

SPECIFICATIONS

General	
Frequency coverage	28.000MHz ~ 29.700MHz
Number of channels	60
Channel step	10Hz, 100Hz, 1KHz, 10KHz
Class of emission	AM(A3E)/FM(F3E)/USB LSB(J3E)
Frequency Control	Phase-Locked-Loop Synthesizer
Antenna Impedance	50Ω
Working temperature	-30°C ~ +55°C
Frequency Tolerance	0.005%
Frequency Stability	0.001%
Power Supply	13.8V DC±15%
Grounding Method	Negative ground
Current Drain	Transmitter: 6A(max.)
	Receiver: about 400mA(max.) 800mA (noise reductions)
Dimensions (W x H x D)	250 x 280 x 60 mm
Weight	Approx. 2.8kg
Antenna Connector	UHF, SO239
RECEIVER	
Maximum sensitivity	1.0μV(-107dBm) FM Mode SINAD: 20dB
	1.0μV(-107dBm) AM Mode SINAD: 10dB
	0.25μV(-119dBm) SSB Mode SINAD: 10dB
Selectivity	AM/FM:6dB@3KHz,50dB @9KHz SSB: 6 dB@2.1KHz,60dB @3.3KHz
Image Rejection	More than 65dB
IF Frequency	AM/FM: 10.695 MHz 1st IF, 455 KHz 2nd IF SSB: 10.695 MHz
Adjacent-Channel	AM/FM : 60dB & SSB: 70 dB
RF Gain Control	45 dB adjustable for optimum signal reception
Automatic Gain Control(AGC)	Less than 10 dB change in audio output for inputs from 10 to 100,000 microvolt.
Audio frequency response	From 300Hz to 2.8kHz
Audio Output Power	4 watts max @8Ω
TRANSMITTER	
Output Power	HI: 12W LO: 1W @13.8V DC FM/AM/CW Mode SSB:25W
Modulation	High and low level class B Amplitude Modulation: AM Varied Capacitance Frequency Modulation: FM
Audio frequency response	From 450Hz to 2.5kHz FM/AM Mode
SSB Carrier Suppression	55dB
Unwanted Sideband	50dB
Inter-modulation Distortion	SSB: 3rd order, more than -25dB; 5th order, more than -35dB

ADJUSTMENT

Common Section

Item	Condition	Measurement		Adjustment		Specifications /Remarks
		Test equipment	Terminal	Parts	Method	
1. Setting	Power supply voltage DC Power supply terminal : 13.8V					
2. VCO lock voltage RX	1) CH: high	Power meter		TP300	less than 4.0V	
	2) CH: Low	DVM			0.8V or more	
3. VCO lock voltage TX	3) CH: high PTT:ON				less than 4.0V	
	4) CH: Low PTT:ON				0.8V or more	

Transmitter section

Item	Condition	Measurement		Adjustment		Specifications /Remarks
		Test equipment	Terminal	Parts	Method	
1. Transmit frequency	TEST CH: center Mode: AM or FM PTT: ON	Frequency counter	ANT		Adjust to the frequency	Within ± 50 Hz
2. DC Power supply Adjust	TEST CH: low, center, high DC Power supply terminal : 13.8V Mode: FM	Voltmeter DC amperemeter		W11	adjust DC voltage to $6.3V \pm 0.1V$ adjust DC voltage to W、W9 $3.6V \pm 0.1V$	
3. High power Adjust	TEST CH: low, center, high DC Power supply terminal : 13.8V Mode: FM PTT: ON	Power meter Ammeter		T13、T14 W11		11W $\pm 1W$ 5.5A or less
Low power Adjust	TEST CH: low, center, high DC Power supply terminal : 13.8V Mode: FM PTT: ON					1W $\pm 0.3W$ 3.0A or less
4. power & frequency residual	TEST CH: low, center, high AG: 1kHz/30mV Mode: USB PTT: ON	Power meter Deviation meter Oscilloscope AG	ANT	W6	Modulate signal: 1K ± 50 Hz 28dB SINAD or more	25W $\pm 0.2W$ 6.0A or less
	TEST CH: low, center, high AG: 1kHz/30mV Mode: LSB PTT: ON	AF VTVM			Modulate signal: -1K ± 50 Hz 28dB SINAD or more	20W $\pm 0.2W$ 6.0A or less
5. degree of wave balance	TEST CH: center REF Level: 35dB Bandwidth: 10KHz AVG: 5 Mod: OFF Mode: USB and LSB PTT: ON			W502	Adjust IF frequency to be lowest.	-10dBm or less

ADJUSTMENT

Item	Condition	Measurement		Adjustment		Specifications /Remarks	
		Test equipment	Terminal	Parts	Method		
6. FM deviation Adjust	TEST CH: low, center, high AG: 1kHz/30mV LPF: 15kHz Mode: FM PTT: ON	Power meter Deviation meter Oscilloscope AG AF VTVM	ANT SP/MIC connector	W500	±2.3~3.0kHz	±50Hz	
7. AM deviation Adjust (High power)	TEST CH: low, center, high AG: 1kHz/30mV LPF: 15kHz Mode: AM PTT: ON			W501	85%~95%	>38W ±3W 5.0A or less	
				(Low power)	W10	85%~95%	>6W ±0.5W 3.0A or less
8. MIC Sensitivity	TEST CH: center AG: 1kHz/0.8mV LPF: 15kHz PTT: ON			Check		30dB SINAD or more	FM: 1.5~2.0kHz AM: 50%~70%
	TEST CH: center AG: 1kHz/0.4mV LPF: 15kHz PTT: ON					USB: 8W~12W LSB: 5W~10W	
9. TONE deviation Adjust	TEST CH: center LPF: 15kHz PTT: ON	85%~95%	1.05kHz±50Hz				

Receiver Section

Item	Condition	Measurement			Adjustment		Specifications /Remarks					
		Test equipment	Terminal	Parts	Method							
1. Sensitivity check	TEST CH: low, center, high Frequency and MODE : Indicated below However, USB: +1kHz LSB: -1kHz RF GAIN: Maximum NB/ANL: ON	SSG DM SP Oscilloscope AG AF V.M	ANT EXT.SP	AM: T8、T9、 T12 USB: T5、T6、 T7、T10								
							Frequency	MODE	SSG ATT	SSG MOD	SSG DEV	
							low, center, high	FM	-107dBm(1.0μV)	1kHz	±1.2kHz	SINAD: 20dB or more
							low, center, high	AM	-107dBm(1.0μV)	1kHz	30%	SINAD: 10dB or more
							low, center, high	USB	-121dBm(0.2μV)	OFF		SINAD: 10dB or more
low, center, high	LSB	-121dBm(0.2μV)	OFF		SINAD: 10dB or more							

ADJUSTMENT

Item	Condition	Measurement		Adjustment		Specifications /Remarks
		Test equipment	Terminal	Parts	Method	
2. Squelch (Threshold) Adjust	TEST CH: center SSG output: -110dBm(0.707 μ V) Mod: 1KHz/1.2KHz, SQL VR: SQ ON Mode: FM	SSG DVM Oscilloscope AG AF VTVM	ANT			Squelch open
	TEST CH: low, center, high SSG output: -50dBm(707 μ V) Mod: 30%/1KHz, Mode: AM			W2	Adjust to open the squelch.	
	TEST CH: low, center, high SSG output: -50dBm(707 μ V) Mod: OFF Add to main frequency base: 1K Mode: USB			W3	Adjust to open the squelch.	
	TEST CH: low, center, high SSG output: -50dBm(707 μ V) Mod: OFF Minus from main frequency base: 1K Mode: LSB			W3	Adjust to open the squelch.	
ASQ Adjust	TEST CH: low, center, high SSG output: -113dBm(0.5 μ V) Mod: 30%/1KHz, Mode: AM				Adjust to open the squelch.	
3. Squelch (Tight) Adjust	TEST CH: center SSG output: -125dBm(0.126 μ V) Mod: 1KHz/1.2KHz, Mode: FM					Squelch open
	TEST CH: low, center, high SSG output: -60dBm(224 μ V) Mod: 30%/1KHz, Mode: AM			W2	Adjust to Tight the squelch.	
	TEST CH: low, center, high SSG output: -60dBm(224 μ V) Mod: OFF Add to main frequency base: 1K Mode: USB			W3	Adjust to Tight the squelch.	
	TEST CH: low, center, high SSG output: -60dBm(224 μ V) Mod: OFF Minus from main frequency base: 1K Mode: LSB			W3	Adjust to Tight the squelch.	

ADJUSTMENT

Item	Condition	Measurement		Adjustment		Specifications /Remarks
		Test equipment	Terminal	Parts	Method	
ASQ Adjust	TEST CH: low, center, high SSG output: -120dBm(0.224 μ V) Mod: 30%/1KHz, Mode: AM	SSG DVM Oscilloscope AG	ANT	W1	Adjust to Tight the squelch.	
4. Sensitivity Adjust	TEST CH: center SSG output: -65dBm(126 μ V) Mod: 1KHz/1.2KHz, Mode: FM	AF VTVM		W4	调整RSSI指示显示满 格	
	TEST CH: center SSG output: -63dBm(158 μ V) Mod: 1KHz/1.2KHz, Mode: USB			W5	调整RSSI指示显示满 格	

EXPAND FREQUENCY CRE 8900

MODIFICATION CRE 8900

Frequency is divided into 2 band,

band 1: 28.000-29.700Mhz

band 2: 25.615-28.305MHz

Default setting is band 1, frequency at 28.000-29.700MHz.

To switch frequency,

Process as below:

- 1) Press FUNC+EMG and turn on radio
- 2) Rotate Channel Selector to select band 2 or band 1,
- 3) Press FUNC key for 3 seconds until indicate "end" on display
- 4) Turn off and on, it will enter into selected band.

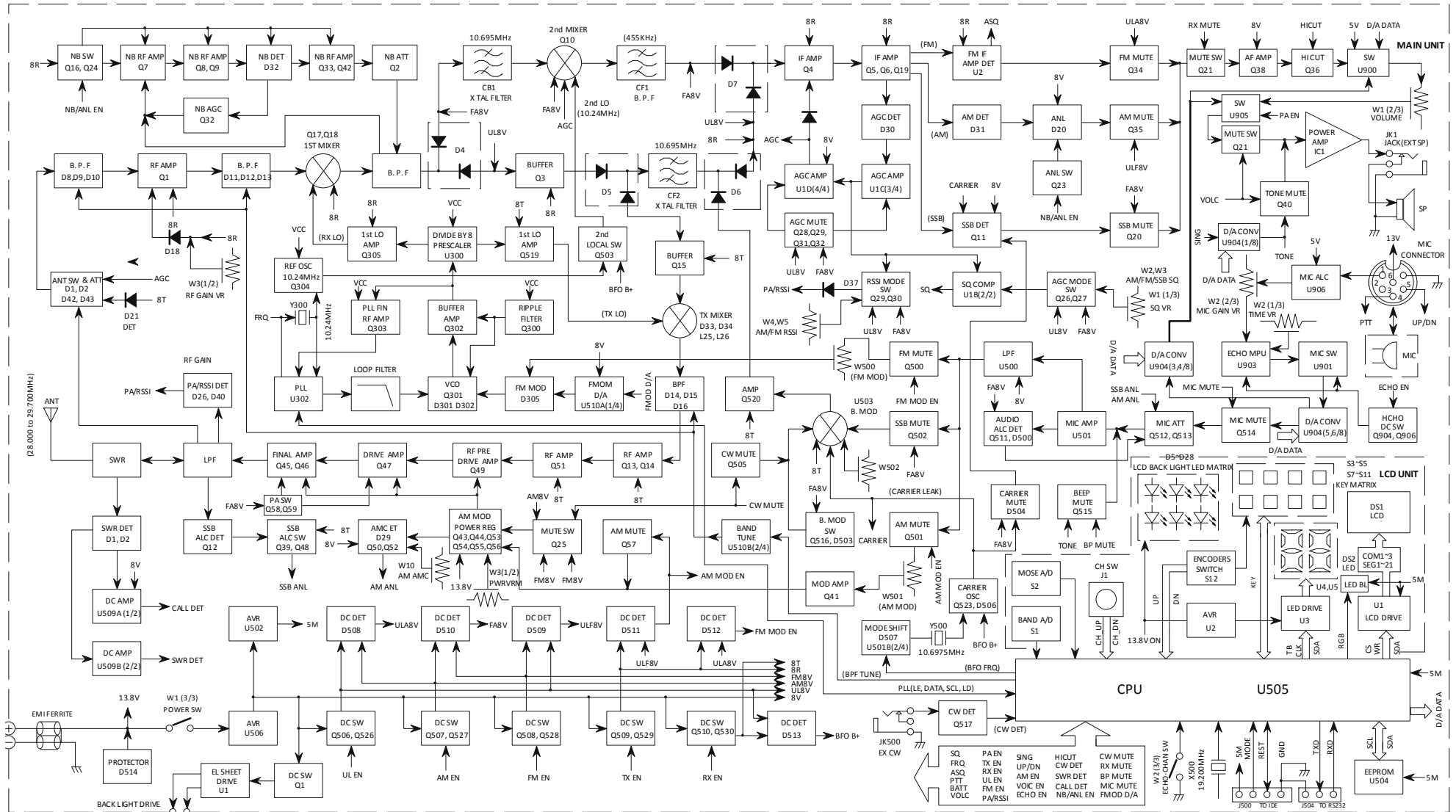
Pour passer de la bande 1 (28.000-29.700Mhz) à la bande 2 (25.615-28.305 Mhz),

Veillez suivre cette procédure :

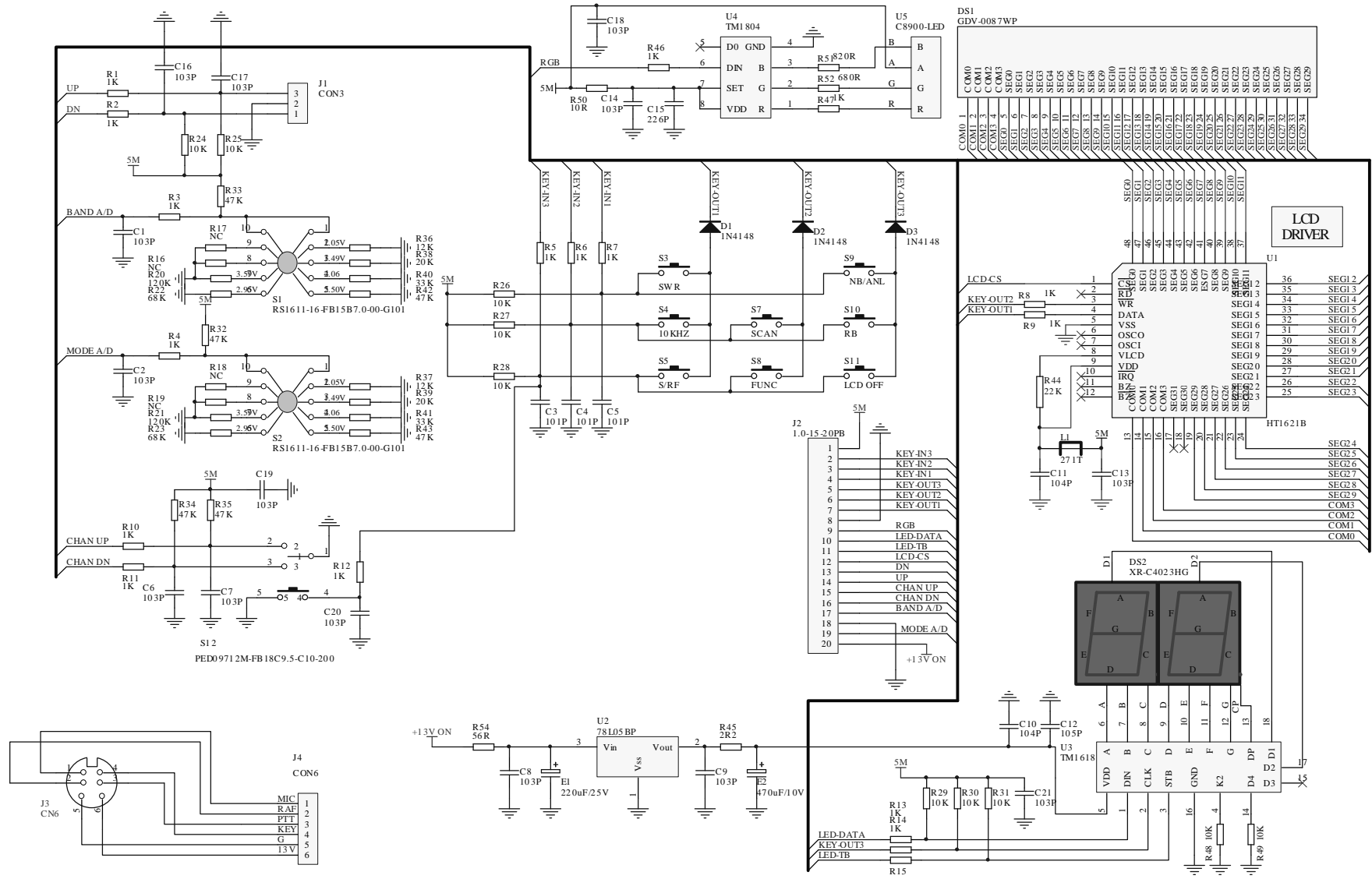
- 1) Appuyer sur FUNC + EMG en même temps et allumer l'appareil.
- 2) Sélectionner la bande 2 avec le bouton des canaux.
- 3) Appuyer sur FUNC pendant 3 secondes jusqu'à l'affichage de « end » et ensuite éteindre l'appareil.
- 4) Rallumer l'appareil, votre CRE 8900 fonctionne maintenant de 25.615Mhz à 28.305Mhz.

Pour remettre en configuration d'origine de 28.000 à 29.700Mhz, suivez la même procédure en sélectionnant la bande 1.

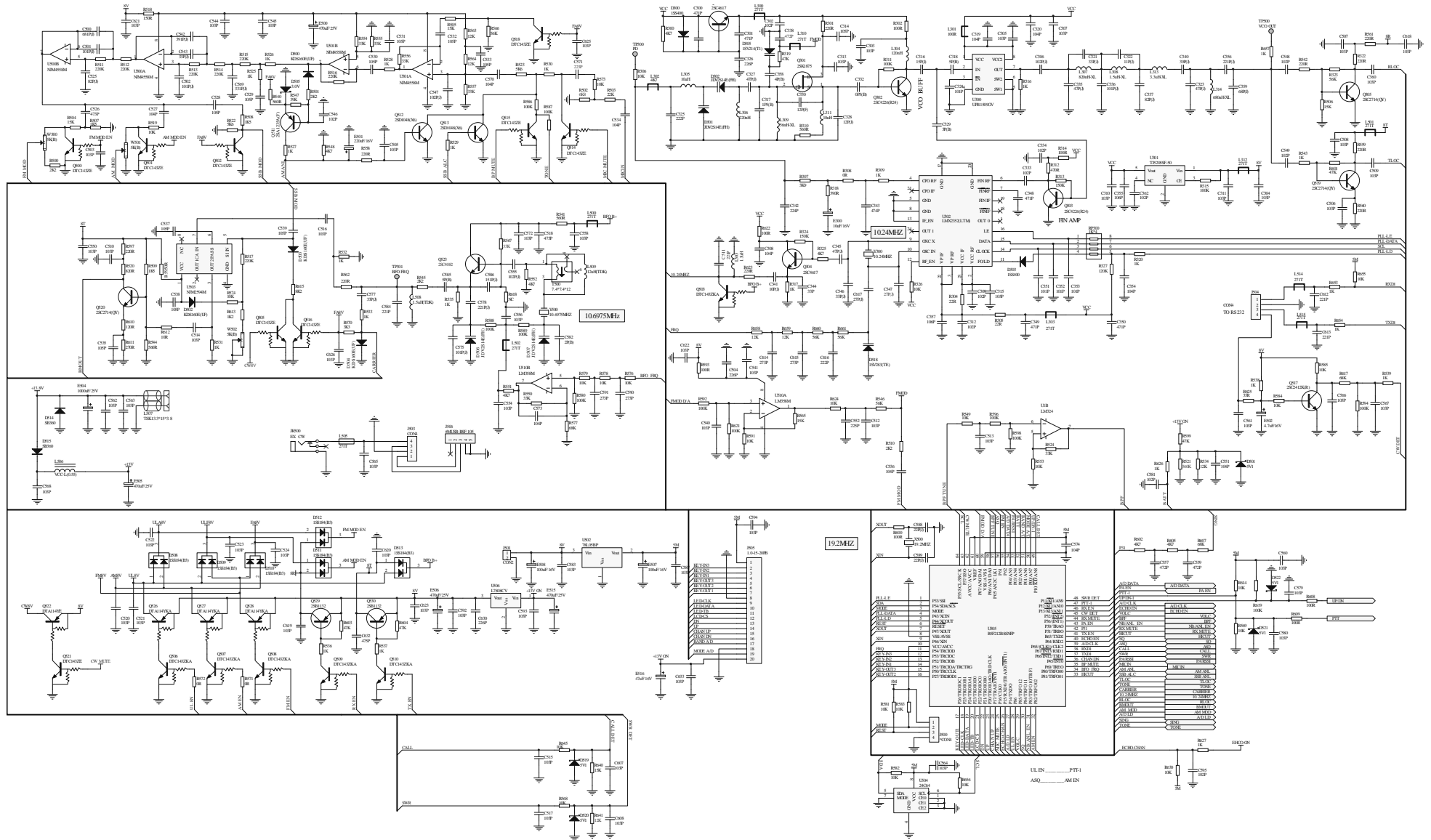
BLOCK DIAGRAM



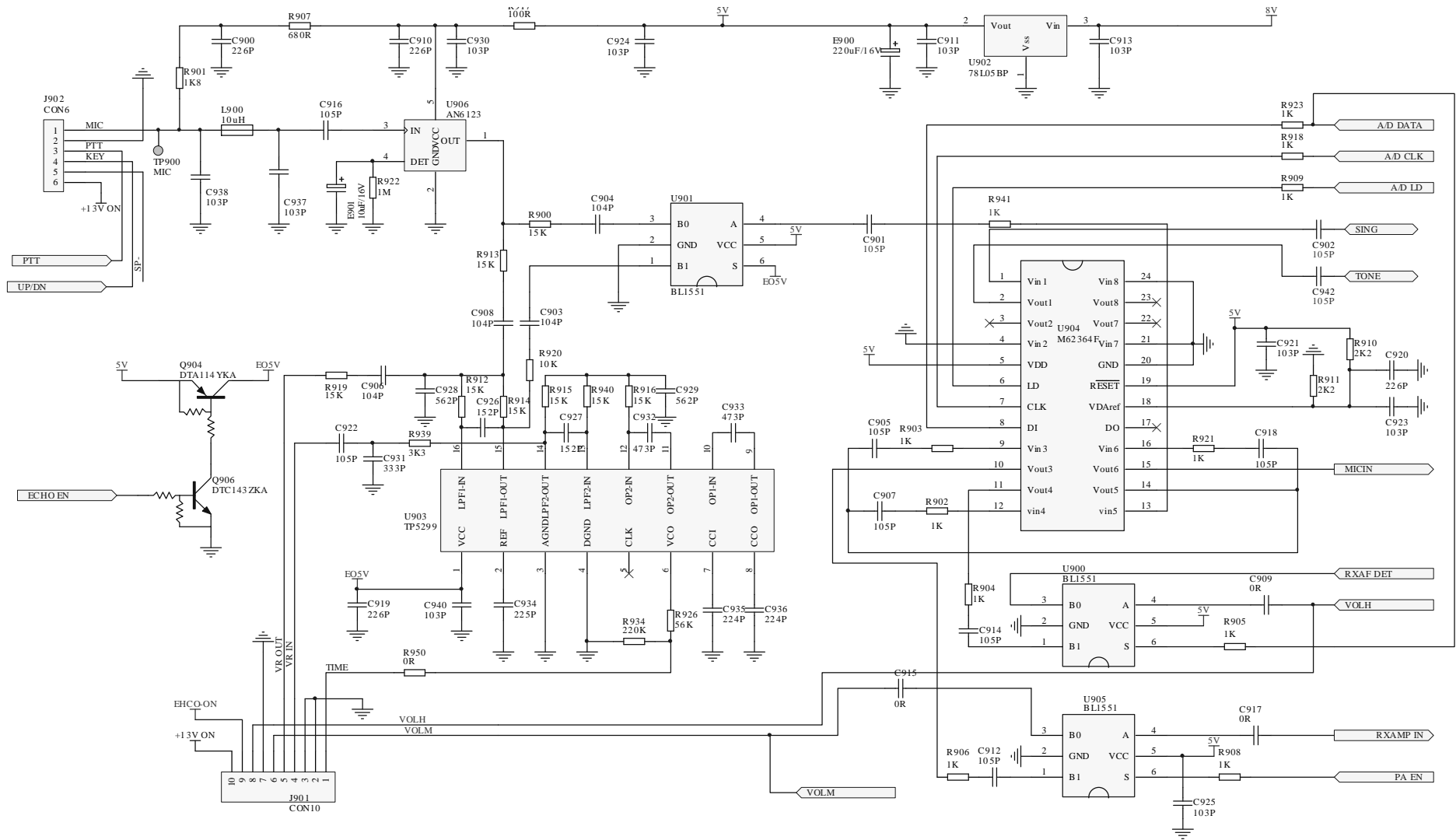
SCHEMATIC DIAGRAM



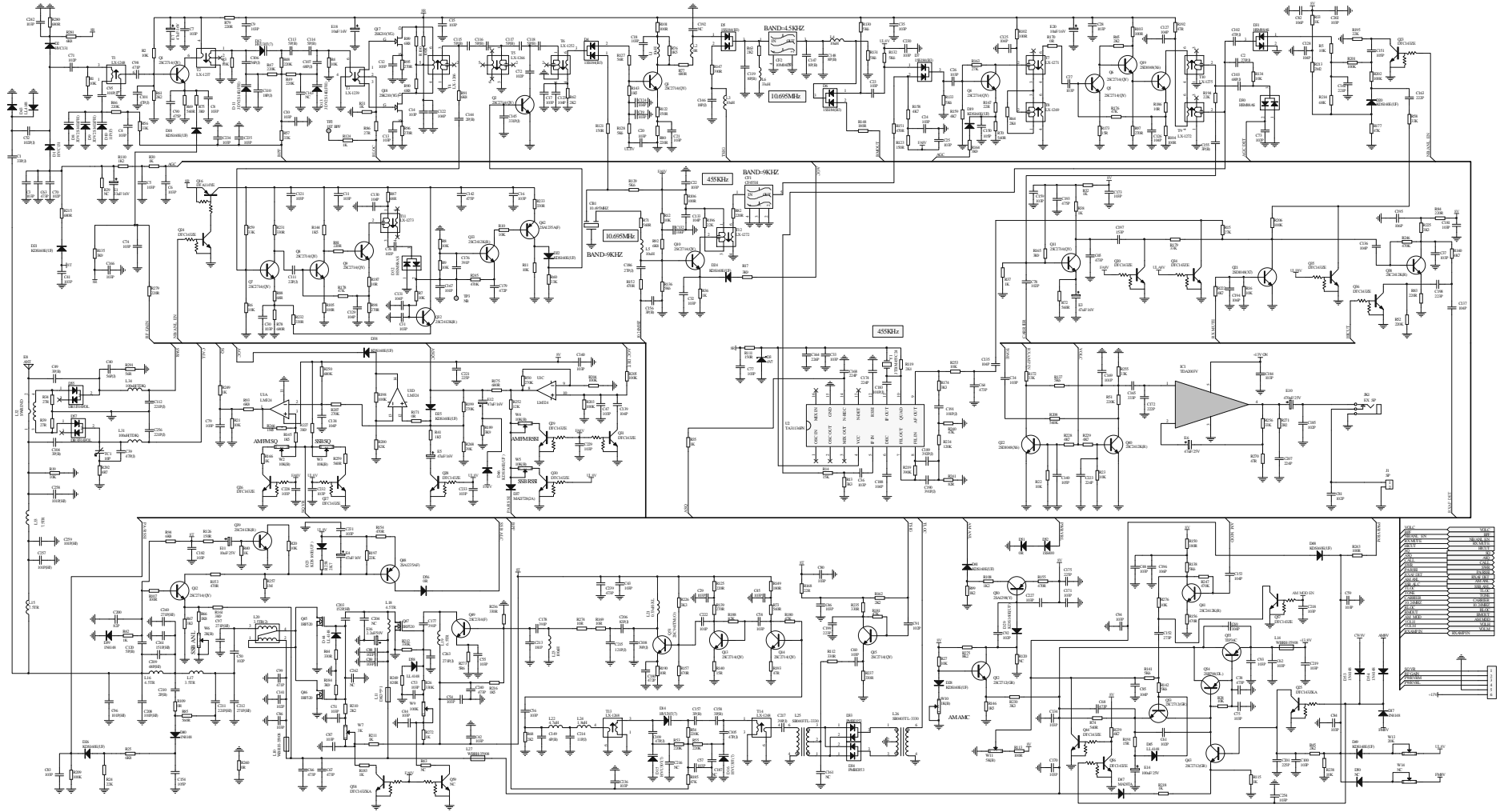
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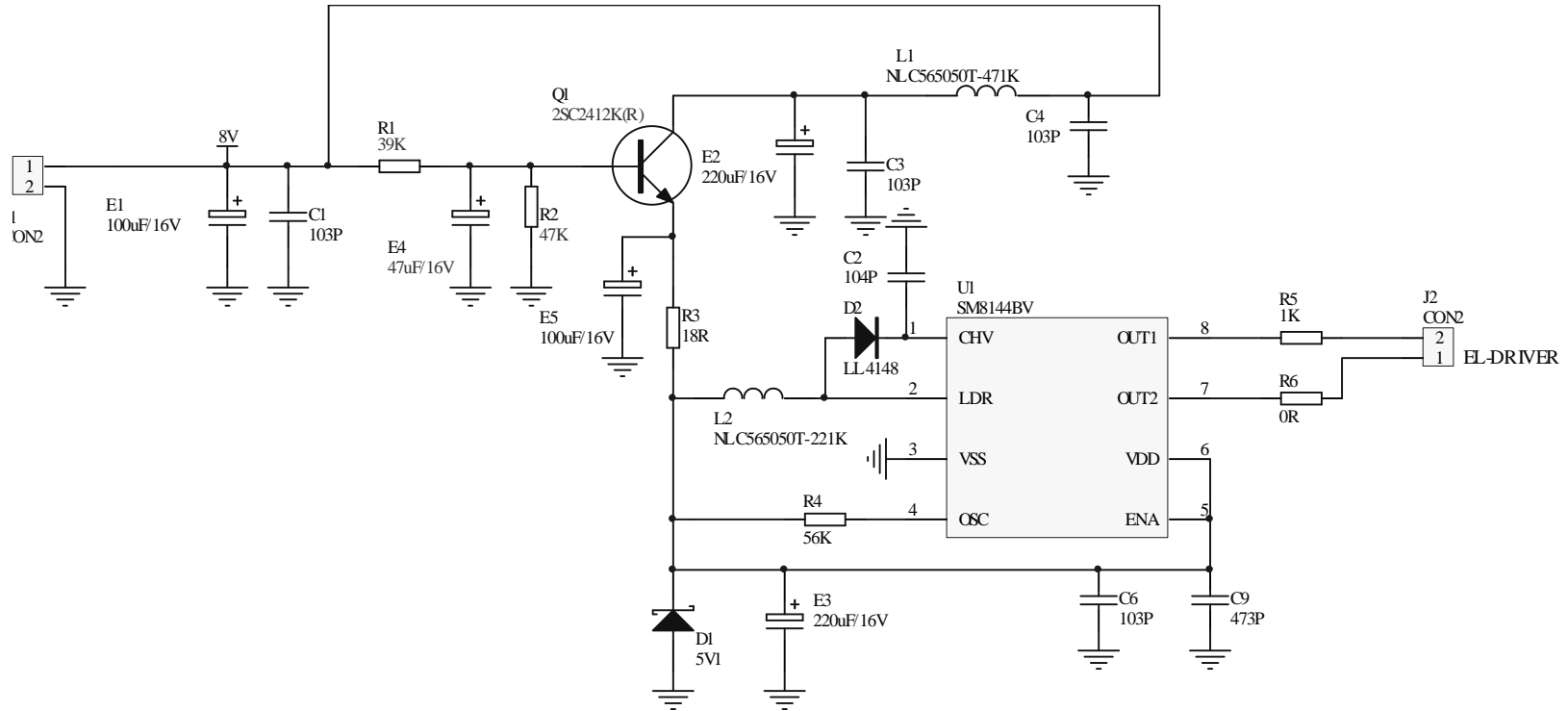
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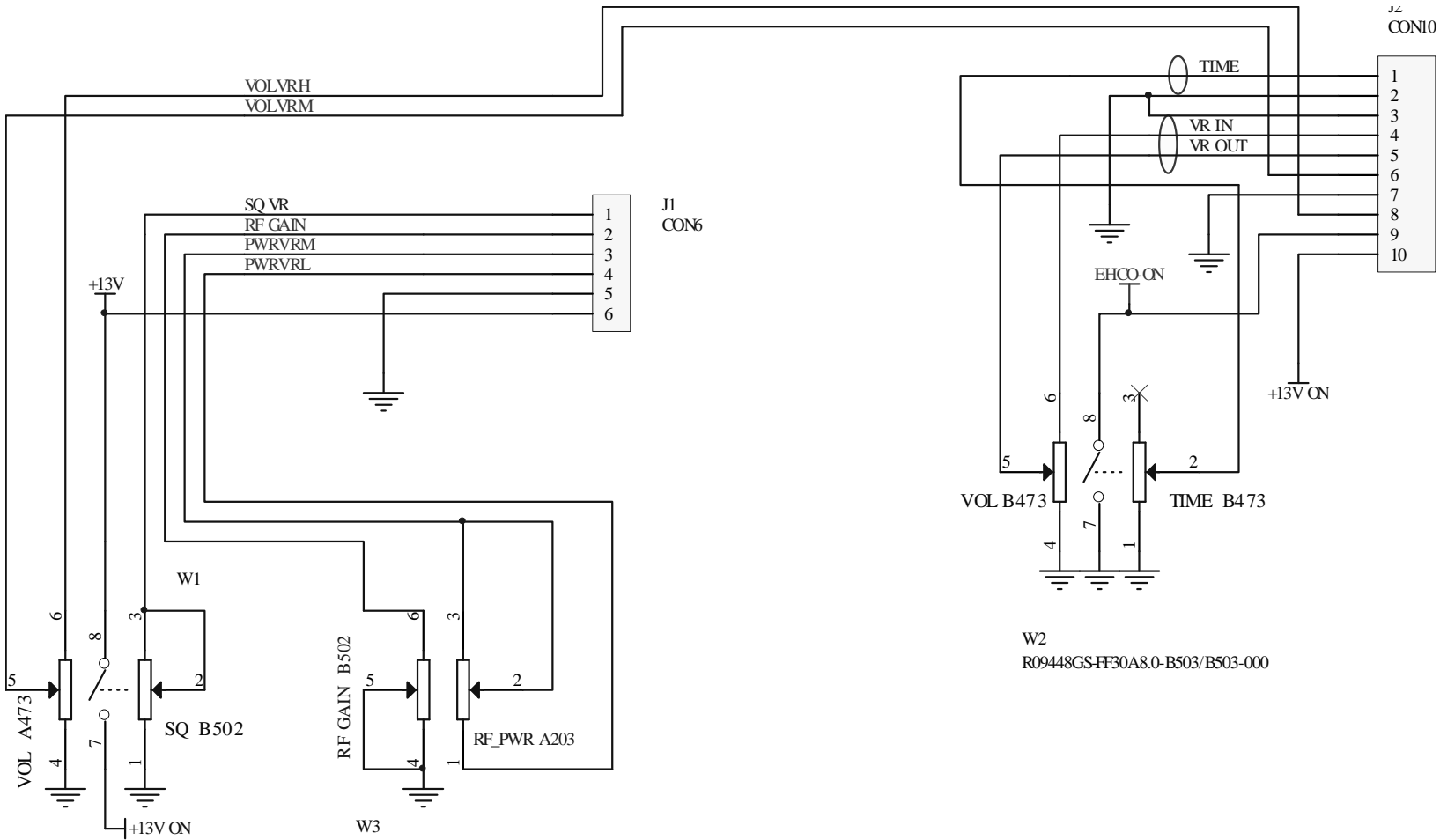
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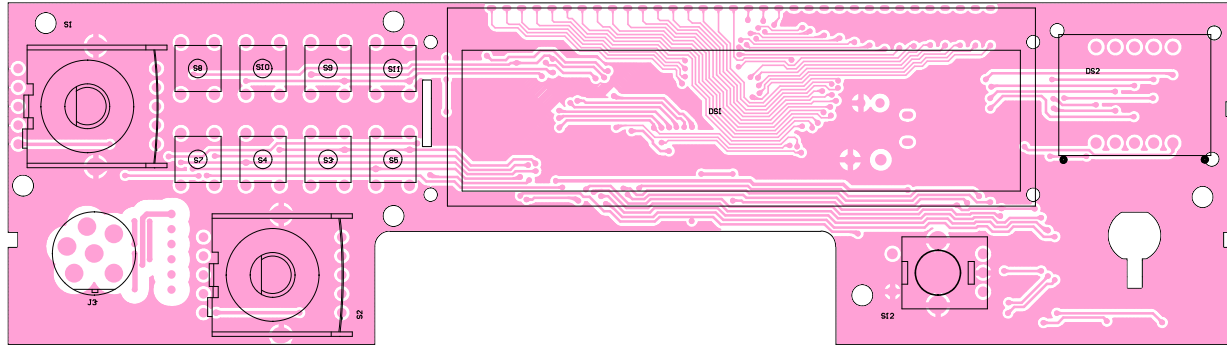
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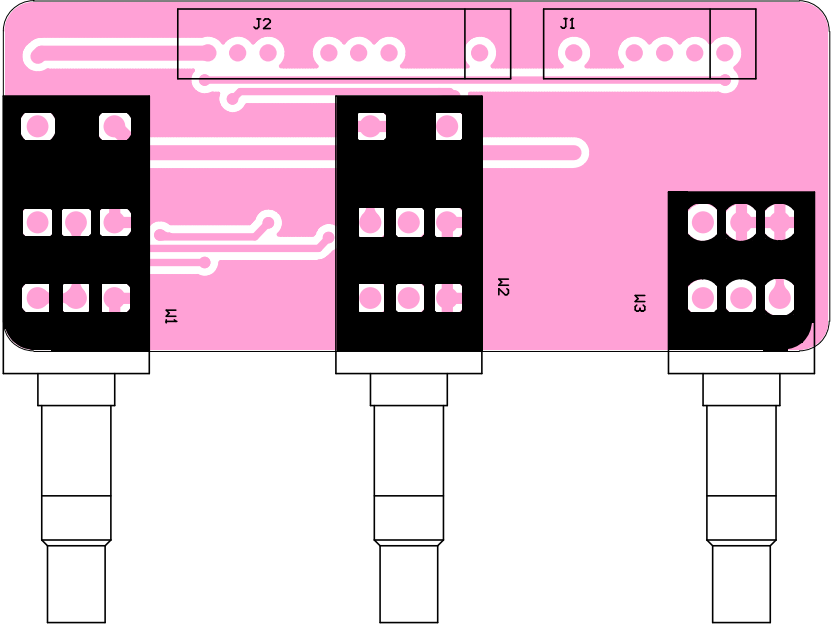
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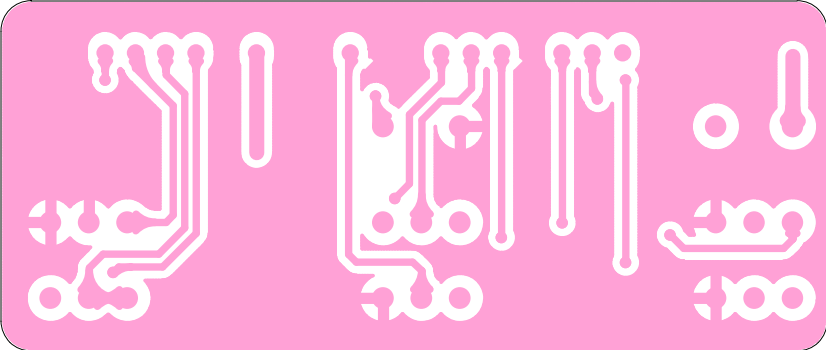
PC BOARD VIEWS



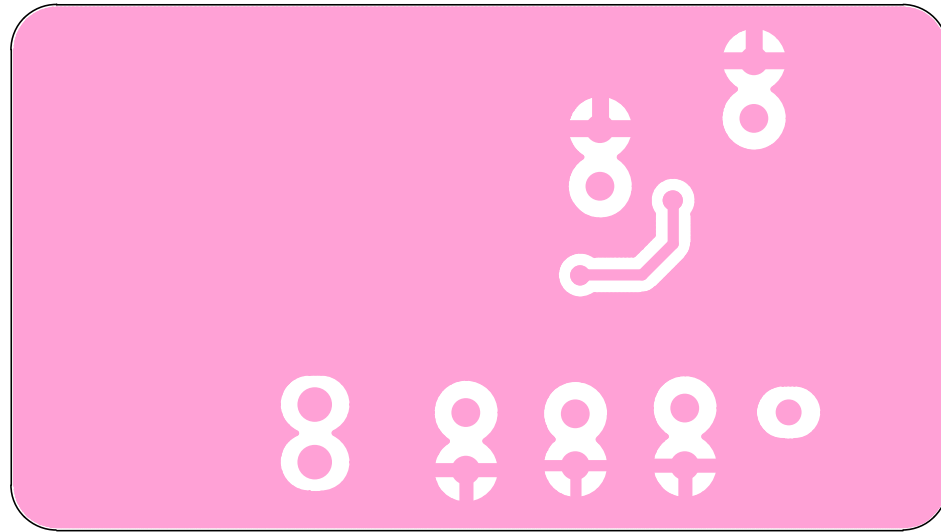
PC BOARD VIEWS



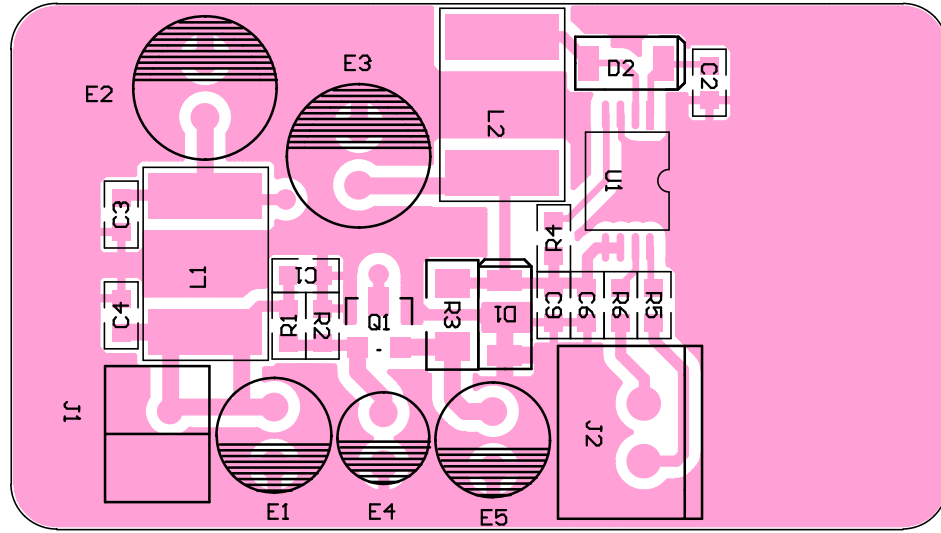
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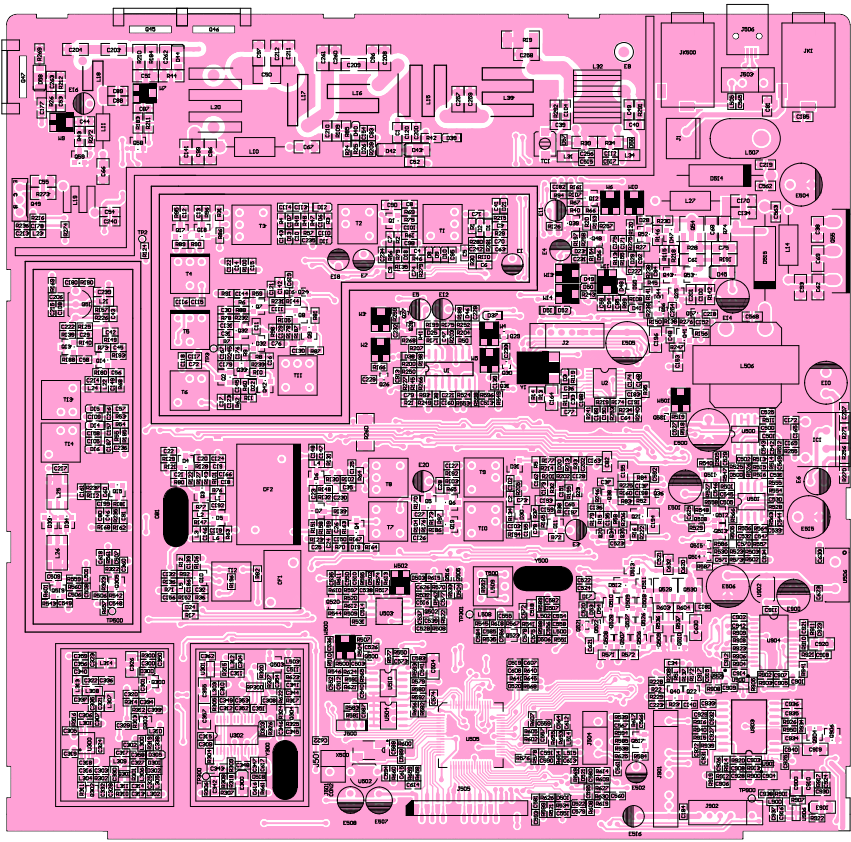
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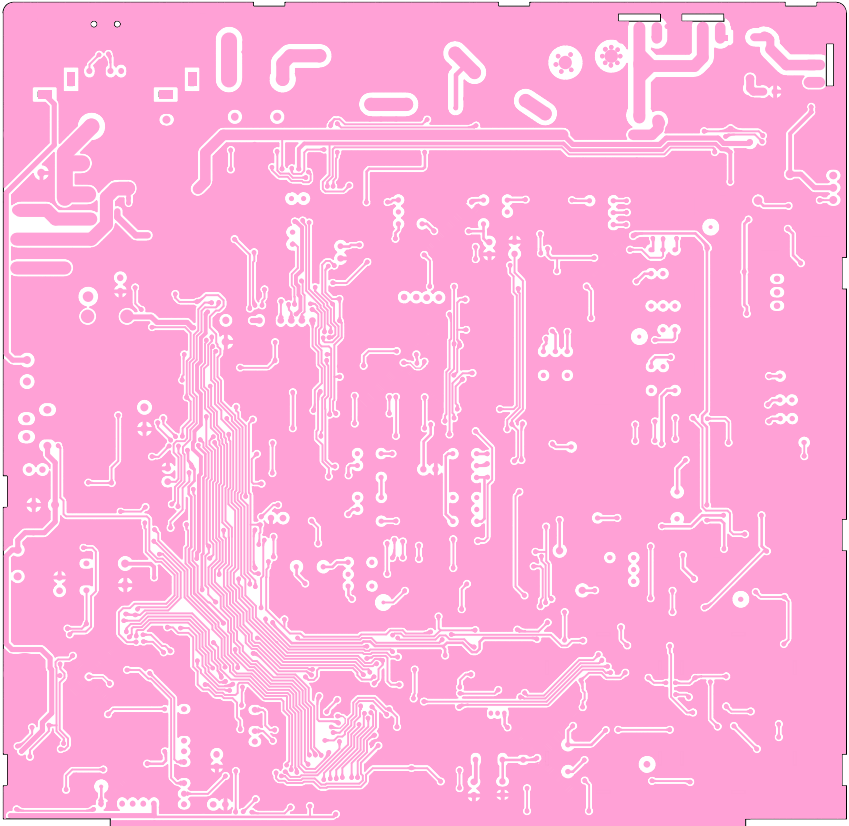
PC BOARD VIEWS



PC BOARD VIEWS



PC BOARD VIEWS



PARTS LIST

DISPLAY UNIT

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
C1-C2		SMT CAPACITOR	0603	2	103±10% 50V
C3-C5		SMT CAPACITOR	0603	3	100P±10% 50V
C6-C9		SMT CAPACITOR	0603	4	103±10% 50V
C10-C11		SMT CAPACITOR	0603	2	104±10% 50V
C12		SMT CAPACITOR	0603	1	105±10% 50V
C13-C14		SMT CAPACITOR	0603	2	103±10% 50V
C15		SMT CAPACITOR	1206	1	226±10% 50V
C16-C21		SMT CAPACITOR	0603	6	103±10% 50V
D1-D3		SMT DIODE	0603	3	1N4148
DS1		LCD DISPLAY		1	LCD-NEW
DS2		LED DISPLAY		1	LED
E1		DIP ELECTRO	6×8	1	220uF/25V
E2		DIP ELECTRO	8×13	1	470uF/10V
J1		DIAL SWITCH		1	
J2		SMT PITCH FPC CONNECTOR		1	1.0-15-20PB
J3		Mic Connector	SKY6	1	HAND MIC INTERFACE
J4		PITCH BAR CONNECTOR	SIP2-2.0mm	1	CON6
L1		SMT FERRITE BEAD	0603	1	271T
R1-R15		SMT RESISTOR	0603	15	1K±5%
R16-R19		SMT RESISTOR	0603	4	NOUSE
R20-R21		SMT RESISTOR	0603	2	120K±5%
R22-R23		SMT RESISTOR	0603	2	68K±5%
R24-R31		SMT RESISTOR	0603	8	10R±5%
R32-R35		SMT RESISTOR	0603	4	47K±5%
R36-R37		SMT RESISTOR	0805	2	12K±5%
R38-R39		SMT RESISTOR	0805	2	20K±5%
R40-R41		SMT RESISTOR	0603	2	33K±5%

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
R42-R43		SMT RESISTOR	0603	2	47K±5%
R44		SMT RESISTOR	0603	1	22K±5%
R45		SMT RESISTOR	0805	1	2.2R±5%
R46-R47		SMT RESISTOR	0603	1	1K±5%
R48-R49		SMT RESISTOR	0603	2	10K±5%
R50		SMT RESISTOR	0805	1	10R±5%
R51		SMT RESISTOR	0805	1	820R±5%
R52		SMT RESISTOR	0805	1	680R±5%
R54		SMT RESISTOR	1206	1	56R±5%
S1-S2		DIAL SWITCH		2	RS1611-16-FB15B7.0-00
S3		KFC TACT SWITCH	6×6×7.5	1	SWR
S4		KFC TACT SWITCH	6×6×7.5	1	10KHZ
S5		KFC TACT SWITCH	6×6×7.5	1	S/RF
S7		KFC TACT SWITCH	6×6×7.5	1	SCAN
S8		KFC TACT SWITCH	6×6×7.5	1	FUNC
S9		KFC TACT SWITCH	6×6×7.5	1	NB/ANL
S10		KFC TACT SWITCH	6×6×7.5	1	RB
S11		KFC TACT SWITCH	6×6×7.5	1	LCD OFF
S12		DIAL SWITCH		1	ENCODER
U1		SMT IC	LQFP-48	1	HT1621B
U2		AVR	TO-92	1	78L05BP
U3		SMT IC	SOL-18	1	TM1618
U4		SMT IC	SOP-8	1	TM1804
U5		LED		1	LED-RGB
W1-W3		R:VARIABLE		3	5K

PARTS LIST

MAIN UNIT

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
C1		SMT CAPACITOR	0805	1	33P±5% 50V
C2		SMT CAPACITOR	0603	1	27P±5% 50V
C3-C37		SMT CAPACITOR	0603	35	103±10% 50V
C38		SMT CAPACITOR	1206	1	473±10% 50V
C39		SMT CAPACITOR	0603	1	47P ±5% 50V
C40		SMT CAPACITOR	0603	1	56P ±5% 50V
C41-C43		SMT CAPACITOR	0603	3	103±10% 50V
C44		SMT CAPACITOR	0805	1	103±10% 50V
C45-C48		SMT CAPACITOR	0603	4	103±10% 50V
C49		SMT CAPACITOR	0805	1	3P±0.1P 50V
C50		SMT CAPACITOR	1206	1	102±10% 50V
C51		SMT CAPACITOR	1206	1	103±10% 50V
C52		SMT CAPACITOR	0805	1	102±5% 50V
C53-C54		SMT CAPACITOR	0805	2	103±10% 50V
C55		SMT CAPACITOR	1206	1	103±10% 50V
C56-C60		SMT CAPACITOR	0603	5	103±10% 50V
C61		SMT CAPACITOR	1206	1	102±10% 50V
C62		SMT CAPACITOR	1206	1	103±10% 50V
C63-C65		SMT CAPACITOR	0603	3	473±10% 50V
C66-C68		SMT CAPACITOR	1206	3	473±10% 50V
C69		SMT CAPACITOR	1206	1	104±10% 50V
C70-C73		SMT CAPACITOR	0603	4	102±10% 50V
C74		SMT CAPACITOR	0603	4	103±10% 50V
C75		SMT CAPACITOR	1206	1	103±10% 50V
C76		SMT CAPACITOR	0603	1	102±10% 50V
C77		SMT CAPACITOR	0603	1	103±10% 50V
C78		SMT CAPACITOR	0603	1	102±10% 50V

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
C79		SMT CAPACITOR	0603	1	103±10% 50V
C80		SMT CAPACITOR	0603	1	103±10% 50V
C81		SMT CAPACITOR	0805	1	102±10% 50V
C82		SMT CAPACITOR	0805	1	106±10% 50V
C83-C84		SMT CAPACITOR	0603	2	103±10% 50V
C85		SMT CAPACITOR	0603	1	104±10% 50V
C86		SMT CAPACITOR	1206	1	103±10% 50V
C87-C88		SMT CAPACITOR	0805	1	103±10% 50V
C89		SMT CAPACITOR	0805	1	102±10% 50V
C90		SMT CAPACITOR	0805	1	103±10% 50V
C91-C92		SMT CAPACITOR	0603	2	102±10% 50V
C93		SMT CAPACITOR	1206	1	102±10% 50V
C94		SMT CAPACITOR	0603	1	103±10% 50V
C95		SMT CAPACITOR	0603	1	100P±5% 50V
C96		SMT CAPACITOR	1206	1	100P±5% 50V
C97		SMT CAPACITOR	1206	1	270P±5% 50V
C98		SMT CAPACITOR	0603	1	470P ±5% 50V
C99		SMT CAPACITOR	1206	1	470P ±5% 50V
C100		SMT CAPACITOR	0805	1	103±10% 50V
C101-C102		SMT CAPACITOR	0603	2	47P ±5% 50V
C103		SMT CAPACITOR	0603	1	68P ±5% 50V
C104		SMT CAPACITOR	0805	1	3P±0.1P 50V
C105		SMT CAPACITOR	0603	1	47P±5% 50V
C106		SMT CAPACITOR	0603	1	56P±5% 50V
C107		SMT CAPACITOR	0603	1	68P±5% 50V
C108		SMT CAPACITOR	0603	1	39P±5% 50V
C109		SMT CAPACITOR	0603	1	47P±5% 50V
C110		SMT CAPACITOR	0603	1	18P±5% 50V

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
C111		SMT CAPACITOR	0603	1	22P±5% 50V
C112		SMT CAPACITOR	0603	1	220P±5% 50V
C113-C118		SMT CAPACITOR	0603	6	5P±0.1P 50V
C119		SMT CAPACITOR	0603	1	8P±0.1P 50V
C120		SMT CAPACITOR	0805	1	5P±0.1P 50V
C121		SMT CAPACITOR	0603	1	103±10% 50V
C122-C133		SMT CAPACITOR	0603	12	104±10% 50V
C134		SMT CAPACITOR	1206	1	103±10% 50V
C135-C139		SMT CAPACITOR	0603	5	104±10% 50V
C140		SMT CAPACITOR	0603	1	105±10% 50V
C141		SMT CAPACITOR	1206	1	102±10% 50V
C142		SMT CAPACITOR	0805		475±10% 50V
C143		SMT CAPACITOR	0603	1	NOUSE
C144		SMT CAPACITOR	0603	1	2P±0.1P 50V
C145		SMT CAPACITOR	0603	1	330P±10% 50V
C146		SMT CAPACITOR	0603	1	18P±1% 50V
C147-C148		SMT CAPACITOR	0603	2	8P±0.1P 50V
C149		SMT CAPACITOR	0603	1	6P±0.1P 50V
C150		SMT CAPACITOR	0603	1	105±10% 50V
C151		SMT CAPACITOR	0805	1	105±10% 50V
C152		SMT CAPACITOR	0603	1	273±10% 50V
C153		SMT CAPACITOR	0805	1	104±10% 50V
C154		SMT CAPACITOR	0603	1	105±10% 50V
C155-C158		SMT CAPACITOR	0603	4	3P±0.1P 50V
C159-C160		SMT CAPACITOR	0603	2	103±10% 50V
C161		SMT CAPACITOR	0603	1	NO USE
C162		SMT CAPACITOR	0603	1	220P±10% 50V
C163		SMT CAPACITOR	0603	1	222±10% 50V

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
C164		SMT CAPACITOR	1206	1	226±10% 50V
C165		SMT CAPACITOR	0603	1	333±10% 50V
C166		SMT CAPACITOR	0603	1	103±10% 50V
C167		SMT CAPACITOR	0603	1	100P±5% 50V
C168		SMT CAPACITOR	0603	1	224±10% 50V
C169		SMT CAPACITOR	0603	1	100P±5% 50V
C170		SMT CAPACITOR	1206	1	103±10% 50V
C171		SMT CAPACITOR	0603	1	103±10% 50V
C172		SMT CAPACITOR	0603	1	222±10% 50V
C173		SMT CAPACITOR	0603	1	103±10% 50V
C174		SMT CAPACITOR	0603	1	224±10% 50V
C175		SMT CAPACITOR	0603	1	225±10% 50V
C176		SMT CAPACITOR	0603	1	390P±10% 50V
C177		SMT CAPACITOR	0805	1	390P±10% 50V
C178		SMT CAPACITOR	0603	1	390P±10% 50V
C179-C180		SMT CAPACITOR	0603	2	472±10% 50V
C181-C182		SMT CAPACITOR	0603	2	103±10% 50V
C183		SMT CAPACITOR	0603	1	100P±10% 50V
C184		SMT CAPACITOR	0603	1	103±10% 50V
C185		SMT CAPACITOR	0805	1	102±10% 50V
C186		SMT CAPACITOR	0603	1	27P±5% 50V
C187		SMT CAPACITOR	0603	1	NO USE
C188		SMT CAPACITOR	0603	1	104±10% 50V
C189		SMT CAPACITOR	0603	1	392±10% 50V
C190		SMT CAPACITOR	0603	1	390P±5% 50V
C191		SMT CAPACITOR	0603	1	100P±5% 50V
C192		SMT CAPACITOR	0603	1	NOUSE
C193		SMT CAPACITOR	0805	1	475P±10% 50V

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
C194		SMT CAPACITOR	1206	1	106±10% 50V
C195		SMT CAPACITOR	0805	1	106±10% 50V
C196		SMT CAPACITOR	1206	1	106±10% 50V
C197		SMT CAPACITOR	0603	1	153±10% 50V
C198-C199		SMT CAPACITOR	0603	2	223P±10% 50V
C200		SMT CAPACITOR	0805	1	82P±5% 50V
C201		SMT CAPACITOR	0805	1	225±10% 50V
C202		SMT CAPACITOR	0603	1	103±10% 50V
C203		SMT CAPACITOR	1206	2	152±5% 50V
C204		SMT CAPACITOR	1206	1	NOUSE
C206		SMT CAPACITOR	0603	1	82P ±5% 50V
C207		SMT CAPACITOR	0805	1	224±10% 50V
C208-		SMT CAPACITOR	1206	1	100P±5% 50V
C209		SMT CAPACITOR	1206	1	68P±5% 50V
C210		SMT CAPACITOR	0805	1	2P±0.1P 50V
C211		SMT CAPACITOR	1206	1	220P±5% 50V
C212		SMT CAPACITOR	1206	1	270P±5% 50V
C213		SMT CAPACITOR	0603	1	180P±10% 50V
C214		SMT CAPACITOR	0603	1	11P±5% 50V
C215		SMT CAPACITOR	0603	1	120P ±5% 50V
C216		SMT CAPACITOR	0603	1	NOUSE
C217		SMT CAPACITOR	0603	1	39P±5% 50V
C218		SMT CAPACITOR	0603	1	103±10% 50V
C219		SMT CAPACITOR	0805	1	103±10% 50V
C221		SMT CAPACITOR	0603	1	225±10% 50V
C222		SMT CAPACITOR	0603	1	100P±10% 50V
C223		SMT CAPACITOR	0603	1	224±10% 50V
C224-C226		SMT CAPACITOR	0603	3	NOUSE

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
C227-C236		SMT CAPACITOR	0603	10	103±10% 50V
C239-C240		SMT CAPACITOR	0805	2	473±10% 50V
C242		SMT CAPACITOR	0603	1	103±10% 50V
C254		SMT CAPACITOR	0603	1	103±10% 50V
C256		SMT CAPACITOR	0603	1	220P±10% 50V
C257-C259		SMT CAPACITOR	1206	3	100P±5% 50V
C260		SMT CAPACITOR	1206	1	270P±5% 50V
C261		SMT CAPACITOR	1206	1	150P±5% 50V
C262		SMT CAPACITOR	1206	1	NOUSE
C263		SMT CAPACITOR	0805	1	270P±5% 50V
C300-C301		SMT CAPACITOR	0603	2	470P±10% 50V
C302		SMT CAPACITOR	0603	1	102±10% 50V
C303-C305		SMT CAPACITOR	0603	3	103±10% 50V
C306		SMT CAPACITOR	0603	1	102±5% 50V
C307		SMT CAPACITOR	0603	1	103±10% 50V
C308		SMT CAPACITOR	0603	1	104±10% 50V
C309		SMT CAPACITOR	0603	1	102±10% 50V
C310-C311		SMT CAPACITOR	0603	2	103±10% 50V
C312		SMT CAPACITOR	0603	1	102±10% 50V
C313		SMT CAPACITOR	0603	1	103±10% 50V
C314-C315		SMT CAPACITOR	0603	2	105±10% 50V
C316		SMT CAPACITOR	0603	1	15P±5% 50V
C317		SMT CAPACITOR	0603	1	1.5P±0.1P 50V
C318		SMT CAPACITOR	0603	1	5P±0.1P 50V
C319-C320		SMT CAPACITOR	0603	2	104±10% 50V
C321		SMT CAPACITOR	0603	1	33P±5% 50V
C322		SMT CAPACITOR	0603	1	11P±3% 50V
C323		SMT CAPACITOR	0603	1	47P±5% 50V

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
C324		SMT CAPACITOR	0603	1	100P±10% 50V
C325		SMT CAPACITOR	0603	1	222±10% 50V
C326		SMT CAPACITOR	1206	1	226±10% 50V
C327		SMT CAPACITOR	0603	1	47P±5% 50V
C328		SMT CAPACITOR	0603	1	12P±3% 50V
C329		SMT CAPACITOR	0603	1	3P±0.1P 50V
C330		SMT CAPACITOR	0603	1	12P±3% 50V
C332		SMT CAPACITOR	0603	1	0.5P ±0.1P 50V
C333-C334		SMT CAPACITOR	0603	2	102±10% 50V
C335		SMT CAPACITOR	0805	1	47P±5% 50V
C336		SMT CAPACITOR	0603	1	100P±5% 50V
C337		SMT CAPACITOR	0603	1	82P±5% 50V
C338		SMT CAPACITOR	0603	1	472±10% 50V
C340		SMT CAPACITOR	0603	1	39P±5% 50V
C341		SMT CAPACITOR	0603	1	10P±5% 50V
C342		SMT CAPACITOR	0805	1	224±10% 50V
C343		SMT CAPACITOR	0805	1	474±10% 50V
C344		SMT CAPACITOR	0603	1	33P±5% 50V
C345		SMT CAPACITOR	0603	1	47P±5% 50V
C346		SMT CAPACITOR	0603	1	33P±5% 50V
C347		SMT CAPACITOR	0603	1	27P±5% 50V
C348-C350		SMT CAPACITOR	0603	3	470P±10% 50V
C351-C353		SMT CAPACITOR	0603	3	100P±10% 50V
C354		SMT CAPACITOR	0603	1	104±10% 50V
C355		SMT CAPACITOR	1206	1	106±10% 50V
C356		SMT CAPACITOR	0603	1	220P±5% 50V
C357		SMT CAPACITOR	1206	1	106±10% 50V
C358		SMT CAPACITOR	0603	1	4P±0.1P 50V

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
C359		SMT CAPACITOR	0603	1	68P±5% 50V
C360		SMT CAPACITOR	0603	1	103±10% 50V
C362		SMT CAPACITOR	0603	1	102±10% 50V
C500		SMT CAPACITOR	0603	1	680P±10% 50V
C501-C502		SMT CAPACITOR	0603	2	100P±5% 50V
C503		SMT CAPACITOR	0603	1	103±10% 50V
C504		SMT CAPACITOR	1206	1	226±10% 50V
C505-C510		SMT CAPACITOR	0603	6	103±10% 50V
C511		SMT CAPACITOR	0603	1	220P±10% 50V
C512-C517		SMT CAPACITOR	0603	6	103±10% 50V
C518		SMT CAPACITOR	0805	1	475±10% 50V
C520-C524		SMT CAPACITOR	0603	5	103±10% 50V
C525		SMT CAPACITOR	0603	1	82P±5% 50V
C526		SMT CAPACITOR	0603	1	473±10% 50V
C527		SMT CAPACITOR	0603	1	104±10% 50V
C528-C533		SMT CAPACITOR	0603	6	105±10% 50V
C534		SMT CAPACITOR	0603	1	104±10% 50V
C535		SMT CAPACITOR	0603	1	105±10% 50V
C536		SMT CAPACITOR	0603	1	104±10% 50V
C537-C539		SMT CAPACITOR	0603	3	105±10% 50V
C540-C541		SMT CAPACITOR	0603	2	103±10% 50V
C542		SMT CAPACITOR	0603	1	390P±5% 50V
C543		SMT CAPACITOR	0603	1	33P±5% 50V
C544-C545		SMT CAPACITOR	0603	2	103±5% 50V
C546-C549		SMT CAPACITOR	0603	4	102±5% 50V
C550		SMT CAPACITOR	0603	1	103±10% 50V
C551		SMT CAPACITOR	0603	1	104±10% 50V
C552		SMT CAPACITOR	0603	1	225±10% 50V

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
C553		SMT CAPACITOR	0805	1	475±10% 50V
C554		SMT CAPACITOR	0603	1	103±10% 50V
C555		SMT CAPACITOR	0603	1	102±5% 50V
C556		SMT CAPACITOR	0603	1	103±5% 50V
C557		SMT CAPACITOR	0603	1	472±10% 50V
C558		SMT CAPACITOR	0603	1	103±10% 50V
C559		SMT CAPACITOR	0603	1	472±10% 50V
C560-C561		SMT CAPACITOR	0603	2	102±10% 50V
C562-C563		SMT CAPACITOR	0805	2	103±10% 50V
C564-C567		SMT CAPACITOR	0603	4	102±10% 50V
C568		SMT CAPACITOR	0805	1	102±10% 50V
C569		SMT CAPACITOR	0603	1	330P±5% 50V
C570		SMT CAPACITOR	0603	1	104±10% 50V
C571		SMT CAPACITOR	0603	1	223±10% 50V
C572		SMT CAPACITOR	0603	1	103±10% 50V
C573-C574		SMT CAPACITOR	0603	2	104±10% 50V
C575		SMT CAPACITOR	0603	1	100P±5% 50V
C577		SMT CAPACITOR	0603	1	33P±5% 50V
C578		SMT CAPACITOR	0603	1	220P±5% 50V
C579-C580		SMT CAPACITOR	0603	2	103±10% 50V
C581		SMT CAPACITOR	0603	1	102±10% 50V
C582		SMT CAPACITOR	0603	1	2P ±0.1P 50V
C583		SMT CAPACITOR	0603	1	103±10% 50V
C584		SMT CAPACITOR	0603	1	220P±10% 50V
C585		SMT CAPACITOR	0603	1	5P±0.1P 50V
C586		SMT CAPACITOR	0603	1	150P±5% 50V
C587		SMT CAPACITOR	0603	1	103±10% 50V
C588-C589		SMT CAPACITOR	0603	2	22P±10% 50V

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
C590-C591		SMT CAPACITOR	0603	2	273P±10% 50V
C592-C594		SMT CAPACITOR	0603	3	103±10% 50V
C595		SMT CAPACITOR	0603	1	102±10% 50V
C607-C608		SMT CAPACITOR	0603	2	103±10% 50V
C612-C613		SMT CAPACITOR	0603	2	220P±10% 50V
C614-C615		SMT CAPACITOR	0603	2	273±10% 50V
C616		SMT CAPACITOR	0603	1	222±10% 50V
C617		SMT CAPACITOR	0603	1	27P±3% 50V
C618-C626		SMT CAPACITOR	0603	9	103±10% 50V
C630		SMT CAPACITOR	1206	1	226±10% 50V
C632		SMT CAPACITOR	0805	1	475±10% 50V
C633		SMT CAPACITOR	0603	1	103±10% 50V
C900		SMT CAPACITOR	1206	1	226±10% 50V
C901-C902		SMT CAPACITOR	0603	2	105±10% 50V
C903-C904		SMT CAPACITOR	0603	2	104±10% 50V
C905		SMT CAPACITOR	0603	1	105±10% 50V
C906		SMT CAPACITOR	0603	1	104±10% 50V
C907		SMT CAPACITOR	0603	1	105±10% 50V
C908		SMT CAPACITOR	0603	1	104±10% 50V
C909		SMT RESISTOR	0603	1	0R±5%
C910		SMT CAPACITOR	1206	1	226P±10% 50V
C911		SMT CAPACITOR	0603	1	103±10% 50V
C912		SMT CAPACITOR	0603	1	105±10% 50V
C913		SMT RESISTOR	0603	1	0R±5%
C914		SMT CAPACITOR	0603	1	105±10% 50V
C915		SMT RESISTOR	0603	1	0R±5%
C916		SMT CAPACITOR	0603	1	105±10% 50V
C917		SMT RESISTOR	0603	1	0R±5%

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
C918		SMT RESISTOR	0603	1	0R±5%
C919-C920		SMT CAPACITOR	1206	2	226±10% 50V
C921		SMT CAPACITOR	0603	1	103±10% 50V
C922		SMT CAPACITOR	0603	1	105±10% 50V
C923-C925		SMT CAPACITOR	0603	3	103±10% 50V
C926-C927		SMT CAPACITOR	0603	2	152±10% 50V
C928-C929		SMT CAPACITOR	0603	2	562±10% 50V
C930		SMT CAPACITOR	0603	1	103±10% 50V
C931		SMT CAPACITOR	0603	1	333±10% 50V
C932-C933		SMT CAPACITOR	0603	2	473±10% 50V
C934		SMT CAPACITOR	0805	1	225±10% 50V
C935-C936		SMT CAPACITOR	0805	2	224±10% 50V
C937-C938		SMT CAPACITOR	0603	2	103±10% 50V
C940		SMT CAPACITOR	0603	1	103±10% 50V
C942		SMT CAPACITOR	0603	1	105±10% 50V
E1		DIP ELECTRO	4x7	1	33uF/16V
E3-E5		DIP ELECTRO	4x7	3	47uF/16V
E6		DIP ELECTRO	5x12	1	47uF/25V
E7		DIP ELECTRO	4x7	1	47uF/16V
E8		ANT		1	ANT
E10		DIP ELECTRO	8x12	1	470uF/25V
E11		DIP ELECTRO	4x7	1	10uF/25V
E12		DIP ELECTRO	4x7	1	47uF/16V
E14		DIP ELECTRO	6.3x12	1	100uF/16V
E16		DIP ELECTRO	4x8	1	2.2uF/25V
E18		DIP ELECTRO	4x7	1	10uF/16V
E20		DIP ELECTRO	4x7	1	10uF/16V
E300		DIP ELECTRO	4x7	1	10uF/16V

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
E500		DIP ELECTRO	8x13	1	470uF/25V
E501		DIP ELECTRO	6.3x12	1	220uF/16V
E502		DIP ELECTRO	4x7	1	4.7uF/16V
E504		DIP ELECTRO	10x17	1	1000uF/25V
E505-E506		DIP ELECTRO	8x13	2	470uF/25V
E507-E508		DIP ELECTRO	6.3x8	2	100uF/16V
E515		DIP ELECTRO	8x13	1	470uF/25V
E516		DIP ELECTRO	4x7	1	47uF/16V
E900		DIP ELECTRO	6.3x12	1	220uF/16V
E901		SMT TANTALUM CAPACITOR	A type	1	10uF/16V
R1-R12		SMT RESISTOR	0603	12	10K±5%
R13		SMT RESISTOR	0603	1	3.3K±5%
R15		SMT RESISTOR	0603	1	15K±5%
R16		SMT RESISTOR	0603	1	10K±5%
R17		SMT RESISTOR	0603	1	3.9K±5%
R19		SMT RESISTOR	2010	1	10K±5%
R20-R23		SMT RESISTOR	0603	4	10K±5%
R24		SMT RESISTOR	0603	1	22K±5%
R25		SMT RESISTOR	0603	1	6.8K±5%
R26		SMT RESISTOR	0805	1	330K±5%
R27		SMT RESISTOR	0603	1	10K±5%
R28		SMT RESISTOR	1206	1	10K±5%
R29		SMT RESISTOR	0603	1	NOUSE
R30-R33		SMT RESISTOR	0603	4	1K±5%
R34		SMT RESISTOR	1206	1	27R±5%
R35-R38		SMT RESISTOR	0603	4	1K±5%
R39		SMT RESISTOR	1206	1	27R±5%
R40		SMT RESISTOR	0603	1	1K±5%

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
R41		SMT RESISTOR	0603	1	1.5K±5%
R42		SMT RESISTOR	0805	1	1K±5%
R43		SMT RESISTOR	0805	1	NO USE
R44		SMT RESISTOR	1206	1	330R±5%
R45		SMT RESISTOR	0603	1	2.2K±5%
R46-R49		SMT RESISTOR	0603	4	220K±5%
R50		SMT RESISTOR	0603	1	270K±5%
R51-R55		SMT RESISTOR	0603	5	220K±5%
R56-R60		SMT RESISTOR	0603	5	33K±5%
R61-R63		SMT RESISTOR	0603	3	2.2K±5%
R64		SMT RESISTOR	0603	1	2.4K±5%
R65		SMT RESISTOR	0603	1	2.2K±5%
R66		SMT RESISTOR	0603	1	1.8K±5%
R67		SMT RESISTOR	0603	1	3.3K±5%
R68		SMT RESISTOR	0603	1	2.2K±5%
R69-R73		SMT RESISTOR	0603	5	560R±5%
R74		SMT RESISTOR	1206	1	560R±5%
R75		SMT RESISTOR	0603	1	3.9K±5%
R76		SMT RESISTOR	0603	1	1.5K±5%
R77-R78		SMT RESISTOR	0603	2	680R±5%
R79-R84		SMT RESISTOR	0603	6	220R±5%
R85		SMT RESISTOR	0805	1	560R±5%
R86		SMT RESISTOR	0603	1	27R±5%
R87-R88		SMT RESISTOR	0603	2	68R±5%
R89-R94		SMT RESISTOR	0603	6	6.8K±5%
R95-R98		SMT RESISTOR	0603	4	270R±5%
R99		SMT RESISTOR	0603	1	1.2K±5%
R100-R107		SMT RESISTOR	0603	8	100R±5%

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
R108		SMT RESISTOR	0603	1	1.2K±5%
R109		SMT RESISTOR	0805	1	0R±5%
R110		SMT RESISTOR	0603	1	1.2K±5%
R111		SMT RESISTOR	0603	1	150R±5%
R112		SMT RESISTOR	0603	1	330R±5%
R113		SMT RESISTOR	0603	1	100R±5%
R115		SMT RESISTOR	0805	1	1K±5%
R119		SMT RESISTOR	0603	1	2.4K±5%
R120		SMT RESISTOR	0603	1	NOUSE
R121-R123		SMT RESISTOR	0603	3	150R±5%
R124		SMT RESISTOR	0603	1	1K±5%
R125		SMT RESISTOR	0603	1	220R±5%
R126		SMT RESISTOR	0603	1	150R±5%
R127		SMT RESISTOR	0603	1	56R±5%
R128-R133		SMT RESISTOR	0603	6	5.6K±5%
R134		SMT RESISTOR	0603	1	10K±5%
R135		SMT RESISTOR	0603	1	3.9K±5%
R136-R138		SMT RESISTOR	0603	3	5.6K±5%
R139		SMT RESISTOR	0603	1	270R±5%
R140		SMT RESISTOR	0603	1	15R±5%
R141		SMT RESISTOR	0603	1	5.6K±5%
R142		SMT RESISTOR	0805	1	5.6K±5%
R143-R145		SMT RESISTOR	0603	3	1.5K±5%
R146		SMT RESISTOR	0805	1	1.5K±5%
R147		SMT RESISTOR	0603	1	390R±5%
R148-R150		SMT RESISTOR	0603	3	180R±5%
R151-R157		SMT RESISTOR	0603	7	470R±5%
R158-R160		SMT RESISTOR	0603	3	4.7K±5%

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
R161		SMT RESISTOR	0603	1	3.9K±5%
R162		SMT RESISTOR	0603	1	2.2K±5%
R163		SMT RESISTOR	0603	1	27K±5%
R164-R165		SMT RESISTOR	0603	2	3.9K±5%
R164-R166		SMT RESISTOR	0603	3	1K±5%
R167-R168		SMT RESISTOR	0603	2	22R±5%
R169		SMT RESISTOR	0603	1	10R±5%
R170-R171		SMT RESISTOR	0603	2	0R±5%
R172		SMT RESISTOR	0603	1	33K±5%
R173		SMT RESISTOR	0603	1	15R±5%
R174		SMT RESISTOR	0603	1	3.3K±5%
R175		SMT RESISTOR	0603	1	680R±5%
R176-R178		SMT RESISTOR	0603	3	47K±5%
R179		SMT RESISTOR	0603	1	33K±5%
R180-R181		SMT RESISTOR	0603	2	47K±5%
R183		SMT RESISTOR	0805	1	1K±5%
R184		SMT RESISTOR	0603	1	3.9K±5%
R185		SMT RESISTOR	0603	1	47K±5%
R186-R187		SMT RESISTOR	0603	2	10R±5%
R188		SMT RESISTOR	0603	1	82K±5%
R189		SMT RESISTOR	0603	1	3.9K±5%
R190		SMT RESISTOR	0603	1	10R±5%
R191		SMT RESISTOR	1206	1	15R±5%
R192		SMT RESISTOR	0603	1	47R±5%
R193-R197		SMT RESISTOR	0603	5	22K±5%
R198		SMT RESISTOR	0603	1	100K±5%
R200		SMT RESISTOR	0603	1	82K±5%
R201-R206		SMT RESISTOR	0603	6	100K±5%

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
R207		SMT RESISTOR	0603	1	270K±5%
R208		SMT RESISTOR	0603	1	560K±5%
R209		SMT RESISTOR	0603	1	100K±5%
R210		SMT RESISTOR	1206	1	2.2K±5%
R211		SMT RESISTOR	0805	1	1K±5%
R212		SMT RESISTOR	0805	1	330K±5%
R213		SMT RESISTOR	0603	1	2.2M±5%
R214		SMT RESISTOR	0603	1	68K±5%
R215		SMT RESISTOR	0603	1	680R±5%
R216		SMT RESISTOR	0603	1	1.5K±5%
R217		SMT RESISTOR	0603	1	1K±5%
R219		SMT RESISTOR	0603	1	390K±5%
R222		SMT RESISTOR	0603	1	4.7K±5%
R225-R226		SMT RESISTOR	0603	2	3.3K±5%
R227		SMT RESISTOR	0603	1	3.9K±5%
R228-R229		SMT RESISTOR	0603	2	4.7K±5%
R230		SMT RESISTOR	0805	1	3.3K±5%
R231-R233		SMT RESISTOR	0603	3	330R±5%
R234		SMT RESISTOR	0603	1	120K±5%
R235-R237		SMT RESISTOR	0603	3	330R±5%
R238		SMT RESISTOR	0603	1	10K±5%
R239		SMT RESISTOR	0603	1	4.7K±5%
R240		SMT RESISTOR	0603	1	47K±5%
R241		SMT RESISTOR	0603	1	82R±5%
R242		SMT RESISTOR	0603	1	100R±5%
R245-R248		SMT RESISTOR	0603	3	470K±5%
R249		SMT RESISTOR	0603	1	1K±5%
R250		SMT RESISTOR	0603	1	680K±5%

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
R252		SMT RESISTOR	0603	1	12K±5%
R253		SMT RESISTOR	0603	1	10K±5%
R255		SMT RESISTOR	0603	1	33K±5%
R256		SMT RESISTOR	0805	1	33K±5%
R257		SMT RESISTOR	0603	1	1M±5%
R258		SMT RESISTOR	0603	1	2.7K±5%
R259		SMT RESISTOR	0603	1	560R±5%
R260		SMT RESISTOR	2010	1	0R±5%
R266		SMT RESISTOR	0603	1	1.5M±5%
R268		SMT RESISTOR	0603	1	39K±5%
R269		SMT RESISTOR	0805	1	820R±5%
R270		SMT RESISTOR	0603	1	47R±5%
R271		SMT RESISTOR	0805	1	2.2R±5%
R272		SMT RESISTOR	0805	1	1K±5%
R273		SMT RESISTOR	1206	1	5.6R±5%
R274		SMT RESISTOR	0603	1	10R±5%
R275		SMT RESISTOR	0603	1	8.2K±5%
R276		SMT RESISTOR	0603	1	10K±5%
R279		SMT RESISTOR	0603	1	220R±5%
R280		SMT RESISTOR	0603	1	680R±5%
R281		SMT RESISTOR	0603	1	6.8K±5%
R291		SMT RESISTOR	0805	1	56R±5%
R292		SMT RESISTOR	0805	1	4.7R±5%
R300		SMT RESISTOR	0603	1	4.7K±5%
R301		SMT RESISTOR	0603	1	220R±5%
R302		SMT RESISTOR	0603	1	100R±5%
R304-R305		SMT RESISTOR	0603	2	22R±5%
R306		SMT RESISTOR	0603	1	10K±5%

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
R307		SMT RESISTOR	0603	1	3.9K±5%
R308		SMT RESISTOR	0603	1	0R±5%
R309		SMT RESISTOR	0603	1	1K±5%
R310		SMT RESISTOR	0603	1	560R±5%
R311		SMT RESISTOR	0603	1	100K±5%
R312		SMT RESISTOR	0603	1	470R±5%
R313		SMT RESISTOR	0603	1	150K±5%
R314		SMT RESISTOR	0603	1	100R±5%
R315		SMT RESISTOR	0603	1	100K±5%
R316-R317		SMT RESISTOR	0805	2	1K±5%
R318		SMT RESISTOR	0603	1	390R±5%
R319		SMT RESISTOR	0603	1	47K±5%
R320		SMT RESISTOR	0603	1	1K±5%
R322		SMT RESISTOR	0603	1	220R±5%
R323		SMT RESISTOR	0603	1	56K±5%
R324		SMT RESISTOR	0603	1	150K±5%
R325		SMT RESISTOR	0603	1	4.7K±5%
R326		SMT RESISTOR	0805	1	10K±5%
R327		SMT RESISTOR	0603	1	120K±5%
R500-R501		SMT RESISTOR	0603	2	2.2K±5%
R502		SMT RESISTOR	0603	1	6.8K±5%
R503		SMT RESISTOR	0603	1	22K±5%
R504-R506		SMT RESISTOR	0603	3	15K±5%
R507-R509		SMT RESISTOR	0603	3	1.5K±5%
R510		SMT RESISTOR	0603	1	2.2K±5%
R511-R517		SMT RESISTOR	0603	7	220K±5%
R518		SMT RESISTOR	0603	1	150R±5%
R519		SMT RESISTOR	0603	1	10K±5%

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
R520		SMT RESISTOR	0603	1	820R±5%
R521		SMT RESISTOR	0603	1	560K±5%
R522-R523		SMT RESISTOR	0603	2	5.6K±5%
R524		SMT RESISTOR	0603	1	33K±5%
R525-R533		SMT RESISTOR	0603	9	1K±5%
R534		SMT RESISTOR	0603	1	12K±5%
R535		SMT RESISTOR	0603	1	1K±5%
R536-R537		SMT RESISTOR	0805	2	1K±5%
R538-R539		SMT RESISTOR	0603	2	1K±5%
R540-R541		SMT RESISTOR	0603	2	560R±5%
R542		SMT RESISTOR	0603	1	220R±5%
R543		SMT RESISTOR	0603	1	1K±5%
R544		SMT RESISTOR	0603	1	560R±5%
R545		SMT RESISTOR	0603	1	2.2K±5%
R546		SMT RESISTOR	0603	1	56K±5%
R547		SMT RESISTOR	0603	1	39K±5%
R548		SMT RESISTOR	0603	1	4.7K±5%
R549		SMT RESISTOR	0603	1	10K±5%
R550		SMT RESISTOR	0603	1	33K±5%
R551-R552		SMT RESISTOR	0603	2	4.7K±5%
R553		SMT RESISTOR	0603	1	10K±5%
R554-R557		SMT RESISTOR	0603	4	33K±5%
R558-R562		SMT RESISTOR	0603	5	220R±5%
R563-R564		SMT RESISTOR	0603	2	12K±5%
R565		SMT RESISTOR	0603	1	15K±5%
R566		SMT RESISTOR	0603	1	56K±5%
R567		SMT RESISTOR	0603	1	33K±5%
R568-R569		SMT RESISTOR	0603	2	10K±5%

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
R570		SMT RESISTOR	0603	1	3.3K±5%
R571-R572		SMT RESISTOR	0603	2	0R±5%
R573-R576		SMT RESISTOR	0603	3	10K±5%
R577		SMT RESISTOR	0603	1	68K±5%
R578-R579		SMT RESISTOR	0603	2	10K±5%
R580		SMT RESISTOR	0603	1	100K±5%
R581-R585		SMT RESISTOR	0603	5	10K±5%
R586-R589		SMT RESISTOR	0603	4	100K±5%
R591		SMT RESISTOR	0603	1	10K±5%
R592		SMT RESISTOR	0603	1	100K±5%
R593		SMT RESISTOR	0603	1	100R±5%
R594		SMT RESISTOR	0603	1	100K±5%
R595		SMT RESISTOR	0603	1	0R±5%
R596		SMT RESISTOR	0603	1	100K±5%
R597		SMT RESISTOR	0603	1	220R±5%
R598		SMT RESISTOR	0603	1	100K±5%
R599		SMT RESISTOR	0603	1	47K±5%
R600		SMT RESISTOR	0603	1	100R±5%
R601		SMT RESISTOR	0603	1	47K±5%
R602		SMT RESISTOR	0603	1	4.7K±5%
R603-R604		SMT RESISTOR	0805	2	47K±5%
R605		SMT RESISTOR	0603	1	4.7K±5%
R607		SMT RESISTOR	0603	1	68K±5%
R608-R609		SMT RESISTOR	0603	2	100R±5%
R610		SMT RESISTOR	0603	1	120R±5%
R611		SMT RESISTOR	0603	1	270R±5%
R612		SMT RESISTOR	0603	1	10R±5%
R613		SMT RESISTOR	0603	1	1.2K±5%

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
R614		SMT RESISTOR	0603	1	10K±5%
R615		SMT RESISTOR	0603	1	8.2K±5%
R617		SMT RESISTOR	0603	1	68K±5%
R618		SMT RESISTOR	0603	1	NOUSE
R619		SMT RESISTOR	0603	1	100K±5%
R621		SMT RESISTOR	0603	1	100K±5%
R622		SMT RESISTOR	0603	1	100R±5%
R623		SMT RESISTOR	0603	1	220R±5%
R624		SMT RESISTOR	0603	1	10K±5%
R625		SMT RESISTOR	0603	1	33R±5%
R626-R627		SMT RESISTOR	0603	2	1K±5%
R630		SMT RESISTOR	0603	1	10K±5%
R640		SMT RESISTOR	0603	1	15K±5%
R641		SMT RESISTOR	0603	1	12K±5%
R645		SMT RESISTOR	0603	1	10K±5%
R653-R654		SMT RESISTOR	0603	2	1K±5%
R655-R656		SMT RESISTOR	0603	2	10K±5%
R657		SMT RESISTOR	0603	1	1K±5%
R658-R659		SMT RESISTOR	0603	2	12K±5%
R660-R661		SMT RESISTOR	0603	2	56K±5%
R900		SMT RESISTOR	0603	1	15K±5%
R901		SMT RESISTOR	0603	1	1.8K±5%
R902-R906		SMT RESISTOR	0603	5	1K±5%
R907		SMT RESISTOR	0603	1	680R±5%
R908-R909		SMT RESISTOR	0603	2	1K±5%
R910-R911		SMT RESISTOR	0603	2	2.2K±5%
R912-R916		SMT RESISTOR	0603	5	15K±5%
R917		SMT RESISTOR	0603	1	100R±5%

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
R918		SMT RESISTOR	0603	1	1K±5%
R919		SMT RESISTOR	0603	1	15K±5%
R920		SMT RESISTOR	0603	1	10K±5%
R921		SMT RESISTOR	0603	1	1K±5%
R922		SMT RESISTOR	0603	1	1M±5%
R923		SMT RESISTOR	0603	1	1K±5%
R926		SMT RESISTOR	0603	1	56K±5%
R934		SMT RESISTOR	0603	1	220K±5%
R939		SMT RESISTOR	0603	1	3.3K±5%
R940		SMT RESISTOR	0603	1	15K±5%
R941		SMT RESISTOR	0603	1	1K±5%
R950		SMT RESISTOR	0603	1	0R±5%
RP300		SMT RESISTOR ARRAY	4D03	1	1K×4
D1-D2		SMT DIODE	0805	2	HVC131
D3		SMT ZENER DIODE	0603	1	4.7V
D4-D7		SMT DIODE	SOT-23	5	1SS184
D8-D9		SMT DIODE	0603	2	JDV2S14E
D10		SMT CAPACITOR	0603	1	11P±1% 50V
D11		SMT VARIABLE CAPACITANCE DIODE	0603	1	JDV2S14E
D12		SMT VARIABLE CAPACITANCE DIODE	0805	1	HVU307
D13		SMT VARIABLE CAPACITANCE DIODE	0603	1	JDV2S14E
D14-D16		SMT VARIABLE CAPACITANCE DIODE	0805	3	HVU307
D17		SMT DIODE	0603	1	1N4148
D18-D29		SMT DIODE	0603	12	KDS160E
D30-D32		SMT DIODE	SOT-23	3	HSM88AS
D33-D34		SMT DIODE	SOT-23	2	PMBD353
D37		SMT DIODE	0805	1	MA2J728
D38		SMT DIODE	0603	1	KDS160E

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
D39-D40		SMT RESISTOR	0805	2	1N4148
D41		SMT DIODE	0603	1	KDS160E
D42-D45		SMT DIODE	SOD-80	4	LL4148
D46		SMT DIODE	0603	1	KDS160E
D47		SMT DIODE	SOT-23	1	MA28TA
D48-D49		SMT DIODE	0603	2	KDS160E
D50		SMT DIODE	SOT-23	1	NOUSE
D51		SMT RESISTOR	0603	1	0R±5%
D52		SMT DIODE	0603	1	1SS400
D53-D54		SMT RESISTOR	0603	2	1N4148
D55		SMT DIODE	SOT-23	1	DB3J314FOL
D56		SMT RESISTOR	0603	1	0R±5%
D57		SMT DIODE	SOT-23	1	DB3J314FOL
D58		SMT DIODE	SOD-80	1	LL4148
D300		SMT DIODE	0603	1	1SS400
D301-D302		SMT VARIABLE CAPACITANCE DIODE	0603	2	JDV2S14E
D303		SMT DIODE	0603	1	1SS400
D305		SMT VARIABLE CAPACITANCE DIODE	0805	1	1SV214
D500		SMT DIODE	0603	1	KDS160E
D501		SMT ZENER DIODE	0603	1	5.1V
D502-D504		SMT DIODE	0603	3	KDS160E
D505		SMT ZENER DIODE	0603	1	3.0V
D506-D507		SMT VARIABLE CAPACITANCE DIODE	0603	2	JDV2S14E
D508-D513		SMT DIODE	SOT-23	6	1SS184
D514-D515		DIP DIODE		2	SB360
D518		SMT VARIABLE CAPACITANCE DIODE	0603	1	1SV283
D519-D522		SMT ZENER DIODE	0603	1	5.1V
Q1-Q15		SMT TRANSISTOR	SOT-23	15	2SC2714

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
Q16		SMT DIGITAL TRANSISTOR	EMT3	1	DTA114YE
Q17-Q18		SMT FET	SOT-23	2	2SK210
Q19		SMT TRANSISTOR	SOT-23	4	2SD1048
Q20		SMT DIGITAL TRANSISTOR	EMT3	1	DTC143ZE
Q21-Q22		SMT TRANSISTOR	SOT-23	2	2SD1048
Q23-Q24		SMT DIGITAL TRANSISTOR	EMT3	2	DTC143ZE
Q25		SMT DIGITAL TRANSISTOR	EMT3	1	DTC143ZKA
Q26-Q31		SMT DIGITAL TRANSISTOR	EMT3	6	DTC143ZE
Q32-Q33		SMT TRANSISTOR	SOT-23	2	2SC2412K
Q34-Q36		SMT DIGITAL TRANSISTOR	EMT3	3	DTC143ZE
Q38-Q41		SMT TRANSISTOR	SOT-23	4	2SC2412K
Q42		SMT TRANSISTOR	SOT-23	1	2SA1235A
Q43		SMT TRANSISTOR	SC-59	1	2SC2712
Q44		SMT DIGITAL TRANSISTOR	EMT3	1	DTC143ZE
Q45-Q47		DIP FET	TO-220	1	IRF520
Q48		SMT TRANSISTOR	SOT-23	1	2SA1235
Q49		DIP TRANSISTOR	TO126	1	2SC2314
Q50		SMT TRANSISTOR	SC-59	1	2SA1298
Q51		DIP TRANSISTOR	TO-92	1	2SC941TM
Q52-Q53		SMT TRANSISTOR	SC-59	2	2SC2712
Q54		SMT TRANSISTOR	SOT-89	1	2SB798
Q55		DIP TRANSISTOR	TO-247	1	TIP36C
Q56-Q57		SMT DIGITAL TRANSISTOR	EMT3	2	DTC143ZE
Q58		SMT DIGITAL TRANSISTOR	EMT3	1	DTC143ZKA
Q300		SMT TRANSISTOR	SC-70	1	2SC4617
Q301		SMT FET	SOT-23	1	2SK1875
Q302-Q303		SMT TRANSISTOR	SC-70	2	2SC4226(R24)
Q304		SMT TRANSISTOR	SC-70	1	2SC4617

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
Q305		SMT TRANSISTOR	SOT-23	1	2SC2714
Q500-Q502		SMT DIGITAL TRANSISTOR	EMT3	3	DTC143ZE
Q503		SMT DIGITAL TRANSISTOR	EMT3	1	DTC143ZKA
Q505		SMT DIGITAL TRANSISTOR	EMT3	1	DTC143ZE
Q506-Q510		SMT DIGITAL TRANSISTOR	EMT3	5	DTC143ZKA
Q511		SMT TRANSISTOR	SOT-23	1	2SA1235
Q512-Q513		SMT TRANSISTOR	SOT-23	2	2SD1048
Q514-Q516		SMT DIGITAL TRANSISTOR	EMT3	1	DTC143ZE
Q517		SMT TRANSISTOR	SOT-23	1	2SC2412K
Q518		SMT DIGITAL TRANSISTOR	EMT3	1	DTC143ZE
Q519-Q520		SMT TRANSISTOR	SOT-23	3	2SC2714
Q521		SMT DIGITAL TRANSISTOR	EMT3	1	DTC143E
Q522		SMT DIGITAL TRANSISTOR	EMT3	1	DTA114YE
Q523		SMT TRANSISTOR	SC-70	1	2SC4082
Q526-Q528		SMT DIGITAL TRANSISTOR	SOT-23	3	DTA114YKA
Q529-Q530		SMT TRANSISTOR	SOT-89	2	2SB1132
Q904		SMT DIGITAL TRANSISTOR	SOT-23	1	DTA114YKA
Q906		SMT DIGITAL TRANSISTOR	EMT3	5	DTC143ZKA
IC1		DIP IC	TO-220	1	TDA2003V
U1		SMT IC	SOP-14	1	LM324
U2		SMT IC	SSOP16	1	TA31136FN
U300		SMT IC	SSOP8-P	1	UPB1509GV
U301		SMT AVR	SOT-25	1	TJ5205SF-50
U302		SMT IC	SSOP-24L	1	LMX2352
U500-U501		SMT IC	SOP-8	2	NJM4558M
U502		DIP AVR	TO-92	1	78L05BP
U503		SMT IC	DMP-8	1	NJM2594M
U504		SMT IC	SOP-8	1	24C64

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
U505		SMT IC	SQFP-64	1	R5F212A8SNFP
U506		DIP AVR	TO-220	1	L7808CV
U510		SMT IC	SOP-8	1	LM358M
U900-U901		SMT IC	SOT363	2	BL1551
U902		DIP IC	TO92L-213	1	78L05BP
U903		SMT IC	SOL-16	1	TP5299
U904		SMT IC	SSOP24-P	1	M62364F
U905		SMT IC	SOT-363	1	BL1551
U906		SMT IC	SOT-25	1	AN6123
L1		SMT SMALL FIXED INDUCTOR	0603	1	10uH
L2		SMT RESISTOR	0603	1	0R
L3-L5		SMT SMALL FIXED INDUCTOR	0603	3	10uH
L6		SMT SMALL FIXED INDUCTOR	0603	1	33uH
L10		FERRITE BEAD		1	WBRH-35908
L11		FERRITE BEAD		1	DK3*5*1
L14		FERRITE BEAD		1	WBRH-35908
L15		FERRITE BEAD		1	7.5TR
L16		AIR-CORE COIL		1	4.5TR
L17		AIR-CORE COIL		1	3.5TR
L18		AIR-CORE COIL		1	4.5TR
L19		AIR-CORE COIL		1	6.5TR
L20		AIR-CORE COIL		1	3.5TR*2
L21		DIP LGA TYPE COLOR CODE INDUCTOR	1/4W	1	0.33uH
L22		SMT SMALL FIXED INDUCTOR	0603	1	4.7uH
L23		SMT SMALL FIXED INDUCTOR	0603	1	100nH
L24		SMT SMALL FIXED INDUCTOR	0603	1	1.8uH
L25-L26		DBM TRANSFORMER		2	SB0403TL-3330
L27		FERRITE BEAD		1	WBRH-35908

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
L31		SMT WIRE WOUND INDUCTOR	2520	1	100uH
L32		SWR		1	SWRIND
L33		FERRITE BEAD		1	H1.2*8.0*7.5TR
L34		SMT WIRE WOUND INDUCTOR	2520	1	100uH
L300-L301		SMT FERRITE BEAD (BLACK)	0603	2	271T
L302		SMT RESISTOR	0603	1	4.7K±5%
L303		SMT FERRITE BEAD (BLACK)	0603	1	271T
L304		SMT SMALL FIXED INDUCTOR	0603	1	120nH
L305		SMT SMALL FIXED INDUCTOR	0603	1	10uH
L306		SMT SMALL FIXED INDUCTOR	0603	1	220nH
L307		SMT WIRE WOUND INDUCTOR	2520	1	820nH
L308		SMT WIRE WOUND INDUCTOR	2520	1	1.5uH
L309		SMT WIRE WOUND INDUCTOR	2520	1	56nH
L310		SMT FERRITE BEAD (BLACK)	0603	1	271T
L311		SMT SMALL FIXED INDUCTOR	0603	1	10uH
L312		SMT FERRITE BEAD (BLACK)	0603	1	271T
L313		SMT WIRE WOUND INDUCTOR	2520	1	3.3uH
L314		SMT WIRE WOUND INDUCTOR	2520	1	680nH
L500- L502		SMT FERRITE BEAD (BLACK)	0603	3	271T
L503		SMT FERRITE BEAD (BLACK)	0603	1	1.5uH
L505		SMT FERRITE BEAD (BLACK)	0603	1	271T
L506		TRANSFORMER(CHOKE)		1	VCC-L(0.55)
L507		FERRITE BEAD		1	TSK13.3*15*3.8
L508		SMT SMALL FIXED INDUCTOR	2520	1	1.5uH
L509		SMT SMALL FIXED INDUCTOR	2520	1	12uH
L514-L515		SMT FERRITE BEAD (BLACK)	0603	2	271T
L900		SMT SMALL FIXED INDUCTOR	0603	1	10uH
CB1		DIP CRYSTAL FILTER		1	10.695MHZ

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
CF1		DIP CERAMIC FILTER		1	CF455H
CF2		CRYSTAL FILTER		1	10M04DS
J1		CONNECTOR	SIP2-2.54mm	1	SP
J2		RIBBON WIRE	SMD-2.0	1	CON6
J500		PITCH BAR CONNECTOR	SIP4-1.27	1	CON4
J501		PITCH BAR CONNECTOR	SIP4-2.0mm	1	CON2
J503-J504		PITCH BAR CONNECTOR	SIP4-2.0mm	2	CON4
J505		SMT PITCH FPC CONNECTOR		1	1.0-15-20PB
J505A		FPC FLEXIBLE FLAT CABLE		1	FFC-A-1.0-20-70
J506		MUSB		1	MUSB
J901		PITCH BAR CONNECTOR	SIP10-2.0mm	1	CON10
J902		PITCH BAR CONNECTOR	SIP6-2.0mm	1	CON6
JK1- JK500		JACK	SK-3.5	2	EX SP
W2-W5		SMT VARIOUS RESISTOR	3×3	4	10K
W6		SMT VARIOUS RESISTOR	3×3	1	2K
W7		SMT VARIOUS RESISTOR	3×3	1	3K
W9		SMT VARIOUS RESISTOR	3×3	1	100K
W10		SMT VARIOUS RESISTOR	3×3	1	1K
W11		SMT VARIOUS RESISTOR	3×3	1	5K
W13		SMT VARIOUS RESISTOR	3×3	1	20K
W14		SMT VARIOUS RESISTOR	3×3	1	NO USE
W500-W502		SMT VARIOUS RESISTOR	3×3	3	5K
T1		COIL IFT		1	1268
T2		COIL IFT		1	1237
T3		COIL IFT		1	1239
T4-T5		COIL IFT		2	1266
T6		COIL IFT		1	1252
T7		COIL IFT		1	1271

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
T8		COIL IFT		1	1269
T9		COIL IFT		1	1272
T10		COIL IFT		1	1275
T11		COIL IFT		1	1273
T12		COIL IFT		1	1272
T13-T14		COIL IFT		2	1268
T500		COIL IFT		1	7.4*7.4*12
TC10		SMT VARIOUS CAPACITOR	2×3	1	10P
X500		DIP CRYSTAL	49S	1	19.200MHZ
Y1		SMT CERAMIC FILTER		1	C24(455)
Y300		DIP CRYSTAL	49S	1	10.24MHZ
Y500		DIP CRYSTAL	49S	1	10.6975MHZ

BACK LIGHT DRIVE UNIT

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
C1		SMT CAPACITOR	0603	1	103±10% 50V
C2		SMT CAPACITOR	0603	1	104±10% 50V
C3-C6		SMT CAPACITOR	0603	3	103±10% 50V
C9		SMT CAPACITOR	0603	1	473±10% 50V
E1		DIP ELECTRO	5×12	1	100uF/16V
E2-E3		DIP ELECTRO	6.3×12	2	220uF/16V
E4		DIP ELECTRO	5×12	1	47uF/16V
E5		DIP ELECTRO	5×12	1	100uF/16V
D1		SMT ZENER DIODE	0603	1	5.0V
D2		SMT DIODE	SOD-80	1	LL4148
R1		SMT RESISTOR	0603	1	39K±5%
R2		SMT RESISTOR	0603	1	47K±5%

PARTS LIST

Ref. No	Parts No.	Description of item	Size (LxW)(mm)	Qty	Specification
R3		SMT RESISTOR	1206	1	18R±5%
R4		SMT RESISTOR	0603	1	56K±5%
R5		SMT RESISTOR	0603	1	1K±5%
R6		SMT RESISTOR	0603	1	0R±5%
Q1		SMT TRANSISTOR	SOT-23	1	2SC2412K
U1		SMT IC	SSOP8	1	SM8144BV
L1		SMT FERRITE BEAD	M565050	1	NLC565050T-471K
L2		SMT FERRITE BEAD	M565050	1	NLC565050T-221K
J1-J2		PITCH BAR CONNECTOR	SIP2-2.0mm	2	CON2