ICOM®

SERVICE MANUAL

MF/HF MARINE TRANSCEIVER

IC-M802

Icom Inc.

INTRODUCTION

This service manual describes the latest service information for the **IC-M802** MF/HF MARINE TRANSCEIVER at the time of publication.

To upgrade quality, any electrical or mechanical parts and internal circuits are subject to change without notice or obligation.

DANGER

NEVER connect the transceiver to an AC outlet or to a DC power supply that uses more than 16 V. This will ruin the transceiver.

DO NOT expose the transceiver to rain, snow or any liquids.

DO NOT reverse the polarities of the power supply when connecting the transceiver.

DO NOT apply an RF signal of more than 20 dBm (100 mW) to the antenna connector. This could damage the transceiver's front end.

ORDERING PARTS

Be sure to include the following four points when ordering replacement parts:

1. 10-digit order numbers
2. Component part number and name
3. Equipment model name and unit name
4. Quantity required

<SAMPLE ORDER>

1110004080	S.IC	µPC2709T	IC-M802	MAIN UNIT	5 pieces
8810005770	Screw	BiH M3×8 ZK	IC-M802	Top cover	10 pieces

Addresses are provided on the inside back cover for your convenience.

REPAIR NOTES

1. Make sure a problem is internal before disassembling the transceiver.
2. **DO NOT** open the transceiver until the transceiver is disconnected from its power source.
3. **DO NOT** force any of the variable components. Turn them slowly and smoothly.
4. **DO NOT** short any circuits or electronic parts. An insulated tuning tool **MUST** be used for all adjustments.
5. **DO NOT** keep power ON for a long time when the transceiver is defective.
6. **DO NOT** transmit power into a signal generator or a sweep generator.
7. **ALWAYS** connect a 50 dB to 60 dB attenuator between the transceiver and a deviation meter or spectrum analyzer when using such test equipment.
8. **READ** the instructions of test equipment thoroughly before connecting equipment to the transceiver.

TABLE OF CONTENTS

SECTION 1 SPECIFICATIONS

• IC-M802

■ GENERAL

• Frequency coverage :

Receive	500 kHz–29.9999 MHz	
Transmit	1.6000–2.9999 MHz 6.0000–6.9999 MHz 12.0000–13.9999 MHz 18.0000–19.9999 MHz 25.0000–27.5000 MHz	4.0000–4.9999 MHz 8.0000–8.9999 MHz 16.0000–17.9999 MHz 22.0000–22.9999 MHz
DSC receive	2.1875 MHz, 4.2075 MHz, 6.3120 MHz, 8.4145 MHz, 12.5770 MHz, 16.8045 MHz	

• Mode : TX/RX J3E (USB/LSB), J2B (AFSK), F1B (FSK), A1A (CW)
RX H3E
DSC J2B

• Antenna impedance : 50 Ω

• Frequency stability : ±10 Hz

• Power supply requirement : 13.6 V DC ±15% Negative ground

• Current drain (at 13.6 V DC) : RX; 3.0 A at Max. output power
TX; 30 A typical at Max. audio output

• Usable temperature range : –20˚C to +55˚C; –4˚F to +131˚F

• Dimensions (projections not included) : 240(W) × 94(H) × 238.4(D) mm; 2 7⁄16(W) × 3 11⁄16(H) × 9 3⁄8(D) in.

• Weight : 4.7 kg; 10.4 lb; 165.8 oz

■ TRANSMITTER

• Output power : 150, 60, 20 W PEP

• Spurious emissions : –62 dB

• Carrier suppressions : 40 dB

• Unwanted sideband suppresion : 55 dB

• Microphone impedance : 600 Ω

■ RECEIVER

• Sensitivity (Receiver) :

MODE	FREQUENCY	20 dB SINAD	10 dB S/N
J3E, A1A	0.5–1.5999 MHz 1.6–1.7999 MHz 1.8–29.9999 MHz	30 dBµVe.m.f. 13 dBµVe.m.f. 8 dBµVe.m.f.	16 dBµV –1 dBµV –6 dBµV
J2B, F1B	1.6–1.7999 MHz 1.8–29.9999 MHz	13 dBµVe.m.f. 8 dBµVe.m.f.	–1 dBµV –6 dBµV
H3E	1.5–1.5999 MHz 1.6–1.7999 MHz 1.8–3.9999 MHz	44 dBµVe.m.f. 30 dBµVe.m.f. 24 dBµVe.m.f.	30 dBµV 16 dBµV 10 dBµV

(DSC) : 0 dBµVe.m.f. (J2B; 2.1875, 4.2075, 6.3120, 8.4145, 12.5770, 16.8045 MHz)

• Squelch sensitivity :

MODE	Threshold	Tight
J3E at 12.230 MHz	Less than +20 dBµV	Less than +90 dBµV
H3E at 1.000 MHz	Less than +30 dBµV	Less than +110 dBµV

• Spurious response rejection : More than 70 dB

• Clarity variable range : ±150 Hz

• RC-25 Remote controller

■ GENERAL

- Microphone impedance : 600 Ω
- Audio output power : More than 5 mW at 16 Ω headphone with 10 % distortion
- Audio output impedance : 8–16 Ω
- Usable temperature range : –20˚C to +55˚C; –4˚F to +131˚F
- Dimension (projections not included) : 220(W) × 110(H) × 84.4(D) mm; 8 21/32(W) × 4 11/32(H) × 3 5/16(D) in.
- Weight : 570 g; 1.3 lb; 20.1 oz

• SP-24 External speaker

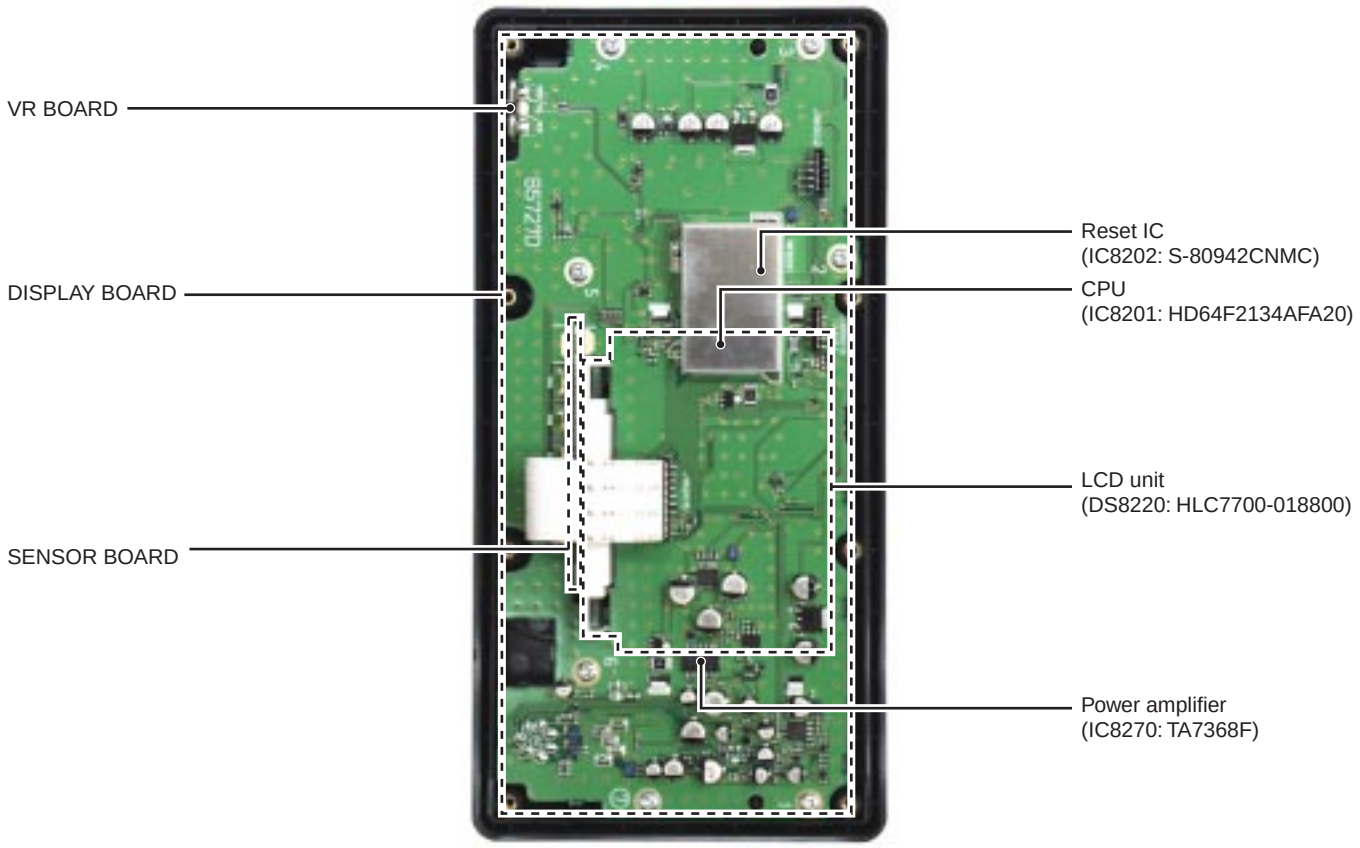
■ GENERAL

- Impedance : 4 Ω
- Input power : Rated input; 5 W
  Maximum input; 7 W
- Usable temperature range : –20˚C to +60˚C; –4˚F to +140˚F
- Dimension (projections not included) : 110(W) × 110(H) × 84.4(D) mm; 4 11/32(H) × 4 11/32(H) × 3 5/16(D) in.
- Weight : 370 g; 0.82 lb; 13.1 oz

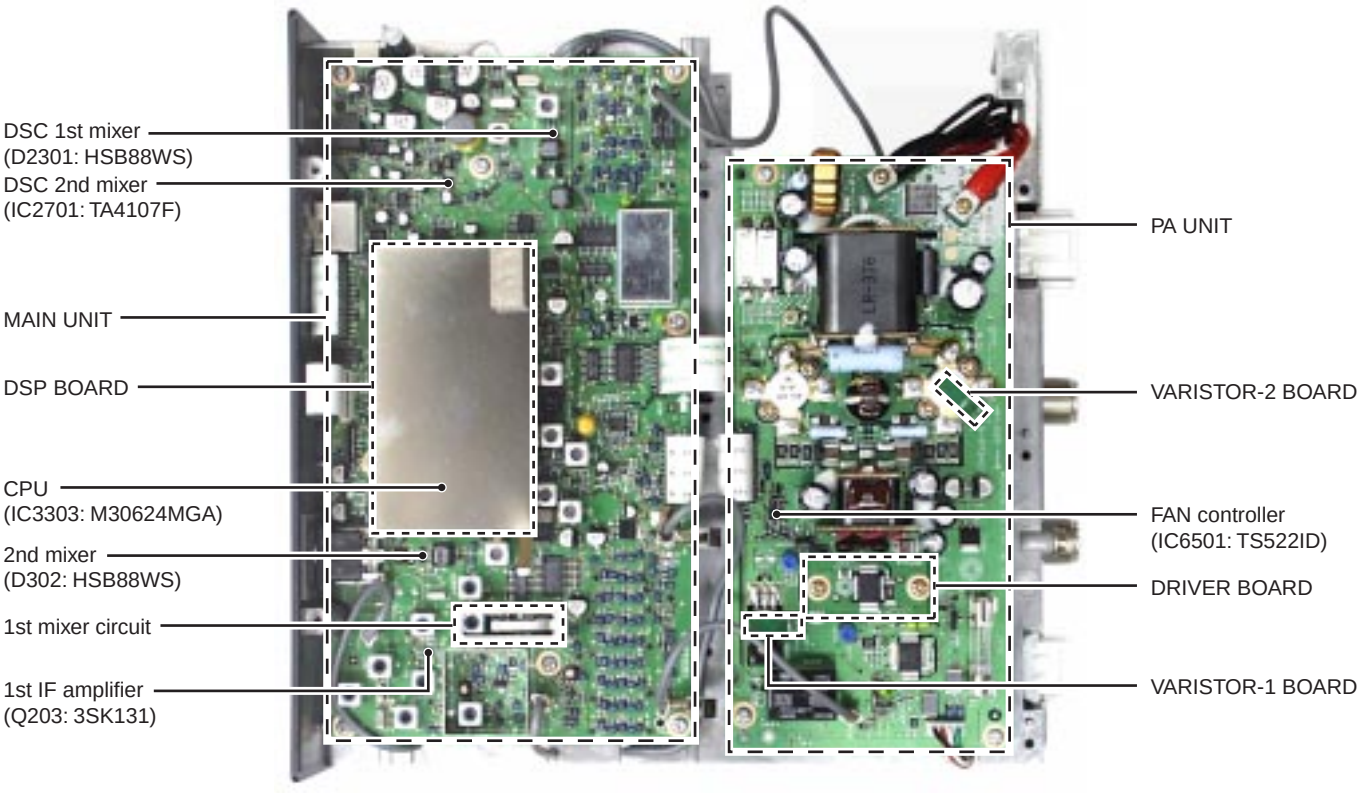
All stated specifications are subject to change without notice or obligation.

SECTION 2 INSIDE VIEWS

• RC-25



• IC-M802



SECTION 3 CIRCUIT DESCRIPTION

3-1 RECEIVER CIRCUITS

3-1-1 RF FILTER CIRCUIT (FILTER AND MAIN UNITS)

Received signals from the antenna connector are applied to the transmit/receive switching and protection relay (FILTER unit; RL7301) which is controlled by the CPU via the "TRXS" line. The signals pass through the 30 MHz cut-off low-pass filter (FILTER unit; L7321, C7321–C7323, C7325), and then applied to the MAIN unit via the J7321.

The signals pass through the transmit/receive switch (D53) and 1.6 MHz cut off high-pass filter (L51–L54, C54, C56, C57, C59, C61–C64), and are then applied to one of the bandpass filters (including one low-pass filter for below 2.0 MHz). These filters are selected by the filter control signals (B0–B8) as described in the table below.

The filtered signals pass through the 33 MHz cut-off low-pass filter (L202, L203, C202–C206), and are then applied to the 1st mixer circuit (Q201, Q202).

Frequency (MHz)	LPF ctrl signal	BPF ctrl signal
0.5–1.999	L0	B0
2–2.999	L1	B1
3–4.999	L2	B2
5–6.999	L3	B3
7–9.999	L4	B4
10–13.999	L5	B5
14–17.999	L6	B6
18–19.999		B7
20–21.999	L7	
22–23.999		
24–29.999		B8

3-1-2 1ST MIXER AND IF CIRCUITS (MAIN UNIT)

The 1st mixer circuit converts the received signals into a fixed frequency, 64.445 kHz 1st IF signal using PLL output frequency. By changing the PLL frequency, only the desired frequency is picked up at the pair of crystal filters (FI301a, FI301b) via the 64.445 kHz bandpass filter (FI201) at the next stage.

The IF amplifier (Q203) and resonator circuits are designed between the filter pair. The PLL output signal (1LO) enters the MAIN unit via the J601 and is amplified at the 1st LO amplifier (Q601). The amplified signal is passed through the 100 MHz cut-off low-pass filter (L604, L605, C604, C606–C610) to suppress harmonics components, and then applied to the 1st mixer circuit (Q201, Q202).

3-1-3 2ND MIXER AND IF CIRCUITS (MAIN UNIT)

The 1st IF signal from the crystal filter (FI301b) is converted again into a 455 kHz 2nd IF signal at the 2nd mixer circuit (D302, L303, L304). The 2nd LO signal (2LO) from the PLL unit enters the MAIN unit via the J301 to be applied to the 2nd mixer circuit.

3-1-4 3RD MIXER AND IF CIRCUITS (MAIN UNIT)

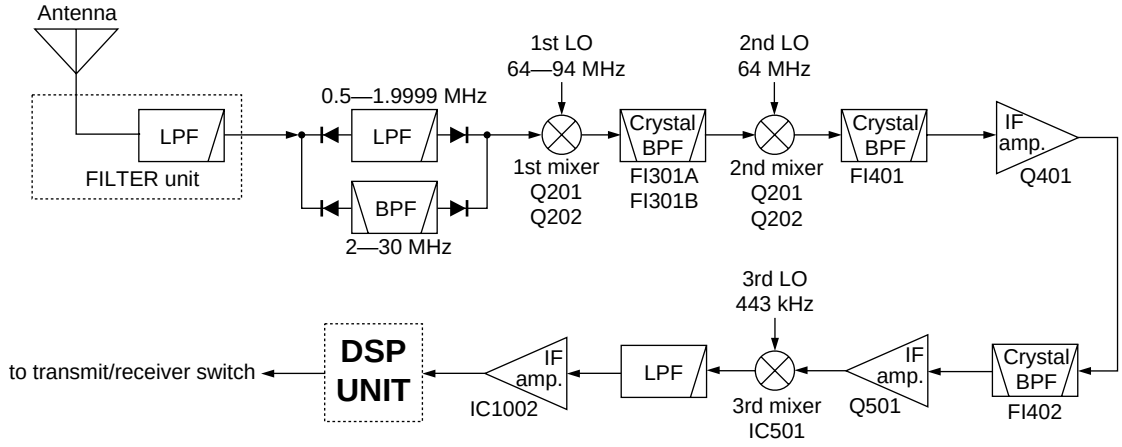
The 2nd IF signal passes through the low-pass filter (L305, L306, C307–C311), and then applied to the IF amplifier (Q401) via the ceramic bandpass filter (FI401). The amplified signal passes through the ceramic bandpass filter (FI402), and then applied to the 3rd mixer circuit via the IF amplifier (Q501). The 2nd IF signal is converted into a 12 kHz 3rd IF signal at the 3rd mixer circuit (IC501). The 3rd LO signal (3LO) from the PLL unit enters the MAIN unit via the J3601 to be applied to the 3rd mixer circuit.

3-1-5 DSP RECEIVER CIRCUIT (MAIN AND DSP UNITS)

The DSP (Digital Signal Processor) circuit enables digital IF filter, digital noise reduction, digital PSN (Pulse Shift Network), phase demodulation, digital automatic notich, and etc.

The 3rd IF signal is applied to the IF amplifier (MAIN unit; IC1002, pin 5) after being passed through the low-pass filter (MAIN unit; IC1002, pins 3, 1). The amplified 12 kHz 3rd IF signal is amplified at the differential amplifiers (IC651a/b), and is then applied to the A/D convertor section in the CODEC IC (IC501) on the DSP board (EX-2432). At the same time, the converted signal is level-shifted 5 V to 3.3 V in the IC (IC501).

• RECEIVER CONSTRUCTION



The level-shifted signal is applied to the DSP IC (IC301) for the digital IF filter, demodulator, automatic notch and noise reduction, etc.

The output signal from the DSP IC is applied to the D/A converter section in the CODEC IC (IC501) to convert into the analog audio signals. Also the signals are level-shifted 3.3 V to 5 V at the level converter section in the IC (IC501).

The level-shifted audio signals are passed through the active filter (IC701a), and then applied to the MAIN unit via J901 (pin 17) as the DRAF signal.

3-1-6 AGC CIRCUIT (DSP AND MAIN UNITS)

The AGC (Automatic Gain Control) circuit reduces IF amplifier gain and attenuates IF signal to keep the audio output at a constant level.

The receiver gain is determined by the voltage on the AGC1 line from the DSP unit. The D/A converter for the AGC (IC102) supplies control voltage to the AGC1 line and sets the receiver gain with the [RF/SQL] control.

The 3rd IF signal from the CODEC IC (IC501) is detected at the AGC detector section in the DSP IC (IC301). The output signal from the DSP IC is level-shifted at the level converter (IC101) and applied to the D/A converter (IC102). The AGC voltage is amplified at the buffer amplifier section in the IC102 and applied to the MAIN unit to control the AGC1 line.

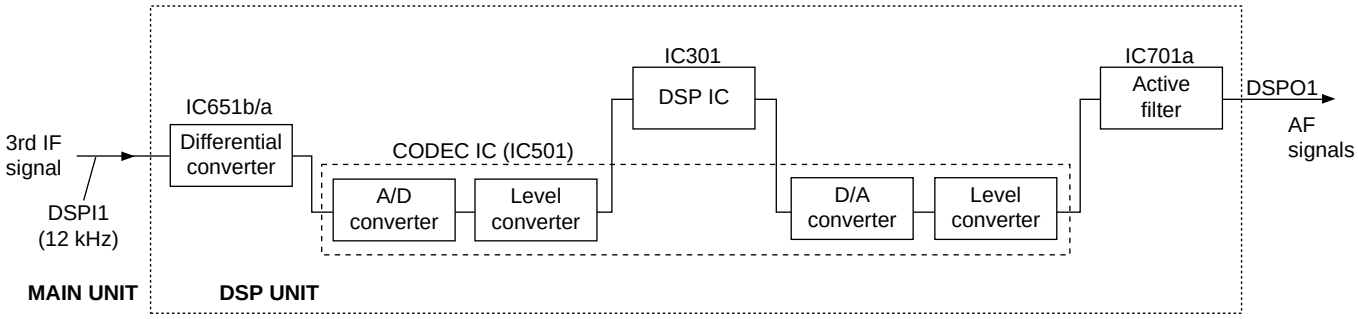
When receiving strong signals, the detected voltage increases and the AGC1 voltage decreases. As the AGC1 voltage is used for the bias voltage of the IF amplifiers (MAIN unit; Q203, Q401, Q501), IF amplifier gain is decreased.

3-1-7 AF AMPLIFIER CIRCUIT (DSP AND MAIN UNITS)

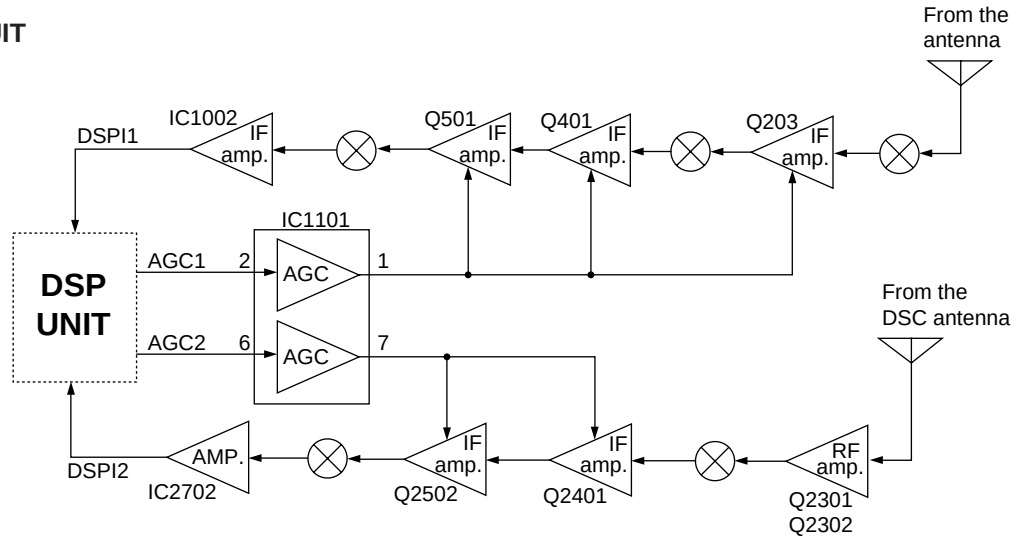
The AF amplifier amplifies the audio signals to the suitable driving level for the speaker.

The AF signals from the DSP unit are passed through the transmit/receive switch (MAIN unit; IC1703, pins 1, 6) via the "DSPO1" signal, and then applied to the AF amplifier (MAIN unit; IC1702, pin 5) after being passed through the low-pass filter (MAIN unit; IC1702, pins 3, 1). The amplified signal passes through the the SQL gate (MAIN unit; IC1701, pins 7, 1) which is controlled by the CPU (IC3303, pin 49) via the "SQLC" signal. The signal is applied to the electronic volume IC (MAIN unit; IC1603, pin 2) which can control the volume attenuation by AFG voltage from the CPU (MAIN unit; IC3303). Beep, tone, side tone, monitor signals are applied to the the elecronic volume IC too. The signal is applied to the AF mute swtich, and then amplified at the AF power amplifier (IC1601, pin 1). The amplified signal is applied to the speaker (SP-24) after being passed through the speaker jack (J1451) via the "AFO" signal.

• DSP CIRCUIT



• AGC CIRCUIT



3-2 TRANSMITTER CIRCUITS

3-2-1 MICROPHONE AMPLIFIER CIRCUIT (RC-25, MAIN AND DSP UNITS)

The microphone amplifier circuit amplifies microphone audio signal to a level needed for the DSP circuit.

Audio signals from the [MIC] connector (J8701, pin 1) are amplified at the AF amplifier (IC8280, pin 3), and then applied to the gate modulator IC (MAIN unit; IC2001, pin 3) via the J2051, pin 1 as “FMOD” signal. The signal is applied to the DSP unit after being passed through the limitter amplifier and low-pass filter IC (MAIN unit; IC1051, pins 3, 7) as “DSPI1” signal.

3-2-2 DSP TRANSMITTER CIRCUIT (DSP UNIT)

The DSP (Digital Signal Processor) circuit enables PSN (Phase Shift Network)/Low Power/Phase modulator, transmitter monitor, side tone, and etc.

The microphone audio signals from the MAIN unit via the “DISPI1” line are amplified at the differential amplifiers (IC651a/b), and are then applied to the A/D converter section in the CODEC IC (IC501). at the same time, the converted signals are level-shifted 5 V to 3.3 V in the IC (IC501).

The level shifted signals are applied to the DSP IC (IC301) and modulated at the DSP IC to p[roduce the 12 kHz transmitter IF signal.

The modulated IF signal from the DSP IC is applied to the D/A convertor section in the CODEC IC (IC501) to convert into the analog IF signal. Also the signal is level-shifted 3.3 V to 5 V at the level converter section in the IC (IC501).

The level-shifted IF signal is passed through the active filter (IC701a), and then applied to the MAIN unit via J901 (pin 17) as the “DSPO1” signal.

3-2-3 SPEECH COMPRESSOR CIRCUIT (DSP UNIT)

The DSP (Digital Signal Processor) circuit enables PSN
The speech compressor compresses the transmitter audio input signals to increase the average output level (average talk power).

When the speech compressor function is ON, the level-shifted signal from the CODEC IC (IC501) is applied to the DSP IC (IC301) and compressed at the DSP IC to obtain an average audio level.

At the same time, the compressed signals are modulated at the DSP IC and applied to the D/A converter section in the CODEC IC (IC501).

3-2-4 IF AMPLIFIER AND MIXER CIRCUITS (MAIN UNIT)

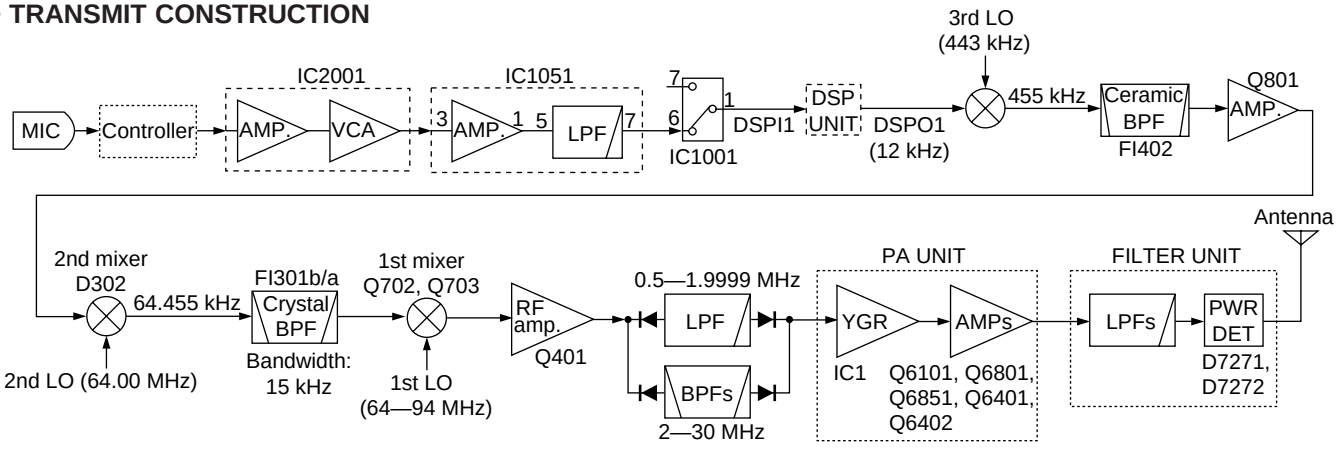
The modulated 3rd IF signal from the DSP unit (“DSPO1” signal: 12 kHz) passes through the transmit/receive swtich (IC1703, pins 1, 5), and then applied to the 3rd mixer circuit (IC901, pin 3). The applied 3rd IF signal is mixed with the 3rd LO signal from the DDS circuit (PLL unit; IC5701) to produce a 455 kHz 2nd IF signal.

The 2nd IF signal is output from IC901, pin 5 and passes through the ceramic bandpass filter (FL402) to suppress the unwanted signals via the D404. The filtered 2nd IF signal is amplified at the 2nd IF amplifier (Q801), and then applied to the 2nd mixer circuit after being passed through the D303 and low-pass filter (L304–L306, C304–C311, R306).

The 2nd IFsignal is mixed with 64 MHz 2nd LO signal, coming from the PLL circuit, at the 2nd mixer circuit (D302) to obtain 64.455 MHz 1st IF signal. The 1st IF signal is passed through the crystal bandpass filter (FI301A, FI301B) to cut off the unwanted signals. The signal is applied to the transmitter mixer circuit (Q702, Q703) to obtain the desired signal via the transmit/receive switch (D301) and attenuator.

The operating (transmitting) frequency is produced at the 1st IF mixer circuit (Q210, Q202) by mixing the 1st IF and 1st LO signals. The mixed signal is then applied to the RF circuit.

• TRANSMIT CONSTRUCTION



3-2-5 RF CIRCUIT (MAIN, PA UNITS AND DRIVER BOARD)

The RF circuit amplifies operating (transmitting) frequency to obtain 150 W of RF output.

The signal from the 1st IF mixer is passed through one of the low-pass filter or bandpass filters (Refer to page 4-1 bandpass filters used), and then applied to the YGR amplifier (IC1, pin 1) after being passed through the attenuator (R5–R7). The amplified signal passes through the low-pass filter (L1–L3, C1–C7) and attenuator (R1–R3), and then applied to the PA unit via J1.

The signal applied from the MAIN unit is amplified at 2 amplifiers (PA unit; Q6101 and Q6801). A part of output signal from 2 amplifiers are applied to the amplifiers to improve the frequency characteristic by feedback. The amplified signal is applied to the drive amplifier (DRIVER board; Q6851) via the J6301 as "DRVI" signal. The signal from the DRIVER board passes through the impedance converter (PA unit; L6301), and then applied to push-pull amplifiers (PA unit; Q6401, Q6402) to obtain a stable 150 W of RF output power. A part of the RF output power returns to the amplifiers to obtain a stable gain between 1.6 MHz and 27.5 MHz bands by using feedback transformer (L6404). The output power is applied to the filter unit via the J6401 as "FLIN" signal.

The amplified signal is applied to the one of the 8 low-pass filters which are composed chebychev type.

• 1.6–1.9999 MHz signal
The signal is applied to the relay (FILTER unit; RL7031) which is controlled by the band control IC (MAIN unit; IC3602) as the "L1M" signal via the buffer amplifier (MAIN unit; IC1301, pin 11). The signal passes through the low-pass filter (FILTER unit; L7036–L7038, C7033–C7039, C7041–C7045, C7049), and then applied to the RL7032.

• 2–2.9999 MHz signal
The signal is applied to the relay (FILTER unit; RL7061) which is controlled by the band control IC (MAIN unit; IC3602) as the "L2M" signal via the buffer amplifier (MAIN unit; IC1301, pin 12). The signal passes through the low-pass filter (FILTER unit; L7066–L7068, C7063–C7084, C7086, C7087), and then applied to the RL7062.

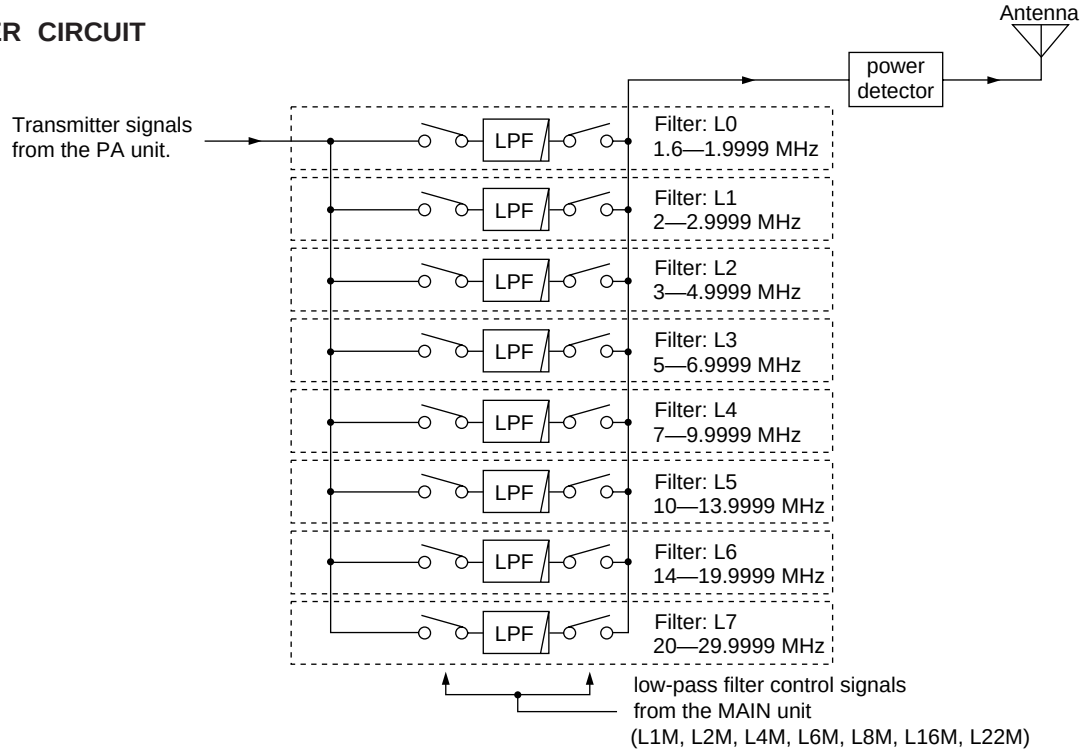
• 3–4.9999 MHz signal
The signal is applied to the relay (FILTER unit; RL7091) which is controlled by the band control IC (MAIN unit; IC3602) as the "L4M" signal via the buffer amplifier (MAIN unit; IC1301, pin 12). The signal passes through the low-pass filter (FILTER unit; L7096–L7098, C7094–C7096, C7098–C7101, C7105–C7107), and then applied to the RL7092.

• 5–6.9999 MHz signal
The signal is applied to the relay (FILTER unit; RL7121) which is controlled by the band control IC (MAIN unit; IC3602) as the "L6M" signal via the buffer amplifier (MAIN unit; IC1301, pin 14). The signal passes through the low-pass filter (FILTER unit; L7126–L7128, C7124–C7132, C7136, C7137), and then applied to the RL7122.

• 7–9.9999 MHz signal
The signal is applied to the relay (FILTER unit; RL7151) which is controlled by the band control IC (MAIN unit; IC3602) as the "L8M" signal via the buffer amplifier (MAIN unit; IC1301, pin 15). The signal passes through the low-pass filter (FILTER unit; L7066–L7068, C7063–C7084, C7086, C7087), and then applied to the RL7152.

• 10–13.9999 MHz signal
The signal is applied to the relay (FILTER unit; RL7181) which is controlled by the band control IC (MAIN unit; IC3602) as the "L12M" signal via the buffer amplifier (MAIN unit; IC1301, pin 16). The signal passes through the low-pass filter (FILTER unit; L7182–L7184, C7183–C7188, C7193), and then applied to the RL7182.

• RF FILTER CIRCUIT



• 14–19.9999 MHz signal
The signal is applied to the relay (FILTER unit; RL7211) which is controlled by the band control IC (MAIN unit; IC3602) as the “L16M” signal via the buffer amplifier (MAIN unit; IC1301, pin 17). The signal passes through the low-pass filter (FILTER unit; L7216–L7218, C7214, C7216, C7217, C7221–C7225), and then applied to the RL7212.

• 20–29.9999 MHz signal
The signal is applied to the relay (FILTER unit; RL7241) which is controlled by the band control IC (MAIN unit; IC3602) as the “L22M” signal via the buffer amplifier (MAIN unit; IC1301, pin 18). The signal passes through the low-pass filter (FILTER unit; L7245, L7246, L7248, C7242–C7244, C7247–C7249, C7253, C7254), and then applied to the RL7242.

The filtered signal is applied to the antenna connector after being passed through the RL7301 and J7311.

3-2-6 ALC CIRCUIT (FILTER AND MAIN UNITS)
The ALC (Automatic Level Control) circuit controls the gain of IF amplifiers in order for the transceiver to output a constant RF power set by the [RF PWR] control even when the supplied voltage shifts, etc.

The RF power level is detected at the power detector circuit (Filter unit; D7271) to be converted into DC voltage and applied to the MAIN unit as the FOR signal.

The FOR signal is applied to the comparator (IC1201, pin 2). The “POCV” signal, controlled by the [RF PWR] control via the I/O expander (IC3606, pin 5), is also applied to the other input (pin 3) for reference. The compared signal is output from pin 1 and applied to the IF amplifier in the MAIN (Q801) unit to control amplifying gain.

When the FOR signal exceeds the POCV voltage, ALC bias voltage from the comparator controls the IF amplifiers. This adjusts the output power to a specified level from the [RF PWR] control until the FOR and POCV voltages are equalized.

3-2-7 APC CIRCUIT (FILTER AND MAIN UNITS)
The APC (Automatic Power Control) circuit protects the power amplifiers on the PA unit from high SWR and excessive current.

• SWR APC CIRCUIT (FILTER AND MAIN UNITS)
The reflected wave signal appears and increases on the antenna connector. When the antenna is mismatched, D7272 of the power detector circuit (D7271, D7272, L7272) in the FILTER unit detects the signal and applies it to the ALC amplifier (IC1201, pin 9) in the MAIN unit as “REF” signal. The output signal decreases the bias voltage of the RF APC amplifier to reduce the output power.

• CURRENT APC CIRCUIT (FILTER AND MAIN UNITS)
The power transistor current is detected from the different voltage between both terminals of a 0.012 Ω resistor (R6651) on the PA board. The detected voltage is applied to the differential amplifier (IC6501). When the current of the final transistors is more than 30 A, the detected voltage is applied to the APC amplifier controller (IC1201) in the MAIN unit to reduce the gate-2 voltage of the IF amplifier (Q801) and thus reduce the output power.

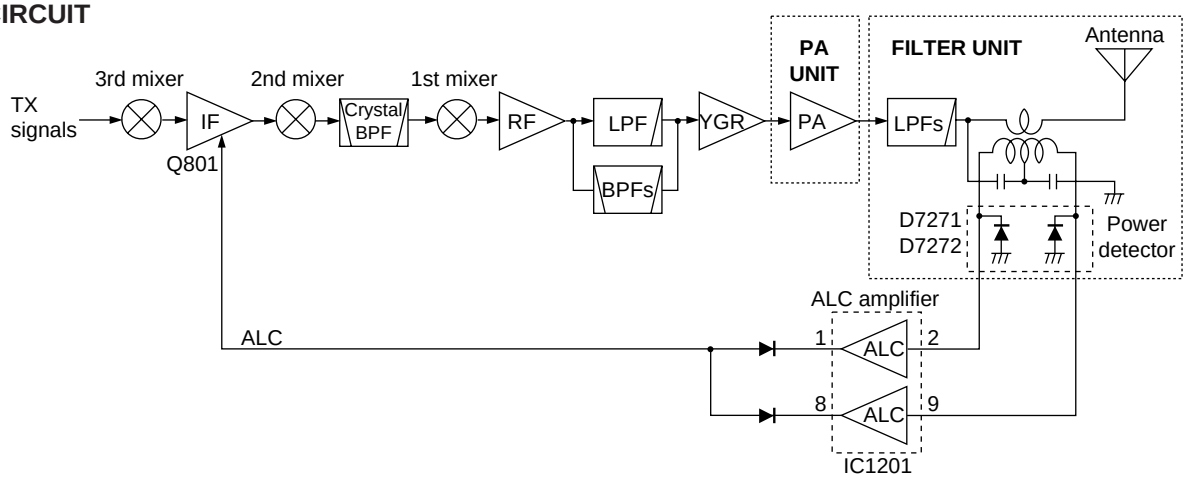
3-2-8 RF METER CIRCUIT (MAIN UNIT)
The output of ALC amplifier (IC1201, pin 12) is applied to the CPU (IC3303, pin 97) as “RFML” signal to indicate the transmit power level on the display.
For antenna current meter indication, the “ANTM” signal from the optional AT-130E is applied to the meter amplifier (IC1201, pin 12) via the J6701 in the PA unit.

3-2-9 MONITOR CIRCUIT (DSP AND MAIN UNITS)
The micorphone audio signals can be monitored to check voice characteristics.

A portion of the transmit IF signal from the DSP IC (IC301) is mixed with a 12 kHz LO signal to demodulate into the AF signals. The demodulated signals are level-shifted 3.3 V to 5 V at the level converter (IC102) to convert into the analog AF signals. The AF signals are then applied to the MAIN unit as “MONI” signal.

The “MONI” signal from the DSP unit is amplified at the AF amplifier (MAIN unit; IC1603, pin 2), and then applied to the VCA amplifier to control the AF volume (pin 7). The amplified signal passes through to the AF mute circuit (MAIN unit; IC1602, pins 1, 7) which is controlled by the CPU via the expander IC (MAIN unit; IC3603) as the “AFMS” signal. The AF signal is applied to the AF power amplifier circuit (MAIN unit; IC1601, pin 1) to drive a speaker.

• ALC CIRCUIT



3-3 PLL CIRCUITS

3-3-1 GENERAL

The PLL circuits generate a reference frequency (32.000 MHz); 1st LO frequencies (64.485–94.455 MHz); 2nd LO frequency (64 MHz), 3rd LO frequency (433.000 kHz).

The 1st LO PLL adopts a mixer-less dual loop PLL system. The BFO uses a DDS and a 2nd LO as a fixed frequency double that the crystal oscillator.

3-3-2 1ST LO PLL (PLL UNIT)

The 1st LO PLL contains a main and reference loop as a dual loop system.

The reference loop generates an approximate 10.5 MHz frequency using a DDS circuit, and the main loop generates a 64.485 to 94.455 MHz frequency using the reference loop frequency.

(1) REFERENCE LOOP PLL

The oscillated signal at the reference VCO (Q5301, D5301) is amplified at the amplifiers (Q5302, Q5351) and is then applied to the DDS IC (IC5101, pin 46). The signal is then divided and detected on phase with the DDS generated frequency.

The detected signal output from the DDS IC (pin 56) is converted into DC voltage (lock voltage) at the loop filter (R5136, R5146, C5112) and then fed back to the reference VCO circuit (Q5301, D5301).

(2) MAIN LOOP PLL

The oscillated signal at one of the main loop VCOs (Q5521, D5521, L5523) is amplified at the buffer amplifiers (Q5601, Q5604) and is then applied to the PLL IC (IC5401, pin 6). The signal is then divided and detected on phase with the reference loop output frequency.

The detected signal output from the PLL IC (pin 2) is converted into a DC voltage (lock voltage) at the loop filter and then fed back to one of the VCO circuits (Q5521, D5521, L5523).

The oscillated signal from the buffer amplifier (Q5601) is also applied to the MAIN unit as a 1st LO signal after being amplified at LO (Q5602) and buffer (Q5603) amplifiers or passed through the bandpass filter (L5602–L5604, C5610–C5616).

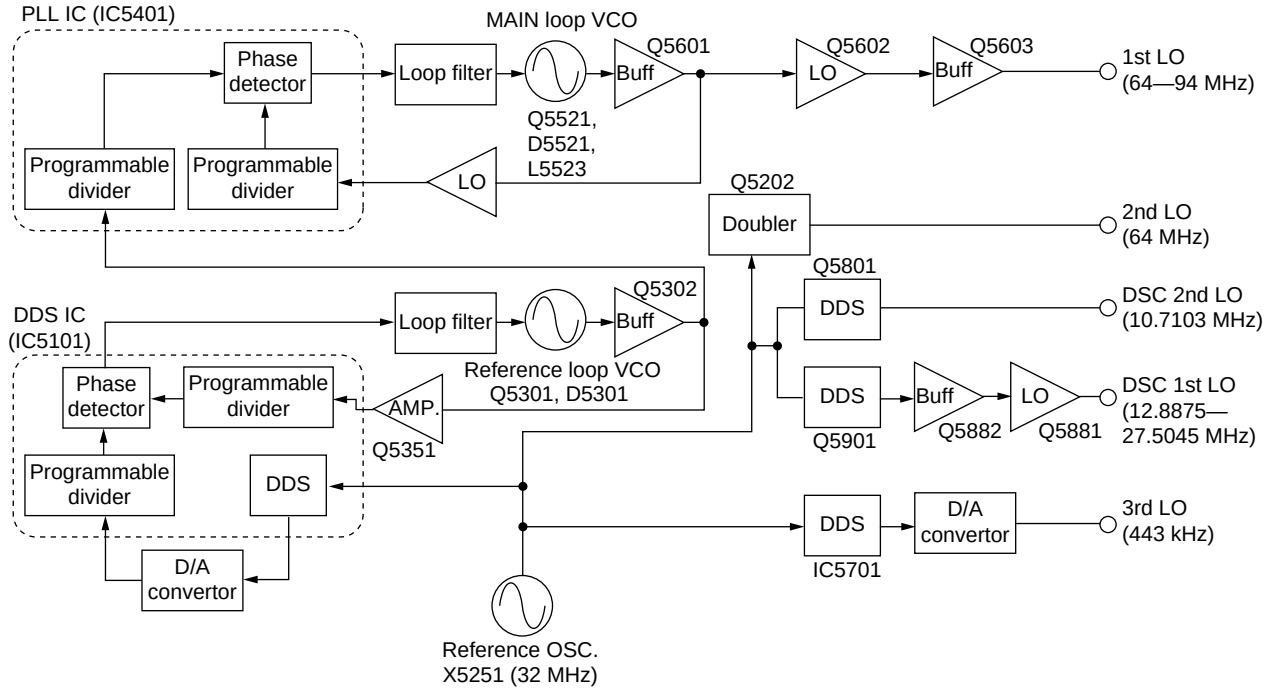
3-3-3 2ND LO AND REFERENCE OSCILLATOR CIRCUITS (PLL UNIT)

The reference oscillator (X5251, CR604) generates a 32.0 MHz frequency for the 2 DDS circuits as a system clock and for the LO output. The oscillated signal is doubled at the doubler circuit (Q5202) and the 64.0 MHz frequency is picked up at the double tuned filter (L5203, L5204). The 64.0 MHz signal is applied to the RF circuit as a 2nd LO signal.

3-3-3 3RD LO CIRCUIT (PLL UNIT)

The DDS IC (IC5701) generates a 10-bit digital signal using the 32 MHz system clock. The digital signal is converted into an analog wave signal at the D/A converter (R5701–R5720). The converted analog wave is passed through the bandpass filter (L5781–L5783, C5781–C5785) and then applied to the MAIN unit as the 3rd LO signal (433.000 kHz) via the attenuator (R5781–R5783).

• PLL CIRCUIT



3-4 DSC CIRCUITS

3-4-1 DSC BANDPASS FILTER AND RF AMPLIFIER CIRCUITS (MAIN UNIT)

The RF circuit filters out-of-band signals and amplifiers signals within the range of frequency coverage.

(1) 2–7 MHz signals

The signals from the antenna connector (J2101) pass through the bandpass filter (L2201, L2202, L2207, L2210, L2213, L2216, L2219, L2220, L2225, L2228, L2231, C2201, C2204, C2207, C2210, C2213, C2216, C2219, C2222, C2225, C2228, C2234, C2240) to obtain desired 2–6 MHz signals and suppress any undesired signals.

(2) 8 MHz signals

The signals from the antenna connector (J2101) pass through the bandpass filter (L2204, L2208, L2211, L2214, L2217, L2221, L2222, L2229, L2232, C2202, C2205, C2208, C2210, C2211, C2214, C2217, C2220, C2223, C2226, C2236, C2241) to obtain desired 8 MHz signals and suppress any undesired signals.

(3) 12 MHz signals

The signals from the antenna connector (J2101) pass through the bandpass filter (L2235–L2242, L2244, L2245, C2229, C2235, C2237, C2239, C2243–C2250, C2252–C2254, C2263, C2264) to obtain desired 12 MHz signals and suppress any undesired signals.

(4) 16 MHz signals

The signals from the antenna connector (J2101) pass through the bandpass filter (L2205, L2206, L2209, L2212, L2215, L2218, L2223, L2224, L2230, L2233, C2203, C2206, C2209, C2212, C2215, C2218, C2221, C2224, C2226, C2227, C2238, C2242) to obtain desired 16 MHz signals and suppress any undesired signals.

The filtered signals are amplified at the RF amplifiers (Q2301, Q2302), and then applied to the 1st mixer circuit (D2301).

3-4-2 DSC 1ST MIXER AND 1ST IF CIRCUITS (MAIN UNIT)

The 1st mixer circuit converts the received signal into a fixed frequency of the 1st IF signal with a PLL output frequency. By changing the PLL frequency, only the desired frequency will pass through a crystal filter at the next stage of the 1st mixer.

The signals from the RF circuit are mixed at the 1st mixer (D2301) with a 1st LO signal coming from the PLL circuit to produce a 10.7 MHz 1st IF signal.

The 1st IF signal is applied to the crystal bandpass filters (FI231) to suppress out-of-band signals. The filtered 1st IF signal is amplified at the 1st IF amplifiers (Q2401, Q2501), then applied to the 2nd mixer circuit (IC2701, pin 3).

3-4-3 DSC 2ND IF AND DSP CIRCUITS (MAIN AND DSP UNITS)

The 2nd mixer circuit converts the 1st signal into a 2nd IF signal. A double conversion superheterodyne system (which converts receive signals twice) improves the image rejection ratio and obtain stable receiver gain.

The 1st IF signal from the 1st IF amplifiers is applied to the 2nd mixer IC (IC2701, pin 3), and is mixed with the 2nd LO signal to the converted into a 12 kHz 2nd IF signal.

The 12 kHz 2nd IF signal from the 2nd mixer (IC2701, pin 5) is applied to the 2nd IF amplifier (IC2702, pin 3), and then passes through the low-pass filter (IC2702, pins 5, 7). The signal is applied to the DSP unit as the “DSPI2” signal.
The signal is amplified at the differential amplifier (DSP unit; IC601), and is then applied to the A/D converter secition in the CODEC IC (DSP unit; IC501). At the same time, the converted signal is level-shifted 5 V to 3.3 V in the IC (DSP unit; IC501).

The level-shifted signal is applied to the DSP IC (DSP unit; IC301) for the digital IF filter, demodulator and noise reduction, etc.

The output signal from the DSP IC is applied to the D/A converter section in the CODEC IC (DSP unit; IC501) to convert into the analog audio signals. Also the signals are level-shifted 3.3 V to 5 V at the level converter section in the IC.

The level-shifted audio signals are passed through the active filter (IC701b), and then applied to the MAIN unit via the J1102 (pin 21) as the “DSPO2” signal.

3-4-4 DSC AGC CIRCUIT (DSP AND MAIN UNITS)

The receiver gain is determined by the voltage on the AGC2 line from the DSP unit. The D/A converter for the AGC (IC102) supplies control voltage to the AGC2 line and sets the DSC receiver gain.

The 3rd IF signal from the CODEC IC (IC501) is detected at the AGC detector section in the DSP IC (IC301). The output signal from the DSP IC is level-shifted at the level converter (IC101) and applied to the D/A converter (IC102). The AGC voltage is amplified at the buffer amplifier section in the IC102 and applied to the MAIN unit to control the AGC2 line.

When receiving strong signals, the detected voltage increases and the AGC2 voltage decreases. As the AGC2 voltage is used for the bias voltage of the IF amplifiers (MAIN unit; Q2401, Q2501), IF amplifier gain is decreased.

3-5 FRONT UNIT (RC-25)

3-5-1 LCD CIRCUIT (DISPLAY AND CONNECT BOARDS)

The LCD (CONNECT board; DS8220) is controlled by the LCD driver (CONNECT board; IC8240) via the drive signals (CL1, RES, CS, RS, WR, RD, DB0–DB7) from the display board. The LCD’s back light employs 24 LED (DS8300–DS8323). The LED are controlled by dimmer (Q8300, Q8301) and dimmer controller (IC8280) circuits.

3-5-2 MICROPHONE CIRCUIT (DISPLAY BOARD)

The AF signals from the microphone are amplified at the AF amplifier (IC8280) via the “MIC” signal. The signal is applied to the IC-M802’s main unit through the J8903 via the “MI” signal.

3-5-3 GROUP AND CHANNEL DIALS CIRCUIT (DISPLAY AND SENSOR BOARDS)

• GROUP DIAL

The signals from the group dial (SENSOR board; S8801) is applied to the FRONT CPU (IC8201, pins 76, 77) via the "GPA" and "GPB" signals.

• CHANNEL DIAL

The signals from the channel dial (SENSOR board; S8802) is applied to the FRONT CPU (IC8021, pins 74, 75) via the "CHA" and "CHB" signals.

3-5-4 KEY'S BACK LIGHTS CIRCUIT (DISPLAY BOARD)

The key"s back lights compose DS8340–DS8350, and are controlled by the dimmer circuit (Q8340–Q8345). The dimmer circuit is controlled by the CPU via the "DIMMER" signal from the FRONT CPU.

3-5-5 RESET CIRCUIT (DISPLAY BOARD)

The reset IC (IC8202) resets the FRONT CPU (IC8201) when IC-M802 is power ON or OFF.

3-6 POWER SUPPLY CIRCUITS

3-6-1 PA UNIT VOLTAGE LINE

LINE	DESCRIPTION
HV13	The voltage from an external power supply.
HV	The same voltage as the HV13 line passed through the fuse (F6701).
S13V	The same voltage as the HV13 line passes through the switching relay (RL6701).
PA8V	8 V for transmitter circuits regulated by the +8 regulator circuit (IC6601).
PAT8	8 V for transmitter circuits regulated by the T8 regulator circuit (Q6601, Q6602).

3-6-2 DISPLAY BOARD (RC-25) VOLTAGE LINE

LINE	DESCRIPTION
HV13	The voltage from PA and MAIN units via the J8602.
10V	Common 10 V converted from the 13 V line and regulated by the +10 regulator circuit (IC8301).
5V	Common 5 V converted from the 5 V line and regulated by the +5 regulator circuit (IC8290).

3-6-3 PLL UNIT VOLTAGE LINE

LINE	DESCRIPTION
HV13	The voltage from PA and MAIN units via the J5001.
H5V	Common 5 V line from the MAIN unit via the J5071.
5V	Common 5 V converted from the 13 V line and regulated by the +5 regulator circuit (IC5001).
8VL	Common 8 V converted from the 13 V line and regulated by the +8 regulator circuit (IC5031).

3-6-4 MAIN UNIT VOLTAGE LINE

LINE	DESCRIPTION
S13V	The voltage from the PA unit via the J1901.
R13V	Receive 13 V converted from the S13V line and regulated by the R13 regulator circuit (IC1303).
8V	Common 8 V converted from the 13 V line and regulated by the +8 regulator circuit (IC1502).
–5V	Common –5 V converted from the 13 V line and regulated by the –5 V DC-DC converter (IC1551, D1551, D1552)
T8	Transmit 8 V converted from the S13V line and regulated by the T8 regulator circuit (Q1501).
R8	Receive 8 V converted from the S13V line and regulated by the R8 regulator circuit (Q1502).
5V	Common 5 V converted from the 13 V line and regulated by the +5 regulator circuit (IC1501).
H5V	Common 5 V converted from the 5 V line and regulated by the +5 regulator circuit (IC3101).

3-7 PORT ALLOCATIONS

3-7-1 MAIN CPU (MAIN UNIT; IC3303)

Pin number	Port name	Description
1	TXS	Outputs T8 regulator circuit (MAIN unit; Q1501) control signal.
2	RXS	Outputs R8 regulator circuit (MAIN unit; Q1502) control signal.
3	PSEL	Outputs serial strobe signal to the latch control IC (IC3601, pin 1).
4	BEEP	Outputs beep audio signals.
6	PDAT	Outputs serial data signal for the PLL circuits.
7	PCK	Outputs serial clock signal for the PLL circuit.
11	UNLK	Input port for PLL unlock signal.
19	PWRS	Outputs switching relay (PA unit; RL6701) control signal.
23	DRES	Outputs the RESET signal.
24	STBO	Outputs strobe signal for the DSP unit.
26	RQO	Outputs data signal for the DSP unit.
27	RQI	Outputs serial data signal for the DSP unit.
28	DO	Input port for the serial data signal from the DSP unit.
29	NMEI	Input port for the NMEA signal.
30	NMEO	Outputs NMEA signal for PLL unit.
32	NMEI2	Input port for the GPS signal from the PLL unit.
33	LSTB	Outputs serial strobe signal for the IC3602, IC3603.
34	DSTB	Outputs strobe signal for the D/A converter IC (IC3606).
37	LCK	Outputs serial clock signal for IC3602–IC3605, D/A converter IC (IC3606) and DSP unit.
38	LDAT	Outputs serial data signal for the IC3602, IC3603 and D/A converter IC (IC3606).
47	MSTB	Outputs serial strobe signal for the IC3603, IC3605.
48	PSTB	Outputs PLL strobe control signal for the LATCH controller (IC3601).
49	SQLC	Outputs squelch control signal for the SQL switching IC (IC1701).
79	STAT	Outputs the optional antenna tuner start control signal for the PA unit via the J1901.
80	KEYS	Input port for the optional antenna tuner key control signal via the PA unit.
89	EDT	I/O port for the serial data signals from/to the EEPROM (IC3301, pin 5).

MAIN CPU (MAIN UNIT; IC3303)–continued

Pin number	Port name	Description
90	ECK	Outputs serial clock signal for the EEPROM (IC3301, pin 6).
92	ASEN	Input port for the SEND signal from the accessory connector (J1801).
93	TEMP	Input port for the power amplifier temperature signal from the PA unit.
94	NSEN	Input port for the SEND signal from the AF/MOD connector (PLL unit; J5051, pin 8) via the J3602.
97	RFML	Input port for the RF/ANTC meter's voltage from the meter amplifier (IC1201, pin 14).

3-7-2 OUTPUT EXPANDER IC FOR THE PLL STROBE (IC3601)

Pin number	Port name	Description
4	PST1	Outputs strobe signal for the DDS IC (PLL unit; IC5101, pin 91).
5	PST2	Outputs strobe signal for the PLL IC (PLL unit; IC5401, pins 13).
6	PST3	Outputs strobe signal for the DDS IC (PLL unit; IC5701, pin 41).
7	PST4	Outputs strobe signal for the DDS IC (PLL unit; IC5801, pin 41).
14	PST5	Outputs strobe signal for the DDS IC (PLL unit; IC5901, pin 41).

3-7-3 OUTPUT EXPANDER IC FOR THE FILTER UNIT (IC3602)

Pin number	Port name	Description
4	L0S	Outputs 0.5–1.999999 MHz low-pass filter control signal.
5	L1S	Outputs 2–2.999999 MHz low-pass filter control signal.
6	L2S	Outputs 3–4.999999 MHz low-pass filter control singnal.
7	L3S	Outputs 5–6.999999 MHz low-pass filter control signal.
11	L7S	Outputs 20–30 MHz low-pass filter control signal.
12	L6S	Outputs 14–19.999999 MHz low-pass filter control signal.
13	L5S	Outputs 10–13.999999 MHz low-pass filter control signal.
14	L4S	Outputs 7–9.999999 MHz low-pass filter control signal.

3-7-4 OUTPUT EXPANDER IC FOR BANDPASS FILTERS (IC3604)

Pin number	Port name	Description
4	B0S	Outputs 0.5–1.999999 MHz bandpass filter control signal.
5	B1S	Outputs 2–2.999999 MHz bandpass filter control signal.
6	B2S	Outputs 3–4.999999 MHz bandpass filter control singnal.
7	B3S	Outputs 5–6.999999 MHz bandpass filter control signal.
11	B7S	Outputs 18–23.999999 MHz bandpass filter control signal.
12	B6S	Outputs 14–17.999999 MHz bandpass filter control signal.
13	B5S	Outputs 10–13.999999 MHz bandpass filter control signal.
14	B4S	Outputs 7–9.999999 MHz bandpass filter control signal.

3-7-5 OUTPUT EXPANDER IC (IC3603)

Pin number	Port name	Description
4	NMS	Outputs NBDP MOD control signal for the gate mod IC (IC2001, pin 10).
5	EMS	Outputs external MOD control signal for the gate mode IC (IC2001, pin 11).
6	MMS	Outputs microphone MOD control signal for the gate mode IC (IC2001, pin 9).
11	NMRS	Outputs NMEA/RS-232C switching singnal.
13	AFMS	Outputs AF mute control signal.
14	CSEN	Outputs SEND control signal for the buffer amplifier (IC1303, pin 6).

3-7-6 OUTPUT EXPANDER IC (IC3605)

Pin number	Port name	Description
4	B8S	Outputs 24–30 MHz bandpass filter control signal.
5	DBP1	Outputs bandpass filter control signal for DSC circuit (For 2.1875, 4.2075, 6.3120 MHz).
6	DBP2	Outputs bandpass filter control signal for the DSC circuit (8.4145 MHz).
7	DBP3	Outputs bandpass filter control signal for the DSC circuit (12.5770 MHz).
14	DBP4	Outputs bandpass filter control signal for the DSC circuit (16.8045 MHz).

3-7-7 D/A CONVERTER IC (IC3606)

Pin number	Port name	Description
5	POCV	Outputs transmit power control signal. The signal is applied to the ALC amplifier (IC1201, pin 3) and RF amplifier (Q701).
6	AFG	Outputs the VCA control signal. The signal is applied to the VCA amplifier (IC1603, pin 8) and RC-25 controller via the J2051, pin 5.
11	FANS	Outputs the cooling fan control signal. The signal is applied to the fan controller (PA unit; IC6501, Q6501).
13	TRXS	Outputs the transmitter/receiver switching signal. The signal is applied to the switching relay circuit (FILTER unit; RL7301).

3-7-8 FRONT CPU PORT ALLOCATIONS (RC-25, DISPLAY BOARD; IC8201)

Pin number	Port name	Description
17	DSEL	Outputs DISTRESS LED control signal.
21	FUNK	Input port for the F switch.
22	TXK	Input port for the [TX] switch.
23	RXK	Input port for the [RX] switch.
24	FCHK	Input port for the [FREQ/CH] switch.
25	T0K	Input port for the [0] switch.
26	ENTK	Input port for the [ENT] switch.
28	PWRK	Input port for the [POWER] switch.
31	PMUT	Input port for the phone plug insert detection signal.
32	FPTT	Input port for the [PTT] switch from the microphone connector (J8701, pin 5).
33	AFGL	Input port for the AF volume control.
34	M1AD	Input port for the using microphone detection signal.
35	M2AD	Input port for the switch signal on the microphone.
36	M3AD	Input port for the microphone connecting detection.
41–46	CL1 RS RD WR $\overline{\text{RES}}$ $\overline{\text{CS}}$	Output LCD drive signals.
48–55	DB7–DB0	Output LCD drive signals.
57	T9K	Input port for the [9] switch.
58	T8K	Input port for the [8] swtich.
59	T7K	Input port for the [7] swtich.
60	T6K	Input port for the [6] switch.
61	T5K	Input port for the [5] switch.
62	T4K	Input port for the [4] switch.
63	T3K	Input port for the [3] switch.
64	T2K	Input port for the [2] switch.
65	T1K	Input port for the [1] switch.
66	EMLK	Input port for [e-mail]/[DSC]/[TS] switches.
67	SETK	Input port for the [SET] switch.
68	MODK	Input port for the [MODE] switch.
69	TUNK	Input port for the [TUNE] switch.
70	DALK	Input port for [CANCEL]/[TELCALL]/[TXF] switches.
71	CSCK	Input port for [DSC]/[CALL]/[CH0]/[SELCALL] switches.
72	DSTK	Input port for the [DISTRESS]/[CALL]/[ALM] switches.

SECTION 4 ADJUSTMENT PROCEDURES

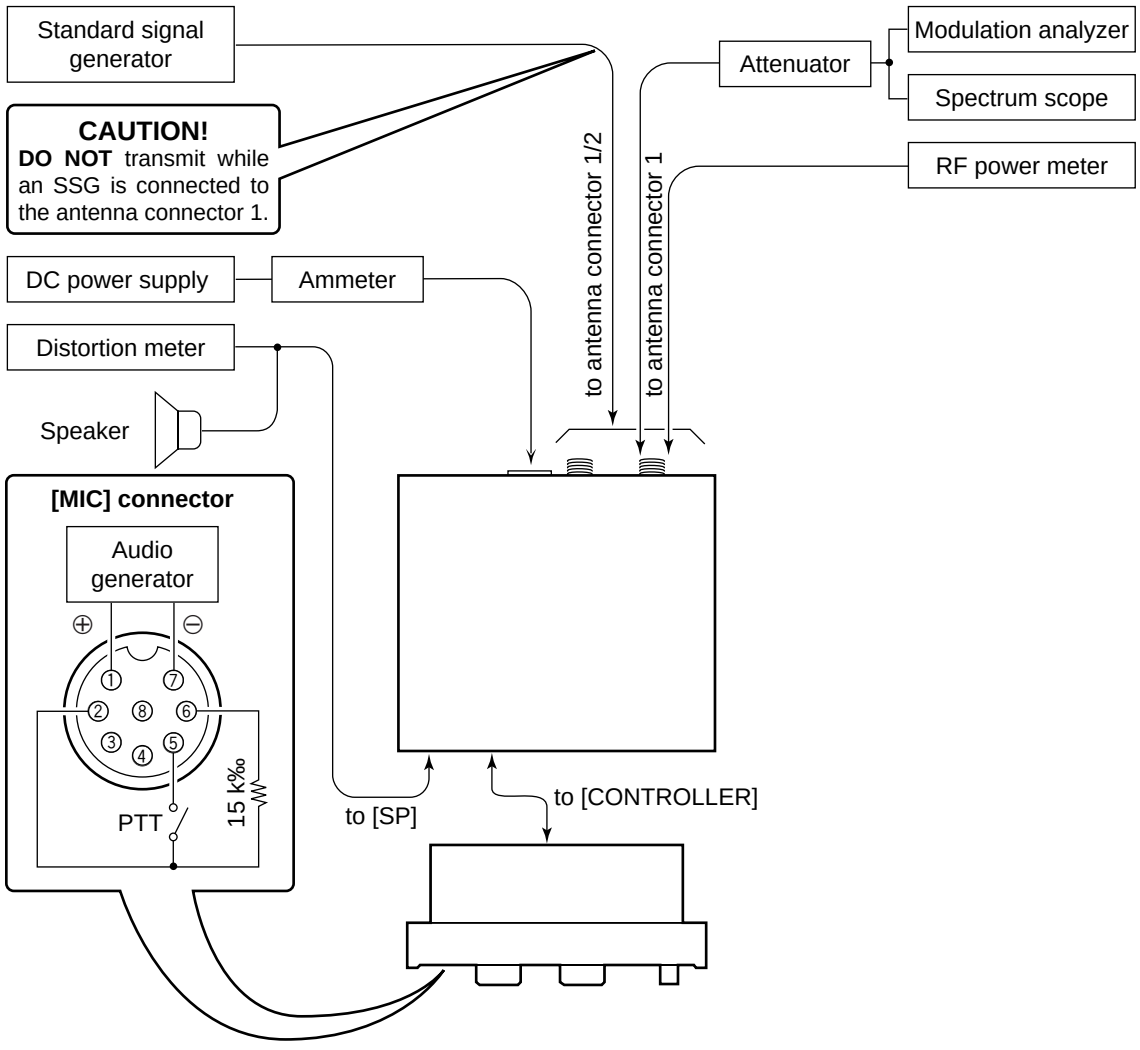
4-1 PREPARATION

When adjusting the contents on page 4-9, a JIG CABLE (see illustration as shown below) is required.
Some adjustments must be performed on the “ADJUSTMENT MODE”. Entering the “ADJUSTMENT MODE”, see the next page.

■ REQUIRED TEST EQUIPMENT

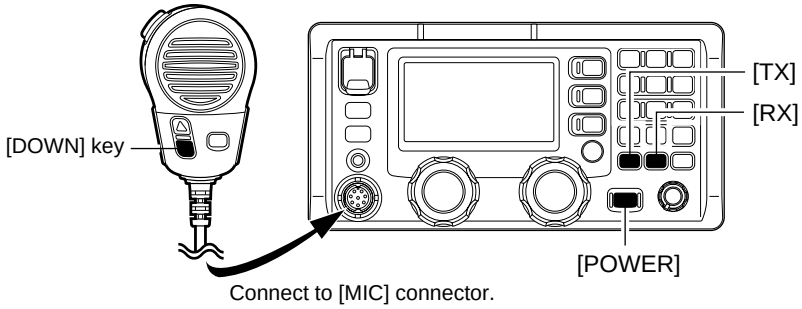
EQUIPMENT	GRADE AND RANGE	EQUIPMENT	GRADE AND RANGE
DC power supply	Output voltage : 7.2 V DC Current capacity : 5 A or more	Audio generator	Frequency range : 300–3000 Hz Output level : 1–500 mV
RF power meter (terminated type)	Measuring range : 1–10 W Frequency range : 300–600 MHz Impedance : 50 Ω SWR : Less than 1.2 : 1	Attenuator	Power attenuation : 40 or 50 dB Capacity : 10 W or more
Frequency counter	Frequency range : 0.1–600 MHz Frequency accuracy : ±1 ppm or better Sensitivity : 100 mV or better	Standard signal generator (SSG)	Frequency range : 120–600 MHz Output level : 0.1 µV–32 mV (–127 to –17 dBm)
		DC voltmeter	Input impedance : 50 kΩ/V DC or better
FM deviation meter	Frequency range : DC–600 MHz Measuring range : 0 to ±5 kHz	Oscilloscope	Frequency range : DC–20 MHz Measuring range : 0.01–20 V
Digital multimeter	Input impedance : 10 MΩ/V DC or better	AC millivoltmeter	Measuring range : 10 mV–10 V

• CONNECTION



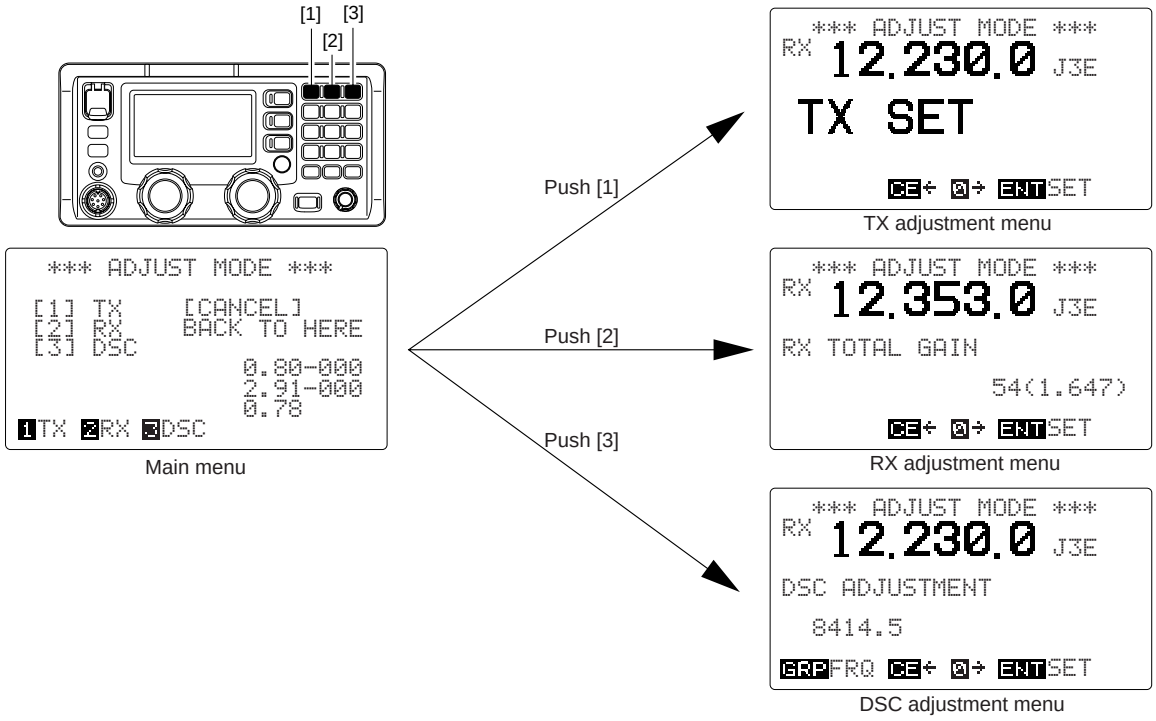
■ ENTERING THE ADJUSTMENT MODE

① Turn the power OFF.
② Push and hold the HM-135's [DOWN] key, [TX] and [RX] buttons, then turn the power ON.
NOTE: Inserting the 15 kΩ resistor between 2 pin and 6 pin of HM-135 works same as pushing and holding HM-135's [DOWN] key (See the illustration on page 4-2).



■ OPERATING ON THE ADJUSTMENT MODE

- Enter the TX adjustment from the MAIN menu : Push the [1] button
- Enter the RX adjustment from the MAIN menu : Push the [2] button
- Enter the DSC adjustment from the MAIN menu : Push the [3] button
- Change the next adjustment item : Push the [0] button
- Return to the pre-adjustment item : Push the [CE] button



- TX ADJUSTMENT ITEM CHANGING

MAIN menu ⇄ TX set ⇄ TX gain ⇄ TX power (High) ⇄ TX power (Middle) ⇄ TX power (Low) ⇄ TX tune power
([1] from MAIN; [0] between TX set, TX gain, TX power (High), TX power (Middle), TX power (Low), TX tune power; [CE] between TX set, TX gain, TX power (High), TX power (Middle), TX power (Low), TX tune power and MAIN menu)

- RX ADJUSTMENT ITEM CHANGING

MAIN menu ⇄ RX total gain ⇄ S level zero ⇄ S level 8
([2] from MAIN; [0] between RX total gain, S level zero, S level 8; [CE] between RX total gain, S level zero, S level 8 and MAIN menu)

- DSC ADJUSTMENT ITEM CHANGING

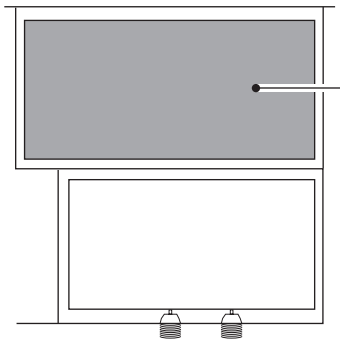
MAIN menu ⇄ DSC adjustment ⇄ *DSC demodulation ⇄ DSC self check
([3] from MAIN; [0] between DSC adjustment, *DSC demodulation, DSC self check; [CE] between DSC adjustment, *DSC demodulation, DSC self check and MAIN menu)

***NOTE:** DO NOT adjust the "DSC DEMODULATION". Thus, after adjusting the "DSC adjustment", push the [0] button twice to skip it.

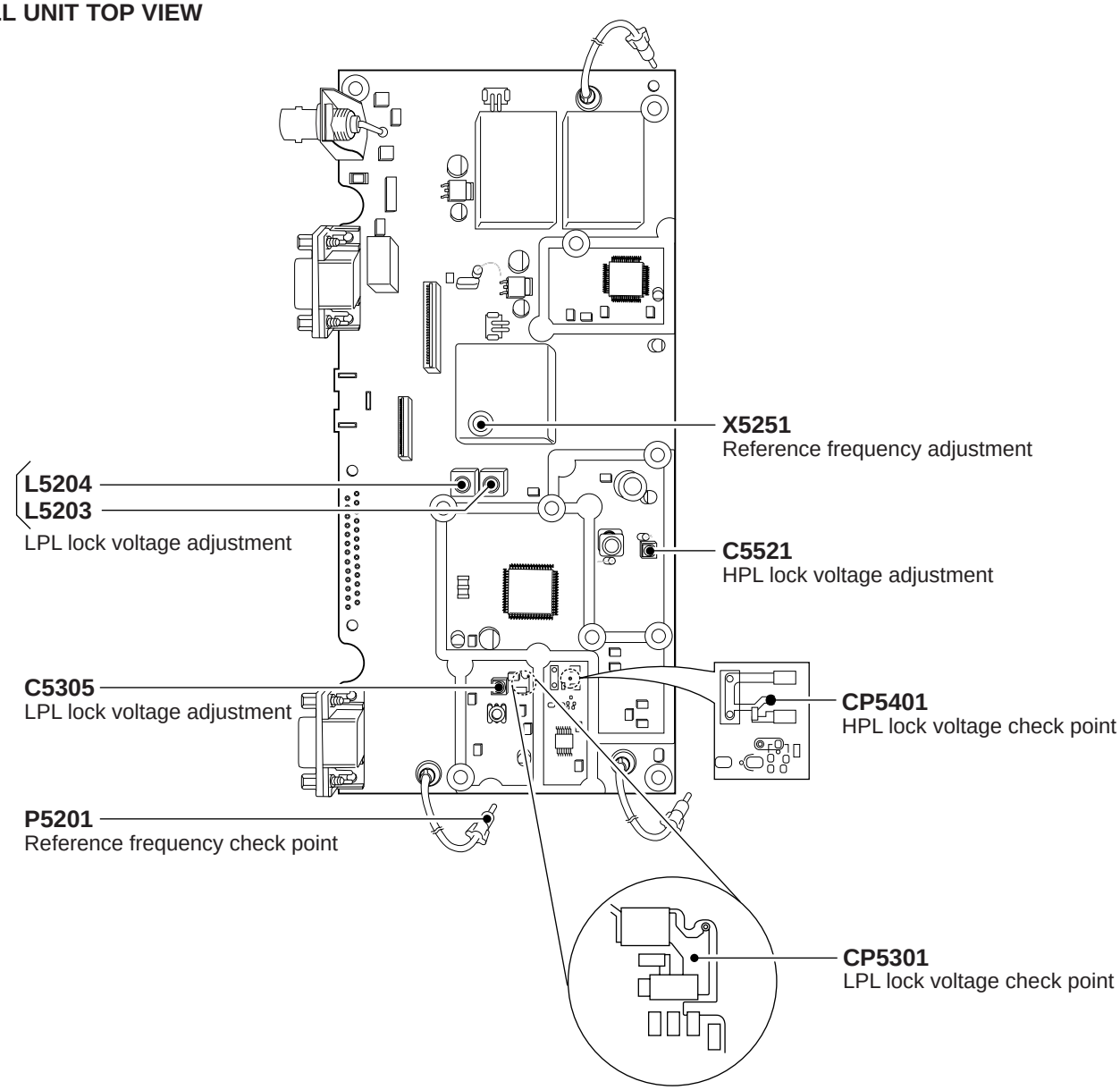
4-2 PLL UNIT ADJUSTMENT

ADJUSTMENT		ADJUSTMENT CONDITIONS	MEASUREMENT		VALUE	ADJUSTMENT	
			UNIT	LOCATION		UNIT	ADJUST
LPL LOCK VOLTAGE	1	• Operating frequency : 0.5000 MHz • Mode : J3E • Receiving	PLL	Connect a digital multi meter or oscilloscope to check point CP5301.	1.0 V	PLL	C5305
	2	• Operating frequency : 0.4999 MHz • Receiving			Less than 4.0 V		Verify
HPL LOCK VOLTAGE	1	• Operating frequency : 29.9999 MHz • Mode : J3E • Receiving	PLL	Connect a digital multi meter or oscilloscope to check point CP5401.	4.2 V	PLL	C5521
	2	• Operating frequency : 0.0300 MHz • Receiving			More than 0.8 V		Verify
REFERENCE FREQUENCY	1	• Wait for 5 minutes after power ON. • Terminate P5201 on the PLL unit to ground with a 50 Ω resister. • Receiving	PLL	Connect an RF volt-meter to check point P5201.	Maximum level	PLL	L5203, L5204
	2			Connect a frequency counter to check point P5201.	63.999990 MHz		X5251

• IC-M802 BOTTOM VIEW



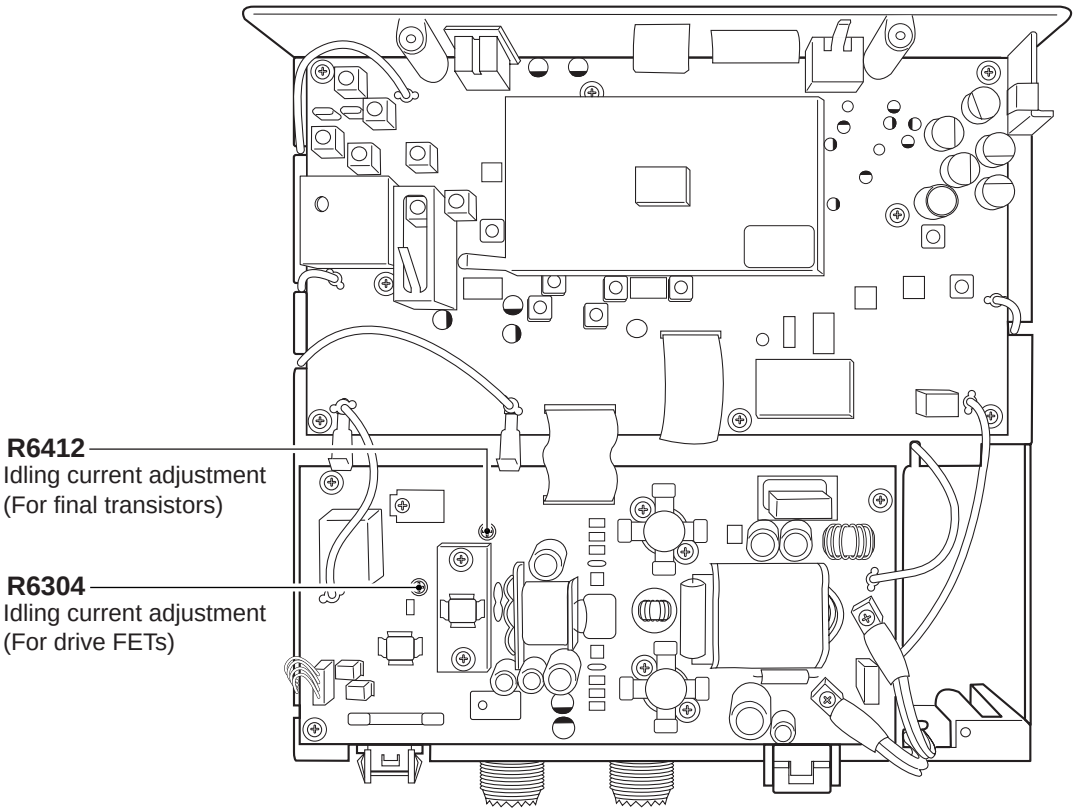
• PLL UNIT TOP VIEW



4-3 PA AND FILTER UNITS ADJUSTMENT

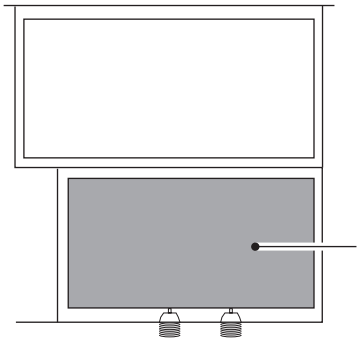
ADJUSTMENT		ADJUSTMENT CONDITIONS	MEASUREMENT		VALUE	ADJUSTMENT	
			UNIT	LOCATION		UNIT	ADJUST
IDLING CURRENT (For drive FETs)	1	• Operating frequency : 12.2350 MHz • Mode : J3E • Apply no audio signal to the [MICROPHONE] connector. • Disconnect J6702. • Preset R6304 and R6412 on the PA unit to max. counter clockwise. • Connect a dummy load or RF power meter to the [ANT] connector. • Transmitting	Rear panel	Connect an ammeter (10 A) between an external power supply and the transceiver.	2.0 A	PA	R6304
(For final transistors)	2	• Transmitting			0.7 A		R6412
		• After adjustment, connect J6701 to the PA unit.					
SWR DETECTOR	1	• Operating frequency : 22.0000 MHz • Mode : J3E • Connect the CP7332 (FOR line) on the FILTER unit to ground.	Rear panel	Connect an RF power meter to the [ANT] connector.	140 W	Audio generator	Output level
	2	• Connect an audio generator to the [MICROPHONE] connector and set as: Frequency : 1.5 kHz • Transmitting	FILTER	Connect a DC voltmeter to check point, CP7331.	Minimum level	FILTER	C7275
		• After adjustment, disconnect CP7332 (FOR line) on the FILTER unit from ground.					

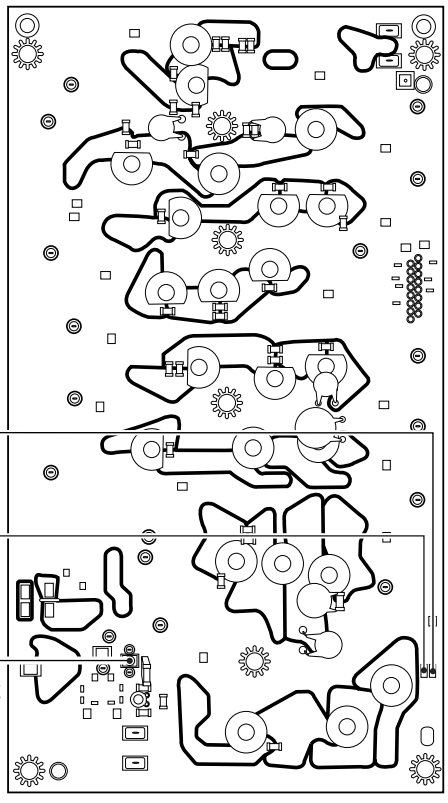
• IC-M802 TOP VIEW



• FILTER UNIT BOTTOM VIEW

• IC-M802 BOTTOM VIEW





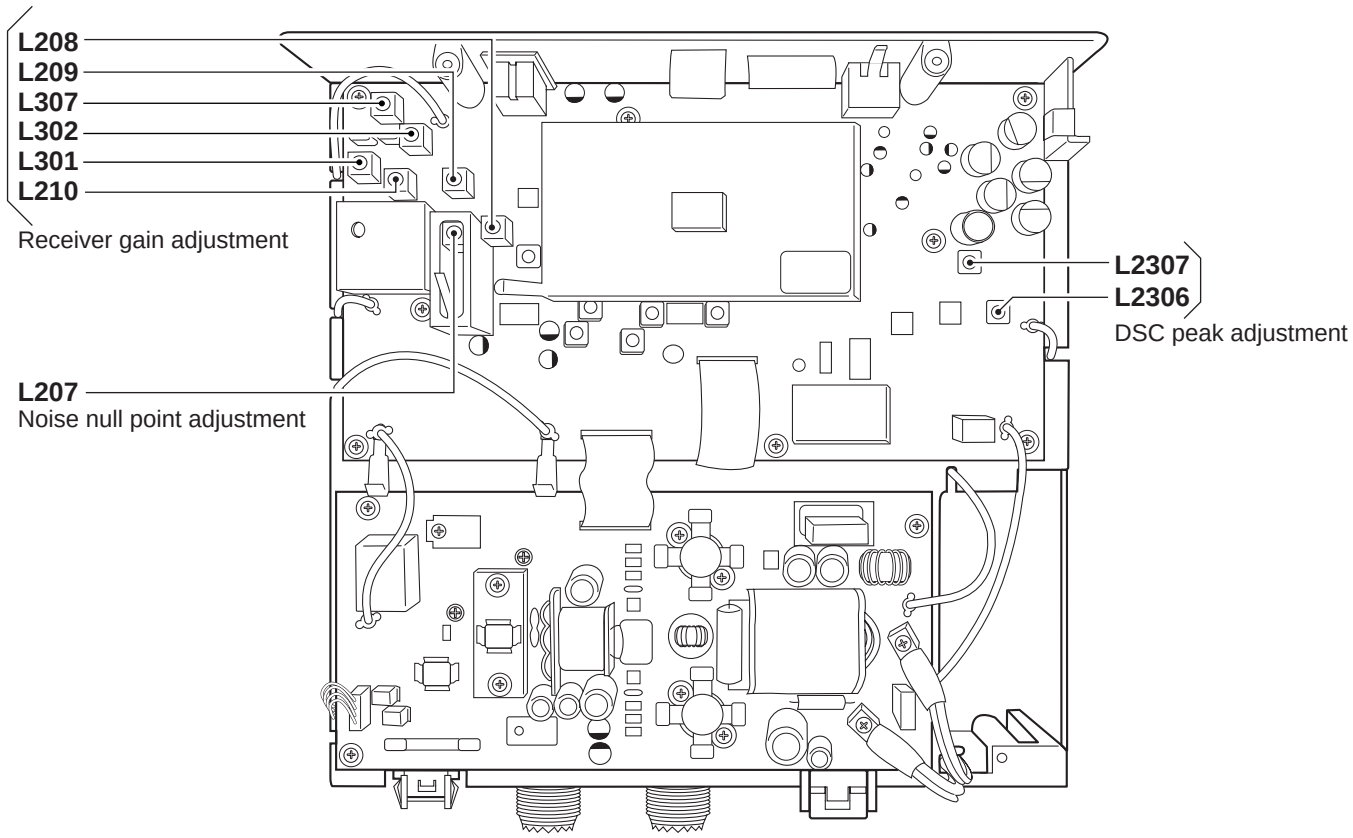
4-4 RECEIVER ADJUSTMENTS

"TOTAL GAIN", "S-METER" and "DSC PEAK" adjustments must be performed at "ADJUSTMENT MODE".

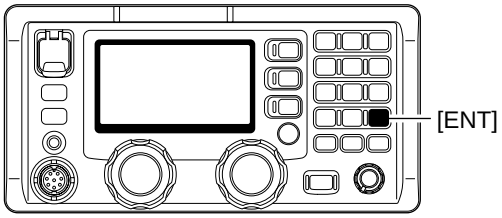
ADJUSTMENT		ADJUSTMENT CONDITIONS	MEASUREMENT		VALUE	ADJUSTMENT	
			UNIT	LOCATION		UNIT	ADJUST
NOISE NULL POINT	1	• Operating frequency : 0.5 MHz • Mode : H3E • Preset L402 and L405 to max. clockwise. • Preset L401, L403, L404 and L801 to max. counter clockwise. • Set the standard signal generator to OFF (no signal output). • Receiving	Front panel	Connect an AC millivoltmeter to the [SP] jack with a 4 Ω dummy load.	Minimum output level	MAIN	L207
RECEIVER GAIN	1	• Operating frequency : 12.2310 MHz • Mode : J3E • Connect a standard signal generator to the [ANT] connector and set as: Frequency : 12.2310 MHz Level : 0.5 µV* (–113 dBm) Modulation : OFF • Receiving	Front panel	Connect an AC millivoltmeter to the [SP] jack with a 4 Ω dummy load.	Maximum output level	MAIN	L208, L209, L210, L301, L302, L307
TOTAL GAIN	1	• While pushing HM-135's "DOWN" key, [TX] and [RX] switches, then turn power ON. • Push [2] swtich to enter the RX adjustment mode. • Connect a standard signal generator to the [ANT] connector and set as: Frequency : 12.3540 MHz Level : 320 µV* (–57 dBm) Modulation : OFF • Receiving	• Push the [ENT] switch to write the adjustment value in the memory.				
S-METER	1	• Set the standard signal generator to OFF (no signal output).	• Push the [ENT] switch to write the adjustment value in the memory.				
	2	• Set the standard signal generator as: Frequency : 12.3540 MHz Level : 10 mV* (–27 dBm) • Receiving	• Push the [ENT] switch to write the adjustment value in the memory.				
DSC PEAK	1	• Push [3] switch to enter the DSC adjustment mode. LCD displayed :"DSC ADJUSTMENT". • DSC frequency : 8.4145 MHz • Connect a standard signal generator to the [DSC ANT] connector and set as: Frequency : 8.4145 MHz Level : 0.5 µV* (–113 dBm) Modulation : OFF • Receiving	Front panel	Connect an AC millivoltmeter to the [SP] jack with a 4 Ω dummy load.	Maximum output level	MAIN	L2306, L2307
DSC SELF CHECK	1	• LCD displayed :"DSC SELF CHECK" • DSC frequency : 8.4145 MHz • Connect an RF power meter to the [DSC ANT] connector on the rear panel. • Receiving	• Push the [ENT] switch, and then verify to return to the "Main menu" on the LCD display. When this check is failure, displayed "NG" on LCD, and beep sound.				

*The output level of the standard signal generator (SSG) is indicated as the SSG's open circuit.

• **IC-M802 TOP VIEW**



• **RC-25 FRONT PANEL**

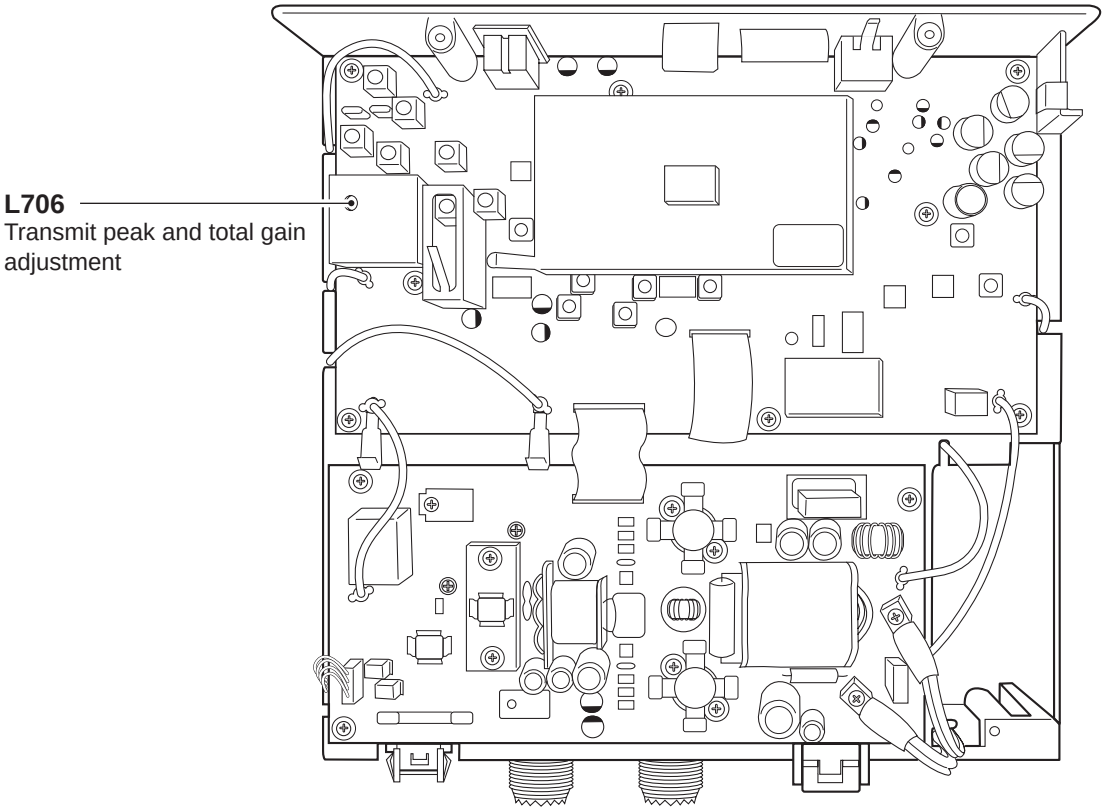


4-5 TRANSMITTER ADJUSTMENTS

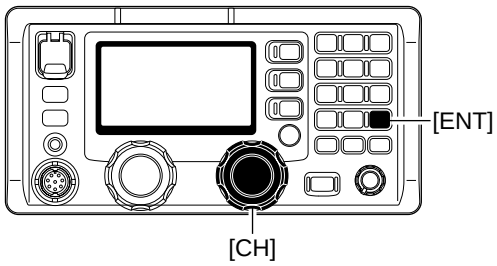
The following adjustments must be performed at “ADJUSTMENT MODE” after “SWR DETECTOR” and “RECEIVER” ADJUSTMENTS in the SECTION 4-3 and 4-4.

ADJUSTMENT		ADJUSTMENT CONDITIONS	MEASUREMENT		VALUE	ADJUSTMENT	
			UNIT	LOCATION		UNIT	ADJUST
TRANSMIT PEAK AND TOTAL GAIN (TX PEAK)	1	• While pushing HM-135’s DOWN key, [TX] and [RX] switches, turn power ON. • Connect an audio generator to the [MICROPHONE] connector and set as: Frequency : 1.5 kHz Level : 10 mV • Push [1] swtich to enter the TX adjustment mode (LCD displayed: “TX SET”). • Push [ENT] switch, then the transceiver is transmitting.	Rear panel	Connect an RF power meter to the [ANT] connector.	Maximum output power	MAIN	L706
(TOTAL GAIN)	2	• After setting 75 W, push the [ENT] key to write the adjustment value in the memory.			75 W	RC-25	[CH] DIAL
TX POWER (HIGH)	1	• LCD displayed :“TX POWER HIGH” • Set the audio generator as: Frequency : 1.5 kHz Level : 100 mV	Rear panel	Connect an RF power meter to the [ANT] connector.	140 W	RC-25	[CH] DIAL
	2	• After setting 140 W, push the [ENT] key to write the adjustment value in the memory.					
(MIDDLE)	1	• LCD displayed :“TX POWER MID” • Set the audio generator as: Frequency : 1.5 kHz Level : 100 mV	Rear panel	Connect an RF power meter to the [ANT] connector.	70 W	RC-25	[CH] DIAL
	2	• After setting 70 W, push the [ENT] key to write the adjustment value in the memory.					
(LOW)	1	• LCD displayed :“TX POWER LOW” • Set the audio generator as: Frequency : 1.5 kHz Level : 100 mV	Rear panel	Connect an RF power meter to the [ANT] connector.	20 W	RC-25	[CH] DIAL
	2	• After setting 20 W, push the [ENT] key to write the adjustment value in the memory.					
TUNE POWER	1	• LCD displayed :“TX POWER TUNE” • Set the audio generator as: Frequency : 1.5 kHz Level : 100 mV	Rear panel	Connect an RF power meter to the [ANT] connector.	10 W	RC-25	[CH] DIAL
	2	• After setting 10 W, push the [ENT] key to write the adjustment value in the memory.					

• IC-M802 TOP VIEW



• RC-25 FRONT PANEL



SECTION 5 PARTS LIST

5-1 IC-M802

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
IC-M802			
MAIN			
IC1	1110004080	S.IC	µPC2709T-E3
IC501	1110005460	S.IC	TA4107F (TE12L)
IC901	1110005460	S.IC	TA4107F (TE12L)
IC1001	1130006220	S.IC	TC4W53FU (TE12L)
IC1002	1110005450	S.IC	TS522IDT
IC1051	1110005450	S.IC	TS522IDT
IC1101	1110000960	S.IC	NJM4558M-T1
IC1201	1110005140	S.IC	NJM3403AV-TE1
IC1301	1160000130	S.IC	TD62783AF (TP1)
IC1302	1160000130	S.IC	TD62783AF (TP1)
IC1303	1160000130	S.IC	TD62783AF (TP1)
IC1501	1180000420	S.IC	TA78L05F (TE12R)
IC1502	1180002180	S.IC	TA78M08F (TE16L)
IC1551	1110001400	S.IC	µPC1555G2-T1
IC1601	1110003090	IC	LA4425A
IC1602	1130006220	S.IC	TC4W53FU (TE12L)
IC1603	1110003300	S.IC	M5282FP 70CD
IC1701	1130006220	S.IC	TC4W53FU (TE12L)
IC1702	1110005450	S.IC	TS522IDT
IC1703	1130006220	S.IC	TC4W53FU (TE12L)
IC2001	1130008230	S.IC	BU4053BCFV-E2
IC2701	1110005460	S.IC	TA4107F (TE12L)
IC2702	1110005450	S.IC	TS522IDT
IC3101	1180000970	S.IC	AN78L05M-(E1)
IC3201	1130005720	S.IC	TC7W04F (TE12L)
IC3301	1140009240	S.IC	HN58X24128FPI
IC3302	1110005770	S.IC	S-80942CNMC-G9C-T2
IC3303	1140010480	S.IC	M30624FGAFP
IC3601	1130007700	S.IC	BU4094BCF-T1
IC3602	1130007700	S.IC	BU4094BCF-T1
IC3603	1130007700	S.IC	BU4094BCF-T1
IC3604	1130007700	S.IC	BU4094BCF-T1
IC3605	1130007700	S.IC	BU4094BCF-T1
IC3606	1110003690	S.IC	M62354GP 75EC
Q51	1530003090	S.TRANSISTOR	2SC4213-B (TE85R)
Q201	1560000720	S.FET	2SK2171-4-TD
Q202	1560000720	S.FET	2SK2171-4-TD
Q203	1580000620	S.FET	3SK131-T2 MAS
Q401	1580000620	S.FET	3SK131-T2 MAS
Q501	1580000620	S.FET	3SK131-T2 MAS
Q601	1530003150	S.TRANSISTOR	2SC4673D-TD
Q701	1580000620	S.FET	3SK131-T2 MAS
Q702	1580000620	S.FET	3SK131-T2 MAS
Q703	1580000620	S.FET	3SK131-T2 MAS
Q801	1580000620	S.FET	3SK131-T2 MAS
Q1203	1510000770	S.TRANSISTOR	2SA1586-GR (TE85R)
Q1204	1510000770	S.TRANSISTOR	2SA1586-GR (TE85R)
Q1205	1530003090	S.TRANSISTOR	2SC4213-B (TE85R)
Q1501	1540000440	S.TRANSISTOR	2SD1619-T-TD
Q1502	1540000440	S.TRANSISTOR	2SD1619-T-TD
Q1503	1590000680	S.TRANSISTOR	DTC114EUA T106
Q1504	1590000680	S.TRANSISTOR	DTC114EUA T106
Q1601	1590000680	S.TRANSISTOR	DTC114EUA T106
Q1801	1540000440	S.TRANSISTOR	2SD1619-T-TD
Q2101	1590000680	S.TRANSISTOR	DTC114EUA T106
Q2102	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q2301	1560000720	S.FET	2SK2171-4-TD
Q2302	1560000720	S.FET	2SK2171-4-TD
Q2401	1580000620	S.FET	3SK131-T2 MAS
Q2501	1580000620	S.FET	3SK131-T2 MAS
Q3001	1590000680	S.TRANSISTOR	DTC114EUA T106
Q3004	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
D51	1750000810	S.DIODE	UM9957F/TR
D52	1750000810	S.DIODE	UM9957F/TR
D53	1790001770	S.DIODE	MA80WK-(TX)
D101	1790001770	S.DIODE	MA80WK-(TX)
D102	1790001770	S.DIODE	MA80WK-(TX)
D103	1790001770	S.DIODE	MA80WK-(TX)

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
D104	1790001770	S.DIODE	MA80WK-(TX)
D105	1790000620	S.DIODE	MA77 (TX)
D106	1790001770	S.DIODE	MA80WK-(TX)
D107	1790001770	S.DIODE	MA80WK-(TX)
D108	1790001770	S.DIODE	MA80WK-(TX)
D109	1790001770	S.DIODE	MA80WK-(TX)
D110	1790000620	S.DIODE	MA77 (TX)
D201	1790001770	S.DIODE	MA80WK-(TX)
D301	1790001770	S.DIODE	MA80WK-(TX)
D302	1750000430	S.DIODE	HSB88WSTR
D303	1790001770	S.DIODE	MA80WK-(TX)
D401	1790000620	S.DIODE	MA77 (TX)
D402	1790000620	S.DIODE	MA77 (TX)
D403	1790000620	S.DIODE	MA77 (TX)
D404	1790000620	S.DIODE	MA77 (TX)
D601	1730002280	S.ZENER	MA8091-M (TX)
D602	1790001770	S.DIODE	MA80WK-(TX)
D901	1790001770	S.DIODE	MA80WK-(TX)
D1201	1790001240	S.DIODE	MA2S728-(TX)
D1202	1790001250	S.DIODE	MA2S111-(TX)
D1203	1790001250	S.DIODE	MA2S111-(TX)
D1204	1790001250	S.DIODE	MA2S111-(TX)
D1205	1790001250	S.DIODE	MA2S111-(TX)
D1206	1730002450	S.ZENER	MA8043-H (TX)
D1207	1790001250	S.DIODE	MA2S111-(TX)
D1501	1790000980	S.DIODE	MA742 (TX)
D1502	1790000980	S.DIODE	MA742 (TX)
D1551	1730002320	S.ZENER	MA8051-M (TX)
D1552	1790000980	S.DIODE	MA742 (TX)
D1554	1730002280	S.ZENER	MA8091-M (TX)
D1801	1790001250	S.DIODE	MA2S111-(TX)
D2101	1790001240	S.DIODE	MA2S728-(TX)
D2102	1790001250	S.DIODE	MA2S111-(TX)
D2103	1750000810	S.DIODE	UM9957F/TR
D2104	1750000810	S.DIODE	UM9957F/TR
D2201	1790001770	S.DIODE	MA80WK-(TX)
D2202	1790001770	S.DIODE	MA80WK-(TX)
D2203	1790001770	S.DIODE	MA80WK-(TX)
D2204	1790001770	S.DIODE	MA80WK-(TX)
D2301	1750000430	S.DIODE	HSB88WSTR
D3001	1790001670	S.DIODE	RB706F-40T106
D3002	1790001670	S.DIODE	RB706F-40T106
D3003	1790001670	S.DIODE	RB706F-40T106
D3004	1790001250	S.DIODE	MA2S111-(TX)
D3006	1790001670	S.DIODE	RB706F-40T106
D3007	1790001670	S.DIODE	RB706F-40T106
D3301	1790001250	S.DIODE	MA2S111-(TX)
D3302	1790001250	S.DIODE	MA2S111-(TX)
D3336	1790001250	S.DIODE	MA2S111-(TX)
D3337	1790001250	S.DIODE	MA2S111-(TX)
FI201	2010002600	XTAL	FL-345 (64.455 MHz)
FI231	2010001880	MONOLITH	FL-231 (10.700 MHz)
FI301	2010002470	XTAL	FL-315 (64.45500 MHz)
FI401	2020001960	CERAMIC	CFWLB455KHFA-B0 (CFWM455H)
FI402	2020001330	CERAMIC	CFWLA455KHFA-B0 (CFWS455HT)
X3301	6050010501	S.XTAL	CR-636A (14.7456 MHz)
L1	6200002650	S.COIL	NL 252018T-R18J
L2	6200002910	S.COIL	NL 252018T-R27J
L3	6200002860	S.COIL	NL 252018T-4R7J
L51	6200002860	S.COIL	NL 252018T-4R7J
L52	6200009880	S.COIL	NL 252018T-820J
L53	6200004670	S.COIL	NL 252018T-3R9J
L54	6200002040	S.COIL	NL 252018T-101J
L55	6200002040	S.COIL	NL 252018T-101J
L56	6200002040	S.COIL	NL 252018T-101J
L101	6200003940	S.COIL	NL 252018T-5R6J

S.=Surface mount

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
L102	6200002860	S.COIL	NL 252018T-4R7J
L103	6200002040	S.COIL	NL 252018T-101J
L104	6200003280	S.COIL	NL 252018T-2R2J
L105	6200002040	S.COIL	NL 252018T-101J
L106	6200009860	S.COIL	NL 252018T-1R5J
L107	6200002040	S.COIL	NL 252018T-101J
L108	6200001980	S.COIL	NL 252018T-1R0J
L109	6200002040	S.COIL	NL 252018T-101J
L110	6200002850	S.COIL	NL 252018T-R82J
L111	6200002040	S.COIL	NL 252018T-101J
L112	6200003660	S.COIL	NL 252018T-R68J
L113	6200002040	S.COIL	NL 252018T-101J
L114	6200002610	S.COIL	NL 252018T-R47J
L115	6200002040	S.COIL	NL 252018T-101J
L116	6200004960	S.COIL	NL 252018T-R33J
L117	6200002040	S.COIL	NL 252018T-101J
L118	6200002860	S.COIL	NL 252018T-4R7J
L119	6200002000	S.COIL	NL 252018T-3R3J
L120	6200003280	S.COIL	NL 252018T-2R2J
L121	6200009860	S.COIL	NL 252018T-1R5J
L122	6200001980	S.COIL	NL 252018T-1R0J
L123	6200003660	S.COIL	NL 252018T-R68J
L124	6200002610	S.COIL	NL 252018T-R47J
L125	6200009850	S.COIL	NL 252018T-R39J
L126	6200002910	S.COIL	NL 252018T-R27J
L127	6200002000	S.COIL	NL 252018T-3R3J
L128	6200003280	S.COIL	NL 252018T-2R2J
L129	6200003660	S.COIL	NL 252018T-R68J
L130	6200002610	S.COIL	NL 252018T-R47J
L131	6200009850	S.COIL	NL 252018T-R39J
L132	6200002910	S.COIL	NL 252018T-R27J
L133	6200003940	S.COIL	NL 252018T-5R6J
L134	6200004950	S.COIL	NL 252018T-1R8J
L135	6200001980	S.COIL	NL 252018T-1R0J
L136	6200003660	S.COIL	NL 252018T-R68J
L137	6200003270	S.COIL	NL 252018T-R56J
L138	6200009850	S.COIL	NL 252018T-R39J
L139	6200004960	S.COIL	NL 252018T-R33J
L140	6200002040	S.COIL	NL 252018T-101J
L141	6200004950	S.COIL	NL 252018T-1R8J
L142	6200004740	S.COIL	NL 252018T-1R2J
L143	6200002850	S.COIL	NL 252018T-R82J
L144	6200002040	S.COIL	NL 252018T-101J
L201	6200002040	S.COIL	NL 252018T-101J
L202	6200002910	S.COIL	NL 252018T-R27J
L203	6200002910	S.COIL	NL 252018T-R27J
L204	6140003620	COIL	LR-403
L205	6200002040	S.COIL	NL 252018T-101J
L206	6200002630	S.COIL	NL 252018T-R10J
L207	6150004270	COIL	LS-483A (C-14924)
L208	6150005110	COIL	LS-540
L209	6150005110	COIL	LS-540
L210	6150004270	COIL	LS-483A (C-14924)
L301	6150005110	COIL	LS-540
L302	6150005110	COIL	LS-540
L303	6140002810	S.COIL	LR-317
L304	6140003530	COIL	LR-395
L305	6200005010	S.COIL	NL 252018T-100J
L306	6200009870	S.COIL	NL 252018T-120J
L307	6150005110	COIL	LS-540
L401	6150005140	COIL	LS-542
L402	6150005140	COIL	LS-542
L403	6150002291	COIL	LS-450
L404	6150005140	COIL	LS-542
L405	6150005140	COIL	LS-542
L406	6200003520	S.COIL	ELJFB 102K-F
L502	6200003520	S.COIL	ELJFB 102K-F
L504	6200002040	S.COIL	NL 252018T-101J
L505	6200002040	S.COIL	NL 252018T-101J
L506	6200003520	S.COIL	ELJFB 102K-F
L601	6200005010	S.COIL	NL 252018T-100J
L602	6200002840	S.COIL	NL 252018T-R22J
L603	6200003280	S.COIL	NL 252018T-2R2J
L604	6200004960	S.COIL	NL 252018T-R33J
L605	6200002840	S.COIL	NL 252018T-R22J
L701	6140002810	S.COIL	LR-317
L702	6200001980	S.COIL	NL 252018T-1R0J
L703	6200003660	S.COIL	NL 252018T-R68J
L704	6200002040	S.COIL	NL 252018T-101J
L705	6200002040	S.COIL	NL 252018T-101J
L706	6150004270	COIL	LS-483A (C-14924)
L707	6140002810	S.COIL	LR-317

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
L801	6150004440	COIL	LS-495
L901	6200002040	S.COIL	NL 252018T-101J
L902	6200002040	S.COIL	NL 252018T-101J
L903	6200002040	S.COIL	NL 252018T-101J
L904	6150005170	COIL	ELELN 102KA
L1301	6200005490	S.COIL	NL 322522T-331J
L1302	6200005490	S.COIL	NL 322522T-331J
L1551	6180001000	COIL	LAL 04NA 102K
L1552	6180001000	COIL	LAL 04NA 102K
L1601	6170000140	COIL	LW-15
L1801	6200003950	S.COIL	HF50ACC 322513-T
L1802	6200003950	S.COIL	HF50ACC 322513-T
L1803	6200002040	S.COIL	NL 252018T-101J
L1804	6200002040	S.COIL	NL 252018T-101J
L1901	6200002040	S.COIL	NL 252018T-101J
L1902	6200002040	S.COIL	NL 252018T-101J
L1903	6200002040	S.COIL	NL 252018T-101J
L1904	6200003950	S.COIL	HF50ACC 322513-T
L1905	6200002040	S.COIL	NL 252018T-101J
L1906	6140002220	COIL	LR-270 (TR6X3X2 3A9)
L1907	6200003950	S.COIL	HF50ACC 322513-T
L1908	6200003950	S.COIL	HF50ACC 322513-T
L2051	6200002040	S.COIL	NL 252018T-101J
L2052	6200002040	S.COIL	NL 252018T-101J
L2053	6200002040	S.COIL	NL 252018T-101J
L2054	6200002040	S.COIL	NL 252018T-101J
L2101	6200002040	S.COIL	NL 252018T-101J
L2201	6200003280	S.COIL	NL 252018T-2R2J
L2202	6200002040	S.COIL	NL 252018T-101J
L2204	6200002040	S.COIL	NL 252018T-101J
L2205	6180001730	COIL	LAL 02NA 1R8K
L2206	6200002040	S.COIL	NL 252018T-101J
L2207	6200003710	S.COIL	NL 252018T-2R7J
L2208	6200002610	S.COIL	NL 252018T-R47J
L2209	6200007790	S.COIL	LQW2BHNR15J01L (LQN21A R15J04)
L2210	6200004950	S.COIL	NL 252018T-1R8J
L2211	6180002380	COIL	LAL 02NA 2R2K
L2212	6180001730	COIL	LAL 02NA 1R8K
L2213	6200005030	S.COIL	NL 252018T-180J
L2214	6200002000	S.COIL	NL 252018T-3R3J
L2215	6200002850	S.COIL	NL 252018T-R82J
L2216	6200003280	S.COIL	NL 252018T-2R2J
L2217	6200003280	S.COIL	NL 252018T-2R2J
L2218	6180002300	COIL	LAL 02NA 1R2K
L2219	6200005040	S.COIL	NL 252018T-220J
L2220	6200003710	S.COIL	NL 252018T-2R7J
L2221	6180001210	COIL	LAL 03NA 8R2K
L2222	6200004960	S.COIL	NL 252018T-R33J
L2223	6200004740	S.COIL	NL 252018T-1R2J
L2224	6200007780	S.COIL	LQW2BHNR12J01L (LQN21A R12J04)
L2225	6200004740	S.COIL	NL 252018T-1R2J
L2228	6200002000	S.COIL	NL 252018T-3R3J
L2229	6200002610	S.COIL	NL 252018T-R47J
L2230	6200007780	S.COIL	LQW2BHNR12J01L (LQN21A R12J04)
L2231	6200002040	S.COIL	NL 252018T-101J
L2232	6200002040	S.COIL	NL 252018T-101J
L2233	6200002040	S.COIL	NL 252018T-101J
L2235	6180000680	COIL	LAL 02NA 4R7K
L2236	6200002040	S.COIL	NL 252018T-101J
L2237	6200007760	S.COIL	LQW2BHN82NJ01L (LQN21A 82NJ04)
L2238	6180002920	COIL	LAL 02NA 5R6K
L2239	6200003660	S.COIL	NL 252018T-R68J
L2240	6200003940	S.COIL	NL 252018T-5R6J
L2241	6200001980	S.COIL	NL 252018T-1R0J
L2242	6200007760	S.COIL	LQW2BHN82NJ01L (LQN21A 82NJ04)
L2244	6200007760	S.COIL	LQW2BHN82NJ01L (LQN21A 82NJ04)
L2245	6200002040	S.COIL	NL 252018T-101J
L2301	6200002040	S.COIL	NL 252018T-101J
L2302	6140003660	COIL	LR-409
L2304	6140003660	COIL	LR-409
L2306	6150005150	COIL	LS-543
L2307	6150003640	COIL	LS-409
L2401	6200010220	S.COIL	NL 252018T-560J
L2501	6200010220	S.COIL	NL 252018T-560J
L2701	6200003520	S.COIL	ELJFB 102K-F
L2702	6200003520	S.COIL	ELJFB 102K-F
L2703	6200002040	S.COIL	NL 252018T-101J
L3301	6200000970	S.COIL	NL 322522T-100K
L3601	6200003950	S.COIL	HF50ACC 322513-T
L3602	6200003950	S.COIL	HF50ACC 322513-T

S.=Surface mount

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
R1	7030003270	S.RESISTOR	ERJ3GEYJ 390 V (39 Ω)
R2	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ω)
R3	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ω)
R4	7030003300	S.RESISTOR	ERJ3GEYJ 680 V (68 Ω)
R5	7030003230	S.RESISTOR	ERJ3GEYJ 180 V (18 Ω)
R6	7030003370	S.RESISTOR	ERJ3GEYJ 271 V (270 Ω)
R7	7030003370	S.RESISTOR	ERJ3GEYJ 271 V (270 Ω)
R8	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R54	7030003410	S.RESISTOR	ERJ3GEYJ 561 V (560 Ω)
R56	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R57	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R58	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R59	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R60	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R61	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R101	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R102	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R103	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R104	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R105	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R106	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R107	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R108	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R109	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R110	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R201	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R202	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R203	7030003240	S.RESISTOR	ERJ3GEYJ 220 V (22 Ω)
R204	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R205	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R207	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R208	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R209	7030003240	S.RESISTOR	ERJ3GEYJ 220 V (22 Ω)
R210	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R211	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R212	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R213	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R214	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R215	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R301	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R306	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ω)
R307	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R309	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R401	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R404	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R405	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R406	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R407	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R408	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R409	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R410	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R413	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R414	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R415	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R502	7030003690	S.RESISTOR	ERJ3GEYJ 124 V (120 kΩ)
R503	7030003610	S.RESISTOR	ERJ3GEYJ 273 V (27 kΩ)
R504	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R505	7030003410	S.RESISTOR	ERJ3GEYJ 561 V (560 Ω)
R506	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R507	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R508	7510001540	S.THERMISTOR	NTCG16 4BH 332KT
R514	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R601	7030006220	S.RESISTOR	ERJ12YJ470U (47 Ω)
R602	7030003290	S.RESISTOR	ERJ3GEYJ 560 V (56 Ω)
R603	7030003530	S.RESISTOR	ERJ3GEYJ 562 V (5.6 kΩ)
R604	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 kΩ)
R605	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 Ω)
R606	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R607	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R701	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R702	7030003410	S.RESISTOR	ERJ3GEYJ 561 V (560 Ω)
R703	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R704	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R705	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R706	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R707	7510001460	S.THERMISTOR	NTCG16 3NH 471KT
R708	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R709	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R710	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R711	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R712	7030003370	S.RESISTOR	ERJ3GEYJ 271 V (270 Ω)
R713	7030003230	S.RESISTOR	ERJ3GEYJ 180 V (18 Ω)

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
R714	7030003370	S.RESISTOR	ERJ3GEYJ 271 V (270 Ω)
R715	7030003230	S.RESISTOR	ERJ3GEYJ 180 V (18 Ω)
R716	7030003370	S.RESISTOR	ERJ3GEYJ 271 V (270 Ω)
R717	7030003370	S.RESISTOR	ERJ3GEYJ 271 V (270 Ω)
R718	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R719	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R720	7030003550	S.RESISTOR	ERJ3GEYJ 822 V (8.2 kΩ)
R722	7510001460	S.THERMISTOR	NTCG16 3NH 471KT
R801	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R802	7030003240	S.RESISTOR	ERJ3GEYJ 220 V (22 Ω)
R803	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R804	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R813	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R901	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R902	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R903	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R904	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ω)
R910	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R911	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1002	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R1003	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R1004	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1005	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1006	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1007	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1008	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R1009	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R1010	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1011	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1014	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1015	7030003650	S.RESISTOR	ERJ3GEYJ 563 V (56 kΩ)
R1016	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R1017	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1018	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R1051	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R1052	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R1053	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1054	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1055	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1057	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1058	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1059	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1060	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R1101	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R1102	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R1103	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R1104	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R1105	7030003730	S.RESISTOR	ERJ3GEYJ 274 V (270 kΩ)
R1106	7030003730	S.RESISTOR	ERJ3GEYJ 274 V (270 kΩ)
R1107	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R1108	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R1109	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R1110	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R1111	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R1112	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R1113	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R1114	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R1202	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R1203	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R1204	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R1205	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R1206	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R1207	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R1208	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R1209	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R1210	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R1211	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R1212	7030003740	S.RESISTOR	ERJ3GEYJ 334 V (330 kΩ)
R1213	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R1214	7030003770	S.RESISTOR	ERJ3GEYJ 564 V (560 kΩ)
R1215	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R1216	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R1217	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R1218	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R1219	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R1220	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MΩ)
R1221	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MΩ)
R1222	7030003240	S.RESISTOR	ERJ3GEYJ 220 V (22 Ω)
R1223	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R1224	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R1225	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R1226	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)

S.=Surface mount

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
R1228	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1230	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R1232	7030009930	S.RESISTOR	ERJ3GEYJ 825 V (8.2 MΩ)
R1233	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R1234	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R1235	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R1301	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 Ω)
R1302	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 Ω)
R1303	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 Ω)
R1304	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 Ω)
R1305	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 Ω)
R1306	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 Ω)
R1307	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 Ω)
R1308	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 Ω)
R1309	7030004040	S.RESISTOR	ERJ3GEYJ 4R7 V (4.7 Ω)
R1310	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R1311	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R1312	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R1313	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R1314	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R1315	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R1316	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R1317	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R1318	7030004040	S.RESISTOR	ERJ3GEYJ 4R7 V (4.7 Ω)
R1319	7030004040	S.RESISTOR	ERJ3GEYJ 4R7 V (4.7 Ω)
R1320	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R1501	7030007190	S.RESISTOR	ERJ12YJ220U (22 Ω)
R1502	7030004040	S.RESISTOR	ERJ3GEYJ 4R7 V (4.7 Ω)
R1503	7030004040	S.RESISTOR	ERJ3GEYJ 4R7 V (4.7 Ω)
R1504	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1505	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1551	7030006220	S.RESISTOR	ERJ12YJ470U (47 Ω)
R1553	7030006220	S.RESISTOR	ERJ12YJ470U (47 Ω)
R1555	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R1556	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R1601	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R1602	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1603	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R1606	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R1607	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R1609	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R1610	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R1611	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R1612	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1613	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1614	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1615	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R1701	7030003490	S.RESISTOR	ERJ3GEYJ 272 V (2.7 kΩ)
R1702	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R1703	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R1704	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R1705	7030003570	S.RESISTOR	ERJ3GEYJ 123 V (12 kΩ)
R1706	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 kΩ)
R1707	7030003410	S.RESISTOR	ERJ3GEYJ 561 V (560 Ω)
R1709	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1710	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1711	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R1712	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R1713	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1715	7030003550	S.RESISTOR	ERJ3GEYJ 822 V (8.2 kΩ)
R1716	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R1717	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1718	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R1719	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R1720	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R1721	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R1722	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1723	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1724	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R1801	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R1802	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R1803	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R1901	7030004040	S.RESISTOR	ERJ3GEYJ 4R7 V (4.7 Ω)
R1902	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R1903	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R2001	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R2002	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R2003	7030003530	S.RESISTOR	ERJ3GEYJ 562 V (5.6 kΩ)
R2101	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R2102	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R2103	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R2104	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
R2105	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R2106	7030003630	S.RESISTOR	ERJ3GEYJ 393 V (39 kΩ)
R2107	7030003630	S.RESISTOR	ERJ3GEYJ 393 V (39 kΩ)
R2201	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R2202	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R2203	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R2204	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R2205	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R2206	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R2207	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R2208	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R2301	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R2302	7030003240	S.RESISTOR	ERJ3GEYJ 220 V (22 Ω)
R2303	7030004040	S.RESISTOR	ERJ3GEYJ 4R7 V (4.7 Ω)
R2402	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 kΩ)
R2403	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R2404	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R2405	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R2406	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R2501	7030003540	S.RESISTOR	ERJ3GEYJ 682 V (6.8 kΩ)
R2502	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 kΩ)
R2503	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R2504	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R2505	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R2506	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R2701	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R2702	7030003650	S.RESISTOR	ERJ3GEYJ 563 V (56 kΩ)
R2703	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R2704	7030003650	S.RESISTOR	ERJ3GEYJ 563 V (56 kΩ)
R2705	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R2706	7030003370	S.RESISTOR	ERJ3GEYJ 271 V (270 Ω)
R2708	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R2709	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R2710	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R2711	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R2712	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R2713	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R2714	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R2715	7030003230	S.RESISTOR	ERJ3GEYJ 180 V (18 Ω)
R2716	7030003370	S.RESISTOR	ERJ3GEYJ 271 V (270 Ω)
R3001	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 kΩ)
R3002	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 kΩ)
R3003	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3004	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3006	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3007	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3008	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3009	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3010	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3011	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3012	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3013	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3014	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R3015	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3017	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3018	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3019	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3020	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3023	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3024	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3025	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3026	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3027	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R3028	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3029	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 kΩ)
R3030	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R3034	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R3036	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3050	7030005691	S.RESISTOR	ERA3YED 123V
R3051	7030009591	S.RESISTOR	ERA3YED 472V
R3101	7030008190	S.RESISTOR	ERJ12YJ330U (33 Ω)
R3201	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3202	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R3203	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3204	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3301	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3302	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3303	7030003650	S.RESISTOR	ERJ3GEYJ 563 V (56 kΩ)
R3304	7030003650	S.RESISTOR	ERJ3GEYJ 563 V (56 kΩ)
R3305	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3306	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3307	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)

S.=Surface mount

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
R3308	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3309	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3310	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3311	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3312	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3313	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R3314	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R3315	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3316	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3317	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3318	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3319	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3320	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3321	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3322	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3323	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3324	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3325	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3326	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3327	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3328	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3329	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3330	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3331	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R3332	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3333	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3334	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3335	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3336	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3337	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3338	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3339	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3340	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3402	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3403	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3404	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3405	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3406	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3408	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3412	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3601	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3602	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3603	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3604	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3605	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3606	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3608	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3609	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3610	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3611	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3612	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3613	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3614	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3615	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3616	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3617	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3618	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3619	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3620	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3621	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3622	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3623	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3624	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3625	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3626	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3627	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3628	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3629	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3630	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3903	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3906	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3907	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3908	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3909	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3915	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3916	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3917	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3918	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3919	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3920	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3921	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
C1	4030007110	S.CERAMIC	C1608 CH 1H 680J-T
C2	4030007120	S.CERAMIC	C1608 CH 1H 820J-T
C3	4030007150	S.CERAMIC	C1608 CH 1H 151J-T
C4	4030007050	S.CERAMIC	C1608 CH 1H 220J-T
C5	4030007120	S.CERAMIC	C1608 CH 1H 820J-T
C6	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C7	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C8	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C9	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C10	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C11	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C54	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C56	4030006870	S.CERAMIC	C1608 JB 1H 222K-T
C57	4030006900	S.CERAMIC	C1608 JB 1H 103K-T
C59	4030010020	S.CERAMIC	C1608 JB 1H 122K-T
C61	4030008860	S.CERAMIC	C1608 JB 1H 153K-T
C62	4030006870	S.CERAMIC	C1608 JB 1H 222K-T
C63	4030008860	S.CERAMIC	C1608 JB 1H 153K-T
C64	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C65	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C66	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C67	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C68	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C101	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C102	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C103	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C104	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C105	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C106	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C107	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C108	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C109	4030006870	S.CERAMIC	C1608 JB 1H 222K-T
C110	4030009980	S.CERAMIC	C1608 JB 1H 152K-T
C111	4030010040	S.CERAMIC	C1608 JB 1H 561K-T
C112	4030010040	S.CERAMIC	C1608 JB 1H 561K-T
C113	4030006850	S.CERAMIC	C1608 JB 1H 471K-T
C114	4030011330	S.CERAMIC	C1608 CH 1H 391J-T
C115	4030007170	S.CERAMIC	C1608 CH 1H 221J-T
C116	4030010750	S.CERAMIC	C1608 CH 1H 201J-T
C117	4030007150	S.CERAMIC	C1608 CH 1H 151J-T
C118	4030011280	S.CERAMIC	C1608 CH 1H 271J-T
C119	4030011280	S.CERAMIC	C1608 CH 1H 271J-T
C120	4030010750	S.CERAMIC	C1608 CH 1H 201J-T
C121	4030007130	S.CERAMIC	C1608 CH 1H 101J-T
C122	4030007100	S.CERAMIC	C1608 CH 1H 560J-T
C123	4030007080	S.CERAMIC	C1608 CH 1H 390J-T
C124	4030007090	S.CERAMIC	C1608 CH 1H 470J-T
C125	4030007050	S.CERAMIC	C1608 CH 1H 220J-T
C126	4030007040	S.CERAMIC	C1608 CH 1H 180J-T
C127	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
C128	4030009970	S.CERAMIC	C1608 JB 1H 182K-T
C129	4030008470	S.CERAMIC	C1608 JB 1H 272K-T
C130	4030009980	S.CERAMIC	C1608 JB 1H 152K-T
C131	4030009980	S.CERAMIC	C1608 JB 1H 152K-T
C132	4030007140	S.CERAMIC	C1608 CH 1H 121J-T
C133	4030010040	S.CERAMIC	C1608 JB 1H 561K-T
C134	4030006850	S.CERAMIC	C1608 JB 1H 471K-T
C135	4030010760	S.CERAMIC	C1608 CH 1H 331J-T
C136	4030011280	S.CERAMIC	C1608 CH 1H 271J-T
C137	4030011830	S.CERAMIC	C1608 CH 1H 301J-T
C138	4030011280	S.CERAMIC	C1608 CH 1H 271J-T
C139	4030007170	S.CERAMIC	C1608 CH 1H 221J-T
C140	4030007160	S.CERAMIC	C1608 CH 1H 181J-T
C141	4030007160	S.CERAMIC	C1608 CH 1H 181J-T
C142	4030007150	S.CERAMIC	C1608 CH 1H 151J-T
C143	4030007130	S.CERAMIC	C1608 CH 1H 101J-T
C144	4030007140	S.CERAMIC	C1608 CH 1H 121J-T
C145	4030010040	S.CERAMIC	C1608 JB 1H 561K-T
C146	4030006850	S.CERAMIC	C1608 JB 1H 471K-T
C147	4030008850	S.CERAMIC	C1608 JB 1H 123K-T
C148	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C149	4030009970	S.CERAMIC	C1608 JB 1H 182K-T
C150	4030006870	S.CERAMIC	C1608 JB 1H 222K-T
C151	4030006870	S.CERAMIC	C1608 JB 1H 222K-T
C152	4030009980	S.CERAMIC	C1608 JB 1H 152K-T
C153	4030009980	S.CERAMIC	C1608 JB 1H 152K-T
C154	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C155	4030009980	S.CERAMIC	C1608 JB 1H 152K-T
C156	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C157	4030006870	S.CERAMIC	C1608 JB 1H 222K-T
C158	4030009980	S.CERAMIC	C1608 JB 1H 152K-T
C159	4030006880	S.CERAMIC	C1608 JB 1H 472K-T

S.=Surface mount

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
C160	4030007170	S.CERAMIC	C1608 CH 1H 221J-T
C161	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C162	4030007160	S.CERAMIC	C1608 CH 1H 181J-T
C163	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C164	4030007150	S.CERAMIC	C1608 CH 1H 151J-T
C165	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C166	4030007130	S.CERAMIC	C1608 CH 1H 101J-T
C167	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C168	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C169	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C170	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C171	4030006850	S.CERAMIC	C1608 JB 1H 471K-T
C172	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C173	4030010760	S.CERAMIC	C1608 CH 1H 331J-T
C174	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C175	4030007040	S.CERAMIC	C1608 CH 1H 180J-T
C201	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C202	4030007120	S.CERAMIC	C1608 CH 1H 820J-T
C203	4030007050	S.CERAMIC	C1608 CH 1H 220J-T
C204	4030007150	S.CERAMIC	C1608 CH 1H 151J-T
C205	4030006990	S.CERAMIC	C1608 CH 1H 080D-T
C206	4030007130	S.CERAMIC	C1608 CH 1H 101J-T
C207	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C208	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C209	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C210	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C211	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C212	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C213	4030007000	S.CERAMIC	C1608 CH 1H 090D-T
C214	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C215	4030006990	S.CERAMIC	C1608 CH 1H 080D-T
C217	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C218	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C219	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C220	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C221	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C223	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C224	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C301	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C302	4030006970	S.CERAMIC	C1608 CH 1H 060D-T
C303	4030006960	S.CERAMIC	C1608 CH 1H 050C-T
C305	4030006850	S.CERAMIC	C1608 JB 1H 471K-T
C307	4030011280	S.CERAMIC	C1608 CH 1H 271J-T
C308	4030009580	S.CERAMIC	C1608 JB 1H 681K-T
C309	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C310	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C311	4030010770	S.CERAMIC	C1608 JB 1H 392K-T
C312	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C314	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C401	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C402	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C403	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C404	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C405	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C406	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C407	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C408	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C409	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C410	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C411	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C412	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C413	4030007140	S.CERAMIC	C1608 CH 1H 121J-T
C414	4030007160	S.CERAMIC	C1608 CH 1H 181J-T
C501	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C502	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C503	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C504	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C505	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C506	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C507	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C508	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C509	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C510	4510006220	S.ELECTROLYTIC	ECEV1CA101UP
C511	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C516	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C517	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C518	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C519	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C520	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C521	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C601	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C602	4030006880	S.CERAMIC	C1608 JB 1H 472K-T

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
C603	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C604	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C605	4030010760	S.CERAMIC	C1608 CH 1H 331J-T
C606	4030007010	S.CERAMIC	C1608 CH 1H 100D-T
C607	4030009510	S.CERAMIC	C1608 CH 1H 010B-T
C608	4030007010	S.CERAMIC	C1608 CH 1H 100D-T
C609	4030006970	S.CERAMIC	C1608 CH 1H 060D-T
C610	4030009510	S.CERAMIC	C1608 CH 1H 010B-T
C611	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C612	4030007060	S.CERAMIC	C1608 CH 1H 270J-T
C701	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C702	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C703	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C705	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C706	4030007070	S.CERAMIC	C1608 CH 1H 330J-T
C707	4030006970	S.CERAMIC	C1608 CH 1H 060D-T
C709	4030007080	S.CERAMIC	C1608 CH 1H 390J-T
C710	4030007040	S.CERAMIC	C1608 CH 1H 180J-T
C711	4030007050	S.CERAMIC	C1608 CH 1H 220J-T
C712	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C714	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C715	4030006960	S.CERAMIC	C1608 CH 1H 050C-T
C716	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C717	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C718	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C720	4030007080	S.CERAMIC	C1608 CH 1H 390J-T
C801	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C802	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C804	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C805	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C806	4510004640	S.ELECTROLYTIC	ECEV1CA470SP
C901	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C902	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C903	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C904	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C905	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C906	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C907	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C908	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C909	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C910	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C1001	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C1002	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C1003	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C1004	4030009970	S.CERAMIC	C1608 JB 1H 182K-T
C1005	4030010040	S.CERAMIC	C1608 JB 1H 561K-T
C1006	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C1007	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C1008	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C1010	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C1011	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C1012	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C1051	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C1052	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C1054	4030006900	S.CERAMIC	C1608 JB 1H 103K-T
C1055	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C1056	4030008880	S.CERAMIC	C1608 JB 1H 223K-T
C1057	4030008880	S.CERAMIC	C1608 JB 1H 223K-T
C1058	4030008880	S.CERAMIC	C1608 JB 1H 223K-T
C1059	4030006900	S.CERAMIC	C1608 JB 1H 103K-T
C1061	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C1062	4030008880	S.CERAMIC	C1608 JB 1H 223K-T
C1063	4030008880	S.CERAMIC	C1608 JB 1H 223K-T
C1064	4030008880	S.CERAMIC	C1608 JB 1H 223K-T
C1101	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C1102	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C1201	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C1202	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C1203	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C1204	4030008680	S.CERAMIC	C2012 JF 1C 105Z-T
C1205	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C1206	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C1207	4030008680	S.CERAMIC	C2012 JF 1C 105Z-T
C1208	4030008680	S.CERAMIC	C2012 JF 1C 105Z-T
C1209	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C1210	4030008680	S.CERAMIC	C2012 JF 1C 105Z-T
C1211	4030008680	S.CERAMIC	C2012 JF 1C 105Z-T
C1212	4030008680	S.CERAMIC	C2012 JF 1C 105Z-T
C1213	4030008680	S.CERAMIC	C2012 JF 1C 105Z-T
C1214	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C1301	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C1302	4030011600	S.CERAMIC	C1608 JB 1E 104K-T

S.=Surface mount

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION
C1303	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1304	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1305	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1306	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1307	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1308	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1309	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1310	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1311	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1312	4510004640	S.ELECTROLYTIC ECEV1CA470SP
C1313	4510006850	S.ELECTROLYTIC ECEV1CA4R7NR (16V 4.7)
C1314	4510004640	S.ELECTROLYTIC ECEV1CA470SP
C1315	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1451	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1501	4510004640	S.ELECTROLYTIC ECEV1CA470SP
C1502	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1503	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1504	4510004630	S.ELECTROLYTIC ECEV1CA100SR
C1505	4510004630	S.ELECTROLYTIC ECEV1CA100SR
C1506	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1507	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1508	4510004640	S.ELECTROLYTIC ECEV1CA470SP
C1509	4030008680	S.CERAMIC C2012 JF 1C 105Z-T
C1510	4030008680	S.CERAMIC C2012 JF 1C 105Z-T
C1551	4030008680	S.CERAMIC C2012 JF 1C 105Z-T
C1552	4510004640	S.ELECTROLYTIC ECEV1CA470SP
C1555	4510004640	S.ELECTROLYTIC ECEV1CA470SP
C1557	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1558	4510004630	S.ELECTROLYTIC ECEV1CA100SR
C1559	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1560	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1561	4030007170	S.CERAMIC C1608 CH 1H 221J-T
C1562	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1563	4030007170	S.CERAMIC C1608 CH 1H 221J-T
C1601	4510006670	S.ELECTROLYTIC ECEV1CA471P
C1602	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1603	4510006670	S.ELECTROLYTIC ECEV1CA471P
C1604	4510006670	S.ELECTROLYTIC ECEV1CA471P
C1605	4510006670	S.ELECTROLYTIC ECEV1CA471P
C1606	4030006900	S.CERAMIC C1608 JB 1H 103K-T
C1607	4510004630	S.ELECTROLYTIC ECEV1CA100SR
C1608	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1609	4030008680	S.CERAMIC C2012 JF 1C 105Z-T
C1610	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1611	4030008680	S.CERAMIC C2012 JF 1C 105Z-T
C1612	4510004650	S.ELECTROLYTIC ECEV1EA4R7SR
C1613	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1614	4510006670	S.ELECTROLYTIC ECEV1CA471P
C1615	4510004630	S.ELECTROLYTIC ECEV1CA100SR
C1616	4510004630	S.ELECTROLYTIC ECEV1CA100SR
C1617	4510004630	S.ELECTROLYTIC ECEV1CA100SR
C1618	4030008680	S.CERAMIC C2012 JF 1C 105Z-T
C1619	4030008920	S.CERAMIC C1608 JB 1H 473K-T
C1701	4030006880	S.CERAMIC C1608 JB 1H 472K-T
C1702	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1703	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1704	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1705	4030008680	S.CERAMIC C2012 JF 1C 105Z-T
C1706	4510006850	S.ELECTROLYTIC ECEV1CA4R7NR (16V 4.7)
C1707	4030008850	S.CERAMIC C1608 JB 1H 123K-T
C1709	4030014300	S.CERAMIC C1608 JB 1E 563K-T
C1710	4030014300	S.CERAMIC C1608 JB 1E 563K-T
C1711	4030014300	S.CERAMIC C1608 JB 1E 563K-T
C1713	4510004630	S.ELECTROLYTIC ECEV1CA100SR
C1714	4510004630	S.ELECTROLYTIC ECEV1CA100SR
C1715	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1716	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1717	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1801	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1802	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1803	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1804	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1805	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1806	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1807	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1901	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1902	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1903	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1904	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1905	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1906	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1907	4030006880	S.CERAMIC C1608 JB 1H 472K-T

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION
C1908	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C1910	4030006880	S.CERAMIC C1608 JB 1H 472K-T
C2001	4510006850	S.ELECTROLYTIC ECEV1CA4R7NR (16V 4.7)
C2002	4510006850	S.ELECTROLYTIC ECEV1CA4R7NR (16V 4.7)
C2003	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2004	4510006850	S.ELECTROLYTIC ECEV1CA4R7NR (16V 4.7)
C2005	4030006880	S.CERAMIC C1608 JB 1H 472K-T
C2006	4030006880	S.CERAMIC C1608 JB 1H 472K-T
C2007	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2008	4030006880	S.CERAMIC C1608 JB 1H 472K-T
C2101	4030007010	S.CERAMIC C1608 CH 1H 100D-T
C2102	4030007030	S.CERAMIC C1608 CH 1H 150J-T
C2103	4030006880	S.CERAMIC C1608 JB 1H 472K-T
C2104	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2105	4030008920	S.CERAMIC C1608 JB 1H 473K-T
C2106	4030008680	S.CERAMIC C2012 JF 1C 105Z-T
C2107	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2201	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2202	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2203	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2204	4030006860	S.CERAMIC C1608 JB 1H 102K-T
C2205	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2206	4030007090	S.CERAMIC C1608 CH 1H 470J-T
C2207	4030009490	S.CERAMIC C1608 JB 1H 821K-T
C2208	4030009980	S.CERAMIC C1608 JB 1H 152K-T
C2209	4030010040	S.CERAMIC C1608 JB 1H 561K-T
C2210	4030007170	S.CERAMIC C1608 CH 1H 221J-T
C2211	4030007170	S.CERAMIC C1608 CH 1H 221J-T
C2212	4030007150	S.CERAMIC C1608 CH 1H 151J-T
C2213	4030010020	S.CERAMIC C1608 JB 1H 122K-T
C2214	4030007170	S.CERAMIC C1608 CH 1H 221J-T
C2215	4030007090	S.CERAMIC C1608 CH 1H 470J-T
C2216	4030006860	S.CERAMIC C1608 JB 1H 102K-T
C2217	4030006870	S.CERAMIC C1608 JB 1H 222K-T
C2218	4030009580	S.CERAMIC C1608 JB 1H 681K-T
C2219	4030007130	S.CERAMIC C1608 CH 1H 101J-T
C2220	4030007160	S.CERAMIC C1608 CH 1H 181J-T
C2221	4030007110	S.CERAMIC C1608 CH 1H 680J-T
C2222	4030010020	S.CERAMIC C1608 JB 1H 122K-T
C2223	4030007160	S.CERAMIC C1608 CH 1H 181J-T
C2224	4030007110	S.CERAMIC C1608 CH 1H 680J-T
C2225	4030010020	S.CERAMIC C1608 JB 1H 122K-T
C2226	4030009980	S.CERAMIC C1608 JB 1H 152K-T
C2227	4030009580	S.CERAMIC C1608 JB 1H 681K-T
C2228	4030007090	S.CERAMIC C1608 CH 1H 470J-T
C2229	4030007030	S.CERAMIC C1608 CH 1H 150J-T
C2236	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2237	4030006860	S.CERAMIC C1608 JB 1H 102K-T
C2238	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2239	4030007060	S.CERAMIC C1608 CH 1H 270J-T
C2240	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2241	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2242	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2243	4030006860	S.CERAMIC C1608 JB 1H 102K-T
C2244	4030007170	S.CERAMIC C1608 CH 1H 221J-T
C2245	4030007060	S.CERAMIC C1608 CH 1H 270J-T
C2246	4030006860	S.CERAMIC C1608 JB 1H 102K-T
C2247	4030007150	S.CERAMIC C1608 CH 1H 151J-T
C2248	4030007060	S.CERAMIC C1608 CH 1H 270J-T
C2249	4030006860	S.CERAMIC C1608 JB 1H 102K-T
C2250	4030006860	S.CERAMIC C1608 JB 1H 102K-T
C2252	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2253	4030006860	S.CERAMIC C1608 JB 1H 102K-T
C2254	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2263	4030009510	S.CERAMIC C1608 CH 1H 010B-T
C2264	4030009510	S.CERAMIC C1608 CH 1H 010B-T
C2266	4030007010	S.CERAMIC C1608 CH 1H 100D-T
C2301	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2302	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2303	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2304	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2307	4030009910	S.CERAMIC C1608 CH 1H 040B-T
C2309	4030007050	S.CERAMIC C1608 CH 1H 220J-T
C2402	4030006880	S.CERAMIC C1608 JB 1H 472K-T
C2403	4030006880	S.CERAMIC C1608 JB 1H 472K-T
C2404	4030006880	S.CERAMIC C1608 JB 1H 472K-T
C2405	4030009910	S.CERAMIC C1608 CH 1H 040B-T
C2406	4030011600	S.CERAMIC C1608 JB 1E 104K-T
C2409	4030006880	S.CERAMIC C1608 JB 1H 472K-T
C2501	4030006880	S.CERAMIC C1608 JB 1H 472K-T
C2502	4030006880	S.CERAMIC C1608 JB 1H 472K-T
C2503	4030011600	S.CERAMIC C1608 JB 1E 104K-T

S.=Surface mount

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
C2504	4030009910	S.CERAMIC	C1608 CH 1H 040B-T
C2701	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C2702	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C2703	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C2704	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C2705	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C2706	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C2707	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C2708	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C2710	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C2711	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C2712	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C2713	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C2714	4030009970	S.CERAMIC	C1608 JB 1H 182K-T
C2715	4030010040	S.CERAMIC	C1608 JB 1H 561K-T
C2716	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3001	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
C3002	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
C3003	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
C3004	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
C3005	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
C3006	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3007	4030007130	S.CERAMIC	C1608 CH 1H 101J-T
C3008	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3009	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3101	4510004640	S.ELECTROLYTIC	ECEV1CA470SP
C3102	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3103	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3104	4510004640	S.ELECTROLYTIC	ECEV1CA470SP
C3201	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3202	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C3302	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3303	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3304	4030007020	S.CERAMIC	C1608 CH 1H 120J-T
C3305	4030007020	S.CERAMIC	C1608 CH 1H 120J-T
C3306	4030008890	S.CERAMIC	C1608 JB 1H 273K-T
C3307	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
C3308	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3309	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C3310	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3311	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3601	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3602	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3603	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3604	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3605	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3606	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C3901	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
RL2101	6330001320	RELAY	AHY103
J1	6510007020	CONNECTOR	TMP-J01X-V6
J51	6510007020	CONNECTOR	TMP-J01X-V6
J301	6510007020	CONNECTOR	TMP-J01X-V6
J601	6510007020	CONNECTOR	TMP-J01X-V6
J1101	6510021650	CONNECTOR	IMSA-9180B-30B
J1102	6510022810	CONNECTOR	IMSA-9180B-22B
J1301	6510022610	S.CONNECTOR	16FMN-BMTTR-A-TBT
J1451	6450000140	CONNECTOR	HSJ0807-01-010
J1801	6450000170	CONNECTOR	TCS4480-01-1111
J1901	6510022540	S.CONNECTOR	20FMN-BMTTR-A-TBT
J2051	6510023180	CONNECTOR	TCS7282-01-211
J2101	6510007020	CONNECTOR	TMP-J01X-V6
J2301	6510007020	CONNECTOR	TMP-J01X-V6
J3001	6510022620	S.CONNECTOR	10FMN-BMTTR-A-TBT
J3601	6510022580	S.CONNECTOR	24FMN-BMTTR-A-TBT
J3602	6510021720	S.CONNECTOR	30FLT-SM1-TB
W501	7030003860	S.JUMPER	ERJ3GE JPW V
W803	7030003860	S.JUMPER	ERJ3GE JPW V
W1011	7030003860	S.JUMPER	ERJ3GE JPW V
W1101	7030003860	S.JUMPER	ERJ3GE JPW V
W1102	7030003860	S.JUMPER	ERJ3GE JPW V
W1227	7030003860	S.JUMPER	ERJ3GE JPW V
W1231	7030003860	S.JUMPER	ERJ3GE JPW V
W1601	7030003860	S.JUMPER	ERJ3GE JPW V
W1701	7030003860	S.JUMPER	ERJ3GE JPW V
W2001	7030003860	S.JUMPER	ERJ3GE JPW V
W2002	7030003860	S.JUMPER	ERJ3GE JPW V

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
W2226	7030000010	S.JUMPER	MCR10EZHJ JPW (000)
W2227	7030000010	S.JUMPER	MCR10EZHJ JPW (000)
W2243	7030000010	S.JUMPER	MCR10EZHJ JPW (000)
W2305	7030003860	S.JUMPER	ERJ3GE JPW V
EP1	0910054674	PCB	B 5722D
EP2	0880000900	UNIT BOARD	EX-2432 #02

[PLL UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
IC5001	1180001070	S.IC	TA7805F (TE16L)
IC5031	1180001250	S.IC	TA7808F (TE16L)
IC5081	1120002920	S.IC	ADM202EARN
IC5082	1130006800	S.IC	TC7W08F (TE12L)
IC5083	1130007040	S.IC	TC7W32F (TE12L)
IC5084	1170000290	S.IC	PS2701-1-F3
IC5085	1170000290	S.IC	PS2701-1-F3
IC5101	1140007880	S.IC	TC190G08AF-0046-Z/SC-1246A
IC5102	1130004830	S.IC	TC7SU04F (TE85R)
IC5103	1130004830	S.IC	TC7SU04F (TE85R)
IC5401	1130009230	S.IC	LMX2306TMX
IC5701	1140004550	S.IC	M65343FP/SC1287
IC5702	1130004830	S.IC	TC7SU04F (TE85R)
IC5801	1140004550	S.IC	M65343FP/SC1287
IC5802	1130004830	S.IC	TC7SU04F (TE85R)
IC5901	1140004550	S.IC	M65343FP/SC1287
IC5902	1130004830	S.IC	TC7SU04F (TE85R)
Q5081	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q5082	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q5083	1590000680	S.TRANSISTOR	DTC114EUA T106
Q5084	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q5085	1590000680	S.TRANSISTOR	DTC114EUA T106
Q5101	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q5202	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q5281	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q5301	1560000330	S.FET	2SK210-GR (TE85R)
Q5302	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q5351	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q5401	1590001330	S.TRANSISTOR	DTA114EUA T106
Q5521	1560000490	S.FET	2SK508 K52 T2B
Q5553	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q5601	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q5602	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q5603	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q5604	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q5881	1530003150	S.TRANSISTOR	2SC4673D-TD
Q5882	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
D5051	1790001250	S.DIODE	MA2S111-(TX)
D5081	1790001250	S.DIODE	MA2S111-(TX)
D5082	1790001250	S.DIODE	MA2S111-(TX)
D5083	1790001250	S.DIODE	MA2S111-(TX)
D5084	1790001250	S.DIODE	MA2S111-(TX)
D5085	1790001250	S.DIODE	MA2S111-(TX)
D5086	1790001250	S.DIODE	MA2S111-(TX)
D5101	1750000270	S.DIODE	1SS301 (TE85R)
D5301	1790000540	S.VARICAP	MA338 (TX)
D5302	1790001210	S.DIODE	1SS375-TL
D5303	1790001210	S.DIODE	1SS375-TL
D5402	1750000270	S.DIODE	1SS301 (TE85R)
D5521	1720000390	S.VARICAP	KV1470TL
FI5101	2020001820	S.CERAMIC	SFECV10M5FA00-R0
X5251	6050010320	XTAL	CR-604 (32.000 MHz)

S.=Surface mount

[PLL UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
L5005	6200009300	S.COIL	ELJPA 100KF 10U
L5021	2040000490	COIL	EXC-ELDR25C
L5101	6200001830	S.COIL	NL 322522T-100J
L5202	6200003260	S.COIL	NL 322522T-101J
L5203	6150004250	COIL	LS-471A (C-14922)
L5204	6150004250	COIL	LS-471A (C-14922)
L5301	6200003260	S.COIL	NL 322522T-101J
L5302	6130001850	COIL	LB-185
L5303	6200001830	S.COIL	NL 322522T-100J
L5304	6200003260	S.COIL	NL 322522T-101J
L5351	6200003260	S.COIL	NL 322522T-101J
L5352	6200003100	S.COIL	NL 322522T-3R9J-3
L5401	6200001830	S.COIL	NL 322522T-100J
L5521	6170000400	COIL	LW-38
L5522	6170000400	COIL	LW-38
L5523	6190001280	COIL	E544GN-110248
L5552	6200003260	S.COIL	NL 322522T-101J
L5601	6200003260	S.COIL	NL 322522T-101J
L5602	6200003420	S.COIL	NL 322522T-R15J-3
L5603	6200003430	S.COIL	NL 322522T-R10J
L5604	6200003430	S.COIL	NL 322522T-R10J
L5605	6200003260	S.COIL	NL 322522T-101J
L5701	6200001830	S.COIL	NL 322522T-100J
L5781	6200001710	S.COIL	NL 322522T-220J
L5782	6200001710	S.COIL	NL 322522T-220J
L5783	6200003150	S.COIL	NL 322522T-180J
L5801	6200001830	S.COIL	NL 322522T-100J
L5881	6200001850	S.COIL	NL 322522T-5R6J
L5882	6200001850	S.COIL	NL 322522T-5R6J
L5883	6200001850	S.COIL	NL 322522T-5R6J
L5884	6200005010	S.COIL	NL 252018T-100J
L5901	6200001830	S.COIL	NL 322522T-100J
L5981	6200003150	S.COIL	NL 322522T-180J
L5982	6200001710	S.COIL	NL 322522T-220J
L5983	6200003140	S.COIL	NL 322522T-150J
R5002	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5003	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5004	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5005	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5006	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5008	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5009	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5010	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5011	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5021	7070000311	RESISTOR	ERG1SJ 100 (10 Ω)
R5051	7030003430	S.RESISTOR	ERJ3GEYJ 821 V (820 Ω)
R5081	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5082	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5083	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5084	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R5085	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R5086	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R5087	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R5088	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5089	7030009620	S.RESISTOR	ERJ12YJ120U (12 Ω)
R5090	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R5091	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R5092	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R5093	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5094	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5095	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5096	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5097	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5098	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5101	7030007200	S.RESISTOR	ERA3YEB 202V
R5102	7030007200	S.RESISTOR	ERA3YEB 202V
R5103	7030007200	S.RESISTOR	ERA3YEB 202V
R5104	7030007200	S.RESISTOR	ERA3YEB 202V
R5105	7030007200	S.RESISTOR	ERA3YEB 202V
R5106	7030007220	S.RESISTOR	ERA3YED 202V
R5107	7030007220	S.RESISTOR	ERA3YED 202V
R5108	7030007220	S.RESISTOR	ERA3YED 202V
R5109	7030007220	S.RESISTOR	ERA3YED 202V
R5110	7030007220	S.RESISTOR	ERA3YED 202V
R5111	7030007220	S.RESISTOR	ERA3YED 202V
R5112	7030007220	S.RESISTOR	ERA3YED 202V
R5113	7030007210	S.RESISTOR	ERA3YEB 102V
R5114	7030007210	S.RESISTOR	ERA3YEB 102V
R5115	7030007210	S.RESISTOR	ERA3YEB 102V
R5116	7030007210	S.RESISTOR	ERA3YEB 102V

[PLL UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
R5117	7030007210	S.RESISTOR	ERA3YEB 102V
R5118	7030007230	S.RESISTOR	ERA3YED 102V
R5119	7030007230	S.RESISTOR	ERA3YED 102V
R5120	7030007230	S.RESISTOR	ERA3YED 102V
R5121	7030007230	S.RESISTOR	ERA3YED 102V
R5122	7030007230	S.RESISTOR	ERA3YED 102V
R5123	7030007230	S.RESISTOR	ERA3YED 102V
R5124	7030007220	S.RESISTOR	ERA3YED 202V
R5125	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R5126	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R5127	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R5128	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R5129	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R5130	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 kΩ)
R5131	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5132	7030003490	S.RESISTOR	ERJ3GEYJ 272 V (2.7 kΩ)
R5133	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5134	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5135	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R5136	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R5137	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5138	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5139	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5140	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5141	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5142	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5143	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5144	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5145	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5146	7030003430	S.RESISTOR	ERJ3GEYJ 821 V (820 Ω)
R5203	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R5204	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R5205	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R5206	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R5251	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5281	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5282	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R5283	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R5284	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R5302	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ω)
R5303	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R5304	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R5305	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ω)
R5306	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R5307	7030003690	S.RESISTOR	ERJ3GEYJ 124 V (120 kΩ)
R5308	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R5309	7030003430	S.RESISTOR	ERJ3GEYJ 821 V (820 Ω)
R5310	7030003430	S.RESISTOR	ERJ3GEYJ 821 V (820 Ω)
R5311	7030003430	S.RESISTOR	ERJ3GEYJ 821 V (820 Ω)
R5312	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5351	7030003570	S.RESISTOR	ERJ3GEYJ 123 V (12 kΩ)
R5352	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5353	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5354	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5403	7030003450	S.RESISTOR	ERJ3GEYJ 122 V (1.2 kΩ)
R5404	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5406	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R5407	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5408	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5410	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5522	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R5524	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R5551	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R5556	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R5557	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R5601	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R5602	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R5603	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5604	7030003650	S.RESISTOR	ERJ3GEYJ 563 V (56 kΩ)
R5605	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R5606	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R5607	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R5608	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R5609	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R5610	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R5611	7030003250	S.RESISTOR	ERJ3GEYJ 270 V (27 Ω)
R5612	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R5613	7030003650	S.RESISTOR	ERJ3GEYJ 563 V (56 kΩ)
R5614	7030003350	S.RESISTOR	ERJ3GEYJ 181 V (180 Ω)
R5701	7030007220	S.RESISTOR	ERA3YED 202V
R5702	7030007230	S.RESISTOR	ERA3YED 102V
R5703	7030007230	S.RESISTOR	ERA3YED 102V

S.=Surface mount

[PLL UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
R5704	7030007230	S.RESISTOR	ERA3YED 102V
R5705	7030007230	S.RESISTOR	ERA3YED 102V
R5706	7030007230	S.RESISTOR	ERA3YED 102V
R5707	7030007230	S.RESISTOR	ERA3YED 102V
R5708	7030007210	S.RESISTOR	ERA3YEB 102V
R5709	7030007210	S.RESISTOR	ERA3YEB 102V
R5710	7030007210	S.RESISTOR	ERA3YEB 102V
R5711	7030007220	S.RESISTOR	ERA3YED 202V
R5712	7030007220	S.RESISTOR	ERA3YED 202V
R5713	7030007220	S.RESISTOR	ERA3YED 202V
R5714	7030007220	S.RESISTOR	ERA3YED 202V
R5715	7030007230	S.RESISTOR	ERA3YED 102V
R5716	7030007220	S.RESISTOR	ERA3YED 202V
R5717	7030007220	S.RESISTOR	ERA3YED 202V
R5718	7030007200	S.RESISTOR	ERA3YEB 202V
R5719	7030007200	S.RESISTOR	ERA3YEB 202V
R5720	7030007200	S.RESISTOR	ERA3YEB 202V
R5721	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R5722	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R5781	7030003410	S.RESISTOR	ERJ3GEYJ 561 V (560 Ω)
R5782	7030007860	S.RESISTOR	ERJ3GEYJ 8R2V
R5783	7030003410	S.RESISTOR	ERJ3GEYJ 561 V (560 Ω)
R5799	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5801	7030007220	S.RESISTOR	ERA3YED 202V
R5802	7030007230	S.RESISTOR	ERA3YED 102V
R5803	7030007230	S.RESISTOR	ERA3YED 102V
R5804	7030007230	S.RESISTOR	ERA3YED 102V
R5805	7030007230	S.RESISTOR	ERA3YED 102V
R5806	7030007230	S.RESISTOR	ERA3YED 102V
R5807	7030007230	S.RESISTOR	ERA3YED 102V
R5808	7030007210	S.RESISTOR	ERA3YEB 102V
R5809	7030007210	S.RESISTOR	ERA3YEB 102V
R5810	7030007210	S.RESISTOR	ERA3YEB 102V
R5811	7030007220	S.RESISTOR	ERA3YED 202V
R5812	7030007220	S.RESISTOR	ERA3YED 202V
R5813	7030007220	S.RESISTOR	ERA3YED 202V
R5814	7030007220	S.RESISTOR	ERA3YED 202V
R5815	7030007220	S.RESISTOR	ERA3YED 202V
R5816	7030007220	S.RESISTOR	ERA3YED 202V
R5817	7030007220	S.RESISTOR	ERA3YED 202V
R5818	7030007200	S.RESISTOR	ERA3YEB 202V
R5819	7030007200	S.RESISTOR	ERA3YEB 202V
R5820	7030007200	S.RESISTOR	ERA3YEB 202V
R5821	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R5822	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R5881	7030000220	S.RESISTOR	MCR10EZHJ 47 Ω (470)
R5882	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5883	7030003450	S.RESISTOR	ERJ3GEYJ 122 V (1.2 kΩ)
R5884	7030000220	S.RESISTOR	MCR10EZHJ 47 Ω (470)
R5885	7030003370	S.RESISTOR	ERJ3GEYJ 271 V (270 Ω)
R5886	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5887	7030003450	S.RESISTOR	ERJ3GEYJ 122 V (1.2 kΩ)
R5888	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ω)
R5889	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5890	7030003410	S.RESISTOR	ERJ3GEYJ 561 V (560 Ω)
R5891	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R5901	7030007220	S.RESISTOR	ERA3YED 202V
R5902	7030007230	S.RESISTOR	ERA3YED 102V
R5903	7030007230	S.RESISTOR	ERA3YED 102V
R5904	7030007230	S.RESISTOR	ERA3YED 102V
R5905	7030007230	S.RESISTOR	ERA3YED 102V
R5906	7030007230	S.RESISTOR	ERA3YED 102V
R5907	7030007230	S.RESISTOR	ERA3YED 102V
R5908	7030007210	S.RESISTOR	ERA3YEB 102V
R5909	7030007210	S.RESISTOR	ERA3YEB 102V
R5910	7030007210	S.RESISTOR	ERA3YEB 102V
R5911	7030007220	S.RESISTOR	ERA3YED 202V
R5912	7030007220	S.RESISTOR	ERA3YED 202V
R5913	7030007220	S.RESISTOR	ERA3YED 202V
R5914	7030007220	S.RESISTOR	ERA3YED 202V
R5915	7030007220	S.RESISTOR	ERA3YED 202V
R5916	7030007220	S.RESISTOR	ERA3YED 202V
R5917	7030007220	S.RESISTOR	ERA3YED 202V
R5918	7030007200	S.RESISTOR	ERA3YEB 202V
R5919	7030007200	S.RESISTOR	ERA3YEB 202V
R5920	7030007200	S.RESISTOR	ERA3YEB 202V
R5921	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R5922	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R5982	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)

[PLL UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
C5021	4510004640	S.ELECTROLYTIC	ECEV1CA470SP
C5022	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5023	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5024	4510007510	S.ELECTOR	ECEV1AA470WR
C5031	4510004640	S.ELECTROLYTIC	ECEV1CA470SP
C5032	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5033	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5034	4510007510	S.ELECTOR	ECEV1AA470WR
C5051	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5052	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5053	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5055	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5081	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5082	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5083	4030006900	S.CERAMIC	C1608 JB 1H 103K-T
C5084	4030006900	S.CERAMIC	C1608 JB 1H 103K-T
C5085	4030008680	S.CERAMIC	C2012 JF 1C 105Z-T
C5086	4030008680	S.CERAMIC	C2012 JF 1C 105Z-T
C5087	4030008680	S.CERAMIC	C2012 JF 1C 105Z-T
C5088	4030008680	S.CERAMIC	C2012 JF 1C 105Z-T
C5089	4030006900	S.CERAMIC	C1608 JB 1H 103K-T
C5090	4030008680	S.CERAMIC	C2012 JF 1C 105Z-T
C5091	4030006900	S.CERAMIC	C1608 JB 1H 103K-T
C5092	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5101	4030007060	S.CERAMIC	C1608 CH 1H 270J-T
C5102	4030007010	S.CERAMIC	C1608 CH 1H 100D-T
C5103	4030006960	S.CERAMIC	C1608 CH 1H 050C-T
C5104	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5105	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C5106	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5107	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5108	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5110	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C5111	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5112	4030007090	S.CERAMIC	C1608 CH 1H 470J-T
C5113	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5115	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5116	4510004640	S.ELECTROLYTIC	ECEV1CA470SP
C5117	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5118	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5120	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5121	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5122	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5123	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5124	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5125	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5126	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5201	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C5202	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C5203	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5204	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5205	4030007030	S.CERAMIC	C1608 CH 1H 150J-T
C5206	4030006910	S.CERAMIC	C1608 CH 1H 0R5C-T
C5207	4030007030	S.CERAMIC	C1608 CH 1H 150J-T
C5251	4030007130	S.CERAMIC	C1608 CH 1H 101J-T
C5253	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5254	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C5281	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5282	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C5283	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5301	4550000730	S.TANTALUM	TESVA 0J 225M1-8L
C5302	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5303	4030009650	S.CERAMIC	C1608 CH 1H 240J-T
C5304	4030011570	S.CERAMIC	CM105 CH 101G 50AT
C5305	4610001850	S.TRIMMER	TZB4R200AB10R00
(TZBX4R200BA110)			
C5306	4030007150	S.CERAMIC	C1608 CH 1H 151J-T
C5307	4030007150	S.CERAMIC	C1608 CH 1H 151J-T
C5308	4030007150	S.CERAMIC	C1608 CH 1H 151J-T
C5309	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5310	4030007010	S.CERAMIC	C1608 CH 1H 100D-T
C5311	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5312	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C5313	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5314	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5315	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5351	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5352	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5353	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5354	4030010000	S.CERAMIC	C1608 CH 1H 510J-T
C5355	4030006960	S.CERAMIC	C1608 CH 1H 050C-T
C5356	4030010000	S.CERAMIC	C1608 CH 1H 510J-T

S.=Surface mount

[PLL UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
C5357	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5401	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5402	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C5403	4030006900	S.CERAMIC	C1608 JB 1H 103K-T
C5404	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5408	4550005980	S.TANTALUM	TEMSVA 1A 475M-8L
C5521	4610001830	S.TRIMMER	TZB4S100AB10R00 (TZBX4N100BA110)
C5522	4030007130	S.CERAMIC	C1608 CH 1H 101J-T
C5523	4030007020	S.CERAMIC	C1608 CH 1H 120J-T
C5524	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5525	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5526	4030009510	S.CERAMIC	C1608 CH 1H 010B-T
C5528	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C5529	4030011340	S.CERAMIC	C1608 CH 1H 471J-T
C5551	4550005980	S.TANTALUM	TEMSVA 1A 475M-8L
C5552	4550003250	S.TANTALUM	TEMSVA 1V 474M-8L
C5556	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C5557	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5558	4510004590	ELECTROLYTIC	16 MV 470 HC
C5560	4510005430	S.ELECTROLYTIC	ECEV0JA220SR
C5561	4030011340	S.CERAMIC	C1608 CH 1H 471J-T
C5601	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5602	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C5603	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5604	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5605	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5606	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C5607	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5608	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5609	4030007090	S.CERAMIC	C1608 CH 1H 470J-T
C5610	4030011280	S.CERAMIC	C1608 CH 1H 271J-T
C5611	4030007090	S.CERAMIC	C1608 CH 1H 470J-T
C5612	4030007060	S.CERAMIC	C1608 CH 1H 270J-T
C5613	4030007020	S.CERAMIC	C1608 CH 1H 120J-T
C5614	4030007060	S.CERAMIC	C1608 CH 1H 270J-T
C5615	4030006980	S.CERAMIC	C1608 CH 1H 070D-T
C5616	4030007040	S.CERAMIC	C1608 CH 1H 180J-T
C5617	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C5618	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5619	4030006930	S.CERAMIC	C1608 CH 1H 020C-T
C5701	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5702	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5703	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5704	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5705	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5706	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5707	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5708	4510005600	S.ELECTROLYTIC	ECEV1CS100SR
C5709	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5710	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C5711	4030007010	S.CERAMIC	C1608 CH 1H 100D-T
C5781	4030008770	S.CERAMIC	C1608 JB 1H 562K-T
C5782	4030009490	S.CERAMIC	C1608 JB 1H 821K-T
C5783	4030006900	S.CERAMIC	C1608 JB 1H 103K-T
C5784	4030009980	S.CERAMIC	C1608 JB 1H 152K-T
C5785	4030006900	S.CERAMIC	C1608 JB 1H 103K-T
C5794	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
C5801	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5802	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5803	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5804	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5805	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5806	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5807	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5808	4510005600	S.ELECTROLYTIC	ECEV1CS100SR
C5809	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5810	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C5811	4030007010	S.CERAMIC	C1608 CH 1H 100D-T
C5881	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
C5882	4030007020	S.CERAMIC	C1608 CH 1H 120J-T
C5883	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5884	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5885	4030006980	S.CERAMIC	C1608 CH 1H 070D-T
C5886	4030009500	S.CERAMIC	C1608 CH 1H 0R5B-T
C5887	4030006980	S.CERAMIC	C1608 CH 1H 070D-T
C5888	4030009510	S.CERAMIC	C1608 CH 1H 010B-T
C5889	4030011770	S.CERAMIC	C1608 CH 1H 060B-T
C5890	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5891	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5892	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5901	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5902	4030006880	S.CERAMIC	C1608 JB 1H 472K-T

[PLL UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
C5903	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5904	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5905	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5906	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5907	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5908	4510005600	S.ELECTROLYTIC	ECEV1CS100SR
C5909	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C5910	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C5911	4030007010	S.CERAMIC	C1608 CH 1H 100D-T
C5981	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C5982	4030007020	S.CERAMIC	C1608 CH 1H 120J-T
C5983	4030009520	S.CERAMIC	C1608 CH 1H 020B-T
C5984	4030007050	S.CERAMIC	C1608 CH 1H 220J-T
C5985	4030009530	S.CERAMIC	C1608 CH 1H 030B-T
C5986	4030009990	S.CERAMIC	C1608 CH 1H 200J-T
RL5081	6330001640	RELAY	ATX209
J5001	6510022580	S.CONNECTOR	24FMN-BMTTR-A-TBT
J5051	6510023120	CONNECTOR	CD6109SA1J0 <CVI>
J5071	6510021720	S.CONNECTOR	30FLT-SM1-TB
J5081	6510023120	CONNECTOR	CD6109SA1J0 <CVI>
J5091	6510023040	CONNECTOR	01K1621
J5201	6510007900	CONNECTOR	TBP-P01X-A1 (B1)
J5601	6510007900	CONNECTOR	TBP-P01X-A1 (B1)
J5801	6510007900	CONNECTOR	TBP-P01X-A1 (B1)
P5201	6510003240	CONNECTOR	TMP-P01X-A1
P5601	6510003240	CONNECTOR	TMP-P01X-A1
P5801	6510003240	CONNECTOR	TMP-P01X-A1
W5051	7030003860	S.JUMPER	ERJ3GE JPW V
W5052	7030003860	S.JUMPER	ERJ3GE JPW V
W5053	7030003860	S.JUMPER	ERJ3GE JPW V
W5054	7030003860	S.JUMPER	ERJ3GE JPW V
W5081	7030003860	S.JUMPER	ERJ3GE JPW V
W5082	7030003860	S.JUMPER	ERJ3GE JPW V
W5201	9009130046	WIRE	62/99/160/C24/C31
W5202	9086700300	WIRE	08
W5203	7030003860	S.JUMPER	ERJ3GE JPW V
W5251	7030003860	S.JUMPER	ERJ3GE JPW V
W5401	7030003860	S.JUMPER	ERJ3GE JPW V
W5402	7030003860	S.JUMPER	ERJ3GE JPW V
W5409	7030003860	S.JUMPER	ERJ3GE JPW V
W5502	7030003860	S.JUMPER	ERJ3GE JPW V
W5601	9024290060	WIRE	62/99/140/C24/C31
W5602	9086700300	WIRE	08
W5801	9024290060	WIRE	62/99/140/C24/C31
W5802	9086700300	WIRE	08
W5981	7030003860	S.JUMPER	ERJ3GE JPW V
WS1	8970024010	CABLE	SX2429 1.5D COAXIAL TUBE (3)/PL
EP5001	0910054683	PCB	B 5723C

S.=Surface mount

[PA UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
IC6501	1110005450	S.IC	TS522IDT
IC6601	1180001250	S.IC	TA7808F (TE16L)
Q6101	1560001020	S.FET	2SK2973 (MTS101P)
Q6401	1590003040	TRANSISTOR	SD1487
Q6402	1590003040	TRANSISTOR	SD1487
Q6403	1540000500	TRANSISTOR	2SD1585K
Q6501	1540000550	S.TRANSISTOR	2SD1664 T100Q
Q6601	1510001040	S.TRANSISTOR	2SA1037AKT146S
Q6602	1590000680	S.TRANSISTOR	DTC114EUA T106
Q6701	1590000680	S.TRANSISTOR	DTC114EUA T106
Q6801	1590003050	S.FET	PD55003
D6601	1710001160	S.DIODE	DF40SC4-4072
D6701	1160000140	S.DIODE	DAP222 TL
D6702	1730000480	S.ZENER	RD10M-T2B3
L6101	6200003840	S.COIL	MLF2012D R22K-T
L6102	6180000990	COIL	LAL 04NA 101K
L6202	6180001240	COIL	LAL 04NA 820K
L6204	2040000490	COIL	EXC-ELDR25C
L6301	6140003720	COIL	LR-416 <KN>
L6303	2040000490	COIL	EXC-ELDR25C
L6401	2040000490	COIL	EXC-ELDR25C
L6402	2040000490	COIL	EXC-ELDR25C
L6403	2040000490	COIL	EXC-ELDR25C
L6404	6140003590	COIL	LR-400
L6405	6140003350	COIL	LR-376
L6406	6140002030	COIL	LR-230 (SK-10M-15Y 120)
L6407	2040000490	COIL	EXC-ELDR25C
L6501	6200003260	S.COIL	NL 322522T-101J
L6701	6200003590	S.COIL	EXCCL3225U1
L6702	6200002040	S.COIL	NL 252018T-101J
L6703	6200003260	S.COIL	NL 322522T-101J
L6704	6200003260	S.COIL	NL 322522T-101J
L6705	6200008820	S.COIL	HF70ACC 635050-T
L6706	6200008820	S.COIL	HF70ACC 635050-T
R6101	7030003270	S.RESISTOR	ERJ3GEYJ 390 V (39 Ω)
R6102	7030003350	S.RESISTOR	ERJ3GEYJ 181 V (180 Ω)
R6103	7030003350	S.RESISTOR	ERJ3GEYJ 181 V (180 Ω)
R6104	7030003300	S.RESISTOR	ERJ3GEYJ 680 V (68 Ω)
R6105	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R6106	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R6107	7030003420	S.RESISTOR	ERJ3GEYJ 681 V (680 Ω)
R6109	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R6110	7030000210	S.RESISTOR	MCR10EZHJ 39 Ω (390)
R6111	7030000210	S.RESISTOR	MCR10EZHJ 39 Ω (390)
R6112	7030000210	S.RESISTOR	MCR10EZHJ 39 Ω (390)
R6201	7030000250	S.RESISTOR	MCR10EZHJ 82 Ω (820)
R6202	7030003510	S.RESISTOR	ERJ3GEYJ 392 V (3.9 kΩ)
R6203	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R6204	7030010800	S.RESISTOR	ERJ1TYJ 2R7U (2.7 Ω)
R6206	7030000340	S.RESISTOR	MCR10EZHJ 470 Ω (471)
R6301	7030000260	S.RESISTOR	MCR10EZHJ 100 Ω (101)
R6302	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R6303	7030003450	S.RESISTOR	ERJ3GEYJ 122 V (1.2 kΩ)
R6304	7310004730	TRIMMER	EVM-2AGA00 B33 (302)
R6401	7030010260	S.RESISTOR	ERJ1TYJ 3R3 U
R6402	7030010260	S.RESISTOR	ERJ1TYJ 3R3 U
R6403	7030010260	S.RESISTOR	ERJ1TYJ 3R3 U
R6404	7030010260	S.RESISTOR	ERJ1TYJ 3R3 U
R6405	7030010260	S.RESISTOR	ERJ1TYJ 3R3 U
R6406	7030010260	S.RESISTOR	ERJ1TYJ 3R3 U
R6407	7030001010	S.RESISTOR	MCR50JZHJ 10 Ω (100)
R6408	7030001010	S.RESISTOR	MCR50JZHJ 10 Ω (100)
R6409	7070000371	RESISTOR	ERX2SJ 2R2 (2.2 Ω)
R6410	7070000371	RESISTOR	ERX2SJ 2R2 (2.2 Ω)
R6411	7070000521	RESISTOR	ERX3SJ 2R7 (2.7 Ω)
R6412	7310004710	TRIMMER	EVM-2AGA00 B23 (202)
R6413	7030000300	S.RESISTOR	MCR10EZHJ 220 Ω (221)
R6415	7070001030	RESISTOR	ERG5SJ 470
R6502	7030005981	S.RESISTOR	ERA3YED 333V
R6503	7030005981	S.RESISTOR	ERA3YED 333V
R6504	7030005971	S.RESISTOR	ERA3YKD 683V (68 kΩ)
R6505	7030005971	S.RESISTOR	ERA3YKD 683V (68 kΩ)
R6506	7030008061	S.RESISTOR	ERA3YED 222V
R6507	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MΩ)

[PA UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
R6509	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R6510	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R6511	7030006111	S.RESISTOR	ERA3YED 752V
R6512	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R6513	7030003740	S.RESISTOR	ERJ3GEYJ 334 V (330 kΩ)
R6514	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R6515	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R6517	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R6602	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R6603	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R6604	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 kΩ)
R6651	7100000810	S.RESISTOR	ERX5WQK 12MH
R6652	7100000810	S.RESISTOR	ERX5WQK 12MH
R6702	7030003420	S.RESISTOR	ERJ3GEYJ 681 V (680 Ω)
R6704	7030003470	S.RESISTOR	ERJ3GEYJ 182 V (1.8 kΩ)
R6705	7510001550	S.THERMISTOR	NTCG16 4LH 333KT
R6801	7030003410	S.RESISTOR	ERJ3GEYJ 561 V (560 Ω)
R6802	7030004050	S.RESISTOR	ERJ3GEYJ 1R0 V (1 Ω)
C6101	4030007120	S.CERAMIC	C1608 CH 1H 820J-T
C6102	4030007120	S.CERAMIC	C1608 CH 1H 820J-T
C6103	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6104	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6105	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6106	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6108	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6109	4030005110	S.CERAMIC	C2012 JB 1E 473K-T
C6201	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6202	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6203	4030004750	S.CERAMIC	C2012 JB 1H 103K-T
C6205	4030008700	S.CERAMIC	GRM21BB11H473KA01L (GRM40 B)
C6206	4030008700	S.CERAMIC	GRM21BB11H473KA01L (GRM40 B)
C6301	4030008960	S.CERAMIC	C2012 JB 1C 104K-T
C6302	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6303	4510004590	ELECTROLYTIC	16 MV 470 HC
C6305	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6306	4510004600	ELECTROLYTIC	16 MV 1000 HC
C6307	4320000811	DIP MICA	KD20C 681J5A
C6308	4030011790	S.CERAMIC	GRM55RF52A684ZD01L (GRM44-1 Y5V)
C6401	4030011760	S.CERAMIC	GRM55R1X2D682JV01L (GRM44-1 SL)
C6403	4030011760	S.CERAMIC	GRM55R1X2D682JV01L (GRM44-1 SL)
C6408	4030016740	S.CERAMIC	ERE22X6C1H102JD01L (GRH111 CH)
C6409	4030016740	S.CERAMIC	ERE22X6C1H102JD01L (GRH111 CH)
C6410	4030017140	S.CERAMIC	GRH111 CH 221J 200PT
C6412	4510004600	ELECTROLYTIC	16 MV 1000 HC
C6413	4510004600	ELECTROLYTIC	16 MV 1000 HC
C6414	4030004740	S.CERAMIC	C2012 JB 1H 472K-T
C6415	4030011790	S.CERAMIC	GRM55RF52A684ZD01L (GRM44-1 Y5V)
C6416	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
C6417	4510004600	ELECTROLYTIC	16 MV 1000 HC
C6418	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C6419	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C6424	4030016740	S.CERAMIC	ERE22X6C1H102JD01L (GRH111 CH)
C6425	4320000681	DIP MICA	KD19C 681J5A
C6427	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6428	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6429	4030016740	S.CERAMIC	ERE22X6C1H102JD01L (GRH111 CH)
C6432	4030011740	S.CERAMIC	GRM32N2C2H201JV01L (GRM42-2 CH)
C6433	4030011740	S.CERAMIC	GRM32N2C2H201JV01L (GRM42-2 CH)
C6501	4030007130	S.CERAMIC	C1608 CH 1H 101J-T
C6503	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6506	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6507	4510004590	ELECTROLYTIC	16 MV 470 HC
C6602	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C6603	4510004590	ELECTROLYTIC	16 MV 470 HC
C6604	4510006230	S.ELECTROLYTIC	ECEV1EA470UP
C6605	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6606	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C6607	4510006230	S.ELECTROLYTIC	ECEV1EA470UP
C6608	4030008700	S.CERAMIC	GRM21BB11H473KA01L (GRM40 B)
C6609	4510006020	ELECTROLYTIC	16 MV 2200 HC
C6610	4030017320	S.CERAMIC	GRM21BB11H104KA11L (GRM40-034)
C6611	4030004740	S.CERAMIC	C2012 JB 1H 472K-T
C6612	4030004720	S.CERAMIC	C2012 JB 1H 102K-T
C6701	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
C6702	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
C6703	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
C6704	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C6705	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C6706	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C6707	4030006880	S.CERAMIC	C1608 JB 1H 472K-T

S.=Surface mount

[PA UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
C6708	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C6801	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
RL6701	6330001470	RELAY	AJS1311
J6301	6510021530	CONNECTOR	IMSA-9230B-1-04Z024-T
J6302	6510021530	CONNECTOR	IMSA-9230B-1-04Z024-T
J6401	6510007020	CONNECTOR	TMP-J01X-V6
J6411	6510021390	CONNECTOR	IMSA-9230B-1-03Z024-T
J6412	6510021390	CONNECTOR	IMSA-9230B-1-03Z024-T
J6501	6510003390	CONNECTOR	B03B-EH-S
J6701	6510022540	S.CONNECTOR	20FMN-BMTTR-A-TBT
J6702	6510007020	CONNECTOR	TMP-J01X-V6
J6703	6510003400	CONNECTOR	B04B-EH-S
F6701	5210000060	FUSE	FGB 5A
F6702	5220000230	HOLDER	S-N5054
F6703	5220000230	HOLDER	S-N5054
W6401	9054500690	WIRE	76/98/020/X98/X98
W6402	9054500690	WIRE	76/98/020/X98/X98
W6601	9045201001	WIRE	74/98/040/X98/X98
W6701	7030008240	S.JUMPER	ERJ12YJ0R00U
EP6001	0910054694	PCB	B 5724D
EP6601	6910000630	BEAD	FSRH070140RN000B (FSOH070RN)
EP6602	6510018330	TERMINAL	F4053A
EP6603	6510018330	TERMINAL	F4053A

[FILTER UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
Q7301	1590000680	S.TRANSISTOR	DTC114EUA T106
D7271	1750000190	S.DIODE	1SS322 (TE85R)
D7272	1750000190	S.DIODE	1SS322 (TE85R)
D7301	1750000550	S.DIODE	1SS355 TE-17
L7031	6200002040	S.COIL	NL 252018T-101J
L7035	6200002040	S.COIL	NL 252018T-101J
L7036	6140002240	COIL	LR-236 (T68-2)
L7037	6140001990	COIL	LR-226 (T68-2)
L7038	6140002000	COIL	LR-227 (T68-2)
L7061	6200002040	S.COIL	NL 252018T-101J
L7065	6200002040	S.COIL	NL 252018T-101J
L7066	6140002340	COIL	LR-263 (T68-2)
L7067	6140002230	COIL	LR-235 (T68-2)
L7068	6140002240	COIL	LR-236 (T68-2)
L7091	6200002040	S.COIL	NL 252018T-101J
L7095	6200002040	S.COIL	NL 252018T-101J
L7096	6140002260	COIL	LR-238 (T68-2)
L7097	6140002230	COIL	LR-235 (T68-2)
L7098	6140002230	COIL	LR-235 (T68-2)
L7121	6200002040	S.COIL	NL 252018T-101J
L7125	6200002040	S.COIL	NL 252018T-101J
L7126	6140002250	COIL	LR-237 (T68-2)
L7127	6140002340	COIL	LR-263 (T68-2)
L7128	6140002340	COIL	LR-263 (T68-2)
L7151	6200005050	S.COIL	NL 252018T-330J
L7155	6200005050	S.COIL	NL 252018T-330J
L7156	6140002280	COIL	LR-241 (T68-6)
L7157	6140002250	COIL	LR-237 (T68-2)
L7158	6140002250	COIL	LR-237 (T68-2)
L7181	6200005050	S.COIL	NL 252018T-330J
L7182	6140002300	COIL	LR-243 (T68-10)
L7183	6140002290	COIL	LR-242 (T68-10)
L7184	6140002290	COIL	LR-242 (T68-10)
L7185	6200005050	S.COIL	NL 252018T-330J
L7211	6200005010	S.COIL	NL 252018T-100J

[FILTER UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
L7215	6200005010	S.COIL	NL 252018T-100J
L7216	6140002290	COIL	LR-242 (T68-10)
L7217	6140002290	COIL	LR-242 (T68-10)
L7218	6140002290	COIL	LR-242 (T68-10)
L7241	6200005010	S.COIL	NL 252018T-100J
L7244	6200005010	S.COIL	NL 252018T-100J
L7245	6140002330	COIL	LR-262 (T68-6)
L7246	6140002330	COIL	LR-262 (T68-6)
L7248	6140002330	COIL	LR-262 (T68-6)
L7271	6200002040	S.COIL	NL 252018T-101J
L7272	6140003490	COIL	LR-391
L7273	6200002040	S.COIL	NL 252018T-101J
L7321	6140001460	COIL	LR-170
L7331	6200002040	S.COIL	NL 252018T-101J
L7332	6200002040	S.COIL	NL 252018T-101J
R7271	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R7272	7030003490	S.RESISTOR	ERJ3GEYJ 272 V (2.7 kΩ)
R7273	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R7274	7030008190	S.RESISTOR	ERJ12YJ330U (33 Ω)
R7275	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R7276	7030003490	S.RESISTOR	ERJ3GEYJ 272 V (2.7 kΩ)
R7277	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R7301	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 Ω)
R7314	7540000230	ABSORBER	SA05 401N
R7315	7030010650	S.RESISTOR	ERJ12YJ823U (82 kΩ)
C7031	4510005480	ELECTROLYTIC	50 MV 1 HC
C7032	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C7033	4320000651	DIP MICA	KD20C 102J5A
C7034	4010006410	CERAMIC	HM13SJ SL 471J 500V
C7035	4010006410	CERAMIC	HM13SJ SL 471J 500V
C7036	4320000981	DIP MICA	KD20C 222J5A
C7037	4010005360	CERAMIC	HM11SJ SL 301J 500V
C7038	4010005880	CERAMIC	HM95SJ SL 271J 500V
C7039	4320000951	DIP MICA	KD20C 272J5A
C7041	4030011120	S.CERAMIC	GRM31M2C2H100JV01L (GRM42-6 CH)
C7042	4010005930	CERAMIC	HM11SJ SL 391J 500V
C7043	4010005930	CERAMIC	HM11SJ SL 391J 500V
C7044	4010005930	CERAMIC	HM11SJ SL 391J 500V
C7045	4010005370	CERAMIC	HM11SJ SL 331J 500V
C7046	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C7049	4010005850	CERAMIC	HM95SJ SL 181J 500V
C7061	4510005480	ELECTROLYTIC	50 MV 1 HC
C7062	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C7063	4030011730	S.CERAMIC	GRM31M2C2H101JV01L (GRM42-6 CH)
C7064	4010006410	CERAMIC	HM13SJ SL 471J 500V
C7065	4010006410	CERAMIC	HM13SJ SL 471J 500V
C7066	4010005370	CERAMIC	HM11SJ SL 331J 500V
C7067	4010005880	CERAMIC	HM95SJ SL 271J 500V
C7068	4010005880	CERAMIC	HM95SJ SL 271J 500V
C7069	4010005880	CERAMIC	HM95SJ SL 271J 500V
C7070	4030011730	S.CERAMIC	GRM31M2C2H101JV01L (GRM42-6 CH)
C7071	4010006410	CERAMIC	HM13SJ SL 471J 500V
C7072	4010006410	CERAMIC	HM13SJ SL 471J 500V
C7073	4010006410	CERAMIC	HM13SJ SL 471J 500V
C7074	4010005880	CERAMIC	HM95SJ SL 271J 500V
C7075	4010005370	CERAMIC	HM11SJ SL 331J 500V
C7076	4010005370	CERAMIC	HM11SJ SL 331J 500V
C7077	4010005370	CERAMIC	HM11SJ SL 331J 500V
C7078	4010005930	CERAMIC	HM11SJ SL 391J 500V
C7079	4010006410	CERAMIC	HM13SJ SL 471J 500V
C7080	4030012480	S.CERAMIC	GRM31M2C2H121JV01L (GRM42-6 CH)
C7081	4030012480	S.CERAMIC	GRM31M2C2H121JV01L (GRM42-6 CH)
C7082	4010005930	CERAMIC	HM11SJ SL 391J 500V
C7083	4010005930	CERAMIC	HM11SJ SL 391J 500V
C7084	4030011550	S.CERAMIC	GRM31M2C2H680JV01L (GRM42-6 CH)
C7085	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C7086	4030011120	S.CERAMIC	GRM31M2C2H100JV01L (GRM42-6 CH)
C7087	4030012480	S.CERAMIC	GRM31M2C2H121JV01L (GRM42-6 CH)
C7091	4510005480	ELECTROLYTIC	50 MV 1 HC
C7092	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7094	4010005370	CERAMIC	HM11SJ SL 331J 500V
C7095	4010005930	CERAMIC	HM11SJ SL 391J 500V
C7096	4010005930	CERAMIC	HM11SJ SL 391J 500V
C7098	4010005370	CERAMIC	HM11SJ SL 331J 500V
C7099	4010006410	CERAMIC	HM13SJ SL 471J 500V
C7100	4030011730	S.CERAMIC	GRM31M2C2H101JV01L (GRM42-6 CH)
C7101	4010005360	CERAMIC	HM11SJ SL 301J 500V
C7102	4030006880	S.CERAMIC	C1608 JB 1H 472K-T

S.=Surface mount

[FILTER UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
C7105	4010006410	CERAMIC	HM13SJ SL 471J 500V
C7106	4010005830	CERAMIC	HM74SJ SL 151J 500V
C7108	4010005370	CERAMIC	HM11SJ SL 331J 500V
C7121	4510005480	ELECTROLYTIC	50 MV 1 HC
C7122	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7124	4030012480	S.CERAMIC	GRM31M2C2H121JV01L (GRM42-6 CH)
C7125	4010005930	CERAMIC	HM11SJ SL 391J 500V
C7126	4030011120	S.CERAMIC	GRM31M2C2H100JV01L (GRM42-6 CH)
C7127	4030012480	S.CERAMIC	GRM31M2C2H121JV01L (GRM42-6 CH)
C7128	4010005880	CERAMIC	HM95SJ SL 271J 500V
C7129	4010005360	CERAMIC	HM11SJ SL 301J 500V
C7130	4030011510	S.CERAMIC	GRM31M2C2H560JV01L (GRM42-6 CH)
C7131	4030011070	S.CERAMIC	GRM31M2C2H5R0CY21L (GRM42-6 CH)
C7132	4010005360	CERAMIC	HM11SJ SL 301J 500V
C7133	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7136	4010005850	CERAMIC	HM95SJ SL 181J 500V
C7137	4030011730	S.CERAMIC	GRM31M2C2H101JV01L (GRM42-6 CH)
C7151	4510005480	ELECTROLYTIC	50 MV 1 HC
C7152	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7153	4030014460	S.CERAMIC	GRM31M2C2H820JV01L (GRM42-6 CH)
C7154	4010005930	CERAMIC	HM11SJ SL 391J 500V
C7155	4030012480	S.CERAMIC	GRM31M2C2H121JV01L (GRM42-6 CH)
C7156	4030011120	S.CERAMIC	GRM31M2C2H100JV01L (GRM42-6 CH)
C7157	4010005930	CERAMIC	HM11SJ SL 391J 500V
C7158	4030014460	S.CERAMIC	GRM31M2C2H820JV01L (GRM42-6 CH)
C7160	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7163	4010005850	CERAMIC	HM95SJ SL 181J 500V
C7181	4510005480	ELECTROLYTIC	50 MV 1 HC
C7182	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7183	4030012480	S.CERAMIC	GRM31M2C2H121JV01L (GRM42-6 CH)
C7184	4030012480	S.CERAMIC	GRM31M2C2H121JV01L (GRM42-6 CH)
C7185	4010005880	CERAMIC	HM95SJ SL 271J 500V
C7186	4030011510	S.CERAMIC	GRM31M2C2H560JV01L (GRM42-6 CH)
C7187	4010005370	CERAMIC	HM11SJ SL 331J 500V
C7188	4030011180	S.CERAMIC	GRM31M2C2H220JV01L (GRM42-6 CH)
C7190	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7193	4010005850	CERAMIC	HM95SJ SL 181J 500V
C7211	4510005480	ELECTROLYTIC	50 MV 1 HC
C7212	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7214	4030011240	S.CERAMIC	GRM31M2C2H470JV01L (GRM42-6 CH)
C7216	4030011190	S.CERAMIC	GRM31M2C2H270JV01L (GRM42-6 CH)
C7217	4030012480	S.CERAMIC	GRM31M2C2H121JV01L (GRM42-6 CH)
C7218	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7221	4030014460	S.CERAMIC	GRM31M2C2H820JV01L (GRM42-6 CH)
C7222	4010005860	CERAMIC	HM95SJ SL 201J 500V
C7223	4030014460	S.CERAMIC	GRM31M2C2H820JV01L (GRM42-6 CH)
C7224	4030011210	S.CERAMIC	GRM31M2C2H330JV01L (GRM42-6 CH)
C7225	4030011120	S.CERAMIC	GRM31M2C2H100JV01L (GRM42-6 CH)
C7241	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7242	4030011730	S.CERAMIC	GRM31M2C2H101JV01L (GRM42-6 CH)
C7243	4030011510	S.CERAMIC	GRM31M2C2H560JV01L (GRM42-6 CH)
C7244	4030011180	S.CERAMIC	GRM31M2C2H220JV01L (GRM42-6 CH)
C7245	4030011070	S.CERAMIC	GRM31M2C2H5R0CY21L (GRM42-6 CH)
C7247	4030011180	S.CERAMIC	GRM31M2C2H220JV01L (GRM42-6 CH)
C7248	4030011210	S.CERAMIC	GRM31M2C2H330JV01L (GRM42-6 CH)
C7249	4030011230	S.CERAMIC	GRM31M2C2H390JV01L (GRM42-6 CH)
C7250	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7253	4010005830	CERAMIC	HM74SJ SL 151J 500V
C7254	4030011180	S.CERAMIC	GRM31M2C2H220JV01L (GRM42-6 CH)
C7272	4030006870	S.CERAMIC	C1608 JB 1H 222K-T
C7274	4030006870	S.CERAMIC	C1608 JB 1H 222K-T
C7275	4610002230	TRIMMER	TZB4Z100DB10B00 (TZBX4Z100BD110)
C7277	4010005850	CERAMIC	HM95SJ SL 181J 500V
C7278	4030007090	S.CERAMIC	C1608 CH 1H 470J-T
C7279	4030007090	S.CERAMIC	C1608 CH 1H 470J-T
C7301	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7302	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7303	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7304	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7321	4030011730	S.CERAMIC	GRM31M2C2H101JV01L (GRM42-6 CH)
C7322	4030011170	S.CERAMIC	GRM31M2C2H180JV01L (GRM42-6 CH)
C7323	4030011730	S.CERAMIC	GRM31M2C2H101JV01L (GRM42-6 CH)
C7325	4030011790	S.CERAMIC	GRM55RF52A684ZD01L (GRM44-1 Y5V)
C7332	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C7345	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
RL7031	6330001570	RELAY	AJS1315
RL7032	6330001570	RELAY	AJS1315
RL7061	6330001570	RELAY	AJS1315
RL7062	6330001570	RELAY	AJS1315
RL7091	6330001570	RELAY	AJS1315

[FILTER UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
RL7092	6330001570	RELAY	AJS1315
RL7121	6330001570	RELAY	AJS1315
RL7122	6330001570	RELAY	AJS1315
RL7151	6330001570	RELAY	AJS1315
RL7152	6330001570	RELAY	AJS1315
RL7181	6330001570	RELAY	AJS1315
RL7182	6330001570	RELAY	AJS1315
RL7211	6330001570	RELAY	AJS1315
RL7212	6330001570	RELAY	AJS1315
RL7241	6330001570	RELAY	AJS1315
RL7242	6330001570	RELAY	AJS1315
RL7301	6330000780	RELAY	AGP 2013 (DSP1-DC12V)
CP7331	6910009670	S.CHECK P	HK3-S-T
CP7332	6910009670	S.CHECK P	HK3-S-T
J7001	6510007900	CONNECTOR	TBP-P01X-A1 (B1)
J7311	6510007020	CONNECTOR	TMP-J01X-V6
J7321	6510007900	CONNECTOR	TBP-P01X-A1 (B1)
J7331	6510022560	CONNECTOR	16FMN-BTRK-A
P7001	6510003240	CONNECTOR	TMP-P01X-A1
P7321	6510003240	CONNECTOR	TMP-P01X-A1
W7001	9014130400	WIRE	62/99/150/C24/C31
W7002	9086700300	WIRE	08
W7321	9012961790	WIRE	62/99/280/C31/C24
W7322	9086700300	WIRE	08
W7333	7030003860	S.JUMPER	ERJ3GE JPW V
W7334	7030003860	S.JUMPER	ERJ3GE JPW V
W7335	7030003860	S.JUMPER	ERJ3GE JPW V
W7336	7030003860	S.JUMPER	ERJ3GE JPW V
W7337	7030003860	S.JUMPER	ERJ3GE JPW V
W7338	7030003860	S.JUMPER	ERJ3GE JPW V
W7339	7030003860	S.JUMPER	ERJ3GE JPW V
W7340	7030003860	S.JUMPER	ERJ3GE JPW V
WS1	8970024020	CABLE	SX2429 1.5D COAXIAL TUBE (2)/FI
EP7001	0910054704	PCB	B 5725D

[DRIVER UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
Q6851	1590003060	S.FET	PD55015S
R6851	7030010520	S.RESISTOR	ERJ1TYJ 101U (100 Ω)
R6852	7030000020	S.RESISTOR	MCR10EZHJ 1 Ω (010)
C6851	4030004750	S.CERAMIC	C2012 JB 1H 103K-T
EP6851	0910054751	PCB	B 5744A

S.=Surface mount

[VARISTOR-1 BOARD]

REF NO.	ORDER NO.	DESCRIPTION	
D6431	1790001760	S.VARISTOR	MA30-(TX)
C6431	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
EP6431	0910054761	PCB	B 5746A

[VARISTOR-2 BOARD]

REF NO.	ORDER NO.	DESCRIPTION	
D6432	1790001760	S.VARISTOR	MA30-(TX)
C6432	4030008920	S.CERAMIC	C1608 JB 1H 473K-T
EP6432	0910054771	PCB	B 5747A

EX-2432
[DSP UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
IC1	1130010010	S.IC	TC7WHU04FU
IC3	1130010540	S.IC	SN74AHC74PWR
IC4	1130010540	S.IC	SN74AHC74PWR
IC51	1130010010	S.IC	TC7WHU04FU
IC101	1130010520	S.IC	SN74HCT244APWR
IC102	1110004770	S.IC	BU9480F-E2
IC152	1180002320	S.REG	TK11218CMCL
IC161	1180002020	S.REG	BA033FP-E2
IC171	1180002270	S.REG	TK11250CMCL
IC201	1130010680	S.IC	M29W102BB-70N1
IC202	1130008040	S.IC	TC7SH04FU
IC203	1130008810	S.IC	TC7SH32FU (TE85L)
IC301	1140010330	S.IC	TMS320VC33PGEA120
IC401	1130010550	S.IC	SN74AHC595PWR
IC403	1130010530	S.IC	SN74AHCT374PWR
IC404	1130010530	S.IC	SN74AHCT374PWR
IC405	1130004670	S.IC	BU4021BF-T1
IC406	1130010540	S.IC	SN74AHC74PWR
IC501	1190001610	S.IC	AK4528-VF
IC601	1110005420	S.IC	BA15532F-E2
IC651	1110005420	S.IC	BA15532F-E2
IC701	1110001900	S.IC	µPC4570G2-T1
IC801	1130010560	S.IC	SN74AHC244PWR
Q201	1590001660	S.TRANSISTOR	XP4312 (TX)
Q301	1590000430	S.TRANSISTOR	DTC144EUA T106
Q302	1590000430	S.TRANSISTOR	DTC144EUA T106
D301	1750000370	S.DIODE	DA221 TL
D302	1750000370	S.DIODE	DA221 TL
D303	1750000370	S.DIODE	DA221 TL
D304	1750000370	S.DIODE	DA221 TL
D901	1790000970	S.DIODE	MA729 (TX)
X1	6050009860	S.XTAL	CR-566 (12.288 MHz)
X51	6050011270	S.XTAL	CR-709 (60.000 MHz)
L1	6200003280	S.COIL	NL 252018T-2R2J
L2	6200003280	S.COIL	NL 252018T-2R2J
L3	6200003280	S.COIL	NL 252018T-2R2J
L51	6200003280	S.COIL	NL 252018T-2R2J
L52	6200001980	S.COIL	NL 252018T-1R0J
L101	6200003280	S.COIL	NL 252018T-2R2J
L102	6200003280	S.COIL	NL 252018T-2R2J
L301	6200003280	S.COIL	NL 252018T-2R2J
L302	6200009840	S.COIL	LQH 3C 2R2M 34
L401	6200003280	S.COIL	NL 252018T-2R2J
L403	6200003280	S.COIL	NL 252018T-2R2J
L404	6200003280	S.COIL	NL 252018T-2R2J
L405	6200003280	S.COIL	NL 252018T-2R2J
L406	6200003280	S.COIL	NL 252018T-2R2J
L501	6200003280	S.COIL	NL 252018T-2R2J
L502	6200003280	S.COIL	NL 252018T-2R2J
L601	6200002040	S.COIL	NL 252018T-101J
L651	6200002040	S.COIL	NL 252018T-101J
L701	6200002040	S.COIL	NL 252018T-101J
L801	6200003280	S.COIL	NL 252018T-2R2J
R1	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R2	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R51	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R52	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R151	7030007240	S.RESISTOR	ERJ12YJ680U (68 Ω)
R161	7030008190	S.RESISTOR	ERJ12YJ330U (33 Ω)
R162	7030007510	S.RESISTOR	ERJ12YJ270U (27 Ω)
R171	7030007180	S.RESISTOR	ERJ12YJ150U (15 Ω)
R201	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R303	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R304	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R305	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R306	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R307	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R308	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R309	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)

S.=Surface mount

[DSP UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
R310	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R311	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R312	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R313	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R317	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R318	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R320	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R321	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R322	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ω)
R323	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R324	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R325	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R326	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R327	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R328	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R329	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R330	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R331	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R332	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R501	7030004040	S.RESISTOR	ERJ3GEYJ 4R7 V (4.7 Ω)
R601	7030006581	S.RESISTOR	ERA3YED 122V
R602	7030009591	S.RESISTOR	ERA3YED 472V
R603	7030010450	S.RESISTOR	ERA3YED 391V
R604	7030010450	S.RESISTOR	ERA3YED 391V
R605	7030007230	S.RESISTOR	ERA3YED 102V
R606	7030007230	S.RESISTOR	ERA3YED 102V
R607	7030009591	S.RESISTOR	ERA3YED 472V
R608	7030009591	S.RESISTOR	ERA3YED 472V
R609	7030009591	S.RESISTOR	ERA3YED 472V
R610	7030009591	S.RESISTOR	ERA3YED 472V
R611	7030005331	S.RESISTOR	ERA3YED 562V
R651	7030010450	S.RESISTOR	ERA3YED 391V
R652	7030010450	S.RESISTOR	ERA3YED 391V
R653	7030007230	S.RESISTOR	ERA3YED 102V
R654	7030007230	S.RESISTOR	ERA3YED 102V
R655	7030009591	S.RESISTOR	ERA3YED 472V
R656	7030009591	S.RESISTOR	ERA3YED 472V
R657	7030009591	S.RESISTOR	ERA3YED 472V
R658	7030009591	S.RESISTOR	ERA3YED 472V
R659	7030005331	S.RESISTOR	ERA3YED 562V
R701	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R702	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R703	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R704	7030003540	S.RESISTOR	ERJ3GEYJ 682 V (6.8 kΩ)
R705	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R706	7030003540	S.RESISTOR	ERJ3GEYJ 682 V (6.8 kΩ)
R707	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R708	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R751	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R752	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R753	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R754	7030003540	S.RESISTOR	ERJ3GEYJ 682 V (6.8 kΩ)
R755	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R756	7030003540	S.RESISTOR	ERJ3GEYJ 682 V (6.8 kΩ)
R757	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R758	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R801	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R802	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R803	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R804	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R805	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R901	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R902	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R903	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R904	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R905	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R906	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
C1	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C2	4030007060	S.CERAMIC	C1608 CH 1H 270J-T
C3	4030007060	S.CERAMIC	C1608 CH 1H 270J-T
C4	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C6	4030007090	S.CERAMIC	C1608 CH 1H 470J-T
C7	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C8	4030007010	S.CERAMIC	C1608 CH 1H 100D-T
C9	4030006960	S.CERAMIC	C1608 CH 1H 050C-T
C51	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C52	4030009920	S.CERAMIC	C1608 CH 1H 050B-T
C53	4030009920	S.CERAMIC	C1608 CH 1H 050B-T
C54	4030006900	S.CERAMIC	C1608 JB 1H 103K-T
C101	4030011600	S.CERAMIC	C1608 JB 1E 104K-T

[DSP UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
C102	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C103	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C104	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C154	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C155	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C156	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C157	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C158	4550006080	S.TANTALUM	TEMSVB2 1C 106M-8L
C161	4550006620	S.TANTALUM	ECST0JY226R
C162	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C163	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C164	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C171	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C172	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C173	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C174	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C175	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C201	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C202	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C203	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C301	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C302	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C303	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C304	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C305	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C306	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C307	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C308	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C309	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C311	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C312	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C313	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C314	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C315	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C316	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C317	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C318	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C319	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C320	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C321	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C322	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C323	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C324	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C325	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C401	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C403	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C404	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C405	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C406	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C407	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C408	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C504	4510005860	S.ELECTROLYTIC	ECEV1HA2R2SR
C505	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C506	4550006620	S.TANTALUM	ECST0JY226R
C507	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C508	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C509	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C510	4550006620	S.TANTALUM	ECST0JY226R
C511	4030007050	S.CERAMIC	C1608 CH 1H 220J-T
C601	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C602	4030009980	S.CERAMIC	C1608 JB 1H 152K-T
C603	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C604	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C605	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C606	4510005830	S.ELECTROLYTIC	ECEV1HAN010R
C651	4030009980	S.CERAMIC	C1608 JB 1H 152K-T
C652	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C653	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C654	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C655	4510005830	S.ELECTROLYTIC	ECEV1HAN010R
C701	4030011280	S.CERAMIC	C1608 CH 1H 271J-T
C702	4030007130	S.CERAMIC	C1608 CH 1H 101J-T
C703	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C704	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C705	4030007130	S.CERAMIC	C1608 CH 1H 101J-T
C706	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C707	4510006220	S.ELECTROLYTIC	ECEV1CA101UP
C708	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C751	4030011280	S.CERAMIC	C1608 CH 1H 271J-T
C752	4030007130	S.CERAMIC	C1608 CH 1H 101J-T
C755	4030007130	S.CERAMIC	C1608 CH 1H 101J-T
C756	4030011600	S.CERAMIC	C1608 JB 1E 104K-T

S.=Surface mount

[DSP UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
C757	4510006220	S.ELECTROLYTIC	ECEV1CA101UP
C758	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C801	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C802	4030006860	S.CERAMIC	C1608 JB 1H 102K-T
C901	4030006960	S.CERAMIC	C1608 CH 1H 050C-T
J901	6910013900	CONNECTOR	IMSA-9180S-22A
J902	6910012460	CONNECTOR	IMSA-9180S-30A
W1	7030003860	S.JUMPER	ERJ3GE JPW V
W2	7030008240	S.JUMPER	ERJ12YJ0R00U
W3	7030003860	S.JUMPER	ERJ3GE JPW V
W4	7030008240	S.JUMPER	ERJ12YJ0R00U
W5	7030003860	S.JUMPER	ERJ3GE JPW V
W151	7030008240	S.JUMPER	ERJ12YJ0R00U
W152	7030003860	S.JUMPER	ERJ3GE JPW V
W171	7030008240	S.JUMPER	ERJ12YJ0R00U
W201	7030003860	S.JUMPER	ERJ3GE JPW V
W202	7030003860	S.JUMPER	ERJ3GE JPW V
W203	7030003860	S.JUMPER	ERJ3GE JPW V
W302	7030003860	S.JUMPER	ERJ3GE JPW V
W303	7030003860	S.JUMPER	ERJ3GE JPW V
W308	7030003860	S.JUMPER	ERJ3GE JPW V
W309	7030003860	S.JUMPER	ERJ3GE JPW V
W310	7030003860	S.JUMPER	ERJ3GE JPW V
W311	7030003860	S.JUMPER	ERJ3GE JPW V
W312	7030003860	S.JUMPER	ERJ3GE JPW V
W501	7030003860	S.JUMPER	ERJ3GE JPW V
W502	7030003860	S.JUMPER	ERJ3GE JPW V
W503	7030003860	S.JUMPER	ERJ3GE JPW V
W504	7030003860	S.JUMPER	ERJ3GE JPW V
W505	7030008240	S.JUMPER	ERJ12YJ0R00U
W901	7030003860	S.JUMPER	ERJ3GE JPW V
W902	7030008240	S.JUMPER	ERJ12YJ0R00U
W903	7030003860	S.JUMPER	ERJ3GE JPW V
W904	7030003860	S.JUMPER	ERJ3GE JPW V
W952	7030003860	S.JUMPER	ERJ3GE JPW V
EP1	0910054518	PCB	B 5666H
EP2	6910012350	S.BEAD	MMZ1608Y 102BT

RC-25
[FRONT UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
W8001	8900009531	CABLE	OPC-942A (P=1 N=10 L=170)
W8005	8900008860	CABLE	OPC-875 (N:20 L:70)

[DISPLAY UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
IC8201	1140010240	S.IC	HD64F2134AFA20 (EX-2545A)
IC8202	1130005770	S.IC	S-80942CNMC-G9C
IC8250	1130005720	S.IC	TC7W04F (TE12L)
IC8260	1130007350	S.IC	TC74HC4066AF
IC8270	1110001810	S.IC	TA7368F (TP1)
IC8280	1110002700	S.IC	NJM2904M-T1
IC8290	1180001070	S.IC	TA7805F (TE16L)
IC8301	1110005580	S.IC	AN8010M-(E1)
IC8310	1180001250	S.IC	TA7808F (TE16L)
Q8251	1590001650	S.TRANSISTOR	XP4601 (TX)
Q8260	1590000680	S.TRANSISTOR	DTC114EUA T106
Q8280	1530002850	S.TRANSISTOR	2SC4116-BL (TE85R)
Q8281	1530002850	S.TRANSISTOR	2SC4116-BL (TE85R)
Q8282	1590000680	S.TRANSISTOR	DTC114EUA T106
Q8300	1540000440	S.TRANSISTOR	2SD1619-T-TD
Q8301	1540000440	S.TRANSISTOR	2SD1619-T-TD
Q8340	1530002850	S.TRANSISTOR	2SC4116-BL (TE85R)
Q8341	1530002850	S.TRANSISTOR	2SC4116-BL (TE85R)
Q8342	1530002850	S.TRANSISTOR	2SC4116-BL (TE85R)
Q8343	1530002850	S.TRANSISTOR	2SC4116-BL (TE85R)
Q8344	1530002850	S.TRANSISTOR	2SC4116-BL (TE85R)
Q8345	1530002850	S.TRANSISTOR	2SC4116-BL (TE85R)
D8201	1750000370	S.DIODE	DA221 TL
D8203	1750000370	S.DIODE	DA221 TL
D8204	1750000550	S.DIODE	1SS355 TE-17
D8205	1750000550	S.DIODE	1SS355 TE-17
D8250	1750000550	S.DIODE	1SS355 TE-17
D8280	1750000370	S.DIODE	DA221 TL
D8701	1750000550	S.DIODE	1SS355 TE-17
X8211	6050010501	S.XTAL	CR-636A (14.7456 MHz)
L8201	6200001830	S.COIL	NL 322522T-100J
L8202	6200005010	S.COIL	NL 252018T-100J
L8203	6200005010	S.COIL	NL 252018T-100J
L8206	6200003950	S.COIL	HF50ACC 322513-T
L8270	6200003260	S.COIL	NL 322522T-101J
L8286	6200005010	S.COIL	NL 252018T-100J
L8290	6200003950	S.COIL	HF50ACC 322513-T
L8701	6200001830	S.COIL	NL 322522T-100J
R8201	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8202	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8203	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8204	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8205	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R8206	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8207	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8208	7030003650	S.RESISTOR	ERJ3GEYJ 563 V (56 kΩ)
R8209	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R8210	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8211	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8212	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8213	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8214	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8215	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8216	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8218	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R8219	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R8221	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R8222	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)

S.=Surface mount

[DISPLAY UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
R8223	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8224	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8225	7030003590	S.RESISTOR	ERJ3GEYJ 183 V (18 kΩ)
R8226	7030003470	S.RESISTOR	ERJ3GEYJ 182 V (1.8 kΩ)
R8227	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R8229	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R8230	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8231	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8232	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8233	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8234	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R8235	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R8236	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R8237	7030003660	S.RESISTOR	ERJ3GEYJ 683 V (68 kΩ)
R8239	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R8240	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R8241	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R8243	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R8246	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8247	7030003240	S.RESISTOR	ERJ3GEYJ 220 V (22 Ω)
R8250	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R8251	7030003590	S.RESISTOR	ERJ3GEYJ 183 V (18 kΩ)
R8252	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R8253	7030003540	S.RESISTOR	ERJ3GEYJ 682 V (6.8 kΩ)
R8254	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)
R8255	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8260	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R8263	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8270	7030003420	S.RESISTOR	ERJ3GEYJ 681 V (680 Ω)
R8274	7030003660	S.RESISTOR	ERJ3GEYJ 683 V (68 kΩ)
R8275	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R8276	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R8278	7030003570	S.RESISTOR	ERJ3GEYJ 123 V (12 kΩ)
R8279	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R8280	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R8281	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R8282	7030003690	S.RESISTOR	ERJ3GEYJ 124 V (120 kΩ)
R8283	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R8284	7030003650	S.RESISTOR	ERJ3GEYJ 563 V (56 kΩ)
R8285	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R8287	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R8288	7030003470	S.RESISTOR	ERJ3GEYJ 182 V (1.8 kΩ)
R8289	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 kΩ)
R8290	7030006060	S.RESISTOR	ERJ12YJ100U (10 Ω)
R8291	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R8300	7030003510	S.RESISTOR	ERJ3GEYJ 392 V (3.9 kΩ)
R8301	7030006220	S.RESISTOR	ERJ12YJ470U (47 Ω)
R8302	7030003510	S.RESISTOR	ERJ3GEYJ 392 V (3.9 kΩ)
R8303	7030006220	S.RESISTOR	ERJ12YJ470U (47 Ω)
R8340	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R8341	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R8342	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R8343	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R8344	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R8345	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R8346	7030003650	S.RESISTOR	ERJ3GEYJ 563 V (56 kΩ)
R8347	7030003390	S.RESISTOR	ERJ3GEYJ 391 V (390 Ω)
R8348	7030003660	S.RESISTOR	ERJ3GEYJ 683 V (68 kΩ)
R8349	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R8350	7030003660	S.RESISTOR	ERJ3GEYJ 683 V (68 kΩ)
R8351	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R8352	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R8373	7030003420	S.RESISTOR	ERJ3GEYJ 681 V (680 Ω)
R8701	7030003260	S.RESISTOR	ERJ3GEYJ 330 V (33 Ω)
R8702	7030003260	S.RESISTOR	ERJ3GEYJ 330 V (33 Ω)
R8703	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R8704	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R8705	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R8706	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R8707	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R8708	7510001560	S.THERMISTOR	NTCG16 4BH 102KT
C8201	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C8202	4510006220	S.ELECTROLYTIC	ECEV1CA101UP
C8203	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C8204	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C8205	4030006900	S.CERAMIC	C1608 JB 1H 103K-T
C8206	4030007020	S.CERAMIC	C1608 CH 1H 120J-T
C8207	4030007020	S.CERAMIC	C1608 CH 1H 120J-T
C8208	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C8209	4030006900	S.CERAMIC	C1608 JB 1H 103K-T

[DISPLAY UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
C8210	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8211	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8212	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8214	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8216	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C8218	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C8219	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C8220	4030017480	S.CERAMIC	C1608 JB 1A 474K-T
C8221	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8222	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8223	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8226	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8241	4510005310	S.ELECTROLYTIC	ECEV1CA220SR
C8242	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8243	4510004640	S.ELECTROLYTIC	ECEV1CA470SP
C8244	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C8250	4030006900	S.CERAMIC	C1608 JB 1H 103K-T
C8260	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8261	4510007110	S.ELECTROLYTIC	ECEV1CA220NP
C8270	4510006220	S.ELECTROLYTIC	ECEV1CA101UP
C8271	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8274	4510007120	S.ELECTROLYTIC	ECEV1AA101SP
C8277	4510006220	S.ELECTROLYTIC	ECEV1CA101UP
C8280	4510005310	S.ELECTROLYTIC	ECEV1CA220SR
C8281	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8282	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C8283	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C8284	4510005860	S.ELECTROLYTIC	ECEV1HA2R2SR
C8285	4510004630	S.ELECTROLYTIC	ECEV1CA100SR
C8286	4510004640	S.ELECTROLYTIC	ECEV1CA470SP
C8287	4510004650	S.ELECTROLYTIC	ECEV1EA4R7SR
C8288	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8289	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8290	4510004640	S.ELECTROLYTIC	ECEV1CA470SP
C8291	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C8292	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C8293	4510004640	S.ELECTROLYTIC	ECEV1CA470SP
C8294	4030007130	S.CERAMIC	C1608 CH 1H 101J-T
C8295	4030007130	S.CERAMIC	C1608 CH 1H 101J-T
C8297	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8298	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8299	4030007090	S.CERAMIC	C1608 CH 1H 470J-T
C8300	4030007090	S.CERAMIC	C1608 CH 1H 470J-T
C8301	4510004640	S.ELECTROLYTIC	ECEV1CA470SP
C8302	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C8303	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C8304	4510004640	S.ELECTROLYTIC	ECEV1CA470SP
C8310	4510004640	S.ELECTROLYTIC	ECEV1CA470SP
C8311	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8312	4030006880	S.CERAMIC	C1608 JB 1H 472K-T
C8313	4510004640	S.ELECTROLYTIC	ECEV1CA470SP
C8373	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
J8205	6510022540	S.CONNECTOR	20FMN-BMTTR-A-TBT
J8701	6510022440	CONNECTOR	LTW-8MP-C
J8702	6450001630	CONNECTOR	HSJ1406-01-050
J8902	6510022620	S.CONNECTOR	10FMN-BMTTR-A-TBT
J8903	6510022620	S.CONNECTOR	10FMN-BMTTR-A-TBT
DS8300	5040002600	LED	TLYU1002
DS8301	5040002600	LED	TLYU1002
DS8302	5040002600	LED	TLYU1002
DS8303	5040002600	LED	TLYU1002
DS8304	5040002600	LED	TLYU1002
DS8305	5040002600	LED	TLYU1002
DS8306	5040002600	LED	TLYU1002
DS8307	5040002600	LED	TLYU1002
DS8308	5040002600	LED	TLYU1002
DS8309	5040002600	LED	TLYU1002
DS8310	5040002600	LED	TLYU1002
DS8311	5040002600	LED	TLYU1002
DS8312	5040002600	LED	TLYU1002
DS8313	5040002600	LED	TLYU1002
DS8314	5040002600	LED	TLYU1002
DS8315	5040002600	LED	TLYU1002
DS8316	5040002600	LED	TLYU1002
DS8317	5040002600	LED	TLYU1002
DS8318	5040002600	LED	TLYU1002
DS8319	5040002600	LED	TLYU1002
DS8320	5040002600	LED	TLYU1002

S.=Surface mount

[DISPLAY UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
DS8321	5040002600	LED	TLYU1002
DS8322	5040002600	LED	TLYU1002
DS8323	5040002600	LED	TLYU1002
DS8340	5040002310	S.LED	SML-311YTT86
DS8341	5040002310	S.LED	SML-311YTT86
DS8342	5040002310	S.LED	SML-311YTT86
DS8343	5040002310	S.LED	SML-311YTT86
DS8344	5040002310	S.LED	SML-311YTT86
DS8345	5040002310	S.LED	SML-311YTT86
DS8346	5040002310	S.LED	SML-311YTT86
DS8347	5040002310	S.LED	SML-311YTT86
DS8348	5040002310	S.LED	SML-311YTT86
DS8349	5040002310	S.LED	SML-311YTT86
DS8350	5040002310	S.LED	SML-311YTT86
W8201	7030000010	S.JUMPER	MCR10EZHJ JPW (000)
W8202	7030000010	S.JUMPER	MCR10EZHJ JPW (000)
W8238	7030003860	S.JUMPER	ERJ3GE JPW V
W8242	7030003860	S.JUMPER	ERJ3GE JPW V
W8270	7030003860	S.JUMPER	ERJ3GE JPW V
W8271	7030003860	S.JUMPER	ERJ3GE JPW V
W8280	7030003860	S.JUMPER	ERJ3GE JPW V
W8281	7030003860	S.JUMPER	ERJ3GE JPW V
W8296	7030003860	S.JUMPER	ERJ3GE JPW V
W8340	7030003860	S.JUMPER	ERJ3GE JPW V
EP8201	0910054714	PCB	B 5727D
EP8205	6910012350	S.BEAD	MMZ1608Y 102BT
EP8292	6910012350	S.BEAD	MMZ1608Y 102BT
EP8293	6910012350	S.BEAD	MMZ1608Y 102BT
EP8294	6910012350	S.BEAD	MMZ1608Y 102BT
EP8295	6910012350	S.BEAD	MMZ1608Y 102BT
EP8296	6910012350	S.BEAD	MMZ1608Y 102BT

[JACK UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
J8601	6510022620	S.CONNECTOR	10FMN-BMTTR-A-TBT
J8602	6510023060	CONNECTOR	TCS7186-01-201
EP8601	0910054961	PCB	B 5812A

[SENSOR UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
S8801	2250000220	ENCODER	TP90N937E20-15F-1540
S8802	2250000220	ENCODER	TP90N937E20-15F-1540
EP8801	0910054732	PCB	B 5729B

[VR UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
R8901	7210002360	VARIABLE	TP96N97-15F-10KB-1301
EP8901	0910054742	PCB	B 5730B

[CONNECT UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
IC8240	1140010010	S.IC	HD66421TBOL
L8220	6200001830	S.COIL	NL 322522T-100J
L8221	6200001830	S.COIL	NL 322522T-100J
R8241	7030003830	S.RESISTOR	ERJ3GEYJ 185 V (1.8 MΩ)
R8242	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MΩ)
R8243	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8244	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8245	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R8246	7030003830	S.RESISTOR	ERJ3GEYJ 185 V (1.8 MΩ)
C8230	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C8231	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
C8232	4550006450	S.TANTALUM	ECST1EY105R
C8233	4550006450	S.TANTALUM	ECST1EY105R
C8234	4550006450	S.TANTALUM	ECST1EY105R
C8235	4550006450	S.TANTALUM	ECST1EY105R
C8236	4550006450	S.TANTALUM	ECST1EY105R
C8237	4030011600	S.CERAMIC	C1608 JB 1E 104K-T
J8220	6510022540	S.CONNECTOR	20FMN-BMTTR-A-TBT
DS8220	5030002280	LCD	HLC7700-018800
EP8220	0910054783	PCB	B 5751C

S.=Surface mount

HM-135
[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
R1	7010006890	RESISTOR	R20J 12 kΩ
R2	7010006910	RESISTOR	R20J 33 kΩ
R3	7010006880	RESISTOR	R20J 6.8 kΩ
R4	7010006900	RESISTOR	R20J 15 kΩ
C1	4010008030	CERAMIC	DD104 B 471K 50V
MC1	7700002120	MICROPHONE	KUC2123-030245
S1	2260002340	SWITCH	SKHHAM024A
S2	2260002340	SWITCH	SKHHAM024A
S3	2260002340	SWITCH	SKHHAM024A
W1	9018490010	WIRE	71/98/010/X98/X98 <KN>
W2	9018490010	WIRE	71/98/010/X98/X98 <KN>
EP1	0910051480	PCB	B 5324
EP2	9018230010	TUBE	IRRAX 0.7(d) L=5mm

[SW BOARD]

REF NO.	ORDER NO.	DESCRIPTION	
S1	2260002330	SWITCH	SKHHLP014A
EP1	0910051490	PCB	B 5325

SP-24
[CHASSIS UNIT]

REF NO.	ORDER NO.	DESCRIPTION	
SP1	2510001170	SPEAKER	077P0401 <KS>
W1	8900011090	CABLE	OPC-1104
EP1	8930006760	M.OTHER	SR-2P-4

S.=Surface mount

SECTION 6 MECHANICAL PARTS AND DISASSEMBLY

6-1 RC-25

[FRONT PARTS]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
W8001	8900009531	Cable OPC-942A	1
W8005	8900008860	Cable OPC-875	1
MP8001	8210018720	2545 front panel assembly	1
MP8002	8210018730	2545 rear panel assembly	1
MP8004	8210018620	2545 reflector	1
MP8005	8930057170	2545 20-key	1
MP8006	8930057160	2545 3-key	1
MP8007	8930057480	2545 LCD holder Y618	1
MP8008	8930057490	2545 LCD filter	1
MP8009	8830001630	VR nut (P)	1
MP8016	8610010851	Knob N279-1	1
MP8017	8610010861	Knob N280-1	2
MP8020	8810004430	Screw PH M3 × 6 ZK	8
MP8022	8810008660	Screw PH BT M3 × 8 NI-ZU	9
MP8023	8930057110	2545 phone cap	1

[DISPLAY BOARD]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
J8701	6510022440	Connector LTW-8MP-C	1
J8702	6450001630	Connector HSJ1406-01-050	1
MP8201	8510014560	2545 shield case	1

[JACK BOARD]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
J8602	6510023060	Connector TCS7186-01-201	1

[SENSOR BOARD]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
S8801	2250000220	TP90N937E20-15F-1540	1
S8802	2250000220	TP90N937E20-15F-1540	1

[VR BOARD]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
R8901	7210002360	TP96N97-15F-10KB-1301	1

[CONNECT BOARD]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
DS8220	5030002320	M802 LCD assembly C	1

6-2 SP-24

[CHASSIS PARTS]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
W1	8900011090	Cable OPC-1104	1
EP1	8930006760	SR-2P-4	1
SP1	2510001170	Speaker 077P0401	1
MP1	8210018780	2431 front panel assembly	1
MP2	8210018790	2431 rear panel assembly	1
MP7	8810004430	Screw PH M3 × 6 ZK	4
MP8	8930057640	Insulate plate (GW)	1

6-3 HM-135

[CHASSIS PARTS]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
W1	8900011080	Cable OPC-1108	1
MP1	8210015570	1823 front panel (B)	1
MP2	8210013620	1823 rear panel	1
MP4	8930039780	1823 seal	1
MP5	8930039750	1823 PTT holder	1
MP6	8930039760	1823 PTT rubber	1
MP7	8930039730	1823 key board	1
MP8	8930039720	1823 hanger knob	1
MP9	8930039740	1823 M-sheet	2
MP11	8810009250	Screw PH B0 2.6 × 16 SUS	5
MP12	8810009260	Screw PH BT 2 × 6 NI	5
MP13	8810009240	Screw BiH M4 × 10 ZK	1
MP14	8850001610	Spring washer M4 SUS	1

[MAIN BOARD]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
MC1	7700002120	Microphone KUC2123-030245	1

6-4 IC-M802

[CHASSIS PARTS]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
J4501	6510000370	Connector MR-DS	1
J4503	6510000370	Connector MR-DS	1
W4501	8900011050	Cable OPC-1109	1
W4502	8900011060	Cable OPC-1141	1
W4505	8900011220	Cable OPC-1143	1
W4506	8900008880	Cable OPC-877	1
W4507	8900011230	Cable OPC-1142	1
W4528	8900011030	Cable OPC-1130	1
MF4501	2710000520	Fan SB0812H-ICOM-00	1
MP4501	8010018820	2429 chassis	1
MP4502	8110007700	2429 T-cover	1
MP4503	8110007710	2429 U-cover	1
MP4504	8110007690	2429 PA-cover	1
MP4505	8930057190	2429 earth plate Y620	2
MP4506	8930057980	Rubber foot (N) SJ-5023K	4
MP4508	8930035230	1546 TR-A clip	1
MP4509	8820000530	Flange bolt M4 × 8 NI	1
MP4511	8820000550	Cap bolt M4 × 8 ZK	2
MP4512	8810008660	Screw PH BT M3 × 8 NI-ZU	42
MP4513	8810005770	Screw BiH M3 × 8 ZK	14
MP4514	8810003170	Setscrew A M3 × 8	9
MP4515	8930057870	2429 earth spring	1
MP4516	8930058100	2429 DC plate	1
MP4517	8930050320	Thermally sheet (M) TC-500TK	1
MP4518	8930050330	Thermally sheet (N) TC-400TKC	2
MP4519	8930055990	Shield tape (H)	1
MP4520	8930057870	2429 earth spring	1

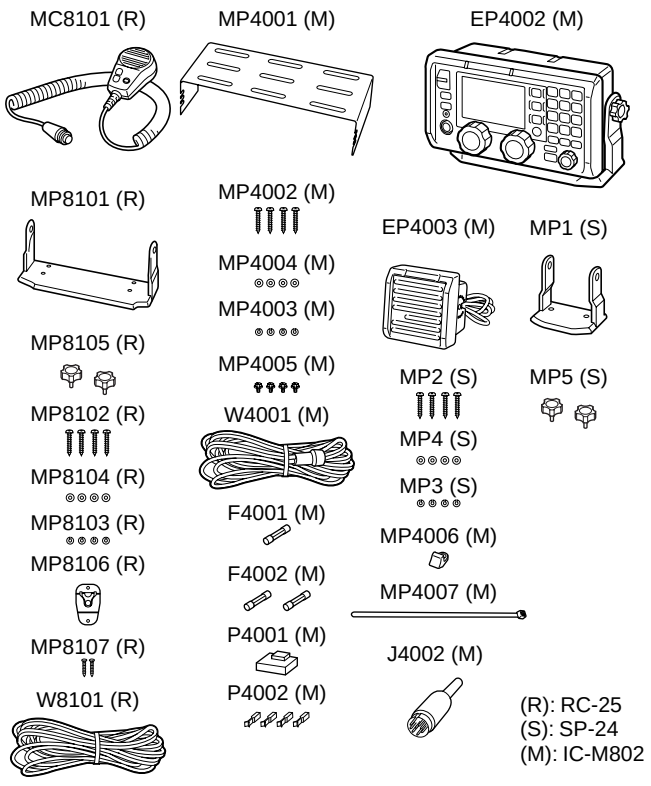
[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
J1451	6450000140	Connector HSJ0807-01-010	1
J1801	6450000170	Connector TCS4480-01-1111	1
J2051	6510023180	Connector TCS7282-01-211	1
EP2	0880000900	DSP board	1
MP201	8510014610	2429 MIX case	1
MP301	8510000180	117 shield plate	1
MP302	8930054530	2355 earth spring	1
MP701	8510011970	2177 OSC case	1
MP702	8510014600	2429 OSC cover	1
MP1501	8510013140	2241 DC-A case	1
MP2051	8930057990	2429 control plate Y630	1

[PLL UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
J5051	6510023120	Connector CD6109SA1J0	1
J5081	6510023120	Connector CD6109SA1J0	1
J5091	6510023040	Connector 01K1621	1
MP5801	8510006941	DTMF shield case-1	1
MP5901	8510006941	DTMF shield case-1	1

ACCESSORIES



[ACCESSORIES]

• IC-M802

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
J4002	6450001280	Connector TCP0587-71-5401	1
P4001	5610000290	Connector XMP-06V	1
P4002	5610000300	Terminal BXA-001T-P0.6	4
F4001	5210000090	Fuse FGB 30A	1
F4002	5210000060	Fuse FGB 5A	2
W4001	8900011041	Cable OPC-1107A	1
EP4002	0880000960	RC-25	1
EP4003	0880001000	SP-24	1
MP4001	8010018980	2429 bracket	1
MP4002	8810001490	Screw A0 5 × 20 SUS	4
MP4003	8850000500	Spring washer SUS	4
MP4004	8850000180	Flat washer SUS	4
MP4005	8810009300	Setscrew (J)	4
MP4006	8950005720	Tie mount (CL8)	1
MP4007	8950005710	Release tie (RELK2R)	1

• RC-25

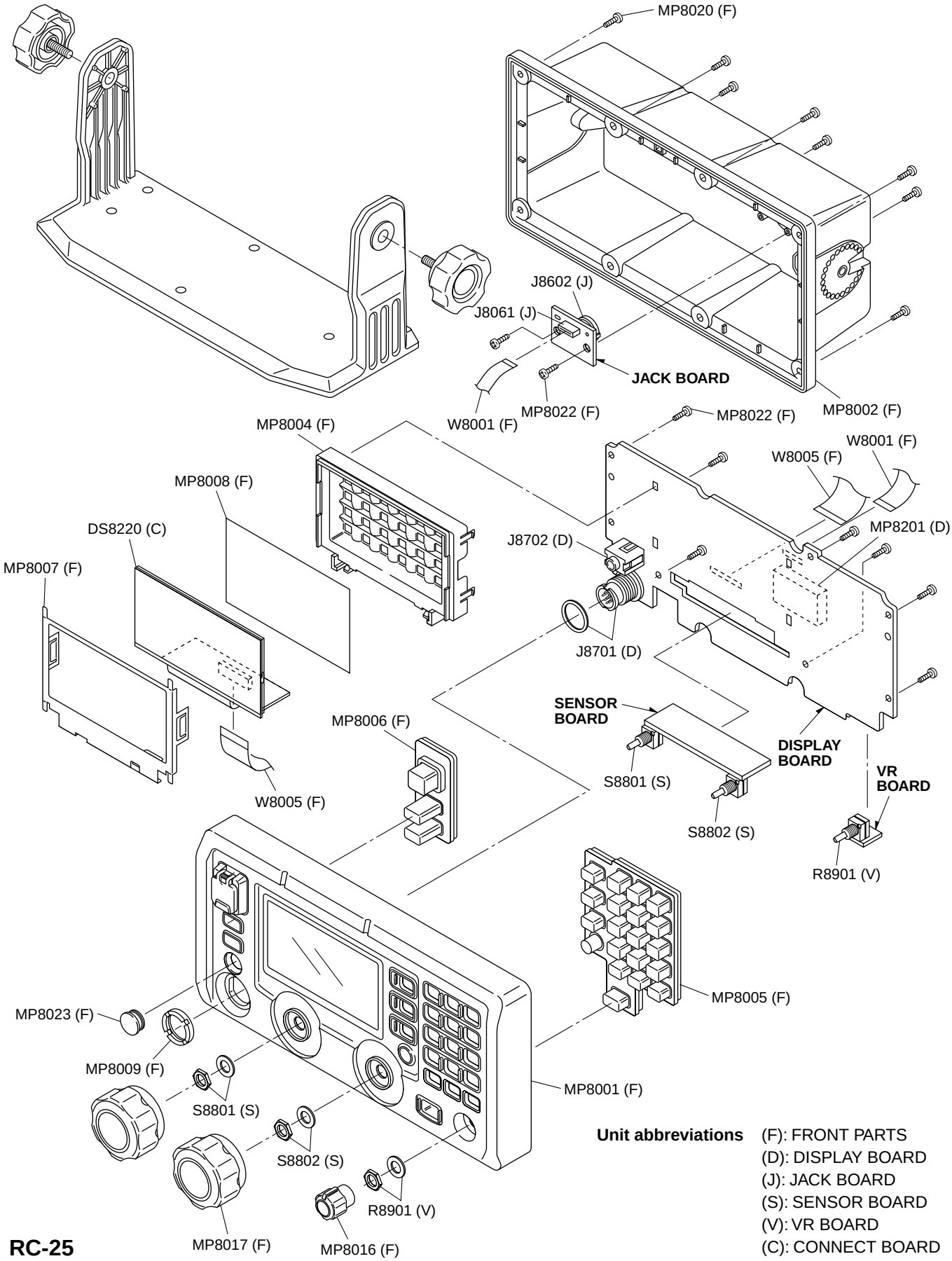
REF. NO.	ORDER NO.	DESCRIPTION	QTY.
MC8101	0800006490	HM-135	1
W8101	8900011070	Cable OPC-1106	1
MP8101	8010018860	2455 bracket	1
MP8102	8810001490	Screw A0 5 × 20 SUS	4
MP8103	8850000500	Spring washer SUS	4
MP8104	8850000180	Flat washer SUS	4
MP8105	8610010561	2040 knob bolt-1	2
MP8106	8950005110	2289 mic hanger	1
MP8107	8810004700	Screw A0 3 × 16 SUS	2

• SP-24

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
MP1	8010018870	2456 bracket	1
MP2	8810001490	Screw A0 5 × 20 SUS	2
MP3	8850000500	Spring washer SUS	2
MP4	8850000180	Flat washer SUS	2
MP5	8610010561	2040 knob bolt-1	2

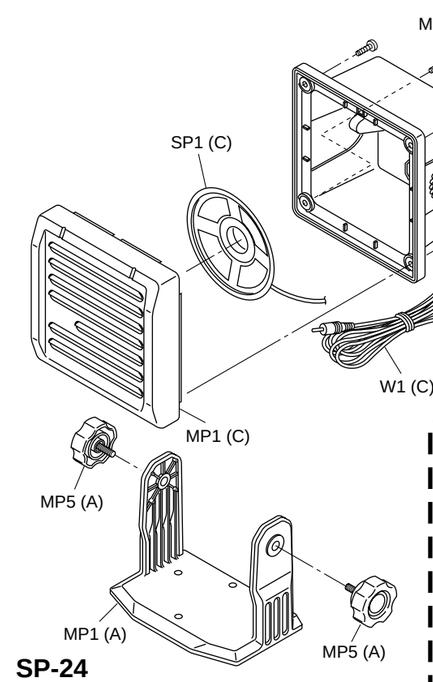
Screw abbreviations

PH: Pan head
BiH: Binding head
BT, B0: Selt-tapping
SUS: Stainless
NI: Nickel
NI-ZU: Nickel-Zinc
ZK: Black



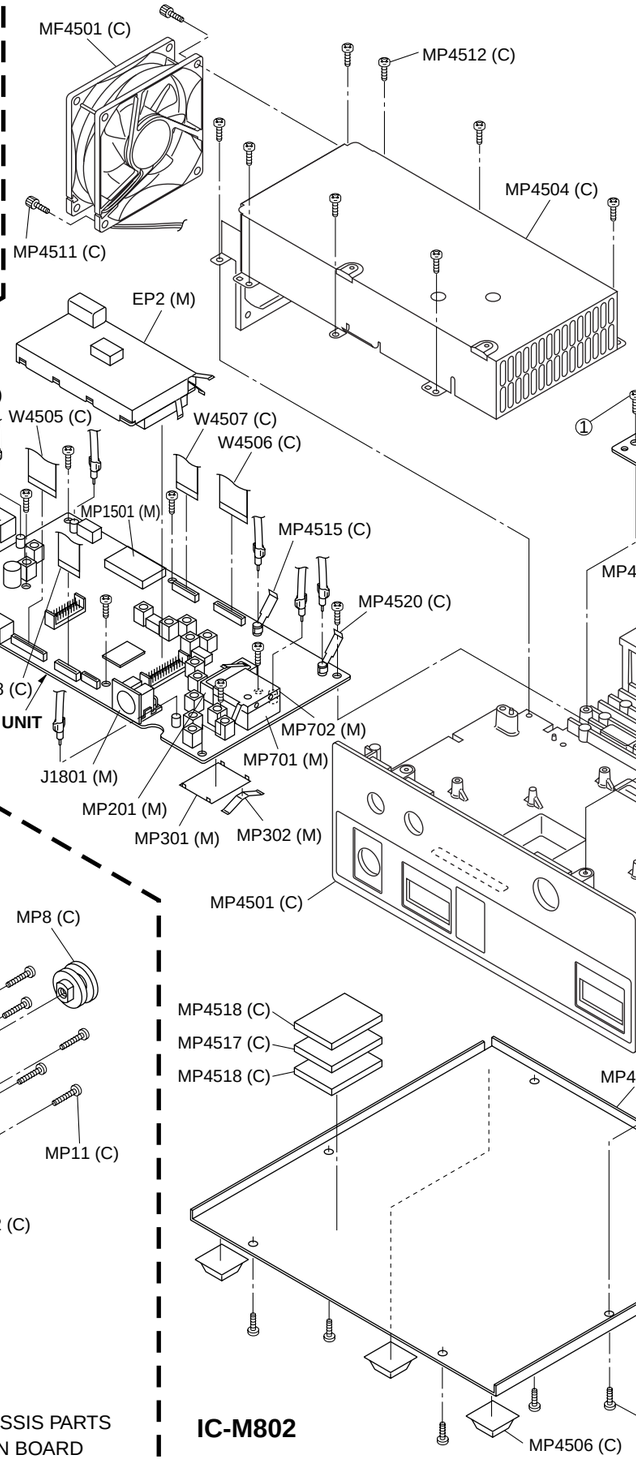
RC-25

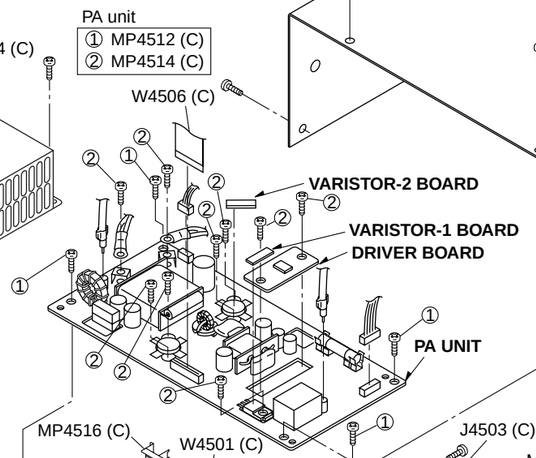
Unit abbreviations
(F): FRONT PARTS
(D): DISPLAY BOARD
(J): JACK BOARD
(S): SENSOR BOARD
(V): VR BOARD
(C): CONNECT BOARD

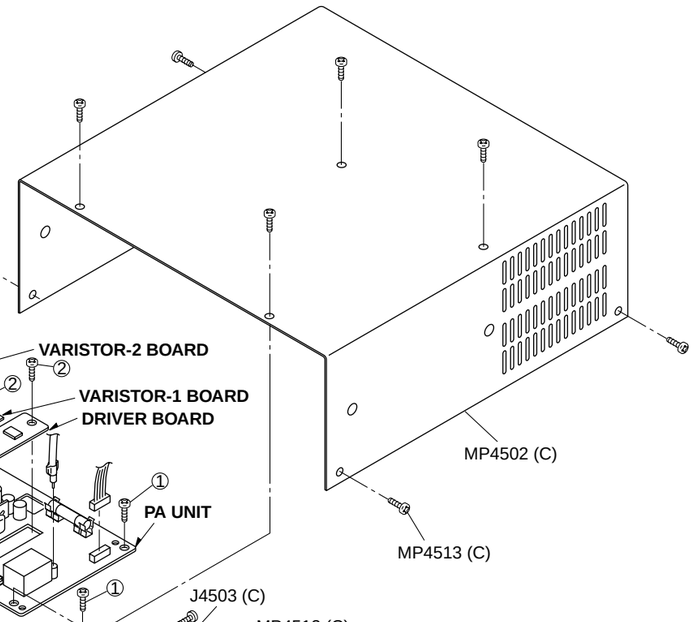


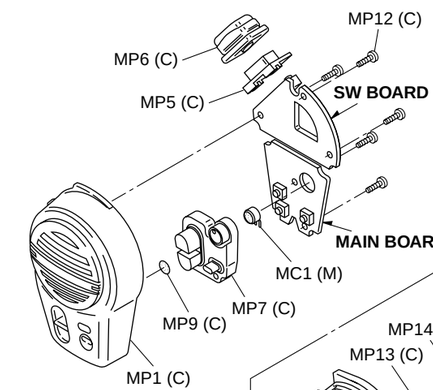
SP-24

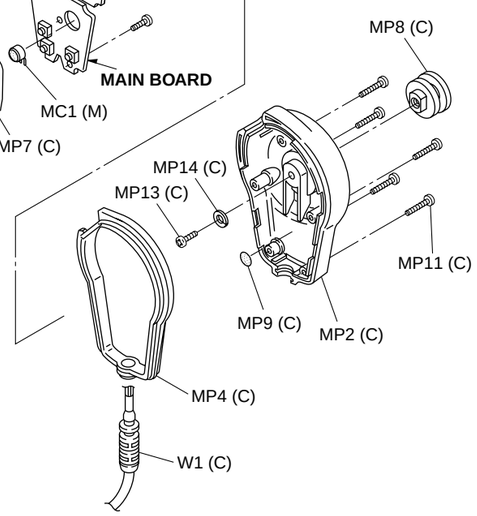
Unit abbreviations (C): CHASSIS PARTS
(A): ACCESSORY PARTS







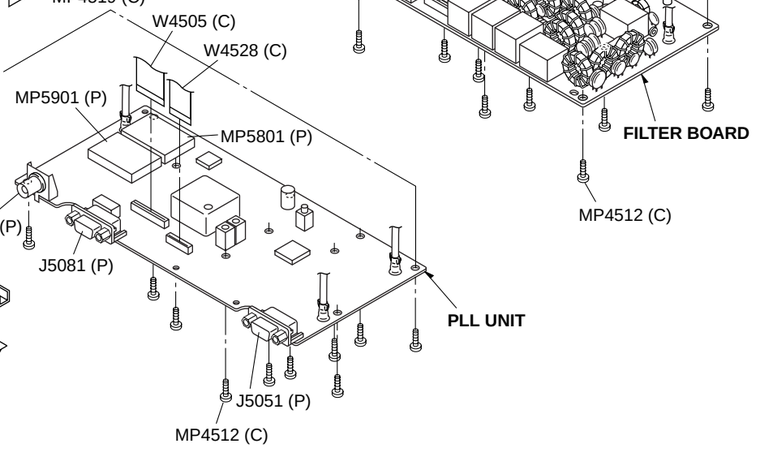




HM-135

Unit abbreviations (C): CHASSIS PARTS
(M): MAIN BOARD

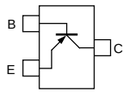
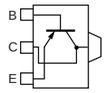
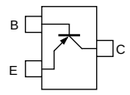
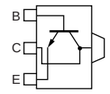
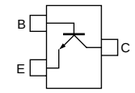
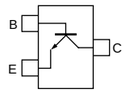
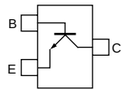
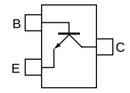
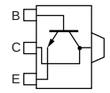
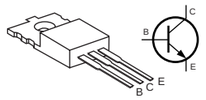
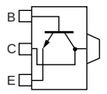
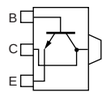
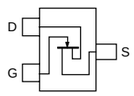
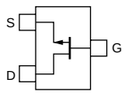
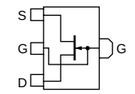
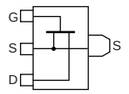
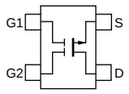
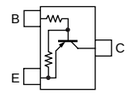
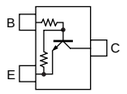
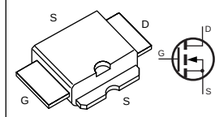
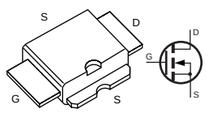
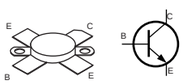
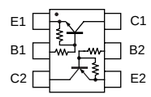
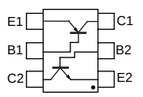
IC-M802



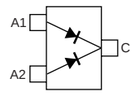
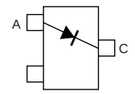
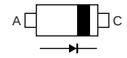
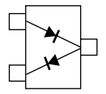
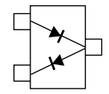
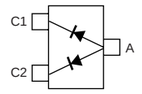
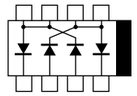
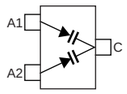
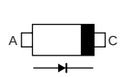
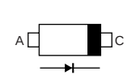
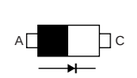
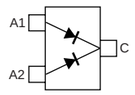
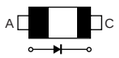
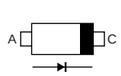
Unit abbreviations (C): CHASSIS PARTS
(M): MAIN UNIT
(P): PLL UNIT

SECTION 7 SEMI-CONDUCTOR INFORMATION

• TRANSISTOR AND FET'S

2SA1037AK S (Symbol: FS) 	**2SA1213 Y** (Symbol: NY) 	**2SA1586 GR** (Symbol: SG) 	**2SC2873 Y** (Symbol: M) 	**2SC4116 BL** (Symbol: LL) 
2SC4116 GR (Symbol: LG) 	**2SC4213 B** (Symbol: AB) 	**2SC4215 O** (Symbol: QO) 	**2SC4673 D TD** (Symbol: CO) 	**2SD1585 K** (Symbol: None) 
2SD1619 T TD (Symbol: DB) 	**2SD1664 T100Q** (Symbol: DAQ) 	**2SK210 GR** (Symbol: YG) 	**2SK508 K52 T2B** (Symbol: K52) 	**2SK2171 4 TD** (Symbol: KM) 
2SK2973 (Symbol: K1) 	**3SK131 T2 MAS** (Symbol: V11) 	**DTA114EUA T106** (Symbol: 14) 	**DTC114EUA T106** (Symbol: 24) 	**PD55003** (Symbol: PD55003) 
PD55015S (Symbol: PD55015) 	**SD1487** (Symbol: SD1487) 	**XP4312** (Symbol: 7T) 	**XP4601** (Symbol: 5C) 	

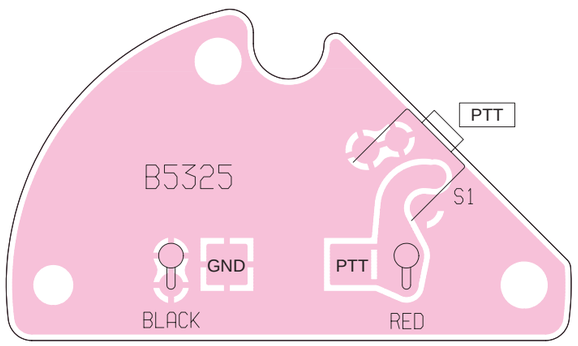
• DIODES

1SS301 (Symbol: B3) 	**1SS322** (Symbol: A9) 	**1SS355** (Symbol: A) 	**1SS375-TL** (Symbol: FH) 	**DA221 TL** (Symbol: K) 
DAP222 TL (Symbol: P) 	**DF40SC4** 	**HSB88WSTR** (Symbol: Silver line) 	**KV1470 TL** (Symbol: F7) 	**MA2S111** (Symbol: A) 
MA2S728 (Symbol: B) 	**MA30-(TX)** (Symbol: 3B) 	**MA77** (Symbol: 4B) 	**MA80WK** (Symbol: M1Y) 	**MA338** (Symbol: 6H) 
MA729 (Symbol: 2B) 	**MA742** (Symbol: M1U) 	**MA8043 H** (Symbol: 4^3) 	**MA8051 M** (Symbol: 5-1) 	**MA8091 M** (Symbol: 9-1)
RB706F-40 T106 (Symbol: 3J) 	**RD10M B3** (Symbol: 103) 	**TLYU1002** 	**UM9957F/TR** 	

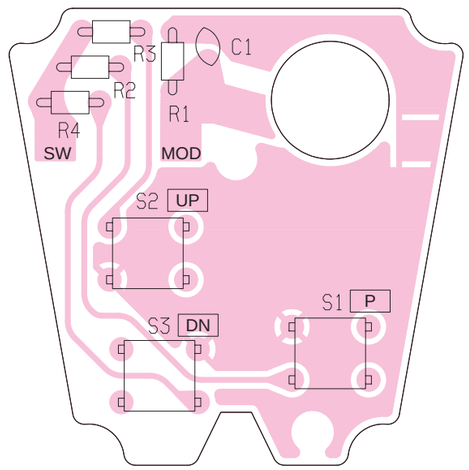
SECTION 8 BOARD LAYOUTS

8-1 HM-135

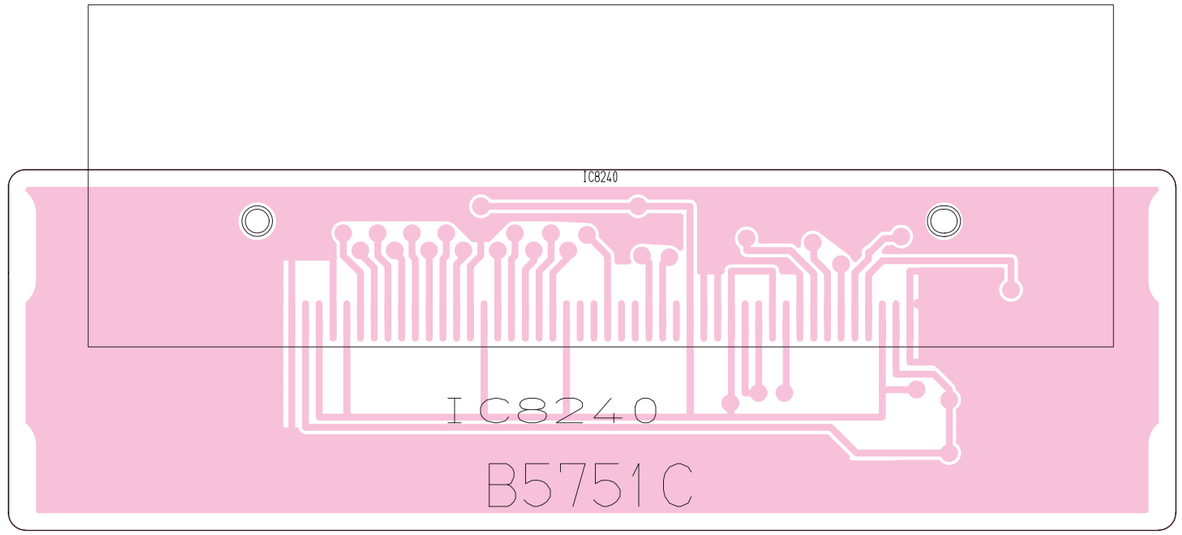
8-1-1 SW BOARD
• TOP VIEW



8-1-2 MAIN BOARD
• TOP VIEW



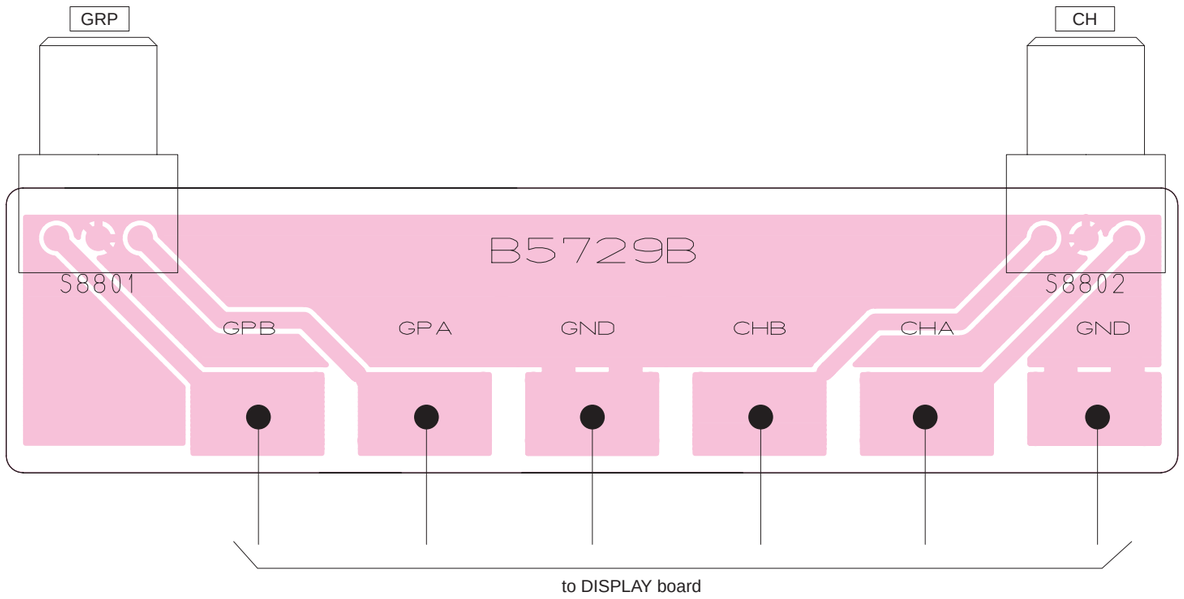
8-2-2 CONNECT BOARD
• TOP VIEW



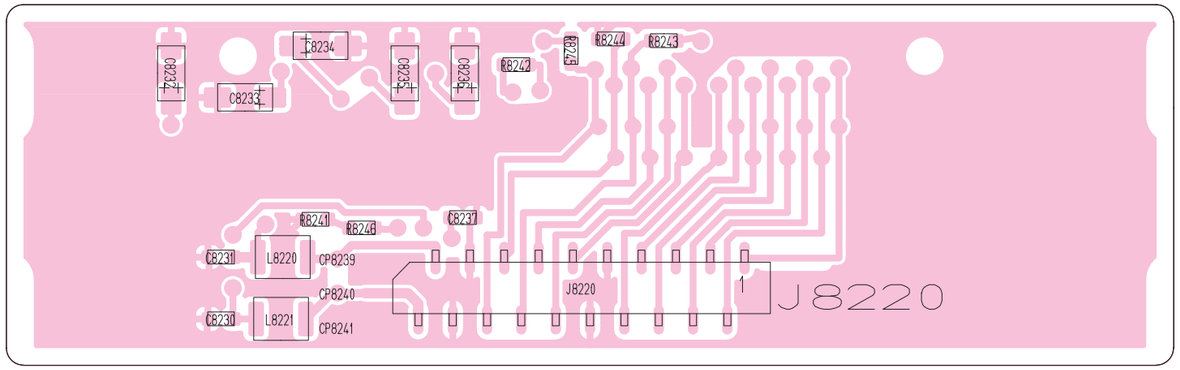
8-2 RC-25

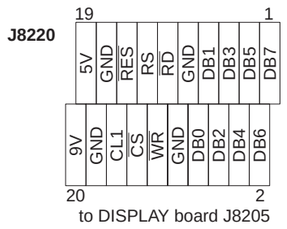
8-2-1 JACK BOARD
• TOP VIEW

8-2-3 SENSOR BOARD
• TOP VIEW



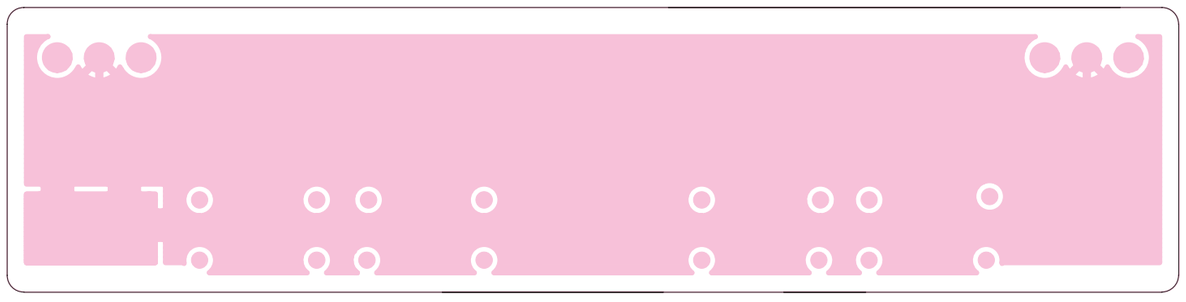
• **BOTTOM VIEW (CONNECT BOARD)**



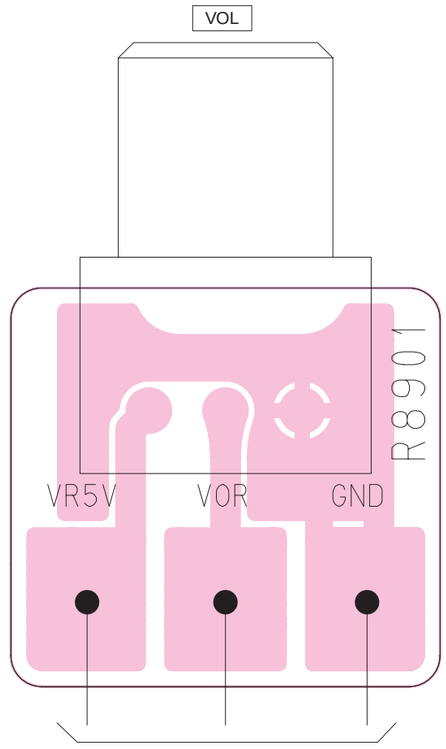


to DISPLAY board J8205

• **BOTTOM VIEW (SENSOR BOARD)**

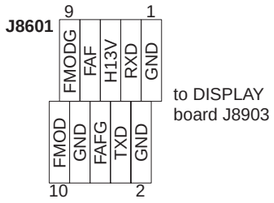


8-2-4 VR BOARD

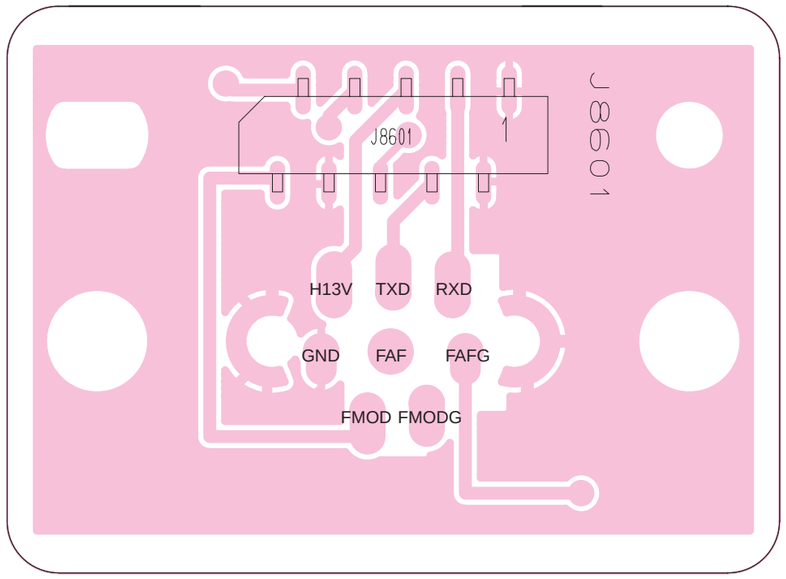


to DISPLAY board

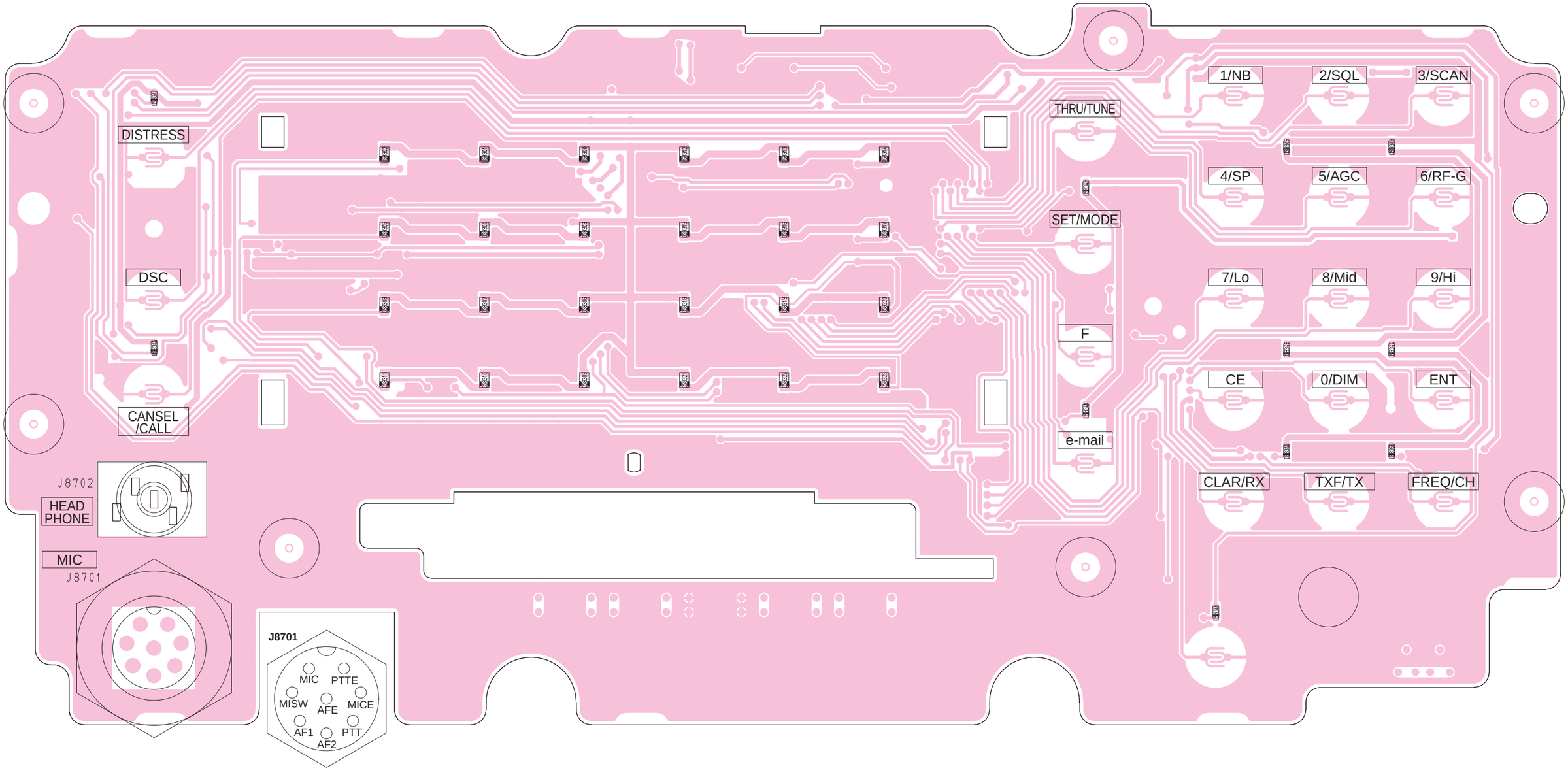
• **BOTTOM VIEW (JACK BOARD)**



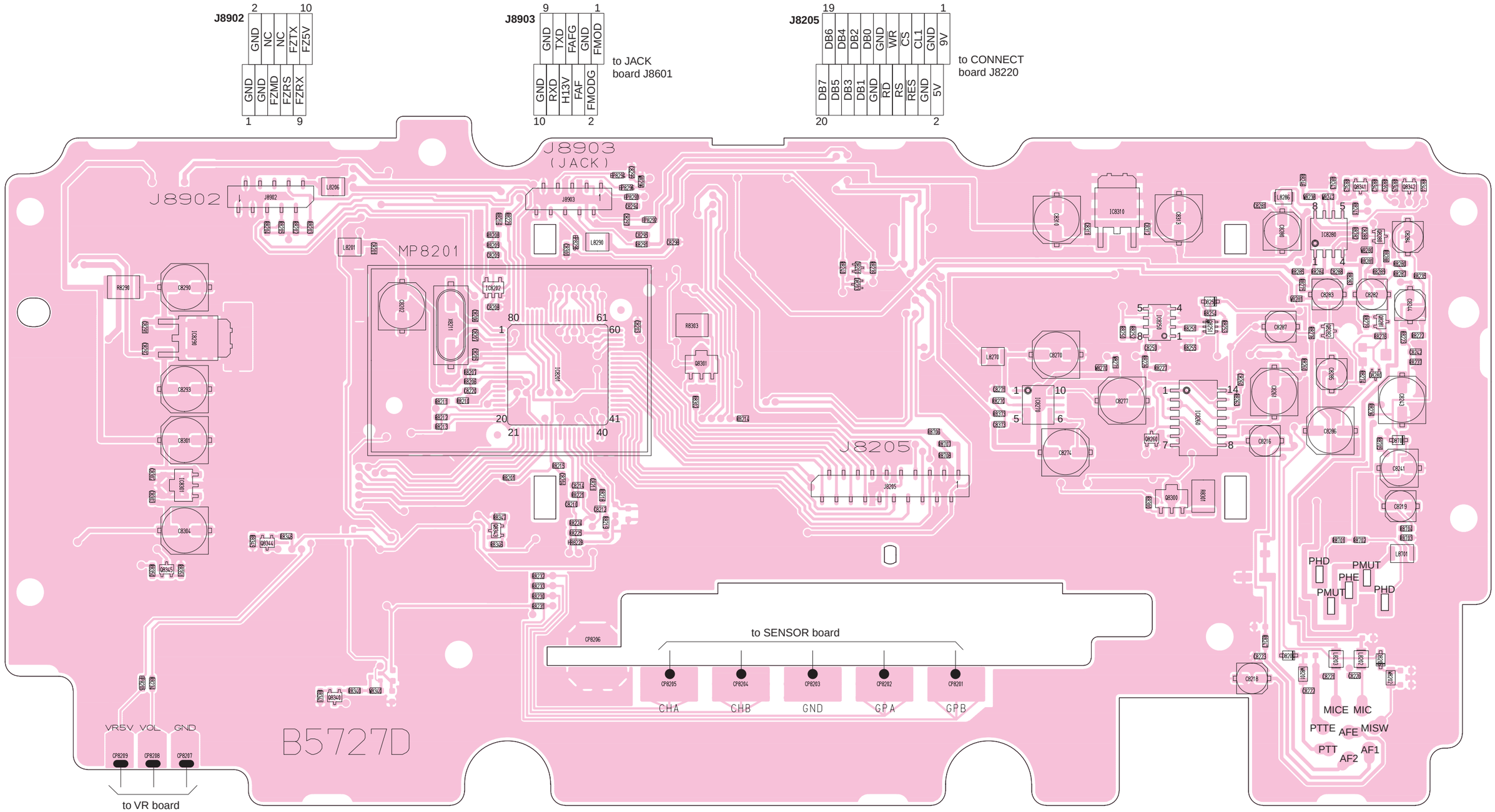
to DISPLAY board J8903



8-2-5 DISPLAY BOARD
• TOP VIEW



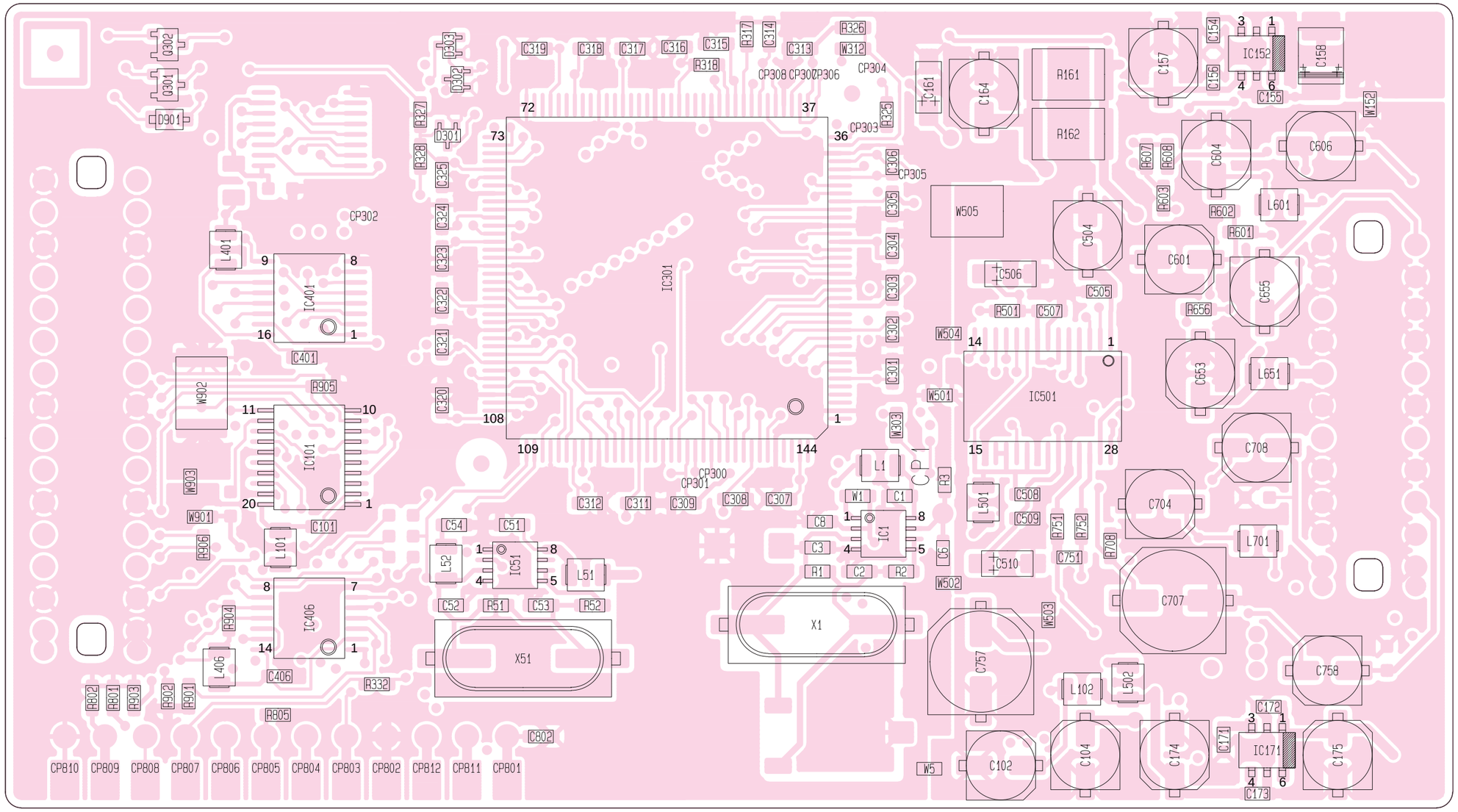
• **BOTTOM VIEW (DISPLAY BOARD)**



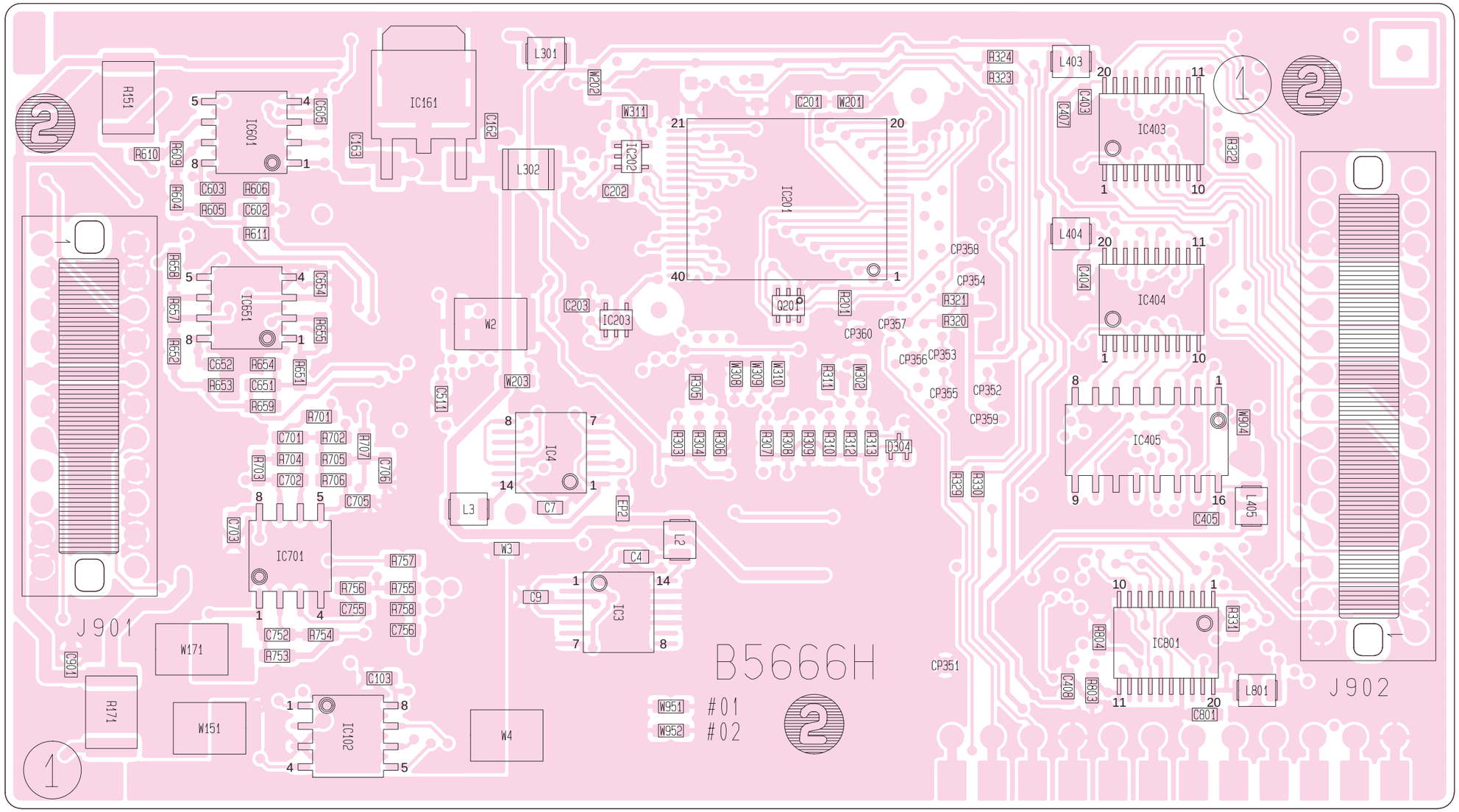
8-3 IC-M802

8-3-1 DSP BOARD

• TOP VIEW



• **BOTTOM VIEW (DSP BOARD)**



MAIN unit J1102

2	DSPI1	GND	1
	GND	GND	
	GND	DSPI2	
	GND	GND	
	8V	8V	
	GND	GND	
	AGC2	AGC1	
	GND	GND	
	DSPO1	GND	
	GND	GND	
22	GND	DSPO2	21

J901

1	DSPI1	GND	2
	GND	GND	
	GND	DSPI2	
	GND	GND	
	8V	8V	
	GND	GND	
	AGC2	AGC1	
	GND	GND	
	DSPO1	GND	
	GND	GND	
21	GND	DSPO2	22

to MAIN unit J1102

J902

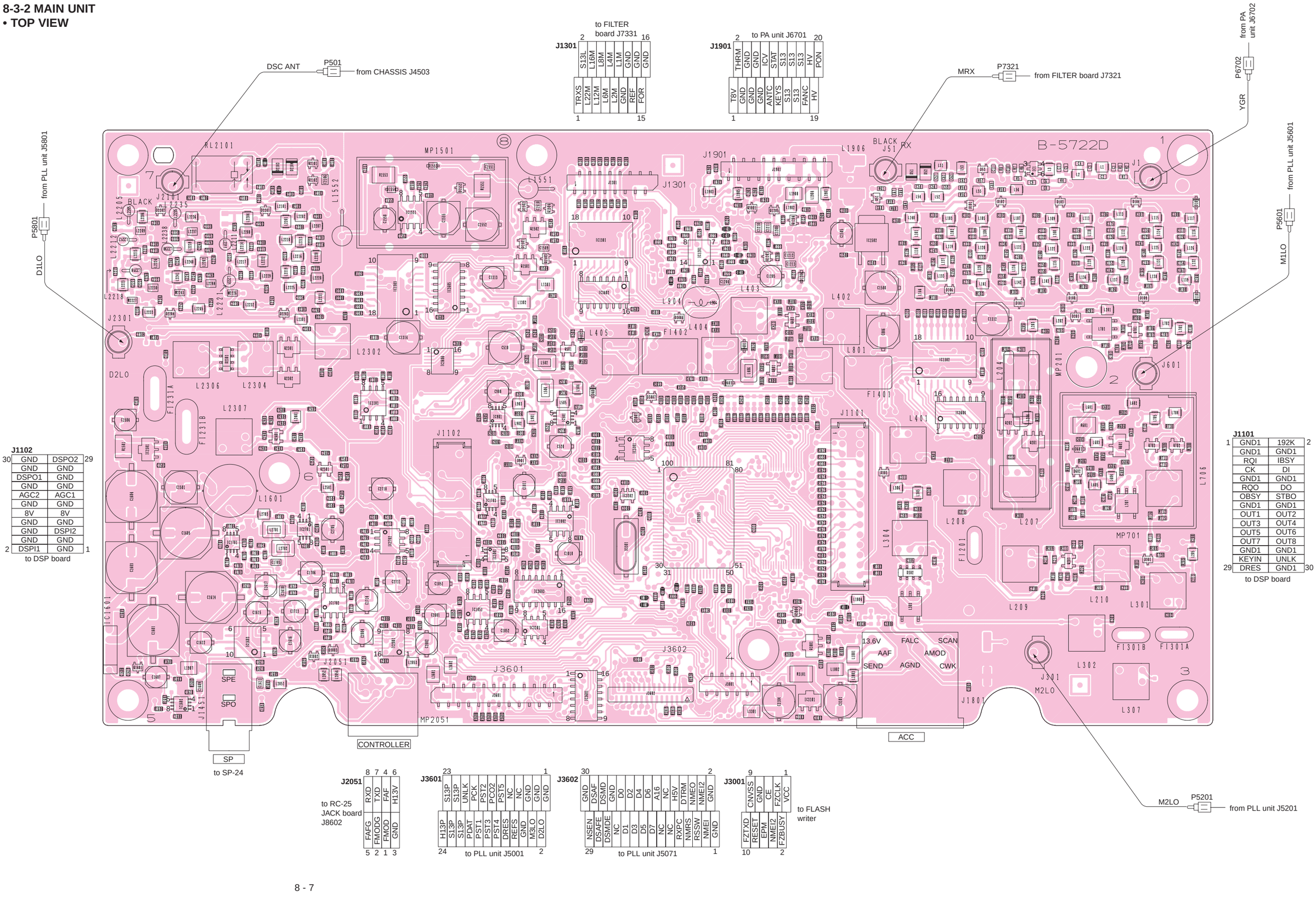
30	DRES	GND1	29
	KEYIN	UNLK	
	GND1	GND1	
	OUT7	OUT8	
	OUT5	OUT6	
	OUT3	OUT4	
	OUT1	OUT2	
	GND1	GND1	
	OBSY	STBO	
	RQO	DO	
	GND1	GND1	
	CK	DI	
	RQI	IBSY	
	GND1	GND1	
2	GND1	192K	1

to MAIN unit J1101

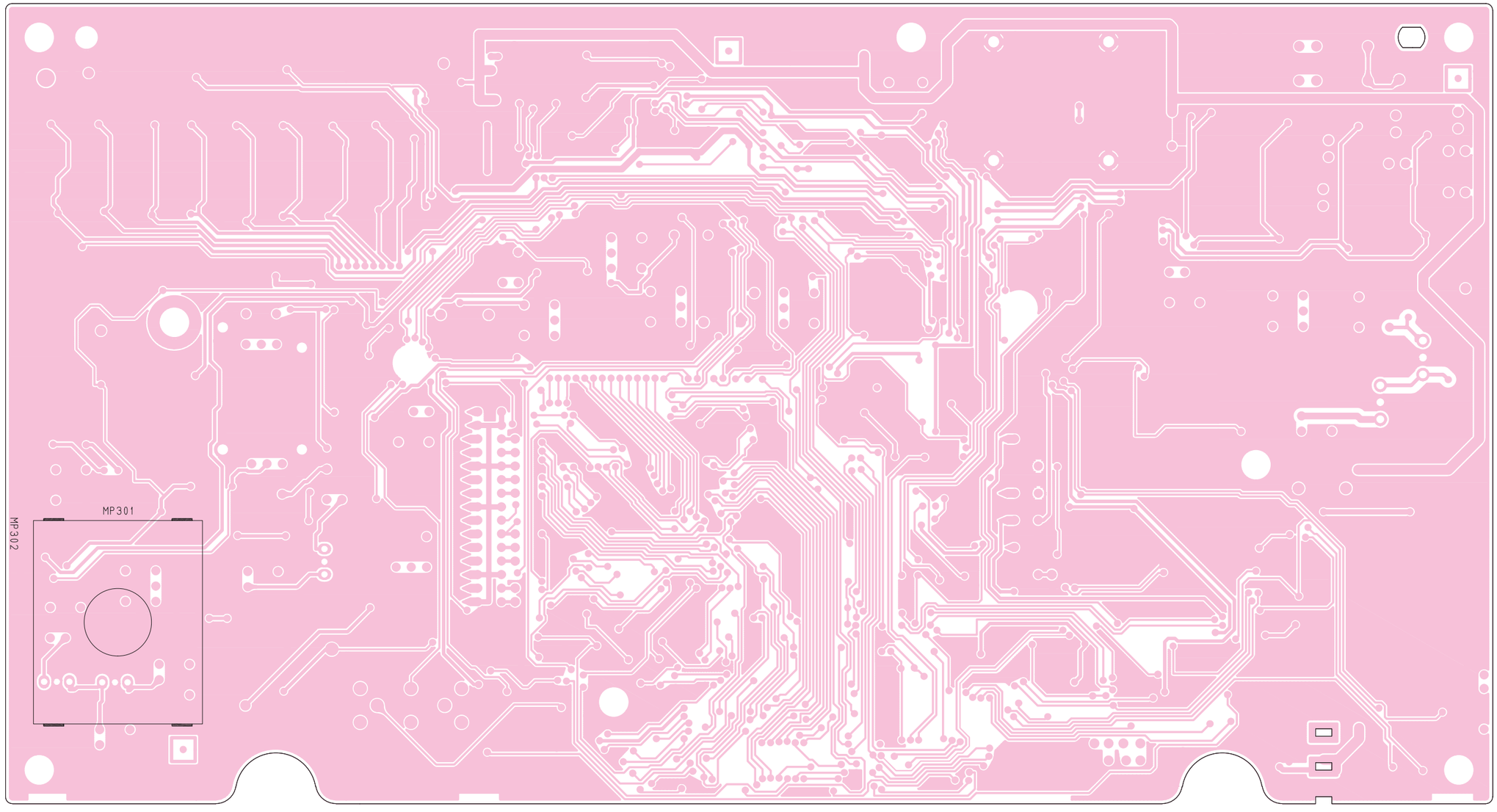
MAIN unit J1101

29	DRES	GND1	30
	KEYIN	UNLK	
	GND1	GND1	
	OUT7	OUT8	
	OUT5	OUT6	
	OUT3	OUT4	
	OUT1	OUT2	
	GND1	GND1	
	OBSY	STBO	
	RQO	DO	
	GND1	GND1	
	CK	DI	
	RQI	IBSY	
	GND1	GND1	
1	GND1	192K	2

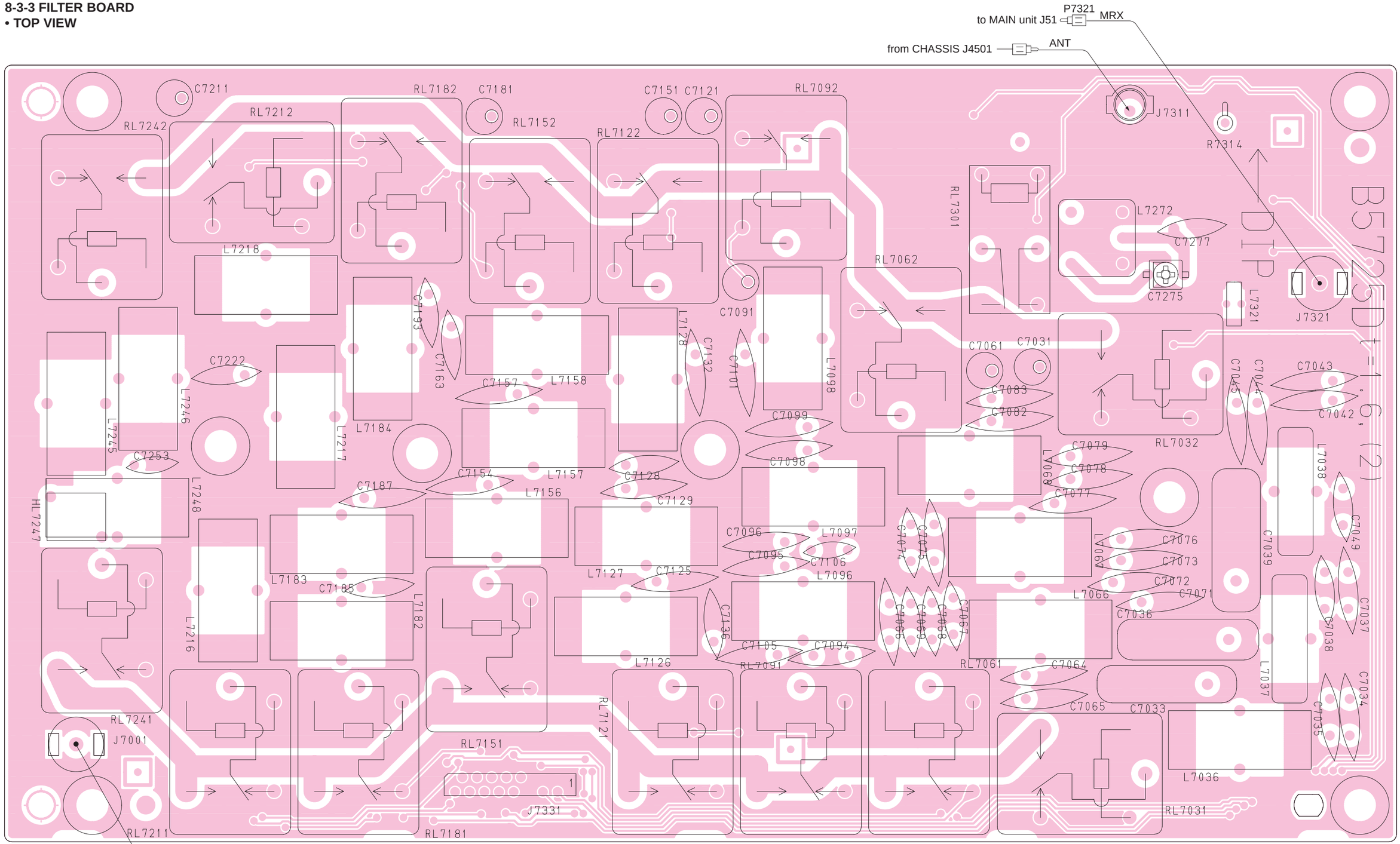
8-3-2 MAIN UNIT
• TOP VIEW



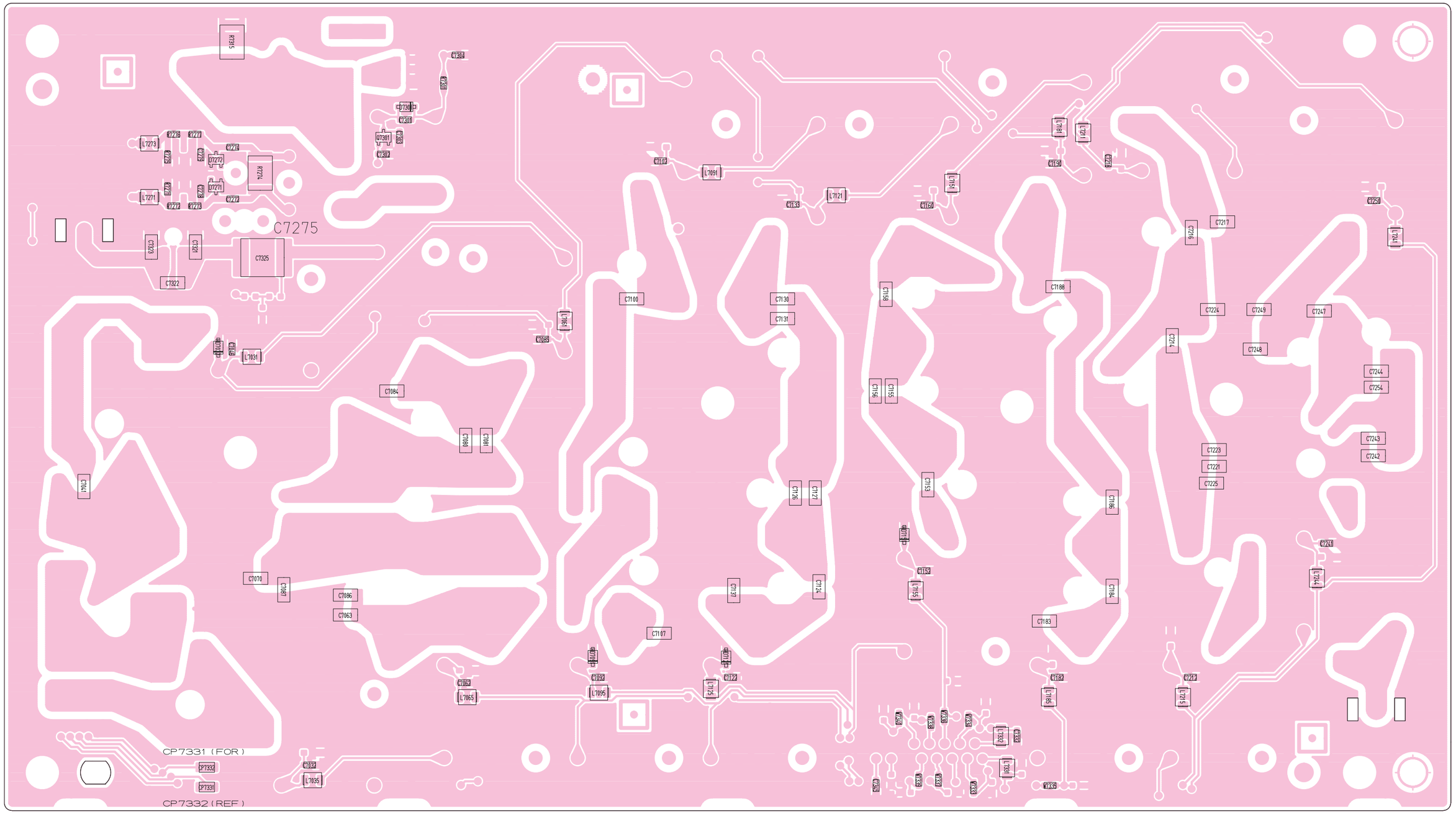
• BOTTOM VIEW (MAIN UNIT)



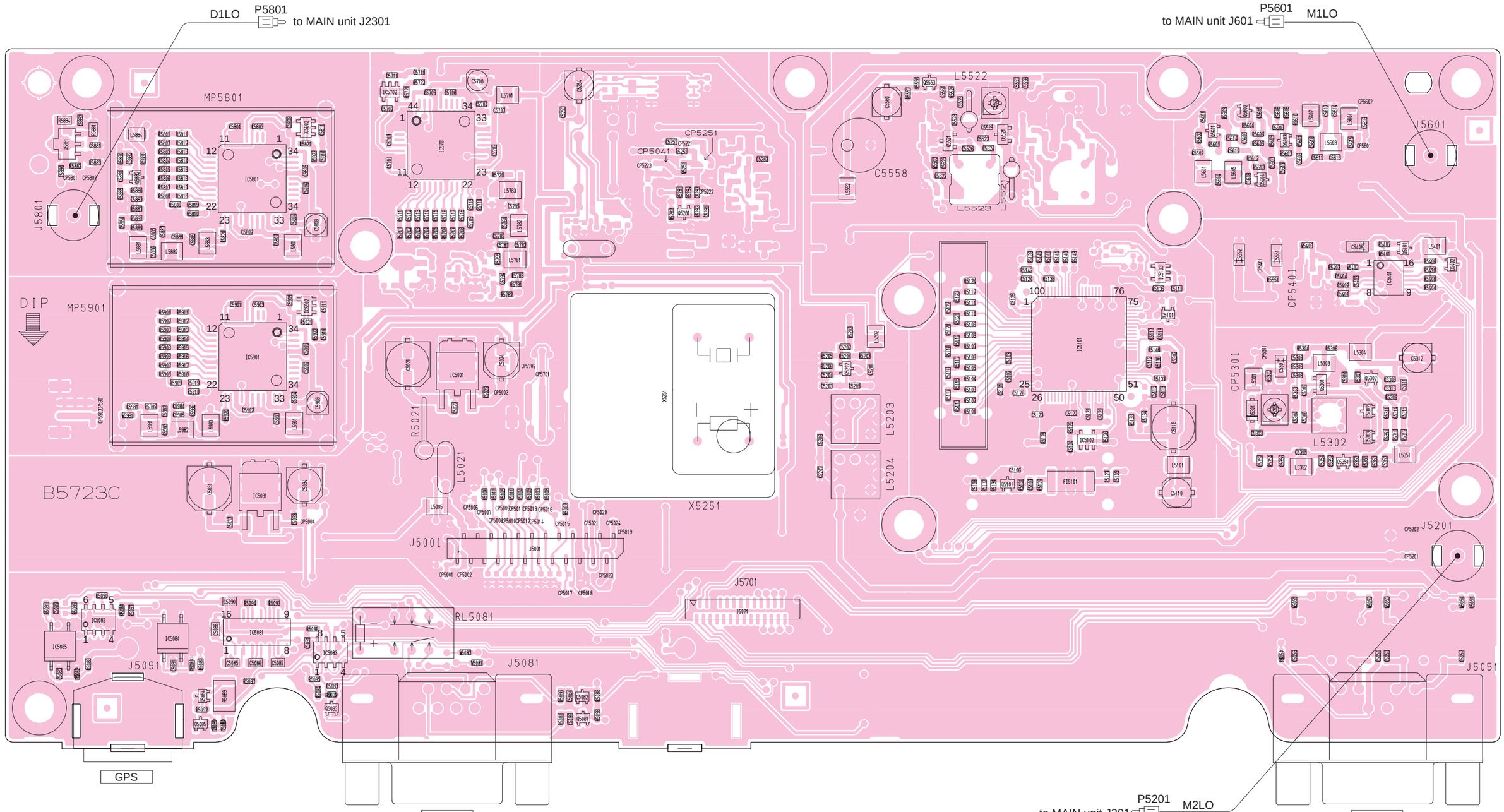
8-3-3 FILTER BOARD
• TOP VIEW



• **BOTTOM VIEW (FILTER BOARD)**



8-3-4 PLL UNIT



J5081

5	4	3	2	1
GND	DTR	PXRXD	PCTXD	
	NC			DTR
9				6

J5001

2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
S13V	S13V	UNLK	PCK	PST2	PCO2	PST5	REFV	PTMP	GND	GND	GND											
H13V	S13V	S13V	S13V	PDAT	PST1	PST3	PST4	DRES	REFS	GND	M3LO	D2LO										
1	to MAIN unit J3601																					23

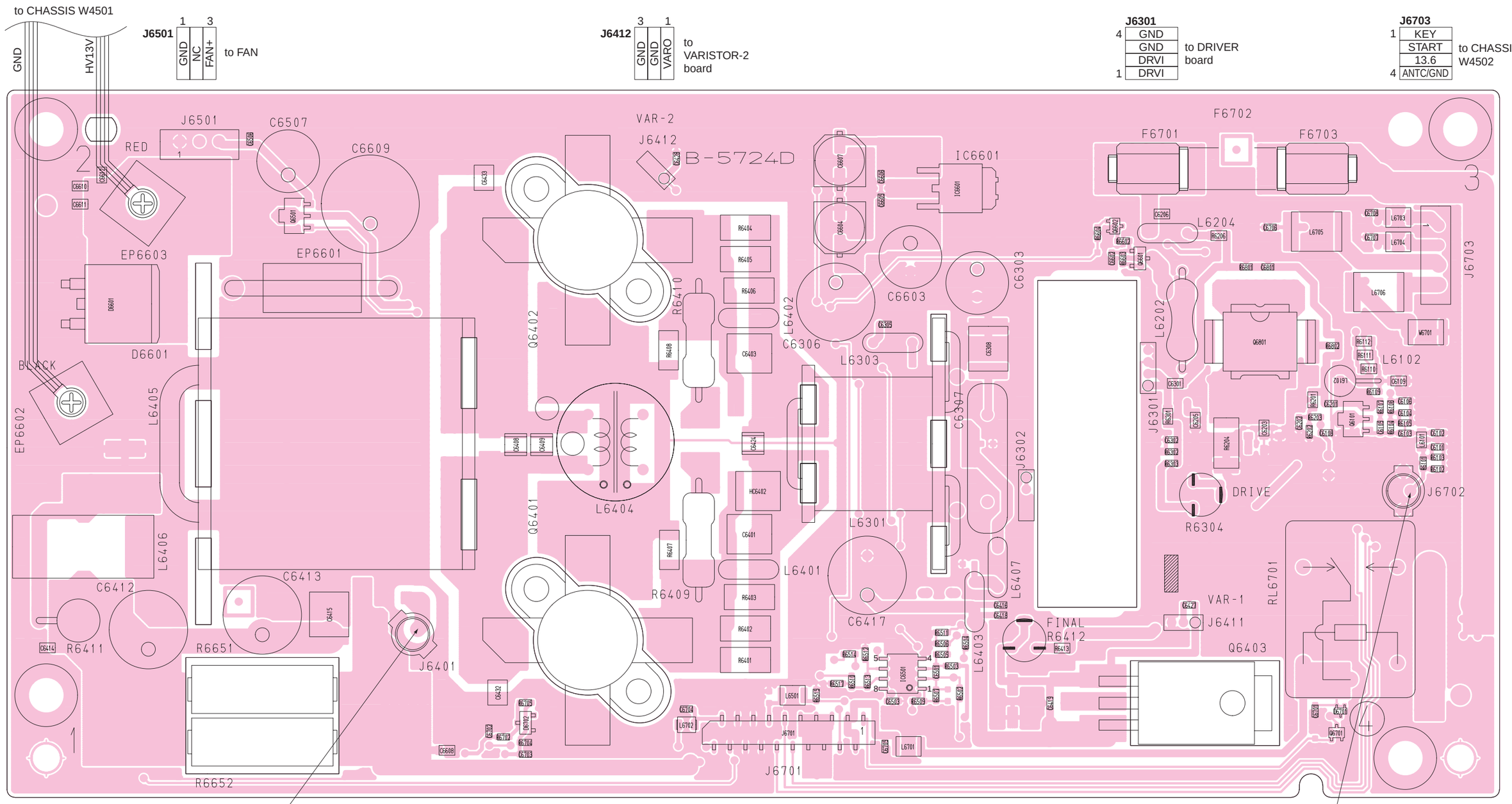
J5071

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
GND	DSAF	DSMD	GND	D0	D2	D4	D6	A16	NC	H5V	DTRM	NKME0	NMEI2	GND														
MSEN	DSAFE	DSMDE	ENAB	D1	D3	D5	D7	AACK	NC	RXPC	NMRS	RSSW	NMEI	GND														
2	to MAIN unit J3602																											30

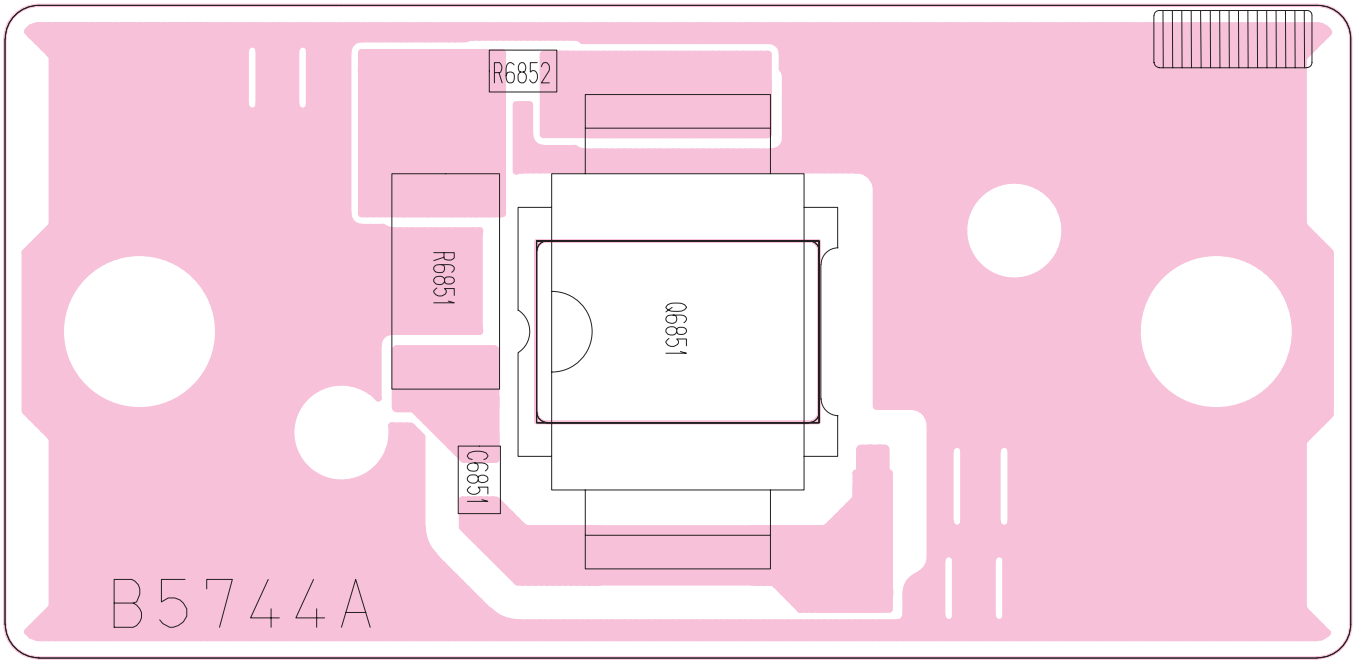
J5051

5	4	3	2	1
AF–	AF+	GND	MOD–	MOD+
GND	NSEND	NC	GND	
9				6

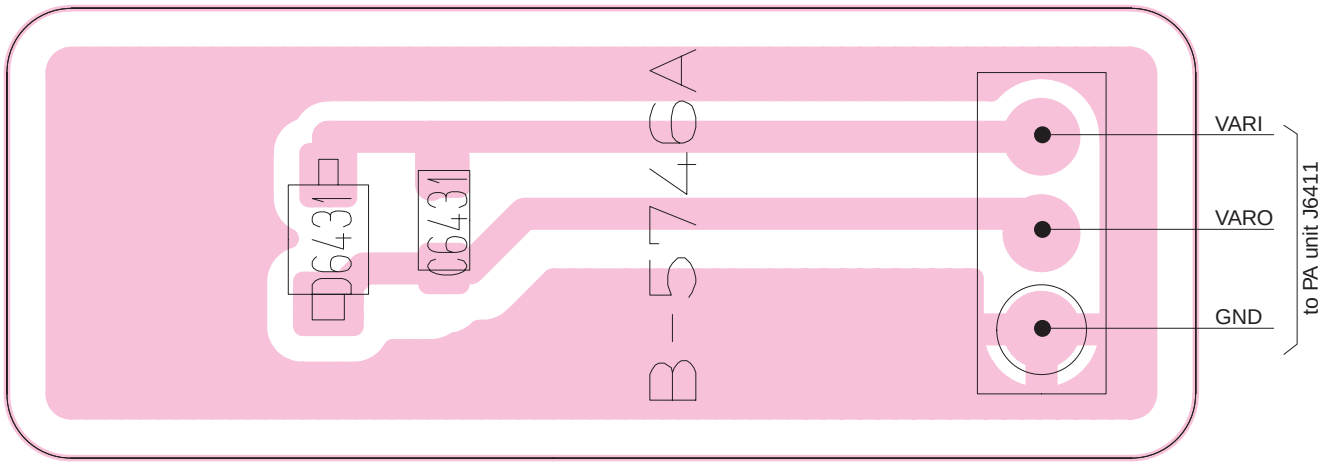
8-3-5 PA UNIT


to CHASSIS W4501
GND
HV13V
J6501
1 3
GND NC FAN+
to FAN
J6412
3 1
GND GND VARO
to VARISTOR-2 board
J6301
4 GND
GND
DRVI
1 DRVI
to DRIVER board
J6703
1 KEY
START
13.6
4 ANTC/GND
to CHASSIS W4502
VAR-2
J6412
B-5724D
J6501
C6507
C6609
RED
BLACK
EP6603
EP6601
D6601
EP6602
L6405
L6406
C6412
C6413
R6411
R6651
R6652
J6401
Q6402
R6410
Q6401
L6404
L6402
C6306
C6603
L6303
C6307
C6303
IC6601
L6301
L6401
C6417
R6409
L6403
L6407
FINAL
R6412
F6701
F6702
F6703
L6204
L6202
Q6801
L6102
J6703
J6302
DRIVE
R6304
VAR-1
J6411
Q6403
RL6701
J6702
J6701
P7001
FLIN
from FILTER board J7001
J6701
19 1
THRM GND GND ICV STAT S13V S13V S13V HV PON
T8V GND GND GND ANTC KEYS S13V S13V FANC HV
20 2
to MAIN unit J1901
J6302
1 DRVO
DRVO
GND
4 GND
to DRIVER board
from MAIN unit J1
YGR
J6411
3 1
GND VARO VARI
to VARISTOR-1 board

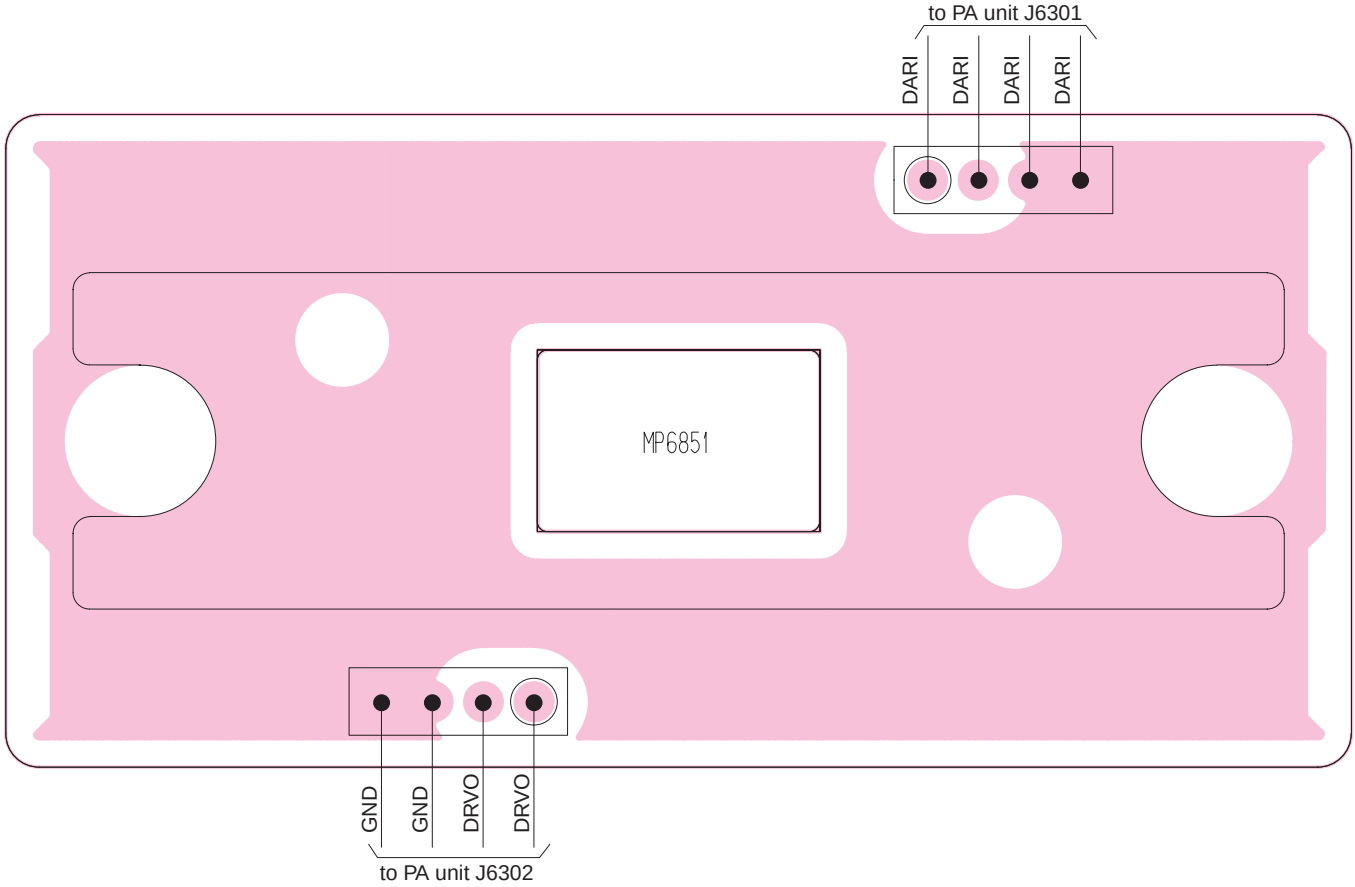
8-3-6 DRIVER BOARD
• TOP VIEW



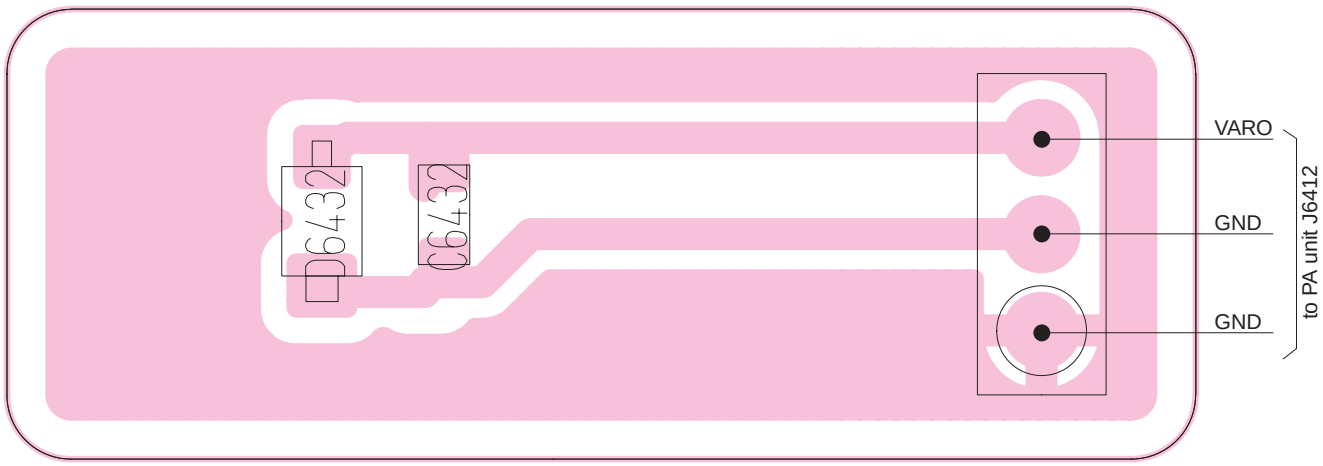
8-3-7 VARISTOR-1 BOARD



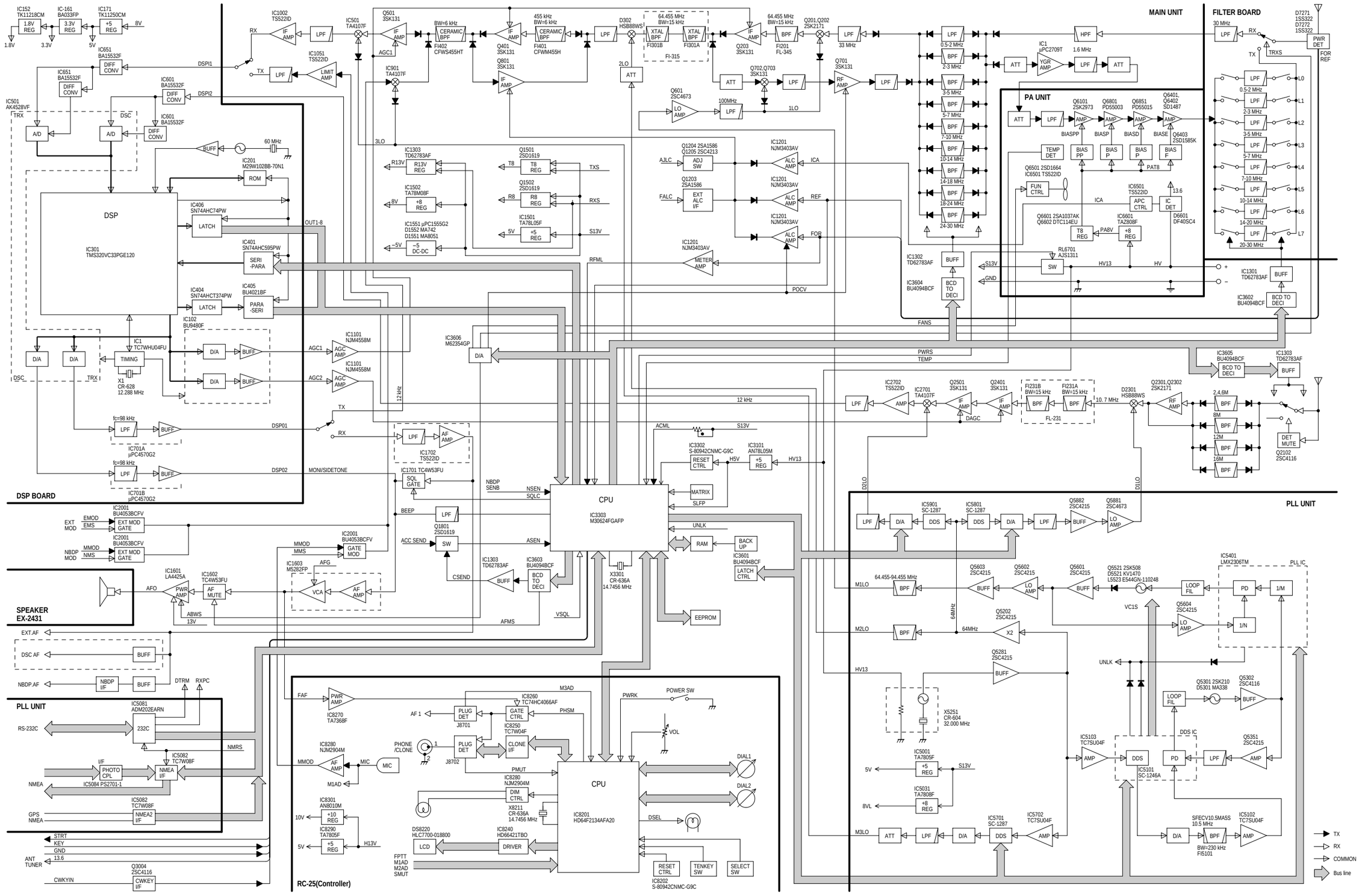
• **BOTTOM VIEW (DRIVER BOARD)**



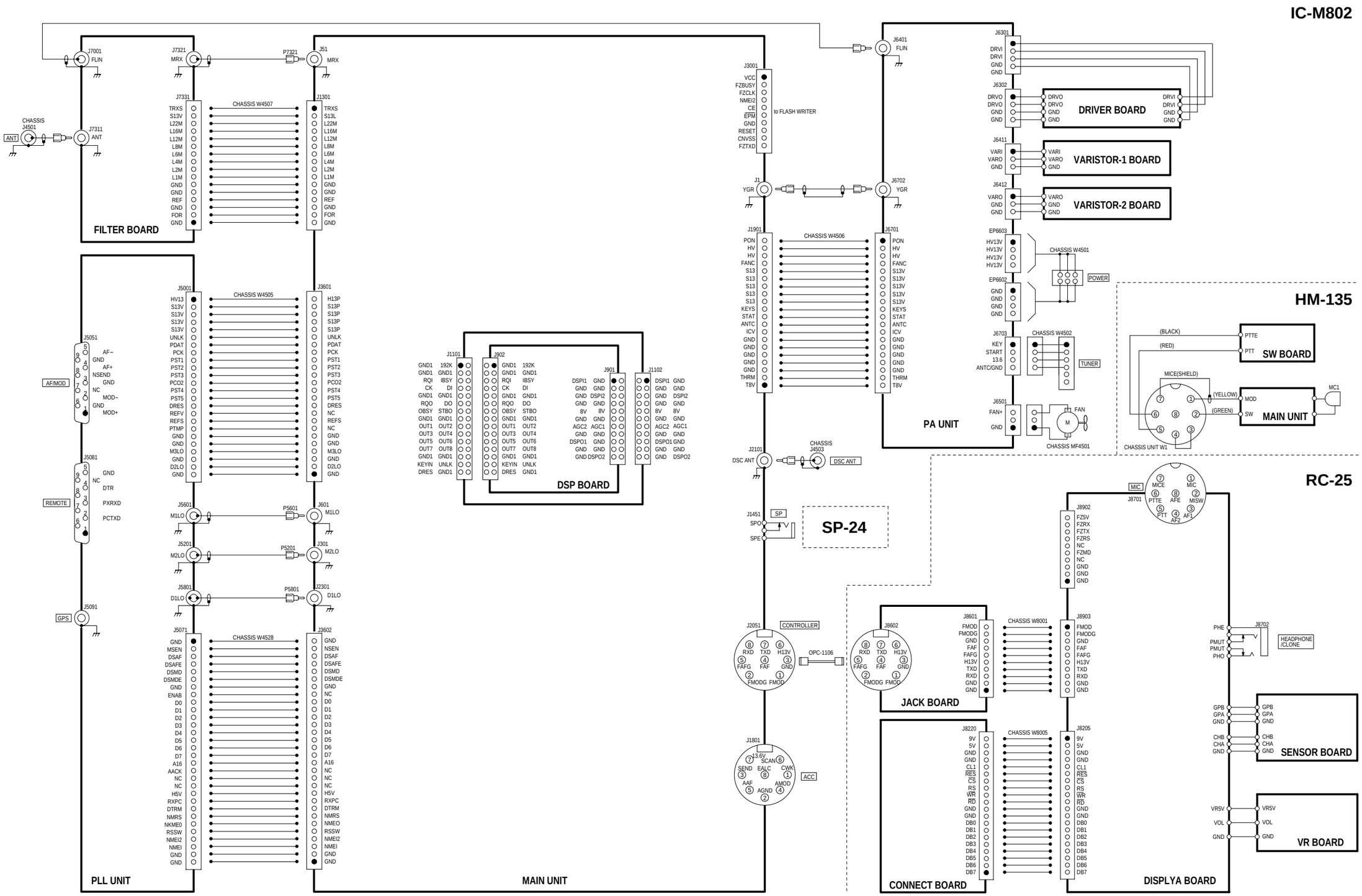
8-3-8 VARISTOR-2 BOARD



SECTION 9 BLOCK DIAGRAM

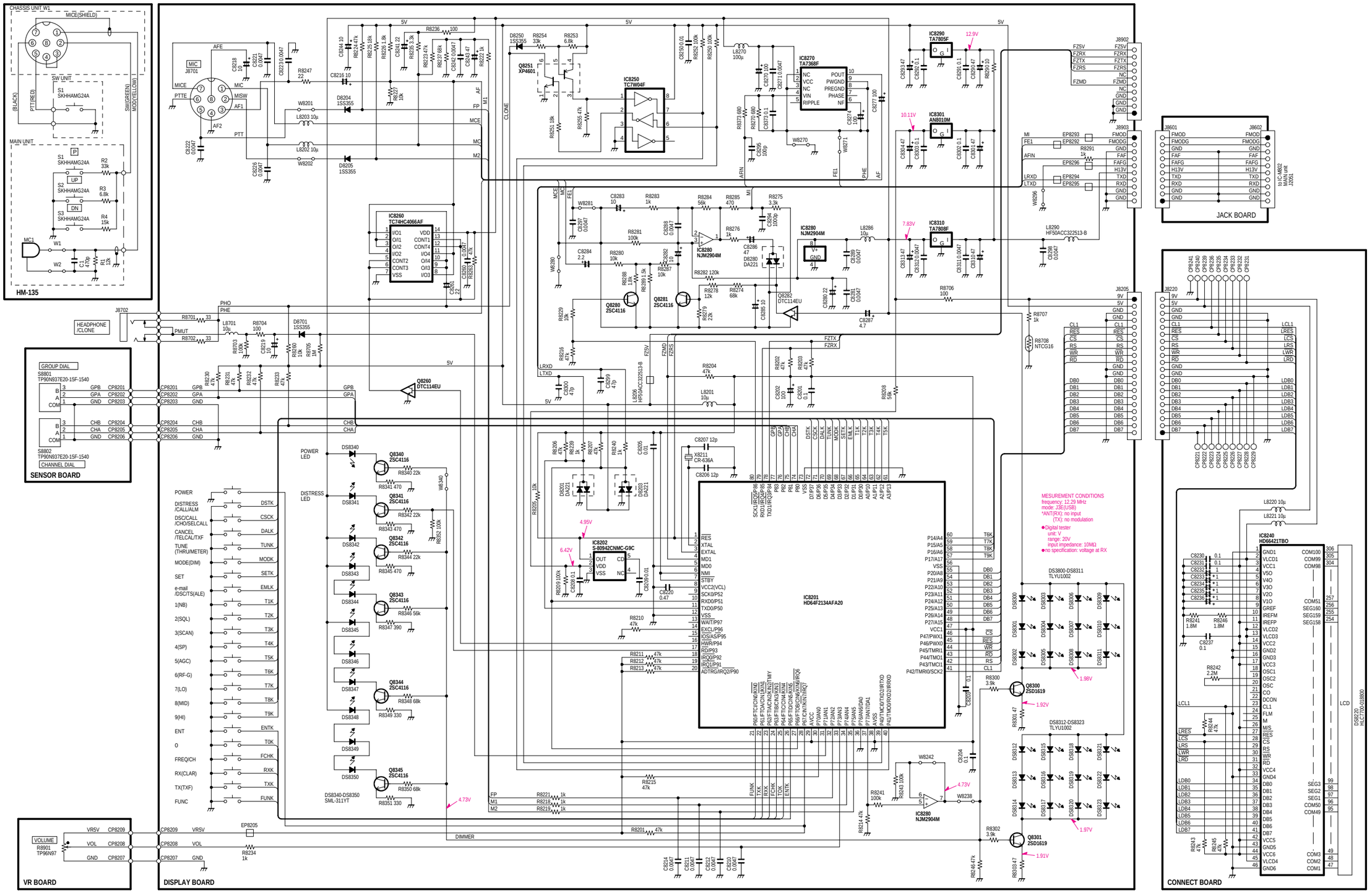


SECTION 10 WIRING DIAGRAM



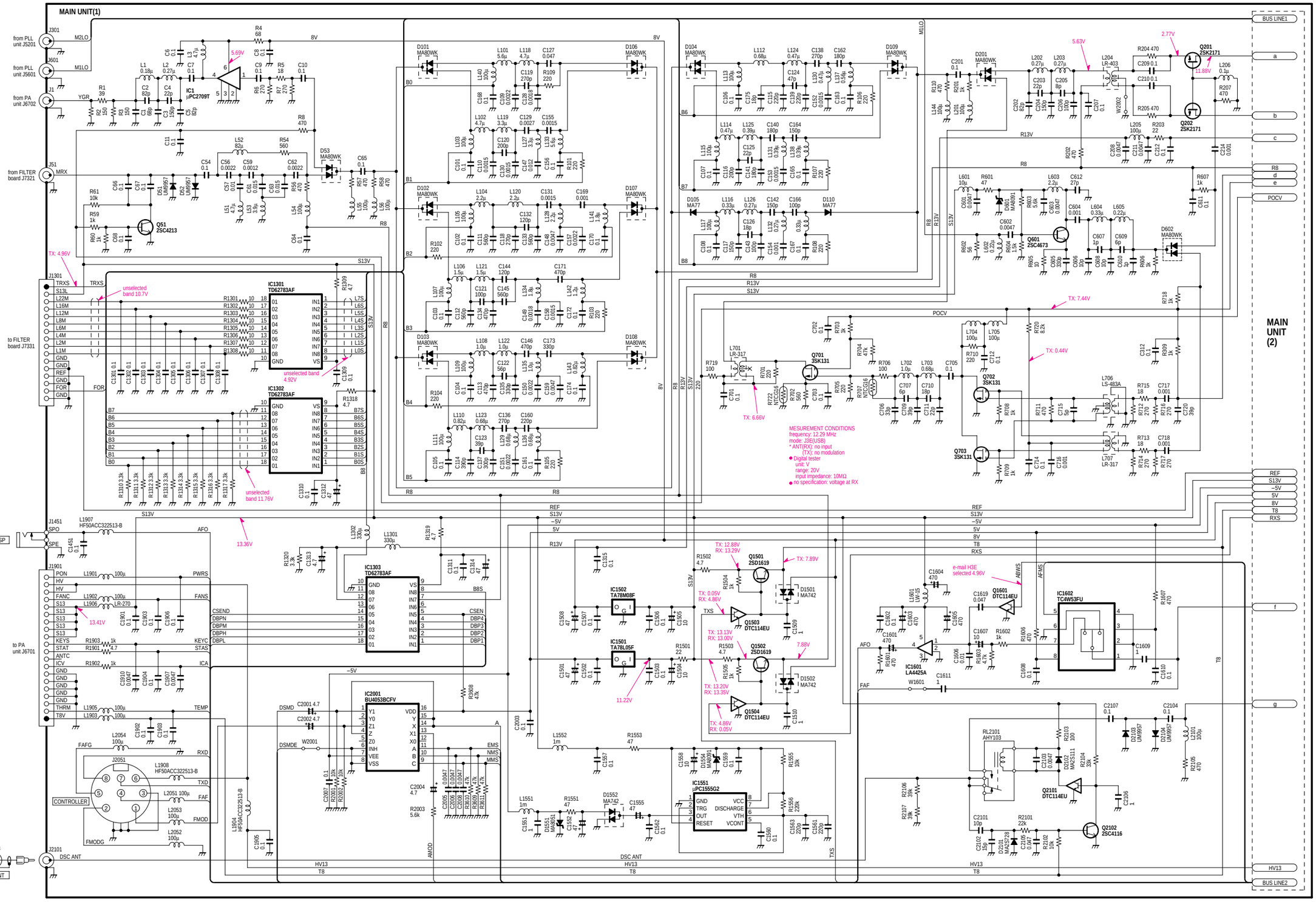
SECTION 11 VOLTAGE DIAGRAMS

11-1 RC-21 and HM-135

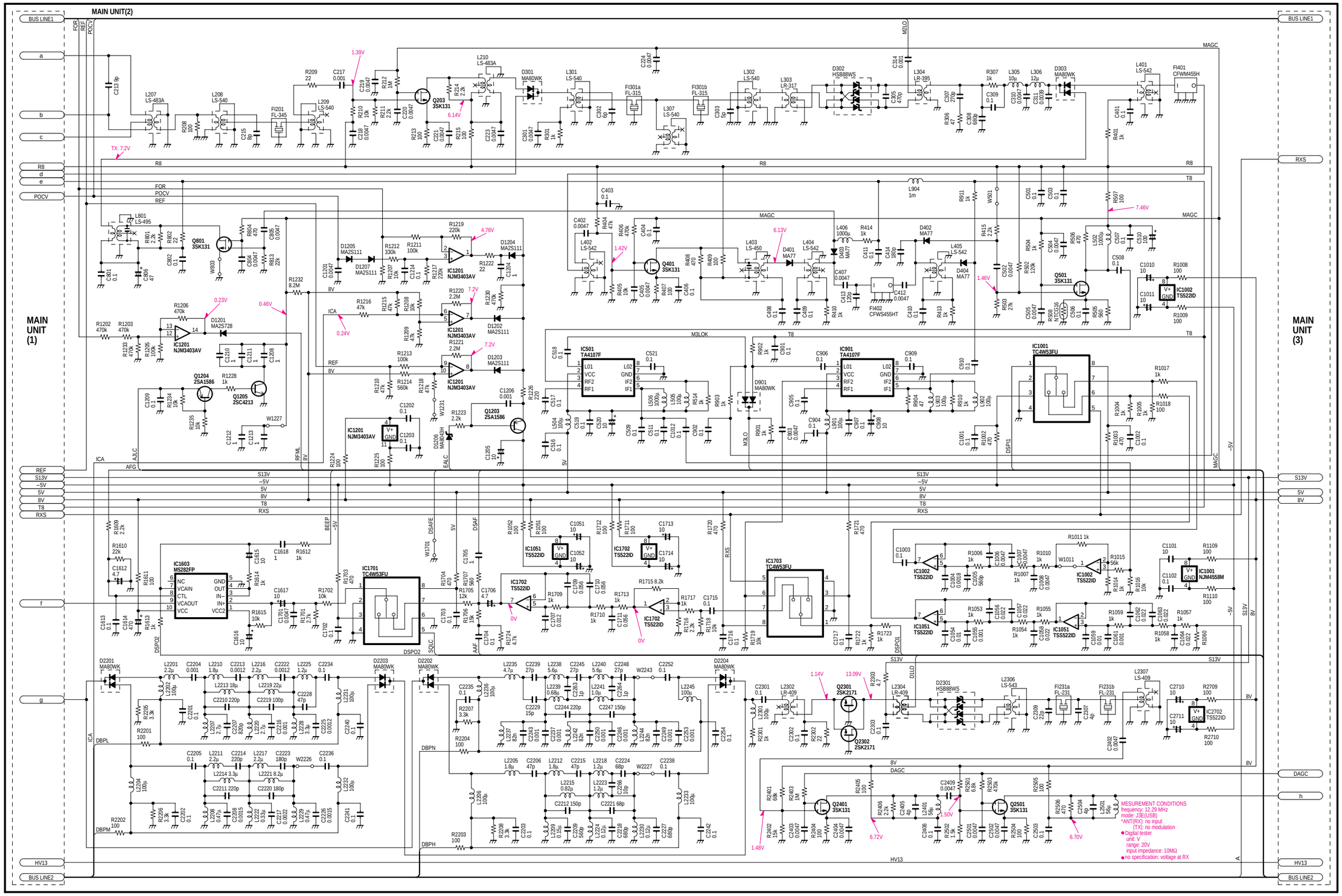


11-2 IC-M802

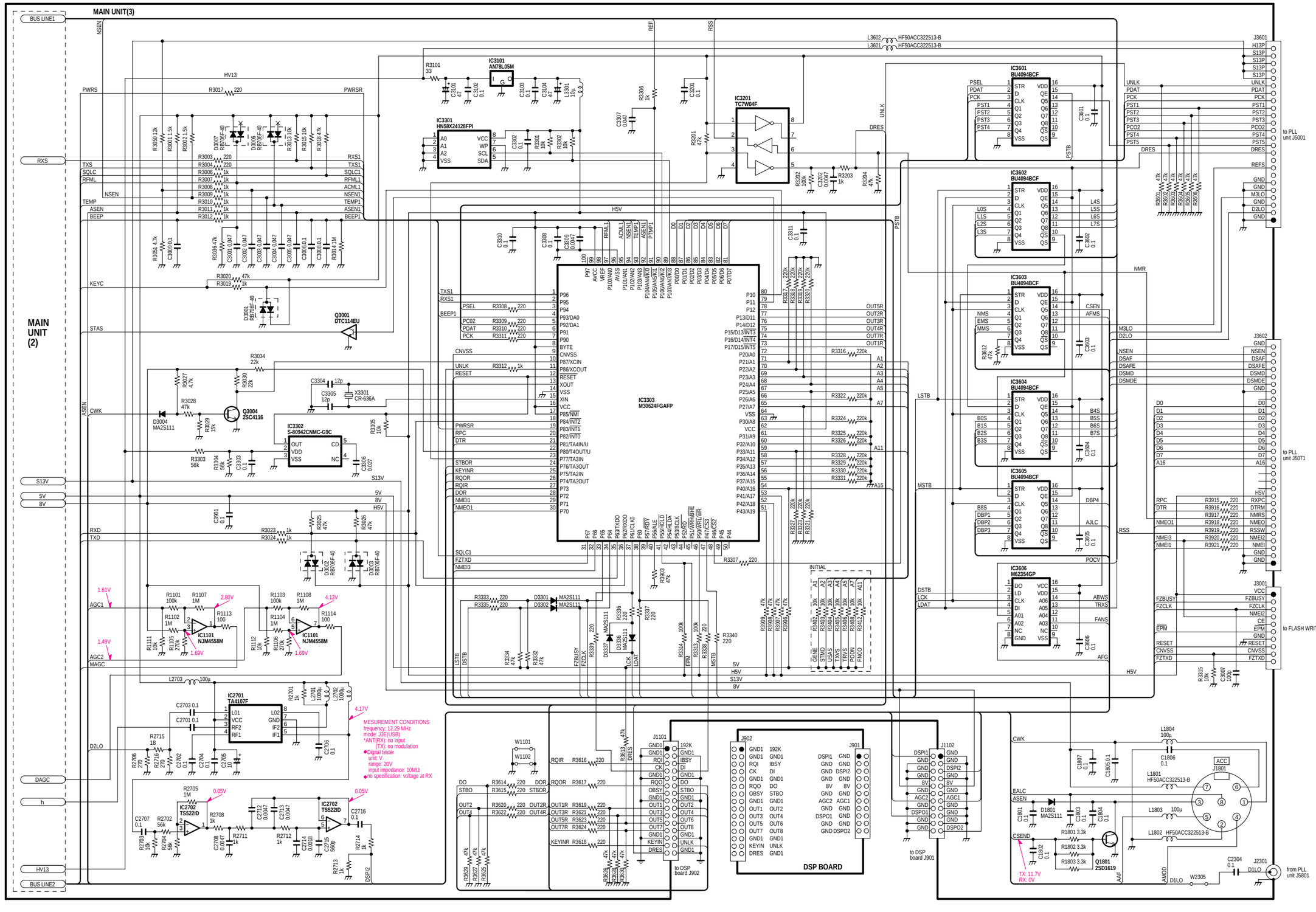
11-2-1 MAIN UNIT (1)



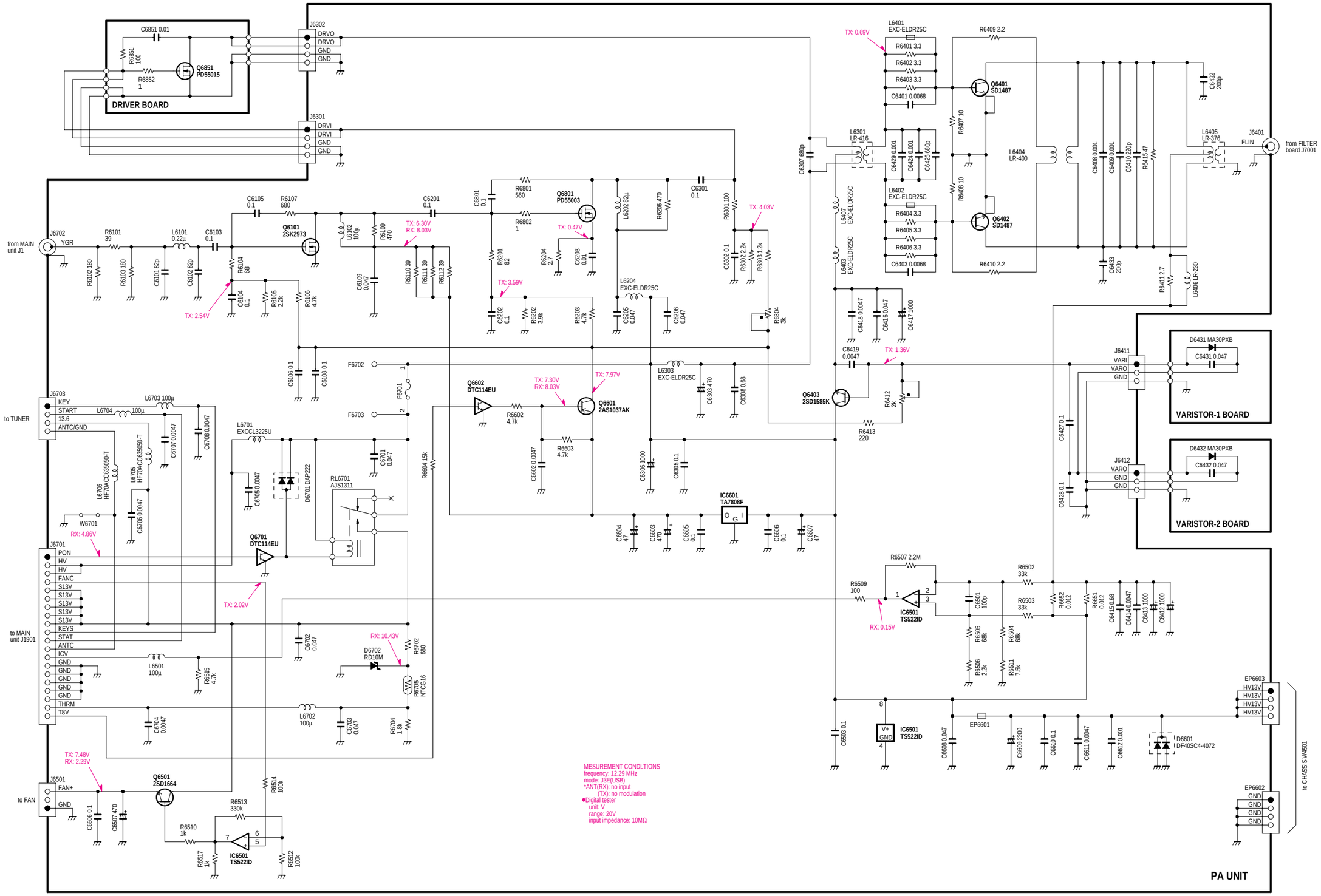
11-2-2 MAIN UNIT (2)



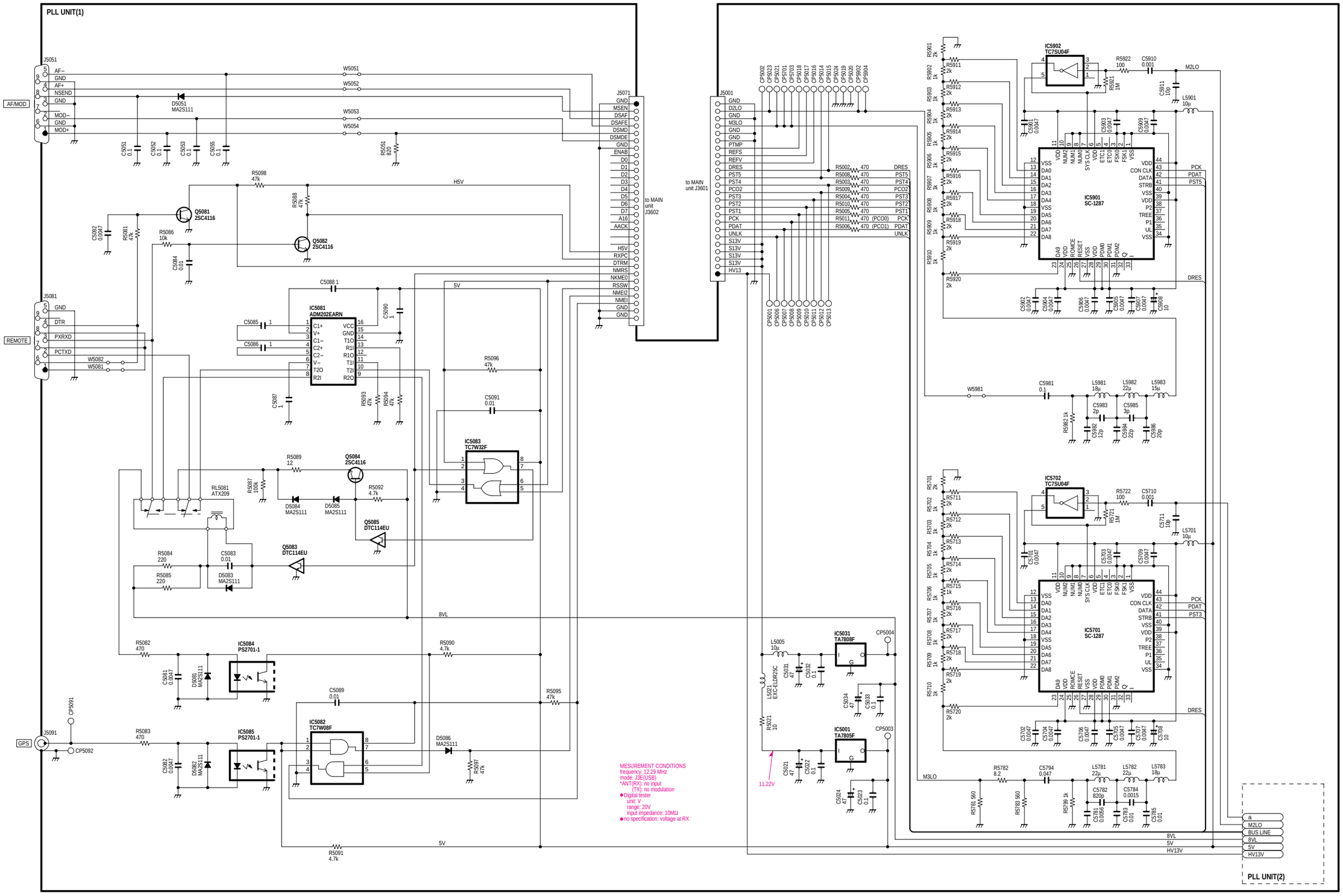
11-2-3 MAIN UNIT (3)



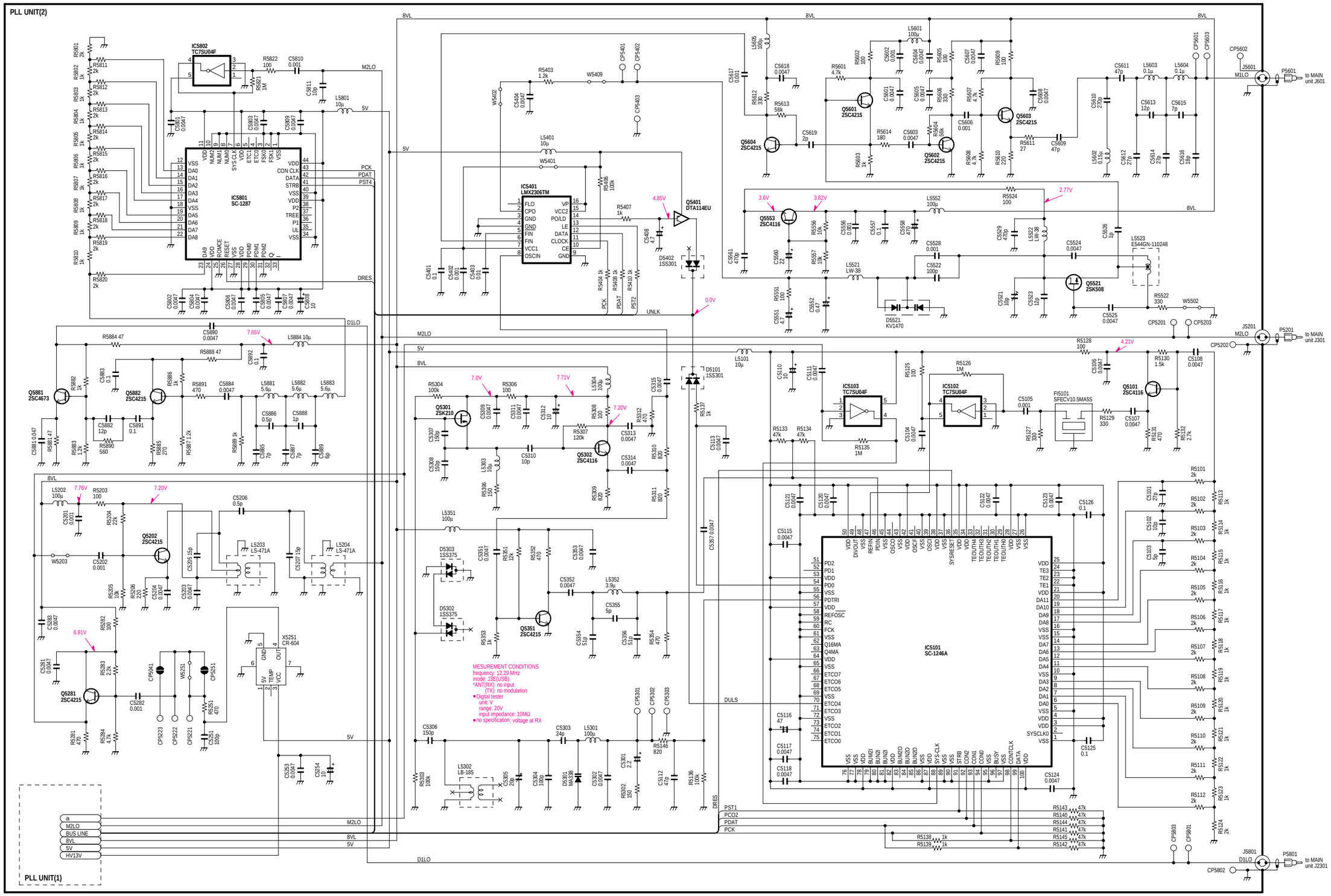
11-2-4 PA UNIT


DRIVER BOARD
J6302
DRVO
DRVO
GND
GND
J6301
DRVI
DRVI
GND
GND
C6851 0.01
R6851 100
R6852 1
Q6851 PD55015
J6702
YGR
from MAIN unit J1
J6703
KEY
START
13.6
ANTC/GND
to TUNER
J6701
PON
HV
HV
FANC
S13V
S13V
S13V
S13V
S13V
KEYS
STAT
ANTC
ICV
GND
GND
GND
GND
GND
THRM
T8V
to MAIN unit J1901
J6501
FAN+
GND
to FAN
W6701
L6705 HF70ACC635050-T
L6706 HF70ACC635050-T
L6701 EXCCL3225U
L6704 100µ
L6703 100µ
L6501 100µ
L6702 100µ
L6102 100µ
L6202 82µ
L6303 EXC-ELDR25C
L6204 EXC-ELDR25C
L6401 EXC-ELDR25C
L6402 EXC-ELDR25C
L6403 EXC-ELDR25C
L6407 EXC-ELDR25C
L6301 LR-416
L6404 LR-400
L6405 LR-376
L6406 LR-230
Q6101 2SK2973
Q6801 PD55003
Q6602 DTC114EU
Q6601 2AS1037AK
Q6701 DTC114EU
Q6501 2SD1664
Q6401 SD1487
Q6402 SD1487
Q6403 2SD1585K
D6701 DAP222
D6702 RD10M
RL6701 AJS1311
IC6601 TA7808F
IC6501 TS522ID
IC6501 TS522ID
D6431 MA30PXB
D6432 MA30PXB
D6601 DF40SC4-4072
VARISTOR-1 BOARD
VARISTOR-2 BOARD
J6411
VARI
VARO
GND
J6412
VARO
GND
GND
J6401
FLIN
from FILTER board J7001
EP6603
HV13V
HV13V
HV13V
HV13V
EP6602
GND
GND
GND
GND
EP6601
to CHASSIS W4501
TX: 0.69V
TX: 4.03V
TX: 6.30V
RX: 8.03V
TX: 0.47V
TX: 3.59V
TX: 2.54V
TX: 7.30V
RX: 8.03V
TX: 7.97V
TX: 1.36V
RX: 4.86V
TX: 2.02V
RX: 10.43V
TX: 7.48V
RX: 2.29V
RX: 0.15V
MESUREMENT CONDLTIONS
frequency: 12.29 MHz
mode: J3E(USB)
*ANT(RX): no input
(TX): no modulation
●Digital tester
unit: V
range: 20V
input impedance: 10MΩ
PA UNIT

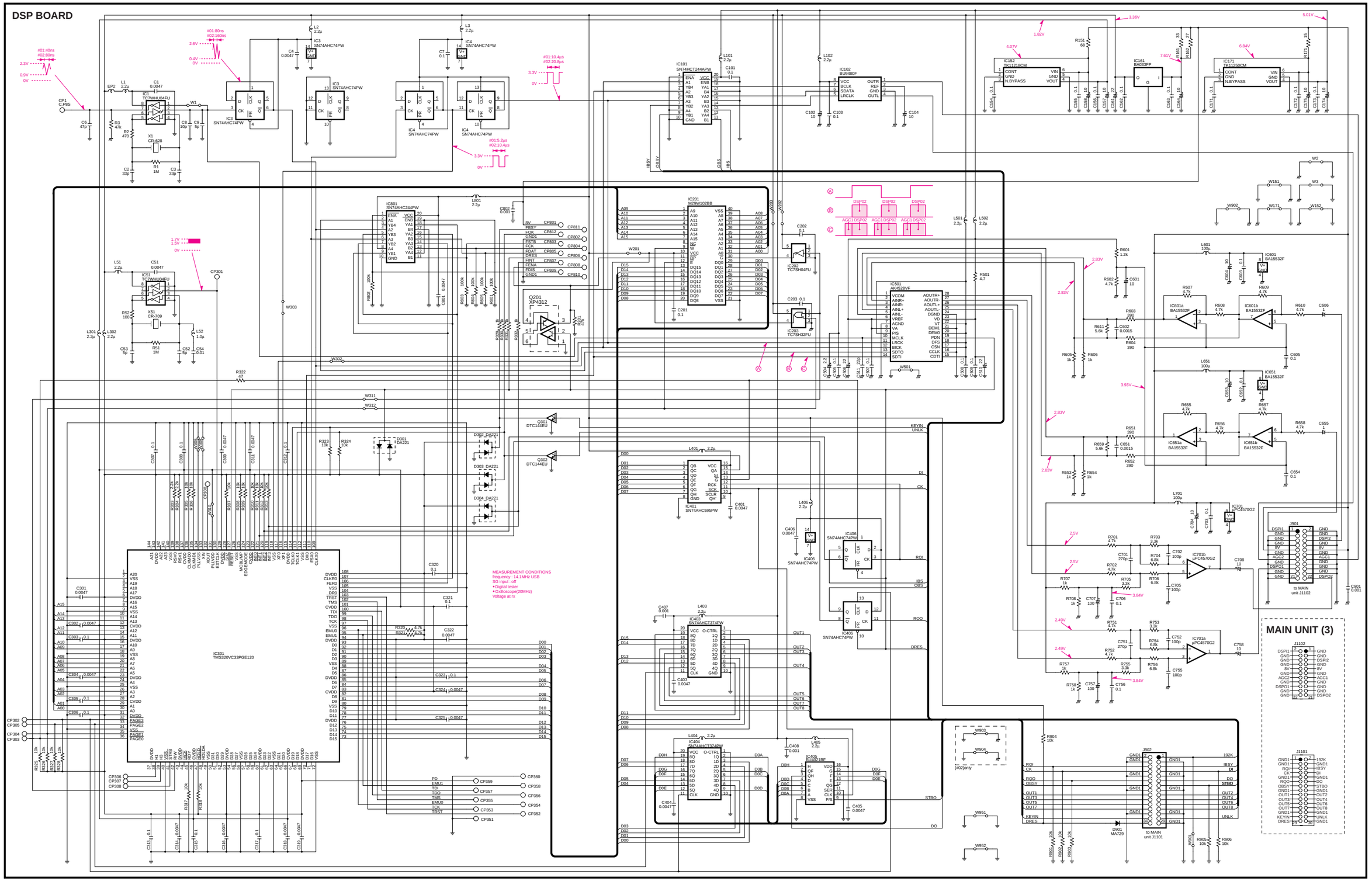
11-2-5 PLL UNIT (1)



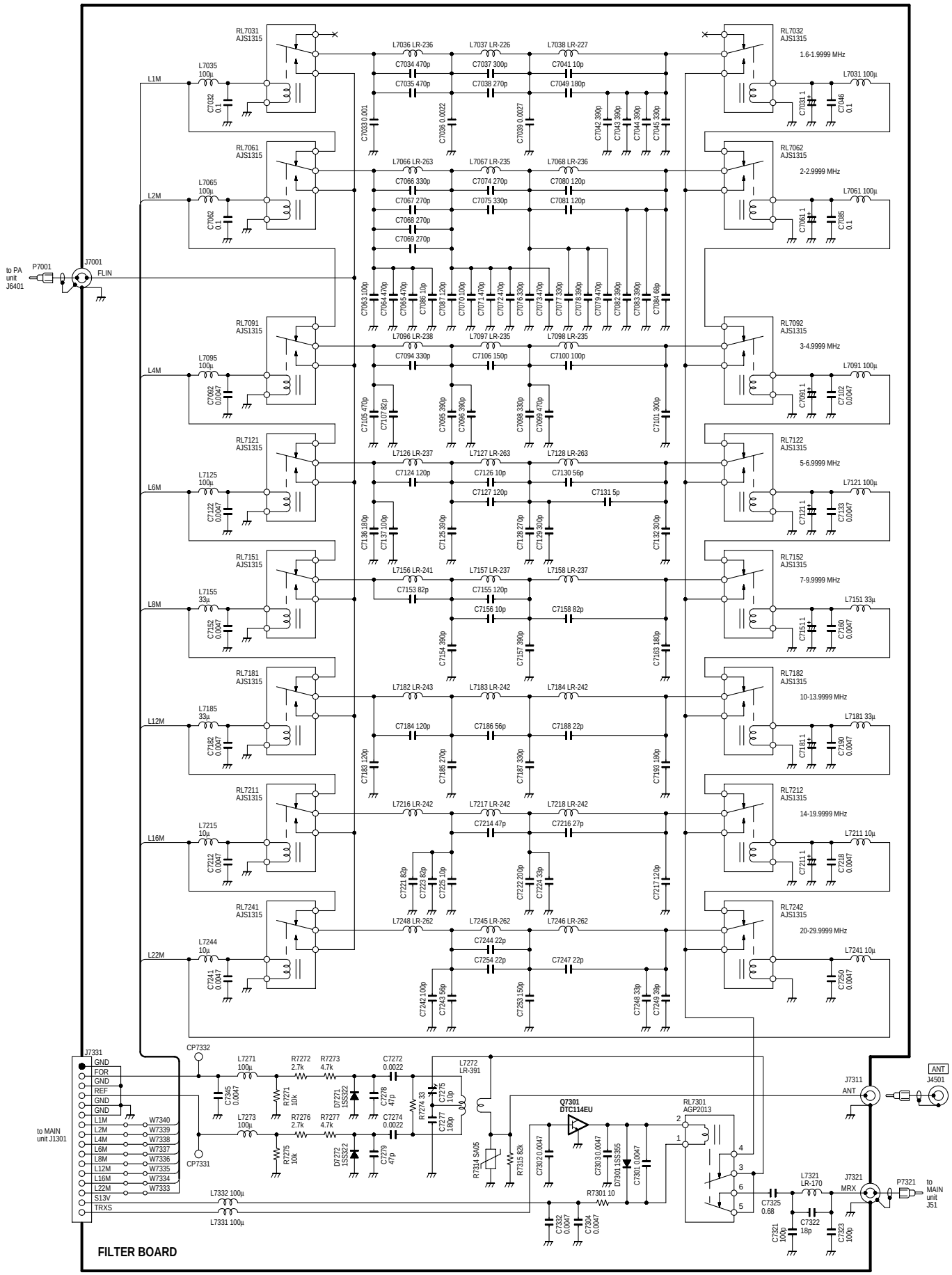
11-2-6 PLL UNIT (2)



11-2-7 DSP BOARD



11-2-8 FILTER BOARD



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