DR-635

Service Manual

CONTENTS

ALINCO, INC.

SPECIFICATIONS

1) GENERAL

Frequency coverage	87.500 - 107.995MHz (WFM RX)
DR-635T (U.S amateur)	108.000 - 135.995MHz (AM RX)
	136.000 - 173.995MHz (RX)
	144.000 - 147.995MHz (TX)
	335.000 - 479.995MHz (RX)
	430.000 - 449.995MHz (TX)
DR-635E (European amateur)	87.500 - 107.995MHz (WFM)
	144.000 - 145.995MHz (RX, TX)
	430.000 - 439.995MHz (RX, TX)
Operating mode	16K0F3E (Wide mode) 8K50F3E (Narrow mode)
Frequency resolution	5, 8.33, 10, 12.5, 15, 20, 25, 30, 50, 100kHz
Number of memory channels	200
Antenna impedance	50Ω unbalanced
Power requirement	13.8V DC±15% (11.7 to 15.8V)
Ground method	Negative ground
Current drain Receive	0.6A (Max.) 0.4A (Squelched)
Transmit	11.0A
Operating temperature	- 10 to 60°C
Frequency stability	±2.5ppm
Dimensions	142 (w) × 40 (h) × 174 (d) mm
	(w/o knobs)
Weight	Approx. 1.0kg

2) TRANSMITTER

Output power	High : 50W (VHF)
	35 W(UHF)
	Mid : 20W
	Low : 5W
Modulation system	Variable reactance frequency modulation
Maximum frequency deviation	±5kHz (Wide mode) ±2.5kHz (Narrow mode)
Spurious emission	-60dB
Adjacent channel power	-60dB
Modulation Distortion	Lass than 3%
Microphone impedance	2kΩ

3) RECEIVER

Sensitivity	-16dBu for 12dB SINAD
Receiver circuitry	Double conversion superheterodyne
Intermediate frequency	1st 21.7MHz 2nd 450kHz (VHF)
	1st 45.1MHz 2nd 455kHz (UHF)
Squelch sensitivity	-18dBu
Selectivity (-6dB / -60dB)	12kHz / 24kHz
Spurious and image rejection ratio	70dB
Audio output power	2.0W (8Ω, 10% THD)

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

CIRCUIT DESCRIPTION

1) VHF Reception

Incoming VHF signals are passed through a low-pass filter network, antenna switching diodes D15 (UM9401F) and D26 (DAN235E), and a high-pass filer network, and on to the RF amplifier Q19 (3SK293).

The amplified RF signal is passed through another RF amplifier Q18 (2SC5226) and band-pass filtered again by varactor turned resonators L46, L49, L51 and D28, D29, D30 (all 1SV215), then applied to the 1st mixer Q21 (3SK293) along with the first local signal from the PLL circuit.

The first local signal is generated between 122.3MHz and 126.3MHz by the VHF VCO, which consists of Q9 (2SK508) and varactor diodes D10 and D11 (both 1SV282), according to the receiving frequency.

The 21.7 MHz first IF signal is applied to monolithic crystal filters XF1 and XF2 (both UM5-3P 21.7M) which strip away unwanted mixer products, and the IF signal is applied to the first IF amplifier Q20 (2SC4215). The amplified first IF signal is then delivered to the FM IF subsystem IC IC3 (TK10931V), which contains the second mixer, limiter amplifier, noise amplifier, and FM detector.

The second local signal is generated by 21.25MHz TCXO, producing the 450kHz second IF signal when mixed with the first IF signal within IC3.

The 450kHz second IF signal is applied to the ceramic filter FL1 (ALFYM450E) which strips away all but the desired signal, and then passes through the limiter amplifier within IC3 to the discriminator coil L101, which removes any amplitude variations in the 450kHz IF signal before detection of speech.

The detected audio then signal is amplified by IC9 (NJM2902V-B) passes through the de-emphasis network, a high-pass filter consisting of IC9 (NJM2902V-A) and associated circuitry, and a low-pass filter consisting and associated circuitry. The filtered audio signal is switched by IC12 (BU4052), and then passes through the audio volume control IC IC13 (M511312FP), which adjusts the audio sensitivity to compensate for audio level variations.

The audio signal is amplified by IC8 (LA4425A), and then applied to the internal loudspeaker.

2) UHF Reception

Incoming UHF signals are passed through a low-pass filter network, a high-pass filter network, antenna switching diodes D14 (UM9401F), and on to the band-pass filter network consisting of varactor diode D49 (HVU359) and L79.

The filtered UHF signal is amplified by RF amplifier Q41 (3SK293) and fed to another band-pass filter consisting of varactor diode D50 (HVU359) and L80, and then is passed through another RF amplifier Q43 (2SC5226) to another band-pass filter consisting of varactor diodes D51 and D52 (both HVU359) and L81 and L82.

The amplified and filtered UHF signal is applied to the 1st mixer Q42 (3SK293) along with the first local signal from the PLL circuit.

The first local signal is generated between 384.9MHz and 404.9MHz by the UHF VCO, which consists of Q29 (2SK508) and varactor diodes D38 and D40 (both 1SV278), according to the receiving frequency.

The 45.1MHz first IF signal is applied to monolithic crystal filters XF3A and XF3B (UM5-3P 45.1M) which strip away unwanted mixer products, and the IF signal is applied to the first IF amplifier Q44 (2SC4618).

The amplified first IF signal is then delivered to the FM IF subsystem IC IC5 (TA31136FN), which contains the second mixer, limiter amplifier, noise amplifier, and FM detector.

The second local signal is generated by 45.555MHz crystal X4, producing the 455kHz second IF signal within IC5.

The 455kHz second IF signal is applied to the ceramic filter FL4 (ALFYM455E) which strips away all but the desired signal, and then passes through the limiter amplifier within IC5 to the discriminator coil L102, which removes any amplitude variations in the 455kHz IF signal before detection of speech.

The detected audio then signal is amplified by IC9 (NJM2902V-C) passes through the de-emphasis network, a high-pass filter consisting of IC9 (NJM2902V-D) and associated circuitry, and a low-pass filter consisting and associated circuitry. The filtered audio signal is switched by IC12 (BU4052), and then passes through the audio volume control IC IC13 (M511312FP), which adjusts the audio sensitivity to compensate for audio level variations.

The audio signal is amplified by IC8 (LA4425A) then applied to the internal loudspeaker.

3) FM Reception

Incoming FM signals are passed through a low-pass filter network, antenna switching diodes D15 (UM9401F) and D26 (DAN235E), and a high-pass filter network, and on the RF amplifier Q36 (2SC5066).

The amplified RF signal is passed through band-pass filtered L, C, then applied to the 1st mixer Q33 (2SC5066) along with the first local signal from the circuit.

The first local signal is generated between 86.7MHz and 118.7MHz by the FM VCO, which consists of Q14 (2SC4808) and varactor diodes D23 and D25 (both 1SV282), according to the receiving frequency.

The 10.7MHz first IF signal is applied to ceramic filters FL3 and FL6 (both SFT10.7MAS) which strip away unwanted mixer products, and the IF signal is applied to the first IF amplifier Q37 (2SC4618).

The amplified first IF signal is then delivered to the FM IF subsystem IC IC3 (TK10931V), limiter amplifier, noise amplifier, and FM detector.

The 10.7MHz first IF signal is applied to the discriminator coil L53, which removes any amplitude variations in the 10.7MHz IF signal before detection of speech.

4) V/V (VHF-VHF) Dual Reception

During V & V operation, the incoming VHF "sub" band signal is passed through a low-pass filter network, antenna switching diode D15 (UM9401F) and a high-pass filter network to the RF amplifier Q19 (3SK293).

The amplified RF signal is passed through a high-pass filter network, VHF "sub" RF amplifier Q31 (2SC5066), and a low-pass filter network, then is applied to the VHF "sub" first mixer Q32 (2SC5066) along with the 45.1MHz VHF "sub" first local signal from the VHF "sub" VCO circuit.

The VHF "sub" first local signal is generated between 189.1MHz and 193.1MHz by the VHF "sub" VCO Q38 (2SC4080).

The 45.1MHz VHF "sub" second IF signal is applied to the UHF receiving circuit.

The VHF "sub" signal is amplified, filtered, and demodulated, etc., by the UHF "main" receiving circuit, described previously.

5) U/U (UHF-UHF) Dual Reception

During U & U operation, the incoming UHF "sub" band signal is passed through a high-pass and a low-pass filter networks, antenna switching diode D14 (UM9401F), and another high-pass filter network to the RF amplifier Q51 (2SC5066).

The amplified RF signal is passed through a low-pass filter network, UHF "sub" RF amplifier Q49 (2SC5066), and a low-pass filter network, then is applied to the UHF "sub" first mixer Q52 (2SC5066) along with the 21 .7MHz UHF "sub" first local signal from the UHF "sub" VCO.

The UHF "sub" first local signal is generated between 408.3MHz and 428.3MHz by the UHF "sub" VCO Q13 (2SC5066).

The 21.7MHz UHF "sub" second IF signal is applied to the VHF receiving circuit.

The UHF "sub" signal is amplified, filtered, and demodulated, etc., by the VHF "main" receiving circuit, described previously.

6) VHF Squelch Control

When no VHF carrier is being received, noise at the output of the detector stage in IC3 is amplified and band-pass filtered by the noise amp section of IC3, then passes through the noise adjust VR (VR8) to CPU. The resulting DC voltage is applied to pin 88 of main CPU IC19 (M30624FGPGP), which compares the squelch threshold level to that which set by the front panel VHF SQL knob.

While no carrier is received, pin 55 of IC19 remains "high" turning on the squelch switch Q108 (DTC363EK) to disable audio output from the speaker.

7) UHF Squelch Control

When no UHF carrier is being received, noise at the output of the detector stage in IC5 is amplified and band-pass filtered by the noise amp section of IC5, then passes through the noise adjust VR (VR9) to CPU.

The resulting DC voltage is applied to pin 90 of main CPU IC19, which compares the squelch threshold level to that which set by the front panel UHF SQL knob.

While no carrier is received, pin 56 of IC19 remains "high" turning on the squelch switch Q109 (DTC363EK) to disable audio output from the speaker.

8) Transmit Signal Path

The speech signal from the microphone passes through the MIC jack CN601 to AF amplifier IC601 (M5218FP) on the FRONT UNIT.

The amplified speech signal is subjected to amplitude limiting by IC601 (M5218FP), then passes through the front interface jacks CN602 and CN2 to MAIN UNIT.

On the MAIN UNIT, the speech signal passes through the audio mute switch IC7 (TC4066F), MIC gain control VR5 and buffer amplifier IC1 (NJM2902V-B) and a low-pass filter network at IC1 (NJM2902V-A) to deviation control VR3 (for VHF TX audio) or VR4 (for UHF TX audio).

9) VHF Transmit Signal Path

The adjusted speech signal from VR3 is delivered to VHF VCO Q9, which frequency modulates the transmitting VCO D6 (1SV278).

The modulated transmit signal passes through buffer amplifier Q7 (2SC5066), a low-pass filter network, and another buffer amplifier Q3 (2SC5226) to another low-pass filter network.

The filtered transmit signal is applied to the Pre-Drive amplifier Q2 (2SK3074) and Drive amplifier Q1 (2SK2975), then finally is amplified by Power amplifier Q4 (RD70HV1) up to 50 Watts.

This three-stage power amplifier's gain is controlled by the APC circuit.

The 50 Watts RF signal passes through a low-pass filter network, antenna switch D1 and D71 (both UM9401F), and another low-pass filter network, and then is delivered to the ANT jack.

10) UHF Transmit Signal Path

The adjusted speech signal from VR4 is delivered to UHF VCO Q29, which frequency modulates the transmitting VCO D35 (1SV278).

The modulated transmit signal passes through buffer amplifier Q28 (2SC5066) to a high-pass filter network.

The filtered transmit signal is applied to the Pre-Drive amplifier Q2 (2SK3074) and Drive amplifier Q1 (2SK2975), then finally is amplified by Power amplifier Q4 (RD70HV1) up to 35 Watts.

This three-stage power amplifier's gain is controlled by the APC circuit.

The 35 Watts RF signal passes through a high-pass filter network, antenna switch D12 and D13 (both UM9401F), a low-pass filter and a high-pass filter networks, and then is delivered to the ANT jack.

11) VHF Tx APC Circuit

A portion of the power amplifier output is rectified by D8 (MA4S713), D9 (MA4S713) and Q12 (2SC4081), and then delivered to APC IC1 (NJM2902V-D) as a DC voltage, which is proportional to the output level of the power amplifier.

The APC IC1 compares the rectified DC voltage from the power amplifier and the reference voltage from the main CPU IC19, producing a control voltage for the Automatic Power Controller Q8 (RN2107) and Q11 (RN1107) which regulates supply voltage to the Pre-Drive amplifier Q2, Drive amplifier Q1, and Power amplifier Q4, so as to maintain stable output power under varying antenna loading conditions.

12) UHF Tx APC Circuit

A portion of the power amplifier output is rectified by D9 (M4S713), D22 (MA4S713) and Q12 (2SC4081), and then delivered to APC IC1 (NJM2902V-D) as a DC voltage, which is proportional to the output level of the power amplifier.

The APC IC1 compares the rectified DC voltage from the power amplifier and the reference voltage from the main CPU IC19, producing a control voltage for the Automatic Power Controller Q8 (RN2107) and Q11 (RN1107) which regulates supply voltage to the Pre-Drive amplifier Q2, Drive amplifier Q1, and Power amplifier Q4, so as to maintain stable output power under varying antenna loading conditions.

13) VHF PTT circuit

When the PTT switch is pressed, pin 4 of front CPU IC604 (M38503M) goes "low" which sends the "PTT" command to the main CPU IC19.

When it receives the "PTT" command, pin71 of IC19 goes "high" to control local switch D5 (1SV306), filter switches D2 and D3, Tx switch D17 (DAN235E), and APC switches Q8 and Q11, which activates the VHF Tx circuit.

Meanwhile, pin 69 of IC19 goes "low" which disables the VHF Rx circuit.

14) UHF PTT circuit

When the PTT switch is pressed, pin 4 of front CPU IC604 (M38503M) goes "low" which sends the "PTT" command to the main CPU IC19.

When it receives the "PTT" command, pin72 of IC19 goes "high" to control local switch D76 (1SV306), filter switches D74 and D75, Tx switch D17 (DAN235E) and APC switches Q8 and Q11, which activates the UHF Tx circuit.

Meanwhile, pin 70 of IC19 goes "low" which disables the UHF Rx circuit.

15) VHF PLL

A portion of the output from the VHF VCO Q9 (2SK508) passes through buffer amplifiers Q7 (2SC5066) and Q5 (2SC5066) to the programmable divider section of the PLL IC IC2 (M64076AGP), which divides the frequency according to the frequency dividing data from the main CPU IC19.

It is then sent to the phase comparator.

The 21.25MHz frequency of the reference oscillator circuit, made up of TCXO X1, is divided by the reference frequency divider section of IC2 into 4250 or 3400 parts to become 5kHz or 6.25kHz comparative reference frequencies, which are utilized by the phase comparator.

The phase comparator section of IC2 compares the phase between the frequency-divided oscillations frequency of the VCO circuit and comparative frequency, and its output is a pulse corresponding to the phase difference.

This pulse is integrated by the charge pump and loop filter of IC2 into a control voltage (VCV) to control the oscillation frequency of the VHF VCO Q9.

16) UHF PLL

A portion of the output from the UHF VCO Q29 (2SK508) passes through buffer amplifier Q28 (2SC5066) and Q39 (2SC5066) to the programmable divider section of the PLL IC IC2 (M64076AGP), which divides the frequency according to the frequency dividing data from the main CPU IC19.

It is then sent to the phase comparator.

The 21.25MHz frequency of the reference oscillator circuit, made up of TCXO X1, is divided by the reference frequency divider section of IC2 into 4250 or 3400 parts to become 5kHz or 6.25kHz comparative reference frequencies, which are utilized by the phase comparator.

The phase comparator section of IC2 compares the phase between the frequency-divided oscillations frequency of the VCO circuit and comparative frequency, and its output is a pulse corresponding to the phase difference.

This pulse is integrated by the charge pump and loop filter of IC2 into a control voltage (VCV) to control the oscillation frequency of the UHF VCO Q29.

17) Power-on Circuit

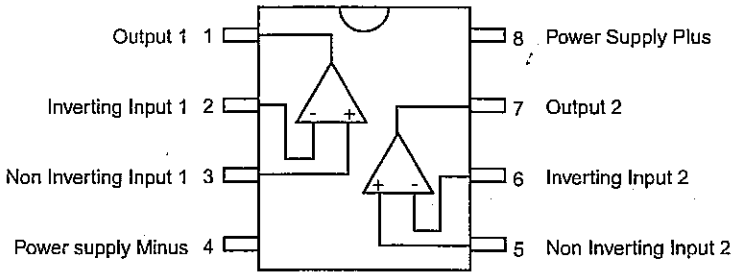
When the POWER switch is turned on, pin 18 of man CPU IC19 goes "low".

When pin 18 of IC19 goes "low", pin 79 of IC19 goes "high" to activate the power switches Q63 (2SB1386) and Q74 (2SC4081), which supply the DC power to the radio.

SEMICONDUCTOR DATA

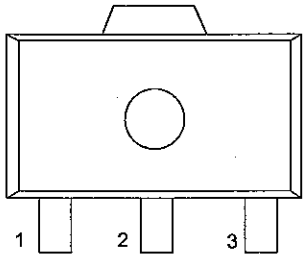
1) M5218FP (XA0068)

Dual Low Noise
Operational Amplifiers



2) NJM78L05UA (XA0098)

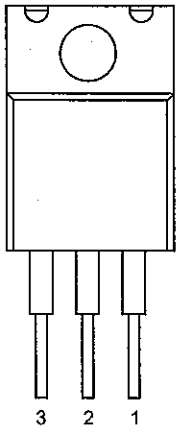
5V Voltage Regulator



1. OUTPUT
2. COMMON
3. INPUT

3) NJM7808FA (XA0102)

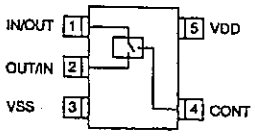
8V Voltage Ragulator
Pin Assignment

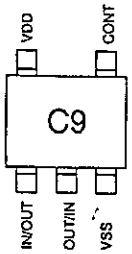


1. OUTPUT
2. COMMON
3. INPUT

4) TC4S66F (XA0115)

Bilateral Switch

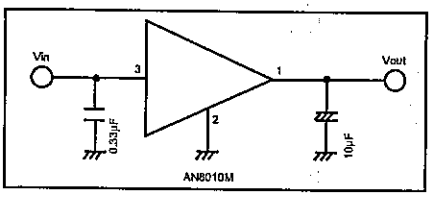


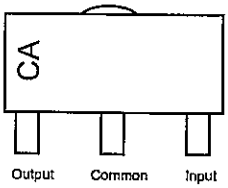


5) AN8010M (XA0119)

10V Voltage Regulator

Test Circuit



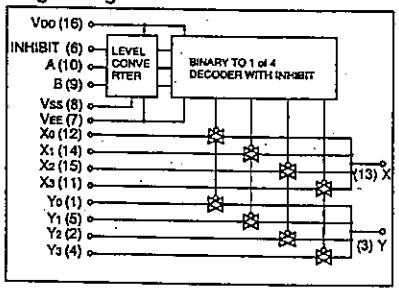


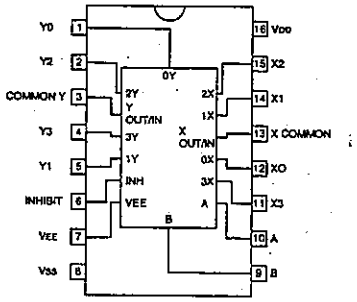
AN8010M

6) BU4052BF (XA0236)

Analog Multiplexer/Demultiplexer

Logic Diagram





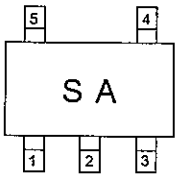
Truth Table

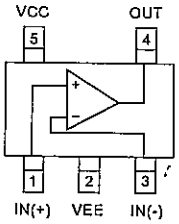
INHIBIT	A	B	ON SWITCH
L	L	L	X0 Y0
L	H	L	X1 Y1
L	L	H	X2 Y2
L	H	H	X3 Y3
H	X	X	NONE

X: Don't Care

7) TA75S01F (XA0332)

Operational Amplifiers





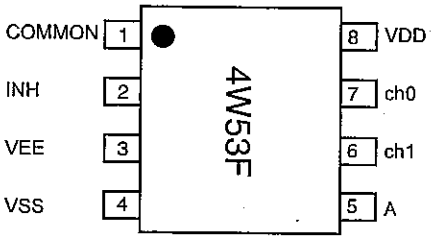
8) TC4W53FU (XA0348)

Multiplexer/Demultiplexer

Function Table

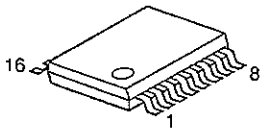
Control input		ON channel
INH	A	
L	L	ch0
L	H	ch1
H	*	NONE

* Don't Care

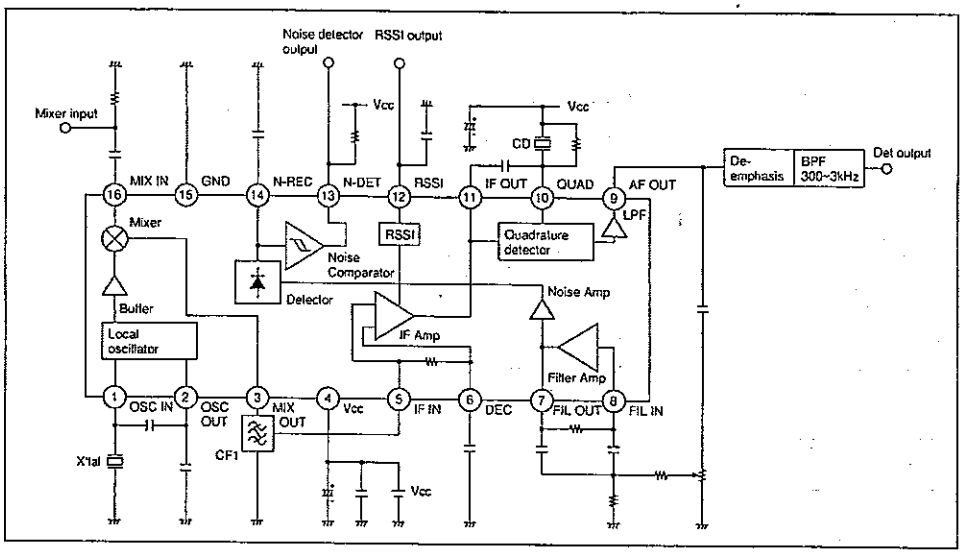


9) TA31136FN (XA0404)

Low Power FM IF

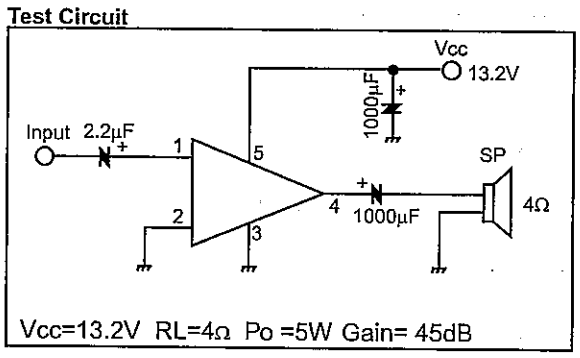


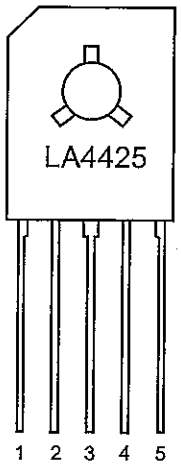
Block Diagram



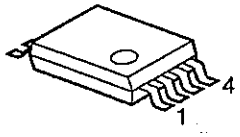
10) LA4425A (XA0410)

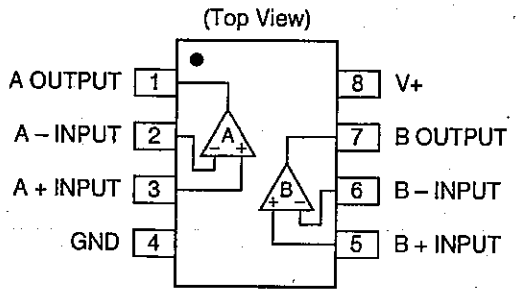
5W Audio Power Amplifiers





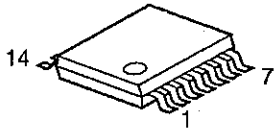
11) NJM2904V (XA0573)

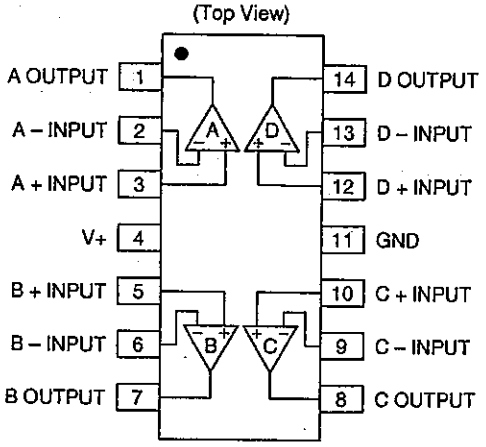




12) NJM2902V-TE1 (XA0596)

Quad Single Supply Operational Amplifier

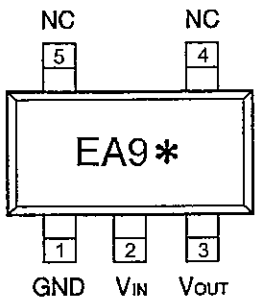




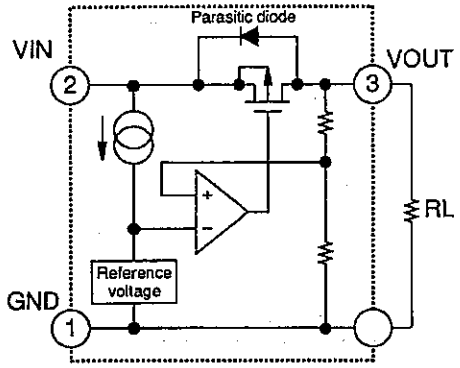
13) S-80845ALMP-EA9-T2 (XA0620)

Voltage Detector

Vin=18V
Iout=100mA

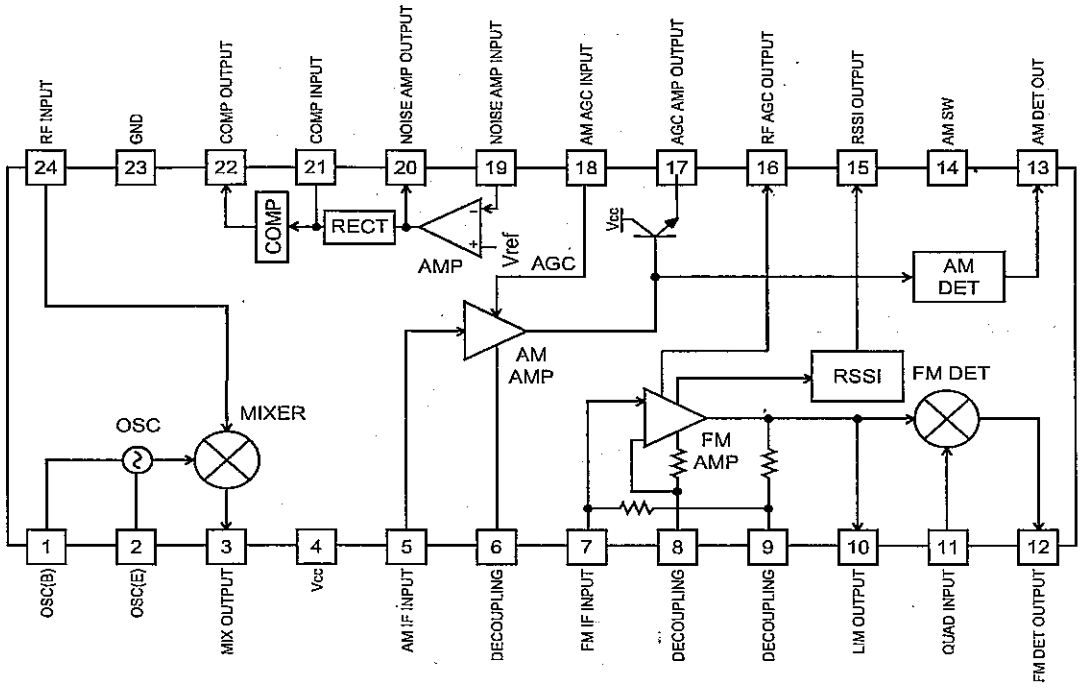


* Lot number



14) TK10931V (XA0666)

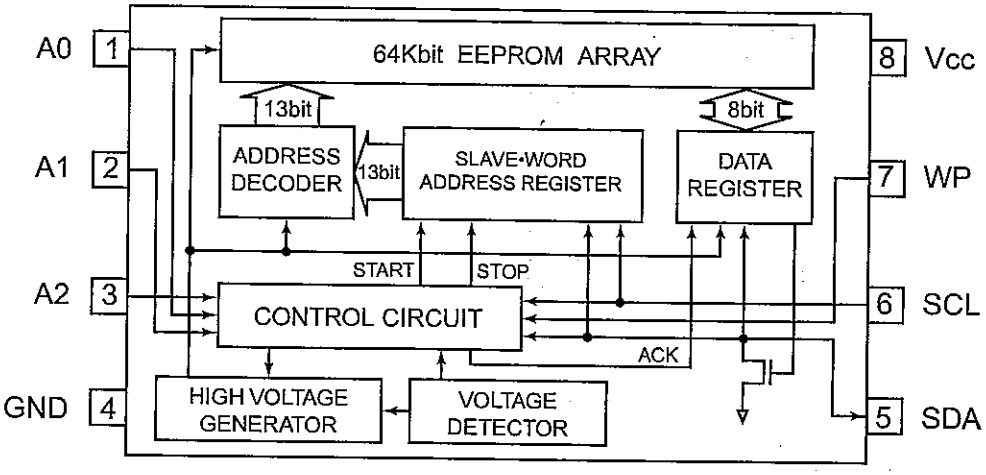
Pin Assignment / BLOCK Diagram (Top View)



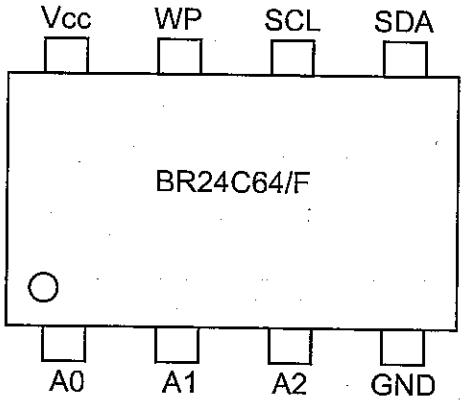
15) BR24C64F-E2 (XA0669)

EE-P ROM

Block Diagram

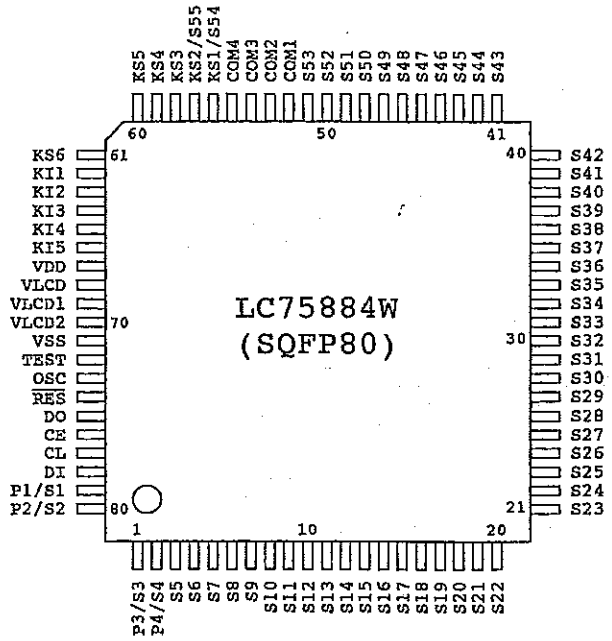


Pin Assignment

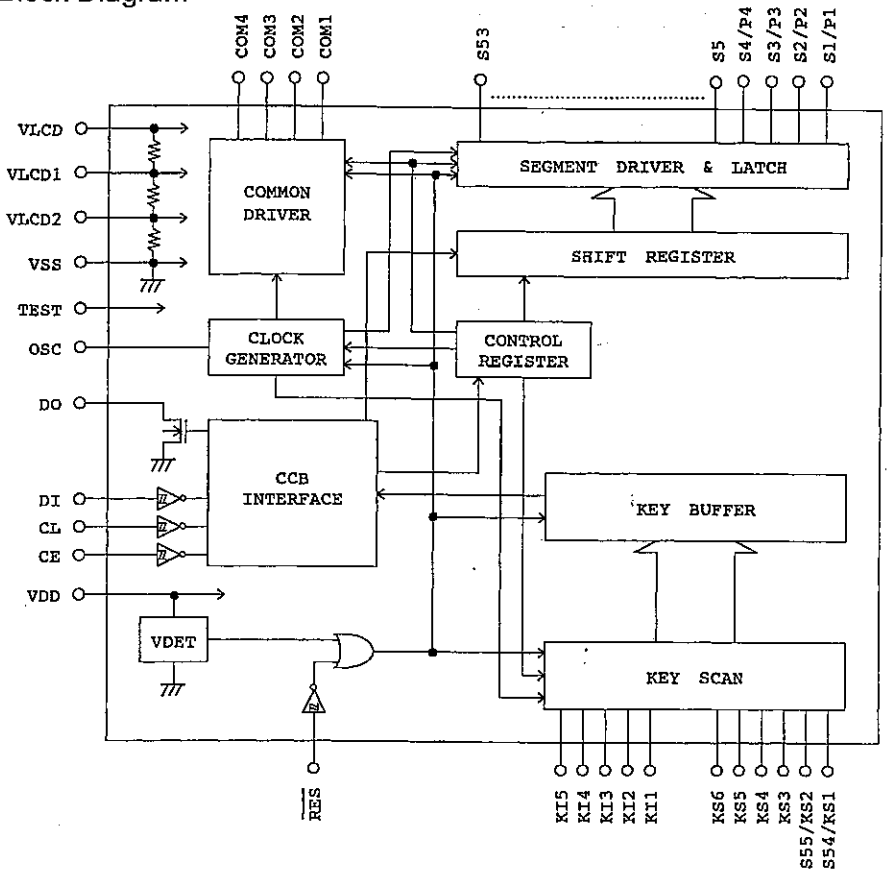


16) LC75884W (XA0899)

LCD Driver

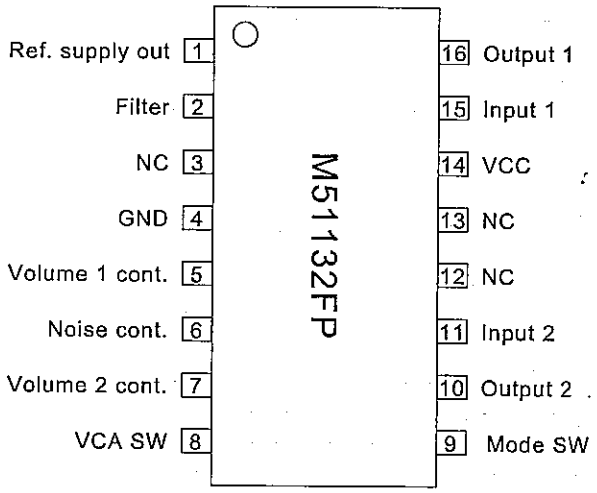


Block Diagram



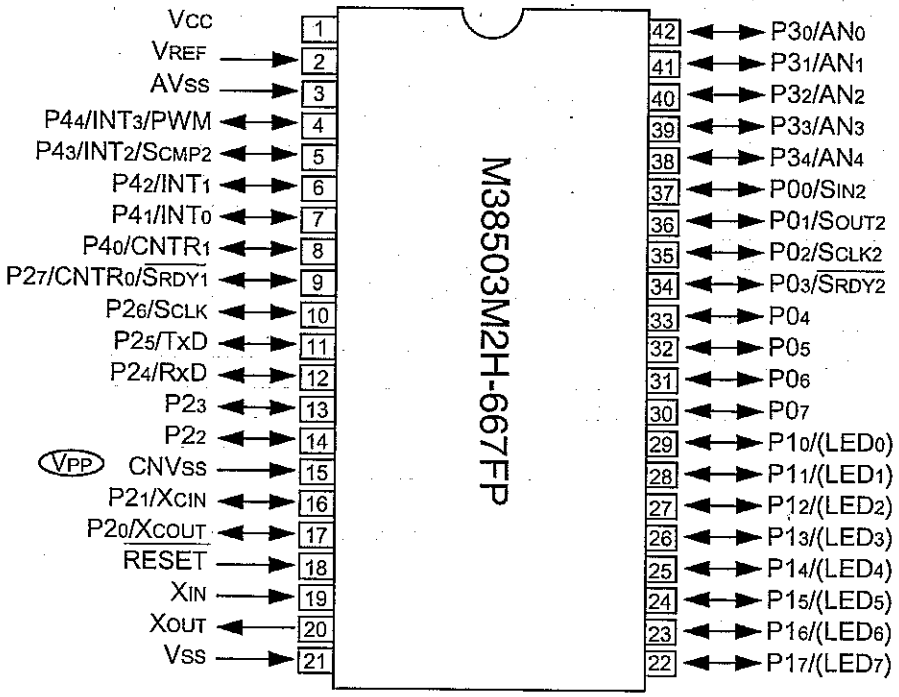
17) M51132FP (XA0900)

2ch Electronic Volume



18) M38503M2H667FP (XA0914)

Front CPU

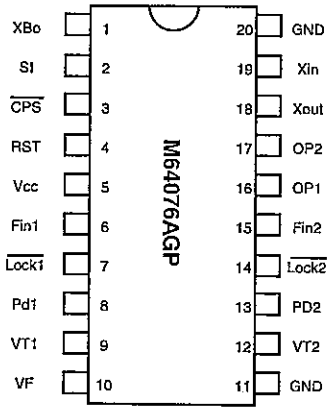


Terminal Function of Front CPU

No.	Pin Name	Function	I/O	Logic	Description
1	Vcc	VCC			
2	Vref	VREF			
3	Avss	AVSS			
4	P44	PTT	I	Activ low	PTT key input
5	P43	RE1	I	Pulse	Dial (rotary encoder) input
6	P42	UP	I	Activ low	Key input (UP)
7	P41	DOWN	I	Activ low	Key input (DOWN)
8	P40	FUNC	I	Activ low	Key input (FUNC)
9	P27	SQL	I	Activ low	Key input (SQL)
10	P26	H/L	I	Activ low	Key input (H/L)
11	P25/TxD	RXD1	I	Pulse	Serial Communication port for Main CPU
12	P24/RxD	TXD1	O	Pulse	Serial Communication port for Main CPU
13	P23	TS/DCS	I	Activ low	Key input (TS/DCS)
14	P22	MHz	I	Activ low	Key input (MHz)
15	CNVss	CNVSS			
16	P21	CALL	I	Activ low	Key input (CALL)
17	P20	BAND	I	Activ low	Key input (BAND)
18	RESET	RESET	I	Activ low	Reset input
19	Xin	XIN	I	Pulse	CPU clock input
20	Xout	XOUT	O		CPU clock output
21	Vss	GND			
22	P17	V/M	I	Activ low	Key input (UP)
23	P16	RED	O	Activ high	Lighting color ON/OFF (RED)
24	P15	GREEN	O	Activ high	Lighting color ON/OFF (YELLOW)
25	P14	TXLED	O	Activ high	TX LED ON/OFF
26	P13	MRLED	O	Activ high	MAIN RX LED ON/OFF
27	P12	SRLED	O	Activ high	SUB RX LED ON/OFF
28	P11	DIM1	O	Activ high	Dommer control 1
29	P10	DIM2	O	Activ high	Dimmer control 2
30	P07				
31	P06				
32	P05	DO	I	Pulse	Data input for LCD driver IC
33	P04	CE	O	Activ high	Strobe for LCD driver IC
34	P03	CL	O	Pulse	Clock output for LCD driver IC
35	P02	DI	O	Pulse	Data output for LCD driver IC
36	P01	MUTE	O	Activ high	-
37	P00	RE2	I		Dial (rotary encoder) input
38	P34/AN4				
39	P33/AN3				
40	P32/AN2				
41	P31/AN1	MVR	I	A/D	MAIN volume voltage input
42	P30/AN0	SVR	I	A/D	SUB volume voltage inpput

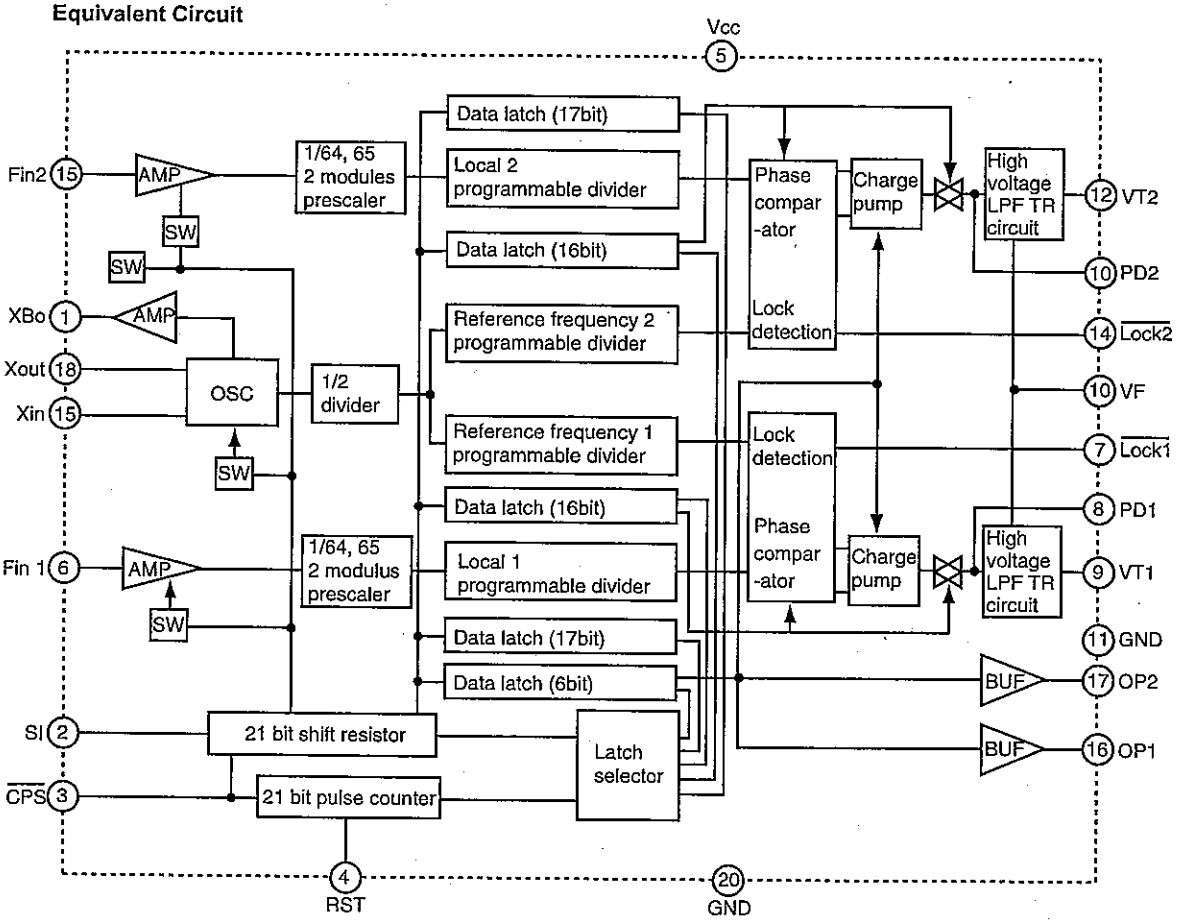
19) M64076AGP (XA0915)

Dual PLL Synthesizer



Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Power supply voltage	Vcc	Fin=80~520MHz Vin=-10dBm	2.7	-	5.5	V
LPF supply voltage	VF		-	9	12	V
Local oscillator input level	Vin	Fin=80~520MHz	-20	-	-4	dBm
Local oscillator input frequency	Fin	Vin=-20~-4dBm Vcc=2.7~5.5V	80	-	520	MHz
Xin input level	Vxin	Vcc=2.7~5.5V Fxin=10~25MHz Sine wave	0.4	-	1.4	Vp-p
Xin input frequency	Fxin	Vcc=2.7~5.5V Vxin=0.4~1.4Vp-p	10	-	25	MHz

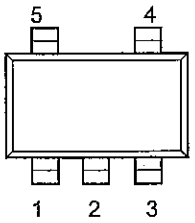
Equivalent Circuit



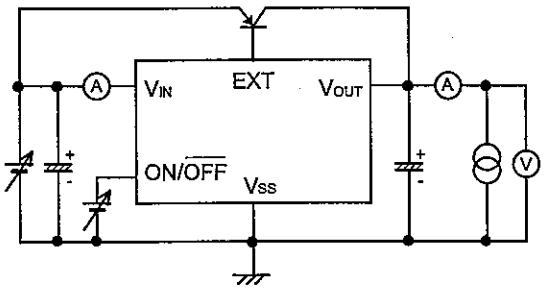
20) S-816A50AMC (XA0925)

Voltage Regulator

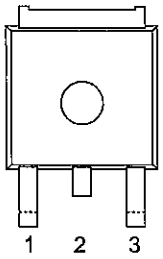
Top View



No.	Terminal
1	EXT
2	VSS
3	ON/$\overline{OFF}$
4	VIN
5	VOUT



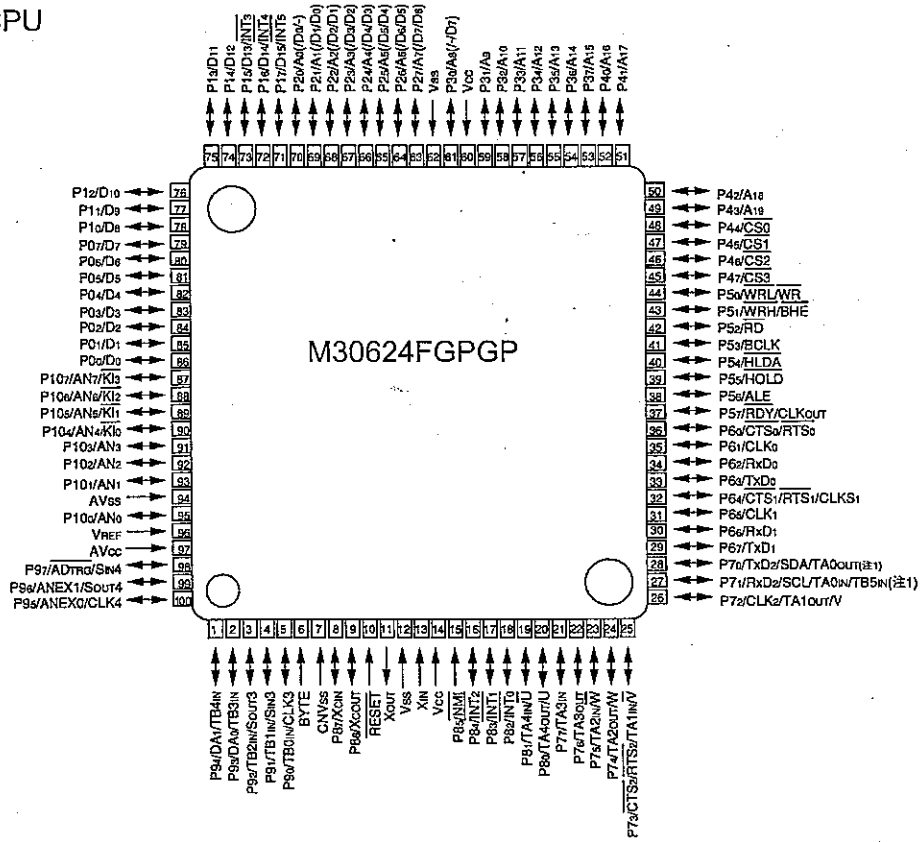
21) NJM78M05DL1A (XA0947)



Voltage Regulator
1.INPUT
2.GND
3.OUTPUT

22) M30624FGPGP (XA1081/XA1082)

Main CPU

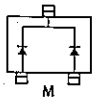
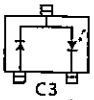
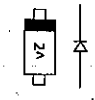
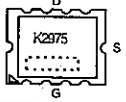
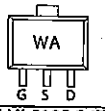
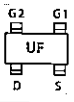
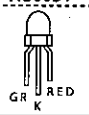
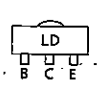


Terminal Function of Main CPU

No.	Pin Name	Function	I/O	Logic	up	Description
1	P94/DA1	TONE	O	D/A		CTCSS tone output/DCS output
2	P93/DA0	APC	O	D/A		Power output control
3	P92	DATA	O	Pulse		Serial data output for PLL IC
4	P91	STB	O	Pulse		Strobe for PLL IC
5	P90	CLK	O	Pulse		Seriai clock output for PLL IC
6	BYTE	BYTE	I			GND
7	CNVss	CNVss	I	H		Witer control
8	P87	-	O			-
9	P86	-	O			-
10	RESET	RESET	I	L		Reset input
11	Xout	XOUT	O			Main clock output
12	Vss	VSS	-			GND
13	Xin	XIN	I			Main clock input
14	Vcc	VCC	-			CPU power terminal
15	P85	NMI	I	Activ high		Interruption
16	P84	BU	I	L		Backup signal detection input
17	P83	SEC	I	Activ high		Aleam(SCR) sinal input
18	P82	PSW	I	L		Power switch input
19	P81	CLKS	O	Activ high		CPU clock-shift output
20	P80	MVRC	O	Pluse		Main volume control
21	P77	LAMP	I	L	up	Lighting color selection (H:2color)
22	P76	SVRC	O	Pulse		Sub volume control
23	P75	-	O			
24	P74	TUV	O	Pulse		144MHz Tuning-voltage control
25	P73	-	O			
26	P72	TUU	O	Pulse		430MHz Tuning-voltage control
27	P71	RXD2	I	Pulse		Serial Communication port for Clone
28	P70	TXD2	O	Pulse		Serial Communication port for Clone
29	P67	TXD1	O	Pulse		Serial Communication port for TNC
30	P66	RXD1	I	Pulse		Serial Communication port for TNC
31	P65	SCLK	O	Pulse		Witer control
32	P64	BUSY	O	Pulse		Witer control
33	P63	TXD	O	Pulse		Serial Communication port for Front CPU
34	P62	RXD	I	Pulse		Serial Communication port for Front CPU
35	P61	SCL	O	Pulse		Serial clock output for EEPROM
36	P60	SDA	I/O	Pulse		Serial dara output for EEPROM
37	P57	DUD	I	Activ low	up	Digital unit detect
38	P56	SCR	I	Activ low	up	Ready sigunal for digital unit
39	P55	EPM	I	Activ low	up	Witer control
40	P54	PTTM	I	Activ low	up	PTT input for TNC
41	P53	T5	O	Activ low		TX power output ON/OFF
42	P52	SQC	O	Activ low		Squelch control for TNC
43	P51	STBD	O	Pulse		Strobe for Digital unit
44	P50	DSQ	I	Activ high		Squelch signal input for Digital unit
45	P47	TNCB	O	Activ high		Power switch ON/OFF for TNC
46	P46	VVCS	O	Activ high		VHF Main VCO ON/OFF
47	P45	UVCS	O	Activ high		UHF Main VCO ON/OFF
48	P44	DCSW	O	Activ high		DCS switch
49	P43	C/S	O	Activ low		Digital/TNC mode ON/OFF
50	P42	VAD	O	Activ high		VHF digital ON/OFF
51	P41	UAD	O	Activ high		UHF digital ON/OFF
52	P40	M/S	O	Activ high		MAIN/SUB band select
53	P37	WIDE	O	Activ low		Wide mode select
54	P36	NAR	O	Activ low		Narrow mode select
55	P35	MUTV	O	Activ low		VHF AF mute signal output
56	P34	MUTU	O	Activ low		VHF AF mute signal output

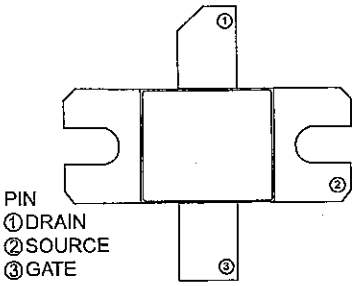
57	P33	XBR	O	Activ high		XBR mute signal
58	P32	DCSV	O	Activ high		VHF DCS switch
59	P31	DCSU	O	Activ high		UHF DCS switch
60	Vcc	VCC	-			CPU power terminal
61	P30	SCRB	O	Activ low		Power output for Aleam
62	Vss	VSS	-			GND
63	P27	VMMT	O	Activ high		VHF mod mute output
64	P26	UMMT	O	Activ high		UHF mod mute output
65	P25	MMUT	O	Activ low		Mic mute output
66	P24	ULV	I	Activ high		VHF unlock input
67	P23	ULU	I	Activ high		UHF unlock input
68	P22	AM	O	Activ high		AM mode ON/OFF
69	P21	5RV	O	Activ high		VHF RX power ON/OFF
70	P20	5RU	O	Activ high		UHF RX power ON/OFF
71	P17	5TV	O	Activ high		VHF TX power ON/OFF
72	P16	5TU	O	Activ high		UHF TX power ON/OFF
73	P15	14RS	O	Activ high		MAIN 144MHz power OM/OFF
74	P14	S43RS	O	Activ high		SUB 430MHz power ON/OFF
75	P13	FMS	O	Activ high		FM power ON/OFF
76	P12	43RS	O	Activ high		MAIN 430MHz power OM/OFF
77	P11	S14RS	O	Activ high		SUB 144MHz power ON/OFF
78	P10	87RS	O	Activ high		Ext band power ON/OFF
79	P07	5VS	O	Activ high		5V power ON/OFF
80	P06	C5S	O	Activ high		5V power ON/OFF
81	P05	ALAM	O	Activ low		AF mute for Aleam
82	P04	TB	O	Pulse		ART/Toneburst signal output
83	P03	BEP1	O	Pulse		Beep sound 1 output
84	P02	BEP2	O	Pulse		Beep sound 2 output
85	P01		O			
86	P00	FAN	O	Activ high		Air FAN power ON/OFF
87	P107/AN7	SMTV	I	A/D		VHF S-meter signal input
88	P106/AN6	SQLV	I	A/D		VHF noise input for squelch
89	P105/AN5	SMTU	I	A/D		UHF S-meter signal input
90	P104/AN4	SQLU	I	A/D		UHF noise input for squelch
91	P103/AN3	TINV	I	A/D		VHF CTCSS/DCS tone input
92	P102/AN2	TINU	I	A/D		UHF CTCSS/DCS tone input
93	P101/AN1	BAT	I	A/D		Power-supply voltage input
94	Avss	AVSS	-			AD converter Gnd
95	P100/AN0	BP1	I	A/D		Band plan
96	Vref	VREF	-			AD converter ref. power
97	Avcc	AVCC	-			AD converter power
98	P97	BP2	I			Ext.Band plan
99	P96/ANEX1	BP3	I			CH Band plan (L:CH)
100	P95/ANEX0	THC	I	A/D		PA Temperature detection

23) Transistor, Diode, and LED Outline Drawings

XB15A407AGB XD0013	UDZ5.1B XD0165	MA742 XD0250	1SS355 XD0254	DSA3A1 XD0274	HVU359TRF XD0314	MA2S728-TX XD0315
						
MA2S077-TX XD0319	DAN235E-TL XD0320	MA2S111-TX XD0323	1SS362TE85L XD0338	1SV308 XD0339	1SS390TE61 XD0342	UM9401F XD0373
						
ISV278 XD0374	MA4S713-TX XD0375	ISV282 XD0376	MAZS270HL XD0377	2SK508 XE0010	3SK131V12 XE0028	2SK2975-T11-A XE0038A
						
2SK3074 XE0044	3SK293TE85L XE0053	VRPG3312X XL0051	FA1111C XL0069	FA1111C XL0077	FA1111C XL0091	MPG338S XL0092
						
SML512BC4T XL0108	2SB1132 XT0061	2SC4081 XT0095	2SA1736 XT0099	2SA1036K XT0110	2SC4215 XT0124	2SC5066-O XT0138
						
2SC5226 XT0146	2SC4808-TX. AR XT0171	2SC4618TLP XT0172	2SB1386 XT0190	2SA1721 XT0206	DTC363EK XU0160	DTD114EK XU0173
						
RN2107TE85L XU0192	RN1107TE85L XU0193	RN1111 XU0197	XP03383-TX XU0202			

RD70VHF1 (XE0047)

Nch MOS FET



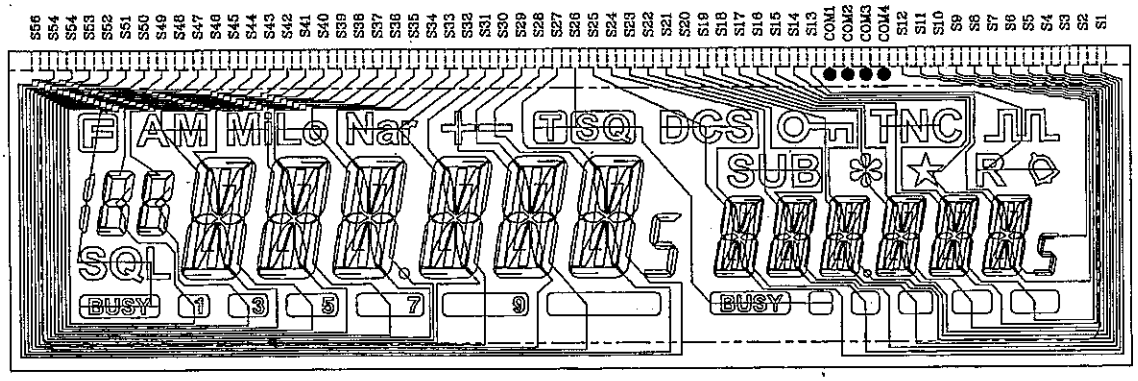
ABSOLUTE MAXIMUM RATING

Symbol	Test conditions	Rating	Unit
Pch	Tc=25°C	150	W
VDSS	Vgs=0V	30	V
VGSS	Vds=0V	±20	V
Tj		+175	°C
Tstg		-40 ~ +125	°C

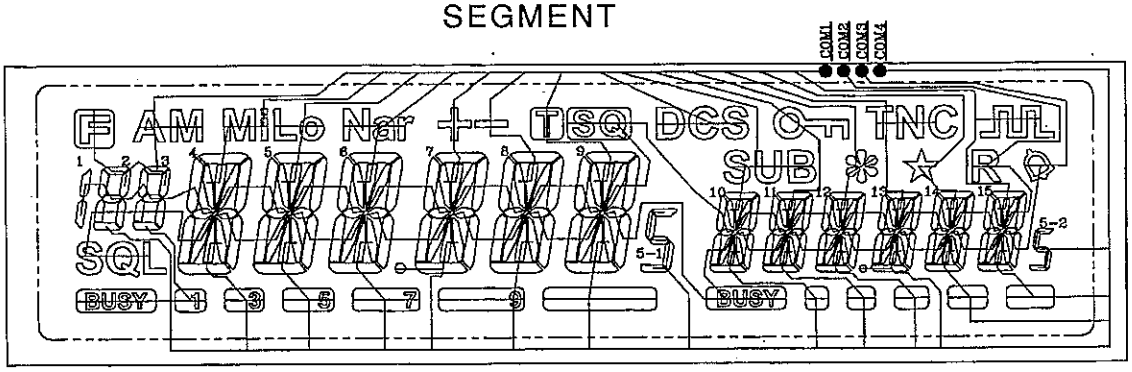
ELECTRICAL CHARACTERISTIC(Ta=25°C)

Parameter	Symbol	Test conditions	Limits		Unit
			Min	Max	
Saturated drain current	IDSS	Vds=17V, Vgs=0V		300	μA
Gate to source leakage current	IGSS	Vds=10V, Vgs=0V		5	μA
Threshold voltage	Vth	Vds=12V, Ids=1ma	1.3	2.3	V
Output power 1	Po1	f=175MHz, Pin=6W	70		W
Drain officiency 1	ηD1	Vds=12.5V Ids(idle)=2.0A	55		%
Output power 2	Po2	f=520MHz, Pin=10W	50		W
Drain officiency 2	ηD2	Vds=12.5V Ids(idle)=2.0A	50		%

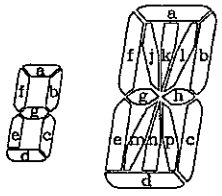
24) LCD Connection

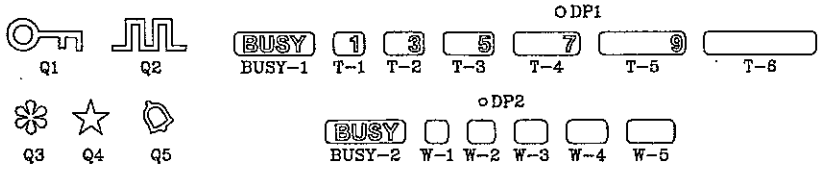


SEGMENT



COMMON

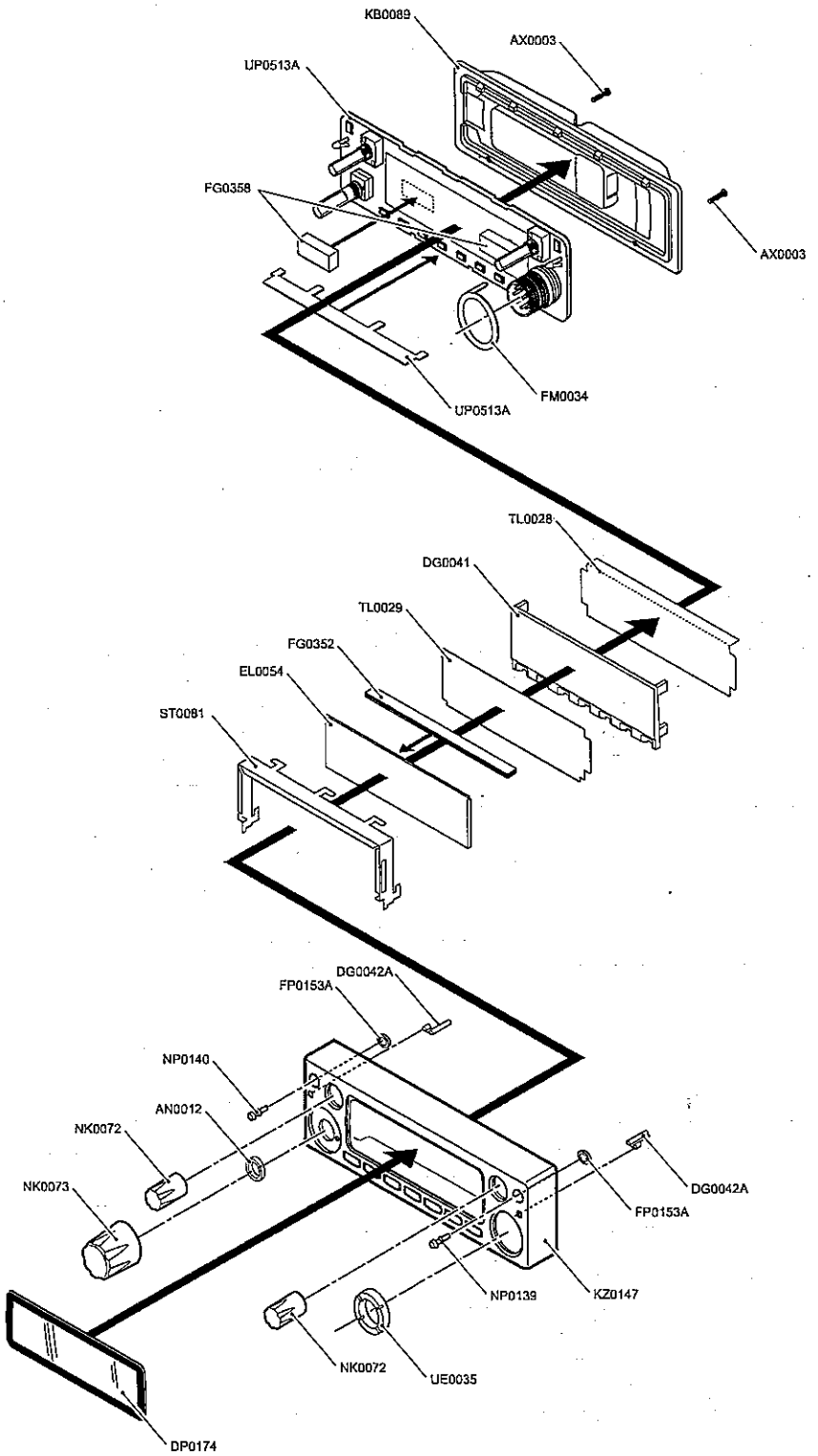




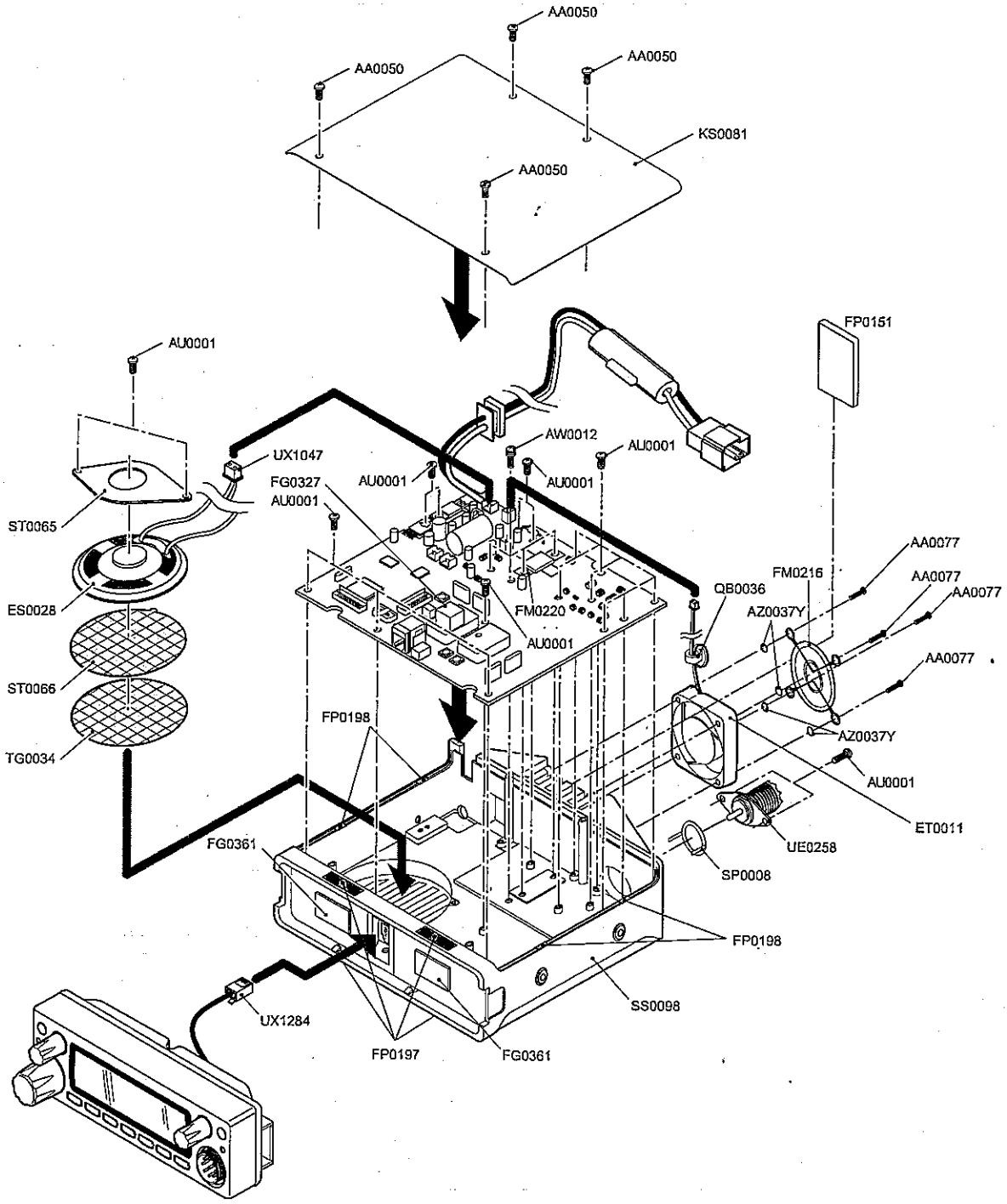
	COM1	COM2	COM3	COM4
S1	10k	10l	10h	10p
S2	10a	10b	10c	W-2
S3	111k	11l	11h	11p
S4	11a	11b	11c	W-3
S5	12k	12l	12h	12p
S6	12a	12b	12c	DP2
S7	13k	13l	13h	13p
S8	13a	13b	13c	W-4
S9	14k	14l	14h	14p
S10	14a	14b	14c	W-5
S11	15k	15l	15h	15p
S12	15a	15b	15c	5-2
COM4	-	-	-	COM4
COM3	-	-	COM3	-
COM2	-	COM2	-	-
COM1	COM1	-	-	-
S13	Q2	R	Q5	-
S14	15j	15g	15m	15n
S15	Q4	15f	15e	15d
S16	14j	14g	14m	14n
S17	TNC	14f	14e	14d
S18	13j	13g	13m	13n
S19	Q3	13f	13e	13d
S20	12j	12g	12m	12n
S21	Q1	12f	12e	12d
S22	11j	11g	11m	11n
S23	SUB	11f	11e	11d
S24	10j	10g	10m	10n
S25	DCS	10f	10e	10d
S26	T	SQ	BUSY-2	W-1
S27	9j	9g	9m	9n
S28	minus(–)	9f	9r	9r
S29	8j	8g	8m	8n
S30	plus(+)	8f	8e	8e
S31	7j	7g	7m	7n
S32	Nar	7f	7e	7e
S33	6j	6g	6m	6n
S34	Lo	6f	6e	6e
S35	5j	5g	5m	5n
S36	Mj	5f	5e	5e
S37	4j	4g	4m	4n
S38	AM	4f	4e	4d
S39	3a	3f	3e	3d
S40	2a	2f	2e	2d
S41	F	1b,c	SQL	BUSY-1
S42	2b	2g	2c	T-1
S43	3b	3g	3c	T-2
S44	4k	4l	4h	4p
S45	4a	4b	4c	T-3
S46	5k	5l	5h	5p
S47	5a	5b	5c	T-4
S48	6k	6l	6h	6p
S49	6a	6b	6c	DP1
S50	7k	7l	7h	7p
S51	7a	7b	7c	T-5
S52	8k	8l	8h	8p
S53	8a	8b	8c	T-6
S54	9k	9l	9h	9p
S55	9a	9b	9c	5-1
S56	N.C.	-	-	-

EXPLODED VIEW

1) Front View



2) Bottom View



PARTS LIST

PART LIST

Front Unit

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
C601	CU3535	Chip C.	GRM36B102K50PT	1	1
C602	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C603	CU3523	Chip C.	GRM36CH101J50PT	1	1
C604	CU0108	Chip C.	2012 B 10V 1UF	1	1
C605	CU3551	Chip C.	GRM36B223K16PT	1	1
C606	CU3535	Chip C.	GRM36B102K50PT	1	1
C607	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C608	CU3535	Chip C.	GRM36B102K50PT	1	1
C609	CU0108	Chip C.	2012 B 10V 1UF	1	1
C610	CU3535	Chip C.	GRM36B102K50PT	1	1
C611	CU3535	Chip C.	GRM36B102K50PT	1	1
C612	CU3535	Chip C.	GRM36B102K50PT	1	1
C613	CU3535	Chip C.	GRM36B102K50PT	1	1
C614	CU3535	Chip C.	GRM36B102K50PT	1	1
C615	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C616	CU3535	Chip C.	GRM36B102K50PT	1	1
C617	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C618	CU3533	Chip C.	GRM36B681K50PT	1	1
C619	CU3535	Chip C.	GRM36B102K50PT	1	1
C620	CU3535	Chip C.	GRM36B102K50PT	1	1
C621	CU3535	Chip C.	GRM36B102K50PT	1	1
C622	CU3535	Chip C.	GRM36B102K50PT	1	1
C623	CU3543	Chip C.	GRM36B472K25PT	1	1
C624	CU3543	Chip C.	GRM36B472K25PT	1	1
C625	CU3551	Chip C.	GRM36B223K16PT	1	1
C626	CU3523	Chip C.	GRM36CH101J50PT	1	1
C627	CU3523	Chip C.	GRM36CH101J50PT	1	1
CN601	UE0035	Connector	MIC FM214-8SMPY	1	1
CN602	UJ0052	Jack	HJC0163-01-022	1	1
D601	XD0254	Chip Diode	1SS355	1	1
D606	XD0254	Chip Diode	1SS355	1	1
D611	XL0069	Chip LED	FA1111C	1	1
D612	XL0108	Chip LED	SML512BC4TT86	1	1
D613	XL0069	Chip LED	FA1111C	1	1
D614	XL0092	Chip LED	MPG3338S	1	1
D618	XL0051	Chip LED	VRPG3312X	1	1
D620	XD0254	Chip Diode	1SS355	1	1
IC601	XA0068	IC	IC M5218FP	1	1
IC602	XA0947	IC	NJM78M05DL1A-TE1	1	1
IC603	XA0899	IC	LC75884W	1	1
IC604	XA0914	IC	M38503M2H667FP	1	1
LCD601	EL0054	LCD	LCD DR620	1	1
Q601	XT0095	Chip Transistor	2SC4081	1	1
Q602	XT0095	Chip Transistor	2SC4081	1	1
Q603	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q604	XT0095	Chip Transistor	2SC4081	1	1
Q605	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q606	XU0192	Chip Transistor	RN2107 TE85L	1	1
Q607	XU0173	Chip Transistor	DTD114EK-T146	1	1
Q608	XU0173	Chip Transistor	DTD114EK-T146	1	1
Q610	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q611	XT0095	Chip Transistor	2SC4081	1	1
Q612	XU0193	Chip Transistor	RN1107 TE85L	1	1
R601	RK3566	Chip R.	1005 1/16W 220K OHMJ	1	1
R602	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R603	RK3551	Chip R.	1005 1/16W 12K OHM J	1	1
R604	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R605	RK3560	Chip R.	1005 1/16W 68K OHM J	1	1
R606	RK3543	Chip R.	1005 1/16W 2.7K OHMJ	1	1
R607	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R608	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R609	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R610	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R611	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R612	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R613	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R614	RK3501	Chip R.	1005 1/16W 0 OHM J	1	1
R615	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R616	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R617	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R618	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R619	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R620	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R621	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R622	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R623	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R624	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R625	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R626	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R627	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R628	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R629	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R630	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R631	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R632	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R633	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R634	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R635	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R636	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R637	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R639	RK3026	Chip R.	1608 1/10W 100 OHM J	1	1
R640	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R641	RK3570	Chip R.	1005 1/16W 470K OHMJ	1	1
R642	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R643	RK3574	Chip R.	1005 1/16W 1.0M OHMJ	1	1
R645	RK3030	Chip R.	1608 1/10W 220 OHM J	1	1
R646	RK3534	Chip R.	1005 1/16W 470 OHM J	1	1
R651	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R652	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R653	RK3535	Chip R.	1005 1/16W 560 OHM J	1	1
R654	RK3532	Chip R.	1005 1/16W 330 OHM J	1	1
R655	RK3528	Chip R.	1005 1/16W 150 OHM J	1	1
R656	RK3535	Chip R.	1005 1/16W 560 OHM J	1	1
R657	RK3528	Chip R.	1005 1/16W 150 OHM J	1	1
R658	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R659	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R660	RK3014	Chip R.	1608 1/10W 10 OHM J	1	1
R662	RK3023	Chip R.	1608 1/10W 56 OHM J	1	1
R663	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R666	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R667	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R668	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R669	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R670	RK3035	Chip R.	1608 1/10W 560 OHM J	1	1
RE601	UR0015	Dial	RH90N74E20-A90770	1	1
SW601	UU0015Z	Switch	EVQPPPA25 TACT SW	1	1
SW602	UU0015Z	Switch	EVQPPPA25 TACT SW	1	1
SW603	UU0015Z	Switch	EVQPPPA25 TACT SW	1	1
SW604	UU0015Z	Switch	EVQPPPA25 TACT SW	1	1
SW605	UU0015Z	Switch	EVQPPPA25 TACT SW	1	1
SW606	UU0015Z	Switch	EVQPPPA25 TACT SW	1	1
SW607	UU0015Z	Switch	EVQPPPA25 TACT SW	1	1
SW608	UU0015Z	Switch	EVQPPPA25 TACT SW	1	1
SW609	UU0015Z	Switch	EVQPPPA25 TACT SW	1	1
VR601	RV0035	Variable R.	EVUF2JFK4B14	1	1
VR602	RV0035	Variable R.	EVUF2JFK4B14	1	1
X601	XB0029	Ceramic OSC	EFOS4914E5	1	1
	DG0041		LCD LIGHT DR620	1	1
	FG0352		LCD RUBBER CONNECTO	1	1
	FG0358		LCD CUSHION DR620	2	2
	FM0034		MIC GND PLATE	1	1
	FP0034		MIC SPACER DR110	1	1
	ST0081		LCD HOLDER DR620	1	1
	TL0028		REFLECTIVE SHEET	1	1
	TL0029		DIFFUSION SHEET	1	1

LED Unit

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
D602	XL0077	Chip LED	FA1111C-TR C/D/ERANK	1	1
D603	XL0077	Chip LED	FA1111C-TR C/D/ERANK	1	1
D604	XL0077	Chip LED	FA1111C-TR C/D/ERANK	1	1
D605	XL0108	Chip LED	SML512BC4TT86	1	1
D607	XL0077	Chip LED	FA1111C-TR C/D/ERANK	1	1
D608	XL0108	Chip LED	SML512BC4TT86	1	1
D609	XL0077	Chip LED	FA1111C-TR C/D/ERANK	1	1
D610	XL0077	Chip LED	FA1111C-TR C/D/ERANK	1	1
D615	XL0108	Chip LED	SML512BC4TT86	1	1
D616	XL0108	Chip LED	SML512BC4TT86	1	1
D617	XL0108	Chip LED	SML512BC4TT86	1	1
D619	XL0108	Chip LED	SML512BC4TT86	1	1
R647	RK3028	Chip R.	1608 1/10W 150 OHM J	1	1
R648	RK3028	Chip R.	1608 1/10W 150 OHM J	1	1
R649	RK3028	Chip R.	1608 1/10W 150 OHM J	1	1
R650	RK3014	Chip R.	1608 1/10W 10 OHM J	1	1
R664	RK3014	Chip R.	1608 1/10W 10 OHM J	1	1
R665	RK3014	Chip R.	1608 1/10W 10 OHM J	1	1

Main Unit

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
C1	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C3	CU3535	Chip C.	GRM36B102K50PT	1	1
C4	CU3031	Chip C.	1608 B 50V 470PF K	1	1
C5	CU4003	Chip C.	GRM42-6CK020C500PT	1	1
C6	CU3019	Chip C.	1608 CH 50V 47PF J	1	1
C8	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C9	CU7046	Chip C.	3225 C 500V 27PF	1	1

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
C10	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C11	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C12	CU3057	Chip C.	1608 CH 50V 13PF	1	1
C13	CU3057	Chip C.	1608 CH 50V 13PF	1	1
C14	CU4023	Chip C.	GRM42-6CH101J500PT	1	1
C15	CU7052	Chip C.	3225 F 500V 82PF	1	1
C16	CU3507	Chip C.	GRM36CH060D50PT	1	1
C17	CU7054	Chip C.	2012 J 100V 22PF	1	1
C18	CU3535	Chip C.	GRM36B102K50PT	1	1
C19	CU3517	Chip C.	GRM36CH330J50PT	1	1
C20	CU4023	Chip C.	GRM42-6CH101J500PT	1	1
C21	CU3535	Chip C.	GRM36B102K50PT	1	1
C22	CU3511	Chip C.	GRM36CH100D50PT	1	1
C23	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C26	CU3535	Chip C.	GRM36B102K50PT	1	1
C27	CU3515	Chip C.	GRM36CH220J50PT	1	1
C29	CU3515	Chip C.	GRM36CH220J50PT	1	1
C30	CU3535	Chip C.	GRM36B102K50PT	1	1
C31	CU3535	Chip C.	GRM36B102K50PT	1	1
C32	CU3024	Chip C.	1608 CH 50V 120PF J	1	1
C33	CU3024	Chip C.	1608 CH 50V 120PF J	1	1
C35	CU4016	Chip C.	GRM42-6CH270J500PT	1	1
C36	CU4015	Chip C.	GRM42-6CH220J500PT	1	1
C38	CU4016	Chip C.	GRM42-6CH270J500PT	1	1
C39	CU4014	Chip C.	GRM42-6CH180J500PT	1	1
C40	CU7050	Chip C.	3225 F 500V 56PF	1	1
C42	CU3513	Chip C.	GRM36CH150J50PT	1	1
C43	CU3518	Chip C.	GRM36CH390J50PT	1	1
C44	CU3515	Chip C.	GRM36CH220J50PT	1	1
C45	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C46	CU3001	Chip C.	1608 CH 50V .5PF C	1	1
C48	CU3001	Chip C.	1608 CH 50V .5PF C	1	1
C49	CU4013	Chip C.	GRM42-6CH150J500PT	1	1
C51	CU3511	Chip C.	GRM36CH100D50PT	1	1
C52	CU0108	Chip C.	2012 B 10V 1UF	1	1
C53	CU0108	Chip C.	2012 B 10V 1UF	1	1
C54	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C55	CU3515	Chip C.	GRM36CH220J50PT	1	1
C56	CU3511	Chip C.	GRM36CH100D50PT	1	1
C57	CU4012	Chip C.	GRM42-6CH120J500PT	1	1
C58	CU3509	Chip C.	GRM36CH080D50PT	1	1
C59	CU3510	Chip C.	1005 CH 50V 9PF D	1	1
C60	CU3514	Chip C.	GRM36CH180J50PT	1	1
C61	CU3514	Chip C.	GRM36CH180J50PT	1	1
C62	CE0339	Electrolytic C.	16V 10UF	1	1
C63	CU4015	Chip C.	GRM42-6CH220J500PT	1	1
C64	CU3535	Chip C.	GRM36B102K50PT	1	1
C65	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C66	CU3503	Chip C.	GRM36CK020C50PT	1	1
C67	CU3535	Chip C.	GRM36B102K50PT	1	1
C68	CU3019	Chip C.	1608 CH 50V 47PF J	1	1
C69	CU3530	Chip C.	GRM36B391K50PT	1	1
C70	CE0420	Electrolytic C.	16MV22SZ	1	1
C71	CU3011	Chip C.	1608 CH 50V 10PF C	1	1
C72	CU3012	Chip C.	1608 CH 50V 12PF J	1	1
C73	CU3015	Chip C.	1608 CH 50V 22PF J	1	1
C74	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C75	CU3514	Chip C.	GRM36CH180J50PT	1	1
C76	CU3514	Chip C.	GRM36CH180J50PT	1	1
C78	CU3531	Chip C.	GRM36B471K50PT	1	1
C79	CU3535	Chip C.	GRM36B102K50PT	1	1
C80	CU3535	Chip C.	GRM36B102K50PT	1	1
C81	CU3511	Chip C.	GRM36CH100D50PT	1	1
C82	CU3547	Chip C.	GRM36B103K16PT	1	1
C83	CU3535	Chip C.	GRM36B102K50PT	1	1
C84	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C85	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C86	CU3535	Chip C.	GRM36B102K50PT	1	1
C87	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C88	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C89	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C91	CU3502	Chip C.	GRM36CK010C50PT	1	1
C92	CU3547	Chip C.	GRM36B103K16PT	1	1
C93	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C94	CU3511	Chip C.	GRM36CH100D50PT	1	1
C95	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C96	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C97	CU3535	Chip C.	GRM36B102K50PT	1	1
C98	CS0220	Chip Tantalum	16V 2.2UF	1	1
C99	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C100	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C101	CU3535	Chip C.	GRM36B102K50PT	1	1
C102	CU3506	Chip C.	GRM36CH050C50PT	1	1
C103	CU4019	Chip C.	GRM42-6CH470J500PT	1	1
C104	CS0220	Chip Tantalum	16V 2.2UF	1	1
C105	CU3512	Chip C.	GRM36CH120J50PT	1	1
C106	CU4008	Chip C.	GRM42-6CH070D500PT	1	1
C107	CU3551	Chip C.	GRM36B223K16PT	1	1
C108	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C109	CU3535	Chip C.	GRM36B102K50PT	1	1
C110	CU3547	Chip C.	GRM36B103K16PT	1	1
C111	CU0002	Chip C.	2012 CH 50V 1.0PF C	1	1
C112	CU4006	Chip C.	GRM42-6CH050C500PT	1	1
C113	CU3502	Chip C.	GRM36CK010C50PT	1	1
C114	CS0063	Chip Tantalum	35V 0.1UF	1	1
C115	CU3005	Chip C.	1608 CH 50V 4PF C	1	1
C116	CU4010	Chip C.	GRM42-6CH090D500PT	1	1
C117	CU4007	Chip C.	GRM42-6CH060D500PT	1	1
C118	CU3547	Chip C.	GRM36B103K16PT	1	1
C119	CE0420	Electrolytic C.	16MV22SZ	1	1
C120	CU3535	Chip C.	GRM36B102K50PT	1	1
C121	CU3535	Chip C.	GRM36B102K50PT	1	1
C122	CU3523	Chip C.	GRM36CH101J50PT	1	1
C123	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C124	CU4006	Chip C.	GRM42-6CH050C500PT	1	1
C125	CU4001	Chip C.	GRM42-6CK010C500PT	1	1
C126	CU4007	Chip C.	GRM42-6CH060D500PT	1	1
C127	CU4016	Chip C.	GRM42-6CH270J500PT	1	1
C128	CU3511	Chip C.	GRM36CH100D50PT	1	1
C129	CU3001	Chip C.	1608 CH 50V .5PF C	1	1
C130	CU3001	Chip C.	1608 CH 50V .5PF C	1	1
C131	CU4019	Chip C.	GRM42-6CH470J500PT	1	1
C132	CU3535	Chip C.	GRM36B102K50PT	1	1
C133	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C134	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C135	CS0063	Chip Tantalum	35V 0.1UF	1	1
C136	CU3531	Chip C.	GRM36B471K50PT	1	1
C137	CU3535	Chip C.	GRM36B102K50PT	1	1
C138	CU3523	Chip C.	GRM36CH101J50PT	1	1
C139	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C141	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C142	CU3523	Chip C.	GRM36CH101J50PT	1	1
C143	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C144	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C145	CU3535	Chip C.	GRM36B102K50PT	1	1
C146	CU3535	Chip C.	GRM36B102K50PT	1	1
C147	CU3523	Chip C.	GRM36CH101J50PT	1	1
C148	CU3547	Chip C.	GRM36B103K16PT	1	1
C149	CU3535	Chip C.	GRM36B102K50PT	1	1
C150	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C151	CU3523	Chip C.	GRM36CH101J50PT	1	1
C152	CU3547	Chip C.	GRM36B103K16PT	1	1
C153	CU3512	Chip C.	GRM36CH120J50PT	1	1
C154	CU3007	Chip C.	1608 CH 50V 6PF C	1	1
C155	CU3535	Chip C.	GRM36B102K50PT	1	1
C156	CU3023	Chip C.	1608 CH 50V 100PF J	1	1
C157	CU3006	Chip C.	1608 CH 50V 5PF C	1	1
C159	CU3506	Chip C.	GRM36CH050C50PT	1	1
C160	CU3007	Chip C.	1608 CH 50V 6PF C	1	1
C161	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C162	CU3508	Chip C.	1005 CH 50V 7PF D	1	1
C163	CU3504	Chip C.	GRM36CJ030C50PT	1	1
C164	CU3547	Chip C.	GRM36B103K16PT	1	1
C165	CU3503	Chip C.	GRM36CK020C50PT	1	1
C166	CU3535	Chip C.	GRM36B102K50PT	1	1
C167	CU3535	Chip C.	GRM36B102K50PT	1	1
C168	CU3535	Chip C.	GRM36B102K50PT	1	1
C169	CU3547	Chip C.	GRM36B103K16PT	1	1
C170	CU3513	Chip C.	GRM36CH150J50PT	1	1
C171	CU3547	Chip C.	GRM36B103K16PT	1	1
C173	CU3515	Chip C.	GRM36CH220J50PT	1	1
C174	CU3511	Chip C.	GRM36CH100D50PT	1	1
C175	CU3511	Chip C.	GRM36CH100D50PT	1	1
C176	CU0108	Chip C.	2012 B 10V 1UF	1	1
C177	CU3503	Chip C.	GRM36CK020C50PT	1	1
C178	CU3515	Chip C.	GRM36CH220J50PT	1	1
C179	CU3503	Chip C.	GRM36CK020C50PT	1	1
C180	CU3502	Chip C.	GRM36CK010C50PT	1	1
C181	CU3502	Chip C.	GRM36CK010C50PT	1	1
C182	CU3512	Chip C.	GRM36CH120J50PT	1	1
C183	CU3535	Chip C.	GRM36B102K50PT	1	1
C184	CU3529	Chip C.	GRM36B331K50PT	1	1
C185	CU3527	Chip C.	GRM36CH221J25PT	1	1
C186	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C187	CU3535	Chip C.	GRM36B102K50PT	1	1
C188	CU3513	Chip C.	GRM36CH150J50PT	1	1
C189	CU3516	Chip C.	GRM36CH270J50PT	1	1
C190	CU3535	Chip C.	GRM36B102K50PT	1	1
C191	CU3504	Chip C.	GRM36CJ030C50PT	1	1
C192	CU3535	Chip C.	GRM36B102K50PT	1	1

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
C196	CS0049	Chip Tantalum	16V 1UF	1	1
C197	CS0063	Chip Tantalum	35V 0.1UF	1	1
C198	CU3535	Chip C.	GRM36B102K50PT	1	1
C199	CU3515	Chip C.	GRM36CH220J50PT	1	1
C200	CU3517	Chip C.	GRM36CH330J50PT	1	1
C201	CU3519	Chip C.	GRM36CH470J50PT	1	1
C202	CU3507	Chip C.	GRM36CH060D50PT	1	1
C203	CU3547	Chip C.	GRM36B103K16PT	1	1
C205	CU3513	Chip C.	GRM36CH150J50PT	1	1
C206	CU3547	Chip C.	GRM36B103K16PT	1	1
C207	CU3535	Chip C.	GRM36B102K50PT	1	1
C208	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C209	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C210	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C211	CU3547	Chip C.	GRM36B103K16PT	1	1
C213	CU3535	Chip C.	GRM36B102K50PT	1	1
C214	CU3535	Chip C.	GRM36B102K50PT	1	1
C215	CU3535	Chip C.	GRM36B102K50PT	1	1
C216	CU3522	Chip C.	GRM36CH820J50PT	1	1
C218	CU3522	Chip C.	GRM36CH820J50PT	1	1
C219	CU3522	Chip C.	GRM36CH820J50PT	1	1
C220	CU3535	Chip C.	GRM36B102K50PT	1	1
C221	CU3547	Chip C.	GRM36B103K16PT	1	1
C222	CU3535	Chip C.	GRM36B102K50PT	1	1
C223	CU3535	Chip C.	GRM36B102K50PT	1	1
C224	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C225	CU3535	Chip C.	GRM36B102K50PT	1	1
C226	CU3515	Chip C.	GRM36CH220J50PT	1	1
C227	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C228	CU3511	Chip C.	GRM36CH100D50PT	1	1
C229	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C230	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C231	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C232	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C233	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C234	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C235	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C236	CU0108	Chip C.	2012 B 10V 1UF	1	1
C237	CU3535	Chip C.	GRM36B102K50PT	1	1
C238	CU3551	Chip C.	GRM36B223K16PT	1	1
C239	CU3535	Chip C.	GRM36B102K50PT	1	1
C240	CU3531	Chip C.	GRM36B471K50PT	1	1
C242	CU3523	Chip C.	GRM36CH101J50PT	1	1
C243	CU3503	Chip C.	GRM36CK020C50PT	1	1
C244	CU3535	Chip C.	GRM36B102K50PT	1	1
C245	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C246	CU3535	Chip C.	GRM36B102K50PT	1	1
C247	CU3506	Chip C.	GRM36CH050C50PT	1	1
C248	CU3547	Chip C.	GRM36B103K16PT	1	1
C249	CU3511	Chip C.	GRM36CH100D50PT	1	1
C250	CU3531	Chip C.	GRM36B471K50PT	1	1
C251	CU3502	Chip C.	GRM36CK010C50PT	1	1
C252	CU3519	Chip C.	GRM36CH470J50PT	1	1
C253	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C254	CU3547	Chip C.	GRM36B103K16PT	1	1
C255	CS0220	Chip Tantalum	16V 2.2UF	1	1
C256	CU3547	Chip C.	GRM36B103K16PT	1	1
C257	CS0220	Chip Tantalum	16V 2.2UF	1	1
C258	CU3504	Chip C.	GRM36CJ030C50PT	1	1
C259	CU3515	Chip C.	GRM36CH220J50PT	1	1
C260	CU3514	Chip C.	GRM36CH180J50PT	1	1
C261	CU3535	Chip C.	GRM36B102K50PT	1	1
C262	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C263	CU3523	Chip C.	GRM36CH101J50PT	1	1
C264	CU3535	Chip C.	GRM36B102K50PT	1	1
C265	CS0063	Chip Tantalum	35V 0.1UF	1	1
C266	CU3524	Chip C.	1005 CH 50V 120PF J	1	1
C267	CU3547	Chip C.	GRM36B103K16PT	1	1
C268	CU3515	Chip C.	GRM36CH220J50PT	1	1
C269	CU3519	Chip C.	GRM36CH470J50PT	1	1
C270	CU3516	Chip C.	GRM36CH270J50PT	1	1
C271	CU3535	Chip C.	GRM36B102K50PT	1	1
C272	CU3535	Chip C.	GRM36B102K50PT	1	1
C273	CU3504	Chip C.	GRM36CJ030C50PT	1	1
C274	CU3535	Chip C.	GRM36B102K50PT	1	1
C275	CU3535	Chip C.	GRM36B102K50PT	1	1
C276	CU3535	Chip C.	GRM36B102K50PT	1	1
C278	CU3513	Chip C.	GRM36CH150J50PT	1	1
C279	CU3535	Chip C.	GRM36B102K50PT	1	1
C280	CU3547	Chip C.	GRM36B103K16PT	1	1
C281	CU3514	Chip C.	GRM36CH180J50PT	1	1
C282	CU3518	Chip C.	GRM36CH390J50PT	1	1
C283	CU3524	Chip C.	1005 CH 50V 120PF J	1	1
C284	CU3504	Chip C.	GRM36CJ030C50PT	1	1
C285	CU3524	Chip C.	1005 CH 50V 120PF J	1	1

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
C286	CU3511	Chip C.	GRM36CH100D50PT	1	1
C287	CU3547	Chip C.	GRM36B103K16PT	1	1
C288	CU3547	Chip C.	GRM36B103K16PT	1	1
C289	CU3535	Chip C.	GRM36B102K50PT	1	1
C290	CU3518	Chip C.	GRM36CH390J50PT	1	1
C291	CU3535	Chip C.	GRM36B102K50PT	1	1
C292	CU3518	Chip C.	GRM36CH390J50PT	1	1
C294	CU3514	Chip C.	GRM36CH180J50PT	1	1
C295	CU3547	Chip C.	GRM36B103K16PT	1	1
C296	CU3547	Chip C.	GRM36B103K16PT	1	1
C298	CU3547	Chip C.	GRM36B103K16PT	1	1
C300	CU3512	Chip C.	GRM36CH120J50PT	1	1
C301	CU3535	Chip C.	GRM36B102K50PT	1	1
C302	CU3535	Chip C.	GRM36B102K50PT	1	1
C303	CU3535	Chip C.	GRM36B102K50PT	1	1
C305	CU3511	Chip C.	GRM36CH100D50PT	1	1
C306	CU3547	Chip C.	GRM36B103K16PT	1	1
C308	CU3535	Chip C.	GRM36B102K50PT	1	1
C309	CU3535	Chip C.	GRM36B102K50PT	1	1
C310	CU3547	Chip C.	GRM36B103K16PT	1	1
C311	CU3535	Chip C.	GRM36B102K50PT	1	1
C312	CU3511	Chip C.	GRM36CH100D50PT	1	1
C313	CU3502	Chip C.	GRM36CK010C50PT	1	1
C314	CU3535	Chip C.	GRM36B102K50PT	1	1
C315	CU3503	Chip C.	GRM36CK020C50PT	1	1
C316	CU0108	Chip C.	2012 B 10V 1UF	1	1
C317	CU3535	Chip C.	GRM36B102K50PT	1	1
C318	CS0063	Chip Tantalum	35V 0.1UF	1	1
C319	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C320	CU3501	Chip C.	GRM36CK0R5C50PT	1	1
C321	CU3547	Chip C.	GRM36B103K16PT	1	1
C322	CU3547	Chip C.	GRM36B103K16PT	1	1
C323	CU3511	Chip C.	GRM36CH100D50PT	1	1
C324	CU0108	Chip C.	2012 B 10V 1UF	1	1
C325	CU3535	Chip C.	GRM36B102K50PT	1	1
C326	CU3504	Chip C.	GRM36CJ030C50PT	1	1
C327	CU3503	Chip C.	GRM36CK020C50PT	1	1
C328	CU3508	Chip C.	1005 CH 50V 7PF D	1	1
C329	CU3512	Chip C.	GRM36CH120J50PT	1	1
C330	CU3505	Chip C.	GRM36CH040C50PT	1	1
C331	CU3515	Chip C.	GRM36CH220J50PT	1	1
C332	CU3535	Chip C.	GRM36B102K50PT	1	1
C333	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C334	CU3505	Chip C.	GRM36CH040C50PT	1	1
C335	CU3511	Chip C.	GRM36CH100D50PT	1	1
C337	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C338	CU3512	Chip C.	GRM36CH120J50PT	1	1
C339	CS0237	Chip Tantalum	10V 4.7UF	1	1
C340	CU3508	Chip C.	1005 CH 50V 7PF D	1	1
C342	CU3547	Chip C.	GRM36B103K16PT	1	1
C344	CU3505	Chip C.	GRM36CH040C50PT	1	1
C345	CU3535	Chip C.	GRM36B102K50PT	1	1
C346	CU3535	Chip C.	GRM36B102K50PT	1	1
C347	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C348	CU3535	Chip C.	GRM36B102K50PT	1	1
C349	CU3523	Chip C.	GRM36CH101J50PT	1	1
C350	CU3535	Chip C.	GRM36B102K50PT	1	1
C353	CU3504	Chip C.	GRM36CJ030C50PT	1	1
C354	CU3547	Chip C.	GRM36B103K16PT	1	1
C355	CU3535	Chip C.	GRM36B102K50PT	1	1
C356	CU3547	Chip C.	GRM36B103K16PT	1	1
C357	CU3547	Chip C.	GRM36B103K16PT	1	1
C358	CU3535	Chip C.	GRM36B102K50PT	1	1
C359	CU3522	Chip C.	GRM36CH820J50PT	1	1
C360	CU3551	Chip C.	GRM36B223K16PT	1	1
C361	CU3527	Chip C.	GRM36CH221J25PT	1	1
C362	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C363	CU3535	Chip C.	GRM36B102K50PT	1	1
C364	CS0237	Chip Tantalum	10V 4.7UF	1	1
C365	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C366	CU3535	Chip C.	GRM36B102K50PT	1	1
C367	CU3511	Chip C.	GRM36CH100D50PT	1	1
C368	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C369	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C370	CU3535	Chip C.	GRM36B102K50PT	1	1
C371	CU3543	Chip C.	GRM36B472K25PT	1	1
C372	CU3527	Chip C.	GRM36CH221J25PT	1	1
C373	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C374	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C375	CU3547	Chip C.	GRM36B103K16PT	1	1
C376	CU3535	Chip C.	GRM36B102K50PT	1	1
C377	CU3547	Chip C.	GRM36B103K16PT	1	1
C378	CU3101	Chip C.	1608 B 50V 0.047UF K	1	1
C379	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C380	CU3503	Chip C.	GRM36CK020C50PT	1	1

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
C381	CU3503	Chip C.	GRM36CK020C50PT	1	1
C382	CU3505	Chip C.	GRM36CH040C50PT	1	1
C383	CU3523	Chip C.	GRM36CH101J50PT	1	1
C384	CU3520	Chip C.	1005 CH 50V 56PF J	1	1
C386	CU3526	Chip C.	GRM36CH181J25PT	1	1
C387	CU3047	Chip C.	1608 B 50V 0.010UF	1	1
C389	CU3538	Chip C.	GRM36B182K50PT	1	1
C390	CU3523	Chip C.	GRM36CH101J50PT	1	1
C391	CU3503	Chip C.	GRM36CK020C50PT	1	1
C392	CU3512	Chip C.	GRM36CH120J50PT	1	1
C393	CU3506	Chip C.	GRM36CH050C50PT	1	1
C394	CU3507	Chip C.	GRM36CH060D50PT	1	1
C395	CU3535	Chip C.	GRM36B102K50PT	1	1
C396	CU3547	Chip C.	GRM36B103K16PT	1	1
C397	CU3535	Chip C.	GRM36B102K50PT	1	1
C398	CU3504	Chip C.	GRM36CJ030C50PT	1	1
C399	CU3535	Chip C.	GRM36B102K50PT	1	1
C401	CU3505	Chip C.	GRM36CH040C50PT	1	1
C402	CU3511	Chip C.	GRM36CH100D50PT	1	1
C403	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C404	CU3547	Chip C.	GRM36B103K16PT	1	1
C405	CU3505	Chip C.	GRM36CH040C50PT	1	1
C406	CU3511	Chip C.	GRM36CH100D50PT	1	1
C407	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C408	CU3102	Chip C.	1608 B 50V 0.033UF K	1	1
C409	CU3549	Chip C.	1005 B 16V 0.015UF K	1	1
C410	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C411	CU3535	Chip C.	GRM36B102K50PT	1	1
C412	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C413	CU3549	Chip C.	1005 B 16V 0.015UF K	1	1
C414	CU3535	Chip C.	GRM36B102K50PT	1	1
C415	CU3523	Chip C.	GRM36CH101J50PT	1	1
C416	CU3523	Chip C.	GRM36CH101J50PT	1	1
C417	CU0002	Chip C.	2012 CH 50V 1.0PF C	1	1
C418	CU3503	Chip C.	GRM36CK020C50PT	1	1
C419	CU3504	Chip C.	GRM36CJ030C50PT	1	1
C420	CU3506	Chip C.	GRM36CH050C50PT	1	1
C421	CU3506	Chip C.	GRM36CH050C50PT	1	1
C422	CU3506	Chip C.	GRM36CH050C50PT	1	1
C423	CU3503	Chip C.	GRM36CK020C50PT	1	1
C425	CU3506	Chip C.	GRM36CH050C50PT	1	1
C426	CU3503	Chip C.	GRM36CK020C50PT	1	1
C427	CU3535	Chip C.	GRM36B102K50PT	1	1
C428	CU3512	Chip C.	GRM36CH120J50PT	1	1
C429	CU3502	Chip C.	GRM36CK010C50PT	1	1
C430	CU3535	Chip C.	GRM36B102K50PT	1	1
C431	CS0237	Chip Tantalum	10V 4.7UF	1	1
C432	CU3535	Chip C.	GRM36B102K50PT	1	1
C434	CU3503	Chip C.	GRM36CK020C50PT	1	1
C435	CS0237	Chip Tantalum	10V 4.7UF	1	1
C436	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C437	CS0237	Chip Tantalum	10V 4.7UF	1	1
C438	CU3505	Chip C.	GRM36CH040C50PT	1	1
C439	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C440	CU0108	Chip C.	2012 B 10V 1UF	1	1
C441	CU3535	Chip C.	GRM36B102K50PT	1	1
C442	CE0364	Electrolytic C.	16V 47UF	1	1
C443	CU3551	Chip C.	GRM36B223K16PT	1	1
C444	CU3551	Chip C.	GRM36B223K16PT	1	1
C445	CE0342	Electrolytic C.	16V 470UF	1	1
C446	CU0108	Chip C.	2012 B 10V 1UF	1	1
C447	CU3535	Chip C.	GRM36B102K50PT	1	1
C448	CU0108	Chip C.	2012 B 10V 1UF	1	1
C449	CU3535	Chip C.	GRM36B102K50PT	1	1
C450	CU3547	Chip C.	GRM36B103K16PT	1	1
C451	CU3551	Chip C.	GRM36B223K16PT	1	1
C453	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C454	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C455	CU3547	Chip C.	GRM36B103K16PT	1	1
C456	CU3535	Chip C.	GRM36B102K50PT	1	1
C457	CU3535	Chip C.	GRM36B102K50PT	1	1
C458	CE0339	Electrolytic C.	16V 10UF	1	1
C459	CS0423	Chip Tantalum	TMCMB1C226MTR	1	1
C460	CE0420	Electrolytic C.	16MV22SZ	1	1
C461	CU3551	Chip C.	GRM36B223K16PT	1	1
C462	CU3551	Chip C.	GRM36B223K16PT	1	1
C463	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C464	CU3547	Chip C.	GRM36B103K16PT	1	1
C465	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C466	CU3102	Chip C.	1608 B 50V 0.033UF K	1	1
C467	CU3535	Chip C.	GRM36B102K50PT	1	1
C468	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C469	CU3027	Chip C.	1608 CH 50V 220PF J	1	1
C470	CE0418	Electrolytic C.	16MV2200CA	1	1
C471	CU3535	Chip C.	GRM36B102K50PT	1	1
C472	CE0339	Electrolytic C.	16V 10UF	1	1
C473	CE0364	Electrolytic C.	16V 47UF	1	1
C474	CU3535	Chip C.	GRM36B102K50PT	1	1
C475	CU3551	Chip C.	GRM36B223K16PT	1	1
C476	CU3549	Chip C.	1005 B 16V 0.015UF K	1	1
C477	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C478	CU3547	Chip C.	GRM36B103K16PT	1	1
C479	CU3535	Chip C.	GRM36B102K50PT	1	1
C480	CE0364	Electrolytic C.	16V 47UF	1	1
C481	CS0049	Chip Tantalum	16V 1UF	1	1
C482	CU3047	Chip C.	1608 B 50V 0.010UF	1	1
C483	CU3541	Chip C.	GRM36B332K50PT	1	1
C484	CU3538	Chip C.	GRM36B182K50PT	1	1
C485	CU3544	Chip C.	GRM36B562K25PT	1	1
C486	CU3540	Chip C.	GRM36B272K50PT	1	1
C487	CU3535	Chip C.	GRM36B102K50PT	1	1
C488	CS0049	Chip Tantalum	16V 1UF	1	1
C489	CU3551	Chip C.	GRM36B223K16PT	1	1
C490	CU3544	Chip C.	GRM36B562K25PT	1	1
C491	CU3542	Chip C.	GRM36B392K50PT	1	1
C492	CU0108	Chip C.	2012 B 10V 1UF	1	1
C493	CU3551	Chip C.	GRM36B223K16PT	1	1
C494	CU3549	Chip C.	1005 B 16V 0.015UF K	1	1
C495	CS0049	Chip Tantalum	16V 1UF	1	1
C496	CU3547	Chip C.	GRM36B103K16PT	1	1
C497	CU3047	Chip C.	1608 B 50V 0.010UF	1	1
C498	CU3047	Chip C.	1608 B 50V 0.010UF	1	1
C499	CU3531	Chip C.	GRM36B471K50PT	1	1
C500	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C501	CU3551	Chip C.	GRM36B223K16PT	1	1
C502	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C503	CU3535	Chip C.	GRM36B102K50PT	1	1
C504	CE0364	Electrolytic C.	16V 47UF	1	1
C505	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C506	CU3538	Chip C.	GRM36B182K50PT	1	1
C507	CU3544	Chip C.	GRM36B562K25PT	1	1
C508	CU3540	Chip C.	GRM36B272K50PT	1	1
C509	CU3535	Chip C.	GRM36B102K50PT	1	1
C510	CU3541	Chip C.	GRM36B332K50PT	1	1
C511	CU3551	Chip C.	GRM36B223K16PT	1	1
C512	CU3551	Chip C.	GRM36B223K16PT	1	1
C513	CU3542	Chip C.	GRM36B392K50PT	1	1
C514	CU3544	Chip C.	GRM36B562K25PT	1	1
C515	CU3523	Chip C.	GRM36CH101J50PT	1	1
C516	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C517	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C518	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C519	CU0108	Chip C.	2012 B 10V 1UF	1	1
C520	CU3511	Chip C.	GRM36CH100D50PT	1	1
C521	CU3535	Chip C.	GRM36B102K50PT	1	1
C522	CE0339	Electrolytic C.	16V 10UF	1	1
C523	CU3507	Chip C.	GRM36CH060D50PT	1	1
C524	CU3509	Chip C.	GRM36CH080D50PT	1	1
C525	CU3527	Chip C.	GRM36CH221J25PT	1	1
C527	CU3547	Chip C.	GRM36B103K16PT	1	1
C530	CU3515	Chip C.	GRM36CH220J50PT	1	1
C531	CU3535	Chip C.	GRM36B102K50PT	1	1
C532	CU3535	Chip C.	GRM36B102K50PT	1	1
C533	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C534	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C536	CU3502	Chip C.	GRM36CK010C50PT	1	1
C537	CU3515	Chip C.	GRM36CH220J50PT	1	1
C538	CU3535	Chip C.	GRM36B102K50PT	1	1
C539	CU3506	Chip C.	GRM36CH050C50PT	1	1
C540	CS0220	Chip Tantalum	16V 2.2UF	1	1
C541	CS0230	Chip Tantalum	25V 1UF	1	1
C542	CS0049	Chip Tantalum	16V 1UF	1	1
C543	CU3535	Chip C.	GRM36B102K50PT	1	1
C545	CS0423	Chip Tantalum	TMCMB1C226MTR	1	1
C546	CS0423	Chip Tantalum	TMCMB1C226MTR	1	1
C547	CU3535	Chip C.	GRM36B102K50PT	1	1
C548	CU3506	Chip C.	GRM36CH050C50PT	1	1
C549	CU0108	Chip C.	2012 B 10V 1UF	1	1
C550	CU0108	Chip C.	2012 B 10V 1UF	1	1
C551	CU3535	Chip C.	GRM36B102K50PT	1	1
C552	CU3551	Chip C.	GRM36B223K16PT	1	1
C554	CU7054	Chip C.	2012 J 100V 22PF	1	1
C555	CU7054	Chip C.	2012 J 100V 22PF	1	1
C556	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C558	CU7047	Chip C.	3225 C 500V 33PF	1	1
C559	CU4006	Chip C.	GRM42-6CH050C500PT	1	1
C560	CU4004	Chip C.	GRM42-6CJ030C500PT	1	1
C561	CU3031	Chip C.	1608 B 50V 470PF K	1	1
C562	CE0341	Electrolytic C.	16V 100UF	1	1
C565	CU7054	Chip C.	2012 J 100V 22PF	1	1

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
C567	CU3035	Chip C.	1608 B 50V 0.001UF	1	1
C568	CU3011	Chip C.	1608 CH 50V 10PF C	1	1
C569	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C570	CS0237	Chip Tantalum	10V 4.7UF	1	1
C571	CS0237	Chip Tantalum	10V 4.7UF	1	1
C572	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C575	CS0424	Chip Tantalum	TMCMA1C106MTR	1	1
C576	CU0111	Chip C.	C2012JB1C105KT-N	1	1
C577	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C578	CU3547	Chip C.	GRM36B103K16PT	1	1
C580	CU0116	Chip C.	GRM21B2C2D221JY21L	1	1
C581	CU3131	Chip C.	GRM188R72E102KW07D	1	1
C582	CU3131	Chip C.	GRM188R72E102KW07D	1	1
C583	CU3131	Chip C.	GRM188R72E102KW07D	1	1
C584	CU3131	Chip C.	GRM188R72E102KW07D	1	1
C586	CU3503	Chip C.	GRM36CK020C50PT	1	1
C587	CU3505	Chip C.	GRM36CH040C50PT	1	1
C588	CU3523	Chip C.	GRM36CH101J50PT	1	1
C589	CU3511	Chip C.	GRM36CH100D50PT	1	1
C590	CU3504	Chip C.	GRM36CJ030C50PT	1	1
C591	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C592	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C593	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
C594	CU3111	Chip C.	1608 B 25V 0.1UF	1	1
CN1	RD0108	Jumper	1/6W TYPE 0 OHM	1	1
CN2	UJ0051	Jack	HJC0212-010024	1	1
CN3	UE0214	Connector	AXN420C530P	1	1
CN4	UE0393	Connector	PI28A11M	1	1
CN5	UE0043	Connector	PI22A02M	1	1
CN6	UE0043	Connector	PI22A02M	1	1
CN7	UA0037Y		R-B2.0X0.2M PLUG 15A	1	1
CN8	UE0455	Connector	PI28A10M	1	1
CN9	UE0226	Connector	B2B-PH-K-S	1	1
CN10	UE0043	Connector	PI22A02M	1	1
CN11	UE0043	Connector	PI22A02M	1	1
D1	XD0373	Chip Diode	UM9401F	1	1
D2	XD0339	Chip Diode	1SV308(TPH3)	1	1
D3	XD0339	Chip Diode	1SV308(TPH3)	1	1
D5	XD0339	Chip Diode	1SV308(TPH3)	1	1
D6	XD0374	Chip Diode	1SV278 TPH2	1	1
D7	XD0342	Chip Diode	1SS390 TE61	1	1
D8	XD0375	Chip Diode	MA4S713-(TX)	1	1
D9	XD0375	Chip Diode	MA4S713-(TX)	1	1
D10	XD0376	Chip Diode	1SV282 TPH2	1	1
D11	XD0376	Chip Diode	1SV282 TPH2	1	1
D12	XD0373	Chip Diode	UM9401F	1	1
D13	XD0373	Chip Diode	UM9401F	1	1
D14	XD0373	Chip Diode	UM9401F	1	1
D15	XD0373	Chip Diode	UM9401F	1	1
D17	XD0320	Chip Diode	DAN235E-TL	1	1
D21	XD0374	Chip Diode	1SV278 TPH2	1	1
D22	XD0375	Chip Diode	MA4S713-(TX)	1	1
D23	XD0376	Chip Diode	1SV282 TPH2	1	1
D24	XD0374	Chip Diode	1SV278 TPH2	1	1
D25	XD0376	Chip Diode	1SV282 TPH2	1	1
D26	XD0320	Chip Diode	DAN235E-TL	1	1
D27	XD0320	Chip Diode	DAN235E-TL	1	1
D28	XD0314	Chip Diode	HVU359TRF	1	1
D29	XD0314	Chip Diode	HVU359TRF	1	1
D30	XD0314	Chip Diode	HVU359TRF	1	1
D31	XD0377	Chip Diode	MAZS0270HL	1	1
D32	XD0338	Chip Diode	1SS362(TE85L)	1	1
D33	XD0320	Chip Diode	DAN235E-TL	1	1
D34	XD0342	Chip Diode	1SS390 TE61	1	1
D35	XD0374	Chip Diode	1SV278 TPH2	1	1
D37	XD0320	Chip Diode	DAN235E-TL	1	1
D38	XD0374	Chip Diode	1SV278 TPH2	1	1
D39	XD0165	Chip Diode	DTZ5.1B TT11	1	1
D40	XD0374	Chip Diode	1SV278 TPH2	1	1
D41	XD0342	Chip Diode	1SS390 TE61	1	1
D42	XD0250	Chip Diode	MA742-(TX)	1	1
D43	XD0319	Chip Diode	MA2S077-(TX)	1	1
D45	XD0323	Chip Diode	MA2S111-(TX)	1	1
D46	XD0374	Chip Diode	1SV278 TPH2	1	1
D47	XD0374	Chip Diode	1SV278 TPH2	1	1
D48	XD0320	Chip Diode	DAN235E-TL	1	1
D49	XD0314	Chip Diode	HVU359TRF	1	1
D50	XD0314	Chip Diode	HVU359TRF	1	1
D51	XD0314	Chip Diode	HVU359TRF	1	1
D52	XD0314	Chip Diode	HVU359TRF	1	1
D53	XD0338	Chip Diode	1SS362(TE85L)	1	1
D54	XD0342	Chip Diode	1SS390 TE61	1	1
D57	XD0165	Chip Diode	DTZ5.1B TT11	1	1
D58	XD0165	Chip Diode	DTZ5.1B TT11	1	1
D59	XD0165	Chip Diode	DTZ5.1B TT11	1	1

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
D60	XD0323	Chip Diode	MA2S111-(TX)	1	1
D61	XD0323	Chip Diode	MA2S111-(TX)	1	1
D62	XD0323	Chip Diode	MA2S111-(TX)	1	1
D63	XD0274	Diode	DSA3A1	1	1
D64	XD0315	Chip Diode	MA2S728-(TX)	1	1
D65	XD0165	Chip Diode	DTZ5.1B TT11	1	1
D66	XD0315	Chip Diode	MA2S728-(TX)	1	1
D67	XD0323	Chip Diode	MA2S111-(TX)	1	1
D68	XD0165	Chip Diode	DTZ5.1B TT11	1	1
D69	XD0315	Chip Diode	MA2S728-(TX)	1	1
D71	XD0373	Chip Diode	UM9401F	1	1
D72	XD0373	Chip Diode	UM9401F	1	1
D73	XD0373	Chip Diode	UM9401F	1	1
D74	XD0339	Chip Diode	1SV308(TPH3)	1	1
D75	XD0339	Chip Diode	1SV308(TPH3)	1	1
D76	XD0339	Chip Diode	1SV308(TPH3)	1	1
D77	XD0165	Chip Diode	DTZ5.1B TT11	1	1
F1	EF0028	Chip Fuses	TF16SN1.25TTD	1	1
FL1	XC0070	Ceramic Filter	ALFYM450E=K	1	1
FL3	XC0078	Ceramic Filter	SFT10.7MA5-Z	1	1
FL4	XC0047	Ceramic Filter	ALFYM455E=K	1	1
FL6	XC0078	Ceramic Filter	SFT10.7MA5-Z	1	1
IC1	XA0596	IC	NJM2902V-TE1	1	1
IC2	XA0915	IC	M64076AGP	1	1
IC3	XA0666	IC	TK10931V	1	1
IC4	XA0573	IC	NJM2904V-TE1	1	1
IC5	XA0404	IC	IC DETECTOR	1	1
IC6	XA0348	IC	TC4W53FU(TE12L)	1	1
IC7	XA0115	IC	IC TC4S66F	1	1
IC8	XA0410	IC	LA4425A	1	1
IC9	XA0596	IC	NJM2902V-TE1	1	1
IC10	XA0348	IC	TC4W53FU(TE12L)	1	1
IC12	XA0236	IC	IC BU4052BCF-E2	1	1
IC13	XA0900	IC	M51132FP	1	1
IC14	XA0119	IC	IC AN8010M	1	1
IC15	XA0348	IC	TC4W53FU(TE12L)	1	1
IC16	XA0102	IC	NJM7808FA	1	1
IC18	XA0596	IC	NJM2902V-TE1	1	1
IC19	XA1081	IC	M30624FGPGP(E)	0	1
IC19	XA1082	IC	M30624FGPGP(T)	1	0
IC20	XA0620	IC	S-80845ALMP-EA9-T2	1	1
IC21	XA0669	IC	BR24L64F-WE2	1	1
IC22	XA0098	IC	IC NJM78L05UA	1	1
IC23	XA0348	IC	TC4W53FU(TE12L)	1	1
IC24	XA0925	IC	S-816A50AMC-BAZ-T2	1	1
IC25	XA0332	IC	TA75S01F(TE85L)	1	1
IC26	XA0332	IC	TA75S01F(TE85L)	1	1
JK1	UJ0053	Jack	HSJ1332-01-020	1	1
JP3	MAGL04GG	Wire	#30AH1-040-H1	1	1
JP4	UX1320	Wire	WIRE UX1320	1	1
L1	QB0055	Inductor	FBA04HA900NA-00	1	1
L2	QKA15A	Coil	MR1.5 1.5T 0.4	1	1
L3	QKA95D	Coil	MR3.0 9.5T 0.6	1	1
L4	QKA55E	Coil	MR3.0 5.5T 0.8	1	1
L5	QKA55E	Coil	MR3.0 5.5T 0.8	1	1
L6	QKA55E	Coil	MR3.0 5.5T 0.8	1	1
L7	QKA45E	Coil	MR3.0 4.5T 0.8	1	1
L8	QKA65A	Coil	MR1.5 3.5T 0.4	1	1
L9	QC0621	Chip Inductor	LL1608-FS33NJ	1	1
L10	QKA15E	Coil	MR3.0 1.5T 0.8	1	1
L11	QK0115	Coil	AS120252-9R3N	1	1
L12	QC0442	Chip Inductor	1608 1.0 UH	1	1
L13	QC0534	Chip Inductor	LQN21A47NJ04	1	1
L14	QKA65A	Coil	MR1.5 3.5T 0.4	1	1
L15	QC0534	Chip Inductor	LQN21A47NJ04	1	1
L16	QC0620	Chip Inductor	LL1608-FS27NJ	1	1
L17	QC0570	Chip Inductor	LL1608FH56NJ 56NH	1	1
L18	QKA75A	Coil	MR1.5 7.5T 0.4	1	1
L19	QKA15A	Coil	MR1.5 1.5T 0.4	1	1
L20	QC0508	Chip Inductor	LK16082R2K-T	1	1
L21	QC0573	Chip Inductor	LL1608FHR10J 100NH	1	1
L22	QKA75A	Coil	MR1.5 7.5T 0.4	1	1
L23	QC0614	Chip Inductor	LL1608-FS8N2J	1	1
L24	QKA45E	Coil	MR3.0 4.5T 0.8	1	1
L25	QA0162	Chip Inductor	VCO QA0162 5CBM	1	1
L26	QC0530	Chip Inductor	LQN21A22NJ04	1	1
L27	QC0442	Chip Inductor	1608 1.0 UH	1	1
L28	QC0442	Chip Inductor	1608 1.0 UH	1	1
L29	QKA15E	Coil	MR3.0 1.5T 0.8	1	1
L30	QKA35E	Coil	MR3.0 3.5T 0.8	1	1
L31	QKA25E	Coil	MR3.0 2.5T 0.8	1	1
L32	QKA15E	Coil	MR3.0 1.5T 0.8	1	1
L33	QKA85C	Coil	COIL MR2.5 8.5T 0.5	1	1
L34	QKA25E	Coil	MR3.0 2.5T 0.8	1	1
L35	QKA25E	Coil	MR3.0 2.5T 0.8	1	1

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
L36	QC0621	Chip Inductor	LL1608-FS33NJ	1	1
L37	QC0442	Chip Inductor	1608 1.0 UH	1	1
L38	QC0573	Chip Inductor	LL1608FHR10J 100NH	1	1
L39	QC0527	Chip Inductor	LQN21A12NJ04	1	1
L40	QC0540	Chip Inductor	LQN21AR15J04	1	1
L41	QC0572	Chip Inductor	LL1608FH82NJ 82NH	1	1
L42	QC0629	Chip Inductor	LL1608-FSR15J	1	1
L43	QC0542	Chip Inductor	LQN21AR22J04	1	1
L44	QC0542	Chip Inductor	LQN21AR22J04	1	1
L45	QC0518	Chip Inductor	LK16081R5K-T	1	1
L46	QA0112	Chip Inductor	V666SHS-063DAQ	1	1
L47	QC0540	Chip Inductor	LQN21AR15J04	1	1
L48	QC0537	Chip Inductor	LQN21A82NJ04	1	1
L49	QA0112	Chip Inductor	V666SHS-063DAQ	1	1
L50	QC0561	Chip Inductor	LL1608FH10NJ 10NH	1	1
L51	QA0112	Chip Inductor	V666SHS-063DAQ	1	1
L52	QC0442	Chip Inductor	1608 1.0 UH	1	1
L53	QA0160	Chip Inductor	K5-S2/33331 R12T739B	1	1
L54	QC0740	Chip Inductor	KQ0805TTER82J	1	1
L55	QC0527	Chip Inductor	LQN21A12NJ04	1	1
L56	QC0621	Chip Inductor	LL1608-FS33NJ	1	1
L57	QA0093	Chip Inductor	BOBBIN	1	1
L58	QC0285	Chip Inductor	2520 0.56UH	1	1
L59	QC0740	Chip Inductor	KQ0805TTER82J	1	1
L60	QC0518	Chip Inductor	LK16081R5K-T	1	1
L62	QC0535	Chip Inductor	LQN21A56NJ04	1	1
L63	QC0442	Chip Inductor	1608 1.0 UH	1	1
L64	QC0531	Chip Inductor	LQN21A27NJ04	1	1
L65	QC0573	Chip Inductor	LL1608FHR10J 100NH	1	1
L66	QC0739	Chip Inductor	KQ0805TTER33J	1	1
L67	QC0542	Chip Inductor	LQN21AR22J04	1	1
L68	QC0542	Chip Inductor	LQN21AR22J04	1	1
L69	QC0518	Chip Inductor	LK16081R5K-T	1	1
L70	QC0536	Chip Inductor	LQN21A68NJ04	1	1
L71	QC0534	Chip Inductor	LQN21A47NJ04	1	1
L72	QC0536	Chip Inductor	LQN21A68NJ04	1	1
L73	QC0573	Chip Inductor	LL1608FHR10J 100NH	1	1
L74	QC0536	Chip Inductor	LQN21A68NJ04	1	1
L75	QC0535	Chip Inductor	LQN21A56NJ04	1	1
L76	QC0442	Chip Inductor	1608 1.0 UH	1	1
L77	QC0534	Chip Inductor	LQN21A47NJ04	1	1
L78	QC0530	Chip Inductor	LQN21A22NJ04	1	1
L79	QKA45A	Coil	MR1.5 4.5T 0.4	1	1
L80	QC0620	Chip Inductor	LL1608-FS27NJ	1	1
L81	QKA45A	Coil	MR1.5 4.5T 0.4	1	1
L82	QKA45A	Coil	MR1.5 4.5T 0.4	1	1
L83	QC0288	Chip Inductor	2520 1.0 UH	1	1
L84	QC0526	Chip Inductor	LQN21A10NJ04	1	1
L85	QC0619	Chip Inductor	LL1608-FS22NJ	1	1
L86	QC0526	Chip Inductor	LQN21A10NJ04	1	1
L87	QC0530	Chip Inductor	LQN21A22NJ04	1	1
L88	QC0518	Chip Inductor	LK16081R5K-T	1	1
L89	QC0532	Chip Inductor	LQN21A33NJ04	1	1
L90	QC0524	Chip Inductor	LQN21A6N8D04	1	1
L91	QC0442	Chip Inductor	1608 1.0 UH	1	1
L92	QC0526	Chip Inductor	LQN21A10NJ04	1	1
L93	QKA25A	Coil	MR1.5 2.5T 0.4	1	1
L94	QC0611	Chip Inductor	LL1608-FS4N7S	1	1
L95	QC0524	Chip Inductor	LQN21A6N8D04	1	1
L96	QC0075	Chip Inductor	3225 12 UH	1	1
L97	QC0611	Chip Inductor	LL1608-FS4N7S	1	1
L101	QA0159	Chip Inductor	DET COIL QA0159	1	1
L102	QA0159	Chip Inductor	DET COIL QA0159	1	1
L103	QC0570	Chip Inductor	LL1608FH56NJ 56NH	1	1
L104	QC0621	Chip Inductor	LL1608-FS33NJ	1	1
L105	QC0619	Chip Inductor	LL1608-FS22NJ	1	1
L106	QC0570	Chip Inductor	LL1608FH56NJ 56NH	1	1
L107	QC0621	Chip Inductor	LL1608-FS33NJ	1	1
L108	QKB003	Coil	COIL QKB003	1	1
L109	QKB003	Coil	COIL QKB003	1	1
L110	QC0568	Chip Inductor	LL1608FH39NJ 39NH	1	1
L111	QC0573	Chip Inductor	LL1608FHR10J 100NH	1	1
L112	QC0559	Chip Inductor	LL1608FH6N8J 6.8NH	1	1
Q1	XE0038A	Chip FET	2SK2975-T31	1	1
Q2	XE0044	Chip FET	2SK3074 TE12L	1	1
Q3	XT0146	Chip Transistor	2SC5226-4-TL	1	1
Q4	XE0047	FET	MTH538A(RD70HVF1-01)	1	1
Q5	XT0138	Chip Transistor	2SC5066-O(TE85L)	1	1
Q6	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q7	XT0138	Chip Transistor	2SC5066-O(TE85L)	1	1
Q8	XU0192	Chip Transistor	RN2107 TE85L	1	1
Q9	XE0010	Chip FET	FET 2SK508K52	1	1
Q10	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q11	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q12	XT0095	Chip Transistor	2SC4081	1	1

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
Q13	XT0138	Chip Transistor	2SC5066-O(TE85L)	1	1
Q14	XT0171	Chip Transistor	2SC4808-TX.AR	1	1
Q15	XT0138	Chip Transistor	2SC5066-O(TE85L)	1	1
Q16	XT0171	Chip Transistor	2SC4808-TX.AR	1	1
Q17	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q18	XT0146	Chip Transistor	2SC5226-4-TL	1	1
Q19	XE0053	Chip FET	3SK293TE85L	1	1
Q20	XT0124	Chip Transistor	2SC4215-Y(TE85L)	1	1
Q21	XE0053	Chip FET	3SK293TE85L	1	1
Q23	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q24	XT0095	Chip Transistor	2SC4081	1	1
Q25	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q26	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q27	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q28	XT0138	Chip Transistor	2SC5066-O(TE85L)	1	1
Q29	XE0010	Chip FET	FET 2SK508K52	1	1
Q31	XT0138	Chip Transistor	2SC5066-O(TE85L)	1	1
Q32	XT0138	Chip Transistor	2SC5066-O(TE85L)	1	1
Q33	XT0138	Chip Transistor	2SC5066-O(TE85L)	1	1
Q34	XU0197	Chip Transistor	RN1111 TE85L	1	1
Q35	XU0192	Chip Transistor	RN2107 TE85L	1	1
Q36	XT0138	Chip Transistor	2SC5066-O(TE85L)	1	1
Q37	XT0172	Chip Transistor	2SC4618TLP	1	1
Q38	XT0171	Chip Transistor	2SC4808-TX.AR	1	1
Q39	XT0138	Chip Transistor	2SC5066-O(TE85L)	1	1
Q40	XT0171	Chip Transistor	2SC4808-TX.AR	1	1
Q41	XE0053	Chip FET	3SK293TE85L	1	1
Q42	XE0053	Chip FET	3SK293TE85L	1	1
Q43	XT0146	Chip Transistor	2SC5226-4-TL	1	1
Q44	XT0172	Chip Transistor	2SC4618TLP	1	1
Q45	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q46	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q47	XT0190	Chip Transistor	2SB1386 T100Q	1	1
Q49	XT0138	Chip Transistor	2SC5066-O(TE85L)	1	1
Q50	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q51	XT0138	Chip Transistor	2SC5066-O(TE85L)	1	1
Q52	XT0138	Chip Transistor	2SC5066-O(TE85L)	1	1
Q54	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q55	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q56	XT0146	Chip Transistor	2SC5226-4-TL	1	1
Q57	XT0146	Chip Transistor	2SC5226-4-TL	1	1
Q58	XU0192	Chip Transistor	RN2107 TE85L	1	1
Q59	XU0202	Chip Transistor	XP03383-TX	1	1
Q61	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q63	XT0190	Chip Transistor	2SB1386 T100Q	1	1
Q64	XT0110	Chip Transistor	2SA1036K	1	1
Q65	XU0192	Chip Transistor	RN2107 TE85L	1	1
Q66	XT0110	Chip Transistor	2SA1036K	1	1
Q67	XU0192	Chip Transistor	RN2107 TE85L	1	1
Q68	XT0061	Chip Transistor	2SB1132	1	1
Q69	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q70	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q71	XT0061	Chip Transistor	2SB1132	1	1
Q72	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q73	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q74	XT0095	Chip Transistor	2SC4081	1	1
Q75	XU0192	Chip Transistor	RN2107 TE85L	1	1
Q76	XU0192	Chip Transistor	RN2107 TE85L	1	1
Q77	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q78	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q79	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q80	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q81	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q82	XT0061	Chip Transistor	2SB1132	1	1
Q83	XU0192	Chip Transistor	RN2107 TE85L	1	1
Q84	XU0192	Chip Transistor	RN2107 TE85L	1	1
Q85	XT0095	Chip Transistor	2SC4081	1	1
Q86	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q87	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q88	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q89	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q90	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q91	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q92	XT0172	Chip Transistor	2SC4618TLP	1	1
Q93	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q94	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q95	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q96	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q97	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q98	XT0146	Chip Transistor	2SC5226-4-TL	1	1
Q99	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q100	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q101	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q102	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q103	XU0193	Chip Transistor	RN1107 TE85L	1	1

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
Q105	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q106	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q107	XT0138	Chip Transistor	2SC5066-O(TE85L)	1	1
Q108	XU0160	Chip Transistor	DTC363EKT146	1	1
Q109	XU0160	Chip Transistor	DTC363EKT146	1	1
Q110	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q111	XU0192	Chip Transistor	RN2107 TE85L	1	1
Q112	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q114	XT0110	Chip Transistor	2SA1036K	1	1
Q115	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q116	XT0206	Chip Transistor	2SA1721-O(TE85L,F)	1	1
Q117	XT0110	Chip Transistor	2SA1036K	1	1
Q118	XU0193	Chip Transistor	RN1107 TE85L	1	1
Q119	XT0206	Chip Transistor	2SA1721-O(TE85L,F)	1	1
R1	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R2	RK6024	Chip R.	6432 1W 68 OHM J	1	1
R3	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R4	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R5	RK3062	Chip R.	1608 1/10W 100KOHM J	1	1
R6	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R7	RK3038	Chip R.	1608 1/10W 1.0KOHM J	1	1
R8	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R9	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R10	RK0069	Chip R.	2125 1/8W 100KOHM J	1	1
R11	RK3524	Chip R.	1005 1/16W 68 OHM J	1	1
R12	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R13	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R14	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R15	RK3018	Chip R.	1608 1/10W 22 OHM J	1	1
R16	RK3032	Chip R.	1608 1/10W 330 OHM J	1	1
R17	RK3534	Chip R.	1005 1/16W 470 OHM J	1	1
R18	RK3560	Chip R.	1005 1/16W 68K OHM J	1	1
R19	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R20	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R21	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R22	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R23	RK3534	Chip R.	1005 1/16W 470 OHM J	1	1
R24	RK3049	Chip R.	1608 1/10W 8.2KOHM J	1	1
R25	RK3534	Chip R.	1005 1/16W 470 OHM J	1	1
R26	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R27	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R28	RK3025	Chip R.	1608 1/10W 82 OHM J	1	1
R29	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R30	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R31	RK3552	Chip R.	1005 1/16W 15K OHM J	1	1
R32	RK3050	Chip R.	1608 1/10W 10K OHM J	1	1
R33	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R34	RK3046	Chip R.	1608 1/10W 4.7KOHM J	1	1
R35	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R36	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R37	RK3518	Chip R.	1005 1/16W 22 OHM J	1	1
R38	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R39	RK3062	Chip R.	1608 1/10W 100KOHM J	1	1
R40	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R41	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R42	RK3050	Chip R.	1608 1/10W 10K OHM J	1	1
R43	RK3534	Chip R.	1005 1/16W 470 OHM J	1	1
R44	RK3050	Chip R.	1608 1/10W 10K OHM J	1	1
R45	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R46	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R47	RK3050	Chip R.	1608 1/10W 10K OHM J	1	1
R48	RK3038	Chip R.	1608 1/10W 1.0KOHM J	1	1
R49	RK3547	Chip R.	1005 1/16W 5.6K OHMJ	1	1
R50	RK3518	Chip R.	1005 1/16W 22 OHM J	1	1
R51	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R53	RK3568	Chip R.	1005 1/16W 330K OHMJ	1	1
R54	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R55	RK3043	Chip R.	1608 1/10W 2.7KOHM J	1	1
R56	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R57	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R58	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R59	RK3501	Chip R.	1005 1/16W 0 OHM J	1	1
R60	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R61	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R62	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R63	RK3524	Chip R.	1005 1/16W 68 OHM J	1	1
R64	RK3556	Chip R.	1005 1/16W 33K OHM J	1	1
R65	RK3022	Chip R.	1608 1/10W 47 OHM J	1	1
R66	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R67	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R68	RK3001	Chip R.	1608 0 OHM	1	1
R69	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R70	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R71	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R72	RK6024	Chip R.	6432 1W 68 OHM J	1	1

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
R73	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R74	RK3038	Chip R.	1608 1/10W 1.0KOHM J	1	1
R75	RK3046	Chip R.	1608 1/10W 4.7KOHM J	1	1
R76	RK3038	Chip R.	1608 1/10W 1.0KOHM J	1	1
R77	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R78	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R79	RK3050	Chip R.	1608 1/10W 10K OHM J	1	1
R80	RK3050	Chip R.	1608 1/10W 10K OHM J	1	1
R81	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R82	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R83	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R84	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R85	RK3054	Chip R.	1608 1/10W 22K OHM J	1	1
R86	RK3552	Chip R.	1005 1/16W 15K OHM J	1	1
R87	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R88	RK3050	Chip R.	1608 1/10W 10K OHM J	1	1
R89	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R90	RK3559	Chip R.	1005 1/16W 56K OHM J	1	1
R92	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R93	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R94	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R95	RK3565	Chip R.	1005 1/16W 180K OHMJ	1	1
R96	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R97	RK3559	Chip R.	1005 1/16W 56K OHM J	1	1
R98	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R99	RK3552	Chip R.	1005 1/16W 15K OHM J	1	1
R100	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R101	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R102	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R103	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R104	RK3555	Chip R.	1005 1/16W 27K OHM J	1	1
R105	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R106	RK3534	Chip R.	1005 1/16W 470 OHM J	1	1
R107	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R108	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R109	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R110	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R111	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R112	RK3501	Chip R.	1005 1/16W 0 OHM J	1	1
R113	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R114	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R115	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R116	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R118	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R119	RK3539	Chip R.	1005 1/16W 1.2K OHMJ	1	1
R120	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R121	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R122	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R123	RK3531	Chip R.	1005 1/16W 270 OHM J	1	1
R124	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R125	RK3572	Chip R.	1005 1/16W 680K OHMJ	1	1
R126	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R127	RK3552	Chip R.	1005 1/16W 15K OHM J	1	1
R128	RK3532	Chip R.	1005 1/16W 330 OHM J	1	1
R129	RK3532	Chip R.	1005 1/16W 330 OHM J	1	1
R130	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R131	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R132	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R133	RK3501	Chip R.	1005 1/16W 0 OHM J	1	1
R134	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R135	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R136	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R137	RK3501	Chip R.	1005 1/16W 0 OHM J	1	1
R138	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R139	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R140	RK3543	Chip R.	1005 1/16W 2.7K OHMJ	1	1
R141	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R142	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R143	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R144	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R145	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R146	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R147	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R148	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R149	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R150	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R151	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R152	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R153	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R154	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R155	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R157	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R158	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R159	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R160	RK3560	Chip R.	1005 1/16W 68K OHM J	1	1

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
R161	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R162	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R163	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R164	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R165	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R166	RK3501	Chip R.	1005 1/16W 0 OHM J	1	1
R168	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R169	RK3559	Chip R.	1005 1/16W 56K OHM J	1	1
R170	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R172	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R173	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R174	RK3547	Chip R.	1005 1/16W 5.6K OHMJ	1	1
R175	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R176	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R177	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R178	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R179	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R180	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R181	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R182	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R183	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R184	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R185	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R186	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R187	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R188	RK3555	Chip R.	1005 1/16W 27K OHM J	1	1
R189	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R190	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R191	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R193	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R194	RK3574	Chip R.	1005 1/16W 1.0M OHMJ	1	1
R195	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R196	RK3552	Chip R.	1005 1/16W 15K OHM J	1	1
R197	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R200	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R201	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R202	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R203	RK3561	Chip R.	1005 1/16W 82K OHM J	1	1
R204	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R205	RK3544	Chip R.	1005 1/16W 3.3K OHMJ	1	1
R206	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R208	RK3501	Chip R.	1005 1/16W 0 OHM J	1	1
R209	RK3534	Chip R.	1005 1/16W 470 OHM J	1	1
R210	RK3519	Chip R.	1005 1/16W 27 OHM J	1	1
R211	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R212	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R213	RK3561	Chip R.	1005 1/16W 82K OHM J	1	1
R214	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R215	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R216	RK3534	Chip R.	1005 1/16W 470 OHM J	1	1
R217	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R218	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R219	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R221	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R222	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R223	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R224	RK3534	Chip R.	1005 1/16W 470 OHM J	1	1
R225	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R226	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R227	RK3559	Chip R.	1005 1/16W 56K OHM J	1	1
R228	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R229	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R230	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R231	RK3551	Chip R.	1005 1/16W 12K OHM J	1	1
R233	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R234	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R235	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R236	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R237	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R238	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R239	RK3547	Chip R.	1005 1/16W 5.6K OHMJ	1	1
R240	RK3566	Chip R.	1005 1/16W 220K OHMJ	1	1
R241	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R242	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R243	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R244	RK3501	Chip R.	1005 1/16W 0 OHM J	1	1
R245	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R246	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R247	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R248	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R249	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R250	RK3555	Chip R.	1005 1/16W 27K OHM J	1	1
R251	RK3555	Chip R.	1005 1/16W 27K OHM J	1	1
R252	RK3566	Chip R.	1005 1/16W 220K OHMJ	1	1
R253	RK3567	Chip R.	1005 1/16W 270K OHMJ	1	1
R254	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R255	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R256	RK3534	Chip R.	1005 1/16W 470 OHM J	1	1
R257	RK3535	Chip R.	1005 1/16W 560 OHM J	1	1
R258	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R259	RK3566	Chip R.	1005 1/16W 220K OHMJ	1	1
R260	RK3557	Chip R.	1005 1/16W 39K OHM J	1	1
R261	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R262	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R263	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R264	RK3518	Chip R.	1005 1/16W 22 OHM J	1	1
R265	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R267	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R268	RK3532	Chip R.	1005 1/16W 330 OHM J	1	1
R269	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R270	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R271	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R272	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R273	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R274	RK3551	Chip R.	1005 1/16W 12K OHM J	1	1
R275	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R276	RK3501	Chip R.	1005 1/16W 0 OHM J	1	1
R277	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R278	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R279	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R280	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R282	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R283	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R284	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R285	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R286	RK3568	Chip R.	1005 1/16W 330K OHMJ	1	1
R288	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R289	RK3570	Chip R.	1005 1/16W 470K OHMJ	1	1
R290	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R291	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R292	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R293	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R294	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R295	RK3557	Chip R.	1005 1/16W 39K OHM J	1	1
R296	RK3557	Chip R.	1005 1/16W 39K OHM J	1	1
R297	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R298	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R299	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R300	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R301	RK3557	Chip R.	1005 1/16W 39K OHM J	1	1
R302	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R303	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R304	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R306	RK3501	Chip R.	1005 1/16W 0 OHM J	1	1
R307	RK3535	Chip R.	1005 1/16W 560 OHM J	1	1
R308	RK3501	Chip R.	1005 1/16W 0 OHM J	1	1
R309	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R310	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R311	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R312	RK3529	Chip R.	1005 1/16W 180 OHM J	1	1
R313	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R314	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R316	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R318	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R319	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R320	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R321	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R322	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R323	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R324	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R327	RK3560	Chip R.	1005 1/16W 68K OHM J	1	1
R328	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R331	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R333	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R334	RK3549	Chip R.	1005 1/16W 8.2K OHMJ	1	1
R335	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R336	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R337	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R338	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R339	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R340	RK3574	Chip R.	1005 1/16W 1.0M OHMJ	1	1
R341	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R342	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R343	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R344	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R346	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R347	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R348	RK3570	Chip R.	1005 1/16W 470K OHMJ	1	1
R349	RK3534	Chip R.	1005 1/16W 470 OHM J	1	1
R350	RK3514	Chip R.	1005 1/16W 10 OHM J	1	1

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
R351	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R352	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R353	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R354	RK3549	Chip R.	1005 1/16W 8.2K OHMJ	1	1
R355	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R356	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R357	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R358	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R359	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R360	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R361	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R362	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R363	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R364	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R365	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R366	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R367	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R368	RK3574	Chip R.	1005 1/16W 1.0M OHMJ	1	1
R369	RK3552	Chip R.	1005 1/16W 15K OHM J	1	1
R370	RK3561	Chip R.	1005 1/16W 82K OHM J	1	1
R371	RK3552	Chip R.	1005 1/16W 15K OHM J	1	1
R372	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R373	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R374	RK3501	Chip R.	1005 1/16W 0 OHM J	0	1
R375	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R376	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R377	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R378	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R379	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R380	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R381	RK3536	Chip R.	1005 1/16W 680 OHM J	1	1
R382	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R383	RK3555	Chip R.	1005 1/16W 27K OHM J	1	1
R384	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R385	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R386	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R387	RK3552	Chip R.	1005 1/16W 15K OHM J	1	1
R388	RK3561	Chip R.	1005 1/16W 82K OHM J	1	1
R389	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R390	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R391	RK3574	Chip R.	1005 1/16W 1.0M OHMJ	1	1
R392	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R394	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R395	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R396	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R397	RK3092	Chip R.	1608 1/10W 75K OHM F	1	1
R398	RK3549	Chip R.	1005 1/16W 8.2K OHMJ	1	1
R399	RK3050	Chip R.	1608 1/10W 10K OHM J	1	1
R400	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R401	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R402	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R403	RK3541	Chip R.	1005 1/16W 1.8K OHMJ	1	1
R404	RK3091	Chip R.	1608 1/10W 39K OHM F	1	1
R405	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R406	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R407	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R408	RK2024	Chip R.	4532 1/2W 470 OHM J	1	1
R409	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R410	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R411	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R412	RK3566	Chip R.	1005 1/16W 220K OHMJ	1	1
R413	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R414	RK3046	Chip R.	1608 1/10W 4.7KOHM J	1	1
R415	RK3091	Chip R.	1608 1/10W 39K OHM F	1	1
R416	RK3557	Chip R.	1005 1/16W 39K OHM J	1	1
R417	RK3561	Chip R.	1005 1/16W 82K OHM J	1	1
R418	RK3559	Chip R.	1005 1/16W 56K OHM J	1	1
R419	RK3563	Chip R.	1005 1/16W 120K OHMJ	1	1
R420	RK3545	Chip R.	1005 1/16W 3.9K OHMJ	1	1
R421	RK3552	Chip R.	1005 1/16W 15K OHM J	1	1
R422	RK0025	Chip R.	2125 1/8W 330 OHM J	1	1
R423	RK3572	Chip R.	1005 1/16W 680K OHMJ	1	1
R424	RK3564	Chip R.	1005 1/16W 150K OHMJ	1	1
R425	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R426	RK3038	Chip R.	1608 1/10W 1.0KOHM J	1	1
R427	RK3534	Chip R.	1005 1/16W 470 OHM J	1	1
R428	RK3544	Chip R.	1005 1/16W 3.3K OHMJ	1	1
R429	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R430	RK3564	Chip R.	1005 1/16W 150K OHMJ	1	1
R431	RK3572	Chip R.	1005 1/16W 680K OHMJ	1	1
R432	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R433	RK3559	Chip R.	1005 1/16W 56K OHM J	1	1
R434	RK3567	Chip R.	1005 1/16W 270K OHMJ	1	1
R435	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R436	RK3560	Chip R.	1005 1/16W 68K OHM J	1	1

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
R437	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R438	RK3552	Chip R.	1005 1/16W 15K OHM J	1	1
R439	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R440	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R441	RK3541	Chip R.	1005 1/16W 1.8K OHMJ	1	1
R442	RK3534	Chip R.	1005 1/16W 470 OHM J	1	1
R443	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R444	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R445	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R446	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R447	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R448	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R449	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R450	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R451	RK3557	Chip R.	1005 1/16W 39K OHM J	1	1
R452	RK3561	Chip R.	1005 1/16W 82K OHM J	1	1
R453	RK3559	Chip R.	1005 1/16W 56K OHM J	1	1
R454	RK3563	Chip R.	1005 1/16W 120K OHMJ	1	1
R455	RK3545	Chip R.	1005 1/16W 3.9K OHMJ	1	1
R456	RK3552	Chip R.	1005 1/16W 15K OHM J	1	1
R457	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R458	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R459	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R460	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R461	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R462	RK3001	Chip R.	1608 0 OHM	1	0
R463	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R464	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R467	RK3564	Chip R.	1005 1/16W 150K OHMJ	1	1
R468	RK3559	Chip R.	1005 1/16W 56K OHM J	1	1
R469	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R470	RK3001	Chip R.	1608 0 OHM	0	1
R472	RK3574	Chip R.	1005 1/16W 1.0M OHMJ	1	1
R473	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R474	RK3567	Chip R.	1005 1/16W 270K OHMJ	1	1
R475	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R476	RK3572	Chip R.	1005 1/16W 680K OHMJ	1	1
R477	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R478	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R479	RK2010	Chip R.	4532 1/2W 33 OHM J	1	1
R481	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R482	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R483	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R484	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R485	RK3501	Chip R.	1005 1/16W 0 OHM J	1	1
R486	RK3557	Chip R.	1005 1/16W 39K OHM J	1	1
R487	RK3557	Chip R.	1005 1/16W 39K OHM J	1	1
R488	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R489	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R490	RK3564	Chip R.	1005 1/16W 150K OHMJ	1	1
R491	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R492	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R493	RK3534	Chip R.	1005 1/16W 470 OHM J	1	1
R494	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R495	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R496	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R497	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R498	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R500	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R501	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R502	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R503	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R504	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R505	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R506	RK3501	Chip R.	1005 1/16W 0 OHM J	1	1
R508	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R509	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R511	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R513	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R514	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R515	RK3552	Chip R.	1005 1/16W 15K OHM J	1	1
R516	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R517	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R519	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R520	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R521	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R522	RK3559	Chip R.	1005 1/16W 56K OHM J	1	1
R523	RK3530	Chip R.	1005 1/16W 220 OHM J	1	1
R524	RK3542	Chip R.	1005 1/16W 2.2K OHMJ	1	1
R525	RK3522	Chip R.	1005 1/16W 47 OHM J	1	1
R526	RK3574	Chip R.	1005 1/16W 1.0M OHMJ	1	1
R527	RK3558	Chip R.	1005 1/16W 47K OHM J	1	1
R528	RK3546	Chip R.	1005 1/16W 4.7K OHMJ	1	1
R529	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1
R530	RK3516	Chip R.	1005 1/16W 15 OHM J	1	1

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
R531	RK3548	Chip R.	1005 1/16W 6.8K OHMJ	1	1
R532	RK3501	Chip R.	1005 1/16W 0 OHM J	1	1
R533	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R534	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R535	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R536	RK3561	Chip R.	1005 1/16W 82K OHM J	1	1
R537	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R538	RK3520	Chip R.	1005 1/16W 33 OHM J	1	1
R539	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R540	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R541	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R542	RK4091	Chip R.	4532 1/2W 100K OHM	1	1
R543	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R544	RK3559	Chip R.	1005 1/16W 56K OHM J	1	1
R545	RK3526	Chip R.	1005 1/16W 100 OHM J	1	1
R547	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R548	RK3554	Chip R.	1005 1/16W 22K OHM J	1	1
R549	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R550	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R551	RK3001	Chip R.	1608 0 OHM	1	1
R553	RK0028	Chip R.	2125 1/8W 470 OHM J	1	1
R554	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R555	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R556	RK0028	Chip R.	2125 1/8W 470 OHM J	1	1
R557	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R558	RK3550	Chip R.	1005 1/16W 10K OHM J	1	1
R559	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R560	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R561	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R562	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R563	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R564	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R565	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R566	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R567	RK3562	Chip R.	1005 1/16W 100K OHMJ	1	1
R568	RK3538	Chip R.	1005 1/16W 1.0K OHMJ	1	1
R571	RK3038	Chip R.	1608 1/10W 1.0KOHM J	1	1
SW1	US0012	Switch	SSSS212A NS L=2	1	1
TH1	XS0021	Thermistor	TBPS1R103K440H5Q	1	1
VR3	RH0142	Trimmer R.	2720 10K OHM	1	1
VR4	RH0142	Trimmer R.	2720 10K OHM	1	1
VR5	RH0146	Trimmer R.	2720 47K OHM	1	1
VR6	RH0154	Trimmer R.	2720 1.0M OHM	1	1
VR7	RH0148	Trimmer R.	2720 100K OHM	1	1
VR8	RH0152	Trimmer R.	2720 470K OHM	1	1
VR9	RH0148	Trimmer R.	2720 100K OHM	1	1
X1	XQ0170	Xtal OSC	GS46128 21.25MHZ	1	1
X4	XQ0176	Xtal OSC	SX-2112 45.555MHZ	1	1
X5	XQ0178	Xtal OSC	HC-49U/3.5 9.8304MHz	1	1
XF1	XF0041	Xtal Filter	UM5 21.7M 21R15A5	1	1
XF2	XF0041	Xtal Filter	UM5 21.7M 21R15A5	1	1
XF3	XF0037	Xtal Filter	45.100M UM5-3P	1	1
	FG0327		CUSHION DR135	1	1
	FM0214		RADIATIVE PLATE 620	1	1
	FM0220		GROUND PLATE DR620	2	2
	TS0172		VCO CASE DR620	2	2
	TS0181		SHIELD BOARD1	1	1
	TS0182		SHIELD BOARD2	1	1
	TZ0049		SILICON DUMPER	4	4
	TZ0056		SILICON DUMPER 49U	1	1
	UP0513A	P.C.B	DR635 INTEGRATED	1	1
	YZ0163		COPPER TAPE 15 x 20M	0.002	0.002

Mechanical Parts

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
	AA0050	Screw	OH M2.6+6 FE/B.ZN	4	4
	AA0077	Screw	BH M3+16 FE/B.ZN	4	4
	AB0012	Screw	PH/S M2.6+5 FE/ZN	2	2
	AN0012	Screw	RND N7X0.75 BR/B.ZN	1	1
	AU0001	Screw	S PH B2.6+8 FE/NI	19	19
	AW0012	Screw	PH/D6 3+9 FE/N	4	4
	AX0003	Screw	0PH P2+16 FE/B.ZN3	2	2
	AZ0037Y	Screw	SPCW 3X8X0.5 BC	4	4
	DG0042A		LED LIGHT DR620	2	2
	DP0174		LCD PANEL DR635	1	1
	ES0028	Speaker	SPEAKER 57-8BC-32	1	1
	ET0011	Fan Motor	FAN FD1240107B-1N	1	1
	FG0361		CUSHION DR620	2	2
	FM0216		FAN COVER DR620	1	1
	FM0222		RADIATIVE PLATE2	1	1
	FP0151		REAR PANEL DR135	1	1
	FP0153A		CUSHION B	2	2
	FP0197		BLIND SHEET DR620	4	4
	FP0198		SPACER DR620	4	4

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
	KB0089		REAR CASE DR620	1	1
	KS0081		BOTTOM CASE DR620	1	1
	KZ0147		FRONT CACE DR620	1	1
	NK0072	Knob	VOL KNOB DR135	2	2
	NK0073	Knob	DIAL KNOB DR135	1	1
	NP0139		POWER BUTTON DR620	1	1
	NP0140		V/M BUTTON DR620	1	1
	QB0036	Ferrite bead	BP53RB120070060M	1	1
	SP0008		GND TERM XM601	1	1
	SS0098		CHASSIS DR620	1	1
	ST0065		SP HOLDER DR135	1	1
	ST0066		SP FITTING DR135	1	1
	TG0034		SP HIMERON DR135	1	1
	UE0258	Connector	FM-M.D.R-(4)	1	1
	UX1047	SP Wire	WIRE DR130	1	1
	UX1284	Cable	CABLE DR620	1	1
	YZ0131	Tape	Tape #9110 12X1mm	80	80

Packing Parts

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
	DS0446		NITTO MODEL PLATE(S)	1	3.2
	EHM53B	Microphone	EMS53B	0	1
	EHM57D	Microphone	EMS57D	1	0
	FM0078Z	Bracket	BRACKET DR130	1	1
	HK0620	Package	PACKAGE DR635	1	1
	HM0215		OUTER CARTON 10PCS	0.2	0.2
	HP0006Z		POLY-BAG	1	1
	HP0035	Plastic bag	E.BAG 5X200X250	1	1
	HU0170		INNER 10PCS DJX3	0.4	0.4
	HU0189		INNER DR620	1	1
	HU0192		INNER B DR620	1	1
	PF0104		ADD SHEET DR635T XBR	1	0
	PH0015		WARRANTY CEAT EXPOR	1	0
	PK0105		DIAGRAM DR635TV	1	1
	PR0288		SCREW STKR DX70	2	2
	PR0447		WARNING FCC (N)	1	0
	PR0452		FCC HOME USE	1	0
	PR0454Y		SECURITY STICKER T	2	2
	PR0478		SERIAL SEAL	0	1.2
	PR0514		EPSON 10X49 LABEL(W)	2	2
	PS0488	Manual	INSTRUCTION DR635TV	1	1
	UX1290A	Wire	WIRE UX1290A	1	1

Accessories (Screw Set)

Ref. No.	Part No.	Description	Parts Name	Qty (T)	Qty (E)
	AA0013	Screw	M5+20 Fe/Zn	4	4
	AE0012	Screw	HEXH/D M4+8 Fe/B.Zn	4	4
	AJ0003	Screw	T5+20 Fe/Zn	4	4
	AJ0003	Nut	N5x0.8 Fe/Zn	4	4
	AZ0009	Washer	5x9.2x1.3 Fe/Zn	4	4
	AZ0010	Washer	5x12x0.8 Fe/Zn	4	4
	EF0005	Fuse	FGBO 125V 15A	2	2
	FM0079Z	Spanner	DR130	1	1
	HP0006	Plastic bag	5x90x170	1	1
	YZ0121	Tape	Tape 10mm	2	2

ADJUSTMENT

1) Adjustment Spot

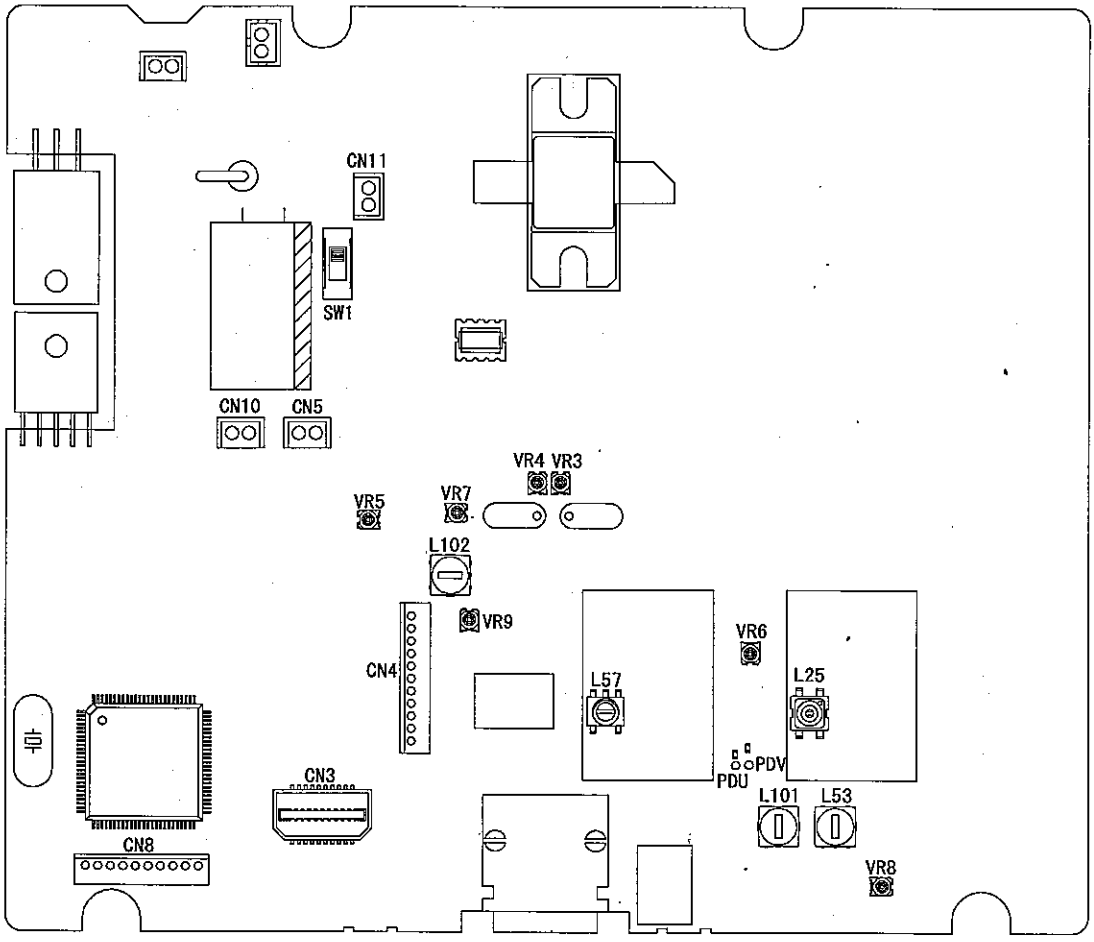
Power Supply Voltage 13.8 V

Output of SSG is all EMF indication

If without instruction, SSG output is MOD 1KHz 3.5KHz/DEV.

Standard Modulation is also based above.

Speaker load is 8Ω and Output is 50~100 mV.



Attention : Don't set the variable resistor into its open position.

2) Adjustment Mode

Adjustment memory table

Memory CH	VHF Freqency [MHz]	VHF Freqency [MHz]	Contents
CH1	146.000	440.000	PD Voltage
CH2	146.000	440.000	Ref Frequency
CH3	146.000 (145.000)	440.000 (435.000)	Hi Power
CH4	146.000 (145.000)	440.000 (435.000)	Mid Power
CH5	146.000 (145.000)	440.000 (435.000)	Low Power
CH6	146.050	440.050	RX Distortion
CH7	136.050	400.050	RX Sensitivity L
CH8	146.050	440.050	RX Sensitivity M
CH9	173.950	479.950	RX Sensitivity H
CH10	146.050	440.050	S Meter 1
CH11	146.050	440.050	S Meter FULL
CH12	146.050	440.050	Squelch
CH13	87.700		RX Distortion
CH14	87.700		S Meter 1
CH15	87.700		S Meter FULL
CH16	146.000 (145.000)	440.000 (435.000)	TX Deviation
CH17	146.000 (145.000)	440.000 (435.000)	TX Deviation NAR
CH18	146.000 (145.000)	440.000 (435.000)	Mic Gain
CH19	146.000 (145.000)	440.000 (435.000)	CTCSS 88.5Hz
CH20	146.000 (145.000)	440.000 (435.000)	DCS 255
CH21	146.000 (145.000)	440.000 (435.000)	Tone Burst 1750Hz
CH22	145.050	435.050	Aging

( ) = DR635E

After the above frequency is written in the memory,
it is set on the adjustment mode by the following operation.

FUNC → TS/DCS (Key Lock)
BAND → CALL → MHz*2 → TS/DCS → H/L*2

Memory switching of VHF and UHF can be done with the BAND key.
Adjustment mode is canceled when a power switch is turned on with CALL key.

[Cautions]
In RX Sensitivity adjustment (L, M and H), the following inequality must be realized.
CH7(L)<CH8(M)<CH9(H) [Example CH7=5A CH8=60 CH9=E0]

3) VHF Adjustment Specification

ITEM	CH No	CONDITION	UNIT	ADJ. POT	ADJUSTING METHOD
PD ADJ.	CH1	146.00MHz RX	MAIN	L25	Adjust so that PDV voltage becomes 2.7V
Frequency	CH2	440.00MHz TX	MAIN	VR6	Adjust so that Tx Frequency becomes within 440.00MHz±100Hz
HI POWER	CH3	146.00MHz HI	FRONT	RE601	Adjust to 50.0±1.0W
MID POWER	CH4	146.00MHz MID	FRONT	RE601	Adjust to 20.0±1.0W
LOW POWER	CH5	146.00MHz LOW	FRONT	RE601	Adjust to 5.0±0.5W
RX Distortion	CH6	146.05MHz SSG 60dBu	MAIN	L101	It is adjusted to become maximum volume when a position of Volume is done at 11 o'clock. Confirm : Less than 3%
Rx Signal Sensitivity	CH7	136.05MHz	FRONT	FUNC-↓ RE601-↓ FUNC	Adjust so that the Rx sensitivity becomes in maximum. Confirm:At -7dBu SINAD more than 12dB
Rx Signal Sensitivity	CH8	146.05MHz	FRONT	FUNC-↓ RE601-↓ FUNC	Adjust so that the Rx sensitivity becomes in maximum. Confirm:At -7dBu SINAD more than 12dB
Rx Signal Sensitivity	CH9	173.95MHz	FRONT	FUNC-↓ RE601-↓ FUNC	Adjust so that the Rx sensitivity becomes in maximum. Confirm:At +4dBu SINAD more than 12dB
S-Meter(1)	CH10	146.05MHz SSG -3dBu	FRONT	FUNC	It is confirmed by the FUNC key.
S-Meter (FULL)	CH11	146.05MHz SSG 15dBu	FRONT	FUNC	It is confirmed by the FUNC key.
Squelch	CH12	146.05MHz SSG OFF Indication 01	MAIN	VR8	Adjust so that the squelch stops at perfectly close location
RX Distortion	CH13	87.7MHz SG 60dBu 1KHz 22KHz/DEV WFM	MAIN	L53	It is adjusted to become maximum volume when a position of Volume is done at 11 o'clock. Confirm : Less than 3% SG OUT 20~80dBu : Less than 5%
S-Meter(1)	CH14	87.7MHz SSG 5dBu 1KHz 22KHz/DEV WFM	FRONT	FUNC	It is confirmed by the FUNC key.
S-Meter (FULL)	CH15	87.7MHz SSG 20dBu 1KHz 22KHz/DEV WFM	FRONT	FUNC	It is confirmed by the FUNC key.
Maximum Deviation	CH16	146.00MHz MOD 1KHz40mVemf	MAIN	VR3	4.5±0.1KHz/DEV
Maximum Deviation	CH17	146.00MHz MOD 1KHz40mVemf NARROW			2.2±0.3KHz/DEV
Mic Gain	CH18	146.00MHz MOD 1KHz4mVemf	MAIN	VR5	2.85±0.1KHz/DEV
CTCSS Modulation	CH19	146.00MHz 88.5Hz			800±400Hz/DEV 3KHz LPF ON
DCS Modulation	CH20	146.00MHz 255 Code	MAIN	VR7	800±50Hz/DEV 3KHz LPF ON
1750Hz Modulation	CH21	146.00MHz 1750Hz			3.0±0.5KHz/DEV

4) UHF Adjustment Specification

ITEM	CH No	CONDITION	UNIT	ADJ.SPOT	ADJUSTING METHOD
PD ADJ.	CH1	440.00MHz RX	MAIN	L57	Adjust so that PDU voltage becomes 3.4V
HI POWER	CH3	440.00MHz HI POWER	FRONT	RE601	Adjust to 35.0±1.0W
MID POWER	CH4	440.00MHz MID POWER	FRONT	RE601	Adjust to 20.0±1.0W
LOW POWER	CH5	440.00MHz LOW POWER	FRONT	RE601	Adjust to 5.0±0.5W
RX Distortion	CH6	440.05MHz SSG 60dBu	MAIN	L102	It is adjusted to become maximum volume when a position of Volume is done at 11 o'clock. Confirm : Less than 3%
Rx Signal Sensitivity	CH7	400.05MHz	FRONT	FUNC ↓ RE601 ↓ FUNC	Adjust so that the Rx sensitivity becomes in maximum. It stops with as big value as possible. Confirm: At -3dBu SINAD more than 12dB
Rx Signal Sensitivity	CH8	440.05MHz	FRONT	FUNC ↓ RE601 ↓ FUNC	Adjust so that the Rx sensitivity becomes in maximum. It stops with as big value as possible. Confirm: At -7dBu SINAD more than 12dB
Rx Signal Sensitivity	CH9	479.95MHz	FRONT	FUNC ↓ RE601 ↓ FUNC	Adjust so that the Rx sensitivity becomes in maximum. Confirm: At +6dBu SINAD more than 12dB
S-Meter(1)	CH10	440.05MHz SSG -3dBu	FRONT	FUNC	It is confirmed by the FUNC key.
S-Meter (FULL)	CH11	440.05MHz SSG 15dBu	FRONT	FUNC	It is confirmed by the FUNC key.
Squelch	CH12	440.05MHz SSG OFF Indication 01	MAIN	VR9	Adjust so that the squelch stops at perfectly close location
Maximum Deviation	CH16	440.00MHz MOD 1KHz 40mVemf	MAIN	VR4	4.5±0.1KHz/DEV
Maximum Deviation	CH17	440.00MHz MOD 1KHz 40mVemf NARROW			2.2±0.3KHz/DEV
Mic Gain	CH18	440.00MHz MOD 1KHz4mVemf			3.0±0.5KHz/DEV
CTCSS Modulation Level	CH19	440.00MHz 88.5Hz			800±400Hz/DEV 3KHz LPF ON
DCS Modulation Level	CH20	440.00MHz 255 Code			800±400Hz/DEV 3KHz LPF ON
1750Hz Modulation Level	CH21	440.00MHz 1750Hz			3.0±0.5KHz/DEV

5) VHF Test Specification

TEST ITEM	CONDITION	TEST STANDARD	NOTE
RX Sensitivity	136.05MHz 145.90MHz 173.95MHz	Less than -6dBu Less than -6dBu Less than +5dBu	12dB SINAD
	87.7MHz	Less than 15dBu	12dB SINAD 22KHz/DEV
	135.05MHz	Less than 6dBu	AM 10dB S/N
	146.05MHzSUB	Less than -4dBu	12dBSINAD
RX Distortion	146.05MHz	Less than 5%	SSG 出力 60dBu
	87.7MHz	Less than 5%	SSG 出力 60dBu 22KHz/DEV
RX S/N	146.05MHz	More than 38dB	SSG 出力 60dBu 0.3～3KHzBPF OFF
Squelch Sensitivity	146.05MHz Indication 02	Squelch Open	SSG Output -10dBu
		Squelch Close	SSG Output OFF
S Meter	146.05MHz 1KHz 3.5KHz/DEV	All appears at 18dBu Disappear at -6dBu	Decrease SSG level and decrease S Meter level
S Meter	87.7MHz 1KHz 22KHz/DEV	All appears at 25dBu Disappear at 0dBu	Decrease SSG level and decrease S Meter level
AF Output	146.05MHz	More than 2W	SSG Output 60dBu MAX VR
AF Output NARROW	146.05MHz NARROW	More than Normal Mode.	SSG Output 60dBu MAX VR
AF Output	87.7MHz	More than 2W	SSG Output 60dBu 22KHz/DEV, MAX VR
Full Duplex Sensitivity	RX 146.05MHz TX 440.05MHz HI Power	Less than -4dBu	12dB SINAD

TEST ITEM	CONDITION	TEST STANDARD	NOTE
TX Output HI POWER	144.00MHz 146.00MHz 148.00MHz	50±5W 50±3W 50±5W	(T)
TX Output MID POWER	146.00MHz	20±2W	
TX Output LOW POWER	146.00MHz	5±1W	
Drain Current	146.00MHz	Less than10A	
Spurious	144.00MHz 146.00MHz 148.00MHz	More than 55dB More than 55dB More than 55dB	M and L standard power is also the same as of H power level
Modulation Level	146.00MHz	2.85±0.2KHz/DEV 4.5±0.2KHz/DEV	MIC IN 4mVemf MIC IN 40mVemf
	146.00MHz NARROW	2.2±0.3KHz/DEV	MIC IN 40mVemf
CTCSS Modulation Level	146.00MHz	800±400Hz/DEV	88.5Hz 3KHz LPF ON
	NARROW 146.00MHz	450±200Hz/DEV	
DCS Modulation Level	146.00MHz	800±200Hz/DEV	Code 255 3KHz LPF ON
	NARROW 146.00MHz	450±200Hz/DEV	
1750Hz Modulation Level	146.00MHz	3.0±0.5KHz/DEV	
Modulation Distortion	146.00MHz	Less than 4%	
TX S/N	146.00MHz	More than 38dB	0.3～3KHz BPF ON
X BAND Repeater	146.00MHz	3.0±0.8KHz/DEV	RX 440.00MHz DEV 1KHz 3.5KHz/DEV SSG Output 60dBu (T)

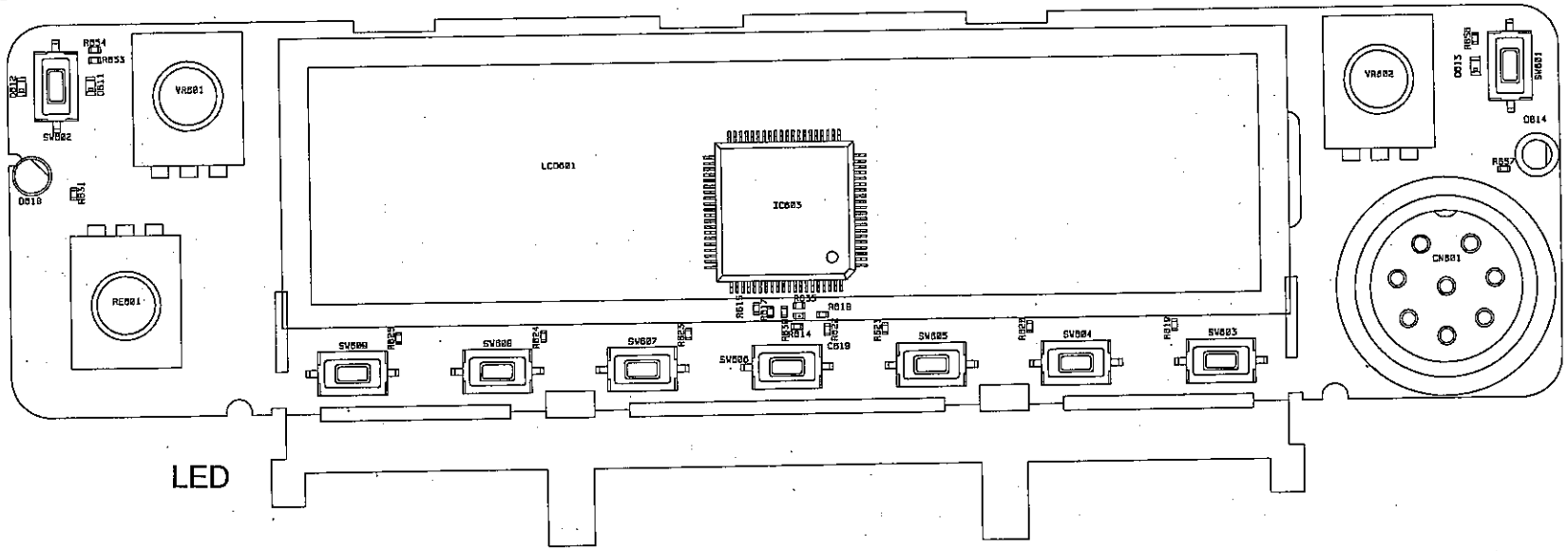
6) UHF Test Specification

TEST ITEM	CONDITION	TEST STANDARD	NOTE
RX Sensitivity	400.05MHz 439.90MHz 479.95MHz	Less than -2dBu Less than -6dBu Less than +7dBu	12dB SINAD
	850.05MHz	Less than 10dBu	12dB SINAD (E)
	380.05MHz	Less than +1dBu	12dB SINAD
	440.05MHzSUB	Less than -4dBu	
RX Distortion	440.05MHz	Less than 5%	SSG 出力 60dBu
RX S/N	440.05MHz	More than 38dB	SSG 出力 60dBu 0.3～3KHzBPF OFF
Squelch Sensitivity	440.05MHz Indication 02	Squelch Open	SSG Output -10dBu
		Squelch Close	SSG Output OFF
S Meter	440.05MHz 1KHz 3.5KHz/DEV	All appears at 18dBu Disappear at -6dBu	Decrease SSG level and decrease S Meter level
AF Output	440.05MHz	More than 2W	SSG Output 60dBu MAX VR
AF Output NARROW	440.05MHz NARROW	More than Normal Mode.	SSG Output 60dBu MAX VR
Full Duplex Sensitivity	RX 440.05MHz TX 146.05MHz HI Power	Less than -4dBu	12dB SINAD

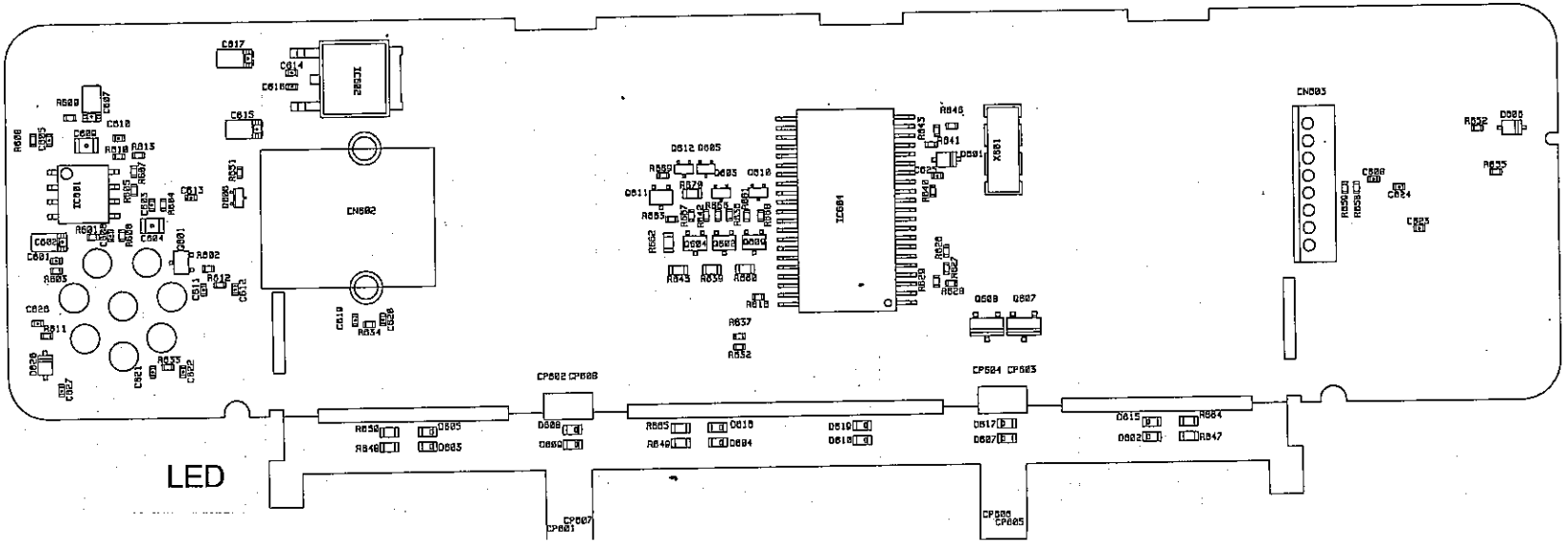
TEST ITEM	CONDITION	TEST STANDARD	NOTE
TX Output HI POWER	430.00MHz 440.00MHz 450.00MHz	35±3W 35±3W 35±3W	(T)
TX Output MID POWER	440.00MHz	20±2W	
TX Output LOW POWER	440.00MHz	5±1W	
Drain Current	440.00MHz	Less than 10A	
Frequency Deviation	440.00MHz	Within±0.3KHz	
Spurious	430.00MHz 440.00MHz 450.00MHz	More than 60dB More than 60dB More than 60dB	M and L standard power is also the same as of H power level
Modulation Level	440.00MHz	3.0±0.5KHz/DEV 4.5±0.2KHz/DEV	MIC IN 4mVemf MIC IN 40mVemf
	440.00MHz NARROW	2.2±0.3KHz/DEV	MIC IN 40mVemf
CTCSS Modulation Level	440.00MHz	800±400Hz/DEV	88.5Hz 3KHz LPF ON
DCS Modulation Level	440.00MHz	800±200Hz/DEV	Code 255 3KHz LPF ON
1750Hz Modulation Level	440.00MHz	3.0±0.5 KHz/DEV	
Modulation Distortion	440.00MHz	Less than 4%	
TX S/N		More than 38dB	0.3～3KHz BPF ON
X BAND Repeater	440.00MHz	3.0±1.0 KHz/DEV	RX 146.00MHz DEV 1KHz 3.5KHz/DEV SSG Output 60dBu (T)

PC BOARD VIEW

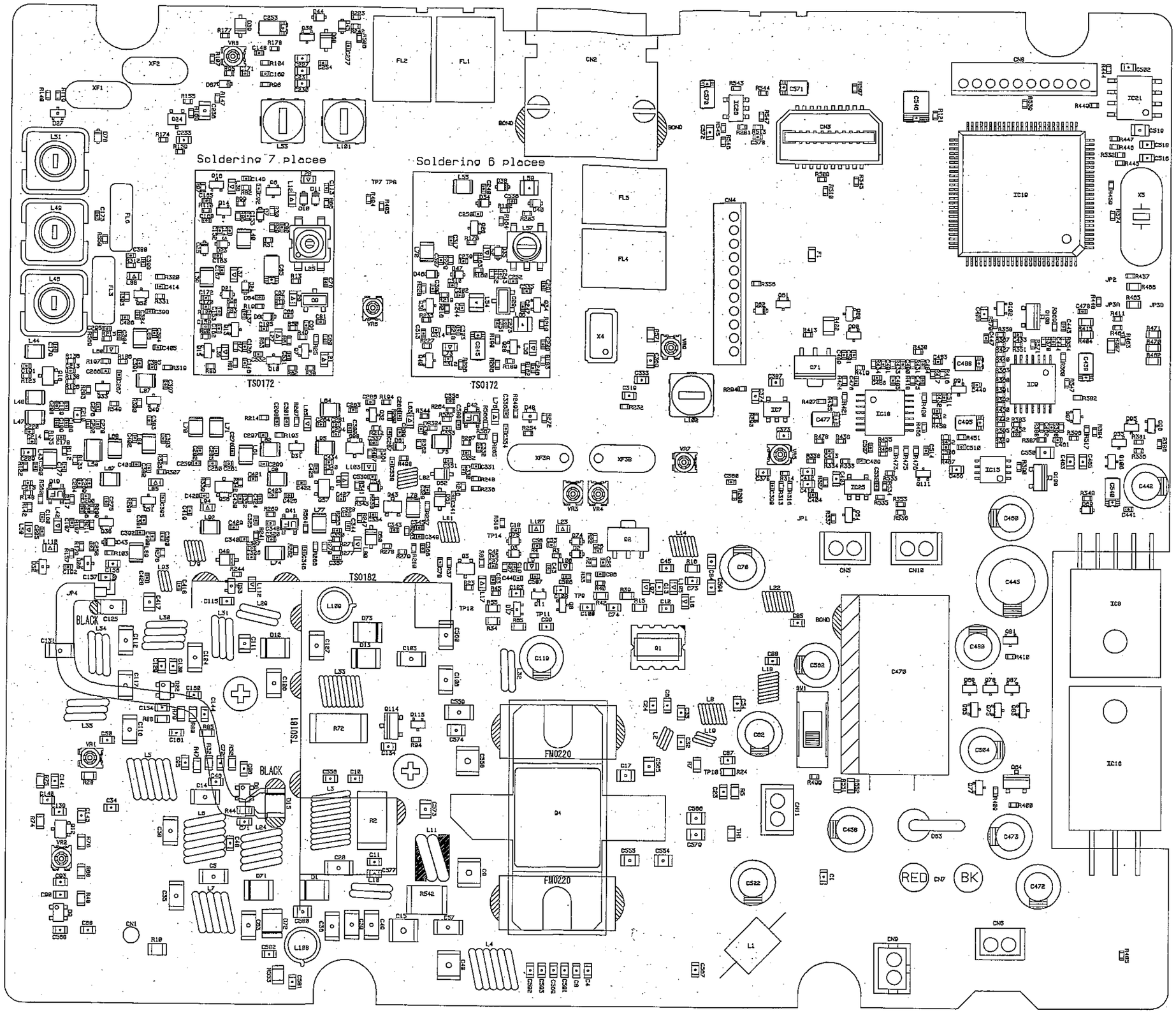
1) Front Side A



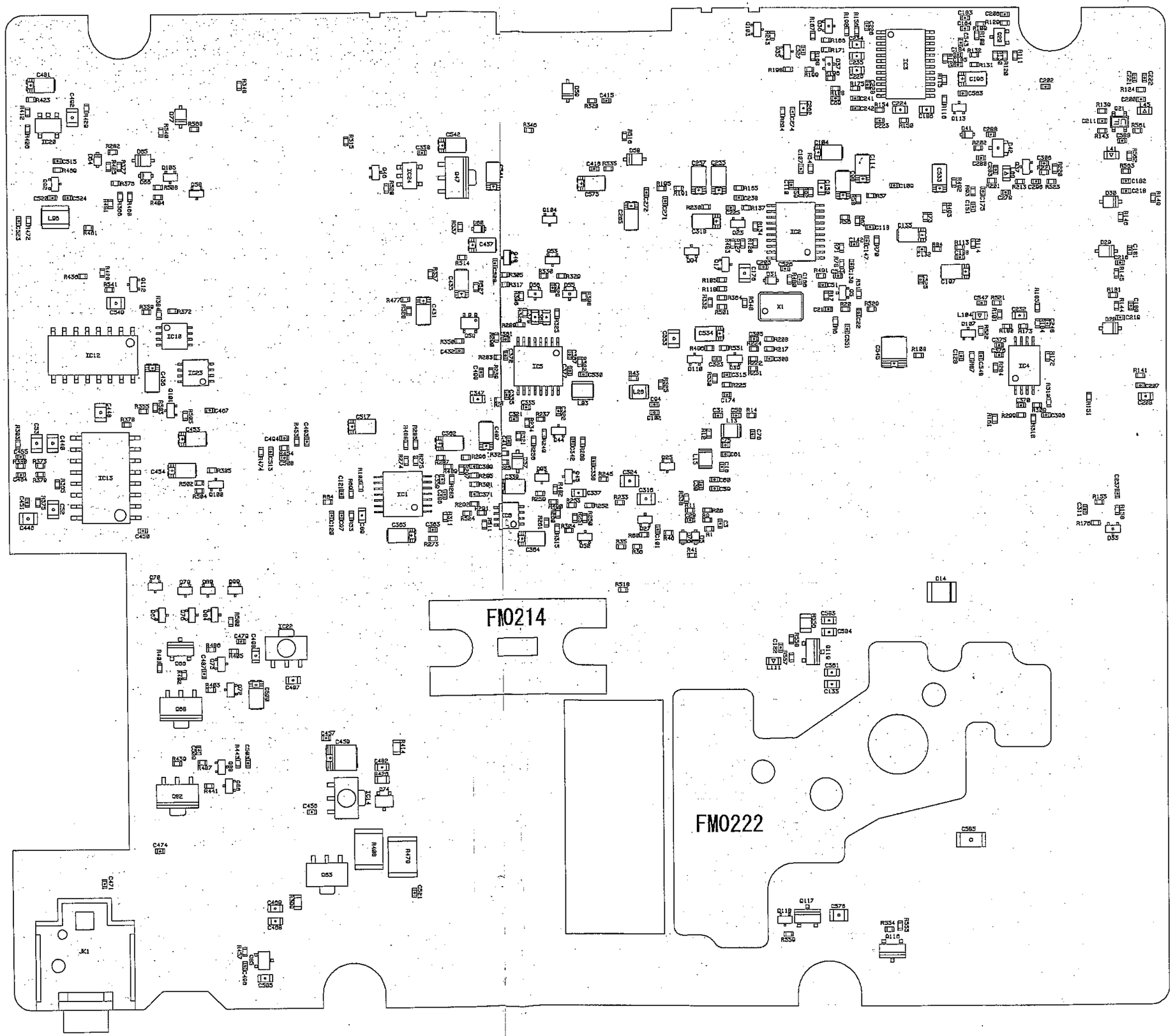
2) Front Side B



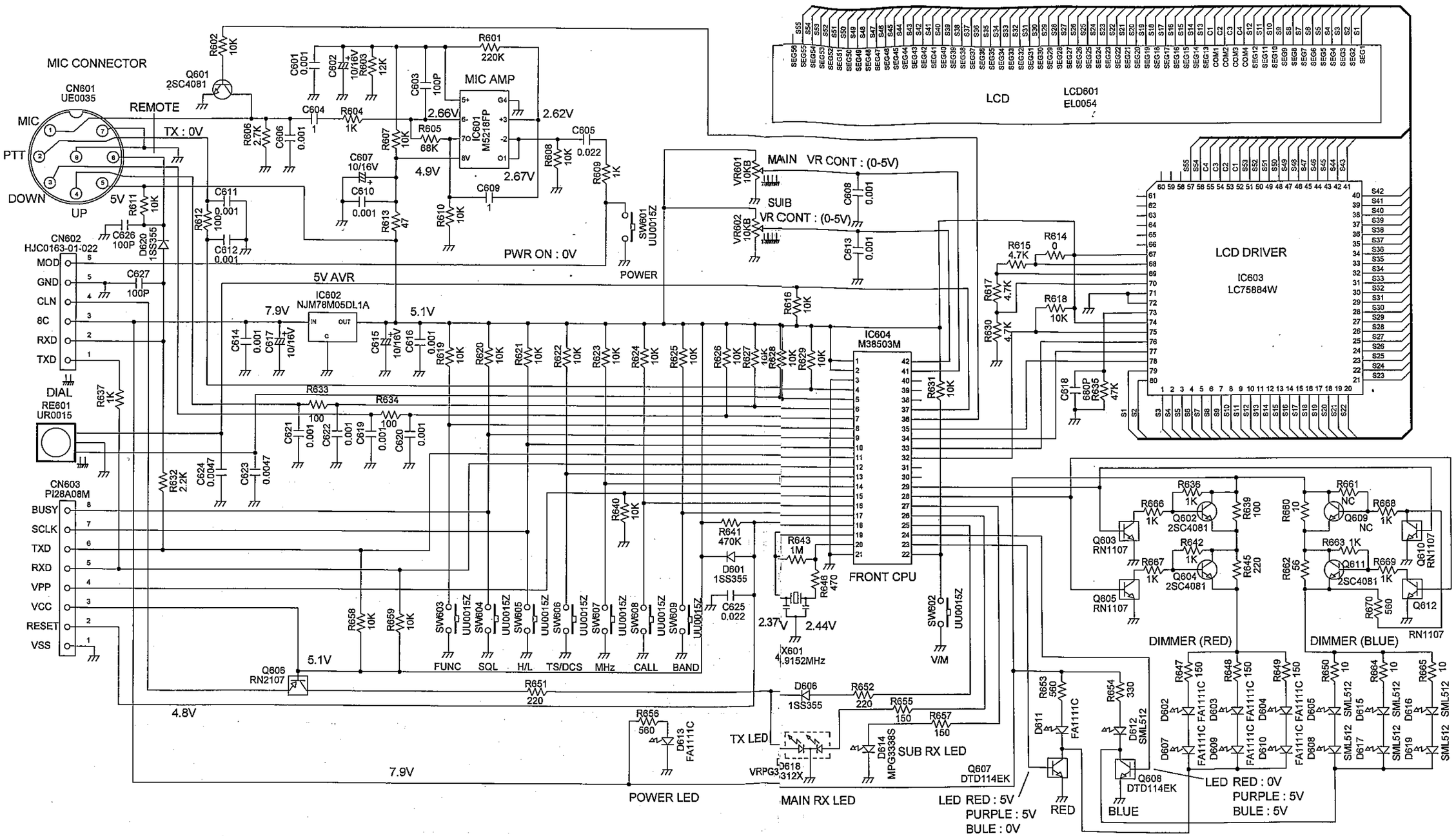
3) Main Side A


Soldering 7 places
Soldering 6 places
TS0172
TS0172
TS0182
TS0181
FW0220
FW0220
BLACK
BLACK
BLACK
RED
BK

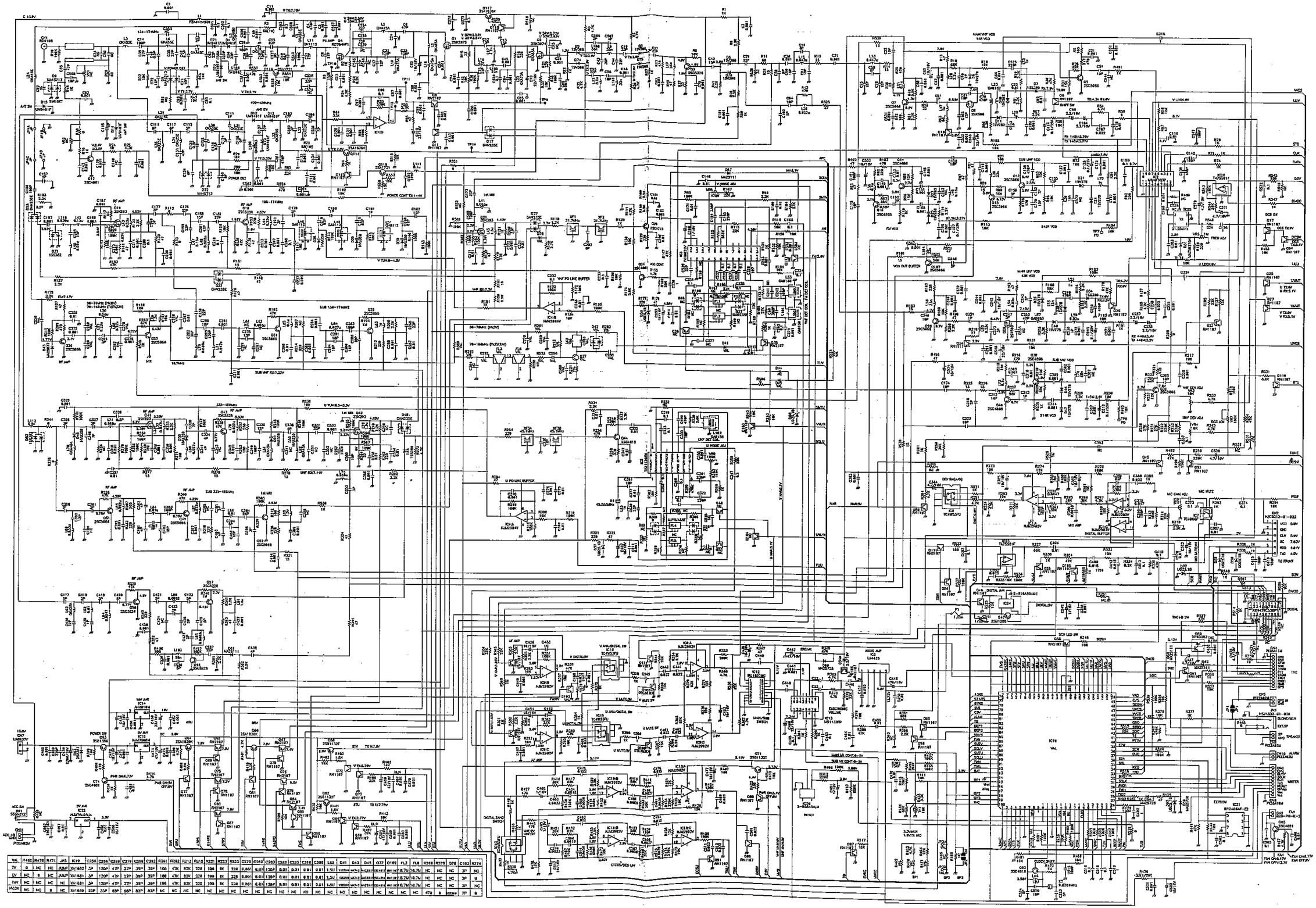
4) Main Side B



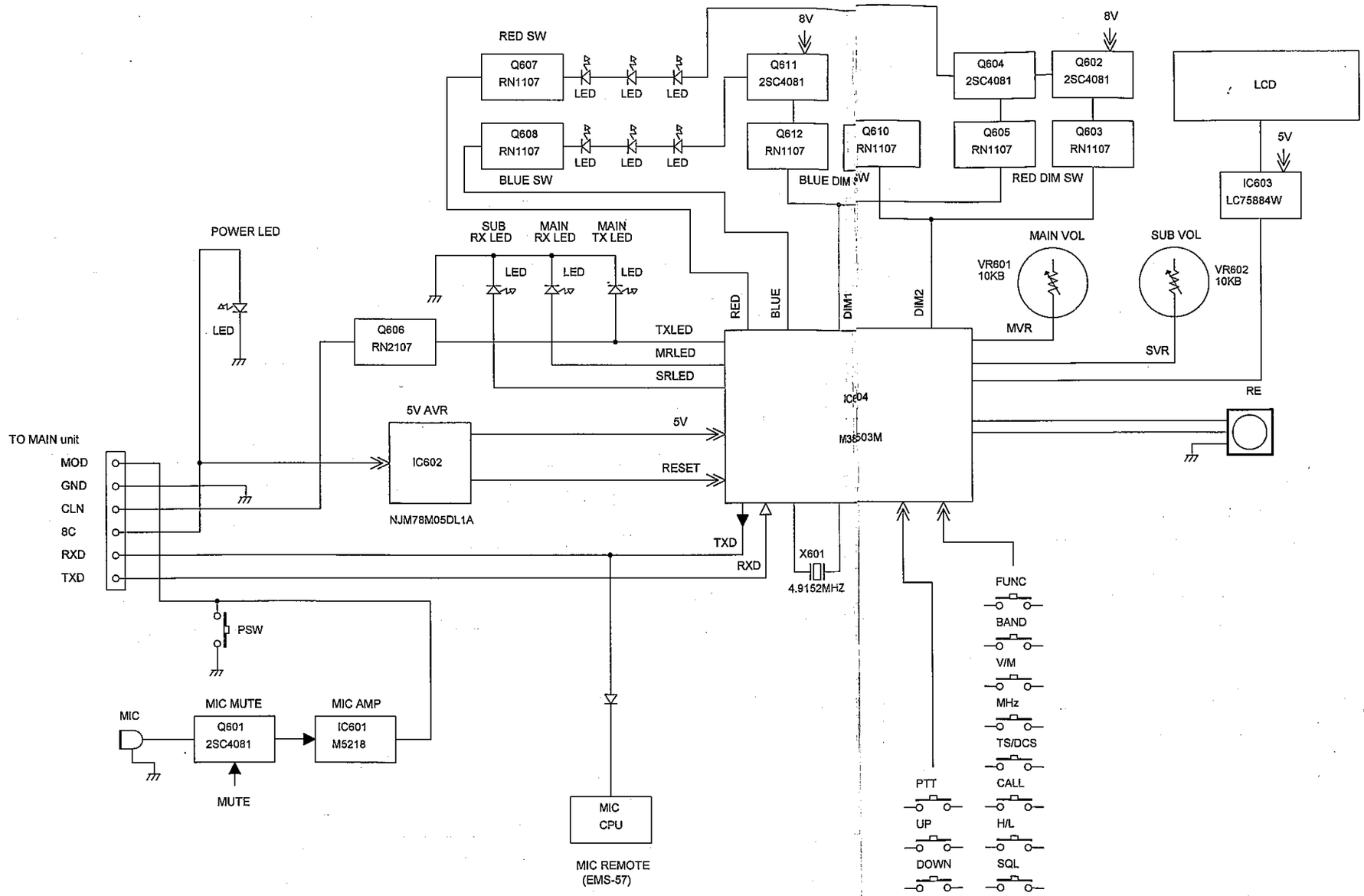
FRONT SCHEMATIC DIAGRAM



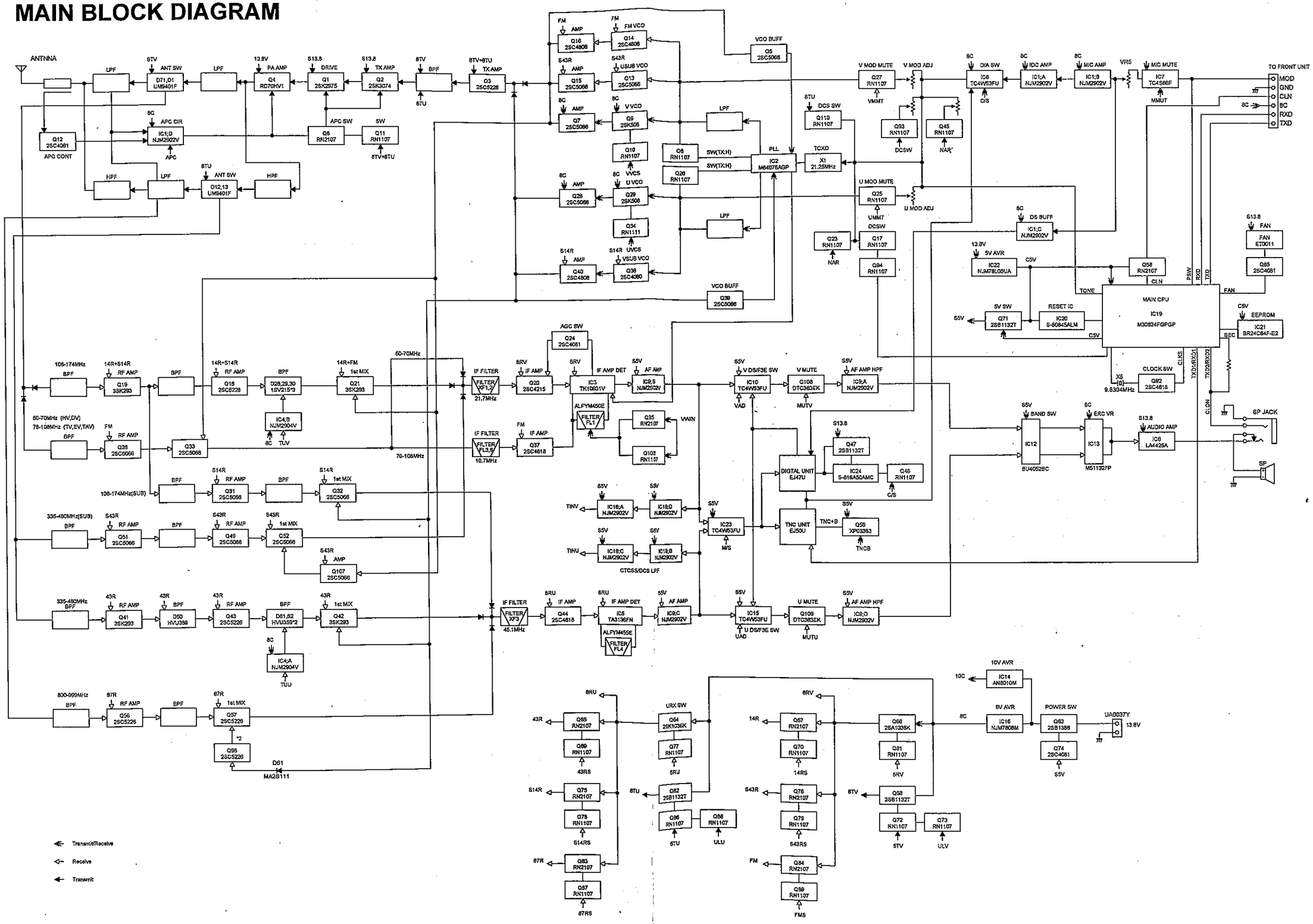
MAIN SCHEMATIC DIAGRAM



FRONT BLOCK DIAGRAM



MAIN BLOCK DIAGRAM



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