HF / 50MHz TRANSCEIVER

TS-590SG

SERVICE MANUAL

KENWOOD

JVCKENWOOD Corporation

RQ045 (K) B5B-7163-00

Phone jack (9P) (E11-0705-15)

Key top (8key) (K2K-0121-00)

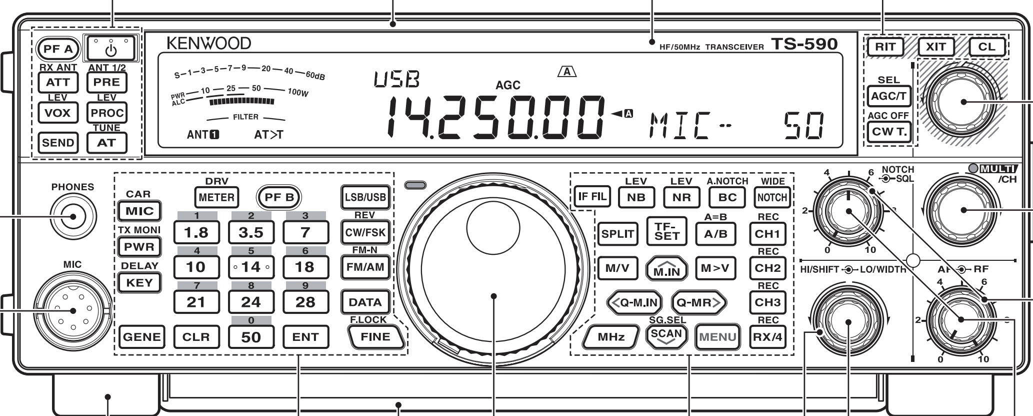
Panel (A6C-0009-00)

Front glass (B1A-0022-00)

Key top (5key) (K2K-0124-00)

Knob (RIT/XIT) (K29-9471-03)

Knob (MULTI/CH, PF-C) (K29-9456-23)



Foot (Front) (J02-0442-04)x2

Key top (25key) (K2K-0122-00)

Knob (Main knob) (K2B-0001-00)

Key top (20key) (K2K-0123-00)

Knob (Inside/HI) (K29-9477-03)

Knob (Outside/SQL, RF) (K29-9596-03)x2

RF coaxial receptacle (Round) (E06-0858-25)

Foot (Front) (J02-0440-14)

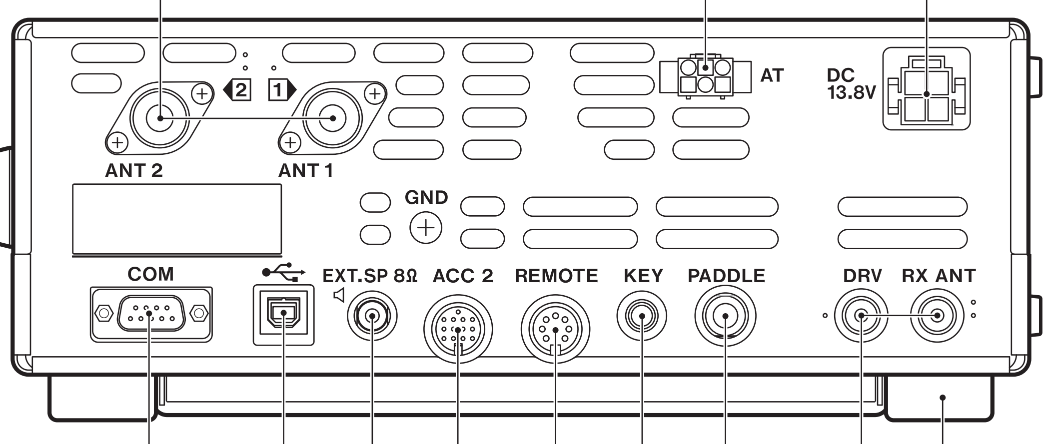
Knob (Outside/LO) (K2K-0125-00)

Knob (Inside/NOTCH, AF) (K29-9390-03)x2

RF coaxial receptacle (M) (E04-0167-15)x2

Lead wire with connector (EXT.AT) (E37-0891-25)

Lead wire with terminal (E37-1480-05)



Sub socket (D) (E58-0529-05)

3.5D phone jack (3P) (E11-0414-15)

DIN socket (E06-0752-15)

Phone jack (9P) (E11-0705-15)

Foot (Back) (J02-0475-15)x2

Rectangular receptacle (E58-0537-05)

DIN socket (E56-0408-15)

3.5D phone jack (3P) (E11-0455-05)

Pin jack (E13-0166-25)x2

This product complies with the **RoHS** directive for the European market.

This product uses Lead Free solder.

CONTENTS

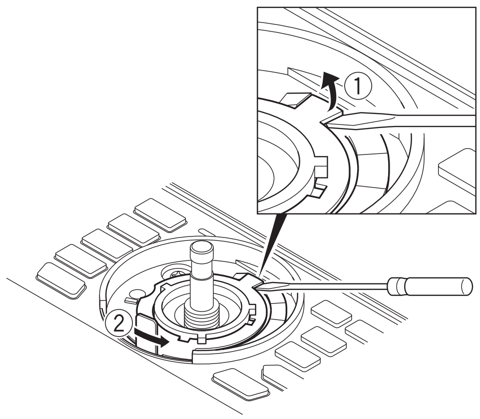
Disclaimer

While every precaution has been taken in the preparation of this manual, JVC KENWOOD Corporation assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein. JVC KENWOOD Corporation reserves the right to make changes to any products herein at any time for improvement purposes.

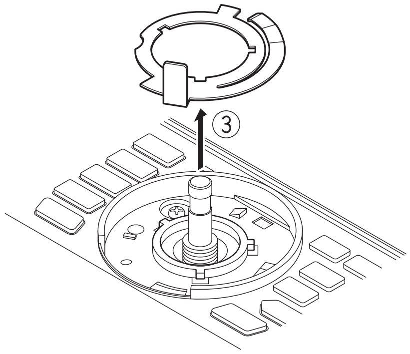
DISASSEMBLY FOR REPAIR

Removing the torque changeover lever (G02-1858-03)

1. Insert the tip of a flat-head screwdriver (or other implement) under the tab of the torque changeover lever, then lift the tab using the tip of the flat-head screwdriver. (①)
   Caution: Be careful not to damage the panel when lifting it.
2. Turn the lever section of the torque changeover lever to the right, as in the position described in step 1. (②)

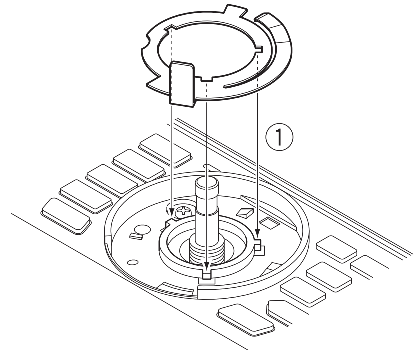


3. Lift the torque changeover lever and remove it from the panel. (③)

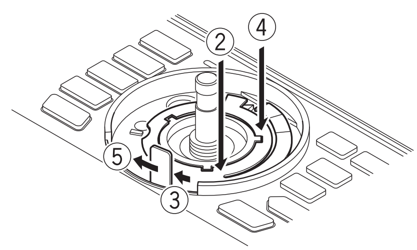


Mounting the torque changeover lever (G02-1858-03)

1. Insert the torque changeover lever by aligning the three tabs of the panel. (①)



2. Slightly turn the lever section of the torque changeover lever to the left (③) while pressing the surface near the tab at the lower right of the torque changeover lever (②).
   Caution: Confirm that the torque changeover lever is caught by the lower right tab of the panel.
3. Turn the lever section of the torque changeover lever to the left (⑤) while pressing the surface near the tab at the upper right of the torque changeover lever (④), then mount it onto the panel.

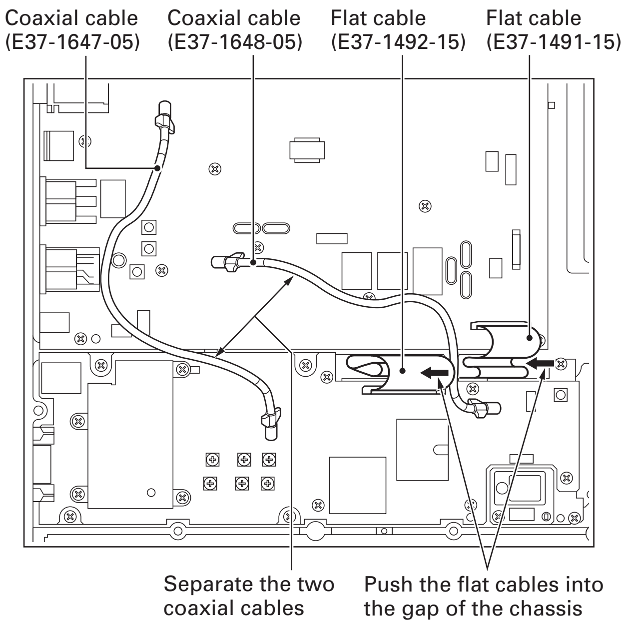


DISASSEMBLY FOR REPAIR

Precautions for Reassembly

Perform the following steps when assembling the bottom side of the transceiver.

1. Separate the two coaxial cables (E37-1647-05, E37-1648-05) as shown in the figure.
2. Push the two flat cables (E37-1491-15, E37-1492-15) into the gap of the chassis so they do not come into contact with the cabinet.



CIRCUIT DESCRIPTION

Frequency Configuration

Figure 1 shows the frequency configuration of this transceiver.

While transmitting, FM mode operates in a double conversion and other modes (AM, SSB, CW, FSK) operate in a triple conversion.

While receiving, the first IF operates in 73.095MHz triple conversion. In modes other than FM, the third IF is 24kHz, and the IF signal is converted by an A/D converter and input into DSP. The FM mode is detected in the FM IC, and the audio signal is converted by an A/D converter and input into the DSP. Under the following conditions, the first IF operates its reception in 11.374MHz double conversion.

1) Modes other than AM or FM
2) Amateur band within the 1.8/3.5/7/14/21MHz bands This specification restricts to the use of these main amateur bands consisting of BPF to achieve sufficient image ratio when performing down conversion on the RX-1 path.
3) DSP filter's bandwidth is 2.7kHz or lower

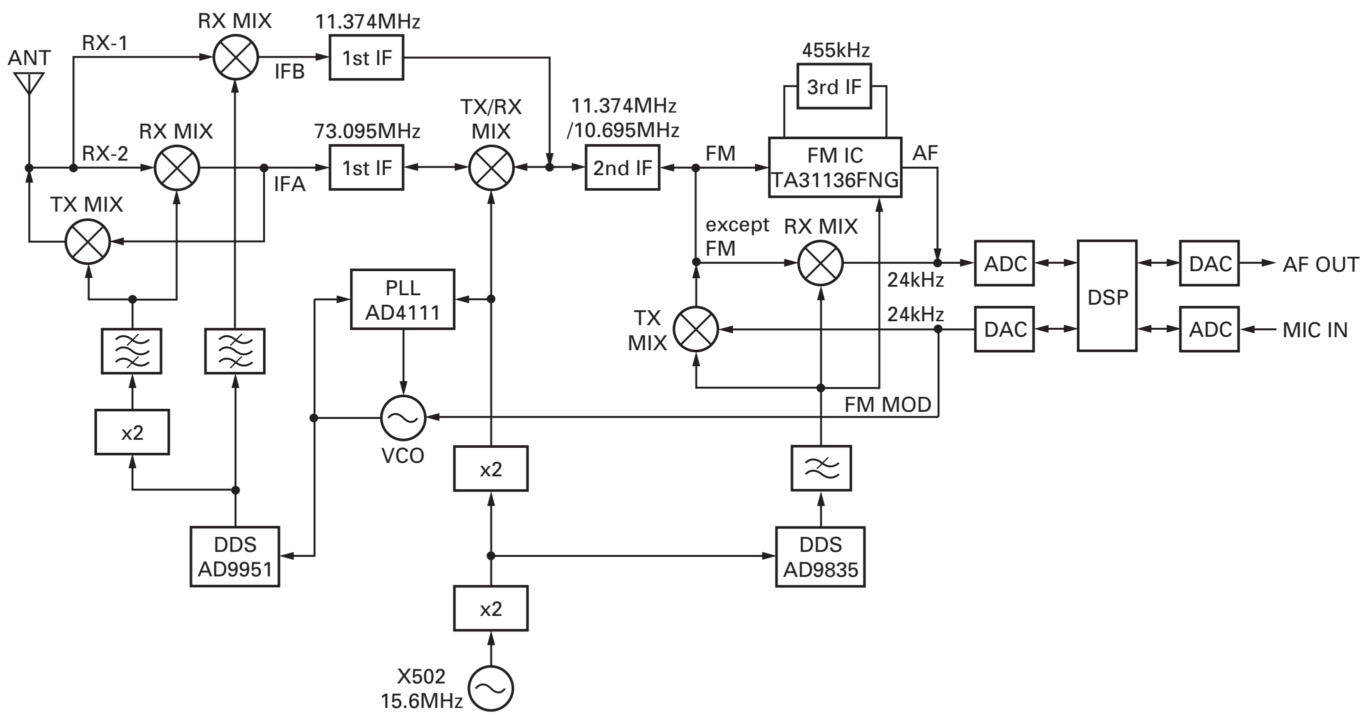


Fig. 1 Frequency configuration

Reference Signal Generator

The reference frequency (fstd), which is used to control the individual LO frequencies, oscillates at 15.6MHz in a crystal oscillation circuit (X502, Q501). This 15.6MHz signal passes through a buffer (Q502) and is doubled in a multiplier (Q503) to generate a 31.2MHz signal. The 31.2MHz signal is used as a reference signal for LO3 (the third local oscillator) DDS (IC601). The 31.2MHz signal is doubled in multipliers (Q504, Q505) to generate a 62.4MHz signal. The 62.4MHz signal is used as a reference signal for LO1 (the first local oscillator) PLL (IC801).

The SO-3 (TCXO unit: 15.6MHz) is configured as an option in this transceiver, so that you can replace the crystal oscillation circuit (X502, Q501) with the SO-3. When using the SO-3, remove the CN903 and CN904 short jumper wires in order to stop the operation of the crystal oscillation circuit (X502, Q501).

LO1/ LO2/ LO3

■ LO1 (the first local oscillator)

The VCO (Q806) oscillates at 393.6MHz or 388.8MHz. The oscillation output of this VCO passes through the BPF and is input to pin 6 of the PLL (IC801). This input signal is divided into 1/N within the PLL. Also, the 62.4MHz signal (15.6MHz reference frequency x 4) is input into PLL pin 8 and divided into 1/R within the PLL. By a phase comparator in the PLL, the frequency divided into 1/N and the frequency divided into 1/R are compared, and then the frequency is locked. The comparison frequency (fø) at this time is 120kHz when transmitting FM, and 4.8MHz otherwise.

393.6MHz or 388.8MHz signal locked by PLL (IC801) would be used as reference by DDS (IC803). The output signal from DDS (IC803) is 12.495MHz to 32.195MHz when RX-1 path is selected, amplified at the broad band amplifier (IC804), and then goes through BPF and is

CIRCUIT DESCRIPTION

output as LO1. When RX-2 path is selected or when transmitting, 36.5625MHz to 66.5475MHz is output, amplified by the broad band amplifier (IC804), and then doubled in the multiplier (D652), goes through BPF, and is output as 73.120MHz to 133.095MHz LO1.

■ LO2 (the second local oscillator)

The reference oscillating circuit's output signal 15.6MHz signal passes through a buffer (Q502) and is doubled in a multiplier (Q503) to generate a 31.2MHz signal. The 31.2MHz signal is also used as the DDS (IC601)'s reference frequency, and therefore its resistance is divided. Then, the 31.2MHz signal is doubled in multipliers (Q504, Q505) to generate a 62.4MHz signal.

The 62.4MHz signal's high harmonic is cut in the BPF and the signal is amplified in the amplifier (Q506) to generate LO2. If IFB is selected, the diode switch (D501) cuts the LO2 output.

■ LO3 (the third local oscillator)

The LO3 used in the modulator and the detector is generated in the DDS (IC601). The DDS output signal passes through the buffer (Q602) and LPF to generate LO3.

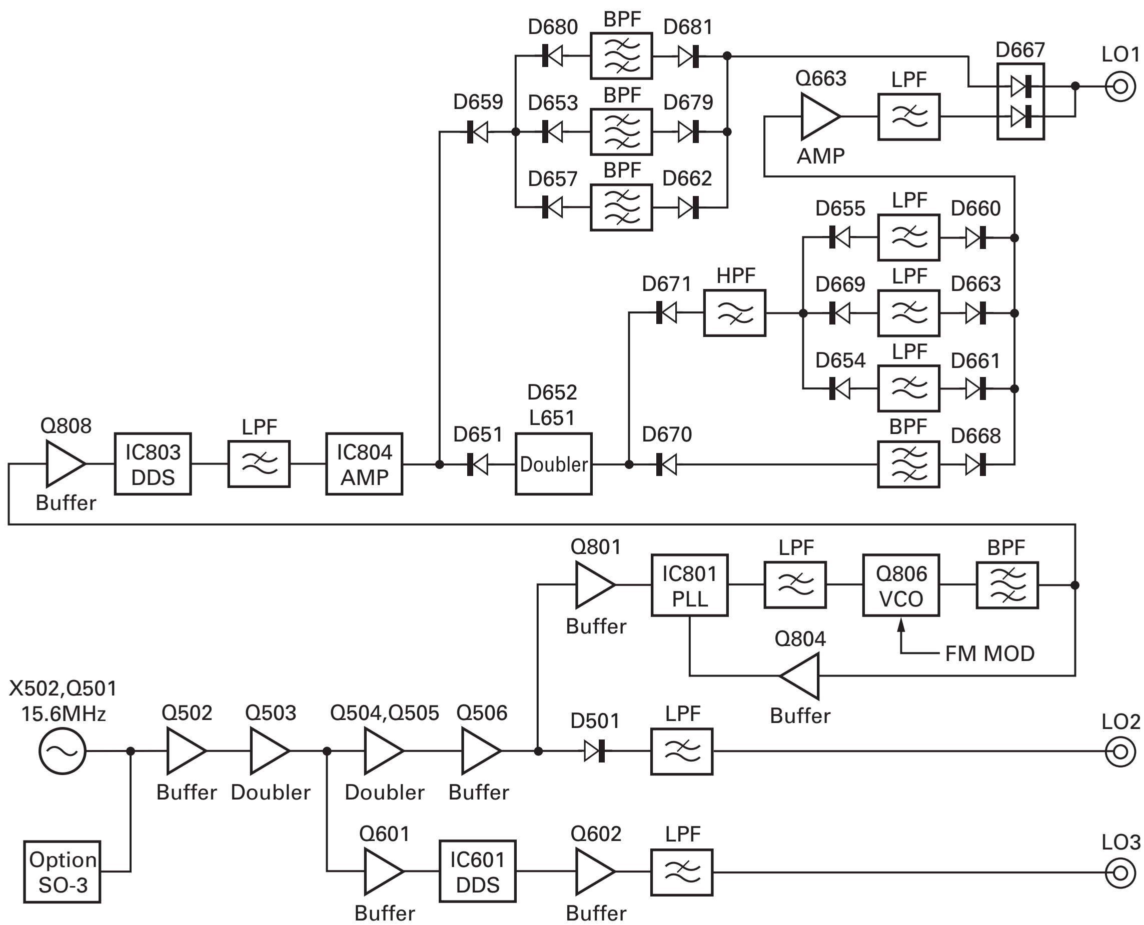


Fig. 2 Reference signal generator, LO1/ LO2/ LO3

CIRCUIT DESCRIPTION

● IF=73M

Frequency: 0.03~60MHz

HF TX/RX LO1		DDS AD9951 (DEN1)							
		USB		LSB		CW		CW-R	
		RX	TX	RX	TX	RX	TX	RX	TX
Filter offset 1		+(DSPFC)/2	+1.5k/2	-(DSPFC)/2	–1.5k/2	+(SHIFT-PITCH)/2	0	–(SHIFT-PITCH)/2	0
RIT		(Δ RIT)/2	-	(Δ RIT)/2	-	(Δ RIT)/2	-	(Δ RIT)/2	-
XIT		-	(Δ XIT)/2	-	(Δ XIT)/2	-	(Δ XIT)/2	-	(Δ XIT)/2
CAR correction	IF10M_2.7k	+(CAR1)/2	+(CAR1)/2	+(CAR1)/2	+(CAR1)/2	+(CAR1)/2	+(CAR1)/2	+(CAR1)/2	+(CAR1)/2
HF TX/RX LO1		DDS AD9951 (DEN1)							
		FSK		FSK-R		AM		FM	
		RX	TX	RX	TX	RX	TX	RX	TX
Filter offset 1		–(SHIFT/2)/2	–(SHIFT/2)/2	–(SHIFT/2)/2	–(SHIFT/2)/2	0	0	0	0
RIT		(Δ RIT)/2	-	(Δ RIT)/2	-	(Δ RIT)/2	-	(Δ RIT)/2	-
XIT		-	(Δ XIT)/2	-	(Δ XIT)/2	-	(Δ XIT)/2	-	(Δ XIT)/2
CAR correction	IF10M_2.7k	-	-	-	-	-	-	-	-

● IF=11M

Frequency: 0.03~21.5MHz (Amateur bands within 1.8/3.5/7/14/21MHz band only)

HF TX/RX LO1		DDS AD9951 (DEN1)					
		USB	LSB	CW	CW-R	FSK	FSK-R
		RX	RX	RX	RX	RX	RX
Filter offset 1		+(DSPFC)	–(DSPFC)	+(SHIFT-PITCH)	–(SHIFT-PITCH)	–(SHIFT/2)	–(SHIFT/2)
RIT		(Δ RIT)	(Δ RIT)	(Δ RIT)	(Δ RIT)	(Δ RIT)	(Δ RIT)
CAR correction	IF11M_2.7k	+(CAR2)	–(CAR2)	+(CAR2)	+(CAR2)	-	-
	IF11M_500	+(CAR3)	–(CAR3)	+(CAR3)	+(CAR3)	-	-

(Δ RIT): RIT frequency variable amount (–9.99~+9.99kHz)
(Δ XIT): XIT frequency variable amount (–9.99~+9.99kHz)
(SHIFT): FSK shift width frequency (170Hz, 200Hz, 425Hz, 850Hz, Initial value:170Hz)
CAR correction: SSB IF-Filter adjustment volume. 0 when using Narrow option filter.
(CAR1): IF 10.695MHz, SSB Normal filter compensation value
(CAR2): IF 11.374MHz, Normal filter compensation value
(CAR3): IF 11.374MHz, Narrow filter compensation value

Table 1-1 LO1 frequency shift data

CIRCUIT DESCRIPTION

LO3		DDS AD9835 (DEN2)										
		USB				LSB		CW		CW-R		
		RX			TX	RX	TX	RX	TX	RX	TX	
		IF73M		IF11M								
		RX<21.3M, 21.5≤RX	21.3≤RX, RX<21.5									
Filter offset 1		–48k+(DSPFC)	+(DSPFC)	–48k+(DSPFC)	–46.5k	–(DSPFC)	–1.5k	+(SHIFT-PITCH)	0	–(SHIFT-PITCH)	0	
CW pitch		-		-	-	-	-	-	-	-	-	
FSK tone		-		-	-	-	-	-	-	-	-	
CAR correction	IF10M_2.7k	+(CAR1)			+(CAR1)	+(CAR1)	+(CAR1)	+(CAR1)	+(CAR1)	+(CAR1)	+(CAR1)	
	IF11M_2.7k			+(CAR2)	+(CAR2)	+(CAR2)		+(CAR2)		+(CAR2)		
	IF11M_500			+(CAR3)	+(CAR3)	+(CAR3)		+(CAR3)		+(CAR3)		

LO3		DDS AD9835 (DEN2)							
		FSK		FSK-R		AM		FM	
		RX	TX	RX	TX	RX	TX	RX	TX
Filter offset 1		0	0	0	0	0	0	0	0
CW pitch		-	-	-	-	-	-	-	-
FSK tone		-	-	-	-	-	-	-	-
CAR correction	IF10M_2.7k	-	-	-	-	-	-	-	-
	IF11M_2.7k	-	-	-	-	-	-	-	-
	IF11M_500	-	-	-	-	-	-	-	-

CAR correction: SSB IF-Filter adjustment volume. 0 when using Narrow option filter.
(CAR1): IF 10.695MHz, SSB Normal filter compensation value
(CAR2): IF 11.374MHz, Normal filter compensation value
(CAR3): IF 11.374MHz, Narrow filter compensation value

Table 1-2 LO3 frequency shift data

Receiver Circuit

In an amateur frequency band or mode that requires anti-proximate interference performance, the receive signal passes through the double conversion RX-1 path, and in other frequency bands and modes, it passes through the triple conversion RX-2 path. (Refer to table 2)

Mode			SSB	CW	FSK	AM	FM
RX-1 path	Conversion method		Double			-	
	IF frequency	1st	11.374MHz			-	
		2nd	24kHz			-	
RX-2 path	Conversion method		Triple				
	IF frequency	1st	73.095MHz				
		2nd	10.695MHz				
		3rd	24kHz				455kHz

Table 2 Mode, conversion method, and IF frequency

■ From the antenna terminal to the preamplifier (Q236)

The receive signal from the antenna terminals (ANT1/ANT2) passes through the antenna changeover relay (K44) in the Final unit (X45-398 A/2), the antenna tuner's IN/THROUGH changeover relay (K45), the transmission/reception changeover relay (K46), and an image filter, and is sent from CN51 to the TX-RX unit (XC1-024 A/2)'s CN100 (RAT) through a co-axial cable.

The signal input into the TX-RX unit passes through the RX ANT relay (K101) and the relay (K103) that corresponds to the ANT OUT function, and then enters the attenuation circuit (ATT) which is approximately 12dB.

When ANT OUT functions during receiving, the signal received through the distributor (splitter) from the DRV OUT terminal and the DRV ANT relay (K800) can be output. If this signal is input to an external receiver, it is possible to receive and to make use of the scope function of the receiver. This can be switched to approximately 20dB by removing the CN101 short jumper. Then, the signal passes through IF trap circuit, the surge absorption limiter, and the BC band attenuating circuit (removes 30kHz to 1.705MHz), and enters the BPF. In the BC band attenuating circuit, in order to avoid interference by high-output broadcasting stations, 11.7MHz and 15.5MHz trap circuit is inserted into E type only.

CIRCUIT DESCRIPTION

The BPF divides in the range as shown in table 3. The BC band's BPF includes ATT for avoiding cross-modulation by medium wave band high input signal (ATT ON: CN102=open, CN103=short, ATT OFF: CN102=short, CN103=open). The transmit signal also passes through the BPF when transmitting.

The preamplifier (Q236) receives the signal passed through the BPF. In this model, it is an emitter grounding circuit which uses a bipolar transistor. Q239 switches the emitter's returning amount to adjust the gain. Approximately 20dB is gained in 21.5 to 60MHz and approximately 12dB in other frequencies. The preamplifier circuit can be passed by turning off the PRE display with the preamplifier key.

Band	Filter range
135kHz/475kHz	30~522kHz
BC	522kHz~1.705MHz
1.8MHz	1.705~2.5MHz
3.5MHz	2.5~4.1MHz
5MHz	4.1~6.9MHz
7MHz	6.9~7.5MHz
10MHz	7.5~10.5MHz
	10.5~13.9MHz
14MHz	13.9~14.5MHz
18MHz	14.5~21.5MHz
21MHz	
24MHz/28MHz	21.5~30.0MHz
50MHz (TX)	49.0~54.0MHz
50MHz (RX)	30.0~60.0MHz

Table 3 BPF range

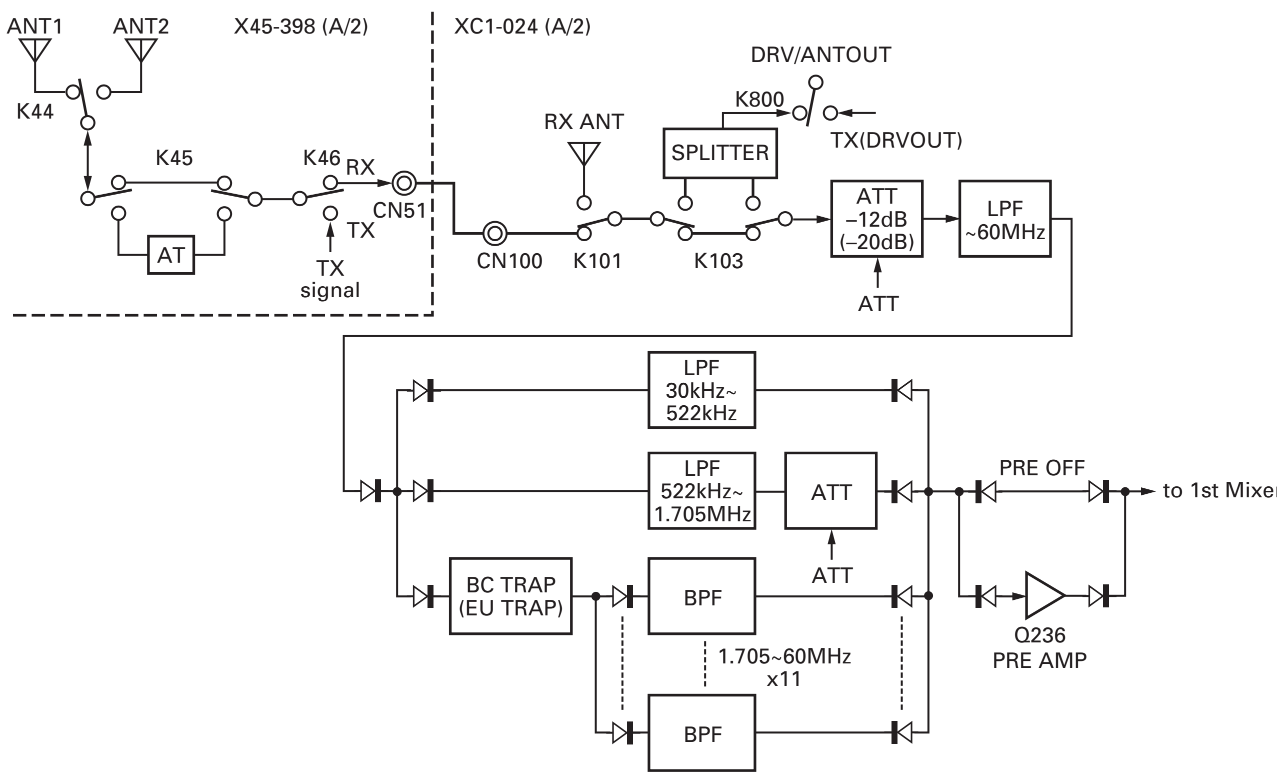


Fig. 3 From antenna terminal to preamplifier (Q236)

CIRCUIT DESCRIPTION

■ From the preamplifier (Q236) to the second IF frequency (10.695MHz/11.374MHz)

The signal from the preamplifier (Q236) output to the second IF amplifier 1 (Q451) is spread into 2 paths: RX-1 and RX-2, depending on the frequency band (refer to table 4). The RX-1 path is selected when the “L” signal is added to Q273, and the RX-2 path is selected if the “H” signal is added.

The RX-1 path signal passes through the LPF for IF trap, is integrated with LO1 (12.495 to 32.195MHz) in the quad-balance first mixer (Q263 to Q266), and is then converted to the first IF (11.374MHz). The first IF signal is split further into two paths when NB1 is selected and other than NB1 is selected. If NB1 is not selected, the first IF signal passes through the 2-pole MCF (XF301) through path. Signals from both paths then enters the second IF amplifier 1 (Q451).

The RX-2 path signal passes through the LPF for IF trap, is integrated with LO1 (73.120 to 133.095MHz) in the quad-balance first mixer (Q321 to Q324), and is then converted to the first IF (73.095MHz). The first IF signal passes through the 2-pole MCF (XF371), and by the trans-feedback type NFB (negative feedback) first IF amplifier (Q391), is amplified by approximately 12dB. The amplified signal is mixed with LO2 (62.4MHz) in the second mixer (D422, D423), converted to the second IF (10.695MHz), and then enters the second IF amplifier 1 (Q451). The second mixer is a passive type that uses a diode, and is a bilateral circuit that converts both receive signal's frequency at the time of reception and transmission signal's frequency at the time of transmission.

The second IF signal that passed through the RX-1 or RX-2 path is amplified by approximately 13dB in the second IF amplifier 1 (Q451), and is then divided into 2 paths: the NB (noise blanker) circuit and the blanking circuit (D461 to D464). Blanking is carried out by D461 to D464.

Then, the second IF signal passes through the IF filter. One of 5 filters is selected, depending on the frequency and the mode (refer to table 5).

The second IF signal that passes through the IF filter enters the AGC circuit which consists of the MOSFET (Q541). The control voltage output from the DSP changes the attenuation of the signal passing through. The signal is amplified by approximately 20dB at the second IF amplifier (Q521, Q522) and passed through the ATT diode (D525). The gain difference between the RX-1 and RX-2 paths is then compensated.

IF frequency	IF filter	Mode				
		FM	AM	SSB	FSK	CW
10.695MHz	15kHz	✔	✔			
	6kHz		✔	✔		
	2.7kHz			✔	✔	✔
11.374MHz	2.7kHz			✔	✔	✔
	500Hz			✔	✔	✔

Table 5 Selecting an IF filter

Band	BPF selection classification	IF switching frequency criteria	IF frequency		
			TX IF	RX IF	
135kHz/475kHz	f <522kHz	f <522kHz		73M	RX-2
BC	0.522≤ f <1.705MHz	0.522≤ f <1.705MHz		73M	RX-2
1.8MHz	1.705≤ f <2.50MHz	1.705≤ f <2.10MHz		11M	RX-1
		2.10≤ f <3.40MHz		73M	RX-2
3.5MHz	2.50≤ f <4.10MHz	3.40≤ f <4.10MHz		11M	RX-1
5MHz	4.10≤ f <6.90MHz	4.10≤ f <6.90MHz		73M	RX-2
7MHz	6.90≤ f <7.50MHz	6.90≤ f <7.50MHz	73M	11M	RX-1
10MHz	7.50≤ f <10.5MHz	7.50≤ f <10.5MHz		73M	RX-2
	10.5≤ f <13.9MHz	10.5≤ f <13.9MHz		73M	RX-2
14MHz	13.9≤ f <14.5MHz	13.9≤ f <14.5MHz		11M	RX-1
18MHz	14.5≤ f <21.5MHz	14.5≤ f <20.9MHz		73M	RX-2
21MHz		20.9≤ f <21.5MHz		11M	RX-1
24MHz/28MHz	21.5≤ f <30.0MHz	21.5≤ f <30.0MHz		73M	RX-2
50MHz (TX)	49.0≤ f <54.0MHz	49.0≤ f <54.0MHz		-	-
50MHz (RX)	30.0≤ f <60.0MHz	30.0≤ f <60.0MHz	-	73M	RX-2

Table 4 Criteria for selecting the RX-1 or RX-2 path

CIRCUIT DESCRIPTION

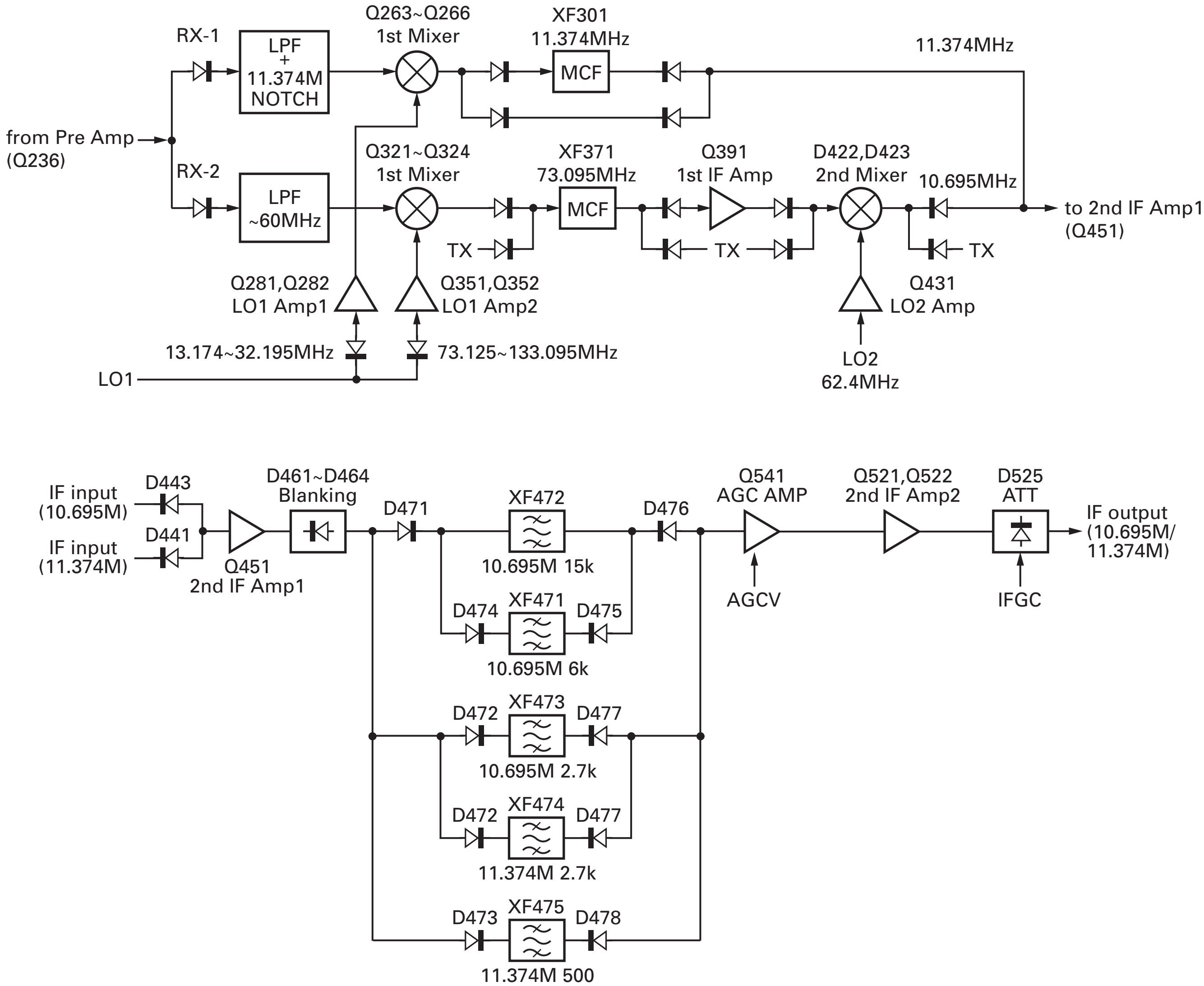


Fig. 4 From the preamplifier (Q236) to the second IF frequency (10.695MHz/11.374MHz)

■ From the second IF to the AF output

The signal that passed through D525 then goes through D526 and enters the FM wave detecting IC (IC591) in FM mode, and the AM/SSB/CW/FSK wave detecting mixer (D551, D552) in other modes.

The FM mode signal is mixed with LO3 (10.240MHz) in the FM detecting IC (IC591), and converted into the third IF (455kHz). The third IF signal passes through the ceramic filter (CF591), demodulated into audio signals, and is then amplified by the FM AF amplifier (IC592).

Signals of modes other than FM are mixed with LO3 (RX-1 path: 11.398MHz, RX-2 path: 10.719MHz) in the AM/SSB/CW/FSK wave detecting mixer (D551, D552), are converted into the third IF (24kHz), and are then amplified by the third IF amplifier (Q551).

Signals of FM mode and modes other than FM are sent from the TX-RX unit (XC1-024 A/2) RIF connector (CN600) to the Control unit (XC1-021 A/3)'s CN61.

The signal input into the Control unit (XC1-021 A/3) is amplified in the operation amplifier (IC64, IC65), A/D conversion is carried out by the A/D converter (IC66), and then the DSP (IC301) filtering, volume control, subtone decoding, etc. are carried out. The output signal from the DSP is converted by the D/A converter (IC72), amplified as an audio signal in the AF power amplifier (IC67), and is then sent from the Control unit (XC1-021 A/3) AF connector (CN65) to the TX-RX unit (XC1-024 A/2) CN3, and output to the PHONES jack (J951) (first priority), EXT.SP jack (J1) (second priority), or internal speaker (third priority).

CIRCUIT DESCRIPTION

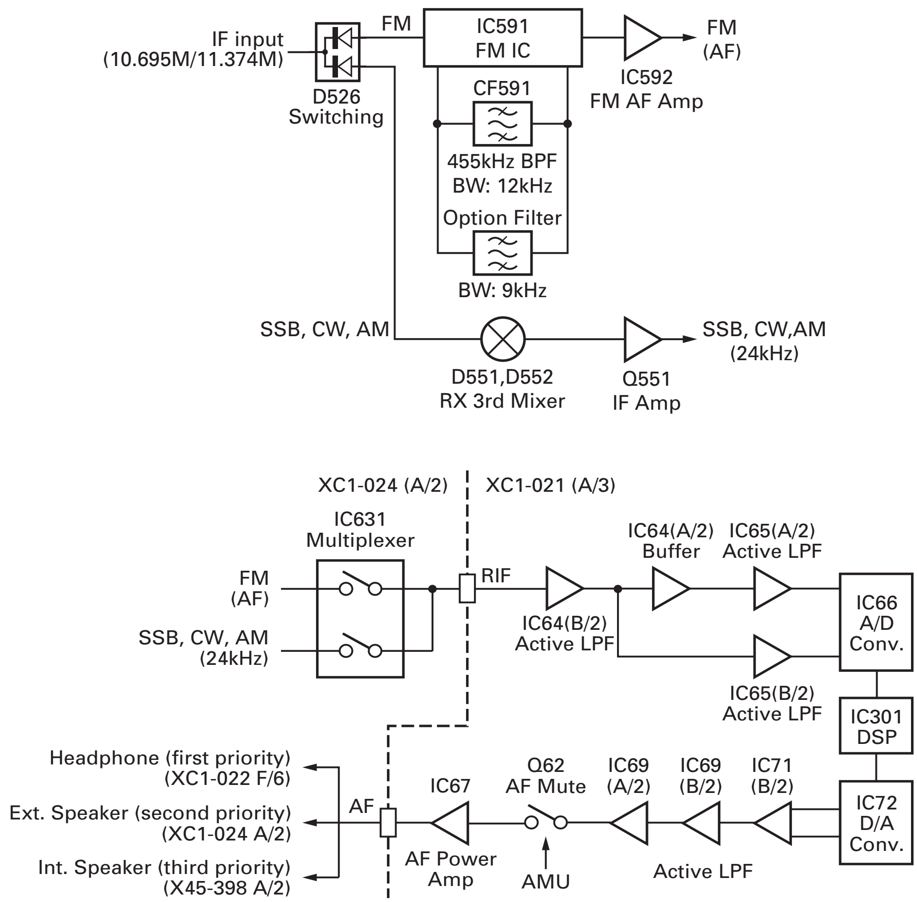


Fig. 5 From second IF to AF output

First Mixer

There are 2 types of first mixers: for IF frequency 11.374MHz RX-1 path, and for IF frequency 73.095MHz RX-2 path.

The first mixer for the RX-1 path is a quad-balance type mixer by JFET (Q263 to Q266), and mixes with LO1 (12.495 to 32.195MHz) which is approximately +18dBm, and converts into the first IF (11.374MHz). Approximately 2.6V bias is added to LO1 in order to suppress distortion.

The first mixer for the RX-2 path is a quad-balance type mixer by JFET (Q321 to Q324), and mixes with LO1 (73.120 to 133.095MHz) which is approximately +18dBm, and converts into the first IF (73.095MHz). No bias is added to this LO1.

The volume resistance (VR261, VR321) within the first mixer circuit is used to adjust mixer balance. After replacing the JFET (Q263~Q266, Q321~Q324), transformer (L261, L262, L264, L323, L324, L326), volume resistance (VR261, VR321), or TX-RX unit (XC1-024 A/2), adjust the mixer balance in the adjustment mode.

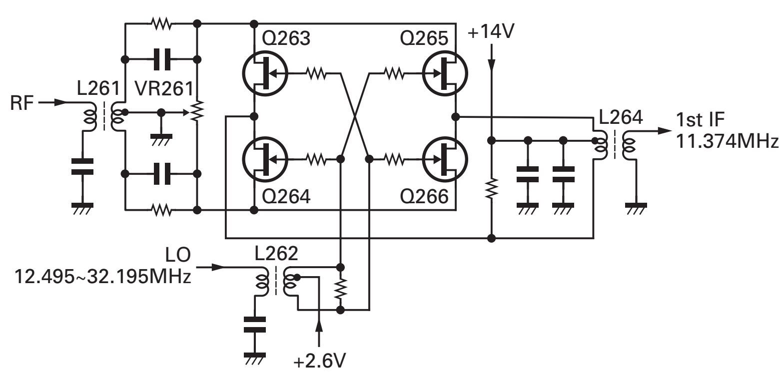


Fig. 6 First mixer circuit of the RX-1 path

CIRCUIT DESCRIPTION

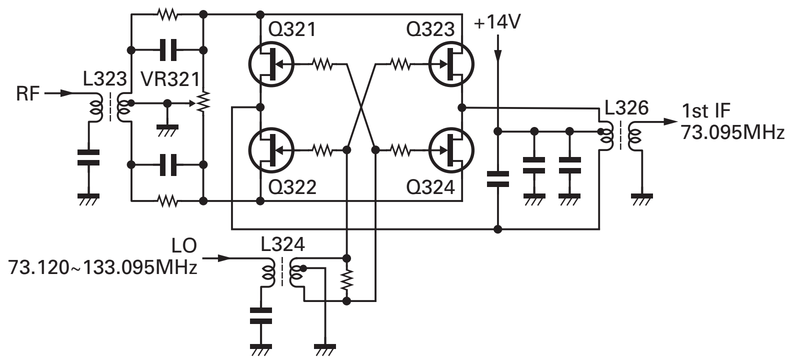


Fig. 7 First mixer circuit of the RX-2 path

MCF Adjustment

There are 2 types of MCFs: for IF frequency 11.374MHz RX-1 path, and for IF frequency 73.095MHz RX-2 path.

The RX-1 path MCF (XF301) is a filter which consists of a 2-pole MCF, whose center frequency is 11.374MHz and passband width is 6kHz.

The RX-2 path MCF (XF371) is a filter which consists of a 2-pole MCF, whose center frequency is 73.095MHz and passband width is 15kHz. Since the XF371 terminal impedance is 2.5kΩ, the impedance is converted using variable coils (L326, L374, L375, L376).

The MCF can be adjusted by connecting a tracking generator to the MCF adjustment connector (CN303, CN304), and then rotating the variable coil (L326, L374, L375, L376). After replacing the MCF (XF371), variable coil (L326, L374, L375, L376), or TX-RX unit (XC1-024 A/2), adjust the MCF in the adjustment mode.

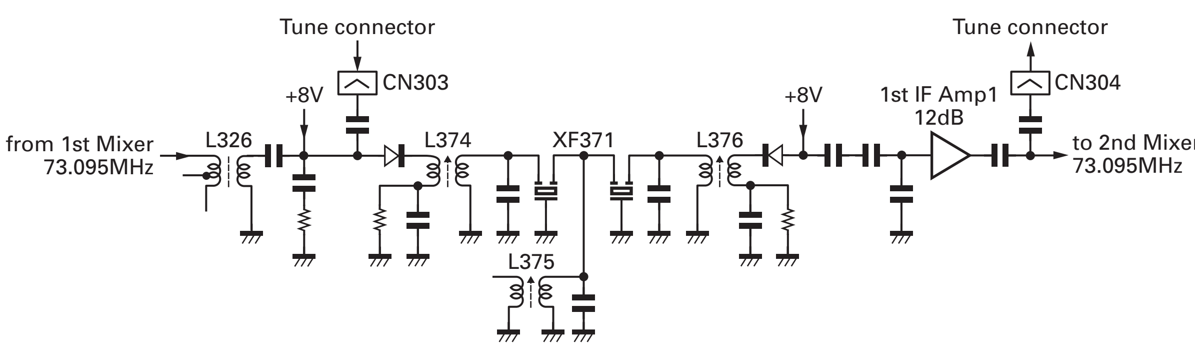


Fig. 8 RX-2 path MCF circuit

CIRCUIT DESCRIPTION

IF Filter

In order to thoroughly remove the interference frequency and components of the image frequency, analog filters corresponding to multiple bandwidths have been placed in the IF stage in addition to the BPF placed in the front stage.

Crystal filters (XF474, XF475) for the first IF (11.374MHz) are inserted in the RX-1 path where the anti-adjacent interference characteristic is enhanced. MCF (XF301) is inserted for bandwidth capping and delay when NB function is operating. In the RX-2 path, the following filters are inserted: MCF (XF371) for the first IF (73.095MHz), crystal filter (XF473) for the second IF (10.695MHz) and ceramic filter (CF591) for the third IF (455kHz for FM only).

Item	XF301: L71-0656-15	XF474: L71-0657-05	XF475: L7B-0002-00
Nominal center frequency	11.374MHz	11.374MHz	11.374MHz
Pass bandwidth	±3kHz or more at 6dB	±1.35kHz or more at 6dB	±250Hz or more at 6dB
Attenuation bandwidth	±17.5kHz or less at 60dB	±4kHz or less at 60dB	±0.75kHz or less at 60dB
Ripple	1dB or less	2dB or less	2dB or less
Insertion loss	3dB or less	6dB or less	Within 5±2dB
Guaranteed attenuation	70dB or more at fo±1MHz	80dB or more at fo±1MHz	80dB or more at fo±1MHz
Center frequency deviation	±500Hz at 6dB	±150Hz at 6dB	±150Hz at 6dB
Terminating impedance	1kΩ // 6pF	900Ω // 9pF	100Ω // 90pF

Item	XF371: L71-0605-05	XF472: L71-0230-15	XF471: L71-0664-05	XF473: L71-0569-15
Nominal center frequency	73.095MHz	10.695MHz	10.695MHz	10.695MHz
Pass bandwidth	±7.5kHz or more at 3dB	±7.5kHz or more at 3dB	±3kHz or more at 6dB	±1.35kHz or more at 6dB
Attenuation bandwidth	±35kHz or less at 40dB	±25kHz or less at 18dB	±40kHz or less at 60dB	±300kHz or less at 60dB
Ripple	1dB or less	0.5dB or less	2dB or less	2dB or less
Insertion loss	3dB or less	2dB or less	3dB or less	6dB or less
Guaranteed attenuation	70dB or more at fo+(500~1000kHz) 70dB or more at fo–(200~1000kHz)	30dB or more at fo±1MHz	60dB or more at fo±1MHz	60dB or more at fo±300kHz
Center frequency deviation	±1.5kHz at 3dB	-	±1kHz at 6dB	±150Hz or less at 6dB
Terminating impedance	2.5kΩ // –0.5pF	3kΩ // 2pF	1.2kΩ // 6pF	1.2kΩ // 7pF

Item	CF591: L72-0998-05
Nominal center frequency	455kHz
Pass bandwidth	±6kHz or less at 6dB
Attenuation bandwidth	±12.5kHz or less at 50dB
Ripple	2dB or less
Insertion loss	6dB or less
Guaranteed attenuation	35dB or more at fo±100kHz
Center frequency deviation	±1.0kHz
Terminating impedance	2kΩ

Table 6 IF filter

CIRCUIT DESCRIPTION

Noise Blanker Circuit (NB Circuit)

■ Noise detection circuit

The Noise detecting circuit is the circuit that removes short frequency pulse noise.

The 10.695MHz or 11.374MHz IF signal passes through the buffer (Q641) in the TX-RX unit (XC1-024 A/2), and is sent from CN674 to the NB unit (XC1-024 B/2) CN667 (NB IF) through a co-axial cable.

The signal input into the NB unit (XC1-024 B/2) is amplified by the 4 stage amplifier (Q651, Q652, Q653, Q663, Q664, Q666), passes through the buffer (Q670), and then noise-detected by D662. This noise-detected voltage switches Q669, turns Q671 ON, attenuates the IF signal in the blanking circuit (D461 to D464) depending on the noise, and removes the pulse noise.

When long-frequency signal is input, the AGC functions and the gains of the NB amplifier 2 (Q652, Q653), NB amplifier 3 (Q663, Q664), and NB amplifier 4 (Q666) are lowered, which results in low detecting voltage, and Q671 is not turned ON. Thus, the IF signal is not attenuated. Because the AGC time constant is large, a pulse with short frequency does not let the AGC function and the detecting voltage increases, Q671 becomes ON and the blanking circuit can function.

When the NB function is turned ON, the threshold variable direct current "NBL" is added to the Q669 emitter from the D/A converter (IC13). By changing the emitter's voltage, the NB effect can be adjusted. Also, when the IF signal is 10.695MHz, Q654, Q665, and Q668 becomes ON and the NB amplifier 2, NB amplifier 3, and NB amplifier 4's tuning point changes to 10.695MHz.

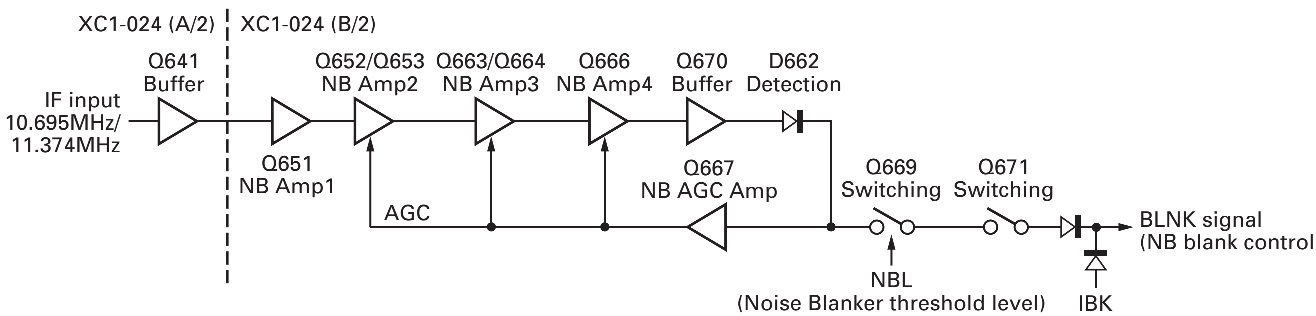


Fig. 9 Noise detection circuit

■ Blanking circuit

The Noise blanking circuit is a circuit which attenuates the IF signal by the signal detected in the noise detection circuit and removes pulse noise.

If pulse noise is not detected in the NB unit, BLNK turns to "H", Q456 turns to ON and Q455 turns to OFF. Also, diodes D461 to D464 turn OFF and the IF signal is attenuated.

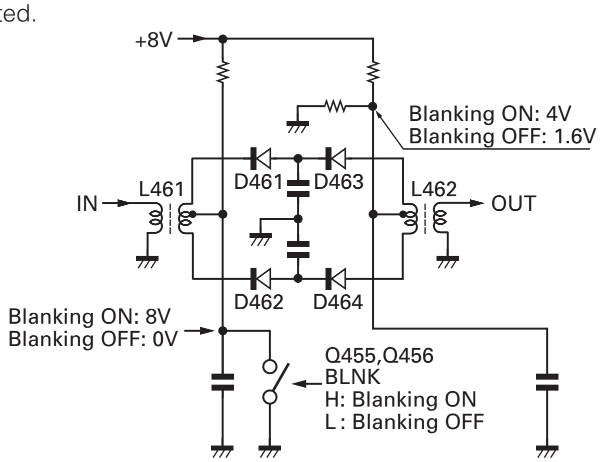


Fig. 10 Blanking circuit

Transmitter Circuit

■ From transmission signal (TIF) to drive output

The path of the transmission signal (TIF) through the analog switch (IC68) in the Control unit (XC1-021 A/3) is different during FM mode and mode other FM.

In FM mode, the transmission signal is switched by the analog switch (IC68), and the frequency is modulated in audio signals into the LO1 (first local oscillator signal). In modes other than FM, the transmission signal is switched by the analog switch (IC68), and then input into the balanced mixer (IC701). The 24kHz IF signal and LO3 (third local oscillator signal) are input into this balanced mixer to generate the 10.695MHz IF signal.

The 10.695MHz transmission IF signal passes through the IF filter (XF471) with 6kHz bandwidth, and the signal is amplified at the 10M transmission IF amplifier (Q721). The pin diode (D721) operates the variable attenuator by current control, and changes the transmission IF signal gain. This variable gain provides the TGC function which controls each band's transmission gain.

CIRCUIT DESCRIPTION

The 10.695MHz transmission IF signal is converted to 73.095MHz by the mixer (D422, D423). The pin diode (D741) changes the 73.095MHz transmission IF signal level by changing the impedance through the current flow through it. This level variance corrects the transmission signal gain (PGC function) at the time of power control.

The MCF (XF371) with 15kHz bandwidth reduces the adjacent spurious components using the 73M transmission IF amplifier (Q742). And the ALC amplifier (Q952) varies the second gate and adjusts the gain using the control voltage generated by the ALC control circuit. As with TS-990, a circuit where power spike is not prone to occurred is used for quick response.

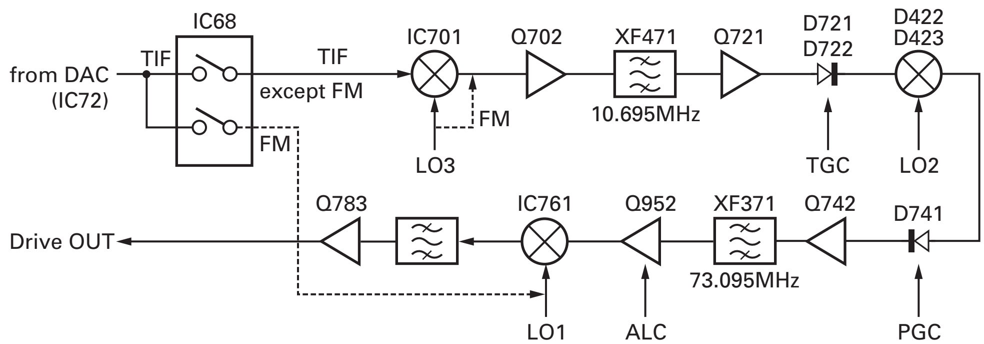


Fig. 11 From transmission signal (TIF) to drive output

■ From the drive output to the antenna terminal

The transmit signal sent from the TX-RX unit (XC1-024 A/2) to the CN2 (TXRF) of the Final unit (X45-398 A/2) is amplified to the designated power in the final stage, passes through the LPF, and is then output from the antenna terminal. This unit includes a relay antenna tuner circuit that operates in all bands.

The transmit signal input into the Final unit (X45-398 A/2) CN2 is amplified by the pre-drive amplifier (Q1, Q2) and the drive amplifier (Q3, Q4). Then, the signal's high harmonic is eliminated in the LPF and the signal goes through the progressive wave/reflected wave detection circuit, amplitude phase detection circuit for the antenna tuner, transmit/receive changeover relay (K46), antenna tuner IN/THROUGH changeover relay (K45), antenna changeover relay (K44), and finally, output through the ANT1 or ANT2 antenna terminal. In order to reduce the transmit/receive changeover relay's operational noise, relays are in a separate unit (X45-398 B/2).

The antenna tuner tunes by the combination of the condenser and the coil. Its operation is the same as in previous models. IC6's phase error signal switches the input side condenser of the tuning circuit, and the IC5 amplitude difference signal switches the output side condenser. The SWR is decided by calculating the voltage of the progressive wave and the reflected wave with the main MCU (XC1-021 IC306).

This model includes a current protection circuit. The current running in the final portion is converted to the potential difference of the 1mΩ resistance inserted into a power line, and the potential difference is detected at IC4. When the potential difference is larger than designated, IC4 output activates ALC. This current protection function controls so that the current would not exceed the predetermined value when the current at the final portion is increased for some unexpected reason. There are other protection circuits the same as the ones included in the previous models.

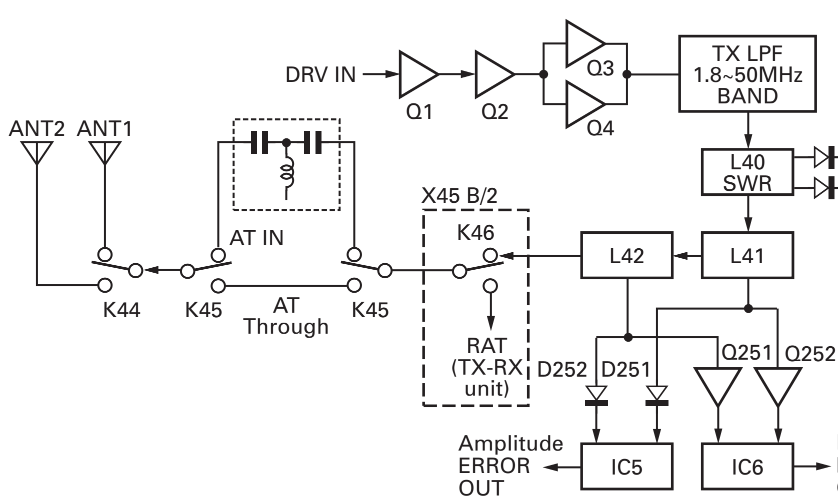


Fig. 12 From the drive output to the antenna terminal

CIRCUIT DESCRIPTION

■ Transmit power control

Transmit power control is done in the same way as in the previous models; the ALC circuit controls the ALC voltage using the progressive wave voltage (VSF) and keeps a constant output.

The voltage detected in the Final unit (X45-398 A/2) progressive wave voltage and reflection wave voltage (VSR) detection circuits is sent to the TX-RX unit's (XC1-024 A/2) CN5. The progressive wave voltage is the intended power (100W, 20W) divided into a suitable voltage by the resistance, and input into the differential amplifiers consisting of IC802.

The output voltage of IC802 (1/2) increases when the progressive wave voltage rises, the current at the base of Q803 increases thereby reduces the collector voltage where the ALC time constant CR is connected. The reduction in this collector voltage reduces the output voltage of the buffer (IC802 1/2), and the ALC voltage from the resistance voltage divider drops. If the ALC voltage (2.5V when the ALC voltage is not added) goes down, the IF amplifier's (Q952) second gate voltage goes down and the gain is decreased.

When transmitting AM, Q802 is turned on approximately 50ms after transmission, and the ALC voltage is controlled with the average power. The input voltage of pin 2 of IC802 (1/2) used as the ALC reference voltage is controlled by the adjustment value (POC) from the main MCU and output from pin 5 of the D/A converter (IC13).

SWR protection is controlled by the reflection wave voltage. The reflection wave voltage is divided by the resistance and input into IC801(1/2). If it exceeds the designated voltage, IC801(1/2)'s output controls the ALC voltage and lowers the power.

The PWR (power) meter is amplified from the progressive wave voltage, the SWR meter is amplified from the reflection wave voltage, and the ALC meter is amplified from the ALC voltage each by the relevant operation amplifier and then input into the A/D converter and displayed on each meter.

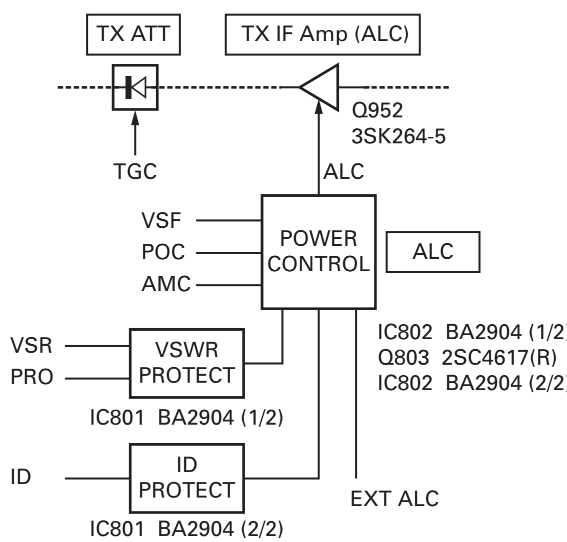


Fig. 13 Transmit power control

DAC (IC75, IC78) and ADC (IC83) Signal Path

■ Outline

DAC (IC75) communicates signals with ACC2 and the Optional unit (VGS-1). DAC (IC78) communicates signals with USB. ADC (IC83) communicates signals with ACC2/ USB and the Optional unit (VGS-1). The signal path of DAC (IC75, IC78) and ADC (IC83) vary depending on each status of transmit/receive.

■ Functions relating to transmission

1) Modulation input path

Each output signal from the analog switch (IC80) passes through the active filter (IC81) and then enters ADC (IC83) and is sent to DSP (IC301).

- The signal sent from the USB (UAO) is output from pin 6 to pin 5 of the analog switch.
- The signal sent from the ACC2 (ANI) is output from pin 2 to pin 1 of the analog switch.
- The message output signal (VAO) from the Optional unit (VGS-1) passes, without going through the analog switch, through the active filter (IC82), and then input into ADC.

CIRCUIT DESCRIPTION

2) Modulation output path

The AF signal processed in DSP (IC301) is output as analog in DAC (IC75, IC78) and then amplified by the active filter (IC73, IC76).

- The signal that passed through the active filter (IC73) is sent to ACC2 output signal (ANO).
- The signal that passed through the active filter (IC76) is sent to USB output signal (UAI).

3) Recoding a message

Signals input from the microphone are processed in ADC (IC66), passed through DSP, and then enter DAC (IC75).

The signals output from DAC (IC75) pin 11 are sent to the Optional unit (VGS-1) and recorded.

■ Constant received audio recording function

1) Recording

A part of received audio signal is processed in ADC (IC66), goes through DSP (IC301), and then enters DAC (IC75). The signals output from DAC (IC75) pin 11 are sent to the Optional unit (VGS-1) and recorded. The recording level is automatically compensated to become constant and you cannot randomly change the level.

2) Playback

The output signal (VAO) from the Optional unit (VGS-1) is input into ADC (IC83), goes through DSP (IC301), and output as AF from DAC (IC72). Playback volume is controlled by DSP.

■ Other functions

1) Playing a message (monitor)

The output signal (VAO) from the Optional unit (VGS-1) is input into ADC (IC83), goes through DSP (IC301), and output as AF from DAC (IC72). Playback audio is controlled by DSP.

2) Playing a pre-recorded voice message

The above-mentioned signal path is also used for playing a pre-recorded voice message.

Digital Control Circuit

■ Outline

The digital control circuit consists of the Control unit's (XC1-021 A/3) main MCU (IC306), EEPROM (IC309), reset IC (IC307), and DSP (IC301). (Refer to Fig. 15)

■ Main MCU and its periphery

The main MCU (IC306) operates at the power supply voltage of 3.3V, and the clock frequency of 22.1184MHz which is 11.0592MHz doubled in the main MCU. Around the main MCU, EEPROM for backup, power supply voltage monitoring circuit which includes a reset circuit, 3-state output buffer (IC311) for DSP control are connected. When the power supply is OFF, the mode is switched to stop mode in order to reduce the standby current.

■ Around the DSP

The DSP (IC301) operates at the power supply voltage of 3.3V and 1.25V and clock frequency of 221.184MHz which is 24.576MHz multiplied by 9 in the DSP. Around DSP, flash memory (IC302) for storing programs, and DAC (IC66, IC83) and DAC (IC72, IC75, IC78) for controlling signals are connected.

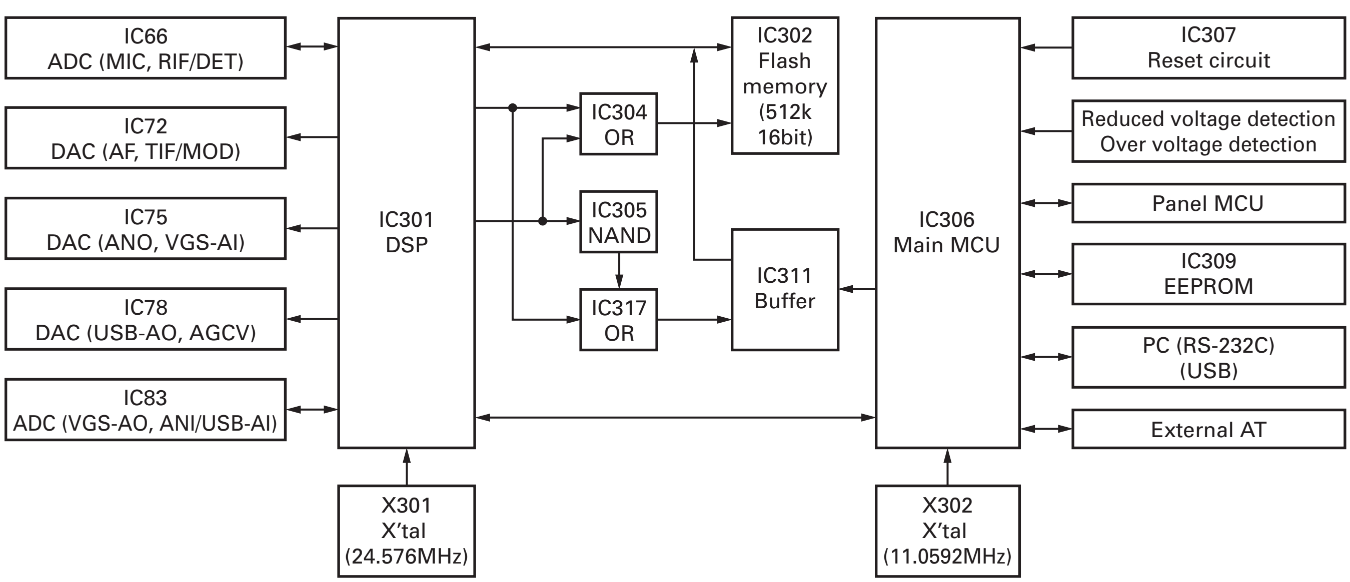


Fig. 14 Digital control circuit

CIRCUIT DESCRIPTION

Display Circuit

The Display unit (XC1-022) consists of the panel MCU (IC103) and the peripheral circuits, LCD display, and LED including LCD backlight. Communication with the main MCU (XC1-021 IC306) is carried out in PTXD, PRXD, PCTS, PRTS. (Transmission speed: 115200bps)

■ Circuits around the panel MCU

The 33C power supply (3.3V) sent from the transceiver is used as the power supply for the digital portion. The panel MCU clock is 11.0592MHz (X101). The reset signal is controlled from the main MCU. Also, the panel MCU accepts the key matrix, various encoders, and volume.

■ LCD driver

The LCD driver used is LC75897PW (IC101). In accordance with the IC's specification, the 5V power supply for the LCD needs to be input after VDD (3.3V), a power supply switch circuit (Q102) for turning 5V ON after 3.3V occurs. In order to reliably control the power ON sequence, such control is executed by the panel MCU. (Frame frequency: 97.66Hz, duty: 1/3, bias: 1/3)

■ LED

LCD backlight uses 54 LEDs for 1 color, and 10 gradations of color between amber and green can be chosen from the menu. There are 7 steps of the back light luminance: 6 steps with the dimmer and OFF. Because the drive transistors (Q101, Q103, Q104, Q105) cannot be directly controlled with the panel MCU because of the quantity of LEDs, logic ICs (IC102, IC104) are used as a buffer. LCD backlight's default value is amber. LED at times of transmit/receive is controlled by the panel MCU.

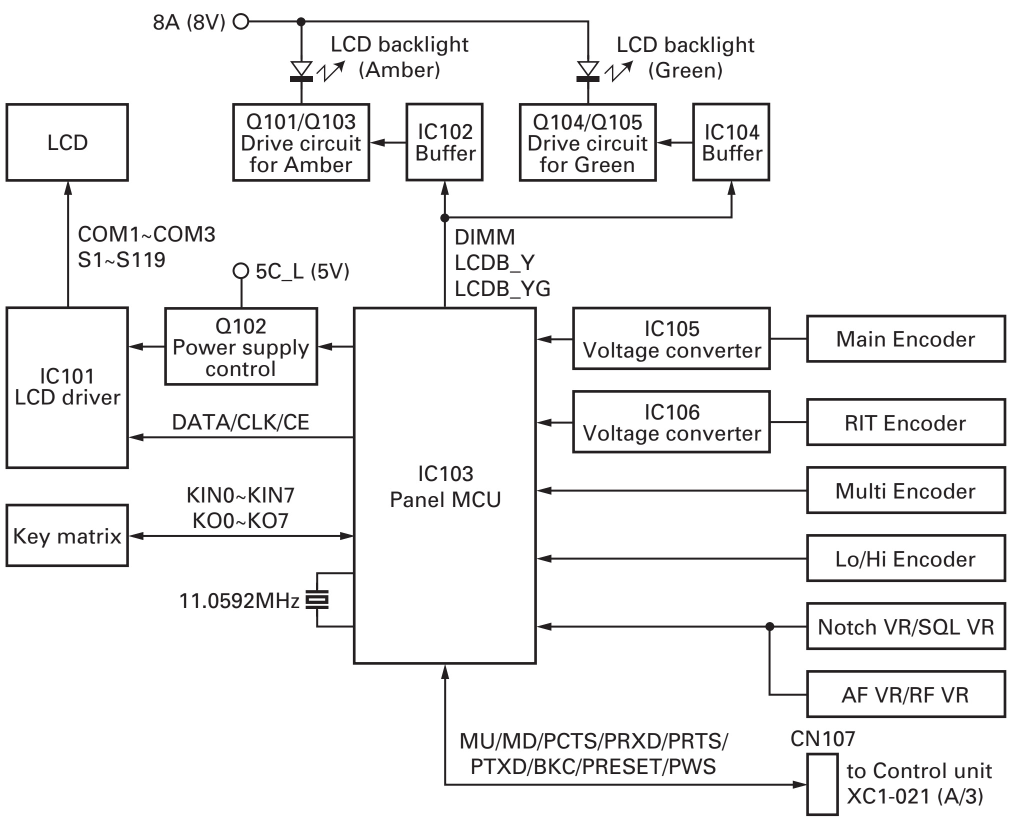


Fig. 15 Display circuit

COMPONENTS DESCRIPTION

Final unit (X45-398X-XX)

Ref. No.	Use / Function	Operation / Condition / Compatibility
IC1	Shift register	BPF switching
IC2,3	Inverter gate	PHD detection
IC4	Drain current detection	Current detection
IC5	Comparator	AMD detection
IC6	D-type flip-flop	PHD detection
IC7	Shift register	Q1: AT switching Q2: ANT switching Q4: BPF switching Q5: FAN control Q6: FAN control Q8: AT control
IC8~10	Shift register	AT control
Q1	Pre-drive amplifier	Single amplifier
Q2	Drive amplifier	Single amplifier
Q3,4	Final amplifier	Push-pull amplifier
Q5	Switching	Power supply control of 14S
Q101	Switching	Over voltage detection
Q251,252	Amplifier	VSF signal amplifier
Q253,254	Switching	Relay (K46) control
Q501~Q508, Q522	Switching	Filter switching depending on band
Q509,510	Switching	FAN control
Q511	Switching	Power supply control of 14S
Q513	Switching	AT control
Q514,515	Switching	Relay (K45) control
Q516	Switching	FAN control
Q517,518	Switching	AT control
Q519	Switching	Relay (K44) control
Q520	Switching	FAN control
Q521 ,Q523, Q524	Switching	AT control
Q525,526	Switching	AT relay operation stops when power is ON
Q527~544	Switching	AT control
D1,2	Attenuator	RF power control
D51,52	Protection	Surge protection
D101	Protection	Reverse connection protection
D102~110	Reverse voltage prevention	Surge protection
D111	Protection	Over voltage protection
D251~253	Detection	RF power detection
D254	Protection	Surge protection
D255	Detection	RF power detection
D256,257	Protection	Surge protection
D258	Switch	
D301~325	Protection	Surge protection
D501~503	Protection	Surge protection

Control unit (XC1-021X-XX)

Ref. No.	Use / Function	Operation / Condition / Compatibility
IC1	3.3V switching regulator	3.3V switching regulator (Digital circuit)
IC2	8V switching regulator	8V switching regulator (Analog circuit for TX-RX, Display and Control unit)
IC3	8V AVR	8V voltage regulator (Local unit XC1-021 B/3)
IC4	3.3V AVR	3.3V voltage regulator (Main MCU and RS-232C circuit)
IC5	5V AVR	5V voltage regulator (Analog circuit)
IC6	1.25V AVR	1.25V voltage regulator power supply (DSP)
IC61	OP amplifier	Isolation amplifier for MIC signal
IC62,63	OP amplifier	Active filter for MIC signal
IC64,65	OP amplifier	Active filter for RIF signal
IC66	A/D converter	A/D converter for MIC and RIF signal
IC67	AF amplifier	
IC68	Analog switch	FMOD and TIF signal ON/OFF switch
IC69	OP amplifier	Active filter for AF signal
IC70	OP amplifier	Active filter for FMOD and TIF signal
IC71	OP amplifier	Active filter for FMOD, TIF and AF signal
IC72	D/A converter	D/A converter for FMOD, TIF and AF signal
IC73	OP amplifier	Active filter for ANO signal
IC74	OP amplifier	Active filter for VAI signal
IC75	D/A converter	D/A converter for ANO and VAI signal
IC76	OP amplifier	Active filter for UAI signal
IC77	OP amplifier	Buffer for AGCV signal and reference voltage source
IC78	D/A converter	D/A converter for UAI and AGCV signal
IC79	OP amplifier	Active filter for AN1 signal
IC80	Analog switch	ANI and UAO signal switch
IC81	OP amplifier	Active filter for ANI and UAO signal
IC82	OP amplifier	Active filter for VAO signal
IC83	A/D converter	A/D converter for ANI, UAO and VAO signal
IC301	DSP	Digital signal
IC302	Flash memory	Program for DSP
IC304	OR gate IC	FCS control
IC305	NAND gate IC	Inverter for A(23) signal
IC306	MCU	Main microcomputer
IC307	Reset IC	MCU reset signal

COMPONENTS DESCRIPTION

Ref. No.	Use / Function	Operation / Condition / Compatibility
IC308	OR gate IC	Buffer for VBINT signal
IC309	EEPROM	
IC310	Analog multiplex-er	A/D port selection of MCU
IC311	Buffer with 3-state output	Data control of DSP
IC312	Buffer	Voltage conversion: 5V → 3.3V (for TTI and TSI signal)
IC313	Buffer	Voltage conversion: 3.3V → 5V (for TTO and TSO signal)
IC314	Buffer	Buffer for CLK signal
IC315	Reset IC	BKC detection
IC316	OR gate IC	Delay time control of FOE
IC317	OR gate IC	Logic IC for IC311 control
IC501,502	Buffer	Voltage conversion: 3.3V → 5V
IC504	5V AVR	5V voltage regulator
IC505	3.3V AVR	3.3V voltage regulator
IC601	DDS	LO3 generator
IC651	Shift register	Q1: I/O update Q2: FM_TX Q3: IFB Q4: IFA Q5: BPF1 Q6: BPF2 Q7: BPF3 Q8: BPF4
IC801	PLL	LO1 reference generator
IC802	1.8V AVR	1.8V voltage regulator
IC803	DDS	LO1 generator
IC804	Amplifier	Wide band amplifier
IC901	Level converter	RS-232C level converter
IC902	OP amplifier	USB audio amplifier
IC903	CODEC	USB audio IC
IC904	AND gate	USB audio IC control
IC905	USB hub	
IC906	USB-UART bridge	
Q1~4	Switching	Power supply control of 3.3V (ON when power is ON)
Q61	Ripple filter	For audio amplifier VCC
Q62	Switching	Detection signal mute switch
Q63,64	Switching	FMOD and TIF signal ON/OFF analog switch control (IC68)
Q65	Buffer	Buffer amplifier for ANO output
Q66,67	Switching	ANI and UAO signal ON/OFF analog switch control (IC80)
Q501	Crystal oscillation circuit	Crystal oscillation circuit (15.6MHz)
Q502	Buffer	15.6MHz buffer
Q503	Doubler	Frequency doubler (15.6MHz x 2 = 31.2MHz)

Ref. No.	Use / Function	Operation / Condition / Compatibility
Q504,505	Doubler	Frequency doubler (31.2MHz x 2 = 62.4MHz)
Q506	Amplifier	LO2 output amplifier
Q601	Buffer	DDS reference buffer
Q602	Buffer	LO3 output buffer
Q651,652	Switching	BPF4 selection switch
Q653,654	Switching	IFB selection switch
Q655,656	Switching	BPF1 selection switch
Q657,658	Switching	IFA selection switch
Q659,660	Switching	BPF2 selection switch
Q661,662	Switching	BPF3 selection switch
Q663	Amplifier	LO1 output amplifier
Q664	Switching	LO1 output LPF cutoff control switch
Q801	Buffer	PLL reference buffer
Q802	Switching	FM modulation switch
Q803	Switching	PLL LPF cutoff control switch
Q804	Amplifier	PLL F-in amplifier
Q805	Filter	Ripple filter
Q806	VCO	
Q807	Amplifier	VCO amplifier
Q808	Amplifier	DDS reference amplifier
Q901,905	Switching	RS-232C IC power supply control switch
Q902,906	Switching	USB IC power supply control switch
Q903,907	Switching	USB audio IC active signal switch
Q904,908	Switching	USB-UART bridge IC active Sig-nal Switch
D1	Switching	Catch diode for 3.3V switching regulator
D2	Switching	Catch diode for 8V switching regulator
D3~6	Voltage shift	Temperature compensation
D7~9	Reverse current prevention	For MIC data
D61	Poly-switch	Current limit
D62	Reverse current prevention	For MIC supply (8V)
D101	Mute	For AF mute
D301	6.2V zener diode	Voltage shift
D302	Reverse current prevention	For SS signal
D304	Switching	
D501	Switching	LO2 output switch
D651	Switching	IFA selection switch
D652	Doubler	DDS output frequency doubler
D653	Switching	LO1 BPF3 selection switch

COMPONENTS DESCRIPTION

Ref. No.	Use / Function	Operation / Condition / Compatibility
D654	Switching	LO1 BPF2 selection switch
D655	Switching	LO1 BPF4 selection switch
D656	Switching	BPF2/ BPF3 selection signal control
D657	Switching	LO1 BPF1/ BPF2 selection switch
D659	Switching	IFB selection switch
D660	Switching	LO1 BPF4 selection switch
D661	Switching	LO1 BPF2 selection switch
D662	Switching	LO1 BPF1/ BPF2 selection switch
D663	Switching	LO1 BPF3 selection switch
D664,665	Switching	LPF cutoff switching
D666	Switching	LO1 BPF4 selection switch
D667	Switching	IFA/ IFB selection switch
D668	Switching	LO1 BPF1 selection switch
D669	Switching	LO1 BPF3 selection switch
D670	Switching	LO1 BPF1 selection switch
D671	Switching	BPF2/ BPF3/ BPF4 selection switch
D672	Switching	BPF1/ BPF2 selection switch
D673,675,677	Switching	BPF cutoff control
D678	Switching	LO1 BPF2 selection switch
D679	Switching	LO1 BPF3 selection switch
D680,681	Switching	LO1 BPF4 selection switch
D682	Switching	LO1 BPF1 selection switch
D683	Switching	LO1 BPF3 selection switch
D801	Variable capacitance diode	FM modulation control
D802,803	Variable capacitance diode	VCO control
D901	Protection	Surge protection
D902	Protection	Voltage protection
D903	Protection	Reverse current protection

Display unit (XC1-0220-00)

Ref. No.	Use / Function	Operation / Condition / Compatibility
IC101	LCD driver	
IC102	Buffer	LCD backlight dimmer control
IC103	MCU	Panel microcomputer
IC104	Buffer	LCD backlight dimmer control
IC105,106	Buffer	Voltage conversion: 5V → 3.3V
Q101	Driver	LCD backlight dimmer control
Q102,106	Switching	5V power supply switch
Q103~105	Driver	LCD backlight dimmer control
Q106	Driver	LED (D214) control
Q107	Driver	LED (D961) control
Q109	Driver	LED (D215) control
D101~115	LED (Green)	LCD backlight
D116~122	Reverse current prevention	Key matrix
D123~160	LED (Green)	LCD backlight
D161~213	LED (Amber)	LCD backlight
D214	LED (Green)	Lights during reception
D215	LED (Red)	Lights during transmission
D216	LED (Green)	LCD backlight
D217	LED (Amber)	LCD backlight
D218	Reverse current prevention	Reduced voltage detection interrupt
D961	LED (Orange)	ON when Mulch encoder is active

TX-RX unit (XC1-024X-XX)

Ref. No.	Use / Function	Operation / Condition / Compatibility
IC11	Shift register	Q1: FIL[1] "H" when 15kHz IF filter is selected Q2: FIL[2] "H" when 6kHz IF filter is selected Q3: FIL[3] "H" when 2.7kHz IF filter is selected Q4: FIL[4] "H" when 500Hz IF filter is selected Q5: RXFM "H" when RX FM mode is selected Q6: TXFM "H" when TX FM mode is selected Q7: HFRGC Not Used Q8: 50RGC "H" when receiving 21.5~30, 30~60MHz and PRE "H" are selected
IC12	Shift register	Q1: DRVO "L" when Drive output is selected Q2: 1STIF "H" when RX 1st IF of 73.095MHz is selected Q3: 455FIL "L" when 455kHz FM narrow filter is selected Q4: NBSW "H" when NB1 function is selected Q5: AMC "H" when AM TX is selected Q6: RLSW "H" when linear amplifier usage is selected in HF or 50MHz band Q7: LINEAR "H" when linear amplifier usage is selected in either band Q8: ANTOUT "H" when RX Antenna output is selected
IC13	D/A convertor	Ao1: POC2 TX power control 2 voltage Ao2: IFGC RX IF gain control voltage Ao3: ALC_REF ALC reference voltage Ao4: TGC TX band gain control voltage Ao5: POC TX power control voltage Ao6: PGC TX power gain control voltage

COMPONENTS DESCRIPTION

Ref. No.	Use / Function	Operation / Condition / Compatibility
IC13	D/A convertor	Ao7: PRO SWR protection control voltage Ao8: NBL NB level control voltage
IC14	Shift register	Q1: BPF[5] "H" when BPF of 5M band is selected Q2: BPF[4] "H" when BPF of 3.5M band is selected Q3: BPF[3] "H" when BPF of 1.8M band is selected Q4: BPF[2] "H" when BPF of BC band (522k~1.705MHz) is selected Q5: BPF[1] "H" when BPF of BC band (30~522kHz) is selected Q6: ATT "L" when attenuator is ON Q7: RXANT "H" when receiving under 30MHz and external RX antenna is ON Q8: PRE "H" when receiving preamplifier is ON
IC15	Shift register	Q1: BPF[13] "H" when BPF of 50M band is selected Q2: BPF[12] "H" when BPF of 30~60M band is selected Q3: BPF[11] "H" when BPF of 28M band is selected Q4: BPF[10] "H" when BPF of 21M band is selected Q5: BPF[9] "H" when BPF of 14M band is selected Q6: BPF[8] "H" when BPF of 11M band is selected Q7: BPF[7] "H" when BPF of 10M band is selected Q8: BPF[6] "H" when BPF of 7M band is selected
IC521	OP amplifier	A/2: AGC Voltage and AGC reference voltage amplifier B/2: Not used
IC591	RX FM IC	RX FM Detection
IC592	OP amplifier	A/2: RX FM Noise squelch voltage amplifier B/2: RX FM AF signal amplifier
IC601	OP amplifier	RX 3rd IF amplifier 2 (24kHz)
IC631	Multiplexer	Receiver output, FM (AF) and SSB/ AM/ CW/ FSK (IF) changeover
IC701	TX Mixer	Transmission mixer (24kHz → 10.695MHz)
IC761	TX Mixer	Transmission mixer (73.095MHz → HF)
IC801	OP amplifier	ALC protection
IC802	OP amplifier	ALC protection
IC803	OP amplifier	ALC protection
IC861	OP amplifier	Amplifier for meter
Q12	Buffer	Buffer amplifier for ANO output
Q13	Switching	External squelch output (open collector)

Ref. No.	Use / Function	Operation / Condition / Compatibility
Q14	Buffer	Buffer amplifier for PKS input signal
Q15	Switching	ON when relay for HF band linear is used
Q16	Switching	ON when relay for HF band linear is transmission
Q17	Switching	ON when relay for HF band linear is used
Q18,19	Switching	ON when relay for HF band linear is used
Q101	Switching	Dedicated external RX antenna changeover relay (K101) control (ON when external RX antenna is selected)
Q102	Switching	ATT changeover relay (K102) control (OFF when ATT is ON)
Q103	Mute	Mutes reception path during transmission (ON during transmission)
Q131~143	Switching	RF BPF selection
Q200	Switching	RX Antenna output changeover relay (K103) control (OFF when ANTOUT is ON)
Q236	Amplifier	Preamplifier (HF~21.5MHz: 12dB, 21.5~60MHz: 20dB)
Q239	Switching	Preamplifier gain control (ON receiving at 21.5~60MHz)
Q263~266	RX mixer	Receiving 1st mixer (HF → 11.374MHz)
Q267	Switching	Power supply control of preamplifier (ON when preamplifier is ON)
Q268	Switching	Power supply control of preamplifier (ON when preamplifier is OFF)
Q269	Switching	Power supply control of preamplifier (ON when preamplifier is ON)
Q270	Switching	Power supply control of preamplifier (ON when preamplifier is OFF)
Q271	Switching	Power supply control of RX 1st IF circuit (ON when RX 1st IF of 73.095MHz is selected)
Q272	Switching	Power supply control of RX 1st IF circuit (ON when RX 1st IF of 11.374MHz is selected)
Q273	Switching	Power supply control of RX 1st IF circuit (ON when RX 1st IF of 73.095MHz is selected)
Q274	Switching	Power supply control of RX 1st IF circuit (ON when RX 1st IF of 11.374MHz is selected)
Q281,282	Amplifier	RX LO1 amplifier (RX 1st IF of 11.374MHz is selected)
Q301	Switching	ON when RX 1st IF of 11.374MHz (NB1 function ON) is selected
Q302,303	Switching	ON when RX 1st IF of 11.374MHz (NB1 function OFF) is selected
Q305	Switching	ON when RX 1st IF of 11.374MHz (NB1 function ON) is selected

COMPONENTS DESCRIPTION

Ref. No.	Use / Function	Operation / Condition / Compatibility
Q321~324	RX mixer	Receiving 1st mixer (HF → 73.095MHz)
Q351,352	Amplifier	RX LO1 amplifier (RX 1st IF of 73.095MHz is selected)
Q391	Amplifier	RX 1st IF amplifier (RX 1st IF of 73.095MHz is selected)
Q421	Switching	Gain correction between 1st IF (ON when TX or RX 1st IF of 73.095MHz are selected)
Q431	Amplifier	LO2 amplifier (ON when TX or RX 1st IF of 73.095MHz are selected)
Q451	Amplifier	RX 2nd IF amplifier 1 (10.695MHz/ 11.374MHz)
Q453	Switching	Gain correction between bands (ON when receiving 21.5~30MHz and PRE "H" are selected)
Q454	Switching	Gain correction between bands (ON when receiving 30~60MHz and PRE "H" are selected)
Q455,456	Switching	ON when BLNK signal is "H"
Q471~477	Switching	IF filter selection
Q521,522	Amplifier	RX 2nd IF amplifier 3 (10.695MHz/ 11.374MHz)
Q541	Amplifier	RX 2nd IF amplifier 2 (10.695MHz/ 11.374MHz)
Q571	Amplifier	LO3 amplifier (ON when RX AM/ SSB/ CW/ FSK mode is selected)
Q631	Switching	Receiver output, FM (AF) and SSB/ AM/ CW (IF) changeover multiplexer (IC631) control
Q641	Buffer	Noise blanker input buffer
Q651	Amplifier	Noise blanker IF amplifier 1 (10.695M/ 11.374MHz)
Q642,643	Switching	Power supply control of NB UNIT (ON when NB1 function is selected)
Q652,653	Amplifier	Noise blanker IF amplifier 2 (10.695MHz/ 11.374MHz) Gain is controlled according to the NB voltage
Q654	Switching	ON when Noise Blanker IF of 10.695MHz is selected
Q663,664	Amplifier	Noise blanker IF amplifier 3 (10.695M/ 11.374MHz) Gain is controlled according to the NB voltage
Q665	Switching	ON when Noise blanker IF of 10.695MHz is selected
Q666	Amplifier	Noise blanker IF amplifier 4 (10.695M/ 11.374MHz) Gain is controlled according to the NB voltage
Q667	Amplifier	Noise blanker AGC control amplifier
Q668	Switching	ON when noise blanker IF of 10.695MHz is selected

Ref. No.	Use / Function	Operation / Condition / Compatibility
Q669	Switching	Audio mute signal generation
Q670	Buffer	Noise Blanker IF buffer
Q671	Switching	Audio mute signal generation
Q702	Buffer	TX IF buffer (10.695MHz)
Q721	Amplifier	TX IF amplifier (10.695MHz) Gain is controlled according to the ALC voltage
Q741	Switching	Transmission IF mute control (Mute when ON)
Q742	Amplifier	TX IF amplifier (73.095MHz)
Q781	Switching	ON when drive output is selected
Q782	Switching	ON when ANT connector output is selected
Q783	Amplifier	TX drive output amplifier
Q784	Switching	Power supply control of TXB to Final unit (X45 A/2) (ON when ANT connector output is selected)
Q785	Switching	ATT changeover relay (K102) control (ON when DRV or ANTOUT is ON)
Q802	Switching	On in AM mode, makes it an average value type ALC
Q803,804	Amplifier	ALC amplifier
Q861,862	Switching	Cancels the time constant for VSF and VSR voltage lines during antenna tuning
Q903~905	Switching	Power supply control of TXB (ON during transmission)
Q906,907	Switching	Power supply control of RXB (ON during reception)
Q908	Switching	Power supply control of RX 1st IF circuit (ON when RX 1st IF of 11.374MHz is selected)
Q909	Switching	Power supply control of RX 1st IF circuit (ON when RX 1st IF of 73.095MHz is selected)
Q910	Switching	Power supply control of RX 1st IF circuit (ON when RX 1st IF of 11.374MHz is selected)
Q911	Switching	Power supply control of RX 1st IF circuit (ON when RX 1st IF of 73.095MHz is selected)
Q914,915	Switching	Power supply control of FM circuit (ON when RX FM mode is selected)
Q916	Switching	Power supply control of 3rd IF circuit (ON when RX AM/ SSB/ CW/ FSK mode is selected)
Q917,918	Switching	Power supply control of FM circuit (ON when TX FM mode is selected)
Q919	Switching	Power supply control of 3rd IF circuit (ON when RX SSB, AM and CW mode are selected)

COMPONENTS DESCRIPTION

Ref. No.	Use / Function	Operation / Condition / Compatibility
Q921,922	Switching	Power supply control of RX circuit (ON during reception)
Q924	Switching	Power supply control of FM circuit (ON when TX FM mode is selected)
Q925	Switching	RX power supply control (ON during transmission)
Q952	Amplifier	TX IF amplifier (73.095MHz) Gain is controlled according to the ALC voltage
D11,12	Clipper	External modulation input
D13	Reverse current prevention	External standby
D14	Surge protection	ACC2 connector (5-pin SQC)
D15	Surge protection	ACC2 connector (9-pin PKS)
D17	Reverse current prevention	Linear amplifier control signal
D18	Surge absorption	Relay (K11)
D19	Reverse current prevention	Linear amplifier control signal
D20~23	Reverse current prevention	Paddle/key control line
D24	Surge protection	ACC2 connector (2-pin RTTY)
D25	Reverse current prevention	Linear amplifier control signal
D101	Surge absorption	External RX antenna terminal
D102	Surge absorption	Relay (K101)
D103	Surge absorption	Relay (K102)
D104~107	Surge absorption	Internal circuit protection
D108	Switching	RX/TX changeover, ON during reception
D109,110	Switching	ON when receiving over 1.705MHz is selected
D111	Surge protection	Receiver RF signal input
D131	Switching	ON when BPF of 522kHz~ 1.705MHz is selected
D132	Switching	ON when BPF of 13.9~14.5MHz is selected
D133	Switching	ON when BPF of 49~54MHz is selected (TX only)
D134	Switching	ON when BPF of 6.9~7.5MHz is selected
D135	Switching	ON when BPF of 30~522kHz is selected
D136	Switching	ON when BPF of 1.705~2.5MHz is selected
D137	Switching	ON when BPF of 2.5~4.1MHz is selected
D138	Switching	ON when BPF of 4.1~6.9MHz is selected
D139	Switching	ON when BPF of 7.5~10.5MHz is selected

Ref. No.	Use / Function	Operation / Condition / Compatibility
D140	Switching	ON when BPF of 10.5~13.9MHz is selected
D141	Switching	ON when BPF of 14.5~21.5MHz is selected
D142	Switching	ON when BPF of 21.5~30MHz is selected
D143	Switching	ON when BPF of 30~60MHz are selected
D144	Switching	ON when BPF of 522kHz~ 1.705MHz is selected
D145	Switching	ON when BPF of 30~522kHz is selected
D146	Switching	ON when BPF of 1.705~2.5MHz is selected
D147	Switching	ON when BPF of 2.5~4.1MHz is selected
D148	Switching	ON when BPF of 4.1~6.9MHz is selected
D149	Switching	ON when BPF of 6.9~7.5MHz is selected
D150	Switching	ON when BPF of 7.5~10.5MHz is selected
D151	Switching	ON when BPF of 10.5~13.9MHz is selected
D152	Switching	ON when BPF of 14.5~21.5MHz is selected
D153	Switching	ON when BPF of 21.5~30MHz is selected
D154	Switching	ON when BPF of 30~60MHz are selected
D155	Switching	ON when BPF of 13.9~14.5MHz is selected
D156	Switching	ON when BPF of 49~54MHz is selected (TX only)
D200	Surge absorption	Relay (K103)
D231	Switching	ON when receiving preamplifier is OFF
D232	Switching	ON when receiving preamplifier is ON
D233	Switching	ON when receiving preamplifier is OFF
D234	Switching	ON when receiving preamplifier is ON
D235	Reverse current prevention	1/2: Receiving ON at 21.5~30MHz 2/2: Receiving ON at 30~60MHz
D261,281	Switching	ON when RX 1st IF of 11.374MHz is selected
D301	Switching	ON when RX 1st IF of 11.374MHz (NB1 function OFF) is selected
D302	Switching	ON when RX 1st IF of 11.374MHz (NB1 function ON) is selected
D321	Switching	ON when RX 1st IF of 73.095MHz is selected
D323	Switching	RX/TX changeover, ON during reception

COMPONENTS DESCRIPTION

Ref. No.	Use / Function	Operation / Condition / Compatibility
D324	Switching	RX/TX changeover, ON during transmission
D351	Switching	ON when RX 1st IF of 73.095MHz is selected
D371	Switching	RX/TX changeover, ON during transmission
D372	Switching	RX/TX changeover, ON during reception
D420	Switching	RX/TX changeover, ON during reception
D421	Switching	RX/TX changeover, ON during transmission
D422,423	RX/TX Mixer	Receiving 2nd/ Transmission mixer (RX: 73.095MHz → 10.695MHz, TX: 10.695MHz → 73.095MHz)
D431	Switching	1/2: RX/TX changeover, ON during transmission 2/2: RX/TX changeover, ON during reception
D441	Switching	ON when RX 1st IF of 11.374MHz (NB1 function ON) is selected
D442	Switching	ON when RX 1st IF of 11.374MHz (NB1 function OFF) is selected
D443	Switching	ON when RX 1st IF of 73.095MHz is selected
D461~464	Noise Blanking	ON when BLNK signal is “H”
D470	Switching	ON when 15kHz IF filter is selected
D471	Switching	ON when 6kHz IF filter is selected
D472	Switching	ON when 10.695MHz 2.7kHz IF filter is selected
D473	Switching	ON when 500Hz IF filter is selected
D474,475	Switching	RX/TX changeover, ON during reception
D476	Switching	ON when 15kHz IF filter is selected
D477	Switching	ON when 10.695MHz 2.7kHz IF filter is selected
D478	Switching	ON when 500Hz IF filter is selected
D479	Switching	ON when 11.374MHz 2.7kHz IF filter is selected
D480,481	Switching	RX/TX changeover, ON during transmission
D482	Switching	ON when 6kHz IF filter is selected
D483	Switching	ON when 11.374MHz 2.7kHz IF filter is selected
D525	Attenuator	IF gain adjustment
D526	Switching	1/2: ON when RX FM mode is selected 2/2: ON when RX AM/ SSB/ CW/ FSK mode are selected
D551,552	RX Mixer	Receiving 3rd mixer (10.695MHz/ 11.374MHz → 24kHz)

Ref. No.	Use / Function	Operation / Condition / Compatibility
D571	Switching	1/2: ON when RX FM mode is selected 2/2: ON when RX AM/ SSB/ CW/ FSK mode is selected
D586,587	Clipper	FM detection IC input
D662	Detection	Noise blanker switching pulse detection
D663,664	Reverse current prevention	Main IBK and NB mute signal matching, main side mute when ON
D701	Switching	1/2: ON when TX AM/ SSB/ CW/ FSK mode is selected 2/2: No connection
D702	Reverse current prevention	ON during TX FM mode
D721,722	Attenuator	TGC control attenuator
D723	Switching	RX/TX changeover, ON during transmission
D724	Attenuator	TGC control attenuator
D741	Attenuator	PGC control attenuator
D761,762	Switching	RX/TX changeover, ON during transmission
D781	Switching	ON when Drive output is selected
D782	Switching	ON when transmitting over 1.705MHz
D783	Switching	ON when transmitting from 30~522kHz
D784	Surge absorption	Relay (K800)
D785	Switching	ON when ANT connector is selected
D799,800	Surge absorption	Drive output terminal
D801	Power control	
D802	Reverse current prevention	External ALC voltage
D806	Reverse current prevention	External ALC voltage
D807	Current protection	Reduce power at over current
D808	Power control	Reduce power at high voltage
D809	Surge protection	ALC meter signal line
D841	Reverse current prevention	CKY signal line
D861,862	Reverse current prevention	Meter circuit

SEMICONDUCTOR DATA

Main MCU: F3651RDFCKFSA (Control unit IC306)

Pin No.	Name	I/O	Function
1	VREF	I	A/D standard voltage input
2	AVCC	I	Analog power supply input
3	DSIN	I	DSP data input
4	DSOUT	O	DSP data output
5	DCLK	O	DSP clock
6	DSCS	O	DSP chip select
7	TDET	I	CTCSS detect signal input from DSP H: Detect
8	VMIC	I	VOX transmit (MIC) signal input from DSP H: Active
9	VANI	I	VOX transmit (ANI) signal input from DSP H: Active
10	DHLT	I	DSP check signal input H: Ready
11	DRST	O	DSP reset output L: Reset
12	UL	I	Unlock detection L: Unlock
13	BYTE	I	Single chip mode selection (Vss connection)
14	CNVSS	I	For production
15	DRET	O	Communication re-start request to DSP
16	PHDET	I	Phone jack connection detection L: Detect
17	RESET	I	For reset L: Reset
18	XOUT	O	System clock output (11.0592MHz)
19	VSS	-	GND
20	XIN	I	System clock input (11.0592MHz)
21	VCC1	-	Power supply input
22	NMI	I	Not used (VCC connection)
23	DREQ	I	Communication request from DSP
24	PWS	I	Power switch input L: Push
25	UVBINT	I	USB connection interrupt input H: Connect
26	UCTS	I	RTS signal input from USB-serial bridge
27	URXD	I	Serial data input from USB-serial bridge
28	URTS	O	RTS signal output to USB-serial bridge
29	UTXD	O	Serial data output to USB-serial bridge
30	NC	O	Not used
31	DCFV	O	Oscillator frequency output for DC/DC converter
32	ABK2	O	Audio blanking signal output for ACC2 and USB H: AF blanking
33	ABK1	O	Audio blanking signal output H: AF blanking
34,35	NC	O	Not used
36	ETXD	O	For production
37	VCC1	-	Power supply input
38	ERXD	I	For production
39	VSS	-	GND
40	SCLK	O	For production
41	BUSY	O	For production
42	PTXD	O	Serial data output for Panel MCU
43	PRXD	I	Serial data input from Panel MCU
44	PRTS	O	RTS signal output for Panel MCU
45	PCTS	I	RTS signal input from Panel MCU
46	PRST	O	Reset signal output for Panel MCU
47	TYPX	I	Type detection
48	TYPY	I	Type detection
49	TYP3	I	Type detection
50	TYP2	I	Type detection
51	TYP1	I	Type detection
52	EPM	O	For production
53	TYP0	I	Type detection
54	EEN	O	EEPROM enable
55	EDA	I	EEPROM data input
56	ECK	O	EEPROM clock
57	ESI	O	EEPROM data output
58	VEN	O	VGS-1 enable
59	VRST	O	VGS-1 reset
60	VPLY	I	VGS-1 playback signal input
61	ECE	O	For production
62	VBSY	I	VGS-1 busy signal input
63	SS	I	PTT (SS) signal input L: Transmit
64	FPRG	I	Firmware programming mode detection
65	AMU	O	Audio mute H: Mute
66	PHD	I	Phase comparison detection for AT
67	AMD	I	Amplitude comparison detection for AT
68	PSC	O	Power switch control H: Power ON
69	TCS	O	AT tuning instruction H: During AT tuning
70	SQC	O	Squelch signal H: Close, L: Open
71	PHPWS	O	Power switch control H: Power ON
72	ATPWS	O	Shift and store bus register for AT control signal H: Valid
73,74	NC	O	Not used
75	PKP	O	Crossband repeater operation instruction L: Crossband repeater operation
76	PKSR	I	Packet transmit/ Crossband transmit instruction Normal H: Transmit, Crossband repeater L: Transmit
77	KEY	I	Key down signal L: Key down
78	KYS	I	Key jack connection detection H: Key jack connection
79	DASH	I	Electronic key dash signal L: Dash ON
80	DOT	I	Electronic Key dot Signal L: Dot ON

SEMICONDUCTOR DATA

Pin No.	Name	I/O	Function
81	TTO	O	External AT control
82	TSO	O	External AT control
83	TTI	I	External AT control
84	TSI	I	External AT control
85	VCC2	I	Power supply input
86	MODSEL	O	Modulation selection L: TIF, H: FM modulation
87	VSS	-	GND
88	ANISEL	O	ACC2 audio/USB audio selection L: ACC2 audio, H: USB audio
89	BEEP	O	Beep pattern instruction H: Beep output
90	BKC	I	Reduced voltage detection interrup H→L: Interrupt
91	IBK	O	IF blanking signal output H: Blanking
92	TLN2	O	Transmit line select 2 for DSP
93	TLN1	O	Transmit line select 1 for DSP
94	TXC	O	Transmit circuit power control H: Transmit circuit power is ON
95	CKY	O	Transmit power output control H: Transmit output
96	NC	I	Not used (External pull up)
97	BOVR	I	Over voltage detection interrupt H→L: Interrupt
98	STPC	I	Interrupt for returning from sleep mode (PC control) L→H: Interrupt
99	STS	O	RS-232C IC power control H: Power ON
100	CTXD	O	Serial data output for RS-232C IC
101	CRXD	I	Serial data input from RS-232C IC
102	CRTS	O	RTS signal output for RS-232C IC
103	CCTS	I	RTS signal input from RS-232C IC
104	LDAT	O	Serial data output for Control unit (LO) (X53 B/3)
105	LCLK	O	Serial clock output for Control unit (LO) (X53 B/3)
106	LEN	O	PLL IC enable
107	DEN1	O	DDS IC (AD9951YSVZ) enable
108	DEN2	O	DDS IC (AD9835BRUZ) enable
109	SEN	O	8-bit shift and register enable (Control unit (LO) X53 B/3)
110	IEN1	O	8-bit shift and register enable (TX-RX unit X57 A/2)
111	IEN2	O	8-bit shift and register enable (TX-RX unit X57 A/2)
112	IEN3	O	D/A converter enable (TX-RX unit X57 A/2)
113	FEN2	O	8-bit shift and register enable (Final unit X45 A/2)
114	DRES	O	DDS IC (AD9951YSVZ) reset output H: Reset
115	FEN1	O	8-bit shift and register enable (Final unit X45 A/2)
116	CLK	O	Serial clock output
117	DATA	O	Serial data output
118	ADC1	O	Multiplexer control signal 1
119	ADC2	O	Multiplexer control signal 2
120	AXC	I	Multiplexer X line input
121	AYC	I	Multiplexer Y line input
122	IDT	I	Current detection
123	VDT	I	Power supply voltage detection (Not used)
124	VSF	I	Forward wave voltage
125	VSR	I	Reflected wave voltage
126	FSQL	I	Squelch voltage
127	AVSS	-	Analog GND
128	FSM	I	S-meter voltage

Panel MCU: F364AEDFBKFTA (Display unit IC103)

Pin No.	Name	I/O	Function
1,2	NC	O	Not used
3	LCD_B_U	O	LCD backlight amber L: Light
4	LCD_B_G	O	LCD backlight green L: Light
5	CHLED	O	MULTI/CH encoder LED H: Light
6	BYTE	I	Single chip mode selection (Vss connection)
7	CNVSS	I	For production
8,9	NC	O	Not used
10	RESET	I	For reset L: Reset
11	XOUT	O	System clock output (11.0592MHz)
12	VSS	-	GND
13	XIN	I	System clock input (11.0592MHz)
14	VCC	I	Power supply input
15	NC	I	Not used (External pull up)
16	LOENCA	I	Low cut encoder pulse A input
17	HIENCA	I	Hi cut encoder pulse A input
18	MULA	I	MULTI encoder pulse A input
19	M-ENCB	I	Main encoder pulse B input
20	M-ENCA	I	Main encoder pulse A input
21	RIT-ENCB	I	RIT encoder pulse B input
22	RIT-ENCA	I	RIT encoder pulse A input
23	NC	I	Not used (External pull down)
24	DIM_A	O	PWM output for dimmer control (amber)
25	NC	I	Not used (External pull down)
26	DIM_G	O	PWM output for dimmer control (green)
27,28	NC	O	Not used

SEMICONDUCTOR DATA

Pin No.	Name	I/O	Function
29	E8TXD	O	For production
30	E8RXD	O	For production
31	E8CLK	O	For production
32	E8BSY	O	For production
33	TXD0	O	The serial port for connection with the main unit
34	RXD0	I	The serial port for connection with the main unit
35	RTS	O	RTS port for connection with the main unit
36	CTS	I	CTS port for connection with the main unit
37,38	NC	O	Not used
39	E8EPM	I	For production
40~43	NC	O	Not used
44	E8CE	I	For production
45~49	NC	O	Not used
50	LOENCB	I	Low cut encoder pulse B input
51	HIENCB	I	Hi cut encoder pulse B input
52	CHENCB	I	MULTI/CH encoder B input
53	LCDDATA	O	LCD driver data output
54	LCDCLK	O	LCD driver clock output
55	LCDCS	O	LCD driver chip select output
56	LCDINH	O	Segment display off control output
57	LCDPOW	O	VLCD power control H: Power supply
58,59	NC	O	Not used
60	VCC	I	Power supply input
61	NC	O	Not used
62	VSS	-	GND
63	NC	O	Not used
64~70	KO6~KO0	O	Key scan output bit 6~0
71	PBKC	I	Reduced voltage detection interrupt
72~78	NC	O	Not used
79~86	KI7~KI0	I	Key scan input bit 7~0
87,88	NC	O	Not used
89	MU	I	MIC up key input (A/D)
90	MD	I	MIC down key input (A/D)
91	NVOL	I	NOTCH volume input (A/D)
92	SVOL	I	SQ volume input (A/D)
93	AFVOL	I	AF volume input (A/D)
94	AVSS	-	Analog GND
95	RFVOL	I	RF volume input (A/D)
96	VREF	I	A/D standard voltage input
97	AVCC	I	Analog power supply input
98	NC	O	Not used
99	TXL	O	TX LED output H: Light
100	BUSYL	O	BUSY LED output H: Light

DSP: DC6726BRFPA225 (Control unit IC301)

Pin No.	Port Name	I/O	Function
1	VSS	-	GND
2	MCLKT	O	Master clock for D/A converter
3	TXC	I	Detection of Reception or Transmission
4	CKY	I	Detection of transmit or Not transmit
5	DHLT	O	DSP check signal to Main MCU
6	VSS	-	GND
7	DREQ	O	Communication request to Main MCU
8	CVDD	I	Core power supply (1.2V)
9	VMIC	O	VOX transmit (MIC) signal output to Main MCU
10	DVDD	I	I/O power supply (3.3V)
11	VANI	O	VOX transmit (ANI) signal output to Main MCU
12	TDET	O	CTCSS detection output to Main MCU
13	VSS	-	GND
14	DRST	I	DSP reset
15	VSS	-	GND
16	CVDD	I	Core power supply (1.2V)
17	CLKIN	I	GND
18	VSS	-	GND
19	TMS	I	For CN305
20	CVDD	I	Core power supply (1.2V)
21	TRST	I	For CN305
22	OSCVSS	-	Oscillator GND
23	OSCIN	I	Oscillator input
24	OSCOUT	O	Oscillator output
25	OSCVDD	I	Oscillator CVDD
26	VSS	-	GND
27	PLLHV	I	PLL DVDD (3.3V)
28	TDI	I	For CN305
29	TDO	O	For CN305
30	VSS	-	GND
31	DVDD	I	I/O power supply (3.3V)
32	EMU[0]	I/O	For CN305
33	CVDD	I	Core power supply (1.2V)
34	EMU[1]	I/O	For CN305
35	TCK	I	For CN305
36	VSS	-	GND
37	NC	O	Not used
38	WE	O	Write enable for flash memory
39	NC	O	Not used
40	VSS	-	GND
41	DQ[7]	I/O	Data bus for flash memory
42	DVDD	I	I/O power supply (3.3V)

SEMICONDUCTOR DATA

Pin No.	Port Name	I/O	Function
43	DQ[6]	I/O	Data bus for flash memory
44	CVDD	I	Core power supply (1.2V)
45	DQ[5]	I/O	Data bus for flash memory
46	DQ[4]	I/O	Data bus for flash memory
47	VSS	-	GND
48	DQ[3]	I/O	Data bus for flash memory
49	DQ[2]	I/O	Data bus for flash memory
50	DVDD	I	I/O power supply (3.3V)
51	DQ[1]	I/O	Data bus for flash memory
52	DQ[0]	I/O	Data bus for flash memory
53	CVDD	I	Core power supply (1.2V)
54	VSS	-	GND
55	DQ[15]	I/O	Data bus for flash memory
56	DQ[14]	I/O	Data bus for flash memory
57	CVDD	I	Core power supply (1.2V)
58	DQ[13]	I/O	Data bus for flash memory
59	DQ[12]	I/O	Data bus for flash memory
60	DVDD	I/O	I/O power supply (3.3V)
61	DQ[11]	I/O	Data bus for flash memory
62	VSS	-	GND
63	DQ[10]	I/O	Data bus for flash memory
64	DQ[9]	I/O	Data bus for flash memory
65	CVDD	I	Core power supply (1.2V)
66	DQ[8]	I/O	Data bus for flash memory
67	NC	O	Not used
68	DVDD	I	I/O power supply (3.3V)
69	VSS	-	GND
70,71	NC	O	Not used
72	VSS	-	GND
73	DVDD	I	I/O power supply (3.3V)
74	A[12]	O	Address bus for flash memory
75	A[10]	O	Address bus for flash memory
76	A[9]	O	Address bus for flash memory
77	CVDD	I	Core power supply (1.2V)
78	VSS	-	GND
79	A[8]	O	Address bus for flash memory
80	A[7]	O	Address bus for flash memory
81	DVDD	I	I/O power supply (3.3V)
82	VSS	-	GND
83	A[6]	O	Address bus for flash memory
84	A[5]	O	Address bus for flash memory
85	CVDD	I	Core power supply (1.2V)
86	A[4]	O	Address bus for flash memory
87	VSS	-	GND
88	A[3]	O	Address bus for flash memory

Pin No.	Port Name	I/O	Function
89	A[2]	O	Address bus for flash memory
90	CVDD	I	Core power supply (1.2V)
91	A[1]	O	Address bus for flash memory
92	DVDD	I	I/O power supply (3.3V)
93	A[11]	O	Address bus for flash memory
94	A[0]	O	Address bus for flash memory
95	VSS	-	GND
96	A[23]	O	Selection for extension I/O port
97,98	NC	O	Not used
99	VSS	-	GND
100	CS	O	Chip select for flash memory
101	CVDD	I	Core power supply (1.2V)
102	NC	O	Not used
103	DVDD	I	I/O power supply (3.3V)
104	OE	O	Output enable for flash memory
105	RYBY	I	Ready/ Busy signal for flash memory
106	VSS	-	GND
107	DSCS	I	SPI0 slave chip select for Main MCU interface
108	DCLK	I	SPI0 serial clock for Main MCU interface
109	VSS	-	GND
110	DSOUT	I	SPI0 data input for Main MCU interface
111	DSIN	O	SPI0 data output for Main MCU interface
112	DVDD	I	I/O power supply (3.3V)
113	SDTI0	I	Serial data input from A/D converter (IC66)
114	VSS	-	GND
115	SDTI1	I	Serial data input from A/D converter (IC83)
116	SDTO0	O	Serial data output for D/A converter (IC72)
117	SDTO1	O	Serial data output for D/A converter (IC75)
118	VSS	-	GND
119	SDTO2	O	Serial data output for D/A converter (IC78)
120	NC	O	Not used
121	PDN	O	Reset for A/D converter and D/A converter
122	NC	O	Not used
123	CVDD	I	Core power supply (1.2V)
124	VSS	-	GND
125	DVDD	I	I/O power supply (3.3V)
126,127	NC	O	Not used
128	CVDD	I	Core power supply (1.2V)

SEMICONDUCTOR DATA

Pin No.	Port Name	I/O	Function
129	VSS	-	GND
130	A[13]	O	Address bus for flash memory
131	A[14]	O	Address bus for flash memory
132	CVDD	I	Core power supply (1.2V)
133	VSS	-	GND
134	A[15]	O	Address bus for flash memory
135	A[16]	O	Address bus for flash memory
136	DVDD	I	I/O power supply (3.3V)
137	A[17]	O	Address bus for flash memory

Pin No.	Port Name	I/O	Function
138	A[18]	O	Address bus for flash memory
139	BCKX0RT	I	Bit clock reception
140	VSS	-	GND
141	FSX0RT	I	Frame synchronous reception
142	BCKX0RT	O	Bit clock transmission for A/D converter and D/A converter
143	MCLKR	O	Master clock for A/D converter
144	FSX0RT	O	Frame synchronous transmission for A/D converter and D/A converter

Extended I/O Port

■ Final unit (X45-398 A/2)

Pin No.	Pin name	Port name	Function	Active level	Condition
IC1: TC74HC4094AFF (Shift register) Enable: FEN1					
4	Q1	2L	1.8M LPF relay	H	1.705 ≤ f < 2.50 (MHz)
5	Q2	7L	7M LPF relay	H	5.50 ≤ f < 7.50 (MHz)
6	Q3	14L	14M LPF relay	H	10.5 ≤ f < 14.50 (MHz)
7	Q4	3L	3.5M LPF relay	H	2.50 ≤ f < 4.00 (MHz)
14	Q5	28L	24M/28M LPF relay	H	21.50 ≤ f < 30.0 (MHz)
13	Q6	10L	10M LPF relay	H	7.50 ≤ f < 10.50 (MHz)
12	Q7	21L	18M/21M LPF relay	H	14.50 ≤ f < 21.50 (MHz)
11	Q8	5L	5M LPF relay	H	4.00 ≤ f < 5.50 (MHz)
IC7: TC74HC4094AFF (Shift register) Enable: FEN1					
4	Q1	ATS	In/Through switching relay	H	L: Through, H: In
5	Q2	ANT2	HF ANT2 switching relay	L	L: ANT1, H: ANT2
6	Q3	NC			
7	Q4	50L	50M LPF relay	H	49.0 ≤ f < 54.0 (MHz)
14	Q5	FANL	Low speed/High speed	H	When the FAN rotates, at either low or high speed, it becomes active.
13	Q6	FANH	High speed	H	When the FAN rotates at high speed, it becomes active.
12	Q7	NC			
11	Q8	L (1)	50M coil	H	49.0 ≤ f < 54.0 (MHz)
IC8: TC74HC4094AFF (Shift register) Enable: FEN2					
4	Q1	CI (1)	2.5p capacitor switching	H	Phase difference correction C1 On: Active, Off: Inactive
5	Q2	CI (2)	5p capacitor switching	H	Phase difference correction C2 On: Active, Off: Inactive
6	Q3	CI (3)	10p capacitor switching	H	Phase difference correction C3 On: Active, Off: Inactive
7	Q4	CI (4)	18p capacitor switching	H	Phase difference correction C4 On: Active, Off: Inactive
14	Q5	CI (5)	39p capacitor switching	H	Phase difference correction C5 On: Active, Off: Inactive
13	Q6	CI (6)	75p capacitor switching	H	Phase difference correction C6 On: Active, Off: Inactive

SEMICONDUCTOR DATA

Pin No.	Pin name	Port name	Function	Active level	Condition
12	Q7	CI (7)	150p capacitor switching	H	Phase difference correction C7 On: Active, Off: Inactive
11	Q8	CI (8)	300p capacitor switching	H	Phase difference correction C8 On: Active, Off: Inactive
			IC9: TC74HC4094AFF (Shift register) Enable: FEN1		
4	Q1	L (2)	28M coil	H	25.50 ≤ f < 30.0 (MHz)
5	Q2	L (3)	24.9M coil	H	21.50 ≤ f < 25.50 (MHz)
6	Q3	L (4)	18M/21M coil	H	14.50 ≤ f < 21.50 (MHz)
7	Q4	L (5)	14M coil	H	10.50 ≤ f < 14.50 (MHz)
14	Q5	L (6)	10M coil	H	7.50 ≤ f < 10.50 (MHz)
13	Q6	L (7)	7M coil	H	6.90 ≤ f < 7.50 (MHz)
12	Q7	L (8)	5M coil	H	4.50 ≤ f < 6.90 (MHz)
11	Q8	L (9)	3.5M coil	H	2.50 ≤ f < 4.50 (MHz)
			IC10: TC74HC4094AFF (Shift register) Enable: FEN2		
4	Q1	CO(1)	2.5p capacitor switching	H	Amplitude difference correction C1 On: Active, Off: Inactive
5	Q2	CO(2)	5p capacitor switching	H	Amplitude difference correction C2 On: Active, Off: Inactive
6	Q3	CO(3)	10p capacitor switching	H	Amplitude difference correction C3 On: Active, Off: Inactive
7	Q4	CO(4)	18p capacitor switching	H	Amplitude difference correction C4 On: Active, Off: Inactive
14	Q5	CO(5)	39p capacitor switching	H	Amplitude difference correction C5 On: Active, Off: Inactive
13	Q6	CO(6)	75p capacitor switching	H	Amplitude difference correction C6 On: Active, Off: Inactive
12	Q7	CO(7)	150p capacitor switching	H	Amplitude difference correction C7 On: Active, Off: Inactive
11	Q8	CO(8)	300p capacitor switching	H	Amplitude difference correction C8 On: Active, Off: Inactive

■ Control (Local) unit (XC1-021 B/3)

Pin No.	Pin name	Port name	Function	Active level	Condition
			IC651: TC74HC4094AFF (Shift register) Enable: EN1		
4	Q1	L_IOUP	AD9951(DDS) data update		
5	Q2	TXFM	FM modulation switch	L	
6	Q3	IFB	IF11M selection	L	When the RX-1 is selected, it becomes active.
7	Q4	IFA	IF73M selection	L	When the RX-2 is selected, it becomes active.
14	Q5	BPF1	LO1 filter selection	L	RX-1: 1.705 ≤ f < 2.1 (MHz), RX-2: 0.03 ≤ f < 10 (MHz)
13	Q6	BPF2	LO1 filter selection	L	RX-1: 3.4 ≤ f < 4.1 (MHz), RX-2: 10 ≤ f < 16 (MHz)
12	Q7	BPF3	LO1 filter selection	L	RX-1: 6.9 ≤ f < 7.5 (MHz), RX-2: 16 ≤ f < 30 (MHz)
11	Q8	BPF4	LO1 filter selection	L	RX-1: 13.9 ≤ f < 21.5 (MHz), RX-2: 30 ≤ f < 60 (MHz)

■ TX-RX unit (XC1-024 A/2)

Pin No.	Pin name	Port name	Function	Active level	Condition
			IC11: TC74HC4094AFF (Shift register) Enable: IEN2		
4	Q1	FIL[1]	IF filter 15kHz	H	IF: 10.695MHz
5	Q2	FIL[2]	IF filter 6kHz	H	IF: 10.695MHz
6	Q3	FIL[3]	IF filter 2.7kHz	H/L	1st IF 10.695MHz: H, 11.374MHz: L

SEMICONDUCTOR DATA

Pin No.	Pin name	Port name	Function	Active level	Condition
7	Q4	FIL[4]	IF filter 500Hz	H	IF: 11.374MHz
14	Q5	RXFM	RX mode: FM	H	
13	Q6	TXFM	TX mode: FM	H	
12	Q7	HFRGC	HF RX gain	H	Not used
11	Q8	50RGC	50M RX gain	H	21.5MHz ≤ f < 60MHz & PRE-AMP ON
IC12: TC74HC4094AFF (Shift register) Enable: IEN2					
4	Q1	DRVO	Drive output switch	L	
5	Q2	1STIF	1st IF switch	H/L	73.095MHz: H, 11.374MHz: L
6	Q3	455FIL	(RX) 455kHz FM filter	H/L	Wide: H, Narrow: L
7	Q4	NBSW	NB function switch	H	
14	Q5	AMC	AM ALC time constant switch	H/L	Slow: H, Fast: L
13	Q6	RLSW	TX-B output switch	H	Linear ON and TXB: H
12	Q7	LINEAR	Liner Relay Switch	H	Linear relay control ON: H
11	Q8	ANTOUT	ANTOUT function switch		
IC13: M62353AGPDF5J (D/A converter) Enable: IEN3					
15	Ao1	POC2			
2	Ao2	IFGC	RX IF gain		
3	Ao3	ALC_REF	ALC reference voltage		
4	Ao4	TGC	Transmit gain control voltage		
5	Ao5	POC	Power control voltage		
6	Ao6	PGC	RF gain control voltage		
7	Ao7	PRO	Protection control reference voltage		
10	Ao8	NBL (TX: IDP)	RX: NB threshold voltage, TX: ID threshold voltage		
IC14: TC74HC4094AFF (Shift register) Enable: IEN1					
4	Q1	BPF[5]	BPF selection	H	4.10 ≤ f < 6.90 (MHz)
5	Q2	BPF[4]	BPF selection	H	2.50 ≤ f < 4.10 (MHz)
6	Q3	BPF[3]	BPF selection	H	1.705 ≤ f < 2.50 (MHz)
7	Q4	BPF[2]	BPF selection	H	0.522 ≤ f < 1.705 (MHz)
14	Q5	BPF[1]	BPF selection	H	0.03 ≤ f < 0.522 (MHz)
13	Q6	ATT	ATT switch	L	
12	Q7	RXANT	RX ANT switch	H	f ≤ 30.0MHz & EXT RX ANT ON
11	Q8	PRE	Pre-AMP switch	H	
IC15: TC74HC4094AFF (Shift register) Enable: IEN1					
4	Q1	BPF[13]	BPF selection	H	49.0 ≤ f < 54.0 (MHz), Only TX
5	Q2	BPF[12]	BPF selection	H	30.0 ≤ f < 60.0 (MHz)
6	Q3	BPF[11]	BPF selection	H	21.5 ≤ f < 30.0 (MHz)
7	Q4	BPF[10]	BPF selection	H	14.5 ≤ f < 21.5 (MHz)
14	Q5	BPF[9]	BPF selection	H	13.9 ≤ f < 14.5 (MHz)
13	Q6	BPF[8]	BPF selection	H	10.5 ≤ f < 13.9 (MHz)
12	Q7	BPF[7]	BPF selection	H	7.50 ≤ f < 10.5 (MHz)
11	Q8	BPF[6]	BPF selection	H	6.90 ≤ f < 7.50 (MHz)

TS-590SG

PARTS LIST

⚠indicates safety critical components.
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

L : Scandinavia **K** : USA **P** : Canada
Y : PX (Far East, Hawaii) **T** : England **E** : Europe
C : China **X** : Australia **M** : Other Areas

TS-590SG

Ref.No	Adderss	Parts No.	Description		Desti-nation
			TS-590SG		
1	1B	A0B-0006-00	METALLIC CABINET(UPPER)		
2	1D	A0B-0007-00	METALLIC CABINET(LOWER)		
3	2F	A22-2525-11	SUB PANEL		
4	3F	A6C-0009-00	PANEL		
6	2C	B09-0355-05	CAP(REAR-COM)		
7	3E	B1A-0022-00	FRONT GLASS		
8	3F	B11-1879-13	ILLUMINATION GUIDE(TX/RX)		
9	3F	B11-1880-13	ILLUMINATION GUIDE(MULTI)		
-		B42-5650-04	SERIAL NUMBER STICKER		
-		B42-7003-04	RATING LABEL(CORD)		E
-		B42-7019-04	STANDARD LABEL(FCC)		K
-		B42-7070-04	STANDARD LABEL(FCC)		K
14	3E	B43-1644-04	BADGE		
15	1H	B5A-0180-00	INSTRUCTION MANUAL(ENGLISH)		
16	1H	B5A-0181-00	INSTRUCTION MANUAL(FRENCH)		
17	1H	B5A-0182-00	INSTRUCTION MANUAL(SPANISH)		E
18	1H	B5A-0183-00	INSTRUCTION MANUAL(ITALIAN)		E
19	1H	B5A-0184-00	INSTRUCTION MANUAL(GERMAN)		E
20	1H	B5A-0185-00	INSTRUCTION MANUAL(DUTCH)		E
21	1H	B5C-0001-00	SCHEMATIC DIAGRAM	ACCESSORY	K
22	1H	B5C-0002-00	SCHEMATIC DIAGRAM	ACCESSORY	K
24	2B	E04-0167-15	RF COAXIAL RECEPTACLE(M)		
25	1G	E07-0751-25	DIN PLUG(7P)	ACCESSORY	
27	1G	E07-1351-25	DIN PLUG(13P)	ACCESSORY	
28	3B	E23-1164-14	EARTH LUG(ANT)		
29	2G	E30-3489-15	DC CORD(DC SUPPLY)	ACCESSORY	
29	2G	E3F-0031-00	FLAT CABLE		
30	2B	E37-0891-25	LEAD WIRE WITH CONNECTOR(EXT.AT)		
31	2A	E37-0959-15	LEAD WIRE WITH CONNECTOR(SP)		
33	2A,3D	E3F-0031-00	FLAT CABLE(TXRXA-FINAL)		
34	2A,2C	E37-1489-15	FLAT CABLE(CON A-FINAL)		
35	3A,2C,1F	E37-1490-15	FLAT CABLE(DISB-CON A)		
36	2C,3D	E37-1491-15	FLAT CABLE(TXRXA-CON B)		
37	2C	E37-1492-15	FLAT CABLE(CON A-CON B)		
38	2A,3D	E3H-0011-00	LEAD WIRE WITH CONNECTOR(TXRX)		
39	1A,3D	E37-1646-05	LEAD WIRE WITH MINIPIN PLUG(RAT)		
40	2C,3D	E37-1647-05	LEAD WIRE WITH MINIPIN PLUG(LO1)		
41	2C,3D	E37-1648-05	LEAD WIRE WITH MINIPIN PLUG(LO2)		
42	2C,3D	E37-1649-05	LEAD WIRE WITH MINIPIN PLUG(LO3)		
-		E37-1499-05	LEAD WIRE WITH CONNECTOR(CON A-CON B)		
-		E37-1500-05	LEAD WIRE WITH CONNECTOR(RIF)		
-		E37-1501-05	LEAD WIRE WITH CONNECTOR(TIF)		
-		E37-1502-05	LEAD WIRE WITH CONNECTOR(AF)		
-		E37-1506-05	LEAD WIRE WITH CONNECTOR(MIC)		
50	2F	E37-1507-05	LEAD WIRE WITH CONNECTOR(MULTI)		
51	3A,3D	E37-1530-05	LEAD WIRE WITH CONNECTOR(TXRXA-FINAL)		
-		E37-1650-05	LEAD WIRE WITH CONNECTOR(TXRXA-FINAL)		
-		E3H-0010-00	LEAD WIRE WITH CONNECTOR(TXRX A-B)		
-		E3H-0011-00	LEAD WIRE WITH MINIPIN PLUG(TXRF)		
-		E3H-0017-00	LEAD WIRE WITH CONNECTOR(MIC)		

Ref.No	Adderss	Parts No.	Description		Desti-nation
53	3D	F09-0453-05	CAP(REAR-DIN)		
54	3A	F09-0478-05	FAN MOTOR		
55	1A	F10-2330-23	SHIELDING COVER(AT)		
56	1A	F10-3116-14	SHIELDING COVER(FINAL-RELAY)		
57	2B	F10-3134-02	SHIELDING PLATE(FINAL)		
-		F10-3135-13	SHIELDING COVER(DCIN SPOTWE)		
58	2C	F10-3136-03	SHIELDING COVER(VGS-1)		
-	2C	F10-3142-04	SHIELDING COVER		
59	1G	F52-0038-05	FUSE(BLADE TYPE)(4A)	ACCESSORY	
60	1G,2G	F52-0044-05	FUSE(BLADE TYPE)(25A)	ACCESSORY	
61	3E	G02-0791-24	FLAT SPRING(AUDIO IC)		
64	3E	G02-1858-03	FLAT SPRING(TORQUE)		
65	1A	G02-1860-04	EARTH SPRING(HF-FINAL)		
62	3F	G02-0505-05	KNOB SPRING		
66	3F	G09-0405-05	KNOB SPRING		
67	1A,1B	G10-1277-04	FIBROUS SHEET (CABINET)		
68	3E	G10-1812-04	FIBROUS SHEET(TORQUE)		
69	1G	G11-2698-04	SHEET	ACCESSORY	
70	3E	G11-4509-04	SHEET (FRONT GLASS)		
71	2C	G11-4510-04	RUBBER SHEET (XC1B:DDS)		
72	1A	G11-4520-04	SHEET (FINAL-RELAY)		
73	2D	G11-4535-04	SHEET (XC1A:DCDC-COIL)		
74	3D	G11-4536-04	RUBBER SHEET (XC1A PCB)		
76	2A	G13-1793-04	CUSHION		
77	2B	G13-1855-04	CUSHION(SP)		
78	2E	G13-2300-04	CUSHION(LCD)		
79	1A	G13-2301-04	CUSHION(TOP RELAY)		
80	1A	G13-2304-04	CUSHION(RELAY)		
81	2D	G13-2312-04	CUSHION(DCDC-COIL)		
82	2B	G13-2341-04	CUSHION(TOP FFC)		
83	1B,2B	G13-2343-04	CUSHION(TOP SHIELD)		
85	2G	H10-6650-01	POLYSTYRENE FOAMED FIXTURE(F)		
86	2H	H10-6651-02	POLYSTYRENE FOAMED FIXTURE(R)		
87	2H	H20-1451-14	PROTECTION COVER		
88	1G	H25-0029-04	PROTECTION BAG (60/110/0.07)		
89	2G	H25-0796-04	PROTECTION BAG		
91	1H	H25-2352-04	PROTECTION BAG (250/350/0.07)		
92	3G	H5A-0177-00	ITEM CARTON CASE		K
93	3H	B4J-0024-00	PACKING LABEL		
94	1C	J02-0440-14	FOOT(FRONT)		
95	1A,1B,1D	J02-0441-15	FOOT(SIDE)		
96	1C	J02-0442-04	FOOT(FRONT)		
97	1D	J02-0475-15	FOOT(BACK)		
-		J61-0307-05	BAND		
100	1B	K01-0427-05	HANDLE		
101	3E	K2B-0001-00	KNOB(MAIN KNOB)		
102	3F	K29-9390-03	KNOB(INSIDE)		
103	3F	K29-9596-03	KNOB(NOTCH/SQL)		
104	3F	K29-9456-23	KNOB (MULTI)		
105	3E	K29-9465-03	KNOB RING(MAIN KNOB)		
106	2F	K2K-0121-00	KEY TOP(8KEY)		
107	2F	K2K-0122-00	KEY TOP(25KEY)		

PARTS LIST

Ref.No	Adderss	Parts No.	Description	Desti-nation
108	3F	K2K-0123-00	KEY TOP(20KEY)	
109	3F	K2K-0124-00	KEY TOP(5KEY)	
110	3F	K29-9471-13	KNOB(RIT)	
111	3F	K29-9477-03	KNOB(INSIDE/HI)	
112	3F	K2K-0125-00	KNOB(OUTSIDE/LO)	
A	3E	N09-6602-05	SPECIAL SCREW(PANEL)	
B	3D	N15-1040-48	FLAT WASHER(GND)	
C	2F	N19-0673-15	SPECIAL WASHER(RIT-ENC)	
D	1F	N33-2606-43	OVAL HEAD MACHINE SCREW(DISPLAY-PCB)	
E	3A,1B,1C,1D	N33-3006-43	OVAL HEAD MACHINE SCREW(CABINET)	
F	2C	N35-2604-43	BINDING HEAD MACHINE SCREW(LO-PCB)	
G	1C,1D	N35-3008-41	BINDING HEAD MACHINE SCREW(FOOT)	
H	3A	N35-3020-48	BINDING HEAD MACHINE SCREW(FAN)	
J	3D	N35-4010-48	BINDING HEAD MACHINE SCREW(GND)	
K	1A,2A	N67-2608-48	PAN HEAD SEMS SCREW(FINAL-TR)	
L	3E	N77-3006-43	HEXAGON SOCKET HEAD SET SCREW	
M	2A,2B,2C,3D	N87-2608-48	BRAZIER HEAD TAPTITE SCREW(PCB)	
116	1G	N99-0331-15	SCREW SET ACCESSORY	
120	2A	T07-0765-45	SPEAKER	
121	2G	T91-0352-65	MICROPHONE ACCESSORY	
123	1F	W02-1836-15	ENCODER(MAIN)	
124	2F	W02-3727-05	ENCODER(RIT)	
Q1		RD06HHF1-102	FET	
Q2		RD16HHF1-102	FET	
Q3		RD100HHF1-102	FET	
Q4		RD100HHF1-102	FET	

Ref.No	Adderss	Parts No.	Description	Desti-nation
			FINAL UNIT (X45-398X-XX)	
C1		CD04BQ1H220M	ALUMINIUM ELECTRO CAPACITOR	
C2		CD04AY1E470M	ELECTRO 47UF 25WV	
C3		CD04BQ1H220M	ALUMINIUM ELECTRO CAPACITOR	
C4		CD04AZ1E471M	ELECTRO 470UF 25WV	
C5		CD04AY1E470M	ELECTRO 47UF 25WV	
C6		CD04AZ1E471M	ELECTRO 470UF 25WV	
C7		CD04AY1E470M	ELECTRO 47UF 25WV	
C15		CC73GCH1H101J	CHIP C 100PF J	
C21		CC73GCH1H470J	CHIP C 47PF J	
C22		CK73GB1H104K	CHIP C 0.10UF K	
C23		CK73GB1H103K	CHIP C 0.010UF K	
C24		CK73FB1E475K	CHIP C 4.7UF K	
C25		CK73GB1H104K	CHIP C 0.10UF K	
C27		CK73GB1H104K	CHIP C 0.10UF K	
C29		CK73GB1H103K	CHIP C 0.010UF K	
C30		CK73GB1H104K	CHIP C 0.10UF K	
C31		CK73GB1H104K	CHIP C 0.10UF K	
C32		CK73GB1E105K	CHIP C 1.0UF K	
C33		CK73FB1E475K	CHIP C 4.7UF K	
C34		CC73GCH1H121J	CHIP C 120PF J	
C35		CK73GB1H103K	CHIP C 0.010UF K	
C36		CC73GCH1H121J	CHIP C 120PF J	
C37		CK73FB1E104K	CHIP C 0.10UF K	
C38		CK73GB1E105K	CHIP C 1.0UF K	
C39		C93-1807-05	CHIP C 0.01UF J	

Ref.No	Adderss	Parts No.	Description	Desti-nation
C40		CK73GB1H102K	CHIP C 1000PF K	
C41		CK73FB1E104K	CHIP C 0.10UF K	
C42		C93-1895-05	CHIP C 390PF J	
C43		CK73FB1H103K	CHIP C 0.010UF K	
C44		C93-1815-05	CHIP C 220PF J	
C45		C93-1812-05	CHIP C 120PF J	
C46		C93-1807-05	CHIP C 0.01UF J	
C47		CK73FB1E104K	CHIP C 0.10UF K	
C48		C93-1807-05	CHIP C 0.01UF J	
C49		C93-1807-05	CHIP C 0.01UF J	
C50		CK73GB1H102K	CHIP C 1000PF K	
C51		CK73GB1H103K	CHIP C 0.010UF K	
C52		CD04BC1E221M	ELECTRO 220UF 25WV	
C53		CK73FB1C105K	CHIP C 1.0UF K	
C54		CK73EB1H104K	CHIP C 0.10UF K	
C55		CK73EB1H104K	CHIP C 0.10UF K	
C56		CK73GB1H102K	CHIP C 1000PF K	
C57		CK73GB1H103K	CHIP C 0.010UF K	
C58		CK73FB1C105K	CHIP C 1.0UF K	
C59		CM73F2H271J	CHIP C 270PF J	
C60		CM73F2H271J	CHIP C 270PF J	
C61		CM73F2H101J	CHIP C 100PF J	
C62		CM73F2H331F	CHIP C 330PF F	
C63		CM73F2H471F	CHIP C 470PF F	
C64		CK73FB1E104K	CHIP C 0.10UF K	
C65		CK73FB1E104K	CHIP C 0.10UF K	
C66		CK73EB1E225K	CHIP C 2.2UF K	
C67		CK73FB1E104K	CHIP C 0.10UF K	
C68		C93-1807-05	CHIP C 0.01UF J	
C69		CK73FB1H102K	CHIP C 1000PF K	
C70		CK73FB1H102K	CHIP C 1000PF K	
C71		C93-0553-05	CHIP C 3.0PF C	
C72		CK73FB1H103K	CHIP C 0.010UF K	
C73		CK73FB1H102K	CHIP C 1000PF K	
C74		CK73FB1E104K	CHIP C 0.10UF K	
C75		CK73FB1H102K	CHIP C 1000PF K	
C76		CK73FB1H102K	CHIP C 1000PF K	
C77		CK73FB1H102K	CHIP C 1000PF K	
C101		C93-1819-05	CHIP C 470PF J	
C102		CK73FB1H103K	CHIP C 0.010UF K	
C103		CK73FB1H103K	CHIP C 0.010UF K	
C104		CK73FB1H103K	CHIP C 0.010UF K	
C105		CK73FB1H103K	CHIP C 0.010UF K	
C106		CK73FB1H103K	CHIP C 0.010UF K	
C107		CK73FB1H103K	CHIP C 0.010UF K	
C108		CK73FB1H103K	CHIP C 0.010UF K	
C109		CK73FB1H103K	CHIP C 0.010UF K	
C110		CK73FB1H103K	CHIP C 0.010UF K	
C111		CK73GB1H103K	CHIP C 0.010UF K	
C112		CK73FB1H103K	CHIP C 0.010UF K	
C113		CK73FB1H103K	CHIP C 0.010UF K	
C114		CK73FB1H103K	CHIP C 0.010UF K	
C115		CK73FB1H103K	CHIP C 0.010UF K	
C116		CK73FB1H103K	CHIP C 0.010UF K	

PARTS LIST

FINAL UNIT (X45-398X-XX)

Ref.No	Adderss	Parts No.	Description			Desti-nation
C117		CK73FB1H103K	CHIP C	0.010UF	K	
C118		CK73FB1H103K	CHIP C	0.010UF	K	
C119		CK73FB1H103K	CHIP C	0.010UF	K	
C120		CK73FB1H103K	CHIP C	0.010UF	K	
C121		CK73FB1H103K	CHIP C	0.010UF	K	
C122		CK73FB1H103K	CHIP C	0.010UF	K	
C124		CK73FB1E104K	CHIP C	0.10UF	K	
C126		CK73FB1H103K	CHIP C	0.010UF	K	
C127		CK73FB1H103K	CHIP C	0.010UF	K	
C128		CK73FB1H103K	CHIP C	0.010UF	K	
C129		CK73FB1H103K	CHIP C	0.010UF	K	
C130		CK73FB1H103K	CHIP C	0.010UF	K	
C131		CK73FB1H103K	CHIP C	0.010UF	K	
C132		CK73GB1H103K	CHIP C	0.010UF	K	
C133		CK73FB1H103K	CHIP C	0.010UF	K	
C134		CK73FB1H103K	CHIP C	0.010UF	K	
C135		CK73FB1H103K	CHIP C	0.010UF	K	
C151		C93-0555-05	CHIP C	5.0PF	C	
C156		C93-0568-05	CHIP C	47PF	J	
C157		C93-0558-05	CHIP C	8.0PF	D	
C158		C93-1811-05	CHIP C	100PF	J	
C159		C93-1811-05	CHIP C	100PF	J	
C160		C93-1816-05	CHIP C	270PF	J	
C161		C93-0565-05	CHIP C	27PF	J	
C162		C93-1816-05	CHIP C	270PF	J	
C163		C93-0558-05	CHIP C	8.0PF	D	
C164		C93-0567-05	CHIP C	39PF	J	
C165		C93-0569-05	CHIP C	56PF	J	
C166		C93-0562-05	CHIP C	15PF	J	
C167		C93-1820-05	CHIP C	560PF	J	
C168		C93-1816-05	CHIP C	270PF	J	
C169		C93-0568-05	CHIP C	47PF	J	
C170		C93-1816-05	CHIP C	270PF	J	
C171		C93-0569-05	CHIP C	56PF	J	
C172		C93-1811-05	CHIP C	100PF	J	
C173		CK73GB1H103K	CHIP C	0.010UF	K	
C174		C93-1811-05	CHIP C	100PF	J	
C175		C93-0565-05	CHIP C	27PF	J	
C176		C93-0567-05	CHIP C	39PF	J	
C177		C93-0559-05	CHIP C	9.0PF	D	
C178		C93-0570-05	CHIP C	68PF	J	
C179		C93-1811-05	CHIP C	100PF	J	
C180		C93-1813-05	CHIP C	150PF	J	
C181		C93-1813-05	CHIP C	150PF	J	
C182		C93-1813-05	CHIP C	150PF	J	
C183		C93-1820-05	CHIP C	560PF	J	
C184		C93-0570-05	CHIP C	68PF	J	
C185		C93-0566-05	CHIP C	33PF	J	
C186		C93-0562-05	CHIP C	15PF	J	
C187		C93-0562-05	CHIP C	15PF	J	
C188		C93-0571-05	CHIP C	82PF	J	
C189		C93-0565-05	CHIP C	27PF	J	
C190		C93-0563-05	CHIP C	18PF	J	
C191		C93-0560-05	CHIP C	10PF	D	
C192		C93-0570-05	CHIP	68PF	J	
C193		C93-1823-05	CHIP C	1000PF	J	
C194		C93-1820-05	CHIP C	560PF	J	
C195		C93-1823-05	CHIP C	1000PF	J	
C196		C93-1817-05	CHIP C	330PF	J	
C197		C93-1815-05	CHIP C	220PF	J	
C198		CK73GB1H103K	CHIP C	0.010UF	K	
C199		CK73GB1H104K	CHIP C	0.10UF	K	
C200		C93-0558-05	CHIP C	8.0PF	D	
C201		C93-1811-05	CHIP C	100PF	J	
C202		C93-1823-05	CHIP C	1000PF	J	
C203		C93-0568-05	CHIP C	47PF	J	
C204		C93-1816-05	CHIP C	270PF	J	
C205		C93-1815-05	CHIP C	220PF	J	
C206		C93-1820-05	CHIP C	560PF	J	
C207		C93-1813-05	CHIP C	150PF	J	
C208		CK73GB1H103K	CHIP C	0.010UF	K	
C209		C93-1811-05	CHIP C	100PF	J	
C210		C93-0564-05	CHIP C	22PF	J	
C211		C93-0570-05	CHIP C	68PF	J	
C212		C93-0565-05	CHIP C	27PF	J	
C213		C93-1812-05	CHIP C	120PF	J	
C214		C93-0569-05	CHIP C	56PF	J	
C215		C93-0569-05	CHIP C	56PF	J	
C217		C93-0565-05	CHIP C	27PF	J	
C218		C93-0570-05	CHIP C	68PF	J	
C219		C93-0571-05	CHIP C	82PF	J	
C220		C93-1811-05	CHIP C	100PF	J	
C221		C93-1811-05	CHIP C	100PF	J	
C222		C93-0554-05	CHIP C	4.0PF	C	
C223		C93-0565-05	CHIP C	27PF	J	
C224		C93-0568-05	CHIP C	47PF	J	
C225		C93-0565-05	CHIP C	27PF	J	
C226		C93-0564-05	CHIP C	22PF	J	
C228		C93-1819-05	CHIP C	470PF	J	
C229		C93-1812-05	CHIP C	120PF	J	
C230		C93-1816-05	CHIP C	270PF	J	
C231		C93-1816-05	CHIP C	270PF	J	
C232		C93-0565-05	CHIP C	27PF	J	
C233		C93-1823-05	CHIP C	1000PF	J	
C234		C93-1816-05	CHIP C	270PF	J	
C236		C93-1816-05	CHIP C	270PF	J	
C237		C93-0568-05	CHIP C	47PF	J	
C238		C93-0564-05	CHIP C	22PF	J	
C239		C93-0568-05	CHIP C	47PF	J	
C240		C93-1813-05	CHIP C	150PF	J	
C241		C93-0565-05	CHIP C	27PF	J	
C242		C93-0571-05	CHIP C	82PF	J	
C243		C93-0563-05	CHIP C	18PF	J	
C252		CK73FB1H102K	CHIP C	1000PF	K	
C253		CK73GB1H103K	CHIP C	0.010UF	K	
C254		CK73GB1H103K	CHIP C	0.010UF	K	
C255		C93-0554-05	CHIP C	4.0PF	C	
C256		CC73FCH1H470J	CHIP C	47PF	J	
C258		CK73GB1H103K	CHIP C	0.010UF	K	

PARTS LIST

FINAL UNIT (X45-398X-XX)

Ref.No	Adderss	Parts No.	Description			Desti-nation
C259		CK73GB1H103K	CHIP C	0.010UF	K	
C260		CC73GCH1H470J	CHIP C	47PF	J	
C261		CK73GB1H103K	CHIP C	0.010UF	K	
C262		CK73GB1H103K	CHIP C	0.010UF	K	
C263		CK73GB1H103K	CHIP C	0.010UF	K	
C264		CK73GB1H103K	CHIP C	0.010UF	K	
C265		CC73GCH1H080D	CHIP C	8.0PF	D	
C266		CC73GCH1H470J	CHIP C	47PF	J	
C267		CK73GB1H102K	CHIP C	1000PF	K	
C269		CK73FB1H103K	CHIP C	0.010UF	K	
C270		CK73GB1H103K	CHIP C	0.010UF	K	
C271		C93-0554-05	CHIP C	4.0PF	C	
C272		CC73FCH1H680J	CHIP C	68PF	J	
C273		CK73GB1H103K	CHIP C	0.010UF	K	
C275		CK73FB1H102K	CHIP C	1000PF	K	
C277		CK73GB1H103K	CHIP C	0.010UF	K	
C278		CK73GB1H103K	CHIP C	0.010UF	K	
C279		CK73GB1H103K	CHIP C	0.010UF	K	
C280		CK73GB1H103K	CHIP C	0.010UF	K	
C281		CK73FB1H103K	CHIP C	0.010UF	K	
C282		CK73FB1H103K	CHIP C	0.010UF	K	
C283		CK73GB1H103K	CHIP C	0.010UF	K	
C301		CK73FB1H102K	CHIP C	1000PF	K	
C302		CK73FB1E104K	CHIP C	0.10UF	K	
C303		CK73FB1H103K	CHIP C	0.010UF	K	
C304		CK73FB1H103K	CHIP C	0.010UF	K	
C305		C91-3115-05	HV C	10PF	2KV	
C306		C91-3115-05	HV C	10PF	2KV	
C307		C91-3115-05	HV C	10PF	2KV	
C308		C91-3115-05	HV C	10PF	2KV	
C309		C91-3115-05	HV C	10PF	2KV	
C310		C91-3115-05	HV C	10PF	2KV	
C311		C91-3115-05	HV C	10PF	2KV	
C312		C91-3115-05	HV C	10PF	2KV	
C313		C91-3115-05	HV C	10PF	2KV	
C314		C91-3115-05	HV C	10PF	2KV	
C315		C91-3115-05	HV C	10PF	2KV	
C316		C91-3115-05	HV C	10PF	2KV	
C317		CK73FB1H103K	CHIP C	0.010UF	K	
C318		CK73FB1H103K	CHIP C	0.010UF	K	
C319		CK73FB1H103K	CHIP C	0.010UF	K	
C320		CK73FB1H103K	CHIP C	0.010UF	K	
C321		CK73FB1H103K	CHIP C	0.010UF	K	
C322		CK73FB1H103K	CHIP C	0.010UF	K	
C323		C91-3115-05	HV C	10PF	2KV	
C324		C91-3115-05	HV C	10PF	2KV	
C325		C91-3115-05	HV C	10PF	2KV	
C326		C91-3115-05	HV C	10PF	2KV	
C327		CK73FB1H103K	CHIP C	0.010UF	K	
C328		CK73FB1H103K	CHIP C	0.010UF	K	
C329		CK73FB1H103K	CHIP C	0.010UF	K	
C330		CK73FB1H103K	CHIP C	0.010UF	K	
C331		CK73FB1H103K	CHIP C	0.010UF	K	
C332		CK73FB1H103K	CHIP C	0.010UF	K	

Ref.No	Adderss	Parts No.	Description			Desti-nation
C333		C91-3126-15	HV CAP			
C334		C91-3126-15	HV CAP			
C335		CK73FB1H103K	CHIP C	0.010UF	K	
C336		CK73FB1H103K	CHIP C	0.010UF	K	
C337		CK73FB1H103K	CHIP C	0.010UF	K	
C338		CK73FB1H103K	CHIP C	0.010UF	K	
C339		CK73FB1H103K	CHIP C	0.010UF	K	
C340		CK73FB1H103K	CHIP C	0.010UF	K	
C341		C91-3127-15	HV CAP			
C342		C91-3127-15	HV CAP			
C343		CK73FB1H103K	CHIP C	0.010UF	K	
C344		CK73FB1H103K	CHIP C	0.010UF	K	
C345		CK73FB1H103K	CHIP C	0.010UF	K	
C346		CK73FB1H103K	CHIP C	0.010UF	K	
C347		CK73FB1H103K	CHIP C	0.010UF	K	
C348		CK73FB1H103K	CHIP C	0.010UF	K	
C349		C91-3127-15	HV CAP(18P)			
C350		C91-3127-15	HV CAP(18P)			
C351		C91-3127-15	HV CAP(18P)			
C352		C91-3127-15	HV CAP(18P)			
C353		CK73FB1H103K	CHIP C	0.010UF	K	
C354		CK73FB1H103K	CHIP C	0.010UF	K	
C355		CK73FB1H103K	CHIP C	0.010UF	K	
C356		CK73FB1H103K	CHIP C	0.010UF	K	
C357		CK73FB1H103K	CHIP C	0.010UF	K	
C358		CK73FB1H103K	CHIP C	0.010UF	K	
C359		C91-3123-05	HV C	150PF	3KV	
C360		C91-3123-05	HV C	150PF	3KV	
C361		C91-3123-05	HV C	150PF	3KV	
C362		C91-3123-05	HV C	150PF	3KV	
C363		CK73FB1H103K	CHIP C	0.010UF	K	
C364		CK73FB1H103K	CHIP C	0.010UF	K	
C365		CK73FB1H103K	CHIP C	0.010UF	K	
C366		CK73FB1H103K	CHIP C	0.010UF	K	
C367		CK73FB1H103K	CHIP C	0.010UF	K	
C368		CK73FB1H103K	CHIP C	0.010UF	K	
C369		C91-3123-05	HV C	150PF	3KV	
C370		C91-3123-05	HV C	150PF	3KV	
C371		CK73FB1H103K	CHIP C	0.010UF	K	
C372		CK73FB1H103K	CHIP C	0.010UF	K	
C373		CK73FB1H103K	CHIP C	0.010UF	K	
C374		CK73FB1H103K	CHIP C	0.010UF	K	
C375		CK73FB1H103K	CHIP C	0.010UF	K	
C376		CK73FB1H103K	CHIP C	0.010UF	K	
C377		C91-3123-05	HV C	150PF	3KV	
C378		C91-3123-05	HV C	150PF	3KV	
C379		C91-3123-05	HV C	150PF	3KV	
C380		C91-3123-05	HV C	150PF	3KV	
C381		CK73FB1H103K	CHIP C	0.010UF	K	
C382		CK73FB1H103K	CHIP C	0.010UF	K	
C383		CK73FB1H103K	CHIP C	0.010UF	K	
C384		CK73FB1H103K	CHIP C	0.010UF	K	
C385		CK73FB1H103K	CHIP C	0.010UF	K	
C386		CK73FB1H103K	CHIP C	0.010UF	K	

PARTS LIST

FINAL UNIT (X45-398X-XX)

Ref.No	Adderss	Parts No.	Description			Desti-nation
C501		CK73FB1H103K	CHIP C	0.010UF	K	
C502		CK73FB1H102K	CHIP C	1000PF	K	
C503		CK73FB1H102K	CHIP C	1000PF	K	
C504		CC73FCH1H101J	CHIP C	100PF	J	
C505		CC73FCH1H101J	CHIP C	100PF	J	
C506		CC73FCH1H101J	CHIP C	100PF	J	
C507		CK73FB1H102K	CHIP C	1000PF	K	
C508		CK73FB1H103K	CHIP C	0.010UF	K	
C510		CK73FB1H103K	CHIP C	0.010UF	K	
C511		CK73FB1H102K	CHIP C	1000PF	K	
C512		CK73FB1H102K	CHIP C	1000PF	K	
C513		CK73FB1H102K	CHIP C	1000PF	K	
C514		CK73FB1H102K	CHIP C	1000PF	K	
C515		CC73FCH1H221J	CHIP C	220PF	J	
C516		CK73FB1H102K	CHIP C	1000PF	K	
C517		CC73FCH1H221J	CHIP C	220PF	J	
C518		CK73GB1H102K	CHIP C	1000PF	K	
C519		CK73GB1H102K	CHIP C	1000PF	K	
C520		CK73FB1H103K	CHIP C	0.010UF	K	
C521		CC73FCH1H221J	CHIP C	220PF	J	
C523		CC73FCH1H221J	CHIP C	220PF	J	
C524		CC73FCH1H221J	CHIP C	220PF	J	
C525		CK73FB1H102K	CHIP C	1000PF	K	
C526		CK73FB1H102K	CHIP C	1000PF	K	
C527		CK73FB1H102K	CHIP C	1000PF	K	
C528		CK73GB1H102K	CHIP C	1000PF	K	
C529		CK73FB1H102K	CHIP C	1000PF	K	
C530		CK73GB1H102K	CHIP C	1000PF	K	
C531		CK73FB1E104K	CHIP C	0.10UF	K	
C532		CK73FB1H102K	CHIP C	1000PF	K	
C533		CK73FB1H102K	CHIP C	1000PF	K	
C534		CK73GB1H103K	CHIP C	0.010UF	K	
C535		CC73FCH1H101J	CHIP C	100PF	J	
C536		CC73FCH1H101J	CHIP C	100PF	J	
C537		CC73FCH1H101J	CHIP C	100PF	J	
C538		CK73FB1H103K	CHIP C	0.010UF	K	
C539		CK73FB1H103K	CHIP C	0.010UF	K	
C540		CC73FCH1H101J	CHIP C	100PF	J	
C541		CC73FCH1H101J	CHIP C	100PF	J	
C542		CC73FCH1H101J	CHIP C	100PF	J	
C543		CK73FB1H103K	CHIP C	0.010UF	K	
C544		CK73FB1H103K	CHIP C	0.010UF	K	
C545		CC73GCH1H221J	CHIP C	220PF	J	
C546		CC73GCH1H221J	CHIP C	220PF	J	
C547		C93-0564-05	CHIP C	22PF	J	
CN2		E04-0491-05	PIN SOCKET			
CN3		E40-6528-05	PIN ASSY			
CN4		E40-6526-05	PIN ASSY			
CN5		E40-6873-05	FLAT CABLE CONNECTOR			
CN6		E41-1682-05	PIN ASSY			
CN7		E41-1682-05	PIN ASSY			
CN8		E40-6525-05	PIN ASSY			
CN9		E40-6881-05	FLAT CABLE CONNECTOR			
CN10		E04-0491-05	PIN SOCKET			
CN11		E04-0491-05	PIN SOCKET			
CN21		J13-0410-05	FUSE HOLDER			
CN22		J13-0410-05	FUSE HOLDER			
CN51		E04-0489-05	PIN SOCKET			
CN52		E41-1682-05	PIN ASSY			
CN259		E23-1310-05	TEST TERMINAL			
CN260		E23-1310-05	TEST TERMINAL			
CN529		E23-1310-05	TEST TERMINAL			
D1		DAN202U	MULTIPLE DIODE			
D2		DAN202U	MULTIPLE DIODE			
D51		DSA301LA	DIODE			
D52		DSA301LA	DIODE			
D101		Z5W27V	SURGE ABSORBER			
D102		DAN202U	MULTIPLE DIODE			
D103		DAN202U	MULTIPLE DIODE			
D104		DAN202U	MULTIPLE DIODE			
D105		DAN202U	MULTIPLE DIODE			
D106		DAN202U	MULTIPLE DIODE			
D107		DAN202U	MULTIPLE DIODE			
D108		DAN202U	MULTIPLE DIODE			
D109		DAN202U	MULTIPLE DIODE			
D110		DAN202U	MULTIPLE DIODE			
D111		DZ2S160M	ZENER DIODE			
D251		RB706F-40	DIODE			
D252		RB706F-40	DIODE			
D253		RB480Y-90	DIODE			
D254		DAN202U	MULTIPLE DIODE			
D255		RB480Y-90	DIODE			
D256		DAN202U	MULTIPLE DIODE			
D257		DAN202U	MULTIPLE DIODE			
D258		KDZ5.1EV-P(Y)	ZENER DIODE			
D301		DAN202U	MULTIPLE DIODE			
D302		DAN202U	MULTIPLE DIODE			
D303		DAN202U	MULTIPLE DIODE			
D304		DAN202U	MULTIPLE DIODE			
D305		DAN202U	MULTIPLE DIODE			
D306		DAN202U	MULTIPLE DIODE			
D307		DAN202U	MULTIPLE DIODE			
D308		DAN202U	MULTIPLE DIODE			
D309		DAN202U	MULTIPLE DIODE			
D310		DAN202U	MULTIPLE DIODE			
D311		DAN202U	MULTIPLE DIODE			
D312		DAN202U	MULTIPLE DIODE			
D313		DAN202U	MULTIPLE DIODE			
D314		DAN202U	MULTIPLE DIODE			
D315		DAN202U	MULTIPLE DIODE			
D316		DAN202U	MULTIPLE DIODE			
D317		DAN202U	MULTIPLE DIODE			
D318		DAN202U	MULTIPLE DIODE			
D319		DAN202U	MULTIPLE DIODE			
D320		DAN202U	MULTIPLE DIODE			
D321		DAN202U	MULTIPLE DIODE			
D322		DAN202U	MULTIPLE DIODE			
D323		DAN202U	MULTIPLE DIODE			

PARTS LIST

FINAL UNIT (X45-398X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
D324		DAN202U	MULTIPLE DIODE	
D325		DAN202U	MULTIPLE DIODE	
D501		DAN202U	MULTIPLE DIODE	
D502		KDS123E-P	DIODE	
D503		KDS123E-P	DIODE	
F1		F53-0391-05	FUSE(UL/CSA)(10A)	
F2		F53-0401-05	FUSE(2A)	
F3		F53-0306-05	FUSE(UL/CSA)(5A)	
F4		F52-0038-05	FUSE(BLADE TYPE)(4A)	
IC1		TC74HC4094AFF	MOS-IC	
IC2		TC7SHU04F-F	MOS-IC	
IC3		TC7SHU04F-F	MOS-IC	
IC4		INA193AIDBVT	ANALOGUE IC	
IC5		TA75S393F-F	MOS-IC	
IC6		TC7WH74FU-F	MOS-IC	
IC7		TC74HC4094AFF	MOS-IC	
IC8		TC74HC4094AFF	MOS-IC	
IC9		TC74HC4094AFF	MOS-IC	
IC10		TC74HC4094AFF	MOS-IC	
K1		S51-1420-05	RELAY	
K2		S51-1420-05	RELAY	
K3		S76-0423-05	RELAY	
K4		S76-0423-05	RELAY	
K5		S76-0423-05	RELAY	
K6		S76-0423-05	RELAY	
K7		S76-0423-05	RELAY	
K8		S76-0423-05	RELAY	
K9		S76-0423-05	RELAY	
K10		S51-1420-05	RELAY	
K11		S76-0423-05	RELAY	
K12		S76-0423-05	RELAY	
K13		S76-0423-05	RELAY	
K14		S76-0423-05	RELAY	
K15		S76-0423-05	RELAY	
K16		S76-0423-05	RELAY	
K17		S51-1420-05	RELAY	
K18		S76-0423-05	RELAY	
K19		S76-0415-05	RELAY	
K20		S76-0415-05	RELAY	
K21		S76-0460-05	RELAY	
K22		S76-0460-05	RELAY	
K23		S76-0415-05	RELAY	
K24		S76-0460-05	RELAY	
K25		S76-0460-05	RELAY	
K26		S76-0415-05	RELAY	
K27		S76-0460-05	RELAY	
K28		S76-0460-05	RELAY	
K29		S76-0415-05	RELAY	
K30		S76-0460-05	RELAY	
K31		S76-0460-05	RELAY	
K32		S76-0415-05	RELAY	
K33		S76-0460-05	RELAY	
K34		S76-0460-05	RELAY	
K35		S76-0415-05	RELAY	
K36		S76-0460-05	RELAY	
K37		S76-0460-05	RELAY	
K38		S76-0415-05	RELAY	
K39		S76-0460-05	RELAY	
K40		S76-0460-05	RELAY	
K41		S76-0415-05	RELAY	
K42		S76-0460-05	RELAY	
K43		S76-0460-05	RELAY	
K44		S76-0424-05	RELAY	
K45		S76-0424-05	RELAY	
K46		S76-0402-05	RELAY	
L2		L92-0447-05	BEADS CORE	
L3		L92-0447-05	BEADS CORE	
L4		L33-1552-05	SMALL FIXED INDUCTOR	
L5		LR79F0ED27NG	CHIP INDUCTOR	
L6		L92-0641-05	FERRITE CORE	
L7		L92-0641-05	FERRITE CORE	
L8		L39-1434-25	TOROIDAL COIL	
L9		L39-1451-05	TOROIDAL COIL	
L10		L39-1569-05	TOROIDAL COIL	
L11		L34-4928-05	COIL	
L15		L39-1550-05	TOROIDAL COIL	
L16		L39-0421-04	COIL	
L17		L34-4925-15	AIR-CORE COIL	
L18		L39-1456-15	TOROIDAL COIL	
L19		L34-1282-05	AIR-CORE COIL	
L20		L34-4926-05	AIR-CORE COIL	
L21		L39-1259-15	TOROIDAL COIL	
L22		L39-1547-05	TOROIDAL COIL	
L23		L34-1282-05	AIR-CORE COIL	
L24		L39-1457-15	TOROIDAL COIL	
L25		L39-1457-15	TOROIDAL COIL	
L26		L39-1221-15	TOROIDAL COIL	
L27		L39-1519-15	TOROIDAL COIL	
L28		L39-1570-05	TOROIDAL COIL	
L29		L39-1549-05	TOROIDAL COIL	
L30		L39-1260-15	TOROIDAL COIL	
L31		L39-1546-05	TOROIDAL COIL	
L32		L39-1405-15	TOROIDAL COIL	
L33		L39-1457-15	TOROIDAL COIL	
L34		L39-1221-15	TOROIDAL COIL	
L35		L34-4925-15	AIR-CORE COIL	
L36		L34-1281-05	AIR-CORE COIL	
L37		L39-1456-15	TOROIDAL COIL	
L38		L34-4927-05	AIR-CORE COIL	
L39		L34-1231-15	AIR-CORE COIL	
L40		L39-0480-15	TOROIDAL COIL	
L41		L39-1442-05	TOROIDAL COIL	
L42		L39-1443-05	TOROIDAL COIL	
L43		L33-1554-05	CHOKE COIL	
L44		L39-1440-15	TOROIDAL COIL	
L45		L39-1440-15	TOROIDAL COIL	
L46		L34-4633-05	AIR-CORE COIL	
L47		L34-4630-05	AIR-CORE COIL	

PARTS LIST

FINAL UNIT (X45-398X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
L48		L34-4490-05	AIR-CORE COIL	
L49		L34-4490-05	AIR-CORE COIL	
L50		L34-4628-05	AIR-CORE COIL	
L51		L34-4490-05	AIR-CORE COIL	
L52		L34-4490-05	AIR-CORE COIL	
L53		L39-1568-05	TOROIDAL COIL	
L101		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L102		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L103		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L104		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L105		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L106		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L107		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L108		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L109		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L112		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L251		L33-0695-05	SMALL FIXED INDUCTOR	
L252		L41-1585-52	SMALL FIXED INDUCTOR(0.15UH)	
L254		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L255		LR79Q0CW222J	CHIP INDUCTOR	
L257		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L259		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L260		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L304		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L306		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L307		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L308		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L310		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L311		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L312		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L314		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L315		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L316		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L318		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L319		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L320		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L322		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L323		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L324		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L326		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L327		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L328		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L330		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L331		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L332		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L334		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L335		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L336		L41-4705-33	SMALL FIXED INDUCTOR(47UH)	
L501		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L502		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L503		L92-0641-05	FERRITE CORE	
L504		L92-0641-05	FERRITE CORE	
L505		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L506		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L507		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L508		L41-4785-52	SMALL FIXED INDUCTOR(0.47UH)	
L509		L34-4811-05	AIR-CORE COIL	
Q5		RRH140P03	FET	
Q101		2SC4617(R)	TRANSISTOR	
Q251		CPH3910	FET	
Q252		CPH3910	FET	
Q253		DTB143EK	DIGITAL TRANSISTOR	
Q254		2SC4617(R)	TRANSISTOR	
Q501		LTC023YEBFS8	TRANSISTOR	
Q502		LTC023YEBFS8	TRANSISTOR	
Q503		LTC023YEBFS8	TRANSISTOR	
Q504		LTC023YEBFS8	TRANSISTOR	
Q505		LTC023YEBFS8	TRANSISTOR	
Q506		LTC023YEBFS8	TRANSISTOR	
Q507		LTC023YEBFS8	TRANSISTOR	
Q508		LTC023YEBFS8	TRANSISTOR	
Q509		DTB143EK	DIGITAL TRANSISTOR	
Q510		DTB143EK	DIGITAL TRANSISTOR	
Q511		LTC023YEBFS8	TRANSISTOR	
Q513		LTC023YEBFS8	TRANSISTOR	
Q514		DTB143EK	DIGITAL TRANSISTOR	
Q515		LTC023YEBFS8	TRANSISTOR	
Q516		LTC023YEBFS8	TRANSISTOR	
Q517		LTC023YEBFS8	TRANSISTOR	
Q518		LTC023YEBFS8	TRANSISTOR	
Q519		LTC023YEBFS8	TRANSISTOR	
Q520		LTC023YEBFS8	TRANSISTOR	
Q521		LTC023YEBFS8	TRANSISTOR	
Q522		LTC023YEBFS8	TRANSISTOR	
Q523		LTC023YEBFS8	TRANSISTOR	
Q524		LTC023YEBFS8	TRANSISTOR	
Q525		SSM3K15AFS-F	FET	
Q526		SSM3K15AFS-F	FET	
Q527		LTC023YEBFS8	TRANSISTOR	
Q528		LTC023YEBFS8	TRANSISTOR	
Q529		LTC023YEBFS8	TRANSISTOR	
Q530		LTC023YEBFS8	TRANSISTOR	
Q531		LTC023YEBFS8	TRANSISTOR	
Q532		LTC023YEBFS8	TRANSISTOR	
Q533		LTC023YEBFS8	TRANSISTOR	
Q534		LTC023YEBFS8	TRANSISTOR	
Q535		LTC023YEBFS8	TRANSISTOR	
Q536		LTC023YEBFS8	TRANSISTOR	
Q537		LTC023YEBFS8	TRANSISTOR	
Q538		LTC023YEBFS8	TRANSISTOR	
Q539		LTC023YEBFS8	TRANSISTOR	
Q540		LTC023YEBFS8	TRANSISTOR	
Q541		LTC023YEBFS8	TRANSISTOR	
Q542		LTC023YEBFS8	TRANSISTOR	
Q543		LTC023YEBFS8	TRANSISTOR	
Q544		LTC023YEBFS8	TRANSISTOR	
R1		RK73EB2E101J	CHIP R 100 J 1/4W	

PARTS LIST

FINAL UNIT (X45-398X-XX)

Ref.No	Adderss	Parts No.	Description				Desti-nation
R2		RK73GB2A470J	CHIP R	47	J	1/10W	
R3		RK73GB2A121J	CHIP R	120	J	1/10W	
R4		RK73GB2A101J	CHIP R	100	J	1/10W	
R5		RK73GB2A681J	CHIP R	680	J	1/10W	
R6		RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R7		RK73GB2A100J	CHIP R	10	J	1/10W	
R8		R92-3625-05	RESISTOR				
R10		RK73FB2B000J	CHIP R	0.0	J	1/8W	
R11		RK73FB2B121J	CHIP R	120	J	1/8W	
R13		RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R14		RK73EB2E5R6J	CHIP R	5.6	J	1/4W	
R15		R92-3625-05	RESISTOR				
R16		R92-3625-05	RESISTOR				
R17		RS14DB3A470J	FL-PROOF RS	47	J	1W	
R18		RK73FB2B102J	CHIP R	1.0K	J	1/8W	
R19		RK73FB2B102J	CHIP R	1.0K	J	1/8W	
R20		RS14DB3A151J	FL-PROOF RS	150	J	1W	
R21		RS14DB3A151J	FL-PROOF RS	150	J	1W	
R22		RK73FB2B152J	CHIP R	1.5K	J	1/8W	
R23		RK73FB2B152J	CHIP R	1.5K	J	1/8W	
R24		RK73FB2B102J	CHIP R	1.0K	J	1/8W	
R25		RK73FB2B223J	CHIP R	22K	J	1/8W	
R26		RK73FB2B223J	CHIP R	22K	J	1/8W	
R27		RK73EB2E1R0J	CHIP R	1.0	J	1/4W	
R28		RK73EB2E1R0J	CHIP R	1.0	J	1/4W	
R29		RK73EB2E1R0J	CHIP R	1.0	J	1/4W	
R30		RK73EB2E1R0J	CHIP R	1.0	J	1/4W	
R31		RK73EB2E1R0J	CHIP R	1.0	J	1/4W	
R32		RK73EB2E1R0J	CHIP R	1.0	J	1/4W	
R33		RS14DB3D180J	FL-PROOF RS	18	J	2W	
R34		RS14DB3D180J	FL-PROOF RS	18	J	2W	
R35		RK73FB2B102J	CHIP R	1.0K	J	1/8W	
R36		RS14DB3A4R7J	FL-PROOF RS	4.7	J	1W	
R37		R92-3636-05	RESISTOR				
R38		R92-3636-05	RESISTOR				
R39		R92-3636-05	RESISTOR				
R50		R92-0150-05	JUMPER REST 0 OHM				
R51		R92-0150-05	JUMPER REST 0 OHM				
R55		RS14DB3D8R2J	FL-PROOF RS	8.2	J	2W	
R56		RS14DB3D470J	FL-PROOF RS	47	J	2W	
R60		RK73GB2A562J	CHIP R	5.6K	J	1/10W	
R61		RK73GB2A562J	CHIP R	5.6K	J	1/10W	
R101		RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R102		RK73GH2A152D	CHIP R	1.5K	D	1/10W	
R104		RK73GB2A103J	CHIP R	10K	J	1/10W	
R105		RK73GB2A103J	CHIP R	10K	J	1/10W	
R249		RK73GB2A224J	CHIP R	220K	J	1/10W	
R250		RK73GB2A224J	CHIP R	220K	J	1/10W	
R251		RK73FB2B103J	CHIP R	10K	J	1/8W	
R252		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R253		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R254		RK73FB2B101J	CHIP R	100	J	1/8W	
R255		RK73FB2B101J	CHIP R	100	J	1/8W	
R256		RK73FB2B100J	CHIP R	10	J	1/8W	

Ref.No	Adderss	Parts No.	Description				Desti-nation
R257		RK73GB2A104J	CHIP R	100K	J	1/10W	
R258		RK73GB2A104J	CHIP R	100K	J	1/10W	
R259		RK73GB2A103J	CHIP R	10K	J	1/10W	
R260		RK73GB2A103J	CHIP R	10K	J	1/10W	
R261		RK73GB2A471J	CHIP R	470	J	1/10W	
R262		RK73GB2A471J	CHIP R	470	J	1/10W	
R263		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R264		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R265		RK73RB2H330J	CHIP R	33	J	1/2W	
R266		RK73RB2H330J	CHIP R	33	J	1/2W	
R267		RK73GB2A105J	CHIP R	1.0M	J	1/10W	
R268		RK73GB2A105J	CHIP R	1.0M	J	1/10W	
R269		RK73FB2B000J	CHIP R	0.0	J	1/8W	
R270		RK73FB2B000J	CHIP R	0.0	J	1/8W	
R271		RK73FB2B000J	CHIP R	0.0	J	1/8W	
R272		RK73GB2A223J	CHIP R	22K	J	1/10W	
R273		R92-1316-05	CHIP R	39	J	1W	
R274		RK73GB2A103J	CHIP R	10K	J	1/10W	
R275		RK73GB2A103J	CHIP R	10K	J	1/10W	
R276		RK73FB2B101J	CHIP R	100	J	1/8W	
R277		RK73GB2A223J	CHIP R	22K	J	1/10W	
R278		RK73FB2B101J	CHIP R	100	J	1/8W	
R279		RK73FB2B101J	CHIP R	100	J	1/8W	
R280		RK73FB2B104J	CHIP R	100K	J	1/8W	
R281		RK73FB2B104J	CHIP R	100K	J	1/8W	
R282		RK73FB2B104J	CHIP R	100K	J	1/8W	
R283		RK73FB2B104J	CHIP R	100K	J	1/8W	
R284		RK73GB2A103J	CHIP R	10K	J	1/10W	
R285		RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R501		RK73FB2B101J	CHIP R	100	J	1/8W	
R502		RK73FB2B101J	CHIP R	100	J	1/8W	
R503		RK73FB2B101J	CHIP R	100	J	1/8W	
R504		RK73PB2H2R2J	CHIP R	2.2	J	1/2W	
R505		RK73PB2H2R2J	CHIP R	2.2	J	1/2W	
R506		RK73PB2H1R0J	CHIP R	1.0	J	1/2W	
R507		RK73PB2H1R0J	CHIP R	1.0	J	1/2W	
R508		RK73PB2H1R0J	CHIP R	1.0	J	1/2W	
R509		RK73PB2H2R2J	CHIP R	2.2	J	1/2W	
R510		RK73PB2H1R0J	CHIP R	1.0	J	1/2W	
R511		RK73PB2H1R0J	CHIP R	1.0	J	1/2W	
R512		RK73PB2H1R0J	CHIP R	1.0	J	1/2W	
R513		RK73GB2A101J	CHIP R	100	J	1/10W	
R514		RK73GB2A101J	CHIP R	100	J	1/10W	
R515		RK73GB2A101J	CHIP R	100	J	1/10W	
R518		RK73GB2A101J	CHIP R	100	J	1/10W	
R519		RK73GB2A101J	CHIP R	100	J	1/10W	
R520		RK73PB2H2R2J	CHIP R	2.2	J	1/2W	
R521		RK73GB2A223J	CHIP R	22K	J	1/10W	
R522		RK73GB2A103J	CHIP R	10K	J	1/10W	
R523		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R524		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R525		RK73FB2B101J	CHIP R	100	J	1/8W	
R526		RK73FB2B101J	CHIP R	100	J	1/8W	
R527		RK73FB2B101J	CHIP R	100	J	1/8W	
R528		RK73GB2A104G	CHIP R	100K	G	1/10W	

PARTS LIST

FINAL UNIT (X45-398X-XX)
CONTROL UNIT (XC1-021X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
R529		RK73GB2A103J	CHIP R 10K J 1/10W	
R530		RK73FB2B101J	CHIP R 100 J 1/8W	
R531		RK73FB2B101J	CHIP R 100 J 1/8W	
R532		RK73FB2B101J	CHIP R 100 J 1/8W	
R533		RK73EB2E000J	CHIP R 0.0 J 1/4W	
R534		RK73EB2E000J	CHIP R 0.0 J 1/4W	
R535		RK73EB2E000J	CHIP R 0.0 J 1/4W	
R536		RK73EB2E000J	CHIP R 0.0 J 1/4W	
R540		RK73GB2A221J	CHIP R 220 J 1/10W	
R541		RK73GB2A221J	CHIP R 220 J 1/10W	
R542		RK73FB2B101J	CHIP R 100 J 1/8W	
R902		RK73GB2A000J	CHIP R 0.0 J 1/10W	K
R903		RK73GB2A000J	CHIP R 0.0 J 1/10W	E
TC1		C05-0370-05	CERAMIC TRIMMER CAPACITOR(20P)	
TH1		NCP18XH103F0S	NEGATIVE TEMP THERMISTOR	
VR1		R12-6736-05	TRIMMING POT.(2.2K)	
VR2		R12-6736-05	TRIMMING POT.(2.2K)	
VR3		R12-6740-05	TRIMMING POT.(10K)	
VR4		R12-6740-05	TRIMMING POT.(10K)	
VR5		R12-6742-05	TRIMMING POT.(22K)	
W1		E37-1480-05	LEAD WIRE WITH TERMINAL	
W2		E37-1508-15	LEAD WIRE WITH MINIPIN PLUG	
W3		E37-1479-15	LEAD WIRE WITH MINIPIN PLUG	
W6		E37-1486-05	LEAD WIRE WITH CONNECTOR	

Ref.No	Adderss	Parts No.	Description	Desti-nation
			CONTROL UNIT (XC1-021X-XX)	
		E18-0254-05	SOCKET	
202		F20-3401-04	INSULATING SHEET	
C1		CK73GB1H104K	CHIP C 0.10UF K	
C2		CK73EB1E225K	CHIP C 2.2UF K	
C3		CD04BQ1V101M	ALUMINIUM ELECTRO CAPACITOR	
C4		CD04BQ1V101M	ALUMINIUM ELECTRO CAPACITOR	
C5		CK73EB1E225K	CHIP C 2.2UF K	
C6		CK73EB1E225K	CHIP C 2.2UF K	
C7		CK73EB1E225K	CHIP C 2.2UF K	
C8		CK73GB1H102K	CHIP C 1000PF K	
C9		CK73GB1A474K	CHIP C 0.47UF K	
C10		CK73GB1C225K	CHIP C 2.2UF K	
C11		CC73GCH1H101J	CHIP C 100PF J	
C12		CK73EB1E225K	CHIP C 2.2UF K	
C13		CC73GCH1H471J	CHIP C 470PF J	
C14		CK73EB1E106K	CHIP C 10UF K	
C15		CK73EB1E106K	CHIP C 10UF K	
C16		CK73EB1E106K	CHIP C 10UF K	
C17		CK73GB1H104K	CHIP C 0.10UF K	
C18		CD04BQ1V101M	ALUMINIUM ELECTRO CAPACITOR	
C19		CD04BQ1V101M	ALUMINIUM ELECTRO CAPACITOR	
C20		CD04BQ1V101M	ALUMINIUM ELECTRO CAPACITOR	
C21		CD04BQ1V101M	ALUMINIUM ELECTRO CAPACITOR	
C22		CK73EB1E225K	CHIP C 2.2UF K	
C23		CK73EB1E225K	CHIP C 2.2UF K	

Ref.No	Adderss	Parts No.	Description	Desti-nation
C24		CK73EB1E225K	CHIP C 2.2UF K	
C25		CK73GB1H102K	CHIP C 1000PF K	
C26		CK73GB1A474K	CHIP C 0.47UF K	
C27		CK73GB1C225K	CHIP C 2.2UF K	
C28		CC73GCH1H101J	CHIP C 100PF J	
C29		C93-1875-05	CHIP C 22UF J	
C30		CC73GCH1H471J	CHIP C 470PF J	
C31		CK73EB1E106K	CHIP C 10UF K	
C32		CK73EB1E106K	CHIP C 10UF K	
C33		CK73EB1E106K	CHIP C 10UF K	
C34		CK73GB1H104K	CHIP C 0.10UF K	
C35		CD04BQ1V101M	ALUMINIUM ELECTRO CAPACITOR	
C36		CD04BQ1V101M	ALUMINIUM ELECTRO CAPACITOR	
C37		CK73GB1H103K	CHIP C 0.010UF K	
C38		CK73GB1E105K	CHIP C 1.0UF K	
C39		CK73EB1A106K	CHIP C 10UF K	
C41		CK73GB1H104K	CHIP C 0.10UF K	
C42		CK73GB1E105K	CHIP C 1.0UF K	
C43		CK73GB1H104K	CHIP C 0.10UF K	
C44		C92-0889-05	ELECTRO 330UF 6.3WV	
C45		CK73GB1H104K	CHIP C 0.10UF K	
C46		CK73GB1E105K	CHIP C 1.0UF K	
C47		CK73GB1H104K	CHIP C 0.10UF K	
C48		CE32CL1C470M	CHIP EL 47UF 16WV	
C49		CK73GB1H104K	CHIP C 0.10UF K	
C50		CK73GB1H102K	CHIP C 1000PF K	
C51		CK73GB1H104K	CHIP C 0.10UF K	
C52		CK73EB1E106K	CHIP C 10UF K	
C53		CK73EB1E106K	CHIP C 10UF K	
C54		CK73EB1E106K	CHIP C 10UF K	
C55		CK73GB1E105K	CHIP C 1.0UF K	
C56		CK73GB1E105K	CHIP C 1.0UF K	
C57		CK73GB1E105K	CHIP C 1.0UF K	
C58		CK73GB1E105K	CHIP C 1.0UF K	
C59		CK73GB1E105K	CHIP C 1.0UF K	
C60		CK73GB1E105K	CHIP C 1.0UF K	
C61		CK73GB1E105K	CHIP C 1.0UF K	
C62		CK73GB1E105K	CHIP C 1.0UF K	
C63		CK73GB1H104K	CHIP C 0.10UF K	
C64		CK73GB1H104K	CHIP C 0.10UF K	
C65		CK73GB1E105K	CHIP C 1.0UF K	
C66		CK73GB1H102K	CHIP C 1000PF K	
C67		CK73GB1H102K	CHIP C 1000PF K	
C68		CK73GB1H102K	CHIP C 1000PF K	
C69		CK73GB1H102K	CHIP C 1000PF K	
C70		CK73GB1A105K	CHIP C 1.0UF K	
C71		CK73GB1H102K	CHIP C 1000PF K	
C72		CK73GB1H102K	CHIP C 1000PF K	
C73		CK73GB1H102K	CHIP C 1000PF K	
C74		CK73GB1H102K	CHIP C 1000PF K	
C75		CK73GB1H102K	CHIP C 1000PF K	
C76		CK73GB1H102K	CHIP C 1000PF K	
C77		CK73GB1H102K	CHIP C 1000PF K	
C78		CK73GB1E105K	CHIP C 1.0UF K	
C79		CK73GB1H102K	CHIP C 1000PF K	

PARTS LIST

CONTROL UNIT (XC1-021X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
C80		CK73FB0J106K	CHIP C 10UF K	
C81		CK73GB1H102K	CHIP C 1000PF K	
C82		CK73FB0J106K	CHIP C 10UF K	
C83		CK73GB1E105K	CHIP C 1.0UF K	
C84		CK73GB1H102K	CHIP C 1000PF K	
C85		CK73GB1H102K	CHIP C 1000PF K	
C86		CK73GB1H102K	CHIP C 1000PF K	
C87		CK73GB1E105K	CHIP C 1.0UF K	
C88		CK73GB1H102K	CHIP C 1000PF K	
C90		CK73GB1H102K	CHIP C 1000PF K	
C91		CK73GB1H102K	CHIP C 1000PF K	
C92		CK73GB1H102K	CHIP C 1000PF K	
C93		CK73GB1H102K	CHIP C 1000PF K	
C96		CD04AZ1E471M	ELECTRO 470UF 25WV	
C97		CD04AZ1E471M	ELECTRO 470UF 25WV	
C98		CK73FB1E104K	CHIP C 0.10UF K	
C99		CK73FB1E104K	CHIP C 0.10UF K	
C100		CK73GB1H223K	CHIP C 0.022UF K	
C102		CK73GB1H104K	CHIP C 0.10UF K	
C104		CK73GB1H103K	CHIP C 0.010UF K	
C106		CK73GB1H223K	CHIP C 0.022UF K	
C107		CK73GB1H104K	CHIP C 0.10UF K	
C109		CK73GB1C225K	CHIP C 2.2UF K	
C110		CK73GB1H182K	CHIP C 1800PF K	
C111		CK73GB1H104K	CHIP C 0.10UF K	
C112		CK73GB1H104K	CHIP C 0.10UF K	
C113		CK73GB1H152K	CHIP C 1500PF K	
C114		CK73GB1C225K	CHIP C 2.2UF K	
C115		CK73GB1C225K	CHIP C 2.2UF K	
C116		CK73GB1H103K	CHIP C 0.010UF K	
C117		CK73GB1H222K	CHIP C 2200PF K	
C118		CK73GB1H222K	CHIP C 2200PF K	
C119		CK73GB1H104K	CHIP C 0.10UF K	
C120		CK73GB1H104K	CHIP C 0.10UF K	
C121		CC73GCH1H471J	CHIP C 470PF J	
C122		CC73GCH1H471J	CHIP C 470PF J	
C123		CK73GB1H103K	CHIP C 0.010UF K	
C126		CK73FB0J106K	CHIP C 10UF K	
C127		CK73GB1H104K	CHIP C 0.10UF K	
C128		CK73GB1H122K	CHIP C 1200PF K	
C129		CK73GB1H104K	CHIP C 0.10UF K	
C130		CC73GCH1H560J	CHIP C 56PF J	
C131		CK73FB0J106K	CHIP C 10UF K	
C132		CK73FB0J106K	CHIP C 10UF K	
C133		CK73GB1H103K	CHIP C 0.010UF K	
C134		CC73GCH1H821J	CHIP C 820PF J	
C135		CC73GCH1H821J	CHIP C 820PF J	
C136		CK73GB1H104K	CHIP C 0.10UF K	
C137		CK73GB1H104K	CHIP C 0.10UF K	
C138		CC73GCH1H121J	CHIP C 120PF J	
C139		CC73GCH1H121J	CHIP C 120PF J	
C140		CK73GB1H103K	CHIP C 0.010UF K	
C145		CK73GB1H104K	CHIP C 0.10UF K	
C146		CK73FB0J106K	CHIP C 10UF K	
C147		CK73GB1H104K	CHIP C 0.10UF K	
C148		CK73FB0J106K	CHIP C 10UF K	
C149		CC73GCH1H470J	CHIP C 47PF J	
C150		CK73GB1H222K	CHIP C 2200PF K	
C151		CK73GB1C224K	CHIP C 0.22UF K	
C152		CK73GB1H104K	CHIP C 0.10UF K	
C153		CK73GB1H104K	CHIP C 0.10UF K	
C154		CK73FB0J106K	CHIP C 10UF K	
C155		CK73FB0J106K	CHIP C 10UF K	
C156		CD04AZ1E221M	ELECTRO 220UF 25WV	
C157		CD04AZ1E471M	ELECTRO 470UF 25WV	
C158		C90-4155-05	ELECTRO 1000UF 16WV	
C159		CK73GB1H104K	CHIP C 0.10UF K	
C160		CE32CL1H4R7M	CHIP EL 4.7UF 50WV	
C161		CK73GB1H473K	CHIP C 0.047UF K	
C162		CK73GB1E105K	CHIP C 1.0UF K	
C163		CK73GB1H182K	CHIP C 1800PF K	
C164		CK73GB1H103K	CHIP C 0.010UF K	
C166		CK73GB1C225K	CHIP C 2.2UF K	
C167		CK73GB1H222K	CHIP C 2200PF K	
C168		CK73GB1H122K	CHIP C 1200PF K	
C169		CK73GB1H104K	CHIP C 0.10UF K	
C170		CK73GB1H104K	CHIP C 0.10UF K	
C171		CC73GCH1H331J	CHIP C 330PF J	
C172		CC73GCH1H470J	CHIP C 47PF J	
C173		CK73GB1C225K	CHIP C 2.2UF K	
C174		CK73GB1E105K	CHIP C 1.0UF K	
C175		CC73GCH1H331J	CHIP C 330PF J	
C176		CC73GCH1H101J	CHIP C 100PF J	
C177		CK73GB1H103K	CHIP C 0.010UF K	
C178		CK73GB1H103K	CHIP C 0.010UF K	
C179		CK73GB1H104K	CHIP C 0.10UF K	
C180		CK73GB1H104K	CHIP C 0.10UF K	
C181		CK73GB1H222K	CHIP C 2200PF K	
C182		CC73GCH1H681J	CHIP C 680PF J	
C183		CK73GB1C225K	CHIP C 2.2UF K	
C184		CK73GB1E105K	CHIP C 1.0UF K	
C185		CK73GB1H103K	CHIP C 0.010UF K	
C186		CC73GCH1H221J	CHIP C 220PF J	
C187		CC73GCH1H681J	CHIP C 680PF J	
C188		CC73GCH1H680J	CHIP C 68PF J	
C189		CC73GCH1H101J	CHIP C 100PF J	
C190		CK73GB1H152K	CHIP C 1500PF K	
C191		CC73GCH1H331J	CHIP C 330PF J	
C192		CK73GB1H104K	CHIP C 0.10UF K	
C193		CK73FB0J106K	CHIP C 10UF K	
C196		CK73GB1H102K	CHIP C 1000PF K	
C197		CK73GB1C225K	CHIP C 2.2UF K	
C198		CK73GB1A105K	CHIP C 1.0UF K	
C199		CK73GB1C225K	CHIP C 2.2UF K	
C200		CK73GB1C225K	CHIP C 2.2UF K	
C201		CK73GB1H332K	CHIP C 3300PF K	
C202		CK73GB1H104K	CHIP C 0.10UF K	
C203		CC73GCH1H331J	CHIP C 330PF J	
C204		CK73GB1C225K	CHIP C 2.2UF K	
C205		CC73GCH1H331J	CHIP C 330PF J	

PARTS LIST

CONTROL UNIT (XC1-021X-XX)

Ref.No	Adderss	Parts No.	Description			Desti-nation
C206		CK73GB1H104K	CHIP C	0.10UF	K	
C207		CK73GB1H103K	CHIP C	0.010UF	K	
C208		CK73GB1H332K	CHIP C	3300PF	K	
C209		CK73GB1C225K	CHIP C	2.2UF	K	
C210		CK73GB1E105K	CHIP C	1.0UF	K	
C211		CK73GB1H222K	CHIP C	2200PF	K	
C212		CK73GB1H104K	CHIP C	0.10UF	K	
C213		CC73GCH1H471J	CHIP C	470PF	J	
C214		CK73GB1E105K	CHIP C	1.0UF	K	
C215		CC73GCH1H471J	CHIP C	470PF	J	
C216		CK73GB1H104K	CHIP C	0.10UF	K	
C217		CK73GB1H103K	CHIP C	0.010UF	K	
C218		CK73GB1H222K	CHIP C	2200PF	K	
C219		CK73GB1E105K	CHIP C	1.0UF	K	
C220		CK73FB0J106K	CHIP C	10UF	K	
C221		CK73GB1H104K	CHIP C	0.10UF	K	
C222		CK73FB0J106K	CHIP C	10UF	K	
C225		CK73GB1E105K	CHIP C	1.0UF	K	
C226		CC73GCH1H821J	CHIP C	820PF	J	
C227		CK73GB1H104K	CHIP C	0.10UF	K	
C228		CC73GCH1H151J	CHIP C	150PF	J	
C229		CK73GB1E105K	CHIP C	1.0UF	K	
C230		CC73GCH1H151J	CHIP C	150PF	J	
C231		CK73GB1H104K	CHIP C	0.10UF	K	
C232		CK73GB1H103K	CHIP C	0.010UF	K	
C233		CC73GCH1H821J	CHIP C	820PF	J	
C234		CK73GB1E105K	CHIP C	1.0UF	K	
C235		CK73GB1H103K	CHIP C	0.010UF	K	
C239		CK73GB1H102K	CHIP C	1000PF	K	
C240		CK73GB1H104K	CHIP C	0.10UF	K	
C241		CK73FB0J106K	CHIP C	10UF	K	
C242		CK73FB0J106K	CHIP C	10UF	K	
C243		CK73FB0J106K	CHIP C	10UF	K	
C244		CK73GB1H104K	CHIP C	0.10UF	K	
C247		CK73GB1H104K	CHIP C	0.10UF	K	
C248		CK73FB0J106K	CHIP C	10UF	K	
C249		CK73GB1H222K	CHIP C	2200PF	K	
C250		CK73GB1E105K	CHIP C	1.0UF	K	
C251		CC73GCH1H331J	CHIP C	330PF	J	
C252		CK73GB1H103K	CHIP C	0.010UF	K	
C253		CK73GB1H103K	CHIP C	0.010UF	K	
C254		CK73GB1E105K	CHIP C	1.0UF	K	
C255		CK73GB1H222K	CHIP C	2200PF	K	
C256		CK73GB1H103K	CHIP C	0.010UF	K	
C257		CK73GB1H104K	CHIP C	0.10UF	K	
C258		CC73GCH1H471J	CHIP C	470PF	J	
C259		CK73GB1E105K	CHIP C	1.0UF	K	
C260		CC73GCH1H471J	CHIP C	470PF	J	
C261		CK73GB1H104K	CHIP C	0.10UF	K	
C262		CK73GB1H222K	CHIP C	2200PF	K	
C263		CK73GB1E105K	CHIP C	1.0UF	K	
C264		CK73GB1E105K	CHIP C	1.0UF	K	
C265		CK73GB1H222K	CHIP C	2200PF	K	
C266		CK73GB1H103K	CHIP C	0.010UF	K	
C267		CK73GB1H104K	CHIP C	0.10UF	K	
C268		CC73GCH1H471J	CHIP C	470PF	J	

Ref.No	Adderss	Parts No.	Description			Desti-nation
C269		CK73GB1E105K	CHIP C	1.0UF	K	
C270		CC73GCH1H471J	CHIP C	470PF	J	
C271		CK73GB1H104K	CHIP C	0.10UF	K	
C272		CK73GB1H222K	CHIP C	2200PF	K	
C273		CK73GB1E105K	CHIP C	1.0UF	K	
C274		CK73GB1H104K	CHIP C	0.10UF	K	
C275		CK73FB0J106K	CHIP C	10UF	K	
C276		CK73GB1H104K	CHIP C	0.10UF	K	
C277		CK73FB0J106K	CHIP C	10UF	K	
C278		CK73GB1H104K	CHIP C	0.10UF	K	
C279		CK73FB0J106K	CHIP C	10UF	K	
C280		CK73GB1H104K	CHIP C	0.10UF	K	
C281		CK73FB0J106K	CHIP C	10UF	K	
C283		CK73GB1H104K	CHIP C	0.10UF	K	
C285		CK73GB1H104K	CHIP C	0.10UF	K	
C286		CK73EB1A106K	CHIP C	10UF	K	
C287		C93-1875-05	CHIP C	22UF	J	
C289		CK73FB0J106K	CHIP C	10UF	K	
C290		CK73GB1E105K	CHIP C	1.0UF	K	
C291		CK73GB1E105K	CHIP C	1.0UF	K	
C292		CK73FB0J106K	CHIP C	10UF	K	
C293		CK73GB1H103K	CHIP C	0.010UF	K	
C295		CE32BM1C101M	CHIP EL	100UF	16WV	
C297		CD04BQ1C471M	ALUMINIUM ELECTRO CAPACITOR			
C299		CK73GB1H102K	CHIP C	1000PF	K	
C300		CK73GB1H102K	CHIP C	1000PF	K	
C301		CD04BQ1C471M	ALUMINIUM ELECTRO CAPACITOR			
C302		CC73GCH1H101J	CHIP C	100PF	J	
C303		CC73GCH1H101J	CHIP C	100PF	J	
C304		CC73GCH1H101J	CHIP C	100PF	J	
C305		C93-0912-05	CHIP C	100UF	M	
C306		CK73GB1H104K	CHIP C	0.10UF	K	
C307		CK73GB1H104K	CHIP C	0.10UF	K	
C308		CK73GB1H104K	CHIP C	0.10UF	K	
C310		CK73GB1H104K	CHIP C	0.10UF	K	
C311		CK73GB1H104K	CHIP C	0.10UF	K	
C312		CK73GB1H104K	CHIP C	0.10UF	K	
C313		CK73GB1H104K	CHIP C	0.10UF	K	
C314		CC73GCH1H101J	CHIP C	100PF	J	
C315		CC73GCH1H101J	CHIP C	100PF	J	
C316		CK73GB1H104K	CHIP C	0.10UF	K	
C317		CK73GB1H104K	CHIP C	0.10UF	K	
C318		CK73GB1H104K	CHIP C	0.10UF	K	
C319		CK73GB1H104K	CHIP C	0.10UF	K	
C320		CK73GB1H102K	CHIP C	1000PF	K	
C321		CK73GB1H104K	CHIP C	0.10UF	K	
C322		CK73GB1H104K	CHIP C	0.10UF	K	
C323		CK73GB1H104K	CHIP C	0.10UF	K	
C324		CK73GB1H104K	CHIP C	0.10UF	K	
C325		CC73GCH1H471J	CHIP C	470PF	J	
C326		CC73GCH1H050B	CHIP C	5.0PF	B	
C327		CK73GB1H104K	CHIP C	0.10UF	K	
C328		CC73GCH1H050B	CHIP C	5.0PF	B	
C329		CC73GCH1H471J	CHIP C	470PF	J	
C330		CK73GB1H104K	CHIP C	0.10UF	K	

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Ref.No	Adderss	Parts No.	Description	Desti-nation
C331		CK73GB1H104K	CHIP C 0.10UF K	
C332		CK73GB1H104K	CHIP C 0.10UF K	
C333		CK73GB1H104K	CHIP C 0.10UF K	
C334		CK73GB1H104K	CHIP C 0.10UF K	
C335		CK73GB1H104K	CHIP C 0.10UF K	
C336		CK73GB1H104K	CHIP C 0.10UF K	
C337		CK73GB1H104K	CHIP C 0.10UF K	
C338		CK73GB1H104K	CHIP C 0.10UF K	
C339		CK73GB1H104K	CHIP C 0.10UF K	
C340		CK73GB1H104K	CHIP C 0.10UF K	
C341		CK73GB1H104K	CHIP C 0.10UF K	
C342		CK73GB1H104K	CHIP C 0.10UF K	
C343		CK73GB1H104K	CHIP C 0.10UF K	
C344		CK73GB1H104K	CHIP C 0.10UF K	
C345		CK73GB1H102K	CHIP C 1000PF K	
C346		CK73GB1H102K	CHIP C 1000PF K	
C347		CK73GB1H104K	CHIP C 0.10UF K	
C348		CC73GCH1H030B	CHIP C 3.0PF B	
C349		CC73GCH1H030B	CHIP C 3.0PF B	
C350		CK73GB1E105K	CHIP C 1.0UF K	
C351		CK73GB1H102K	CHIP C 1000PF K	
C352		CK73GB1H104K	CHIP C 0.10UF K	
C353		CK73GB1H104K	CHIP C 0.10UF K	
C354		CK73GB1H104K	CHIP C 0.10UF K	
C355		CK73GB1H104K	CHIP C 0.10UF K	
C356		CK73GB1H104K	CHIP C 0.10UF K	
C357		CK73GB1H104K	CHIP C 0.10UF K	
C358		CK73GB1H104K	CHIP C 0.10UF K	
C359		CK73GB1H104K	CHIP C 0.10UF K	
C360		CK73GB1H104K	CHIP C 0.10UF K	
C361		CK73GB1H104K	CHIP C 0.10UF K	
C362		CK73GB1H104K	CHIP C 0.10UF K	
C363		CK73GB1E105K	CHIP C 1.0UF K	
C364		CK73GB1H104K	CHIP C 0.10UF K	
C365		CK73GB1E105K	CHIP C 1.0UF K	
C366		CK73GB1E105K	CHIP C 1.0UF K	
C367		CK73GB1H102K	CHIP C 1000PF K	
C368		CK73GB1H102K	CHIP C 1000PF K	
C371		CK73GB1H102K	CHIP C 1000PF K	
C373		CK73GB1H102K	CHIP C 1000PF K	
C375		CK73GB1H102K	CHIP C 1000PF K	
C377		CK73GB1H102K	CHIP C 1000PF K	
C379		CC73GCH1H331J	CHIP C 330PF J	
C380		CC73GCH1H331J	CHIP C 330PF J	
C381		CC73GCH1H101J	CHIP C 100PF J	
C382		CC73GCH1H101J	CHIP C 100PF J	
C385		CK73GB1H102K	CHIP C 1000PF K	
C386		CK73GB1H222K	CHIP C 2200PF K	
C387		CK73GB1H222K	CHIP C 2200PF K	
C388		CK73GB1H222K	CHIP C 2200PF K	
C389		CK73GB1H102K	CHIP C 1000PF K	
C390		CK73GB1H102K	CHIP C 1000PF K	
C391		CK73GB1H102K	CHIP C 1000PF K	
C392		CK73GB1H222K	CHIP C 2200PF K	
C393		CK73GB1H102K	CHIP C 1000PF K	

Ref.No	Adderss	Parts No.	Description	Desti-nation
C394		CK73GB1H102K	CHIP C 1000PF K	
C395		CK73GB1H102K	CHIP C 1000PF K	
C396		CK73GB1H222K	CHIP C 2200PF K	
C397		CK73GB1H102K	CHIP C 1000PF K	
C399		CK73GB1H102K	CHIP C 1000PF K	
C400		CK73GB1H222K	CHIP C 2200PF K	
C402		CK73GB1H102K	CHIP C 1000PF K	
C403		CK73GB1H222K	CHIP C 2200PF K	
C404		CK73GB1H102K	CHIP C 1000PF K	
C405		CK73GB1H102K	CHIP C 1000PF K	
C406		CK73GB1H102K	CHIP C 1000PF K	
C407		CK73GB1H222K	CHIP C 2200PF K	
C408		CK73GB1H102K	CHIP C 1000PF K	
C409		CK73GB1H222K	CHIP C 2200PF K	
C416		CK73GB1H102K	CHIP C 1000PF K	
C417		CK73GB1H102K	CHIP C 1000PF K	
C418		CK73GB1H222K	CHIP C 2200PF K	
C419		CK73GB1H102K	CHIP C 1000PF K	
C420		CK73GB1H102K	CHIP C 1000PF K	
C421		CK73GB1H102K	CHIP C 1000PF K	
C422		CK73GB1H102K	CHIP C 1000PF K	
C423		CK73GB1H222K	CHIP C 2200PF K	
C424		CK73GB1H222K	CHIP C 2200PF K	
C425		CK73GB1H102K	CHIP C 1000PF K	
C426		CK73GB1H222K	CHIP C 2200PF K	
C427		CK73GB1E105K	CHIP C 1.0UF K	
C428		CK73GB1H102K	CHIP C 1000PF K	
C429		CK73GB1E105K	CHIP C 1.0UF K	
C430		CK73GB1H102K	CHIP C 1000PF K	
C437		CK73GB1H102K	CHIP C 1000PF K	
C439		CK73GB1H102K	CHIP C 1000PF K	
C441		CK73GB1H102K	CHIP C 1000PF K	
C445		CK73GB1H102K	CHIP C 1000PF K	
C450		CK73GB1H102K	CHIP C 1000PF K	
C453		CK73GB1H102K	CHIP C 1000PF K	
C455		CK73GB1H102K	CHIP C 1000PF K	
C457		CK73GB1H102K	CHIP C 1000PF K	
C460		CK73GB1H102K	CHIP C 1000PF K	
C465		CK73GB1E105K	CHIP C 1.0UF K	
C466		CK73GB1H102K	CHIP C 1000PF K	
C467		CK73GB1E105K	CHIP C 1.0UF K	
C468		CK73GB1H102K	CHIP C 1000PF K	
C469		CK73GB1E105K	CHIP C 1.0UF K	
C470		CK73GB1H102K	CHIP C 1000PF K	
C471		CK73GB1H104K	CHIP C 0.10UF K	
C473		CK73GB1E105K	CHIP C 1.0UF K	
C474		CK73GB1H102K	CHIP C 1000PF K	
C475		CK73GB1H102K	CHIP C 1000PF K	
C483		CK73GB1H104K	CHIP C 0.10UF K	
C486		CK73GB1H104K	CHIP C 0.10UF K	
C487		CK73GB1H104K	CHIP C 0.10UF K	
C488		CK73GB1H104K	CHIP C 0.10UF K	
C489		CK73GB1E105K	CHIP C 1.0UF K	
C490		C93-0912-05	CHIP C 100UF M	
C491		CK73GB1H104K	CHIP C 0.10UF K	

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Ref.No	Adderss	Parts No.	Description			Desti-nation
C492		CK73GB1H104K	CHIP C	0.10UF	K	
C493		CK73GB1H104K	CHIP C	0.10UF	K	
C494		CK73GB1H102K	CHIP C	1000PF	K	
C495		CK73EB1A106K	CHIP C	10UF	K	
C496		CK73GB1H102K	CHIP C	1000PF	K	
C501		CK73GB1H102K	CHIP C	1000PF	K	
C505		CC73GCH1H470J	CHIP C	47PF	J	
C506		CC73GCH1H101J	CHIP C	100PF	J	
C507		CC73GCH1H101J	CHIP C	100PF	J	
C508		CK73GB1H102K	CHIP C	1000PF	K	
C509		CK73GB1H102K	CHIP C	1000PF	K	
C510		CK73GB1H102K	CHIP C	1000PF	K	
C511		CK73GB1H102K	CHIP C	1000PF	K	
C512		CK73GB1H102K	CHIP C	1000PF	K	
C513		CK73GB1H102K	CHIP C	1000PF	K	
C514		CK73GB1H102K	CHIP C	1000PF	K	
C515		CK73GB1H102K	CHIP C	1000PF	K	
C516		CK73GB1H102K	CHIP C	1000PF	K	
C517		CK73GB1H102K	CHIP C	1000PF	K	
C518		CK73GB1H102K	CHIP C	1000PF	K	
C519		CK73GB1H102K	CHIP C	1000PF	K	
C520		CK73GB1H102K	CHIP C	1000PF	K	
C521		CK73GB1H102K	CHIP C	1000PF	K	
C523		CK73GB1H102K	CHIP C	1000PF	K	
C524		CK73GB1H102K	CHIP C	1000PF	K	
C525		CK73GB1H102K	CHIP C	1000PF	K	
C526		CK73GB1H102K	CHIP C	1000PF	K	
C527		CK73GB1H102K	CHIP C	1000PF	K	
C528		CK73GB1H102K	CHIP C	1000PF	K	
C529		CK73GB1H102K	CHIP C	1000PF	K	
C530		CC73GCH1H101J	CHIP C	100PF	J	
C531		CC73GCH1H101J	CHIP C	100PF	J	
C534		CC73GCH1H101J	CHIP C	100PF	J	
C535		CC73GCH1H101J	CHIP C	100PF	J	
C536		CK73GB1H103K	CHIP C	0.010UF	K	
C537		CK73GB1H103K	CHIP C	0.010UF	K	
C538		CS77BA1A100M	CHIP TNTL	10UF	10WV	
C539		CK73GB1H103K	CHIP C	0.010UF	K	
C540		CC73GCH1H080B	CHIP C	8.0PF	B	
C542		CC73GCH1H151J	CHIP C	150PF	J	
C543		CC73GCH1H390J	CHIP C	39PF	J	
C544		CK73GB1H103K	CHIP C	0.010UF	K	
C545		CK73GB1H103K	CHIP C	0.010UF	K	
C546		CC73GCH1H050B	CHIP C	5.0PF	B	
C547		CK73GB1H103K	CHIP C	0.010UF	K	
C548		CK73GB1H473K	CHIP C	0.047UF	K	
C549		CC73GCH1H470J	CHIP C	47PF	J	
C550		CK73GB1H103K	CHIP C	0.010UF	K	
C551		CC73GCH1H470J	CHIP C	47PF	J	
C552		CK73GB1H103K	CHIP C	0.010UF	K	
C553		CC73GCH1H390J	CHIP C	39PF	J	
C554		CC73GCH1H040B	CHIP C	4.0PF	B	
C555		CK73GB1H391K	CHIP C	390PF	K	
C556		CC73GCH1H150J	CHIP C	15PF	J	
C557		CC73GCH1H821J	CHIP C	820PF	J	
C558		CC73GCH1H150J	CHIP C	15PF	J	
C559		CK73GB1H391K	CHIP C	390PF	K	
C560		CK73GB1H103K	CHIP C	0.010UF	K	
C561		CC73GCH1H101J	CHIP C	100PF	J	
C562		CK73GB1H472K	CHIP C	4700PF	K	
C563		CK73GB1H473K	CHIP C	0.047UF	K	
C564		CK73GB1H102K	CHIP C	1000PF	K	
C565		CK73GB1H472K	CHIP C	4700PF	K	
C566		CK73GB1H473K	CHIP C	0.047UF	K	
C567		CK73GB1H102K	CHIP C	1000PF	K	
C568		CC73GCH1H680J	CHIP C	68PF	J	
C569		CC73GCH1H120J	CHIP C	12PF	J	
C570		CC73GCH1H271J	CHIP C	270PF	J	
C571		CC73GCH1H080B	CHIP C	8.0PF	B	
C572		CC73GCH1H271J	CHIP C	270PF	J	
C573		CC73GCH1H120J	CHIP C	12PF	J	
C574		CC73GCH1H680J	CHIP C	68PF	J	
C575		CK73GB1H102K	CHIP C	1000PF	K	
C576		CK73GB1H103K	CHIP C	0.010UF	K	
C577		CK73GB1H102K	CHIP C	1000PF	K	
C578		CK73GB1H472K	CHIP C	4700PF	K	
C579		CK73GB1H473K	CHIP C	0.047UF	K	
C580		CK73GB1H102K	CHIP C	1000PF	K	
C581		CC73GCH1H390J	CHIP C	39PF	J	
C582		CC73GCH1H680J	CHIP C	68PF	J	
C583		CC73GCH1H390J	CHIP C	39PF	J	
C584		CK73GB1H102K	CHIP C	1000PF	K	
C585		CK73GB1H102K	CHIP C	1000PF	K	
C586		CC73GCH1H560J	CHIP C	56PF	J	
C587		CK73GB1E105K	CHIP C	1.0UF	K	
C588		CK73GB1A105K	CHIP C	1.0UF	K	
C589		CK73GB1H103K	CHIP C	0.010UF	K	
C590		CE32CL1H4R7M	CHIP EL	4.7UF	50WV	
C591		CK73GB1H103K	CHIP C	0.010UF	K	
C592		CK73GB1H103K	CHIP C	0.010UF	K	
C593		C93-1875-05	CHIP C	22UF	J	
C594		CK73GB1H103K	CHIP C	0.010UF	K	
C595		CK73GB1H103K	CHIP C	0.010UF	K	
C596		C93-1875-05	CHIP C	22UF	J	
C597		CK73GB1E105K	CHIP C	1.0UF	K	
C598		CK73GB1H102K	CHIP C	1000PF	K	
C599		CK73GB1E105K	CHIP C	1.0UF	K	
C600		CK73GB1E105K	CHIP C	1.0UF	K	
C601		CK73GB1H472K	CHIP C	4700PF	K	
C602		CK73GB1H102K	CHIP C	1000PF	K	
C604		CK73GB1H102K	CHIP C	1000PF	K	
C605		CC73GCH1H390J	CHIP C	39PF	J	
C606		CC73GCH1H680J	CHIP C	68PF	J	
C607		CS77BA1A100M	CHIP TNTL	10UF	10WV	
C608		CK73GB1H472K	CHIP C	4700PF	K	
C610		CK73GB1H103K	CHIP C	0.010UF	K	
C611		CK73GB1H103K	CHIP C	0.010UF	K	
C612		CS77BA1A100M	CHIP TNTL	10UF	10WV	
C613		CK73GB1C473K	CHIP C	0.047UF	K	

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Ref.No	Adderss	Parts No.	Description	Desti-nation
C615		CC73GCH1H101J	CHIP C 100PF J	
C616		CK73GB1H103K	CHIP C 0.010UF K	
C617		CK73GB1H473K	CHIP C 0.047UF K	
C618		CK73GB1H473K	CHIP C 0.047UF K	
C619		CK73GB1H473K	CHIP C 0.047UF K	
C620		CK73GB1H391K	CHIP C 390PF K	
C621		CC73GCH1H330J	CHIP C 33PF J	
C622		CC73GCH1H561J	CHIP C 560PF J	
C623		CC73GCH1H820J	CHIP C 82PF J	
C624		CC73GCH1H331J	CHIP C 330PF J	
C648		CK73GB1H102K	CHIP C 1000PF K	
C649		CC73GCH1H181J	CHIP C 180PF J	
C650		CC73GCH1H181J	CHIP C 180PF J	
C651		CK73GB1H102K	CHIP C 1000PF K	
C652		CK73GB1H103K	CHIP C 0.010UF K	
C653		CK73GB1H103K	CHIP C 0.010UF K	
C654		CK73GB1H102K	CHIP C 1000PF K	
C655		CK73GB1H103K	CHIP C 0.010UF K	
C656		CK73GB1H103K	CHIP C 0.010UF K	
C657		CC73GCH1H560J	CHIP C 56PF J	
C658		CC73GCH1H181J	CHIP C 180PF J	
C659		CC73GCH1H270J	CHIP C 27PF J	
C660		CK73GB1H103K	CHIP C 0.010UF K	
C661		CC73GCH1H221J	CHIP C 220PF J	
C662		CK73GB1H103K	CHIP C 0.010UF K	
C663		CK73GB1H103K	CHIP C 0.010UF K	
C664		CC73GCH1H270J	CHIP C 27PF J	
C665		CC73GCH1H181J	CHIP C 180PF J	
C666		CK73GB1H103K	CHIP C 0.010UF K	
C667		CC73GCH1H820J	CHIP C 82PF J	
C668		CC73GCH1H560J	CHIP C 56PF J	
C669		CK73GB1H103K	CHIP C 0.010UF K	
C670		CC73GCH1H560J	CHIP C 56PF J	
C671		CK73GB1H103K	CHIP C 0.010UF K	
C672		CC73GCH1H270J	CHIP C 27PF J	
C673		CC73GCH1H330J	CHIP C 33PF J	
C674		CC73GCH1H100C	CHIP C 10PF C	
C675		CC73GCH1H680J	CHIP C 68PF J	
C676		CC73GCH1H560J	CHIP C 56PF J	
C677		CK73GB1H103K	CHIP C 0.010UF K	
C678		CK73GB1H103K	CHIP C 0.010UF K	
C679		CC73GCH1H270J	CHIP C 27PF J	
C680		CC73GCH1H080B	CHIP C 8.0PF B	
C681		CK73GB1H103K	CHIP C 0.010UF K	
C682		CC73GCH1H680J	CHIP C 68PF J	
C683		CC73GCH1H560J	CHIP C 56PF J	
C684		CC73GCH1H270J	CHIP C 27PF J	
C685		CC73GCH1H100C	CHIP C 10PF C	
C686		CK73GB1H103K	CHIP C 0.010UF K	
C687		CC73GCH1H270J	CHIP C 27PF J	
C688		CK73GB1H103K	CHIP C 0.010UF K	
C689		CC73GCH1H561J	CHIP C 560PF J	
C690		CK73GB1H103K	CHIP C 0.010UF K	
C691		CC73GCH1H820J	CHIP C 82PF J	
C692		CC73GCH1H820J	CHIP C 82PF J	

Ref.No	Adderss	Parts No.	Description	Desti-nation
C693		CC73GCH1H681J	CHIP C 680PF J	
C694		CC73GCH1H680J	CHIP C 68PF J	
C695		CC73GCH1H820J	CHIP C 82PF J	
C696		CK73GB1H103K	CHIP C 0.010UF K	
C697		CC73GCH1H181J	CHIP C 180PF J	
C698		CC73GCH1H561J	CHIP C 560PF J	
C699		CK73GB1H103K	CHIP C 0.010UF K	
C700		CC73GCH1H180J	CHIP C 18PF J	
C701		CC73GCH1H1R5B	CHIP C 1.5PF B	
C702		CC73GCH1H270J	CHIP C 27PF J	
C703		CC73GCH1H330J	CHIP C 33PF J	
C704		CK73GB1H102K	CHIP C 1000PF K	
C705		CC73GCH1H090B	CHIP C 9.0PF B	
C706		CK73GB1H102K	CHIP C 1000PF K	
C707		CC73GCH1H090B	CHIP C 9.0PF B	
C708		CC73GCH1H270J	CHIP C 27PF J	
C709		CC73GCH1H560J	CHIP C 56PF J	
C710		CC73GCH1H470J	CHIP C 47PF J	
C711		CC73GCH1H560J	CHIP C 56PF J	
C712		CC73GCH1H040B	CHIP C 4.0PF B	
C713		CC73GCH1H150J	CHIP C 15PF J	
C714		CC73GCH1H680J	CHIP C 68PF J	
C715		CC73GCH1H470J	CHIP C 47PF J	
C716		CC73GCH1H470J	CHIP C 47PF J	
C717		CC73GCH1H220J	CHIP C 22PF J	
C718		CC73GCH1H080B	CHIP C 8.0PF B	
C719		CC73GCH1H121J	CHIP C 120PF J	
C720		CC73GCH1H470J	CHIP C 47PF J	
C721		CC73GCH1H040B	CHIP C 4.0PF B	
C722		CC73GCH1H560J	CHIP C 56PF J	
C723		CC73GCH1H150J	CHIP C 15PF J	
C724		CC73GCH1H680J	CHIP C 68PF J	
C725		CC73GCH1H330J	CHIP C 33PF J	
C726		CC73GCH1H030B	CHIP C 3.0PF B	
C727		CC73GCH1H270J	CHIP C 27PF J	
C728		CC73GCH1H151J	CHIP C 150PF J	
C729		CK73GB1H102K	CHIP C 1000PF K	
C730		CC73GCH1H680J	CHIP C 68PF J	
C732		CC73GCH1H060B	CHIP C 6.0PF B	
C733		CC73GCH1H560J	CHIP C 56PF J	
C734		CC73GCH1H330J	CHIP C 33PF J	
C735		CC73GCH1H030B	CHIP C 3.0PF B	
C736		CC73GCH1H270J	CHIP C 27PF J	
C738		CC73GCH1H121J	CHIP C 120PF J	
C739		CC73GCH1H220J	CHIP C 22PF J	
C740		CC73GCH1H680J	CHIP C 68PF J	
C741		CK73GB1H102K	CHIP C 1000PF K	
C742		CK73GB1H102K	CHIP C 1000PF K	
C743		CC73GCH1H121J	CHIP C 120PF J	
C744		CC73GCH1H470J	CHIP C 47PF J	
C745		CC73GCH1H030B	CHIP C 3.0PF B	
C746		CC73GCH1H560J	CHIP C 56PF J	
C748		CK73GB1H102K	CHIP C 1000PF K	
C749		CK73GB1H102K	CHIP C 1000PF K	

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Ref.No	Adderss	Parts No.	Description			Desti-nation
C750		CK73GB1H102K	CHIP C	1000PF	K	
C751		CK73GB1H102K	CHIP C	1000PF	K	
C752		CC73GCH1H101J	CHIP C	100PF	J	
C753		CK73GB1H102K	CHIP C	1000PF	K	
C754		CK73GB1H102K	CHIP C	1000PF	K	
C755		CK73GB1H102K	CHIP C	1000PF	K	
C756		CK73GB1H472K	CHIP C	4700PF	K	
C757		CK73GB1H102K	CHIP C	1000PF	K	
C758		CK73GB1H102K	CHIP C	1000PF	K	
C759		CK73GB1H102K	CHIP C	1000PF	K	
C760		CK73GB1H102K	CHIP C	1000PF	K	
C761		CC73GCH1H390J	CHIP C	39PF	J	
C762		CK73GB1H102K	CHIP C	1000PF	K	
C763		CK73GB1H472K	CHIP C	4700PF	K	
C764		CK73GB1H102K	CHIP C	1000PF	K	
C765		CC73GCH1H220J	CHIP C	22PF	J	
C766		CC73GCH1H240J	CHIP C	24PF	J	
C767		CK73GB1H472K	CHIP C	4700PF	K	
C768		CC73GCH1H120J	CHIP C	12PF	J	
C769		CC73GCH1H180J	CHIP C	18PF	J	
C770		CC73GCH1H330J	CHIP C	33PF	J	
C771		CC73GCH1H470J	CHIP C	47PF	J	
C772		CC73GCH1H220J	CHIP C	22PF	J	
C773		CC73GCH1H330J	CHIP C	33PF	J	
C774		CC73GCH1H100C	CHIP C	10PF	C	
C775		CC73GCH1H120J	CHIP C	12PF	J	
C776		CC73GCH1H180J	CHIP C	18PF	J	
C777		CC73GCH1H150J	CHIP C	15PF	J	
C778		CC73GCH1H220J	CHIP C	22PF	J	
C779		CK73GB1H102K	CHIP C	1000PF	K	
C780		CK73GB1H102K	CHIP C	1000PF	K	
C781		CC73GCH1H470J	CHIP C	47PF	J	
C782		CC73GCH1H470J	CHIP C	47PF	J	
C783		CC73GCH1H470J	CHIP C	47PF	J	
C784		CK73GB1H102K	CHIP C	1000PF	K	
C785		CK73GB1H102K	CHIP C	1000PF	K	
C786		CK73GB1H103K	CHIP C	0.010UF	K	
C801		CK73FB1H153K	CHIP C	0.015UF	K	
C802		CK73GB1H472K	CHIP C	4700PF	K	
C803		CK73GB1H102K	CHIP C	1000PF	K	
C804		CS77MA1ER47M	CHIP TNTL	0.47UF	25WV	
C805		CK73GB1A105K	CHIP C	1.0UF	K	
C806		CK73GB1H102K	CHIP C	1000PF	K	
C807		CK73GB1H473K	CHIP C	0.047UF	K	
C808		CK73GB1H102K	CHIP C	1000PF	K	
C809		CK73FB1H153K	CHIP C	0.015UF	K	
C810		CC73GCH1H390J	CHIP C	39PF	J	
C811		CK73FB1H153K	CHIP C	0.015UF	K	
C812		CK73GB1A105K	CHIP C	1.0UF	K	
C813		CK73EB1E106K	CHIP C	10UF	K	
C814		CK73GB1C104K	CHIP C	0.10UF	K	
C815		CK73EB1E106K	CHIP C	10UF	K	
C816		CC73GCH1H680J	CHIP C	68PF	J	
C817		CK73GB1C104K	CHIP C	0.10UF	K	

Ref.No	Adderss	Parts No.	Description			Desti-nation
C818		CC73GCH1H101J	CHIP C	100PF	J	
C819		CK73GB1C104K	CHIP C	0.10UF	K	
C820		CC73GCH1H101J	CHIP C	100PF	J	
C821		CC73GCH1H101J	CHIP C	100PF	J	
C822		CK73GB1C104K	CHIP C	0.10UF	K	
C823		CK73GB1H102K	CHIP C	1000PF	K	
C824		CC73GCH1H120J	CHIP C	12PF	J	
C825		CK73EB1E106K	CHIP C	10UF	K	
C826		CK73GB1C104K	CHIP C	0.10UF	K	
C827		CC73GCH1H471J	CHIP C	470PF	J	
C828		CE32BM1C220M	CHIP EL	22UF	16WV	
C829		CK73GB1H472K	CHIP C	4700PF	K	
C830		CK73EB1E106K	CHIP C	10UF	K	
C831		CC73GCH1H080B	CHIP C	8.0PF	B	
C833		CC73GCH1H390J	CHIP C	39PF	J	
C834		CC73GCH1H050B	CHIP C	5.0PF	B	
C835		CC73GCH1H0R5B	CHIP C	0.5PF	B	
C836		CC73GCH1H040B	CHIP C	4.0PF	B	
C837		CK73GB1H103K	CHIP C	0.010UF	K	
C838		CC73GCH1H070B	CHIP C	7.0PF	B	
C839		CK73GB1H102K	CHIP C	1000PF	K	
C840		CK73GB1H103K	CHIP C	0.010UF	K	
C841		CC73GCH1H040B	CHIP C	4.0PF	B	
C843		CC73GCH1H0R5B	CHIP C	0.5PF	B	
C844		CK73GB1H103K	CHIP C	0.010UF	K	
C845		CC73GCH1H471J	CHIP C	470PF	J	
C846		CC73GCH1H120J	CHIP C	12PF	J	
C847		CK73GB1H102K	CHIP C	1000PF	K	
C848		CK73GB1H102K	CHIP C	1000PF	K	
C849		CK73EB1E106K	CHIP C	10UF	K	
C850		CK73EB1E106K	CHIP C	10UF	K	
C851		CK73GB1H102K	CHIP C	1000PF	K	
C852		CC73GCH1H101J	CHIP C	100PF	J	
C853		CC73GCH1H150J	CHIP C	15PF	J	
C855		CC73GCH1H101J	CHIP C	100PF	J	
C856		CK73EB1E106K	CHIP C	10UF	K	
C860		CC73GCH1H101J	CHIP C	100PF	J	
C861		CS77BA1A100M	CHIP TNTL	10UF	10WV	
C862		CK73GB1C104K	CHIP C	0.10UF	K	
C865		CK73GB1C104K	CHIP C	0.10UF	K	
C866		CK73GB1C104K	CHIP C	0.10UF	K	
C867		CK73GB1C104K	CHIP C	0.10UF	K	
C868		CK73GB1C104K	CHIP C	0.10UF	K	
C869		CK73GB1C104K	CHIP C	0.10UF	K	
C870		CK73GB1C104K	CHIP C	0.10UF	K	
C871		CK73GB1C104K	CHIP C	0.10UF	K	
C872		CK73GB1C104K	CHIP C	0.10UF	K	
C873		CK73GB1A105K	CHIP C	1.0UF	K	
C874		CC73GCH1H180J	CHIP C	18PF	J	
C875		CC73GCH1H180J	CHIP C	18PF	J	
C876		CC73GCH1H330J	CHIP C	33PF	J	
C877		CK73GB1H102K	CHIP C	1000PF	K	
C878		CC73GCH1H120J	CHIP C	12PF	J	
C879		CK73GB1C104K	CHIP C	0.10UF	K	
C880		CC73GCH1H470J	CHIP C	47PF	J	

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Ref.No	Adderss	Parts No.	Description			Desti-nation
C881		CK73GB1C104K	CHIP C	0.10UF	K	
C882		CK73GB1C104K	CHIP C	0.10UF	K	
C883		CC73GCH1H390J	CHIP C	39PF	J	
C884		CC73GCH1H470J	CHIP C	47PF	J	
C885		CK73GB1H102K	CHIP C	1000PF	K	
C886		CK73GB1H102K	CHIP C	1000PF	K	
C887		CK73GB1C104K	CHIP C	0.10UF	K	
C888		CK73GB1H102K	CHIP C	1000PF	K	
C891		CC73GCH1H080B	CHIP C	8.0PF	B	
C892		CK73GB1H102K	CHIP C	1000PF	K	
C895		CC73GCH1H330J	CHIP C	33PF	J	
C901		CC73GCH1H101J	CHIP C	100PF	J	
C902		CC73GCH1H101J	CHIP C	100PF	J	
C903		CC73GCH1H101J	CHIP C	100PF	J	
C904		CK73GB1H102K	CHIP C	1000PF	K	
C905		CK73GB1H102K	CHIP C	1000PF	K	
C908		CK73GB1H102K	CHIP C	1000PF	K	
C909		CK73GB1H102K	CHIP C	1000PF	K	
C910		CK73GB1H102K	CHIP C	1000PF	K	
C911		CK73GB1H102K	CHIP C	1000PF	K	
C912		CK73GB1H102K	CHIP C	1000PF	K	
C913		CK73GB1H102K	CHIP C	1000PF	K	
C914		CK73GB1H102K	CHIP C	1000PF	K	
C915		CK73GB1H102K	CHIP C	1000PF	K	
C916		CK73GB1H472K	CHIP C	4700PF	K	
C917		CK73GB1A105K	CHIP C	1.0UF	K	
C918		CK73GB1A105K	CHIP C	1.0UF	K	
C919		CK73GB1H102K	CHIP C	1000PF	K	
C920		CK73GB1H102K	CHIP C	1000PF	K	
C921		CK73GB1A105K	CHIP C	1.0UF	K	
C922		CK73GB1A105K	CHIP C	1.0UF	K	
C923		CK73GB1A105K	CHIP C	1.0UF	K	
C924		CK73GB1A105K	CHIP C	1.0UF	K	
C925		CK73GB1A105K	CHIP C	1.0UF	K	
C926		CK73GB1H102K	CHIP C	1000PF	K	
C927		CK73GB1H104K	CHIP C	0.10UF	K	
C928		CK73GB1C225K	CHIP C	2.2UF	K	
C929		CK73GB1H102K	CHIP C	1000PF	K	
C930		CK73GB1A105K	CHIP C	1.0UF	K	
C931		CK73GB1A105K	CHIP C	1.0UF	K	
C932		CC73GCH1H222J	CHIP C	2200PF	J	
C933		CK73GB1H102K	CHIP C	1000PF	K	
C934		CK73FB0J106K	CHIP C	10UF	K	
C935		CK73GB1H102K	CHIP C	1000PF	K	
C936		CK73FB0J106K	CHIP C	10UF	K	
C937		CK73FB0J106K	CHIP C	10UF	K	
C938		CK73GB1H102K	CHIP C	1000PF	K	
C939		CK73GB1H102K	CHIP C	1000PF	K	
C940		CK73FB0J106K	CHIP C	10UF	K	
C941		CK73FB0J106K	CHIP C	10UF	K	
C942		CC73GCH1H150J	CHIP C	15PF	J	
C943		CC73GCH1H150J	CHIP C	15PF	J	
C944		CK73GB1H102K	CHIP C	1000PF	K	
C945		CK73FB0J106K	CHIP C	10UF	K	
C946		CK73GB1H102K	CHIP C	1000PF	K	
C947		CK73FB0J106K	CHIP C	10UF	K	
C948		CK73GB1H104K	CHIP C	0.10UF	K	
C949		CK73GB1H104K	CHIP C	0.10UF	K	
C950		CK73GB1H104K	CHIP C	0.10UF	K	
C951		CK73GB1H104K	CHIP C	0.10UF	K	
C952		CK73GB1A105K	CHIP C	1.0UF	K	
C953		CC73GCH1H050B	CHIP C	5.0PF	B	
C954		CK73GB1A105K	CHIP C	1.0UF	K	
C955		CC73GCH1H050B	CHIP C	5.0PF	B	
C956		CK73GB1H104K	CHIP C	0.10UF	K	
C957		CK73GB1H104K	CHIP C	0.10UF	K	
C958		CK73GB1H102K	CHIP C	1000PF	K	
C959		CK73GB1A105K	CHIP C	1.0UF	K	
C960		CK73GB1H104K	CHIP C	0.10UF	K	
C961		CK73GB1H104K	CHIP C	0.10UF	K	
C962		CK73GB1H104K	CHIP C	0.10UF	K	
C964		CK73GB1A105K	CHIP C	1.0UF	K	
C965		CK73GB1H104K	CHIP C	0.10UF	K	
C966		CK73GB1E105K	CHIP C	1.0UF	K	
C967		CK73GB1A105K	CHIP C	1.0UF	K	
C968		CK73GB1E105K	CHIP C	1.0UF	K	
C969		CK73GB1E105K	CHIP C	1.0UF	K	
C970		CK73GB1E105K	CHIP C	1.0UF	K	
C971		CC73GCH1H330J	CHIP C	33PF	J	
C972		CK73GB1H102K	CHIP C	1000PF	K	
C980		CC73GCH1H471J	CHIP C	470PF	J	
C981		CC73GCH1H471J	CHIP C	470PF	J	
C982		CC73GCH1H471J	CHIP C	470PF	J	
C984		CC73GCH1H471J	CHIP C	470PF	J	
C987		CC73GCH1H471J	CHIP C	470PF	J	
C988		CC73GCH1H471J	CHIP C	470PF	J	
C989		CC73GCH1H471J	CHIP C	470PF	J	
C990		CC73GCH1H471J	CHIP C	470PF	J	
C991		CC73GCH1H471J	CHIP C	470PF	J	
CN1		E40-6526-05	PIN ASSY			
CN2		E40-6526-05	PIN ASSY			
CN61		E40-6525-05	PIN ASSY			
CN62		E40-6525-05	PIN ASSY			
CN63		E40-6879-05	FLAT CABLE CONNECTOR			
CN64		E41-1687-05	PIN ASSY			
CN65		E40-6525-05	PIN ASSY			
CN301		E41-1948-05	FLAT CABLE CONNECTOR			
CN302		E40-6656-05	PIN ASSY			
CN303		E40-6745-05	FLAT CABLE CONNECTOR			
CN305		E40-6727-05	FLAT CABLE CONNECTOR			
CN502		E40-6745-05	FLAT CABLE CONNECTOR			
CN503		E41-1684-05	PIN ASSY			
CN508		E04-0191-05	PIN SOCKET			
CN601		E04-0191-05	PIN SOCKET			
CN654		E04-0191-05	PIN SOCKET			
CN901		E40-6357-05	PIN ASSY			
CN903		E40-5487-05	PIN ASSY			
CN904		E40-5487-05	PIN ASSY			

PARTS LIST

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Ref.No	Adderss	Parts No.	Description	Desti-nation
CP301		RK74GB1J473J	CHIP-COM 47K J 1/16W	
CP302		RK74GB1J473J	CHIP-COM 47K J 1/16W	
CP304		RK74GB1J473J	CHIP-COM 47K J 1/16W	
CP305		RK74GB1J473J	CHIP-COM 47K J 1/16W	
CP310		RK74GB1J473J	CHIP-COM 47K J 1/16W	
CP314		RK74GB1J473J	CHIP-COM 47K J 1/16W	
CP315		RK74GB1J473J	CHIP-COM 47K J 1/16W	
CP316		RK74GB1J473J	CHIP-COM 47K J 1/16W	
CP317		RK74GB1J470J	CHIP-COM 47 J 1/16W	
CP318		RK74GB1J470J	CHIP-COM 47 J 1/16W	
CP319		RK74GB1J470J	CHIP-COM 47 J 1/16W	
CP320		RK74GB1J470J	CHIP-COM 47 J 1/16W	
D1		RB060L-40	SCHOTTKY BARRIER DIODE	
D2		RB060L-40	SCHOTTKY BARRIER DIODE	
D3		1SR154-400	DIODE	
D4		1SR154-400	DIODE	
D5		1SR154-400	DIODE	
D6		1SR154-400	DIODE	
D7		RB531SM-30	DIODE	
D8		RB531SM-30	DIODE	
D9		RB531SM-30	DIODE	
D61		MINISMDC05002F	VARISTOR	
D62		1SS355	DIODE	
D101		RB531SM-30	DIODE	
D301		EDZV6.2B	ZENER DIODE	
D302		RB531SM-30	DIODE	
D304		1SR154-400	DIODE	
D501		RN142S	DIODE	
D651		RN142S	DIODE	
D652		RB715F	SCHOTTKY BARRIER DIODE	
D653		RN142S	DIODE	
D654		RN142S	DIODE	
D655		RN142S	DIODE	
D656		DAN202U	MULTIPLE DIODE	
D657		RN142S	DIODE	
D659		RN142S	DIODE	
D660		RN142S	DIODE	
D661		RN142S	DIODE	
D662		RN142S	DIODE	
D663		RN142S	DIODE	
D664		1SS390	DIODE	
D665		1SS390	DIODE	
D666		1SS390	DIODE	
D667		RN142S	DIODE	
D668		RN142S	DIODE	
D669		RN142S	DIODE	
D670		RN142S	DIODE	
D671		RN142S	DIODE	
D672		DAN202U	MULTIPLE DIODE	
D673		1SS390	DIODE	
D674		RN142S	DIODE	
D675		1SS390	DIODE	
D677		1SS390	DIODE	
D678		1SS390	DIODE	
D679		RN142S	DIODE	
D680		RN142S	DIODE	
D681		RN142S	DIODE	
D682		1SS390	DIODE	
D683		1SS390	DIODE	
D801		1SV283F	VARIABLE CAPACITANCE DIODE	
D802		1SV283F	VARIABLE CAPACITANCE DIODE	
D803		1SV283F	VARIABLE CAPACITANCE DIODE	
D901		RSB12JS2	MULTIPLE DIODE	
D902		HZU3BLL	ZENER DIODE	
D903		RB531SM-30	DIODE	
F901		F53-0317-15	FUSE(500MA)	
IC1		LT3685EMSE	ANALOGUE IC	
IC2		LT3685EMSE	ANALOGUE IC	
IC3		BA00DD0WHFP	MOS-IC	
IC4		BA033CC0FP	ANALOGUE IC	
IC5		BA05CC0FP	ANALOGUE IC	
IC6		XC6220B12BPR-G	MOS-IC	
IC61		BA4580RFVM	BI-POLAR IC	
IC62		BA4580RFVM	BI-POLAR IC	
IC63		NJM2732V	BIPOLAR IC	
IC64		NJM2732V	BIPOLAR IC	
IC65		NJM2732V	BIPOLAR IC	
IC66		AK5385BVF	MOS-IC	
IC67		LA4425A	MOS-IC	
IC68		TC7W66FK-F	MOS-IC	
IC69		NJM2732V	BIPOLAR IC	
IC70		NJM2732V	BIPOLAR IC	
IC71		NJM2732V	BIPOLAR IC	
IC72		AK4382AVT	MOS-IC	
IC73		BA2904FVM	MOS-IC	
IC74		BA2904FVM	MOS-IC	
IC75		AK4387ET	ANALOG IC	
IC76		BA2904FVM	MOS-IC	
IC77		BA2904FVM	MOS-IC	
IC78		AK4387ET	ANALOG IC	
IC79		NJM2732V	BIPOLAR IC	
IC80		TC7W66FK-F	MOS-IC	
IC81		NJM2732V	BIPOLAR IC	
IC82		BA2904FVM	MOS-IC	
IC83		WM8782ASEDSRV	MOS-IC	
IC301		DC6726BRFPA225	MICROPROCESSOR IC	
IC302		29LV800CBKDND	ROM IC	
IC304		TC7SH32FU-F	MOS-IC	
IC305		TC7SH00FU-F	MOS-IC	
IC306		F3651RDFCKFSA	MICROCONTROLLER IC	
IC307		BU4829FVE	MOS-IC	
IC308		TC7SH32FU-F	MOS-IC	
IC309		HN58X25128FPIE	ROM IC	
IC310		TC74HC4052AFT	MOS-IC	
IC311		HD74LV541AT	MOS-IC	
IC312		HD74LV2G34AUS	MOS-IC	

PARTS LIST

CONTROL UNIT (XC1-021X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
IC313		TC7WT125FUF	MOS-IC	
IC314		HD74LV2G34AUS	MOS-IC	
IC315		BU4829FVE	MOS-IC	
IC316		TC7SH32FU-F	MOS-IC	
IC317		TC7SH32FU-F	MOS-IC	
IC501		TC7WT125FUF	MOS-IC	
IC502		TC7WT125FUF	MOS-IC	
IC504		BA05CC0FP	ANALOGUE IC	
IC505		BA033CC0FP	ANALOGUE IC	
IC601		AD9835BRUZ	MOS-IC	
IC651		TC74HC4094AFF	MOS-IC	
IC801		ADF4111BRUZ	MOS-IC	
IC802		XC6219B182PR-G	MOS-IC	
IC803		AD9951YSVZ	MOS-IC	
IC804		UPC2710TB-A	BIPOLAR IC	
IC901		ADM3202ARUZ	MOS-IC	
IC902		TC75S51FE(F)	MOS-IC	
IC903		PCM2903B	MOS-IC	
IC904		TC7SH08FU-F	MOS-IC	
IC905		USB2512BI	MOS-IC	
IC906		CP2102SX0567	MOS-IC	
J901		E58-0529-05	SUB SOCKET(D)	
J902		E58-0537-05	RECTANGULAR RECEPTACLE	
L2		L33-1548-05	CHOKE COIL	
L3		L33-1548-05	CHOKE COIL	
L4		L33-1553-05	CHOKE COIL	
L5		L33-1548-05	CHOKE COIL	
L6		L33-1548-05	CHOKE COIL	
L7		L33-1553-05	CHOKE COIL	
L8		L92-0639-05	CHIP FERRITE	
L11		L33-2600-05	CHOKE COIL	
L13		L33-2600-05	CHOKE COIL	
L15		L92-0641-05	FERRITE CORE	
L16		L92-0641-05	FERRITE CORE	
L17		L92-0641-05	FERRITE CORE	
L18		L92-0641-05	FERRITE CORE	
L19		L41-1005-39	SMALL FIXED INDUCTOR(10UH)	
L20		L33-1554-05	CHOKE COIL	
L21		L33-1554-05	CHOKE COIL	
L61		L92-0467-05	CHIP FERRITE	
L62		L92-0467-05	CHIP FERRITE	
L63		L92-0467-05	CHIP FERRITE	
L64		L33-1553-05	CHOKE COIL	
L65		L92-0639-05	CHIP FERRITE	
L66		L92-0639-05	CHIP FERRITE	
L68		L92-0467-05	CHIP FERRITE	
L69		L92-0639-05	CHIP FERRITE	
L301		L33-1554-05	CHOKE COIL	
L302		L33-1554-05	CHOKE COIL	
L303		L79-1940-05	FILTER	
L305		L92-0639-05	CHIP FERRITE	
L307		L92-0639-05	CHIP FERRITE	

Ref.No	Adderss	Parts No.	Description	Desti-nation
L402		L92-0639-05	CHIP FERRITE	
L403		L92-0639-05	CHIP FERRITE	
L404		L92-0639-05	CHIP FERRITE	
L405		L92-0639-05	CHIP FERRITE	
L407		L92-0639-05	CHIP FERRITE	
L408		L33-1554-05	CHOKE COIL	
L409		L92-0180-05	CHIP FERRITE	
L410		L92-0180-05	CHIP FERRITE	
L411		L92-0180-05	CHIP FERRITE	
L412		L92-0180-05	CHIP FERRITE	
L413		L92-0180-05	CHIP FERRITE	
L414		L92-0180-05	CHIP FERRITE	
L415		L92-0180-05	CHIP FERRITE	
L416		L92-0180-05	CHIP FERRITE	
L417		L92-0180-05	CHIP FERRITE	
L418		L92-0180-05	CHIP FERRITE	
L419		L92-0180-05	CHIP FERRITE	
L420		L92-0180-05	CHIP FERRITE	
L501		L92-0639-05	CHIP FERRITE	
L502		LR73Z0AE101J	CHIP INDUCTOR	
L503		L41-1595-52	SMALL FIXED INDUCTOR(1.5UH)	
L504		L41-2295-52	SMALL FIXED INDUCTOR(2.2UH)	
L505		L34-4816-05	COIL	
L506		LR79F0ED68NG	CHIP INDUCTOR	
L507		L41-1895-52	SMALL FIXED INDUCTOR(1.8UH)	
L508		LR79F0ED33NG	CHIP INDUCTOR	
L509		L41-1595-52	SMALL FIXED INDUCTOR(1.5UH)	
L510		LR79F0ED68NG	CHIP INDUCTOR	
L511		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L512		L41-1095-52	SMALL FIXED INDUCTOR(1.0UH)	
L513		LR79F0EDR10G	CHIP INDUCTOR	
L514		L41-4785-52	SMALL FIXED INDUCTOR(0.47UH)	
L515		LR79F0ED22NG	CHIP INDUCTOR	
L516		L41-8285-52	SMALL FIXED INDUCTOR(0.82UH)	
L517		LR79F0ED22NG	CHIP INDUCTOR	
L518		L41-4785-52	SMALL FIXED INDUCTOR(0.47UH)	
L519		LR79F0EDR10G	CHIP INDUCTOR	
L520		L41-1095-52	SMALL FIXED INDUCTOR(1.0UH)	
L521		L41-1585-52	SMALL FIXED INDUCTOR(0.15UH)	
L522		L41-1585-52	SMALL FIXED INDUCTOR(0.15UH)	
L523		L41-2295-52	SMALL FIXED INDUCTOR(2.2UH)	
L524		L41-2285-53	SMALL FIXED INDUCTOR(0.22UH)	
L525		L41-2285-53	SMALL FIXED INDUCTOR(0.22UH)	
L601		L41-1095-52	SMALL FIXED INDUCTOR(1.0UH)	
L602		L41-1585-52	SMALL FIXED INDUCTOR(0.15UH)	
L603		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L604		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L605		L41-8285-52	SMALL FIXED INDUCTOR(0.82UH)	
L606		L41-5685-52	SMALL FIXED INDUCTOR(0.56UH)	
L651		L39-1480-15	TOROIDAL COIL	
L652		LR79F0EDR10G	CHIP INDUCTOR	
L653		LR79F0ED82NG	CHIP INDUCTOR	
L654		LR79F0EDR10G	CHIP INDUCTOR	
L655		L40-1288-67	SMALL FIXED INDUCTOR(120NH/8)	

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CONTROL UNIT (XC1-021X-XX)

Ref.No	Adderss	Parts No.	Description	Desti- nation
L656		L41-1085-14	SMALL FIXED INDUCTOR(100NH)	
L657		L41-1085-14	SMALL FIXED INDUCTOR(100NH)	
L658		L40-3391-86	SMALL FIXED INDUCTOR(3.3UH/160	
L659		L40-1288-67	SMALL FIXED INDUCTOR(120NH/8)	
L660		L41-1085-14	SMALL FIXED INDUCTOR(100NH)	
L661		L41-1085-14	SMALL FIXED INDUCTOR(100NH)	
L662		L41-3385-52	SMALL FIXED INDUCTOR(0.33UH)	
L663		L41-4785-52	SMALL FIXED INDUCTOR(0.47UH)	
L664		L41-2785-52	SMALL FIXED INDUCTOR(0.27UH)	
L665		L41-6878-14	SMALL FIXED INDUCTOR(68NH)	
L666		L41-1085-14	SMALL FIXED INDUCTOR(100NH)	
L667		L41-6878-14	SMALL FIXED INDUCTOR(68NH)	
L668		L34-4936-05	COIL	
L669		L41-5678-14	SMALL FIXED INDUCTOR(56NH)	
L670		L41-2285-14	SMALL FIXED INDUCTOR(220NH)	
L671		L34-4936-05	COIL	
L672		L40-1288-67	SMALL FIXED INDUCTOR(120NH/8)	
L673		L34-4936-05	COIL	
L674		L41-5678-14	SMALL FIXED INDUCTOR(56NH)	
L675		L41-2785-14	SMALL FIXED INDUCTOR(270NH)	
L676		L34-4936-05	COIL	
L677		L34-4936-05	COIL	
L678		L41-1085-14	SMALL FIXED INDUCTOR(100NH)	
L679		L41-5678-14	SMALL FIXED INDUCTOR(56NH)	
L680		L41-2785-14	SMALL FIXED INDUCTOR(270NH)	
L681		L34-4936-05	COIL	
L682		L41-1085-14	SMALL FIXED INDUCTOR(100NH)	
L683		L41-2285-14	SMALL FIXED INDUCTOR(220NH)	
L684		L41-8275-14	SMALL FIXED INDUCTOR(82NH)	
L685		L41-6878-14	SMALL FIXED INDUCTOR(68NH)	
L686		L41-1895-52	SMALL FIXED INDUCTOR(1.8UH)	
L687		L40-3391-86	SMALL FIXED INDUCTOR(3.3UH/160	
L688		L41-1095-52	SMALL FIXED INDUCTOR(1.0UH)	
L689		L41-3385-52	SMALL FIXED INDUCTOR(0.33UH)	
L690		LR79F0ED39NG	CHIP INDUCTOR	
L691		LR79F0ED33NG	CHIP INDUCTOR	
L692		L41-6878-14	SMALL FIXED INDUCTOR(68NH)	
L693		L41-4785-52	SMALL FIXED INDUCTOR(0.47UH	
L696		L41-1895-52	SMALL FIXED INDUCTOR(1.8UH)	
L697		L41-1085-14	SMALL FIXED INDUCTOR(100NH)	
L698		L40-1288-67	SMALL FIXED INDUCTOR(120NH/8)	
L801		L41-1095-52	SMALL FIXED INDUCTOR(1.0UH)	
L802		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L803		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L804		L40-1581-86	SMALL FIXED INDUCTOR(0.15U/160	
L805		L41-2285-52	SMALL FIXED INDUCTOR(0.22UH)	
L806		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L807		L41-2785-08	SMALL FIXED INDUCTOR(270NH)	
L808		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L809		L41-3388-08	SMALL FIXED INDUCTOR(330NH)	
L810		L34-4645-15	AIR-CORE COIL	
L811		L41-3388-08	SMALL FIXED INDUCTOR(330NH)	
L812		L41-3388-08	SMALL FIXED INDUCTOR(330NH)	
L813		L41-3375-53	SMALL FIXED INDUCTOR(33NH)	
L814		LR79F0ED33NG	CHIP INDUCTOR	
L817		L92-0639-05	CHIP FERRITE	
L819		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L822		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L824		L39-1480-15	TOROIDAL COIL	
L825		L40-1588-67	SMALL FIXED INDUCTOR(150NH/8)	
L826		L40-1088-67	SMALL FIXED INDUCTOR(100NH/8)	
L827		L41-3391-08	SMALL FIXED INDUCTOR(3.3NH)	
L828		L40-8278-67	SMALL FIXED INDUCTOR(82NH/8)	
L829		L41-1895-52	SMALL FIXED INDUCTOR(1.8UH)	
L840		L41-1895-52	SMALL FIXED INDUCTOR(1.8UH)	
L903		L92-0639-05	CHIP FERRITE	
L904		L92-0639-05	CHIP FERRITE	
L905		L92-0639-05	CHIP FERRITE	
L906		L41-2295-52	SMALL FIXED INDUCTOR(2.2UH)	
L907		L92-0639-05	CHIP FERRITE	
L908		L92-0639-05	CHIP FERRITE	
L909		L92-0639-05	CHIP FERRITE	
L910		L92-0639-05	CHIP FERRITE	
L911		L92-0639-05	CHIP FERRITE	
L912		L92-0639-05	CHIP FERRITE	
L913		L92-0639-05	CHIP FERRITE	
L916		L33-2375-05	CHOKE COIL	
L917		L33-1554-05	CHOKE COIL	
L919		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L920		L41-2295-52	SMALL FIXED INDUCTOR(2.2UH)	
Q1		LTC014EEBFS8	DIGITAL TRANSISTOR	
Q2		TPC6111-F	FET	
Q3		TPC6111-F	FET	
Q4		LTC043TEBFS8	TRANSISTOR	
Q61		2SC5566-E	TRANSISTOR	
Q62		RUE002N02	FET	
Q63		LTC023YEBFS8	TRANSISTOR	
Q64		DTB143EK	DIGITAL TRANSISTOR	
Q65		2SC4617(R)	TRANSISTOR	
Q66		LTC023YEBFS8	TRANSISTOR	
Q67		DTB143EK	DIGITAL TRANSISTOR	
Q501		2SC4617(R)	TRANSISTOR	
Q502		2SC4617(R)	TRANSISTOR	
Q503		2SC5108(Y)F	TRANSISTOR	
Q504		2SC4617(R)	TRANSISTOR	
Q505		2SC4617(R)	TRANSISTOR	
Q506		2SC4649(N,P)	TRANSISTOR	
Q601		2SC4617(R)	TRANSISTOR	
Q602		2SC4617(R)	TRANSISTOR	
Q651		LTA014EEBFS8	DIGITAL TRANSISTOR	
Q652		LTC044EEBFS8	DIGITAL TRANSISTOR	
Q653		LTA014EEBFS8	DIGITAL TRANSISTOR	
Q654		LTC044EEBFS8	DIGITAL TRANSISTOR	
Q655		LTA014EEBFS8	DIGITAL TRANSISTOR	
Q656		LTC044EEBFS8	DIGITAL TRANSISTOR	
Q657		LTA014EEBFS8	DIGITAL TRANSISTOR	
Q658		LTC044EEBFS8	DIGITAL TRANSISTOR	
Q659		LTA014EEBFS8	DIGITAL TRANSISTOR	

PARTS LIST

CONTROL UNIT (XC1-021X-XX)

Ref.No	Adderss	Parts No.	Description				Desti-nation
Q660		LTC044EEBFS8	DIGITAL TRANSISTOR				
Q661		LTA014EEBFS8	DIGITAL TRANSISTOR				
Q662		LTC044EEBFS8	DIGITAL TRANSISTOR				
Q663		2SC5108(Y)F	TRANSISTOR				
Q664		RE1C001ZP	FET				
Q801		2SC4649(N,P)	TRANSISTOR				
Q802		RE1C001ZP	FET				
Q803		2SC4617(R)	TRANSISTOR				
Q804		2SC5108(Y)F	TRANSISTOR				
Q805		2SC4617(R)	TRANSISTOR				
Q806		MCH3914(7)-H	FET				
Q807		2SC5108(Y)F	TRANSISTOR				
Q808		2SC5108(Y)F	TRANSISTOR				
Q901		RE1C001ZP	FET				
Q902		RE1C002ZP	FET				
Q903		RE1C001ZP	FET				
Q904		RE1C001ZP	FET				
Q905		LTC014EEBFS8	DIGITAL TRANSISTOR				
Q906		LTC014EEBFS8	DIGITAL TRANSISTOR				
Q907		LTC014EEBFS8	DIGITAL TRANSISTOR				
Q908		LTC014EEBFS8	DIGITAL TRANSISTOR				
Q909		LTC014EEBFS8	DIGITAL TRANSISTOR				
R1		RK73GB2A473J	CHIP R	47K	J	1/10W	
R2		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R3		RK73EB2E000J	CHIP R	0.0	J	1/4W	
R4		RK73GB2A103J	CHIP R	10K	J	1/10W	
R5		RK73GB2A184J	CHIP R	180K	J	1/10W	
R6		RK73GB2A103J	CHIP R	10K	J	1/10W	
R7		RK73GB2A101J	CHIP R	100	J	1/10W	
R8		RK73GH2A393D	CHIP R	39K	D	1/10W	
R9		RK73GH2A123D	CHIP R	12K	D	1/10W	
R11		RK73EB2E000J	CHIP R	0.0	J	1/4W	
R12		RK73EB2E000J	CHIP R	0.0	J	1/4W	
R13		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R14		RK73GB2A473J	CHIP R	47K	J	1/10W	
R15		RK73GB2A103J	CHIP R	10K	J	1/10W	
R16		RK73GB2A184J	CHIP R	180K	J	1/10W	
R17		RK73GB2A103J	CHIP R	10K	J	1/10W	
R18		RK73GB2A101J	CHIP R	100	J	1/10W	
R19		RK73GH2A124D	CHIP R	120K	D	1/10W	
R20		RK73GH2A133D	CHIP R	13K	D	1/10W	
R22		RK73EB2E000J	CHIP R	0.0	J	1/4W	
R25		RK73FB2B000J	CHIP R	0.0	J	1/8W	
R26		RK73EB2E000J	CHIP R	0.0	J	1/4W	
R27		RK73GB2A473J	CHIP R	47K	J	1/10W	
R28		RK73GB2A103J	CHIP R	10K	J	1/10W	
R29		RK73EB2E000J	CHIP R	0.0	J	1/4W	
R30		RK73GB2A103J	CHIP R	10K	J	1/10W	
R31		RK73EB2E000J	CHIP R	0.0	J	1/4W	
R33		RK73PB2H1R0J	CHIP R	1.0	J	1/2W	
R34		RK73PB2H1R0J	CHIP R	1.0	J	1/2W	
R35		RK73PB2H1R0J	CHIP R	1.0	J	1/2W	
R36		RK73PB2H1R0J	CHIP R	1.0	J	1/2W	
R37		RK73PB2H101J	CHIP R	100	J	1/2W	
R43		RK73PB2H6R8J	CHIP R	6.8	J	1/2W	
R44		RK73PB2H6R8J	CHIP R	6.8	J	1/2W	
R45		RK73PB2H101J	CHIP R	100	J	1/2W	
R46		RK73GH2A333D	CHIP R	33K	D	1/10W	
R47		RK73GH2A622D	CHIP R	6.2K	D	1/10W	
R48		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R49		RK73PB2H2R2J	CHIP R	2.2	J	1/2W	
R50		RK73PB2H2R2J	CHIP R	2.2	J	1/2W	
R51		RK73PB2H2R2J	CHIP R	2.2	J	1/2W	
R61		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R62		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R63		RK73GB2A470J	CHIP R	47	J	1/10W	
R64		RK73GB2A470J	CHIP R	47	J	1/10W	
R65		RK73GB2A101J	CHIP R	100	J	1/10W	
R66		RK73GB2A101J	CHIP R	100	J	1/10W	
R67		RK73GB2A101J	CHIP R	100	J	1/10W	
R68		RK73GB2A101J	CHIP R	100	J	1/10W	
R69		RK73GB2A101J	CHIP R	100	J	1/10W	
R70		RK73GB2A101J	CHIP R	100	J	1/10W	
R71		RK73GB2A101J	CHIP R	100	J	1/10W	
R72		RK73GB2A470J	CHIP R	47	J	1/10W	
R73		RK73GB2A470J	CHIP R	47	J	1/10W	
R74		RK73GB2A470J	CHIP R	47	J	1/10W	
R75		RK73GB2A123J	CHIP R	12K	J	1/10W	
R77		RK73GB2A223J	CHIP R	22K	J	1/10W	
R79		RK73GB2A334J	CHIP R	330K	J	1/10W	
R80		RK73GB2A334J	CHIP R	330K	J	1/10W	
R81		RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R82		RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R83		RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R85		RK73GB2A104J	CHIP R	100K	J	1/10W	
R86		RK73GB2A223J	CHIP R	22K	J	1/10W	
R87		RK73GB2A223J	CHIP R	22K	J	1/10W	
R88		RK73GB2A183J	CHIP R	18K	J	1/10W	
R89		RK73GB2A183J	CHIP R	18K	J	1/10W	
R91		RK73GB2A103J	CHIP R	10K	J	1/10W	
R92		RK73GB2A103J	CHIP R	10K	J	1/10W	
R94		RK73GB2A183J	CHIP R	18K	J	1/10W	
R95		RK73GB2A183J	CHIP R	18K	J	1/10W	
R96		RK73GB2A223J	CHIP R	22K	J	1/10W	
R97		RK73GB2A223J	CHIP R	22K	J	1/10W	
R98		RK73GB2A183J	CHIP R	18K	J	1/10W	
R99		RK73GB2A183J	CHIP R	18K	J	1/10W	
R100		RK73GB2A183J	CHIP R	18K	J	1/10W	
R101		RK73GB2A183J	CHIP R	18K	J	1/10W	
R104		RK73GB2A100J	CHIP R	10	J	1/10W	
R105		RK73GB2A100J	CHIP R	10	J	1/10W	
R106		RK73GB2A682J	CHIP R	6.8K	J	1/10W	
R108		RK73GB2A223J	CHIP R	22K	J	1/10W	
R109		RK73GB2A223J	CHIP R	22K	J	1/10W	
R110		RK73GB2A682J	CHIP R	6.8K	J	1/10W	
R111		RK73GB2A333J	CHIP R	33K	J	1/10W	
R112		RK73GB2A103J	CHIP R	10K	J	1/10W	
R113		RK73GB2A103J	CHIP R	10K	J	1/10W	
R115		RK73GB2A333J	CHIP R	33K	J	1/10W	
R116		RK73GB2A333J	CHIP R	33K	J	1/10W	

PARTS LIST

CONTROL UNIT (XC1-021X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
R117		RK73GB2A223J	CHIP R 22K J 1/10W	
R118		RK73GB2A223J	CHIP R 22K J 1/10W	
R119		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R120		RK73GB2A333J	CHIP R 33K J 1/10W	
R121		RK73GB2A333J	CHIP R 33K J 1/10W	
R122		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R125		RK73GB2A220J	CHIP R 22 J 1/10W	
R126		RK73GB2A220J	CHIP R 22 J 1/10W	
R127		RK73GB2A151J	CHIP R 150 J 1/10W	
R128		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R129		RK73GB2A4R7J	CHIP R 4.7 J 1/10W	
R130		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R131		RK73GB2A682J	CHIP R 6.8K J 1/10W	
R132		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R133		RK73GB2A104J	CHIP R 100K J 1/10W	
R134		RK73GB2A103J	CHIP R 10K J 1/10W	
R135		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R136		RK73GB2A103J	CHIP R 10K J 1/10W	
R137		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R140		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R141		RK73GB2A123J	CHIP R 12K J 1/10W	
R142		RK73GB2A183J	CHIP R 18K J 1/10W	
R143		RK73GB2A123J	CHIP R 12K J 1/10W	
R144		RK73GB2A223J	CHIP R 22K J 1/10W	
R145		RK73GB2A822J	CHIP R 8.2K J 1/10W	
R146		RK73GB2A223J	CHIP R 22K J 1/10W	
R147		RK73GB2A223J	CHIP R 22K J 1/10W	
R148		RK73GB2A223J	CHIP R 22K J 1/10W	
R149		RK73GB2A223J	CHIP R 22K J 1/10W	
R152		RK73GB2A123J	CHIP R 12K J 1/10W	
R153		RK73GB2A183J	CHIP R 18K J 1/10W	
R154		RK73GB2A153J	CHIP R 15K J 1/10W	
R155		RK73GB2A223J	CHIP R 22K J 1/10W	
R158		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R159		RK73GB2A822J	CHIP R 8.2K J 1/10W	
R160		RK73GB2A123J	CHIP R 12K J 1/10W	
R161		RK73GB2A682J	CHIP R 6.8K J 1/10W	
R162		RK73GB2A682J	CHIP R 6.8K J 1/10W	
R163		RK73GB2A183J	CHIP R 18K J 1/10W	
R164		RK73GB2A682J	CHIP R 6.8K J 1/10W	
R165		RK73GB2A123J	CHIP R 12K J 1/10W	
R166		RK73GB2A103J	CHIP R 10K J 1/10W	
R167		RK73GB2A103J	CHIP R 10K J 1/10W	
R169		RK73GB2A393J	CHIP R 39K J 1/10W	
R170		RK73GB2A393J	CHIP R 39K J 1/10W	
R171		RK73GB2A103J	CHIP R 10K J 1/10W	
R172		RK73GB2A103J	CHIP R 10K J 1/10W	
R174		RK73GB2A103J	CHIP R 10K J 1/10W	
R175		RK73GB2A103J	CHIP R 10K J 1/10W	
R176		RK73GB2A103J	CHIP R 10K J 1/10W	
R177		RK73GB2A101J	CHIP R 100 J 1/10W	
R178		RK73GB2A471J	CHIP R 470 J 1/10W	
R179		RK73GB2A104J	CHIP R 100K J 1/10W	
R181		RK73GB2A104J	CHIP R 100K J 1/10W	
R182		RK73GB2A822J	CHIP R 8.2K J 1/10W	
R183		RK73GB2A183J	CHIP R 18K J 1/10W	
R184		RK73GB2A183J	CHIP R 18K J 1/10W	
R185		RK73GB2A223J	CHIP R 22K J 1/10W	
R186		RK73GB2A223J	CHIP R 22K J 1/10W	
R188		RK73GB2A183J	CHIP R 18K J 1/10W	
R189		RK73GB2A183J	CHIP R 18K J 1/10W	
R190		RK73GB2A822J	CHIP R 8.2K J 1/10W	
R192		RK73GB2A183J	CHIP R 18K J 1/10W	
R193		RK73GB2A183J	CHIP R 18K J 1/10W	
R194		RK73GB2A183J	CHIP R 18K J 1/10W	
R195		RK73GB2A223J	CHIP R 22K J 1/10W	
R196		RK73GB2A223J	CHIP R 22K J 1/10W	
R198		RK73GB2A822J	CHIP R 8.2K J 1/10W	
R199		RK73GB2A683J	CHIP R 68K J 1/10W	
R200		RK73GB2A683J	CHIP R 68K J 1/10W	
R205		RK73GB2A183J	CHIP R 18K J 1/10W	
R206		RK73GB2A183J	CHIP R 18K J 1/10W	
R207		RK73GB2A183J	CHIP R 18K J 1/10W	
R208		RK73GB2A223J	CHIP R 22K J 1/10W	
R209		RK73GB2A223J	CHIP R 22K J 1/10W	
R211		RK73GB2A183J	CHIP R 18K J 1/10W	
R212		RK73GB2A183J	CHIP R 18K J 1/10W	
R213		RK73GB2A183J	CHIP R 18K J 1/10W	
R214		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R216		RK73GB2A103J	CHIP R 10K J 1/10W	
R217		RK73GB2A223J	CHIP R 22K J 1/10W	
R218		RK73GB2A223J	CHIP R 22K J 1/10W	
R219		RK73GB2A272J	CHIP R 2.7K J 1/10W	
R220		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R222		RK73GB2A104J	CHIP R 100K J 1/10W	
R223		RK73GB2A103J	CHIP R 10K J 1/10W	
R224		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R226		RK73GB2A223J	CHIP R 22K J 1/10W	
R227		RK73GB2A223J	CHIP R 22K J 1/10W	
R229		RK73GB2A183J	CHIP R 18K J 1/10W	
R230		RK73GB2A183J	CHIP R 18K J 1/10W	
R231		RK73GB2A183J	CHIP R 18K J 1/10W	
R232		RK73GB2A183J	CHIP R 18K J 1/10W	
R233		RK73GB2A183J	CHIP R 18K J 1/10W	
R234		RK73GB2A183J	CHIP R 18K J 1/10W	
R236		RK73GB2A223J	CHIP R 22K J 1/10W	
R237		RK73GB2A183J	CHIP R 18K J 1/10W	
R238		RK73GB2A223J	CHIP R 22K J 1/10W	
R239		RK73GB2A183J	CHIP R 18K J 1/10W	
R240		RK73GB2A183J	CHIP R 18K J 1/10W	
R242		RK73GB2A473J	CHIP R 47K J 1/10W	
R243		RK73GB2A103J	CHIP R 10K J 1/10W	
R244		RK73GB2A473J	CHIP R 47K J 1/10W	
R246		RK73GB2A223J	CHIP R 22K J 1/10W	
R247		RK73GB2A183J	CHIP R 18K J 1/10W	
R248		RK73GB2A223J	CHIP R 22K J 1/10W	
R249		RK73GB2A183J	CHIP R 18K J 1/10W	
R250		RK73GB2A183J	CHIP R 18K J 1/10W	
R252		RK73GB2A472J	CHIP R 4.7K J 1/10W	

PARTS LIST

CONTROL UNIT (XC1-021X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
R253		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R254		RK73GB2A332J	CHIP R 3.3K J 1/10W	
R255		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R256		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R257		RK73GB2A103J	CHIP R 10K J 1/10W	
R258		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R259		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R260		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R261		RK73GB2A103J	CHIP R 10K J 1/10W	
R262		RK73GB2A103J	CHIP R 10K J 1/10W	
R263		RK73GB2A103J	CHIP R 10K J 1/10W	
R264		RK73GB2A103J	CHIP R 10K J 1/10W	
R265		RK73GB2A103J	CHIP R 10K J 1/10W	
R266		RK73GB2A103J	CHIP R 10K J 1/10W	
R267		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R268		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R269		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R270		RK73GB2A473J	CHIP R 47K J 1/10W	
R271		RK73GB2A473J	CHIP R 47K J 1/10W	
R272		RK73GB2A473J	CHIP R 47K J 1/10W	
R273		RK73GB2A473J	CHIP R 47K J 1/10W	
R274		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R278		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R282		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R283		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R284		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R289		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R293		RK73GB2A000J	CHIP R 0.0 J 1/10W	K
R294		RK73GB2A000J	CHIP R 0.0 J 1/10W	E
R300		RK73GB2A473J	CHIP R 47K J 1/10W	
R303		RK73GB2A101J	CHIP R 100 J 1/10W	
R306		RK73GB2A473J	CHIP R 47K J 1/10W	
R309		RK73GB2A470J	CHIP R 47 J 1/10W	
R312		RK73GB2A470J	CHIP R 47 J 1/10W	
R313		RK73GB2A470J	CHIP R 47 J 1/10W	
R314		RK73GB2A470J	CHIP R 47 J 1/10W	
R315		RK73GB2A473J	CHIP R 47K J 1/10W	
R316		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R317		RK73GB2A470J	CHIP R 47 J 1/10W	
R320		RK73GB2A470J	CHIP R 47 J 1/10W	
R321		RK73GB2A473J	CHIP R 47K J 1/10W	
R322		RK73GB2A470J	CHIP R 47 J 1/10W	
R323		RK73GB2A473J	CHIP R 47K J 1/10W	
R324		RK73GB2A470J	CHIP R 47 J 1/10W	
R325		RK73GB2A473J	CHIP R 47K J 1/10W	
R326		RK73GB2A470J	CHIP R 47 J 1/10W	
R327		RK73GB2A473J	CHIP R 47K J 1/10W	
R328		RK73GB2A470J	CHIP R 47 J 1/10W	
R329		RK73GB2A473J	CHIP R 47K J 1/10W	
R330		RK73GB2A470J	CHIP R 47 J 1/10W	
R331		RK73GB2A473J	CHIP R 47K J 1/10W	
R332		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R333		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R334		RK73GB2A470J	CHIP R 47 J 1/10W	
R335		RK73GB2A470J	CHIP R 47 J 1/10W	
R336		RK73GB2A470J	CHIP R 47 J 1/10W	
R339		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R341		RK73GB2A473J	CHIP R 47K J 1/10W	
R343		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R344		RK73GB2A470J	CHIP R 47 J 1/10W	
R345		RK73GB2A473J	CHIP R 47K J 1/10W	
R346		RK73GB2A473J	CHIP R 47K J 1/10W	
R347		RK73GB2A473J	CHIP R 47K J 1/10W	
R348		RK73GB2A473J	CHIP R 47K J 1/10W	
R355		RK73GB2A473J	CHIP R 47K J 1/10W	
R357		RK73GB2A473J	CHIP R 47K J 1/10W	
R365		RK73GB2A105J	CHIP R 1.0M J 1/10W	
R366		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R367		RK73GB2A473J	CHIP R 47K J 1/10W	
R370		RK73GB2A330J	CHIP R 33 J 1/10W	
R372		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R375		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R378		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R380		RK73GB2A105J	CHIP R 1.0M J 1/10W	
R381		RK73GB2A105J	CHIP R 1.0M J 1/10W	
R382		RK73GB2A473J	CHIP R 47K J 1/10W	
R383		RK73GB2A101J	CHIP R 100 J 1/10W	
R384		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R385		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R386		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R387		RK73GB2A101J	CHIP R 100 J 1/10W	
R388		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R389		RK73GB2A154J	CHIP R 150K J 1/10W	
R390		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R391		RK73GB2A473J	CHIP R 47K J 1/10W	
R393		RK73GB2A105J	CHIP R 1.0M J 1/10W	
R394		RK73GB2A473J	CHIP R 47K J 1/10W	
R395		RK73GB2A473J	CHIP R 47K J 1/10W	
R397		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R398		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R399		RK73GB2A102J	CHIP R 1.0K J 1/10W	E
R403		RK73GB2A473J	CHIP R 47K J 1/10W	
R405		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R406		RK73GB2A473J	CHIP R 47K J 1/10W	
R407		RK73GB2A101J	CHIP R 100 J 1/10W	
R408		RK73GB2A473J	CHIP R 47K J 1/10W	
R409		RK73GB2A473J	CHIP R 47K J 1/10W	
R410		RK73GB2A473J	CHIP R 47K J 1/10W	
R411		RK73GB2A473J	CHIP R 47K J 1/10W	
R412		RK73GB2A105J	CHIP R 1.0M J 1/10W	
R413		RK73GB2A105J	CHIP R 1.0M J 1/10W	
R414		RK73GB2A473J	CHIP R 47K J 1/10W	
R415		RK73GB2A103J	CHIP R 10K J 1/10W	
R416		RK73GB2A103J	CHIP R 10K J 1/10W	
R417		RK73GB2A101J	CHIP R 100 J 1/10W	
R418		RK73GB2A101J	CHIP R 100 J 1/10W	
R419		RK73GB2A473J	CHIP R 47K J 1/10W	
R420		RK73GB2A473J	CHIP R 47K J 1/10W	
R421		RK73GB2A473J	CHIP R 47K J 1/10W	
R422		RK73GB2A473J	CHIP R 47K J 1/10W	

PARTS LIST

CONTROL UNIT (XC1-021X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
R423		RK73GB2A473J	CHIP R 47K J 1/10W	
R424		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R425		RK73GB2A103J	CHIP R 10K J 1/10W	
R426		RK73GB2A183J	CHIP R 18K J 1/10W	
R439		RK73GB2A101J	CHIP R 100 J 1/10W	
R440		RK73GB2A101J	CHIP R 100 J 1/10W	
R441		RK73GB2A101J	CHIP R 100 J 1/10W	
R442		RK73GB2A101J	CHIP R 100 J 1/10W	
R443		RK73GB2A101J	CHIP R 100 J 1/10W	
R444		RK73GB2A101J	CHIP R 100 J 1/10W	
R445		RK73GB2A101J	CHIP R 100 J 1/10W	
R446		RK73GB2A101J	CHIP R 100 J 1/10W	
R447		RK73GB2A101J	CHIP R 100 J 1/10W	
R448		RK73GB2A101J	CHIP R 100 J 1/10W	
R449		RK73GB2A101J	CHIP R 100 J 1/10W	
R450		RK73GB2A101J	CHIP R 100 J 1/10W	
R451		RK73GB2A101J	CHIP R 100 J 1/10W	
R452		RK73GB2A101J	CHIP R 100 J 1/10W	
R453		RK73GB2A101J	CHIP R 100 J 1/10W	
R454		RK73GB2A101J	CHIP R 100 J 1/10W	
R455		RK73GB2A101J	CHIP R 100 J 1/10W	
R456		RK73GB2A101J	CHIP R 100 J 1/10W	
R457		RK73GB2A101J	CHIP R 100 J 1/10W	
R458		RK73GB2A101J	CHIP R 100 J 1/10W	
R459		RK73GB2A101J	CHIP R 100 J 1/10W	
R460		RK73GB2A101J	CHIP R 100 J 1/10W	
R461		RK73GB2A101J	CHIP R 100 J 1/10W	
R462		RK73GB2A101J	CHIP R 100 J 1/10W	
R463		RK73GB2A101J	CHIP R 100 J 1/10W	
R464		RK73GB2A101J	CHIP R 100 J 1/10W	
R465		RK73GB2A101J	CHIP R 100 J 1/10W	
R466		RK73GB2A101J	CHIP R 100 J 1/10W	
R467		RK73GB2A101J	CHIP R 100 J 1/10W	
R468		RK73GB2A101J	CHIP R 100 J 1/10W	
R469		RK73GB2A101J	CHIP R 100 J 1/10W	
R470		RK73GB2A101J	CHIP R 100 J 1/10W	
R471		RK73GB2A101J	CHIP R 100 J 1/10W	
R472		RK73GB2A101J	CHIP R 100 J 1/10W	
R473		RK73GB2A101J	CHIP R 100 J 1/10W	
R474		RK73GB2A101J	CHIP R 100 J 1/10W	
R475		RK73GB2A101J	CHIP R 100 J 1/10W	
R476		RK73GB2A101J	CHIP R 100 J 1/10W	
R477		RK73GB2A101J	CHIP R 100 J 1/10W	
R478		RK73GB2A101J	CHIP R 100 J 1/10W	
R479		RK73GB2A101J	CHIP R 100 J 1/10W	
R480		RK73GB2A101J	CHIP R 100 J 1/10W	
R481		RK73GB2A101J	CHIP R 100 J 1/10W	
R482		RK73GB2A101J	CHIP R 100 J 1/10W	
R483		RK73GB2A101J	CHIP R 100 J 1/10W	
R484		RK73GB2A101J	CHIP R 100 J 1/10W	
R485		RK73GB2A101J	CHIP R 100 J 1/10W	
R486		RK73GB2A101J	CHIP R 100 J 1/10W	
R487		RK73GB2A101J	CHIP R 100 J 1/10W	
R488		RK73GB2A101J	CHIP R 100 J 1/10W	
R489		RK73GB2A101J	CHIP R 100 J 1/10W	

Ref.No	Adderss	Parts No.	Description	Desti-nation
R490		RK73GB2A101J	CHIP R 100 J 1/10W	
R491		RK73GB2A101J	CHIP R 100 J 1/10W	
R492		RK73GB2A101J	CHIP R 100 J 1/10W	
R493		RK73GB2A101J	CHIP R 100 J 1/10W	
R494		RK73GB2A101J	CHIP R 100 J 1/10W	
R495		RK73GB2A473J	CHIP R 47K J 1/10W	
R497		RK73GB2A473J	CHIP R 47K J 1/10W	
R498		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R499		RK73GB2A473J	CHIP R 47K J 1/10W	
R501		RK73GB2A101J	CHIP R 100 J 1/10W	
R502		RK73GB2A101J	CHIP R 100 J 1/10W	
R503		RK73GB2A101J	CHIP R 100 J 1/10W	
R504		RK73GB2A101J	CHIP R 100 J 1/10W	
R505		RK73GB2A101J	CHIP R 100 J 1/10W	
R506		RK73GB2A101J	CHIP R 100 J 1/10W	
R507		RK73GB2A101J	CHIP R 100 J 1/10W	
R508		RK73GB2A101J	CHIP R 100 J 1/10W	
R509		RK73GB2A101J	CHIP R 100 J 1/10W	
R510		RK73GB2A101J	CHIP R 100 J 1/10W	
R511		RK73GB2A101J	CHIP R 100 J 1/10W	
R512		RK73GB2A101J	CHIP R 100 J 1/10W	
R513		RK73GB2A101J	CHIP R 100 J 1/10W	
R514		RK73GB2A101J	CHIP R 100 J 1/10W	
R515		RK73GB2A101J	CHIP R 100 J 1/10W	
R516		RK73GB2A101J	CHIP R 100 J 1/10W	
R517		RK73GB2A101J	CHIP R 100 J 1/10W	
R518		RK73GB2A101J	CHIP R 100 J 1/10W	
R519		RK73GB2A101J	CHIP R 100 J 1/10W	
R520		RK73GB2A101J	CHIP R 100 J 1/10W	
R521		RK73GB2A101J	CHIP R 100 J 1/10W	
R522		RK73GB2A101J	CHIP R 100 J 1/10W	
R523		RK73GB2A101J	CHIP R 100 J 1/10W	
R524		RK73GB2A101J	CHIP R 100 J 1/10W	
R525		RK73GB2A101J	CHIP R 100 J 1/10W	
R526		RK73GB2A101J	CHIP R 100 J 1/10W	
R527		RK73GB2A101J	CHIP R 100 J 1/10W	
R528		RK73GB2A103J	CHIP R 10K J 1/10W	
R530		RK73GB2A223J	CHIP R 22K J 1/10W	
R531		RK73GB2A101J	CHIP R 100 J 1/10W	
R532		RK73GB2A222J	CHIP R 2.2K J 1/10W	
R535		RK73PB2H2R2J	CHIP R 2.2 J 1/2W	
R536		RK73PB2H2R2J	CHIP R 2.2 J 1/2W	
R537		RK73GB2A100J	CHIP R 10 J 1/10W	
R538		RK73GB2A101J	CHIP R 100 J 1/10W	
R539		RK73GB2A822J	CHIP R 8.2K J 1/10W	
R540		RK73GB2A153J	CHIP R 15K J 1/10W	
R541		RK73GB2A391J	CHIP R 390 J 1/10W	
R542		RK73GB2A181J	CHIP R 180 J 1/10W	
R543		RK73GB2A224J	CHIP R 220K J 1/10W	
R544		RK73GB2A470J	CHIP R 47 J 1/10W	
R545		RK73GB2A180J	CHIP R 18 J 1/10W	
R546		RK73GB2A180J	CHIP R 18 J 1/10W	
R547		RK73GB2A180J	CHIP R 18 J 1/10W	
R548		RK73GB2A153J	CHIP R 15K J 1/10W	

PARTS LIST

CONTROL UNIT (XC1-021X-XX)

Ref.No	Adderss	Parts No.	Description				Desti-nation
R549		RK73GB2A682J	CHIP R	6.8K	J	1/10W	
R550		RK73GB2A470J	CHIP R	47	J	1/10W	
R551		RK73GB2A271J	CHIP R	270	J	1/10W	
R552		RK73GB2A470J	CHIP R	47	J	1/10W	
R553		RK73GB2A153J	CHIP R	15K	J	1/10W	
R554		RK73GB2A682J	CHIP R	6.8K	J	1/10W	
R555		RK73GB2A271J	CHIP R	270	J	1/10W	
R556		RK73GB2A180J	CHIP R	18	J	1/10W	
R557		RK73GB2A180J	CHIP R	18	J	1/10W	
R558		RK73GB2A470J	CHIP R	47	J	1/10W	
R559		RK73GB2A682J	CHIP R	6.8K	J	1/10W	
R560		RK73GB2A682J	CHIP R	6.8K	J	1/10W	
R561		RK73GB2A101J	CHIP R	100	J	1/10W	
R562		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R563		RK73GB2A820J	CHIP R	82	J	1/10W	
R564		RK73GB2A121J	CHIP R	120	J	1/10W	
R565		RK73GB2A820J	CHIP R	82	J	1/10W	
R567		RK73GB2A101J	CHIP R	100	J	1/10W	
R568		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R569		RK73GB2A272J	CHIP R	2.7K	J	1/10W	
R601		RK73GB2A561J	CHIP R	560	J	1/10W	
R602		RK73GB2A683J	CHIP R	68K	J	1/10W	
R604		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R605		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R606		RK73GB2A392J	CHIP R	3.9K	J	1/10W	
R607		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R608		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R609		RK73GB2A560J	CHIP R	56	J	1/10W	
R610		RK73GB2A331J	CHIP R	330	J	1/10W	
R611		RK73GB2A101J	CHIP R	100	J	1/10W	
R612		RK73GB2A104J	CHIP R	100K	J	1/10W	
R614		RK73GB2A391J	CHIP R	390	J	1/10W	
R615		RK73GB2A470J	CHIP R	47	J	1/10W	
R616		RK73GB2A153J	CHIP R	15K	J	1/10W	
R617		RK73GB2A153J	CHIP R	15K	J	1/10W	
R618		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R619		RK73GB2A332J	CHIP R	3.3K	J	1/10W	
R621		RK73GB2A332J	CHIP R	3.3K	J	1/10W	
R624		RK73GB2A332J	CHIP R	3.3K	J	1/10W	
R625		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R626		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R627		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R630		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R632		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R633		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R634		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R636		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R637		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R638		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R639		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R640		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R648		RK73GB2A821J	CHIP R	820	J	1/10W	
R649		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R650		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R651		RK73GB2A101J	CHIP R	100	J	1/10W	
R652		RK73GB2A101J	CHIP R	100	J	1/10W	
R653		RK73GB2A101J	CHIP R	100	J	1/10W	
R654		RK73GB2A101J	CHIP R	100	J	1/10W	
R655		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R657		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R658		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R659		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R660		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R661		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R662		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R663		RK73GB2A821J	CHIP R	820	J	1/10W	
R667		RK73GB2A104J	CHIP R	100K	J	1/10W	
R668		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R669		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R671		RK73GB2A821J	CHIP R	820	J	1/10W	
R672		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R673		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R674		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R675		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R676		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R679		RK73GB2A471J	CHIP R	470	J	1/10W	
R680		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R681		RK73GB2A120J	CHIP R	12	J	1/10W	
R682		RK73GB2A821J	CHIP R	820	J	1/10W	
R684		RK73GB2A471J	CHIP R	470	J	1/10W	
R685		RK73GB2A271J	CHIP R	270	J	1/10W	
R686		RK73GB2A121J	CHIP R	120	J	1/10W	
R687		RK73GB2A151J	CHIP R	150	J	1/10W	
R688		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R689		RK73GB2A121J	CHIP R	120	J	1/10W	
R690		RK73GB2A180J	CHIP R	18	J	1/10W	
R691		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R692		RK73GB2A470J	CHIP R	47	J	1/10W	
R693		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R694		RK73GB2A390J	CHIP R	39	J	1/10W	
R695		RK73GB2A470J	CHIP R	47	J	1/10W	
R696		RK73GB2A271J	CHIP R	270	J	1/10W	
R697		RK73GB2A121J	CHIP R	120	J	1/10W	
R698		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R699		RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R700		RK73GB2A121J	CHIP R	120	J	1/10W	
R701		RK73GB2A151J	CHIP R	150	J	1/10W	
R702		RK73GB2A153J	CHIP R	15K	J	1/10W	
R704		RK73GB2A821J	CHIP R	820	J	1/10W	
R705		RK73GB2A470J	CHIP R	47	J	1/10W	
R706		RK73GB2A470J	CHIP R	47	J	1/10W	
R707		RK73GB2A101J	CHIP R	100	J	1/10W	
R708		RK73GB2A104J	CHIP R	100K	J	1/10W	
R711		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R713		RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R714		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R715		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R716		RK73GB2A271J	CHIP R	270	J	1/10W	
R718		RK73GB2A180J	CHIP R	18	J	1/10W	
R720		RK73GB2A271J	CHIP R	270	J	1/10W	

PARTS LIST

CONTROL UNIT (XC1-021X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
R722		RK73GB2A152J	CHIP R 1.5K J 1/10W	
R724		RK73GB2A821J	CHIP R 820 J 1/10W	
R725		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R727		RK73GB2A104J	CHIP R 100K J 1/10W	
R728		RK73GB2A152J	CHIP R 1.5K J 1/10W	
R729		RK73GB2A821J	CHIP R 820 J 1/10W	
R801		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R802		RK73GB2A180J	CHIP R 18 J 1/10W	
R803		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R804		RK73GB2A470J	CHIP R 47 J 1/10W	
R805		RK73GB2A153J	CHIP R 15K J 1/10W	
R806		RK73GB2A682J	CHIP R 6.8K J 1/10W	
R807		RK73GB2A272J	CHIP R 2.7K J 1/10W	
R808		RK73GB2A101J	CHIP R 100 J 1/10W	
R809		RK73GB2A221J	CHIP R 220 J 1/10W	
R810		RK73GB2A104J	CHIP R 100K J 1/10W	
R811		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R812		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R813		RK73GB2A221J	CHIP R 220 J 1/10W	
R815		RK73GB2A103J	CHIP R 10K J 1/10W	
R816		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R818		RK73GB2A122J	CHIP R 1.2K J 1/10W	
R820		RK73GB2A101J	CHIP R 100 J 1/10W	
R821		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R822		RK73GB2A153J	CHIP R 15K J 1/10W	
R823		RK73GB2A153J	CHIP R 15K J 1/10W	
R824		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R825		RK73GB2A101J	CHIP R 100 J 1/10W	
R826		RK73GB2A101J	CHIP R 100 J 1/10W	
R827		RK73GB2A101J	CHIP R 100 J 1/10W	
R828		RK73GB2A101J	CHIP R 100 J 1/10W	
R829		RK73GB2A101J	CHIP R 100 J 1/10W	
R832		RK73GB2A473J	CHIP R 47K J 1/10W	
R833		RK73GB2A470J	CHIP R 47 J 1/10W	
R835		RK73GB2A180J	CHIP R 18 J 1/10W	
R836		RK73GB2A104J	CHIP R 100K J 1/10W	
R837		RN73GH1J221D	CHIP R 220 D 1/16W	
R838		RK73GB2A180J	CHIP R 18 J 1/10W	
R839		RK73GB2A180J	CHIP R 18 J 1/10W	
R840		RN73GH1J151D	CHIP R 150 D 1/16W	
R841		RK73GB2A470J	CHIP R 47 J 1/10W	
R843		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R844		RK73GB2A101J	CHIP R 100 J 1/10W	
R846		RK73GB2A273J	CHIP R 27K J 1/10W	
R847		RK73GB2A393J	CHIP R 39K J 1/10W	
R849		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R850		RK73GB2A153J	CHIP R 15K J 1/10W	
R851		RK73GB2A153J	CHIP R 15K J 1/10W	
R852		RK73GB2A101J	CHIP R 100 J 1/10W	
R853		RK73GB2A331J	CHIP R 330 J 1/10W	
R854		RK73GB2A101J	CHIP R 100 J 1/10W	
R856		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R858		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R859		RK73GB2A000J	CHIP R 0.0 J 1/10W	

Ref.No	Adderss	Parts No.	Description	Desti-nation
R860		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R861		RK73GB2A101J	CHIP R 100 J 1/10W	
R863		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R864		RK73GB2A151J	CHIP R 150 J 1/10W	
R865		RK73GB2A151J	CHIP R 150 J 1/10W	
R866		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R867		RK73GB2A101J	CHIP R 100 J 1/10W	
R868		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R869		RK73GB2A101J	CHIP R 100 J 1/10W	
R870		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R871		RK73GB2A101J	CHIP R 100 J 1/10W	
R872		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R873		RK73GB2A470J	CHIP R 47 J 1/10W	
R874		RK73GB2A392J	CHIP R 3.9K J 1/10W	
R875		RK73GB2A180J	CHIP R 18 J 1/10W	
R876		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R878		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R879		RK73GB2A101J	CHIP R 100 J 1/10W	
R880		RK73GB2A680J	CHIP R 68 J 1/10W	
R881		RK73GB2A101J	CHIP R 100 J 1/10W	
R882		RK73GB2A100J	CHIP R 10 J 1/10W	
R883		RK73GB2A101J	CHIP R 100 J 1/10W	
R884		RK73GB2A682J	CHIP R 6.8K J 1/10W	
R885		RK73GB2A391J	CHIP R 390 J 1/10W	
R900		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R901		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R902		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R903		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R904		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R905		RK73GB2A101J	CHIP R 100 J 1/10W	
R906		RK73GB2A101J	CHIP R 100 J 1/10W	
R907		RK73GB2A104J	CHIP R 100K J 1/10W	
R908		RK73GB2A101J	CHIP R 100 J 1/10W	
R909		RK73GB2A101J	CHIP R 100 J 1/10W	
R910		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R911		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R912		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R913		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R914		RK73GB2A562J	CHIP R 5.6K J 1/10W	
R915		RK73GB2A223J	CHIP R 22K J 1/10W	
R916		RK73GB2A333J	CHIP R 33K J 1/10W	
R917		RK73GB2A333J	CHIP R 33K J 1/10W	
R918		RK73GB2A153J	CHIP R 15K J 1/10W	
R919		RK73GB2A153J	CHIP R 15K J 1/10W	
R920		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R921		RK73GB2A105J	CHIP R 1.0M J 1/10W	
R922		RK73GB2A105J	CHIP R 1.0M J 1/10W	
R923		RK73GB2A220J	CHIP R 22 J 1/10W	
R924		RK73GB2A220J	CHIP R 22 J 1/10W	
R925		RK73GB2A152J	CHIP R 1.5K J 1/10W	
R926		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R927		RK73GB2A221J	CHIP R 220 J 1/10W	
R928		RK73GB2A101J	CHIP R 100 J 1/10W	
R929		RK73GB2A472J	CHIP R 4.7K J 1/10W	

PARTS LIST

CONTROL UNIT (XC1-021X-XX)
DISPLAY UNIT (XC1-0220-00)

Ref.No	Adderss	Parts No.	Description	Desti-nation
R930		RK73GB2A221J	CHIP R 220 J 1/10W	
R931		RK73GH2A123D	CHIP R 12K D 1/10W	
R932		RK73GB2A153J	CHIP R 15K J 1/10W	
R934		RK73GB2A105J	CHIP R 1.0M J 1/10W	
R935		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R937		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R939		RK73GB2A221J	CHIP R 220 J 1/10W	
R941		RK73GB2A473J	CHIP R 47K J 1/10W	
R943		RK73GB2A473J	CHIP R 47K J 1/10W	
R946		RK73GB2A473J	CHIP R 47K J 1/10W	
R947		RK73GB2A104J	CHIP R 100K J 1/10W	
R950		RK73GB2A104J	CHIP R 100K J 1/10W	
R951		RK73GB2A104J	CHIP R 100K J 1/10W	
R952		RK73GB2A473J	CHIP R 47K J 1/10W	
R953		RK73GB2A103J	CHIP R 10K J 1/10W	
R957		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R958		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R959		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R960		RK73GB2A101J	CHIP R 100 J 1/10W	
R961		RK73GB2A101J	CHIP R 100 J 1/10W	
R962		RK73GB2A101J	CHIP R 100 J 1/10W	
R963		RK73GB2A101J	CHIP R 100 J 1/10W	
R968		R92-1061-05	JUMPER REST 0 OHM	E
R970		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R971		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R972		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R980		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R981		RK73GB2A221J	CHIP R 220 J 1/10W	
R986		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R987		RK73GB2A221J	CHIP R 220 J 1/10W	
R993		RK73GB2A000J	CHIP R 0.0 J 1/10W	K
R994		RK73GB2A000J	CHIP R 0.0 J 1/10W	E
TC501		C05-0384-05	CERAMIC TRIMMER CAPACITOR(10P)	
TC801		C05-0384-05	CERAMIC TRIMMER CAPACITOR(10P)	
W504		E37-1498-05	LEAD WIRE WITH CONNECTOR	
X301		L77-3054-05	CRYSTAL RESONATOR(24.576MHZ)	
X302		L77-3069-05	CRYSTAL RESONATOR(11.0592MHZ)	
X502		L77-1906-05	CRYSTAL RESONATOR(15.6MHZ)	
X901		L77-3053-05	CRYSTAL RESONATOR(12MHZ)	
X902		L77-3052-05	CRYSTAL RESONATOR(24MHZ)	

Ref.No	Adderss	Parts No.	Description	Desti-nation
			DISPLAY UNIT (XC1-0220-00)	
301	1E	B11-1878-12	ILLUMINATION GUIDE	
302	1E	B11-1882-03	FILTER	
308	1E	B1B-0022-00	REFLECTION SHEET	
303	1E	B38-0934-05	LCD	
304	2F	E23-1176-14	EARTH LUG	
305	1E	E29-1230-14	INTER CONNECTOR	
306	2F	E37-1511-05	PROCESSED LEAD WIRE	
307	1E	J21-8620-23	MOUNTING HARDWARE	

Ref.No	Adderss	Parts No.	Description	Desti-nation
C101		CK73GB1H102K	CHIP C 1000PF K	
C102		CK73FB0J106K	CHIP C 10UF K	
C103		CK73GB1H102K	CHIP C 1000PF K	
C104		CK73FB0J106K	CHIP C 10UF K	
C105		CK73GB1H104K	CHIP C 0.10UF K	
C106		CK73GB1H104K	CHIP C 0.10UF K	
C107		CK73GB1H103K	CHIP C 0.010UF K	
C108		CK73GB1H471K	CHIP C 470PF K	
C109		CK73GB1H102K	CHIP C 1000PF K	
C110		CK73GB1H104K	CHIP C 0.10UF K	
C111		CK73GB1H104K	CHIP C 0.10UF K	
C112		CK73GB1H104K	CHIP C 0.10UF K	
C113		CK73GB1H102K	CHIP C 1000PF K	
C114		CK73GB1H104K	CHIP C 0.10UF K	
C115		C93-0912-05	CHIP C 100UF M	
C116		CK73GB1H102K	CHIP C 1000PF K	
C117		CC73GCH1H030B	CHIP C 3.0PF B	
C118		CC73GCH1H030B	CHIP C 3.0PF B	
C119		CK73GB1H104K	CHIP C 0.10UF K	
C120		CK73GB1H104K	CHIP C 0.10UF K	
C121		CK73GB1H104K	CHIP C 0.10UF K	
C122		CK73GB1H102K	CHIP C 1000PF K	
C123		CK73GB1H102K	CHIP C 1000PF K	
C124		CK73GB1H102K	CHIP C 1000PF K	
C125		CK73GB1A105K	CHIP C 1.0UF K	
C126		CK73GB1H102K	CHIP C 1000PF K	
C127		CK73GB1H102K	CHIP C 1000PF K	
C128		CK73GB1A105K	CHIP C 1.0UF K	
C129		CK73GB1H102K	CHIP C 1000PF K	
C130		CK73GB1H102K	CHIP C 1000PF K	
C131		CK73GB1H102K	CHIP C 1000PF K	
C132		CK73GB1H102K	CHIP C 1000PF K	
C133		CK73GB1H102K	CHIP C 1000PF K	
C134		CK73GB1H102K	CHIP C 1000PF K	
C135		CK73GB1H102K	CHIP C 1000PF K	
C136		CK73GB1H102K	CHIP C 1000PF K	
C137		CK73GB1A105K	CHIP C 1.0UF K	
C138		CK73GB1H102K	CHIP C 1000PF K	
C139		CK73GB1H102K	CHIP C 1000PF K	
C140		CK73GB1H102K	CHIP C 1000PF K	
C141		CK73GB1H102K	CHIP C 1000PF K	
C142		CK73GB1H102K	CHIP C 1000PF K	
C143		CK73GB1H102K	CHIP C 1000PF K	
C144		CK73GB1H102K	CHIP C 1000PF K	
C145		CK73GB1H102K	CHIP C 1000PF K	
C146		CK73GB1H102K	CHIP C 1000PF K	
C147		CK73GB1H102K	CHIP C 1000PF K	
C148		CK73GB1H102K	CHIP C 1000PF K	
C149		CK73GB1H102K	CHIP C 1000PF K	
C150		CK73GB1H102K	CHIP C 1000PF K	
C151		CE32BM1C101M	CHIP EL 100UF 16WV	
C152		CE32BM1C101M	CHIP EL 100UF 16WV	
C153		CE32BM1C101M	CHIP EL 100UF 16WV	
C154		C93-0912-05	CHIP C 100UF M	
C155		C93-0912-05	CHIP C 100UF M	

PARTS LIST

DISPLAY UNIT (XC1-0220-00)

Ref.No	Adderss	Parts No.	Description				Desti-nation
C157		CK73GB1H222K	CHIP C	2200PF	K		
C159		CK73GB1H222K	CHIP C	2200PF	K		
C161		CK73GB1H222K	CHIP C	2200PF	K		
C163		CK73GB1H222K	CHIP C	2200PF	K		
C164		CK73GB1H103K	CHIP C	0.010UF	K		
C169		CK73GB1H223K	CHIP C	0.022UF	K		
C171		CK73GB1H223K	CHIP C	0.022UF	K		
C172		CK73GB1H102K	CHIP C	1000PF	K		
C950		CK73GB1H103K	CHIP C	0.010UF	K		
C951		CK73GB1H103K	CHIP C	0.010UF	K		
C952		CK73FB1C105K	CHIP C	1.0UF	K		
C953		CK73FB1C105K	CHIP C	1.0UF	K		
C954		CK73FB1C105K	CHIP C	1.0UF	K		
C955		CK73FB1C105K	CHIP C	1.0UF	K		
C956		CK73GB1H103K	CHIP C	0.010UF	K		
C957		CK73GB1H103K	CHIP C	0.010UF	K		
C958		CK73GB1H103K	CHIP C	0.010UF	K		
C959		CK73GB1H103K	CHIP C	0.010UF	K		
C973		CK73GB1A474K	CHIP C	0.47UF	K		
CN101		E40-6727-05	FLAT CABLE CONNECTOR				
CN102		E40-6527-05	PIN ASSY				
CN103		E41-1684-05	PIN ASSY				
CN104		E41-1775-05	PIN ASSY				
CN105		E40-6765-05	PIN ASSY				
CN106		E40-6708-05	PIN ASSY				
CN107		E40-6879-05	FLAT CABLE CONNECTOR				
CN951		E41-1687-05	PIN ASSY				
CN953		E40-6766-05	PIN ASSY				
CN964		E41-1701-05	PIN ASSY				
CN965		E41-1775-05	PIN ASSY				
CN966		E40-6710-05	PIN ASSY				
CP101		RK74GB1J102J	CHIP-COM	1.0K	J	1/16W	
CP102		RK74GB1J102J	CHIP-COM	1.0K	J	1/16W	
CP103		RK74GB1J103J	CHIP-COM	10K	J	1/16W	
CP104		RK74GB1J103J	CHIP-COM	10K	J	1/16W	
CP105		RK74GB1J473J	CHIP-COM	47K	J	1/16W	
CP106		RK74GB1J101J	CHIP-COM	100	J	1/16W	
CP107		RK74GB1J473J	CHIP-COM	47K	J	1/16W	
D101		B3A-0012-00	LED(GREEN)				
D102		B3A-0012-00	LED(GREEN)				
D103		B3A-0012-00	LED(GREEN)				
D104		B3A-0012-00	LED(GREEN)				
D105		B3A-0012-00	LED(GREEN)				
D106		B3A-0012-00	LED(GREEN)				
D107		B3A-0012-00	LED(GREEN)				
D108		B3A-0012-00	LED(GREEN)				
D109		B3A-0012-00	LED(GREEN)				
D110		B3A-0012-00	LED(GREEN)				
D111		B3A-0012-00	LED(GREEN)				
D112		B3A-0012-00	LED(GREEN)				
D113		B3A-0012-00	LED(GREEN)				
D114		B3A-0012-00	LED(GREEN)				
D115		B3A-0012-00	LED(GREEN)				

Ref.No	Adderss	Parts No.	Description	Desti-nation
D116		DA2S101	DIODE	
D117		DA2S101	DIODE	
D118		DA2S101	DIODE	
D119		DA2S101	DIODE	
D120		DA2S101	DIODE	
D121		DA2S101	DIODE	
D122		DA2S101	DIODE	
D123		B3A-0012-00	LED(GREEN)	
D124		B3A-0012-00	LED(GREEN)	
D125		B3A-0012-00	LED(GREEN)	
D126		B3A-0012-00	LED(GREEN)	
D127		B3A-0012-00	LED(GREEN)	
D128		B3A-0012-00	LED(GREEN)	
D129		B3A-0012-00	LED(GREEN)	
D130		B3A-0012-00	LED(GREEN)	
D131		B3A-0012-00	LED(GREEN)	
D132		B3A-0012-00	LED(GREEN)	
D133		B3A-0012-00	LED(GREEN)	
D134		B3A-0012-00	LED(GREEN)	
D135		B3A-0012-00	LED(GREEN)	
D136		B3A-0012-00	LED(GREEN)	
D137		B3A-0012-00	LED(GREEN)	
D138		B3A-0012-00	LED(GREEN)	
D139		B3A-0012-00	LED(GREEN)	
D140		B3A-0012-00	LED(GREEN)	
D141		B3A-0012-00	LED(GREEN)	
D142		B3A-0012-00	LED(GREEN)	
D143		B3A-0012-00	LED(GREEN)	
D144		B3A-0012-00	LED(GREEN)	
D145		B3A-0012-00	LED(GREEN)	
D146		B3A-0012-00	LED(GREEN)	
D147		B3A-0012-00	LED(GREEN)	
D148		B3A-0012-00	LED(GREEN)	
D149		B3A-0012-00	LED(GREEN)	
D150		B3A-0012-00	LED(GREEN)	
D151		B3A-0012-00	LED(GREEN)	
D152		B3A-0012-00	LED(GREEN)	
D153		B3A-0012-00	LED(GREEN)	
D154		B3A-0012-00	LED(GREEN)	
D155		B3A-0012-00	LED(GREEN)	
D156		B3A-0012-00	LED(GREEN)	
D157		B3A-0012-00	LED(GREEN)	
D158		B3A-0012-00	LED(GREEN)	
D159		B3A-0012-00	LED(GREEN)	
D160		B3A-0012-00	LED(GREEN)	
D161		B3A-0013-00	LED(AMBER)	
D162		B3A-0013-00	LED(AMBER)	
D163		B3A-0013-00	LED(AMBER)	
D164		B3A-0013-00	LED(AMBER)	
D165		B3A-0013-00	LED(AMBER)	
D166		B3A-0013-00	LED(AMBER)	
D167		B3A-0013-00	LED(AMBER)	
D168		B3A-0013-00	LED(AMBER)	
D169		B3A-0013-00	LED(AMBER)	
D170		B3A-0013-00	LED(AMBER)	

PARTS LIST

DISPLAY UNIT (XC1-0220-00)

Ref.No	Adderss	Parts No.	Description	Desti-nation
D171		B3A-0013-00	LED(AMBER)	
D172		B3A-0013-00	LED(AMBER)	
D173		B3A-0013-00	LED(AMBER)	
D174		B3A-0013-00	LED(AMBER)	
D175		B3A-0013-00	LED(AMBER)	
D176		B3A-0013-00	LED(AMBER)	
D177		B3A-0013-00	LED(AMBER)	
D178		B3A-0013-00	LED(AMBER)	
D179		B3A-0013-00	LED(AMBER)	
D180		B3A-0013-00	LED(AMBER)	
D181		B3A-0013-00	LED(AMBER)	
D182		B3A-0013-00	LED(AMBER)	
D183		B3A-0013-00	LED(AMBER)	
D184		B3A-0013-00	LED(AMBER)	
D185		B3A-0013-00	LED(AMBER)	
D186		B3A-0013-00	LED(AMBER)	
D187		B3A-0013-00	LED(AMBER)	
D188		B3A-0013-00	LED(AMBER)	
D189		B3A-0013-00	LED(AMBER)	
D190		B3A-0013-00	LED(AMBER)	
D191		B3A-0013-00	LED(AMBER)	
D192		B3A-0013-00	LED(AMBER)	
D193		B3A-0013-00	LED(AMBER)	
D194		B3A-0013-00	LED(AMBER)	
D195		B3A-0013-00	LED(AMBER)	
D196		B3A-0013-00	LED(AMBER)	
D197		B3A-0013-00	LED(AMBER)	
D198		B3A-0013-00	LED(AMBER)	
D199		B3A-0013-00	LED(AMBER)	
D200		B3A-0013-00	LED(AMBER)	
D201		B3A-0013-00	LED(AMBER)	
D202		B3A-0013-00	LED(AMBER)	
D203		B3A-0013-00	LED(AMBER)	
D204		B3A-0013-00	LED(AMBER)	
D205		B3A-0013-00	LED(AMBER)	
D206		B3A-0013-00	LED(AMBER)	
D207		B3A-0013-00	LED(AMBER)	
D208		B3A-0013-00	LED(AMBER)	
D209		B3A-0013-00	LED(AMBER)	
D210		B3A-0013-00	LED(AMBER)	
D211		B3A-0013-00	LED(AMBER)	
D212		B3A-0013-00	LED(AMBER)	
D213		B3A-0013-00	LED(AMBER)	
D214		B30-2167-05	LED(GR)	
D215		B30-2168-05	LED(R)	
D216		B3A-0012-00	LED(GREEN)	
D217		B3A-0013-00	LED(AMBER)	
D218		RB531SM-30	DIODE	
D961		B30-2146-05	LED(AMBER)	
IC101		LC75897PW	MOS-IC	
IC102		TC7W125FU-F	MOS-IC	
IC103		F364AEDFBKFTA	MICROCONTROLLER IC	
IC104		TC7W125FU-F	MOS-IC	
IC105		HD74LV2G34AUS	MOS-IC	

Ref.No	Adderss	Parts No.	Description	Desti-nation
IC106		HD74LV2G34AUS	MOS-IC	
J950		E06-0858-25	RF COAXIAL RECEPTADLE(ROUND)	
J951		E11-0705-15	PHONE JACK (9P)	
L101		L92-0639-05	CHIP FERRITE	
L102		L92-0639-05	CHIP FERRITE	
L103		L92-0639-05	CHIP FERRITE	
L104		L92-0639-05	CHIP FERRITE	
L105		L92-0639-05	CHIP FERRITE	
L106		L33-1556-05	CHOKE COIL	
L107		L33-1554-05	CHOKE COIL	
L108		L33-1554-05	CHOKE COIL	
L109		L92-0639-05	CHIP FERRITE	
L901		L92-0639-05	CHIP FERRITE	
L902		L92-0639-05	CHIP FERRITE	
L903		L92-0639-05	CHIP FERRITE	
Q101		2SD2114K(W)	TRANSISTOR	
Q102		RE1C001ZP	FET	
Q103		2SD2114K(W)	TRANSISTOR	
Q104		2SD2114K(W)	TRANSISTOR	
Q105		2SD2114K(W)	TRANSISTOR	
Q106		LTC024EEBFS8	TRANSISTOR	
Q107		RU1C002UN	FET	
Q108		LTC014EEBFS8	DIGITAL TRANSISTOR	
Q109		LTC024EEBFS8	TRANSISTOR	
R101		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R102		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R103		RK73GB2A473J	CHIP R 47K J 1/10W	
R104		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R105		RK73GB2A103J	CHIP R 10K J 1/10W	
R106		RK73GB2A680J	CHIP R 68 J 1/10W	
R107		RK73GB2A680J	CHIP R 68 J 1/10W	
R108		RK73GB2A680J	CHIP R 68 J 1/10W	
R109		RK73GB2A103J	CHIP R 10K J 1/10W	
R110		RK73GB2A680J	CHIP R 68 J 1/10W	
R111		RK73GB2A680J	CHIP R 68 J 1/10W	
R112		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R113		RK73GB2A680J	CHIP R 68 J 1/10W	
R114		RK73GB2A680J	CHIP R 68 J 1/10W	
R115		RK73GB2A680J	CHIP R 68 J 1/10W	
R116		RK73GB2A680J	CHIP R 68 J 1/10W	
R117		RK73GB2A680J	CHIP R 68 J 1/10W	
R118		RK73GB2A680J	CHIP R 68 J 1/10W	
R119		RK73GB2A680J	CHIP R 68 J 1/10W	
R120		RK73GB2A473J	CHIP R 47K J 1/10W	
R121		RK73GB2A103J	CHIP R 10K J 1/10W	
R122		RK73GB2A680J	CHIP R 68 J 1/10W	
R123		RK73GB2A680J	CHIP R 68 J 1/10W	
R124		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R125		RK73GB2A680J	CHIP R 68 J 1/10W	
R126		RK73GB2A473J	CHIP R 47K J 1/10W	
R127		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R128		RK73GB2A680J	CHIP R 68 J 1/10W	
R129		RK73GB2A221J	CHIP R 220 J 1/10W	

PARTS LIST

DISPLAY UNIT (XC1-0220-00)

Ref.No	Adderss	Parts No.	Description	Desti-nation
R130		RK73GB2A473J	CHIP R 47K J 1/10W	
R131		RK73GB2A680J	CHIP R 68 J 1/10W	
R132		RK73GB2A680J	CHIP R 68 J 1/10W	
R133		RK73GB2A473J	CHIP R 47K J 1/10W	
R134		RK73GB2A473J	CHIP R 47K J 1/10W	
R135		RK73GB2A473J	CHIP R 47K J 1/10W	
R136		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R137		RK73GB2A473J	CHIP R 47K J 1/10W	
R138		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R139		RK73GB2A473J	CHIP R 47K J 1/10W	
R140		RK73GB2A473J	CHIP R 47K J 1/10W	
R141		RK73GB2A473J	CHIP R 47K J 1/10W	
R142		RK73GB2A121J	CHIP R 120 J 1/10W	
R143		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R144		RK73GB2A121J	CHIP R 120 J 1/10W	
R145		RK73GB2A121J	CHIP R 120 J 1/10W	
R146		RK73GB2A103J	CHIP R 10K J 1/10W	
R147		RK73GB2A121J	CHIP R 120 J 1/10W	
R148		RK73GB2A121J	CHIP R 120 J 1/10W	
R149		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R150		RK73GB2A121J	CHIP R 120 J 1/10W	
R151		RK73GB2A121J	CHIP R 120 J 1/10W	
R152		RK73GB2A121J	CHIP R 120 J 1/10W	
R153		RK73GB2A121J	CHIP R 120 J 1/10W	
R154		RK73GB2A473J	CHIP R 47K J 1/10W	
R155		RK73GB2A473J	CHIP R 47K J 1/10W	
R157		RK73GB2A473J	CHIP R 47K J 1/10W	
R158		RK73GB2A473J	CHIP R 47K J 1/10W	
R159		RK73GB2A473J	CHIP R 47K J 1/10W	
R160		RK73GB2A105J	CHIP R 1.0M J 1/10W	
R161		RK73GB2A154J	CHIP R 150K J 1/10W	
R162		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R163		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R164		RK73GB2A121J	CHIP R 120 J 1/10W	
R165		RK73GB2A121J	CHIP R 120 J 1/10W	
R166		RK73GB2A121J	CHIP R 120 J 1/10W	
R167		RK73GB2A103J	CHIP R 10K J 1/10W	
R168		RK73GB2A121J	CHIP R 120 J 1/10W	
R169		RK73GB2A121J	CHIP R 120 J 1/10W	
R170		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R171		RK73GB2A105J	CHIP R 1.0M J 1/10W	
R172		RK73GB2A121J	CHIP R 120 J 1/10W	
R173		RK73GB2A473J	CHIP R 47K J 1/10W	
R174		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R175		RK73GB2A121J	CHIP R 120 J 1/10W	
R176		RK73GB2A121J	CHIP R 120 J 1/10W	
R177		RK73GB2A121J	CHIP R 120 J 1/10W	
R178		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R179		RK73GB2A561J	CHIP R 560 J 1/10W	
R180		RK73GB2A561J	CHIP R 560 J 1/10W	
R181		RK73GB2A101J	CHIP R 100 J 1/10W	
R182		RK73GB2A101J	CHIP R 100 J 1/10W	
R183		RK73GB2A101J	CHIP R 100 J 1/10W	
R184		RK73GB2A101J	CHIP R 100 J 1/10W	
R185		RK73GB2A562J	CHIP R 5.6K J 1/10W	

Ref.No	Adderss	Parts No.	Description	Desti-nation
R186		RK73GB2A562J	CHIP R 5.6K J 1/10W	
R187		RK73GB2A101J	CHIP R 100 J 1/10W	
R188		RK73GB2A101J	CHIP R 100 J 1/10W	
R189		RK73GB2A101J	CHIP R 100 J 1/10W	
R190		RK73GB2A101J	CHIP R 100 J 1/10W	
R191		RK73GB2A562J	CHIP R 5.6K J 1/10W	
R192		RK73GB2A562J	CHIP R 5.6K J 1/10W	
R193		RK73GB2A101J	CHIP R 100 J 1/10W	
R194		RK73GB2A101J	CHIP R 100 J 1/10W	
R195		RK73GB2A101J	CHIP R 100 J 1/10W	
R196		RK73GB2A101J	CHIP R 100 J 1/10W	
R197		RK73GB2A101J	CHIP R 100 J 1/10W	
R198		RK73GB2A101J	CHIP R 100 J 1/10W	
R199		RK73GB2A101J	CHIP R 100 J 1/10W	
R200		RK73GB2A101J	CHIP R 100 J 1/10W	
R201		RK73GB2A101J	CHIP R 100 J 1/10W	
R202		RK73GB2A101J	CHIP R 100 J 1/10W	
R203		RK73GB2A101J	CHIP R 100 J 1/10W	
R204		RK73GB2A101J	CHIP R 100 J 1/10W	
R205		RK73GB2A101J	CHIP R 100 J 1/10W	
R206		RK73GB2A101J	CHIP R 100 J 1/10W	
R207		RK73GB2A101J	CHIP R 100 J 1/10W	
R208		RK73GB2A101J	CHIP R 100 J 1/10W	
R209		RK73GB2A101J	CHIP R 100 J 1/10W	
R210		RK73GB2A470J	CHIP R 47 J 1/10W	
R211		RK73GB2A470J	CHIP R 47 J 1/10W	
R212		RK73GB2A101J	CHIP R 100 J 1/10W	
R213		RK73GB2A101J	CHIP R 100 J 1/10W	
R214		RK73GB2A101J	CHIP R 100 J 1/10W	
R215		RK73GB2A101J	CHIP R 100 J 1/10W	
R216		RK73GB2A121J	CHIP R 120 J 1/10W	
R217		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R218		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R219		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R220		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R221		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R222		RK73GB2A473J	CHIP R 47K J 1/10W	
R223		RK73GB2A101J	CHIP R 100 J 1/10W	
R224		RK73GB2A101J	CHIP R 100 J 1/10W	
R225		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R952		RK73FB2B470J	CHIP R 47 J 1/8W	
R953		RK73FB2B470J	CHIP R 47 J 1/8W	
R954		RK73FB2B470J	CHIP R 47 J 1/8W	
R955		RK73FB2B470J	CHIP R 47 J 1/8W	
R975		R92-1205-05	CHIP R 120 J 1/4W	
R977		R92-1205-05	CHIP R 120 J 1/4W	
R978		RK73FB2B180J	CHIP R 18 J 1/10W	
R979		RK73FB2B180J	CHIP R 18 J 1/10W	
S101		S70-0475-15	TACT SWITCH	
S102		S70-0475-15	TACT SWITCH	
S103		S70-0475-15	TACT SWITCH	
S104		S70-0475-15	TACT SWITCH	
S105		S70-0475-15	TACT SWITCH	

PARTS LIST

Ref.No	Adderss	Parts No.	Description	Desti-nation
S106		S70-0475-15	TACT SWITCH	
S107		S70-0475-15	TACT SWITCH	
S108		S70-0475-15	TACT SWITCH	
S109		S70-0475-15	TACT SWITCH	
S110		S70-0475-15	TACT SWITCH	
S111		S70-0475-15	TACT SWITCH	
S112		S70-0475-15	TACT SWITCH	
S113		S70-0475-15	TACT SWITCH	
S114		S70-0475-15	TACT SWITCH	
S115		S70-0475-15	TACT SWITCH	
S116		S70-0475-15	TACT SWITCH	
S117		S70-0475-15	TACT SWITCH	
S118		S70-0475-15	TACT SWITCH	
S119		S70-0475-15	TACT SWITCH	
S120		S70-0475-15	TACT SWITCH	
S121		S70-0475-15	TACT SWITCH	
S122		S70-0475-15	TACT SWITCH	
S123		S70-0475-15	TACT SWITCH	
S124		S70-0475-15	TACT SWITCH	
S125		S70-0475-15	TACT SWITCH	
S126		S70-0475-15	TACT SWITCH	
S127		S70-0475-15	TACT SWITCH	
S128		S70-0475-15	TACT SWITCH	
S129		S70-0475-15	TACT SWITCH	
S130		S70-0475-15	TACT SWITCH	
S131		S70-0475-15	TACT SWITCH	
S132		S70-0475-15	TACT SWITCH	
S133		S70-0475-15	TACT SWITCH	
S134		S70-0475-15	TACT SWITCH	
S135		S70-0475-15	TACT SWITCH	
S136		S70-0475-15	TACT SWITCH	
S137		S70-0475-15	TACT SWITCH	
S138		S70-0475-15	TACT SWITCH	
S139		S70-0475-15	TACT SWITCH	
S140		S70-0475-15	TACT SWITCH	
S141		S70-0475-15	TACT SWITCH	
S142		S70-0475-15	TACT SWITCH	
S143		S70-0475-15	TACT SWITCH	
S144		S70-0475-15	TACT SWITCH	
S145		S70-0475-15	TACT SWITCH	
S146		S70-0475-15	TACT SWITCH	
S147		S70-0475-15	TACT SWITCH	
S148		S70-0475-15	TACT SWITCH	
S149		S70-0475-15	TACT SWITCH	
S150		S70-0475-15	TACT SWITCH	
S151		S70-0475-15	TACT SWITCH	
S152		S70-0475-15	TACT SWITCH	
S153		S70-0475-15	TACT SWITCH	
S154		S70-0475-15	TACT SWITCH	
S155		S70-0475-15	TACT SWITCH	
S156		S70-0475-15	TACT SWITCH	
S952	2F	T9K-0006-00	ROTARY ENCODER	
S953	1F	W02-3737-05	ENCODER	
VR953	1F	R31-0677-15	VARIABLE RESISTOR	
VR954	1F	R31-0677-15	VARIABLE RESISTOR	
X101		L77-3069-05	CRYSTAL RESONATOR(11.0592MHZ)	

Ref.No	Adderss	Parts No.	Description			Desti-nation
TX-RX UNIT (XC1-024X-XX)						
C10		CK73GB1E105K	CHIP C	1.0UF	K	
C11		CK73GB1E105K	CHIP C	1.0UF	K	
C12		CK73GB1H102K	CHIP C	1000PF	K	
C13		CC73GCH1H271J	CHIP C	270PF	J	
C14		CC73GCH1H271J	CHIP C	270PF	J	
C15		CK73GB1H103K	CHIP C	0.010UF	K	
C17		CK73GB1H103K	CHIP C	0.010UF	K	
C19		CK73GB1H103K	CHIP C	0.010UF	K	
C21		CK73GB1H103K	CHIP C	0.010UF	K	
C23		CK73GB1H103K	CHIP C	0.010UF	K	
C25		CK73GB1H103K	CHIP C	0.010UF	K	
C27		CK73GB1H103K	CHIP C	0.010UF	K	
C39		CK73GB1H103K	CHIP C	0.010UF	K	
C40		CK73GB1H103K	CHIP C	0.010UF	K	
C42		CK73GB1H104K	CHIP C	0.10UF	K	
C43		CK73GB1H104K	CHIP C	0.10UF	K	
C49		CK73GB1H104K	CHIP C	0.10UF	K	
C50		CK73GB1H104K	CHIP C	0.10UF	K	
C52		CD04AZ1V101M	ELECTRO	100UF	35WV	
C54		CK73FB1E475K	CHIP C	4.7UF	K	
C56		CK73GB1E105K	CHIP C	1.0UF	K	
C57		CK73FB1E475K	CHIP C	4.7UF	K	
C58		CK73FB1H102K	CHIP C	1000PF	K	
C59		CK73GB1H103K	CHIP C	0.010UF	K	
C60		CK73GB1H102K	CHIP C	1000PF	K	
C61		CK73FB1H102K	CHIP C	1000PF	K	
C62		CK73FB1H102K	CHIP C	1000PF	K	
C63		CK73GB1H102K	CHIP C	1000PF	K	
C64		CK73GB1H103K	CHIP C	0.010UF	K	
C65		CK73GB1H103K	CHIP C	0.010UF	K	
C66		CK73GB1H104K	CHIP C	0.10UF	K	
C67		CK73GB1H104K	CHIP C	0.10UF	K	
C68		CK73GB1H104K	CHIP C	0.10UF	K	
C69		CK73GB1H104K	CHIP C	0.10UF	K	
C70		CK73GB1H104K	CHIP C	0.10UF	K	
C71		CK73GB1H104K	CHIP C	0.10UF	K	
C72		CK73GB1H104K	CHIP C	0.10UF	K	
C73		CK73GB1H104K	CHIP C	0.10UF	K	
C74		CK73GB1H104K	CHIP C	0.10UF	K	
C75		CK73GB1H104K	CHIP C	0.10UF	K	
C76		CK73GB1H104K	CHIP C	0.10UF	K	
C77		CK73GB1H104K	CHIP C	0.10UF	K	
C78		CK73GB1H104K	CHIP C	0.10UF	K	
C79		CK45FE3A222Z	CERAMIC	2200PF	Z	
C80		CK73FB1H103K	CHIP C	0.010UF	K	
C81		CK73FB1H102K	CHIP C	1000PF	K	
C82		CK73FB1H102K	CHIP C	1000PF	K	
C83		CK73FB1H102K	CHIP C	1000PF	K	
C84		CK73GB1H103K	CHIP C	0.010UF	K	

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
C85		CK73GB1H102K	CHIP C 1000PF K	
C86		CK73GB1H102K	CHIP C 1000PF K	
C87		CK73GB1H102K	CHIP C 1000PF K	
C88		CK73GB1H102K	CHIP C 1000PF K	
C97		CK73GB1E105K	CHIP C 1.0UF K	
C98		CK73GB1H102K	CHIP C 1000PF K	
C101		CK73GB1H103K	CHIP C 0.010UF K	
C102		CK73GB1H103K	CHIP C 0.010UF K	
C103		CK73GB1H103K	CHIP C 0.010UF K	
C104		CK73GB1H103K	CHIP C 0.010UF K	
C106		CD04AZ1E471M	ELECTRO 470UF 25WV	
C107		CC73GCH1H560J	CHIP C 56PF J	
C108		CK73GB1H102K	CHIP C 1000PF K	
C109		CC73GCH1H090D	CHIP C 9.0PF D	
C110		CC73GCH1H560J	CHIP C 56PF J	
C111		CK73GB1H104K	CHIP C 0.10UF K	
C112		CK73EB1H104K	CHIP C 0.10UF K	
C113		CK73GB1H102K	CHIP C 1000PF K	
C114		CK73EB1H104K	CHIP C 0.10UF K	
C115		CK73GB1H103K	CHIP C 0.010UF K	
C116		CK73GB1H103K	CHIP C 0.010UF K	
C117		CK73GB1H103K	CHIP C 0.010UF K	
C118		CK73GB1H103K	CHIP C 0.010UF K	
C119		CK73GB1E105K	CHIP C 1.0UF K	
C120		CK73GB1H104K	CHIP C 0.10UF K	
C121		CC73GCH1H152J	CHIP C 1500PF J	
C122		CC73FCH1H472J	CHIP C 4700PF J	
C123		CC73GCH1H152J	CHIP C 1500PF J	
C127		CC73GCH1H150J	CHIP C 15PF J	
C128		CC73GCH1H271J	CHIP C 270PF J	
C129		CC73GCH1H271J	CHIP C 270PF J	
C130		CC73GCH1H680J	CHIP C 68PF J	
C131		CC73GCH1H222J	CHIP C 2200PF J	
C132		CC73FCH1H332J	CHIP C 3300PF J	
C133		CC73GCH1H221J	CHIP C 220PF J	
C134		CK73GB1H104K	CHIP C 0.10UF K	
C135		CK73GB1H104K	CHIP C 0.10UF K	
C137		CC73GCH1H222J	CHIP C 2200PF J	
C138		CK73GB1H103K	CHIP C 0.010UF K	
C139		CC73FCH1H392J	CHIP C 3900PF J	
C140		CK73GB1H104K	CHIP C 0.10UF K	
C141		CC73GCH1H222J	CHIP C 2200PF J	
C142		CK73GB1H104K	CHIP C 0.10UF K	
C143		CC73GCH1H102J	CHIP C 1000PF J	
C144		CK73GB1H104K	CHIP C 0.10UF K	
C145		CC73GCH1H102J	CHIP C 1000PF J	
C146		CK73GB1H104K	CHIP C 0.10UF K	
C147		CC73GCH1H821J	CHIP C 820PF J	
C148		CK73GB1H104K	CHIP C 0.10UF K	
C149		CC73GCH1H271J	CHIP C 270PF J	
C150		CK73GB1H104K	CHIP C 0.10UF K	
C151		CC73GCH1H151J	CHIP C 150PF J	
C152		CK73GB1H104K	CHIP C 0.10UF K	
C153		CC73GCH1H270J	CHIP C 27PF J	

Ref.No	Adderss	Parts No.	Description	Desti-nation
C154		CK73GB1H104K	CHIP C 0.10UF K	
C155		CC73GCH1H102J	CHIP C 1000PF J	
C156		CC73GCH1H102J	CHIP C 1000PF J	
C157		CC73GCH1H120J	CHIP C 12PF J	
C158		CC73GCH1H040C	CHIP C 4.0PF C	
C159		CK73GB1E105K	CHIP C 1.0UF K	
C160		CC73GCH1H102J	CHIP C 1000PF J	
C161		CC73GCH1H102J	CHIP C 1000PF J	
C162		CC73GCH1H102J	CHIP C 1000PF J	
C163		CC73GCH1H102J	CHIP C 1000PF J	
C164		CC73GCH1H102J	CHIP C 1000PF J	
C165		CC73GCH1H102J	CHIP C 1000PF J	
C166		CC73GCH1H102J	CHIP C 1000PF J	
C167		CK73GB1H104K	CHIP C 0.10UF K	
C168		CK73GB1H104K	CHIP C 0.10UF K	
C169		CK73GB1H103K	CHIP C 0.010UF K	
C170		CK73GB1H153K	CHIP C 0.015UF K	
C171		CK73GB1E105K	CHIP C 1.0UF K	
C172		CC73GCH1H040C	CHIP C 4.0PF C	
C173		CC73GCH1H122J	CHIP C 1200PF J	
C174		CC73GCH1H561J	CHIP C 560PF J	
C175		CC73GCH1H471J	CHIP C 470PF J	
C176		CC73GCH1H151J	CHIP C 150PF J	
C177		CC73GCH1H101J	CHIP C 100PF J	
C178		CC73GCH1H680J	CHIP C 68PF J	
C179		CC73GCH1H330J	CHIP C 33PF J	
C180		CC73GCH1H560J	CHIP C 56PF J	
C181		CC73GCH1H102J	CHIP C 1000PF J	
C182		CC73GCH1H120J	CHIP C 12PF J	
C183		CC73GCH1H102J	CHIP C 1000PF J	
C184		CC73GCH1H102J	CHIP C 1000PF J	
C185		CK73GB1E105K	CHIP C 1.0UF K	
C186		CC73GCH1H102J	CHIP C 1000PF J	
C187		CC73GCH1H102J	CHIP C 1000PF J	
C188		CC73GCH1H102J	CHIP C 1000PF J	
C189		CC73GCH1H102J	CHIP C 1000PF J	
C190		CC73GCH1H102J	CHIP C 1000PF J	
C191		CK73GB1H102K	CHIP C 1000PF K	
C192		CC73GCH1H102J	CHIP C 1000PF J	
C193		CC73GCH1H102J	CHIP C 1000PF J	
C194		CK73GB1H103K	CHIP C 0.010UF K	
C195		CK73GB1H103K	CHIP C 0.010UF K	
C196		CK73GB1H104K	CHIP C 0.10UF K	
C197		CK73GB1H104K	CHIP C 0.10UF K	
C198		CC73GCH1H090D	CHIP C 9.0PF D	
C199		CC73FCH1H392J	CHIP C 3900PF J	
C200		CK73GB1H104K	CHIP C 0.10UF K	
C201		CC73GCH1H222J	CHIP C 2200PF J	
C202		CK73GB1H104K	CHIP C 0.10UF K	
C203		CC73GCH1H102J	CHIP C 1000PF J	
C204		CK73GB1H104K	CHIP C 0.10UF K	
C205		CC73GCH1H102J	CHIP C 1000PF J	
C206		CK73GB1H104K	CHIP C 0.10UF K	
C207		CC73GCH1H821J	CHIP C 820PF J	

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description			Desti-nation
C208		CK73GB1H104K	CHIP C	0.10UF	K	
C209		CC73GCH1H331J	CHIP C	330PF	J	
C210		CK73GB1H104K	CHIP C	0.10UF	K	
C211		CC73GCH1H151J	CHIP C	150PF	J	
C212		CK73GB1H104K	CHIP C	0.10UF	K	
C213		CC73GCH1H680J	CHIP C	68PF	J	
C214		CK73GB1H104K	CHIP C	0.10UF	K	
C215		CK73GB1E105K	CHIP C	1.0UF	K	
C216		CK73GB1H104K	CHIP C	0.10UF	K	
C217		CK73GB1H103K	CHIP C	0.010UF	K	
C221		CK73GB1H103K	CHIP C	0.010UF	K	
C229		CK73GB1H104K	CHIP C	0.10UF	K	
C231		CK73GB1H103K	CHIP C	0.010UF	K	
C232		CK73GB1H104K	CHIP C	0.10UF	K	
C234		CK73GB1E105K	CHIP C	1.0UF	K	
C235		CK73GB1H103K	CHIP C	0.010UF	K	
C236		CC73GCH1H101J	CHIP C	100PF	J	
C237		CK73GB1H104K	CHIP C	0.10UF	K	
C238		CK73GB1H102K	CHIP C	1000PF	K	
C239		CK73GB1H472K	CHIP C	4700PF	K	
C240		CK73GB1E105K	CHIP C	1.0UF	K	
C241		CK73GB1H103K	CHIP C	0.010UF	K	
C242		CK73GB1H103K	CHIP C	0.010UF	K	
C243		CK73GB1E105K	CHIP C	1.0UF	K	
C244		CK73GB1H104K	CHIP C	0.10UF	K	
C246		CK73GB1H103K	CHIP C	0.010UF	K	
C247		CK73GB1H104K	CHIP C	0.10UF	K	
C249		CK73GB1H103K	CHIP C	0.010UF	K	
C250		CC73GCH1H470J	CHIP C	47PF	J	
C251		CC73GCH1H560J	CHIP C	56PF	J	
C252		CC73GCH1H560J	CHIP C	56PF	J	
C253		CC73GCH1H820J	CHIP C	82PF	J	
C254		CC73GCH1H680J	CHIP C	68PF	J	
C255		CC73GCH1H330J	CHIP C	33PF	J	
C256		CC73GCH1H330J	CHIP C	33PF	J	
C257		CC73GCH1H151J	CHIP C	150PF	J	
C258		CC73GCH1H470J	CHIP C	47PF	J	
C259		CC73GCH1H221J	CHIP C	220PF	J	
C260		CC73GCH1H681J	CHIP C	680PF	J	
C261		CK73GB1H104K	CHIP C	0.10UF	K	
C262		CK73GB1H104K	CHIP C	0.10UF	K	
C263		CK73GB1H104K	CHIP C	0.10UF	K	
C265		CK73GB1H103K	CHIP C	0.010UF	K	
C266		CK73GB1H102K	CHIP C	1000PF	K	
C268		CK73GB1H104K	CHIP C	0.10UF	K	
C269		CE32CL1C100M	CHIP EL	10UF	16WV	
C270		CK73GB1H104K	CHIP C	0.10UF	K	
C272		CC73GCH1H471J	CHIP C	470PF	J	
C273		CK73GB1H102K	CHIP C	1000PF	K	
C274		CK73GB1H103K	CHIP C	0.010UF	K	
C275		CC73GCH1H561J	CHIP C	560PF	J	
C276		CC73GCH1H151J	CHIP C	150PF	J	
C277		CK73GB1H103K	CHIP C	0.010UF	K	
C281		CK73GB1H103K	CHIP C	0.010UF	K	
C282		CK73GB1H104K	CHIP C	0.10UF	K	

Ref.No	Adderss	Parts No.	Description			Desti-nation
C283		CK73GB1H104K	CHIP C	0.10UF	K	
C284		CK73GB1H103K	CHIP C	0.010UF	K	
C286		CK73GB1H472K	CHIP C	4700PF	K	
C287		CK73GB1H103K	CHIP C	0.010UF	K	
C288		CK73GB1H104K	CHIP C	0.10UF	K	
C289		CK73GB1H472K	CHIP C	4700PF	K	
C290		CK73GB1H104K	CHIP C	0.10UF	K	
C291		CC73GCH1H680J	CHIP C	68PF	J	
C292		CC73GCH1H680J	CHIP C	68PF	J	
C293		CC73GCH1H680J	CHIP C	68PF	J	
C294		CC73GCH1H470J	CHIP C	47PF	J	
C295		CC73GCH1H470J	CHIP C	47PF	J	
C296		CC73GCH1H470J	CHIP C	47PF	J	
C297		CC73GCH1H680J	CHIP C	68PF	J	
C298		CC73GCH1H680J	CHIP C	68PF	J	
C302		CC73GCH1H330J	CHIP C	33PF	J	
C303		CC73GCH1H330J	CHIP C	33PF	J	
C305		CC73GCH1H220J	CHIP C	22PF	J	
C309		CC73GCH1H100D	CHIP C	10PF	D	
C310		CK73GB1H103K	CHIP C	0.010UF	K	
C311		CK73GB1H103K	CHIP C	0.010UF	K	
C312		CK73GB1H103K	CHIP C	0.010UF	K	
C313		CC73GCH1H151J	CHIP C	150PF	J	
C314		CC73GCH1H390J	CHIP C	39PF	J	
C315		CK73GB1H102K	CHIP C	1000PF	K	
C316		CC73GCH1H100D	CHIP C	10PF	D	
C317		CC73GCH1H390J	CHIP C	39PF	J	
C318		CC73GCH1H151J	CHIP C	150PF	J	
C319		CK73GB1H103K	CHIP C	0.010UF	K	
C320		CK73GB1H103K	CHIP C	0.010UF	K	
C321		CC73GCH1H560J	CHIP C	56PF	J	
C322		CC73GCH1H330J	CHIP C	33PF	J	
C323		CC73GCH1H820J	CHIP C	82PF	J	
C324		CC73GCH1H390J	CHIP C	39PF	J	
C325		CC73GCH1H270J	CHIP C	27PF	J	
C326		CK73GB1H104K	CHIP C	0.10UF	K	
C327		CK73GB1H104K	CHIP C	0.10UF	K	
C328		CK73GB1H104K	CHIP C	0.10UF	K	
C330		CK73GB1H103K	CHIP C	0.010UF	K	
C335		CC73GCH1H020C	CHIP C	2.0PF	C	
C336		CK73GB1H104K	CHIP C	0.10UF	K	
C337		CC73GCH1H471J	CHIP C	470PF	J	
C338		CK73GB1H102K	CHIP C	1000PF	K	
C339		CK73GB1H103K	CHIP C	0.010UF	K	
C341		CK73GB1H102K	CHIP C	1000PF	K	
C342		CC73GCH1H020C	CHIP C	2.0PF	C	
C343		CC73GCH1H102J	CHIP C	1000PF	J	
C344		CC73GCH1H102J	CHIP C	1000PF	J	
C350		CC73GCH1H180J	CHIP C	18PF	J	
C351		CK73GB1H103K	CHIP C	0.010UF	K	
C352		CK73GB1H104K	CHIP C	0.10UF	K	
C353		CK73GB1H104K	CHIP C	0.10UF	K	
C354		CC73GCH1H060D	CHIP C	6.0PF	D	
C355		CK73GB1H103K	CHIP C	0.010UF	K	
C356		CK73GB1H472K	CHIP C	4700PF	K	

TS-590SG

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description			Desti-nation
C357		CK73GB1H103K	CHIP C	0.010UF	K	
C358		CK73GB1H104K	CHIP C	0.10UF	K	
C359		CK73GB1H104K	CHIP C	0.10UF	K	
C360		CK73GB1H472K	CHIP C	4700PF	K	
C361		CC73GCH1H270J	CHIP C	27PF	J	
C362		CC73GCH1H270J	CHIP C	27PF	J	
C363		CK73GB1H104K	CHIP C	0.10UF	K	
C373		CK73GB1H102K	CHIP C	1000PF	K	
C374		CC73GCH1H010C	CHIP C	1.0PF	C	
C377		CK73GB1H102K	CHIP C	1000PF	K	
C391		CK73GB1H103K	CHIP C	0.010UF	K	
C392		CK73GB1H103K	CHIP C	0.010UF	K	
C395		CK73GB1E105K	CHIP C	1.0UF	K	
C396		CC73GCH1H090D	CHIP C	9.0PF	D	
C397		CK73GB1H103K	CHIP C	0.010UF	K	
C398		CK73GB1E105K	CHIP C	1.0UF	K	
C399		CK73GB1H103K	CHIP C	0.010UF	K	
C401		CK73GB1H103K	CHIP C	0.010UF	K	
C402		CC73GCH1H020C	CHIP C	2.0PF	C	
C412		CK73GB1H103K	CHIP C	0.010UF	K	
C413		CK73GB1H103K	CHIP C	0.010UF	K	
C421		CK73GB1H103K	CHIP C	0.010UF	K	
C423		CC73GCH1H220J	CHIP C	22PF	J	
C424		CK73GB1H103K	CHIP C	0.010UF	K	
C425		CK73GB1H103K	CHIP C	0.010UF	K	
C426		CK73GB1H103K	CHIP C	0.010UF	K	
C428		CC73GCH1H330J	CHIP C	33PF	J	
C429		CC73GCH1H330J	CHIP C	33PF	J	
C431		CK73GB1H103K	CHIP C	0.010UF	K	
C432		CK73GB1H102K	CHIP C	1000PF	K	
C433		CK73GB1H103K	CHIP C	0.010UF	K	
C434		CC73GCH1H090D	CHIP C	9.0PF	D	
C435		CK73GB1H103K	CHIP C	0.010UF	K	
C436		CK73GB1E105K	CHIP C	1.0UF	K	
C440		CC73GCH1H151J	CHIP C	150PF	J	
C441		CC73GCH1H151J	CHIP C	150PF	J	
C442		CK73GB1H103K	CHIP C	0.010UF	K	
C443		CK73GB1H103K	CHIP C	0.010UF	K	
C444		CK73GB1H103K	CHIP C	0.010UF	K	
C445		CK73GB1H103K	CHIP C	0.010UF	K	
C446		CK73GB1H103K	CHIP C	0.010UF	K	
C447		CK73GB1H103K	CHIP C	0.010UF	K	
C448		CK73GB1H103K	CHIP C	0.010UF	K	
C449		CK73GB1H103K	CHIP C	0.010UF	K	
C451		CK73GB1H103K	CHIP C	0.010UF	K	
C452		CK73GB1H103K	CHIP C	0.010UF	K	
C453		CK73GB1H103K	CHIP C	0.010UF	K	
C454		CK73GB1H104K	CHIP C	0.10UF	K	
C455		CK73GB1E105K	CHIP C	1.0UF	K	
C456		CK73GB1H103K	CHIP C	0.010UF	K	
C457		CK73GB1H103K	CHIP C	0.010UF	K	
C458		CC73GCH1H680J	CHIP C	68PF	J	
C459		CK73GB1E105K	CHIP C	1.0UF	K	
C462		CK73GB1H103K	CHIP C	0.010UF	K	
C463		CK73GB1H103K	CHIP C	0.010UF	K	
C466		CK73GB1H102K	CHIP C	1000PF	K	
C467		CK73GB1H104K	CHIP C	0.10UF	K	
C468		CC73GCH1H100D	CHIP C	10PF	D	
C469		CC73GCH1H100D	CHIP C	10PF	D	
C470		CC73GCH1H680J	CHIP C	68PF	J	
C471		CK73GB1H103K	CHIP C	0.010UF	K	
C472		CK73GB1H103K	CHIP C	0.010UF	K	
C473		CK73GB1H103K	CHIP C	0.010UF	K	
C474		CK73GB1H103K	CHIP C	0.010UF	K	
C475		CK73GB1H103K	CHIP C	0.010UF	K	
C476		CC73GCH1H680J	CHIP C	68PF	J	
C477		CC73GCH1H680J	CHIP C	68PF	J	
C478		CC73GCH1H680J	CHIP C	68PF	J	
C479		CC73GCH1H680J	CHIP C	68PF	J	
C480		CK73GB1H103K	CHIP C	0.010UF	K	
C481		CC73GCH1H470J	CHIP C	47PF	J	
C482		CC73GCH1H470J	CHIP C	47PF	J	
C483		CC73GCH1H470J	CHIP C	47PF	J	
C484		CC73GCH1H270J	CHIP C	27PF	J	
C485		CC73GCH1H060D	CHIP C	6.0PF	D	
C486		CC73GCH1H121J	CHIP C	120PF	J	
C487		CC73GCH1H060D	CHIP C	6.0PF	D	
C488		CC73GCH1H090D	CHIP C	9.0PF	D	
C490		CC73GCH1H180J	CHIP C	18PF	J	
C492		CC73GCH1H060D	CHIP C	6.0PF	D	
C494		CC73GCH1H121J	CHIP C	120PF	J	
C495		CC73GCH1H060D	CHIP C	6.0PF	D	
C496		CC73GCH1H270J	CHIP C	27PF	J	
C497		CC73GCH1H470J	CHIP C	47PF	J	
C498		CC73GCH1H470J	CHIP C	47PF	J	
C499		CC73GCH1H470J	CHIP C	47PF	J	
C500		CK73GB1H103K	CHIP C	0.010UF	K	
C501		CC73GCH1H680J	CHIP C	68PF	J	
C502		CC73GCH1H680J	CHIP C	68PF	J	
C503		CC73GCH1H680J	CHIP C	68PF	J	
C504		CC73GCH1H680J	CHIP C	68PF	J	
C505		CK73GB1H103K	CHIP C	0.010UF	K	
C506		CK73GB1H103K	CHIP C	0.010UF	K	
C507		CK73GB1H103K	CHIP C	0.010UF	K	
C508		CK73GB1H103K	CHIP C	0.010UF	K	
C509		CK73GB1H103K	CHIP C	0.010UF	K	
C522		CC73GCH1H330J	CHIP C	33PF	J	
C523		CK73GB1H103K	CHIP C	0.010UF	K	
C524		CK73GB1H103K	CHIP C	0.010UF	K	
C526		CK73GB1H103K	CHIP C	0.010UF	K	
C528		CK73GB1H103K	CHIP C	0.010UF	K	
C529		CK73GB1H103K	CHIP C	0.010UF	K	
C530		CK73GB1H103K	CHIP C	0.010UF	K	
C531		CK73GB1E105K	CHIP C	1.0UF	K	
C533		CK73GB1H103K	CHIP C	0.010UF	K	
C534		CK73GB1H103K	CHIP C	0.010UF	K	
C536		CK73GB1H103K	CHIP C	0.010UF	K	
C537		CK73GB1H104K	CHIP C	0.10UF	K	

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description			Desti-nation
C539		CK73GB1H103K	CHIP C	0.010UF	K	
C540		CK73GB1H104K	CHIP C	0.10UF	K	
C541		CK73GB1H103K	CHIP C	0.010UF	K	
C543		CK73GB1H103K	CHIP C	0.010UF	K	
C544		CK73GB1H103K	CHIP C	0.010UF	K	
C546		CK73GB1H103K	CHIP C	0.010UF	K	
C547		CK73GB1E105K	CHIP C	1.0UF	K	
C548		CK73GB1H103K	CHIP C	0.010UF	K	
C551		CK73GB1H103K	CHIP C	0.010UF	K	
C552		CC73GCH1H470J	CHIP C	47PF	J	
C553		CK73GB1H103K	CHIP C	0.010UF	K	
C554		CK73GB1H103K	CHIP C	0.010UF	K	
C555		CC73GCH1H101J	CHIP C	100PF	J	
C556		CK73GB1E105K	CHIP C	1.0UF	K	
C557		CK73GB1H103K	CHIP C	0.010UF	K	
C558		CK73GB1E105K	CHIP C	1.0UF	K	
C559		CK73GB1H103K	CHIP C	0.010UF	K	
C560		CC73GCH1H100D	CHIP C	10PF	D	
C567		CC73GCH1H391J	CHIP C	390PF	J	
C568		CC73GCH1H391J	CHIP C	390PF	J	
C569		CK73GB1H103K	CHIP C	0.010UF	K	
C570		CK73GB1E105K	CHIP C	1.0UF	K	
C571		CK73GB1H103K	CHIP C	0.010UF	K	
C572		CK73GB1H103K	CHIP C	0.010UF	K	
C573		CK73GB1H103K	CHIP C	0.010UF	K	
C574		CK73GB1H103K	CHIP C	0.010UF	K	
C575		CK73GB1H103K	CHIP C	0.010UF	K	
C576		CK73GB1H102K	CHIP C	1000PF	K	
C577		CK73GB1H103K	CHIP C	0.010UF	K	
C578		CC73GCH1H221J	CHIP C	220PF	J	
C579		CC73GCH1H220J	CHIP C	22PF	J	
C580		CC73GCH1H391J	CHIP C	390PF	J	
C581		CK73GB1H103K	CHIP C	0.010UF	K	
C582		CK73GB1H103K	CHIP C	0.010UF	K	
C583		CC73GCH1H221J	CHIP C	220PF	J	
C584		CC73GCH1H220J	CHIP C	22PF	J	
C591		CK73GB1H104K	CHIP C	0.10UF	K	
C592		CE32CL1C220M	CHIP EL	22UF	16WV	
C593		CK73GB1H103K	CHIP C	0.010UF	K	
C594		CE32CL1C220M	CHIP EL	22UF	16WV	
C595		CK73GB1H104K	CHIP C	0.10UF	K	
C597		CK73GB1H104K	CHIP C	0.10UF	K	
C598		CK73GB1H104K	CHIP C	0.10UF	K	
C599		CK73GB1H104K	CHIP C	0.10UF	K	
C600		CK73GB1H103K	CHIP C	0.010UF	K	
C601		CC73GCH1H820J	CHIP C	82PF	J	
C602		CK73GB1H104K	CHIP C	0.10UF	K	
C603		CK73GB1H104K	CHIP C	0.10UF	K	
C604		CK73GB1H104K	CHIP C	0.10UF	K	
C605		CK73GB1H104K	CHIP C	0.10UF	K	
C606		CK73GB1H104K	CHIP C	0.10UF	K	
C608		CK73GB1H104K	CHIP C	0.10UF	K	
C609		CK73GB1H104K	CHIP C	0.10UF	K	
C610		CC73GCH1H270J	CHIP C	27PF	J	
C611		CC73GCH1H271J	CHIP C	270PF	J	
C612		CC73GCH1H271J	CHIP C	270PF	J	
C613		CC73GCH1H391J	CHIP C	390PF	J	
C614		CK73FB1A106K	CHIP C	10UF	K	
C615		CK73GB1E105K	CHIP C	1.0UF	K	
C616		CK73GB1E105K	CHIP C	1.0UF	K	
C618		CC73GCH1H331J	CHIP C	330PF	J	
C619		CK73GB1H104K	CHIP C	0.10UF	K	
C620		CK73GB1H103K	CHIP C	0.010UF	K	
C621		CK73GB1H222K	CHIP C	2200PF	K	
C625		CK73GB1H103K	CHIP C	0.010UF	K	
C626		CK73GB1H103K	CHIP C	0.010UF	K	
C627		CK73GB1H103K	CHIP C	0.010UF	K	
C628		CK73GB1H103K	CHIP C	0.010UF	K	
C630		CK73FB1A106K	CHIP C	10UF	K	
C631		CK73GB1E105K	CHIP C	1.0UF	K	
C632		CK73FB1A106K	CHIP C	10UF	K	
C633		CK73GB1H103K	CHIP C	0.010UF	K	
C634		CK73GB1E105K	CHIP C	1.0UF	K	
C638		CK73GB1H102K	CHIP C	1000PF	K	
C639		CK73GB1H103K	CHIP C	0.010UF	K	
C640		CK73GB1H103K	CHIP C	0.010UF	K	
C648		CC73GCH1H100D	CHIP C	10PF	D	
C649		CC73GCH1H020C	CHIP C	2.0PF	C	
C650		CK73GB1H103K	CHIP C	0.010UF	K	
C651		CK73GB1H102K	CHIP C	1000PF	K	
C652		CK73GB1H103K	CHIP C	0.010UF	K	
C653		CK73GB1H103K	CHIP C	0.010UF	K	
C654		CC73GCH1H470J	CHIP C	47PF	J	
C656		CK73GB1H103K	CHIP C	0.010UF	K	
C657		CK73GB1E105K	CHIP C	1.0UF	K	
C658		CC73GCH1H430J	CHIP C	43PF	J	
C659		CC73GCH1H080D	CHIP C	8.0PF	D	
C668		CK73GB1H103K	CHIP C	0.010UF	K	
C670		CK73GB1H103K	CHIP C	0.010UF	K	
C671		CK73GB1H103K	CHIP C	0.010UF	K	
C673		CK73GB1H103K	CHIP C	0.010UF	K	
C674		CK73GB1C474K	CHIP C	0.47UF	K	
C675		CK73GB1H103K	CHIP C	0.010UF	K	
C679		CK73GB1H103K	CHIP C	0.010UF	K	
C680		CK73GB1H103K	CHIP C	0.010UF	K	
C681		CC73GCH1H100D	CHIP C	10PF	D	
C682		CK73GB1H103K	CHIP C	0.010UF	K	
C683		CK73GB1H102K	CHIP C	1000PF	K	
C684		CK73GB1H103K	CHIP C	0.010UF	K	
C686		CK73GB1E105K	CHIP C	1.0UF	K	
C687		CK73GB1H103K	CHIP C	0.010UF	K	
C688		CE32CL1C470M	CHIP EL	47UF	16WV	
C689		CK73GB1E105K	CHIP C	1.0UF	K	
C691		CC73GCH1H360J	CHIP C	36PF	J	
C692		CC73GCH1H390J	CHIP C	39PF	J	
C693		CC73GCH1H100D	CHIP C	10PF	D	
C694		CC73GCH1H090D	CHIP C	9.0PF	D	

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
C701		CC73GCH1H100D	CHIP C 10PF D	
C702		CK73GB1E105K	CHIP C 1.0UF K	
C703		CK73FB1A225K	CHIP C 2.2UF K	
C705		CC73GCH1H180J	CHIP C 18PF J	
C706		CK73GB1H103K	CHIP C 0.010UF K	
C707		CK73GB1H103K	CHIP C 0.010UF K	
C708		CK73GB1H103K	CHIP C 0.010UF K	
C709		CK73GB1H103K	CHIP C 0.010UF K	
C710		CK73GB1H103K	CHIP C 0.010UF K	
C712		CK73GB1H103K	CHIP C 0.010UF K	
C713		CK73GB1H103K	CHIP C 0.010UF K	
C714		CE32CL1C100M	CHIP EL 10UF 16WV	
C715		CK73GB1H103K	CHIP C 0.010UF K	
C716		CK73GB1H103K	CHIP C 0.010UF K	
C717		CC73GCH1H102J	CHIP C 1000PF J	
C721		CK73GB1H103K	CHIP C 0.010UF K	
C722		CK73GB1H103K	CHIP C 0.010UF K	
C723		CK73GB1H103K	CHIP C 0.010UF K	
C724		CC73GCH1H050C	CHIP C 5.0PF C	
C726		CK73GB1H103K	CHIP C 0.010UF K	
C728		CK73GB1H103K	CHIP C 0.010UF K	
C730		CK73GB1H103K	CHIP C 0.010UF K	
C731		CK73GB1H103K	CHIP C 0.010UF K	
C733		CC73GCH1H220J	CHIP C 22PF J	
C734		CK73GB1H103K	CHIP C 0.010UF K	
C735		CC73GCH1H330J	CHIP C 33PF J	
C741		CC73GCH1H470J	CHIP C 47PF J	
C742		CK73GB1H102K	CHIP C 1000PF K	
C743		CK73GB1H102K	CHIP C 1000PF K	
C744		CK73GB1H103K	CHIP C 0.010UF K	
C745		CC73GCH1H470J	CHIP C 47PF J	
C746		CK73GB1H102K	CHIP C 1000PF K	
C747		CK73GB1H104K	CHIP C 0.10UF K	
C748		CK73GB1H102K	CHIP C 1000PF K	
C749		CK73GB1H103K	CHIP C 0.010UF K	
C750		CK73GB1H103K	CHIP C 0.010UF K	
C751		CK73GB1E105K	CHIP C 1.0UF K	
C762		CK73GB1H103K	CHIP C 0.010UF K	
C763		CK73GB1H104K	CHIP C 0.10UF K	
C764		CK73GB1H103K	CHIP C 0.010UF K	
C765		CK73GB1H104K	CHIP C 0.10UF K	
C766		CK73GB1H103K	CHIP C 0.010UF K	
C767		CK73GB1H103K	CHIP C 0.010UF K	
C768		CC73GCH1H120J	CHIP C 12PF J	
C769		CC73GCH1H471J	CHIP C 470PF J	
C770		CK73GB1H103K	CHIP C 0.010UF K	
C771		CK73GB1H104K	CHIP C 0.10UF K	
C772		CK73GB1H102K	CHIP C 1000PF K	
C773		CK73GB1H104K	CHIP C 0.10UF K	
C774		CK73GB1H103K	CHIP C 0.010UF K	
C776		CK73GB1H103K	CHIP C 0.010UF K	
C779		CK73GB1H103K	CHIP C 0.010UF K	
C780		CK73GB1H102K	CHIP C 1000PF K	
C782		CK73GB1E105K	CHIP C 1.0UF K	
C783		CK73GB1H103K	CHIP C 0.010UF K	

Ref.No	Adderss	Parts No.	Description	Desti-nation
C784		CK73GB1H102K	CHIP C 1000PF K	
C785		CK73GB1H104K	CHIP C 0.10UF K	
C786		CK73GB1H102K	CHIP C 1000PF K	
C787		CC73GCH1H180J	CHIP C 18PF J	
C788		CK73GB1H104K	CHIP C 0.10UF K	
C789		CC73GCH1H390J	CHIP C 39PF J	
C790		CK73GB1E105K	CHIP C 1.0UF K	
C791		CK73GB1E105K	CHIP C 1.0UF K	
C792		CE32CL1V4R7M	CHIP EL 4.7UF 35WV	
C793		CC73GCH1H330J	CHIP C 33PF J	
C794		CK73GB1H104K	CHIP C 0.10UF K	
C795		CK73GB1H103K	CHIP C 0.010UF K	
C796		CK73GB1H104K	CHIP C 0.10UF K	
C797		CK73GB1E105K	CHIP C 1.0UF K	
C798		CK73GB1H103K	CHIP C 0.010UF K	
C799		CE32CL1V4R7M	CHIP EL 4.7UF 35WV	
C800		CC73GCH1H150J	CHIP C 15PF J	
C802		CK73GB1H104K	CHIP C 0.10UF K	
C803		CK73GB1H104K	CHIP C 0.10UF K	
C804		CK73GB1H102K	CHIP C 1000PF K	
C805		CC73GCH1H101J	CHIP C 100PF J	
C806		CK73GB1H103K	CHIP C 0.010UF K	
C807		CK73GB1H103K	CHIP C 0.010UF K	
C808		CC73GCH1H101J	CHIP C 100PF J	
C809		CK73GB1H103K	CHIP C 0.010UF K	
C811		CK73GB1H223K	CHIP C 0.022UF K	
C812		CK73GB1C474K	CHIP C 0.47UF K	
C813		CC73GCH1H101J	CHIP C 100PF J	
C814		CK73GB1E105K	CHIP C 1.0UF K	
C818		CE32CL1V4R7M	CHIP EL 4.7UF 35WV	
C819		CC73GCH1H100D	CHIP C 10PF D	
C820		CC73GCH1H100D	CHIP C 10PF D	
C821		CK73GB1H103K	CHIP C 0.010UF K	
C822		CK73GB1C225K	CHIP C 2.2UF K	
C823		CC73GCH1H101J	CHIP C 100PF J	
C824		CK73GB1H103K	CHIP C 0.010UF K	
C825		CK73GB1H103K	CHIP C 0.010UF K	
C826		CK73GB1H103K	CHIP C 0.010UF K	
C827		CC73GCH1H101J	CHIP C 100PF J	
C828		CK73GB1E105K	CHIP C 1.0UF K	
C841		CK73GB1H333K	CHIP C 0.033UF K	
C842		CK73GB1H103K	CHIP C 0.010UF K	
C861		CK73GB1H103K	CHIP C 0.010UF K	
C862		CK73GB1H104K	CHIP C 0.10UF K	
C863		CK73GB1H104K	CHIP C 0.10UF K	
C864		CK73GB1H104K	CHIP C 0.10UF K	
C865		CK73GB1H103K	CHIP C 0.010UF K	
C866		CK73GB1H102K	CHIP C 1000PF K	
C867		CK73GB1H103K	CHIP C 0.010UF K	
C901		CK73GB1H102K	CHIP C 1000PF K	
C902		CK73GB1H104K	CHIP C 0.10UF K	
C903		CE32CL1C220M	CHIP EL 22UF 16WV	
C904		CD04BQ1C471M	ALUMINIUM ELECTRO CAPACITOR	
C905		CK73GB1H104K	CHIP C 0.10UF K	

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description			Desti-nation
C906		CK73GB1H102K	CHIP C	1000PF	K	
C908		CE32CL1C220M	CHIP EL	22UF	16WV	
C909		CK73GB1H104K	CHIP C	0.10UF	K	
C910		CK73GB1H104K	CHIP C	0.10UF	K	
C911		CE32CL1C220M	CHIP EL	22UF	16WV	
C912		CK73GB1H102K	CHIP C	1000PF	K	
C924		CK73GB1H102K	CHIP C	1000PF	K	
C927		CK73GB1H104K	CHIP C	0.10UF	K	
C929		CE32CL1C220M	CHIP EL	22UF	16WV	
C930		CK73GB1H104K	CHIP C	0.10UF	K	
C931		CK73GB1H103K	CHIP C	0.010UF	K	
C960		CC73GCH1H470J	CHIP C	47PF	J	
C961		CK73GB1H102K	CHIP C	1000PF	K	
C962		CC73GCH1H070D	CHIP C	7.0PF	D	
C963		CK73GB1H103K	CHIP C	0.010UF	K	
C964		CK73GB1H103K	CHIP C	0.010UF	K	
C965		CK73GB1H102K	CHIP C	1000PF	K	
C966		CK73GB1H102K	CHIP C	1000PF	K	
C967		CK73GB1H103K	CHIP C	0.010UF	K	
C968		CC73GCH1H020C	CHIP C	2.0PF	C	
C969		CK73GB1H102K	CHIP C	1000PF	K	
C970		CK73GB1H103K	CHIP C	0.010UF	K	
C971		CK73GB1H103K	CHIP C	0.010UF	K	
C972		CK73GB1E105K	CHIP C	1.0UF	K	
C973		CC73GCH1H060D	CHIP C	6.0PF	D	
C974		CC73GCH1H220J	CHIP C	22PF	J	
C993		CC73GCH1H102J	CHIP C	1000PF	J	
C994		CC73GCH1H090D	CHIP C	9.0PF	D	
CF591		L72-0372-05	CERAMIC FILTER			
CN1		E40-6526-05	PIN ASSY			
CN2		E40-6656-05	PIN ASSY			
CN3		E40-6525-05	PIN ASSY			
CN4		E41-1684-05	PIN ASSY			
CN5		E40-6726-05	FLAT CABLE CONNECTOR			
CN100		E04-0490-05	PIN SOCKET			
CN101		E40-5487-05	PIN ASSY			
CN102		E40-5487-05	PIN ASSY			
CN103		E40-5487-05	PIN ASSY			
CN200		E04-0490-05	PIN SOCKET			
CN201		E40-6852-05	PIN ASSY			
CN300		E04-0490-05	PIN SOCKET			
CN303		E40-6852-05	PIN ASSY			
CN304		E40-6852-05	PIN ASSY			
CN400		E04-0490-05	PIN SOCKET			
CN500		E18-0254-05	SOCKET			
CN501		E18-0254-05	SOCKET			
CN600		E40-6525-05	PIN ASSY			
CN650		E40-6529-05	PIN ASSY			
CN663		E40-6529-05	PIN ASSY			
CN667		E04-0490-05	PIN SOCKET			
CN674		E04-0490-05	PIN SOCKET			

Ref.No	Adderss	Parts No.	Description	Desti-nation
CN700		E40-6525-05	PIN ASSY	
CN800		E04-0490-05	PIN SOCKET	
D11		1SS226-F	DIODE	
D12		1SS226-F	DIODE	
D13		DA2S101	DIODE	
D14		EDZV18B	ZENER DIODE	
D15		EDZV4.3B	ZENER DIODE	
D17		DA2S101	DIODE	
D18		DAN202U	MULTIPLE DIODE	
D19		DA2S101	DIODE	
D20		DA2S101	DIODE	
D21		DA2S101	DIODE	
D22		DA2S101	DIODE	
D23		DA2S101	DIODE	
D24		DA221	MULTIPLE DIODE	
D25		DA2S101	DIODE	
D101		DSP-301N	SURGE ABSORBER	
D102		DAN202U	MULTIPLE DIODE	
D103		DAN202U	MULTIPLE DIODE	
D104		V08(G)	DIODE	
D105		MMSD103T1G	DIODE	
D106		MMSD103T1G	DIODE	
D107		V08(G)	DIODE	
D108		RN142S	DIODE	
D109		RN142S	DIODE	
D110		RN142S	DIODE	
D111		EZJZ1V500AA	VARISTOR	
D131		RN142S	DIODE	
D132		RN142S	DIODE	
D133		RN142S	DIODE	
D134		RN142S	DIODE	
D135		RN142S	DIODE	
D136		RN142S	DIODE	
D137		RN142S	DIODE	
D138		RN142S	DIODE	
D139		RN142S	DIODE	
D140		RN142S	DIODE	
D141		RN142S	DIODE	
D142		RN142S	DIODE	
D143		RN142S	DIODE	
D144		RN142S	DIODE	
D145		RN142S	DIODE	
D146		RN142S	DIODE	
D147		RN142S	DIODE	
D148		RN142S	DIODE	
D149		RN142S	DIODE	
D150		RN142S	DIODE	
D151		RN142S	DIODE	
D152		RN142S	DIODE	
D153		RN142S	DIODE	
D154		RN142S	DIODE	
D155		RN142S	DIODE	
D156		RN142S	DIODE	

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
D200		DA2S101	DIODE	
D231		RN142S	DIODE	
D232		RN142S	DIODE	
D233		RN142S	DIODE	
D234		RN142S	DIODE	
D235		DAN202U	MULTIPLE DIODE	
D261		RN142S	DIODE	
D281		RN142S	DIODE	
D301		RN142S	DIODE	
D302		RN142S	DIODE	
D321		RN142S	DIODE	
D323		RN142S	DIODE	
D324		RN142S	DIODE	
D351		RN142S	DIODE	
D371		RN142S	DIODE	
D372		RN142S	DIODE	
D420		RN142S	DIODE	
D421		RN142S	DIODE	
D422		RB706F-40	DIODE	
D423		RB706F-40	DIODE	
D431		DAN202U	MULTIPLE DIODE	
D441		RN142S	DIODE	
D442		RN142S	DIODE	
D443		RN142S	DIODE	
D461		RN142S	DIODE	
D462		RN142S	DIODE	
D463		RN142S	DIODE	
D464		RN142S	DIODE	
D470		RN142S	DIODE	
D471		RN142S	DIODE	
D472		RN142S	DIODE	
D473		RN142S	DIODE	
D474		RN142S	DIODE	
D475		RN142S	DIODE	
D476		RN142S	DIODE	
D477		RN142S	DIODE	
D478		RN142S	DIODE	
D479		RN142S	DIODE	
D480		RN142S	DIODE	
D481		RN142S	DIODE	
D482		RN142S	DIODE	
D483		RN142S	DIODE	
D525		L204BBB	DIODE	
D526		DAN202U	MULTIPLE DIODE	
D551		RB706F-40	DIODE	
D552		RB706F-40	DIODE	
D571		DAN202U	MULTIPLE DIODE	
D586		1SS226-F	DIODE	
D587		1SS226-F	DIODE	
D662		RB706F-40	DIODE	
D663		RN142S	DIODE	
D664		RN142S	DIODE	
D701		DAN202U	MULTIPLE DIODE	
D702		DA2S101	DIODE	
D721		RN731V	DIODE	
D722		RN731V	DIODE	
D723		RN142S	DIODE	
D724		DA204U	MULTIPLE DIODE	
D741		RN731V	DIODE	
D761		RN142S	DIODE	
D762		RN142S	DIODE	
D781		RN142S	DIODE	
D782		RN142S	DIODE	
D783		RN142S	DIODE	
D784		DAN202U	MULTIPLE DIODE	
D785		RN142S	DIODE	
D799		EDZV18B	ZENER DIODE	
D800		EDZV18B	ZENER DIODE	
D801		EDZV6.2B	ZENER DIODE	
D802		DA2S101	DIODE	
D806		DZ2J100M	ZENER DIODE	
D807		DA2S101	DIODE	
D808		DA2S101	DIODE	
D809		DZ2J033(M)	ZENER DIODE	
D841		DA2S101	DIODE	
D861		RB531SM-30	DIODE	
D862		RB531SM-30	DIODE	
F1		F53-0388-05	FUSE(1.25A)	
F901		F53-0363-05	FUSE(0.5A)	
F911		F53-0316-15	FUSE(375MA)	
F954		F53-0363-05	FUSE(0.5A)	
IC11		TC74HC4094AFF	MOS-IC	
IC12		TC74HC4094AFF	MOS-IC	
IC13		R2A20168SA	MOS-IC	
IC14		TC74HC4094AFF	MOS-IC	
IC15		TC74HC4094AFF	MOS-IC	
IC521		BA2904FVM	MOS-IC	
IC591		TA31136FNG	MOS-IC	
IC592		NJM2732V	BIPOLAR IC	
IC601		BA4580RFVM	BI-POLAR IC	
IC631		TC4W53FU-F	MOS-IC	
IC701		TA4107F-F	MOS-IC	
IC761		TA4107F-F	MOS-IC	
IC801		BA2904FVM	MOS-IC	
IC802		BA2904FVM	MOS-IC	
IC803		BA2904FVM	MOS-IC	
IC861		BA2904FVM	MOS-IC	
J1		E11-0414-15	3.5D PHONE JACK(3P)	
J2		E56-0408-15	DIN SOCKET	
J3		E06-0752-15	DIN SOCKET	
J4		E11-0455-05	3.5D PHONE JACK(3P)	
J5		E11-0705-15	PHONE JACK (9P)	
J100		E13-0166-25	PIN JACK	
J800		E13-0166-25	PIN JACK	

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
K11		S51-1420-05	RELAY	
K101		S76-0483-05	RELAY	
K102		S76-0483-05	RELAY	
K103		S76-0476-05	RELAY	
K800		S76-0483-05	RELAY	
L11		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L12		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L13		L41-1095-52	SMALL FIXED INDUCTOR(1.0UH)	
L14		L41-1085-53	SMALL FIXED INDUCTOR(0.1UH)	
L15		L41-1085-53	SMALL FIXED INDUCTOR(0.1UH)	
L16		L41-1085-53	SMALL FIXED INDUCTOR(0.1UH)	
L17		L41-1085-53	SMALL FIXED INDUCTOR(0.1UH)	
L18		L33-1557-05	CHOKE COIL	
L19		L33-1554-05	CHOKE COIL	
L21		L92-0639-05	CHIP FERRITE	
L22		L92-0639-05	CHIP FERRITE	
L23		L92-0639-05	CHIP FERRITE	
L24		L92-0639-05	CHIP FERRITE	
L25		L92-0639-05	CHIP FERRITE	
L26		L92-0639-05	CHIP FERRITE	
L101		LR73Z0AE101J	CHIP INDUCTOR	
L102		LR73Z0AE101J	CHIP INDUCTOR	
L103		L41-1588-60	SMALL FIXED INDUCTOR(150NH)	
L104		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L105		L33-0695-05	SMALL FIXED INDUCTOR	
L106		L40-6891-14	SMALL FIXED INDUCTOR	E
L107		L33-0695-05	SMALL FIXED INDUCTOR	
L108		L40-6891-14	SMALL FIXED INDUCTOR	E
L109		L41-5698-64	SMALL FIXED INDUCTOR(5.6UH)	
L110		L33-0695-05	SMALL FIXED INDUCTOR	
L131		L41-6898-64	SMALL FIXED INDUCTOR(6.8UH)	
L132		L41-6898-64	SMALL FIXED INDUCTOR(6.8UH)	
L133		L34-4941-05	COIL	
L134		L34-4942-05	COIL	
L135		L41-2788-60	SMALL FIXED INDUCTOR(270NH)	
L136		L33-0695-05	SMALL FIXED INDUCTOR	
L137		L41-1898-60	SMALL FIXED INDUCTOR(1.8UH)	
L138		L41-1298-60	SMALL FIXED INDUCTOR(1.2UH)	
L139		L41-1098-60	SMALL FIXED INDUCTOR(1UH)	
L140		L41-3388-60	SMALL FIXED INDUCTOR(330NH)	
L141		L41-2288-60	SMALL FIXED INDUCTOR(220NH)	
L142		L41-2288-60	SMALL FIXED INDUCTOR(220NH)	
L143		L41-2288-60	SMALL FIXED INDUCTOR(220NH)	
L144		L41-1588-60	SMALL FIXED INDUCTOR(150NH)	
L145		L41-1505-08	SMALL FIXED INDUCTOR(15UH)	
L146		L33-0695-05	SMALL FIXED INDUCTOR	
L147		L41-6898-64	SMALL FIXED INDUCTOR(6.8UH)	
L148		L41-5698-64	SMALL FIXED INDUCTOR(5.6UH)	
L149		L41-1898-60	SMALL FIXED INDUCTOR(1.8UH)	
L150		L34-4941-05	COIL	
L151		L41-2298-60	SMALL FIXED INDUCTOR(2.2UH)	
L152		L41-1898-60	SMALL FIXED INDUCTOR(1.8UH)	
L153		L34-4942-05	COIL	
L154		L41-1098-60	SMALL FIXED INDUCTOR(1UH)	

Ref.No	Adderss	Parts No.	Description	Desti-nation
L155		L41-1098-60	SMALL FIXED INDUCTOR(1UH)	
L156		L41-2788-60	SMALL FIXED INDUCTOR(270NH)	
L157		L41-1098-60	SMALL FIXED INDUCTOR(1UH)	
L158		L41-1505-08	SMALL FIXED INDUCTOR(15U)	
L159		L41-1898-60	SMALL FIXED INDUCTOR(1.8UH)	
L160		L41-1298-60	SMALL FIXED INDUCTOR(1.2UH)	
L161		L41-1098-60	SMALL FIXED INDUCTOR(1UH)	
L162		L41-3388-60	SMALL FIXED INDUCTOR(330NH)	
L163		L41-2288-60	SMALL FIXED INDUCTOR(220NH)	
L164		L41-2288-60	SMALL FIXED INDUCTOR(220NH)	
L165		L41-2288-60	SMALL FIXED INDUCTOR(220NH)	
L166		L41-1588-60	SMALL FIXED INDUCTOR(150NH)	
L167		L34-4941-05	COIL	
L168		L34-4942-05	COIL	
L170		L33-0695-05	SMALL FIXED INDUCTOR	
L171		L34-4608-15	AIR-CORE COIL	
L172		L34-4608-15	AIR-CORE COIL	
L200		L3K-0002-00	TOROIDAL COIL	
L201		LR73Z0AE101J	CHIP INDUCTOR	
L231		L33-0695-05	SMALL FIXED INDUCTOR	
L232		L41-2288-60	SMALL FIXED INDUCTOR(220NH)	
L233		L33-0695-05	SMALL FIXED INDUCTOR	
L234		L39-1556-05	TOROIDAL COIL	
L235		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L236		L41-1588-60	SMALL FIXED INDUCTOR(150NH)	
L237		L33-0695-05	SMALL FIXED INDUCTOR	
L251		L41-2288-60	SMALL FIXED INDUCTOR(220NH)	
L252		L41-2288-60	SMALL FIXED INDUCTOR(220NH)	
L253		L34-4935-05	COIL	
L254		L41-2288-60	SMALL FIXED INDUCTOR(220NH)	
L255		L34-4935-05	COIL	
L261		L39-1554-15	TOROIDAL COIL	
L262		L39-1480-15	TOROIDAL COIL	
L263		LR73Z0AE101J	CHIP INDUCTOR	
L264		L39-1555-05	TOROIDAL COIL	
L267		L41-3388-60	SMALL FIXED INDUCTOR(330NH)	
L268		L41-1598-60	SMALL FIXED INDUCTOR(1.5UH)	
L269		LR73Z0AE101J	CHIP INDUCTOR	
L281		LR73Z0AE101J	CHIP INDUCTOR	
L283		LR73Z0AE101J	CHIP INDUCTOR	
L284		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L285		L40-4781-86	SMALL FIXED INDUCTOR(0.47UH)	
L303		L40-1291-86	SMALL FIXED INDUCTOR(1.2U)	
L304		L40-2791-86	SMALL FIXED INDUCTOR(2.7U)	
L305		L40-5691-86	SMALL FIXED INDUCTOR(5.6U)	
L306		L40-5691-86	SMALL FIXED INDUCTOR(5.6U)	
L307		L40-2791-86	SMALL FIXED INDUCTOR(2.7U)	
L308		L40-1291-86	SMALL FIXED INDUCTOR(1.2U)	
L309		LR73Z0AE101J	CHIP INDUCTOR	
L311		LR73Z0AE101J	CHIP INDUCTOR	
L312		LR73Z0AE101J	CHIP INDUCTOR	
L321		L41-1288-60	SMALL FIXED INDUCTOR(120NH)	
L322		L41-1088-60	SMALL FIXED INDUCTOR(100NH)	
L323		L39-1493-15	TOROIDAL COIL	
L324		L39-1480-15	TOROIDAL COIL	

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
L325		LR73Z0AE101J	CHIP INDUCTOR	
L326		L34-4709-05	COIL	
L327		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L328		L41-4785-52	SMALL FIXED INDUCTOR(0.47UH)	
L351		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L353		LR73Z0AE101J	CHIP INDUCTOR	
L354		L41-4785-52	SMALL FIXED INDUCTOR(0.47UH)	
L355		L41-1095-52	SMALL FIXED INDUCTOR(1.0UH)	
L356		L41-1085-53	SMALL FIXED INDUCTOR(0.1UH)	
L374		L34-4818-05	COIL	
L375		L34-4818-05	COIL	
L376		L34-4818-05	COIL	
L391		LR73Z0AE101J	CHIP INDUCTOR	
L393		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L394		L39-1553-05	TOROIDAL COIL	
L397		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L421		L39-1255-15	TOROIDAL COIL	
L422		L39-1255-15	TOROIDAL COIL	
L431		L41-4785-52	SMALL FIXED INDUCTOR(10UH)	
L432		L40-1288-67	SMALL FIXED INDUCTOR(120NH/8)	
L451		LR73Z0AE101J	CHIP INDUCTOR	
L452		LR73Z0AE101J	CHIP INDUCTOR	
L453		LR73Z0AE101J	CHIP INDUCTOR	
L454		L41-1098-60	SMALL FIXED INDUCTOR(1UH)	
L455		LR73Z0AE101J	CHIP INDUCTOR	
L456		L41-1098-60	SMALL FIXED INDUCTOR(1UH)	
L461		L39-1480-15	TOROIDAL COIL	
L462		L39-1571-05	TOROIDAL COIL	
L471		LR73Z0AE101J	CHIP INDUCTOR	
L472		LR73Z0AE101J	CHIP INDUCTOR	
L473		LR73Z0AE101J	CHIP INDUCTOR	
L474		L41-5695-52	SMALL FIXED INDUCTOR(5.6UH)	
L475		L41-5695-52	SMALL FIXED INDUCTOR(5.6UH)	
L476		L41-4798-60	SMALL FIXED INDUCTOR(4.7UH)	
L477		L41-8295-52	SMALL FIXED INDUCTOR(8.2UH)	
L478		L40-8291-86	SMALL FIXED INDUCTOR(8.2U)	
L479		L40-5691-86	SMALL FIXED INDUCTOR(5.6U)	
L480		L40-4791-86	SMALL FIXED INDUCTOR(4.7U)	
L481		L40-5691-86	SMALL FIXED INDUCTOR(5.6U)	
L482		LR73Z0AE101J	CHIP INDUCTOR	
L483		LR73Z0AE101J	CHIP INDUCTOR	
L484		LR73Z0AE101J	CHIP INDUCTOR	
L485		L41-1898-60	SMALL FIXED INDUCTOR(1.8UH)	
L486		L40-1891-86	SMALL FIXED INDUCTOR(1.8U)	
L521		L40-4791-86	SMALL FIXED INDUCTOR(4.7U)	
L522		LR73Z0AE101J	CHIP INDUCTOR	
L523		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L524		L39-1599-05	TOROIDAL COIL	
L525		LR73Z0AE101J	CHIP INDUCTOR	
L526		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L527		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L528		LR73Z0AE101J	CHIP INDUCTOR	
L542		LR73Z0AE101J	CHIP INDUCTOR	
L543		L39-1598-05	TOROIDAL COIL	
L551		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L552		L39-1255-15	TOROIDAL COIL	
L571		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L572		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L573		L40-8281-86	SMALL FIXED INDUCTOR(0.82UH)	
L574		L40-8281-86	SMALL FIXED INDUCTOR(0.82UH)	
L575		L40-4781-86	SMALL FIXED INDUCTOR(0.47UH)	
L591		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L592		LR73Z0AE101J	CHIP INDUCTOR	
L593		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L594		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L595		L34-4787-05	COIL	
L641		LR79F0EDR10G	CHIP INDUCTOR	
L651		L41-4795-52	SMALL FIXED INDUCTOR(4.7UH)	
L652		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L653		L34-4935-05	COIL	
L654		L41-2285-52	SMALL FIXED INDUCTOR(0.22UH)	
L662		L33-0695-05	SMALL FIXED INDUCTOR	
L663		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L664		L34-4935-05	COIL	
L665		L34-4935-05	COIL	
L701		LR73Z0AE101J	CHIP INDUCTOR	
L702		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L703		L40-1001-86	SMALL FIXED INDUCTOR(10UH)	
L705		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L721		LR73Z0AE101J	CHIP INDUCTOR	
L722		LR73Z0AE101J	CHIP INDUCTOR	
L725		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L727		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L728		LR73Z0AE101J	CHIP INDUCTOR	
L741		LR79F0EDR10G	CHIP INDUCTOR	
L742		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L761		LR73Z0AE101J	CHIP INDUCTOR	
L762		L39-1476-05	TOROIDAL COIL	
L763		L39-1480-15	TOROIDAL COIL	
L765		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L781		L41-2785-52	SMALL FIXED INDUCTOR(0.27UH)	
L782		LR79F0EDR10G	CHIP INDUCTOR	
L783		LR73Z0AE101J	CHIP INDUCTOR	
L784		L41-4705-52	SMALL FIXED INDUCTOR(47UH)	
L785		L33-0695-05	SMALL FIXED INDUCTOR	
L786		LR79F0EDR10G	CHIP INDUCTOR	
L788		LR73Z0AE101J	CHIP INDUCTOR	
L903		L41-1005-52	SMALL FIXED INDUCTOR(10UH)	
L956		L41-1095-52	SMALL FIXED INDUCTOR(1.0UH)	
L957		L41-4785-52	SMALL FIXED INDUCTOR(0.47UH)	
L959		L41-2785-53	SMALL FIXED INDUCTOR(0.27UH)	
Q12		LSCR523EBFS8	TRANSISTOR	
Q13		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q14		RUE002N02	FET	
Q15		LTC014EEBFS8	DIGITAL TRANSISTOR	
Q16		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q17		2SB1188(Q,R)	TRANSISTOR	

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
Q18		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q19		SSM3K15AMFV	FET	
Q101		LTC023YEBFS8	TRANSISTOR	
Q102		LTC023YEBFS8	TRANSISTOR	
Q103		2SD1757K	TRANSISTOR	
Q131		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q132		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q133		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q134		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q135		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q136		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q137		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q138		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q139		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q140		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q141		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q142		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q143		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q200		SSM3K15AMFV	FET	
Q236		2SC5551AF	TRANSISTOR	
Q239		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q263		2SK1740-4	FET	
Q264		2SK1740-4	FET	
Q265		2SK1740-4	FET	
Q266		2SK1740-4	FET	
Q267		2SB1694	TRANSISTOR	
Q268		RE1L002SN	FET	
Q269		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q270		2SB1694	TRANSISTOR	
Q271		2SB1694	TRANSISTOR	
Q272		RE1L002SN	FET	
Q273		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q274		2SB1694	TRANSISTOR	
Q281		2SC5551AF	TRANSISTOR	
Q282		2SC5551AF	TRANSISTOR	
Q301		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q302		LSCR523EBFS8	TRANSISTOR	
Q303		LSCR523EBFS8	TRANSISTOR	
Q305		LSCR523EBFS8	TRANSISTOR	
Q321		2SK1740-4	FET	
Q322		2SK1740-4	FET	
Q323		2SK1740-4	FET	
Q324		2SK1740-4	FET	
Q351		2SC5551AF	TRANSISTOR	
Q352		2SC5551AF	TRANSISTOR	
Q391		2SC5551AF	TRANSISTOR	
Q421		LTC014EEBFS8	DIGITAL TRANSISTOR	
Q431		2SC3356-A	TRANSISTOR	
Q451		2SC5551AF	TRANSISTOR	
Q453		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q454		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q455		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q456		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q471		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q472		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q473		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q474		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q475		LSCR523EBFS8	TRANSISTOR	
Q476		LSCR523EBFS8	TRANSISTOR	
Q477		LSCR523EBFS8	TRANSISTOR	
Q521		2SC5551AF	TRANSISTOR	
Q522		2SC5551AF	TRANSISTOR	
Q541		3SK264-5	FET	
Q571		2SC4725	TRANSISTOR	
Q631		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q641		2SC3356-A	TRANSISTOR	
Q642		LTA014EEBFS8	DIGITAL TRANSISTOR	
Q643		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q651		2SC3356-A(R25	TRANSISTOR	
Q652		2SC3356-A(R25	TRANSISTOR	
Q653		2SC3356-A(R25	TRANSISTOR	
Q654		2SC4617(R)	TRANSISTOR	
Q663		2SC3356-A(R25	TRANSISTOR	
Q664		2SC3356-A(R25	TRANSISTOR	
Q665		2SC4617(R)	TRANSISTOR	
Q666		2SC4617(R)	TRANSISTOR	
Q667		2SK1824-A	FET	
Q668		2SC4617(R)	TRANSISTOR	
Q669		2SC4617(R)	TRANSISTOR	
Q670		2SC4617(R)	TRANSISTOR	
Q671		LTA014EEBFS8	DIGITAL TRANSISTOR	
Q702		2SC4725	TRANSISTOR	
Q721		2SC4726(P,Q)	TRANSISTOR	
Q741		2SK1830F	FET	
Q742		2SC3356-A	TRANSISTOR	
Q781		SSM3K15AMFV	FET	
Q782		SSM3K15AMFV	FET	
Q783		2SC5551AF	TRANSISTOR	
Q784		DTB143EK	DIGITAL TRANSISTOR	
Q785		SSM3K15AMFV	FET	
Q802		SSM3K15AMFV	FET	
Q803		2SC4617(R)	TRANSISTOR	
Q804		2SC4617(R)	TRANSISTOR	
Q861		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q862		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q903		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q904		2SB1188(Q,R)	TRANSISTOR	
Q905		LTC014EEBFS8	DIGITAL TRANSISTOR	
Q906		RE1L002SN	FET	
Q907		2SB1188(Q,R)	TRANSISTOR	
Q908		DTB143EK	DIGITAL TRANSISTOR	
Q909		DTB143EK	DIGITAL TRANSISTOR	
Q910		RE1L002SN	FET	
Q911		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q914		LTC043ZEBFS8	DIGITAL TRANSISTOR	

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
Q915		2SB1694	TRANSISTOR	
Q916		SSM3K15AMFV	FET	
Q917		2SB1694	TRANSISTOR	
Q918		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q919		2SB1694	TRANSISTOR	
Q921		2SB1694	TRANSISTOR	
Q922		SSM3K15AMFV	FET	
Q924		SSM3K15AMFV	FET	
Q925		LTC043ZEBFS8	DIGITAL TRANSISTOR	
Q952		3SK264-5	FET	
R11		RK73GB2A103J	CHIP R 10K J 1/10W	
R12		RK73GB2A101J	CHIP R 100 J 1/10W	
R13		RK73GB2A101J	CHIP R 100 J 1/10W	
R14		RK73GB2A101J	CHIP R 100 J 1/10W	
R15		RK73GB2A101J	CHIP R 100 J 1/10W	
R16		RK73GB2A101J	CHIP R 100 J 1/10W	
R17		RK73GB2A101J	CHIP R 100 J 1/10W	
R21		RK73GB2A104J	CHIP R 100K J 1/10W	
R22		RK73GB2A123J	CHIP R 12K J 1/10W	
R23		RK73GB2A101J	CHIP R 100 J 1/10W	
R24		RK73GB2A471J	CHIP R 470 J 1/10W	
R25		RK73GB2A392J	CHIP R 3.9K J 1/10W	
R26		RK73GB2A562J	CHIP R 5.6K J 1/10W	
R27		RK73GB2A474J	CHIP R 470K J 1/10W	
R28		RK73GB2A2R2J	CHIP R 2.2 J 1/10W	
R29		RK73GB2A103J	CHIP R 10K J 1/10W	
R30		RK73GB2A103J	CHIP R 10K J 1/10W	
R31		RK73GB2A103J	CHIP R 10K J 1/10W	
R32		RK73GB2A103J	CHIP R 10K J 1/10W	
R33		RK73GB2A223J	CHIP R 22K J 1/10W	
R34		RK73GB2A221J	CHIP R 220 J 1/10W	
R35		RK73GB2A153J	CHIP R 15K J 1/10W	
R36		RK73GB2A101J	CHIP R 100 J 1/10W	
R37		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R38		RK73GB2A103J	CHIP R 10K J 1/10W	
R39		RK73GB2A101J	CHIP R 100 J 1/10W	
R40		RK73GB2A101J	CHIP R 100 J 1/10W	
R41		RK73GB2A223J	CHIP R 22K J 1/10W	
R42		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R43		RK73GB2A101J	CHIP R 100 J 1/10W	
R44		RK73GB2A153J	CHIP R 15K J 1/10W	
R51		RK73GB2A101J	CHIP R 100 J 1/10W	
R52		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R101		RK73FB2B473J	CHIP R 47K J 1/8W	
R102		RK73EB2E560J	CHIP R 56 J 1/4W	
R103		RK73EB2E102J	CHIP R 1.0K J 1/4W	
R104		RK73EB2E181J	CHIP R 180 J 1/4W	
R105		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R106		RK73GB2A101J	CHIP R 100 J 1/10W	
R107		RK73GB2A222J	CHIP R 2.2K J 1/10W	
R108		RK73GB2A222J	CHIP R 2.2K J 1/10W	
R109		RK73FB2B680J	CHIP R 68 J 1/8W	
R110		RK73GB2A560J	CHIP R 56 J 1/10W	
R111		RK73EB2E102J	CHIP R 1.0K J 1/4W	

Ref.No	Adderss	Parts No.	Description	Desti-nation
R131		RK73GB2A103J	CHIP R 10K J 1/10W	
R132		RK73GB2A103J	CHIP R 10K J 1/10W	
R133		RK73GB2A103J	CHIP R 10K J 1/10W	
R134		RK73GB2A103J	CHIP R 10K J 1/10W	
R135		RK73GB2A103J	CHIP R 10K J 1/10W	
R136		RK73GB2A103J	CHIP R 10K J 1/10W	
R137		RK73GB2A103J	CHIP R 10K J 1/10W	
R138		RK73GB2A103J	CHIP R 10K J 1/10W	
R139		RK73GB2A103J	CHIP R 10K J 1/10W	
R140		RK73GB2A103J	CHIP R 10K J 1/10W	
R141		RK73GB2A103J	CHIP R 10K J 1/10W	
R142		RK73GB2A103J	CHIP R 10K J 1/10W	
R143		RK73GB2A103J	CHIP R 10K J 1/10W	
R144		RK73EB2E330J	CHIP R 33 J 1/4W	
R145		RK73GB2A471J	CHIP R 470 J 1/10W	
R146		RK73FB2B560J	CHIP R 56 J 1/8W	
R147		RK73GB2A560J	CHIP R 56 J 1/10W	
R148		RK73GB2A560J	CHIP R 56 J 1/10W	
R149		RK73GB2A560J	CHIP R 56 J 1/10W	
R150		RK73GB2A560J	CHIP R 56 J 1/10W	
R151		RK73GB2A560J	CHIP R 56 J 1/10W	
R152		RK73GB2A560J	CHIP R 56 J 1/10W	
R153		RK73GB2A330J	CHIP R 33 J 1/10W	
R154		RK73GB2A560J	CHIP R 56 J 1/10W	
R155		RK73GB2A560J	CHIP R 56 J 1/10W	
R156		RK73EB2E680J	CHIP R 68 J 1/4W	
R157		RK73EB2E680J	CHIP R 68 J 1/4W	
R158		RK73EB2E560J	CHIP R 56 J 1/4W	
R159		RK73EB2E680J	CHIP R 68 J 1/4W	
R160		RK73EB2E680J	CHIP R 68 J 1/4W	
R161		RK73EB2E680J	CHIP R 68 J 1/4W	
R162		RK73EB2E680J	CHIP R 68 J 1/4W	
R163		RK73EB2E680J	CHIP R 68 J 1/4W	
R164		RK73EB2E680J	CHIP R 68 J 1/4W	
R165		RK73EB2E680J	CHIP R 68 J 1/4W	
R166		RK73EB2E680J	CHIP R 68 J 1/4W	
R167		RK73EB2E560J	CHIP R 56 J 1/4W	
R168		RK73GB2A560J	CHIP R 56 J 1/10W	
R169		RK73EB2E680J	CHIP R 68 J 1/4W	
R170		RK73FB2B330J	CHIP R 33 J 1/8W	
R171		RK73FB2B330J	CHIP R 33 J 1/8W	
R172		RK73FB2B330J	CHIP R 33 J 1/8W	
R173		RK73FB2B330J	CHIP R 33 J 1/8W	
R174		RK73FB2B330J	CHIP R 33 J 1/8W	
R175		RK73FB2B330J	CHIP R 33 J 1/8W	
R176		RK73FB2B330J	CHIP R 33 J 1/8W	
R177		RK73FB2B330J	CHIP R 33 J 1/8W	
R178		RK73FB2B330J	CHIP R 33 J 1/8W	
R179		RK73FB2B330J	CHIP R 33 J 1/8W	
R180		RK73FB2B330J	CHIP R 33 J 1/8W	
R181		RK73FB2B330J	CHIP R 33 J 1/8W	
R182		RK73FB2B330J	CHIP R 33 J 1/8W	
R212		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R213		RK73GB2A472J	CHIP R 4.7K J 1/10W	

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description				Desti-nation
R214		RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R215		RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R217		RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R218		RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R219		RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R220		RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R221		RK73GB2A100J	CHIP R	10	J	1/10W	
R222		RK73GB2A150J	CHIP R	15	J	1/10W	
R223		RK73GB2A104J	CHIP R	100K	J	1/10W	
R231		RK73FB2B221J	CHIP R	220	J	1/8W	
R232		RK73GB2A682J	CHIP R	6.8K	J	1/10W	
R235		RK73GB2A122J	CHIP R	1.2K	J	1/10W	
R236		RK73GB2A471J	CHIP R	470	J	1/10W	
R237		RK73GB2A821J	CHIP R	820	J	1/10W	
R238		RK73GB2A120J	CHIP R	12	J	1/10W	
R239		RK73FB2B390J	CHIP R	39	J	1/8W	
R240		RK73GB2A151J	CHIP R	150	J	1/10W	
R241		RK73EB2E121J	CHIP R	120	J	1/4W	
R242		RK73EB2E121J	CHIP R	120	J	1/4W	
R243		RK73GB2A682J	CHIP R	6.8K	J	1/10W	
R244		RK73GB2A562J	CHIP R	5.6K	J	1/10W	
R245		RK73GB2A181J	CHIP R	180	J	1/10W	
R246		RK73GB2A820J	CHIP R	82	J	1/10W	
R247		RK73FB2B271J	CHIP R	270	J	1/8W	
R248		RK73FB2B221J	CHIP R	220	J	1/8W	
R249		RK73FB2B271J	CHIP R	270	J	1/8W	
R261		RK73FB2B471J	CHIP R	470	J	1/8W	
R263		RK73EB2E331J	CHIP R	330	J	1/4W	
R264		RK73EB2E331J	CHIP R	330	J	1/4W	
R265		RK73GB2A100J	CHIP R	10	J	1/10W	
R266		RK73GB2A100J	CHIP R	10	J	1/10W	
R267		RK73GB2A271J	CHIP R	270	J	1/10W	
R268		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R269		RK73GB2A100J	CHIP R	10	J	1/10W	
R270		RK73GB2A100J	CHIP R	10	J	1/10W	
R271		RK73GB2A100J	CHIP R	10	J	1/10W	
R272		RK73GB2A821J	CHIP R	820	J	1/10W	
R273		RK73GB2A332J	CHIP R	3.3K	J	1/10W	
R274		RK73GB2A182J	CHIP R	1.8K	J	1/10W	
R275		RK73GB2A331J	CHIP R	330	J	1/10W	
R276		RK73GB2A470J	CHIP R	47	J	1/10W	
R281		RK73GB2A471J	CHIP R	470	J	1/10W	
R282		RK73GB2A561J	CHIP R	560	J	1/10W	
R283		RK73GB2A151J	CHIP R	150	J	1/10W	
R284		RK73GB2A681J	CHIP R	680	J	1/10W	
R285		RK73GB2A8R2J	CHIP R	8.2	J	1/10W	
R286		RK73GB2A8R2J	CHIP R	8.2	J	1/10W	
R287		RK73FB2B100J	CHIP R	10	J	1/8W	
R301		RK73GB2A101J	CHIP R	100	J	1/10W	
R304		RK73GB2A101J	CHIP R	100	J	1/10W	
R305		RK73GB2A101J	CHIP R	100	J	1/10W	
R306		RK73GB2A101J	CHIP R	100	J	1/10W	
R307		RK73GB2A103J	CHIP R	10K	J	1/10W	
R308		RK73GB2A103J	CHIP R	10K	J	1/10W	

Ref.No	Adderss	Parts No.	Description				Desti-nation
R309		RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R310		RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R311		RK73GB2A103J	CHIP R	10K	J	1/10W	
R312		RK73GB2A103J	CHIP R	10K	J	1/10W	
R313		RK73GB2A471J	CHIP R	470	J	1/10W	
R314		RK73GB2A100J	CHIP R	10	J	1/10W	
R315		RK73GB2A471J	CHIP R	470	J	1/10W	
R321		RK73FB2B471J	CHIP R	470	J	1/8W	
R323		RK73GB2A681J	CHIP R	680	J	1/10W	
R324		RK73GB2A681J	CHIP R	680	J	1/10W	
R325		RK73GB2A100J	CHIP R	10	J	1/10W	
R326		RK73GB2A100J	CHIP R	10	J	1/10W	
R327		RK73GB2A271J	CHIP R	270	J	1/10W	
R329		RK73GB2A100J	CHIP R	10	J	1/10W	
R330		RK73GB2A100J	CHIP R	10	J	1/10W	
R331		RK73GB2A100J	CHIP R	10	J	1/10W	
R336		RK73GB2A331J	CHIP R	330	J	1/10W	
R337		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R352		RK73EB2E471J	CHIP R	470	J	1/4W	
R355		RK73GB2A471J	CHIP R	470	J	1/10W	
R356		RK73GB2A151J	CHIP R	150	J	1/10W	
R357		RK73GB2A151J	CHIP R	150	J	1/10W	
R358		RK73GB2A8R2J	CHIP R	8.2	J	1/10W	
R359		RK73GB2A8R2J	CHIP R	8.2	J	1/10W	
R360		RK73EB2E100J	CHIP R	10	J	1/4W	
R361		RK73GB2A560J	CHIP R	56	J	1/10W	
R362		RK73GB2A121J	CHIP R	120	J	1/10W	
R363		RK73GB2A121J	CHIP R	120	J	1/10W	
R371		RK73GB2A331J	CHIP R	330	J	1/10W	
R372		RK73GB2A331J	CHIP R	330	J	1/10W	
R392		RK73GB2A471J	CHIP R	470	J	1/10W	
R393		RK73FB2B220J	CHIP R	22	J	1/8W	
R394		RK73GB2A101J	CHIP R	100	J	1/10W	
R395		RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R396		RK73GB2A681J	CHIP R	680	J	1/10W	
R397		RK73GB2A271J	CHIP R	270	J	1/10W	
R398		RK73GB2A180J	CHIP R	18	J	1/10W	
R399		RK73GB2A271J	CHIP R	270	J	1/10W	
R408		RK73GB2A471J	CHIP R	470	J	1/10W	
R421		RK73GB2A331J	CHIP R	330	J	1/10W	
R422		RK73GB2A271J	CHIP R	270	J	1/10W	
R423		RK73GB2A330J	CHIP R	33	J	1/10W	
R424		RK73GB2A221J	CHIP R	220	J	1/10W	
R431		RK73GB2A330J	CHIP R	33	J	1/10W	
R432		RK73GB2A124J	CHIP R	120K	J	1/10W	
R433		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R434		RK73GB2A100J	CHIP R	10	J	1/10W	
R436		RK73GB2A220J	CHIP R	22	J	1/10W	
R437		RK73GB2A220J	CHIP R	22	J	1/10W	
R438		RK73GB2A331J	CHIP R	330	J	1/10W	
R439		RK73GB2A180J	CHIP R	18	J	1/10W	
R440		RK73GB2A331J	CHIP R	330	J	1/10W	
R451		RK73EB2E471J	CHIP R	470	J	1/4W	
R452		RK73GB2A392J	CHIP R	3.9K	J	1/10W	

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
R453		RK73GB2A152J	CHIP R 1.5K J 1/10W	
R454		RK73GB2A821J	CHIP R 820 J 1/10W	
R455		RK73GB2A220J	CHIP R 22 J 1/10W	
R457		RK73GB2A8R2J	CHIP R 8.2 J 1/10W	
R458		RK73GB2A103J	CHIP R 10K J 1/10W	
R460		RK73GB2A220J	CHIP R 22 J 1/10W	
R461		RK73GB2A330J	CHIP R 33 J 1/10W	
R462		RK73GB2A120J	CHIP R 12 J 1/10W	
R463		RK73GB2A331J	CHIP R 330 J 1/10W	
R464		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R465		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R466		RK73GB2A221J	CHIP R 220 J 1/10W	
R467		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R468		RK73GB2A221J	CHIP R 220 J 1/10W	
R469		RK73GB2A271J	CHIP R 270 J 1/10W	
R470		RK73GB2A271J	CHIP R 270 J 1/10W	
R471		RK73GB2A391J	CHIP R 390 J 1/10W	
R472		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R473		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R477		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R478		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R479		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R480		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R481		RK73GB2A101J	CHIP R 100 J 1/10W	
R482		RK73GB2A101J	CHIP R 100 J 1/10W	
R483		RK73GB2A101J	CHIP R 100 J 1/10W	
R484		RK73GB2A101J	CHIP R 100 J 1/10W	
R485		RK73GB2A101J	CHIP R 100 J 1/10W	
R486		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R487		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R488		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R489		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R491		RK73GB2A391J	CHIP R 390 J 1/10W	
R492		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R493		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R496		RK73GB2A101J	CHIP R 100 J 1/10W	
R497		RK73GB2A101J	CHIP R 100 J 1/10W	
R498		RK73GB2A101J	CHIP R 100 J 1/10W	
R499		RK73GB2A101J	CHIP R 100 J 1/10W	
R500		RK73GB2A101J	CHIP R 100 J 1/10W	
R501		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R502		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R503		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R504		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R505		RK73GB2A103J	CHIP R 10K J 1/10W	
R506		RK73GB2A103J	CHIP R 10K J 1/10W	
R507		RK73GB2A103J	CHIP R 10K J 1/10W	
R508		RK73GB2A103J	CHIP R 10K J 1/10W	
R509		RK73GB2A103J	CHIP R 10K J 1/10W	
R520		RK73GB2A393J	CHIP R 39K J 1/10W	
R521		RK73FB2B331J	CHIP R 330 J 1/8W	
R525		RK73GB2A682J	CHIP R 6.8K J 1/10W	
R526		RK73GB2A103J	CHIP R 10K J 1/10W	
R527		RK73GB2A682J	CHIP R 6.8K J 1/10W	

Ref.No	Adderss	Parts No.	Description	Desti-nation
R528		RK73GB2A103J	CHIP R 10K J 1/10W	
R529		RK73GB2A103J	CHIP R 10K J 1/10W	
R530		RK73GB2A561J	CHIP R 560 J 1/10W	
R531		RK73GB2A151J	CHIP R 150 J 1/10W	
R532		RK73GB2A821J	CHIP R 820 J 1/10W	
R533		RK73GB2A8R2J	CHIP R 8.2 J 1/10W	
R534		RK73GB2A8R2J	CHIP R 8.2 J 1/10W	
R535		RK73GB2A120J	CHIP R 12 J 1/10W	
R536		RK73GB2A122J	CHIP R 1.2K J 1/10W	
R537		RK73GB2A101J	CHIP R 100 J 1/10W	
R538		RK73GB2A331J	CHIP R 330 J 1/10W	
R539		RK73GB2A151J	CHIP R 150 J 1/10W	
R540		RK73GB2A471J	CHIP R 470 J 1/10W	
R542		RK73GB2A104J	CHIP R 100K J 1/10W	
R543		RK73GB2A104J	CHIP R 100K J 1/10W	
R544		RK73GB2A220J	CHIP R 22 J 1/10W	
R547		RK73GB2A471J	CHIP R 470 J 1/10W	
R548		RK73GB2A151J	CHIP R 150 J 1/10W	
R549		RK73GB2A390J	CHIP R 39 J 1/10W	
R550		RK73GB2A151J	CHIP R 150 J 1/10W	
R551		RK73GB2A471J	CHIP R 470 J 1/10W	
R552		RK73GB2A221J	CHIP R 220 J 1/10W	
R553		RK73GB2A221J	CHIP R 220 J 1/10W	
R554		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R555		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R556		RK73GB2A223J	CHIP R 22K J 1/10W	
R557		RK73GB2A183J	CHIP R 18K J 1/10W	
R558		RK73GB2A470J	CHIP R 47 J 1/10W	
R560		RK73GB2A563J	CHIP R 56K J 1/10W	
R571		RK73GB2A471J	CHIP R 470 J 1/10W	
R575		RK73GB2A103J	CHIP R 10K J 1/10W	
R576		RK73GB2A222J	CHIP R 2.2K J 1/10W	
R577		RK73GB2A152J	CHIP R 1.5K J 1/10W	
R578		RK73GB2A470J	CHIP R 47 J 1/10W	
R579		RK73GB2A270J	CHIP R 27 J 1/10W	
R583		RK73GB2A4R7J	CHIP R 4.7 J 1/10W	
R586		RK73GB2A471J	CHIP R 470 J 1/10W	
R590		RK73GB2A681J	CHIP R 680 J 1/10W	
R593		RK73GB2A471J	CHIP R 470 J 1/10W	
R595		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R601		RK73GB2A681J	CHIP R 680 J 1/10W	
R603		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R609		RK73GB2A334J	CHIP R 330K J 1/10W	
R610		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R611		RK73GB2A223J	CHIP R 22K J 1/10W	
R612		RK73GB2A122J	CHIP R 1.2K J 1/10W	
R614		RK73GB2A273J	CHIP R 27K J 1/10W	
R615		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R616		RK73GB2A104J	CHIP R 100K J 1/10W	
R617		RK73GB2A684J	CHIP R 680K J 1/10W	
R618		RK73GB2A103J	CHIP R 10K J 1/10W	
R620		RK73GB2A223J	CHIP R 22K J 1/10W	
R621		RK73GB2A473J	CHIP R 47K J 1/10W	
R622		RK73GB2A223J	CHIP R 22K J 1/10W	
R623		RK73GB2A103J	CHIP R 10K J 1/10W	

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
R624		RK73GB2A273J	CHIP R 27K J 1/10W	
R625		RK73GB2A223J	CHIP R 22K J 1/10W	
R626		RK73GB2A103J	CHIP R 10K J 1/10W	
R628		RK73GB2A273J	CHIP R 27K J 1/10W	
R629		RK73GB2A684J	CHIP R 680K J 1/10W	
R632		RK73GB2A103J	CHIP R 10K J 1/10W	
R633		RK73GB2A473J	CHIP R 47K J 1/10W	
R634		RK73GB2A473J	CHIP R 47K J 1/10W	
R635		RK73GB2A473J	CHIP R 47K J 1/10W	
R636		RK73GB2A473J	CHIP R 47K J 1/10W	
R640		RK73GB2A154J	CHIP R 150K J 1/10W	
R641		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R642		RK73GB2A101J	CHIP R 100 J 1/10W	
R643		RK73GB2A471J	CHIP R 470 J 1/10W	
R644		RK73GB2A101J	CHIP R 100 J 1/10W	
R646		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R648		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R650		RK73GB2A221J	CHIP R 220 J 1/10W	
R651		RK73GB2A104J	CHIP R 100K J 1/10W	
R652		RK73GB2A221J	CHIP R 220 J 1/10W	
R653		RK73GB2A101J	CHIP R 100 J 1/10W	
R654		RK73GB2A101J	CHIP R 100 J 1/10W	
R655		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R656		RK73GB2A473J	CHIP R 47K J 1/10W	
R657		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R658		RK73GB2A101J	CHIP R 100 J 1/10W	
R659		RK73GB2A182J	CHIP R 1.8K J 1/10W	
R665		RK73GB2A221J	CHIP R 220 J 1/10W	
R666		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R667		RK73GB2A222J	CHIP R 2.2K J 1/10W	
R668		RK73GB2A101J	CHIP R 100 J 1/10W	
R669		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R670		RK73GB2A473J	CHIP R 47K J 1/10W	
R671		RK73GB2A223J	CHIP R 22K J 1/10W	
R672		RK73GB2A473J	CHIP R 47K J 1/10W	
R673		RK73GB2A683J	CHIP R 68K J 1/10W	
R674		RK73GB2A103J	CHIP R 10K J 1/10W	
R675		RK73GB2A223J	CHIP R 22K J 1/10W	
R676		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R677		RK73GB2A473J	CHIP R 47K J 1/10W	
R678		RK73GB2A152J	CHIP R 1.5K J 1/10W	
R679		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R680		RK73GB2A153J	CHIP R 15K J 1/10W	
R681		RK73GB2A103J	CHIP R 10K J 1/10W	
R682		RK73GB2A221J	CHIP R 220 J 1/10W	
R683		RK73GB2A333J	CHIP R 33K J 1/10W	
R684		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R685		RK73GB2A563J	CHIP R 56K J 1/10W	
R686		RK73GB2A101J	CHIP R 100 J 1/10W	
R687		RK73GB2A681J	CHIP R 680 J 1/10W	
R689		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R691		RK73GB2A473J	CHIP R 47K J 1/10W	
R692		RK73GB2A220J	CHIP R 22 J 1/10W	
R693		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R694		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R695		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R701		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R702		RK73GB2A223J	CHIP R 22K J 1/10W	
R703		RK73GB2A392J	CHIP R 3.9K J 1/10W	
R705		RK73GB2A471J	CHIP R 470 J 1/10W	
R706		RK73GB2A471J	CHIP R 470 J 1/10W	
R707		RK73GB2A681J	CHIP R 680 J 1/10W	
R708		RK73GB2A101J	CHIP R 100 J 1/10W	
R709		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R710		RK73GB2A224J	CHIP R 220K J 1/10W	
R711		RK73GB2A331J	CHIP R 330 J 1/10W	
R712		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R713		RK73GB2A820J	CHIP R 82 J 1/10W	
R714		RK73GB2A471J	CHIP R 470 J 1/10W	
R715		RK73GB2A182J	CHIP R 1.8K J 1/10W	
R716		RK73GB2A151J	CHIP R 150 J 1/10W	
R717		RK73GB2A470J	CHIP R 47 J 1/10W	
R721		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R722		RK73GB2A151J	CHIP R 150 J 1/10W	
R725		RK73GB2A332J	CHIP R 3.3K J 1/10W	
R726		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R727		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R728		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R729		RK73GB2A560J	CHIP R 56 J 1/10W	
R730		RK73GB2A222J	CHIP R 2.2K J 1/10W	
R732		RK73GB2A104J	CHIP R 100K J 1/10W	
R734		RK73GB2A220J	CHIP R 22 J 1/10W	
R735		RK73GB2A471J	CHIP R 470 J 1/10W	
R736		RK73GB2A223J	CHIP R 22K J 1/10W	
R742		RK73GB2A331J	CHIP R 330 J 1/10W	
R744		RK73GB2A390J	CHIP R 39 J 1/10W	
R745		RK73GB2A100J	CHIP R 10 J 1/10W	
R746		RK73GB2A332J	CHIP R 3.3K J 1/10W	
R747		RK73GB2A182J	CHIP R 1.8K J 1/10W	
R748		RK73GB2A471J	CHIP R 470 J 1/10W	
R749		RK73GB2A103J	CHIP R 10K J 1/10W	
R750		RK73GB2A470J	CHIP R 47 J 1/10W	
R751		RK73GB2A471J	CHIP R 470 J 1/10W	
R753		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R762		RK73GB2A101J	CHIP R 100 J 1/10W	
R763		RK73GB2A470J	CHIP R 47 J 1/10W	
R764		RK73EB2E820J	CHIP R 82 J 1/4W	
R765		RK73GB2A681J	CHIP R 680 J 1/10W	
R766		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R767		RK73GB2A471J	CHIP R 470 J 1/10W	
R768		RK73GB2A102J	CHIP R 1.0K J 1/10W	
R769		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R772		RK73GB2A471J	CHIP R 470 J 1/10W	
R777		RK73GB2A104J	CHIP R 100K J 1/10W	
R779		RK73GB2A103J	CHIP R 10K J 1/10W	
R780		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R781		RK73GB2A104J	CHIP R 100K J 1/10W	
R782		RK73FB2B391J	CHIP R 390 J 1/8W	
R783		RK73GB2A103J	CHIP R 10K J 1/10W	

PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description				Desti-nation
R784		RK73GB2A103J	CHIP R	10K	J	1/10W	
R785		RK73FB2B391J	CHIP R	390	J	1/8W	
R786		RK73GB2A6R8J	CHIP R	6.8	J	1/10W	
R787		RK73GB2A391J	CHIP R	390	J	1/10W	
R788		RK73GB2A4R7J	CHIP R	4.7	J	1/10W	
R789		RK73GB2A100J	CHIP R	10	J	1/10W	
R790		RK73GB2A471J	CHIP R	470	J	1/10W	
R791		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R792		RK73GB2A471J	CHIP R	470	J	1/10W	
R793		RK73GB2A151J	CHIP R	150	J	1/10W	
R794		RK73GB2A471J	CHIP R	470	J	1/10W	
R795		RK73GB2A124J	CHIP R	120K	J	1/10W	
R796		RK73GB2A184J	CHIP R	180K	J	1/10W	
R797		RK73GB2A563J	CHIP R	56K	J	1/10W	
R798		RK73GB2A154J	CHIP R	150K	J	1/10W	
R799		RK73FB2B221J	CHIP R	220	J	1/8W	
R800		RK73FB2B102J	CHIP R	1.0K	J	1/8W	
R801		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R802		RK73GB2A473J	CHIP R	47K	J	1/10W	
R803		RK73GB2A224J	CHIP R	220K	J	1/10W	
R804		RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R805		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R806		RK73GB2A224J	CHIP R	220K	J	1/10W	
R807		RK73GB2A332J	CHIP R	3.3K	J	1/10W	
R808		RK73GB2A104J	CHIP R	100K	J	1/10W	
R809		RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R810		RK73GB2A563J	CHIP R	56K	J	1/10W	
R811		RK73GB2A473J	CHIP R	47K	J	1/10W	
R813		RK73GB2A104J	CHIP R	100K	J	1/10W	
R814		RK73GB2A104J	CHIP R	100K	J	1/10W	
R815		RK73GB2A823J	CHIP R	82K	J	1/10W	
R816		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R817		RK73GB2A822J	CHIP R	8.2K	J	1/10W	
R818		RK73GB2A104J	CHIP R	100K	J	1/10W	
R819		RK73GB2A471J	CHIP R	470	J	1/10W	
R820		RK73GB2A103J	CHIP R	10K	J	1/10W	
R821		RK73GB2A473J	CHIP R	47K	J	1/10W	
R822		RK73GB2A471J	CHIP R	470	J	1/10W	
R823		RK73GB2A471J	CHIP R	470	J	1/10W	
R824		RK73GB2A103J	CHIP R	10K	J	1/10W	
R825		RK73GB2A224J	CHIP R	220K	J	1/10W	
R826		RK73GB2A473J	CHIP R	47K	J	1/10W	
R827		RK73GB2A100J	CHIP R	10	J	1/10W	
R828		RK73GB2A105J	CHIP R	1.0M	J	1/10W	
R829		RK73GB2A124J	CHIP R	120K	J	1/10W	
R830		RK73GB2A333J	CHIP R	33K	J	1/10W	
R831		RK73GB2A331J	CHIP R	330	J	1/10W	
R832		RK73GB2A331J	CHIP R	330	J	1/10W	
R833		RK73GB2A104J	CHIP R	100K	J	1/10W	
R834		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R835		RK73GB2A104J	CHIP R	100K	J	1/10W	
R836		RK73GB2A153J	CHIP R	15K	J	1/10W	
R837		RK73GB2A104J	CHIP R	100K	J	1/10W	
R838		RK73GB2A104J	CHIP R	100K	J	1/10W	

Ref.No	Adderss	Parts No.	Description				Desti-nation
R839		RK73GB2A101J	CHIP R	100	J	1/10W	
R840		RK73GB2A123J	CHIP R	12K	J	1/10W	
R841		RK73GB2A100J	CHIP R	10	J	1/10W	
R842		RK73GB2A103J	CHIP R	10K	J	1/10W	
R843		RK73GB2A100J	CHIP R	10	J	1/10W	
R844		RK73GB2A104J	CHIP R	100K	J	1/10W	
R845		RK73GB2A183J	CHIP R	18K	J	1/10W	
R846		RK73GB2A333J	CHIP R	33K	J	1/10W	
R847		RK73GB2A104J	CHIP R	100K	J	1/10W	
R848		RK73GB2A123J	CHIP R	12K	J	1/10W	
R849		RK73GB2A224J	CHIP R	220K	J	1/10W	
R850		RK73GB2A333J	CHIP R	33K	J	1/10W	
R851		RK73GB2A334J	CHIP R	330K	J	1/10W	
R859		RK73GB2A333J	CHIP R	33K	J	1/10W	
R860		RK73GB2A103J	CHIP R	10K	J	1/10W	
R862		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R863		RK73GB2A474J	CHIP R	470K	J	1/10W	
R864		RK73GB2A183J	CHIP R	18K	J	1/10W	
R865		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R866		RK73GB2A223J	CHIP R	22K	J	1/10W	
R867		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R868		RK73GB2A473J	CHIP R	47K	J	1/10W	
R869		RK73GB2A103J	CHIP R	10K	J	1/10W	
R870		RK73GB2A104J	CHIP R	100K	J	1/10W	
R871		RK73GB2A224J	CHIP R	220K	J	1/10W	
R872		RK73GB2A104J	CHIP R	100K	J	1/10W	
R873		RK73GB2A273J	CHIP R	27K	J	1/10W	
R874		RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R875		RK73GB2A182J	CHIP R	1.8K	J	1/10W	
R876		RK73GB2A394J	CHIP R	390K	J	1/10W	
R877		RK73GB2A333J	CHIP R	33K	J	1/10W	
R878		RK73GB2A184J	CHIP R	180K	J	1/10W	
R879		RK73GB2A224J	CHIP R	220K	J	1/10W	
R880		RK73GB2A101J	CHIP R	100	J	1/10W	
R881		RK73GB2A104J	CHIP R	100K	J	1/10W	
R901		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R902		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R903		RK73GB2A103J	CHIP R	10K	J	1/10W	
R905		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R906		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R907		RK73GB2A473J	CHIP R	47K	J	1/10W	
R908		RK73GB2A473J	CHIP R	47K	J	1/10W	
R909		RK73GB2A473J	CHIP R	47K	J	1/10W	
R910		RK73GB2A103J	CHIP R	10K	J	1/10W	
R911		RK73GB2A103J	CHIP R	10K	J	1/10W	
R917		RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R918		RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R919		RK73GB2A682J	CHIP R	6.8K	J	1/10W	
R920		RK73GB2A682J	CHIP R	6.8K	J	1/10W	
R922		RK73GB2A471J	CHIP R	470	J	1/10W	
R923		RK73GB2A103J	CHIP R	10K	J	1/10W	
R924		RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R925		RK73GB2A473J	CHIP R	47K	J	1/10W	
R927		RK73GB2A000J	CHIP R	0.0	J	1/10W	
R940		RK73GB2A103J	CHIP R	10K	J	1/10W	

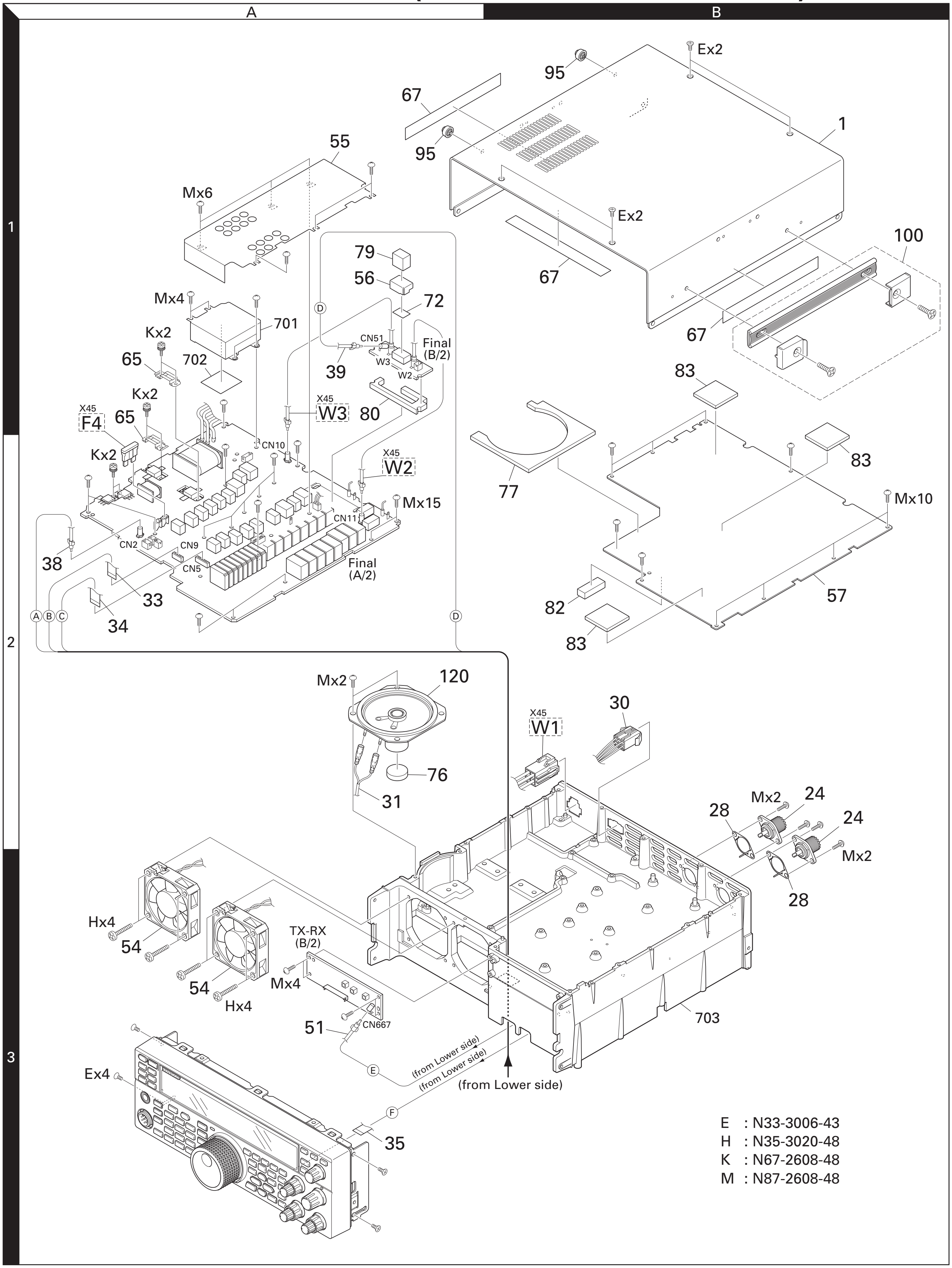
PARTS LIST

TX-RX-UNIT (XC1-024X-XX)

Ref.No	Adderss	Parts No.	Description	Desti-nation
R941		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R942		RK73GB2A473J	CHIP R 47K J 1/10W	
R943		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R968		RK73GB2A471J	CHIP R 470 J 1/10W	
R970		RK73GB2A222J	CHIP R 2.2K J 1/10W	
R971		RK73GB2A470J	CHIP R 47 J 1/10W	
R972		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R973		RK73GB2A470J	CHIP R 47 J 1/10W	
R974		RK73GB2A000J	CHIP R 0.0 J 1/10W	
R975		RK73GB2A222J	CHIP R 2.2K J 1/10W	
R976		RK73GB2A473J	CHIP R 47K J 1/10W	
R977		RK73GB2A184J	CHIP R 180K J 1/10W	
R979		RK73GB2A472J	CHIP R 4.7K J 1/10W	
R980		RK73GB2A471J	CHIP R 470 J 1/10W	
R981		RK73GB2A821J	CHIP R 820 J 1/10W	
R991		RK73GB2A000J	CHIP R 0.0 J 1/10W	K
R993		RK73GB2A000J	CHIP R 0.0 J 1/10W	E
TC101		C05-0379-05	CERAMIC TRIMMER CAPACITOR(30P)	E
TC102		C05-0379-05	CERAMIC TRIMMER CAPACITOR(30P)	E
TC105		C05-0378-05	CERAMIC TRIMMER CAPACITOR(20P)	
TC136		C05-0379-05	CERAMIC TRIMMER CAPACITOR(30P)	
TH421		157-101-65001	NEGATIVE TEMP THERMISTOR	
TH460		157-101-65001	NEGATIVE TEMP THERMISTOR	
TH531		157-101-65001	NEGATIVE TEMP THERMISTOR	
TH591		NCP18WB473J0S	NEGATIVE TEMP THERMISTOR	
TH592		NCP18WB473J0S	NEGATIVE TEMP THERMISTOR	
TH701		157-302-65801	NEGATIVE TEMP THERMISTOR	
TH702		157-102-65001	NEGATIVE TEMP THERMISTOR	
TH703		157-102-65001	NEGATIVE TEMP THERMISTOR	
VR261		R32-0346-05	SEMI FIXED VARIABLE RESISTOR	
VR321		R32-0346-05	SEMI FIXED VARIABLE RESISTOR	
XF301		L71-0656-15	MCF (11.374M)	
XF371		L71-0605-05	MCF (73.095M)	
XF471		L71-0664-05	MCF (10.695MHZ)	
XF472		L71-0230-15	MCF (10695K)	
XF473		L71-0569-15	CRYSTAL FILTER (10.695M)	
XF474		L71-0657-05	CRYSTAL FILTER (11.374M)	
XF475		L7B-0002-00	CRYSTAL FILTER	

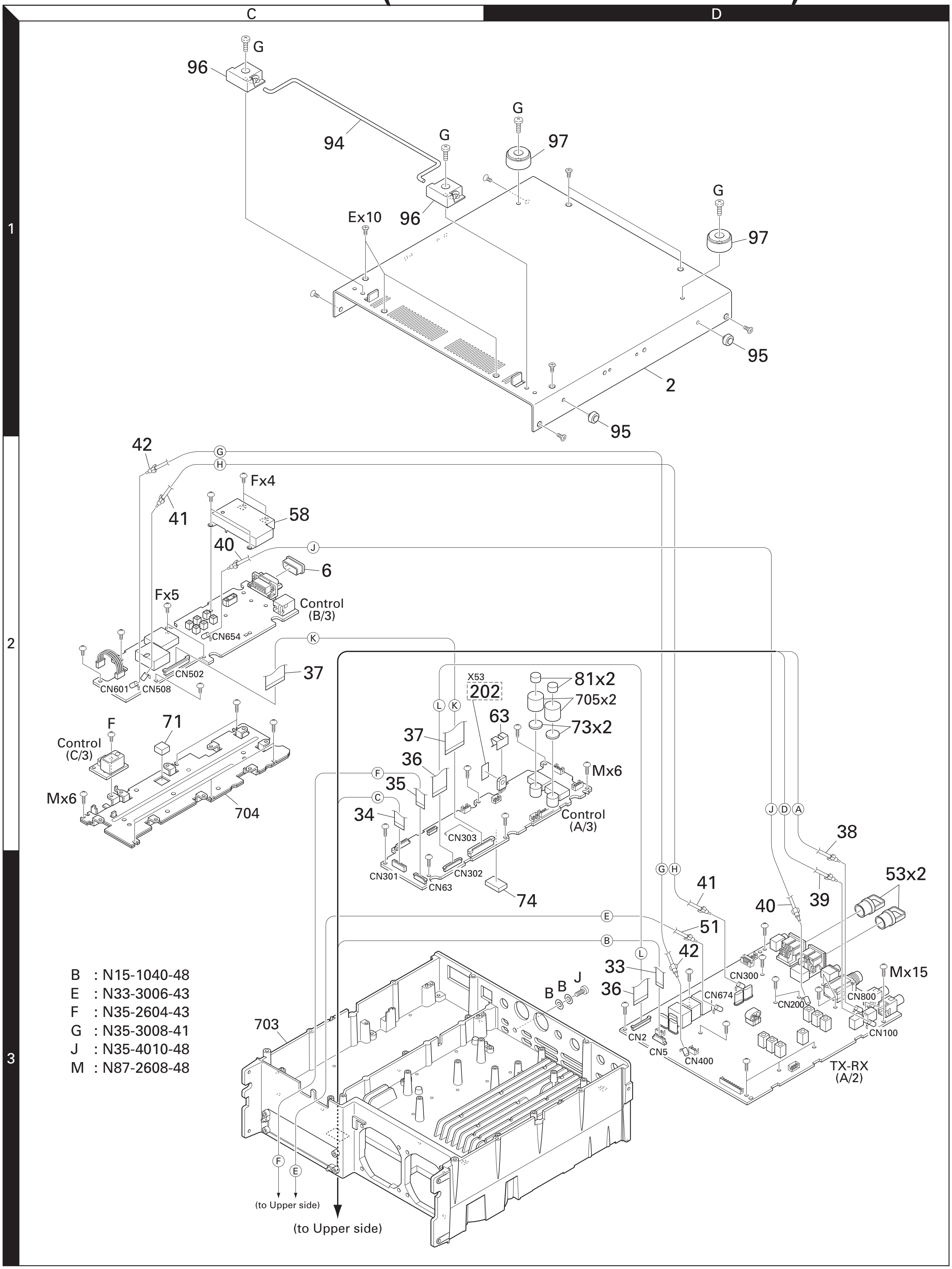
–MEMO–

EXPLODED VIEW (MAIN BODY UPPER SIDE)



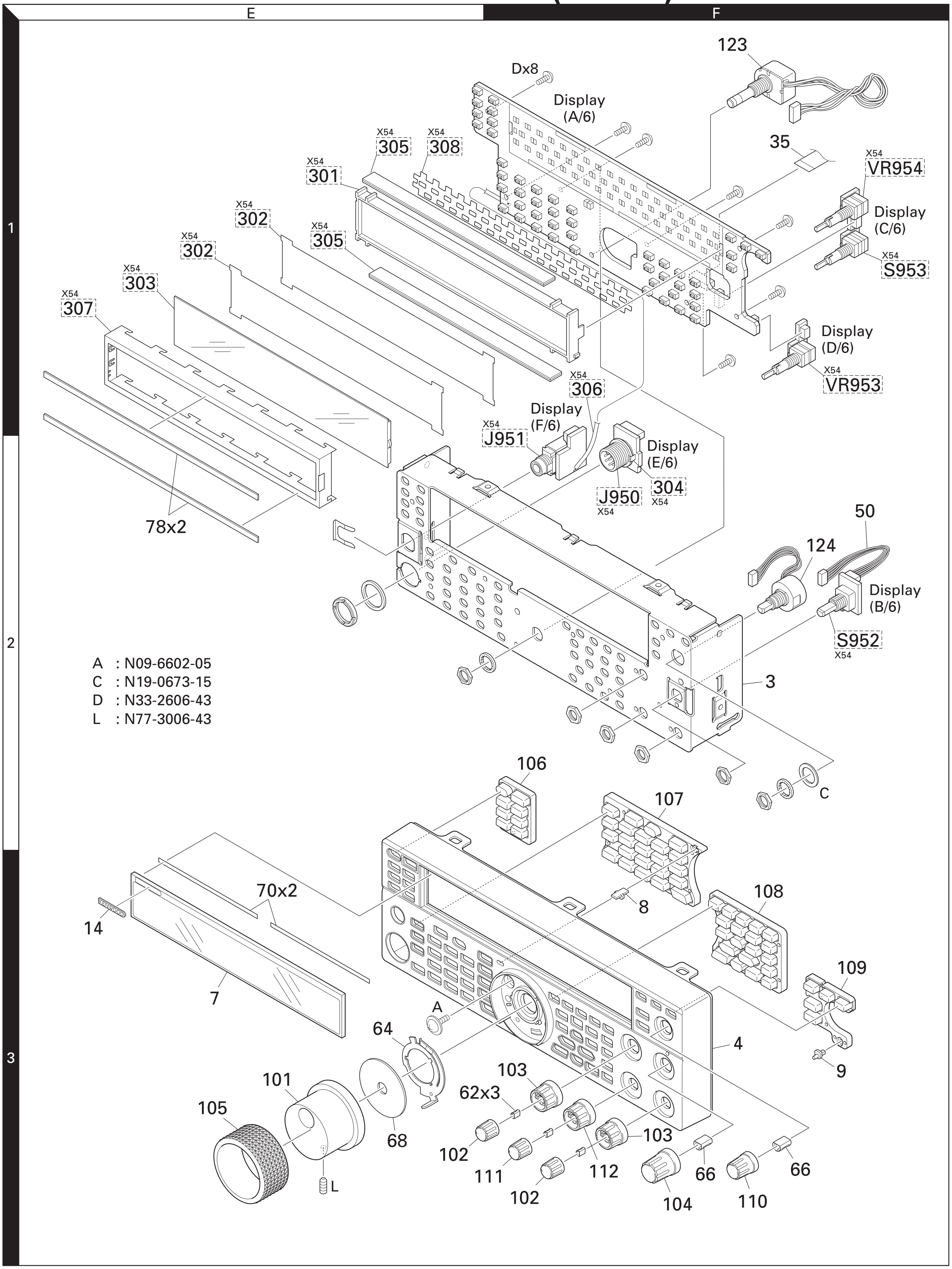
Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (MAIN BODY LOWER SIDE)



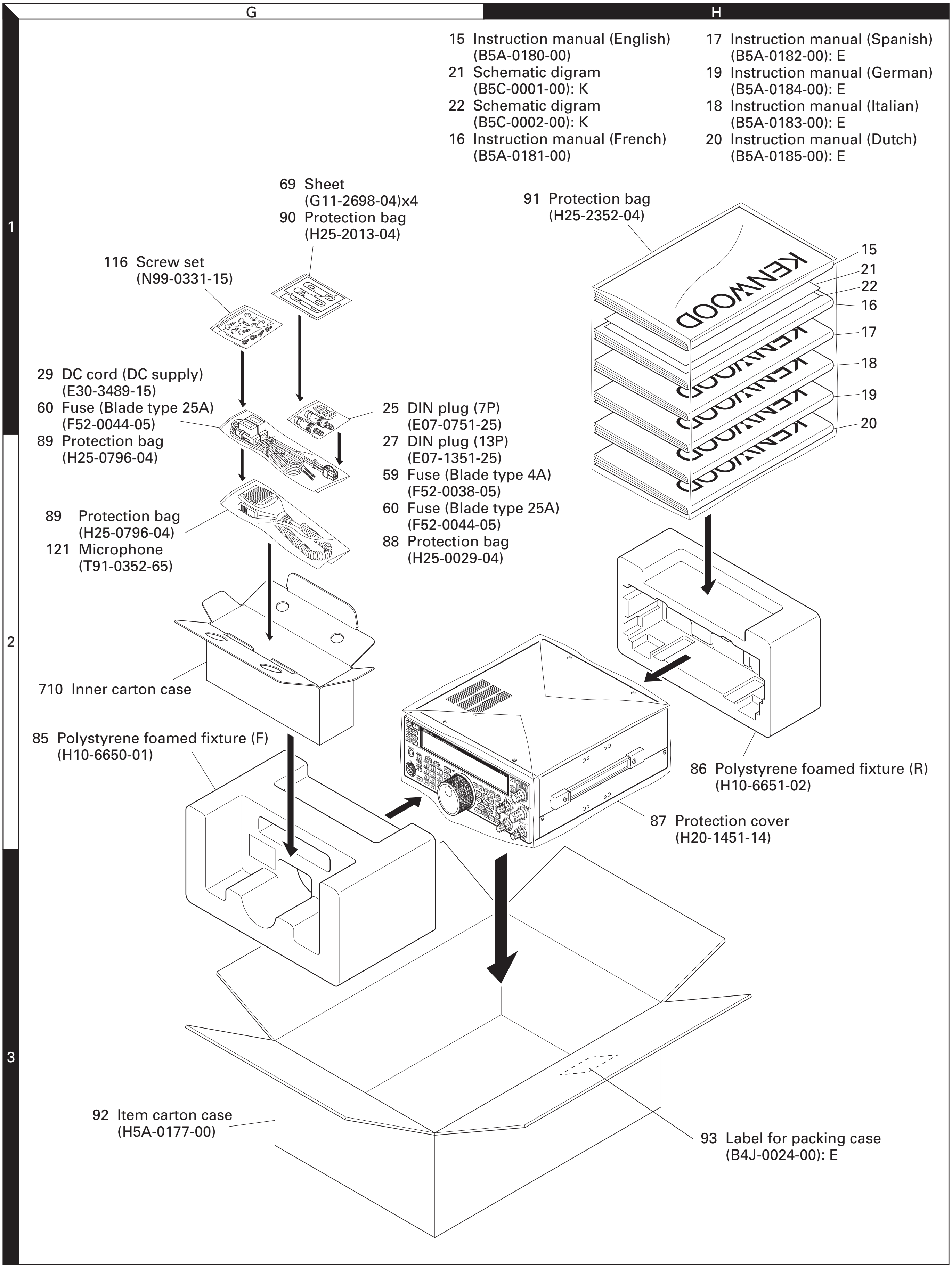
Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (PANEL)



Parts with the exploded numbers larger than 700 are not supplied.

PACKING



Parts with the exploded numbers larger than 700 are not supplied.

ADJUSTMENT

Updating the Firmware

The firmware of the main MCU and DSP can be updated using the "TS-590 G Update" update software. Update the firmware according to the procedure displayed in update software.

Refer to the help file of the update software for a detailed procedure.

Download the latest "TS-590 G Update" update software from the following URL:
http://www.kenwood.com/i/products/info/amateur/software_download.html
* The URL may change without notice.

Note: Update the firmware after replacing the main MCU or Flash memory.

Required Test Equipment

1. DC Voltmeter (DC V.M)
1) Input resistance: More than 1MΩ
2) Voltage range: 1.5 to 1000V AC/DC

Note: A high-recision multimeter may be used. However, accurate readings can not be obtained for high- impedance circuits.

2. DC Ammeter
1) Current range: 100mA, 1.5A, 30A, high-precision ammeter may be used.

3. RF VTVM (RF V.M)
1) Input impedance: 1MΩ and less than 3pF, min.
2) Voltage range: 10mV to 300V
3) Frequency range: 10kHz to 500MHz

4. AF Voltmeter (AF V.M)
1) Frequency range: 50Hz to 10kHz
2) Input resistance: 1MΩ or greater
3) Voltage range: 10mV to 30V

5. AF Generator (AG)
1) Frequency range: 200Hz to 5kHz
2) Output: 1mV or less to 1V, low distortion

6. AF Dummy Load (DM. SP)
1) Impedance: 8Ω
2) Dissipation: 3W or greater

7. Oscilloscope
Requires high sensitivity, and external synchronization capability (150MHz or greater).

8. Standard Signal Generator (SSG)
1) Frequency range: 50kHz to 60MHz
2) Output: –133dBm/0.1μV to 7dBm/1V
3) Output impedance: 50Ω
4) AM and FM modulation can be possible

Note: Generator must be frequency stable.

9. Frequency Counter (f. counter)
1) Minimum input voltage: 50mV
2) Frequency range: 150MHz or greater

10. Noise Generator (Noise G.)
Must generate ignition noise containing harmonics beyond 60MHz.

11. Audio Analyzer

12. RF Dummy Load
1) Impedance: 150Ω and 50Ω
2) Dissipation: 150W or greater

13. Linear Detector
1) Frequency range: 60MHz or greater

14. Power Meter
1) Impedance: 50Ω
2) Dissipation: 300W continuous or greater
3) Frequency limits: 60MHz or greater

15. Spectrum Analyzer
1) Frequency range: 100kHz to 140MHz or greater
2) Bandwidth: 1kHz to 3MHz

16. Tracking Generator

17. Directional Coupler

18. Monitor Receiver

19. Microphone
MC-43S or MC-60S8

20. Distortion Meter

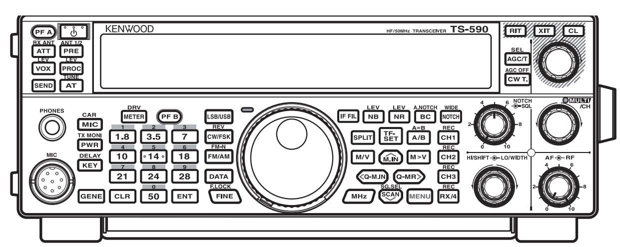
21. Double Signal Pad (50Ω)

Preparation

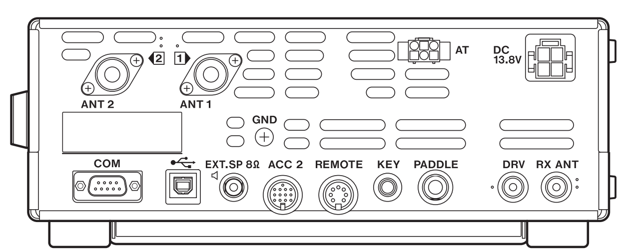
Unless otherwise specified, knobs and switches should be set as follows.

POWER....................ON
NOTCH....................Center
AF....................MIN
RF....................MAX
SQL....................MIN

■ Front panel



■ Rear panel

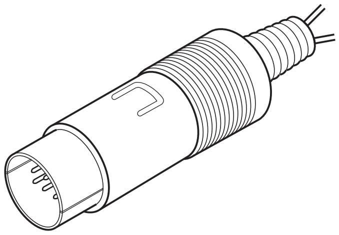


ADJUSTMENT

Service Jig

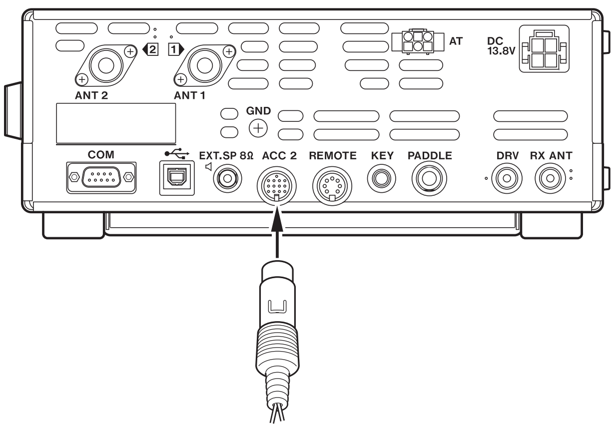
■ ACC 2 connector short plug

Use the same adjustment jig as the TS-590S.



■ How to use the ACC 2 connector short plug

Insert the adjustment jig into the ACC 2 connector located on the rear panel of the transceiver.



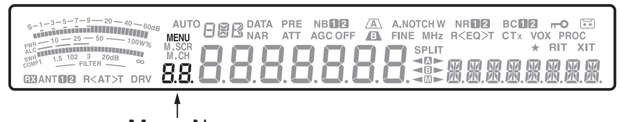
Adjustment Mode

■ Outline

1. You can adjust the transceiver in service adjustment mode (adjustment using the panel keys) or with manual adjustment (turning a coil and trimmer, etc). The service adjustment mode (hereinafter referred to as “adjustment mode”) has 75 items (Menu No. 00 to 74) and all adjustment data is stored in the EEPROM (XC1-021 A/3: IC309).
2. You can enter adjustment mode and change each setting data.
3. New data is written to the EEPROM by performing Menu No. 72 writing.

■ Operation procedures in adjustment mode

1. How to start the adjustment mode
   - Insert the adjustment jig into the ACC 2 connector located on the rear panel of the transceiver.
   - Turn the transceiver ON while pressing the [MIC] key and [NR] key, to enter adjustment mode and the Menu No. appears on the Memory channel number display. Remove the adjustment jig from the transceiver when the Menu No. appears.



2. Select the adjustment mode Menu No.
   Turn the [MULTI/CH] knob to change the Menu No.
3. Change the adjustment mode setting data
   Setting data can be changed using the [M.IN] or [SCAN] key.
4. Write the adjustment mode data
   Press the [M.IN] or [SCAN] key on the main unit or the [UP] or [DWN] key on the microphone on Menu No. 72.
5. Cancel the adjustment mode
   Press the [CLR] key to return to normal VFO mode.

Note: When the power is turned OFF during the adjustment mode, adjustment mode is canceled.

■ Adjustment Mode Menu (Menu No. 00~74)

No.	Adjustment Item	Display	Condition		
			Frequency (MHz)	RX IF (MHz)	Mode
00	CAR Point	10M 2.7k	1.81	73	USB
01		11M 2.7k	1.81	11	USB
02		11M 500H	1.81	11	CW
03	HF 11M IF Gain	HF11 GAIN	14.2	11	USB
04	HF 73M IF Gain	HF73 GAIN	14.2	73	USB
05	11M Mix BAL	HF11 BAL	0.136	11	USB
06	73M Mix BAL	HF73 BAL	0.100	73	USB
07	AGC Reference	AGC REF	14.2	73	USB
08	HF S-Meter	HF.SSB S1	14.2	11	USB
09		HF.SSB S9			
10		HF.SSB SF			
11	HF FM S-Meter	HF.FM. S1	29.2	73	FM
12		HF.FM.SFUL			
13	HF FM Squelch	HF.FM.SQ.TH	29.2	73	FM
14		HF.FM.SQ.TI			
15	50M IF Gain	50. GAIN	50.2	73	USB
16	50M S-Meter	50.SSB S1	50.2	73	USB
17		50.SSB S9			
18		50.SSB SF			
19	50M FM S-Meter	50.FM S1	50.2	73	FM
20		50.FMSFUL			
21	50M FM Squelch	50.FM.SQ.TH	50.2	73	FM
22		50.FM.SQ.TI			
23	ALC Reference	ALC REF	14.1	73	USB
24	POC/ Power Meter	POC 100W	14.1	73	CW
25		P.MTR 100W	14.1		
26		50M 100W	50.1		

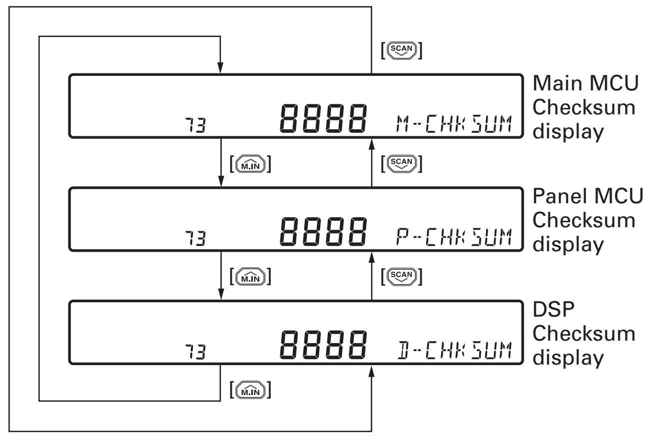
ADJUSTMENT

No.	Adjustment Item	Display	Condition: Frequency (MHz)	Condition: RX IF (MHz)	Condition: Mode
27	POC/ Power Meter	50P.M100W	50.1	73	CW
28		POC 50W	14.1		
29		P.MTR 50W			
30		POC 25W			
31		P.MTR 25W			
32		POC 10W			
33		P.MTR 10W			
34		POC 5W			
35		P.MTR 5W			
36	TX Gain	TGC 14M	14.1	73	CW
37	ALC Meter	ALC.START	14.1	73	CW
38		ALC.MAX			
39	TGC	TGC LW	0.136	11	CW
40		TGC 1.8M	1.83		
41		TGC 3.5M	3.51		
42		TGC 5M	5.30		
43		TGC 7M	7.01		
44		TGC 10M	10.1		
45		TGC 18M	18.1		
46		TGC 21M	21.1		
47		TGC 24M	24.9	73	
48		TGC 28M	29.1		
49		TGC 50M	50.1		
50	PGC	PGC 50W	14.1	73	CW
51		PGC 25W			
52		PGC 10W			
53		PGC 5W			
54	FM Deviation	DEV.WIDE	29.1	11	FM
55		DEV.NAROW		73	
56	Current	CURRENT	28.0	73	USB
57	PRO	SWR PRO	14.1	73	USB
58	SWR	HF SWR	14.1		USB
59		50M SWR	50.1		USB
72	WRITE	WRITE ROM	-	-	-
73	CHECKSUM	M-CHKSUM	-	-	-
74	Display check	-	-	-	-

• MENU No.73 is a checksum confirmation mode

The checksum of the main MCU, the panel MCU, and the DSP can be confirmed using the [M.IN] key or [SCAN] key.

- The checksum value of the main MCU appears on the 7 segment display while [M-CHKSUM] appears on the 13 segment display.
- The checksum value of the panel MCU appears on the 7 segment display while [P-CHKSUM] appears on the 13 segment display.
- The checksum value of the DSP appears on the 7 segment display while [D-CHKSUM] appears on the 13 segment display.



ADJUSTMENT

Display Check

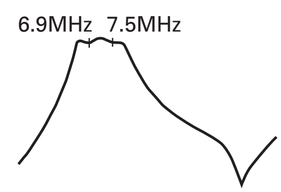
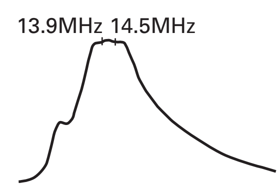
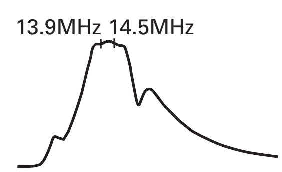
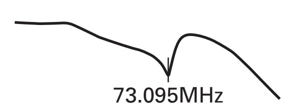
Item	Condition	Measurement			Adjustment			Specifications / Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
1. Setting and full reset	1) Connect the DC cord to the DC power supply. DC IN: DC 13.8V							
	2) Full reset (1) Turn the transceiver ON by pressing the power switch while the [A/B] key is pressed, and the reset confirmation message appears. (2) Turn the [MULTI/CH] control and select “FULL RESET”. (3) Press [A/B] to perform the Full reset.				Front panel	LCD	After displaying “HELLO”, the display is reset as follows; DISP f.: 14.000.00 Mode: USB Meter: ALC ANT: 1 AGC PRE	Display should be normal. Should be at the reset frequency.
2. LCD all segments light	1) Menu No.: 74						Check	LCD all segments light.

PLL Section

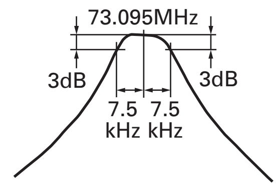
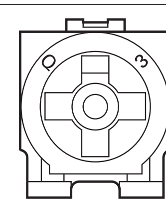
Item	Condition	Measurement			Adjustment			Specifications / Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
1. LO2 level	1) Display f.: 14.100MHz Mode: FM Disconnect the cable from CN508 and insert a cable from the spectrum analyzer. After the adjustment, connect the cable to CN508.	Spectrum analyzer	Control (B/3)	CN508 (LO2)	Control (B/3)	L505	Level max.	–15dBm or more
2. LO2 (62.4MHz) frequency	1) Display f.: 14.100MHz Mode: FM Disconnect the cable from CN508 and insert a cable from the frequency counter. After the adjustment, connect the cable to CN508.	f. counter				TC501	62.4MHz	±40Hz **Note:** If the SO-3 is installed in the transceiver, do not make the LO2 (62.4MHz) frequency adjustment.
3. LO1 level	1) Display f.: 1.900MHz Mode: USB Disconnect the cable from CN654 and insert a cable from the spectrum analyzer. After the adjustment, connect the cable to CN654.	Spectrum analyzer		CN654 (LO1)		L668 L673 L677	Level max.	–7dBm or more
	2) Display f.: 7.1500MHz Mode: USB Disconnect the cable from CN654 and insert a cable from the spectrum analyzer. After the adjustment, connect the cable to CN654.					L671 L676 L681	Level max.	–3dBm or more
4. Lock voltage	1) Frequency: 7.02MHz Mode: USB 2) Frequency: 14.02MHz Mode: LSB	DC V.M		CV		TC801	1) 1.5V (adjust), ±0.1V 2) Below 4.5V (check)	±0.1V

ADJUSTMENT

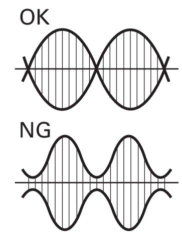
Receiver Section

Item	Condition	Measurement			Adjustment			Specifications / Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
• Perform the following in the adjustment mode. Item 4 and 8~22. To terminate the adjustment menu in the middle, save your settings with Menu No. 72.								
1. Trap frequency (E type only) • 15.5MHz	1) Display f.: 15.501MHz Mode: USB PRE-AMP: ON	Tracking generator Spectrum analyzer	Rear panel TX-RX (A/2)	ANT 1 CN201	TX-RX (A/2)	TC102	Adjust TC102 to get a null point at 15.501MHz as shown.	
• 11.7MHz	2) Display f.: 11.700MHz Mode: USB PRE-AMP: ON					TC101	Adjust TC101 to get a null point at 11.7MHz as shown. Repeat the trap frequency adjustment 2 to 3 times, alternating between 15.5MHz and 11.7MHz.	
2. HF BPF	1) Display f.: 7.200MHz Mode: USB PRE-AMP: ON					L133 L150 L167	Adjust the coils to obtain the frequency response as shown.	
	2) Display f.: 14.200MHz Mode: USB PRE-AMP: ON					L134 L153 L168		**K type**  **E type** 
3. IF Trap (73.095MHz)	1) Display f.: 50MHz Mode: USB PRE-AMP: ON					L135	Adjust L135 at 73.095MHz to minimum level.	

ADJUSTMENT

Item	Condition	Measurement			Adjustment			Specifications / Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
4. MCF (73.095MHz)	1) Display f.: 29.200MHz Mode: FM Spectrum analyzer setting Center f.: 73.095MHz Frequency span: 100kHz XdB/DIV: 10dB TG level: 0dBm RBW: 3kHz VBW: 10kHz Connect the tracking generator output to CN303. Connect the spectrum analyzer input to CN304.	Tracking generator Spectrum analyzer	TX-RX (A/2)	CN303 CN304	TX-RX (A/2)	L326 L374 L375 L376	Adjust the coils to obtain the frequency response as shown.	
5. RX Trap • 11.3745MHz	1) Display f.: 21.4MHz Mode :USB PRE-AMP: ON SSG f.: 11.3745MHz SSG output: –30dBm (7.07mV)	SSG AF V.M	Rear panel	ANT 1 EXT. SP		L253 L255	Check S-meter is not appear. AF output min. Repeat adjust for 2 to 3 times.	If S-meter is appear, turn SSG level settings down until S-meter is not appear.
• 44.150MHz	2) Display f.: 21.4MHz Mode: USB PRE-AMP: ON SSG f.: 44.150MHz SSG output: –30dBm (7.07mV)					TC105	Check S-meter is not appear. AF output min.	
6. FM discriminator	1) Display f.: 29.200MHz Mode: FM PRE-AMP: ON AF output: 0.63V/8Ω SSG f.: 29.200MHz SSG output: –53dBm (0.501mV) MOD: 1kHz DEV: 3kHz	SSG Oscilloscope AF V.M Distortion meter DM.SP Audio analyzer				L595	Adjust the L595 to AF maximum output of 0.63V/ 8 ohms. Check the distortion and the waveform is a good sine wave.	AF max. 2.3% or less
7. 1st mixer balance	1) Adjustment of VR261					VR261	Adjust the volume position of VR261 as shown.	
	2) Menu No.: 06 (100kHz, USB) PRE-AMP: OFF SSG: OFF	SSG AF V.M	Rear panel	ANT 1 EXT. SP		VR321	Noise min.	

ADJUSTMENT

Item	Condition	Measurement			Adjustment			Specifications / Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
8. Carrier point (XF473 10.695M /2.7k)	1) Menu No.: 00 (1.81MHz, USB) AGC: OFF SSG1 f.: 1.81010MHz SSG2 f.: 1.81290MHz SSG output: –33dBm (5.01mV)	SSG1 SSG2 2 signal pad Oscillo-scope	Rear panel TX-RX (A/2)	ANT 1 TP2 (CAR)	Front panel	[M.IN] or [SCAN]	Change the adjust-ment values to get the waveform as shown.	
9. Carrier point (XF474 11.374M /2.7k)	1) Menu No.: 01 (1.81MHz, USB) AGC: OFF SSG1 f.: 1.81010MHz SSG2 f.: 1.81290MHz SSG output: –33dBm (5.01mV)							
10. Carrier point (XF475 11.374M /500)	1) Menu No.: 02 (1.81MHz, CW) AGC: OFF SSG1 f.: 1.80970MHz SSG2 f.: 1.81030MHz SSG output: –33dBm (5.01mV)							
11. AGC start level (11M)	1) Menu No.: 03 (14.2MHz, USB) SSG f.: 14.201MHz SSG output: –113dBm (0dBu)	SSG Oscilloscope AF V.M DM.SP	Rear panel	ANT 1 EXT.SP			Adjust data until the display shown “1 to 2”.	
12. AGC start level (73M) • 14M	1) Menu No.: 04 (14.2MHz, USB) SSG f.: 14.201MHz SSG output: –113dBm (0dBu)							
13. AGC gain curve	1) Menu No.: 07 (14.2MHz, USB) P.AMP: ON FIL/SEL(S): 11M 2.7kHz AGC: MID SSG f: 14.201MHz SSG output: –55dBm (58dBμ)							
14. HF SSB S-meter • S1	1) Menu No.: 08 (14.2MHz, USB) SSG f.: 14.201MHz SSG output: –107dBm (1μV)						Set the SSG, then press the [M.IN] or [SCAN] key.	S-meter lights up to S1 posi-tion.
• S9	2) Menu No.: 09 (14.2MHz, USB) SSG output: –81dBm (19.9μV)							S-meter lights up to S9 posi-tion.
• Full scale (Lights up all)	3) Menu No.: 10 (14.2MHz, USB) SSG output: –21dBm (19.9mV)							S-meter lights up all.
15. HF FM S-meter • S1	1) Menu No.: 11(29.2MHz, FM) SSG f.: 29.200MHz SSG output: –117dBm (0.316μV) MOD: 1kHz DEV: 3kHz							S-meter lights up to 1dot posi-tion.
• Full scale (Lights up all)	2) Menu No.: 12 (29.2MHz, FM) SSG output: –95dBm (3.98μV)							S-meter lights up all.
16. HF FM SQL threshold	1) Menu No.: 13 (29.2MHz, FM) SSG output: OFF MOD: 1kHz DEV: 3kHz							
17. HF FM SQL tight	1) Menu No.: 14 (29.2MHz, FM) SSG f.: 29.200MHz SSG output: –113dBm (0.501μV) MOD: 1kHz DEV: 3kHz							
18. AGC start level (73M) • 50M	1) Menu No.: 15 (50.2MHz, USB) SSG f.: 50.201MHz SSG output: –117dBm (–4dBu)						Adjust data until the display shown “1 to 2”.	

ADJUSTMENT

Item	Condition	Measurement			Adjustment			Specifications / Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
19. 50M SSB S-meter • S1	1) Menu No.: 16 (50.2MHz, USB) SSG f.: 50.201MHz SSG output: –111dBm (0.63μV)	SSG Oscilloscope AF V.M DM.SP	Rear panel	ANT 1 EXT.SP	Front panel	[M.IN] or [SCAN]	Set the SSG, then press the [M.IN] or [SCAN] key.	S-meter lights up to S1 position.
• S9	2) Menu No.: 17 (50.2MHz, USB) SSG output: –85dBm (12.6μV)							S-meter lights up to S9 position.
• Full scale (Lights up all)	3) Menu No.: 18 (50.2MHz, USB) SSG output: –25dBm (12.6mV)							S-meter lights up all.
20. 50M FM S-meter • S1	1) Menu No.: 19 (50.2MHz, FM) SSG f.: 50.2MHz SSG output: –117dBm (0.316μV) MOD: 1kHz DEV: 3kHz							S-meter lights up to 1dot position.
• Full scale (Lights up all)	2) Menu No.: 20 (50.2MHz, FM) SSG output: –95dBm (3.98μV)							S-meter lights up all.
21. 50M FM SQL threshold	1) Menu No.: 21 (50.2MHz, FM) SSG output: OFF MOD: 1kHz DEV: 3kHz							
22. 50M FM SQL tight	1) Menu No.: 22 (50.2MHz, FM) SSG f.: 50.200MHz SSG output: –113dBm (0.501μV) MOD: 1kHz DEV: 3kHz							

- Writing data: After items 7~22 have been adjusted;
  1) Menu No. : 72
  2) [M.IN] or [SCAN] key: Push once time. Display “rEAdy” → “good” (If “nG” is displayed, enter data again.)
  3) [CLR] key: Push once time.

Item	Condition	Test-equipment	Unit	Terminal	Unit	Parts	Method	Specifications / Remarks
23. S/N Check (Reference)	1) Display f.: Refer to Table 1. AF output: 0.63V/8Ω AGC: FAST SSG f.: Refer to Table 1. However, USB : +1kHz LSB: –1kHz PRE-AMP: ON ATT: OFF	SSG Oscilloscope AF V.M DM.SP	Rear panel	ANT 1 EXT.SP				

Frequency	Mode	SSG RF level (dBm)	SSG MOD	DEV	Measurement	Spec.
550kHz	AM	–85	1kHz	60%→OFF	S/N	>10dB
1.8MHz	LSB	–119	OFF	OFF	S/N	>10dB
3.7MHz	CW	–123	OFF	OFF	S/N	>10dB
5.3MHz	LSB	–119	OFF	OFF	S/N	>10dB
7.2MHz	LSB	–119	OFF	OFF	S/N	>10dB
14.2MHz	USB	–119.5	OFF	OFF	S/N	>10dB
18.2MHz	USB	–119.5	OFF	OFF	S/N	>10dB
21.2MHz	FSK	–119.5	OFF	OFF	S/N	>10dB
24.8MHz	USB	–123	OFF	OFF	S/N	>10dB
29.6MHz	FM	–119	1kHz	3kHz	SINAD	>12dB
50.2MHz	USB	–123	OFF	OFF	S/N	>10dB

Table 1

ADJUSTMENT

Item	Condition	Measurement			Adjustment			Specifications / Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
24. PRE-AMP gain	1) Display f.: 14.200MHz Mode: USB PRE-AMP: ON AGC: FAST AF output: 0.63V/8Ω SSG f.: 14.201MHz SSG output: –119dBm (0.25μV)	SSG Oscillo-scope AF V.M DM.SP	Rear panel	ANT 1 EXT.SP			Set the AF level at 0dB.	
	2) PRE-AMP: OFF						Check the AF level.	–(5~15)dB
25. RF ATT	1) Display f.: 14.200MHz Mode: USB ATT: ON AGC: FAST AF output: 0.63V/8Ω SSG f.: 14.201MHz SSG output: –107dBm (1μV)						Set the AF level at 0dB.	
	2) PRE-AMP: OFF						Check the AF level.	–(10~14)dB
26. NB gain	1) Display f.: 14.200MHz Mode: USB PRE-AMP: ON AGC: FAST NB1: ON SSG f.: 14.201MHz SSG output: –103dBm (1.58μV)	DC V.M SSG Oscillo-scope AF V.M DM.SP Noise G.	TX-RX (B/2) Rear panel	TP601 (NB) ANT1 EXT.SP	TX-RX (B/2)	L653 L664 L665	Voltage min.	4V or less
	2) NB1: OFF → ON						Adjust output of noise generator to S5, and check.	Noise should disappear when NB1 is ON.
27. VGS-1 (Option)	1) Disconnect the antenna cable from the transceiver. Connect the VGS-1 to CN901 on the Control unit (A/3). Display f.: 14.100MHz Mode: USB AF knob: MIN				Front panel	[PF A]	1 push	The display frequency can be heard vocally.
	2) Connect a microphone to the MIC jack.					[CH1]	Hold down [CH1] key, and talk into the microphone for approximately 10 seconds.	
							Press the [CH1] key again.	The recorded voice message is played back.

ADJUSTMENT

Transmitter Section

Item	Condition	Measurement: Test-equipment	Measurement: Unit	Measurement: Terminal	Adjustment: Unit	Adjustment: Parts	Adjustment: Method	Specifications / Remarks
• Perform the following in the adjustment mode. Item 2~24. To terminate the adjustment menu in the middle, save your settings with Menu No. 72.								
1. Final idling current	1) Display f.: 14.100MHz Mode : USB Final unit (A/2) VR1, 2, 3, 4: MIN Transmit	Ammeter	Final (A/2)	DC IN	Final (A/2)		Check the default current (I_2) of DC IN.	
						VR1	I_2 + 650mA = I_A	±50mA
						VR2	I_A + 1000mA = I_B	±100mA
						VR3	I_B + 1000mA = I_C	±50mA
						VR4	I_C + 1000mA = I_D	±50mA
2. ALC reference voltage	1) Menu No.: 23 (14.1MHz, USB) Transmit	DC V.M	TX-RX (A/2)	TP1 (ALC)	Front panel	[M.IN] or [SCAN]	Set the adjustment value within the limit of the specified voltage.	2.5V±0.1V
3. HF Max power (100W)	1) Menu No.: 24 (14.1MHz, CW) Transmit	Power meter 150W ATT	Rear panel	ANT 1			Set the adjustment value within the limit of the specified power.	100W±3.0W
4. 14.1MHz Null	1) Menu No.: 24 (14.1MHz, CW) Transmit	Power meter 150W ATT DC V.M	Rear panel Final (A/2)	ANT 1 TP2 (VSR)	Final (A/2)	TC1	VSR voltage min.	0.3V or less
5. Power meter 100W	1) Menu No.: 25 (14.1MHz, CW) Transmit	Power meter 150W ATT	Rear panel	ANT 1	Front panel	[M.IN]	1 push	Power meter lights up to 100W position.
6. 50M Max power (100W)	1) Menu No.: 26 (50.1MHz, CW) Transmit					[M.IN] or [SCAN]	Set the adjustment value within the limit of the specified power.	100W±3.0W
7. 50M Power meter 100W	1) Menu No.: 27 (50.1MHz, CW) Transmit					[M.IN]	1 push	Power meter lights up to 100W position.
8. POC 50W	1) Menu No.: 28 (14.1MHz, CW) Transmit					[M.IN] or [SCAN]	Set the adjustment value within the limit of the specified power.	50W±2.0W
9. Power meter 50W	1) Menu No.: 29 (14.1MHz, CW) Transmit					[M.IN]	1 push	Power meter lights up to 50W position.
10. POC 25W	1) Menu No.: 30 (14.1MHz, CW) Transmit					[M.IN] or [SCAN]	Set the adjustment value within the limit of the specified power.	25W±1.0W
11. Power meter 25W	1) Menu No.: 31 (14.1MHz, CW) Transmit					[M.IN]	1 push	Power meter lights up to 25W position.

ADJUSTMENT

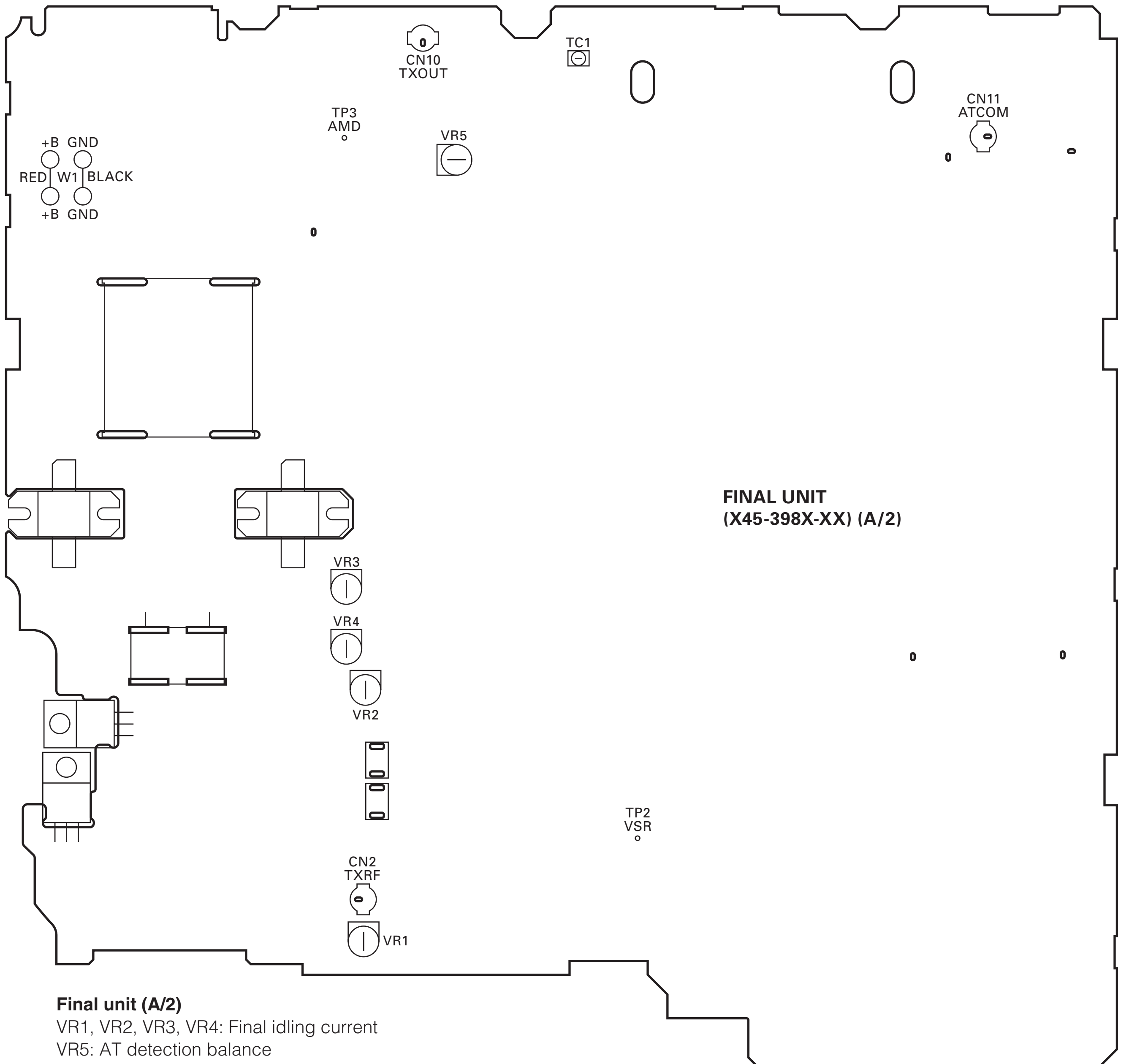
Item	Condition	Measurement			Adjustment			Specifications / Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
12. POC 10W	1) Menu No.: 32 (14.1MHz, CW) Transmit	Power meter 150W ATT	Rear panel	ANT 1	Front panel	[M.IN] or [SCAN]	Set the adjustment value within the limit of the specified power.	10W±0.5W
13. Power meter 10W	1) Menu No.: 33 (14.1MHz, CW) Transmit					[M.IN]	1 push	Power meter lights up to 10W position.
14. POC 5W	1) Menu No.: 34 (14.1MHz, CW) Transmit					[M.IN] or [SCAN]	Set the adjustment value within the limit of the specified power.	5.0W±0.3W
15. Power meter 5W	1) Menu No.: 35 (14.1MHz, CW) Transmit					[M.IN]	1 push	Power meter lights up to 5W position.
16. TGC GAIN	1) Menu No.: 36 (14.1MHz, CW) Transmit					[M.IN] or [SCAN]	Set the adjustment value within the limit of the specified power.	107W±3.0W
17. ALC meter • Start point	1) Menu No.: 37 (14.1MHz, CW) Transmit					[M.IN]	1 push	ALC meter lights up to 1.
• Zone max. (15 dots) point	2) Menu No.: 38 (14.1MHz, CW) Transmit							ALC meter zone max.
18. Band TGC (HF) • 1.8M	1) Menu No.: 40 (1.83MHz, CW) Transmit					[M.IN] or [SCAN]	Set the adjustment value to become the specified ALC meter.	ALC meter 15 dots
• 3.5M	2) Menu No.: 41 (3.51MHz, CW) Transmit							
• 5.0M	3) Menu No.: 42 (5.3MHz, CW) Transmit							
• 7.0M	4) Menu No.: 43 (7.01MHz, CW) Transmit							
• 10M	5) Menu No.: 44 (10.1MHz, CW) Transmit							
• 18M	6) Menu No.: 45 (18.1MHz, CW) Transmit							
• 21M	7) Menu No.: 46 (21.1MHz, CW) Transmit							
• 24.9M	8) Menu No.: 47 (24.9MHz, CW) Transmit							
• 28M	9) Menu No.: 48 (28.1MHz, CW) Transmit							
19. Band TGC • 50M	1) Menu No.: 49 (50.1MHz, CW) Transmit							

ADJUSTMENT

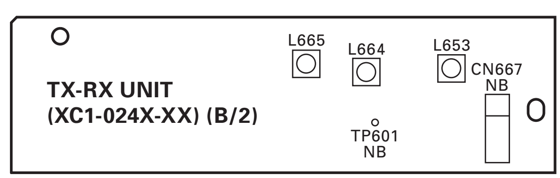
Item	Condition	Measurement			Adjustment			Specifications / Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
20. Power PGC • 50W	1) Menu No.: 50 (14.1MHz, CW) Transmit	Power meter 150W ATT	Rear panel	ANT 1	Front panel	[M.IN] or [SCAN]	Set the adjustment value to become the specified ALC meter.	ALC meter 15 dots
• 25W	2) Menu No.: 51 (14.1MHz, CW) Transmit							
• 10W	3) Menu No.: 52 (14.1MHz, CW) Transmit							
• 5W	4) Menu No.: 53 (14.1MHz, CW) Transmit							
21. FM deviation • Wide	1) Menu No.: 54 (29.1MHz, FM) Transmit	Power meter Linear detector 150W ATT					4.1kHz According to the larger +, –.	±0.1kHz
• Narrow	2) Menu No.: 55 (29.1MHz, FM) Transmit						2.1kHz According to the larger +, –.	±0.1kHz
22. Current protection	1) Menu No.: 56 (24.9MHz, USB) Transmit DC power supply DC IN: **DC 15.9V**	Ammeter					Set the adjustment value within the limit of the specified current.	21.0A±0.1A
23. SWR protection	1) Menu No.: 57 (14.1MHz, USB) Transmit DC power supply DC IN: DC 13.8V 150Ω dummy connection : Use a cable that is 1m long	150Ω dummy load Through type power meter					Set the adjustment value within the limit of the specified power.	40W±1W
24. SWR meter • 14M (SWR: 3)	1) Menu No.: 58 (14.1MHz, USB) Transmit DC power supply DC IN: DC 13.8V 150Ω dummy connection : Use a cable that is 1m long					[M.IN]	1 push	SWR meter lights up to 3 position.
• 50M (SWR: 3)	2) Menu No.: 59 (50.1MHz, USB) Transmit DC power supply DC IN: DC 13.8V 150Ω dummy connection : Use a cable that is approx. 18cm long							
• Writing data : After items 2~24 have been adjusted; 1) Menu No.: 72 2) [M.IN] or [SCAN] key: Push once time. Display “rEAdy” → “good” (If “nG” is displayed, enter data again.) 3) [CLR] key: Push once time.								
25. AT detection balance	1) Display f.: 51.9MHz Mode: FM Power: 10W Transmit	Oscilloscope Power meter 150W ATT	Final (A/2)	TP3 (AMP)	Final (A/2)	VR5	Turn the VR5 to the point where the waveform on the oscilloscope changes from high to low. (Threshold point)	

ADJUSTMENT

Adjustment Points (Upper Side)



Final unit (A/2)
VR1, VR2, VR3, VR4: Final idling current
VR5: AT detection balance
TC1: 14.1MHz null

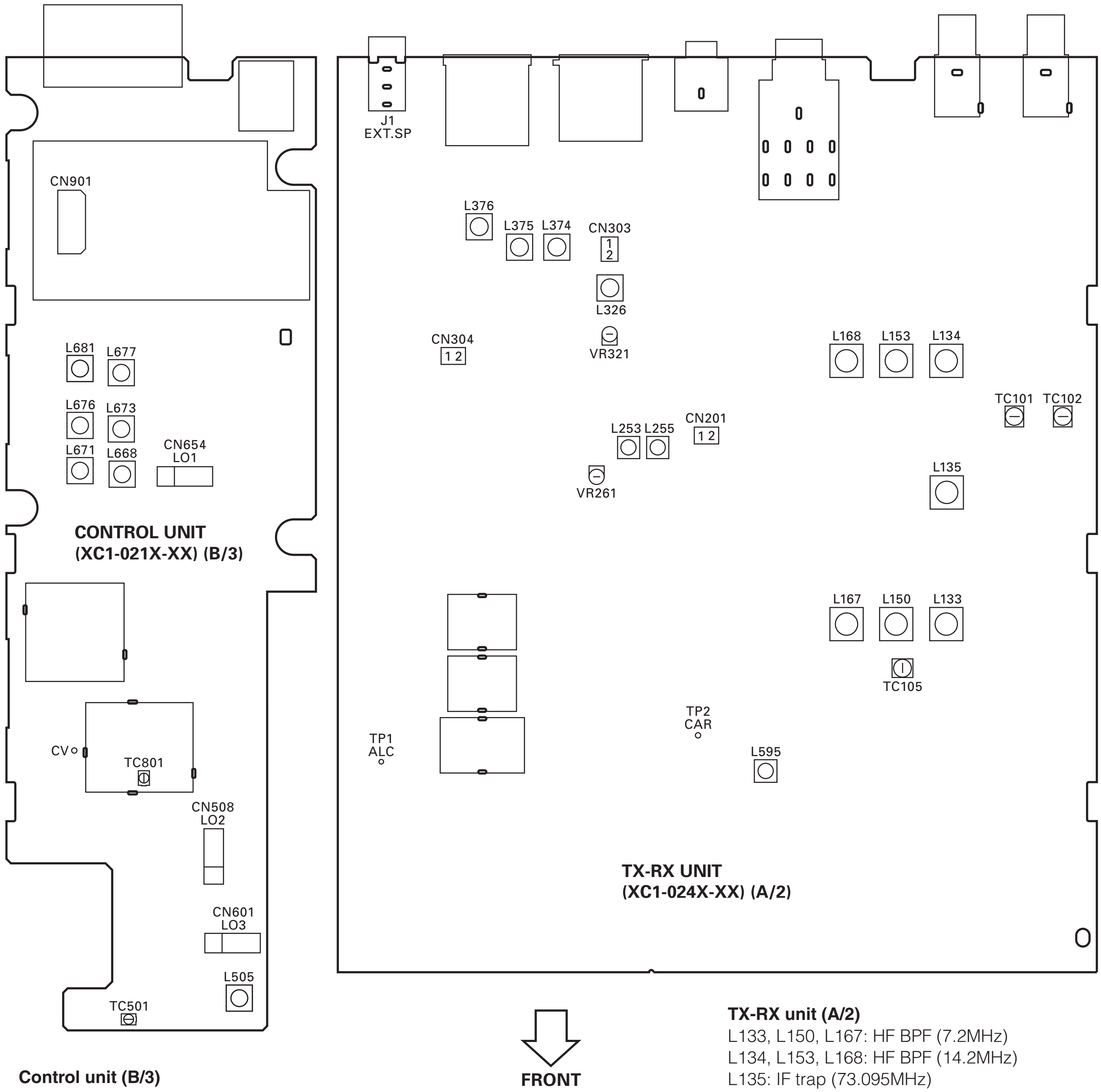


TX-RX unit (B/2)
L653, L664, L665: NB gain

FRONT

ADJUSTMENT

Adjustment Points (Lower Side)



Control unit (B/3)
L505: LO2 level
L671, L676, L681: LO1 level (7.15MHz)
L668, L673, L677: LO1 level (1.9MHz)
TC501: LO2 (62.4MHz) frequency
TC801: Lock voltage

TX-RX unit (A/2)
L133, L150, L167: HF BPF (7.2MHz)
L134, L153, L168: HF BPF (14.2MHz)
L135: IF trap (73.095MHz)
L253, L255: RX trap (11.3745MHz)
L326, L374, L375, L376: MCF (73.095MHz)
L595: FM discriminator
TC101: Trap frequency (11.7MHz) E type only
TC102: Trap frequency (15.5MHz) E type only
TC105: RX trap (44.150MHz)
VR261, VR321: 1st mixer balance

TERMINAL FUNCTION

FINAL UNIT (X45-398X-XX A/2)

Pin No.	Name	I/O	Function
CN2 (to TX-RX unit A/2 CN800)			
1	TXRF	I	TX RF input (Coaxial)
CN3 (to EXT. AT)			
1	14S	O	Switched 14V (for external antenna tuner)
2	GND	-	GND
3	TT	I/O	External antenna tuner (AT-300) IN/ THROUGH control
4	TS	I/O	External antenna tuner (AT-300) tuning start control
5	GND	-	GND
CN4 (to Control unit A/3 CN1)			
1	14S	I	Switched 14V
2	GND	-	GND
3	14V	I	Non switched 14V
CN5 (to Control unit A/3 CN301)			
1	DATA	I	Serial data
2	CLK2	I	Serial clock
3	BOVR	O	Over voltage detection Over 19V becomes “H”
4	GND	-	GND
5	PSC	I	Power supply switch control signal “H” when power is ON
6	GND	-	GND
7	TH1	O	Thermistor detection voltage
8	AMD	O	Output voltage of amplitude detector
9	TS	I/O	External antenna tuner (AT-300) tuning start control
10	PHD	O	Output voltage of phase detector
11	TT	I/O	External antenna tuner (AT-300) IN/ THROUGH control
12	ATPWS	I	AT relay operating stop signal
13	FEN1	I	IC1, IC7, IC9 enable
14	FEN2	I	IC8, IC10 enable
CN6 (to FAN2)			
1	FAN2+	O	Supply FAN2 voltage
2	GND	-	GND
CN7 (to FAN1)			
1	FAN1+	O	Supply FAN1 voltage
2	GND	-	GND
CN8 (to INT. SPEAKER)			
1	SP	O	Speaker output
2	SPG	-	Speaker GND
CN9 (to TX-RX unit A/2 CN5)			
1	TXB	I	TX 8V
2	ID	O	Power current signal
3	33C	I	3.3V (DC/DC)
4	VSR	O	Reflected wave power detection voltage
5	SP	I	Speaker input
6	VSF	O	Forward wave power detection voltage
7	SPG	-	Speaker GND
8	GND	-	GND
9	NC	-	No connection
10	5A	I	Non switched 5V
CN10 (to Final (Relay) unit B/2 W3)			
1	TXOUT	O	TX RF output (Coaxial)
CN11 (to Final (Relay) unit B/2 W2)			
1	ATCOM	I	TX/RX relay common terminal (Coaxial)
W1 (to DC 13.8V)			
1	+B	I	Power supply voltage 13.8V
2	+B	I	Power supply voltage 13.8V
3	GND	-	GND
4	GND	-	GND
W6 (to Final (Relay) unit B/2 CN52)			
1	TXRL	O	TX relay control signal
2	GND	-	GND

FINAL (RELAY) UNIT (X45-398X-XX B/2)

Pin No.	Name	I/O	Function
CN51 (to TX-RX unit A/2 CN100)			
1	RAT	O	RAT output (Coaxial)
CN52 (to Final unit A/2 W6)			
1	TXRL	I	TX relay control signal
2	GND	-	GND
W2 (to Final unit A/2 CN11)			
1	ATCOM	I/O	TX/RX relay common (Coaxial)
W3 (to Final unit A/2 CN10)			
1	TXOUT	I	TX RF input (Coaxial)

CONTROL UNIT (XC1-021X-XX A/3)

Pin No.	Name	I/O	Function
CN1 (to Final unit A/2 CN4)			
1	14S	I	Switched 14V
2	GND	-	GND
3	14V	I	Non switched 14V
CN2 (to TX-RX unit A/2 CN1)			
1	14S	O	Switched 14V
2	GND	-	GND
3	8A	O	8V (DC/DC)
CN61 (to TX-RX unit A/2 CN600)			
1	RIF	I	RX IF input
2	GND	-	GND

TERMINAL FUNCTION

Pin No.	Name	I/O	Function
CN62 (to TX-RX unit A/2 CN700)			
1	TIF	O	TX IF output
2	GND	-	GND
CN63 (to Display unit A/6 CN107)			
1	5C	O	5V
2	NC	-	No connection
3	GND	-	GND
4	MU	O	MIC up control
5	MD	O	MIC down control
6	PCTS	I	RTS signal input from Panel MCU
7	PRXD	I	Serial data input from Panel MCU
8	PRTS	O	RTS signal output to Panel MCU
9	PTXD	O	Serial data output to Panel MCU
10	BKC	O	Reduced voltage detection interrupt
11	PRST	O	Reset signal for Panel MCU
12	GND	-	GND
13	NC	-	No connection
14	33C	O	3.3V (DC/DC)
15	PWS	I	Power switch input signal
16	GND	-	GND
17	GND	-	GND
18	NC	-	No connection
19	8A	O	8V
20	8A	O	8V
CN64 (to Display (MIC) unit E/6 CN951)			
1	MIC	I	MIC signal input
2	MSG	-	MIC GND
3	MCG	-	GND
4	MU	I	MIC UP control
5	MD	I	MIC Down control
6	SS	I	MIC standby (PTT) control
7	8A	O	8V
CN65 (to TX-RX unit A/2 CN3)			
1	AF	O	Audio signal output
2	AFG	-	Audio GND
CN301 (to Final unit A/2 CN5)			
1	DATA	O	Serial data
2	CLK2	O	Serial clock
3	BOVR	I	Over voltage detection Over 19V becomes “H”
4	GND	-	GND
5	PSC	O	Power supply switch control signal “H” when power is ON
6	GND	-	GND
7	TH1	I	Thermistor detection voltage
8	AMD	I	Input voltage of amplitude detector

Pin No.	Name	I/O	Function
9	TS	I/O	External antenna tuner (AT-300) tuning start control
10	PHD	I	Input voltage of phase detector
11	TT	I/O	External antenna tuner (AT-300) IN/ THROUGH control
12	ATPWS	O	AT relay operating stop signal
13	FEN1	O	IC1, IC7, IC9 enable
14	FEN2	O	IC8, IC10 enable
CN302 (to TX-RX unit A/2 CN2)			
1	5A	O	Non switched 5V
2	NC	-	No connection
3	GND	-	GND
4	DGND	-	Digital GND
5	NC	-	No connection
6	33C	O	3.3V (DC/DC)
7	IDT	I	Power current voltage
8	IBK	O	IF blanking H: Mute
9	TXC	O	TX ON/OFF H: TXB ON
10	VSFM	I	VSF meter voltage
11	VSRM	I	VSR meter voltage
12	TCS	O	VSF/VSR detector time constant control
13	ALM	I	ALC meter voltage
14	CKY	O	CKY mute signal H: Mute
15	IEN3	O	IC 13 enable
16	IEN2	O	IC11, IC12 enable
17	IEN1	O	IC14, IC15 enable
18	DATA	O	Serial data
19	CLK1	O	Serial clock
20	AD1	I	No connection
21	PHDET	I	Phone jack detection signal L: No phone jack
22	FSQL	I	FM squelch voltage
23	FSM	I	FM S-meter voltage
24	AGCV	O	AGC control voltage
25	KYS	I	KEY jack judgement signal H: Plugged
26	DASH	I	Electronic keyer dash signal L: KEY dash
27	DOT	I	Electronic keyer dot signal L: KEY dot
28	KEY	I	KEY down signal L: KEY down
29	SS	I	Standby switch L: TX
30	RTK	I	RTTY key signal
31	SQC	O	SQL control voltage H: SQ open
32	PKP	O	Inverting PKS control H: PTT ON
33	PKSR	I	PTT input for data communication L: PTT ON
34	GND	-	Analog GND
35	ANO	O	Packet data output
36	ANI	I	Packet data input

TERMINAL FUNCTION

Pin No.	Name	I/O	Function
CN303 (to Control (LO) unit B/3 CN502)			
1	GND	-	GND
2	FMOD	O	FM modulation audio
3	GND	-	GND
4	DRES	O	IC803 reset
5	DEN1	O	IC601 enable
6	SEN	O	IC651enable
7	DEN2	O	IC803 enable
8	LEN	O	IC801 enable
9	LCLK	O	Serial clock for PLL, DDS
10	LDAT	O	Serial data for PLL, DDS
11	UL	I	Unlock detection L: PLL unlock
12	GND	-	GND
13	NC	-	No connection
14	8A	O	8V
15	8A	O	8V
16	NC	-	No connection
17	33M	O	3.3V for USB (DC/DC)
18	33D	O	3.3V for RS-232C
19	NC	-	No connection
20	5C	O	5V
21	NC	-	No connection
22	UAO	I	USB audio input
23	UAI	O	USB audio output
24	DGND	-	Digital GND
25	URTS	O	USB request to send
26	UCTS	I	USB clear to send
27	UTXD	O	USB transmitted data
28	URXD	I	USB received data
29	USDA	I/O	USB serial data
30	USCL	O	USB serial clock
31	URST	O	USB reset
32	VBINT	I	USB connection interrupt input
33	TYPY	I	50W switch H: 50W
34	STPC	I	Interrupt for returning from sleep mode (PC control)
35	STS	O	RS-232C receiver bias control
36	CCTS	I	RS-232C clear to send
37	CRTS	O	RS-232C request to send
38	CTXD	O	RS-232C transmitted data
39	CRXD	I	RS-232C received data
40	TYPX	-	Type detection
41	VDGND	-	VGS-1 digital GND
42	VBSY	I	VGS-1 busy signal
43	VPLY	I	VGS-1 playback signal
44	CLK	O	VGS-1 serial clock
45	DATA	O	VGS-1 serial data
46	VEN	O	VGS-1 enable
47	VRST	O	VGS-1 reset
48	VAGND	-	VGS-1 analog GND
49	VAI	O	VGS-1 audio output
50	VAO	I	VGS-1 audio input

CONTROL (LO) UNIT (XC1-021X-XX B/3)

Pin No.	Name	I/O	Function
CN502 (to Control unit A/3 CN303)			
1	VAO	O	VGS-1 audio output
2	VAI	I	VGS-1 audio input
3	VAGND	-	VGS-1 analog GND
4	VRST	I	VGS-1 reset
5	VEN	I	VGS-1 enable
6	DATA	I	VGS-1 serial data
7	CLK	I	VGS-1 serial clock
8	VPLY	O	VGS-1 playback signal
9	VBSY	O	VGS-1 busy signal
10	VDGND	-	VGS-1 digital GND
11	TYPX	-	Type detection
12	CRXD	O	RS-232C received data
13	CTXD	I	RS-232C transmitted data
14	CRTS	I	RS-232C request to send
15	CCTS	O	RS-232C clear to send
16	STS	I	RS-232C receiver bias control
17	STPC	O	Interrupt for returning from sleep mode (PC control)
18	TYPY	O	50W switch H: 50W
19	VBINT	O	USB connection interrupt input
20	URST	I	USB reset
21	USCL	I	USB serial clock
22	USDA	I/O	USB serial data
23	URXD	O	USB received data
24	UTXD	I	USB transmitted data
25	UCTS	O	USB clear to send
26	URTS	I	USB request to send
27	DGND	-	Digital GND
28	UAI	I	USB Audio In
29	UAO	O	USB Audio Out
30	NC	-	No connection
31	5C	I	5V
32	NC	-	No connection
33	33D	I	3.3V for RS-232C
34	33M	I	3.3V for USB (DC/DC)
35	NC	-	No connection

TERMINAL FUNCTION

Pin No.	Name	I/O	Function
36	8A	I	8V
37	8A	I	8V
38	NC	-	No connection
39	GND	-	GND
40	UL	O	Unlock detection L: PLL unlock
41	LDAT	I	Serial data for PLL, DDS
42	LCLK	I	Serial clock for PLL, DDS
43	LEN	I	IC801 enable
44	DEN2	I	IC803 enable
45	SEN	I	IC651 enable
46	DEN1	I	IC601 enable
47	DRES	I	IC803 reset
48	GND	-	GND
49	FMOD	I	FM modulation audio
50	GND	-	GND
CN508 (to TX-RX unit A/2 CN300)			
1	LO2	I	2nd local signal (Coaxial)
CN601 (to TX-RX unit A/2 CN400)			
1	LO3	I	3rd local signal (Coaxial)
CN654 (to TX-RX unit A/2 CN200)			
1	LO1	I	1st local signal (Coaxial)
CN901 (to Option VGS-1)			
1	VBSY	I	VGS-1 Busy Signal
2	VPLY	I	VGS-1 Playback Signal
3	NC	-	No connection
4	DATA	O	VGS-1 serial data
5	CLK	O	VGS-1 serial clock
6	VEN	O	VGS-1 enable
7	NC	-	No connection
8	VRST	O	VGS-1 reset
9	VDGND	-	VGS-1 digital GND
10	VAGND	-	VGS-1 analog GND
11	VAO	I	VGS-1 voice output
12	VAI	O	VGS-1 voice input
13	VAGND	-	VGS-1 analog GND
14	5C	O	5V
15	NC	-	No connection
16	NC	-	No connection
17	NC	-	No connection
18	NC	-	No connection
19	NC	-	No connection
20	NC	-	No connection
21	NC	-	No connection
22	NC	-	No connection
23	NC	-	No connection
24	NC	-	No connection
25	NC	-	No connection
26	NC	-	No connection
W504 (to Control (SO-3) unit C/3 CN503)			
1	REF	I	15.6MHz Option SO-3
2	GND	-	GND
3	GND	-	GND
4	5C	O	5V
J901 (COM)			
1	NC	-	No connection
2	RXD	O	Received Data
3	TXD	I	Transmitted Data
4	NC	-	No connection
5	GND	-	GND
6	NC	-	No connection
7	RTS	I	Request to send
8	CTS	O	Clear to send
9	NC	-	No connection
J902 (USB)			
1	VBUS	I	Power supply from PC (5V)
2	D–	I/O	Universal serial data
3	D+	I/O	Universal serial data
4	GND	-	GND

CONTROL (SO-3) UNIT (XC1-021X-XX C/3)

Pin No.	Name	I/O	Function
CN503 (to Control (LO) unit B/3 W504)			
1	REF	O	15.6MHz Option SO-3
2	GND	-	GND
3	GND	-	GND
4	5C	I	5V

DISPLAY UNIT (XC1-0220-00 A/6)

Pin No.	Name	I/O	Function
CN102 (to Main Encoder)			
1	5C	O	5V
2	MENB	I	Main encoder pulse B
3	MENA	I	Main encoder pulse A
4	GND	-	GND
CN103 (to RIT/XIT)			
1	5C	O	5V
2	RITA	I	RIT encoder pulse A
3	RITB	I	RIT encoder pulse B
4	GND	-	GND

TERMINAL FUNCTION

Pin No.	Name	I/O	Function
CN104 (to Display (MULTI/CH) unit B/6 CN965)			
1	MSW	O	Multi encoder switch
2	MLED	O	Multi encoder LED (D961)
3	MULB	I	Multi encoder pulse B
4	GND	-	GND
5	MULA	I	Multi encoder pulse A
CN105 (to Display (VR) unit C/6 CN953)			
1	LB	I	Low cut encoder pulse B
2	GND	-	GND
3	LA	I	Low cut encoder pulse A
4	HB	I	Hi cut encoder pulse B
5	HA	I	Hi cut encoder pulse A
6	33C	O	3.3V (DC/DC)
7	NVOL	I	Notch volume voltage
8	SVOL	I	Squelch volume voltage
CN106 (to Display (AF/RF) unit D/6 CN966)			
1	33C	O	3.3V (DC/DC)
2	AFVOL	I	AF volume voltage
3	RFVOL	I	RF volume voltage
4	NC	-	No connection
5	GND	-	GND
CN107 (to Control unit A/3 CN63)			
1	8A	I	8V
2	8A	I	8V
3	NC	-	No connection
4	GND	-	GND
5	GND	-	GND
6	PWS	O	Power switch output signal
7	33C	I	3.3V (DC/DC)
8	NC	-	No connection
9	GND	-	GND
10	PRST	I	Reset signal for Panel MCU
11	BKC	I	Reduced voltage detection interrupt
12	PTXD	I	Serial data input from Main MCU
13	PRTS	I	RTS signal input from Main MCU
14	PRXD	O	Serial data output to Main MCU
15	PCTS	O	RTS signal output to Main MCU
16	MD	I	MIC Down control
17	MU	I	MIC UP control
18	GND	-	GND
19	NC	-	No connection
20	5C	I	5V

DISPLAY (MULTI/CH) UNIT (XC1-0220-00 B/6)

Pin No.	Name	I/O	Function
CN965 (to Display unit A/6 CN104)			
1	MSW	I	Multi encoder switch
2	MLED	I	Multi encoder LED (D961)
3	MULB	O	Multi encoder pulse B
4	GND	-	GND
5	MULA	O	Multi encoder pulse A

DISPLAY (VR) UNIT (XC1-0220-00 C/6)

Pin No.	Name	I/O	Function
CN953 (to Display unit A/6 CN105)			
1	LB	O	Low cut encoder pulse B
2	GND	-	GND
3	LA	O	Low cut encoder pulse A
4	HB	O	Hi cut encoder pulse B
5	HA	O	Hi cut encoder pulse A
6	33C	I	3.3V (DC/DC)
7	NVOL	O	Notch volume voltage
8	SVOL	O	SQL volume voltage

DISPLAY (AF/RF) UNIT (XC1-0220-00 D/6)

Pin No.	Name	I/O	Function
CN966 (to Display unit A/6 CN106)			
1	33C	I	3.3V (DC/DC)
2	AFVOL	O	AF volume voltage
3	RFVOL	O	RF volume voltage
4	NC	-	No connection
5	GND	-	GND

DISPLAY (MIC) UNIT (XC1-0220-00 E/6)

Pin No.	Name	I/O	Function
CN951 (to Control unit A/3 CN64)			
1	MIC	O	MIC signal
2	MSG	-	MIC GND
3	MCG	-	GND
4	MU	O	MIC UP control
5	MD	O	MIC Down control
6	SS	O	MIC standby (PTT) control
7	8A	I	8V
J950 (MIC)			
1	MIC	I	MIC signal input
2	SS	I	MIC standby (PTT) control
3	MD	I	MIC Down control
4	MU	I	MIC UP control
5	8A	O	8V

TERMINAL FUNCTION

Pin No.	Name	I/O	Function
6	NC	-	No connection
7	MSG	-	MIC GND
8	MCG	-	GND

DISPLAY (PHONE) UNIT (XC1-0220-00 F/6)

Pin No.	Name	I/O	Function
CN964 (to TX-RX unit A/2 CN4)			
1	PH1	I	AF input from phone jack
2	PHG	-	GND for phone jack
3	PH2	O	AF output to phone jack
4	PHDET	O	Phone jack detection signal
J951 (PHONES)			
1	PHG	-	GND for phone jack
2	PH1_R	O	AF output to phone jack
3	PH1_R	O	AF output to phone jack
4	PH1	O	AF output to external speaker
5	PH2	I	AF input to external speaker
6	NC	-	No connection
7	NC	-	No connection
8	PHG	-	GND for phone jack
9	PHDET	I	Phone jack detection signal

TX-RX UNIT (XC1-024X-XX A/2)

Pin No.	Name	I/O	Function
CN1 (to Control unit A/3 CN2)			
1	14S	I	Switched 14V
2	GND	-	GND
3	8A	I	8V (DC/DC)
CN2 (to Control unit A/3 CN302)			
1	ANI	O	Packet data output
2	ANO	I	Packet data input
3	GND	-	Analog GND
4	PKSR	O	PTT output for data communication L: PTT ON
5	PKP	I	Invert PKS control H: PTT ON
6	SQC	I	SQL control voltage input H: SQL open
7	RTK	O	RTTY key signal
8	SS	O	Standby switch L: TX
9	KEY	O	KEY down signal L: KEY down
10	DOT	O	Electronic keyer dot signal L: KEY dot
11	DASH	O	Electronic keyer dash signal L: KEY dash
12	KYS	O	KEY jack judgement signal H: Plugged
13	AGCV	I	AGC control voltage
14	FSM	O	FM S-meter voltage
15	FSQL	O	FM squelch voltage
16	PHDET	O	Phone jack detection signal H: No phone jack
17	AD1	O	No connection (Reserved)
18	CLK1	I	Serial clock
19	DATA	I	Serial data
20	IEN1	I	IC14, IC15 enable
21	IEN2	I	IC11, IC12 enable
22	IEN3	I	IC 13 enable
23	CKY	I	CKY mute signal H: Mute
24	ALM	O	ALC meter voltage
25	TCS	I	VSF/VSR detector time constant control
26	VSRM	O	VSR meter voltage
27	VSFM	O	VSF meter voltage
28	TXC	I	TX ON/OFF H: TXB ON
29	IBK	I	IF blanking H: Mute
30	IDT	O	Power current voltage
31	33C	I	3.3V (DC/DC)
32	NC	-	No connection
33	DGND	-	Digital GND
34	GND	-	GND
35	NC	-	No connection
36	5A	I	Non switched 5V
CN3 (to Control unit A/3 CN65)			
1	AF	I	Audio signal input
2	AFG	-	Audio GND
CN4 (to Display (PHONE) unit F/6 CN964)			
1	PH1	O	AF output for phone jack
2	PHG	-	GND for phone jack
3	PH2	I	AF input for phone jack
4	PHDET	I	Phone jack detector signal H: No phone jack
CN5 (to Final unit A/2 CN9)			
1	5A	O	Non switched 5V
2	NC	-	No connection
3	GND	-	GND
4	SPG	-	Speaker GND
5	VSF	I	Forward wave power detection voltage
6	SP	O	Speaker output
7	VSR	I	Reflected wave power detection voltage
8	33C	O	3.3V (DC/DC)
9	ID	I	Power current signal
10	TXB	O	TX 8V
CN100 (to Final (Relay) unit B/2 CN51)			
1	RAT	I	RAT input (Coaxial)
CN200 (to Control (LO) unit B/3 CN654)			
1	LO1	I	1st local signal (Coaxial)

TERMINAL FUNCTION

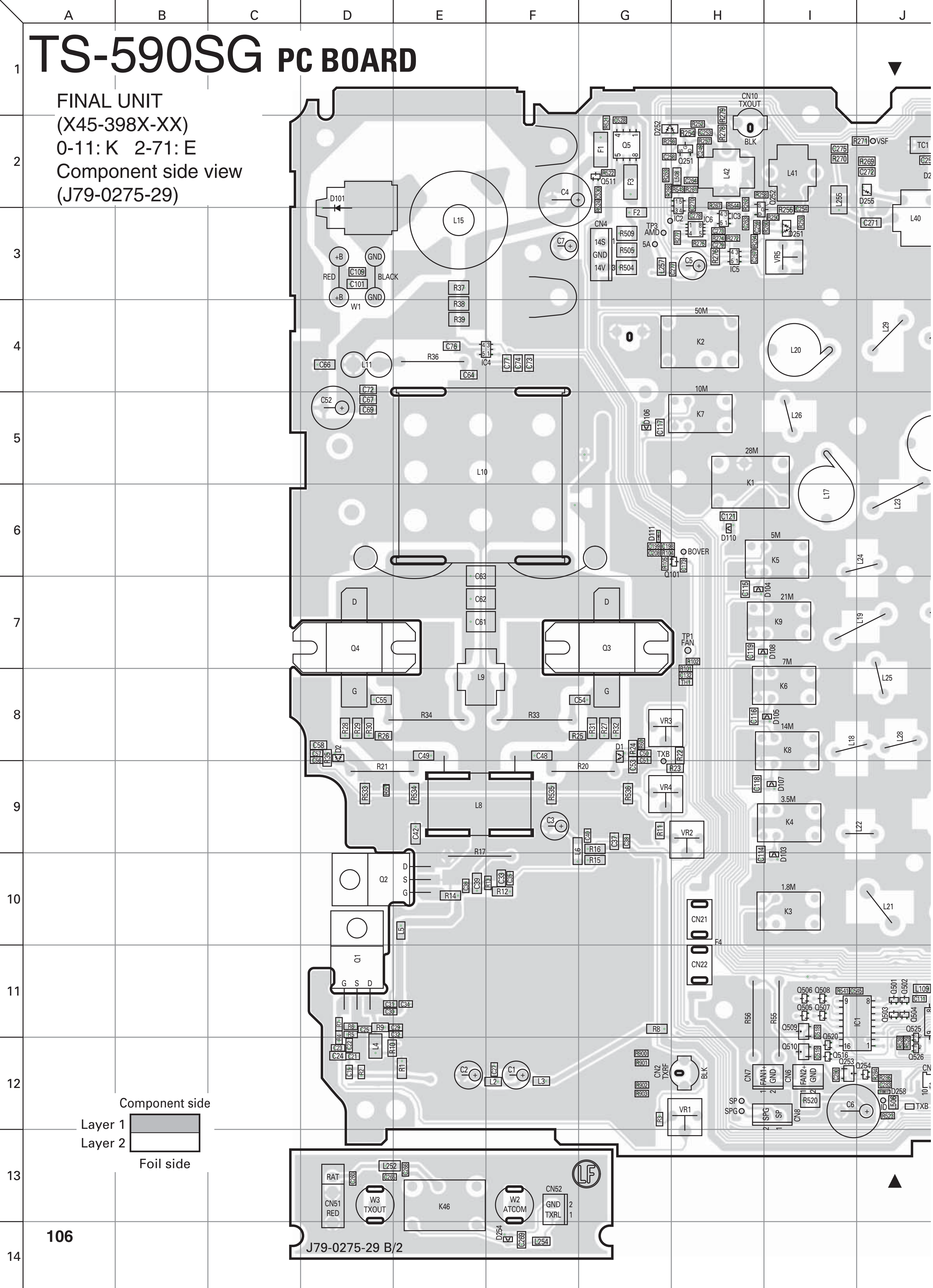
Pin No.	Name	I/O	Function
CN300 (to Control (LO) unit B/3 CN508)			
1	LO2	I	2nd local signal (Coaxial)
CN400 (to Control (LO) unit B/3 CN601)			
1	LO3	I	3rd local signal (Coaxial)
CN600 (to Control unit A/3 CN61)			
1	RIF	O	RX IF output
2	GND	-	GND
CN650 (to TX-RX (NB) unit B/2 CN663)			
1	GND	-	GND
2	IBK	O	IF blanking H: Mute
3	1STIF	O	1st IF switch signal H: 73.095MHz
4	NBL	O	Noise Blanker level
5	NB8	O	8V (NB1 ON)
6	BLNK	I	IF mute signal H: Mute
CN674 (to Final unit A/2 CN667)			
1	NBIF	O	NB IF output (Coaxial)
CN700 (to Control unit A/3 CN62)			
1	TIF	I	TX IF input
2	GND	-	GND
CN800 (to Final unit A/2 CN2)			
1	TXRF	I	TX RF output (Coaxial)
J1 (EXT.SP)			
4	GND	-	GND
5	PH2	O	AF output for external speaker
6	SP	I	Internal speaker AF signal
J2 (ACC2)			
1	NC	-	No connection
2	RTTY	I	RTTY key input
3	ANO	O	Packet RX signal output
4	GND	-	GND
5	PSQ	O	Squelch control signal SQL tight: Hi-Z
6	NC	-	No connection
7	NC	-	No connection
8	GND	-	GND
9	PKS	I	PTT line control for data communication H: PTT ON
10	NC	-	No connection
11	ANI	I	Packet data input
12	GND	-	GND
13	SS	I	Standby switch L: TX
J3 (REMOTE)			
1	SPO	O	Speaker output
2	COM	-	Common terminal (relay)
3	SS	I	Standby switch L: TX
4	MKE	-	Make terminal (relay)
5	BRK	-	Break terminal (relay)
6	ALC	I	ALC voltage
7	TX14V	O	TX 14V
J4 (KEY)			
1	GND	-	GND
2	KEY	I	KEY down signal input
3	GND	-	GND
10	NC	-	No connection
11	KYS	I	KEY jack judgement signal
J5 (PADDLE)			
1	GND	-	GND
2	DOT	I	Dot signal input
3	DASH	I	Dash signal input
4	KYS	I	KEY jack judgement signal
5	KYS	I	KEY jack judgement signal
6	NC	-	No connection
7	NC	-	No connection
8	NC	-	No connection
9	NC	-	No connection
J100 (RX ANT)			
1	RXANT	I	RX antenna input (Coaxial)
J800 (DRV)			
1	DRV/ANT	O	Drive/RX signal output (Coaxial)

TX-RX (NB) UNIT (XC1-024X-XX B/2)

Pin No.	Name	I/O	Function
CN663 (to TX-RX unit A/2 CN650)			
1	GND	-	GND
2	IBK	I	IF blanking H: Mute
3	1STIF	I	1st IF switch signal H: 73.095MHz
4	NBL	I	Noise blanker level
5	NB8	I	8V (NB1 ON)
6	BLNK	O	IF mute signal H: Mute
CN667 (to TX-RX unit A/2 CN674)			
1	NBIF	I	NB IF input (Coaxial)

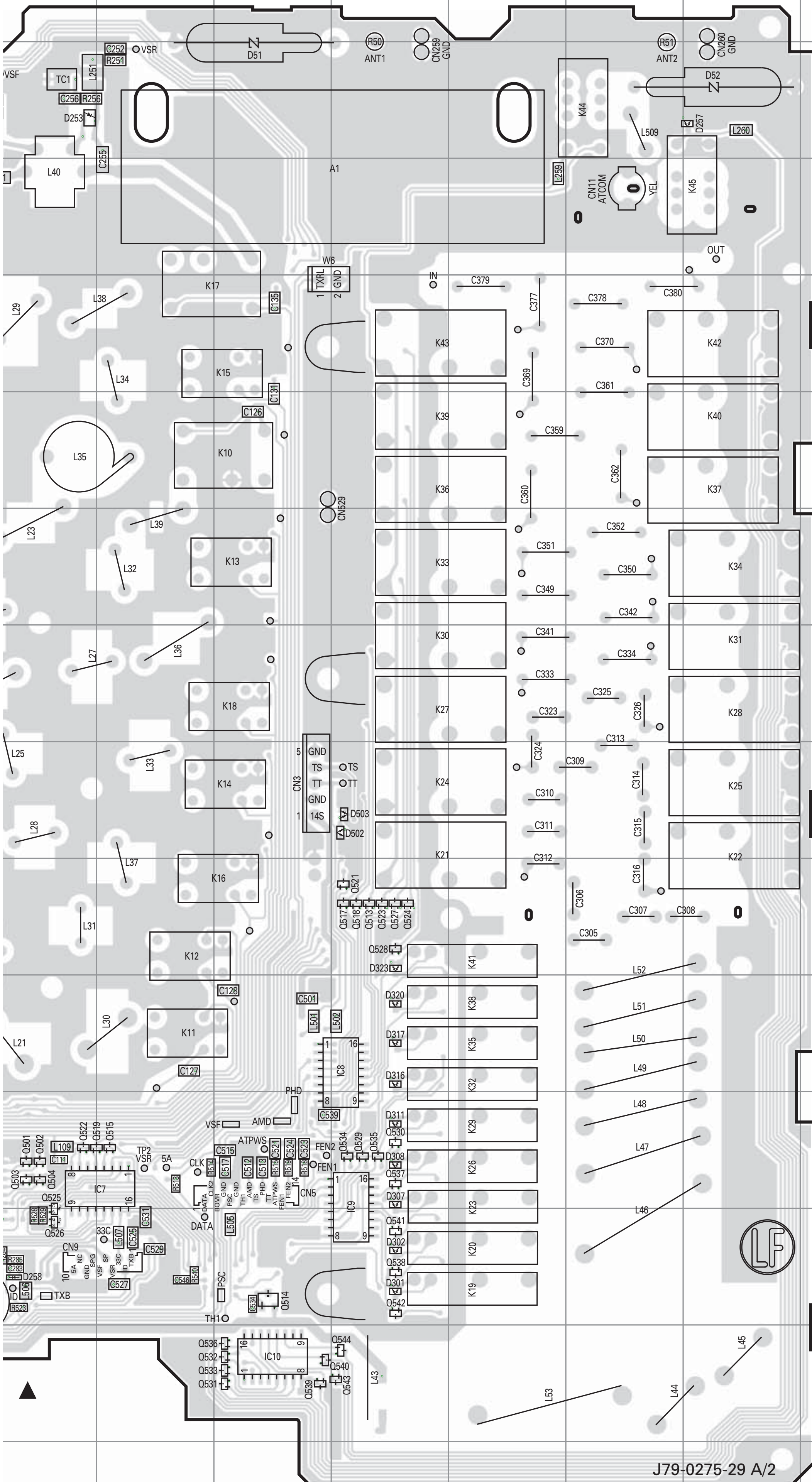
TS-590SG **PC BOARD**

FINAL UNIT
(X45-398X-XX)
0-11: K 2-71: E
Component side view
(J79-0275-29)



PC BOARD TS-590SG

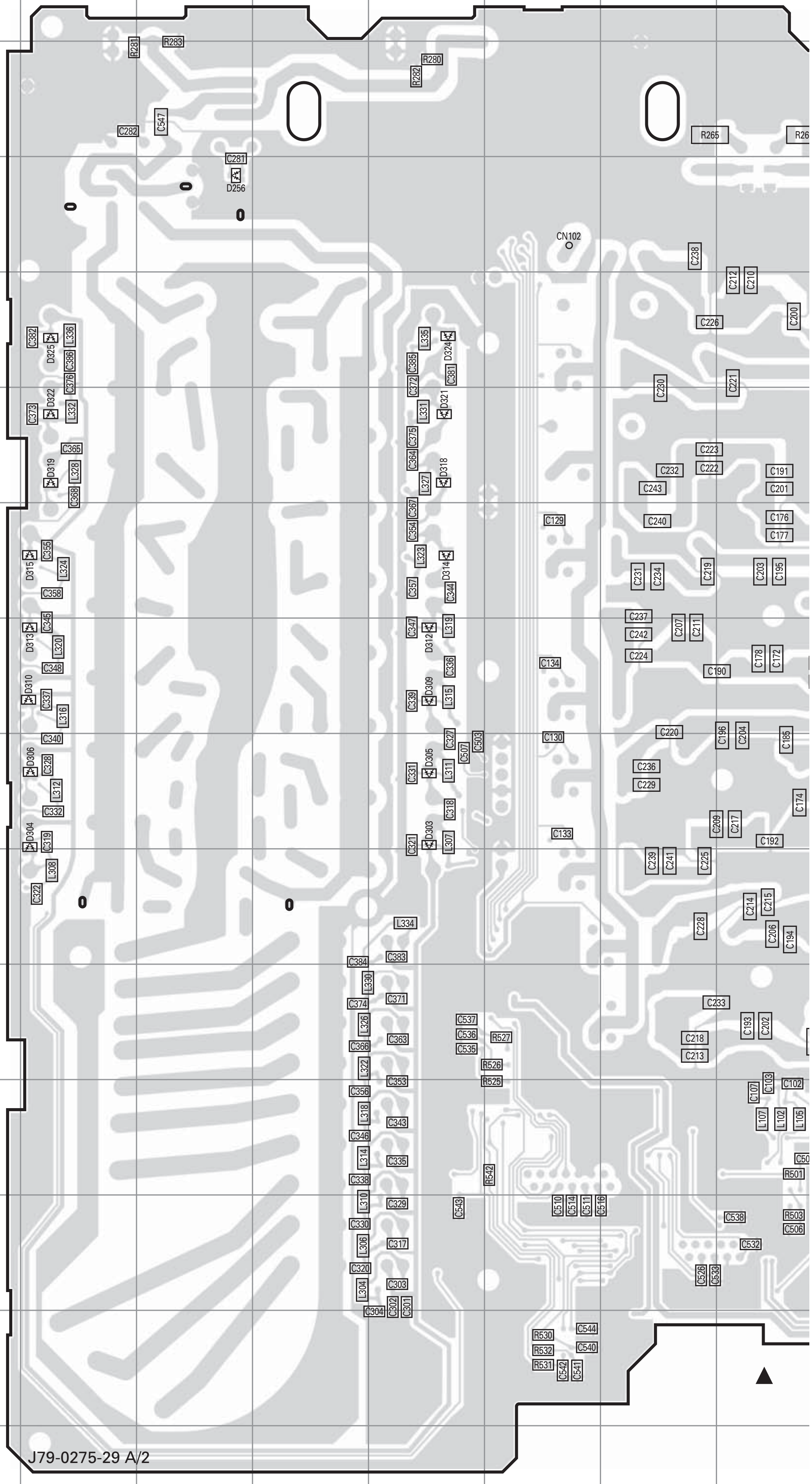
FINAL UNIT
(X45-398X-XX)
0-11: K 2-71: E
Component side view
(J79-0275-29)



Ref. No.	Address	Ref. No.	Address
IC1	11J	Q529	11M
IC2	2H	Q530	11M
IC3	3H	Q531	13L
IC4	4E	Q532	13L
IC5	3H	Q533	13L
IC6	3H	Q534	11M
IC7	11K	Q535	11M
IC8	10M	Q536	13L
IC9	11M	Q537	11M
IC10	13L	Q538	12M
Q1	11D	Q539	13L
Q2	10D	Q540	13L
Q3	7G	Q541	12M
Q4	7D	Q542	12M
Q5	2G	Q543	13M
Q101	6H	Q544	13M
Q251	2H	D1	8G
Q252	3H	D2	8D
Q253	12I	D51	2L
Q254	12J	D52	2P
Q501	11J	D101	2D
Q502	11J	D103	10I
Q503	11J	D104	7H
Q504	11J	D105	8I
Q505	11I	D106	5G
Q506	11I	D107	9I
Q507	11I	D108	7H
Q508	11I	D110	6H
Q509	11I	D111	6G
Q510	12I	D251	3I
Q511	2G	D252	2G
Q513	9M	D253	2J
Q514	12L	D254	14F
Q515	11K	D255	2J
Q516	12I	D257	2P
Q517	9M	D258	12J
Q518	9M	D301	12M
Q519	11K	D302	12M
Q520	12I	D307	11M
Q521	9M	D308	11M
Q522	11J	D311	11M
Q523	9M	D316	10M
Q524	9M	D317	10M
Q525	12J	D320	10M
Q526	12J	D323	9M
Q527	9M	D502	8M
Q528	9M	D503	8M

TS-590SG PC BOARD

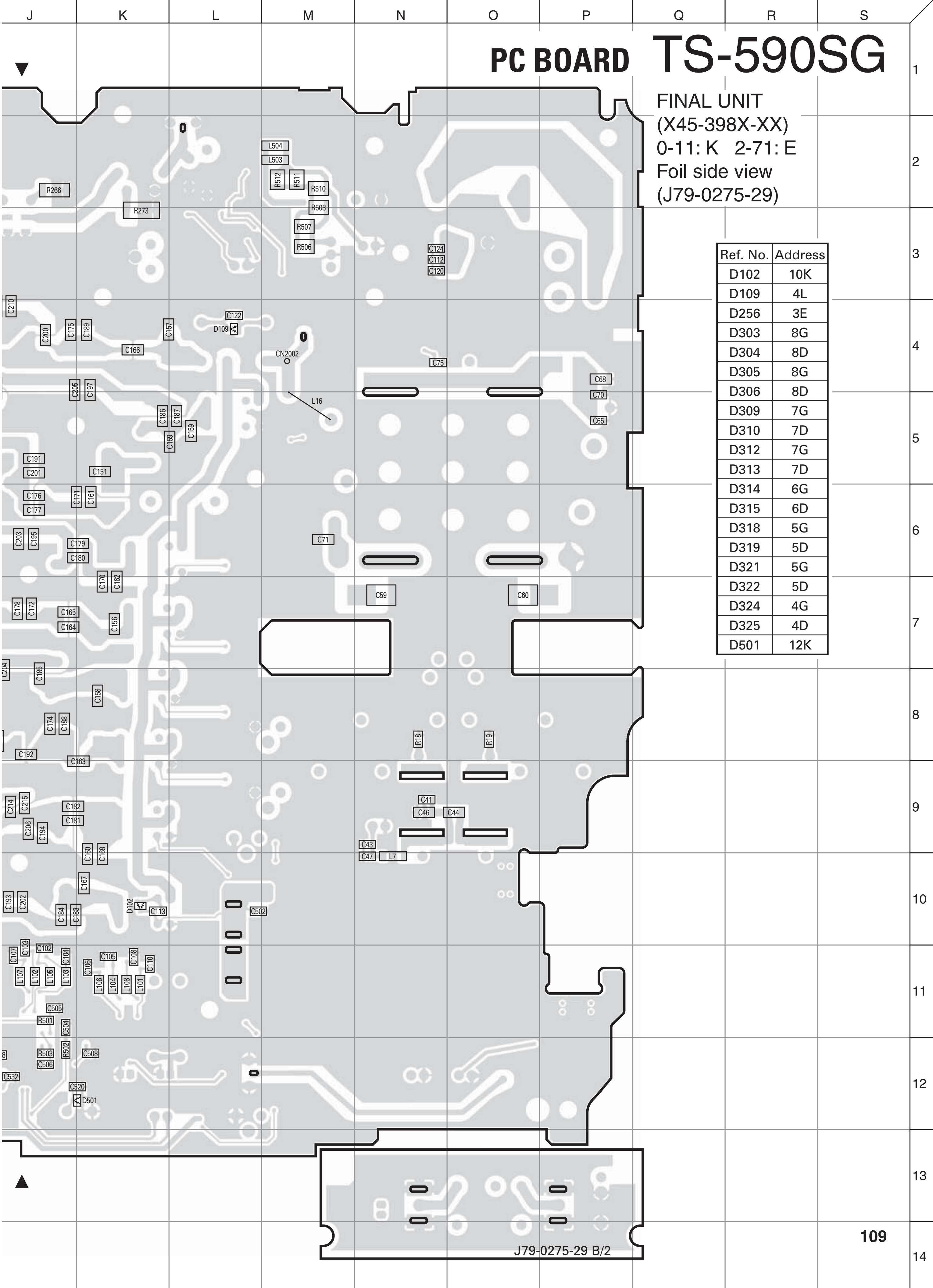
FINAL UNIT
(X45-398X-XX)
0-11: K 2-71: E
Foil side view
(J79-0275-29)



Component side
Layer 1
Layer 2
Foil side

PC BOARD TS-590SG

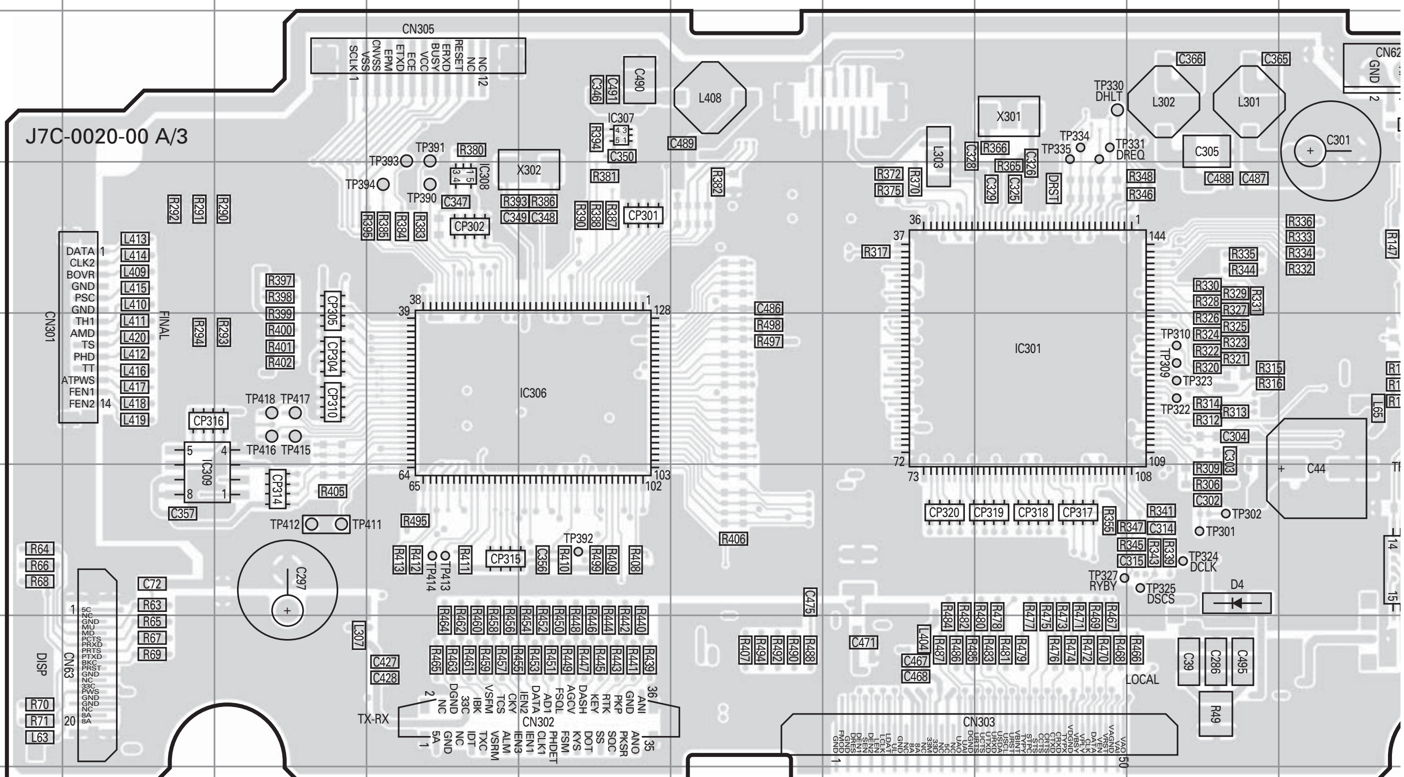
FINAL UNIT
(X45-398X-XX)
0-11: K 2-71: E
Foil side view
(J79-0275-29)



Ref. No.	Address
D102	10K
D109	4L
D256	3E
D303	8G
D304	8D
D305	8G
D306	8D
D309	7G
D310	7D
D312	7G
D313	7D
D314	6G
D315	6D
D318	5G
D319	5D
D321	5G
D322	5D
D324	4G
D325	4D
D501	12K

TS-590SG PC BOARD

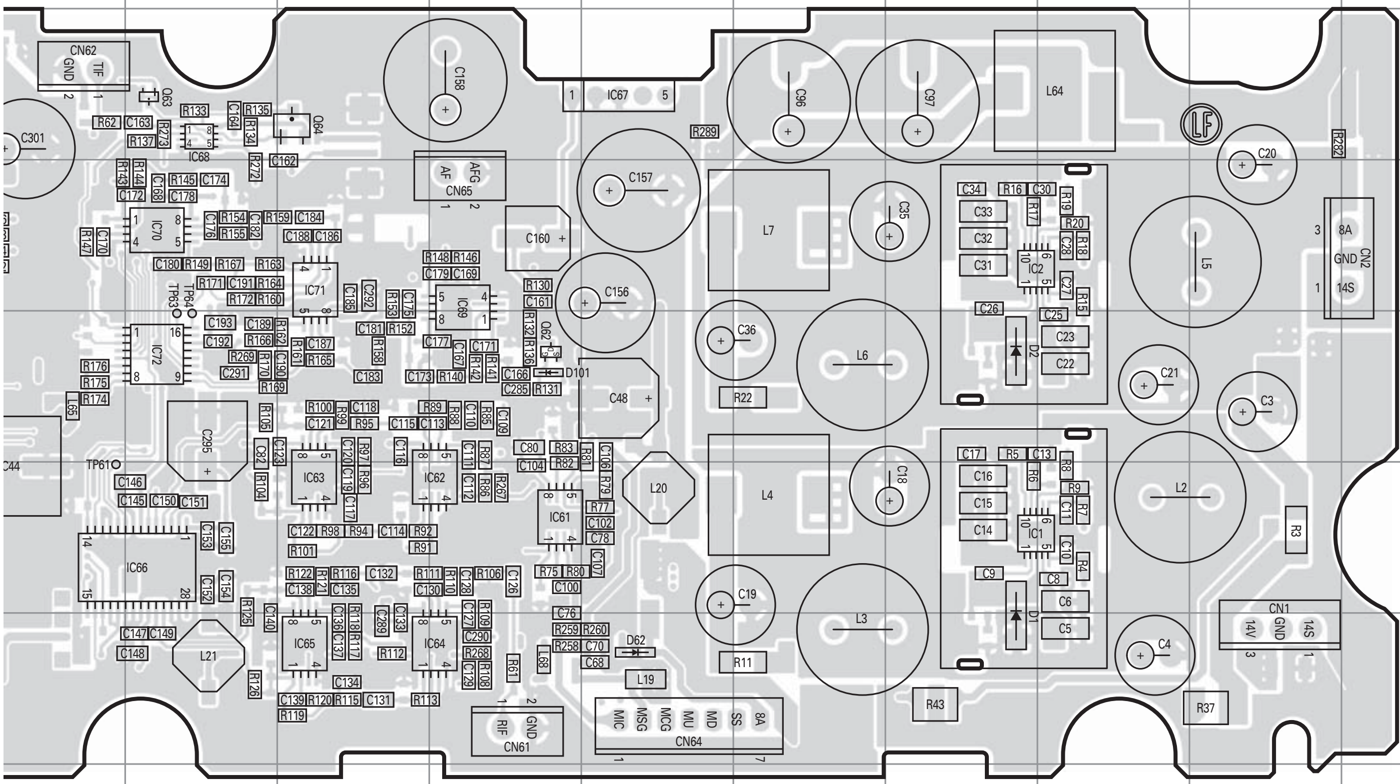
CONTROL UNIT (XC1-021X-XX) (A/3) 0-11: K 2-71: E
Component side view (J7C-0020-00 A/3)

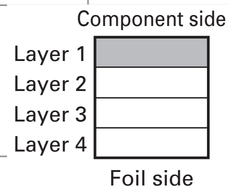


Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC1	6P	IC69	4M	Q63	3K
IC2	4P	IC70	4K	Q64	3L
IC61	6M	IC71	4L	D1	7P
IC62	6M	IC72	5K	D2	5P
IC63	6L	IC301	5H	D4	6I
IC64	7M	IC306	5E	D62	7N
IC65	7L	IC307	3E	D101	5M
IC66	6K	IC308	4D		
IC67	3N	IC309	6B		
IC68	3K	Q62	5M		

PC BOARD TS-590SG

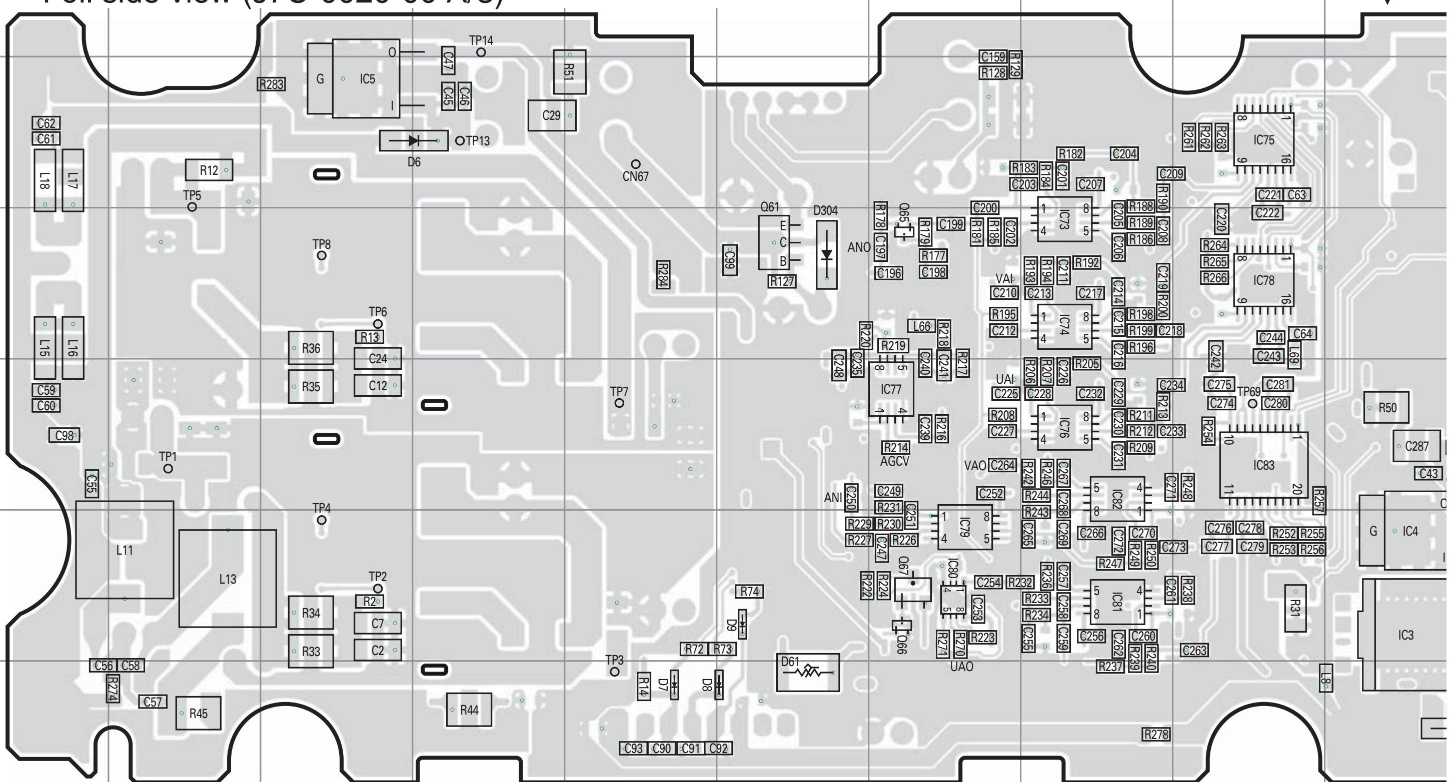
CONTROL UNIT (XC1-021X-XX) (A/3) 0-11: K 2-71: E
Component side view (J7C-0020-00 A/3)





TS-590SG PC BOARD

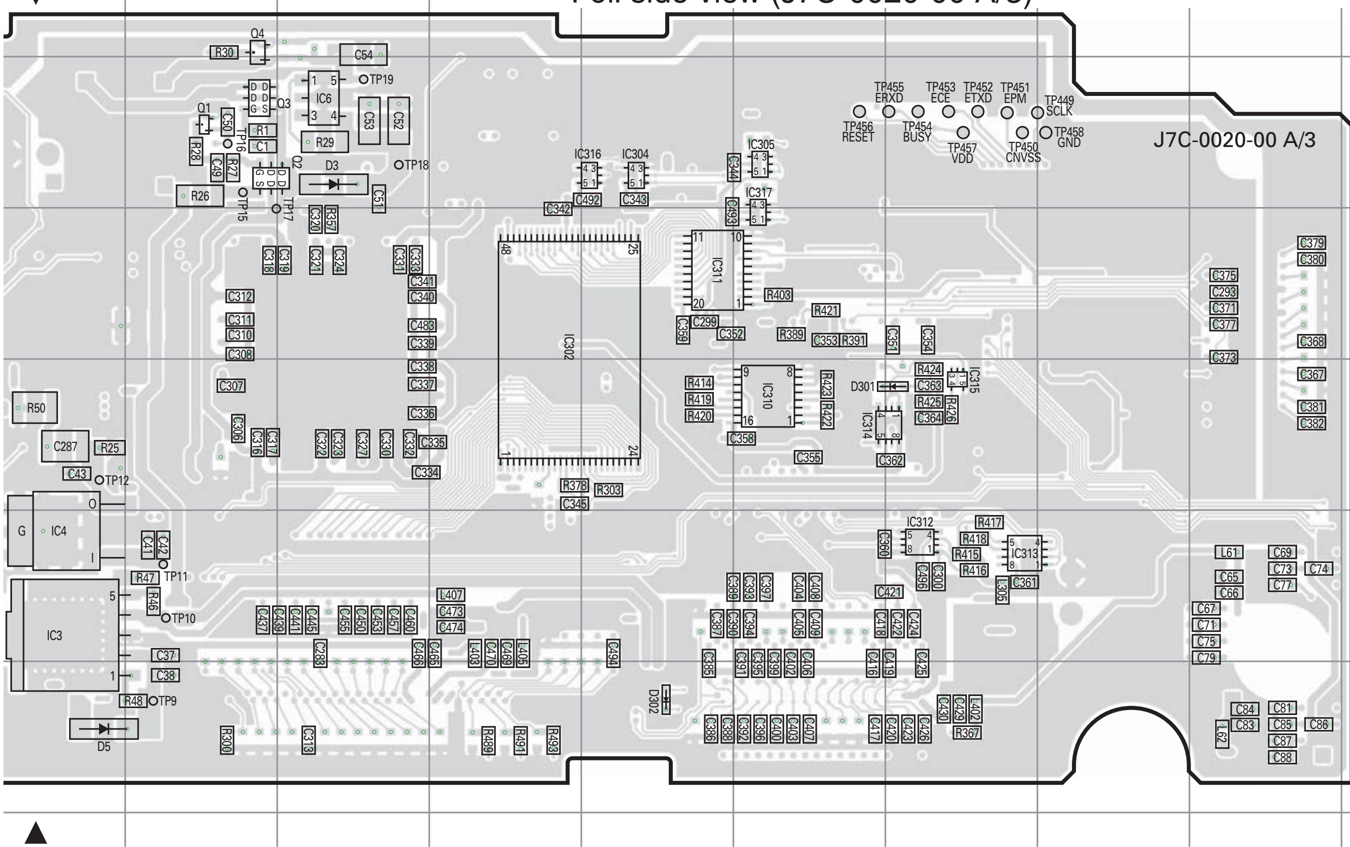
CONTROL UNIT (XC1-021X-XX) (A/3) 0-11: K 2-71: E
Foil side view (J7C-0020-00 A/3)



Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC3	7J	IC80	6G	IC314	5P	Q67	6G
IC4	6J	IC81	6H	IC315	5P	D3	4L
IC5	3D	IC82	6H	IC316	4N	D5	7K
IC6	3L	IC83	5I	IC317	4O	D6	3D
IC73	4H	IC302	5N	Q1	3K	D7	7F
IC74	5H	IC304	4N	Q2	4L	D8	7F
IC75	3I	IC305	3O	Q3	3L	D9	7F
IC76	5H	IC310	5O	Q4	3L	D61	7F
IC77	5G	IC311	4O	Q61	4F	D301	5P
IC78	4I	IC312	6P	Q65	4G	D302	7N
IC79	6G	IC313	6Q	Q66	7G	D304	4F

PC BOARD TS-590SG

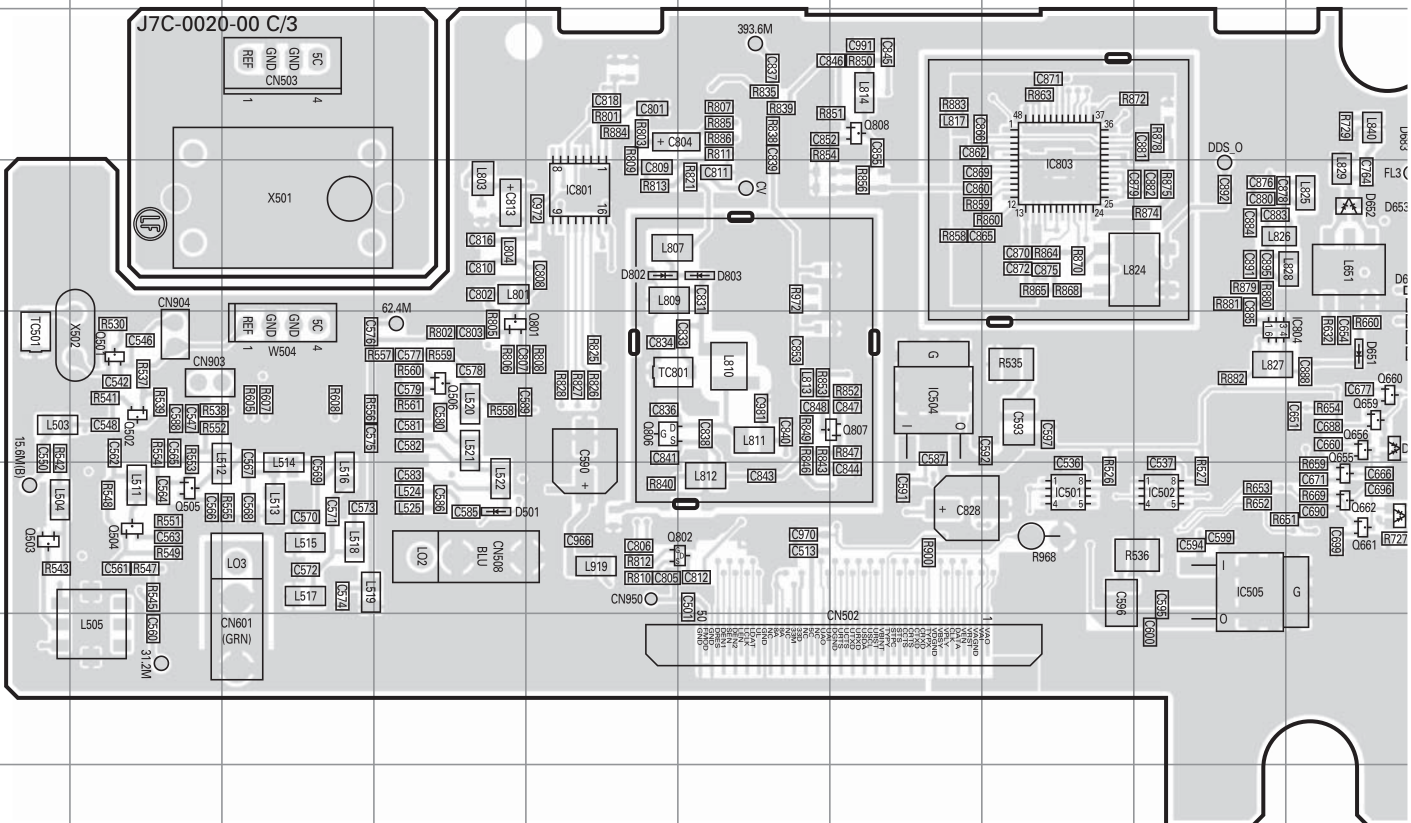
CONTROL UNIT (XC1-021X-XX) (A/3) 0-11: K 2-71: E
Foil side view (J7C-0020-00 A/3)



Component side
Layer 1
Layer 2
Layer 3
Layer 4
Foil side

TS-590SG PC BOARD

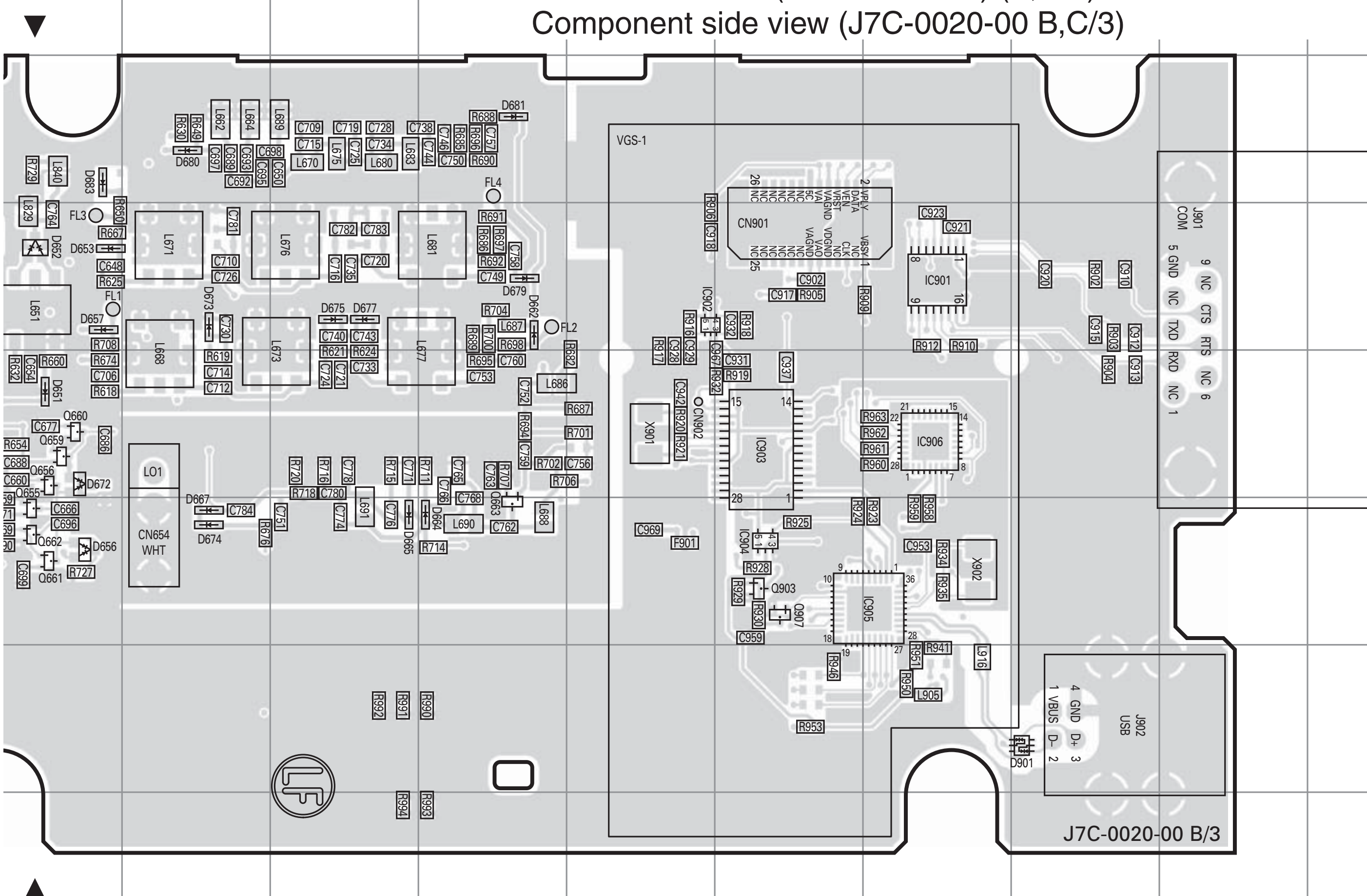
CONTROL UNIT (XC1-021X-XX) (B,C/3) 0-11: K 2-71: E
Component side view (J7C-0020-00 B,C/3)



Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC501	6H	IC905	6P	Q660	5J	D652	4J	D677	4L
IC502	6I	IC906	5P	Q661	6J	D653	4J	D679	4M
IC504	5G	Q501	5B	Q662	6J	D656	5J	D680	3K
IC505	6I	Q502	5B	Q663	6M	D657	4J	D681	3M
IC801	4E	Q503	6A	Q801	5D	D662	4M	D683	3J
IC803	4H	Q504	6B	Q802	6F	D664	6M	D801	6F
IC804	5I	Q505	6B	Q806	5E	D665	6L	D802	4E
IC901	4P	Q506	5D	Q807	5G	D667	6K	D803	4F
IC902	4N	Q655	6J	Q808	3G	D672	5J	D901	7Q
IC903	5O	Q656	5J	D501	6D	D673	4K		
IC904	6O	Q659	5J	D651	5J	D675	4L		

PC BOARD TS-590SG

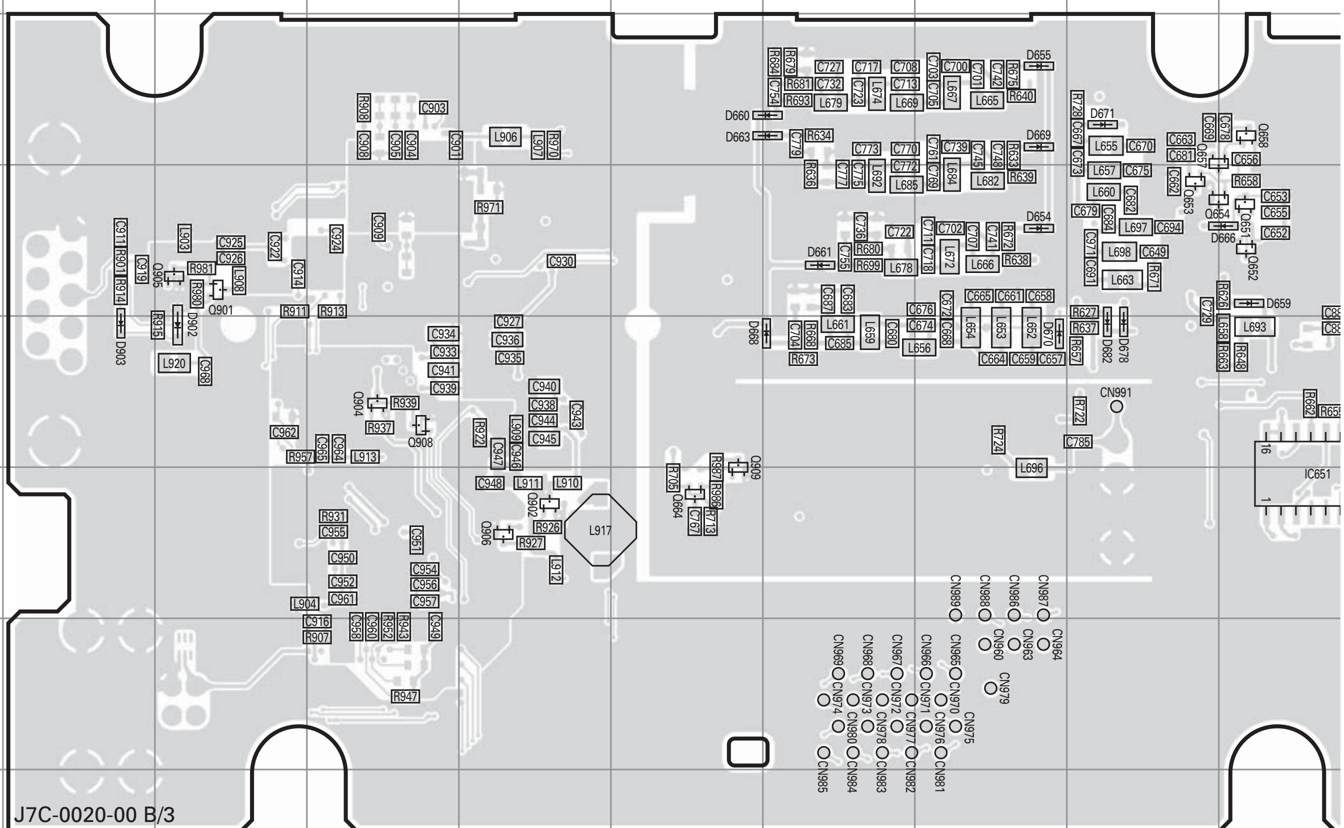
CONTROL UNIT (XC1-021X-XX) (B,C/3) 0-11: K 2-71: E
Component side view (J7C-0020-00 B,C/3)



	Component side
Layer 1	
Layer 2	
Layer 3	
Layer 4	
	Foil side

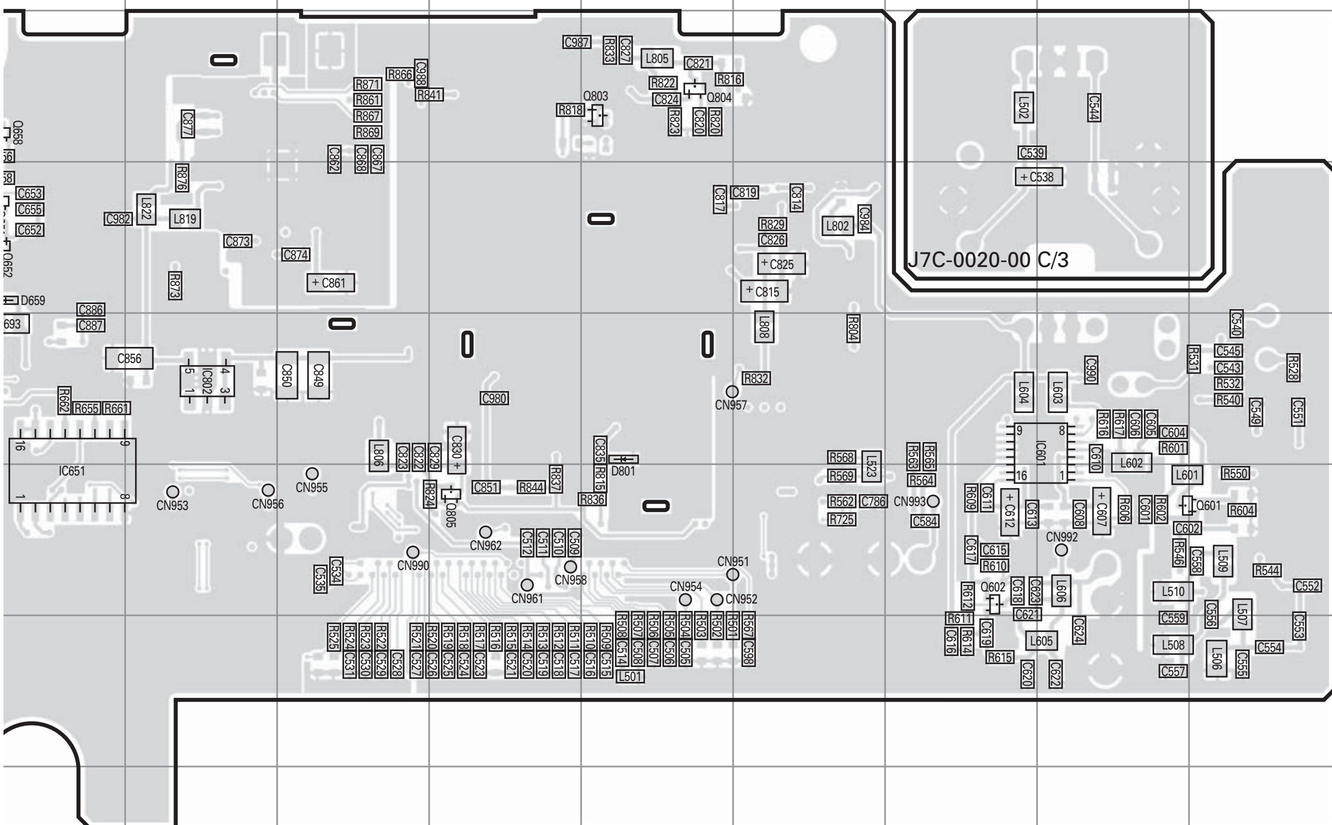
TS-590SG PC BOARD

CONTROL UNIT (XC1-021X-XX) (B,C/3) 0-11: K 2-71: E
Foil side view (J7C-0020-00 B,C/3)



Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC601	5Q	Q664	6F	D661	4G
IC651	6J	Q803	3M	D663	3G
IC802	5K	Q804	3N	D666	4J
Q601	6Q	Q805	6M	D668	5G
Q602	6P	Q901	4C	D669	3H
Q651	4J	Q902	6E	D670	5H
Q652	4J	Q904	5D	D671	3I
Q653	4I	D654	4H	D678	5I
Q654	4I	D655	3H	D682	5I
Q657	3I	D659	4J	D902	5C
Q658	3J	D660	3G	D903	5B

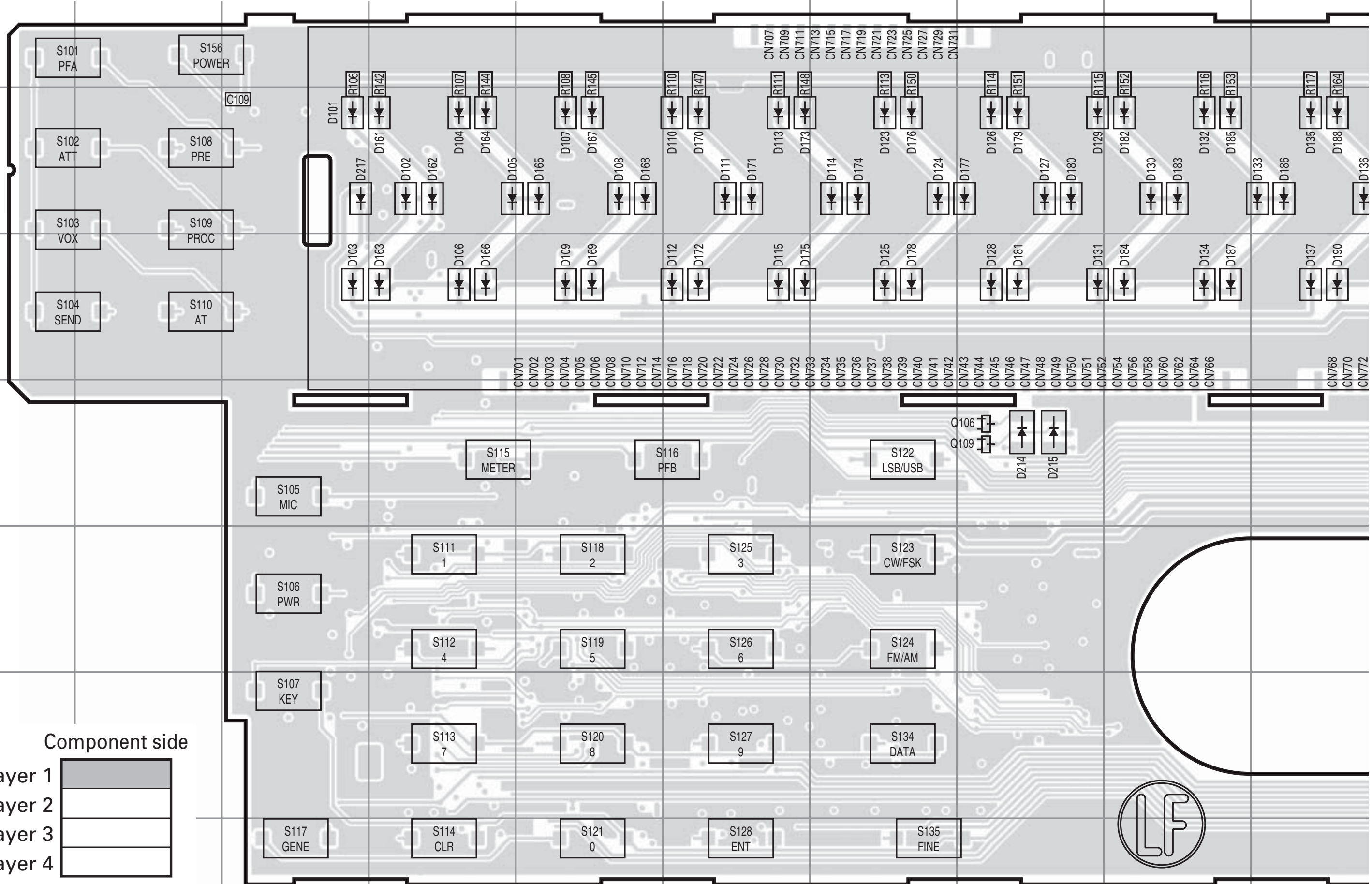
CONTROL UNIT (XC1-0210-00X-XX) (B,C/3) 0-11: K 2-71: E
Foil side view (J7C-0020-00 B,C/3)



Component side
Layer 1
Layer 2
Layer 3
Layer 4
Foil side

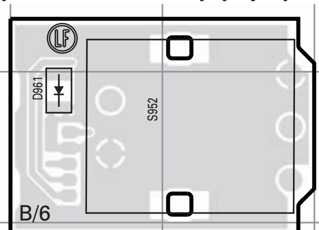
TS-590SG **PC BOARD**

DISPLAY UNIT (XC1-0220-00) (A/6): DISPLAY
Component side view (J7C-0024-00 A/6)

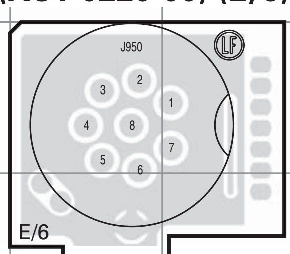


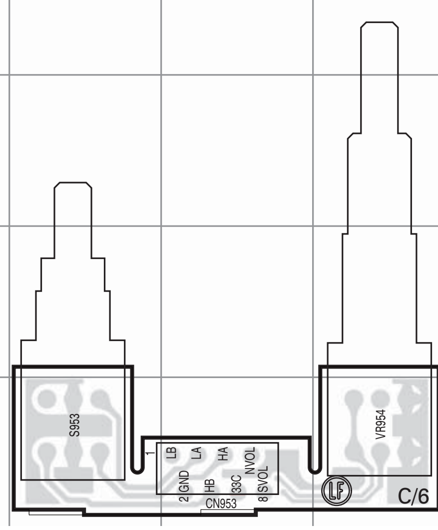
Component side
Layer 1
Layer 2
Layer 3
Layer 4
Foil side

DISPLAY UNIT
(XC1-0220-00) (B/6): MULCH/CH



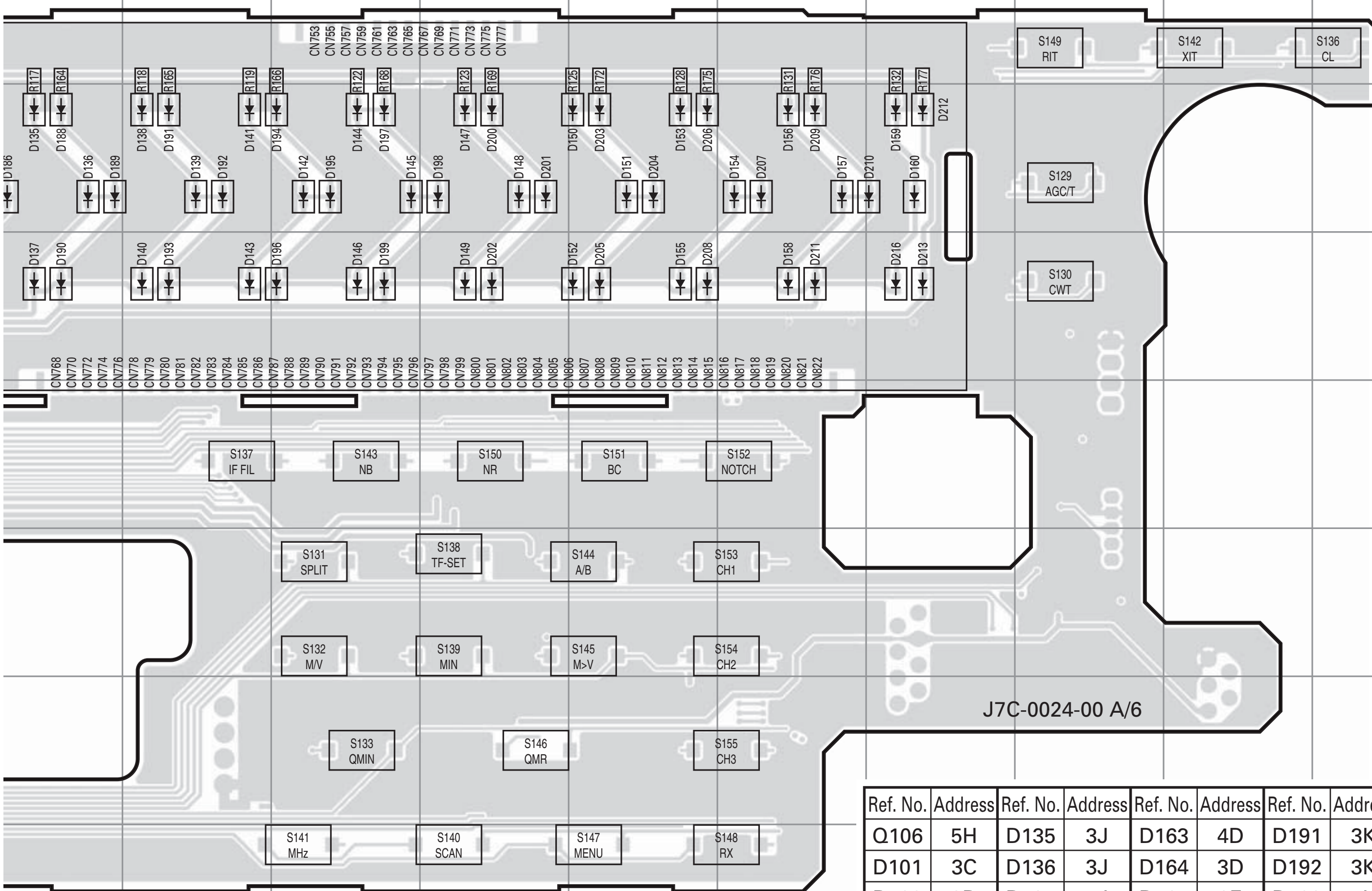
DISPLAY UNIT
(XC1-0220-00) (E/6): MIC



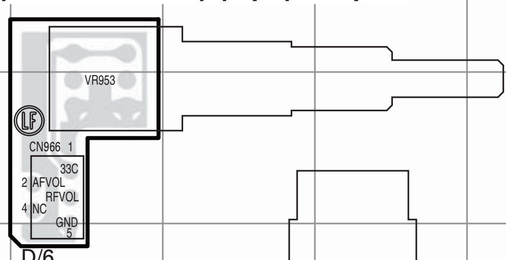


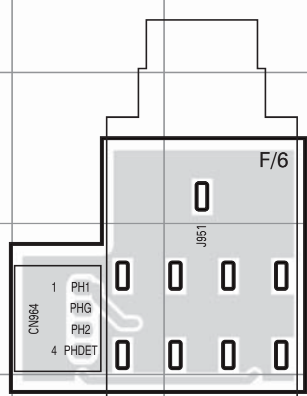
DISPLAY UNIT
(XC1-0220-00) (C/6)
: HI/LO (SHIFT/WIDTH), NOTCH/SQL

DISPLAY UNIT (XC1-0220-00) (A/6): DISPLAY
Component side view (J7C-0024-00 A/6)



DISPLAY UNIT
(XC1-0220-00) (D/6): AF/RF



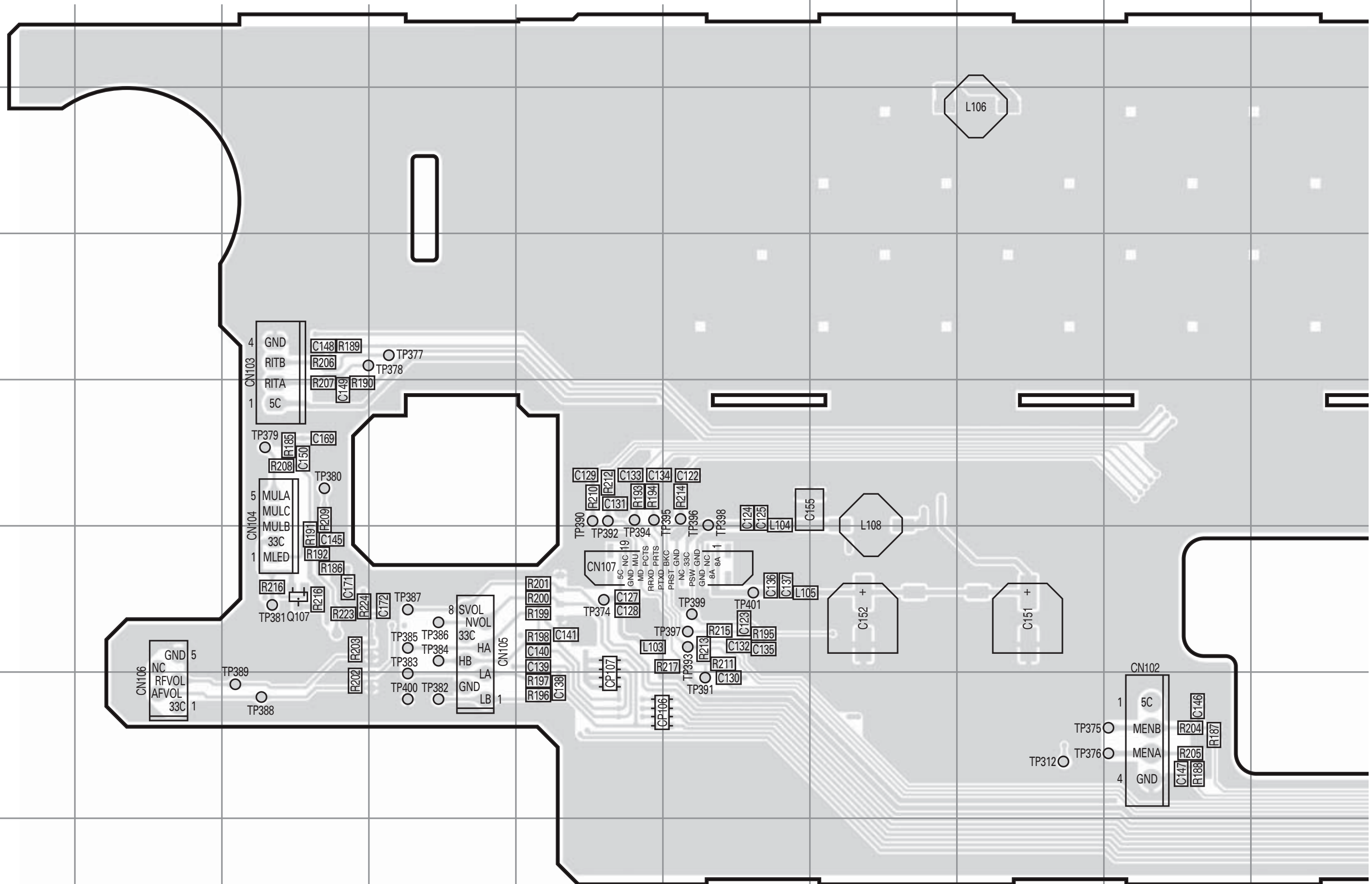


DISPLAY UNIT
(XC1-0220-00) (F/6): PHONE

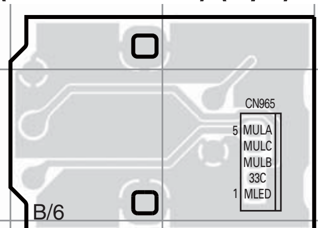
Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
Q106	5H	D135	3J	D163	4D	D191	3K
D101	3C	D136	3J	D164	3D	D192	3K
D102	3D	D137	4J	D165	3E	D193	4K
D103	4C	D138	3K	D166	4D	D194	3L
D104	3D	D139	3K	D167	3E	D195	3L
D105	3D	D140	4K	D168	3E	D196	4L
D106	4D	D141	3K	D169	4E	D197	3L
D107	3E	D142	3L	D170	3F	D198	3M
D108	3E	D143	4K	D171	3F	D199	4L
D109	4E	D144	3L	D172	4F	D200	3M
D110	3F	D145	3L	D173	3F	D201	3M
D111	3F	D146	4L	D174	3G	D202	4M
D112	4F	D147	3M	D175	4F	D203	3N
D113	3F	D148	3M	D176	3G	D204	3N
D114	3G	D149	4M	D177	3H	D205	4N
D115	4F	D150	3N	D178	4G	D206	3N
D123	3G	D151	3N	D179	3H	D207	3O
D124	3G	D152	4N	D180	3H	D208	4N
D125	4G	D153	3N	D181	4H	D209	3O
D126	3H	D154	3O	D182	3I	D210	3P
D127	3H	D155	4N	D183	3I	D211	4O
D128	4H	D156	3O	D184	4I	D212	3P
D129	3H	D157	3O	D185	3I	D213	4P
D130	3I	D158	4O	D186	3J	D214	5H
D131	4H	D159	3P	D187	4I	D215	5H
D132	3I	D160	3P	D188	3J	D216	4P
D133	3J	D161	3D	D189	3J	D217	3C
D134	4I	D162	3D	D190	4J	D961	10B

TS-590SG PC BOARD

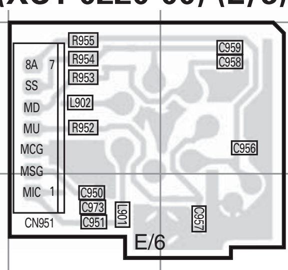
DISPLAY UNIT (XC-0220-00) (A/6): DISPLAY
Foil side view (J7C-0024-00 A/6)

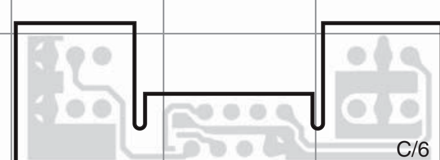


DISPLAY UNIT
(XC1-0220-00) (B/6): MULCH/CH



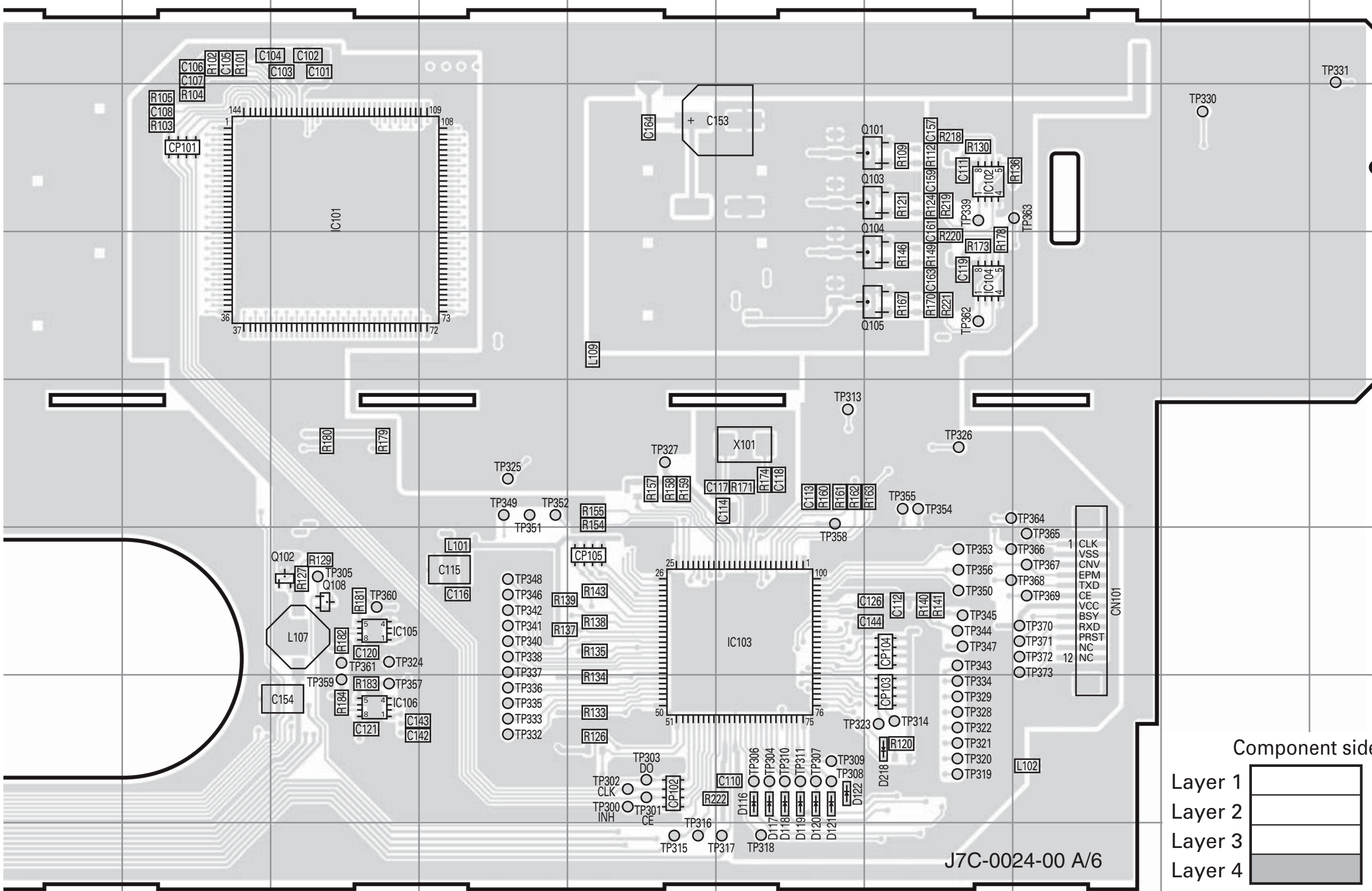
DISPLAY UNIT
(XC1-0220-00) (E/6): MIC





DISPLAY UNIT
(XC1-0220-00) (C/6)
: HI/LO (SHIFT/WIDTH), NOTCH/SQL

DISPLAY UNIT (XC1-0220-00) (A/6): DISPLAY
Foil side view (J7C-0024-00 A/6)



Component side

Layer 1

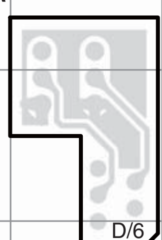
Layer 2

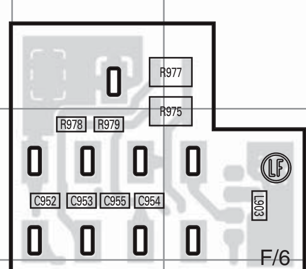
Layer 3

Layer 4

Foil side

DISPLAY UNIT (XC1-0220-00) (D/6): AF/RF



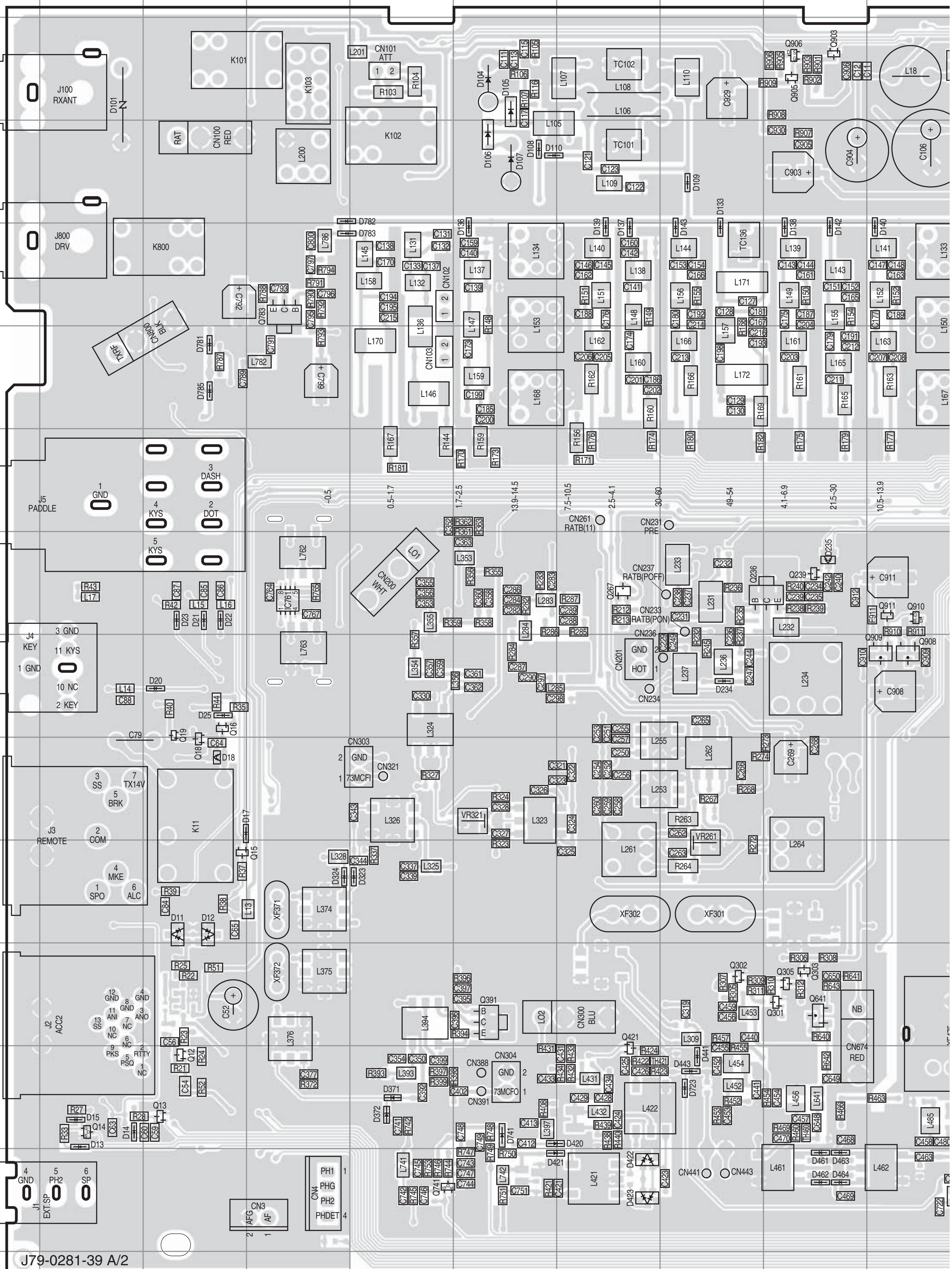


DISPLAY UNIT (XC1-0220-00) (F/6): PHONE

Ref. No.	Address	Ref. No.	Address
IC101	3L	Q105	4P
IC102	3P	Q107	6C
IC103	6O	D116	7O
IC104	4P	D117	7O
IC105	6L	D118	7O
IC106	7L	D119	7O
Q101	3P	D120	7O
Q102	6L	D121	7O
Q103	3P	D122	7O
Q104	4P	D218	7P

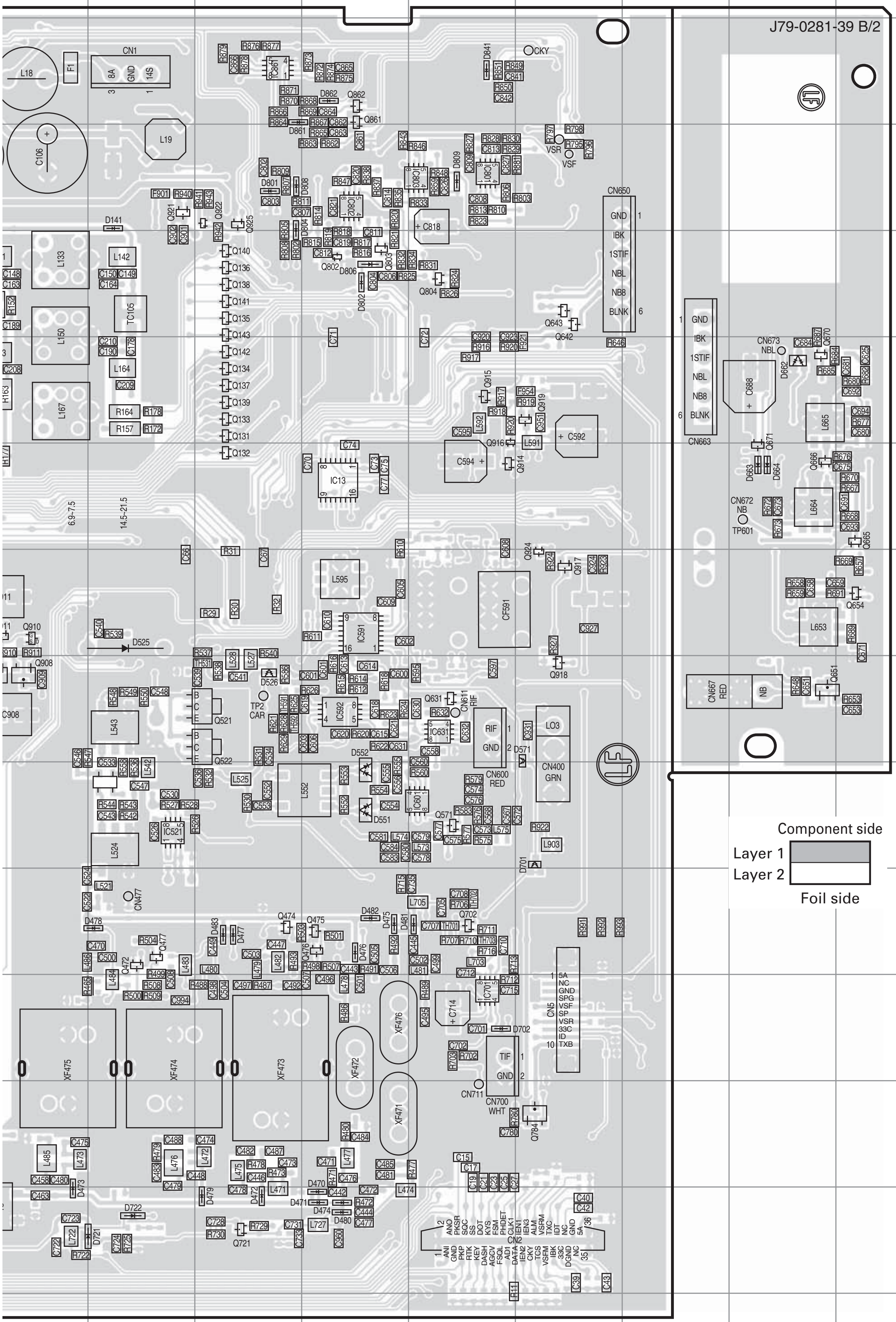
TS-590SG PC BOARD

TX-RX UNIT (XC1-024X-XX)
0-11: K 2-71: E
Component side view (J79-0281-39)



TX-RX UNIT (XC1-024X-XX)
0-11: K 2-71: E
Component side view (J79-0281-39)

PC BOARD TS-590SG



Ref. No.	Address	Ref. No.	Address
IC13	6M	D12	10C
IC521	10L	D13	12B
IC591	7M	D14	12C
IC592	8M	D15	12B
IC631	8N	D17	9D
IC701	11N	D18	9C
IC761	8D	D20	8C
IC801	3O	D21	7C
IC802	4O	D22	7D
IC803	3N	D23	7C
IC861	2L	D101	3C
Q12	12C	D102	3D
Q13	12C	D103	3D
Q14	12B	D104	4F
Q15	10D	D105	2E
Q16	8C	D106	3F
Q131	5L	D107	3F
Q132	6L	D108	3F
Q133	5L	D109	3H
Q134	5L	D110	3F
Q135	4L	D132	3F
Q136	4L	D134	3K
Q137	5L	D136	3F
Q138	4L	D137	3G
Q139	5L	D138	3I
Q140	4L	D139	3G
Q141	4L	D140	3J
Q142	5L	D141	3K
Q143	4L	D142	3J
Q236	7I	D143	3H
Q239	7I	D234	8H
Q267	7G	D235	7I
Q301	11G	D323	9D
Q391	11F	D371	12E
Q421	12G	D421	12G
Q471	10N	D422	13H
Q472	10K	D423	13H
Q473	10M	D441	11H
Q474	10M	D443	12H
Q475	10M	D461	13I
Q476	10M	D462	13I
Q477	10K	D463	13J
Q521	8L	D464	13J
Q522	8L	D471	13M
Q541	8K	D472	13L
Q551	9N	D473	12K
Q571	9N	D474	13M
Q591	6O	D475	10N
Q631	8N	D476	10M
Q641	11I	D477	10L
Q651	8R	D478	10K
Q654	7R	D521	9K
Q660	3R	D522	9K
Q661	3Q	D523	9K
Q662	3Q	D524	9K
Q665	6R	D525	7K
Q666	6R	D526	8L
Q670	5R	D551	9M
Q671	6Q	D552	9M
Q702	10N	D571	8O
Q721	13L	D660	4R
Q741	13F	D661	4R
Q781	4C	D662	5Q
Q782	4B	D663	6Q
Q783	4D	D701	9O
Q784	12O	D702	11O
Q801	4O	D721	13K
Q802	4M	D722	13K
Q803	3M	D723	12H
Q804	3M	D741	12F
Q805	3M	D762	7E
Q806	3N	D781	4C
Q807	3N	D782	3D
Q841	2N	D783	3D
Q842	2N	D799	4C
Q861	2M	D800	4C
Q862	2M	D801	3L
Q903	2I	D802	4M
Q905	2I	D803	2O
Q906	2I	D806	4M
Q908	8J	D808	3M
Q909	8J	D809	3O
Q910	7J	D810	4M
Q911	7J	D811	3N
Q915	5N	D812	3N
Q916	5O	D813	3N
Q917	7O	D841	2N
Q918	8O	D842	2N
Q920	3K	D843	2N
Q925	3L	D861	2M
D11	10C	D862	2M

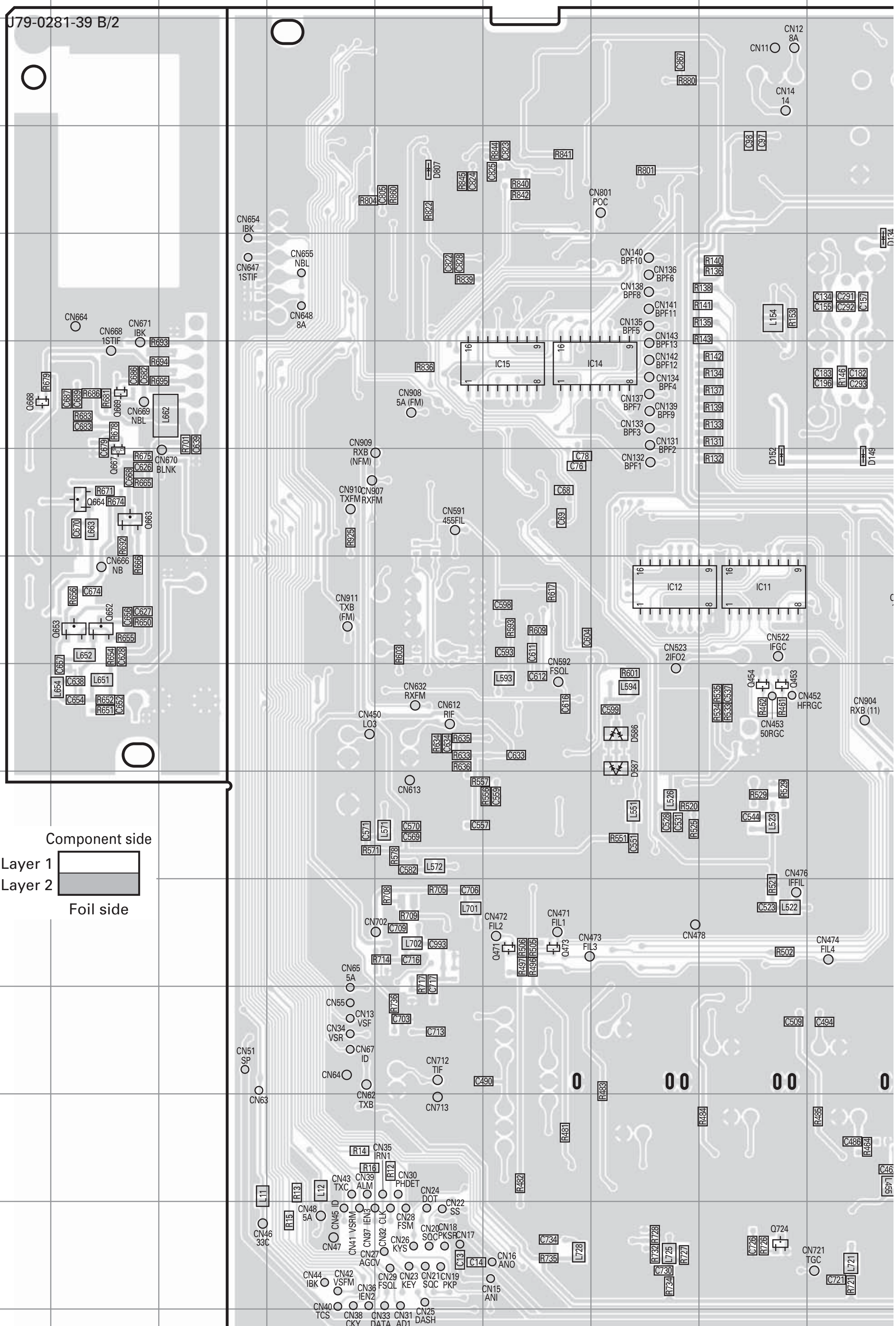
A B C D E F G H I J

TS-590SG **PC BOARD**

TX-RX UNIT (XC1-024X-XX)
0-11: K 2-71: E
Foil side view (J79-0281-39)

Ref. No.	Address
IC11	7I
IC12	7H
IC14	5G
IC15	5F
Q17	10Q
Q101	2P
Q102	2O
Q103	2N
Q263	9L
Q264	10L
Q265	9K
Q266	10K
Q268	8M
Q269	7M
Q270	7M
Q271	7L
Q272	7M
Q273	7L
Q274	6M
Q281	8M
Q282	8M
Q321	9N
Q322	9N
Q323	9N
Q324	9N
Q351	8N
Q352	8N
Q431	12M
Q451	12K
Q453	8I
Q454	8I
Q455	12J
Q456	12J
Q652	7C
Q653	7B
Q663	6C
Q664	6B
Q667	6C
Q668	5B
Q669	5C
Q742	12N
Q904	2K
Q907	2K
D24	12Q
D131	3O
D133	3L
D135	3O
D144	6O
D145	6O
D146	6N
D147	6L
D148	6K
D149	6J
D150	6M
D151	6J
D152	6I
D153	6J
D154	6L
D155	6N
D156	6L
D231	6L
D232	6L
D233	8L
D261	8M
D281	6O
D321	8M
D351	7O
D431	12M
D586	8G
D587	8G
D761	6O
D807	3E

J79-0281-39 B/2

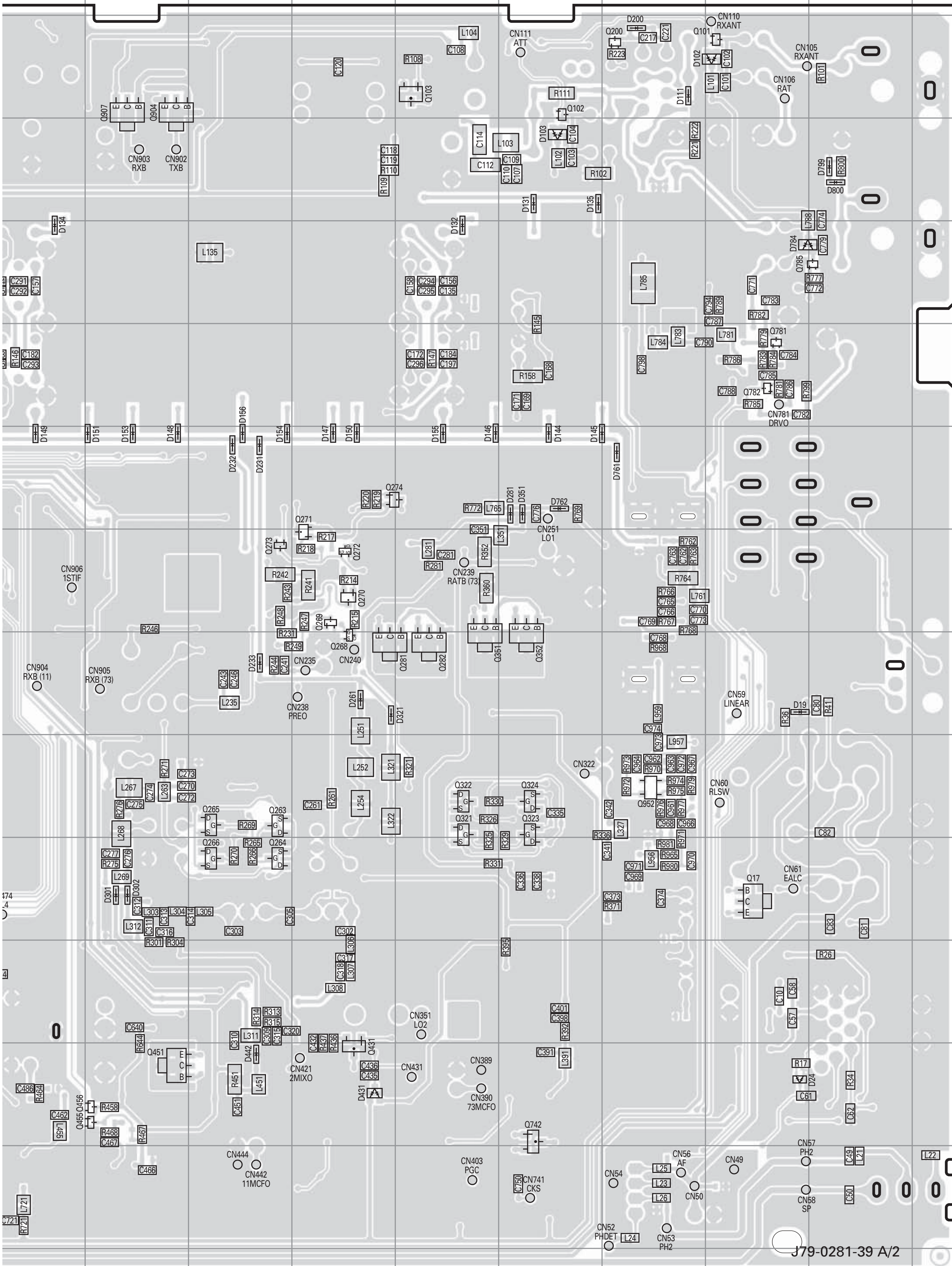


Component side
Layer 1
Layer 2
Foil side

J K L M N O P Q R S

TX-RX UNIT (XC1-024X-XX)
0-11: K 2-71: E
Foil side view (J79-0281-39)

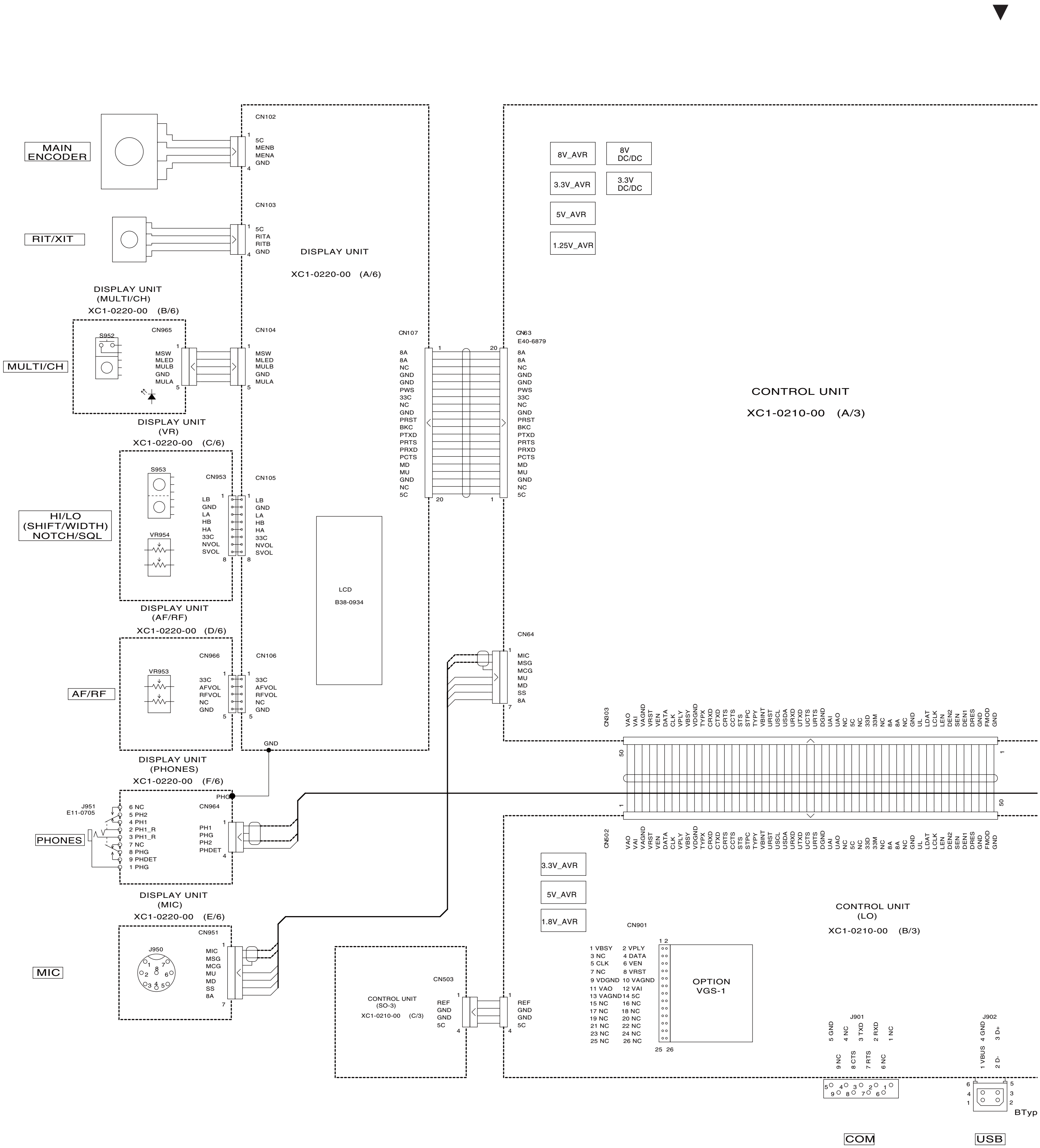
PC BOARD TS-590SG



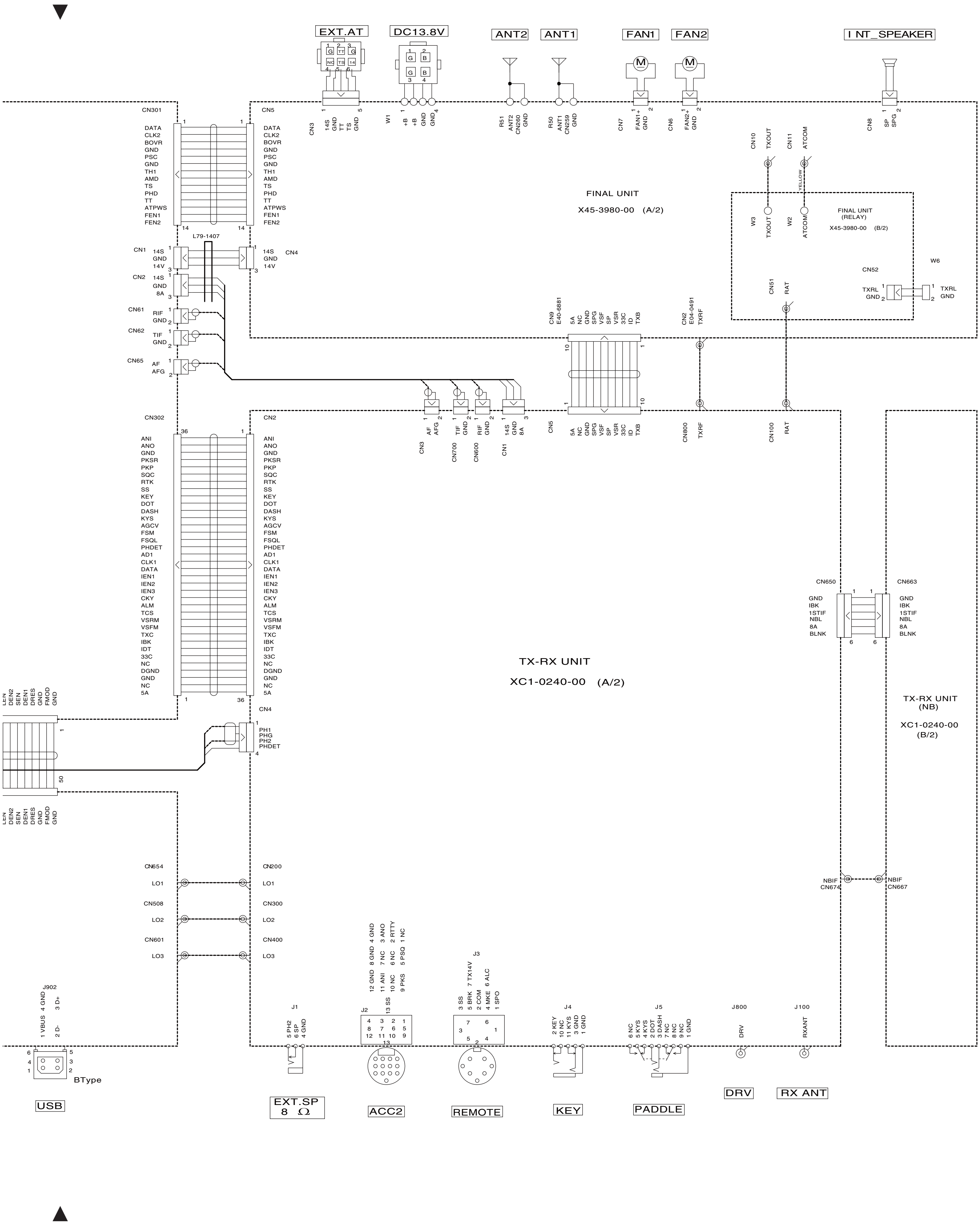
1 2 3 4 5 6 7 8 9 10 11 12 13 14

TS-590SG

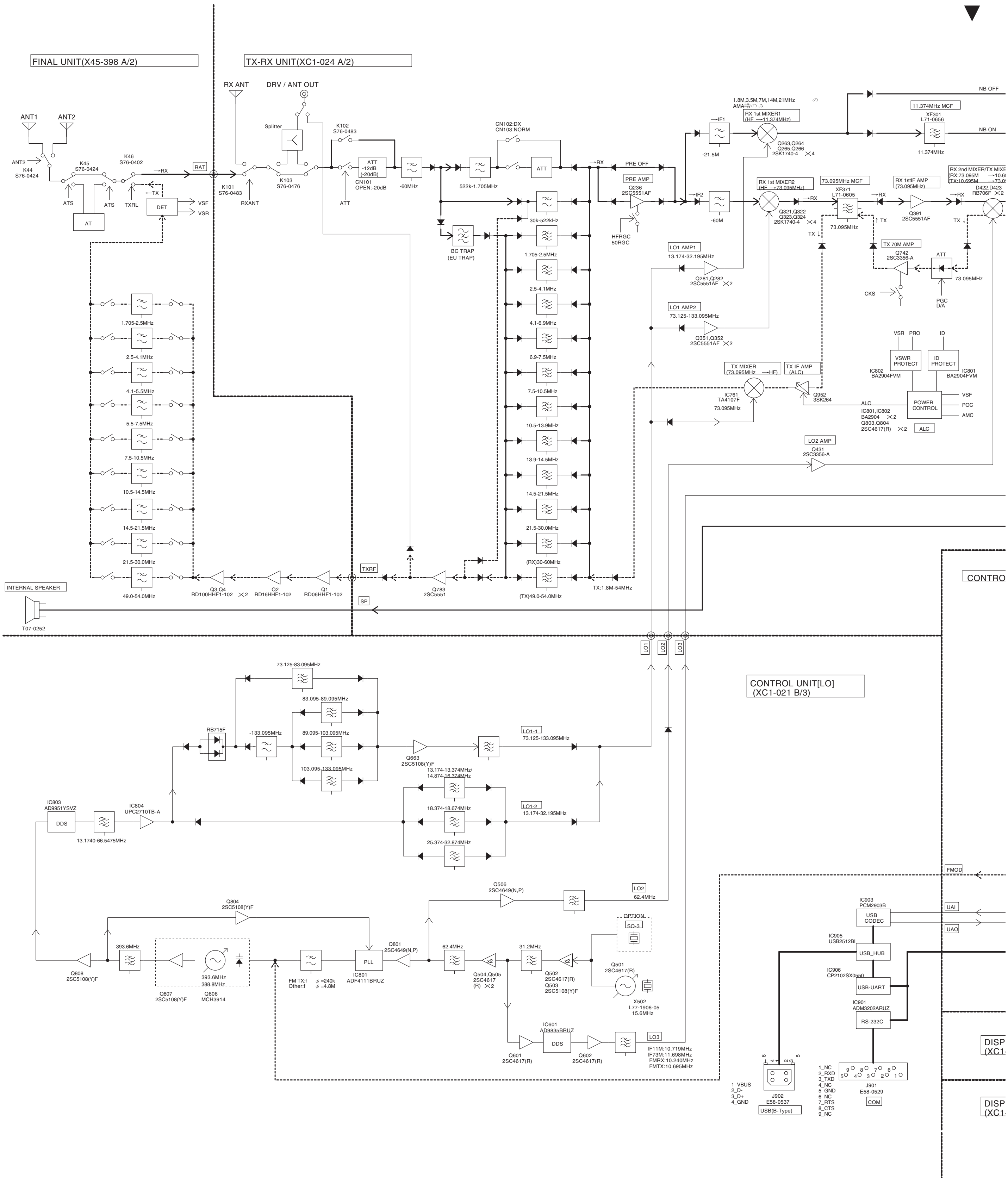
INTERCONNECTION DIAGRAM



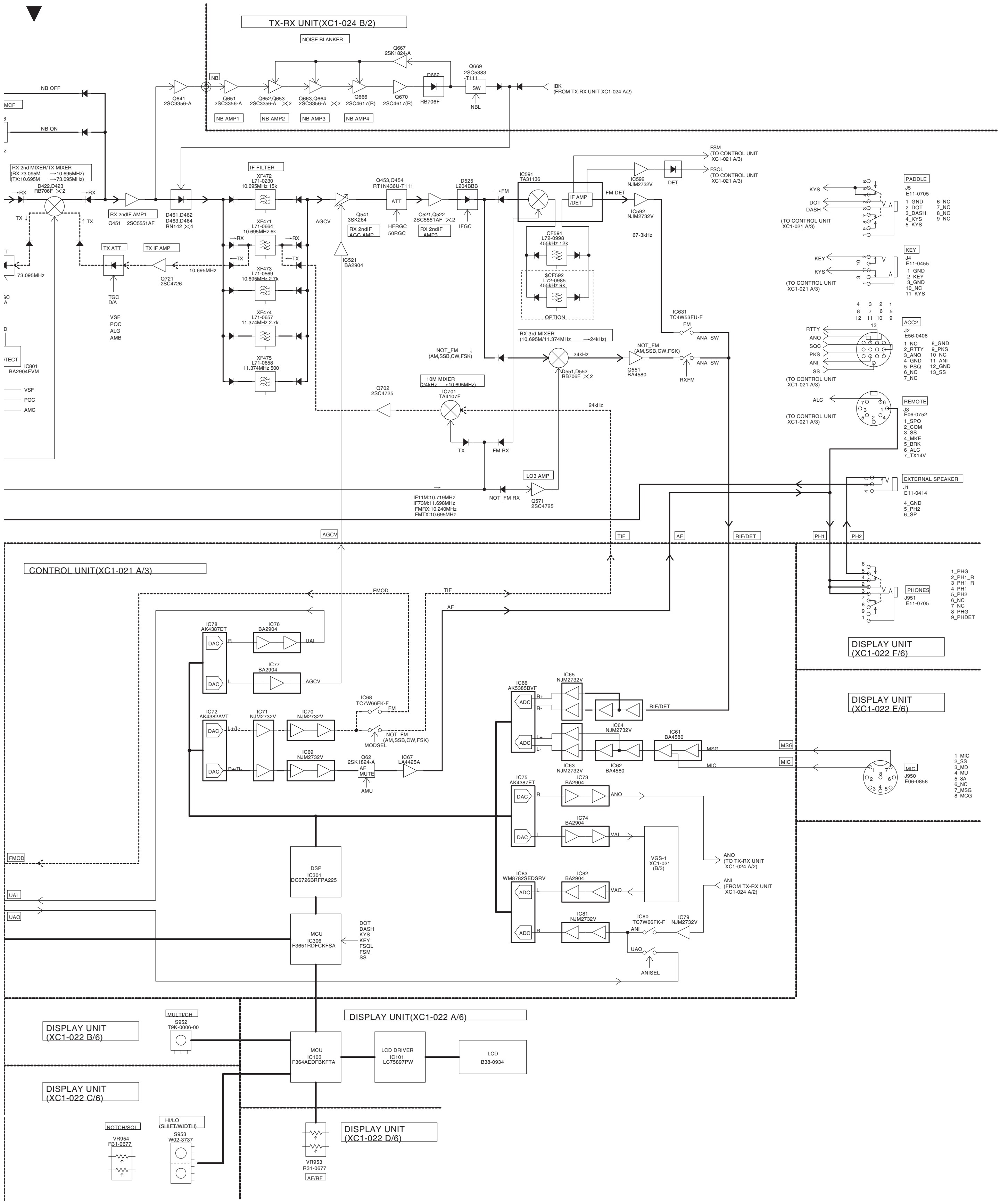
INTERCONNECTION DIAGRAM



BLOCK DIAGRAM

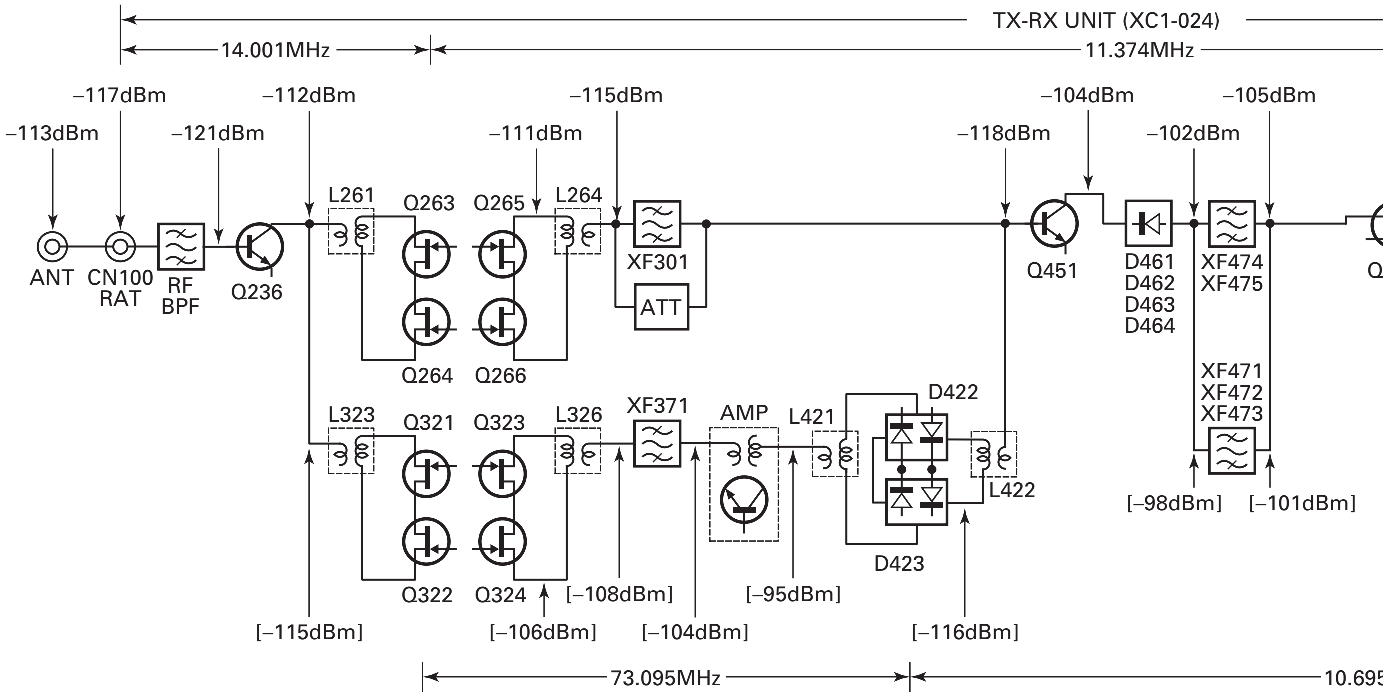


BLOCK DIAGRAM



LEVEL DIAGRAM

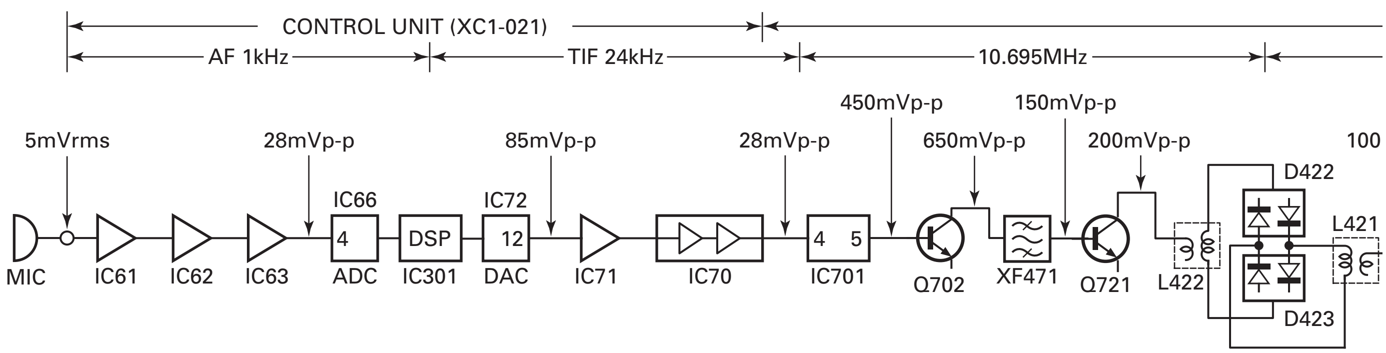
Receiver Section



Measurement condition
Frequency: 14.0MHz
PRE AMP: ON
ANT input: –113dBm/0.501µV
AF output: 0.63V/8Ω, 1kHz
Mode: USB
The values in parentheses ( ) are those in FM mode
The values in parentheses [ ] are those in RX2 (IF1: 73.095MHz): Filter Lo: 300/Hi: 3400

Input –113dBm from the antenna, set AF VOLUME so that AF output is 0.63Vrms, and measure the signal level at each par
The AF section is measured with an oscilloscope and the other parts are measured with an RF voltmeter.

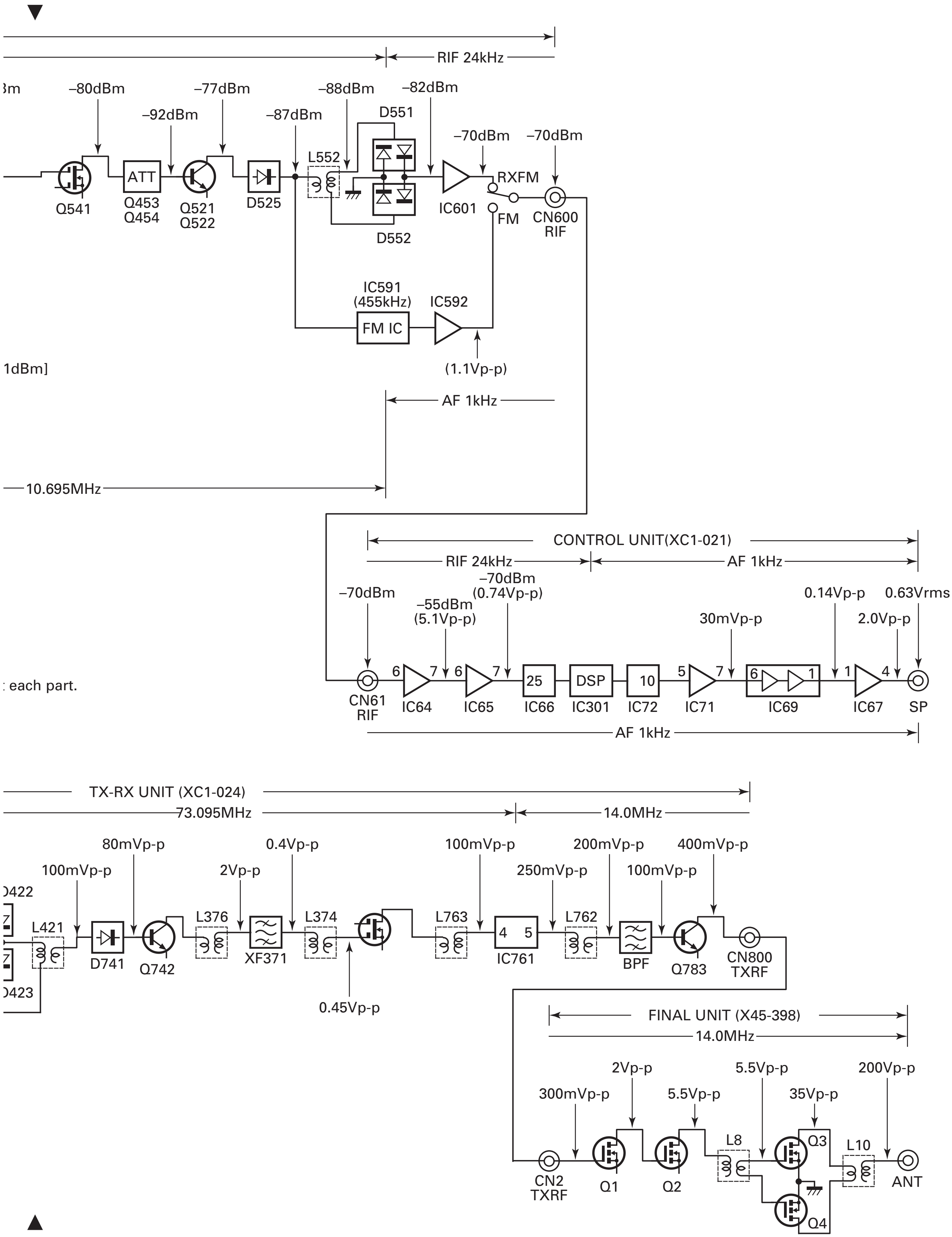
Transmitter Section



Measurement condition
Frequency: 14.1MHz
MIC input: 1kHz/5mV
Output power: 100W
MIC level: ALC zone maximum

Audio frequency section is measured by the AF voltmeter or oscilloscope.
Radio frequency section is measured by high impedance RF voltmeter.

LEVEL DIAGRAM



OPTIONAL ACCESSORIES

PS-60 (DC Power Supply)

■ **External View**

ARCP-590G (Radio Control Program)

ARHP-590G (Radio Host Program)

ARUA-10 (USB Audio Controller)

Available free for downloading from the KENWOOD website:
http://www.kenwood.com/i/products/info/amateur/software_download.html

SPECIFICATIONS

General

Mode		J3E (SSB)/ A1A (CW)/ A3E (AM)/ F3E (FM)/ F1B (FSK)
Number of memory channels		110 + 10 (Quick memory channels)
Antenna impedance	160 m ~ 6 m band	50 Ω (with built-in antenna tuner 16.7 ~ 150 Ω)
Supply Voltage		DC 13.8 V±15%
Grounding method		Negative ground
Current	Transmit (max.)	Less than 20.5 A
	Receive (no signal)	Less than 1.5 A
Usable temperature range		–10°C ~ +50°C (+14°F ~ +122°F)
Frequency stability without SO-3	–10°C ~ 50°C	Within ±5 ppm
Frequency stability with SO-3	–10°C ~ 50°C	Within ±0.5 ppm
Dimensions (W x H x D Projections not included)		270 x 96 x 291 mm/ 10.63 x 3.78 x 11.46 inches
Weight		Approx. 7.4 kg/ 16.3 lbs

Transmitter

Frequency range	160 m band		1.8 ~ 2.0 MHz (K type)/ 1.81 ~ 2.0 MHz (E type)
	80 m band		3.5 ~ 4.0 MHz (K type)/ 3.5 ~ 3.8 MHz (E type)
	60 m band		5.1675 MHz, 5.25 ~ 5.45 MHz (K type)
	40 m band		7.0 ~ 7.3 MHz (K type)/ 7.0 ~ 7.2 MHz (E type)
	30 m band		10.1 ~ 10.15 MHz
	20 m band		14.0 ~ 14.35 MHz
	17 m band		18.068 ~ 18.168 MHz
	15 m band		21.0 ~ 21.45 MHz
	12 m band		24.89 ~ 24.99 MHz
	10 m band		28.0 ~ 29.7 MHz
	6 m band		50.0 ~ 54.0 MHz (K type)/ 50.0 ~ 52.0 MHz (E type)
Output power	SSB/ CW/ FSK/ FM	Max.	100 W
		Min.	5 W
	AM	Max.	25 W
		Min.	5 W
Maximum frequency deviation (FM)	Wide		±5kHz or less
	Narrow		±2.5kHz or less
Modulation	SSB		Balanced
	AM		Low power
	FM		Reactance
Spurious emissions	160 m ~ 10 m band		-50dB or less
	6 m band		-60dB or less
Carrier suppression (SSB)			50dB or more
Unwanted sideband suppression (modulation frequency 1.0 kHz)			50dB or more
Transmit frequency response			–6 dB: 400 ~ 2600 Hz
XIT shift frequency range			±9.999 kHz
Microphone impedance			600 Ω

SPECIFICATIONS

Receiver

Circuit type		RX1 (1.8/ 3.5/ 7/ 14/ 21 MHz band/ IF band width of 2.7 kHz or less (SSB/CW/FSK))	RX2 (Other)
		Double conversion superheterodyne	Triple conversion superheterodyne
Frequency range		0.13 (VFO 30 kHz) ~ 60 MHz	
Intermediate frequency	1st IF	11.374 MHz	73.095 MHz
	2nd IF	24 kHz	10.695 MHz
	3rd IF	–	24 kHz (except FM)/ 455 kHz (FM)
Sensitivity (typ.)	SSB/ CW/ FSK (S/N 10 dB)	0.13 ~ 0.522 MHz: 0.5 μV 0.522 ~ 1.705 MHz: 4 μV 1.705 ~ 24.5 MHz: 0.2 μV 24.5 ~ 30.0 MHz: 0.13 μV 50.0 ~ 54.0 MHz: 0.13 μV	
	AM (S/N 10 dB)	0.13 ~ 0.522 MHz: 6.3 μV 0.522 ~ 1.705 MHz: 31.6 μV 1.705 ~ 24.5 MHz: 2 μV 24.5 ~ 30.0 MHz: 1.3 μV 50.0 ~ 54.0 MHz: 1.3 μV	
	FM (12 dB SINAD)	28.0 ~ 30.0 MHz: 0.22 μV 50.0 ~ 54.0 MHz: 0.22 μV	
Squelch sensitivity	SSB/ CW/ FSK/ AM	0.13 ~ 0.522 MHz: 5.6uV or less 0.522 ~ 1.705 MHz: 18uV or less 1.705 ~ 30.0 MHz: 1.8uV or less 50.0 ~ 54.0 MHz: 1.1uV or less	
	FM	28.0 ~ 30.0 MHz: 0.2uV or less 50.0 ~ 54.0 MHz: 0.2uV or less	
Selectivity	SSB	2.2kHz or more (-6dB), 1.2kHz or less (-60dB)	
	CW/ FSK	500Hz or more (-6dB), 1.2kHz or less (-60dB)	
	AM	6kHz or more (-6dB), 12.0kHz or less (-50dB)	
	FM	12.0kHz or more (-6dB), 25.0kHz or less (-50dB)	
Spurious response	Image Ratio	70dB or more	
	IF Rejection	70dB or more	
Notch filter attenuation	Auto	60dB or more	
	Manual	70dB or more	
Beat cancel attenuation (at 1 kHz)		40dB or more	
Audio output (4 to 8 Ω,10% distortion)		1.5W or more	
Audio output impedance (EXT.SP)		8 Ω	
RIT shift frequency range		±9.999 kHz	

Specifications are subject to change without notice due to advancements in technology.

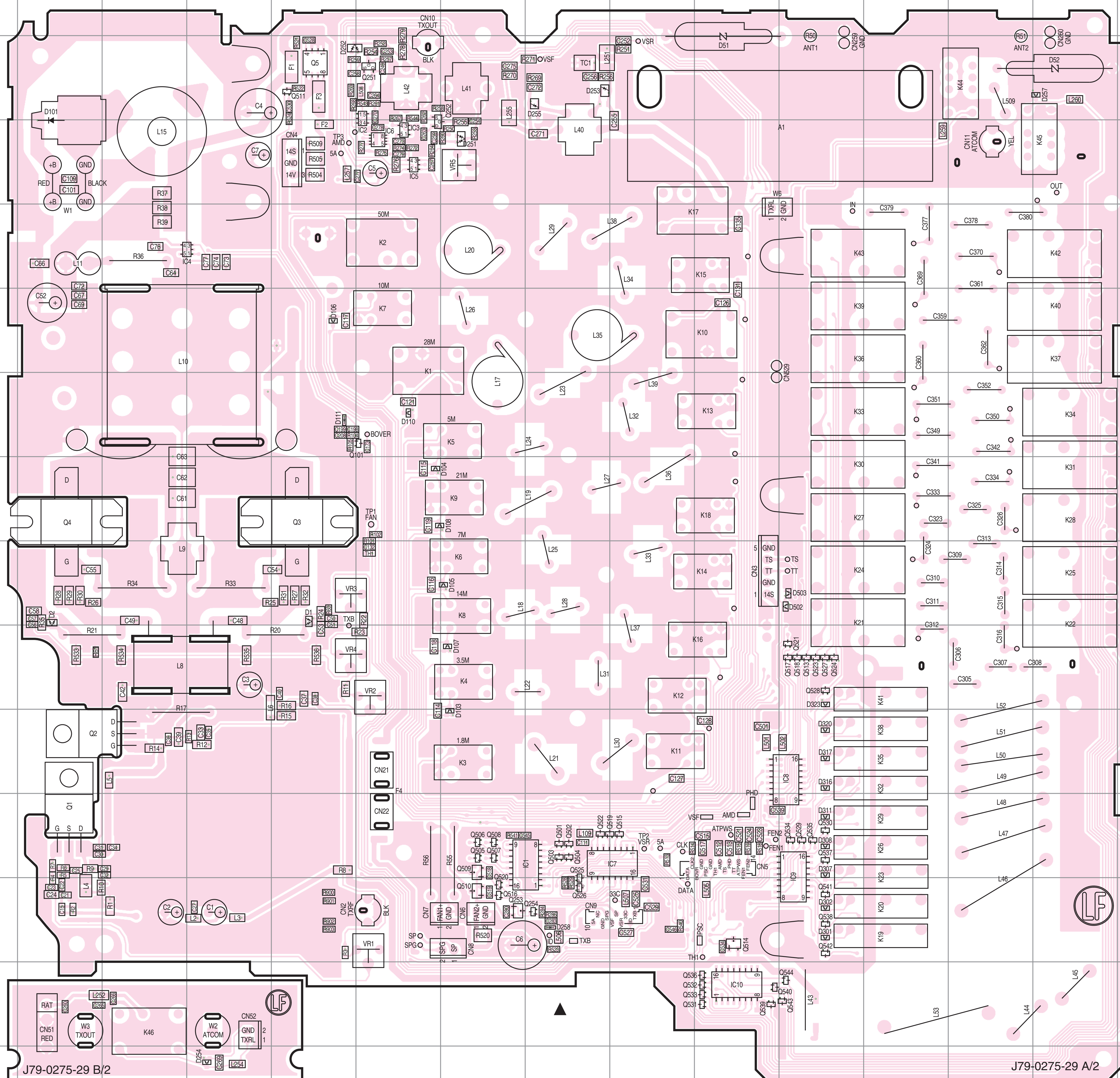
MEMO

TS-590SG

JVCKENWOOD Corporation
Communications Systems BU

TS-590SG PC BOARD

FINAL UNIT
(X45-398X-XX)
0-11: K 2-71: E
Component side view
(J79-0275-29)



Component side
Layer 1
Layer 2
Foil side

PC BOARD TS-590SG

FINAL UNIT
(X45-398X-XX)
0-11: K 2-71: E
Component side view
(J79-0275-29)

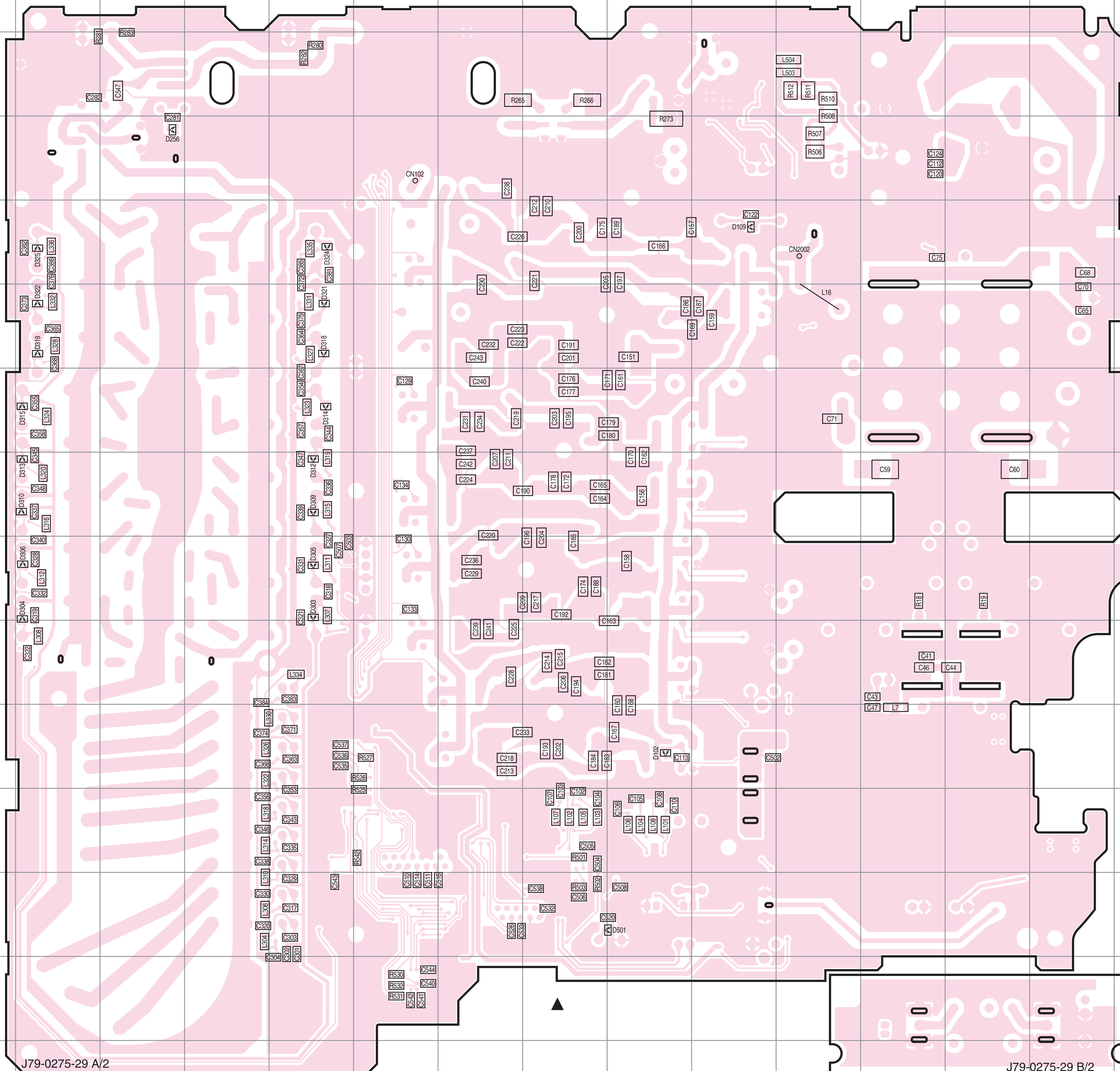
Ref. No.	Address	Ref. No.	Address
IC1	11J	Q529	11M
IC2	2H	Q530	11M
IC3	3H	Q531	13L
IC4	4E	Q532	13L
IC5	3H	Q533	13L
IC6	3H	Q534	11M
IC7	11K	Q535	11M
IC8	10M	Q536	13L
IC9	11M	Q537	11M
IC10	13L	Q538	12M
Q1	11D	Q539	13L
Q2	10D	Q540	13L
Q3	7G	Q541	12M
Q4	7D	Q542	12M
Q5	2G	Q543	13M
Q101	6H	Q544	13M
Q251	2H	D1	8G
Q252	3H	D2	8D
Q253	12I	D51	2L
Q254	12J	D52	2P
Q501	11J	D101	2D
Q502	11J	D103	10I
Q503	11J	D104	7H
Q504	11J	D105	8I
Q505	11I	D106	5G
Q506	11I	D107	9I
Q507	11I	D108	7H
Q508	11I	D110	6H
Q509	11I	D111	6G
Q510	12I	D251	3I
Q511	2G	D252	2G
Q513	9M	D253	2J
Q514	12L	D254	14F
Q515	11K	D255	2J
Q516	12I	D257	2P
Q517	9M	D258	12J
Q518	9M	D301	12M
Q519	11K	D302	12M
Q520	12I	D307	11M
Q521	9M	D308	11M
Q522	11J	D311	11M
Q523	9M	D316	10M
Q524	9M	D317	10M
Q525	12J	D320	10M
Q526	12J	D323	9M
Q527	9M	D502	8M
Q528	9M	D503	8M

TS-590SG PC BOARD

FINAL UNIT
(X45-398X-XX)
0-11: K 2-71: E
Foil side view
(J79-0275-29)

PC BOARD TS-590SG

FINAL UNIT
(X45-398X-XX)
0-11: K 2-71: E
Foil side view
(J79-0275-29)



Ref. No.	Address
D102	10K
D109	4L
D256	3E
D303	8G
D304	8D
D305	8G
D306	8D
D309	7G
D310	7D
D312	7G
D313	7D
D314	6G
D315	6D
D318	5G
D319	5D
D321	5G
D322	5D
D324	4G
D325	4D
D501	12K

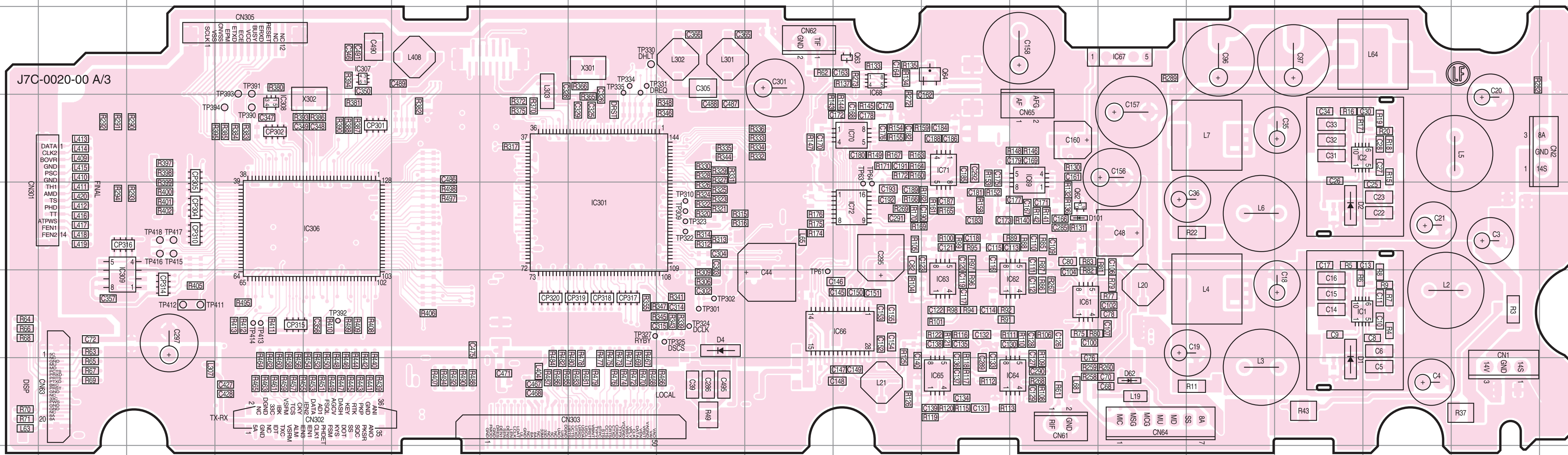
Component side
Layer 1
Layer 2
Foil side

TS-590SG PC BOARD

PC BOARD TS-590SG

CONTROL UNIT (XC1-021X-XX) (A/3) 0-11: K 2-71: E
Component side view (J7C-0020-00 A/3)

CONTROL UNIT (XC1-021X-XX) (A/3) 0-11: K 2-71: E
Component side view (J7C-0020-00 A/3)



Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC1	6P	IC69	4M	Q63	3K
IC2	4P	IC70	4K	Q64	3L
IC61	6M	IC71	4L	D1	7P
IC62	6M	IC72	5K	D2	5P
IC63	6L	IC301	5H	D4	6I
IC64	7M	IC306	5E	D62	7N
IC65	7L	IC307	3E	D101	5M
IC66	6K	IC308	4D		
IC67	3N	IC309	6B		
IC68	3K	Q62	5M		

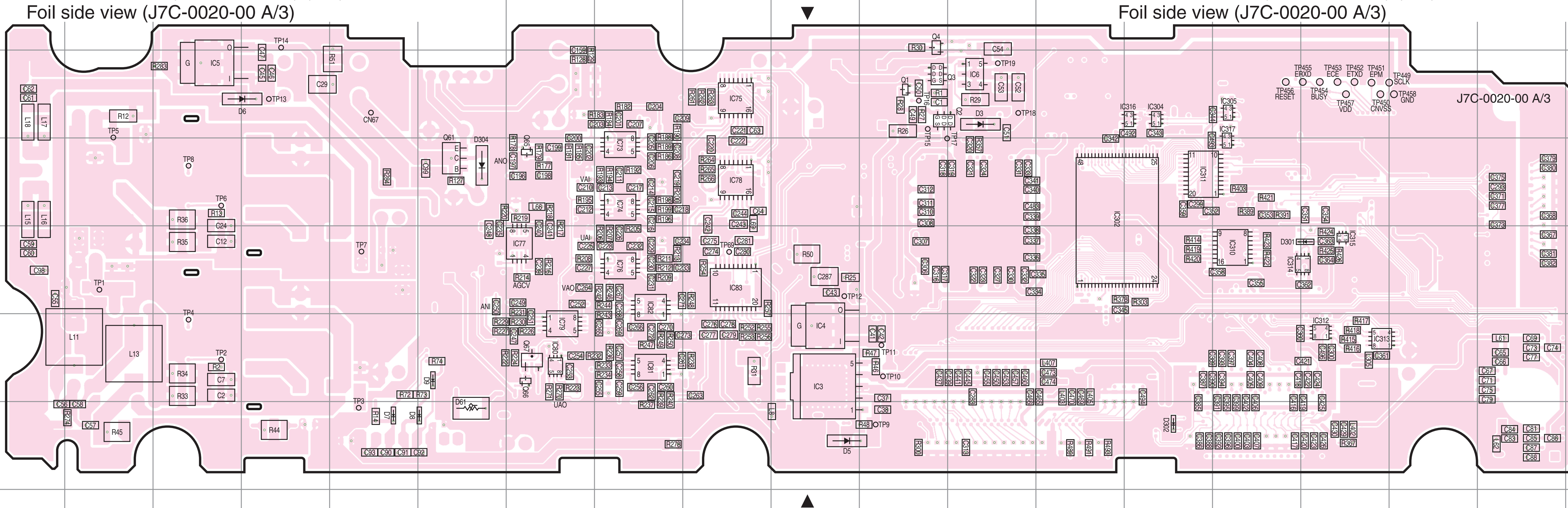
Component side
Layer 1
Layer 2
Layer 3
Layer 4
Foil side

TS-590SG PC BOARD

PC BOARD TS-590SG

CONTROL UNIT (XC1-021X-XX) (A/3) 0-11: K 2-71: E
Foil side view (J7C-0020-00 A/3)

CONTROL UNIT (XC1-021X-XX) (A/3) 0-11: K 2-71: E
Foil side view (J7C-0020-00 A/3)



Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC3	7J	IC80	6G	IC314	5P	Q67	6G
IC4	6J	IC81	6H	IC315	5P	D3	4L
IC5	3D	IC82	6H	IC316	4N	D5	7K
IC6	3L	IC83	5I	IC317	4O	D6	3D
IC73	4H	IC302	5N	Q1	3K	D7	7F
IC74	5H	IC304	4N	Q2	4L	D8	7F
IC75	3I	IC305	3O	Q3	3L	D9	7F
IC76	5H	IC310	5O	Q4	3L	D61	7F
IC77	5G	IC311	4O	Q61	4F	D301	5P
IC78	4I	IC312	6P	Q65	4G	D302	7N
IC79	6G	IC313	6Q	Q66	7G	D304	4F

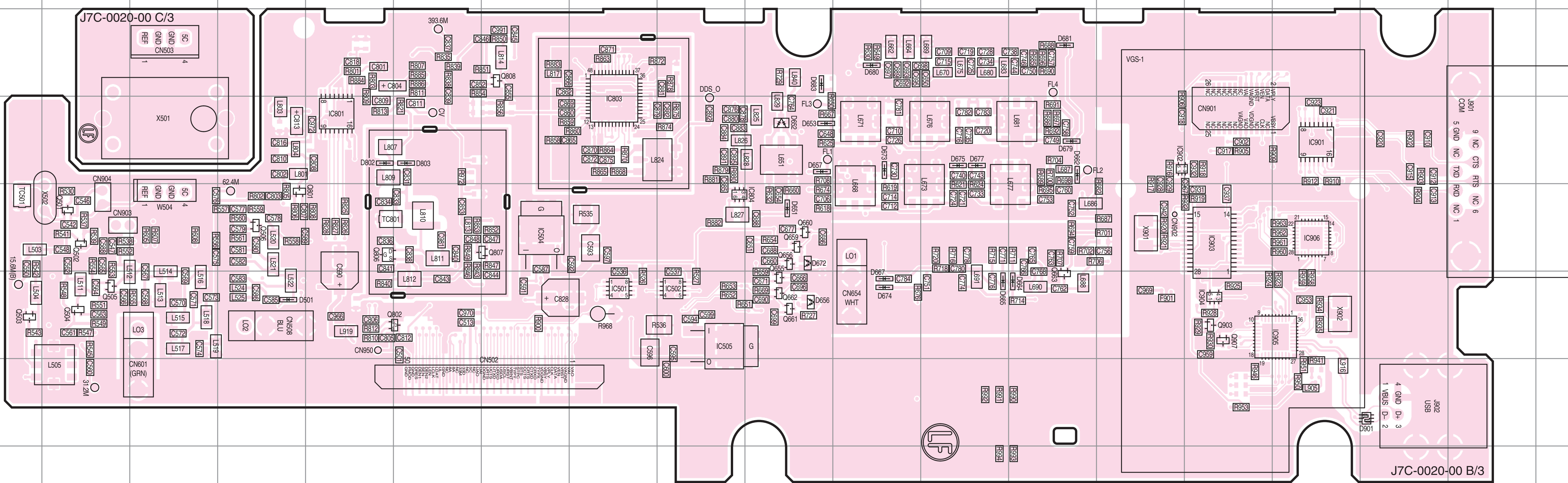
Component side
Layer 1
Layer 2
Layer 3
Layer 4
Foil side

TS-590SG PC BOARD

PC BOARD TS-590SG

CONTROL UNIT (XC1-021X-XX) (B,C/3) 0-11: K 2-71: E
Component side view (J7C-0020-00 B,C/3)

CONTROL UNIT (XC1-021X-XX) (B,C/3) 0-11: K 2-71: E
Component side view (J7C-0020-00 B,C/3)



Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC501	6H	IC905	6P	Q660	5J	D652	4J	D677	4L
IC502	6I	IC906	5P	Q661	6J	D653	4J	D679	4M
IC504	5G	Q501	5B	Q662	6J	D656	5J	D680	3K
IC505	6I	Q502	5B	Q663	6M	D657	4J	D681	3M
IC801	4E	Q503	6A	Q801	5D	D662	4M	D683	3J
IC803	4H	Q504	6B	Q802	6F	D664	6M	D801	6F
IC804	5I	Q505	6B	Q806	5E	D665	6L	D802	4E
IC901	4P	Q506	5D	Q807	5G	D667	6K	D803	4F
IC902	4N	Q655	6J	Q808	3G	D672	5J	D901	7Q
IC903	5O	Q656	5J	D501	6D	D673	4K		
IC904	6O	Q659	5J	D651	5J	D675	4L		

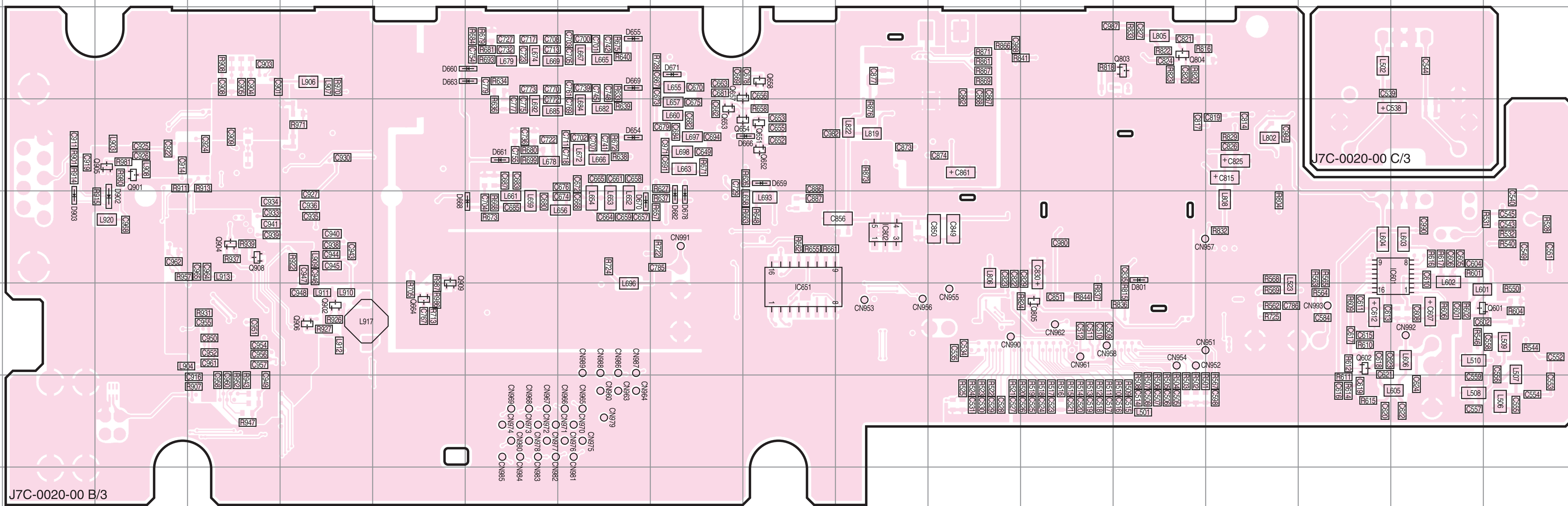
Component side
Layer 1
Layer 2
Layer 3
Layer 4
Foil side

TS-590SG PC BOARD

PC BOARD TS-590SG

CONTROL UNIT (XC1-021X-XX) (B,C/3) 0-11: K 2-71: E
Foil side view (J7C-0020-00 B,C/3)

CONTROL UNIT (XC1-0210-00X-XX) (B,C/3) 0-11: K 2-71: E
Foil side view (J7C-0020-00 B,C/3)



Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC601	5Q	Q664	6F	D661	4G
IC651	6J	Q803	3M	D663	3G
IC802	5K	Q804	3N	D666	4J
Q601	6Q	Q805	6M	D668	5G
Q602	6P	Q901	4C	D669	3H
Q651	4J	Q902	6E	D670	5H
Q652	4J	Q904	5D	D671	3I
Q653	4I	D654	4H	D678	5I
Q654	4I	D655	3H	D682	5I
Q657	3I	D659	4J	D902	5C
Q658	3J	D660	3G	D903	5B

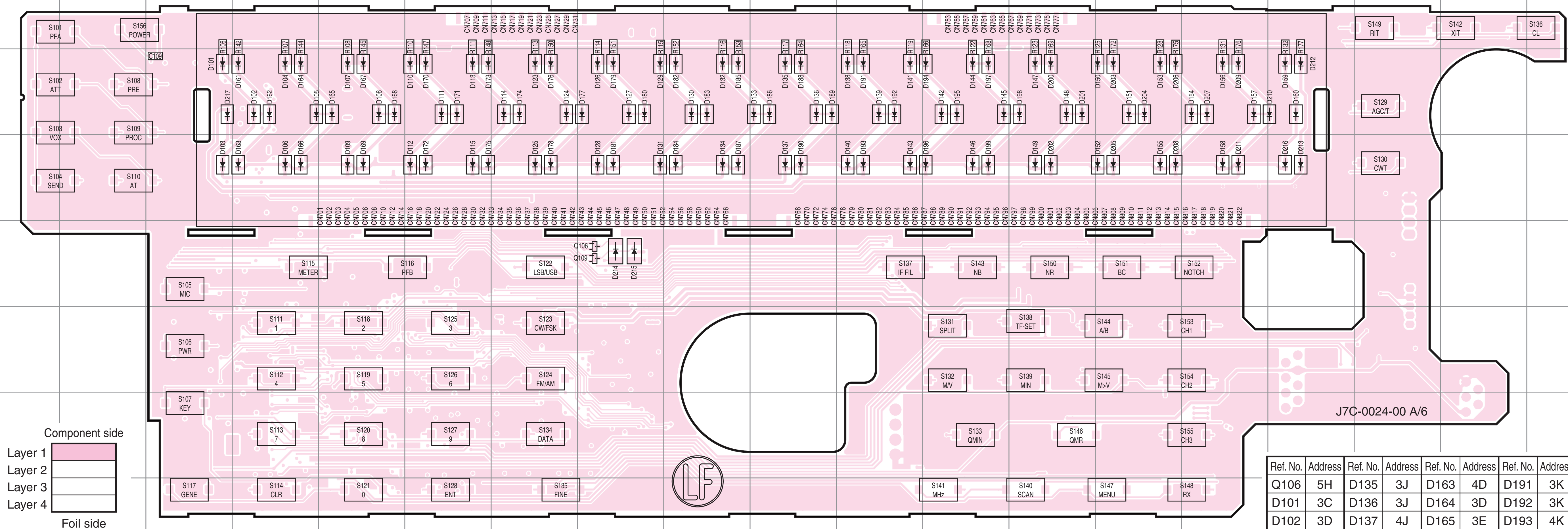
Component side

Layer 1
Layer 2
Layer 3
Layer 4

Foil side

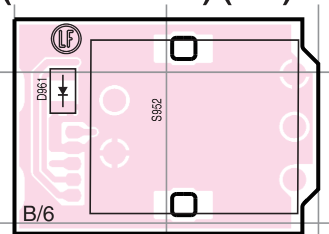
DISPLAY UNIT (XC1-0220-00) (A/6): DISPLAY
Component side view (J7C-0024-00 A/6)

DISPLAY UNIT (XC1-0220-00) (A/6): DISPLAY
Component side view (J7C-0024-00 A/6)

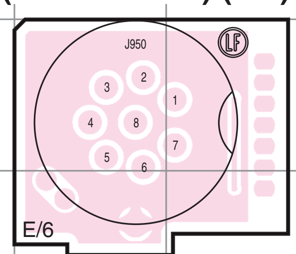


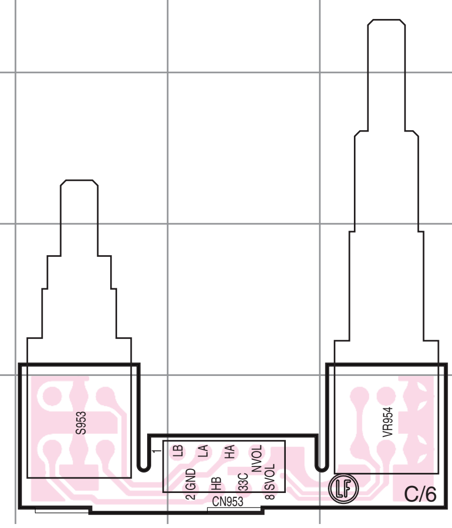
Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
Q106	5H	D135	3J	D163	4D	D191	3K
D101	3C	D136	3J	D164	3D	D192	3K
D102	3D	D137	4J	D165	3E	D193	4K
D103	4C	D138	3K	D166	4D	D194	3L
D104	3D	D139	3K	D167	3E	D195	3L
D105	3D	D140	4K	D168	3E	D196	4L
D106	4D	D141	3K	D169	4E	D197	3L
D107	3E	D142	3L	D170	3F	D198	3M
D108	3E	D143	4K	D171	3F	D199	4L
D109	4E	D144	3L	D172	4F	D200	3M
D110	3F	D145	3L	D173	3F	D201	3M
D111	3F	D146	4L	D174	3G	D202	4M
D112	4F	D147	3M	D175	4F	D203	3N
D113	3F	D148	3M	D176	3G	D204	3N
D114	3G	D149	4M	D177	3H	D205	4N
D115	4F	D150	3N	D178	4G	D206	3N
D123	3G	D151	3N	D179	3H	D207	3O
D124	3G	D152	4N	D180	3H	D208	4N
D125	4G	D153	3N	D181	4H	D209	3O
D126	3H	D154	3O	D182	3I	D210	3P
D127	3H	D155	4N	D183	3I	D211	4O
D128	4H	D156	3O	D184	4I	D212	3P
D129	3H	D157	3O	D185	3I	D213	4P
D130	3I	D158	4O	D186	3J	D214	5H
D131	4H	D159	3P	D187	4I	D215	5H
D132	3I	D160	3P	D188	3J	D216	4P
D133	3J	D161	3D	D189	3J	D217	3C
D134	4I	D162	3D	D190	4J	D961	10B

DISPLAY UNIT
(XC1-0220-00) (B/6): MULCH/CH



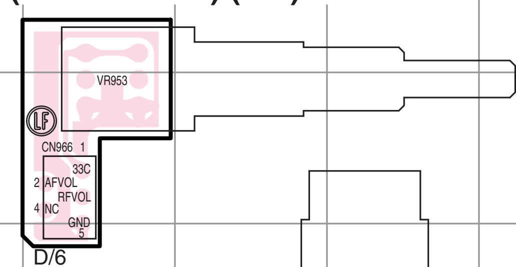
DISPLAY UNIT
(XC1-0220-00) (E/6): MIC

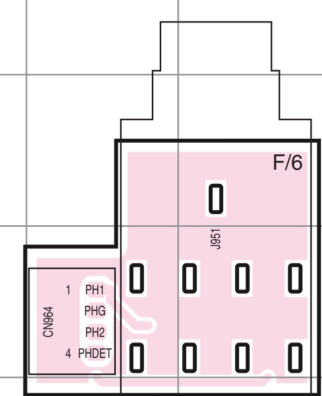




DISPLAY UNIT
(XC1-0220-00) (C/6)
: HI/LO (SHIFT/WIDTH), NOTCH/SQL

DISPLAY UNIT
(XC1-0220-00) (D/6): AF/RF





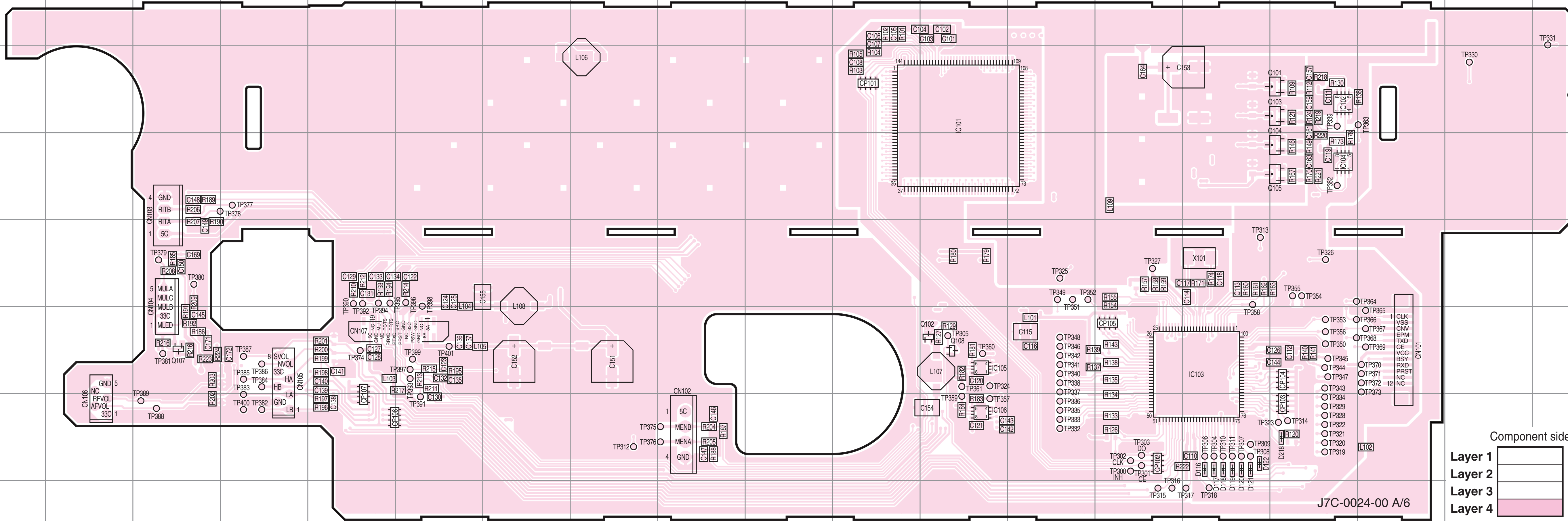
DISPLAY UNIT
(XC1-0220-00) (F/6): PHONE

TS-590SG PC BOARD

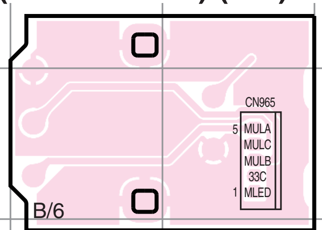
PC BOARD TS-590SG

DISPLAY UNIT (XC-0220-00) (A/6): DISPLAY
Foil side view (J7C-0024-00 A/6)

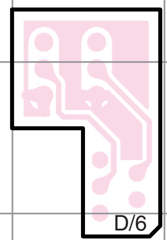
DISPLAY UNIT (XC1-0220-00) (A/6): DISPLAY
Foil side view (J7C-0024-00 A/6)



DISPLAY UNIT
(XC1-0220-00) (B/6): MULCH/CH

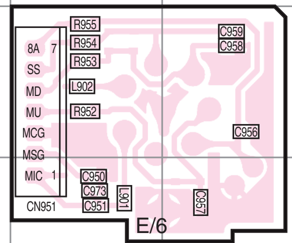


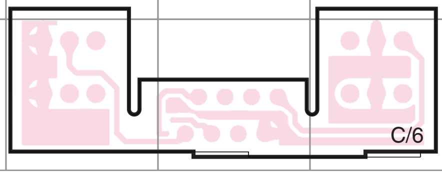
DISPLAY UNIT
(XC1-0220-00) (D/6): AF/RF



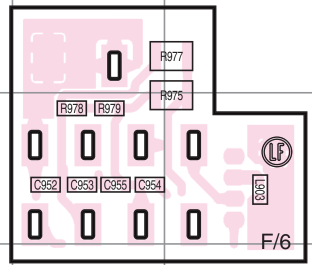
Ref. No.	Address	Ref. No.	Address
IC101	3L	Q105	4P
IC102	3P	Q107	6C
IC103	6O	D116	7O
IC104	4P	D117	7O
IC105	6L	D118	7O
IC106	7L	D119	7O
Q101	3P	D120	7O
Q102	6L	D121	7O
Q103	3P	D122	7O
Q104	4P	D218	7P

DISPLAY UNIT
(XC1-0220-00) (E/6): MIC





DISPLAY UNIT
(XC1-0220-00) (C/6)
: HI/LO (SHIFT/WIDTH), NOTCH/SQL



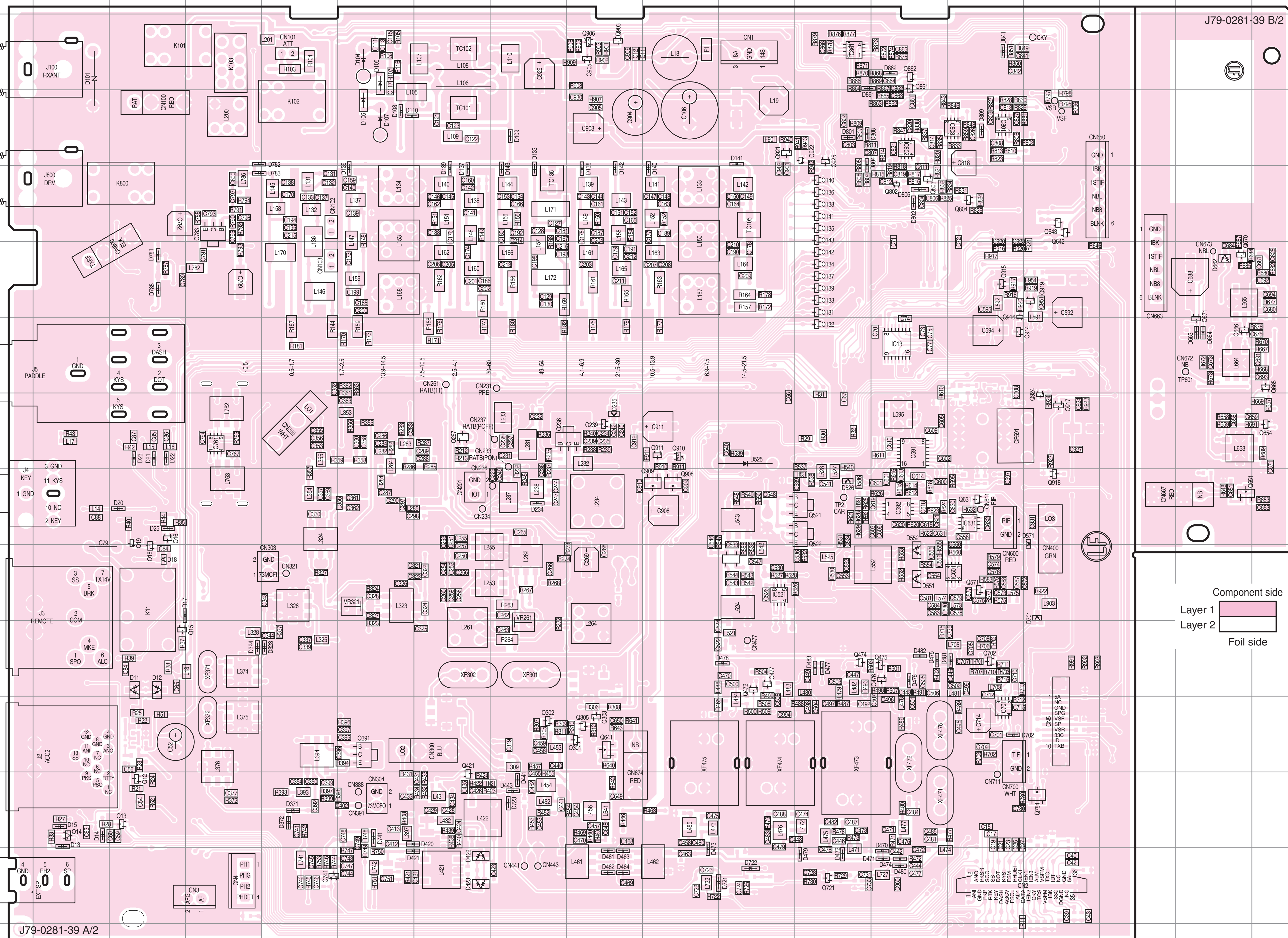
DISPLAY UNIT
(XC1-0220-00) (F/6): PHONE

TS-590SG PC BOARD

TX-RX UNIT (XC1-024X-XX)
0-11: K 2-71: E
Component side view (J79-0281-39)

TX-RX UNIT (XC1-024X-XX)
0-11: K 2-71: E
Component side view (J79-0281-39)

PC BOARD TS-590SG



Component side
Layer 1
Layer 2
Foil side

Ref. No.	Address	Ref. No.	Address
IC13	6M	D12	10C
IC521	10L	D13	12B
IC591	7M	D14	12C
IC592	8M	D15	12B
IC631	8N	D17	9D
IC701	11N	D18	9C
IC761	8D	D20	8C
IC801	3O	D21	7C
IC802	4O	D22	7D
IC803	3N	D23	7C
IC861	2L	D101	3C
Q12	12C	D102	3D
Q13	12C	D103	3D
Q14	12B	D104	4F
Q15	10D	D105	2E
Q16	8C	D106	3F
Q131	5L	D107	3F
Q132	6L	D108	3F
Q133	5L	D109	3H
Q134	5L	D110	3F
Q135	4L	D132	3F
Q136	4L	D134	3K
Q137	5L	D136	3F
Q138	4L	D137	3G
Q139	5L	D138	3I
Q140	4L	D139	3G
Q141	4L	D140	3J
Q142	5L	D141	3K
Q143	4L	D142	3J
Q236	7I	D143	3H
Q239	7I	D234	8H
Q267	7G	D235	7I
Q301	11G	D323	9D
Q391	11F	D371	12E
Q421	12G	D421	12G
Q471	10N	D422	13H
Q472	10K	D423	13H
Q473	10M	D441	11H
Q474	10M	D443	12H
Q475	10M	D461	13I
Q476	10M	D462	13I
Q477	10K	D463	13J
Q521	8L	D464	13J
Q522	8L	D471	13M
Q541	8K	D472	13L
Q551	9N	D473	12K
Q571	9N	D474	13M
Q591	6O	D475	10N
Q631	8N	D476	10M
Q641	11I	D477	10L
Q651	8R	D478	10K
Q654	7R	D521	9K
Q660	3R	D522	9K
Q661	3Q	D523	9K
Q662	3Q	D524	9K
Q665	6R	D525	7K
Q666	6R	D526	8L
Q670	5R	D551	9M
Q671	6Q	D552	9M
Q702	10N	D571	8O
Q721	13L	D660	4R
Q741	13F	D661	4R
Q781	4C	D662	5Q
Q782	4B	D663	6Q
Q783	4D	D701	9O
Q784	12O	D702	11O
Q801	4O	D721	13K
Q802	4M	D722	13K
Q803	3M	D723	12H
Q804	3M	D741	12F
Q805	3M	D762	7E
Q806	3N	D781	4C
Q807	3N	D782	3D
Q841	2N	D783	3D
Q842	2N	D799	4C
Q861	2M	D800	4C
Q862	2M	D801	3L
Q903	2I	D802	4M
Q905	2I	D803	2O
Q906	2I	D806	4M
Q908	8J	D808	3M
Q909	8J	D809	3O
Q910	7J	D810	4M
Q911	7J	D811	3N
Q915	5N	D812	3N
Q916	5O	D813	3N
Q917	7O	D841	2N
Q918	8O	D842	2N
Q920	3K	D843	2N
Q925	3L	D861	2M
D11	10C	D862	2M

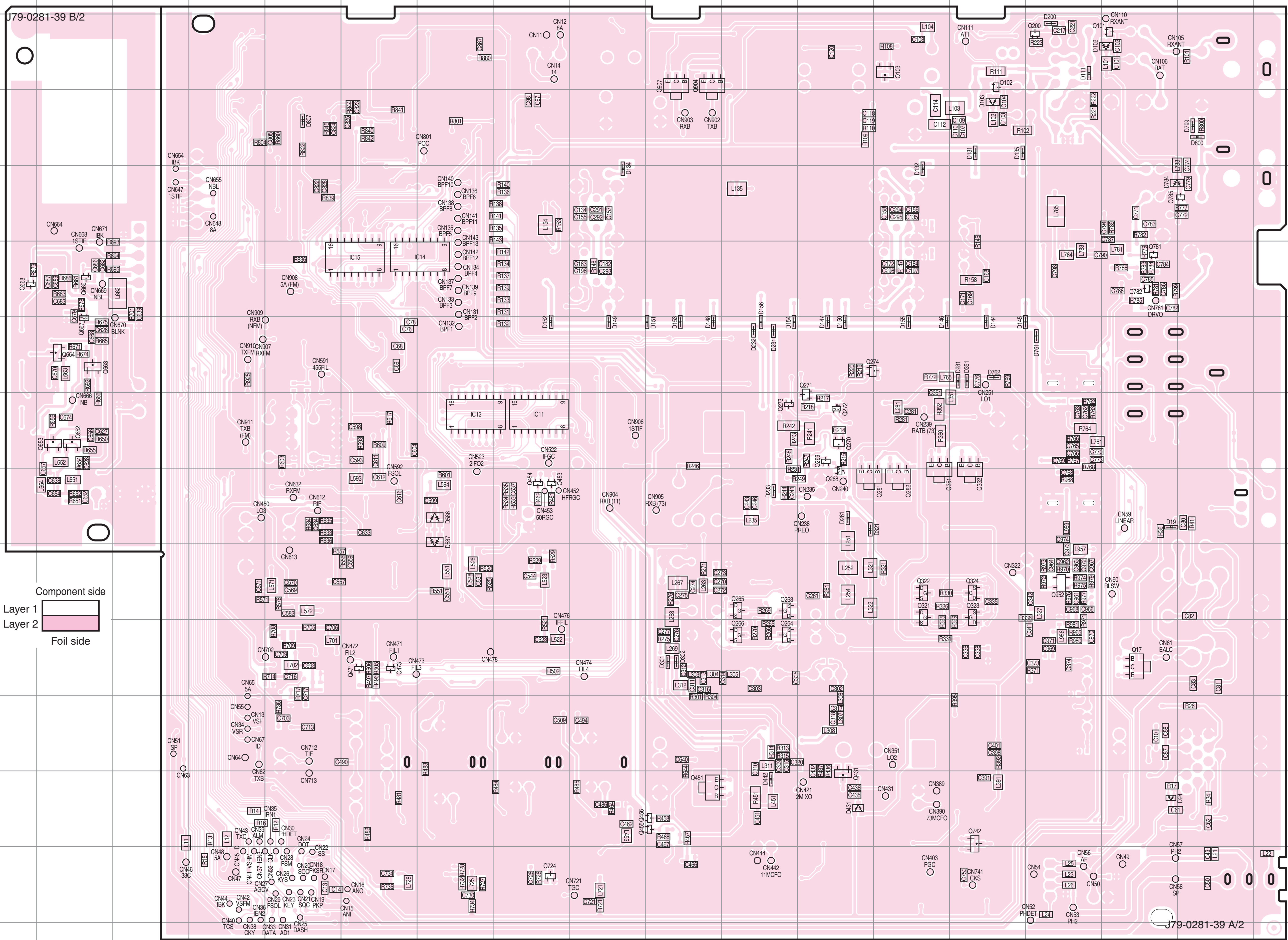
TS-590SG PC BOARD

TX-RX UNIT (XC1-024X-XX)
0-11: K 2-71: E
Foil side view (J79-0281-39)

TX-RX UNIT (XC1-024X-XX)
0-11: K 2-71: E
Foil side view (J79-0281-39)

PC BOARD TS-590SG

Ref. No.	Address
IC11	7I
IC12	7H
IC14	5G
IC15	5F
Q17	10Q
Q101	2P
Q102	2O
Q103	2N
Q263	9L
Q264	10L
Q265	9K
Q266	10K
Q268	8M
Q269	7M
Q270	7M
Q271	7L
Q272	7M
Q273	7L
Q274	6M
Q281	8M
Q282	8M
Q321	9N
Q322	9N
Q323	9N
Q324	9N
Q351	8N
Q352	8N
Q431	12M
Q451	12K
Q453	8I
Q454	8I
Q455	12J
Q456	12J
Q652	7C
Q653	7B
Q663	6C
Q664	6B
Q667	6C
Q668	5B
Q669	5C
Q742	12N
Q904	2K
Q907	2K
D24	12Q
D131	3O
D133	3L
D135	3O
D144	6O
D145	6O
D146	6N
D147	6L
D148	6K
D149	6J
D150	6M
D151	6J
D152	6I
D153	6J
D154	6L
D155	6N
D156	6L
D231	6L
D232	6L
D233	8L
D261	8M
D281	6O
D321	8M
D351	7O
D431	12M
D586	8G
D587	8G
D761	6O
D807	3E

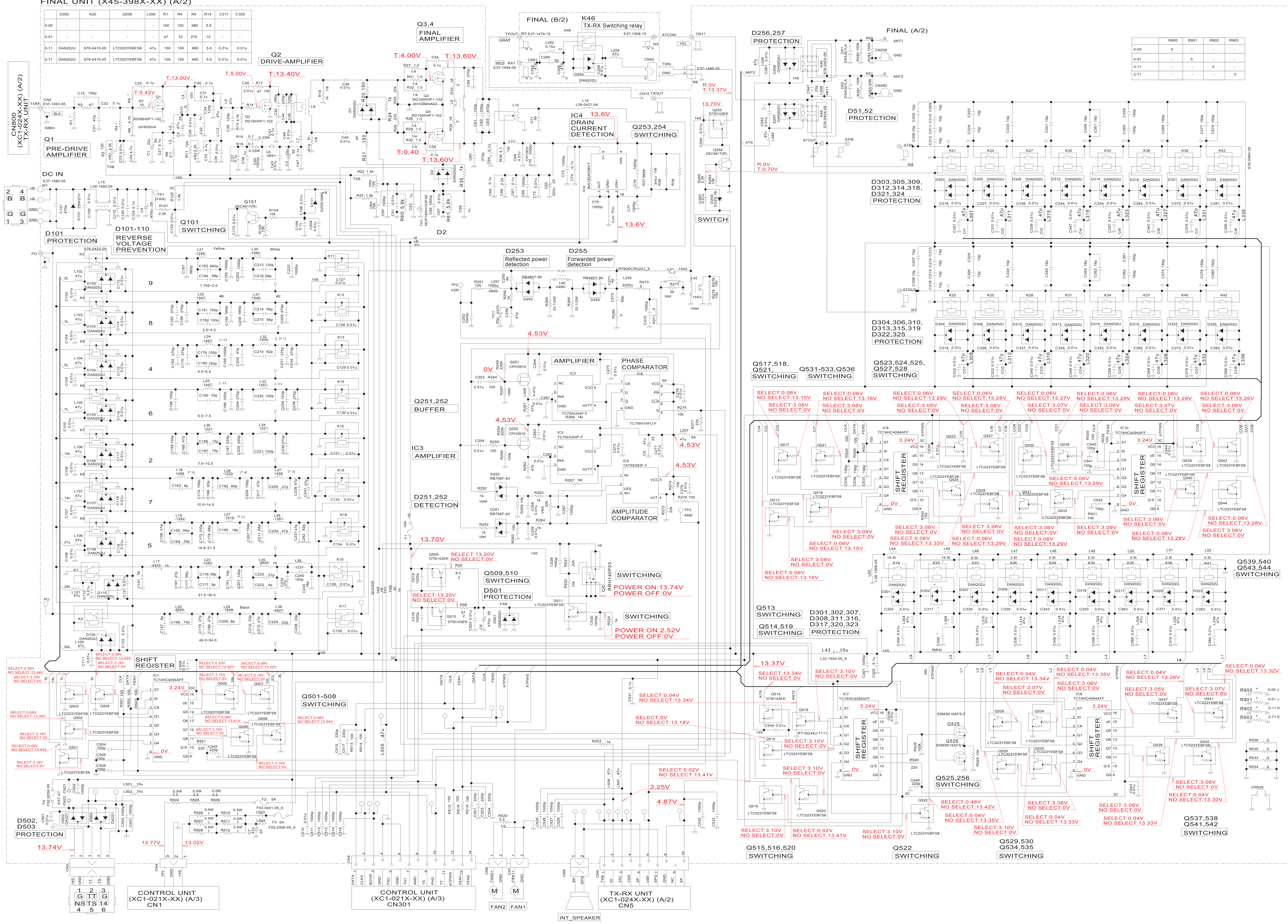


Component side
Layer 1
Layer 2
Foil side

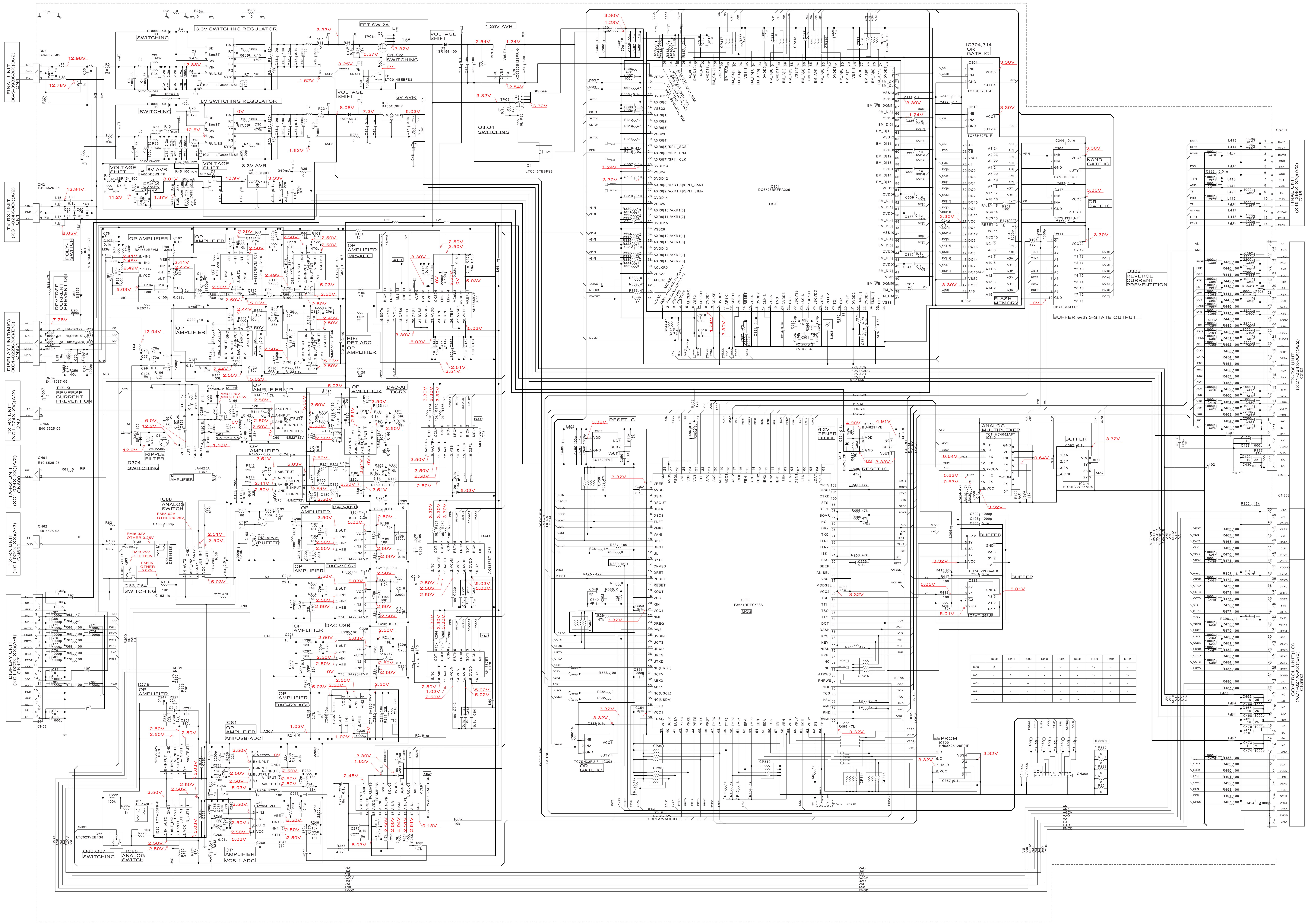
FINAL UNIT (X45-398X-XX) (A/2)

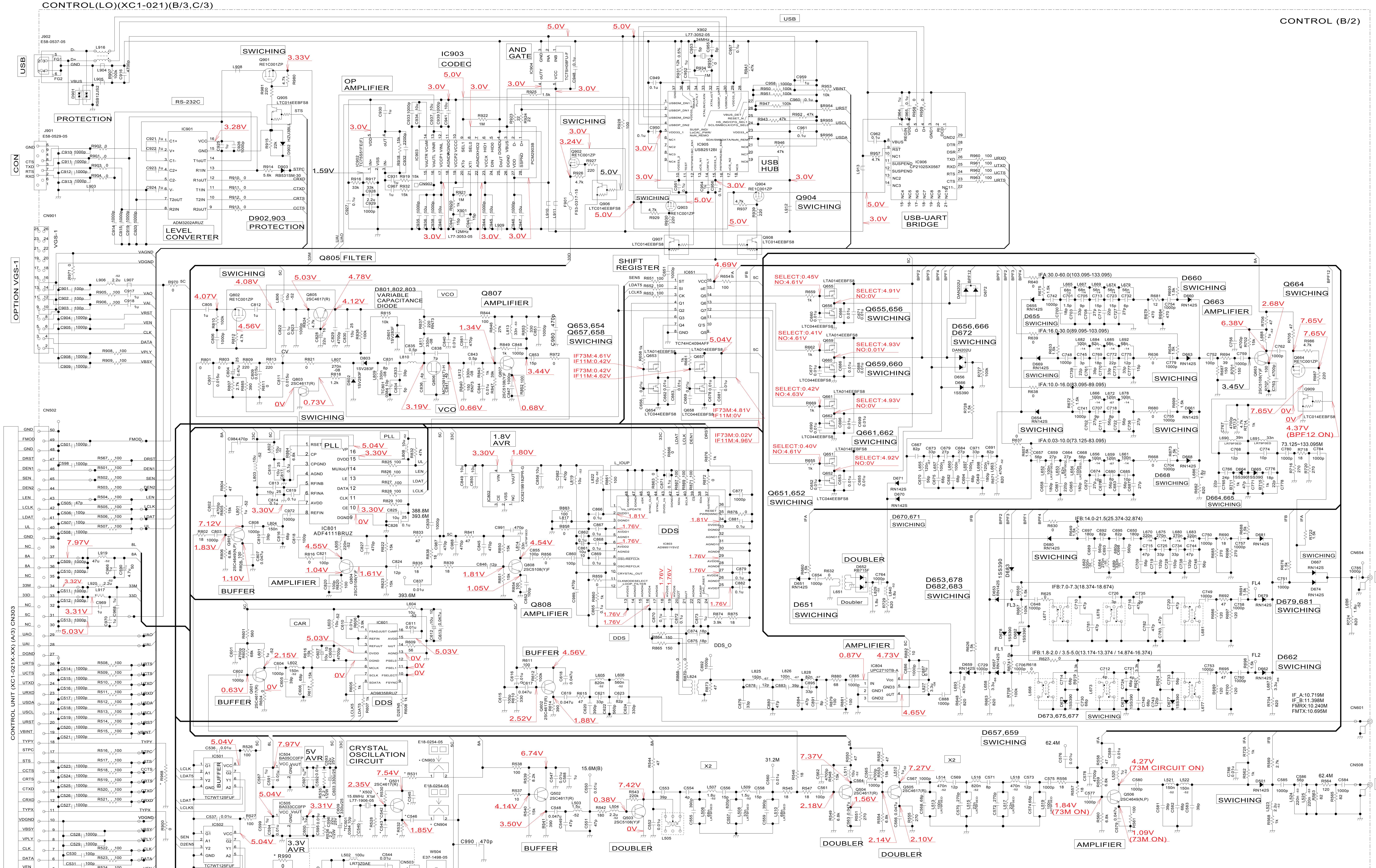
	D302	K20	Q538	L306	R1	R4	R5	R14	C317	C320
0-00	-	-	-	-	100	100	680	5.6	-	-
0-01	-	-	-	-	47	33	270	10	-	-
0-11	DAN202U	S76-0415-05	LTC023YEBFS8	47u	100	100	680	5.6	0.01u	0.01u
2-71	DAN202U	S76-0415-05	LTC023YEBFS8	47u	100	100	680	5.6	0.01u	0.01u

	R900	R901	R902	R903
0-00	0	-	-	-
0-01	-	0	-	-
0-11	-	-	0	-
2-71	-	-	-	0



(SCHEMATIC DIAGRAM XC1-021 A/3)

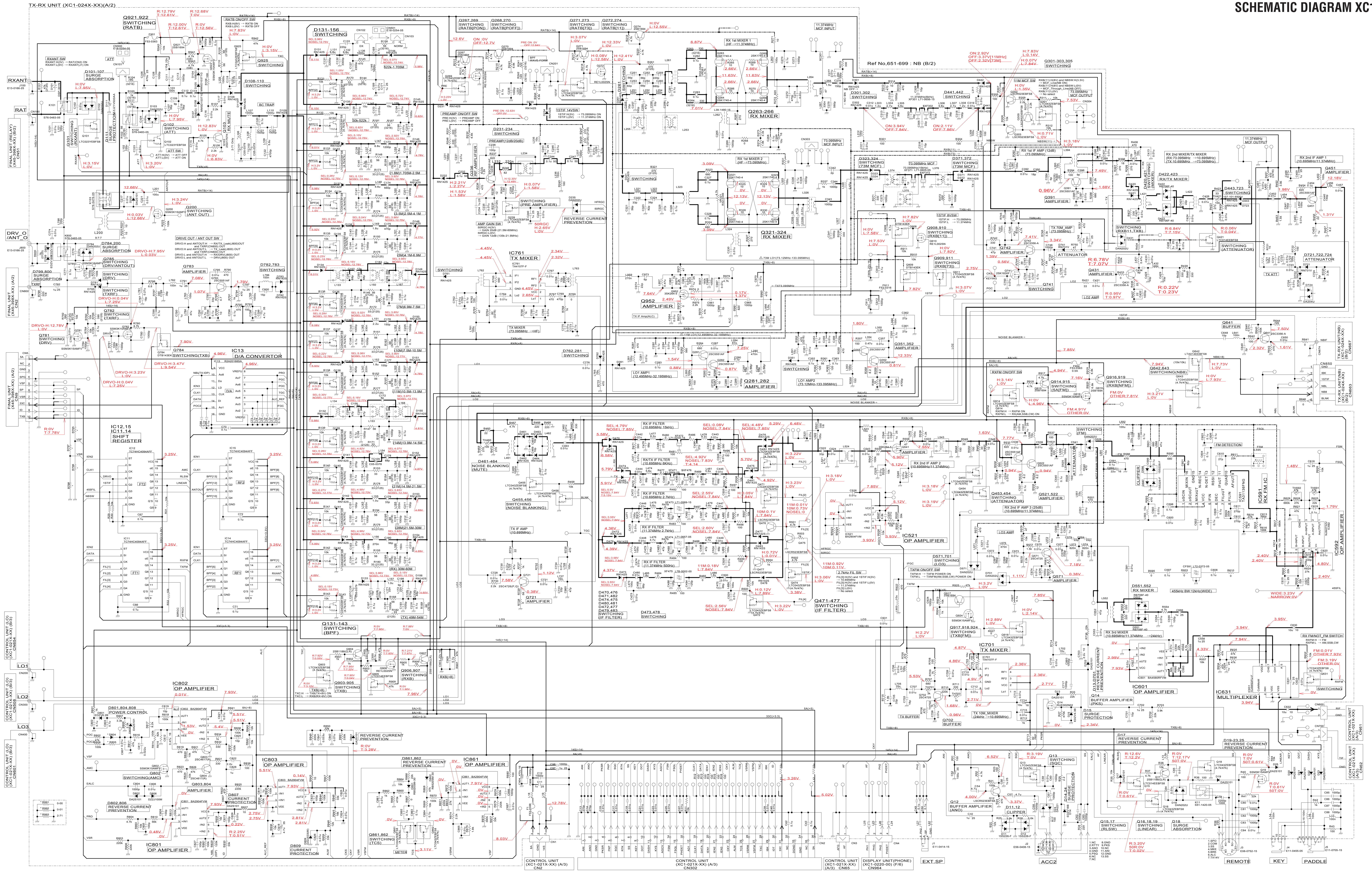




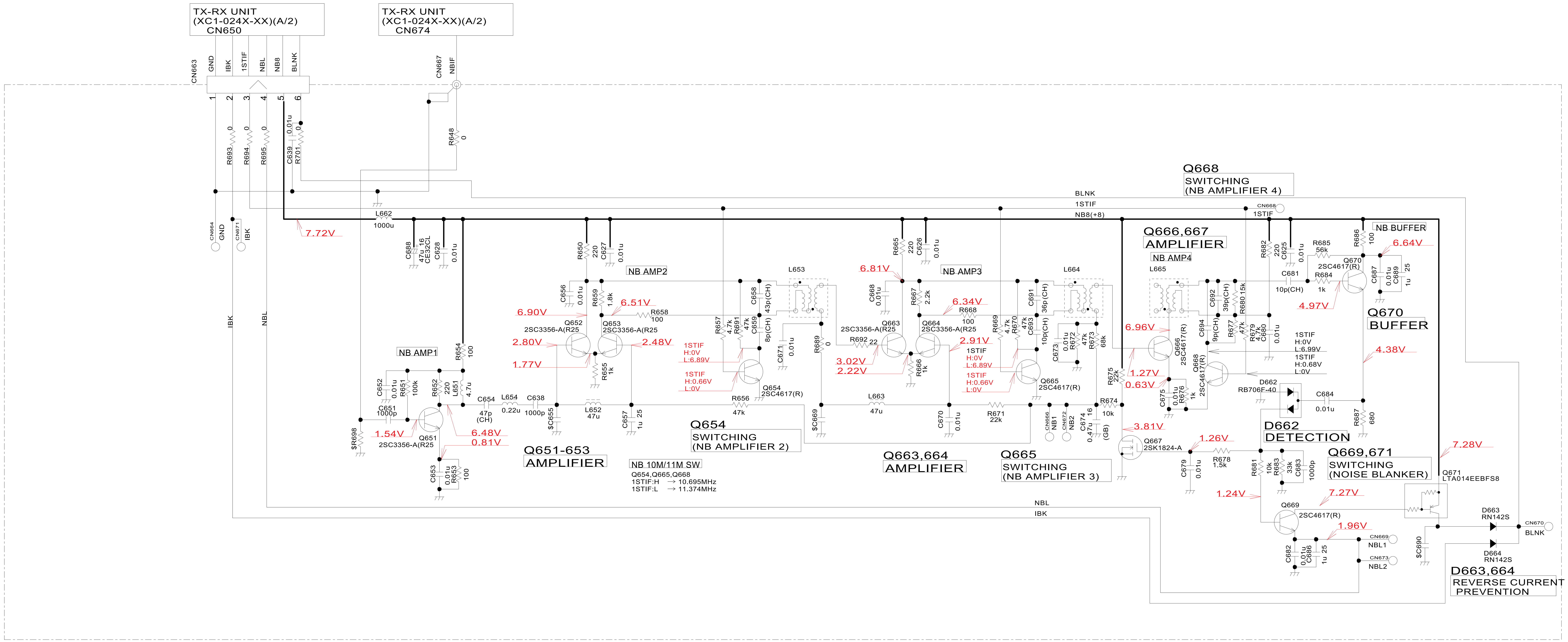
	CN903	CN904	Q501	TC501	X501	X502	R528	R530	R531	R532	R968	R990	R991	R992	R993	R994	C540	C542	C543	C545	C546
0-00	-	-	-	-	L77-1820-45	-	-	-	-	-	0	0	-	-	-	-	-	-	-	-	-
0-01	-	-	-	-	L77-1820-45	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-
0-02	-	-	-	-	L77-1820-45	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-
0-11	E40-5487-05	E40-5487-05	2SC4617(R)	C05-0384-05	-	L77-1906-05	10k	22k	100	2.2k	-	-	-	-	0	-	8p	150p	39p	0.01u	5p
2-71	E40-5487-05	E40-5487-05	2SC4617(R)	C05-0384-05	-	L77-1906-05	10k	22k	100	2.2k	0	-	-	-	-	0	8p	150p	39p	0.01u	5p

DISPLAY UNIT (XC1-0220-00) (A/6)

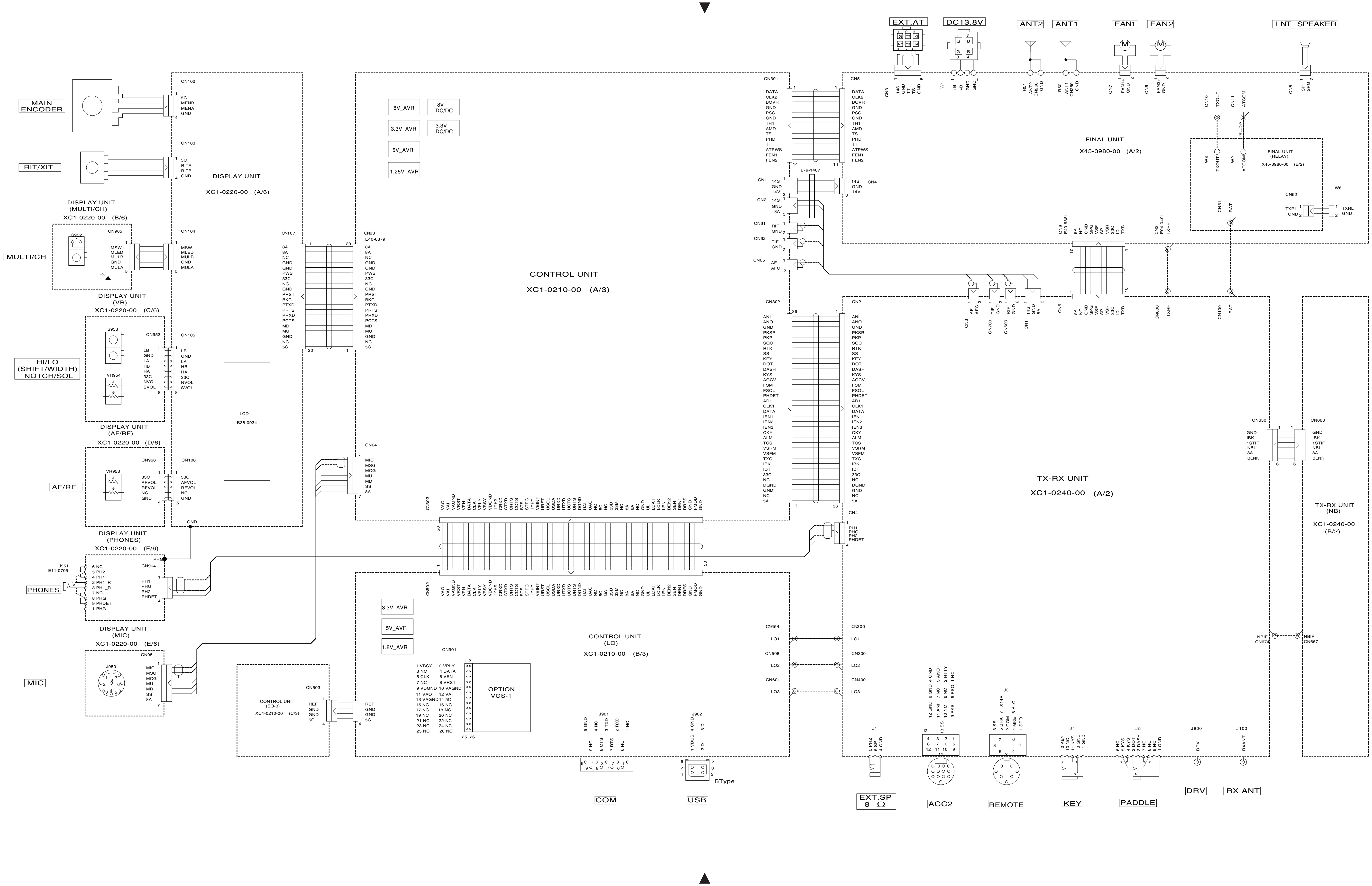
SCHEMATIC DIAGRAM XC1-024 A/2)



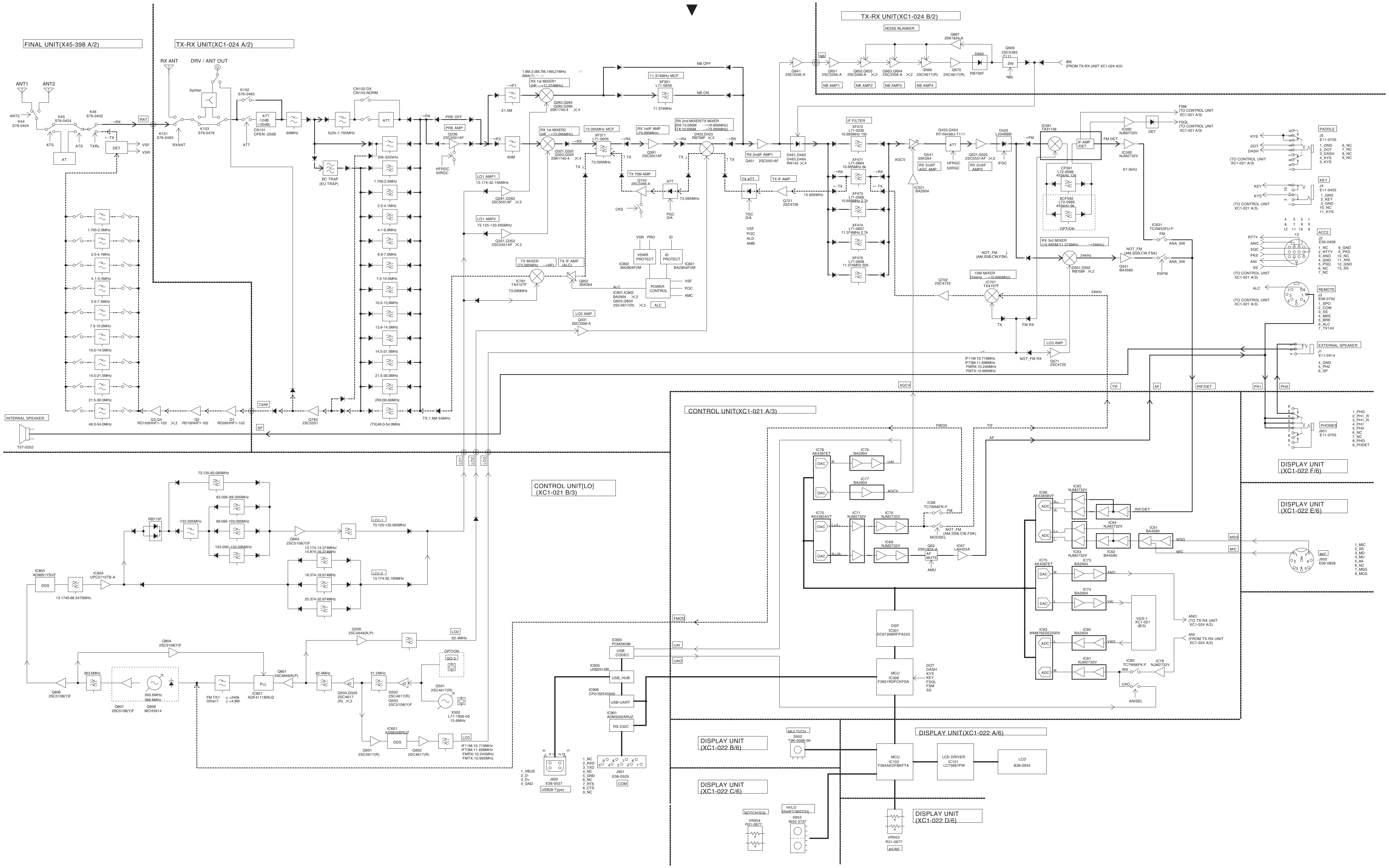
X57-785X-XX(A/2)		D804	TC101	TC102	L106	L108	R795	R796	R797	R798	R805	R991	R992	R993
J	0-00	-	-	-	-	-	120k	180k	56k	150k	0	0	-	-
K	0-01	DA2S101	-	-	-	-	0	-	0	-	-	-	0	-
E	2-71	-	C05-0379-05	C05-0379-05	6.8u	6.8u	120k	180k	56k	150k	0	-	-	0



TX-RX UNIT (XC1-024X-XX)(B/2)

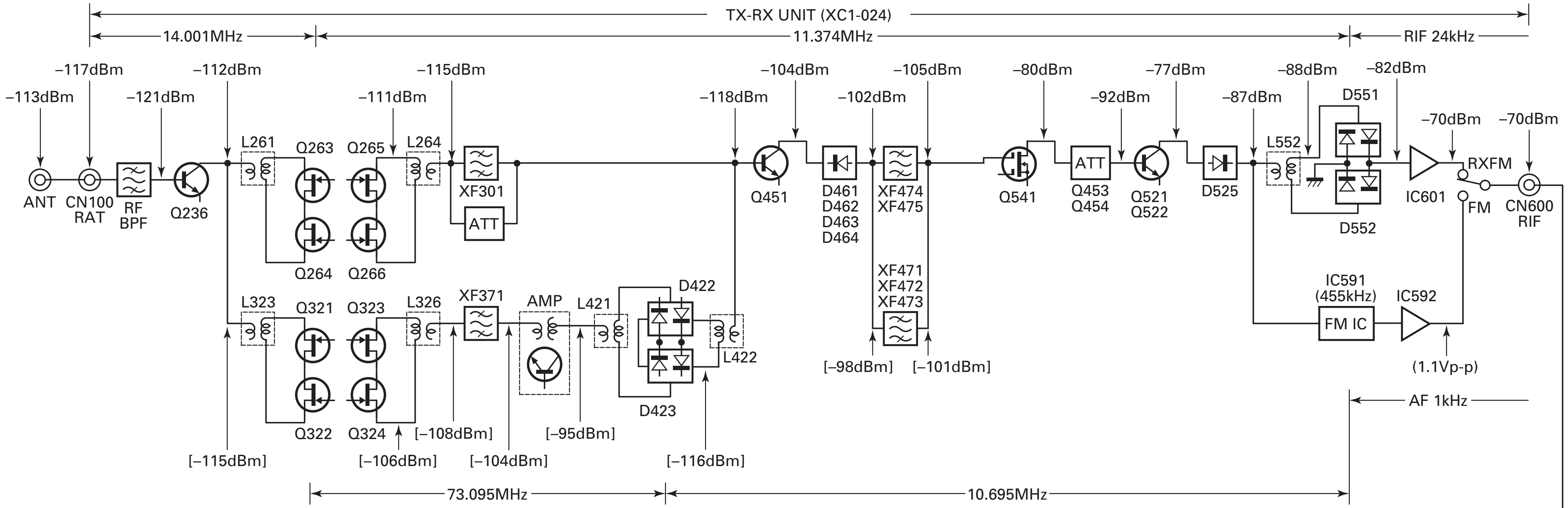


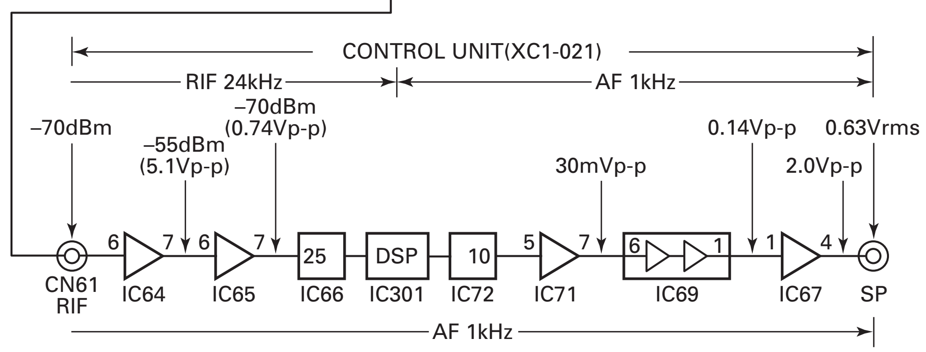
EXT.AT
DC13.8V
ANT2
ANT1
FAN1
FAN2
INT_SPEAKER
MAIN ENCODER
RIT/XIT
DISPLAY UNIT
XC1-0220-00 (A/6)
DISPLAY UNIT (MULTI/CH)
XC1-0220-00 (B/6)
MULTI/CH
DISPLAY UNIT (VR)
XC1-0220-00 (C/6)
HI/LO (SHIFT/WIDTH) NOTCH/SQL
DISPLAY UNIT (AF/RF)
XC1-0220-00 (D/6)
AF/RF
DISPLAY UNIT (PHONES)
XC1-0220-00 (F/6)
PHONES
DISPLAY UNIT (MIC)
XC1-0220-00 (E/6)
MIC
LCD
B38-0934
CONTROL UNIT
XC1-0210-00 (A/3)
8V_AVR
8V DC/DC
3.3V_AVR
3.3V DC/DC
5V_AVR
1.25V_AVR
FINAL UNIT
X45-3980-00 (A/2)
FINAL UNIT (RELAY)
X45-3980-00 (B/2)
TX-RX UNIT
XC1-0240-00 (A/2)
TX-RX UNIT (NB)
XC1-0240-00 (B/2)
CONTROL UNIT (LO)
XC1-0210-00 (B/3)
CONTROL UNIT (SO-3)
XC1-0210-00 (C/3)
OPTION VGS-1
1.8V_AVR
COM
USB
BType
EXT.SP 8 Ω
ACC2
REMOTE
KEY
PADDLE
DRV
RX ANT



FINAL UNIT(X45-398 A/2)
TX-RX UNIT(XC1-024 A/2)
TX-RX UNIT(XC1-024 B/2)
NOISE BLANKER
CONTROL UNIT(XC1-021 A/3)
CONTROL UNIT[LO] (XC1-021 B/3)
DISPLAY UNIT (XC1-022 F/6)
DISPLAY UNIT (XC1-022 E/6)
DISPLAY UNIT (XC1-022 B/6)
DISPLAY UNIT (XC1-022 C/6)
DISPLAY UNIT(XC1-022 A/6)
DISPLAY UNIT (XC1-022 D/6)
ANT1
ANT2
RX ANT
DRV / ANT OUT
INTERNAL SPEAKER
EXTERNAL SPEAKER
PADDLE
KEY
ACC2
REMOTE
PHONES
MIC
DSP
MCU
LCD DRIVER
LCD

Receiver Section

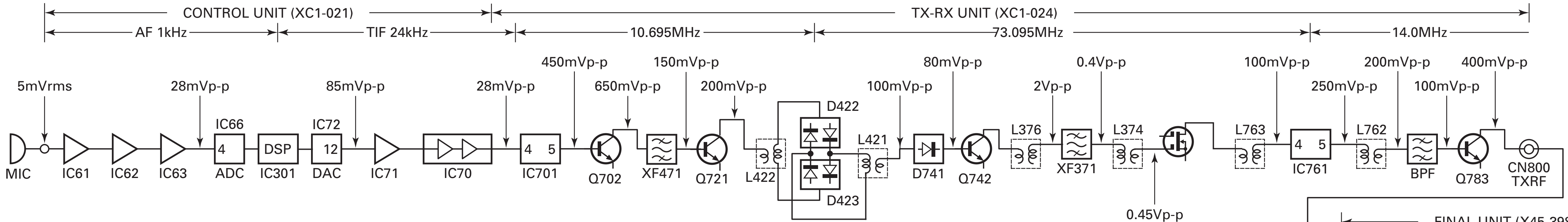


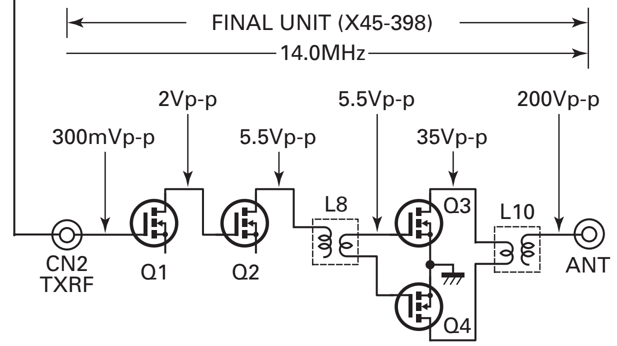


Measurement condition
Frequency: 14.0MHz
PRE AMP: ON
ANT input: –113dBm/0.501μV
AF output: 0.63V/8Ω, 1kHz
Mode: USB
The values in parentheses ( ) are those in FM mode
The values in parentheses [ ] are those in RX2 (IF1: 73.095MHz): Filter Lo: 300/Hi: 3400

Input –113dBm from the antenna, set AF VOLUME so that AF output is 0.63Vrms, and measure the signal level at each part.
The AF section is measured with an oscilloscope and the other parts are measured with an RF voltmeter.

Transmitter Section





Measurement condition
Frequency: 14.1MHz
MIC input: 1kHz/5mV
Output power: 100W
MIC level: ALC zone maximum

Audio frequency section is measured by the AF voltmeter or oscilloscope.
Radio frequency section is measured by high impedance RF voltmeter.