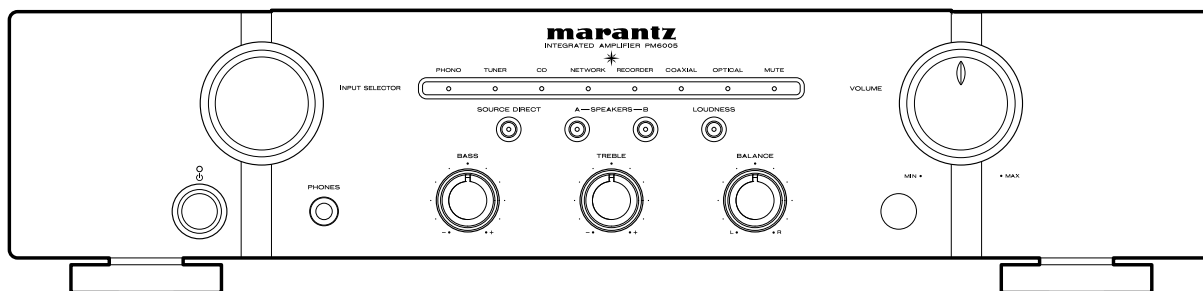


# Service Manual

PM6005 /N1B/N1SG/U1B/K1B

Integrated Amplifier



• For purposes of improvement, specifications and design are subject to change without notice.

• Please use this service manual with referring to the operating instructions without fail.

• Some illustrations using in this service manual are slightly different from the actual set.

# marantz®

## PM6005

Ver. 2

Please refer to the  
MODIFICATION NOTICE.

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# ABOUT THIS MANUAL

Read the following information before using the service manual.

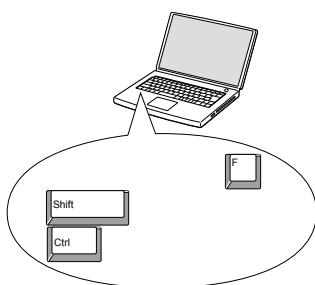
## What you can do with this manual

### Search for a Ref. No. (phrase) (Ctrl+Shift+F)

You can use the search function in Acrobat Reader to search for a Ref. No. in schematic diagrams, printed wiring board diagrams, block diagrams, and parts lists.

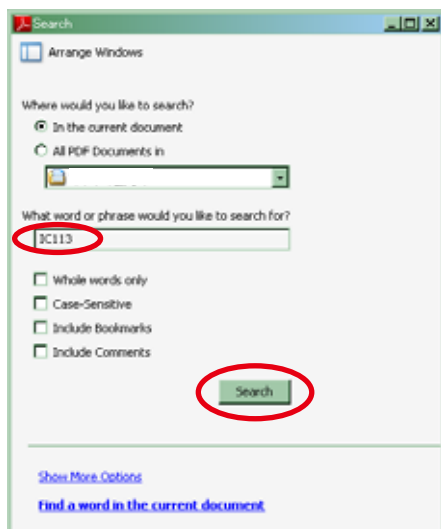
1. Press **Ctrl+Shift+F** on the keyboard.

- The Search window appears.



2. Enter the Ref. No. you want to search for in the Search window, and then click the **Search** button.

- A list of search results appears.



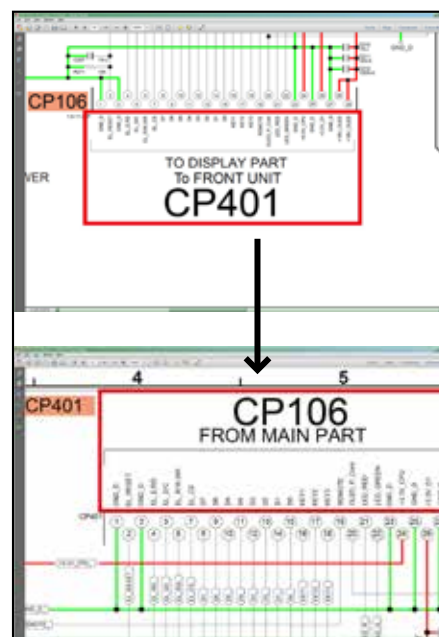
3. Click an item on the list.

- The screen jumps to the page for that item, and the search phrase is displayed.

### Jump to the target of a schematic diagram connector

Click the Ref. No. of the target connector in the red box around a schematic diagram connector.

- The screen jumps to the target connector.



- Page magnification stays the same as before the jump.

## Using Adobe Reader (Windows version)

### Add notes to this data (Sign)

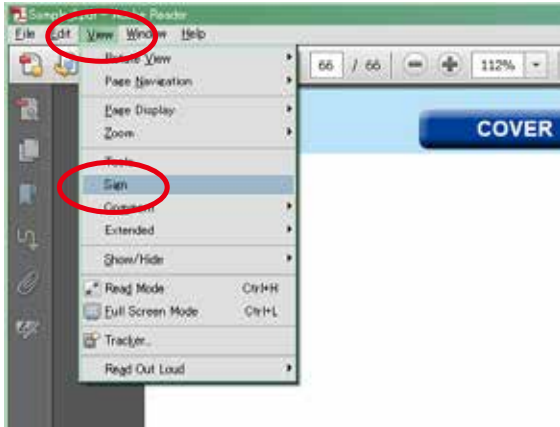
The Sign function lets you add notes to the data in this manual.

Save the file once you have finished adding notes.

#### [Example using Adobe Reader X]

On the "**View**" menu, click "**Sign**".

- The Sign pane appears.



#### [Example using Adobe Reader 9]

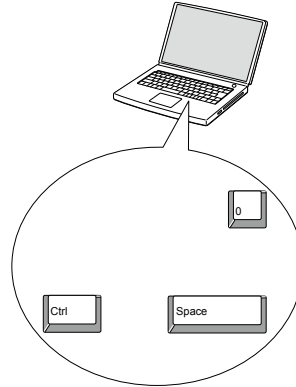
On the "**Document**" menu, click "**Sign**".

### Magnify schematic / printed wiring board diagrams - 1

#### (Ctrl+Space, mouse operation)

Press **Ctrl+Space** on the keyboard and drag the mouse to select the area you want to view.

- The selected area is magnified.

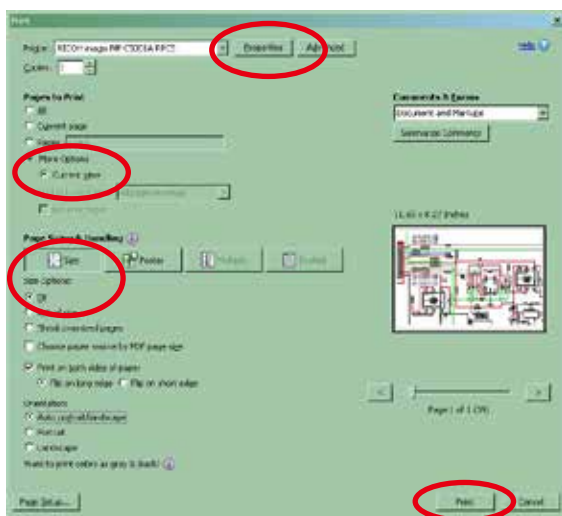


- When you want to move the area shown, hold down **Space** and drag the mouse.
- When you want to show a full page view, press **Ctrl+0** on the keyboard.

### Print a magnified part of the manual

The Properties dialog box and functions will vary depending on your printer.

1. Drag the mouse to magnify the part you want to print.
2. On the "**File**" menu, click "**Print**".
3. Configure the following settings in the Print dialog box.



4. Click the **Print** button to start printing.

#### • Properties

Click this button and check that the printer is set to a suitable paper size.

#### • Page to print

Select the following checkbox.

**"More Options" : "Current View"**

#### • Page Sizing & Handling

Select the following checkbox.

**"Size" / "Size Options" : "Fit"**

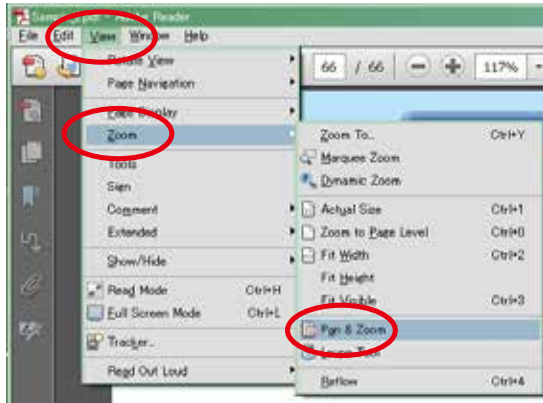
## Magnify schematic / printed wiring board diagrams - 2

### (Pan & Zoom function)

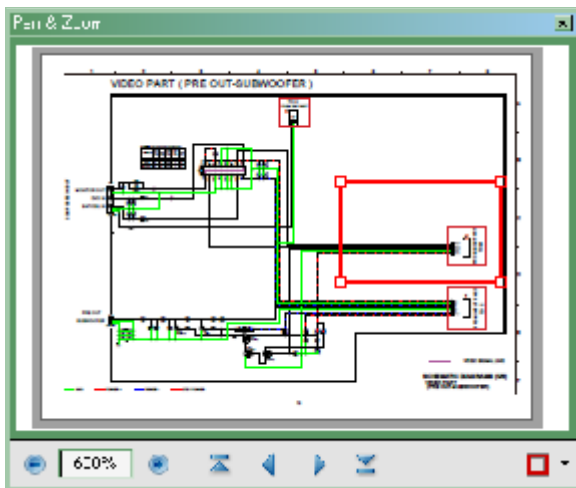
The Pan & Zoom function lets you see which part of a magnified diagram is being shown in a separate window.

#### [Example using Adobe Reader X]

On the "View" menu, point to "Zoom", and then click "Pan & Zoom".



- The Pan & Zoom window appears on the screen.



#### [Example using Adobe Reader 9]

On the "Tools" menu, point to "Select & Zoom", and then click "Pan & Zoom Window".

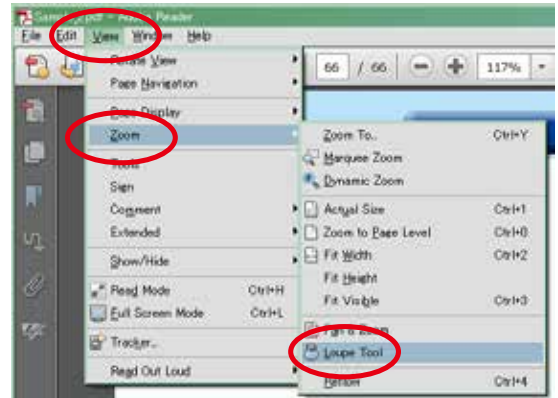
## Magnify schematic / printed wiring board diagrams - 3

### (Loupe Tool function)

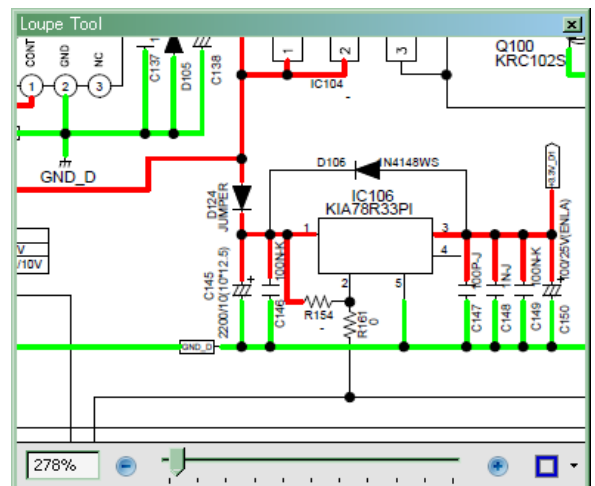
The Loupe Tool function lets you magnify a specific part of a diagram in a separate window.

#### [Example using Adobe Reader X]

On the "View" menu, point to "Zoom", and then click "Loupe Tool".



- The Loupe Tool window appears on the screen.



#### [Example using Adobe Reader 9]

On the "Tools" menu, point to "Select & Zoom", and then click "Loupe Tool Window".

## SAFETY PRECAUTIONS

The following items should be checked for continued protection of the customer and the service technician.

### leakage current check

Before returning the set to the customer, be sure to carry out either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the set is defective.

Be sure to test for leakage current with the AC plug in both polarities, in addition, when the set's power is in each state (on, off and standby mode), if applicable.

### **CAUTION** Please heed the following cautions and instructions during servicing and inspection.

#### ⊙ Heed the cautions!

Cautions which are delicate in particular for servicing are labeled on the cabinets, the parts and the chassis, etc. Be sure to heed these cautions and the cautions described in the handling instructions.

#### ⊙ Cautions concerning electric shock!

- (1) An AC voltage is impressed on this set, so if you touch internal metal parts when the set is energized, you may get an electric shock. Avoid getting an electric shock, by using an isolating transformer and wearing gloves when servicing while the set is energized, or by unplugging the power cord when replacing parts, for example.
- (2) There are high voltage parts inside. Handle with extra care when the set is energized.

#### ⊙ Caution concerning disassembly and assembly!

Through great care is taken when parts were manufactured from sheet metal, there may be burrs on the edges of parts. The burrs could cause injury if fingers are moved across them in some rare cases. Wear gloves to protect your hands.

#### ⊙ Use only designated parts!

The set's parts have specific safety properties (fire resistance, voltage resistance, etc.). Be sure to use parts which have the same properties for replacement. The burrs have the same properties. In particular, for the important safety parts that are indicated by the ⚠ mark on schematic diagrams and parts lists, be sure to use the designated parts.

#### ⊙ Be sure to mount parts and arrange the wires as they were originally placed!

For safety reasons, some parts use tapes, tubes or other insulating materials, and some parts are mounted away from the surface of printed circuit boards. Care is also taken with the positions of the wires by arranging them and using clamps to keep them away from heating and high voltage parts, so be sure to set everything back as it was originally placed.

#### ⊙ Make a safety check after servicing!

Check that all screws, parts and wires removed or disconnected when servicing have been put back in their original positions, check that no serviced parts have deteriorate the area around. Then make an insulation check on the external metal connectors and between the blades of the power plug, and otherwise check that safety is ensured.

(Insulation check procedure)

Unplug the power cord from the power outlet, disconnect the antenna, plugs, etc., and on the power. Using a 500V insulation resistance tester, check that the insulation resistance value between the inplug and the externally exposed metal parts (antenna terminal, headphones terminal, input terminal, etc.) is 1MΩ or greater. If it is less, the set must be inspected and repaired.

### **CAUTION** Concerning important safety parts

Many of the electric and the structural parts used in the set have special safety properties. In most cases these properties are difficult to distinguish by sight, and the use of replacement parts with higher ratings (rated power and withstand voltage) does not necessarily guarantee that safety performance will be preserved. Parts with safety properties are indicated as shown below on the wiring diagrams and the parts list in this service manual. Be sure to replace them with the parts which have the designated part number.

- (1) Schematic diagrams.....Indicated by the ⚠ mark.
- (2) Parts lists.....Indicated by the ⚠ mark.

The use of parts other than the designated parts could cause electric shocks, fires or other dangerous situations.

## NOTE FOR SCHEMATIC DIAGRAM

### WARNING:

Parts indicated by the  $\triangle$  mark have critical characteristics. Use ONLY replacement parts recommended by the manufacturer.

### CAUTION:

Before returning the set to the customer, be sure to carry out either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the set is defective.

### WARNING:

DO NOT return the set to the customer unless the problem is identified and remedied.

### NOTICE:

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM / M=1,000,000 OHM

ALL CAPACITANCE VALUES ARE EXPRESSED IN MICRO FARAD, UNLESS OTHERWISE INDICATED. P INDICATES MICRO-MICRO FARAD. EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION. CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

## NOTE FOR PARTS LIST

1. Parts indicated by "nsp" on this table cannot be supplied.
2. When ordering a part, make a clear distinction between "1" and "I" (i) to avoid mis-supplying.
3. A part ordered without specifying its part number can not be supplied.
4. Part indicated by "★" mark is not illustrated in the exploded view.
5. General-purpose Carbon Film Resistor in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)
6. General-purpose Carbon Chip Resistors are not included in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

**WARNING:** Parts indicated by the  $\triangle$  mark have critical characteristics. Use ONLY replacement parts recommended by the manufacturer.

## INSTRUCTIONS FOR HANDLING SEMI-CONDUCTORS AND OPTICAL UNIT

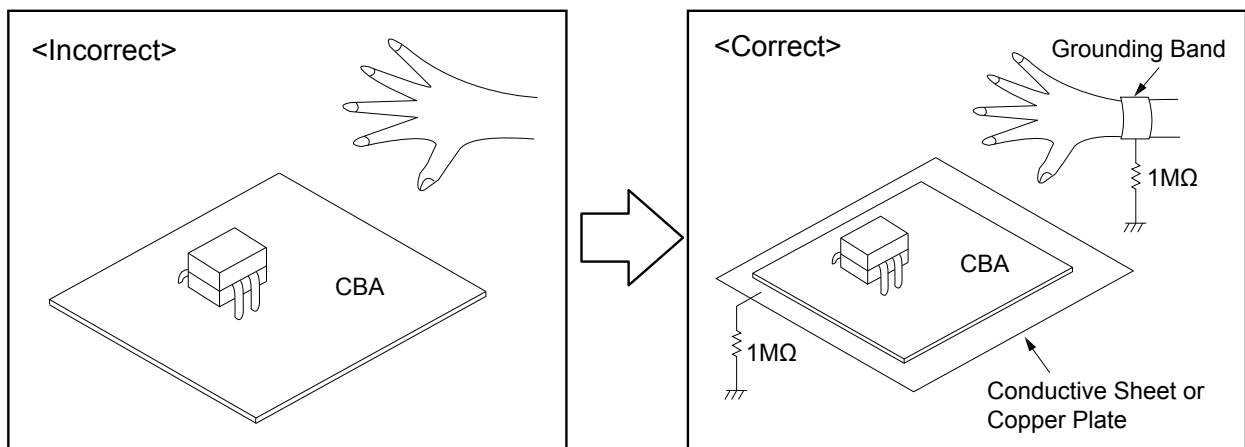
Electrostatic breakdown of the semi-conductors or optical pickup may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

### 1. Ground for Human Body

Be sure to wear a grounding band (1 M $\Omega$ ) that is properly grounded to remove any static electricity that may be charged on the body.

### 2. Ground for Workbench

Be sure to place a conductive sheet or copper plate with proper grounding (1 M $\Omega$ ) on the workbench or other surface, where the semi-conductors are to be placed. Because the static electricity charge on clothing will not escape through the body grounding band, be careful to avoid contacting semi-conductors with your clothing



[illegible]

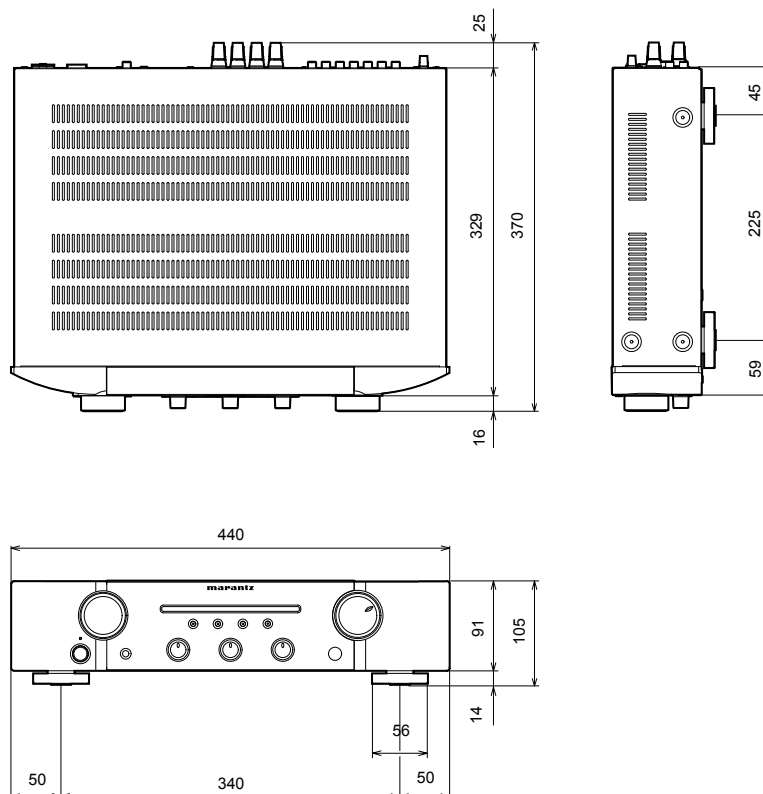
# TECHNICAL SPECIFICATIONS

- **RMS Power output**  
(20 Hz – 20 kHz simultaneous drive of both channels) :  
45 W x 2 (8  $\Omega$ /ohms load)  
60 W x 2 (4  $\Omega$ /ohms load)
- **Total harmonic distortion**  
(20 Hz – 20 kHz simultaneous drive of both channels, 8  $\Omega$ /ohms load) :  
0.08 %
- **Output band width** (8  $\Omega$ /ohms load, 0.06 %) :  
10 Hz – 50 kHz
- **Frequency response** (CD, 1 W, 8  $\Omega$ /ohms load) :  
10 Hz – 70 kHz +0 dB, –1 dB
- **Dumping factor** (8  $\Omega$ /ohms load, 40 Hz – 20 kHz) :  
100
- **Input sensitivity/Input impedance**  
**PHONO (MM)** : 2.2 mV/47 k $\Omega$ /kohms  
**CD, TUNER, NETWORK, RECORDER** : 200 mV/20 k $\Omega$ /kohms
- **Maximum allowable PHONO input level** (1 kHz) **MM** :  
100 mV
- **RIAA deviation** (20 Hz – 20 kHz) :  
 $\pm 1.0$  dB
- **S/N** (IHF-A, 8  $\Omega$ /ohms load)  
**PHONO (MM)** : 83 dB (5 mV input, 1 W output)  
**CD, TUNER, NETWORK, RECORDER** : 102 dB (2 V input, Rated output)
- **Tone control**  
**Bass (50 Hz)** :  $\pm 10$  dB  
**Treble (15 kHz)** :  $\pm 10$  dB
- **Digital input**  
**Coaxial** : 0.5 Vp-p  
**Optical** : –27 dBm or later
- Power requirement (for U model)** : AC 120 V, 60 Hz  
**Power requirement (for N model)** : AC 230 V, 50/60 Hz  
**Power requirement (for K model)** : AC 220 V, 50 Hz  
**Power requirement (for F model)** : AC 100 V, 50/60 Hz  
**Power consumption** : 155 W  
**Power consumption during standby** : 0.3 W

## DIMENSION

Unit : in. (mm)

Weight : 7.6 kg

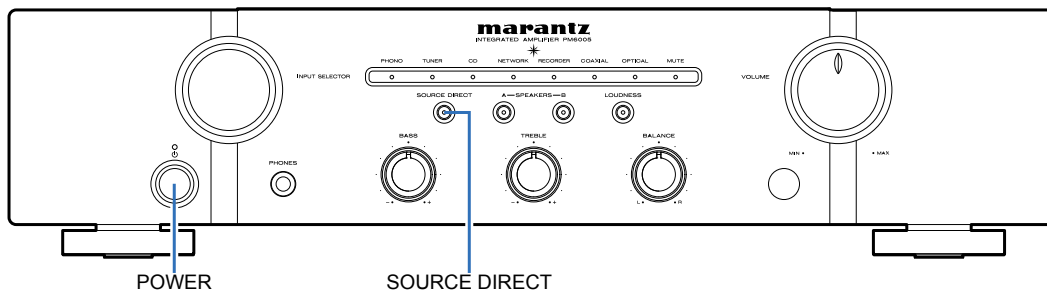


## CAUTION IN SERVICING

### Initializing INTEGRATED AMPLIFIER

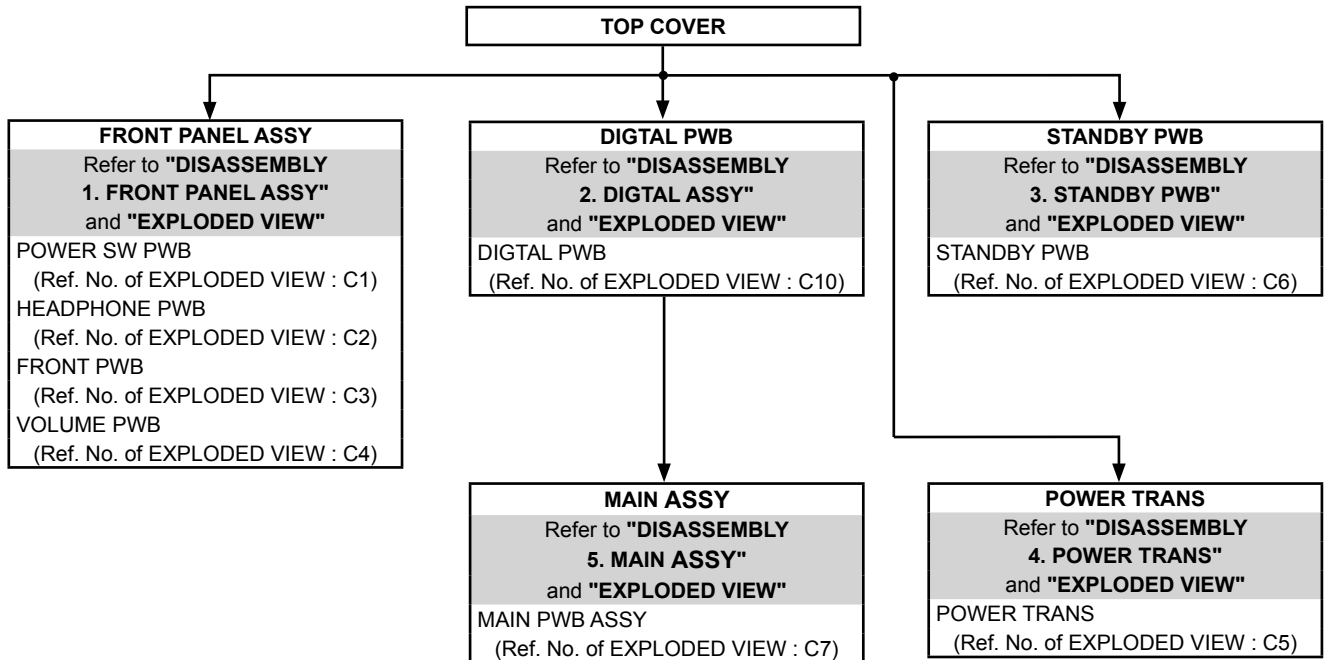
INTEGRATED AMPLIFIER initialization should be performed when the  $\mu$ com and peripheral parts of  $\mu$ com were replaced.

1. Turn off the power pressing "**POWER**" button.
2. Press "**POWER**" button while simultaneously while pressing "**SOURCE DIRECT**" buttons.
3. Check the set entered the service mode.(Refer to [15 page](#) "**SERVICE MODE**".)



## DISASSEMBLY

- Disassemble in order of the arrow in the following figure.
- In the case of the re-assembling, assemble it in order of the reverse of the following flow.
- In the case of the re-assembling, observe "attention of assembling".
- If wire bundles are untied or moved to perform adjustment or replace parts etc., be sure to rearrange them neatly as they were originally bundled or placed afterward.  
Otherwise, incorrect arrangement can be a cause of noise generation.

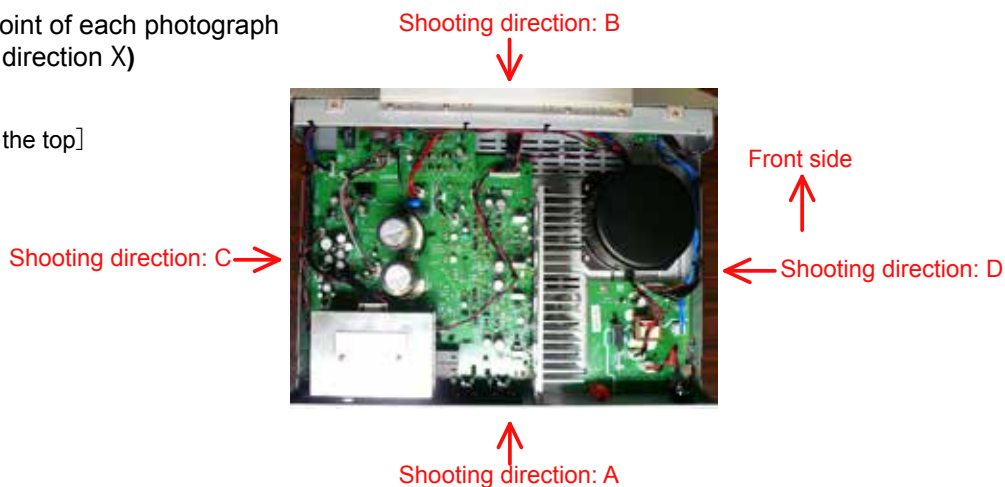


## About the photos used for "descriptions of the DISASSEMBLY" section

- The shooting direction of each photograph used herein is indicated on the left side of the respective photograph as "Shooting direction: \*\*\*".
- Refer to the diagram below about the shooting direction of each photograph.
- Photographs with no shooting direction indicated were taken from the top of the set.

The viewpoint of each photograph  
(Shooting direction X)

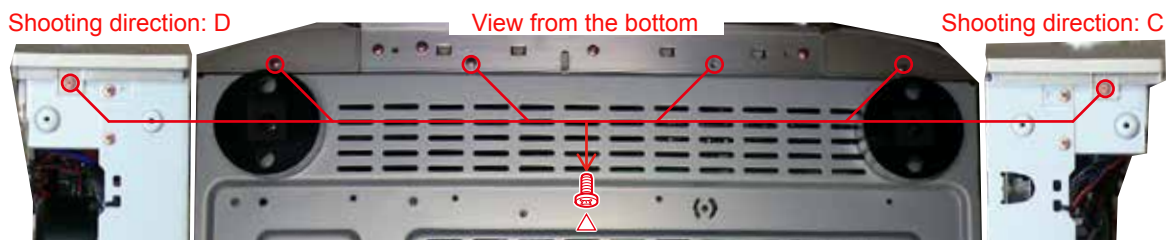
[View from the top]



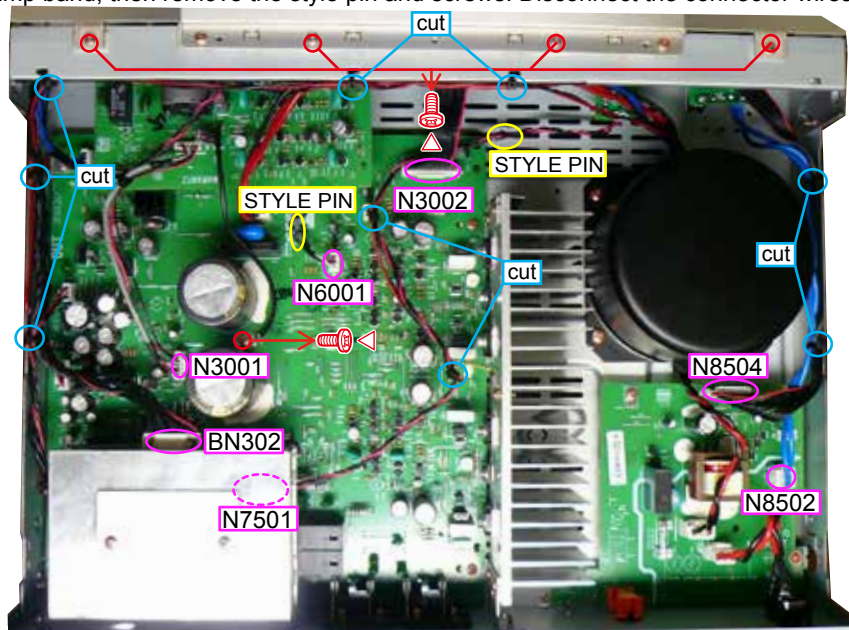
## 1. FRONT PANEL ASSY

Proceeding : **TOP COVER** → **FRONT PANEL ASSY**

- (1) Remove the screws.



- (2) Cut the wire clamp band, then remove the style pin and screws. Disconnect the connector wires.



## 2. DIGITAL ASSY

Proceeding : **TOP COVER** → **DIGITAL ASSY**

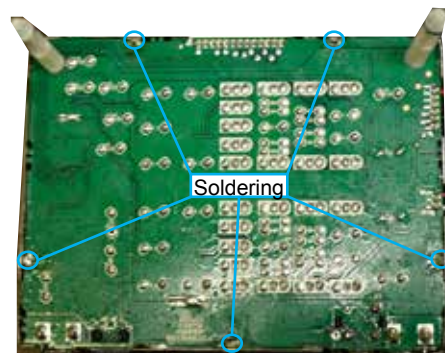
(1) Remove the screws.



(2) Cut the wire clamp band, then remove the PCB HOLDER. Disconnect the connector wires.



(3) Disconnect the shield cover. Remove the soldering.

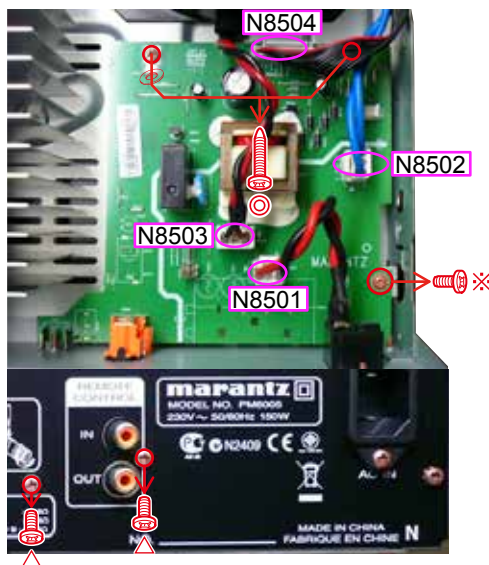


Please refer to "EXPLODED VIEW" for the disassembly method of each P.W.B included in DIGITAL ASSY.

### 3. STANDBY PWB

Proceeding : **TOP COVER** → **STANDBY PWB**

(1) Remove the screws. Disconnect the connector wires.



### 4. POWER TRANS

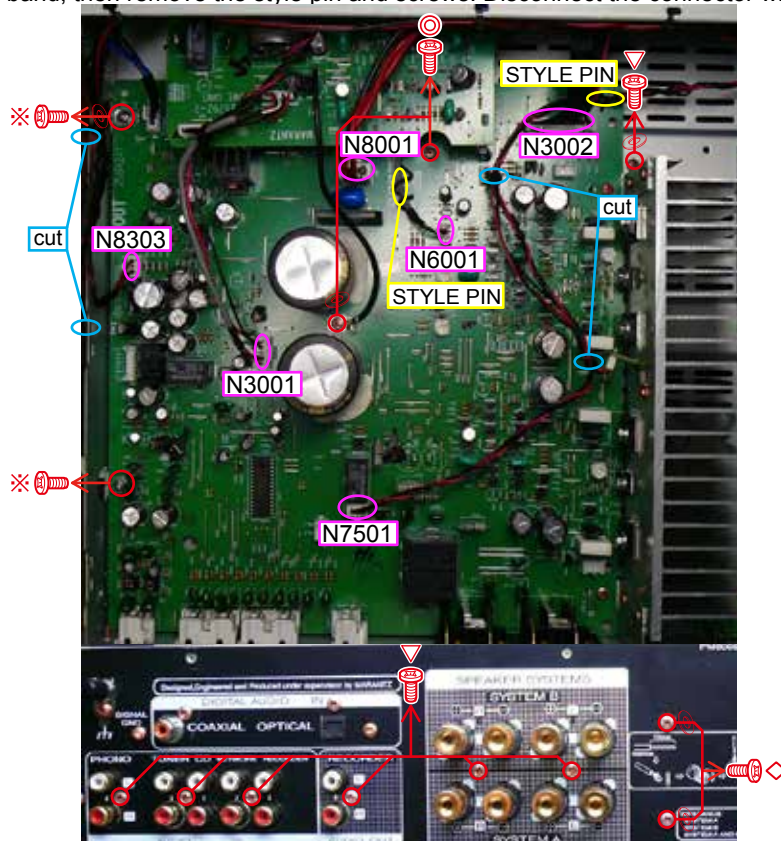
Proceeding : **TOP COVER** → **POWER TRANS**

Please refer to "EXPLODED VIEW" for the disassembly method of each P.W.B included in POWER TRANS.

### 5. MAIN ASSY

Proceeding : **TOP COVER** → **DIGITAL ASSY** → **MAIN ASSY**

(1) Cut the wire clamp band, then remove the style pin and screws. Disconnect the connector wires.



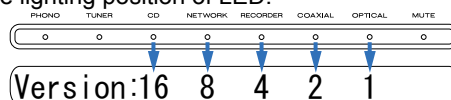
## SERVICE MODE

### Microprocessor (U1001) version check

(1) Press the POWER button with pressing the SOURCE DIRECT button on the unit.

(2) The firmware version is displayed on the front LED. (Display time is only for 3 seconds.)

The firmware version is displayed in the lighting position of LED.



Ex. :

Light up OPTICAL [1 ], Version : 1

Light up OPTICAL [1 ] and RECORDER [4 ], Version : 5

Light up OPTICAL [1 ] and NETWORK [8 ], Version : 9

(3) Each LED light up then all LED light up.

(4) Turn off the power to quit Service Mode. (The unit to the default status)

## WHEN THE MICROPROCESSOR IS REPLACED WITH A NEW ONE

When the U-PRO (Microprocessor) or the Flash ROM is replaced, confirm the following.

| PWB Name | Ref. No. | Description   | After replaced | Remark |
|----------|----------|---------------|----------------|--------|
| FRONT    | U1001    | STM32F100R8T6 | A              |        |

After replacing

**A** : Mask ROM (With software). No need for write-in of software to the microprocessor.

**B** : Flash ROM (With software). Usually, no need for write-in of software. But, when the software was updated, you should write the new software on the microprocessor or flash ROM. Please check the software version.

**C** : Empty Flash ROM (Without software). You should write the software on the microprocessor or flash ROM. Refer to "Update procedure" or "writing procedure", when you write the software.

**D** : Flash ROM (With software). But you should write to the latest version of each region.

# ADJUSTMENT

## IDLING CURRENT ALIGNMENT

### Adjusting Procedure

Set the power voltage to rated voltage for this adjustment.

- (1) Adjust the Idling Current with the variable resistor **V6001** and **V6002** on the PWB **CUP12578Z**.
- (2) Turn off the power.
- (3) "+" of Connect Digital Voltage is connected to the No. 1 pin and connected "-" to No. 3 pin of **N6003**.
- (4) "+" of Connect Digital Voltage is connected to the No. 1 pin and connected "-" to No. 3 pin of **N6004**.
- (5) Before turning on the power, **V6001** and **V6002** have been counter clockwise turned with the adjustment driver.
- (6) Turn on the power, VOLUME is set as (0min.).

- (7) After 2 minutes.

With seeing the digital voltage meter turn the variable resistor clockwise slowly to adjust the idling current.

Idling adjustment with **V6001 (V6002)**.

- Turn **V6001 (V6002)** clockwise to increase the idling current.
- The adjustment value of idling current is 10 mV(22.5 mA)  $\pm$  0.5 mV(1.1 mA) each.

- (8) After 6 minutes.

Repeat the same procedure as 7.

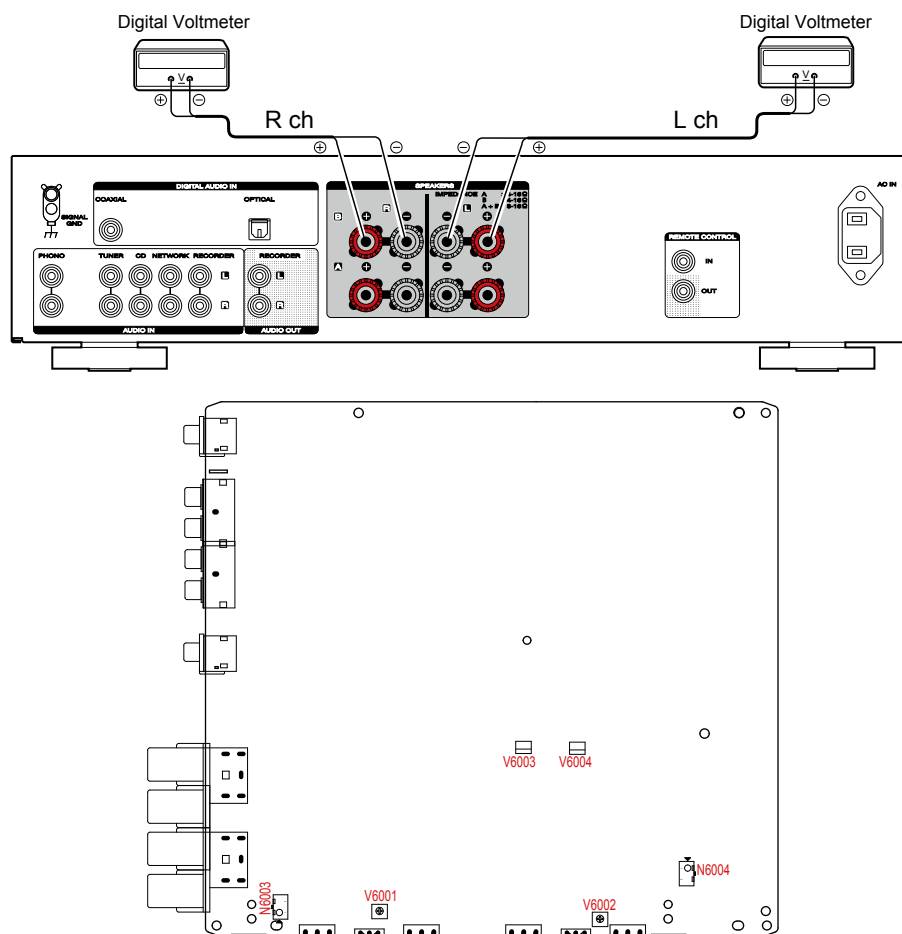
- The adjustment value of idling current is 20 mV(45 mA)  $\pm$  0.5 mV(1.1 mA) each.

Adjustment is completed.

- (9) Remove connection cable, attach the top cover.

**NOTE** : Idling current decreases with the temperature rise inside the unit, and it is set to 20 mV (45 mA) of setting value in about 30 minutes after turn on the power.

## DC OFFSET VOLTAGE ADJUSTMENT



### Adjusting Procedure

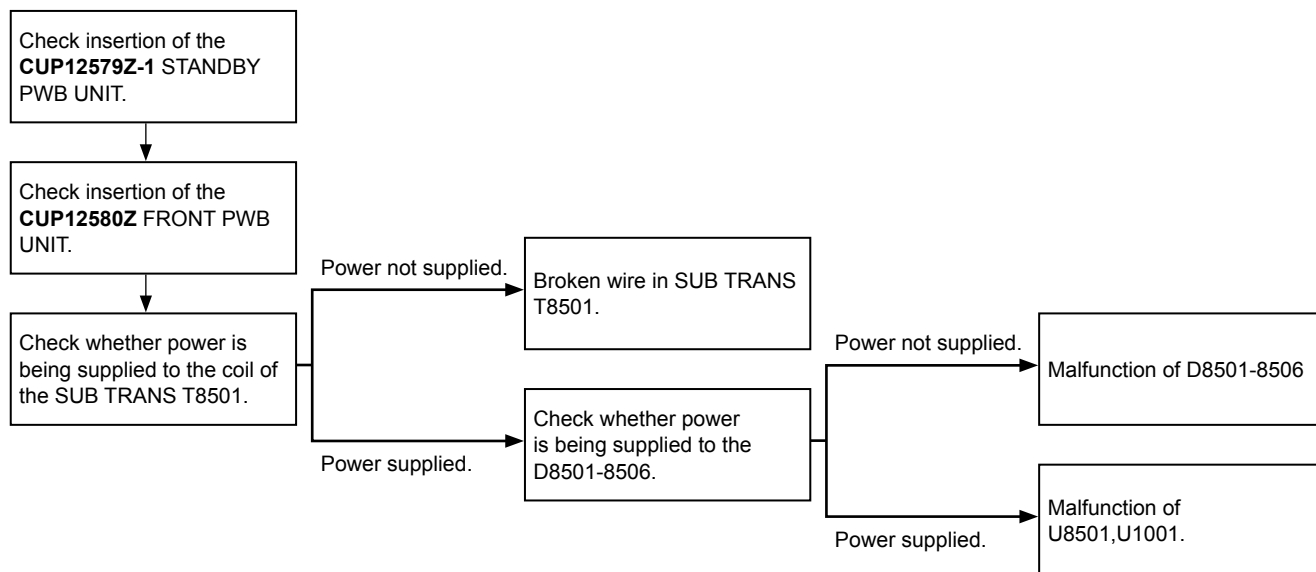
#### DC Offset Voltage Adjustment

- (1) Before turning on the power, Insert Digital Voltage Meter between the SPEAKERS SYSTEM A (L CH) "+" and "-". Insert Digital Voltage Meter between the SPEAKERS SYSTEM A (R CH) "+" and "-".
  - (2) Adjust the VOLUME to MIN.
  - (3) Turn on the power. Then turn the SPAKERS SW to A.  
Adjustment is started immediately after a speaker relay turns on.
  - (4) First L CH is adjusted.  
The variable resistor **V6003** on **CUP12578Z** is turned with adjustment driver, and the Digital Voltage Meter is adjusted to "**0 mV  $\pm$  3 mV**".
  - (5) Then, R CH is adjusted.  
The variable resistor **V6004** on **CUP12578Z** is turned with adjustment driver, and the Digital Voltage Meter is adjusted to "**0 mV  $\pm$  3 mV**".
- NOTE :** DC offset voltage drops when turn the semi-fixed resistor (**V6003** and **V6004**) clockwise. DC offset voltage rises when turn the semi-fixed resistor un-clockwise. Please turn it slowly, because value of Digital Voltage Meter changes slowly.
- (6) Although after-adjustment DC offset voltage has some change, Please check that the range of DC offset voltage between L ch (R ch) "+" and L ch (R ch) "-" terminal of SPEAKERS SYSTEM A is "**0 mV  $\pm$  20 mV**". CHART OF FACTORY MODE.

## TROUBLE SHOOTING

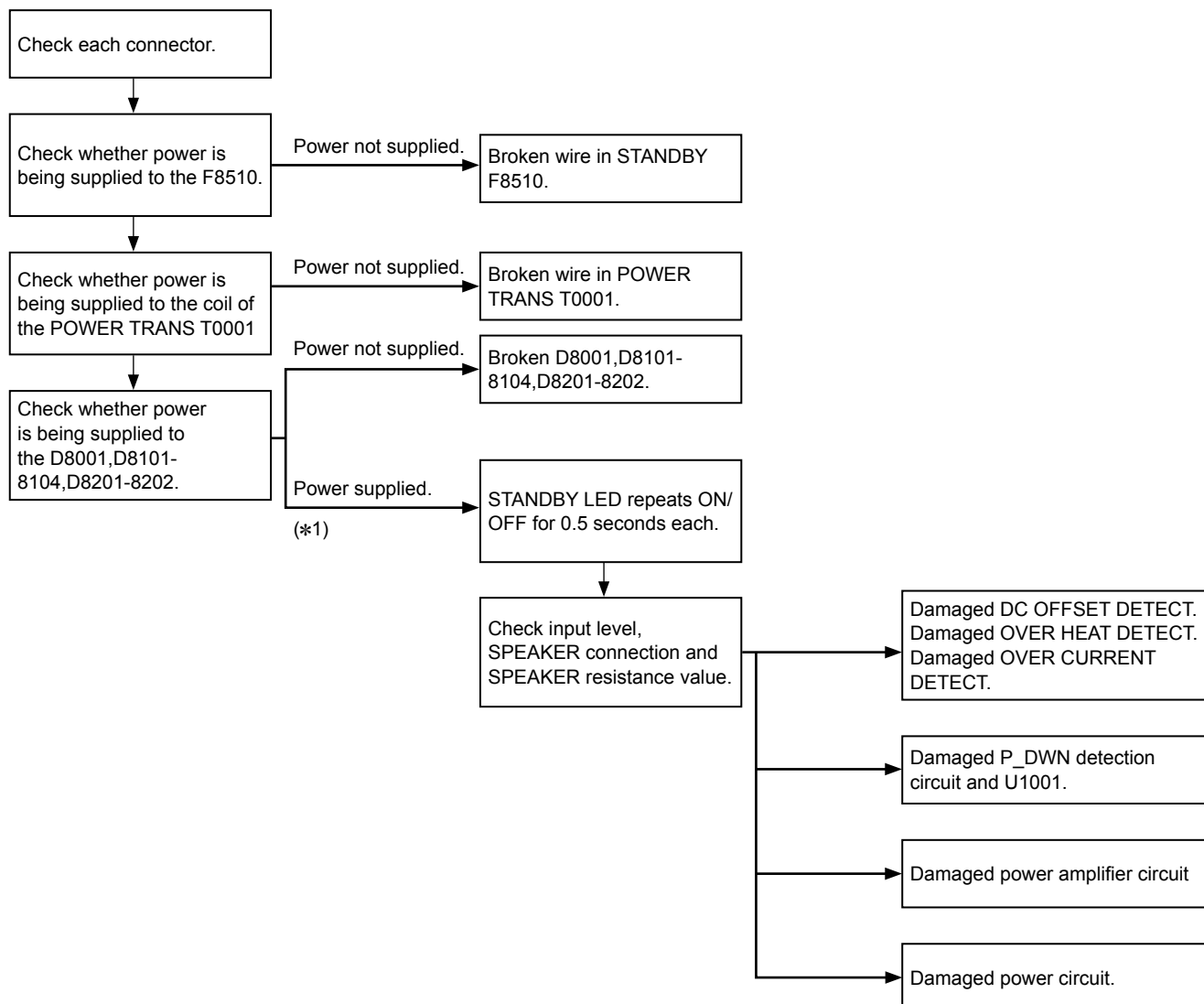
### 1. The power can not be turned on.

(STANDBY LED does not light (STANDBY MODE))

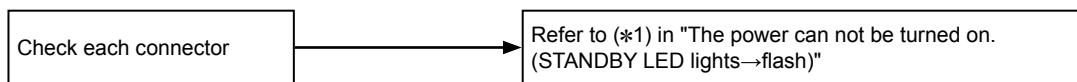


### 2. The power can not be turned on.

(STANDBY LED lights→flash)

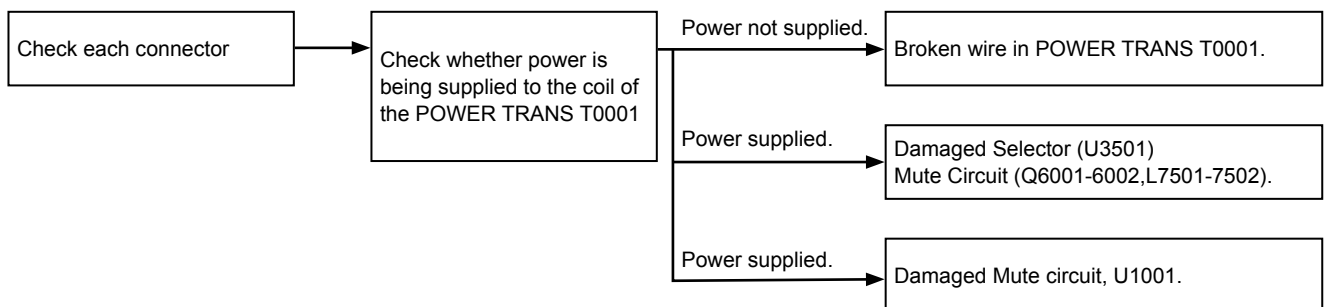


### 3. STANDBY LED flashes while using unit. (protection circuit is set)



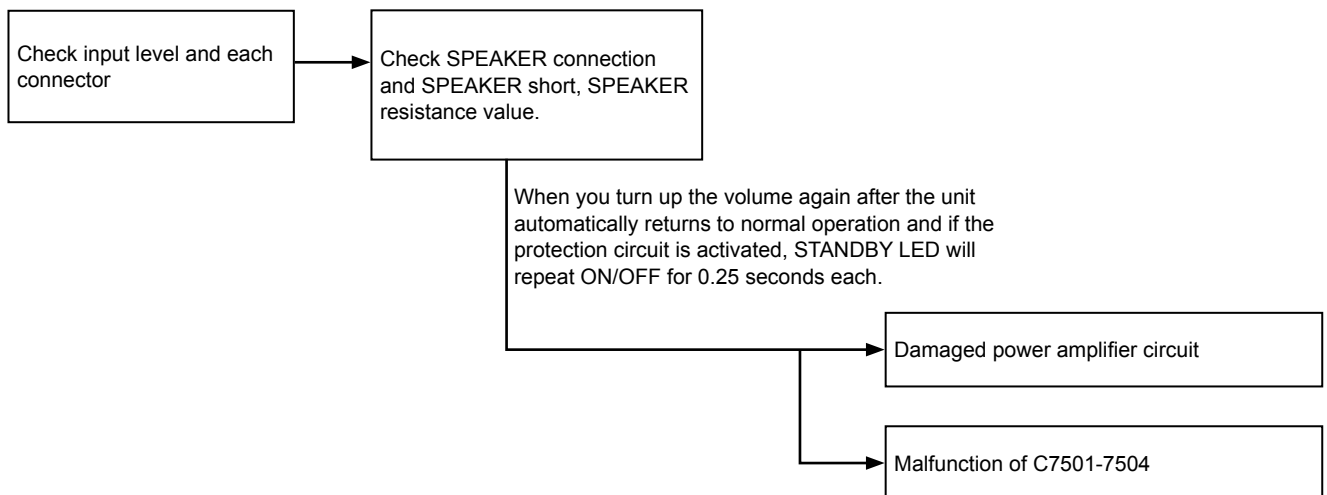
### 4. The power turned on, but a sound does not output normally. (Both channels)

#### 4.1 STANDBY LED does not flash (protection mode is not set)



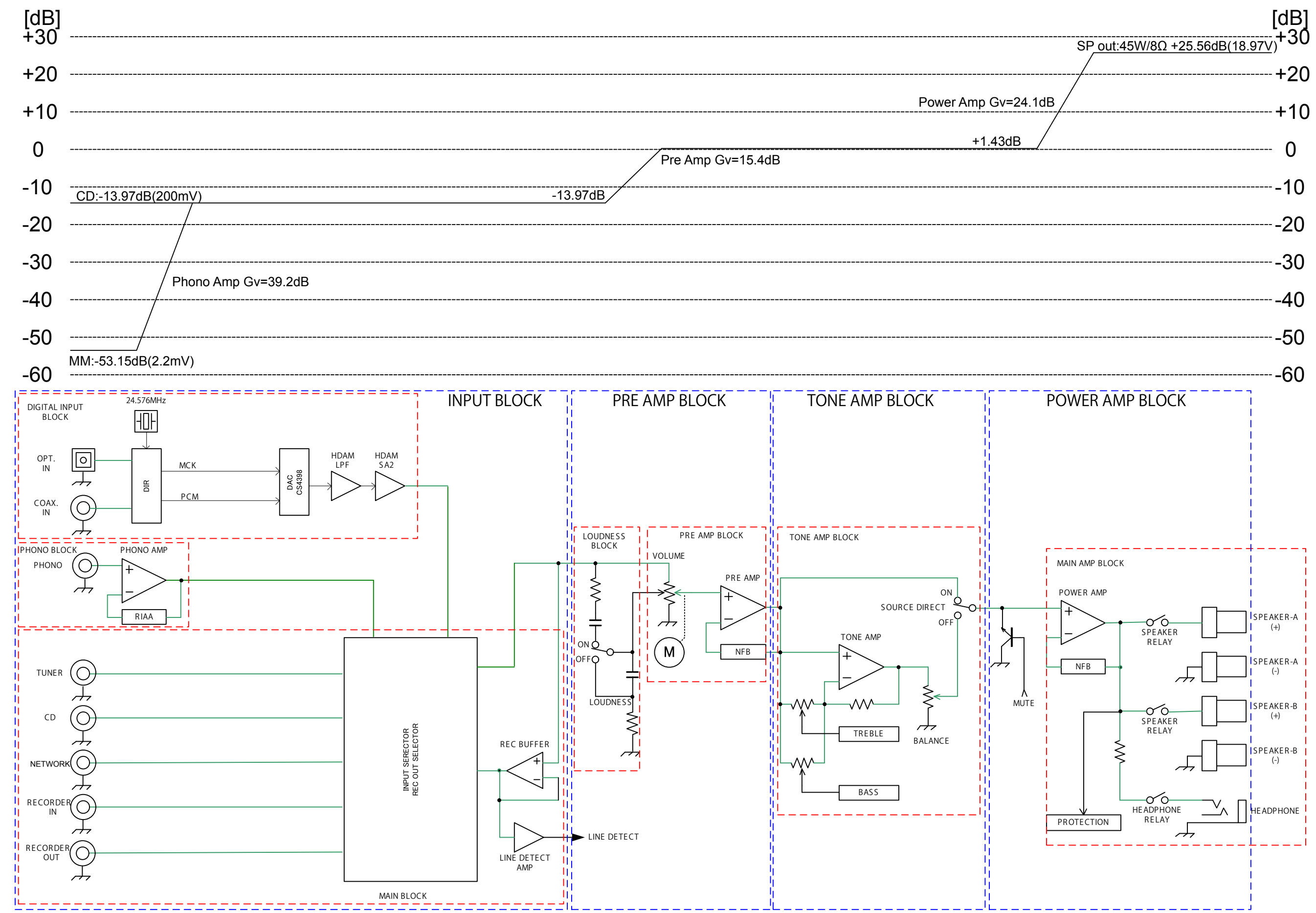
#### 4.2 When the volume is turned up, Mute LED flashes. (protection mode is set)

Repeats ON/OFF for 0.5 second each, and automatically returns to normal operation.

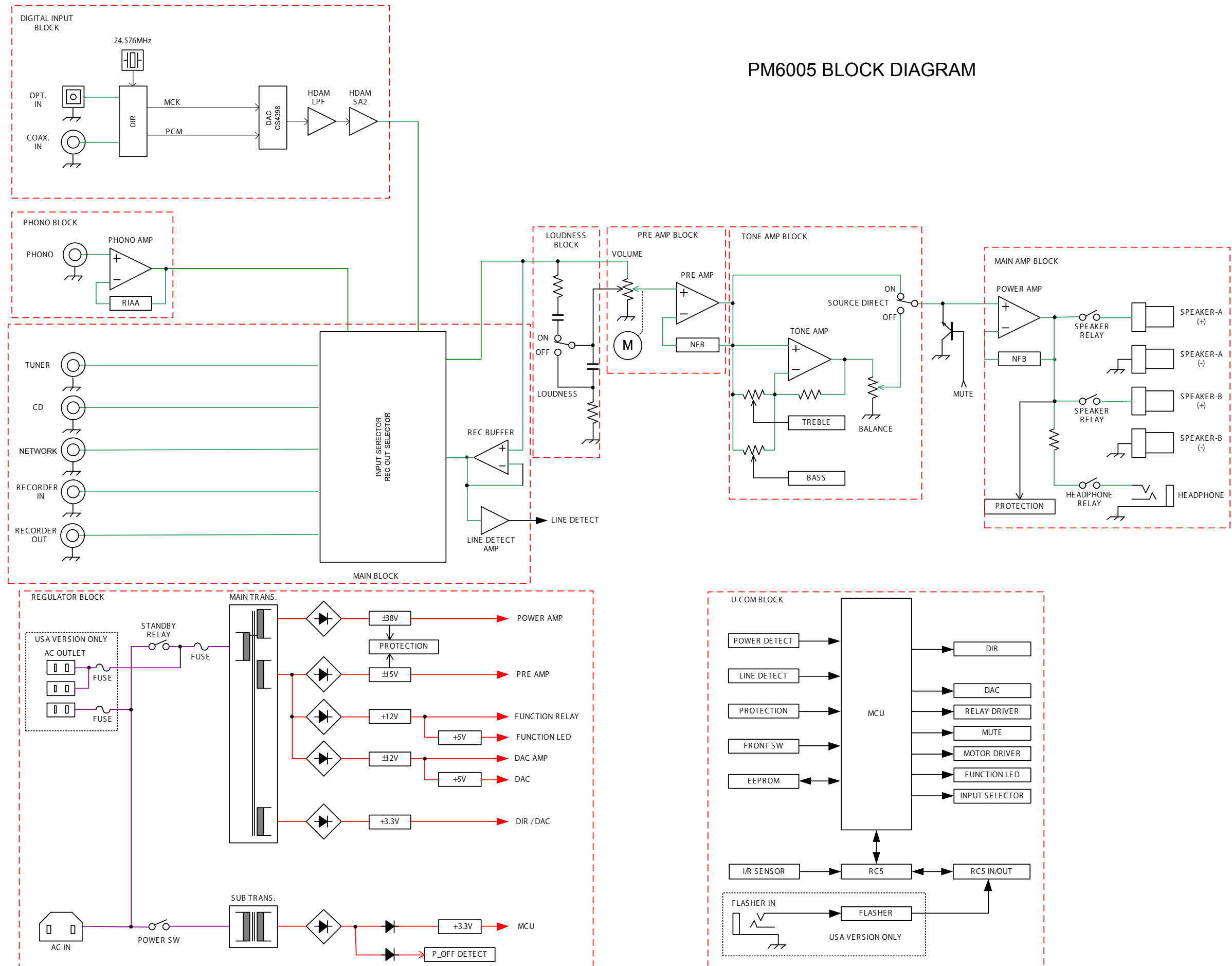


Personal notes:

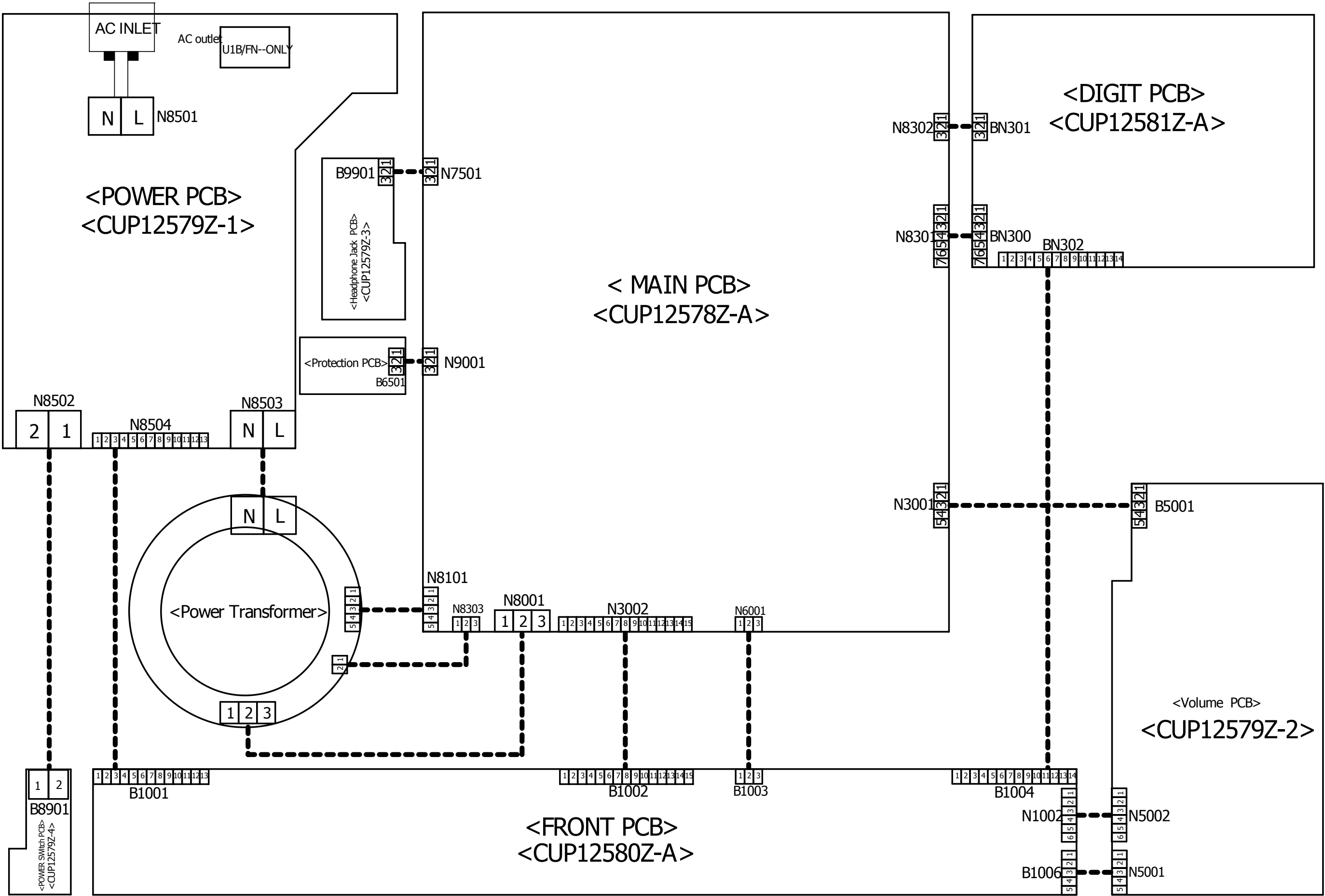
LEVEL DIAGRAM



## POWER DIAGRAM

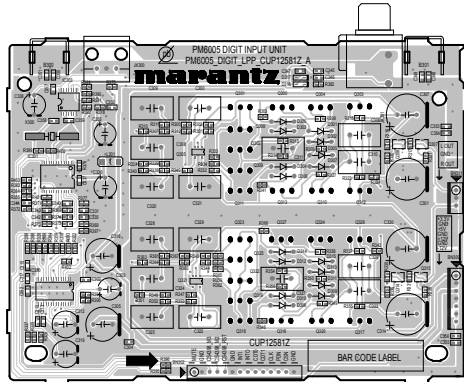


WIRING DIAGRAM

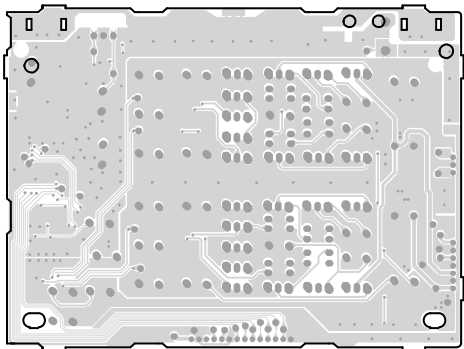


| PRINTED WIRING BOARDS                                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Lead-free Solder<br>When soldering, use the Lead-free Solder (Sn-Ag-Cu). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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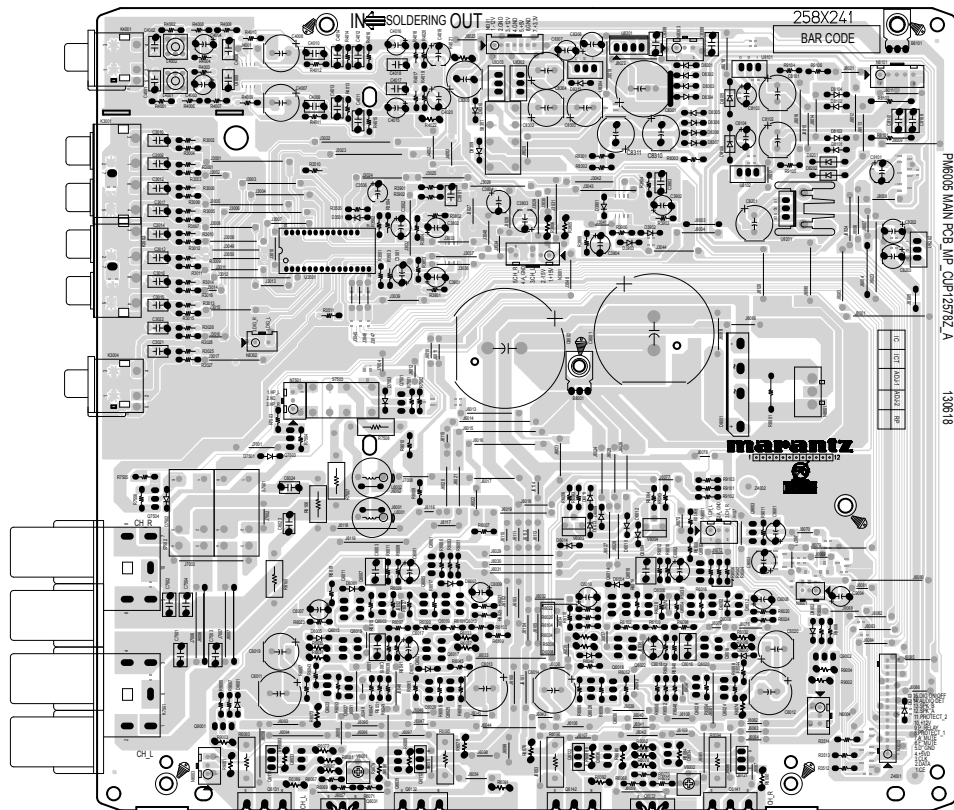
DIGITAL (A SIDE)



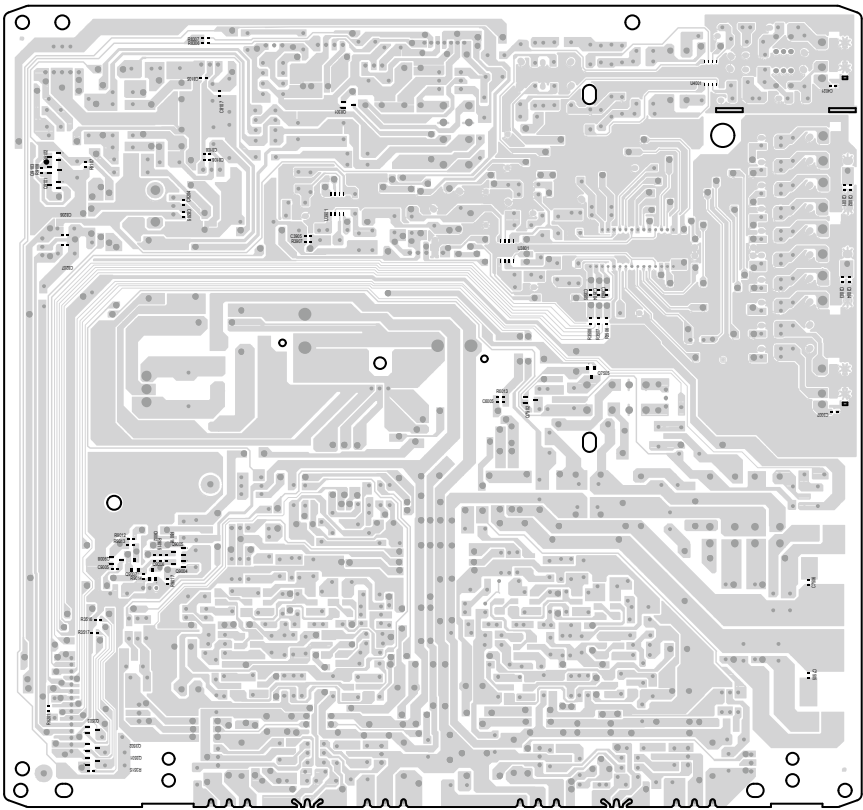
DIGITAL (B SIDE)



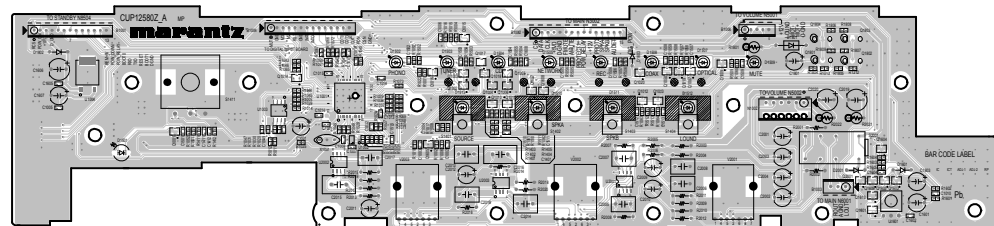
MAIN (A SIDE)



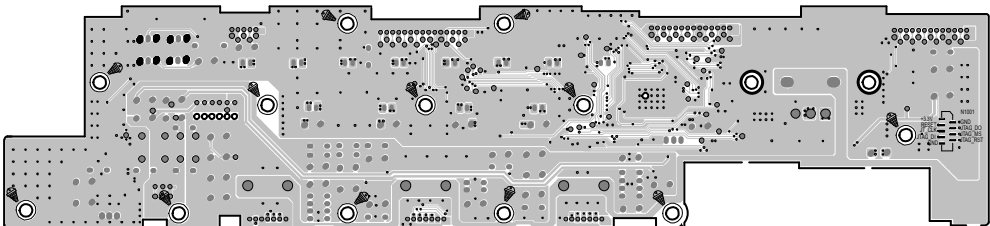
MAIN (B SIDE)



FRONT (A SIDE)

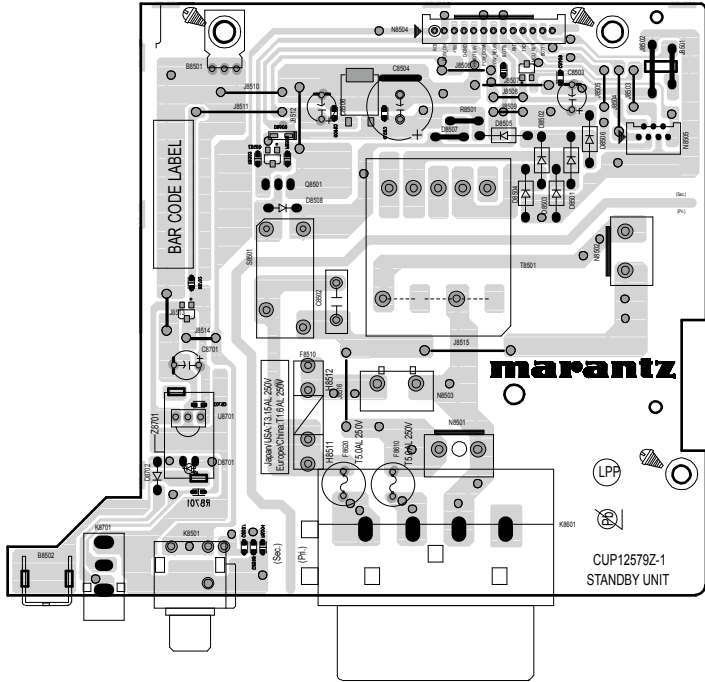


FRONT (B SIDE)

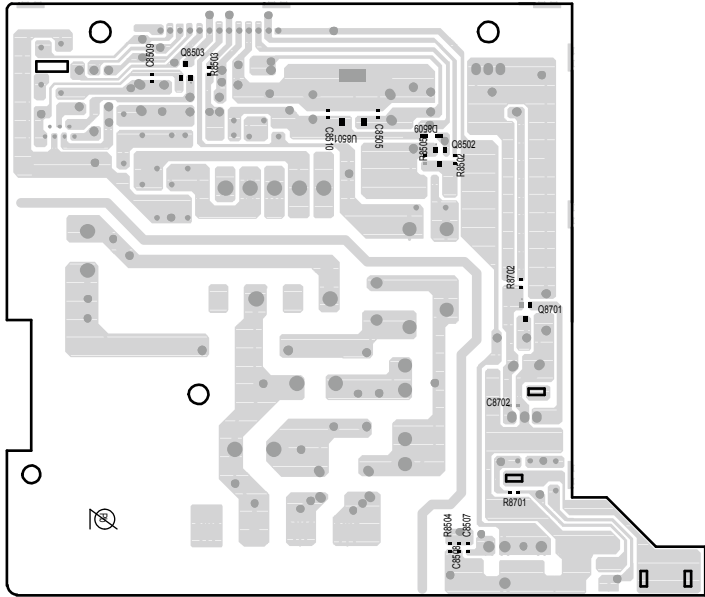


|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |   |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|---|
|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |   |
| A |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | A |
| B |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | B |
| C |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | C |
| D |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | D |
| E |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | E |
| F |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | F |
| G |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | G |
| H |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | H |
| J |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | J |
| K |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | K |
| L |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | L |
| M |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | M |

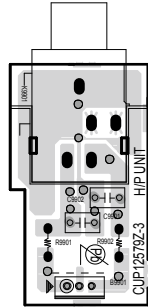
STANDBY (A SIDE)



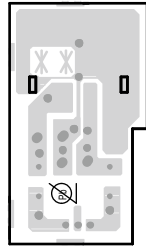
STANDBY (B SIDE)



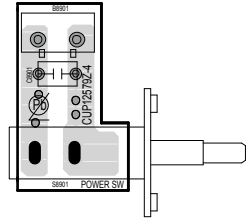
HEADPHONE (A SIDE)



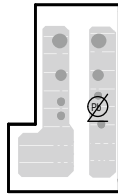
HEADPHONE (B SIDE)



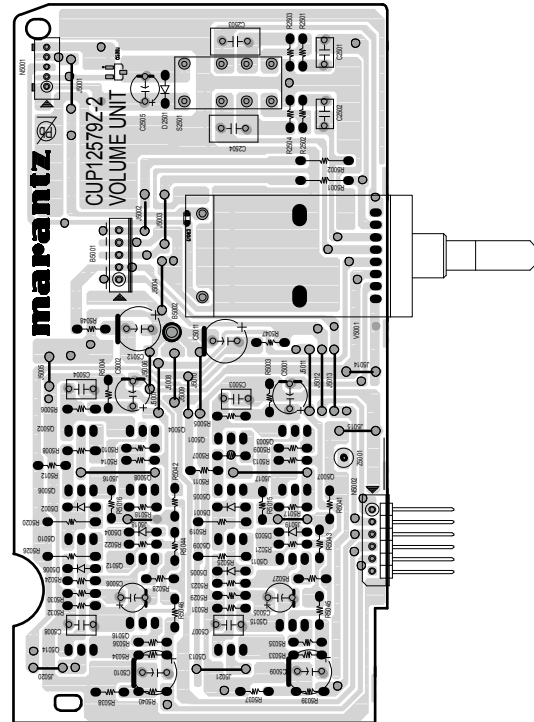
POWER SW (A SIDE)



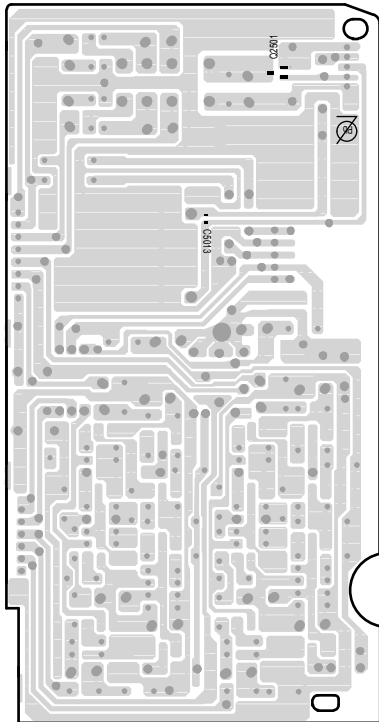
POWER SW (B SIDE)



VOLUME (A SIDE)



VOLUME (B SIDE)

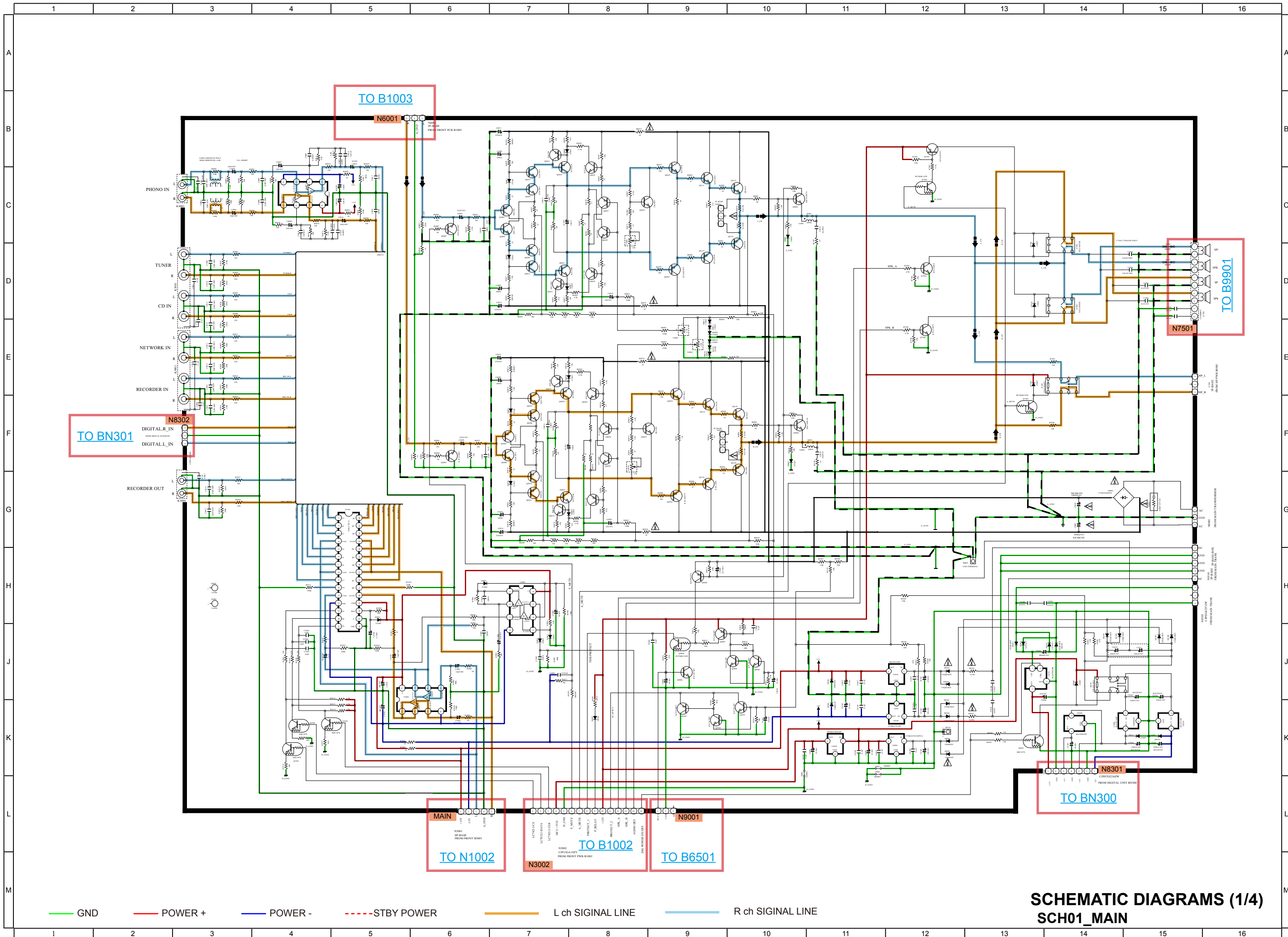


POSISTER (A SIDE)

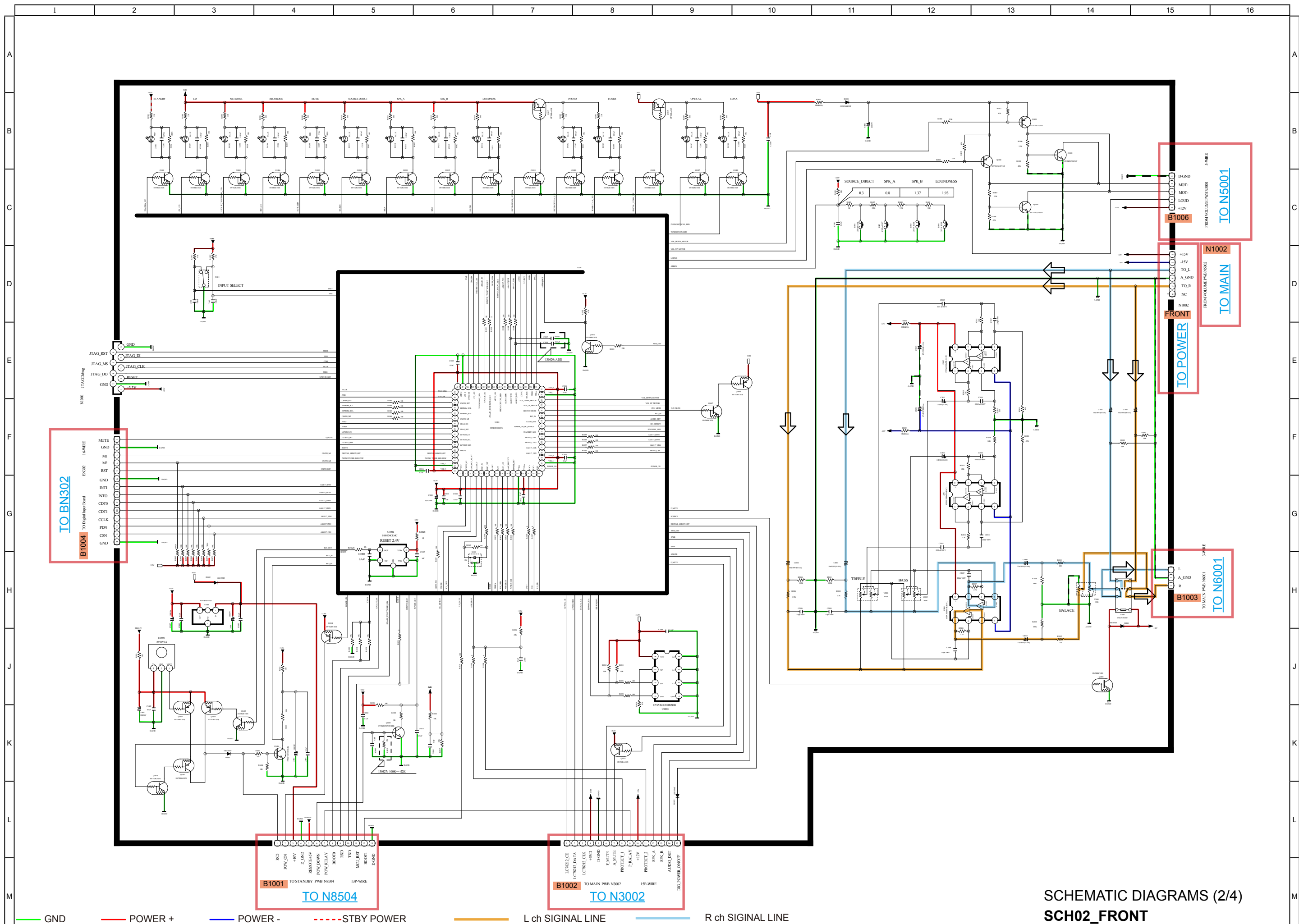


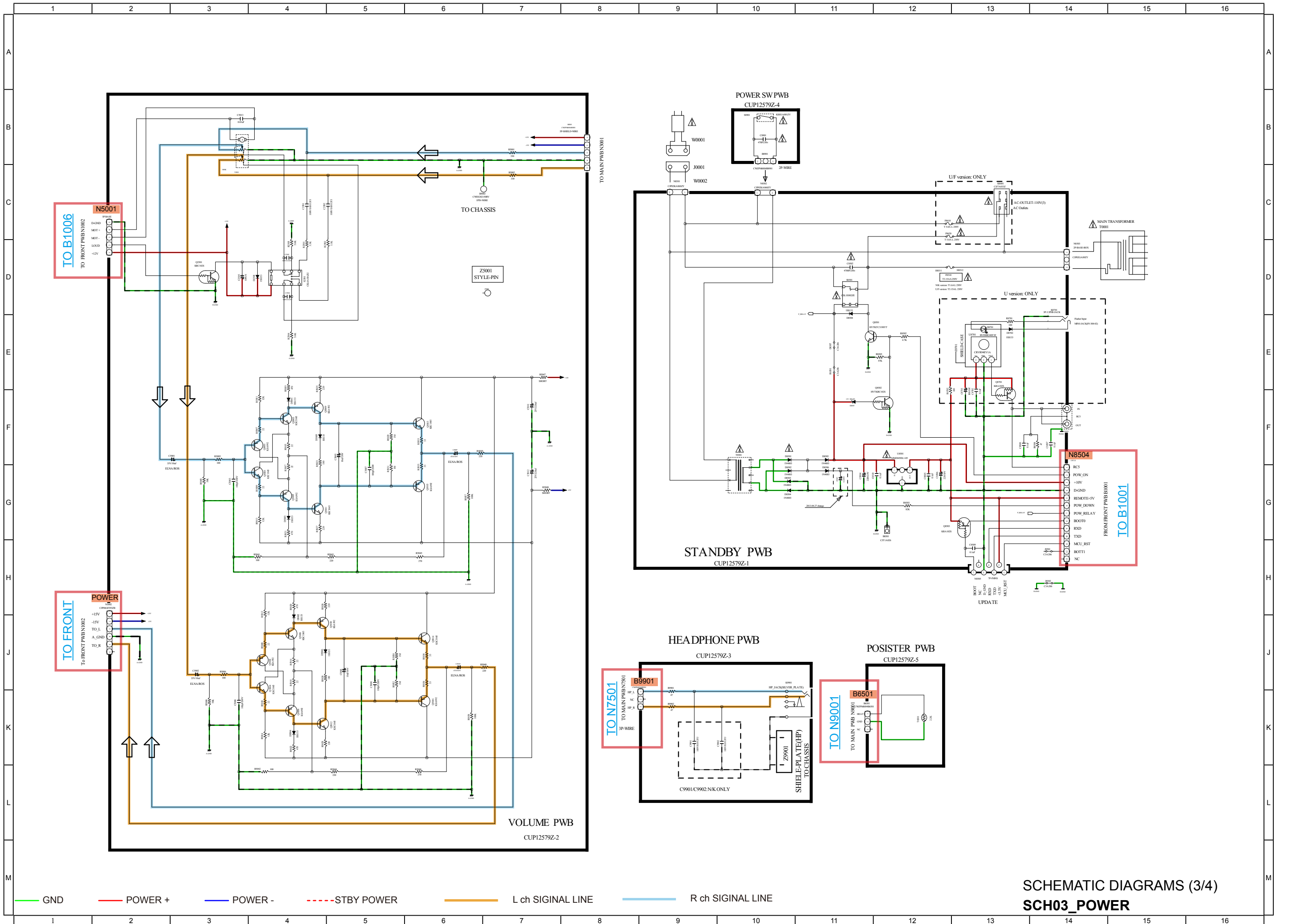
POSISTER (B SIDE)



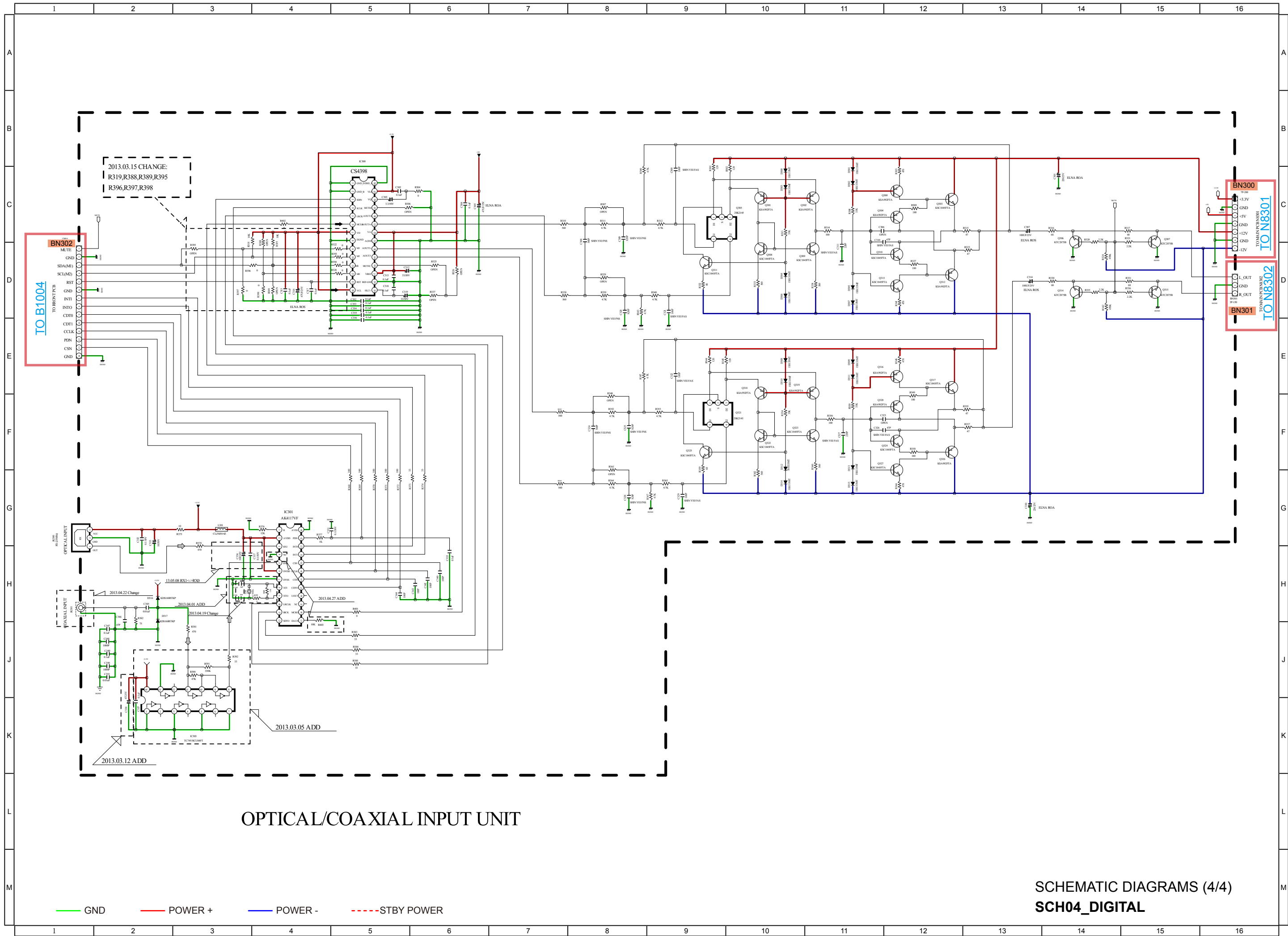


SCHEMATIC DIAGRAMS (1/4)  
SCH01\_MAIN

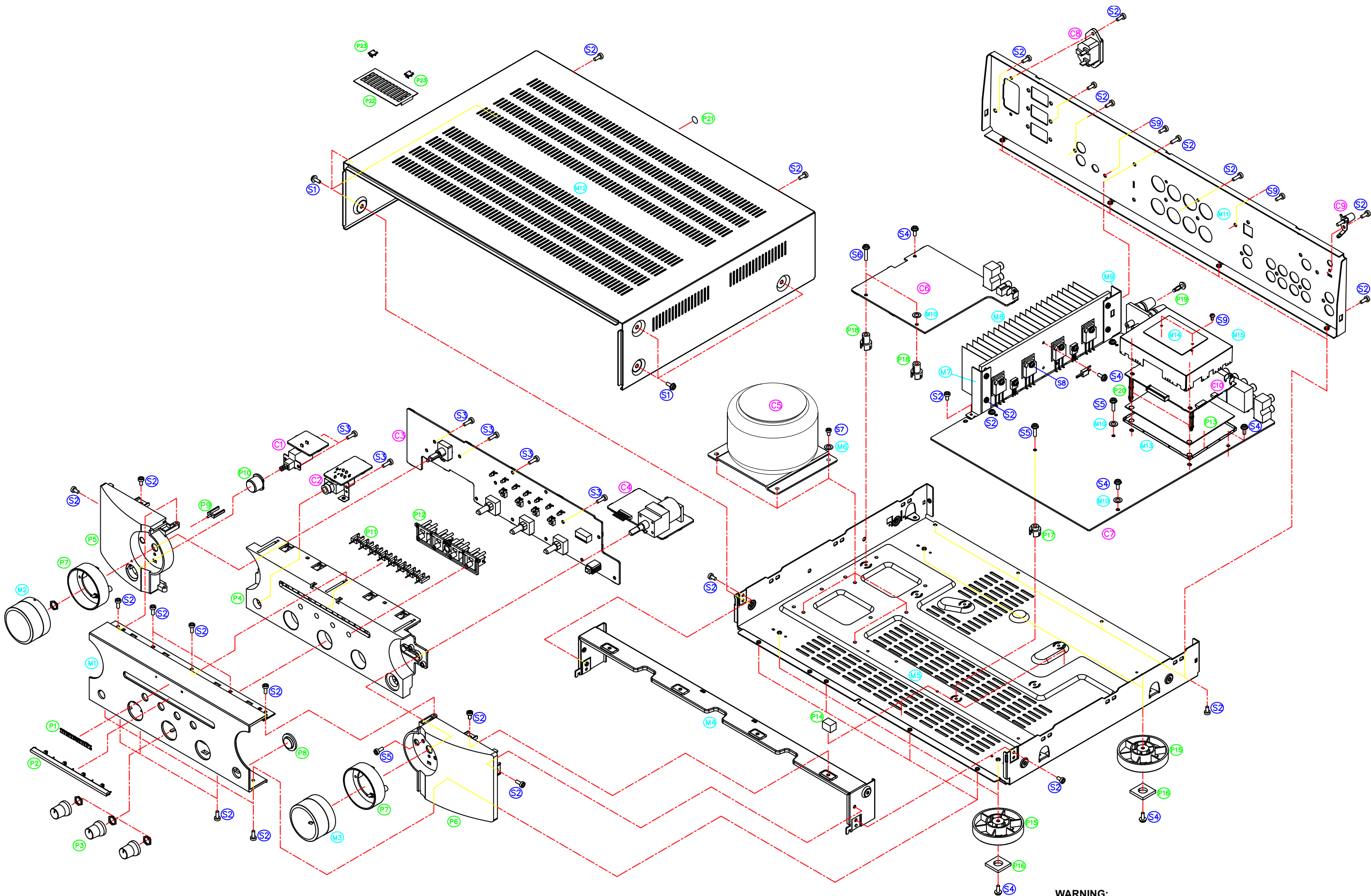




SCHEMATIC DIAGRAMS (3/4)  
SCH03\_POWER



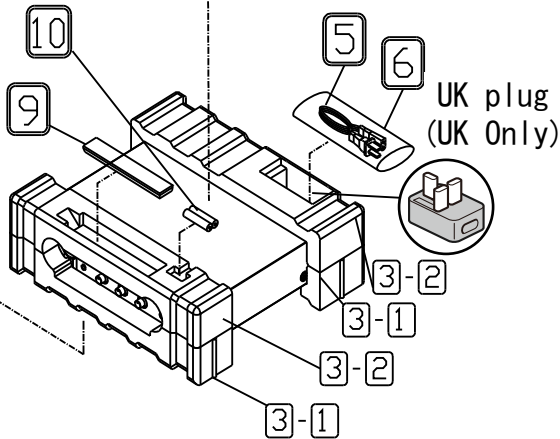
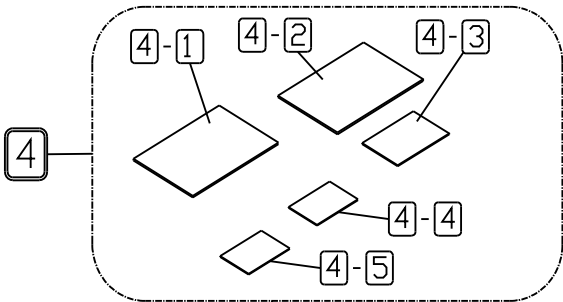
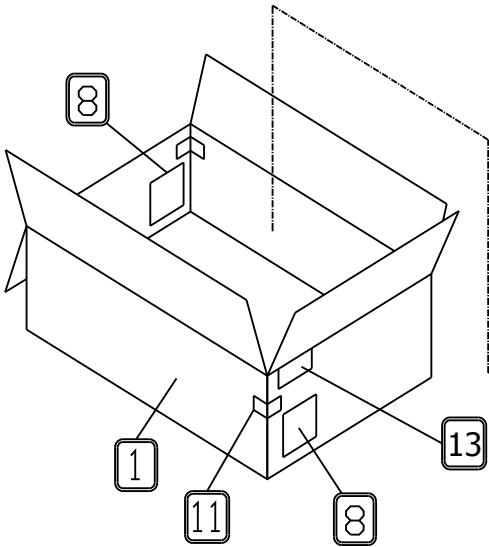
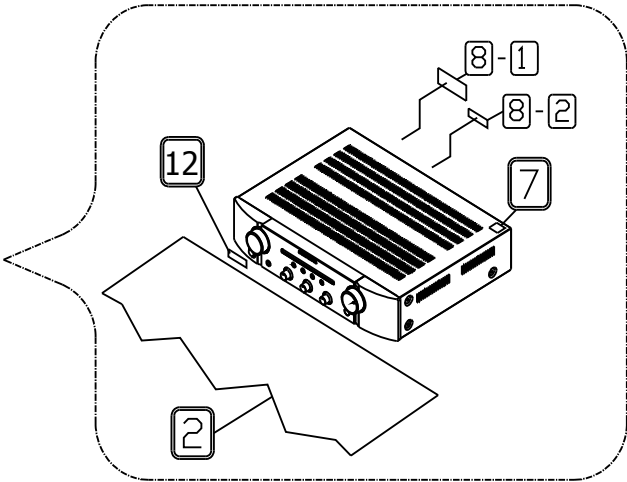
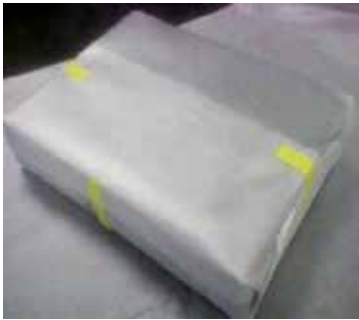
**EXPLODED VIEW**  
Please refer to the last chapter for the part list.



**WARNING:**  
Parts marked with this symbol  have critical characteristics.  
Use ONLY replacement parts recommended by the manufacturer.

**PACKING VIEW**

Please refer to the last chapter for the part list.

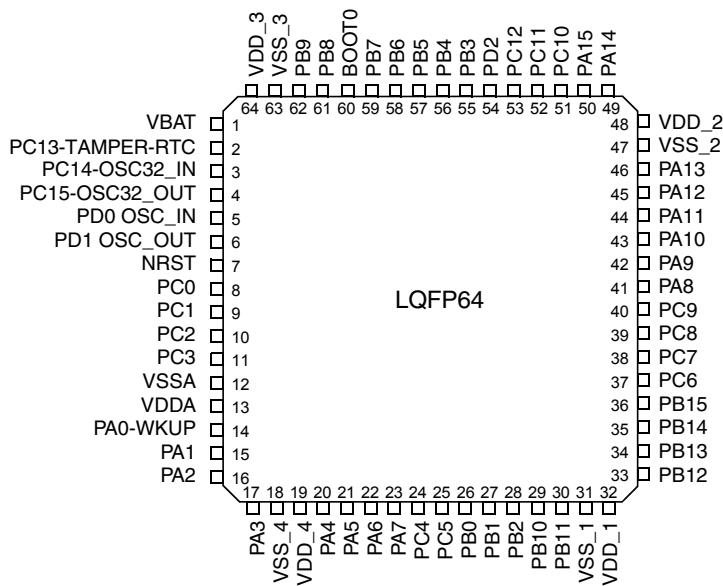


# SEMICONDUCTORS

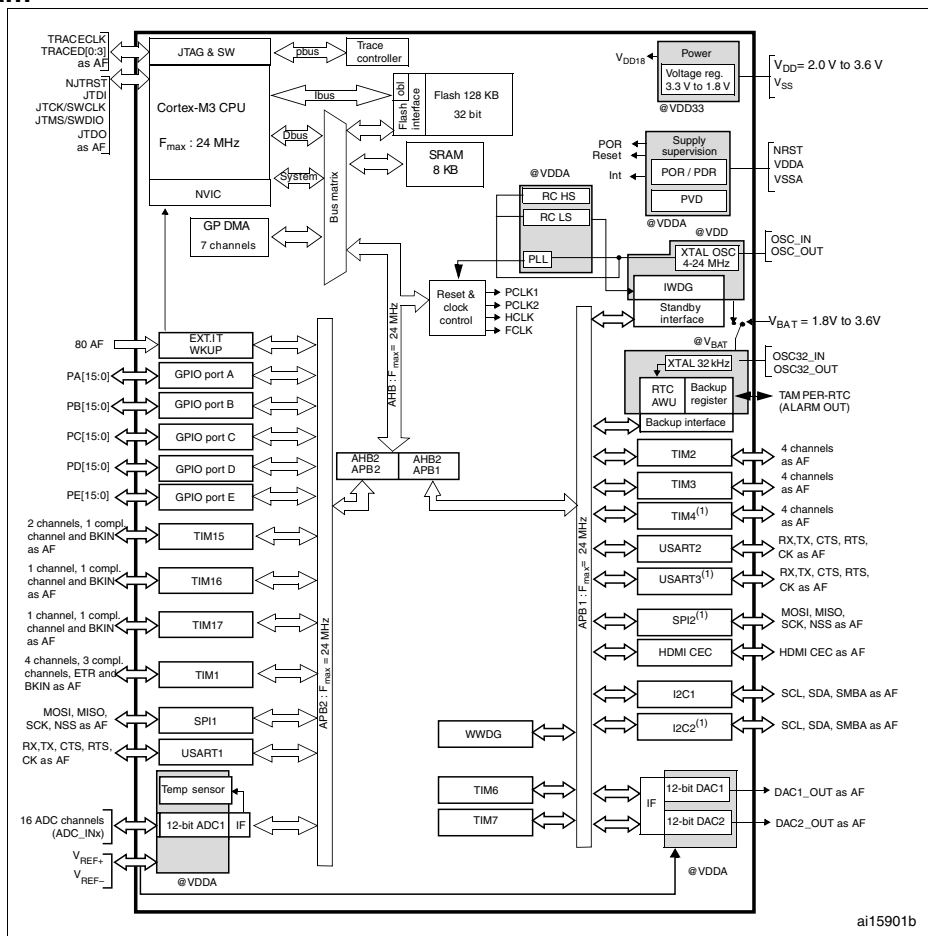
Only major semiconductors are shown, general semiconductors etc. are omitted to list.  
The semiconductor which described a detailed drawing in a schematic diagram are omitted to list.

## 1. IC's

### STM32F100R8T6 (U1001)



## Block Diagram

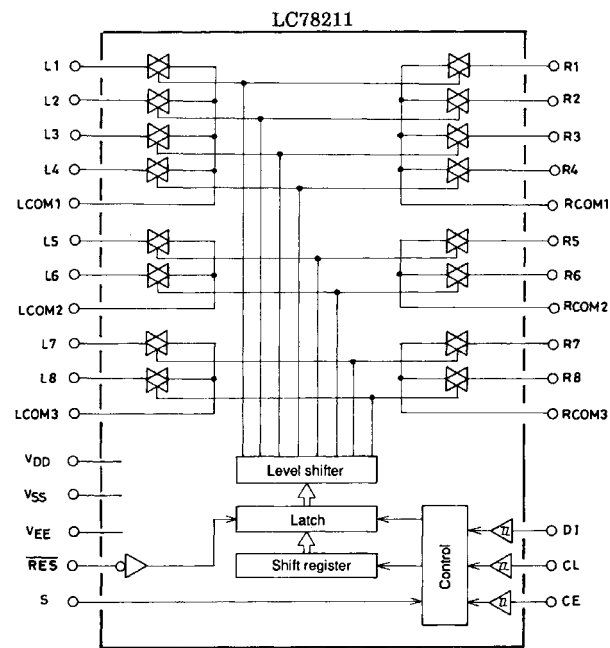


1. Peripherals not present in low-density value line devices.
2. AF = alternate function on I/O port pin.
3.  $T_A = -40\text{ }^{\circ}\text{C}$  to  $+85\text{ }^{\circ}\text{C}$  (junction temperature up to  $105\text{ }^{\circ}\text{C}$ ) or  $T_A = -40\text{ }^{\circ}\text{C}$  to  $+105\text{ }^{\circ}\text{C}$  (junction temperature up to  $125\text{ }^{\circ}\text{C}$ ).

## Terminal Functions

| Pin | Symbol          | Pin Name        | I/O | Pu/<br>Pd | STBY | Description                                                             |
|-----|-----------------|-----------------|-----|-----------|------|-------------------------------------------------------------------------|
| 1   | VBAT            | VBAT(VDD +3.3V) | S   |           | —    | 3.3V power supply                                                       |
| 2   | PC13/TAMPER-RTC | CS4398_M3       | I/O |           | L    | CS4398 m3                                                               |
| 3   | PC14-OCS32-IN   | AMP_MUTE_EAR_ON | I/O |           | L    | enable SPKA,SPKB,EARPHONE RELAY power supply                            |
| 4   | PC15-OCS32-OUT  | RC5_OUT         | I/O |           | L    | RC5_OUT                                                                 |
| 5   | PD0/OSC_IN      | 8MHz_OSC_IN     | I   |           | —    | System 8MHz_OSC_IN                                                      |
| 6   | PD1/OSC_OUT     | 8MHz_OSC_OUT    | O   |           | —    | System 8MHz_OSC_IN                                                      |
| 7   | NRST            | RESET#          | I/O |           | H    | RESET                                                                   |
| 8   | PC0             | ADKEY           | I/O | pu        | H    | Detect press key voltage                                                |
| 9   | PC1             | REC_LED         | I/O |           | L    | Recorder status output high enable tr,other status low disable tr       |
| 10  | PC2             | AMP_PROT        | I/O | pu        | H    | power on and working short circuit/high temperature protect Detect      |
| 11  | PC3             | POWER_DET       | O/O |           | L    | AC IN detect                                                            |
| 12  | VSSA            | GND             | S   |           | —    | GND                                                                     |
| 13  | VDDA            | +3.3V           | S   |           | —    | 3.3V power supply                                                       |
| 14  | PA0-WKUP        | ENC+            | I/O | pu        | H    | input select control                                                    |
| 15  | PA1             | ENC-            | I/O | pu        | H    | input select control                                                    |
| 16  | PA2             | KILL_IR         | I/O |           | H    | keyboard remote recive signal control                                   |
| 17  | PA3             | POWER_ON        | I/O |           | H    | power on output enable tr control relay                                 |
| 18  | VSS_4           | GND             | S   |           | —    | GND                                                                     |
| 19  | VDD_4           | +3.3V           | S   |           | —    | 3.3V power supply                                                       |
| 20  | PA4             | AK4117_CSN      | I/O | pu        | H    | ak4117 chip select                                                      |
| 21  | PA5             | AK4117_CLK      | I/O | pu        | H    | ak4117 clock                                                            |
| 22  | PA6             | AK4117_CDT0     | I/O | pu        | H    | ak4117 cdt0                                                             |
| 23  | PA7             | AK4117_CDT1     | I/O | pu        | H    | ak4117 cdt1                                                             |
| 24  | PC4             | STB_LED         | I/O |           | H    | standby status enable tr on,power on disable tr tr off                  |
| 25  | PC5             | DC_DETECT       | I/O | pu        | L    | detect power on +5v voltage                                             |
| 26  | PB0             | AUDIO_DET       | I/O | pu        | H    | detect no signal power off                                              |
| 27  | PB1             | RC5_IN          | I/O |           | H    | RC5 signal input                                                        |
| 28  | PB2/BOOT1       | BOOT1           | I/O |           | L    | updata set low,working status mute control                              |
| 29  | PB10            | VOL_UP_MOTOR    | I/O | pu        | L    | Remotecontrol volume motor up                                           |
| 30  | PB11            | VOL_DOWN_MOTOR  | I/O | pu        | L    | remotecontrol volume motor down                                         |
| 31  | VSS_1           | GND             | S   |           | —    | GND                                                                     |
| 32  | VDD_1           | +3.3V           | S   |           | —    | 3.3V power supply                                                       |
| 33  | PB12            | SPKA            | I/O |           | L    | output high control speaker A channel output                            |
| 34  | PB13            | SPKB            | I/O |           | L    | output high control speaker B channel output                            |
| 35  | PB14            | SOURCE          | I/O |           | L    | output high control source direct                                       |
| 36  | PB15            | LOUDN           | I/O |           | L    | output high control loudness                                            |
| 37  | PC6             | AK4117_INT0     | I/O | pu        | L    | ak4117 int0 control pin                                                 |
| 38  | PC7             | AK4117_INT1     | I/O | pu        | L    | ak4117 int1 control pin                                                 |
| 39  | PC8             | AK4117_PDN      | I/O | pu        | H    | ak4117 power down control pin                                           |
| 40  | PC9             | PHONE_LED       | I/O |           | L    | phono status output high enable tr,other status low disable tr          |
| 41  | PA8             | MUTE_LED        | I/O |           | L    | mute status output high enable tr,optial/coax status no signal blinking |
| 42  | PA9             | UPDATE_TX       | I/O |           | L    | updata tx pin / network status led control pin                          |
| 43  | PA10            | UPDATE_RX       | I/O |           | H    | updata rx                                                               |
| 44  | PA11            | TUNER_LED       | I/O |           | L    | tuner status output high enable tr,other status low disable tr          |
| 45  | PA12            | CD_LED          | I/O |           | L    | cd status output high enable tr,other status low disable tr             |
| 46  | JTMS            | JTMS            | I/O |           | H    | jtag debug port                                                         |
| 47  | VSS_2           | GND             | S   |           | —    | GND                                                                     |
| 48  | VDD_2           | +3.3V           | S   |           | —    | 3.3V power supply                                                       |
| 49  | PA14/JTCK       | JTAG_JTCK       | I/O |           | L    | jtag debug port                                                         |
| 50  | PA15/JTDI       | JTAG_JTDI       | I/O |           | H    | jtag debug port                                                         |
| 51  | PC10            | CS4398_RST      | I/O |           | H    | cs4398 reset                                                            |
| 52  | PC11            | EEPROM_SCL      | I/O | PU        | H    | eeeprom clock                                                           |
| 53  | PC12            | EEPROM_SDA      | I/O | pu        | H    | eeeprom data port                                                       |
| 54  | PD2             | CS44398_M2      | I/O | pu        | H    | cs4398 m2                                                               |
| 55  | PB3/JTDO        | JTAG_JTDO       | I/O |           | L    | jtag debug port                                                         |
| 56  | PB4/JNTRST      | JTAG_RST        | I/O |           | H    | jtag debug port                                                         |
| 57  | PB5             | LC78212_CE      | I/O |           | H    | channel chip select                                                     |
| 58  | PB6             | LC78212_SCL     | I/O |           | H    | channel chip clock                                                      |
| 59  | PB7             | LC78212_SDA     | I/O |           | H    | channel chip data                                                       |
| 60  | BOOT0           | BOOT0           | I   |           | L    | updata nedd high level select                                           |
| 61  | PB8             | OPTICAL_LED     | I/O |           | L    | optial status output high enable tr,other status low disable tr         |
| 62  | PB9             | COAX_LED        | I/O |           | L    | coax status output high enable tr,other status low disable tr           |
| 63  | VSS_3           | GND             | S   |           | —    | GND                                                                     |
| 64  | VDD_3           | +3.3V           | S   |           | —    | 3.3V power supply                                                       |

LC78212 (U3501)

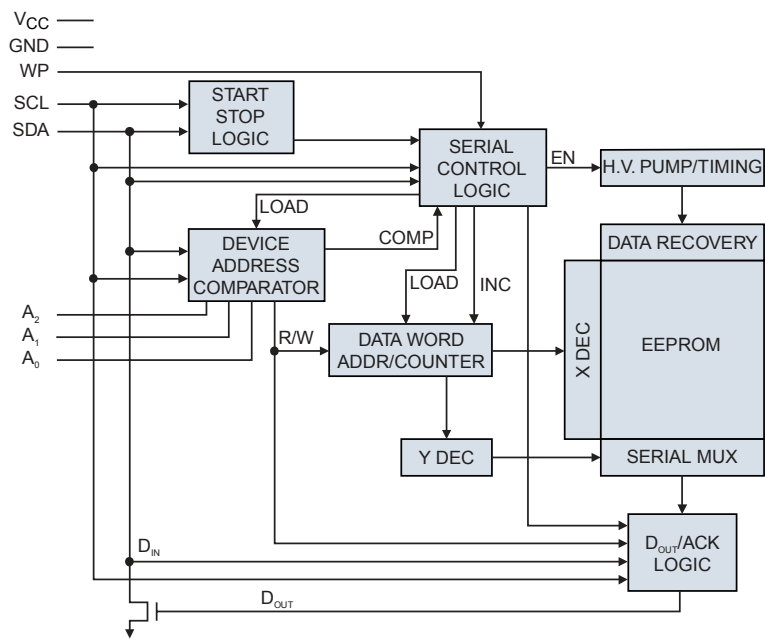


U1003 AT24C04BN

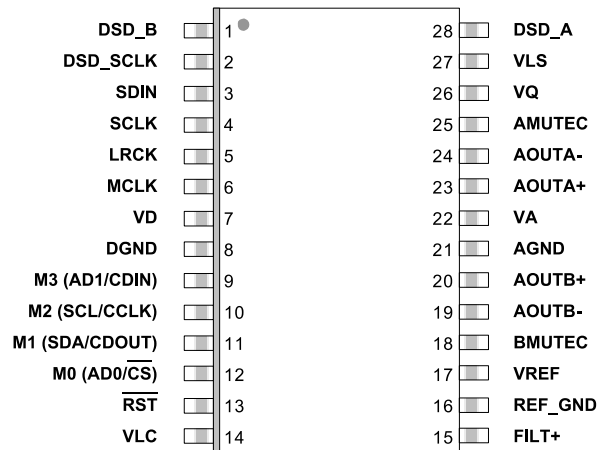
8-lead SOIC

|     |   |   |                 |
|-----|---|---|-----------------|
| A0  | 1 | 8 | V <sub>CC</sub> |
| A1  | 2 | 7 | WP              |
| A2  | 3 | 6 | SCL             |
| GND | 4 | 5 | SDA             |

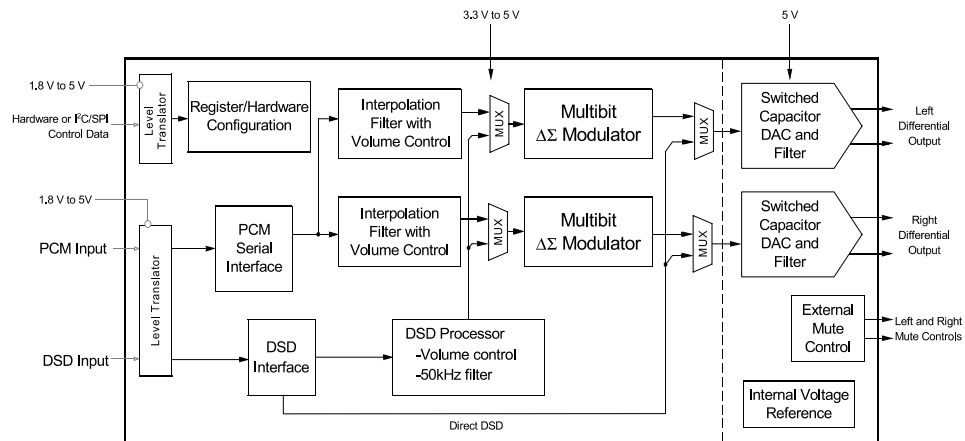
| Pin Name        | Description        |
|-----------------|--------------------|
| A0 – A2         | Address Inputs     |
| SDA             | Serial Data        |
| SCL             | Serial Clock Input |
| WP              | Write Protect      |
| NC              | No Connect         |
| GND             | Ground             |
| V <sub>CC</sub> | Power Supply       |



## IC300 CS4398



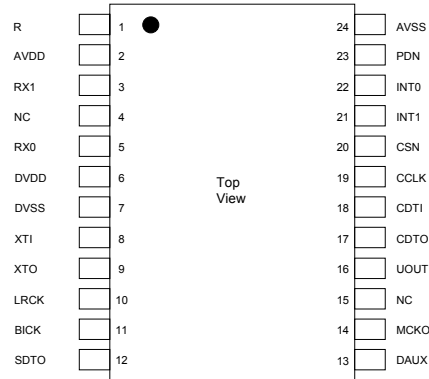
## Block Diagram



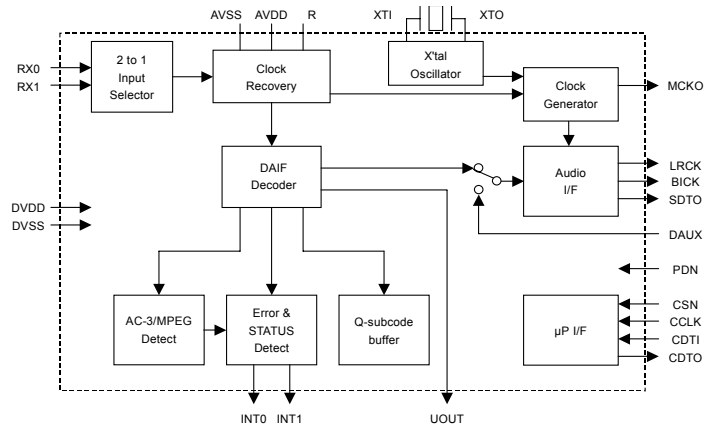
## Terminal Functions

| Pin Name                      | Pin # | Pin Description                                                                                                                                                                                                                                    |
|-------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DSD_A                         | 28    | <b>Direct Stream Digital Input (Input)</b> - Input for Direct Stream Digital serial audio data.                                                                                                                                                    |
| DSD_B                         | 1     |                                                                                                                                                                                                                                                    |
| DSD_SCLK                      | 2     | <b>DSD Serial Clock (Input)</b> - Serial clock for the Direct Stream Digital audio interface.                                                                                                                                                      |
| SDIN                          | 3     | <b>Serial Audio Data Input (Input)</b> - Input for two's complement serial audio data.                                                                                                                                                             |
| SCLK                          | 4     | <b>Serial Clock (Input)</b> - Serial clock for the serial audio interface.                                                                                                                                                                         |
| LRCK                          | 5     | <b>Left Right Clock (Input)</b> - Determines which channel, Left or Right, is currently active on the serial audio data line.                                                                                                                      |
| MCLK                          | 6     | <b>Master Clock (Input)</b> - Clock source for the delta-sigma modulator and digital filters.                                                                                                                                                      |
| VD                            | 7     | <b>Digital Power (Input)</b> - Positive power for the digital section.                                                                                                                                                                             |
| DGND                          | 8     | <b>Digital Ground (Input)</b> - Ground reference for the digital section.                                                                                                                                                                          |
| RST                           | 13    | <b>Reset (Input)</b> - The device enters system reset when enabled.                                                                                                                                                                                |
| VLC                           | 14    | <b>Control Port Power (Input)</b> - Positive power for Control Port I/O.                                                                                                                                                                           |
| FILT+                         | 15    | <b>Positive Voltage Reference (Output)</b> - Positive reference voltage for the internal sampling circuits.                                                                                                                                        |
| REF_GND                       | 16    | <b>Reference Ground (Input)</b> - Ground reference for the internal sampling circuits.                                                                                                                                                             |
| VREF                          | 17    | <b>Voltage Reference (Input)</b> - Positive voltage reference for the internal sampling circuits.                                                                                                                                                  |
| BMUTEC                        | 18    | <b>Mute Control (Output)</b> - The Mute Control pin is active during power-up initialization, muting, power-down or if the master clock to left/right clock frequency ratio is incorrect. During reset, these outputs are set to a high impedance. |
| AMUTEC                        | 25    |                                                                                                                                                                                                                                                    |
| AOUTB+                        | 20    | <b>Differential Right Channel Analog Output (Output)</b> - The full-scale differential analog output level is specified in the Analog Characteristics specification table.                                                                         |
| AOUTB-                        | 19    |                                                                                                                                                                                                                                                    |
| AGND                          | 21    | <b>Analog Ground (Input)</b> - Ground reference for the analog section.                                                                                                                                                                            |
| VA                            | 22    | <b>Analog Power (Input)</b> - Positive power for the analog section.                                                                                                                                                                               |
| AOUTA+                        | 23    | <b>Differential Left Channel Analog Output (Output)</b> - The full-scale differential analog output level is specified in the Analog Characteristics specification table.                                                                          |
| AOUTA-                        | 24    |                                                                                                                                                                                                                                                    |
| VQ                            | 26    | <b>Quiescent Voltage (Output)</b> - Filter connection for internal quiescent voltage.                                                                                                                                                              |
| VLS                           | 27    | <b>Serial Audio Interface Power (Input)</b> - Positive power for serial audio interface I/O.                                                                                                                                                       |
| Stand-Alone Mode Definitions  |       |                                                                                                                                                                                                                                                    |
| M3                            | 9     | <b>Mode Selection (Input)</b> - Determines the operational mode of the device.                                                                                                                                                                     |
| M2                            | 10    |                                                                                                                                                                                                                                                    |
| M1                            | 11    |                                                                                                                                                                                                                                                    |
| M0                            | 12    |                                                                                                                                                                                                                                                    |
| Control Port Mode Definitions |       |                                                                                                                                                                                                                                                    |
| AD1/CDIN                      | 9     | <b>Address Bit 1 (I<sup>2</sup>C) / Control Data Input (SPI) (Input)</b> - AD1 is a chip address pin in I <sup>2</sup> C mode; CDIN is the input data line for the Control Port interface in SPI mode.                                             |
| SCL/CCLK                      | 10    | <b>Serial Control Port Clock (Input)</b> - Serial clock for the serial Control Port.                                                                                                                                                               |
| SDA/CDOUT                     | 11    | <b>Serial Control Data (I<sup>2</sup>C) / Control Data Output (SPI) (Input/Output)</b> - SDA is a data I/O line in I <sup>2</sup> C mode. CDOUT is the output data line for the Control Port interface in SPI mode.                                |
| AD0/CS                        | 12    | <b>Address Bit 0 (I<sup>2</sup>C) / Control Port Chip Select (SPI) (Input)</b> - AD0 is a chip address pin in I <sup>2</sup> C mode; CS is the chip select signal for SPI format.                                                                  |

## IC301 AK4117



## Block Diagram

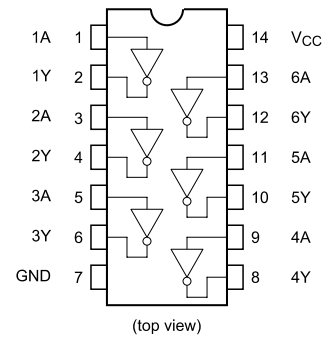


## Terminal Functions

| No. | Pin Name | I/O | Function                                                                                                                                                      |
|-----|----------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | R        | -   | External Resistor Pin<br>12k $\Omega$ -5% ~ 13k $\Omega$ +5% resistor to AVSS externally.                                                                     |
| 2   | AVDD     | -   | Analog Power Supply Pin                                                                                                                                       |
| 3   | RX1      | I   | Receiver Channel 1 (Internal Biased Pin)                                                                                                                      |
| 4   | NC       | -   | No Connect<br>No internal bonding.                                                                                                                            |
| 5   | RX0      | I   | Receiver Channel 0 (Internal Biased Pin)                                                                                                                      |
| 6   | DVDD     | -   | Digital Power Supply Pin                                                                                                                                      |
| 7   | DVSS     | -   | Digital Ground Pin                                                                                                                                            |
| 8   | XTI      | I   | X'tal Input Pin                                                                                                                                               |
| 9   | XTO      | O   | X'tal Output Pin                                                                                                                                              |
| 10  | LRCK     | O   | Output Channel Clock Pin                                                                                                                                      |
| 11  | BICK     | O   | Audio Serial Data Clock Pin                                                                                                                                   |
| 12  | SDTO     | O   | Audio Serial Data Output Pin                                                                                                                                  |
| 13  | DAUX     | I   | Auxiliary Audio Data Input Pin                                                                                                                                |
| 14  | MCKO     | O   | Master Clock Output Pin                                                                                                                                       |
| 15  | NC       | -   | No Connect<br>No internal bonding.                                                                                                                            |
| 16  | UOUT     | O   | U-bit Output Pin<br>When UOUTE bit = "0", UOUT pin = "L".                                                                                                     |
| 17  | CDTO     | O   | Control Data Output Pin                                                                                                                                       |
| 18  | CDTI     | I   | Control Data Input Pin                                                                                                                                        |
| 19  | CCLK     | I   | Control Data Clock Pin                                                                                                                                        |
| 20  | CSN      | I   | Chip Select Pin                                                                                                                                               |
| 21  | INT1     | O   | Interrupt 1 Pin                                                                                                                                               |
| 22  | INT0     | O   | Interrupt 0 Pin                                                                                                                                               |
| 23  | PDN      | I   | Power-Down & Reset Pin<br>When "L", the AK4117 is powered-down and reset, and all output pins go to "L" and the control registers are reset to default state. |
| 24  | AVSS     | -   | Analog Ground Pin                                                                                                                                             |

Note 1: All input pins except internal biased pins should not be left floating.

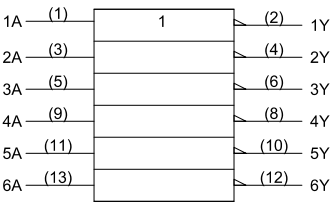
**IC303 TC74VHC04FT**  
**Pin Assignment**



**Truth Table**

| A | Y |
|---|---|
| L | H |
| H | L |

**IEC Logic Symbol**



## FRONT PCB ASS'Y

NOTE: The symbols in the column Remarks indicate the following destinations.  
 U : North America model N : Europe model K : China model F : Japan model  
 B : Black model SG : Silver gold model

| REF No.                     | Part No.      | Part Name                               | Remarks             | Q'ty | New | Ver |
|-----------------------------|---------------|-----------------------------------------|---------------------|------|-----|-----|
| <b>SEMICONDUCTORS GROUP</b> |               |                                         |                     |      |     |     |
| D1501                       | 90M-HI101040R | L.E.D , RED                             | HVD342VCTB7T089     | 1    |     |     |
| D1502 -1508                 | 943176100140M | LED,BLUE (2.54MM PITCH)                 | CVD1L034XB12E0CTT02 | 7    | *   |     |
| D1509                       | 943176100150M | LED, RED(3.5PIE, 2.5MM PITCH, 330MCD)   | CVDSL1343V8RCT32    | 1    | *   |     |
| D1510 -1513                 | 943176100140M | LED,BLUE (2.54MM PITCH)                 | CVD1L034XB12E0CTT02 | 4    | *   |     |
| D1601                       | 00D9430182609 | DIODE , SWITCHING                       | CVD1SS133MT         | 1    |     |     |
| D1603                       | 00D9430182609 | DIODE , SWITCHING                       | CVD1SS133MT         | 1    |     |     |
| D1801                       | 00D9430182502 | DIODE , RECT                            | CVD1N4003ST         | 1    |     |     |
| D1802                       | 00D9430182609 | DIODE , SWITCHING                       | CVD1SS133MT         | 1    |     |     |
| D2001                       | 00D9430182609 | DIODE , SWITCHING                       | CVD1SS133MT         | 1    |     |     |
| Q1001 -1013                 | 00D2690192902 | T.R , CHIP , SOT-23                     | HVTKRC102S          | 13   |     |     |
| Q1014 ,1015                 | 00D2690184907 | T.R , CHIP , SOT-23                     | HVTKRA102S          | 2    |     |     |
| Q1016                       | 00D2690192902 | T.R , CHIP , SOT-23                     | HVTKRC102S          | 1    |     |     |
| Q1017                       | 00D2690184907 | T.R , CHIP , SOT-23                     | HVTKRA102S          | 1    |     |     |
| Q1018                       | 00D2690192902 | T.R , CHIP , SOT-23                     | HVTKRC102S          | 1    |     |     |
| Q1019                       | 00D2690184907 | T.R , CHIP , SOT-23                     | HVTKRA102S          | 1    |     |     |
| Q1020                       | 00D2690192902 | T.R , CHIP , SOT-23                     | HVTKRC102S          | 1    |     |     |
| Q1601 -1603                 | 00D2690184907 | T.R , CHIP , SOT-23                     | HVTKRA102S          | 3    |     |     |
| Q1604 ,1605                 | 00D2730464901 | T.R , CHIP , SOT-23                     | HVTKTC3875SYRTK     | 2    |     |     |
| Q1607                       | 00D2690192902 | T.R , CHIP , SOT-23                     | HVTKRC102S          | 1    |     |     |
| Q1608                       | 00D2690184907 | T.R , CHIP , SOT-23                     | HVTKRA102S          | 1    |     |     |
| Q1609 ,1610                 | 00D2690192902 | T.R , CHIP , SOT-23                     | HVTKRC102S          | 2    |     |     |
| Q1801 ,1802                 | 00MHT600141B1 | T.R                                     | HVTKTA1271YT        | 2    |     |     |
| Q1803 ,1804                 | 00MHT800951B0 | T.R                                     | HVTKTC3203YT        | 2    |     |     |
| Q2001                       | 00D2690192902 | T.R , CHIP , SOT-23                     | HVTKRC102S          | 1    |     |     |
| U1001                       | 943243101870M | IC,MCU 32BIT 64K FLASH LQFP-64          | CVISTM32F100R8T6    | 1    | *   |     |
| U1002                       | 943234009290S | I.C , RESET 2.4V (200ms,C-MOS,SOT23-5P) | CVIS80124CLMCJ1J2   | 1    |     |     |
| U1003                       | 943236000650S | I.C , EEPROM(4K, JEDEC SOIC)            | CVIAT24C04BNSHB     | 1    |     |     |
| U1004                       | 943239010400S | I.C, REGULATOR(3.3V/TO-252)             | CVINJM2845DL133     | 1    |     |     |
| U1601                       | 262010007707S | REMOTE SENSOR , R94EV1A                 | CRVR94EV1A          | 1    |     |     |
| U2001 -2003                 | 00D2631289900 | I.C , OPAMP(DUAL/LOW NOISE) Copper      | CVIAZ4580MTR-E1-CU  | 3    |     |     |
| <b>RESISTOR GROUP</b>       |               |                                         |                     |      |     |     |
| R1001                       | nsp           | RES, CHIP(1608/5%/22Kohm)               | CRJ10DJ223T         | 1    |     |     |
| R1002                       | nsp           | RES, CHIP(1608/5%/1Kohm)                | CRJ10DJ102T         | 1    |     |     |
| R1004                       | nsp           | RES, CHIP(1608/5%/47Kohm)               | CRJ10DJ473T         | 1    |     |     |
| R1005 ,1006                 | nsp           | RES, CHIP(1608/5%/10Kohm)               | CRJ10DJ103T         | 2    |     |     |
| R1008                       | nsp           | RES, CHIP(1608/5%/10Kohm)               | CRJ10DJ103T         | 1    |     |     |
| R1010 -1014                 | nsp           | RES, CHIP(1608/5%/10Kohm)               | CRJ10DJ103T         | 5    |     |     |
| R1015 ,1016                 | nsp           | RES, CHIP(1608/5%/0ohm)                 | CRJ10DJ0R0T         | 2    |     |     |
| R1017 ,1018                 | nsp           | RES, CHIP(1608/5%/22Kohm)               | CRJ10DJ223T         | 2    |     |     |
| R1020 -1022                 | nsp           | RES, CHIP(1608/5%/47Kohm)               | CRJ10DJ473T         | 3    |     |     |
| R1024 -1027                 | nsp           | RES, CHIP(1608/5%/0ohm)                 | CRJ10DJ0R0T         | 4    |     |     |
| R1028                       | nsp           | RES, CHIP(1608/5%/10ohm)                | CRJ10DJ100T         | 1    |     |     |
| R1029                       | nsp           | RES, CHIP(1608/5%/10Kohm)               | CRJ10DJ103T         | 1    |     |     |
| R1030 -1047                 | nsp           | RES, CHIP(1608/5%/100ohm)               | CRJ10DJ101T         | 18   |     |     |
| R1048                       | nsp           | RES, CHIP(1608/5%/220ohm)               | CRJ10DJ221T         | 1    |     |     |
| R1049                       | nsp           | RES, CHIP(1608/5%/1Mohm)                | CRJ10DJ105T         | 1    |     |     |
| R1050                       | nsp           | RES, CHIP(1608/5%/33ohm)                | CRJ10DJ330T         | 1    |     |     |
| R1051                       | nsp           | RES, CHIP(1608/5%/1Kohm)                | CRJ10DJ102T         | 1    |     |     |
| R1052 -1059                 | nsp           | RES, CHIP(1608/5%/10Kohm)               | CRJ10DJ103T         | 8    |     |     |
| R1061 -1064                 | nsp           | RES, CHIP(1608/5%/10Kohm)               | CRJ10DJ103T         | 4    |     |     |
| R1066 -1071                 | nsp           | RES, CHIP(1608/5%/10Kohm)               | CRJ10DJ103T         | 6    |     |     |
| R1073                       | nsp           | RES, CHIP(1608/5%/100ohm)               | CRJ10DJ101T         | 1    |     |     |
| R1212                       | nsp           | RES, CHIP(1608/5%/10Kohm)               | CRJ10DJ103T         | 1    |     |     |
| R1401                       | nsp           | RES, CHIP(1608/5%/10Kohm)               | CRJ10DJ103T         | 1    |     |     |
| R1402                       | nsp           | RES, CHIP(1608/5%/1Kohm)                | CRJ10DJ102T         | 1    |     |     |
| R1403                       | nsp           | RES, CHIP(1608/5%/2.2Kohm)              | CRJ10DJ222T         | 1    |     |     |
| R1404                       | nsp           | RES, CHIP(1608/5%/3.9Kohm)              | CRJ10DJ392T         | 1    |     |     |
| R1405                       | nsp           | RES, CHIP(1608/5%/10Kohm)               | CRJ10DJ103T         | 1    |     |     |
| R1411 ,1412                 | nsp           | RES, CHIP(1608/5%/47Kohm)               | CRJ10DJ473T         | 2    |     |     |
| R1501                       | nsp           | RES, CHIP(1608/5%/150ohm)               | CRJ10DJ151T         | 1    |     |     |
| R1502 -1513                 | nsp           | RES, CHIP(1608/5%/330ohm)               | CRJ10DJ331T         | 12   |     |     |
| R1601 ,1602                 | nsp           | RES, CHIP(1608/5%/100ohm)               | CRJ10DJ101T         | 2    |     |     |
| R1603                       | nsp           | RES, CHIP(1608/5%/47Kohm)               | CRJ10DJ473T         | 1    |     |     |
| R1604                       | nsp           | RES, CHIP(1608/5%/18Kohm)               | CRJ10DJ183T         | 1    |     |     |
| R1605                       | nsp           | RES, CHIP(1608/5%/33Kohm)               | CRJ10DJ333T         | 1    |     |     |
| R1801                       | 00MGG0510016X | RES , CFPS1/4CMHTA100J                  | CRG14SANJ100CLPS    | 1    |     |     |
| R1802 -1807                 | nsp           | RES, CHIP(1608/5%/2.2Kohm)              | CRJ10DJ222T         | 6    |     |     |
| R1808 ,1809                 | nsp           | RES, CHIP(1608/5%/47Kohm)               | CRJ10DJ473T         | 2    |     |     |
| R2001 ,2002                 | nsp           | RES, CARBON(1/5W,56Kohm,J)              | CRD20TJ563T         | 2    |     |     |
| R2003 ,2004                 | nsp           | RES, CARBON(1/5W,100Kohm,J)             | CRD20TJ104T         | 2    |     |     |
| R2005 -2008                 | nsp           | RES, CARBON(1/5W,2.7Kohm,J)             | CRD20TJ272T         | 4    |     |     |
| R2009 ,2010                 | nsp           | RES, CARBON(1/5W,100Kohm,J)             | CRD20TJ104T         | 2    |     |     |
| R2011 ,2012                 | nsp           | RES, CARBON(1/5W,220ohm,J)              | CRD20TJ221T         | 2    |     |     |
| R2013 -2016                 | nsp           | RES, CARBON(1/5W,1.2Kohm,J)             | CRD20TJ122T         | 4    |     |     |
| R2017 ,2018                 | nsp           | RES, CARBON(1/5W,56Kohm,J)              | CRD20TJ563T         | 2    |     |     |
| R2019 ,2020                 | nsp           | RES, CARBON(1/5W,47Kohm,J)              | CRD20TJ473T         | 2    |     |     |
| ! R2021 ,2022               | 00MGG0510016X | RES , CFPS1/4CMHTA100J                  | CRG14SANJ100CLPS    | 2    |     |     |
| <b>CAPACITORS GROUP</b>     |               |                                         |                     |      |     |     |
| C1001                       | 943134502680M | CAP , ELECT(10uF/63V )                  | CCEA1JH100T         | 1    | *   |     |
| C1002 -1006                 | nsp           | CAP, CHIP(1608, 50V/0.1uF)              | CCUS1H104KC         | 5    |     |     |
| C1007                       | nsp           | CAP, CHIP(1608, 10V/1uF)                | CCUS1A105KC         | 1    |     |     |
| C1008 -1016                 | nsp           | CAP, CHIP(1608, 50V/0.1uF)              | CCUS1H104KC         | 9    |     |     |
| C1017 ,1018                 | nsp           | CAP, CHIP(1608, 50V/0.01uF)             | CCUS1H103KC         | 2    |     |     |
| C1401                       | nsp           | CAP, CHIP(1608, 50V/0.01uF)             | CCUS1H103KC         | 1    |     |     |
| C1411 ,1412                 | nsp           | CAP, CHIP(1608, 50V/0.01uF)             | CCUS1H103KC         | 2    |     |     |
| C1502 -1508                 | nsp           | CAP, CHIP(1608, 50V/0.01uF)             | CCUS1H103KC         | 7    |     |     |
| C1510 -1515                 | nsp           | CAP, CHIP(1608, 50V/0.01uF)             | CCUS1H103KC         | 6    |     |     |
| C1601                       | 13405012940AS | CAP, ELECT(16V/100uF)                   | CCEA1CH101T         | 1    |     |     |
| C1602                       | nsp           | CAP, CHIP(1608, 50V/0.1uF)              | CCUS1H104KC         | 1    |     |     |
| C1603                       | 13405012940AS | CAP, ELECT(16V/100uF)                   | CCEA1CH101T         | 1    |     |     |
| C1603                       | 13405012940AS | CAP, ELECT(16V/100uF)                   | CCEA1CH101T         | 1    |     |     |
| C1604 ,1605                 | nsp           | CAP, CHIP(1608, 50V/0.1uF)              | CCUS1H104KC         | 2    |     |     |
| C1606                       | 00MOA10702520 | CAP, ELECT(25V/100uF)                   | CCEA1EH101T         | 1    |     |     |
| C1607                       | 13405012940AS | CAP, ELECT(16V/100uF)                   | CCEA1CH101T         | 1    |     |     |

| REF No.                  | Part No.      | Part Name                                   | Remarks |                    | Q'ty | New | Ver |
|--------------------------|---------------|---------------------------------------------|---------|--------------------|------|-----|-----|
| C1801                    | nsp           | CAP, ELECT(10V/220uF)                       |         | CCEA1AH221T        | 1    |     |     |
| C2001 -2004              | 00MOA10605020 | ELECT , CAP(ELNA/RA-2)                      |         | HCEA1HRA100T       | 4    |     |     |
| C2005 -2008              | 943133000580S | CAP , POLYPROPYLENE (WIMA 220PF/100VDC)     |         | CCMP2A221JA02T     | 4    |     |     |
| C2009 ,2010              | 00MOA22605020 | CAP, ELECT(ELNA/RA-2, 50V/22UF)             |         | CCEA1HRA220T       | 2    |     |     |
| C2011 ,2012              | nsp           | CAP, ELECT(50V/2.2uF)                       |         | CCEA1HH2R2T        | 2    |     |     |
| C2013 ,2014              | 943133501610M | CAP, MYLAR(100V/0.01uF/J)                   |         | CCQI2A103JZT       | 2    | *   |     |
| C2015 ,2016              | 943133501650M | CAP, MYLAR(100V/0.068uF/J)                  |         | CCQI2A683JZT       | 2    | *   |     |
| C2017 ,2018              | 943133000580S | CAP , POLYPROPYLENE (WIMA 220PF/100VDC)     |         | CCMP2A221JA02T     | 2    |     |     |
| C2019 ,2020              | 00D2544574919 | CAP, ELECT(50V/47uF),ELNA/RA3               |         | CCEA1HRA3470T      | 2    |     |     |
| <b>OTHER PARTS GROUP</b> |               |                                             |         |                    |      |     |     |
| B1001                    | nsp           | ROCKING TYPE WIRE ASSY(13P, 300MM, 2.0MM)   |         | CWB1B01330047      | 1    |     |     |
| B1002                    | nsp           | WIRE ASS'Y(15P, 120MM, 2.0MM)               |         | CWB1B01512047      | 1    |     |     |
| B1003                    | nsp           | WIRE ASS'Y (3PIN,160MM,61301000200AS)       |         | CWZPM6004B1003     | 1    |     |     |
| B1004                    | nsp           | Wire ass'y ( 14P,600mm,2.0mm )              |         | CWB1B01460047      | 1    |     |     |
| B1006                    | nsp           | WIRE ASS'Y (5PIN,160MM,61205000900AS)       |         | CWZPM6004B1006     | 1    |     |     |
| N1002                    | nsp           | LOCKING TYPE , STRAIGHT WAFER , 2.5MM 10PIN |         | CJP06HA292ZY       | 1    |     |     |
| S1401 -1404              | 00D9430004402 | SW , TACT                                   |         | CST1A0122T         | 4    |     |     |
| S1411                    | 90M-SR000290R | VR , ENCODER                                |         | CSR2A034Z          | 1    |     |     |
| S2001                    | 943682000810S | RELAY,BC3-12H,DC12V,2C2P                    |         | CSL4A016ZU         | 1    |     |     |
| V2001                    | 90M-RB000060R | RES , VARIABLE BALANCE                      |         | CVV2X11M203Z       | 1    |     |     |
| V2002 ,2003              | 90M-RB000050R | RES , VARIABLE TONE                         |         | CVV2X10B103Z       | 2    |     |     |
| X1001                    | 00MFQ08004061 | RESONATOR , CERAMIC(8MHz 47PF)              |         | CVFCSTLS8M00G56A0T | 1    |     |     |

## MAIN PCB ASS'Y

NOTE:The symbols in the column Remarks indicate the following destinations.  
 U : North America model N : Europe model K : China model F : Japan model  
 B : Black model SG : Silver gold model

| REF No.                     | Part No.      | Part Name                                      | Remarks | Q'ty               | New | Ver |
|-----------------------------|---------------|------------------------------------------------|---------|--------------------|-----|-----|
| <b>SEMICONDUCTORS GROUP</b> |               |                                                |         |                    |     |     |
| D3501                       | 00D9430182609 | DIODE , SWITCHING                              |         | CVD1SS133MT        | 1   |     |
| D3901 -3903                 | 00D9430182609 | DIODE , SWITCHING                              |         | CVD1SS133MT        | 3   |     |
| D6001 -6014                 | 00D9430182609 | DIODE , SWITCHING                              |         | CVD1SS133MT        | 14  |     |
| D7501 -7503                 | 00D9430182609 | DIODE , SWITCHING                              |         | CVD1SS133MT        | 3   |     |
| ! D8001                     | 00MHE20030290 | DIODE , BRIDGE 30A                             |         | CVDD30XBN20        | 1   |     |
| ! D8101 -8104               | 00MHD20055100 | DIODE , SCHOTTKY (100V/1A)                     |         | CVD11EQS10GT       | 4   |     |
| D8105 ,8106                 | 00D9430182502 | DIODE , RECT                                   |         | CVD1N4003T         | 2   |     |
| ! D8201 ,8202               | 00D9430182502 | DIODE , RECT                                   |         | CVD1N4003T         | 2   |     |
| ! D8301 -8308               | 00MHD20055100 | DIODE , SCHOTTKY (100V/1A)                     |         | CVD11EQS10GT       | 8   |     |
| D8309 -8311                 | 00D9430182609 | DIODE , SWITCHING                              |         | CVD1SS133MT        | 3   |     |
| D9001 ,9002                 | 00D9430182609 | DIODE , SWITCHING                              |         | CVD1SS133MT        | 2   |     |
| Q3501 -3503                 | 00D9630121606 | T.R , CHIP , SOT-23                            |         | HVTKRC107S         | 3   |     |
| Q6001 ,6002                 | 00MHT805501B0 | T.R , MUTE                                     |         | HVTKTC2874BT       | 2   |     |
| Q6003 ,6004                 | 943211500150S | PNP , TO-92, LOW NOISE, HFE:300-600, FAILCHILD |         | CVTKSA992FTA       | 2   |     |
| Q6005 -6008                 | 943213500150S | NPN , TO-92, LOW NOISE, HFE:300-600, FAILCHILD |         | CVTKSC1845FTA      | 4   |     |
| Q6009 ,6010                 | 943211500150S | PNP , TO-92, LOW NOISE, HFE:300-600, FAILCHILD |         | CVTKSA992FTA       | 2   |     |
| Q6011 ,6012                 | 943213500150S | NPN , TO-92, LOW NOISE, HFE:300-600, FAILCHILD |         | CVTKSC1845FTA      | 2   |     |
| Q6013 -6016                 | 943211500150S | PNP , TO-92, LOW NOISE, HFE:300-600, FAILCHILD |         | CVTKSA992FTA       | 4   |     |
| Q6017 ,6018                 | 943213500150S | NPN , TO-92, LOW NOISE, HFE:300-600, FAILCHILD |         | CVTKSC1845FTA      | 2   |     |
| Q6019 ,6020                 | 00D2710314903 | T.R                                            |         | HVTKTA1024YT       | 2   |     |
| Q6021 ,6022                 | 00D2730471907 | T.R                                            |         | HVTKTC3206YAT      | 2   |     |
| Q6023 ,6024                 | 00D9430154404 | T.R                                            |         | HVTKTC3198YT       | 2   |     |
| Q6025 -6028                 | 90M-HT600010R | T.R                                            |         | HVTKTA1266YT       | 4   |     |
| Q6029 ,6030                 | 00D9430154404 | T.R                                            |         | HVTKTC3198YT       | 2   |     |
| ! Q6031 ,6032               | 943219005820S | T.R(FM20-TO220F)                               |         | CVT2SC4495         | 2   |     |
| ! Q6033 ,6034               | 00D2730471907 | T.R                                            |         | HVTKTC3206YAT      | 2   |     |
| ! Q6035 ,6036               | 00D2710314903 | T.R                                            |         | HVTKTA1024YT       | 2   |     |
| ! Q6111                     | 90M-HT300820R | T.R , PRE DRIVE                                |         | HVTKTC3423Y        | 1   |     |
| ! Q6112                     | 90M-HT100540R | T.R , PRE DRIVE                                |         | HVTKTA1360Y        | 1   |     |
| ! Q6121                     | 90M-HT300820R | T.R , PRE DRIVE                                |         | HVTKTC3423Y        | 1   |     |
| ! Q6122                     | 90M-HT100540R | T.R , PRE DRIVE                                |         | HVTKTA1360Y        | 1   |     |
| ! Q6131                     | 90M-HT300950R | T.R , POWER                                    |         | HVT2SC4467-OKM     | 1   |     |
| ! Q6132                     | 90M-HT100700R | T.R , POWER                                    |         | HVT2SA1694-OKM     | 1   |     |
| ! Q6141                     | 90M-HT300950R | T.R , POWER                                    |         | HVT2SC4467-OKM     | 1   |     |
| ! Q6142                     | 90M-HT100700R | T.R , POWER                                    |         | HVT2SA1694-OKM     | 1   |     |
| Q7501                       | 90M-HT600010R | T.R                                            |         | HVTKTA1266YT       | 1   |     |
| Q7502                       | 00D9630121606 | T.R , CHIP , SOT-23                            |         | HVTKRC107S         | 1   |     |
| Q7503 ,7504                 | 00D9430154404 | T.R                                            |         | HVTKTC3198YT       | 2   |     |
| Q7505                       | 00D9630121606 | T.R , CHIP , SOT-23                            |         | HVTKRC107S         | 1   |     |
| Q8301                       | 00D9630121606 | T.R , CHIP , SOT-23                            |         | HVTKRC107S         | 1   |     |
| Q9001 ,9002                 | 943213500150S | NPN , TO-92, LOW NOISE, HFE:300-600, FAILCHILD |         | CVTKSC1845FTA      | 2   |     |
| Q9003                       | 943211500150S | PNP , TO-92, LOW NOISE, HFE:300-600, FAILCHILD |         | CVTKSA992FTA       | 1   |     |
| Q9004 -9006                 | 00D2730464901 | T.R , CHIP , SOT-23                            |         | HVTKTC3875SYRTK    | 3   |     |
| Q9007                       | 00D9430058908 | T.R , CHIP , SOT-23                            |         | HVTKTA1504SYRTK    | 1   |     |
| Q9008                       | 00D2690192902 | T.R , CHIP , SOT-23                            |         | HVTKRC102S         | 1   |     |
| Q9101 ,9102                 | 00D2730464901 | T.R , CHIP , SOT-23                            |         | HVTKTC3875SYRTK    | 2   |     |
| Q9103                       | 00D9430058908 | T.R , CHIP , SOT-23                            |         | HVTKTA1504SYRTK    | 1   |     |
| U3501                       | 00MHC10309030 | I.C , FUNCTION                                 |         | HVILC78212         | 1   |     |
| U3801                       | 00D2631289900 | I.C , OPAMP(DUAL/LOW NOISE) Copper             |         | CVIAZ4580MTR-E1-CU | 1   |     |
| U3901                       | 00D2631289900 | I.C , OPAMP(DUAL/LOW NOISE) Copper             |         | CVIAZ4580MTR-E1-CU | 1   |     |
| U4001                       | 00MHC10102090 | I.C , OP AMP (JRC)                             |         | HVINJM2068MDTE1    | 1   |     |
| U8101                       | 00MHC3891599F | I.C.REGULATOR(+15V,TO-220IS-4)                 |         | CVIKIA7815APIUPF   | 1   |     |
| U8102                       | 00MHC3991599F | I.C.REGULATOR(-15V,TO220IS)                    |         | CVIKIA7915PI       | 1   |     |
| U8201                       | nsp           | I.C HEATSINK ASS'Y(CMY1A338)                   |         | CVIKIA7812APIBSA   | 1   |     |
| U8201A                      | nsp           | HEAT SINK 25MM                                 |         | CMY1A338           | 1   |     |
| U8201B                      | nsp           | SCREW                                          |         | CTB3*8FFB          | 1   |     |
| U8201C                      | 00D2631100021 | I.C.REGULATOR(+12V,TO220IS)                    |         | HVIA7812API        | 1   |     |
| U8201D                      | nsp           | COMPOUND , SILICONE                            |         | K8AYG6260          | 0.2 |     |
| ! U8202                     | 00MHC3890599F | I.C.REGULATOR(+5V,TO220IS)                     |         | HVIA7805API        | 1   |     |
| U8301                       | 90M-HC300740R | REGULATOR(3.3V OUTPUT LOWDROPO)                |         | HVIA7805API        | 1   |     |
| U8302                       | 00D2631100021 | I.C.REGULATOR(+12V,TO220IS)                    |         | HVIA7812API        | 1   |     |
| U8303                       | 00D9430183909 | I.C , REGULATOR                                |         | HVIA7912PI         | 1   |     |
| ! U8304                     | 00MHC3890599F | I.C.REGULATOR(+5V,TO220IS)                     |         | HVIA7805API        | 1   |     |
| <b>RESISTOR GROUP</b>       |               |                                                |         |                    |     |     |
| R3001 ,3002                 | nsp           | RES , CARBON(1/5W,220Kohm,J)                   |         | CRD20TJ224T        | 2   |     |
| R3003 ,3004                 | nsp           | RES , CARBON(1/5W,220ohm,J)                    |         | CRD20TJ221T        | 2   |     |
| R3005 ,3006                 | nsp           | RES , CARBON(1/5W,220Kohm,J)                   |         | CRD20TJ224T        | 2   |     |
| R3007 ,3008                 | nsp           | RES , CARBON(1/5W,220ohm,J)                    |         | CRD20TJ221T        | 2   |     |
| R3009 ,3010                 | nsp           | RES , CARBON(1/5W,220Kohm,J)                   |         | CRD20TJ224T        | 2   |     |
| R3011 ,3012                 | nsp           | RES , CARBON(1/5W,220ohm,J)                    |         | CRD20TJ221T        | 2   |     |
| R3013 ,3014                 | nsp           | RES , CARBON(1/5W,220Kohm,J)                   |         | CRD20TJ224T        | 2   |     |
| R3015 ,3016                 | nsp           | RES , CARBON(1/5W,220ohm,J)                    |         | CRD20TJ221T        | 2   |     |
| R3025 ,3026                 | nsp           | RES , CARBON(1/5W,220Kohm,J)                   |         | CRD20TJ224T        | 2   |     |
| R3027 ,3028                 | nsp           | RES , CARBON(1/5W,560ohm,J)                    |         | CRD20TJ561T        | 2   |     |
| R3501 ,3502                 | nsp           | RES , CARBON(1/5W,47ohm,J)                     |         | CRD20TJ470T        | 2   |     |
| R3503 ,3504                 | nsp           | RES , CARBON(1/5W,100Kohm,J)                   |         | CRD20TJ104T        | 2   |     |
| R3505                       | nsp           | RES , CARBON(1/5W,10Kohm,J)                    |         | CRD20TJ103T        | 1   |     |
| R3506 -3508                 | nsp           | RES , CHIP(1608/5%/120ohm)                     |         | CRJ10DJ121T        | 3   |     |
| R3510 ,3511                 | nsp           | RES , CARBON(1/5W,220Kohm,J)                   |         | CRD20TJ224T        | 2   |     |
| R3512 -3514                 | nsp           | RES , CARBON(1/5W,4.7Kohm,J)                   |         | CRD20TJ472T        | 3   |     |
| R3515 -3517                 | nsp           | RES , CHIP(1608/5%/220ohm)                     |         | CRJ10DJ221T        | 3   |     |
| R3801 ,3802                 | nsp           | RES , CARBON(1/5W,100Kohm,J)                   |         | CRD20TJ104T        | 2   |     |
| R3803 ,3804                 | nsp           | RES , CARBON(1/5W,1Kohm,J)                     |         | CRD20TJ102T        | 2   |     |
| ! R3805 ,3806               | 00MGG0510016X | RES , CFPS1/4CMHTA100J                         |         | CRG14SANJ100CLPS   | 2   |     |
| R3901 ,3902                 | nsp           | RES , CARBON(1/5W,10Kohm,J)                    |         | CRD20TJ103T        | 2   |     |
| R3903                       | nsp           | RES , CARBON(1/5W,100ohm,J)                    |         | CRD20TJ101T        | 1   |     |
| R3904                       | nsp           | RES , CARBON(1/5W,39Kohm,J)                    |         | CRD20TJ393T        | 1   |     |
| R3905                       | nsp           | RES , CARBON(1/5W,100Kohm,J)                   |         | CRD20TJ104T        | 1   |     |
| R3906                       | nsp           | RES , CARBON(1/5W,47Kohm,J)                    |         | CRD20TJ473T        | 1   |     |
| R3907                       | nsp           | RES , CHIP(1608/5%/100Kohm)                    |         | CRJ10DJ104T        | 1   |     |
| R4001 ,4002                 | nsp           | WIRE , COPPER(D0.6)                            | U/F     | C3A206             | 2   |     |
| R4001 ,4002                 | nsp           | RES , CARBON(1/5W,6.8Kohm,J)                   | N/K     | CRD20TJ682T        | 2   |     |
| R4003 ,4004                 | nsp           | RES , CARBON(1/5W,330Kohm,J)                   |         | CRD20TJ334T        | 2   |     |
| R4005 ,4006                 | nsp           | RES , CARBON(1/5W,56Kohm,J)                    |         | CRD20TJ563T        | 2   |     |

| REF No.          | Part No.      | Part Name                                         | Remarks |                  | Q'ty | New | Ver |
|------------------|---------------|---------------------------------------------------|---------|------------------|------|-----|-----|
| R4007 -4010      | nsp           | RES, CARBON(1/5W,100ohm,J)                        |         | CRD20TJ101T      | 4    |     |     |
| R4011 ,4012      | nsp           | RES, CARBON(1/5W,82Kohm,J)                        |         | CRD20TJ823T      | 2    |     |     |
| R4013 ,4014      | nsp           | RES, CARBON(1/5W,6.8Kohm,J)                       |         | CRD20TJ682T      | 2    |     |     |
| R4015 ,4016      | nsp           | RES, CARBON(1/5W,100ohm,J)                        |         | CRD20TJ101T      | 2    |     |     |
| R4017 ,4018      | nsp           | RES, CARBON(1/5W,100Kohm,J)                       |         | CRD20TJ104T      | 2    |     |     |
| R4019 ,4020      | nsp           | RES, CARBON(1/5W,100ohm,J)                        |         | CRD20TJ101T      | 2    |     |     |
| ! R4021 ,4022    | 00MGG0510016X | RES, CFPS1/4CMHTA100J                             |         | CRG14SANJ100CLPS | 2    |     |     |
| R6001 ,6002      | nsp           | RES, CARBON(1/5W,10ohm,J)                         |         | CRD20TJ100T      | 2    |     |     |
| R6003 ,6004      | nsp           | RES, CARBON(1/5W,220Kohm,J)                       |         | CRD20TJ224T      | 2    |     |     |
| R6005 ,6006      | nsp           | RES, CARBON(1/5W,330ohm,J)                        |         | CRD20TJ331T      | 2    |     |     |
| R6007 ,6008      | nsp           | RES, CARBON(1/5W,1Kohm,J)                         |         | CRD20TJ102T      | 2    |     |     |
| R6009 ,6010      | nsp           | RES, CARBON(1/5W,47Kohm,J)                        |         | CRD20TJ473T      | 2    |     |     |
| R6011 ,6012      | nsp           | RES, CARBON(1/5W,100ohm,J)                        |         | CRD20TJ101T      | 2    |     |     |
| R6013            | nsp           | RES, CHIP(1608/5%/1Mohm)                          |         | CRJ10DJ105T      | 1    |     |     |
| R6015 -6018      | nsp           | RES, CARBON(1/5W,22ohm,J)                         |         | CRD20TJ220T      | 4    |     |     |
| R6019 -6022      | nsp           | RES, CARBON(1/5W,33Kohm,J)                        |         | CRD20TJ333T      | 4    |     |     |
| R6023 ,6026      | nsp           | WIRE, COPPER(D0.6)                                |         | C3A206           | 4    |     |     |
| R6027 -6030      | nsp           | RES, CARBON(1/5W,22ohm,J)                         |         | CRD20TJ220T      | 4    |     |     |
| ! R6031 -6034    | 00MGG0547116X | RES, CFPS1/4CMHTA471J                             |         | CRG14SANJ471CLPS | 4    |     |     |
| ! R6035 -6038    | 00MGG0515116X | RES, CFPS1/4CMHTA151J                             |         | CRG14SANJ151CLPS | 4    |     |     |
| R6039 -6042      | nsp           | RES, CARBON(1/5W,1Mohm,J)                         |         | CRD20TJ105T      | 4    |     |     |
| R6043 -6046      | nsp           | RES, CARBON(1/5W,4.7Kohm,J)                       |         | CRD20TJ472T      | 4    |     |     |
| R6047 -6056      | nsp           | RES, CARBON(1/5W,22ohm,J)                         |         | CRD20TJ220T      | 10   |     |     |
| R6057 -6060      | nsp           | RES, CARBON(1/5W,47Kohm,J)                        |         | CRD20TJ473T      | 4    |     |     |
| R6061 ,6062      | nsp           | RES, CARBON(1/5W,100Kohm,J)                       |         | CRD20TJ104T      | 2    |     |     |
| R6063 ,6064      | nsp           | RES, CARBON(1/5W,470Kohm,J)                       |         | CRD20TJ474T      | 2    |     |     |
| R6065 ,6066      | nsp           | RES, CARBON(1/5W,22Kohm,J)                        |         | CRD20TJ223T      | 2    |     |     |
| R6067 ,6068      | nsp           | RES, CARBON(1/5W,6.2Kohm,J)                       |         | CRD20TJ622T      | 2    |     |     |
| R6069 ,6070      | nsp           | RES, CARBON(1/5W,820ohm,J)                        |         | CRD20TJ821T      | 2    |     |     |
| R6071 ,6072      | nsp           | RES, CARBON(1/5W,47ohm,J)                         |         | CRD20TJ470T      | 2    |     |     |
| ! R6073 -6076    | 00MGG0522016X | RES, CFPS1/4CMHTA220J                             |         | CRG14SANJ220CLPS | 4    |     |     |
| ! R6077 -6080    | 00MGG0510116X | RES, FLAME RETARDANT(1/4W 5% 100 OHM) CFPS1/4CMHT |         | CRG14SANJ101CLPS | 4    |     |     |
| ! R6081 ,6082    | 00MGG0510216X | RES, CFPS1/4CMHTA102J                             |         | CRG14SANJ102CLPS | 2    |     |     |
| ! R6083 -6086    | 00MGG0547016X | RES, CFPS1/4CMHTA470J                             |         | CRG14SANJ470CLPS | 4    |     |     |
| ! R6087 ,6088    | 00MGG0522116X | RES, FLAME RETARDANT(1/4W 5% 220 OHM) CFPS1/4CMHT |         | CRG14SANJ221CLPS | 2    |     |     |
| ! R6089 -6092    | 00MGG0510016X | RES, CFPS1/4CMHTA100J                             |         | CRG14SANJ100CLPS | 4    |     |     |
| ! R6093 -6096    | 943129500920M | RES, CEMENT                                       |         | CRF5EKR22        | 4    | *   |     |
| ! R6097 ,6098    | 00D2412396928 | RES, CARBON(1/5W,100ohm,J)                        |         | CRD20TJ101T      | 2    |     |     |
| ! R6099 -6102    | 00D2412397943 | RES, CARBON(1/5W,330ohm,J)                        |         | CRD20TJ331T      | 4    |     |     |
| ! R6103 ,6104    | 00D2412397969 | RES, CARBON(1/5W,390ohm,J)                        |         | CRD20TJ391T      | 2    |     |     |
| ! R6105 ,6106    | 943124500360M | RES, METAL OXIDE FILM MINI , 2W, 10 ohm , 5%      |         | CRG2SANJ100HU    | 2    | *   |     |
| R6108            | nsp           | WIRE, COPPER(D0.6)                                |         | C3A206           | 0.02 |     |     |
| R6109 ,6110      | 00D2412397969 | RES, CARBON(1/5W,390ohm,J)                        |         | CRD20TJ391T      | 2    |     |     |
| R7501            | nsp           | RES, CARBON(1/5W,47Kohm,J)                        |         | CRD20TJ473T      | 1    |     |     |
| R7502 ,7503      | nsp           | RES, CARBON(1/5W,4.7Kohm,J)                       |         | CRD20TJ472T      | 2    |     |     |
| R7504            | nsp           | RES, CARBON(1/5W,47Kohm,J)                        |         | CRD20TJ473T      | 1    |     |     |
| R7505            | nsp           | RES, CARBON(1/5W,4.7Kohm,J)                       |         | CRD20TJ472T      | 1    |     |     |
| R7506            | nsp           | RES, CARBON(1/5W,47Kohm,J)                        |         | CRD20TJ473T      | 1    |     |     |
| R7507 ,7508      | 943124500370M | RES, METAL OXIDE FILM MINI , 2W, 330 ohm , 5%     |         | CRG2SANJ331HU    | 2    | *   |     |
| ! R8001          | 943129500910M | AC CAPACITOR RC NETWORK, 125VAC                   |         | CCKDHCRC684KB    | 1    | *   |     |
| ! R8101 ,8102    | 943121500450M | RES, CFPB1/2CL12.5A1R0J                           |         | CRG12SANJ1R0CLPB | 2    | *   |     |
| R8301 -8303      | nsp           | RES, CARBON(1/5W,22Kohm,J)                        |         | CRD20TJ223T      | 3    |     |     |
| R8306            | nsp           | RES, CHIP(1608/5%/330ohm)                         |         | CRJ10DJ331T      | 1    |     |     |
| R8307            | nsp           | RES, CHIP(1608/5%/100ohm)                         |         | CRJ10DJ101T      | 1    |     |     |
| R9001 ,9002      | 00MGG0510216X | RES, CFPS1/4CMHTA102J                             |         | CRG14SANJ102CLPS | 2    |     |     |
| R9003 ,9004      | 00MGG0515216X | RES, FLAME RETARDANT(1/4W 5% 1.5KOHM) CFPS1/4CMHT |         | CRG14SANJ152CLPS | 2    |     |     |
| R9005 -9008      | nsp           | RES, CARBON(1/5W,22Kohm,J)                        |         | CRD20TJ223T      | 4    |     |     |
| R9009 ,9010      | nsp           | RES, CARBON(1/5W,82Kohm,J)                        |         | CRD20TJ823T      | 2    |     |     |
| R9011            | nsp           | RES, CARBON(1/5W,6.8Kohm,J)                       |         | CRD20TJ682T      | 1    |     |     |
| R9012 -9014      | nsp           | RES, CHIP(1608/5%/22Kohm)                         |         | CRJ10DJ223T      | 3    |     |     |
| R9015            | nsp           | RES, CHIP(1608/5%/100Kohm)                        |         | CRJ10DJ104T      | 1    |     |     |
| R9016            | nsp           | RES, CHIP(1608/5%/68Kohm)                         |         | CRJ10DJ683T      | 1    |     |     |
| R9017            | nsp           | RES, CHIP(1608/5%/47Kohm)                         |         | CRJ10DJ473T      | 1    |     |     |
| R9101 -9103      | nsp           | RES, CARBON(1/5W,33Kohm,J)                        |         | CRD20TJ333T      | 3    |     |     |
| R9104 -9106      | nsp           | RES, CARBON(1/5W,22Kohm,J)                        |         | CRD20TJ223T      | 3    |     |     |
| R9107            | nsp           | RES, CHIP(1608/5%/10Kohm)                         |         | CRJ10DJ103T      | 1    |     |     |
| R9108            | nsp           | RES, CHIP(1608/5%/68Kohm)                         |         | CRJ10DJ683T      | 1    |     |     |
| CAPACITORS GROUP |               |                                                   |         |                  |      |     |     |
| C3001 -3004      | nsp           | CAP, CHIP(1608, 25V/0.1uF, MURATA GRM18)          |         | CCUMUS1E104ZF    | 4    |     |     |
| C3007            | nsp           | CAP, CHIP(1608, 25V/0.1uF, MURATA GRM18)          |         | CCUMUS1E104ZF    | 1    |     |     |
| C3009 -3016      | 943133501630M | CAP, MYLAR(100V/220PF/J)                          | N/K     | CCQI2A221JZTS    | 8    | *   |     |
| C3021 ,3022      | 943133501630M | CAP, MYLAR(100V/220PF/J)                          | N/K     | CCQI2A221JZTS    | 2    | *   |     |
| C3501 ,3502      | 00MOA10605020 | ELECT , CAP(ELNA/RA-2)                            |         | HCEA1HRA100T     | 2    |     |     |
| C3503 -3505      | nsp           | CAP, CHIP(1608, 50V/330pF)                        |         | CCUS1H331JA      | 3    |     |     |
| C3506            | nsp           | CAP, ELECT(50V/4.7uF)                             |         | CCEA1HH4R7T      | 1    |     |     |
| C3801 ,3802      | 00MOA10605020 | ELECT , CAP(ELNA/RA-2)                            |         | HCEA1HRA100T     | 2    |     |     |
| C3803 ,3804      | 00D9430188700 | CAP, ELECT(25V/100uF, ELNA/RA3)                   |         | CCEA1ERA3101T    | 2    |     | 2   |
| C3901            | 943133501630M | CAP , MYLAR(100V/220PF/J)                         | N/K     | CCQI2A221JZTS    | 1    | *   |     |
| C3902            | 00MOA10605020 | ELECT , CAP(ELNA/RA-2)                            |         | HCEA1HRA100T     | 1    |     |     |
| C3904            | 943134502680M | CAP, ELECT(10uF/63V)                              |         | CCEA1JH100T      | 1    | *   |     |
| C4001 ,4002      | 943133501630M | CAP , MYLAR(100V/220PF/J)                         | N/K     | CCQI2A221JZTS    | 2    | *   |     |
| C4003 ,4004      | 00MOA10605020 | ELECT , CAP(ELNA/RA-2)                            |         | HCEA1HRA100T     | 2    |     |     |
| C4005 ,4006      | 943133501630M | CAP , MYLAR(100V/220PF/J)                         |         | CCQI2A221JZTS    | 2    | *   |     |
| C4007 ,4008      | 943134502700M | CAP , ELECT (220uF/35V, RA2, ELNA)                |         | CCEA1VRA2221T    | 2    | *   |     |
| C4009 ,4010      | 943133501640M | CAP , MYLAR(100V/0.039uF/J)                       |         | CCQI2A393JZT     | 2    | *   |     |
| C4011 ,4012      | 943133501600M | CAP , MYLAR(100V/0.001uF/J)                       |         | CCQI2A102JZT     | 2    | *   |     |
| C4013 ,4014      | 943133501610M | CAP , MYLAR(100V/0.01uF/J)                        |         | CCQI2A103JZT     | 2    | *   |     |
| C4015 ,4016      | 00MOA10605020 | ELECT , CAP(ELNA/RA-2)                            |         | HCEA1HRA100T     | 2    |     |     |
| C4019 ,4020      | 00D9430188700 | CAP, ELECT(25V/100uF, ELNA/RA3)                   |         | CCEA1ERA3101T    | 2    |     | 2   |
| C4021            | nsp           | CAP, CHIP(1608, 25V/0.1uF, MURATA GRM18)          |         | CCUMUS1E104ZF    | 1    |     |     |
| C6001 ,6002      | 943134502660M | CAP, ELECT (22uF/25V, ROS, ELNA)                  |         | CCEA1EROS220T    | 2    | *   |     |
| C6003 ,6004      | 00MOF55101591 | CAP, POLYPROPYLENE(FAS(133)-200V-101K)            |         | CCMP2B101KS17T   | 2    |     |     |
| C6005            | nsp           | CAP, CHIP(1608, 50V/0.022uF)                      |         | CCUS1H223KC      | 1    |     |     |
| C6011 -6014      | 943134502690M | CAP, ELECT(470uF/63V, RA2, ELNA)                  |         | CCEA1JRA2471E    | 4    | *   |     |
| C6015 ,6016      | 00MOF55331381 | CAP , POLYPROPYLENE(FNS(135)-100V-331K)           |         | CCMP2A331KS13T   | 2    |     |     |
| C6017 ,6018      | 943134502640M | CAP, ELECT(16V/47uF, ELNA/RA2, 5X11)              |         | CCEA1ERA470T     | 2    | *   |     |
| C6019 ,6020      | 943134502700M | CAP, ELECT (220uF/35V, RA2, ELNA)                 |         | CCEA1VRA2221T    | 2    | *   |     |
| C6023 ,6024      | 943133501640M | CAP , MYLAR(100V/0.039uF/J)                       |         | CCQI2A393JZT     | 2    | *   |     |
| C7501 ,7504      | 943133501610M | CAP , MYLAR(100V/0.01uF/J)                        | N/K     | CCQI2A103JZT     | 4    | *   |     |
| C7505 ,7506      | nsp           | CAP, CHIP(1608, 50V/0.01uF, MURATA GRM18)         |         | CCUMUS1H103KC    | 2    |     |     |
| ! C8001 ,8002    | 943134502720M | CAP,ELECT (NICHICON,10000UF/63V,35X50)            |         | CCET63VLKS103N   | 2    | *   |     |
| C8101 ,8102      | 00MOA47703520 | CAP, ELECT(35V/470uF)                             |         | CCEA1VH471E      | 2    |     |     |

| REF No.                  | Part No.      | Part Name                                | Remarks |               | Q'ty | New | Ver |
|--------------------------|---------------|------------------------------------------|---------|---------------|------|-----|-----|
| C8103 ,8104              | 943134502640M | CAP, ELECT(16V/47uF,ELNA/RA2, 5X11)      |         | CCEA1ERA470T  | 2    | *   |     |
| C8105 ,8108              | nsp           | CAP, CHIP(1608, 50V/0.1uF)               |         | CCUS1H104KC   | 4    |     |     |
| C8109 ,8110              | 943133501610M | CAP , MYLAR(100V/0.01uF/J)               |         | CCQI2A103JZT  | 2    | *   |     |
| C8201                    | 943134502620M | CAP, ELECT(470UF/25V, RA2, ELNA )        |         | CCEA1ERA2471E | 1    | *   |     |
| C8202 ,8203              | 00D9430148708 | CAP, ELECT(50V/47uF)                     |         | CCEA1HH470T   | 2    |     |     |
| C8204 ,8207              | nsp           | CAP, CHIP(1608, 50V/0.1uF)               |         | CCUS1H104KC   | 4    |     |     |
| C8301                    | 00MOA68801620 | CAP, ELECT(16V/6800uF)                   |         | CCEA1CH682E   | 1    |     |     |
| C8302 ,8305              | 943134502700M | CAP , ELECT (220uF/35V, RA2, ELNA)       |         | CCEA1VRA2221T | 4    | *   |     |
| C8306                    | 943134010570S | CAP, ELECT(16V/220uF)                    |         | CCEA1CH221T   | 1    |     |     |
| C8307                    | 00MOA10605020 | ELECT , CAP(ELNA/RA-2)                   |         | HCEA1HRA100T  | 1    |     |     |
| C8308 ,8309              | 943133501610M | CAP , MYLAR(100V/0.01uF/J)               |         | CCQI2A103JZT  | 2    | *   |     |
| C8310 ,8311              | 943134502700M | CAP, ELECT (220uF/35V, RA2, ELNA)        |         | CCEA1VRA2221T | 2    | *   |     |
| C9001                    | nsp           | CAP, ELECT(50V/0.47uF)                   |         | CCEA1HHR47T   | 1    |     |     |
| C9002                    | nsp           | CAP, CHIP(1608, 25V/0.1uF, MURATA GRM18) |         | CCUMUS1E104ZF | 1    |     |     |
| C9003                    | 00D9430148708 | CAP, ELECT(50V/47uF)                     |         | CCEA1HH470T   | 1    |     |     |
| C9004                    | 943134502680M | CAP , ELECT(10uF/63V )                   |         | CCEA1JH100T   | 1    | *   |     |
| C9005                    | nsp           | CAP, CHIP(1608, 25V/0.1uF, MURATA GRM18) |         | CCUMUS1E104ZF | 1    |     |     |
| C9101                    | 00D9430148708 | CAP, ELECT(50V/47uF)                     |         | CCEA1HH470T   | 1    |     |     |
| <b>OTHER PARTS GROUP</b> |               |                                          |         |               |      |     |     |
| B8001                    | nsp           | PLATE , EARTH(TRONIC ELECTRONICS)        |         | CJT1A026      | 1    |     |     |
| B8101                    | nsp           | PLATE , EARTH(TRONIC ELECTRONICS)        |         | CJT1A026      | 1    |     |     |
| K3001 ,3002              | 943643102620M | JACK RCA, 4P(W/R*2), VERTICAL,GOLD       |         | CJJ4P081Z     | 2    | *   |     |
| K3004                    | 943643102600M | JACK RCA, 2P(W/R), VERTICAL, GOLD        |         | CJJ4N101Z     | 1    | *   |     |
| K4001                    | 943643102600M | JACK RCA, 2P(W/R), VERTICAL, GOLD        |         | CJJ4N101Z     | 1    | *   |     |
| K7501                    | 90M-YT005410R | TERMINAL , SPEAKER 8P SCREW              |         | CJJ5Q015Z     | 1    |     |     |
| N3001                    | nsp           | LOCKING TYPE , STRAIGHT WAFER , 2.5MM    |         | CJP05GI237ZW  | 1    |     |     |
| N3002                    | nsp           | LOCKING TYPE , STRAIGHT WAFER (2mm)      |         | CJP15GI236ZW  | 1    |     |     |
| N6001                    | nsp           | LOCKING TYPE , STRAIGHT WAFER, 2.5MM     |         | CJP03GI237ZW  | 1    |     |     |
| N6003 ,6004              | nsp           | LOCKING TYPE , STRAIGHT WAFER, 2.5MM     |         | CJP03GI237ZW  | 2    |     |     |
| N7501                    | nsp           | LOCKING TYPE , STRAIGHT WAFER, 2.5MM     |         | CJP03GI237ZW  | 1    |     |     |
| N8001                    | nsp           | WAFER,YW396-03B(3.96mm)                  |         | CJP03GA90ZY   | 1    |     |     |
| N8101                    | nsp           | LOCKING TYPE , STRAIGHT WAFER , 2.5MM    |         | CJP05GI237ZW  | 1    |     |     |
| N8301                    | nsp           | LOCKING TYPE , STRAIGHT WAFER , 2MM      |         | CJP07GI236ZW  | 1    |     |     |
| N8302                    | nsp           | LOCKING TYPE , STRAIGHT WAFER , 2MM      |         | CJP03GI236ZW  | 1    |     |     |
| N8303                    | nsp           | LOCKING TYPE , STRAIGHT WAFER, 2.5MM     |         | CJP03GI237ZW  | 1    |     |     |
| N9001                    | nsp           | WAFER , STRAIGHT(3PIN)                   |         | CJP03GA19ZY   | 1    |     |     |
| L4001 ,4002              | 00D9430193601 | COIL, TOROIDAL                           | N/K     | CLU9S004Z     | 2    |     |     |
| S7501 ,7502              | 943682010300S | RELAY,G5PA-28-MC,DC12V,2C1P              |         | CSL3A018ZE    | 2    |     |     |
| S7503                    | 943682000810S | RELAY,BC3-12H,DC12V,2C2P                 |         | CSL4A016ZU    | 1    |     |     |
| S8301                    | 943682000810S | RELAY,BC3-12H,DC12V,2C2P                 |         | CSL4A016ZU    | 1    |     |     |
| TW91                     | nsp           | 2P WIRE ASS'Y(100MM)                     |         | CWZPM5003TW91 | 1    |     |     |
| V6001 ,6002              | 943161009370S | RES , SEMI FIXED (220 OHM)               |         | CVN12A221B03T | 2    |     |     |
| V6003 ,6004              | 943161100150D | RES , SEMI FIXED (4.7K , B CURVE)        |         | CVN12A472B03T | 2    |     | 2   |
| Z4001 ,4002              | nsp           | WIRE ASS'Y (1P, 80MM,BLK,#22)            |         | CWE5202080A   | 2    |     |     |

## POWER PCB ASS'Y

NOTE: The symbols in the column Remarks indicate the following destinations.  
 U : North America model N : Europe model K : China model F : Japan model  
 B : Black model SG : Silver gold model

| REF No.                     | Part No.      | Part Name                                      | Remarks | Q'ty                | New  | Ver |
|-----------------------------|---------------|------------------------------------------------|---------|---------------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |               |                                                |         |                     |      |     |
| D2501                       | 00D9430182609 | DIODE , SWITCHING                              |         | CVD1SS133MT         | 1    |     |
| D5001 -5006                 | 00D9430182609 | DIODE , SWITCHING                              |         | CVD1SS133MT         | 6    |     |
| ! D8501 -8506               | 00D9430182502 | DIODE , RECT                                   |         | CVD1N4003T          | 6    |     |
| D8507                       | nsp           | WIRE, COPPER(D0.6)                             |         | C3A206              | 0.02 |     |
| D8508                       | 00D9430182609 | DIODE , SWITCHING                              |         | CVD1SS133MT         | 1    |     |
| D8509                       | 943202500770M | DIODE, CHIP ZENER(11V,200MW)                   |         | CVDUDZS11BSR        | 1    | *   |
| D8701                       | 90M-HI200020R | INFRARED L.E.D                                 |         | BVDSIR34S3F         | 1    |     |
| D8702                       | 00D9430182609 | DIODE , SWITCHING                              | U       | CVD1SS133MT         | 1    |     |
| Q2501                       | 00D2690192902 | T.R , CHIP , SOT-23                            |         | HVTKRC102S          | 1    |     |
| Q5001 ,5002                 | 943211500150S | PNP , TO-92, LOW NOISE, HFE:300-600, FAILCHILD |         | CVTKSA992FTA        | 2    |     |
| Q5003 -5006                 | 943213500150S | NPN , TO-92, LOW NOISE, HFE:300-600, FAILCHILD |         | CVTKSC1845FTA       | 4    |     |
| Q5007 -5010                 | 943211500150S | PNP , TO-92, LOW NOISE, HFE:300-600, FAILCHILD |         | CVTKSA992FTA        | 4    |     |
| Q5011 -5014                 | 943213500150S | NPN , TO-92, LOW NOISE, HFE:300-600, FAILCHILD |         | CVTKSC1845FTA       | 4    |     |
| Q5015 ,5016                 | 943211500150S | PNP , TO-92, LOW NOISE, HFE:300-600, FAILCHILD |         | CVTKSA992FTA        | 2    |     |
| Q8501                       | 00D9430154404 | T.R                                            |         | HVTKTC3198YT        | 1    |     |
| Q8502                       | 00D2690192902 | T.R , CHIP , SOT-23                            |         | HVTKRC102S          | 1    |     |
| Q8503                       | 00D2690184907 | T.R , CHIP , SOT-23                            |         | HVTKRA102S          | 1    |     |
| Q8701                       | 00D2690184907 | T.R , CHIP , SOT-23                            | U       | HVTKRA102S          | 1    |     |
| ! U8501                     | 943219500140M | I.C. REGULATOR(5.0V/TO-252)                    |         | CVINJM2845DL1-05    | 1    | *   |
| U8701                       | 262010007707S | REMOTE SENSOR , R94EVL1A                       | U       | CRVR94EVL1A         | 1    |     |
| <b>RESISTOR GROUP</b>       |               |                                                |         |                     |      |     |
| R2501 ,2502                 | nsp           | RES. CARBON(1/5W,3.3Kohm,J)                    |         | CRD20TJ332T         | 2    |     |
| R2503 ,2504                 | nsp           | RES. CARBON(1/5W,5.6Kohm,J)                    |         | CRD20TJ3562T        | 2    |     |
| R5001 ,5002                 | nsp           | RES. CARBON(1/5W,330ohm,J)                     |         | CRD20TJ3331T        | 2    |     |
| R5003 ,5004                 | nsp           | RES. CARBON(1/5W,56Kohm,J)                     |         | CRD20TJ3563T        | 2    |     |
| R5005 ,5006                 | nsp           | RES. CARBON(1/5W,100ohm,J)                     |         | CRD20TJ3101T        | 2    |     |
| R5007 -5010                 | nsp           | RES. CARBON(1/5W,22ohm,J)                      |         | CRD20TJ220T         | 4    |     |
| R5011 -5014                 | nsp           | RES. CARBON(1/5W,12Kohm,J)                     |         | CRD20TJ3123T        | 4    |     |
| R5015 -5018                 | nsp           | RES. CARBON(1/5W,22ohm,J)                      |         | CRD20TJ220T         | 4    |     |
| R5019 -5022                 | nsp           | RES. CARBON(1/5W,470ohm,J)                     |         | CRD20TJ3471T        | 4    |     |
| R5023 ,5024                 | nsp           | RES. CARBON(1/5W,180ohm,J)                     |         | CRD20TJ181T         | 2    |     |
| R5025 -5028                 | nsp           | RES. CARBON(1/5W,220ohm,J)                     |         | CRD20TJ221T         | 4    |     |
| R5029 -5032                 | nsp           | RES. CARBON(1/5W,1Mohm,J)                      |         | CRD20TJ105T         | 4    |     |
| R5033 -5036                 | nsp           | RES. CARBON(1/5W,33ohm,J)                      |         | CRD20TJ330T         | 4    |     |
| R5037 ,5038                 | nsp           | RES. CARBON(1/5W,100Kohm,J)                    |         | CRD20TJ3104T        | 2    |     |
| R5039 ,5040                 | nsp           | RES. CARBON(1/5W,220ohm,J)                     |         | CRD20TJ221T         | 2    |     |
| R5041 ,5042                 | nsp           | RES. CARBON(1/5W,100ohm,J)                     |         | CRD20TJ3101T        | 2    |     |
| R5043 ,5044                 | nsp           | RES. CARBON(1/5W,220ohm,J)                     |         | CRD20TJ221T         | 2    |     |
| R5045 ,5046                 | nsp           | RES. CARBON(1/5W,270ohm,J)                     |         | CRD20TJ271T         | 2    |     |
| R5047 ,5048                 | nsp           | WIRE, COPPER(D0.6)                             |         | C3A206              | 2    |     |
| R8501                       | nsp           | WIRE, COPPER(D0.6)                             |         | C3A206              | 0.02 |     |
| R8502                       | nsp           | RES. CHIP(1608/5%/4.7Kohm)                     |         | CRJ10DJ472T         | 1    |     |
| R8503                       | nsp           | RES. CHIP(1608/5%/82Kohm)                      |         | CRJ10DJ823T         | 1    |     |
| R8504                       | nsp           | RES. CHIP(1608/5%/47ohm)                       |         | CRJ10DJ470T         | 1    |     |
| R8505                       | nsp           | RES. CHIP(1608/5%/47Kohm)                      |         | CRJ10DJ473T         | 1    |     |
| R8701 ,8702                 | nsp           | RES. CHIP(1608/5%/100ohm)                      | U       | CRJ10DJ101T         | 2    |     |
| R9901 ,9902                 | nsp           | RES. CARBON(1/5W,47ohm,J)                      |         | CRD20TJ3470T        | 2    |     |
| <b>CAPACITORS GROUP</b>     |               |                                                |         |                     |      |     |
| C2501 ,2502                 | 943133501600M | CAP , MYLAR(100V/0.001uF/J)                    |         | CCQI2A102JZT        | 2    | *   |
| C2503 ,2504                 | 943133501620M | CAP , MYLAR(100V/0.1uF/J)                      |         | CCQI2A104JZT        | 2    | *   |
| C5001 ,5002                 | 943134502710M | CAP. ELECT(10UF/35V, ROS, ELNA )               |         | CCEA1VROS100T       | 2    | *   |
| C5003 ,5004                 | nsp           | CAP. POLYPROPYLENE(FAS(133)-200V-101K)         |         | CCMP2B101KS17T      | 2    |     |
| C5005 ,5006                 | 00MOA10605020 | ELECT , CAP(ELNA/RA-2)                         |         | HCEA1HRA100T        | 2    |     |
| C5007 ,5008                 | nsp           | CAP. POLYPROPYLENE(FAS(133)-200V-101K)         |         | CCMP2B101KS17T      | 2    |     |
| C5009 ,5010                 | 943134502670M | CAP. ELECT(47UF/25V, ROS, ELNA )               |         | CCEA1EROS470T       | 2    | *   |
| C5011 ,5012                 | 943134005720M | CAP. ELECT (220UF/25V, 8*11.5, RA2)            |         | CCEA1ERA221T        | 2    |     |
| C5013                       | nsp           | CAP. CHIP(1608, 50V/0.01uF)                    |         | CCUS1H103KC         | 1    |     |
| ! C8502                     | 00D9430024408 | CAP. CERAMIC(X1/Y2/SC)                         |         | KCKDKS472ME         | 1    |     |
| C8503                       | nsp           | CAP. ELECT(50V/0.22uF)                         |         | CCEA1HHR22T         | 1    |     |
| C8504                       | 13405013120AS | CAP. ELECT(25V/2200uF)                         |         | CCEA1EH222E         | 1    |     |
| C8505                       | nsp           | CAP. CHIP(1608, 50V/0.1uF)                     |         | CCUS1H104KC         | 1    |     |
| C8506                       | nsp           | CAP. ELECT(10V/220uF)                          |         | CCEA1AH221T         | 1    |     |
| C8507 -8510                 | nsp           | CAP. CHIP(1608, 50V/0.1uF)                     |         | CCUS1H104KC         | 4    |     |
| C8701                       | 13405012940AS | CAP. ELECT(16V/100uF)                          | U       | CCEA1CH101T         | 1    |     |
| C8702                       | nsp           | CAP. CHIP(1608, 50V/0.1uF)                     | U       | CCUS1H104KC         | 1    |     |
| ! C8901                     | 90M-DK100800R | CAP. CERAMIC(KH TYPE)                          |         | KCKDKS471ME         | 1    |     |
| C9901 ,9902                 | 943133501610M | CAP , MYLAR(100V/0.01uF/J)                     | N/K     | CCQI2A103JZT        | 2    | *   |
| <b>OTHER PARTS GROUP</b>    |               |                                                |         |                     |      |     |
| B5001                       | nsp           | WIRE ASS'Y (5PIN,160MM,61301000300AS)          |         | CWZPM6004B5001      | 1    |     |
| B5002                       | nsp           | WIRE ASS'Y                                     |         | CWE8202150RV        | 1    |     |
| B6501                       | nsp           | WIRE ASS'Y (3PIN,120MM,61205000800AS)          |         | CWZPM6004B6501      | 1    |     |
| B8501                       | nsp           | PLATE , EARTH(TRONIC ELECTRONICS)              |         | CJT1A026            | 1    |     |
| B8502                       | nsp           | BRACKET , PCB                                  |         | CMD1A569-V1         | 1    |     |
| B8901                       | nsp           | WIRE ASS'Y (2PIN,240MM,61205000600AS)          |         | CWZPM6004B8901      | 1    |     |
| B9901                       | nsp           | WIRE ASS'Y (3PIN,400MM,61205000700AS)          |         | CWZPM6004B9901      | 1    |     |
| ! F8510                     | 90M-FS001420R | FUSE(218Series, 250V/3.15A)                    | U/F     | KBA2C3150TLEY       | 1    |     |
| ! F8510                     | 943652500320M | FUSE(218Series, 250V/1.6A)                     | N/K     | KBA2C1600TLEY       | 1    | *   |
| ! F8610                     | 943652500310M | FUSE(372 Series/5A/TR5)                        | U/F     | CBA2D5000A3EYT      | 1    | *   |
| ! F8620                     | 943652500310M | FUSE(372 Series/5A/TR5)                        | U/F     | CBA2D5000A3EYT      | 1    | *   |
| H8511 ,8512                 | nsp           | HOLDER , FUSE                                  | K/U/F   | KJCF5S              | 2    |     |
| H8511 ,8512                 | nsp           | HOLDER , FUSE                                  | N/K     | CJCF5S              | 2    |     |
| J8511                       | nsp           | WIRE, COPPER(D0.6)                             | U       |                     | 1    |     |
| J8514                       | nsp           | WIRE, COPPER(D0.6)                             | U       | C3A206              | 1    |     |
| K8501                       | 943643102610M | JACK RCA, 2P(O/O), VERTICAL, SILVER            |         | CJJ4N102Z           | 1    | *   |
| ! K8601                     | 943641500290M | AC OUTLET(USA, 1P, AC-183-UL-12V)              | U/F     | CJJ7A033Z           | 1    | *   |
| K8701                       | 90M-YT004860R | JACK, STEREO (BLK MOLD)                        | U       | CJJ2D008Z           | 1    |     |
| K9901                       | 90M-YT004500R | JACK, PHONES(6.35mm,SILVER)                    |         | CJJ2E026Z           | 1    |     |
| N5001                       | nsp           | WAFER , STRAIGHT                               |         | CJP05GA19ZY         | 1    |     |
| N5002                       | nsp           | PIN HEADER , 6P ANGLE(P/H2.54,1X6X90, L=16.5)  |         | CJP06GF293ZB        | 1    |     |
| N8501 ,8502                 | nsp           | WAFER, 2P, 3.96mm                              |         | CJP02KA060ZY        | 2    |     |
| N8503                       | nsp           | WAFER, 2P, 7.92mm                              |         | CJP02GA89ZY         | 1    |     |
| N8504                       | nsp           | LOCKING TYPE , STRAIGHT WAFER , 2MM            |         | CJP13GI236ZW        | 1    |     |
| N8505                       | nsp           | WAFER, FFC(7P-1mm, ANGLE)                      |         | CJP07GB113ZY        | 1    |     |
| S2501                       | 943682000810S | RELAY,BC3-12H,DC12V,2C2P                       |         | CSL4A0162U          | 1    |     |
| ! S8501                     | 00D9430194900 | RELAY,G5PA-1,DC6V,1C1P                         |         | CSL1E002ZE          | 1    |     |
| ! S8901                     | 90M-SP001250R | SW. PUSH (MOMS) CN                             |         | KSH1A0012V          | 1    |     |
| T6501                       | 943252100170M | POSISTOR , PTFM04BC222Q2N34B0                  |         | CRTPTH9M04BC222TS2F | 1    | *   |
| ! T8501                     | 943101002880M | TRANS , SUB C515                               | U       | CLT50I09ZU          | 1    |     |

|   | REF No. | Part No.      | Part Name                         | Remarks |              | Q'ty | New | Ver |
|---|---------|---------------|-----------------------------------|---------|--------------|------|-----|-----|
| ! | T8501   | 90M-TS003170R | TRANS , SUB CD6002/F              | F       | CLT5I009ZJ   | 1    |     |     |
| ! | T8501   | 943101007210M | TRANS , SUB CD6003/K              | K       | CLT5I009ZH   | 1    |     |     |
| ! | T8501   | 90M-TS003180R | TRANS , SUB CD6002/N              | N       | CLT5I009ZE   | 1    |     | 2   |
|   | V5001   | 00D9430197305 | VOLUME , MOTOR                    |         | CVV9Y13B503Z | 1    |     |     |
|   | Z1602   | nsp           | CUSHION , IR                      |         | CHG1A448     | 1    |     |     |
|   | Z5001   | nsp           | WIRE ASS'Y (1P, 80MM,BLK,#22)     |         | CWE5202080A  | 1    |     |     |
|   | Z6501   | nsp           | TUBE , UL (0.8PIE , 3mm , BLACK ) |         | C4B120R82    | 2    |     |     |
|   | Z8701   | nsp           | SHIELD , CASE FLASHER             | U       | CMC1A441     | 1    |     |     |
|   | Z9901   | nsp           | PLATE , SHIELD(HP)                |         | CMC1A346-V1  | 1    |     |     |

## DIGIT PCB ASS'Y

NOTE: The symbols in the column Remarks indicate the following destinations.  
 U : North America model N : Europe model K : China model F : Japan model  
 B : Black model SG : Silver gold model

| REF No.                     | Part No.      | Part Name                                         | Remarks        | Q'ty | New | Ver |
|-----------------------------|---------------|---------------------------------------------------|----------------|------|-----|-----|
| <b>SEMICONDUCTORS GROUP</b> |               |                                                   |                |      |     |     |
| D300 -315                   | 00D9430182609 | DIODE , SWITCHING                                 | CVD1SS133MT    | 16   |     |     |
| D316 ,317                   | 201310001503S | DIODE, ULTRA-HIGH SPEED                           | CVDKDS160RTKP  | 2    |     |     |
| IC300                       | 90M-HC109330R | AUDIO DAC (TSSOP-28 PACKAGE)                      | HVICS4398CZ    | 1    |     |     |
| IC301                       | 943239101140M | I.C. Low Power 192kHz Digital Audio Receiver      | CVIAK4117VF    | 1    | *   |     |
| IC303                       | 00D2623077900 | I.C. HEX INVERTER                                 | HVITC74VHC04FT | 1    |     |     |
| Q300 -302                   | 943211500150S | PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD     | CVTKSA992FTA   | 3    |     |     |
| Q303                        | 943213500150S | NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD     | CVTKSC1845FTA  | 1    |     |     |
| Q304                        | 943211500150S | PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD     | CVTKSA992FTA   | 1    |     |     |
| Q305                        | 943222500200D | F.E.T , 2SK2145 (N-CH, 2-3L1C, LOW NOISE, TOSHIBA | CVT2SK2145     | 1    |     |     |
| Q306 ,307                   | 00D9430072502 | T.R , CHIP , SOT-23                               | HVTKTC2875B    | 2    |     |     |
| Q308 -311                   | 943213500150S | NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD     | CVTKSC1845FTA  | 4    |     |     |
| Q312                        | 943211500150S | PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD     | CVTKSA992FTA   | 1    |     |     |
| Q313                        | 943213500150S | NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD     | CVTKSC1845FTA  | 1    |     |     |
| Q314 ,315                   | 00D9430072502 | T.R , CHIP , SOT-23                               | HVTKTC2875B    | 2    |     |     |
| Q316                        | 943211500150S | PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD     | CVTKSA992FTA   | 1    |     |     |
| Q317                        | 943213500150S | NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD     | CVTKSC1845FTA  | 1    |     |     |
| Q318 -320                   | 943211500150S | PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD     | CVTKSA992FTA   | 3    |     |     |
| Q321                        | 943222500200D | F.E.T , 2SK2145 (N-CH, 2-3L1C, LOW NOISE, TOSHIBA | CVT2SK2145     | 1    |     |     |
| Q322 -325                   | 943213500150S | NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD     | CVTKSC1845FTA  | 4    |     |     |
| Q326                        | 943211500150S | PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD     | CVTKSA992FTA   | 1    |     |     |
| Q327                        | 943213500150S | NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD     | CVTKSC1845FTA  | 1    |     |     |
| <b>RESISTOR GROUP</b>       |               |                                                   |                |      |     |     |
| R300                        | nsp           | RES, CHIP(1608/5%/4.7Kohm)                        | CRJ10DJ472T    | 1    |     |     |
| R301 ,302                   | nsp           | RES, CHIP(1608/5%/120ohm)                         | CRJ10DJ121T    | 2    |     |     |
| R303                        | nsp           | RES, CHIP(1608/5%/470ohm)                         | CRJ10DJ471T    | 1    |     |     |
| R304                        | nsp           | RES, CHIP(1608/5%/0ohm)                           | CRJ10DJ0R0T    | 1    |     |     |
| R308                        | nsp           | RES, CHIP(1608/5%/33Kohm)                         | CRJ10DJ333T    | 1    |     |     |
| R309                        | nsp           | RES, CHIP(1608/5%/180ohm)                         | CRJ10DJ181T    | 1    |     |     |
| R310                        | nsp           | RES, CHIP(1608/5%/560ohm)                         | CRJ10DJ561T    | 1    |     |     |
| R311 ,312                   | nsp           | RES, CHIP(1608/5%/4.7Kohm)                        | CRJ10DJ472T    | 2    |     |     |
| R313                        | nsp           | RES, CHIP(1608/5%/33Kohm)                         | CRJ10DJ333T    | 1    |     |     |
| R314                        | nsp           | RES, CHIP(1608/5%/100ohm)                         | CRJ10DJ101T    | 1    |     |     |
| R315                        | nsp           | RES, CHIP(1608/5%/47ohm)                          | CRJ10DJ470T    | 1    |     |     |
| R316 ,317                   | nsp           | RES, CHIP(1608/5%/68ohm)                          | CRJ10DJ680T    | 2    |     |     |
| R318 ,319                   | nsp           | RES, CHIP(1608/5%/10Kohm)                         | CRJ10DJ103T    | 2    |     |     |
| R320 ,321                   | nsp           | RES, CHIP(1608/5%/2.2Kohm)                        | CRJ10DJ222T    | 2    |     |     |
| R322                        | nsp           | RES, CHIP(1608/5%/0ohm)                           | CRJ10DJ0R0T    | 1    |     |     |
| R323                        | nsp           | RES, CHIP(1608/5%/47ohm)                          | CRJ10DJ470T    | 1    |     |     |
| R324                        | nsp           | RES, CHIP(1608/5%/470Kohm)                        | CRJ10DJ474T    | 1    |     |     |
| R327                        | nsp           | RES, CHIP(1608/5%/180ohm)                         | CRJ10DJ181T    | 1    |     |     |
| R328                        | nsp           | RES, CHIP(1608/5%/0ohm)                           | CRJ10DJ0R0T    | 1    |     |     |
| R330 -332                   | nsp           | RES, CHIP(1608/5%/68ohm)                          | CRJ10DJ680T    | 3    |     |     |
| R333 ,334                   | nsp           | RES, CHIP(1608/5%/560ohm)                         | CRJ10DJ561T    | 2    |     |     |
| R335 ,336                   | nsp           | RES, CHIP(1608/5%/2.2Kohm)                        | CRJ10DJ222T    | 2    |     |     |
| R338                        | nsp           | RES, CHIP(1608/5%/560ohm)                         | CRJ10DJ561T    | 1    |     |     |
| R339 ,340                   | nsp           | RES, CHIP(1608/5%/4.7Kohm)                        | CRJ10DJ472T    | 2    |     |     |
| R341                        | nsp           | RES, CHIP(1608/5%/470ohm)                         | CRJ10DJ471T    | 1    |     |     |
| R342                        | nsp           | RES, CHIP(1608/5%/470Kohm)                        | CRJ10DJ474T    | 1    |     |     |
| R343                        | nsp           | RES, CHIP(1608/5%/4.7Kohm)                        | CRJ10DJ472T    | 1    |     |     |
| R344 ,345                   | nsp           | RES, CHIP(1608/5%/120ohm)                         | CRJ10DJ121T    | 2    |     |     |
| R346                        | nsp           | RES, CHIP(1608/5%/470ohm)                         | CRJ10DJ471T    | 1    |     |     |
| R347                        | nsp           | RES, CHIP(1608/5%/4.7Kohm)                        | CRJ10DJ472T    | 1    |     |     |
| R349                        | nsp           | RES, CHIP(1608/5%/180ohm)                         | CRJ10DJ181T    | 1    |     |     |
| R350                        | nsp           | RES, CHIP(1608/5%/33Kohm)                         | CRJ10DJ333T    | 1    |     |     |
| R351                        | nsp           | RES, CHIP(1608/5%/560ohm)                         | CRJ10DJ561T    | 1    |     |     |
| R352 ,353                   | nsp           | RES, CHIP(1608/5%/4.7Kohm)                        | CRJ10DJ472T    | 2    |     |     |
| R354                        | nsp           | RES, CHIP(1608/5%/33Kohm)                         | CRJ10DJ333T    | 1    |     |     |
| R355                        | nsp           | RES, CHIP(1608/5%/47ohm)                          | CRJ10DJ470T    | 1    |     |     |
| R356                        | nsp           | RES, CHIP(1608/5%/100ohm)                         | CRJ10DJ101T    | 1    |     |     |
| R357                        | nsp           | RES, CHIP(1608/5%/47ohm)                          | CRJ10DJ470T    | 1    |     |     |
| R358                        | nsp           | RES, CHIP(1608/5%/180ohm)                         | CRJ10DJ181T    | 1    |     |     |
| R359                        | nsp           | RES, CHIP(1608/5%/68ohm)                          | CRJ10DJ680T    | 1    |     |     |
| R360                        | nsp           | RES, CHIP(1608/5%/560ohm)                         | CRJ10DJ561T    | 1    |     |     |
| R362 ,363                   | nsp           | RES, CHIP(1608/5%/560ohm)                         | CRJ10DJ561T    | 2    |     |     |
| R364 ,365                   | nsp           | RES, CHIP(1608/5%/4.7Kohm)                        | CRJ10DJ472T    | 2    |     |     |
| R366                        | nsp           | RES, CHIP(1608/5%/470ohm)                         | CRJ10DJ471T    | 1    |     |     |
| R367                        | nsp           | RES, CHIP(1608/5%/4.7Kohm)                        | CRJ10DJ472T    | 1    |     |     |
| R368 -372                   | nsp           | RES, CHIP(1608/5%/100ohm)                         | CRJ10DJ101T    | 5    |     |     |
| R373 ,374                   | nsp           | RES, CHIP(1608/5%/33ohm)                          | CRJ10DJ330T    | 2    |     |     |
| R375                        | nsp           | RES, CHIP(1608/5%/10ohm)                          | CRJ10DJ100T    | 1    |     |     |
| R376                        | nsp           | RES, CHIP(1608/5%/12Kohm)                         | CRJ10DJ123T    | 1    |     |     |
| R377                        | nsp           | RES, CHIP(1608/5%/1Kohm)                          | CRJ10DJ102T    | 1    |     |     |
| R378                        | nsp           | RES, CHIP(1608/5%/470ohm)                         | CRJ10DJ471T    | 1    |     |     |
| R381                        | nsp           | RES, CHIP(1608/5%/470ohm)                         | CRJ10DJ471T    | 1    |     |     |
| R382                        | nsp           | RES, CHIP(1608/5%/75ohm)                          | CRJ10DJ750T    | 1    |     |     |
| R383 -385                   | nsp           | RES, CHIP(1608/5%/33ohm)                          | CRJ10DJ330T    | 3    |     |     |
| R390                        | nsp           | RES, CHIP(1608/5%/47Kohm)                         | CRJ10DJ473T    | 1    |     |     |
| R391                        | nsp           | RES, CHIP(1608/5%/330Kohm)                        | CRJ10DJ334T    | 1    |     |     |
| R392                        | nsp           | RES, CHIP(1608/5%/33ohm)                          | CRJ10DJ330T    | 1    |     |     |
| R393 ,394                   | nsp           | RES, CHIP(1608/5%/0ohm)                           | CRJ10DJ0R0T    | 2    |     |     |
| R396 -399                   | nsp           | RES, CHIP(1608/5%/0ohm)                           | CRJ10DJ0R0T    | 4    |     |     |
| R400                        | nsp           | RES, CHIP(1608/5%/1Mohm)                          | CRJ10DJ105T    | 1    |     |     |
| R401 ,402                   | nsp           | RES, CHIP(1608/5%/0ohm)                           | CRJ10DJ0R0T    | 2    |     |     |
| R403                        | nsp           | RES, CHIP(1608/5%/10Kohm)                         | CRJ10DJ103T    | 1    |     |     |
| <b>CAPACITORS GROUP</b>     |               |                                                   |                |      |     |     |
| C300                        | 943133501570M | CAP , POLYPROPYLENE(FAS(133)-200V-181K)           | CCMP2B181KS17T | 1    | *   |     |
| C301                        | 943134005720M | CAP, ELECT (220UF/25V, 8*11.5, RA2)               | CCEA1ERA221T   | 1    |     |     |
| C302                        | nsp           | CAP, CHIP(1608, 50V/0.1uF)                        | CCUS1H104KC    | 1    |     |     |
| C303                        | 00MOA33505020 | CAP, ELECT(50V/3.3uF)                             | CCEA1HH3R3T    | 1    |     |     |
| C304                        | nsp           | CAP, CHIP(1608, 50V/0.1uF)                        | CCUS1H104KC    | 1    |     |     |
| C305                        | 943134502650M | CAP, ELECT (47uF/25V, ROA, ELNA)                  | CCEA1EROA470T  | 1    | *   |     |
| C307                        | 943134502730M | CAP , ELECT (ELNA/ROS, 25V/100UF)                 | HCEA1ER101T    | 1    | *   |     |
| C308                        | 943133501550M | CAP , POLYPROPYLENE(FNS(135)-100VDC-561J)         | CCMP2A561JS13T | 1    | *   |     |
| C309                        | 943133501560M | CAP , POLYPROPYLENE(FNS(135)-100VDC-821J)         | CCMP2A821JS13T | 1    | *   |     |

| REF No.                  | Part No.      | Part Name                                   | Remarks |                    | Q'ty | New | Ver |
|--------------------------|---------------|---------------------------------------------|---------|--------------------|------|-----|-----|
| C310                     | 943133501590M | CAP , POLYPROPYLENE (FAS(133)-200VDC 470KTP |         | CCMP2B470KS17T     | 1    | *   |     |
| C311                     | 943133501580M | CAP , POLYPROPYLENE (FAS(133)-200V-221K)    |         | CCMP2B221KS17T     | 1    | *   |     |
| C312                     | nsp           | CAP, ELECT(50V/33uF)                        |         | CCEA1HH330T        | 1    |     |     |
| C313                     | nsp           | CAP, CHIP(1608, 50V/0.1uF)                  |         | CCUS1H104KC        | 1    |     |     |
| C314                     | 943134502730M | CAP , ELECT (ELNA/ROS, 25V/100UF)           |         | HCEA1ER101T        | 1    | *   |     |
| C315                     | nsp           | CAP, CHIP(1608, 50V/0.1uF)                  |         | CCUS1H104KC        | 1    |     |     |
| C316                     | 943134502670M | CAP, ELECT(47UF/25V, ROS, ELNA )            |         | CCEA1EROS470T      | 1    | *   |     |
| C317 ,318                | nsp           | CAP, CHIP(1608, 50V/0.1uF)                  |         | CCUS1H104KC        | 2    |     |     |
| C319                     | nsp           | CAP, ELECT(50V/33uF)                        |         | CCEA1HH330T        | 1    |     |     |
| C320                     | 943133501560M | CAP , POLYPROPYLENE (FNS(135)-100VDC-821J)  |         | CCMP2A821JS13T     | 1    | *   |     |
| C321 ,322                | 943133501570M | CAP , POLYPROPYLENE (FAS(133)-200V-181K)    |         | CCMP2B181KS17T     | 2    | *   |     |
| C324                     | 943133501550M | CAP , POLYPROPYLENE (FNS(135)-100VDC-561J)  |         | CCMP2A561JS13T     | 1    | *   |     |
| C325                     | 943133501560M | CAP , POLYPROPYLENE (FNS(135)-100VDC-821J)  |         | CCMP2A821JS13T     | 1    | *   |     |
| C326                     | 943133501590M | CAP , POLYPROPYLENE (FAS(133)-200VDC 470KTP |         | CCMP2B470KS17T     | 1    | *   |     |
| C327                     | 943133501580M | CAP , POLYPROPYLENE (FAS(133)-200V-221K)    |         | CCMP2B221KS17T     | 1    | *   |     |
| C328                     | 943133501560M | CAP , POLYPROPYLENE (FNS(135)-100VDC-821J)  |         | CCMP2A821JS13T     | 1    | *   |     |
| C329                     | 943133501570M | CAP , POLYPROPYLENE (FAS(133)-200V-181K)    |         | CCMP2B181KS17T     | 1    | *   |     |
| C330                     | 943134005720M | CAP, ELECT (220UF/25V, 8*11.5, RA2)         |         | CCEA1ERA221T       | 1    |     |     |
| C331 ,332                | nsp           | CAP, CHIP(1608, 50V/0.1uF)                  |         | CCUS1H104KC        | 2    |     |     |
| C333                     | nsp           | CAP, ELECT(50V/10uF)                        |         | CCEA1HH100T        | 1    |     |     |
| C335                     | nsp           | CAP, CHIP(1608, 50V/0.1uF)                  |         | CCUS1H104KC        | 1    |     |     |
| C336                     | 13405012840AS | CAP, ELECT(10V/100uF)                       |         | CCEA1AH101T        | 1    |     |     |
| C337                     | nsp           | CAP, CHIP(1608, 50V/0.1uF)                  |         | CCUS1H104KC        | 1    |     |     |
| C338                     | 00D9430175001 | CAP, ELECT(25V/47uF)                        |         | CCEA1EH470T        | 1    |     |     |
| C340                     | nsp           | CAP, CHIP(1608, 50V/100pF)                  |         | CCUS1H101JA        | 1    |     |     |
| C342 -344                | nsp           | CAP, CHIP(1608, 50V/100pF)                  |         | CCUS1H101JA        | 3    |     |     |
| C345                     | nsp           | CAP, CHIP(1608, 50V/0.01uF)                 |         | CCUS1H103KC        | 1    |     |     |
| C346                     | nsp           | CAP, CHIP(1608, 50V/47pF)                   |         | CCUS1H470JA        | 1    |     |     |
| C347                     | nsp           | CAP, CHIP(1608, 50V/0.1uF)                  |         | CCUS1H104KC        | 1    |     |     |
| C348                     | nsp           | CAP, CHIP(1608, 50V/1000pF)                 |         | CCUS1H102KC        | 1    |     |     |
| C349                     | nsp           | CAP, CHIP(1608, 50V/0.1uF)                  |         | CCUS1H104KC        | 1    |     |     |
| C350                     | nsp           | CAP, CHIP(1608, 50V/1000pF)                 |         | CCUS1H102KC        | 1    |     |     |
| C351                     | nsp           | CAP, CHIP(1608, 50V/0.01uF)                 |         | CCUS1H103KC        | 1    |     |     |
| C352 -357                | nsp           | CAP, CHIP(1608, 50V/0.1uF)                  |         | CCUS1H104KC        | 6    |     |     |
| C358 ,359                | nsp           | CAP, CHIP(1608, 50V/18pF)                   |         | CCUS1H180JA        | 2    |     |     |
| <b>OTHER PARTS GROUP</b> |               |                                             |         |                    |      |     |     |
| BN300                    | nsp           | Wire ass'y (7P,120mm,ANGLE 2.0mm )          |         | CWB1B00712046      | 1    |     |     |
| BN301                    | nsp           | Wire ass'y (3P,150mm,ANGLE 2.0mm)           |         | CWB1B00315046001   | 1    |     |     |
| BN302                    | nsp           | WAFER (14P LOCK ANGLE 2.0mm)                |         | CJP14GJ288ZY       | 1    |     |     |
| JK300                    | 943643102630M | MODULE , OPTICAL(RX 25MHz)                  |         | CJSJSR2124-00-BBBN | 1    | *   |     |
| JK301                    | 943643102590M | JACK, 1P(BK),SEPA-GND,GOLD                  |         | CJJ4M085Z          | 1    | *   |     |
| L301                     | nsp           | FERRITE CHIP BEAD(4516/60R)                 |         | CLZ9Z014Z          | 1    |     |     |
| RT01                     | 00MYJ04002640 | RECEPTACLE , AC(15A/250V,R-301,B21)         |         | CJJ8A006ZW         | 1    |     |     |
| TW91                     | nsp           | 2P WIRE ASS'Y(100MM)                        |         | CWZPM5003TW91      | 1    |     |     |
| X300                     | 943141100900S | X-TAL, HC-49/S SMD , 24.576MHz, 12PF        |         | COX24576E120ST     | 1    |     |     |

## EXPLODED

NOTE: The symbols in the column Remarks indicate the following destinations.  
 U : North America model N : Europe model K : China model F : Japan model  
 B : Black model SG : Silver gold model

| REF No. | Part No.      | Part Name                     | Remarks |                | Q'ty | New | Ver |
|---------|---------------|-------------------------------|---------|----------------|------|-----|-----|
| C1      | nsp           | POWER S/W PCB ASS'Y           |         | CUP12579Z-4    | 1    |     |     |
| C2      | nsp           | POWER H/P PCB ASS'Y           |         | CUP12579Z-3    | 1    |     |     |
| C3      | nsp           | PM6005/N FRONT PCB ASS'Y      |         | CUP12580Z      | 1    |     |     |
| C4      | nsp           | POWER VOLUME PCB ASS'Y        |         | CUP12579Z-2    | 1    |     |     |
| !       | C5            | 943101102270M POWER TRANS(U)  | U       | CLT5Z030ZU     | 1    | *   |     |
| !       | C5            | 943101102271M POWER TRANS(N)  | N       | CLT5Z030ZE     | 1    | *   |     |
| !       | C5            | 943101102272M POWER TRANS(K)  | K       | CLT5Z030ZH     | 1    | *   |     |
| !       | C5            | 943101102273M POWER TRANS(F)  | F       | CLT5Z030ZJ     | 1    | *   |     |
| C6      | nsp           | POWER STANDBY PCB ASS'Y       |         | CUP12579Z-1    | 1    |     |     |
| C7      | nsp           | PM6005/U MAIN PCB ASS'Y       |         | CUP12578Z      | 1    |     |     |
| !       | C8            | 00MYJ04002640 AC INLET ASSY   |         | CJ38A006ZW     | 1    |     |     |
| C9      | nsp           | TERMINAL , GROUND             |         | CMA1A006       | 1    |     |     |
| C10     | nsp           | PM6005/N DIGIT PCB ASS'Y      |         | CUP12581Z      | 1    |     |     |
| P1      | 421410006004M | BADGE , MARANTZ               |         | CGB1A206       | 1    |     |     |
| P2      | 943416101120M | WINDOW , FUNCTION             |         | CGU1A479A12    | 1    | *   |     |
| P3      | 943412101130M | KNOB , ROTARY                 | BK      | CBN1A278       | 3    | *   |     |
| P3      | 943412101140M | KNOB , ROTARY                 | SG      | CBN1A278RMD10  | 3    | *   |     |
| P4      | nsp           | PANEL SUB                     | BK      | CGW1A546       | 1    |     |     |
| P4      | nsp           | PANEL SUB                     | SG      | CGW1A546RMD10  | 1    |     |     |
| P5      | 943404100570M | PANEL , SIDE L                | BK      | CGW3A467RNVB37 | 1    | *   |     |
| P5      | 943404100580M | PANEL , SIDE L                | SG      | CGW3A467ROUD10 | 1    | *   |     |
| P6      | 943422003990M | PANEL , SIDE R PM5003/N1B     | BK      | CGW1A466RNZB37 | 1    |     |     |
| P6      | 943422004000M | PANEL , SIDE R PM5003/N1SG    | SG      | CGW1A466ROYD10 | 1    |     |     |
| P7      | 943412002830M | ORNAMENT , RING               | BK      | CGR1A456B37    | 2    |     |     |
| P7      | 943412002840M | ORNAMENT , RING               | SG      | CGR1A456RMD10  | 2    |     |     |
| P8      | 481510004009M | WINDOW , IR                   | BK      | CGU1A424A12    | 1    |     |     |
| P8      | 481510004047M | WINDOW , IR                   | SG      | CGU1A424       | 1    |     |     |
| P9      | 481510003006M | INDICATOR , POWER             |         | CGL1A274       | 1    |     |     |
| P10     | 411510016027M | KNOB , PUSH POWER AV8003/N BK | BK      | CBC1A166       | 1    |     |     |
| P10     | 943411001970M | KNOB , POWER                  | SG      | CBC1A166RMD10  | 1    |     |     |
| P11     | 943411102830M | INDICATOR , FUNCTION          |         | CGL1A307       | 1    | *   |     |
| P12     | 943411102820M | TACK KNOB ASS'Y               | BK      | CBT1A1085XA    | 1    | *   |     |
| P12     | 943411102810M | TACK KNOB ASS'Y               | SG      | CBT1A1085WA    | 1    | *   |     |
| P13     | nsp           | PC SHEET                      |         | CMX1A331       | 1    |     |     |
| P14     | nsp           | CUSHION , EVA                 |         | CHG1A104       | 2    |     |     |
| P15     | 00M243W057210 | FOOT , FRONT                  |         | CKL2A042H46    | 4    |     |     |
| P16     | 00M32CW107010 | CUSHION , FOOT                |         | CHG1A360       | 4    |     |     |
| P17     | nsp           | HOLDER , PCB                  |         | CHE170         | 2    |     |     |
| P18     | nsp           | HOLDER , PCB                  |         | CHE2A030       | 2    |     |     |
| P19     | nsp           | LOCKER                        |         | CRE1A037       | 8    |     |     |
| P20     | nsp           | SPACER , PCB(KCA-34)          |         | CRE1A108       | 2    |     |     |
| P21     | nsp           | SHEET , SCREW                 |         | CGX1A439       | 1    |     |     |
| P22     | 943416101140M | SHEET , TOP                   | BK      | CGX1A436Z      | 1    | *   |     |
| P22     | 943416101130M | SHEET , TOP                   | SG      | CGX1A436Y      | 1    | *   |     |
| P23     | 45451000500AM | STOPPER , SHEET               | BK      | CMH1A306Z      | 2    |     |     |
| P23     | 45451000501AM | STOPPER , SHEET               | SG      | CMH1A306Y      | 2    |     |     |
| M1      | 943402104090M | PANEL , AL FRONT              | BK      | CKM1A204RC23   | 1    | *   |     |
| M1      | 943402104080M | PANEL , AL FRONT              | SG      | CKM1A204QC62   | 1    | *   |     |
| M2      | 943412002810M | PM5003/N1B INPUT KNOB ASS'Y   | BK      | CGK1A138ZA     | 1    |     |     |
| M2      | 943412002820M | PM5003/N1SG INPUT KNOB ASS'Y  | SG      | CGK1A138YA     | 1    |     |     |
| M3      | 943412004010M | PM5003/N1B VOLUME KNOB ASS'Y  | BK      | CGK1A137ZA     | 1    |     |     |
| M3      | 943412004020M | PM5003/N1SG VOLUME KNOB ASS'Y | SG      | CGK1A137YA     | 1    |     |     |
| M4      | nsp           | FRAME , FRONT                 |         | CUF2A004       | 1    |     |     |
| M5      | nsp           | CHASSIS , BOTTOM              |         | CUA1A288       | 1    |     |     |
| M6      | nsp           | WASHER                        |         | CNW1A051       | 4    |     |     |
| M7      | nsp           | BRACKET(F) , HEAT SINK        |         | CMD1A366-V1    | 1    |     |     |
| M8      | nsp           | HEAT SINK                     |         | CMY3A286       | 1    |     |     |
| M9      | nsp           | BRACKET(F) , HEAT SINK        |         | CMD1A367-V1    | 1    |     |     |
| M10     | nsp           | WASHER , GROUND               |         | CNW1A035       | 4    |     |     |
| M11     | nsp           | PANEL REAR                    | U       | CKF3A391N      | 1    |     |     |
| M11     | nsp           | PANEL REAR                    | F       | CKF5A391L      | 1    |     |     |
| M11     | nsp           | PANEL REAR                    | K       | CKF4A391M      | 1    |     |     |
| M11     | nsp           | PANEL REAR                    | N       | CKF4A391P      | 1    |     |     |
| M12     | 943401002850M | CABINET , TOP PM5003/N1B      | BK      | CKC1A187K117   | 1    |     |     |
| M12     | 943401002860M | CABINET , TOP PM5003/N1SG     | SG      | CKC1A187D11    | 1    |     |     |
| M13     | nsp           | SHIELD BRACKET                |         | CMD1A844       | 1    |     |     |
| M14     | nsp           | SHIELD PLATE                  |         | CMD1A857       | 1    |     |     |
| M15     | nsp           | SHIELD CHASSIS                |         | CMD1A845       | 1    |     |     |
| S1      | nsp           | SCREW                         | BK      | CTW3+8JFZR     | 6    |     |     |
| S1      | nsp           | SCREW                         | SG      | CTW3+8JFC      | 6    |     |     |
| S2      | nsp           | SCREW                         |         | CTB3+8JFB      | 50   |     |     |
| S3      | nsp           | SCREW                         |         | CTB3+10JFB     | 17   |     |     |
| S4      | nsp           | SCREW                         |         | CTW3+8JFB      | 7    |     |     |
| S5      | nsp           | SCREW                         |         | CTB3+12JFB     | 4    |     |     |
| S6      | nsp           | SCREW                         |         | CTB3+18JFB     | 2    |     |     |
| S7      | nsp           | SCREW                         |         | CTBR4+8FFB     | 4    |     |     |
| S8      | nsp           | SCREW , SPECIAL               |         | CHD1A012ZR     | 6    |     |     |
| S9      | nsp           | SCREW                         |         | CTB3+6FFB      | 5    |     |     |
| ★       | nsp           | HEAT SINK ASS'Y               |         | CMYPM6005      | 1    |     |     |
| ★       | nsp           | COMPOUND , SILICONE           |         | K8AYG6260      | 4    |     |     |
|         | nsp           | CLAMPER                       |         | CHR301-V1      | 11   |     |     |
|         | nsp           | BRACKET , PCB                 |         | CMD1A569-V1    | 2    |     |     |
|         | nsp           | 2P WIRE ASS'Y(100MM)          |         | CWZPM5003TW91A | 1    |     |     |

## PACKING

NOTE:The symbols in the column Remarks indicate the following destinations.  
 U : North America model N : Europe model K : China model F : Japan model  
 B : Black model SG : Silver gold model

| REF No. | Part No.      | Part Name                     | Remarks                            | Q'ty | New | Ver |
|---------|---------------|-------------------------------|------------------------------------|------|-----|-----|
| 1       | 943531103910M | BOX OUT CARTON                |                                    | 1    | *   |     |
| 2       | nsp           | BAG , POLY(SET)               |                                    | 1    |     |     |
| 3-1     | 943533101990M | PAD , SNOW BOTTOM(F/R)        |                                    | 1    | *   |     |
| 3-2     | 943533101980M | SNOW PAD(FRONT-TOP)           |                                    | 1    | *   |     |
| 4       |               | INSTRUCTION MANUAL ASS'Y      |                                    | 1    |     |     |
| 4-1     | 35201026900AM | CD MANUAL ASS'Y               | N                                  | 1    | *   |     |
| 4-1     | 35201029100AM | CD MANUAL ASS'Y               | K                                  | 1    | *   |     |
| 4-1     | 54111109100AM | MANUAL , INSTRUCTION          | F                                  | 1    | *   |     |
| 4-1     | 35201028900AM | CD MANUAL ASS'Y               | U                                  | 1    | *   |     |
| 4-2     | 54311027300AM | SAFETY INSTRUCTION            | N                                  | 1    |     |     |
| 4-2     | 54311028500AM | SAFETY INSTRUCTION            | K                                  | 1    |     |     |
| 4-2     | 54111093410AD | SAFETY INSTRUCTION            | F                                  | 1    |     |     |
| 4-2     | 54311028500AM | SAFETY INSTRUCTION            | U                                  | 1    |     | 2   |
| 4-3     | 54111111100AM | MANUAL , GETTI NG START       | N                                  | 1    | *   |     |
| 4-3     | 54111111400AM | MANUAL , GETTI NG START       | K                                  | 1    | *   |     |
| 4-3     | 54111111300AM | MANUAL , GETTI NG START       | F                                  | 1    | *   |     |
| 4-3     | 54111111200AM | MANUAL , GETTI NG START       | U                                  | 1    | *   |     |
| 4-4     | nsp           | SHEET , GOST                  | N                                  | 1    |     |     |
| 4-4     | nsp           | CARD FOR CHINA IDENTIFICATION | K                                  | 1    |     |     |
| 4-4     | nsp           | CARD , USER (JAPAN)           | F                                  | 1    |     |     |
| 4-4     | nsp           | CARD , WARRANTY               | U                                  | 1    |     |     |
| 4-5     | nsp           | WARRANTY CANADA               | U                                  | 1    |     |     |
| !       | 5             | 90M-ZC000320R                 | CORD , POWER(DETACHABLE/EUR)       | 1    |     |     |
| !       | 5             | 90M-ZC000650R                 | CORD , POWER                       | 1    |     |     |
| !       | 5             | 611050028007S                 | CORD , POWER JPN INLET TYPE (250V) | 1    |     |     |
| !       | 5             | 90M-ZC000310R                 | CORD , POWER(PLUG+SOCKET)UL        | 1    |     |     |
| 6       | nsp           | BAG , POLY                    |                                    | 1    |     |     |
| 7       | nsp           | LABEL , HOT                   |                                    | 1    |     |     |
| 8       | nsp           | LABEL , CONTROL               |                                    | 1    |     |     |
| 8-1     | nsp           | LABEL , CONTROL               |                                    | 1    |     |     |
| 8-2     | nsp           | LABEL , CONTROL               |                                    | 1    |     |     |
| 9       | 30701015400AM | RC001PMCD                     |                                    | 1    |     |     |
| 10      | nsp           | BATTERY , AAA 2PCS IN PACK    |                                    | 2    |     |     |
| 11      | nsp           | LABEL , WHITE M1 SG           | SG                                 | 2    |     |     |
| 12      | nsp           | CARD , WARRANTY CHINA         | K                                  | 1    |     |     |
| 12      | nsp           | CARD , WARRANTY (JAPAN)       | F                                  | 1    |     |     |
| 13      | nsp           | LABEL , POWER                 | K                                  | 1    |     |     |