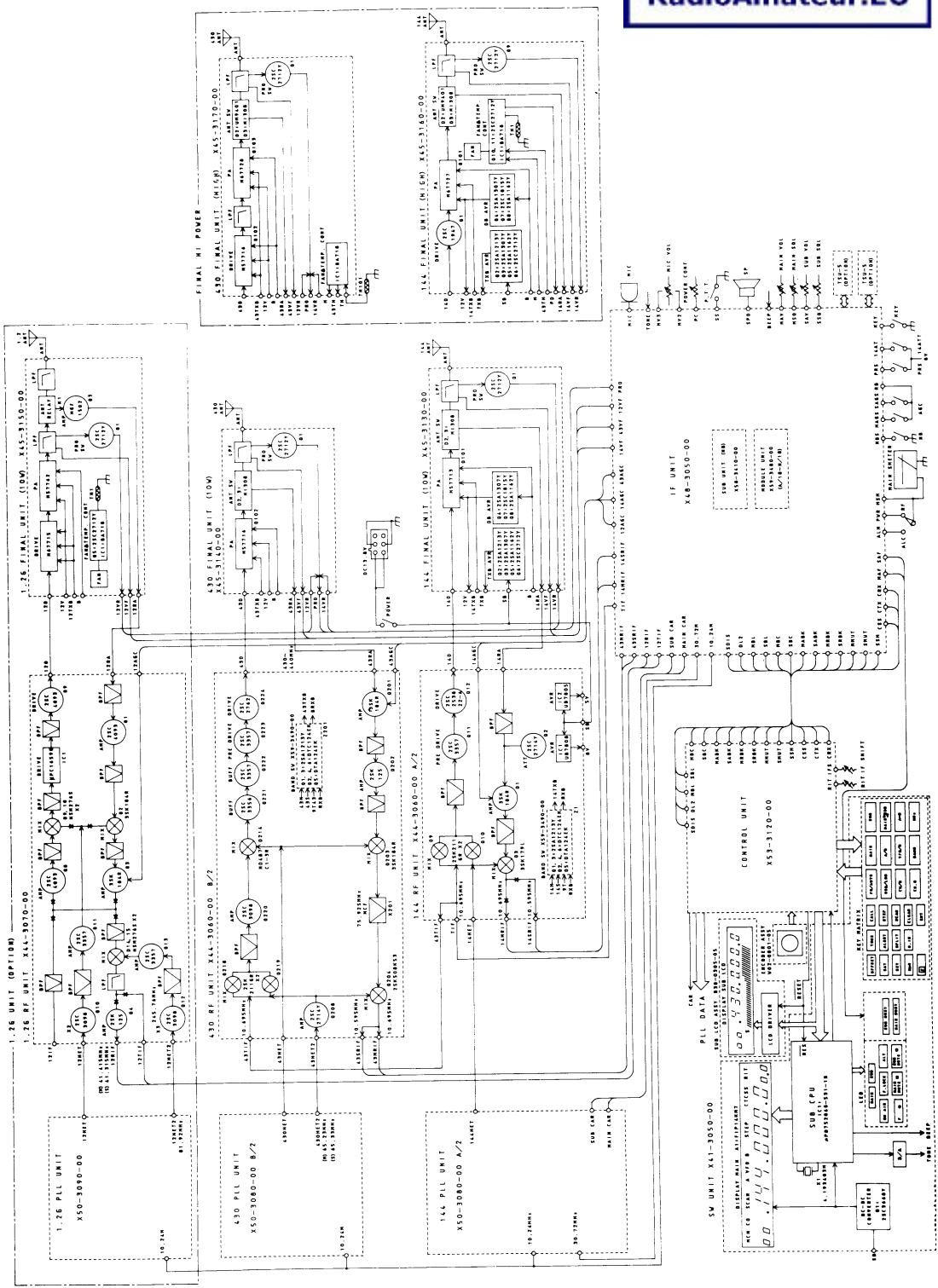


5. BLOCK DIAGRAM AND CIRCUIT DIAGRAM

5-1. BLOCK DIAGRAM

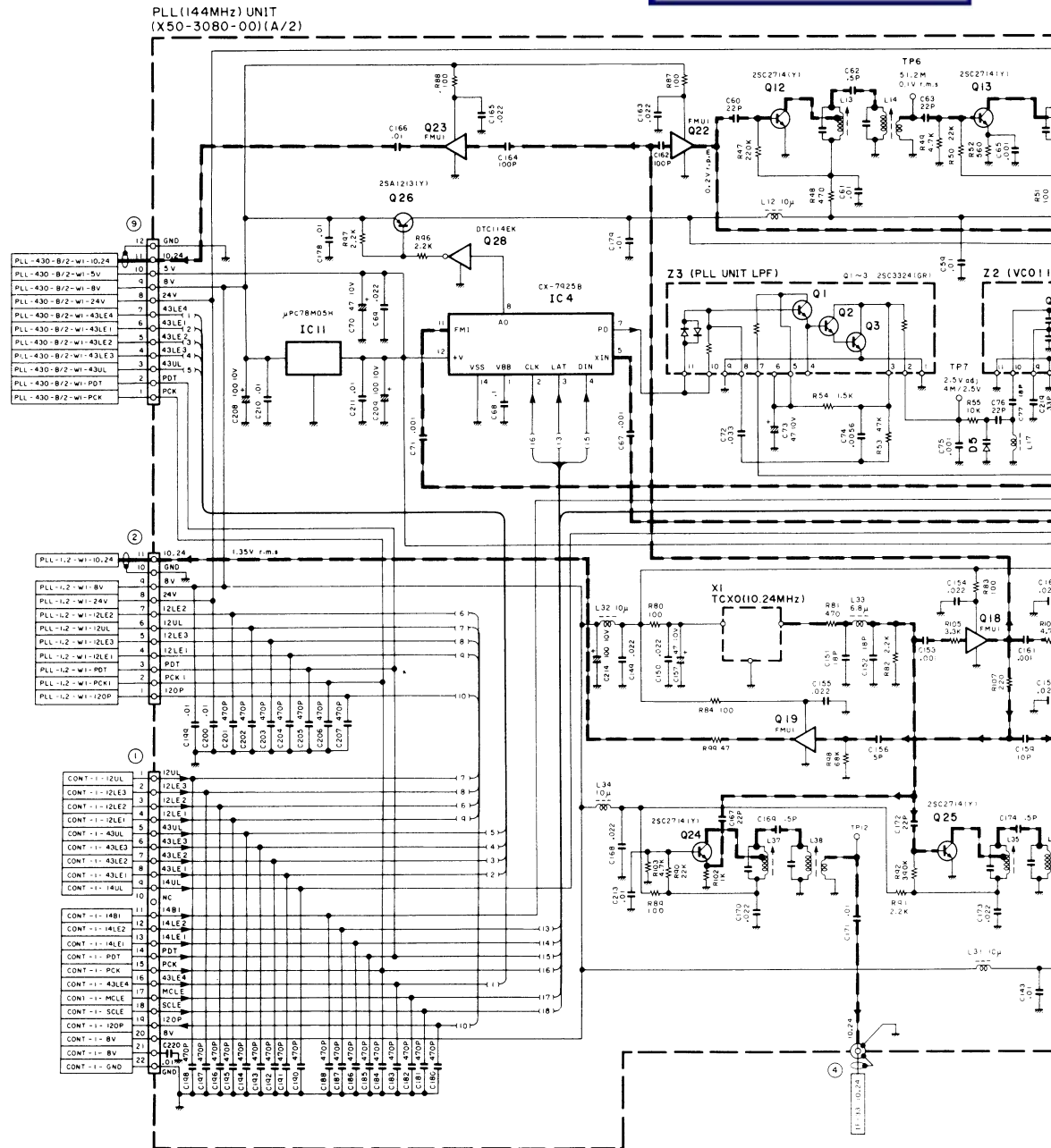
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RadioAmateur.EU

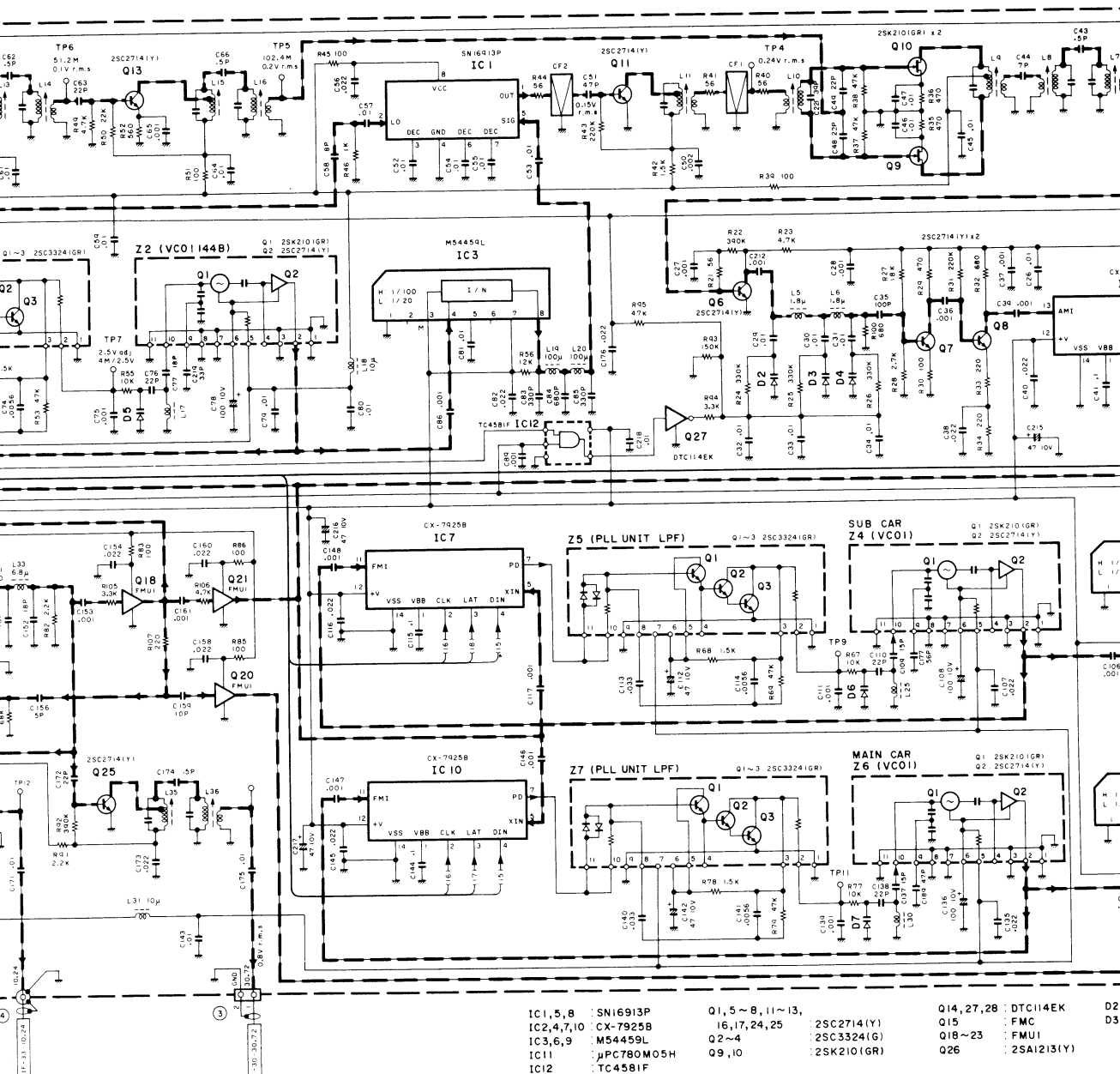


5-2. CIRCUIT DIAGRAM

■ PLL (144 MHz) UNIT (X50-3080-00) (A/2)

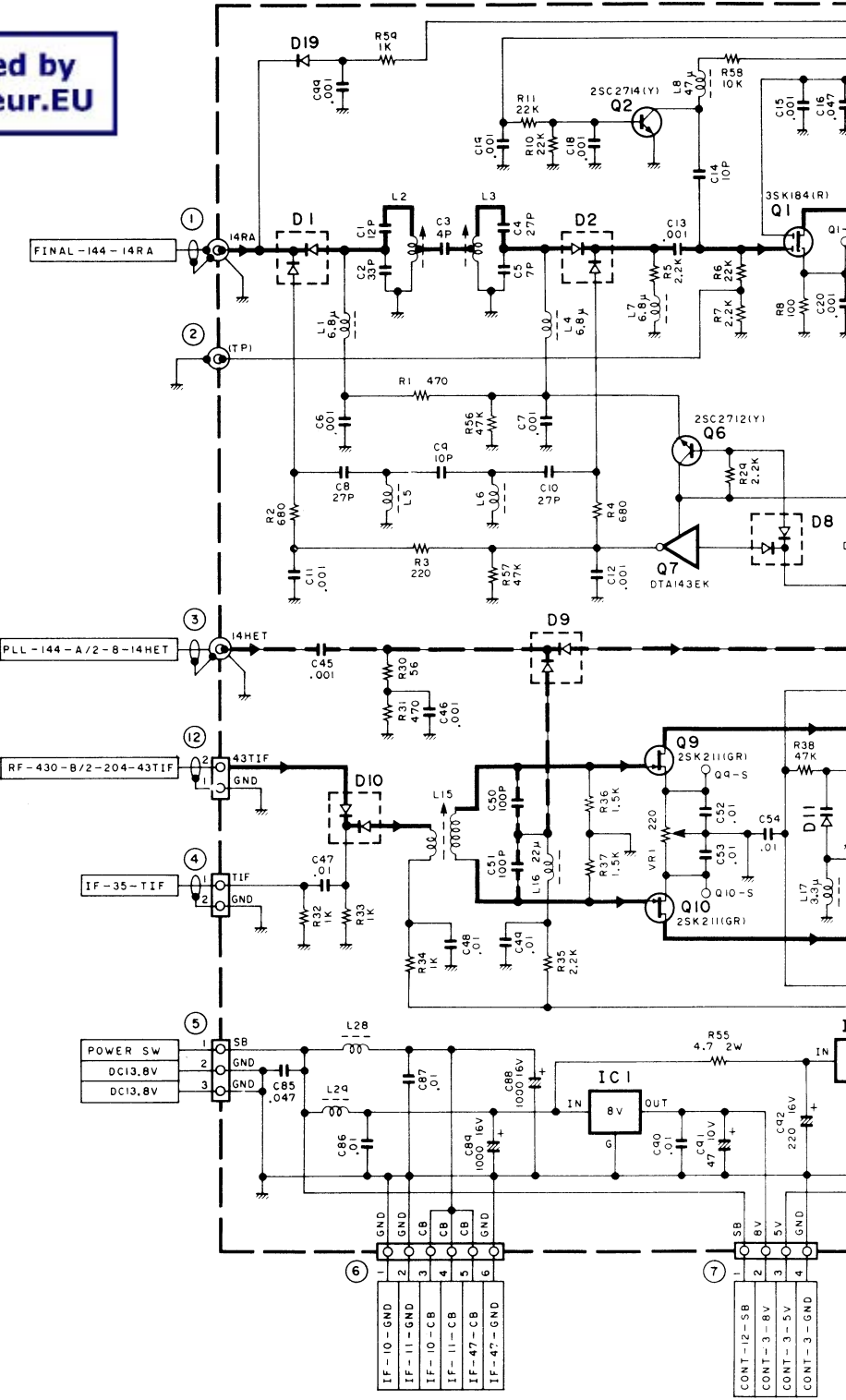
Downloaded by
RadioAmateur.EU

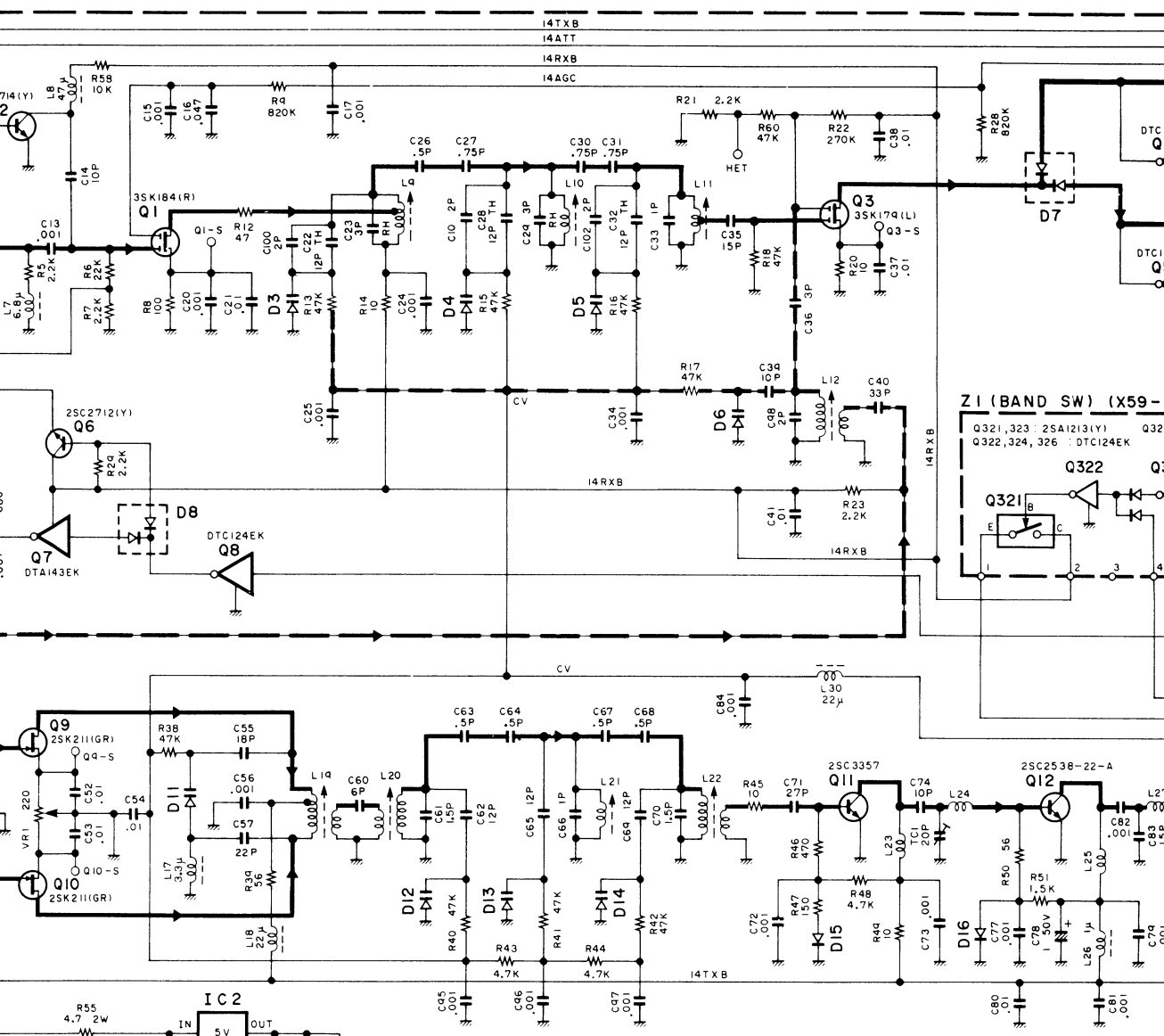




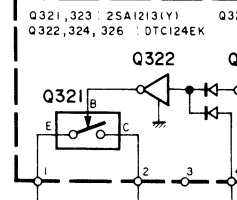
- | | | | | | | |
|------------|------------|---------------|------------|-----------|------------|----|
| IC1,5,8 | SN16913P | Q1,5~8,11~13, | 2SC2714(Y) | Q14,27,28 | DTC114EK | D2 |
| IC2,4,7,10 | CX-7925B | 16,17,24,25 | 2SC2714(Y) | Q15 | FMC | D3 |
| IC3,6,9 | M54459L | Q2~4 | 2SC3324(G) | Q18~23 | FMU1 | |
| IC11 | μPC780M05H | Q9,10 | 2SK2101GR) | Q26 | 2SA1213(Y) | |
| IC12 | TC4581F | | | | | |

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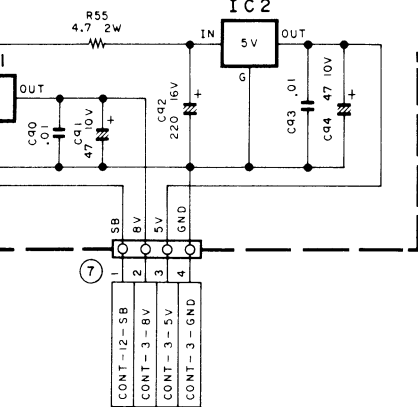
Z1 (BAND SW) (X59-)



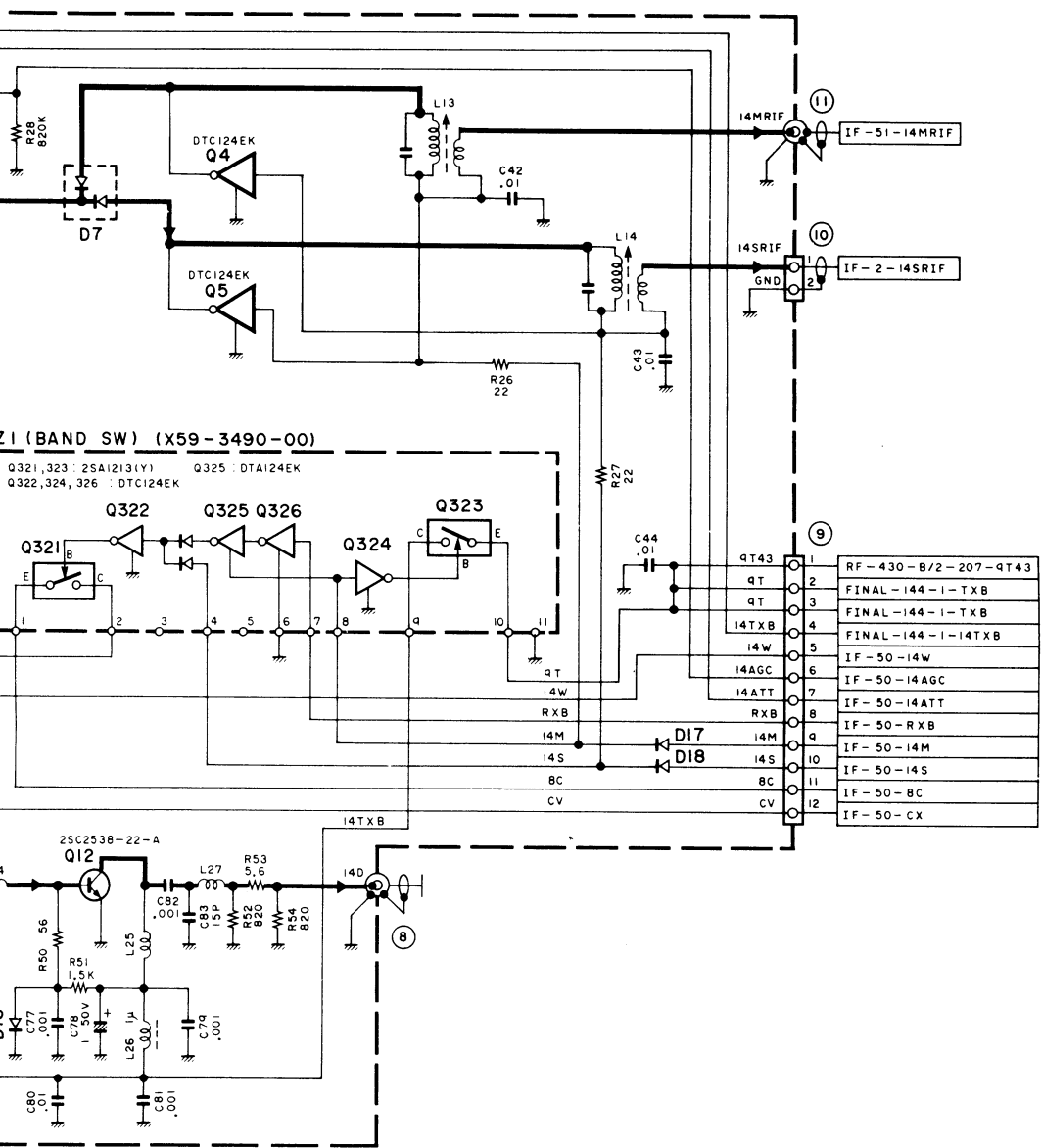
IC1 : UB7808
 IC2 : UB7805

Q1 : 3SK184(R)
 Q2 : 2SC2714(Y)
 Q3 : 3SK179(L)
 Q4,5,8 : DTC124EK
 Q6 : 2SC2712(Y)
 Q7 : DTA143EK
 Q9,10 : 2SK211(GR)
 Q11 : 2SC3357
 Q12 : 2SC2538-22-A

D1, 2, 7~10 : DAN235H
 D3~6, 11~14 : ISV205
 D15~18 : RLS73
 D19 : RLS135



Note:
 Circuit



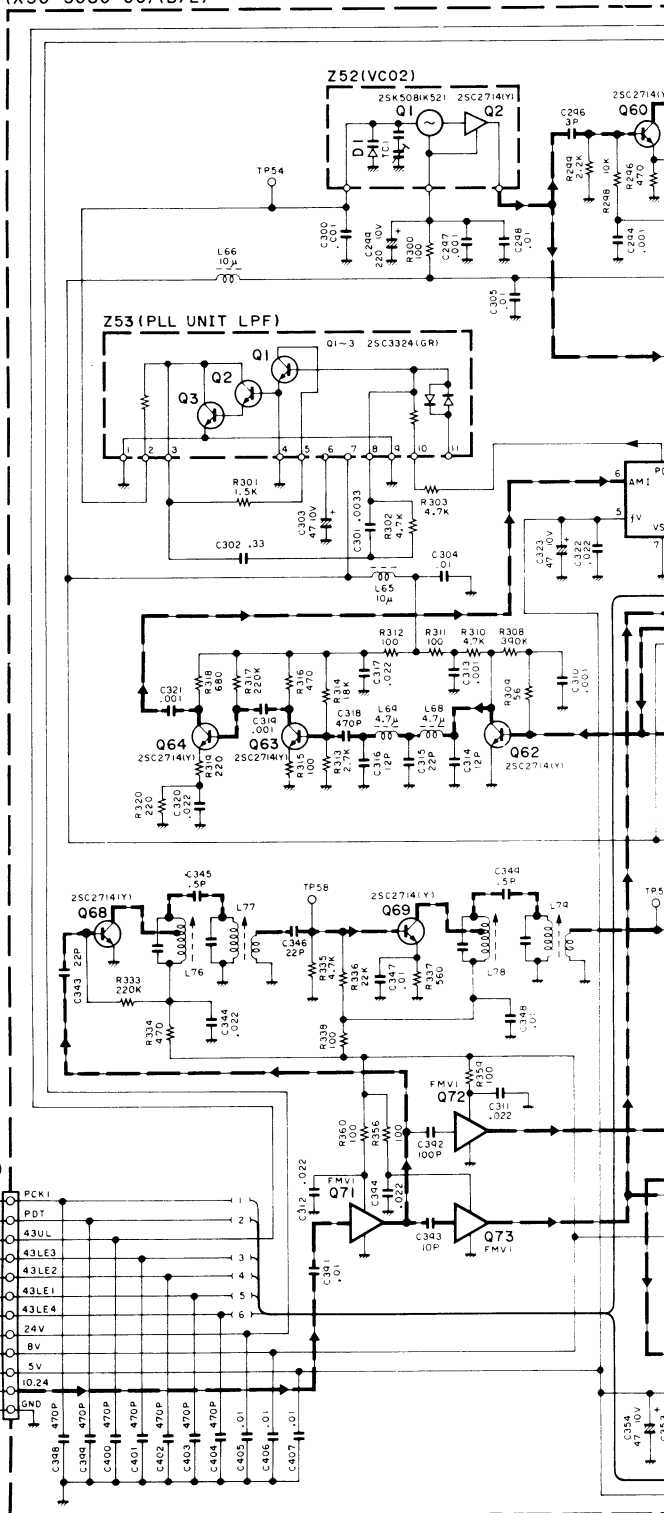
- D1, 2, 7~10 : DAN235K
- D3~6, 11~14 : ISV205
- D15~18 : RLS73
- D19 : RLS135

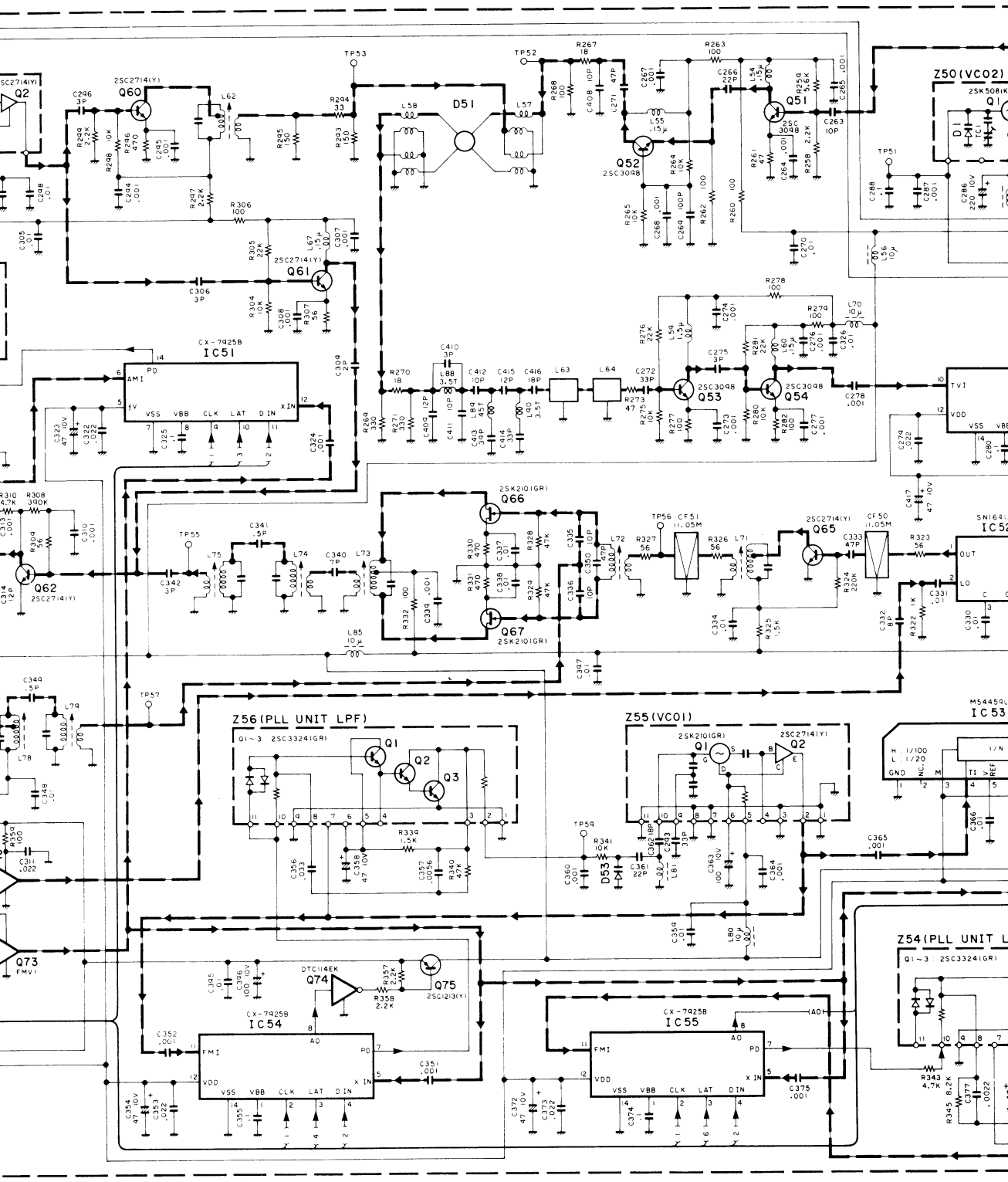
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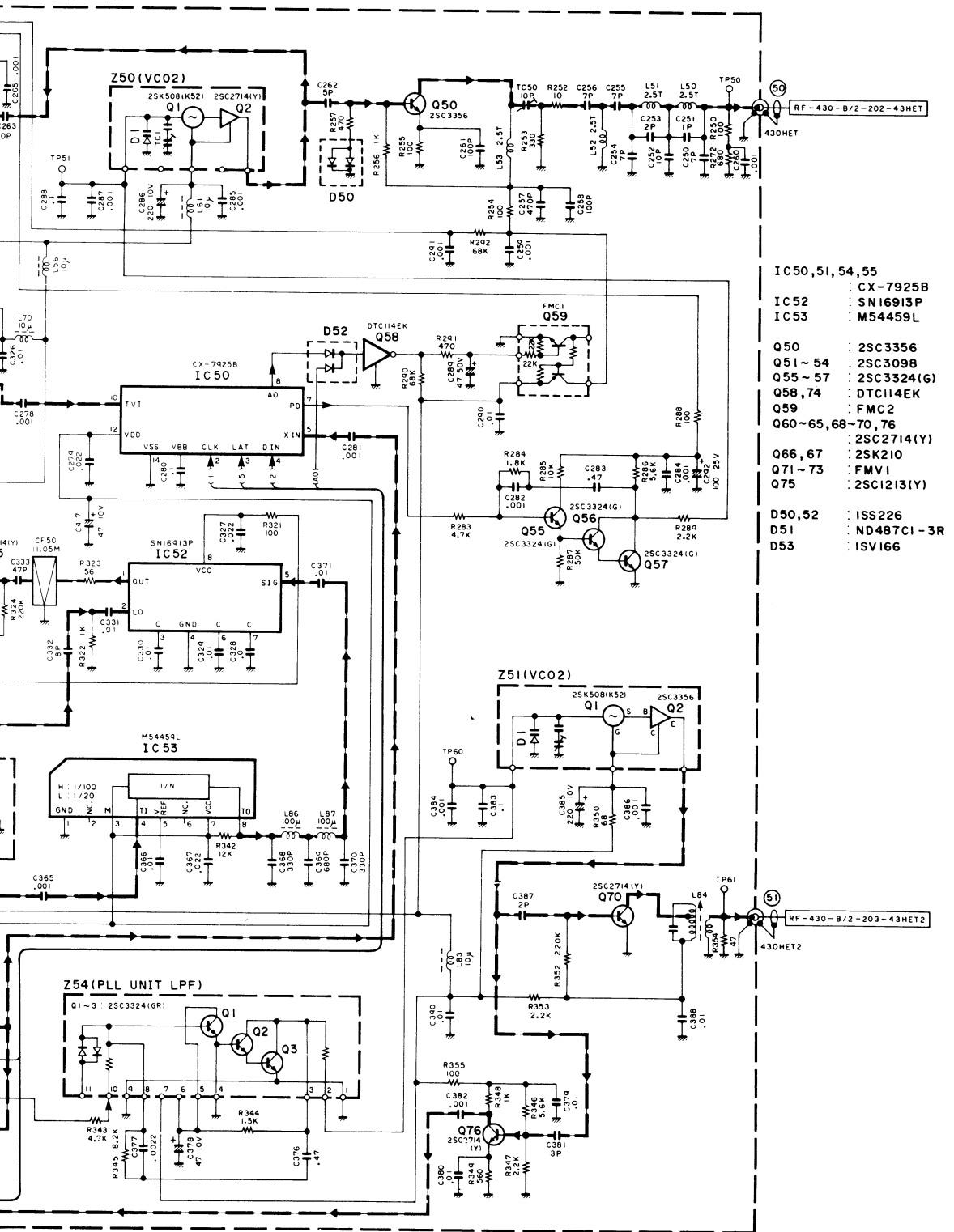
Note:
 Circuit Diagram is subject to change without notice due to advancements in technology.

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| | |
|----|-------|
| 1 | PCK1 |
| 2 | PDT |
| 3 | 43UL |
| 4 | 43LE3 |
| 5 | 43LE2 |
| 6 | 43LE1 |
| 7 | 43LE4 |
| 8 | 24V |
| 9 | 8V |
| 10 | 5V |
| 11 | 10.24 |
| 12 | GND |

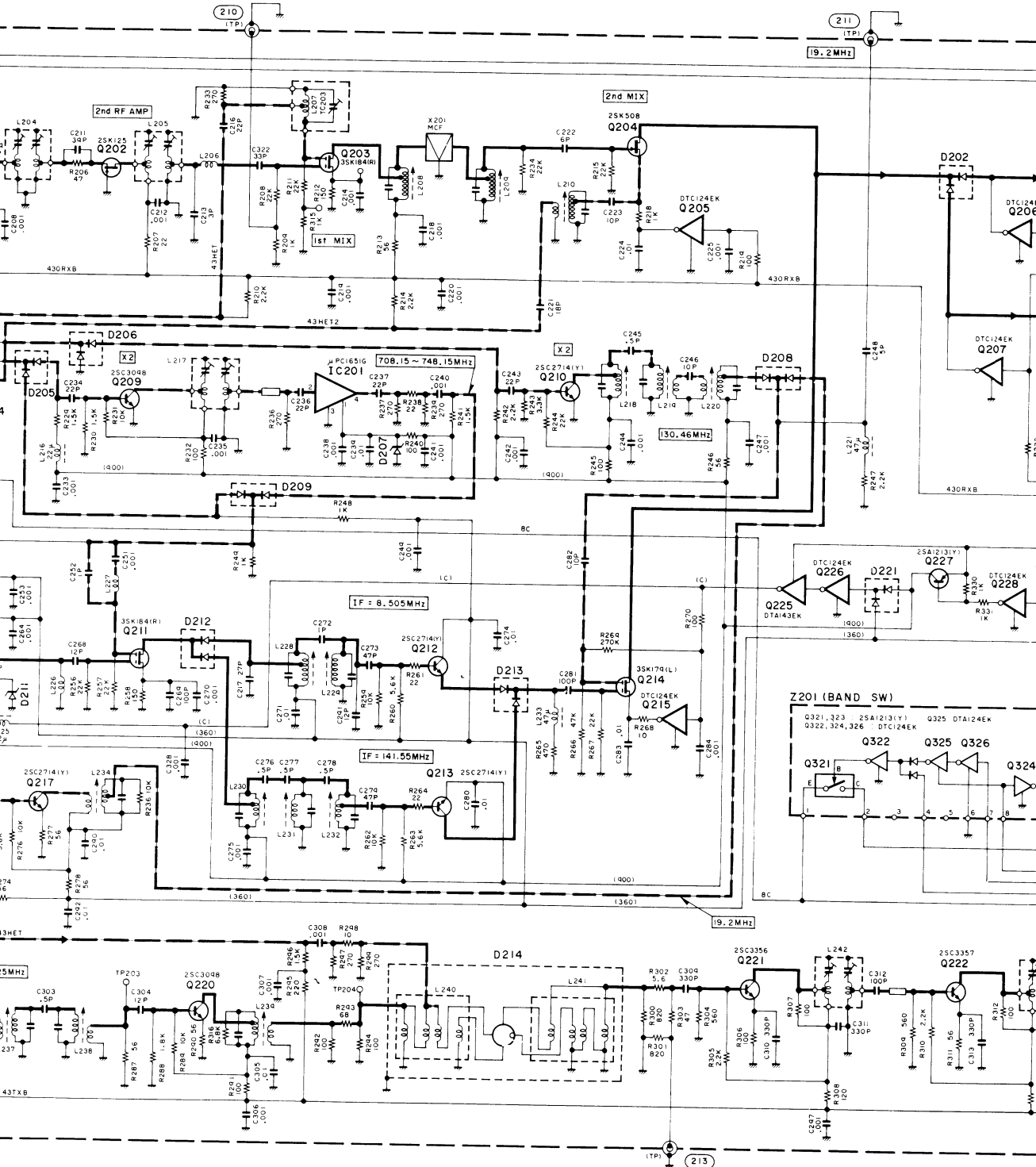




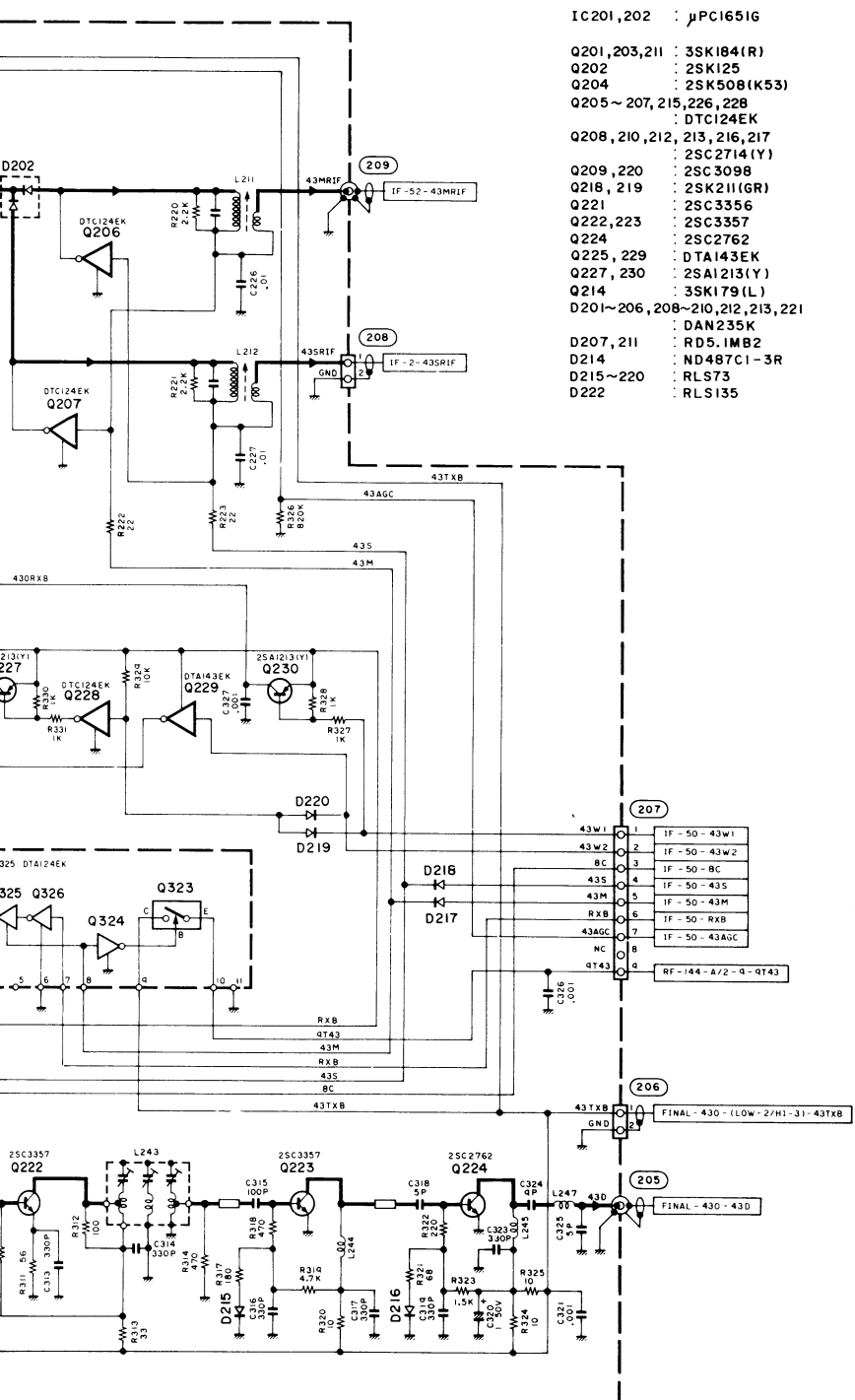


- | | |
|-----------------------|----------------|
| IC 50, 51, 54, 55 | : CX-7925B |
| IC 52 | : SN16913P |
| IC 53 | : M54459L |
| Q50 | : 25C3356 |
| Q51 ~ 54 | : 25C3098 |
| Q55 ~ 57 | : 25C3324(G) |
| Q58, 74 | : DTC114EK |
| Q59 | : FMV2 |
| Q60 ~ 65, 68 ~ 70, 76 | : 25C2714(Y) |
| Q66, 67 | : 25K210 |
| Q71 ~ 73 | : FMV1 |
| Q75 | : 25C213(Y) |
| D50, 52 | : ISS226 |
| D51 | : ND487C1 - 3R |
| D53 | : ISV166 |

Note: Circuit Diagram is subject to change without notice due to advancements in technology.



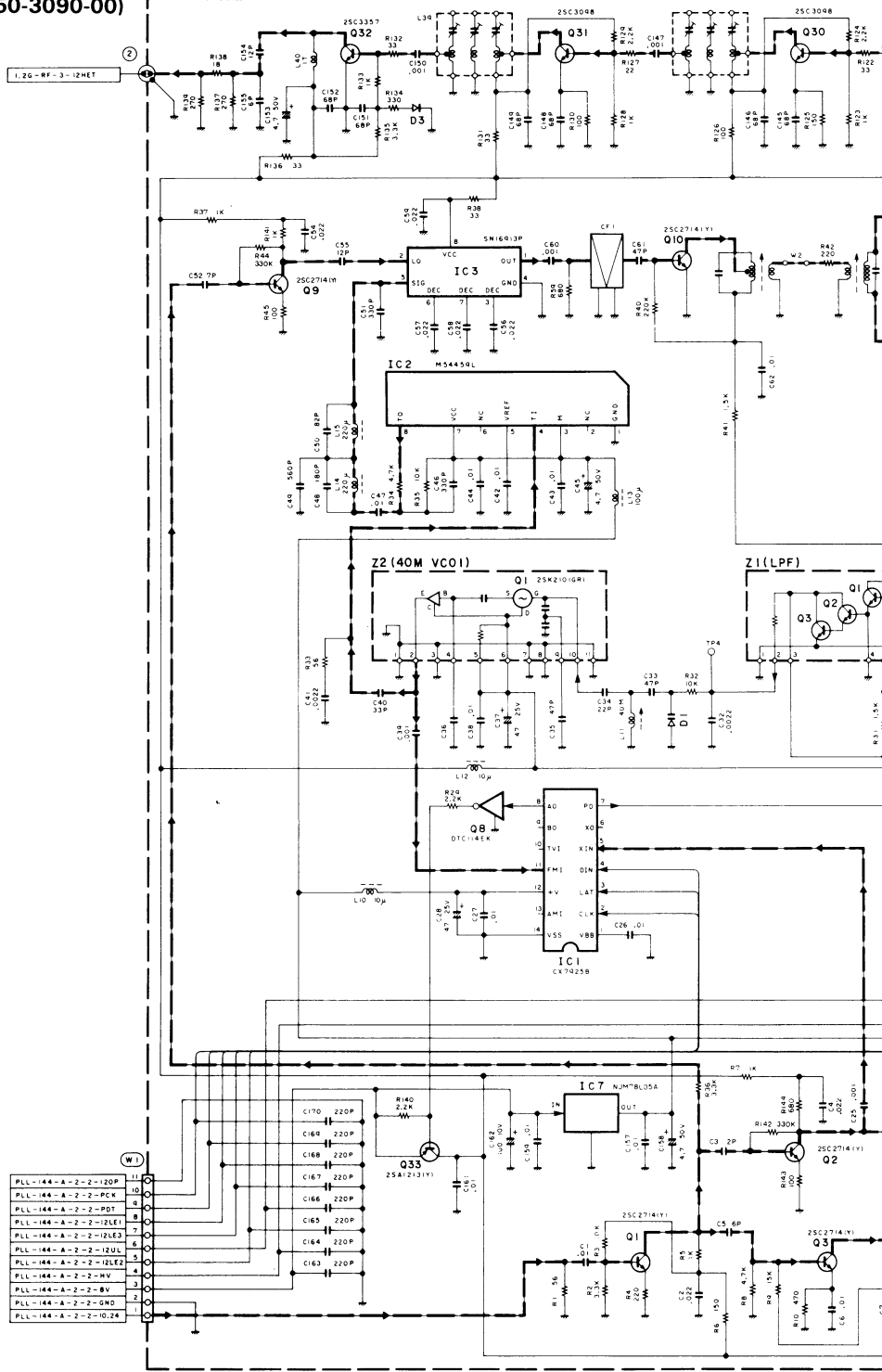
Note: Circuit Diagram is s



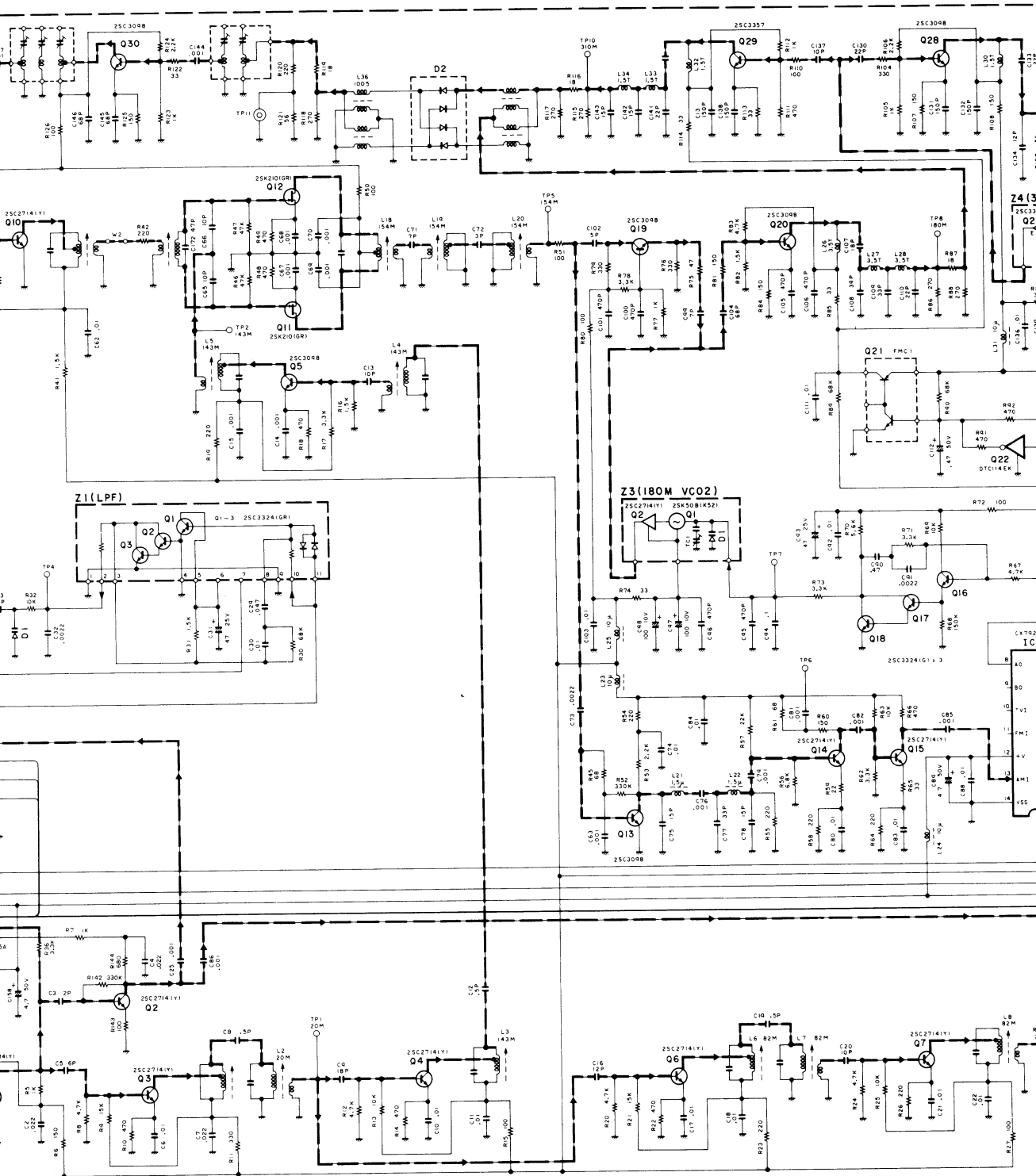
- IC201,202 : μ PC16516
- Q201,203,211 : 3SK184(R)
 Q202 : 2SK125
 Q204 : 2SK508(K53)
 Q205 ~ 207, 215, 226, 228 : DTC124EK
 Q208, 210, 212, 213, 216, 217 : 2SC2714(Y)
 Q209, 220 : 2SC3098
 Q218, 219 : 2SK211(GR)
 Q221 : 2SC3356
 Q222, 223 : 2SC3357
 Q224 : 2SC2762
 Q225, 229 : DTA143EK
 Q227, 230 : 2SA1213(Y)
 Q214 : 3SK179(L)
 D201 ~ 206, 208 ~ 210, 212, 213, 221 : DAN235K
 D207, 211 : RD5.1MB2
 D214 : ND487C1-3R
 D215 ~ 220 : RLS73
 D222 : RLS135

PLL (1.2 GHz) UNIT (X50-3090-00)

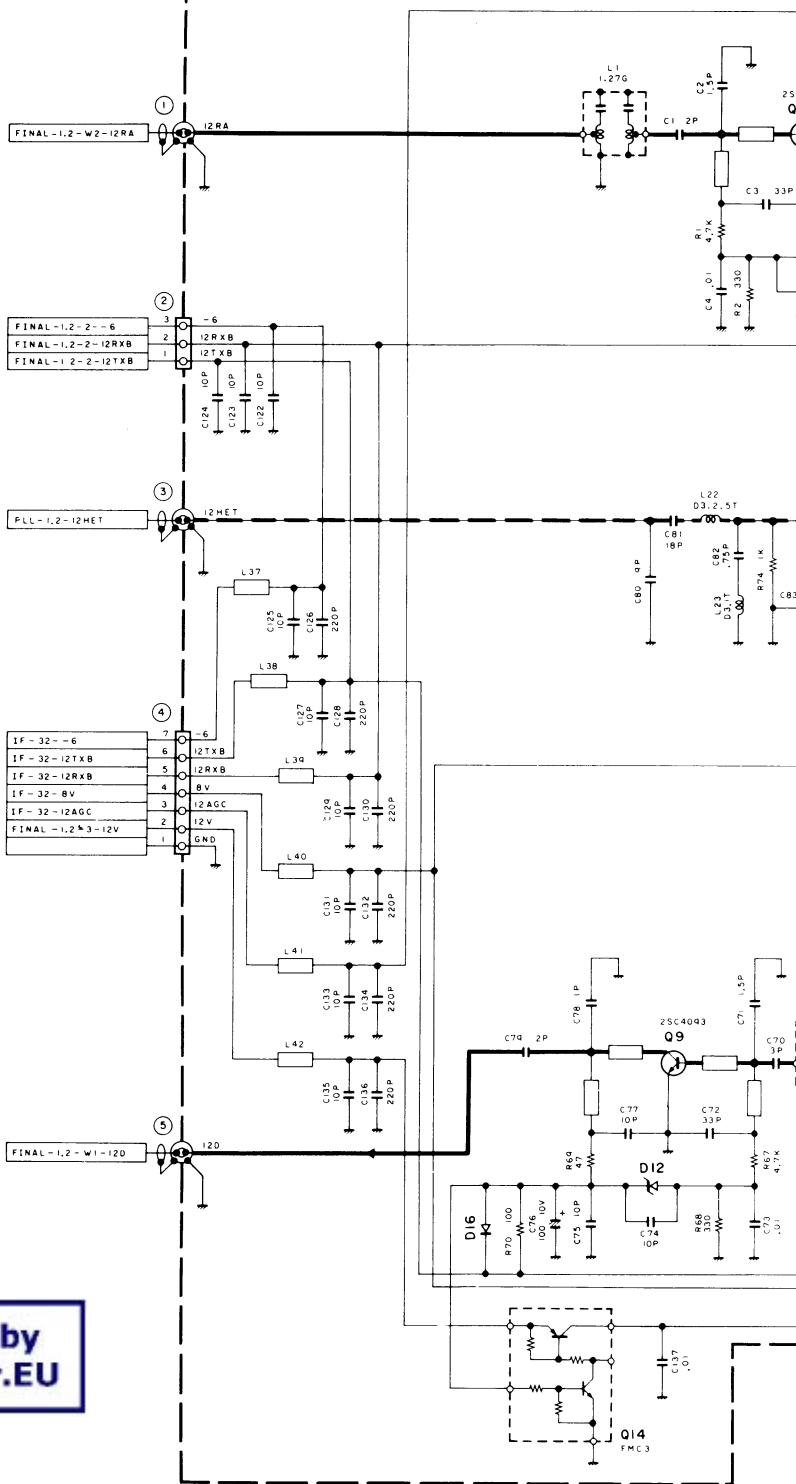
PLL(1.2GHz) UNIT (X50-3090-00)



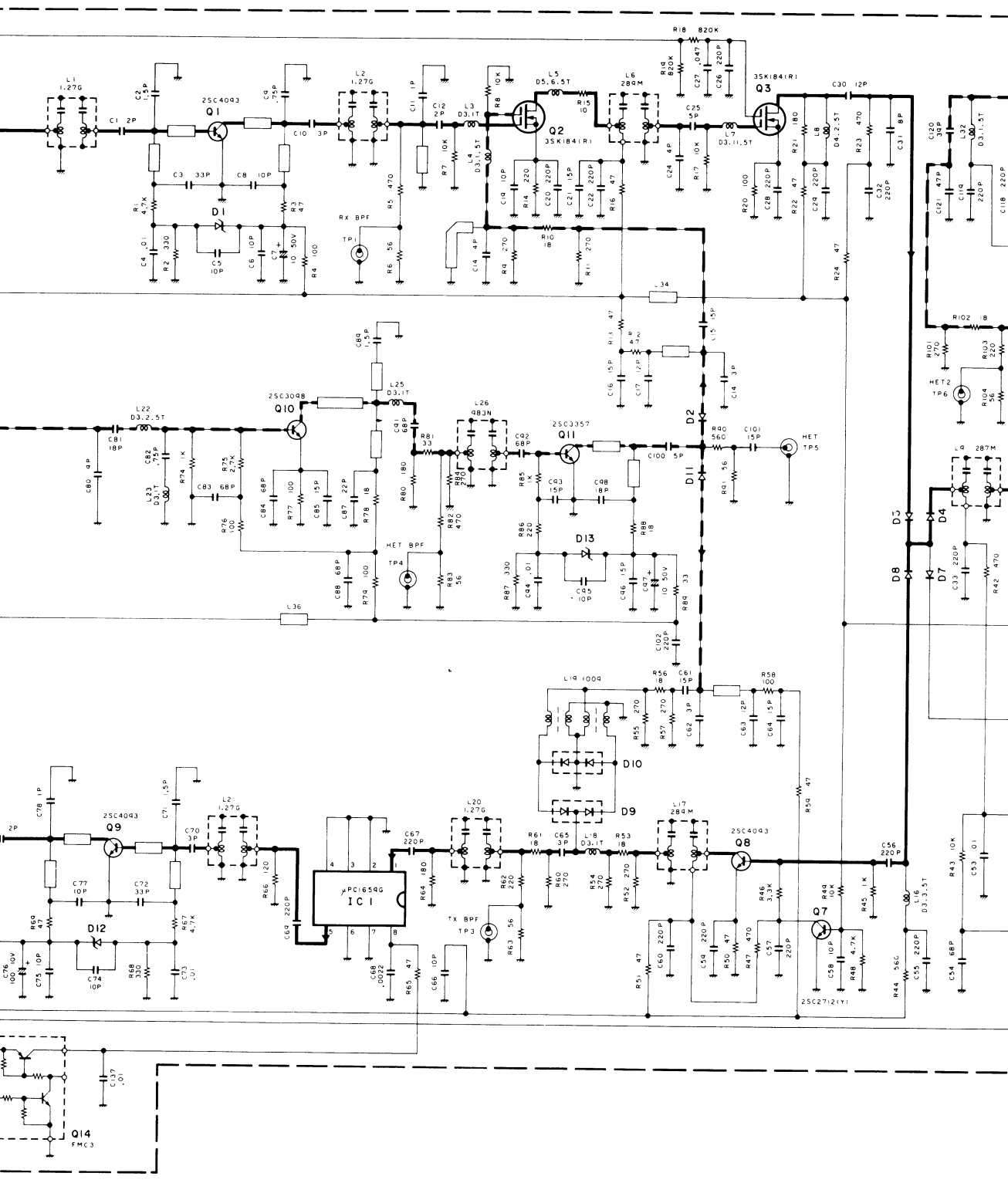
| | |
|----|---------------------|
| 11 | PLL-144-A-2-2-120P |
| 10 | PLL-144-A-2-2-PCB |
| 9 | PLL-144-A-2-2-PDT |
| 8 | PLL-144-A-2-2-12LE1 |
| 7 | PLL-144-A-2-2-12LE3 |
| 6 | PLL-144-A-2-2-12LE2 |
| 5 | PLL-144-A-2-2-12LE1 |
| 4 | PLL-144-A-2-2-12LE2 |
| 3 | PLL-144-A-2-2-12V |
| 2 | PLL-144-A-2-2-8V |
| 1 | PLL-144-A-2-2-2-04D |
| 0 | PLL-144-A-2-2-10.24 |



Note: Circuit Diagram is subject to change

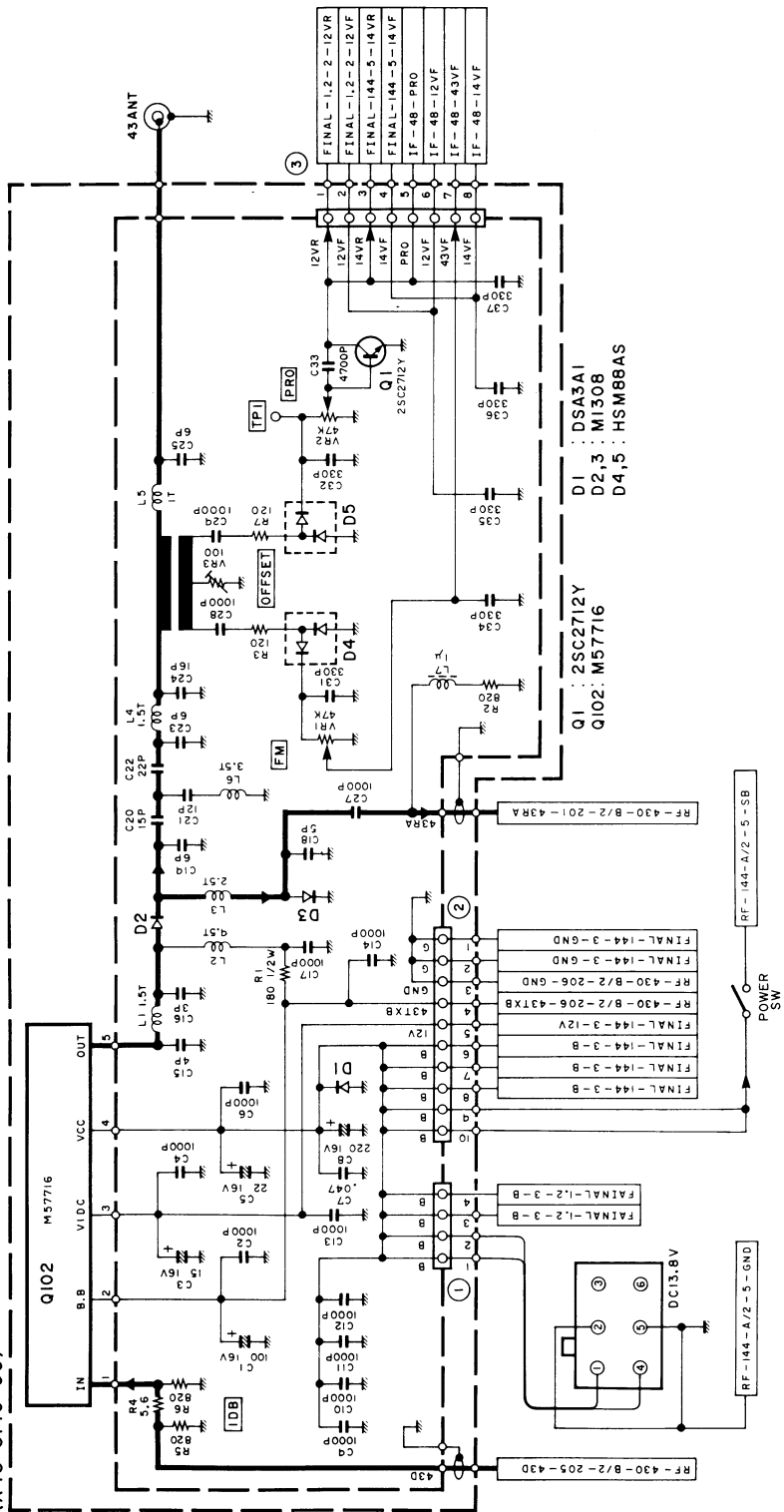


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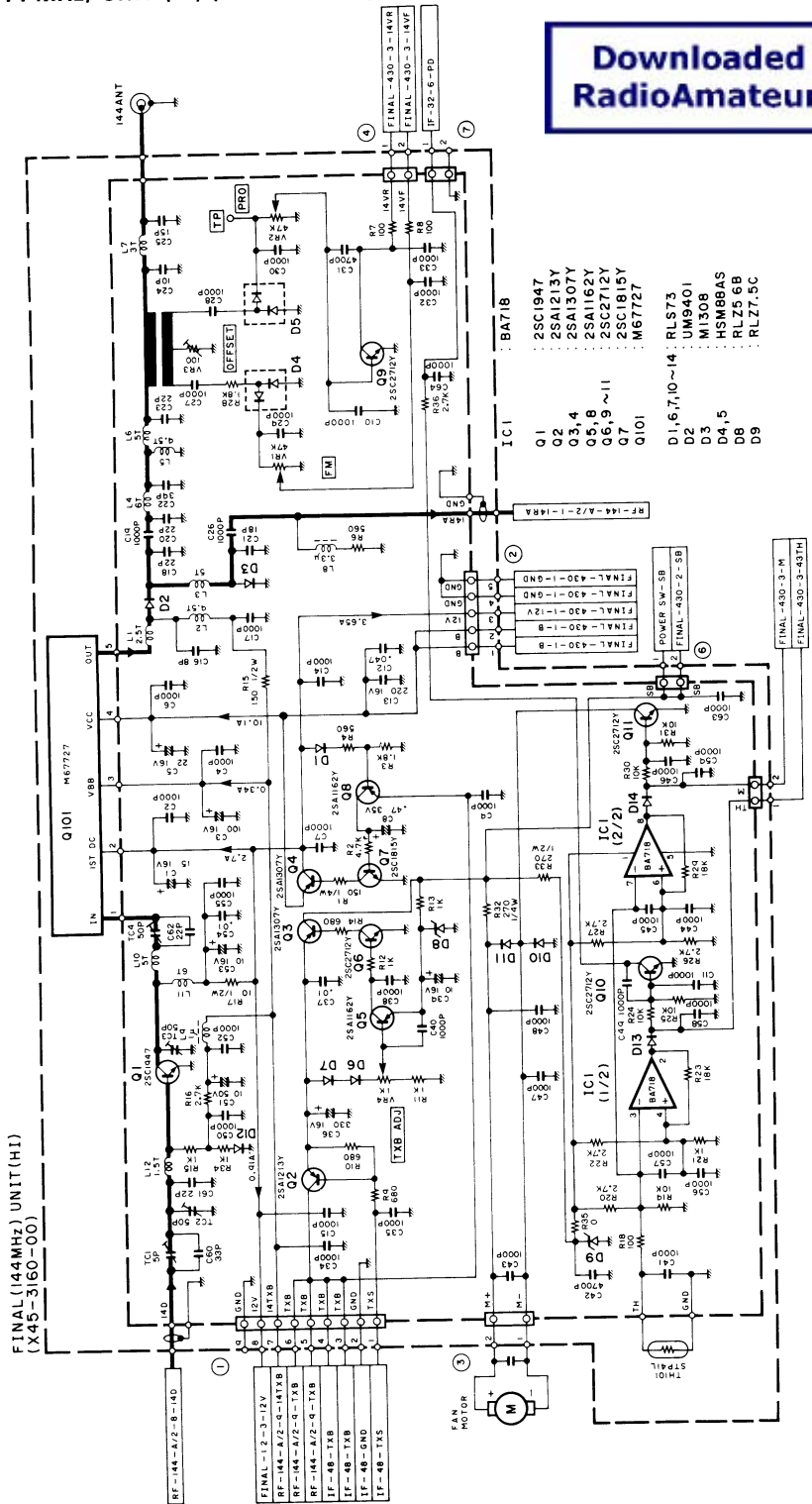
FINAL (430 MHz) UNIT (LOW) (X45-3140-00)

FINAL (430MHz) UNIT (LOW)
(X45-3140-00)



Q1 : 2SC2712Y
Q102: M57716
D1 : DSA3A1
D2,3 : MI308
D4,5 : HSM88AS

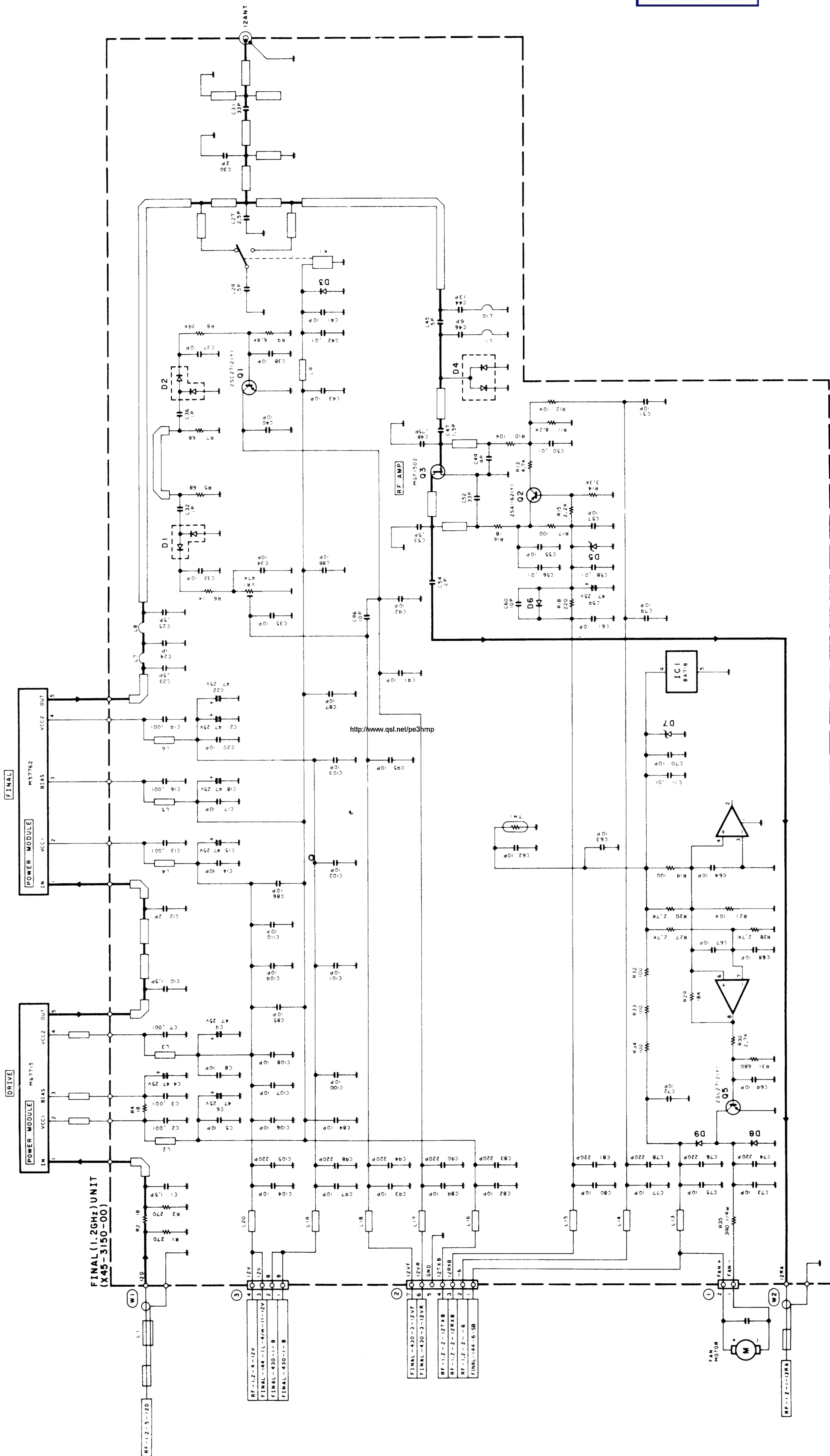
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FINAL (144MHz) UNIT (HI)
(X45-3160-00)

- IC1 : BAT16
IC2 : 2SC1947
IC3 : 2SA1213Y
Q1 : 2SA1307Y
Q2 : 2SA1162Y
Q3,4 : 2SC2712Y
Q5,8 : 2SC2712Y
Q6,9 ~11 : 2SC1815Y
Q7 : 2SC1815Y
Q10 : M67727
Q101 : RLS73
D1,6,7,10~14 : UM9401
D2 : M1308
D3 : HSM88AS
D4,5 : RLZ5 6B
D6,8 : RLZ5 6B
D9 : RLZ7.5C

Note: Circuit Diagram is subject to change without notice due to advancements in technology.



<http://www.qsl.net/pe3hmp>