC: & CMAX & & & 9-180 \\
\hline & & & CSS: & FOCC: & CMAX? & & & 9-180 \\
\hline & & & & FOCC: & CMAX \({ }^{\text {1 }}\) ? & & & 9-11 \\
\hline & \[
\begin{aligned}
& \text { CSS } \\
& \text { CSS }
\end{aligned}
\] & FDTC:
FDTC: & ENABLE: & STATUS:
STATUS: & CMODE & & & - \({ }_{\text {9-212 }}\) \\
\hline & & & FDTC: & FACCH: & CNPC? & & & \(9-30\) \\
\hline & & MSS: & RDCCH: & ENABle: & cNuMber & & & 9441 \\
\hline & & & MSS: & RDCCH: & CNUMber: & ADDRess & & 9-434 \\
\hline & & & MSS: & ROCCH & CNUMber: & ADDRess: & ENCoding & 9-434 \\
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\begin{tabular}{|c|c|c|c|c|c|}
\hline CSS: & CALL: & SLOT? & & & \\
\hline CSS: & CAlL: & TYPE & & & \\
\hline CSS: & CALL: & TYPE? & & & \\
\hline CSS: & CALL: & VC & & & \\
\hline CSS: & CALL: & VC? & & & \\
\hline Css: & CALL: & VMAC & & & \\
\hline CsS: & CALL: & VMAC? & & & \\
\hline CsS: & CHANnel & & & & \\
\hline CSS: & CHANnel? & & & & \\
\hline CsS: & CONFigure & NONE & & & \\
\hline CSS: & CONFigure & USER & & & \\
\hline CSS: & EBCCH: & ALT SOC & MAP: & PSID . RSID & \\
\hline CSS: & EBCCH: & ALT SOC & MAP & PSID_RSID? & \\
\hline CSS: & EBCCH: & ALT SOC & NUMBer & & \\
\hline CSS: & EBCCH: & ALT SOC & NUMBer? & & \\
\hline CSS: & EBCCH: & ALT SOC & SOC & & \\
\hline CSS: & EBCCH: & ALT SOC & SOC? & & \\
\hline CSS: & EBCCH: & AUTO: & PROGRAM & & \\
\hline CSS: & EBCCH: & BSMC & & & \\
\hline css: & EBCCH: & BSMC? & & & \\
\hline CSS: & EBCCH: & BULLD & & & \\
\hline CSS: & EBCCH: & CHAN & & & \\
\hline CSS: & EBCCH: & CHAN? & & & \\
\hline CSS: & EBCCH: & CHANnel: & GROUP: & FIRST & \\
\hline CsS: & EBCCH: & CHANnel: & GROUP: & FIRST? & \\
\hline CSS: & EBCCH: & CHANnel: & GROUP: & LAST? & \\
\hline CsS: & EBCCH: & CHANnel: & GROUP: & LAST? & \\
\hline Css: & EBCCH: & CHANnel: & NuMBer
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\hline CSS: & EBCCH: & CUSTOM & CONTrol & & \\
\hline CSS: & EBCCH: & CUSTOM: & CONTrol? & & \\
\hline CSS: & EBCCH: & CUSTOM: & LENGth & & \\
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\hline Css: & EBCCH: & DATA? & & & \\
\hline CSS: & EBCCH: & ECL & & & \\
\hline CSS: & EBCCH: & ECL? & & & \\
\hline Css: & EBCCH: & ENABLE & ALT SOC_LIST & & \\
\hline CsS: & EBCCH: & ENABLE & ALT SOC LIST? & & \\
\hline CSS: & EBCCH: & ENABLE & CHANRE! & & \\
\hline css: & EBCCH: & ENABLE: & HYPERband: & INFO & \\
\hline Css: & EBCCH: & ENABLE & HYPERband: & INFO? & \\
\hline CSS: & EBCCH : & ENABLE: & MACA: & EIGHT: & CONTroi \\
\hline CSS: & EBCCH: & ENABLE & MACA & EIGHT & CONTrol? \\
\hline CSS: & EBCCH: & ENABLE: & MACA: & LIST & \\
\hline Css: & EBCCH: & ENABLE: & MACA & LIST. & OTHER \\
\hline Css: & EBCCH: & ENABLE: & MACA & LIST:
LIST? & OTHER? \\
\hline css: & EBCCH: & ENABLE: & MCC & & \\
\hline CSS: & EBCCH: & ENABLE: & MCC? & & \\
\hline CSS: & EBCCH: & ENABLE: & NEIGHbor: & ANALOG & \\
\hline css: & EBCCH: & ENABLE: & NEIGHDOR: & ANALOG? & \\
\hline CSS: & EBCCH: & ENABLE: & NEIGHbor: & MULTi: & ANALOG \\
\hline CSS: & EBCCH: & ENABLE: & NEIGHbor: & MULTi: & ANALOG? \\
\hline Css: & EBCCH: & ENABLE: & NEIGHbor: & MULti: & OTHER \\
\hline CSS: & EBCCH: & ENABLE: & NEIGHbor: & MULti: & OTHER? \\
\hline css: & EBCCH: & ENABLE: & NEIGHbor:
NEIGHbor: & MULti: & TDMA \\
\hline Css: & EBCCH: & ENABLE: & NEIGHbor: & OTHER: & INFO \\
\hline CsS: & EBCCH: & ENABLE: & NEIGHbor: & OTHER: & INFO? \\
\hline Css: & EBCCH: & ENABLE: & NEIGHbor: & TDMA & \\
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\hline css: & EBCCH: & ENABLE & NEIGHbor: & TDMA? & \\
\hline CSS: & EBCCH: & ENABLE & NONPublic & & \\
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\hline Css: & EBCCH: & ENABLE: & SIGnal & & \\
\hline Css: & & ENABLE: & SIGnal? & & \\
\hline css: & EBCCH: & HYPEFband: & INFO? & & \\
\hline CSS: & EBCCH: & IRA & & & \\
\hline Css: & EBCCH: & IRA? & & & \\
\hline Css: & EBCCH: & MACA: & EIGHT: & CONTrol & \\
\hline CSS: & EBCCH: & MACA & EIGHT: & CONTrol? & \\
\hline CsS: & EBCCH: & MACA & LIST: & CHAN & \\
\hline Css: & EBCCH: & MACA & LIST: & CHAN? & \\
\hline CSS: & EBCCH: & MACA & LIST: & Number & \\
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CHAN?
HYPERband
HYPERBand?
HYPERBand
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\hline \multicolumn{4}{|l|}{\multirow[t]{2}{*}{}} \\
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\end{tabular}
\begin{tabular}{|c|c|}
\hline TYPE: & NETwork? \\
\hline ACCess: & MS_PWR \\
\hline ACCess: & MS PWR? \\
\hline ACCess: & RSS MIN \\
\hline Access: & RSS_MIN? \\
\hline CHAN & \\
\hline CHAN? & \\
\hline DELAY & \\
\hline DELAY? & \\
\hline DVCC & \\
\hline DVCC? & \\
\hline HL_FREQ & \\
\hline HL FREQ? & \\
\hline OFFset & \\
\hline OFFset? & \\
\hline PROToco & \\
\hline PROTocol? & \\
\hline PSID_RSID & INDicator \\
\hline PSID-RSID & INDicator? \\
\hline PSID-RSID: & LENGth \\
\hline PSID \({ }^{-7 S I D}\) & LENGTh? \\
\hline PSID_RSID: & SUPport \\
\hline PSID RSID & SUPport? \\
\hline RETRY & \\
\hline RETRY? & \\
\hline SS_SUFF & \\
\hline SS SUFF? & \\
\hline SYN̄C & \\
\hline SYNC? & \\
\hline TYPE: & CELL \\
\hline TYPE: & CELL? \\
\hline TYPE & NETwork \\
\hline TYPE: & NETwork? \\
\hline COUNT & \\
\hline COUNt? & \\
\hline SERVice: & INDicator \\
\hline SERVice: & INDicator? \\
\hline SERVice: & MAP \\
\hline ACCess: & MS PWR \\
\hline AcCess: & MS \({ }^{\text {PWWR }}\) \\
\hline ACCess: & RSS \\
\hline AcCess: & RSS_MIN? \\
\hline CHAN & \\
\hline CHAN? & \\
\hline DELAY & \\
\hline DELAY? & \\
\hline DVCC & \\
\hline DVCC? & \\
\hline HL_FREO & \\
\hline HL FREQ? & \\
\hline NUMBer & \\
\hline NUMBer? & \\
\hline OFFset & \\
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\hline PROTocol & \\
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\hline PSID RSID: & INDicator \\
\hline PSID RSID: & INDicator? \\
\hline PSID RSID & LENGth \\
\hline PSID-RSID: & LENGth? \\
\hline PSID-RSID: & SUPport \\
\hline PSID_RSID: & SUPport? \\
\hline RETRY & \\
\hline RETRY? & \\
\hline SS_SUFF & \\
\hline SS SUFF? & \\
\hline SYÑC & \\
\hline SYNC? & \\
\hline TYPE & \\
\hline TYPE & CELL? \\
\hline TYPE & NETwork \\
\hline TYPE: & NETwork? \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|}
\hline FBCCH: & BSMC & & & \\
\hline FBCCH: & BSMC? & & & \\
\hline FBCCH: & BUILD & & & \\
\hline FBCCH: & CAPability & & & \\
\hline FBCCH: & CAPability? & & & \\
\hline FBCCH: & CBN: & HIGH & & \\
\hline FBCCH : & CBN & HIGH ? & & \\
\hline FBCCH: & CONfiguration & & & \\
\hline FBCCH : & CONfiguration? & & & \\
\hline FBCCH: & COUNTRY: & CODE & & \\
\hline FBCCH : & COUNTRY: & CODE? & & \\
\hline FBCCH : & CUSTOM: & CONTrol & & \\
\hline FBCCH: & CUSTOM: & CONTrol? & & \\
\hline FBCCH: & CUSTOM: & LENGTh & & \\
\hline FBCCH: & CUSTOM: & LENGTh? & & \\
\hline FBCCH : & DATA? & & & \\
\hline FBCCH : & DELay & & & \\
\hline FBCCH: & DELay? & & & \\
\hline FBCCH: & DEREG & & & \\
\hline FBCCH: & DEREG? & & & \\
\hline FBCCH: & DIC & & & \\
\hline FBCCH : & DIC? & & & \\
\hline FBCCH : & DVCC & & & \\
\hline FBCCH: & DVCC? & & & \\
\hline FBCCH: & EC & & & \\
\hline FBCCH: & EC? & & & \\
\hline FBCCH: & ENABLE & ADDitional: & DCCH & \\
\hline FBCCH: & ENABLE: & ADDitional: & DCCH ? & \\
\hline FBCCH: & ENABLE & ALPHA: & SID & \\
\hline FBCCH : & ENABLE & ALPHA: & SID? & \\
\hline FBCCH: & ENABIE & ALT SOC LIST & & \\
\hline FBCCH: & ENABLE & ALT_SOC_LIST? & & \\
\hline FBCCH: & ENABLE & CBN: & HIGH & \\
\hline FBCCH: & ENABLE & CBN: & HIGH? & \\
\hline FBCCH: & ENABLE: & COUNTRY: & CODE & \\
\hline FBCCH: & ENABLE & COUNTRY: & CODE? & \\
\hline FBCCH: & ENABLE & EXTENDED & & \\
\hline FBCCH: & ENABLE & EXTENDED? & & \\
\hline FBCCH: & ENABLE & MACA: & EIGHT & CONTrol \\
\hline FBCCH: & ENABLE: & MACA: & EIGHT & CONTTrol? \\
\hline FBCCH: & ENABLE & MACA: & LIST & \\
\hline FBCCH: & ENABLE: & MACA: & LIST: & OTHER \\
\hline FBCCH: & ENABLE: & MACA: & LIST, & OTHER? \\
\hline FBCCH: & ENABLE & MACA: & LIST? & \\
\hline \({ }_{\text {FBCCH }} \mathrm{FBCH}\) : & ENABLE & MAP: & AUTH? & \\
\hline FBCCH : & ENABLE: & MAP: & REG_INFO & \\
\hline FBCCH: & ENABLE: & MAP: & REG \({ }^{\text {INFO? }}\) & \\
\hline FBCCH: & ENABLE & NONPublic: & PROEability & \\
\hline FBCCH: & ENABLE & NONPublic: & PROBability? & \\
\hline FBCCH: & ENABLE & NONPublic: & REGistration & \\
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& \text { FBCCH } \\
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\] & ENABLE & PSID RSID? REGī̄ & & \\
\hline FBCCH & ENABLE & REGID? & & \\
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\hline FBCCH : & EXTended? & & & \\
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FBCCH & FOREG FOREG? & & & \\
\hline FBCCH & HYPERitame & & & \\
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MACA
\end{tabular} & EIGHT: & CONTrol & \\
\hline FBCCH: & MACA: & EIGHT: & CONTrol? & \\
\hline FBCCH & & & & \\
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\begin{tabular}{|c|c|}
\hline LIST & CHAN? \\
\hline LIST: & NuMBer \\
\hline LIST: & NUMBer? \\
\hline LIST & OTHER: \\
\hline LIST: & OTHER: \\
\hline LIST & OTHER: \\
\hline LIST & OTHER: \\
\hline LIST & OTHER: \\
\hline Status & \\
\hline STATus? & \\
\hline TYPE & \\
\hline ARO & \\
\hline ARQ? & \\
\hline AUTH & \\
\hline AUTH? & \\
\hline CODER & \\
\hline CODER? & \\
\hline DPM & \\
\hline DPM? & \\
\hline MEA: & ALGORithms \\
\hline MEA: & ALGORithms \\
\hline MEA: & DOMAIN \\
\hline MEA: & DOMAIN? \\
\hline MEK & \\
\hline MEK? & \\
\hline MENU MENU? & \\
\hline REG_INFO & \\
\hline REG_INFO? & \\
\hline SMS \({ }^{-}\) & \\
\hline SMS? & \\
\hline USER & \\
\hline USER? & \\
\hline VPM & \\
\hline VPM? & \\
\hline BUSY & \\
\hline BUSY? & \\
\hline REPetitions & \\
\hline REPetitions? & \\
\hline RETries & \\
\hline RETries? & \\
\hline STOP & \\
\hline STOP? & \\
\hline ACCess & \\
\hline AcCess? & \\
\hline BSMC & \\
\hline BSMC? & \\
\hline MACA & \\
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\hline MACA_MULTi & \\
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\hline OLC & \\
\hline OLC? & \\
\hline REGistration & \\
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\hline SELection & \\
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\hline SERVICe & \\
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\hline SOC & \\
\hline Soc? & \\
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\hline SOC BSMC? & \\
\hline STRÜCTure & \\
\hline STRUCTure? & \\
\hline SYSID & \\
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\hline & \\
\hline PROBability:
PROBability: & BLOCK \\
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\hline REGistration: & CONTro \\
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\hline FBCCH \\
\hline FBCCH FBCCH \\
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\hline \multirow[t]{2}{*}{FBCC
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\hline \multirow[t]{4}{*}{FBCC
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\end{tabular}
\begin{tabular}{|c|c|}
\hline NUMber: & EBCCH? \\
\hline NuMber: & FBCCH \\
\hline NUMber: & FBCCH? \\
\hline NUMber: & NON PCH \\
\hline Number: & NON-PCH? \\
\hline NUMber: & REServed \\
\hline NuMber: & REServed? \\
\hline NuMber: & SBCCH \\
\hline NUMber: & SBCCH? \\
\hline OATS & \\
\hline OATS? & \\
\hline OLC & \\
\hline OLC? & \\
\hline OPTional: & DATA \\
\hline OPTional: & DATA? \\
\hline OPTional: & LENGth \\
\hline OPTional: & LENGTh? \\
\hline OPTional: & MSGiype \\
\hline OPTional: & MSGtype? \\
\hline PCH & \\
\hline PCH ? & \\
\hline PD & \\
\hline PD? & \\
\hline PDREG & \\
\hline PDREG? & \\
\hline PFC & \\
\hline PFC? & \\
\hline PFM & \\
\hline PFM? & \\
\hline PROGram & \\
\hline PROTocol & \\
\hline PROTocol? & \\
\hline PSID_RSID: & NuMBer \\
\hline PSID-RSID: & NUMBer? \\
\hline PSID RSID: & SOC \\
\hline PSID_RSID: & soc? \\
\hline PSID-RSID: & TYPE \\
\hline PSID-RSID: & TYPE? \\
\hline PSID-RSID: & VALUE \\
\hline PSID RSID: & VALUE? \\
\hline PURĒG & \\
\hline PUREG? & \\
\hline RAND & \\
\hline RAND? & \\
\hline RDATA: & LENGth \\
\hline RDATA: & LENGth? \\
\hline REGH & \\
\hline REGH? & \\
\hline REGID & 1 D \\
\hline REGID: & ID? \\
\hline REGID & PER \\
\hline REGID: & PER? \\
\hline REGPER & \\
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\hline REGR & \\
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\hline RNUM & \\
\hline RNUM? & \\
\hline & \\
\hline S? & \\
\hline SCAN: & \\
\hline SCAN: & INTerval? \\
\hline SCAN: & OPTION \\
\hline SCAN: & OPTION? \\
\hline SID & \\
\hline SID? & \\
\hline SOC & \\
\hline SOC? & \\
\hline SS_SUFF & \\
\hline SS SUFF? & \\
\hline SUBaddress & \\
\hline SUBaddress & \\
\hline SUPERframe & \\
\hline SUPERifam & \\
\hline SYREG & \\
\hline SYREG? & \\
\hline USER: & DATA \\
\hline USER: & DATA? \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|}
\hline FBCCH: & USER: & LENGth & & \\
\hline FBCCH: & USER: & LENGth? & & \\
\hline FBCCH: & USER & MSGtype & & \\
\hline FBCCH: & USER: & MSGtype? & & \\
\hline FBCCH: & USER: & PD & & \\
\hline FBCCH: & USER: & PD ? & & \\
\hline FDCCH: & SUPERframe: & ACCess: & PE & \\
\hline FDCCH: & SUPERframe: & AcCess: & PE? & \\
\hline FDCCH: & SUPERframe: & ACCess: & SCF & \\
\hline FDCCH: & SUPERframe: & ACCess: & SCF? & \\
\hline FDCCH: & SUPERframe: & ACCess: & TYPE & NONE \\
\hline FDCCH: & SUPERframe: & ACCess: & TYPE & PROGram \\
\hline FDCCH: & SUPERframe: & Access: & TYPE & RANDom \\
\hline FDCCH : & SUPERifame: & ACCess: & TYPE & REServed \\
\hline FDCCH: & SUPERframe: & ACCess: & TYPE? & \\
\hline FDCCH: & SUPER frame: & BRI & & \\
\hline FDCCH: & SUPER frame: & BRI? & & \\
\hline FDCCH: & SUPER frame: & DATA & & \\
\hline FDCCH: & SUPERframe: & DATA? & & \\
\hline FDCCH: & SUPER trame: & DVCC & & \\
\hline FDCCH: & SUPERtrame: & DVCC? & & \\
\hline FDCCH: & SUPER trame: & INCrement & & \\
\hline FDCCH: & SUPER frame. & NUMBer? & & \\
\hline FDCCH: & SUPER frame: & PE & & \\
\hline FDCCH: & SUPER frame: & PE? & & \\
\hline FDCCH: & SUPERframe: & RN & & \\
\hline FDCCH: & SUPERframe: & RN? & & \\
\hline FDCCH: & SUPERtrame: & SFP & & \\
\hline FDCCH: & SUPERtrame: & SFP? & & \\
\hline FDCCH : & SUPERtrame: & STARt & & \\
\hline FDCCH: & SUPERArame: & STOP & & \\
\hline FDCCH: & SUPER \({ }^{\text {Strame: }}\) & TYPE & & \\
\hline FDCCH: & SUPER frame: & TYPE? & & \\
\hline FDCCH: & SUPERtrame: & ZERO & & \\
\hline FDTC: & AMT: & CONNect & & \\
\hline FDTC: & AMT: & RELease & & \\
\hline FDTC & AMT: & SERVice: & REQuest & \\
\hline FDTC & AMT; & Status & & \\
\hline FDTC: & AMT? & & & \\
\hline FDTC:
FDTC: & ATS
ATS? & & & \\
\hline FDTC: & AUTHBS & & & \\
\hline FDTC: & AUTHBS? & & & \\
\hline FDTC: & BSMC & & & \\
\hline FDTC: & BSMC? & & & \\
\hline FDTC: & CALLING: & NAME & & \\
\hline FDTC: & CALLING: & NAME: & PI & \\
\hline FDTC: & CALLING: & NAMe: & Pl? & \\
\hline FDTC: & CALLING: & NAMe: & & \\
\hline FDTC: & CALLING: & NAMe: & REServed? & \\
\hline FDTC: & CALLING: & NAMe: & & \\
\hline FDTC: & CALLING: & NAMe: & St? & \\
\hline FDTC: & CALLING: & NUM & & \\
\hline FDIC: & CALLING: & NUM? & & \\
\hline FDTC: & CALLING: & PI & & \\
\hline FDTC: & CALLING: & PI? & & \\
\hline FDTC: & CALLING: & PLANid & & \\
\hline FDTC: & CALLING: & PLANid? & & \\
\hline FDTC: & CALLING: & REServed
REServed? & & \\
\hline FDTC: & CALLING: & & & \\
\hline FDTC: & CALLING: & Sl ? & & \\
\hline FDTC: & CALLING: & TYpe & & \\
\hline FDTC:
FDIC: & \begin{tabular}{l}
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\end{tabular} & TYpe? & & \\
\hline FDTC: & CHANGE & BSMC & & \\
\hline FDTC: & CHANGE: & BSMC? & & \\
\hline FDTC: & CHANGE & SOC & & \\
\hline FDIC: & CHANGE & SOC? & & \\
\hline FDTC: & CONTROL & & & \\
\hline FDTC: & CONTROL? & CONTrol & & \\
\hline FDTC: & Custom: & CONTrol? & & \\
\hline FDTC: & CUSTOM: & LENGth & & \\
\hline FDTC & CUSTOM: & LENGth? & & \\
\hline FDTC FDTC & DCCHinfo: DCCHinfo: & CHANnel CHANnel? & & \\
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TARGE
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BSACK
FLASHACK
FLASHACK?
SBDA
SBDA?
CENTer
CENTer
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\hline MESSage: & CENTer: & PLANid? \\
\hline MESSage: & CENTer: & TYPE \\
\hline MESSage: & CENTer: & TPE? \\
\hline MSGWTG: & MESSage: & NUMBer \\
\hline MSGWTG: & MESSage: & NUMBer? \\
\hline MSGWTG: & MESSage: & TYPE \\
\hline MSGWTG: & Number & \\
\hline MSGWTG: & NumBer? & \\
\hline NOMW & & \\
\hline NOMW? & & \\
\hline PV & & \\
\hline PV ? & & \\
\hline PVI & & \\
\hline PVI? & & \\
\hline RANDRA & & \\
\hline RANDRA? & & \\
\hline RANDSSD & & \\
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\hline RANDU & & \\
\hline RANDU? & & \\
\hline Rate & & \\
\hline RATE? & & \\
\hline RCAUSe & & \\
\hline RCAUSe: & REServed & \\
\hline RCAUSe: & REServed? & \\
\hline RCAUSe? & & \\
\hline RDATA UNIT: & HLP: & DATA \\
\hline RDATA-UNIT & HLP: & DATA? \\
\hline RDATA-UNIT: & HLP: & IDentitier \\
\hline RDATA-UNIT: & HLP: & IDentifier? \\
\hline RDATA UNIT: & LENGth & \\
\hline RDATA-UNIT: & LENGth? & \\
\hline RFCHANT & & \\
\hline RFCHAN? & & \\
\hline RN & & \\
\hline RN? & & \\
\hline RTRANSaction & & \\
\hline RTRANSaction? & & \\
\hline SBl & & \\
\hline SBI? & & \\
\hline SERVice: & CAUSe & \\
\hline SERVice: & CAUSe: & NuMBer \\
\hline SERVice: & CAUSe: & NUMBer? \\
\hline SERVice: & CAUSe? & \\
\hline SERVice: & CODE & \\
\hline SERVICe: & CODE? & \\
\hline SET: & TA & \\
\hline SIGNAL & CADENCE & \\
\hline SIGNAL & CADENCE? & \\
\hline SIGNAL: & PITCH & \\
\hline SIGNAL & PITCH? & \\
\hline SLOT, & & \\
\hline SLOT? & & \\
\hline soc & & \\
\hline soc? & & \\
\hline STARt & & \\
\hline STOP & & \\
\hline SUPPort: & IRA & \\
\hline SUPPort: & IRA? & \\
\hline TA & & \\
\hline TA? & & \\
\hline TALK: & DELAY & \\
\hline TALK & START
STOP & \\
\hline TASK & & \\
\hline TASK? & & \\
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\hline TI? & & \\
\hline USER: & DEST & ADDRess \\
\hline USER: & DEST & ADDRess? \\
\hline USER: & DEST & ENCoding \\
\hline USER: & DEST & ENCoding? \\
\hline USER: & DEST & PLANid \\
\hline USER: & DEST & PLANid? \\
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ALYNC, PAGE
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DISMEM
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FLASHWinfo
G3_MSG WTG
G3 PAGE
HANDOff

SLOT
SLOT2
SLOT





OFF
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\begin{tabular}{|c|c|c|c|c|}
\hline ALPHA: & PSID_RSID: & NAME: & CHARacter & 9-17 \\
\hline ALPHA: & PSID-RSID: & NAME: & CHARacter? & 9 9-3 \\
\hline ALPHA: & PSID-RSID: & number & & 9-37 \\
\hline ALPHA: & PSID_RSID. & NUMBer? & & \(9-3\) \\
\hline ALPHA: & SID & & & \(9-3\) \\
\hline ALPHA: & SID? & & & \(9-3\) \\
\hline ARM & & & & \\
\hline ARM? & & & & 9.34 \\
\hline ATS & & & & 9.3 \\
\hline ATS? & & & & \({ }_{9} 9\) \\
\hline AUTH & & & & \({ }_{9}-35\) \\
\hline AUTH? & & & & \\
\hline AUTHBS & & & & \({ }_{9-3}\) \\
\hline AUTHBS? & & & & \\
\hline BCN & & & & \\
\hline BCN? & & & & 9.33 \\
\hline BSMC & & & & 9 \\
\hline BSMC? & & & & 9.34 \\
\hline BT & & & & \\
\hline BT? & & & & 9-33 \\
\hline BU & & & & 9-33 \\
\hline BU? & & & & \\
\hline BUILD: & ARO & & & 9-337 \\
\hline BUILD: & HARD & & & 9-3 \\
\hline BUILD: & NONARQ & & & 9 \\
\hline CALLED & ADDRess & & & 9 \\
\hline CALLED & ADDRess? & & & 9-35 \\
\hline CALLED & ENCoding & & & 935 \\
\hline CALLED & ENCoding? & & & 9-35 \\
\hline CALLED: & PLANid & & & 9-35 \\
\hline CALLED: & PLANId? & & & 9-355 \\
\hline CALLED & SUBaddress: & ADDRess & & 9-35 \\
\hline CALLED & SUBaddress: & ADDRess? & & 9-35 \\
\hline CALLED & SUBaddress: & LENGth & & 9-35 \\
\hline CALLED: & SUBaddress: & LENGth? & & 9-35 \\
\hline CALLED: & SUBaddress: & ODD_EVEN & & 9-35 \\
\hline CALLED: & SUBaddress: & ODD-EVEN? & & 9-35 \\
\hline CALLED: & SUBaddress: & RESĖved & & 9-35 \\
\hline CALLED: & SUBaddress: & REServed? & & 9-35 \\
\hline CALLED: & SUBaddress: & TYPE, & & 9-35 \\
\hline CALLED: & SUBaddress: & TYPE? & & \(9 \cdot 35\) \\
\hline CALLED: & TYPE & & & 9-35 \\
\hline CALLED: & TYPE? & & & \\
\hline CALLING: & ADDRess & & & 9-35 \\
\hline CALLING: & ADDRess? & & & 9-35 \\
\hline CALLING: & ENCoding & & & 9-357 \\
\hline CALLING: & ENCoding? & & & \(9 \cdot 35\) \\
\hline CALLING: & PLANid & & & \\
\hline CALLING: & PLANId? & & & 9-35 \\
\hline CALLING: & PRESentation: & \({ }_{P 1}\) & & 9-35 \\
\hline CALLING: & PRESentation: & PI? & & 9-35 \\
\hline CALLING: & PRESentation: & \(\mathrm{Sl}_{51}\) & & 9.35 \\
\hline CALLING: & SUBaddress: & ADDRess & & 9-35 9 \\
\hline CALLING: & SUBaddress: & ADDRess? & & 9.35 \\
\hline CALLING: & SUBaddress: & LENGth & & 9-35 \\
\hline CALLING: & SUBaddress: & LENGth? & & 9.35 \\
\hline CALLING: & SUBaddress: & ODD_EVEN & & 9-35 \\
\hline CALLING: & SUBaddress: & ODD \({ }^{-}\)EVEN? & & 9-35 \\
\hline CALLING: & SUBaddress: & REServed & & 9-35 \\
\hline CALLING: & SUBaddress: & REServed? & & 9-35 \\
\hline CALLING: & SUBaddress: & TYPE & & 9-35 \\
\hline CALLING: & SUBaddress: & TYPE? & & 9-35 \\
\hline CALLING: & TYPE & & & 9-35 \\
\hline \begin{tabular}{l}
CALLING: \\
CHAN
\end{tabular} & TYPE? & & & 9-35 \\
\hline CHAN? & & & & 9-34 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline css: & SPACH: & CUSTOM: & CONTrol & & & 9-348 \\
\hline Css: & SPACH: & CUSTOM: & CONTrol? & & & 9.348 \\
\hline CSS: & SPACH: & CUSTOM: & LENGth & & & 9-348 \\
\hline CSS: & SPACH: & CUSTOM: & LENGth? & & & \(9 \cdot 348\) \\
\hline css: & SPACH: & DATA: & ARQ? & & & \(9 \cdot 338\) \\
\hline CSS: & SPACH: & DATA: & HARD? & & & 9.338 \\
\hline CSS: & SPACH: & DATA & NONARQ? & & & 9.338 \\
\hline CSS: & SPACH: & DEBUG & & & & 9.347 \\
\hline CSS: & SPACH: & DEBUG? & & & & 9-347 \\
\hline CSS: & SPACH: & DIRectory: & ADDRess & & & 9-370 \\
\hline CSS: & SPACH: & DIRectory: & ADDRess? & & & 9-370 \\
\hline CSS: & SPACH: & DiRectory: & ENCoding & & & 9-370 \\
\hline CSS: & SPACH: & DiRectory: & ENCoding? & & & \(9-370\) \\
\hline CSS: & SPACH: & DIRectory: & PLANid & & & 9-370 \\
\hline CSS: & SPACH: & DIRectory: & PLANid? & & & 9370 \\
\hline Css: & SPACH: & DiRectory: & SUBaddress: & ADDRess & & 9-371 \\
\hline Css: & SPACH: & DiRectory: & SUBaddress: & ADDRess? & & 9-371 \\
\hline CSS: & SPACH: & DIRectory: & SUBaddress: & LENGth & & 9-371 \\
\hline CSS: & SPACH: & DIRectory: & SUBaddress: & LENGth? & & 9-371 \\
\hline Css: & SPACH: & DIRectory: & SUBaddress: & ODD_EVEN & & 9-371 \\
\hline css: & SPACH: & DIRectory: & SUBaddress: & ODD-EVEN? & & 9-371 \\
\hline css: & SPACH: & DRectory: & SUBaddress: & REServed & & 9-371 \\
\hline Css: & SPACH: & DIRectory: & SUBaddress: & REServed? & & 9-371 \\
\hline CSS: & SPACH: & DIRectory: & SUBaddress: & TYPE & & 9-371 \\
\hline css: & SPACH: & DIRectory: & SUBaddress: & TYPE? & & 9-371 \\
\hline css: & SPACH: & DIRectory: & TYPE & & & 9.370 \\
\hline CsS: & SPACH: & DIRectory: & TYPE? & & & 9-370 \\
\hline CSS: & SPACH: & DISPlay: & CHARacter & & & 9-347 \\
\hline css: & SPACH: & DISPlay: & CHARacter? & & & \(9 \cdot 347\) \\
\hline css: & SPACH: & DISPPay & LENGth & & & 9-347 \\
\hline Css: & SPACH: & DISPlay & LENGth? & & & 9-347 \\
\hline CSS: & SPACH: & DMAC & & & & 9-349 \\
\hline css: & SPACH: & DTX: & SUPport & & & 9-349 \\
\hline CSS: & SPACH: & DTX: & SUPport? & & & 9-346 \\
\hline CSS: & SPACH: & DVCC & & & & 9-348 \\
\hline CsS: & SPACH: & DVCC? & & & & 9.348 \\
\hline CSS: & SPACH: & EHI & & & & 9-342 \\
\hline CSS: & SPACH: & EHI? & & & & 9-342 \\
\hline CSS: & SPACH: & ENABLE & ALPHA: & PSID RSID & & 9-383 \\
\hline css: & SPACH: & ENABLE & ALPHA: & PSID RSID? & & 9.383 \\
\hline css: & SPACH: & ENABLE & ALPHA: & SID. & & 9-383 \\
\hline CSS: & SPACH: & ENABLE & ALPHA: & SID? & & 9-383 \\
\hline css: & SPACH: & ENABLE: & CALLED: & ADDRess & & 9-379 \\
\hline Css: & SPACH: & ENABLE: & CALLED: & SUBaddress & & 9.379 \\
\hline css: & SPACH: & ENABLE & CALLED: & SUBaddress? & & 9-379 \\
\hline Css: & SPACH: & ENABLE & CALLING: & ADDRess & & 9-379 \\
\hline CSS: & SPACH: & ENABLE & CALLING: & ADDRess? & & 9-379 \\
\hline css: & SPACH: & ENABLE: & CALLING: & PRESentation & & \(9 \cdot 380\) \\
\hline CSS: & SPACH: & ENABLE: & CALLING: & PRESentation? & & 9-380 \\
\hline css: & SPACH: & ENABLE: & CALLING: & SUBaddress? & & 9-379 \\
\hline CSS: & SPACH: & ENABLE: & DIRectory: & ADDRess & & 9-383 \\
\hline css: & SPACH: & ENABLE & DiRectory: & ADDRess? & & 9-383 \\
\hline Css: & SPACH: & ENABLE: & Dinectory: & SUBaddress & & 9-383 \\
\hline css: & SPACH: & ENABLE & DISPlay & sUbacdress? & & -9-377 \\
\hline CSS: & SPACH: & ENABLE & DISPlay? & & & 9-377 \\
\hline CSS: & SPACH: & ENABLE: & DTX & & & 9-377 \\
\hline Css: & SPACH: & ENABLE: & DTX? & & & 9-377 \\
\hline Css: & SPACH: & ENABLE: & HYPERband: & INFO & & 9.378 \\
\hline Css: & SPACH: & ENABLE &  & WFO? & & 9.378 \\
\hline CSS: & SPACH: & ENABLE & MACA: & LIST: & OTHER & 9.384 \\
\hline CSS: & SPACH: & ENABLE & MACA: & LIST: & OTHER? & 9-384 \\
\hline CsS: & SPACH: & ENABLE & MACA: & LIST? & & 9-384 \\
\hline CsS: & SPACH: & ENABLE & MESSage: & CENTer: & ADDRess & 9-380 \\
\hline Css: & SPACH: & ENABLE & MESSage & CENTER: & ADDRess? & 9-380 \\
\hline css: & SPACH: & ENABLE & MODE: & MEM & & 9-378 \\
\hline Css: & SPACH: & ENABLE & MODE: & MEM ? & & 9.378 \\
\hline CSS: & SPACH: & ENABLE & MODE: & VOICE? & & 9-378 \\
\hline CsS: & SPACH: & ENABLE: & MSID: & ASSIGNment & & 9-382 \\
\hline CSS: & SPACH: & ENABLE: & MSID: & ASSIGNment? & & 9-382 \\
\hline CSS: & SPACH: & ENABLE: & PFC: & ASSIGNment? & & -9-382 \\
\hline css: & SPACH: & ENABLE & PSID RSID. & AVAILable & & \\
\hline
\end{tabular}

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\begin{tabular}{|c|c|c|c|}
\hline ENABLE & PSID.RSID
QUEUE: & AVAlLable? & \\
\hline ENABLE & QuEue: & POSition & \\
\hline ENABLE: & QUEUE: & Position? & \\
\hline ENABLE: & RCF-AUTH & & \\
\hline ENABLE & RCF AUTH? & & \\
\hline ENABLE & RDATA: & DELAY & \\
\hline ENABLE & RDATA: & DELAY? & \\
\hline ENABLE & REJect: & TIME & \\
\hline ENABLE & REJect & TIME? & \\
\hline ENABLE & RETRY: & CHANnel & \\
\hline ENABLE & RETRY: & CHANnel? & \\
\hline ENABLE & RNUM: & LIST & \\
\hline ENABLE & RNUM: & LIST? & \\
\hline ENABLE & Signal & & \\
\hline ENABLE & SIGnal? & & \\
\hline ENABLE & SUBaddress & & \\
\hline ENABLE & SUBaddress? & & \\
\hline ENABLE & USER: & DEST & ADDRess \\
\hline ENABLE & USER: & DEST & ADDRess? \\
\hline ENABLE & USER: & DEST: & SUBaddress \\
\hline ENABLE & USER: & DEST: & SuBaddress? \\
\hline ENABLE & USER: & GROUP & \\
\hline ENABLE & USER: & GROUP? & \\
\hline ENABLE: & USER: & ORIG: & ADDRess \\
\hline ENABLE: & USER: & ORIG: & ADDRess? \\
\hline ENABLE & USER: & ORIG: & PRESentation \\
\hline ENABLE: & USER: & ORIG: & PRESentation? \\
\hline ENABLE: & USER: & ORIG: & SUBaddress \\
\hline ENABLE: & USER: & ORIG: & SUBaddress? \\
\hline FRNO & & & \\
\hline FRNO? & & & \\
\hline GA & & & \\
\hline GA? & & & \\
\hline IDT & & & \\
\hline IDT? & & & \\
\hline LENGth: & ARQ? & & \\
\hline LENGth: & HARD? & & \\
\hline LENGth: & NONARQ? & & \\
\hline LT & & & \\
\hline LT? & & & \\
\hline MACA & LIST: & CHAN & \\
\hline MACA & LIST: & CHAN? & \\
\hline MACA & LIST: & NUMBer & \\
\hline MACA & LIST: & NUMBer? & \\
\hline MACA & LIST: & OTHER: & CHAN \\
\hline MACA & LIST: & OTHER: & CHAN? \\
\hline MACA & LIST: & OTHER: & HYPERband \\
\hline MACA & LIST & OTHER: & HYPERband? \\
\hline MACA & LIST & OTHER: & NUMBer \\
\hline MACA & LIST: & OTHER: & NUMBer? \\
\hline MEA & & & \\
\hline MEA ? & & & \\
\hline MEK & & & \\
\hline MEK? & & & \\
\hline MEM & & & \\
\hline MEM? & & & \\
\hline MESSage: & CENTer: & ADDRess & \\
\hline MESSage: & CENTer: & ADDRess? & \\
\hline MESSage: & CENTer: & ENCoding & \\
\hline MESSage: & CENTer: & ENCoding? & \\
\hline MESSage: & CENTer: & PLANid & \\
\hline MESSage: & CENTer: & PLANİ? & \\
\hline MESSage: & CENTer: & TYPE & \\
\hline MESSage: & CENTer: & TYPE? & \\
\hline MIN1 & & & \\
\hline MIN1? & & & \\
\hline MIN2 & & & \\
\hline M1N2? & & & \\
\hline Min3 & & & \\
\hline MIN3? & & & \\
\hline MM & & & \\
\hline MM? & & & \\
\hline MODE: & DIC & & \\
\hline MODE & DIC? & & \\
\hline MODE: & HYPERband: & INFO & \\
\hline MODE: & HYPERband: & INFO? & \\
\hline MODE: & MEM: & MEA & \\
\hline MODE & MEM & MEA ? & \\
\hline
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\begin{tabular}{|c|c|}
\hline MODE & MEM : \\
\hline MODE & MEM : \\
\hline MODE & MEM: \\
\hline MODE & MEM: \\
\hline MODE & VOICE \\
\hline MODE & VOICE \\
\hline MODE & VOICE \\
\hline MODE & VOICE \\
\hline MSGtype1: & analog \\
\hline MSGtype1: & AUDIT \\
\hline MSGtype 1: & BSCHALcon \\
\hline MSGtype 1: & BSMC \\
\hline MSGtype1: & CAPability \\
\hline MSGtype1: & DIGital \\
\hline MSGtype 1: & DRETRY \\
\hline MSGtype 1: & MSGWTG \\
\hline MSGtype1: & PAGE \\
\hline MSGtype1: & PU \\
\hline MSGtype1: & QDISC_ACK \\
\hline MSGtype1: & QupDate \\
\hline MSGtype1: & RDATA \\
\hline MSGtype 1: & RDATA_ACCept \\
\hline MSGtype 1: & RDATA REJect \\
\hline MSGtype 1: & REG ACCept \\
\hline MSGtype 1: & REG_REJect \\
\hline MSGtype 1: & RELease \\
\hline MSGtype 1 & REORDer \\
\hline MSGtype1: & SOC \\
\hline MSGtype1: & SPACHnotification \\
\hline MSGtype1: & SSDUP \\
\hline MSGtype1: & TESTreg \\
\hline MSGtype1: & UCHAL \\
\hline MSGtype1: & USERalert \\
\hline MSGtype2: & ANALOG \\
\hline MSGtype2: & AUDIT \\
\hline MSGtype2: & BSCHALcon \\
\hline MSGtype2: & BSMC \\
\hline MSGtype2: & CAPability \\
\hline MSGtypez: & DIGital \\
\hline MSGtype2: & DRETRY \\
\hline MSGtype2: & MSGWTG \\
\hline MSGtype2: & PAGE \\
\hline MSGtype2: & PU \\
\hline MSGtypez: & QDISC_ACK \\
\hline MSGtype2: & QUPDate \\
\hline MSGtype2: & RDATA \\
\hline MSGtype2: & RDATA ACCept \\
\hline MSGtype2: & ROATA REJect \\
\hline MSGtype2: & REG_ACCept \\
\hline MSGtype2: & REG_REJect \\
\hline MSGtype2: & RELease \\
\hline MSGtype2: & REORDer \\
\hline MSGtype2: & SOC \\
\hline MSGtype2: & SPACHnotification \\
\hline MSGtype2: & SSDUP \\
\hline MSGtype2: & TESTreg \\
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\hline MSGtype2: & USERalert \\
\hline MSGtype3: & ANALOG \\
\hline MSGtype3: & AUDIT \\
\hline MSGiype3: & BSCHALcon \\
\hline MSGtype3: & BSMC \\
\hline MSGtype3: & CAPability \\
\hline MSGtype3: & DIGital \\
\hline MSGtype3: & DRETRY \\
\hline MSGGtype3: & MSGWTG \\
\hline MSGtype3: & PAGE \\
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\hline MSGtype3: & QDISC_ACK \\
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\hline MSGtype3: & RDATA \\
\hline MSGtype3: & RDATA_ACCept \\
\hline MSGtype3: & RDATA REJect \\
\hline MSGIype3: & REGACDCept \\
\hline MSGGtype3: & REG_REJect \\
\hline MSGtype3: & RELease \\
\hline MSGtype3: & REORDer \\
\hline MSGtype3: & SOC \\
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& \text { RCF }
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\hline RDATA: & DELAY? \\
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\hline RDATA UNIT: & HLP: \\
\hline RDATA UNIT: & HLP: \\
\hline RDATA UNIT & HLP. \\
\hline RDATA-UNIT & LENGTh \\
\hline RDATA UNIT: & LENGth? \\
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\hline REJect: & RDATA: \\
\hline REJect: & REGistration: \\
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\hline RELease & CAUSE \\
\hline RELease: & CAUSE? \\
\hline REorder: & CAUSE \\
\hline REorder: & CAUSE? \\
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\hline RETRY & HYPERband? \\
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\hline RETRY: & NUMBer? \\
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\hline RN? & \\
\hline RNUM: & LIST \\
\hline RNUM: & LIST? \\
\hline RNUM: & NUMBer \\
\hline RNUM: & NUMBer? \\
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\hline RSVD: & ARO? \\
\hline RSVD: & HEADER \\
\hline RSVD: & HEADER? \\
\hline RTRANSaction & \\
\hline RTRANSaction? & \\
\hline SB & \\
\hline SCC & \\
\hline SCC? & \\
\hline SEND ARCH & \\
\hline SEND HARD & \\
\hline SEND-PCH & \\
\hline SERVice & \\
\hline SERVice? & \\
\hline SIGnal: & CADence \\
\hline SIGnal: & CADence? \\
\hline SIGnal:
SiGnal: & DURation \\
\hline SIGnal: & DURation? \\
\hline SIGnal: & PITCH? \\
\hline SOC & \\
\hline SOC? & \\
\hline SRM & \\
\hline SRM? & \\
\hline SUBaddress: & ADDRess \\
\hline SuBaddress: & ADDRess? \\
\hline SUBaddress: & LENGth \\
\hline SUBaddress & LENGIth? \\
\hline SUBaddress: & ODD_EVEN \\
\hline SUBaddress & ODD EVEN? \\
\hline SUBaddress: & REServed \\
\hline SUBaddress & REServed? \\
\hline SUBaddress: & TYPE \\
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SUBaddress \\
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\end{tabular} & TYPE? \\
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\hline & & FDTC: & FACCH: & CUSTOM: & CONTroi? \\
\hline & & FDTC: & FACCH: & custom: & LENGth? \\
\hline & & MSS: & RDCCH: & CUSTOM: & CONTrol \\
\hline & & MSS: & RDCCH: & CUSTOM: & CONTIol? \\
\hline & & & RDCCH
RDCCH & CUSTom: & LENGth \\
\hline & & & RDCCH: & CUSTOm: & CONTrol? \\
\hline & & & RDCCH: & CUSTOm: & LENGth? \\
\hline & & RDTC & FACCH: & CUSTOM: & CONTtol? \\
\hline & & RDTC: & FACCH: & CUSTOM: & LENGth? \\
\hline & CSS: & EBCCH: & OPTional: & data & \\
\hline & CSS: & EBCCH: & USER: & data & \\
\hline & CSS: & FBCCH. & OPTional: & data & \\
\hline & CSS & FBCCH: & USER: & data & \\
\hline & CSS: & FDCCH: & SUPERframe: & data & \\
\hline css & FDTC & RDATA UNIT: & HLP & data & \\
\hline css & SPACH: & RDATA UNIT: & HLP: & data & \\
\hline MSS & RDCCH: & Enable: & MODE: & data & \\
\hline & MSS: & RDCCH: & MESSage: & data & \\
\hline MSS & RDCCH: & RDATA_UNIT: & & data & \\
\hline & & \[
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& \text { BER: } \\
& \text { BER: }
\end{aligned}
\] & RDTC:
RDTC: & \begin{tabular}{l}
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\end{tabular} & 45MHZ OFFse LOOPBACK \\
\hline & & BER: & RDTC: & DATA: & PSeudo \\
\hline & & BER & RDTC: & DATA: & USER \\
\hline & & css: & SPACH: & data: & ARO? \\
\hline & & CSS & SPACH: & data: & HAFD? \\
\hline & & CSS & SPACH: & data: & NONARQ? \\
\hline & MSS: & RDCCH: & MODE: & DATA: & ACKED \\
\hline & MSS: & RDCCH : & MODE: & DATA: & ACKED? \\
\hline & MSS: & RDCCH: & MODE: & DATA: & \(\stackrel{C R C}{ }\) \\
\hline & MSS: & RDCCH: & MODE: & DATA: & CRC?
PART \\
\hline & MSS: & RDCCH: & MODE: & DATA: & PART
PART \\
\hline & MSS: & RDCCH: & MODE: & DATA: & PM \\
\hline & MSS: & RDCCH: & MODE: & DATA: & PM ? \\
\hline & MSS: & RDCCH: & MODE: & DATA: & RLP \\
\hline & MSS: & RDCCH: & MODE: & DATA: & RLP? \\
\hline & MSS: & RDCCH: & MODE: & DATA: & SAP \\
\hline & MSS: & RDCCH: & MODE: & DATA: & SAP? \\
\hline & & RDCCH: & MODE: & DATA: & ACKED? \\
\hline & & RDCCH:
RDCCH: & MODE: & DATA: & CRC?
PART? \\
\hline & & RDCCH: & MODE: & DATA: & PM? \\
\hline & & RDCCH: & MODE: & DATA: & RLP? \\
\hline & & RDCCH: & MODE: & DATA: & SAP? \\
\hline & RDTC & FACCH: & MODe & DATA: & ACKED? \\
\hline & RDTC & FACCH: & MODe: & DATA: & CRC? \\
\hline & RDTC & FACCH: & MODe: & DATA: & PART? \\
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RDTC & FACCH
FACCH & MODe
MODe & dATA: & PM? \({ }_{\text {RES }}\) \\
\hline & ROTC & FACCH: & MODe: & DATA: & RLP? \\
\hline & ROTC & FACCH: & MODe: & DATA: & SAP? \\
\hline & & & RECC: & DATA: & ACKED? \\
\hline & & & RECC & DATA: & PART? \\
\hline & css & EBCCH: & OPTional: & DATA? & \\
\hline & CSS: & EBCCH: & USER: & DATA? & \\
\hline & & CSS: & FBCCH: & DATA? & \\
\hline & CSS & \(\stackrel{\text { FBCCH }}{ }\) & OPTional: & DATA? & \\
\hline & CSS & \(\underset{\mathrm{FBCCH}}{\mathrm{FDCCH}}\) & USER:
SUPERirame & DATA? & \\
\hline css & FDTC: & RDATA UNIT: & HLP: & DATA? & \\
\hline css: & SPACH: & RDATA UNIT: & HLP: & DATA? & \\
\hline & & FDCCH: & RAW: & DAAA? & \\
\hline FDCCH: & SPACH: & RDATA UNIT: & HLP: & DATA? & \\
\hline FDTC: & FACCH: & RDATA_UNIT: FDTC: & \[
\begin{aligned}
& \mathrm{HLP} \\
& \text { IS54: }
\end{aligned}
\] & \[
\begin{aligned}
& \text { DATA? } \\
& \text { DATA? }
\end{aligned}
\] & \\
\hline & FOCC: & RAW: & A: & data? & \\
\hline & FOCC: & RAW: & B: & DATA? & \\
\hline & & FVC: & RAW: & DATA? & \\
\hline & & MSS & RDCCH: & DATA? & \\
\hline MSS
MSS & ROCCH: & ENABIE & MODE: & DATA? & \\
\hline & & RDCCH: & RAW: & DATA? & \\
\hline & RDCCH: & RDATA UNIT: & HLP: & DATA? & \\
\hline RDTC & FACCH: & RDATA_UNIT: & HLP: & DATA? & \\
\hline EBCCH: & NEIGHbor: & ANAlog: & CELL: & DCC & \\
\hline EBCCH: & NEIGHbor: & ANAlog: & MULti & DCC & \\
\hline
\end{tabular}


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\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & & FOCC & ovcc? & & & & \\
\hline & & FVC: & DVCC? & & & & \\
\hline & MSS & RDCCH: & DVCC? & & & & \\
\hline & MSS & RDTC: & DVCC? & & & & \\
\hline & CSS: & RDCCH:
FOCC: & DVCC? & & & & \\
\hline & css: & FOCC: & E? & & & & \\
\hline & & FOCC: & E? & & & & \\
\hline & & RECC: & E? & & & & \\
\hline CSS: & FBCCH: & Number CSS: & EBCCH & ALT SOC: & MAP: & & \\
\hline & & CSS: & EsCCH: & ALT SOC: & MAP: & PSID_RSID? & \\
\hline & & CSS: & EBCCH: & ALT SOC: & NuMBer & & \\
\hline & & CSS & EBCCH: & ALT-SOC & NUMBer? & & \\
\hline & & CSS & EBCCH: & ALT \({ }^{-5 O C}\) & SOC & & \\
\hline & & CSS: & EBCCH: & ALT \({ }^{-5} \mathrm{SOC}\) : & SOC? & & \\
\hline & & CSS & EBCCH: & AUTO: & PROGRAM & & \\
\hline & & CSS: & EBCCH: & BSMC & & & \\
\hline & & CSS: & EBCCH: & BSMC? & & & \\
\hline & & CSS & EBCCH: & CHAN & & & \\
\hline & & css: & EBCCH: & CHAN? & & & \\
\hline & & CSS & EBCCH: & CHANET: & GROUP: & FIRST & \\
\hline & & CSS: & EBCCH: & CHANnel: & GROUP: & FIRST? & \\
\hline & & CSS: & EBCCH: & CHANnel: & GROUP: & LAST & \\
\hline & & CSS: & EBCCH: & CHANEI: & GROUP: & LAST? & \\
\hline & & CSS: & EBCCH: & CHANnel: & NUMBer & & \\
\hline & & CSS: & EBCCH: & CHANnel: & NUMBer?
CONTrol & & \\
\hline & & CSS: & EBCCH: & CUSTOM: & CONTrol? & & \\
\hline & & CSS: & EBCCH: & CUSTOM: & LENGth & & \\
\hline & & CSS: & EBCCH: & CUSTOM: & LENGTh? & & \\
\hline & & CSS: & EBCCH: & DATA? & & & \\
\hline & & CSS & EBCCH: & ECL? & & & \\
\hline & & CSS & EBCCH: & enable: & ALT SOC LIST & & \\
\hline & & CSS: & EBCCH: & ENABLE: & ALT SOC_LIST? & & \\
\hline & & CSS & EBCCH: & ENABLE: &  & & \\
\hline & & CSS: & EBCCH: & ENABLE: & CHANnel?
HYPERband: & INFO & \\
\hline & & css: & EBCCH: & ENABLE: & HYPERiband: & NFO? & \\
\hline & & CSS & EBCCH: & ENABLE: & MACA & ElGHT: & CONTrol \\
\hline & & CSS & EBCCH: & ENABLE: & MACA: & EIGHT: & CONTrol? \\
\hline & & CSS: & EBCCH: & ENABLE: & MACA: & LIST & OTHER \\
\hline & & CSS & EBCCH: & ENABLE: & MACA: & LIST: & OTHER? \\
\hline & & CSS: & EBCCH: & ENABLE: & MACA: & LIST? & \\
\hline & & CSS: & EBCCH: & ENABLE: & MCC
MCC & & \\
\hline & & CSS: & EBCCH: & ENABLE: & NEIGHbor: & ANALOG & \\
\hline & & CSS: & EBCCH: & ENABLE & NEIGHbor: & ANALOG? & \\
\hline & & CSS: & EBCCH: & ENABIE: & NEIGHbor:
NEIGHbor: & MULti: & ANALOG
ANALOG? \\
\hline & & CSS: & EBCCH: & ENABLE: & NEFGHDOOT: & mutii & OTHER \\
\hline & & css: & EBCCH: & ENABLE: & NEIGHbor: & MULti: & OTHER? \\
\hline & & CSS: & EBCCH: & ENABLE: & NEIGHbor: & MULit & TDMA \\
\hline & & CSS & EBCCH: & ENABLE: & NEEGHbor: & OTHER: & INFO \\
\hline & & CSS: & EBCCH: & ENABLE: & NEIGHbor: & OTHER: & INFO? \\
\hline & & CSS: & EBCCH: & ENABLE & NEIGHbor: & TDMA & \\
\hline & & CSS & EBCCH: & ENABLLE & NEIGHbor: & TDMA: & INFO? \\
\hline & & CSS & EBCCH: & ENABLE: & NEIGHbor: & TDMA? & \\
\hline & & CSS: & EBCCH: & ENABLE: & NONPublic & & \\
\hline & & CSS: & EBCCH: & ENABLE: & SIGnal & & \\
\hline & & CSS: & EBCCH: & ENABLE: & SIGnal? & & \\
\hline & & CSS: & EBCCH: & HYPERband: & INFO & & \\
\hline & & CSS: & EBCCH: & HYPERband: & INFO? & & \\
\hline & & CSS: & EBCCH: & IRA? & & & \\
\hline & & CSS: & EBCCH: & LENGth? & & & \\
\hline & & CSS: & EBCCH: & MACA & EIGHT: & CONTrol & \\
\hline & & CSS: & EBCCH: & MACA: & EIGHT: & CONTrol? & \\
\hline & & CSS: & EBCCH: & MACA: & LIST: & CHAN? & \\
\hline & & CSS: & EBCCH: & MACA & LIST: & NUMBer & \\
\hline & & CSS: & EBCCH: & MACA: & LIST & NUMBer? & \\
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\begin{tabular}{|c|c|c|}
\hline LIST: & OTHER: & CHAN
CHAN? \\
\hline LIST & OTHER: & HYPER \\
\hline LIST: & Other: & HYPER \\
\hline LIST: & OTHEA: & Number \\
\hline LIST: & OTHER: & Number \\
\hline STATUS & & \\
\hline STATus? & & \\
\hline TYPE & & \\
\hline TYPE? & & \\
\hline ARO & & \\
\hline ARO? & & \\
\hline CODER & & \\
\hline CODER? & & \\
\hline DPM & & \\
\hline DPM? & & \\
\hline MEA: & AlGORithms & \\
\hline MEA: & ALGORithms? & \\
\hline MEA: & DOMAIN & \\
\hline MEA: & DOMAIN? & \\
\hline MEK & & \\
\hline MEK? & & \\
\hline MENU & & \\
\hline MENU? & & \\
\hline SMS & & \\
\hline SMS? & & \\
\hline USER & & \\
\hline USER? & & \\
\hline VPM & & \\
\hline VPM? & & \\
\hline ALTrci & & \\
\hline ALTrci? & & \\
\hline BSMC & & \\
\hline BSMC? & & \\
\hline EMERGency & & \\
\hline EMERGency? & & \\
\hline MACA & & \\
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\hline MACA MULti & & \\
\hline MACA-MULti? & & \\
\hline NEIGHBor: & CELL & \\
\hline NEIGHbor: & CELL: & MULti \\
\hline NEIGHbor: & CELL: & MULti? \\
\hline NEIGHbor: & CELL? & \\
\hline NEIGHbor: & SERVice & \\
\hline NEIGHbor: & SERVice: & MULtio \\
\hline NEIGHbor: & SERVice: & MULti? \\
\hline NEIGHbor: & SERVice? & \\
\hline \(\stackrel{\text { RCI? }}{ }\) & & \\
\hline SERVice & & \\
\hline SERVice? & & \\
\hline SOC & & \\
\hline SOC? \({ }^{\text {SSMMC }}\) & & \\
\hline SOC-BSMC? & & \\
\hline TIME & & \\
\hline TIME? & & \\
\hline SERV SS & & \\
\hline SERV_SS? & & \\
\hline ANAlog: & CELL & ACCess
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\hline ANAlog: & CELL & ACCess \\
\hline ANAlog: & CELL & Access \\
\hline ANAlog: & CELL: & CHAN \\
\hline ANAlog: & CELL & CHAN? \\
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\hline NEIGHDOT: & OTHER \\
\hline NEIGHbor: & OTHE \\
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\end{tabular}


CELL
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NETwo
NETwork
NETwork?
LETwork?
MS_PWR
MS PWR?
RSS MIN
RSS \({ }^{\text {MIN }}\)

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最 NEIGHbor：
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\begin{tabular}{|c|c|c|c|}
\hline NPublic &  & & \\
\hline NONPublic: OATS & LENGTh? & & \\
\hline OATS? & & & \\
\hline OPTional: & DATA & & \\
\hline OPTional: & DATA? & & \\
\hline OPTional: & LENGth & & \\
\hline OPTional: & LENGth? & & \\
\hline OPTional: & MSGtype & & \\
\hline OPTional: & MSGlype? & & \\
\hline PD & & & \\
\hline PD? & & & \\
\hline PROGram & & & \\
\hline RCl & & & \\
\hline RCl? & & & \\
\hline SERV_SS & & & \\
\hline SERV-SS? & & & \\
\hline SID & & & \\
\hline SID? & & & \\
\hline S|Gnal: & CADence & & \\
\hline StGnal: & CADence? & & \\
\hline SIGnal: & DURation & & \\
\hline Signal: & DURation? & & \\
\hline SIGnal: & PITCH & & \\
\hline SIGnal SOC & PITCH? & & \\
\hline SOC? & & & \\
\hline TEXT & CHARacter & & \\
\hline TEXT: & CHARacter? & & \\
\hline TEXT & ENCoding & & \\
\hline TEXT & ENCoding? & & \\
\hline TEXT & LENGTh & & \\
\hline TEXT & LENGth? & & \\
\hline TEXT & REServed & & \\
\hline TEXT & REServed? & & \\
\hline TIME & & & \\
\hline TIME? & & & \\
\hline USER & DATA & & \\
\hline USER: & LENGth & & \\
\hline USER: & LENGth? & & \\
\hline USER: & MSGtype & & \\
\hline USER: & MSGtype? & & \\
\hline USER & PD & & \\
\hline USER & PD? & & \\
\hline ZONE & DIRection & & \\
\hline ZONE & DIRection? & & \\
\hline ZONE & DST? & & \\
\hline ZONE & MiNutes & & \\
\hline ZONE & Minutes? & & \\
\hline ALT_SOC: & MAP: & PSID_RSID? & \\
\hline ALT SOC: & NUMBer? & & \\
\hline \[
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& \mathrm{ALT} \\
& \mathrm{BC} \text { ? }
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\] & SOC? & & \\
\hline BI? & & & \\
\hline BSMC? & & & \\
\hline CHAN? & & & \\
\hline CHANEI: & GROUP: & FIRST? & \\
\hline CHANBel: & GROUP: & LAST? & \\
\hline CHANnel: & \begin{tabular}{l}
NUMBer? \\
PT?
\end{tabular} & & \\
\hline CLI? & & & \\
\hline CUSTOM: & CONTrol? & & \\
\hline CUSTOM: & LENGth? & & \\
\hline HYPERband: & & & \\
\hline HYPERband: & & & \\
\hline IRA? & & & \\
\hline L3L1? & & & \\
\hline MACA: & EIGHT: & CONTrol? & \\
\hline MACA & EIGHT: & PT? & \\
\hline MACA: & LIST: & CHAN? & \\
\hline MACA: & LIST: & NUMBer? & \\
\hline MACA: & LIST: & OTHER: & CHAN? \\
\hline MACA: & LIST: & OTHER: & HYPERband?
NuMBer? \\
\hline MACA: & LIST: & OTHER: & PT? \\
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\begin{tabular}{|c|c|}
\hline MACA & \(1.15 T\) \\
\hline MACA: & STATus? \\
\hline MAP: & ARQ? \\
\hline MAP: & CODER? \\
\hline MAP: & DPM? \\
\hline MAP: & MEA \\
\hline MAP: & MEA: \\
\hline MAP: & MEK? \\
\hline MAP: & MENU? \\
\hline MAP: & SMS? \\
\hline MAP: & USER? \\
\hline MAP: & VPM? \\
\hline MCC & CODE? \\
\hline MCC & PT? \\
\hline MSGitype? & \\
\hline MULti: & SERV SS \\
\hline NEIGHbor: & ANAlog: \\
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\hline NE|GHbor: & OTHER: \\
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NEIGHbor: & TDMA: \\
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PT?
TYPE?
ARQ?
CODER?
DPM?
MEA:
MEA:
MEK?
MENU?
SMS?
USER?
VPM?
CODE?
PT? ALGORithms?
DOMAIN?
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12-54
\begin{tabular}{|c|c|c|}
\hline css: & \({ }_{\text {FDCCH: }}\) & LAYER2 \\
\hline FOCCH: & FECCH: & NUMber \\
\hline & CSS: & \({ }^{\mathrm{FBCOH}}\) \\
\hline & FDCCH: & \({ }_{\text {fech }}\) \\
\hline FDCCH & LAYER2: & FBCCH \\
\hline & CSS: & EBCCH \\
\hline & \({ }_{\text {CDSCH }}\) & EBCCH \\
\hline FDCCH: & LAYER2: & EBCCH \\
\hline
\end{tabular}


\begin{tabular}{|c|c|c|}
\hline CELL: & PSID_RSID: & LENGTh? \\
\hline CELL: & PSID-RSID: & SUPport? \\
\hline CELL: & RETRY? & \\
\hline CELL: & SS_SUFF? & \\
\hline CELL: & SYN̄C? & \\
\hline CELL: & TYPE: & CELL? \\
\hline CELL: & TYPE & NETwork? \\
\hline INFO: & count? & \\
\hline INFO: & PT? & \\
\hline INFO: & SERVice: & INDicator? \\
\hline INFO: & SERVice: & MAP? \\
\hline MULti: & ACCess: & MS PWR? \\
\hline MULti: & AcCess: & RSŞ_MIN? \\
\hline MULti: & CHAN? & \\
\hline Multi: & DELay? & \\
\hline MULti: & DVCC? & \\
\hline MULti: & HL FREQ? & \\
\hline MULti: & NuMBEr? & \\
\hline MULti: & OFFset? & \\
\hline MULti: & PROTOCOI? & \\
\hline MULti: & PSID_RSID. & INDicator? \\
\hline MULti: & PSID_RSID: & LENGth? \\
\hline Muliti & PSID RSID: & SUPport? \\
\hline MULti: & PT? & \\
\hline MULti: & RETRY? & \\
\hline MULti: & SS SUFF? & \\
\hline MULti & SYÑC? & \\
\hline MULTi & TYPE & CELL \\
\hline MULti: & TYPE & NETwork? \\
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\end{tabular}


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\begin{tabular}{|c|c|c|}
\hline USER: & GROUP & \\
\hline USER: & GROUP? & \\
\hline USER: & ORIG: & ADDRess \\
\hline USER: & ORIG: & ADDRess? \\
\hline USER: & ORIG: & PRESentation \\
\hline USER: & ORIG: & PRESentation? \\
\hline USER: & ORIG: & SUBaddress \\
\hline USER: & ORIG: & SUBaddress? \\
\hline BANOWidth & & \\
\hline BANDWidth? & & \\
\hline CALLED & SUBaddress & \\
\hline CALLED & SUBaddress? & \\
\hline CALLING: & ADDRess & \\
\hline CALLING: & ADDRess? & \\
\hline CALLING: & PRESentation & \\
\hline CALLING: & PRESentation? & \\
\hline CAILING: & SUBaddress & \\
\hline CALLING: & SUBaddress? & \\
\hline CNUMber & & \\
\hline cnumber? & & \\
\hline DCCH: & MEM & \\
\hline DCCH: & MEM? & \\
\hline DISPlay & & \\
\hline DISPlay? & & \\
\hline MEASurement: & LTM & \\
\hline MEASurement: & LTM ? & \\
\hline MEASurement: & OTHER: & STM \\
\hline MEASurement: & OTHER: & STM? \\
\hline MEASurement: & STM & \\
\hline MEASurement: & STM? & \\
\hline MEM & & \\
\hline MEM? & & \\
\hline MESSage: & CENTer: & \\
\hline MESSage: & CENTer: & ADDRess? \\
\hline MODE: & DATA & \\
\hline MODE & DATA? & \\
\hline MODE & voice & \\
\hline MODE: & Volce? & \\
\hline PFC. & REQuest & \\
\hline PFC: & REQuest? & \\
\hline PSIO RSID: & SELect & \\
\hline PSID \({ }^{-R S I D}\) & SELect? & \\
\hline RDATA: & DELay & \\
\hline RDATA: & DELay? & \\
\hline SID_REPort & & \\
\hline SID REPort? & & \\
\hline SUEaddress & & \\
\hline SUBaddress? & & \\
\hline SUPPort: & Alt SOC & \\
\hline SUPPort: & Alt SOC? & \\
\hline USER: & DEST: & ADDRess \\
\hline USER: & DEST & ADDRess? \\
\hline USER: & DEST & SUBaddress \\
\hline USER: & GROUP & \\
\hline USER: & GROUP? & \\
\hline USER: & ORIG: & ADDRess \\
\hline USER: & ORIG: & ADDRess? \\
\hline USER: & ORIG: & PRES: \\
\hline USER: & ORIG: & PRES: \\
\hline USER: & ORIG: & subaddress? \\
\hline
\end{tabular}
믄므
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow{26}{*}{MSS:} & MSS & RDCCH: & CNUMber: & ADDRess: & ENCoding & & & \\
\hline & MSS & RDCCH & DEST: & ADDRess & ENCoding & & & 9-434 \\
\hline & RDCCH: & MESSage: & CENTer & ADDRess: & ENCoding & & & 9-427 \\
\hline & & RDCCH: & ORIG: & ADDRess: & ENCoding & & & 9 9-431 \\
\hline & CSS: & CSS:
FDTC & EBCCH:
MESSage & TEXT: & ENCoding? & & & 9-315 \\
\hline & CSS & FDTC & USER: & DEST: & ENCoding? & & & 9-218
9.226 \\
\hline & css & FDTC & USER: & ORIG: & ENCoding? & & & 9-226 \\
\hline & & css: & SPACH: & CALLED: & ENCoding? & & & 9.228 \\
\hline & & CSS & SPACH: & CALLING: & ENCoding? & & & - \({ }_{9} 9.357\) \\
\hline & & CSS: & SPACH: & DiRectory & ENCoding? & & & 9.370 \\
\hline & CSS & SPACH: & MESSage: & CENTer: & ENCoding? & & & \\
\hline & CSS: & SPACH: & USER: & DEST: & ENCoding? & & & \({ }_{9} 9362\) \\
\hline & & SPACH: & USER: & ORIG: & ENCoding? & & & 9 9-365 \\
\hline & & FDCCH: & EBCCH: & TEXT: & ENCoding? & & & 9-115 \\
\hline & & FDCCH: & SPACH: & CALLED: & ENCoding? & & & 9-132 \\
\hline & & FDCCH: & SPACH: & CALLING: & ENCoding? & & & 9-134 \\
\hline & & FDCCH: & SPACH: & DIRectory: & ENCoding? & & & 9-145 \\
\hline & FDCCH: & SPACH: & MESSage: & CENTer: & ENCoding? & & & 9-137 \\
\hline & FDCCH: & SPACH: & USER: & DEST: & ENCoding? & & & 9-138 \\
\hline & FDCCH: & SPACH: & USER: & ORIG: & ENCoding? & & & 9.141 \\
\hline & FDTC & FACCH: & MESSage: & CENTer: & ENCoding? & & & \\
\hline & FDTC. & FACCH: & USER: & DEST: & ENCoding? & & & \(9-38\) \\
\hline & FDTC: & FACCH: & USER: & ORIG: & ENCoding? & & & 9-39 \\
\hline & MSS & RDCCH: & CALLED: & ADDRess: & ENCoding? & & & 9-422 \\
\hline & MSS & RDCCH: & CALLING: & ADDRess: & ENCoding? & & & \(9-424\) \\
\hline & MSS
MSS & ROCCH:
RDCCH: & CNUMber: & ADDRess: & ENCoding? & & & 9.434 \\
\hline \multirow[t]{40}{*}{MSS} & RDCCH: & RUCSS \({ }^{\text {Mage. }}\) & CENTER: & ADDRess: & ENCoding? & & & \(9-429\) \\
\hline & MSS & ROCCH: & ORIG: & ADDRess: & ENCoding? & & & 9-427 \\
\hline & & & RDCCH: & CALLED: & ENCoding? & & & 9.431 \\
\hline & & & RDCCH: & CALLING: & ENCoding? & & & 9-167 \\
\hline & & & RDCCH: & CNUMBer: & ENCoding? & & & 9-174 \\
\hline & & & MESSage: & CENTer: & ENCoding? & & & \(9-170\) \\
\hline & & RDCCH: & USER: & DEST: & ENCoding? & & & 9-171 \\
\hline & RDTC & FACCH: & MESSage: & CENTer: & ENCoding? & & & 9-172 \\
\hline & RDTC & FACCH: & USER \({ }^{\text {a }}\) & DEST: & ENCoding? & & & \({ }_{9}^{9-58}\) \\
\hline & RDTC & FACCH: & USER. & ORIG: & ENCoding? & & & - \({ }^{9} 964\) \\
\hline & MSS & RDCCH: & LAYER2: & RSVD & END & & & 9.402 \\
\hline & MSS & RDCCH: & LAYER2: & RSVD: & END? & & & \({ }_{9-402}^{9-12}\) \\
\hline & & & RDCCH: & RSVD: & END? & & & \({ }^{9}-160\) \\
\hline & & RUCCH: & LAYER2: & RACH: & END RSVV? & & & 9-155 \\
\hline & & & MMEMory: & CATalog: & ENTĒY? & & & 9-451 \\
\hline & & & CSS: & FOCC: & EP? & & & 9.181 \\
\hline & & & & FOCC & EP? & & & \({ }_{9} 9.12\) \\
\hline & & & & RECC & ER? & & & \(9-46\) \\
\hline & & & BER & RDTC: & ERRORS? & & & \({ }_{9-448}\) \\
\hline & css & FDTC: & ENABIE & STATUS: & ESN & & & 9.212 \\
\hline & cSS & FDTC: & MSS: & RDCCH:
STATUS: & ESN & & & 9-436 \\
\hline & & & MSS: & RDCCH: & ESN? & & & \(9 \cdot 212\) \\
\hline & & & & RDCCH: & ESN? & & & 9-175 \\
\hline & & & RDTC: & FACCH: & ESN? & & & 9.56 \\
\hline & & & & RECC:
RVC: & ESN? & & & 9.46 \\
\hline & & & MODacc & FDTC: & EVM? & & & 9-449 \\
\hline & & css: & FBCCH: & ENABLE: & EXTENDED & & & 9-275 \\
\hline & & & CSS: & FBCCH: & EXTended & & & 9-256 \\
\hline & & & FDCCH: & FBCCH: & EXTended: & PT? & & 9-81 \\
\hline & & CSS: & FBCCH:
CSS: & \begin{tabular}{l}
ENABLE \\
FBCCH:
\end{tabular} & EXTENDED? & & & 9-275 \\
\hline & & FDTC: & RAW: & SELect: & FACCH & & & 9-42 \\
\hline & & & CSS: & FDTC: & FACCH: & \({ }^{\text {ALERT }}\) & & 9-199 \\
\hline & & & CSS & FDTC & FACCH: & BSACK & & 9-199 \\
\hline & & & CSS: & FDTC & FACCH: & BSCHALCON & & 9-199
g-199 \\
\hline & & & CSS: & FDTC, & FACCH: & BSMC & & 9-199 \\
\hline & & & CSs: & FDTC & FACCH: & CAPability: & REQuest & 9-200 \\
\hline & & & CSS: & FDTC & FACCH: & DEDicated: & HANDoif & 9-200 \\
\hline & & & CSS: & FDTC & FACCH: & FLASH & & 9-200 \\
\hline & & & CSS: & FDTC: & FACCH: & FLASHACK & & 9-200 \\
\hline & & & CSS: & FDTC: & FACCH: & HANDati & & 9-200 \\
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\hline FACCH: FACCH: & HYPERBand: & MEASure & \\
\hline FACCH: & MAINTenance & & \\
\hline FACCH: & MEASure & & \\
\hline FACCH: & PLC & & \\
\hline FACCH: & PU & & \\
\hline FACCH: & RAW & & \\
\hline FACCH: & RDATA: & ACCept & \\
\hline FACCH: & RDATA: & MESSage & \\
\hline FACCH: & RDATA: & REJect & \\
\hline FACCH: & REAUTHentication & & \\
\hline FACCH: & RELease & & \\
\hline FACCH: & SBDA & & \\
\hline FACCH: & SCDA & & \\
\hline FACCH: & SERVice: & RESPonse & \\
\hline FACCH: & SMEASure & & \\
\hline FACCH: & SOC & & \\
\hline FACCH: & SR & & \\
\hline FACCH: & SSDUP & & \\
\hline FACCH: & UCHAL & & \\
\hline FACCH: & AMT? & & \\
\hline FACCH: & ATS? & & \\
\hline FACCH: & AUTHBS? & & \\
\hline FACCH: & BSMC? & & \\
\hline FACCH: & CALLING: & NAMe: & \\
\hline FACCH: & CALLING: & NAMe: & REServed? \\
\hline FACCH: & CALLING: & NAME: & \\
\hline FACCH: & CALLING: & NAMe? & \\
\hline FACCH: & CALLING: & NUM? & \\
\hline FACCH: & CALLING: & NUM1? & \\
\hline FACCH: & CALLING: & NUM2? & \\
\hline FACCH: & CALLING: & PI? & \\
\hline FACCH: & CALLING: & PLANid? & \\
\hline FACCH: & CALLING: & REServed? & \\
\hline FACCH: & CALLING: & SI? & \\
\hline FACCH: & CALLING: & SPare? & \\
\hline FACCH: & CALLING: & TYpe? & \\
\hline FACCH: & CHANGE: & BSMC? & \\
\hline FACCH: & CHANGE: & SOC? & \\
\hline FACCH: & CNPC? & & \\
\hline FACCH: & CUSTOM: & CONTrol? & \\
\hline FACCH: & CUSTOM: & LENGIt? & \\
\hline FACCH: & DCCHinto: & CHANnel? & \\
\hline FACCH: & DCCHinfo: & DVCC? & \\
\hline FACCH: & DCCHinto: & HYPERband? & \\
\hline FACCH: & DELTA: & TIME? & \\
\hline FACCH: & DIC? & & \\
\hline FACCH: & DlGits?
DMAC? & & \\
\hline FACCH: & DPM? & & \\
\hline FACCH: & DTX? & & \\
\hline FACCH: & DTXControl? & & \\
\hline FACCH: & HDVCC? & & \\
\hline FACCH: & HYPERband: & BAND? & \\
\hline FACCH: & HYPERband: & CHANnel? & \\
\hline FACCH: & HYPERband: & NUMBer? & \\
\hline FACCH: & HYPERband: & TARGet? & \\
\hline FACCH: & LDP? & & \\
\hline FACCH: & MAP: & ARQ? & \\
\hline FACCH: & MAP: & CODER? & \\
\hline FACCH: & MAP & MEA: & ALGORithms? \\
\hline FACCH: & MAP: & MEA: & DOMAIN? \\
\hline FACCH: & MAP: & MEK?
SMS & \\
\hline FACCH: & MAP: & SMS?
VPM? & \\
\hline FACCH: & MEM ? & & \\
\hline FACCH: & MEMA? & & \\
\hline FACCH: & MEMB? & & \\
\hline FACCH: & MEMC: & MEA? & \\
\hline FACCH: & MEMC: & MED? & \\
\hline FACCH: & MEMC: & MEK? & \\
\hline FACCH: & MESSage: & CENTer: & ADDRess? \\
\hline FACCH: & MESSage: & CENTer: & ENCoding? \\
\hline FACCH: & MESSage: & CENTer: & LENGIh? \\
\hline FACCH: & MESSage: & CENTer: & TYPE? \\
\hline FACCH: & MSGtype? & & \\
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\end{tabular}



\begin{tabular}{|c|c|c|c|}
\hline USER & ORIG: & PRESentation: & PI? \\
\hline USER & ORIG: & PRESentation: & REServed? \\
\hline USER: & ORIG: & PRESentation: & SI? \\
\hline USER: & ORIG: & SUBaddress: & ADDRess? \\
\hline USER: & ORIG & SUBaddress & LENGith? \\
\hline USER: & ORIG: & SUBaddress: & ODD_EVEN? \\
\hline USER: & ORIG: & SUBaddress: & REServed? \\
\hline USER: & ORIG: & SUBaddress: & TYPE? \\
\hline USER: & ORIG: & TYPE? & \\
\hline VPM? & & & \\
\hline SLOT1 & & & \\
\hline SLOT1_2 & & & \\
\hline SLOT1-2_3 & & & \\
\hline SLOT1-3 & & & \\
\hline SLOT2 & & & \\
\hline SLOT2_3 & & & \\
\hline SLOT3 \({ }^{3}\) & & & \\
\hline AcCess: & BURSTsize & & \\
\hline ACCess: & BURSTsize? & & \\
\hline ACCess: & MS_PWR & & \\
\hline ACCess: & MS \({ }^{-}\)PWR? & & \\
\hline ACCess: & RSS_MIN & & \\
\hline ACCess: & RSS \({ }^{-M I N \text { ? }}\) & & \\
\hline ADDitional: & DCCH : & CHANnet & \\
\hline ADDitional: & DCCH: & CHANnel? & \\
\hline ADDitional: & DCCH : & SLOT & \\
\hline ADDitional: & DCCH: & SLOT? & \\
\hline ADDitiona: & NuMBer & & \\
\hline ADDitional: & NuMBer? & & \\
\hline ALPHA: & SID & & \\
\hline ALPHA: & SID? & & \\
\hline ALT SOC: & MAP & PSID RSID & \\
\hline ALT SOC: & MAP: & PSID_RSID? & \\
\hline ALT-SOC: & NUMBer & & \\
\hline ALTSOC: & NuMBer? & & \\
\hline ALT SOC: & SOC & & \\
\hline ALT SOC:
AUTH & SOC? & & \\
\hline \[
\begin{aligned}
& \text { AUTH } \\
& \text { AUTH? }
\end{aligned}
\] & & & \\
\hline BARred & & & \\
\hline BARred? & & & \\
\hline BSMC & & & \\
\hline BSMC? & & & \\
\hline BUILD & & & \\
\hline CAPability & & & \\
\hline CAPability? & & & \\
\hline CBN: & HIGH
HiGH? & & \\
\hline \begin{tabular}{l}
CBN: \\
CONfiguration
\end{tabular} & HIGH? & & \\
\hline CONfiguration? & & & \\
\hline COUNTRY: & CODE & & \\
\hline COUNTRY: & CODE? & & \\
\hline CUSTOM: & CONTrol & & \\
\hline CUSTOM: & CONTrol? & & \\
\hline CUSTOM: & LENG的, & & \\
\hline CUSTOM: & LENGth? & & \\
\hline DELay & & & \\
\hline DELay? & & & \\
\hline DEREG & & & \\
\hline DEFEG? & & & \\
\hline DIC & & & \\
\hline DIC? & & & \\
\hline DVCC & & & \\
\hline DVCC? & & & \\
\hline EC & & & \\
\hline EC? & & & \\
\hline ENABLE: & ADDitional: & OCCH & \\
\hline ENABLE & ADDitional: & DCCH ? & \\
\hline ENABLE: & ALPHA: & & \\
\hline ENABLE & ALPHA & SID? & \\
\hline ENABLE & ALT SOC LIST, & & \\
\hline ENABLE & CBT SOC_LIST? & & \\
\hline ENABLE & CBN: & HIGH? & \\
\hline ENABLE & COUNTRY: & CODE & \\
\hline ENABLE & COUNTRY & CODE? & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline ENABLE & EXTENDED & & \\
\hline ENABLE & EXTENDED? & & \\
\hline ENABLE: & MACA & EIGHT & CONTrol \\
\hline ENABLE: & MACA & EIGHT: & CONTrol? \\
\hline ENABLE & MACA: & LIST & \\
\hline ENABLE & MACA: & LIST & OTHER \\
\hline ENABLE & MACA: & LIST: & OTHER? \\
\hline ENABLE & MACA: & LIST? & \\
\hline ENABIE & MAP: & AUTH & \\
\hline ENABLE: & MAP: & AUTH? & \\
\hline ENABLE: & MAP: & REG INFO & \\
\hline ENABLE: & MAP: & REG INFO? & \\
\hline ENABLE: & NONPublic: & PROBability & \\
\hline ENABLE: & NONPublic: & PROBability? & \\
\hline ENABLE & NONPublic: & REGistration & \\
\hline ENABLE: & NONPublic: & REGistration? & \\
\hline ENABLE & PSID_RSID & & \\
\hline ENABLE: & PSID RSID? & & \\
\hline ENABLE & REGID & & \\
\hline ENABLE: & REGID? & & \\
\hline ENABLE: & REGPER & & \\
\hline ENABLE: & REGPER? & & \\
\hline ENABLE: & RNUM & & \\
\hline ENABLE & RNUM? & & \\
\hline EXTended & & & \\
\hline EXTended? & & & \\
\hline FC, & & & \\
\hline FC? & & & \\
\hline FOREG & & & \\
\hline FOREG? & & & \\
\hline HYPERirame & & & \\
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\hline INITial & & & \\
\hline INITial? & & & \\
\hline IRA & & & \\
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\hline LAREG & & & \\
\hline LAREG? & & & \\
\hline LENGTh? MACA & EIGHT: & CONTrol & \\
\hline MACA: & EIGHT: & CONTrol? & \\
\hline MACA & LIST: & CHAN & \\
\hline MACA: & LIST: & CHAN? & \\
\hline MACA: & LIST: & NUMBer & \\
\hline MACA & LIST: & NUMBer? & \\
\hline MACA & LIST: & OTHER: & CHAN \\
\hline MACA & LIST: & OTHER: & CHAN? \\
\hline MACA & LIST: & OTHER: & HYPERband \\
\hline MACA: & LIST: & OTHER: & HYPERband? NUMBer \\
\hline MACA & LIST: & OTHER: & NUMBer? \\
\hline MACA & Status & & \\
\hline MACA: & STATus? & & \\
\hline MACA: & TYPE & & \\
\hline MAP: & ARQ & & \\
\hline MAP: & ARO? & & \\
\hline MAP & AUTH, & & \\
\hline MAP: & AUTH? & & \\
\hline MAP: & CODER & & \\
\hline MAP: & CODER & & \\
\hline MAP: & DPM? & & \\
\hline MAP: & MEA: & ALGORithms & \\
\hline MAP: & MEA: & ALGORithms? & \\
\hline MAP: & MEA: & DOMAIN & \\
\hline MAP: & MEA: & DOMAIN? & \\
\hline MAP: & MEK
MEK? & & \\
\hline MAP: & MENU & & \\
\hline MAP: & MENU? & & \\
\hline MAP: & REG_NFO? & & \\
\hline MAP: & SMS & & \\
\hline MAP: & SMS? & & \\
\hline MAP: & USER & & \\
\hline MAP: & VPM & & \\
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\end{tabular}

\begin{tabular}{|c|c|c|c|c|}
\hline css: & FBCCH: & PSID RSID: & TYPE & \\
\hline CSS: & FBCCH: & PSID RSID: & TYPE? & \\
\hline CSS & FBCCH: & PSID RSID: & VALUE & \\
\hline CSS & FBCCH: & PSID \({ }^{-1}\) SID: & VALUE? & \\
\hline CSS & FBCCH: & PUREG & & \\
\hline CSS: & FBCCH: & PUREG? & & \\
\hline CSS: & FBCCH: & RAND & & \\
\hline CSS: & FBCCH: & RAND? & & \\
\hline CSS: & FBCCH: & RDATA: & LENGth & \\
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\hline CSS: & FBCCH: & REGH & & \\
\hline CSS: & FBCCH: & REGH? & & \\
\hline CSS: & FBCCH: & REGID: & ID & \\
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\hline CSS: & FBCCH: & REGID: & PER? & \\
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\hline CSS: & FBCCH: & REGPER? & & \\
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\hline CSS: & FBCCH: & REGR? & & \\
\hline CSS: & FBCCH: & RNUM & & \\
\hline CSS: & FBCCH: & RNUM? & & \\
\hline CSS: & FBCCH: & S & & \\
\hline CSS: & FBCCH: & S? & & \\
\hline CSS: & FBCCH: & SCAN: & INTerval & \\
\hline CSS: & FBCCH: & SCAN: & INTerval? & \\
\hline CSS: & FBCCH: & SCAN: & OPTION & \\
\hline CSS: & FBCCH: & SCAN: & OPTION? & \\
\hline CSS: & FBCCH: & SID & & \\
\hline CSS: & FBCCH: & SID? & & \\
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\hline CSS: & FBCCH: & SOC? & & \\
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& \text { SS_SUFF? }
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\hline css: & FBCCH: & SUBaddressing & & \\
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\hline css: & FBCCH: & SUPERIframe & & \\
\hline CSS: & FBCCH: & SUPERtrame? & & \\
\hline CSS: & FBCCH: & SYREG & & \\
\hline CSS: & FBCCH: & SYREG? & & \\
\hline CSS: & FBCCH: & USER: & DATA & \\
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\hline CSS: & FBCCH: & USER: & LENGith? & \\
\hline CSS: & FBCCH: & USER: & MSGtype & \\
\hline CSS: & FBCCH: & USER: & MSGtype? & \\
\hline CSS: & FBCCH: & USER: & PD & \\
\hline CSS: & FBCCH: & USER: & PD? & \\
\hline rDCCH: & FBCCH: & ACCess: & BURSTsize? & \\
\hline FDCCH: & FBCCH: & ACCess: & MS PWR? & \\
\hline FDCCH: & FBCCH: & ACCess: & RSS MIN? & \\
\hline FDCCH: & FBCCH: & ADDitional: & CHANnet? & \\
\hline FDCCH: & FBCCH: & ADDitional: & NUMBer? & \\
\hline FDCCH: & FBCCH: & ADDitional: & & \\
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\hline FDCCH: & FBCCH: & ALPHA: & SID: & CHARacters? \\
\hline FDCCH: & FBCCH: & ALPHA: & SID: & LENGth? \\
\hline FDCCH: & FBCCH: & ALPHA: & SID: & \\
\hline FDCCH: & FBCCH: & ALT SOC: & MAP: & PSID_RSID? \\
\hline FDCCH: & FBCCH: & AlT-SOC: & NuMBer? & \\
\hline FDCCH: & FBCCH: & ALT \({ }^{-} \mathrm{SOC}\) : & SOC? & \\
\hline FDCCH: & FBCCH: & AUTH? & & \\
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\hline FDCCH: & FBCCH: & BC? & & \\
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\hline FDCCH: & FBCCH: & BSMC? & & \\
\hline FDCCH: & FBCCH: & CAPability? & & \\
\hline FDCCH: & FBCCH: & CBN: & HIGH? & \\
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FDCCH: & FBCCH: & CBN: & PT? & \\
\hline FDCCH: & FBCCH: & CONfiguration? & & \\
\hline FDCCH: & FBCCH: & CUSTOM: & CONT & \\
\hline FDCCH: & FBCCH: & CUSTOM: & LENGth? & \\
\hline FDCCH: & FBCCH: & DELay? & & \\
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\hline FDCCH:
FDCCH: & FBCCH: & DIC?
DVCC? & & \\
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\begin{tabular}{|c|c|c|c|c|c|}
\hline FDCCH: & FBCCH: & ExTended: & COUNt? & & \\
\hline FDCCH: & FBCCH: & EXTended: & PT? & & \\
\hline FDCCH: & FBCCH: & FC? & & & \\
\hline FDCCH: & FBCCH: & FOREG? & & & \\
\hline FDCCH: & FBCCH: & HYPERframe? & & & \\
\hline FDCCH: & FBCCH: & INITial? & & & \\
\hline FDCCH: & FBCCH: & IRA? & & & \\
\hline FDCCH: & FBCCH: & L3L1? & & & \\
\hline FDCCH: & FBCCH: & LAREG? & & & \\
\hline FDCCH: & FBCCH: & MACA & EIGHT & CONTTrol? & \\
\hline FDCCH : & FBCCH: & MACA & EIGHT: & PT? & \\
\hline FDCCH: & FBCCH: & MACA: & LIST: & CHAN? & \\
\hline FDCCH: & FBCCH: & MACA: & LIST: & NUMBer? & \\
\hline FDCCH: & FBCCH: & MACA: & LIST & OTHER: & CHAN? \\
\hline FDCCH: & FBCCH: & MACA & LIST & OTHER: & HYPERband? \\
\hline FDCCH: & FBCCH: & MACA & LIST: & OTHER: & NUMBer? \\
\hline FDCCH: & FBCCH: & MACA: & LIST: & OTHER: & \\
\hline FDCCH : & FBCCH: & MACA: & LIST: & PT? & \\
\hline FDCCH: & FBCCH: & MACA & STATus? & & \\
\hline FDCCH: & FBCCH: & MACA: & TYPE? & & \\
\hline FDCCH: & FBCCH: & MAP: & ARQ? & & \\
\hline FDCCH: & FBCCH: & MAP & AUTH? & & \\
\hline FDCCH: & FBCCH: & MAP: & CODER? & & \\
\hline FDCCH: & FBCCH: & MAP: & DPM? & & \\
\hline FDCCH: & FBCCH: & MAP & MEA: & ALGORithms? & \\
\hline FDCCH: & FBCCH: & MAP & MEA: & DOMAIN? & \\
\hline FDCCH: & FBCCH: & MAP & MEK? & & \\
\hline FDCCH: & FBCCH: & MAP & MENU? & & \\
\hline FDCCH: & FBCCH: & MAP & REG 1 INFO? & & \\
\hline FDCCH : & FBCCH: & MAP: & SMS? & & \\
\hline FDCCH: & FBCCH: & MAP: & USER? & & \\
\hline FDCCH: & FBCCH: & MAP & VPM? & & \\
\hline FDCCH: & FBCCH: & MAX & BUSY? & & \\
\hline FDCCH: & FBCCH: & MAX: & REPetitions? & & \\
\hline FDCCH: & FBCCH: & MAX: & RETries? & & \\
\hline FDCCH: & FBCCH: & MCC: & PT? & & \\
\hline FDCCH: & FBCCH: & MSGtype? & & & \\
\hline FDCCH: & FBCCH: & NETwork? & & & \\
\hline FDCCH: & FBCCH: & NONPublic: & PROBability: & BLOCk? & \\
\hline FDCCH: & FBCCH: & NONPublic: & PROBability: & LENGth? & \\
\hline FDCCH: & FBCCH: & NONPubic:
NONPublic: & PROBability:
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\hline FDCCH: & FBCCH: & NONPublic: & REGistration: & PT? & \\
\hline FDCCH: & FBCCH: & NuMber: & EBCCH ? & & \\
\hline FDCCH: & FBCCH: & NUMber: & FBCCH? & & \\
\hline FDCCH: & FBCCH: & NuMber: & NON PPCH? & & \\
\hline FDCCH: & FBCCH: & NUMber: & REServed? & & \\
\hline FDCCH: & FBCCH: & NUMber: & SBCCH? & & \\
\hline FDCCH: & FBCCH: & OLC? & & & \\
\hline FDCCH: & FBCCH: & PCH ? & & & \\
\hline FDCCH: & FBCCH: & PD ? & & & \\
\hline FDCCH: & FBCCH: & PDREG? & & & \\
\hline FDCCH: & FBCCH: & PFC? & & & \\
\hline FDCCH: & FBCCH: & PFM? & & & \\
\hline FDCCH: & FBCCH: & PROTOCOI? & & & \\
\hline FDCCH: & FBCCH: & PSID RSID: & NuMBer? & & \\
\hline FDCCH
FDCCH & FBCCH: & PSID RSID: & PT? \({ }^{\text {Pre }}\) & & \\
\hline FDCCH: & FBCCH: & PSID RSID: & TYPE? & & \\
\hline FDCCH: & FBCCH: & PSID RSID: & VALUE? & & \\
\hline FDCCH: & FBCCH: & PUREG? & & & \\
\hline FDCCH & FBCCH: & RAND? & & & \\
\hline FDCCH & FBCCH: & RDATA: & LENGth? & & \\
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\hline FOCCH:
FDCCH: & FBCCH:
FBCCH: & REGID: & & & \\
\hline FDCCH: & FBCCH: & REGistration: & PERiod? & & \\
\hline FDCCH: & FBCCH: & REGistration: & PT? & & \\
\hline FDCCH: & FBCCH: & REGR? & & & \\
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\end{tabular} & RNUM:
RNUM: & NUMBer? PT? & & \\
\hline FDCCH : & FBCCH: & S? & & & \\
\hline FDCCH: & FBCCH: & SCAN: & INTerval? & & \\
\hline FDCCH: & FBCCH: & SCAN: & OPTion? & & \\
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\end{tabular}

\begin{tabular}{|c|c|c|c|c|}
\hline FBCCH: & SID? & & & \\
\hline FBCCH: & SOC? & & & \\
\hline FBCCH: & SS SUFF? & & & \\
\hline FBCCH: & suBaddressing & & & \\
\hline FBCCH: & SUPER frame? & & & \\
\hline FBCCH: & SYREG? & & & \\
\hline FBCCH: & BC ? & & & \\
\hline FBCCH: & BI? & & & \\
\hline FBCCH: & CLI? & & & \\
\hline FBCCH: & CRC? & & & \\
\hline FBCCH: & EC? & & & \\
\hline FBCCH: & FC? & & & \\
\hline FBCCH: & L3DATA? & & & \\
\hline FBCCH: & ᄂ3L1? & & & \\
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\hline FDCCH: & SUPERframe: & ACCess: & PE & \\
\hline FDCCH: & SUPERframe: & ACCess: & PE? & \\
\hline FDCCH: & SUPERframe: & AcCess: & SCF & \\
\hline FDCCH: & SUPERframe: & AcCess: & SCF? & \\
\hline FDCCH: & SUPERframe: & ACCess: & TYPE & NONE \\
\hline FDCCH: & SUPER frame: & ACCess: & TYPE & PROGram \\
\hline FDCCH: & SUPERframe: & ACCess: & TYPE & RANDom \\
\hline FDCCH: & SUPERframe: & AcCess: & TYPE & REServed \\
\hline FDCCH: & SUPER \({ }^{\text {frame: }}\) & AcCess: & TYPE? & \\
\hline FDCCH: & SUPERtrame: & BRI & & \\
\hline FDCCH: & SUPERframe: & BRI? & & \\
\hline FDCCH: & SUPERframe: & dATA & & \\
\hline FDCCH: & SUPERframe: & DATA? & & \\
\hline FDCCH: & SUPERtrame: & DVCC & & \\
\hline FDCCH: & SUPER frame: & DVCC? & & \\
\hline FDCCH: & SUPERArame: & increment & & \\
\hline FDCCH: & SUPERframe: & NUMBer? & & \\
\hline FDCCH: & SUPER frame: & PE & & \\
\hline FDCCH: & SUPERArame: & PE? & & \\
\hline FDCCH: & SUPERframe: & RN & & \\
\hline FDCCH: & SUPERTrame: & RN? & & \\
\hline FDCCH: & SUPERirame: & SFP & & \\
\hline FDCCH: & SUPERframe: & SFP? & & \\
\hline FDCCH: & SUPERATame: & STARt & & \\
\hline FDCCH: & SUPERframe: & STOP & & \\
\hline FDCCH: & SUPERframe: & TYPE & & \\
\hline FDCCH: & SUPERitrame: & TYPE? & & \\
\hline FDCCH: & SUPERTrame: & ZERO & & \\
\hline FDCCH: & \({ }^{\text {BRIP }}\) CHANEI & & & \\
\hline FDCCH: & CHANnel CHANnel? & & & \\
\hline FDCCH: & CONFigure & NONE & & \\
\hline FDCCH: & CONFigure & USER & & \\
\hline FDCCH: & CPE? & & & \\
\hline FDCCH: & CRC? & & & \\
\hline FDCCH: & CSFP? & & & \\
\hline FDCCH: & DVCC & & & \\
\hline FDCCH: & OVCCC & ALT SOC & & PSID_RSID \\
\hline FDCCH: & EBCCH: & ALT-SOC & NUMBer? & \\
\hline FDCCH: & EBCCH: & ALT SOC: & SOC? & \\
\hline FDCCH: & EBCCH: & BC ? & & \\
\hline FDCCH: & EBCCH: & B1? & & \\
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\hline FDCCH: & EBCCH: & CHAN易: & GROUP: & FIRST? \\
\hline FDCCH: & EBCCH: & CHANnel: & GROUP: & LAST? \\
\hline FDCCH: & EBCCH: & CHANnel & NUMBer? & \\
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\hline FDCCH: & EBCCH: & CUSTOM: & CONTrol? & \\
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\hline FDCCH: & EBCCH & HYPRRband: & & \\
\hline FDCCH: & EBCCH: & IRA? & & \\
\hline FDCCH: & EBCCH: & L3LI? & & \\
\hline FDCCH: & EBCCH: & MACA & EIGHT & CONTrot? \\
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ALGORithms?
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DOMAIN?
\begin{tabular}{|c|c|c|}
\hline CELL & Access & MS PWR? \\
\hline CELL & AcCess: & RSS_MIN? \\
\hline CELL & CHAN? & \\
\hline CELL & DCC? & \\
\hline CELL & DELay? & \\
\hline CELL & HL FREQ? & \\
\hline CELL & OFFset? & \\
\hline CELL & PROTOCO? & \\
\hline CELL & RETRY? & \\
\hline CELL & SS SUFF? & \\
\hline CELL & TYPE & CELL? \\
\hline CELL & TYPE & NETwork? \\
\hline MULti: & ACCess: & MS_PWR? \\
\hline MULti: & ACCess: & RSS MIN? \\
\hline MULti: & CHAN? & \\
\hline MULti: & DCC? & \\
\hline MULLt: & DELay? & \\
\hline MULti: & HL FREQ? & \\
\hline MULTi: & NUMBE? & \\
\hline MULti: & OFFset? & \\
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\hline info: & HYPERband? & \\
\hline INFO: & PT? & \\
\hline INFO: & SERVice: & INDicator? \\
\hline INFO: & SERVice: & MAP? \\
\hline MULti: & ACCess: & MS PWR? \\
\hline MULti: & ACCess: & RSS_MIN? \\
\hline MULti: & CHAN? & \\
\hline MULti: & DELay? & \\
\hline MULt: & DVCC? & \\
\hline MULti: & HL FREO? & \\
\hline MULti: & OFFset? & \\
\hline MULti: & PROTocol? & \\
\hline MULti : & PSID_RSID & INDicator? \\
\hline MULLi: & PSID-RSID & LENGth? \\
\hline MULti: & \(\mathrm{PSID}^{-7 \mathrm{RSID}}\) & Support? \\
\hline Multi: & RETRY? & \\
\hline MULti: & SS SUFF? & \\
\hline MULti: & SYMC? & \\
\hline MULti: & TYPE: & CELL? \\
\hline MULti: & TYPE & NETwork? \\
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\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
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\hline \multicolumn{2}{|l|}{\multirow[b]{2}{*}{HL FREQ？}} \\
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\hline \multicolumn{2}{|l|}{OFFset？} \\
\hline PSID RSID： & InDicator？ \\
\hline PSID RSiD： & LENGTh？ \\
\hline PSID－RSID： & SUPport？ \\
\hline \multicolumn{2}{|l|}{RETRY？} \\
\hline \multicolumn{2}{|l|}{SS＿SUFF？} \\
\hline SYÑC？ & \\
\hline TYPE： & CELL？ \\
\hline TYPE： & NETwork？ \\
\hline \multicolumn{2}{|l|}{COUNT？} \\
\hline \multicolumn{2}{|l|}{PT？} \\
\hline SERVice： & INDicator？ \\
\hline SERVIIce： & MAP？ \\
\hline ACCess： & MS PWR？ \\
\hline AcCess： & RSS＿MIN？ \\
\hline \multicolumn{2}{|l|}{CHAN？} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{DELay？}} \\
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\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{NUMBer？}} \\
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\hline PSID＿RSID： & LENGth？ \\
\hline PSID＿RSID： & SUPport？ \\
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\hline \multicolumn{2}{|l|}{RETRY？} \\
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\hline FBCCH : & CBN & HIGH ? & & \\
\hline FBCCH: & CBN & PT? & & \\
\hline FBCCH: & CLI? & & & \\
\hline FBCCH: & CONfiguration? & & & \\
\hline FBCCH : & CUSTOM: & CONTrol? & & \\
\hline FBCCH: & CUSTOM & LENGth? & & \\
\hline FBCCH : & DELay? & & & \\
\hline FBCCH : & DEREG? & & & \\
\hline FBCCH: & DIC? & & & \\
\hline FBCCH : & DVCC? & & & \\
\hline FBCCH: & EC? & & & \\
\hline FBCCH: & EXTended: & COUNT? & & \\
\hline FBCCH: & EXTended: & PT? & & \\
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\hline FBCCH. & L3LI? & & & \\
\hline FBCCH - & LAREG? & & & \\
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\hline FBCCH: & MACA & LIST: & CHAN? & \\
\hline FBCCH: & MACA: & LIST: & Number? & \\
\hline FBCCH: & MACA & LIST: & OTHER: & CHAN? \\
\hline FBCCH & MACA & LIST: & OTHER: & HYPERband? \\
\hline FBCCH & MACA: & LIST: & OTHEF: & NUMBer? \\
\hline FBCCH: & MACA: & LIST: & OTHER & PT? \\
\hline FBCCH: & MACA: & LIST: & PT? & \\
\hline FBCCH: & MACA: & STATus? & & \\
\hline FBCCH: & MACA: & TYPE? & & \\
\hline FBCCH: & MAP: & ARQ? & & \\
\hline FBCCH: & MAP: & AUTH? & & \\
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\hline FBCCH: & MAP: & DPM? & & \\
\hline FBCCH: & MAP: & MEA: & ALGORithms? & \\
\hline FBCCH & MAP: & MEA: & DOMAIN? & \\
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\hline FBCCH: & MAP: & REG \({ }^{\text {S }}\) SFO?
SMS? & & \\
\hline FBCCH : & MAP: & USER? & & \\
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\hline FBCCH: & MAX: & BUSY? & & \\
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\hline FBCCH: & MAX: & STOP? & & \\
\hline FBCCH & MCC: & & & \\
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\hline FBCCH: & NETwork? & & & \\
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\hline FECCH: & NONPublic: & REGistration: & CONTrol? & \\
\hline FBCCH : & NONPublic: & REGistration: & PT? & \\
\hline \({ }^{\mathrm{FBCCH}}\) & NUMber: & EBCCH? & & \\
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NON PCH? & & \\
\hline FBCCH : & Number: & RESērved? & & \\
\hline FBCCH: & NuMber: & SBCCH ? & & \\
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PCH ? & & & \\
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\(\mathrm{FBCCH}:\) & PSID-RSID:
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\hline FBCCH: & PSID \({ }^{-R S I D}\) & SOC? & & \\
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FBCCH & PSID-RSID: & \begin{tabular}{l}
TYPE? \\
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\end{tabular} & & \\
\hline FBCCH : & FUREG? & & & \\
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\hline FDCCH: & FBCCH: & S & & & \\
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\hline FDCCH: & FBCCH: & SYREG? & & & 9.86 \\
\hline FDCCH: & [AYER2: & DECode & & & \\
\hline FDCCH: & LAYER2: & EBCCH: & BC? & & \\
\hline FDCCH: & LAYER2: & EBCCH: & BI? & & \\
\hline FDCCH: & LAYER2: & EBCCH: & CLI? & & 9.72 \\
\hline \({ }_{\text {FDCCH }}\) & LAYER2: & EBCCH: & \(\stackrel{\text { CRC? }}{ }\) & & 9.722 \\
\hline FDCCH: & LAYER2: & EBCCH: & L3DATA? & & 9.73 \\
\hline FDCCH: & LAYER2: & EBCCH: & L3L1? & & 9.73 \\
\hline \({ }_{\text {FDCCH: }}^{\text {FDCCH: }}\) & LAYER2: & EbCCH: & RSVD? & & \({ }_{9}^{9.71}\) \\
\hline FDCCH: & LAYER2: & \({ }_{\text {FBCCH: }}\) & \({ }_{81} \mathrm{BC}\) & & \\
\hline FDCCH: & LAYER2: & FBCCH : & CLl? & & 9.71 \\
\hline FDCCH: & LAYER2: & FBCCH: & CRC? & & \\
\hline FDCCH: & LAYER2: & FBCCH: & \({ }_{\text {FCC }}\) & & 9.71 \\
\hline FDCCH: & LAYER2: & FBCCH : & L3DATA? & & \\
\hline FDCCH: & LAYER2: & FBCCH: & L3LL? & & \\
\hline FDCCH: & LAYER2: & SPACH: & ARM? & & \\
\hline FDCCH: & LAYER2: & SPACH: & \(\mathrm{ARQ}_{7} \mathrm{RSVD}\) ? & & 9.74 \\
\hline FDCCH: & LAYER2, & SPACH: & & & \\
\hline FDCCH: & LAYER2: & SPACH: & Bu? & & 9.74 \\
\hline FDCCH: & LAYER2: & SPACH: & CAC? & & \\
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\hline FDCCH: & LAYER2: & SPACH: & HA RSVD? & & 9.74 \\
\hline FDCCH: & LAYER2: & SPACH: & & & \\
\hline FDCCH: & A-AYER2: & SPACH: & Lizanath? & & 9.75 \\
\hline FDCCH: & LAYER2. & SPACH: & \({ }_{\text {L3LI? }}\) & & \\
\hline \({ }_{\text {FDCCH: }}\) & LAYER2: & SPACH: & MEA? & & 9.75 \\
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\hline FDCCH & LAYER2: & SPACH: & MSID: & Ls? & 9.76 \\
\hline FDCCH: & LAYER2: & SPACH: & MSID: & MS? & 76 \\
\hline \(\xrightarrow{\text { FDCCH: }}\) FDCCH: & LAYER2: & SPACH: & MSCO? & & 9.76 \\
\hline \({ }_{\text {FDCCH: }}\) & LAYER2: & SPACH: & PEA? & & \\
\hline FDCCH: & LAYER2: & SPACH: & PEM? & & 9.76 \\
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\hline \({ }_{\text {FDCCH }}\) & LAYER2: & SPACH: & UGID: & LS? & 9.77 \\
\hline FDCCH: & LAYER2: & SPACH: & UGID, & MS? & 9.77 \\
\hline \(\xrightarrow{\text { FDCCH: }}\) FDCCH: & LAYER2: & TYPE? & & & \\
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\hline FDCCH: & RĀTE & & & & \\
\hline FDCCH: & RAIE? & & & & 9.67 \\
\hline FDCCH: & baw & DATA? & & & 9.69 \\
\hline \({ }_{\text {focch }}\) & RAW & FULL? & & & 9.69 \\
\hline FDCCH : & RAW & Start & & & 9-69 \\
\hline FDCCH: & RAW: & STOP & & & 9.69 \\
\hline \(\stackrel{\text { FDCCH: }}{\text { FDCCH: }}\) & RAW & STS? & & & \({ }_{9.69}\) \\
\hline FDCCH: & REMote: & Raw & DVCC & & 9.68 \\
\hline \({ }_{\text {FDCCH }}\) & REMote: & RAW: & StARt & & 9.68 \\
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\hline FDIC: & AMl? & & & & \\
\hline FDTC: & ATS \({ }_{\text {ATS }}\) & & & & \\
\hline FDTC: & AUTHBS & & & & \\
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\hline Enable & NOMW? & & \\
\hline ENABLE & RFCHAN & & \\
\hline ENABLE & RFCHAN? & & \\
\hline ENABLE: & SIGNAL & & \\
\hline ENABLE & SIGNAL? & & \\
\hline ENABLE & STATUS & CMODE & \\
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\hline ENABLE & STATUS: & ESN & \\
\hline ENABLE & STATUS: & ESN? & \\
\hline ENABLE: & Status: & MEM & \\
\hline ENABLE: & Status: & MEM? & \\
\hline ENABLE: & STATUS & TASK & \\
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\hline ENABLE: & TA? & & \\
\hline ENABLE & USER: & DEST & ADDRess \\
\hline ENABLE: & USER: & DEST: & ADDRess? \\
\hline ENABLE: & USER: & DEST: & SUBaddress \\
\hline ENABLE: & USER: & DEST: & SuBaddress? \\
\hline ENABLE & USER: & ORIG: & ADDRess \\
\hline ENABLE & USER: & ORIG: & ADDRess? \\
\hline ENABLE & USER: & ORIG: & PRESentation \\
\hline ENABLE & USER: & ORIG: & PRESentation? \\
\hline ENABLE & USER: & ORIG: & SUBaddress \\
\hline ENABLE & USER: & ORIG: & SUBaddress? \\
\hline ENABLE: & VMI & & Subadress? \\
\hline ENABLE: & VMI? & & \\
\hline FACCH: & ALERT & & \\
\hline FACCH: & AUDIT & & \\
\hline FACCH: & BSACK & & \\
\hline FACCH: & BSCHALCON & & \\
\hline FACCH: & BSMC & & \\
\hline FACCH: & CAPability: & REQuest & \\
\hline FACCH: & CAPability: & RESPonse & \\
\hline FACCH: & DEDicated: & HANDoff & \\
\hline FACCH: & FLASH & & \\
\hline FACCH: & FLASHACK & & \\
\hline FACCH: & HANDoff & & \\
\hline FACCH: & HYPERband: & MEASure & \\
\hline FACCH: & LC & & \\
\hline \[
\begin{aligned}
& \text { FACCH: } \\
& \text { FACCH }
\end{aligned}
\] & MAINTenance MEASure & & \\
\hline FACCH : & PLC & & \\
\hline FACCH: & PU & & \\
\hline FACCH: & RAW & & \\
\hline FACCH: & RDATA: & ACCept & \\
\hline FACCH: & RDATA: & MESSage & \\
\hline FACCH: & RDATA: \({ }_{\text {REAUTHentication }}\) & REJect & \\
\hline FACCH: & RELease & & \\
\hline FACCH: & SBDA & & \\
\hline FACCH: & SCDA & & \\
\hline FACCH: & SERVice: & RESPonse & \\
\hline FACCH: & \[
\begin{aligned}
& \text { SME } \\
& \text { SOC }
\end{aligned}
\] & & \\
\hline FACCH: & SR & & \\
\hline FACCH: & SSDUP & & \\
\hline FACCH: & UCHAL & & \\
\hline HANDoff: & CHANnel & & \\
\hline HANDoff: & CHANnel? & & \\
\hline HYPERband: & BAND & & \\
\hline HYPERband: & BAND? & & \\
\hline HYPERband & \begin{tabular}{l}
CHANne \\
CHANnel?
\end{tabular} & & \\
\hline HYPERband: & number & & \\
\hline HYPERband: & NUMBer? & & \\
\hline HYPERband: & TARGet & & \\
\hline HYPERband: LDP & TARGet? & & \\
\hline LDP? & & & \\
\hline MAP: & ARO & & \\
\hline MAP: & ARO? & & \\
\hline MAP: & CODER
CODER & & \\
\hline
\end{tabular}

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\begin{tabular}{|c|c|c|c|c|}
\hline FDTC: & SOC? & & & \\
\hline FDTC: & STARt & & & \\
\hline FDTC: & STOP & & & \\
\hline FDTC: & SUPPort: & IRA & & \\
\hline FDTC: & SUPPort: & IRA? & & \\
\hline FDTC: & & & & \\
\hline FDTC: & TA? & & & \\
\hline FDTC: & TALK: & DELAY & & \\
\hline FDTC: & TALK: & START & & \\
\hline FDTC: & TALK: & STOP & & \\
\hline FDTC: & TASK & & & \\
\hline FDTC: & TASK? & & & \\
\hline FDTC: & TI & & & \\
\hline FDTC: & TI? & & & \\
\hline FDTC: & USER: & DEST: & ADDRess & \\
\hline FDTC: & USER: & DEST & ADDRess? & \\
\hline FDTC: & USER: & DEST & ENCoding & \\
\hline FDTC: & USER: & DEST: & ENCoding? & \\
\hline FDTC: & USER: & DEST & PLANid & \\
\hline FDIC: & USER: & DEST & PLANid? & \\
\hline FDTC: & USER: & DEST & SUBaddress: & ADDRess \\
\hline FDTC: & USER: & DEST: & SUBaddress: & ADDRess? \\
\hline FDTC: & USER: & DEST: & SUBaddiess: & LENGth \\
\hline FDTC: & USER: & DEST & SUBaddress: & LENGTh? \\
\hline FDTC: & USER: & DEST: & SUBaddress: & ODD_EVEN \\
\hline FDTC: & USER: & DEST: & SUBaddress: & ODD-EVEN? \\
\hline FDTC: & USER: & DEST: & SUBaddress: & REServed \\
\hline FDTC: & USER: & DEST: & SUBaddress: & REServed? \\
\hline FDTC: & USER: & DEST: & SUBaddress: & TYPE \\
\hline FDTC: & USER: & DEST: & SUBaddress: & TYPE? \\
\hline FDTC: & USER: & DEST: & TYPE & \\
\hline FDTC: & USER: & DEST: & TYPE? & \\
\hline FDTC: & USER: & ORIG: & ADDRess & \\
\hline FDIC: & USER: & ORIG: & ADDRess? & \\
\hline FOTC: & USER & ORIG: & ENCoding & \\
\hline FDTC: & USER: & ORIG: & ENCoding? & \\
\hline FDTC: & USER: & ORIG: & PLANId & \\
\hline FDTC: & USER: & ORIG: & PLANid? & \\
\hline FDTC: & USER: & ORIG: & PRESentation: & PI \\
\hline FDIC: & USER: & ORIG & PRESentation: & Pl ? \\
\hline FDIC: & USER & ORIG & PRESentation: & REServed \\
\hline FDTC: & USER: & ORIG: & PRESEntation: & REServed? \\
\hline FDTC: & USER: & ORIG: & PRESentation: & \\
\hline FDTC: & USER: & ORIG & PRESentation: & SI? \\
\hline FDTC: & USER: & ORIG: & SUBaddress: & ADDRess \\
\hline FDTC: & USER: & ORIG: & SUBaddress: & ADDRess? \\
\hline FDTC: & USER: & ORIG & SUBaddress: & LENGth \\
\hline FDTC: & USER: & ORIG: & SUBaddress: & LENG施? \\
\hline FDTC: & USER: & ORIG: & SUBaddress: & ODD_EVEN \\
\hline FDTC: & USER: & ORIG: & SUBaddress: & ODD EVEN? \\
\hline FDTC: & USER: & ORIG: & SUBaddress: & REServed \\
\hline FDTC: & USER: & ORIG: & SuBaddress: & REServed? \\
\hline FDTC: & USER & ORIG: & SUBaddress: & TYPE \\
\hline FDTC: & USER: & ORIG: & SUBaddress: & TYPE? \\
\hline FDTC: & USER: & ORIG: & TYPE & \\
\hline FDTC: & USER: & ORIG: & TYPE? & \\
\hline FDTC: & VMI: & PM_V & & \\
\hline FDTC: & VMI: & PM \({ }^{-}\)? & & \\
\hline FDTC: & VMI: & VC & & \\
\hline FDTC: & VMI: & VC ? & & \\
\hline FDTC: & VPM & & & \\
\hline FDTC: & VPM ? & & & \\
\hline FDTC: & CHANREI & & & \\
\hline FDTC: & CONFigure & NONE & & \\
\hline FDTC: & CONFigure & USER & & \\
\hline FDTC: & DVCC? & & & \\
\hline FDTC: & FACCH: & AMT? & & \\
\hline FDTC: & FACCH: & ATS? & & \\
\hline FDTC: & FACCH: & AUTHBS? & & \\
\hline FDTC: & FACCH: & BSMC? & & \\
\hline FDTC: & FACCH: & CALLING: & NAMe: & \\
\hline FDTC: & FACCH : & CALLING: & NAMe: & REServed? \\
\hline FDTC: & FACCH: & CALLING: & NAMe: & \\
\hline FDTC: & FACCH: & CALLING: & NAME? & \\
\hline FDTC:
FDTC: & FACCH: & CALLING: & NUM? & \\
\hline FDTC: & FACCH: & CALLING: & NUM2? & \\
\hline FDTC: & FACCH: & CALLING: & Pl? & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline FDTC: & FACCH: & CALLING: & PLANId? & & 9-30 \\
\hline FDTC: & FACCH : & CALLING: & REServed? & & 9-30 \\
\hline FDTC: & FACCH: & CALLING: & SI? & & 9-30 \\
\hline FDTC: & FACCH: & CALLING: & SPare? & & 9-30 \\
\hline FDTC: & FACCH: & CALLING: & TYpe? & & 9.29 \\
\hline FDTC: & FACCH : & CHANGE: & BSMC? & & 9-30 \\
\hline FDTC: & FACCH: & CHANGE: & SOC? & & 9-30 \\
\hline FDTC: & FACCH: & CNPC? & & & 9.30 \\
\hline FDTC: & FACCH: & CUSTOM: & CONTrol? & & 9-30 \\
\hline FDTC: & FACCH: & CUSTOM & LENGth? & & 9-30 \\
\hline FDTC: & FACCH: & OCCHinfo: & CHANEI? & & 9.31 \\
\hline FDTC: & FACCH : & DCCHinfo: & DVCC? & & 9-31 \\
\hline FDTC: & FACCH: & DCCHinfo: & HYPERband? & & 9-31 \\
\hline FDTC: & FACCH: & DELTA: & TIME? & & 9-31 \\
\hline FDTC: & FACCH: & DIC? & & & 9-31 \\
\hline FDTC: & FACCH : & Digits? & & & 9.31 \\
\hline FDTC: & FACCH: & DMAC? & & & 9-31 \\
\hline FDTC: & FACCH: & DPM? & & & 9-31 \\
\hline FDTC: & FACCH: & DTX? & & & 9-31 \\
\hline FDTC: & FACCH: & DTXControl? & & & 9-31 \\
\hline FDTC: & FACCH: & HDVCC? & & & 9-31 \\
\hline FDTC: & FACCH: & HYPERband: & BAND? & & 9-32 \\
\hline FDTC: & FACCH: & HYPERband: & CHANnel? & & 9-32 \\
\hline FDTC: & FACCH: & HYPERband: & NUMEer? & & 9-32 \\
\hline FDTC: & FACCH: & HYPERband: & TARGet? & & 9-32 \\
\hline FDTC: & FACCH: & LC? & & & 9-32 \\
\hline FDTC: & FACCH: & LDP? & & & 9-32 \\
\hline FDTC: & FACCH: & MAP & ARO? & & 9.33 \\
\hline FDTC: & FACCH: & MAP & CODER? & & 9-32 \\
\hline FDTC: & FACCH: & MAP: & MEA: & ALGORithms? & 9-32 \\
\hline FDTC: & FACCH: & MAP & MEA: & DOMAIN? & 9-32 \\
\hline FDTC: & FACCH: & MAP & MEK? & & 9-33 \\
\hline FDTC: & FACCH: & MAP & SMS? & & 9-33 \\
\hline FDTC: & FACCH: & MAP. & VPM? & & 9-32 \\
\hline FDTC: & FACCH: & MEM? & & & 9.33 \\
\hline FDTC: & FACCH: & MEMA? & & & 9-33 \\
\hline FDTC: & FACCH: & MEMB? & & & 9-33 \\
\hline FDTC: & FACCH: & MEMC: & MED? & & \begin{tabular}{l} 
9.33 \\
\\
\hline 9
\end{tabular} \\
\hline FDTC: & FACCH: & MEMC: & MEK? & & 9-33 \\
\hline FDTC: & FACCH : & MESSage: & CENTer: & ADDRess? & 9-34 \\
\hline FDTC: & FACCH: & MESSage: & CENTer: & ENCoding? & 9.34 \\
\hline FDTC: & FACCH: & MESSage: & CENTer: & LENGth? & 9.34 \\
\hline FDTC: & FACCH: & MESSage: & CENTer: & PLANId? & 9-34 \\
\hline FDTC: & FACCH: & MSGtype? & CENTer: & & 9.34
9.28 \\
\hline FDTC: & FACCH: & MSGWTG: & NuMBer? & & 9-34 \\
\hline FDTC: & FACCH: & MSGWTG: & TYPE? & & 9-34 \\
\hline FDTC: & FACCH: & NOMW? & & & 9.34 \\
\hline FDTC:
FDTC: & FACCH:
FACCH: & NV? & & & 9.34 \\
\hline FDTC: & FACCH: & PD? & & & 9.34
9
9 \\
\hline FDTC: & FACCH: & PV ? & & & \(9 \cdot 35\) \\
\hline FDTC: & FACCH: & PVI? & & & 9.35 \\
\hline FDTC: & FACCH: & RANORA? & & & 9-35 \\
\hline FDTC: & FACCH: & RANDSSD1? & & & 9-35 \\
\hline FDTC: & FACCH: & RANDU? & & & 9-35 \\
\hline FDTC: & FACCH: & RATE? & & & 9-35 \\
\hline FDTC: & FACCH: & RCAUSe: & REServed? & & 9-35 \\
\hline FDTC: & FACCH: & RCAUSE? & HLP & DATA? & 9.35
9.36 \\
\hline FDTC: & FACCH: & RDATA-UNIT & HLP: & 1Dentifier? & 9-36 \\
\hline FDTC: & FACCH: & RDATA UNIT: & LENGTh? & & 9-36 \\
\hline FOTC: & FACCH: & RFCHAN? & & & 9.36 \\
\hline FDTC: & FACCH: & RL?
RN? & & & 9-36 \\
\hline FDTC: & FACCH: & RTRANSaction? & & & 9-36 \\
\hline FDTC: & FACCH: & SBI? & & & 9-36 \\
\hline FDTC: & FACCH: & SERVice: & CAUSe: & NUMBer? & \(9 \cdot 37\) \\
\hline FDTC: & FACCH: & SERVice: & CAUSe? & & 9.37 \\
\hline FDTC: & FACCH: & SIGnal? & Cobe? & & 9-36 \\
\hline FDTC: & FACCH: & SOC? & & & 9-37 \\
\hline FDTC: & FACCH: & SPMA? & & & 9.37 \\
\hline FDIC:
FDTC: & FACCH: & SPMB? & IRA? & & -9-37 \\
\hline FDTC: & FACCH: & TA? & & & 9.37 \\
\hline
\end{tabular}


12-82


MSS


12-85






\section*{的}
\(\longrightarrow\)

\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{5}{*}{} & \multirow[t]{5}{*}{\[
\begin{aligned}
& \text { MSS } \\
& \text { MSS }
\end{aligned}
\]} & RDCCH: & USER: \\
\hline & & RDCCH:
RDCCH: & USER: \\
\hline & & RDCCH: & USER: \\
\hline & & RDCCH: & USER: \\
\hline & & RDCCH & USER: \\
\hline \multirow[t]{6}{*}{\[
\begin{aligned}
& \text { CSS: } \\
& \text { MSS: }
\end{aligned}
\]} & SPACH: & ENABLE & USER: \\
\hline & RDCCH: & ENABIE: & USER: \\
\hline & FDCCH: & LAYER2: & SPACH: \\
\hline & MSS: & RDCCH: & SUPPort: \\
\hline & \multirow[t]{2}{*}{MSS:} & RDCCH: & SUPPort: \\
\hline & & RDCCH: & SUPPort: \\
\hline \multirow[t]{8}{*}{\[
\begin{aligned}
& \text { CSS: } \\
& \text { CSS: }
\end{aligned}
\]} & \multirow[t]{8}{*}{\[
\begin{aligned}
& \text { CALL: } \\
& \text { FDTC } \\
& \text { CSS: } \\
& \text { CSS: }
\end{aligned}
\]} & PROCess: & FVC: \\
\hline & & FACCH: & DEDicated: \\
\hline & & FDTC & FACCH: \\
\hline & & FVC: & ORDER: \\
\hline & & CSS: & FDTC: \\
\hline & & & FDTC: \\
\hline & & CSS & FVC: \\
\hline & & CSS: & FVC: \\
\hline \multirow[t]{8}{*}{css:} & CALL: & PROCess: & FDTC:
BUILD \\
\hline & CSS: & SPACH: & BUILD: \\
\hline & CSS: & SPACH: & PRTA: \\
\hline & \multirow[t]{2}{*}{CSS} & SPACH: & LENGth: \\
\hline & & FDTC & FACCH: \\
\hline & \multirow[t]{2}{*}{\[
\begin{aligned}
& \operatorname{css}: \\
& \text { css: }
\end{aligned}
\]} & SPACH: & RSVD: \\
\hline & & & EDIT: \\
\hline & CSS: & FBCCH: & CBN: \\
\hline CSS: & FBCCH: & ENABLE & CBN: \\
\hline & CSS: & FBCCH: & CBN \\
\hline css: & FBCCH: & ENABLE: & CBN: \\
\hline \multirow[b]{2}{*}{EBCCH:} & FDCCH: & FBCCH: & CBN: \\
\hline & \multirow[t]{2}{*}{NEIGHbor NE|GHbor:} & ANAlog: & CELL: \\
\hline EBCCH: & & ANAlog: & MULİ: \\
\hline EBCCH & \multirow[t]{2}{*}{NEIGHbor:
NEIGHbor:} & OTHER: & MULti: \\
\hline EBCCH & & TDMA: & CELL: \\
\hline EBCCH & NEIGHbor:
NEIGHbor: & TDMA: & MULti \\
\hline EBCCH & NEIGHbor: & ANAlog: & CELL: \\
\hline EBCCH & NEIGHbor: & ANAlog: & MULt: \\
\hline EBCCH & NEIGHbor: & OTHER & MULti \\
\hline EBCCH: & NEIGHbor: & TDMA: & CELL: \\
\hline EBCCH: & NEIGHbor: & TDMA: & MULti: \\
\hline EBCCH: & \multirow[t]{2}{*}{NEIGHbor:
NEIGHbor:} & ANAlog: & CELL: \\
\hline EBCCH & & ANAlog: & MULti: \\
\hline EBCCH & NEIGHbor NEIGHbor & OTHER & MULti: \\
\hline EBCCH: & NEIGHbor: & TDMA: & CELL: \\
\hline \multirow[t]{21}{*}{EBCCH:} & \multirow[t]{2}{*}{NE1GHbor:
CSS:} & TDMA & multio \\
\hline & & FDTC: & RDATA UNIT: \\
\hline & CSS: & FDIC: & RDATA UNIT: \\
\hline & \multirow[t]{2}{*}{} & FDTC: & RDATA UNIT: \\
\hline & & FDTC: & RDATA-UNIT: \\
\hline & CSS: & SPACH: & RDATA-UNIT: \\
\hline & CSS: & SPACH: & RDATA-UNIT: \\
\hline & \multirow[t]{2}{*}{CSS:} & SPACH: & RDATA UNIT: \\
\hline & & SPACH & RDATA UNIT: \\
\hline & \[
\begin{aligned}
& \text { CSS: } \\
& \text { FDCH: }
\end{aligned}
\] & SPACH & RDATA-UNIT: \\
\hline & \multirow[t]{2}{*}{FDCCH:
FDTC} & SPACH: & RDATA-UNIT: \\
\hline & & FACCH: & RDATA-UNIT: \\
\hline & FDTC
FDTC & FACCH: & RDATA-UNIT \\
\hline & MSS: & RDCCH: & RDATA-UNIT \\
\hline & MSS & ROCCH: & RDATA UNIT \\
\hline & \multirow[t]{3}{*}{MSS} & RDCCH: & RDATA UNIT \\
\hline & & RDCCH: & RDATA-UNIT \\
\hline & & RDCCH & RDATA-UNIT \\
\hline & & RDCCH: & RDATA-UNIT \\
\hline & RDTC & FACCH: & RDATA UNIT \\
\hline & RDTC: & FACCH: & RDATA-UNIT \\
\hline & \multirow[t]{2}{*}{MACA:} & LIST: & OTHER: \\
\hline \multirow[t]{2}{*}{\({ }_{\text {CSCCH }}\)} & & NEIGHbor: & OTHER: \\
\hline & NEIGHbor: & OTHER: & INFO: \\
\hline \multirow[t]{3}{*}{FBCCH :} & \multirow[t]{3}{*}{\[
\begin{aligned}
& \text { MACA } \\
& \text { CSS: }
\end{aligned}
\]} & LIST:
FDTC & OTHER:
DCCHinfo: \\
\hline & & CSS: & FOCC: \\
\hline & & CSS & \\
\hline
\end{tabular}


\footnotetext{
MS
MS?

LS?
MS?
}



\footnotetext{

}


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\begin{tabular}{|c|c|c|c|}
\hline LAYER2: & FBCCH & BC? & \\
\hline LAYER2: & FBCCH & Bl ? & \\
\hline LAYER2: & FBCCH: & CLI? & \\
\hline LAYER2: & FBCCH & CRC? & \\
\hline Layerz: & FBCCH & EC? & \\
\hline LAYER2: & FBCCH & FC? & \\
\hline LAYER2: & FBCCH & L3DATA? & \\
\hline LAYER2: & FBCCH: & L3LI? & \\
\hline LAYER2: & SPACH: & ARM? & \\
\hline LAYER2: & SPACH: & ARO RSVD? & \\
\hline LAYER2: & SPACH: & BCN ? & \\
\hline LAYER2: & SPACH: & BT? & \\
\hline LAYER2: & SPACH: & BU? & \\
\hline LAYER2: & SPACH: & CRC? & \\
\hline LAYER2: & SPACH: & EH RSVD? & \\
\hline LAYER2: & SPACH: & FRNO? & \\
\hline LAYER2: & SPACH: & GA? & \\
\hline LAYER2: & SPACH: & HA RSVD? & \\
\hline LAYER2: & SPACH: & IDT? & \\
\hline LAYER2: & SPACH: & L3DATA? & \\
\hline LAYER2: & SPACH: & L3LENGTH? & \\
\hline LAYER2: & SPACH: & L3LI? & \\
\hline LAYER2: & SPACH: & MEA? & \\
\hline LAYER2: & SPACH: & MEK? & \\
\hline LAYER2: & SPACH & MM? & \\
\hline LAYER2: & SPACH: & MSID: & LS? \\
\hline LAYER2: & SPACH: & MSID: & MS? \\
\hline LAYER2: & SPACH: & MSID? & \\
\hline LAYER2: & SPACH: & PCON? & \\
\hline LAYER2: & SPACH: & PEA? & \\
\hline LAYER2: & SPACH & PFM? & \\
\hline LAYER2: & SPACH: & PI? & \\
\hline LAYER2: & SPACH: & SRM? & \\
\hline LAYER2: & SPACH: & UGID: & LS? \\
\hline LAYER2: & SPACH: & UGID: & MS? \\
\hline LAYER2: & SPACH: & UGID? & \\
\hline LAYER2: & TYPE? & & \\
\hline LAYER2: & ARO & & \\
\hline LAYER2: & ARQ? & & \\
\hline LAYER2: & EHI & & \\
\hline LAYER2: & EHI? & & \\
\hline LAYER2: & FRNO & & \\
\hline LAYER2: & FRNO? & & \\
\hline LAYER2: & IDT & & \\
\hline LAYER2: & IDT? & & \\
\hline LAYER2: & MEA & & \\
\hline LAYER2: & MEA? & & \\
\hline LAYER2: & MEK & & \\
\hline LAYER2: & MEK? & & \\
\hline LAYER2: & MIN & & \\
\hline LAPER2: & MIN? & & \\
\hline LAYER2: & MSID: & LS & \\
\hline LAYER2: & MSID: & LS? & \\
\hline LAYER2: & MSID: & MS & \\
\hline LAYER2: & MSID: & MS? & \\
\hline LAYER2: & NL3M & & \\
\hline LAYER2: & NL3M? & & \\
\hline LAYER2: & PEA & & \\
\hline LAYER2: & PEA? & & \\
\hline LAYER2: & RSVD: & ARQ & \\
\hline LAYER2: & RSVD: & ARQ? & \\
\hline LAYER2: & RSVD: & EHI & \\
\hline LAYER2: & RSVD: & EHI? & \\
\hline LAYER2: & RSVD: & END & \\
\hline LAYER2: & RSVD: & END? & \\
\hline LAYER2: & DECode & & \\
\hline LAYER2: & RACH: & ARQ_RSVD? & \\
\hline LAYER2: & RACH: & BT? & \\
\hline LAYER2: & RACH: & Cl ? & \\
\hline LAYER2: & RACH: & EH RSVD? & \\
\hline LAYER2: & RACH: & EHI? & \\
\hline LAYER2: & RACH: & END RSVD? & \\
\hline LAYER2: & RACH: & FRNO_MAP? & \\
\hline LAYER2: & RACH: & IDT? & \\
\hline LAYER2: & RACH: & L3DATA? & \\
\hline LAYER2: & RACH: & L3LENGTH? & \\
\hline LAYER2: & RACH: & L3LI? & \\
\hline
\end{tabular}





\footnotetext{

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\begin{tabular}{|c|c|c|}
\hline LIST: & NUMBer & \\
\hline LIST: & NUMBer? & \\
\hline LIST: & OTHER: & CHAN \\
\hline LIST: & OTHER: & CHAN? \\
\hline LIST: & OTHER: & HYPERband \\
\hline LIST: & OTHER: & HYPERband? \\
\hline LIST: & OTHER: & NUMBer \\
\hline LIST: & OTHER: & NUMBer? \\
\hline Status & & \\
\hline STATus? & & \\
\hline TYPE & & \\
\hline TYPE? & & \\
\hline EIGHT: & CONTrol & \\
\hline EIGHT: & CONTral? & \\
\hline LIST & & \\
\hline LIST: & OTHER & \\
\hline LIST: & OTHER? & \\
\hline LIST? & & \\
\hline EIGHT & CONTrol & \\
\hline EIGHT: & CONTrol? & \\
\hline LIST: & CHAN & \\
\hline LIST: & CHAN? & \\
\hline LIST: & NuMBer & \\
\hline LIST: & NUMBer? & \\
\hline LIST: & OTHER: & CHAN \\
\hline LIST: & OTHER: & CHAN? \\
\hline LIST & OTHER: & HYPERband \\
\hline LIST: & OTHER: & HYPER \({ }^{\text {band? }}\) \\
\hline LIST: & OTHER: & NuMBer \\
\hline LIST: & OTHER: & NUMBer? \\
\hline STATus & & \\
\hline STATus? & & \\
\hline TYPE & & \\
\hline TYPE? & & \\
\hline LIST & & \\
\hline LIST: & OTHER & \\
\hline LIST: & OTHER? & \\
\hline LIST? & & \\
\hline LIST: & CHAN & \\
\hline LIST: & CHAN? & \\
\hline LIST: & NUMBer & \\
\hline LIST & NUMBer? & \\
\hline LIST: & OTHER: & CHAN \\
\hline LIST: & OTHER: & CHAN? \\
\hline LIST: & OTHER: & HYPERband \\
\hline LIST: & OTHER: & HYPERband? \\
\hline LIST: & OTHER: & NUMBer \\
\hline LIST: & OTHER: & NUMBer? \\
\hline EIGHT & CONTrol? & \\
\hline EIGHT & PT? & \\
\hline LISI: & CHAN? & \\
\hline LIST: & NUMBer? & \\
\hline LIST: & OTHER: & CHAN? \\
\hline LIST: & OTHER: & HYPERband? \\
\hline LIST: & OTHER: & NuMBer? \\
\hline LIST: & OTHER: & PT? \\
\hline LIST: & PT? & \\
\hline STATus? & & \\
\hline EIGHT: & CONTİI? & \\
\hline EIGHT & PT? & \\
\hline LIST: & CHAN? & \\
\hline LIST & NUMBer? & \\
\hline LIST: & OTHER: & CHAN? \\
\hline LIST: & OTHER: & HYPERband? \\
\hline LISI: & OTHER: & NUMBer? \\
\hline LIST: & OTHER: & PT? \\
\hline LIST: & PT? & \\
\hline STATUS? & & \\
\hline LIST & CHAN? & \\
\hline LIST: & NUMBer? & \\
\hline LIST: & OTHER: & CHAN? \\
\hline LIST: & OTHER: & HYPERband? \\
\hline LIST. & OTHER: & NUMBer? \\
\hline
\end{tabular}


\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & FDCCH: & FBCCH: & мCC: & CODE? & & & 9-89 \\
\hline & & FDCCH: & FBCCH: & MCC: & PT? & & & 9-89 \\
\hline & CSS: & EBCCH: & ENABLE: & MCC? & & & & \[
\begin{aligned}
& 9-327 \\
& 9-323
\end{aligned}
\] \\
\hline & CSS: & CSS:
FDTC: & EBCCH MEMC: & \[
\begin{aligned}
& \text { MCC? } \\
& \text { MEA? }
\end{aligned}
\] & & & & \[
\begin{aligned}
& 9-323 \\
& 9-217
\end{aligned}
\] \\
\hline & & CSS: & SPACH: & MEA & & & & 9.342 \\
\hline css & SPACH: & MODE: & MEM & MEA & & & & 9-351 \\
\hline & MSS: & RDCCH: & LAYER2 & MEA & & & & 9-400 \\
\hline & MSS & RDCCH & MEM & MEA & & & & 9-421 \\
\hline & CSS: & EBCCH & MAP: & MEA: & ALGORithms & & & 9-319 \\
\hline & CSs: & EBCCH & MAP: & MEA: & AlGORithms? & & & 9.319 \\
\hline & css & EBCCH: & MAP: & MEA: & DOMAIN & & & 9-319 \\
\hline & CSS & EBCCH: & MAP: & MEA: & DOMAIN? & & & 9-319 \\
\hline & css & FBCCH - & MAP: & MEA: & ALGORithms & & & 9-271 \\
\hline & CSS & FBCCH : & MAP: & MEA: & ALGORithms? & & & 9-271 \\
\hline & CSS & FBCCH: & MAP: & MEA: & DOMAIN & & & 9-271 \\
\hline & CSS: & FBCCH: & MAP: & MEA: & DOMAIN? & & & 9-271 \\
\hline & css & FDTC: & MAP: & MEA: & ALGORithms & & & 9-216 \\
\hline & css. & FDTC: & MAP: & MEA: & ALGORithms? & & & 9-216 \\
\hline & CSS & FDTC: & MAP: & MEA: & DOMAIN & & & 9-216 \\
\hline & CSS: & FDTC: & MAP: & MEA: & DOMAIN? & & & 9-216 \\
\hline & FDCCH: & EBCCH: & MAP: & MEA: & ALGORithms? & & & 9-118 \\
\hline & FDCCH : & EBCCH: & MAP: & MEA: & DOMAIN? & & & 9-118 \\
\hline & FDCCH: & FBCCH & MAP: & MEA: & ALGORithms? & & & 9.92 \\
\hline & FDCCH: & FBCCH & MAP: & MEA: & DOMAIN? & & & 9-92 \\
\hline & FDTC: & FACCH & MAP: & MEA: & ALGORithms? & & & 9.32 \\
\hline & FDTC & FACCH: & MAP: & MEA: & DOMAIN? & & & 9-32 \\
\hline & RDTC: & FACCH: & MAP: & MEA: & ALGORithms? & & & \(9 \cdot 57\) \\
\hline & RDTC: & FACCH: & MAP: & MEA: & DOMAIN? & & & 9.57 \\
\hline & CSS: & FDTC: & MEMC:
SPACH: & MEA? & & & & \(9-217\)
9.342 \\
\hline css: & SPACH: & MODE: & MEM: & MEA? & & & & 9-351 \\
\hline & FDCCH: & LAYER2: & SPACH: & MEA? & & & & 9-75 \\
\hline & & FDCCH: & SPACH: & MEA? & & & & 9-123 \\
\hline FDCCH: & SPACH: & MODE: & MEM: & MEA? & & & & 9-128 \\
\hline & FDTC & FACCH: & MEMC: & MEA? & & & & 9-33 \\
\hline & MSS: & RDCCH: & LAYER2: & MEA? & & & & 9-400 \\
\hline & MSS: & RDCCH: & MEM: & MEA? & & & & 9-421 \\
\hline & RDCCH & LAYER2: & RACH: & MEA? & & & & 9-156 \\
\hline & & & RDCCH: & MEA? & & & & 9-159 \\
\hline & & RDCCH: & MEM: & MEA? & & & & 9-167 \\
\hline & POWer: & FDTC & CABLE: & MEASLow? & & & & 9-450 \\
\hline CSS: & & & HYPERband: & MEASure & & & & \\
\hline & css: & FDTC: & FACCH: & MEASure & & & & 9-200 \\
\hline & & & & MEASure: & SAT? & & & 9-451 \\
\hline & & POWer: & FDTC: or RDTC: & MEASure:
MEASure? & ST? & & & 9-451
9.450 \\
\hline & MSS & RDCCH: & ENABIe: & MEASurement: & LTM & & & 9-438 \\
\hline & MSS & RDCCH & ENABIE: & MEASurement: & LTM? & & & 9-438 \\
\hline & MSS & ROCCH: & ENABIE: & MEASurement: & OTHER & STM & & 9-438 \\
\hline & MSS: & RDCCH: & ENABIe: & MEASurement: & OTHER: & STM? & & 9-438 \\
\hline & MSS. & RDCCH:
RDCCH: & ENABIe: & MEASurement: & STM
STM & & & 9-438
9 \\
\hline & & RDCCH: & ENABIE: & MEASurement: & LTM & BER & & 9.415 \\
\hline & & MSS: & RDCCH: & MEASurement: & LTM & BER? & & 9-415 \\
\hline & & MSS: & RDCCH: & MEASurement: & LTM & FULL & & 9-415 \\
\hline & & MSS: & RDCCH: & MEASurement: & LTM & FULL? & & 9-415 \\
\hline & & MSS: & RDCCH & MEASurement: & LTM & & & 9-415 \\
\hline & & MSS: & RDCCH: & MEASurement: & LTM & RSS? & & 9-415 \\
\hline & & MSS: & RDCCH: & MEASurement: & LTM & WER & & \begin{tabular}{l}
9.415 \\
\hline-415
\end{tabular} \\
\hline & & MSS: & RDCCH & MEASurement: & LTM: & WER? & & \(9-415\)
9.416 \\
\hline & & MSS: & RDCCH: & MEASurement: & OTHER: & STM: & LENGth & 9-416
9.416 \\
\hline & & MSS: & RDCCH:
RDCCH: & MEASurement: & OTHER:
OTHER: & STM
STM & RENGOth? & \({ }_{9} 9.416\) \\
\hline & & MSS: & RDCCH: & MEASurement: & OTHER: & STM: & REPort? & 9-416 \\
\hline & & MSS: & RDCCH: & MEASurement: & OTHER: & STM: & RSS & 9-417 \\
\hline & & MSS: & RDCCH: & MEASurement: & OTHER: & STM: & RSS? & 9-417 \\
\hline & & MSS: & RDCCH:
RDCCH & MEASurement: & STM:
STM: & NV
NV ? & & 9.416
9.416 \\
\hline & & MSS: & RDCCH: & MEASurement: & STM: & RSS & & 9-416 \\
\hline & & MSS: & RDCCH: & MEASurement: & STM: & RSS? & & 9-416 \\
\hline & & & RDCCH: & MEASurement: & LTM: & BER? & & 9-164 \\
\hline & & & RDCCH: & MEASurement: & LTM & FULL? & & 9-164 \\
\hline & & & RDCCH: & MEASurement: & LTM & RSS? & & - \(\begin{array}{r}\text { 9-164 } \\ 9.164\end{array}\) \\
\hline & & & RDCCH: & MEASurement: & LTM
OTHER: & WER? & LENGth? & 9-164
\(9-165\) \\
\hline & & & RDCCH: & MEASurement: & OTHER: & STM: & REPort? & 9-165 \\
\hline & & & ROCCH : & MEASurement: & OTHER: & STM: & RSS? & 9-165 \\
\hline
\end{tabular}

12-101

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & mss & RDCCH: & Enable: & MEM? & & & & 9-439 \\
\hline & & RDTC & FACCH FACCH & MEM? & & & & \({ }_{9}^{9.53}\) \\
\hline & & & FACCH: & MEMB? & & & & 9-33 \\
\hline & css & FDTC & ENABLE & MEMC. & & & & \({ }_{9}^{9-211}\) \\
\hline & & CSS: & \begin{tabular}{l}
FDTC: \\
FDTC
\end{tabular} & MEMC: & MEA MEA & & & \({ }_{9}^{9-217}\) \\
\hline & & css: & FDTC & MEMC: & MED & & & 9.217 \\
\hline & & Csss & FDTC & MEMC: & M M \(=\) ? & & & 9-217 \\
\hline & & CSS: & Fotc & MEMC: & M M K \% & & & \({ }_{9}^{9-217}\) \\
\hline & & FDTC & FACCH: & м \(\quad\) mC: & MEA ? & & & 9.33 \\
\hline & & FDTC & \(\xrightarrow{\text { FACCH }}\) FACCH & MEMC: & MED? & & & \({ }_{9}^{9.33}\) \\
\hline & css & FDTC & enable: & MEMC? & & & & 9.211 \\
\hline & CSS & \({ }_{\text {EBCCH: }}^{\text {FBCCH: }}\) & MAP: & MENU & & & & 9.272 \\
\hline & CSS: & EBCCH: & MAP: & MENU? & & & & 9.319 \\
\hline & CSS: & FECCH: & MAP & MENU? & & & & \({ }^{9} \cdot 172\) \\
\hline & FDCCH & EBCCH: & MAP & MENU? & & & & 9-118 \\
\hline & FDCCH: & \({ }^{\mathrm{FBCCH}}\) F & MAP. & MENU? & & & & \({ }_{9}^{9.922}\) \\
\hline CSS & FDIC:
CSSS & FACCH: & RDABA & MESSSage & CENTer: & ADDRess & & 9.211 \\
\hline & css: & FDTC: & Enable: & MESSage: & CENTer: & ADDRess? & & 9-211 \\
\hline & & CSS: & FDTC & MESSage: & CENTer: & ADDRess & & 9.218 \\
\hline & & Css: & \({ }^{\text {FDTC }}\) & MESSSage: & CENTer: & ADDRess? & & \({ }_{9}^{9.218}\) \\
\hline & & css & FDTC & MESSage: & CENTer: & ENCOding? & & 9.218 \\
\hline & & CSS: & FDTC
FDTC & MESSSage: & CENTer: &  & & \({ }_{9}^{9-21818}\) \\
\hline & & Css: & FDTC: & MESSage: & CENTer: & TYPE & & 9.218 \\
\hline & & FDTC: & \({ }^{\text {FDTG }}\) MSGTG: & MESSSage: & CENTer: & & & \({ }_{\substack{\text { g.218 } \\ 9.218}}\) \\
\hline & Css & \({ }_{\text {FOTIC }}\) FDTC & MSGWTG: & MESSSage: & NUMBer? & & & 9.218
9.219 \\
\hline & Css & FDTC: & MSGWTG: & MESSage: & TYPE? & & & 9.219 \\
\hline & Css: & SPACH: & ENABLE: & MESSage: & CENTer & ADDRess
ADDRess? & & -9.380 \\
\hline & & SPACH: & ENABLE: & MESSage: & CENTer: & ADDRess? & & \({ }_{9}^{9-361}\) \\
\hline & & CSS & SPACH: & MESSSage: & CENTer: & ADDCess? & & \({ }_{9}^{9.361}\) \\
\hline & & css: & SPACH: & MESSage: & CENTer & ENCoding? & & \({ }_{9} 964\) \\
\hline & & css & SPPCH: & MESSSage: & CENTer: & Planid & & 9.361 \\
\hline & & \({ }^{\text {csss }}\) & SPACH: & MESSage: & CENTer: & TYPE & & \({ }_{9}^{9-361}\) \\
\hline & & CSS: & SPACH: & MESSSage: & CENTer: & TYPE? & & ¢ 9.361 \\
\hline & & \({ }_{\text {FOCCH }}\) & SPACH: & MESSage: & CENTer & ADCosess? & & 9-137 \\
\hline & & \({ }^{\text {FOCCH: }}\) & SPACH: & MESSSage: & CENTer: & lench? & &  \\
\hline & & FOCCH: & SPACH: & MESSage: & CENTer: & PT? & & 9.137 \\
\hline & & \(\stackrel{\text { FOCCH }}{\text { FDTC }}\) & SPACCH: & MESSSage: & CENTer: & \({ }_{\text {ADPRess? }}\) & & \({ }_{9}^{9.34}\) \\
\hline & & \({ }_{\text {FOTC }}\) FOTC & FACCH: & MESSSage: & CENTe: &  & &  \\
\hline & & \({ }^{\text {FDTC }}\) FDTC & FACCH: & MESSage: & CENTer: & Planid? & & 9.34 \\
\hline & & FDTC & FACCH: & MESSage: & CENTer: & & & 9.34 \\
\hline & MSS & RDCCH: & ENABE: & MESSage: & Center: & ADDRess & & 9.440
9.440 \\
\hline & & MSS & RDCCH: & MESSage: & ACCESS & TYPE: & NONE & -9.398 \\
\hline & & MSS: & \(\xrightarrow{\text { RDCCCH: }}\) & MESSage: & ACCESSS: & TYPE? & & 9.398 \\
\hline & & MSS: & RDCCH: & MESSage: & CENTer: & ADDRess & & - 9.4 .427 \\
\hline & & MSS & RDCCH: & MESSage: & CENTer: & ADDRess: & ENCoding? & 9.427 \\
\hline & & MSS & RDCCH: & MESSage: & CENTer: & ADDRess? & & \({ }_{9}^{9-427}\) \\
\hline & & Mss: & RDCCH: & MESSage: & CENTer: & PLANid? & & 9.427 \\
\hline & & MSS: & RDCCH: & MESSSage: & CENTer: & TYPE ? & & -9-427 \\
\hline & & MSS: & RDCCH: & MESSage: & CORRUPT & & & 9.399 \({ }_{9}\) \\
\hline & & Mss & RDCCH: & MESSage: & DATA & & & 9395 \\
\hline & & MSS
MSS & R RDCCH: & MESSage: & LENGGT & & & - 9 9-394 \\
\hline & & MSS & RDCCH: & MESSage: & REPeat: & OFF & & 9-399 \\
\hline & & MSS & R ROCCH: & MESSage: & REPeat: & SYNC & & 9-399 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline & MSS: & RDCCH : & MESSage: & REPeat: & SYNC? \\
\hline & MSS: & RDCCH: & MESSage: & SEND & \\
\hline & MSS: & RDCCH: & MESSage: & SFP & \\
\hline & MSS: & RDCCH: & MESSage: & SFP? & \\
\hline & MSS & RDCCH: & MESSage: & STOP & \\
\hline & & RDCCH: & MESSage: & CENTer: & ADDRess? \\
\hline & & RDCCH: & MESSage: & CENTer: & ENCoding? \\
\hline & & RDCCH : & MESSage: & CENTer: & LENGTh? \\
\hline & & RDCCH: & MESSage: & CENTer: & PLANid? \\
\hline & & RDCCH: & MESSage: & CENTer: & TYPE? \\
\hline & RDTC & FACCH: & MESSage: & CENTer: & ADDRess? \\
\hline & RDTC: & FACCH: & MESSage: & CENTer: & ENCoding? \\
\hline & RDTC: & FACCH : & MESSage: & CENTer: & LENGIt? \\
\hline & RDTC. & FACCH: & MESSage: & CENTer: & PLANid? \\
\hline & RDTC & FACCH: & MESSage: & CENTer: & TYPE? \\
\hline & FDTC: & RAW: & MESSage? & & \\
\hline & CSS: & CALLL: & MIN & & \\
\hline & CSS & MSCM & MIN & & \\
\hline & FOCC & CAPTure: & MIN & & \\
\hline FOCC: & CAPTure: & SELect: & MiN & & \\
\hline MSS: & RDCCH: & LAYER2: & MiN & & \\
\hline MSS: & RDCCH: & USER: & MIN & & \\
\hline & CSS & CALL: & MIN? & & \\
\hline & css & MSCM: & MIN? & & \\
\hline FDCCH: & SPACH: & MSIT: & MIN? & & \\
\hline FDCCH: & SPACH & UGD: & MIN? & & \\
\hline & FOCC: & CAPTure: & Min? & & \\
\hline & & FOCC: & MIN? & & \\
\hline MSS: & RDCCH: & LAYER2: & MIN? & & \\
\hline \begin{tabular}{l}
MSS: \\
FDCCH
\end{tabular} & ROCCH:
LAYER2 & USER: & MIN? & & \\
\hline & & RDCCH: & MIN? & & \\
\hline & & RECC: & MIN? & & \\
\hline & CSS: & SPACH: & MIN1 & & \\
\hline & CSS: & SPACH: & MiN1? & & \\
\hline & CSS: & SPACH: & MiN2 & & \\
\hline & CSS: & SPACH: & Min2? & & \\
\hline & CSS: & SPACH: & M1N3
MiN3? & & \\
\hline css: & EBCCH: & ZONE: & MiNutes & & \\
\hline CSS: & EBCCH: & ZONE: & MiNutes? & & \\
\hline FDCCH: & EBCCH: & ZONE: & MiNutes? & & \\
\hline & CSS: & SPACH: & MM & & \\
\hline FDCCH: & CSS: & SPACH: & MM? & & \\
\hline & FDCCH & \[
\begin{aligned}
& \text { SPACH: } \\
& \text { SPACH: }
\end{aligned}
\] & MM? & & \\
\hline & & & MMEMory: & CATalog: & ENTRY? \\
\hline & & & MMEMory: & CATalog:
CATalog: & \\
\hline & & & MMEMory: & CATalog? & \\
\hline & & & MMEMory:
MMEMory: & DELete
INITialize & \\
\hline & & & MMEMory: & INITialize? & \\
\hline & & & MMEMory: & LOAD & MACRo \\
\hline & & & MMEMory: & PACK & \\
\hline CSS: & CALL: & PROCess: & MMEMOry: MOBINIT & Store: & MACRO \\
\hline & & & MODacc: & FDTC & CHANnel \\
\hline & & & MODacc: & FDTC & COMPlete? \\
\hline & & & MODacc: & FDTC: & FREQ_ERRor? \\
\hline & & & MODacc: & FDTC: & 10.0 FFset? \\
\hline & & & MODacc: & FDTC:
FDTC: & MAGG ERRor?
PHASE ERROr? \\
\hline & & & MODacc: & FDTC: & RUN? \\
\hline & & & MODacc: & FDTC: & SETup \\
\hline CSS: & SPACH: & ENABLE & MODE: & MEM & \\
\hline CSS: & SPACH: & ENABLE & MODE: & MEM? & \\
\hline CSS: & SPACH: & ENABLE: & MODE: & VOICE
VOICE & \\
\hline & CSS: & SPACH: & MODE: & & \\
\hline & CsS: & SPACH: & MODE: & DIC? & \\
\hline & CSS: & SPACH: & MODE: & HYPERband: & INFO \\
\hline & CSS: & SPACH: & MODE: & HYPERBand: & INFO? \\
\hline & css: & SPACH: & MODE: & MEM:
MEM & MEA \\
\hline & CSS: & SPACH: & MODE: & MEM & MED \\
\hline
\end{tabular}





\section*{388088
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MSGtyPe3:

```
ANALOG
AUDIT
BSCHALcon
BSMC
CAPability
CAPability
DIGGital
DRETRY
MSGWTG
PAGE
PU
PAGE
PU
QDISC ACK
QUPDate
QUPDate
RDATA ACCept
RDATA REJect
RDATA-REJe
REGACCept
REG_REJect
REG_REJe
RELEase
REORDer
REORDer
SOC
SPACHnotitication
SSDUP
    SPACH
SSDUP
TESTreq
    TESTreg
UCHAL
UCHAL
USERalert
ANALOG
ANALOG
AUDIT
    AUDIT
SSCHALCon
    CAPability
    DIGitai
DRETRY
MSGWTG
    PAGE
    PU
QDISC_ACK
    QDISC_AC
QUPDate
RDATA
    RDATA
    RDATA ACCept
    RDATA REJect
REG_ACCept
    REG_REJect
    RELEase
REORDer
    REORDe
SOC
    SPACHnotification
    SSDUP
    TESTreg
UCHAL
USERalert
\begin{tabular}{ll} 
MESSage: & NUMBer \\
MESSage: & NUMBer? \\
MESSage: & TYPE \\
MESSage: & TYPE? \\
NUMBer & \\
NUMBer? & \\
NUMBer & \\
NUMBer? & \\
NV & \\
NV ? & \\
TYPE & \\
TYPE? & \\
NUMBer? & \\
NV? & \\
TYPE? & \\
NUMBer? & \\
TYPE? & \\
ASSIGNment & \\
ASSSGNment? & \\
ASSSNment & \\
ASSIGNment? &
\end{tabular}






\begin{tabular}{|c|c|}
\hline PRESentation: PRESentation: & \\
\hline SUBaddress: & ADDRess \\
\hline SUBaddress: & ADDRess? \\
\hline SUBaddress: & LENGth \\
\hline SUBaddress: & LENGth? \\
\hline SUBaddress: & ODD EVEN \\
\hline SUBaddress: & ODD EVEN? \\
\hline SUBaddress: & REServed \\
\hline SUBaddress: & REServed? \\
\hline SUBaddress: & TYPE \\
\hline SUBaddress: & TYPE? \\
\hline \begin{tabular}{l}
TYPE \\
TYPE?
\end{tabular} & \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{REQuest REQuest?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{\multirow[t]{6}{*}{\begin{tabular}{l}
VERsion \\
VERsion? \\
MAP? \\
SELect \\
SELect?
\end{tabular}}} \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{REServed REServed?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{\multirow[t]{3}{*}{\[
\begin{aligned}
& \text { DELay } \\
& \text { DELay? DATA } \\
& \text { HLP: }
\end{aligned}
\]}} \\
\hline & \\
\hline & \\
\hline \multicolumn{2}{|l|}{\multirow[b]{2}{*}{HLP: IDentifier}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{HLP: IDentifier?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{LENGth LENGTh?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{TYPE TYPE?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{RANDom USER}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Status STATus?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{} \\
\hline \multicolumn{2}{|l|}{ADDRess
AD} \\
\hline \multicolumn{2}{|l|}{LENGth} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{LENGth?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{ODD-EVEN?} \\
\hline \multicolumn{2}{|l|}{RESErved} \\
\hline \multicolumn{2}{|l|}{REServed?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{TYPE}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{} \\
\hline \multicolumn{2}{|l|}{ALT-SOC?} \\
\hline \multicolumn{2}{|l|}{ANA800} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{ANAB00?
ASYNC}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{ASYNC?}} \\
\hline & \\
\hline
\end{tabular}
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\begin{tabular}{|c|c|}
\hline ENABLE & NEIGHbor \\
\hline ENABLE: & NEIGHbor \\
\hline & NEIGHbor
EBCCH: \\
\hline CSS: & EBCCH: \\
\hline CSS: & EBCCH: \\
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\hline NEIGHDOT: & ANAlog: \\
\hline NEIGH \({ }^{\text {a }}\), & ANAlog: \\
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\hline NEIGHBOT & TDMA: \\
\hline NEIGHbor: & TDMA: \\
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OTHER? \\
TDMA
\end{tabular}}} \\
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\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{SERV SS}} \\
\hline & \\
\hline access: & MS PWR \\
\hline ACCess & MS PWR? \\
\hline Access: & RSS Min \\
\hline Access: & RSS_MIN? \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{CHAN}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{DCC} \\
\hline \multicolumn{2}{|l|}{DCC?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{DELAY}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
HL FREQ \\
HL FREO?
\end{tabular}}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{NüMBer} \\
\hline \multicolumn{2}{|l|}{NUMBer?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{OFFset}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{OFFset?
PROTocol} \\
\hline \multicolumn{2}{|l|}{PROTocol?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{RETRY
RETRY?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{RETRY? SS SUFF} \\
\hline \multicolumn{2}{|l|}{SS-SUFF?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{TYPE: CELL}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{TYPE: NETwork} \\
\hline \multicolumn{2}{|l|}{TYPE: NETwork?} \\
\hline \multicolumn{2}{|l|}{ACCess: MS_PWR} \\
\hline \multirow[b]{2}{*}{ACCess: RSS MIN} & MS \({ }^{\text {PWR }}\) \\
\hline & RSS MIN \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{ACCess: RSS_Min?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{} \\
\hline \multicolumn{2}{|l|}{CHAN?} \\
\hline \multicolumn{2}{|l|}{DELAY?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{DVCC
DVCC?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{DVCC?
HL FREQ} \\
\hline \multicolumn{2}{|l|}{HL FREO?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{OFFset}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{PROTocol} \\
\hline \multicolumn{2}{|l|}{PROTOCOI?} \\
\hline \multicolumn{2}{|l|}{PSID_RSID: INDicator} \\
\hline \multicolumn{2}{|l|}{PSID-RSID: INDicator?} \\
\hline \multicolumn{2}{|l|}{PSID-RSID: LENGIT} \\
\hline \multicolumn{2}{|l|}{PSIDRSID: LENG施?} \\
\hline PSID-RSID: & SUPport \\
\hline \multicolumn{2}{|l|}{PSID RSID: SUPport?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{RETRY
RETRY?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{SSSSUFF}} \\
\hline \multicolumn{2}{|l|}{\multirow[b]{2}{*}{SYNC}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{SYNC?} \\
\hline \multicolumn{2}{|l|}{TYPE: CELL} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{TYPE: CELL?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{TYPE: NETwork?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{ACCess: MS.PWR}} \\
\hline & MS \({ }^{-P W R}\) ? \\
\hline \multicolumn{2}{|l|}{ACCess: \(\quad\) RS \({ }^{\text {S MIN }}\)} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{ACCess: RSS MiN?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{CHAN?} \\
\hline \multicolumn{2}{|l|}{DELAY} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{DELAY?
DVCC}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{DVCC?} \\
\hline \multicolumn{2}{|l|}{HL FREO} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{HL-FREQ?}} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
NuMBer \\
NuMBer?
\end{tabular}}} \\
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\hline OFFset? PROTOCOI PROTOcol? & \\
\hline PSID_RSID: & InDicator \\
\hline PSID-RSID: & indicator? \\
\hline PSID_RSID: & LENGth \\
\hline PSID-RSID: & LENGTh? \\
\hline PSID RSID: & SUPport \\
\hline PSID RSID: & SUPport? \\
\hline RETRY & \\
\hline RETRY? & \\
\hline SS_SUFF & \\
\hline SS_SUFF? & \\
\hline SYÑC & \\
\hline SYNC? & \\
\hline TYPE: & CELL \\
\hline TYPE & CELL? \\
\hline TYPE & NETwork \\
\hline TYPE & NETwork? \\
\hline SERV SS? & \\
\hline Access: & MS_PWR? \\
\hline ACCess: & RSŞ_MIN? \\
\hline CHAN? & \\
\hline DCC? & \\
\hline DELay? & \\
\hline HL FREQ? & \\
\hline Number? & \\
\hline OFFset? & \\
\hline PROTOCOI? & \\
\hline PT? & \\
\hline RETRY? & \\
\hline SS SUFF? & \\
\hline TYPE: & CELL? \\
\hline TYPE: & NETwork? \\
\hline ACCess: & MS PWR? \\
\hline Access: & RSS_MIN? \\
\hline CHAN? & \\
\hline DELay? & \\
\hline DVCC? & \\
\hline HL FREQ? OFFset? & \\
\hline PROTOCOI? & \\
\hline PSID_RSID: & INDicator? \\
\hline PSID RSID: & LENGth? \\
\hline PSID-RSID: & SUPport? \\
\hline RETRY? & \\
\hline SS_SUFF? & \\
\hline SYÑC? & \\
\hline TYPE: & CELL? \\
\hline TYPE: & NETwork? \\
\hline ACCess: & MS PWR? \\
\hline ACCess: & RSŞ_MIN? \\
\hline CHAN? & \\
\hline DELay? & \\
\hline DVCC? & \\
\hline HL FREQ? & \\
\hline NuMMBer? & \\
\hline OFFset? & \\
\hline PROTocol? & \\
\hline PSID_RSID & INDicator? \\
\hline PSID-RSID & LENGth? \\
\hline PSID_RSID & SUPport? \\
\hline PT? & \\
\hline RETRY? & \\
\hline SYNTC? & \\
\hline TYPE: & CELL? \\
\hline TYPE & NETwork? \\
\hline
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\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & css & FDTC: & CALLING & NAMe: & P1? & & & \\
\hline & CSS & FDTC & CALLING: & NAMe: & REServed & & & \\
\hline & CSS & FDTC: & CALLING: & NAMe: & REServed? & & & \\
\hline & css & FDTC: & CALLING: & NAMe: & & & & \\
\hline & \(\mathrm{CSS}_{\text {SPACH }}\) & FDTC: & CALLING: & NAMe: & \(\mathrm{Sl}^{\text {l }}\) ? & & & \\
\hline CSS & SPACH: & ALPHA: & PSID RSID: & NAME: & CHARacter & & & \\
\hline CSS: & SPACH: & ALPHA: & \(P\) SID RSID: & NAME: & CHARacter? & & & \\
\hline FDCCH: & SPACH: & ALPHA: & PSID_RSID: & NAME: & CHARacters? & & & \\
\hline FDCCH : & SPACH: & ALPHA: & PSID RSID: & NAME: & LENGth? & & & \\
\hline & FDTC FDTC & FACCH: & CALLING: & NAMe:
NAMe: & \begin{tabular}{l}
PI ? \\
REServed?
\end{tabular} & & & \\
\hline & FDTC: & FACCH: & CALLING: & NAMe: & SI? & & & \\
\hline & CSS: & FDTC: & CALLING: & NAMe? & & & & \\
\hline CSS: & FDTC: & ENABLE: & CALLING: & NAMe? & & & & \\
\hline & FDTC & FACCH: & CALLING FOCC & NAMe? NAWC? & & & & \\
\hline & css: & EBCCH: & ENABLE: & NEIGHbor: & ANALOG & & & \\
\hline & CSS & EBCCH & ENABLE: & NEIGHbor: & ANALOG? & & & \\
\hline & css & EBCCH & ENABLE & NEIGHbor: & Multi: & ANALOG & & \\
\hline & CSS & EBCCH: & ENABLE: & NEIGHBor: & MULit: & ANALOG? & & \\
\hline & CSS & EBCCH & ENABLE: & NEIGHbor: & MULti: & OTHER
OTHER? & & \\
\hline & CSS: & EBCCH: & ENABLE: & NEIGHbor: & MULti: & TDMA & & \\
\hline & CSS & EBCCH & ENABIE & NEIGHbor: & MULti: & TDMA? & & \\
\hline & CSS & EBCCH & ENABLE: & NEIGHbor: & OTHER: & INFO & & \\
\hline & CSS: & EBCCH: & ENABEE: & NEIGHbor:
NEIGHbor: & OTHER: & INFO? & & \\
\hline & CSS & EBCCH: & ENABLE: & NEIGHbor: & TDMA: & iNFO & & \\
\hline & CSS: & EBCCH: & ENABLE: & NEIGHbor: & TDMA & INFO? & & \\
\hline & CSS & EBCCH & ENABLE: & NEIGHbor: & TDMA? & & & \\
\hline & CSS & EBCCH & MSGtype:
MSGGpe: & NEIGHbor: & CEELL & MULit & & \\
\hline & CSS & EBCCH: & MSGlype: & NEIGHbor: & CELL: & MULit? & & \\
\hline & CSS & EBCCH & MSGtype: & NEIGHbor: & CELL? & & & \\
\hline & CSS & EBCCH & MSGType: & NEIGHBOr: & SERVice & & & \\
\hline & CSs & EBCCH & MSGGtype: & NEIGHBor: & SERVice: & MULti? & & \\
\hline & css: & EBCCH: & MSGtype: & NEIGHbor: & SERVice? & & & \\
\hline & & CSS: & EBCCH: & NEIGHbor: & ANAlog: & CELL: & ACCess: & MS_PWR \\
\hline & & CSS: & EBCCH: & NEIGHbor: & ANAlog: & CELL: & ACCess: & MS PWR? \\
\hline & & CSS & EBCCH: & NEIGHbor: & ANAlog: & CELL: & ACCess: & RSS_MIN? \\
\hline & & CSS: & EBCCH: & NEIGHbor: & ANAlog: & CELL: & CHAN & \\
\hline & & CSS & EBCCH: & NEIGHBOO: & ANAlog: & CELL: & CHAN? & \\
\hline & & CSS: & EBCCH: & NEIGHbor: & ANAlog: & CELL: & DCC & \\
\hline & & CSS & EBCCH: & NEIGHBor: & ANAlog: & CELL: & DELAY & \\
\hline & & CSS: & EBCCH: & NEIGHBOR: & ANAlog: & CELL: & DELAY? & \\
\hline & & CSS: & EBCCH: & NEIGHbor: & ANAlog: & CELL: & HL_FREO & \\
\hline & & CSS: & EBCCH: & NEIGHbor: & ANAlog: & CELL: & HLFFset & \\
\hline & & css & EBCCH: & NEIGHbor: & ANAlog: & CELL: & OFFset? & \\
\hline & & CSS & EBCCH & NEIGHbor: & ANAlog: & CELL: & PROTocol & \\
\hline & & CSS & EBCCH: & NEIGHbor: & ANAlog: & CELL: & PROTOcol? & \\
\hline & & CSS: & EBCCH: & NEIGHBor: & ANAIog: & CELL: & RETRY
RETRY? & \\
\hline & & CSS & EBCCH: & NEIGHbor: & ANAlog: & CELLL: & SS_SUFF & \\
\hline & & CSS: & EBCCH: & NEIGHbor: & ANAiog: & CELL: & SS SUFF? & \\
\hline & & CSS & EBCCH: & NEIGHbor: & ANAlog: & CELL: & TYPE: & CELL \\
\hline & & CSS: & EBCCH: & NEIGHbor: & ANAlog: & CELL: & TYPE: & NETwork \\
\hline & & CSS & EBCCH: & NEIGHbor: & ANAlog: & CELL: & TYPE: & NETwork? \\
\hline & & CSS & EBCCH & NEIGHbor: & ANAlog: & MULti: & ACCess: & MS_PWR \\
\hline & & CSS: & EBCCH & NEIGHbor: & ANAlog: & MULti: & ACCess: & MS PWR? \\
\hline & & CSS: & EBCCH: & NEIGHbor: & ANAIOg: & MULti: & ACCess: & RSS_MIN
RSS_MIN? \\
\hline & & CSS: & EBCCH & NEIGHbor: & ANAlog: & MULti: & CHAN & \\
\hline & & CSS: & EBCCH & NEIGHbor: & ANAlog: & MULti: & CHAN? & \\
\hline & & CSS: & EBCCH: & NEIGHDOr: & ANAlog: & MULti: & DCC & \\
\hline & & CSS: & EBCCH: & NEIGHbor: & ANAlog: & MULti: & DCC? & \\
\hline & & CSS: & EBCCH: & NEIGHbOr: & ANAlog: & MULTi: & DELAY & \\
\hline & & CSS: & EBCCH & NEIGHbor: & ANAlog: & MULti: & HL_FREQ & \\
\hline & & CSS: & EBCCH: & NEIGHbor: & ANAlog: & MULti: & HL FREO? & \\
\hline & & CSS: & EBCCH: & NEIGHbor: & ANAlog: & MULti: & NuMBer & \\
\hline & & CSS: & EBCCH: & NEIGHbor: & ANAIog: & MULti: & NUMBer? & \\
\hline & & CSS: & EBCCH & NEIGHbor: & ANAlog: & MULti: & OFFset? & \\
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CELL?
NETwork
NETwork?
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Twork
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INDicator
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MAP
MAP?
MS PWR
MS PWR?
RSSMM
RSS_MIN?

12-119






CELL
CELL?
NETwork
NETwork?

INDicator
INDicator?
MAP
MAP?
MS_PR
MS PWR?
RSS_MN
RSS_MIN?

12-120

FDCCH
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FDCCH

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\hline \multicolumn{3}{|l|}{NETwork?} \\
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\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{NEWACC}} \\
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\hline \multicolumn{3}{|l|}{Newacc?} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{NEWACC?}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{NL3M} \\
\hline \multicolumn{3}{|l|}{NL3M?} \\
\hline \multicolumn{3}{|l|}{NL3M?} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{NL3M?
NOMW}} \\
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\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{NOMW?
NOMW?}} \\
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\hline \multicolumn{3}{|l|}{NOMW?} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{NON PCH}} \\
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\hline \multicolumn{3}{|l|}{NON \({ }^{\text {PCCH}}\) ?} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{NONARO
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\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{NONARQ?}} \\
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\hline \multicolumn{3}{|l|}{NONPublic} \\
\hline NONPublic: & BLOCK & \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{NONPublic: BLOCK?
NONPublic:
LENGth}} \\
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\hline \multicolumn{3}{|l|}{NONPublic: LENG號?} \\
\hline \multicolumn{3}{|l|}{NONPublic: \({ }^{\text {LeNGth? }}\) NONPublic:
PROBability} \\
\hline \multicolumn{3}{|l|}{NONPublic: PROBability?} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{\(\begin{array}{ll}\text { NONPublic: } & \text { REGistration } \\ \text { NONPublic: } \\ \text { REGistration? }\end{array}\)}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{NONPublic: PROBability: BLOCK} \\
\hline \multicolumn{3}{|l|}{NONPublic: PROBability: BLOCk?} \\
\hline \multicolumn{3}{|l|}{NONPublic: PROBability: LENGth} \\
\hline \multicolumn{3}{|l|}{NONPublic: PROBability: LENGTh?} \\
\hline \multicolumn{3}{|l|}{NONPublic: REGistration: CONTrol} \\
\hline \multicolumn{3}{|l|}{NONPublic: REGistration: CONTrol?} \\
\hline \multicolumn{3}{|l|}{NONPublic: PROBability: BLOCk?} \\
\hline \multicolumn{3}{|l|}{NONPublic: PROBability: LENGG?} \\
\hline \multicolumn{3}{|l|}{\(\begin{array}{ll}\text { NONPublic: } & \text { Probability: LENGth? } \\ \text { NONPublic: } & \text { PROBability: PT? }\end{array}\)} \\
\hline \multicolumn{3}{|l|}{NONPublic: PROBability: BLOCk?} \\
\hline \multicolumn{3}{|l|}{NONPublic: PROBability; LENGTh?} \\
\hline \multicolumn{3}{|l|}{NONPublic: PROBability: PT?} \\
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\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{NORMal
NORMal}} \\
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\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{NOTification?}} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{NUM}} \\
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\hline \multicolumn{3}{|l|}{NUM?} \\
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\end{tabular}
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\hline & & FDTC & FACCH: & CALLING: & NUM? & & 9-29 \\
\hline & & RDTC: & FACCH: & CALLED: & NUM? & & \(9-29\)
9.54 \\
\hline & & RDTC & FACCH & CALLING: & NUM? & & 9.55 \\
\hline & & FDTC: & FACCH & CALLING: & NUM1? & & 9-29 \\
\hline & & FDTC: & FACCH: & CALLING: & NUM2? & & \(\stackrel{9}{9-29}\) \\
\hline & & CSS: & EBCCH: & ALT SOC: & NUMBer & & 9-321 \\
\hline & CSS: & EBCCH: & MACA: & LIST: & NUMBer & & 9-313
9 \\
\hline css & EBCCH: & MACA: & LIST: & OTHER: & NUMBer & & \({ }_{9}-318\) \\
\hline css: & EBCCH: & NEIGHbor: & ANAIOg: & MULti: & NuMBer & & 9.300 \\
\hline & CSS: & EBCCH: & NEIGHBor: & ANAlog: & Number & & 9-290 \\
\hline & CSS: & EBCCH: & NEIGHbor: & OTHER: & Number & & 9-305 \\
\hline css & EBCCH: & NEIGHbor. & TDMA: & MULti: & NUMBer & & 9-294 \\
\hline & CSS: & EBCCH: & NEIGHbor: & TDMA: & Number & & 9-284 \\
\hline & & CSS & FBCCH & ADDitional & NuMBer & & 9-263 \\
\hline & & CSS: & FBCCH: & ALT SOC: & NUMBer & & 9-273 \\
\hline & CSS: & FBCCH: & MACA: & LIST: & NuMBer & & 9-269 \\
\hline css: & FBCCH: & MACA: & LIST: & OTHER: & NuMBer & & 9.269 \\
\hline & & CSS: & FBCCH & PSID_RSID: & NuMBer & & 9-266 \\
\hline & & CSS: & FDTC: & DCCAinto: & Number & & 9-207 \\
\hline & & CSS: & FDTC: & HYPERband: & NUMBer & & 9-215 \\
\hline & css: & FDTC: & MSGWTG: & MESSage: & NuMBer & & 9-218 \\
\hline & & CSS: & FDTC: & MSGWIG: & NUMBer & & 9-219 \\
\hline & CSS: & FDTC: & SERVice: & CAUSe: & NUMBer & & 9-223 \\
\hline & CSS: & SPACH: & ALPHA: & PSID RSID: & NUMBer & & - \(\begin{aligned} & \text { 9-182 } \\ & 9-375\end{aligned}\) \\
\hline & CSS: & SPACH: & MACA: & LIST- \({ }^{\text {- }}\) & NuMBer & & \({ }_{9}-376\) \\
\hline css & SPACH: & MACA: & LIST: & OTHER: & Number & & 9.376 \\
\hline & & CSS: & SPACH: & MSGWTG: & NuMBer & & 9-353 \\
\hline & css: & SPACH: & PSID RSID: & Avallable: & NUMBer & & 9-369 \\
\hline & & CSS: & SPACH: & RETRY: & NUMBer & & 9352 \\
\hline & & CSS: & SPACH: & RNUM: & NUMBer & & 9-368 \\
\hline & & MSS: & RDCCH: & VoICEMode:
FBCCH: & NUMBer & EBCCH & 9-420 \\
\hline & & & CSS: & FBCCH: & NUMber: & EBCCH? & 9.255
9.255 \\
\hline & & & css: & FBCCH: & NUMber: & FBCCH & 9-255 \\
\hline & & & Css & FBCCH: & NUMber: & \(\mathrm{FBCCH}^{\text {a }}\) & 9-255 \\
\hline & & & CSS: & FBCCH & NUMber: & NON PCH & 9-255 \\
\hline & & & CSS: & FBCCH
FBCCH & NUMber:
NuMber: & NON-PCH?
REServed & 9-255
9.255 \\
\hline & & & CSS: & FBCCH: & NUMber: & REServed? & 9.255 \\
\hline & & & css: & FBCCH: & number: & SBCCH & 9-255 \\
\hline & & & CSS: & FBCCH: & NUMber: & SBCCH? & 9-255 \\
\hline & & & FDCCH: & FBCCH: & NUMber: & EBCCH? & 9.81 \\
\hline & & & FDCCH: & FBCCH: & NUMber: & FBCCH? & 9.81 \\
\hline & & & FDCCH: & FBCCH & NUMber: & NON PCH ? & 9-81 \\
\hline & & & FDCCH:
FDCCH: & FBCCH:
FBCCH: & NUMber:
NUMber: & REServed?
SBCCH? & \(9-81\)
9.81 \\
\hline & & CSS: & EBCCH: & ALT_SOC: & NUMBer? & & \({ }_{9} 9.321\) \\
\hline & & CSS: & EBCCH: & CHANTEI: & NUMBer? & & \(9-313\) \\
\hline & CSS & EBCCH: & MACA: & LIST: & NUMBer? & & 9-317 \\
\hline CSS
CSS & EBCCH: & MACA & LIST: & OTHER: & NUMBer?
NUMBer? & & \(9-318\)
9.300 \\
\hline & CSCCH: & NEIGHbor: & ANAIOG: & M M ALIIO: & NUMBer?
NUMBer? & & 9-300
\(9-290\) \\
\hline & CSS & EBCCH: & NEIGHbor: & OTHER: & NuMBer? & & 9-305 \\
\hline css & EBCCH: & NEIGHbor: & TDMA: & MULTii: & NUMBer? & & 9-294 \\
\hline & CSS & EBCCH: & NEIGHbor: & TDMA: & NUMBer? & & 9-284 \\
\hline & & CSS: & FBCCH: & ALT SOC & NuMBer? & & 9-263
9.273 \\
\hline & CSS & FBCCH: & MACA: & LIST: & NUMBer? & & 9-269 \\
\hline CSS & FBCCH: & MACA & LIST: & OTHER: & NUMBer? & & 9-269 \\
\hline & & CSS: & FBCCH: & PSID RSID: & NUMBer? & & 9-266 \\
\hline & & CSS: & FDCCH: &  & NUMBer? & & 9-250 \\
\hline & & CSS: & & DCCHinto:
HYPERband: & NUMBer? & & 9-207 \\
\hline & css & FDTC: & MSGWTG & MESSage: & NUMBer? & & 9-218 \\
\hline & & CSS: & FDTC: & MSGWTG: & NUMBer? & & 9-219 \\
\hline & CSS & FDTC: & SERVice: & CAUSE: & NUMBer? & & 9-223 \\
\hline & CSS & SPACH: & MACA: & LIST: & NUMBer? & & 9-376 \\
\hline css & SPACH: & MACA. & LIST: & OTHER: & NUMBer? & & 9-376 \\
\hline & & CSS. & SPACH: & MSGWTG: & NUMBer? & & 9.353 \\
\hline & CSS & SPACH: & PSID RSID: & AVAILable: & NUMBer? & & 9-369 \\
\hline & & CSS: & SPACH: & & NUMBer? & & -9-352 \\
\hline & & FDCCH: & EBCCH: & ALT SOC: & NUMBer? & & 9-119 \\
\hline & & FDCCH & EBCCH: & CHANnel: & NUMBer? & & 9-114 \\
\hline & FDCCH: & EBCCH & MACA: & LIST: & NUMBer? & & 9-116 \\
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\end{tabular}









\begin{tabular}{|c|c|}
\hline SUBaddress & ADDRess? \\
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Subaddress: \\
SUBaddress:
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LENGth? \\
\hline SUBaddress: & ODD_EVEN \\
\hline SUEaddress: & ODD_EVEN? \\
\hline SUBaddress: & REServed \\
\hline SUBaddress: & REServed? \\
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\hline ADDRess & \\
\hline ADDRess? & \\
\hline ENCoding & \\
\hline ENCoding? & \\
\hline PLANid & \\
\hline PLANid? & \\
\hline PRESentation: & PI \\
\hline PRESentation: & PI? \\
\hline PRESentation: & SI \\
\hline PRESentation: & Sl? \\
\hline SUBaddress: & ADDRess \\
\hline SUBaddress: & ADDRess? \\
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\hline SUBaddress: & LENGth? \\
\hline SUBaddress: & ODD_EVE \\
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\section*{EBCCH:
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\hline ORIG: & PRESentation: & SI? \\
\hline ORIG: & SUBaddress: & ADDRess \\
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\hline OTHER: & HYPERband & \\
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\hline OTHER: & NUMBer & \\
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\hline OTHER: & HYPERband & \\
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\hline OTHER: & INFO: & HYPERband \\
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\hline OTHER: & MULti: & ACCess: \\
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\hline OTHER: & MULti: & CHAN \\
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\hline OTHER: & MULti: & DELAY? \\
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\end{tabular}
INDicator
INDicator?
MAP
MAP?
MS PWR
MS PWR?
MS PWR?
RSSMIN
RSS MIN?

\section*{}



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\begin{tabular}{|c|c|c|}
\hline MULti： & DVCC & \\
\hline MULti： & DVCC？ & \\
\hline MULti： & HL＿FREQ & \\
\hline MULti： & HL FREQ？ & \\
\hline MULti： & OFFset & \\
\hline MULti： & OFFset？ & \\
\hline MULti： & PROTocol & \\
\hline MULIt： & PROTocol？ & \\
\hline MULti： & PSID RSID & INDicator \\
\hline MULti： & PSID－RSID： & INDicator？ \\
\hline MULti： & PSID RSID： & LENGth \\
\hline MULti： & PSID RSID： & LENGth？ \\
\hline MULti： & PSID－RSID： & SUPport \\
\hline MULti： & PSID－RSID： & SUPport？ \\
\hline MULti： & RETMY & \\
\hline MULtii： & RETRY？ & \\
\hline MULLti： & SS＿SUFF & \\
\hline MULti： & SS－SUFF？ & \\
\hline MULti： & SYNC & \\
\hline MULti： & SYNC？ & \\
\hline MULti： & TYPE： & CELL \\
\hline MULti： & TYPE： & CELL？ \\
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\hline MULTi： & TYPE： & NETwork？ \\
\hline NuMBer & & \\
\hline NUMBer？ & & \\
\hline CHAN & & \\
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\hline CHAN？ & & \\
\hline HYPERband？ & & \\
\hline NuMBer？ & & \\
\hline PT？ & & \\
\hline HYPERband？ & & \\
\hline INFO： & COUNT？ & \\
\hline INFO： & HYPERband？ & \\
\hline INFO： & PT ？ & \\
\hline INFO： & SERVice： & INDicator？ \\
\hline INFO： & SERVice： & MAP？ \\
\hline Multi & ACCess： & MS PWR？ \\
\hline Multi： & ACCess： & RSS̄＿MIN？ \\
\hline MULti： & CHAN？ & \\
\hline MULti： & DELay？ & \\
\hline MuLti： & DVCC？ & \\
\hline MULti： & HL FREO？ & \\
\hline MULti & OFFset？ & \\
\hline multi & PROTocol？ & \\
\hline Multi： & PSID＿RSID： & INDicator？ \\
\hline multi： & PSID－RSID： & LENG㕵？ \\
\hline MULti & PSID ASID & SUPport？ \\
\hline Multi： & RETRY？ & \\
\hline MULti： & SS＿SUFF？ & \\
\hline MULti： & SYN̄C？ & \\
\hline MULti： & TYPE & CELL？ \\
\hline MULti & TYPE： & NETwork？ \\
\hline NUMBer？ & & \\
\hline PT？ & & \\
\hline CHAN？ & & \\
\hline HYPERband？ & & \\
\hline NUMBer？
PT？ & & \\
\hline CHAN？ & & \\
\hline HYPERband？ & & \\
\hline NUMBer？ & & \\
\hline STM & & \\
\hline STM？ & & \\
\hline STM： & LENGth & \\
\hline STM： & LENG解？ & \\
\hline STM： & REPort & \\
\hline
\end{tabular}


12-130





12-136

12-137
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & FDCCH: & SPACH: & mandu? & & & 9.150 \\
\hline & FDTC: & FACCH: & RANDU? & & & \({ }_{9}^{9.35}\) \\
\hline & & FVC: & handu? & & & \({ }_{9} 9.24\) \\
\hline & Css: & FDTC: & Rate & & & \({ }_{9}^{9.220}\) \\
\hline & & FDCCH: & Rate & & & 9.67 \\
\hline & & MSSCH: & RATE & & & 9.151 \\
\hline & css: & FDTC: & fate? & & & 9 9-220 \\
\hline & & CsS: & Rate? & & & \(9 \cdot 176\) \\
\hline & FDTC & FACCH: & RATE? & & & \({ }_{9}^{9.35}\) \\
\hline & & MSS: & RATE? & & & 9-390 \\
\hline & & RDCCH: & RATE? & & & 9-151 \\
\hline CSS & \({ }_{\text {FOCC }}\) & FACCH- & \({ }^{\text {Ratw }}\) & & & 9.183 \\
\hline & CSS: & FOCC & Raw & & & 9-183 \\
\hline MSS & RDTC & \({ }_{\text {FACCH: }}\) & RAW & & & 9.446 \\
\hline & & FDCCH: & RAW: & DATA? & & 9.69 \({ }_{\text {9.69 }}\) \\
\hline & & FDCCH: & Raw: & FULL? & & 9.69 \\
\hline & & FDCCH & RAW: & \({ }_{\text {STARt }}\) & & 9.699 \\
\hline & & FDCCH & raw: & STOP & & 9.69 \\
\hline & & FDCCH: & Raw & SYNC? & & 9-69 \\
\hline & FDCCH: & REMote: & RAW: & DVCC & & \({ }_{9} 9.68\) \\
\hline & FDCCH: & REMote: & Raw: & STARt & & 9.68 \\
\hline & FDCCH: & REMote: & Raw: & Stop & & 9-68 \\
\hline & & FDTC: & Raw & count? & & \({ }_{9-42}\) \\
\hline & & FDTC: & RAW: & DEPTH & & \({ }_{9-42}^{9-42}\) \\
\hline & & FDTC: & RAW: & MESSLage? & & - 9.42 \\
\hline & & \({ }_{\text {FDTC: }}\) & Raw: & SELect: & FACCH & \({ }_{9-42}^{9.42}\) \\
\hline & & \({ }_{\text {FDTC, }}\) & RAW: & SELect: & SACCH & 9.42 \\
\hline & & FDIC: & RAW: & Stop & & 9-42 \\
\hline & & FDTC: & RAW: & IM \({ }^{\text {a }}\). & & \({ }^{9.42}\) \\
\hline & & FOCC: & Raw & A: & DATA? & 9.18 \\
\hline & & FOCC: & RAW: & A: & PARITY? & -9.18 \\
\hline & & FOCC: & RAW: & \({ }_{\text {B }} \mathrm{E}\) & CAECK? & 9-19 \\
\hline & & FOCC & Raw : & B: & PARITY? & 9-19 \\
\hline & & FOCC: & RAW: & CAPTure: & & 9-16 \\
\hline & & FOCC: & RAW: & CAPTure: & \({ }^{\text {A }}\) AJDT \({ }^{\text {a }}\) & \({ }_{9}^{9-16}\) \\
\hline & & \({ }_{\text {FOCC }}\) & RAW: & CAPTure: & AUSCALCOON & 9-16 \\
\hline & & FOCC: & Raw: & CAPTure: & DIR RTRY & 9-16 \\
\hline & & FOCC: & RAW: & CAPTure: & index? & 9-18 \\
\hline & & \(\underset{\text { FOCC }}{ }\) & RAW: & CAPTure: &  & \({ }_{9.17}^{9-16}\) \\
\hline & & FOCC: & Raw: & CAPTure: & MsG wTG & 9-17 \\
\hline & & Focc:
Focc: & RAW: & CAPTure: & NaUT-REG & ¢9-17 \\
\hline & & FOCC: & RAW: & CAPTure: & ORDer? & 9.17 \\
\hline & & \(\xrightarrow{\text { FOCCC: }}\) & RAW: & CAPTure: & PAGE & 9-17 \\
\hline & & FOCC: & RAW: & CAPTure: & REORDER & 9-17 \\
\hline & & \({ }_{\text {FOCC }}\) & RAW: & CAPTure: & SLOT \({ }^{\text {S }}\) & 9-17 \\
\hline & & \(\xrightarrow{\mathrm{FOCC}} \mathrm{FOC}\) & RAW: & CAPTure: & SLOT \({ }^{\text {SSO }}\) & 9.7 \\
\hline & & FOCC: & RAW: & CAPTure: & UCHAL & \({ }_{9} 9.17\) \\
\hline & & FOCC: & RAW: & CAPTure: & VC_DES & 9.17 \\
\hline & & FOCC & RAW: & CALLure? & & - \(\begin{aligned} & \text { 9-18 } \\ & 9.18\end{aligned}\) \\
\hline & & FOCC: & RAW: & STARt & & 9-18 \\
\hline & & \(\xrightarrow{\text { FOCCC }}\) FOCC: & RAW: & & & \({ }_{\text {9.18 }}^{9.18}\) \\
\hline & & FOCC: & Raw: & TS? & & \({ }_{9} 19\) \\
\hline & & Focc: & RAW: & WORD: & & - 9 9.16 \\
\hline & & FOCC: & RAW: & WORD: & вотн & 9-16 \\
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\footnotetext{

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12-139
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\hline RDCCH: & & BUILD & & \\
\hline RDCCH: & & CALLED: & ADDRess & \\
\hline RDCCH: & & CALLED & ADDRess: & ENCoding \\
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\hline RDCCH : & & CALLED & PLANid & \\
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\hline RDCCH: & & CALLED & SUBaddress: & ADDRess \\
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\hline RDCCH: & & CALLED. & SUBaddress: & REServed? \\
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\hline RDCCH: & & CALLING: & PLANid & \\
\hline RDCCH: & & CALLING: & PLANid? & \\
\hline RDCCH: & & CALLING: & PRESentation: & PI \\
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\hline RDCCH: & & CALLING: & SUBaddress: & ADDRess \\
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\hline SUBaddress & RES \\
\hline SUBaddress: & TYPE? \\
\hline TYPE & \\
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\hline ADDRess & \\
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\hline TYPE? & \\
\hline MSGtype & \\
\hline MSGtype? & \\
\hline CONTTOL & \\
\hline CONTrol? & \\
\hline LENGth & \\
\hline LENGth? & \\
\hline ALGORithm & \\
\hline ALGORithm? & \\
\hline DOMAIN & \\
\hline DOMAIN? & \\
\hline KEY & \\
\hline KEY? & \\
\hline ADDRess & \\
\hline ADDRess: & ENCoding \\
\hline ADDRess: & ENCoding? \\
\hline ADDRess? & \\
\hline PLANid & \\
\hline PLANid? & \\
\hline SUBaddress: & ADDRess \\
\hline SUBaddress: & ADDRess? \\
\hline SUBaddress: & LENGth \\
\hline SUBaddress: & LENGth? \\
\hline SUBaddress: & ODD EVEN \\
\hline SUBaddress: & ODD_EVEN? \\
\hline SUBaddress: & REServed \\
\hline SUBaddress: & REServed? \\
\hline SUBaddress: & TYPE \\
\hline SUBaddress: & TYPE? \\
\hline TYPE & \\
\hline TYPE? & \\
\hline CHARacter & \\
\hline CHARacter? & \\
\hline LENGTh & \\
\hline LENGTh? & \\
\hline BANDWidth & \\
\hline & \\
\hline CALLED: & SUBaddress \\
\hline CALLED: & SUBaddress? \\
\hline CALLING: & ADDRess \\
\hline CALLING: & ADDRess? \\
\hline CALLING: & PRESentation \\
\hline CALLING & PRESentation? \\
\hline CALLING & SUBaddress \\
\hline CALLING & SUBaddress? \\
\hline CNUMber & \\
\hline CNUMber? & \\
\hline DCCH & MEM \\
\hline DCCH: & MEM? \\
\hline DISPlay & \\
\hline DISPlay? & \\
\hline MEASurement: & LTM \\
\hline MEASurement: & LTM? \\
\hline MEASurement: & OTHER: \\
\hline MEASurement: & OTHER: \\
\hline MEASurement: & STM \\
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\end{tabular}

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STM
STM?
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MEM
MEM?
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\begin{tabular}{|c|c|c|}
\hline MESSage: & CENTer: & ADDRess \\
\hline MESSage: & CENTer: & ADDRess? \\
\hline MODE: & DATA? & \\
\hline MODE: & VOICe & \\
\hline MODE: & voice? & \\
\hline PFC: & REQuest & \\
\hline PFC: & REQuest? & \\
\hline PSID RSID: & SELect & \\
\hline PSID_RSID: & SELect? & \\
\hline RDATA: & DELay & \\
\hline RDATA & DELay? & \\
\hline SID_REPort & & \\
\hline SID REPort? & & \\
\hline SUBaddress & & \\
\hline SUBaddress? & & \\
\hline SUPPort: & ALT SOC & \\
\hline SUPPort: & ALT SOC? & \\
\hline USER: & DEST: & ADDRess \\
\hline USER: & DEST: & ADDRess? \\
\hline USER & DEST & SUBaddress \\
\hline USER & DEST: & SUEaddress? \\
\hline USER: & GROUP & \\
\hline USER & GROUP? & \\
\hline USER & ORIG: & ADDRes \\
\hline USER: & ORIG: & ADDRess? \\
\hline USER & ORIG: & PRES: \\
\hline USER & ORIG: & PRES: \\
\hline USER & ORIG: & SUBaddress \\
\hline USER & ORIG: & SUBaddress? \\
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\begin{tabular}{|c|c|c|c|}
\hline & \multicolumn{3}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
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\begin{tabular}{|c|c|c|c|c|c|}
\hline RDCCH: & MIN? & & & & 9-158 \\
\hline RDCCH: & MODE & DATA & ACKED? & & 9-166 \\
\hline RDCCH: & MODE & DATA & CRC? & & 9-166 \\
\hline HDCCH: & MODE & DATA: & PART? & & 9-166 \\
\hline RDCCH: & MODE & DATA & PM? & & 9-166 \\
\hline RDCCH: & MODE & DATA & RLP? & & 9-166 \\
\hline RDCCH: & MODE & DATA & SAP? & & 9-166 \\
\hline RDCCH: & MODE & voice: & PM? & & 9-165 \\
\hline RDCCH: & MODE & voice: & VC ? & & 9.165 \\
\hline RDCCH: & MODEL? & & & & 9-162 \\
\hline RDCCH: & MSGtype? & & & & 9-160 \\
\hline RDCCH: & MSID & LS? & & & 9-158 \\
\hline RDCCH: & MSID: & MS? & & & 9-158 \\
\hline RDCCH: & NL3M? & & & & 9-159 \\
\hline RDCCH: & PD? & & & & 9-160 \\
\hline RDCCH: & PEA? & & & & 9-159 \\
\hline RDCCH: & PFC: & REQuest? & & & 9-175 \\
\hline RDCCH: & PFC 1 1? & & & & 9-160 \\
\hline RDCCH: & PROTOcol: & VERsion? & & & 9-162 \\
\hline RDCCH: & PSID_RSID & MAP? & & & 9.160 \\
\hline ADCCH: & PSID RSID: & SELect? & & & 9-160 \\
\hline RDCCH: & RANDBS? & & & & 9-161 \\
\hline RDCCH: & RANDC? & & & & 9.161 \\
\hline ROCCH: & RATE? & & & & 9.151 \\
\hline RDCCH: & RAW: & COUNT? & & & 9-154 \\
\hline RDCCH: & RAW: & DATA? & & & 9.154 \\
\hline RDCCH: & RAW: & DEPTH & & & 9-154 \\
\hline RDCCH: & RAW: & PREAMble? & & & 9-154 \\
\hline ROCCH: & RAW: & STARt & & & 9.154 \\
\hline RDCCH: & RAW: & STOP & & & 9-154 \\
\hline RDCCH: & RAW: & SYNCPLLUS? & & & - \({ }_{\text {9-154 }}\) \\
\hline RDCCH: & RAW: & TS? & & & 9-154 \\
\hline ROCCH: & RCAUSe: & REServed? & & & 9.174 \\
\hline RDCCH: & RCAUSe? & & & & 9.174 \\
\hline RDCCH: & RDATA: & DELay? & & & 9.174 \\
\hline RDCCH: & RDATA UNIT & HLP: & DATA? & & 9-170 \\
\hline RDCCH: & RDATA UNIT: & HLP: & IDentifier? & & 9-170 \\
\hline RDCCH:
RDCCH: & RDATA-UNIT
REG: & LENGth?
TYPE? & & & - \(\begin{aligned} & \text { 9-170 } \\ & 9-174\end{aligned}\) \\
\hline RDCCH: & REMote: & RAW: & DVCC & & - \({ }_{\text {9-174 }}\) \\
\hline RDCCH: & REMote: & RAW: & LENGth: & ABBREViated & 9-153 \\
\hline RDCCH: & REMote: & RAW: & LENGth: & NORMal & 9. 153 \\
\hline RDCCH:
RDCCH: & REMOTe:
REMote & RAW: & STARt & & ¢.153 \\
\hline RDCCH: & REMote & TIMEslot: & Start & & 9-152 \\
\hline RDCCH: & REMote: & TIMEslot: & Stop & & 9-152 \\
\hline RDCCH: & RSVD. & \({ }^{\text {ARO? }}\) & & & 9-160 \\
\hline RDCCH: & RSVD: & ENI? & & & 9-160 \\
\hline RDCCH: & RTRANSaction? & & & & 9-170 \\
\hline RDCCH: & SCM? & & & & 9-162 \\
\hline RDCCH:
RDCCH: & SERVice? & & & & 9-165 \\
\hline RDCCH: & SID REPort? & & & & 9-151 \\
\hline RDCCH: & SLOT & & & & 9-151 \\
\hline RDCCH: & SOC? & Status? & & & 9.175 \\
\hline RDCCH: & START & & & & -9-158 \\
\hline RDCCH: & STOP & & & & 9.158 \\
\hline RDCCH: & SUBaddress: & ADDRess? & & & 9-161 \\
\hline RDCCH: & SUBaddress: & LENGTh? & & & 9-161 \\
\hline RDCCH: & SUBaddress: & RESSIVed? & & & 9.161 \\
\hline PDCCH & SuBaddress: & TYPE? & & & 9-161 \\
\hline RDCCH: & SUPPort & AlT SOC? & & & 9-164 \\
\hline RDCCH: & SUPPort & ANABOO? & & & 9-163 \\
\hline RDCCH: & SUPPort: & ASYNC?
BSMC? & & & 9-163 \\
\hline RDCCH: & SUPPort: & DOUBle? & & & 9-163 \\
\hline RDCCH: & SUPPort: & FREQuency: & BANDS? & & 9-163 \\
\hline RDCCH: & SUPPort: & G3fax? & & & 9.163 \\
\hline RDCCH: & SUPPort: & HALF?
IRA? & & & 9.163 \\
\hline BDCCH : & SupPort: & MAX & PFC? & & 9-162 \\
\hline RDCCH:
RDCCH: & SUPPort & SMS? & & & 9.163 \\
\hline RDCCH: & SUPPort & SOC? & & & 9-162 \\
\hline
\end{tabular}

\footnotetext{
12-147
}

\begin{tabular}{|c|c|c|c|c|}
\hline ROCCH: & SUPPort: & STU_III? & & \\
\hline RDCCH: & SUPPort: & SUBäddress? & & \\
\hline RDCCH: & SUPPort: & TRIPle? & & \\
\hline RDCCH: & SUPPort: & USER? & & \\
\hline RDCCH: & SYNC? & & & \\
\hline RDCCH: & SYNCPlus? & & & \\
\hline RDCCH: & USER: & DEST & ADDRess? & \\
\hline RDCCH: & USER: & DEST & ENCoding? & \\
\hline RDCCH: & USER & DEST & LENGTh? & \\
\hline RDCCH: & USER: & DEST & PLANid? & \\
\hline RDCCH: & USEF: & DEST & SUBaddiess: & ADDRess? \\
\hline RDCCH: & USER: & DEST: & SUBaddress: & LENGTh? \\
\hline RDCCH: & USER & DEST: & SUBaddress: & ODD_EVEN \\
\hline RDCCH: & USER: & DEST: & SUBaddress: & RESêrved? \\
\hline RDCCH: & USER: & DEST: & SUBaddress: & TYPE? \\
\hline RDCCH: & USER: & DEST: & TYPE? & \\
\hline RDCCH: & USER & GROUP & Status? & \\
\hline RDCCH: & USER: & GROUP & TYPE? & \\
\hline RDCCH: & USER: & GROUP & UGID & LS? \\
\hline RDCCH: & USER: & GROUP & UGID & MS? \\
\hline RDCCH: & USER & ORIG & ADDRess? & \\
\hline RDCCH: & USER & ORIG & ENCoding? & \\
\hline RDCCH: & USER & ORIG: & LENG:th? & \\
\hline RDCCH: & USER & ORIG: & PLANid? & \\
\hline RDCCH: & USER: & ORIG & PRESentation: & PI? \\
\hline RDCCH: & USER: & ORIG: & PRESentation: & \\
\hline RDCCH: & USER: & ORIG: & SUBaddress: & ADDRess? \\
\hline RDCCH: & USER: & ORIG: & SUBaddress: & LENGTh? \\
\hline RDCCH: & USER: & ORIG & SUBaddress: & ODD_EVEN? \\
\hline RDCCH: & USER: & ORIG: & SuBaddress: & RESérved? \\
\hline RDCCH: & USER: & ORIG: & SUBaddress: & TYPE? \\
\hline RDCCH: & USER: & ORIG & TYPE? & \\
\hline RDCCH: & VC_MAP? & & & \\
\hline RDCCH: & VINTage: & FIRMware? & & \\
\hline RDCCH: & VINage: & SOFTware? & & \\
\hline RDCCH: & VOICEMode: & NUMBer? & & \\
\hline RDCCH: & VOICEMode: & PM? & & \\
\hline RDCCH: & vOICEMode & \(v C\) ? & & \\
\hline RDTC: & BITS? & & & \\
\hline RDTC: & CHANnel & & & \\
\hline RDTC: & CLEAR & & & \\
\hline RDTC: & DATA: & 45 MHZ _OFFset & & \\
\hline RDTC: & DATA: & LOOPBACK & & \\
\hline RDTC:
RDTC: & DATA: & PSeudo & & \\
\hline RDTC:
RDTC: & \begin{tabular}{l}
DATA \\
ERRORS?
\end{tabular} & USER & & \\
\hline RDTC: & GO & & & \\
\hline RDTC: & RFLVL & & & \\
\hline RDTC: & SETup & & & \\
\hline RDTC: & SLOT & & & \\
\hline RDTC: & STATUS? & & & \\
\hline FDTC: & STOP & & & \\
\hline RDTC: & DVCC & & & \\
\hline RDTC: & DVCC? & & & \\
\hline RDTC: & FACCH: & RAW & & \\
\hline RDTC: & LENGTh: & NORMal & & \\
\hline RDTC: & LENGth: & SHORTened & & \\
\hline RDTC: & START & & & \\
\hline RDTC: & STOP & & & \\
\hline RDTC: & TA & & & \\
\hline RDTC: & TA? & & & \\
\hline RDTC: & voCoder: & ACELP & & \\
\hline RDTC: & VOCoder: & VSELP & & \\
\hline RDTC: & AUTO: & ACKnowledge: & ENABIE & \\
\hline RDTC: & AUTO: & ACKnowledge: & ENABle? & \\
\hline RDTC: & CHANnel & & & \\
\hline RDIC: & CONFigure & NONE & & \\
\hline RDTC: & CONFigure & USER & & \\
\hline RDTC: & FACCH: & AMT? & & \\
\hline RDTC: & FACCH: & AUTHRA? & & \\
\hline RDTC: & FACCH: & AUTHU? & & \\
\hline RDTC: & FACCH: & BSMC? & & \\
\hline RDTC: & FACCH: & CALLED & NUM? & \\
\hline RDTC: & FACCH: & CALLED: & PLANid? & \\
\hline RDTC: & FACCH: & CAlLED: & SPare? & \\
\hline
\end{tabular}

\begin{tabular}{|c|}
\hline FACCH
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\end{tabular}

TYpe?
NUM?
PI?
PLANI?
SI?
SPare
TYpe?
CONT
LENG




BAND
CHAN
NUME

ARQ?
CODE
MEA:
MEA
MEK?
SMS?
VPM?
CEN
CEN
CEN
CEN
CEN
DAT
DATA
DAT
DATA
DATA
DATA
Ype?
MUM?
PI?
LANid?
SI?
SPare?
TYpe?
CONTrol?
NTrol?
NGth?
ND?
CHANnel?
NUMBer?
ARQ?
CODER?
MEA:
MEA
MEK?
SMS?
VPM?
CENTe
CENTe
CENTe
CENTE
CENT
DATA
DATA
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OATA
DATA
DATA
DATA
VOIC
ALGORithms?
DOMAIN?


ADDRess?
ENCoding?
LENGIth?
PLANid?
TYPE?
ACKED?
CRC?
PART?
PM?
RESErved
RLP?
SAP?
PM V?
VC?

\begin{tabular}{ll} 
SUBaddress: & TYPE? \\
TYPE? \\
ADDRess? & \\
ENCoding? & \\
LENGTh? & \\
PLAN? & \\
PRESentation: & LENGth? \\
PRESentation: & Pl? \\
PRESentation: & REServed? \\
PRESentation: & Sl? \\
SUBaddress: & ADDRess? \\
SUBadress: & LENGth? \\
SUBaddress: & ODD EVEN? \\
SUBaddress: & REServed? \\
SUBaddress: & TYPE? \\
TYPE? &
\end{tabular}
\begin{tabular}{|c|c|}
\hline css & FBCCH
CSSS
MSS
CSSS:
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CDCCH
FDCCH \\
\hline CSS & \begin{tabular}{l}
FDCCH \\
FOCCH \\
FDCCH \\
FBCCH \\
CSS: \\
CSS:
\end{tabular} \\
\hline & css \\
\hline \[
\begin{aligned}
& \mathrm{css} \\
& \mathrm{MSS}
\end{aligned}
\] & FDTC: RDCCH CSS \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{CSS} & SPACH: & MSGtype1: \\
\hline & SPACH: & MSGtype2 \\
\hline CSS: & SPACH: & MSGtype3 \\
\hline \multirow[t]{6}{*}{CSS:} & SPACH: & MSGtype4: \\
\hline & CSS: & FBCCH: \\
\hline & css & FOCC \\
\hline & css & FBCCH: \\
\hline & CSS: & FOCC: \\
\hline & FDCCH: & FBCCH: \\
\hline & CSS: & FOCC: \\
\hline \multirow[t]{9}{*}{CSS:} & FBCCH: & ENABLE: \\
\hline & CSS: & FOCC: \\
\hline & CSS & FBCCH: \\
\hline & CSS & FBCCH : \\
\hline & CSS & FBCCH : \\
\hline & CSS: & FBCCH: \\
\hline & FDCCH: & FBCCH: \\
\hline & FDCCH : & FBCCH: \\
\hline & FDCCH: & FBCCH: \\
\hline \multirow[t]{2}{*}{css:} & FBCCH: & ENABLE \\
\hline & CSS: & FOCC: \\
\hline css: & GLACT: & ACTion: \\
\hline & CSS: & GLACT: \\
\hline \multirow[t]{3}{*}{css:} & GLACT: & ACTion: \\
\hline & css: & GLACT: \\
\hline & & FOCC: \\
\hline CSS: & CALL & PROCess: \\
\hline FECCH: & ENABLE: & NONPublic: \\
\hline CSS: & FBCCH & MSGiype \\
\hline MSS: & RDCCH: & MSGtype: \\
\hline CSS: & FBCCH: & NONPublic: \\
\hline CSS: & FBCCH & NONPublic: \\
\hline CSS: & SPACH: & REJect: \\
\hline css: & SPACH: & REJect: \\
\hline CSS: & SPACH: & REJect \\
\hline CSS & SPACH: & REJect \\
\hline CSS & SPACH: & REJect: \\
\hline CSS: & SPACH: & RE Ject \\
\hline \multirow[t]{4}{*}{FDCCH:} & FBCCH: & NONPublic: \\
\hline & FBCCH: & NONPublic: \\
\hline & FDCCH: & FBCCH: \\
\hline & FDCCH: & FBCCH \\
\hline FDCCH: & SPACH: & REJect: \\
\hline FDCCH: & SPACH: & REJect: \\
\hline FDCCH: & SPACH: & REJect: \\
\hline FDCCH: & SPACH: & REJect: \\
\hline FBCCH: & ENABLE: & NONPublic: \\
\hline CSS: & FBCCH : & MSGtype: \\
\hline CSS: & FBCCH: & ENABLE: \\
\hline \multirow[t]{7}{*}{CSS:} & CSS: & FBCCH: \\
\hline & \({ }^{\text {CBCCH: }}\) CSS: & FECCH: \\
\hline & CSS & FBCCH : \\
\hline & CSS & FOCC: \\
\hline & CSS & FBCCH \\
\hline & CSS & FOCC: \\
\hline & & FOCC: \\
\hline \multirow[t]{14}{*}{FDTC RDCCH: CSS CSS:} & FACCH: & RDATA: \\
\hline & MSGIype & RDATA: \\
\hline & SPACH: & ENABLE \\
\hline & \[
\begin{aligned}
& \text { SPACH } \\
& \text { CSS: }
\end{aligned}
\] & \begin{tabular}{l}
ENABLE \\
SPACH
\end{tabular} \\
\hline & CSS: & SPACH: \\
\hline & CSS: & SPACH: \\
\hline & CSS: & SPACH: \\
\hline & CSS & SPACH: \\
\hline & CSS: & SPACH: \\
\hline & CSS: & SPACH: \\
\hline & CSS: & SPACH: \\
\hline & FDCCH & SPACH: \\
\hline & FDCCH: & SPACH: \\
\hline & FDCCH
FDCCH & SPACH: \\
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\end{tabular}

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\end{tabular} &  & Bix & \[
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\footnotetext{

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\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow{5}{*}{\[
\begin{aligned}
& \text { css } \\
& \text { css } \\
& \text { css }
\end{aligned}
\]} & \multirow[b]{5}{*}{\[
\begin{aligned}
& \text { FDTC: } \\
& \text { FOTC } \\
& \text { FOTC } \\
& \text { CSSS } \\
& \text { CSS } \\
& \text { CSS }
\end{aligned}
\]} & & & & & & \\
\hline & & \[
\begin{aligned}
& \text { CSS } \\
& \text { USER }
\end{aligned}
\] & DEST & RUBaddress: PRESentation & REServed REServed & & 9.221
9.227
9.229 \\
\hline & & USER: & ORIG: & SUBadress: & RESErved & & 9.230 \\
\hline & & SPACH: & CALLING: & SUBaddress: & REServed & & - \({ }_{\text {9,358 }}^{9-356}\) \\
\hline & & SPACH: & DiRectory: & SUBaddress: & REServed & & 9.371 \\
\hline \multirow[t]{10}{*}{CSS} & \multirow[t]{6}{*}{\begin{tabular}{l}
SPACH \\
SPACH \\
MSS \\
MSS: \\
MSS
\end{tabular}} & CSS: & SPACH: & SUBaddress: & REServed
REServed & & - \({ }_{\text {9.346 }}\) \\
\hline & & USER & Ofig: & Subaddess: & REServed & & \({ }_{9} 9366\) \\
\hline & & ROCCH: & CALLED: & SUBadores: & REServed & & \({ }_{9}^{9.423}\) \\
\hline & & RDCCH:
ROCCH: & CALLING: & Subaadress: & \({ }_{\text {Reser }}^{\text {REServed }}\) & & \({ }_{9}^{9.435}\) \\
\hline & & RDCCH: & ORIG: & Subaddress: & REServed & & \({ }_{9.432}\) \\
\hline & & MSS: & RDCCH:
ROCCH: & RCAUSe: & RESErved
RESEerved & & \({ }_{9}^{9.4083}\) \\
\hline & \multirow[t]{2}{*}{RDTC:} & FACCH: & mode & DATA: & REServed & & \({ }_{\text {9.59 }}\) \\
\hline & & CSS: & EBCCH: & NuMber: & RESServed? & & \({ }_{9}^{9.355}\) \\
\hline & \multirow[t]{2}{*}{css.} & FOTC. & CALING: & NAMe: & Reserved? & & \begin{tabular}{l} 
9.204 \\
9.203 \\
9.203 \\
\hline
\end{tabular} \\
\hline & & CSS: & FDTC & RCALSe: & REServed? & & \({ }^{9} 9.221\) \\
\hline \multirow[t]{5}{*}{\[
\begin{aligned}
& \mathrm{css} \\
& \text { css } \\
& \text { css }
\end{aligned}
\]} & FDTC & USER: & DEST: & SUBacdress: & ReServed? & & 9-227 \\
\hline & \multirow[t]{2}{*}{FOTC
CSS
CSS} & USER: & ORIG: & PRESentation: & Reserved? & & \({ }_{9}^{9.223}\) \\
\hline & & SPACH: & CALLED: & SUBaddress: & REServed? & &  \\
\hline & \[
\begin{aligned}
& \text { CSS } \\
& \text { CSS }
\end{aligned}
\] & SPACH: & CALLING: & Subaddress: & REServed? & & \({ }_{9}^{9.371}\) \\
\hline & \multirow{3}{*}{SPACH SPACH:} & CSS: & SPACH: & SUBaddress: & REServed? & & \({ }_{9} 9346\) \\
\hline \multirow[t]{5}{*}{CSS} & & USER: & DEST: & SUBaddress: & ReServed? & & ¢-366 \\
\hline & & PDCCH: & EBCCH : & TEXT: & REServed? & & 9.115 \\
\hline & \multirow[t]{3}{*}{FDCCH FDCCH
FDCCH} & \({ }_{\text {SPACH: }}\) & \(\xrightarrow{\text { FBCCL }}\) CALED: & NUMber: & ReServed? & & \({ }_{9.133}^{9.81}\) \\
\hline & & SPACH: & CALLING: & SUBaddress: & REServed? & & 9.135 \\
\hline & & SPACH: & \({ }^{\text {Difectory: }}\) & SUBaddress: & REServed? & & ¢. 9.146 \\
\hline \multirow[t]{3}{*}{\(\underset{F}{\mathrm{FDCCH}} \mathrm{FDCH}\) FDCCH} & \multirow[t]{3}{*}{\[
\begin{aligned}
& \text { SPACH: } \\
& \text { SACH: }
\end{aligned}
\]} & USER: & DEST: & Subacdress: & REServed? & & \({ }_{9} 9.139\) \\
\hline & & FACCL & OALILING: & SUBacdress: & REServed? & & - \(\begin{aligned} & 9.142 \\ & 9.29\end{aligned}\) \\
\hline & & \({ }^{\text {FDITC, }}\) & FACCH: & CALLING: & RESEserved? & & 9.30 \\
\hline \multirow[t]{11}{*}{FDTC
FDTC FDTC} & \multirow[t]{5}{*}{\begin{tabular}{l}
FACCH \\
FACCH: \\
MSS: \\
MSS:
MSS: \\
MSS:
\end{tabular}} & USER: & DEST: & SUBaddress: & REServed? & & 9-39 \\
\hline & & USER: & ORIG: & PRESentation: & RESEerved? & & 9-40 \\
\hline & & USER & CALLED: & SUBaddess: & REServed? & & 9.423 \\
\hline & & ADCCH: & Calling: & SuBadaress: & REServed? & & 9.425 \\
\hline & & ROCCH: & DEST: & SUBaddress: & REServed? & & 9-430 \\
\hline & & MSS: & RDCCH: & RCAUSe: & RESServed? & & 9.433 \\
\hline & & MSS: & RDCCH: & SUBaddress: & RESEerved? & & 9408 \\
\hline & & RDCCH: & CALLING: & SuBaddress: & Reserved? & & - \(\begin{gathered}\text { g-168 } \\ 9.169\end{gathered}\) \\
\hline & & & ADCCH: & RCAUSe \({ }^{\text {a }}\) & RESESrved? & & 9.-174 \\
\hline & RDCCH: & USER & DEST: & SUBaddress: & RESEerved? & & - 9 9-172 \\
\hline & RDCCH: & USER & ORIG: & SUBaddress: & ReServed? & & 9.173 \\
\hline \multirow[t]{5}{*}{RDTC RDTC:} & \multirow[t]{5}{*}{\[
\begin{aligned}
& \text { FACCH: } \\
& \text { FACCH } \\
& \text { FACSS } \\
& \text { CSS } \\
& \text { CS }
\end{aligned}
\]} & USER & DEST: & SUBaddress: & REServed? & & \({ }_{9}^{9-63}\) \\
\hline & & USER & ORIG: & PRESEntation:
SUBadastess: & REServed? & & - 9.65 \\
\hline & & FDIC: & FACCH: & CAPability: & RESPonse & & 9-200 \\
\hline & & FDrs: & \(\stackrel{\text { FACCH: }}{\text { FBCCH }}\) & SERV: & Response & & 9.201 \\
\hline & & CSS: & FBCCH: & max: & RETries? & & 9.260 \\
\hline \multirow[t]{8}{*}{\[
\begin{aligned}
& \text { CSS: } \\
& \text { CSS: } \\
& \text { CSS: } \\
& \text { CSS }
\end{aligned}
\]} & \multirow[t]{8}{*}{EBCOH
EBCH
EBCH
EBCH
EBCCH} & NEIGHbor: & ANAlog: & CELL: & RETRY & & \({ }_{9-292}\) \\
\hline & & NEIGHbor: & ANAlog: & Multi: & RETRY & & 9-302 \\
\hline & & NEIGHbor: & TTMA: & CELL: & REETRY & & ¢9-287 \\
\hline & & NEIGHbor: & TDMA & MULi & RETRY & & \({ }_{\text {9.297 }}\) \\
\hline & & CSs & SPACH: & ENABLE: & RETTY: & CHAANel & - \({ }^{9.378}\) \\
\hline & & & Css: & SPACH: & RETRY:
RETRY: & CHANnel & -9.353 \({ }_{\text {9.353 }}\) \\
\hline & & & Css & SPACH: & RETRY: & chand & \({ }_{\text {9.353 }}^{9.353}\) \\
\hline & & & CSS & SPACH: & RETRY: & HYPERband? & -9.353 \\
\hline
\end{tabular}







 SPACH:
SPACH:
\begin{tabular}{|c|c|c|}
\hline CALLING: & ENCoding? & \\
\hline CALLING: & PLANId & \\
\hline CALLING: & PLANIC? & \\
\hline CALLING: & PRESentation: & Pl \\
\hline CALLING: & PRESentation: & PI? \\
\hline CALLING: & PRESentation: & SI \\
\hline CALLING: & PRESentation: & SI? \\
\hline CALLING: & SUBaddress: & ADDRess \\
\hline CALLING: & SUBaddress: & ADDRess? \\
\hline CALLING: & SUBaddress: & LENGth \\
\hline CALLING: & SUBaddress: & LENGTh? \\
\hline CALLING: & SUBaddress: & ODO EVEN \\
\hline CALLING: & SUBaddress: & ODDEVEN? \\
\hline CALLING: & SUBaddress: & REServed \\
\hline CALLING: & SUBaddress: & REServed? \\
\hline CALLING: & SUBaddress: & TYPE \\
\hline CALLING: & SUBaddress: & TYPE? \\
\hline CALLING: & TYPE & \\
\hline CALLING: & TYPE? & \\
\hline CHAN & & \\
\hline CHAN? & & \\
\hline CUSTOM: & CONTrol & \\
\hline CUSTOM: & CONTrol? & \\
\hline CUSTOM: & LENGth & \\
\hline CUSTOM: & LENGTh? & \\
\hline DATA: & ARQ? & \\
\hline DATA: & HARD? & \\
\hline DATA: & NONARQ? & \\
\hline DEBUG & & \\
\hline DEBUG? & & \\
\hline DIRectory: & ADDRess & \\
\hline DIRectory: & ADDRess? & \\
\hline DIRectory: & ENCoding & \\
\hline DIRectory: & ENCoding? & \\
\hline DIRectory: & PLANid & \\
\hline DIRectory: & PLANid? & \\
\hline DiRectory: & SUBaddress: & ADDRess \\
\hline Dinectory: & SUBaddress: & ADDRess? \\
\hline DIRectory: & SUBaddress: & LENGth \\
\hline DIRectory: & SUBaddress: & LENGth? \\
\hline DiRectory: & SUBaddress: & ODD_EVEN \\
\hline DIRectory: & SUBaddress: & ODDEEVEN? \\
\hline DIRectory: & SUBaddress: & REServed \\
\hline DIRectory: & SUBaddress: & REServed? \\
\hline DIRectory: & SUBaddress: & TYPE \\
\hline DiRectory: & SUBaddress: & TYPE? \\
\hline DiRectory: & TYPE & \\
\hline DIRectory: & TYPE? & \\
\hline DISPlay: & CHARacter & \\
\hline DISPlay: & CHARacter? & \\
\hline DISPPay: & LENGth & \\
\hline DISPlay: & LENGth? & \\
\hline DMAC & & \\
\hline DMAC? & & \\
\hline DTX: & SUPport & \\
\hline DTX: & SUPport? & \\
\hline DVCC & & \\
\hline DVCC? & & \\
\hline EHI & & \\
\hline EHI? & & \\
\hline ENABLE: & ALPHA: & PSID_RSID \\
\hline ENABLE & ALPHA: & PSID_RSID? \\
\hline ENABLE: & ALPHA: & SID \\
\hline ENABLE: & ALPHA: & SID? \\
\hline ENABLE: & CALLED: & ADDRess \\
\hline ENABLE: & CALLED & ADDRess? \\
\hline ENABLE: & CALLED: & SUBaddress \\
\hline ENABLE: & CALLED: & SUBaddress? \\
\hline ENABLE: & CALLING: & ADDRess \\
\hline ENABLE: & CALLING: & ADDRess? \\
\hline ENABLE: & CALLING: & PRESentation \\
\hline ENABLE & CALLING: & PRESentation \\
\hline ENABLE: & CALLING: & SUBaddress \\
\hline ENABLE & CALLING: & SUBaddress? \\
\hline ENABLE: & DiRectory: & ADDRess \\
\hline ENABLE & DiRectory & ADDRess? \\
\hline ENABLE & DiRectory: & SUBaddress \\
\hline ENABLE & DIRectory: & SUBaddress? \\
\hline
\end{tabular}

12-161



\begin{tabular}{|c|c|c|}
\hline MESSage: & CENTer: & ADDRess? \\
\hline MESSage: & CENTer: & ENCoding \\
\hline MESSage: & CENTer: & ENCoding? \\
\hline MESSage: & CENTer: & PLANid \\
\hline MESSage: & CENTer: & PLANid? \\
\hline MESSage: & CENTer: & TYPE \\
\hline MESSage: & CENTer: & TYPE? \\
\hline MIN1 & & \\
\hline MIN1? & & \\
\hline Min2 & & \\
\hline MIN2? & & \\
\hline MIN3 & & \\
\hline M1N3? & & \\
\hline MM & & \\
\hline MM ? & & \\
\hline MODE: & DIC & \\
\hline MODE & DIC? & \\
\hline MODE: & HYPERband: & info \\
\hline MODE: & HYPERband: & INFO? \\
\hline MODE: & MEM & MEA \\
\hline MODE: & MEM & MEA ? \\
\hline MODE & MEM & MED \\
\hline MODE: & MEM & MED? \\
\hline MODE: & MEM & MEK \\
\hline MODE: & MEM & MEK? \\
\hline MODE: & VOICE & PM_V \\
\hline MODE: & VOICE & PM-V? \\
\hline MODE: & VOICE & \\
\hline MODE: & VOICE & V ? \\
\hline MSGitype1: & ANALOG & \\
\hline MSGtype 1: & AUDIT & \\
\hline MSGtype 1: & BSCHAL con & \\
\hline MSGtypet: & BSMC & \\
\hline MSGtype1: & CAPability & \\
\hline MSGtype1: & DiGital & \\
\hline MSGtype1: & DRETRY & \\
\hline MSGtypet: & MSGWTG & \\
\hline MSGtype1: & PAGE & \\
\hline MSGtype1: & PU & \\
\hline MSGtype1: & QDISC_ACK & \\
\hline MSGtype 1 : & QUPDate & \\
\hline MSGtype1: & RDATA & \\
\hline MSGtype1: & RDATA ACCept & \\
\hline MSGItype 1: & RDATA REJect & \\
\hline MSGtype1: & REG_ACCept & \\
\hline MSGtype 1: & REG_REJect & \\
\hline MSGIype1: & RELease & \\
\hline MSGtype 1: & REORDer & \\
\hline MSGtype 1: & SOC & \\
\hline MSGtype1: & SPACHnotification & \\
\hline MSGtype1: & SSDUP & \\
\hline MSGtype : & TESTreg & \\
\hline MSGtype 1: & UCHAL & \\
\hline MSGtype1: & USERalert & \\
\hline MSGitye2: & ANALOG & \\
\hline MSGtype2: & AUDIT & \\
\hline MSGtype2: & BSCHALcon & \\
\hline MSGItype2: & BSMC & \\
\hline MSGtype2: & CAPability & \\
\hline MSGtype2: & DIGital & \\
\hline MSGIype2: & DRETRY & \\
\hline MSGtype2 MSGtype2: & \[
\begin{aligned}
& \text { MSGWTG } \\
& \text { PAGE }
\end{aligned}
\] & \\
\hline MSGtype2: & PU & \\
\hline MSGtype2: & QDISC_ACK & \\
\hline MSGtype2: & QUPDāte & \\
\hline MSGType2: & RDATA & \\
\hline MSGtype2: & RDATA ACCept & \\
\hline MSGtype2: & RDATA REJect & \\
\hline MSGtype2: & REG_ACCept & \\
\hline MSGtype2: & REG_REJect & \\
\hline MSGtype2: & RELease & \\
\hline MSGtype2: & REORDer & \\
\hline \begin{tabular}{l}
MSGtype2: \\
MSGtype2:
\end{tabular} & SPACHnotitication & \\
\hline MSGtype2. & SSDUP & \\
\hline MSGtype2: & TESTreg & \\
\hline MSGtype2: & UCHAL & \\
\hline
\end{tabular}

12-163


\begin{tabular}{|c|c|}
\hline MSGiype2: & USERale \\
\hline MSGtype3 & ANALOG \\
\hline MSGtype 3 : & BSCHALCon \\
\hline MSGtype3: & BSMC \\
\hline MSGtype3: & CAPability \\
\hline MSGtype3: & DiGital \\
\hline MSGtype3: & DRETRY \\
\hline MSGtype3: & MSGWTG \\
\hline MSGtype3: & PAGE \\
\hline MSGtype3: & PU \\
\hline MSGtype3: & QDISC ACK \\
\hline MSGtype3: & QuPDate \\
\hline MSGtype3: & RDATA \\
\hline MSGtype3: & RDATA ACCept \\
\hline MSGtype3: & RDATA REJect \\
\hline MSGtype3: & REG_AC̄Cept \\
\hline MSGtype3: & REG_REJect \\
\hline MSGtype3: & RELease \\
\hline MSGtype3: & REORDer \\
\hline MSGtype3: & SOC \\
\hline MSGtype3: & SPACHnotification \\
\hline MSGtype3: & SSDUP \\
\hline MSGtype3: & TESTreg \\
\hline MSGtype3: & UCHAL \\
\hline MSGtype3: & USERalert \\
\hline MSGtype \({ }^{\text {: }}\) & ANALOG \\
\hline MSGtype 4 & AUDIT \\
\hline MSGtype 4 & BSCHALcon \\
\hline MSGtype 4 & BSMC \\
\hline MSGtype 4 & CAPability \\
\hline MSGtype 4 : & DIGital \\
\hline MSGtype4 & DRETRY \\
\hline MSGtype 4 : & MSGWTG \\
\hline MSGtype 4 & Page \\
\hline MSGtype 4 & \\
\hline MSGtype4: & QDISC_ACK \\
\hline MSGtype 4 & QUPDate \\
\hline MSGtype4: & RDATA \\
\hline MSGitype 4 & RDATA_ACCept \\
\hline MSGtype 4 : & RDATA REJect \\
\hline MSGtype4: & REG_ACCept \\
\hline MSGtype 4 : & REG-REJect \\
\hline MSGitype4: & RELease \\
\hline MSGtype 4 & REORDer \\
\hline MSGtype 4 : & SOC \\
\hline MSGtype4: & SPACHnotification \\
\hline MSGtype4: & SSDUP \\
\hline MSGitype 4 & TESTreg \\
\hline MSGtype4 & UCHAL \\
\hline MSGtype4: & USERalert \\
\hline MSGWTG: & NUMBer \\
\hline MSGWTG: & NUMBer? \\
\hline MSGWTG: & \\
\hline MSGWTG: & NV? \\
\hline MSGWTG: & TYPE \\
\hline MSGWTG: & TYPE? \\
\hline MSID: & ASSIGNment \\
\hline MSID: & ASSIGNment? \\
\hline MSID: & IDT \\
\hline MSID & IDT? \\
\hline MSID: & LS \\
\hline MSID: & LS? \\
\hline MSID: & MS \\
\hline MSID: & MS? \\
\hline NOTification & \\
\hline NOTítication? & \\
\hline PCON & \\
\hline PCON? & \\
\hline PD & \\
\hline PD? & \\
\hline PEA & \\
\hline PEA? & \\
\hline PFC: & \\
\hline PFC: & ASSIGNment? \\
\hline PFM & \\
\hline PFM? & \\
\hline
\end{tabular}
母86\％



DCCH:
DCCH
DCCH
AYER2


CADence?
DURation
DURation?
PURCH
PITCH?

ADDRess?
LENGth
LENGTH?
ODD-EVEN
ODD-EVEN
RESErved
REServed?
REServed
TYPE
\(L S\)
\(L S ?\)
\(M S\)
\(M S\)
\(\begin{array}{ll}\text { MS } & \\ \text { MS? } & \\ \text { DEST: } & \text { ADDRess } \\ \text { DEST: } & \text { ADDRess? } \\ \text { DEST: } & \text { ENCoding } \\ \text { DEST: } & \text { ENCoding? }\end{array}\)
ENCoding
PLANiid
PLANid?
\begin{tabular}{|c|c|}
\hline des. & ADDRess \\
\hline SUBaddress: & ADDRess? \\
\hline SUBaddress: & LENGth \\
\hline SUBaddress: & LENGth? \\
\hline SUBaddress: & ODD EVEN \\
\hline SUBaddress: & ODD EVEN? \\
\hline SUBaddress: & REServed \\
\hline SUBaddress: & REServed? \\
\hline SUBaddress: & TYPE \\
\hline SUBaddress & TYPE \\
\hline TYPE & \\
\hline & \\
\hline D. & LS \\
\hline D & LS? \\
\hline O & MS \\
\hline D & MS ? \\
\hline Status & \\
\hline STATUS & \\
\hline PPE & \\
\hline TYPE? & \\
\hline ADDRess & \\
\hline ADDRess? & \\
\hline ENCoding & \\
\hline ENCoding? & \\
\hline PLANid & \\
\hline PLANId? & \\
\hline PRESentation: & PI \\
\hline PRESentation: & PI ? \\
\hline PRESentation: & SI \\
\hline PRESentation: & SI? \\
\hline SUBaddress: & ADDRess \\
\hline SuBaddress: & ADDRess? \\
\hline SuBaddress: & LENGTh \\
\hline SUBaddress: & LENG施? \\
\hline SUBaddress: & ODD EVEN \\
\hline SUBaddress: & ODD_EVEN? \\
\hline SuBaddress: & REServed \\
\hline SUBaddress: & REServed? \\
\hline SUBaddress: & TYPE \\
\hline SUBaddress: & TYPE? \\
\hline
\end{tabular}



路



\begin{tabular}{ll} 
LENGth? & \\
RDATA: & CAUSE? \\
RDATA: & SPARE? \\
REGistration: & CAUSE? \\
REGGistration: & TME: \\
REGistration: & TME: \\
REGGistration: & TIME: \\
CAUSE? & \\
CAUSE? & \\
TONE? & \\
CHANnel? & \\
HYPERband? & \\
NUMBer? & \\
LIST? & \\
NUMBer? & \\
PT?
\end{tabular}

LoWer?
PT?
UPPer?

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & FDCCH: & SPACH FDTC: RDTC & \begin{tabular}{l}
REJect \\
FACCH \\
FACCH \\
FACCH
FDTC: \\
FDTC:
\end{tabular} & \begin{tabular}{l}
RDATA: \\
CALLING \\
CALLING \\
FACCH:
FACCH: \\
FACCH:
\end{tabular} & \begin{tabular}{l}
SPARE? \\
SPare? \\
SPare? \\
SPMA?
SPMB? \\
SPRINTF
\end{tabular} & & ( \(\begin{aligned} & 9.147 \\ & 9.30 \\ & 9.54 \\ & 9.55 \\ & 9.57 \\ & 9.37 \\ & 9.37 \\ & 9.453\end{aligned}\) \\
\hline & & css: & \[
\begin{aligned}
& \text { FDTC } \\
& \text { CSS }
\end{aligned}
\] & FACCH SPACH & SR
SRM
SRM
SRM & &  \\
\hline & & FDCCH. & LAYER2: & SPACH: & SRM? & & 9-742 \\
\hline css: & EBCCH: & neighbor: & \({ }_{\text {ANAlog: }}\) & CELL: & Shm? & & 9.122 \\
\hline CSS: & EBCCH & NEIGHber: & ANALOG: & Mutit & SS-SuFF & & \({ }_{\text {9,-301 }}^{9-291}\) \\
\hline CSS & EECCH & NEEIGHbor: & OTHER: & MULLI: & SS_SUFF & & ¢ 9 \\
\hline Css: & EBCCH: & NEIGHbor: & TDMA: & MULCL & SS-SUFF & & 9-295 \\
\hline css. & EBCCH: & NEIGHbor: & analiog: & CELL: & SS SUFF? & & 9-261 \\
\hline Css & EBCCH: & NEIGHbor: & ANAlog: & multi: & SS-SUFF? & & \({ }_{9}^{9-301}\) \\
\hline Css: & EBCCH: & NEIGHbor: & OTHER: & MULLI: & SS & & 9.307 \\
\hline CSS & EBCCH: & NEIGHbor: & TDMA: & CELL & SS SuFF? & & \({ }_{\text {9.-285 }}^{9.295}\) \\
\hline FOCH. & & & CSS & FBCCH: & SStsuff? & & \(9-261\) \\
\hline FDCCH: & EBCCH: & NEIGHbor: & \({ }_{\text {AnAlog }}\) Ansil & MULit & SSS SuFf? & &  \\
\hline \(\underset{\text { FOCCH: }}{\text { FDCCH: }}\) & EBCCH & NEIGHbI: & OTHER & MULit & SS SuF? & & 9.110 \\
\hline & EBCCH: & NEIGHbor: & TDMA: & MULLI: & SS-SuFF? & & \({ }_{9.104}^{9.966}\) \\
\hline & & css & PDCCH:
MSCM: & OBCCH: & SSESUF? & & 9.85 \\
\hline & & & FOCC: & CAPTure: & SSD-UPdate & & 9.8 \\
\hline & & css & FDTC: & FACCH: & SSDUP & & \({ }_{9}^{9.202}\) \\
\hline & & Css & \({ }_{\text {SPACH: }}\) & ORDER: & SSDUP & & 9-193 \\
\hline & & Css: & SPACH: & MSGGiype2: & SSDUP & & 9.344 \\
\hline & & Css: & SPACH: & MSGGypees: & SSDUP & & 9.344 \\
\hline & & & MSS: & ROCCH:
RDCCH & SSDUP: & STATus
STATus? & 9.436 \({ }_{\text {9.436 }}\) \\
\hline & & & & \(\xrightarrow{\text { RACCH: }}\) & SSDUP; & STATus? & \({ }^{9} 9.175\) \\
\hline & & MSS & RDCCH & MSGItype: & SSTUPion & & \({ }_{9}^{9.406}\) \\
\hline & & css & FOCCH: & SUPECiframe & \(\stackrel{\text { STAAR }}{ }\) & & \({ }_{9}^{9.247}\) \\
\hline & & css: & FSTC: & TALK: & \({ }_{\text {StaRT }}\) & & ¢-199 \\
\hline & & & & Css: & start & & 9.177 \\
\hline & & FDCCH: & REMote: & RAW: & Staht & & \({ }_{\text {9.69 }} 9.68\) \\
\hline & & FDCCH: & REMote: & TIMEslot: & STAAR & & \({ }_{9.67}^{9.68}\) \\
\hline & & & FDTC: & 1554: & START & & \({ }_{9}^{9.78}\) \\
\hline & & & FDTC: & RAW: & START & & 9.42 \\
\hline & & & FOCC, & RAW: & Stant & & \({ }_{9} 918\) \\
\hline & & & & FOCC: & Start & & \({ }_{9.4}\) \\
\hline & & & FVC: & RAW: & Start & & \({ }^{9.25}\) \\
\hline & & & MSS & RDCCH
RDTC: & STARt & & 9.445 \\
\hline & & & MSS: & RVC: & Staht & & \({ }_{9}^{9.4445}\) \\
\hline & & & \(\xrightarrow{\text { RDCCM }}\) REMote & RAW: & STAAt
STARt & & ¢ 9 9-154 \\
\hline & & RDCCH : & REMote: & TIMESIOT: & Stapit & & \({ }_{9} 9152\) \\
\hline & & & RDTC: & REMote: & Start & & \({ }_{9.51}^{9.158}\) \\
\hline & & & & RDECC: & STARt & & 9.50 \\
\hline & & & & RVC) & Stant & & \({ }_{9}^{9.44}\) \\
\hline & & CSS: & EBCCH:
FBCCH & MACA: & STATus & & ¢9.368 \({ }_{\text {9.316 }}\) \\
\hline & & Css: & & MACA: & Stafus & & 9-262 \\
\hline & CSS: & MSS & USER & GROUP:
ssoup & STATus & & \({ }_{\substack{\text { 9.364 } \\ 9.436}}^{\text {9.38 }}\) \\
\hline & & & & & & & 9.436 \\
\hline
\end{tabular}

12-170
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multirow[t]{16}{*}{MSS:} & ROCCH: & USER: & GROUP: & Status & \\
\hline & & CSS: & FDTC: & ENABLE: & Status: & CMODE \\
\hline & & CSS: & FDIC: & ENABLE: & STATUS: & CMODE? \\
\hline & & CSS: & FDTC: & ENABLE & STATUS: & ESN \\
\hline & & CSS: & FDTC:
FDTC: & ENABLE: & \begin{tabular}{l}
STATUS: \\
status:
\end{tabular} & ESN? \\
\hline & & CSS & FDTC: & ENABLE: & Status: & MEM? \\
\hline & & CSS & FDTC: & ENABLE: & Status: & TASK \\
\hline & & CSS & FDTC: & ENABLE: & Status: & TASK? \\
\hline & & CSS: & FDTC: & ENABLE & STATUS: & \\
\hline & & CSS & FDTC: & ENABLE: & STATUS: & \\
\hline & & css & FDTC: & ENABLE & STATUS: & VPM \\
\hline & & CSS: & FDTC: & ENABLE: & Status: & VPM? \\
\hline & & & BER: & RDTC: & Status? & \\
\hline & & css: & EBCCH: & MACA: & Status? & \\
\hline & & CSS: & FBCCH: & MACA: & Status? & \\
\hline & & & CSS & RECC: & Status? & \\
\hline & css: & SPACH: & USER: & GROUP: & Status? & \\
\hline & & FDCCH: & EBCCH: & MACA: & Status? & \\
\hline & & FDCCH: & FBCCH & MACA: & Status? & \\
\hline & FDCCH: & SPACH: & USER: & GROUP: & STATus? & \\
\hline & & MSS: & RDCCH: & SSDUP: & STATus? & \\
\hline & MSS & RDCCH: & USER: & GROUP: & STATus? & \\
\hline & & & RDCCH: & SSDUP: & STATus? & \\
\hline \multirow{17}{*}{MSS} & \multirow{17}{*}{\[
\begin{aligned}
& \text { RDCCH } \\
& \text { MSS } \\
& \text { MSS } \\
& \text { MSS } \\
& \text { MSS } \\
& \text { MSS }
\end{aligned}
\]} & RDCCH: & USER: & GROUP: & STATUS? & \\
\hline & & ENABIe: & MEASurement: & OTHER: & STM & \\
\hline & & RDCCH: & ENABIE: & MEASurement: & STM & \\
\hline & & RDCCH: & MEASurement: & OTHER: & STM: & LENGTh \\
\hline & & RDCCH & MEASurement: & OTHER: & STM: & LENGTh? \\
\hline & & RDCCH: & MEASurement: & OTHER: & STM: & REPort \\
\hline & & RDCCH: & MEASurement: & OTHER: & STM: & REPort? \\
\hline & & RDCCH: & MEASurement: & OTHER: & STM: & \\
\hline & & RDCCH: & MEASurement: & OTHER: & STM: & RSS? \\
\hline & & MSS & RDCCH & MEASurement: & STM: & \\
\hline & & MSS & RDCCH: & MEASurement: & STM: & NV? \\
\hline & & MSS: & RDCCH: & MEASurement: & STM: & RSS \\
\hline & & MSS: & RDCCH: & MEASurement: & STM: & RSS? \\
\hline & & RDCCH: & MEASurement: & OTHER: & STM: & LENGIT? \\
\hline & & RDCCH & MEASurement: & OTHER: & STM: & REPort? \\
\hline & & RDCCH: & MEASurement: & OTHER: & STM: & \\
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& \text { NV? } \\
& \text { RSS? }
\end{aligned}
\] \\
\hline \multirow[t]{30}{*}{MSS} & \multirow[t]{30}{*}{\[
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& \text { RDCCH: } \\
& \text { MSS: }
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\]} & \multirow[t]{3}{*}{ENABIE: RDCCH} & MEASurement & OTHFR: & STM? & \\
\hline & & & ENABle: & MEASurement & STM? & \\
\hline & & & BER: & RDTC: & STOP & \\
\hline & & \multirow[t]{2}{*}{CSS:} & FBCCH: & MAX: & STOP & \\
\hline & & & FDCCH: & SUPERframe: & STOP & \\
\hline & & \multirow[t]{5}{*}{css:} & CSS & FDTC: & STOP & \\
\hline & & & CSS: & FVC: & STOP & \\
\hline & & & CSS: & GLACT & STOP & \\
\hline & & & cSs: & MSCM: & STOP & \\
\hline & & & & CSS: & STOP & \\
\hline & & \multirow[t]{9}{*}{FDCCH FDCCH} & FDCCH:
REMote: & RAW: & STOP & \\
\hline & & & REMote: & TIMEsiot: & STOP & \\
\hline & & & & FDCCH: & STOP & \\
\hline & & & FDTC & 1554 & STOP & \\
\hline & & & & FDTC: & Stop & \\
\hline & & & FOCC: & RAW: & STOP & \\
\hline & & & FOCC: & REMote FOCC: & STOP stop & \\
\hline & & & FVC: & RAW: & STOP & \\
\hline & & & & FVC: & STOP & \\
\hline & & \multirow[t]{4}{*}{MSS:} & RDCCH: & MESSage: & STOP & \\
\hline & & & MSS: & RDCCH: & STOP & \\
\hline & & & & RDTC
RVC: & Stop & \\
\hline & & & RDCCH: & RAW: & Stop & \\
\hline & & \multirow[t]{6}{*}{RDCCH FDCCH} & REMote: & RAW: & STOP & \\
\hline & & & REMote: & TIMEsiot & STOP & \\
\hline & & & & RDCCH: & STOP & \\
\hline & & & RDTC: & REM Mote: & STOP & \\
\hline & & & & RDTC: & STOP & \\
\hline & & & & RECC:
RVC: & STOP & \\
\hline & & CSS: & FBCCH: & MAX: & STOP? & \\
\hline
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\hline \multirow[t]{6}{*}{} & FDCCH & FBCCH : & MAX: & STOP? & \multirow{7}{*}{\[
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STREAM:
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\hline & CSS & FBCCH : & MSGtype: & STRUCTure? & \\
\hline & MSS: & RDCCH: & SUPPort: & STU_II & \\
\hline & MSS & RDCCH: & SUPPort: & STU-III? & \\
\hline & & RDCCH: & SUPPort: & STU & \\
\hline FDTC & ENABLE & USER & DEST: & SuBaddress & \\
\hline FDTC & ENABLE & USER: & ORIG: & SUBaddress & \\
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\hline \multirow[t]{5}{*}{\[
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\]} & ENABLE & USER: & DEST: & SUBaddress & \\
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\hline & RDCCH: & ENABIe: & CAlLED: & SUBaddress & \\
\hline & RDCCH: & ENABIE & CALLING: & SUBaddress & \\
\hline & MSS: & RDCCH & ENABIE: & SUBaddress & \\
\hline \multirow[t]{3}{*}{\(\mathrm{RDCCH}:\) RDCCH:} & ENABIe: & USER: & DEST: & SUBaddress & \\
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\hline CSS & FDTC: & USER & DEST & SUBaddress: & LENGth? \\
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\hline \multirow[t]{2}{*}{CSS} & FDTC & USER & DEST & SuBaddress: & ODO-EVEN? \\
\hline & FDTC: & USER & DEST & SUBaddress: & REServed \\
\hline \multirow[t]{2}{*}{CSS} & FDTC: & USER: & DEST: & SUBaddress: & REServed? \\
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\hline \multirow[t]{2}{*}{CSS
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\hline \multirow[t]{2}{*}{CSS} & FDTC: & USER: & ORIG: & SUBaddress: & REServed \\
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\hline \multirow[t]{2}{*}{} & FDTC: & USER: & ORIG: & SUBaddress: & TYPE \\
\hline & FDTC: & USER & ORIG: & SUBaddress: & TYPE? \\
\hline \multirow{34}{*}{css} & CSS & SPACH: & CALLED: & SUBaddress: & ADDRess \\
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\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline & & CSS & SPACH: & ENABLE: & CALLED: & SUBaddress? & & & & 9-379 \\
\hline & & CSS & SPACH: & ENABLE: & CALLING: & SUBaddress? & & & & 9-379 \\
\hline & & css & SPACH: & ENABLE: & DiRectory: & SUBaddress? & & & & 9-383 \\
\hline & & & CSS: & SPACH: & ENABLE: & SUBaddress? & & & & 9-377 \\
\hline & CSS: & SPACH: & ENABLE: & USER: & DEST: & SUBaddress? & & & & 9-380 \\
\hline & CSS: & SPACH: & ENABLE: & USER: & ORIG: & SUBaddress? & & & & 9-381 \\
\hline & & MSS & RDCCH: & ENABIE: & CALLED & SUBaddress? & & & & 9-440 \\
\hline & & MSS & RDCCH: & ENABIe: & CALLING: & SUBaddress? & & & & 9-439 \\
\hline & & & MSS & RDCCH & ENABIe: & SUBaddress? & & & & 9-437 \\
\hline & MSS & RDCCH: & ENABle: & USER: & DEST: & SUBaddress? & & & & 9-440 \\
\hline & MSS & RDCCH : & ENABIe: & USER: & ORIG: & SUBaddress? & & & & 9-441 \\
\hline & & & MSS & RDCCH: & SUPPort: & SUBaddress? & & & & 9-412 \\
\hline & & & & ROCCH: & SUPPort: & SUBaddress? & & & & \(9-163\) \\
\hline & & & & CSS: & FBCCH: & SUBaddressing & & & & 9-261 \\
\hline & & & & CSS: & FBCCH: & SUBaddressing? & & & & 9-261 \\
\hline & & & & FDCCH: & FBCCH: & SUBaddressing? & & & & 9-85 \\
\hline & & & MSS & RDCCH : & MODE: & SUBCHANnel & & & & 9-391 \\
\hline & & & & CSS: & FBCCH: & SUPERframe & & & & 9-256 \\
\hline & & & & CSS & FDCCH: & SUPERframe: & ACCess: & PE & & 9-249 \\
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\hline & & & & CSS: & FDCCH: & SUPERframe: & ACCess: & SCF & & 9-250 \\
\hline & & & & CSS: & FDCCH : & SUPERframe: & ACCess: & SCF? & & 9-250 \\
\hline & & & & CSS: & FDCCH: & SUPERframe: & ACCess: & TYPE: & NONE & 9-249 \\
\hline & & & & CSS: & FDCCH: & SUPERframe: & ACCess: & TYPE & PROGram & 9.249 \\
\hline & & & & CSS: & FDCCH: & SUPERframe: & ACCess: & TYPE: & RANDOm & 9-248 \\
\hline & & & & Css: & FDCCH: & SUPERframe: & ACCess: & TYPE? & Reserved & 9-248
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\hline & & & & CSS & FDCCH: & SUPERframe: & BRI & & & \(9-245\) \\
\hline & & & & CSS: & FDCCH: & SUPERframe: & BRI? & & & 9-245 \\
\hline & & & & CSS: & FDCCH: & SUPERframe: & DATA & & & 9-246 \\
\hline & & & & CSS & FDCCH: & SUPERframe: & DATA? & & & 9-247 \\
\hline & & & & CSS: & FDCCH: & SUPERframe: & DVCC & & & 9-247 \\
\hline & & & & CSS & FDCCH: & SUPERtrame: & DVCC? & & & 9-247 \\
\hline & & & & CSS: & FDCCH: & SUPERtrame: & NCrement
Number? & & & 9-250
\(9-250\) \\
\hline & & & & CSS: & FDCCH : & SUPERframe: & PE & & & 9.246 \\
\hline & & & & CSS: & FDCCH: & SUPERframe: & PE? & & & 9-246 \\
\hline & & & & CSS: & FDCCH: & SUPERframe: & RN & & & 9-246 \\
\hline & & & & Css: & FDCCH: & SUPERframe: & RN? & & & 9-246 \\
\hline & & & & CSS: & FDCCH:
FDCCH: & SUPERframe:
SUPERframe: & SFP & & & 9-245 \\
\hline & & & & CSS: & FDCCH: & SUPERframe: & START & & & 9-245 \\
\hline & & & & CSS: & FDCCH: & SUPERframe: & STOP & & & 9-247 \\
\hline & & & & CSS: & FDCCH: & SUPERframe: & TYPE & & & 9-247 \\
\hline & & & & CSS: & FDCCH: & SUPERframe: & TYPE? & & & 9-247 \\
\hline & & & & CSS: & FDCCH:
FBCCH: & SUPERframe:
SUPERframe? & ZERO & & & 9.250
9.256 \\
\hline & & & & FDCCH: & FBCCH: & SUPERframe? & & & & 9.81 \\
\hline CSS & EeCCH: & NEIGHbor: & OTHER: & Multi & PSID RSID & support & & & & 9-311 \\
\hline CSS: & EBCCH & NEIGHbor: & TDMA: & CELL: & PSID-RSID. & Support & & & & 9-289 \\
\hline CSS & EBCCH & NEIGHbor: & TDMA & MULTi: & PSID_RSID: & Support & & & & \\
\hline & & & CSS: & SPACH: & DTX: & SUPport & & & & 9-346 \\
\hline & & & & CSS & FDTC
FDTC & SUPPort: & \({ }_{\text {IR }}^{\text {IRA }}\) / & & & 9-224 \\
\hline & & & & FDTC: & FACCH: & SUPPort: & IRA? & & & 9.37 \\
\hline & & & MSS: & RDCCH: & ENABle: & SUPPort: & ALT SOC & & & 9-437 \\
\hline & & & MSS: & RDCCH: & ENABIe: & SUPPort: & ALT-SOC? & & & 9-437 \\
\hline & & & & MSS: & RDCCH:
RDCCH: & SUPPort: & AlT SoC & & & 9-414 \\
\hline & & & & MSS: & RDCCH: & SUPPort: & ANA800 & & & 9.413 \\
\hline & & & & MSS: & RDCCH: & SUPPort: & ANA800? & & & \(9 \cdot 413\) \\
\hline & & & & MSS: & RDCCH: & SUPPort: & ASYNC & & & 9-412 \\
\hline & & & & MSS: & RDCCH:
RDCCH: & SUPPort: & ASYNC?
BSMC & & & 9-412 \\
\hline & & & & MSS: & RDCCH: & SUPPort: & BSMC? & & & \(9-412\) \\
\hline & & & & MSS: & RDCCH: & SUPPort: & DOUBle & & & 9.413 \\
\hline & & & & MSS: & RDCCH: & SUPPort: & DOUBle? & & & 9-413 \\
\hline & & & & MSS: & RDCCH: & SUPPort: & FREQuency: & BANDS & & \({ }_{9-412}^{9-412}\) \\
\hline & & & & MSS: & RDCCH: & SUPPort: & G3fax & & & 9-412 \\
\hline & & & & MSS: & ROCCH:
RDCCH: & SUPPort: & G3fax? & & & 9-413 \\
\hline & & & & MSS: & RDCCH: & SUPPort: & HALF? & & & 9-413 \\
\hline & & & & MSS: & RDCCH: & SUPPort: & IRA
IRA? & & & 9-413 \\
\hline & & & & MSS: & RDCCH: & SUPPort: & MAX: & PFC & & 9.411 \\
\hline & & & & MSS: & RDCCH : & SUPPort: & MAX & PFC? & & 9-411 \\
\hline & & & & MSS: & RDCCH: & SUPPort: & SMS & & & 9.412 \\
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\hline TDMA: & MULLi: & PSID_RSID: & LENGth? \\
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\hline TDMA: & MULti: & PSID RSID: & SUPport? \\
\hline TDMA: & MULLi: & RETRY & \\
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\hline TDMA: & CELL & PSID_RSID: & INDicator? \\
\hline TDMA: & CELL & PSID RSID: & LENGTh? \\
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\hline TDMA: & MULti: & CHAN? & \\
\hline TDMA: & MULti: & DELay? & \\
\hline TDMA: & MULti: & DVCC? & \\
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\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & MSS & RDCCH : & ORIG: & SUBaddress: & TYPE & & 9-432 \\
\hline & & MSS: & RDCCH: & ORIG: & TYPE & & 9-432 \\
\hline & & MSS: & RDCCH: & REG & TYPE & & 9-434 \\
\hline & & MSS & RDCCH: & SUBaddress: & TYPE & & -9-408 \\
\hline & MSS & RDCCH: & USER: & GROUP: & TYPE & & 9-428 \\
\hline CSS & EBCCH: & NEIGHbor: & ANAlog: & CELL & TYPE: & CELL & 9-292 \\
\hline CSS: & EECCH: & NEIGHbor: & ANAlog: & CELL: & TYPE: & CELL? & 9-292 \\
\hline CSS: & EBCCH: & NEIGHbor: & ANAlog: & CELL & TYPE: & NETwork & 9.292 \\
\hline CSS: & EBCCH: & NEIGHbor: & ANAlog: & CELL: & TYPE: & NETwork? & 9-292 \\
\hline css: & EBCCH: & NEIGHbor: & ANAlog: & muLti: & TYPE: & CELL & 9-302 \\
\hline CSS & EBCCH: & NEIGHbor: & ANAlog: & MULTi & TYPE: & CELL? & \(9-302\) \\
\hline CSS: & EBCCH: & NEIGHbor: & ANAlog: & MULti: & TYPE; & NETwork & 9-302 \\
\hline CSS: & EECCH: & NEIGHbor: & ANAlog: & MULti: & TYPE: & NETwork? & 9-302 \\
\hline CSS: & EECCH: & NEIGHbor: & OTHER & Multi: & TYPE: & CELL & 9-308 \\
\hline CSS: & EBCCH: & NEIGHbor: & OTHER: & Multi: & TYPE: & CELL? & 9-308 \\
\hline CSS: & EBCCH: & NEIGHbor: & OTHER: & MULti: & TYPE: & NETwork & 9-308 \\
\hline css & EBCCH: & NEIGHbor: & OTHER: & MULiti & TYPE: & NETwork? & 9-308 \\
\hline Css: & EBCCH & NEIGHbor: & TDMA: & CEIL: & TYPE: & CELL & 9-286 \\
\hline CSS & EBCCH & NEIGHbor. & TDMA: & CELL: & TYPE: & CELL? & 9.286 \\
\hline CSS & EBCCH & NEIGHbor: & TDMA: & CELL: & TYPE: & NETwork & 9-286 \\
\hline CSS & EBCCH & NEIGHbor: & TDMA: & CELL: & TYPE: & NETwork? & 9-286 \\
\hline CSS: & EBCCH & NEIGHbor: & TDMA: & MULti: & TYPE: & CELL & 9-296 \\
\hline CSS: & EBCCH: & NEIGHbor: & TDMA: & MULt: & TYPE: & CELL? & 9.296 \\
\hline CSS & EBCCH: & NEIGHbor: & TDMA: & MULti: & TYPE: & NETwork & 9-296 \\
\hline css: & EBCCH: & NEIGHbor: & TDMA: & MULti: & TYPE: & NETwork? & 9-296 \\
\hline & CSS: & FDCCH: & SUPERframe: & AcCess: & TYPE: & NONE & 9.249 \\
\hline & CSS & FDCCH: & SUPERframe: & AcCess: & TYPE: & PROGram & 9-249 \\
\hline & CSS & FDCCH: & SUPERframe: & AcCess: & TYPE: & RANDom & 9.248 \\
\hline & CSS: & FDCCH: & SUPERframe: & ACCess: & TYPE: & RESErved & \(9-248\) \\
\hline \(\xrightarrow{\text { FDCCH }}\) FDCCH & EBCCH & NEIGHbor: & ANAlog:
ANAlog: & CELLL: & TYPE: & CELL?
NETwork? & 9.100 \\
\hline FDCCH: & EBCCH & NEIGHbor: & ANAlog: & MULti: & TYPE: & CELL? & 9-108 \\
\hline FDCCH & EBCCH & NEIGHbor: & ANAlog: & MULti: & TYPE: & NETwork? & 9-108 \\
\hline FDCCH & EBCCH & NEIGHbot: & OTHER: & mULti: & TYPE: & CELL? & 9-111 \\
\hline FDCCH: & EBCCH: & NEIGHbor: & OTHER: & MULti: & TYPE: & NETwork? & 9.111 \\
\hline FDCCH
FDCCH & EBCCH & NEIGHbor: & TDMA: & CELL: & TYPE: & CELL? & 9-97 \\
\hline FDCCH
FDCCH & EBCCH
EBCCH & NEIGHbor:
NEIGHbor: & TDMA & CELL: & TYPE: & NETwork? & 9.97 \\
\hline FDCCH: & EBCCH: & NEIGHbor: & TDMA: & MULti: & TYPE: & NETwork? & -9.105 \\
\hline & MSS & RDCCH: & MESSage: & ACCESS: & TYPE: & NONE & 9.398 \\
\hline & MSS & RDCCH: & MESSage: & ACCESS: & TYPE: & SFP & 9.398 \\
\hline & & & CSS: & CALL: & TYPE? & & 9-187 \\
\hline & & CSS: & EBCCH: & MACA & TYPE? & & 9-316 \\
\hline & & CSS: & FBCCH: & MACA: & TYPE? & & 9-268 \\
\hline & CSS & FDCCH: & FBCCH
SUPERARame & PSID_RSID:
ACCess: & TYPE? & & 9-267 \\
\hline & & CSS & FDCCH: & SUPERframe: & TYPE? & & 9-249 \\
\hline & & CSS: & FDTC: & CALLING: & TYpe? & & 9.203 \\
\hline & CSS & FDTC:
FDTC & MESSage:
MSGWTG: & CENTer: & TYPE? & & 9.218
\(9-219\) \\
\hline css & FDTC & USER: & DEST: & SUBaddress: & TYPE? & & 9-219 \\
\hline & CSS: & FDTC: & USER: & DEST: & TYPE? & & 9-226 \\
\hline css & FDIC & USER: & ORIG. & SUBaddress: & TYPE? & & 9-229 \\
\hline & CSS & FDTC
SPACH & USER & SUIG: & TYPE? & & 9-228 \\
\hline & & CSS: & SPACH: & CALLED: & TYPE? & & 9-356
9 \\
\hline & cSS & SPACH: & CALLING: & SUBaddress: & TYPE? & & 9 9-358 \\
\hline & cSs: & CSSACH & SPACH:
DIRectory & CALLING: & TYPE? & & 9-357 \\
\hline & & CSS: & SPACH: & DIRectory: & TYPE? & & \({ }_{9}^{9-371}\) \\
\hline & css & SPACH: & MESSage & CENTER: & TYPE? & & 9.361 \\
\hline & & CSS: & SPACH: & MSGWTG: & TYPE? & & 9-353 \\
\hline & css: & SPACH: & PSID. RSID.
SPACH. & AVAILable: & TYPE? & & 9-369 \\
\hline css: & SPACH: & USER: & DEST: & SUBaddress: & TYPE? & & \({ }_{9} 9.363\) \\
\hline & CSS: & SPACH: & USER: & DEST: & TYPE? & & \(9-362\) \\
\hline css: & CSSACH: & SPACH: & USER: & GROUP: & TYPE? & & \({ }_{9}^{9-364}\) \\
\hline & CSS: & SPACH: & USER: & ORIG: & TYPE? & & \(9-366\)
\(9-365\) \\
\hline & & FDCCH: & EBCCH: & MACA & TYPE? & & \({ }^{9} 116\) \\
\hline & & FDCCH
FDCCH & FBCCH
FBCCH: & MACA PSID RID: & TYPE? & & 9.90
9.88 \\
\hline & & & FDCCH: & LAYER2: & TYPE? & & 9.70 \\
\hline & FDCCH: & SPACH: & CALLED: & SUBaddress: & TYPE? & & 9-133 \\
\hline & FDCCH: & SPACH: & CALLING: & Subaddress: & TYPE? & & 9-132 \\
\hline & & FDCCH: & SPACH: & CALLING: & TYPE? & & 9-134 \\
\hline & FDCCH: & SPACH: & DIRectory: & SUBaddress: & TYPE? & & 9-146 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & FDCCH: & FOCCH: FDCCH & SPACH MESSage SPACH: & DIRectory CENTE:: MSGW & TYPE? TYPE? & \\
\hline & FDCCH: & SPACH: & PSPID RSID: & AVAl Lable: & TYPE? & \\
\hline \multirow[t]{2}{*}{FDCCH} & SPACH: & USER: & DEST & Subaddress: & TYPE? & \\
\hline & \(\xrightarrow{\text { FDCCH: }}\) FDCCH: & SPACH: & USER: & DEST GROUP & TYPE? & \\
\hline \multirow[t]{4}{*}{FDCCH.} & \({ }_{\text {SPACH: }}\) & USER: & Ofig: & subaddress: & TYPE? & \\
\hline & FDCCH & & USER: & ORIG: & TYPE? & \\
\hline & & FDTC: & FACCH: & CALLING: & TYpe? & \\
\hline & FDTC: & FDTC: & FACCH: & msawte: & TYPE? & \\
\hline FDTC & FACCH: & USER & DEST: & SUBaddress: & TYPE? & \\
\hline \multirow[t]{22}{*}{FDTC} & FACCH: & FACCH: & ORIG: & Subadaress: & TYPE? & \\
\hline & FDTC: & FACCH: & USER & ORIG: & TYPE? & \\
\hline & MSS & RDCCH: & CALLED & SUBaddess: & TYPE? & \\
\hline & mss & BDCCH : & CAlling & SuBaddress: & TYPE? & \\
\hline & & MSS: & nDCCH & CALLING: & TYPE? & \\
\hline & & MSS: & RDCCH: & CNumber: & TYPE? & \\
\hline & MSS & RDCCH & DEST: & SUBadaress: & TYPE? & \\
\hline & mss & поСCH: & MESSage: & ACCESS: & TYPE? & \\
\hline & MSS & RDCCH:
RDCCH: & MESSage: & CENTer:
SuBaddress: & TYPE? & \\
\hline & & mss: & RDCCH: & ORIG: & TYPE? & \\
\hline & & MSS: & RDCCH: & REG: & TYPE? & \\
\hline & mss & RDCCH : & USER: & GROUP: & TYPE? & \\
\hline & & RDCCH: & CALLED
ROCCH: & SUBaddres: & TYPE? & \\
\hline & & RDCCH: & CALLING: & SUBaddress: & TYPE? & \\
\hline & & & RRCCH: & CNumber: & TYPE? & \\
\hline & & RDCCH: & MESSage: & CENTer: & TYPE? & \\
\hline & & & RDCCH. & SUBaddress: & TYPE? & \\
\hline & RDCCH & USER \({ }_{\text {LSCCH }}\) & OEST: & SEST & TYPE? & \\
\hline & & & USER: & GROUP: & TYPE? & \\
\hline & ROCCH: & USER & ORIG: & SUBaddress. & TYPE? & \\
\hline & & RDTC: & FACCH: & CALLED & TYpe? & \\
\hline & & FACCH: & \({ }^{\text {MESSSage }}\) & CENTer: & TYPE? & \\
\hline RDTC & FACCH: & \(\triangle\) USER & DEST, & Subaddess. & TYPE? & \\
\hline \multirow[t]{19}{*}{RDTC:} & FACCH: & USER: & ORIG: & SUBaddress: & TYPE? & \\
\hline & & \({ }_{\text {FACCH: }}^{\text {CSS }}\) & USER & \({ }_{\text {OAIG: }}\) FACCH: & UYPEAL & \\
\hline & & CSS & FVC. & ORDEE: & UCHAL & \\
\hline & & Css & \({ }_{\text {SSACH }}\) & MSGGype1: & UCHAL & \\
\hline & & Css: & SPACH: & MSGtypez: & UCHAL & \\
\hline & & CSs & SPACH: & MsGtype 4 : & UCHAL & \\
\hline & & FOCC: & Raw: & CAPTure: & UCHAL & \\
\hline & & MSS: & RDCCH: & MSGIype: & UCHALcon & \\
\hline & & & CSS & SPACH: & UGID: & \({ }_{\text {LS }}^{\text {LS }}\) ? \\
\hline & & & CSS: & SPACH: & UGID: & \\
\hline & & & LAYER2: & SPACH: & UGID: & LS? \\
\hline & & FDCCH: & LAYER2: & SPACH: & UGID: & MS? \\
\hline & & & FDCCH:
FDCCH: & SPACH: & UGID: & LSIN? \\
\hline & & & FDCCH: & SPACH: & UGID: & MS? \\
\hline & MSS & RDCCH: & USER: & GROUP: & UGID: & LS \\
\hline & MSS & RDCCH & USER: & GROUP & UGID: & MS \\
\hline & MSS & RDCCH & USER: & GRoup & UGID: & MS? \\
\hline & & RDCCH: & USER & GRoup & UGID: & \\
\hline & & FDCCH: & LAYER2: & SPACH: & UGID? & \\
\hline
\end{tabular}




\begin{tabular}{|c|c|}
\hline SuBaddress: & ADDRess? \\
\hline \multirow[t]{2}{*}{SUBaddress:} & LENGth \\
\hline & LENGth? \\
\hline SUBaddress: & ODD EVEN \\
\hline SUBaddress: ODD EVEN? & ODD EVEN? \\
\hline SUBaddress: & REServed \\
\hline \multicolumn{2}{|l|}{SUBaddress: REServed?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{SUBaddress: TYPE?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{TYPE}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{ADDRess} \\
\hline \multicolumn{2}{|l|}{ADDRess?} \\
\hline \multicolumn{2}{|l|}{SUBaddress} \\
\hline \multicolumn{2}{|l|}{SUBaddress?} \\
\hline \multicolumn{2}{|l|}{ADDRess} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{ADDRess?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{PRESentation} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{SUBaddress}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{ADDRess}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{ENCoding} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{ENCoding?}} \\
\hline & PLANid \({ }^{\text {a }}\) \\
\hline \multicolumn{2}{|l|}{PLANid?} \\
\hline SUBaddress: & ADDRess \\
\hline SUBaddress: & ADDRess? \\
\hline SUBaddress: & LENGTh \\
\hline SUBaddress: & LENGth? \\
\hline SUBaddress: & ODD EVEN \\
\hline SUBaddress: & ODD_EVEN? \\
\hline SUBaddress: & REServed \\
\hline SUBaddress: & REServed? \\
\hline SUBaddress: & \\
\hline \multicolumn{2}{|l|}{\multirow[b]{2}{*}{TYPE}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{TYPE?} \\
\hline & LS \\
\hline 1 D & LS? \\
\hline ID: & MS \\
\hline 1 D & MS? \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{STATus
STATUS?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{TYPE} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{TYPE?
ADDRess}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{ADDRess?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{ENCoding
ENCoding?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{PLANid} \\
\hline \multicolumn{2}{|l|}{PLANid?} \\
\hline PRESentation: & Pl \\
\hline PRESentation: & PI? \\
\hline PRESentation: & SI \\
\hline PRESentation: & SI? \\
\hline SuBaddress: & ADDRess \\
\hline SUBaddress & ADDRess? \\
\hline SUBaddress: & LENGTh \\
\hline SUBaddress: & LENGth? \\
\hline SUBaddress: & ODD_EVEN \\
\hline SUBaddress: & ODD EVEN? \\
\hline SUBaddress: & REServed \\
\hline SUBaddress: & REServed? \\
\hline SUBaddress: & \\
\hline SUBaddress: & TYPE? \\
\hline \multicolumn{2}{|l|}{TYPE} \\
\hline \multicolumn{2}{|l|}{TYPE?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{ADDRess?}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{ENCOding?} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{PLANid?}} \\
\hline & \\
\hline SuBaddress: & ADDRes \\
\hline SuBaddress: & LENGTh? \\
\hline
\end{tabular}





\begin{tabular}{|c|c|}
\hline SUBaddress: & ODD EVEN? \\
\hline SUBaddress: & \\
\hline SUBaddress: & REServed? \\
\hline SUBaddress: & TYPE? \\
\hline IVPE? & \\
\hline & \\
\hline ID: & MS? \\
\hline PT? & \\
\hline STATus? & \\
\hline TYPE? & \\
\hline ADDRess? & \\
\hline ENCoding? & \\
\hline LENGTh? & \\
\hline PLANid? & \\
\hline PRESentation: & PI ? \\
\hline PRESentation: & SI? \\
\hline PT? & \\
\hline SUBaddress & ADDRess? \\
\hline SUBaddress & LENGth? \\
\hline SUBaddress & ODD EVEN \\
\hline SUBaddress & \\
\hline SUBaddress & REServed? \\
\hline SUBaddress & TYPE? \\
\hline TYPE? & \\
\hline ADDRess? & \\
\hline ENCoding? & \\
\hline LENGth? & \\
\hline PLANid? & \\
\hline SUBaddress: & ADDRess? \\
\hline SUBaddress: & LENGth? \\
\hline SUBaddress: & ODD_EVEN \\
\hline SUBaddress: & RESérved? \\
\hline SUBaddress: & TYPE? \\
\hline TYPE? & \\
\hline ADDRess? & \\
\hline ENCoding? & \\
\hline LENGTh? & \\
\hline PLANid? & \\
\hline PRESentation: & LENGth? \\
\hline PRESentation: & \\
\hline PRESentation: & REServed? \\
\hline PRESentation: & \\
\hline SUBaddress: & ADDRess? \\
\hline SUBaddress: & LENGth? \\
\hline SUBaddress: & ODD EVEN? \\
\hline SUBaddress: & REServed? \\
\hline SUBaddress: & TYPE? \\
\hline TYPE? & \\
\hline ADDRess & \\
\hline ADDRess? & \\
\hline SUBaddress & \\
\hline SUBaddress? & \\
\hline & \\
\hline DDRess & \\
\hline ADDRess? & \\
\hline PRES: & Pl \\
\hline RES: & Pl? \\
\hline suBaddress & \\
\hline UBaddress? & \\
\hline Status & \\
\hline Status? & \\
\hline TYPE & \\
\hline TYPE? & \\
\hline UGID: & LS \\
\hline UGID: & LS? \\
\hline UGID: & MS \\
\hline UGID: & MS? \\
\hline ADDRess? & \\
\hline ENCoding? & \\
\hline LENGTh? & \\
\hline PLANid? & \\
\hline SuBaddress: & ADDRess? \\
\hline SUBaddress: & LENGth? \\
\hline SUBaddress & ODD EVEN? \\
\hline SUBaddress: & REServed? \\
\hline
\end{tabular}

\footnotetext{

}

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & mss & \[
\begin{aligned}
& \text { RDCCH: } \\
& \text { MSS }
\end{aligned}
\] & ENable: & \begin{tabular}{l}
VC.MAP? \\
VC-MAP?
\end{tabular} & & 9-4.437 \\
\hline & mss & RDCCH: & \({ }_{\text {RROTOCol }}\) & VERSion & & \({ }_{9}^{9.464}\) \\
\hline & mss & \({ }^{\mathrm{RDCCH}}\) & PROTTocol & VERsion? & & 9.410 \\
\hline & & ROCCH: & PROTOCOO
RDCCH: & VERsion? & FIRMware & \({ }_{9}^{9.411}\) \\
\hline & & MSS: & RDCCH & VINtage: & FIRMware? & 9.411 \\
\hline & & MSS: & \(\xrightarrow{\mathrm{RDCCH}} \mathrm{RDCCH}\) & VINtage: & SoFTware
SOFTware? & \({ }_{9}^{9.411}\) \\
\hline & & & RDCCH & Vintige: &  & \({ }_{9}^{9.4162}\) \\
\hline & & & RDCCH: & VMAC & SOFTware? &  \\
\hline & & Css: & FVC: & VMAC & & 9.198 \\
\hline & & CSS: & SPACH: & VMAC & & - 9.3244 \\
\hline & & CSS: & CALL & VMAC? & & 9-188 \\
\hline & & Css: & MSCM & VMAC? & & 9.244 \\
\hline & & CSS: & SPACH: & vmac? & & 9.345 \\
\hline & & FDCCH: & SPACH:
FOCC: & VMAC?
VMAC? & & \({ }_{\substack{\text { g-125 }}}^{\text {9.125 }}\) \\
\hline & & & FVC: & VMAC? & & 9.24 \\
\hline & css & FDTC & ENABLE: & VMM1: & & 9.2244 \\
\hline & & css & \({ }_{\text {FDTC }}\) & vMM: & PM-V? & \({ }_{9}^{9} 9.230\) \\
\hline & & CSS: & FDTC: & VMM: & VC? & - 9.230 \\
\hline & & \({ }_{\text {FDTTC }}\) & FACCH: & vM: & PM \({ }^{\text {V }}\) ? & 9-40 \\
\hline & css & FDTC: & enable & vMi? & & 9.214 \\
\hline & & & FATCLC
FDTC: & VOCODER:
VOCODER: & ACELP
VSELP & \({ }_{\substack{\text { 9.27 } \\ 9.27}}\) \\
\hline & & MSS: & RDTC, & vocoder: & ACELP & 9.445 \\
\hline & & MSS: & RDTC & Vocoder: & VSELP & \({ }_{0}^{9.445}\) \\
\hline & & & RDTC: & vocoder: & VSELP & \({ }_{9}^{9.51}\) \\
\hline CSS & SPACH: & ENABLE: & MODE: & VOICE & & \\
\hline & Css: & SPACH: & MODE: & voice: & PM V & 9 9-350 \\
\hline & CSS & SPACH: & MODE: & VOICE: & PM
VC
C
P & 9.350 \\
\hline & CS5: & SPACH: & MODE: & voice: & VC? & 9.350 \\
\hline & \(\underset{\text { FOCCH: }}{\text { FDCCH }}\) & SPACH:
SPACH: & MODE: & VOICE: & \({ }_{\text {PM }} \mathrm{PM}^{\text {V }}\) ? & -9.128 \\
\hline & \({ }_{\text {FDCCH: }}\) & SPACH & MODE: & VOICE: & vc? & 9-128 \\
\hline & MSS: & RDCCH & MODE: & voice: & PM & 9.418 \\
\hline & MSS: & RDCCH:
ROCCH & MODE: & volce: & PM
VC
c & - 9.4 .418 \\
\hline & MSS & RDCCH : & MODE: & volce: & VCC? & 9.418 \\
\hline & & RDCCH: & MODE: & voice: & PM? & - \({ }_{\text {g-165 }}^{9.165}\) \\
\hline & FDTC & FACCH: & MODe: & voice: & PM V V ? & 9.58 \\
\hline S & SPACH: & FNABLE: & MODe: & voice? & & \({ }_{9}^{9-378}\) \\
\hline mss & RDCCH: & ENABLe: & MODE: & voice? & & 9.438 \\
\hline & & FVCCM: & ORDER: & VOICE MSG WTC & & - 9 9.193 \\
\hline & & mss: & RDCCH: & VOICEMode: & NUMEer & \\
\hline & & mss. & RDCCH: & VOICEMode: & NUMEer? & 9.420 \\
\hline & & MSS: & RDCCH: & VOICEMode: & \({ }^{\text {PM }}\) PM & - 9 9-420 \\
\hline & & Mss & ADCCH: & VOICEMode: & vC & 9.420 \\
\hline & & MSS: & RDCCH: & VoICEMode: & & 9.420 \\
\hline & & & RDCCH & VOICEMode: & NUMB & -9.166 \\
\hline & & & RDCCH: & VOICEMode: & vC? & \({ }_{9} 166\) \\
\hline & CSS: & FVC: & ENABLE: & Volceprivacy & & - 9 9-195 \\
\hline & CSS & EBCCH: & MAP: & VPM & & 9-318 \\
\hline css & CSS & \({ }_{\text {F }}^{\text {FRACCLE }}\) ( & MAPTIUS: & VPM & & - \({ }_{9}^{9-213}\) \\
\hline & css. & FDTC: & MAP: & VPM & & 9.216 \\
\hline & css & EBCCH: & MAP: & VPM? & & \({ }_{9} \cdot 318\) \\
\hline Ss & CSS: & FBCCH: & MAP: & VPM? & & 9.270 \\
\hline & CSS & FDIC: & MAP: & VPM? & & 9.215 \\
\hline
\end{tabular}

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\section*{APPENDICES}

\section*{APPENDIX A - PREDEFINED MACROS AND CONSTANTS}

\section*{A-1 PREDEFINED MACROS}

The following macros are predefined in the HOST and Special Test (Sp Tst):
```

*DMC "Chirp_1", BEGIN
SOUND 1600,50
DELAY }10
SOUND 1600,50
END

```
```

*DMC "Chirp_2", BEGIN
SOUND 1300,30
SOUND 1500,30
SOUND 1700,30
SOUND 1500,30
SOUND 1300,30
END

```

\section*{A-2 PREDEFINED CONSTANTS}

The following colors are predefined constants in the HOST and Sp Tst:
\begin{tabular}{lll} 
WHITE & YELLOW & MAGENTA \\
RED & CYAN & GREEN \\
BLUE & DARK_GRAY & LIGHT_GRAY \\
BROWN & DARK_MAGENTA & DARK_RED \\
DARK_CYAN & DARK_GREEN & DARK_BLUE \\
BLACK & &
\end{tabular}

The following Front Panel Keys are predefined constants and are equal to the corresponding keycodes (see Appendix B):
\begin{tabular}{ll} 
DEL & CE \\
STOR & SETUP \\
AUTO & GO \\
F_RIGHT & F_LEFT \\
LEFT & F_DOWN \\
DOWN & UP \\
ESC & ENTER \\
F2 & F3 \\
F5 & F6
\end{tabular}

RCL
SGL_STEP
STOP
RIGHT
F UP
BACK_ARROW
F1
F4
F6

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A-2

\section*{APPENDIX B - FRONT PANEL KEYS AND KEYCODES}

\section*{B-1 TABLE OF FRONT PANEL KEYS AND KEYCODES}
\begin{tabular}{|c|c|c|c|c|c|}
\hline KEY & KEYCODE & KEY & KEYCODE & KEY & KEYCODE \\
\hline F1 & 1152 & +/- & 1025 & K & 75 \\
\hline F2 & 2176 & 4 & 2056 & L & 76 \\
\hline F3 & 4224 & 5 & 2052 & M & 77 \\
\hline F4 & 8320 & 6 & 2050 & N & 78 \\
\hline F5 & 16512 & M/ \(\mu\) & 2049 & \(\bigcirc\) & 79 \\
\hline F6 & 32896 & 1 & 4104 & P & 80 \\
\hline RF GEN & 1088 & 2 & 4100 & Q & 81 \\
\hline RCVR & 2112 & 3 & 4098 & R & 82 \\
\hline DPLX & 4160 & \(\mathrm{K} / \mathrm{m}\) & 4097 & S & 83 \\
\hline AF GEN & 8256 & - & 8208 & T & 84 \\
\hline SCOPE/ANLZ & 16448 & * & 8200 & U & 85 \\
\hline MTRS & 32832 & 0 & 8196 & V & 86 \\
\hline AUTO & 1056 & \# & 8194 & W & 87 \\
\hline SGL STEP & 2080 & ENTER & 8193 & \(X\) & 88 \\
\hline GO & 4128 & A & 65 & Y & 89 \\
\hline STOP & 8224 & B & 66 & Z & 90 \\
\hline SETUP & 16400 & C & 67 & FIELD SELECT \(\leftarrow\) & 257 \\
\hline Store & 32784 & D & 68 & FIELD SELECT \(\uparrow\) & 513 \\
\hline RCL & 32776 & E & 69 & FIELD SELECT \(\downarrow\) & 258 \\
\hline CE & 16388 & F & 70 & FIELD SELECT \(\rightarrow\) & 514 \\
\hline DEL & 32772 & G & 71 & DATA SCROLL \(\uparrow 1\) & 264 \\
\hline 7 & 1032 & H & 72 & DATA SCROLL \(\downarrow^{2}\) & 260 \\
\hline 8 & 1028 & 1 & 73 & DATA SCROLL \(\leftarrow\) & 520 \\
\hline 9 & 1026 & \(J\) & 74 & DATA SCROLL \(\rightarrow\) & 516 \\
\hline \multicolumn{6}{|l|}{\begin{tabular}{l}
1. Same as turning DATA SCROLL Spinner to the right. \\
2. Same as turning DATA SCROLL Spinner to the left.
\end{tabular}} \\
\hline
\end{tabular}

Table B-1 Front Panel Keys and Keycodes

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\section*{APPENDIX C - INDIVIDUAL SELF TEST COMMANDS (HOST Only)}

\section*{C-1 GENERAL}

This section describes the TMAC commands for the HOST individual Self Tests. The commands in this section should only be used while in the User Screen (SCREEN:USER). Each command responds with a series of values. Some of the tests may take several seconds to execute.

Use *TST? to conduct a complete self test. See para 2-17 and Section 3.

Any active test is completed and response returned before TMAC interprets any new commands.

\section*{C-2 RESPONSE DATA}

Each test returns a standard set of response data which consists of four data values separated by commas as follows: TN,S,TP, TF. See Table C-1 for a description of this standard set of response data:
\begin{tabular}{|c|l|}
\hline \begin{tabular}{c} 
DATA \\
VALUE
\end{tabular} & \multicolumn{1}{|c|}{ DESCRIPTION } \\
\hline TN & \begin{tabular}{l} 
Self Test Number corresponding to the test number \\
of the HOST Self Test. The HOST Self Test is accessible \\
from the Auxiliary Functions Menu (see Section 5 \\
of the IFR-1900 Operation Manual). \\
Returns a value from 2 to 24.
\end{tabular} \\
\hline S & Status result of test executed. 1 if test Passed; 0 Failed. \\
\hline TP & \begin{tabular}{l} 
Total Number of Passes for this test since Test Set was \\
powered up. Returns 0 to 999.
\end{tabular} \\
\hline TF & \begin{tabular}{l} 
Total Number of Failures for this test since Test Set was \\
powered up. Returns 0 to 999.
\end{tabular} \\
\hline
\end{tabular}

Table C-1 Standard Response Data (STD-DAT)
The data in Table C-1 are returned for each test. The Standard Response Data is referred to as STD-DAT. In addition to the STD-DAT, most tests return other response data which are appended (follows the STD-DAT) and are described in the command description.

All Pass or Fail status values not part of STD-DAT is denoted as \(0 / 1 /-1\) where \(0=\) Fail, \(1=\) Pass and \(-1=\) Not Tested. A status returns -1 if a previous portion of the test failed and caused the test to abort.

For returned status values of -1 , any associated data values should be ignored.
The TP and TF values in STD-DAT should only be used when the Test Set is self tested using the commands listed in this section.

\section*{C-3 COMMANDS}

TEST:TOD?
Returns Time of Day Clock self test status. Returns STD-DAT.

\section*{TEST:RAM?}

Returns RAM Memory (CPU/Memory Board RAM) self test status. Returns STD-DAT,PS, PA,MS,MA.

PS - CPU RAM test status (0/1/-1).
PA - CPU RAM failed address (if applicable) (\#ho to \#hFFFF).
MS - Memory Board RAM test status (0/1/-1).
MA - Memory Board RAM failed address (if applicable) (\#h210000 to \#h2FFFFF).

\section*{TEST:ROM?}

Returns ROM Memory (CPU/Memory Board ROM) self test status. Returns STD-DAT,PS, PC,MS,MC.

PS - CPU ROM test status (0/1/-1).
PC - CPU ROM Checksum (\#h0 to \#hFF).
MS - Memory Board ROM test status (0/1/-1).
MA - Memory Board ROM Checksum (\#h0 to \#hFF).

\section*{TEST:WAITS?}

Returns Wait State Generator self test status. Returns STD-DAT,S1,R1,S2,R2,S3,R3.
S1-Register 1 test status (0/1/-1).
R1 - Register 1 value (\#h3A expected).
S2 - Register 2 test status ( \(0 / 1 /-1\) ).
R2 - Register 2 value (\#h3A expected).
S3-Register 3 test status ( \(0 / 1 /-1\) ).
R3 - Register 3 value (\#h5A expected).

\section*{TEST:BUSs?}

Returns I/O Bus Communications self test status. Returns STD-DAT,CS,MS,FS,RS,ES.
CS - Counter Board communications (0/1/-1).
MS - Monitor Board communications (0/1/-1).
FS - Function Generator Board communications (0/1/-1).
RS - RF I/O Board communication status ( \(0 / 1 /-1\) ).
ES - SCSI device communication status ( \(0 / 1 /-1\) ).

\section*{TEST:SUPply?}

Returns Voltage (Power Supply voltage) self test status. Returns STD-DAT, S5,V5, S15, V15,S15M,V15M.
```

S5 - +5 V measurement status (0/1/-1).
V5 - +5 V measurement in volts (5.0 \pm10%).
S15 - +15 V measurement status (0/1/-1).
V15 - +15 V measurement in volts (15.0 \pm10%).
S15M - -15 V measurement status (0/1/-1).
V15M --15 V measurement in volts (-15.0 \pm10%).

```

\section*{TEST:TEMP?}

Returns Temperature (Ambient/RF Temperature) self test status. Returns STD-DAT,AS, AT,RS,RT.

AS - Ambient Temperature status (0/1/-1).
AT - Ambient Temperature measured in \({ }^{\circ} \mathrm{C}(0.0\) to 80.0\()\).
RS - RF Temperature status (0/1/-1).
RT - RF Temperature measured in \({ }^{\circ} \mathrm{C}\) ( 0.0 to 150.0).

\section*{TEST:SINAD?}

Returns Audio SINAD self test status. Returns STD-DAT,SR.
SR - SINAD Reading in \(\mathrm{dB}(10.0 \pm 1.5)\).

\section*{TEST:SCOPe?}

Returns Scope Period and Level self test status. Returns STD-DAT,PS,LS,H1,V1,H2,V2, H3, V3,H4, V4, H5, V5, H6, V6.
PS - Period Status (0/1/-1).
LS - Level Status (0/1/-1).
H1 - Point 1 Horizontal position (0 to 400).
V1 - Point 1 Vertical position (0 to 255).
H2 - Point 2 Horizontal position (0 to 400).
V2 - Point 2 Vertical position (0 to 255).
H3 - Point 3 Horizontal position (0 to 400).
V3 - Point 3 Vertical position (0 to 255).
H4 - Point 4 Horizontal position (0 to 400).
V4 - Point 4 Vertical position (0 to 255).
H5 - Point 5 Horizontal position (0 to 400).
V5 - Point 5 Vertical position (0 to 255).
H6 - Point 6 Horizontal position (0 to 400).
V6 - Point 6 Vertical position (0 to 255).

\section*{TEST:AF?}

Returns Audio Frequency Counter self test status. Returns STD-DAT,AF.
AF - Measured Audio Frequency ( \(3789 \pm 30.0\) ).

\section*{TEST:LPASs?}

Returns Low-Pass Filter self test status. Returns STD-DAT,S5,R5,S10,R10,S20,R20.
S5-5 kHz measurement status (0/1/-1).
R5 - 5 kHz measurement in \(\mathrm{kHz}(10.0 \pm 10 \%)\).
S10-10 kHz measurement status (0/1/-1).
R10-10 kHz measurement kHz ( 50 to \(90 \%\) of R5).
S20-20 kHz measurement status (0/1/-1).
R20-20 kHz measurement kHz ( \(\leq 10 \%\) of R5).

TEST:BPASs?
Returns Band-Pass (CWT) Filter self test status. Returns STD-DAT,S1,R1,S2,R2,S3,R3, S4,R4,S5,R5,S6,R6.

S1 - 300 Hz measurement status ( \(0 / 1 /-1\) ).
R1 - 300 Hz measurement in \(\mathrm{kHz}(<15 \%\) of R3).
S2-450 Hz measurement status (0/1/-1).
R2-450 Hz measurement in kHz ( 10 to \(50 \%\) of R3).
S3-1 kHz measurement status (0/1/-1).
R3 - 1 kHz measurement (BASELINE).
S4-2 kHz measurement status (0/1/-1).
R4-2 kHz measurement.
S5-4.2 kHz measurement status ( \(0 / 1 /-1\) ).
R5 - 4.2 kHz measurement in \(\mathrm{kHz}(\leq 30 \%\) of R3).
S6-4.9 kHz measurement status ( \(0 / 1 /-1\) ).
R6-4.9 kHz measurement in kHz ( \(\leq 10 \%\) of R3).
TEST:HPASs?
Returns High-Pass Filter self test status. Returns STD-DAT,S10,R10,S3,R3,S15,R15.
S10-10 kHz measurement status (0/1/-1).
R10-10 kHz measurement in \(\mathrm{kHz}(10.0 \pm 10 \%)\).
S3-3 kHz measurement status (0/1/-1).
R3-3 kHz measurement in kHz ( 50 to \(90 \%\) of R10).
S15-15 kHz measurement status (0/1/-1).
R15-15 kHz measurement in \(\mathrm{kHz}(\leq 10 \%\) of R10).

\section*{TEST:LOCK?}

Returns Phaselock Loops self test status. Returns STD-DAT,RS,GS,AS.
RS - Receiver lock status (0/1/-1).
GS - Generator lock status (0/1/-1).
AS - Analyzer lock status (0/1/-1).
TEST:POWer?
Returns Power Meter self test status. Returns STD-DAT,S1.
S1-10 MHz measurement (2.0 to 20.0).

\section*{TEST:LEVel?}

Returns Analyzer Level self test status. Returns STD-DAT, S1, P1, B1, L1, R1, S2, P2, B2, L2, R2,S3, P3, B3, L3, R3, S4, P4, B4, L4, R4.
S1-10 MHz level test status (0/1/-1).
P1 - 10 MHz baseline position ( \(\geq 127\) ).
B1 -10 MHz baseline value in dB .
\(\mathrm{L} 1-10 \mathrm{MHz} 1\) division to left of baseline in \(\mathrm{dB}(<B 1\) to 30\()\).
\(R 1-10 \mathrm{MHz} 1\) division to right of baseline in \(d B(<B 1\) to 30\()\).
S2-64 MHz level test status ( \(0 / 1 /-1\) ).
P2 - 64 MHz baseline position ( \(\geq 127\) ).
B2 -64 MHz baseline value in dB .
L2 - 64 MHz 1 division to left of baseline in dB (<B2 to 30 ).
R2-64 MHz 1 division to right of baseline in dB ( \(<B 2\) to 30 ).
S3-577.9999 MHz level test status (0/1/-1).
P3-577.9999 MHz baseline position ( \(\geq 127\) ).
B3 - 577.9999 MHz baseline value in dB .
L3-577.9999 MHz 1 division to left of baseline in \(d B\) ( \(<B 3\) to 30 ).
R3-577.9999 MHz 1 division to right of baseline in dB ( \(<B 3\) to 30 ).
S4-918.0125 MHz level test status ( \(0 / 1 /-1\) ).
P4-918.0125 MHz baseline position ( \(\geq 127\) ).
B4 - 918.0125 MHz baseline value in dB .
L4-918.0125 MHz 1 division to left of baseline in dB (<B4 to 30).
R4-918.0125 MHz 1 division to right of baseline in dB (<B4 to 30 ).

\section*{TEST:AMMOD?}

Returns AM Modulation self test status. Returns STD-DAT,SR,SP,DS,MS,MD.
SR - Scope Reference level in dB.
SP - Second Peak level in dB ( \(17 \pm 3\) from SR).
DS - Difference Status (0/1/-1).
MS - Modulation Status ( \(0 / 1 /-1\) ).
MD - Modulation Reading in \% ( \(30.0 \pm 6.0\) ).

\section*{TEST:SYNTH?}

Returns Synthesizer Response self test status. Returns STD-DAT,SC,DS,RHS,RHL,RLS, RLL,GHS,GHL,GLS,GLL.
SC - Scope Center level (0 to 255).
DS - Digitizer check status (0/1/-1).
RHS - Receiver highest level status (0/0/-1).
RHL - Receiver highest level ( \(\leq \mathrm{SC}+25\) ).
RLS - Receiver lowest level status (0/1/-1).
RLL - Receiver lowest level ( \(\geq\) SC - 25).
GHS - Generator highest level status (0/0/-1).
GHL - Generator highest level ( \(\leq\) SC +25 ).
GLS - Generator lowest level status ( \(0 / 1 /-1\) ).
GLL - Generator lowest level ( \(\geq\) SC - 25).

\section*{TEST:RF?}

Returns RF Counter self test status. Returns STD-DAT,RC.
RC - RF Error measurement in \(\mathrm{Hz}(0.0 \pm 30.0)\)

\section*{TEST:FMDEV?}

Returns FM Deviation self test status. Returns STD-DAT,PR,MR,DR.
PR - Plus Deviation Reading.
MR - Minus Deviation Reading.
DR - Calculated Deviation in \(\mathrm{Hz}(5.0 \pm 1.0)\)

\section*{TEST:DISP?}

Returns Analyzer Dispersion self test status. Returns STD-DAT,CS,CP,P1,P5,DS,MS.
CS - Center Test status (0/1/-1).
CP - Center Point position (0 to 400).
P1 - Point 1 position (0 to 400).
P5 - Point 5 position (0 to 400).
DS - Dispersion status ( \(0 / 1 /-1\) ).
MS - Multiple (5) Peak status (0/1/-1).

\section*{TEST:RSELect?}

Returns Receiver Selectivity self test status. Returns STD-DAT,S1,NR1,CL1,CR1,CS1, L10,R10,S10,L40,R40,S40,S2,NR2,CL2,CR2,CS2,L100,R100,S100,L400,R400,S400.

S1 - FM1 Test status (0/1/-1).
NR1 - Noise Signal Reading.
CL1 - Center level in dBm (-127.0 to 0).
CR1-Center Signal Reading.
CS1 - Center Level status (0/1/-1).
L10-10 kHz Offset level in dBm (CL1 \(\pm 3.0\) ).
R10-10 kHz Signal Reading.
S10-10 kHz Offset Level status ( \(0 / 1 /-1\) ).
L40-40 kHz Offset level in dBm (<CL1-3.0).
R40-40 kHz Signal Reading.
S40-40 kHz Offset Level status (0/1/-1).
S2 - FM3 Test status (0/1/-1).
NR2 - Noise Signal Reading.
CL2 - Center level in dBm (-127.0 to 0).
CR2 - Center Signal Reading.
CS2 - Center Level status (0/1/-1).
L100-100 kHz Offset level in dBm (CL2 \(\pm 3.0\) ).
R100-100 kHz Signal Reading.
S100-100 kHz Offset Level status (0/1/-1).
L400-400 kHz Offset level in dBm (<CL2-3.0).
R400-400 kHz Signal Reading.
S400-400 kHz Offset Level status (0/1/-1).

\section*{TEST:AUX?}

Returns Special Test Self Test status. Returns STD-DAT,S1,S2,S3,S4, S5, S6, S7,S8.
S1-SCSI Bus status (0/1/-1).
S2 - Time of Day Clock status (0/1/-1).
S3 - Wait-State Generator status ( \(0 / 1 /-1\) ).
S4-CPU ROM Test status ( \(0 / 1 /-1\) ).
S5 - Memory Board ROM Test status (0/1/-1).
S6-CPU RAM Test status (0/1/-1).
S7 - Memory Board RAM Test status (0/1/-1).
S8 - UUT Board Test status (0/1/-1).

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\section*{APPENDIX D - SCREEN CHARACTERS}

Table D-1 lists all the possible screen characters that are resident with the HOST. The below characters may be displayed using the following TMAC command: print chr (code).
\begin{tabular}{|c|c|}
\hline CHARACTER & CODE \\
\hline M & 20 \\
\hline T & 21 \\
\hline 0 & 22 \\
\hline 1 & 23 \\
\hline 2 & 24 \\
\hline 3 & 25 \\
\hline 4 & 26 \\
\hline 5 & 27 \\
\hline 6 & 28 \\
\hline 7 & 29 \\
\hline 8 & 30 \\
\hline 9 & 31 \\
\hline (space) & 32 \\
\hline ! & 33 \\
\hline " & 34 \\
\hline \# & 35 \\
\hline \$ & 36 \\
\hline \% & 37 \\
\hline \& & 38 \\
\hline , & 39 \\
\hline \((\) & 40 \\
\hline ) & 41 \\
\hline * & 42 \\
\hline + & 43 \\
\hline , & 44 \\
\hline - & 45 \\
\hline . & 46 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline CHARACTER & CODE \\
\hline 1 & 47 \\
\hline 0 & 48 \\
\hline 1 & 49 \\
\hline 2 & 50 \\
\hline 3 & 51 \\
\hline 4 & 52 \\
\hline 5 & 53 \\
\hline 6 & 54 \\
\hline 7 & 55 \\
\hline 8 & 56 \\
\hline 9 & 57 \\
\hline : & 58 \\
\hline ; & 59 \\
\hline \(<\) & 60 \\
\hline \(=\) & 61 \\
\hline \(>\) & 62 \\
\hline ? & 63 \\
\hline @ & 64 \\
\hline A & 65 \\
\hline B & 66 \\
\hline C & 67 \\
\hline D & 68 \\
\hline E & 69 \\
\hline F & 70 \\
\hline G & 71 \\
\hline H & 72 \\
\hline 1 & 73 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline CHARACTER & CODE \\
\hline J & 74 \\
\hline K & 75 \\
\hline L & 76 \\
\hline M & 77 \\
\hline N & 78 \\
\hline 0 & 79 \\
\hline P & 80 \\
\hline Q & 81 \\
\hline R & 82 \\
\hline S & 83 \\
\hline T & 84 \\
\hline U & 85 \\
\hline V & 86 \\
\hline W & 87 \\
\hline X & 88 \\
\hline Y & 89 \\
\hline Z & 90 \\
\hline [ & 91 \\
\hline 1 & 92 \\
\hline ] & 93 \\
\hline \(\wedge\) & 94 \\
\hline - & 95 \\
\hline , & 96 \\
\hline a & 97 \\
\hline b & 98 \\
\hline c & 99 \\
\hline d & 100 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline CHARACTER & CODE \\
\hline e & 101 \\
\hline f & 102 \\
\hline 9 & 103 \\
\hline h & 104 \\
\hline i & 105 \\
\hline ) & 106 \\
\hline k & 107 \\
\hline 1 & 108 \\
\hline m & 109 \\
\hline n & 110 \\
\hline 0 & 111 \\
\hline \(p\) & 112 \\
\hline q & 113 \\
\hline \(r\) & 114 \\
\hline s & 115 \\
\hline \(t\) & 116 \\
\hline u & 117 \\
\hline V & 118 \\
\hline w & 119 \\
\hline x & 120 \\
\hline \(y\) & 121 \\
\hline z & 122 \\
\hline \{ & 123 \\
\hline \(\Omega\) & 124 \\
\hline \} & 125 \\
\hline Ф & 126 \\
\hline
\end{tabular}

Table D-1 HOST Screen Characters

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\section*{APPENDIX E - ABBREVIATIONS}

A

A
ac
ACELP

AF
AGC
AM
AMPS

ANLZ
ANSI

ANT
ASCII

BFO
BER
bps

CCH
ccw
CW
C Wt

Ampere
Alternating Current
Algebraic Codebook Excited Linear Predictive

Audio Frequency
Automatic Gain Control
Amplitude Modulation
Advanced Mobile Phone Service

Analyzer
American National Standards Institute

Antenna
American National Standard Code for Information Interchange

B
Beat Frequency Oscillator
Bit Error Rate
Bits per second
C
Control Channel
Counterclockwise
Clockwise
C-Weight
dB
dBm
dc
DCS
Demod Audio
DMM
DSAT

DST
DTMF
ESD
ESN
ETACS
EXT
EXT MOD
FACCH
FDTC
FM
FOCC
Freq
Func Gen

FVC

D
Decibels
Decibels relative to 1 milliwatt

Direct Current
Digital Coded Squelch
Demodulated Audio
Digital Multimeter
Digital Supervisory Audio Tone

Digital Signalling Tone
Dual Tone Multi-Frequency
E
Electrostatic discharge
Electronic Serial Number
Enhanced Total Access Communications System

External
External Modulation

\section*{F}

Fast Associated Control Channel

Forward Digital Traffic Channel

Frequency Modulation
Forward Control Channel
Frequency
Function Generator
Forward Voice Channel
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{2}{|r|}{G} & \multicolumn{2}{|r|}{M} \\
\hline Gen & Generator & MHz & Megahertz \\
\hline GHz & Gigahertz & MIN & Mobile Identification Number \\
\hline GND & Ground & MOD & Modulation \\
\hline \multirow[t]{3}{*}{GPIB} & \multirow[t]{2}{*}{General Purpose Interface Bus} & MODL & Modulation Level \\
\hline & & \(\mathrm{M} \Omega\) & Mega ohm \\
\hline & H & ms & Milliseconds \\
\hline Hz & Hertz & msg & message \\
\hline \multirow[t]{2}{*}{Hex} & Hexadecimal & MTS & Mobile Telephone Service \\
\hline & 1 & mV & Millivolts \\
\hline Id & Identification & mW & Milliwatts \\
\hline IEEE & Institute of Electrical and Electronic Engineers & & N \\
\hline \multirow[t]{2}{*}{IMTS} & \multirow[t]{2}{*}{Improved Mobile Telephone Service} & N/A & Not applicable \\
\hline & & NAMPS & Narrow Band Advanced Mobile Phone Service \\
\hline 1/0 & K & NVRAM & Non-Volatile Random Access Memory \\
\hline kbps & kilobits per second & & 0 \\
\hline kHz & kilohertz & Opn & Operation \\
\hline \multirow[t]{2}{*}{\(\mathrm{k} \Omega\)} & kilo ohm & & P \\
\hline & L & PM & Phase Modulation \\
\hline LSB & Lower Sideband & PWR & Power \\
\hline LvI & Level & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{2}{|r|}{R} & \multicolumn{2}{|r|}{T} \\
\hline RAM & Random Access Memory & TDMA & Time Division Multiple \\
\hline RBW & Resolution Bandwidth & & Access \\
\hline RCI & Remote Command & TERM & Terminal \\
\hline & Interpreter & TRI & Triangle \\
\hline RCL & Recall & Tx & Transmit \\
\hline RCV & Receive & & U \\
\hline Rcur & Receiver & USB & Upper Sideband \\
\hline RDTC & Reverse Digital Traffic Channel & UUT & Unit Under Test \\
\hline RECC & Reverse Control Channel & & V \\
\hline Res & Resolution & V & Volt \\
\hline RF & Radio Frequency & VCHAN & Voice Channel \\
\hline RF Pwr & RF Power & Vrms & Voltage Root Mean Square \\
\hline Rgtr & Register & VSELP & Vector Sum Excited Linear Prediction \\
\hline RMS & Root Mean Square & & w \\
\hline RVC & Reverse Voice Channel & W & Watt \\
\hline SACCH & Slow Associated Control Channel & Xmtr & X
Transmitter \\
\hline SAT & Supervisory Audio Tone & & \\
\hline SCC & Supervisory Audio Tone Color Code & & \\
\hline sec & Second & & \\
\hline SIN & Sine & & \\
\hline SQU & Square & & \\
\hline SSB & Single Side Band & & \\
\hline SSD & Shared Secret Data & & \\
\hline Std & Standard & & \\
\hline
\end{tabular}

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Continuous Remote Raw Timeslot Data FDCCH

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[^0]:    Validity is determined by FDCCH:FBCCH:CUSTOM:LENGth?

[^1]:    Validity is determined by FDCCH:FBCCH:MACA:LIST:NUMBer?

