



**HF/VHF/UHF**

**ULTRA-COMPACT TRANSCEIVER**

**FT-857**

## Technical Supplement

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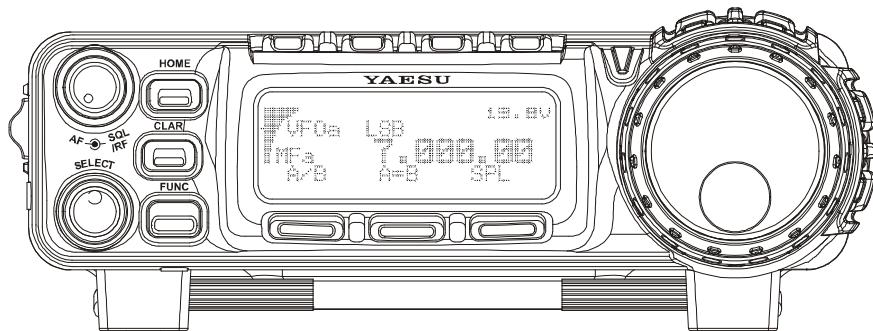
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## Introduction

This manual provides technical information necessary for servicing the FT-857 HF/VHF/UHF Ultra-Compact Transceiver.

Servicing this equipment requires expertise in handling surface-mount chip components. Attempts by non-qualified persons to service this equipment may result in permanent damage not covered by the warranty, and may be illegal in some countries.

Two PCB layout diagrams are provided for each double-sided circuit board in the Transceiver. Each side of is referred to by the type of the majority of components installed on that side ("leaded" or "chip-only"). In most cases one side has only chip components, and the other has either a mixture of both chip and leaded components (trimmers, coils, electrolytic capacitors, ICs, etc.), or leaded components only.

While we believe the technical information in this manual to be correct, VERTEX STANDARD assumes no liability for damage that may occur as a result of typographical or other errors that may be present. Your cooperation in pointing out any inconsistencies in the technical information would be appreciated.

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# **Specifications**

## **General**

<b>Frequency Range:</b>	Receive: 0.1-56 MHz, 76-108 MHz, 118-164 MHz, 420-470 MHz
<b>Emission Modes:</b>	Transmit: 160 - 6 Meters, 2 Meters, 70 Centimeters (Amateur bands only) A1 (CW), A3 (AM), A3J (LSB/USB), F3 (FM), F1 (9600 bps packet), F2 (1200 bps packet) 10 Hz (CW/SSB), 100 Hz (AM/FM/WFM)
<b>Synthesizer Steps (Min.):</b>	50 Ohms, Unbalanced
<b>Antenna Impedance:</b>	14 °F to 140 °F (-10 °C to +60 °C)
<b>Operating Temp. Range:</b>	±4 ppm from 1 min. to 60 min after power on. @25 °C: 1 ppm/hour
<b>Frequency Stability:</b>	±0.5 ppm/1 hour @25 °C, after warmup (with optional TCXO-9)
<b>Supply Voltage:</b>	Normal: 13.8 VDC ±15 %, Negative Ground
<b>Current Consumption:</b>	Squelched: 550 mA (Approx.) Receive: 1 A Transmit: 22 A
<b>Case Size (W x H x D):</b>	6.1" x 2.0" x 9.2" (155 x 52 x 233 mm)
<b>Weight (Approx.):</b>	4.6 lb. (2.1 kg)

## **Transmitter**

<b>RF Power Output:</b> (@13.8 V DC)	SSB/CW/FM	AM Carrier
160- 6 M:	100 W	25 W
2 M:	50 W	12.5 W
70 CM:	20 W	5 W

<b>Modulation Types:</b>	SSB: Balanced Modulator, AM: Early Stage (Low Level), FM: Variable Reactance
<b>FM Maximum Deviation:</b>	±5 kHz (FM-N: ±2.5 kHz)
<b>Spurious Radiation:</b>	-50 dB (1.8-29.7 MHz) -60 dB (50/144/430 MHz)
<b>Carrier Suppression:</b>	>40 dB
<b>Opp. Sideband Suppression:</b>	>50 dB
<b>SSB Frequency Response:</b>	400 Hz-2600 Hz (-6 dB)
<b>Microphone Impedance:</b>	200-10k Ohms (Nominal: 600 Ohms)

# **Specifications**

## **Receiver**

**Circuit Type:**

Double-Conversion Superheterodyne (SSB/CW/AM/FM)

Superheterodyne (WFM)

**Intermediate Frequencies:**

1st: 68.33 MHz (SSB/CW/AM/FM); 10.7 MHz (WFM)

2nd: 455 kHz

**Sensitivity:**

	SSB/CW	AM	FM
100 kHz-1.8 MHz	—	32 µV	—
1.8 MHz-28 MHz	0.2 µV	2 µV	—
28 MHz-30 MHz	0.2 µV	2 µV	0.5 µV
50 MHz-54 MHz	0.125 µV	1 µV	0.2 µV
144/430 MHz	0.125 µV	—	0.2 µV

(SSB/CW/AM = 10 dB S/N, FM = 12 dB SINAD)

**Squelch Sensitivity:**

	SSB/CW/AM	FM
100 kHz-1.8 MHz	—	—
1.8 MHz-28 MHz	2.5 µV	—
28 MHz-30 MHz	2.5 µV	0.32 µV
50 MHz-54 MHz	1 µV	0.16 µV
144/430 MHz	0.5 µV	0.16 µV

**Image Rejection:**

HF/50 MHz: 70 dB,  
144/430 MHz: 60 dB

**IF Rejection:**

60 dB

**Selectivity (-6/-60 dB):**

SSB/CW: 2.2 kHz/4.5 kHz

AM: 6 kHz/20 kHz

FM: 15 kHz/30 kHz

FM-N: 9 kHz/25 kHz

SSB (optional YF-122S installed): 2.3 kHz/4.7 kHz (-66 dB)

CW (option YF-122C installed): 500 Hz/2.0 kHz

CW (option YF-122CN installed): 300 Hz/1.0 kHz

**AF Output:**

2.5 W (@4 Ohms, 10% THD or less)

**AF Output Impedance:**

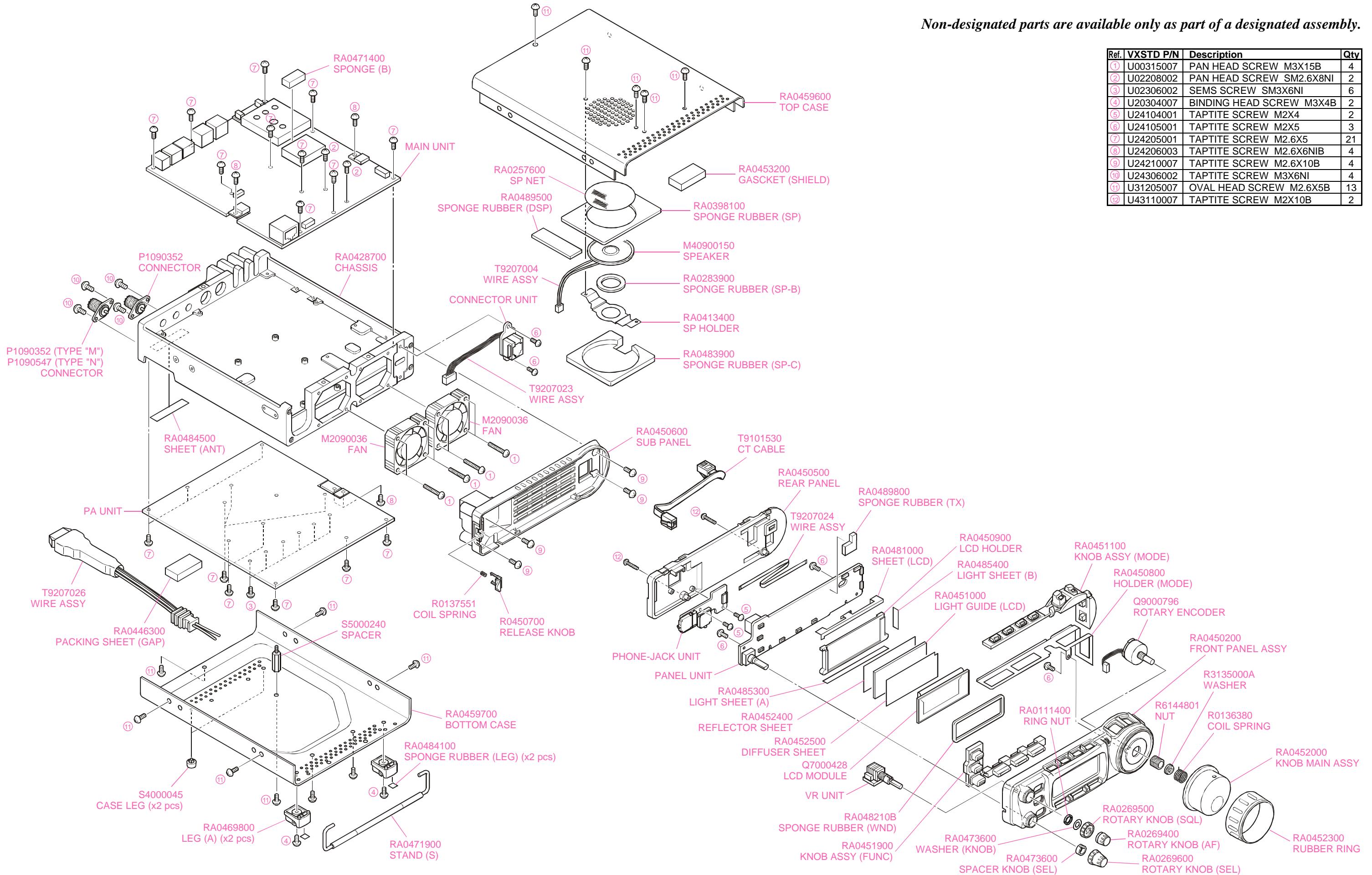
4-16 Ohms

*Specifications are subject to change without notice, and are guaranteed within the amateur bands only.*

## **Note**

# Exploded View & Miscellaneous Parts

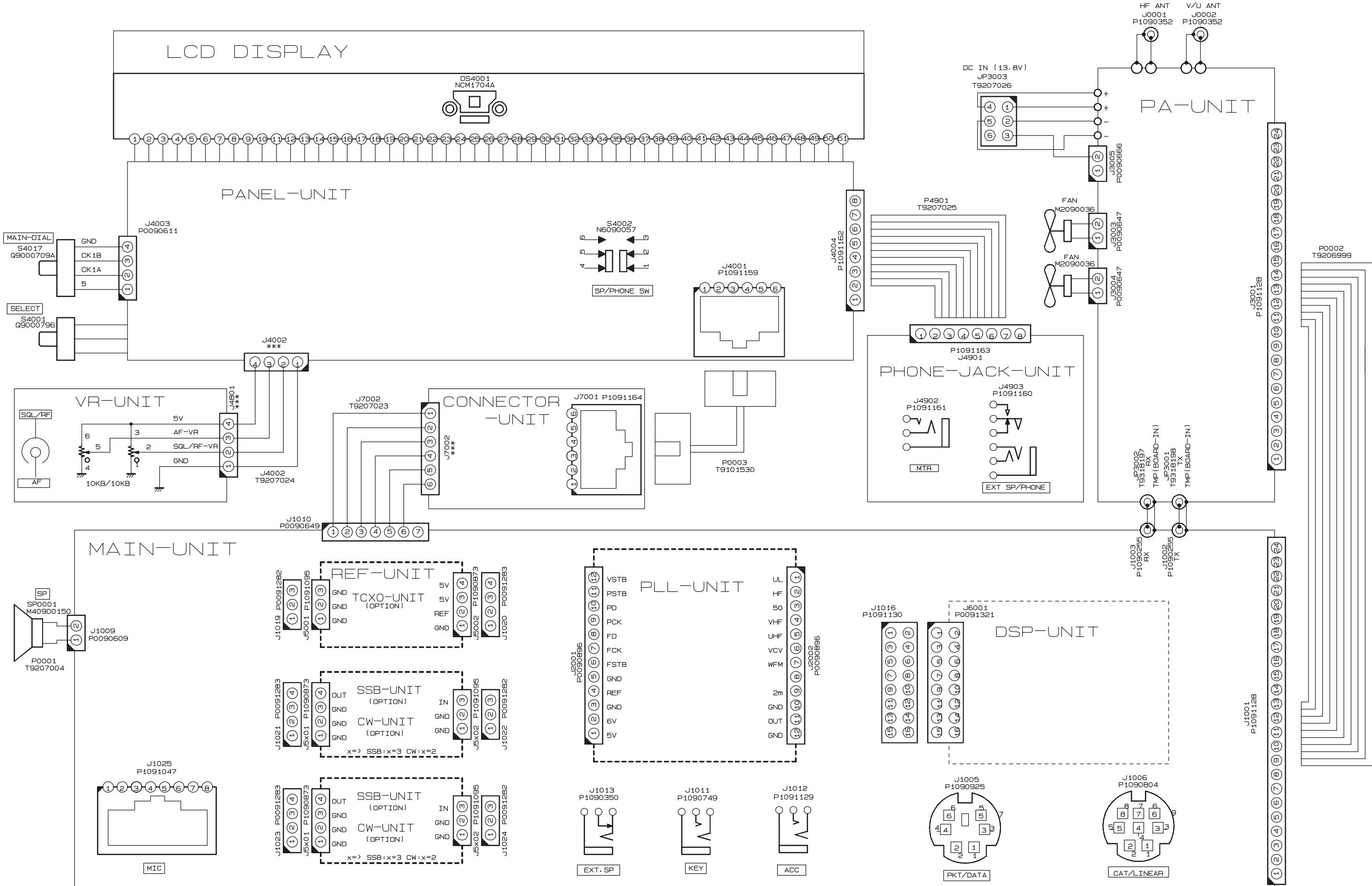
*Non-designated parts are available only as part of a designated assembly.*



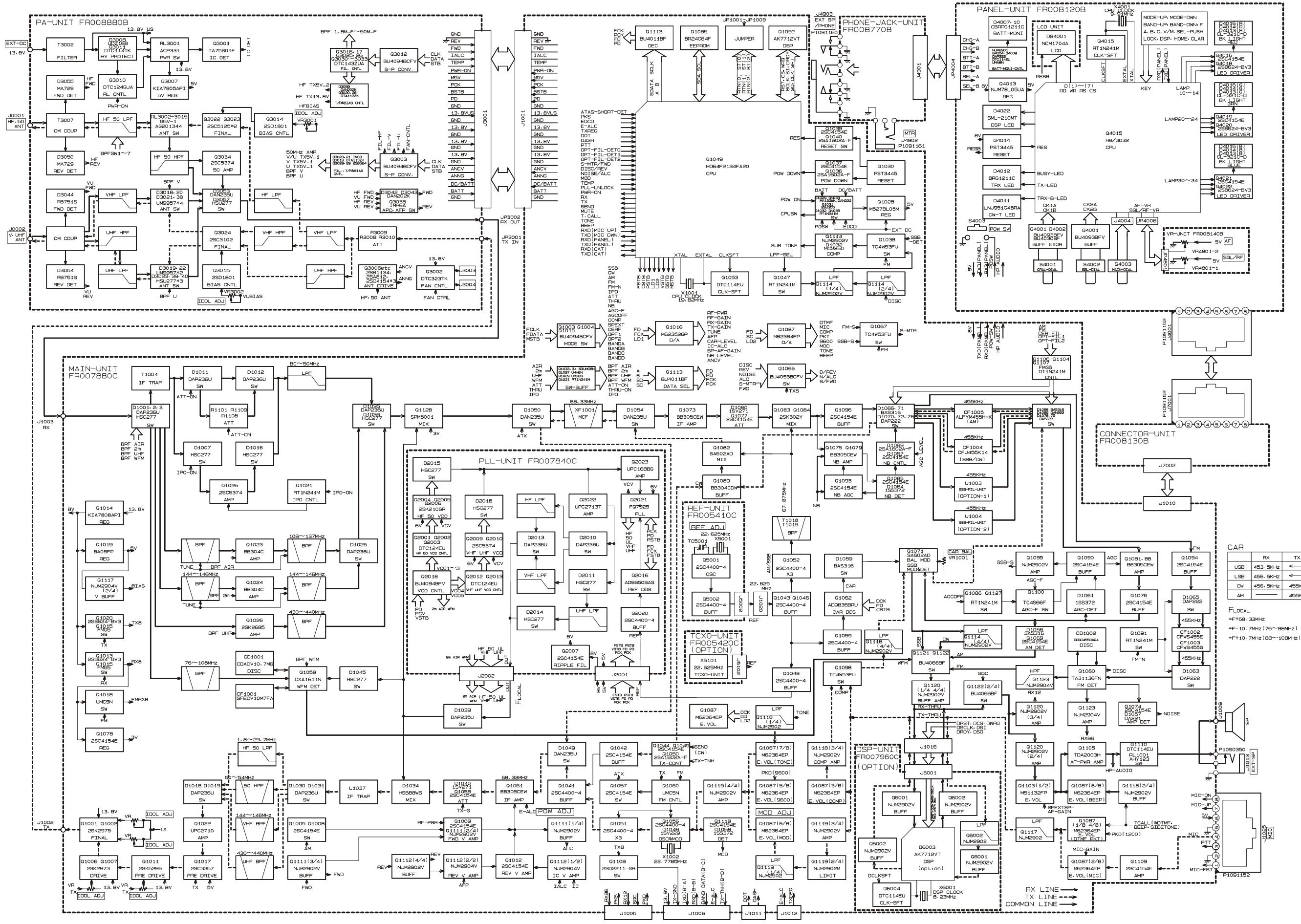
Ref.	VXSTD P/N	Description	Qty
①	U00315007	PAN HEAD SCREW M3X15B	4
②	U02208002	PAN HEAD SCREW SM2.6X8NI	2
③	U02306002	SEMS SCREW SM3X6NI	6
④	U20304007	BINDING HEAD SCREW M3X4B	2
⑤	U24104001	TAPTITE SCREW M2X4	2
⑥	U24105001	TAPTITE SCREW M2X5	3
⑦	U24205001	TAPTITE SCREW M2.6X5	21
⑧	U24206003	TAPTITE SCREW M2.6X6NIB	4
⑨	U24210007	TAPTITE SCREW M2.6X10B	4
⑩	U24306002	TAPTITE SCREW M3X6NI	4
⑪	U31205007	OVAL HEAD SCREW M2.6X5B	13
⑫	U43110007	TAPTITE SCREW M2X10B	2

## **Note**

# Connection Diagram



# Block Diagram



# Circuit Description

## Receive Signal Circuitry

### RF Stages

Signals between 0.1 and 56 MHz received at the antenna terminal pass through a low-pass filter, selected according to the receiving frequency, then pass to another low-pass filter, to remove unwanted out-of-band signals. The filtered receiving signal passes, through one of the following circuits, to the 1st Mixer **Q1128** (SPM5001): (1) an attenuator network (-10dB) which consists of resistors R1101, R1108, R1109; (2) a “through” circuit enabled via diodes **D1011** and **D1012** (both **DAP236U**); or (3) RF amplifier **Q1025** (**2SC5374**).

Received 430 MHz signals, after passing through a high-pass filter composed of L3058, L3069, C3250, C3251, C3253, C3258, and C3298, are passed through low-pass filter composed of L3043, L3044, C3209, C3211, C3214, C3215, C3246, and C3255, and through a directional coupler, to the UHF T/R switch circuit composed of diode switch **D3019/D3022** (both **UM9957F**), **D3023**, and **D3039** (both **HSU277**). Then the signals are fed to the 1st Mixer **Q1128** via the RF-AMP **Q1026** (**2SK2685**).

Received 145 MHz signals, after passing through a high-pass filter composed of L3055, L3056, L3067, C3248, C3249, C3252, and C3254, are passed through a low-pass filter composed of L3040, L3041, C3204, C3205, C3210, C3213, and C3216, and a directional coupler, to the VHF T/R switch circuit, composed of diode switch **D3018/D3021** (both **UM9957F**). Then the signals are fed to 1st Mixer **Q1128** via the RF-AMP, **Q1024** (**BB304CDW**).

Received 76-108 MHz signals, after passing through a high-pass filter composed of L3055, L3056, L3067, C3248, C3249, C3252, and C3254, are passed through low-pass filter composed of L3040, L3041, C3204, C3205, C3210, C3213, and C3216, and a directional coupler, to the T/R switch circuit, composed of diode switch **D3018/D3021** (both **UM9957F**). Then it is fed to the Wide-FM IF IC **Q1058** (**CXA1611N**) on the MAIN Unit.

### 1st Mixer Circuit/1st IF Circuit

The 1st mixer on the MAIN Unit consists of quad MOS FET **Q1128** (**SPN5001**), where the receiving signal is mixed with the 1st local signal (68.430-538.330 MHz) from the PLL Unit. The resulting output signal (68.33 MHz) passes through monolithic crystal filter (MCF) **XF1001** (**MF68Q**, BW:  $\pm 6.0$  kHz) to obtain the 1st IF signal with a center frequency of 68.33 MHz. The IF signal passes through the 1st IF amplifier **Q1073** (**BB305CEW**) to the 2nd Mixer, **Q1083** and **Q1084** (both **2SK302Y**).

### 2nd Mixer Circuit/2nd IF Circuit

The 2nd Mixer consists of FETs **Q1083** and **Q1084** (both **2SK302Y**) on the MAIN Unit, where the 1st IF signal is mixed with the 2nd local signal (67.875 MHz). The resulting output signal (455 kHz) is applied to the 2nd IF

filter which is matched to the receiving mode: either CF1004, CF1005 or an optional mechanical filter.

### Noise Blanker Circuit

A portion of the 2nd IF signal is amplified by Noise Blanker Amplifiers **Q1075** and **Q1079** (both **BB305CEW**) on the MAIN Unit, and then rectified by **D1064** (**1SS372**). This output is applied to the Noise Blanker Controllers, **Q1093** (**2SC4154E**) and **Q1099** (**2SA1602A**), which yield Blanking signal according to the timing of the incoming noise pulses. Then Blanking signal controls the Noise Blanker Gate **D1066** (**BAS316**), to slice out the impulse noise from the signal.

### AGC Circuit

The AGC circuit consists of **D1061** (**1SS372**), transistor **Q1090** (**2SC4154E**), and associated parts on the MAIN Unit. Output from the AGC circuit is fed back to the IF AGC circuit that controls the gain of the IF amplifier FETs.

### FM IF Circuit/FM Demodulator Circuit

On FM, the 2nd IF signal passes through the buffer amplifier **Q1094** (**2SC4154E**) and 2nd IF filters (CF1002 and CF1003) to the FM IF IC **Q1080** (**TA31135FN**) which contains a mixer, limiter amplifier, filter amplifier, squelch trigger, and demodulator. The demodulated audio signal at **Q1080** passes through a low-pass filter (R1339 and C1282) and a de-emphasis circuit (R1303 and C1345), then proceeds to the Audio Amplifier Circuit.

The squelch circuit selectively amplifies the noise component of the demodulator output using the filter amplifier inside the FM IF IC and an active band-pass filter consisting of an externally attached resistor and capacitor. Signal detection is performed by **D1057** (**DA221**).

### SSB/CW Demodulator Circuit

The 2nd IF SSB/CW signal passes through buffer amplifiers **Q1088** and **Q1081** (both **BB305CEW**) to the SSB balanced demodulator **Q1071** (**SA602AD**) which produces audio by applying the carrier signal from the CAR-DDS IC **Q1062** (**AD9835BRU**). The demodulated audio signal is stripped of high-frequency components by an active low-pass filter, op-amp IC **Q1120** (**NJM2902V**), then is applied to the Audio Amplifier Circuit.

### AM Demodulator Circuit

The 2nd IF AM signal passes through buffer amplifiers **Q1088** and **Q1081** (both **BB305CEW**) to the AM demodulator **D1055** (**BAS316**), yielding demodulated audio signal which is applied to the Audio Amplifier Circuit.

### Audio Amplifier Circuit

The demodulated audio signal is passed through AF pre-amplifier **Q1119** (**NJM2902V**) and electronic volume control IC **Q1087** (**M62364EP**) to the AF Amplifier IC **Q1105** (**TDA2003H**) which drives the internal or external speaker to a maximum output of approximately 2.5 Watts.

# Circuit Description

## Transmit Signal Circuitry

### *Microphone Amplifier Circuit*

The audio signal from microphone jack is amplified by audio amplifier **Q1109 (2SC4154E)** on the MAIN Unit, and then is applied to electronic volume control IC **Q1087 (M62364EP)**, the level of which is set via the User Menu.

### *SSB Modulator Circuit*

The output (audio signal) from the electronic volume control IC is passed through audio amplifier **Q1118 (NJM2902V)** to the balanced modulator IC **Q1071 (SA602AD)** which produces a Double Sideband (DSB) signal by applying the carrier signal from the CAR-DDS IC **Q1062 (AD9835BRU)**. The DSB modulated signal (455 kHz) is fed to ceramic filter **CF1004** (or the optional mechanical filter) which strips residual carrier and the undesired sideband, resulting in a Single Sideband (SSB) signal.

### *AM Modulator Circuit*

As in the SSB modulator circuit, a carrier signal appropriate to the transmitting mode (AM) from the CAR-DDS Unit and an audio signal from the microphone are applied to balanced modulator IC **Q1071 (SA602AD)**. The control signal from Mode Switch IC **Q1003 (BU4094BCFV)** causes a voltage ("AM 5V") to be sent from transistor **Q1058 (2SC4154E)**. This voltage is applied to IC **Q1071** via **D1059 (BAS316)**, causing the balanced modulator to lose balance. The restored carrier signal and modulated signal are then fed to the TX mixer via ceramic filter **CF1004**.

### *FM Modulator Circuit*

The output (audio signal) from the electronic volume control IC is passed through the pre-emphasis circuit which consists capacitor C1492 and resistors R1493 and R1477, and Instantaneous Deviation Control **Q1119 (NJM2902V)**, to the splatter filter which consists **Q1119**, capacitor C1430, and resistors R1358 and R1384. The filtered audio signal is applied to the FM modulator circuit, which produces the FM signal. The FM modulator circuit uses a voltage controlled crystal oscillator (VCXO) which consists **Q1055 (2SC4400)**, **D1046 (1SV229)**, and **X1002** (22.7767 MHz).

### *1st IF Circuit/1st Mixer Circuit*

The modulated SSB/AM signal is applied to the 2nd Mixer **Q1082 (SA602AD)**, which produces the 68.33 MHz 2nd IF signal utilizing the 2nd local signal (68.875 MHz). The 2nd IF signal is fed through the 2nd IF filter **XF1004** which strips away unwanted mixer products, then passes through the 2nd IF amplifier **Q1061 (BB304CDW)** to the double balanced mixer **D1034 (HSB88WS)** which produces the transmit frequency by applying the local signal (68.430-538.330 MHz) from the PLL Unit. The transmit signal is passed through a low-pass filter (1.8-29.7 MHz), a high-pass filter (50-54 MHz), a band-pass filter (144-146 MHz), or a band-pass filter (430-450 MHz) which consists of various inductors and capacitors. The filtered transmit signal is amplified by **Q1017 (2SC3357)**, **Q1011 (2SK2596)**, **Q1006/Q1007 (2SK2973)**, and **Q1001/Q1002 (2SK2975)**, and is applied to the Power Amplifier: **Q3022/Q3023 (2SC5125)**: HF/50 MHz) or **Q3024 (2SC3102)**: 144/430 MHz).

### *ALC Circuit*

The output from the directional coupler is routed from connector J3001 and applied to the ALC circuit via connector J1001 on the MAIN Unit.

The ALC circuit consists of an op-amp circuit for amplifying the forward and reflected voltage, a time-constant ALC amplifier, and a transmit signal control circuit on the MAIN Unit. The forward voltage from connector J1001 on the MAIN Unit is added with a DC control voltage and is then applied to op-amp IC **Q1111 (NJM2902V)**. The reflected voltage is added with a DC control voltage and is then applied to op-amp IC **Q1112 (NJM2904V)**. In the event of high SWR conditions (SWR 3:1 or more), transmitter output is reduced, thus protecting the PA Unit from potential damage; a "HI SWR" indication also appears on the LCD, alerting the user to an antenna problem.

The ALC amplifier magnifies the forward wave output via transistor **Q1009 (2SC4154)**. This output then passes through a fast-attack, slow-delay RC time-constant circuit, which consists of R1051 and C1051, for input to the TX signal control circuit on the MAIN Unit. The TX control circuit adjusts the IF amplifier gain via gate 2 of FET **Q1061 (BB304CDW)** of the 2nd IF amplifier circuit, to prevent the TX output from exceeding the preset level.

# Circuit Description

## PLL Frequency Synthesizer

The PLL Frequency Synthesizer consists mainly of the master reference oscillator circuit, 2nd local oscillator circuit, PLL IC, and CAR-DDS and REF-DDS units, which digitally synthesize carrier outputs, plus a PLL circuit which contains a voltage controlled oscillator (VCO).

### Master Reference Oscillator Circuit

The master reference oscillator uses a Crystal Oscillator (oscillation frequency: 22.625 MHz) composed of **Q5001 (2SC4400-4)**, **X5001**, TC5001, C5001, and R5005. The reference oscillator signal passes through a buffer amplifier **Q5002 (2SC4400-4)**, and is then fed to the MAIN Unit via J5002.

### CAR-DDS Circuit REF-DDS Circuit

DDS ICs **Q1062 (AD9835BRU)**, and **Q2016 (AD9850BAS)** each contain a shift register, selector, phase accumulator, and ROM. The reference oscillation frequency (22.625 MHz) that is delivered to each of the DDS Units is applied to each DDS IC after amplification by transistors **Q1043**, **Q1046**, **Q1048**, and **Q1059** (all **2SC4400-3**).

The DDS outputs contain digital amplitude data corresponding to serial frequency data from CPU IC **Q1049**. The DDS frequency range is 453.5 ~ 466.5 kHz (center frequency = 455.0 kHz) for the CAR-DDS, and 7.2-8.0 MHz for the REF DDS.

### 1st Local Oscillator Circuit

VCO output is buffer-amplified by **Q2011 (2SC5374)** and **Q2022 (UPC2713T)**, and passes through a low-pass filter. It is then fed to the TX/RX frequency mixer circuitry of the MAIN Unit.

### 2nd Local Oscillator Circuit

The 2nd LO circuit is a Hartley-type overtone oscillator circuit (frequency: 67.875 MHz) composed of **Q1052 (2SC4400-3)** on the MAIN Unit.

### PLL Circuit

The PLL circuit is a frequency mixing type composed of a VCO, mixer, PLL IC, and loop filter. The VCO consists of five circuits (VCO1, VCO2, VCO3, VCO4 and VCO5), with a frequency range of 68.430-538.330 MHz divided into five bands, allocated to the five VCO circuits. VCO1-VCO5 consist mainly of FETs **Q2004**, **Q2005**, and **Q2006** (all **2SK210GR**); transistors **Q2009** and **Q2010** (both **2SC5374**); diodes **D2001-D2006** (all **HVC362**), **D2007 (1SV282)**, **D2008 (1SV281)**, and **D2009 (1SV286)**; and coils T2001-T2003, L2010, and L2011.

The VCO switching signal from the connector J2002 is used to drive switching transistors **Q2001**, **Q2002**, **Q2003**, **Q2012**, and **Q2013** (all **DTC124EU**) to switch the source terminal of the oscillator FET.

The 68.430-538.330 MHz VCO signal is buffer-amplified by **Q2023 (UPC1688G)**, and fed to PLL IC **Q2021 (FQ7925)**.

The REF-DDS signal (7.2-8.0 MHz) is fed to PLL IC **Q2021** after it passes through a low-pass filter composed of C2064, C2067, C2069, C2071, C2075, L2014, L2015, and L2016, and is fed to PLL IC **Q2021 (FQ7925)**. The phase of the reference frequency and that of the signal input to the PLL IC are compared, and a signal whose pulse corresponds to the phase difference is produced.

# Alignment

## Introduction and Precautions

The following procedures cover adjustments that are not normally required once the transceiver has left the factory. However, if damage occurs and some parts subsequently be 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 by authorized Vertex Standard service technicians, experienced with the circuitry and fully equipped for repair and alignment. If a fault is suspected, contact the selling dealer for instructions regarding repair. Authorized Vertex Standard service technicians have the latest configuration information, and realign all circuits and make complete performance checks to ensure compliance with factory specifications after repairs.

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, 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. Most steps do not require all of the equipment listed, but the interactions of some adjustments may require that more complex adjustments be performed in a sequence. Do not attempt to perform only a single step unless it is clearly isolated electrically from all other steps. Rather, have all test equipment ready before beginning, and follow all of the steps in a section in the order they are presented.

## Required Test Equipment

- Digital DC Voltmeter (high-Z, 1 M-Ohm/V)
- DC Ammeter
- RF Millivoltmeter
- AC Voltmeter
- RF Standard Signal Generator w/calibrated output and dB scale,  $0 \text{ dB}\mu = 0.5 \mu\text{V}$
- Signal Generator with calibrated output
- Spectrum Analyzer good to at least 1 GHz.
- Frequency Counter
- 50-Ohm Dummy Load (200 watts)
- 100-Ohm Dummy Load (200 watts)
- 150-Ohm Dummy Load (200 watts)
- In-Line Wattmeter (200 watts, 50-Ohm)
- Linear Detector
- RF Coupler

## Alignment Preparation & Precautions

A 50-ohm RF Dummy load and in-line wattmeter must be connected to the main antenna jack in all procedures that call for transmission, except where specified otherwise. 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~86°F (20°C ~ 30°C). When the transceiver is brought into the shop from hot or cold air, it should be allowed time to come to room temperature before alignment.

Whenever 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  $0 \text{ dB}\mu = 0.5 \mu\text{V}$  (closed circuit).

## Local Oscillator Adjustment

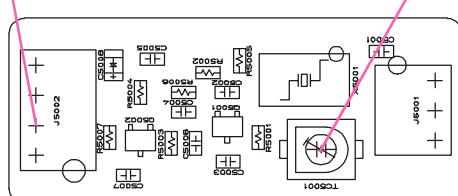
### Reference Frequency Adjustment

1. Connect an RF millivoltmeter or an oscilloscope to pin 2 of **J5002** on the REF Unit.
2. Confirm that the RF millivoltmeter reading is 115 mV ( $\pm 30$  mV) rms or 320 mV ( $\pm 90$  mV) p-p.
3. Connect the frequency counter to pin 2 of **J5002** on the REF Unit.
4. Adjust the **TC5001** for 67.875000 MHz ( $\pm 10$  Hz) on the frequency counter.

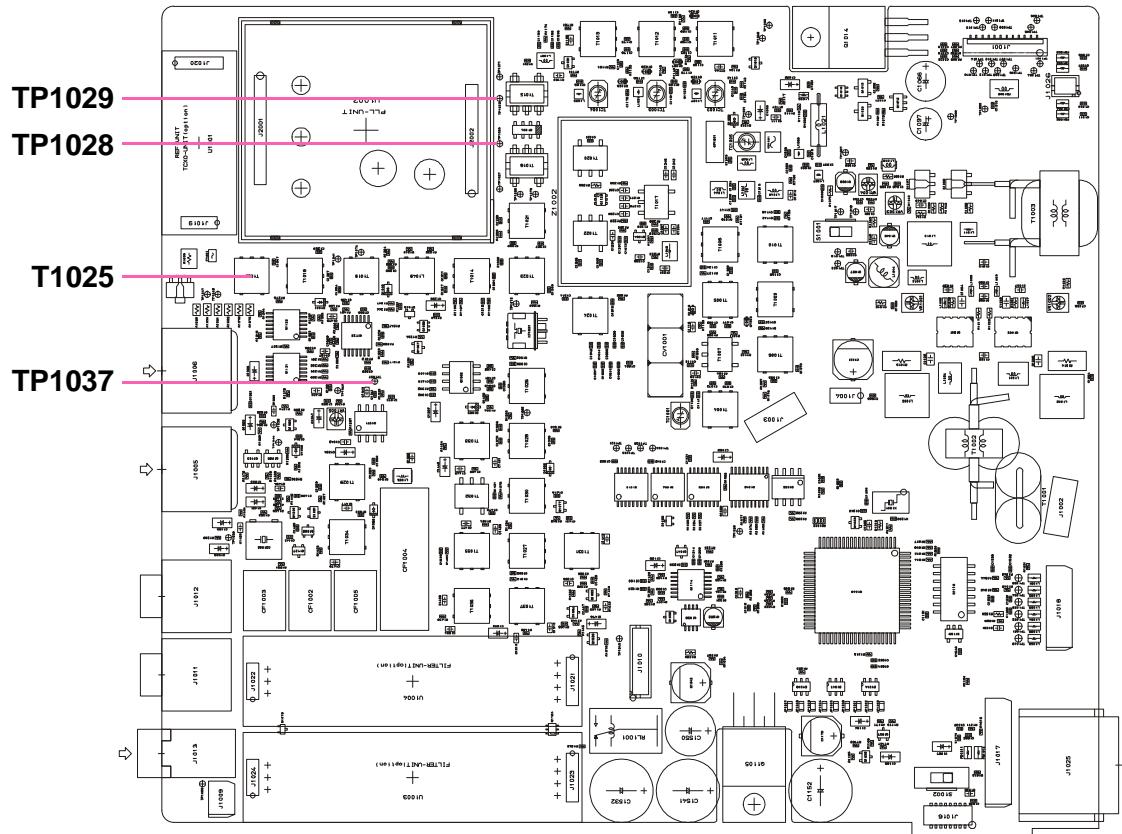
### 3rd Local Adjustment

1. Connect an RF millivoltmeter or an oscilloscope to **TP1037** on the MAIN Unit.
2. Key the transceiver on CW mode, and adjust **T1025** for maximum indication on the RF millivoltmeter.
3. Confirm that the indicated voltage is 100 mV ( $\pm 30$  mV) rms or 280 mV ( $\pm 80$  mV) p-p.

**J5002 (pin 2)**                    **TC5001**



**REF Unit Alignment Points**



**MAIN Unit Alignment Points I**

## PLL Adjustment

### VCO VCV Adjustment

1. Connect the DC voltmeter to **TP1028** on the MAIN Unit (or pin 6 of **J2002** on the PLL Unit), and referring to the table below, tune the transformer/inductor on the PLL Unit on each frequency listed. Then confirm that the correct voltage is present, or adjust the listed component for the required voltage.

Tune to :	Adjust / Confirm	For
13.895 MHz	Adjust T2001	5.5V $\pm 0.5$ V
76.000 MHz	Confirm	At least 0.8V
32.995 MHz	Adjust T2002	5.5V $\pm 0.5$ V
19.900 MHz	Confirm	At least 0.8V
55.995 MHz	Adjust T2003	5.5V $\pm 0.5$ V
88.000 MHz	Confirm	At least 0.5V
163.995 MHz	Adjust L2010	5.5V $\pm 0.5$ V
118.000 MHz	Confirm	At least 0.5V
469.995 MHz	Adjust L2011	5.5V $\pm 0.5$ V
420.000 MHz	Confirm	At least 0.5V

### 1st Local Output Level

1. Connect the RF millivoltmeter to **TP1029** on the MAIN Unit (or pin 11 of **J2002** on the PLL Unit), and set the transceiver to 28.000 MHz.
2. Confirm that the RF level is at least 0 dBm or 200 mV rms.

# Alignment

## PLL Unlock

1. Connect the DC voltmeter to **TP1029** on the MAIN Unit (or pin 11 of **J2002** on the PLL Unit).
2. Disconnect the REF Unit from the MAIN Unit; confirm that the DC voltmeter shows less than 0.5 V and that “UNLOCK” is displayed on the LCD.
3. Re-connect the REF Unit to the MAIN Unit, and confirm that the DC voltmeter shows at least 3.5 V and that the LCD returns to its normal display.

## Idling Current Adjustment

Before alignment, set the mode to CW and tune the transceiver to 1.800 MHz. Nothing should be connected to the CW Key Jack, and switch off **S1001** on the MAIN Unit.

### Pre-Driver Stage Idling Current

1. Connect the ammeter between **TP1019** (+) and **TP1020** (-) on the MAIN Unit.
2. Press the PTT, and adjust **VR1004** for an indication of 35 mA ( $\pm 2$  mA) on the ammeter.

### Driver Stage Idling Current

1. Connect the ammeter between **TP1017** (+) and **TP1018** (-) on the MAIN Unit.
2. Press the PTT and adjust **VR1003** for an indication of 30 mA ( $\pm 2$  mA) on the ammeter.

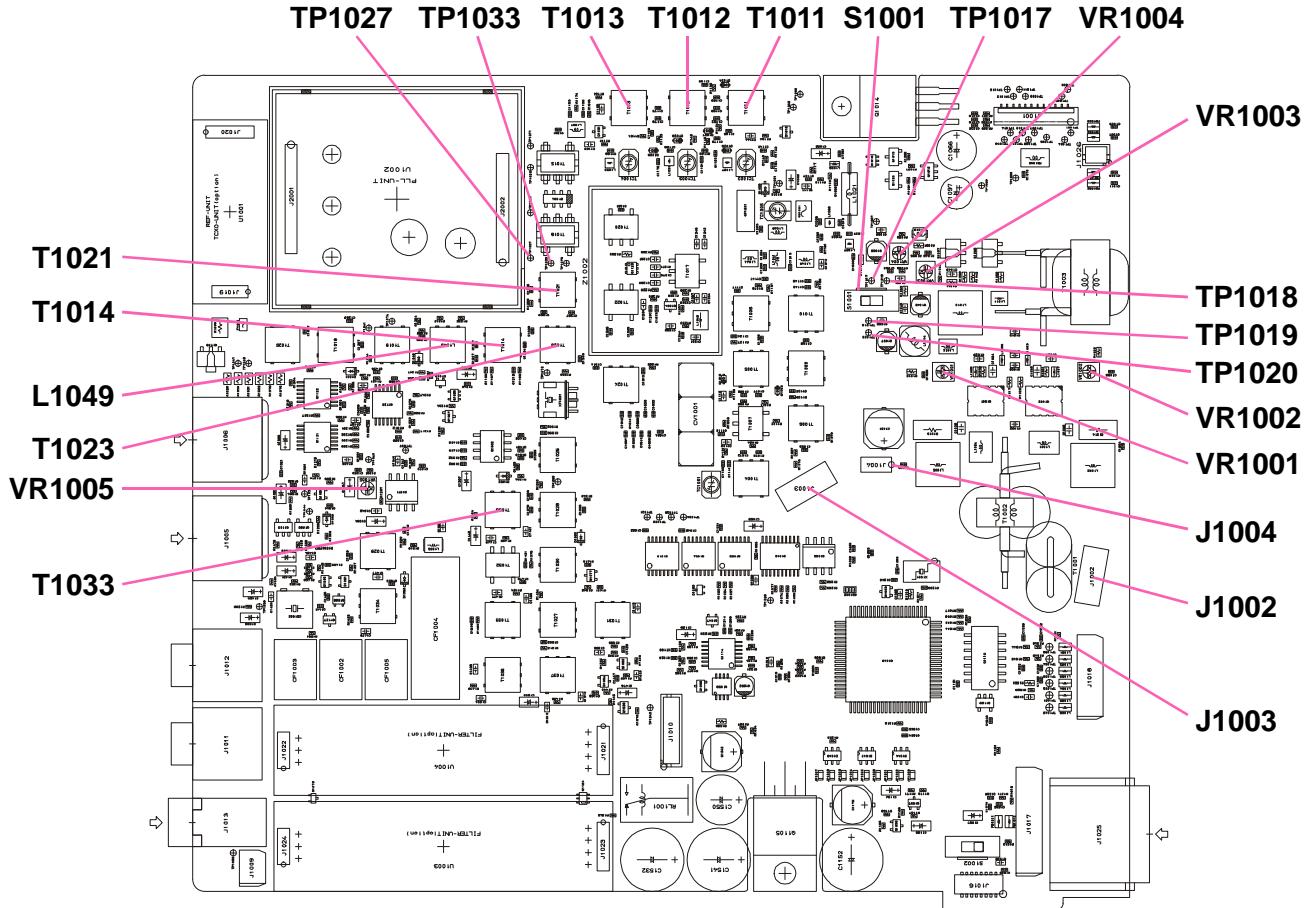
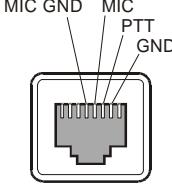
## Exciter Stage Idling Current

1. Disconnect the Jumper Plug from **J1004** on the MAIN Unit, then connect the ammeter to **J1004** (pin 1: -, pin 1: +).
2. Turn both **VR1001** and **VR1002** fully counterclockwise.
3. Press the PTT and adjust **VR1002** for an indication of 100mA ( $\pm 10$  mA) on the ammeter.
4. Press the PTT and adjust **VR1001** for an indication of 200mA ( $\pm 10$  mA) on the ammeter.
5. Re-connect the Jumper Plug to **J1004** and switch on **S1001**.

## TX IF Adjustment

### SSB/CW TX IF Adjustment

1. Tune the frequency to the 14 MHz band. Connect the RF millivoltmeter to **TP1033** on the MAIN Unit.
2. Disconnect the Coaxial Cable from **J1002** and terminate **J1002** into a 50-Ohm dummy load.
3. Inject a 1 kHz tone at 1 mV level to the **MIC** jack.
4. Key the transmitter, and adjust **T1033** for maximum indication on the RF millivoltmeter.
5. Disconnect the 50-Ohm dummy load and re-connect the Coaxial Cable to **J1002**.



**MAIN Unit Alignment Points II**

## FM TX IF Adjustment

1. Tune the frequency to the 28 MHz band. Connect the RF millivoltmeter to **TP1033** on the MAIN Unit.
2. Disconnect the Coaxial Cable from **J1002** and terminate **J1002** into a 50-Ohm dummy load.
3. Key the transmitter in the FM mode, and adjust **T1014**, **T1023**, and **T1021** alternately for maximum indication on the RF millivoltmeter.
4. Connect the frequency counter to **TP1033**.
5. Key the transmitter in the FM mode without microphone input. Adjust **L1049** for a reading of 68.3300 MHz ( $\pm 100$  Hz).
6. Disconnect the 50-Ohm dummy load and re-connect the Coaxial Cable to **J1002**.

## Carrier Balance Adjustment

1. Tune the frequency to the 14 MHz band. Disconnect the Coaxial Cable from **J1002** on the MAIN Unit.
2. Terminate **J1002** into a 50-Ohm dummy load and connect a spectrum analyzer or a RF millivoltmeter at this point.
3. Key the transmitter in the USB mode without microphone input. Adjust **VR1005** for maximum carrier suppression on the spectrum analyzer or for minimum indication on the RF millivoltmeter.
4. Disconnect the 50-Ohm dummy load and the spectrum analyzer or the RF millivoltmeter, and re-connect the Coaxial Cable to **J1002**.

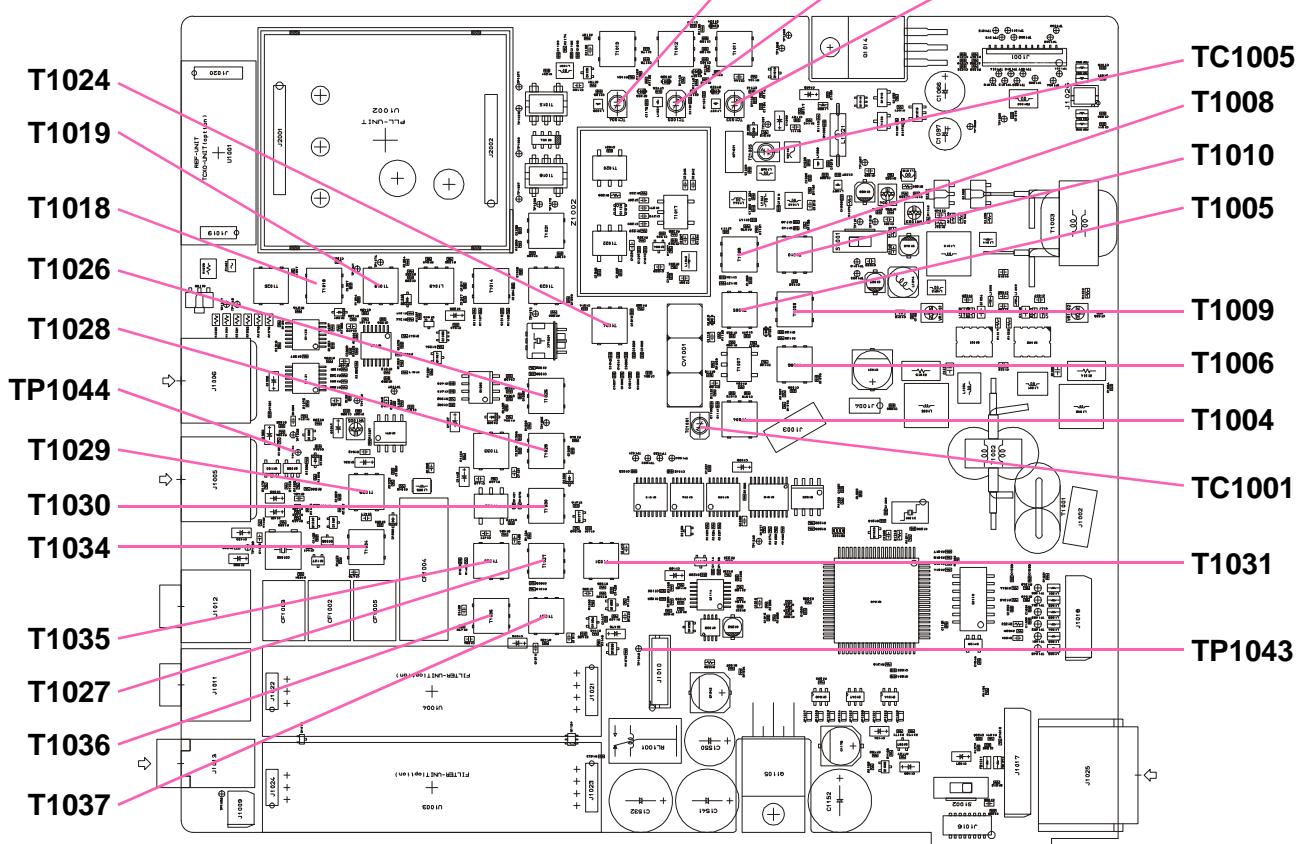
## TX BPF Adjustment

### VHF TX BPF Adjustment

1. Set the frequency to 145.995 MHz. Disconnect the Coaxial Cable from **J1002** on the MAIN Unit.
2. Connect the spectrum analyzer to **J1002**, which should be terminated into a 50-Ohm dummy load.
3. Inject a 1 kHz tone at 1 mV level to the **MIC** jack.
4. Key the transceiver in the USB mode, and adjust **T1013**, **T1012**, and **T1011** alternately for maximum indication on the spectrum analyzer.
5. Disconnect the 50-Ohm dummy load and the spectrum analyzer, and re-connect the Coaxial Cable to **J1002**.

### UHF TX BPF Adjustment

1. Set the frequency to 430.000 MHz. Disconnect the Coaxial Cable from **J1002** on the MAIN Unit.
2. Connect the spectrum analyzer to **J1002**, which should be terminated into a 50-Ohm dummy load.
3. Inject a 1 kHz tone at 1 mV level to the **MIC** jack.
4. Key the transceiver in the USB mode, and adjust **TC1004**, **TC1003** and **TC1002** alternately for maximum indication on the spectrum analyzer.
5. Disconnect the 50-Ohm dummy load and the spectrum analyzer, and re-connect the Coaxial Cable to **J1002**.



**MAIN Unit Alignment Points III**

# Alignment

## RX Adjustment

### SSB IF Adjustment

1. Connect the signal generator to the HF/50 MHz antenna jack, and the AF millivoltmeter and the SINAD meter to the speaker jack.
2. Tune the transceiver to 51.995 MHz, and switch off the ATT and IPO feature. Inject a 51.995 MHz signal from a signal generator at 0 dB $\mu$  output.
3. Adjust **T1018, T1019, T1024, T1026, T1028, T1030, T1035, T1036, T1037, T1034** and **T1029** on the MAIN UNIT alternately for maximum indication on the AF millivoltmeter. Several passes may be necessary, as the adjustments inter-react to some degree.

### FM IF Adjustment

1. Connect the signal generator to the HF/50 MHz antenna jack.
2. Tune the transceiver to 51.995 MHz. Inject a 51.995 MHz signal from a signal generator at 5 dB $\mu$  output, with 1 kHz AF FM modulation at  $\pm 3.5$  kHz deviation.
3. Adjust **T1024, T1026**, and **T1028** on the MAIN Unit alternately for maximum level on the S-meter.

### Air-Band Reception Adjustment

1. Connect the signal generator to the HF/50 MHz antenna jack, and the DC voltmeter to **TP1044** on the MAIN Unit.
2. Tune the transceiver to 128.000 MHz in the AM mode. Inject a 128.000 MHz signal from the signal generator at 20 dB $\mu$  output, with 30% AM modulation at 400 Hz audio frequency.
3. Adjust **T1005** and **T1008** for minimum indication on the DC voltmeter.

### VHF Band Alignment

1. Connect the signal generator to the 144/430 MHz antenna jack, and the DC voltmeter to **TP1044** on the MAIN Unit.
2. Tune the transceiver to 145.995 MHz in the CW mode. Inject a 145.995 MHz signal from a signal generator at 20 dB $\mu$  output.
3. Adjust **T1006, T1009**, and **T1010** alternately for minimum indication on the DC voltmeter.

### UHF Band Alignment

1. Connect the signal generator to the 144/430 MHz antenna jack, and the DC voltmeter to **TP1044** on the MAIN Unit.
2. Tune the transceiver to 439.995 MHz in the CW mode. Inject a 439.995 MHz signal from the signal generator at 20 dB $\mu$  output.
3. Adjust **TC1001** for minimum indication on the DC voltmeter.

### W-FM Reception Adjustment

1. Connect the signal generator to the 144/430 MHz antenna jack, and the SINAD meter to the speaker jack.
2. Tune the transceiver to 88.000 MHz. Inject an 88.000 MHz signal from the signal generator at 30dBu output, with  $\pm 22.5$  kHz deviation FM modulation of a 1 kHz audio signal.
3. Adjust **TC1005** for the best SINAD sensitivity. Then reduce the output level of the signal generator to where the signal just begins to sound slightly "noisy," and adjust **TC1005** again for best SINAD.

### Image Rejection Trap Adjustment

1. Connect the signal generator to the HF/50 MHz antenna jack, the AF millivoltmeter to the speaker jack.
2. Tune the transceiver to 51.995 MHz in the FM mode. Inject a 68.330 MHz signal from a signal generator at 70 dB $\mu$  output, with 1 kHz AF FM modulation at  $\pm 3.5$  kHz deviation
3. Adjust **T1004** for minimum indication on the AF millivoltmeter. Then increase the output level of the signal generator slightly and adjust **T1004** again, so as to ensure maximum notching of the image.

### Noise Blanker Adjustment

1. Connect the signal generator to the HF/50 MHz antenna jack, and the DC voltmeter to **TP1043** on the MAIN Unit.
2. Tune the transceiver to 51.995 MHz and inject a 51.995 MHz signal from the signal generator at 20 dB $\mu$  output.
3. Activate the noise blanker, and adjust **T1027** and **T1031** for minimum indication on the DC voltmeter.

## Power Amplifier Adjustment

### HF/50 MHz Idling Current Adjustment

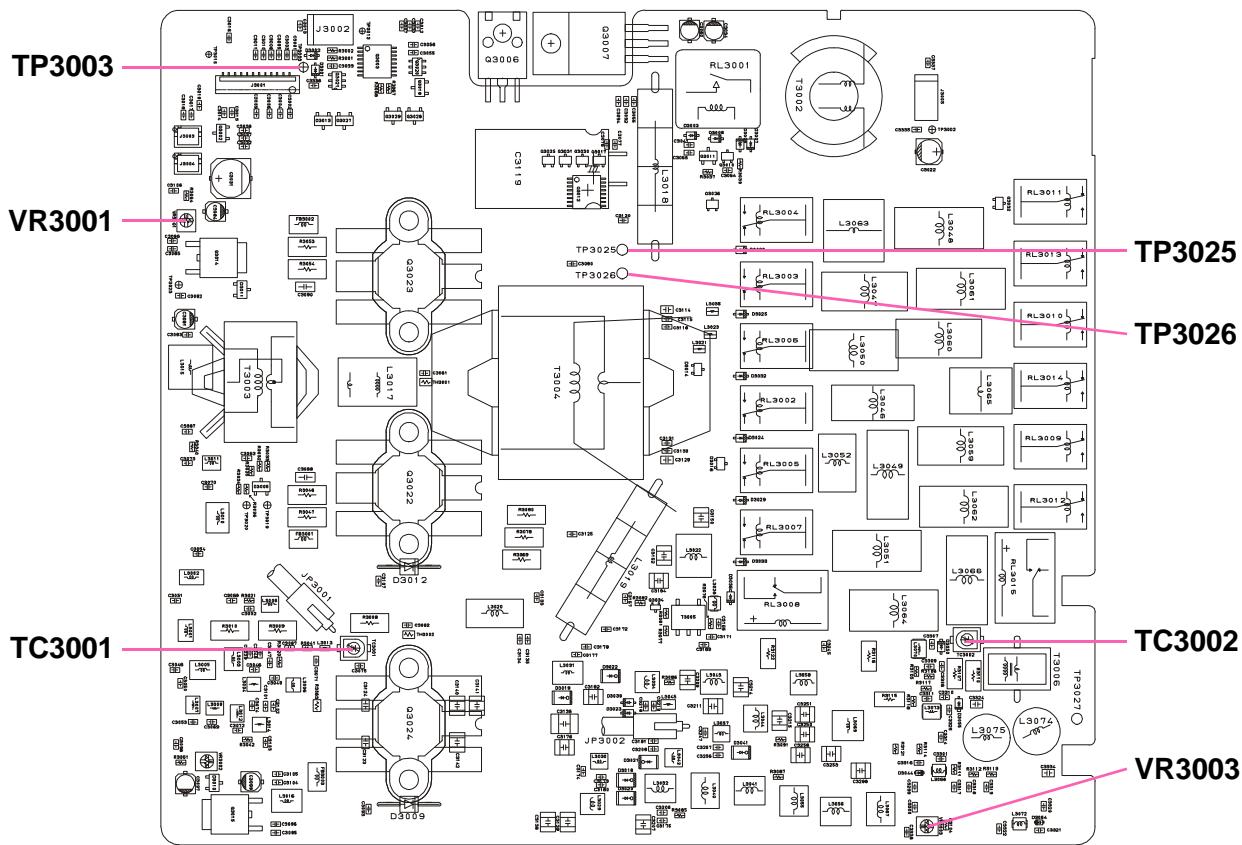
1. Connect the 50-Ohm dummy load to the HF/50 MHz antenna jack.
2. Tune the transceiver to any HF band, or to the 50 MHz band.
3. Disconnect the wire jumper from **TP3025** and **TP3026** on the PA Unit, then connect the ammeter between **TP3025** (+) and **TP3026** (-).
4. Turn **VR3001** fully counterclockwise.
5. Press the PTT, and adjust **VR3001** for an indication of 300 mA ( $\pm 10$  mA) on the ammeter.
6. Disconnect the ammeter, and re-connect **TP3025** and **TP3026** using the wire jumper.

### V/UHF Idling Current Adjustment

1. Connect the 50-Ohm dummy load to the 144/430 MHz antenna jack.
2. Tune the transceiver to the 430 MHz band.
3. Disconnect the wire jumper from **TP3025** and **TP3026** on the PA Unit, then connect the ammeter between **TP3025** (+) and **TP3026** (-).
4. Turn **VR3002** fully counterclockwise.
5. Press the PTT, and adjust **VR3002** for an indication of 300 mA ( $\pm 10$  mA) on the ammeter.
6. Disconnect the ammeter, and re-connect **TP3025** and **TP3026** using the wire jumper.

### Directional Coupler Balance Adjustment

1. Connect the 50-Ohm dummy load to the HF/50 MHz antenna jack.
2. Tune the transceiver to 28 MHz band in the CW mode, and connect the DC voltmeter to **TP3003** on the PA Unit.
3. Press the PTT, and adjust **TC3002** for minimum indication on the DC voltmeter.
4. Connect the 50-Ohm dummy load and wattmeter to the 144/430 MHz antenna jack
5. Tune the transceiver to 439.995 MHz in the CW mode.
6. Press the PTT, and adjust **VR3003** for minimum indication on the DC voltmeter.
7. Leave the transceiver on 439.995 MHz band and key the transceiver.
8. Adjust **TC3001** for maximum indication on the wattmeter.



PA Unit Alignment Points

# Alignment

## LCD Contrast Alignment

1. Connect a DC voltmeter (High Impedance) to **TP4027** on the PANEL Unit.
2. Adjust **VR4001** for an indication of  $-2.54\text{ V}$  ( $\pm 0.02\text{ V}$ ) on the voltmeter.

## Software Menu Alignment

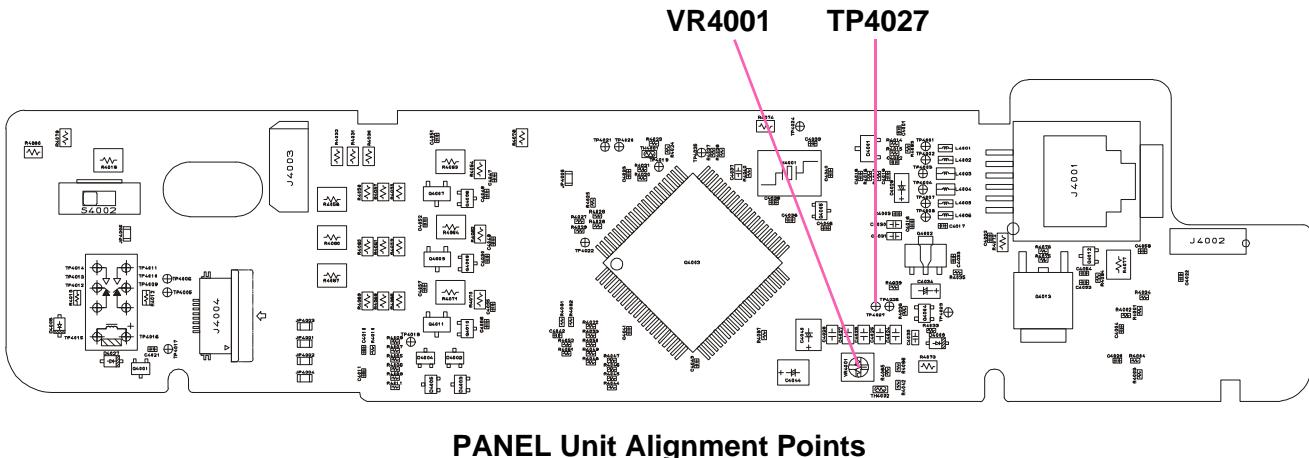
The antenna jacks should be connected to a dummy load (in cases where transmission is involved) or the signal generator (in the case of reception). General alignment conditions are as follows unless otherwise noted.

**AF-gain knob:** Center  
**RF-gain knob:** Fully clockwise  
**SQL:** Fully counterclockwise  
**ATT/IPO/CTCSS/DCS:** Off  
**AGC:** Auto  
**Output power:** Max  
**Break-in:** On,  
**CW Keyer:** Off  
**VOX:** Off

Press and hold in three Multi Function Keys ([**A**], [**B**], [**C**]) simultaneously and turn on the transceiver while holding them in; the alignment menu will then be activated (you will hear a “diddle-diddle-diddle” opening tone sequence to confirm that the alignment menu has been activated).

In the alignment procedures, each alignment parameter is selected by rotating the main **DIAL** knob. Each Alignment item is then selected by rotating the **SELECT** knob.

To store the alignment parameters when you are satisfied with the adjustment, press the **[FUNC]** key for longer than a one second.



## **RX Gain Adjustment**

1. Tune the transceiver to the 1.8 MHz band in the CW mode.
2. Select “HF1RXG” in the menu by rotating the **SELECT** knob, if necessary.
3. Inject an RF signal from the signal generator at 9 dB $\mu$  output.
4. Adjust the “HF1RXG” parameter by rotating the main **DIAL** knob to the point where the S-meter indicates “S1.”
5. The other RX gain adjustments (see the chart below) should be performed in the same way. The output levels of the signal generator at each frequency are shown below.

Menu	Frequency	Output Level of SG
01: HF1RXG	1.8 MHz Band	9 dB $\mu$
02: HF2RXG	7 MHz Band	9 dB $\mu$
03: HF3RXG	21 MHz Band	6 dB $\mu$
04: 50MRXG	50 MHz Band	3 dB $\mu$
05: VHFRXG	144 MHz Band	0 dB $\mu$
06: UHFRXG	430 MHz Band	0 dB $\mu$

## **SSB S-Meter Adjustment**

1. Tune the transceiver to the 21 MHz band in the CW mode.
2. Inject an RF signal from the signal generator at 36 dB $\mu$  output.
3. Select menu item “07: SSB-S9” and press the **[A]** key to set this parameter.
4. Increase the signal generator output level to 86 dB $\mu$ .
5. Select menu item “08: SSB-FS” and press the **[A]** key to set this parameter.

## **FM S-Meter Adjustment**

1. Tune the transceiver to the 144 MHz band in the FM mode.
2. Inject an RF signal from the signal generator at 0 dB $\mu$  output, with  $\pm 3.5$  kHz deviation FM Modulation of a 1 kHz tone.
3. Select menu item “09: FM-S1” and press the **[A]** key to set this parameter.
4. Increase the signal generator output level to 25 dB $\mu$ .
5. Select menu item “10: FM-FS” and press the **[A]** key to set this parameter.

## **FM Center Meter Adjustment**

1. Tune the transceiver to the 144 MHz band in the FM mode.
2. Inject an RF signal from the signal generator at 10 dB $\mu$  output, with  $\pm 3.5$  kHz deviation FM Modulation of a 1 kHz tone.
3. Set the frequency of the signal generator 3 kHz below the receiving frequency of the transceiver.
4. Select menu item “11: DISC-L” and press the **[A]** key to set this parameter.
5. Set the frequency of the signal generator 3 kHz above the receiving frequency of the transceiver.
6. Select menu item “12: DISC-H” and press the **[A]** key to set this parameter.

## **FM Squelch Adjustment**

1. Tune the transceiver to the 144 MHz band in the FM mode. Confirm that the squelch knob is turned fully counterclockwise.
2. Inject an RF signal from the signal generator at  $-15$  dB $\mu$  output, with  $\pm 3.5$  kHz deviation FM Modulation of a 1 kHz tone.
3. Select menu item “13: FM-TH1” and press the **[A]** key to set this parameter.
4. Select menu item “14: FM-TH2” and press the **[A]** key again.
5. Increase the signal generator output level to 0 dB $\mu$ .
6. Select menu item “15: FM-TI1” and press the **[A]** key to set this parameter.
7. Select menu item “16: FM-TI2” and press the **[A]** key again.

## **Power Supply Voltage Display Adjustment**

1. Tune the transceiver to the 144 MHz band in the FM mode. Confirm that the power supply voltage is 13.8 V ( $\pm 0.1$  V).
2. Select menu item “17: VCC” and adjust this parameter such that “138” is displayed on the LCD.

# **Alignment**

## **Over-current Protection Adjustment**

1. Set the transceiver to the CW mode.
2. Select menu item “**18: HF1-IC.**” Tune the transceiver to the 1.8 MHz band and key the transceiver. Adjust this parameter for 140 Watts of transmission power.
3. Select menu item “**19: HF2-IC.**” Tune the transceiver to the 7 MHz band and key the transceiver. Adjust this parameter for 130 Watts of transmission power.
4. Select menu item “**20: HF3-IC.**” Tune the transceiver to the 21 MHz band and key the transceiver. Adjust this parameter for 130 Watts of transmission power.
5. Select menu item “**21: 50M-IC.**” Tune the transceiver to the 50 MHz band and key the transceiver. Adjust this parameter for 120 Watts of transmission power.
6. Select menu item “**22: VHF-IC.**” Tune the transceiver to the 144 MHz band and key the transceiver. Adjust this parameter for 60 Watts of transmission power.
7. Select menu item “**23: UHF-IC.**” Tune the transceiver to 430.000 MHz and key the transceiver. Adjust this parameter for 25 Watts of transmission power.

## **RF Power Adjustment**

1. Tune the transceiver to the 1.8 MHz band in the CW mode.
2. Select menu item “**24: HF1-MAX.**” Key the transmitter, and adjust this parameter for 100 Watts ( $\pm 5$  W) of transmission power.
3. Select menu item “**25: HF1-MID2.**” Key the transmitter, and confirm that the output power is 50 W ( $\pm 5$  W). In case the transmission power is not within the specified tolerance, adjust this parameter for 50 W ( $\pm 5$  W) of transmission power.
4. Select menu item “**26: HF1-MID1.**” Key the transmitter, and confirm that the output power is 10 W ( $\pm 1$  W). In case the power is not within the specified tolerance, adjust this parameter for 10 W ( $\pm 1$  W) of transmission power.
5. Select menu item “**27: HF1-MIN.**” Key the transmitter, and confirm that the output power is 5 W ( $\pm 1$  W). In case the power is not within the specified tolerance, adjust this parameter for 5 W ( $\pm 1$  W) of transmission power.
6. The other RF power adjustment menus, [**HF2-\*\***] and [**HF3-\*\***], should be adjusted in the same manner as shown above for the 7 MHz and 21 MHz bands respectively.
7. Tune the transceiver to the 50 MHz band in the CW mode.
8. Select menu item “**36: 50M-MAX.**” Key the transmitter, and adjust this parameter for 100 W ( $\pm 5$  W) of transmission power.
9. Select menu item “**37: 50M-MID2.**” Key the transmitter, and confirm that the output power is 50 W ( $\pm 5$  W). In case the transmission power is not within the specified tolerance, adjust this parameter for 50 W ( $\pm 5$  W) of transmission power.
10. Select menu item “**38: 50M-MID1.**” Key the transmitter, and confirm that the output power is 20 W ( $\pm 2$  W). In case the power is not within the specified tolerance, adjust this parameter for 20 W ( $\pm 2$  W) of transmission power.
11. Select menu item “**39: 50M-MIN.**” Key the transmitter, and confirm that the output power is 5 W ( $+0/-1$  W). In case the power is not within the specified tolerance, adjust this parameter for 5 W ( $+0/-1$  W) of transmission power.
12. Tune the transceiver to the 144 MHz band in the CW mode.
13. Select menu item “**40: VHF-MAX.**” Key the transmitter, and adjust this parameter for 50 W ( $\pm 2.5$  W) of transmission power.
14. Select menu item “**41: VHF-MID.**” Key the transmitter, and confirm that the output power is 20 W ( $\pm 2$  W).

In case the transmission power is not within the specified tolerance, adjust this parameter for 20 W ( $\pm 2$  W) of transmission power.

15. Select menu item “**42: VHF-MIN.**” Key the transmitter, and confirm that the output power is 5 W (+0/-1 W). In case the power is not within the specified tolerance, adjust this parameter for 5 W (+0/-1 W) of transmission power.
16. Tune the transceiver to the 430 MHz band in the CW mode.
17. Select menu item “**43: UHF-MAX.**” Key the transmitter, and adjust this parameter for 20 W ( $\pm 1$  W) of transmission power.
18. Select menu item “**44: UHF-MID.**” Key the transmitter, and confirm that the output power is 20 W ( $\pm 0.3$  W). In case the transmission power is not within the specified tolerance, adjust this parameter for 20 W ( $\pm 0.3$  W) of transmission power.

### ***TX Gain Adjustment***

1. Set the transceiver to the USB mode.
2. Inject a 1 kHz tone at 1 mV level to the MIC jack.
3. Tune the transceiver to the 1.8 MHz band.
4. Select menu item “**45: HF1TXG.**” Key the transmitter, and adjust this parameter for 70 W ( $\pm 10$  W) of transmission power.
5. The other TX gain adjustment menus, “**46: HF2TXG,**” “**47: HF3TXG,**” and “**48: 50MTXG,**” should be adjusted in the same manner as detailed above on the 7 MHz, 21 MHz, and 50 MHz bands, respectively.
6. Tune the transceiver to the 144 MHz band.
7. Select menu item “**49: VHFTXG.**” Key the transmitter and adjust this parameter for 35 W ( $\pm 5$  W) of transmission power.
8. Tune the transceiver to the 430 MHz band.
9. Select menu item “**50: UHFTXG.**” Key the transmitter and adjust this parameter for 10 W ( $\pm 2$  W) of transmission power.

### ***ALC (Automatic Level Control) Meter Adjustment***

1. Tune the transceiver to the 21 MHz band in the USB mode.
2. Select menu item “**51: ALC-1.**” Key the transceiver without microphone input and press the [A] key. Now, a value which the microprocessor computes will be displayed on the LCD.
3. Rotate the main **DIAL** knob to adjust this parameter to a reading four digits lower than the parameter value displayed in the previous step.
4. After setting the parameter, confirm that all the dots of the ALC meter have gone out.
5. Select menu item “**52: ALC-M.**” 1 kHz tone at 4 mV level to the **MIC** jack.
6. Press the [A] key and confirm that the ALC meter shows an “S-8” S-meter reading on the LCD.

### ***AFP (Automatic Final Protection) Adjustment***

1. Tune the transceiver to the 1.8 MHz band in the CW mode, and connect a 150-Ohm dummy load to the antenna jack.
2. Select menu item “**53: HF1-RV.**” Key the transmitter, and adjust this parameter for an “S-8” S-meter reading on the LCD.
3. The other AFP adjustment menus, “**54: HF2-RV,**” “**55: HF3-RV,**” and “**56: 50M-RV,**” should be adjusted in the same manner as shown above on the 7 MHz, 21 MHz, and 50 MHz bands, respectively.
4. Tune the transceiver to the 144 MHz band.
5. Select menu item “**57: VHF-RV.**” Key the transmitter, and adjust this parameter for an “S-6” S-meter reading on the LCD.
6. Tune the transceiver to the 430 MHz band.
7. Select menu item “**58: UHF-RV.**” Key the transmitter, and adjust this parameter for an “S-3” S-meter reading on the LCD.

### ***Carrier Level Adjustment***

1. Tune the transceiver to the 21 MHz band in the CW mode.
2. Connect a 50-Ohm dummy load to the HF/50MHz antenna jack.
3. Select menu item “**59: CW-CAR.**” Key the transmitter, and adjust this parameter for an “S-9” S-meter reading on the LCD.
4. Connect the oscilloscope to the HF/50MHz antenna jack via an appropriate attenuator.
5. Set the transceiver to the AM mode.
6. Inject a 1 kHz tone at 1 mV level to the **MIC** jack.
7. Select menu item “**60: AM-CAR.**” Key the transmitter, and adjust this parameter for 33% AM modulation on the oscilloscope.

# Alignment

## FM Modulation Adjustment

1. Tune the transceiver to the 144 MHz band in the FM mode. Connect the FM linear detector to the 144/430 MHz antenna jack via an appropriate attenuator.
2. Inject a 1 kHz tone at 15 mV level to the **MIC** jack.
3. Select menu item “**61: DEV-W.**” Key the transmitter, and adjust this parameter for a maximum deviation of  $\pm 4.5$  kHz ( $\pm 0.2$  kHz) on the FM linear detector.
4. Select menu item to “**62: DEV-N.**” Key the transmitter, and adjust this parameter for maximum deviation of  $\pm 2.25$  kHz ( $\pm 0.1$  kHz) on the FM linear detector.
5. Select menu item to “**63: M-MTR.**” Key the transmitter, and set this parameter for an “S-9” indication on the S-meter on the LCD.
6. Select menu item to “**64: DTMF.**” Key the transmitter, and adjust this parameter for a maximum deviation of  $\pm 3.5$  kHz ( $\pm 0.3$  kHz) on the FM linear detector (the transceiver generates the DTMF “D” tone automatically while the menu item selected is “**64: DTMF**”).
7. Select menu item to “**65: CTCSS.**” Key the transmitter without microphone input, and adjust this parameter for a maximum deviation of  $\pm 0.7$  kHz ( $\pm 0.1$  kHz) on the FM linear detector (the transceiver generates a CTCSS tone automatically while the menu item selected is “**65: CTCSS**”).
8. Select menu item to “**66: DCS.**” Key the transmitter without microphone input, and adjust this parameter for a maximum deviation of  $\pm 0.7$  kHz ( $\pm 0.2$  kHz) on the FM linear detector (the transceiver generates a DCS tone automatically while the menu item selected is “**66: DCS**”).

## SSB Carrier Point Adjustment

1. Tune the transceiver to the 21 MHz band in the LSB mode.
2. Connect a 50-Ohm dummy load and wattmeter to the HF/50MHz antenna jack.
3. Inject a 400 Hz tone at 1 mV level to the **MIC** jack.
4. Select menu item “**67: LSB-CP.**” Key the transmitter, and adjust the audio generator output so that the transmission power is 20 Watts.
5. Change the audio frequency to 2600 Hz. Key the transmitter, and adjust this parameter so that the transmission power is 20 W ( $\pm 2$  W).
6. The adjustment for the USB carrier point is performed in the same manner as done for LSB by changing the transmission mode to USB and the menu item to “**68: USB-CP.**”

## VSWR Adjustment

1. Connect a 100-Ohm dummy load to the HF/50 MHz antenna jack.
2. Tune the transceiver to the 14 MHz band in the CW mode, and set the output power to 10 Watts.
3. Select menu item “**69: SWR2.**” Key the transceiver and press the **[A]** key to set this parameter.
4. Connect a 150-Ohm dummy load to the HF/50 MHz antenna jack, and set the output power to 10 Watts.
5. Select menu item “**70: SWR3**”. Key the transceiver and press the **[A]** key to set this parameter.

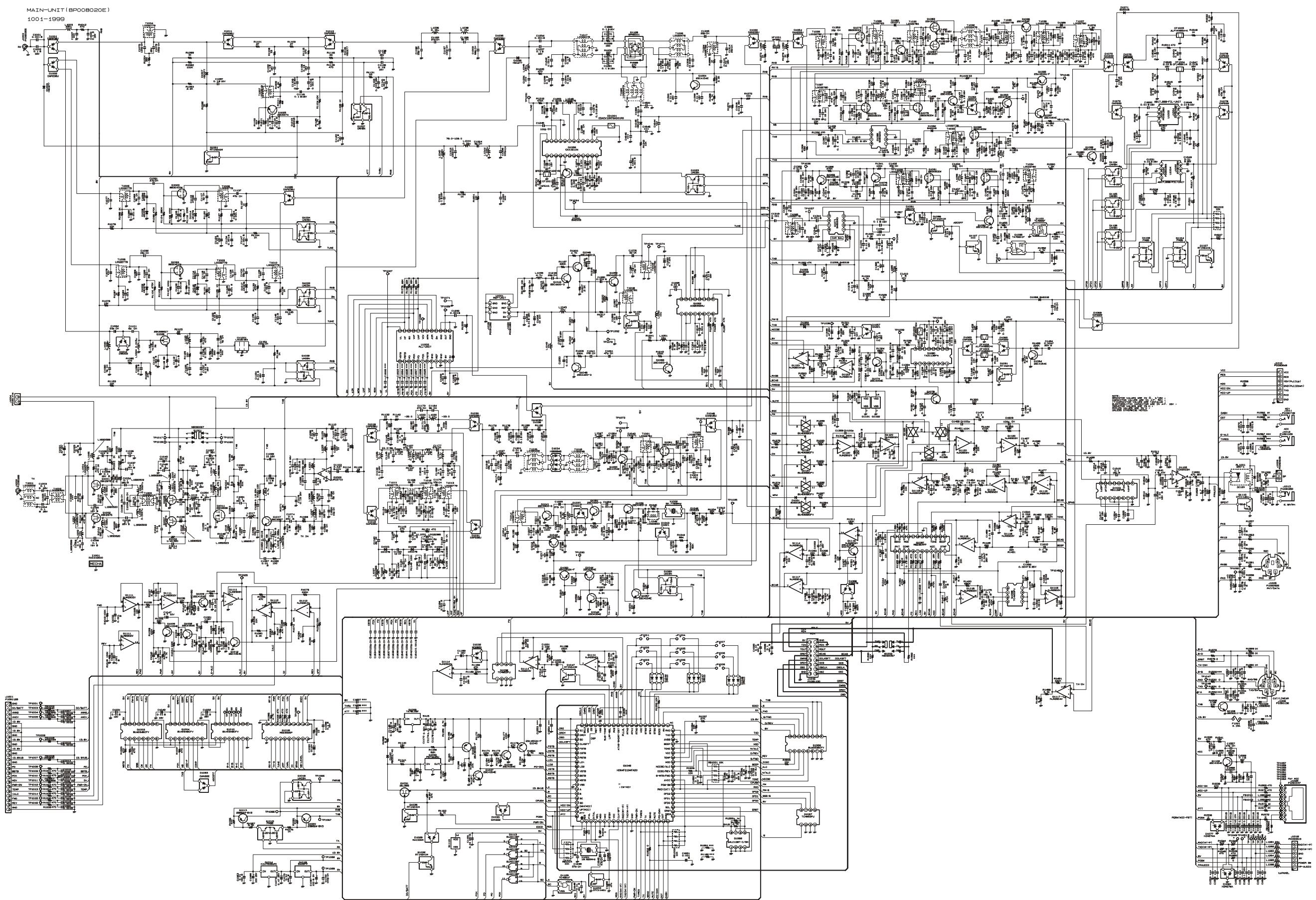
## ATAS control voltage confirmation

1. Connect the DC voltmeter to the HF/50 MHz antenna jack.
2. Select menu item “**71: ATAS.**”
3. Press the **[A]** key, and confirm that the voltage is 9.0 to 10.1 Volts.
4. Press the **[B]** key, and confirm that the voltage is 7.5 to 8.5 Volts.
5. Press the **[C]** key, and confirm that the voltage is more than 10.5 Volts.

This completes the internal alignment routine for all bands. To save all settings and exit, press and hold in the **[FUNC]** key for at least one second.

# MAIN Unit

## Circuit Diagram

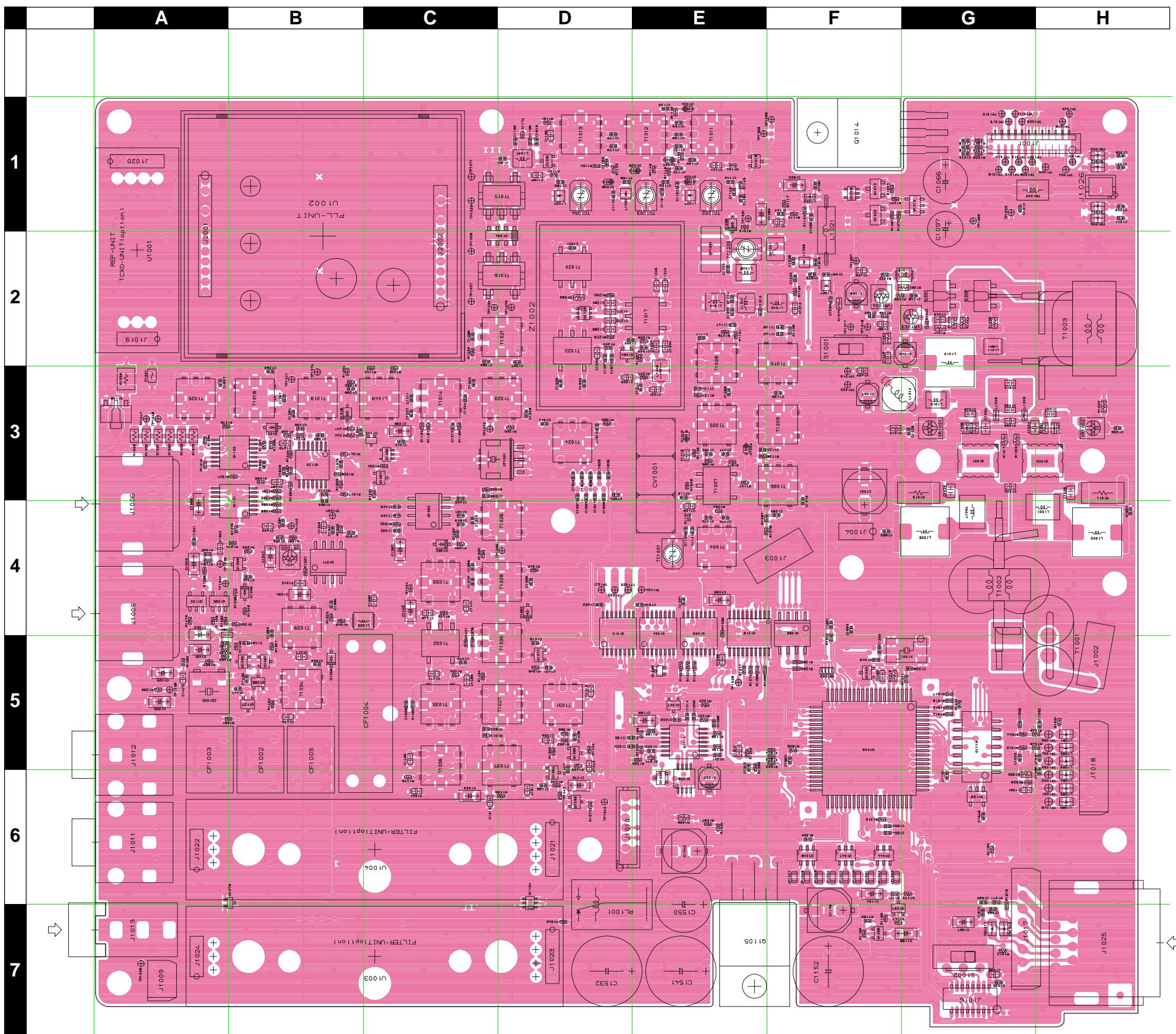
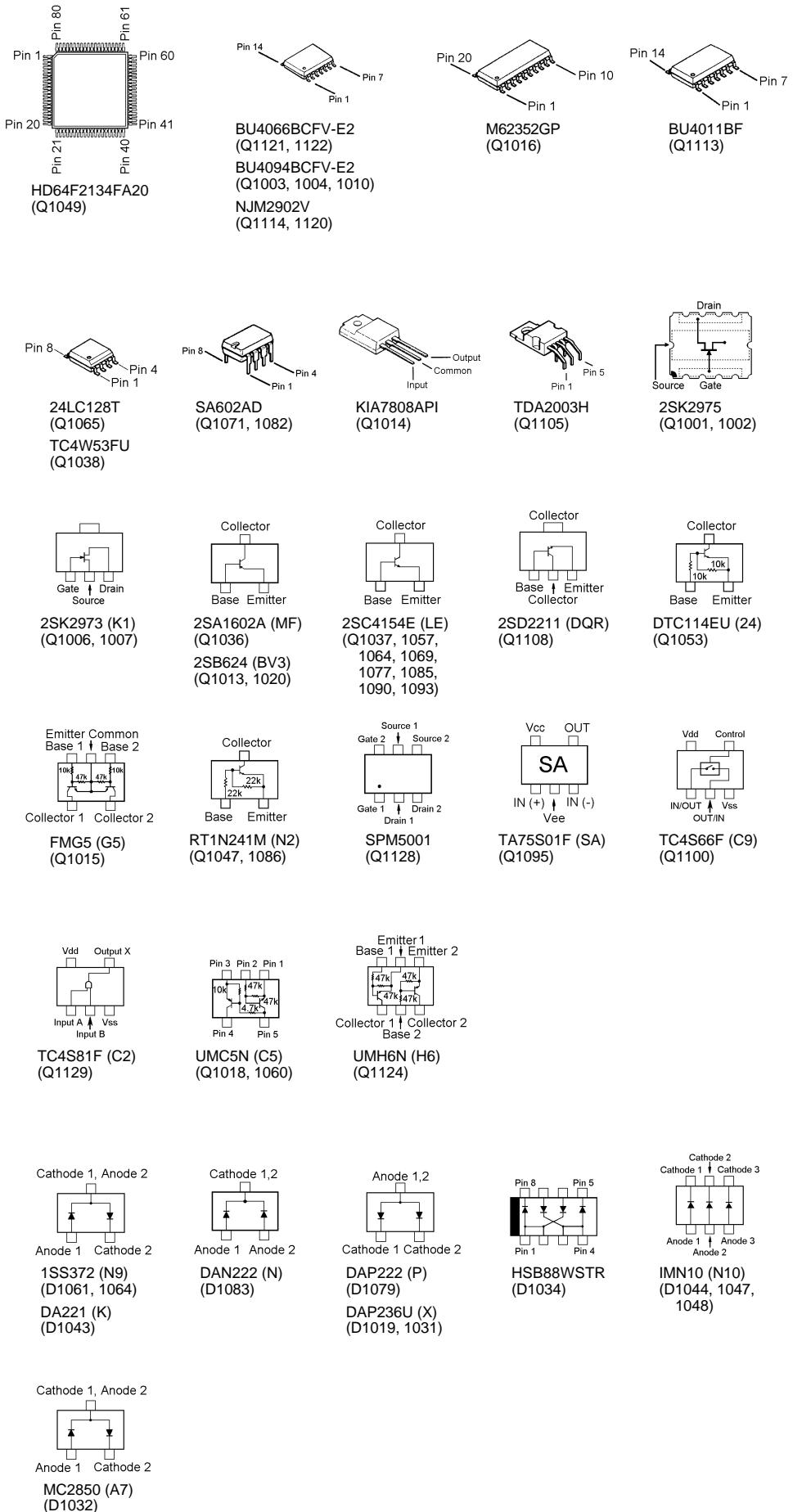


## **MAIN Unit**

**Note:**

# **MAIN Unit**

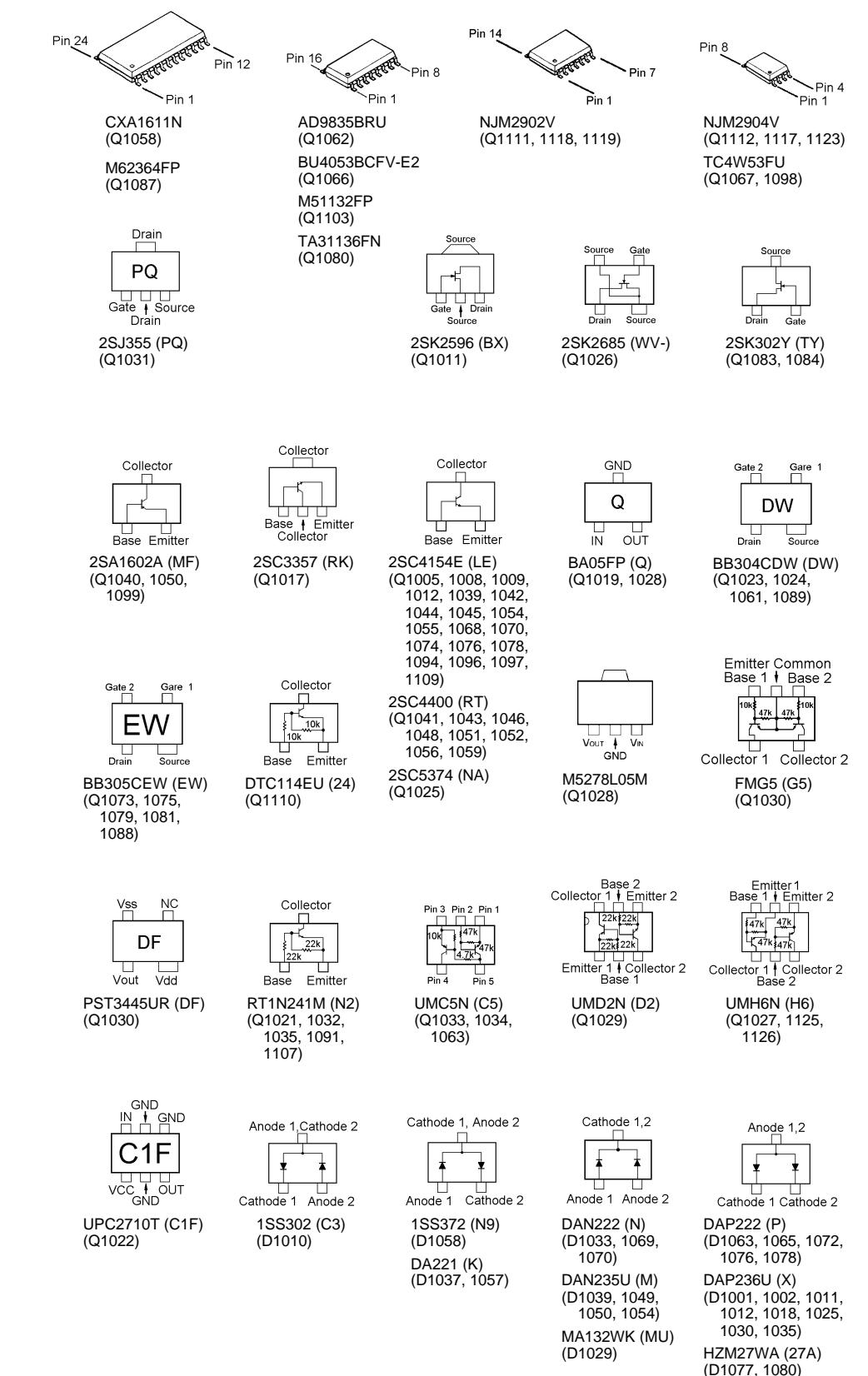
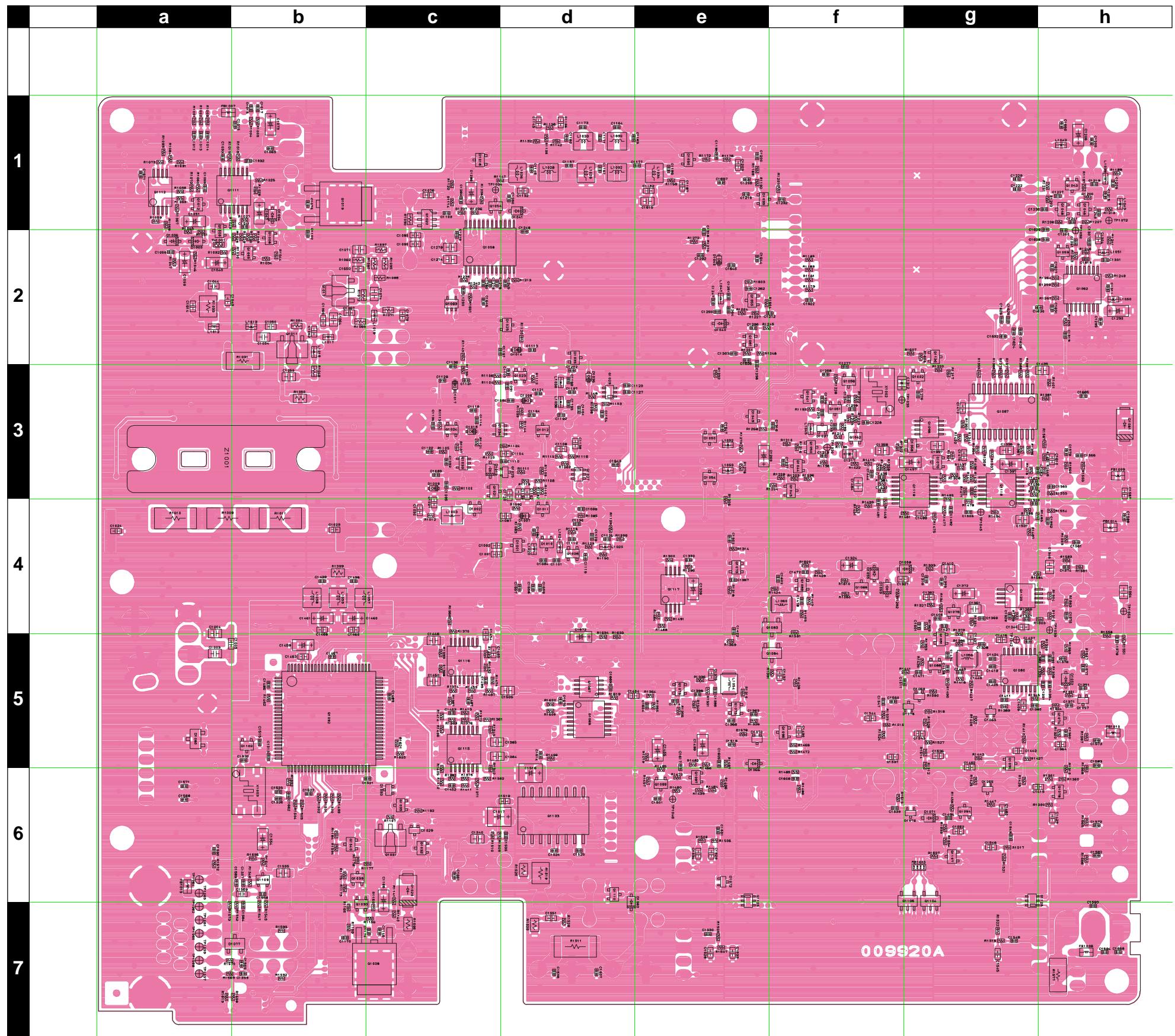
## ***Parts Layout***



Side A

# MAIN Unit

## Parts Layout



Side B

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR	
	PCB with Components					CP7534004 CP7534005 CP7534006 CP7534007 CP7534008 CP7534009 CP7534010 CP7534011 CP7534012 CP7534013 CP7534014 CP7534015 CP7534016 CP7534017 CP7534018 CP7534019 CP7534020	VER. A2 VER. A1 VER. A2 VER. A3 VER. B1 VER. B2 VER. B3 VER. C1 VER. C2 VER. C3 VER. D1 VER. D2 VER. H1 VER. H1 VER. E1 VER. E2 VER. E3				
	Printed Circuit Board				AH007M000	FR009920A		1-			
C 1001	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	B	c4	
C 1002	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	c4	
C 1003	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-	B	a5	
C 1004	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-	B	a5	
C 1005	CHIP CAP.	6pF	50V	CH	GRM39CH060D50PT	K22174207		1-	B	a5	
C 1007	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	H1	
C 1008	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	H1	
C 1009	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	H1	
C 1010	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	G1	
C 1011	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	H2	
C 1012	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	a1	
C 1013	CHIP CAP.	220pF	25V	CH	TMK105CH221JW-F	K22148246		1-	B	a1	
C 1014	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	a1	
C 1015	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	b1	
C 1016	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	b1	
C 1017	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	b1	
C 1018	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	G1	
C 1019	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	G1	
C 1020	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	G1	
C 1021	AL.ELECTRO.CAP.	47uF	16V		ECEV1CA470SP	K48120005		1-	A	F4	
C 1023	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	b4	
C 1024	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	a4	
C 1025	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-	A	G4	
C 1026	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-	A	H4	
C 1029	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	G3	
C 1030	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	c4	
C 1031	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	E4	
C 1032	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	b1	
C 1033	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	a1	
C 1034	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-	A	G3	
C 1035	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-	A	G3	
C 1037	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	H3	
C 1038	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213		1-	A	G3	
C 1039	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		1-	A	G3	
C 1040	CHIP TA.CAP.	1uF	16V		TESVA1C105M1-8R	K78120009		1-	B	a2	
C 1042	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	E4	
C 1043	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	B	a2	
C 1044	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	a2	
C 1045	AL.ELECTRO.CAP.	10uF	16V		RV2-16V100MB55-R	K48120014		1-	A	G3	
C 1046	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	F3	
C 1047	CHIP TA.CAP.	4.7uF	10V		TEMSVA1A475M-8R	K78100022		1-	B	b2	
C 1049	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	G2	
C 1050	CHIP CAP.	8pF	50V	CH	GRM39CH080D50PT	K22174209		1-	B	b2	
C 1051	CHIP TA.CAP.	1uF	16V		TESVA1C105M1-8R	K78120009		1-	B	a2	
C 1052	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	D4	
C 1053	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	F3	
C 1054	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-	B	b2	
C 1055	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-	B	b3	
C 1056	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	a1	
C 1057	AL.ELECTRO.CAP.	10uF	16V		RV2-16V100MB55-R	K48120014		1-	A	F3	
C 1058	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a2	
C 1059	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	B	a2	
C 1061	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	F2	
C 1063	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b1	
C 1064	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-	B	b2	

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1065	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	B	b2
C 1066	AL.ELECTRO.CAP.	100uF	16V		RC2-16V101MS(6X7)	K40129038		1-	A	G1
C 1067	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	b2
C 1068	AL.ELECTRO.CAP.	10uF	16V		RV2-16V100MB55-R	K48120014		1-	A	F2
C 1069	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	F2
C 1070	CHIP CAP.	120pF	50V	CH	UMK105CH121JW-F	K22178284		1-	A	E4
C 1071	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-	B	b2
C 1072	CHIP CAP.	150pF	25V	CH	TMK105CH151JW-F	K22148242		1-	A	E4
C 1073	CHIP TA.CAP.	0.47uF	25V		TESVA1E474M1-8R	K78140009		1-	B	b1
C 1074	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-	B	c2
C 1075	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b1
C 1076	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	c1
C 1079	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	c2
C 1080	CHIP CAP.	7pF	50V	CH	UMK105CH070DW-F	K22178255		1-	B	d4
C 1081	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	F1
C 1082	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	E3
C 1083	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	F4
C 1084	CHIP CAP.	22pF	50V	CH	UMK105CH220JW-F	K22178266		1-	B	d4
C 1085	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	B	c2
C 1086	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	d4
C 1087	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d4
C 1088	CHIP CAP.	2pF	50V	CK	UMK105CK020CW-F	K22178250		1-	A	E3
C 1090	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	c2
C 1091	CHIP CAP.	47pF	50V	CH	UMK105CH470JW-F	K22178274		1-	B	d3
C 1092	CHIP CAP.	15pF	50V	CH	UMK105CH150JW-F	K22178262		1-	B	c3
C 1093	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	E4
C 1094	CHIP CAP.	470pF	50V	B	UMK105B471KW-F	K22178825		1-	B	d3
C 1095	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	B	c4
C 1096	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	F2
C 1097	AL.ELECTRO.CAP.	100uF	6.3V		RC2-6V101M-T34(5X7)	K46080006		1-	A	G2
C 1099	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	E5
C 1100	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	b2
C 1101	CHIP CAP.	6pF	50V	CH	UMK105CH060DW-F	K22178254		1-	B	d4
C 1102	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d4
C 1103	CHIP CAP.	0.047uF	10V	BJ	LMK105BJ473KV-F	K22108805		1-	B	c2
C 1104	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d3
C 1105	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	d3
C 1106	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	c3
C 1107	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	F2
C 1108	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d3
C 1109	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	E4
C 1110	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	d3
C 1111	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	F2
C 1112	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	d4
C 1113	CHIP CAP.	470pF	50V	B	UMK105B471KW-F	K22178825		1-	B	d3
C 1114	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	B	c3
C 1115	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	E4
C 1116	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	E3
C 1117	CHIP CAP.	5pF	50V	CH	UMK105CH050CW-F	K22178253		1-	A	E2
C 1118	CHIP CAP.	2pF	50V	CK	UMK105CK020CW-F	K22178250		1-	B	c3
C 1119	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	d4
C 1120	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d4
C 1121	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d3
C 1122	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c3
C 1123	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	d3
C 1124	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	E3
C 1125	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	E3
C 1126	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	d4
C 1127	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d3
C 1128	CHIP CAP.	7pF	50V	CH	UMK105CH070DW-F	K22178255		1-	B	c3
C 1129	CHIP CAP.	4pF	50V	CH	UMK105CH040CW-F	K22178252		1-	B	d4
C 1131	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	B	c3
C 1132	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d1
C 1133	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	E4
C 1134	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	d3
C 1136	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	c3
C 1137	CHIP CAP.	47pF	50V	CH	UMK105CH470JW-F	K22178274		1-	B	c3
C 1138	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d3
C 1139	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d4
C 1140	CHIP CAP.	2pF	50V	CK	UMK105CK020CW-F	K22178250		1-	A	E1
C 1141	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	E4
C 1142	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	F2
C 1143	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d1

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1144	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	E1
C 1145	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	d1
C 1146	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c7
C 1147	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	E2
C 1148	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	F2
C 1150	CHIP CAP.	6pF	50V	CH	UMK105CH060DW-F	K22178254		1-	A	E1
C 1151	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	d3
C 1152	AL.ELECTRO.CAP.	1000uF	16V		RE3-16V102MH3 1000UF	K40129096		1-	A	F7
C 1153	CHIP CAP.	1pF	50V	CK	UMK105CK010CW-F	K22178248		1-	A	E1
C 1154	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d3
C 1155	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	A	E1
C 1156	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d1
C 1157	CHIP CAP.	27pF	50V	CH	UMK105CH270JW-F	K22178268		1-	B	d1
C 1158	CHIP CAP.	2pF	50V	CK	UMK105CK020CW-F	K22178250		1-	A	E1
C 1159	CHIP CAP.	3pF	50V	CJ	UMK105CJ030CW-F	K22178251		1-	A	E1
C 1160	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	D1
C 1161	CHIP CAP.	5pF	50V	CH	UMK105CH050CW-F	K22178253		1-	A	E1
C 1162	CHIP CAP.	3pF	50V	CJ	UMK105CJ030CW-F	K22178251		1-	A	E1
C 1163	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	d1
C 1164	CHIP CAP.	9pF	50V	CH	UMK105CH090DW-F	K22178257		1-	B	d1
C 1165	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	A	E1
C 1166	CHIP TA.CAP.	1uF	16V		TESVA1C105M1-8R	K78120009		1-	B	c7
C 1167	CHIP CAP.	220pF	25V	CH	TMK105CH221JW-F	K22148246		1-	B	d1
C 1168	CHIP CAP.	0.5pF	50V	CK	UMK105CK0R5CW-F	K22178247		1-	A	D1
C 1169	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	D1
C 1170	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	b7
C 1171	CHIP CAP.	150pF	25V	CH	TMK105CH151JW-F	K22148242		1-	B	d1
C 1172	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	E1
C 1173	CHIP CAP.	27pF	50V	CH	UMK105CH270JW-F	K22178268		1-	B	d1
C 1174	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c7
C 1175	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	A	D1
C 1176	CHIP CAP.	4pF	50V	CH	UMK105CH040CW-F	K22178252		1-	A	D1
C 1177	CHIP CAP.	27pF	50V	CH	UMK105CH270JW-F	K22178268		1-	B	e1
C 1178	AL.ELECTRO.CAP.	100uF	6.3V		RV2-6V101M-R	K48080005		1-	A	F7
C 1179	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	A	D1
C 1180	CHIP CAP.	68pF	50V	CH	UMK105CH680JW-F	K22178278		1-	B	d1
C 1182	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	e1
C 1183	CHIP CAP.	2pF	50V	CK	UMK105CK020CW-F	K22178250		1-	A	D1
C 1184	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	E1
C 1185	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	D1
C 1186	CHIP CAP.	120pF	50V	CH	UMK105CH121JW-F	K22178284		1-	B	e1
C 1187	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	e1
C 1188	CHIP TA.CAP.	1uF	16V		TESVA1C105M1-8R	K78120009		1-	A	G7
C 1189	CHIP TA.CAP.	1uF	16V		TESVA1C105M1-8R	K78120009		1-	A	E5
C 1190	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	D5
C 1191	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	G6
C 1192	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	B	d3
C 1193	CHIP CAP.	27pF	50V	CH	UMK105CH270JW-F	K22178268		1-	B	d3
C 1194	CHIP TA.CAP.	1uF	16V		TESVA1C105M1-8R	K78120009		1-	A	F7
C 1195	CHIP CAP.	120pF	50V	CH	UMK105CH121JW-F	K22178284		1-	A	D1
C 1196	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	e1
C 1197	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	d3
C 1198	CHIP CAP.	9pF	50V	CH	UMK105CH090DW-F	K22178257		1-	B	d3
C 1199	CHIP CAP.	120pF	50V	CH	UMK105CH121JW-F	K22178284		1-	A	D1
C 1200	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	e1
C 1201	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	D1
C 1202	CHIP CAP.	68pF	50V	CH	UMK105CH680JW-F	K22178278		1-	B	d3
C 1203	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	e1
C 1204	CHIP CAP.	12pF	50V	CH	UMK105CH120JW-F	K22178260		1-	A	C3
C 1205	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	h1
C 1206	CHIP TA.CAP.	10uF	10V		TEMPSVA1A106M-8R	K78100028		1-	B	h1
C 1207	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C3
C 1208	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	e1
C 1209	CHIP CAP.	18pF	50V	CH	UMK105CH180JW-F	K22178264		1-	B	h1
C 1210	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	F2
C 1211	CHIP CAP.	18pF	50V	CH	UMK105CH180JW-F	K22178264		1-	A	C3
C 1212	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C3
C 1213	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	E2
C 1214	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	E5
C 1215	CHIP CAP.	15pF	50V	CH	UMK105CH150JW-F	K22178262		1-	B	h1
C 1216	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	e1
C 1217	CHIP TA.CAP.	1uF	10V		TESVSP1A105M-8R	K78100032		1-	B	f3
C 1218	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	f3

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1219	CHIP CAP.	22pF	50V	CH	UMK105CH220JW-F	K22178266		1-	B	h1
C 1221	CHIP CAP.	0.022uF	16V	B	EMK105B223KW-F	K22128813		1-	A	E6
C 1222	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	g1
C 1223	CHIP CAP.	0.0033uF	50V	B	UMK105B332KW-F	K22178835		1-	A	E5
C 1224	CHIP CAP.	9pF	50V	CH	UMK105CH090DW-F	K22178257		1-	A	E2
C 1225	CHIP CAP.	27pF	50V	CH	UMK105CH270JW-F	K22178268		1-	B	f3
C 1226	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	f3
C 1227	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	h1
C 1228	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	f3
C 1229	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	g1
C 1230	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h1
C 1232	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	f1
C 1234	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	E2
C 1235	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	E2
C 1236	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	C3
C 1237	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	E2
C 1238	CHIP CAP.	27pF	50V	CH	UMK105CH270JW-F	K22178268		1-	A	G5
C 1239	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	D3
C 1240	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C3
C 1241	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	B	h2
C 1242	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	E2
C 1243	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	h2
C 1244	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	E3
C 1245	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	d2
C 1246	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	E2
C 1247	CHIP CAP.	4pF	50V	CH	UMK105CH040CW-F	K22178252		1-	B	e2
C 1248	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d2
C 1249	CHIP CAP.	47pF	50V	CH	UMK105CH470JW-F	K22178274		1-	A	F5
C 1250	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h2
C 1251	CHIP CAP.	9pF	50V	CH	UMK105CH090DW-F	K22178257		1-	B	e2
C 1252	AL.ELECTRO.CAP.	10uF	16V		RV2-16V100MB55-R	K48120014		1-	A	E6
C 1253	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	E2
C 1254	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	f3
C 1255	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	A	F5
C 1256	CHIP CAP.	7pF	50V	CH	UMK105CH070DW-F	K22178255		1-	B	e2
C 1257	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	f3
C 1258	CHIP CAP.	0.0047uF	25V	B	TMK105B472KW-F	K22148831		1-	A	E5
C 1259	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	f3
C 1260	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d1
C 1261	CHIP CAP.	47pF	50V	CH	UMK105CH470JW-F	K22178274		1-	B	h2
C 1262	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	e2
C 1263	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	B	e3
C 1264	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	e2
C 1266	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	E5
C 1267	CHIP CAP.	18pF	50V	CH	UMK105CH180JW-F	K22178264		1-	A	B3
C 1268	CHIP CAP.	82pF	50V	UJ	GRP1553U1H820JZ01E	K22178322		1-	B	f3
C 1269	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B3
C 1270	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	D2
C 1271	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	D2
C 1272	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	e2
C 1273	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	c2
C 1274	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	c2
C 1275	CHIP CAP.	0.022uF	16V	B	EMK105B223KW-F	K22128813		1-	B	c2
C 1276	CHIP CAP.	2pF	50V	CK	UMK105CK020CW-F	K22178250		1-	B	g3
C 1277	CHIP CAP.	82pF	50V	UJ	GRP1553U1H820JZ01E	K22178322		1-	B	f3
C 1278	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c2
C 1279	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	c2
C 1280	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	D2
C 1281	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	D2
C 1282	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	E2
C 1283	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c1
C 1284	CHIP CAP.	15pF	50V	CH	UMK105CH150JW-F	K22178262		1-	A	B3
C 1285	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	B	c2
C 1286	CHIP TA.CAP.	1uF	16V		TESVA1C105M1-8R	K78120009		1-	B	c1
C 1287	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	D3
C 1288	CHIP CAP.	18pF	50V	CH	UMK105CH180JW-F	K22178264		1-	A	C2
C 1289	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C3
C 1290	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	c2
C 1291	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	B3
C 1292	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	e2
C 1293	CHIP TA.CAP.	4.7uF	10V		TEMSVA21A475M-8R	K78100045		1-	B	h2
C 1295	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	h2
C 1296	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	e2

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1298	CHIP CAP.	15pF	50V	CH	UMK105CH150JW-F	K22178262		1-	B	e3
C 1299	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	B3
C 1300	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	D2
C 1301	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	h2
C 1302	CHIP CAP.	8pF	50V	CH	UMK105CH080DW-F	K22178256		1-	A	C3
C 1303	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	e3
C 1304	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	h2
C 1305	CHIP CAP.	22pF	50V	CH	UMK105CH220JW-F	K22178266		1-	A	D3
C 1306	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	D3
C 1307	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	h2
C 1308	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	D3
C 1309	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	E3
C 1310	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	E6
C 1311	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	h2
C 1312	CHIP TA.CAP.	4.7uF	6.3V		TESVSP0J475M-8R	K78080053		1-	B	f3
C 1313	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	D3
C 1314	CHIP CAP.	15pF	50V	CH	UMK105CH150JW-F	K22178262		1-	A	D3
C 1315	CHIP CAP.	0.033uF	10V	BJ	LMK105BJ333KV-F	K22108804		1-	A	E6
C 1316	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	f3
C 1318	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	e2
C 1319	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h2
C 1320	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	A4
C 1321	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	A4
C 1322	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	A4
C 1323	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	A4
C 1324	CHIP TA.CAP.	2.2uF	10V		TESVA1A225M1-8R	K78100021		1-	B	f4
C 1325	CHIP CAP.	0.0047uF	25V	B	TMK105B472KW-F	K22148831		1-	A	D5
C 1326	CHIP TA.CAP.	1uF	16V		TESVA1C105M1-8R	K78120009		1-	B	e4
C 1327	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	f4
C 1328	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g5
C 1329	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g5
C 1330	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	e4
C 1333	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	E6
C 1334	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	B4
C 1336	CHIP TA.CAP.	0.47uF	25V		TESVA1E474M1-8R	K78140009		1-	A	A5
C 1337	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g5
C 1338	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C4
C 1340	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	B4
C 1341	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	B4
C 1342	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	B4
C 1344	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	B4
C 1345	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g5
C 1346	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	h4
C 1347	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	B4
C 1350	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B3
C 1351	CHIP CAP.	0.047uF	10V	BJ	LMK105BJ473KV-F	K22108805		1-	B	h5
C 1352	CHIP CAP.	15pF	50V	CH	UMK105CH150JW-F	K22178262		1-	B	e4
C 1353	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	B4
C 1355	CHIP CAP.	15pF	50V	CH	UMK105CH150JW-F	K22178262		1-	A	C4
C 1356	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	D5
C 1357	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	g3
C 1358	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	f3
C 1359	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	B4
C 1360	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h5
C 1361	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	g4
C 1362	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g4
C 1363	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	B	e5
C 1364	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	h5
C 1365	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	B4
C 1366	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	A4
C 1367	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	e4
C 1368	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	e5
C 1369	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g5
C 1370	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B4
C 1371	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	h5
C 1372	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	B	g4
C 1375	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	e5
C 1376	CHIP CAP.	0.0033uF	50V	B	UMK105B332KW-F	K22178835		1-	A	B3
C 1378	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g4
C 1379	CHIP CAP.	7pF	50V	CH	UMK105CH070DW-F	K22178255		1-	A	C4
C 1380	CHIP CAP.	270pF	25V	CH	GRM36CH271J25PT	K22148248		1-	B	g5
C 1381	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B4
C 1382	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h5

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1383	CHIP CAP.	0.0015uF	50V	B	UMK105B152KW-F	K22178831		1-	A	B3
C 1386	CHIP CAP.	220pF	25V	CH	TMK105CH221JW-F	K22148246		1-	B	e5
C 1387	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	C4
C 1388	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C4
C 1389	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B5
C 1390	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	h5
C 1391	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	h5
C 1392	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	C4
C 1394	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	h5
C 1395	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	C4
C 1396	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	g3
C 1397	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	B	g3
C 1398	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	B	e5
C 1399	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	D4
C 1400	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	B4
C 1401	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	D5
C 1403	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C4
C 1404	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d5
C 1405	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	C4
C 1406	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	B	g5
C 1407	CHIP CAP.	56pF	50V	CH	UMK105CH560JW-F	K22178276		1-	B	g5
C 1408	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g5
C 1409	CHIP CAP.	2pF	50V	CK	UMK105CK020CW-F	K22178250		1-	A	C4
C 1410	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	g4
C 1411	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g5
C 1412	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g3
C 1413	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	D5
C 1414	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	e5
C 1415	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g6
C 1416	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g5
C 1417	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	B5
C 1418	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	D5
C 1419	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g5
C 1420	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	A5
C 1421	CHIP CAP.	18pF	50V	CH	UMK105CH180JW-F	K22178264		1-	A	C5
C 1422	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	B	e5
C 1423	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	A5
C 1424	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g5
C 1425	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g5
C 1426	CHIP CAP.	270pF	25V	CH	GRM36CH271J25PT	K22148248		1-	A	B5
C 1427	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g5
C 1428	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	A	D5
C 1429	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	h6
C 1430	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	f4
C 1431	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	C4
C 1432	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	f5
C 1433	CHIP CAP.	22pF	50V	CH	UMK105CH220JW-F	K22178266		1-	A	C4
C 1434	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	B	g5
C 1435	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	h3
C 1436	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	f3
C 1437	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g5
C 1440	CHIP CAP.	220pF	25V	CH	TMK105CH221JW-F	K22148246		1-	B	g5
C 1441	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B5
C 1442	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g6
C 1443	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	D6
C 1444	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	f3
C 1445	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	C4
C 1447	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	D6
C 1448	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	C4
C 1449	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g5
C 1451	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	C4
C 1455	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	B	e6
C 1456	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	B3
C 1457	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	B	g3
C 1458	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g5
C 1462	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g6
C 1464	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	f4
C 1466	CHIP CAP.	220pF	25V	CH	TMK105CH221JW-F	K22148246		1-	A	D6
C 1470	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C5
C 1471	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	B	g5
C 1472	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	f4
C 1473	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	B3
C 1474	CHIP CAP.	0.0047uF	25V	B	TMK105B472KW-F	K22148831		1-	B	g4

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1475	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g3
C 1476	CHIP TA.CAP.	2.2uF	10V	B	TESVA1A225M1-8R	K78100021		1-	A	D6
C 1477	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	C5
C 1478	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	f4
C 1479	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	B5
C 1480	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g6
C 1481	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	f4
C 1482	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g3
C 1483	CHIP CAP.	0.047uF	10V	BJ	LMK105BJ473KV-F	K22108805		1-	A	B5
C 1484	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	A5
C 1488	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	C5
C 1490	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	f5
C 1491	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	A5
C 1492	CHIP CAP.	0.0047uF	25V	B	TMK105B472KW-F	K22148831		1-	B	g4
C 1494	CHIP CAP.	0.0047uF	25V	B	TMK105B472KW-F	K22148831		1-	B	g6
C 1495	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g4
C 1496	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	C6
C 1497	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	B4
C 1498	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g4
C 1499	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	B	e5
C 1500	CHIP CAP.	0.022uF	16V	B	EMK105B223KW-F	K22128813		1-	B	g4
C 1502	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	g4
C 1503	CHIP TA.CAP.	1uF	16V		TESVA1C105M1-8R	K78120009		1-	A	A5
C 1504	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	C6
C 1506	CHIP CAP.	0.0033uF	50V	B	UMK105B332KW-F	K22178835		1-	B	g4
C 1507	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	g4
C 1509	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	C6
C 1510	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	C6
C 1511	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	B	f5
C 1512	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	D6
C 1516	CHIP TA.CAP.	10uF	16V		TEMSVB21C106M-8R	K78120025		1-	B	d6
C 1517	CHIP TA.CAP.	22uF	16V		TEMSVB21C226M-8R	K78120028		1-	B	c6
C 1518	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	B	e5
C 1519	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1	B	d6
C 1519	CHIP CAP.	1uF	10V	F	GRM39F105Z10PT	K22105001		2-	B	d6
C 1528	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	e7
C 1529	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	e6
C 1530	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	e7
C 1531	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	e6
C 1532	AL.ELECTRO.CAP.	1000uF	16V		RE3-16V102MH3 1000UF	K40129096		1-	A	D7
C 1533	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	e7
C 1534	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	e6
C 1535	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1	B	d6
C 1535	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		2-	B	d6
C 1536	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g6
C 1537	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	f6
C 1539	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	f6
C 1540	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	c6
C 1541	AL.ELECTRO.CAP.	1000uF	16V		RE3-16V102MH3 1000UF	K40129096		1-	A	E7
C 1542	AL.ELECTRO.CAP.	47uF	16V		ECEV1CA470SP	K48120005		1-	A	E6
C 1543	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g5
C 1544	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	f5
C 1545	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g7
C 1546	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g6
C 1547	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	f5
C 1548	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g7
C 1549	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g6
C 1550	AL.ELECTRO.CAP.	470uF	16V		RE3-16V471M 470UF	K40129066		1-	A	E7
C 1551	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d7
C 1552	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	g6
C 1554	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	B	b6
C 1555	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	b6
C 1557	CHIP CAP.	47pF	50V	CH	UMK105CH470JW-F	K22178274		1-	B	b6
C 1558	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	b7
C 1559	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	b7
C 1560	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	B	f5
C 1562	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	h4
C 1563	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	b7
C 1564	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	h4
C 1565	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h4
C 1566	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	h3
C 1567	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	G7
C 1568	CHIP CAP.	470pF	50V	B	UMK105B471KW-F	K22178825		1-	B	a6

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1569	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	b7
C 1570	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	G7
C 1571	CHIP CAP.	470pF	50V	B	UMK105B471KW-F	K22178825		1-	B	a6
C 1572	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h6
C 1573	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h5
C 1574	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h4
C 1575	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h5
C 1576	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h5
C 1577	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h5
C 1578	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h5
C 1579	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h3
C 1580	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	G7
C 1581	CHIP CAP.	1uF	10V	F	GRM39F105Z10PT	K22105001		1-	A	G6
C 1582	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h6
C 1583	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h6
C 1586	CHIP CAP.	470pF	50V	B	UMK105B471KW-F	K22178825		1-	A	H6
C 1587	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	h4
C 1588	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h4
C 1589	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	b6
C 1590	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	a6
C 1591	CHIP CAP.	470pF	50V	B	UMK105B471KW-F	K22178825		1-	A	H6
C 1592	CHIP CAP.	470pF	50V	B	UMK105B471KW-F	K22178825		1-	A	H5
C 1593	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h7
C 1594	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	h7
C 1595	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	G7
C 1596	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	G7
C 1597	CHIP CAP.	12pF	50V	CH	UMK105CH120JW-F	K22178260		1-	A	F2
C 1598	CHIP CAP.	5pF	50V	CH	UMK105CH050CW-F	K22178253		1-	A	F2
C 1599	CHIP CAP.	4pF	50V	CH	UMK105CH040CW-F	K22178252		1-	A	F2
C 1600	CHIP CAP.	68pF	50V	CH	UMK105CH680JW-F	K22178278		1-	A	B5
C 1601	CHIP CAP.	22pF	50V	CH	UMK105CH220JW-F	K22178266		1-	B	g5
C 1602	CHIP CAP.	15pF	50V	CH	UMK105CH150JW-F	K22178262		1-	B	f4
C 1603	CHIP CAP.	47pF	50V	CH	UMK105CH470JW-F	K22178274		1-	A	C5
C 1604	CHIP CAP.	47pF	50V	CH	UMK105CH470JW-F	K22178274		1-	B	e5
C 1605	CHIP CAP.	68pF	50V	CH	UMK105CH680JW-F	K22178278		1-	B	e6
C 1606	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	B	f6
C 1607	CHIP CAP.	15pF	50V	CH	UMK105CH150JW-F	K22178262		1-	A	A3
C 1608	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	A	C5
C 1609	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	B3
C 1610	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	h3
C 1613	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		1-	A	G3
C 1614	CHIP CAP.	3pF	50V	CJ	GRM39CJ030C50PT	K22174204		1-	B	a2
C 1615	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	e1
C 1616	CHIP CAP.	15pF	50V	CH	UMK105CH150JW-F	K22178262		1-	A	D1
C 1617	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178289		1-	B	e6
C 1618	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178289		1-	B	h2
C 1619	CHIP CAP.	7pF	50V	CH	UMK105CH070DW-F	K22178255		1-	A	F2
C 1620	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	A	F2
C 1633	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	D4
C 1634	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	D4
C 1635	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	D3
C 1636	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	D3
C 1637	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	D4
C 1638	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	D4
C 1639	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	D3
C 1640	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	D3
C 1641	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	D4
C 1642	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	D3
C 1643	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178289		1-	B	d3
C 1647	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	B	e3
C 1648	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	G6
C 1650	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	B	b2
C 1651	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	F5
C 1652	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	F1
C 1656	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	B	e3
C 1660	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	F6
C 1661	CHIP CAP.	0.0033uF	50V	B	UMK105B332KW-F	K22178835		1	B	c6
C 1661	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		2-	B	c6
C 1663	CHIP CAP.	100pF	50V	CH	GRM36CH101J50PT	K22178236		1-	A	F4
C 1664	CHIP CAP.	100pF	50V	CH	GRM36CH101J50PT	K22178236		1-	A	H4
C 1664	CHIP TA.CAP.	1uF	16V		TESVA1C105M1-8R	K78120009		1-	B	d5
CD1001	CERAMIC DISC				CDACV10M7GA001-R0-TC	H7901420		1-	A	F2
CD1002	CERAMIC DISC				CDDBC455CX24-TC	H7900980		1-	A	A5

W/ CE  
W/ CE

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
CF1001	CERAMIC FILTER				SFECV10M7FA00-R0-TC	H3900537		1-	A	E2
CF1002	CERAMIC FILTER				ALFYM455E=K	H3900543		1-	A	B6
CF1003	CERAMIC FILTER				ALFYM455G=K	H3900545		1-	A	A6
CF1004	CERAMIC FILTER				CFJ455K14	H3900386		1-	A	B5
CF1005	CERAMIC FILTER				ALFYM455H=K	H3900542		1-	A	B5
CV1001	HELICAL RESONATOR	440MHz			H5T-440 440M	L4020161		1-	A	E3
D 1001	DIODE				DAP236U T106	G2070592		1-	B	d4
D 1002	DIODE				DAP236U T106	G2070592		1-	B	c4
D 1003	DIODE				HSC277TRF	G2070584		1-	A	E3
D 1004	DIODE				BAS316	G2070716		1-	B	b2
D 1005	DIODE				BAS316	G2070716		1-	B	a2
D 1006	DIODE				UDZS TE-17 5.6B	G2070910		1-	B	a2
D 1007	DIODE				HSC277TRF	G2070584		1-	B	d4
D 1008	DIODE				1SV278(TPH2)	G2070616		1-	B	d3
D 1009	DIODE				1SV278(TPH2)	G2070616		1-	B	c4
D 1010	DIODE				1SS302 TE85R	G2070088		1-	B	d4
D 1011	DIODE				DAP236U T106	G2070592		1-	B	d4
D 1012	DIODE				DAP236U T106	G2070592		1-	B	d3
D 1013	DIODE				BAS316	G2070716		1-	B	c3
D 1014	DIODE				1SV278(TPH2)	G2070616		1-	B	d3
D 1015	DIODE				1SV278(TPH2)	G2070616		1-	B	c3
D 1016	DIODE				HSC277TRF	G2070584		1-	A	E3
D 1017	DIODE				1SV278(TPH2)	G2070616		1-	B	c3
D 1018	DIODE				DAP236U T106	G2070592		1-	B	c1
D 1019	DIODE				DAP236U T106	G2070592		1-	A	E1
D 1020	DIODE				RB051L-40TE25	G2070718		1-	B	c7
D 1023	DIODE				1SV278(TPH2)	G2070616		1-	A	E1
D 1024	DIODE				1SV278(TPH2)	G2070616		1-	A	E1
D 1025	DIODE				DAP236U T106	G2070592		1-	B	d2
D 1026	DIODE				1SV278(TPH2)	G2070616		1-	A	E1
D 1027	DIODE				1SV278(TPH2)	G2070616		1-	A	E1
D 1028	DIODE				1SV278(TPH2)	G2070616		1-	A	D1
D 1029	DIODE				MA132WK-(TX)	G2070776		1-	B	c6
D 1030	DIODE				DAP236U T106	G2070592		1-	B	e1
D 1031	DIODE				DAP236U T106	G2070592		1-	A	D1
D 1032	DIODE				MC2850-T11-1	G2070704		1-	A	E6
D 1033	DIODE				DAN222 TL	G2070174		1-	B	c6
D 1034	DIODE				HSB88WSTR	G2070290		1-	A	D2
D 1035	DIODE				DAP236U T106	G2070592		1-	B	d3
D 1036	DIODE				HSC277TRF	G2070584		1-	B	d3
D 1037	DIODE				DA221 TL	G2070178		1-	B	f3
D 1038	DIODE				1SV217(TPH3)	G2070568		1-	A	E2
D 1039	DIODE				DAN235U TL	G2070176		1-	B	e1
D 1040	DIODE				1SV271 TPH3	G2070476		1-	B	e2
D 1041	DIODE				BAS316	G2070716		1-	B	d2
D 1043	DIODE				DA221 TL	G2070178		1-	A	C3
D 1044	DIODE				IMN10 T108	G2070078		1-	A	F6
D 1045	DIODE				HSC277TRF	G2070584		1-	B	e2
D 1046	DIODE				1SV229 TPH3	G2070256		1-	A	B3
D 1047	DIODE				IMN10 T108	G2070078		1-	A	F6
D 1048	DIODE				IMN10 T108	G2070078		1-	A	F6
D 1049	DIODE				DAN235U TL	G2070176		1-	B	e3
D 1050	DIODE				DAN235U TL	G2070176		1-	B	e3
D 1051	DIODE				BAS316	G2070716		1-	A	B3
D 1052	DIODE				BAS316	G2070716		1-	B	h5
D 1053	DIODE				BAS316	G2070716		1-	B	f4
D 1054	DIODE				DAN235U TL	G2070176		1-	B	e3
D 1055	DIODE				BAS316	G2070716		1-	B	f4
D 1056	DIODE				BAS316	G2070716		1-	A	B4
D 1057	DIODE				DA221 TL	G2070178		1-	B	h5
D 1058	DIODE				1SS372(TE85R)	G2070632		1-	B	g3
D 1059	DIODE				BAS316	G2070716		1-	B	g4
D 1060	DIODE				1SV271 TPH3	G2070476		1-	A	D4
D 1061	DIODE				1SS372(TE85R)	G2070632		1-	A	B5
D 1062	DIODE				BAS316	G2070716		1-	A	C4
D 1063	DIODE				DAP222-TL	G2070432		1-	B	g5
D 1064	DIODE				1SS372(TE85R)	G2070632		1-	A	D6
D 1065	DIODE				DAP222-TL	G2070432		1-	B	g6
D 1066	DIODE				BAS316	G2070716		1-	B	e6
D 1068	DIODE				BAS316	G2070716		1-	A	B5
D 1069	DIODE				DAN222 TL	G2070174		1-	B	g5
D 1070	DIODE				DAN222 TL	G2070174		1-	B	e5
D 1071	DIODE				BAS316	G2070716		1-	B	g6

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
D 1072	DIODE				DAP222-TL	G2070432		1-	B	e6
D 1076	DIODE				DAP222-TL	G2070432		1-	B	g6
D 1077	DIODE				HZM27WA-TR	G2070530		1-	B	b7
D 1078	DIODE				DAP222-TL	G2070432		1-	B	g5
D 1079	DIODE				DAP222-TL	G2070432		1-	A	B7
D 1080	DIODE				HZM27WA-TR	G2070530		1-	B	a5
D 1081	DIODE				D1F20-4063	G2070474		1-	B	h3
D 1082	DIODE				BAS316	G2070716		1-	B	d7
D 1083	DIODE				DAN222 TL	G2070174		1-	A	E5
F 1001	CHIP FUSE	3.15A			KAB-2402-322NA31	Q0000087		1-	A	A3
FB1002	CHIP COIL				BLM21P300SPT	L1690840		1-	A	H1
FB1003	CHIP COIL				BLM21P300SPT	L1690840		1-	A	H1
FB1004	CHIP COIL				BLM21P300SPT	L1690840		1-	A	H1
FB1005	FERRITE BEADS				SMB304729	L9190094		1-	A	G1
FB1006	CHIP COIL				BLM21P300SPT	L1690840		1-	A	H2
FB1007	CHIP COIL				BLM21P300SPT	L1690840		1-	B	a1
FB1008	CHIP COIL				BLM21P300SPT	L1690840		1-	B	h7
FB1009	CHIP COIL				BLM21P300SPT	L1690840		1-	B	h3
FB1010	CHIP COIL				BLM21P300SPT	L1690840		1-	B	h5
FB1011	CHIP COIL				BLM21P300SPT	L1690840		1-	A	G7
FB1012	CHIP COIL				BLM21P300SPT	L1690840		1-	A	G7
FB1013	CHIP COIL				BLM21P300SPT	L1690840		1-	B	a7
FB1014	CHIP COIL				BLM21P300SPT	L1690840		1-	B	h4
J 1001	CONNECTOR				24FLT-SM1-TB	P1091128		1-	A	G1
J 1002	CONNECTOR				TMP-J01X-A2	P1090255		1-	A	H5
J 1003	CONNECTOR				TMP-J01X-A2	P1090255		1-	A	F4
J 1004	CONNECTOR				IMSA-9202B-1-02-T	P0091174		1-	A	F4
J 1005	CONNECTOR				CSK-M50-06 R41-0599D	P1090925		1-	A	A4
J 1006	CONNECTOR				M50-08-30-434S R41-0599F	P1091132		1-	A	A4
J 1009	CONNECTOR				SB20-02WS	P0090609		1-	A	A7
J 1010	CONNECTOR				B7B-ZR	P0090649		1-	A	D6
J 1011	CONNECTOR				HSJ0912-01-041	P1090749		1-	A	A6
J 1012	CONNECTOR				HSJ0912-01-040	P1091129		1-	A	A6
J 1013	CONNECTOR				SG8035#01	P1090350		1-	A	A7
J 1016	CONNECTOR				IL-WX-16SB-VF-B-E1000	P1091130		1-	A	G7
J 1018	CONNECTOR				SB20-06WS	P0090613		1-	A	H6
J 1019	CONNECTOR				9210B-1-03Z172-T	P0091282		1-		
J 1020	CONNECTOR				9210B-1-04Z172-T	P0091283		1-		
J 1021	CONNECTOR				9210B-1-03Z172-T	P0091282		1-		
J 1022	CONNECTOR				9210B-1-03Z172-T	P0091282		1-		
J 1023	CONNECTOR				9210B-1-04Z172-T	P0091283		1-		
J 1024	CONNECTOR				9210B-1-04Z172-T	P0091283		1-		
J 1025	CONNECTOR				R41-4904H	P1091047		1-	A	H7
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. A1	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. A2	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. A3	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. B1	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. B2	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. B3	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. C1	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. C2	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. C3	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. D1	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. D2	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. E1	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. E2	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. E3	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. H1	1-	A	F6
JP1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. H2	1-	A	F6
JP1002	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. A1	1-	A	F6
JP1002	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. A2	1-	A	F6
JP1002	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. B1	1-	A	F6
JP1002	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. B2	1-	A	F6
JP1002	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. C1	1-	A	F6
JP1002	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. C2	1-	A	F6
JP1002	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. D1	1-	A	F6
JP1002	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. D2	1-	A	F6
JP1002	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. E1	1-	A	F6
JP1002	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. E2	1-	A	F6
JP1002	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. H1	1-	A	F6
JP1002	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. H2	1-	A	F6
JP1003	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. A1	1-	A	F6
JP1003	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. B1	1-	A	F6

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
JP1003	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. C1	1-	A	F6
JP1003	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. D1	1-	A	F6
JP1003	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. E1	1-	A	F6
JP1003	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. H1	1-	A	F6
JP1006	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. A1	1-	A	F6
JP1006	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. A2	1-	A	F6
JP1006	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. A3	1-	A	F6
JP1006	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. C1	1-	A	F6
JP1006	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. C2	1-	A	F6
JP1006	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. C3	1-	A	F6
JP1006	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. H1	1-	A	F6
JP1006	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. H2	1-	A	F6
JP1007	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. D1	1-	A	F6
JP1007	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. D2	1-	A	F6
JP1008	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. B1	1-	A	F6
JP1008	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. B2	1-	A	F6
JP1008	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. B3	1-	A	F6
JP1008	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. C1	1-	A	F6
JP1008	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. C2	1-	A	F6
JP1008	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. C3	1-	A	F6
JP1008	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. D1	1-	A	F6
JP1008	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. D2	1-	A	F6
JP1009	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. E1	1-	A	F6
JP1009	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. E2	1-	A	F6
JP1009	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. E3	1-	A	F6
JP1009	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. H1	1-	A	F6
JP1009	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000	VER. H2	1-	A	F6
JP1010	WIRE ASSY				GRN 25 2/2	T50502500		1-		
L 1001	COIL				E2 0.4-3.0-9.5T-L	L0022575		1-	A	H4
L 1002	M.RFC	10uH			CDRH74-100MC	L1690599		1-	A	H4
L 1003	CHIP COIL	330uH			LQH3N331K02M00-	L1690105		1-	B	c4
L 1004	COIL				E2 0.4-3.0-9.5T-L	L0022575		1-	A	G4
L 1005	M.RFC	10uH			CDRH74-100MC	L1690599		1-	A	G4
L 1006	M.RFC	0.022uH			HK1608 22NJ-T	L1690520		1-	A	G3
L 1007	M.RFC	0.022uH			HK1608 22NJ-T	L1690520		1-	A	H3
L 1008	M.RFC	0.0027uH			HK1608 2N7S-T	L1690509		1-	A	G3
L 1009	M.RFC	0.0027uH			HK1608 2N7S-T	L1690509		1-	A	G3
L 1010	M.RFC	10uH			CDRH74-100MC	L1690599		1-	A	G3
L 1011	COIL				E2 0.3-1.7-7T-R	L0022372		1-	A	G2
L 1012	M.RFC	0.039uH			HK1608 39NJ-T	L1690523		1-	B	a2
L 1013	M.RFC	0.0056uH			HK1608 5N6S-T	L1690513		1-	B	b2
L 1014	M.RFC	10uH			7B05NB-100M	L1690988		1-	A	F3
L 1015	COIL				E2 0.25-1.85-8.5T-L	L0022576		1-	A	G3
L 1016	M.RFC	0.039uH			HK1608 39NJ-T	L1690523		1-	B	b3
L 1017	M.RFC	0.012uH			HK1608 12NJ-T	L1690517		1-	B	b2
L 1018	M.RFC	4.7uH			ELJ-FC4R7KF	L1690348		1-	A	G2
L 1019	M.RFC	0.056uH			HK1608 56NJ-T	L1690525		1-	B	c2
L 1020	M.RFC	0.068uH			HK1608 68NJ-T	L1690526		1-	B	d4
L 1021	M.RFC	15uH			LAL03TA150K	L1790097		1-	A	F2
L 1023	M.RFC	10uH			LK1608 100K-T	L1690689		1-	A	F1
L 1024	M.RFC	0.015uH			HK1608 15NJ-T	L1690518		1-	B	d4
L 1025	M.RFC	0.022uH			HK1608 22NJ-T	L1690520		1-	B	d4
L 1026	CHIP COIL	0.1uH			C2520C-R10J	L1690544		1-	B	d1
L 1027	COIL				E2 0.28-1.0-4T-R	L0022365		1-	A	E1
L 1028	CHIP COIL	0.47uH			C2520C-R47J	L1690552		1-	B	d1
L 1029	CHIP COIL	0.047uH			C2520C-47NK	L1690540		1-	B	d1
L 1030	CHIP COIL	0.27uH			C2520C-R27J	L1690549		1-	B	d1
L 1031	COIL				E2 0.28-1.0-4T-R	L0022365		1-	A	D1
L 1032	CHIP COIL	0.47uH			C2520C-R47J	L1690552		1-	B	d1
L 1033	CHIP COIL	0.22uH			C2520C-R22J	L1690548		1-	B	d1
L 1034	CHIP COIL	0.1uH			C2520C-R10J	L1690544		1-	B	e1
L 1035	COIL				E2 0.28-1.0-4T-R	L0022365		1-	A	D1
L 1036	M.RFC	0.12uH			LK1608 R12K-T	L1690408		1-	B	d3
L 1037	CHIP COIL	0.082uH			C2520C-82NK	L1690543		1-	A	D1
L 1038	M.RFC	0.15uH			LK1608 R15K-T	L1690409		1-	B	d3
L 1039	M.RFC	4.7uH			LK1608 4R7K-T	L1690688		1-	B	h1
L 1040	CHIP COIL	0.033uH			C2520C-33NK	L1690538		1-	A	F2
L 1041	CHIP COIL	0.33uH			C2520C-R33J	L1690550		1-	A	E2
L 1042	M.RFC	10uH			LK1608 100K-T	L1690689		1-	B	h1
L 1043	M.RFC	10uH			LK1608 100K-T	L1690689		1-	B	h1
L 1044	CHIP COIL	0.033uH			C2520C-33NK	L1690538		1-	A	E2
L 1045	M.RFC	2.2uH			LK1608 2R2K-T	L1690634		1-	B	f3
L 1046	CHIP COIL	330uH			LQH3N331K02M00-	L1690105		1-	A	E3

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
L 1047	M.RFC	0.15uH			HK1608 R15J-T	L1690938		1-	B	e2
L 1048	COIL				E2 0.25-1.85-8.5T-L	L0022576		1-	A	E2
L 1049	COIL 05RF				2.7UH 020812327	L0022833		1-	A	C3
L 1050	M.RFC	10uH			LK1608 100K-T	L1690689		1-	B	h2
L 1051	M.RFC	10uH			LK1608 100K-T	L1690689		1-	B	h2
L 1052	M.RFC	10uH			LK1608 100K-T	L1690689		1-	B	e3
L 1053	M.RFC	10uH			LK1608 100K-T	L1690689		1-	B	e3
L 1054	M.RFC	470uH			FLC32T-471J	L1690235		1-	B	e5
L 1055	M.RFC	470uH			FLC32T-471J	L1690235		1-	A	B5
L 1056	M.RFC	470uH			FLC32T-471J	L1690235		1-	B	g5
L 1060	M.RFC	470uH			FLC32T-471J	L1690235		1-	B	f4
L 1061	M.RFC	22uH			LK2125 220M-T	L1690335		1-	A	H5
L 1062	M.RFC	22uH			LK2125 220M-T	L1690335		1-	A	H5
L 1063	M.RFC	22uH			LK2125 220M-T	L1690335		1-	A	H6
L 1064	M.RFC	22uH			LK2125 220M-T	L1690335		1-	A	H6
L 1065	M.RFC	22uH			LK2125 220M-T	L1690335		1-	A	H6
L 1066	M.RFC	22uH			LK2125 220M-T	L1690335		1-	A	H6
L 1067	COIL				E2 0.26-0.9-3T-R	L0022367		1-	A	F2
L 1068	COIL				E2 0.28-1.0-4T-R	L0022365		1-	A	F2
P 1001	CONNECTOR				IMSA-9206H-T	P1090988		1-		
Q 1001	FET				2SK2975-T11	G3829757		1-	A	G3
Q 1002	FET				2SK2975-T11	G3829757		1-	A	H3
Q 1003	IC				BU4094BCFV-E2	G1093527		1-	A	E5
Q 1004	IC				BU4094BCFV-E2	G1093527		1-	A	E5
Q 1005	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	b2
Q 1006	FET				2SK2973-T13	G3829738		1-	A	G2
Q 1007	FET				2SK2973-T13	G3829738		1-	A	G2
Q 1008	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	b2
Q 1009	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	a2
Q 1010	IC				BU4094BCFV-E2	G1093527		1-	A	D5
Q 1011	FET				2SK2596BXTL	G3825967		1-	B	b3
Q 1012	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	a1
Q 1013	TRANSISTOR				2SB624-T2B BV3	G3206247C		1-	A	F1
Q 1014	IC				KIA7808API	G1093164		1-	A	F1
Q 1015	TRANSISTOR				FMG5 T148	G3070021		1-	A	G1
Q 1016	IC				M62352GP-70EC	G1092689		1-	A	E5
Q 1017	TRANSISTOR				2SC3357-T2	G3333577		1-	B	b2
Q 1018	TRANSISTOR				UMC5N TR	G3070137		1-	A	F1
Q 1019	IC				BA05FP-E2	G1093209		1-	B	b1
Q 1020	TRANSISTOR				2SB624-T2B BV3	G3206247C		1-	A	F2
Q 1021	TRANSISTOR				RT1N241M-T11-1	G3070249		1-	B	c4
Q 1022	IC				UPC2710T-E3	G1091844		1-	B	c2
Q 1023	IC				BB304CDW-TL	G1093324		1-	B	d3
Q 1024	IC				BB304CDW-TL	G1093324		1-	B	c3
Q 1025	TRANSISTOR				2SC5374-TL	G3353748		1-	B	d3
Q 1026	FET				2SK2685ZT-TR	G3826857		1-	B	d4
Q 1027	TRANSISTOR				UMH6N TR	G3070216		1-	B	d3
Q 1028	IC				BA05FP-E2	G1093209		1-	B	c7
Q 1029	TRANSISTOR				UMD2N TR	G3070076		1-	B	d3
Q 1030	IC				PST3445UR	G1093232		1-	B	b7
Q 1031	FET				2SJ355-T1	G3703558		1-	B	c6
Q 1032	TRANSISTOR				RT1N241M-T11-1	G3070249		1-	B	c6
Q 1033	TRANSISTOR				UMC5N TR	G3070137		1-	B	c3
Q 1034	TRANSISTOR				UMC5N TR	G3070137		1-	B	c3
Q 1035	TRANSISTOR				RT1N241M-T11-1	G3070249		1-	B	c6
Q 1036	TRANSISTOR				2SA1602A-T11-1F	G3116028F		1-	A	F7
Q 1037	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	A	F7
Q 1038	IC				TC4W53FU TE12L	G1091675		1-	A	E6
Q 1039	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	b6
Q 1040	TRANSISTOR				2SA1602A-T11-1F	G3116028F		1-	B	b6
Q 1041	TRANSISTOR				2SC4400-3-TL	G3344008C		1-	B	f3
Q 1042	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	f3
Q 1043	TRANSISTOR				2SC4400-3-TL	G3344008C		1-	B	h1
Q 1044	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	f3
Q 1045	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	f4
Q 1046	TRANSISTOR				2SC4400-3-TL	G3344008C		1-	B	h1
Q 1047	TRANSISTOR				RT1N241M-T11-1	G3070249		1-	A	E5
Q 1048	TRANSISTOR				2SC4400-3-TL	G3344008C		1-	B	h1
Q 1049	IC				HD64F2134FA20	*		1-	A	F5
Q 1050	TRANSISTOR				2SA1602A-T11-1F	G3116028F		1-	B	f3
Q 1051	TRANSISTOR				2SC4400-3-TL	G3344008C		1-	B	f3
Q 1052	TRANSISTOR				2SC4400-3-TL	G3344008C		1-	B	g3
Q 1053	TRANSISTOR				DTC114EU T106	G3070084		1-	A	F5

\*: Please contact VERTEX STANDARD.

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
Q 1054	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	c1
Q 1055	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	e2
Q 1056	TRANSISTOR				2SC4400-3-TL	G3344008C		1-	B	f3
Q 1057	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	A	C3
Q 1058	IC				CXA1611N-T4	G1092695		1-	B	c2
Q 1059	TRANSISTOR				2SC4400-3-TL	G3344008C		1-	B	h2
Q 1060	TRANSISTOR				UMC5N TR	G3070137		1-	A	C3
Q 1061	IC				BB304CDW-TL	G1093324		1-	B	e2
Q 1062	IC				AD9835BRU	G1093142		1-	B	h2
Q 1063	TRANSISTOR				UMC5N TR	G3070137		1-	B	c2
Q 1064	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	A	D3
Q 1065	IC				24LC128T-I/SN	G1093668		1-	A	F5
Q 1066	IC				BU4053BCFV-E2	G1093422		1-	B	d5
Q 1067	IC				TC4W53FU TE12L	G1091675		1-	B	d5
Q 1068	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	f4
Q 1069	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	A	B4
Q 1070	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	g3
Q 1071	IC				SA602AD-T	G1093612		1-	A	B4
Q 1073	IC				BB305CEW-TL	G1093677		1-	B	e4
Q 1074	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	h5
Q 1075	IC				BB305CEW-TL	G1093677		1-	B	e5
Q 1076	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	g4
Q 1077	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	A	D5
Q 1078	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	h6
Q 1079	IC				BB305CEW-TL	G1093677		1-	B	e5
Q 1080	IC				TA31136FN(EL)	G1091605		1-	B	g5
Q 1081	IC				BB305CEW-TL	G1093677		1-	B	g5
Q 1082	IC				SA602AD-T	G1093612		1-	A	C4
Q 1083	FET				2SK302Y TE85R	G3803027Y		1-	B	f5
Q 1084	FET				2SK302Y TE85R	G3803027Y		1-	B	f5
Q 1085	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	A	D6
Q 1086	TRANSISTOR				RT1N241M-T11-1	G3070249		1-	A	B5
Q 1087	IC				M62364FP 600D	G1093033		1-	B	g3
Q 1088	IC				BB305CEW-TL	G1093677		1-	B	g5
Q 1089	IC				BB304CDW-TL	G1093324		1-	B	f4
Q 1090	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	A	B5
Q 1091	TRANSISTOR				RT1N241M-T11-1	G3070249		1-	B	g6
Q 1093	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	A	D6
Q 1094	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	g6
Q 1095	IC				TA75S01F TE85R	G1091593		1-	A	A4
Q 1096	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	f5
Q 1097	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	e6
Q 1098	IC				TC4W53FU TE12L	G1091675		1-	B	g3
Q 1099	TRANSISTOR				2SA1602A-T11-1F	G3116028F		1-	B	e6
Q 1100	IC				TC4S66F TE85R	G1090893		1-	A	A4
Q 1103	IC				M51132FP 600C	G1091930		1-	B	d6
Q 1104	TRANSISTOR				FMG5 T148	G3070021		1-	B	g7
Q 1105	IC				TDA2003H	G1090815		1-	A	E7
Q 1106	TRANSISTOR				FMG5 T148	G3070021		1-	B	g7
Q 1107	TRANSISTOR				RT1N241M-T11-1	G3070249		1-	B	g6
Q 1108	TRANSISTOR				2SD2211 T100 QR	G3422117Q		1-	A	A3
Q 1109	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	b6
Q 1110	TRANSISTOR				DTC114EU T106	G3070084		1-	B	d7
Q 1111	IC				NJM2902V-TE1	G1091679		1-	B	b1
Q 1112	IC				NJM2904V-TE1	G1091677		1-	B	a1
Q 1113	IC				BU4011BF-E2	G1092724		1-	A	G5
Q 1114	IC				NJM2902V-TE1	G1091679		1-	A	E5
Q 1117	IC				NJM2904V-TE1	G1091677		1-	B	e4
Q 1118	IC				NJM2902V-TE1	G1091679		1-	B	g4
Q 1119	IC				NJM2902V-TE1	G1091679		1-	B	g4
Q 1120	IC				NJM2902V-TE1	G1091679		1-	A	B3
Q 1121	IC				BU4066BCFV-E2	G1093537		1-	A	B4
Q 1122	IC				BU4066BCFV-E2	G1093537		1-	A	B3
Q 1123	IC				NJM2904V-TE1	G1091677		1-	B	g4
Q 1124	TRANSISTOR				UMH6N TR	G3070216		1-	A	D7
Q 1125	TRANSISTOR				UMH6N TR	G3070216		1-	B	e7
Q 1126	TRANSISTOR				UMH6N TR	G3070216		1-	B	g7
Q 1128	IC				SPM5001	G1093686		1-	A	D2
Q 1129	IC				TC4S81F TE85R	G1090895		1-	A	G6
R 1001	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	a1
R 1002	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	a1
R 1003	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	a1
R 1004	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b1

# 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.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b1
R 1006	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	G1
R 1007	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	G1
R 1008	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	G1
R 1010	CHIP RES.	470	1W	5%	RMC1 471JTE	J24305471		1-	B	a4
R 1011	CHIP RES.	470	1W	5%	RMC1 471JTE	J24305471		1-	B	b4
R 1012	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	c4
R 1013	CHIP RES.	220	1W	5%	RMC1 221JTE	J24305221		1-	A	G4
R 1014	CHIP RES.	220	1W	5%	RMC1 221JTE	J24305221		1-	A	H4
R 1015	CHIP RES.	330	1/16W	5%	RMC1/16 331JATP	J24185331		1-	A	F3
R 1016	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	A	G3
R 1017	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	A	G3
R 1018	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b1
R 1019	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	a1
R 1020	CHIP RES.	330	1/16W	5%	RMC1/16 331JATP	J24185331		1-	A	H3
R 1021	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	A	H3
R 1022	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	A	G3
R 1023	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	E5
R 1024	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	E5
R 1025	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b1
R 1026	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	b1
R 1027	CHIP RES.	2.2M	1/16W	5%	RMC1/16S 225JTH	J24189065		1-	B	b2
R 1028	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b2
R 1029	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	B	b2
R 1031	CHIP RES.	470	1/2W	5%	RMC1/2 471JCTP	J24275471		1-	B	b3
R 1032	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	a2
R 1033	CHIP RES.	220	1/4W	5%	RMC1/4 221JATP	J24245221		1-	B	a2
R 1034	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b2
R 1035	CHIP RES.	2.7k	1/16W	5%	RMC1/16S 272JTH	J24189030		1-	A	F2
R 1036	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b2
R 1037	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	E5
R 1038	CHIP RES.	10	1/16W	5%	RMC1/16 100JATP	J24185100		1-	A	G2
R 1039	CHIP RES.	10	1/16W	5%	RMC1/16 100JATP	J24185100		1-	A	G2
R 1041	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	A	G2
R 1042	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	A	G2
R 1043	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	b2
R 1044	CHIP RES.	2.2M	1/16W	5%	RMC1/16S 225JTH	J24189065		1-	B	b2
R 1045	CHIP RES.	10	1/16W	5%	RMC1/16S 100JTH	J24189001		1-	B	a2
R 1046	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	a2
R 1047	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a2
R 1048	CHIP RES.	270	1/16W	5%	RMC1/16 271JATP	J24185271		1-	B	b3
R 1049	CHIP RES.	330	1/16W	5%	RMC1/16S 331JTH	J24189019		1-	B	b2
R 1050	CHIP RES.	470	1/10W	5%	RMC1/10T 471J	J24205471		1-	B	b3
R 1051	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	a2
R 1052	CHIP RES.	1.8k	1/16W	5%	RMC1/16S 182JTH	J24189028		1-	A	F2
R 1053	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	F2
R 1054	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	B	b2
R 1057	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	F1
R 1058	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a1
R 1059	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a2
R 1060	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	a1
R 1061	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	G2
R 1062	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	B	b2
R 1063	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a1
R 1064	CHIP RES.	390	1/16W	5%	RMC1/16S 391JTH	J24189020		1-	A	E4
R 1065	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	B	b2
R 1066	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	E5
R 1067	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a1
R 1068	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	E5
R 1069	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a2
R 1070	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	F2
R 1071	CHIP RES.	1.8k	1/16W	5%	RMC1/16 182JATP	J24185182		1-	B	c2
R 1072	CHIP RES.	1.8k	1/16W	5%	RMC1/16 182JATP	J24185182		1-	B	b2
R 1073	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a1
R 1074	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	E5
R 1075	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	F2
R 1076	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	E4
R 1077	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	E5
R 1078	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	E2
R 1079	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	a1
R 1080	CHIP RES.	120	1/16W	5%	RMC1/16 121JATP	J24185121		1-	B	c2
R 1082	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d4
R 1083	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	d4

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1084	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a1
R 1085	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	d4
R 1086	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	E3
R 1087	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	E4
R 1088	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	B	c2
R 1089	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	d3
R 1090	CHIP RES.	330	1/16W	5%	RMC1/16 331JATP	J24185331		1-	B	c2
R 1091	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	a1
R 1092	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	d4
R 1093	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	a1
R 1094	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	E6
R 1095	CHIP RES.	120	1/16W	5%	RMC1/16 121JATP	J24185121		1-	B	c2
R 1096	CHIP RES.	10	1/16W	5%	RMC1/16S 100JTH	J24189001		1-	A	E5
R 1097	CHIP RES.	27k	1/16W	5%	RMC1/16S 273JTH	J24189042		1-	A	E6
R 1098	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	d3
R 1099	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	d3
R 1100	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	c4
R 1101	CHIP RES.	27	1/16W	5%	RMC1/16S 270JTH	J24189006		1-	B	d4
R 1103	CHIP RES.	120	1/16W	5%	RMC1/16S 121JTH	J24189014		1-	A	F1
R 1104	CHIP RES.	680k	1/16W	5%	RMC1/16S 684JTH	J24189059		1-	B	c3
R 1105	CHIP RES.	680k	1/16W	5%	RMC1/16S 684JTH	J24189059		1-	B	c3
R 1106	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	c3
R 1107	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	c3
R 1108	CHIP RES.	33	1/16W	5%	RMC1/16S 330JTH	J24189007		1-	B	d4
R 1109	CHIP RES.	27	1/16W	5%	RMC1/16S 270JTH	J24189006		1-	B	d3
R 1110	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	F2
R 1111	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	B	d3
R 1112	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d3
R 1113	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	c3
R 1114	CHIP RES.	18	1/16W	5%	RMC1/16S 180JTH	J24189004		1-	B	c1
R 1115	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	d3
R 1116	CHIP RES.	33	1/16W	5%	RMC1/16S 330JTH	J24189007		1-	B	d3
R 1117	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	A	F1
R 1118	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	B	d4
R 1119	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	d4
R 1120	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	d2
R 1121	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	c3
R 1122	CHIP RES.	18	1/16W	5%	RMC1/16S 180JTH	J24189004		1-	B	c1
R 1123	CHIP RES.	33	1/16W	5%	RMC1/16S 330JTH	J24189007		1-	B	d4
R 1124	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d3
R 1125	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	c3
R 1126	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	E3
R 1127	CHIP RES.	10	1/16W	5%	RMC1/16S 100JTH	J24189001		1-	A	E3
R 1128	CHIP RES.	10	1/16W	5%	RMC1/16S 100JTH	J24189001		1-	A	E3
R 1129	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	d4
R 1130	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	d4
R 1131	CHIP RES.	33	1/16W	5%	RMC1/16S 330JTH	J24189007		1-	A	E4
R 1132	CHIP RES.	10	1/16W	5%	RMC1/16S 100JTH	J24189001		1-	B	d1
R 1133	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	c3
R 1134	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	E1
R 1135	CHIP RES.	150	1/16W	5%	RMC1/16S 151JTH	J24189015		1-	B	d1
R 1136	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	d1
R 1137	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	E2
R 1138	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	F2
R 1139	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	A	E1
R 1141	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	c7
R 1142	CHIP RES.	10	1/16W	5%	RMC1/16S 100JTH	J24189001		1-	B	d1
R 1143	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	E1
R 1144	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	d3
R 1145	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	c3
R 1146	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	E1
R 1147	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	c1
R 1148	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	d3
R 1149	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	E1
R 1150	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	c7
R 1151	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	D1
R 1153	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d3
R 1154	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	A	E1
R 1155	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	D1
R 1156	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	B	c7
R 1157	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	c6
R 1158	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	e1
R 1159	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	b7

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1160	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b7
R 1161	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	D1
R 1162	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	c6
R 1163	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	F7
R 1164	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	D1
R 1165	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	F7
R 1166	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	F7
R 1167	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	F7
R 1168	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	E5
R 1169	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	E5
R 1170	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	G7
R 1171	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	F7
R 1172	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	e1
R 1173	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b7
R 1174	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	D1
R 1175	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b6
R 1176	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	e1
R 1177	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	c6
R 1178	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	b6
R 1179	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	f2
R 1181	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	f2
R 1183	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	f2
R 1184	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b6
R 1185	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	f2
R 1186	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C3
R 1187	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C3
R 1188	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	h1
R 1189	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	e1
R 1190	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C3
R 1191	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	F2
R 1192	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	e1
R 1193	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	f3
R 1194	CHIP RES.	120k	1/16W	5%	RMC1/16S 124JTH	J24189050		1-	A	E5
R 1195	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	f3
R 1196	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	f3
R 1197	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	B	h1
R 1198	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	A	E5
R 1199	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	f3
R 1200	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	h1
R 1201	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	h1
R 1202	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	h1
R 1203	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	f3
R 1204	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	f4
R 1205	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	E3
R 1206	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	B	h2
R 1207	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	h2
R 1208	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	f3
R 1209	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	f1
R 1210	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	f3
R 1211	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	G5
R 1212	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	E2
R 1213	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	d2
R 1214	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	f3
R 1215	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	h1
R 1216	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	f3
R 1217	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	g3
R 1218	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	F6
R 1219	CHIP RES.	0	1/16W	5%	RMC1/16S 000JATP	J24185000		1-	A	F5
R 1220	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	g3
R 1221	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	E5
R 1222	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	B	f3
R 1223	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	f3
R 1224	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	e2
R 1225	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	E5
R 1226	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	c2
R 1228	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	f3
R 1229	CHIP RES.	150	1/16W	5%	RMC1/16S 151JTH	J24189015		1-	A	D2
R 1230	CHIP RES.	150	1/16W	5%	RMC1/16S 151JTH	J24189015		1-	A	D2
R 1231	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C4
R 1232	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	e3
R 1233	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	f3
R 1234	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C3
R 1235	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	c2

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1236	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	C3
R 1237	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	c2
R 1238	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	c1
R 1239	CHIP RES.	10	1/16W	5%	RMC1/16S 100JTH	J24189001		1-	A	C3
R 1240	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	C3
R 1241	CHIP RES.	22	1/16W	5%	RMC1/16S 220JTH	J24189005		1-	B	h2
R 1242	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	c2
R 1243	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	h2
R 1244	CHIP RES.	56k	1/16W	5%	RMC1/16S 563JTH	J24189046		1-	A	B3
R 1245	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	e2
R 1246	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	h2
R 1247	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	A	B3
R 1248	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	e3
R 1249	CHIP RES.	3.9k	1/16W	5%	RMC1/16S 392JTH	J24189032		1-	B	h2
R 1250	CHIP RES.	33	1/16W	5%	RMC1/16S 330JTH	J24189007		1-	A	D3
R 1252	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	B3
R 1253	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	F6
R 1254	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	B3
R 1255	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	B	h2
R 1256	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	E6
R 1257	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	E3
R 1258	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	E2
R 1259	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	h2
R 1260	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	D3
R 1262	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	F5
R 1263	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	F5
R 1264	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	h2
R 1265	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	D3
R 1266	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	E6
R 1267	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	h2
R 1268	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-	B	e3
R 1270	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	e2
R 1272	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	e2
R 1273	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	e3
R 1274	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	B4
R 1275	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	B4
R 1276	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	A3
R 1277	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	E6
R 1278	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	e3
R 1280	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	f4
R 1281	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	B4
R 1282	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	f4
R 1283	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	E5
R 1284	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	A4
R 1285	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	A4
R 1286	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	B	g4
R 1287	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	B4
R 1288	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	g5
R 1289	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	B4
R 1290	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	B4
R 1291	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	B4
R 1292	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	A	B4
R 1293	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B4
R 1294	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	A	A3
R 1295	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	E6
R 1296	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	e4
R 1297	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	B3
R 1298	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	B4
R 1299	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	A5
R 1300	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	e4
R 1301	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-	B	h5
R 1302	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C4
R 1303	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	h5
R 1304	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	h4
R 1305	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	D6
R 1306	CHIP RES.	680	1/16W	5%	RMC1/16S 681JTH	J24189023		1-	B	e4
R 1307	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B3
R 1308	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	g3
R 1309	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B4
R 1310	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	B	h5
R 1311	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	B	g3
R 1312	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	A	B4
R 1313	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	C5

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1314	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	e4
R 1315	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	h6
R 1316	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	A3
R 1317	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B4
R 1318	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	B	e4
R 1319	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	e5
R 1320	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	h5
R 1321	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	g3
R 1322	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	f3
R 1323	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	A	B4
R 1324	CHIP RES.	680k	1/16W	5%	RMC1/16S 684JTH	J24189059		1-	B	h5
R 1325	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	B4
R 1326	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	e5
R 1327	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	g4
R 1328	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	A	B3
R 1329	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-	A	B5
R 1330	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	C4
R 1331	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	e5
R 1332	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	C4
R 1333	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	g4
R 1334	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	g5
R 1335	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	h5
R 1336	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	e5
R 1337	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	g3
R 1338	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	h5
R 1339	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	h5
R 1340	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	D4
R 1341	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	g4
R 1344	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	g3
R 1345	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	B	g5
R 1346	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	D5
R 1347	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	B3
R 1348	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	e5
R 1349	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B5
R 1350	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	h6
R 1351	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	h6
R 1352	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-	A	A5
R 1353	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	g5
R 1354	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043	AUS	1-	B	g3
R 1354	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043	EXP	1-	B	g3
R 1354	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043	FRA	1-	B	g3
R 1354	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047	JPN	1-	B	g3
R 1354	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043	USA	1-	B	g3
R 1355	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	g3
R 1356	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	e5
R 1357	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B5
R 1358	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	f3
R 1359	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	g3
R 1360	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	g3
R 1363	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	B	g5
R 1364	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	e5
R 1365	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	e5
R 1366	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	g3
R 1369	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	e5
R 1373	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	g3
R 1377	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	g3
R 1379	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	g5
R 1380	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	A5
R 1381	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	h3
R 1384	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034		1-	B	f4
R 1385	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	D5
R 1386	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	g5
R 1387	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	g3
R 1388	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039		1-	B	g3
R 1389	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	g5
R 1390	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	h6
R 1391	CHIP RES.	150	1/16W	5%	RMC1/16S 151JTH	J24189015		1-	B	f5
R 1392	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	A	D5
R 1394	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C4
R 1395	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	B3
R 1396	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1	B	g3
R 1396	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		2-	B	g3
R 1397	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	g3

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1400	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	f3
R 1401	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	h3
R 1402	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	D5
R 1403	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	D6
R 1404	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C4
R 1407	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	g5
R 1408	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	C4
R 1409	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	g5
R 1410	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	g5
R 1415	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	f3
R 1416	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	g3
R 1417	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-	B	g3
R 1418	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	g5
R 1419	CHIP RES.	33	1/16W	5%	RMC1/16S 330JTH	J24189007		1-	B	e6
R 1420	CHIP RES.	680k	1/16W	5%	RMC1/16S 684JTH	J24189059		1-	B	g3
R 1421	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	A	B3
R 1422	CHIP RES.	2.2M	1/16W	5%	RMC1/16S 225JTH	J24189065		1-	B	f3
R 1424	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	f4
R 1425	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	g6
R 1426	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	g6
R 1427	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	g6
R 1428	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B3
R 1429	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	f4
R 1430	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	g5
R 1431	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	f4
R 1433	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	f4
R 1434	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C5
R 1435	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	g5
R 1436	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	g3
R 1437	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-	B	g3
R 1438	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	B	f5
R 1439	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	e6
R 1440	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	D6
R 1441	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	g5
R 1442	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	g6
R 1443	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	B	f4
R 1444	CHIP RES.	270k	1/16W	5%	RMC1/16S 274JTH	J24189054	1	A	B3	
R 1444	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053	2-	A	B3	
R 1446	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013	1-	A	B5	
R 1447	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029	1-	B	g6	
R 1448	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041	1-	B	h3	
R 1449	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049	1-	B	f4	
R 1450	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057	1-	B	g3	
R 1451	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041	1-	B	h3	
R 1452	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021	1-	A	B5	
R 1453	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025	1-	B	f4	
R 1454	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017	1-	A	C5	
R 1455	CHIP RES.	2.2M	1/16W	5%	RMC1/16S 225JTH	J24189065	1-	A	A5	
R 1456	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053	1-	B	g6	
R 1457	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045	1-	B	e6	
R 1458	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049	1-	A	A5	
R 1461	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035	1-	B	g4	
R 1463	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047	1-	A	B3	
R 1464	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041	1-	B	e6	
R 1466	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025	1-	B	e6	
R 1468	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055	1-	B	f5	
R 1470	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033	1-	B	e6	
R 1471	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043	1-	B	g4	
R 1472	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013	1-	B	f6	
R 1473	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043	1-	B	g4	
R 1475	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037	1-	B	g4	
R 1476	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029	1-	A	C6	
R 1477	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049	1-	B	g4	
R 1478	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043	1-	B	g4	
R 1479	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021	1-	A	A5	
R 1482	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033	1-	B	e6	
R 1483	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043	1-	B	g4	
R 1484	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031	1-	B	e5	
R 1486	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025	1-	B	f6	
R 1487	CHIP RES.	2.2M	1/16W	5%	RMC1/16S 225JTH	J24189065	1-	B	g4	
R 1488	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031	1-	B	e5	
R 1491	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055	1-	B	e5	
R 1493	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035	1-	B	g4	

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1494	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	g4
R 1495	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	D6
R 1496	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	e6
R 1498	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	B	d6
R 1500	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b6
R 1505	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	e7
R 1506	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	e6
R 1507	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	e7
R 1508	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	e6
R 1509	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1	B	c6
R 1509	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		2-	B	c6
R 1510	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039		1	B	c6
R 1510	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		2-	B	c6
R 1511	CHIP RES.	1	1W	5%	RMC1 1R0JTE	J24305010		1-	B	d7
R 1512	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	g6
R 1513	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	f6
R 1514	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	g6
R 1515	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	f5
R 1516	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	g7
R 1517	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	g6
R 1518	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	g5
R 1519	CHIP RES.	220	1/4W	5%	RMC1/4 221JATP	J24245221		1-	B	d6
R 1520	CHIP RES.	4.7	1/10W	5%	RMC1/10T 4R7J	J24205479		1-	B	d6
R 1521	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	B	g6
R 1522	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	B	g7
R 1523	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	f5
R 1524	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	B	f5
R 1525	CHIP RES.	4.7	1/10W	5%	RMC1/10T 4R7J	J24205479		1-	B	d7
R 1526	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-	B	g5
R 1527	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	B	g5
R 1528	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	B	d7
R 1530	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	A	A3
R 1531	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	A	A3
R 1533	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	g6
R 1534	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	B	g6
R 1535	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b6
R 1537	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	g6
R 1538	CHIP RES.	470	1/4W	5%	RMC1/4 471JATP	J24245471		1-	A	A3
R 1539	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b7
R 1541	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039		1-	B	b6
R 1542	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	A	D7
R 1543	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b7
R 1544	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	G5
R 1545	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	G5
R 1546	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	B	b6
R 1547	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	B	b7
R 1548	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	G5
R 1549	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	G5
R 1550	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	G6
R 1551	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	h5
R 1552	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b7
R 1553	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	B	h3
R 1554	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	B	h4
R 1555	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	h4
R 1556	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	E6
R 1557	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	h5
R 1558	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	h5
R 1559	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	h4
R 1560	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	h3
R 1561	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	h4
R 1562	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	h4
R 1563	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	h5
R 1565	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	h6
R 1566	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	h6
R 1567	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	h5
R 1568	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	h6
R 1569	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	a7
R 1570	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	a7
R 1571	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	G7
R 1572	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	a6
R 1573	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	a7
R 1576	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	A	A3
R 1577	CHIP RES.	3.9	1/2W	5%	RMC1/2 3R9JATP	J24275399		1-	B	h7

# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1578	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-	B	e5
R 1579	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	D6
R 1580	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-	B	g5
R 1581	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	A5
R 1582	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	A5
R 1583	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	h4
R 1584	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	g4
R 1585	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B4
R 1586	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	B4
R 1587	CHIP RES.	2.2M	1/16W	5%	RMC1/16S 225JTH	J24189065		1-	B	h3
R 1588	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	g4
R 1589	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	A	D2
R 1590	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039		1-	A	B5
R 1591	CHIP RES.	330	1/16W	5%	RMC1/16S 331JTH	J24189019		1-	B	f5
R 1594	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	b6
R 1595	CHIP RES.	6.8	1/10W	5%	RMC1/10T 6R8J	J24205689	1	B	c7	
R 1595	CHIP RES.	15	1/10W	5%	RMC1/10T 150J	J24205150	2-	B	c7	
R 1596	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	f3
R 1597	CHIP RES.	4.7	1/16W	5%	RMC1/16 4R7JATP	J24185479		1-	A	c2
R 1599	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	B	d4
R 1600	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	f4
R 1601	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	c2
R 1602	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	F5
R 1603	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	B	e2
R 1604	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	B	e2
R 1605	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d5
R 1606	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	F5
R 1609	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	E4
R 1610	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	B	f4
R 1611	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	A	E3
R 1612	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	G7
R 1613	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	a7
R 1614	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	G5
R 1617	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	G5
R 1618	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	G7
R 1619	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	d5
R 1620	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	d5
R 1621	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	c5
R 1622	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	F6
R 1623	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	F6
R 1624	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	F5
R 1625	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	c6
R 1630	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	G5
R 1631	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	H5
R 1633	CHIP RES.	18k	1/16W	5%	RMC1/16S 183JTH	J24189040		1-	B	d5
R 1634	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d5
RB1002	BLOCK RES.	10k			SR4E103JT	J42900027		1-	A	F5
RB1003	BLOCK RES.	10k			SR4E103JT	J42900027		1-	B	g6
RL1001	RELAY		DC12V		G5V-1 DC12V	M1190120		1-	A	D7
S 1001	SLIDE SWITCH				SSSS22	N6090057		1-	A	F3
S 1002	SLIDE SWITCH				SSSS22	N6090057		1-	A	G7
T 1001	COIL PWR-WIDE				A0898	L0022552		1-	A	H5
T 1002	COIL PWR-WIDE				3A TR9.3X4.8X5.0	L0022642A		1-	A	G4
T 1003	COIL PWR-WIDE				3A6 RIB8X14X6.5	L0022641A		1-	A	H2
T 1004	COIL 05RF				100M 010812300A	L0022779		1-	A	E4
T 1005	COIL 05RF				100M 010812300A	L0022779		1-	A	E3
T 1006	COIL 05RF				100M 010812300A	L0022779		1-	A	F4
T 1007	COIL WIDE-TRANS.				990812213	L0022619		1-	A	E4
T 1008	COIL 05RF				100M 010812300A	L0022779		1-	A	E3
T 1009	COIL 05RF				100M 010812300A	L0022779		1-	A	F3
T 1010	COIL 05RF				100M 010812300A	L0022779		1-	A	F3
T 1011	COIL 05RF				100M 010812300A	L0022779		1-	A	E1
T 1012	COIL 05RF				100M 010812300A	L0022779		1-	A	E1
T 1013	COIL 05RF				100M 010812300A	L0022779		1-	A	D1
T 1014	COIL 05RF				74.62M 010812302	L0022781		1-	A	C3
T 1015	BALUN TRANSFORMERS				B5F458DB-1011=P3	L0190246		1-	A	D1
T 1016	BALUN TRANSFORMERS				B5F458DB-1011=P3	L0190246		1-	A	D2
T 1017	COIL WIDE-TRANS.				960812088	L0022478		1-	A	E2
T 1018	COIL 05RF				74.62M 010812302	L0022781		1-	A	B3
T 1019	COIL 05RF				74.62M 010812302	L0022781		1-	A	B3
T 1020	COIL WIDE-TRANS.				950812004	L0022479		1-	A	D2
T 1021	COIL 05RF				74.62M 010812302	L0022781		1-	A	D2
T 1022	COIL WIDE-TRANS.				960812088	L0022478		1-	A	D3

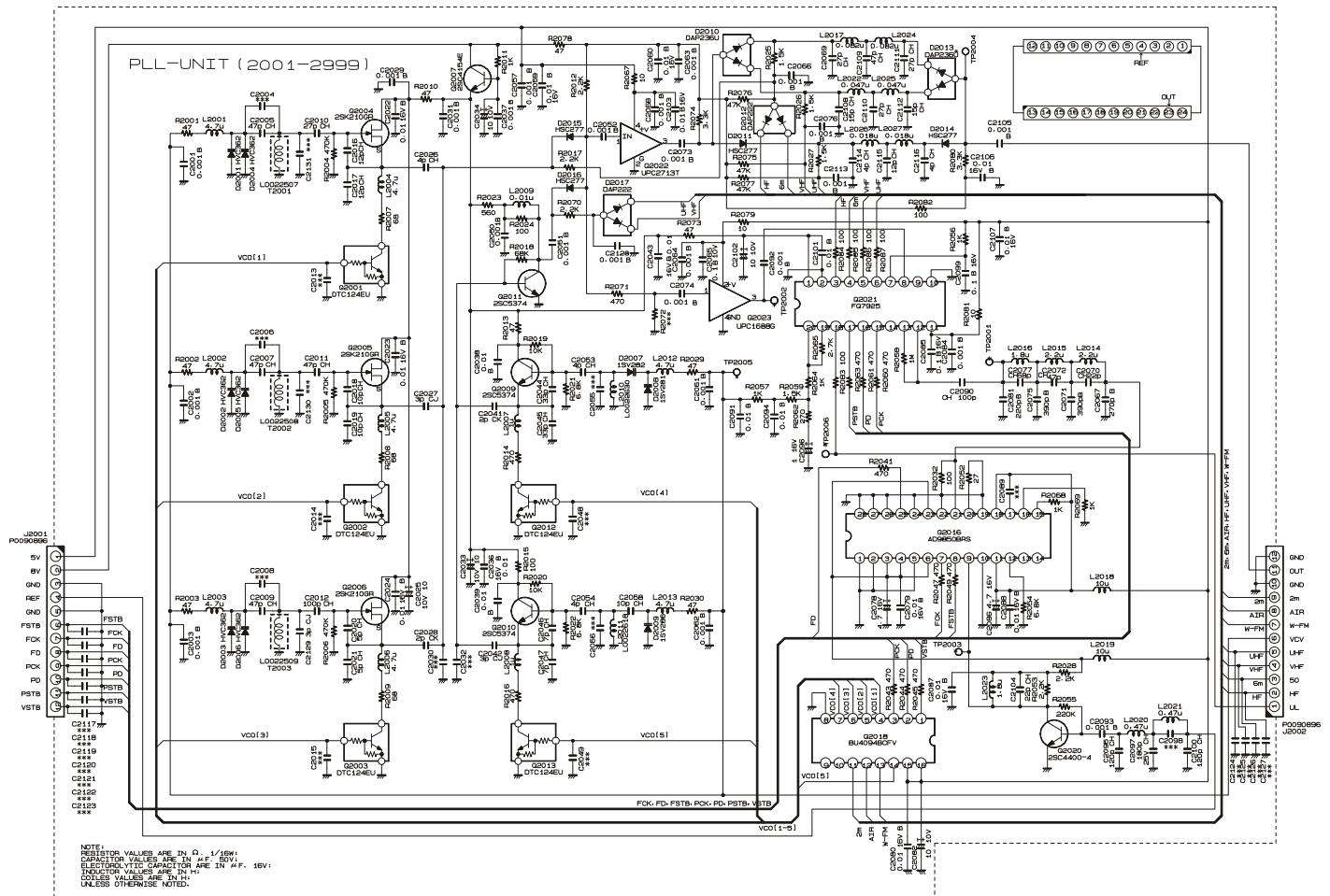
# MAIN Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
T 1023	COIL 05RF				74.62M 010812303	L0022782		1-	A	D3
T 1024	COIL 05RF				74.62M 010812303	L0022782		1-	A	D3
T 1025	COIL 05RF				455K 010812299	L0022778		1-	A	A3
T 1026	COIL 05RF				74.62M 010812303	L0022782		1-	A	D4
T 1027	COIL 05RF				455K 010812301	L0022780		1-	A	D5
T 1028	COIL 05RF				50M 010812304	L0022783		1-	A	D4
T 1029	COIL 05RF				455K 010812299	L0022778		1-	A	B5
T 1030	COIL 05RF				74.62M 010812302	L0022781		1-	A	D5
T 1031	COIL 05RF				455K 010812301	L0022780		1-	A	D5
T 1032	COIL WIDE-TRANS.				960812088	L0022478		1-	A	C5
T 1033	COIL 05RF				455K 010812299	L0022778		1-	A	C4
T 1034	COIL 05RF				455K 010812301	L0022780		1-	A	B5
T 1035	COIL 05RF				455K 010812299	L0022778		1-	A	C5
T 1036	COIL 05RF				455K 010812301	L0022780		1-	A	C6
T 1037	COIL_05RF				455K 010812301	L0022780		1-	A	D6
TC1001	TRIMMER CAP.	3pF			ECR-KN003A61X 3P	K91000264		1-	A	E4
TC1002	TRIMMER CAP.	6pF			ECR-KN006A61X 6P	K91000225		1-	A	E1
TC1003	TRIMMER CAP.	6pF			ECR-KN006A61X 6P	K91000225		1-	A	E1
TC1004	TRIMMER CAP.	6pF			ECR-KN006A61X 6P	K91000225		1-	A	D1
TC1005	TRIMMER CAP.	10pF			ECR-KN010C61X	K91000226		1-	A	E2
TH1001	THERMISTOR				TBPS1R223K460H5Q	G9090085		1-	B	a2
VR1001	POT.	1k			EVN-5ESX50B13	J51811102		1-	A	G3
VR1002	POT.	1k			EVN-5ESX50B13	J51811102		1-	A	H3
VR1003	POT.	2.2k			EVN-5ESX50BE3	J51811222		1-	A	G2
VR1004	POT.	2.2k			EVN-5ESX50BE3	J51811222		1-	A	F2
VR1005	POT.	10k			EVN-5ESX50B14	J51811103		1-	A	B4
X 1001	XTAL TSS-6035B	19.82MHz			19.820MHZ	H0103262		1-	A	G5
X 1002	XTAL TSS-7050A	22.7785MHz			22.7785MHZ	H0103277		1-	B	f3
XF1001	XTAL FILTER				MF68Q TR-6(3)	H1102349		1-	A	D3
	HEATSINK PLATE SHIELD CASE SHIELD SHEET				(MIXER)	RA0416500 RA0439400 RA0459300		1- 1- 1-	B	a3

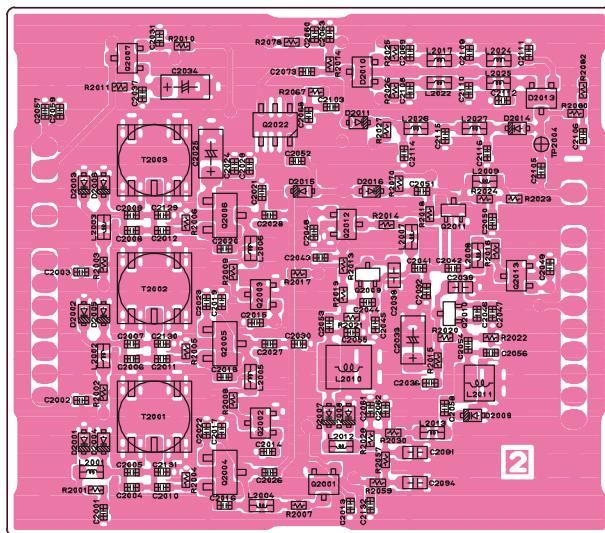
# PLL Unit

## Circuit Diagram

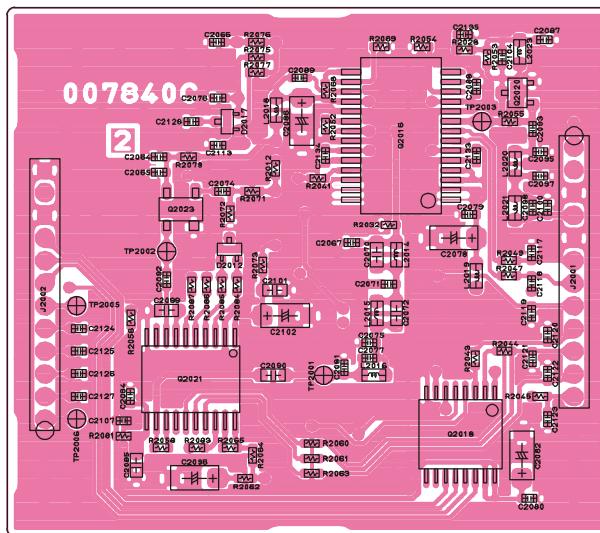


# PLL Unit

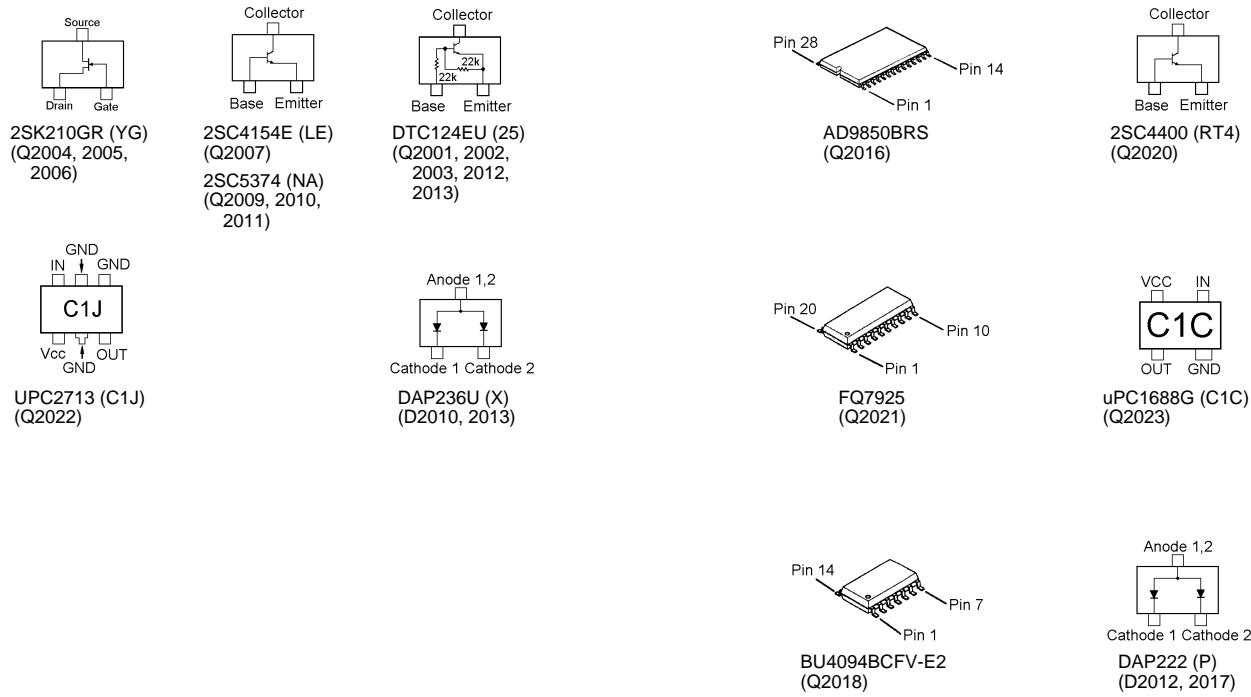
## Parts Layout



Side A



Side B



# PLL Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
PCB with Components										CB1229001
Printed Circuit Board										FR0078400
C 2001	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	A2
C 2002	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	A2
C 2003	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	A1
C 2005	CHIP CAP.	47pF	50V	CH	UMK105CH470JW-F	K22178274		1-	A	A2
C 2007	CHIP CAP.	47pF	50V	CH	UMK105CH470JW-F	K22178274		1-	A	A2
C 2009	CHIP CAP.	47pF	50V	CH	UMK105CH470JW-F	K22178274		1-	A	A1
C 2010	CHIP CAP.	27pF	50V	CH	UMK105CH270JW-F	K22178268		1-	A	A2
C 2011	CHIP CAP.	47pF	50V	CH	UMK105CH470JW-F	K22178274		1-	A	A2
C 2012	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1-	A	A1
C 2016	CHIP CAP.	12pF	50V	CH	UMK105CH120JW-F	K22178260		1-	A	A2
C 2017	CHIP CAP.	12pF	50V	CH	UMK105CH120JW-F	K22178260		1-	A	A2
C 2018	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	A	A2
C 2019	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	A	A1
C 2020	CHIP CAP.	5pF	50V	CH	UMK105CH050CW-F	K22178253		1-	A	A1
C 2021	CHIP CAP.	5pF	50V	CH	UMK105CH050CW-F	K22178253		1-	A	A1
C 2022	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	A2
C 2023	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	A1
C 2024	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	A1
C 2025	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	A1
C 2026	CHIP CAP.	4pF	50V	CH	UMK105CH040CW-F	K22178252		1-	A	A2
C 2027	CHIP CAP.	3pF	50V	CJ	UMK105CJ030CW-F	K22178251		1-	A	A2
C 2028	CHIP CAP.	2pF	50V	CK	UMK105CK020CW-F	K22178250		1-	A	A1
C 2029	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	A1
C 2031	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	A1
C 2033	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	B2
C 2034	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	A1
C 2036	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B2
C 2037	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	A1
C 2038	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	B1
C 2039	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	B1
C 2041	CHIP CAP.	2pF	50V	CK	UMK105CK020CW-F	K22178250		1-	A	B1
C 2042	CHIP CAP.	3pF	50V	CJ	UMK105CJ030CW-F	K22178251		1-	A	B1
C 2043	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B1
C 2044	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	A	B1
C 2045	CHIP CAP.	33pF	50V	CH	UMK105CH330JW-F	K22178270		1-	A	B2
C 2046	CHIP CAP.	7pF	50V	CH	UMK105CH070DW-F	K22178255		1-	A	B2
C 2047	CHIP CAP.	7pF	50V	CH	UMK105CH070DW-F	K22178255		1-	A	B2
C 2050	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	B1
C 2051	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	B1
C 2052	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	A1
C 2053	CHIP CAP.	5pF	50V	CH	UMK105CH050CW-F	K22178253		1-	A	B2
C 2054	CHIP CAP.	4pF	50V	CH	UMK105CH040CW-F	K22178252		1-	A	B2
C 2057	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	A1
C 2058	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	A	B2
C 2059	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	A1
C 2060	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B1
C 2061	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	B2
C 2062	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	B2
C 2063	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	B1
C 2064	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	a1
C 2065	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	a1
C 2066	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	a1
C 2067	CHIP CAP.	270pF	50V	B	UMK105B271KW-F	K22178822		1	B	b1
C 2067	CHIP CAP.	330pF	50V	B	UMK105B331KW-F	K22178823		2-	B	b1
C 2068	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	A1
C 2069	CHIP CAP.	27pF	50V	CH	UMK105CH270JW-F	K22178268		1-	A	B1
C 2070	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		1	B	b1
C 2070	CHIP CAP.	82pF	50V	CH	GRM39CH820J50PT	K22174233		2-	B	b1
C 2071	CHIP CAP.	390pF	50V	B	UMK105B391KW-F	K22178824		1	B	b1
C 2071	CHIP CAP.	680pF	50V	B	UMK105B681KW-F	K22178827		2-	B	b1
C 2072	CHIP CAP.	47pF	50V	CH	GRM39CH470J50PT	K22174227		1	B	b2
C 2072	CHIP CAP.	68pF	50V	CH	GRM39CH680J50PT	K22174231		2-	B	b2
C 2073	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	A1
C 2074	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	a1
C 2075	CHIP CAP.	390pF	50V	B	UMK105B391KW-F	K22178824		1	B	b2
C 2075	CHIP CAP.	680pF	50V	B	UMK105B681KW-F	K22178827		2-	B	b2
C 2076	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	a1
C 2077	CHIP CAP.	68pF	50V	CH	UMK105CH680JW-F	K22178278		1	B	b2
C 2077	CHIP CAP.	22pF	50V	CH	UMK105CH220JW-F	K22178266		2-	B	b2
C 2078	CHIP TA.CAP.	4.7uF	16V		TEMSVA1C475M-8R	K78120031		1-	B	b1
C 2079	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b1

# PLL Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 2080	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b2
C 2081	CHIP CAP.	390pF	50V	B	UMK105B391KW-F	K22178824		1-	B	b2
C 2082	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	B	b2
C 2084	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	a2
C 2085	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	a2
C 2086	CHIP TA.CAP.	4.7uF	16V		TEMSVA1C475M-8R	K78120031		1-	B	a1
C 2087	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b1
C 2088	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1	B	b1
C 2088	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		2-	B	b1
C 2090	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		1	B	a2
C 2090	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206		2-	B	a2
C 2091	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	B2
C 2092	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	a1
C 2093	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	b1
C 2094	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	B2
C 2095	CHIP CAP.	120pF	50V	CH	UMK105CH121JW-F	K22178284		1-	B	b1
C 2096	CHIP TA.CAP.	1uF	16V		TMCSA1C105MTR	K78120023		1-	B	a2
C 2097	CHIP CAP.	180pF	25V	CH	GRM36CH181J25PT	K22148201		1-	B	b1
C 2099	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	a2
C 2100	CHIP CAP.	120pF	50V	CH	UMK105CH121JW-F	K22178284		1-	B	b1
C 2101	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	a1
C 2102	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	B	a2
C 2103	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B1
C 2104	CHIP CAP.	22pF	50V	CH	UMK105CH220JW-F	K22178266		1-	B	b1
C 2105	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	A	B1
C 2106	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B1
C 2107	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a2
C 2108	CHIP CAP.	15pF	50V	CH	UMK105CH150JW-F	K22178262		1-	A	B1
C 2109	CHIP CAP.	47pF	50V	CH	UMK105CH470JW-F	K22178274		1-	A	B1
C 2110	CHIP CAP.	27pF	50V	CH	UMK105CH270JW-F	K22178268		1-	A	B1
C 2111	CHIP CAP.	27pF	50V	CH	UMK105CH270JW-F	K22178268		1-	A	B1
C 2112	CHIP CAP.	15pF	50V	CH	UMK105CH150JW-F	K22178262		1-	A	B1
C 2113	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	a1
C 2114	CHIP CAP.	4pF	50V	CH	UMK105CH040CW-F	K22178252		1-	A	B1
C 2115	CHIP CAP.	12pF	50V	CH	UMK105CH120JW-F	K22178260		1-	A	B1
C 2116	CHIP CAP.	4pF	50V	CH	UMK105CH040CW-F	K22178252		1-	A	B1
C 2128	CHIP CAP.	0.001uF	50V	B	UMK105B102KW-F	K22178829		1-	B	a1
C 2129	CHIP CAP.	3pF	50V	CJ	UMK105CJ030CW-F	K22178251		1-	A	A1
C 2132	CHIP CAP.	100pF	50V	CH	UMK105CH101JW-F	K22178282		1	A	B2
C 2133	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b1
C 2134	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b1
D 2001	DIODE				HVC362TRF	G2070636		1-	A	A2
D 2002	DIODE				HVC362TRF	G2070636		1-	A	A2
D 2003	DIODE				HVC362TRF	G2070636		1-	A	A1
D 2004	DIODE				HVC362TRF	G2070636		1-	A	A2
D 2005	DIODE				HVC362TRF	G2070636		1-	A	A2
D 2006	DIODE				HVC362TRF	G2070636		1-	A	A1
D 2007	DIODE				1SV282(TPH3)	G2070778		1-	A	B2
D 2008	DIODE				1SV281(TPH3)	G2070620		1-	A	B2
D 2009	DIODE				1SV286(TPL3)	G2070610		1-	A	B2
D 2010	DIODE				DAP236U T106	G2070592		1-	A	B1
D 2011	DIODE				HSC277TRF	G2070584		1-	A	B1
D 2012	DIODE				DAP222-TL	G2070432		1-	B	a1
D 2013	DIODE				DAP236U T106	G2070592		1-	A	B1
D 2014	DIODE				HSC277TRF	G2070584		1-	A	B1
D 2015	DIODE				HSC277TRF	G2070584		1-	A	A1
D 2016	DIODE				HSC277TRF	G2070584		1-	A	B1
D 2017	DIODE				DAP222-TL	G2070432		1-	B	a1
J 2001	CONNECTOR				9230B-1-1Z2003-T	P0090896		1-	B	b1
J 2002	CONNECTOR				9230B-1-1Z2003-T	P0090896		1-	B	a2
L 2001	M.RFC	4.7uH			LK1608 4R7K-T	L1690688		1-	A	A2
L 2002	M.RFC	4.7uH			LK1608 4R7K-T	L1690688		1-	A	A2
L 2003	M.RFC	4.7uH			LK1608 4R7K-T	L1690688		1-	A	A1
L 2004	M.RFC	4.7uH			LK1608 4R7K-T	L1690688		1-	A	A2
L 2005	M.RFC	4.7uH			LK1608 4R7K-T	L1690688		1-	A	A2
L 2006	M.RFC	4.7uH			LK1608 4R7K-T	L1690688		1-	A	A1
L 2007	M.RFC	1uH			LK1608 1R0K-T	L1690687		1-	A	B1
L 2008	M.RFC	1uH			LK1608 1R0K-T	L1690687		1-	A	B1
L 2009	M.RFC	0.01uH			HK1608 10NJ-T	L1690516		1-	A	B1
L 2010	COIL				E2 0.4-2.0-5.5T-L	L0022630		1-	A	B2
L 2011	COIL				E2 0.45-1.4-2.5T-L	L0022618		1-	A	B2
L 2012	M.RFC	4.7uH			LK1608 4R7K-T	L1690688		1-	A	B2
L 2013	M.RFC	4.7uH			LK1608 4R7K-T	L1690688		1-	A	B2

# PLL Unit

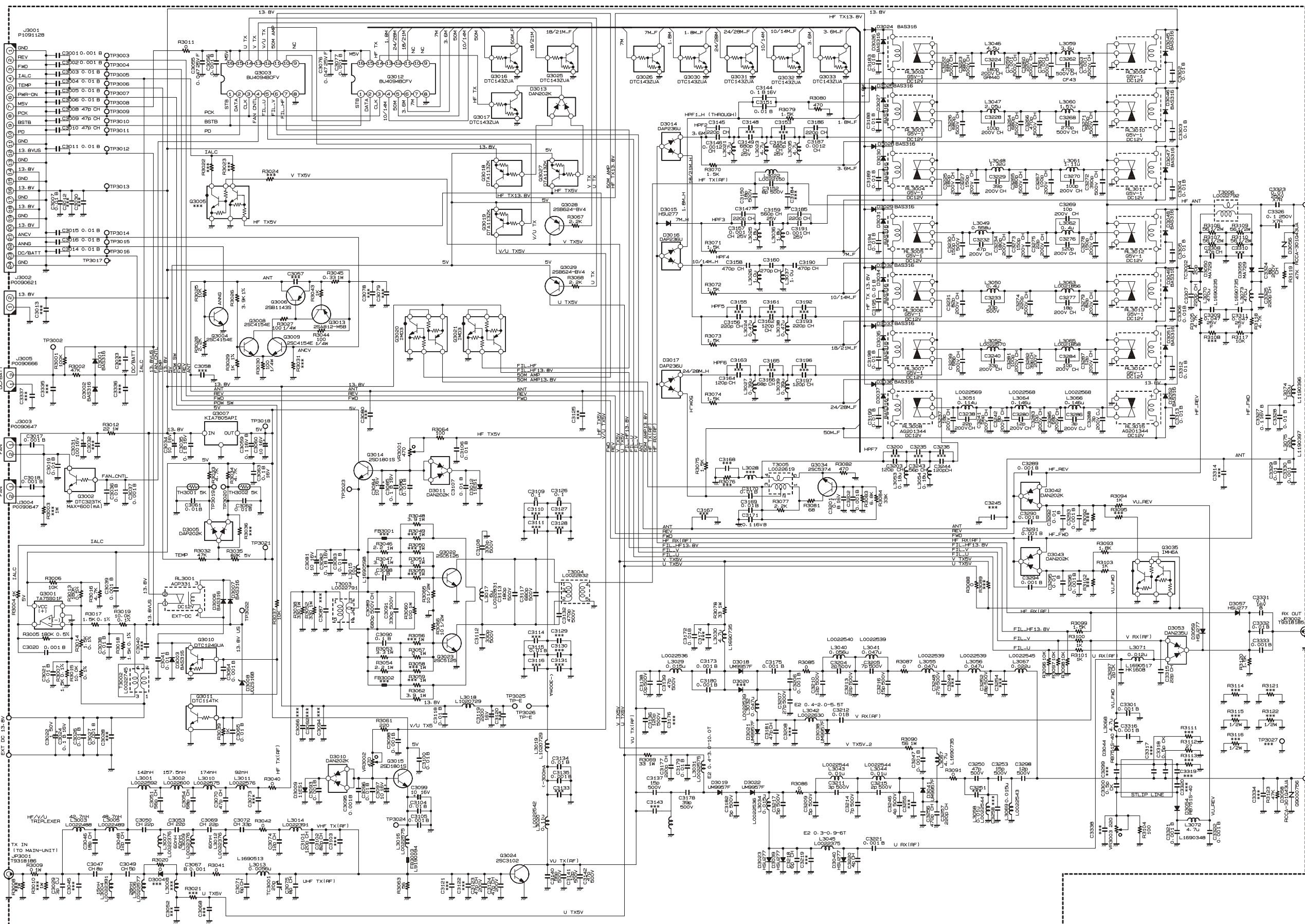
## Parts List

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L 2014	M.RFC	2.2uH			LK1608 2R2K-T	L1690634		1	B	b1
L 2014	M.RFC	1.2uH			LK1608 1R2K-T	L1690845		2-	B	b1
L 2015	M.RFC	2.2uH			LK1608 2R2K-T	L1690634		1	B	b2
L 2015	M.RFC	1.8uH			LK1608 1R8K-T	L1690847		2-	B	b2
L 2016	M.RFC	1.8uH			LK1608 1R8K-T	L1690847		1-	B	b2
L 2017	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		1-	A	B1
L 2018	M.RFC	10uH			LK1608 100K-T	L1690689		1-	B	a1
L 2019	M.RFC	10uH			LK1608 100K-T	L1690689		1-	B	b1
L 2020	M.RFC	0.47uH			LK1608 R47K-T	L1690414		1-	B	b1
L 2021	M.RFC	0.47uH			LK1608 R47K-T	L1690414		1-	B	b1
L 2022	M.RFC	0.047uH			HK1608 47NJ-T	L1690524		1-	A	B1
L 2023	M.RFC	1.8uH			LK1608 1R8K-T	L1690847		1-	B	b1
L 2024	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		1-	A	B1
L 2025	M.RFC	0.047uH			HK1608 47NJ-T	L1690524		1-	A	B1
L 2026	M.RFC	0.018uH			HK1608 18NJ-T	L1690519		1-	A	B1
L 2027	M.RFC	0.018uH			HK1608 18NJ-T	L1690519		1-	A	B1
Q 2001	TRANSISTOR				DTC124EU T106	G3070045		1-	A	B2
Q 2002	TRANSISTOR				DTC124EU T106	G3070045		1-	A	A2
Q 2003	TRANSISTOR				DTC124EU T106	G3070045		1-	A	A1
Q 2004	FET				2SK210GR TE85R	G3802107G		1-	A	A2
Q 2005	FET				2SK210GR TE85R	G3802107G		1-	A	A2
Q 2006	FET				2SK210GR TE85R	G3802107G		1-	A	A1
Q 2007	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	A	A1
Q 2009	TRANSISTOR				2SC5374-TL	G3353748		1-	A	B1
Q 2010	TRANSISTOR				2SC5374-TL	G3353748		1-	A	B2
Q 2011	TRANSISTOR				2SC5374-TL	G3353748		1-	A	B1
Q 2012	TRANSISTOR				DTC124EU T106	G3070045		1-	A	B1
Q 2013	TRANSISTOR				DTC124EU T106	G3070045		1-	A	B1
Q 2016	IC				AD9850BRS-REEL	G1092567		1-	B	b1
Q 2018	IC				BU4094BCFV-E2	G1093527		1-	B	b2
Q 2020	TRANSISTOR				2SC4400-4-TL	G3344008D		1-	B	b1
Q 2021	IC				FQ7925	G1091710		1-	B	a2
Q 2022	IC				UPC2713T-E3	G1092862		1-	A	A1
Q 2023	IC				UPC1688G-T1	G1092286		1-	B	a1
R 2001	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	A	A2
R 2002	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	A	A2
R 2003	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	A	A1
R 2004	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	A2
R 2005	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	A2
R 2006	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	A1
R 2007	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	A	A2
R 2008	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	A	A2
R 2009	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	A	A1
R 2010	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	A	A1
R 2011	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	A1
R 2012	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	a1
R 2013	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	B1
R 2014	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	B1
R 2015	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	B2
R 2016	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	B1
R 2017	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	A1
R 2018	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	A	B1
R 2019	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	B1
R 2020	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	B2
R 2021	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B2
R 2022	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B2
R 2023	CHIP RES.	560	1/16W	5%	RMC1/16S 561JTH	J24189022		1-	A	B1
R 2024	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	B1
R 2025	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-	A	B1
R 2026	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-	A	B1
R 2027	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-	A	B1
R 2028	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	b1
R 2029	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	A	B2
R 2030	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	A	B2
R 2032	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1	B	b1
R 2032	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		2-	B	b1
R 2041	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b1
R 2043	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b2
R 2044	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b2
R 2045	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b2
R 2047	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b1
R 2049	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b1
R 2052	CHIP RES.	27	1/16W	5%	RMC1/16S 270JTH	J24189006		1-	B	b1

# PLL Unit

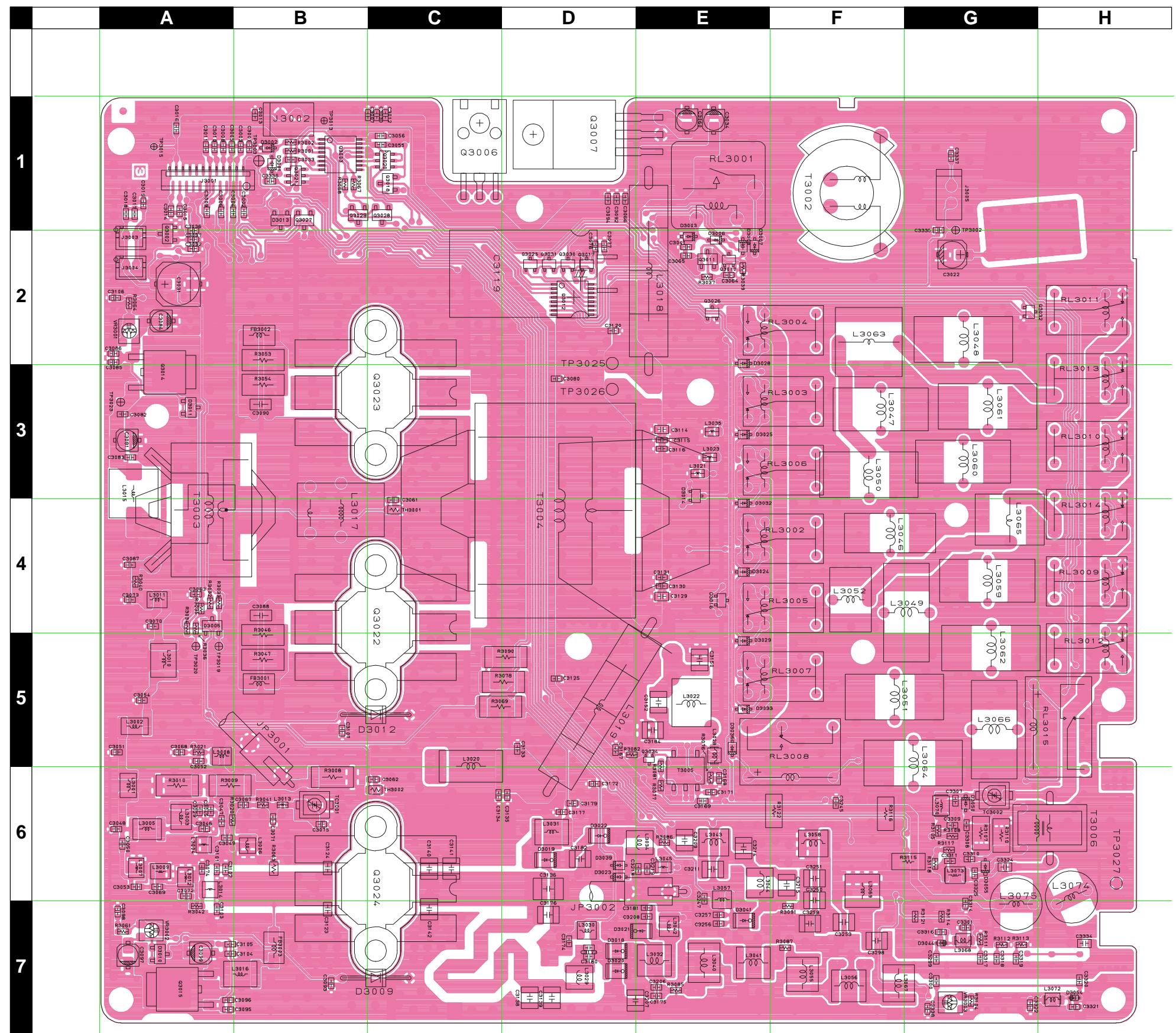
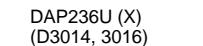
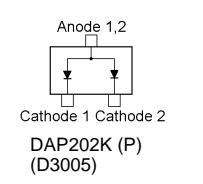
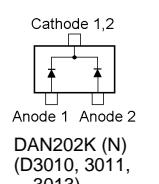
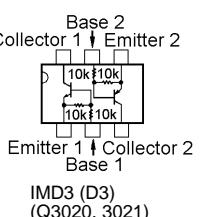
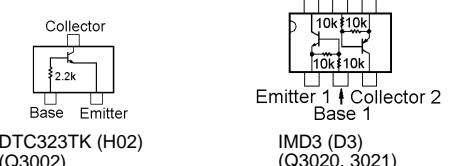
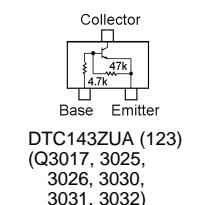
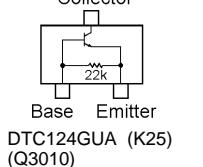
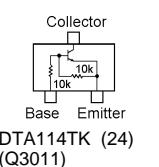
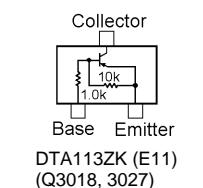
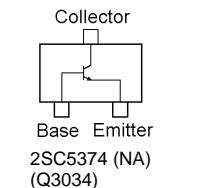
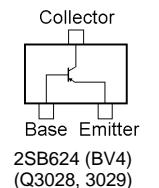
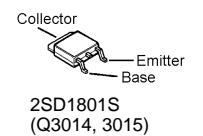
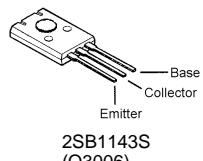
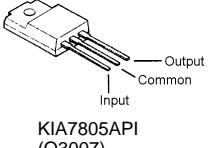
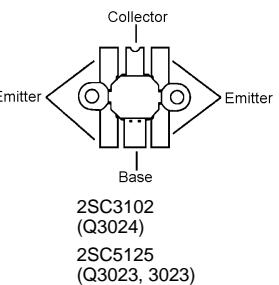
## Parts List

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R 2053	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	b1
R 2054	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-	B	b1
R 2055	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	b1
R 2056	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	a2
R 2057	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B2
R 2058	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	B	a2
R 2059	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B2
R 2060	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b2
R 2061	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b2
R 2062	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1	B	a2
R 2062	CHIP RES.	270	1/16W	5%	RMC1/16S 271JTH	J24189018		2-	B	a2
R 2063	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b2
R 2064	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	a2
R 2065	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	a2
R 2067	CHIP RES.	10	1/16W	5%	RMC1/16S 100JTH	J24189001		1-	A	B1
R 2068	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	b1
R 2069	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	b1
R 2070	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	B1
R 2071	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	a1
R 2073	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	B	a1
R 2074	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	B1
R 2075	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a1
R 2076	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a1
R 2077	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a1
R 2078	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1-	A	A1
R 2079	CHIP RES.	10	1/16W	5%	RMC1/16S 100JTH	J24189001		1-	B	a1
R 2080	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	B1
R 2081	CHIP RES.	10	1/16W	5%	RMC1/16S 100JTH	J24189001		1-	B	a2
R 2082	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	B1
R 2083	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	a2
R 2084	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	a1
R 2085	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	a1
R 2086	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	a1
R 2087	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	a1
T 2001	COIL 05RF				CS-4N 5203-JPS-076	L0022507		1-	A	A2
T 2002	COIL 05RF				CS-4N 5203-JPS-077	L0022508		1-	A	A1
T 2003	COIL 05RF				CS-4N 5203-JPS-078	L0022509		1-	A	A1
	SHIELD CASE PLL SHIELD CASE COVER					RA0271100 RA02712A0		1- 1-		



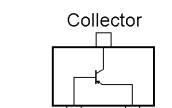
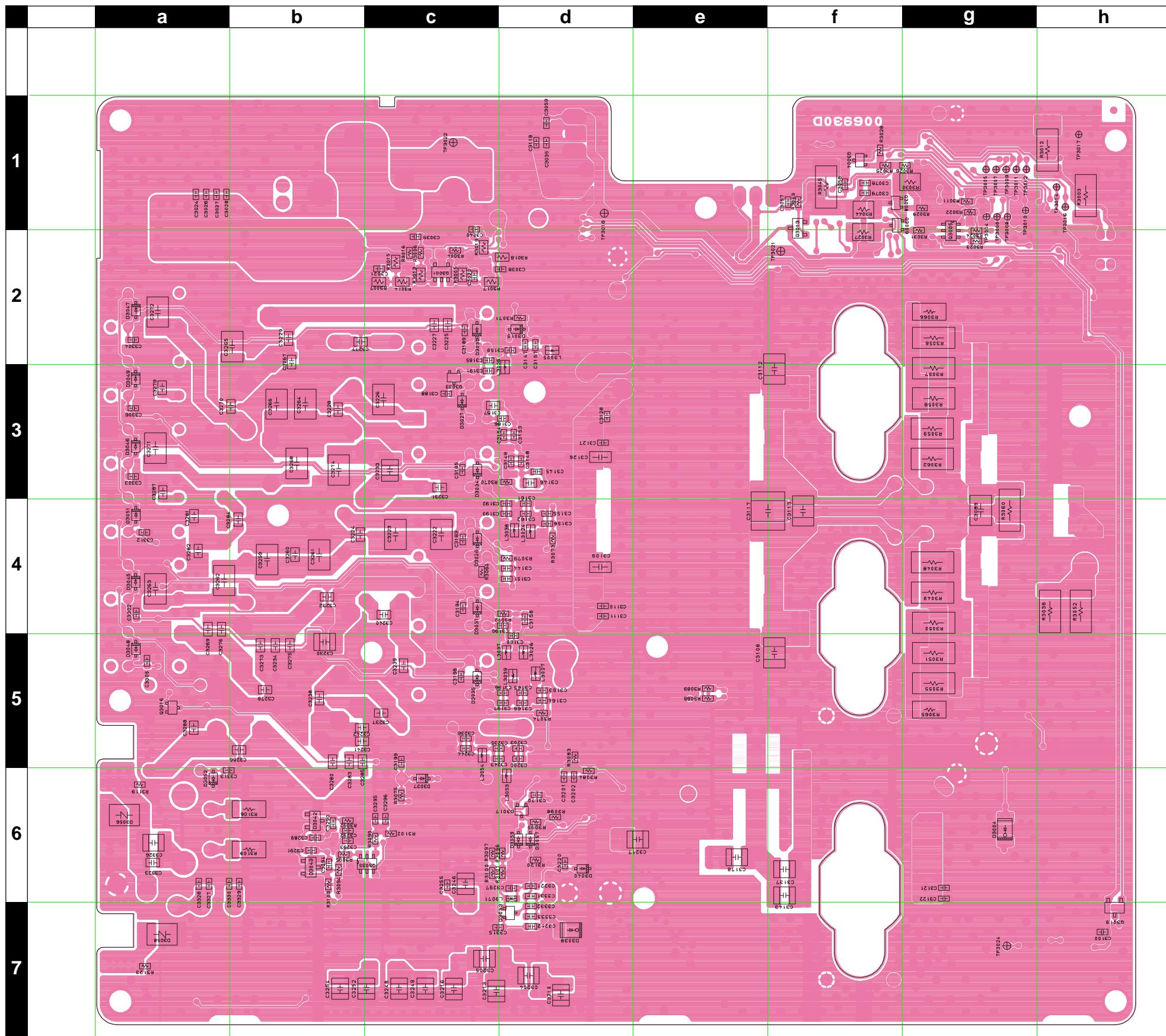
## ***PA Unit***

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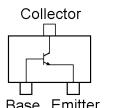


# PA Unit

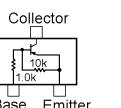
## Parts Layout



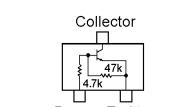
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(Q3013)



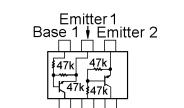
2SC4154E (LE)  
(Q3004, 3008,  
3009)



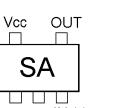
DTA113ZK (E11)  
(Q3019)



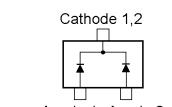
DTC143ZUA (123)  
(Q3016, 3033)



IMH6 (H6)  
(Q3035)



TA75S01F (SA)  
(Q3001)



DAN202K (N)  
(D3042, 3043)



DAN235U (M)  
(D3053)



DAP236U (X)  
(D3017)

Side B

# PA Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	PCB with Components					CS1785002 CS1785003 CS1785004 CS1785005 CS1785006 CS1785004	VER. USA VER. EXP (CE OFF) VER. AUS (CE OFF) VER. FRA (CE OFF) VER. EXP (CE ON) VER. FRA (CE ON)			
	Printed Circuit Board				AH007M000	FR006930D				
C 3001	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	1-	A	B1	
C 3002	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	1-	A	B1	
C 3003	CHIP CAP.	1uF	10V	F	GRM39F105Z10PT	K22105001	1-	A	B1	
C 3004	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	A1	
C 3005	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	A1	
C 3006	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	A1	
C 3007	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	B1	
C 3008	CHIP CAP.	47pF	50V	CH	GRM39CH470J50PT	K22174227	1-	A	A1	
C 3009	CHIP CAP.	47pF	50V	CH	GRM39CH470J50PT	K22174227	1-	A	A1	
C 3010	CHIP CAP.	47pF	50V	CH	GRM39CH470J50PT	K22174227	1-	A	A1	
C 3011	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	A1	
C 3014	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	A1	
C 3015	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	A1	
C 3016	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	A1	
C 3017	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	1-	A	A1	
C 3018	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	1-	A	A1	
C 3019	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	A1	
C 3020	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	B	c2	
C 3021	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	B	c2	
C 3022	AL.ELECTRO.CAP.	1uF	50V		ECEV1HA010SR	K48170019	1	A	G2	
C 3024	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805	1-	B	a1	
C 3026	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	B	a1	
C 3027	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	1-	B	a1	
C 3029	CHIP CAP.	3pF	50V	CJ	GRM39CJ030C50PT	K22174204	1-	A	A6	
C 3031	AL.ELECTRO.CAP.	100uF	16V		ECEV1CA101WP	K48120012	1-	A	A2	
C 3034	AL.ELECTRO.CAP.	10uF	16V		RV2-16V100MB55-R	K48120014	1-	A	E1	
C 3035	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805	1-	B	d1	
C 3036	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	A1	
C 3037	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	1-	A	A2	
C 3038	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	B	d2	
C 3039	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	1-	B	c2	
C 3041	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	E2	
C 3046	CHIP CAP.	18pF	50V	CH	GRM39CH180J50PT	K22174217	1-	A	A6	
C 3047	CHIP CAP.	8pF	50V	CH	GRM39CH080D50PT	K22174209	1-	A	A6	
C 3048	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213	1-	A	A6	
C 3049	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206	1-	A	A6	
C 3050	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219	1-	A	A6	
C 3051	CHIP CAP.	56pF	50V	CH	GRM39CH560J50PT	K22174229	1-	A	A5	
C 3053	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219	1-	A	A6	
C 3054	CHIP CAP.	68pF	50V	CH	GRM39CH680J50PT	K22174231	1-	A	A5	
C 3055	CHIP CAP.	0.047uF	25V	F	GRM39F473Z25PT	K22145002	1-	A	C1	
C 3056	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	1-	A	C1	
C 3059	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805	1-	B	d1	
C 3060	AL.ELECTRO.CAP.	10uF	16V		RV2-16V100MB55-R	K48120014	1-	A	E1	
C 3061	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	C4	
C 3062	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	C6	
C 3063	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805	1-	A	A4	
C 3064	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	1-	A	E2	
C 3065	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	E2	
C 3067	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	1-	A	B6	
C 3069	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219	1-	A	A6	
C 3070	CHIP CAP.	47pF	50V	CH	GRM39CH470J50PT	K22174227	1-	A	A4	
C 3071	CHIP CAP.	6pF	50V	CH	GRM39CH060D50PT	K22174207	1-	A	B6	
C 3072	CHIP CAP.	33pF	50V	CH	GRM39CH330J50PT	K22174223	1-	A	A6	
C 3074	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213	1-	A	A6	
C 3075	CHIP CAP.	8pF	50V	CH	GRM39CH080D50PT	K22174209	1-	A	B6	
C 3076	CHIP CAP.	0.047uF	25V	F	GRM39F473Z25PT	K22145002	1-	A	D2	
C 3077	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	1-	A	D2	
C 3081	AL.ELECTRO.CAP.	10uF	16V		RV2-16V100MB55-R	K48120014	1-	A	A3	
C 3082	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805	1-	A	A3	
C 3083	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	A3	
C 3084	AL.ELECTRO.CAP.	10uF	16V		RV2-16V100MB55-R	K48120014	1-	A	A2	
C 3085	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805	1-	A	A2	
C 3086	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	A	A2	
C 3088	CHIP CAP.	0.1uF	50V	B	GRM42-6B104K50PT	K22171820	1-	A	B4	
C 3089	CHIP CAP.	680pF	500V	CH	CF43CH681J500AT	K22277218	1-	B	g4	

# PA Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 3090	CHIP CAP.	0.1uF	50V	B	GRM42-6B104K50PT	K22171820		1-	A	B3
C 3091	FILM CAP.	330pF	500V		UC342H3300J-T	K33279014		1-		
C 3093	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	B7
C 3095	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	A7
C 3096	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	A7
C 3097	AL.ELECTRO.CAP.	10uF	16V		RV2-16V100MB55-R	K48120014		1-	A	A7
C 3098	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	A7
C 3099	AL.ELECTRO.CAP.	10uF	16V		RV2-16V100MB55-R	K48120014		1-	A	A7
C 3100	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	h7
C 3101	CHIP CAP.	120pF	50V	CH	GRM39CH121J50PT	K22174237		1-	A	A6
C 3102	CHIP CAP.	82pF	50V	CH	GRM39CH820J50PT	K22174233		1-	A	A6
C 3104	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	A7
C 3105	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	A7
C 3106	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	A2
C 3107	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	B5
C 3108	FILM CAP.	330pF	500V		UC342H3300J-T	K33279014		1-	B	f5
C 3109	CHIP CAP.	0.1uF	50V	B	GRM42-6B104K50PT	K22171820		1-	B	d4
C 3112	FILM CAP.	330pF	500V		UC342H3300J-T	K33279014		1-	B	f3
C 3113	FILM CAP.	180pF	500V		UC342H1800J-T	K33279039		1-	B	f4
C 3115	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	E3
C 3117	FILM CAP.	680pF	500V		UC552H6800J-T	K33279042		1-	B	e4
C 3118	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	d1
C 3119	AL.ELECTRO.CAP.	2200uF	16V		RE3-16V222M 2200UF	K40129064		1-	A	D2
C 3123	CHIP CAP.	47pF	200V	CH	GRM40CH470J200PT	K22230224		1-	A	B7
C 3124	CHIP CAP.	47pF	200V	CH	GRM40CH470J200PT	K22230224		1-	A	B6
C 3126	CHIP CAP.	0.1uF	50V	B	GRM42-6B104K50PT	K22171820		1-	B	d3
C 3132	FILM CAP.	470pF	500V		UC342H470J-T	K33279015		1-		
C 3134	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	C6
C 3135	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	D6
C 3136	FILM CAP.	120pF	500V		UC342H1200J-T	K33279026		1-	A	D6
C 3137	FILM CAP.	15pF	500V		UC232H0150J-T	K33279028		1-	B	f6
C 3138	FILM CAP.	10pF	500V		UC232H0100D-T	K33279019		1-	A	D7
C 3139	FILM CAP.	47pF	500V		UC232H0470J-T	K33279034		1-	A	D7
C 3140	FILM CAP.	56pF	500V		UC232H0560J-T	K33279035		1-	A	C6
C 3141	FILM CAP.	12pF	500V		UC232H0120J-T	K33279020		1-	A	C6
C 3142	FILM CAP.	47pF	500V		UC232H0470J-T	K33279034		1-	A	C7
C 3144	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d4
C 3145	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243		1-	B	d3
C 3146	CHIP CAP.	0.0012uF	50V	CH	GRM40CH122J50PT	K22170290		1-	B	d3
C 3147	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243		1-	B	d2
C 3149	CHIP CAP.	680pF	25V	CH	GRM39CH681J25PT	K22144203		1-	B	d3
C 3150	FILM CAP.	18pF	500V		UC232H0180J-T	K33279029		1-	A	E5
C 3151	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	d4
C 3152	FILM CAP.	8pF	500V		UC232H0080D-T	K33279005		1-	A	E5
C 3154	CHIP CAP.	680pF	25V	CH	GRM39CH681J25PT	K22144203		1-	B	d3
C 3156	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243		1-	B	d4
C 3157	CHIP CAP.	0.001uF	25V	CH	GRM39CH102J25PT	K22144204		1-	B	d2
C 3158	CHIP CAP.	470pF	50V	CH	GRM39CH471J50PT	K22174249		1-	B	d4
C 3159	CHIP CAP.	560pF	25V	CH	GRM39CH561J25PT	K22144201		1-	B	d2
C 3160	CHIP CAP.	270pF	50V	CH	GRM39CH271J50PT	K22174251		1-	B	d5
C 3162	CHIP CAP.	120pF	50V	CH	GRM39CH121J50PT	K22174237		1-	B	d4
C 3164	CHIP CAP.	120pF	50V	CH	GRM39CH121J50PT	K22174237		1-	B	d5
C 3166	CHIP CAP.	68pF	50V	CH	GRM39CH680J50PT	K22174231		1-	B	d5
C 3169	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	E6
C 3170	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	d6
C 3171	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	E6
C 3172	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	D6
C 3173	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	D7
C 3175	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	E7
C 3177	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243		1-	A	D6
C 3178	FILM CAP.	39pF	500V		UC232H0390J-T	K33279038		1-	B	e6
C 3179	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	A	D6
C 3180	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	D7
C 3181	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		1-	A	E7
C 3182	FILM CAP.	5pF	500V		UC232H0050D-T	K33279010		1-	A	D6
C 3183	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	c4
C 3185	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243		1-	B	c2
C 3186	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243		1-	B	d3
C 3187	CHIP CAP.	0.0012uF	50V	CH	GRM40CH122J50PT	K22170290		1-	B	c3
C 3188	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	c3
C 3189	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	c2
C 3190	CHIP CAP.	470pF	50V	CH	GRM39CH471J50PT	K22174249		1-	B	d4
C 3191	CHIP CAP.	0.001uF	25V	CH	GRM39CH102J25PT	K22144204		1-	B	c3

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 3193	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243		1-	B	d4
C 3194	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	c4
C 3195	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	c3
C 3197	CHIP CAP.	120pF	50V	CH	GRM39CH121J50PT	K22174237		1-	B	d5
C 3198	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	c5
C 3199	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	c5
C 3201	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d6
C 3202	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	B	d6
C 3203	CHIP CAP.	120pF	50V	CH	GRM39CH121J50PT	K22174237		1-	B	d5
C 3204	FILM CAP.	2pF	500V		UC232H0020D-T	K33279043		1-	B	d7
C 3205	FILM CAP.	7pF	500V		UC232H0070D-T	K33279046		1-	B	c7
C 3206	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	E7
C 3207	FILM CAP.	27pF	500V	B	UC232H0270J-T	K33279023		1-	A	D7
C 3210	FILM CAP.	12pF	500V		UC232H0120J-T	K33279020		1-	B	d7
C 3211	FILM CAP.	3pF	500V		UC232H0030D-T	K33279027		1-	A	E6
C 3212	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	d7
C 3213	FILM CAP.	22pF	500V		UC232H0220J-T	K33279021		1-	B	c7
C 3214	FILM CAP.	7pF	500V		UC232H0070D-T	K33279046		1-	A	E6
C 3215	FILM CAP.	2pF	500V		UC232H0020D-T	K33279043		1-	A	F6
C 3216	FILM CAP.	15pF	500V		UC232H0150J-T	K33279028		1-	B	c7
C 3217	FILM CAP.	5pF	500V		UC232H0050D-T	K33279010		1-	B	e6
C 3218	CHIP CAP.	6pF	50V	CH	GRM39CH060D50PT	K22174207		1-	A	E6
C 3220	CHIP CAP.	4pF	50V	CH	GRM39CH040C50PT	K22174205		1-	B	d6
C 3221	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	B	d6
C 3222	CHIP CAP.	680pF	500V	CH	CF43CH681J500AT	K22277218		1-	B	c4
C 3223	CHIP CAP.	680pF	500V	CH	CF43CH681J500AT	K22277218		1-	B	c4
C 3224	CHIP CAP.	180pF	200V	CH	GRM40CH181J200PT	K22230231		1-	B	b4
C 3225	CHIP CAP.	180pF	200V	CH	GRM40CH181J200PT	K22230231		1-	B	c2
C 3226	CHIP CAP.	680pF	500V	CH	CF43CH681J500AT	K22277218		1-	B	c3
C 3227	CHIP CAP.	150pF	200V	CH	GRM40CH151J200PT	K22230230		1-	B	c2
C 3228	CHIP CAP.	100pF	200V	CH	GRM40CH101J200PT	K22230228		1-	B	b3
C 3229	CHIP CAP.	39pF	200V	CH	GRM40CH390J200PT	K22230223		1-	B	b2
C 3230	CHIP CAP.	150pF	500V	CH	CF32CH151J500AT	K22275249		1-	B	b5
C 3231	CHIP CAP.	82pF	200V	CH	GRM40CH820J200PT	K22230227		1-	B	c3
C 3232	CHIP CAP.	47pF	200V	CH	GRM40CH470J200PT	K22230224		1-	B	b4
C 3233	FILM CAP.	39pF	500V		UC232H0390J-T	K33279038		1-	B	c3
C 3234	CHIP CAP.	180pF	200V	CH	GRM40CH181J200PT	K22230231		1-	B	b5
C 3237	CHIP CAP.	18pF	200V	CH	GRM40CH180J200PT	K22230219		1-	B	c5
C 3238	CHIP CAP.	22pF	200V	CH	GRM40CH220J200PT	K22230220		1-	B	b5
C 3239	CHIP CAP.	68pF	200V	CH	GRM40CH680J200PT	K22230226		1-	B	c5
C 3240	CHIP CAP.	33pF	200V	CH	GRM40CH330J200PT	K22230222		1-	B	c4
C 3241	CHIP CAP.	56pF	200V	CH	GRM40CH560J200PT	K22230225		1-	B	b5
C 3242	CHIP CAP.	8pF	200V	CH	GRM40CH080D200PT	K22230214		1-	B	b5
C 3243	CHIP CAP.	56pF	50V	CH	GRM39CH560J50PT	K22174229		1-	B	c5
C 3244	CHIP CAP.	120pF	50V	CH	GRM39CH121J50PT	K22174237		1-	B	c5
C 3246	FILM CAP.	7pF	500V		UC232H0070D-T	K33279046		1-	B	c6
C 3247	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	E6
C 3248	FILM CAP.	27pF	500V		UC232H0270J-T	K33279023		1-	B	c7
C 3250	FILM CAP.	47pF	500V		UC232H0470J-T	K33279034		1-	A	F6
C 3252	FILM CAP.	18pF	500V		UC232H0180J-T	K33279029		1-	B	c7
C 3253	FILM CAP.	10pF	500V		UC232H0100D-T	K33279019		1-	A	F7
C 3257	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243		1-	A	E7
C 3259	CHIP CAP.	0.001uF	500V	CH	CF43CH102J500AT	K22277222		1-	B	b4
C 3260	CHIP CAP.	220pF	200V	CH	GRM40CH221J200PT	K22230232		1-	B	b4
C 3261	CHIP CAP.	0.001uF	500V	CH	CF43CH102J500AT	K22277222		1-	B	b4
C 3262	CHIP CAP.	470pF	500V	CH	CF43CH471J500AT	K22277214		1-	B	a4
C 3263	CHIP CAP.	0.001uF	500V	CH	CF43CH102J500AT	K22277222		1-	B	a4
C 3264	CHIP CAP.	680pF	500V	CH	CF43CH681J500AT	K22277218		1-	B	b3
C 3265	CHIP CAP.	680pF	500V	CH	CF43CH681J500AT	K22277218		1-	B	b2
C 3266	CHIP CAP.	470pF	500V	CH	CF43CH471J500AT	K22277214		1-	B	b3
C 3267	CHIP CAP.	100pF	200V	CH	GRM40CH101J200PT	K22230228		1-	B	b2
C 3268	CHIP CAP.	270pF	500V	CH	CF43CH271J500AT	K22277208		1-	B	b3
C 3269	CHIP CAP.	10pF	200V	CH	GRM40CH100D200PT	K22230216		1-	B	a4
C 3270	CHIP CAP.	100pF	200V	CH	GRM40CH101J200PT	K22230228		1-	B	a3
C 3271	CHIP CAP.	560pF	500V	CH	CF43CH561J500AT	K22277216		1-	B	a3
C 3272	CHIP CAP.	390pF	500V	CH	CF43CH391J500AT	K22277212		1-	B	a2
C 3273	CHIP CAP.	150pF	200V	CH	GRM40CH151J200PT	K22230230		1-	B	b5
C 3274	CHIP CAP.	220pF	500V	CH	CF43CH221J500AT	K22277206		1-	B	b3
C 3275	CHIP CAP.	22pF	200V	CH	GRM40CH220J200PT	K22230220		1-	B	b5
C 3276	CHIP CAP.	120pF	200V	CH	GRM40CH121J200PT	K22230229		1-	B	a4
C 3277	CHIP CAP.	22pF	200V	CH	GRM40CH220J200PT	K22230220	W/ CE	1-	B	b2
C 3277	CHIP CAP.	18pF	200V	CH	GRM40CH180J200PT	K22230219	W/O CE	1-	B	b2
C 3278	CHIP CAP.	150pF	200V	CH	GRM40CH151J200PT	K22230230		1-	B	b5

# PA Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 3279	CHIP CAP.	82pF	200V	CH	GRM40CH820J200PT	K22230227		1-	B	a3
C 3280	CHIP CAP.	12pF	200V	CH	GRM40CH120J200PT	K22230217		1-	B	b5
C 3281	CHIP CAP.	100pF	200V	CH	GRM40CH101J200PT	K22230228		1-	B	a4
C 3282	CHIP CAP.	39pF	200V	CH	GRM40CH390J200PT	K22230223		1-	B	a4
C 3283	CHIP CAP.	10pF	200V	CH	GRM40CH100D200PT	K22230216		1-	B	b5
C 3284	CHIP CAP.	10pF	200V	CH	GRM40CH100D200PT	K22230216		1-	B	b4
C 3285	CHIP CAP.	68pF	200V	CH	GRM40CH680J200PT	K22230226		1-	B	b5
C 3286	CHIP CAP.	3pF	200V	CJ	GRM40CJ030C200PT	K22230210		1-	B	b5
C 3287	CHIP CAP.	12pF	200V	CH	GRM40CH120J200PT	K22230217		1-	B	a3
C 3288	CHIP CAP.	3pF	200V	CJ	GRM40CJ030C200PT	K22230210		1-	B	a5
C 3289	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	B	b6
C 3290	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	B	b6
C 3291	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	B	b6
C 3292	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	b6
C 3293	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	B	b6
C 3294	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	B	b6
C 3295	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	c6
C 3296	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	B	c6
C 3297	CHIP CAP.	2pF	50V	CK	GRM39CK020C50PT	K22174203		1-	B	d6
C 3298	FILM CAP.	10pF	500V		UC232H0100D-T	K32379019		1-	A	F7
C 3300	CHIP CAP.	0.5pF	50V	CK	GRM39CK0R5C50PT	K22174201	1	A	G7	
C 3300	CHIP CAP.	0.5pF	50V	CK	GRM39CK0R5B50PT	K22174265	2-	A	G7	
C 3301	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	G7
C 3302	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	a4
C 3303	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	a3
C 3304	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	a2
C 3305	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	a5
C 3306	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	a3
C 3307	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243		1-	A	G6
C 3308	CHIP CAP.	47pF	50V	CH	GRM39CH470J50PT	K22174227		1-	A	G6
C 3309	CHIP CAP.	0.047uF	25V	F	GRM39F473Z25PT	K22145002		1-	A	G6
C 3311	CHIP CAP.	0.047uF	25V	F	GRM39F473Z25PT	K22145002		1-	A	G6
C 3312	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	a4
C 3313	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	a6
C 3316	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	G7
C 3318	CHIP CAP.	0.5pF	50V	CK	GRM39CK0R5C50PT	K22174201	1	A	G7	
C 3318	CHIP CAP.	0.5pF	50V	CK	GRM39CK0R5B50PT	K22174265	2-	A	G7	
C 3321	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	H7
C 3322	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	G7
C 3323	CHIP CAP.	0.01uF	250V	X7R	GRM21BR72E103KW03L	K22240801		1-	B	a6
C 3324	CHIP CAP.	8pF	200V	CH	GRM40CH080D200PT	K22230214		1-	A	G6
C 3325	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243		1-	A	G6
C 3326	CHIP CAP.	0.1uF	250V	X7R	GRM32DR72E104KW01L	K22245801		1-	B	a6
C 3327	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	a6
C 3328	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	a6
C 3329	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	b6
C 3330	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	B	a6
C 3331	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	d6
C 3332	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	B	d7
C 3333	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	B	d7
C 3338	CHIP CAP.	1pF	50V	CK	GRM39CK010C50PT	K22174202	EXP	1-	A	G7
C 3338	CHIP CAP.	1pF	50V	CK	GRM39CK010C50PT	K22174202	FRA	1-	A	G7
C 3339	CHIP CAP.	7pF	200V	CH	GRM40CH070D200PT	K22230213		1-	A	
D 3001	DIODE				BAS316	G20707116		1-	A	B1
D 3002	DIODE				BAS316	G20707116		1-	A	B1
D 3003	DIODE				BAS316	G20707116		1-	A	E2
D 3005	DIODE				DAP202K T146	G2070180		1-	A	A4
D 3006	DIODE				BAS316	G20707116		1-	A	E2
D 3007	DIODE				BAS316	G20707116		1-	A	E2
D 3008	DIODE				UDZS TE-17 16B	G2070914		1-	A	E2
D 3009	DIODE				11ES1	G2090499		1-	A	C7
D 3010	DIODE				DAN202K T146	G2070182		1-	A	A7
D 3011	DIODE				DAN202K T146	G2070182		1-	A	A3
D 3012	DIODE				11ES1	G2090499		1-	A	C5
D 3013	DIODE				DAN202K T146	G2070182		1-	A	B1
D 3014	DIODE				DAP236U T106	G2070592		1-	A	E3
D 3015	DIODE				HSU277TRF	G2070118		1-	B	d2
D 3016	DIODE				DAP236U T106	G2070592		1-	A	E4
D 3017	DIODE				DAP236U T106	G2070592		1-	B	d6
D 3018	DIODE				UM9957F/TR	G2070562		1-	A	D7
D 3019	DIODE				UM9957F/TR	G2070562		1-	A	D6
D 3021	DIODE				UM9957F/TR	G2070562		1-	A	E7
D 3022	DIODE				UM9957F/TR	G2070562		1-	A	D6

**Parts List**

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
D 3023	DIODE				HSU277TRF	G2070118		1-	A	D6
D 3024	DIODE				BAS316	G2070716		1-	A	E4
D 3025	DIODE				BAS316	G2070716		1-	A	E3
D 3026	DIODE				BAS316	G2070716		1-	B	c4
D 3027	DIODE				BAS316	G2070716		1-	B	c3
D 3028	DIODE				BAS316	G2070716		1-	A	E2
D 3029	DIODE				BAS316	G2070716		1-	A	E5
D 3030	DIODE				BAS316	G2070716		1-	B	c2
D 3031	DIODE				BAS316	G2070716		1-	B	c4
D 3032	DIODE				BAS316	G2070716		1-	A	E4
D 3033	DIODE				BAS316	G2070716		1-	A	E5
D 3034	DIODE				BAS316	G2070716		1-	B	c3
D 3035	DIODE				BAS316	G2070716		1-	B	c5
D 3036	DIODE				BAS316	G2070716		1-	A	E5
D 3037	DIODE				BAS316	G2070716		1-	B	c6
D 3038	DIODE				UM9957F/TR	G2070562		1-	B	d7
D 3039	DIODE				HSU277TRF	G2070118		1-	A	D6
D 3040	DIODE				HSU277TRF	G2070118		1-	B	d6
D 3041	DIODE				UM9957F/TR	G2070562		1-	A	E7
D 3042	DIODE				DAN202K T146	G2070182		1-	B	b6
D 3043	DIODE				DAN202K T146	G2070182		1-	B	b6
D 3044	DIODE				RB751S-40TE61	G2070850		1-	A	G7
D 3045	DIODE				BAS316	G2070716		1-	B	a4
D 3046	DIODE				BAS316	G2070716		1-	B	a3
D 3047	DIODE				BAS316	G2070716		1-	B	a2
D 3048	DIODE				BAS316	G2070716		1-	B	a5
D 3049	DIODE				BAS316	G2070716		1-	B	a3
D 3050	DIODE				MA729-(TX)	G2070320		1-	A	G6
D 3051	DIODE				BAS316	G2070716		1-	B	a4
D 3052	DIODE				BAS316	G2070716		1-	B	a6
D 3053	DIODE				DAN235U TL	G2070176		1-	B	d7
D 3054	DIODE				RB751S-40TE61	G2070850		1-	A	H7
D 3055	DIODE				MA729-(TX)	G2070320		1-	A	G6
D 3056	SURGE ABSORBER				RCCA-301Q43UA	Q9000756		1-	B	a6
D 3057	DIODE				HSU277TRF	G2070118		1-	B	d6
D 3058	SURGE ABSORBER				RCCA-301Q43UA	Q9000756		1-	B	a7
D 3059	DIODE				HSU277TRF	G2070118		1-	B	d6
FB3003	FERRITE BEADS				SMB304729	L9190094		1-	A	B7
FB3004	FERRITE BEADS				FB43801	L9190025		1-	-	-
J 3001	CONNECTOR				24FLT-SM1-TB	P1091128		1-	A	A1
J 3002	CONNECTOR				SC25-02WS	P0090621		1	A	B1
J 3003	CONNECTOR				B2B-ZR	P0090647		1-	A	A2
J 3004	CONNECTOR				B2B-ZR	P0090647		1-	A	A2
J 3005	CONNECTOR				B2B-EH	P0090666		1-	A	G1
JP3001	WIRE ASSY				RED 140 TMP/TMP(B1)	T9318198		1-	A	B6
JP3002	WIRE ASSY				GRN 290 TMP/TMP(B1)	T9318197		1-	A	E6
JP3003	WIRE ASSY				AH007M	T9207026		1-	-	-
L 3001	COIL				E2 0.25-1.9-12T-L	L0022592		1-	A	A6
L 3002	COIL				E2 0.25-1.9-12.5T-L	L0022600		1-	A	A5
L 3003	COIL				E2 0.5-2.0-6T-R	L0022488		1-	A	A6
L 3004	COIL				E2 0.45-1.4-4T-L	L0022391		1-	A	A6
L 3005	COIL				E2 0.5-2.0-7T-R	L0022489		1-	A	A6
L 3006	COIL				E2 0.35-1.6-4.5T-L	L0022577		1-	A	B6
L 3007	COIL				E2 0.3-1.7-8T-L	L0022376		1-	A	A6
L 3009	COIL				E2 0.3-1.7-8T-L	L0022376		1-	A	A6
L 3010	COIL				E2 0.4-3.0-9.5T-L	L0022575		1-	A	A5
L 3011	COIL				E2 0.25-1.85-8.5T-L	L0022576		1-	A	A4
L 3012	COIL				E2 0.3-1.7-8T-L	L0022376		1-	A	A6
L 3013	M.RFC	0.0056uH			HK1608 5N6S-T	L1690513		1-	A	B6
L 3014	COIL				E2 0.45-1.4-4T-L	L0022391		1-	A	A6
L 3015	M.RFC	10uH			CDRH73-100MC	L1690598		1-	A	A3
L 3016	COIL				E2 0.4-3.0-9.5T-L	L0022575		1-	A	B7
L 3017	TOROIDAL COIL	6uH			6H3 TR10X5X5	L0022831		1-	A	B3
L 3018	RFC WITH BEADS				3A RI5.8X6.4-2	L1020729		1-	A	E1
L 3019	RFC WITH BEADS				3A RI5.8X6.4-2	L1020729		1-	A	D6
L 3020	COIL	0.11uH			AS0810-B0NK	L0022542		1-	A	C5
L 3021	M.RFC	4.7uH			LK2125 4R7K-T	L1690327		1-	A	E3
L 3022	COIL A1				4.5T6.0D1.2UEW R	L0022150		1-	A	E5
L 3023	M.RFC	4.7uH			LK2125 4R7K-T	L1690327		1-	A	E3
L 3024	M.RFC	0.47uH			LK2125 R47K-T	L1690315		1-	B	d4
L 3025	M.RFC	1.8uH			LK2125 1R8K-T	L1690322		1-	B	d2
L 3026	M.RFC	1uH			LK2125 1R0K-T	L1690319		1-	B	d5
L 3027	M.RFC	0.39uH			LK2125 R39K-T	L1690314		1-	B	d5

# PA Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
L 3029	COIL	0.015uH			AS0803-15NK	L0022536		1-	A	D7
L 3030	CHIP COIL	4.7uH			C2520C-4R7K	L1690735		1-	A	D7
L 3031	COIL				E2 0.4-3.0-9.5T-L	L0022575		1-	A	D6
L 3032	COIL	0.047uH			AS0805-47NK	L0022539		1-	A	E7
L 3034	COIL	0.015uH			AS0803-15NK	L0022536		1-	A	E6
L 3035	M.RFC	4.7uH			LK2125 4R7K-T	L1690327		1-	A	E3
L 3036	M.RFC	1.8uH			LK2125 1R8K-T	L1690322		1-	B	d3
L 3037	M.RFC	1uH			LK2125 1R0K-T	L1690319		1-	B	d5
L 3038	M.RFC	0.47uH			LK2125 R47K-T	L1690315		1-	B	d4
L 3039	M.RFC	0.39uH			LK2125 R39K-T	L1690314		1-	B	d5
L 3040	COIL	0.056uH			AS0806-56NK	L0022540		1-	A	E7
L 3041	COIL	0.047uH			AS0805-47NK	L0022539		1-	A	E7
L 3042	COIL				E2 0.4-2.0-5.5T-L	L0022630		1-	A	E7
L 3043	COIL	0.01uH			AS1003-10NK	L0022544		1-	A	E6
L 3044	COIL	0.01uH			AS1003-10NK	L0022544		1-	A	E6
L 3045	COIL				E2 0.3-0.9-6T-R	L0022375		1-	A	E6
L 3046	TOROIDAL COIL	4.5uH			4.50U T44-2	L0022560		1-	A	F4
L 3047	TOROIDAL COIL	2.05uH			2.05U T44-2	L0022562		1-	A	F3
L 3048	TOROIDAL COIL	1.32uH			1.32U T44-2	L0022564A		1-	A	G2
L 3049	TOROIDAL COIL	0.558uH			0.558U T44-10	L0022566A		1-	A	F4
L 3050	TOROIDAL COIL	0.4uH			0.400U T44-10	L0022567		1-	A	F3
L 3051	TOROIDAL COIL	0.114uH			0.114U T44-10	L0022569		1-	A	F5
L 3052	COIL B1				6.0T8.0D0.8UEW L	L0022570		1-	A	F4
L 3053	M.RFC	0.18uH			LK2125 R18K-T	L1690310		1-	B	d6
L 3054	M.RFC	0.18uH			LK2125 R18K-T	L1690310		1-	B	c5
L 3055	COIL	0.047uH			AS0805-47NK	L0022539		1-	A	F7
L 3056	COIL	0.047uH			AS0805-47NK	L0022539		1-	A	F7
L 3057	CHIP COIL	4.7uH			C2520C-4R7K	L1690735		1-	A	E6
L 3058	COIL	0.01uH			AS1003-10NK	L0022544		1-	A	F6
L 3059	TOROIDAL COIL	3.6uH			3.60U T44-2	L0022561		1-	A	G4
L 3060	TOROIDAL COIL	1.57uH			1.57U T44-2	L0022563		1-	A	G3
L 3061	TOROIDAL COIL	1.11uH			1.11U T44-2	L0022565A		1-	A	G3
L 3062	TOROIDAL COIL	0.4uH			0.400U T44-10	L0022567		1-	A	G4
L 3063	COIL B1				9.0T8.5D0.9UEW R	L0021856		1-	A	F2
L 3064	TOROIDAL COIL	0.146uH			0.146U T44-10	L0022568		1-	A	G5
L 3065	COIL B1				7.0T8.5D0.9UEW R	L0021858		1-	A	G4
L 3066	TOROIDAL COIL	0.146uH			0.146U T44-10	L0022568		1-	A	G5
L 3067	COIL	0.022uH			AS1004-22NK	L0022545		1-	A	F7
L 3068	M.RFC	4.7uH			ELJ-FC4R7KF	L1690348		1-	A	G7
L 3069	COIL	0.015uH			AS1203-15NK	L0022543		1-	A	F6
L 3070	M.RFC	470uH			FLC32T-471J	L1690235		1-	A	G6
L 3071	M.RFC	0.012uH			HK1608 12NJ-T	L1690517		1-	B	d6
L 3072	M.RFC	4.7uH			ELJ-FC4R7KF	L1690348		1-	A	H7
L 3073	M.RFC	470uH			FLC32T-471J	L1690235		1-	A	G6
L 3074	M.RFC	120uH			RCH-875 121K	L1190396		1-	A	H7
L 3075	M.RFC	22uH			RCR-875D 220L	L1190397		1-	A	G7
Q 3001	IC				TA75S01F TE85R	G1091593		1-	B	c2
Q 3002	TRANSISTOR				DTC323TK T146	G3070042		1-	A	A2
Q 3003	IC				BU4094BCFV-E2	G1093527		1-	A	B1
Q 3004	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	f1
Q 3006	TRANSISTOR				2SB1143S	G3211430S		1-	A	C1
Q 3007	IC				KIA7805API	G1093163		1-	A	D1
Q 3008	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	f1
Q 3009	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	f1
Q 3010	TRANSISTOR				DTC124GUA T106	G3070184		1-	A	E2
Q 3011	TRANSISTOR				DTC114TK T146	G3070073		1-	A	E2
Q 3012	IC				BU4094BCFV-E2	G1093527		1-	A	D2
Q 3013	TRANSISTOR				2SA812-T2B M5B	G3108127E		1-	B	f1
Q 3014	TRANSISTOR				2SD1801S-TL	G3418018S		1-	A	A3
Q 3015	TRANSISTOR				2SD1801S-TL	G3418018S		1-	A	A7
Q 3016	TRANSISTOR				DTC143ZUA T106	G3070188		1-	B	a5
Q 3017	TRANSISTOR				DTC143ZUA T106	G3070188		1-	A	D2
Q 3018	TRANSISTOR				DTA113ZK T146	G3070129		1-	A	C1
Q 3019	TRANSISTOR				DTA113ZK T146	G3070129		1-	B	h7
Q 3020	TRANSISTOR				IMD3 T108	G3070053		1-	A	C1
Q 3021	TRANSISTOR				IMD3 T108	G3070053		1-	A	B1
Q 3022	TRANSISTOR				2SC5125-21	G3351250		1-	A	C4
Q 3023	TRANSISTOR				2SC5125-21	G3351250		1-	A	C3
Q 3024	TRANSISTOR				2SC3102	G3331020		1-	A	C6
Q 3025	TRANSISTOR				DTC143ZUA T106	G3070188		1-	A	D2
Q 3026	TRANSISTOR				DTC143ZUA T106	G3070188		1-	A	E2
Q 3027	TRANSISTOR				DTA113ZK T146	G3070129		1-	A	B1
Q 3028	TRANSISTOR				2SB624-T2B BV4	G3206247D		1-	A	C1

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
Q 3029	TRANSISTOR				2SB624-T2B BV4	G3206247D		1-	A	B1
Q 3030	TRANSISTOR				DTC143ZUA T106	G3070188		1-	A	D2
Q 3031	TRANSISTOR				DTC143ZUA T106	G3070188		1-	A	D2
Q 3032	TRANSISTOR				DTC143ZUA T106	G3070188		1-	A	G2
Q 3033	TRANSISTOR				DTC143ZUA T106	G3070188		1-	B	c3
Q 3034	TRANSISTOR				2SC5374-TL	G3353748		1-	A	E5
Q 3035	TRANSISTOR				IMH6A T108	G3070066		1-	B	c6
R 3001	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	A	B1
R 3002	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	B1
R 3004	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	B	c2
R 3005	CHIP RES.	180k	1/10W	0.5%	RR1220R-184-D-T5	J24209225		1-	B	c2
R 3006	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	c2
R 3007	CHIP RES.	1.5k	1/10W	0.1%	RR1220P-152-B	J24209078		1-	B	c2
R 3009	CHIP RES.	0	1W	5%	RMC1 JPATE	J24305000		1-	A	A6
R 3011	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	g1
R 3012	CHIP RES.	22	1W	5%	RMC1 220JTE	J24305220		1-	B	h1
R 3013	CHIP RES.	180k	1/10W	0.5%	RR1220R-184-D-T5	J24209225		1-	B	c2
R 3014	CHIP RES.	1.5k	1/10W	0.1%	RR1220P-152-B	J24209078		1-	B	c2
R 3015	CHIP RES.	10k	1/10W	0.1%	RR1220P-103-B	J24209098		1-	B	c2
R 3016	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	B	c2
R 3017	CHIP RES.	1.5k	1/10W	0.1%	RR1220P-152-B	J24209078		1-	B	c2
R 3018	CHIP RES.	1.5k	1/10W	0.1%	RR1220P-152-B	J24209078		1-	B	d2
R 3019	CHIP RES.	10k	1/10W	0.1%	RR1220P-103-B	J24209098		1-	B	c2
R 3020	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	A6
R 3025	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	f1
R 3026	CHIP RES.	3.9k	1/16W	1%	RMC1/16 392FTP	J24183392		1-	B	g1
R 3027	CHIP RES.	100	1/4W	5%	RMC1/4 101JATP	J24245101		1-	B	f2
R 3028	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	B	f1
R 3029	CHIP RES.	1k	1/16W	1%	RMC1/16 102FTP	J24183102		1-	B	g1
R 3030	CHIP RES.	100	1/4W	5%	RMC1/4 101JATP	J24245101		1-	B	g1
R 3031	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	B	g1
R 3032	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	A4
R 3033	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	A	A4
R 3034	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	A	A4
R 3035	CHIP RES.	82k	1/16W	5%	RMC1/16 823JATP	J24185823		1-	A	A4
R 3037	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	E2
R 3038	CHIP RES.	330	1W	5%	RMC1 331JTE	J24305331		1-	B	h4
R 3039	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	A	E2
R 3040	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	A4
R 3041	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	B6
R 3042	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	A7
R 3043	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	B	f1
R 3044	CHIP RES.	100	1/4W	5%	RMC1/4 101JATP	J24245101		1-	B	f1
R 3045	CHIP RES.	0.33	1W	10%	RMC1 R33KATE	J24309001		1-	B	f1
R 3046	CHIP RES.	2.2	1W	5%	RMC1 2R2JTE	J24305229		1-	A	B5
R 3047	CHIP RES.	3.3	1W	5%	RMC1 3R3JTE	J24305339		1-	A	B5
R 3048	CHIP RES.	3.9	1W	5%	RMC1 3R9JTE	J24305399		1-	B	g4
R 3051	CHIP RES.	0	1W	5%	RMC1 JPATE	J24305000		1-	B	g5
R 3052	CHIP RES.	330	1W	5%	RMC1 331JTE	J24305331		1-	B	h4
R 3053	CHIP RES.	3.3	1W	5%	RMC1 3R3JTE	J24305339		1-	A	B2
R 3054	CHIP RES.	2.2	1W	5%	RMC1 2R2JTE	J24305229		1-	A	B3
R 3057	CHIP RES.	0	1W	5%	RMC1 JPATE	J24305000		1-	B	g3
R 3060	CHIP RES.	100	1W	5%	RMC1 101JTE	J24305101		1-	B	g4
R 3061	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	A	A7
R 3062	CHIP RES.	3.9	1W	5%	RMC1 3R9JTE	J24305399		1-	B	g3
R 3063	CHIP RES.	56	1/10W	5%	RMC1/10T 560J	J24205560		1-	A	B6
R 3064	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	A2
R 3065	CHIP RES.	10	1/2W	5%	RMC1/2 100JCTP	J24275100		1-	B	g5
R 3066	CHIP RES.	10	1/2W	5%	RMC1/2 100JCTP	J24275100		1-	B	g2
R 3067	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	A	B1
R 3068	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	A	B1
R 3069	CHIP RES.	33	1W	5%	RMC1 330JTE	J24305330		1-	A	C5
R 3070	CHIP RES.	1.5k	1/16W	5%	RMC1/16 152JATP	J24185152		1-	B	d3
R 3071	CHIP RES.	1.5k	1/16W	5%	RMC1/16 152JATP	J24185152		1-	B	d2
R 3072	CHIP RES.	1.5k	1/16W	5%	RMC1/16 152JATP	J24185152		1-	B	d4
R 3073	CHIP RES.	1.5k	1/16W	5%	RMC1/16 152JATP	J24185152		1-	B	d4
R 3074	CHIP RES.	1.5k	1/16W	5%	RMC1/16 152JATP	J24185152		1-	B	d5
R 3075	CHIP RES.	1.5k	1/16W	5%	RMC1/16 152JATP	J24185152		1-	B	c6
R 3077	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	A	E6
R 3078	CHIP RES.	33	1W	5%	RMC1 330JTE	J24305330		1-	A	D5
R 3079	CHIP RES.	1.5k	1/16W	5%	RMC1/16 152JATP	J24185152		1-	B	d4
R 3080	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	B	c4
R 3081	CHIP RES.	68	1/16W	5%	RMC1/16 680JATP	J24185680		1-	A	E5

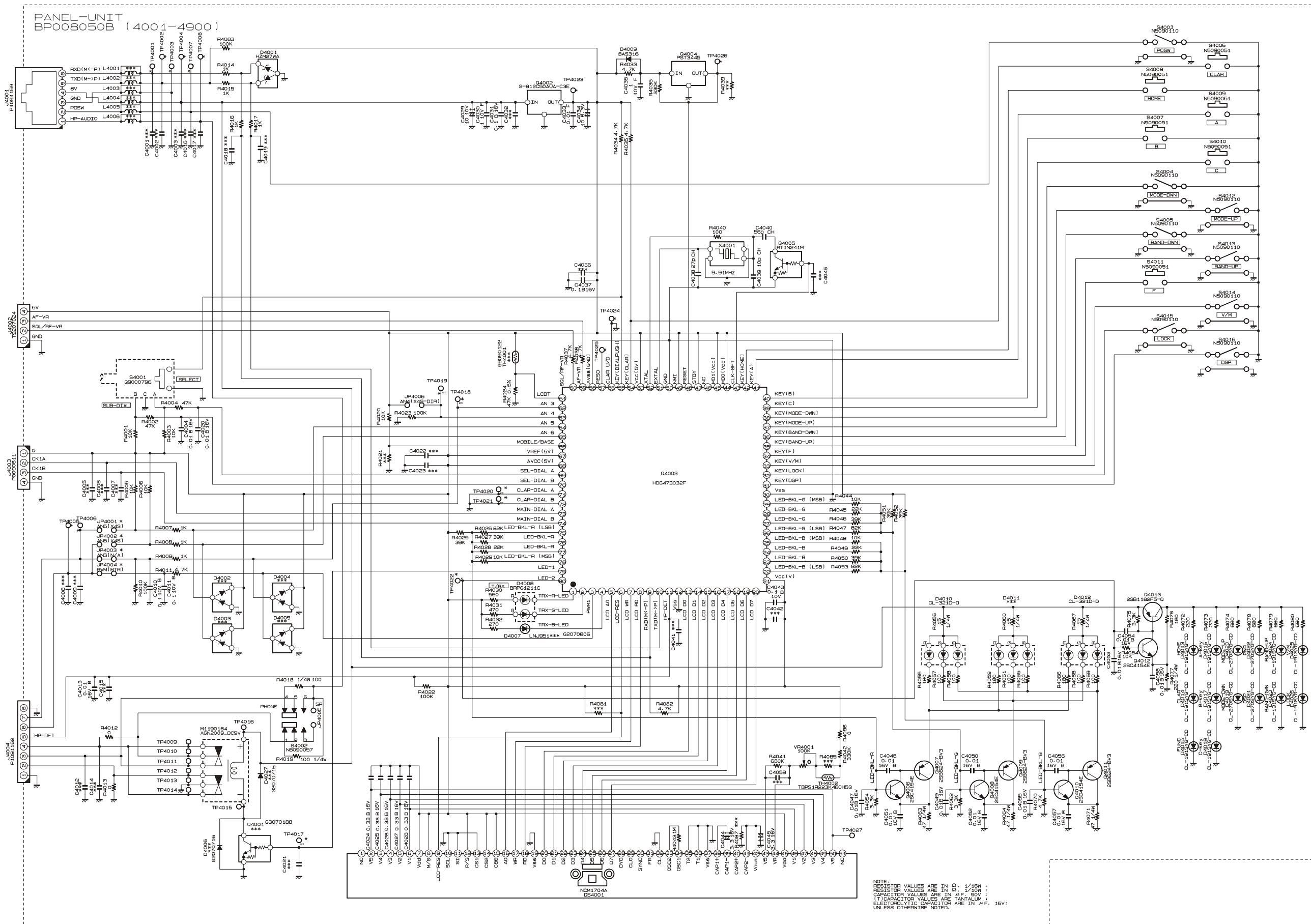
# PA Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 3082	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	A	D5
R 3083	CHIP RES.	6.8k	1/16W	5%	RMC1/16 682JATP	J24185682		1-	B	d5
R 3084	CHIP RES.	33k	1/16W	5%	RMC1/16 333JATP	J24185333		1-	B	d6
R 3085	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	E7
R 3086	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	E6
R 3087	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	F7
R 3088	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	e5
R 3090	CHIP RES.	56	1W	5%	RMC1 560JTE	J24305560		1-	A	D5
R 3091	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	F7
R 3093	CHIP RES.	1.8k	1/16W	5%	RMC1/16 182JATP	J24185182		1-	B	c6
R 3094	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	B	b6
R 3096	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	d6
R 3097	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	c6
R 3098	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	B	d6
R 3099	CHIP RES.	1.5k	1/16W	5%	RMC1/16 152JATP	J24185152		1-	B	d6
R 3100	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	B	c6
R 3101	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	B	d6
R 3103	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	B	b6
R 3104	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	A	G7
R 3105	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	A	G6
R 3106	CHIP RES.	56	1/2W	5%	RMC1/2 560JTE	J24275560		1-	B	b6
R 3107	CHIP RES.	56	1/2W	5%	RMC1/2 560JTE	J24275560		1-	A	G6
R 3109	CHIP RES.	56	1/2W	5%	RMC1/2 560JTE	J24275560		1-	B	b6
R 3110	CHIP RES.	56	1/2W	5%	RMC1/2 560JTE	J24275560		1-	A	G6
R 3112	CHIP RES.	27	1/16W	5%	RMC1/16 270JATP	J24185270		1-	A	G7
R 3117	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	G6
R 3118	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	A	G6
R 3119	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	B	a6
R 3120	CHIP RES.	1.5k	1/16W	5%	RMC1/16 152JATP	J24185152		1-	B	d6
R 3123	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	B	a7
RL3001	RELAY		DC12V		ACP331 DC12V	M1190175		1-	A	E1
RL3002	RELAY		DC12V		G5V-1 DC12V	M1190120		1-	A	E4
RL3003	RELAY		DC12V		G5V-1 DC12V	M1190120		1-	A	E3
RL3004	RELAY		DC12V		G5V-1 DC12V	M1190120		1-	A	E2
RL3005	RELAY		DC12V		G5V-1 DC12V	M1190120		1-	A	E4
RL3006	RELAY		DC12V		G5V-1 DC12V	M1190120		1-	A	E3
RL3007	RELAY		DC12V		G5V-1 DC12V	M1190120		1-	A	E5
RL3008	RELAY		DC12V		AG201344 DC12V	M1190124		1-	A	E6
RL3008	RELAY		DC12V		AG231344 DC12V	M1190145		3-	A	E6
RL3009	RELAY		DC12V		G5V-1 DC12V	M1190120		1-	A	H4
RL3010	RELAY		DC12V		G5V-1 DC12V	M1190120		1-	A	H3
RL3011	RELAY		DC12V		G5V-1 DC12V	M1190120		1-	A	H2
RL3012	RELAY		DC12V		G5V-1 DC12V	M1190120		1-	A	H4
RL3013	RELAY		DC12V		G5V-1 DC12V	M1190120		1-	A	H2
RL3014	RELAY		DC12V		G5V-1 DC12V	M1190120		1-	A	H3
RL3015	RELAY		DC12V		AG201344 DC12V	M1190124		1-	A	G5
RL3015	RELAY		DC12V		AG231344 DC12V	M1190145		3-	A	G5
T 3002	TOROIDAL COIL				D12A RI16X8X8(H007)	L0022745		1-	A	F1
T 3003	COIL PWR-WIDE				#223092	L0022791		1-	A	A4
T 3004	COIL PWR-WIDE				D12A RIB16X32X22	L0022832		1-	A	D4
T 3005	COIL WIDE-TRANS.				990812213	L0022619		1-	A	E6
T 3006	COIL WIDE-TRANS.				#223093	L0022792		1-	A	H6
TC3001	TRIMMER CAP.	20pF			ECR-JA020E11X	K91000228		1-	A	B6
TC3002	TRIMMER CAP.	20pF			ECR-JA020E11X	K91000228		1-	A	G6
TH3001	THERMISTOR				157-502-53002TP	G9090049		1-	A	C4
TH3002	THERMISTOR				157-502-53002TP	G9090049		1-	A	C6
TP3025	TERMINAL				TP-E/MS-60124	Q5000016		1-	A	D2
TP3026	TERMINAL				TP-E/MS-60124	Q5000016		1-	A	D3
VR3001	POT.	470			EVN-5ESX50BQ2	J51811471		1-	A	A2
VR3002	POT.	470			EVN-5ESX50BQ2	J51811471		1-	A	A7
VR3003	POT.	220			EVN-5ESX50BE2	J51811221		1-	A	G7

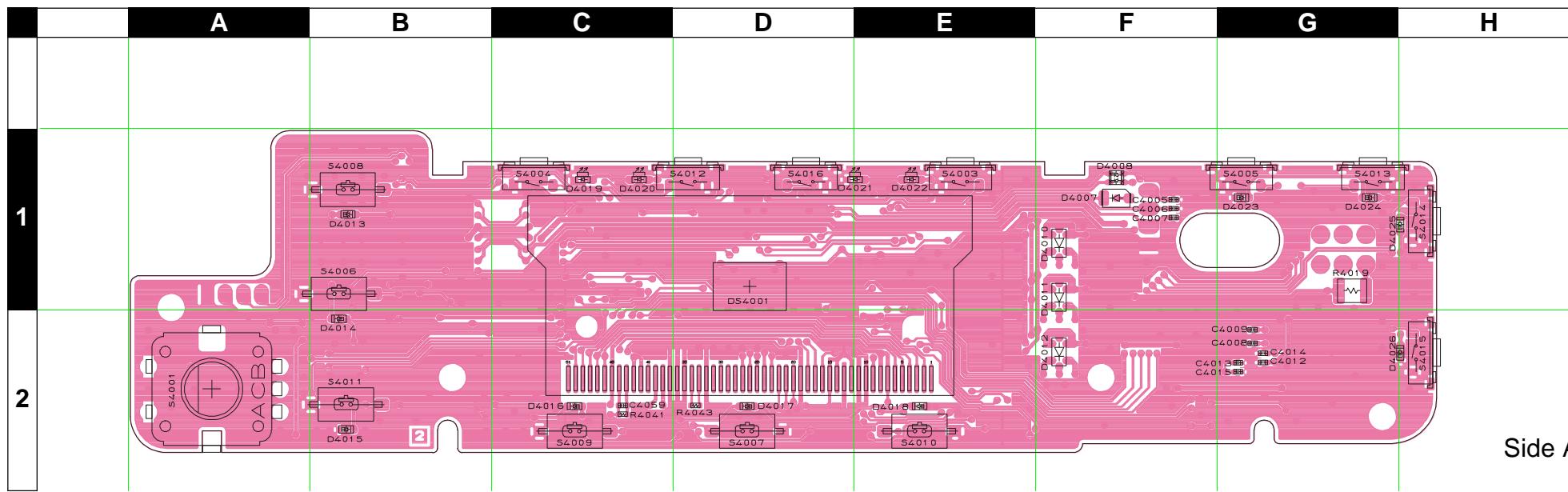
# PANEL Unit

## Circuit Diagram

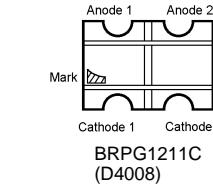


# PANEL Unit

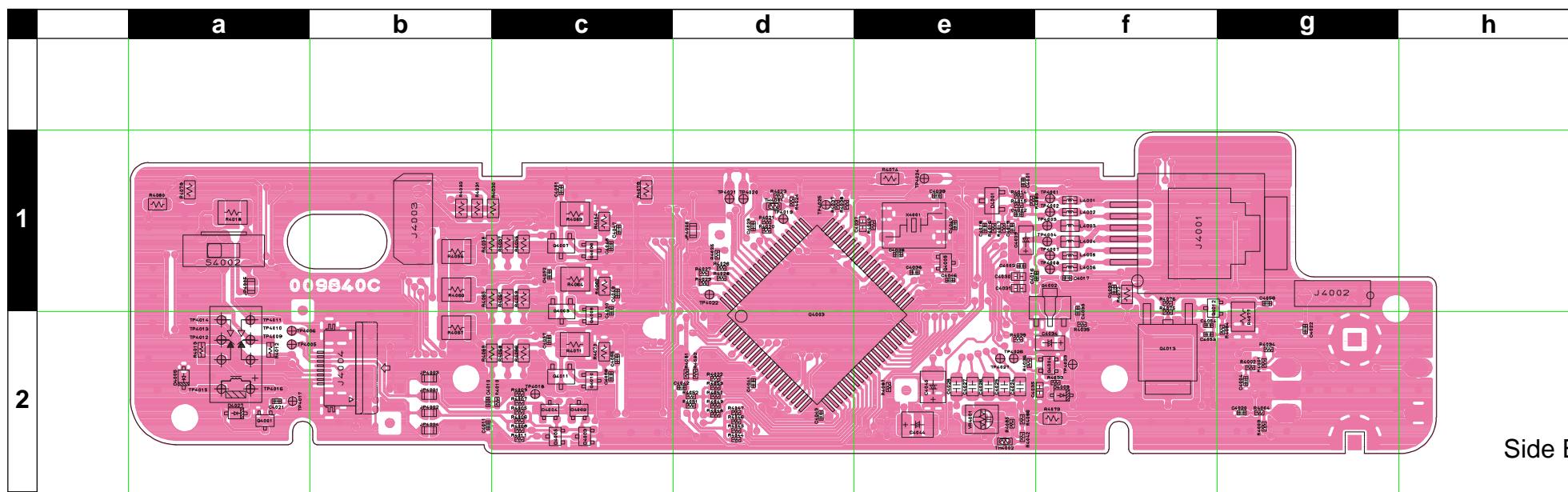
## Parts Layout



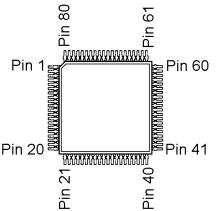
Side A



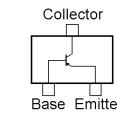
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(D4008)



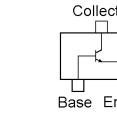
Side B



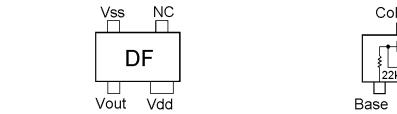
HD6473032F  
(Q4003)



2SB624 (BV3)  
(Q4007, 4009,  
4011)



2SC4154E (LE)  
(Q4006, 4008,  
4010, 4012)



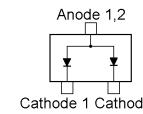
PST3445UR (DF)  
(Q4004)



RT1N241M (N2)  
(Q4005)



S-812C50AUA  
(Q4002)



HZM27WA (27A)  
(D4001)

# PANEL Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
PCB with Components										CB1231001
Printed Circuit Board						AH007M000	FR0098400			
C 4001	CHIP CAP.	470pF	50V	B	GRM36B471K50PT	K22178805		1-	B	e1
C 4002	CHIP CAP.	470pF	50V	B	GRM36B471K50PT	K22178805		1-	B	e1
C 4003	CHIP CAP.	470pF	50V	B	GRM36B471K50PT	K22178805		1-	B	e1
C 4004	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g2
C 4010	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	b2
C 4011	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	b2
C 4013	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	G2
C 4016	CHIP CAP.	470pF	50V	B	GRM36B471K50PT	K22178805		1-	B	e1
C 4017	CHIP CAP.	470pF	50V	B	GRM36B471K50PT	K22178805		1-	B	f1
C 4020	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g2
C 4024	CHIP CAP.	0.33uF	16V	B	GRM40B334K16PT	K22120807		1-	B	e2
C 4025	CHIP CAP.	0.33uF	16V	B	GRM40B334K16PT	K22120807		1-	B	e2
C 4026	CHIP CAP.	0.33uF	16V	B	GRM40B334K16PT	K22120807		1-	B	e2
C 4027	CHIP CAP.	0.33uF	16V	B	GRM40B334K16PT	K22120807		1-	B	e2
C 4028	CHIP CAP.	0.33uF	16V	B	GRM40B334K16PT	K22120807		1-	B	e2
C 4029	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	B	e1
C 4030	CHIP CAP.	1uF	10V	F	GRM39F105Z10PT	K22105001		1-	B	e1
C 4031	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	e1
C 4033	CHIP CAP.	0.01uF	50V	F	UMK105F103ZW-F	K22179017		1-	B	f1
C 4034	CHIP TA.CAP.	10uF	6.3V		TEMSVA0J106M-8R	K78080027		1-	B	f2
C 4035	CHIP CAP.	1uF	10V	F	GRM39F105Z10PT	K22105001		1-	B	f2
C 4037	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	e1
C 4038	CHIP CAP.	27pF	50V	CH	UMK105CH270JW-F	K22178268		1-	B	e1
C 4039	CHIP CAP.	10pF	50V	CH	UMK105CH100DW-F	K22178258		1-	B	e1
C 4040	CHIP CAP.	56pF	50V	CH	UMK105CH560JW-F	K22178276		1-	B	e1
C 4043	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	d2
C 4044	CHIP TA.CAP.	3.3uF	16V		TESVB21C335M8R	K78120010		1-	B	e2
C 4045	CHIP TA.CAP.	3.3uF	16V		TESVB21C335M8R	K78120010		1-	B	e2
C 4047	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c1
C 4048	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c1
C 4049	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c1
C 4050	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c1
C 4051	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c1
C 4052	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c1
C 4053	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	f2
C 4054	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	f2
C 4055	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c2
C 4056	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c2
C 4057	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c2
C 4058	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	g1
D 4001	DIODE				HZM27WA-TR	G2070530		1-	B	e1
D 4007	LED				LNJ951C4BRA	G2070806		1-	A	F1
D 4008	LED				BRPG1211C-TR	G2070654		1-	A	F1
D 4009	DIODE				BAS316	G2070716		1-	B	f2
D 4010	LED				CL-321D-D-T	G2070904		1-	A	F1
D 4012	LED				CL-321D-D-T	G2070904		1-	A	F2
D 4013	LED				19-215UYOC/S530-A2/TR8	G2070884		1-	A	B1
D 4013	LED				19-215UYOC/S530-A2/TR8	G2070884		4-	A	B1
D 4014	LED				19-215UYOC/S530-A2/TR8	G2070884		1-	A	B2
D 4014	LED				19-215UYOC/S530-A2/TR8	G2070884		4-	A	B2
D 4015	LED				19-215UYOC/S530-A2/TR8	G2070884		1-	A	B2
D 4015	LED				19-215UYOC/S530-A2/TR8	G2070884		4-	A	B2
D 4016	LED				19-215UYOC/S530-A2/TR8	G2070884		1-	A	C2
D 4016	LED				19-215UYOC/S530-A2/TR8	G2070884		4-	A	C2
D 4017	LED				19-215UYOC/S530-A2/TR8	G2070884		1-	A	D2
D 4017	LED				19-215UYOC/S530-A2/TR8	G2070884		4-	A	D2
D 4018	LED				19-215UYOC/S530-A2/TR8	G2070884		1-	A	E2
D 4018	LED				19-215UYOC/S530-A2/TR8	G2070884		4-	A	E2
D 4019	LED				CL-270TD-C-T	G2070884		1-	A	C1
D 4019	LED				CL-270TD-C-T	G2070930		4-	A	C1
D 4020	LED				CL-270TD-C-T	G2070930		1-	A	C1
D 4020	LED				CL-270TD-C-T	G2070930		4-	A	C1
D 4021	LED				CL-270TD-C-T	G2070930		1-	A	D1
D 4021	LED				CL-270TD-C-T	G2070930		4-	A	D1
D 4022	LED				CL-270TD-C-T	G2070930		1-	A	E1
D 4022	LED				CL-270TD-C-T	G2070930		4-	A	E1
D 4023	LED				19-215UYOC/S530-A2/TR8	G2070884		1-	A	G1
D 4023	LED				19-215UYOC/S530-A2/TR8	G2070884		4-	A	G1
D 4024	LED				19-215UYOC/S530-A2/TR8	G2070884		1-	A	G1
D 4024	LED				19-215UYOC/S530-A2/TR8	G2070884		4-	A	G1
D 4025	LED				19-215UYOC/S530-A2/TR8	G2070884		1-	A	H1

# PANEL Unit

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
D 4025	LED				19-215UYOC/S530-A2/TR8	G2070884		4-	A	H1
D 4026	LED				19-215UYOC/S530-A2/TR8	G2070884		1-	A	H2
D 4026	LED				19-215UYOC/S530-A2/TR8	G2070884		4-	A	H2
DS4001	LCD MODULE				NCM1704A	Q7000428		1-	A	D1
J 4001	CONNECTOR				HJC0271-011023	P1091159		1-	B	f1
J 4002	WIRE ASSY				AH007M	T9207024		1-	B	g1
J 4003	CONNECTOR				SB20-04WS	P0090611		1-	B	b1
J 4004	CONNECTOR				52745-0890	P1091162		1-	B	b2
JP4003	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	b2
JP4004	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	b2
L 4001	M.RFC	10uH			LK1608 100K-T	L1690689		1-	B	f1
L 4002	M.RFC	10uH			LK1608 100K-T	L1690689		1-	B	f1
Q 4002	IC				S-812C50AUA-C3E-T2	G1093652		1-	B	f1
Q 4003	IC				HD6473032F R0717	G1093818		1-	B	d2
Q 4004	IC				PST3445UR	G1093232		1-	B	f2
Q 4005	TRANSISTOR				RT1N241M-T11-1	G3070249		1-	B	e1
Q 4006	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	c1
Q 4007	TRANSISTOR				2SB624-T2B BV3	G3206247C		1-	B	c1
Q 4008	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	c2
Q 4009	TRANSISTOR				2SB624-T2B BV3	G3206247C		1-	B	c1
Q 4010	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	c2
Q 4011	TRANSISTOR				2SB624-T2B BV3	G3206247C		1-	B	c2
Q 4012	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	f1
Q 4013	TRANSISTOR				2SB1182-TLQ	G3070063		1-	B	f2
R 4001	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	g2
R 4002	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	g2
R 4003	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	g2
R 4004	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	g2
R 4005	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	c2
R 4006	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	c2
R 4007	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	c2
R 4008	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	c2
R 4009	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	c2
R 4010	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	c2
R 4011	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	c2
R 4012	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	a2
R 4013	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	a2
R 4014	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	e1
R 4015	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	e1
R 4016	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	e1
R 4017	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	e1
R 4018	CHIP RES.	100	1/4W	5%	RMC1/4 101JATP	J24245101		1-	B	a1
R 4019	CHIP RES.	100	1/4W	5%	RMC1/4 101JATP	J24245101		1-	A	G1
R 4020	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d1
R 4022	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d2
R 4023	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d1
R 4024	CHIP RES.	47k	1/16W	0.5%	RR0510R-473-D	J24189159		1-	B	d1
R 4025	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	B	d1
R 4026	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	B	d1
R 4027	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	B	d1
R 4028	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	d1
R 4029	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d1
R 4030	CHIP RES.	560	1/10W	5%	RMC1/10T 561J	J24205561		1-	B	c1
R 4031	CHIP RES.	470	1/10W	5%	RMC1/10T 471J	J24205471		1-	B	b1
R 4032	CHIP RES.	270	1/10W	5%	RMC1/10T 271J	J24205271		1-	B	b1
R 4033	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	f2
R 4034	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	g2
R 4035	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	f2
R 4036	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	B	e2
R 4037	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	d1
R 4038	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	d1
R 4040	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	e1
R 4041	CHIP RES.	680k	1/16W	5%	RMC1/16S 684JTH	J24189059		1-	A	C2
R 4042	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	B	e2
R 4043	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	A	D2
R 4044	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d2
R 4045	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	d2
R 4046	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	B	d2
R 4047	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	B	d2
R 4048	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d2
R 4049	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	d2
R 4050	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	B	d2
R 4051	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	B	d2

# PANEL Unit

## Parts List

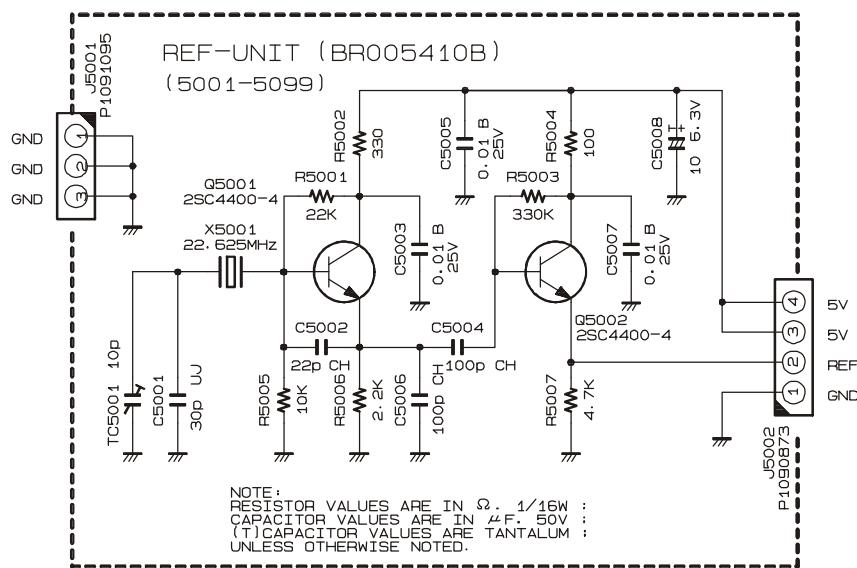
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 4052	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	B	d2
R 4053	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	B	d2
R 4054	CHIP RES.	3.3k	1/10W	5%	RMC1/10T 332J	J24205332		1-	B	c1
R 4055	CHIP RES.	180	1/10W	5%	RMC1/10T 181J	J24205181		1-	B	c1
R 4056	CHIP RES.	15	1/4W	5%	RMC1/4 150JATP	J24245150		1-	B	b1
R 4057	CHIP RES.	100	1/10W	5%	RMC1/10T 101J	J24205101		1-	B	c1
R 4058	CHIP RES.	100	1/10W	5%	RMC1/10T 101J	J24205101		1-	B	b1
R 4059	CHIP RES.	180	1/10W	5%	RMC1/10T 181J	J24205181		1-	B	c1
R 4060	CHIP RES.	15	1/4W	5%	RMC1/4 150JATP	J24245150		1-	B	b1
R 4061	CHIP RES.	100	1/10W	5%	RMC1/10T 101J	J24205101		1-	B	c1
R 4062	CHIP RES.	3.3k	1/10W	5%	RMC1/10T 332J	J24205332		1-	B	c1
R 4063	CHIP RES.	47	1/4W	5%	RMC1/4 470JATP	J24245470		1-	B	c1
R 4064	CHIP RES.	47	1/4W	5%	RMC1/4 470JATP	J24245470		1-	B	c1
R 4065	CHIP RES.	100	1/10W	5%	RMC1/10T 101J	J24205101		1-	B	b1
R 4066	CHIP RES.	180	1/10W	5%	RMC1/10T 181J	J24205181		1-	B	c2
R 4067	CHIP RES.	15	1/4W	5%	RMC1/4 150JATP	J24245150		1-	B	b2
R 4068	CHIP RES.	100	1/10W	5%	RMC1/10T 101J	J24205101		1-	B	c2
R 4069	CHIP RES.	100	1/10W	5%	RMC1/10T 101J	J24205101		1-	B	b2
R 4070	CHIP RES.	4.7k	1/10W	5%	RMC1/10T 472J	J24205472		1-	B	c2
R 4071	CHIP RES.	47	1/4W	5%	RMC1/4 470JATP	J24245470		1-	B	c2
R 4072	CHIP RES.	680	1/10W	5%	RMC1/10T 681J	J24205681		1-	B	f1
R 4073	CHIP RES.	680	1/10W	5%	RMC1/10T 681J	J24205681		1-	B	f2
R 4074	CHIP RES.	1.2k	1/10W	5%	RMC1/10T 122J	J24205122		1-	B	e1
R 4075	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	f1
R 4076	CHIP RES.	180	1/16W	5%	RMC1/16S 181JTH	J24189016		1-	B	f1
R 4077	CHIP RES.	220	1/4W	5%	RMC1/4 221JATP	J24245221		1-	B	g2
R 4078	CHIP RES.	1.2k	1/10W	5%	RMC1/10T 122J	J24205122		1-	B	c1
R 4079	CHIP RES.	1.2k	1/10W	5%	RMC1/10T 122J	J24205122		1-	B	a1
R 4080	CHIP RES.	1.2k	1/10W	5%	RMC1/10T 122J	J24205122		1-	B	a1
R 4082	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	d2
R 4083	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	e1
R 4084	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	g2
R 4086	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	e2
S 4001	ROTARY ENCODER				EC12E24244A4	Q9000796		1-	A	A2
S 4002	SLIDE SWITCH				SSSS22	N6090057		1-	B	a1
S 4003	TACT SWITCH				SKQTLA	N5090110		1-	A	E1
S 4004	TACT SWITCH				SKQTLA	N5090110		1-	A	C1
S 4005	TACT SWITCH				SKQTLA	N5090110		1-	A	G1
S 4006	TACT SWITCH				SKQDAA	N5090051		1-	A	B1
S 4007	TACT SWITCH				SKQDAA	N5090051		1-	A	D2
S 4008	TACT SWITCH				SKQDAA	N5090051		1-	A	B1
S 4009	TACT SWITCH				SKQDAA	N5090051		1-	A	C2
S 4010	TACT SWITCH				SKQDAA	N5090051		1-	A	E2
S 4011	TACT SWITCH				SKQDAA	N5090051		1-	A	B2
S 4012	TACT SWITCH				SKQTLA	N5090110		1-	A	D1
S 4013	TACT SWITCH				SKQTLA	N5090110		1-	A	G1
S 4014	TACT SWITCH				SKQTLA	N5090110		1-	A	H1
S 4015	TACT SWITCH				SKQTLA	N5090110		1-	A	H2
S 4016	TACT SWITCH				SKQTLA	N5090110		1-	A	D1
S 4017	ROTARY ENCODER				RES20D50-201-1G	Q9000709A		1-		
TH4002	THERMISTOR				TBPS1R223K460H5Q	G9090085		1-	B	e2
VR4001	POT.	100k			EVN-5ESX50B15	J51811104		1-	B	e2
X 4001	XTAL TSS-7050A	9.91MHz			9.91MHz	H0103276		1-	B	e1
	LIGHT GUIDE LCD HOLDER REFLECTOR SHEET DIFFUSER SHEET SHEET SPACER SPONGE RUBBER LIGHT SHEET LIGHT SHEET				(LCD)  (LCD)  (LCD)  (TX)  (A)  (B)	RA0451000 RA0450900 RA0452400 RA0452500 RA0481000 RA0481900 RA0484900 RA0485300 RA0485400		1- 1- 1- 1- 1- 1- 1- 1- 1- 1-		

## **PANEL Unit**

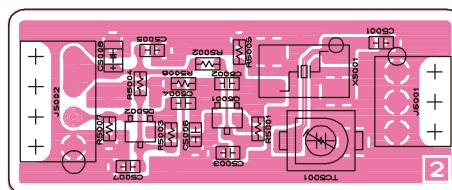
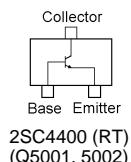
**Note**

# REF Unit

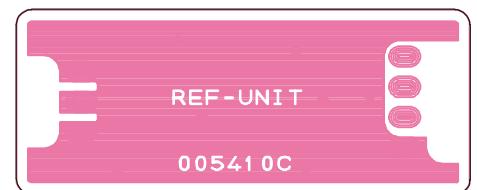
## Circuit Diagram



## Parts Layout



Side A



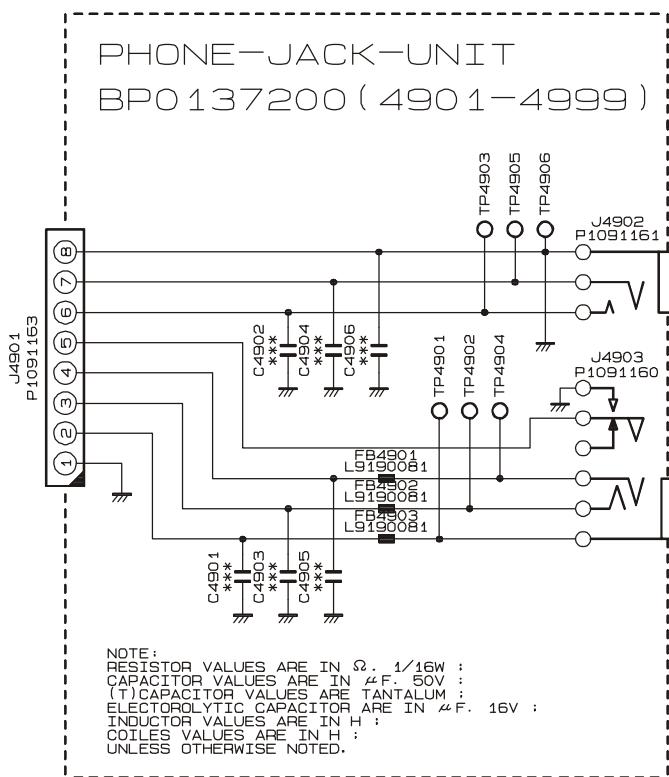
Side B

## Parts List

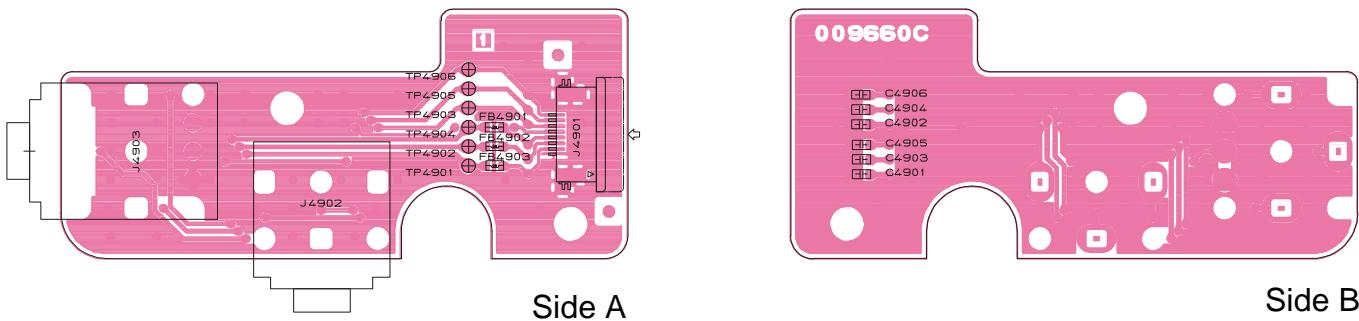
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	PCB with Components					CB1232001				
	Printed Circuit Board					FR0054100				1-
C 5001	CHIP CAP.	27pF	50V	CH	GRM39CH270J50PT	K22174221				
C 5002	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219				
C 5003	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823				
C 5004	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235				
C 5005	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823				
C 5006	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235				
C 5007	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823				
C 5008	CHIP TA.CAP.	10uF	6.3V		TESVSP0J106M-8R	K78080055				
J 5001	CONNECTOR				9117S-03D	P1091095				
J 5002	CONNECTOR				9117S-04D	P1090873				
Q 5001	TRANSISTOR				2SC4400-4-TL	G3344008D				
Q 5002	TRANSISTOR				2SC4400-4-TL	G3344008D				
R 5001	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223				
R 5002	CHIP RES.	330	1/16W	5%	RMC1/16 331JATP	J24185331				
R 5003	CHIP RES.	330k	1/16W	5%	RMC1/16 334JATP	J24185334				
R 5004	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101				
R 5005	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103				
R 5006	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222				
R 5007	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472				
TC5001	TRIMMER CAP.	20pF			ECR-JA020E11X	K9100228				
X 5001	XTAL TSS-6035B				22.625MHZ	H0103273				

# PHONE-JACK Unit

## Circuit Diagram



## Parts Layout

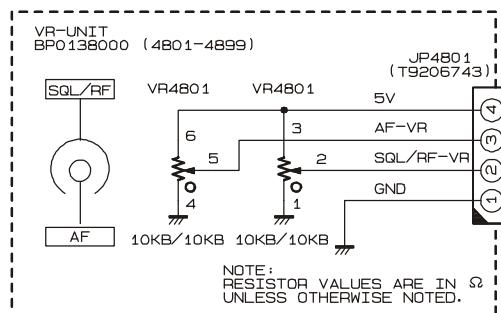


## Parts List

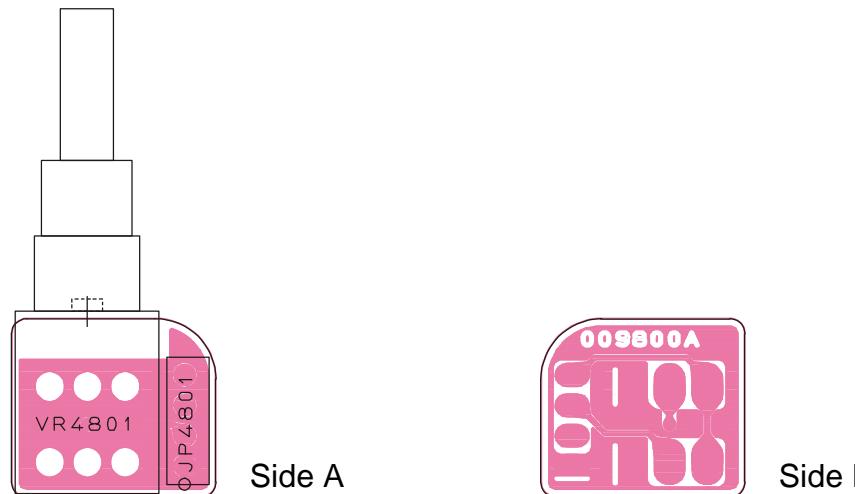
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR			
PCB with Components					CB2331001								
Printed Circuit Board					AH007M000	FR0096600							
FB4901	FERRITE BEADS				BK1608HS121-T	L9190081			1-				
FB4902	FERRITE BEADS				BK1608HS121-T	L9190081			1-				
FB4903	FERRITE BEADS				BK1608HS121-T	L9190081			1-				
J 4901	CONNECTOR				52746-0890	P1091163			1-				
J 4902	CONNECTOR				HSJ7062-01-440	P1091161			1-				
J 4903	CONNECTOR				HSJ7063-01-440	P1091160			1-				
P 4901	WIRE ASSY				AH007M	T9207025			1-				

# VR Unit

## Circuit Diagram



## Parts Layout

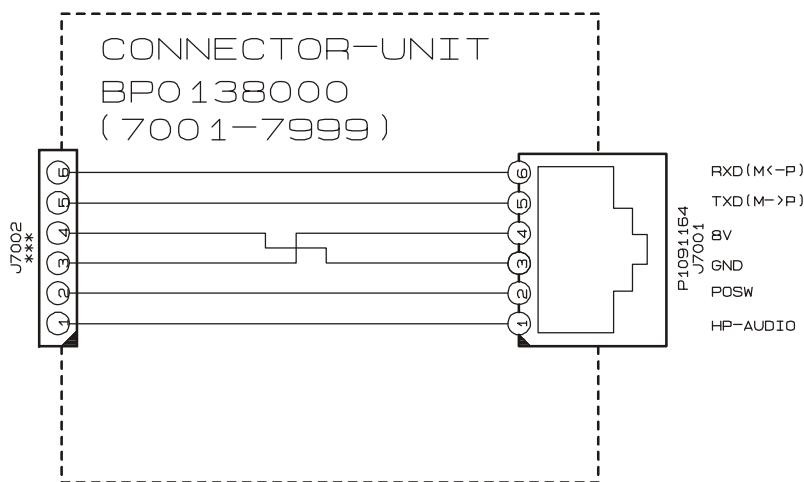


## Parts List

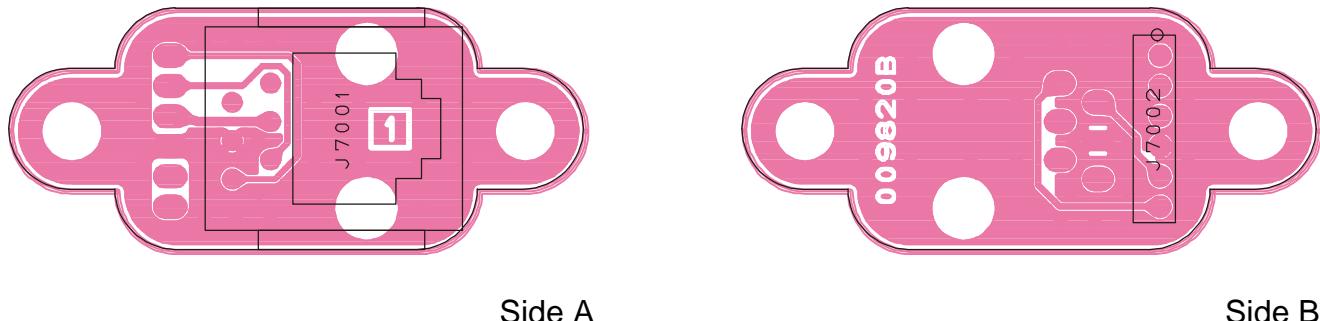
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	PCB with Components					CB2339001				
	Printed Circuit Board				AH007M000	FR0098000				
VR4801	POT.				RK0972210 10KB/10KB	J62800141		1-	A	

# **CONNECTOR Unit**

## **Circuit Diagram**



## **Parts Layout**

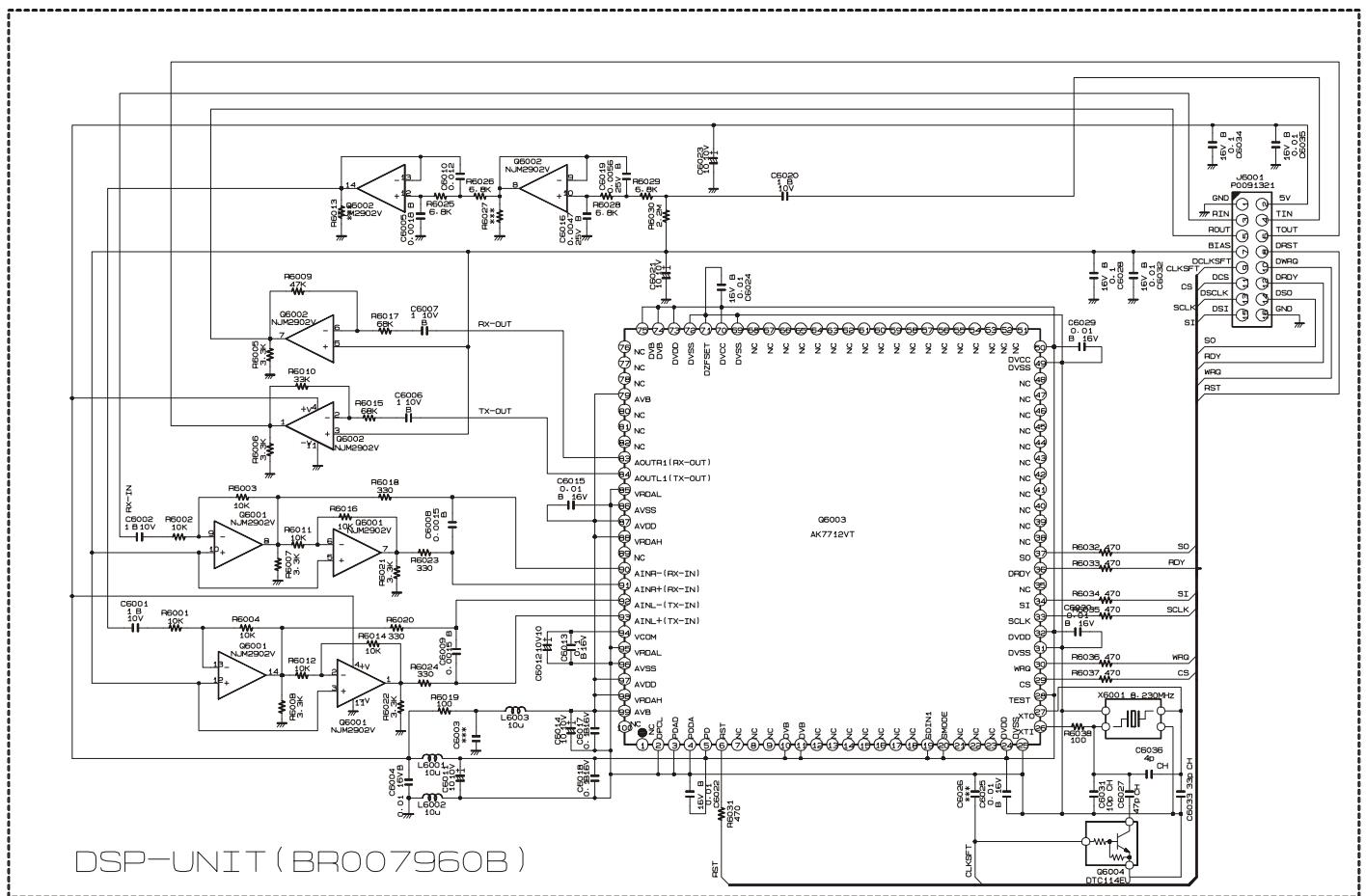


## **Parts List**

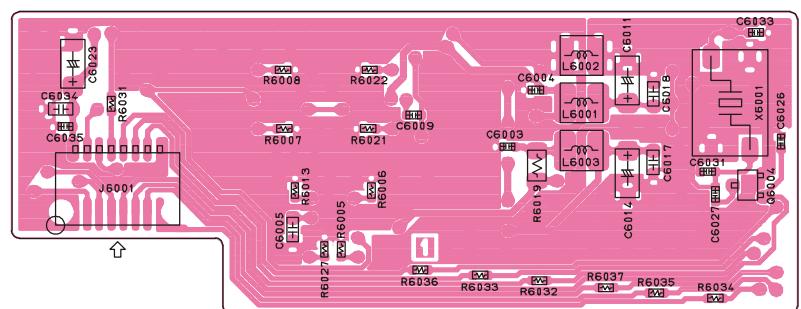
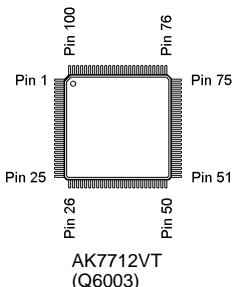
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	PCB with Components					CB2338001				
	Printed Circuit Board				AH007M000	FR009820B			1-	
J 7001	CONNECTOR				HJC0278-010022	P1091164			1-	
J 7002	WIRE ASSY				AH007M	T9207023			1-	

# DSP-2 Unit (Option)

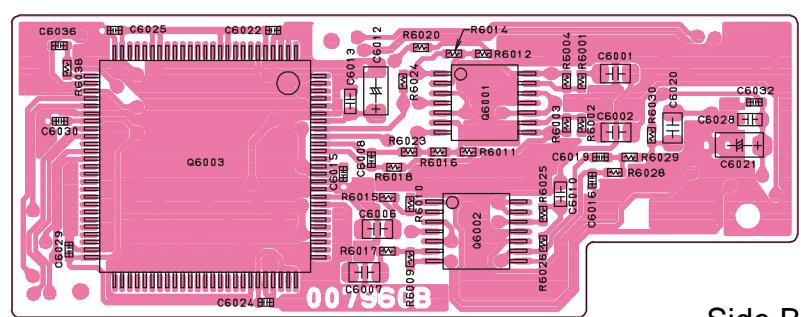
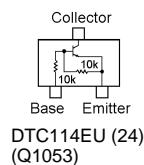
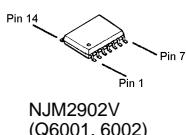
## Circuit Diagram



## Parts Layout



Side A



Side B

# DSP-2 Unit (Option)

## Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
Printed Circuit Board										
C 6001	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	
C 6002	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	
C 6004	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	
C 6005	CHIP CAP.	0.0018uF	50V	B	GRM39B182M50PT	K22174812		1-	A	
C 6006	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	
C 6007	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	
C 6008	CHIP CAP.	0.0015uF	50V	B	GRM36B152K50PT	K22178811		1-	B	
C 6009	CHIP CAP.	0.0015uF	50V	B	GRM36B152K50PT	K22178811		1-	A	
C 6010	CHIP CAP.	0.012uF	50V	B	GRM39B123K50PT	K22174825		1-	B	
C 6011	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	
C 6012	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	B	
C 6013	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	
C 6014	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	
C 6015	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	
C 6016	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	B	
C 6017	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
C 6018	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
C 6019	CHIP CAP.	0.0056uF	25V	B	GRM36B562K50PT	K22148802		1-	B	
C 6020	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-		
C 6021	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	B	
C 6022	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	
C 6023	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	
C 6024	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	
C 6025	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	
C 6027	CHIP CAP.	47pF	50V	CH	GRM36CH470J50PT	K22178228		1-	A	
C 6028	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	B	
C 6029	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	
C 6030	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	
C 6031	CHIP CAP.	10pF	50V	CH	GRM36CH100D50PT	K22178212		1-	A	
C 6032	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	
C 6033	CHIP CAP.	33pF	50V	CH	GRM36CH330J50PT	K22178224		1-	A	
C 6034	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
C 6035	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	
C 6036	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206		1-	B	
J 6001	CONNECTOR				IL-WX-16PB-HF-B-E1000	P0091321		1-	A	
L 6001	CHIP COIL	10uH			C2520F-100K	L1690596		1-	A	
L 6002	CHIP COIL	10uH			C2520F-100K	L1690596		1-	A	
L 6003	CHIP COIL	10uH			C2520F-100K	L1690596		1-	A	
Q 6001	IC				NJM2902V-TE1	G1091679		1-	B	
Q 6002	IC				NJM2902V-TE1	G1091679		1-	B	
Q 6003	IC				AK7712VT	G1092699		1-	B	
Q 6004	TRANSISTOR				DTC114EU T106	G3070084		1-	A	
R 6001	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	
R 6002	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	
R 6003	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	
R 6004	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	
R 6005	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	
R 6006	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	
R 6007	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	
R 6008	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	
R 6009	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	
R 6010	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	
R 6011	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	
R 6012	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	
R 6014	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	
R 6015	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	B	
R 6016	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	
R 6017	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	B	
R 6018	CHIP RES.	330	1/16W	5%	RMC1/16S 331JTH	J24189019		1-	B	
R 6019	CHIP RES.	100	1/10W	5%	RMC1/10T 101J	J24205101		1-	A	
R 6020	CHIP RES.	330	1/16W	5%	RMC1/16S 331JTH	J24189019		1-	B	
R 6021	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	
R 6022	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	
R 6023	CHIP RES.	330	1/16W	5%	RMC1/16S 331JTH	J24189019		1-	B	
R 6024	CHIP RES.	330	1/16W	5%	RMC1/16S 331JTH	J24189019		1-	B	
R 6025	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-	B	
R 6026	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-	B	
R 6028	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-	B	
R 6029	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-	B	
R 6030	CHIP RES.	2.2M	1/16W	5%	RMC1/16S 225JTH	J24189065		1-	B	
R 6031	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	

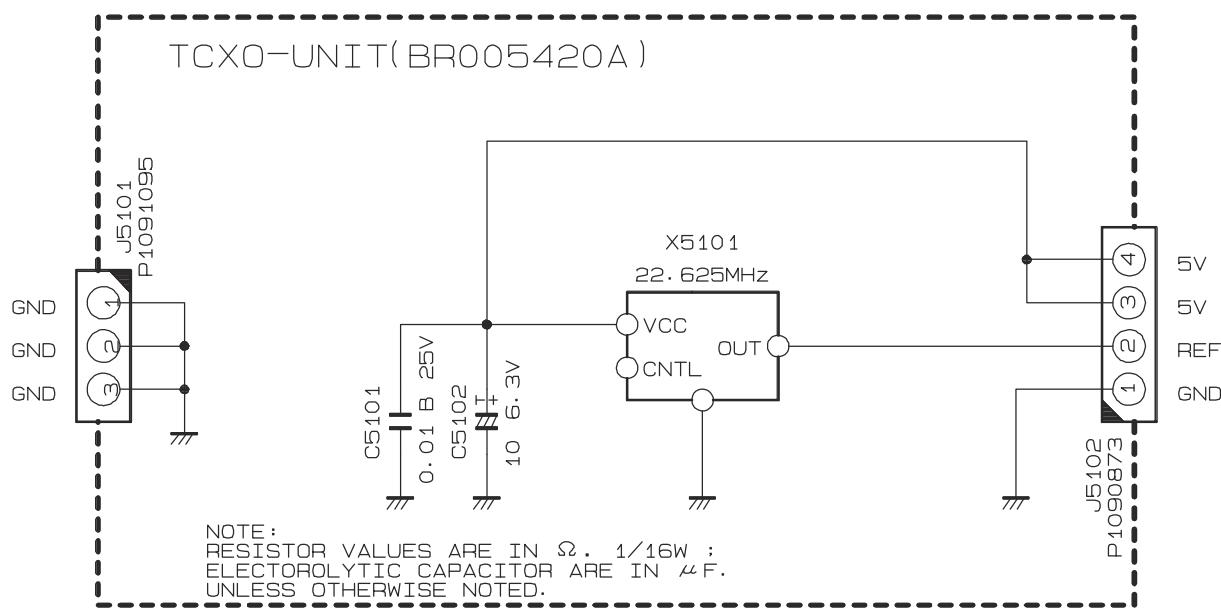
# **DSP-2 Unit (Option)**

## **Parts List**

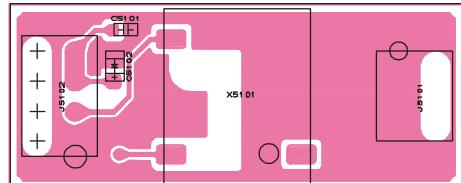
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 6032	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	
R 6033	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	
R 6034	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	
R 6035	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	
R 6036	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	
R 6037	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	
R 6038	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	
X 6001	XTAL TSS-7050A	8.23MHz			8.230MHz	H0103261		1-	A	

# TCXO-9 Unit (Option)

## 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
Printed Circuit Board									FR005860C	1-
C 5101	CHIP CAP.	0.01μF	25V	B	GRM39B103K25PT	K22144803			1-	
C 5102	CHIP TA.CAP.	10μF	6.3V		TESVSP0J106M-8R	K78080055			1-	
J 5101	CONNECTOR				9117S-03D	P1091095			1-	
J 5102	CONNECTOR				9117S-04D	P1090873			1-	
X 5101	XTAL OSC	22.625MHz			NTO-801BS 22.625MHZ	H9500560			1-	



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