Vertex Standard

VX-537

UHF Band
Service Manual

 EC052U90D

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Introduction

This manual provides technical information necessary for servicing the **VX-537** UHF FM 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.

Contents

Specifications

General

Number of Channels:	512 channels
Frequency Range:	450 - 490 MHz
Channel Spacing:	12.5 / 25 kHz
Battery Voltage:	7.5 VDC ±20 %
Battery Life w/FNB-V29A (5-5-9 duty):	10 hours (13 hours. w/saver) @5.0W
Temperature Range:	–22 °F to +140 °F (–30 °C to +60 °C)
Frequency Stability:	better than ±2.5 ppm
Case Size:	2.3“ (w) x 6.0“ (H) x 1.5“ (D) (59 x 152 x 39 mm) w/FNB-29A
	2.3“ (w) x 6.4“ (H) x 1.5“ (D) (59 x 163 x 39 mm) w/FNB-29AL
Weight:	18.7 oz (530 g) w/FNB-29A
	19.4 oz (550 g) w/FNB-29AL

Receiver

Circuit Type:	Double-conversion Super-heterodyne
IFs:	44.25 MHz, 450 kHz
Sensitivity:	EIA12-dB SINAD: 0.25 µV
Adjacent Channel Selectivity:	75 dB (25 kHz) / 68 dB (12.5 kHz)
Intermodulation:	75 dB (25 kHz) / 65 dB (12.5 kHz)
Spurious and Image Rejection:	75 dB
Hum & Noise:	45 dB (25 kHz) / 40 dB (12.5 kHz)
AF Output:	0.7 W @ 16 Ohms, 5 % THD

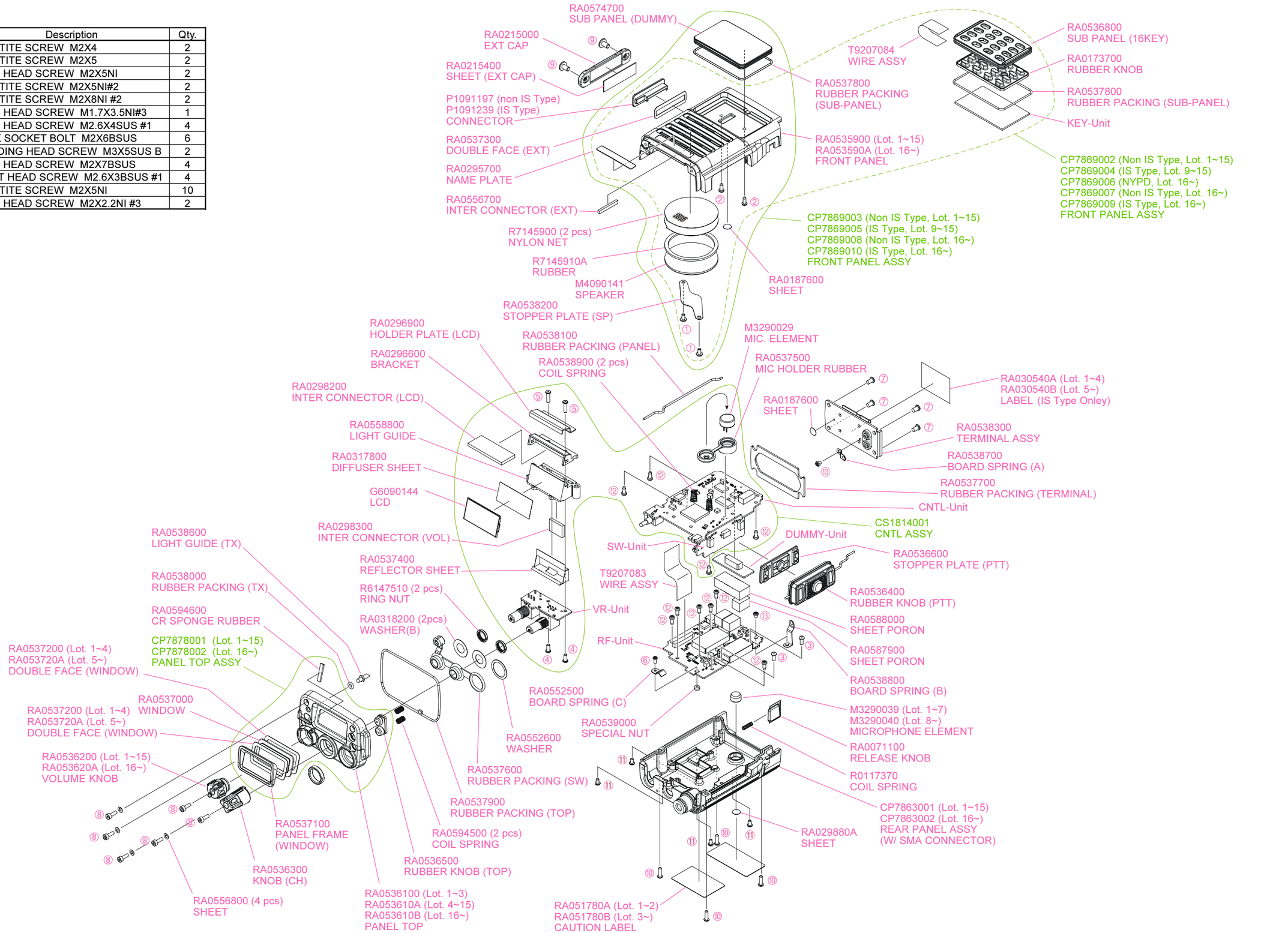
Transmitter

Power Output:	5.0 / 2.0 / 1.0 / 0.25 W
Modulation System:	Direct FM; 16K0F3E (25 kHz) / 11K0F3E (12.5 kHz)
Conducted Spurious Emissions:	70 dB Below Carrier
FM Hum & Noise:	45 dB (25 kHz) / 40 dB (12.5 kHz)
Audio Distortion (@ 1 kHz):	< 3 %

Specifications are subject to change without notice or obligation.

Exploded View & Miscellaneous Parts

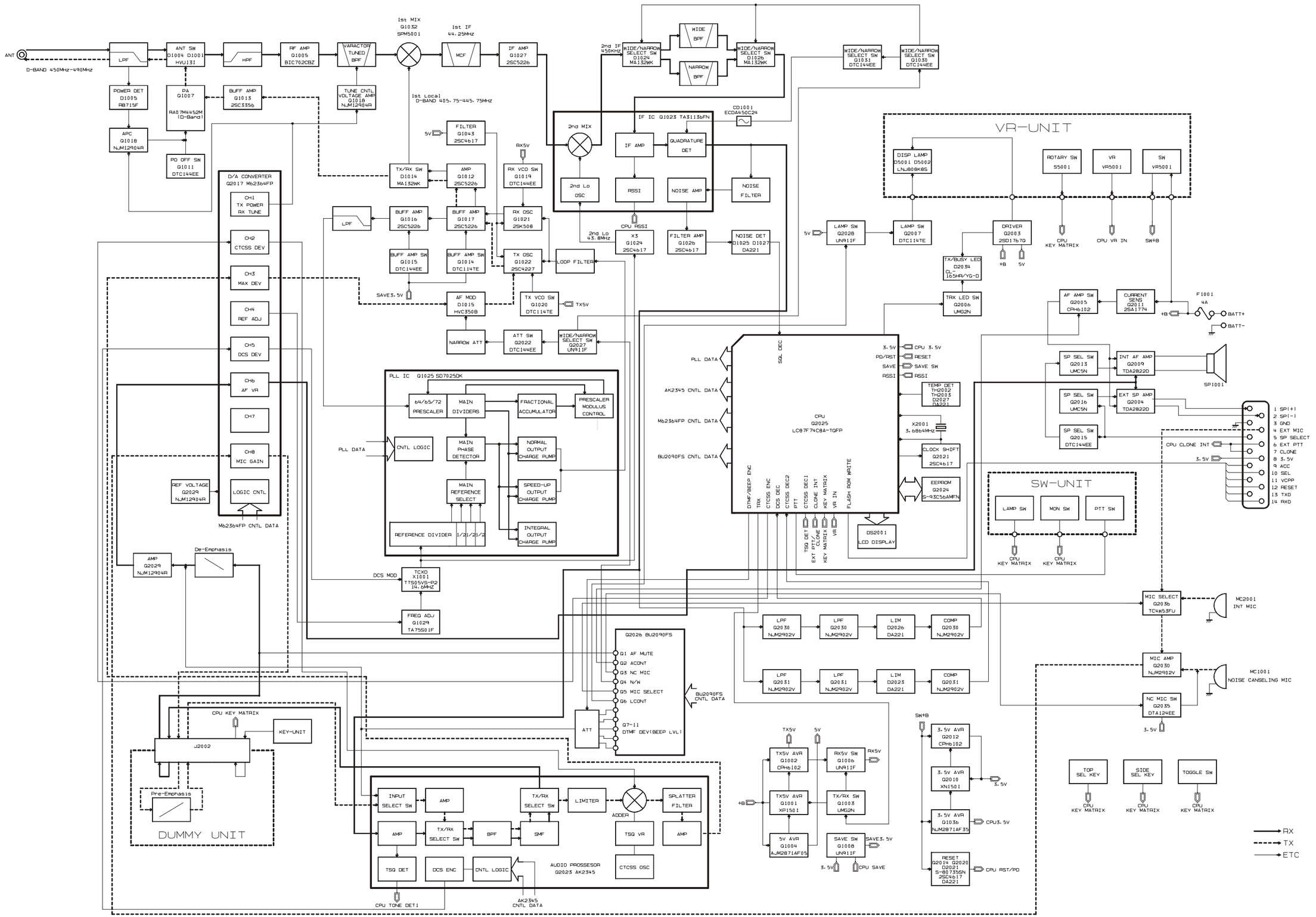
Ref.	VXSTD P/N	Description	Qty.
①	U24104001	TAPTITE SCREW M2X4	2
②	U44105001	TAPTITE SCREW M2X5	2
③	U00105002	PAN HEAD SCREW M2X5NI	2
④	U9900094	TAPTITE SCREW M2X5NI#2	2
⑤	U9900116	TAPTITE SCREW M2X8NI #2	2
⑥	U07135302	PAN HEAD SCREW M1.7X3.5NI#3	1
⑦	U07440120	PAN HEAD SCREW M2.6X4SUS #1	4
⑧	U51106027	HEX SOCKET BOLT M2X6BSUS	6
⑨	U20305027	BINDING HEAD SCREW M3X5SUS B	2
⑩	U07270127	PAN HEAD SCREW M2X7BSUS	4
⑪	U32430127	FLAT HEAD SCREW M2.6X3BSUS #1	4
⑫	U44105002	TAPTITE SCREW M2X5NI	10
⑬	U07222302	PAN HEAD SCREW M2X2.2NI #3	2



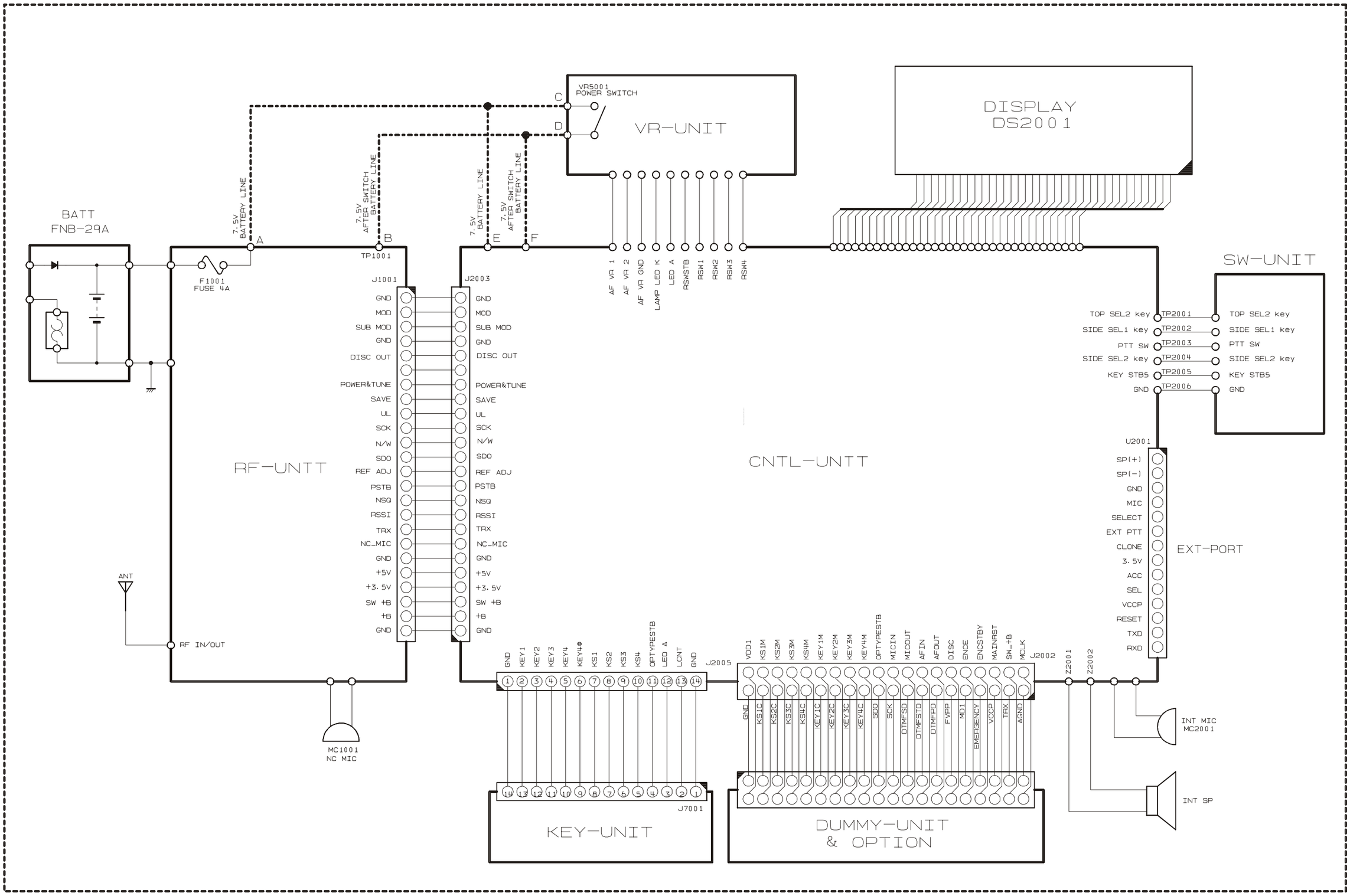
Exploded View & Miscellaneous Parts

Note

Block Diagram



Connection Diagram



1. Overview

The **VX-537** is a UHF/FM hand-held transceiver designed to operate in the frequency range of 450 to 490MHz.

2. Circuit Configuration by Frequency

The receiver is a double-conversion superheterodyne with a first intermediate frequency (IF) of 44.25MHz and a second IF of 450kHz. Incoming signals from the antenna are mixed with the local signal from PLL to produce the first IF of 44.25MHz.

This is then mixed with the 43.8MHz second local oscillator (using the 14.6MHz reference crystal) output to produce the 450kHz second IF. This is detected to give the demodulated signal.

The transmit signal frequency is generated by PLL VCO, and modulated by the signal from the microphone. It is then amplified and sent to the antenna.

3. Receive Signal Path

3-1 Front-end RF amplifier

Incoming RF from the antenna jack is delivered to the RF Unit and passes through a low-pass filter and high-pass filter consisting of coils L1003, L1004, L1006, L1008, L1001, L1002, L1005, L1007, L1009, & L1010, capacitors C1003, C1004, C1006, C1008, C1011, C1014, C1022, C1025, C1002, C1005, C1007, C1009, C1013, C1017, C1018, C1020, C1021, C1204, C1028 & C1031, and antenna switching diode **D1004** (**HVU131**).

Signals within the frequency range of the transceiver are then amplified by **Q1005** (**BIC702C**) and enter a varactor-tuned band-pass filter consisting of coils L1016, L1017, & L1019, capacitors C1052, C1053, C1060, C1063, C1067, C1068, C1070, C1072, C1073, C1074, C1082, C1084, & C1092, resisters R1024, R1033, & R1048, and diodes **D1008**, **D1009**, **D1010**, **D1011**, **D1012**, & **D1013** (all **HVC350B**) before first mixer.

3-2 First Mixer

Buffered output from the VCO is amplified by **Q1012** (**2SC5226**) to provide a pure first local signal between 405.75 and 445.75MHz for injection to the first mixer **Q1032** (**SPM5001**). The 44.25MHz first mixer product then passes through monolithic crystal filters **XF1001** (**MFT44P2 44.25MHZ**) to strip away all but the desired signal.

3-3 IF amplifier

The first IF signal is amplified by **Q1027** (**2SC5226**).

The amplified first IF signal is applied to FM IF subsystem IC **Q1023** (**TA31136FN**) which contains the second mixer, second local oscillator, limiter amplifier, noise amplifier, and S-meter amplifier.

A second local signal is generated by **Q1024** (**2SC4617**) using the 14.6MHz crystal **X1001** as a reference, producing a 43.8MHz signal which yields a 450kHz second IF when mixed with the first IF signal within **Q1023** (**TA31136FN**).

The second IF then passes through the ceramic filter **CF1001** (**ALFYM450F=K**: wide channels), **CF1002** (**ALFYM450G=K**: narrow channels) to strip away unwanted mixer products, and is applied to the limiter amplifier in **Q1023** (**TA31136FN**), which removes amplitude variations in the 450kHz IF, before detection of the speech by the ceramic discriminator **CD1001** (**ECDA450C24**).

3-4 Audio amplifier

Detected audio from **Q1023** (**TA31136FN**) is applied to **Q2023** (**AK2345**) and audio low-pass filter, and then past the volume control **Q2017** (**M62364FP**) to the audio BTL amplifier **Q2004** (**TDA2822D**: external speaker) or **Q2009** (**TDA2822D**: internal speaker), providing up to 0.5 Watts to the optional headphone jack or 16-ohm loudspeaker.

3-5 Squelch Control

The squelch circuitry consists of a noise amplifier & band-pass filter within **Q1023** (**TA31136FN**), and noise detector **D1025** and **D1027** (both **DA221**).

When no carrier received, noise at the output of the detector stage in **Q1023** (**TA31136FN**) is amplified and band-pass filtered by the noise amplifier section of **Q1023** (**TA31136FN**) and the network between pins 7 and 8, and then rectified by **D1025** (**DA221**).

The resulting DC squelch control voltage is passed to pin 19 of the microprocessor **Q2025** (**LC87F74C8A**). If carrier is received, this signal causes pin 6 of **Q2026** (**BU2090FS**) to go low and pin 89 of **Q2025** (**LC87F74C8A**) to go high. Pin 6 of **Q2026** (**BU2090FS**) signal is applied to **Q2005** (**CPH6102**), **Q2013** (**UMC5N**), and **Q2016** (**UMC5N**) to disable the supply voltage at the audio amplifier **Q2004** and **Q2009** (both **TDA2822D**), meanwhile pin 89 of **Q2025** (**LC87F74C8A**) signal applied to **Q2006** (**UMG2N**) to hold the green (Busy) half of the LED **D2034** (**CL-165HR/YG-D**).

The microprocessor then checks the DTMF decoder chip on the Optional Unit, the CTCSS and the CDCSS code for DTMF or CTCSS or CDCSS code squelch information, if enabled, respectively. If not transmitting and CTCSS or CDCSS is not activated, or if the received tone or code matches that programmed, the microprocessor stops scanning, if active, and allows audio to pass through the audio amplifier **Q2004** and **Q2009** (both **TDA2822D**) to the loudspeaker by enabling the supply voltage to it via **Q2005** (**CPH6102**) and **Q2011** (**2SA1774**).

Circuit Description

4 Transmit Signal Path

4-1 Microphone amplifier

Speech input from the microphone is amplified in **Q2030** (**NJM2902V**) after there is a filter and is sent to **Q2017** (**M62364FP**) and sent to Dummy Unit (or Optional Unit). The audio which returned from Dummy Unit passes **Q2023** (**AK2345**) to be pre-emphasized.

The processed audio is then mixed with a CTCSS tone generated by the microprocessor **Q2025** (**LC87F74C8A**) and delivered to **D1015** (**HVC350B**) for frequency modulating the PLL carrier up to ±5 kHz from the unmodulated carrier at the transmitting frequency.

If a CDCSS code is enabled for transmission, the code is generated by the microprocessor **Q2025** (**LC87F74C8A**) and delivered to **X1001** (TCXO: **TTS05VS-P2 14.6MHz**) for CDCSS modulating.

If DTMF is enabled for transmission, the tone is generated by the microprocessor **Q2025** (**LC87F74C8A**) and applied to the splutter filter **Q2023** (**AK2345**) in place of speech audio. Also, the tone is amplified for monitoring in the loudspeaker.

4-2 Noise canceling microphone circuit

The two signals from internal microphone (main and sub) are input to the positive input (sub) and to the negative input (main) and of the **Q2030** (**NJM2902V**). If the same signal is input to both main and sub, the main signal is canceled at the output of Pin1 of the **Q2030** (**NJM2902V**). In other words, noise from nearby sources not directly connected to the transceiver enters the main and sub input at the same signal and is therefore canceled out.

When a signal is only input to main microphone and there is no signal at sub microphone, the main signal is output as is from **Q2030** (**NJM2902V**).

4-3 Drive and Final amplifier

The modulated signal from the VCO **Q1022** (**2SC4227**) is buffered by **Q1032** (**2SC5226**) and amplified by **Q1017** (**2SC5226**) and **Q1013** (**2SC3356**). The low-level transmit signal is then applied to the Power Module **Q1007** (**RA07M4452M**) for final amplification up to 5 watts output power.

The transmit signal then passes through the antenna switch **D1004** (**HVU131**) and is low-pass filtered to suppress away harmonic spurious radiation before delivery to the antenna.

4-4 Automatic Transmit Power Control

RF power output from the final amplifier is sampled by C1016 and C1019, then rectified by **D1005** (**RB715F**). The resulting DC is fed back through **Q1018** (**NJM12904R**) to the Power Module **Q1007** (**RA07M4452M**), and thus the power output.

The microprocessor selects either “High” or one of three “Low” power levels.

4-5 Transmit Inhibit

When the Transmit PLL is unlocked, pin 18 of PLL chip **Q2025** (**LC87F74C8A**) goes to logic low. The resulting DC unlock control voltage is passed to pin 20 of the microprocessor **Q2025** (**LC87F74C8A**). While the transmit PLL is unlocked, pin 85 of **Q2025** (**LC87F74C8A**) remains low, which then turns off the Automatic Power Controller **Q1011** (**DTC144EE**) and **Q1018** (**NJM12904R**) to disable the supply voltage to the Power Module **Q1007** (**RA07M4452M**), disabling the transmitter.

4-6 Spurious Suppression

Generation of spurious products by the transmitter is minimized by the fundamental carrier frequency being equal to final transmitting frequency, modulated directly in the transmit VCO. Additional harmonic suppression is provided by a low-pass filter consisting of L1004, L1006, & L1008 and C1004, C1006, C1008, C1011, C1014, & C1022, resulting in more than 60 dB of harmonic suppression prior to delivery to the antenna.

5 PLL Frequency Synthesizer

PLL frequency synthesizer consists of the VCO **Q1021** (**2SK508**: RX) and **Q1022** (**2SC4227**: TX), VCO buffers **Q1017** (**2SC5226**), **Q1012** (**2SC5225**), **Q1016** (**2SC5225**), PLL subsystem IC **Q1025** (**SA7025DK**) and **X1001**(TCXO: **TTS05VS-P2 14.6MHZ**).

The frequency stability is ±2.5 ppm within temperature range of –30 to +60 °C. The output of the 14.6MHz reference is applied to pin 8 of the PLL IC.

While receiving, VCO oscillates between 405.75MHz and 445.75MHz according to the transceiver version and the programmed receiving frequency. The VCO generates 405.75 to 445.75MHz for providing to the first local signal. In TX, the VCO generates 450 to 490MHz.

The output of the VCO is amplified by the **Q1016** (**2SC5526**) and routed to the pin 5 of the PLL IC **Q1025** (**SA7025DK**). Also the output of the VCO is amplified by the **Q1012** (**2SC5225**) and routed first local /Power Module according to **D1014** (**MA132**).

The PLL IC **Q1025** (**SA7025DK**) consists of a prescaler, fractional divider, reference divider, phase comparator, charge pump. This PLL IC **Q1025** (**SA7025DK**) is fractional-N type synthesizer and performs in the 40 or 50 kHz reference signal which is eighth of the channel step (5, 6.25, or 7.5kHz). The input signal from pin 5 and 8 of the PLL IC **Q1025** (**SA7025DK**) is divided down to the 40 or 50 kHz and compared at phase comparator. The pulsed output signal of the phase comparator is applied to the charge pump and transformed into DC signal in the loop filter. The DC signal is applied to the pin 1 of the VCO and locked to keep the VCO frequency constant.

PLL date is output from DTA (pin100), CLK (pin2) and PSTB (pin98) of the microprocessor **Q2025** (**LC87F74C8A**). The data are input to PLL IC when the channel is changed or when transmission is changed to reception and vice versa. A PLL lock condition is always monitored by the pin20 of the **Q2025** (**LC87F74C8A**). When the PLL is unlocked, the UL goes low.

6 Miscellaneous Circuits

6-1 Push-To-Talk Transmit Activation

The PTT switch on the microphone is connected to pin 32 of microprocessor **Q2025** (**LC87F74C8A**), so that when the PTT switch is closed, pin 85 of **Q2025** (**LC87F74C8A**) goes high. This signals the microprocessor to activate the TX/RX controller **Q1003** (**UMG2N**), which then disables the receiver by disabling the 5 V supply bus at **Q1006** (**UN911F**) to the front-end, FM IF subsystem IC **Q1023** (**TA31136FN**) and receiver VCO circuitry.

At the same time, **Q1001** (**XP1501**) and **Q1002** (**CPH6102**) activates the TX 5V supply line to enable the transmitter.

Note

Introduction

The **VX-530** is carefully aligned at the factory for the specified performance across the frequency range specified for each version. Realignment should therefore not be necessary except in the event of a component failure, or when altering the version type. All component replacement and service should be performed only by an authorized **VERTEX STANDARD** representative, or the warranty policy may be voided.

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

We recommend that servicing be performed only by authorized **VERTEX STANDARD** service technicians who are experienced with the circuitry and fully equipped for repair and alignment. 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** reserves 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 realignment determined to be absolutely necessary.

Do not attempt to perform only a single step unless it is clearly isolated electrically from all other steps. Have all test equipment ready before beginning, and follow all of the steps in a section in the order presented.

The following test equipment (and thorough familiarity with its correct use) is necessary for complete realignment. Correction of problems caused by misalignment resulting from use of improper test equipment is not covered under the warranty policy. While most steps do not require all of the equipment listed, the interactions of some adjustments may require that more complex adjustments be performed afterwards.

Required Test Equipment

- ❒ RF Signal Generator with calibrated output level at 600 MHz
- ❒ Deviation Meter (linear detector)
- ❒ In-line Wattmeter with 5% accuracy at 600 MHz
- ❒ 50-Ohm RF Dummy Load with power rating 10W at 600 MHz
- ❒ 16-Ohm AF Dummy Load
  (***Attention :*** *Audio output is BTL output; do not short "shield" to ground!)*
- ❒ Regulated DC Power Supply
  (standard 7.5V DC, 3A)
- ❒ Frequency Counter with 0.2 ppm accuracy at 600 MHz
- ❒ AC Voltmeter
- ❒ DC Voltmeter
- ❒ UHF Sampling Coupler
- ❒ IBM PC / compatible Computer with Microsoft DOS v3.0 or later operating system
- ❒ Vertex Standard Microphone Cable (T9206933), **CT-29** Connection Cable, and **SVC65** Alignment program

Alignment Preparation and 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, in 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 20 °C and 30 °C (68 °F ~ 86 °F). 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.

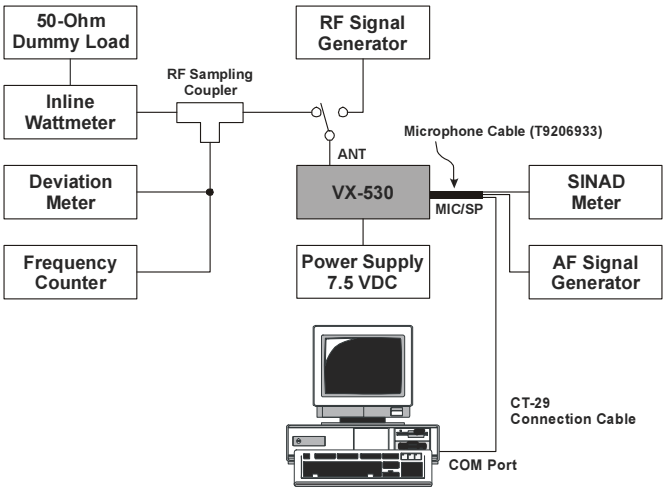
Whenever possible, alignments should be made with oscillator shields and circuit boards firmly affixed in place. Also, the test equipment must be thoroughly warmed up before beginning.

Note*: Signal levels in dB referred to in the alignment procedure are based on 0 dBμ EMF = 0.5 μV.*

Alignment

Test Equipment Setup

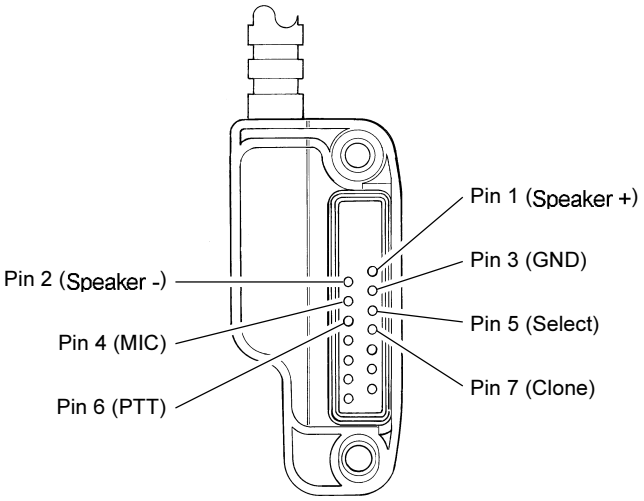
Set up the test equipment as shown below, applying 7.5V DC power to the transceiver.



Alignment Equipment Setup

Important Note

When connecting the Microphone Cable (T9206933) plug to the **MIC/SP** jack of the **VX-530**, you must remove the plastic cap and its mounting screws prior to adjustment. Please remember to re-attach the cap and screws when the adjustment is complete.



Microphone Cable Pinout

VXSTD P/N: T9206933

Test Adapter Schematic

SVC65 Alignment Program Outline

Installation of the SVC65 Alignment Program

The VX-530 series of transceivers uses the SVC65 alignment Program for all adjustments. After downloading the "zip" file from the Vertex Standard Web site, move it into the desired folder on your computer's hard drive, then unzip the file and then execute the "Setup" program.

Transceiver Switch Functionality

When the transceiver is in the "alignment mode," the PTT Switch, Toggle Switch, all Key buttons, and the Channel Selector knob are all disabled.

All required actions involving these controls are remotely controlled by the PC.

Alignment Sequence

Although the data displayed on the computer's screen during alignment is "temporary" data, it is important that you follow the basic alignment sequence properly, so that the displayed data and the data loaded into the transceiver are identical.

Basic Alignment Sequence

1. Execute the **SVC65** Alignment Program.
2. Download the current alignment data from the **VX-530**.
3. Perform alignment steps as needed.
4. Upload the revised alignment data back to the **VX-530**.

When you have finished making changes to each alignment parameter, the alignment tool will ask you "Update this data?" If you select "Yes," the temporary data will be saved.

Note!

Because of the bridge audio amplifier circuit used in the **VX-530**, it is necessry to construct and use a simple audio load test adapter as shown in the schematic diagram on the previous page, when conducting receiver alignment steps.

Do not connect either side of the speaker leads to chassis "ground."

SVC65 Alignment Menu

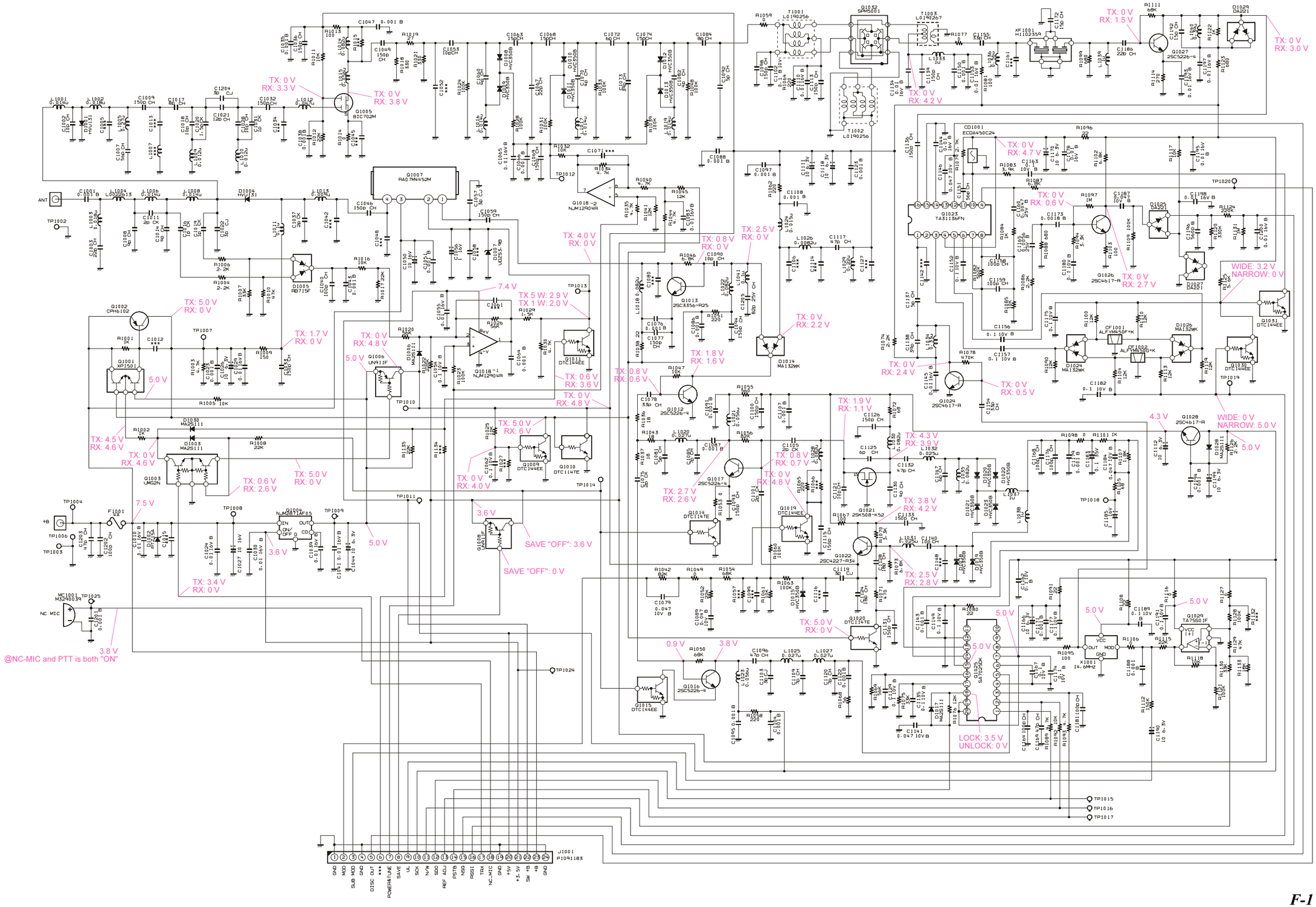
The **SVC65** Alignment Software may be used to align the following parameters. During the alignment procedure, each parameter is adjusted for a higher or lower value using the computer's [▲] and [▼] keys. When the desired value is reached, press the computer's [**ENTER**] key to lock in the new value. Please refer to the computer's screen (**SVC65** Alignment Program Window) for details of the alignment procedure.

- [0] Common TX
  - [0] Frequency
  - [1] Tx Power Hi
  - [2] Tx Power L1
  - [3] Tx Power L2
  - [4] Tx Power L3
  - [5] Max Deviation
  - [6] MIC Gain
  - [7] Sub Audio Deviation
- [1] Common RX
  - [0] Tight NSQL
  - [1] Threshold NSQL
  - [2] RSSI SQL
  - [3] Tx Save
- [2] Channels TX
  - [0] Tx Hi Power Trim
  - [1] Tx Low Power Trim
  - [2] Max Deviation Trim
  - [3] Sub Audio Deviation Trim
- [3] Channels Rx
  - [0] Manual Tuning
- [4] Others
  - [0] Battery Warning
  - [1] Management

Note

RF Unit (Lot. 1 ~ 8)

Circuit Diagram

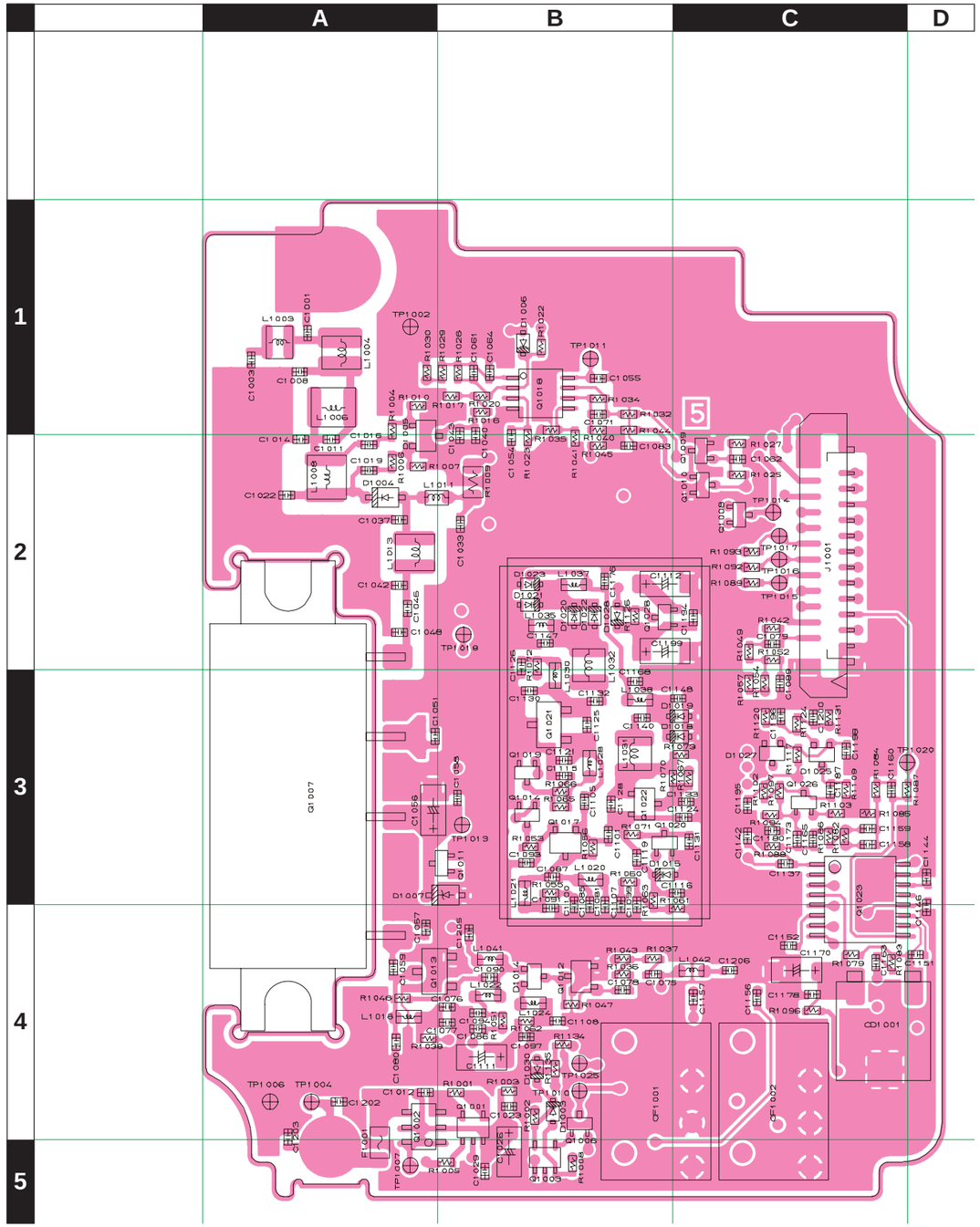


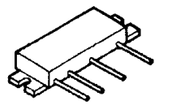
RF Unit (Lot. 1 ~ 8)

Note

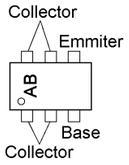
RF Unit (Lot. 1 ~ 8)

Parts Layout (Side A)

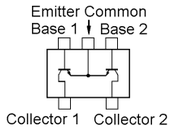




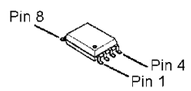
RA07M4452M
(Q1007)



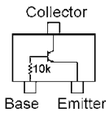
CPH6102 (AB)
(Q1002)



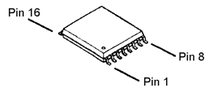
XP1501 (5R)
(Q1001)



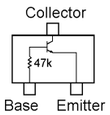
NJM12904R
(Q1018)



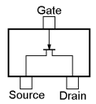
DTC114TE (04)
(Q1010, 1014, 1020)



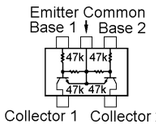
TA31136FN
(Q1023)



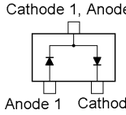
DTC144EE (96)
(Q1009, 1011, 1019)



2SK508 (K52)
(Q1021)

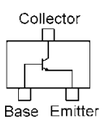


UMG2N (G2)
(Q1003)



DA221 (K)
(D1025, 1027)

RB715F (3D)
(D1005)

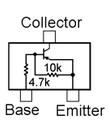


2SC3356 (R24)
(Q1013)

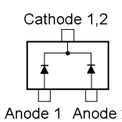
2SC4227 (R32)
(Q1022)

2SC4617 (BR)
(Q1026, 1028)

2SC5226 (R22)
(Q1012, 1017)



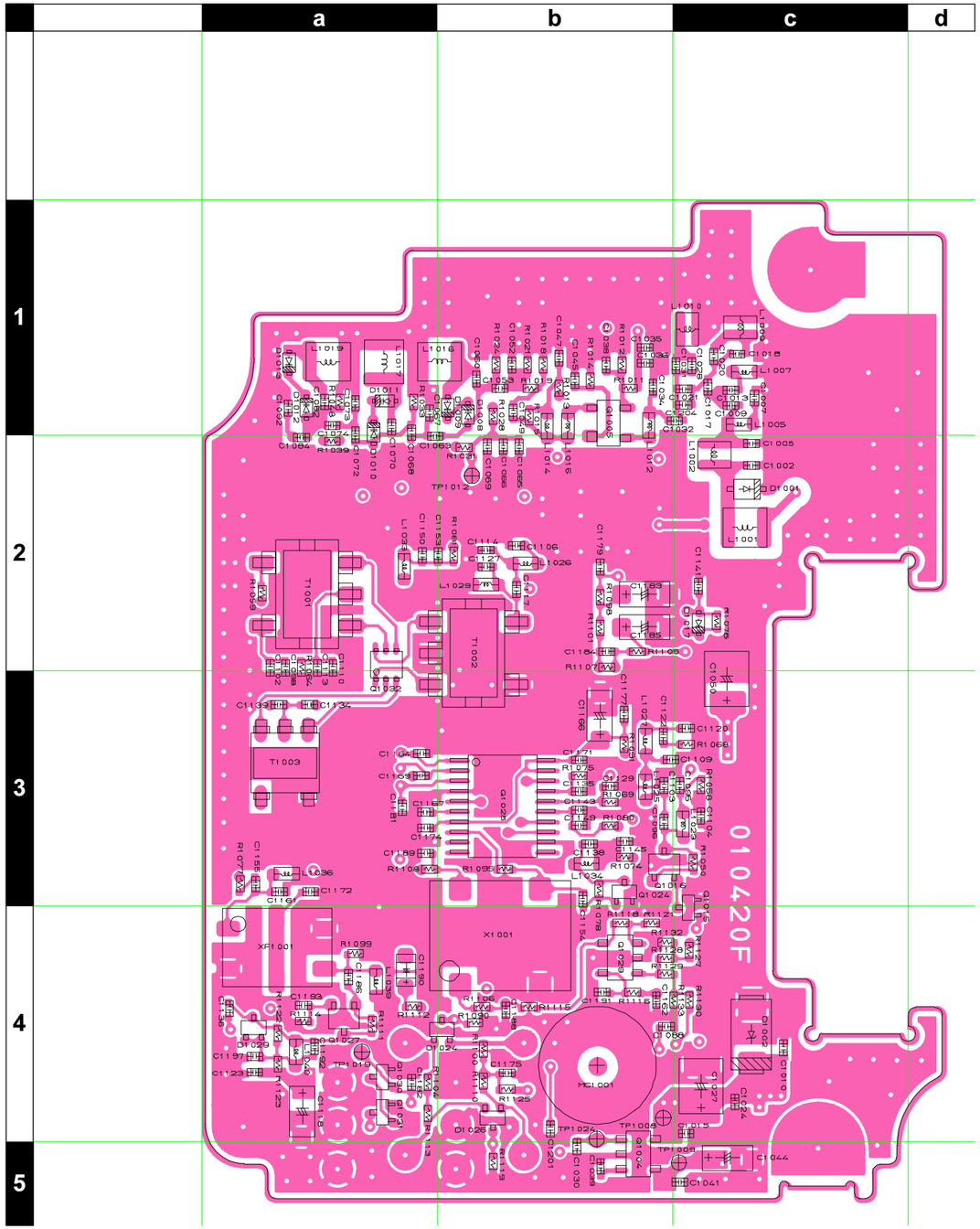
UN911F (6O)
(Q1006, 1008)

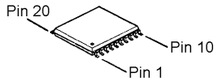


MA132WK (MU)
(D1014)

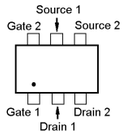
RF Unit (Lot. 1 ~ 8)

Parts Layout (Side B)

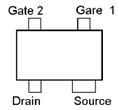




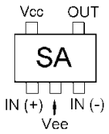
SA7025DK
(Q1025)



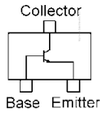
SPM5001
(Q1032)



BIC702M
(Q1005)

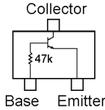


TA75S01F (SA)
(Q1029)

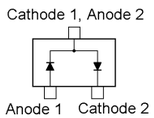


2SC4617 (BR)
(Q1024)

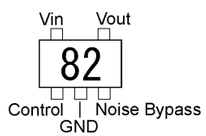
2SC5226 (R22)
(Q1016, 1027)



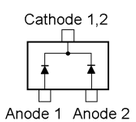
DTC144EE (96)
(Q1015, 1030, 1031)



DA221 (K)
(D1029)



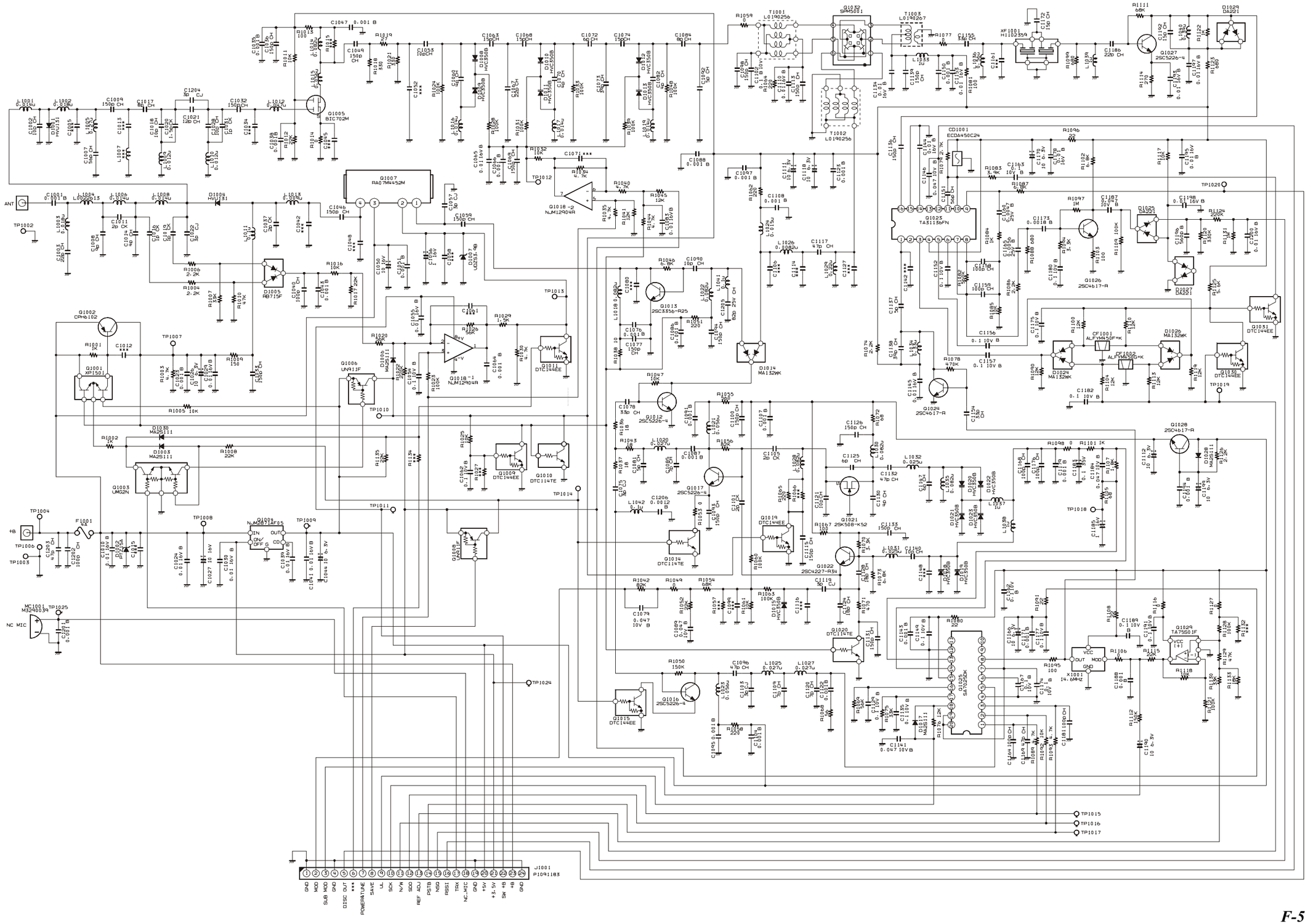
NJM2871AF05 (82)
(Q1004)



MA132WK (MU)
(D1024, 1026)

RF Unit (Lot. 9 ~)

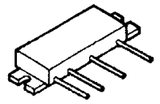
Circuit Diagram



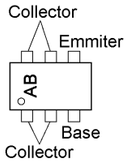
RF Unit (Lot. 9 ~)

Note

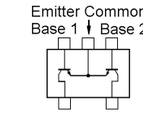
Parts Layout (Side A)



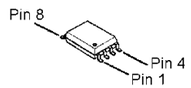
RA07M4452M
(Q1007)



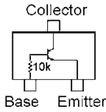
CPH6102 (AB)
(Q1002)



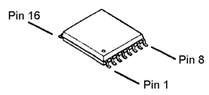
XP1501 (5R)
(Q1001)



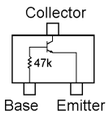
NJM12904R
(Q1018)



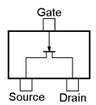
DTC114TE (04)
(Q1010, 1014, 1020)



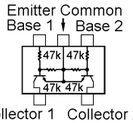
TA31136FN
(Q1023)



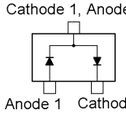
DTC144EE (96)
(Q1009, 1011, 1019)



2SK508 (K52)
(Q1021)

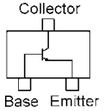


UMG2N (G2)
(Q1003)



DA221 (K)
(D1025, 1027)

RB715F (3D)
(D1005)

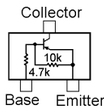


2SC3356 (R24)
(Q1013)

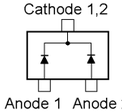
2SC4227 (R32)
(Q1022)

2SC4617 (BR)
(Q1026, 1028)

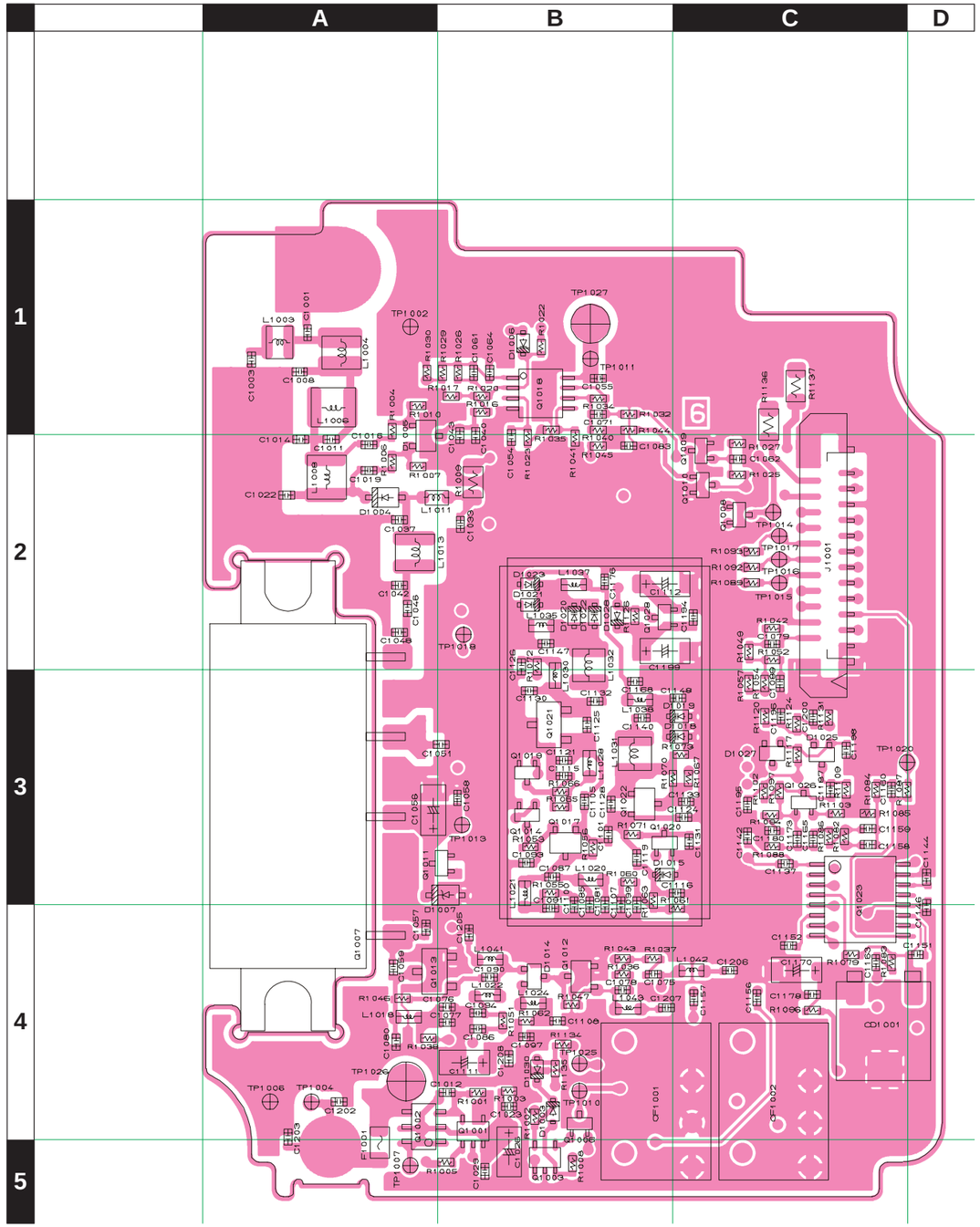
2SC5226 (R22)
(Q1012, 1017)



UN911F (6O)
(Q1006, 1008)

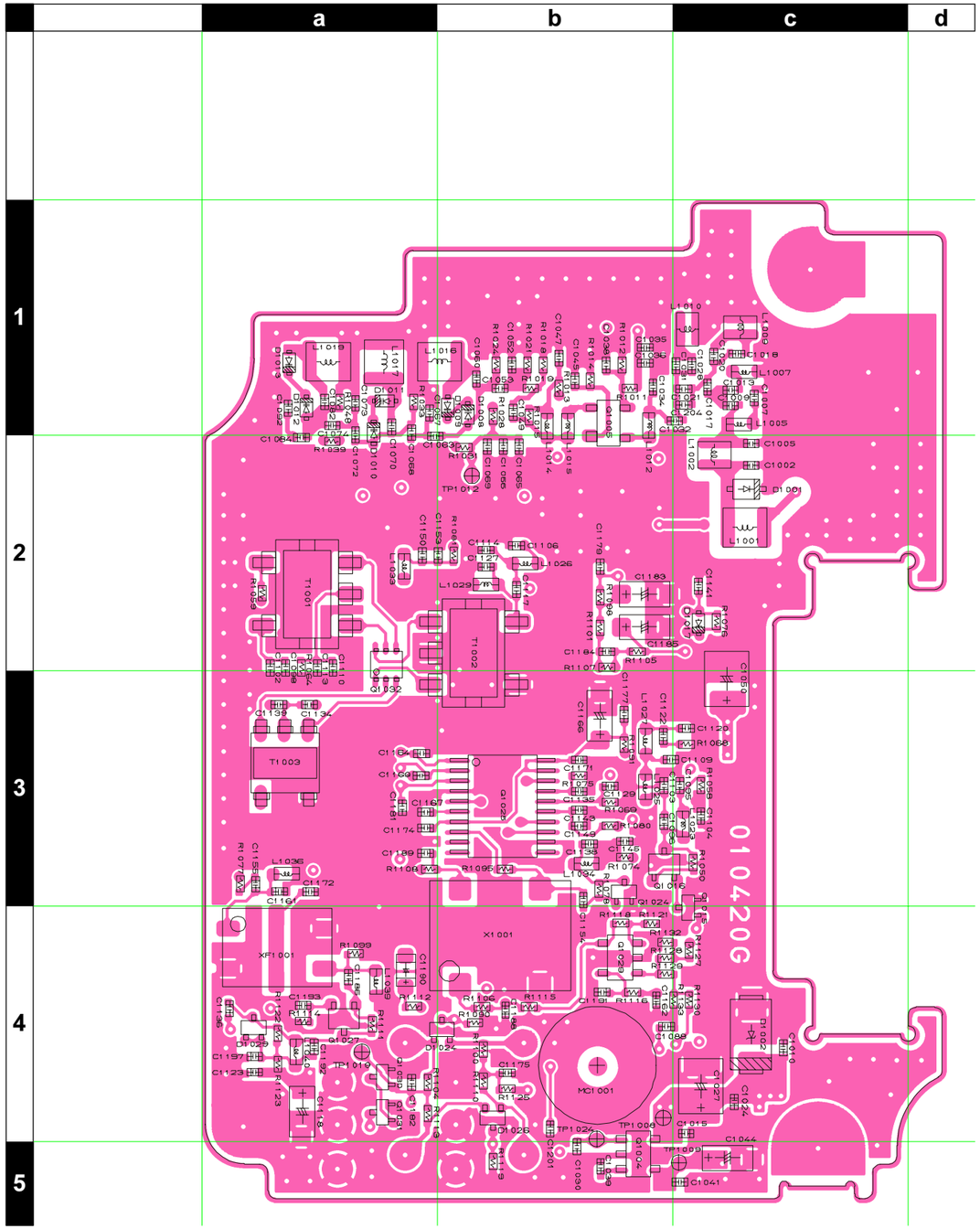


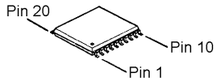
MA132WK (MU)
(D1014)



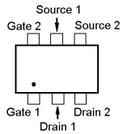
RF Unit (Lot. 9 ~)

Parts Layout (Side B)

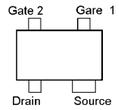




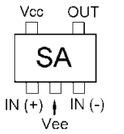
SA7025DK
(Q1025)



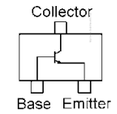
SPM5001
(Q1032)



BIC702M
(Q1005)

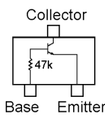


TA75S01F (SA)
(Q1029)

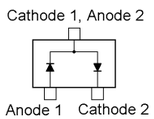


2SC4617 (BR)
(Q1024)

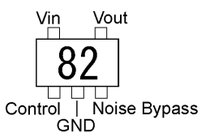
2SC5226 (R22)
(Q1016, 1027)



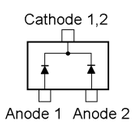
DTC144EE (96)
(Q1015, 1030, 1031)



DA221 (K)
(D1029)



NJM2871AF05 (82)
(Q1004)



MA132WK (MU)
(D1024, 1026)

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	PCB with Components					CB2457001 CB2457003 CB2457004	VTX Non-IS Type EXP VTX IS Type			
	Printed Circuit Board					FR010420F FR010420G		1-8 9-		
C 1001	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	A1
C 1002	CHIP CAP.	10pF	50V	CH	GRM1552C1H100JZ01D	K22178212		1-	B	c2
C 1003	CHIP CAP.	22pF	50V	CH	GRM1552C1H220JZ01D	K22178220		1-	A	A1
C 1007	CHIP CAP.	56pF	50V	CH	GRM1552C1H560JD01D	K22178230		1-	B	c1
C 1008	CHIP CAP.	9pF	50V	CH	GRM1552C1H9R0DZ01D	K22178211		1-	A	A1
C 1009	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	B	c1
C 1010	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c4
C 1010	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	c4
C 1011	CHIP CAP.	2pF	50V	CK	GRM1554C1H2R0BZ01D	K22178289		1-	A	A2
C 1014	CHIP CAP.	4pF	50V	CH	GRM1552C1H4R0CZ01D	K22178206		1-	A	A2
C 1016	CHIP CAP.	1pF	50V	CK	GRM1554C1H1R0CZ01D	K22178202		1-	A	A2
C 1017	CHIP CAP.	8pF	50V	CH	GRM1552C1H8R0DZ01D	K22178210		1-	B	c1
C 1018	CHIP CAP.	10pF	50V	CH	GRM1552C1H100JZ01D	K22178212		1-	B	c1
C 1019	CHIP CAP.	1pF	50V	CK	GRM1554C1H1R0CZ01D	K22178202		1-	A	A2
C 1020	CHIP CAP.	1.5pF	50V	CK	GRM1554C1H1R5CZ01D	K22178203		1-	B	c1
C 1021	CHIP CAP.	12pF	50V	CH	GRM1552C1H120JZ01D	K22178214		1-	B	c1
C 1022	CHIP CAP.	3pF	50V	CJ	GRP1553C1H3R0CZ01E	K22178205		1-	A	A2
C 1023	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B4
C 1024	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c4
C 1024	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	c4
C 1026	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	A	B5
C 1027	CHIP TA.CAP.	10uF	16V		TEESVB21C106M8R	K78120025		1-	B	c4
C 1028	CHIP CAP.	10pF	50V	CH	GRM1552C1H100JZ01D	K22178212		1-	B	c1
C 1029	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B5
C 1029	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	B5
C 1030	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b5
C 1030	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	b5
C 1031	CHIP CAP.	1pF	50V	CK	GRM1554C1H1R0CZ01D	K22178202		1-	B	c1
C 1032	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	B	b1
C 1033	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	A	B2
C 1035	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b1
C 1036	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	B	b1
C 1037	CHIP CAP.	2pF	50V	CK	GRM1554C1H2R0CZ01D	K22178204		1-	A	A2
C 1038	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b1
C 1039	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b5
C 1039	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	b5
C 1040	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	A	B1
C 1041	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c5
C 1041	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	c5
C 1043	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B1
C 1044	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	B	c5
C 1046	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	A	A2
C 1047	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b1
C 1049	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	B	b1
C 1050	CHIP TA.CAP.	10uF	16V		TEESVB21C106M8R	K78120025		1-	B	c3
C 1051	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B3
C 1053	CHIP CAP.	10pF	50V	CH	GRM1552C1H100JZ01D	K22178212		1-	B	b1
C 1054	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	A	B2
C 1055	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B1
C 1055	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	B1
C 1056	CHIP TA.CAP.	1uF	16V		TMCSA1C105MTR	K78120023		1-	A	A3
C 1057	CHIP CAP.	3pF	50V	CJ	GRP1553C1H3R0CZ01E	K22178205		1-	A	A4
C 1059	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	A	A4
C 1060	CHIP CAP.	4pF	50V	CH	GRM1552C1H4R0CZ01D	K22178206		1-	B	b1
C 1062	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	A	C2
C 1063	CHIP CAP.	15pF	50V	CH	GRM1552C1H150JZ01D	K22178216		1-	B	a1
C 1064	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B1
C 1065	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b2
C 1065	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	b2
C 1066	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b2
C 1067	CHIP CAP.	22pF	50V	CH	GRM1552C1H220JZ01D	K22178220		1-	B	a1
C 1068	CHIP CAP.	15pF	50V	CH	GRM1552C1H150JZ01D	K22178216		1-	B	a1
C 1069	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	B	b2
C 1070	CHIP CAP.	4pF	50V	CH	GRM1552C1H4R0CZ01D	K22178206		1-	B	a1
C 1072	CHIP CAP.	6pF	50V	CH	GRM1552C1H6R0DZ01D	K22178208		1-	B	a1
C 1073	CHIP CAP.	39pF	50V	CH	GRM1552C1H390JZ01D	K22178226		1-	B	a1
C 1074	CHIP CAP.	15pF	50V	CH	GRM1552C1H150JZ01D	K22178216		1-	B	a1
C 1075	CHIP CAP.	2pF	50V	CK	GRM1554C1H2R0CZ01D	K22178204		1-	A	B4
C 1075	CHIP CAP.	3pF	50V	CJ	GRP1553C1H3R0CZ01E	K22178205		3-	A	B4
C 1076	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B4
C 1077	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	A	B4
C 1078	CHIP CAP.	33pF	50V	CH	GRM1552C1H330JZ01D	K22178224		1-	A	B4
C 1079	CHIP CAP.	0.047uF	10V	B	GRM155B11A473KA01D	K22108801		1-	A	C2

RF Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1081	CHIP CAP.	5pF	50V	CH	GRM1552C1H5R0CZ01D	K22178207		1-	A	B3
C 1082	CHIP CAP.	4pF	50V	CH	GRM1552C1H4R0CZ01D	K22178206		1-	B	a1
C 1083	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B2
C 1083	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	B2
C 1084	CHIP CAP.	8pF	50V	CH	GRM1552C1H8R0DZ01D	K22178210		1-	B	a2
C 1085	CHIP CAP.	7pF	50V	CH	GRM1552C1H7R0DZ01D	K22178209		1-	A	B3
C 1086	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B4
C 1087	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B3
C 1088	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b4
C 1088	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		9-	B	b4
C 1089	CHIP CAP.	0.047uF	10V	B	GRM155B11A473KA01D	K22108801		1-	A	C3
C 1090	CHIP CAP.	10pF	50V	CH	GRM1552C1H100JZ01D	K22178212		1-	A	B4
C 1091	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B4
C 1092	CHIP CAP.	5pF	50V	CH	GRM1552C1H5R0CZ01D	K22178207		1-	B	a1
C 1093	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	A	B3
C 1094	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-8	A	B4
C 1094	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804	FOR NYPD	9-	A	B4
C 1094	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834	FOR NYPD	29-	A	B4
C 1094	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240	VTX(USA)	9-	A	B4
C 1095	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	c3
C 1096	CHIP CAP.	47pF	50V	CH	GRM1552C1H470JZ01D	K22178228		1-	B	b3
C 1097	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B4
C 1098	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	B	a2
C 1100	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	A	B3
C 1101	CHIP CAP.	2pF	50V	CK	GRM1554C1H2R0BZ01D	K22178289		1-	A	B3
C 1102	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	a2
C 1103	CHIP CAP.	3pF	50V	CJ	GRP1553C1H3R0CZ01E	K22178205		1-	B	b3
C 1104	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	c3
C 1105	CHIP CAP.	2pF	50V	CK	GRM1554C1H2R0BZ01D	K22178289		1-	A	B3
C 1106	CHIP CAP.	1pF	50V	CK	GRM1554C1H1R0CZ01D	K22178202		4-	B	b2
C 1107	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B3
C 1108	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B4
C 1109	CHIP CAP.	7pF	50V	CH	GRM1552C1H7R0DZ01D	K22178209		1-	B	b3
C 1110	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a2
C 1110	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	a2
C 1111	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	A	B4
C 1112	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	A	B2
C 1113	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	B	a2
C 1114	CHIP CAP.	1pF	50V	CK	GRM1554C1H1R0CZ01D	K22178202		4-	B	b2
C 1115	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	A	B3
C 1117	CHIP CAP.	47pF	50V	CH	GRM1552C1H470JZ01D	K22178228		1-	B	b2
C 1117	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		4-	B	b2
C 1118	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	B	a4
C 1119	CHIP CAP.	3pF	50V	CJ	GRP1553C1H3R0CZ01E	K22178205		1-	A	B3
C 1120	CHIP CAP.	7pF	50V	CH	GRM1552C1H7R0DZ01D	K22178209		1-	B	c3
C 1121	CHIP CAP.	10pF	50V	CH	GRM1552C1H100JZ01D	K22178212		1-	A	B3
C 1122	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b3
C 1123	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	a4
C 1124	CHIP CAP.	18pF	50V	CH	GRM1552C1H180JZ01D	K22178218		1-	A	C3
C 1125	CHIP CAP.	6pF	50V	CH	GRM1552C1H6R0DZ01D	K22178208		1-	A	B3
C 1126	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	A	B2
C 1128	CHIP CAP.	18pF	50V	CH	GRM1552C1H180JZ01D	K22178218		1-	A	B3
C 1129	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b3
C 1130	CHIP CAP.	4pF	50V	CH	GRM1552C1H4R0CZ01D	K22178206		1-	A	B3
C 1131	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	A	C3
C 1132	CHIP CAP.	47pF	50V	CH	GRM1552C1H470JZ01D	K22178228		1-	A	B3
C 1133	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	A	C3
C 1134	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a3
C 1134	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	a3
C 1135	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b3
C 1136	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	B	a4
C 1137	CHIP CAP.	5pF	50V	CH	GRM1552C1H5R0CZ01D	K22178207		1-	A	C3
C 1138	CHIP CAP.	39pF	50V	CH	GRM1552C1H390JZ01D	K22178226		1-	B	b3
C 1139	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	B	a3
C 1140	CHIP CAP.	10pF	50V	CH	GRM1552C1H100JZ01D	K22178212		1-	A	B3
C 1141	CHIP CAP.	0.047uF	10V	B	GRM155B11A473KA01D	K22108801		1-	B	c2
C 1143	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b3
C 1144	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	D3
C 1144	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	D3
C 1145	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b3
C 1145	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	b3
C 1146	CHIP CAP.	0.047uF	10V	B	GRM155B11A473KA01D	K22108801		1-	A	D4
C 1147	CHIP CAP.	6pF	50V	CH	GRM1552C1H6R0DZ01D	K22178208		1-	A	B2
C 1149	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b3
C 1150	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	a2
C 1151	CHIP CAP.	56pF	50V	CH	GRM1552C1H560JD01D	K22178230		1-	A	D4
C 1152	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	A	C4
C 1153	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a2

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1153	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	a2
C 1154	CHIP CAP.	33pF	50V	CH	GRM1552C1H330JZ01D	K22178224		1-8	B	b3
C 1154	CHIP CAP.	5pF	50V	CH	GRM1552C1H5R0CZ01D	K22178207	FOR NYPD	9-	B	b3
C 1154	CHIP CAP.	33pF	50V	CH	GRM1552C1H330JZ01D	K22178224	VTX(USA)	9-	B	b3
C 1155	CHIP CAP.	33pF	50V	CH	GRM1552C1H330JZ01D	K22178224		1-	B	a3
C 1156	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	A	C4
C 1157	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	A	C4
C 1158	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	A	C3
C 1159	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	A	C3
C 1160	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	A	C3
C 1160	CHIP CAP.	0.0047uF	50V	B	GRM155B11H472KA01D	K22178838		29-	A	C3
C 1162	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b4
C 1163	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	A	C4
C 1164	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	B	a3
C 1165	CHIP CAP.	0.0056uF	25V	B	GRM155B11E562KA01D	K22148802		1-	A	C3
C 1166	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	B	b3
C 1167	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	a3
C 1168	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	A	B3
C 1169	CHIP CAP.	47pF	50V	CH	GRM1552C1H470JZ01D	K22178228		1-	B	a3
C 1170	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	A	C4
C 1171	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b3
C 1172	CHIP CAP.	15pF	50V	CH	GRM1552C1H150JZ01D	K22178216		1-	B	a3
C 1173	CHIP CAP.	0.0018uF	50V	B	GRM155B11H182KA01D	K22178812		1-	A	C3
C 1174	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	a3
C 1175	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b4
C 1176	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	A	B2
C 1177	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b3
C 1178	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C4
C 1178	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	C4
C 1179	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b2
C 1180	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	A	C3
C 1181	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	B	a3
C 1182	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	a4
C 1183	CHIP TA.CAP.	0.1uF	35V		TEESVA1V104M8R	K78160025		1-	B	b2
C 1184	CHIP CAP.	0.047uF	10V	B	GRM155B11A473KA01D	K22108801		1-	B	b2
C 1185	CHIP TA.CAP.	1uF	16V		TMCSA1C105MTR	K78120023		1-	B	b2
C 1186	CHIP CAP.	22pF	50V	CH	GRM1552C1H220JZ01D	K22178220		1-	B	a4
C 1187	CHIP CAP.	0.047uF	10V	B	GRM155B11A473KA01D	K22108801		1-	A	C3
C 1188	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b4
C 1189	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	a3
C 1189	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		9-	B	a3
C 1189	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	a3
C 1190	CHIP TA.CAP.	10uF	6.3V		ECST0JZ106R	K78080078		1-	B	a4
C 1190	CHIP TA.CAP.	10uF	6.3V		TEESVP0J106M8R	K78080055		9-	B	a4
C 1191	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b4
C 1192	CHIP CAP.	15pF	50V	CH	GRM1552C1H150JZ01D	K22178216		1-	B	a4
C 1193	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a4
C 1193	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	a4
C 1194	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	C2
C 1195	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C3
C 1195	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	C3
C 1196	CHIP CAP.	560pF	50V	B	GRM155B11H561KD01	K22178806		1-	A	C3
C 1197	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a4
C 1197	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	a4
C 1198	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C3
C 1198	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	C3
C 1199	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	A	B2
C 1200	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C3
C 1200	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	C3
C 1201	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b4
C 1202	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	A	A4
C 1203	CHIP CAP.	47pF	50V	CH	GRM1552C1H470JZ01D	K22178228		1-	A	A4
C 1204	CHIP CAP.	3pF	50V	CJ	GRP1553C1H3R0CZ01E	K22178205		1-	B	c1
C 1205	CHIP CAP.	82pF	25V	CH	TMK105CH820J-F	K22148236		1-8	A	B4
C 1205	CHIP CAP.	0.0012uF	50V	B	GRM155B11H122KA01	K22178810	FOR NYPD	9-	A	B4
C 1205	CHIP CAP.	82pF	25V	CH	TMK105CH820J-F	K22148236	VTX(USA)	9-	A	B4
C 1206	CHIP CAP.	0.0012uF	50V	B	GRM155B11H122KA01	K22178810		3-	A	C4
C 1207	CHIP CAP.	0.0012uF	50V	B	GRM155B11H122KA01	K22178810	FOR NYPD	9-	A	B4
C 1208	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		9-	A	B4
C 1208	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	B4
CD1001	CERAMIC DISC				ECDA450C24	H7901460		1-	A	C4
CF1001	CERAMIC FILTER				ALFYM450F=K	H3900531		1-	A	B4
CF1002	CERAMIC FILTER				ALFYM450G=K	H3900534		1-	A	C4
D 1001	DIODE				HVU131 TRF-E	G2070462		1-	B	c2
D 1002	DIODE				PTZ TE25 15A	G2070692		1-	B	c4
D 1003	DIODE				MA2S111-(TX)	G2070614		1-	A	B4
D 1004	DIODE				HVU131 TRF-E	G2070462		1-	A	A2
D 1005	DIODE				RB715F T106	G2070752		1-	A	A1

RF Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
D 1006	DIODE				MA2S111-(TX)	G2070614		1-	A	B1
D 1007	DIODE				UDZS TE-17 3.9B	G2070906		1-	A	B3
D 1008	DIODE				HVC350B-TRF-E	G2070596		1-	B	b1
D 1009	DIODE				HVC350B-TRF-E	G2070596		1-	B	b1
D 1010	DIODE				HVC350B-TRF-E	G2070596		1-	B	a1
D 1011	DIODE				HVC350B-TRF-E	G2070596		1-	B	a1
D 1012	DIODE				HVC350B-TRF-E	G2070596		1-	B	a1
D 1013	DIODE				HVC350B-TRF-E	G2070596		1-	B	a1
D 1014	DIODE				MA132WK-(TX)	G2070776		1-	A	B4
D 1015	DIODE				HVC350B-TRF-E	G2070596		1-	A	B3
D 1017	DIODE				MA2S111-(TX)	G2070614		1-	B	c2
D 1018	DIODE				HVC350B-TRF-E	G2070596		1-	A	C3
D 1019	DIODE				HVC350B-TRF-E	G2070596		1-	A	C3
D 1020	DIODE				HVC350B-TRF-E	G2070596		1-	A	B2
D 1021	DIODE				HVC350B-TRF-E	G2070596		1-	A	B2
D 1022	DIODE				HVC350B-TRF-E	G2070596		1-	A	B2
D 1023	DIODE				HVC350B-TRF-E	G2070596		1-	A	B2
D 1024	DIODE				MA132WK-(TX)	G2070776		1-	B	b4
D 1025	DIODE				DA221 TL	G2070178		1-	A	C3
D 1026	DIODE				MA132WK-(TX)	G2070776		1-	B	b4
D 1027	DIODE				DA221 TL	G2070178		1-	A	C3
D 1028	DIODE				MA2S111-(TX)	G2070614		1-	A	B2
D 1029	DIODE				DA221 TL	G2070178		1-	B	a4
D 1030	DIODE				MA2S111-(TX)	G2070614		1-	A	B4
F 1001	CHIPFUSE	4A			KAB2402-402NA31010	Q0000086		1-	A	A5
J 1001	CONNECTOR				9639S-24Y901	P1091183		1-	A	C2
L 1001	COIL	0.014uH			AS050425-14NK	L0022583		1-	B	c2
L 1002	COIL	0.018uH			AS030421-18NK	L0022584		1-	B	c2
L 1003	COIL	0.018uH			AS030421-18NK	L0022584		1-	A	A1
L 1004	COIL				E2 0.5-1.4-2.5T-L	L0022613		1-	A	A1
L 1005	M.RFC	0.27uH			LK1608 R27K-T	L1690411		1-	B	c1
L 1006	COIL	0.014uH			AS050425-14NK	L0022583		1-	A	A1
L 1008	COIL	0.014uH			AS050425-14NK	L0022583		1-	A	A2
L 1009	COIL	0.012uH			AS030321-12NK	L0022582		1-	B	c1
L 1010	COIL	0.012uH			AS030321-12NK	L0022582		1-	B	c1
L 1011	M.RFC	0.1uH		5%	C1608CB-R10J-RF	L1691063		1-	A	A2
L 1011	M.RFC	0.1uH		2%	C1608CB-R10G-RF	L1691045		7-	A	A2
L 1012	M.RFC	0.047uH			HK1608 47NJ-T	L1690524		1-	B	b1
L 1013	COIL	0.009uH			AS050325-9R0NK	L0022612		1-	A	A2
L 1014	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		1-	B	b1
L 1015	M.RFC	0.056uH			HK1608 56NJ-T	L1690525		1-	B	b1
L 1016	COIL	0.014uH			AS050425-14NK	L0022583		1-	B	a1
L 1017	COIL	0.014uH			AS050425-14NK	L0022583		1-	B	a1
L 1018	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		1-	A	A4
L 1019	COIL	0.014uH			AS050425-14NK	L0022583		1-	B	a1
L 1020	M.RFC	0.027uH			HK1608 27NJ-T	L1690521		1-	A	B3
L 1021	M.RFC	0.056uH			HK1608 56NJ-T	L1690525		1-	A	B3
L 1022	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		1-8	A	B4
L 1022	M.RFC	0.01uH			HK1608 10NJ-T	L1690516	FOR NYPD	9-	A	B4
L 1022	M.RFC	0.082uH			HK1608 82NJ-T	L1690527	VTX(USA)	9-	A	B4
L 1023	M.RFC	0.056uH			HK1608 56NJ-T	L1690525		1-	B	c3
L 1024	M.RFC	0.015uH			HK1608 15NJ-T	L1690518		1-	A	B4
L 1025	M.RFC	0.027uH			HK1608 27NJ-T	L1690521		1-	B	b3
L 1026	M.RFC	0.0082uH			HK1608 8N2J-T	L1690515		1-	B	b2
L 1026	M.RFC	0.015uH			HK1608 15NJ-T	L1690518		4-	B	b2
L 1027	M.RFC	0.027uH			HK1608 27NJ-T	L1690521		1-	B	b3
L 1028	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		1-	A	B3
L 1029	M.RFC	0.22uH			HK1608 R22J-T	L1690940		1-3	B	b2
L 1030	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		1-	A	B3
L 1031	COIL	0.025uH			AS030521-25NK	L0022585		1-	A	B3
L 1032	COIL	0.025uH			AS030521-25NK	L0022585		1-	A	B2
L 1033	M.RFC	1uH			LK1608 1R0K-T	L1690687		1-	B	a2
L 1034	M.RFC	0.33uH			LK1608 R33K-T	L1690412		1-	B	b3
L 1035	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		1-	A	B2
L 1036	M.RFC	0.56uH			LK1608 R56K-T	L1690415		1-	B	a3
L 1037	M.RFC	1uH			LK1608 1R0K-T	L1690687		1-	A	B2
L 1038	M.RFC	1uH			LK1608 1R0K-T	L1690687		1-	A	B3
L 1039	M.RFC	1uH			LK1608 1R0K-T	L1690687		1-	B	a4
L 1040	M.RFC	0.39uH			LK1608 R39K-T	L1690413		1-	B	a4
L 1041	M.RFC	0.1uH			HK1608 R10J-T	L1690528		1-	A	B4
L 1042	M.RFC	0.1uH			HK1608 R10J-T	L1690528		3-	A	C4
L 1043	M.RFC	0.1uH			HK1608 R10J-T	L1690528	FOR NYPD	9-	A	B4
MC1001	MICROPHONEELEMENT				SKB-2244S-C1033G04	M3290039		1-	B	b4
MC1001	MICROPHONEELEMENT				SKB-2244S-C1033MG	M3290040		8-	B	b4
MC1001	MICROPHONEELEMENT				OB-22S44-C1033MG	M3290048		19-	B	b4
MC1001	MICROPHONEELEMENT				0B-22S44-C1033MG H/F	M3290056		38-	B	b4
Q 1001	TRANSISTOR				XP1501-(TX)	G3070143		1-	A	B4
Q 1002	TRANSISTOR				CPH6102-TL	G3070223		1-	A	A4

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
Q 1003	TRANSISTOR				UMG2N TR	G3070088		1-	A	B5
Q 1004	IC				NJM2871AF05-TE1	G1093658		1-	B	b5
Q 1005	IC				BIC702M-TL	G1093398		1-	B	b1
Q 1006	TRANSISTOR				UN911F-(TX)	G3070150		1-	A	B4
Q 1006	TRANSISTOR				UNR911FJ0L	G3070349		10-	A	B4
Q 1007	IC				RA07M4452M	G1093763		1-	A	A4
Q 1008	TRANSISTOR				UN911F-(TX)	G3070150		1-	A	C2
Q 1008	TRANSISTOR				UNR911FJ0L	G3070349		10-	A	C2
Q 1009	TRANSISTOR				DTC144EE TL	G3070075		1-	A	C2
Q 1010	TRANSISTOR				DTC114TE TL	G3070225		1-	A	C2
Q 1011	TRANSISTOR				DTC144EE TL	G3070075		1-	A	B3
Q 1012	TRANSISTOR				2SC5226-4-TL	G3352268D		1-	A	B4
Q 1013	TRANSISTOR				2SC3356-T2B R25	G3333567E		1-	A	A4
Q 1014	TRANSISTOR				DTC114TE TL	G3070225		1-	A	B3
Q 1015	TRANSISTOR				DTC144EE TL	G3070075		1-	B	c3
Q 1016	TRANSISTOR				2SC5226-4-TL	G3352268D		1-	B	b3
Q 1017	TRANSISTOR				2SC5226-4-TL	G3352268D		1-	A	B3
Q 1018	IC				NJM12904R-TE1	G1093337		1-	A	B1
Q 1019	TRANSISTOR				DTC144EE TL	G3070075		1-	A	B3
Q 1020	TRANSISTOR				DTC114TE TL	G3070225		1-	A	B3
Q 1021	FET				2SK508-T2B K52 A	G3805087B		1-	A	B3
Q 1022	TRANSISTOR				2SC4227-T1 R34	G3342278D		1-	A	B3
Q 1023	IC				TA31136FNG(EL)	G1091605		1-	A	C3
Q 1024	TRANSISTOR				2SC4617 TL R	G3346178R		1-	B	b3
Q 1025	IC				SA7025DK	G1093014		1-	B	b3
Q 1026	TRANSISTOR				2SC4617 TL R	G3346178R		1-	A	C3
Q 1027	TRANSISTOR				2SC5226-4-TL	G3352268D		1-	B	a4
Q 1028	TRANSISTOR				2SC4617 TL R	G3346178R		1-	A	B2
Q 1029	IC				TA75S01F(TE85R.F)	G1091593		1-	B	b4
Q 1030	TRANSISTOR				DTC144EE TL	G3070075		1-	B	a4
Q 1031	TRANSISTOR				DTC144EE TL	G3070075		1-	B	a4
Q 1032	IC				SPM5001-TL-E	G1093686		1-	B	a2
R 1001	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B4
R 1002	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B4
R 1003	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	B4
R 1004	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	A1
R 1005	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B5
R 1006	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	A2
R 1007	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	A	A2
R 1008	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	B5
R 1009	CHIP RES.	150	1/10W	5%	RMC1/10T 151J	J24205151		1-	A	B2
R 1010	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	A1
R 1011	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b1
R 1012	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	b1
R 1013	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	b1
R 1014	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	b1
R 1016	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B1
R 1017	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	B1
R 1018	CHIP RES.	330	1/16W	5%	RMC1/16S 331JTH	J24189019		1-	B	b1
R 1019	CHIP RES.	27	1/16W	5%	RMC1/16S 270JTH	J24189006		1-	B	b1
R 1020	CHIP RES.	56k	1/16W	5%	RMC1/16S 563JTH	J24189046		1-	A	B1
R 1021	CHIP RES.	330	1/16W	5%	RMC1/16S 331JTH	J24189019		1-	B	b1
R 1022	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	A	B1
R 1023	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	B2
R 1024	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b1
R 1025	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C2
R 1026	CHIP RES.	56k	1/16W	5%	RMC1/16S 563JTH	J24189046		1-	A	B1
R 1028	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b1
R 1029	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-	A	B1
R 1029	CHIP RES.	1.2k	1/16W	5%	RMC1/16S 122JTH	J24189026		18-	A	B1
R 1030	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	A1
R 1031	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b2
R 1032	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B1
R 1033	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	a1
R 1034	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	B1
R 1035	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	B1
R 1036	CHIP RES.	18	1/16W	5%	RMC1/16S 180JTH	J24189004		1-	A	B4
R 1037	CHIP RES.	18	1/16W	5%	RMC1/16S 180JTH	J24189004		1-	A	B4
R 1038	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		1	A	A4
R 1038	CHIP RES.	22	1/16W	5%	RMC1/16S 220JTH	J24189005		2-8	A	A4
R 1038	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009	FOR NYPD	9-	A	A4
R 1038	CHIP RES.	22	1/16W	5%	RMC1/16S 220JTH	J24189005	VTX(USA)	9-	A	A4
R 1039	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	a2
R 1040	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	B1
R 1041	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	A	B2
R 1042	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	A	C2
R 1043	CHIP RES.	18	1/16W	5%	RMC1/16S 180JTH	J24189004		1-	A	B4
R 1044	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	B1

RF Unit

Parts List

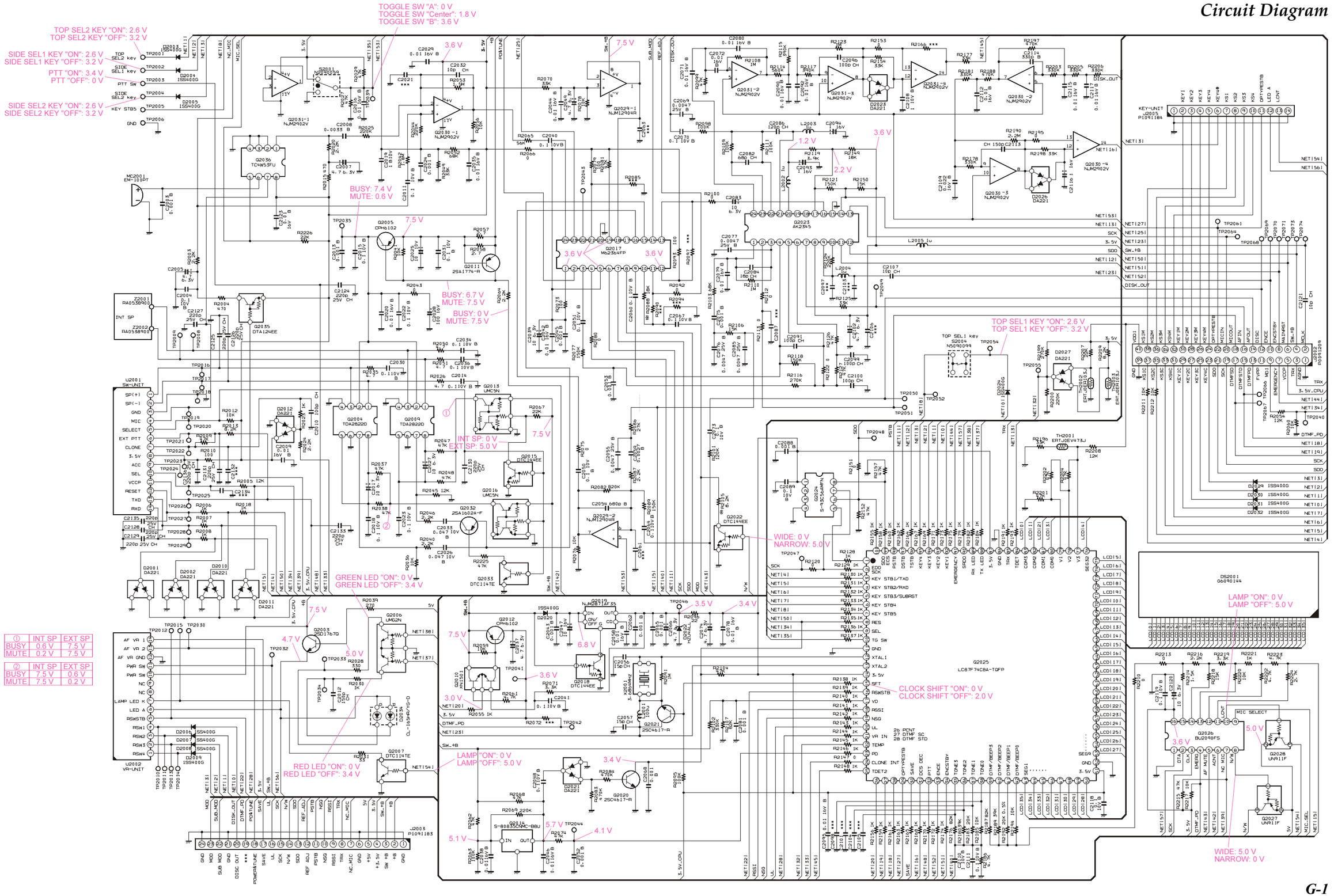
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1045	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	A	B2
R 1046	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-	A	A4
R 1047	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B4
R 1048	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	a1
R 1049	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	C2
R 1050	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	B	c3
R 1050	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		3-	B	c3
R 1051	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	A	B4
R 1052	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	C2
R 1053	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	B3
R 1054	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	A	C3
R 1055	CHIP RES.	560	1/16W	5%	RMC1/16S 561JTH	J24189022		1-	A	B3
R 1056	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	A	B3
R 1058	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	B	c3
R 1059	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	a2
R 1060	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	B3
R 1061	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C4
R 1062	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	A	B4
R 1063	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	B3
R 1064	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	B	a2
R 1065	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	A	B3
R 1067	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	C3
R 1068	CHIP RES.	56	1/16W	5%	RMC1/16S 560JTH	J24189010		1-	B	c3
R 1069	CHIP RES.	56k	1/16W	5%	RMC1/16S 563JTH	J24189046		1-	B	b3
R 1070	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	B3
R 1071	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	B3
R 1072	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	A	B2
R 1073	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-	A	C3
R 1074	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	b3
R 1075	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	b3
R 1076	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	c2
R 1077	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	a3
R 1078	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	b3
R 1079	CHIP RES.	2.7k	1/16W	5%	RMC1/16S 272JTH	J24189030		1-	A	C4
R 1080	CHIP RES.	22	1/16W	5%	RMC1/16S 220JTH	J24189005		1-	B	b3
R 1081	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	b2
R 1082	CHIP RES.	560k	1/16W	5%	RMC1/16S 564JTH	J24189058		1-	A	C3
R 1083	CHIP RES.	3.9k	1/16W	5%	RMC1/16S 392JTH	J24189032		1-	A	C4
R 1084	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C3
R 1085	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C3
R 1086	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	C3
R 1087	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-	A	C3
R 1088	CHIP RES.	680	1/16W	5%	RMC1/16S 681JTH	J24189023		1-	A	C3
R 1089	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	C2
R 1090	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	b4
R 1091	CHIP RES.	22	1/16W	5%	RMC1/16S 220JTH	J24189005		1-	B	b3
R 1092	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C2
R 1093	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	C2
R 1094	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	C3
R 1095	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	b3
R 1096	CHIP RES.	22	1/16W	5%	RMC1/16S 220JTH	J24189005		1-	A	C4
R 1097	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	A	C3
R 1098	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	b2
R 1099	CHIP RES.	680	1/16W	5%	RMC1/16S 681JTH	J24189023		1-	B	a4
R 1100	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	b4
R 1101	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	b2
R 1102	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-	A	C3
R 1103	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	C3
R 1104	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	a4
R 1105	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	B	b2
R 1106	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	b4
R 1107	CHIP RES.	1.8k	1/16W	5%	RMC1/16S 182JTH	J24189028		1-	B	b2
R 1108	CHIP RES.	22	1/16W	5%	RMC1/16S 220JTH	J24189005		1-	B	a3
R 1109	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	C3
R 1110	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	b4
R 1111	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	B	a4
R 1112	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	B	a4
R 1113	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	a4
R 1114	CHIP RES.	270	1/16W	5%	RMC1/16S 271JTH	J24189018		1-	B	a4
R 1115	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	b4
R 1116	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	b4
R 1117	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C3
R 1118	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b4
R 1119	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	b5
R 1120	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	A	C3
R 1121	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b4
R 1122	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	a4
R 1123	CHIP RES.	680	1/16W	5%	RMC1/16S 681JTH	J24189023		1-	B	a4

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1124	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	A	C3
R 1125	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034		1-	B	b4
R 1126	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	B2
R 1127	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	c4
R 1128	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b4
R 1129	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	b4
R 1130	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	c4
R 1131	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	A	C3
R 1133	CHIP RES.	18k	1/16W	5%	RMC1/16S 183JTH	J24189040		1-	B	b4
R 1135	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	B4
R 1136	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	NON IS	9-	A	C1
R 1137	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	NON IS	9-	A	C1
T 1001	BALUN TRANSFOMERS				#458DB-1676=P3	L0190256		1-	B	a2
T 1002	BALUN TRANSFOMERS				#458DB-1676=P3	L0190256		1-	B	b2
T 1003	BALUN TRANSFOMERS				#617PT-1587=P3	L0190267		1-	B	a3
X 1001	XTAL OSC	14.6MHz			TTS05VS-P2 14.6MHZ	H9500740		1-	B	b4
XF1001	XTAL FILTER				MFT44P2 44.25MHZ	H1102359		1-	B	a4
	SPECIAL NUT					RA0539000		1-		
	SHIELD CASE VCO					RA0208100		1-		
	HOLDER PLATE				(PM)	R0152370A		1-		

Note

CNTL Unit (Lot. 1 ~ 8)

Circuit Diagram

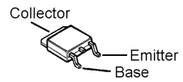


①	INT SP	EXT SP
BUSY	0.6 V	7.5 V
MUTE	0.2 V	7.5 V

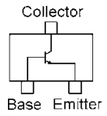
②	INT SP	EXT SP
BUSY	7.5 V	0.6 V
MUTE	7.5 V	0.2 V

CNTL Unit (Lot. 1 ~ 8)

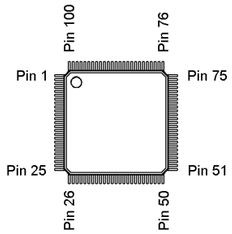
Note



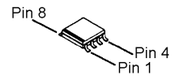
2SD1767 (DC)
(Q2003)



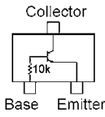
2SC4617 (BR)
(Q2002, 2021)



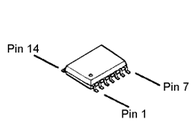
LC87F74C8A
(Q2025)



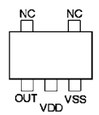
S-93C56AMFN
(Q2024)



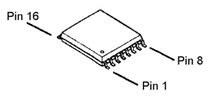
DTC114TE (04)
(Q2002, 2021)



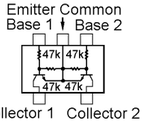
NJM2902V
(Q2031)



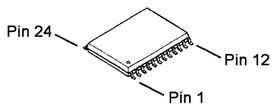
S-80835CNMC
(Q2014)



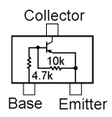
BU2090FS
(Q2026)



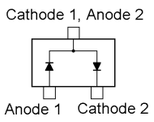
UMG2N (G2)
(Q2006)



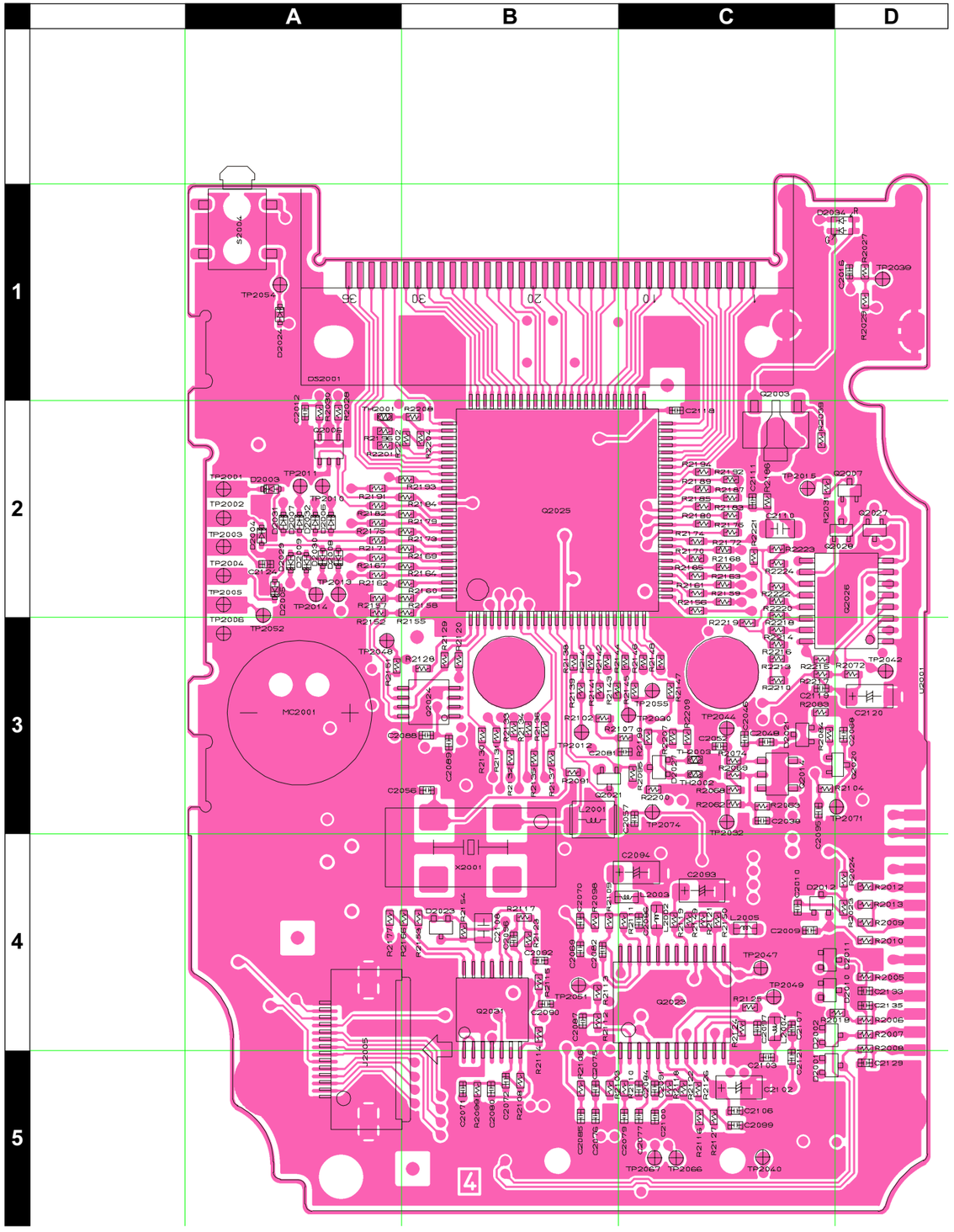
AK2345
(Q2023)



UN911F (6O)
(Q2027, 2028)

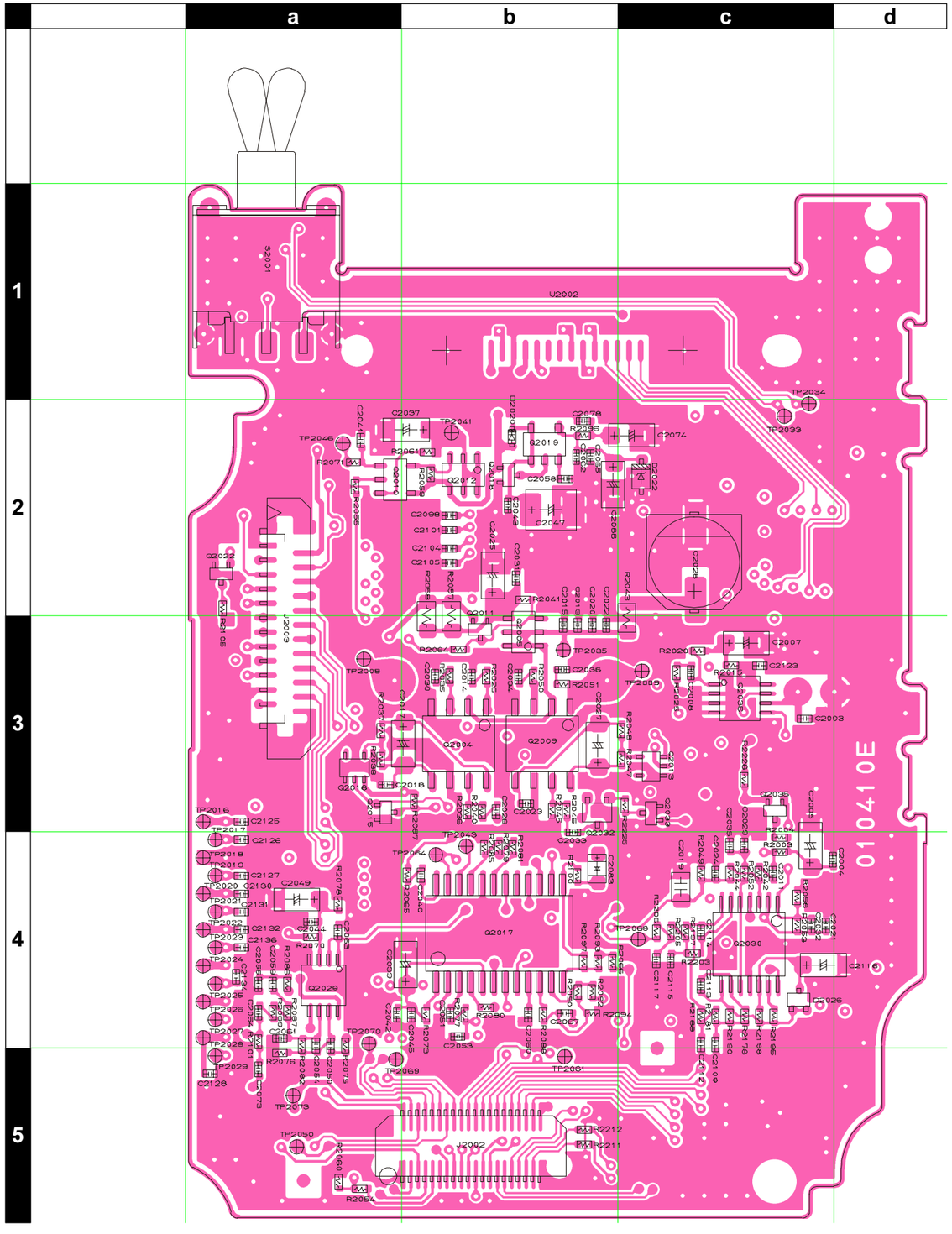


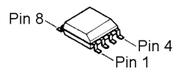
DA221 (K)
(D2001, 2002, 2010, 2011, 2012, 2021, 2023, 2027)



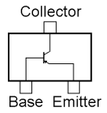
CNTL Unit (Lot. 1 ~ 8)

Parts Layout (Side B)

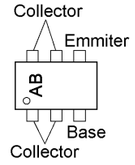




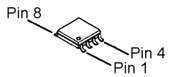
TDA2822D013TR
(Q2004, 2009)



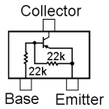
2SA1602A (MF)
(Q2032)
2SA1774 (FR)
(Q2011)



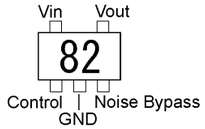
CPH6102 (AB)
(Q2005, 2012)



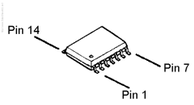
NJM12904R
(Q2029)
TC4W53FU
(Q2036)



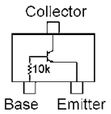
DTA124EE (15)
(Q2035)



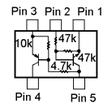
NJM2871AF35 (82)
(Q2019)



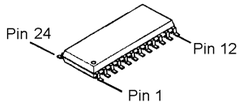
NJM2902V
(Q2030)



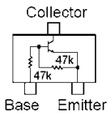
DTC114TE (04)
(Q2033)



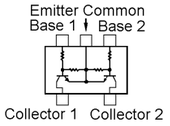
UMC5N (C5)
(Q2013, 2016)



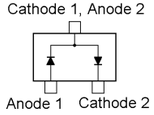
M62364FP
(Q2017)



DTC144EE (26)
(Q2015, 2018, 2022)



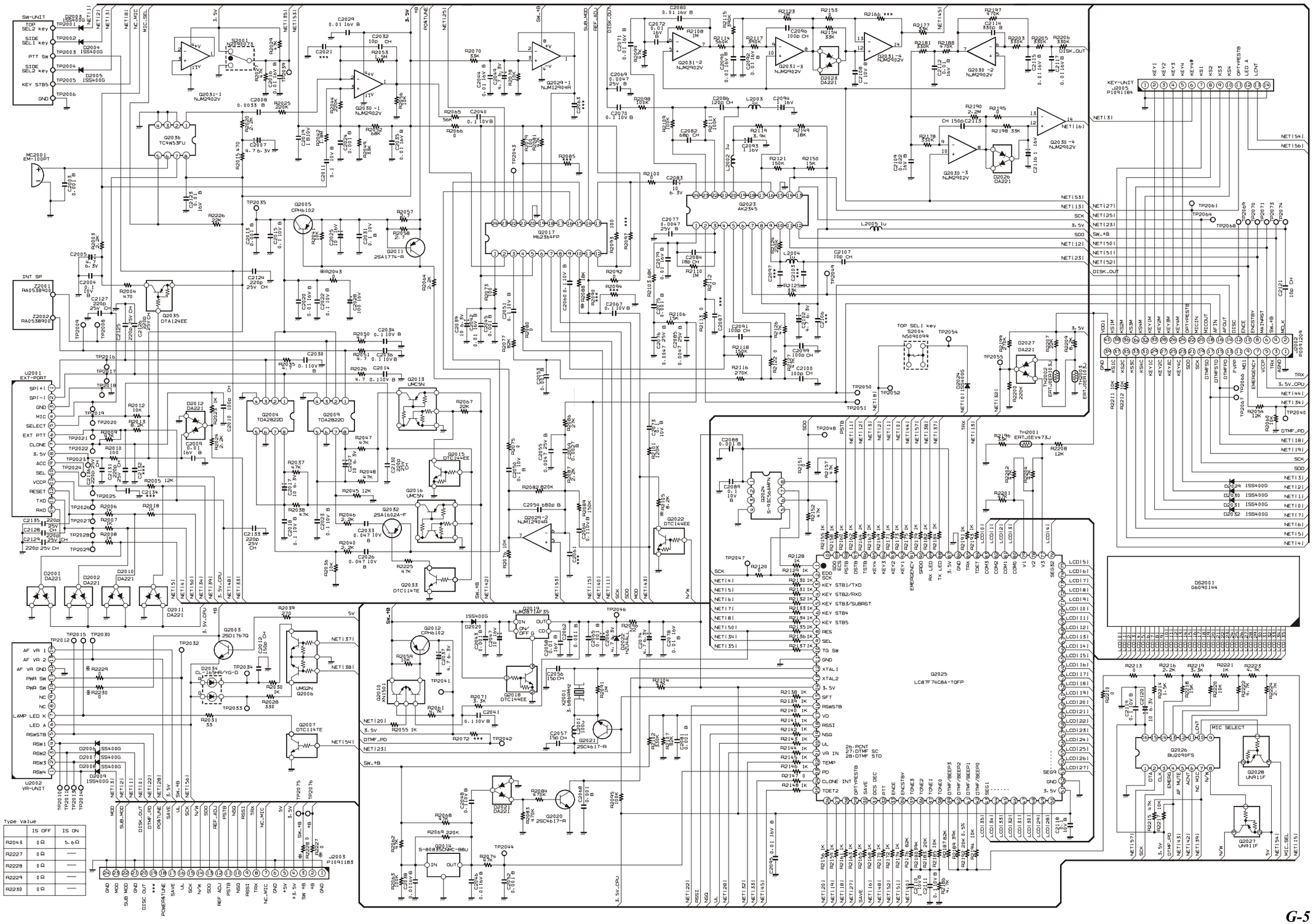
XN1501 (R5)
(Q2010)



DA221 (K)
(D2026)

CNTL Unit (Lot. 9 ~)

Circuit Diagram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SIDE SEL1 key
PTT SW
SIDE SEL2 key
KEY STB5
GND
KEY-UNIT
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NET161
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NET531
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NET551
NET561
NET571
DISK_OUT
SCK
SDO
SW-+B
3.5V
TRX
3.5V_CPU
MIC SELECT
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LC87F74C8A-TQFP
Q2026
BU2040FS
Q2027
UNR11F
Q2028
UNR11F
U2002
VR-UNIT
U2001
EXT-PORT
INT SP
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RA0538900
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RA0558900
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D2011 DA221
D2012 DA221
D2026 DA221
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Q2004 TDA2822D
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Q2013 UMC5N
Q2014 DTC114EE
Q2015 DTC114EE
Q2016 UMC5N
Q2017 M62364FP
Q2018 DTC144EE
Q2019 NJM2904R
Q2020 2SC4617-R
Q2021 2SC4617-R
Q2022 DTC144EE
Q2023 AK2345
Q2029-1 NJM2904R
Q2029-2 NJM2904R
Q2030-1 NJM2902V
Q2030-2 NJM2902V
Q2030-3 NJM2902V
Q2030-4 NJM2902V
Q2031-1 NJM2902V
Q2031-2 NJM2902V
Q2031-3 NJM2902V
Q2031-4 NJM2902V
Q2032 2SA1602A-F
Q2033 DTC114TE
Q2034 CL-165HR/YG-D
Q2035 DTA124EE
Q2036 TC4W53FU
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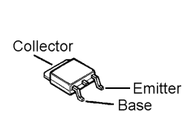
TP2039
TP2040

CNTL Unit (Lot. 9 ~)

Note

Parts Layout (Side A)



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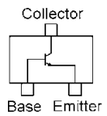
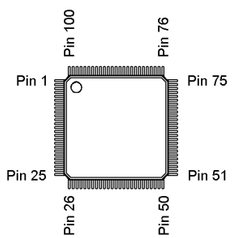
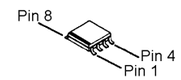
(Q2003)



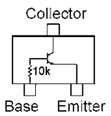
2SC4617 (BR)
(Q2002, 2021)



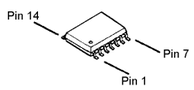
LC87F74C8A
(Q2025)



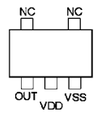
S-93C56AMFN
(Q2024)



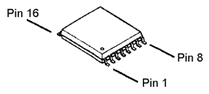
DTC114TE (04)
(Q2002, 2021)



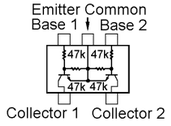
NJM2902V
(Q2031)



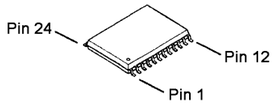
S-80835CNMC
(Q2014)



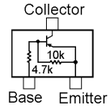
BU2090FS
(Q2026)



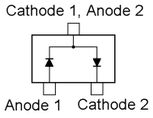
UMG2N (G2)
(Q2006)



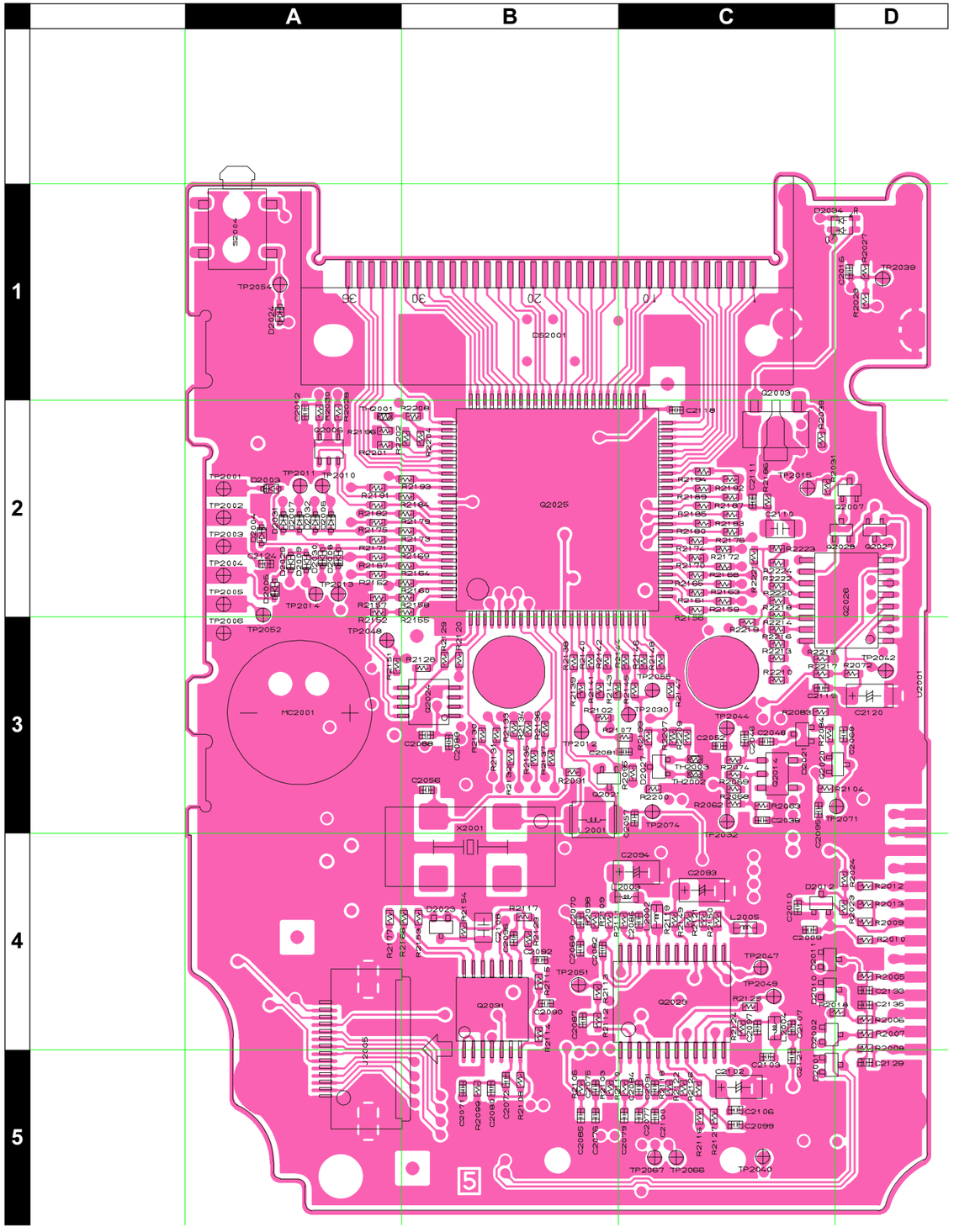
AK2345
(Q2023)



UN911F (6O)
(Q2027, 2028)

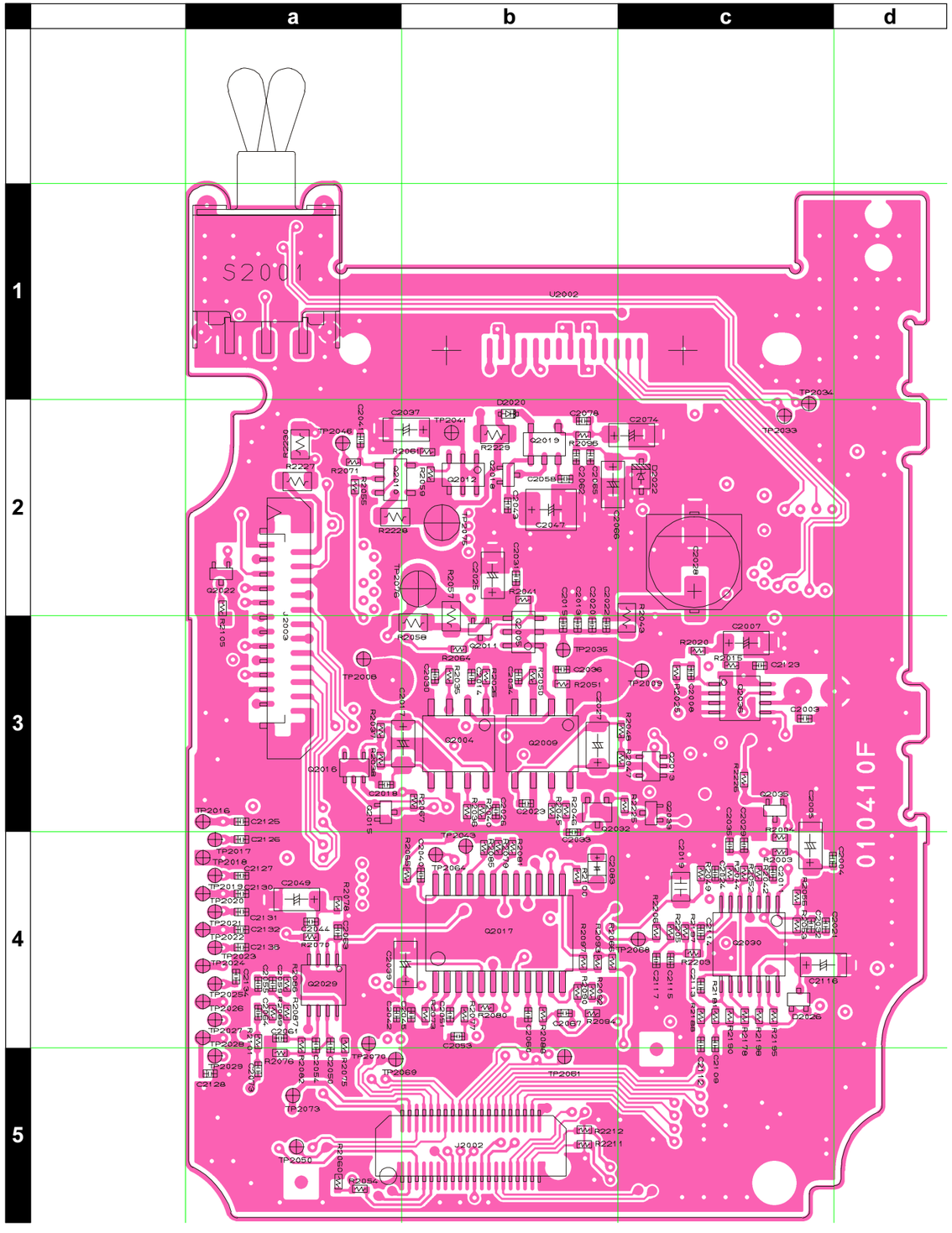


DA221 (K)
(D2001, 2002, 2010, 2011, 2012, 2021, 2023, 2027)



CNTL Unit (Lot. 9 ~)

Parts Layout (Side B)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U2002
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C2175

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	PCB with Components with VR Unit & SW Unit					CS1814002 CS1814004 CS1814006	VTX Non-IS Type EXP VTX IS Type			
	Printed Circuit Board					FR010410E FR010410F	1-8 9-			
C 2003	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	c3
C 2004	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	d4
C 2005	CHIP TA.CAP.	4.7uF	6.3V		TEESVA0J475M8R	K78080017		1-	B	c4
C 2007	CHIP TA.CAP.	4.7uF	6.3V		TMCMA0J475MTR	K78080026		1-	B	c3
C 2008	CHIP CAP.	0.0033uF	50V	B	GRM155B11H332KA01D	K22178815		1-	B	c3
C 2009	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C4
C 2009	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	C4
C 2010	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	A	C4
C 2011	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	c4
C 2012	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	A	A2
C 2013	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b3
C 2014	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b3
C 2015	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b3
C 2016	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	D1
C 2016	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	D1
C 2017	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	B	b3
C 2018	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	a3
C 2019	CHIP CAP.	1uF	10V	B	GRM219B11A105KC01D	K22100803		1-	B	c4
C 2020	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b3
C 2020	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	b3
C 2022	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b3
C 2023	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b3
C 2024	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	c4
C 2025	CHIP TA.CAP.	10uF	10V		TEESVA1A106M8R	K78100028		1-	B	b2
C 2025	CHIP TA.CAP.	10uF	16V		TEESVA1C106M8R	K78120077		9-	B	b2
C 2026	CHIP CAP.	0.047uF	10V	B	GRM155B11A473KA01D	K22108801		1-	B	b3
C 2027	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	B	b3
C 2028	AL.ELECTRO.CAP.	100uF	16V		EEE1CA101WP	K48120012		1-	B	c2
C 2029	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c4
C 2029	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	c4
C 2030	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b3
C 2031	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b2
C 2032	CHIP CAP.	10pF	50V	CH	GRM1552C1H100JZ01D	K22178212		1-	B	c4
C 2033	CHIP CAP.	0.047uF	10V	B	GRM155B11A473KA01D	K22108801		1-	B	b3
C 2034	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b3
C 2035	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c4
C 2035	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	c4
C 2036	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b3
C 2037	CHIP TA.CAP.	4.7uF	6.3V		TEESVA0J475M8R	K78080017		1-	B	b2
C 2038	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C3
C 2038	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	C3
C 2039	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	B	b4
C 2040	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b4
C 2041	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	a2
C 2042	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b4
C 2042	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	b4
C 2043	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b2
C 2044	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a4
C 2044	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	a4
C 2045	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b4
C 2046	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C3
C 2046	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	C3
C 2047	CHIP TA.CAP.	10uF	16V		TEESVB21C106M8R	K78120025		1-	B	b2
C 2048	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	A	C3
C 2049	CHIP TA.CAP.	4.7uF	6.3V		TEESVA0J475M8R	K78080017		1-	B	a4
C 2050	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	a4
C 2051	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b4
C 2052	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	C3
C 2053	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b4
C 2054	CHIP CAP.	680pF	50V	B	GRM155B11H681KA01D	K22178807		1-	B	a4
C 2055	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	B	a4
C 2055	CHIP CAP.	0.0047uF	50V	B	GRM155B11H472KA01D	K22178838		29-	B	a4
C 2056	CHIP CAP.	15pF	50V	CH	GRM1552C1H150JZ01D	K22178216		1-	A	B3
C 2057	CHIP CAP.	15pF	50V	CH	GRM1552C1H150JZ01D	K22178216		1-	A	C3
C 2058	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b2
C 2058	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	b2
C 2059	CHIP CAP.	0.0027uF	50V	B	GRM155B11H272KA01D	K22178814		1-	B	a4
C 2060	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b4
C 2062	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b2
C 2064	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	a4
C 2065	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b2
C 2066	CHIP TA.CAP.	4.7uF	6.3V		TMCMA0J475MTR	K78080026		1-	B	c2
C 2067	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	b4

CNTL Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 2068	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	D3
C 2069	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	A	B4
C 2069	CHIP CAP.	0.0047uF	50V	B	GRM155B11H472KA01D	K22178838		29-	A	B4
C 2070	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	A	B4
C 2071	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B5
C 2071	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	B5
C 2072	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B5
C 2072	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	B5
C 2073	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	a5
C 2074	CHIP TA.CAP.	4.7uF	6.3V		TEESVA0J475M8R	K78080017		1-	B	c2
C 2075	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B5
C 2076	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	A	B5
C 2076	CHIP CAP.	0.0047uF	50V	B	GRM155B11H472KA01D	K22178838		29-	A	B5
C 2077	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	A	C5
C 2077	CHIP CAP.	0.0047uF	50V	B	GRM155B11H472KA01D	K22178838		29-	A	C5
C 2078	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b2
C 2078	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	b2
C 2079	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C5
C 2079	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	C5
C 2080	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B5
C 2080	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	B5
C 2081	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	C3
C 2082	CHIP CAP.	68pF	50V	CH	GRM1552C1H680JZ01D	K22178232		1-	A	B4
C 2083	CHIP TA.CAP.	10uF	6.3V		TEESVP0J106M8R	K78080055		1-	B	b4
C 2084	CHIP CAP.	18pF	50V	CH	GRM1552C1H180JZ01D	K22178218		1-	A	C5
C 2085	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	A	B5
C 2085	CHIP CAP.	0.0047uF	50V	B	GRM155B11H472KA01D	K22178838		29-	A	B5
C 2086	CHIP CAP.	120pF	50V	CH	GRM1552C1H121JA01D	K22178238		1-	A	C4
C 2088	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B3
C 2089	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	A	B3
C 2090	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B4
C 2090	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	B4
C 2091	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	A	C5
C 2092	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B4
C 2092	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	B4
C 2093	CHIP TA.CAP.	1uF	16V		TMCSA1C105MTR	K78120023		1-	A	C4
C 2094	CHIP TA.CAP.	1uF	16V		TMCSA1C105MTR	K78120023		1-	A	C4
C 2095	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C3
C 2095	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	A	C3
C 2096	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	A	B4
C 2099	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	A	C5
C 2100	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	A	C5
C 2102	CHIP TA.CAP.	4.7uF	6.3V		TMCMA0J475MTR	K78080026		1-	A	C5
C 2107	CHIP CAP.	10pF	50V	CH	GRM1552C1H100JZ01D	K22178212		1-	A	C4
C 2108	CHIP CAP.	1uF	10V	B	GRM219B11A105KC01D	K22100803		1-	A	B4
C 2109	CHIP CAP.	0.022uF	16V	B	GRM155B11C223KA01D	K22128806		1-	B	c4
C 2110	CHIP CAP.	1uF	10V	B	GRM219B11A105KC01D	K22100803		1-	A	C2
C 2111	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	A	C2
C 2112	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c4
C 2112	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	c4
C 2113	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	B	c4
C 2114	CHIP CAP.	330pF	50V	B	GRM155B11H331KA01D	K22178803		1-	B	c4
C 2115	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c4
C 2115	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	c4
C 2116	CHIP TA.CAP.	1uF	16V		TMCSA1C105MTR	K78120023		1-	B	c4
C 2117	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c4
C 2117	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	c4
C 2118	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	A	C2
C 2119	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	A	C3
C 2120	CHIP TA.CAP.	10uF	6.3V		TEESVA0J106M8R	K78080027		1-	A	D3
C 2121	CHIP CAP.	10pF	50V	CH	GRM1552C1H100JZ01D	K22178212		1-	A	C5
C 2123	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c3
C 2123	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	c3
C 2124	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	A	A2
C 2124	CHIP CAP.	220pF	50V	CH	GRM1552C1H221JA01D	K22179713		29-	A	A2
C 2125	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	B	a3
C 2125	CHIP CAP.	220pF	50V	CH	GRM1552C1H221JA01D	K22179713		29-	B	a3
C 2126	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	B	a4
C 2126	CHIP CAP.	220pF	50V	CH	GRM1552C1H221JA01D	K22179713		29-	B	a4
C 2127	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	B	a4
C 2127	CHIP CAP.	220pF	50V	CH	GRM1552C1H221JA01D	K22179713		29-	B	a4
C 2128	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	B	a5
C 2128	CHIP CAP.	220pF	50V	CH	GRM1552C1H221JA01D	K22179713		29-	B	a5
C 2129	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	A	D5
C 2129	CHIP CAP.	220pF	50V	CH	GRM1552C1H221JA01D	K22179713		29-	A	D5
C 2130	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	B	a4
C 2130	CHIP CAP.	220pF	50V	CH	GRM1552C1H221JA01D	K22179713		29-	B	a4
C 2131	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	B	a4

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 2131	CHIP CAP.	220pF	50V	CH	GRM1552C1H221JA01D	K22179713		29-	B	a4
C 2133	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	A	D4
C 2133	CHIP CAP.	220pF	50V	CH	GRM1552C1H221JA01D	K22179713		29-	A	D4
C 2135	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	A	D4
C 2135	CHIP CAP.	220pF	50V	CH	GRM1552C1H221JA01D	K22179713		29-	A	D4
C 2136	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	B	a4
C 2136	CHIP CAP.	220pF	50V	CH	GRM1552C1H221JA01D	K22179713		29-	B	a4
D 2001	DIODE				DA221 TL	G2070178		1-	A	C5
D 2002	DIODE				DA221 TL	G2070178		1-	A	C4
D 2003	DIODE				1SS400G T2R	G2070934		1-	A	A2
D 2004	DIODE				1SS400G T2R	G2070934		1-	A	A2
D 2005	DIODE				1SS400G T2R	G2070934		1-	A	A2
D 2006	DIODE				1SS400G T2R	G2070934		1-	A	A2
D 2007	DIODE				1SS400G T2R	G2070934		1-	A	A2
D 2008	DIODE				1SS400G T2R	G2070934		1-	A	A2
D 2009	DIODE				1SS400G T2R	G2070934		1-	A	A2
D 2010	DIODE				DA221 TL	G2070178		1-	A	C4
D 2011	DIODE				DA221 TL	G2070178		1-	A	C4
D 2012	DIODE				DA221 TL	G2070178		1-	A	C4
D 2020	DIODE				1SS400G T2R	G2070934		1-	B	b2
D 2021	DIODE				DA221 TL	G2070178		1-	A	C3
D 2022	DIODE				HZU4ALL-TR	G2070428		1-	B	c2
D 2023	DIODE				DA221 TL	G2070178		1-	A	B4
D 2024	DIODE				1SS400G T2R	G2070934		1-	A	A1
D 2026	DIODE				DA221 TL	G2070178		1-	B	c4
D 2027	DIODE				DA221 TL	G2070178		1-	A	C3
D 2029	DIODE				1SS400G T2R	G2070934		1-	A	A2
D 2030	DIODE				1SS400G T2R	G2070934		1-	A	A2
D 2031	DIODE				1SS400G T2R	G2070934		1-	A	A2
D 2032	DIODE				1SS400G T2R	G2070934		1-	A	A2
D 2034	LED				CL-165HR/YG-D-T	G2070860		1-	A	D1
DS2001	LCD				J015003	G6090144		1-	A	B1
J 2002	CONNECTOR				AXK6S40535P	P0091209		1-	B	b5
J 2003	CONNECTOR				9639S-24Y901	P1091183		1-	B	a3
J 2005	CONNECTOR				9637S-14-Y905	P1091184		1-	A	A5
L 2001	M.RFC	100uH			FLC32T-101J	L1690227		1-	A	B3
L 2002	M.RFC	1uH			LK1608 1R0K-T	L1690687		1-	A	C4
L 2003	M.RFC	1uH			LK1608 1R0K-T	L1690687		1-	A	C4
L 2004	M.RFC	1uH			LK1608 1R0K-T	L1690687		1-	A	C4
L 2005	M.RFC	1uH			LK1608 1R0K-T	L1690687		1-	A	C4
MC2001	MIC.ELEMENT				EM-100PT	M3290029		1-	A	A3
Q 2003	TRANSISTOR				2SD1767 T100 Q	G3417677Q		1-	A	C2
Q 2004	IC				TDA2822D013TR	G1091542		1-	B	b3
Q 2005	TRANSISTOR				CPH6102-TL	G3070223		1-	B	b3
Q 2006	TRANSISTOR				UMG2N TR	G3070088		1-	A	A2
Q 2007	TRANSISTOR				DTC114TE TL	G3070225		1-	A	D2
Q 2009	IC				TDA2822D013TR	G1091542		1-	B	b3
Q 2010	TRANSISTOR				XN1501-(TX)	G3070149		1-	B	b2
Q 2011	TRANSISTOR				2SA1774 TL R	G3117748R		1-	B	b3
Q 2012	TRANSISTOR				CPH6102-TL	G3070223		1-	B	b2
Q 2013	TRANSISTOR				UMC5N TR	G3070137		1-	B	c3
Q 2014	IC				S-80835CNMC-B8U-T2-G	G1093606		1-	A	C3
Q 2015	TRANSISTOR				DTC144EE TL	G3070075		1-	B	a3
Q 2016	TRANSISTOR				UMC5N TR	G3070137		1-	B	a3
Q 2017	IC				M62364FP 600D	G1093033		1-	B	b4
Q 2018	TRANSISTOR				DTC144EE TL	G3070075		1-	B	b2
Q 2019	IC				NJM2871AF35(TAPE)	G1093899		1-	B	b2
Q 2020	TRANSISTOR				2SC4617 TL R	G3346178R		1-	A	D3
Q 2021	TRANSISTOR				2SC4617 TL R	G3346178R		1-	A	B3
Q 2022	TRANSISTOR				DTC144EE TL	G3070075		1-	B	a2
Q 2023	IC				AK2345CP-E2	G1093184		1-	A	C4
Q 2024	IC				S-93C56AMFN-TB-G	G1093348		1-	A	B3
Q 2025	IC				LC87F74C8A-TQFP-E	※		1-	A	B2
Q 2025	IC				LC87F7BC8A-F56G2-E	※		10-	A	B2
Q 2026	IC				BU2090FS-E2	G1092187		1-	A	D2
Q 2027	TRANSISTOR				UN911F-(TX)	G3070150		1-	A	D2
Q 2027	TRANSISTOR				UNR911FJ0L	G3070349		10-	A	D2
Q 2028	TRANSISTOR				UN911F-(TX)	G3070150		1-	A	D2
Q 2028	TRANSISTOR				UNR911FJ0L	G3070349		10-	A	D2
Q 2029	IC				NJM12904R-TE1	G1093337		1-	B	a4
Q 2030	IC				NJM2902V-TE1	G1091679		1-	B	c4
Q 2031	IC				NJM2902V-TE1	G1091679		1-	A	B4
Q 2032	TRANSISTOR				2SA1602A-T111-1F	G3116028F		1-	B	b3
Q 2032	TRANSISTOR				ISA1602AM1-T111-1F	G3070380		23-	B	b3
Q 2033	TRANSISTOR				DTC114TE TL	G3070225		1-	B	c3
Q 2035	TRANSISTOR				DTA124EE TL	G3070116		1-	B	c3
Q 2036	IC				TC4W53FU(TE12L_F)	G1091675		1-	B	c3
R 2003	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	c4

※: Please contact Vertex Standard

CNTL Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 2004	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	c4
R 2005	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	A	D4
R 2006	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	D4
R 2007	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	D4
R 2008	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	D5
R 2009	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	D4
R 2010	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	D4
R 2012	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	D4
R 2013	CHIP RES.	8.2k	1/16W	5%	RMC1/16S 822JTH	J24189036		1-	A	D4
R 2015	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	c3
R 2018	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C4
R 2020	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	c3
R 2023	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	D4
R 2024	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	D4
R 2025	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	c3
R 2026	CHIP RES.	4.7	1/16W	5%	RMC1/16S 4R7JTH	J24189066		1-	B	b3
R 2027	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	D1
R 2028	CHIP RES.	330	1/16W	5%	RMC1/16S 331JTH	J24189019		1-	A	A2
R 2029	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	D1
R 2030	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	A2
R 2031	CHIP RES.	33	1/16W	5%	RMC1/16S 330JTH	J24189007		1-	A	C2
R 2035	CHIP RES.	4.7	1/16W	5%	RMC1/16S 4R7JTH	J24189066		1-	B	b3
R 2036	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b3
R 2037	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a3
R 2038	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a3
R 2039	CHIP RES.	270	1/16W	5%	RMC1/16S 271JTH	J24189018		1-	A	C2
R 2040	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	b3
R 2041	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b2
R 2042	CHIP RES.	1.8M	1/16W	5%	RMC1/16S 185JTH	J24189064		1-	B	c4
R 2043	CHIP RES.	5.6	1/10W	5%	RMC1/10T 5R6J	J24205569	FOR NYPD	1-	B	c3
R 2043	CHIP RES.	5.6	1/10W	5%	RMC1/10T 5R6J	J24205569	IS VER.	9-	B	c3
R 2043	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	NON IS	9-	B	c3
R 2043	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VTX(USA)	1-8	B	c3
R 2044	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	c4
R 2045	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	b3
R 2046	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	b3
R 2047	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	c3
R 2048	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	c3
R 2049	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	c4
R 2050	CHIP RES.	4.7	1/16W	5%	RMC1/16S 4R7JTH	J24189066		1-	B	b3
R 2051	CHIP RES.	4.7	1/16W	5%	RMC1/16S 4R7JTH	J24189066		1-	B	b3
R 2052	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	B	c4
R 2053	CHIP RES.	1.5M	1/16W	5%	RMC1/16S 155JTH	J24189063		1-	B	c4
R 2054	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	a5
R 2055	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	a2
R 2056	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	c4
R 2057	CHIP RES.	2.7	1/10W	5%	RMC1/10T 2R7J	J24205279		1-	B	b2
R 2058	CHIP RES.	2.7	1/10W	5%	RMC1/10T 2R7J	J24205279		1-	B	b3
R 2059	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b2
R 2060	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a5
R 2061	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	b2
R 2062	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	C3
R 2063	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	C3
R 2064	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	b3
R 2065	CHIP RES.	56k	1/16W	5%	RMC1/16S 563JTH	J24189046		1-	B	b4
R 2066	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	c4
R 2067	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	b3
R 2068	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	C3
R 2069	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	A	C3
R 2070	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	a4
R 2071	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	a2
R 2073	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	b4
R 2074	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	C3
R 2075	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	a4
R 2076	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a5
R 2077	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	B	b4
R 2077	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		3-	B	b4
R 2078	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a4
R 2079	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	b4
R 2080	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	b4
R 2081	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	b4
R 2082	CHIP RES.	820k	1/16W	5%	RMC1/16S 824JTH	J24189060		1-	B	a4
R 2083	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	C3
R 2084	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	C3
R 2086	CHIP RES.	27k	1/16W	5%	RMC1/16S 273JTH	J24189042		1-	B	a4
R 2087	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	a4
R 2088	CHIP RES.	18k	1/16W	5%	RMC1/16S 183JTH	J24189040		1-	B	b4
R 2089	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	B	a4

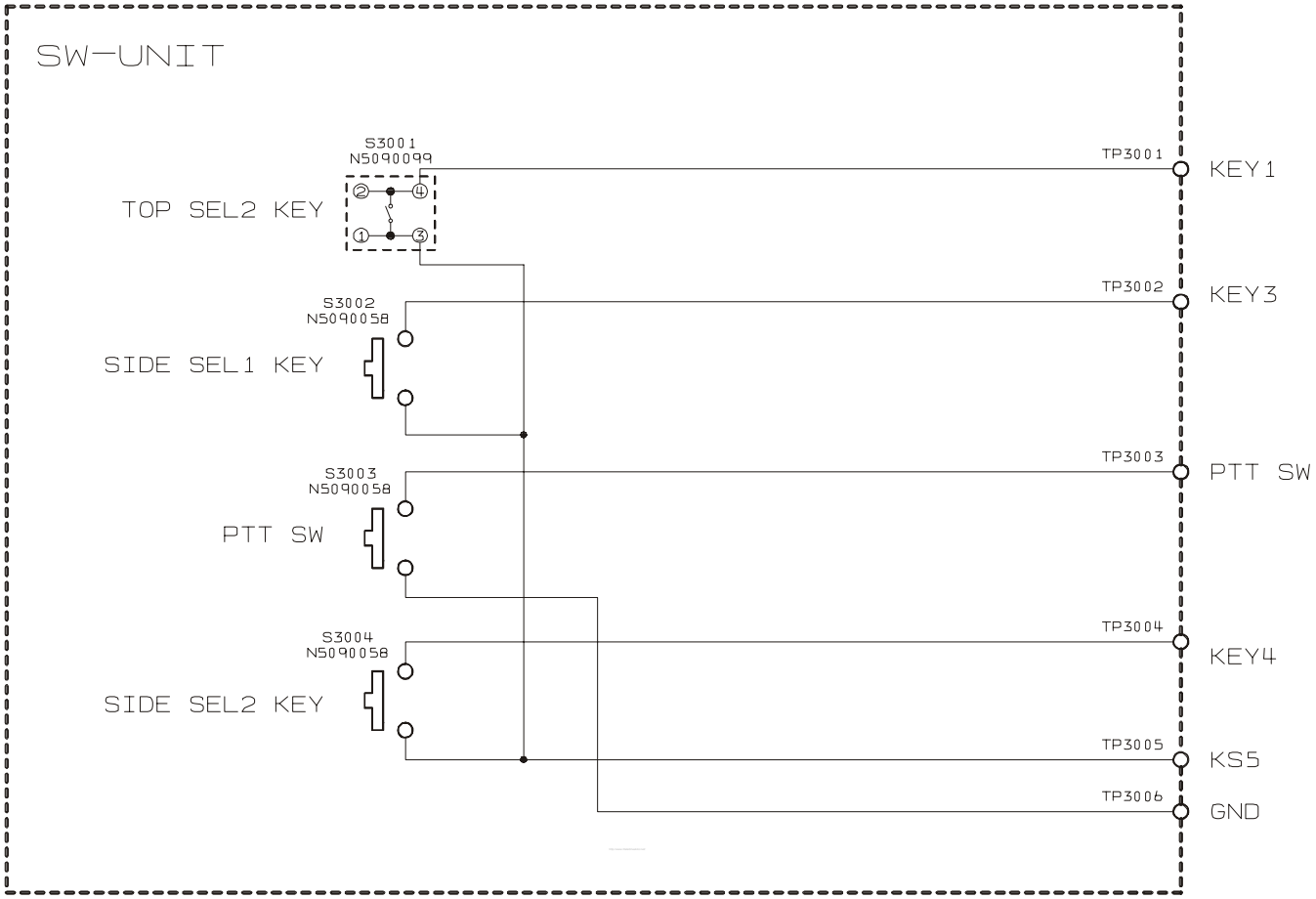
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 2091	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	A	B3
R 2092	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	b4
R 2093	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	b4
R 2095	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	C3
R 2096	CHIP RES.	22	1/16W	5%	RMC1/16S 220JTH	J24189005		1-	B	b2
R 2098	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	B4
R 2099	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	B5
R 2100	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	b4
R 2101	CHIP RES.	120k	1/16W	5%	RMC1/16S 124JTH	J24189050		1-	B	a4
R 2102	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	A	B3
R 2103	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	A	B5
R 2104	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	C3
R 2105	CHIP RES.	8.2k	1/16W	5%	RMC1/16S 822JTH	J24189036		1-	B	a2
R 2106	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039		1-	A	B5
R 2107	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	A	C3
R 2108	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	A	B5
R 2109	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	B4
R 2110	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	A	C5
R 2111	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	C4
R 2112	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	B4
R 2113	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	B4
R 2114	CHIP RES.	560k	1/16W	5%	RMC1/16S 564JTH	J24189058		1-	A	B4
R 2115	CHIP RES.	390k	1/16W	5%	RMC1/16S 394JTH	J24189056		1-	A	B4
R 2116	CHIP RES.	270k	1/16W	5%	RMC1/16S 274JTH	J24189054		1-	A	C5
R 2117	CHIP RES.	390k	1/16W	5%	RMC1/16S 394JTH	J24189056		1-	A	B4
R 2118	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	A	C5
R 2119	CHIP RES.	3.9k	1/16W	5%	RMC1/16S 392JTH	J24189032		1-	A	C4
R 2120	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	B3
R 2121	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	A	C4
R 2122	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	C5
R 2123	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	A	B4
R 2124	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	A	C4
R 2125	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	A	C4
R 2126	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	C5
R 2127	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	C5
R 2128	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2129	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2130	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2131	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2132	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2133	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2134	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2135	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2136	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2137	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2138	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2139	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2140	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2141	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2142	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2143	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2144	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C3
R 2145	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C3
R 2146	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C3
R 2147	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	C3
R 2148	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C3
R 2149	CHIP RES.	18k	1/16W	5%	RMC1/16S 183JTH	J24189040		1-	A	C4
R 2150	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039		1-	A	C4
R 2151	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	A3
R 2152	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	A3
R 2153	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	B4
R 2154	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	A	B4
R 2155	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B3
R 2156	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C3
R 2157	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	A2
R 2158	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B2
R 2159	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C2
R 2160	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B2
R 2161	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C2
R 2162	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	A2
R 2163	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C2
R 2164	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B2
R 2165	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C2
R 2167	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	A2
R 2168	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C2
R 2169	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B2
R 2170	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C2
R 2171	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	A2

CNTL Unit

Parts List

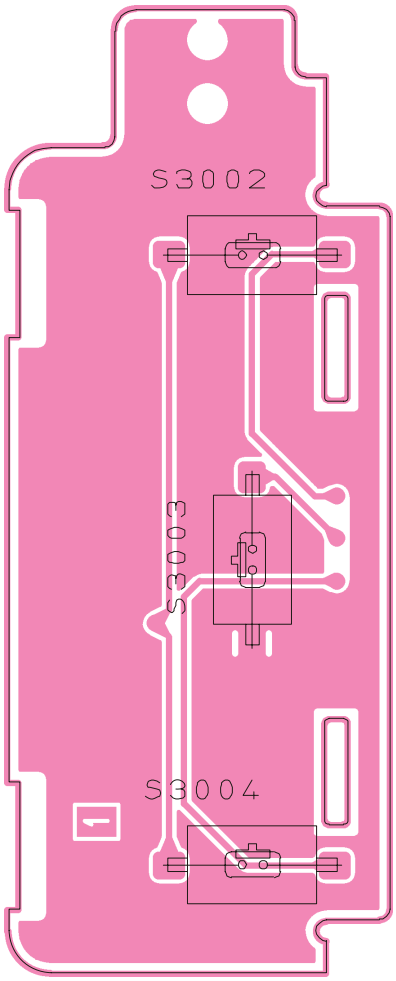
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 2172	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C2
R 2173	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B2
R 2174	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C2
R 2175	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	A2
R 2176	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	A	C2
R 2177	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	A	A4
R 2178	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	B	c4
R 2179	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B2
R 2180	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	A	C2
R 2181	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	B	c4
R 2182	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	A2
R 2183	CHIP RES.	20k	1/16W	0.50%	RR0510R-203-D	J24189150		1-	A	C2
R 2184	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B2
R 2185	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C2
R 2186	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	C2
R 2187	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	A	C2
R 2188	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	c4
R 2189	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	A	C2
R 2190	CHIP RES.	2.2M	1/16W	5%	RMC1/16S 225JTH	J24189065		1-	B	c4
R 2191	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	A2
R 2192	CHIP RES.	20k	1/16W	0.50%	RR0510R-203-D	J24189150		1-	A	C2
R 2193	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B2
R 2194	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C2
R 2195	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	c4
R 2196	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	A	A2
R 2197	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	c4
R 2198	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	c4
R 2199	CHIP RES.	270k	1/16W	5%	RMC1/16S 274JTH	J24189054		1-	A	C3
R 2200	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	A	C3
R 2201	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	A2
R 2202	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	B2
R 2203	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	B	c4
R 2204	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	B2
R 2205	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	B	c4
R 2206	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	B	c4
R 2207	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	C3
R 2208	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	A	B2
R 2209	CHIP RES.	8.2k	1/16W	5%	RMC1/16S 822JTH	J24189036		1-	A	C3
R 2210	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	C3
R 2211	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b5
R 2212	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b5
R 2213	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	C3
R 2214	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-	A	C3
R 2215	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	C3
R 2216	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	C3
R 2217	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C3
R 2218	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039		1-	A	C3
R 2219	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	C3
R 2220	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C2
R 2221	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C2
R 2222	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	C2
R 2223	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	C2
R 2224	CHIP RES.	2.7k	1/16W	5%	RMC1/16S 272JTH	J24189030		1-	A	C2
R 2225	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	c3
R 2226	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	c3
R 2227	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	NON IS	9-	B	a2
R 2228	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	NON IS	9-	B	b2
R 2229	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	NON IS	9-	B	b2
R 2230	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	NON IS	9-	B	a2
S 2001	TOGGLE SWITCH				ATE1E-6M3-14	N2090059		1-	B	a1
S 2001	TOGGLE SWITCH				ATE1E-6M3-17-Z	N2090073		9-	B	a1
S 2004	TACT SWITCH				PT-035-C1-T 08-035-120	N5090099		1-	A	A1
S 2004	TACT SWITCH				PT-035-C2-T 08-035-160	N5090099A		17-	A	A1
TH2001	THERMISTOR				ERTJ0EV473J	G9090120		1-	A	A2
TH2002	THERMISTOR				ERTJ0ER103J	G9090119		1-	A	C3
TH2003	THERMISTOR				ERTJ0ER103J	G9090119		1-	A	C3
X 2001	XTAL NX1255GC	3.6864MHz			3.6864MHZ	H0103301		1-	A	B4
	LIGHT GUIDE					RA0558800		1-		
	BRACKET					RA0296600		1-		
	HOLDER PLATE				(LCD)	RA0296900		1-		
	INTERCONNECTOR				(LCD)	RA0298200		1-		
	INTERCONNECTOR				(VOL)	RA0298300		1-		
	DIFFUSER SHEET					RA0317800		1-		
	REFLECTOR SHEET					RA0537400		1-		
	COIL SPRING					RA0538900		1-		
	HOLDER PLATE				(TGL)	RA0207700		1-		
	MIC HOLDER RUBBER					RA0537500		1-		

Circuit Diagram

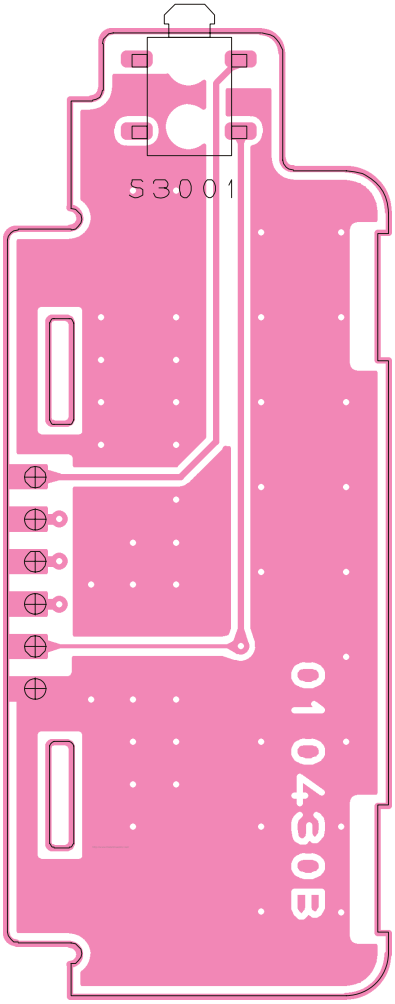


SW Unit

Parts Layout



Side A



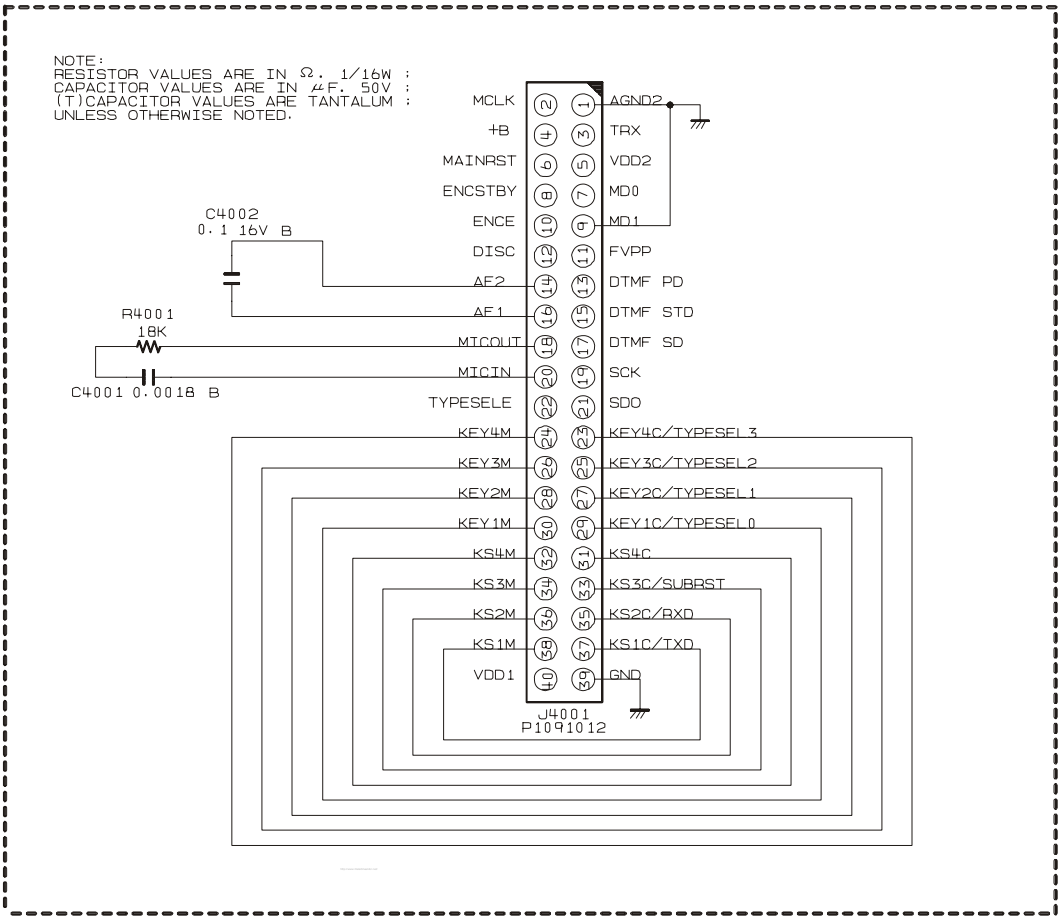
Side B

Parts List

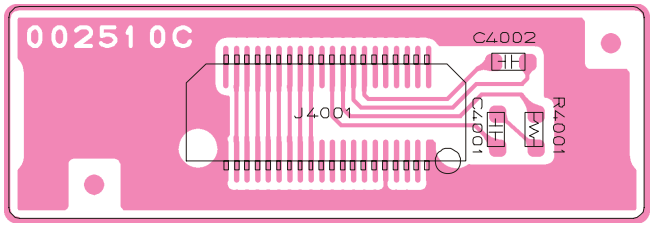
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	PCB with Components					CB2458001				
	Printed Circuit Board				AC052U000	FR010430B		1-		
S 3001	TACT SWITCH				PT-035-C1-T 08-035-120	N5090099		1-16	B	
S 3001	TACT SWITCH				PT-035-C2-T 08-035-160	N5090099A		17-	B	
S 3002	TACT SWITCH				SKQDAB	N5090058		1-	A	
S 3003	TACT SWITCH				SKQDAB	N5090058		1-	A	
S 3004	TACT SWITCH				SKQDAB	N5090058		1-	A	

Dummy Unit

Circuit Diagram



Parts Layout



Parts List

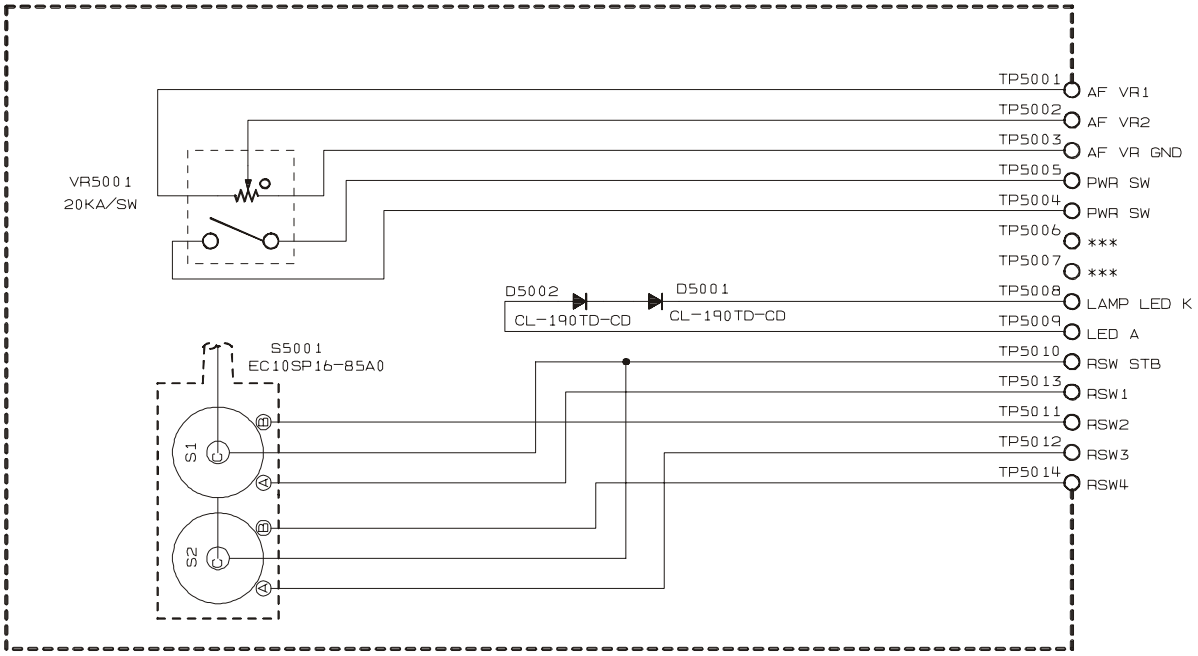
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	PCB with Components					CB2543001				
	Printed Circuit Board					FR002510C		1-		
C 4001	CHIP CAP.	0.0018uF	50V	B	GRM39B182M50PT	K22174812		1-		
C 4002	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-		
J 4001	CONNECTOR				AXK5S40035P	P1091012		1-		
R 4001	CHIPRES.	18k	1/16W	5%	RMC1/16 183JATP	J24185183		1-		

Dummy Unit

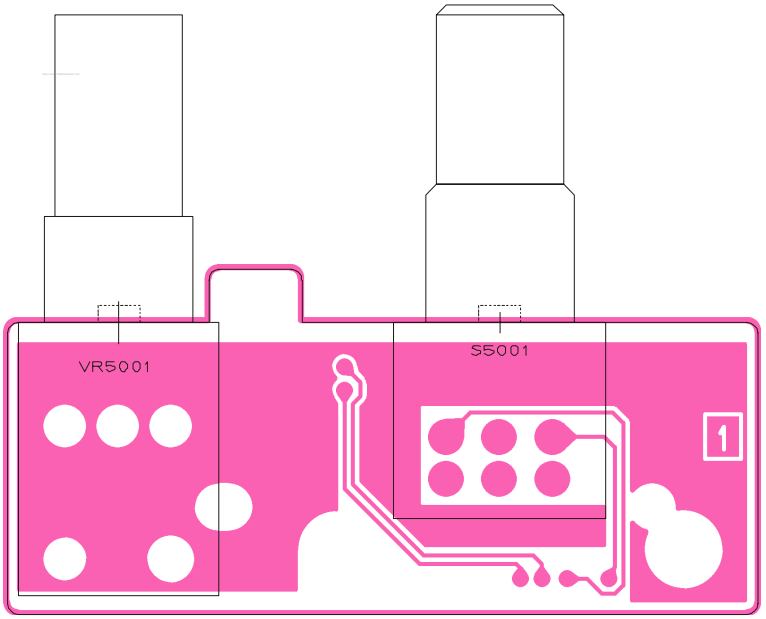
Note

VR Unit (Lot. 1 ~ 8)

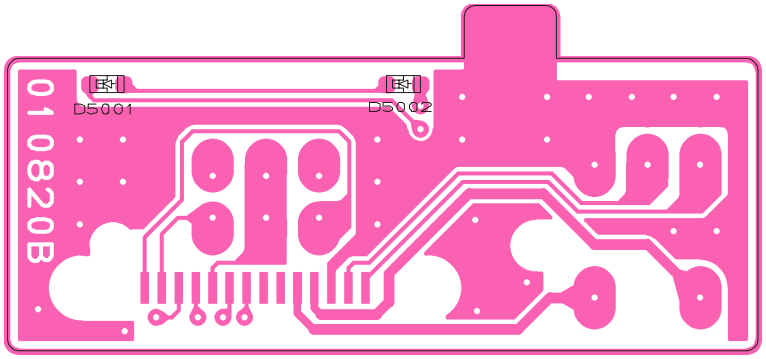
Circuit Diagram



Parts Layout



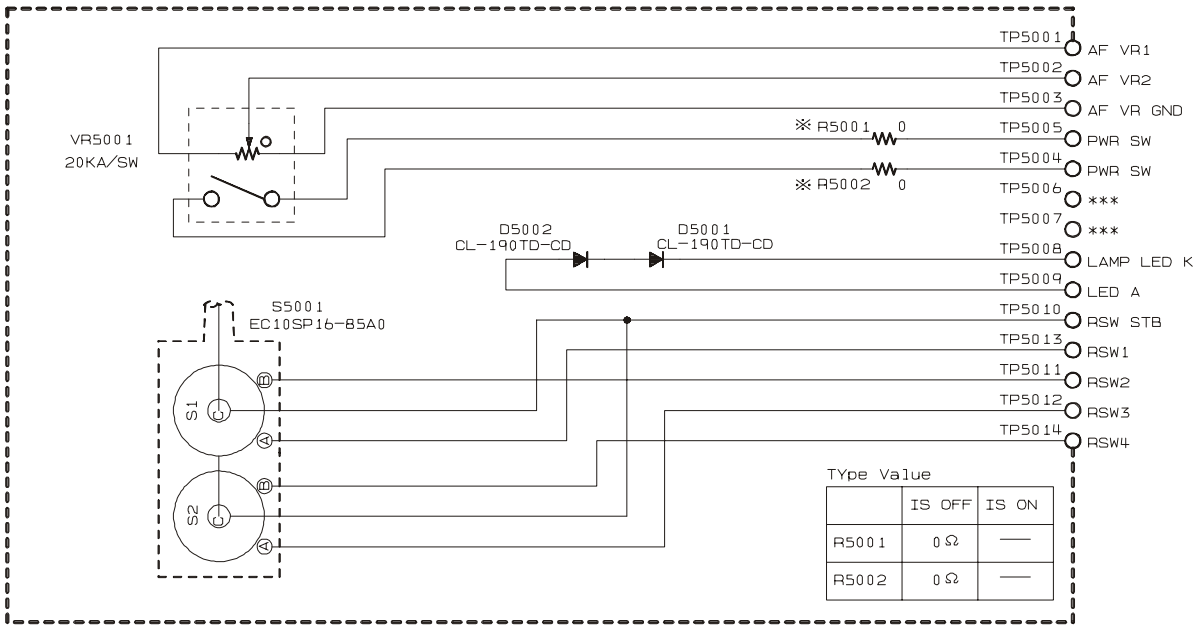
Side A



Side B

VR Unit (Lot. 9 ~)

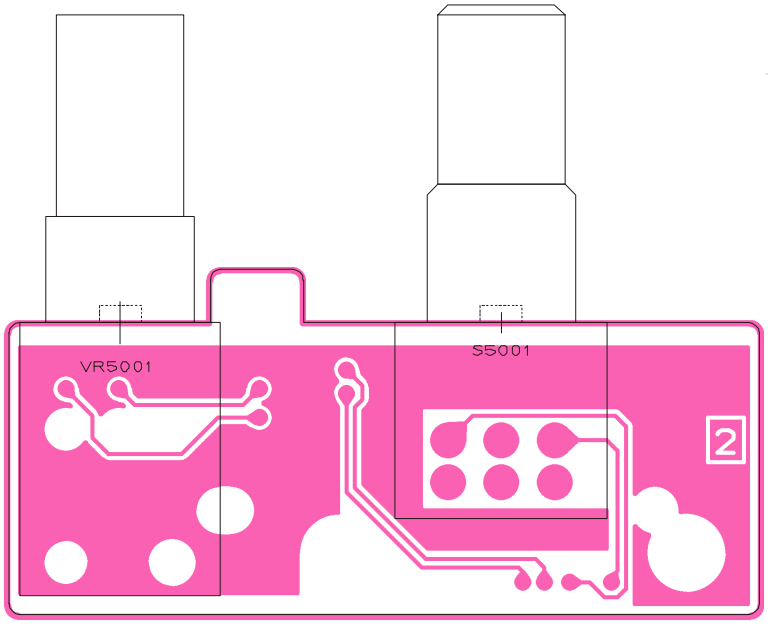
Circuit Diagram



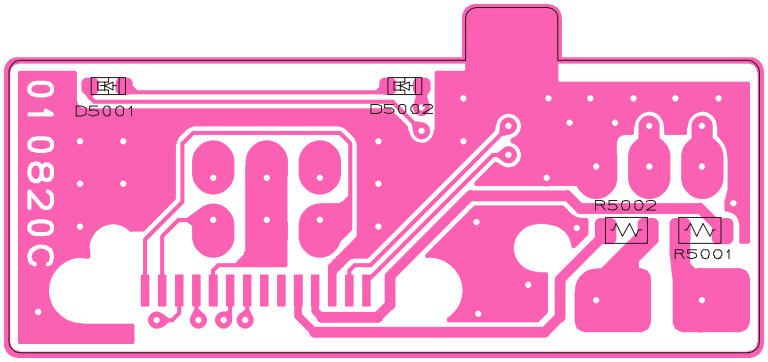
TYpe Value

	IS OFF	IS ON
R5001	0Ω	——
R5002	0Ω	——

Parts Layout



Side A

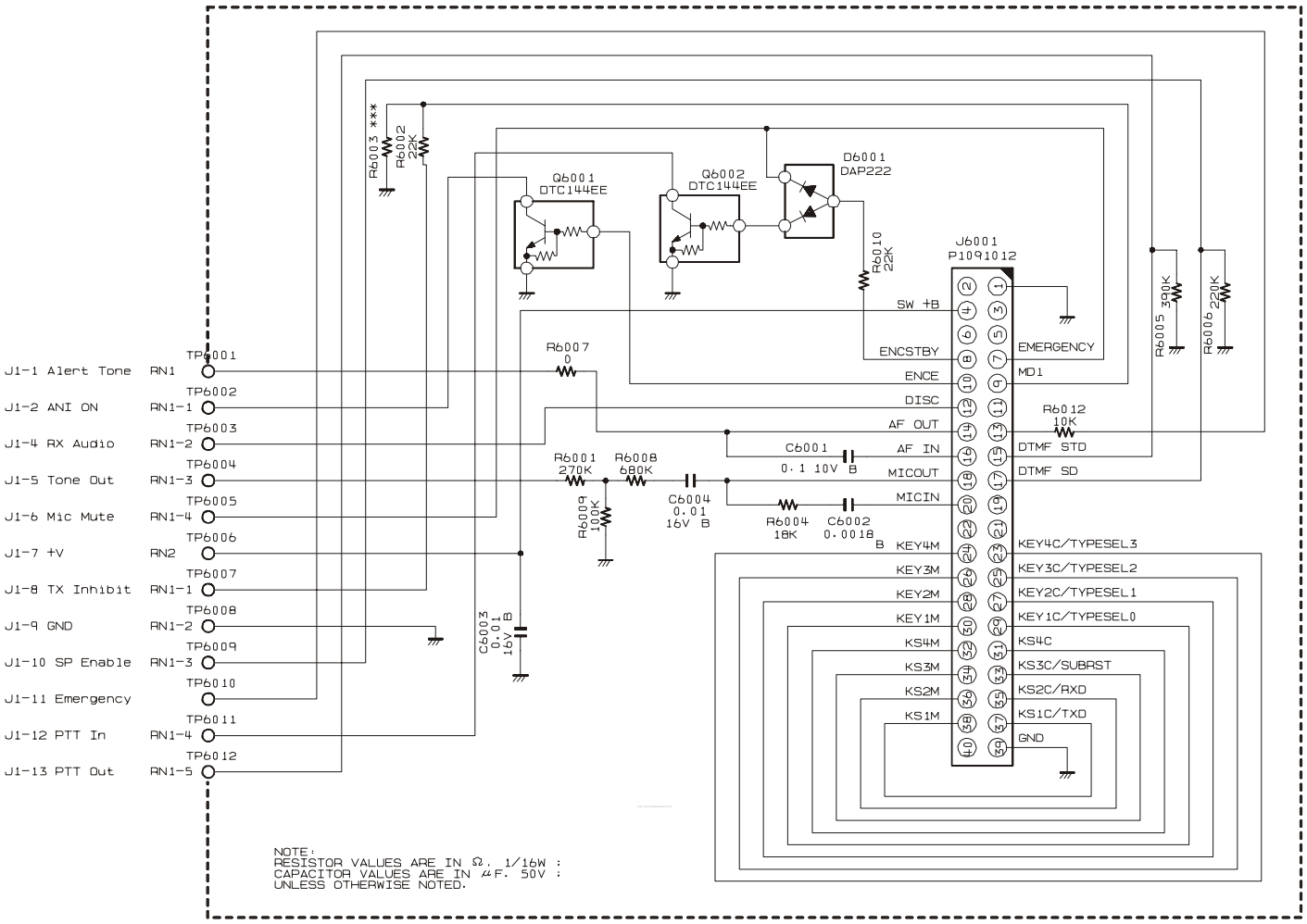


Side B

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	PCB with Components					CB2542001 CB2542003 CB2542004	VTX Non-IS Type EXP VTX IS Type			
	Printed Circuit Board					FR010820B FR010820C		1-8 9-		
D 5001	LED				CL-190TD-CD-T	G2070838		1-10	B	a1
D 5001	LED				TLOU1020(T14)	G2070990		11-	B	a1
D 5002	LED				CL-190TD-CD-T	G2070838		1-10	B	b1
D 5002	LED				TLOU1020(T14)	G2070990		11-	B	b1
R 5001	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	Non-IS	9-	B	c1
R 5002	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	Non-IS	9-	B	b1
S 5001	ROTARY SWITCH				EC10SP16-92A0	Q9000812		1-15	A	B1
S 5001	ROTARY SWITCH				EC10SP16-98A0	Q9000848		16-	A	B1
VR5001	POT.				TP96N975N RY-7544 20KA/SW	J60800275		1	A	A1
VR5001	POT.				TP96N1034N RY-7617	J60800279		2-4	A	A1
VR5001	POT.				TP96N1034N RY-7625	J60800280		5-	A	A1

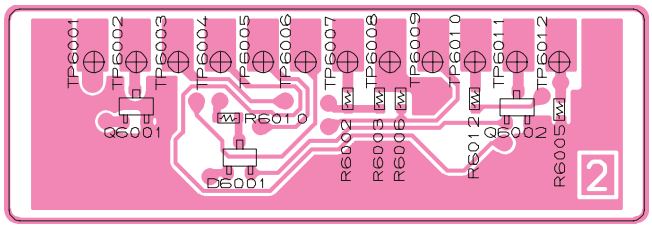
Note

Circuit Diagram

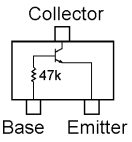


Interface Unit

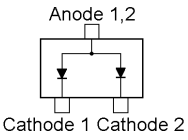
Parts Layout



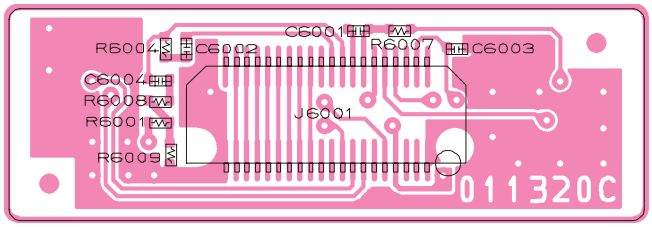
Side A



DTC144EE (96)
(Q6001, 6002)



DAP222 (P)
(D6001)



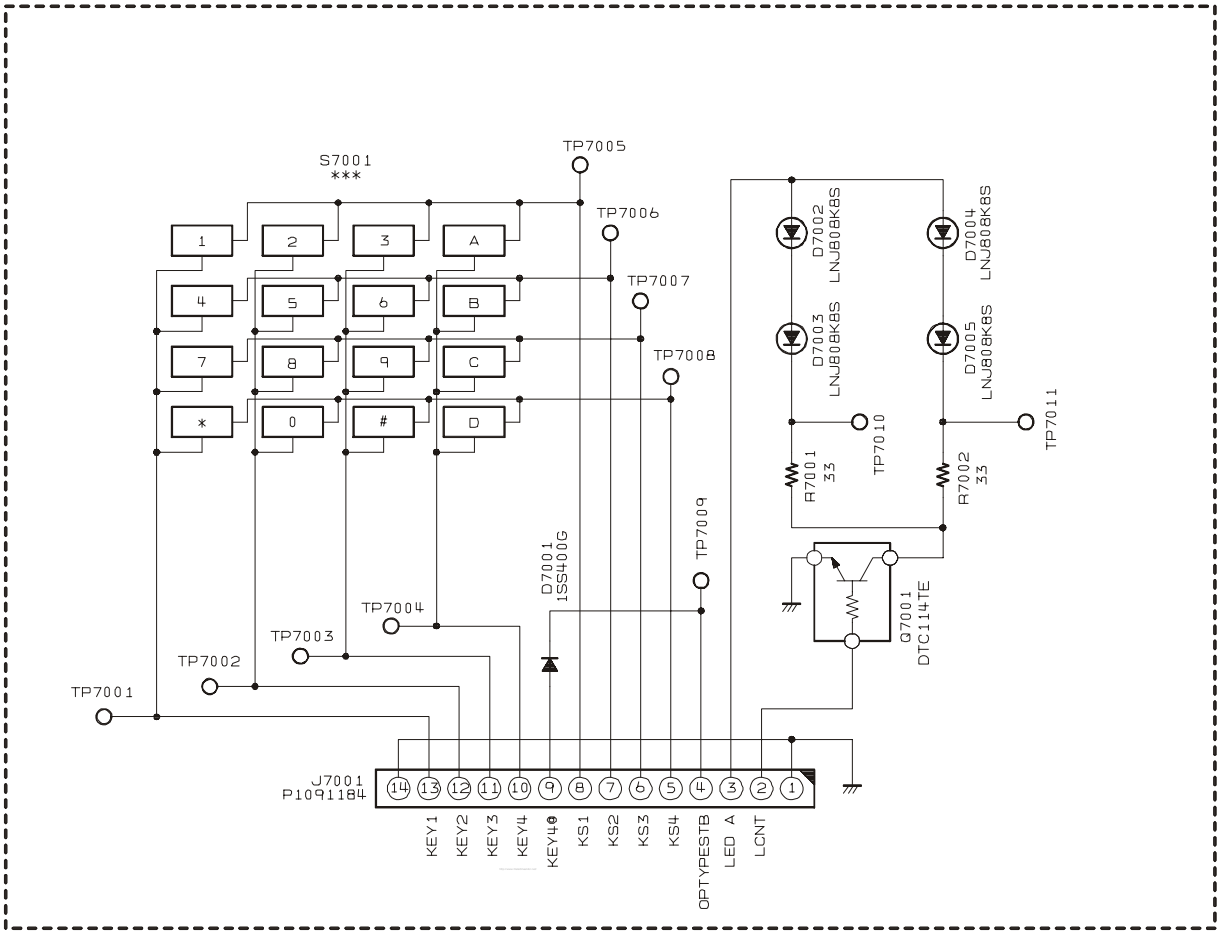
Side B

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	PCB with Components					CB2656001				
	Printed Circuit Board					FR011320C		1-		
C 6001	CHIP CAP.	0.1uF	10V	B	GRM155B11A104KA01D	K22108802		1-	B	
C 6002	CHIP CAP.	0.0018uF	50V	B	GRM155B11H182KA01D	K22178812		1-	B	
C 6003	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	
C 6003	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	
C 6004	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	
C 6004	CHIP CAP.	0.01uF	25V	B	GRM155B11E103KA01D	K22148834		29-	B	
D 6001	DIODE				DAP222-TL	G2070432		1-	A	
J 6001	CONNECTOR				AXK5S40035P	P1091012		1-	B	
Q 6001	TRANSISTOR				DTC144EE TL	G3070075		1-	A	
Q 6002	TRANSISTOR				DTC144EE TL	G3070075		1-	A	
R 6001	CHIP RES.	270k	1/16W	5%	RMC1/16S 274JTH	J24189054		1-	B	
R 6002	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	
R 6004	CHIP RES.	18k	1/16W	5%	RMC1/16S 183JTH	J24189040		1-	B	
R 6005	CHIP RES.	390k	1/16W	5%	RMC1/16S 394JTH	J24189056		1-	A	
R 6006	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	A	
R 6007	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	
R 6008	CHIP RES.	680k	1/16W	5%	RMC1/16S 684JTH	J24189059		1-	B	
R 6009	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	
R 6010	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	
R 6012	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	

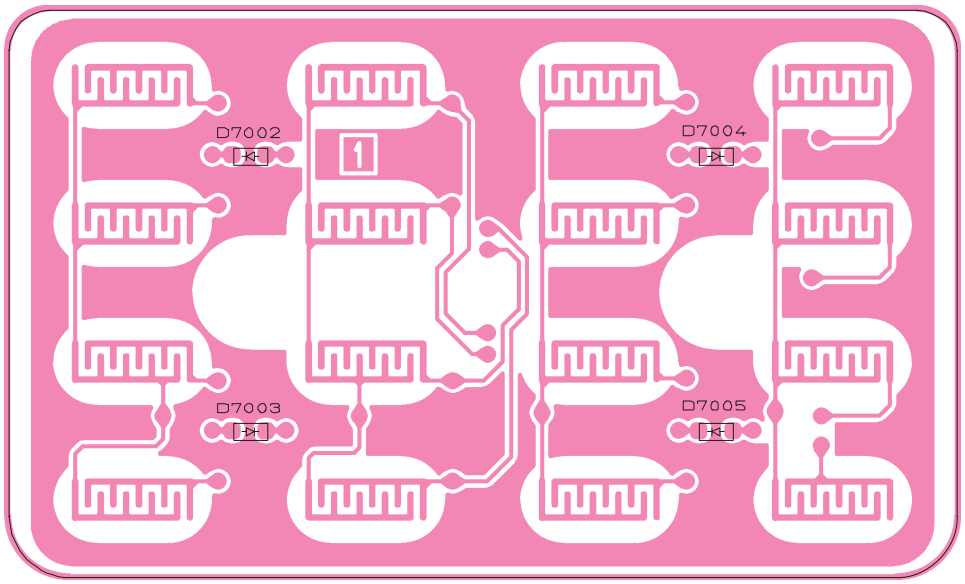
Key Unit

Circuit Diagram

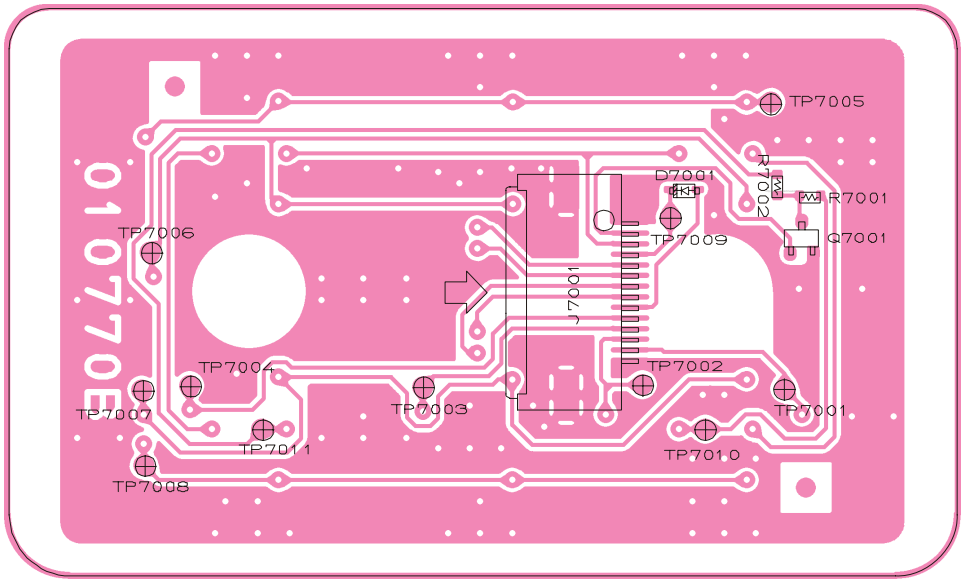


Key Unit

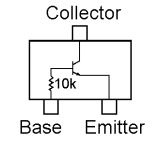
Parts Layout



Side A



Side B



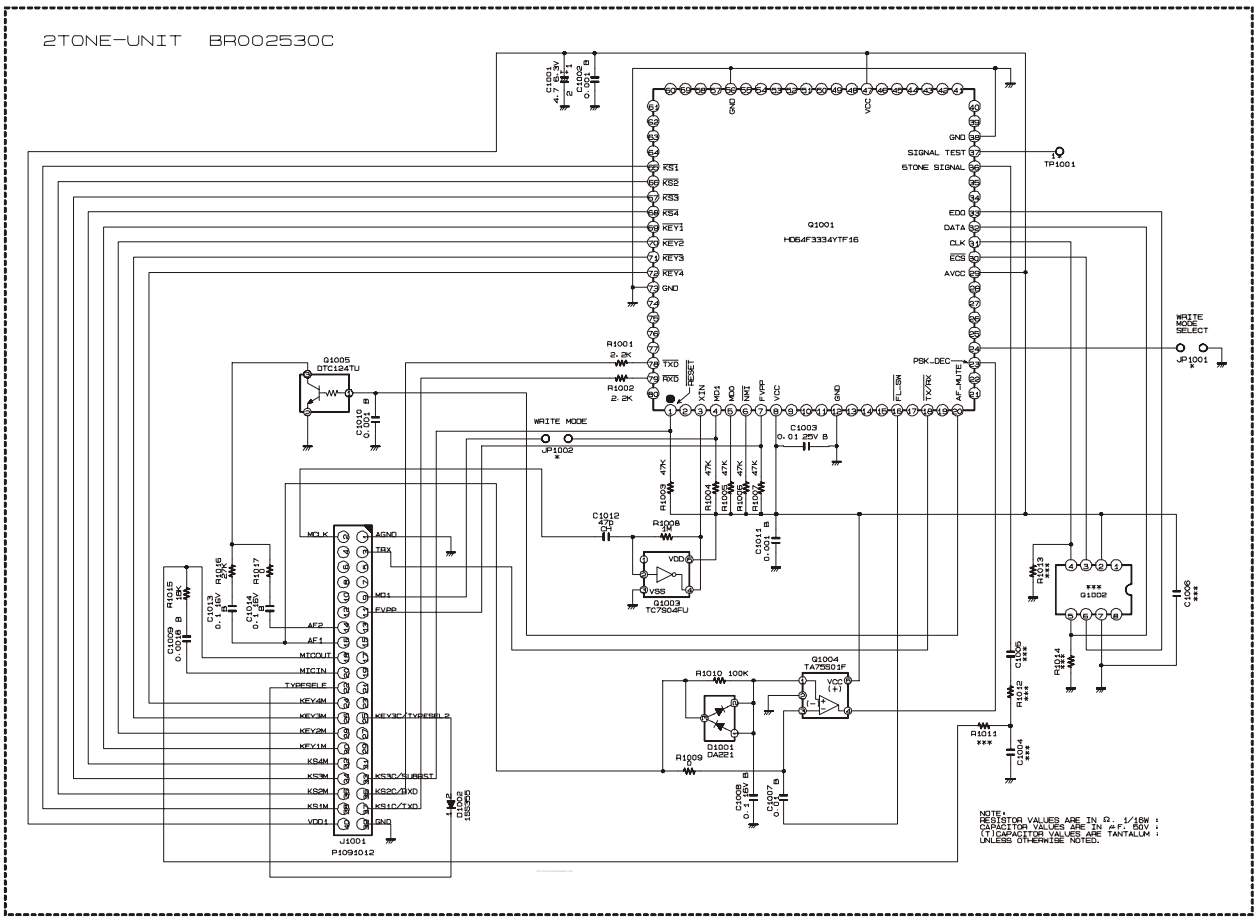
DTC114TE (04)
(Q7001)

Parts List

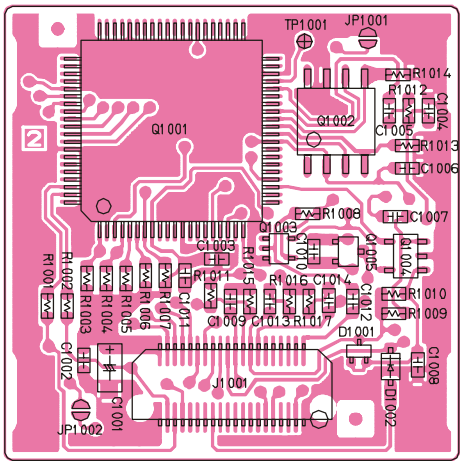
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	PCB with Components					CB2535001				
	Printed Circuit Board					FR010770B		1-		
D 7001	DIODE				1SS400G T2R	G2070934		1-	B	
D 7002	LED				LNJ808K8SRA	G2070790		1-	A	
D 7003	LED				LNJ808K8SRA	G2070790		1-	A	
D 7004	LED				LNJ808K8SRA	G2070790		1-	A	
D 7005	LED				LNJ808K8SRA	G2070790		1-	A	
J 7001	CONNECTOR				IMSA-9637S-14Y900	P1091184		1-	B	
Q 7001	TRANSISTOR				DTC114TE TL	G3070225		1-	B	
R 7001	CHIP RES.	33	1/16W	5%	RMC1/16S 330JTH	J24189007		1-	B	
R 7002	CHIP RES.	33	1/16W	5%	RMC1/16S 330JTH	J24189007		1-	B	

F2D-8 2-Tone Decode Unit

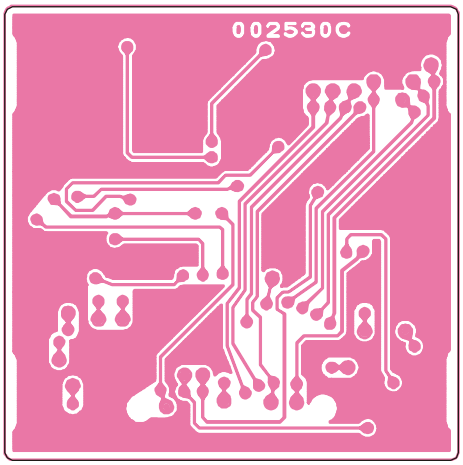
Circuit Diagram



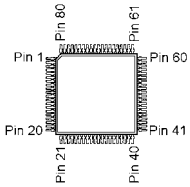
Parts Layout



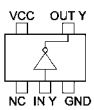
Side A



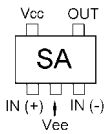
Side B



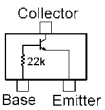
HD64F3334YTF16
(Q1001)



TC7S04FU (E5)
(Q1003)



TA75S01F (SA)
(Q1004)



DTC124TU (05)
(Q1005)

F2D-8 2-Tone Decode Unit

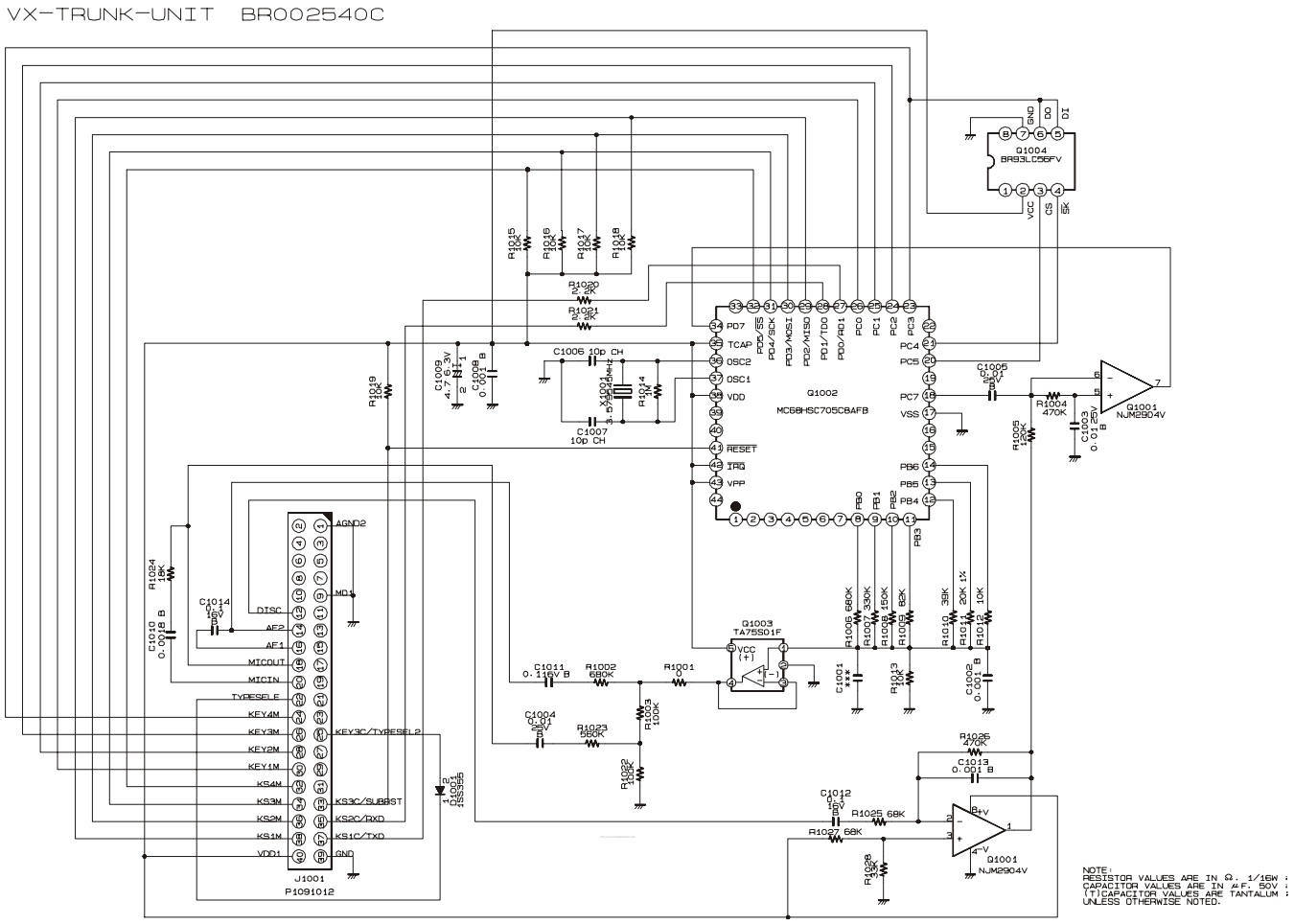
Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	Printed Circuit Board					FR002530C		1-		
C 1001	CHIP TA.CAP.	4.7uF	6.3V		TEMSVA0J475M-8R	K78080017		1-	A	
C 1002	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	
C 1003	CHIP CAP.	0.01uF	25V	B	GRM39B103K25PT	K22144803		1-	A	
C 1007	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
C 1007	CHIP CAP.	0.0015uF	50V	B	GRM39B152M50PT	K22174811		6-	A	
C 1007	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		18-	A	
C 1008	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
C 1009	CHIP CAP.	0.0018uF	50V	B	GRM39B182M50PT	K22174812		1-	A	
C 1010	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	
C 1011	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	
C 1012	CHIP CAP.	47pF	50V	CH	GRM39CH470J50PT	K22174227		1-	A	
C 1013	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
C 1014	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
D 1001	DIODE				DA221 TL	G2070178		1-	A	
D 1002	DIODE				1SS355 TE-17	G2070470		1-	A	
J 1001	CONNECTOR				AXK5S40035P	P1091012		1-	A	
Q 1001	IC				HD64F3334YTF16	※		1-	A	
Q 1001	IC				HD64F3334YTFLH16	※		6-	A	
Q 1001	IC				HD64F3334YTF16	※		9-	A	
Q 1003	IC				TC7S04FU TE85R	G1091530		1-	A	
Q 1004	IC				TA75S01F TE85R	G1091593		1-	A	
Q 1005	TRANSISTOR				DTC124TU T106	G3070065		1-	A	
R 1001	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	A	
R 1002	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	A	
R 1003	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	
R 1004	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	
R 1005	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	
R 1006	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	
R 1007	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	
R 1008	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	A	
R 1009	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	A	
R 1009	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		6-	A	
R 1010	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	A	
R 1015	CHIP RES.	18k	1/16W	5%	RMC1/16 183JATP	J24185183		1-	A	
R 1016	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	
R 1016	CHIP RES.	27k	1/16W	5%	RMC1/16 273JATP	J24185273		6-	A	
R 1017	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	
	BLIND SHEET					RA0109300		1-		

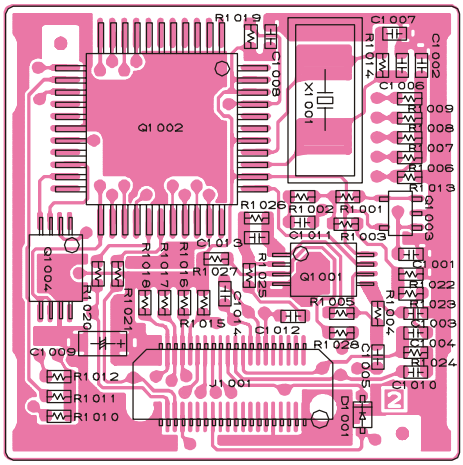
※: Please contact VERTEX STANDARD.

VTP-50 VX-Trunk Unit

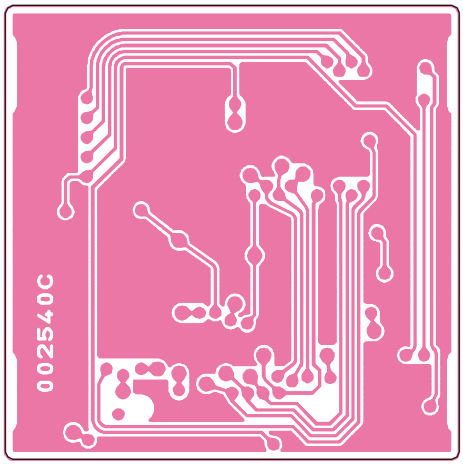
Circuit Diagram



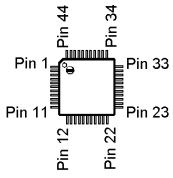
Parts Layout



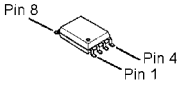
Side A



Side B

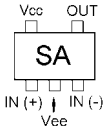


MC68HSC705C8A502
(Q1002)



BR3LC56FV
(Q1004)

NJM2904V
(Q1001)



TA75S01F (SA)
(Q1003)

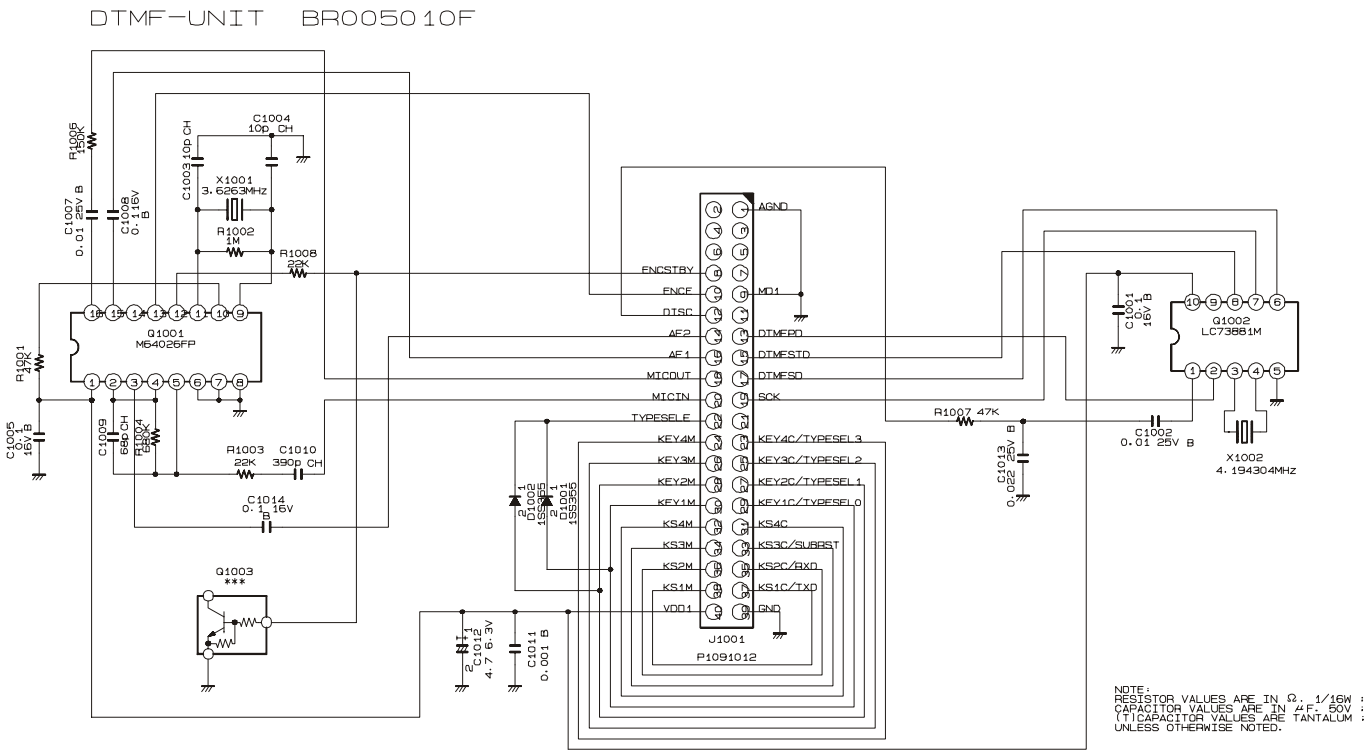
VTP-50 VX-Trunk Unit

Parts List

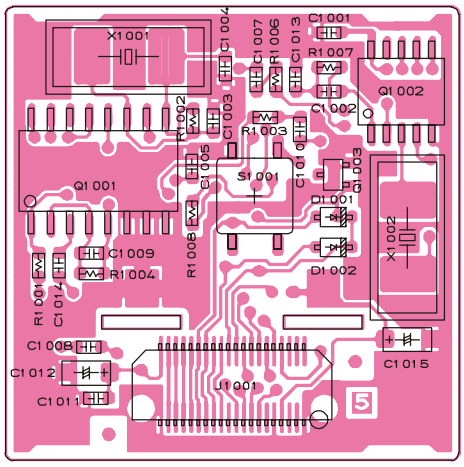
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	Printed Circuit Board					FR002540C		1-		
C 1002	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	
C 1003	CHIP CAP.	0.01uF	25V	B	GRM39B103M25PT	K22144802		1-	A	
C 1003	CHIP CAP.	0.01uF	25V	B	GRM39B103K25PT	K22144803		9-	A	
C 1004	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
C 1004	CHIP CAP.	0.01uF	25V	B	GRM39B103K25PT	K22144803		9-	A	
C 1005	CHIP CAP.	0.01uF	25V	B	GRM39B103M25PT	K22144802		1-	A	
C 1005	CHIP CAP.	0.01uF	25V	B	GRM39B103K25PT	K22144803		9-	A	
C 1006	CHIP CAP.	10pF	50V	CH	GRM39CH100C50PT	K22174248		1-	A	
C 1007	CHIP CAP.	10pF	50V	CH	GRM39CH100C50PT	K22174248		1-	A	
C 1008	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	
C 1009	CHIP TA.CAP.	4.7uF	6.3V		TEMSVA0J475M-8R	K78080017		1-	A	
C 1010	CHIP CAP.	0.0018uF	50V	B	GRM39B182M50PT	K22174812		1-	A	
C 1011	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
C 1012	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
C 1013	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	
C 1014	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
D 1001	DIODE				1SS355 TE-17	G2070470		1-	A	
J 1001	CONNECTOR				AXK5S40035P	P1091012		1-	A	
Q 1001	IC				NJM2904V-TE1	G1091677		1-	A	
Q 1002	IC				MC68HSC705C8A502-6030 130	G1092917		1-	A	
Q 1002	IC				MC68HSC705C8A502-6030 131	G1093326		6-	A	
Q 1003	IC				TA75S01F TE85R	G1091593		1-	A	
Q 1004	IC				BR93LC56FV-E2	G1092787		1-	A	
R 1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	
R 1002	CHIP RES.	680k	1/16W	5%	RMC1/16 684JATP	J24185684		1-	A	
R 1003	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	A	
R 1004	CHIP RES.	470k	1/16W	5%	RMC1/16 474JATP	J24185474		1-	A	
R 1005	CHIP RES.	120k	1/16W	5%	RMC1/16 124JATP	J24185124		1-	A	
R 1006	CHIP RES.	680k	1/16W	5%	RMC1/16 684JATP	J24185684		1-	A	
R 1007	CHIP RES.	330k	1/16W	5%	RMC1/16 334JATP	J24185334		1-	A	
R 1008	CHIP RES.	150k	1/16W	5%	RMC1/16 154JATP	J24185154		1-	A	
R 1009	CHIP RES.	82k	1/16W	5%	RMC1/16 823JATP	J24185823		1-	A	
R 1010	CHIP RES.	39k	1/16W	5%	RMC1/16 393JATP	J24185393		1-	A	
R 1011	CHIP RES.	20k	1/16W	1%	RMC1/16 203FTP	J24183203		1-	A	
R 1012	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	
R 1013	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	
R 1014	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	A	
R 1015	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	
R 1016	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	
R 1017	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	
R 1018	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	
R 1019	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	
R 1020	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	A	
R 1021	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	A	
R 1022	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	A	
R 1023	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	A	
R 1024	CHIP RES.	18k	1/16W	5%	RMC1/16 183JATP	J24185183		1-	A	
R 1025	CHIP RES.	68k	1/16W	5%	RMC1/16 683JATP	J24185683		1-	A	
R 1026	CHIP RES.	470k	1/16W	5%	RMC1/16 474JATP	J24185474		1-	A	
R 1027	CHIP RES.	68k	1/16W	5%	RMC1/16 683JATP	J24185683		1-	A	
R 1028	CHIP RES.	33k	1/16W	5%	RMC1/16 333JATP	J24185333		1-	A	
X 1001	XTAL SX-1315	3.579545MHz			3.579545MHZ	H0103185		1-	A	
	BLIND SHEET					RA0109300		1-		

FVP-25 Encryption / DTMF Pager Unit

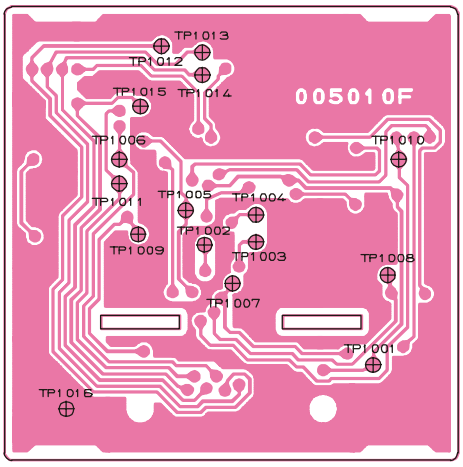
Circuit Diagram



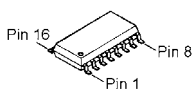
Parts Layout



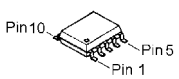
Side A



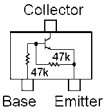
Side B



M64026FP
(Q1001)



LC73881
(Q1002)



DTC144EU (26)
(Q1003)

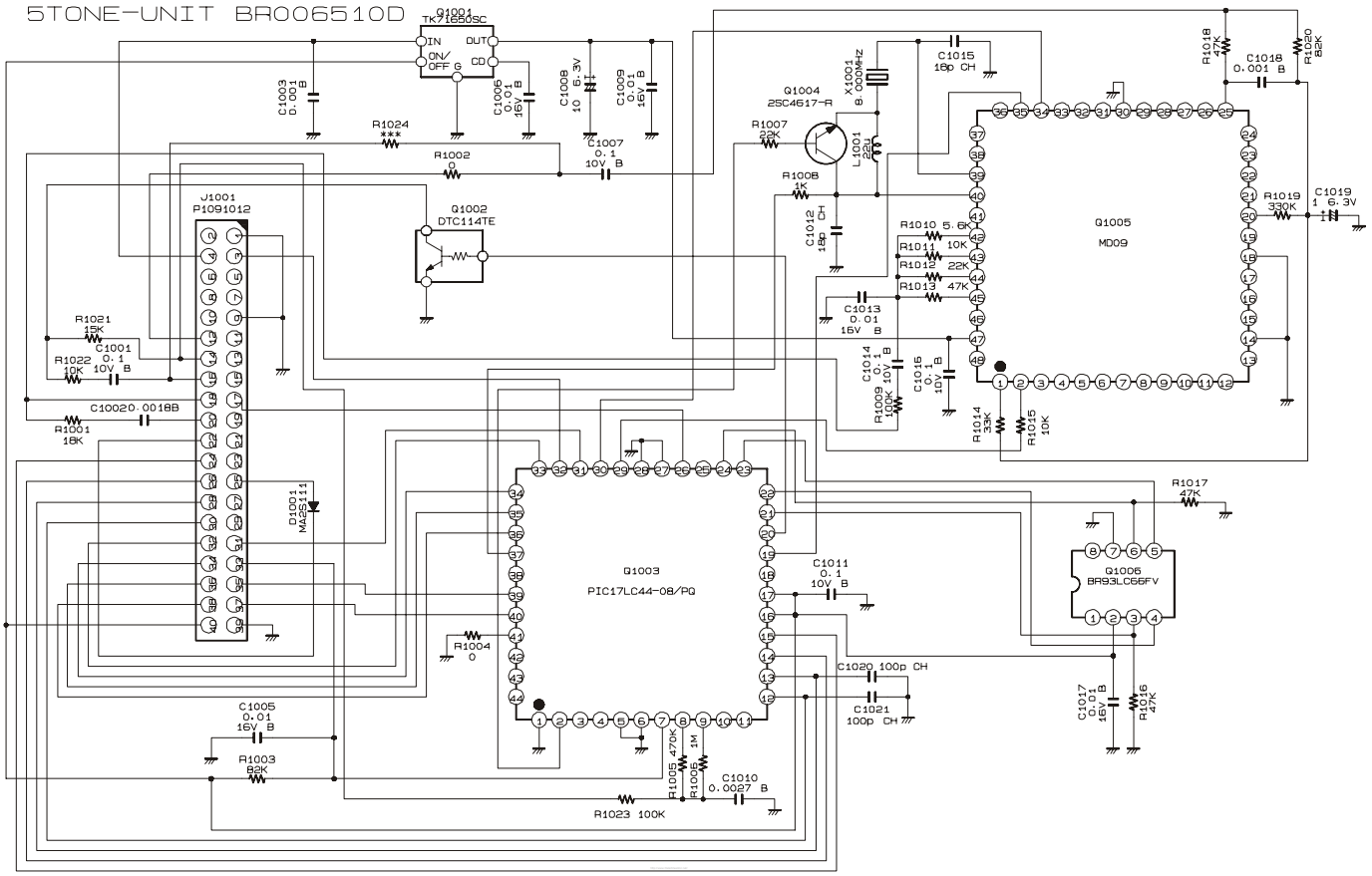
FVP-25 Encryption / DTMF Pager Unit

Parts List

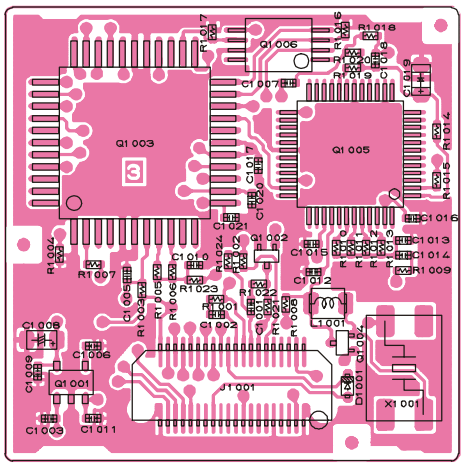
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	Printed Circuit Board					FR005010F		1-		
C 1001	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	B1
C 1002	CHIP CAP.	0.01uF	25V	B	GRM39B103M25PT	K22144802		1-	A	B1
C 1003	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	A	A1
C 1004	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	A	A1
C 1005	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	A1
C 1007	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	A1
C 1007	CHIP CAP.	0.01uF	25V	B	GRM39B103M25PT	K22144802		32-	A	A1
C 1008	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	A2
C 1009	CHIP CAP.	68pF	50V	CH	GRM39CH680J50PT	K22174231		1-	A	A1
C 1010	CHIP CAP.	390pF	50V	CH	GRM39CH391J50PT	K22174255		1-	A	A1
C 1011	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	A2
C 1012	CHIP TA.CAP.	4.7uF	6.3V		TEMSVA0J475M-8R	K78080017		1-	A	A2
C 1013	CHIP CAP.	0.022uF	25V	B	GRM39B223K25PT	K22144807		1-	A	A1
C 1014	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	A1
D 1001	DIODE				1SS355 TE-17	G2070470		1-	A	B1
D 1002	DIODE				1SS355 TE-17	G2070470		1-	A	B1
J 1001	CONNECTOR				AXK5S40035P	P1091012		1-	A	A2
Q 1001	IC				M64026FP-650C	G1092754		1-	A	A1
Q 1002	IC				LC73881M-TLM	G1092755		1-	A	B1
Q 1003	TRANSISTOR				DTC144EU T106	G3070041		1-	A	B1
R 1001	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	A1
R 1002	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	A	A1
R 1003	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	A	A1
R 1004	CHIP RES.	680k	1/16W	5%	RMC1/16 684JATP	J24185684		1-	A	A1
R 1006	CHIP RES.	150k	1/16W	5%	RMC1/16 154JATP	J24185154		1-	A	A1
R 1007	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	B1
R 1008	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	A1
R 1008	CARBON FILM RES.	22k	1/8W	5%	RD18TJ223 22K	J01215223		14-	A	A1
R 1008	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		17-	A	A1
X 1001	XTAL SX-1315	3.6263MHz			3.6263MHZ	H0103183		1-	A	A1
X 1002	XTAL SX-1315	4.194304MHz			4.194304MHZ	H0103184		1-	A	B1
	BLIND SHEET					RA0109300		1-		

F5D-14 5-Tone Unit

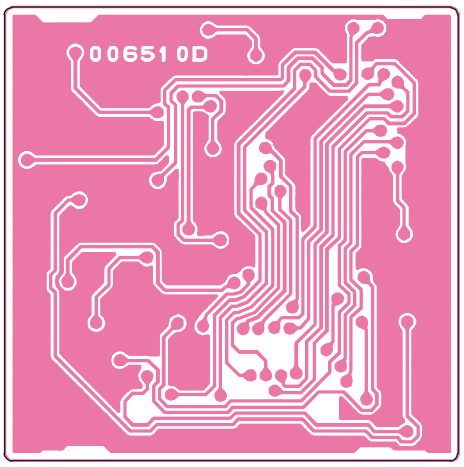
Circuit Diagram



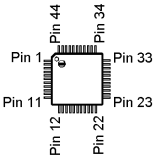
Parts Layout



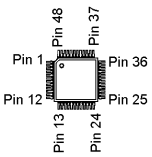
Side A



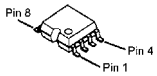
Side B



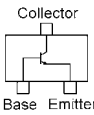
PIC17LC44-08/PQ
(Q1003)



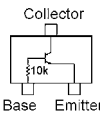
MD09
(Q1005)



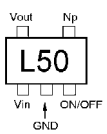
BR93LC66FV
(Q1006)



2SC4617 (BR)
(Q1004)



DTC114TE (04)
(Q1002)



TK71650SC (L50)
(Q1001)

F5D-14 5-Tone Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	Printed Circuit Board					FR006510B		1-		
	Printed Circuit Board					FR006510D		3-		
C 1001	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	
C 1002	CHIP CAP.	0.0018uF	50V	B	GRM36B182K50PT	K22178812		1-	A	
C 1003	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	A	
C 1005	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	
C 1006	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	
C 1007	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	
C 1008	CHIP TA.CAP.	10uF	6.3V		EEJK0JS106R	K78080079		1-	A	
C 1008	CHIP TA.CAP.	10uF	6.3V		ECST0JZ106R	K78080078		8-	A	
C 1009	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	
C 1010	CHIP CAP.	0.0027uF	50V	B	GRM36B272K50PT	K22178814		1-	A	
C 1011	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	
C 1012	CHIP CAP.	18pF	50V	CH	GRM36CH180J50PT	K22178218		1-	A	
C 1013	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	
C 1014	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	
C 1015	CHIP CAP.	18pF	50V	CH	GRM36CH180J50PT	K22178218		1-	A	
C 1016	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	
C 1017	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	
C 1018	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	A	
C 1019	CHIP TA.CAP.	1uF	6.3V		TMCP0J105MTR	K78080071		1-	A	
C 1020	CHIP CAP.	100pF	50V	CH	GRM36CH101J50PT	K22178236		1-	A	
C 1021	CHIP CAP.	100pF	50V	CH	GRM36CH101J50PT	K22178236		1-	A	
D 1001	DIODE				MA2S111-(TX)	G2070614		1-	A	
J 1001	CONNECTOR				AXK5S40035P	P1091012		1-	A	
L 1001	M.RFC	22uH			ELJ-FC220K	L1690201		1-	A	
Q 1001	IC				TK71650SCL	G1093136		1-	A	
Q 1002	TRANSISTOR				DTC114TE TL	G3070225		1-	A	
Q 1003	IC				PIC17LC44-08/PQ	S8100917		1-	A	
Q 1004	TRANSISTOR				2SC4617 TL R	G3346178R		1-	A	
Q 1005	IC				MD09	G1093276		1-	A	
Q 1006	IC				BR93LC66FV-E2	G1092853		1-	A	
R 1001	CHIP RES.	18k	1/16W	5%	RMC1/16S 183JTH	J24189040		1-	A	
R 1002	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	
R 1003	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	A	
R 1004	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	
R 1005	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	
R 1006	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	A	
R 1007	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	
R 1008	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	
R 1009	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	
R 1010	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034		1-	A	
R 1011	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	
R 1012	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	
R 1013	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	
R 1014	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	A	
R 1015	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	
R 1016	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	
R 1017	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	
R 1018	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	
R 1019	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	A	
R 1020	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	A	
R 1021	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039		1-	A	
R 1022	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	
R 1023	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	
X 1001	XTAL 94SMX	8MHz			8.000MHZ	H0103248		1-	A	
	BLIND SHEET					RA0109300		1-