DJ – X11T/E/K
Service Manual

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ALINCO, INC.

SPECIFICATIONS

Receivable frequency range	Receivable frequency range (Main band): 0.05 to 1300MHz Receivable frequency range (Sub band): 118 to 171MHz, 336 to 470MHz (USA T version: cellular frequencies [824.000 ~ 849.99995MHz, 869.000 ~ 894.99995MHz] are blocked.)	
Frequency step	0.05/0.1/1/5/6.25/8.33/10/12.5/15/20/25/30/50/100/125/150/200/500kHz/1MHz	
Modulation mode	AM/SSB/CW/FM/WFM	
Power supply voltage	Operating range (External power supply port): 5.4 ~ 6VDC Standard battery: 4.5V (AA battery), 3.7V (Lithium ion battery)	
Current consumption	Average: Mono-band: Approx. 130mA, Dual-band: Approx. 180mA (6.0VDC)	
Operating temperature range	-10°C ~ +60°C per CE (+14°F ~ +140°F)	
Dimensions	61 (W) x 106 (H) x 38 (D) mm / 2.4 (W) x 4.17 (H) x 1.50 (D) in (projection exclusive)	
Weight	Approx. 235g / 8.29oz (antenna and lithium ion battery pack inclusive)	
Receive	Reception method (Main band):	AM/SSB/CW/FM: Triple-conversion Super-heterodyne WFM: Double-conversion Super-heterodyne
	Reception method (Sub band):	AM/FM: Double-conversion Super-heterodyne
	Intermediate frequency: AM/SSB/CW/FM (Main band) WFM (Main band): AM/FM (Sub band):	 1st intermediate frequency: 243.95MHz 2nd intermediate frequency: 45.055MHz 3rd intermediate frequency: 455kHz 2nd intermediate frequency: 10.7MHz 1st intermediate frequency: 51.65MHz 2nd intermediate frequency: 450kHz
	Sensitivity (Main band):	0.050 to 0.531MHz (AM): 5dBµ (10dB S/N)typ 0.531 to 1.62MHz (AM): 2dBµ (10dB S/N)typ 1.62 to 76MHz (AM): -5dBµ (10dB S/N)typ 1.62 to 76MHz (SSB,CW): -10dBu (10dB S/N)typ 1.62 to 76MHz (FM): -15dBµ (12dB SINAD)typ 76 to 108MHz (WFM): -3dBµ (12dB SINAD)typ 108 to 136MHz (AM): -6dBµ (10dB S/N)typ 136 to 174MHz (FM): -14dBµ (12dB SINAD)typ 175 to 221.75MHz (WFM): -6dBµ (12dB SINAD)typ 221.8 to 336MHz (AM): 0dBµ (10dB S/N)typ 336 to 475.75MHz (FM): -13dBµ (12dB SINAD)typ 475.75 to 770MHz (WFM): -13dBµ (12dB SINAD)typ 770 to 1260MHz (FM): -9dBµ (12dB SINAD)typ 1260 to 1300MHz (FM): -6dBµ (12dB SINAD)typ
	Sensitivity (Sub band):	118 to 136MHz (AM): -3dBµ (10dB S/N)typ 136 to 170MHz (FM): -14dBµ (12dB SINAD)typ 336 to 470MHz (FM): -14dBµ (12dB SINAD)typ
	Selectivity:	AM/FM: -6dB/12kHz or more, -60dB/35kHz or less SSB/CW: -6dB/2kHz or more, -50dB/7.5kHz or less WFM: -6dB/180kHz±40kHz, -20dB/470kHz or less
	Audio output power:	More than 100mW (8Ω)

! NOTE: All specifications are subject to change without notice or obligation

CIRCUIT DESCRIPTION

1) Receiver System

Main band ; Triple Super heterodyne Conversion (AM,SSB,CW,FM)
Double Super heterodyne Conversion (WFM)
1st IF :243.95MHz
2nd IF :45.055MHz (AM,SSB,CW,FM)
2nd IF :10.7MHz (WFM)
3rd IF :455kHz (AM,SSB,CW,FM)

Sub band ; Triple Super heterodyne Conversion (AM,FM)
1st IF :51.65MHz
2nd IF :450kHz

1. Front end
Main band

[0.050-1.62MHz]
The incoming signal from the bar antenna passes through a low-pass filter and goes to the first amplifier (Q108), then the signal goes to the common mixer (IC104).

[0.050-49.99995MHz]
The incoming signal from the antenna goes to band switch circuitry (D142). The signal passes through the low-pass filter, then it is amplified at RF amplifier (Q131). The amplified signal goes to the common mixer (IC104).

[50-117.99995MHz]
The incoming signal from the antenna goes to band switch circuitry (D137). The signal passes through the low-pass filter, then it is amplified at RF amplifier (Q130). The amplified signal goes to the common mixer (IC104).

[118-170.99995MHz]
The incoming signal from the antenna goes to band switch circuitry (D124). The signal passes through the band-pass filter, then it is amplified at two RF amplifiers (Q114•Q121). The amplified signal through again the band-pass filter, then it is goes to the common mixer (IC104).

[171-274.99995MHz]
The incoming signal from the antenna goes to band switch circuitry (D132). The signal passes through the band-pass filter, then it is amplified at RF amplifier (Q122). The amplified signal goes to the common mixer (IC104).

[275-469.99995MHz]
The incoming signal from the antenna goes to band switch circuitry (D150•D151). The signal passes through the band-pass filter, then it is amplified at two RF amplifiers (Q136•Q148). The amplified signal through again the band-pass filter, then it is goes to the common mixer (IC104).

[470-869.99995MHz]
The incoming signal from the antenna goes to band switch circuitry (D160). The signal passes through the band-pass filter, then it is amplified at RF amplifier (Q157). The amplified signal goes to the common mixer (IC104).
Note that the cellular-phone band block system is mentioned on the separated sheet for the T-version.

[870-1299.99995MHz]
The incoming signal from the antenna goes to band switch circuitry (D161). The signal passes through the band-pass filter, then it is amplified at RF amplifier (Q158). The amplified signal goes to the common mixer (IC104).

Sub band

[118-170.995MHz]
The incoming signal from the antenna goes to band switch circuitry (D124). The signal passes through the band-pass filter, then it is amplified at two RF amplifiers (Q114・Q115). The amplified signal through again the band-pass filter, then it is goes to the common mixer (IC104).

[336-469.995MHz]
The incoming signal from the antenna goes to band switch circuitry (D150・D151). The signal passes through the band-pass filter, then it is amplified at two RF amplifiers (Q136・Q137). The amplified signal through again the band-pass filter, then it is goes to the common mixer (IC104).

2. Mixer

Main band

[The 1st Mixer]
The 1st local oscillator signal for the 1st mixer is supplied from the VCO.
The incoming signal to the 1st mixer (IC104) and the 1st local signal are added or subtracted at mixer (IC104), and the SAW filter (FL101) selects the signal of 243.95MHz, then it goes to the 2nd mixer (IC105) after the adjacent signal is eliminated.

[The 2nd Mixer]
The 2nd local oscillator signal for the 2nd mixer is supplied from the VCO.

{FM/AM/SSB/CW}
In FM/AM/SSB/CW mode, the signal heterodowned to the 2nd IF of 45.055MHz by the mixer passes through a crystal filter (XF101) and unwanted signal components are eliminated.
The resulting signal is amplified by the 2nd IF amplifier (Q110) and goes to the IFIC (IC107).

{WFM}
In WFM mode, the signal heterodowned to the 2nd IF of 10.7MHz by the mixer passes through a ceramic filter (FL102) and unwanted signal components are eliminated.
The resulting signal is amplified by the IF amplifier (Q112) and goes to the IFIC (IC107).

[The 3rd Mixer]
The 3rd local oscillator signal for the 3rd mixer is 455kHz signal that is produced by multiplying the 44.6MHz (X103) .

Sub band

[The 1st Mixer]
The 1st local oscillator signal for the 1st mixer is supplied from the VCO.
The incoming signal to the 1st mixer (IC111) and the 1st local signal are added or subtracted at mixer (IC111), and the crystal filter (XF102) selects the signal of 51.65MHz. The resulting signal is amplified by the 2nd IF amplifier (Q147) and goes to the IFIC (IC113).

[The 2nd Mixer]
The 2nd local oscillator signal for the 2nd mixer is 450kHz signal that is produced by multiplying the frequency 51.2MHz that is multiplied 12.8MHz (X101) by 3 at (Q160).

3. IF

Main band

[FM]
In FM mode, the signal passes through an external ceramic filter (FL103) and switch (D143・D146), and goes back to the IF IC (IC107).
The signal is amplified by the internal IF amplifier is demodulated by the quadrature FM demodulation circuit using a ceramic discriminator (X104) and output as an AF signal.

[AM]
In AM mode, the signal passes through an external ceramic filter (FL103) and switch (D143・D146), and goes back to the IF IC (IC107). The 2nd IF amplifier (Q110) is controlled by reverse AGC at AGC amplifier (Q116) to get better audio output even though the input is changed, and the gain is controlled.

[SSB/CW]
In SSB mode, the signal passes through two external ceramic filters (FL103・FL104) and switch (D143・D146), and goes back to the IF IC (IC107). The 2nd IF amplifier (Q110) is controlled by reverse AGC at AGC amplifier (Q116) to get better audio output even though the input is changed, and the gain is controlled.
The amplified signal is mixed with the oscillator signal for the silicon oscillator (IC501) from the Demodulate (IC505) to AF signal.

[WFM]
In WFM mode, the signal of 10.7MHz passes through WFM switch (D149) and goes to the IF IC (IC107).
The signal is amplified by the internal IF amplifier is demodulated by the quadrature FM demodulation circuit using a ceramic discriminator (X102) and output as an AF signal.

Sub band

[FM]
In FM mode, the signal passes through an external ceramic filter (FL105) and goes back to the IF IC (IC113).
The signal is amplified by the internal IF amplifier is demodulated by the quadrature FM demodulation circuit using a ceramic discriminator (X106) and output as an AF signal.

[AM]
In AM mode, the signal passes through an external ceramic filter (FL105) and goes back to the IF IC (IC113). The 2nd IF amplifier (Q147) is controlled by reverse AGC at AGC amplifier (Q155) to get better audio output even though the input is changed, and the gain is controlled.

4. Squelch

Main band

The AF signal got from pin 12 of IF IC (IC107) is fed to pin 19 of IF IC (IC107). The input signal is output from pin 21 of IF IC (IC107) passing through the noise filter amplifier and rectifier circuits inside of IF IC (IC107). The rectified signal is added to the A/D port of the microcomputer (IC511). Judging the signal, the microcomputer controls ON/OFF of the audio output.

Sub band

The AF signal got from pin 12 of IF IC (IC113) is fed to pin 19 of IF IC (IC113). The input signal is output from pin 21 of IF IC (IC113) passing through the noise filter amplifier and rectifier circuits inside of IF IC (IC113). The rectified signal is added to the A/D port of the microcomputer (IC511). Judging the signal, the microcomputer controls ON/OFF of the audio output.

5. Audio

Main band

[FM/AM/SSB/CW]
The AF signal goes to the switching IC (IC108•IC514). The switched signal passes through the electronic volume (IC512) and goes to active filter (Q514).
The adjusted signal goes to the AUDIO IC (IC515) and drives a speaker, etc.
[WFM]
The AF signal goes to the switching IC (IC108•IC514). The switched signal passes through the electronic volume (IC512).
The adjusted signal goes to the AUDIO IC (IC515) and drives a speaker, etc.

Sub band

[FM/AM]
The AF signal goes to the switching IC (IC510). The switched signal passes through active filter (Q514) and goes to the electronic volume (IC512).
The adjusted signal goes to the AUDIO IC (IC515) and drives a speaker, etc.

6. VCO

Main band

[The 1st Local]
The VCO for the 1st local consists of the Colpitts oscillator. (D107, D114) and (L105) determine the frequency, and they are oscillated at the transistor (Q102). The oscillated signal passes through the buffer amplifiers (Q103, Q104) and goes to the PLL-IC (IC106).

[The 2nd Local]
The VCO for the 1st local consists of the Colpitts oscillator. (D123, D126) and (L121) determine the frequency, and they are oscillated at the transistor (Q111). The oscillated signal passes through the butter amplifier (Q113) and goes to the PLL-IC (IC106).

Sub band

[The UHF Local]
The VCO for the 1st local consists of the Colpitts oscillator. D164, D165 and L180 determine the frequency, and they are oscillated at the transistor (Q162). The oscillated signal passes through the buffer amplifiers (Q161) and goes to the PLL-IC (IC101).

[The VHF Local]
The VCO for the 1st local consists of the Colpitts oscillator. (D166·D167) and (L181) determine the frequency, and they are oscillated at the transistor (Q163). The oscillated signal passes through the buffer amplifiers (Q161) and goes to the PLL-IC (IC101).

7. PLL

Main band

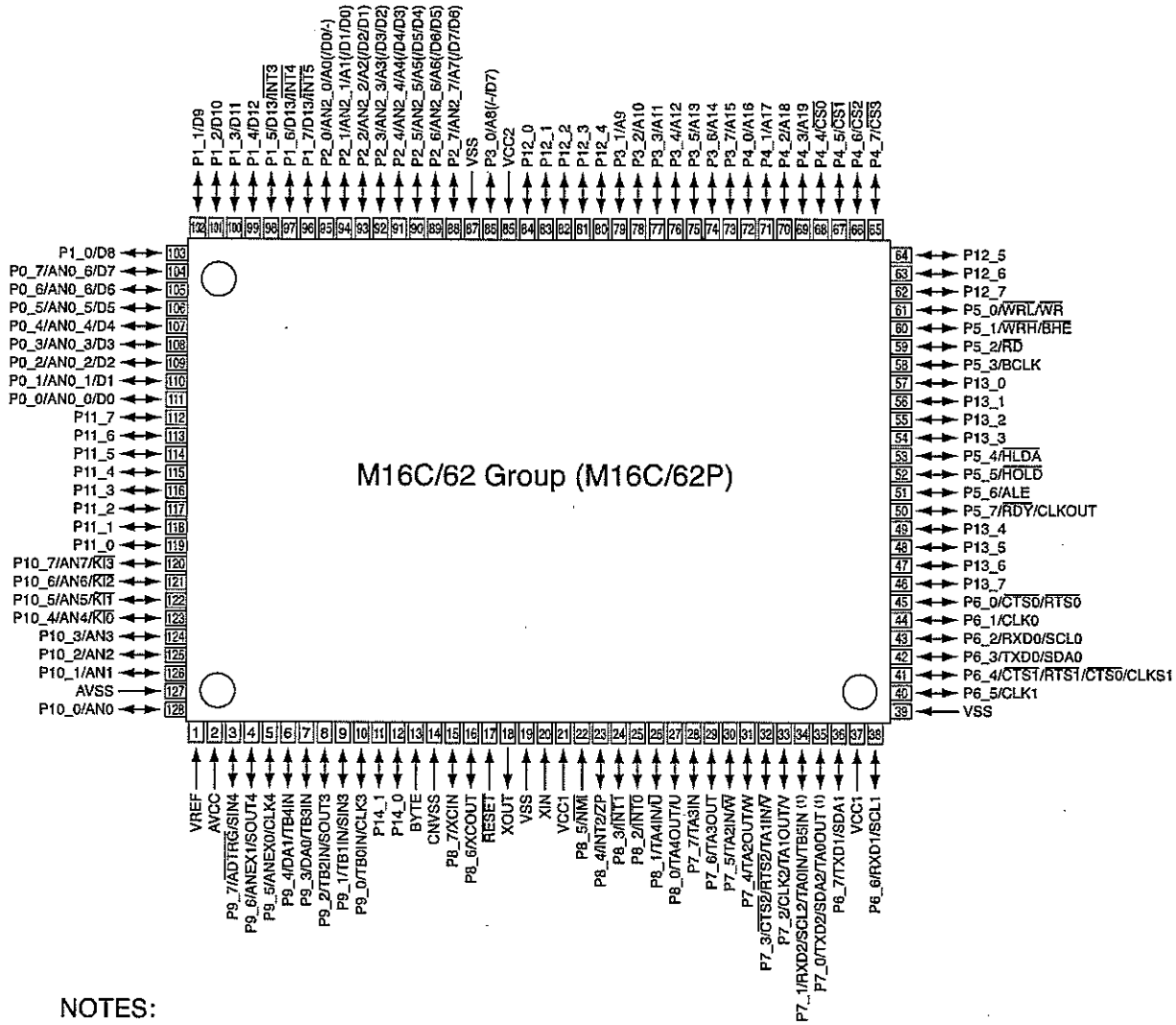
PLL-IC (IC106) is used to control the oscillation frequency of VCO. The microcomputer (IC511) sends the signal with serial data to PLL-IC (IC106). The 12.9MHz reference frequency of PLL-IC (IC106) oscillates the crystal oscillator (X101).

Sub band

PLL-IC (IC101) is used to control the oscillation frequency of VCO. The microcomputer (IC511) sends the signal with serial data to PLL-IC (IC101). The 12.9MHz reference frequency of PLL-IC (IC101) oscillates the crystal oscillator (X101).

2) M30627FJ (E&K : XA1406 , T : XA1453)
CPU

Terminal Connection
(TOP VIEW)



NOTES:
1.P7_0 and P7_1 are N channel open-drain output pins.

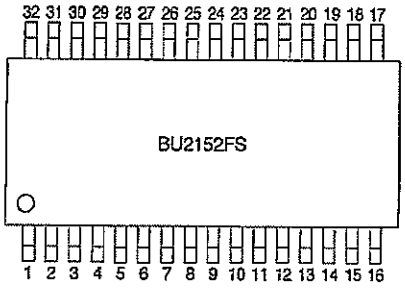
No.	Terminal	Signal	I/O	Description
1	VREF	VDD1	—	Power supply
2	AVCC	VDD1	—	Power supply
3	P9_7	PCNT	O	Power voltage detection SW
4	P9_6	LFTSW	I	LFT key input
5	P9_5	MONISW	I	MONI key input
6	P9_4	MSCRAJ	O	Secret signal leak control
7	P9_3	VOICE	O	Voice output
8	P9_2	fp1	I	F tune signal input
9	P9_1	BFSDI	I/O	Signal data I/O for BFO
10	P9_0	MAFS1	I	Main AF SW
11	P14_1	SCK	I/O	Signal clock for EEPROM
12	P14_0	SDI	I/O	Signal data for EEPROM
13	BYTE	VSS	—	CPU GND
14	CNVSS	VSS	—	CPU GND
15	P8_7	BP2	I	Band plan 2 detection
16	P8_6	WAF	O	WFM AF SW
17	RESET	RST	I	Reset input
18	XOUT	XOUT	O	Clock output
19	VSS	VSS	—	CPU GND
20	XIN	XIN	I	Clock input
21	VCC1	VDD1	—	Power supply
22	P6_5	VDS	—	Power supply
23	P6_4	BU	I	Back up signal detection input
24	P6_3	R1A	I	Rotary encoder B input 1A
25	P6_2	R2A	I	Rotary encoder B input 2A
26	P6_1	R1B	I	Rotary encoder B input 1B
27	P6_0	BEEP	O	Beep output
28	P7_7	R2B	I	Rotary encoder B input 2B
29	P7_6	MSCRF	O	Secret signal output
30	P7_5	FNCSW	I	FUNC key input
31	P7_4	BP1	I	Band plan 1 input
32	P7_3	AFHC	O	AF high sound control
33	P7_2	RPUSH	I	Rotary encoder B push SW input R
34	P7_1	RXD	I	Clone data reception input
35	P7_0	TXD	O	Clone data transmission output
36	P6_7	AFLC	O	AF low sound control
37	VCC1	VDD1	—	Power supply
38	P6_6	BFSCK	I/O	Signal clock I/O for BFO
39	VSS	VSS	—	CPU GND
40	P6_5	/CS1	O	Chip Select signal
41	P6_4	/RES	O	External reset pin
42	P6_3	A0	O	Display data select signal
43	P6_2	WR	O	Read/Write execution control signal
44	P6_1	/RD	O	Read/Write enable control signal
45	P6_0	MGLC	O	Main Green LED SW
46	P13_7	D0	O	Display data signal
47	P13_6	D1	O	Display data signal
48	P13_5	D2	O	Display data signal
49	P13_4	D3	O	Display data signal
50	P5_7	NC	—	—

No.	Terminal	Signal	I/O	Description
51	P5_6	NC	—	—
52	P5_5	NC	—	—
53	P5_4	NC	—	—
54	P13_3	D4	O	Display data signal
55	P13_2	D5	O	Display data signal
56	P13_1	D6	O	Display data signal
57	P13_0	D7	O	Display data signal
58	P5_3	TP	—	For firmware update
59	P5_2	NC	—	—
60	P5_1	NC	—	—
61	P5_0	CLNC	O	Clone SW
62	P12_7	RCAFS	O	AF SW
63	P12_6	SGLC	O	Sub Green LED SW
64	P12_5	SRLC	O	Sub Red LED SW
65	P4_7	NC	—	—
66	P4_6	SPC	O	Audio SW
67	P4_5	SDRSW	I	SDR SW
68	P4_4	AFPC	O	Audio power SW
69	P4_3	RCSW	I	Remote controller AF SW
70	P4_2	NC	—	—
71	P4_1	STRNC	O	Sub Carrier Canceling function SW
72	P4_0	NC	—	—
73	P3_7	SSBC	O	SSB SW
74	P3_6	STNC	O	Sub Tone SQL function SW
75	P3_5	MTRNC	O	Main Carrier Canceling function SW
76	P3_4	MTNC	O	Main Tone SQL function SW
77	P3_3	KI0	I	Key matrix input
78	P3_2	KI1	I	Key matrix input
79	P3_1	KI2	I	Key matrix input
80	P12_4	KI3	I	Key matrix input
81	P12_3	KO0	—	Key matrix output
82	P12_2	KO1	—	Key matrix output
83	P12_1	KO2	O	Key matrix output
84	P12_0	KO3	O	Key matrix output
85	VCC2	VDD2	—	Power supply
86	P3_0	SAFS	O	Sub SF SW
87	VSS	VSS	—	CPU GND
88	P2_7	LED1	O	Backlight SW Key
89	P2_6	EARC	O	Earphone antenna SW
90	P2_5	MAMC	O	Main AM SW
91	P2_4	SAMC	O	Sub AM SW
92	P2_3	MPLC	O	Main PLL SW
93	P2_2	SPLC	O	Sub PLL SW
94	P2_1	LPUSH	I	Rotary encoder A push SW input L
95	P2_0	RE2B	I	Rotary encoder A input 2B
96	P1_7	DET	O	Ext power detection
97	P1_6	RE2A	I	Rotary encoder A input 2A
98	P1_5	RE1A	I	Rotary encoder A input 1A
99	P1_4	RE1B	I	Rotary encoder A input 1B
100	P1_3	AFC	O	AF SW

No.	Terminal	Signal	I/O	Description
101	P1_2	MVC2C	O	Main VCO SW output
102	P1_1	C3C	O	C3V SW
103	P1_0	BUG	O	Bugging SW output
104	P0_7	SUC	O	Sub UHF VCO SW output
105	P0_6	SVC	O	Sub VHF VCO SW output
106	P0_5	CHG	O	Charge function SW
107	P0_4	BAT	I	Battery voltage detection
108	P0_3	SSQL	I	Noise level input for squelch
109	P0_2	SSMT	I	Sub S-meter input
110	P0_1	MSQL	I	Noise level input for squelch
111	P0_0	MSMT	I	Main S-meter input
112	P11_7	STB1	O	Strobe for Main PLL
113	P11_6	STB2	O	Strobe for Sub PLL
114	P11_5	STB3	O	Strobe for parallel converter
115	P11_4	STB4	O	Strobe for D-A converter
116	P11_3	DATA	I/O	Serial data output/Unlock input
117	P11_2	CLK	O	Serial clock output
118	P11_1	SDCSC	O	Sub DCS SW
119	P11_0	MDCSC	O	Main DCS SW
120	P10_7	ADIN	I	Remote controller SW level input
121	P10_6	STIN	I	Sub Tone input
122	P10_5	MTIN	I	Main Tone input
123	P10_4	POSW	I	POWER key input
124	P10_3	MSCRC	O	Main SCR SW
125	P10_2	MAFS2	O	Main AF SW
126	P10_1	STB5	O	Strobe for Evol
127	AVSS	VSS	—	CPU GND
128	P10_0	BCHK	I	Power supply level input

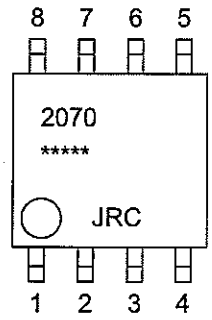
SEMICONDUCTOR DATA

1) BU2152FS (XA1352) 24bit serial parallel driver



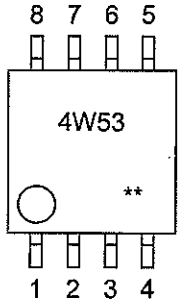
No.	Terminal	Signal	I/O	Description
1	VSS	GND	—	GND
2	CLK	CLK	I	Clock input
3	VSS	GND	—	GND
4	DATA	DATA	I	Data input
5	P1	ATT2C	O	ATT control output
6	P2	MBF7C	O	Main band 7 front end power
7	P3	WFMMC	O	WFM SW
8	P4	MBF4C	O	Main band 4 front end power
9	P5	MBF1C	O	Main band 1 front end power
10	P6	MBF6C	O	Main band 6 front end power
11	P7	SDRC	O	SDR SW
12	P8	NFMC	O	FM SW
13	P9	XTLC	O	Crystal power
14	P10	MSSBC	O	SSB SW
15	P11	AGCC	O	AGC control
16	P12	ERWSW	O	ERW-8 SW
17	P13	DB3C	O	Doubler 3 power
18	P14	DB2C	O	Doubler 2 power
19	P15	DB1C	O	Doubler 1 power
20	P16	ATT0C	O	ATT control output
21	P17	MBF2C	O	Main band 2 front end power
22	P18	MBF5C	O	Main band 5 front end power
23	P19	FCNTC	O	F tune power
24	P20	SBF5C	O	Sub band 5 front end power
25	P21	MBF3C	O	Main band 3 front end power
26	P22	SBF3C	O	Sub band 3 front end power
27	P23	BARC	O	Bar antenna SW
28	P24	ATT1C	O	ATT control output
29	SO	NC	—	NC
30	STB	STB3	I	Strobe input
31	CLB	CLB	I	Power supply
32	VDD	C3V	—	Power supply

2) NJM2070M (XA0210) Audio Power Amplifier



1. NC
2. + INPUT
3. - INPUT
4. GND
5. GND
6. OUTPUT
7. V+
8. NC

3) TC4W53FU (XA0348) Analog Multiplexer / De-multiplexer

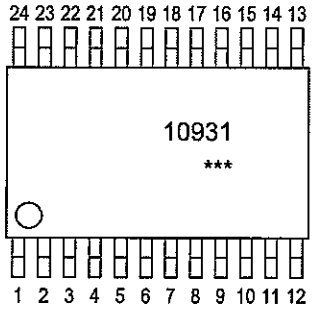


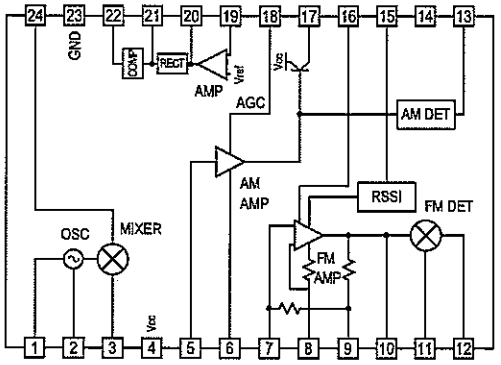
1. COMMON
2. INH
3. VEE
4. VSS
5. A
6. ch1
7. ch0
8. VDD

Control input		On channel
INH	A	
L	L	ch0
L	H	ch1
H	*	NONE

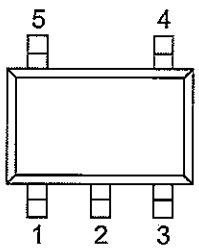
*Don't care

4) TK10931V (XA0666) AM / FM IF IC



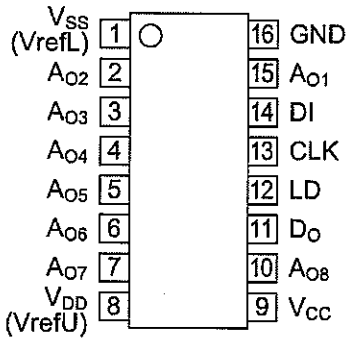


5) S-812C30AMC (XA0833) High operating voltage CMOS voltage regulator



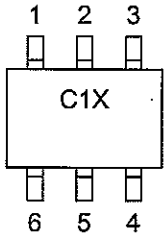
1.GND
2.V_{IN}
3.V_{OUT}
4.NC
5.NC

6) M62367GP (XA0902) 3V Type 8-bit 8ch D/A Converter with Buffer Amplifiers



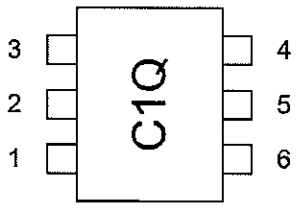
No.	Terminal	Signal	I/O	Description
1	VSS	GND	—	GND
2	V02	DETC	O	DET SW
3	V03	MATTC	O	Main RF gain control
4	V04	SATTC	O	Sub RF gain control
5	V05	REFAJ	O	Crystal control
6	V06	FTNC	O	F count SW
7	V07	XOAJ	O	Main IF control
8	VDD	C3V	—	Power supply
9	VCC	C3V	—	Power supply
10	A08	MIFC	O	Main IF IC power
11	D0	NC	—	NC
12	LD	STB4	I	Strobe input
13	CLK	CLK	I	Cock input
14	DI	DATA	I	Data input
15	A01	SIFC	O	Sub IF IC power
16	GND	GND	—	GND

7) upc2757TB (XA0976) MMIC Down-converter



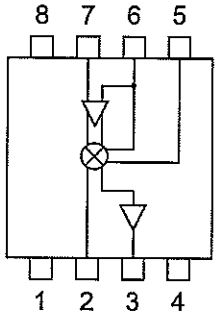
1. RF INPUT
2. GND
3. LO INPUT
4. PS
5. Vcc
6. IF OUTPUT

8) upc2746TB (XA0985) Bipolar Analog Integrated Circuits



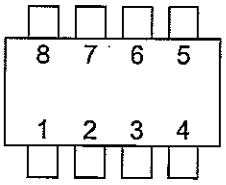
1.INPUT
2.GND
3.GND
4.OUTPUT
5.GND
6.Vcc

9) NJM2594V (XA0995) Double Balanced Modulation / Demodulation



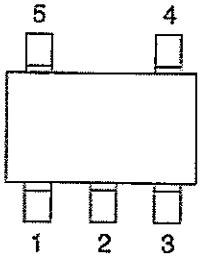
1. V+
2. Output 1
3. Output 2
4. GND
5. Signal Input
6. Bypass
7. Carrier Input
8. NC

10) MM1438 (XA1013) Monolithic IC



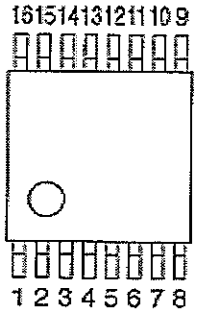
1.GND
2.LV
3.SW2
4.SW1
5.Vcc
6.EXT
7.CEL
8.CS

11) TC75S51FU (XA1014) Operational Amplifier



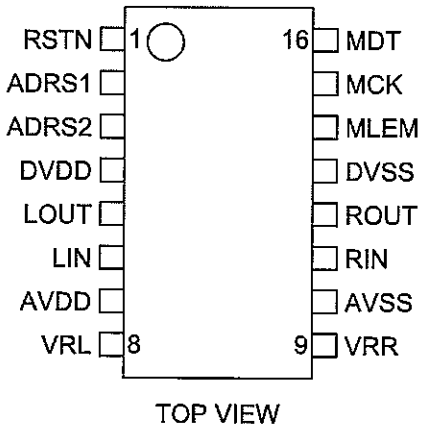
1. IN+
2. GND
3. IN-
4. OUT
5. VDD

12) MB15F07SL (XA1033) PLL Frequency Synthesizer



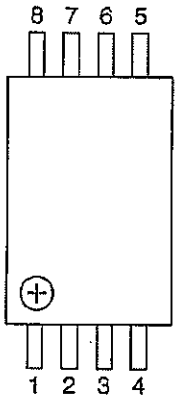
1. GND2
2. OSC_IN
3. GND1
4. fin1
5. Vcc1
6. LD
7. PS1
8. Do1
9. Do2
10. PS2
11. Xfin2
12. VCC2
13. fin2
14. LE
15. DATA
16. Clock

13) SM6451B (XA1186) Audio Variable Volume



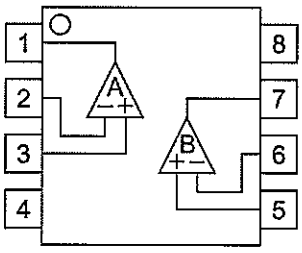
TOP VIEW

14) AT24C1024B (XA1351) EEPROM



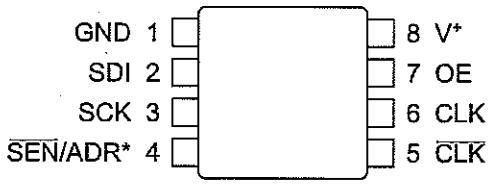
1.A0
2.A1
3.A2
4.GND
5.SDA
6.SCL
7.WP
8.V_{CC}

15) NJM12904 (XA1355) Single suppry dual amplifier



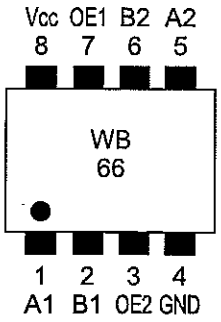
1.A OUTPUT
2.A -INPUT
3.A +INPUT
4.GND
5.B +INPUT
6.B -INPUT
7.B OUTPUT
8.V^+

16) LTC6904 (XA1405) 1kHz - 68MHz Serial Port Programmable Oscillator



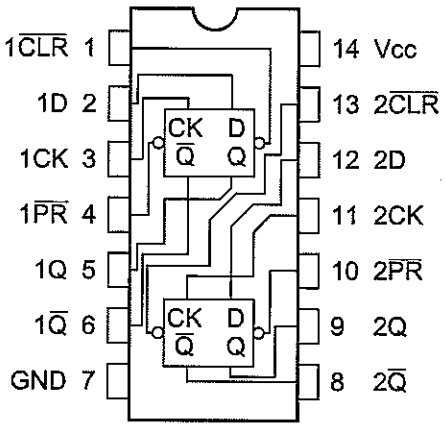
1.GND
2.SDI
3.SCK
4.$\overline{SEN}$/ADR
5.$\overline{CLK}$
6.CLK
7.OE
8.V+

17) TC7WB66FK (XA1407) Dual Bus Switch



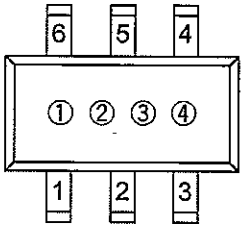
1.A1
2.B1
3.OE2
4.GND
5.A2
6.B2
7.OE1
8.Vcc

18) TC74VHC74FK (XA1408) Dual D-Type Flip-Flop with Preset and Clear



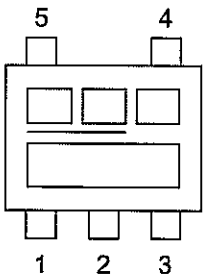
1.1$\overline{CLK}$
2.1D
3.1CK
4.1$\overline{PR}$
5.1Q
6.1$\overline{Q}$
7.GND
8.2$\overline{Q}$
9.2Q
10.2$\overline{PR}$
11.2CK
12.2D
13.2$\overline{CLK}$
14.Vcc

19) TC1240 (XA1409) Positive Doubling Charge Pumps with Shutdown



1.V_{IN}
2.GND
3.C-
4.SHDN
5.V_{OUT}
6.C+

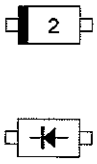
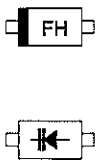
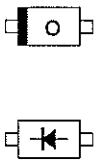
20) BD4928 (XA1426) Voltage Detector IC

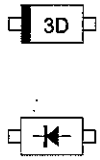
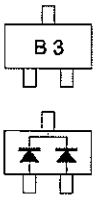
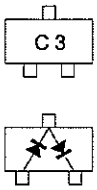
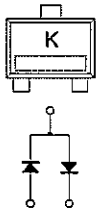
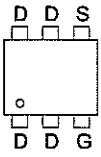


1.V_{OUT}
2.SUB
3.N.C.
4.GND
5.V_{DD}

21) Transistor, Diode and LED Outline Drawings

Top View

XD0376	XD0384	XD0396	XD0401	XD0421	XD0427	XD0432
1SV282	JDP2S02S	VDZ3.9B	DG1M3	1SV323	JDV2S14E	JDS2S03S
						

XD0433	XD0435	XD0484	XD0494	XD0495	XD0496	XE0058
RB715W	1SS361FV	RB521CS	1SS362FV	HVD350B	DA221M	MCH6305
						

XE0069	XE0081	XE0090	XE0095	XE0098	XL0116	XL0128
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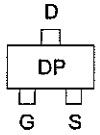	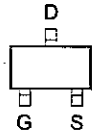	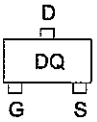	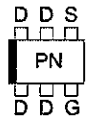	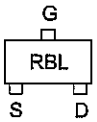	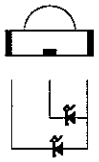	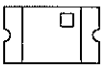

XT0178	XT0180	XT0195	XT0210	XT0212	XT0213	XT0214
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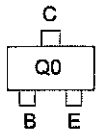
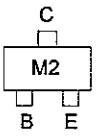
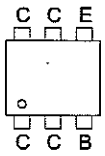
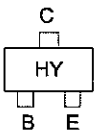
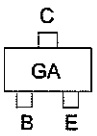
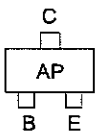
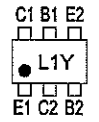
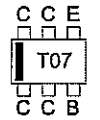
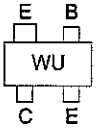
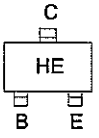
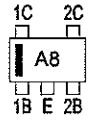
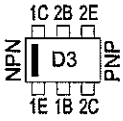
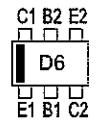
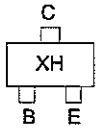
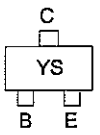
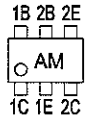
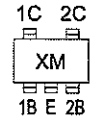
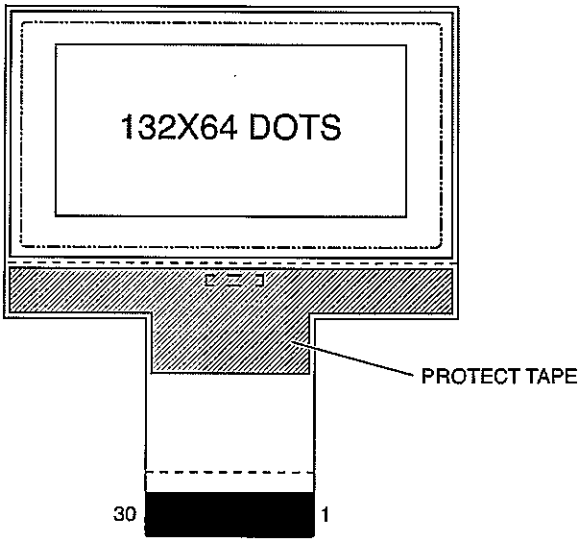
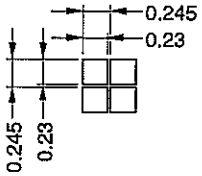
						

XT0237	XT0239	XT0240	XU0207	XU0208	XU0209	XU0210
US6T7	2SC5820	2SC4250	EMA8	EMD3	EMD6	RN1107MFV
			 Rb=10kohm Rbe=47kohm	 Rb=10kohm Rbe=10kohm		 Rb=10kohm Rbe=47kohm

XU0212	XU0224	XU0226				
RN2115MFV	MT6C03AE	RN1711				
 Rb=2.2kohm Rbe=10kohm						

22) LCD Connection (EL0063)

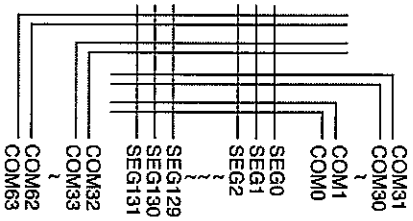




DETAIL "DOTS"

PIN	SYMBOL
1	P/S
2	C86
3	V0
4	V1
5	V2
6	V3
7	V4
8	CAP2N
9	CAP2P
10	CAP1P
11	CAPIN
12	CAP3P
13	V^{OUT}
14	V^{SS}
15	V^{DD}

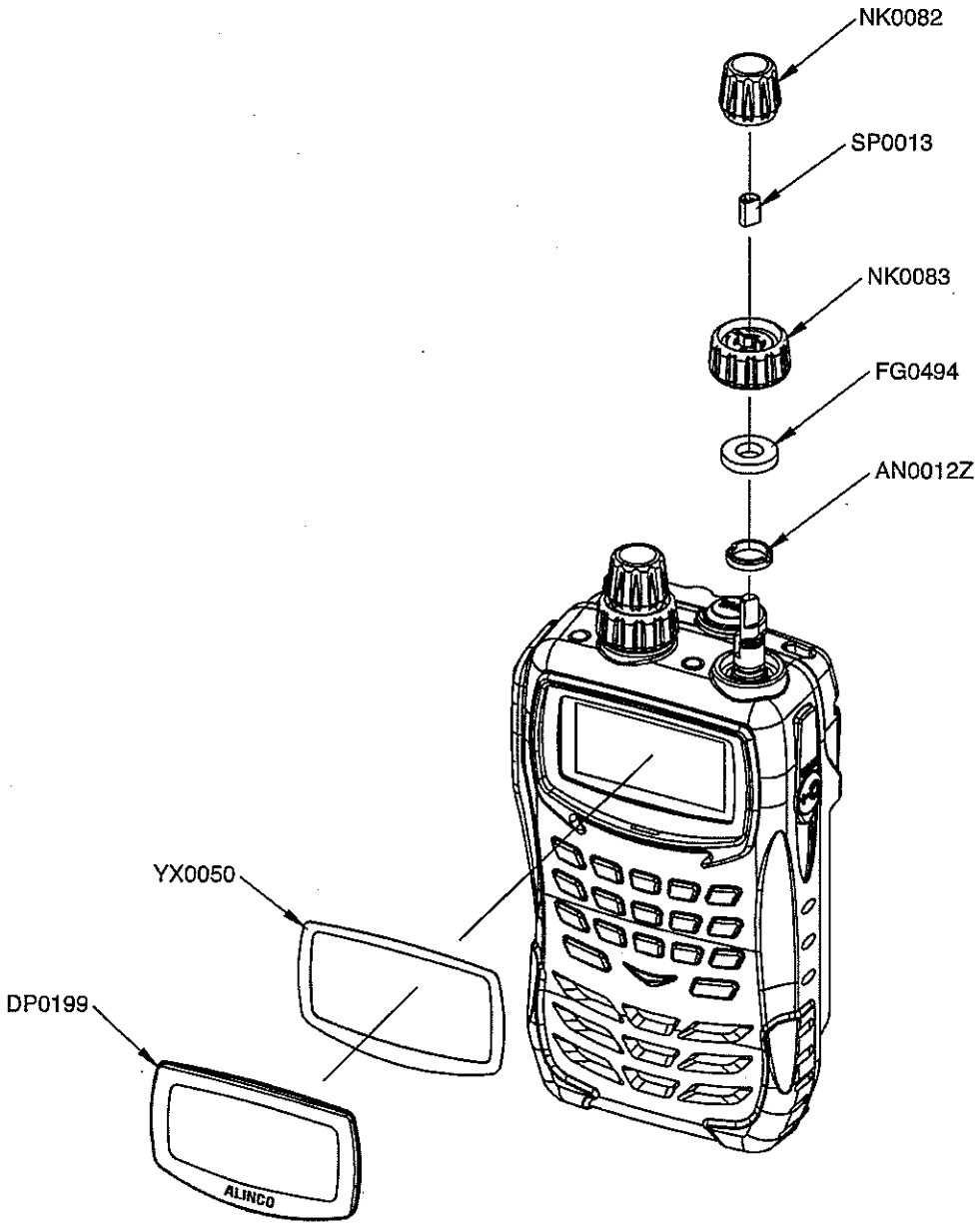
PIN	SYMBOL
16	D7
17	D6
18	D5
19	D4
20	D3
21	D2
22	D1
23	D0
24	/RD
25	WR
26	A0
27	/RES
28	/CS1
29	NC
30	NC



LAYOUT

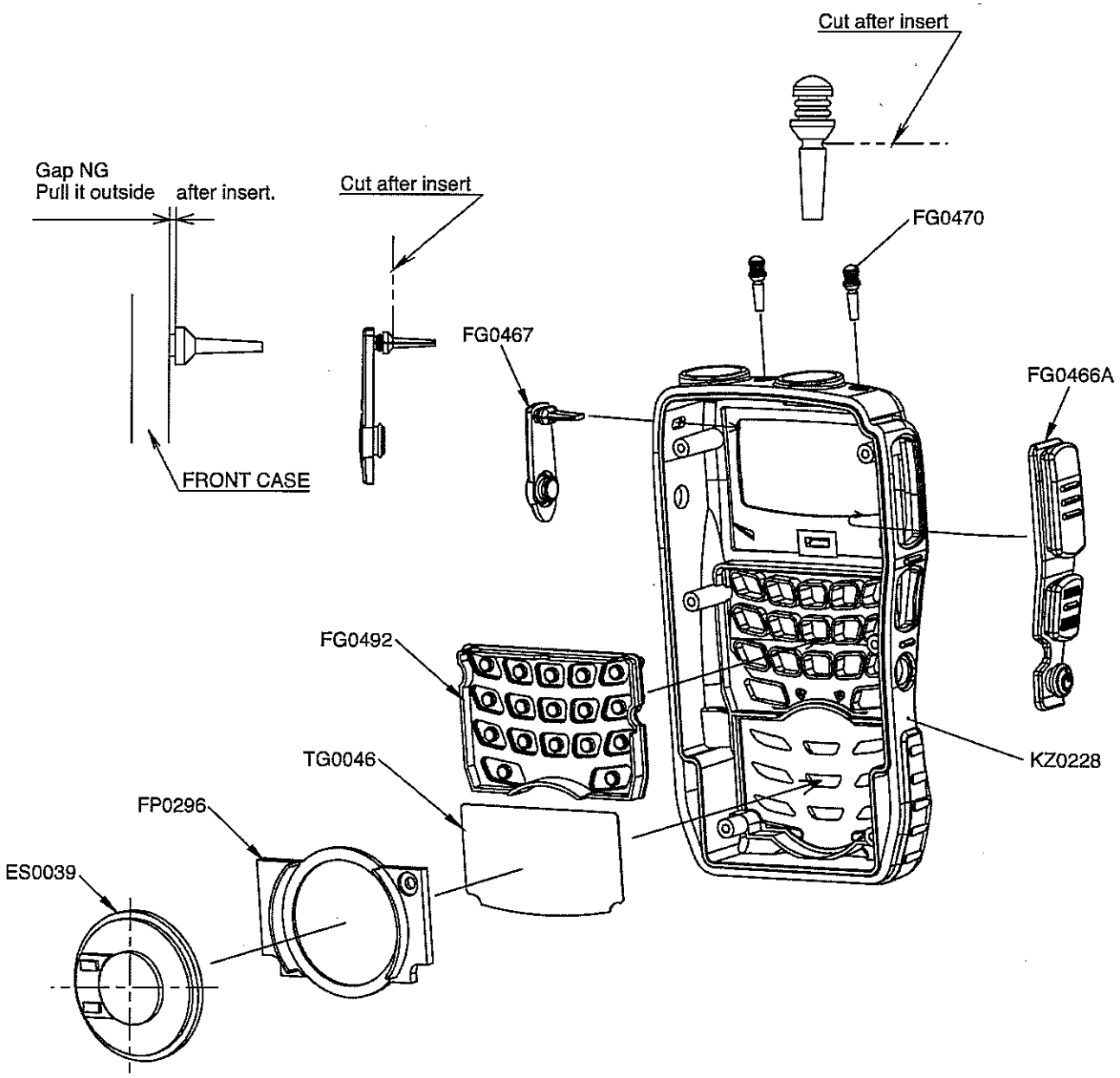
EXPLODED VIEW

1) Front View (1)

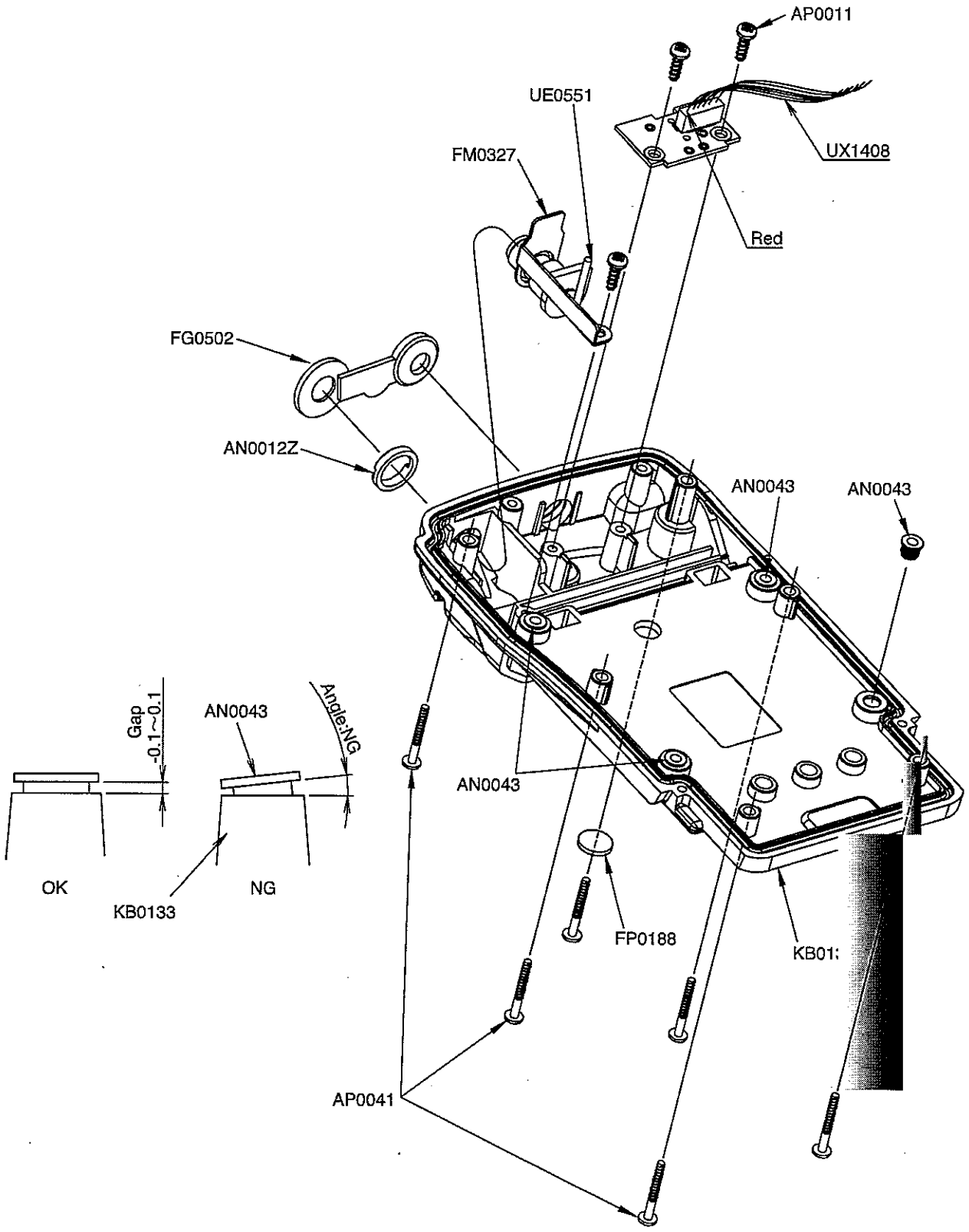


Push the all edge strongly.

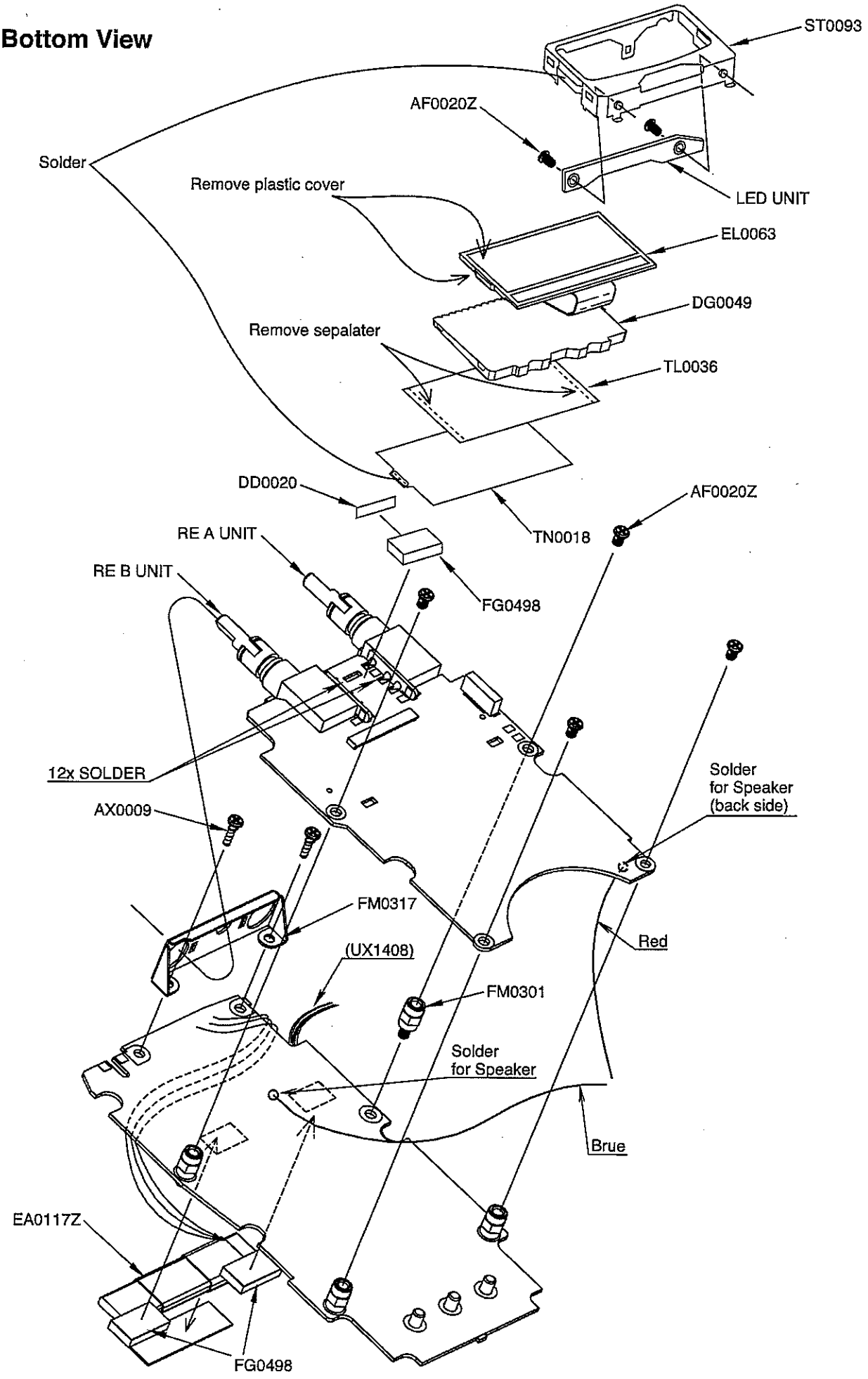
1) Front View (2)



2) Rear View


AP0011
UE0551
UX1408
FM0327
Red
FG0502
AN0012Z
AN0043
AN0043
AN0043
AP0041
FP0188
KB01:
Gap
-0.1~0.1
AN0043
Angle:NG
OK
NG
KB0133

3) Bottom View



PARTS LIST

CPU Unit

Ref No.	Parts No.	Description	Parts Name	Version
	DG0049		LCD LIGHT	
	EL0063		G	
	ST0093		LCD HOLDER	
	TL0036		REFLECTIV SHEET	
	TN0018		SHIELD TAPE	
	UP0664		INTEGRATED	
C501	CS0431	Chip Tantalum	10V 2.2UF	
C502	CU3542	Chip C	GRM36B392K50PT	
C503	CU3554	Chip C	GRM36B104K10PT	
C504	CS0453	Chip Tantalum	TMCP0J226MTRF	
C505	CU3547	Chip C	GRM36B103K16PT	
C506	CU3559	Chip C	GRM155B30J105KE18D	
C507	CU3547	Chip C	GRM36B103K16PT	
C508	CU3542	Chip C	GRM36B392K50PT	
C509	CU3553	Chip C	GRM36B473K10PT	
C510	CU3554	Chip C	GRM36B104K10PT	
C511	CU3552	Chip C	GRM36B333K10PT	
C512	CU3559	Chip C	GRM155B30J105KE18D	
C513	CU3559	Chip C	GRM155B30J105KE18D	
C514	CU3554	Chip C	GRM36B104K10PT	
C515	CU3552	Chip C	GRM36B333K10PT	
C516	CU3559	Chip C	GRM155B30J105KE18D	
C517	CU3559	Chip C	GRM155B30J105KE18D	
C518	CU3559	Chip C	GRM155B30J105KE18D	
C520	CU3559	Chip C	GRM155B30J105KE18D	
C521	CU3554	Chip C	GRM36B104K10PT	
C522	CU3535	Chip C	GRM36B102K50PT	
C523	CU3535	Chip C	GRM36B102K50PT	
C524	CU3554	Chip C	GRM36B104K10PT	
C525	CU3535	Chip C	GRM36B102K50PT	
C526	CU3535	Chip C	GRM36B102K50PT	
C527	CU3547	Chip C	GRM36B103K16PT	
C528	CU3559	Chip C	GRM155B30J105KE18D	
C529	CU3523	Chip C	GRM1552C1H101JZ01D	
C530	CU3547	Chip C	GRM36B103K16PT	
C531	CU3544	Chip C	GRM36B562K25PT	
C532	CU3525	Chip C	GRM1552C1H151JD01D	
C533	CU3559	Chip C	GRM155B30J105KE18D	
C534	CU3535	Chip C	GRM36B102K50PT	
C535	CU3547	Chip C	GRM36B103K16PT	
C536	CS0451	Chip Tantalum	TMCP0G336MTR	
C537	CU3544	Chip C	GRM36B562K25PT	
C538	CU3544	Chip C	GRM36B562K25PT	
C539	CU3559	Chip C	GRM155B30J105KE18D	
C540	CU3559	Chip C	GRM155B30J105KE18D	
C541	CU3554	Chip C	GRM36B104K10PT	
C542	CS0451	Chip Tantalum	TMCP0G336MTR	
C543	CU3547	Chip C	GRM36B103K16PT	
C544	CU3547	Chip C	GRM36B103K16PT	
C545	CU3547	Chip C	GRM36B103K16PT	
C546	CU3547	Chip C	GRM36B103K16PT	
C547	CU3553	Chip C	GRM36B473K10PT	
C548	CU3554	Chip C	GRM36B104K10PT	
C549	CU3559	Chip C	GRM155B30J105KE18D	
C551	CU3559	Chip C	GRM155B30J105KE18D	
C552	CU3559	Chip C	GRM155B30J105KE18D	
C553	CU3559	Chip C	GRM155B30J105KE18D	
C554	CU3559	Chip C	GRM155B30J105KE18D	
C555	CU3559	Chip C	GRM155B30J105KE18D	
C556	CU3559	Chip C	GRM155B30J105KE18D	
C557	CU3535	Chip C	GRM36B102K50PT	
C558	CU3535	Chip C	GRM36B102K50PT	
C559	CU3552	Chip C	GRM36B333K10PT	
C560	CU3559	Chip C	GRM155B30J105KE18D	
C561	CU3554	Chip C	GRM36B104K10PT	
C562	CU3552	Chip C	GRM36B333K10PT	
C563	CU3559	Chip C	GRM155B30J105KE18D	
C564	CU3559	Chip C	GRM155B30J105KE18D	
C565	CU3554	Chip C	GRM36B104K10PT	
C566	CU3547	Chip C	GRM36B103K16PT	
C567	CU3547	Chip C	GRM36B103K16PT	
C568	CU3547	Chip C	GRM36B103K16PT	
C569	CU3547	Chip C	GRM36B103K16PT	
C570	CU3535	Chip C	GRM36B102K50PT	
C571	CU3535	Chip C	GRM36B102K50PT	
C572	CS0453	Chip Tantalum	TMCP0J226MTRF	
C573	CU3535	Chip C	GRM36B102K50PT	
C574	CU3535	Chip C	GRM36B102K50PT	
C575	CU3547	Chip C	GRM36B103K16PT	
C576	CS0453	Chip Tantalum	TMCP0J226MTRF	
C577	CU3554	Chip C	GRM36B104K10PT	
C578	CU3547	Chip C	GRM36B103K16PT	
C579	CU3523	Chip C	GRM1552C1H101JZ01D	
C580	CU3544	Chip C	GRM36B562K25PT	
C581	CU3525	Chip C	GRM1552C1H151JD01D	
C583	CU3535	Chip C	GRM36B102K50PT	

Ref No.	Parts No.	Description	Parts Name	Version
C584	CU3547	Chip C	GRM36B103K16PT	
C585	CS0451	Chip Tantalum	TMCP0G336MTR	
C586	CU3544	Chip C	GRM36B562K25PT	
C588	CU3559	Chip C	GRM155B30J105KE18D	
C589	CU3547	Chip C	GRM36B103K16PT	
C590	CU3559	Chip C	GRM155B30J105KE18D	
C591	CU3559	Chip C	GRM155B30J105KE18D	
C592	CU3554	Chip C	GRM36B104K10PT	
C593	CU3554	Chip C	GRM36B104K10PT	
C598	CU3559	Chip C	GRM155B30J105KE18D	
C599	CU3559	Chip C	GRM155B30J105KE18D	
C600	CS0427	Chip Tantalum	6.3V10UF	
C601	CU3535	Chip C	GRM36B102K50PT	
C602	CU3535	Chip C	GRM36B102K50PT	
C604	CU3535	Chip C	GRM36B102K50PT	
C605	CU3544	Chip C	GRM36B562K25PT	
C609	CS0427	Chip Tantalum	6.3V10UF	
C613	CS0427	Chip Tantalum	6.3V10UF	
C620	CU3559	Chip C	GRM155B30J105KE18D	
C621	CU3559	Chip C	GRM155B30J105KE18D	
C622	CU3547	Chip C	GRM36B103K16PT	
C624	CU3554	Chip C	GRM36B104K10PT	
C626	CS0466	Chip Tantalum	TMCMA0J107MTRF	
C628	CS0466	Chip Tantalum	TMCMA0J107MTRF	
C629	CU3515	Chip C	GRM36CH220J50PT	
C630	CU3515	Chip C	GRM36CH220J50PT	
C631	CU3535	Chip C	GRM36B102K50PT	
C632	CS0466	Chip Tantalum	TMCMA0J107MTRF	
C633	CU3554	Chip C	GRM36B104K10PT	
C634	CS0455	Chip Tantalum	TMCMB1A107MTRF	
C635	CU3554	Chip C	GRM36B104K10PT	
C636	CS0455	Chip Tantalum	TMCMB1A107MTRF	
C637	CU3554	Chip C	GRM36B104K10PT	
C638	CU3554	Chip C	GRM36B104K10PT	
C639	CU3523	Chip C	GRM1552C1H101JZ01D	
C640	CU3559	Chip C	GRM155B30J105KE18D	
C641	CU3535	Chip C	GRM36B102K50PT	
C642	CU3554	Chip C	GRM36B104K10PT	
C643	CU3559	Chip C	GRM155B30J105KE18D	
C644	CS0397	Chip Tantalum	16V 1UF	
C645	CU3547	Chip C	GRM36B103K16PT	
CN501	UE0592	Cnnector	BM08B-SURS-TF	
CN502	UE0591	Cnnector	AXK6S40647YG	
D503	XD0496	Dhip Diode	DA221MT2L	
D504	XD0484	Dhip Diode	RB521CS-30T2R	
D505	XD0484	Dhip Diode	RB521CS-30T2R	
D506	XD0496	Dhip Diode	DA221MT2L	
D507	XD0484	Dhip Diode	RB521CS-30T2R	
D508	XL0116	Dhip LED	BRPY1211F	
D509	XL0116	Dhip LED	BRPY1211F	
D510	XD0484	Dhip Diode	RB521CS-30T2R	
D511	XL0128	Dhip LED	SML-D12M8WT86	
D512	XL0128	Dhip LED	SML-D12M8WT86	
D513	XL0128	Dhip LED	SML-D12M8WT86	
D514	XL0128	Dhip LED	SML-D12M8WT86	
D515	XL0128	Dhip LED	SML-D12M8WT86	
D516	XL0128	Dhip LED	SML-D12M8WT86	
D518	XD0484	Dhip Diode	RB521CS-30T2R	
D519	XD0396	Dhip Diode	VDZT2R 3.9B	
IC501	XA1405	IC	LTC6904IMS8#TRPBF	
IC502	XA1355	IC	NJM12904RB1-TE1	
IC503	XA1355	IC	NJM12904RB1-TE1	
IC504	XA1355	IC	NJM12904RB1-TE1	
IC505	XA0995	IC	NJM2594V TE1	
IC506	XA1355	IC	NJM12904RB1-TE1	
IC507	XA1355	IC	NJM12904RB1-TE1	
IC510	XA0348	IC	TC4W53FU(TE12L)	
IC511	XA1406	IC	M30627FJPGP#U5C	K,E,EGR
IC511	XA1453	IC	M30627FJPGP#U5C	T
IC512	XA1186	IC	SM6451B	
IC514	XA0348	IC	TC4W53FU(TE12L)	
IC515	XA0210	IC	IC NJM2070M	
IC516	XA0833	IC	S812C30AMC-C2K-T2	
IC517	XA1351	IC	AT24C1024-TH-B	
IC518	XA1426	IC	BD4928FVE-TR	
L502	QC0507	Chip Inductor	LK16081R0K-T	
L503	QC0510	Chip Inductor	LK1608330M-T	
L506	QC0510	Chip Inductor	LK1608330M-T	
LCD501	UE0587	Cnnector	FH33-30S-0.5SH	
Q501	XE0081	Chip FET	RTR040N03	
Q502	XU0210	Chip Transistor	RN1107FV	
Q503	XU0210	Chip Transistor	RN1107FV	
Q504	XU0210	Chip Transistor	RN1107FV	
Q505	XU0210	Chip Transistor	RN1107FV	
Q506	XT0214	Chip Transistor	HN2C01FE-GR(T5L,F)	
Q507	XT0214	Chip Transistor	HN2C01FE-GR(T5L,F)	

Ref No.	Parts No.	Description	Parts Name.	Version
Q508	XT0210	Chip Transistor	2SC6026MFV-GR	
Q509	XU0210	Chip Transistor	RN1107FV	
Q510	XU0210	Chip Transistor	RN1107FV	
Q511	XU0210	Chip Transistor	RN1107FV	
Q512	XE0069	Chip FET	SSM3K15FV(TPL3,Z)	
Q513	XE0090	Chip FET	SSM3J15FV(TPL3,Z)	
Q514	XE0069	Chip FET	SSM3K15FV(TPL3,Z)	
Q515	XU0209	Chip Transistor	EMD6T2R	
Q517	XT0237	Chip Transistor	US6T7	
Q519	XU0207	Chip Transistor	EMA8T2R	
Q520	XU0207	Chip Transistor	EMA8T2R	
Q521	XU0207	Chip Transistor	EMA8T2R	
Q522	XU0207	Chip Transistor	EMA8T2R	
Q525	XT0210	Chip Transistor	2SC6026MFV-GR	
Q526	XE0095	Chip FET	RTL035N03TR	
Q527	XU0210	Chip Transistor	RN1107FV	
Q528	XU0208	Chip Transistor	EMD3T2R	
Q529	XE0069	Chip Transistor	SSM3K15FV(TPL3,Z)	
Q530	XE0069	Chip FET	SSM3K15FV(TPL3,Z)	
Q531	XU0210	Chip Transistor	RN1107FV	
Q532	XT0195	Chip Transistor	MCH6102-TL	
R501	RK3562	Chip R	1005 1/16W 100K OHMJ	
R502	RK3562	Chip R	1005 1/16W 100K OHMJ	
R503	RK3514	Chip R	1005 1/16W 10 OHM J	
R504	RK3562	Chip R	1005 1/16W 100K OHMJ	
R505	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R506	RK3550	Chip R	1005 1/16W 10K OHM J	
R507	RK3526	Chip R	1005 1/16W 100 OHM J	
R508	RK3558	Chip R	1005 1/16W 47K OHM J	
R509	RK3550	Chip R	1005 1/16W 10K OHM J	
R510	RK3562	Chip R	1005 1/16W 100K OHMJ	
R511	RK3561	Chip R	1005 1/16W 82K OHM J	
R512	RK3561	Chip R	1005 1/16W 82K OHM J	
R513	RK3526	Chip R	1005 1/16W 100 OHM J	
R514	RK3558	Chip R	1005 1/16W 47K OHM J	
R515	RK3561	Chip R	1005 1/16W 82K OHM J	
R516	RK3556	Chip R	1005 1/16W 33K OHM J	
R517	RK3550	Chip R	1005 1/16W 10K OHM J	
R518	RK3568	Chip R	1005 1/16W 330K OHMJ	
R519	RK3558	Chip R	1005 1/16W 47K OHM J	
R520	RK3559	Chip R	1005 1/16W 56K OHM J	
R521	RK3566	Chip R	1005 1/16W 220K OHMJ	
R522	RK3562	Chip R	1005 1/16W 100K OHMJ	
R523	RK3536	Chip R	1005 1/16W 680 OHM J	
R524	RK3556	Chip R	1005 1/16W 33K OHM J	
R525	RK3574	Chip R	1005 1/16W 1.0M OHMJ	
R526	RK3550	Chip R	1005 1/16W 10K OHM J	
R527	RK3556	Chip R	1005 1/16W 33K OHM J	
R528	RK3566	Chip R	1005 1/16W 220K OHMJ	
R529	RK3552	Chip R	1005 1/16W 15K OHM J	
R530	RK3552	Chip R	1005 1/16W 15K OHM J	
R531	RK3547	Chip R	1005 1/16W 5.6K OHMJ	
R532	RK3570	Chip R	1005 1/16W 470K OHMJ	
R533	RK3563	Chip R	1005 1/16W 120K OHMJ	
R534	RK3571	Chip R	1005 1/16W 560K OHMJ	
R535	RK3558	Chip R	1005 1/16W 47K OHM J	
R536	RK3570	Chip R	1005 1/16W 470K OHMJ	
R537	RK3541	Chip R	1005 1/16W 1.8K OHMJ	
R539	RK3534	Chip R	1005 1/16W 470 OHM J	
R540	RK3558	Chip R	1005 1/16W 47K OHM J	
R541	RK3562	Chip R	1005 1/16W 100K OHMJ	
R542	RK3558	Chip R	1005 1/16W 47K OHM J	
R543	RK3550	Chip R	1005 1/16W 10K OHM J	
R544	RK3562	Chip R	1005 1/16W 100K OHMJ	
R545	RK3561	Chip R	1005 1/16W 82K OHM J	
R546	RK3561	Chip R	1005 1/16W 82K OHM J	
R547	RK3526	Chip R	1005 1/16W 100 OHM J	
R548	RK3558	Chip R	1005 1/16W 47K OHM J	
R549	RK3561	Chip R	1005 1/16W 82K OHM J	
R550	RK3556	Chip R	1005 1/16W 33K OHM J	
R551	RK3550	Chip R	1005 1/16W 10K OHM J	
R552	RK3558	Chip R	1005 1/16W 47K OHM J	
R553	RK3559	Chip R	1005 1/16W 56K OHM J	
R554	RK3520	Chip R	1005 1/16W 33 OHM J	
R555	RK3501	Chip R	1005 1/16W 0 OHM J	
R556	RK3001	Chip R	1608 0 OHM	
R557	RK3562	Chip R	1005 1/16W 100K OHMJ	
R558	RK3556	Chip R	1005 1/16W 33K OHM J	
R559	RK3550	Chip R	1005 1/16W 10K OHM J	
R560	RK3556	Chip R	1005 1/16W 33K OHM J	
R561	RK3562	Chip R	1005 1/16W 100K OHMJ	
R562	RK3570	Chip R	1005 1/16W 470K OHMJ	
R563	RK3563	Chip R	1005 1/16W 120K OHMJ	
R564	RK3571	Chip R	1005 1/16W 560K OHMJ	
R565	RK3558	Chip R	1005 1/16W 47K OHM J	
R566	RK3562	Chip R	1005 1/16W 100K OHMJ	
R567	RK3534	Chip R	1005 1/16W 470 OHM J	
R568	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R569	RK3558	Chip R	1005 1/16W 47K OHM J	

Ref No.	Parts No.	Description	Parts Name.	Version
R570	RK3501	Chip R	1005 1/16W 0 OHM J	
R571	RK3562	Chip R	1005 1/16W 100K OHMJ	
R573	RK3562	Chip R	1005 1/16W 100K OHMJ	
R574	RK3501	Chip R	1005 1/16W 0 OHM J	
R575	RK3574	Chip R	1005 1/16W 1.0M OHMJ	
R576	RK3526	Chip R	1005 1/16W 100 OHM J	
R577	RK3530	Chip R	1005 1/16W 220 OHM J	
R578	RK3562	Chip R	1005 1/16W 100K OHMJ	
R579	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R580	RK3546	Chip R	1005 1/16W 4.7K OHMJ	
R581	RK3574	Chip R	1005 1/16W 1.0M OHMJ	
R582	RK3574	Chip R	1005 1/16W 1.0M OHMJ	
R583	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R585	RK3526	Chip R	1005 1/16W 100 OHM J	
R586	RK3562	Chip R	1005 1/16W 100K OHMJ	
R587	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R589	RK3530	Chip R	1005 1/16W 220 OHM J	
R592	RK3546	Chip R	1005 1/16W 4.7K OHMJ	
R594	RK3555	Chip R	1005 1/16W 27K OHM J	
R596	RK3555	Chip R	1005 1/16W 27K OHM J	
R600	RK3578	Chip R	1005 1/16W 2.2M OHMJ	
R604	RK3550	Chip R	1005 1/16W 10K OHM J	
R605	RK3562	Chip R	1005 1/16W 100K OHMJ	
R606	RK3528	Chip R	1005 1/16W 150 OHM J	
R607	RK3528	Chip R	1005 1/16W 150 OHM J	
R608	RK3528	Chip R	1005 1/16W 150 OHM J	
R609	RK3528	Chip R	1005 1/16W 150 OHM J	
R610	RK3528	Chip R	1005 1/16W 150 OHM J	
R611	RK3528	Chip R	1005 1/16W 150 OHM J	
R612	RK3550	Chip R	1005 1/16W 10K OHM J	
R613	RK3550	Chip R	1005 1/16W 10K OHM J	
R619	RK3578	Chip R	1005 1/16W 2.2M OHMJ	
R621	RK3562	Chip R	1005 1/16W 100K OHMJ	
R625	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R626	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R627	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R629	RK3527	Chip R	1005 1/16W 120 OHM J	
R630	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R631	RK3548	Chip R	1005 1/16W 6.8K OHMJ	
R632	RK3532	Chip R	1005 1/16W 330 OHM J	
R633	RK3501	Chip R	1005 1/16W 0 OHM J	
R634	RK3544	Chip R	1005 1/16W 3.3K OHMJ	
R636	RK3518	Chip R	1005 1/16W 22 OHM J	
R637	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R638	RK3514	Chip R	1005 1/16W 10 OHM J	
R641	RK3562	Chip R	1005 1/16W 100K OHMJ	
R642	RK3501	Chip R	1005 1/16W 0 OHM J	
R643	RK3550	Chip R	1005 1/16W 10K OHM J	
R646	RK3562	Chip R	1005 1/16W 100K OHMJ	
R648	RK3562	Chip R	1005 1/16W 100K OHMJ	
R649	RK3526	Chip R	1005 1/16W 100 OHM J	
R651	RK3550	Chip R	1005 1/16W 10K OHM J	
R652	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R653	RK3557	Chip R	1005 1/16W 39K OHM J	
R654	RK3550	Chip R	1005 1/16W 10K OHM J	
R656	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R657	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R658	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R659	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R660	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
SW501	UU0047	Chip Switch	SKRPABE010	
SW502	UU0047	Chip Switch	SKRPABE010	
SW503	UU0047	Chip Switch	SKRPABE010	
SW504	UU0047	Chip Switch	SKRPABE010	
SW505	UU0047	Chip Switch	SKRPABE010	
SW506	UU0047	Chip Switch	SKRPABE010	
SW507	UU0047	Chip Switch	SKRPABE010	
SW508	UU0047	Chip Switch	SKRPABE010	
SW509	UU0047	Chip Switch	SKRPABE010	
SW510	UU0047	Chip Switch	SKRPABE010	
SW511	UU0043	Chip Switch	EVQPJ705K	
SW512	UU0043	Chip Switch	EVQPJ705K	
SW513	UU0043	Chip Switch	EVQPJ705K	
SW514	UU0047	Chip Switch	SKRPABE010	
SW515	UU0047	Chip Switch	SKRPABE010	
SW516	UU0047	Chip Switch	SKRPABE010	
SW517	UU0047	Chip Switch	SKRPABE010	
SW518	UU0047	Chip Switch	SKRPABE010	
SW519	UU0047	Chip Switch	SKRPABE010	
SW520	UU0047	Chip Switch	SKRPABE010	
W502	MRCL07AA	Wire	#30R02-070-02	
X502	XQ0230	Crystal	CSA-309 14.7456MHZ	

JACK Unit

Ref No.	Parts No.	Description	Parts Name.	Version
	UX1408		08SUR-32S 60L	
CN851	UE0592	Cnnector	BM08B-SURS-TF	
JK851	UJ0060	Jack	HSJ1594-010150	

LED Unit

Ref No.	Parts No.	Description	Parts Name	Version
D801	XL0128	Chip LED	SML-D12M8WT86	
D802	XL0128	Chip LED	SML-D12M8WT86	
R801	RK3527	Chip R	1005 1/16W 120 OHM J	
R802	RK3527	Chip R	1005 1/16W 120 OHM J	

RE Unit

Ref No.	Parts No.	Description	Parts Name	Version
RE901	UR0028	Rotary Encoder	TP70D974AE20 21.3F	
RE902	UR0028	Rotary Encoder	TP70D974AE20 21.3F	

MAIN Unit

Ref No.	Parts No.	Description	Parts Name	Version
	TS0167		VCO CASE A	
	TS0168		VCO CASE B	
	TS0191		VCO CASE DJX11	
	UE0333A		SPRING CONNECTOR	
	UP0665		DJX11 RF INTEGRATED	
C101	CU3535	Chip C	GRM36B102K50PT	
C102	CU3535	Chip C	GRM36B102K50PT	
C103	CU3535	Chip C	GRM36B102K50PT	
C104	CU3535	Chip C	GRM36B102K50PT	
C105	CU3507	Chip C	GRM36CH060D50PT	
C106	CU3507	Chip C	GRM36CH060D50PT	
C107	CU3535	Chip C	GRM36B102K50PT	
C108	CU3535	Chip C	GRM36B102K50PT	
C109	CU3535	Chip C	GRM36B102K50PT	
C110	CU3535	Chip C	GRM36B102K50PT	
C111	CU3511	Chip C	GRM36CH100D50PT	
C112	CS0466	Chip Tantalum	TMCMA0J107MTRF	
C113	CU3535	Chip C	GRM36B102K50PT	
C114	CU3554	Chip C	GRM36B104K10PT	
C115	CU3535	Chip C	GRM36B102K50PT	
C116	CU3531	Chip C	GRM36B471K50PT	
C118	CU3504	Chip C	GRM36CJ030C50PT	
C119	CU3547	Chip C	GRM36B103K16PT	
C120	CS0403	Chip Tantalum	TMCP1D224MTR	
C121	CU3502	Chip C	GRM36CK010C50PT	
C122	CU3535	Chip C	GRM36B102K50PT	
C123	CU3539	Chip C	GRM36B222K50PT	
C124	CU3554	Chip C	GRM36B104K10PT	
C125	CU3511	Chip C	GRM36CH100D50PT	
C126	CU3505	Chip C	GRM36CH040C50PT	
C127	CU3531	Chip C	GRM36B471K50PT	
C128	CU3513	Chip C	GRM36CH150J50PT	
C129	CS0431	Chip Tantalum	10V 2.2UF	
C130	CU3554	Chip C	GRM36B104K10PT	
C131	CU3535	Chip C	GRM36B102K50PT	
C132	CU3504	Chip C	GRM36CJ030C50PT	
C133	CU3554	Chip C	GRM36B104K10PT	
C134	CU3504	Chip C	GRM36CJ030C50PT	
C135	CU3511	Chip C	GRM36CH100D50PT	
C136	CU3504	Chip C	GRM36CJ030C50PT	
C137	CU3547	Chip C	GRM36B103K16PT	
C138	CU3535	Chip C	GRM36B102K50PT	
C139	CU3547	Chip C	GRM36B103K16PT	
C140	CU3554	Chip C	GRM36B104K10PT	
C141	CU3535	Chip C	GRM36B102K50PT	
C142	CU3547	Chip C	GRM36B103K16PT	
C143	CS0431	Chip Tantalum	10V 2.2UF	
C144	CU3535	Chip C	GRM36B102K50PT	
C145	CU3554	Chip C	GRM36B104K10PT	
C147	CU3547	Chip C	GRM36B103K16PT	
C148	CU3511	Chip C	GRM36CH100D50PT	
C149	CU3508	Chip C	1005 CH 50V 7PF D	
C150	CU3511	Chip C	GRM36CH100D50PT	
C151	CU3522	Chip C	GRM1552C1H820JD01D	
C152	CU3520	Chip C	GRM1552C1H560JD01D	
C153	CU3554	Chip C	GRM36B104K10PT	
C154	CU3547	Chip C	GRM36B103K16PT	
C155	CU3547	Chip C	GRM36B103K16PT	
C156	CU3554	Chip C	GRM36B104K10PT	
C157	CU3547	Chip C	GRM36B103K16PT	
C159	CU3535	Chip C	GRM36B102K50PT	
C160	CU3535	Chip C	GRM36B102K50PT	
C161	CU3535	Chip C	GRM36B102K50PT	
C162	CU3512	Chip C	GRM36CH120J50PT	
C163	CU3547	Chip C	GRM36B103K16PT	
C164	CU3523	Chip C	GRM1552C1H101JZ01D	
C165	CU3535	Chip C	GRM36B102K50PT	
C166	CU3554	Chip C	GRM36B104K10PT	
C167	CU3535	Chip C	GRM36B102K50PT	
C168	CU3502	Chip C	GRM36CK010C50PT	
C169	CU3547	Chip C	GRM36B103K16PT	
C170	CU3547	Chip C	GRM36B103K16PT	
C171	CU3547	Chip C	GRM36B103K16PT	
C173	CU3547	Chip C	GRM36B103K16PT	
C174	CU3535	Chip C	GRM36B102K50PT	
C175	CU3515	Chip C	GRM36CH220J50PT	
C176	CU3514	Chip C	GRM36CH180J50PT	
C177	CU3511	Chip C	GRM36CH100D50PT	
C178	CU3501	Chip C	GRM36CK0R5C50PT	
C179	CU3535	Chip C	GRM36B102K50PT	
C180	CU3547	Chip C	GRM36B103K16PT	
C181	CU3535	Chip C	GRM36B102K50PT	
C182	CU3535	Chip C	GRM36B102K50PT	
C183	CU3547	Chip C	GRM36B103K16PT	
C184	CS0451	Chip Tantalum	TMCP0G336MTR	
C185	CU3547	Chip C	GRM36B103K16PT	
C186	CU3503	Chip C	GRM36CK020C50PT	
C187	CU3503	Chip C	GRM36CK020C50PT	
C188	CU3535	Chip C	GRM36B102K50PT	
C189	CU3547	Chip C	GRM36B103K16PT	
C190	CU3554	Chip C	GRM36B104K10PT	
C191	CU3535	Chip C	GRM36B102K50PT	
C192	CU3535	Chip C	GRM36B102K50PT	
C193	CU3515	Chip C	GRM36CH220J50PT	
C194	CU3535	Chip C	GRM36B102K50PT	
C196	CU3511	Chip C	GRM36CH100D50PT	
C197	CU3523	Chip C	GRM1552C1H101JZ01D	
C198	CU3502	Chip C	GRM36CK010C50PT	
C199	CU3535	Chip C	GRM36B102K50PT	
C201	CU3506	Chip C	GRM36CH050C50PT	
C202	CU3535	Chip C	GRM36B102K50PT	
C203	CU3513	Chip C	GRM36CH150J50PT	
C204	CU3516	Chip C	GRM36CH270J50PT	
C205	CU3511	Chip C	GRM36CH100D50PT	
C206	CU3513	Chip C	GRM36CH150J50PT	
C207	CU3535	Chip C	GRM36B102K50PT	
C208	CS0453	Chip Tantalum	TMCP0J226MTRF	
C209	CS0403	Chip Tantalum	TMCP1D224MTR	
C210	CU3512	Chip C	GRM36CH120J50PT	
C211	CU3512	Chip C	GRM36CH120J50PT	
C212	CU3539	Chip C	GRM36B222K50PT	
C213	CU3510	Chip Tantalum	1005 CH 50V 9PF D	
C214	CU3523	Chip C	GRM1552C1H101JZ01D	
C215	CU3547	Chip C	GRM36B103K16PT	
C217	CU3516	Chip C	GRM36CH270J50PT	
C218	CU3513	Chip C	GRM36CH150J50PT	
C219	CS0431	Chip Tantalum	10V 2.2UF	
C220	CU3547	Chip C	GRM36B103K16PT	
C221	CU3535	Chip C	GRM36B102K50PT	
C222	CU3512	Chip C	GRM36CH120J50PT	
C223	CS0453	Chip Tantalum	TMCP0J226MTRF	
C224	CU3514	Chip C	GRM36CH180J50PT	
C225	CU3511	Chip C	GRM36CH100D50PT	
C226	CU3519	Chip C	GRM36CH470J50PT	
C227	CU3519	Chip C	GRM36CH470J50PT	
C228	CS0464	Chip Tantalum	TMCP1A106MTRF	
C229	CU3547	Chip C	GRM36B103K16PT	
C230	CU3544	Chip C	GRM36B562K25PT	
C231	CU3535	Chip C	GRM36B102K50PT	
C232	CS0451	Chip Tantalum	TMCP0G336MTR	
C233	CU3547	Chip C	GRM36B103K16PT	
C234	CS0431	Chip Tantalum	10V 2.2UF	
C235	CS0431	Chip Tantalum	10V 2.2UF	
C236	CU3547	Chip C	GRM36B103K16PT	
C237	CS0403	Chip Tantalum	TMCP1D224MTR	
C238	CS0431	Chip Tantalum	10V 2.2UF	
C239	CU3523	Chip C	GRM1552C1H101JZ01D	
C241	CU3511	Chip C	GRM36CH100D50PT	
C242	CU3513	Chip C	GRM36CH150J50PT	
C243	CU3535	Chip C	GRM36B102K50PT	
C244	CU3523	Chip C	GRM1552C1H101JZ01D	
C245	CU3533	Chip C	GRM36B681K50PT	
C246	CU3554	Chip C	GRM36B104K10PT	
C247	CU3554	Chip C	GRM36B104K10PT	
C248	CU3535	Chip C	GRM36B102K50PT	
C249	CU3523	Chip C	GRM1552C1H101JZ01D	
C250	CU3547	Chip C	GRM36B103K16PT	
C251	CU3535	Chip C	GRM36B102K50PT	
C252	CU3547	Chip C	GRM36B103K16PT	
C253	CU3519	Chip C	GRM36CH470J50PT	
C254	CU3519	Chip C	GRM36CH470J50PT	
C255	CU3535	Chip C	GRM36B102K50PT	
C257	CU3509	Chip C	GRM36CH080D50PT	
C258	CU3535	Chip C	GRM36B102K50PT	
C259	CU3551	Chip C	GRM36B223K16PT	
C260	CU3504	Chip C	GRM36CJ030C50PT	
C261	CU3535	Chip C	GRM36B102K50PT	
C262	CU3510	Chip C	1005 CH 50V 9PF D	
C263	CU3519	Chip C	GRM36CH470J50PT	
C264	CU3535	Chip C	GRM36B102K50PT	
C265	CU3535	Chip C	GRM36B102K50PT	
C266	CS0453	Chip Tantalum	TMCP0J226MTRF	
C267	CS0451	Chip Tantalum	TMCP0G336MTR	
C268	CU3513	Chip C	GRM36CH150J50PT	
C269	CU3514	Chip C	GRM36CH180J50PT	

Ref No.	Parts No.	Description	Parts Name	Version
C270	CU3551	Chip C	GRM36B223K16PT	
C271	CU3559	Chip C	GRM155B30J105KE18D	
C272	CU3519	Chip C	GRM36CH470J50PT	
C273	CU3547	Chip C	GRM36B103K16PT	
C274	CU3554	Chip C	GRM36B104K10PT	
C275	CU3554	Chip C	GRM36B104K10PT	
C276	CU3554	Chip C	GRM36B104K10PT	
C277	CU3554	Chip C	GRM36B104K10PT	
C278	CU3559	Chip C	GRM155B30J105KE18D	
C279	CU3524	Chip C	GRM1552C1H121JA01D	
C281	CU3547	Chip C	GRM36B103K16PT	
C282	CU3554	Chip C	GRM36B104K10PT	
C283	CS0451	Chip Tantalum	TMCP0G336MTR	
C284	CU3547	Chip C	GRM36B103K16PT	
C285	CU3547	Chip C	GRM36B103K16PT	
C286	CU3514	Chip C	GRM36CH180J50PT	
C287	CU3547	Chip C	GRM36B103K16PT	
C288	CS0451	Chip Tantalum	TMCP0G336MTR	
C290	CS0466	Chip Tantalum	TMCMA0J107MTRF	
C291	CU3535	Chip C	GRM36B102K50PT	
C292	CU3535	Chip C	GRM36B102K50PT	
C293	CU3547	Chip C	GRM36B103K16PT	
C294	CU3521	Chip C	GRM1552C1H680JZ01D	
C295	CU3535	Chip C	GRM36B102K50PT	
C296	CU3554	Chip C	GRM36B104K10PT	
C297	CU3535	Chip C	GRM36B102K50PT	
C299	CU3547	Chip C	GRM36B103K16PT	
C300	CU3515	Chip C	GRM36CH220J50PT	
C302	CU3513	Chip C	GRM36CH150J50PT	
C303	CU3506	Chip C	GRM36CH050C50PT	
C305	CU3554	Chip C	GRM36B104K10PT	
C306	CU3554	Chip C	GRM36B104K10PT	
C307	CU3554	Chip C	GRM36B104K10PT	
C308	CU3554	Chip C	GRM36B104K10PT	
C309	CU3554	Chip C	GRM36B104K10PT	
C310	CU3518	Chip C	GRM36CH390J50PT	
C311	CU3515	Chip C	GRM36CH220J50PT	
C312	CU3519	Chip C	GRM36CH470J50PT	
C313	CU3515	Chip C	GRM36CH220J50PT	
C315	CU3522	Chip C	GRM1552C1H820JD01D	
C316	CU3523	Chip C	GRM1552C1H101JZ01D	
C317	CU3520	Chip C	GRM1552C1H560JD01D	
C318	CU3513	Chip C	GRM36CH150J50PT	
C321	CS0463	Chip Tantalum	10V 47M A	
C322	CS0453	Chip Tantalum	TMCP0J226MTRF	
C323	CU3535	Chip C	GRM36B102K50PT	
C325	CS0397	Chip Tantalum	16V 1UF	
C326	CS0463	Chip Tantalum	10V 47M A	
C327	CU3531	Chip C	GRM36B471K50PT	
C328	CE0374	Chip Tantalum	16V 100UF	
C329	CU3535	Chip C	GRM36B102K50PT	
C330	CU3535	Chip C	GRM36B102K50PT	
C331	CU3507	Chip C	GRM36CH060D50PT	
C332	CU3502	Chip C	GRM36CK010C50PT	
C333	CU3559	Chip C	GRM155B30J105KE18D	
C334	CU3535	Chip C	GRM36B102K50PT	
C335	CU3505	Chip C	GRM36CH040C50PT	
C336	CU3504	Chip C	GRM36CJ030C50PT	
C337	CU3531	Chip C	GRM36B471K50PT	
C338	CS0463	Chip Tantalum	10V 47M A	
C339	CU3506	Chip C	GRM36CH050C50PT	
C340	CU3523	Chip C	GRM1552C1H101JZ01D	
C341	CU3510	Chip Tantalum	1005 CH 50V 9PF D	
C342	CU3513	Chip C	GRM36CH150J50PT	
C344	CU3535	Chip C	GRM36B102K50PT	
C346	CU3531	Chip C	GRM36B471K50PT	
C347	CU3559	Chip C	GRM155B30J105KE18D	
C348	CU3535	Chip C	GRM36B102K50PT	
C349	CS0466	Chip Tantalum	TMCMA0J107MTRF	
C350	CU3514	Chip C	GRM36CH180J50PT	
C351	CU3547	Chip C	GRM36B103K16PT	
C352	CU3535	Chip C	GRM36B102K50PT	
C353	CU3547	Chip C	GRM36B103K16PT	
C354	CU3535	Chip C	GRM36B102K50PT	
C355	CU3547	Chip C	GRM36B103K16PT	
C356	CU3547	Chip C	GRM36B103K16PT	
C357	CU3511	Chip C	GRM36CH100D50PT	
C358	CS0466	Chip Tantalum	TMCMA0J107MTRF	
C359	CU3503	Chip C	GRM36CK020C50PT	
C360	CU3503	Chip C	GRM36CK020C50PT	
C361	CU3506	Chip C	GRM36CH050C50PT	
C362	CU3504	Chip C	GRM36CJ030C50PT	
C363	CU3531	Chip C	GRM36B471K50PT	
C364	CU3547	Chip C	GRM36B103K16PT	
C365	CU3514	Chip C	GRM36CH180J50PT	
C366	CU3547	Chip C	GRM36B103K16PT	
C367	CU3523	Chip C	GRM1552C1H101JZ01D	
C368	CU3514	Chip C	GRM36CH180J50PT	
C369	CU3514	Chip C	GRM36CH180J50PT	

Ref No.	Parts No.	Description	Parts Name	Version
C370	CU3547	Chip C	GRM36B103K16PT	
C371	CU3531	Chip C	GRM36B471K50PT	
C372	CS0453	Chip Tantalum	TMCP0J226MTRF	
C373	CS0451	Chip Tantalum	TMCP0G336MTR	
C374	CU3531	Chip C	GRM36B471K50PT	
C375	CU3554	Chip C	GRM36B104K10PT	
C376	CU3531	Chip C	GRM36B471K50PT	
C377	CU3547	Chip C	GRM36B103K16PT	
C378	CU3531	Chip C	GRM36B471K50PT	
C379	CU3523	Chip C	GRM1552C1H101JZ01D	
C380	CU3523	Chip C	GRM1552C1H101JZ01D	
C381	CU3531	Chip C	GRM36B471K50PT	
C382	CU3547	Chip C	GRM36B103K16PT	
C383	CU3529	Chip C	GRM36B331K50PT	
C386	CU3551	Chip C	GRM36B223K16PT	
C387	CU3551	Chip C	GRM36B223K16PT	
C388	CU3547	Chip C	GRM36B103K16PT	
C389	CU3504	Chip C	GRM36CJ030C50PT	
C390	CU3547	Chip C	GRM36B103K16PT	
C391	CU3535	Chip C	GRM36B102K50PT	
C392	CU3531	Chip C	GRM36B471K50PT	
C393	CU3504	Chip C	GRM36CJ030C50PT	
C395	CU3547	Chip C	GRM36B103K16PT	
C396	CU3559	Chip C	GRM155B30J105KE18D	
C397	CU3505	Chip C	GRM36CH040C50PT	
C398	CU3559	Chip C	GRM155B30J105KE18D	
C399	CU3547	Chip C	GRM36B103K16PT	
C400	CU3554	Chip C	GRM36B104K10PT	
C401	CU3504	Chip C	GRM36CJ030C50PT	
C402	CU3560	Chip C	1005 CH 50V 1.5PF C	
C403	CU3503	Chip C	GRM36CK020C50PT	
C404	CU3505	Chip C	GRM36CH040C50PT	
C405	CS0451	Chip Tantalum	TMCP0G336MTR	
C406	CU3511	Chip C	GRM36CH100D50PT	
C407	CU3547	Chip C	GRM36B103K16PT	
C408	CU3508	Chip C	1005 CH 50V 7PF D	
C409	CU3508	Chip C	1005 CH 50V 7PF D	
C410	CU3531	Chip C	GRM36B471K50PT	
C411	CU3509	Chip C	GRM36CH080D50PT	
C412	CU3515	Chip C	GRM36CH220J50PT	
C414	CU3547	Chip C	GRM36B103K16PT	
C415	CU3554	Chip C	GRM36B104K10PT	
C416	CU3547	Chip C	GRM36B103K16PT	
C417	CU3554	Chip C	GRM36B104K10PT	
C418	CU3554	Chip C	GRM36B104K10PT	
C420	CU3547	Chip C	GRM36B103K16PT	
C421	CU3547	Chip C	GRM36B103K16PT	
C422	CU3522	Chip C	GRM1552C1H820JD01D	
C423	CU3547	Chip C	GRM36B103K16PT	
C424	CU3554	Chip C	GRM36B104K10PT	
C425	CU3518	Chip C	GRM36CH390J50PT	
C426	CU3529	Chip C	GRM36B331K50PT	
C428	CU3547	Chip C	GRM36B103K16PT	
C429	CU3504	Chip C	GRM36CJ030C50PT	
C430	CU3518	Chip C	GRM36CH390J50PT	
C431	CS0451	Chip Tantalum	TMCP0G336MTR	
C432	CU3554	Chip C	GRM36B104K10PT	
C433	CU3554	Chip C	GRM36B104K10PT	
C435	CU3559	Chip C	GRM155B30J105KE18D	
C437	CU3535	Chip C	GRM36B102K50PT	
C439	CU3535	Chip C	GRM36B102K50PT	
C440	CU3502	Chip C	GRM36CK010C50PT	
C441	CU3535	Chip C	GRM36B102K50PT	
C442	CU3535	Chip C	GRM36B102K50PT	
C443	CU3535	Chip C	GRM36B102K50PT	
C444	CU3502	Chip C	GRM36CK010C50PT	
C445	CU3535	Chip C	GRM36B102K50PT	
CN101	UE0590	Cnnector	AXK5S40047YG	
D101	XD0432	Dhip Diode	JDS2S03S	
D102	XD0484	Dhip Diode	RB521CS-30T2R	
D103	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D104	XD0432	Dhip Diode	JDS2S03S	
D105	XD0432	Dhip Diode	JDS2S03S	
D106	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D107	XD0427	Dhip Diode	JDV2S14	
D108	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D109	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D110	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D111	XD0432	Dhip Diode	JDS2S03S	
D112	XD0432	Dhip Diode	JDS2S03S	
D113	XD0494	Dhip Diode	1SS362FV	
D114	XD0427	Dhip Diode	JDV2S14	
D115	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D116	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D117	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D118	XD0433	Dhip Diode	RB715WTL	
D119	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D120	XD0432	Dhip Diode	JDS2S03S	
D121	XD0384	Dhip Diode	JDP2S02S(TPH3)	

Ref No.	Parts No.	Description	Parts Name.	Version
D122	XD0435	Dhip Diode	1SS361FV	
D123	XD0495	Dhip Diode	HVD350B-E	
D124	XD0432	Dhip Diode	JDS2S03S	
D125	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D126	XD0495	Dhip Diode	HVD350B-E	
D127	XD0433	Dhip Diode	RB715WTL	
D128	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D129	XD0433	Dhip Diode	RB715WTL	
D130	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D131	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D132	XD0432	Dhip Diode	JDS2S03S	
D133	XD0432	Dhip Diode	JDS2S03S	
D134	XD0484	Dhip Diode	RB521CS-30T2R	
D135	XD0401	Dhip Diode	DG1M3-5003	
D136	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D137	XD0432	Dhip Diode	JDS2S03S	
D138	XD0432	Dhip Diode	JDS2S03S	
D139	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D141	XD0484	Dhip Diode	RB521CS-30T2R	
D142	XD0432	Dhip Diode	JDS2S03S	
D143	XD0435	Dhip Diode	1SS361FV	
D144	XD0484	Dhip Diode	RB521CS-30T2R	
D145	XD0421	Dhip Diode	1SV323(TPH3,H)	
D146	XD0435	Dhip Diode	1SS361FV	
D147	XD0401	Dhip Diode	DG1M3-5003	
D149	XD0432	Dhip Diode	JDS2S03S	
D150	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D151	XD0432	Dhip Diode	JDS2S03S	
D152	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D153	XD0396	Dhip Diode	VDZT2R 3.9B	
D154	XD0432	Dhip Diode	JDS2S03S	
D156	XD0433	Dhip Diode	RB715WTL	
D157	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D158	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D159	XD0432	Dhip Diode	JDS2S03S	
D160	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D161	XD0384	Dhip Diode	JDP2S02S(TPH3)	
D163	XD0433	Dhip Diode	RB715WTL	
D164	XD0421	Dhip Diode	1SV323(TPH3,H)	
D165	XD0421	Dhip Diode	1SV323(TPH3,H)	
D166	XD0376	Dhip Diode	1SV282 TPH2	
D167	XD0376	Dhip Diode	1SV282 TPH2	
FL101	XC0120	SAW Filter	NSVS1123	
FL102	XC0133	Ceramic Filter	SFECF10M7HA00-R0	
FL103	XC0143	Ceramic Filter	CFWKA455KEFA-R0	
FL104	XC0144	Ceramic Filter	LTC455IW-AA	
FL105	XC0112	Ceramic Filter	CFWKA450KEFA-R0	
IC101	XA1033	IC	BND	
IC102	XA0985	IC	UPC2746TB	
IC103	XA0985	IC	UPC2746TB	
IC104	XA0976	IC	UPC2757TB-E3	
IC105	XA0976	IC	UPC2757TB-E3	
IC106	XA1033	IC	BND	
IC107	XA0666	IC	TK10931V	
IC108	XA0348	IC	TC4W53FU(TE12L)	
IC109	XA1013	IC	3644	
IC110	XA1409	IC	TC1240AECHTR	
IC111	XA0976	IC	UPC2757TB-E3	
IC112	XA0902	IC	M62367	
IC113	XA0666	IC	TK10931V	
IC114	XA1407	IC	TC7WB66FK	
IC115	XA1355	IC	NJM12904RB1-TE1	
IC116	XA1408	IC	TC74VHC74FK	
IC117	XA1352	IC	BU2152FS	
IC119	XA1014	IC	TC75S51FU TE85L	
JK101	UJ0074	Jack	LGP2631-0200F	
L101	QC0803	Chip Inductor	MLG1005S18NJT	
L102	QC0811	Chip Inductor	1005 82NH	
L103	QC0812	Chip Inductor	1005 100NH	
L104	QC0798	Chip Inductor	1005 6.8NH	
L105	QC0780	Chip Inductor	C1608H-12NJ	
L107	QC0794	Chip Inductor	1005 3.3NH	
L108	QC0794	Chip Inductor	1005 3.3NH	
L109	QC0798	Chip Inductor	1005 6.8NH	
L110	QC0732	Chip Inductor	LK10051R0K-B	
L111	QC0958	Chip Inductor	LQW15AN18NG00	
L112	QC0958	Chip Inductor	LQW15AN18NG00	
L114	QC0732	Chip Inductor	LK10051R0K-B	
L115	QC0960	Chip Inductor	LQW15AN62NG00	
L116	QC0945	Chip Inductor	LQW15AN68NG00D	
L117	QC0959	Chip Inductor	LQW15AN40NG00	
L118	QC0736	Chip Inductor	LK10052R2K-B	
L119	QC0812	Chip Inductor	1005 100NH	
L120	QC0812	Chip Inductor	1005 100NH	
L121	QC0956	Chip Inductor	C1608CB62NG	
L122	QC0805	Chip Inductor	1005 27NH	
L123	QC0736	Chip Inductor	LK10052R2K-B	
L124	QC0809	Chip Inductor	1005 56NH	
L125	QC0805	Chip Inductor	1005 27NH	

Ref No.	Parts No.	Description	Parts Name.	Version
L126	QC0813	Chip Inductor	1005 120NH	
L127	QC0806	Chip Inductor	1005 33NH	
L130	QC0809	Chip Inductor	1005 56NH	
L131	QC0814	Chip Inductor	1005 150NH	
L132	QC0813	Chip Inductor	1005 120NH	
L134	QC0806	Chip Inductor	1005 33NH	
L135	QC0806	Chip Inductor	1005 33NH	
L136	QC0808	Chip Inductor	1005 47NH	
L137	QC0732	Chip Inductor	LK10051R0K-B	
L138	QC0812	Chip Inductor	1005 100NH	
L139	QC0806	Chip Inductor	1005 33NH	
L140	QC0806	Chip Inductor	1005 33NH	
L141	QC0507	Chip Inductor	LK16081R0K-T	
L142	QC0815	Chip Inductor	1005 180NH	
L143	QC0813	Chip Inductor	1005 120NH	
L144	QC0810	Chip Inductor	1005 68NH	
L145	QC0812	Chip Inductor	1005 100NH	
L146	QC0815	Chip Inductor	1005 180NH	
L147	QC0815	Chip Inductor	1005 180NH	
L148	QC0957	Chip Inductor	LQW15AN12NG00	
L149	QC0811	Chip Inductor	1005 82NH	
L150	QC0805	Chip Inductor	1005 27NH	
L151	QC0804	Chip Inductor	MLG1005S22NJT	
L152	QC0799	Chip Inductor	1005 8.2NH	
L154	QC0804	Chip Inductor	MLG1005S22NJT	
L155	QC0803	Chip Inductor	MLG1005S18NJT	
L156	QC0799	Chip Inductor	1005 8.2NH	
L157	QC0807	Chip Inductor	1005 39NH	
L158	QC0732	Chip Inductor	LK10051R0K-B	
L159	QC0732	Chip Inductor	LK10051R0K-B	
L160	QC0809	Chip Inductor	1005 56NH	
L161	QC0804	Chip Inductor	MLG1005S22NJT	
L162	QC0799	Chip Inductor	1005 8.2NH	
L163	QC0799	Chip Inductor	1005 8.2NH	
L164	QC0801	Chip Inductor	MLG1005S12NJT	
L165	QC0796	Chip Inductor	1005 4.7NH	
L166	QC0738	Chip Inductor	LQH32CN100K33L	
L167	QC0808	Chip Inductor	1005 47NH	
L168	QC0803	Chip Inductor	MLG1005S18NJT	
L170	QC0958	Chip Inductor	LQW15AN18NG00	
L171	QC0797	Chip Inductor	1005 5.6NH	
L172	QC0799	Chip Inductor	1005 8.2NH	
L173	QC0799	Chip Inductor	1005 8.2NH	
L174	QC0798	Chip Inductor	1005 6.8NH	
L175	QC0798	Chip Inductor	1005 6.8NH	
L176	QC0806	Chip Inductor	1005 33NH	
L177	QC0816	Chip Inductor	1005 220NH	
L178	QC0816	Chip Inductor	1005 220NH	
L179	QC0804	Chip Inductor	MLG1005S22NJT	
L180	QC0955	Chip Inductor	C1608H-15NG	
L181	QC0784	Chip Inductor	C1608H-27NJ	
L182	QC0808	Chip Inductor	1005 47NH	
L183	QC0806	Chip Inductor	1005 33NH	
L184	QC0806	Chip Inductor	1005 33NH	
L186	QC0732	Chip Inductor	LK10051R0K-B	
Q101	XT0210	Chip Transistor	2SC6026MFV-GR	
Q102	XT0180	Chip Transistor	2SC5066FT-Y(TE85L)	
Q103	XT0180	Chip Transistor	2SC5066FT-Y(TE85L)	
Q104	XT0180	Chip Transistor	2SC5066FT-Y(TE85L)	
Q105	XU0224	Chip Transistor	MT6C03AE	
Q106	XU0212	Chip Transistor	RN2115FV	
Q107	XE0069	Chip FET	SSM3K15FV(TPL3,Z)	
Q108	XE0098	Chip FET	2SK1875-BL(TE85L,F)	
Q109	XE0069	Chip FET	SSM3K15FV(TPL3,Z)	
Q110	XT0178	Chip Transistor	2SC4915-O(TE85L)	
Q111	XT0180	Chip Transistor	2SC5066FT-Y(TE85L)	
Q112	XT0213	Chip Transistor	2SC5659T2L	
Q113	XT0180	Chip Transistor	2SC5066FT-Y(TE85L)	
Q114	XU0224	Chip Transistor	MT6C03AE	
Q115	XT0180	Chip Transistor	2SC5066FT-Y(TE85L)	
Q116	XT0214	Chip Transistor	HN2C01FE-GR(T5L,F)	
Q117	XT0210	Chip Transistor	2SC6026MFV-GR	
Q118	XE0069	Chip FET	SSM3K15FV(TPL3,Z)	
Q119	XT0210	Chip Transistor	2SC6026MFV-GR	
Q120	XU0210	Chip Transistor	RN1107FV	
Q121	XT0180	Chip Transistor	2SC5066FT-Y(TE85L)	
Q122	XT0180	Chip Transistor	2SC5066FT-Y(TE85L)	
Q123	XT0213	Chip Transistor	2SC5659T2L	
Q124	XU0226	Chip Transistor	RN1711(TE85L,F)	
Q125	XU0207	Chip Transistor	EMA8T2R	
Q126	XT0210	Chip Transistor	2SC6026MFV-GR	
Q127	XU0210	Chip Transistor	RN1107FV	
Q128	XE0058	Chip FET	MCH6305-TL	
Q129	XT0195	Chip Transistor	MCH6102-TL	
Q130	XT0240	Chip Transistor	2SC4250FV	
Q131	XT0178	Chip Transistor	2SC4915-O(TE85L)	
Q132	XT0195	Chip Transistor	MCH6102-TL	
Q133	XU0210	Chip Transistor	RN1107FV	
Q134	XU0212	Chip Transistor	RN2115FV	

Ref No.	Parts No.	Description	Parts Name.	Version
Q135	XT0214	Chip Transistor	HN2C01FE-GR(T5L,F)	
Q136	XU0224	Chip Transistor	MT6C03AE	
Q137	XT0180	Chip Transistor	2SC5066FT-Y(TE85L)	
Q138	XU0207	Chip Transistor	EMA8T2R	
Q139	XU0207	Chip Transistor	EMA8T2R	
Q140	XU0207	Chip Transistor	EMA8T2R	
Q141	XU0207	Chip Transistor	EMA8T2R	
Q142	XU0207	Chip Transistor	EMA8T2R	
Q143	XU0207	Chip Transistor	EMA8T2R	
Q144	XU0207	Chip Transistor	EMA8T2R	
Q145	XU0207	Chip Transistor	EMA8T2R	
Q146	XU0207	Chip Transistor	EMA8T2R	
Q147	XT0178	Chip Transistor	2SC4915-O(TE85L)	
Q148	XT0180	Chip Transistor	2SC5066FT-Y(TE85L)	
Q149	XT0212	Chip Transistor	2SA1955FV-A(TPL3)	
Q150	XT0212	Chip Transistor	2SA1955FV-A(TPL3)	
Q151	XU0207	Chip Transistor	EMA8T2R	
Q152	XU0207	Chip Transistor	EMA8T2R	
Q153	XU0207	Chip Transistor	EMA8T2R	
Q155	XT0214	Chip Transistor	HN2C01FE-GR(T5L,F)	
Q157	XT0239	Chip Transistor	2SC5820WU-TL-E	
Q158	XT0239	Chip Transistor	2SC5820WU-TL-E	
Q160	XT0178	Chip Transistor	2SC4915-O(TE85L)	
Q161	XT0180	Chip Transistor	2SC5066FT-Y(TE85L)	
Q162	XT0180	Chip Transistor	2SC5066FT-Y(TE85L)	
Q163	XT0180	Chip Transistor	2SC5066FT-Y(TE85L)	
Q164	XU0207	Chip Transistor	EMA8T2R	
R101	RK3526	Chip R	1005 1/16W 100 OHM J	
R102	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R103	RK3522	Chip R	1005 1/16W 47 OHM J	
R104	RK3522	Chip R	1005 1/16W 47 OHM J	
R105	RK3526	Chip R	1005 1/16W 100 OHM J	
R106	RK3546	Chip R	1005 1/16W 4.7K OHMJ	
R107	RK3550	Chip R	1005 1/16W 10K OHM J	
R108	RK3522	Chip R	1005 1/16W 47 OHM J	
R109	RK3550	Chip R	1005 1/16W 10K OHM J	
R110	RK3526	Chip R	1005 1/16W 100 OHM J	
R111	RK3550	Chip R	1005 1/16W 10K OHM J	
R112	RK3559	Chip R	1005 1/16W 56K OHM J	
R113	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R114	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R115	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R116	RK3550	Chip R	1005 1/16W 10K OHM J	
R117	RK3562	Chip R	1005 1/16W 100K OHMJ	
R118	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R119	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R120	RK3561	Chip R	1005 1/16W 82K OHM J	
R121	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R122	RK3519	Chip R	1005 1/16W 27 OHM J	
R123	RK3519	Chip R	1005 1/16W 27 OHM J	
R124	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R125	RK3534	Chip R	1005 1/16W 470 OHM J	
R126	RK3521	Chip R	1005 1/16W 39 OHM J	
R127	RK3533	Chip R	1005 1/16W 390 OHM J	
R128	RK3550	Chip R	1005 1/16W 10K OHM J	
R129	RK3532	Chip R	1005 1/16W 330 OHM J	
R130	RK3518	Chip R	1005 1/16W 22 OHM J	
R131	RK3521	Chip R	1005 1/16W 39 OHM J	
R132	RK3521	Chip R	1005 1/16W 39 OHM J	
R133	RK3516	Chip R	1005 1/16W 15 OHM J	
R134	RK3544	Chip R	1005 1/16W 3.3K OHMJ	
R135	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R136	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R137	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R138	RK3561	Chip R	1005 1/16W 82K OHM J	
R139	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R140	RK3514	Chip R	1005 1/16W 10 OHM J	
R141	RK3518	Chip R	1005 1/16W 22 OHM J	
R142	RK3532	Chip R	1005 1/16W 330 OHM J	
R143	RK3516	Chip R	1005 1/16W 15 OHM J	
R144	RK3526	Chip R	1005 1/16W 100 OHM J	
R145	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R146	RK3526	Chip R	1005 1/16W 100 OHM J	
R147	RK3518	Chip R	1005 1/16W 22 OHM J	
R148	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R149	RK3530	Chip R	1005 1/16W 220 OHM J	
R150	RK3533	Chip R	1005 1/16W 390 OHM J	
R151	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R152	RK3514	Chip R	1005 1/16W 10 OHM J	
R153	RK3514	Chip R	1005 1/16W 10 OHM J	
R154	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R155	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R156	RK3550	Chip R	1005 1/16W 10K OHM J	
R157	RK3522	Chip R	1005 1/16W 47 OHM J	
R158	RK3518	Chip R	1005 1/16W 22 OHM J	
R159	RK3568	Chip R	1005 1/16W 330K OHMJ	
R160	RK3562	Chip R	1005 1/16W 100K OHMJ	
R161	RK3526	Chip R	1005 1/16W 100 OHM J	
R162	RK3526	Chip R	1005 1/16W 100 OHM J	

Ref No.	Parts No.	Description	Parts Name.	Version
R163	RK3530	Chip R	1005 1/16W 220 OHM J	
R164	RK3526	Chip R	1005 1/16W 100 OHM J	
R165	RK3526	Chip R	1005 1/16W 100 OHM J	
R166	RK3526	Chip R	1005 1/16W 100 OHM J	
R167	RK3518	Chip R	1005 1/16W 22 OHM J	
R168	RK3562	Chip R	1005 1/16W 100K OHMJ	
R169	RK3516	Chip R	1005 1/16W 15 OHM J	
R170	RK3550	Chip R	1005 1/16W 10K OHM J	
R171	RK3550	Chip R	1005 1/16W 10K OHM J	
R172	RK3518	Chip R	1005 1/16W 22 OHM J	
R173	RK3546	Chip R	1005 1/16W 4.7K OHMJ	
R174	RK3523	Chip R	1005 1/16W 56 OHM J	
R175	RK3514	Chip R	1005 1/16W 10 OHM J	
R176	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R177	RK3532	Chip R	1005 1/16W 330 OHM J	
R178	RK3532	Chip R	1005 1/16W 330 OHM J	
R179	RK3533	Chip R	1005 1/16W 390 OHM J	
R180	RK3550	Chip R	1005 1/16W 10K OHM J	
R181	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R182	RK3522	Chip R	1005 1/16W 47 OHM J	
R183	RK3531	Chip R	1005 1/16W 270 OHM J	
R184	RK3566	Chip R	1005 1/16W 220K OHMJ	
R185	RK3560	Chip R	1005 1/16W 68K OHM J	
R186	RK3522	Chip R	1005 1/16W 47 OHM J	
R187	RK3550	Chip R	1005 1/16W 10K OHM J	
R188	RK3532	Chip R	1005 1/16W 330 OHM J	
R189	RK3546	Chip R	1005 1/16W 4.7K OHMJ	
R190	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R191	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R192	RK3518	Chip R	1005 1/16W 22 OHM J	
R193	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R194	RK3526	Chip R	1005 1/16W 100 OHM J	
R195	RK3530	Chip R	1005 1/16W 220 OHM J	
R196	RK3550	Chip R	1005 1/16W 10K OHM J	
R197	RK3544	Chip R	1005 1/16W 3.3K OHMJ	
R198	RK3526	Chip R	1005 1/16W 100 OHM J	
R199	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R200	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R201	RK3563	Chip R	1005 1/16W 120K OHMJ	
R202	RK3514	Chip R	1005 1/16W 10 OHM J	
R203	RK3550	Chip R	1005 1/16W 10K OHM J	
R204	RK3526	Chip R	1005 1/16W 100 OHM J	
R205	RK3562	Chip R	1005 1/16W 100K OHMJ	
R206	RK3562	Chip R	1005 1/16W 100K OHMJ	
R207	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R208	RK3522	Chip R	1005 1/16W 47 OHM J	
R209	RK3526	Chip R	1005 1/16W 100 OHM J	
R210	RK3534	Chip R	1005 1/16W 470 OHM J	
R211	RK3550	Chip R	1005 1/16W 10K OHM J	
R212	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R213	RK3526	Chip R	1005 1/16W 100 OHM J	
R214	RK3522	Chip R	1005 1/16W 47 OHM J	
R215	RK3550	Chip R	1005 1/16W 10K OHM J	
R216	RK3518	Chip R	1005 1/16W 22 OHM J	
R217	RK3562	Chip R	1005 1/16W 100K OHMJ	
R218	RK3544	Chip R	1005 1/16W 3.3K OHMJ	
R219	RK3544	Chip R	1005 1/16W 3.3K OHMJ	
R220	RK3562	Chip R	1005 1/16W 100K OHMJ	
R221	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R222	RK3550	Chip R	1005 1/16W 10K OHM J	
R223	RK3562	Chip R	1005 1/16W 100K OHMJ	
R224	RK3522	Chip R	1005 1/16W 47 OHM J	
R225	RK3501	Chip R	1005 1/16W 0 OHM J	
R226	RK3526	Chip R	1005 1/16W 100 OHM J	
R227	RK3553	Chip R	1005 1/16W 18K OHM J	
R229	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R230	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R231	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R232	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R233	RK3562	Chip R	1005 1/16W 100K OHMJ	
R234	RK3534	Chip R	1005 1/16W 470 OHM J	
R235	RK3566	Chip R	1005 1/16W 220K OHMJ	
R237	RK3574	Chip R	1005 1/16W 1.0M OHMJ	
R238	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R239	RK3562	Chip R	1005 1/16W 100K OHMJ	
R240	RK3562	Chip R	1005 1/16W 100K OHMJ	
R241	RK3526	Chip R	1005 1/16W 100 OHM J	
R242	RK3565	Chip R	1005 1/16W 180K OHMJ	
R243	RK3562	Chip R	1005 1/16W 100K OHMJ	
R244	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R245	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R246	RK3550	Chip R	1005 1/16W 10K OHM J	
R247	RK3514	Chip R	1005 1/16W 10 OHM J	
R248	RK3514	Chip R	1005 1/16W 10 OHM J	
R249	RK3559	Chip R	1005 1/16W 56K OHM J	
R250	RK3550	Chip R	1005 1/16W 10K OHM J	
R251	RK3546	Chip R	1005 1/16W 4.7K OHMJ	
R252	RK3562	Chip R	1005 1/16W 100K OHMJ	
R253	RK3542	Chip R	1005 1/16W 2.2K OHMJ	

Ref No.	Parts No.	Description	Parts Name.	Version
R254	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R255	RK3546	Chip R	1005 1/16W 4.7K OHMJ	
R256	RK3526	Chip R	1005 1/16W 100 OHM J	
R257	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R258	RK3558	Chip R	1005 1/16W 47K OHM J	
R259	RK3526	Chip R	1005 1/16W 100 OHM J	
R260	RK3532	Chip R	1005 1/16W 330 OHM J	
R261	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R262	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R263	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R264	RK3528	Chip R	1005 1/16W 150 OHM J	
R265	RK3532	Chip R	1005 1/16W 330 OHM J	
R266	RK3562	Chip R	1005 1/16W 100K OHMJ	
R267	RK3546	Chip R	1005 1/16W 4.7K OHMJ	
R268	RK3550	Chip R	1005 1/16W 10K OHM J	
R269	RK3562	Chip R	1005 1/16W 100K OHMJ	
R270	RK3562	Chip R	1005 1/16W 100K OHMJ	
R271	RK3562	Chip R	1005 1/16W 100K OHMJ	
R272	RK3532	Chip R	1005 1/16W 330 OHM J	
R273	RK3532	Chip R	1005 1/16W 330 OHM J	
R274	RK0159	Chip R	1608 1/10W 0.33OHM J	
R275	RK3558	Chip R	1005 1/16W 47K OHM J	
R276	RK3501	Chip R	1005 1/16W 0 OHM J	
R277	RK3546	Chip R	1005 1/16W 4.7K OHMJ	
R278	RK3547	Chip R	1005 1/16W 5.6K OHMJ	
R279	RK3501	Chip R	1005 1/16W 0 OHM J	
R280	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R281	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R282	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R283	RK3550	Chip R	1005 1/16W 10K OHM J	
R284	RK3526	Chip R	1005 1/16W 100 OHM J	
R285	RK3550	Chip R	1005 1/16W 10K OHM J	
R286	RK3550	Chip R	1005 1/16W 10K OHM J	
R287	RK3550	Chip R	1005 1/16W 10K OHM J	
R288	RK3526	Chip R	1005 1/16W 100 OHM J	
R289	RK3550	Chip R	1005 1/16W 10K OHM J	
R290	RK3532	Chip R	1005 1/16W 330 OHM J	
R291	RK3550	Chip R	1005 1/16W 10K OHM J	
R293	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R294	RK3526	Chip R	1005 1/16W 100 OHM J	
R295	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R296	RK3559	Chip R	1005 1/16W 56K OHM J	
R297	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R298	RK3514	Chip R	1005 1/16W 10 OHM J	
R299	RK3559	Chip R	1005 1/16W 56K OHM J	
R300	RK3550	Chip R	1005 1/16W 10K OHM J	
R302	RK3526	Chip R	1005 1/16W 100 OHM J	
R303	RK3562	Chip R	1005 1/16W 100K OHMJ	
R304	RK3526	Chip R	1005 1/16W 100 OHM J	
R305	RK3518	Chip R	1005 1/16W 22 OHM J	
R306	RK3522	Chip R	1005 1/16W 47 OHM J	
R307	RK3514	Chip R	1005 1/16W 10 OHM J	
R308	RK3566	Chip R	1005 1/16W 220K OHMJ	
R309	RK3550	Chip R	1005 1/16W 10K OHM J	
R310	RK3522	Chip R	1005 1/16W 47 OHM J	
R311	RK3516	Chip R	1005 1/16W 15 OHM J	
R312	RK3516	Chip R	1005 1/16W 15 OHM J	
R313	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R314	RK3522	Chip R	1005 1/16W 47 OHM J	
R315	RK3550	Chip R	1005 1/16W 10K OHM J	
R316	RK3532	Chip R	1005 1/16W 330 OHM J	
R317	RK3532	Chip R	1005 1/16W 330 OHM J	
R318	RK3526	Chip R	1005 1/16W 100 OHM J	
R319	RK3562	Chip R	1005 1/16W 100K OHMJ	
R320	RK3550	Chip R	1005 1/16W 10K OHM J	
R321	RK3526	Chip R	1005 1/16W 100 OHM J	
R322	RK3558	Chip R	1005 1/16W 47K OHM J	
R323	RK3558	Chip R	1005 1/16W 47K OHM J	
R324	RK3550	Chip R	1005 1/16W 10K OHM J	
R325	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R326	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R327	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R328	RK3522	Chip R	1005 1/16W 47 OHM J	
R329	RK3522	Chip R	1005 1/16W 47 OHM J	
R330	RK3562	Chip R	1005 1/16W 100K OHMJ	
R331	RK3553	Chip R	1005 1/16W 18K OHM J	
R332	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R333	RK3514	Chip R	1005 1/16W 10 OHM J	
R334	RK3550	Chip R	1005 1/16W 10K OHM J	
R335	RK3550	Chip R	1005 1/16W 10K OHM J	
R336	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R337	RK3518	Chip R	1005 1/16W 22 OHM J	
R339	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R340	RK3518	Chip R	1005 1/16W 22 OHM J	
R341	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R342	RK3559	Chip R	1005 1/16W 56K OHM J	
R343	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R344	RK3562	Chip R	1005 1/16W 100K OHMJ	
R345	RK3568	Chip R	1005 1/16W 330K OHMJ	

Ref No.	Parts No.	Description	Parts Name.	Version
R346	RK3550	Chip R	1005 1/16W 10K OHM J	
R347	RK3550	Chip R	1005 1/16W 10K OHM J	
R348	RK3547	Chip R	1005 1/16W 5.6K OHMJ	
R349	RK3514	Chip R	1005 1/16W 10 OHM J	
R350	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R351	RK3562	Chip R	1005 1/16W 100K OHMJ	
R352	RK3556	Chip R	1005 1/16W 33K OHM J	
R353	RK3550	Chip R	1005 1/16W 10K OHM J	
R354	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R355	RK3544	Chip R	1005 1/16W 3.3K OHMJ	
R356	RK3518	Chip R	1005 1/16W 22 OHM J	
R357	RK3565	Chip R	1005 1/16W 180K OHMJ	
R358	RK3514	Chip R	1005 1/16W 10 OHM J	
R359	RK3547	Chip R	1005 1/16W 5.6K OHMJ	
R360	RK3550	Chip R	1005 1/16W 10K OHM J	
R361	RK3546	Chip R	1005 1/16W 4.7K OHMJ	
R362	RK3501	Chip R	1005 1/16W 0 OHM J	
R363	RK3562	Chip R	1005 1/16W 100K OHMJ	
R364	RK3530	Chip R	1005 1/16W 220 OHM J	
R365	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R366	RK3547	Chip R	1005 1/16W 5.6K OHMJ	
R367	RK3562	Chip R	1005 1/16W 100K OHMJ	
R368	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R369	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R370	RK3550	Chip R	1005 1/16W 10K OHM J	
R371	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R372	RK3562	Chip R	1005 1/16W 100K OHMJ	
R373	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R374	RK3547	Chip R	1005 1/16W 5.6K OHMJ	
R375	RK3562	Chip R	1005 1/16W 100K OHMJ	
R376	RK3544	Chip R	1005 1/16W 3.3K OHMJ	
R377	RK3530	Chip R	1005 1/16W 220 OHM J	
R378	RK3501	Chip R	1005 1/16W 0 OHM J	
R379	RK3501	Chip R	1005 1/16W 0 OHM J	
R380	RK3556	Chip R	1005 1/16W 33K OHM J	
R381	RK3526	Chip R	1005 1/16W 100 OHM J	
R382	RK3550	Chip R	1005 1/16W 10K OHM J	
R383	RK3530	Chip R	1005 1/16W 220 OHM J	
R384	RK3550	Chip R	1005 1/16W 10K OHM J	
R385	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R386	RK3526	Chip R	1005 1/16W 100 OHM J	
R387	RK3550	Chip R	1005 1/16W 10K OHM J	
R388	RK3526	Chip R	1005 1/16W 100 OHM J	
R389	RK3550	Chip R	1005 1/16W 10K OHM J	
R390	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R391	RK3518	Chip R	1005 1/16W 22 OHM J	
R392	RK3562	Chip R	1005 1/16W 100K OHMJ	
R393	RK3562	Chip R	1005 1/16W 100K OHMJ	
R395	RK3501	Chip R	1005 1/16W 0 OHM J	
R396	RK3550	Chip R	1005 1/16W 10K OHM J	
R397	RK3558	Chip R	1005 1/16W 47K OHM J	
R399	RK3558	Chip R	1005 1/16W 47K OHM J	
R400	RK3563	Chip R	1005 1/16W 120K OHMJ	
R401	RK3542	Chip R	1005 1/16W 2.2K OHMJ	
R402	RK3554	Chip R	1005 1/16W 22K OHM J	
R403	RK3501	Chip R	1005 1/16W 0 OHM J	
R404	RK3501	Chip R	1005 1/16W 0 OHM J	
R405	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R406	RK3539	Chip R	1005 1/16W 1.2K OHMJ	
R407	RK3538	Chip R	1005 1/16W 1.0K OHMJ	
R408	RK3532	Chip R	1005 1/16W 330 OHM J	
R409	RK3532	Chip R	1005 1/16W 330 OHM J	
W501	MACL12AA	Wire	#30A02-120-02	
X101	XQ0194	Crystal	NT3225SA12.8M	
X102	XK0011	Discriminator	CDSCB10M7GF126-R0	
X103	XQ0136A	Crystal	TOP-B 44.595MHZ-A	
X104	XK0013	Discriminator	CDBKB455KCAY77-R0	
X105	XQ0231	Crystal	DSO221SR42.8MHZ	
X106	XK0012	Discriminator	CDBKB450KCAY77-R0	
XF101	XF0048	Crystal Filter	45S30B2	
XF102	XF0082	Crystal Filter	DSF753S 51.65MHZ	

Mecanical Unit

Ref No.	Parts No.	Description	Parts Name.	Version
	AF0020Z		OPH M2+3 FE/N 1	
	AN0012Z		RND M7X0.75 DR/BN	
	AN0043		INSERT FB2001	
	AP0011		PH P2+6 FE/B.ZN	
	AP0041		BIND P 2+15-10 BC	
	AP0042		BIND P 2+10-6 BC	
	AX0009		OPH P2+6 FE/N 1	
	DD0020		BLIND SHEET A	
	DP0199		LCD PANEL	
	EA0117Z		EA0117Z	
	ES0039		32-8BB-10P	
	FG0466A		PTT RUBBER	
	FG0467		DC CAP	
	FG0470		ON AIR RUBBER	
	FG0492		KEY BOAD X11	
	FG0494		ANT CAP	
	FG0498		CUSHION	
	FG0502		JACK CAP	
	FM0301		6NUT L6.1 M2+3	
	FM0317		VOL CHASSIS	
	FM0327		ANT.GND DJX11	
	FP0188		JACK PANEL DR135	
	FP0296		SP BASE	
	KB0133		REAR CASE	
	KZ0228		FRONT CASE ASSY	
	NK0082		VOL KNOB	
	NK0083		SQL KNOB	
	SP0013		KNOB SPRING #7800	
	TG0046		SP NET DJG7	
	UE0551		SMA ANT CONNECTOR	
	YX0025		ANT. TAPE	
	YX0050		LCD TAPE	

Packing Unit

Ref No.	Parts No.	Description	Parts Name.	Version
	EA0154		ANT. EA154	
	BH0020A		Belt-clip unit	
	#G1500		HAND STRAP ASSY	
	#G1646		EDC174 P VAG	
	#G1644		EDH-36 P BAG	
	EG0074		EBP-74 P BAG	
	FM0324		LOCK LEVER	
	EDC-140		AC ADAPTOR	
	PS0612		INSTRUCTION DJX11T	
	PR0514		E-10x49 LABEL(W)	
	DS0446		SPEC SHEET	
	PR0478		SERIAL SEAL	
	HK0713		Individual Box DJX11	
	HU0270		INNER MAIN	
	HU0271		INNER SIDE	
	HM0250		10-CARTON BOX	
	HU0246		10-INNER	
	HP0031		P BAG	

ADJUSTMENT

Adjustment Mode

How to enter the Adjustment mode

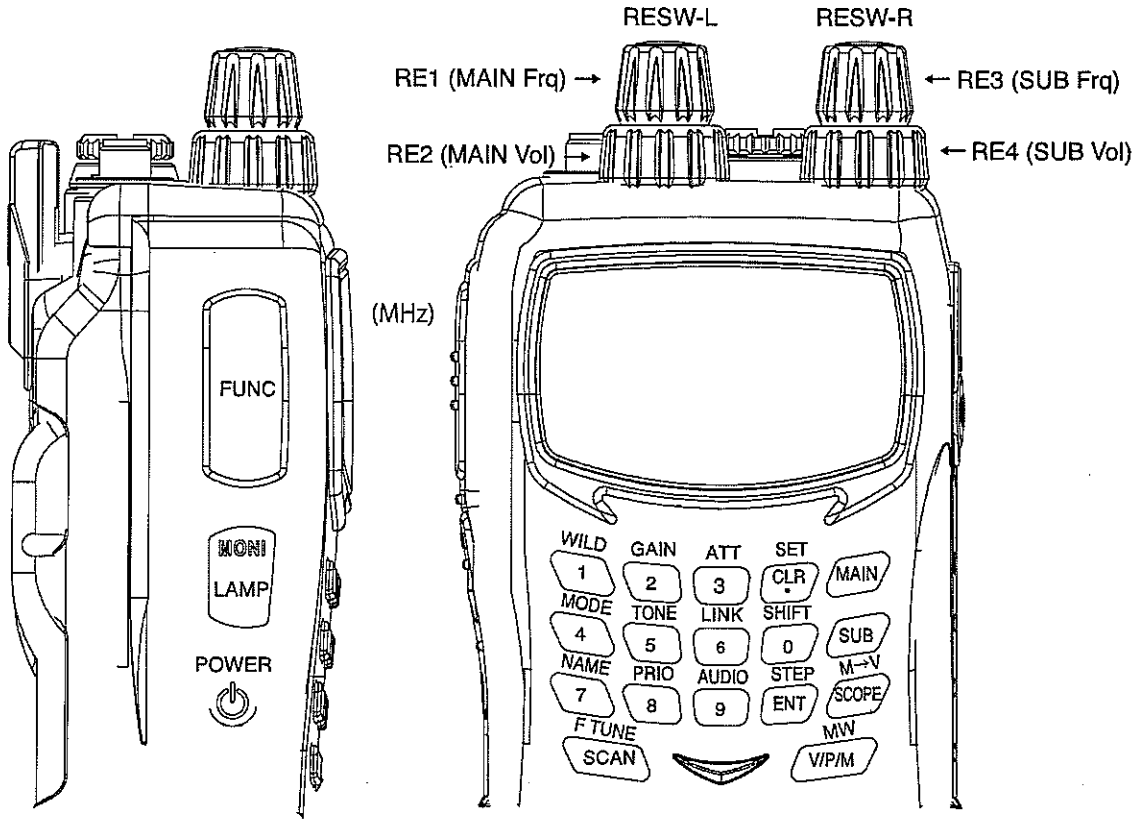
After Key lock, Push 3→1→2→3→2→1

● After adjust each item, Press the V/P/M Key.

● When want to change the display, press the MAIN key or SUB key

Adjustment Points

SQL : After push the RE, Rotate the RE.



Power Supply : 6.0±0.1 V

Mod:Frequency : 1KHz

Dev : FM 3.5KHz/ AM 30%/ WFM 50.5KHz

	Item	Display	Spec	Display Frq	Adj Key
0	Aging	AGING	Automatic operation		V/P/M Key
1	BFO (USB)	USB	456.5KHz ±300Hz	7.105MHz	RE3 TP518
2	BFO (LSB)	LSB	453.5KHz ±300Hz	7.105MHz	RE3 TP518
3	Ref Freq	FrEq	339.56MHz ±200Hz	435.17MHz	RE3 TP101
4	3rd Lo AM L Freq	TVCXO	44.60495MHz ±100Hz	7.1MHz	RE3 TP109
5	3rd Lo AM M Freq	MVCXO	44.600MHz ±100Hz	7.105MHz	RE3 TP109
6	3rd Lo AM H Freq	BVCXO	44.595MHz ±100Hz	7.11MHz	RE3 TP109
13	Offset F Counter	Fadj	1.5GHz No Mod 100dBu	1.5GHz	V/P/M Key
14	M SQL 1 Adj (MBF1)	MSQL 1L	NFM -14dBu	25.17MHz	V/P/M Key
15	M SQL 9 Adj (MBF1)	MSQL 1H	NFM -6dBu	25.17MHz	V/P/M Key
16	M SQL 1 Adj (MBF2)	MSQL 2L	NFM -14dBu	70.17MHz	V/P/M Key
17	M SQL 9 Adj (MBF2)	MSQL 2H	NFM -6dBu	70.17MHz	V/P/M Key
18	M SQL 1 Adj (MBF3)	MSQL 3L	NFM -14dBu	145.17MHz	V/P/M Key
19	M SQL 9 Adj (MBF3)	MSQL 3H	NFM -6dBu	145.17MHz	V/P/M Key
20	S SQL 1 Adj (SBF3)	SSQL VL	NFM -14dBu	145.17MHz	V/P/M Key
21	S SQL 9 Adj (SBF3)	SSQL VH	NFM -6dBu	145.17MHz	V/P/M Key
22	S SMT Min Adj (NFM)	SSMT VL	NFM -5dBu	145.17MHz	V/P/M Key
23	S SMT Max Adj (NFM)	SSMT VH	NFM 14dBu	145.17MHz	V/P/M Key
24	M SQL 1 Adj (MBF4)	MSQL 4L	NFM -10dBu	225.17MHz	V/P/M Key
25	M SQL 9 Adj (MBF4)	MSQL 4H	NFM -2dBu	225.17MHz	V/P/M Key
26	M SQL 1 Adj (MBF5)	MSQL 5L	NFM -13dBu	435.17MHz	V/P/M Key
27	M SQL 9 Adj (MBF5)	MSQL 5H	NFM -5dBu	435.17MHz	V/P/M Key
28	M SMT Min Adj (NFM)	MSMT NL	NFM -5dBu	435.17MHz	V/P/M Key
29	M SMT Max Adj (NFM)	MSMT NH	NFM 14dBu	435.17MHz	V/P/M Key
30	S SQL 1 Adj (SBF5)	SSQL UL	NFM -13dBu	435.17MHz	V/P/M Key
31	S SQL 9 Adj (SBF5)	SSQL UH	NFM -5dBu	435.17MHz	V/P/M Key
32	S SMT Min Adj (NFM)	SSMT NL	NFM -5dBu	435.17MHz	V/P/M Key
33	S SMT Max Adj (NFM)	SSMT NH	NFM 14dBu	435.17MHz	V/P/M Key
34	M SQL 1 Adj (MBF6)	MSQL 6L	NFM -7dBu	767.17MHz	V/P/M Key
35	M SQL 9 Adj (MBF6)	MSQL 6H	NFM 1dBu	767.17MHz	V/P/M Key
36	M SQL 1 Adj (MBF7)	MSQL 7L	NFM -7dBu	1280.17MHz	V/P/M Key
37	M SQL 9 Adj (MBF7)	MSQL 7H	NFM 1dBu	1280.17MHz	V/P/M Key

No4~No6 must be used the jig.

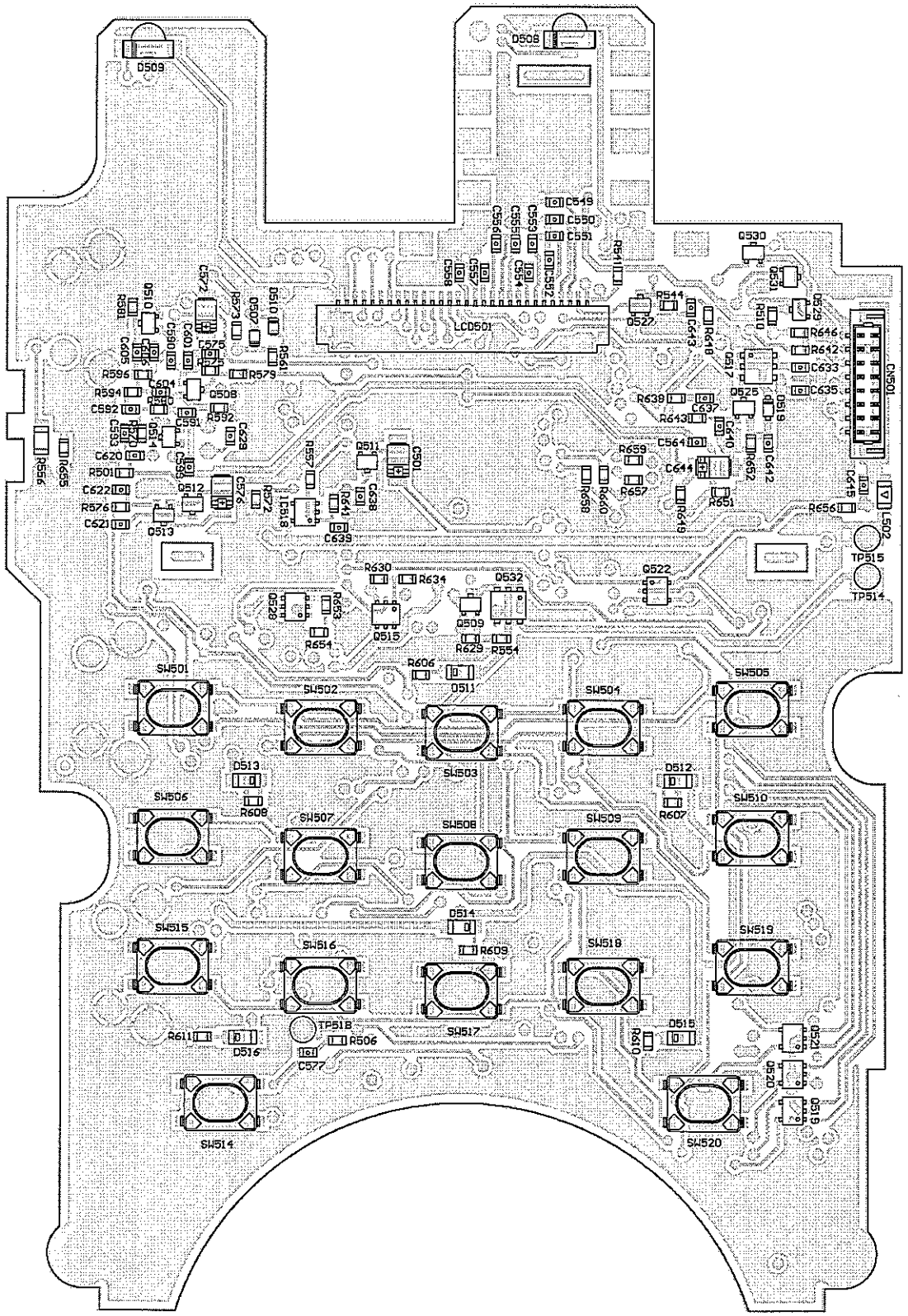
	Item	Display	Spec	Display Frq	Adj Key
38	M SQL 1 Adj (AM)	MSQL AL	AM 10dBu-	119.17MHz	V/P/M Key
39	M SQL 9 Adj (AM)	MSQL AH	AM -2dBu	119.17MHz	V/P/M Key
40	M SMT Min Adj (AM)	MSMT AL	AM 4dBu	119.17MHz	V/P/M Key
41	M SMT Max Adj (AM)	MSMT AH	AM 13dBu	119.17MHz	V/P/M Key
42	S SQL 1 Adj (AM)	SSQL AL	AM -10dBu	119.17MHz	V/P/M Key
43	S SQL 9 Adj (AM)	SSQL AH	AM -2dBu	119.17MHz	V/P/M Key
44	S SMT Min Adj (AM)	SSMT AL	AM 6dBu	119.17MHz	V/P/M Key
45	S SMT Max Adj (AM)	SSMT AH	AM 14dBu	119.17MHz	V/P/M Key
46	M SQL 1 Adj (WFM)	MSQL WL	WFM -7dBu	84.5MHz	V/P/M Key
47	M SQL 9 Adj (WFM)	MSQL WH	WFM 1dBu	84.5MHz	V/P/M Key
48	M SMT 1 Adj (WFM)	MSMT WL	WFM 10dBu	84.5MHz	V/P/M Key
49	M SMT 9 Adj (WFM)	MSMT WH	WFM 25dBu	84.5MHz	V/P/M Key
50	Battery Display	DC IN	DC 6.0V	350.17MHz	V/P/M Key
51	Descrambling level	SCR	NFM 30dBu No strange sound	350.17MHz	RE3

No need to adjust No.51.(Descrambling level).

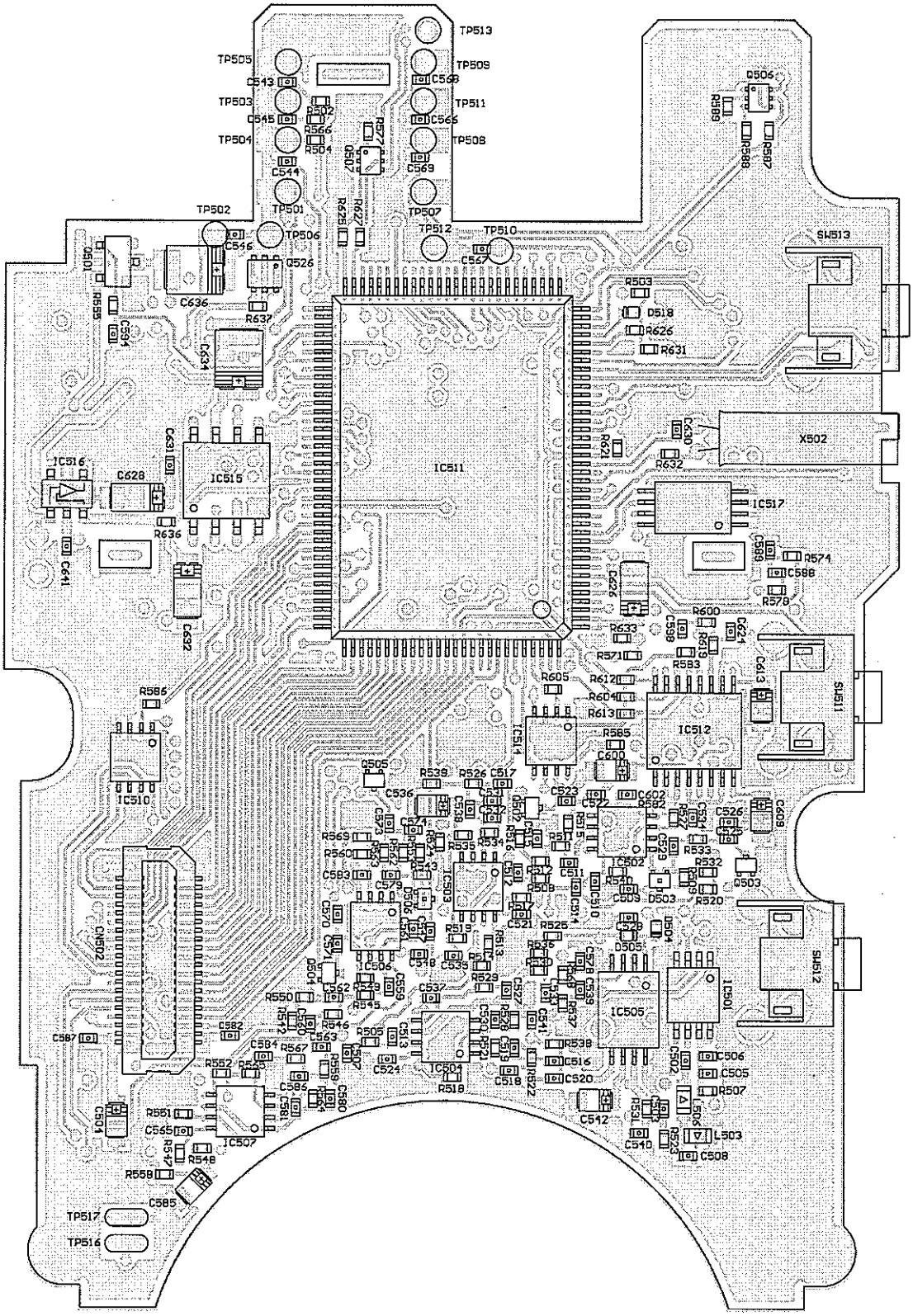
Finally press the FUNC key after finishing all adjustment items.

PC BOARD VIEW

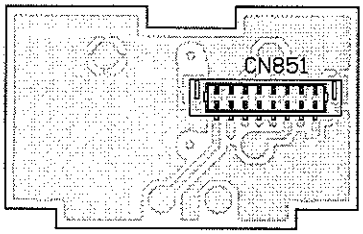
CPU Unit Side A



CPU Unit Side B

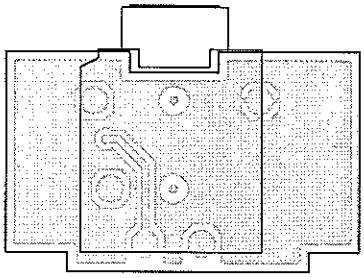


JACK UNIT
Side A

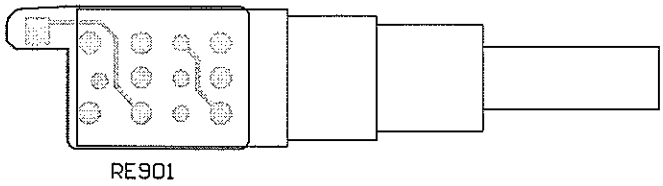


Side B

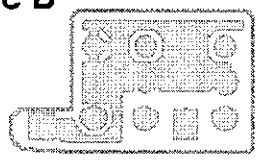
JK851



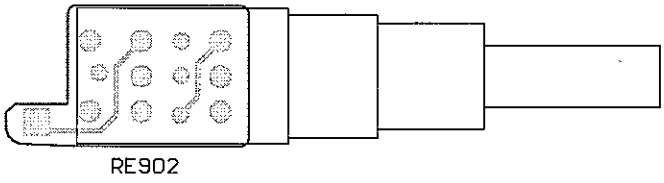
RE A UNIT
Side A



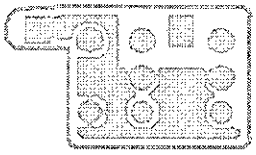
Side B



RE B UNIT
Side A

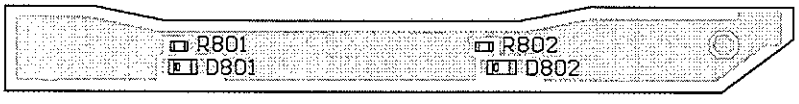


Side B

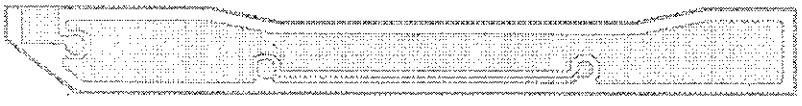


LED UNIT
Side A

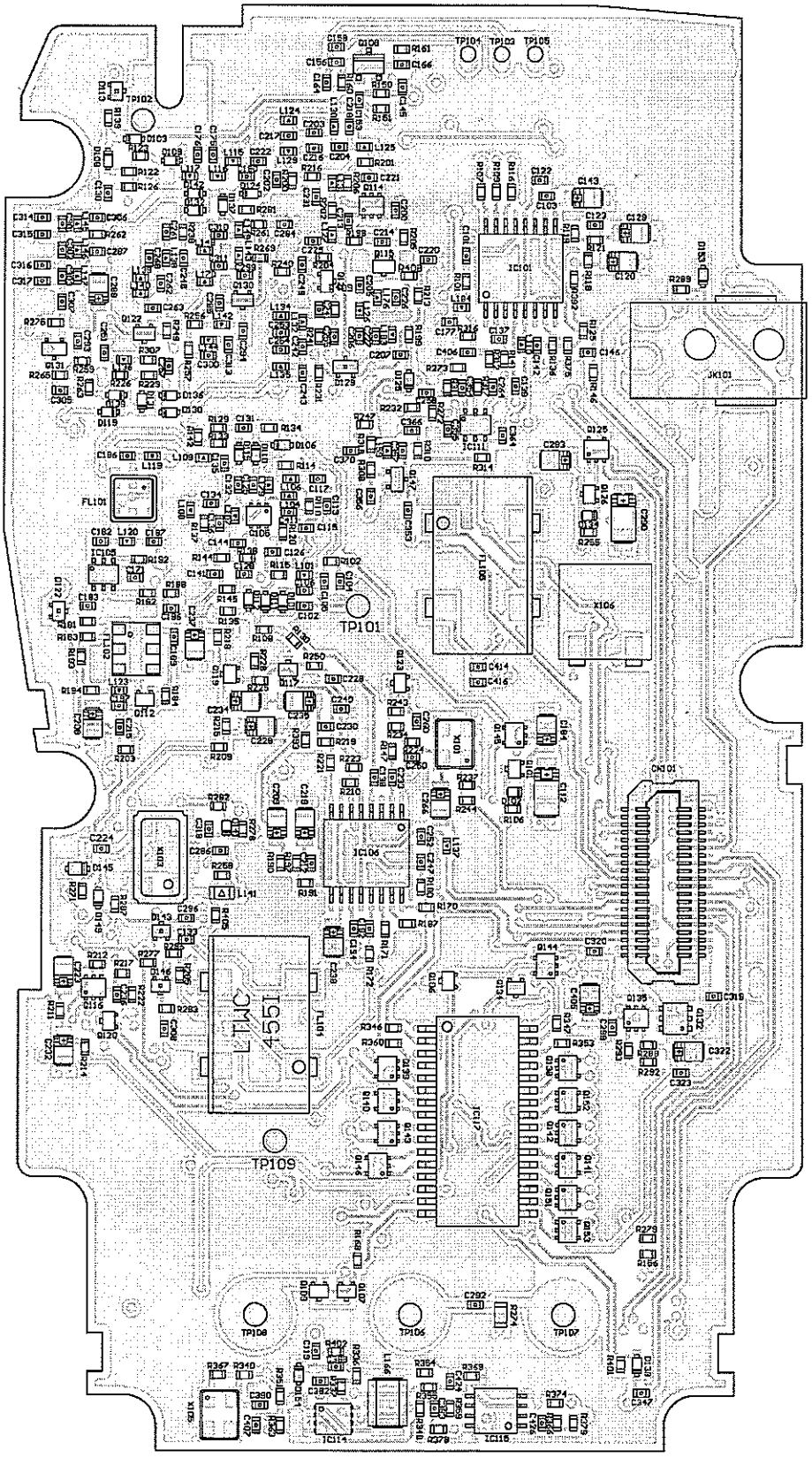
REF .No



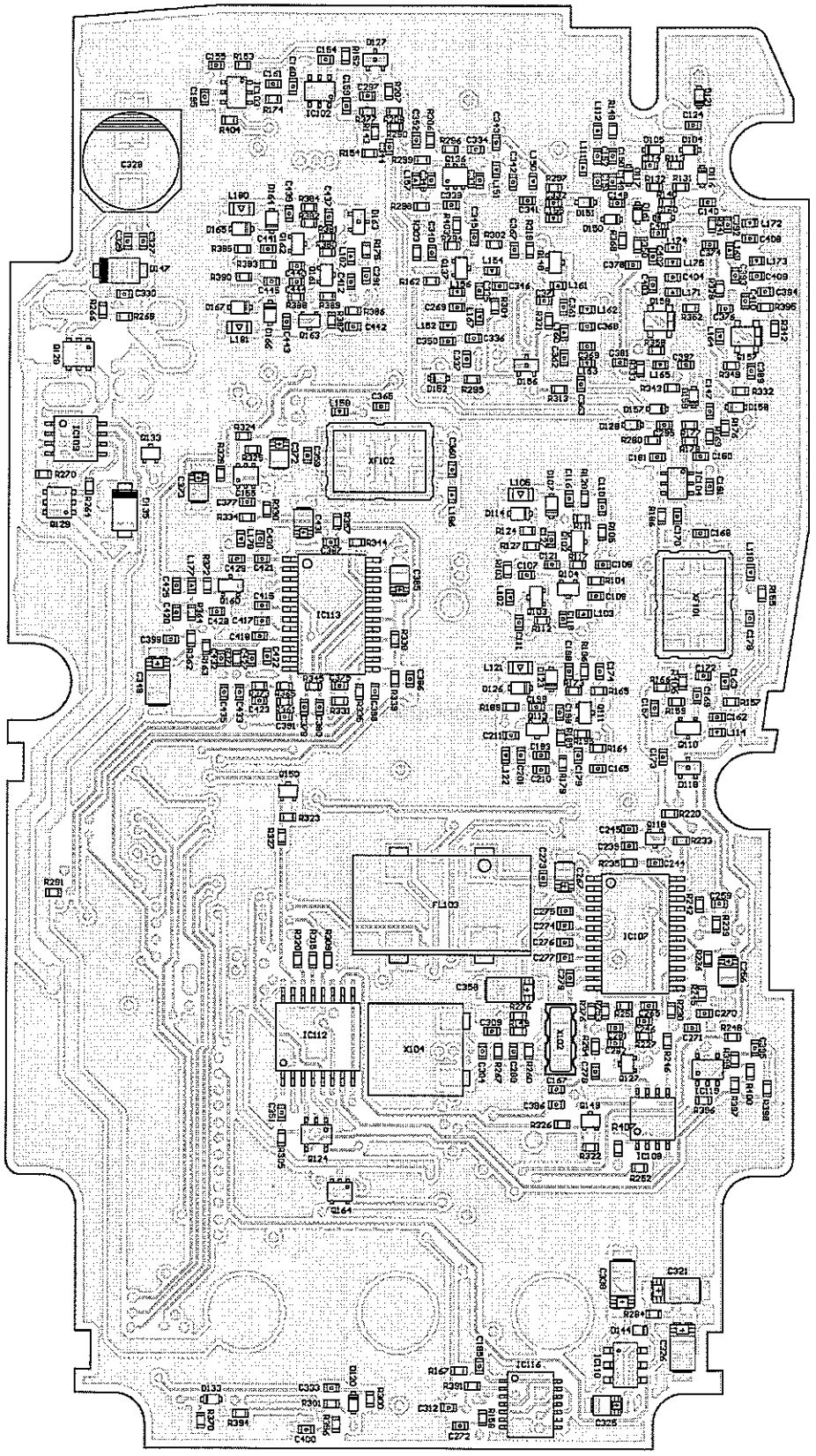
Side B



MAIN Unit Side A



MAIN Unit Side B



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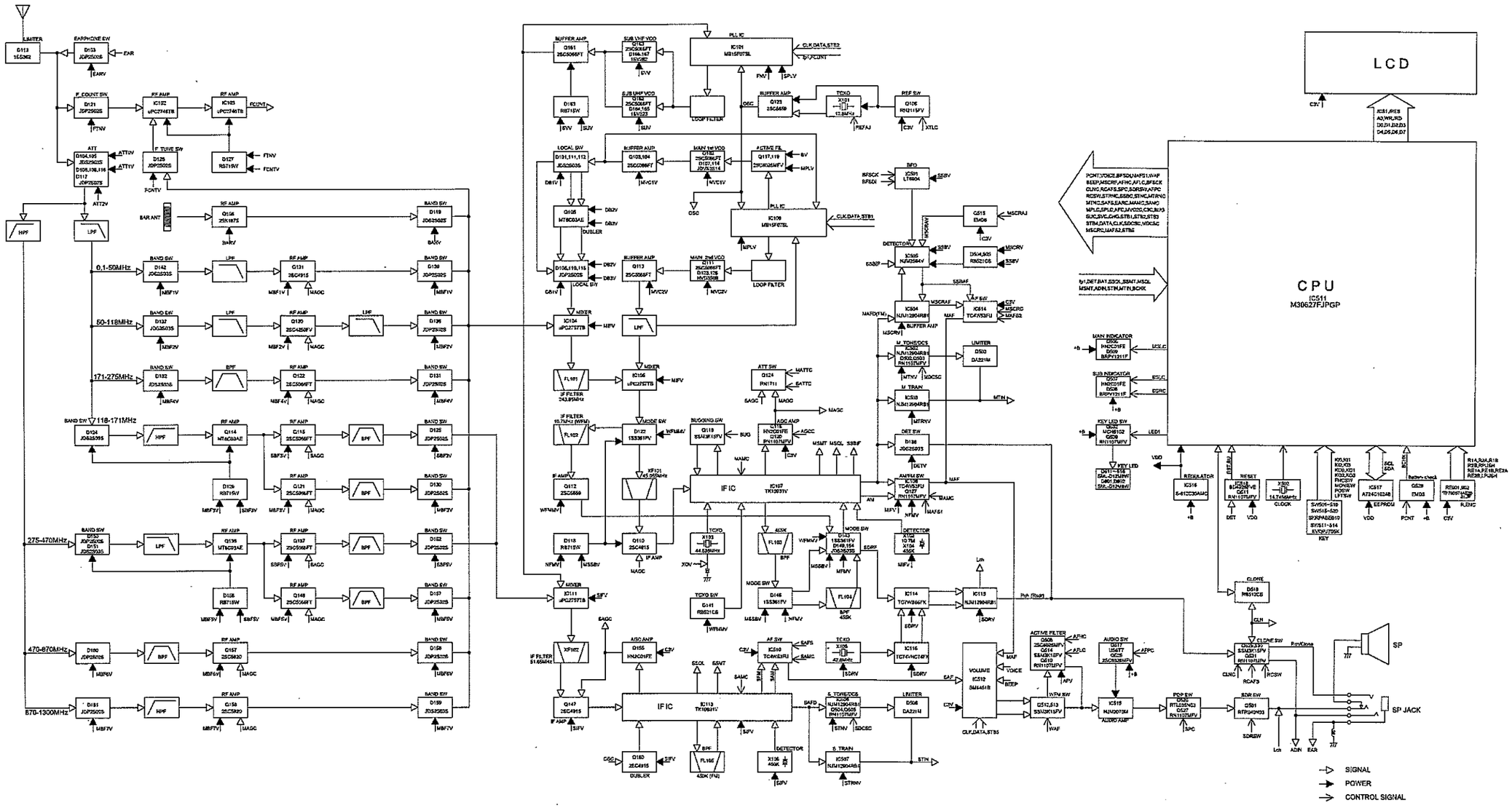
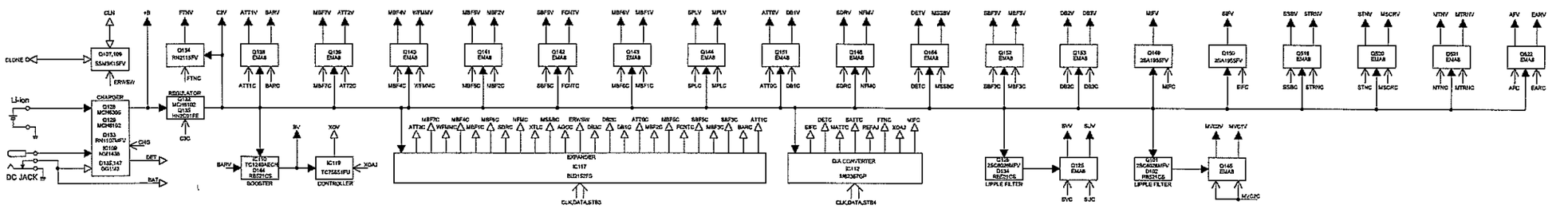
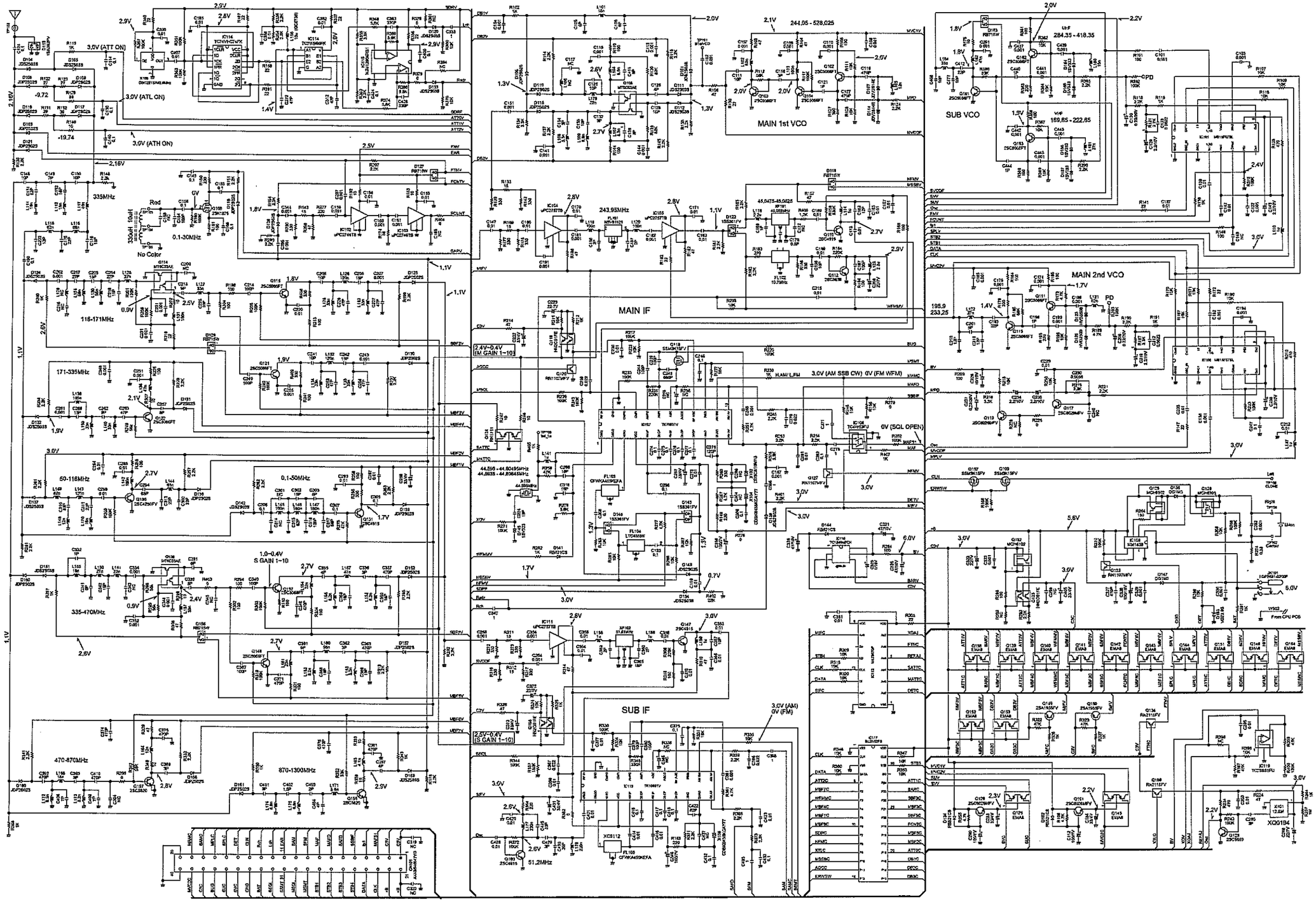
BLOCK DIAGRAM



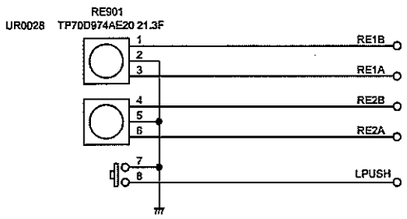


MAIN

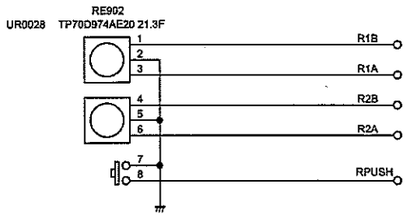


MAIN 1st VCO
SUB VCO
MAIN 2nd VCO
MAIN IF
SUB IF
244.05 - 528.025
284.35 - 418.35
169.85 - 222.65
243.95MHz
335MHz
0.1-30MHz
118-171MHz
171-335MHz
50-116MHz
0.1-50MHz
335-470MHz
470-870MHz
870-1300MHz
51.2MHz
3.0V (ATT ON)
3.0V (ATL ON)
3.0V (ATH ON)
3.0V (AM SSB CW) 0V (FM WFM)
0V (SQL OPEN)
2.4V-0.4V (M GAIN 1-10)
2.5V-0.4V (S GAIN 1-10)
1.0-0.4V S GAIN 1-10
3.0V (AM) 0V (FM)
No Color

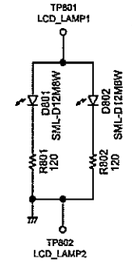
RE A Unit



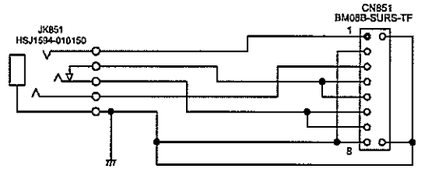
RE B Unit

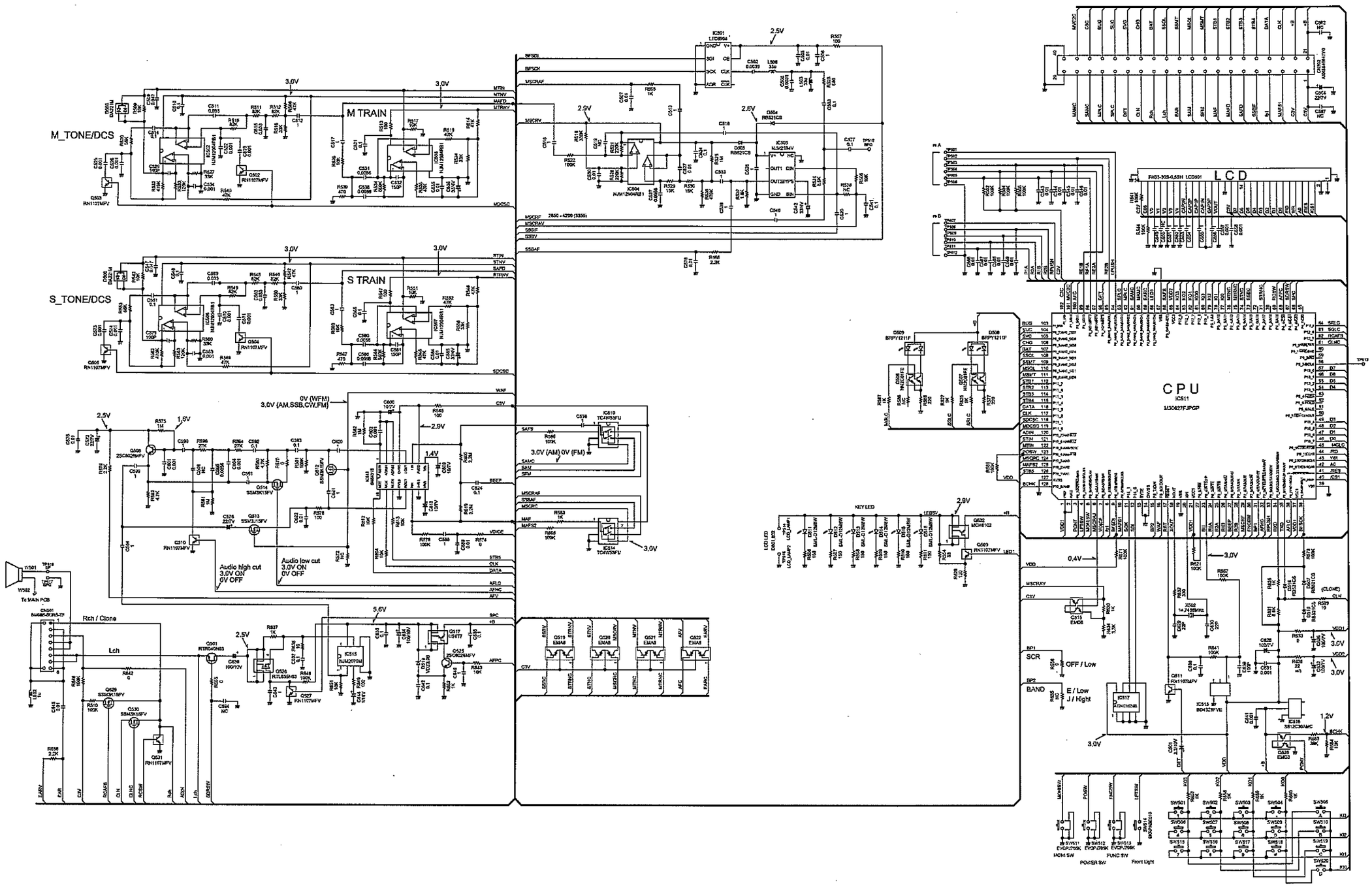


Led Unit



Jack Unit



SCHEMATIC DIAGRAM

CPU