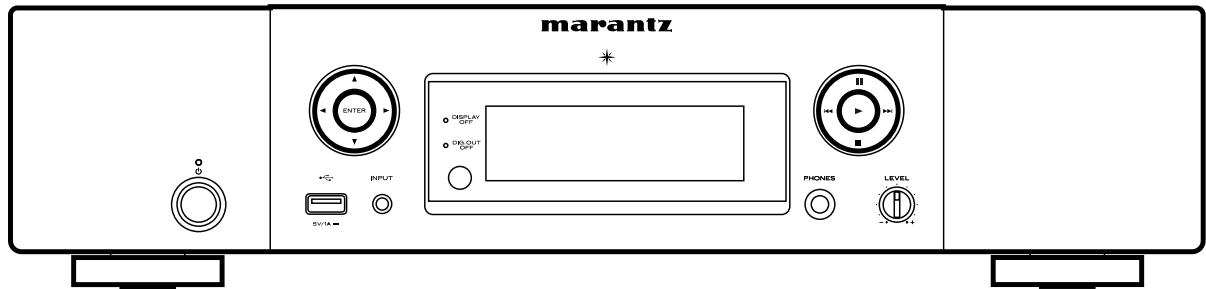


# Service Manual

NA8005 /N1B, N1SG, U1B, K1B, FN

Network Audio Player



• 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®

## NA8005

Ver. 1

## Contents

<b>ABOUT THIS MANUAL</b> .....	3
What you can do with this manual .....	3
Using Adobe Reader (Windows version) .....	4
<b>SAFETY PRECAUTIONS</b> .....	6
<b>NOTE FOR SCHEMATIC DIAGRAM</b> .....	7
<b>NOTE FOR PARTS LIST</b> .....	7
<b>TECHNICAL SPECIFICATIONS</b> .....	9
<b>DIMENSION</b> .....	9
<b>Precautions During Service</b> .....	10
<b>DISASSEMBLY</b> .....	6
<b>SPECIAL MODE</b> .....	11
Special Mode Configuration Buttons.....	11
1. Factory Initialization Mode (Factory Reset).....	12
2. Initialization Mode (User Reset).....	13
3. Version Display Mode .....	13
4. Product Mode2.....	15
5. Protection History Display Mode .....	15
6. DPMS Force Update Mode .....	16
7. Update Mode (by RS232C).....	18
8. MAC Address Rewrite Mode.....	18
9. Access to Development Server Mode.....	18
10.USB Update Mode (by USB).....	18
11. Control 4 Identify Mode .....	18
<b>Procedure after Replacing the Microprocessor, etc.</b> .....	28
2. Updating by DPMS.....	29
<b>Firmware Update Procedure</b> .....	30
1. Updating by USB.....	30
<b>TROUBLE SHOOTING</b> .....	28
1. Power not turn on.....	28
2. OLED doesn't Light .....	30
3. No Sound, Noise generated.....	32
<b>MEASURING METHOD AND WAVEFORMS</b> .....	39
<b>BLOCK DIAGRAM</b> .....	41
<b>POWER DIAGRAM</b> .....	42
<b>WIRING DIAGRAM</b> .....	43
<b>PRINTED Circuit BOARDS</b> .....	44
AUDIO.....	44
AUDIO.....	44
POWER.....	45
SMPS .....	45
POWER.....	45
SMPS .....	45
DIGITAL.....	46
STANDBY.....	46
PHONE .....	46
FRONT.....	46
<b>SCHEMATIC DIAGRAMS (1/8 )</b> .....	47
01-AUDIO.....	47
02-MCU .....	48
03-NETWORK.....	49
04-BDSP_DIR .....	50
05-JACK.....	51
06-POWER .....	52
07-SMPS.....	53
08-FRONT.....	54
<b>EXPLODED VIEW</b> .....	55
<b>PACKING VIEW</b> .....	57
<b>SEMICONDUCTORS</b> .....	58
1. IC's.....	58
2. DISPLAY .....	70

# ABOUT THIS MANUAL

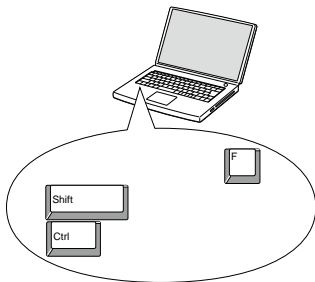
Read the following information before using the service manual.

## What you can do with this manual

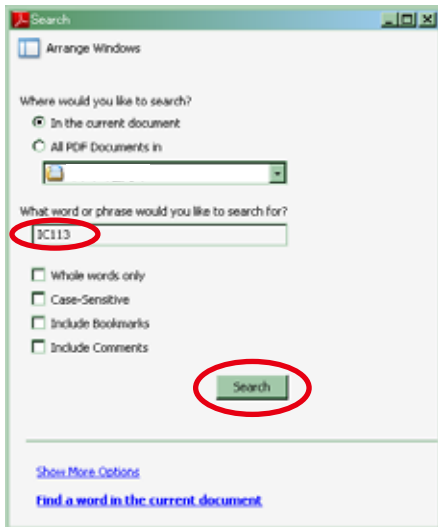
### Search for a Ref. No. (phrase) (Ctrl+Shift+F)

You can use the search function in Acrobat Reader to search for a Ref. No. in schematic diagrams, 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.

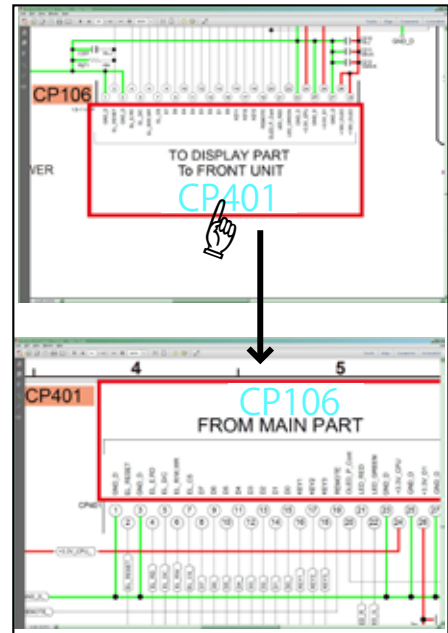


3. Click an item on the list.
  - The screen jumps to the page for that item, and the search phrase is displayed.

### 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)

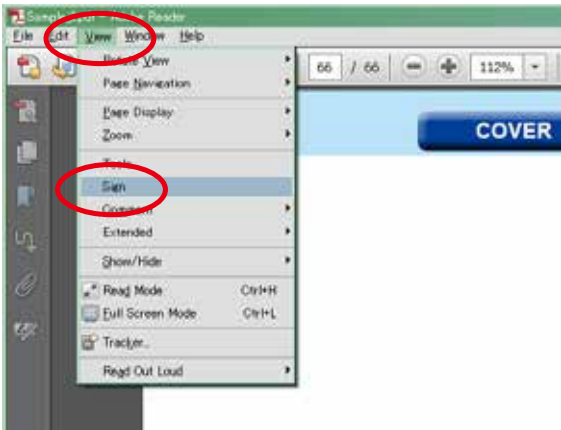
The Sign function lets you add notes to the data in this manual.

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]

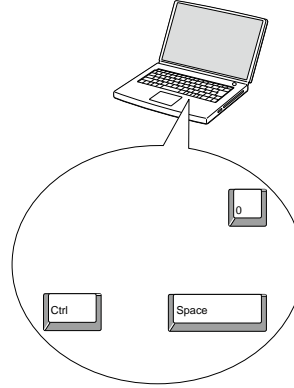
On the "Document" menu, click "Sign".

### 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.

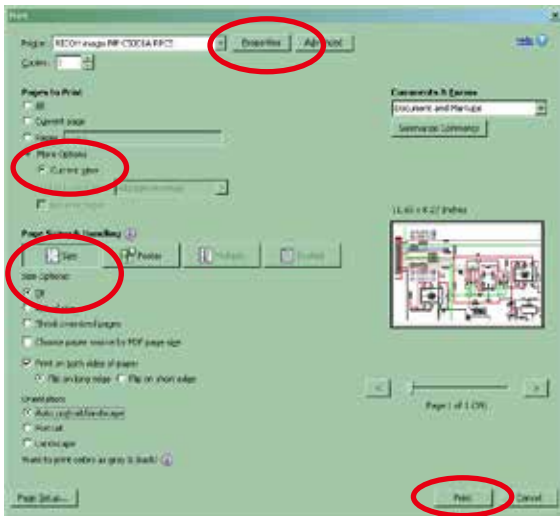


- When you want to move the area shown, hold down **Space** and drag the mouse.
- When you want to show a full page view, press **Ctrl+0** on the keyboard.

### 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"

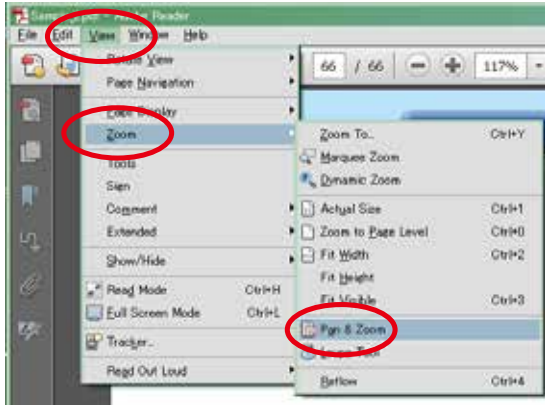
## Magnify schematic / printed wiring board diagrams - 2

### (Pan & Zoom function)

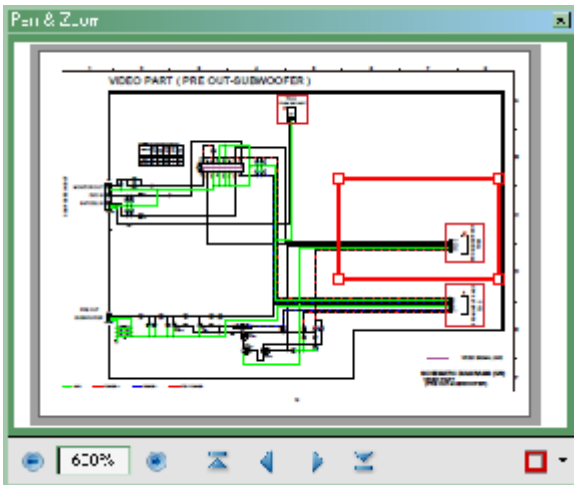
The Pan & Zoom function lets you see which part of a magnified diagram is being shown in a separate window.

#### [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".

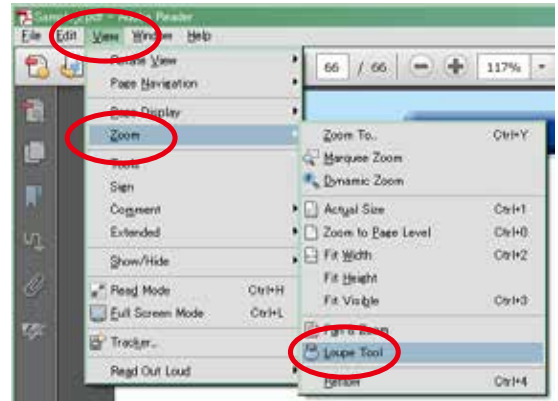
## Magnify schematic / printed wiring board diagrams - 3

### (Loupe Tool function)

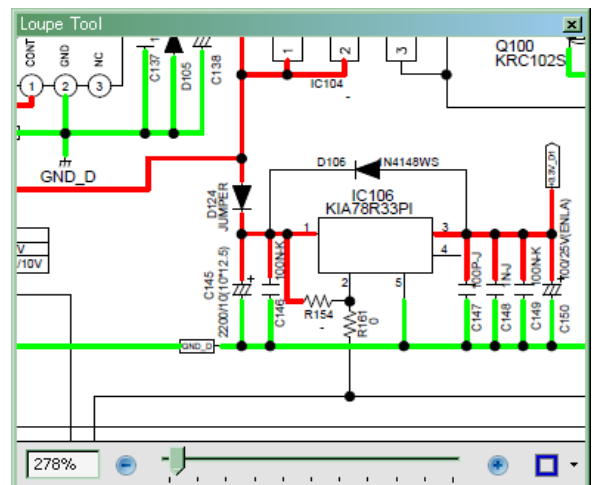
The Loupe Tool function lets you magnify a specific part of a diagram in a separate window.

#### [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  $\triangle$  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 1M $\Omega$  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  $\triangle$  mark.
- (2) Parts lists.....Indicated by the  $\triangle$  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 "1" (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.

**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

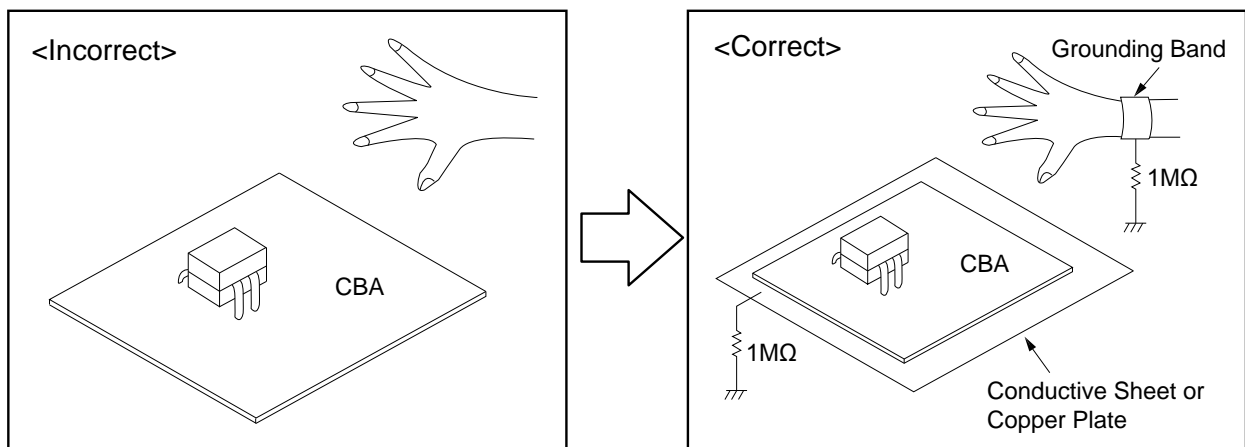
Electrostatic breakdown of the semi-conductors or optical pickup may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

### 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







# TECHNICAL SPECIFICATIONS

□ **Audio performance**

- **Analog output**
  - Channels:** 2-channels
  - Playable frequency range:** 2 Hz - 96 kHz
  - Playable frequency response:** "2 Hz - 50 kHz (-3 dB) (DSD mode, PCM sampling frequency: 192 kHz) 2 Hz - 20 kHz (PCM sampling frequency: 44.1 kHz)"
  - S/N:** 110 dB (Audible range)
  - Dynamic range:** 106 dB (DSD/192 kHz) (Audible range) 101 dB (44.1 kHz)
  - Harmonic distortion:** 0.0012 % (1 kHz, Audible range)
  - Output level**
    - Unbalanced output:** 2.3 V RMS (PCM) 1.7 V RMS (DSD)
    - Headphone output:** 30 mW/32 Ω/ohms (variable maximum)
- **Digital output**
  - Coaxial:** 0.5 Vp-p / 75 Ω/ohms
  - Optical :** -15 - -21 dBm

• **Digital input**

- Coaxial:** 0.5 Vp-p / 75 Ω/ohms
- Optical :** -27 dBm or lator
- USB (Front):** USB Type A (USB 2.0 High speed)
- USB (Rear):** USB Type B (USB 2.0 High speed)

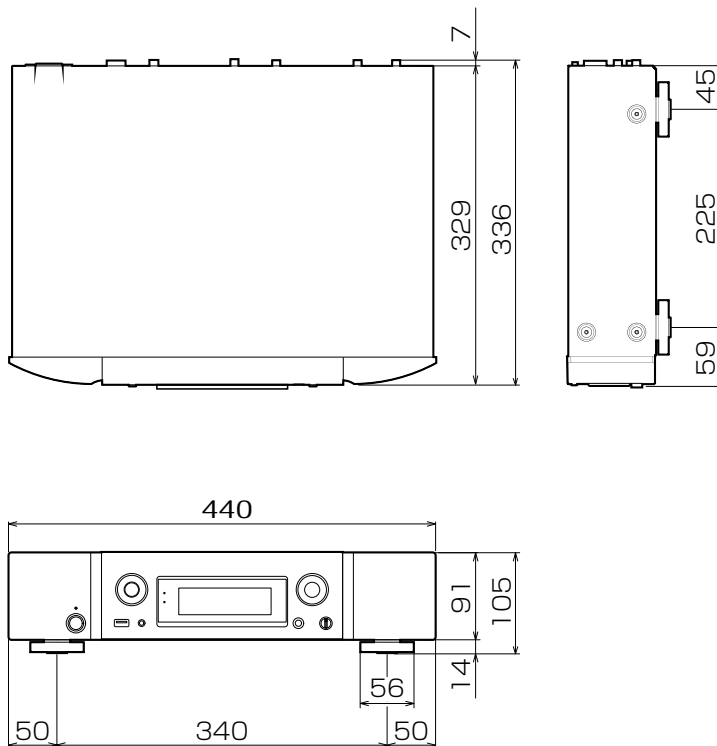
□ **General**

- Power supply voltage/ frequency: F** AC 100V, 50/60Hz
- Power supply voltage/ frequency: N** AC 230 V, 50/60 Hz
- Power supply voltage/ frequency: U** AC 120 V, 60 Hz
- Power supply voltage/ frequency: K** AC 220 V, 50 Hz
- Power consumption (EN60065):** 30W
- Power consumption in standby mode:** 0.4W
- Power consumption in " Network Control " - "On" mode:** 4W

## DIMENSION

o Dimensions

Unit : mm



o Weight : 7.2 kg

## PRECAUTIONS DURING SERVICE

### Initializing This Unit

Initialize this unit if you have replaced the microcomputer, one of the parts around the microcomputer.

1. Disconnect the AC plug of this unit to turn the power off.
2. When executing the initialization (User Reset) described in the Owner's Manual.  
Press the "INPUT" and "ENTER" buttons simultaneously while inserting the AC plug to turn the power on.  
"INITIALIZING" appears on the display.

When executing the initialization Factory Initialization (Factory Reset).

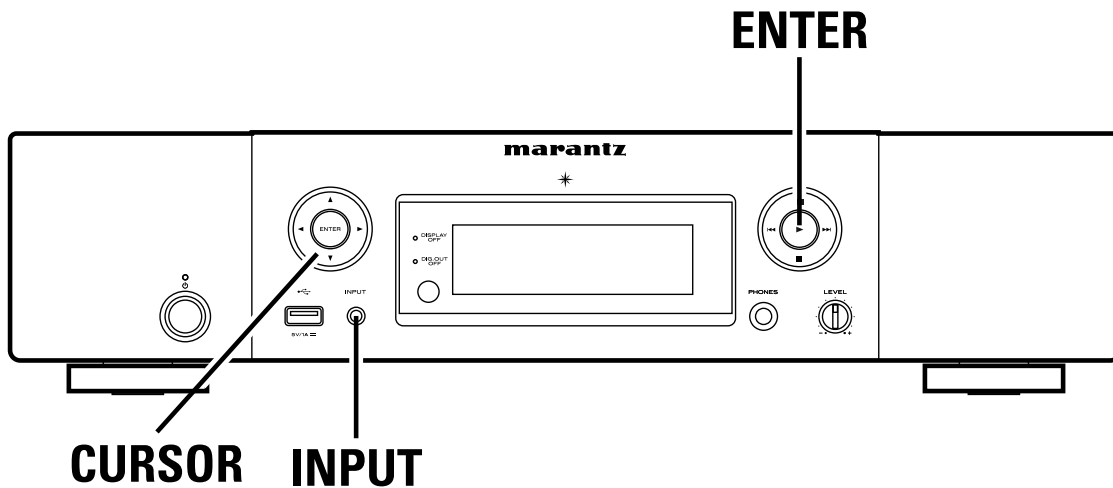
Press the "INPUT" and CURSOR DOWN "▼" buttons simultaneously while inserting the AC plug to turn the power on.  
"Factory Reset" appears on the display.

See "[SPECIAL MODE](#)" on [page 11](#) for details on the differences between the different types of initialization.

3. The unit then changes to the normal mode.

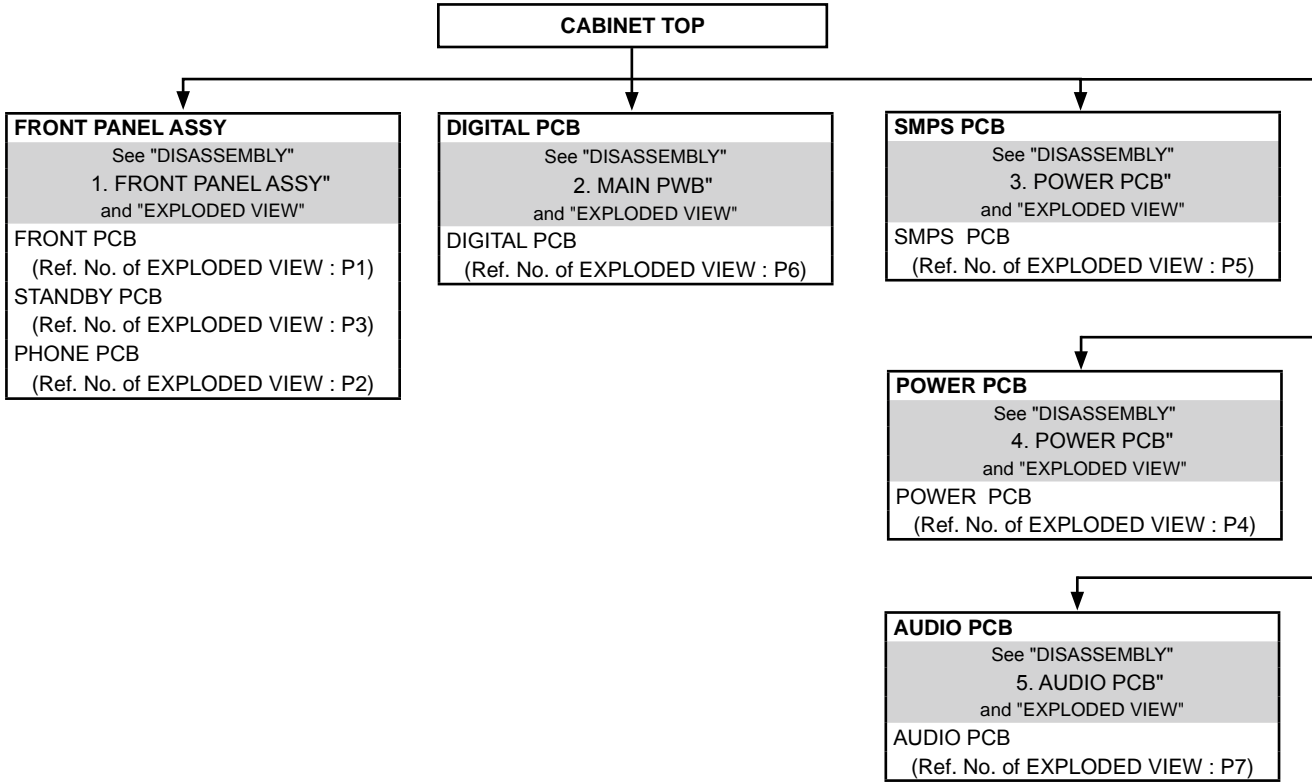
**NOTE :**

- If the status in step 3 does not occur, start again from step 1.
- Initializing the device restores settings configured by the user to the factory settings. Take note of your settings beforehand and reconfigure them after initialization.



# DISASSEMBLY

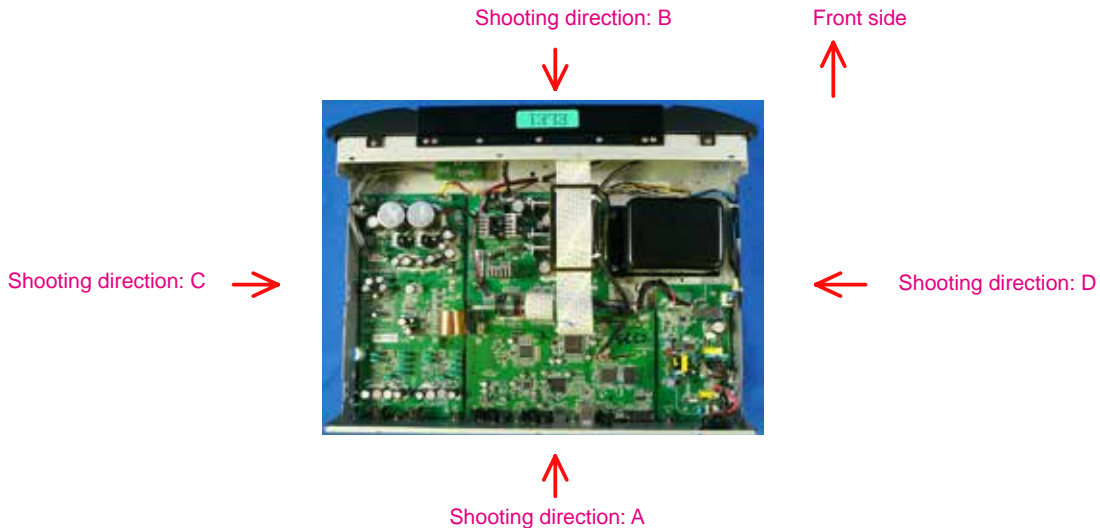
- Remove each part in the order of the arrows below.
- Reassemble removed parts in the reverse order.
- Read "Precautions During Work" before reassembling removed parts.
- If wire bundles are removed or moved during adjustment or part replacement, reshape the wires after completing the work. Failure to shape the wires correctly may cause problems such as noise.



## Explanatory Photos for DISASSEMBLY

- The angles from which the photos are taken are shown by "Photo angle : A, B, C, D".
- See the diagram below about the shooting direction of each photograph.
- Photographs with no shooting direction indicated were taken from the top of the unit.
- The photograph is NA8005U1B model.

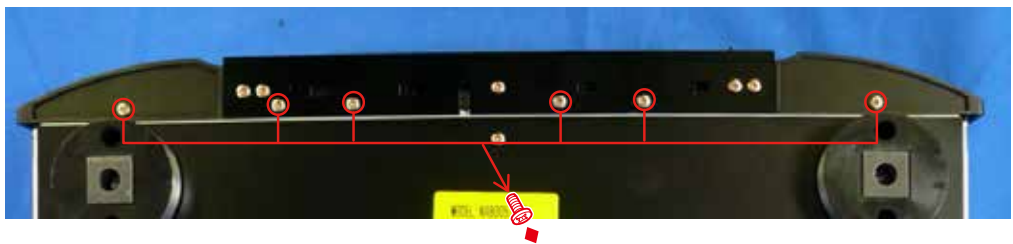
The viewpoint of each photograph  
(Shooting direction:X) □ View from the top]



# 1. FRONT PANEL ASSY

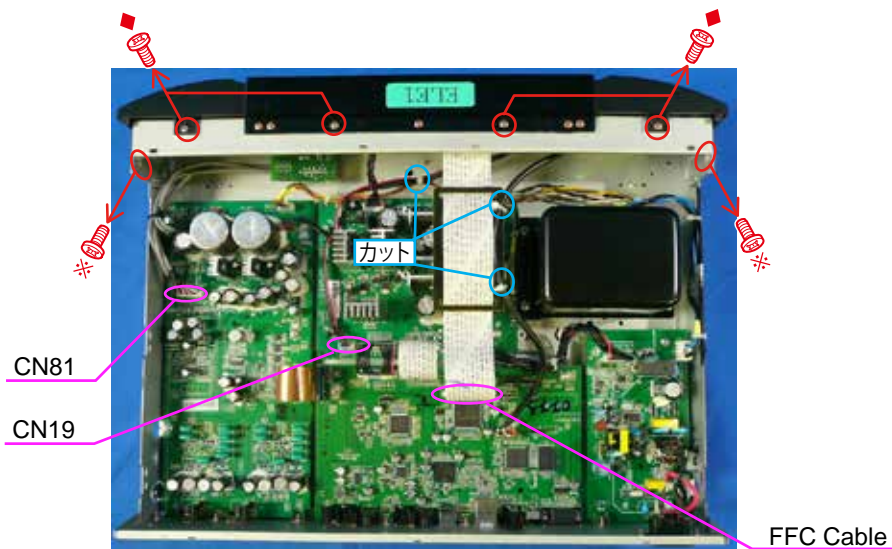
Proceeding: **CABINET TOP** → **FRONT PANEL ASSY**

(1) Remove the screws.



Bottom side

(3) Remove the connector wires and FFC. Remove the screws.



See "EXPLODED VIEW" for instructions on how to remove each PCB of the FRONT PANEL ASSY.

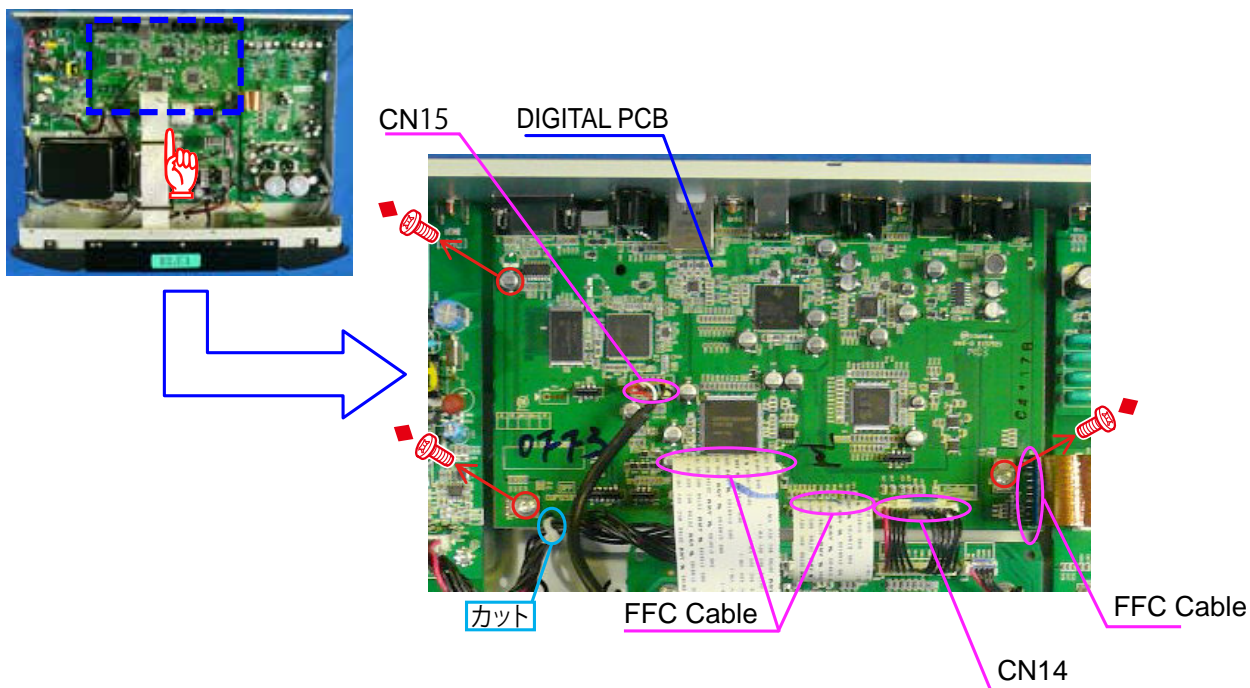
## 2. DIGITAL PCB

Proceeding: **CABINET TOP** → **DIGITAL PCB**

(1) Remove the screws.



(2) Remove the screws. Remove the connector wires and FFC.



### 3. SMPS PCB

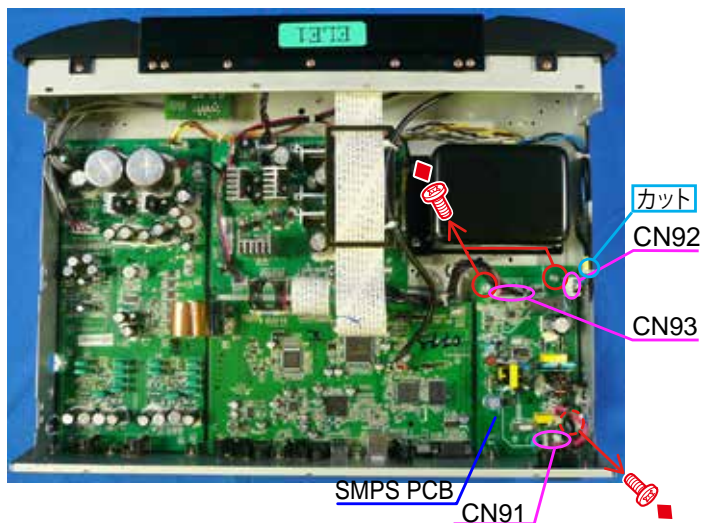
Proceeding: CABINET TOP → SMPS PCB

- (1) Remove the screw.



Shooting direction A

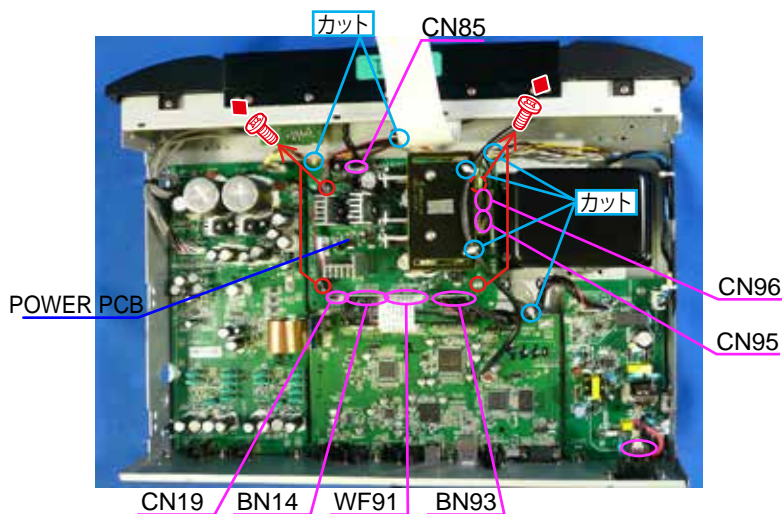
- (2) Remove the screws. Remove the connector wires and FFC.



### 4. POWER PCB

Proceeding: CABINET TOP → POWER PCB

- (1) Remove the screws. Remove the connector wires and FFC.



## 5. AUDIO PCB

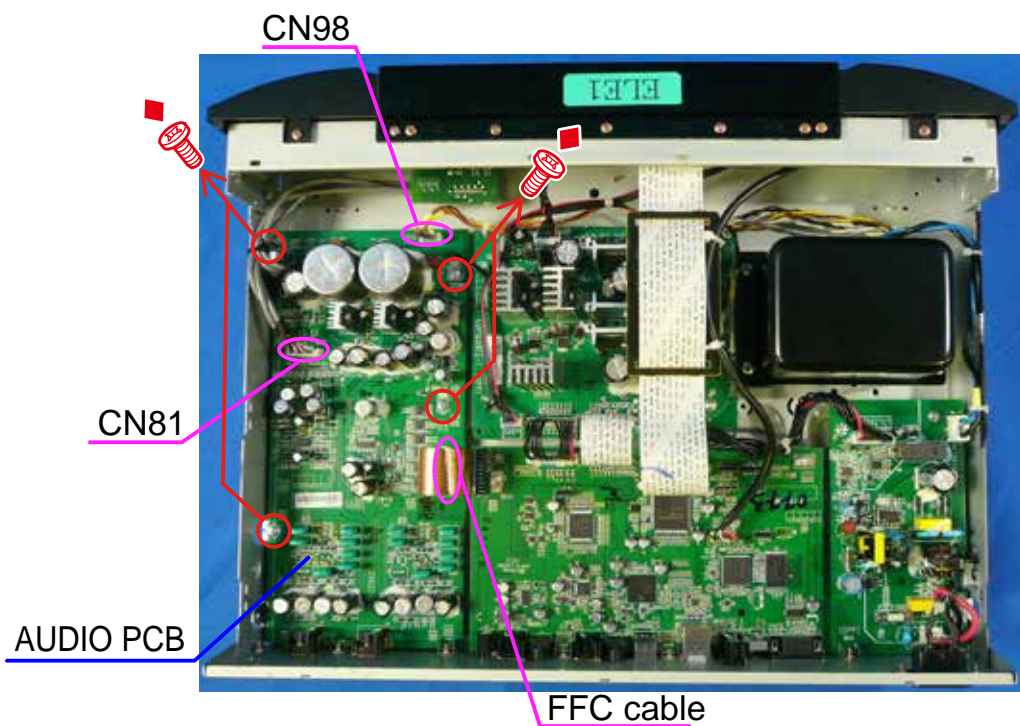
Proceeding: **CABINET TOP** → **AUDIO PCB**

- (1) Remove the screws.



Shooting direction A

- (2) Remove the connector wires and remove the screws.



# SPECIAL MODE

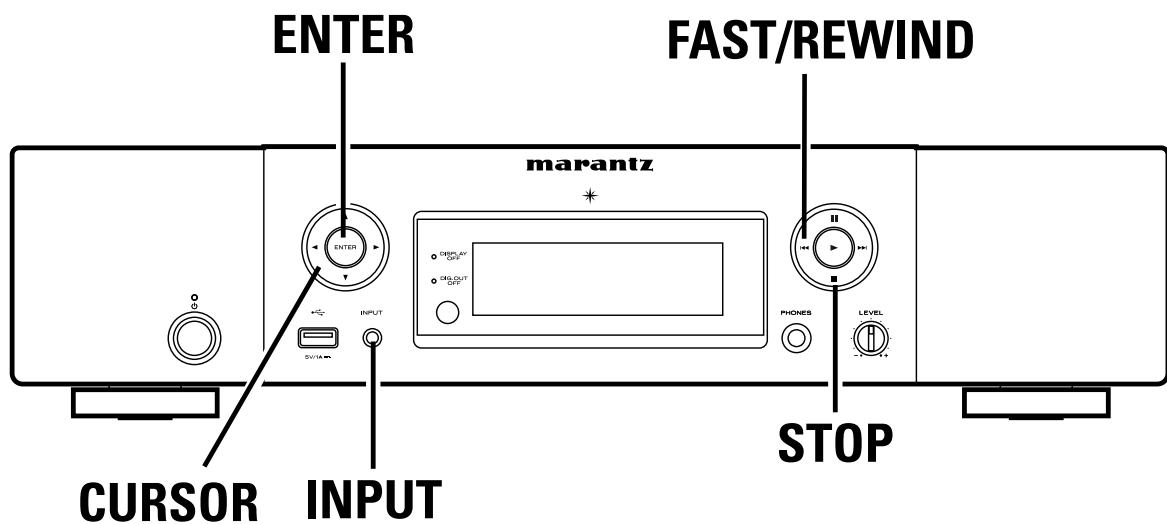
## Special Mode Configuration Buttons

No.1 - No.10 : Turn on the AC plug while pressing the button of A and B at the same time.

No.11: Hold down buttons A and B for at least 3 seconds while the power is on.

Each button continue to press until the lit of ON/STANDBY LED.

No.	Mode	Button A	Button B	Contents
1	Factory Initialization (Factory Reset)	INPUT	▼:CURSOR DOWN	Defaults to the setting value.
2	Initialization ( User Reset)	INPUT	ENTER	Except that it does not clear the version up information and the history of protection. See details "2. Updating by DPMS" on page 29.
3	Version display	▲:CURSOR UP	-	Version Display
4	Product mode 2	INPUT	◀:CURSOR LEFT	Factory use.
5	Protection History Display	INPUT	▲:CURSOR UP	Latest view of Protection history.
6	DPMS force update mode	⏮: FAST/REWIND	▲:CURSOR LEFT	DPMS update.
7	Update (by RS232C)	⏮: FAST/REWIND	▼:CURSOR UP	Development/Factory use.
8	MAC Address rewrite	⏮: FAST/REWIND	▶:CURSOR RIGHT	Development/Factory use.
9	Access to development server	⏮: FAST/REWIND	ENTER	Development/Factory use.
10	Update (by USB)	⏮: FAST/REWIND	◀:CURSOR LEFT	Updating by USB memory.
11	Control 4 Identify	■:STOP	▼:CURSOR DOWN	N/U Only. Function when a Control 4 compatible device is connected. (Identify function)





## 1. Factory Initialization Mode (Factory Reset)

Backup data initialization is carried out. Refer to Initialization Items (Default setting). After initialization, move on to normal mode.

\*Can't erase the Recently Played List. Recently Played List erase with User Reset.

Refer to [SPCIALMODE "2.Initialization moder (User Reset)"]

### CAUTION

Clear the Version information (such as rewriting failed log) .

Clear the history of protection.

### Startup display

All lights on display. And light the **STANDBY LED** (Orange), **DISPLAY OFF LED** (Red), **DIGI.OUT OFF LED** (Red). 2 seconds.

↓

All lights on display. And light the **STANBY LED**(Orange). 2 seconds.

↓

"Factory Reset" displayed for 5 seconds.



### Initialization Items (Default setting)

	Default
INPUT	Internet Radio
DIMMER	100%
Favorite list	Clear all
iPod mode	Direct mode
AUTO STANDBY	N : ON Others : OFF
Protection history	NO PROTECT
Network setting	DHCP (On)
Network Standby	OFF
Friendly Name	Marantz NA8005
Digital Out	ON
232C STANDBY	OFF

## 2. Initialization Mode (User Reset)

Backup data initialization is carried out. Refer to Initialization Items. After initialization, move on to normal mode.  
\*Can erase the Recently Played List.

### CAUTION

The difference is the following points.

- Version information (such as rewriting failed log) not cleared.
- History of protection does not cleared.
- Setting of the "Audio Out" is not changed.

### Startup display

"Initialized" is displayed for 5 seconds.



## 3. Version Display Mode

Menu items appear in the Add Version. Otherwise, normal operation.  
To exit this mode, unplug the power cord.

### Startup display

"Version" is displayed for 5 seconds.



### How to Display Version

Press **INPUT** button and **Cursor**  $\Delta$  / **Cursor**  $\nabla$  to select the Setup. Then press **ENTER** button.

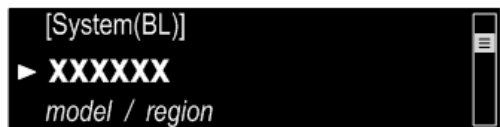


Press **ENTER** button.



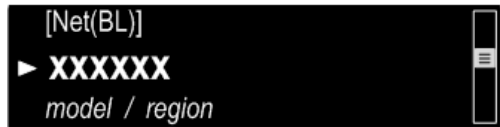
System u-com version is displayed.

Press **Cursor**  $\nabla$  button.



Boot loader version for the system microprocessor is displayed.

Press **Cursor**  $\nabla$  button.



Boot loader version for the network microprocessor is displayed.

Press **Cursor** ▾ button.



Image version for the network microprocessor is displayed.

Press **Cursor** ▾ button.



USB-DAC version is displayed.

Press **Cursor** ▾ button.



Serial number is displayed. (Serial: MZ\_bccddddd)

## 4. Product Mode2

Startup display

"Product Mode2" is displayed for 5 seconds.



The following settings for checking operation when the unit is manufactured are configured automatically.

- Sleep setting : 4 minutes
- Auto standby timer setting : 4 minutes

A 4-minute timer operates when the sleep setting is configured.

When auto standby is set, standby is performed under the following conditions.

Auto Standby Conditions

USB/iPod : No Connection or Unsupported Data or continue no operation and Stop state.

Network : No Connection or Unsupported Disc or continue no operation and Stop state.

Digital In : No Input(unlock)

To exit this mode, unplug the power cord.

## 5. Protection History Display Mode

Startup display

"Product Mode2" is displayed for 5 seconds.



To exit this mode, unplug the power cord.

- No history found



- DC protection occurred.



Case: +B/-B was short circuit.(+12V\_D, +12V\_A, -12V\_A or +29V was failed)

### How to delete Protection history (backup)

Protection history is deleted by pressing the **Cursor**  $\Delta$  button for more than 5 seconds when the protection history is displayed.



"No Protection" is displayed after the protection history is deleted.



Protection history is also deleted by factory initialization.

## 6. DPMS Force Update Mode

Updating the firmware by DPMS.

See "2. Updating by DPMS" on page 29.

### Error code table

- Preparation operation rewritten, Update error code checking. (Check ETHERNET unit)

Error Code	Details of Error code	Coping strategies
01	Login failed(DPMS Access Login Incorrect notification)	Reset and update again. Carry out the update in an environment that has little network load.
02	Login failed(DPMS Access Server Busy information)	Carry out the update in an environment that has little network load.
03	Login failed(DPMS Access link failure information)	Check the network connection. Carry out the update in an environment that has little network load.
04	Firm Info response acquisition error recieved	Check the network connection. Carry out the update in an environment that has little network load.
05	Firm Info response acquisition TimeOut	Check the network connection. Carry out the update in an environment that has little network load.
06	All Firm Info response acquisition error recieved	Check the network connection. Carry out the update in an environment that has little network load.
07	All Firm Info response acquisitionTimeOut	Check the network connection. Carry out the update in an environment that has little network load.
08	Main Firm Info response acquisition error recieved	Check the network connection. Carry out the update in an environment that has little network load.
09	Main Firm Info response acquisition TimeOut	Check the network connection. Carry out the update in an environment that has little network load.
0A	DownLoad failed ((NG)information recieved)	Check the network connection. Carry out the update in an environment that has little network load.
0B	DownLoad failed((ServerBusy) information recieved)	Check the network connection. Carry out the update in an environment that has little network load.
0C	DownLoad failed((connection failed)information recieved)	Check the network connection. Carry out the update in an environment that has little network load.

- Firm error codes at the main microprocessor rewritten. (Check the main microprocessor)

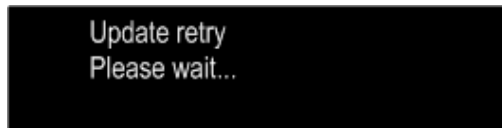
Error Code	Details of Error code	Coping strategies
10	Firm Info response acquisition TimeOut(Main rewrite Firmware recieved failure(TimeOut))	Turn off and on the power. Updating starts automatically.
11	Firm Info response acquisition recieved error(Main rewrite Firmware recieved failure(Error))	Turn off and on the power. Updating starts automatically.
12	Firm Info response acquisition recieved error (Main rewrite Firmware recieved data incorrect(CheckSumError))	Turn off and on the power. Updating starts automatically.
13	Rewrite failiure (BlockErase failued before Main rewriting )	Turn off and on the power. Updating starts automatically.
14	Rewrite failiure (BlockWrite failued before Main rewriting)	Turn off and on the power. Updating starts automatically.
15	Rewrite failiure (Verify incorrect after Main rewriting)	Turn off and on the power. Updating starts automatically.
20	Failed to acquire the IP Address after transitioning to the Boot Loader Mode (AutoIP)	Carry out the update in an environment that has little network load.
21	Failed to acquire the IP Address after transitioning to the Boot Loader Mode (AutoIP)	Carry out the update in an environment that has little network load.
22	Login failed (DPMS Access Login Incorrect notification), after moved BootLoaderMode. (AutoIP)	Carry out the update in an environment that has little network load.
23	Received "Server congestion" notification, after moved BootLoaderMode. (AutoIP)	Carry out the update in an environment that has little network load.
24	Received "connection failed", after moved BootLoaderMode. (AutoIP)	Carry out the update in an environment that has little network load.
36	Login failiure(DPMSAccess Login incorrect infomation)	Carry out the update in an environment that has little network load.
37	Login failiure(DPMSAccess Server busy infomation)	Carry out the update in an environment that has little network load.
38	Login failiure(DPMSAccess connection failed infomation)	Check the network connection. Carry out the update in an environment that has little network load.
39	Login failiure(DPMSAccess access TimeOut)	Check the network connection. Carry out the update in an environment that has little network load.
3A	DownLoad failiure(Download error (NG)information recieved)	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
3B	DownLoad failiure(Download error (ServerBusy) information recieved)	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.

3C	DownLoad failure(Download error (connection failed) information recived)	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
3D	Failed to acquire the IP Address after transitioning to the Boot Loader Mode (AutoIP)	"Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load."
3E	Failed to acquire the IP Address after transitioning to the Boot Loader Mode (TimeOut)	"Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load."

- CX870 system Firmware error codes when rewriting. (Check the ETHERNET unit)

Error Code	Details of Error code	Coping strategies
A0	Net not connected	Check the network connection. Carry out the update in an environment that has little network load.
A1	Net Connection TimeOut can not get status	Check the network connection. Carry out the update in an environment that has little network load.
A2	Login failed	Check the network connection. Carry out the update in an environment that has little network load.
A3	Login failed	Check the network connection. Carry out the update in an environment that has little network load.
A4	Login failed	Check the network connection. Carry out the update in an environment that has little network load.
A6	Error receiving response FirmlInfo acquisition	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
A7	FirmlInfo Get Response TimeOut	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
A8	Net not connected	Check the network connection. Carry out the update in an environment that has little network load.
A9	Net Connection TimeOut can not get status	Check the network connection. Carry out the update in an environment that has little network load.
AA	After download request, Login Failed	Check the network connection. Carry out the update in an environment that has little network load.
AB	After download request, Login Failed	Check the network connection. Carry out the update in an environment that has little network load.
AC	After download request, Login Failed	Check the network connection. Carry out the update in an environment that has little network load.
AE	Failure of DownLoad	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
AF	Failure of DownLoad	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
B0	Failure of DownLoad	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
B2	Update error	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.

Failure to update, after the move again DM860 itself display retry processing



## 7. Update Mode (by RS232C)

The firmware update using PC via RS232C.

Upgrade by DPMS. No display.

To exit this mode, unplug the power cord.

## 8. MAC Address Rewrite Mode

Rewriting the MAC address mode.

Production / development for, there is no detailed description.

To exit this mode, unplug the power cord.

## 9. Access to Development Server Mode

Production / development for, there is no detailed description.

To exit this mode, unplug the power cord.

## 10. USB Update Mode (by USB)

Turn on the AC plug while pressing the button of FAST/REWIND "⏮" and CURSOR LEFT "⬅" at the same time.

See details "[1. Updating by USB](#)" on page 30".

## 11. Control 4 Identify Mode

Hold down buttons STOP "■" and CURSOR DOWN "▼" for at least 3 seconds while the power is on.

The "Identify" function for a Control4 compatible device is executed.

The following is displayed before returning to the normal display.



### CAUTION

This only operates for N/U.

Wait for a short time after this unit has started, and configure this setting after the DM860 module has started.





## PROCEDURE AFTER REPLACING THE MICROPROCESSOR, ETC.

The procedure after replacing the u-COM (microprocessor), flash ROM, etc. is as follows.

PCB Name	Ref. No.	Description	Procedure after Replacement	備考
MAIN	IC11	R5F56108VNFP	<b>B</b>	Main
MAIN	IC24	H27U1G8F2BTR-BC	<b>B</b>	Network
MAIN	IC32	MX25L4006EM1I-12G	<b>B</b>	USB

### Procedure after Replacement

**A** : The software has been written. The software is not written at the time of replacement.

**B** : The software has been written. The software may need to be rewritten by version updates. Check the version.

**C** : The software has not been written. The software needs to be written after replacement.

See "**Firmware Update Procedure**" for information on writing the software.

**D** : The software has been written. Be sure to rewrite with the latest software for your service region.

See "**Firmware Update Procedure**" for information on writing the software.

## 2. Updating by DPMS

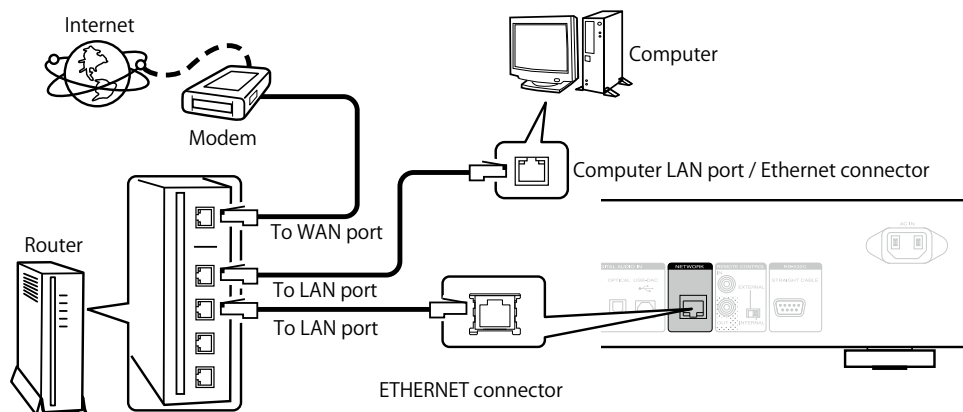
Download the latest firmware from the internet and update the firmware.

### 2.1. Network Connection

(1) System Requirements

- A broadband internet connection
- Modem
- Router
- Ethernet cable (CAT-5 or greater recommended)

(2) Settings



### 2.2. Check and update the firmware

Check whether new firmware is available. It is also possible to check approximately how long the update will take.

- (1) Turn on the power pressing ON/STANDBY button.
- (2) Press INPUT and Cursor  $\Delta/\nabla$  buttons. Select the Setup, then press ENTER button.
  - Press Cursor  $\Delta/\nabla$  buttons select to General. Press ENTER button.
  - Press Cursor  $\Delta/\nabla$  buttons select to Firmware. Press ENTER button.
  - Press Cursor  $\Delta/\nabla$  buttons select to Update. Press ENTER button.
  - Press Cursor  $\Delta/\nabla$  buttons select to Check for Update. Press ENTER button.
- (3) Press the ENTER button.
  - The latest version of the firmware uploaded to the web is displayed.
  - If the latest firmware version is on the web, proceed to (4).
  - If the latest firmware is already installed, press the INPUT button to close the Update menu.
- (4) Press ENTER button. Select "YES", then press ENTER button.
- (5) Firmware Update will be started.

#### --- Precautions for Updates ---

- The environment and settings must allow connection to broadband Internet for updates.
- Never turn off the power before an update is completed.
- It takes around 1 hour to complete the update.

Once an update is started, normal operations cannot be performed until it is completed.

The GUI menu settings and image adjustment settings of this unit may be initialized.

Take note of your settings beforehand and reconfigure them after the update.

# FIRMWARE UPDATE PROCEDURE

## 1. Updating by USB

The latest firmware can be downloaded to a USB memory for updates.

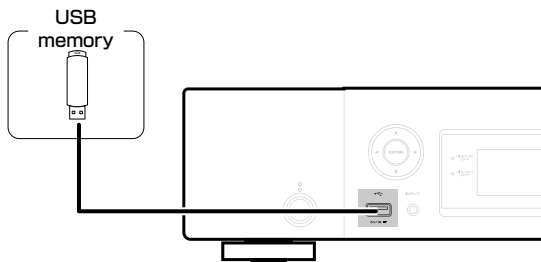
### 1.1. Connecting to the USB Memory

(1) Preparation

- USB format: Prepare a USB memory formatted in FAT16 or FAT32.
- Do not run the USB memory through a hub.
- Do not connect a computer to the USB port of this unit using a USB cable.
- Do not use an extension cable when connecting the USB unit.

### 1.2. Update and prepare for the update file

- Copy the update files to the USB memory.
- Insert the USB memory in the USB port. Should be connected to the USB connector on the front of the unit.



- Turn on the AC plug while pressing the button of FAST/REWIND "8" and CURSOR LEFT "0" at the same time.
- The following message appears on the display:



- Press the "ENTER" button, and firmware update starts on this unit.
  - if updating all devices, hold down buttons "INPUT" for at least 3 seconds.
- The following message appears on the display:



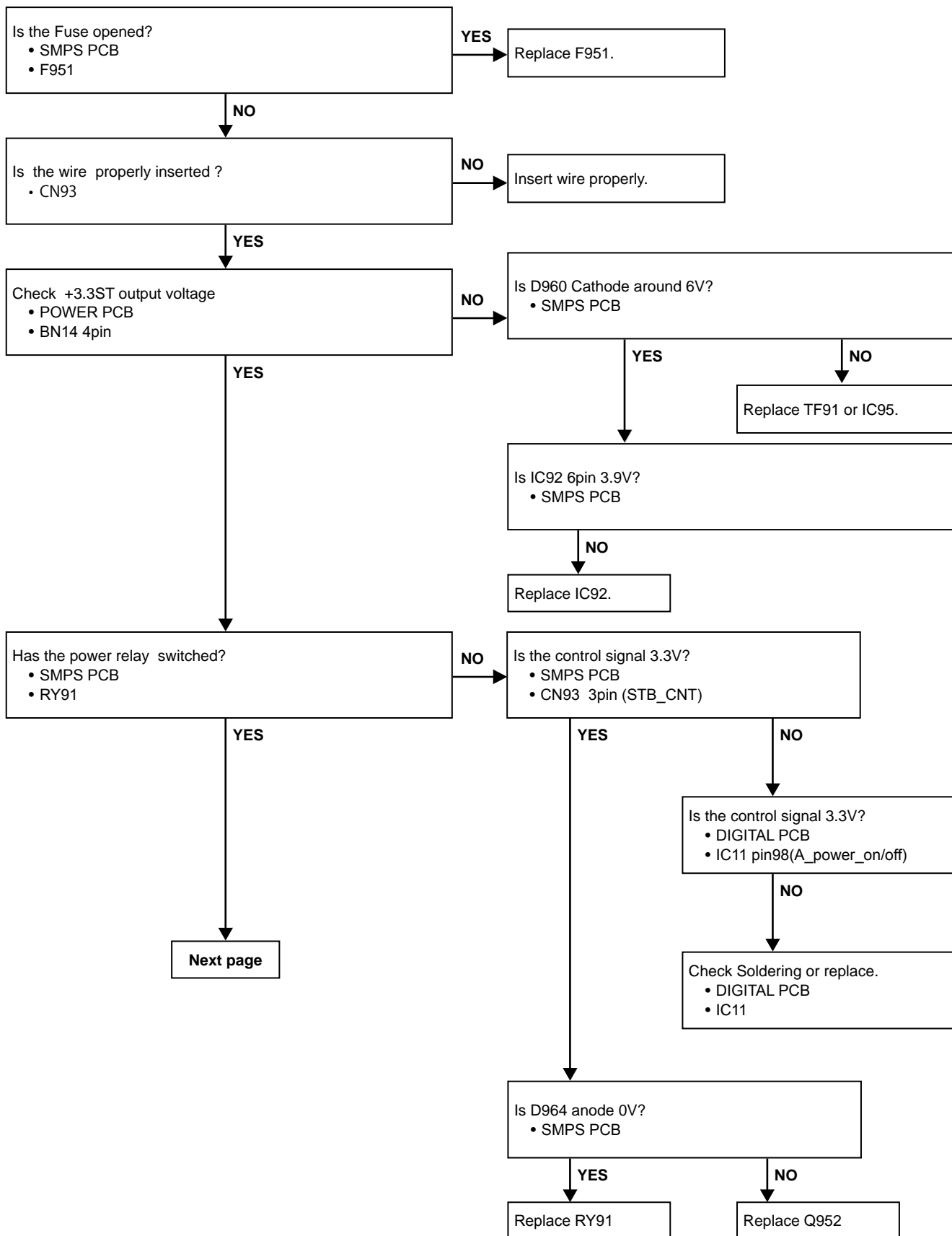
- This unit is turned off after the update is completed. • Disconnect the AC plug of this unit to turn the power off.

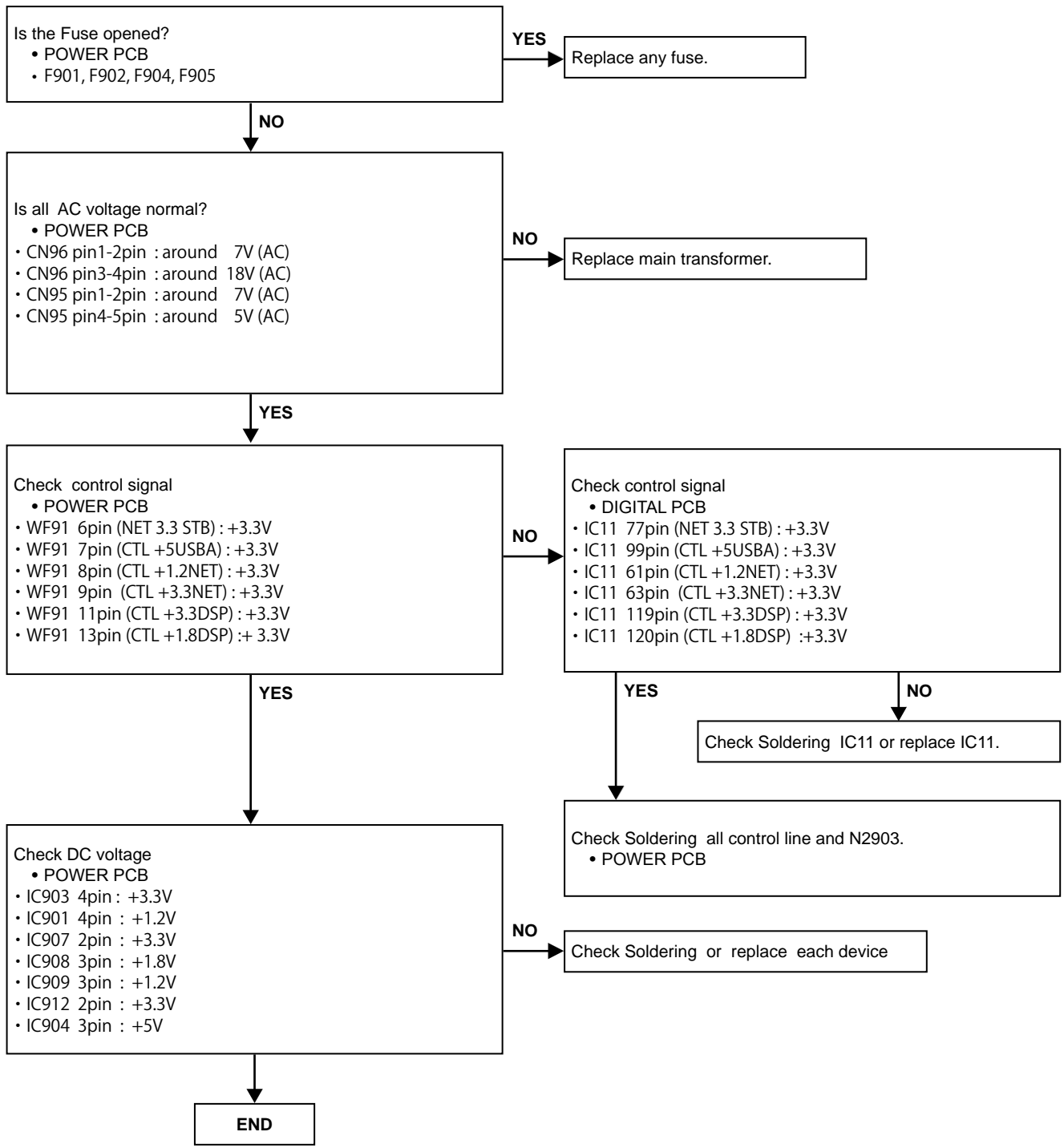
### --- Precautions for Updates ---

- Never remove the USB memory before the update is finished.
  - Never turn off the power before an update is completed.
- Once an update is started, normal operations cannot be performed until it is completed.

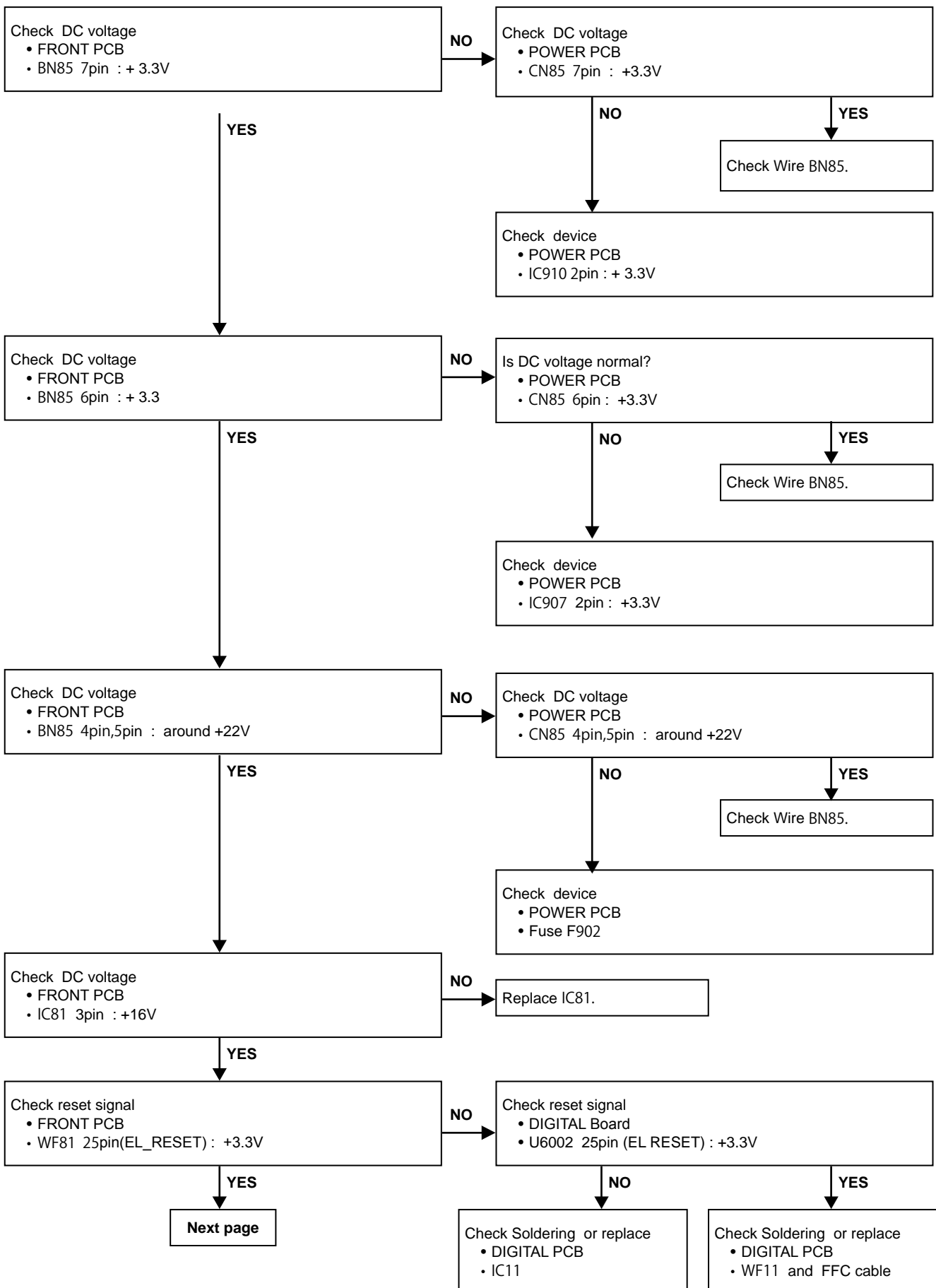
# TROUBLE SHOOTING

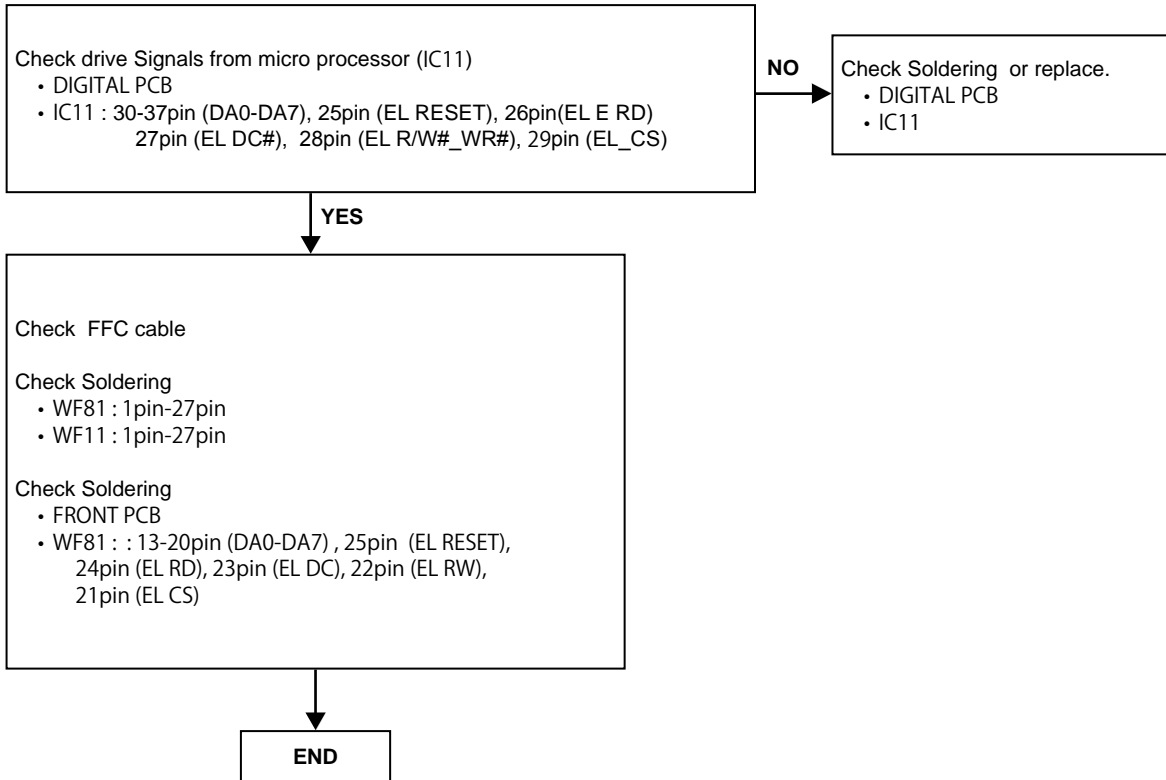
## 1. Power not turn on.





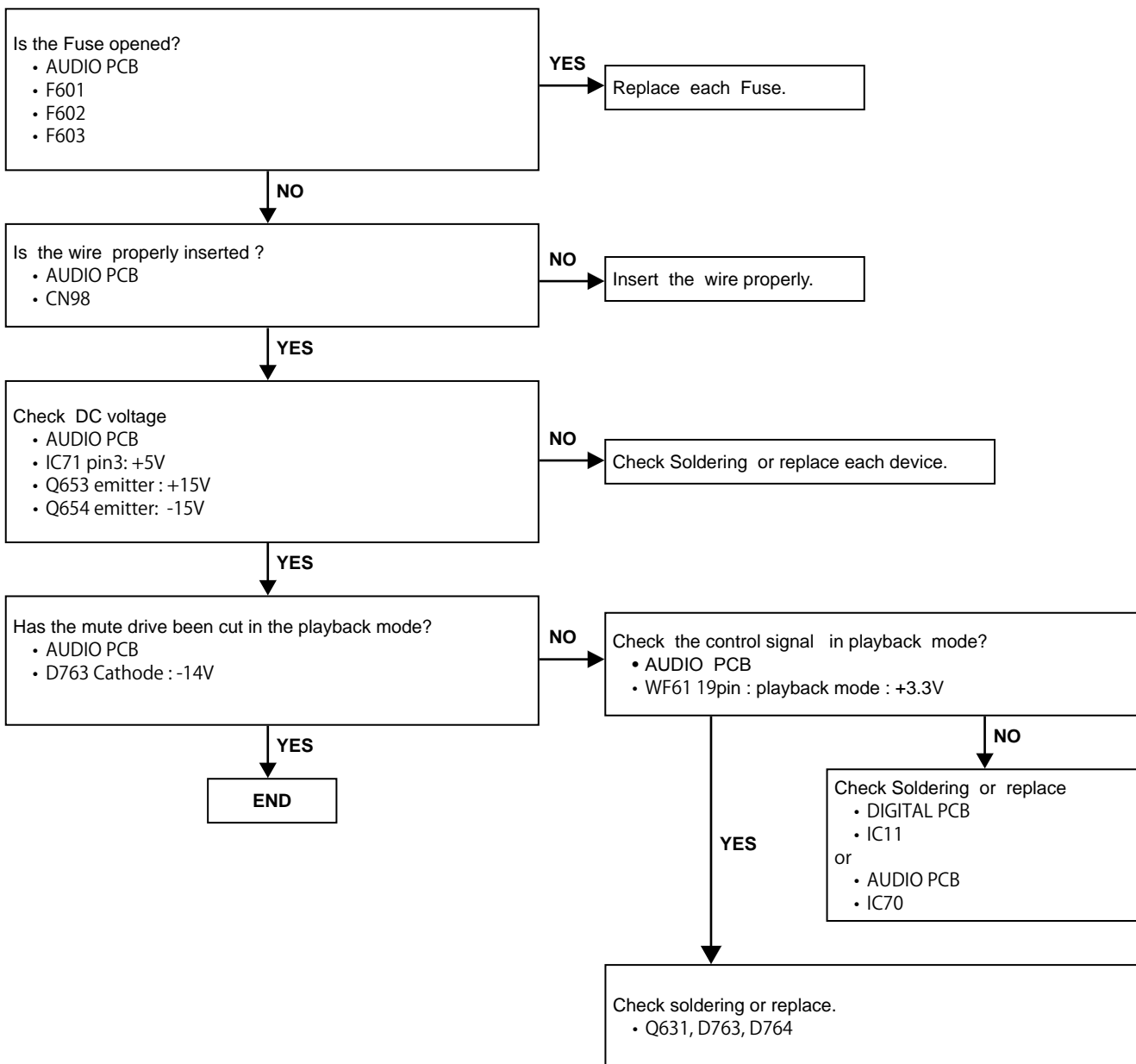
## 2. OLED doesn't Light





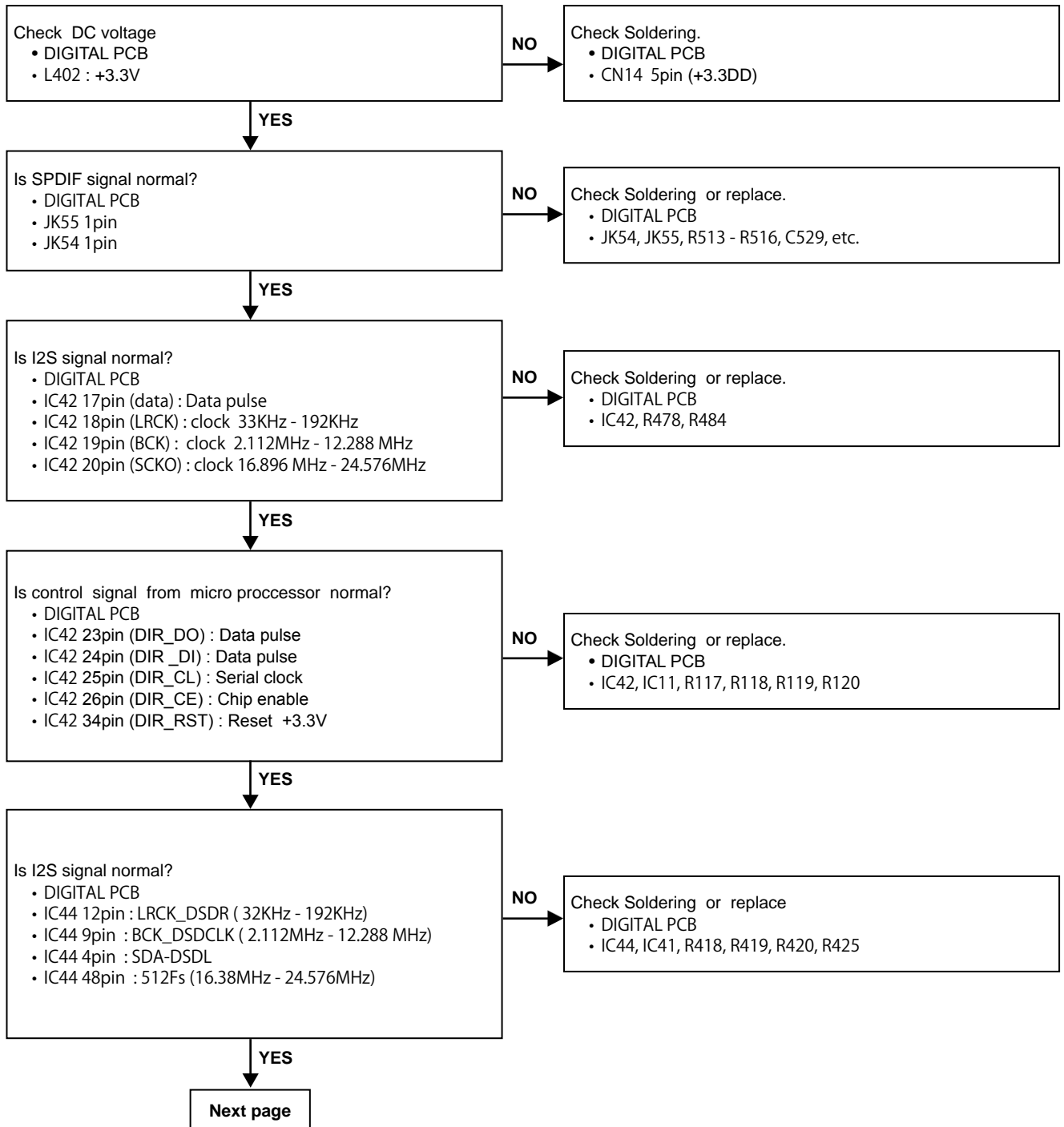
### 3. No Sound, Noise generated

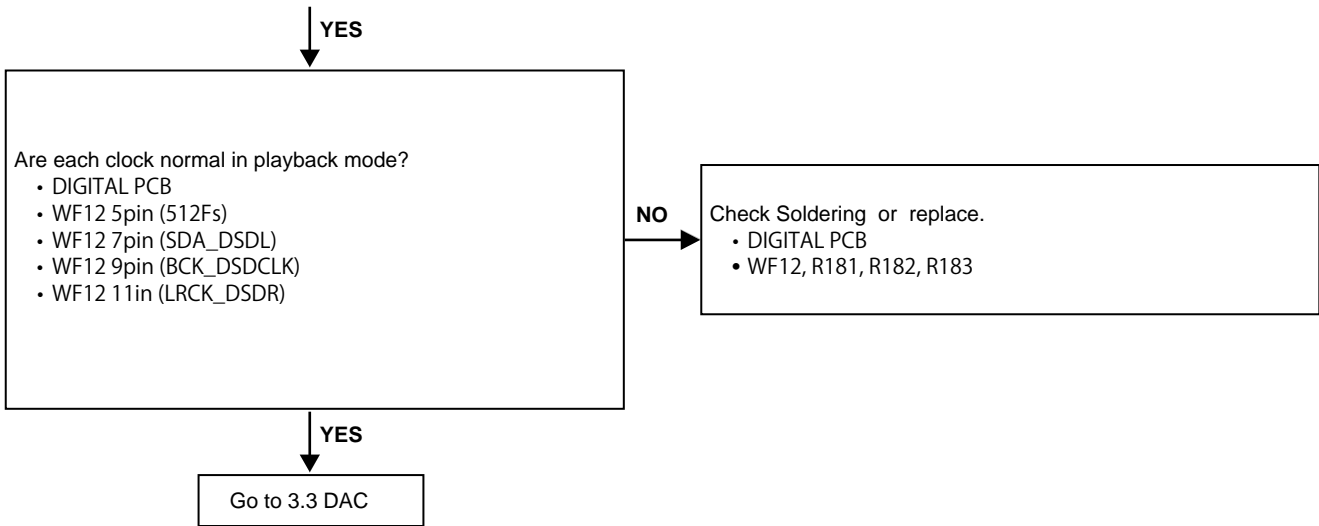
#### 3.1. COMMON



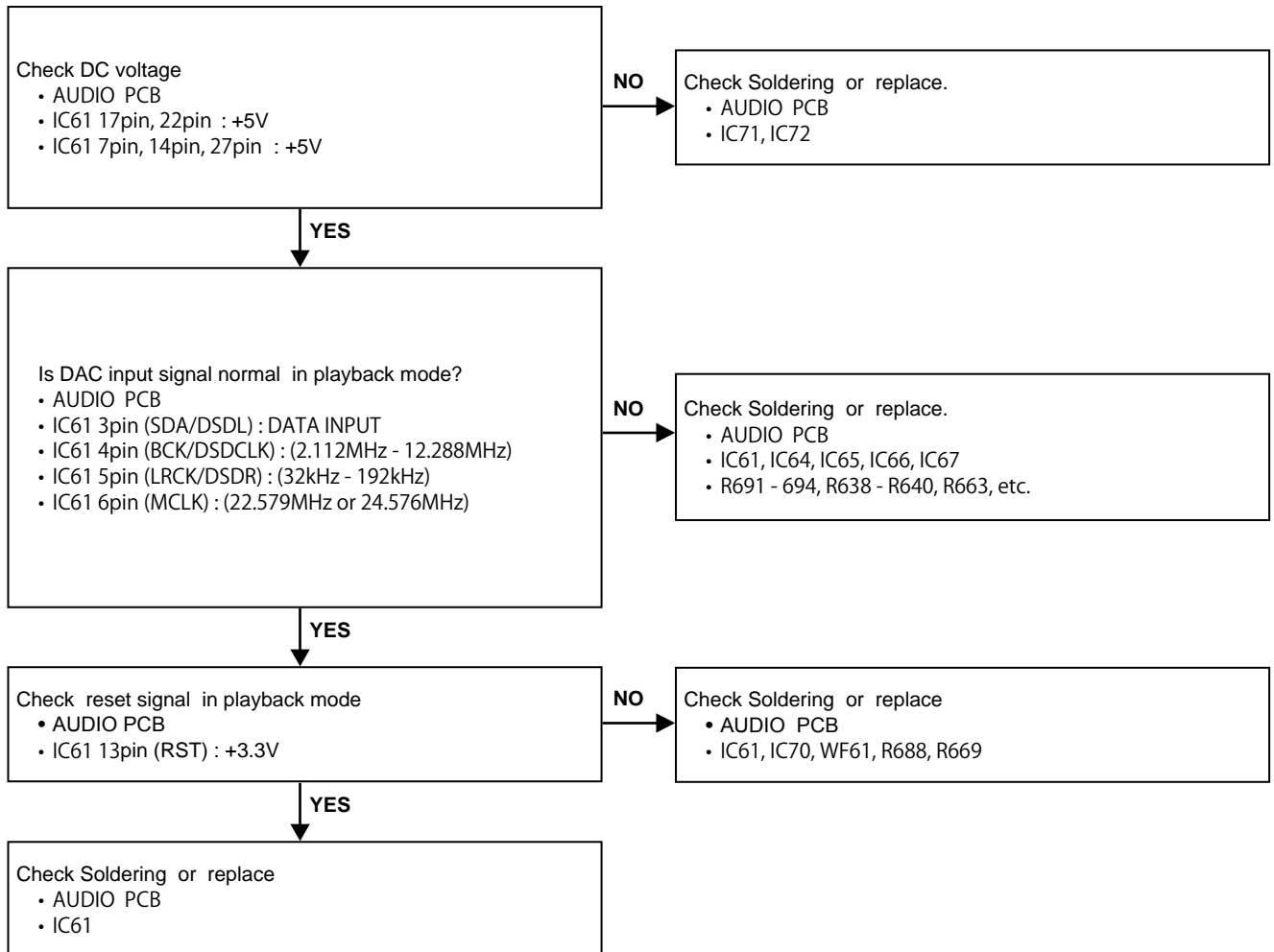


### 3.2. COAXIAL,OPTICAL

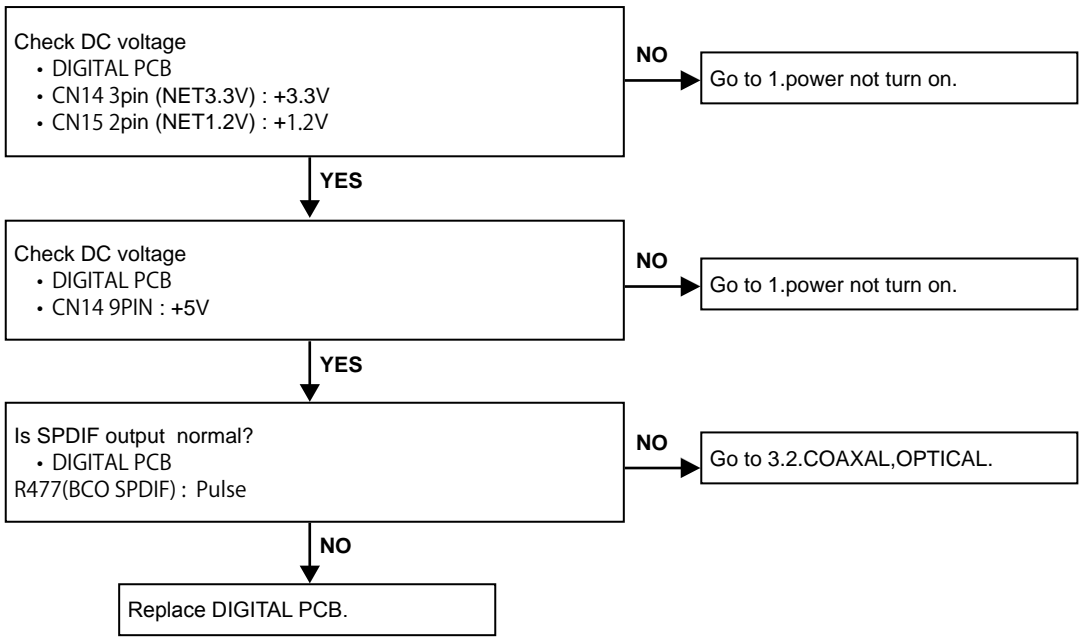




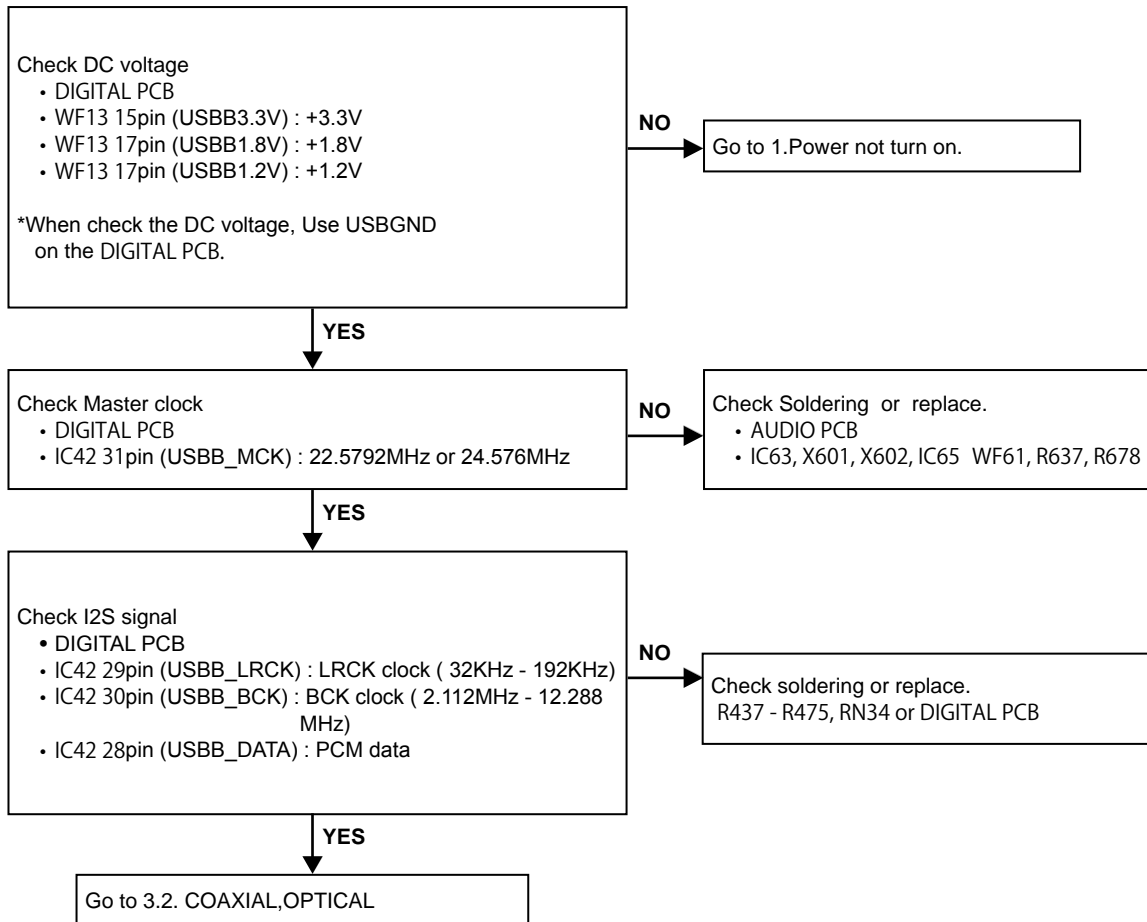
### 3.3. DAC



### 3.4. USB A/ETHERNET



### 3.5. USB B

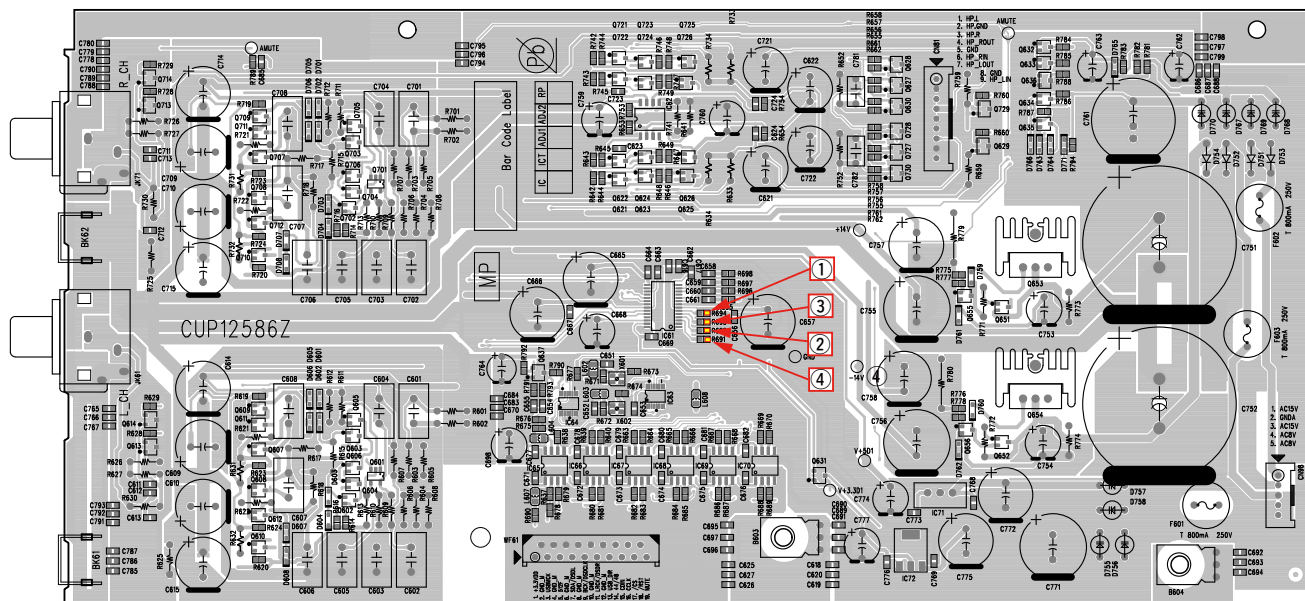




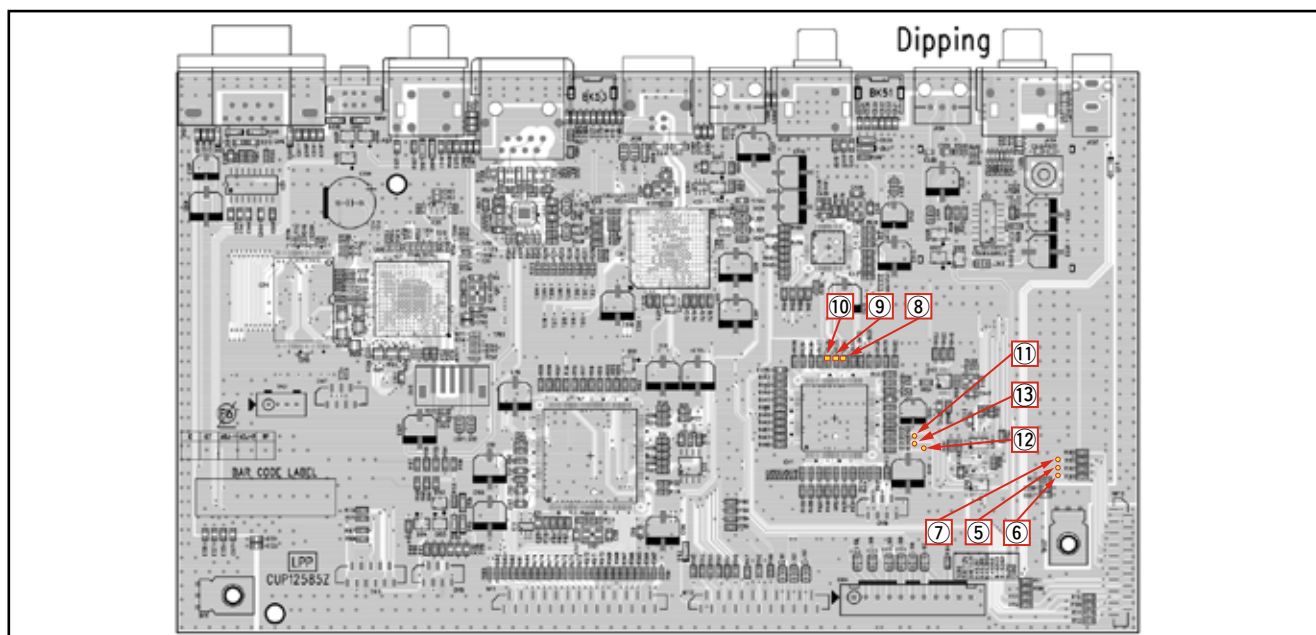
# MEASURING METHOD AND WAVEFORMS

(It is better to use wires for extending between the probe and test points.)

## CUP12586Z AUDIO PCB: TEST POINT



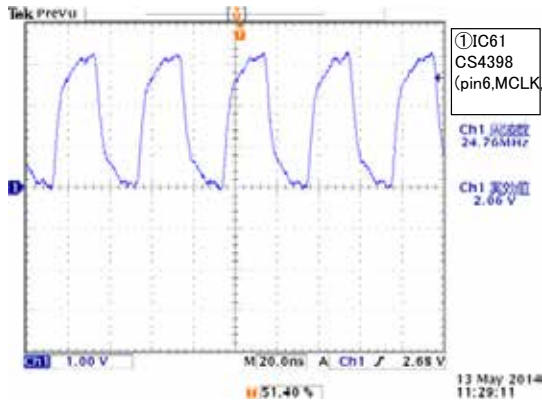
## CUP12585Z DIGITAL PCB: TEST POINT



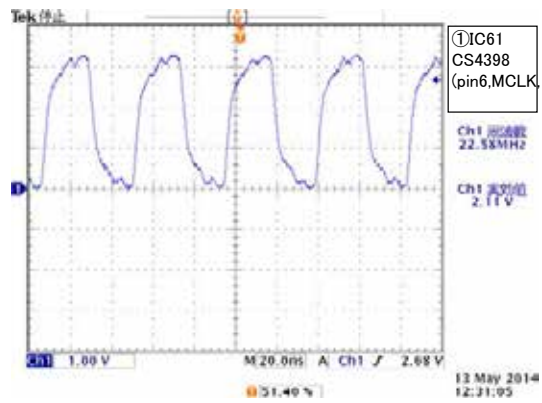
①	MCLK	R694
②	SCLK	R692
③	LRCK	R693
④	SDIN	R691
⑤	BCK_DSDCLK	R182
⑥	LRCK_DSDR	R183
⑦	SDA_DSDL	R181
⑧	DIR_BCK	R434
⑨	DIR_LRCK	R435
⑩	DIR_DATA	R436
⑪	DAC_BCK	R420
⑫	DAC_LRCK	R418
⑬	DAC_DATA	R419

# WAVEFORMS

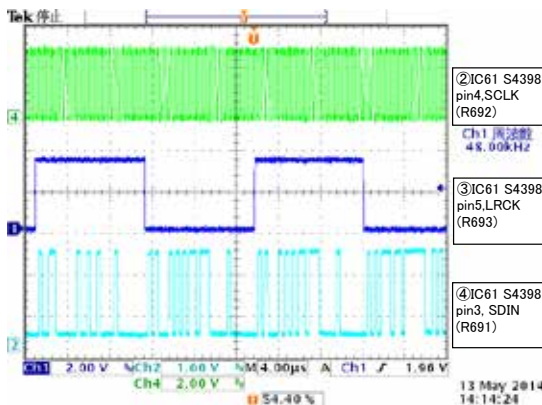
1. MASTER CLOCK (ex. PCM Playback from COAX IN, FS=48K)



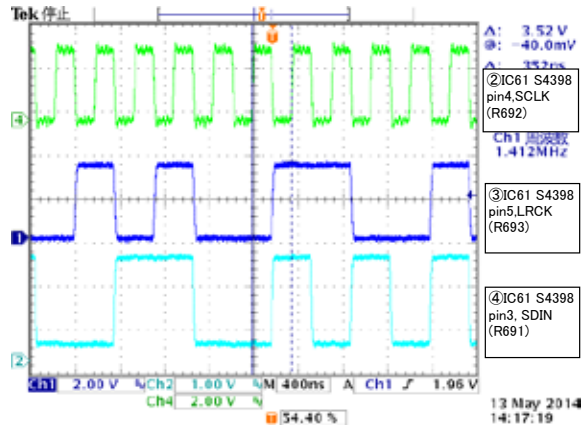
2. MASTER CLOCK (ex. DSD64 Playback from USB)



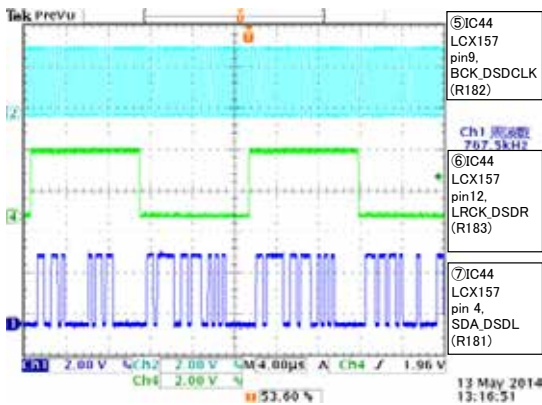
3. I12 Input to DAC, CS4398 (ex. PCM Playback from COAX IN, FS=48K)



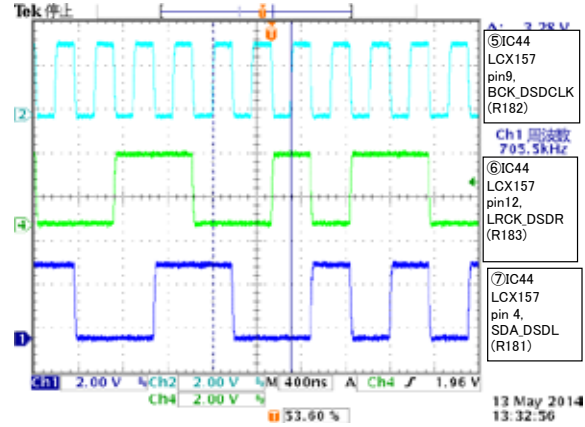
4. DSD64 Input to DAC, CS4398 (ex. DSD64 Playback from USB)



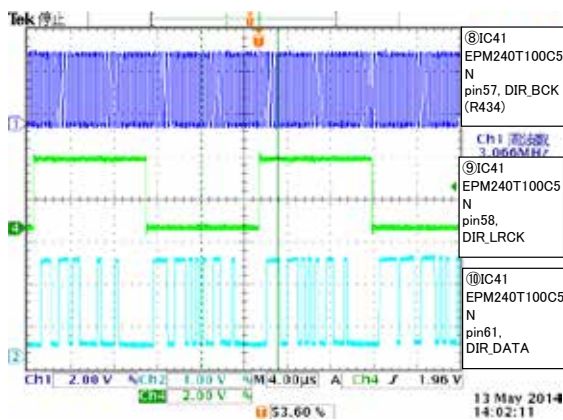
5. I12 Signal OUTPUT from DIGITAL PWB (ex. PCM from COAX IN, FS=48K)



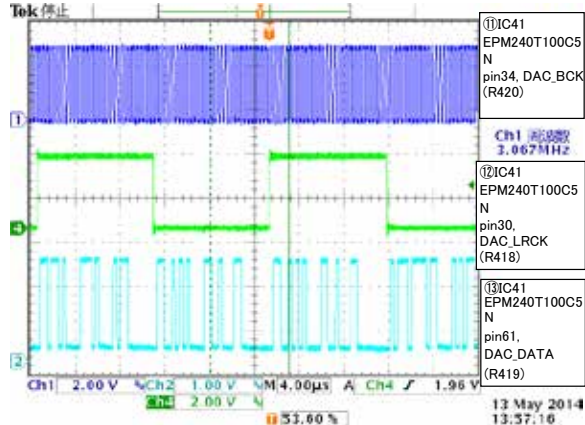
6. DSD64 Signal OUTPUT from DIGITAL PWB (ex. DSD64 Playback from USB)



7. PLD INPUT I12 (ex. PCM from COAX IN, FS=48K)



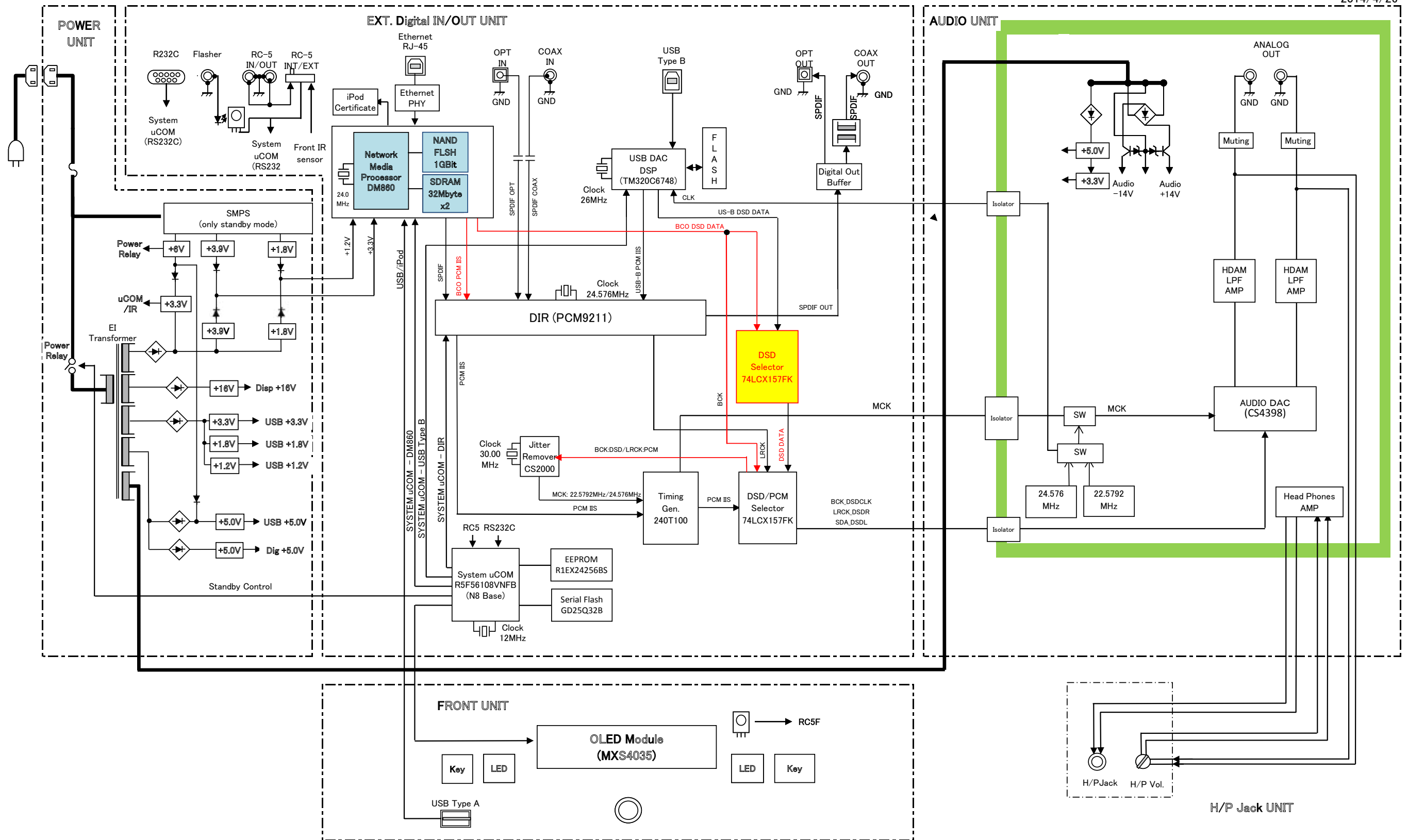
8. PLD OUTPUT I12 (ex. PCM from COAX IN, FS=48K)



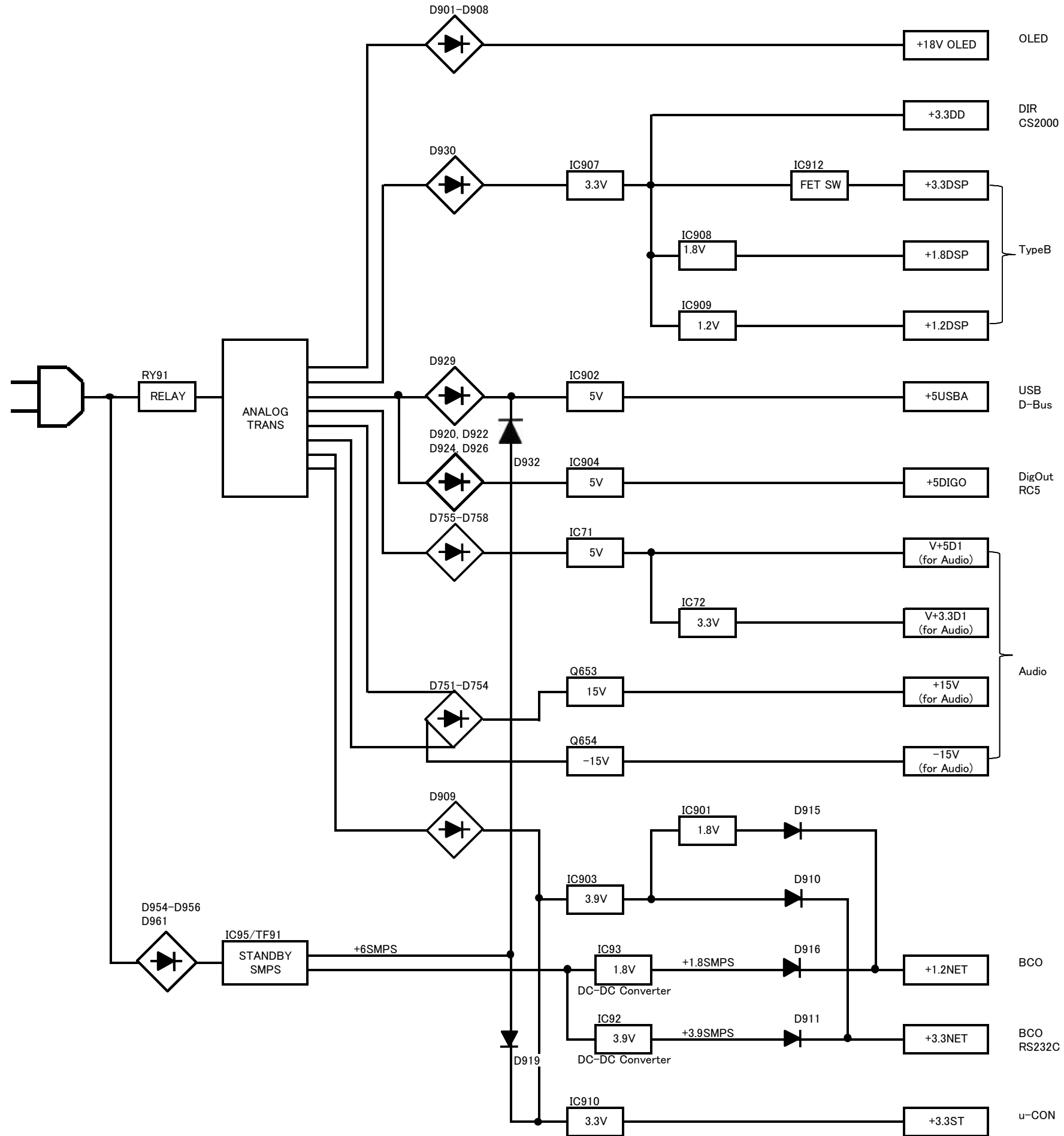


# BLOCK DIAGRAM

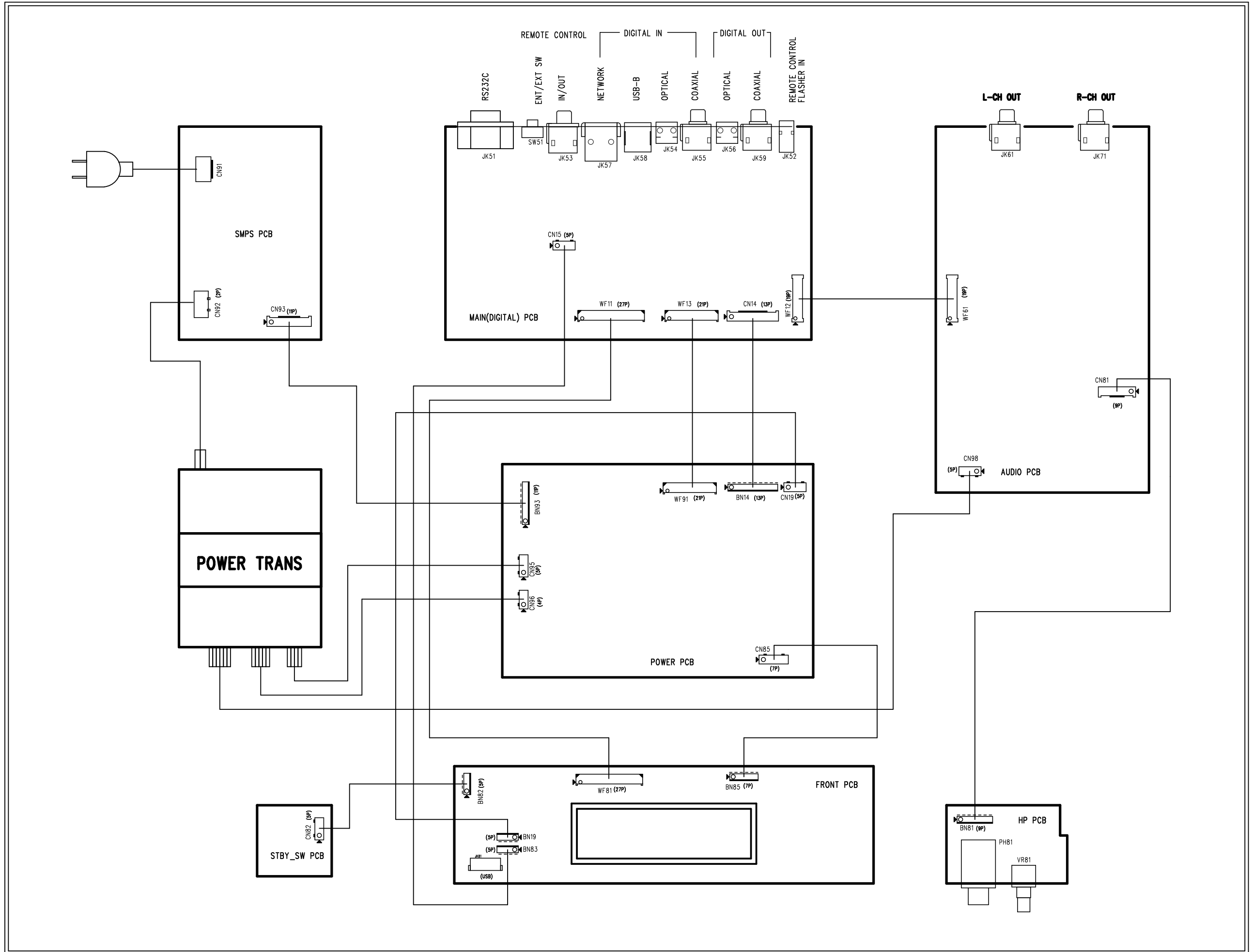
2014/4/26



# POWER DIAGRAM



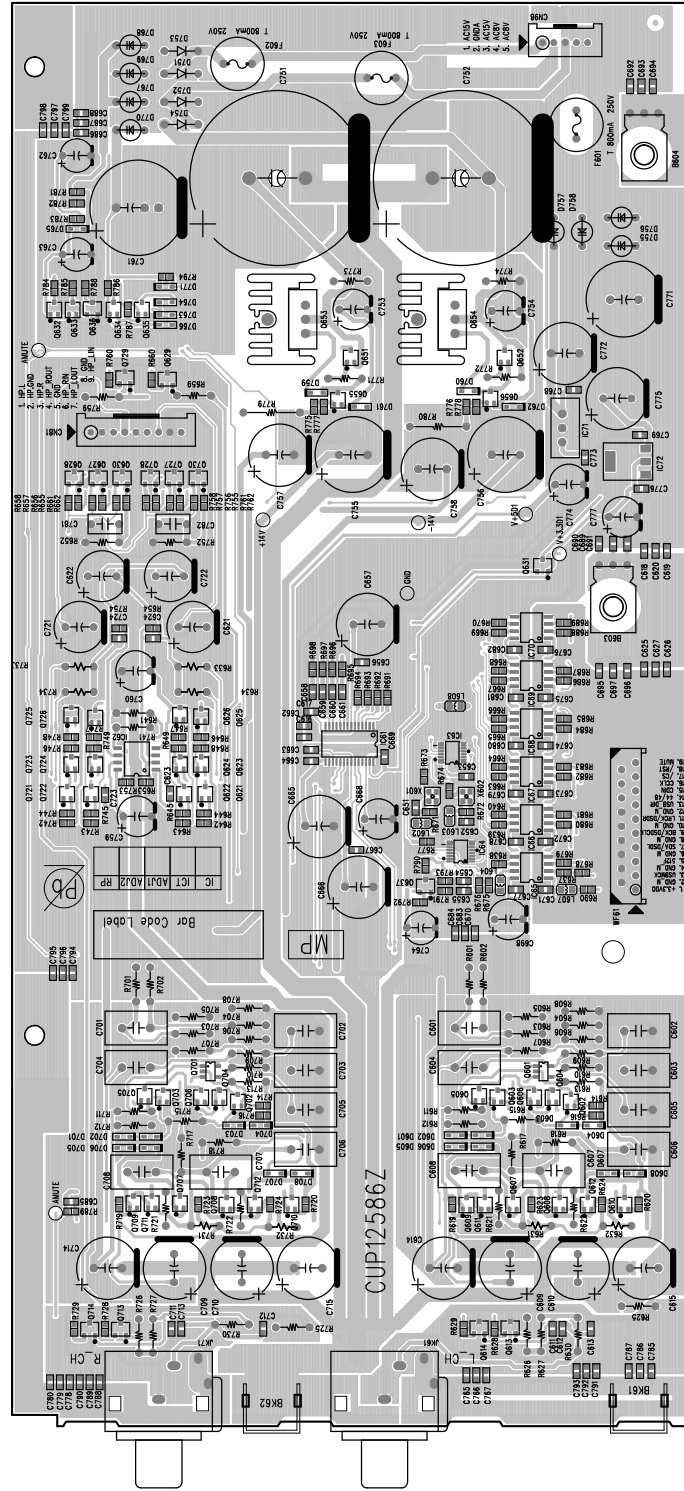
# WIRING DIAGRAM



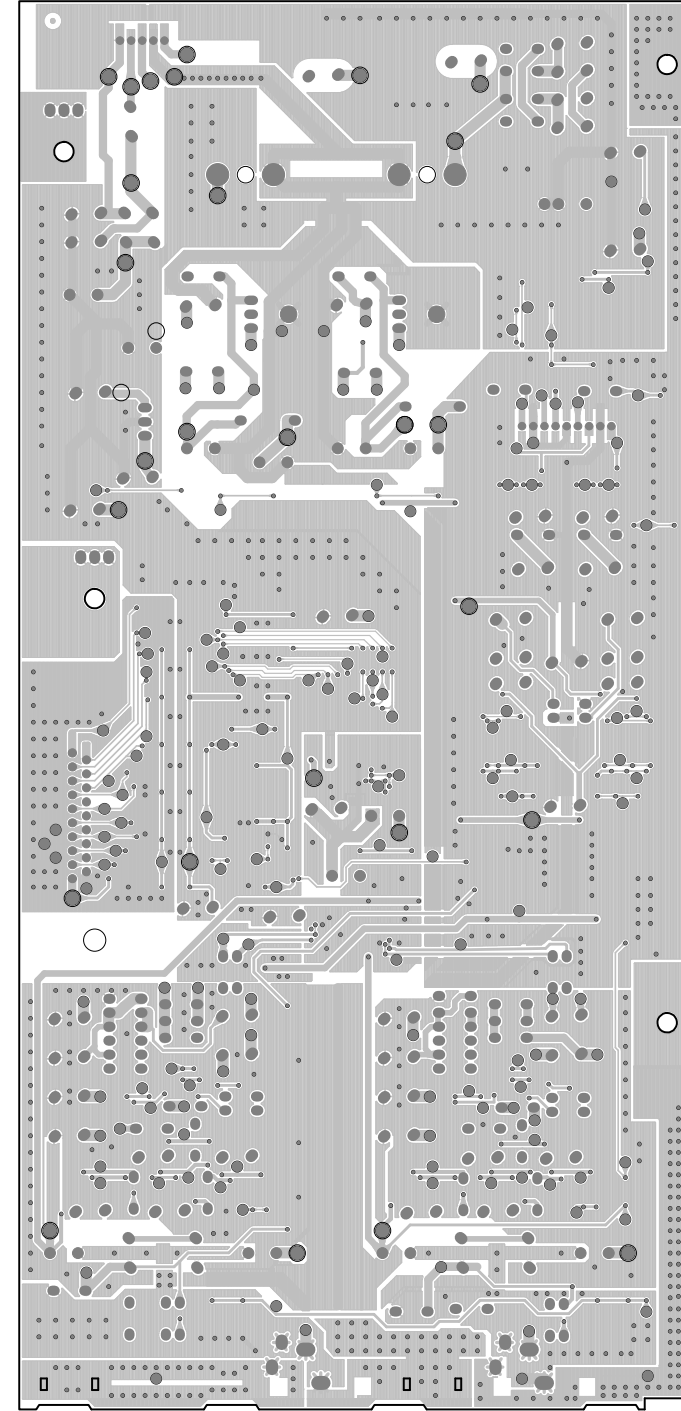
# PRINTED CIRCUIT BOARDS

**Lead-free Solder**  
When soldering, use the Lead-free Solder (Sn-Ag-Cu).

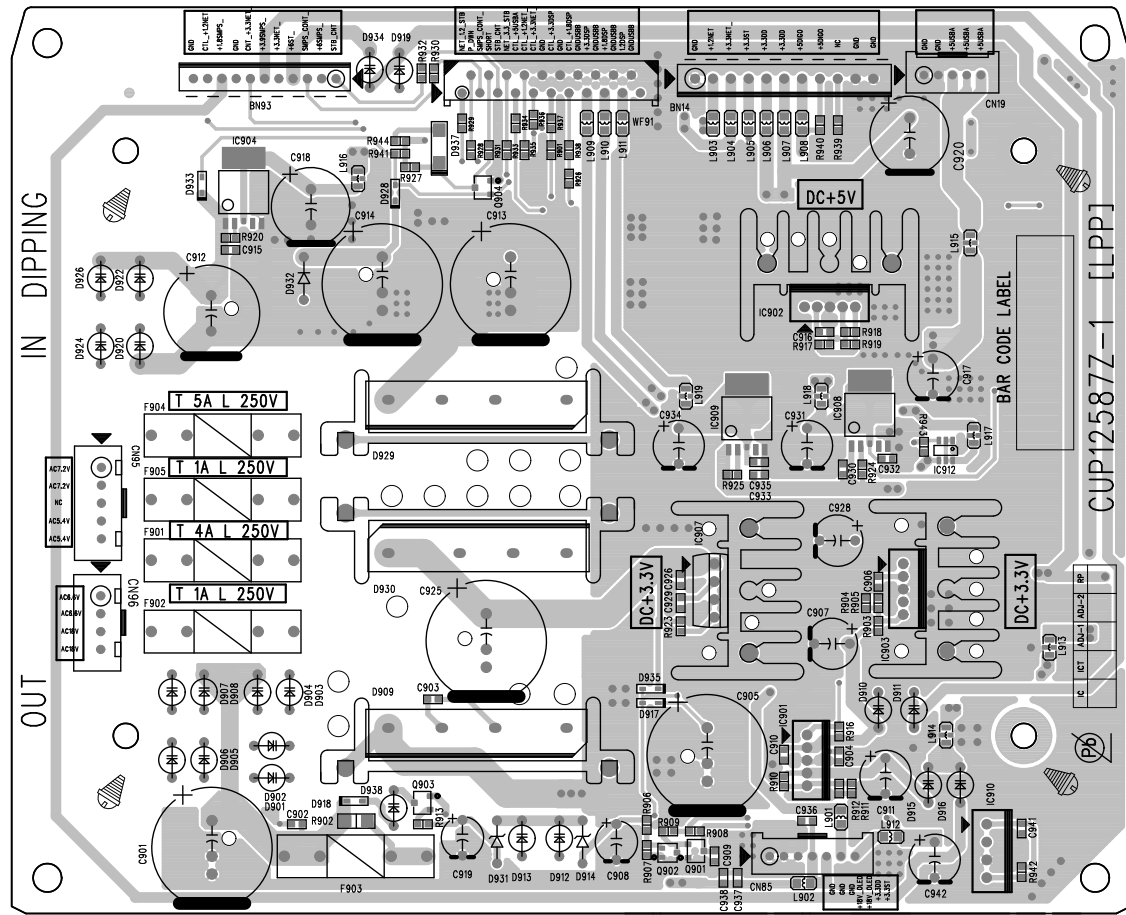
## AUDIO (A SIDE)



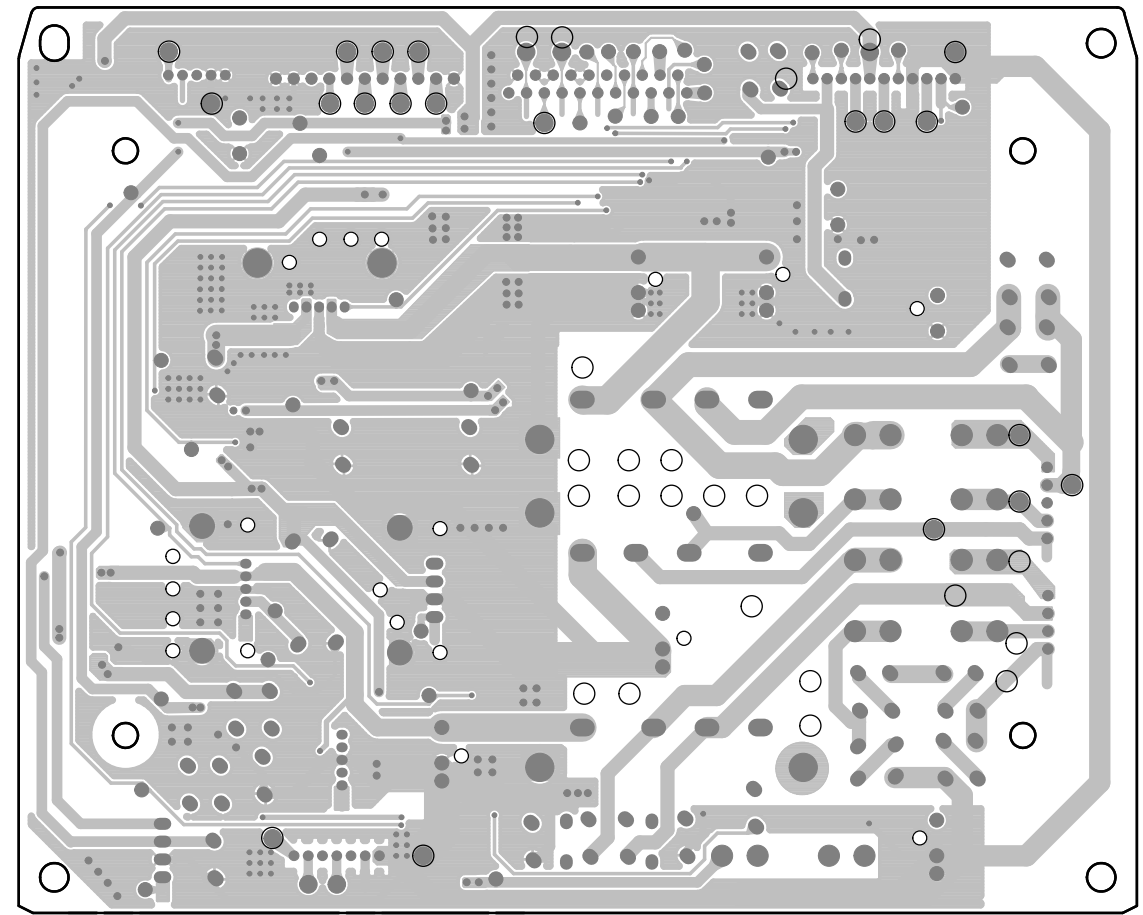
## AUDIO (B SIDE)



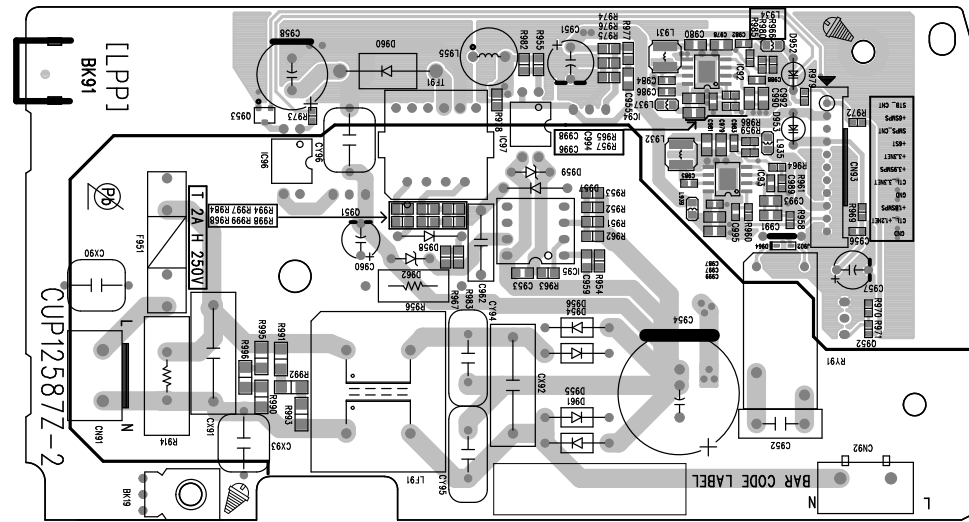
**POWER  
(A SIDE)**



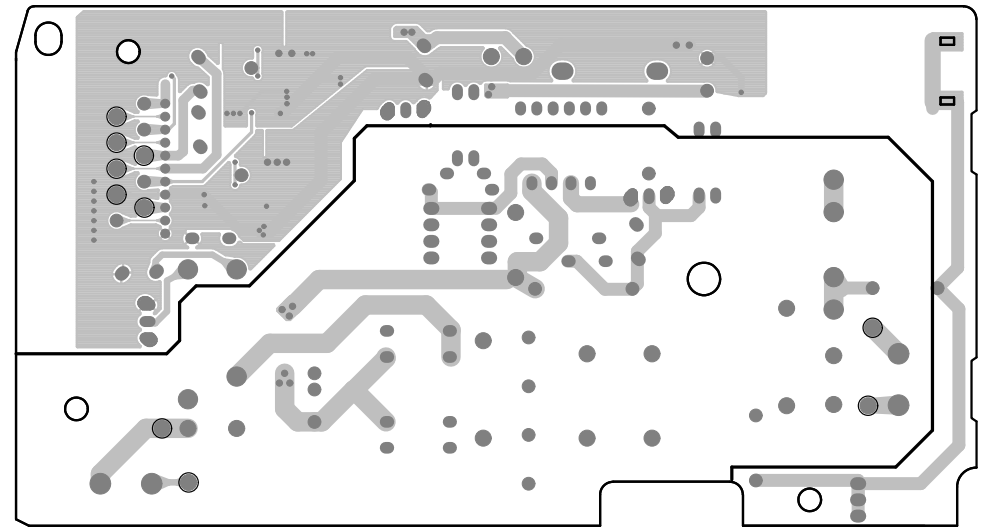
**POWER  
(B SIDE)**



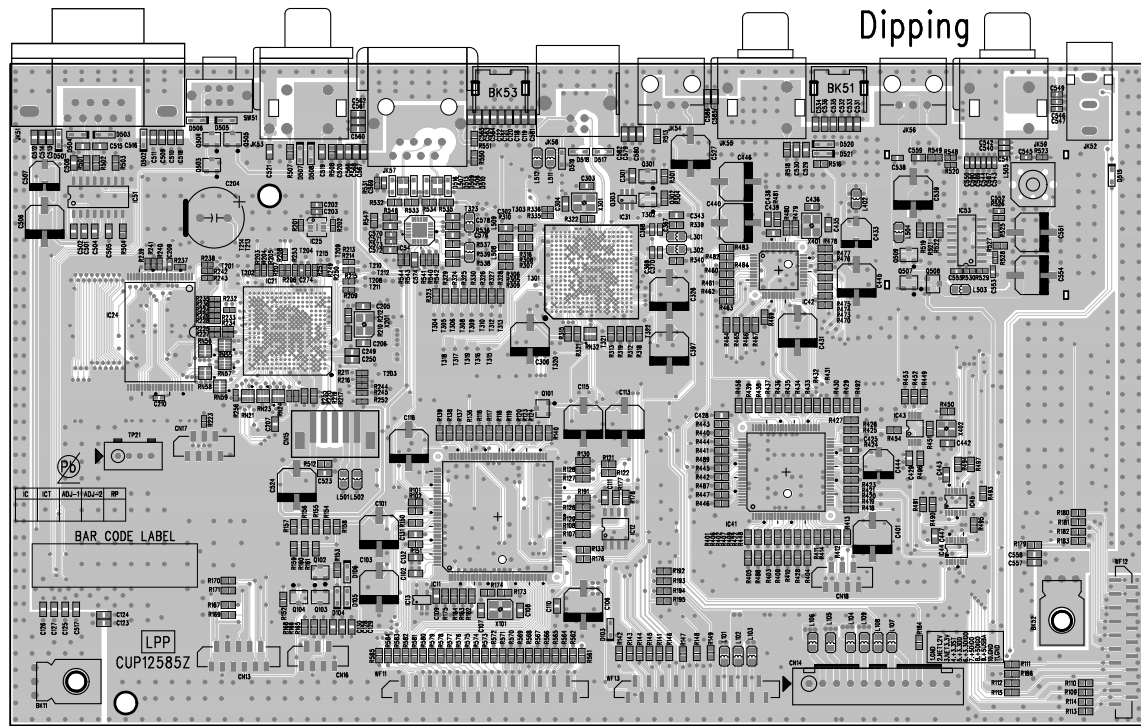
**SMPS  
(A SIDE)**



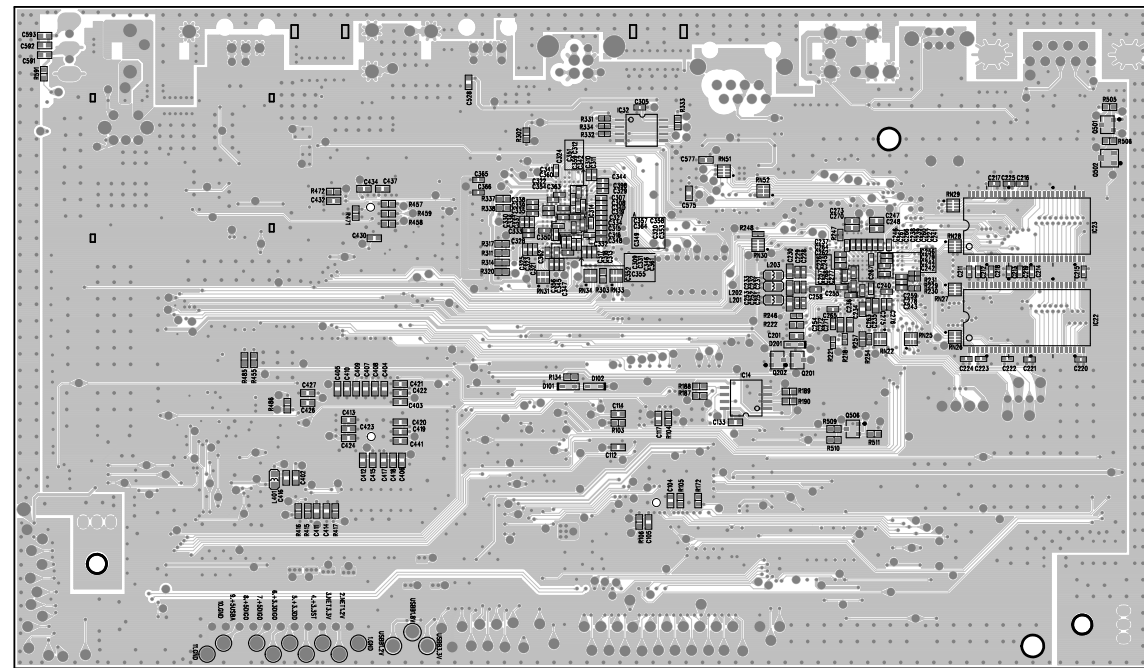
**SMPS  
(B SIDE)**



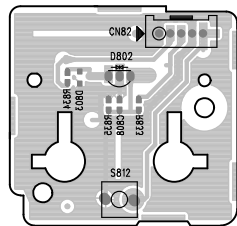
**DIGITAL  
(A SIDE)**



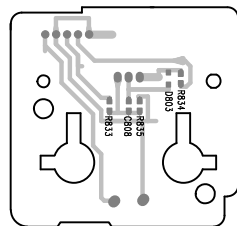
**DIGITAL  
(B SIDE)**



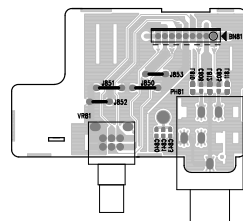
**STANDBY  
(A SIDE)**



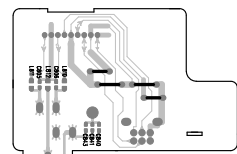
**STANDBY  
(B SIDE)**



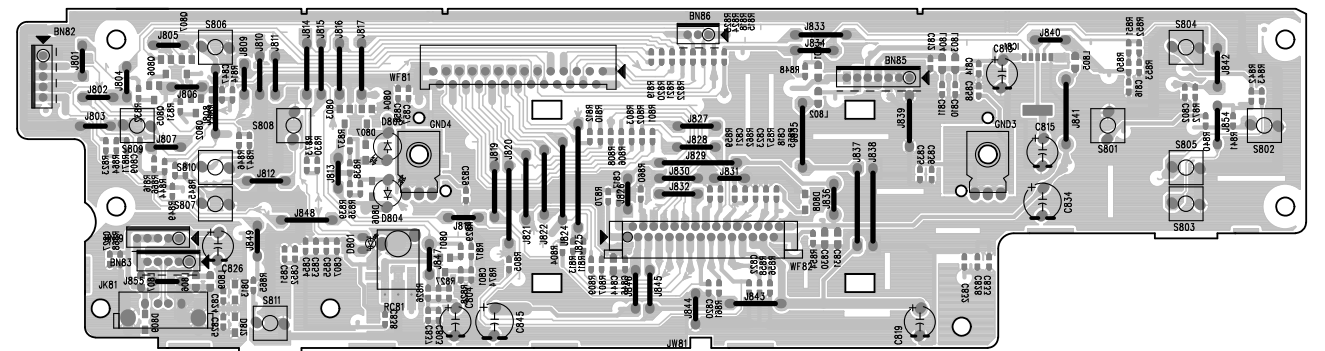
**PHONE  
(A SIDE)**



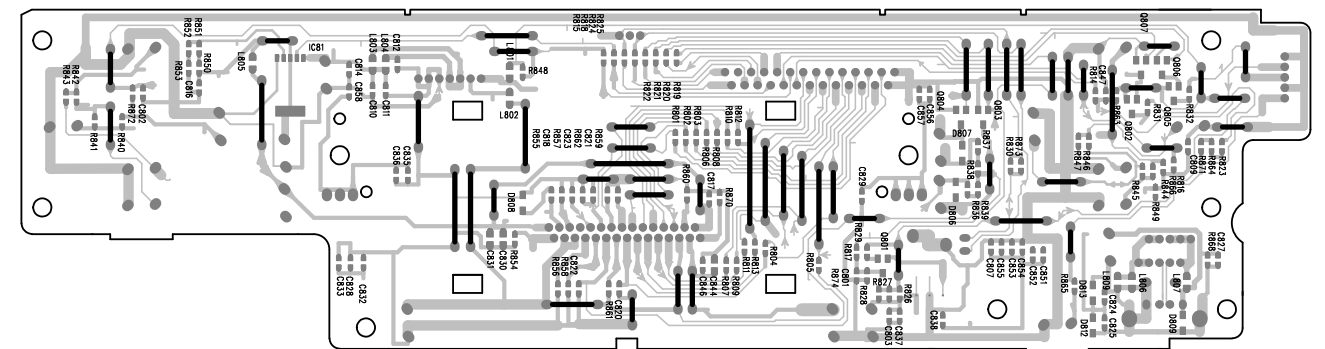
**PHONE  
(B SIDE)**

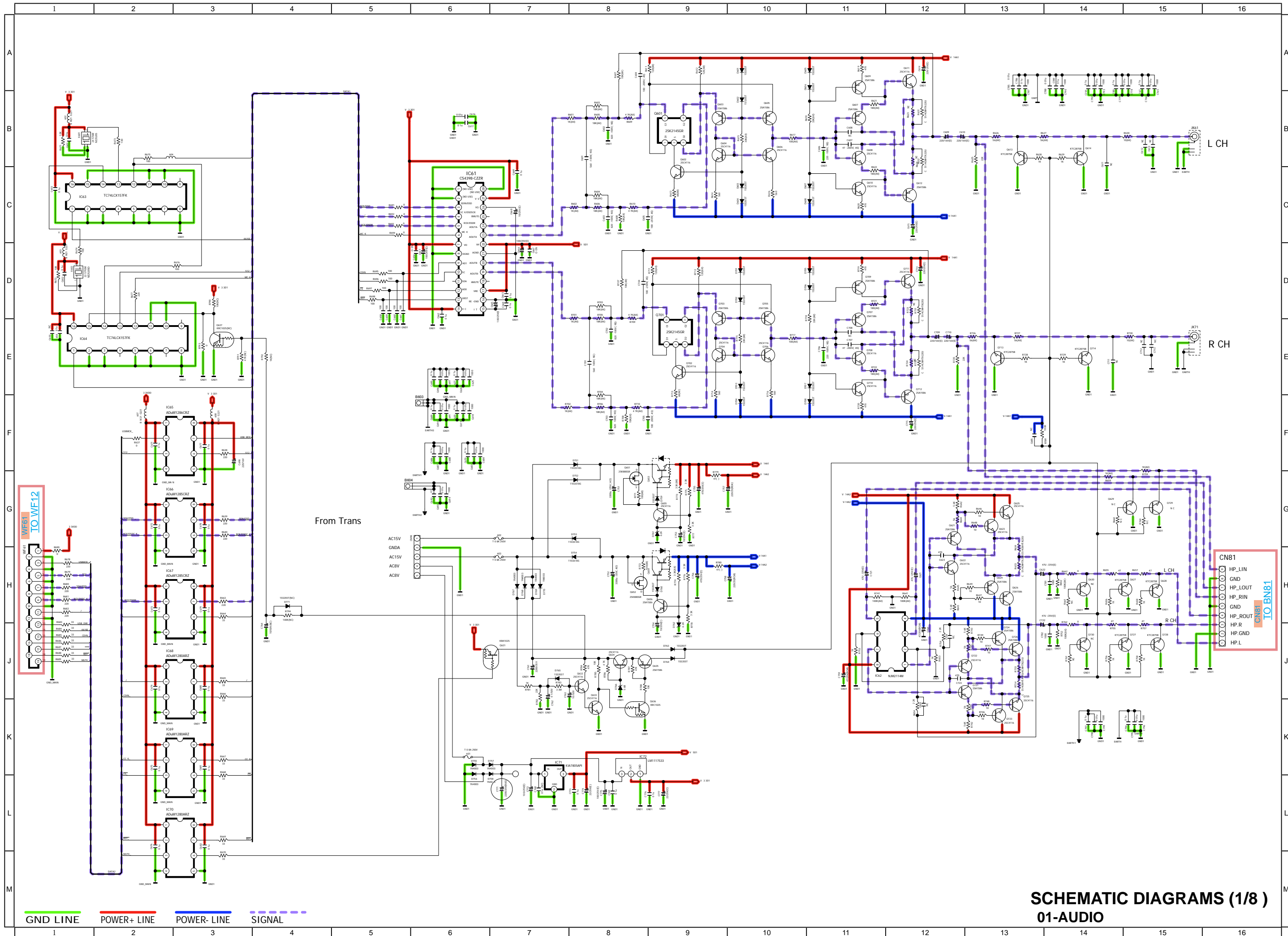


**FRONT  
(A SIDE)**



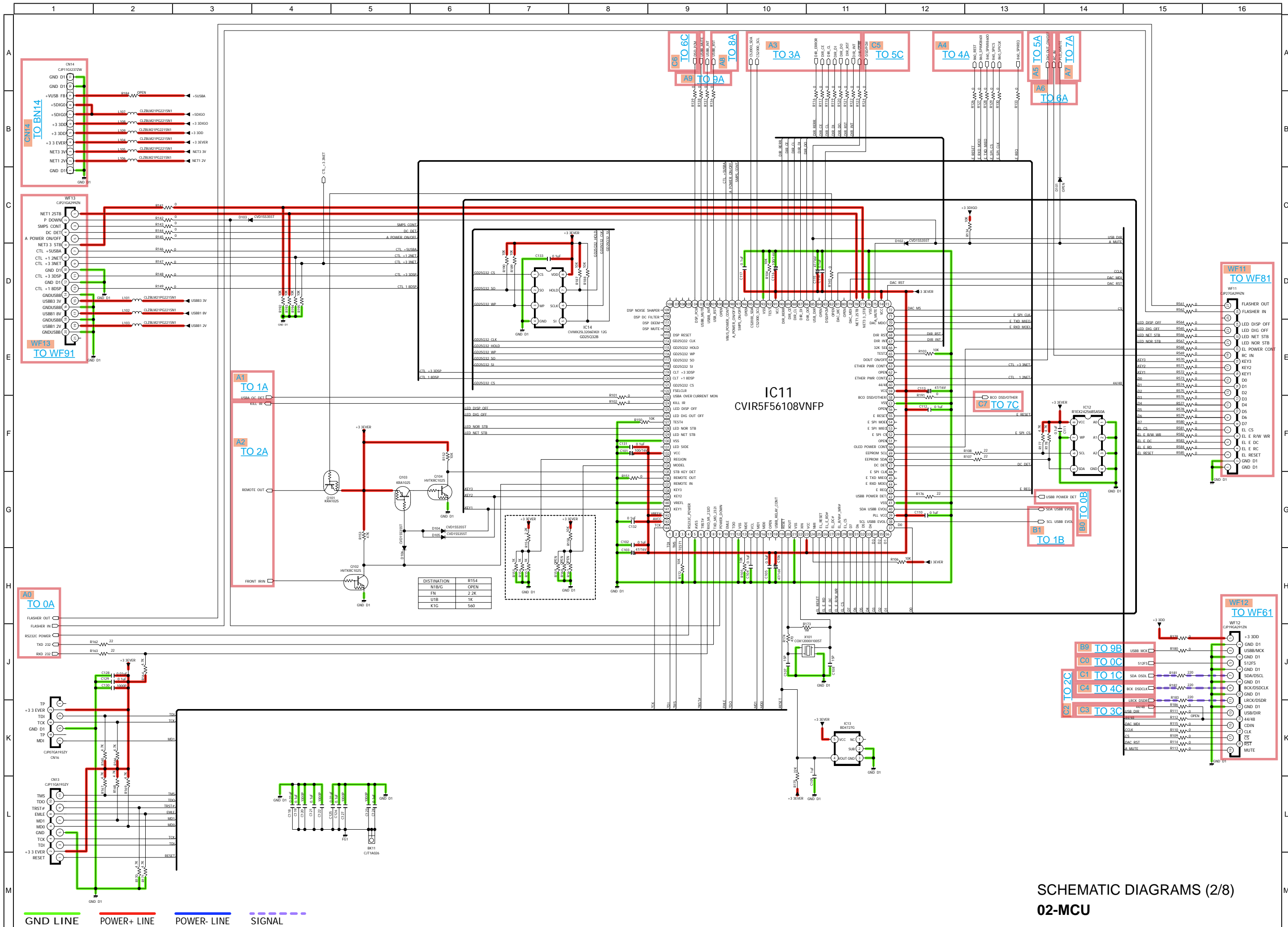
**FRONT  
(B SIDE)**





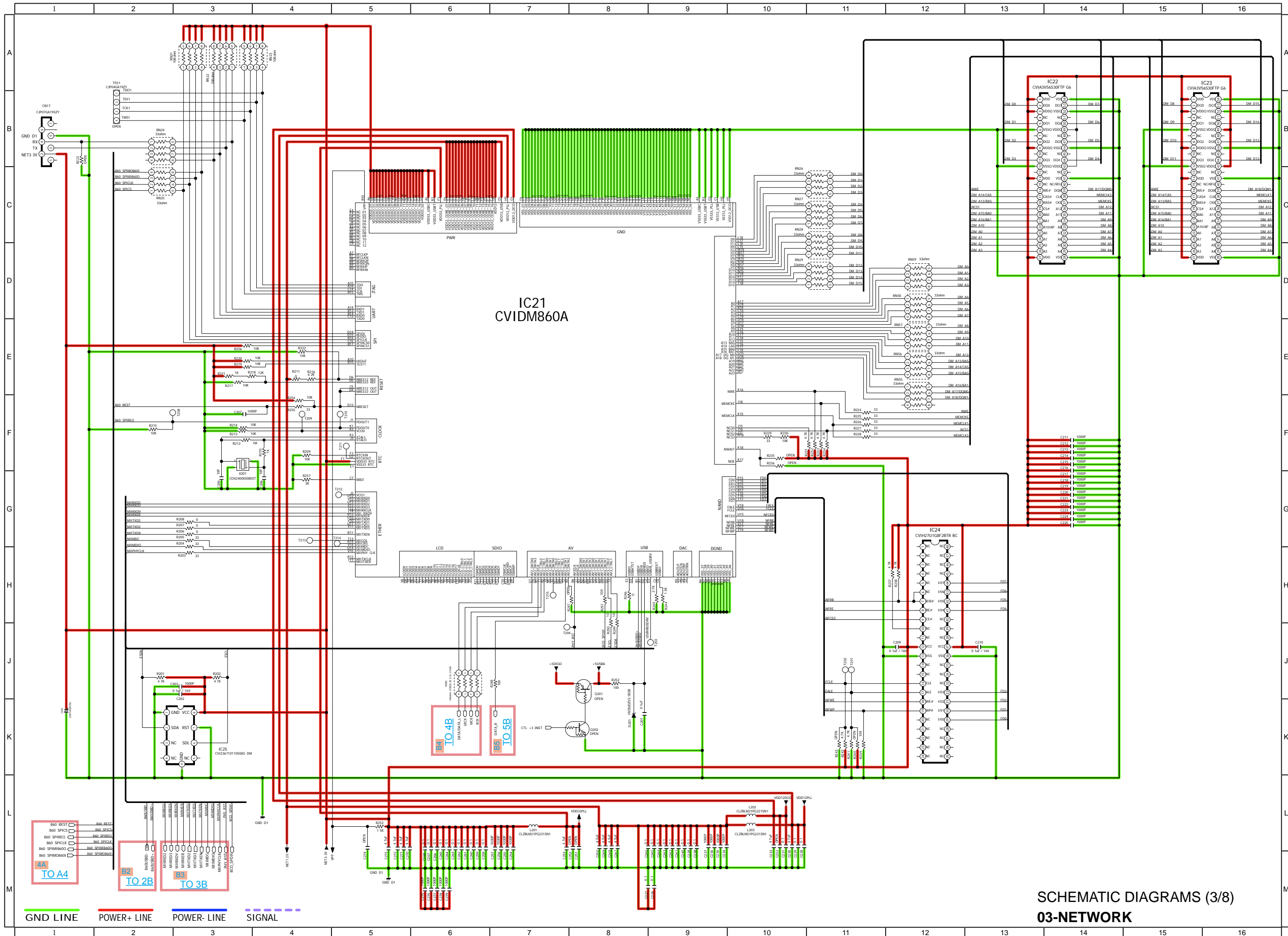
**SCHEMATIC DIAGRAMS (1/8)**  
**01-AUDIO**

— GND LINE  
— POWER+ LINE  
— POWER- LINE  
— SIGNAL

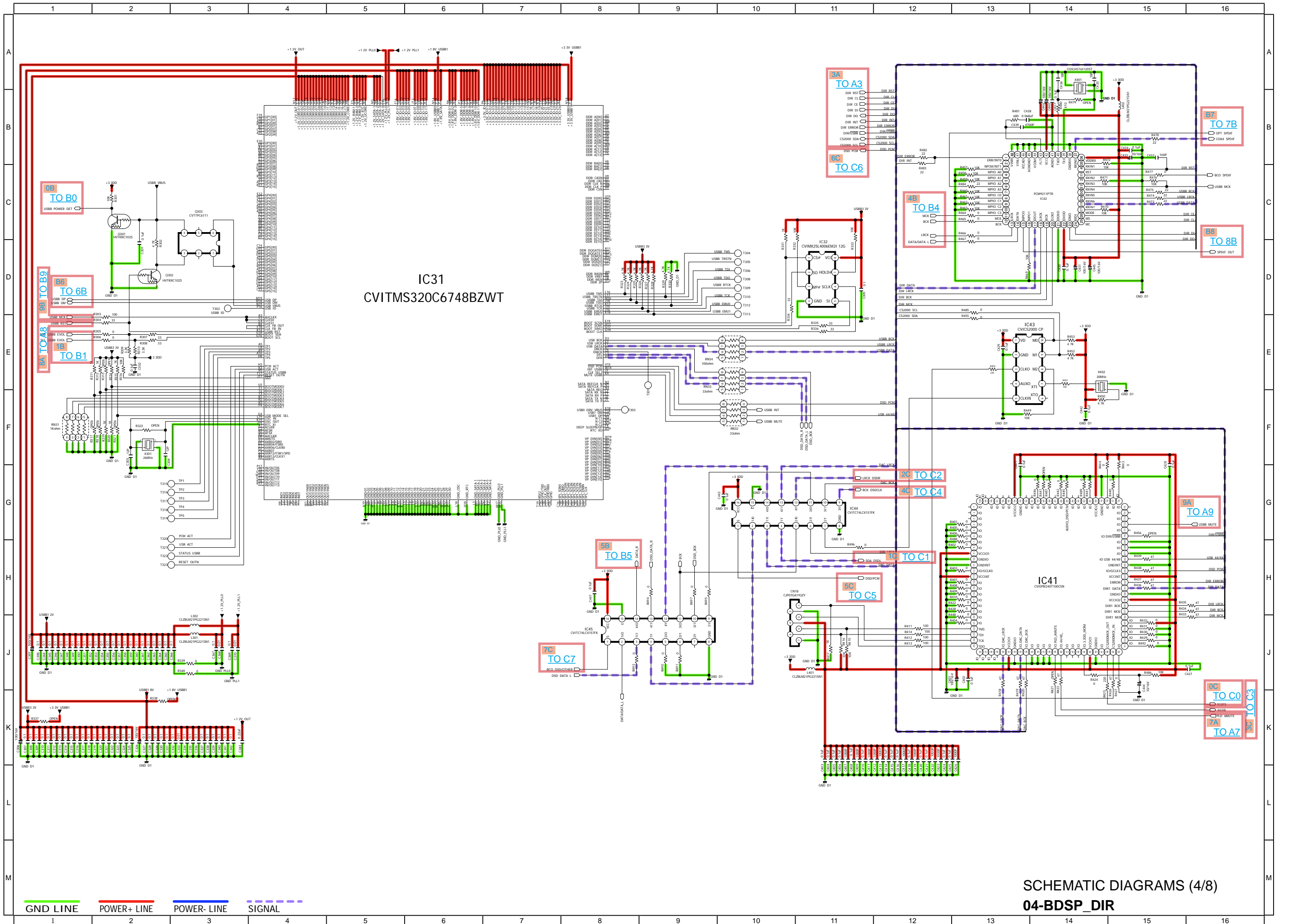


**SCHEMATIC DIAGRAMS (2/8)**  
**02-MCU**

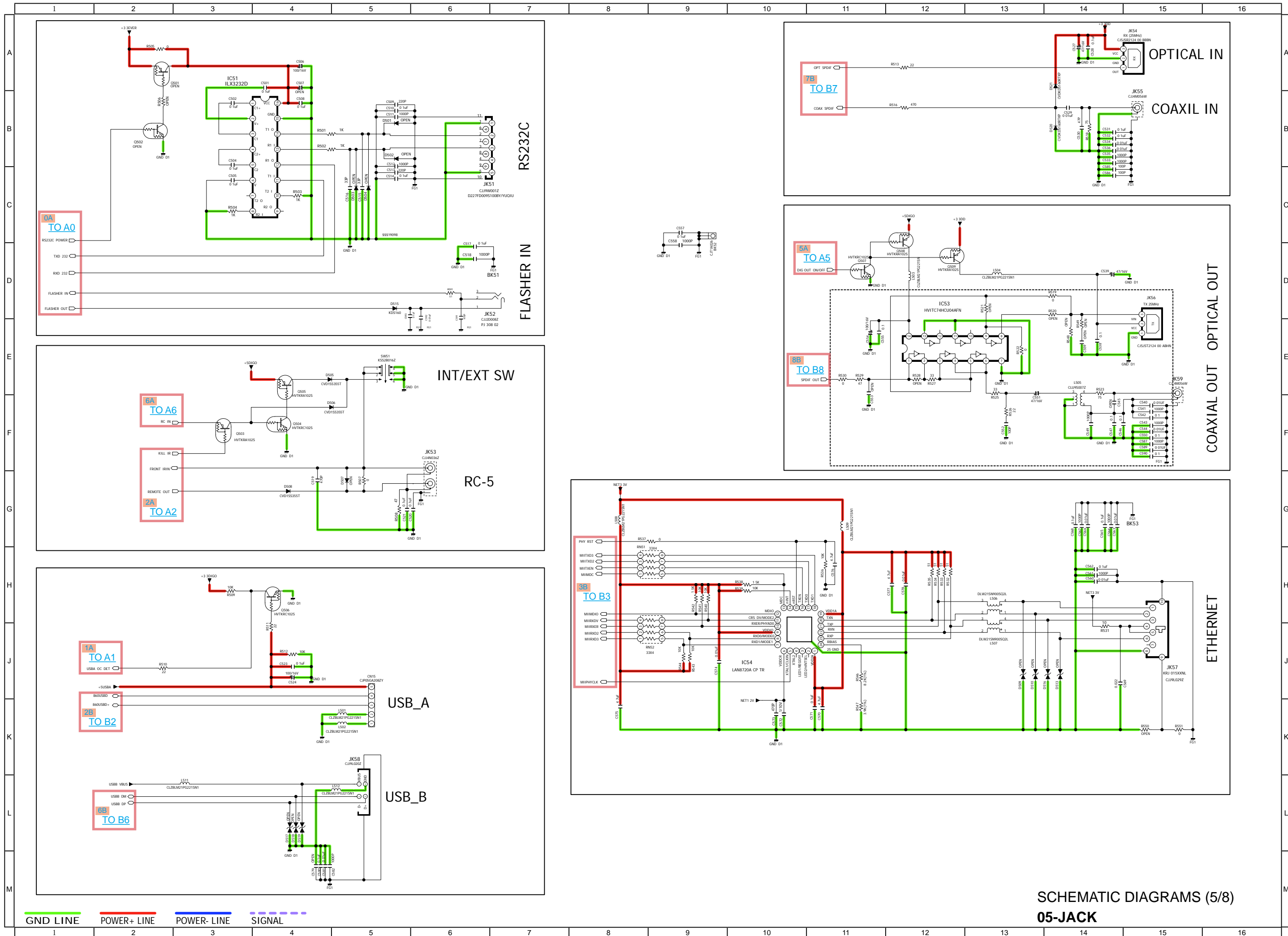




SCHMATIC DIAGRAMS (3/8)  
03-NETWORK

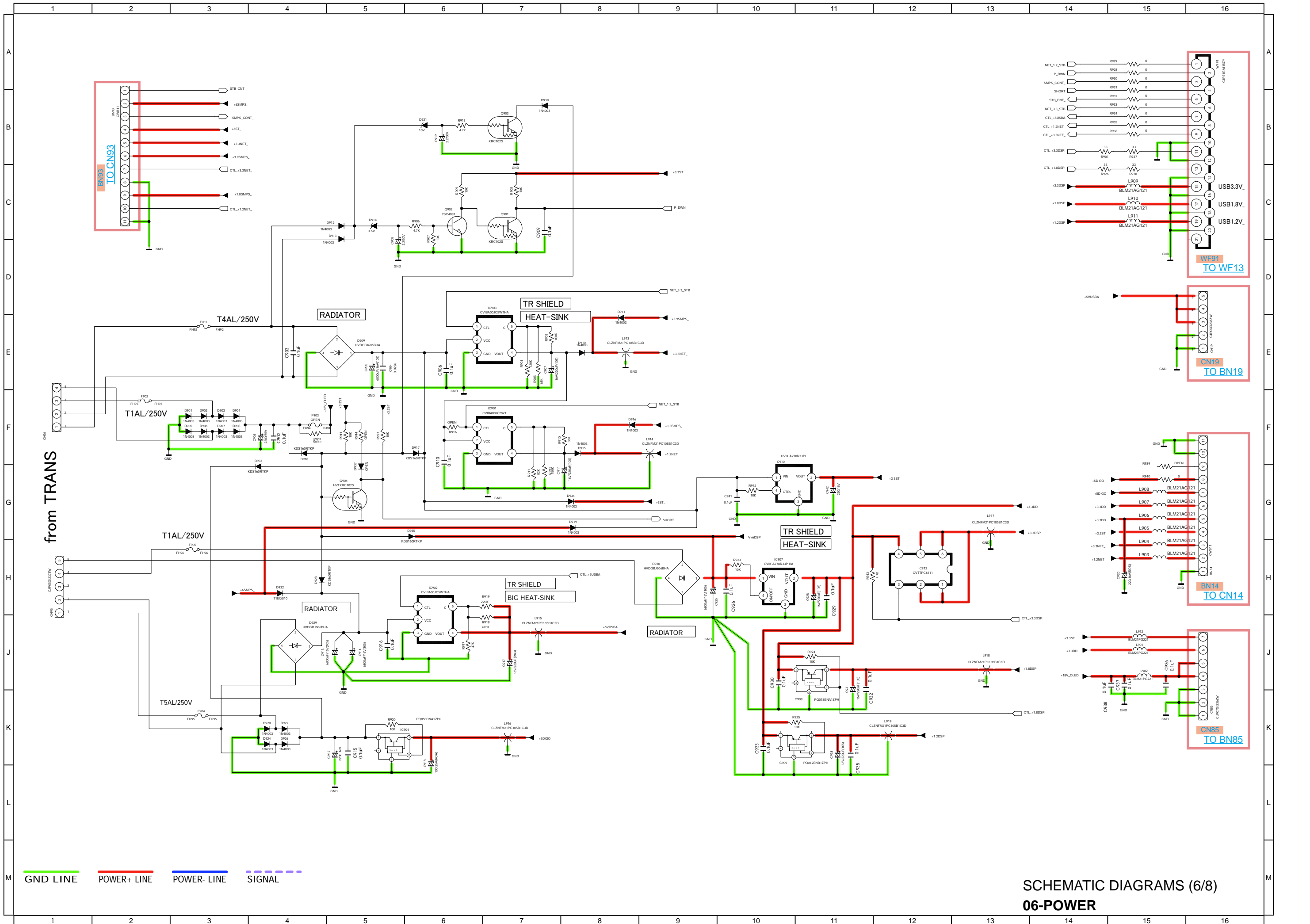


SCHEMATIC DIAGRAMS (4/8)  
04-BDSP\_DIR

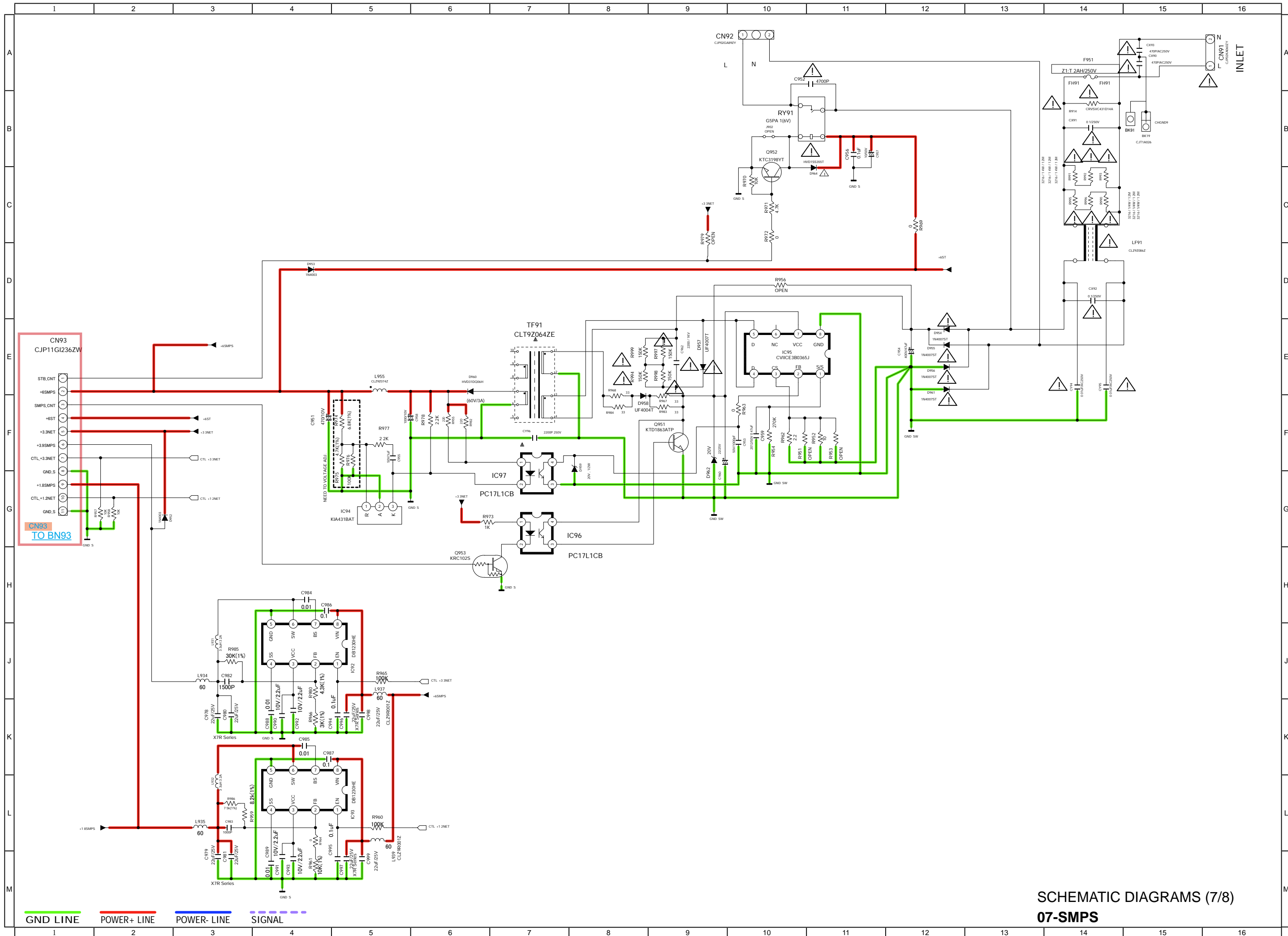


— GND LINE   
 — POWER+ LINE   
 — POWER- LINE   
 - - - SIGNAL

SCHEMATIC DIAGRAMS (5/8)  
05-JACK

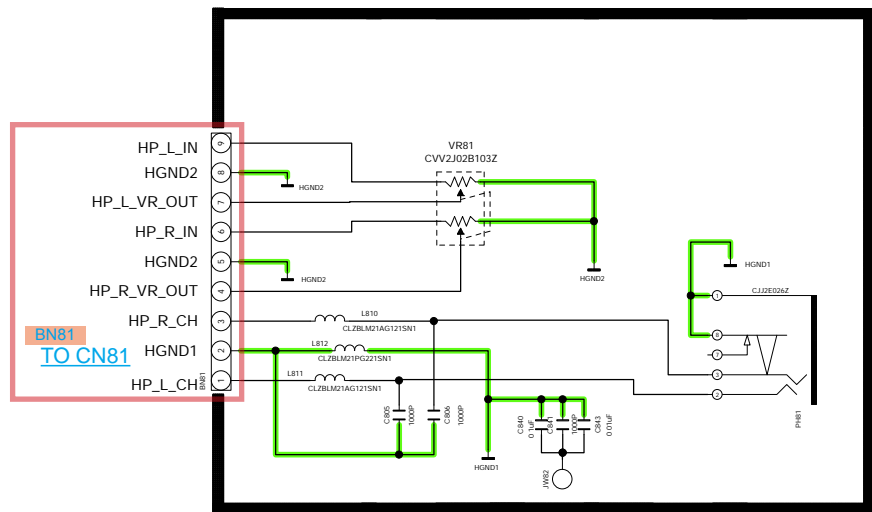
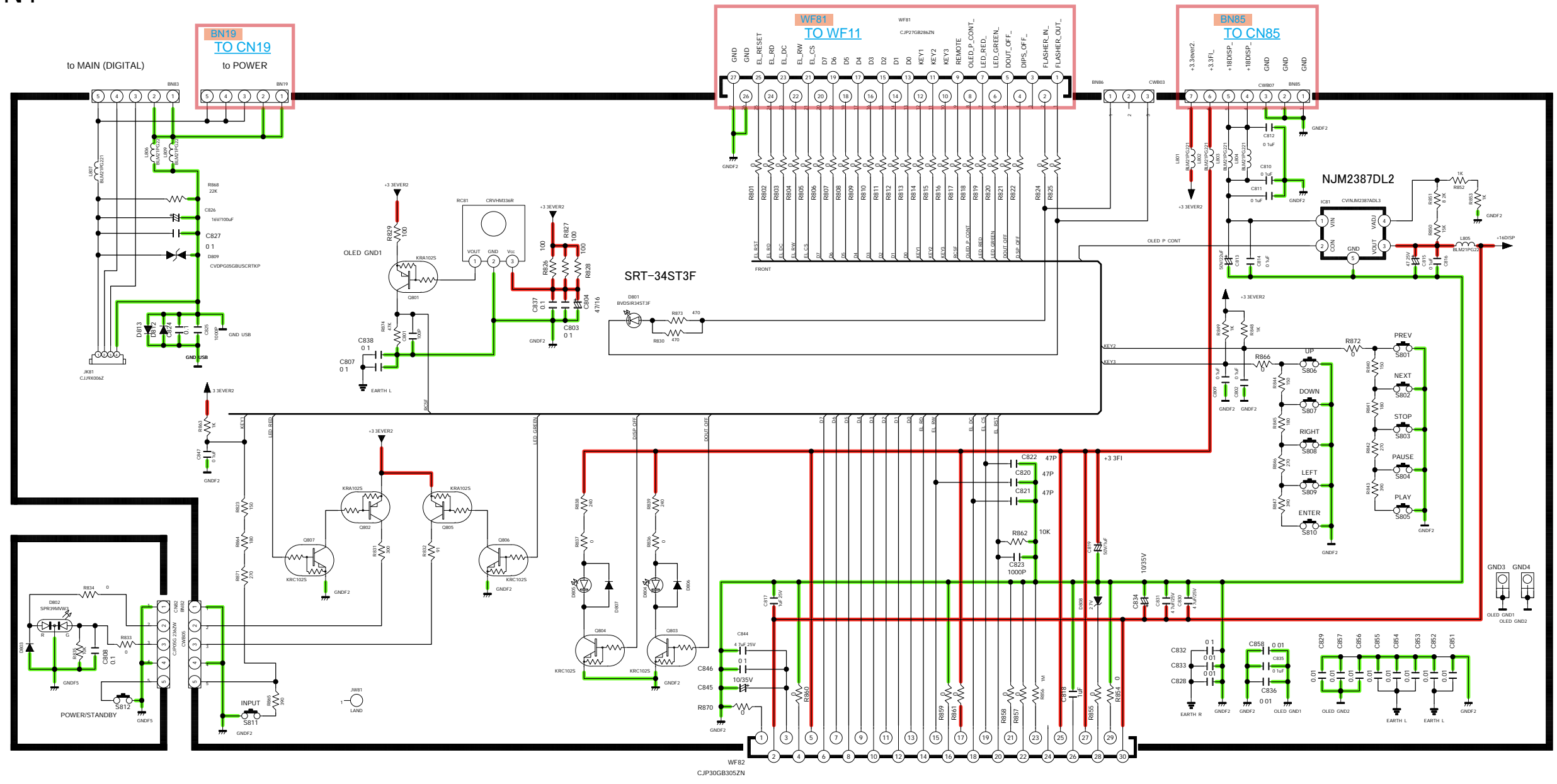


SCHEMATIC DIAGRAMS (6/8)  
06-POWER



**SCHEMATIC DIAGRAMS (7/8)**  
**07-SMPS**

# NA8005 FRONT

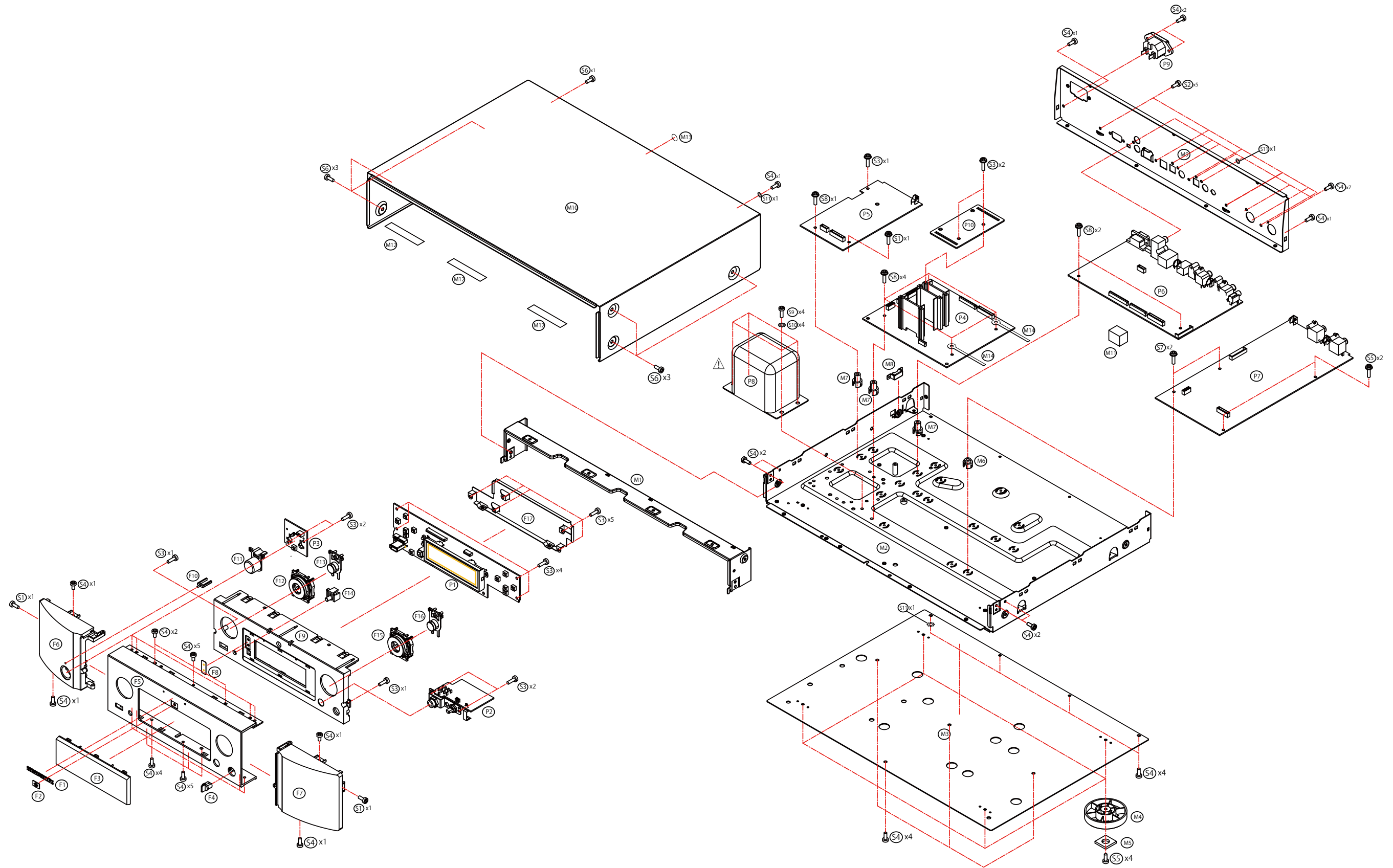



— GND LINE  
— POWER+ LINE  
— POWER- LINE  
- - - SIGNAL

SCHEMATIC DIAGRAMS (8/8)  
**08-FRONT**

# EXPLODED VIEW

Please see the last chapter for the part list.



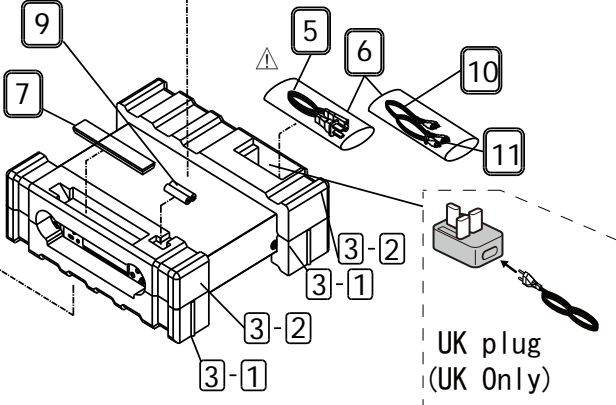
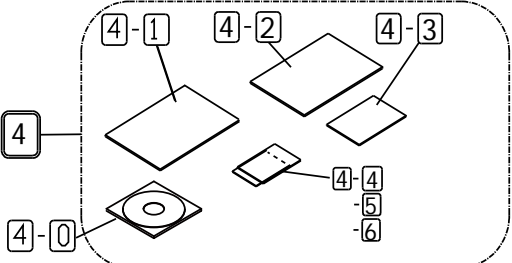
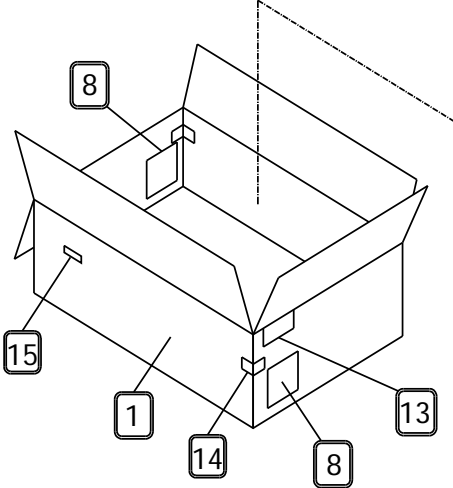
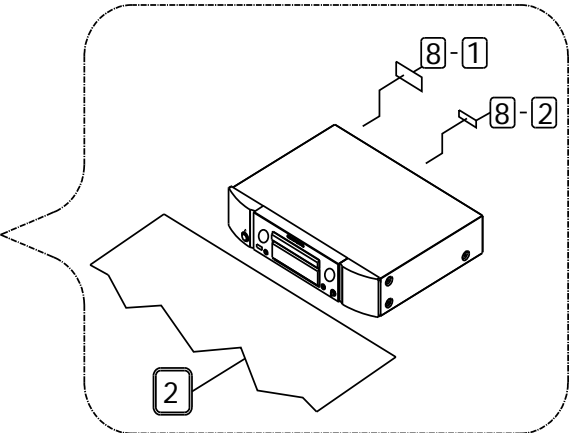
**WARNING:**  
Parts marked with this symbol  have critical characteristics.  
Use **ONLY** replacement parts recommended by the manufacturer.





# PACKING VIEW

Please see the last chapter for the part list.

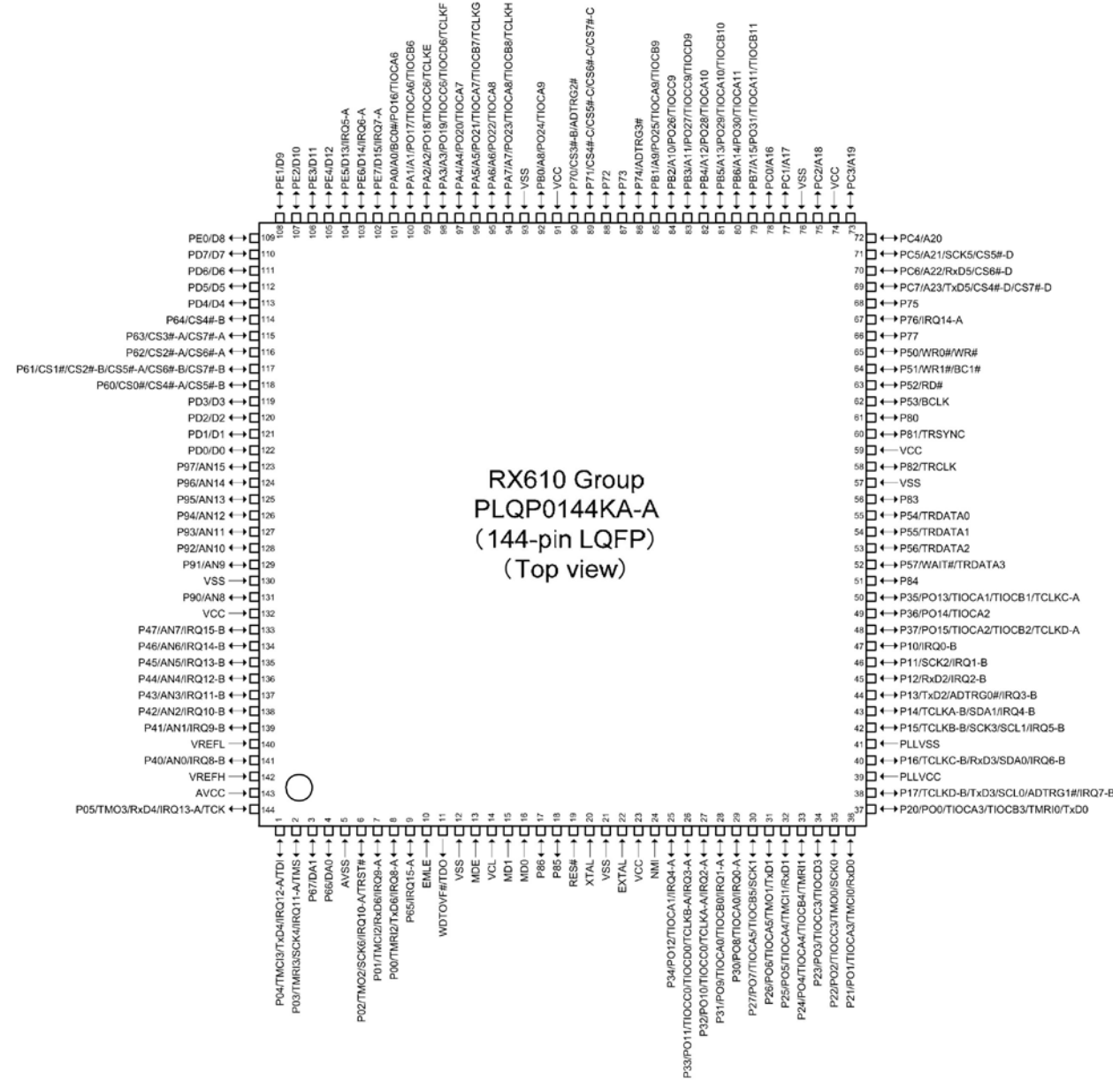


# SEMICONDUCTORS

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

### R5F56108VNFP (MAIN : IC 11)



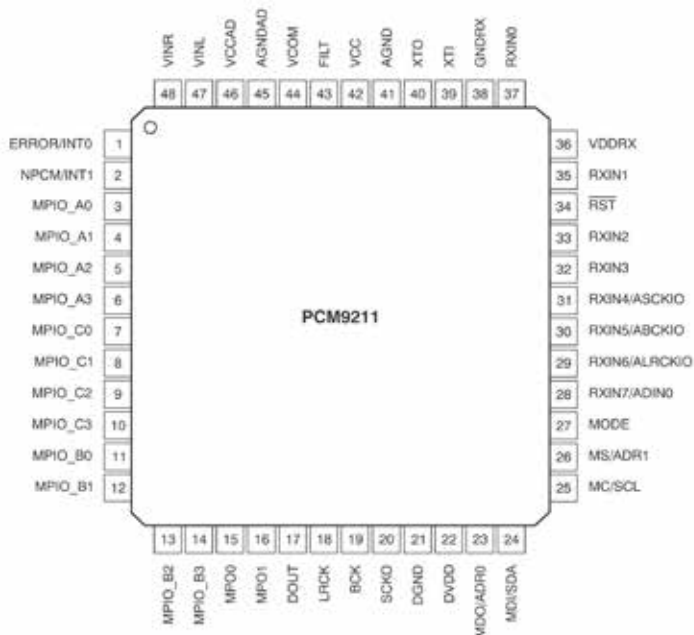
### R5F56108VNFP Terminal Functions

Pin	Port Name	I/O	Function	Network STBY	STBY MODE	Network STBY	PD/PU
1	TDI	I	CONNECTION for EMULATOR	H	I	I	PU
2	TMS	I	CONNECTION for EMULATOR	H	I	I	PU
3	TEST1	I	Port for Setting up "PWB CHECK MODE"	L	I	I	PD
4	232C POWER	O	POWER Control for 232C	L	O/L	O/L	PD
5	AVSS	-	GND	L	-	-	-
6	TRST#	I	Connection port to EMULATOR	L	I	I	PD
7	RXD MI232O	I	UPDATE	H	I	I	PU
8	TXD MO232I	O	UPDATE	L	O/L	O/L	-
9	P.Down	I	P.Down Detection (INT)	P-0	I	I	PU
10	EMLE	I	Connection port to EMULATOR	L	I	I	PD
11	TDO	O	Connection port to EMULATOR	H	O/L	O/L	-
12	VSS	-	GND	L	-	-	-
13	MDE	I	Setting operation mode	L	I	I	PD
14	VCL	I	Connect to capacitor, 0.1μF		I	I	-
15	MD1	I	Connection port to EMULATOR	H	I	I	PU
16	MD0	I	Connection port to EMULATOR	H	I	I	PU
17	OPEN	O	OPEN	L	O/L	O/L	-
18	OPEN	O	OPEN	L	O/L	O/L	PD
19	RESET	I	RESET	H	I	I	PU
20	X-OUT	-	X OUT 12MHz	P-1	-	-	-
21	VSS	-	GND	L	-	-	-
22	X-IN	-	X IN 12MHz	P-2	-	-	-
23	VCC	-	+3.3V_CPU	H	-	-	-
24	NMI	I	Request Interruption PORT	H	I	I	PU
25	EL RESET	O	OLED RESET "L" = RESET	L	O/L	O/L	PD
26	EL E,RD	O	EL READ OUT	L	O/L	O/L	-
27	EL D/C	O	Switch Data/Commando "H"data, "L"command	L	O/L	O/L	-
28	EL R/W,WR	O	EL WRITE	L	O/L	O/L	-
29	EL CS	O	EL CS "L" = Communication enable with OLED	L	O/L	O/L	-
30	D7	O	Data Bus for OLED	L	O/L	O/L	-
31	D6	O	Data Bus for OLED	L	O/L	O/L	-
32	D5	O	Data Bus for OLED	L	O/L	O/L	-
33	D4	O	Data Bus for OLED	L	O/L	O/L	-
34	D3	O	Data Bus for OLED	L	O/L	O/L	-
35	D2	O	Data Bus for OLED	L	O/L	O/L	-
36	D1	O	Data Bus for OLED	L	O/L	O/L	-
37	D0	O	Data Bus for OLED	L	O/L	O/L	-
38	SCK USBB	O	USBB/E.VOL(I2C) CLOCK OUTPUT	L	O/L	O/L	PU
39	PLLVC	-	+3.3V_CPU	H	-	-	-
40	SDA_USB	I/O	USBB/E.VOL(I2C) DATA IN/OUT	L	O/L	O/L	PU
41	PLLVS	-	GND	L	-	-	-
42	USBB_POWER_DET	I	USBB_BUS Power Detection	L	I	I	PU
43	E_REQ	I	DM870/860 Interrupt for Communicaion request	L	I	I	PD
44	E_RXDMOEI	SO	NETWORK serial DATA INPUT (DM870/860 RXD)	H	O/L	O/L	PU(CX870)
45	E_TXDMIEO	SI	NETWORK serial DATA OUTPUT (DM870/860 TXD)	L	O/L	I	PU(CX870)
46	E_SPICLK	O	ETHERNET Control Communication PORT (CLK)	H	O/L	O/L	PU(CX870)
47	DC_DET	I	DC POWER Abnormal Detection	L	I	I	PU
48	EEPROM SDA	I/O	EEPROM R1EX24256A Control Port	H(PU)	I	I	PU
49	EEPROM SCL	O	EEPROM R1EX24256A Control Port	H(PU)	I	I	PU
50	OLED Power Cont	O	OLED +18V power control	L	O/L	O/L	PD
51	OPEN	I	OPEN	L	I	I	-
52	/E_SPICS	O	SCI CS Signal OUTPUT to DM870/860	H	O/L	O/L	PU(CX870)
53	E_SPIMIEO	I	ETHERNETCommunication control Port	H	I	I	PU(CX870)
54	E_SPIMOEI	O	ETHERNETCommunication control Port	L	O/L	O/L	PU(CX870)

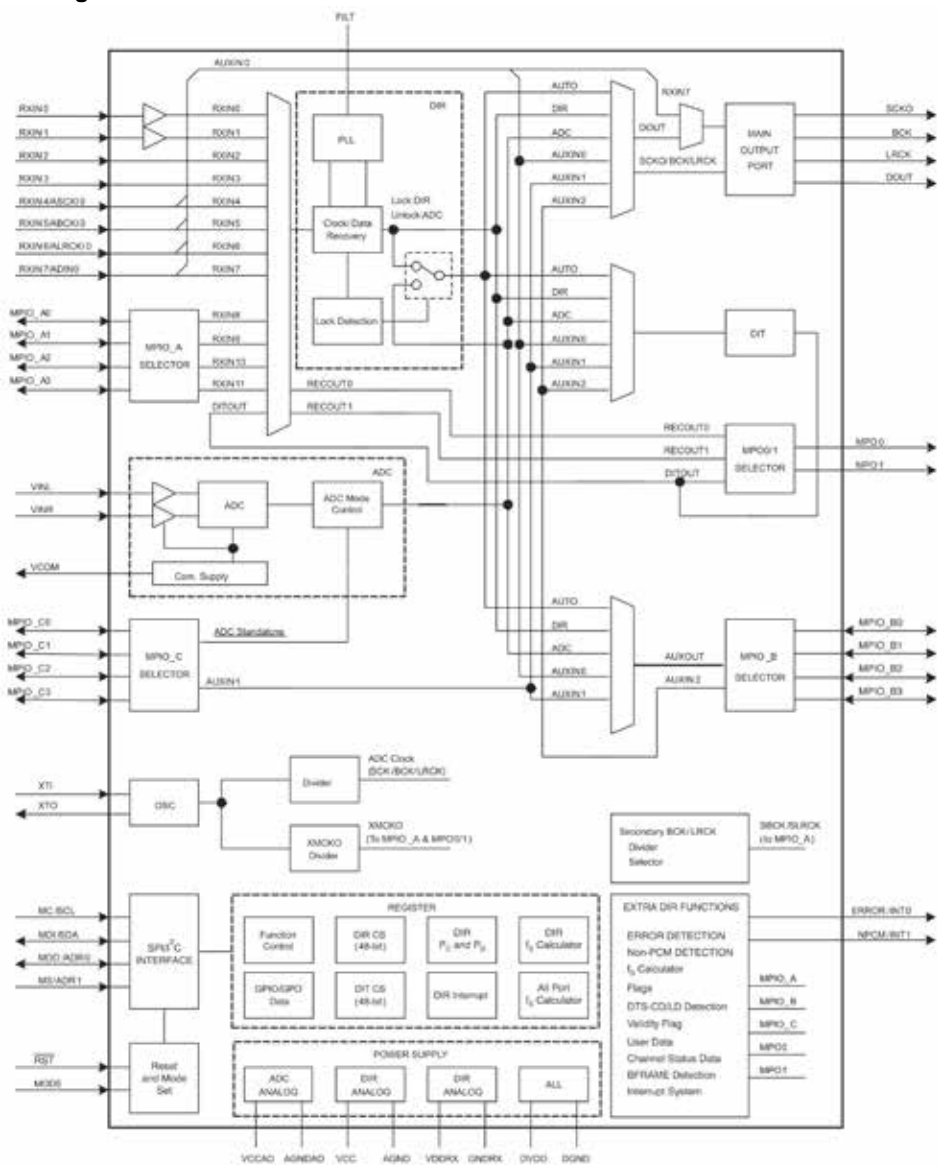
Pin	Port Name	I/O	Function	Network STBY	STBY MODE	Network STBY	PD/PU
55	E_RESET	O	Reset to DM870/860 (P.UP at DM870/860 side)	H	O/L	O/L	PU(CX870)
56	OPEN	I	OPEN	L	I	I	-
57	VSS	-	GND	L	-	-	-
58	OPEN	O	OPEN	L	O/L	O/L	-
59	VCC	-	+3.3V_CPU	H	-	-	-
60	44/48	O	Select DAC MCK	L	O/L	O/L	-
61	Ether_Power_Cont2	O	1.2V power Control for DM870	L	O/L	O/H	-
62	OPEN	O	OPEN	H	O/L	O/L	-
63	Ether Power Cont1	O	3.3V power Control for DM870	H	O/L	O/H	-
64	DOUT_ON_OFF	O	Power control for DIGITAL OUTPUT	L	O/L	O/L	PD
65	TEST2	I	Port for Setting up "PWB CHECK MODE"	L	I	I	PD
66	OPEN	O	OPEN	L	O/L	O/L	-
67	DIR_INT	I	DIR Control	L	I	I	PD (DIR_RERR) Common
68	DIR_RST	O	DIR Control	L	O/L	O/L	-
69		O	SPI Communication with CY920	L			
70		I	SPI Communication with CY920	L			
71		O	SPI Communication with CY920	L			
72	DAC_MS	O	DAC Control	L	O/L	O/L	-
73	DAC_RST	O	DAC Control	L	O/L	O/L	-
74	VCC	-	+3.3V_CPU	H	-	-	-
75	AMUTE	O	Mute Control	L	O/L	O/L	PU
76	VSS	-	GND	L	-	-	-
77	NET_3.3_STB	O	BCO+3.3V Power Control L at Network STBY/Normal STBY	L	O/L	O/L	-
78	NET_1.2_STB	O	BCO+1.2V Power control L at Network STBY/Normal STBY	L	O/L	O/L	-
79	DAC_MDI	O	DAC Control	L	O/L	O/L	-
80	DAC_MDO	O	OPEN	L	O/L	O/L	-
81	DAC_MC	O	DAC Control	L	O/L	O/L	-
82	REMOTE OUT	O	Remote Output signal	L	O/H	O/H	PU
83	DSD/PCM_OUT	O	DSD or PCM Switching signal	L	O/L	O/L	-
84	OPEN	O	OPEN	L	O/L	O/L	-
85	DIR/USB	O	DIR/USBB Switching	L	O/L	O/L	-
86	DIR_DO	I	DIR Control	L	I	I	-
87	DIR_DI	O	DIR Control	L	O/L	O/L	-
88	DIR_CL	O	DIR Control	L	O/L	O/L	-
89	DIR_CE	O	DIR Control	L	O/L	O/L	-
90	DIR_RERR	I	DIR Control	L	I	I	PD
91	VCC	-	+3.3V_CPU	H	-	-	-
92	TEST3	I	Port for Setting up "PWB CHECK MODE"	L	I	I	PD
93	VSS	-	GND	L	-	-	-
94	CS2000_SCL	O	CS2000(I2C)_Clock Output	L	O/L	O/L	PU
95	CS2000_SDA	I/O	CS2000(I2C)_DATA IN/OUT	L	O/L	O/L	PU
96	OPEN	O	OPEN	L	O/L	O/L	-
97	SMPS ON/OFF	O	ON/STANDBY Control L=Network/Normal STBY, H=ON	L	O/H	O/H	PD
98	A.Power ON/OFF	O	ON/STANDBY Control L=Network/Normal STBY, H=ON	L	O/L	O/L	PD
99	VBUS Power Cont	I/O	VBUS Power Control	L	O/L	O/L	PD
100	OPEN	O	OPEN	L	O/L	O/L	-
101	USBB_RST	O	RESET for USBB DSP ACTIVE:L	L	O/L	O/L	PD
102	USBB_INT	I	USBB Interruption ACTIVE:L	L	O/L	O/L	PU
103	USBB_MUTE	I	USBB MUTE	PU	O/L	O/L	PU
104	DSD/PCM	I	USBB DSD/PCM Detection	PU	O/L	O/L	PU
105	OPEN	O	OPEN	L	O/L	O/L	-
106	OPEN	O	OPEN	L	O/L	O/L	-
107	OPEN	O	OPEN	L	O/L	O/L	-
108	OPEN	O	OPEN	L	O/L	O/L	-
109	OPEN	O	OPEN	L	O/L	O/L	-
110	OPEN	O	OPEN	L	O/L	O/L	-
111	OPEN	O	OPEN	L	O/L	O/L	-

Pin	Port Name	I/O	Function	Network STBY	STBY MODE	Network STBY	PD/PU
112	OPEN	O	OPEN	L	O/L	O/L	-
113	OPEN	O	OPEN	L	O/L	O/L	-
114	GD25Q32_CLK	O	GD25Q32-6P, CLK	L	O/L	O/L	-
115	GD25Q32_HOLD	I/O	GD25Q32-7P,HOLD# ( IO3 )	L	I	I	PU
116	GD25Q32_WP	O	GD25Q32-3P,WP# ( IO2 )	L	I	I	PU
117	GD25Q32_SO	O	GD25Q32-2P,SO ( IO1 )	L	I	I	PU
118	GD25Q32_SI	O	GD25Q32-5P,SI ( IO0 )	L	I	I	PU
119	CLT_+3.3DSP	O	DSP +3.3V Power Control	L	O/L	O/L	-
120	CLT_+1.8DSP	O	DSP+1.2V Power Control	L	O/L	O/L	-
121	GD25Q32_CS	O	GD25Q32-1P, CS	H(PU)	O/L	O/L	-
122	OPEN	O	OPEN	H(PU)	O/L	O/L	-
123	USBA_OVER_CURRENT_MONI	I	USBA Over Current Detection	L	O/L	O/L	PD
124	KILL IR	O	Unable IR Sensor input	L	O/L	O/L	-
125	LED_DISP_OFF	O	LED Control, DISPLAY OFF	L	O/L	O/L	PD
126	LED_DIGOUT_OFF	O	LED Control, DIGITAL OUT OFF	L	O/L	O/L	PD
127	TEST4	I	Port for Setting up "PWB CHECK MODE"	L	I	I	PD
128	LED_NOR_STB	O	LED Control, NORMAL STANDBY	L	O/L	O/L	PD
129	LED_NET_LED	O	LED Control, NETWORK STANDBY	H	O/L	O/H	PD
130	VSS	-	GND	L	-	-	-
131	OPEN	O	OPEN	L	O/L	O/L	PD
132	VCC	-	+3.3V CPU	H	-	-	-
133	REGION	I	Region ID PORT 0V:E2 0.43V:JP 0.82V:E3 1.24V:E1C	0.4V	I	I	-
134	MODEL	I	Model ID PORT 0V:NA8005 3.3V:Other	0V	I	I	-
135	STB_KEY_DET	I	Key detection for POWER ON	H(PU)	I	I	PU
136	OPEN	I	OPEN	0.755V	I	I	PD
137	REMOTE IN	I	REMOTE IN	P-23	I	I	PU
138	KEY3	I	Key Input 3(A/D port)	P-24	I	I	PU
139	KEY2	I	Key Input 2(A/D port)	P-24	I	I	PU
140	VREFL	-	GND	L	-	-	-
141	KEY1	I	Key Input 1(A/D port)	P-24	I	I	-
142	VREFH	-	+3.3V_CPU	H	-	-	-
143	AVCC	-	+3.3V_CPU	H	-	-	-
144	TCK	I	Connection port to EMULATOR	H	I	I	PU

PCM9211 (DIGITAL : IC42)



PCM9211 Block Diagram

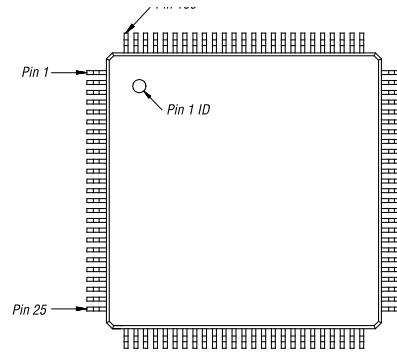


## PCM9211 Pin Discriptions

PIN				DESCRIPTION
NO.	NAME	I/O	5-V TOLERANT	
1	ERROR/INT0	O	No	DIR Error detection output / Interrupt0 output
2	NPCM/INT1	O	No	DIR Non-PCM detection output / Interrupt1 output
3	MPIO_A0	I/O	Yes	Multipurpose I/O, Group A <sup>(1)</sup>
4	MPIO_A1	I/O	Yes	Multipurpose I/O, Group A <sup>(1)</sup>
5	MPIO_A2	I/O	Yes	Multipurpose I/O, Group A <sup>(1)</sup>
6	MPIO_A3	I/O	Yes	Multipurpose I/O, Group A <sup>(1)</sup>
7	MPIO_C0	I/O	Yes	Multipurpose I/O, Group C <sup>(1)</sup>
8	MPIO_C1	I/O	Yes	Multipurpose I/O, Group C <sup>(1)</sup>
9	MPIO_C2	I/O	Yes	Multipurpose I/O, Group C <sup>(1)</sup>
10	MPIO_C3	I/O	Yes	Multipurpose I/O, Group C <sup>(1)</sup>
11	MPIO_B0	I/O	Yes	Multipurpose I/O, Group B <sup>(1)</sup>
12	MPIO_B1	I/O	Yes	Multipurpose I/O, Group B <sup>(1)</sup>
13	MPIO_B2	I/O	Yes	Multipurpose I/O, Group B <sup>(1)</sup>
14	MPIO_B3	I/O	Yes	Multipurpose I/O, Group B <sup>(1)</sup>
15	MPO0	O	No	Multipurpose output 0
16	MPO1	O	No	Multipurpose output 1
17	DOUT	O	No	Main output port, serial digital audio data output
18	LRCK	O	No	Main output port, LR clock output
19	BCK	O	No	Main output port, Bit clock output
20	SCKO	O	No	Main output port, System clock output
21	DGND	-	-	Ground, for digital
22	DVDD	-	-	Power supply, 3.3 V (typ.), for digital
23	MDO/ADR0	I/O	Yes	Software control I/F, SPI data output / I <sup>2</sup> C slave address setting <sup>0(2)</sup>
24	MDI/SDA	I/O	Yes	Software control I/F, SPI data input / I <sup>2</sup> C data input/output <sup>(2)(3)</sup>
25	MC/SCL	I	Yes	Software control I/F, SPI clock input / I <sup>2</sup> C clock input <sup>(2)</sup>
26	MS/ADR1	I	Yes	Software control I/F, SPI chip select / I <sup>2</sup> C slave address setting <sup>1(2)</sup>
27	MODE	I	No	Control mode setting, (see the Serial Control Mode section, Control Mode Pin Setting)
28	RXIN7/ADIN0	I	Yes	Biphase signal, input 7 / AUXIN0, serial audio data input <sup>(2)</sup>
29	RXIN6/ALRCKI0	I	Yes	Biphase signal, input 6 / AUXIN0, LR clock input <sup>(2)</sup>
30	RXIN5/ABCKI0	I	Yes	Biphase signal, input 5 / AUXIN0, bit clock input <sup>(2)</sup>
31	RXIN4/ASCKI0	I	Yes	Biphase signal, input 4 / AUXIN0, system clock input <sup>(2)</sup>
32	RXIN3	I	Yes	Biphase signal, input 3 <sup>(2)</sup>
33	RXIN2	I	Yes	Biphase signal, input 2 <sup>(2)</sup>
34	RST	I	Yes	Reset Input, active low <sup>(2)(4)</sup>
35	RXIN1	I	Yes	Biphase signal, input 1, built-in coaxial amplifier
36	VDRRX	-	-	Power supply, 3.3 V (typ.), for RXIN0 and RXIN1.
37	RXIN0	I	Yes	Biphase signal, input 0, built-in coaxial amplifier
38	GNDRX	-	-	Ground, for RXIN
39	XTI	I	No	Oscillation circuit input for crystal resonator or external XTI clock source input <sup>(5)</sup>
40	XTO	O	No	Oscillation circuit output for crystal resonator
41	AGND	-	-	Ground, for PLL analog
42	VCC	-	-	Power supply, 3.3 V (typ.), for PLL analog
43	FILT	O	No	External PLL loop filter connection terminal; must connect recommended filter
44	VCOM	O	No	ADC common voltage output; must connect external decoupling capacitor
45	AGNDAD	-	-	Ground, for ADC analog
46	VCCAD	-	-	Power supply, 5.0 V (typ.), for ADC analog
47	VINL	I	No	ADC analog voltage input, left channel
48	VINR	I	No	ADC analog voltage input, right channel

- (1) Schmitt trigger input
- (2) Schmitt trigger input
- (3) Open-drain configuration in I<sup>2</sup>C mode
- (4) Onboard pull-down resistor (50 kΩ, typical)
- (5) CMOS Schmitt trigger input

**EPM240T100C5N (DIGITAL : IC41)**



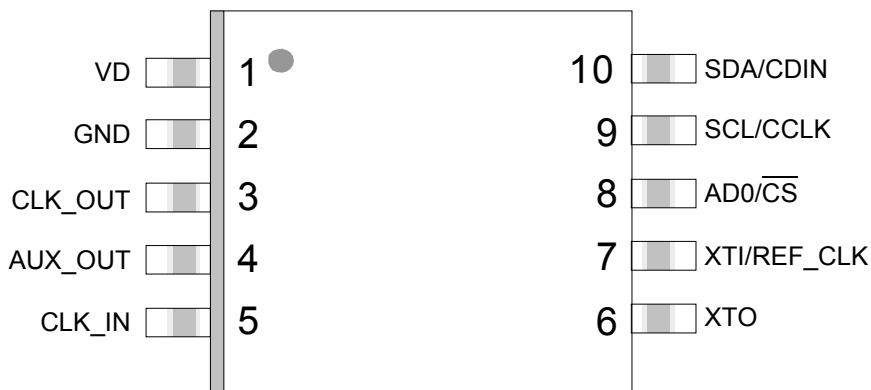
**EPM240T100C5N Terminal Function**

Pin NO.	New	Pin/Pad Name	Connect Device	Direction	Detail
1	IO	NC	-	-	NC
2	IO	NC	-	-	NC
3	IO	NC	-	-	NC
4	IO	.MODE3.	CD MECHA	IN	PLD_RST(MODE3.)
5	IO	.SRDATA0	CD MECHA	IN	SRDATA BE→PLD Control
6	IO	.SRCLK	CD MECHA	IN	SRCLK BE→PLD Control
7	IO	.DFRST_IN	CD MECHA	IN	DFRST_IN BE→PLD Control
8	IO	.MODE2.	CD MECHA	IN	MP3 fs (44.1k,48k:L / 32k:H) Detect
9	VCCIO1	33_VCCIO	DA3.3V	-	Power Supply
10	GNDIO	GND	DGND	-	Ground
11	GNDINT	GND	DGND	-	Ground
12	IO/GCLK0	.FE_DSD/PCM	CD MECHA	IN	MODE(FE_DSD/PCM)
13	VCCINT	33_VCCIO	DA3.3V	-	Power Supply
14	IO/GCLK1	.BE_DAC_CS	CD MECHA	IN	BE_DAC_CS
15	IO	.PDATA0	CD MECHA	IN	PDATA0
16	IO	.PLRCK	CD MECHA	IN	PLRCK
17	IO	.PBCK.	CD MECHA	IN	PBCK.
18	IO	.DMIX_L	CD MECHA	IN	DMIX_L
19	IO	.DMIX_R	CD MECHA	IN	DMIX_R
20	IO	.DBCK	CD MECHA	IN	DBCK
21	IO	.PMCK	CD MECHA	IN	PMCK
22	TMS	.TMS	PLD UPDATE	IN	Test Mode State for JTAG
23	TDI	.TDI	PLD UPDATE	IN	Test Data Input for JTAG
24	TCK	.TCK	PLD UPDATE	IN	Test Clock for JTAG
25	TDO	.TDO	PLD UPDATE	OUT	Test Data Out for JTAG
26	IO	.SLAVE_MCK	CD MECHA	OUT	CD MECHA MCK(33.8688MHz)
27	IO	.DAC_DSD_DATAL	DSD1792A	OUT	DAC_DSD_DATAL
28	IO	.DAC_DSD_DATAR	DSD1792A	OUT	DAC_DSD_DATAR
29	IO	.DAC_DSD_BCK	DSD1792A	OUT	DAC_DSD_BCK
30	IO	.DAC_LRCK	DSD1792A	OUT	DAC_LRCK
31	VCCIO1	33_VCCIO	DA3.3V	-	Power Supply
32	GNDIO	GND	DGND	-	Ground
33	IO	.DAC_DATA	DSD1792A	OUT	DAC_DATA
34	IO	.DAC_BCK	DSD1792A	OUT	DAC_BCK
35	IO	.DAC_MCK 22.5792M	DAC_MCK 22M	IN	DAC_MCK 22.5792MHz
36	IO	.22.5792M_DIR	DIR_MCK 22M	IN	DIR_MCK 22.5792MHz
37	IO	.22.5792M_USBA	USBA_MCK 22M	IN	USBA_MCK 22.5792MHz
38	IO	.DAC_MCK 24.576M	DAC_MCK 24M	IN	DAC_MCK 24.576MHz
39	IO	PLD_AMUTE	AUDIO MUTE	OUT	ANALOG Mute
40	IO	.44/48	AUDIO UNIT SELECTOR	OUT	Switch MCK (22M/24M)
41	IO	.DAC_CS_OUT	DSD1792A	OUT	DAC_CS_OUT
42	IO	.DAC_DATA_OUT	DSD1792A	OUT	DAC_DATA_OUT
43	IO/DEV_OE	.DAC_CK_OUT	DSD1792A	OUT	DAC_CK_OUT
44	IO/DEV_CLRn	3.3DD_MONI	+3.3DD	IN	+3.3DD Moni
45	VCCIO1	33_VCCIO	DA3.3V	-	Power Supply
46	GNDIO	GND	DGND	-	Ground



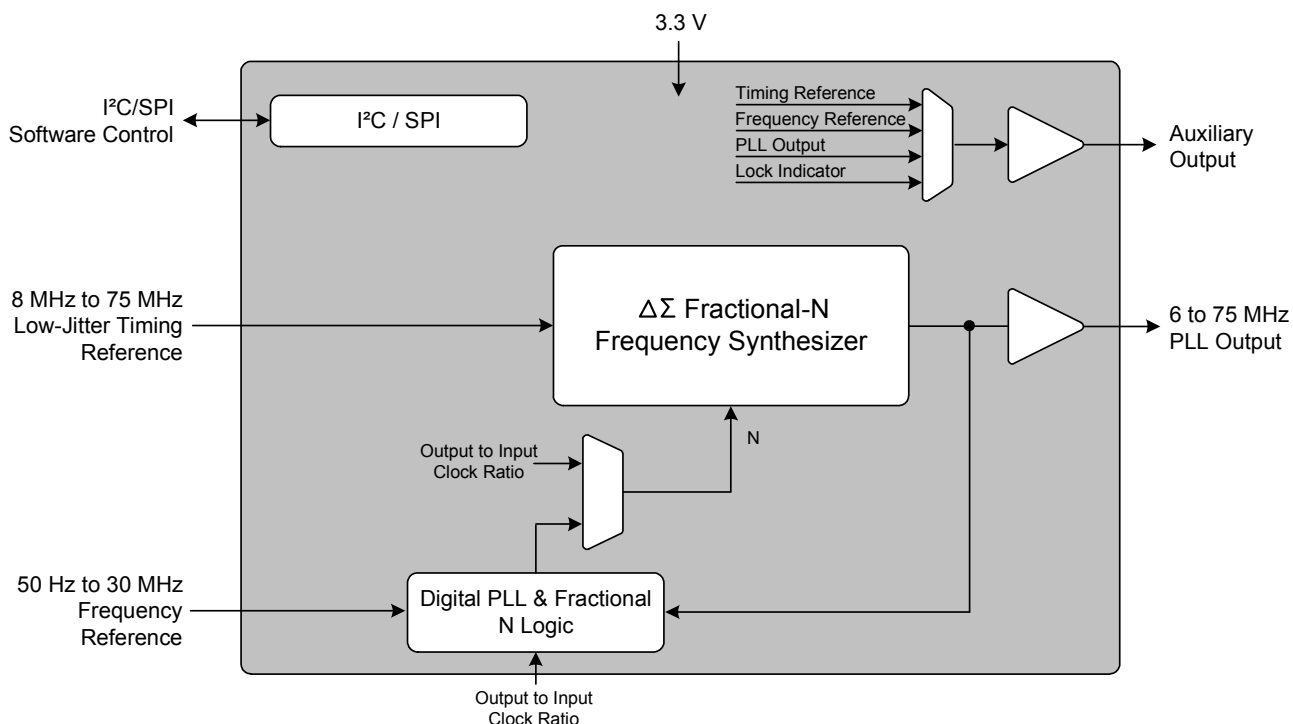
Pin NO.	New	Pin/Pad Name	Connect Device	Direction	Detail
47	IO	.DAC_RST_OUT	DSD1792A	OUT	DAC RST
48	IO	.CS2000MCK_OUT	CS2000	OUT	CS2000MCK_OUT
49	IO	.CS2000MCK_IN	CS2000	IN	CS2000MCK_IN
50	IO	.PLD_RSV3	M3062LFGPGP	OUT	PLD_RSV3
51	IO	.PLD_DAC_SEL	AUDIO UNIT SELECTOR	OUT	PLD_DAC_SEL
52	IO	.DAC_CK_IN	M3062LFGPGP	IN	DAC_CK_IN : for L/Rch DAC :to DSD1792A MC
53	IO	.DAC_CS_IN	M3062LFGPGP	IN	DAC_CS_IN : for L/Rch DAC:to DSD1792A MS
54	IO	.DAC_DATA_IN	M3062LFGPGP	IN	DAC_DATA_IN : for L/Rch DAC:to DSD1792A MDI
55	IO	.USBB_MODE	M3062LFGPGP	IN	USB_B_MODE
56	IO	.DIR1_MCK	PCM9211	IN	DIR_MCK
57	IO	.DIR1_BCK	PCM9211	IN	DIR_BCK
58	IO	.DIR1_LRCK	PCM9211	IN	DIR_LRCK
59	VCCIO2	33_VCCIO	DA3.3V	-	Power Supply
60	GNDIO	GND	DGND	-	Ground
61	IO	.DIR1_DATA	PCM9211	IN	DIR_DATA
62	IO/GCLK2	.ERROR	PCM9211	IN	DIR_ERROR
63	VCCINT	33_VCCIO	DA3.3V	-	Power Supply
64	IO/GCLK3	.USBB_DSD_PCM	"TMS320C6748BZWT3 /M3062LFGPGP"	IN	USBB_DSD_PCM
65	GNDINT	GND	DGND	-	Ground
66	IO	.USBB_44/48	"TMS320C6748BZWT3 /(M3062LFGPGP)"	IN	USBB Moni (44.1kHz:L/48kHz:H)
67	IO	.USBB_DSD_BCK	TMS320C6748BZWT3	IN	USBB_DSD_BCK
68	IO	.USBB_DSD_DATA_L	TMS320C6748BZWT3	IN	USBB_DSD_DATA_L
69	IO	.USBB_DSD_DATA_R	TMS320C6748BZWT3	IN	USBB_DSD_DATA_R
70	IO	.CD USBB DIR	M3062LFGPGP	IN	MODE (CD,USBB/DIR) Detect
71	IO	NC	CS2000	-	NC
72	IO	USBB_MUTE	TMS320C6748BZWT3	IN	USBB Mute Control
73	IO	NC	-	-	NC
74	IO	NC	-	-	NC
75	IO	NC	-	-	NC
76	IO	.INT_EXT	M3062LFGPGP	IN	INT/EXT selection port
77	IO	.D_MUTE	M3062LFGPGP	IN	Moni USBB_PCM→DSD MUTE timing
78	IO	.DAC_CONT_SEL	M3062LFGPGP	IN	DAC_CONT_SEL (SYSCON/DV3.2)
79	GNDIO	GND	DGND	-	Ground
80	VCCIO2	33_VCCIO	DA3.3V	-	Power Supply
81	IO	.DAC_RST_IN	M3062LFGPGP	IN	DAC_RST_IN : for L/Rch DAC:to DSD1792A RST
82	IO	.DSD_MUTE_F	M3062LFGPGP	IN	EN_VER(DSD_MUTE_F) : USBB_DSD→PCM MUTE timing
83	IO	.USBB_MCK_OUT	"TMS320C6748BZWT3 /PCM9211"	OUT	MCK for USB-DAC,DIR
84	IO	.M/SEL	N3305 7P FFC Connector	OUT	M/SEL for SYSCON Update
85	IO	.AUDIO_DSD/PCM	M3062LFGPGP	IN	Audio Gain (SACD : Hi/Others : Lo) Detect
86	IO	.CONT5.	M3062LFGPGP	IN	MCK (USB-A/Others) Detect
87	IO	CLK22.5792Mhz	AK8142	OUT	AK8142 22.5792MHz
88	IO	.SLAVE_MCK 33.8688M	AK8142	IN	AK8142 MCK 33.8688MHz
89	IO	.OCXO_IN_22.5792M	AK8142	OUT	AK8142 22.5792MHz
90	IO	AMUTE	AUDIO UNIT	IN	DV3.2 AMUTE (L : MUTE/H : MUTE Off)
91	IO	NC	-	-	NC
92	IO	NC	-	-	NC
93	GNDIO	GND	DGND	-	Ground
94	VCCIO2	33_VCCIO	DA3.3V	-	Power Supply
95	IO	NC	-	-	NC
96	IO	NC	-	-	NC
97	IO	NC	-	-	NC
98	IO	NC	-	-	NC
99	IO	NC	-	-	NC
100	IO	NC	-	-	NC

**CS2000-CP (DIGITAL : IC43)**

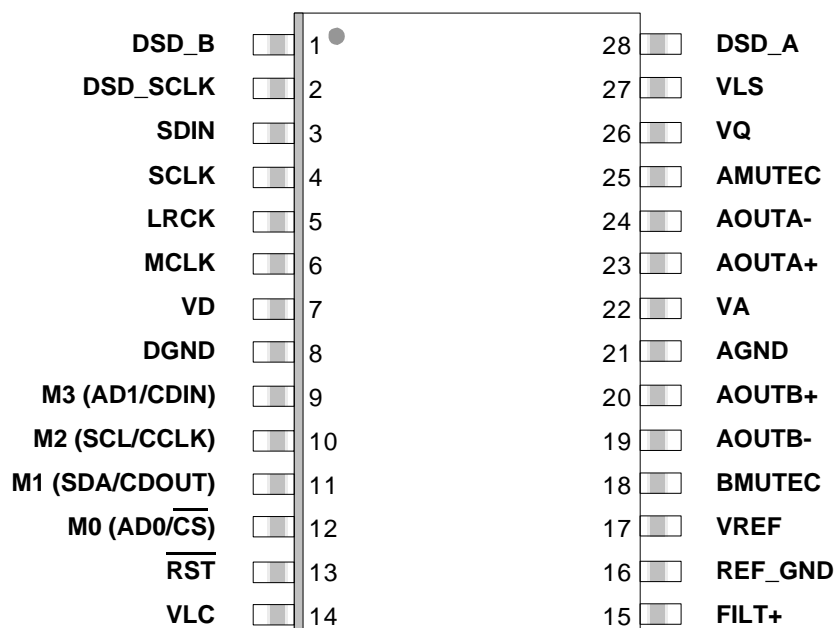


Pin Name	#	Pin Description
VD	1	<b>Digital Power (Input)</b> - Positive power supply for the digital and analog sections.
GND	2	<b>Ground (Input)</b> - Ground reference.
CLK_OUT	3	<b>PLL Clock Output (Output)</b> - PLL clock output
AUX_OUT	4	<b>Auxiliary Output (Output)</b> - This pin outputs a buffered version of one of the input or output clocks, or a status signal, depending on register configuration
CLK_IN	5	<b>Frequency Reference Clock Input (Input)</b> - Clock input for the Digital PLL frequency reference
XTO XTI/REF_CLK	6 7	<b>Crystal Connections (XTI/XTO) / Timing Reference Clock Input (REF_CLK) (Input/Output)</b> - XTI/XTO are I/O pins for an external crystal which may be used to generate the low-jitter PLL input clock REF_CLK is an input for an externally generated low-jitter reference clock.
AD0/CS	8	<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 in SPI Mode.
SCL/CCLK	9	<b>Control Port Clock (Input)</b> - SCL/CCLK is the serial clock for the serial control port in I <sup>2</sup> C and SPI mode.
SDA/CDIN	10	<b>Serial Control Data (Input/Output)</b> - SDA is the data I/O line in I <sup>2</sup> C Mode. CDIN is the input data line for the control port interface in SPI Mode.

**CS2000-CP Block Diagram**



## CS4398 (AUDIO : IC61)



## CS4398 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.
BMUTE C	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.
AMUTE C	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/CDOOUT	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. CDOOUT is the output data line for the Control Port interface in SPI mode.
AD0/ $\overline{\text{CS}}$	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; $\overline{\text{CS}}$ is the chip select signal for SPI format.

## ADuM1286(AUDIO : IC65)

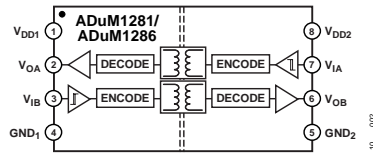


Figure 5. ADuM1281/ADuM1286 Pin Configuration

Table 21. ADuM1281/ADuM1286 Pin Function Descriptions

Pin No.	Mnemonic	Description
1	$V_{DD1}$	2.7 V to 5.5 V Supply Voltage for Isolator Side 1.
2	$V_{OA}$	Logic Output A.
3	$V_{IB}$	Logic Input B.
4	$GND_1$	Ground 1. Ground reference for Isolator Side 1.
5	$GND_2$	Ground 2. Ground reference for Isolator Side 2.
6	$V_{OB}$	Logic Output B.
7	$V_{IA}$	Logic Input A.
8	$V_{DD2}$	2.7 V to 5.5 V Supply Voltage for Isolator Side 2.

## ADuM1280 (AUDIO : IC68, IC69, IC70) / ADuM1285 (AUDIO : IC66, IC67)

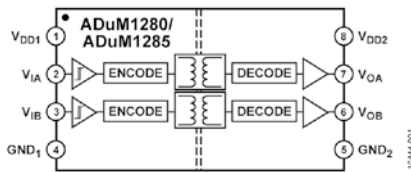


Figure 4. ADuM1280/ADuM1285 Pin Configuration

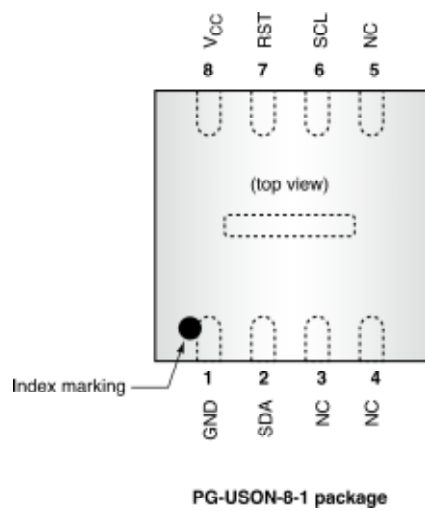
Table 20. ADuM1280/ADuM1285 Pin Function Descriptions

Pin No.	Mnemonic	Description
1	$V_{DD1}$	2.7 V to 5.5 V Supply Voltage for Isolator Side 1.
2	$V_{IA}$	Logic Input A.
3	$V_{IB}$	Logic Input B.
4	$GND_1$	Ground 1. Ground reference for Isolator Side 1.
5	$GND_2$	Ground 2. Ground reference for Isolator Side 2.
6	$V_{OB}$	Logic Output B.
7	$V_{OA}$	Logic Output A.
8	$V_{DD2}$	2.7 V to 5.5 V Supply Voltage for Isolator Side 2.

MFI337S3959 (DIGITAL : IC25)

Signal name	Pin	I/O	Description
GND	1		Supply voltage, negative terminal
SDA	2	I/O	I <sup>2</sup> C data
NC	3-5		Must not be connected
SCL	6	I	I <sup>2</sup> C clock
RST	7	I	At reset: selects I <sup>2</sup> C slave address. During operation: CP warm reset.
V <sub>CC</sub>	8		Supply voltage, positive terminal

Figure 1-1 CP chip pinouts, top view

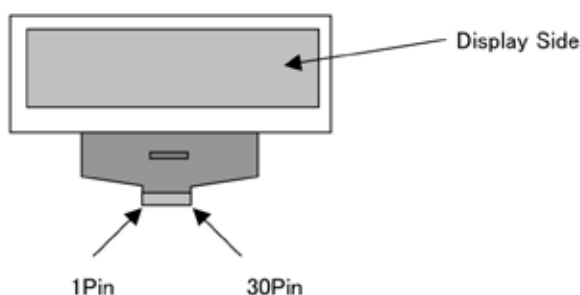


The thermal pad on the bottom of the CP may be left unconnected or optionally connected to GND.

## 2. DISPLAY

### S020-MXS4035A-3

端子番号 Pin No.	端子名 Pin Name	入出力 IO	機能 Functions
1	VSS	P	グラウンド GND
2	VCC	P	ドライバー系陽極電源 Power supply for Anode Driver
3	VCOMH	O	ドライバー系陰極電源 Power supply for Cathode Driver
4	VLSS	P	アナロググラウンド Analog system ground
5	CLS	I	VDDIO に接続 Connected to VDDIO
6	D7	I	データバス Data Bus
7	D6	I	データバス Data Bus
8	D5	I	データバス Data Bus
9	D4	I	データバス Data Bus
10	D3	I	データバス Data Bus
11	D2	I	データバス Data Bus
12	D1 (SDIN)	I	データバス、またはシリアルデータ入力 Data Bus or Serial Date Input
13	D0 (SCLK)	I	データバス、またはシリアルクロック入力 Data Bus or Serial Clock Input
14	E, RD#	I	読み出し (シリアルインターフェース時、内部で "L" 固定になる) Read (This pin stays "L"(low) in Serial Interface Mode)
15	R/W#, WR#	I	書き込み (シリアルインターフェース時、内部で "L" 固定になる) Write (This pin stays "L"(low) in Serial Interface Mode)
16	BS0	I	インターフェース選択子 Select MCU bus interface setting
17	BS1	I	<ul style="list-style-type: none"> <li>•BS0=0, BS1=0 : 4 line SPI</li> <li>•BS0=0, BS1=1 : 8bit 8080 Parallel</li> <li>•BS0=1, BS1=0 : 3 line SPI</li> <li>•BS0=1, BS1=1 : 8bit 6800 Parallel</li> </ul>
18	D/C#	I	データ/コマンド切替制御 "H":データ, "L":コマンド Data/Command Control. "H":Data, "L":Command
19	CS#	I	チップセレクト "L" でI/F通信可能 Chip Select, Active "L"
20	RES#	I	リセット "L" でリセット Reset, Active "L"
21	VSS	P	グラウンド GND
22	CL	I	VSSIに接続してください。 Connected to VSS
23	IREF	O	陽極出力基準電流設定端子 Reference current setting
24	NC	-	
25	VDDIO	P	インターフェイス系電源 Power supply for Interface logic level
26	VDD	O	内部ロジック系電源 Power supply for Core logic operation
27	VCI	P	外部ロジック系電源 Low voltage power supply
28	VSL	P	陽極基準電位 Segment Reference voltage
29	VLSS	P	アナロググラウンド Analog system ground
30	VCC	P	ドライバー系陽極電源 Power supply for Anode Driver



## POWER PCB ASS'Y

※Parts indicated by "nsp" on this table cannot be supplied.

※The parts listed t 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>						
D901-908	00D9430209400	DIODE ,RECT				8
D909	nsp	HEAT SINK ASS'Y(HVDGBJ606+CMY1A138-V2) HVDGBJ606 + CMY1A138-V2				1
L	943203003170S	DIODE , BR DGE				1
D910-913	00D9430209400	DIODE ,RECT 1N4003				4
D914	90M-HD302380R	DIODE ZENER 1/2W 3.6V ZJ3 6B/HOM (H.K) COMPANY LTD				1
D915 916	00D9430209400	DIODE ,RECT 1N4003				2
D917,918	201310001503S	DIODE ,ULTRA-HIGH SPEED KDS160-RTK/P, KEC				2
D919,920	00D9430209400	DIODE ,RECT 1N4003				2
D922	00D9430209400	DIODE ,RECT 1N4003				1
D924	00D9430209400	DIODE ,RECT 1N4003				1
D926	00D9430209400	DIODE ,RECT 1N4003				1
D928	201310001503S	DIODE ULTRA-HIGH SPEED KDS160-RTK/P KEC				1
D929,930	nsp	HEAT SINK ASS'Y(HVDGBJ606+CMY1A138-V2) HVDGBJ606 + CMY1A138-V2				2
L	943203003170S	DIODE , BR DGE				1
D931	nsp	DIODE , ZENER ,1/2W, 10V ZJ10B/HOM (H.K) COMPANY LTD				1
D932	00MHD20055100	EOL item DIODE , SCHOTTKY (100V/1A)				1
D933	201310001503S	DIODE ULTRA-HIGH SPEED KDS160-RTK/P KEC				1
D934	00D9430209400	DIODE ,RECT 1N4003				1
D935	201310001503S	DIODE ,ULTRA-HIGH SPEED KDS160-RTK/P, KEC				1
D938	00D9430209400	DIODE ,RECT 1N4003				1
D952,953	00D9430209400	DIODE ,RECT 1N4003				2
D954-956	00D9630328409	DIODE ,RECT F ER, AXIAL				3
D957	00D9430040709	DIODE SCHOTTKY UF4007				1
D958	00D9430040806	DIODE SCHOTTKY UF4004 PANJIT				1
D959	943202001360S	DIODE ZENER 1/2W 20V ZJ20B/HOM (H.K) COMPANY LTD				1
D960	90M-HD201990R	EOL 31DQ06-FC5 N EC				1
D961	00D9630328409	DIODE , RECT F ER, AXIAL				1
D962	943202001360S	DIODE , ZENER ,1/2W, 20V ZJ20B/HOM (H.K) COMPANY LTD				1
D964	00D2760717903	DIODE CH P SWITCH NG				1
IC901	943219500150M	I.C REGULATOR 5P N.5V 1.5A BA00JC5WT ROHM				1
IC902	nsp	HEAT SINK ASS'Y(CV BA00JC5WT+CMY7A222-V1) CVIBA00JC5WT+CMY7A222-V1				1
L	943219500150M	I.C REGULATOR 5P N.5V, 1.5A BA00JC5WT ROHM				1
IC903	nsp	HEAT SINK ASS'Y(CV BA00JC5WT+CMY4A222-V2) CVIBA00JC5WT+CMY4A222-V2				1
L	943219500150M	I.C REGULATOR 5P N.5V, 1.5A BA00JC5WT ROHM				1
IC904	00D2631288901	I.C REGULATOR (5V)				1
IC907	nsp	HEAT SINK ASS'Y(CV KIA278R33PI+CMY4A222-V2) CVIKIA278R33PI+CMY4A222-V2				1
L	90M-HC300740R	REGULATOR(3.3V OUTPUT LOWDROP) KIA278R33PI				1
IC908	231810090509S	I.C. REGULATOR (1.8V) PQ018ENA1ZPH				1
IC909	231810071508S	I.C.REGULATOR				1
IC910	90M-HC300740R	REGULATOR(3.3V OUTPUT LOWDROP) KIA278R33PI				1
IC912	943229500020S	MOSFET,TPC6111(P-CH,U-MOSV) TPC6111 TOSHIBA				1
IC92 93	943239100820D	I.C DC DC CONVERTER(3A 700KHZ SOP-8P)				2
IC94	90M-HC300770R	I.C REGULATOR KIA431B				1
IC95	943235003220S	I.C. CoolSET ICE3B0365J ICE3B0365J DIP-8P NF NEON				1
IC96,97	00D9430038601	I.C. , PHOTO COUPLER				2
Q901	00D2690192902	T R ,CHIP ,SOT-23 KRC102S				1
Q902	00MHX300012AY	T R , 2SC4081, NPN, UMT3, ROHM 2SC4081 ROHM				1
Q903 904	00D2690192902	T R ,CHIP ,SOT-23 KRC102S				2
Q951	21405002340AS	T R ,KTD1863 (NPN TO-92L GENERAL KEC)				1
Q952	00D9430154404	T R ,KTC3198Y				1
Q953	00D2690192902	T R ,CHIP ,SOT-23 KRC102S				1
<b>RESISTOR GROUP</b>						
R901	nsp	RES. CHIP(1608/5%/33ohm)				1
R902	nsp	RES. CHIP(3216/5%/0ohm)				1
R903	nsp	RES. CHIP(1608/5%/100Kohm)				1
R904	nsp	RES. CHIP(1608/5%/120Kohm)				1
R905	nsp	RES. CHIP(1608/5%/68Kohm)				1
R906	nsp	RES. CHIP(1608/5%/4.7Kohm)				1
R907-909	nsp	RES. CHIP(1608/5%/10Kohm)				3
R910	nsp	RES. CHIP(1608/5%/33Kohm)				1
R911	nsp	RES. CHIP(1608/5%/82Kohm)				1
R912	nsp	RES. CHIP(1608/5%/150Kohm)				1
R913	nsp	RES. CHIP(1608/5%/4.7Kohm)				1
R914	nsp	VARISTOR SVC431D-14ABW7				1
R917	nsp	RES. CH P(1608/5%/47Kohm)				1
R918	nsp	RES. CH P(1608/5%/470Kohm)				1
R919	nsp	RES. CH P(1608/5%/220Kohm)				1
R920	nsp	RES. CH P(1608/5%/10Kohm)				1
R923-925	nsp	RES. CH P(1608/5%/10Kohm)				3
R926	nsp	RES. CH P(1608/5%/33ohm)				1
R927	nsp	RES. CH P(1608/5%/10Kohm)				1
R928-936	nsp	RES. CH P(1608/5%/0ohm)				9
R937 938	nsp	RES. CH P(1608/5%/33ohm)				2
R940	nsp	RES. CH P(1608/5%/0ohm)				1
R941 942	nsp	RES. CH P(1608/5%/10Kohm)				2
R943	nsp	RES. CH P(1608/5%/4.7Kohm)				1
R952	nsp	RES. CH P(2012/5%/10ohm)				1
R954	00D2470013926	RES. CH P(2012/5%/270Kohm) 270K, 5%, 2012				1
R955	nsp	RES. CH P(2012/5%/220ohm)				1
R957 958	nsp	RES. CHIP(1608/5%/10Kohm)				2
R959	nsp	RES. CHIP(1608/1%/8.2Kohm)				1
R960	nsp	RES. CHIP(1608/5%/100Kohm)				1
R961	nsp	RES. CHIP(1608/1%/10Kohm)				1
R962	nsp	RES. CHIP(2012/5%/2.2ohm)				1
R963	nsp	RES. CHIP(2012/5%/0ohm)				1
R964	nsp	RES. CHIP(1608/5%/0ohm)				1
R965	nsp	RES. CHIP(1608/5%/100Kohm)				1
R966	nsp	RES. CHIP(1608/1%/3Kohm)				1
R967,968	nsp	RES. CHIP(2012/5%/33ohm)				2
R969	nsp	RES. CHIP(1608/5%/0ohm)				1
R970	nsp	RES. CH P(1608/5%/10Kohm)				1
R971	nsp	RES. CH P(1608/5%/4.7Kohm)				1
R972	nsp	RES. CH P(1608/5%/0ohm)				1
R973	nsp	RES. CH P(1608/5%/1Kohm)				1
R974	nsp	RES. CH P(2012/1%/6.8Kohm)				1
R975	943124003440S	RES. CH P(2012/1%/4.7Kohm)				1
R976	nsp	RES. CH P(2012/5%/100Kohm)				1
R977 978	00MN 05222110	RES. CHIP(2012/5%/2.2Kohm)				2

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
R980	nsp	RES CHIP(1608/1%/4.3Kohm)		CRJ10DF4301T	1	
R982	nsp	RES CHIP(2012/5%/220ohm)		CRJ18AJ221T	1	
R983,984	nsp	RES CHIP(2012/5%/33ohm)		CRJ18AJ330T	2	
R985	nsp	RES CHIP(1608/1%/30Kohm)		CRJ10DF3002T	1	
R986	nsp	RES CHIP(1608/1%/7.5Kohm)		CRJ10DF7501T	1	
R990-993	nsp	RES CHIP(3216/5%/1.2Mohm) 3216 SIZE		CRJ14CJ125T	4	
R994	00MN 05154110	RES CHIP(2012/5%/150Kohm) 150K 5% 2012		CRJ18AJ154T	1	
R995,996	nsp	RES CHIP(3216/5%/1.2Mohm) 3216 SIZE		CRJ14CJ125T	2	
R997-999	00MN 05154110	RES CHIP(2012/5%/150Kohm) 150K 5% 2012		CRJ18AJ154T	3	
RT01	00MYJ04002640	RECEPTACLE , AC(15A/250V,R-301,B21) R-301(B21)		CJJA006Z	1	
RY91	00D9430194900	RELAY,G5PA-1,DC6V,1C1P G5PA-1,DC 6V/OMRON		CSL1E002ZE	1	
<b>CAPACITORS GROUP</b>						
C901	00MOA22803520	CAP ELECT(35V/2200uF)		CCEA1VH222E	1	
C902 903	nsp	CAP CHIP(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	2	
C904	nsp	CAP CHIP(1608, 50V/0.022uF, X7R) SAMSUNG CL10B223KB8NNNC		CCUS1H223KCS	1	
C905	943133502120S	CAP ELECT(16V/6800uF), 105°C CCEA**H***ES		CCEA1CH682ES	1*	
C906	nsp	CAP CHIP(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C907	943133502130S	CAP ELECT(16V/220uF) 105°C		CCEA1CH221TS	1*	
C908	nsp	CAP ELECT(50V/2.2uF) 2 2UF 50V		CCEA1HH2R2T	1	
C909 910	nsp	CAP CHIP(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	2	
C911	943133502130S	CAP ELECT(16V/220uF),105°C		CCEA1CH221TS	1*	
C912	nsp	CAP ELECT(16V/2200uF) 2200UF/16V		CCEA1CH222E	1	
C913,914	943133502120S	CAP ELECT(16V/6800uF), 105°C CCEA**H***ES		CCEA1CH682ES	2*	
C915,916	nsp	CAP CHIP(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	2	
C917	00D2544577958	CAP ELECT(16V/220uF) ELNA/RA3 RA3-16V221MF3#8P-T2		CCEA1CRA3221T	1	
C918	00MOA107025R1	CAP ELECT(ROA 25V/100UF 10X16) ROA-25V101MH4#-T2		CCEA1EROA101T	1	
C919	nsp	CAP ELECT(50V/2.2uF) 2 2UF 50V		CCEA1HH2R2T	1	
C920	00MOA22701620	CAP ELECT(16V/220uF),ELNA/ROS ELNA/ROS, 16V/220UF		CCEA1CR221T	1	
C925	943133502120S	CAP ELECT(16V/6800uF), 105°C CCEA**H***ES		CCEA1CH682ES	1*	
C926	nsp	CAP CHIP(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C928	943133502130S	CAP ELECT(16V/220uF) 105°C		CCEA1CH221TS	1*	
C929 930	nsp	CAP CH P(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	2	
C931	00D2544577958	CAP ELECT(16V/220uF) ELNA/RA3 RA3-16V221MF3#8P-T2		CCEA1CRA3221T	1	
C932,933	nsp	CAP CH P(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	2	
C934	943133502130S	CAP ELECT(16V/220uF),105°C		CCEA1CH221TS	1*	
C935-938	nsp	CAP CH P(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	4	
C941	nsp	CAP CH P(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C942	00D2544577958	CAP ELECT(16V/220uF) ELNA/RA3 RA3-16V221MF3#8P-T2		CCEA1CRA3221T	1	
C951	00MOA47701020	CAP ELECT(10V/470uF) 105°C 10V/470UF/105°C		CCEA1AH471TS	1	
C952	00D9430024408	CAP CERAMIC(X1/Y2/SC) 0 0047UF/2.5KV		KCKDKS472ME	1	
C953	nsp	CAP CHIP(2012, 50V/1000pF, X7R) SAMSUNG CL21B102KB8NNNC		CCUC1H102KCS	1	
C954	943133502140S	CAP ELECT(400V/47uF) KOSH N KRH SER ES (SIZE 16*25)		CCET400VKRH470K	1*	
C955	nsp	CAP CHIP(2012 50V/1uF X7R X7S) SAMSUNG CL21B105KBFNNNC		CCUC1H105KCS	1	
C956	nsp	CAP CHIP(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C957	nsp	CAP ELECT(50V/10uF)		CCEA1HH100T	1	
C958	943133502150S	CAP ELECT(10V/1000uF),105°C KRM-10V102MD(10*12.5L)		CCEA1AH102ES	1*	
C959	nsp	CAP CHIP(2012, 50V/0.47uF, X7R) SAMSUNG CL21B474KBFNNNE		CCUC1H474KCS	1	
C960	00MOA22605020	CAP ELECT(25V/22uF) 22UF 25V		CCEA1EH220T	1	
C962	nsp	CAP CERAMIC(1kV/2200pF/K) EKR3A222K05FK5		CCKT3A222KBL	1	
C978-981	nsp	CAP CHIP(2012 25V/22uF X7R) SAMSUNG CL21B226KAFNNNE		CCUC1E226KCS	4	
C982	nsp	CAP CHIP(1608 50V/1500pF X7R) SAMSUNG CL10B152KB8NNNC		CCUS1H152KCS	1	
C983	nsp	CAP CH P(1608, 50V/1000pF, X7R) SAMSUNG CL10B102KB8NNNC		CCUS1H102KCS	1	
C984,985	nsp	CAP CH P(1608, 50V/0.01uF, X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	2	
C986,987	nsp	CAP CH P(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	2	
C988,989	nsp	CAP CH P(1608, 50V/0.01uF, X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	2	
C990-993	nsp	CAP CH P(2012 10V/2.2uF X5R) SAMSUNG CL21A225KPFNNNC		CCUC1A225KCS	4	
C994 995	nsp	CAP CH P(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	2	
C996-999	nsp	CAP CH P(2012 25V/22uF X7R) SAMSUNG CL21B226KAFNNNE		CCUC1E226KCS	4	
<b>OTHER PARTS GROUP</b>						
CN19	nsp	LOCK NG TYPE , STRAIGHT WAFER , 2mm		CJP05GI236ZW	1	
CN85	nsp	LOCK NG TYPE , STRAIGHT WAFER , 2MM		CJP07GI236ZW	1	
CN91	nsp	WAFER 2P 3.96mm		CJP02KA060ZY	1	
CN92	nsp	WAFER 2P 7.92mm YW396-02AB/YEONHO		CJP02GA89ZY	1	
CN93	nsp	LOCK NG TYPE STRAIGHT WAFER (2mm)		CJP11GI236ZW	1	
CN95	nsp	LOCK NG TYPE , STRAIGHT WAFER , 2.5MM		CJP05GI237ZW	1	
CN96	nsp	LOCK NG TYPE , STRAIGHT WAFER , 2.5MM A2512WV0-4P		CJP04GI237ZW	1	
CX90	963134011730S	CAP CERAMIC(X1/Y1 470P,AC250V) DE1B3KX471KB4BL01 MURATA		CCKDKX471KBM	1	
CX91 92	943139500020S	CAP POLYPROPYLENE F L M		HCOF2E104KZE	2	
CX93	963134011730S	CAP CERAMIC(X1/Y1 470P AC250V) DE1B3KX471KB4BL01 MURATA		CCKDKX471KBM	1	
CY94 95	963132011940S	CAP CERAMIC(X1/Y2 0.01uF AC250V) DE2F3KY103MB3BM02 MURATA		CCKDKY103MFM	2	
CY96	963132011930S	CAP CERAMIC(X1/Y1 2200P,AC250V) DE1E3KX222MB4BL01 MURATA		CCKDKX222MEM	1	
BK19	nsp	PLATE , EARTH(TRONIC ELECTRONICS)		CJT1A026	1	
BK91	nsp	BRACKET , PCB		CMD1A569-V1	1	
BN14	nsp	W RE ASSY (11P N , 50mm, LOCK NG)		CWB1D01105058	1	
BN93	nsp	W RE ASSY (LOCKING TYPE 11P 180MM 2.0MM)		CWB1D01118047	1	
F901	nsp	HOLDER FUSE		KJCFCS5	2	
F901	90M-FS001490R	FUSE(218Series, 250V/4A) 0218004.MXP		KBA2C4000TLEY	1	
F902	nsp	HOLDER , FUSE		KJCFCS5	2	
F902	943652001740S	FUSE(218Series, 250V/1A)		KBA2C1000TLEY	1	
F904	nsp	HOLDER , FUSE		KJCFCS5	2	
F904	0520100170060	FUSE(218Series 250V/5A) 5A/250V(EUR)		KBA2C5000TLEY	1	
F905	nsp	HOLDER FUSE		KJCFCS5	2	
F905	943652001740S	FUSE(218Series 250V/1A)		KBA2C1000TLEY	1	
F951	nsp	HOLDER , FUSE		KJCFCS5	2	
F951	943652500520M	FUSE(215Series, 250V/2A)		KBA2C2000TLEY	1*	
L901,902	nsp	FERRITE CH P BEAD(2012/220R) BLM21PG221SN1/MURATAMURATA		CLZBLM21PG221SN1	2	
L903-911	nsp	FERRITE CH P BEAD(2012/120R) BLM21AG121SN1/MURATAMURATA		CLZBLM21AG121SN1	9	
L912	nsp	FERRITE CH P BEAD(2012/220R) BLM21PG221SN1/MURATAMURATA		CLZBLM21PG221SN1	1	
L913-919	nsp	BEAD EMI SUPPRESSION F LTER (1uF/500Mohm) NFM21PC105B1C3D		CLZNFM21PC105B1C3D	7	
L931,932	nsp	COL_SMD POWER(3.3uH/3.2A) SWPA4030S3R3MT_MTEK SUNLORD		CLQ20E3R3NRZ	2	
L934,935	nsp	FERRITE ,CH P BEAD(60ohm, 2012) HCB2012KF-600T40 CO LMASTER		CLZ9R001Z	2	
L937	nsp	FERRITE ,CH P BEAD(60ohm, 2012) HCB2012KF-600T40 CO LMASTER		CLZ9R001Z	1	
L939	nsp	FERRITE CH P BEAD(60ohm 2012) HCB2012KF-600T40 CO LMASTER		CLZ9R001Z	1	
L955	943111003310S	COL CHOKE(20uH)		CLZ92074Z	1	
LF91	943149003340S	LINE F LTER(10MH)		CLZ9Z086Z	1	
TF91	943102011250S	TRANS , SWITCHING (EE1625, M-CR603)		CLT9Z064ZE	1	
TF91	nsp	2P WIRE ASSY(100MM)		CWZPM5003TW91	1	
WF91	nsp	WAFER, FFC(21P-1 25mm, STRAIGHT) 12511HS-21/YEONHO		CJP21GA115ZY	1	
★	nsp	HEAT SINK		CMY2A138-V2	1	
★	nsp	SCREW		CTB3+8JR	1	
★	nsp	HEAT SINK		CMY2A138-V2	1	
★	nsp	SCREW		CTB3+8JR	1	
★	nsp	HEAT SINK		CMY2A138-V2	1	
★	nsp	SCREW		CTB3+8JR	1	
★	nsp	HEAT SINK		CMY2A222-V1	1	
★	nsp	SCREW		CTB3+8JR	1	



REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
★	nsp	HEAT SINK		1		
★	nsp	SCREW		1		
★	nsp	HEAT SINK		1		
★	nsp	SCREW		1		

FRONT PCB ASS'Y

※Parts indicated by "nsp" on this table cannot be supplied.  
 ※The parts listed t 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>						
D801	963262010460S	LED (Infrared light emitting diode)		1		
D802	00D9430106203	LED , 2COLOR(RED/GREEN) SPR-39MVW3		1		
D803	00D2760717903	DIODE , CH P , SWITCH NG		1		
D804 805	90M-HI101040R	LED RED SLR342VCTB7T089 ROHM		2		
D806 807	00D2760717903	DIODE CH P SWITCH NG		2		
D808	943202500450D	DIODE ZENER(CH P 27V) ROHM		1		
D809	943209006830S	DIODE , ESD PROTECTION USC PG05GBUSC-RTKP , KEC		1		
D812,813	00D2760717903	DIODE , CH P , SWITCH NG		2		
IC81	943231101580S	IC, REGULATOR(ADJ,CONT,1A,TO252-DL3)		1		
Q801 802	00D2690184907	TR CH P SOT-23 KRA102S		2		
Q803 804	00D2690192902	TR CH P SOT-23 KRC102S		2		
Q805	00D2690184907	TR CH P SOT-23 KRA102S		1		
Q806,807	00D2690192902	TR , CH P , SOT-23 KRC102S		2		
<b>RESISTOR GROUP</b>						
R801-822	nsp	RES, CHIP(1608/5%/0ohm)		22		
R823	nsp	RES, CHIP(1608/5%/150ohm)		1		
R824 825	nsp	RES, CHIP(1608/5%/0ohm)		2		
R826-829	nsp	RES, CHIP(1608/5%/100ohm)		4		
R830	nsp	RES, CHIP(1608/5%/470ohm)		1		
R831	nsp	RES, CHIP(1608/5%/180ohm)		1		
R832	00MNN05560610	RES, CHIP(1608/5%/56ohm)		1		
R833,834	nsp	RES, CHIP(1608/5%/0ohm)		2		
R835	nsp	RES, CHIP(1608/5%/10Kohm)		1		
R836 837	nsp	RES, CHIP(1608/5%/0ohm)		2		
R838,839	nsp	RES, CHIP(1608/5%/240ohm)		2		
R840	nsp	RES, CH P(1608/5%/150ohm)		1		
R841	nsp	RES, CH P(1608/5%/180ohm)		1		
R842	nsp	RES, CH P(1608/5%/270ohm)		1		
R843	nsp	RES, CH P(1608/5%/390ohm)		1		
R844	nsp	RES, CH P(1608/5%/150ohm)		1		
R845	nsp	RES, CH P(1608/5%/180ohm)		1		
R846	nsp	RES, CH P(1608/5%/270ohm)		1		
R847	nsp	RES, CH P(1608/5%/390ohm)		1		
R848,849	nsp	RES, CH P(1608/5%/1Kohm)		2		
R850	nsp	RES, CH P(1608/5%/15Kohm)		1		
R851	nsp	RES, CH P(1608/5%/82Kohm)		1		
R852 853	nsp	RES, CH P(1608/5%/1Kohm)		2		
R854,855	nsp	RES, CH P(1608/5%/0ohm)		2		
R856	nsp	RES, CH P(1608/5%/1Mohm)		1		
R857-861	nsp	RES, CH P(1608/5%/0ohm)		5		
R862	nsp	RES, CH P(1608/5%/10Kohm)		1		
R863	nsp	RES, CHIP(1608/5%/1Kohm)		1		
R864	nsp	RES, CHIP(1608/5%/180ohm)		1		
R865	nsp	RES, CHIP(1608/5%/390ohm)		1		
R866,867	nsp	RES, CHIP(1608/5%/0ohm)		2		
R868	nsp	RES, CHIP(1608/5%/22Kohm)		1		
R870	nsp	RES, CHIP(1608/5%/0ohm)		1		
R871	nsp	RES, CHIP(1608/5%/270ohm)		1		
R872	nsp	RES, CHIP(1608/5%/0ohm)		1		
R873	nsp	RES, CHIP(1608/5%/470ohm)		1		
R874	nsp	RES, CHIP(1608/5%/47Kohm)		1		
RC81	262010007707S	SENSOR, REMOTE(367KHz) HM336R GOOD TAKE		1		
<b>CAPACITORS GROUP</b>						
C801	nsp	CAP CHIP(1608 50V/100pF C0G) SAMSUNG CL10C101JB8NNNC		1		
C802 803	nsp	CAP CHIP(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		2		
C804	nsp	CAP ELECT(16V/47uF)-S		1		
C805,806	nsp	CAP, CHIP(1608, 50V/1000pF, X7R) SAMSUNG CL10B102KB8NNNC		2		
C807-812	nsp	CAP, CHIP(1608, 50V/01uF, X7R) SAMSUNG CL10B104KB8NNNC		6		
C813	943134002070S	CAP ELECT(50V/22uF)-S		1		
C814	nsp	CAP CHIP(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		1		
C815	nsp	CAP ELECT(25V/47uF)-S 47UF 25V		1		
C816	nsp	CAP CHIP(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		1		
C817	nsp	CAP, CHIP(1608, 25V/1uF, MURATA GRM18) MURATA		1		
C818	nsp	CAP, CHIP(1608, 10V/1uF, X7R, X7S) SAMSUNG CL10B105KP8NNNC		1		
C819	nsp	CAP, ELECT(50V/1uF)-S		1		
C820-822	nsp	CAP, CH P(1608, 50V/47pF, C0G) SAMSUNG CL10C470JB8NNNC		3		
C823	nsp	CAP, CH P(1608 50V/1000pF X7R) SAMSUNG CL10B102KB8NNNC		1		
C824	nsp	CAP, CH P(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		1		
C825	nsp	CAP, CH P(1608, 50V/1000pF, X7R) SAMSUNG CL10B102KB8NNNC		1		
C826	nsp	CAP, ELECT(16V/100uF)-S		1		
C827	nsp	CAP, CH P(1608, 50V/01uF, X7R) SAMSUNG CL10B104KB8NNNC		1		
C828,829	nsp	CAP, CH P(1608, 50V/001uF, X7R) SAMSUNG CL10B103KB8NNNC		2		
C830 831	nsp	CAP, CH P(2012 25V/47uF) MURATA		2		
C832	nsp	CAP, CH P(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		1		
C833	nsp	CAP, CH P(1608 50V/001uF X7R) SAMSUNG CL10B103KB8NNNC		1		
C834	nsp	CAP, ELECT(35V/10uF)-S 10UF 35V		1		
C835	nsp	CAP, CH P(1608, 50V/01uF, X7R) SAMSUNG CL10B104KB8NNNC		1		
C836	nsp	CAP, CH P(1608, 50V/001uF, X7R) SAMSUNG CL10B103KB8NNNC		1		
C837 838	nsp	CAP, CH P(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		2		
C840	nsp	CAP, CH P(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		1		
C841	nsp	CAP, CHIP(1608 50V/1000pF X7R) SAMSUNG CL10B102KB8NNNC		1		
C843	nsp	CAP, CHIP(1608, 50V/001uF, X7R) SAMSUNG CL10B103KB8NNNC		1		
C844	nsp	CAP, CHIP(2012, 25V/47uF) MURATA		1		
C845	nsp	CAP, ELECT(35V/10uF)-S 10UF 35V		1		
C846 847	nsp	CAP, CHIP(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		2		
C851-858	nsp	CAP, CHIP(1608 50V/001uF X7R) SAMSUNG CL10B103KB8NNNC		8		
<b>OTHER PARTS GROUP</b>						
CN82	nsp	LOCK NG TYPE , STRAIGHT WAFER , 2mm		1		
BN19	nsp	W RE ASSY		1		
BN81	nsp	W RE ASSY(9P, 2MM, 350MM, SH ELD)		1		
BN82	nsp	W RE ASSY		1		
BN83	nsp	W RE ASSY(5P 2MM 550MM SH ELD)		1		
BN85	nsp	W RE ASSY (LOCKING TYPE 7P 120MM 20MM)		1		
GND3,4	nsp	PLATE , EARTH(TRONIC ELECTRONICS)		2		
J801-822	nsp	W RE, COPPER(D06) CU978/SN21, D06 20050901		22		
J824-854	nsp	W RE, COPPER(D06) CU978/SN21, D06 20050901		31		
JK81	943643100150S	JACK , USB STRAIGHT(BLACK) U250FD004BY/YUQIU		1		
JW81	nsp	W RE ASSY(1P 80MM BLK #22)		1		

REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
JW82	nsp	W RE ASSY		CWE8102100RV	1		
L801-807	nsp	FERRITE CH P BEAD(2012/220R) BLM21PG221SN1/MURATAMURATA		CLZBLM21PG221SN1	7		
L809	nsp	FERRITE CH P BEAD(2012/220R) BLM21PG221SN1/MURATAMURATA		CLZBLM21PG221SN1	1		
L810,811	nsp	FERRITE CH P BEAD(2012/120R) BLM21AG121SN1/MURATAMURATA		CLZBLM21AG121SN1	2		
L812	nsp	FERRITE CH P BEAD(2012/220R) BLM21PG221SN1/MURATAMURATA		CLZBLM21PG221SN1	1		
PH81	90M-YT004500R	JACK PHONES(635mm SILVER) PJ-612A-51/YUQIU		CJJ2E026Z	1		
S801-812	00D9430004402	SW TACT SKHV10910G		CST1A012ZT	12		
VR81	00D9430196908	RES_VARIABLE		CVV2J02B103Z	1		
WF81	nsp	WAFER,FFC 125mm,ANGLE 125-2S-NPW		CJP27GB286ZN	1		
WF82	nsp	WAFER, FPC/FFC(30P, 1mm PITCH, ANGLE) FPC 10S-12X-NPW		CJP30GB305ZN	1		
★	963179100040S	OLED MODULE (MXS4035-A) S020-MXS4035-A-3		CFLMXS4035-A	1		
★	nsp	CUSHION R		CHG1A577	1		
★	nsp	PLATE EARTH		CMC1A348-V1	1		
★	nsp	COVER SH ELD OLED		CMC1A448	1		
★	nsp	HOLDER , OLED		CMH1A346	1		

## AUDIO PCB ASS'Y

※Parts indicated by "nsp" on this table cannot be supplied.

※The parts listed t 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>						
D601-608	00D2760717903	DIODE CHIP SWITCHING		HVD1SS355T	8	
D701-708	00D2760717903	DIODE ,CHIP , SWITCHING		HVD1SS355T	8	
D751-754	00MHD20055100	EOL item DIODE , SCHOTTKY (100V/1A)		CVD11EQS10GT	4	
D755-758	00D9430209400	DIODE ,RECT 1N4003		CVD1N4003SRT	4	
D759,760	00D2760717903	DIODE ,CHIP , SWITCHING		HVD1SS355T	2	
D761,762	943202500830S	DIODE ,ZENER(CH P.6 2V) 1712 TYPE		HVDUDZ56 2BSR	2*	
D763-765	00D2760717903	DIODE ,CHIP , SWITCHING		HVD1SS355T	3	
D766	90M-HD302270R	DIODE ,ZENER(CH P.5 6V) 1712 TYPE ROHM		HVDUDZ55 6BSR	1	
D767-770	00D9430209400	DIODE ,RECT 1N4003		CVD1N4003SRT	4	
IC61	90M-HC109330R	AUDIO DAC (TSSOP-28 PACKAGE) CS4398-CZ		HVICS4398CZ	1	
IC62	90M-HC109460R	I.C. ,OP AMP		HV NJM2114M	1	
IC63,64	943233102000S	I.C. ,2-CHANNEL MUX(VSSOP-16P) TC74LCX157FK TOSH BA		CVITC74LCX157FK	2*	
IC65	943236101830S	I.C. ,Digital Isolators.Low Out(8-SOIC) ADUM1286CRZ		CVIADUM1286CRZ	1*	
IC66,67	23981009450AS	I.C. ,Digital Isolators.Low Out(8-SOIC) ADUM1285CRZ		CVIADUM1285CRZ	2	
IC68-70	23981009350AS	I.C. ,Digital Isolators.High Out(8-SOIC) ADUM1280ARZ		CVIADUM1280ARZ	3	
IC71	00MHC3890599F	I.C.REGULATOR(+5V.T0220IS) KIA7805API (KEC)		HV KIA7805API	1	
IC72	943219500160M	I.C REGULATOR(1.0A 3.3V SOT-223) WITHNET TECH		CV LM1175S33	1	
Q601	943222500200D	F.E.T 2SK2145 (N-CH 2-3L1C LOW NOISE TOSH BA) TOSH BA		CVT2SK2145	1	
Q602	00MHX300012AY	T.R 2SC4116 NPN SC-70 TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	1	
Q603	212050002507S	T.R 2SA1586 PNP SC-70 TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q604	00MHX300012AY	T.R 2SC4116 NPN SC-70 TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	1	
Q605	212050002507S	T.R 2SA1586 PNP SC-70 TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q606	00MHX300012AY	T.R 2SC4116 NPN SC-70 TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	1	
Q607	212050002507S	T.R 2SA1586 PNP SC-70 TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q608	00MHX300012AY	T.R 2SC4116 NPN SC-70 TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	1	
Q609	212050002507S	T.R 2SA1586 PNP SC-70 TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q610,611	00MHX300012AY	T.R. 2SC4116, NPN, SC-70, TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	2	
Q612	212050002507S	T.R. 2SA1586, PNP, SC-70, TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q613,614	00D9430072502	T.R. ,CHIP ,SOT-23 KTC2875B		HVTKTC2875B	2	
Q621	212050002507S	T.R. 2SA1586, PNP, SC-70, TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q622,623	00MHX300012AY	T.R. 2SC4116, NPN, SC-70, TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	2	
Q624	212050002507S	T.R. 2SA1586, PNP, SC-70, TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q625	00MHX300012AY	T.R. 2SC4116, NPN, SC-70, TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	1	
Q626	212050002507S	T.R. 2SA1586, PNP, SC-70, TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q627,628	00D9430072502	T.R. ,CHIP ,SOT-23 KTC2875B		HVTKTC2875B	2	
Q631	00D2690184907	T.R. ,CHIP ,SOT-23 KRA102S		HVTKRA102S	1	
Q632-634	00MHX300012AY	T.R. 2SC4116, NPN, SC-70, TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	3	
Q635	212050002507S	T.R. 2SA1586, PNP, SC-70, TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q636	00D2690192902	T.R. ,CHIP ,SOT-23 KRC102S		HVTKRC102S	1	
Q651,652	00MHY208801AZ	F.E.T 2SK880, N-CH, SC-70, TOSH BA 2SK880 TOSHIBA		CVT2SK880GR	2	
Q653	nsp	HEATSINK ASS'Y(CVT2SD2081 + CMY2A223-V2) CVT2SD2081 + CMY2A223-V2		CVT2SD2081JA	1	
Q654	nsp	HEATSINK ASS'Y(CVT2SB1259 + CMY2A223-V2) CVT2SB1259 + CMY2A223-V2		CVT2SB1259JA	1	
Q655	00MHX300012AY	T.R 2SC4116 NPN SC-70 TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	1	
Q656	212050002507S	T.R 2SA1586 PNP SC-70 TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q701	943222500200D	F.E.T 2SK2145 (N-CH 2-3L1C LOW NOISE TOSH BA) TOSH BA		CVT2SK2145	1	
Q702	00MHX300012AY	T.R 2SC4116 NPN SC-70 TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	1	
Q703	212050002507S	T.R 2SA1586 PNP SC-70 TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q704	00MHX300012AY	T.R 2SC4116 NPN SC-70 TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	1	
Q705	212050002507S	T.R 2SA1586 PNP SC-70 TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q706	00MHX300012AY	T.R 2SC4116 NPN SC-70 TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	1	
Q707	212050002507S	T.R 2SA1586 PNP SC-70 TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q708	00MHX300012AY	T.R. 2SC4116, NPN, SC-70, TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	1	
Q709	212050002507S	T.R. 2SA1586, PNP, SC-70, TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q710,711	00MHX300012AY	T.R. 2SC4116, NPN, SC-70, TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	2	
Q712	212050002507S	T.R. 2SA1586, PNP, SC-70, TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q713,714	00D9430072502	T.R. ,CHIP ,SOT-23 KTC2875B		HVTKTC2875B	2	
Q721	212050002507S	T.R. 2SA1586, PNP, SC-70, TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q722,723	00MHX300012AY	T.R. 2SC4116, NPN, SC-70, TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	2	
Q724	212050002507S	T.R. 2SA1586, PNP, SC-70, TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q725	00MHX300012AY	T.R. 2SC4116, NPN, SC-70, TOSHIBA 2SC4116 TOSHIBA		CVT2SC4116	1	
Q726	212050002507S	T.R. 2SA1586, PNP, SC-70, TOSH BA 2SA1586 TOSH BA		CVT2SA1586	1	
Q727,728	00D9430072502	T.R. ,CHIP ,SOT-23 KTC2875B		HVTKTC2875B	2	
<b>RESISTOR GROUP</b>						
R601,602	nsp	RES. CARBON(1/5W,1Kohm,J)		CRD20TJ102T	2	
R603-606	nsp	RES. CARBON(1/5W,18Kohm,J)		CRD20TJ183T	4	
R607,608	nsp	RES. CARBON(1/5W,10Kohm,J)		CRD20TJ103T	2	
R609,610	nsp	RES. CARBON(1/5W 4.7Kohm J)		CRD20TJ472T	2	
R611,612	00MGD05121160	RES. CARBON(1/5W 120ohm J)		CRD20TJ121T	2	
R613	00MGD05680160	RES. CARBON(1/5W 68ohm J)		CRD20TJ680T	1	
R614	00MNN05561610	RES. CH P(1608/5%/560ohm)		CRJ10DJ561T	1	
R615	nsp	RES. CARBON(1/5W 33Kohm J)		CRD20TJ333T	1	
R616	00MNN05561610	RES. CH P(1608/5%/560ohm)		CRJ10DJ561T	1	
R617	nsp	RES. CARBON(1/5W 100ohm J)		CRD20TJ101T	1	
R618	nsp	RES. CARBON(1/5W 33Kohm J)		CRD20TJ333T	1	
R619,620	nsp	RES. CH P(1608/5%/470ohm)		CRJ10DJ471T	2	
R621,622	00MGD05181160	RES. CARBON(1/5W 180ohm J)		CRD20TJ181T	2	
R625	nsp	RES. CARBON(1/5W,22Kohm,J)		CRD20TJ223T	1	
R626,627	nsp	RES. CARBON(1/5W,56ohm,J)		CRD20TJ560T	2	
R628,629	nsp	RES. CH P(1608/5%/1Kohm)		CRJ10DJ102T	2	
R630	nsp	RES. CARBON(1/5W,10ohm,J)		CRD20TJ100T	1	
R631-634	00MGG0522016X	RES. ,CFPS1/4CMHTA220J KOA		CRG14SANJ220CLPS	4	
R637	nsp	RES. CH P(1608/5%/0ohm)		CRJ10DJ0R0T	1	
R638-640	nsp	RES. CH P(1608/5%/220ohm)		CRJ10DJ221T	3	
R641	nsp	RES. CARBON(1/5W,100Kohm,J)		CRD20TJ104T	1	
R642,643	nsp	RES. CH P(1608/5%/5.6Kohm)		CRJ10DJ562T	2	
R644,645	00MNN05560610	RES. CH P(1608/5%/56ohm)		CRJ10DJ560T	2	
R646-649	nsp	RES. CH P(1608/5%/10ohm)		CRJ10DJ100T	4	
R652	nsp	RES. CARBON(1/5W,100Kohm,J)		CRD20TJ104T	1	
R653	nsp	RES. CH P(1608/5%/1Kohm)		CRJ10DJ102T	1	
R654	nsp	RES. CH P(1608/5%/2.2Kohm)		CRJ10DJ222T	1	
R655	nsp	RES. CH P(1608/5%/47ohm)		CRJ10DJ470T	1	
R656	nsp	RES. CH P(1608/5%/1Kohm)		CRJ10DJ102T	1	
R657	nsp	RES. CH P(1608/5%/47ohm)		CRJ10DJ470T	1	
R658	nsp	RES. CH P(1608/5%/1Kohm)		CRJ10DJ102T	1	
R659	nsp	RES. CARBON(1/5W 10ohm J)		CRD20TJ100T	1	
R662	nsp	RES. CH P(1608/5%/0ohm)		CRJ10DJ0R0T	1	

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
R663	nsp	RES CH P(1608/5%/220ohm)		CRJ10DJ221T	1	
R664-670	nsp	RES CH P(1608/5%/33ohm)		CRJ10DJ330T	7	
R671-672	nsp	RES CH P(1608/5%/10Kohm)		CRJ10DJ103T	2	
R673-676	nsp	RES CH P(1608/5%/100ohm)		CRJ10DJ101T	4	
R677	nsp	RES CH P(1608/5%/220ohm)		CRJ10DJ221T	1	
R678	nsp	RES CH P(1608/5%/100ohm)		CRJ10DJ101T	1	
R679	nsp	RES CH P(1608/5%/33ohm)		CRJ10DJ330T	1	
R680-682	nsp	RES CH P(1608/5%/220ohm)		CRJ10DJ221T	3	
R683-689	nsp	RES CH P(1608/5%/33ohm)		CRJ10DJ330T	7	
R690-694	nsp	RES, CH P(1608/5%/0ohm)		CRJ10DJ0R0T	5	
R695-698	nsp	RES, CH P(1608/5%/100ohm)		CRJ10DJ101T	4	
R701,702	nsp	RES, CARBON(1/5W,1Kohm,J)		CRD20TJ102T	2	
R703-706	nsp	RES, CARBON(1/5W,18Kohm,J)		CRD20TJ183T	4	
R707,708	nsp	RES, CARBON(1/5W,10Kohm,J)		CRD20TJ103T	2	
R709,710	nsp	RES, CARBON(1/5W,4.7Kohm,J)		CRD20TJ472T	2	
R711,712	00MGD05121160	RES, CARBON(1/5W,120ohm,J)		CRD20TJ121T	2	
R713	00MGD05680160	RES, CARBON(1/5W,68ohm,J)		CRD20TJ680T	1	
R714	00MNN05561610	RES, CH P(1608/5%/560ohm)		CRJ10DJ561T	1	
R715	nsp	RES, CARBON(1/5W,33Kohm,J)		CRD20TJ333T	1	
R716	00MNN05561610	RES, CH P(1608/5%/560ohm)		CRJ10DJ561T	1	
R717	nsp	RES, CARBON(1/5W,100ohm,J)		CRD20TJ101T	1	
R718	nsp	RES, CARBON(1/5W,33Kohm,J)		CRD20TJ333T	1	
R719,720	nsp	RES, CH P(1608/5%/470ohm)		CRJ10DJ471T	2	
R721,722	00MGD05181160	RES, CARBON(1/5W,180ohm,J)		CRD20TJ181T	2	
R725	nsp	RES CARBON(1/5W 22Kohm J)		CRD20TJ223T	1	
R726 727	nsp	RES CARBON(1/5W 56ohm J)		CRD20TJ560T	2	
R728 729	nsp	RES CH P(1608/5%/1Kohm)		CRJ10DJ102T	2	
R730	nsp	RES CARBON(1/5W 10ohm J)		CRD20TJ100T	1	
R731-734	00MG0522016X	RES CFPS1/4CMHTA220J KOA		CRG14SANJ220CLPS	4	
R741	nsp	RES CARBON(1/5W 100Kohm J)		CRD20TJ104T	1	
R742 743	nsp	RES CH P(1608/5%/5.6Kohm)		CRJ10DJ562T	2	
R744 745	00MNN05560610	RES CH P(1608/5%/56ohm)		CRJ10DJ560T	2	
R746-749	nsp	RES CH P(1608/5%/10ohm)		CRJ10DJ100T	4	
R752	nsp	RES CARBON(1/5W 100Kohm J)		CRD20TJ104T	1	
R753	nsp	RES, CH P(1608/5%/1Kohm)		CRJ10DJ102T	1	
R754	nsp	RES, CH P(1608/5%/2.2Kohm)		CRJ10DJ222T	1	
R755	nsp	RES, CH P(1608/5%/47ohm)		CRJ10DJ470T	1	
R756	nsp	RES, CH P(1608/5%/1Kohm)		CRJ10DJ102T	1	
R757	nsp	RES, CH P(1608/5%/47ohm)		CRJ10DJ470T	1	
R758	nsp	RES, CH P(1608/5%/1Kohm)		CRJ10DJ102T	1	
R759	nsp	RES, CARBON(1/5W,10ohm,J)		CRD20TJ100T	1	
R762	nsp	RES, CH P(1608/5%/0ohm)		CRJ10DJ0R0T	1	
R771,772	nsp	RES, CARBON(1/5W,100ohm,J)		CRD20TJ101T	2	
R773,774	nsp	RES, CARBON(1/5W,3.3Kohm,J)		CRD20TJ332T	2	
R775-778	nsp	RES, CH P(1608/5%/3.3Kohm)		CRJ10DJ332T	4	
R779,780	943121500420M	RES, CARBON 47 OHM 1/4W J		CRD25FJ470T	2	
R781	nsp	RES, CH P(1608/5%/1Kohm)		CRJ10DJ102T	1	
R782	nsp	RES, CH P(1608/5%/22Kohm)		CRJ10DJ223T	1	
R783	nsp	RES, CH P(1608/5%/3.3Kohm)		CRJ10DJ335T	1	
R784	nsp	RES CH P(1608/5%/47Kohm)		CRJ10DJ473T	1	
R785	nsp	RES CH P(1608/5%/10Kohm)		CRJ10DJ103T	1	
R786	nsp	RES CH P(1608/5%/4.7Kohm)		CRJ10DJ472T	1	
R787	nsp	RES CH P(1608/5%/47Kohm)		CRJ10DJ473T	1	
R788	nsp	RES CH P(1608/5%/10Kohm)		CRJ10DJ103T	1	
R789	nsp	RES CH P(1608/5%/100Kohm)		CRJ10DJ104T	1	
R793	nsp	RES CH P(1608/5%/0ohm)		CRJ10DJ0R0T	1	
<b>CAPACITORS GROUP</b>						
C601	943133501550M	CAP POLYPROPYLENE(FNS(135)-100VDC-561J) FNS(135)-100VDC-561JSH NYEI		CCMP2A561JS13T	1	
C602 603	943133501560M	CAP POLYPROPYLENE(FNS(135)-100VDC-821J) FNS(135)-100VDC-821JSH NYEI		CCMP2A821JS13T	2	
C604,605	943133501570M	CAP POLYPROPYLENE(FAS(133)-200V-181K) FAS(133)-200V-181K SHINYEI		CCMP2B181KS17T	2	
C606	943133501580M	CAP POLYPROPYLENE(FAS(133)-200V-221K) FAS(133)-200V-221K SHINYEI		CCMP2B221KS17T	1	
C607	943133501590M	CAP POLYPROPYLENE (FAS(133)-200VDC 470KTP FAS(133)200VDC470KTPSH NYEI		CCMP2B470KS17T	1	
C609,610	00MOA227016Z0	CAP, ELECT(16V/220uF,ELNA/ROS ELNA/ROS, 16V/220UF		CCEA1CR221T	2	
C614,615	00MOA227025R0	CAP, ELECT(220UF/25V, 10X20, ELNA/ROA)		CCEA1EROA221T	2	
C616	nsp	CAP, CH P(1608, 50V/0.01uF, X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	1	
C617	nsp	CAP, CH P(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C618	nsp	CAP, CH P(1608, 50V/1000pF, X7R) SAMSUNG CL10B102KB8NNNC		CCUS1H102KCS	1	
C619	nsp	CAP, CH P(1608, 50V/0.01uF, X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	1	
C620	nsp	CAP, CH P(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C621,622	943134502670M	CAP, ELECT(47UF/25V, ROS, ELNA ) ROS-25V470MG3#PE-T2		CCEA1EROS470T	2	
C623	nsp	CAP, CH P(1608, 50V/470pF, C0G) SAMSUNG CL10C471JB8NNNC		CCUS1H471JAS	1	
C625	nsp	CAP, CH P(1608, 50V/1000pF, X7R) SAMSUNG CL10B102KB8NNNC		CCUS1H102KCS	1	
C626	nsp	CAP, CH P(1608, 50V/0.01uF, X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	1	
C627	nsp	CAP, CH P(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C651-654	nsp	CAP, CH P(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	4	
C657	00MOA107025Z1	CAP ELECT(ELNA/ROS 25V/100UF)		HCEA1ER101T	1	
C658-661	nsp	CAP, CH P(1608 50V/100pF C0G) SAMSUNG CL10C101JB8NNNC		CCUS1H101JAS	4	
C662-664	nsp	CAP, CH P(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	3	
C665 666	00MOA107025R1	CAP ELECT(ROA 25V/100UF 10X16) ROA-25V101MH4#-T2		CCEA1EROA101T	2	
C667	nsp	CAP, CH P(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C668	00MOA106025R1	CAP ELECT(10uF/25V ROA ELNA) ROA-25V100ME3#-T2		CCEA1EROA100T	1	
C669-676	nsp	CAP, CH P(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	8	
C678-682	nsp	CAP, CH P(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	5	
C683	nsp	CAP, CH P(1608 50V/0.01uF X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	1	
C684	nsp	CAP, CH P(1608, 50V/1000pF, X7R) SAMSUNG CL10B102KB8NNNC		CCUS1H102KCS	1	
C686	nsp	CAP, CH P(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C687	nsp	CAP, CH P(1608, 50V/0.01uF, X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	1	
C688	nsp	CAP, CH P(1608, 50V/1000pF, X7R) SAMSUNG CL10B102KB8NNNC		CCUS1H102KCS	1	
C689	nsp	CAP, CH P(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C690	nsp	CAP, CH P(1608, 50V/0.01uF, X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	1	
C691	nsp	CAP, CH P(1608, 50V/1000pF, X7R) SAMSUNG CL10B102KB8NNNC		CCUS1H102KCS	1	
C692	nsp	CAP, CH P(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C693	nsp	CAP, CH P(1608, 50V/0.01uF, X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	1	
C694	nsp	CAP, CH P(1608, 50V/1000pF, X7R) SAMSUNG CL10B102KB8NNNC		CCUS1H102KCS	1	
C695	nsp	CAP, CH P(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C696	nsp	CAP, CH P(1608, 50V/0.01uF, X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	1	
C697	nsp	CAP, CH P(1608, 50V/1000pF, X7R) SAMSUNG CL10B102KB8NNNC		CCUS1H102KCS	1	
C698	00D2544577958	CAP, ELECT(16V/220uF,ELNA/RA3 RA3-16V221MF3#8P-T2		CCEA1CRA3221T	1	
C701	943133501550M	CAP POLYPROPYLENE(FNS(135)-100VDC-561J) FNS(135)-100VDC-561JSH NYEI		CCMP2A561JS13T	1	
C702 703	943133501560M	CAP POLYPROPYLENE(FNS(135)-100VDC-821J) FNS(135)-100VDC-821JSH NYEI		CCMP2A821JS13T	2	
C704 705	943133501570M	CAP POLYPROPYLENE(FAS(133)-200V-181K) FAS(133)-200V-181K SHINYEI		CCMP2B181KS17T	2	
C706	943133501580M	CAP POLYPROPYLENE(FAS(133)-200V-221K) FAS(133)-200V-221K SHINYEI		CCMP2B221KS17T	1	
C707	943133501590M	CAP POLYPROPYLENE (FAS(133)-200VDC 470KTP FAS(133)200VDC470KTPSH NYEI		CCMP2B470KS17T	1	
C709 710	00MOA227016Z0	CAP ELECT(16V/220uF) ELNA/ROS ELNA/ROS 16V/220UF		CCEA1CR221T	2	

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
C714 715	00MOA227025R0	CAP ELECT(220UF/25V 10X20 ELNA/ROA)		CCEA1EROA221T	2	
C721 722	943134502670M	CAP ELECT(47UF/25V ROS ELNA) ROS-25V470MG3#PE-T2		CCEA1EROS470T	2	
C723	nsp	CAP CH P(1608 50V/470pF C0G) SAMSUNG CL10C471JB8NNNC		CCUS1H471JAS	1	
C751 752	13405026100AS	CAP ELECT(3300uF/25V LKG NICHICON) LKG1E332MESBZT NICHICON		CCEA1ELKG332E	2	
C753 754	00MOA106025R1	CAP ELECT (10uF/25V ROA ELNA) ROA-25V100ME3#-T2		CCEA1EROA100T	2	
C755 756	00MOA477025R6	CAP ELECT (470uF/25V 12.5X25 ROA) ROA-25V471M 6#-S13		CCEA1EROA471E	2	
C757 758	00MOA227025R0	CAP ELECT(220UF/25V 10X20 ELNA/ROA)		CCEA1EROA221T	2	
C759 760	943134502650M	CAP ELECT (47uF/25V ROA ELNA) ROA-25V 470MG3#-T2		CCEA1EROA470T	2	
C761	00MOA22803520	CAP ELECT(35V/2200uF)		CCEA1VH222E	1	
C762	nsp	CAP, ELECT(50V/0.1uF)		CCEA1HH0R1T	1	
C763	nsp	CAP, ELECT(50V/10uF)		CCEA1HH100T	1	
C769	nsp	CAP, CH P(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C771	nsp	CAP,ELECT(2200uF/25V , RA3 , ELNA)		CCEA1ERA3222E	1	
C772	00MOA107025R1	CAP, ELECT(ROA, 25V/100UF, 10X16) ROA-25V101MH4#-T2		CCEA1EROA101T	1	
C773	nsp	CAP, CH P(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C774	943134502660M	CAP, ELECT (22uF/25V, ROS, ELNA) 22 UF M 25V ARS-TYPE ELNA		CCEA1EROS220T	1	
C775	00MOA107025Z1	CAP , ELECT (ELNA/ROS, 25V/100UF)		HCEA1ER101T	1	
C776	nsp	CAP, CH P(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C777	943134502660M	CAP, ELECT (22uF/25V, ROS, ELNA) 22 UF M 25V ARS-TYPE ELNA		CCEA1EROS220T	1	
C781,782	nsp	CAP, MYLAR(50V/1000pF/J)		HCQ1H102JZT	2	
C785	nsp	CAP, CH P(1608, 50V/0.01uF, X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	1	
C786	nsp	CAP, CH P(1608, 50V/0.1uF, X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C787	nsp	CAP, CH P(1608, 50V/1000pF, X7R) SAMSUNG CL10B102KB8NNNC		CCUS1H102KCS	1	
C788	nsp	CAP, CH P(1608, 50V/0.01uF, X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	1	
C789	nsp	CAP, CH P(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C790	nsp	CAP, CH P(1608 50V/1000pF X7R) SAMSUNG CL10B102KB8NNNC		CCUS1H102KCS	1	
C791	nsp	CAP, CH P(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C792	nsp	CAP, CH P(1608 50V/0.01uF X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	1	
C793	nsp	CAP, CH P(1608 50V/1000pF X7R) SAMSUNG CL10B102KB8NNNC		CCUS1H102KCS	1	
C794	nsp	CAP, CH P(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C795	nsp	CAP, CH P(1608 50V/0.01uF X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	1	
C796	nsp	CAP, CH P(1608 50V/1000pF X7R) SAMSUNG CL10B102KB8NNNC		CCUS1H102KCS	1	
C797	nsp	CAP, CH P(1608 50V/0.1uF X7R) SAMSUNG CL10B104KB8NNNC		CCUS1H104KCS	1	
C798	nsp	CAP, CH P(1608 50V/0.01uF X7R) SAMSUNG CL10B103KB8NNNC		CCUS1H103KCS	1	
C799	nsp	CAP, CH P(1608, 50V/1000pF, X7R) SAMSUNG CL10B102KB8NNNC		CCUS1H102KCS	1	
<b>OTHER PARTS GROUP</b>						
CN81	nsp	LOCK NG TYPE , STRAIGHT WAFER , 2MM		CJP09G1236ZW	1	
CN98	nsp	LOCK NG TYPE , STRAIGHT WAFER , 2mm		CJP05G1236ZW	1	
B603,604	nsp	PLATE , EARTH(TRONIC ELECTRONICS)		CJT1A026	2	
BK61,62	nsp	BRACKET , PCB		CMD1A569-V1	2	
F601-603	90M-FS001530R	FUSE(0.8A, 372 SER ES/TR5) 0.8A, 372 SERIES/TR5		KBA2D0800A3EYT	3	
JK61	943643101920S	JACK , RCA (1P, BK, GOLD PLATE) RJ-0111R-29T		CJJ4M073ZY	1	
JK71	943643101920S	JACK , RCA (1P, BK, GOLD PLATE) RJ-0111R-29T		CJJ4M073ZY	1	
L602,603	nsp	FERRITE CHIP BEAD(2012/220R) BLM21PG221SN1/MURATAMURATA		CLZBLM21PG221SN1	2	
L604	nsp	FERRITE CHIP BEAD(2012/120R) BLM21AG121SN1/MURATAMURATA		CLZBLM21AG121SN1	1	
L607,608	nsp	FERRITE CHIP BEAD(2012/220R) BLM21PG221SN1/MURATAMURATA		CLZBLM21PG221SN1	2	
WF61	nsp	WAFER, FFC(19P-1 25mm, STRAIGHT) 12511HS-19/YEONHO		CJP19GA115ZY	1	
X601	14181008150AS	OSC, SMD(24 576MHz, NZ2520S) NZ2520S NDK		COX24576I150SN	1	
X602	14181008250AS	OSC, SMD(22 5792MHz, NZ2520S) NZ2520S NDK		COX22579I150SN	1	
	nsp	HEAT S NK		CMY2A223-V2	1	
	943219500190M	T.R 2SD2081 NPN TO220F SANKEN 2SD2081		CVT2SD2081	1	
	nsp	HEAT S NK		CMY2A223-V2	1	
	943219500170M	T.R 2SB1259 PNP TO220F SANKEN 2SB1259		CVT2SB1259	1	

## DIGITAL PCB ASS'Y

※Parts indicated by "nsp" on this table cannot be supplied.

※The parts listed in 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>						
D102-106	00D2760717903	DIODE ,CH P , SWITCH NG				
D201	nsp	DIODE , ZENER(CH P.51V) ROHM				
D505.506	00D2760717903	DIODE ,CH P , SWITCH NG				
D508	00D2760717903	DIODE CH P SWITCH NG				
D515	201310001503S	DIODE ULTRA-HIGH SPEED KDS160-RTK/P KEC				
D520 521	201310001503S	DIODE ULTRA-HIGH SPEED KDS160-RTK/P KEC				
IC11	nsp	IC ,CPU(2M/PLQP0144KA-A) R5F56108VNFPP RENESAS				
IC11	943243102500S	IC ,CPU(2M/PLQP0144KA-A) CV R5F56108VNFPP				
IC12	943239100720S	EEPROM(256KBIT ,SOP-8P) R1EX24256BSAS0A RENESAS				
IC12	nsp	IC EEPROM(256KBIT SOP-8P) R1EX24256BSAS0I RENESAS				
IC13	235010007507S	IC RESET 27V (SSOP-5P) ROHM				
IC14	nsp	IC Serial Flash 32M(SOP8L 200M L) GD25Q32B	K			
IC14	943248102870S	IC, FONT(CH NA)	K			
IC21	23681011260AS	IC , Network Media processor(LFBGA-320P) DM860A SMSC				
IC22.23	24681007660AS	IC , SDRAM(256M,8BIT ,TSOP-54P) A3V56S30GTP-60				
IC24	nsp	1G NAND FLASH(48P-TSOP1) H27U1G8F2BTR-BC/HYNIHYNIX				
IC24	943248102720M	IC NAND FLASH BCO H27U1G8F2BTR-BC	N			
IC24	943248102730M	IC NAND FLASH BCO H27U1G8F2BTR-BC	U			
IC24	943248102710M	IC , NAND FLASH BCO H27U1G8F2BTR-BC	F			
IC24	943248102740M	IC , NAND FLASH BCO H27U1G8F2BTR-BC	K			
IC25	23671011050AS	IC , POD AUTHENTICATION FROM D&M MF1337S3959				
IC31	24581003360AS	IC , Fixed/Floating-Point DSP(NFBGA) TMS320C6748BZWT				
IC32	nsp	IC 4M-BIT -x 1/x 2J CMOS SERIAL FLASH MX25L4006EM2I-12G				
IC32	943248102880S	IC 4M-BIT SERIAL FLASH CVIANAM1913AV				
IC41	nsp	IC , P-TERM PLD(TQFP-100P) EPM240T100C5N				
IC41	943249101000S	IC , P-TERM PLD(TQFP-100P) CV EPM240T100C5N SA8005				
IC42	943236101350D	IC , D R/DIT(WITH ADC ,LQFP-48P) PCM9211PTR				
IC43	23681011850AS	IC , Clock Synthesizer & Multiplier CS2000CP-CZZR				
IC44 45	943233102000S	IC 2-CHANNEL MUX(VSSOP-16P) TC74LCX157FK TOSH BA				
IC51	963239008800S	IC RS232 (33V) LX3232D				
IC53	00MHC700417ZZ	IC , NVERTER(SOIC-14) ONSEMI				
IC54	943239100700S	IC , Ethernet Transceiver(QFN-24P) LAN8720A-CP-TR				
Q101	00D2690184907	TR , CH P , SOT-23 KRA102S				
Q102	00D2690192902	TR , CH P , SOT-23 KRC102S				
Q103	00D2690184907	TR CH P SOT-23 KRA102S				
Q104	00D2690192902	TR CH P SOT-23 KRC102S				
Q301 302	00D2690192902	TR CH P SOT-23 KRC102S				
Q303	943229500020S	MOSFET ,TPC6111(P-CH,U-MOSV) TPC6111 TOSHIBA				
Q503	00D2690184907	TR , CH P , SOT-23 KRA102S				
Q504	00D2690192902	TR , CH P , SOT-23 KRC102S				
Q505	00D2690184907	TR , CH P , SOT-23 KRA102S				
Q506 507	00D2690192902	TR CH P SOT-23 KRC102S				
Q508 509	00D2690184907	TR CH P SOT-23 KRA102S				
<b>RESISTOR GROUP</b>						
R101.102	nsp	RES ,CHIP(1608/5%/0ohm)				
R103-106	nsp	RES ,CHIP(1608/5%/10Kohm)				
R107,108	nsp	RES ,CHIP(1608/5%/22ohm)				
R109-111	nsp	RES ,CHIP(1608/5%/0ohm)				
R113-124	nsp	RES ,CHIP(1608/5%/0ohm)				
R126-130	nsp	RES ,CHIP(1608/5%/0ohm)				
R133	nsp	RES ,CHIP(1608/5%/0ohm)				
R134	nsp	RES ,CHIP(1608/5%/10Kohm)				
R136-149	nsp	RES ,CHIP(1608/5%/0ohm)				
R150	nsp	RES ,CHIP(1608/5%/10Kohm)				
R151	nsp	RES ,CHIP(1608/5%/0ohm)				
R152	nsp	RES ,CH P(1608/5%/10Kohm)				
R153	nsp	RES ,CH P(1608/5%/47Kohm)				
R154	nsp	RES ,CH P(1608/5%/1Kohm)	U			
R154	nsp	RES ,CH P(1608/5%/2.2Kohm)	F			
R154	00MNN05561610	RES ,CH P(1608/5%/560ohm)	K			
R155-157	nsp	RES ,CH P(1608/5%/1Kohm)				
R158	nsp	RES ,CH P(1608/5%/10Kohm)				
R162,163	nsp	RES ,CH P(1608/5%/22ohm)				
R164-171	nsp	RES ,CH P(1608/5%/47Kohm)				
R172	nsp	RES ,CH P(1608/5%/10Kohm)				
R173	nsp	RES ,CH P(1608/5%/1Mohm)				
R174	nsp	RES ,CH P(1608/5%/470ohm)				
R175	nsp	RES ,CH P(1608/5%/22Kohm)				
R176	nsp	RES ,CH P(1608/5%/22ohm)				
R177,178	nsp	RES ,CH P(1608/5%/47Kohm)				
R179,180	nsp	RES ,CHIP(1608/5%/0ohm)				
R181-183	nsp	RES ,CHIP(1608/5%/22ohm)				
R186	nsp	RES ,CHIP(1608/5%/0ohm)				
R187-190	nsp	RES ,CHIP(1608/5%/10Kohm)				
R191	nsp	RES ,CHIP(1608/5%/0ohm)				
R192-195	nsp	RES ,CHIP(1608/5%/10Kohm)				
R201,202	nsp	RES ,CHIP(1005/5%/47Kohm)				
R203-205	nsp	RES ,CHIP(1005/5%/33ohm)				
R206-208	nsp	RES ,CHIP(1005/5%/0ohm)				
R209	nsp	RES ,CHIP(1005/5%/10Kohm)				
R210	nsp	RES ,CHIP(1608/5%/1Kohm)				
R211	nsp	RES ,CH P(1005/5%/0ohm)				
R212	nsp	RES ,CH P(1608/5%/1Mohm)				
R213-215	nsp	RES ,CH P(1005/5%/10Kohm)				
R216	nsp	RES ,CH P(1005/5%/68Kohm)				
R217	nsp	RES ,CH P(1608/5%/10Kohm)				
R218	nsp	RES ,CH P(1005/5%/12Kohm)				
R219	nsp	RES ,CH P(1608/5%/10Kohm)				
R220	nsp	RES ,CH P(1005/5%/10Kohm)				
R221	nsp	RES ,CH P(1005/5%/1Kohm)				
R222	nsp	RES ,CH P(1608/5%/10Kohm)				
R224-229	nsp	RES ,CH P(1005/5%/33ohm)				
R230	nsp	RES ,CH P(1005/5%/10Kohm)				
R231-234	nsp	RES ,CH P(1005/5%/47Kohm)				
R237,238	nsp	RES ,CH P(1005/5%/47Kohm)				
R239	nsp	RES ,CH P(1005/5%/10Kohm)				
R241,242	nsp	RES ,CH P(1005/5%/47Kohm)				
R244	nsp	RES ,CHIP(1005/5%/15Kohm)				

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
R245	nsp	RES CHIP(1005/5%/27Kohm)	CRJ06J1272T	1		
R246	nsp	RES CHIP(1005/5%/0ohm)	CRJ06J10R0T	1		
R248	nsp	RES CHIP(1005/5%/100ohm)	CRJ06J101T	1		
R249,250	nsp	RES CHIP(1005/5%/10ohm)	CRJ06J100T	2		
R251,252	nsp	RES CHIP(1005/5%/100ohm)	CRJ06J101T	2		
R253	nsp	RES CHIP(1005/5%/15Kohm)	CRJ06J152T	1		
R254	nsp	RES CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R255	nsp	RES CHIP(1005/5%/33ohm)	CRJ06J330T	1		
R256	nsp	RES CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R257	nsp	RES CHIP(1608/5%/3Kohm)	CRJ10DJ302T	1		
R301	nsp	RES CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1		
R302	nsp	RES CHIP(1608/5%/47Kohm)	CRJ10DJ472T	1		
R303	nsp	RES CH P(1608/5%/100ohm)	CRJ10DJ101T	1		
R304	nsp	RES CH P(1608/5%/33ohm)	CRJ10DJ330T	1		
R305,306	nsp	RES CH P(1608/5%/0ohm)	CRJ10DJ0R0T	2		
R307,308	nsp	RES CH P(1608/5%/33ohm)	CRJ10DJ330T	2		
R309,310	nsp	RES CH P(1608/5%/33Kohm)	CRJ10DJ332T	2		
R311,312	nsp	RES CH P(1608/5%/1Kohm)	CRJ10DJ102T	2		
R315	nsp	RES CH P(1608/5%/1Kohm)	CRJ10DJ102T	1		
R316	nsp	RES CH P(1608/5%/10Kohm)	CRJ10DJ103T	1		
R319,320	nsp	RES CH P(1608/5%/1Kohm)	CRJ10DJ102T	2		
R323-330	nsp	RES CH P(1608/5%/47Kohm)	CRJ10DJ472T	8		
R331	nsp	RES CH P(1005/5%/1Kohm)	CRJ06J102T	1		
R332	nsp	RES CH P(1005/5%/10Kohm)	CRJ06J103T	1		
R333	nsp	RES CH P(1608/5%/10Kohm)	CRJ10DJ103T	1		
R334-336	nsp	RES CH P(1005/5%/33ohm)	CRJ06J330T	3		
R339,340	nsp	RES CH P(1608/5%/0ohm)	CRJ10DJ0R0T	2		
R401-410	nsp	RES CH P(1608/5%/0ohm)	CRJ10DJ0R0T	10		
R411-414	nsp	RES CHIP(1608/5%/100ohm)	CRJ10DJ101T	4		
R415,416	nsp	RES CHIP(1608/5%/10Kohm)	CRJ10DJ103T	2		
R417	nsp	RES CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1		
R418-420	nsp	RES CHIP(1608/5%/47ohm)	CRJ10DJ470T	3		
R422	nsp	RES CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R423	nsp	RES CHIP(1608/5%/47ohm)	CRJ10DJ470T	1		
R424	nsp	RES CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R425	nsp	RES CHIP(1608/5%/220ohm)	CRJ10DJ221T	1		
R426	nsp	RES CHIP(1608/5%/47ohm)	CRJ10DJ470T	1		
R427-432	nsp	RES CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	6		
R433-439	nsp	RES CHIP(1608/5%/47ohm)	CRJ10DJ470T	7		
R440-446	nsp	RES CH P(1608/5%/0ohm)	CRJ10DJ0R0T	7		
R448	nsp	RES CH P(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R449	nsp	RES CH P(1608/5%/10Kohm)	CRJ10DJ103T	1		
R450	nsp	RES CH P(1608/5%/47Kohm)	CRJ10DJ472T	1		
R451	nsp	RES CH P(1608/5%/150ohm)	CRJ10DJ151T	1		
R452,453	nsp	RES CH P(1608/5%/47Kohm)	CRJ10DJ472T	2		
R454	nsp	RES CH P(1608/5%/220ohm)	CRJ10DJ221T	1		
R455	nsp	RES CH P(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R457-463	nsp	RES CH P(1608/5%/10Kohm)	CRJ10DJ103T	7		
R464-467	nsp	RES CH P(1608/5%/0ohm)	CRJ10DJ0R0T	4		
R469-472	nsp	RES CH P(1608/5%/10Kohm)	CRJ10DJ103T	4		
R473-475	nsp	RES CH P(1608/5%/22ohm)	CRJ10DJ220T	3		
R476	nsp	RES CH P(1608/5%/10Kohm)	CRJ10DJ103T	1		
R477	nsp	RES CH P(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R478	nsp	RES CH P(1608/5%/22ohm)	CRJ10DJ220T	1		
R480	nsp	RES CH P(1608/5%/470ohm)	CRJ10DJ471T	1		
R481	nsp	RES CHIP(1608/5%/680ohm)	CRJ10DJ681T	1		
R482-484	nsp	RES CHIP(1608/5%/22ohm)	CRJ10DJ220T	3		
R485	nsp	RES CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R486	nsp	RES CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1		
R487-497	nsp	RES CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	11		
R501-504	nsp	RES CHIP(1608/5%/1Kohm)	CRJ10DJ102T	4		
R505	nsp	RES CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R507	nsp	RES CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R508	nsp	RES CHIP(1608/5%/47ohm)	CRJ10DJ470T	1		
R509	nsp	RES CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1		
R510,511	nsp	RES CH P(1608/5%/22ohm)	CRJ10DJ220T	2		
R512	nsp	RES CH P(1608/5%/10Kohm)	CRJ10DJ103T	1		
R513	nsp	RES CH P(1608/5%/22ohm)	CRJ10DJ220T	1		
R516	nsp	RES CH P(1608/5%/470ohm)	CRJ10DJ471T	1		
R518	nsp	RES CH P(1608/5%/75ohm)	CRJ10DJ750T	1		
R519	nsp	RES CH P(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R522	nsp	RES CH P(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R523	nsp	RES CH P(1005/5%/75ohm)	CRJ06J750T	1		
R525	nsp	RES CH P(1608/5%/33ohm)	CRJ10DJ330T	1		
R526	nsp	RES CH P(1005/5%/22ohm)	CRJ06J220T	1		
R527	nsp	RES CH P(1608/5%/33ohm)	CRJ10DJ330T	1		
R529	nsp	RES CH P(1005/5%/47ohm)	CRJ06J470T	1		
R530	nsp	RES CH P(1005/5%/0ohm)	CRJ06J0R0T	1		
R531	nsp	RES CH P(1005/5%/10ohm)	CRJ06J100T	1		
R532-535	nsp	RES CH P(1608/1%/51ohm)	CRJ10DF51R0T	4		
R536	nsp	RES CH P(1608/5%/10Kohm)	CRJ10DJ103T	1		
R537	nsp	RES CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R538	nsp	RES CHIP(1608/5%/15Kohm)	CRJ10DJ152T	1		
R539	nsp	RES CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1		
R540,541	nsp	RES CHIP(1005/5%/10Kohm)	CRJ06J103T	2		
R542	nsp	RES CHIP(1005/5%/15Kohm)	CRJ06J152T	1		
R543,544	nsp	RES CHIP(1005/5%/10Kohm)	CRJ06J103T	2		
R546	nsp	RES CHIP(1608/1%/82Kohm)	CRJ10DF8201T	1		
R547	nsp	RES CHIP(1608/1%/39Kohm)	CRJ10DF3901T	1		
R551	nsp	RES CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R561,562	nsp	RES CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	2		
R564-585	nsp	RES CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	22		
R591	nsp	RES CH P(1608/5%/51ohm)	CRJ10DJ510T	1		
RN21-23	nsp	RES CH P(1005/5%/10Kohm*4)	CRJ064J103T	3		
RN24-29	nsp	RES CH P(1005/5%/33ohm*4)	CRJ064J330T	6		
RN30	nsp	RES CH P(1005/5%/100ohm*4)	CRJ064J101T	1		
RN31	nsp	RES CH P(1005/5%/1Kohm*4)	CRJ064J102T	1		
RN32,33	nsp	RES CH P(1005/5%/33ohm*4)	CRJ064J330T	2		
RN34	nsp	RES CH P(1005/5%/100ohm*4)	CRJ064J101T	1		
RN51,52	nsp	RES CH P(1005/5%/33ohm*4)	CRJ064J330T	2		
RN55-59	nsp	RES CH P(1005/5%/33ohm*4)	CRJ064J330T	5		
<b>CAPACITORS GROUP</b>						
C101	943134500040S	CAP_SMD ELECT(16V/100uF) LELON	HCEC1CRV2101T	1		
C102	nsp	CAP CHIP(1608, 50V/01uF, X7R) SAMSUNG CL10B104KB8NNNC	CCUS1H104KCS	1		
C103	nsp	CAP, ELEC SMD 47UF/16V LELON	CCEC1CRV2470T	1		
C104,105	nsp	CAP CHIP(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC	CCUS1H104KCS	2		



REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
C106	nsp	CAP_ELEC_SMD_47UF/16V_LELON	CCEC1CRV2470T	1		
C107,108	nsp	CAP_CHIP(1608,50V/15pF,COG)_SAMSUNG_CL10C150JB8NNNC	CCUS1H150JAS	2		
C109	nsp	CAP_CHIP(1608,10V/1uF,X7R,X7S)_SAMSUNG_CL10B105KP8NNNC	CCUS1A105KCS	1		
C110-112	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	3		
C113	nsp	CAP_ELEC_SMD_47UF/16V_LELON	CCEC1CRV2470T	1		
C114	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C115	nsp	CAP_ELEC_SMD_47UF/16V_LELON	CCEC1CRV2470T	1		
C116	943134500040S	CAP_SMD_ELECT(16V/100uF)_LELON	HCEC1CRV2101T	1		
C117	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C118	nsp	CAP_CHIP(1608,50V/001uF,X7R)_SAMSUNG_CL10B103KB8NNNC	CCUS1H103KCS	1		
C119	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C120	nsp	CAP_CHIP(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	1		
C121	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C122,123	nsp	CAP_CH_P(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	2		
C124	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C125	nsp	CAP_CH_P(1608,50V/001uF,X7R)_SAMSUNG_CL10B103KB8NNNC	CCUS1H103KCS	1		
C126	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C127	nsp	CAP_CH_P(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	1		
C128	nsp	CAP_CH_P(1608,50V/001uF,X7R)_SAMSUNG_CL10B103KB8NNNC	CCUS1H103KCS	1		
C129	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C130	nsp	CAP_CH_P(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	1		
C131-133	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	3		
C201	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C202	nsp	CAP_CH_P(1005,16V/01uF,X7R)_SAMSUNG_CL05B104KO5NNNC	CCUIH104KCS	1		
C203	nsp	CAP_CH_P(1005,50V/1000pF,X7R)_SAMSUNG_CL05B102KB5NNNC	CCUIH102KCS	1		
C204	00MOA227016Z0	CAP_ELECT(16V/220uF)_ELNA/ROS_ELNA/ROS_16V/220UF	CCEA1CR221T	1		
C205,206	nsp	CAP_CH_P(1608,50V/10pF,COG)_SAMSUNG_CL10C100JB8NNNC	CCUS1H100JAS	2		
C207	nsp	CAP_CH_P(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	1		
C209,210	nsp	CAP_CHIP(1005,16V/01uF,X7R)_SAMSUNG_CL05B104KO5NNNC	CCUIH104KCS	2		
C211-225	nsp	CAP_CHIP(1005,50V/1000pF,X7R)_SAMSUNG_CL05B102KB5NNNC	CCUIH102KCS	15		
C226-229	nsp	CAP_CHIP(1005,16V/01uF,X7R)_SAMSUNG_CL05B104KO5NNNC	CCUIH104KCS	4		
C230	nsp	CAP_CHIP(1608,63V/47uF,MURATA_GRM18)_MURATA	CCUS0J475KC	1		
C231	nsp	CAP_CHIP(1005,16V/01uF,X7R)_SAMSUNG_CL05B104KO5NNNC	CCUIH104KCS	1		
C233	nsp	CAP_CHIP(1608,63V/47uF,MURATA_GRM18)_MURATA	CCUS0J475KC	1		
C234,235	nsp	CAP_CHIP(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	2		
C236,237	nsp	CAP_CHIP(1005,50V/1000pF,X7R)_SAMSUNG_CL05B102KB5NNNC	CCUIH102KCS	2		
C238-246	nsp	CAP_CHIP(1005,16V/01uF,X7R)_SAMSUNG_CL05B104KO5NNNC	CCUIH104KCS	9		
C247-250	nsp	CAP_CHIP(1608,63V/47uF,MURATA_GRM18)_MURATA	CCUS0J475KC	4		
C253	nsp	CAP_CHIP(1608,63V/47uF,MURATA_GRM18)_MURATA	CCUS0J475KC	1		
C254-257	nsp	CAP_CH_P(1005,50V/1000pF,X7R)_SAMSUNG_CL05B102KB5NNNC	CCUIH102KCS	4		
C258-268	nsp	CAP_CH_P(1005,16V/01uF,X7R)_SAMSUNG_CL05B104KO5NNNC	CCUIH104KCS	11		
C270-273	nsp	CAP_CH_P(1608,63V/47uF,MURATA_GRM18)_MURATA	CCUS0J475KC	4		
C275-279	nsp	CAP_CH_P(1005,50V/1000pF,X7R)_SAMSUNG_CL05B102KB5NNNC	CCUIH102KCS	5		
C301,302	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	2		
C303,304	nsp	CAP_CH_P(1608,50V/12pF,COG)_SAMSUNG_CL10C120JB8NNNC	CCUS1H120JAS	2		
C305	nsp	CAP_CH_P(1005,16V/01uF,X7R)_SAMSUNG_CL05B104KO5NNNC	CCUIH104KCS	1		
C306	943134500040S	CAP_SMD_ELECT(16V/100uF)_LELON	HCEC1CRV2101T	1		
C307-325	nsp	CAP_CH_P(1005,16V/01uF,X7R)_SAMSUNG_CL05B104KO5NNNC	CCUIH104KCS	19		
C326	943134500040S	CAP_SMD_ELECT(16V/100uF)_LELON	HCEC1CRV2101T	1		
C327-332	nsp	CAP_CH_P(1005,16V/01uF,X7R)_SAMSUNG_CL05B104KO5NNNC	CCUIH104KCS	6		
C333	nsp	CAP_CH_P(1005,25V/001uF,X7R)_SAMSUNG_CL05B103KA5NNNC	CCUS1H103KCS	1		
C334-342	nsp	CAP_CH_P(1005,16V/01uF,X7R)_SAMSUNG_CL05B104KO5NNNC	CCUIH104KCS	9		
C343	nsp	CAP_CH_P(1608,16V/022uF,X7R)_SAMSUNG_CL10B224KO8NNNC	CCUS1C224KCS	1		
C344-367	nsp	CAP_CH_P(1005,16V/01uF,X7R)_SAMSUNG_CL05B104KO5NNNC	CCUIH104KCS	24		
C368	nsp	CAP_CH_P(1005,25V/001uF,X7R)_SAMSUNG_CL05B103KA5NNNC	CCUS1H103KCS	1		
C369	nsp	CAP_CHIP(1005,16V/01uF,X7R)_SAMSUNG_CL05B104KO5NNNC	CCUIH104KCS	1		
C370	nsp	CAP_CHIP(1005,25V/001uF,X7R)_SAMSUNG_CL05B103KA5NNNC	CCUIH103KCS	1		
C397	943134500040S	CAP_SMD_ELECT(16V/100uF)_LELON	HCEC1CRV2101T	1		
C398	nsp	CAP_CHIP(1005,16V/01uF,X7R)_SAMSUNG_CL05B104KO5NNNC	CCUIH104KCS	1		
C401	943134500040S	CAP_SMD_ELECT(16V/100uF)_LELON	HCEC1CRV2101T	1		
C402-406	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	5		
C407	nsp	CAP_CHIP(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	1		
C408	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C409	nsp	CAP_CHIP(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	1		
C410	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C411-413	nsp	CAP_CHIP(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	3		
C414-416	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	3		
C417	nsp	CAP_CH_P(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	1		
C418	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C419	nsp	CAP_CH_P(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	1		
C420,421	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	2		
C422,423	nsp	CAP_CH_P(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	2		
C424,425	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	2		
C426	nsp	CAP_CH_P(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	1		
C427-430	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	4		
C431	943134500040S	CAP_SMD_ELECT(16V/100uF)_LELON	HCEC1CRV2101T	1		
C432	nsp	CAP_CH_P(1608,50V/100pF,COG)_SAMSUNG_CL10C101JB8NNNC	CCUS1H101JAS	1		
C433	nsp	CAP_SMD_ELECT(16V/10uF)_LELON	HCEC1CRV2100T	1		
C434	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C435,436	nsp	CAP_CH_P(1608,50V/18pF,COG)_SAMSUNG_CL10C180JB8NNNC	CCUS1H180JAS	2		
C437	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C438	nsp	CAP_CHIP(1608,50V/0068uF,X7R)_SAMSUNG_CL10B683KB8NNNC	CCUS1H683KCS	1		
C439	nsp	CAP_CHIP(1608,50V/4700pF,X7R)_SAMSUNG_CL10B472KB8NNNC	CCUS1H472KCS	1		
C440	943134500040S	CAP_SMD_ELECT(16V/100uF)_LELON	HCEC1CRV2101T	1		
C441-443	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	3		
C444	nsp	CAP_SMD_ELECT(16V/10uF)_LELON	HCEC1CRV2100T	1		
C445,446	943134500040S	CAP_SMD_ELECT(16V/100uF)_LELON	HCEC1CRV2101T	2		
C447	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C501,502	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	2		
C504,505	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	2		
C506	943134500040S	CAP_SMD_ELECT(16V/100uF)_LELON	HCEC1CRV2101T	1		
C508	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C509	nsp	CAP_CHIP(1608,50V/220pF,COG)_SAMSUNG_CL10C221JB8NNNC	CCUS1H221JAS	1		
C510	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C511,512	nsp	CAP_CHIP(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	2		
C513	nsp	CAP_CH_P(1608,50V/220pF,COG)_SAMSUNG_CL10C221JB8NNNC	CCUS1H221JAS	1		
C514	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C515,516	nsp	CAP_CH_P(1608,50V/33pF,COG)_SAMSUNG_CL10C330JB8NNNC	CCUS1H330JAS	2		
C517	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C518	nsp	CAP_CH_P(1608,50V/1000pF,X7R)_SAMSUNG_CL10B102KB8NNNC	CCUS1H102KCS	1		
C519	nsp	CAP_CH_P(1608,50V/470pF,COG)_SAMSUNG_CL10C471JB8NNNC	CCUS1H471JAS	1		
C520,521	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	2		
C523	nsp	CAP_CH_P(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		
C524	943134500040S	CAP_SMD_ELECT(16V/100uF)_LELON	HCEC1CRV2101T	1		
C527	nsp	CAP_ELEC_SMD_47UF/16V_LELON	CCEC1CRV2470T	1		
C528	nsp	CAP_CHIP(1608,50V/01uF,X7R)_SAMSUNG_CL10B104KB8NNNC	CCUS1H104KCS	1		

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
C529	nsp	CAP CHIP(1608 50V/001uF X7R) SAMSUNG CL10B103KB8NNNC		1		
C530	nsp	CAP CHIP(1608 50V/47pF COG) SAMSUNG CL10C470JB8NNNC		1		
C531,532	nsp	CAP CHIP(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		2		
C533	nsp	CAP CHIP(1608 50V/1000pF X7R) SAMSUNG CL10B102KB8NNNC		1		
C534	nsp	CAP CHIP(1608 50V/001uF X7R) SAMSUNG CL10B103KB8NNNC		1		
C535	nsp	CAP CHIP(1608 50V/1000pF X7R) SAMSUNG CL10B102KB8NNNC		1		
C536	nsp	CAP CHIP(1608 50V/001uF X7R) SAMSUNG CL10B103KB8NNNC		1		
C538	nsp	CAP CHIP(1005 16V/01uF X7R) SAMSUNG CL05B104KO5NNNC		1		
C539	nsp	CAP ELEC SMD 47UF/16V LELON		1		
C540	nsp	CAP CHIP(1005 25V/001uF X7R) SAMSUNG CL05B103KA5NNNC		1		
C541	nsp	CAP CHIP(1005 50V/1000pF X7R) SAMSUNG CL05B102KB5NNNC		1		
C542	nsp	CAP CHIP(1005 16V/01uF X7R) SAMSUNG CL05B104KO5NNNC		1		
C543	nsp	CAP CH P(1005 50V/1000pF X7R) SAMSUNG CL05B102KB5NNNC		1		
C544	nsp	CAP CH P(1005 25V/001uF X7R) SAMSUNG CL05B103KA5NNNC		1		
C546,547	nsp	CAP CH P(1005 16V/01uF X7R) SAMSUNG CL05B104KO5NNNC		2		
C549	nsp	CAP CH P(1005 50V/1000pF X7R) SAMSUNG CL05B102KB5NNNC		1		
C550	nsp	CAP CH P(1005 16V/01uF X7R) SAMSUNG CL05B104KO5NNNC		1		
C551	nsp	CAP ELEC SMD 47UF/16V LELON		1		
C552	nsp	CAP CH P(1005 50V/1000pF COG) SAMSUNG CL05C101JB5NNNC		1		
C554	943134500040S	CAP SMD ELECT(16V/100uF) LELON		1		
C555	nsp	CAP CH P(1005 16V/01uF X7R) SAMSUNG CL05B104KO5NNNC		1		
C557	nsp	CAP CH P(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		1		
C558	nsp	CAP CH P(1608 50V/1000pF X7R) SAMSUNG CL10B102KB8NNNC		1		
C560	nsp	CAP CH P(1608 50V/001uF X7R) SAMSUNG CL10B103KB8NNNC		1		
C561	nsp	CAP CH P(1608 50V/1000pF X7R) SAMSUNG CL10B102KB8NNNC		1		
C562	nsp	CAP CH P(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		1		
C563	nsp	CAP CH P(1608 50V/001uF X7R) SAMSUNG CL10B103KB8NNNC		1		
C564	nsp	CAP CH P(1608 50V/1000pF X7R) SAMSUNG CL10B102KB8NNNC		1		
C565	nsp	CAP CHIP(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		1		
C566	nsp	CAP CHIP(1608 50V/001uF X7R) SAMSUNG CL10B103KB8NNNC		1		
C567	nsp	CAP CHIP(1608 50V/1000pF X7R) SAMSUNG CL10B102KB8NNNC		1		
C568	nsp	CAP CHIP(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		1		
C569	nsp	CAP CHIP(1005 25V/0022uF X7R) SAMSUNG CL05B223KA5NNNC		1		
C570	nsp	CAP CHIP(1608 63V/47uF MURATA GRM18) MURATA		1		
C571	nsp	CAP CHIP(1005 16V/01uF X7R) SAMSUNG CL05B104KO5NNNC		1		
C572	nsp	CAP CHIP(1608 10V/1uF X7R X7S) SAMSUNG CL10B105KP8NNNC		1		
C573	nsp	CAP CHIP(1005 50V/470pF COG) SAMSUNG CL05C471JB5NNNC		1		
C574	nsp	CAP CHIP(1608 50V/001uF X7R) SAMSUNG CL10B103KB8NNNC		1		
C575-577	nsp	CAP CHIP(1608 63V/47uF MURATA GRM18) MURATA		3		
C578	nsp	CAP CH P(1608 50V/001uF X7R) SAMSUNG CL10B103KB8NNNC		1		
C580	nsp	CAP CH P(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		1		
C581	nsp	CAP CH P(1608 50V/001uF X7R) SAMSUNG CL10B103KB8NNNC		1		
C582	nsp	CAP CH P(1608 50V/1000pF X7R) SAMSUNG CL10B102KB8NNNC		1		
C585-586	nsp	CAP CH P(1608 50V/1000pF COG) SAMSUNG CL10C101JB8NNNC		2		
C587	nsp	CAP CH P(1005 50V/1000pF X7R) SAMSUNG CL05B102KB5NNNC		1		
C589	nsp	CAP CH P(1005 25V/001uF X7R) SAMSUNG CL05B103KA5NNNC		1		
C590	nsp	CAP CH P(1005 16V/01uF X7R) SAMSUNG CL05B104KO5NNNC		1		
C591	nsp	CAP CH P(1005 50V/470pF COG) SAMSUNG CL05C471JB5NNNC		1		
C592	nsp	CAP CH P(1608 50V/001uF X7R) SAMSUNG CL10B103KB8NNNC		1		
C593	nsp	CAP CH P(1608 50V/01uF X7R) SAMSUNG CL10B104KB8NNNC		1		
<b>OTHER PARTS GROUP</b>						
CN13	nsp	WAFER, FFC, SMD(11P-1mm, STRAIGHT)		1		
CN14	nsp	WAFER, 11P LOCK STRAIGHT 25MM JWVT A2512WV0-NP		1		
CN15	nsp	WAFER, SMD(2MM PITCH) 20022WS-NN		1		
CN16-18	nsp	WAFER, FFC, SMD(07P-1mm, STRAIGHT)		3		
BK11	nsp	PLATE EARTH(TRONIC ELECTRONICS)		1		
BK51	nsp	BRACKET PCB		1		
BK52	nsp	PLATE EARTH(TRONIC ELECTRONICS)		1		
BK53	nsp	BRACKET PCB		1		
JK51	943646100420S	JACK, 9P D-SUB FEMALE(RS-232C) D227FD009S100BY/YUQIU		1		
JK52	90M-YT004860R	JACK, STEREO (BLK MOLD) PJ-308-02/YUQIU		1		
JK53	90M-YT003120R	JACK 2P(ORG) SEPA-GND S LVER		1		
JK54	943643102630M	MODULE OPTICAL(RX 25MHz)		1		
JK55	943646000840S	JACK 1P(BK) SEPA-GND GOLD		1		
JK56	62201000300AS	MODULE OPTICAL(TX 25MHz)		1		
JK57	943643102430S	JACK, RJ-45 W/TRANSFORMER KRJ-015XXNL		1		
JK58	943643102880S	JACK, USB B TYPE		1		
JK59	943646000840S	JACK 1P(BK) SEPA-GND GOLD		1		
L101-109	nsp	FERRITE CH P BEAD(2012/220R) BLM21PG221SN1/MURATAMURATA		9		
L201-203	nsp	FERRITE CH P BEAD(2012/220R) BLM21PG221SN1/MURATAMURATA		3		
L301,302	nsp	FERRITE CH P BEAD(2012/220R) BLM21PG221SN1/MURATAMURATA		2		
L401,402	nsp	FERRITE CH P BEAD(2012/220R) BLM21PG221SN1/MURATAMURATA		2		
L501-504	nsp	FERRITE CH P BEAD(2012/220R) BLM21PG221SN1/MURATAMURATA		4		
L505	nsp	PULSE TRANS(K7-T/33302) MITSUMI		1		
L506-507	nsp	CO L CHOKO CHIP(2012/90R) DLW21SN900S02L/MURATAMURATA		2		
L508-509	nsp	FERRITE CH P BEAD(2012/220R) BLM21PG221SN1/MURATAMURATA		2		
L511,512	nsp	FERRITE CH P BEAD(2012/220R) BLM21PG221SN1/MURATAMURATA		2		
SW51	90M-SS000710R	SWITCH, SL DE		1		
WF11	nsp	WAFER, FFC, SMD(27P-125mm, STRAIGHT) F12509Y-27-A012		1		
WF12	nsp	WAFER, FFC, SMD(19P-125mm, STRAIGHT) 125-9-NPB		1		
WF13	nsp	WAFER FFC SMD(21P-125mm STRAIGHT) 125-9-NPB		1		
X101	943141100610S	X-TAL SMD 32X25 12000MHz 10PF 7V12000005 TXC		1		
X201	943141100640S	X-TAL SMD 32X25 24000MHz, 8PF 7V24000002 TXC		1		
X301	943141101230S	X-TAL, SMD 32X25, 26000MHz, 9PF 7V26000056 TXC		1		
X401	943141100620S	X-TAL, SMD 32X25, 24576MHz, 12PF 7V24500006 TXC		1		
X402	943141101240S	OSC, SMD 32X25, 30000MHz, TXC TC30000002 TXC		1		
	nsp	HOLDER PCB		2		
	nsp	HOLDER PCB		7		
	nsp	EOL item CUSHION FOOT		4		
	nsp	RUBBER		1		
	nsp	PANEL, REAR		1		
	nsp	FOOT, FRONT		4		
	90M-FC500030R	FERRITE R NG 29X77X19		1		
	nsp	FERRITE CORE TFCK-16813		1		
	nsp	FERRITE CORE (FFC) GSSC-335-10 GSSC-335-10		1		
	nsp	FERRITE CORE GTFC 23-11-14 GTFC 23-11-14		1		
	nsp	COVER, SCREW		1		
	nsp	WASHER, GROUND		1		
	nsp	WASHER 00M54050400M0		4		

## EXPLODED

※Parts indicated by "nsp" on this table cannot be supplied.

※The parts listed b 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
★	nsp	FRONT PCB				
HP1	-----	FRONT PCB ASS'Y				
HP2	-----	PHONE PCB ASS'Y				
HP3	-----	STANDBY PCB ASS'Y				
LP10	-----	CARD CABLE PCB				
★	nsp	POWER PCB				
HP4	-----	POWER PCB ASS'Y				
LP5	-----	SMPS PCB ASS'Y				
P6	9U6391013200M	DIGITAL PCB ASS'Y N				
P6	9U6391015400M	DIGITAL PCB ASS'Y U				
P6	9U6391015600M	DIGITAL PCB ASS'Y K				
P6	9U6391015600M	DIGITAL PCB ASS'Y F				
P7	nsp	AUDIO PCB ASS'Y				
F1	42141006004M	BADGE , MARANTZ				
F2	42141003200AM	BADGE , STAR MARK	SG			
F2	42141003201AM	BADGE , STAR MARK	B			
F3	943416101110M	WINDOW				
F4	00M24AW154120	KNOB, LEVEL	SG			
F4	943411007050M	KNOB, LEVEL	B			
F5	943402104060M	PANEL, AL FRONT	SG			
F5	943402104070M	PANEL, AL FRONT	B			
F6	943402105000M	PANEL , SIDE(L)	SG			
F6	943402105010M	PANEL , SIDE(L)	N1B,U1B			
F6	943402105020M	PANEL , SIDE(L)	K1B			
F7	943402105030M	PANEL , SIDE(R)	SG			
F7	943402105040M	PANEL , SIDE(R)	B			
F8	nsp	SHEET , LED				
F9	nsp	PANEL , SUB	SG			
F9	nsp	PANEL , SUB	B			
F10	481510003006M	INDICATOR, POWER				
F11	411510021036M	KNOB, POWER	SG			
F11	411510015017M	KNOB, POWER	B			
F12	943412101300M	CURSOR KNOB ASS'Y	SG			
F12	943412101310M	CURSOR KNOB ASS'Y	B			
F13	943412101320M	ENTER KNOB ASS'Y	SG			
F13	943412101330M	ENTER KNOB ASS'Y	B			
F14	943411103250M	BUTTON , INPUT	SG			
F14	943411103250M	BUTTON , INPUT	B			
F15	943411103270M	CURSOR BUTTON ASS'Y	SG			
F15	943411103280M	CURSOR BUTTON ASS'Y	B			
F16	943411103290M	PLAY BUTTON ASS'Y	SG			
F16	943411103300M	PLAY BUTTON ASS'Y	B			
F17	nsp	CHASSIS , FRONT				
M1	nsp	FRAME, FRONT				
M2	nsp	CHASSIS, BOTTOM				
M3	nsp	PLATE, BOTTOM				
M4	00M243W057210	FOOT, FRONT				
M5	00M32CW107010	CUSHION, FOOT				
M6	nsp	HOLDER, PCB				
M7	nsp	HOLDER, PCB				
M8	nsp	COVER, SCREW				
M9	nsp	PANEL , REAR				
M9	nsp	PANEL , REAR				
M10	401310003033M	CABINET, TOP	SG			
M10	401310003002M	CABINET, TOP	B			
M11	nsp	CUSHION				
M12	nsp	TAPE , HEMELON				
M13	nsp	SCREW, COVER				
M14	nsp	CLAMPER, WIRE				
P8	943101102280M	TRANS, POWER ( 230V/50Hz, NA8005/N1)	N			
P8	943101102290M	TRANS, POWER ( 120V/60Hz, NA8005/U1B )	U			
P8	943101102480M	TRANS, POWER ( 220V/50Hz, NA8005/K1B )	K			
P8	943101102300M	TRANS, POWER ( 100V/50-60Hz, NA8005/FN )	F			
P9	00MYJ04002640	RECEPTACLE , AC				
S1	nsp	SCREW	SG			
S2	nsp	SCREW	SG			
S3	nsp	SCREW	SG			
S4	nsp	SCREW	SG			
S5	nsp	SCREW	SG			
S6	nsp	SCREW	SG			
S7	nsp	SCREW	SG			
S8	nsp	SCREW	SG			
S9	nsp	SCREW	SG			
S10	nsp	WASHER, GND	SG			
S11	nsp	WASHER, GND	B			
★	943606502510S	FFC(27P, 80MM, 1.25MM, B, 10MM)				
★	943606502520S	FFC(21P, 80MM, 1.25MM, B, 10MM)				
★	943606502530S	FFC(19P, 100MM, 1.25MM, B, 10MM, SHIELD)				
★	nsp	BRACKET , PHONE				
★	nsp	2P WIRE ASS'Y(100MM)				
★	nsp	NUT , PHONE				

## PACKING

※Parts indicated by "nsp" on this table cannot be supplied.

※The parts listed t 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	CPG	Q'ty	New	Ver
1	943531103890M	BOX OUTCARTON		CPG1A994X	1	*	
2	nsp	BAG POLY		CPB1A213	1		
3-1	943533101940M	PAD SNOWBOTTOM(F/R)		CPS2A964	1	*	
3-2	943533101930M	PAD SNOWTOP(F/R)		CPS2A962	1	*	
4	-----	INSTRUCTIONMANUALASS'Y		-----	1		
4-0	35201029301AM	CDMANUAL N	N	CFT1A118ZA	1	*	
4-0	35201029300AM	CDMANUAL U	U	CFT1A119ZA	1	*	
4-0	35201029303AM	CDMANUAL K	K	CFT1A120ZA	1	*	
4-1	54111112100AM	MANUAL,INSTRUCTION	F	CQX1A1773Z	1	*	
4-2	nsp	SAFETYINSTRUCTION	F	CQE1A712Z	1		
4-2	nsp	SAFETYINSTRUCTION	K	CQE1A708Z	1		
4-2	nsp	SAFETYINSTRUCTION	U	CQE1A706Z	1		
4-2	nsp	SAFETYINSTRUCTION	N	CQE1A689Z	1		
4-3	54111112202AM	MANUAL GETT NGSTART	F	CQX1A1776Z	1	*	
4-3	54111112200AM	MANUAL GETT NGSTART	U	CQX1A1775Z	1	*	
4-3	54111112201AM	MANUAL GETT NGSTART	N	CQX1A1774Z	1	*	
4-3	54111112203AM	MANUAL,GETT NGSTART	K	CQX1A1777Z	1	*	
4-4	nsp	CARD,USER(JAPAN)	F	CQE1A139S	1		
4-5	nsp	SHEET,ADDRESS(JAPAN)	F	CQE1A195N	1		
4-5	nsp	CARDFORCHINAIDENTIFICATION	K	CQE1A450Z	1		
4-6	nsp	CARD,WARRANTY	U	CQE1A131V	1		
4-6	nsp	WARRANTYCANADA	U	CQE1A132V	1		
5	611050028007S	CORD,POWER F	F	CJA2J115ZV	1		
5	90M-ZC000650R	CORD,POWER K	K	CJA2N075Z	1		
5	90M-ZC000310R	CORD,POWER U	U	CJA2A070Z	1		
5	90M-ZC000320R	CORD,POWER N	N	CJA2B054Z	1		
6	nsp	BAG POLY		CPB1A213	1		
7	30701016100AM	REMOCON RC003NA		CARTNA8005A1	1		
8	nsp	LABEL CONTROL		CQB1A993Z	1		
8-1	nsp	LABEL,SERIAL		CQB1A993Z	1		
8-2	nsp	LABEL,DATE	F, K	CQB1A994Z	1		
9	nsp	BATTERY(SIZE'AAA')		CABR03PPB	1		
10	nsp	2PCORD,PIN		CJS4M009X	1		
11	nsp	1PCORD,PIN		CJS4N014Z	1		
13	nsp	CARD,WARRANTY(JAPAN)	F	CQE1A123W	1		
13	nsp	CARD,WARRANTYCHINA	K	CQE1A449W	1		
14	nsp	LABEL,WHITEM1SG	SG	CQB1A908Z	1		
15	nsp	SpotifyLabel	N	CQB1A1273Z	1		
15	nsp	LABEL QPLAY	K	CQB1A1310Z	1		