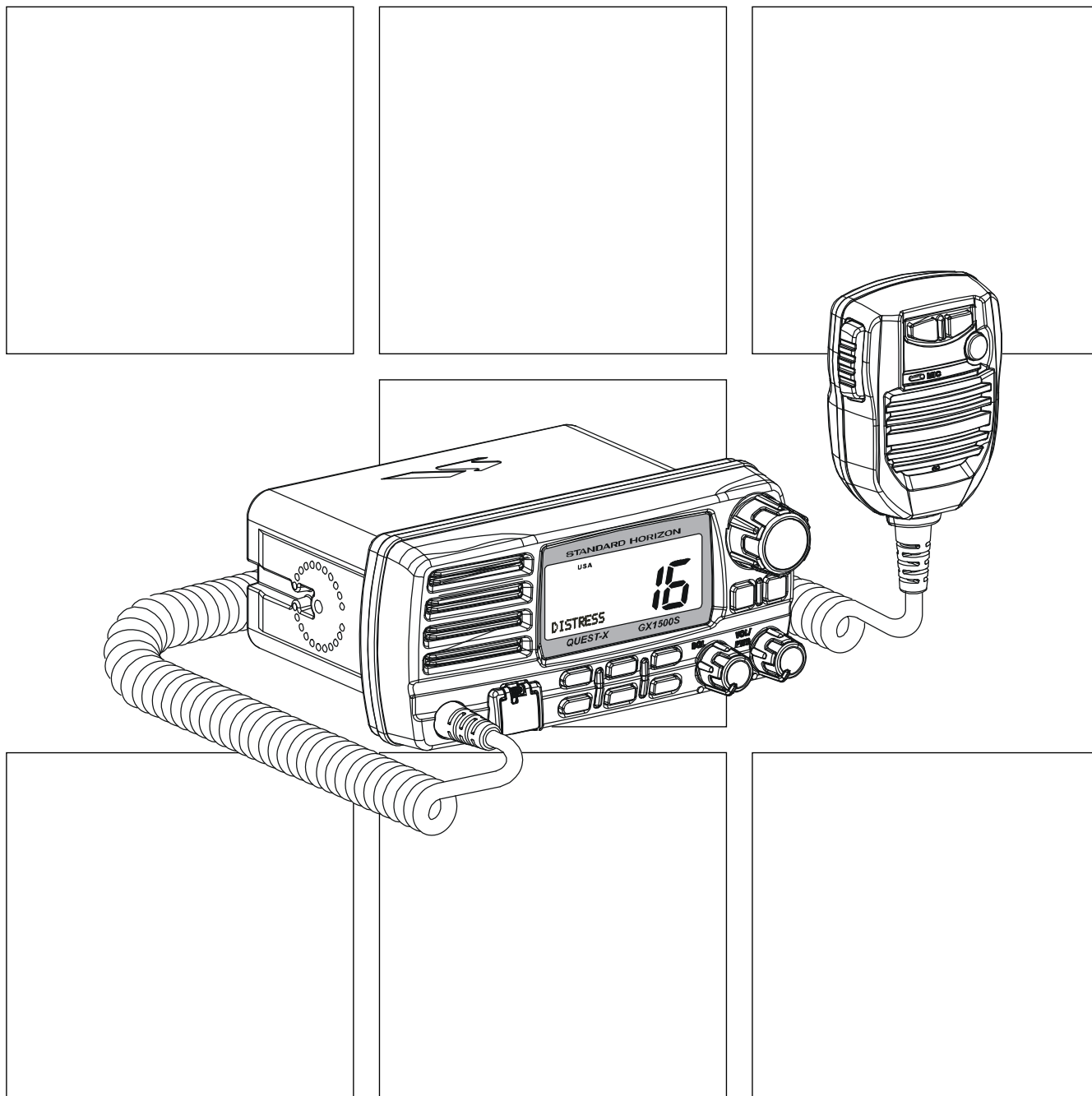


STANDARD HORIZON

25 Watt VHF/FM Marine Transceiver

QUEST-X GX1500S/E

SERVICE MANUAL



Specifications

GENERAL

Channels:	All USA, International, and Canadian
Input Voltage:	13.8 VDC $\pm 20\%$
Current Drain:	Standby 0.4 A Receive 1.5 A Transmit 5.5 A (Hi); 1.5 A (Lo)
Dimensions (H x W x D):	3.1" x 7" x 5.7" (80 x 180 x 145 mm)
Flush-Mount Dimensions (H x W x D):	2.5" x 6.3" x 5.1" (64 x 160 x 130 mm)
Weight:	2.2 lbs (1 kg)

TRANSMITTER

Frequency Range:	156.025 to 157.425 MHz
RF Output:	25 W (Hi); 1 W (Lo)
Conducted Spurious Emissions:	80 dB (Hi); 60 dB (Lo)
Audio Response:	within $\pm 1/-3$ of a 6 dB/octave pre-emphasis characteristic at 300 to 3000 Hz
Audio Distortion:	5 %
Modulation:	16K0G3E, for DSC 16K0G2B
Frequency Stability:	$\pm 0.0005\%$ (-20°C to $+50^{\circ}\text{C}$)
FM Hum and Noise:	50 dB

RECEIVER

Frequency Range:	156.050 to 163.275 MHz
Sensitivity:	12 dB SINAD 0.25 μV 12 dB SINAD (70 CH Receiver) 0.3 μV Squelch Sensitivity (Threshold) 0.2 μV
Modulation Acceptance Bandwidth:	± 7.5 kHz
Selectivity:	better than -80 dB (Spurious and Image Rejection) better than -75 dB (Intermodulation and Rejection at 12 dB SINAD)
Audio Output:	4.5 W
Audio Response:	within $\pm 2/-8$ of a 6 dB/octave de-emphasis characteristic at 300 to 3000 Hz
Frequency Stability:	± 0.0005 % (-20°C to $+50^{\circ}\text{C}$)
Channel Spacing:	25 kHz
DSC Format:	ITU Class D
NMEA Input/Output:	Output - DSC, DSE Input - GLL, GGA, RMC, and GNS

Performance specifications are nominal, unless otherwise indicated, and are subject to change without notice.

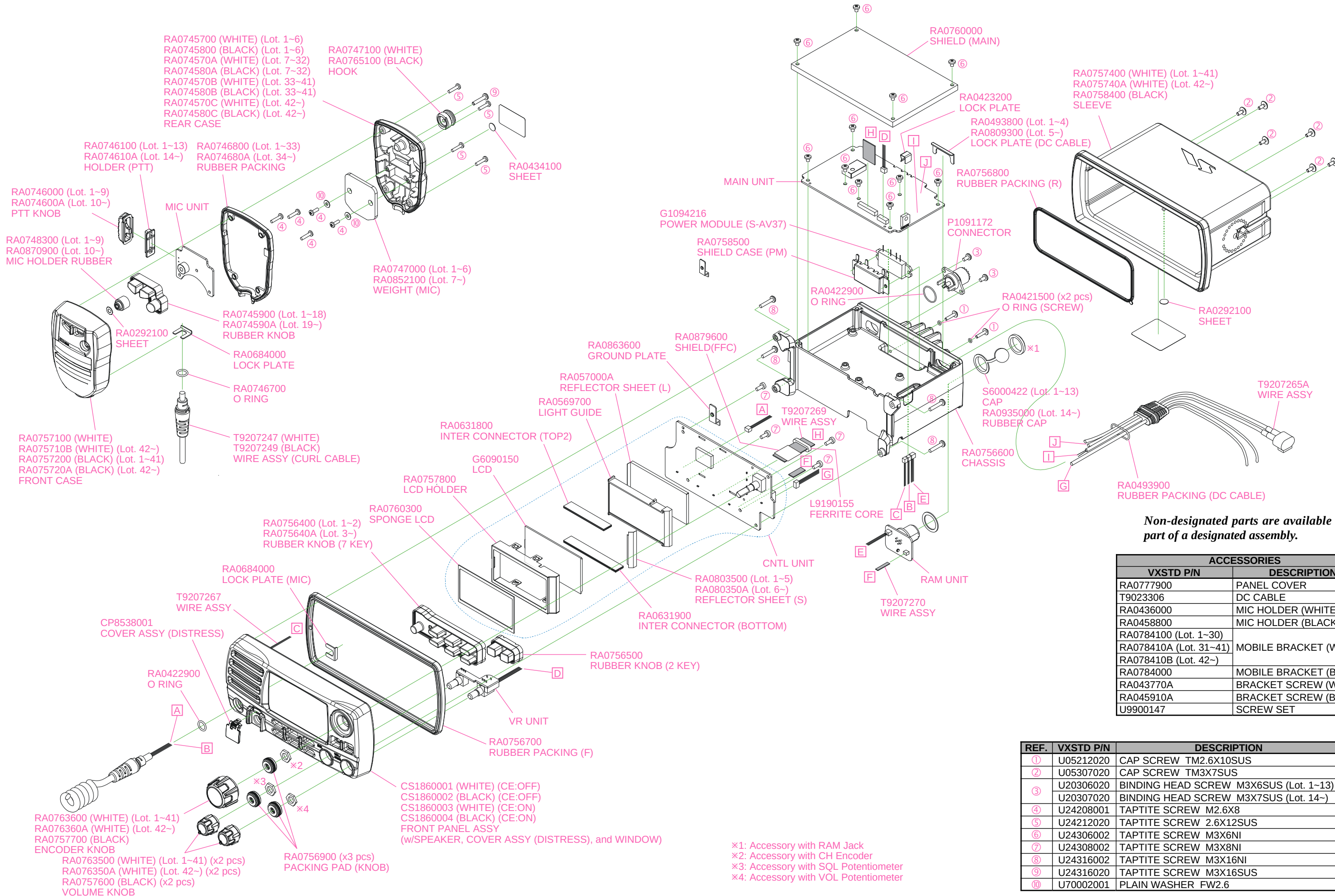
Measurements are made in accordance with EN301 025. All stated specifications are subject to change without notice or obligation.

Important Note

This transceiver was assembled using Pb (lead) free solder, based on the RoHS specification.

Only lead-free solder (Alloy Composition: Sn-3.0Ag-0.5Cu) should be used for repairs performed on this apparatus. The solder stated above utilizes the alloy composition required for compliance with the lead-free specification, and any solder with the above alloy composition may be used.

Exploded View & Miscellaneous Parts



ACCESSORIES	
VXSTD P/N	DESCRIPTION
RA0777900	PANEL COVER
T9023306	DC CABLE
RA0436000	MIC HOLDER (WHITE)
RA0458800	MIC HOLDER (BLACK)
RA0784100 (Lot. 1~30)	MOBILE BRACKET (WHITE)
RA078410A (Lot. 31~41)	
RA078410B (Lot. 42~)	
RA0784000	MOBILE BRACKET (BLACK)
RA043770A	BRACKET SCREW (WHITE)
RA045910A	BRACKET SCREW (BLACK)
U9900147	SCREW SET

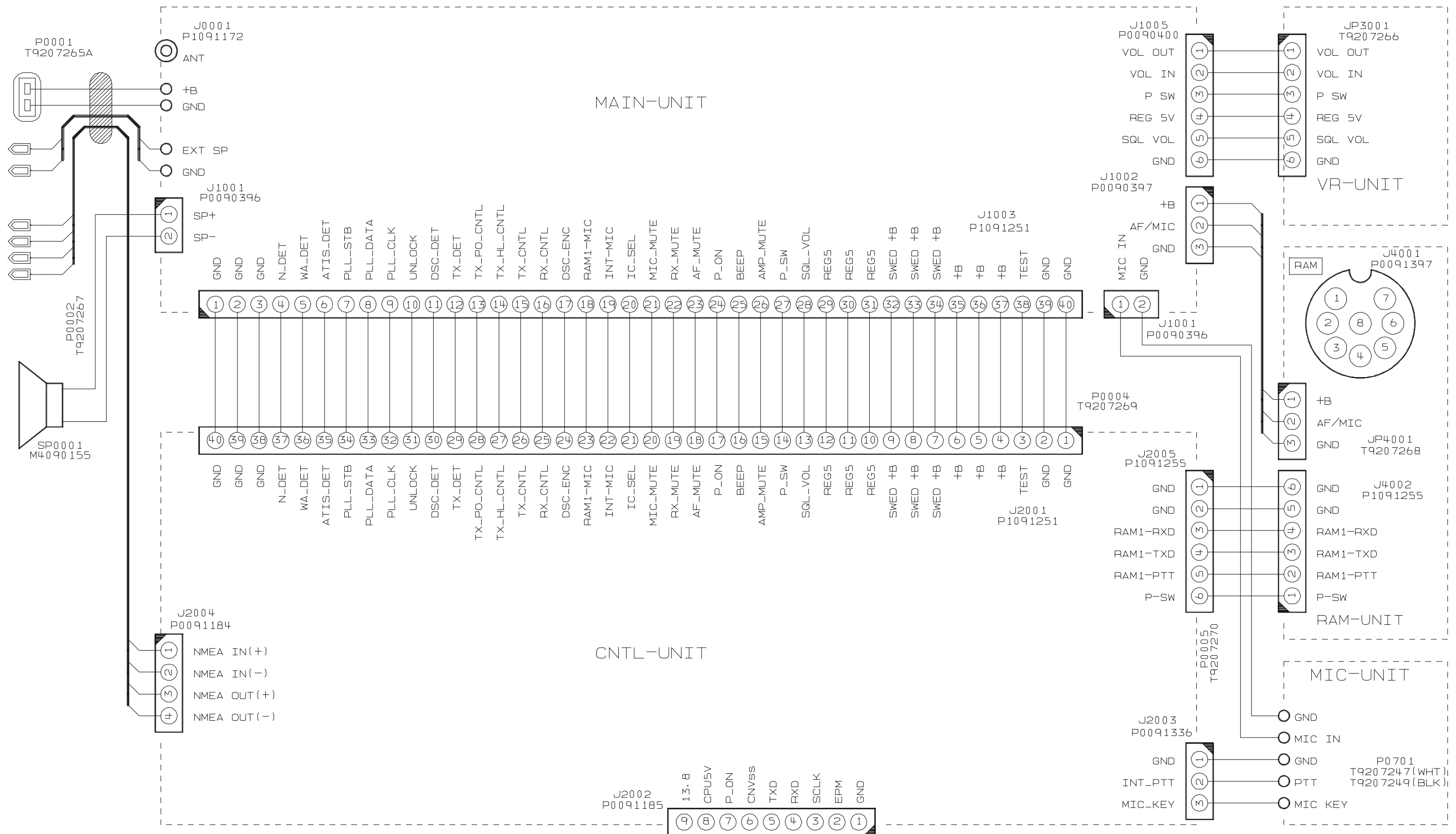
REF.	VXSTD P/N	DESCRIPTION	QTY.
①	U05212020	CAP SCREW TM2.6X10SUS	2
②	U05307020	CAP SCREW TM3X7SUS	6
③	U20306020	BINDING HEAD SCREW M3X6SUS (Lot. 1~13)	2
	U20307020	BINDING HEAD SCREW M3X7SUS (Lot. 14~)	
④	U24208001	TAPTITE SCREW M2.6X8	5
⑤	U24212020	TAPTITE SCREW 2.6X12SUS	4
⑥	U24306002	TAPTITE SCREW M3X6NI	11
⑦	U24308002	TAPTITE SCREW M3X8NI	4
⑧	U24316002	TAPTITE SCREW M3X16NI	4
⑨	U24316020	TAPTITE SCREW M3X16SUS	1
⑩	U70002001	PLAIN WASHER FW2.6	2

※1: Accessory with RAM Jack
※2: Accessory with CH Encoder
※3: Accessory with SQL Potentiometer
※4: Accessory with VOL Potentiometer

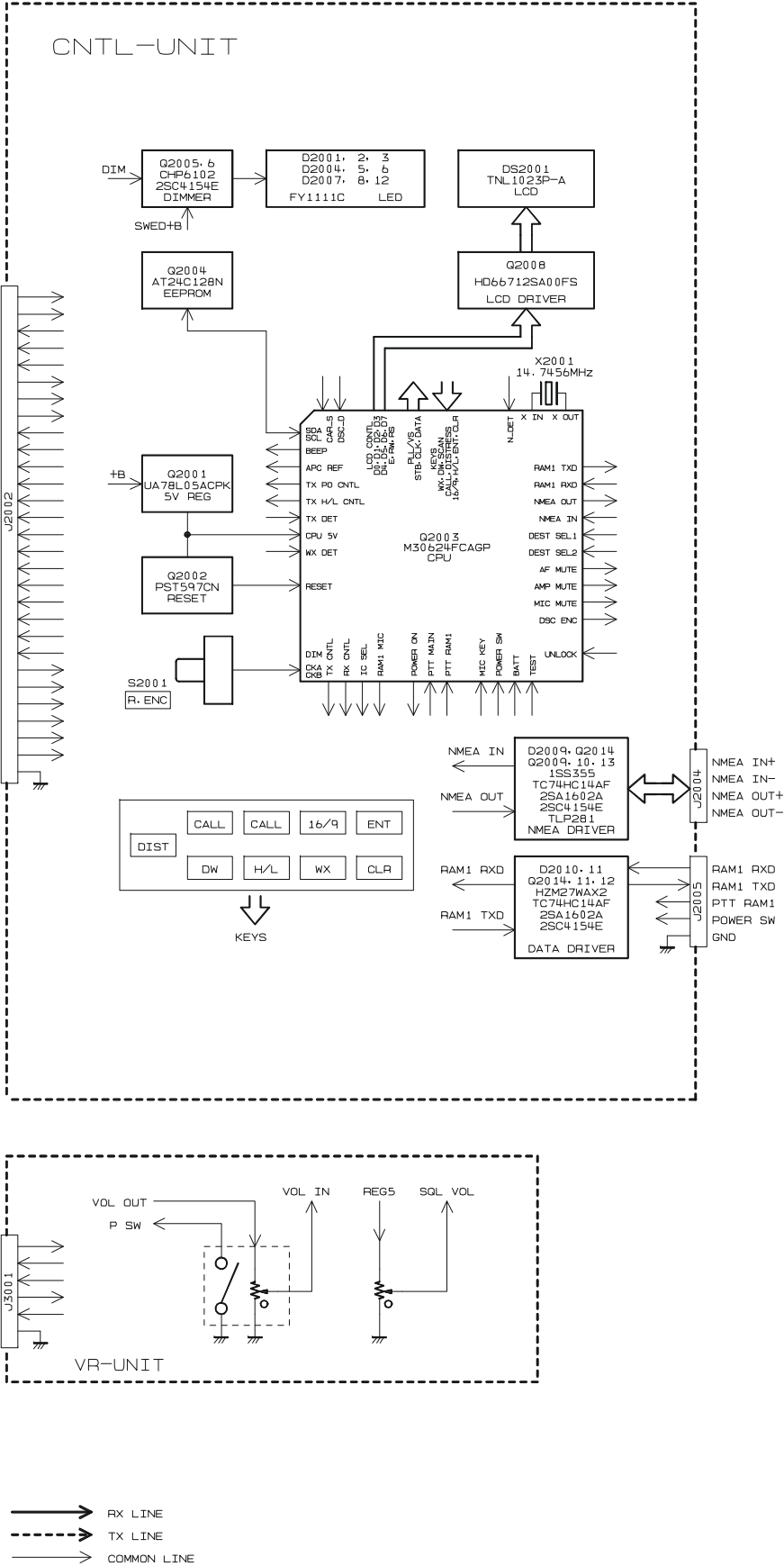
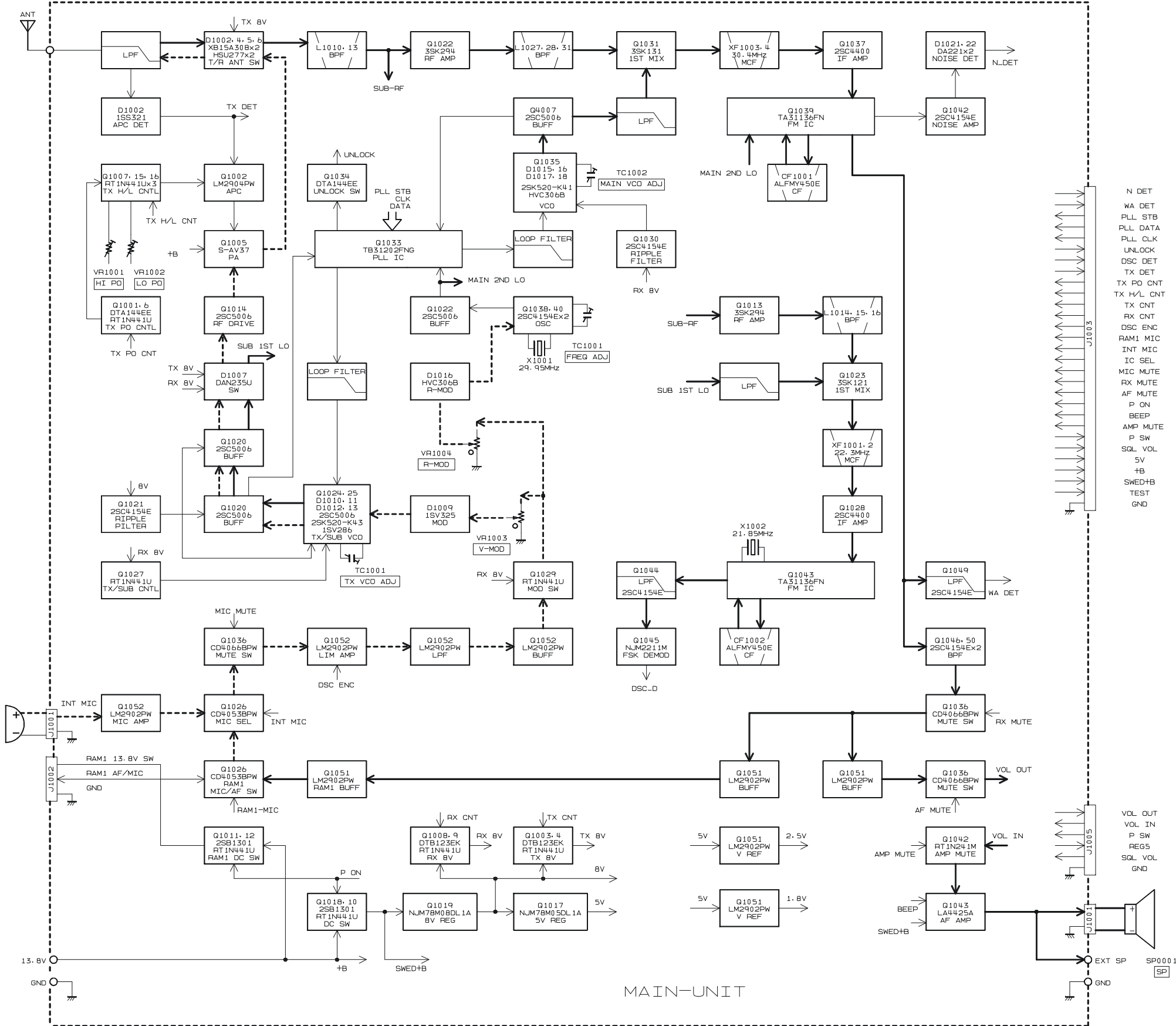
Exploded View & Miscellaneous Parts

Note

Connection Diagram



Block Diagram



Circuit Description

Reception and transmission are switched by 16-bit MPU IC **Q2003 (M30624FGPGP)** on the CNTL Unit. The receiver uses double-conversion superheterodyne circuitry, with a 21.4 MHz 1st IF and 450 kHz 2nd IF. The 1st local is produced by a PLL synthesizer, yielding the 30.4 MHz 1st IF. The 2nd local uses a 29.950 MHz crystal oscillator, yielding the 450 kHz 2nd IF. The 2nd mixer and other circuits use a custom IC to convert and amplify the 2nd IF and detect FM to obtain demodulated signals. During transmit, the PLL synthesizer oscillates at the desired frequency directly, for amplification to obtain RF power output. During transmit, voice modulation is applied to this synthesizer. Transceiver functions, such as TX/RX control, PLL synthesizer settings, and channel programming, are controlled using the MPU.

Receiver

Incoming RF signals from the antenna connector are delivered to the RF Unit, and pass through a low-pass filter (LPF) consisting of coils L1001 & L1002 and capacitors C1002, C1004, & C1007, and antenna switching diode **D1004 (XB15A308)** for delivery to the receiver front end.

Signals within the frequency range of the transceiver are then passed through a bandpass filter consisting of coils L1010 & L1013 and capacitors C1059, C1060, C1062, C1094, & C1095, before RF amplification by **Q1022 (3SK294)**.

The amplified RF is then passed through a bandpass filter again consisting of coils L1027, L1028, & L1031 and capacitors C1165, C1166, C1167, C1168, C1169, C1191, & C1192, the pure in-band input signal is delivered to 1st mixer **Q1031 (3SK131)**.

Buffered output from the MAIN VCO is amplified by **Q1032 (2SC5006)** and low-pass filtered by coils L1038, L1040, & L1055 and capacitors C1216, C1217, C1245, and C1246, to provide a pure 1st local signal between 125.65 and 131.625 MHz for delivery to the 1st mixer **Q1031 (3SK131)**.

The 30.4 MHz 1st mixer product then passes through monolithic crystal filters XF1003 and XF1004 (± 6.5 kHz BW), and is amplified by **Q1037 (2SC4400-3)** and delivered to the input of the FM IF subsystem IC **Q1039 (TA31136FN)**. This IC contains the 2nd mixer, 2nd local oscillator, limiter amplifier, FM detector, noise amplifier, and squelch gates.

The 2nd local in the FM IF subsystem IC is produced from crystal **X1001** (29.950 MHz), and the 1st IF is converted to 450 kHz by the 2nd mixer and stripped of unwanted components by ceramic filter **CF1001**.

After passing through a limiter amplifier, the signal is demodulated by the FM detector. Demodulated receive audio from the FM IF subsystem IC is amplified by **Q1046**

and **Q1050** (both **2SC4154E**), then the signal is through the AF selector switch **Q1036 (CD4066BPW)**. The selected signal is passed through the AF Mute switch **Q1047 (RT1N441U)** to the AF power amplifier **Q1048 (LA4425A)**, the audio signal is delivered to the 16 Ohm internal loudspeaker and external Speaker terminal in the accessory cable.

PLL Synthesizer

The 1st Local signal maintains stability from the PLL synthesizer by using a 29.950 MHz reference signal from crystal **X1001**. PLL synthesizer IC **Q1035 (TB31202FNG)** consists of a prescaler, reference counter, swallow counter, programmable counter, a serial data input port to set these counters based on the external data, a phase comparator, and a charge pump.

The PLL synthesizer IC divides the 29.950 MHz reference signal by 2396 using the reference counter (12.5 kHz comparison frequency). The reference oscillator feeds to the PLL synthesizer IC **Q1035 (TB31202FNG)** for the 2nd local signal.

The VCO output is divided by the prescaler, swallow counter and programmable counter. These two signals are compared by the phase comparator, and applied to the charge pump.

A voltage proportional to their phase difference is delivered to the low-pass filter circuit, then fed back to the VCO as a voltage with phase error, controlling and stabilizing the oscillating frequency. This synthesizer also operates as a modulator during transmit.

The MAIN VCO is consisted of **Q1035 (2SK520-K41)** and varactor diodes **D1015**, **D1016**, **D1017**, and **D1018** (all **HVC306B**), which oscillates at 30.4 MHz below from the receiving frequency. The MAIN VCO output passes through buffer amplifier **Q1032 (2SC5006)** to obtain stable output, then applied to the 1st mixer **Q1031 (3SK131)**. The DC supply for the MAIN VCO is regulated by **Q1030 (2SC4154E)**.

The TX & SUB VCO is consisted of **Q1025 (2SK520-K4)** and varactor diode **D1010**, **D1011**, **D1012**, and **D1013** (all **1SV286B**), which oscillates at 134.225 MHz for the CH70 receiving and the fundamental transmit frequency during a transmit, with direct frequency-modulation using varactor diode **D1009 (1SV325)**. The TX & SUB VCO output passes through buffer amplifier **Q1024 (2SC5006)** to obtain stable output. The TX & SUB VCO output is passed through another buffer amplifier **Q1020 (2SC5006)** and diode switch **D1007 (DAN235U)** to the sub 1st mixer **Q1023 (3SK131)** during receive, and to drive amplifiers **Q1014 (2SC5006)** for transmit. The DC supply for the TX & SUB VCO is regulated by **Q1021 (2SC4154E)**.

Circuit Description

Transmitter

Voice audio from the microphone is delivered to the MAIN Unit. After passing through microphone amplifier **Q1002 (NJM12902V)**, a pre-emphasis network, limiter (IDC: instantaneous deviation control), and low-pass filter network **Q1052 (LM2902PW)**, the audio is adjusted for optimum deviation level and delivered to the next stage.

Voice or DSC (Digital Selective Calling) encode signal inputs from the low-pass filter network **Q1052 (LM2902PW)** is by the TX & SUB VCO **Q1025 (2SK520-K4)** and varactor diode **D1010, D1011, D1012, & D1013** (all **1SV286B**), which oscillates the fundamental transmit frequency with direct frequency-modulation using varactor diode **D1009 (1SV325)**. The modulated signal passes through buffer amplifier **Q1024** and **Q1020** (both **2SC5006**), diode switch **D1007 (DAN235U)** to drive amplifiers **Q1014 (2SC5006)** and RF power amplifier module **Q1005 (S-AV37)**.

The RF energy then passes through antenna switch **D1002 (XB15A30B)** and low-pass filter (LPF) consisting of coils L1001 & L1002 and capacitors C1002, C1004, & C1007, and finally to the antenna connector.

RF output power from the RF power amplifier module **Q1012 (S-AV37)** is sampled by C1005 and C1006 and is rectified by **D1001 (1SS321)**. The resulting DC is fed through Automatic Power Controllers **Q1002 (LM2904PW)** to RF power amplifier module **Q1012 (S-AV37)**, thus providing positive control of the power output.

Generation of spurious products by the transmitter is minimized by the fundamental carrier frequency being equal to the final transmitting frequency, modulated directly in the transmit VCO. Additional harmonic suppression is provided by a low-pass filter consisting of coils and capacitors, resulting in more than 70 dB of harmonic suppression prior to delivery of the RF energy to the antenna.

DSC Encoder/ Decoder

Encoder

The DCS (Digital Selective Calling) encode signal which D/A converted in the 16-bit MPU IC **Q2003 (M30624FGPGP)** on the CNTL Unit is fed through the low-pass filter **Q1052 (LM2902PW)** on the MAIN Unit to the TX & SUB VCO **Q1025 (2SK520-K41)**.

Decoder

Incoming the receiving DSC code on the CH70 from the antenna connector are passed through a SUB-RX RF amplifier **Q1013 (3SK294)** to the bandpass filter consisting of coils L1014, L1015, & L1016 and capacitors C1066, C1068, C1099, C1100, C1101, C1102, C1103, & C1104, then the filtered signal deliver to SUB-RX 1st mixer **Q1023 (3SK131)**.

Buffered output from the TX & SUB VCO **Q1025 (2SK520)** is amplified by **Q1024** and **Q1020** (both **2SC5006**) and bandpass filtered by coils L1021 & L1022 and capacitors C1106, C1107, C1121, C1122, & C1123, to provide a pure 1st local signal (134.225 MHz) for delivery to the SUB-RX 1st mixer **Q1023 (3SK131)**.

The 22.3 MHz 1st mixer product then passes through monolithic crystal filters XF1001 and XF1002 (± 6.5 kHz BW) and buffer amplifier **Q1028 (2SC4400-3)**, then deliver to the SUB-RX FM IF subsystem IC **Q1045 (TA31136FN)**. This IC contains the 2nd mixer, 2nd local oscillator, limiter amplifier, FM detector, noise amplifier, and squelch gates.

The 2nd local is produced by crystal X1002 (21.850 MHz) then deliver to the 2nd mixer in the SUB-RX FM IF subsystem IC **Q1045 (TA31136FN)**. The 1st IF is converted to 450 kHz by the 2nd mixer and stripped of unwanted components by ceramic filter CF1002.

Filtered signal from the ceramic filter CF1002 is applied to the limiter amplifier in the SUB-RX FM IF subsystem IC **Q1045 (TA31136FN)**, and then demodulate by the FM detector in the SUB-RX FM IF subsystem IC **Q1045 (TA31136FN)**. Demodulated signal from the SUB-RX FM IF subsystem IC **Q1045 (TA31136FN)** is passes through the low-pass filter **Q1044 (2SC4154E)** to the DSC Decoder IC **Q1045 (NJM2211M)** which the receiving DCS code is decoded. The decoded DCS signal delivered to the 16-bit MPU IC **Q2004 (M30624FGAGP)**.

The SUB-RX 1st Local signal maintains stability from the PLL synthesizer by using a 29.950 MHz reference signal from crystal X1001. PLL synthesizer IC **Q1035 (TB31202FNG)** consists of a prescaler, reference counter, swallow counter, programmable counter, a serial data input port to set these counters based on the external data, a phase comparator, and a charge pump.

The PLL synthesizer IC divides the 29.950 MHz reference signal by 2396 using the reference counter (12.5 kHz comparison frequency). The reference oscillator feeds to the PLL synthesizer IC **Q1035 (TB31202FNG)**, for the 2nd local signal.

The VCO output is divided by the prescaler, swallow counter and programmable counter. These two signals are compared by the phase comparator, and applied to the charge pump.

A voltage proportional to their phase difference is delivered to the low-pass filter circuit, then fed back to the VCO as a voltage with phase error, controlling and stabilizing the oscillating frequency.

The TX & SUB VCO is consisted of **Q1025 (2SK520-K4)** and varactor diode **D1010, D1011, D1012, and D1013** (all **1SV286B**), which oscillates at 134.225 MHz. The TX &

Circuit Description

SUB VCO output passes through buffer amplifier **Q1024 (2SC5006)** to obtain stable output.

1050 Hz Weather Alert Decoder

1050 Hz Weather Alert signal from the FM IF subsystem IC **Q1039 (TA31136FN)** is demodulated by **Q1049 (2SC4154E)** then is applied to 16-bit MPU IC **Q2003 (M30624FGPGP)** on the CNTL Unit.

MPU

Operation is controlled by 16-bit MPU IC **Q2003 (M30624FGPGP)**. The system clock uses a 14.74560 MHz crystal for a time base. IC **Q2002 (PST597CN)** resets the MPU when the power is on, and monitors the voltage of the regulated 5V power supply line.

EEPROM

The EE-PROM **Q2004 (AT24C128N)** retains TX and RX data for all memory channels, prescaler dividing, IF frequency, local oscillator injection side, and reference oscillator data.

Circuit Description

Note

The **GX1500S/E** has been carefully aligned at the factory for the specified performance across the marine band.

Realignment should therefore not be necessary except in the event of a component failure. All component replacement and service should be performed only by an authorized Standard Horizon representative, or the warranty policy may be voided.

The following procedures cover the sometimes critical and tedious adjustments that are not normally required once the transceiver has left the factory. However, if damage occurs and some parts are replaced, realignment may be required. If a sudden problem occurs during normal operation, it is likely due to component failure; realignment should not be done until after the faulty component has been replaced.

We recommend that servicing be performed only by authorized Standard Horizon service technicians who are experienced with the circuitry and fully equipped for repair and alignment. Therefore, if a fault is suspected, contact the dealer from whom the transceiver was purchased for instructions regarding repair. Authorized Standard Horizon service technicians realign all circuits and make complete performance checks to ensure compliance with factory specifications after replacing any faulty components.

Those who do undertake any of the following alignments are cautioned to proceed at their own risk. Problems caused by unauthorized attempts at realignment are not covered by the warranty policy. Also, Standard Horizon, a division of Vertex Standard must reserve the right to change circuits and alignment procedures in the interest of improved performance, without notifying owners. Under no circumstances should any alignment be attempted unless the normal function and operation of the transceiver are clearly understood, the cause of the malfunction has been clearly pinpointed and any faulty components replaced, and the need for realignment determined to be absolutely necessary.

The following test equipment (and thorough familiarity with its correct use) is necessary for complete realignment. Correction of problems caused by misalignment resulting from use of improper test equipment is not covered under the warranty policy. While most steps do not require all of the equipment listed, the interactions of some adjustments may require that more complex adjustments be performed afterwards. Do not attempt to perform only a single step unless it is clearly isolated electrically from all other steps. Have all test equipment ready before beginning, and follow all of the steps in a section in the order presented.

Required Test Equipment

- ☐ RF Signal Generator with calibrated output level at 200 MHz
- ☐ Deviation Meter (linear detector)
- ☐ AF Millivoltmeter
- ☐ SINAD Meter
- ☐ Inline Wattmeter with 5% accuracy at 200 MHz
- ☐ Regulated DC Power Supply: 13.8 VDC, 10A
- ☐ 50-ohm Non-reactive Dummy Load: 30W at 200 MHz
- ☐ Frequency Counter: >0.1 ppm accuracy at 200 MHz
- ☐ AF Signal Generator
- ☐ DC Voltmeter: high impedance
- ☐ VHF Sampling Coupler
- ☐ AF Dummy Load: 4 Ohms, 10 W
- ☐ Oscilloscope
- ☐ Spectrum Analyzer
- ☐ CP160 GPS/Chart Plotter
- ☐ GX2360S Marine Transceiver

Alignment Preparation & Precautions

A dummy load and inline wattmeter must be connected to the main antenna jack in all procedures that call for transmission. Correct alignment is not possible with an antenna.

After completing one step, read the following step to determine whether the same test equipment will be required. If not, remove the test equipment (except dummy load and wattmeter, if connected) before proceeding.

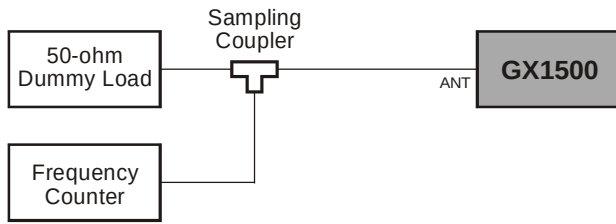
Correct alignment requires that the ambient temperature be the same as that of the transceiver and test equipment, and that this temperature be held constant between 68 °F and 86 °F (20 °C and 30 °C). When the transceiver is brought into the shop from hot or cold air it should be allowed some time for thermal equalization with the environment before alignment. If possible, alignments should be made with oscillator shields and circuit boards firmly affixed in place. Also, the test equipment must be thoroughly warmed up before beginning.

Note: Signal levels in dB referred to in this procedure are based on 0 dBμ = 0.5 μV (closed circuit).

Alignment

Reference Frequency Adjustment

- Setup the test equipment as shown below.



- Set the channel to CH16.
- Use the [H/L(NAV)] key to set the transceiver to "LOW" power.
- With the PTT switch pressed, adjust **TC1003** so that the Frequency Counter reading is 156.800 MHz $\pm$ 100 Hz.
- Release the PTT switch.

Receiver VCV Adjustment

- Setup the test equipment as shown below.



- Set the channel to CH16.
- Adjust **TC1002** so that the DC voltmeter reading is 1.5 V $\pm$ 0.1 V.

Sub Receiver/Transmitter VCV Adjustment

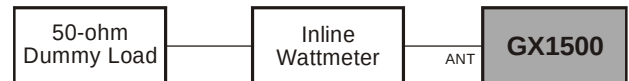
- Setup the test equipment as shown below.



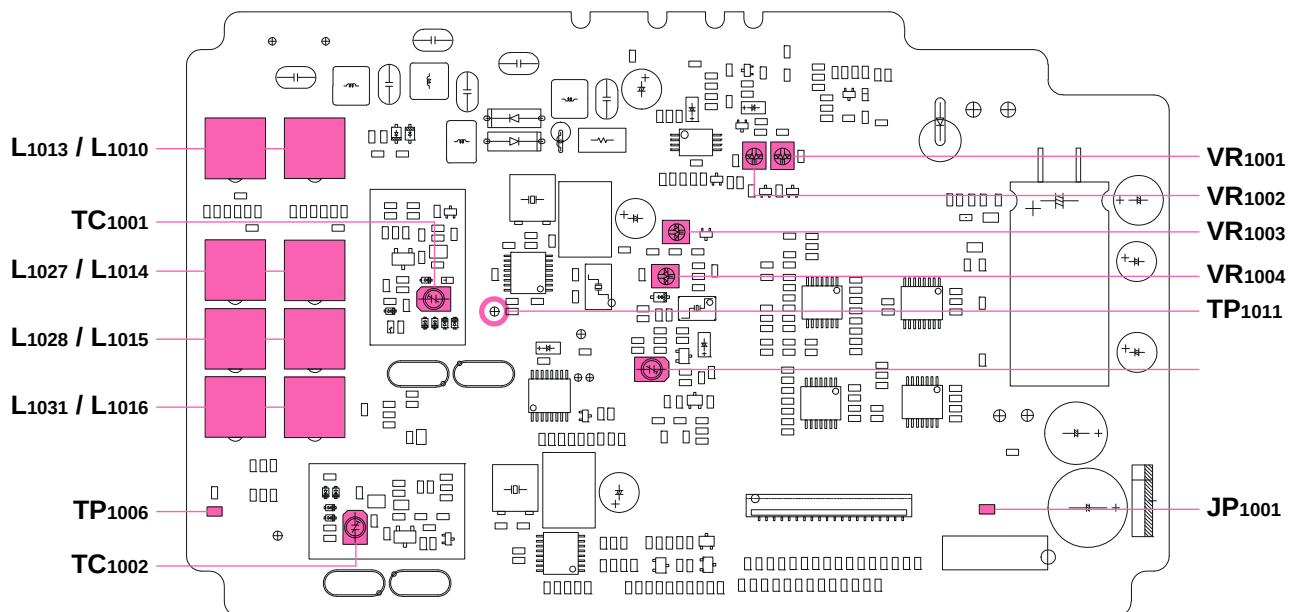
- Set the channel to CH16.
- With the PTT switch pressed, adjust **TC1001** so that the DC voltmeter reading is 3.0 V $\pm$ 0.1 V.
- Release the PTT switch.

Transmit Power Adjustment

- Setup the test equipment as shown below.



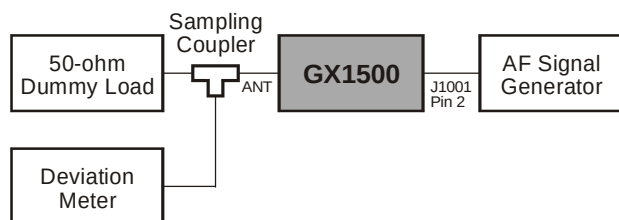
- Set the channel to CH16.
- Use the [H/L(NAV)] key to set the transceiver to "HI" power.
- With the PTT switch pressed, adjust **VR1001** so that RF output power is 24 W $\pm$ 0.3 W.
- Release the PTT switch, then set the transceiver to "LOW" power by the [H/L(NAV)] key.
- With the PTT switch pressed, adjust **VR1002** so that RF output power is 0.8 W $\pm$ 0.1 W.
- Release the PTT switch.



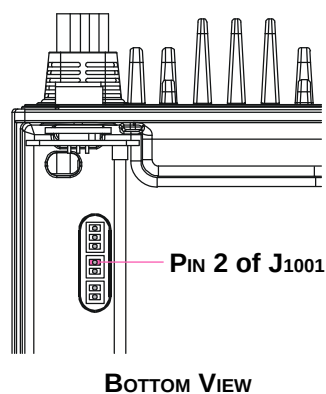
MAIN UNIT ALIGNMENT POINT

TX Deviation Adjustment

- ❑ Setup the test equipment as shown below.



- ❑ Set the AF Signal Generator output to 100 mVrms at 1 kHz.
- ❑ Set the channel to CH16.
- ❑ With the PTT switch pressed, adjust **VR1003** so that the maximum deviation is $4.4 \text{ kHz} \pm 0.1 \text{ kHz}$.
- ❑ Release the PTT switch, then set the AF Signal Generator output to 1 Vrms at 100 Hz.
- ❑ With the PTT switch pressed, adjust **VR1004** so that the maximum deviation is $4.4 \text{ kHz} \pm 0.1 \text{ kHz}$.
- ❑ Release the PTT switch

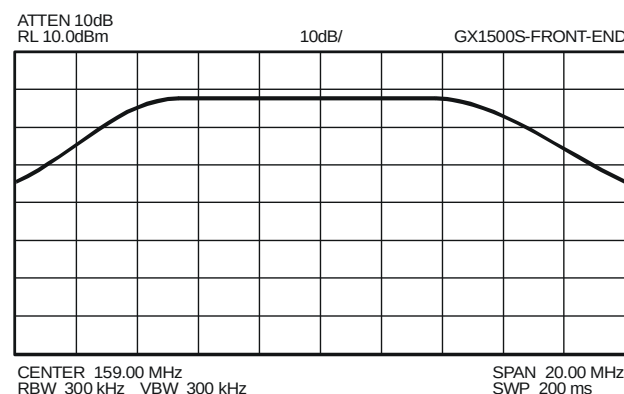


Receiver Front-end Adjustment

- ❑ Setup the test equipment as shown below.



- ❑ Set the spectrum analyzer as shown below:
 - CENTER: 159.000 MHz
 - SPAN: 20.000 MHz
 - RBW, VBW: 30 kHz
 - SWP: 200 ms
- ❑ Set the channel to CH01A.
- ❑ Adjust **L1010**, **L1013**, **L1027**, **L1028**, and **L1031** until the wave form shown in below is obtained.



Sub Receiver Front-end Adjustment

- ❑ Setup the test equipment as shown below.



- ❑ Set the RF Signal Generator output to 156.525 MHz, at a level of $+10\text{dB}\mu$, $\pm 3.0 \text{ kHz}$ deviation with a 1 kHz audio tone.
- ❑ Adjust **L1016**, **L1015**, and **L1014** in order for maximum indication on the DC voltmeter.

Alignment

Software Alignment/Confirmation Mode

The “Software Alignment/Confirmation Mode” has been build in the microprocessor in order to adjust and confirm the performance of transceiver.

The purpose is to adjust transceiver simply and to confirm the performance of transceiver smoothly.

STARTING SOFTWARE ALIGNMENT MODE

- ☐ Confirm that the transceiver’s power is turned off.
- ☐ Short the TEST points (JP1001).
- ☐ Press and hold the **VOL/PWR** knob until the radio turns on while press and holding the [**CALL(MENU)**] and [**DISTRESS**] keys. The LCD will be as shown in the illustration at the right.

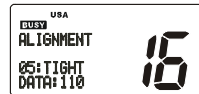
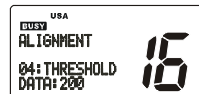


Squelch Adjustment

- ☐ Setup the test equipment as shown below.



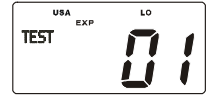
- ☐ Press the [**SCAN(MEM)**] key to recall the Alignment Item “04: THRESHOLD.”
- ☐ Set the RF Signal Generator output to 156.800 MHz, at a level of -10dBμV, ±3.0 kHz deviation with a 1 kHz audio tone.
- ☐ Press the [**DW(IC)**] key.
- ☐ Press the [**ENT**] key to save the new setting.
- ☐ Press the [**SCAN(MEM)**] key to recall the Alignment Item “05: TIGHT.”
- ☐ Set the RF Signal Generator output to 156.800 MHz, at a level of +4dBμ ±3.0 kHz deviation with a 1 kHz audio tone.
- ☐ Press the [**DW(IC)**] key.
- ☐ Press the [**ENT**] key to save the new setting.
- ☐ Press the [**SCAN(MEM)**] key to recall the Alignment Item “07: DC VOLT.”
- ☐ Press the [**DW(IC)**] key.
- ☐ Press the [**ENT**] key to save the new setting.



This completes the Software Alignment Mode. To save all settings and exit, press and hold the [**DISTRESS**] key for 2 seconds.

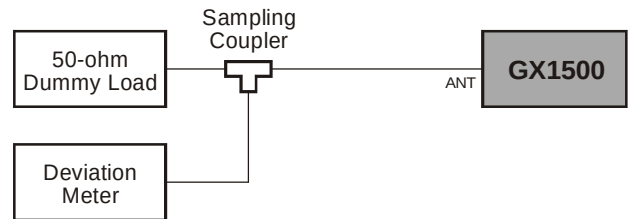
STARTING SOFTWARE CONFIRMATION MODE

- ☐ Confirm that the transceiver’s power is turned off.
- ☐ Short the TEST points (JP1001).
- ☐ Press and hold the PWR key until the radio turns on while press and holding the [**DW(IC)**] and [**DISTRESS**] keys. Release the keys, the LCD will be as shown for one second in the illustration at the right.



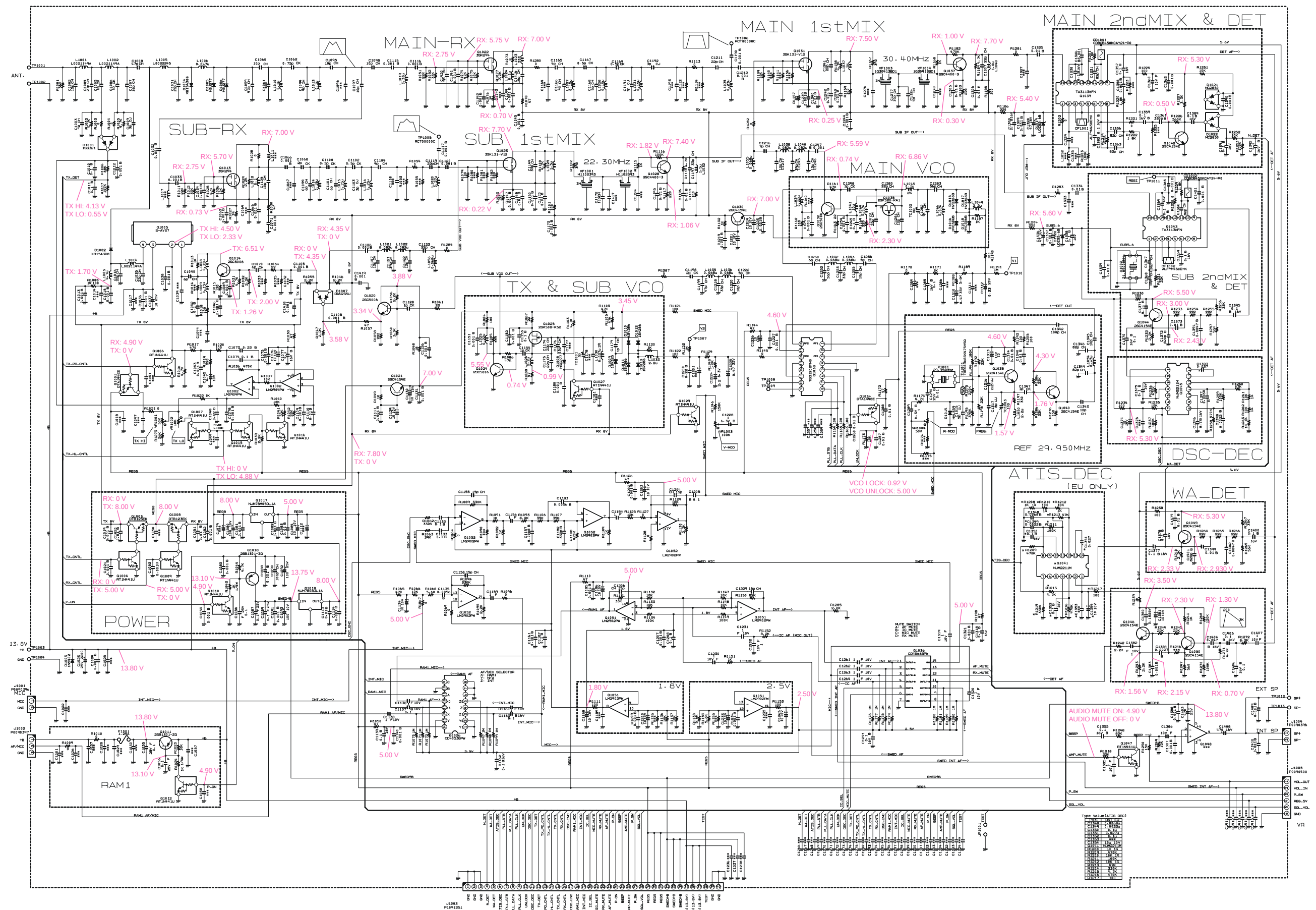
DSC Encoder Confirmation

- ☐ Setup the test equipment as shown below.



- ☐ Set the channel to CH70.
 - ☐ Press the PTT switch, confirm that the first tone deviation is 4.0 kHz ±0.3 kHz.
- Note:** In CH70 while Software Confirmation Mode, ever time you are in transmit mode, (every time you press PTT), the following test tone can be outputted:
- 1st transmission: Synthetic tone of 1300 Hz and 2100 Hz
 - 2nd transmission: 1300 Hz
 - 3rd transmission: 2100 Hz
 - 4th transmission: No Modulation
 - 5th transmission: Return to 1st transmission

This completes the Software Alignment/Confirmation Mode. Turn the transceiver’s power off, then disconnect the Jumper from the TEST points (JP1001).

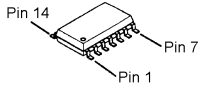
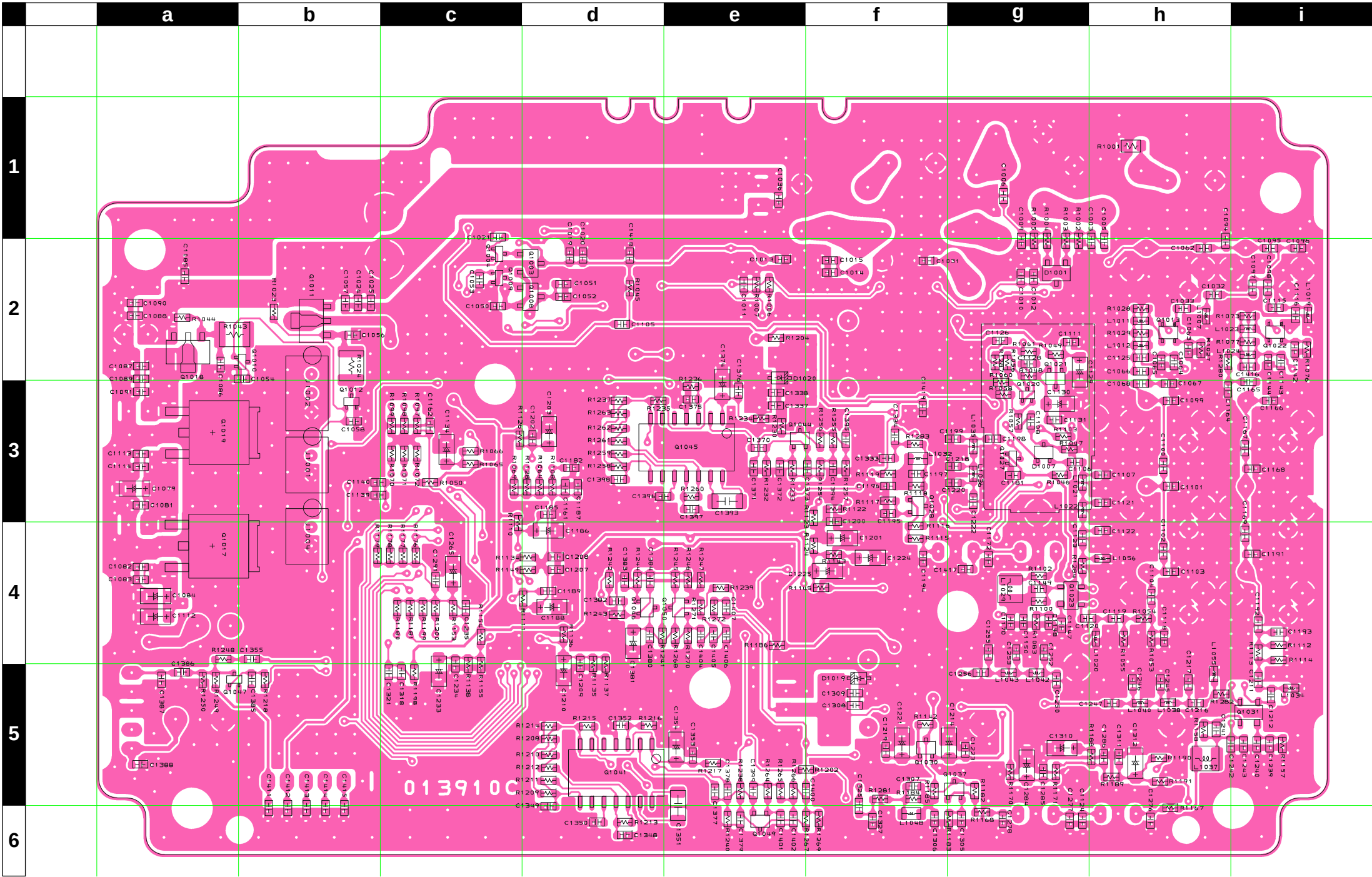


MAIN Unit (Lot. 1~6)

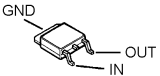
Note

MAIN Unit (Lot. 1~6)

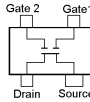
Parts Layout (Side B)



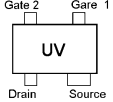
NJM2211M
(Q1041, 1045)



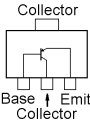
NJM7808DL1A
(Q1019)
NJM78M05DL1A
(Q1017)



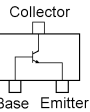
3SK131 (V12)
(Q1023, 1031)



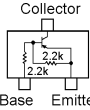
3SK294 (UV)
(Q1013, 1022)



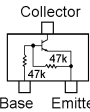
2SB1301 (ZQ)
(Q1011, 1018)



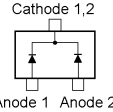
2SC4154 (LE)
(Q1021, 1030, 1044,
1046, 1049, 1050)
2SC4400 (RT4)
(Q1028, 1037)
2SC5006 (24)
(Q1020)



DTB123EK (F12)
(Q1003, 1008)



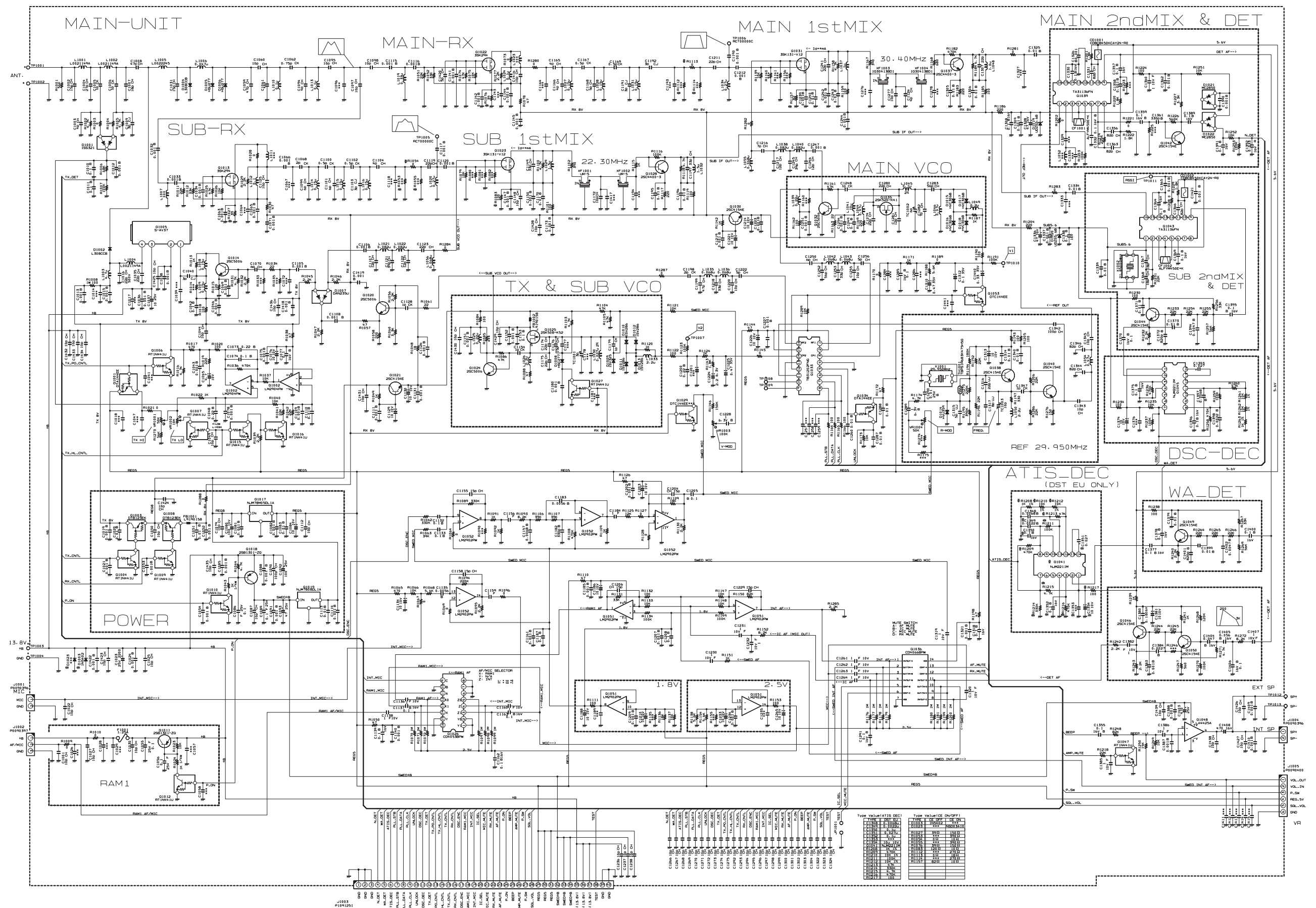
RT1N441U (N3)
(Q1004, 1009, 1010,
1012, 1027, 1047)



1SS321 (F9)
(Q1001)
DAN235U (M)
(Q1007)

MAIN Unit (Lot. 7~)

Circuit Diagram

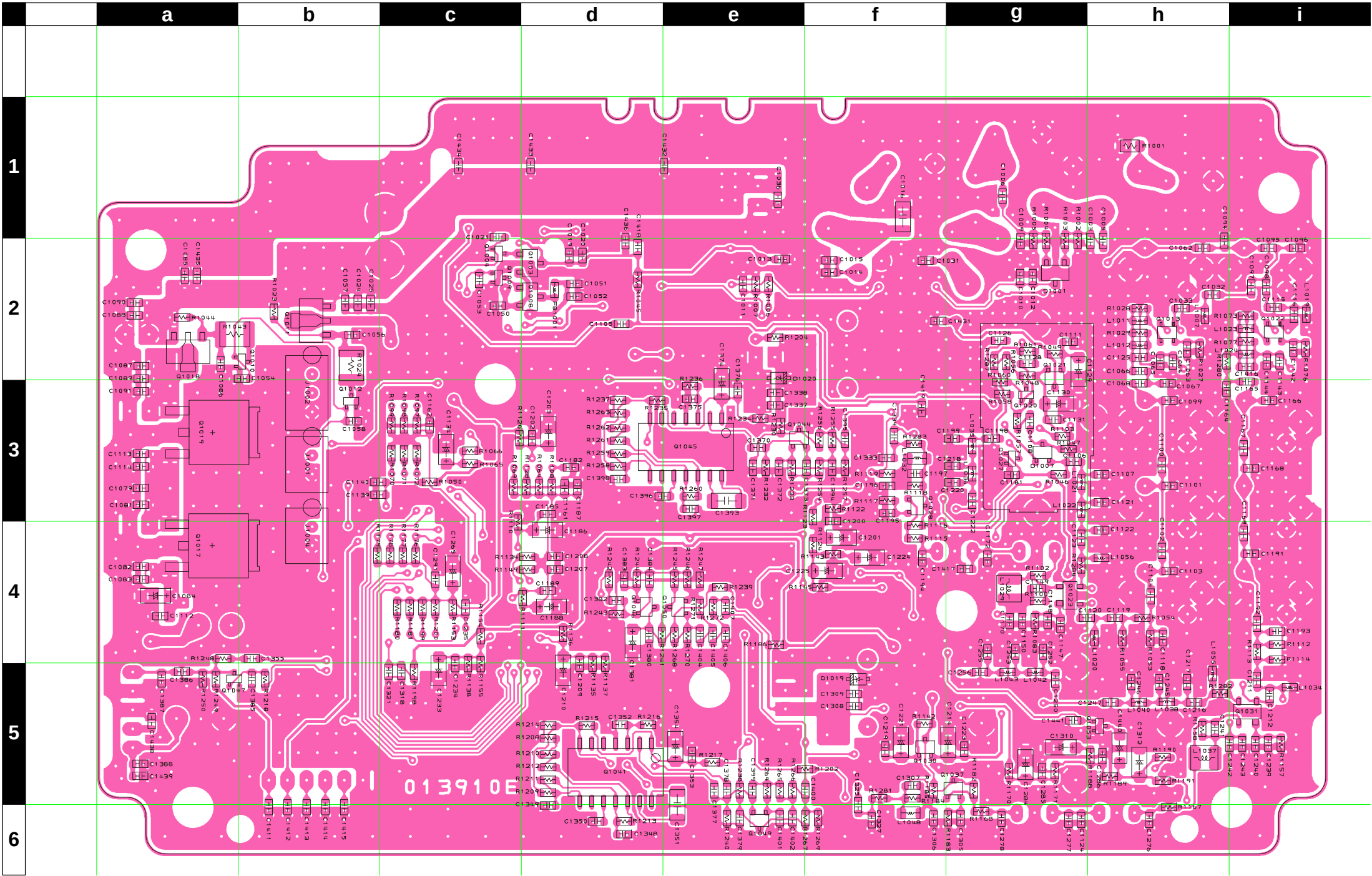


MAIN Unit (Lot. 7~)

Note

MAIN Unit (Lot. 7~)

Parts Layout (Side B)



NJM2211M
(Q1041, 1045)

NJM7808DL1A
(Q1019)
NJM78M05DL1A
(Q1017)

3SK131 (V12)
(Q1023, 1031)

3SK294 (UV)
(Q1013, 1022)

2SB1301 (ZQ)
(Q1011, 1018)

2SC4154 (LE) (Lot. 1~18)
2SC4081 (Lot. 19~)
(Q1021, 1030, 1044, 1046, 1049, 1050)
2SC4400 (RT4)
(Q1028, 1037)
2SC5006 (24)
(Q1020)

DTB123EK (F12)
(Q1003, 1008)

RT1N441U (N3) (Lot. 1~18)
DTC144EE (26) (Lot. 19~)
(Q1004, 1009, 1010, 1012, 1027, 1047)
(Q1053; Lot. 7~)

1SS321 (F9)
(Q1001)
DAN235U (M)
(Q1007)

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
PCB with Components						CB3333001 CB3333002 CB3333003	USA EUROPE EXP			
Printed Circuit Board						FR013910C FR013910E		1- 7-		
C 1001	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	H3
C 1002	CERAMIC CAP.	15pF	50V	CH	CHU5 150J6	K02179104		1-	A	B1
C 1003	CHIP CAP.	4pF	50V	CH	GRM1882C1H4R0CZ01D	K22174205		1-	B	h2
C 1004	CERAMIC CAP.	27pF	50V	CH	CHU5 270J6	K02179107		1-	A	B1
C 1005	CHIP CAP.	1pF	50V	CK	GRM1884C1H1R0CZ01D	K22174202		1-	B	h2
C 1006	CHIP CAP.	1pF	50V	CK	GRM1884C1H1R0CZ01D	K22174202		1-	B	g1
C 1007	CERAMIC CAP.	18pF	50V	CH	CHU5 180J6	K02179105		1-	A	C1
C 1008	CERAMIC CAP.	47pF	50V	CH	CHU5 470J6	K02179110		1-	A	C1
C 1009	CHIP CAP.	3pF	50V	CJ	GRM1883C1H3R0CZ01D	K22174204		1-	B	g2
C 1010	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	g2
C 1011	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	e2
C 1012	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	g2
C 1013	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	e2
C 1015	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	f2
C 1016	CERAMIC CAP.	22pF	50V	CH	CHU5 220J6	K02179106		1-	B	f1
C 1016	CHIP CAP.	22pF	500V	CH	1206N220J501LT	K22278213		7-	B	f1
C 1019	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	d2
C 1020	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	d2
C 1021	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	c1
C 1022	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	H3
C 1023	AL.ELECTRO.CAP.	2200uF	25V		RE3-25V222MI6#	K40149055		1-	A	H2
C 1023	AL.ELECTRO.CAP.	2200uF	25V		UVR1E222MHD	K40149078		19-	A	H2
C 1024	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	b2
C 1025	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B	b2
C 1027	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	H2
C 1030	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	G2
C 1031	CHIP CAP.	15pF	50V	CH	GRM1882C1H150JA01D	K22174215		1-	B	f2
C 1032	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	h2
C 1033	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	h2
C 1034	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	B2
C 1035	CERAMIC CAP.	22pF	50V	CH	CHU5 220J6	K02179106		1-	A	C1
C 1036	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	e1
C 1037	AL.ELECTRO.CAP.	10uF	25V		RC2-25V100ME1#	K40149012		1-	A	E1
C 1037	AL.ELECTRO.CAP.	10uF	25V		USA1E100MDD	K40149076		19-	A	E1
C 1038	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	E1
C 1040	CHIP CAP.	3pF	50V	CJ	GRM1883C1H3R0CZ01D	K22174204		1-	A	F1
C 1042	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	F1
C 1043	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	E1
C 1044	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F1
C 1045	CHIP TA.CAP.	4.7uF	10V		TEESVA1A475M8R	K78100022		1-	A	F1
C 1046	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	G1
C 1048	CHIP CAP.	0.22uF	10V	B	GRM188B11A224KA01D	K22104801		1-	A	E2
C 1048	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		25-	A	E2
C 1049	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F2
C 1050	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B	c2
C 1051	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	d2
C 1052	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	d2
C 1053	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	c2
C 1054	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	b2
C 1055	CHIP CAP.	0.1uF	25V	F	GRM188F11E104ZA01D	K22145001		1-	A	G2
C 1056	CHIP CAP.	0.1uF	25V	F	GRM188F11E104ZA01D	K22145001		1-	B	b2
C 1059	CHIP CAP.	47pF	50V	CH	GRM1882C1H470JA01D	K22174227		1-	A	B2
C 1060	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		1-	A	B2
C 1062	CHIP CAP.	0.75pF	50V	CK	GRM1884C1HR75CZ01D	K22174260		1-	B	h2
C 1063	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	h2
C 1065	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	h2
C 1066	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	h2
C 1068	CHIP CAP.	2pF	50V	CK	GRM1884C1H2R0CZ01D	K22174203		1-	B	h3
C 1069	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	F1
C 1070	CHIP CAP.	6pF	50V	CH	GRM1882C1H6R0DZ01D	K22174207		1-	A	F1
C 1071	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	B2
C 1073	CHIP CAP.	0.22uF	10V	B	GRM188B11A224KA01D	K22104801		1-	A	E1
C 1074	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	E1
C 1075	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	E1
C 1076	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	A	E1
C 1077	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	E1
C 1078	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	E2
C 1079	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B	a3

MAIN Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1080	AL.ELECTRO.CAP.	100uF	10V		RE2-10V101ME3#	K40109024		1-	A	I4
C 1080	AL.ELECTRO.CAP.	100uF	16V		UVR1C101MDD	K40129104		19-	A	I4
C 1081	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	a3
C 1082	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	a4
C 1083	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	a4
C 1084	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	a4
C 1085	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	a2
C 1086	CHIP CAP.	0.1uF	25V	F	GRM188F11E104ZA01D	K22145001		1-	B	a2
C 1087	CHIP CAP.	0.1uF	25V	F	GRM188F11E104ZA01D	K22145001		1-	B	a2
C 1087	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B	a2
C 1088	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	a2
C 1089	CHIP CAP.	0.1uF	25V	F	GRM188F11E104ZA01D	K22145001		1-	B	a2
C 1090	CHIP CAP.	100pF	50V	CH	GRM1882C1H101JA01D	K22174235		1-	B	a2
C 1091	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	a3
C 1092	AL.ELECTRO.CAP.	100uF	25V		RE2-25V101MH3#	K40149028		1-	A	I2
C 1092	AL.ELECTRO.CAP.	100uF	25V		UVR1E101MED	K40149080		19-	A	I2
C 1093	AL.ELECTRO.CAP.	100uF	10V		RE2-10V101ME3#	K40109024		1-	A	I3
C 1093	AL.ELECTRO.CAP.	47uF	25V		UVR1E470MDD6 47UF	K40149046		6-	A	I3
C 1094	CHIP CAP.	4pF	50V	CH	GRM1882C1H4R0CZ01D	K22174205		1-	B	h2
C 1095	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		1-	B	i2
C 1097	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		1-	B	i2
C 1098	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		1-	B	i2
C 1099	CHIP CAP.	6pF	50V	CH	GRM1882C1H6R0DZ01D	K22174207		1-	B	h3
C 1100	CHIP CAP.	0.5pF	50V	CK	GRM1884C1HR50CZ01D	K22174201		1-	B	h3
C 1101	CHIP CAP.	6pF	50V	CH	GRM1882C1H6R0DZ01D	K22174207		1-	B	h3
C 1102	CHIP CAP.	0.5pF	50V	CK	GRM1884C1HR50CZ01D	K22174201		1-	B	h4
C 1103	CHIP CAP.	3pF	50V	CJ	GRM1883C1H3R0CZ01D	K22174204		1-	B	h4
C 1104	CHIP CAP.	4pF	50V	CH	GRM1882C1H4R0CZ01D	K22174205		1-	B	h4
C 1105	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	d2
C 1106	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	g3
C 1107	CHIP CAP.	12pF	50V	CH	GRM1882C1H120JA01D	K22174213		1-	B	h3
C 1108	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	g3
C 1109	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	E2
C 1110	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	A	E2
C 1111	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	g2
C 1112	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B	a4
C 1113	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	a3
C 1114	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	a3
C 1115	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	i2
C 1116	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	i2
C 1117	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	B4
C 1119	CHIP CAP.	22pF	50V	CH	GRM1882C1H220JA01D	K22174219		1-	B	h4
C 1120	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	g4
C 1121	CHIP CAP.	39pF	50V	CH	GRM1882C1H390JA01D	K22174225		1-	B	h3
C 1122	CHIP CAP.	12pF	50V	CH	GRM1882C1H120JA01D	K22174213		1-	B	h4
C 1123	CHIP CAP.	22pF	50V	CH	GRM1882C1H220JA01D	K22174219		1-	B	g4
C 1124	CHIP CAP.	4pF	50V	CH	GRM1882C1H4R0CZ01D	K22174205		1-	B	g6
C 1125	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		1-	B	h2
C 1126	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	g2
C 1128	CHIP CAP.	1pF	50V	CK	GRM1884C1H1R0CZ01D	K22174202		1-	B	g2
C 1129	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	g2
C 1130	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	g3
C 1131	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	g3
C 1132	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	F3
C 1133	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	F4
C 1134	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	c3
C 1135	CHIP CAP.	0.0056uF	50V	B	GRM188B11H562KA01D	K22174818		1-	A	F3
C 1136	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	G3
C 1137	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	G3
C 1138	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	G3
C 1139	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	b3
C 1140	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	b3
C 1141	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	A2
C 1142	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	i2
C 1144	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	i2
C 1145	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	A2
C 1147	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	g4
C 1148	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	g4
C 1148	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B	g4
C 1149	CHIP CAP.	33pF	50V	CH	GRM1882C1H330JA01D	K22174223		1-	B	g4
C 1150	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	g4
C 1151	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	B2
C 1152	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	B2

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1153	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	B2
C 1154	CHIP CAP.	1pF	50V	CK	GRM1884C1H1R0CZ01D	K22174202		1-	A	C2
C 1155	CHIP CAP.	15pF	50V	CH	GRM1882C1H150JA01D	K22174215		1-	A	F4
C 1156	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	F3
C 1157	CHIP CAP.	0.0068uF	50V	B	GRM188B11H682KA01D	K22174834		1-	A	F3
C 1158	CHIP CAP.	15pF	50V	CH	GRM1882C1H150JA01D	K22174215		1-	A	F3
C 1159	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	F3
C 1160	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	G3
C 1161	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	d3
C 1162	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	c3
C 1163	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	G3
C 1165	CHIP CAP.	4pF	50V	CH	GRM1882C1H4R0CZ01D	K22174205		1-	B	i2
C 1166	CHIP CAP.	4pF	50V	CH	GRM1882C1H4R0CZ01D	K22174205		1-	B	i3
C 1167	CHIP CAP.	0.5pF	50V	CK	GRM1884C1HR50CZ01D	K22174201		1-	B	i3
C 1168	CHIP CAP.	5pF	50V	CH	GRM1882C1H5R0CZ01D	K22174206		1-	B	i3
C 1169	CHIP CAP.	0.5pF	50V	CK	GRM1884C1HR50CZ01D	K22174201		1-	B	i4
C 1170	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	g4
C 1172	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		1-	B	g4
C 1173	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	C4
C 1174	CHIP CAP.	22pF	50V	CH	GRM1882C1H220JA01D	K22174219		1-	A	C3
C 1174	CHIP CAP.	18pF	50V	CH	GRM1882C1H180JA01D	K22174217		3-	A	C3
C 1174	CHIP CAP.	22pF	50V	CH	GRM1882C1H220JA01D	K22174219		7-	A	C3
C 1174	CHIP CAP.	18pF	50V	CH	GRM1882C1H180JA01D	K22174217		11-	A	C3
C 1175	CHIP CAP.	22pF	50V	CH	GRM1882C1H220JA01D	K22174219		1-	A	C2
C 1176	CHIP CAP.	15pF	50V	CH	GRM1882C1H150JA01D	K22174215		1-	A	B3
C 1179	CHIP CAP.	1pF	50V	CK	GRM1884C1H1R0CZ01D	K22174202		1-	A	B3
C 1180	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	C3
C 1182	CHIP CAP.	330pF	50V	B	GRM188B11H331KD01D	K22174820		1-	B	d3
C 1183	CHIP CAP.	0.0056uF	50V	B	GRM188B11H562KA01D	K22174818		1-	A	F3
C 1184	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	F3
C 1185	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	d3
C 1186	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	d4
C 1187	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	d3
C 1188	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	d4
C 1190	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	A5
C 1191	CHIP CAP.	3pF	50V	CJ	GRM1883C1H3R0CZ01D	K22174204		1-	B	i4
C 1192	CHIP CAP.	3pF	50V	CJ	GRM1883C1H3R0CZ01D	K22174204		1-	B	i4
C 1195	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	f3
C 1196	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	f3
C 1197	CHIP CAP.	33pF	50V	CH	GRM1882C1H330JA01D	K22174223		1-	B	f3
C 1198	CHIP CAP.	2pF	50V	CK	GRM1884C1H2R0CZ01D	K22174203		1-	B	g3
C 1199	CHIP CAP.	47pF	50V	CH	GRM1882C1H470JA01D	K22174227		1-	B	g3
C 1200	CHIP CAP.	0.22uF	10V	B	GRM188B11A224KA01D	K22104801		1-	B	f3
C 1202	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	d3
C 1203	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	d3
C 1204	CHIP CAP.	15pF	50V	CH	GRM1882C1H150JA01D	K22174215		1-	A	F3
C 1205	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	F2
C 1206	CHIP CAP.	15pF	50V	CH	GRM1882C1H150JA01D	K22174215		1-	A	F4
C 1207	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	d4
C 1208	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	d4
C 1209	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	d4
C 1210	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	d5
C 1211	CHIP CAP.	22pF	50V	CH	GRM1882C1H220JA01D	K22174219		1-	B	i5
C 1212	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	i5
C 1214	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	g5
C 1216	CHIP CAP.	7pF	50V	CH	GRM1882C1H7R0DZ01D	K22174208		1-	B	h5
C 1217	CHIP CAP.	12pF	50V	CH	GRM1882C1H120JA01D	K22174213		1-	B	h5
C 1218	CHIP CAP.	33pF	50V	CH	GRM1882C1H330JA01D	K22174223		1-	B	g3
C 1219	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	f5
C 1220	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		1-	B	g3
C 1221	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	f5
C 1222	CHIP CAP.	5pF	50V	CH	GRM1882C1H5R0CZ01D	K22174206		1-	B	g3
C 1223	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	g5
C 1224	CHIP TA.CAP.	2.2uF	6.3V		TEESVA0J225M8R	K78080009		1-	B	f4
C 1225	CHIP TA.CAP.	0.47uF	35V		TEESVA1V474M8R	K78160029		1-	B	f4
C 1226	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	A	D3
C 1227	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	D4
C 1228	CHIP CAP.	1uF	6.3V	B	GRM188B10J105KA01D	K22084801		1-	A	E3
C 1229	CHIP CAP.	15pF	50V	CH	GRM1882C1H150JA01D	K22174215		1-	A	F4
C 1230	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	F4
C 1231	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	F4
C 1232	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	F4
C 1233	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	c5

MAIN Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1234	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	c4
C 1236	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	G5
C 1237	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	G5
C 1238	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	G5
C 1239	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	i5
C 1240	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	i5
C 1241	CHIP CAP.	22pF	50V	CH	GRM1882C1H220JA01D	K22174219		1-	B	h5
C 1242	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	h5
C 1243	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	i5
C 1244	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	A5
C 1245	CHIP CAP.	39pF	50V	CH	GRM1882C1H390JA01D	K22174225		1-	B	h5
C 1246	CHIP CAP.	12pF	50V	CH	GRM1882C1H120JA01D	K22174213		1-	B	h5
C 1247	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	h5
C 1248	CHIP CAP.	1pF	50V	CK	GRM1884C1H1R0CZ01D	K22174202		1-	A	C5
C 1249	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	B5
C 1250	CHIP CAP.	6pF	50V	CH	GRM1882C1H6R0DZ01D	K22174207		1-	B	g5
C 1251	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	C5
C 1252	CHIP CAP.	56pF	50V	CH	GRM1882C1H560JA01D	K22174229		1-	B	g4
C 1253	CHIP CAP.	33pF	50V	CH	GRM1882C1H330JA01D	K22174223		1-	B	g4
C 1254	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	B5
C 1255	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		1-	B	g4
C 1256	CHIP CAP.	5pF	50V	CH	GRM1882C1H5R0CZ01D	K22174206		1-	B	g5
C 1260	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	A	D4
C 1261	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	G4
C 1262	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	G4
C 1263	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	G4
C 1264	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	G4
C 1265	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	c4
C 1266	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	E6
C 1267	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	E5
C 1268	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F6
C 1269	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F5
C 1270	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F6
C 1271	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F5
C 1272	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F6
C 1273	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F5
C 1274	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F6
C 1275	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F5
C 1277	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		1-	B	g6
C 1279	CHIP CAP.	22pF	50V	CH	GRM1882C1H220JA01D	K22174219		1-	A	C5
C 1280	CHIP CAP.	22pF	50V	CH	GRM1882C1H220JA01D	K22174219		1-	A	B5
C 1281	CHIP CAP.	12pF	50V	CH	GRM1882C1H120JA01D	K22174213		1-	A	B5
C 1282	CHIP CAP.	7pF	50V	CH	GRM1882C1H7R0DZ01D	K22174208		1-	A	B5
C 1283	CHIP CAP.	56pF	50V	CH	GRM1882C1H560JA01D	K22174229		1-	A	B5
C 1285	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	g5
C 1287	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	A	D4
C 1288	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	A	D4
C 1289	CHIP CAP.	1uF	6.3V	B	GRM188B10J105KA01D	K22084801		1-	A	E3
C 1290	CHIP CAP.	0.01uF	25V	B	GRM39B103M25PT	K22144802		1-	A	E3
C 1290	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		17-	A	E3
C 1291	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	c4
C 1292	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F6
C 1293	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F5
C 1294	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F6
C 1295	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F5
C 1296	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F6
C 1297	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F5
C 1298	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F6
C 1299	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F5
C 1300	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F6
C 1301	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F5
C 1302	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F6
C 1303	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F5
C 1304	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	G6
C 1305	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	g6
C 1306	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	f6
C 1307	CHIP CAP.	22pF	50V	CH	GRM1882C1H220JA01D	K22174219		1-	B	f5
C 1308	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	f5
C 1309	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	f5
C 1310	CHIP TA.CAP.	0.47uF	35V		TEESVA1V474M8R	K78160029		1-	B	g5
C 1312	CHIP TA.CAP.	0.33uF	20V		TEMSVA21D334M-8R	K78130018		1-	B	h5
C 1312	CHIP TA.CAP.	0.1uF	35V		TEESVA1V104M8R	K78160025		7-31	B	h5
C 1313	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	A	E3

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1314	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	A	E4
C 1315	CHIP CAP.	5pF	50V	UJ	GRM1883U1H5R0CZ01D	K22174305		1-	A	E3
C 1315	CHIP CAP.	4pF	50V	CH	GRM1882C1H4R0CZ01D	K22174205		19-	A	E3
C 1316	CHIP CAP.	22pF	50V	UJ	GRM1883U1H220JZ01D	K22174316		1-	A	E3
C 1316	CHIP CAP.	22pF	50V	CH	GRM1882C1H220JA01D	K22174219		19-	A	E3
C 1317	CHIP CAP.	8pF	50V	UJ	GRM1883U1H8R0DZ01D	K22174308		1-	A	D3
C 1317	CHIP CAP.	8pF	50V	CH	GRM1882C1H8R0DZ01D	K22174209		19-	A	D3
C 1318	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	c5
C 1319	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	G4
C 1320	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	G4
C 1321	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	c5
C 1322	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	G5
C 1323	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	G6
C 1324	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	G5
C 1325	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	f5
C 1326	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	C5
C 1328	AL.ELECTRO.CAP.	47uF	16V		RE2-16V470ME3#	K40129054		1-	A	D5
C 1328	AL.ELECTRO.CAP.	47uF	16V		UVR1C470MDD	K40129107		19-	A	D5
C 1330	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	C5
C 1331	CHIP CAP.	82pF	50V	CH	GRM1882C1H820JA01D	K22174233		1-	A	C5
C 1332	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	D6
C 1334	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	f3
C 1336	AL.ELECTRO.CAP.	47uF	16V		RE2-16V470ME3#	K40129054		1-	A	D2
C 1336	AL.ELECTRO.CAP.	47uF	16V		UVR1C470MDD	K40129107		19-	A	D2
C 1337	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	e3
C 1338	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	e3
C 1339	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	A	D3
C 1340	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	A	E4
C 1342	CHIP CAP.	100pF	50V	CH	GRM1882C1H101JA01D	K22174235		1-	A	E4
C 1343	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		1-	A	E4
C 1344	CHIP CAP.	82pF	50V	CH	GRM1882C1H820JA01D	K22174233		1-	A	E4
C 1345	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		1-	A	E4
C 1346	CHIP CAP.	82pF	50V	CH	GRM1882C1H820JA01D	K22174233		1-	A	E4
C 1347	CHIP CAP.	1pF	50V	CK	GRM1884C1H1R0CZ01D	K22174202		1-	A	E4
C 1348	CHIP CAP.	0.0068uF	50V	B	GRM188B11H682KA01D	K22174834	EUROPE	1-	B	d6
C 1349	CHIP CAP.	0.0022uF	50V	B	GRM188B11H222KA01D	K22174822	EUROPE	1-	B	d5
C 1350	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805	EUROPE	1-	B	d6
C 1351	FILM CAP.	0.027uF	16V		ECHU1C273JX5	K57120041	EUROPE	1-	B	e5
C 1352	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805	EUROPE	1-	B	d5
C 1354	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028	EUROPE	1-	B	e5
C 1355	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	b4
C 1356	CHIP CAP.	82pF	50V	CH	GRM1882C1H820JA01D	K22174233		1-	A	D5
C 1356	CHIP CAP.	180pF	50V	CH	GRM1882C1H181JA01D	K22174241		7-	A	D5
C 1357	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	D5
C 1358	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	D5
C 1359	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	E6
C 1360	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	A	E5
C 1361	CHIP CAP.	330pF	50V	B	GRM188B11H331KD01D	K22174820		1-	A	E6
C 1362	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	E5
C 1363	CHIP CAP.	82pF	50V	CH	GRM1882C1H820JA01D	K22174233		1-	A	D5
C 1363	CHIP CAP.	180pF	50V	CH	GRM1882C1H181JA01D	K22174241		7-	A	D5
C 1364	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	C3
C 1365	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	C3
C 1366	CHIP CAP.	82pF	50V	CH	GRM1882C1H820JA01D	K22174233		1-	A	C3
C 1367	CHIP CAP.	18pF	50V	CH	GRM1882C1H180JA01D	K22174217		1-	A	D3
C 1368	CHIP CAP.	18pF	50V	CH	GRM1882C1H180JA01D	K22174217		1-	A	D3
C 1369	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	D3
C 1370	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	e3
C 1371	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	e3
C 1372	CHIP CAP.	820pF	50V	B	GRM188B11H821KA01D	K22174808		1-	B	e3
C 1373	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	f3
C 1374	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	e3
C 1375	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	e3
C 1377	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	e5
C 1378	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	e5
C 1379	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	e6
C 1380	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	d4
C 1381	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	d4
C 1382	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	B	d4
C 1383	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	d4
C 1384	CHIP CAP.	0.0027uF	50V	B	GRM188B11H272KA01D	K22174814		1-	B	d4
C 1385	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	B	b5
C 1386	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	B	a5

MAIN Unit

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REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1387	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	a5
C 1388	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	a5
C 1389	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	E5
C 1390	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	E5
C 1391	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	E6
C 1392	CHIP CAP.	0.033uF	16V	R	GRM188R11C333KA01D	K22124801		1-	A	E6
C 1393	FILM CAP.	0.027uF	16V		ECHU1C273JX5	K57120041		1-	B	e3
C 1394	CHIP CAP.	0.0047uF	50V	B	GRM188B11H472KA01D	K22174833		1-	B	f3
C 1395	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	f3
C 1396	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	d3
C 1397	CHIP CAP.	0.0068uF	50V	B	GRM188B11H682KA01D	K22174834		1-	B	e3
C 1398	CHIP CAP.	0.0022uF	50V	B	GRM188B11H222KA01D	K22174822		1-	B	d3
C 1399	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B	e5
C 1400	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	e5
C 1401	CHIP CAP.	820pF	50V	B	GRM188B11H821KA01D	K22174808		1-	B	e6
C 1402	CHIP CAP.	0.0047uF	50V	B	GRM188B11H472KA01D	K22174833		1-	B	e6
C 1403	AL.ELECTRO.CAP.	470uF	25V		RE3-25V471MH3#	K40149044		1-	A	I5
C 1403	AL.ELECTRO.CAP.	470uF	25V		UVR1E471MPD	K40149077		19-	A	I5
C 1404	CHIP CAP.	0.047uF	16V	B	GRM39B473K16PT	K22124804		1-	B	e4
C 1404	CHIP CAP.	0.047uF	25V	B	GRM188B11E473KA01D	K22144811		17-	B	e4
C 1405	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	e4
C 1405	CHIP CAP.	0.056uF	16V	B	GRM188B11C563KA01D	K22124807		3-	B	e4
C 1406	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B	e4
C 1407	CHIP CAP.	1uF	10V	F	GRM188F11A105ZA01D	K22105001		1-	B	e4
C 1408	AL.ELECTRO.CAP.	470uF	16V		RE3-16V471MG3#	K40129066		1-	A	H4
C 1408	AL.ELECTRO.CAP.	470uF	16V		UVR1C471MPD	K40129108		19-	A	H4
C 1409	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	H4
C 1410	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	H4
C 1416	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		1-	B	i2
C 1418	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	d2
C 1419	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	f3
C 1420	CHIP CAP.	5pF	50V	CH	GRM1882C1H5R0CZ01D	K22174206		1-	A	A2
C 1421	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	A	D2
C 1422	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		7-	A	H1
C 1423	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	H1
C 1424	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	F2
C 1425	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	E1
C 1426	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	H3
C 1427	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	H4
C 1428	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	B4
C 1429	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	B2
C 1430	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	A	B2
C 1431	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B	f2
C 1432	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B	d1
C 1433	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B	d1
C 1434	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B	c1
C 1435	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B	a2
C 1436	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B	d2
C 1438	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B	a5
C 1439	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B	a5
C 1440	CHIP TA.CAP.	0.33uF	35V		TEESVA1V334M8R	K78160028		7-	B	h5
CD1001	CERAMIC DISC				CDBC450KCAY24-R0	H7901340		1-	A	C5
CD1002	CERAMIC DISC				CDBC450KCAY24-R0	H7901340		1-	A	D2
CF1001	CERAMIC FILTER				ALFYM450E=K	H3900535		1-	A	D4
CF1001	CERAMIC FILTER				LTM450EW	H3900574		18-	A	D4
CF1002	CERAMIC FILTER				ALFYM450E=K	H3900535		1-	A	D2
CF1002	CERAMIC FILTER				LTM450EW	H3900574		18-	A	D2
D 1001	DIODE				1SS321(TE85R.F)	G2070076		1-	B	g2
D 1002	DIODE				XB15A308A2GB	G2090742		1-	A	C1
D 1002	DIODE				L308CCB	G2090792		6-	A	C1
D 1003	DIODE				1N5402	G2090778		1-6	A	G2
D 1003	DIODE				1N5402	G2090778		7-	A	G2
D 1004	DIODE				XB15A308A2GB	G2090742		1-	A	D2
D 1004	DIODE				L308CCB	G2090792		6-	A	D2
D 1005	DIODE				HSU277TRF-E	G2070118		1-	A	B2
D 1006	DIODE				HSU277TRF-E	G2070118		1-	A	B2
D 1007	DIODE				DAN235U TL	G2070176		1-	B	g3
D 1008	DIODE				HSC277TRF-E	G2070584		1-	A	C3
D 1009	DIODE				1SV325(TPH3.F)	G2070848		1-	A	B3
D 1010	DIODE				1SV286(TPH3.F)	G2070610		1-	A	C3
D 1011	DIODE				1SV286(TPH3.F)	G2070610		1-	A	C3
D 1012	DIODE				1SV286(TPH3.F)	G2070610		1-	A	C3
D 1013	DIODE				1SV286(TPH3.F)	G2070610		1-	A	C3

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REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
D 1014	DIODE				HVU359 TRF-E	G2070452		1-	A	E3
D 1015	DIODE				HVC306B TRU-E	G2070918		1-	A	B5
D 1016	DIODE				HVC306B TRU-E	G2070918		1-	A	B5
D 1017	DIODE				HVC306B TRU-E	G2070918		1-	A	B5
D 1018	DIODE				HVC306B TRU-E	G2070918		1-	A	B5
D 1019	DIODE				UDZS TE-17 5.6B	G2070910		1-	B	f5
D 1020	DIODE				UDZS TE-17 5.6B	G2070910		1-	B	e2
D 1021	DIODE				MC2850-T111-1	G2070704		1-	A	E5
D 1021	DIODE				DAN217U T106	G2071236		19-	A	E5
D 1022	DIODE				MC2850-T111-1	G2070704		1-	A	E5
D 1022	DIODE				DAN217U T106	G2071236		19-	A	E5
D 1023	DIODE				NSD03A10-TE16L3	G2070272	W/ CE LABEL	7-	A	G2
F 1001	CHIP FUSE	1.25A			FCC16 132ABTP	Q0000109		1-	A	G2
FB1001	FERRITE BEADS				FBMH1608HM102-T	L9190158		7-	B	d2
FB1002	FERRITE BEADS				FBMH1608HM102-T	L9190158		7-	A	B2
J 1001	CONNECTOR				B2B-PH-K-S(LF)(SN)	P0090396		1-	B	b3
J 1002	CONNECTOR				B3B-PH-K-S(LF)(SN)	P0090397		1-	B	b2
J 1003	CONNECTOR				40FLT-SM2-TB(LF)(SN)(M)	P1091251		1-	A	F5
J 1004	CONNECTOR				B2B-PH-K-S(LF)(SN)	P0090396		1-	B	b4
J 1005	CONNECTOR				B6B-PH-K-S(LF)(SN)	P0090400		1-	A	H5
L 1001	COIL A1				4.5T3.5D0.8UEW R	L0021149A		1-	A	B1
L 1002	COIL A1				4.5T3.5D0.8UEW R	L0021149A		1-	A	B1
L 1003	M.RFC	4.7uH			LAL03NA4R7K	L1190203		1-	A	D2
L 1004	COIL A1				4.5T3.5D0.8UEW R	L0021149A		1-	A	D1
L 1005	COIL A1				3.5T4.0D0.8UEW R	L0022245		1-	A	C1
L 1006	M.RFC	0.047uH			HK1608 47NJ-T	L1690524		1-	A	B2
L 1008	M.RFC	0.15uH			HK1608 R15J-T	L1690938		1-	A	F1
L 1009	M.RFC	0.15uH			HK1608 R15J-T	L1690938		1-	A	F1
L 1010	COIL	0.1uH			#E528SNAS-100075	L0190269		1-	A	A2
L 1012	M.RFC	0.1uH			LL1608-FSR10J	L1690921		1-	B	h2
L 1013	COIL	0.1uH			#E528SNAS-100075	L0190269		1-	A	A2
L 1014	COIL	0.15uH			#E528SNAS-100076	L0190270		1-	A	A3
L 1015	COIL	0.15uH			#E528SNAS-100076	L0190270		1-	A	A4
L 1016	COIL	0.15uH			#E528SNAS-100076	L0190270		1-	A	A4
L 1019	M.RFC	0.33uH			LK1608 R33K-T	L1690412		1-	B	i2
L 1020	M.RFC	0.27uH			LK1608 R27K-T	L1690411		1-	B	h4
L 1021	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		1-	B	g3
L 1022	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		1-	B	g3
L 1024	M.RFC	0.1uH			HK1608 R10J-T	L1690528		1-	B	i2
L 1025	M.RFC	0.22uH			HK1608 R22J-T	L1690940		1-	A	C2
L 1026	M.RFC	2.2uH			LK1608 2R2K-T	L1690634		1-	A	C2
L 1027	COIL	0.15uH			#E528SNAS-100076	L0190270		1-	A	A3
L 1028	COIL	0.15uH			#E528SNAS-100076	L0190270		1-	A	A4
L 1029	CHIP COIL	1.5uH		10%	C2520C-1R5K-RK	L1690729		1-	B	g4
L 1030	M.RFC	0.027uH		2%	C2012C-27NG-RA	L1690769		1-	A	C3
L 1031	COIL	0.15uH			#E528SNAS-100076	L0190270		1-	A	A4
L 1032	M.RFC	1.5uH			LK2125 1R5K-T	L1690321		1-	B	f3
L 1033	M.RFC	2.2uH			LK1608 2R2K-T	L1690634		1-	A	B3
L 1034	M.RFC	0.27uH			LK1608 R27K-T	L1690411		1-	B	i5
L 1035	M.RFC	0.068uH			HK1608 68NJ-T	L1690526		1-	B	g3
L 1036	M.RFC	0.068uH			HK1608 68NJ-T	L1690526		1-	B	g3
L 1037	CHIP COIL	1uH		10%	C2520C-1R0K-RK	L1690727		1-	B	h5
L 1038	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		1-	B	h5
L 1039	M.RFC	0.22uH			HK1608 R22J-T	L1690940		1-	A	C5
L 1040	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		1-	B	h5
L 1041	M.RFC	10uH			LK2125 100K-T	L1690331		1-	A	B5
L 1042	M.RFC	0.068uH			HK1608 68NJ-T	L1690526		1-	B	g5
L 1043	M.RFC	0.068uH			HK1608 68NJ-T	L1690526		1-	B	g5
L 1044	M.RFC	0.47uH			LK1608 R47K-T	L1690414		1-	A	C5
L 1045	M.RFC	0.1uH		2%	C2012C-R10G-RA	L1690776		1-	A	B5
L 1046	M.RFC	0.47uH			LK1608 R47K-T	L1690414		1-	A	B5
L 1048	M.RFC	1uH			LK2125 1R0K-T	L1690319		1-	B	f6
L 1049	M.RFC	2.2uH			LK1608 2R2K-T	L1690634		1-	A	B5
L 1050	M.RFC	2.2uH			LK1608 2R2K-T	L1690634		1-	A	D3
L 1054	M.RFC	0.47uH			LK1608 R47K-T	L1690414		1-	A	E4
L 1055	M.RFC	0.068uH			HK1608 68NJ-T	L1690526		1-	B	h5
L 1056	M.RFC	0.068uH			HK1608 68NJ-T	L1690526		1-	B	h4
Q 1001	TRANSISTOR				DTA144EE TL	G3070074		1-	A	E2
Q 1002	IC				LM2904PWR	G1094010		1-	A	E2
Q 1003	TRANSISTOR				DTB123EK T146	G3070022		1-	B	d2
Q 1004	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	B	c2
Q 1004	TRANSISTOR				DTC144EE TL	G3070075		19-	B	c2
Q 1005	IC				S-AV37(VX.F)	G1094216		1-		

MAIN Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
Q 1005	IC				S-AV37(VX.F)	G1094216		7-		
Q 1005	IC				S-AV37A(VX.Q)	G1094559		25-		
Q 1006	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	A	E1
Q 1006	TRANSISTOR				DTC144EE TL	G3070075		19-	A	E1
Q 1007	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	A	F2
Q 1007	TRANSISTOR				DTC144EE TL	G3070075		19-	A	F2
Q 1008	TRANSISTOR				DTB123EK T146	G3070022		1-	B	d2
Q 1009	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	B	c2
Q 1009	TRANSISTOR				DTC144EE TL	G3070075		19-	B	c2
Q 1010	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	B	b2
Q 1010	TRANSISTOR				DTC144EE TL	G3070075		19-	B	b2
Q 1011	TRANSISTOR				2SB1301-T2 ZQ/ZP	G3213017Q		1-	B	b2
Q 1012	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	B	b3
Q 1012	TRANSISTOR				DTC144EE TL	G3070075		19-	B	b3
Q 1013	FET				3SK294(TE85L)	G4802948		1-	B	h2
Q 1014	TRANSISTOR				2SC5006-T1	G3350068		1-	A	F1
Q 1015	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	A	F2
Q 1015	TRANSISTOR				DTC144EE TL	G3070075		19-	A	F2
Q 1016	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	A	E2
Q 1016	TRANSISTOR				DTC144EE TL	G3070075		19-	A	E2
Q 1017	IC				NJM78M05DL1A-TE1	G1093660		1-	B	a4
Q 1018	TRANSISTOR				2SB1301-T2 ZQ/ZP	G3213017Q		1-	B	a2
Q 1019	IC				NJM7808DL1A-TE1	G1093802		1-	B	a3
Q 1020	TRANSISTOR				2SC5006-T1	G3350068		1-	B	g3
Q 1021	TRANSISTOR				2SC4154-T111-1E	G3341548E		1-	B	g2
Q 1021	TRANSISTOR				2SC4081 T106 R	G3340818R		19-	B	g2
Q 1022	FET				3SK294(TE85L)	G4802948		1-	B	i2
Q 1023	FET				3SK131-T2B V12	G4801317B		1-	B	g4
Q 1024	TRANSISTOR				2SC5006-T1	G3350068		1-	A	C2
Q 1025	FET				2SK508-T2B K52 A	G3805087B		1-	A	B3
Q 1025	FET				2SK508-T1B-A K52	G3805088B		14-	A	B3
Q 1026	IC				CD4053BPWR	G1093864		1-	A	G3
Q 1027	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	B	g3
Q 1027	TRANSISTOR				DTC144EE TL	G3070075		19-	B	g3
Q 1028	TRANSISTOR				2SC4400-3-TL	G3344008C		1-	B	f3
Q 1029	TRANSISTOR				RT1N441U-T11-1	G3070247		1-6	A	E2
Q 1030	TRANSISTOR				2SC4154-T111-1E	G3341548E		1-	B	f5
Q 1030	TRANSISTOR				2SC4081 T106 R	G3340818R		19-	B	f5
Q 1031	FET				3SK131-T2B V12	G4801317B		1-	B	i5
Q 1032	TRANSISTOR				2SC5006-T1	G3350068		1-	A	C5
Q 1033	IC				TB31202FNG(TAPE)	G1094103		1-	A	D4
Q 1034	TRANSISTOR				DTA144EE TL	G3070074		1-	A	D4
Q 1035	FET				2SK520-T2B K41	G3805207A		1-	A	B5
Q 1036	IC				CD4066BPWR	G1093865		1-	A	G4
Q 1037	TRANSISTOR				2SC4400-3-TL	G3344008C		1-	B	g5
Q 1038	TRANSISTOR				2SC4154-T111-1E	G3341548E		1-	A	E4
Q 1038	TRANSISTOR				2SC4081 T106 R	G3340818R		19-	A	E4
Q 1039	IC				TA31136FNG(EL)	G1091605		1-	A	D5
Q 1040	TRANSISTOR				2SC4154-T111-1E	G3341548E		1-	A	E4
Q 1040	TRANSISTOR				2SC4081 T106 R	G3340818R		19-	A	E4
Q 1041	IC				NJM2211M-TE1	G1092943	EUROPE	1-	B	d5
Q 1042	TRANSISTOR				2SC4154-T111-1E	G3341548E		1-	A	E5
Q 1042	TRANSISTOR				2SC4081 T106 R	G3340818R		19-	A	E5
Q 1043	IC				TA31136FNG(EL)	G1091605		1-	A	D3
Q 1044	TRANSISTOR				2SC4154-T111-1E	G3341548E		1-	B	e3
Q 1044	TRANSISTOR				2SC4081 T106 R	G3340818R		19-	B	e3
Q 1045	IC				NJM2211M-TE1	G1092943		1-	B	e3
Q 1046	TRANSISTOR				2SC4154-T111-1E	G3341548E		1-	B	d4
Q 1046	TRANSISTOR				2SC4081 T106 R	G3340818R		19-	B	d4
Q 1047	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	B	a5
Q 1047	TRANSISTOR				DTC144EE TL	G3070075		19-	B	a5
Q 1048	IC				LA4425A-E	G1092241		1-	A	i5
Q 1049	TRANSISTOR				2SC4154-T111-1E	G3341548E		1-	B	e6
Q 1049	TRANSISTOR				2SC4081 T106 R	G3340818R		19-	B	e6
Q 1050	TRANSISTOR				2SC4154-T111-1E	G3341548E		1-	B	e4
Q 1050	TRANSISTOR				2SC4081 T106 R	G3340818R		19-	B	e4
Q 1051	IC				LM2902PWR	G1094009		1-	A	F4
Q 1052	IC				LM2902PWR	G1094009		1-	A	F3
Q 1053	TRANSISTOR				DTC144EE TL	G3070075		7-	B	h5
R 1001	CHIP RES.	56k	1/10W	5%	RMC1/10T 563J	J24205563		1-	B	h1
R 1002	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	B	g2
R 1003	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	g2
R 1004	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	g2

MAIN Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1005	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	B	g2
R 1006	CHIP RES.	68k	1/16W	5%	RMC1/16 683JATP	J24185683		1-	B	e2
R 1007	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	B	e2
R 1008	CHIP RES.	100	1W	5%	RMC1 101JTE	J24305101		1-	A	D2
R 1009	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	A	G3
R 1010	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	A	H2
R 1011	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	A	A2
R 1012	CHIP RES.	33k	1/16W	5%	RMC1/16 333JATP	J24185333		1-	A	B2
R 1013	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	A	F1
R 1015	CHIP RES.	120	1/16W	5%	RMC1/16 121JATP	J24185121		1-	A	F1
R 1016	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	A	E1
R 1017	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	A	E1
R 1018	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	F1
R 1019	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	A	E1
R 1020	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	E1
R 1021	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	F2
R 1022	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	A	E2
R 1023	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	b2
R 1024	CHIP RES.	1k	1/4W	5%	RMC1/4 102JATP	J24245102		1-	B	b2
R 1025	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	B2
R 1026	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	B2
R 1027	CHIP RES.	39	1/16W	5%	RMC1/16 390JATP	J24185390		1-6	B	h2
R 1027	CHIP RES.	150	1/16W	5%	RMC1/16 151JATP	J24185151	W/ CE LABEL	7-	B	h2
R 1027	CHIP RES.	39	1/16W	5%	RMC1/16 390JATP	J24185390	W/O CE LABEL	7-	B	h2
R 1028	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	h2
R 1029	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	h2
R 1030	CHIP RES.	47	1/16W	5%	RMC1/16 470JATP	J24185470		1-	A	B2
R 1031	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	A	F1
R 1032	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	A	F1
R 1034	CHIP RES.	22	1/16W	5%	RMC1/16 220JATP	J24185220		1-	A	G1
R 1036	CHIP RES.	470k	1/16W	5%	RMC1/16 474JATP	J24185474		1-	A	E1
R 1037	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	E2
R 1038	CHIP RES.	47	1/16W	5%	RMC1/16 470JATP	J24185470		1-	A	E1
R 1039	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	A	E2
R 1040	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	E2
R 1041	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	A	E2
R 1042	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	A	E2
R 1043	CHIP RES.	1k	1/4W	5%	RMC1/4 102JATP	J24245102		1-	B	a2
R 1044	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	B	a2
R 1045	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	d2
R 1046	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	g3
R 1047	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	g3
R 1048	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	B	g2
R 1049	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	B	g2
R 1050	CHIP RES.	47	1/16W	5%	RMC1/16 470JATP	J24185470		1-	B	c3
R 1051	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	A	A2
R 1052	CHIP RES.	33k	1/16W	5%	RMC1/16 333JATP	J24185333		1-	A	A2
R 1053	CHIP RES.	390	1/16W	5%	RMC1/16 391JATP	J24185391	W/ CE LABEL	7-	B	h4
R 1054	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-6	B	h4
R 1054	CHIP RES.	10	1/16W	5%	RMC1/16 100JATP	J24185100	W/ CE LABEL	7-	B	h4
R 1054	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	W/O CE LABEL	7-	B	h4
R 1055	CHIP RES.	390	1/16W	5%	RMC1/16 391JATP	J24185391	W/ CE LABEL	7-	B	h4
R 1056	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	g2
R 1057	CHIP RES.	47	1/16W	5%	RMC1/16 470JATP	J24185470		1-	B	g3
R 1058	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	B	g3
R 1060	CHIP RES.	3.3k	1/16W	5%	RMC1/16 332JATP	J24185332		1-	B	g3
R 1061	CHIP RES.	22	1/16W	5%	RMC1/16 220JATP	J24185220		1-	B	g2
R 1062	CHIP RES.	330k	1/16W	5%	RMC1/16 334JATP	J24185334		1-	A	F3
R 1063	CHIP RES.	39k	1/16W	5%	RMC1/16 393JATP	J24185393		1-	A	F4
R 1064	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	d3
R 1065	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	B	c3
R 1066	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	c3
R 1067	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	F3
R 1068	CHIP RES.	5.6k	1/16W	5%	RMC1/16 562JATP	J24185562		1-	A	F3
R 1069	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	c3
R 1070	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	B	c3
R 1071	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	B	c3
R 1072	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	B	c3
R 1073	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	i2
R 1074	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	A2
R 1075	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	A2
R 1076	CHIP RES.	39	1/16W	5%	RMC1/16 390JATP	J24185390		1-6	B	i2
R 1076	CHIP RES.	150	1/16W	5%	RMC1/16 151JATP	J24185151	W/ CE LABEL	7-	B	i2

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Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1076	CHIP RES.	39	1/16W	5%	RMC1/16 390JATP	J24185390	W/O CE LABEL	7-	B	i2
R 1077	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	i2
R 1078	CHIP RES.	47	1/16W	5%	RMC1/16 470JATP	J24185470		1-	A	A2
R 1079	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	B4
R 1083	CHIP RES.	120	1/16W	5%	RMC1/16 121JATP	J24185121		1-6	B	g4
R 1083	CHIP RES.	10	1/16W	5%	RMC1/16 100JATP	J24185100	W/ CE LABEL	7-	B	g4
R 1083	CHIP RES.	120	1/16W	5%	RMC1/16 121JATP	J24185121	W/O CE LABEL	7-	B	g4
R 1084	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	B2
R 1086	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	C2
R 1087	CHIP RES.	22	1/16W	5%	RMC1/16 220JATP	J24185220		1-6		
R 1088	CHIP RES.	47	1/16W	5%	RMC1/16 470JATP	J24185470		1-	A	C2
R 1089	CHIP RES.	330k	1/16W	5%	RMC1/16 334JATP	J24185334		1-	A	F3
R 1091	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	A	F3
R 1092	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	A	F3
R 1093	CHIP RES.	8.2k	1/16W	5%	RMC1/16 822JATP	J24185822		1-	A	F3
R 1094	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		1-	A	F3
R 1095	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	A	F3
R 1096	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	F3
R 1097	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	B	c3
R 1098	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	B	c3
R 1099	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	B	c3
R 1100	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	B	g4
R 1101	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	B4
R 1102	CHIP RES.	390	1/16W	5%	RMC1/16 391JATP	J24185391		1-	B	g4
R 1103	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	B	g3
R 1104	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	B3
R 1105	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	B3
R 1106	CHIP RES.	39k	1/16W	5%	RMC1/16 393JATP	J24185393		1-	A	F3
R 1107	CHIP RES.	39k	1/16W	5%	RMC1/16 393JATP	J24185393		1-	A	F3
R 1108	CHIP RES.	470k	1/16W	5%	RMC1/16 474JATP	J24185474		1-	B	d3
R 1109	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	A	F3
R 1110	CHIP RES.	47	1/16W	5%	RMC1/16 470JATP	J24185470		1-	B	c3
R 1111	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	c4
R 1112	CHIP RES.	270	1/16W	5%	RMC1/16 271JATP	J24185271	W/ CE LABEL	7-	B	i4
R 1113	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-6	B	i4
R 1113	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	W/ CE LABEL	7-	B	i4
R 1113	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	W/O CE LABEL	7-	B	i4
R 1114	CHIP RES.	270	1/16W	5%	RMC1/16 271JATP	J24185271	W/ CE LABEL	7-	B	i4
R 1115	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	B	f4
R 1116	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	B	f4
R 1117	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	B	f3
R 1118	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	B	f3
R 1119	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	f3
R 1120	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	A	B3
R 1121	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	E3
R 1122	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	f3
R 1123	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	B	f3
R 1124	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	B	f4
R 1125	CHIP RES.	12k	1/16W	5%	RMC1/16 123JATP	J24185123		1-	A	F3
R 1126	CHIP RES.	47	1/16W	5%	RMC1/16 470JATP	J24185470		1-	B	c3
R 1127	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	F3
R 1128	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	d3
R 1129	CHIP RES.	18k	1/16W	5%	RMC1/16 183JATP	J24185183		1-	A	F3
R 1130	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	A	F2
R 1131	CHIP RES.	33k	1/16W	5%	RMC1/16 333JATP	J24185333		1-	A	F4
R 1132	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	F4
R 1133	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	G4
R 1134	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	B	d4
R 1136	CHIP RES.	18k	1/16W	5%	RMC1/16 183JATP	J24185183		1-	B	d4
R 1137	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	d4
R 1138	CHIP RES.	5.6k	1/16W	5%	RMC1/16 562JATP	J24185562		1-	B	c4
R 1139	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	A5
R 1142	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	B	f5
R 1143	CHIP RES.	1.8k	1/16W	5%	RMC1/16 182JATP	J24185182		1-	B	f4
R 1144	CHIP RES.	47	1/16W	5%	RMC1/16 470JATP	J24185470		1-	A	D4
R 1145	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	f4
R 1146	CHIP RES.	150k	1/16W	5%	RMC1/16 154JATP	J24185154		1-	A	E3
R 1147	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	F4
R 1148	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	F4
R 1149	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	B	d4
R 1150	CHIP RES.	82k	1/16W	5%	RMC1/16 823JATP	J24185823		1-	A	F4
R 1151	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	A	G4
R 1152	CHIP RES.	8.2k	1/16W	5%	RMC1/16 822JATP	J24185822		1-	A	F4

MAIN Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1153	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101	W/ CE LABEL W/O CE LABEL	1-	B	c4
R 1154	CHIP RES.	5.6k	1/16W	5%	RMC1/16 562JATP	J24185562		1-	B	c4
R 1157	CHIP RES.	82	1/16W	5%	RMC1/16 820JATP	J24185820		1-6	B	i5
R 1157	CHIP RES.	10	1/16W	5%	RMC1/16 100JATP	J24185100		7-8	B	i5
R 1157	CHIP RES.	82	1/16W	5%	RMC1/16 820JATP	J24185820		7-8	B	i5
R 1157	CHIP RES.	82	1/16W	5%	RMC1/16 820JATP	J24185820		9-	B	i5
R 1158	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	B	h5
R 1159	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	A5
R 1161	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	C5
R 1162	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	C5
R 1163	CHIP RES.	22	1/16W	5%	RMC1/16 220JATP	J24185220		1-	A	C5
R 1164	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	D4
R 1165	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	D4
R 1166	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	D4
R 1167	CHIP RES.	390	1/16W	5%	RMC1/16 391JATP	J24185391		1-	B	h6
R 1168	CHIP RES.	680	1/16W	5%	RMC1/16 681JATP	J24185681		1-	B	g6
R 1169	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	A	C5
R 1170	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	g5
R 1171	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	B	g5
R 1172	CHIP RES.	47	1/16W	5%	RMC1/16 470JATP	J24185470		1-	A	D4
R 1173	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	D4
R 1174	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	A	E3
R 1176	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	B	c4
R 1177	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-6	B	c4
R 1178	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	B	c4
R 1179	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	B	b4
R 1180	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	B	c4
R 1181	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	B	c4
R 1182	CHIP RES.	470k	1/16W	5%	RMC1/16 474JATP	J24185474		1-	B	g5
R 1183	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	B	f6
R 1184	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	B	f5
R 1185	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	f5
R 1186	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	B	e4
R 1187	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102	1-	A	B5	
R 1188	CHIP RES.	5.6k	1/16W	5%	RMC1/16 562JATP	J24185562	1-	B	h5	
R 1189	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	1-	B	h5	
R 1190	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101	1-	B	h5	
R 1191	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104	1-	B	h5	
R 1192	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223	1-	A	E3	
R 1193	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101	1-	A	E4	
R 1194	CHIP RES.	180k	1/16W	5%	RMC1/16 184JATP	J24185184	1-	A	E3	
R 1194	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224	19-	A	E3	
R 1195	CHIP RES.	390k	1/16W	5%	RMC1/16 394JATP	J24185394	1-	A	E3	
R 1196	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223	1-	A	E3	
R 1197	CHIP RES.	330	1/16W	5%	RMC1/16 331JATP	J24185331	1-	A	E3	
R 1197	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102	19-	A	E3	
R 1198	CHIP RES.	47	1/16W	5%	RMC1/16 470JATP	J24185470	1-	B	c5	
R 1199	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105	1-	B	c4	
R 1200	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105	1-	B	c4	
R 1201	CHIP RES.	1.8k	1/16W	5%	RMC1/16 182JATP	J24185182	1-	A	C5	
R 1202	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	1-	B	e5	
R 1203	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104	1-	A	D6	
R 1204	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221	1-	B	e2	
R 1205	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101	1-	A	E4	
R 1206	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223	1-	A	E4	
R 1208	CHIP RES.	1k	1/16W	1%	RMC1/16 102FTP	J24183102	EUROPE	1-	B	d5
R 1209	CHIP RES.	470k	1/16W	5%	RMC1/16 474JATP	J24185474	EUROPE	1-	B	d5
R 1210	CHIP RES.	10k	1/16W	1%	RMC1/16 103FTP	J24183103	EUROPE	1-	B	d5
R 1211	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104	EUROPE	1-	B	d5
R 1212	CHIP RES.	10k	1/16W	1%	RMC1/16 103FTP	J24183103	EUROPE	1-	B	d5
R 1213	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473	EUROPE	1-	B	d6
R 1214	CHIP RES.	330k	1/16W	5%	RMC1/16 334JATP	J24185334	EUROPE	1-	B	d5
R 1215	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472	EUROPE	1-	B	d5
R 1216	CHIP RES.	470k	1/16W	5%	RMC1/16 474JATP	J24185474	EUROPE	1-	B	d5
R 1217	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101	EUROPE	1-	B	e5
R 1218	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	B	b5
R 1219	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		1-	A	D6
R 1219	CHIP RES.	270k	1/16W	5%	RMC1/16 274JATP	J24185274		7-	A	D6
R 1220	CHIP RES.	1.8k	1/16W	5%	RMC1/16 182JATP	J24185182		1-	A	D5
R 1221	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	D6
R 1222	CHIP RES.	1.8k	1/16W	5%	RMC1/16 182JATP	J24185182		1-	A	D5
R 1224	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	E5
R 1226	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	A	E6

MAIN Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1227	CHIP RES.	3.3k	1/16W	5%	RMC1/16 332JATP	J24185332		1-	A	E5
R 1228	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	C3
R 1229	CHIP RES.	1.8k	1/16W	5%	RMC1/16 182JATP	J24185182		1-	A	D3
R 1230	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e3
R 1231	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	A	D3
R 1232	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	e3
R 1233	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	B	e3
R 1234	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e3
R 1235	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	d3
R 1236	CHIP RES.	470k	1/16W	5%	RMC1/16 474JATP	J24185474		1-	B	e3
R 1237	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	B	d3
R 1238	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e5
R 1239	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	B	e4
R 1240	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	e6
R 1241	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	B	d4
R 1242	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	d4
R 1243	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	d4
R 1244	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	B	d4
R 1245	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	B	e4
R 1247	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	B	e4
R 1248	CHIP RES.	82k	1/16W	5%	RMC1/16 823JATP	J24185823		1-	B	a4
R 1249	CHIP RES.	15k	1/16W	5%	RMC1/16 153JATP	J24185153		1-	B	a5
R 1250	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	a5
R 1251	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	E5
R 1252	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	E6
R 1253	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	A	E6
R 1254	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	B	f3
R 1255	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	B	f3
R 1256	CHIP RES.	33k	1/16W	5%	RMC1/16 333JATP	J24185333		1-	B	f3
R 1257	CHIP RES.	56k	1/16W	5%	RMC1/16 563JATP	J24185563		1-	B	f3
R 1258	CHIP RES.	470k	1/16W	5%	RMC1/16 474JATP	J24185474		1-	B	d3
R 1259	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	B	d3
R 1260	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	B	e3
R 1261	CHIP RES.	10k	1/16W	1%	RMC1/16 103FTP	J24183103		1-	B	d3
R 1262	CHIP RES.	10k	1/16W	1%	RMC1/16 103FTP	J24183103		1-	B	d3
R 1263	CHIP RES.	1k	1/16W	1%	RMC1/16 102FTP	J24183102		1-	B	d3
R 1264	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	B	e5
R 1265	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	B	e5
R 1266	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	B	e5
R 1267	CHIP RES.	33k	1/16W	5%	RMC1/16 333JATP	J24185333		1-	B	e6
R 1268	CHIP RES.	120k	1/16W	5%	RMC1/16 124JATP	J24185124		1-	B	e4
R 1269	CHIP RES.	56k	1/16W	5%	RMC1/16 563JATP	J24185563		1-	B	f6
R 1270	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	B	e4
R 1271	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	B	e4
R 1272	CHIP RES.	8.2k	1/16W	5%	RMC1/16 822JATP	J24185822		1-	B	e4
R 1273	CHIP RES.	56k	1/16W	5%	RMC1/16 563JATP	J24185563		1-	A	F2
R 1275	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		1-	A	E3
R 1275	CHIP RES.	33k	1/16W	5%	RMC1/16 333JATP	J24185333		19-	A	E3
R 1276	CHIP RES.	150	1/16W	5%	RMC1/16 151JATP	J24185151		1-	A	E4
R 1280	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	h2
R 1281	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	f5
R 1282	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	h5
R 1283	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	f3
R 1284	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	g4
R 1285	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	A	G4
R 1286	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	A	E4
R 1287	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	g2
R 1288	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		7-	A	F2
R 1289	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		7-	A	C4
TC1001	TRIMMER CAP.	3pF			ECR-KN003A61X 3P	K91000264		1-	A	C3
TC1001	TRIMMER CAP.	3pF			TZC3Z030A110R00	K91000280		42-	A	C3
TC1002	TRIMMER CAP.	6pF			ECR-KN006A61X 6P	K91000225		1-	A	B5
TC1002	TRIMMER CAP.	6pF			TZC3Z060A110R00	K91000281		42-	A	B5
TC1003	TRIMMER CAP.	10pF			ECR-KN010C61X	K91000226		1-	A	E4
TC1003	TRIMMER CAP.	10pF			TZC3R100A110R00	K91000282		36-	A	E4
TH1001	THERMISTOR				TBPS1R683K475H5Q	G9090159		1-	A	E3
TP1005	CHECK TERMINAL				RCT00000C	Q5000103		1-	A	C4
TP1006	CHECK TERMINAL				RCT00000C	Q5000103		1-	A	A5
VR1001	POT.	50k			EVN-5ESX50B54	J51811503		1-	A	F2
VR1002	POT.	10k			EVN-5ESX50B14	J51811103		1-	A	F2
VR1003	POT.	100k			EVN-5ESX50B15	J51811104		1-	A	E2
VR1004	POT.	50k			EVN-5ESX50B54	J51811503		1-	A	E3
X 1001	XTAL DSX531S	29.95MHz			DSX531S 29.950MHZ	H0103316		1-	A	E3

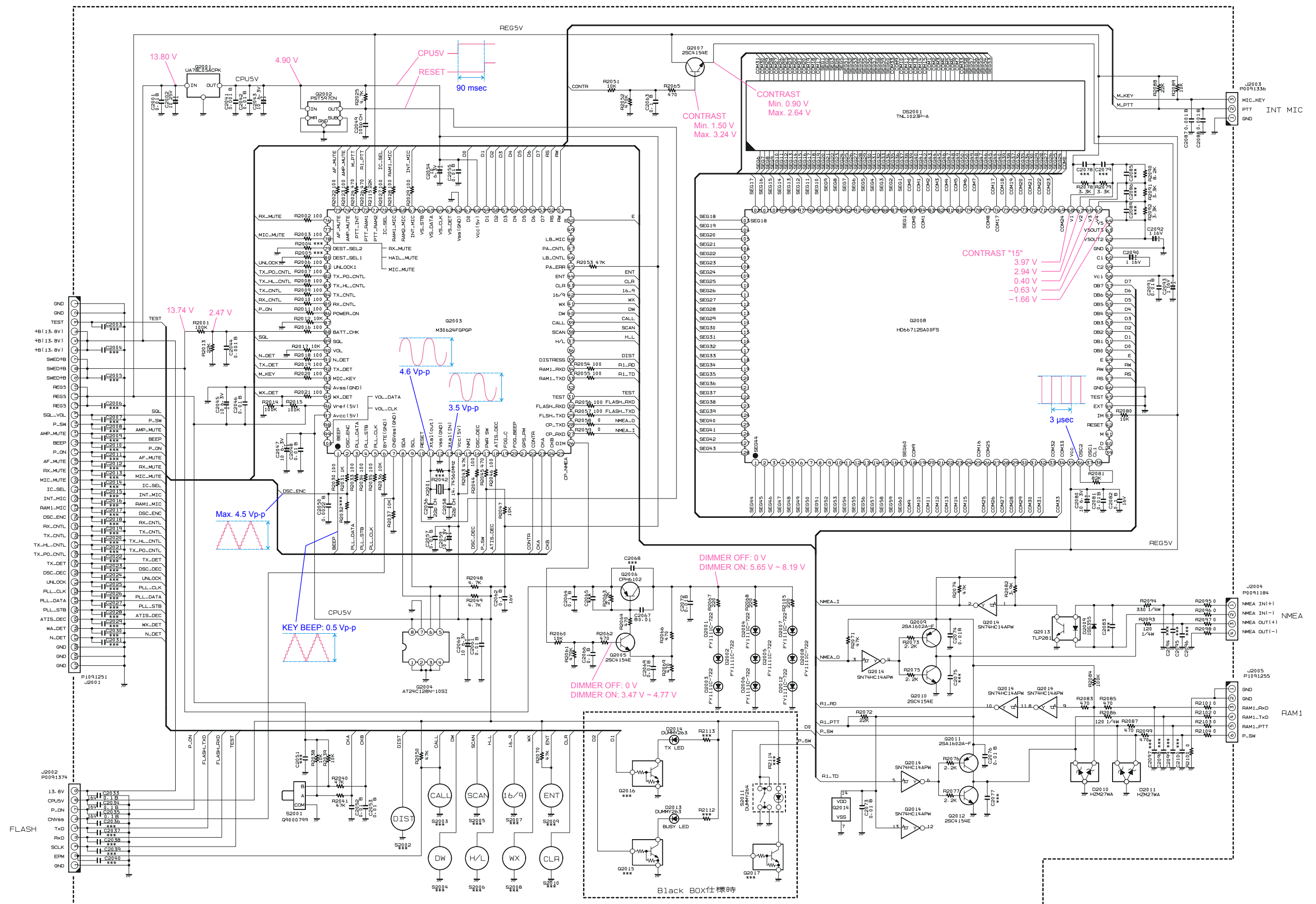
MAIN Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
X 1002	XTAL TOP-B	21.85MHz			21.85000MHZ	H0103270		1-	A	D3
XF1001	XTAL FILTER				UM-5 22.300MHZ	H1102393		1-	A	B4
XF1002	XTAL FILTER				UM-5 22.300MHZ	H1102393		1-	A	C4
XF1003	XTAL FILTER				1Q30413BD1	H1102396		1-	A	B6
XF1004	XTAL FILTER				1Q30413BD1	H1102396		1-	A	B6
	SHIELD CASE VCO					RA0752700		1-		
	SHIELD CASE VCO					RA0752700		1-		
	SHIELD CASE COVER					RA0798700		1-		
	GASKET				L=20	RA0797100		1-		
	LEAF SPRING					R0140031		1-		
	LEAF SPRING					R0140031		7-		
	GASKET				(L=18)	RA0879700	W/ CE LABEL	7-		
	LEAF SPRING					R0140031	W/ CE LABEL	7-		

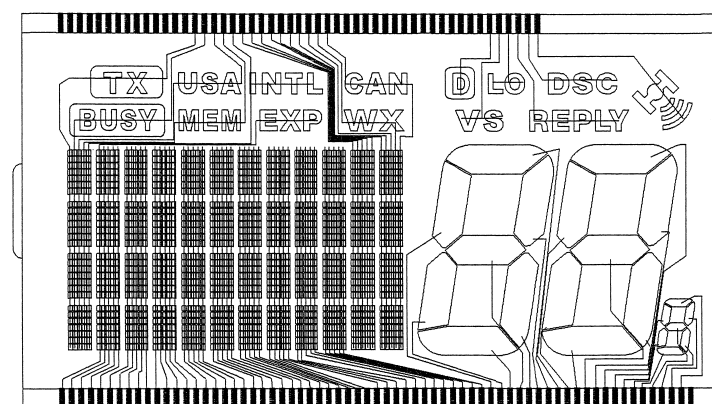
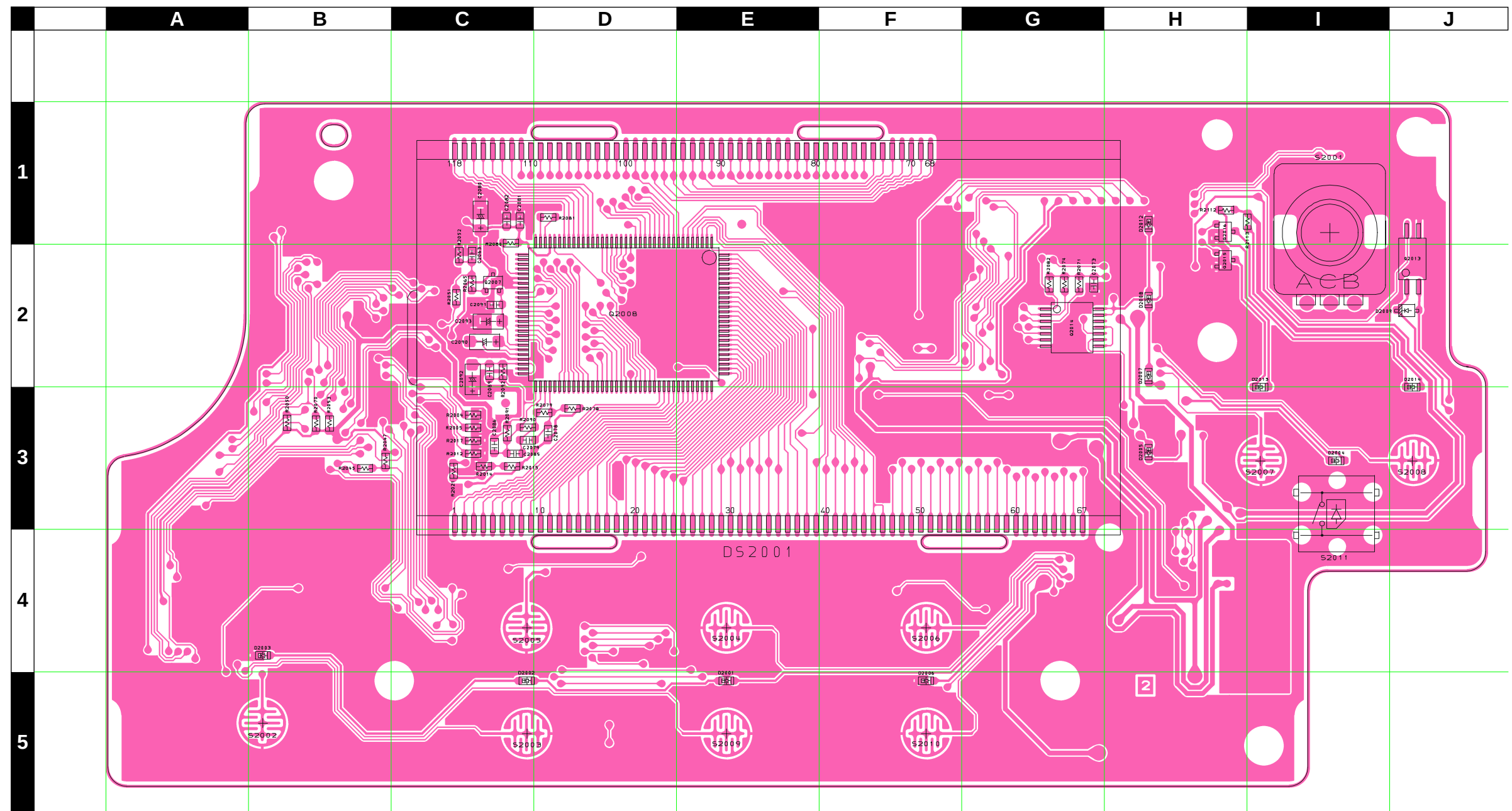
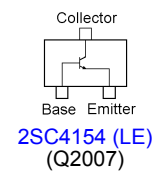
MAIN Unit

Note

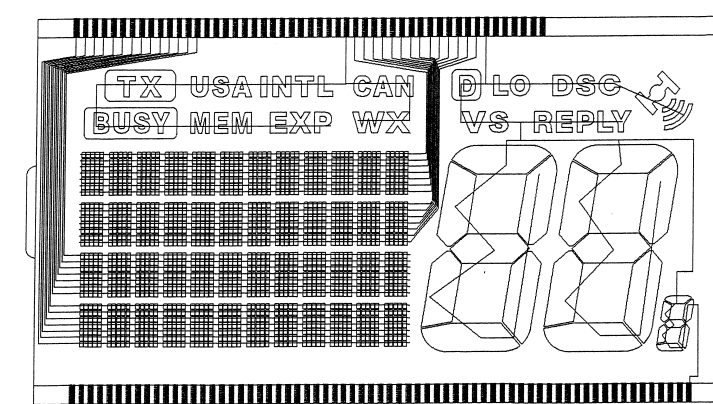


CNTL Unit (Lot. 1~6)

Note



SEGMENT

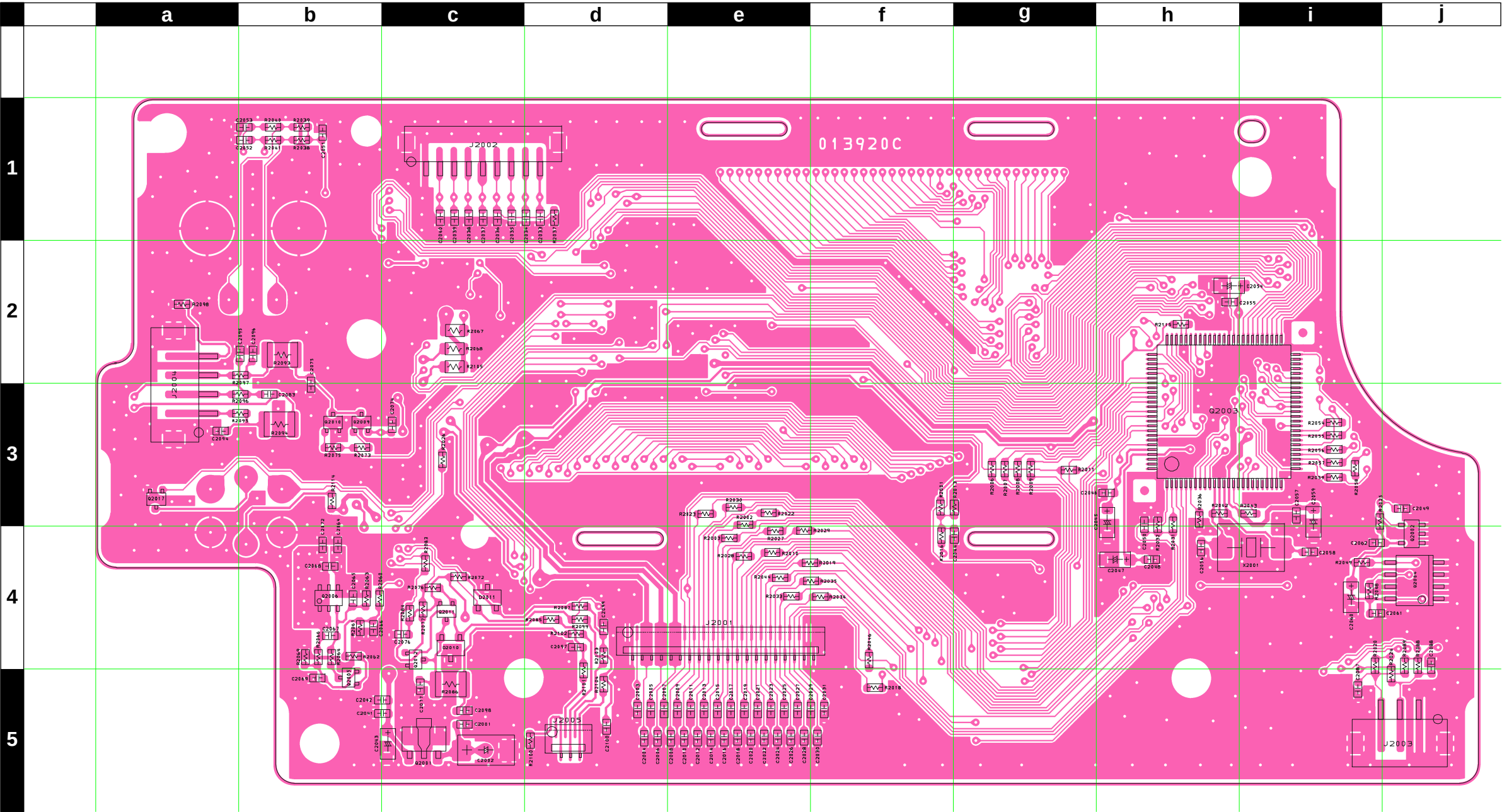


COMMON

LCD (DS2001)

CNTL Unit (Lot. 1~6)

Parts Layout (Side B)



M30620FCAGP (Q2003)

AT24C128N (Q2004)

2SA1602A (MF) (Q2009, 2011)

2SC4154 (LE) (Q2005, 2010, 2012)

HZM27WA (27A) (D2010, 2011)

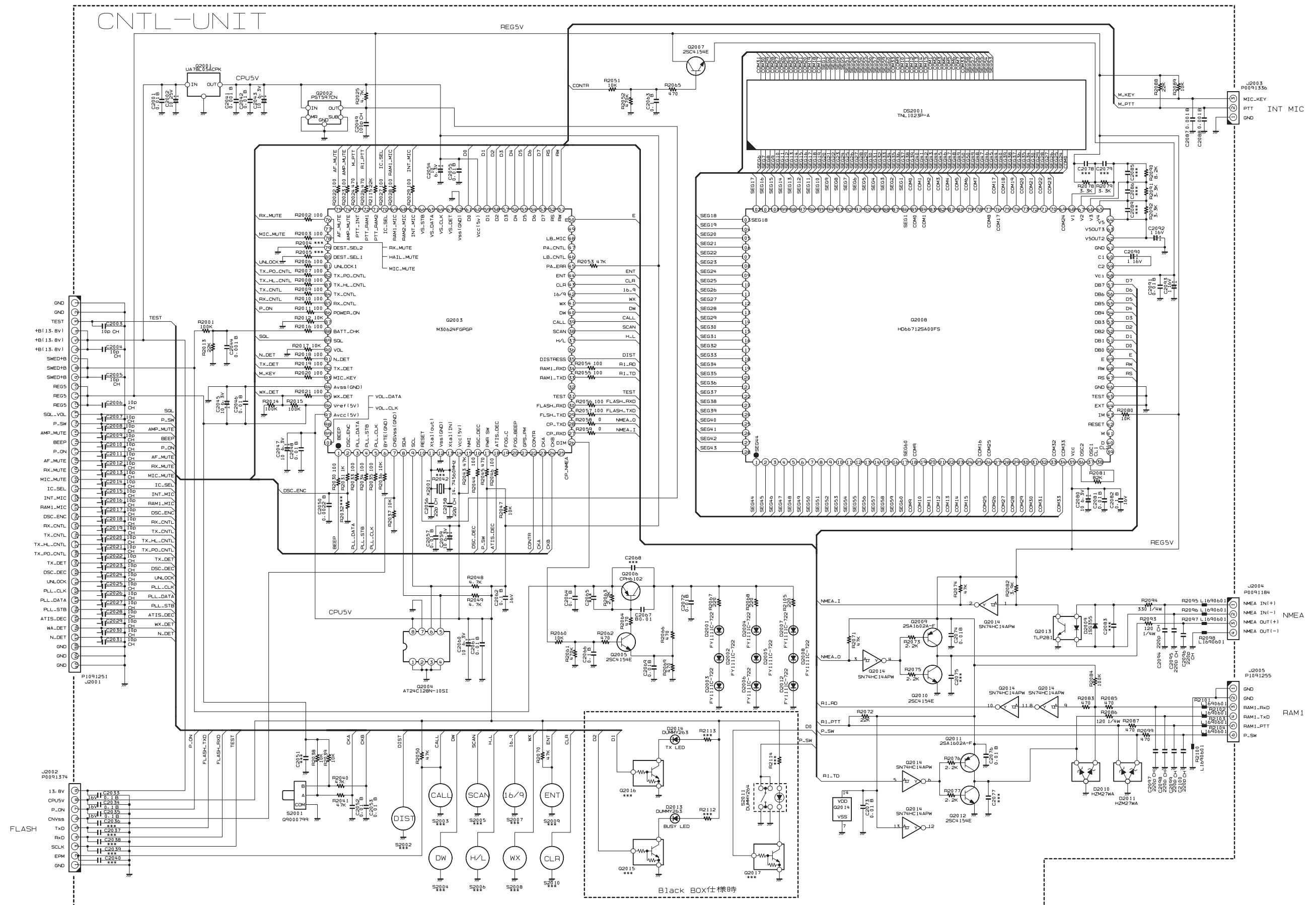
CPH6102 (AB) (Q2006)

PST597CNR (7C) (Q2002)

UA78L05ACPK (Q2001)

CNTL Unit (Lot. 7~)

Circuit Diagram

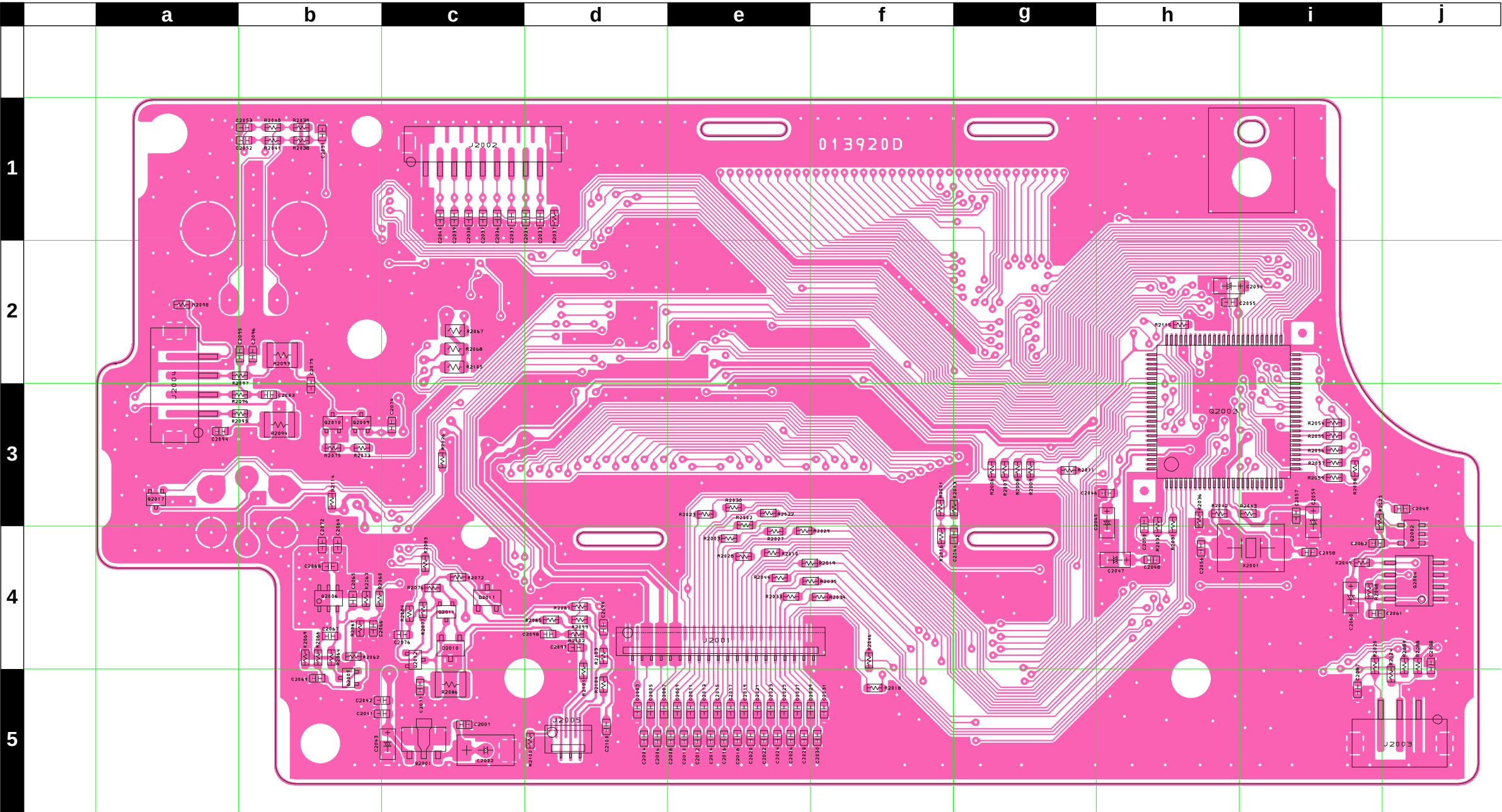


CNTL Unit (Lot. 7~)

Note

CNTL Unit (Lot. 7~)

Parts Layout (Side B)



M30620FCAGP (Q2003)

AT24C128N (Q2004)

2SA1602A (MF) (Lot. 1~13)
ISA1602AM1 (MF) (Lot. 14~18)
2SA1576A (F141) (Lot. 19~) (Q2009, 2011)

2SC4154 (LE) (Lot. 1~18)
2SC4081 (Lot. 19~) (Q2005, 2010, 2012)

HZM27WA (27A) (D2010, 2011)

CPH6102 (AB) (Q2006)

PST597CNR (7C) (Q2002)

UA78L05ACPK (Q2001)

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY	ADR
PCB with Components						CS1859001	EUROPE USA EXP	1-			
						CS1859002		7-			
						CS1859003		7-			
						CS1859004		7-			
Printed Circuit Board					AM017N000	FR013920C		1-			
						FR013920D		7-			
C 2001	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B		c5
C 2002	CHIP TA.CAP.	10uF	25V		TEESVC1E106M12R	K78140021		1-	B		c5
C 2003	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		d5
C 2004	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		d5
C 2005	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		d5
C 2006	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		d5
C 2007	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		d5
C 2008	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2009	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2010	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2011	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2012	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2013	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2014	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2015	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2016	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2017	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2018	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2019	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2020	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2021	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2022	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2023	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2024	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2025	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2026	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2027	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2028	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2029	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		e5
C 2030	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		f5
C 2031	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-	B		f5
C 2033	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B		d1
C 2034	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B		d1
C 2035	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B		c1
C 2041	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B		b5
C 2042	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B		b5
C 2043	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	B		c5
C 2044	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174809		1-	B		g4
C 2045	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	B		h3
C 2046	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B		h3
C 2047	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	B		h4
C 2048	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B		h4
C 2049	CHIP CAP.	100pF	50V	CH	GRM1882C1H101JA01D	K22174235		1-	B		j3
C 2050	CHIP CAP.	0.0022uF	50V	B	GRM188B11H222KA01D	K22174822		1-	B		h3
C 2052	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B		b1
C 2053	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B		b1
C 2054	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	B		h2
C 2055	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B		h2
C 2056	CHIP CAP.	22pF	50V	CH	GRM1882C1H220JA01D	K22174219		1-	B		h4
C 2057	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B		i3
C 2058	CHIP CAP.	22pF	50V	CH	GRM1882C1H220JA01D	K22174219		1-	B		i4
C 2059	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	B		i3
C 2060	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	B		i4
C 2061	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B		i4
C 2062	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B		i4
C 2063	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A		C2
C 2064	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B		b4
C 2066	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	B		b4
C 2067	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B		b4
C 2069	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B		b5
C 2072	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B		b4
C 2073	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	A		G2
C 2074	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B		c3
C 2076	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	B		c4
C 2080	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	A		C1
C 2081	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	A		C1
C 2082	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A		C1

CNTL Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 2087	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	i5
C 2088	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		1-	B	j4
C 2090	CHIP TA.CAP.	1uF	16V		TEESVA1C105M8R	K78120009		1-	A	C2
C 2091	CHIP CAP.	0.01uF	50V	B	GRM188B11H103KA01D	K22174823		1-	A	C2
C 2092	CHIP TA.CAP.	1uF	16V		TEESVA1C105M8R	K78120009		1-	A	C2
C 2093	CHIP TA.CAP.	1uF	16V		TEESVA1C105M8R	K78120009		1-	A	C2
C 2094	CHIP CAP.	220pF	50V	CH	GRM1882C1H221JA01D	K22174243		7-	B	a3
C 2095	CHIP CAP.	220pF	50V	CH	GRM1882C1H221JA01D	K22174243		7-	B	b2
C 2096	CHIP CAP.	220pF	50V	CH	GRM1882C1H221JA01D	K22174243		7-	B	b2
C 2097	CHIP CAP.	220pF	50V	CH	GRM1882C1H221JA01D	K22174243		7-	B	d4
C 2098	CHIP CAP.	220pF	50V	CH	GRM1882C1H221JA01D	K22174243		7-	B	c5
C 2099	CHIP CAP.	220pF	50V	CH	GRM1882C1H221JA01D	K22174243		7-	B	d4
C 2100	CHIP CAP.	220pF	50V	CH	GRM1882C1H221JA01D	K22174243		7-	B	d5
D 2001	LED				FY1111C-722-TR	G2070916		1-	A	E5
D 2002	LED				FY1111C-722-TR	G2070916		1-	A	C5
D 2003	LED				FY1111C-722-TR	G2070916		1-	A	B4
D 2004	LED				FY1111C-722-TR	G2070916		1-	A	I3
D 2005	LED				FY1111C-722-TR	G2070916		1-	A	H3
D 2006	LED				FY1111C-722-TR	G2070916		1-	A	F5
D 2007	LED				FY1111C-722-TR	G2070916		1-	A	H2
D 2008	LED				FY1111C-722-TR	G2070916		1-	A	H2
D 2009	DIODE				1SS355 TE-17	G2070470		1-	A	J2
D 2010	DIODE				HZM27WA TR-E	G2070530		1-	B	c4
D 2011	DIODE				HZM27WA TR-E	G2070530		1-	B	c4
D 2012	LED				FY1111C-722-TR	G2070916		1-	A	H1
DS2001	LCD				TNL1023P-A	G6090150		1-	A	E2
J 2001	CONNECTOR				40FLT-SM2-TB(LF)(SN)(M)	P1091251		1-	B	e4
J 2002	CONNECTOR				B9B-ZR-SM4-TFT(LF)(SN)	P0091374		1-	B	c1
J 2003	CONNECTOR				B3B-PH-SM4-TB(LF)(SN)	P0091336		1-	B	j5
J 2004	CONNECTOR				B4B-PH-SM4-TB(LF)(SN)	P0091184		1-	B	a3
J 2005	CONNECTOR				06FLT-SM2-TB(LF)(SN)	P1091255		1-	B	d5
Q 2001	IC				UA78L05ACPK	G1094156		1-	B	c5
Q 2002	IC				PST597CNR	G1092589		1-	B	j4
Q 2003	IC				M30624FGPGP(FLASH)			1-	B	h3
Q 2004	IC				AT24C128N-10SU-2.7	G1093516		1-	B	j4
Q 2004	IC				AT24C128BN-SH-T	G1094607		29-	B	j4
Q 2005	TRANSISTOR				2SC4154-T111-1E	G3341548E		1-	B	b5
Q 2005	TRANSISTOR				2SC4081 T106 R	G3340818R		19-	B	b5
Q 2006	TRANSISTOR				CPH6102-TL	G3070223		1-	B	b4
Q 2007	TRANSISTOR				2SC4154-T111-1E	G3341548E		1-	A	C2
Q 2007	TRANSISTOR				2SC4081 T106 R	G3340818R		19-	A	C2
Q 2008	IC				HD66712SA00FS	G1093817		1-	A	D2
Q 2009	TRANSISTOR				2SA1602A-T111-1F	G3116028F		1-	B	b3
Q 2009	TRANSISTOR				ISA1602AM1-T111-1F	G3070380		14-	B	b3
Q 2009	TRANSISTOR				2SA1576A T106 R	G3115768R		19-	B	b3
Q 2010	TRANSISTOR				2SC4154-T111-1E	G3341548E		1-	B	b3
Q 2010	TRANSISTOR				2SC4081 T106 R	G3340818R		19-	B	b3
Q 2011	TRANSISTOR				2SA1602A-T111-1F	G3116028F		1-	B	c4
Q 2011	TRANSISTOR				ISA1602AM1-T111-1F	G3070380		14-	B	c4
Q 2011	TRANSISTOR				2SA1576A T106 R	G3115768R		19-	B	c4
Q 2012	TRANSISTOR				2SC4154-T111-1E	G3341548E		1-	B	c4
Q 2012	TRANSISTOR				2SC4081 T106 R	G3340818R		19-	B	c4
Q 2013	PHOTO COUPLER				TLP281(GB-TP)	G0090037		1-	A	J2
Q 2013	PHOTO COUPLER				PC3H7CDJ000F	G0090039		11-	A	J2
Q 2014	IC				SN74HC14APW(TAPE)	G1094227		1-	A	G2
R 2001	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	B	f3
R 2002	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e3
R 2003	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e4
R 2004	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	EUROPE	7-	A	C3
R 2006	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	g3
R 2007	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	g3
R 2008	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	g3
R 2009	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	g3
R 2010	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e4
R 2011	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	g3
R 2012	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	C3
R 2013	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	B	g3
R 2014	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	A	C3
R 2015	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	A	C3
R 2016	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	f4
R 2017	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	C3
R 2018	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	f5
R 2019	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e4

Parts List

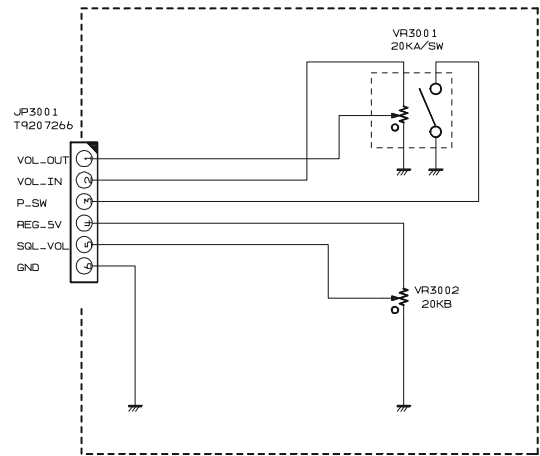
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R 2020	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	i4
R 2021	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	C3
R 2022	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e3
R 2023	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e3
R 2024	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	B	j5
R 2025	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	B	i3
R 2026	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	B	c3
R 2027	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e4
R 2028	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e4
R 2029	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e4
R 2030	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e3
R 2031	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	B	h3
R 2033	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e4
R 2034	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	f4
R 2035	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e4
R 2036	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	h3
R 2037	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	d1
R 2038	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	b1
R 2039	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	b1
R 2040	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	B	b1
R 2041	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	B	b1
R 2043	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	B	i3
R 2044	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	e4
R 2045	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	A	B3
R 2046	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	f4
R 2047	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	B3
R 2048	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	B	i4
R 2049	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	B	i4
R 2050	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	B3
R 2051	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	C2
R 2052	CHIP RES.	470k	1/16W	5%	RMC1/16 474JATP	J24185474		1-	A	C2
R 2053	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	B3
R 2054	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	i3
R 2055	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	i3
R 2056	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	i3
R 2057	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	i3
R 2058	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	i3
R 2059	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	i3
R 2060	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	b4
R 2061	CHIP RES.	470k	1/16W	5%	RMC1/16 474JATP	J24185474		1-	B	b4
R 2062	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	B	b4
R 2063	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	b4
R 2064	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	B	b4
R 2065	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	A	C2
R 2066	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	B	b4
R 2067	CHIP RES.	220	1/10W	5%	RMC1/10T 221J	J24205221		1-	B	c2
R 2068	CHIP RES.	220	1/10W	5%	RMC1/10T 221J	J24205221		1-	B	c2
R 2069	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	B	b4
R 2070	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	B3
R 2071	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	G2
R 2072	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	B	c4
R 2073	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	b3
R 2074	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	G2
R 2075	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	b3
R 2076	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	c4
R 2077	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	c4
R 2078	CHIP RES.	3.3k	1/16W	5%	RMC1/16 332JATP	J24185332		1-	A	D3
R 2079	CHIP RES.	3.3k	1/16W	5%	RMC1/16 332JATP	J24185332		1-	A	D3
R 2080	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	C1
R 2081	CHIP RES.	82k	1/16W	5%	RMC1/16 823JATP	J24185823		1-	A	D1
R 2082	CHIP RES.	3.9k	1/16W	5%	RMC1/16 392JATP	J24185392		1-	A	G2
R 2083	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	B	c4
R 2084	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	B	c4
R 2085	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	B	d4
R 2086	CHIP RES.	120	1/4W	5%	RMC1/4 121JATP	J24245121		1-	B	c5
R 2087	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	B	d4
R 2088	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	B	j4
R 2089	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	j4
R 2090	CHIP RES.	8.2k	1/16W	5%	RMC1/16 822JATP	J24185822		1-	A	C3
R 2091	CHIP RES.	3.3k	1/16W	5%	RMC1/16 332JATP	J24185332		1-	A	C3
R 2092	CHIP RES.	3.3k	1/16W	5%	RMC1/16 332JATP	J24185332		1-	A	C2
R 2093	CHIP RES.	120	1/4W	5%	RMC1/4 121JATP	J24245121		1-	B	b2
R 2094	CHIP RES.	330	1/4W	5%	RMC1/4 331JATP	J24245331		1-	B	b3

CNTL Unit

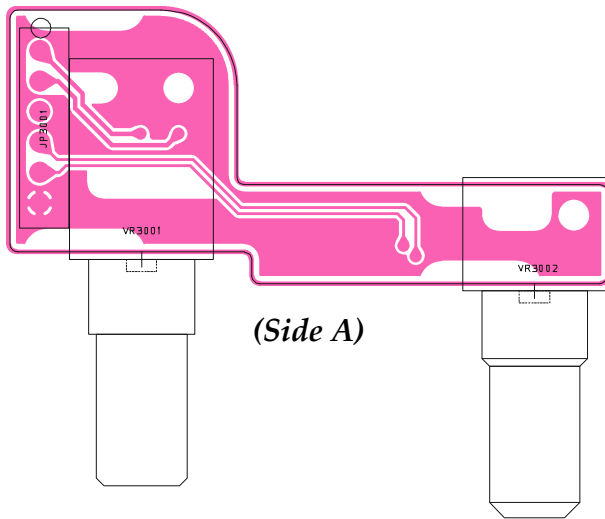
Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 2095	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	b3
R 2096	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	b3
R 2097	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	b2
R 2098	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	a2
R 2099	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	B	d4
R 2100	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	d5
R 2101	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	d5
R 2102	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	d4
R 2103	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	d4
R 2104	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	d5
R 2105	CHIP RES.	220	1/10W	5%	RMC1/10T 221J	J24205221		1-	B	c2
R 2115	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	B	h2
S 2001	ROTARY ENCODER				EC11B20204	Q9000799		1-	A	i1
X 2001	XTAL 94SMX	14.7456MHZ			94M147-18(D) 14.74560MHZ	H0103271		1-	B	i4
	LCD HOLDER				(LCD)	RA0757800		1-		
	LIGHT GUIDE				(L)	RA0569700		1-		
	REFLECTOR SHEET				(S)	RA057000A		1-		
	REFLECTOR SHEET				(S)	RA0803500		1-		
	REFLECTOR SHEET				(S)	RA080350A		6-		
	INTER CONNECTOR				(TOP2)	RA0631800		1-		
	INTER CONNECTOR				(BOTTOM2)	RA0631900		1-		
	SPONGE RUBBER				(LCD)	RA0760300		1-		
	INSULATOR SHEET					RA0811200		1-		
	INSULATOR SHEET					RA0811200		1-		

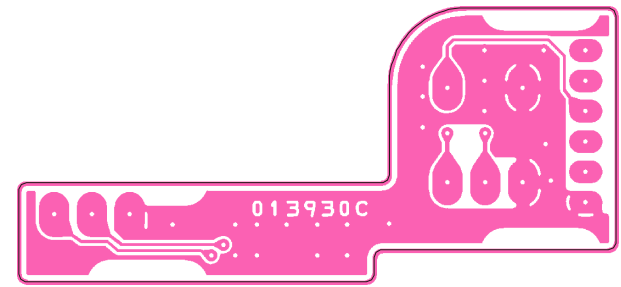
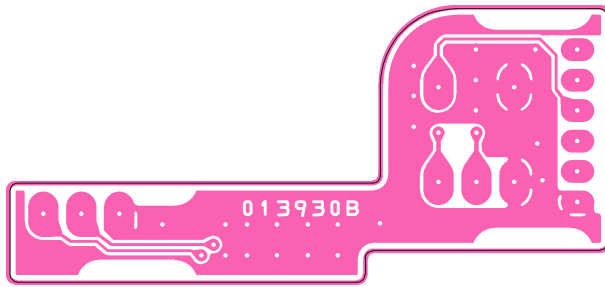
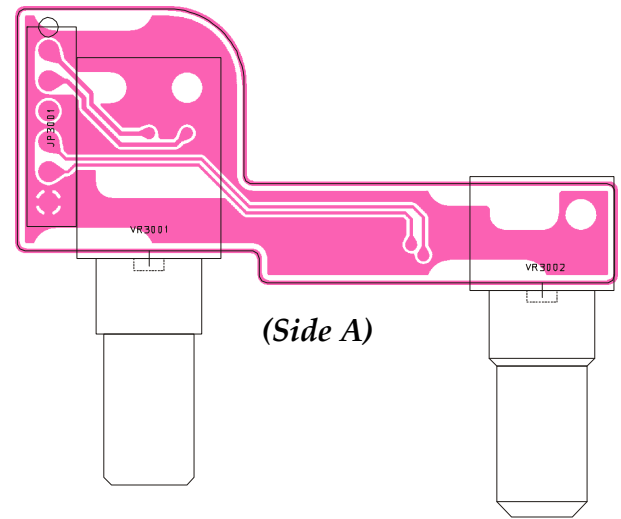
Circuit Diagram



Parts Layout (Lot. 1~6)



Parts Layout (Lot. 7~)

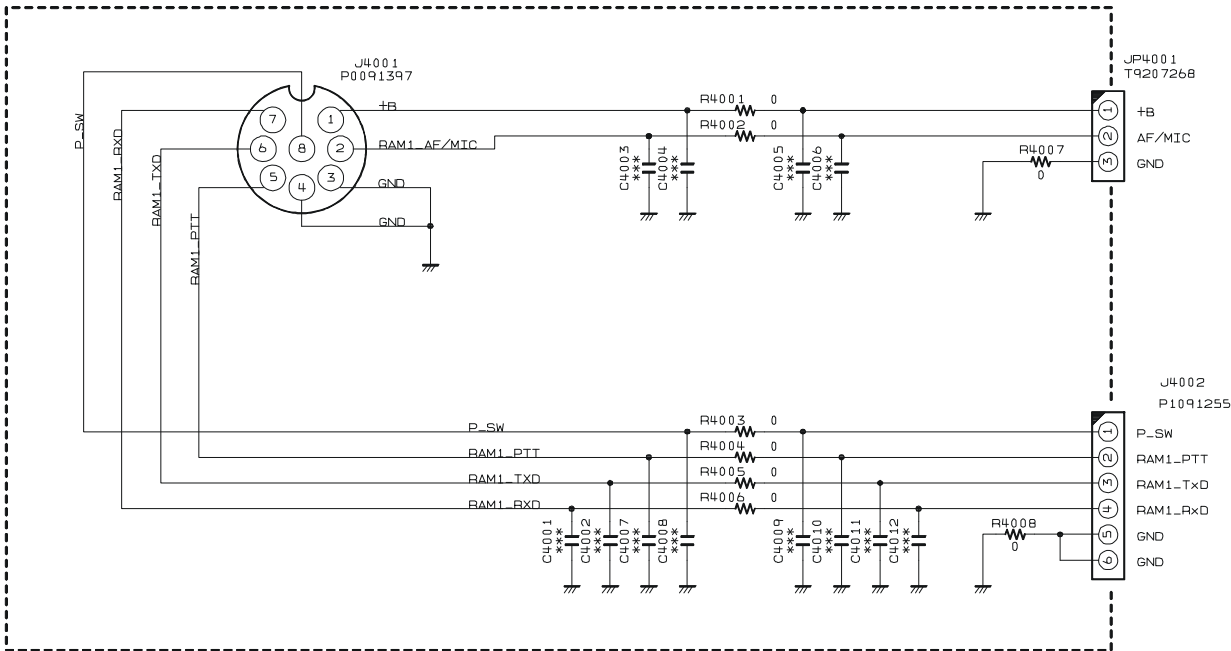


Parts List

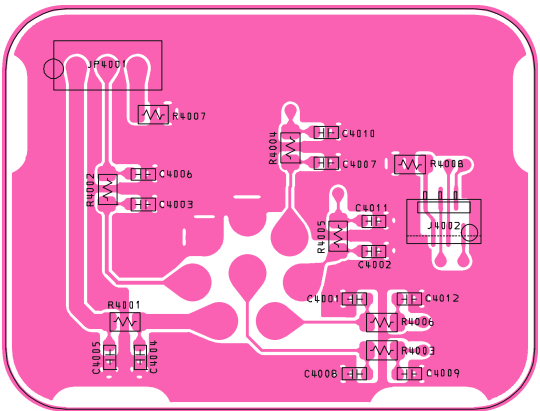
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
PCB with Components						CB3335001	CE:OFF			
						CB3335002	CE:ON			
Printed Circuit Board					AM017N000	FR0139300		1-		
JP3001	WIRE ASSY				AM017N VR	T9207266	W/ CE LABEL W/O CE LABEL	1-6		
JP3001	WIRE ASSY				AM017N VR(CE)	T9207357		7-		
JP3001	WIRE ASSY				AM017N VR	T9207266		7-		
VR3001	POT.				RK0971114 20KA/SW	J60800274		1-		
VR3002	POT.				RK0971110 20KB	J60800261		1-		

RAM Unit (Lot. 1~6)

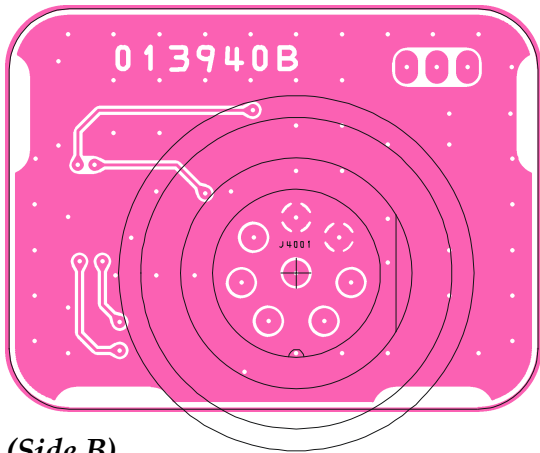
Circuit Diagram



Parts Layout

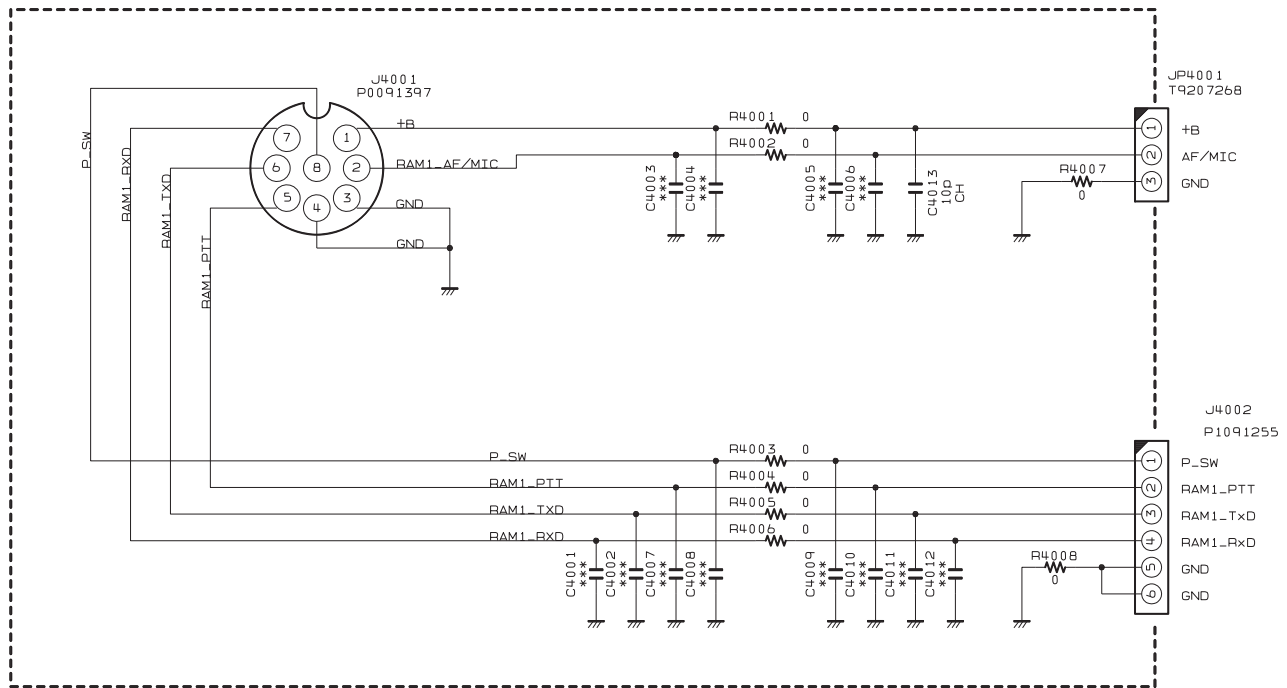


(Side A)

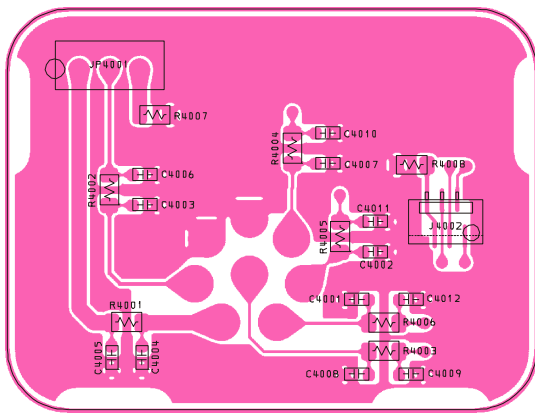


(Side B)

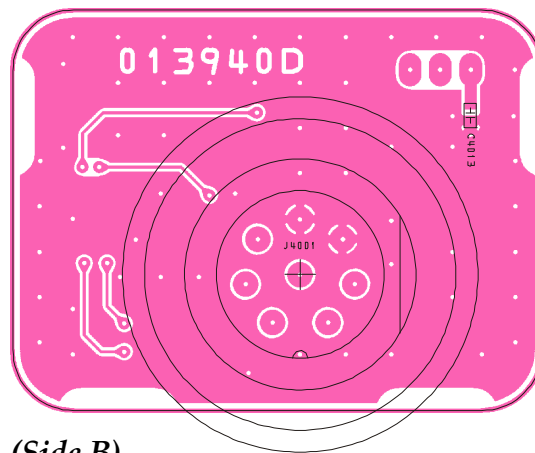
Circuit Diagram



Parts Layout



(Side A)



(Side B)

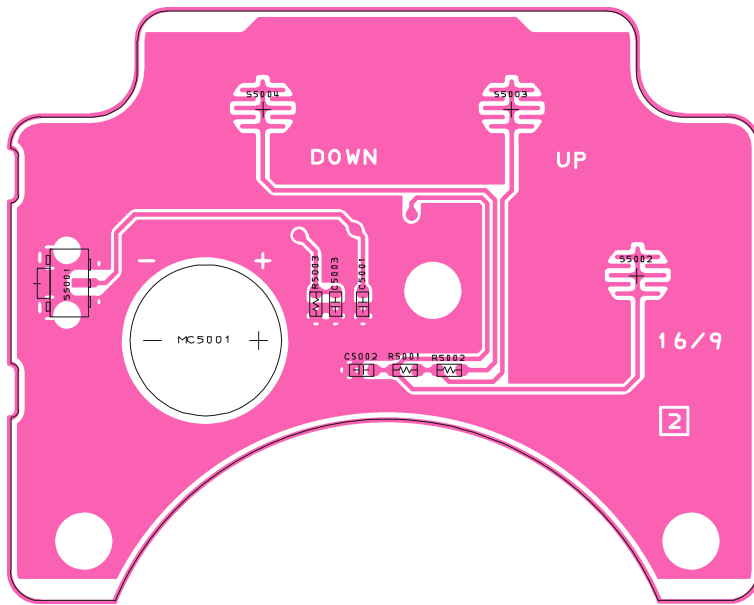
Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
PCB with Components						CB3336001				
Printed Circuit Board						AM017N000				
						FR013940B		1-		
						FR013940D		7-		
C 4013	CHIP CAP.	10pF	50V	CH	GRM1882C1H100JA01D	K22174211		7-		
J 4001	CONNECTOR				VERBD-08PMMP-LC-6	P0091397		1-		
J 4002	CONNECTOR				06FLT-SM2-TB(LF)(SN)	P1091255		1-		
JP4001	WIRE ASSY				AM017N RAM	T9207268		1-		
R 4001	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-		
R 4002	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-		
R 4003	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-		
R 4004	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-		
R 4005	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-		
R 4006	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-		
R 4007	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-		
R 4008	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-		

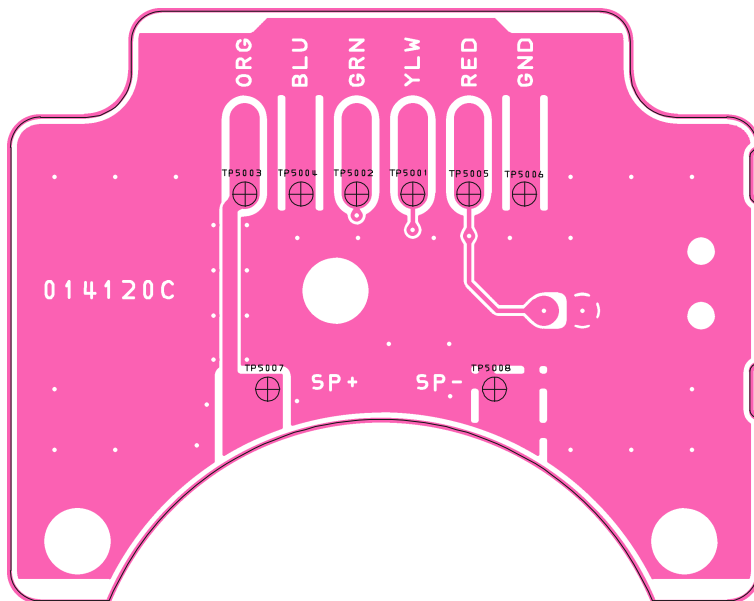
Circuit Diagram



Parts Layout



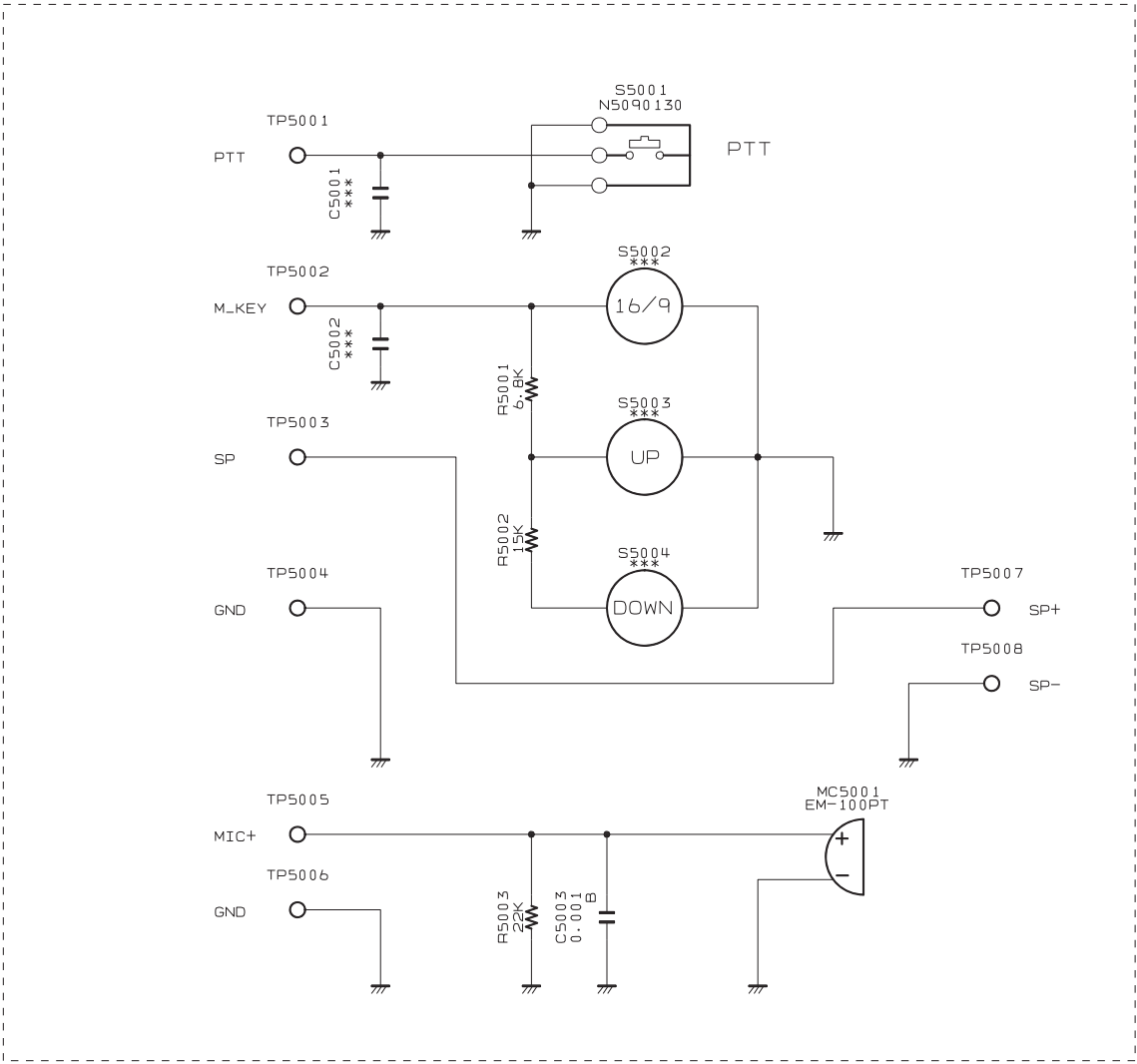
(Side A)



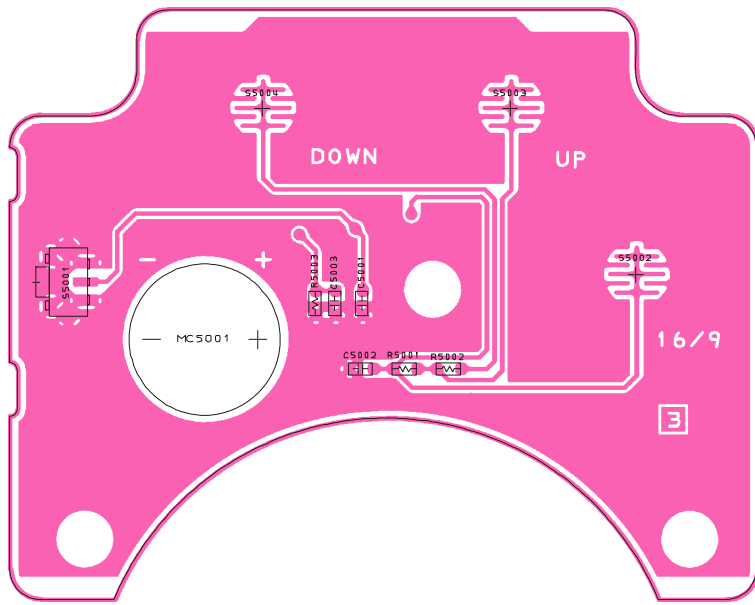
(Side B)

MIC Unit (Lot. 17~18)

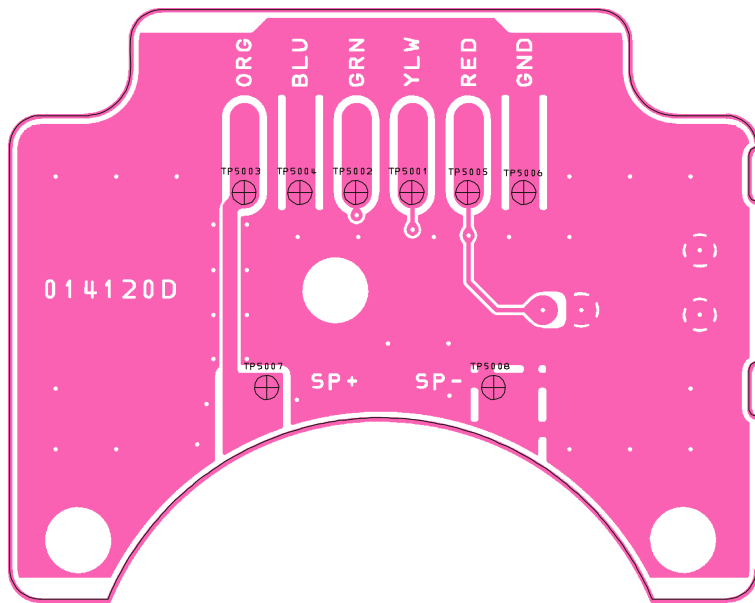
Circuit Diagram



Parts Layout



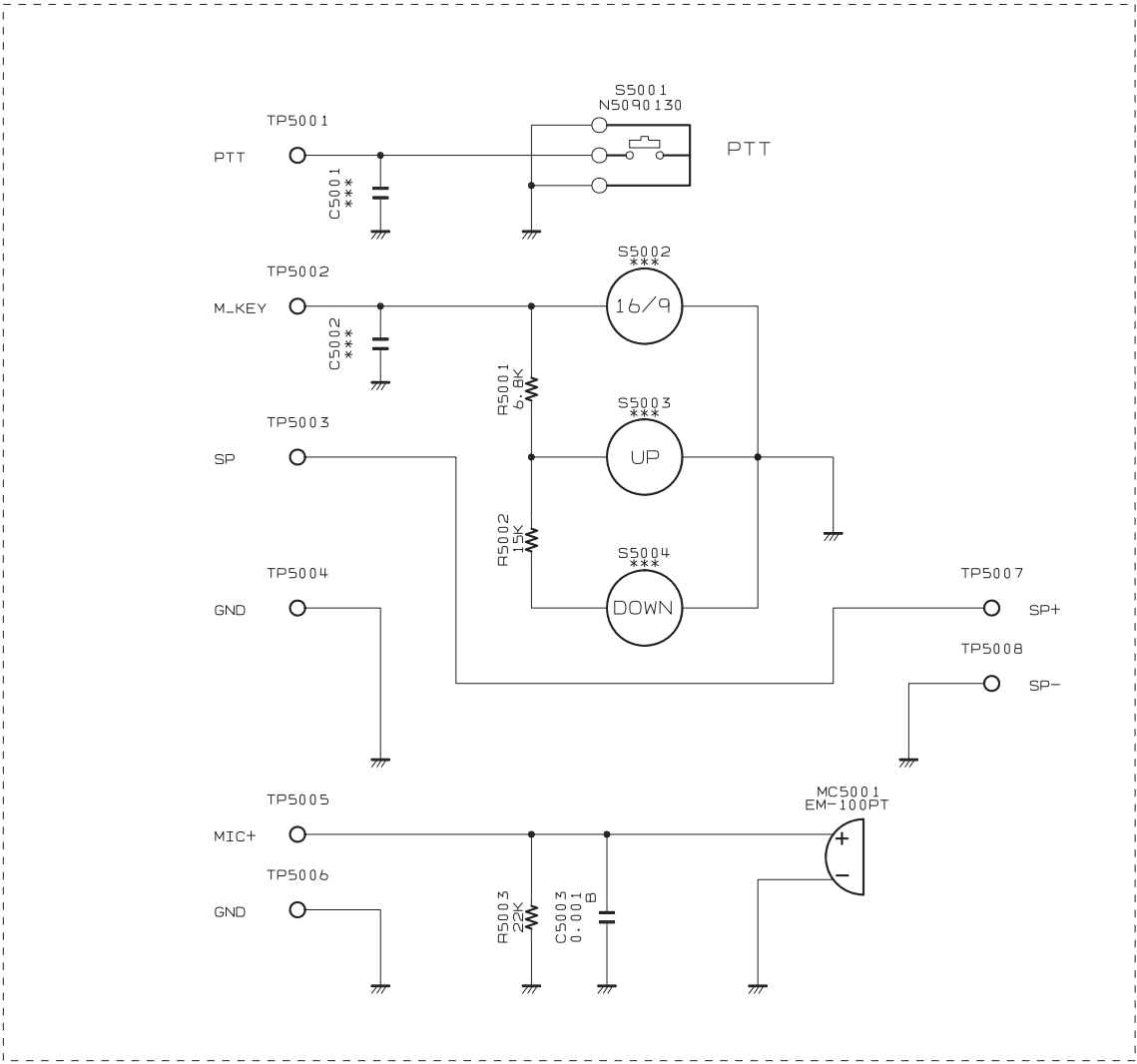
(Side A)



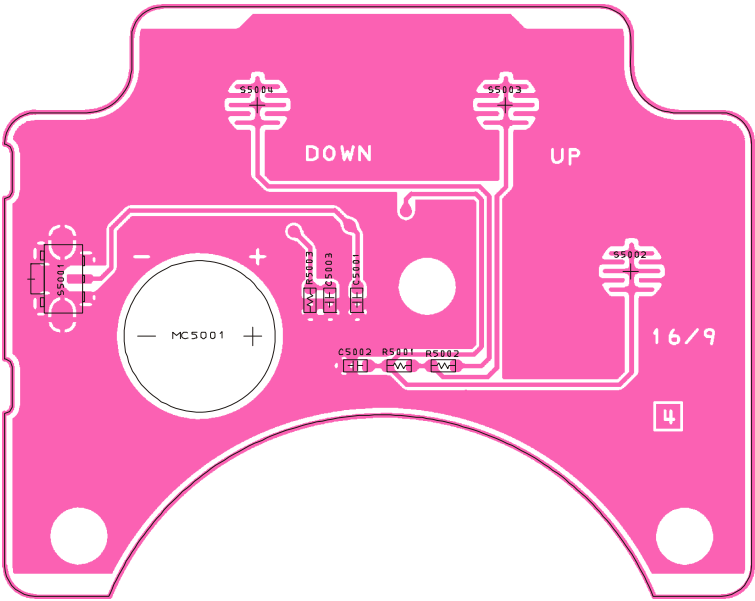
(Side B)

MIC Unit (Lot. 19~)

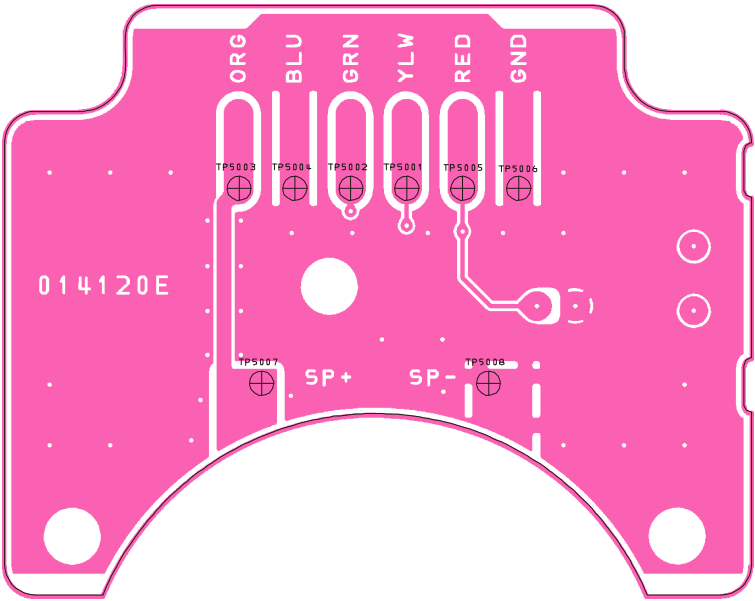
Circuit Diagram



Parts Layout



(Side A)



(Side B)

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
PCB with Components						CB3449001				
Printed Circuit Board						AM016N000				
						FR014120C		1-		
						FR014120D		17-		
						FR014120E		19-		
C 5001	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		35-		
C 5002	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		35-		
C 5003	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174809		1-		
C 5003	CHIP CAP.	0.001uF	50V	B	GRM188B11H102KA01D	K22174821		35-		
FB5001	FERRITE BEADS				BK1608HS601-T	L9190083		35-		
FB5002	FERRITE BEADS				BK1608HS601-T	L9190083		35-		
FB5003	FERRITE BEADS				BK1608HS601-T	L9190083		35-		
MC5001	MIC. ELEMENT				EM-100PT	M3290029		1-		
MC5001	MIC. ELEMENT				PF0-1055P	M3290045		23-		
R 5001	CHIP RES.	6.8k	1/16W	5%	RMC1/16 682JATP	J24185682		1-		
R 5002	CHIP RES.	15k	1/16W	5%	RMC1/16 153JATP	J24185153		1-		
R 5003	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-		
S 5001	TACT SWITCH				SKRTLAE010	N5090130		1-		
S 5001	TACT SWITCH				SKHLLD	N5090066		35-		



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