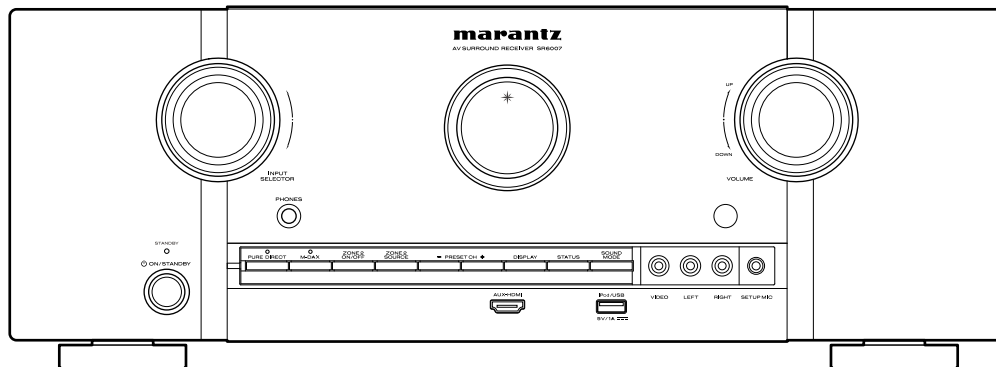


# Service Manual

**SR6007 /U1B,K1B**  
**N1SG,N1B**

## AV Surround Receiver



- 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®**

# SR6007

**Ver. 3**

Please refer to the  
MODIFICATION NOTICE.

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# ABOUT THIS MANUAL

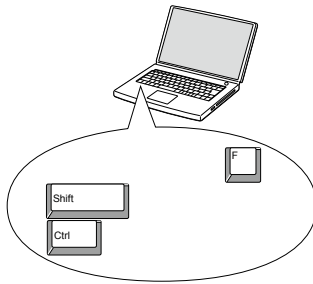
Read the following information before using the service manual.

## What you can do with this manual

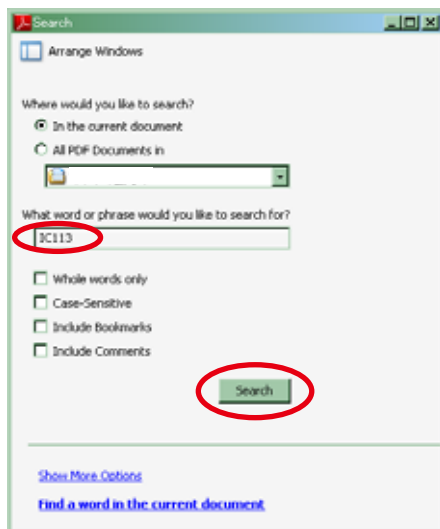
### Search for a Ref. No. (phrase) (Ctrl+Shift+F)

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

1. Press **Ctrl+Shift+F** on the keyboard.
  - The Search window appears.



2. Enter the Ref. No. you want to search for in the Search window, and then click the **Search** button.
  - A list of search results appears.

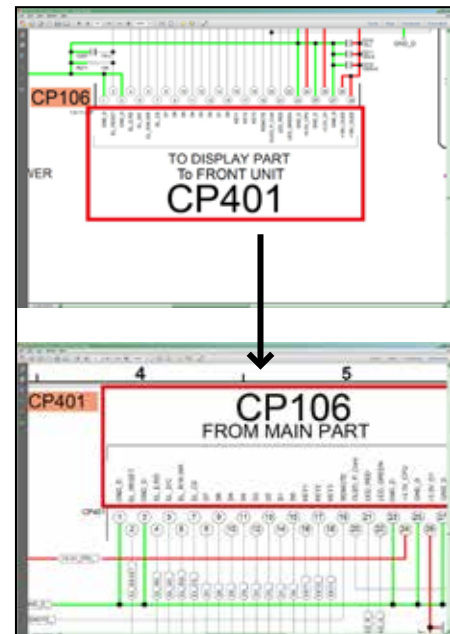


3. Click an item on the list.
  - The screen jumps to the page for that item, and the search phrase is displayed.

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

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

- The screen jumps to the target connector.



- Page magnification stays the same as before the jump.

## Using Adobe Reader (Windows version)

### Add notes to this data (Sign)

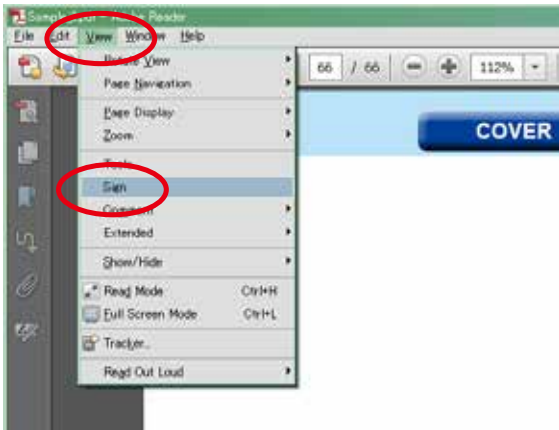
The Sign function lets you add notes to the data in this manual.

Save the file once you have finished adding notes.

#### [Example using Adobe Reader X]

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

- The Sign pane appears.



#### [Example using Adobe Reader 9]

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

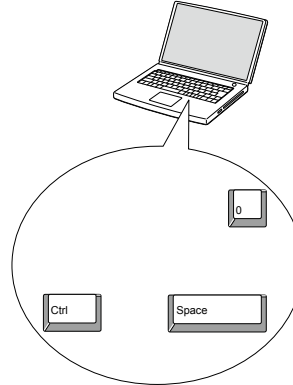
### Magnify schematic / printed wiring board diagrams - 1

(Ctrl+Space, mouse operation)

#### [Example using Adobe Reader 9,X]

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

- The selected area is magnified.

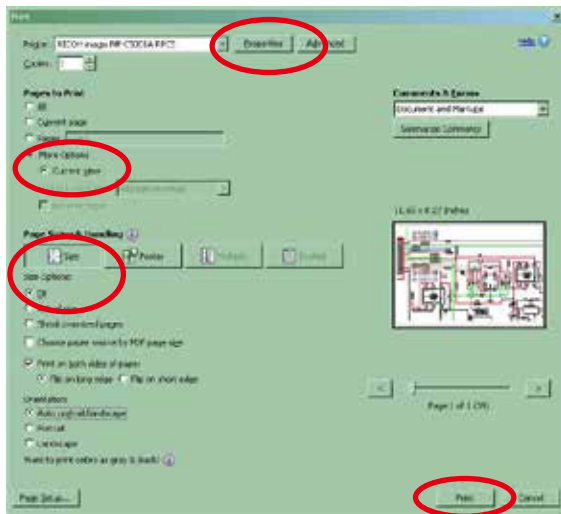


- When you want to move the area shown, hold down **Space** and drag the mouse.
- When you want to show a full page view, press **Ctrl+0** on the keyboard.

### 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.



#### • 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"

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



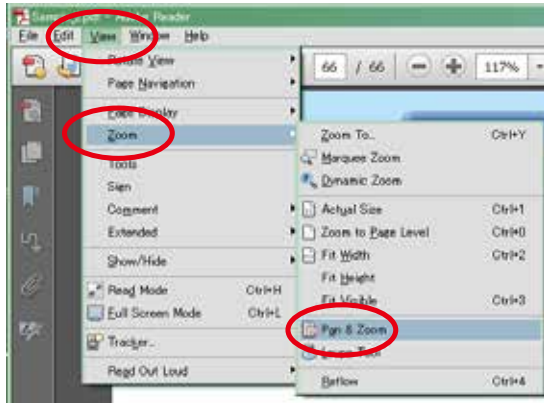
## Magnify schematic / printed wiring board diagrams - 2

### (Pan & Zoom function)

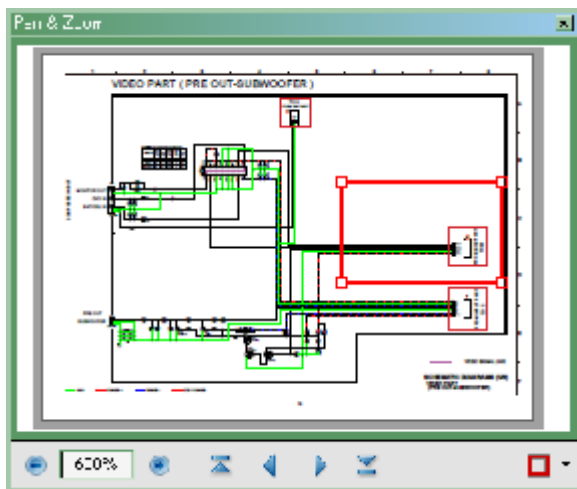
The Pan & Zoom function lets you see which part of a magnified diagram is being shown in a separate window.

#### [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".

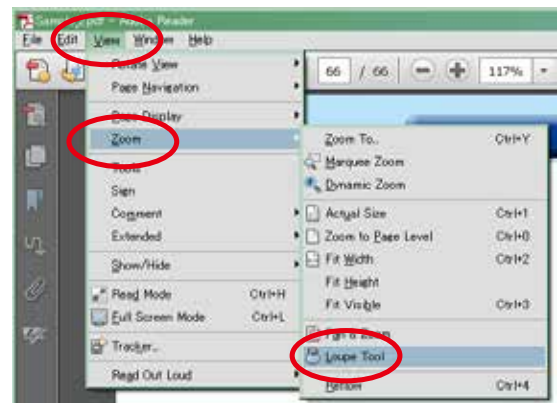
## Magnify schematic / printed wiring board diagrams - 3

### (Loupe Tool function)

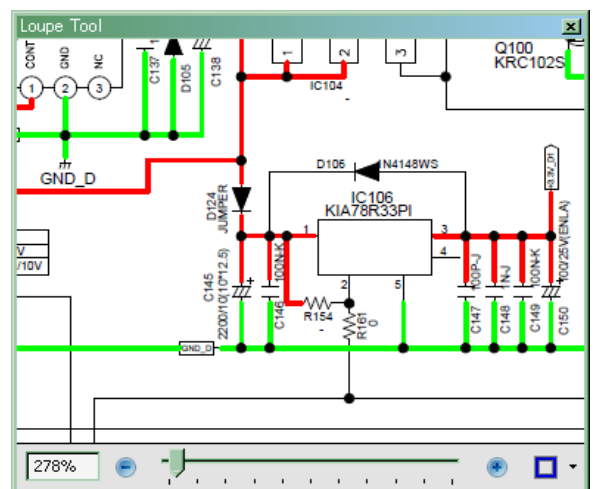
The Loupe Tool function lets you magnify a specific part of a diagram in a separate window.

#### [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".

## MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, **MARANTZ** company has created the ultimate in stereo sound. Only original **MARANTZ** parts can insure that your **MARANTZ** product will continue to perform to the specifications for which it is famous.

Parts for your **MARANTZ** equipment are generally available to our National Marantz Subsidiary or agent.

### ORDERING PARTS :

Parts can be ordered either by mail or by Fax.. In both cases, the correct part number has to be specified.

The following information must be supplied to eliminate delays in processing your order :

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature : any order form or Fax. must be signed, otherwise such part order will be considered as null and void.

#### USA

**MARANTZ AMERICA, INC**  
100 CORPORATE DRIVE  
MAHWAH, NEW JERSEY 07430  
USA

#### EUROPE / TRADING

**D&M EUROPE B. V.**  
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BEEMDSTRAAT 11, 5653 MA EINDHOVEN  
THE NETHERLANDS  
PHONE : +31 - 40 - 2507844  
FAX : +31 - 40 - 2507860

#### CANADA

**D&M Canada Inc.**  
5-505 APPLE CREEK BLVD.  
MARKHAM, ONTARIO L3R 5B1  
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PHONE : 905 - 415 - 9292  
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#### JAPAN

**D&M Holdings Inc.**  
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ROOM.808 SHANGHAI AIRPORT CITY TERMINAL  
NO.1600 NANJING (WEST) ROAD, SHANGHAI,  
CHINA. 200040  
TEL : 021 - 6248 - 5151  
FAX : 021 - 6248 - 4434

### NOTE ON SAFETY :

Symbol ⚠ Fire or electrical shock hazard. Only original parts should be used to replaced any part marked with symbol ⚠.

Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

### 安全上の注意 :

⚠ がついている部品は、安全上重要な部品です。必ず指定されている部品番号のものを使用して下さい。

### SHOCK, FIRE HAZARD SERVICE TEST :

**CAUTION** : After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or Front Panel of product and controls and chassis bottom.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before it is return to the user/customer.

Ref. UL Standard No. 60065.

In case of difficulties, do not hesitate to contact the Technical  
Department at above mentioned address.

## 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 ⚠ mark have critical characteristics. Use ONLY replacement parts recommended by the manufacturer.

### **CAUTION:**

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

### **WARNING:**

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

### **NOTICE:**

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

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

## NOTE FOR PARTS LIST

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

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

# TECHNICAL SPECIFICATIONS

## □ Audio Section

### • Power amplifier

#### Rated output:

Front :  
110 W + 110 W (8  $\Omega$ , 20 Hz – 20 kHz with 0.08 % T.H.D.)

Center :  
110 W (8  $\Omega$ , 20 Hz – 20 kHz with 0.08 % T.H.D.)

Surround :  
110 W + 110 W (8  $\Omega$ , 20 Hz – 20 kHz with 0.08 % T.H.D.)

Surround back:  
110 W + 110 W (8  $\Omega$ , 20 Hz – 20 kHz with 0.08 % T.H.D.)

#### Maximum effective output power:

Front :  
190 W + 190 W (6  $\Omega$ , 1 kHz with 10 % T.H.D.)

Center :  
190 W (6  $\Omega$ , 1 kHz with 10 % T.H.D.)

Surround :  
190 W + 190 W (6  $\Omega$ , 1 kHz with 10 % T.H.D.)

Surround back:  
190 W + 190 W (6  $\Omega$ , 1 kHz with 10 % T.H.D.)

Output connectors: 6 – 8  $\Omega$

### • Analog

Input sensitivity/Input impedance: 200 mV/47 k $\Omega$

Frequency response: 10 Hz – 100 kHz — +1, –3 dB (DIRECT mode)

S/N : 100 dB (IHF–A weighted, DIRECT mode)

Distortion: 0.005 % (20 Hz – 20 kHz) (DIRECT mode)

Rated output : 1.2 V

### • Digital

D/A output : Rated output — 2 V (at 0 dB playback)  
Total harmonic distortion — 0.008 % (1 kHz, at 0 dB)  
S/N ratio — 102 dB  
Dynamic range — 100 dB

Digital input : Format — Digital audio interface

### • Phono equalizer (PHONO input — MEDIA PLAYER OUT)

Input sensitivity : 2.5 mV

RIAA deviation:  $\pm 1$  dB (20 Hz to 20 kHz)

S/N : 74 dB (A weighting, with 5 mV input)

Rated output: 150 mV

Distortion factor : 0.03 % (1 kHz, 3 V)

## □ Video section

### • Standard video connectors

Input/output level and impedance: 1 Vp-p, 75  $\Omega$

Frequency response : 5 Hz – 10 MHz — 0, –3 dB

### • Color component video connector

Input/output level and impedance:

Y (brightness) signal — 1 Vp-p, 75  $\Omega$

P<sub>B</sub> / C<sub>B</sub> signal — 0.7 Vp-p, 75  $\Omega$

P<sub>R</sub> / C<sub>R</sub> signal — 0.7 Vp-p, 75  $\Omega$

Frequency response : 5 Hz – 60 MHz — 0, –3 dB

## □ Tuner section

[FM] (Note:  $\mu$ V at 75  $\Omega$ , 0 dBf =  $1 \times 10^{-15}$  W)

Receiving Range (for U model):

[FM] 87.5 MHz – 107.9 MHz

Receiving Range (for N, K model):

[FM] 87.5 MHz – 108.0 MHz

Usable Sensitivity:

[FM] 1.2  $\mu$ V (12.8 dBf)

50 dB Quieting Sensitivity:

[FM] MONO 2.8  $\mu$ V (20.2 dBf)

S/N:

[FM] MONO 70 dB (IHF–A weighted, DIRECT mode)

STEREO 67 dB (IHF–A weighted, DIRECT mode)

Total harmonic Distortion:

[FM] MONO 0.7 % (at 1 kHz)

STEREO 1.0 % (at 1 kHz)

## □ General

Power supply (for U model) : AC 120 V, 60 Hz

Power supply (for N model) : AC 230 V, 50/60 Hz

Power supply (for K model) : AC 220 V, 50 Hz

Power consumption:

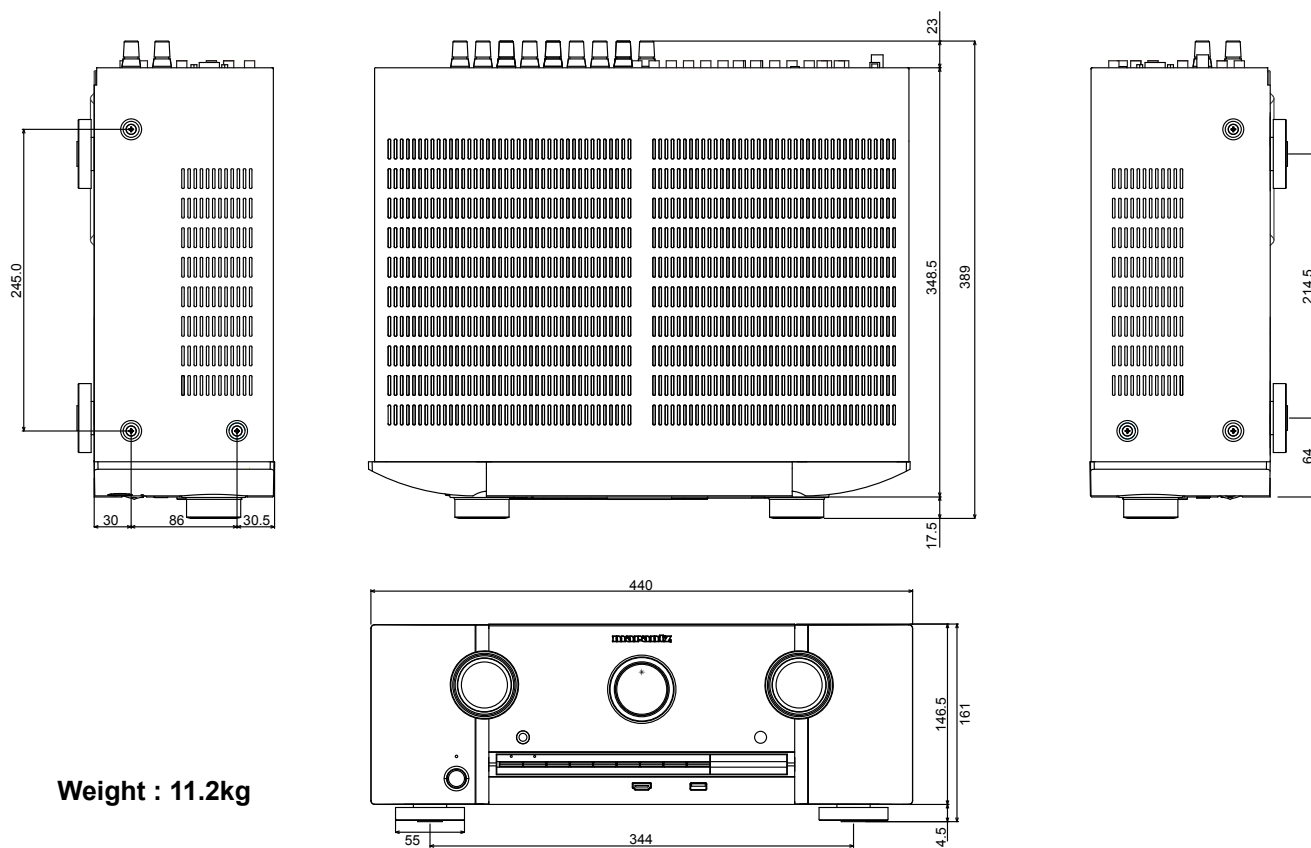
650 W

0.2 W (Standby)

0.5 W (CEC standby)

2.7 W (Network standby)

# DIMENSION



Weight : 11.2kg

## CAUTIONS IN SERVICING

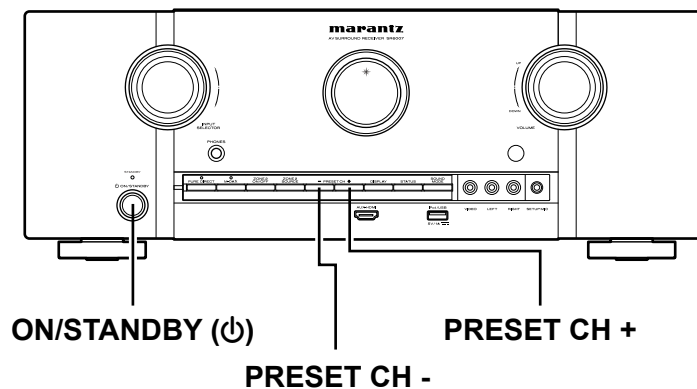
### Initializing AV Surround Receiver

AV Surround Receiver initialization should be performed when the  $\mu$ com, peripheral parts of  $\mu$ com, and Digital PCB. were replaced.

1. Turn off the power pressing "ON/STANDBY (⏻)" button.
2. Press "ON/STANDBY (⏻)" button while simultaneously while pressing "PRESET CH +" and "PRESET CH -" buttons.
3. Check that the entire display is flashing at intervals of about 1 second, and then release the 2 buttons.  
The microprocessor will be initialized.

**NOTE:** • If step 3 fails, start over from step 1.

- All user settings will be lost and the factory setting will be recovered after the set is initialized.  
So make sure to note down your setting beforehand for restoring after the initialization.



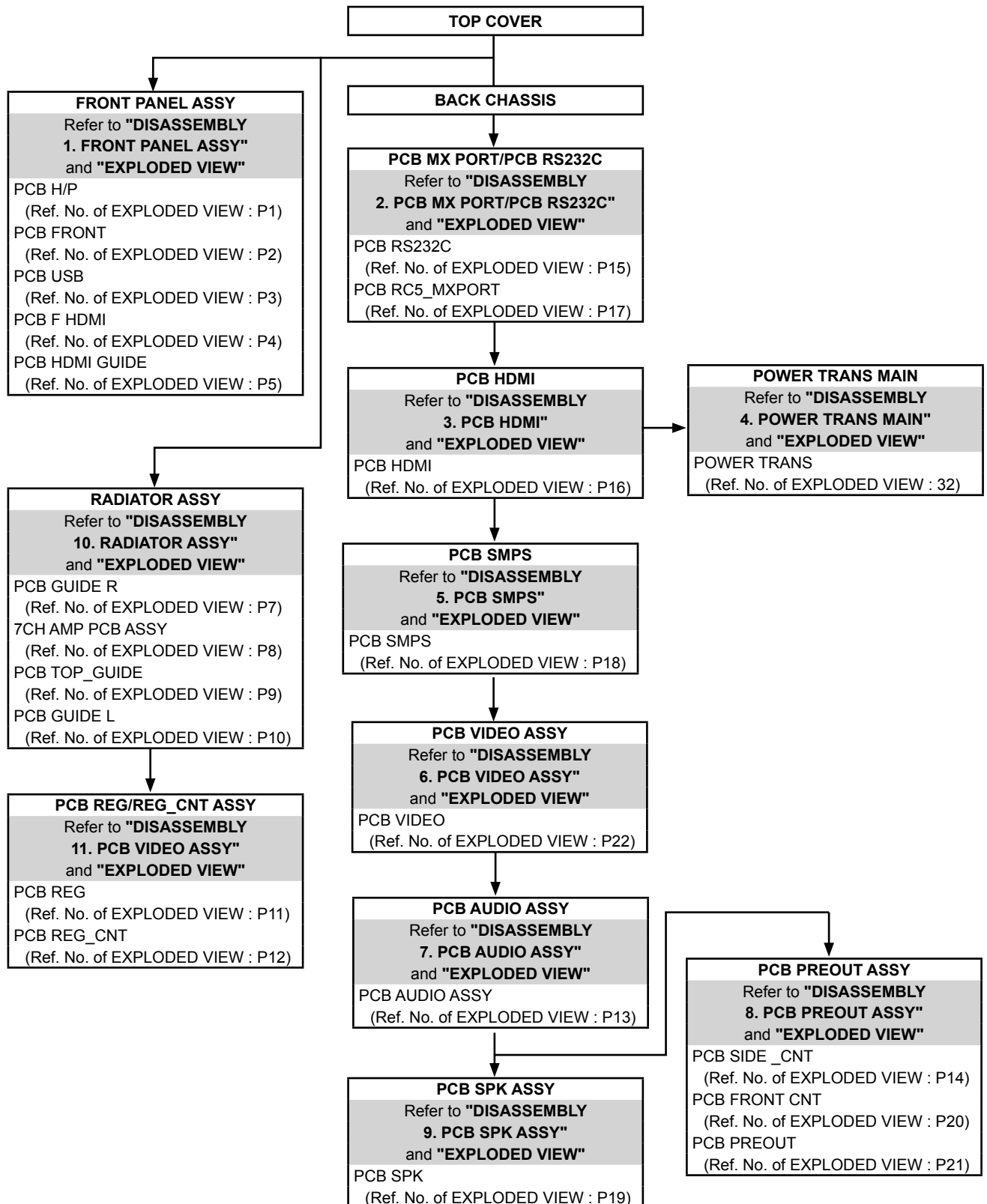
### Service Jig

When you repair the printing board, you can use the following JIG (Extension cable kit). Please order it from Marantz Official Service Distributor in your region if necessary.

8U-110084S : EXTENSION UNIT KIT : 1 Set  
(Refer to 55 page.)

# DISASSEMBLY

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



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

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

### The viewpoint of each photograph (Shooting direction)

[View from the top]

Shooting direction: C →



Shooting direction: B



Front side



← Shooting direction: D

Shooting direction: A





## 1. FRONT PANEL ASSY

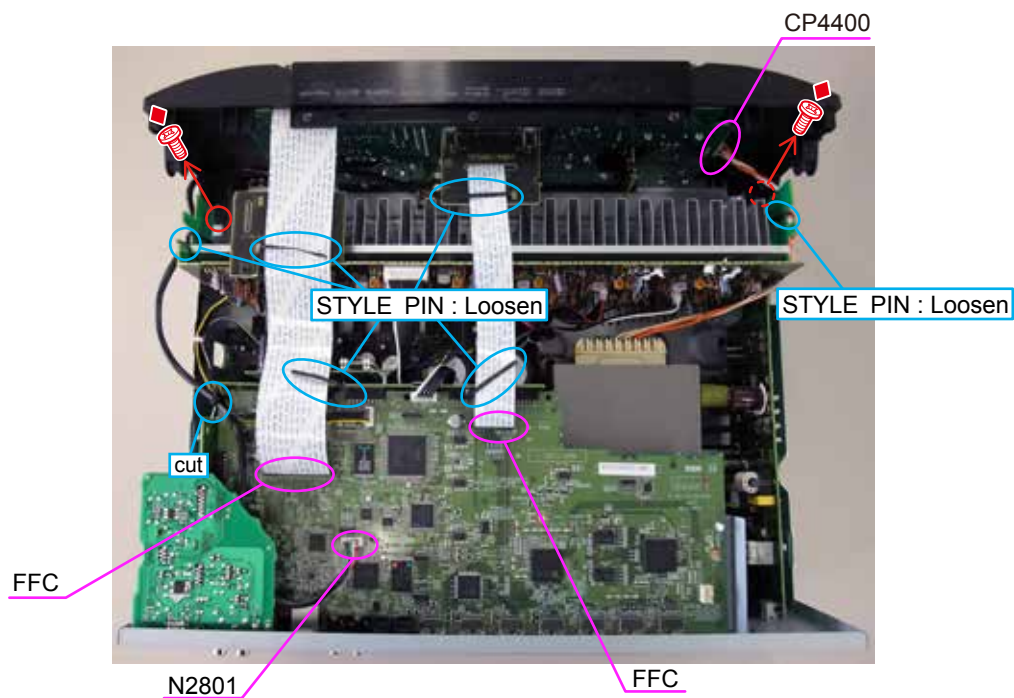
Proceeding : **TOP COVER** → **FRONT PANEL ASSY**

(1) Remove the screws.

View from the bottom



(2) Cut the wire clamp band, then disconnect the connector wires and FFC. Remove the screws.

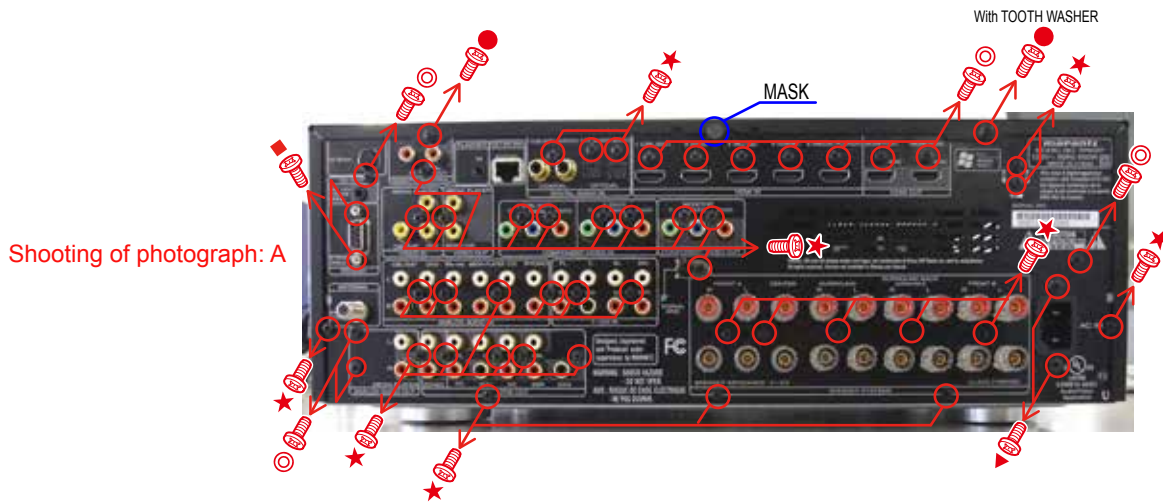


Please refer to "EXPLODED VIEW" for the disassembly method of each P.W.B included in FRONT PANEL ASSY.

## 2. PCB MX PORT/PCB RS232C

Proceeding : **TOP COVER** → **BACK CHASSIS** → **PCB MX PORT/PCB RS232C**

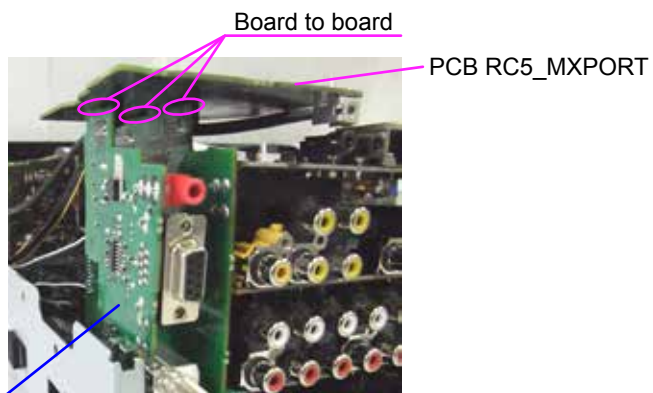
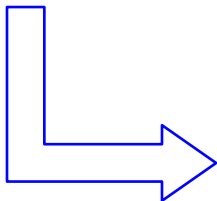
(1) Remove the screws.



(2) Disconnect the connector board.



Shooting of photograph: A

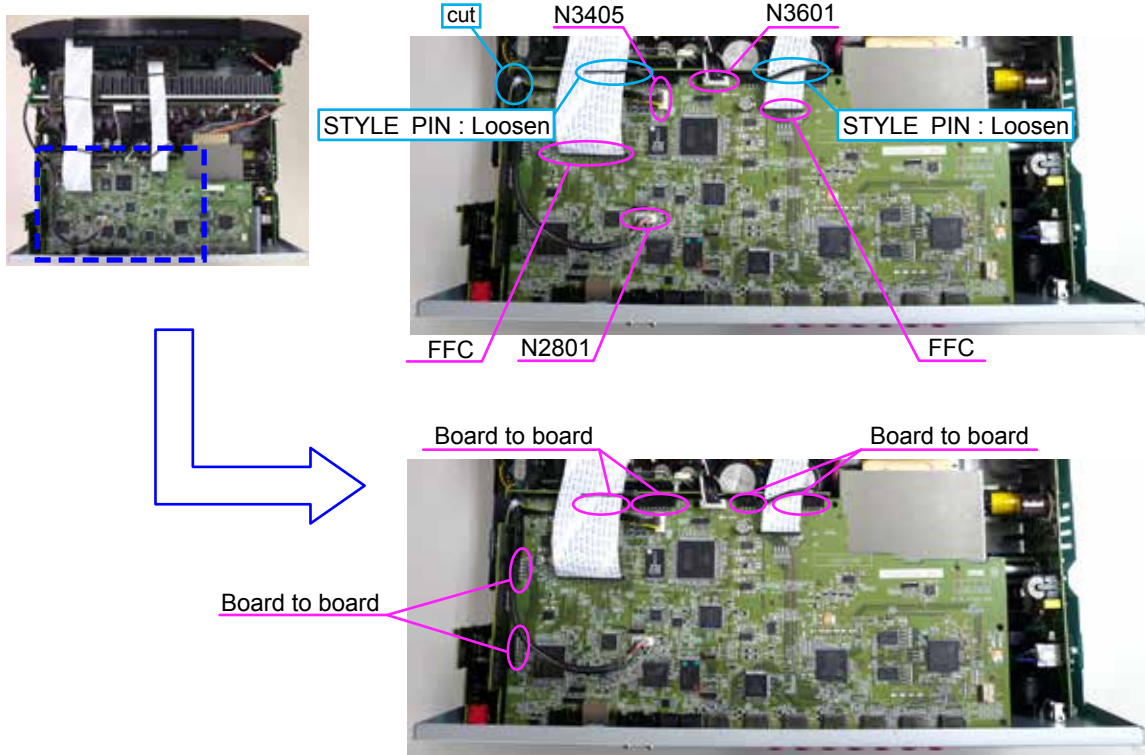


Please refer to "EXPLODED VIEW" for the disassembly method of PCB MX PORT/PCB RS232C.

### 3. PCB HDMI

Proceeding : **TOP COVER** → **BACK CHASSIS** → **PCB MX PORT/PCB RS232C**  
→ **PCB HDMI**

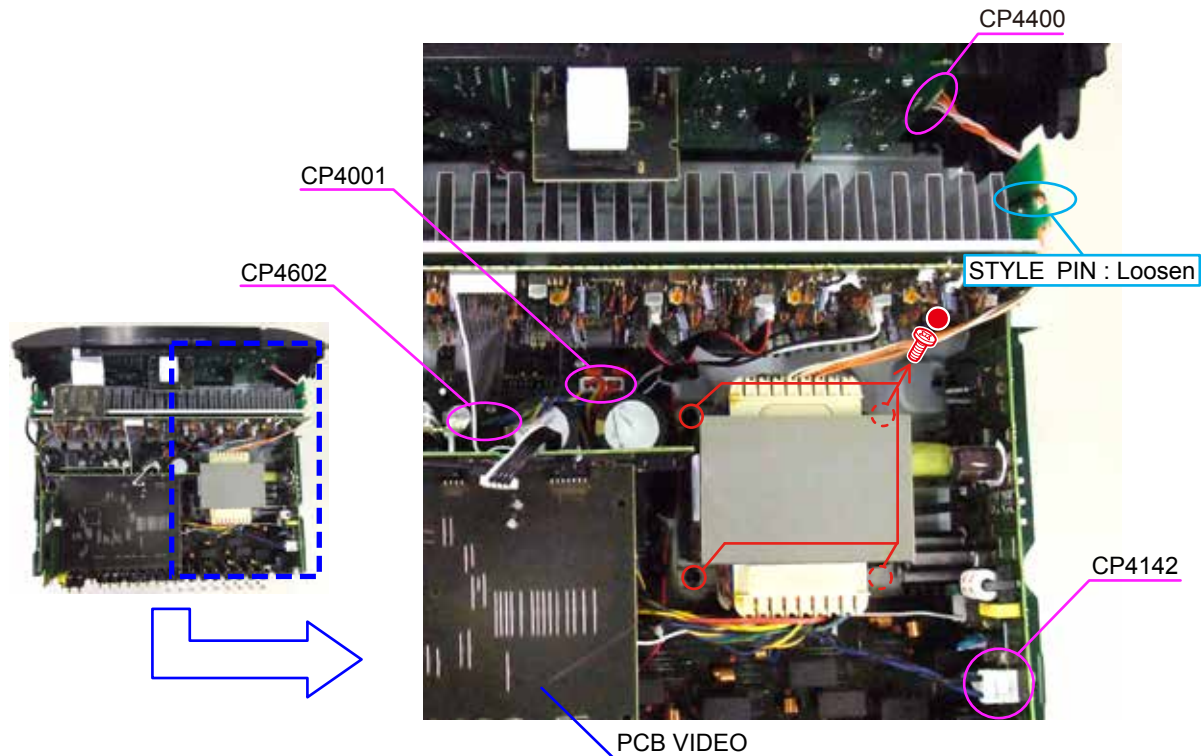
(1 ) Cut the wire clamp band, then disconnect the connector wires and FFC. Disconnect the connector board.



#### 4. POWER TRANS MAIN

Proceeding : **TOP COVER** → **BACK CHASSIS** → **PCB MX PORT/PCB RS232C**  
→ **PCB HDMI** → **POWER TRANS MAIN**

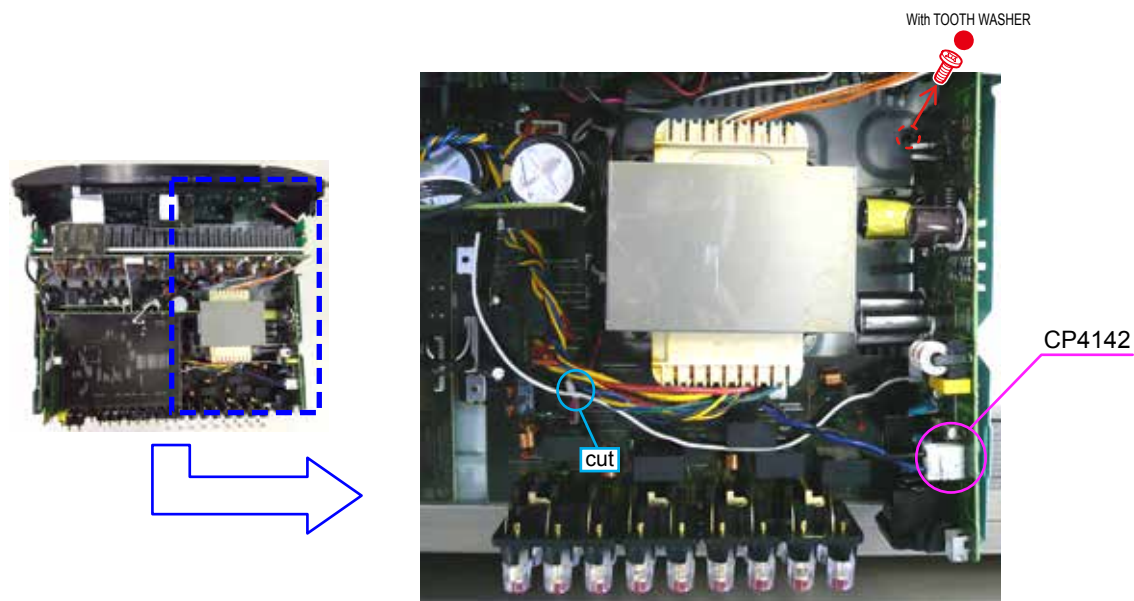
(1) Disconnect the connector wires, then remove the screws.



#### 5. PCB SMPS ASSY

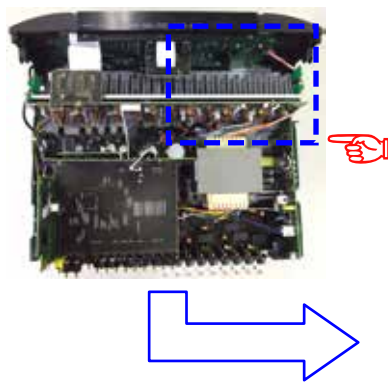
Proceeding : **TOP COVER** → **BACK CHASSIS** → **PCB MX PORT/PCB RS232C**  
→ **PCB HDMI** → **PCB SMPS ASSY**

(1) Cut the wire clamp band, then disconnect the connector wire. Remove the screw.





(2) Remove the screws.

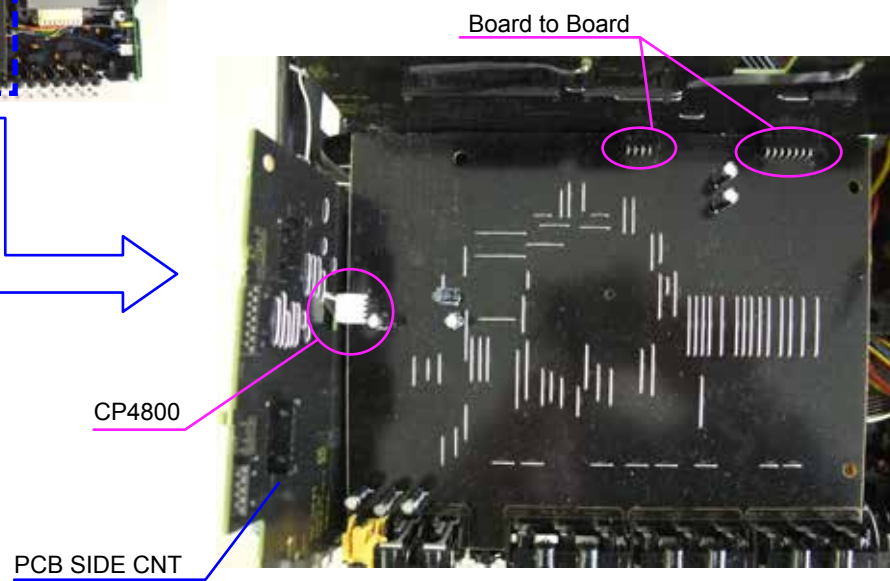


Shooting of photograph: D

## 6. PCB VIDEO

Proceeding : **TOP COVER** → **BACK CHASSIS** → **PCB MX PORT/PCB RS232C**  
→ **PCB HDMI** → **PCB SMPS ASSY** → **PCB VIDEO**

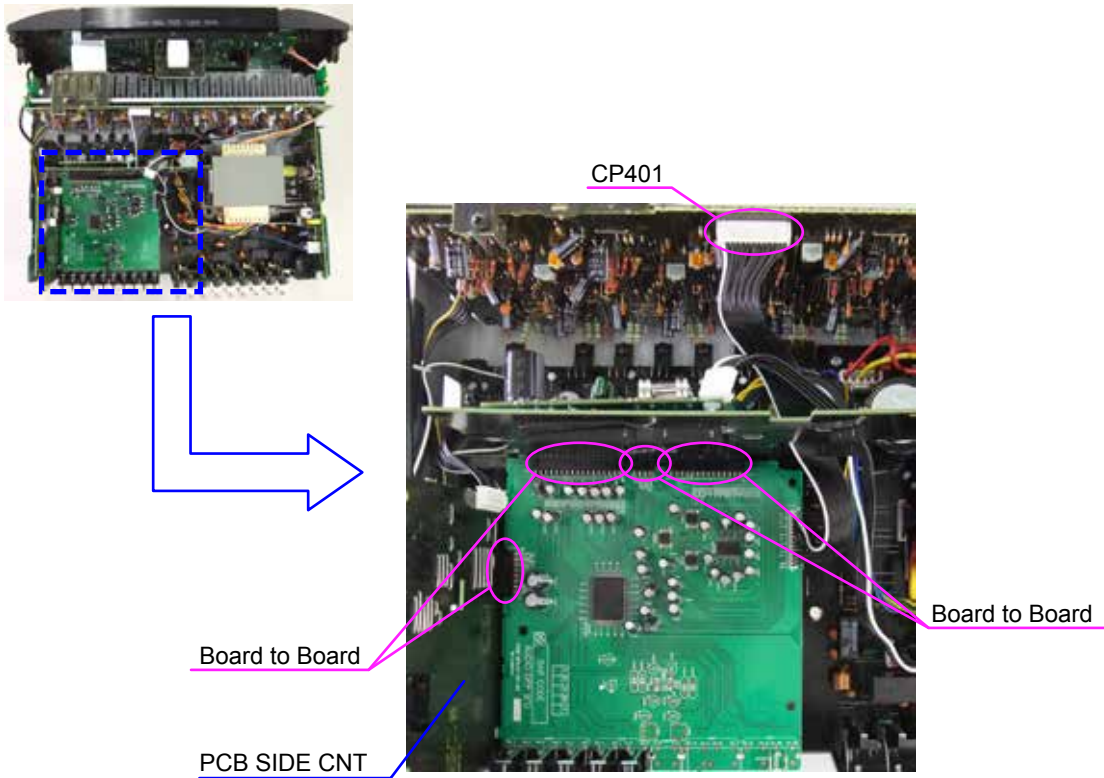
(1) Disconnect the connector wire and connector board.



## 7. PCB AUDIO

Proceeding : **TOP COVER** → **BACK CHASSIS** → **PCB MX PORT/PCB RS232C**  
→ **PCB HDMI** → **PCB SMPS ASSY** → **PCB VIDEO** → **PCB AUDIO**

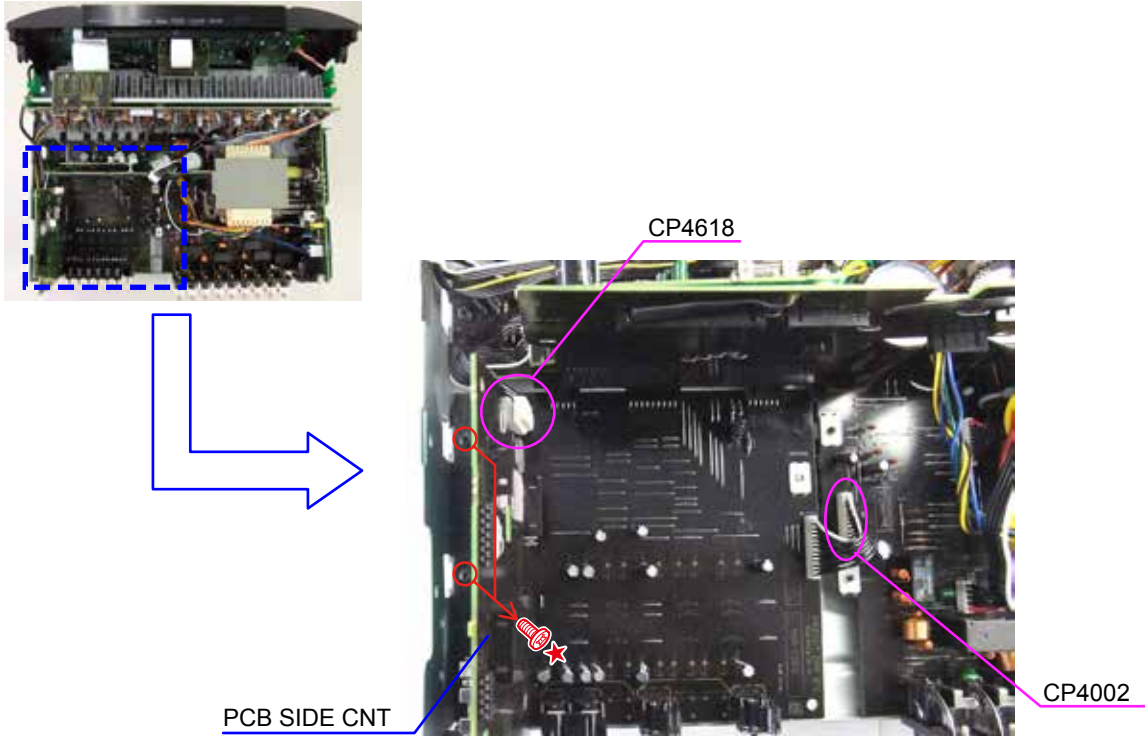
(1) Disconnect the connector wire and connector board.



## 8. PCB PREOUT

Proceeding : **TOP COVER** → **BACK CHASSIS** → **PCB MX PORT/PCB RS232C**  
→ **PCB HDMI** → **PCB SMPS ASSY** → **PCB VIDEO** → **PCB AUDIO**  
→ **PCB PREOUT**

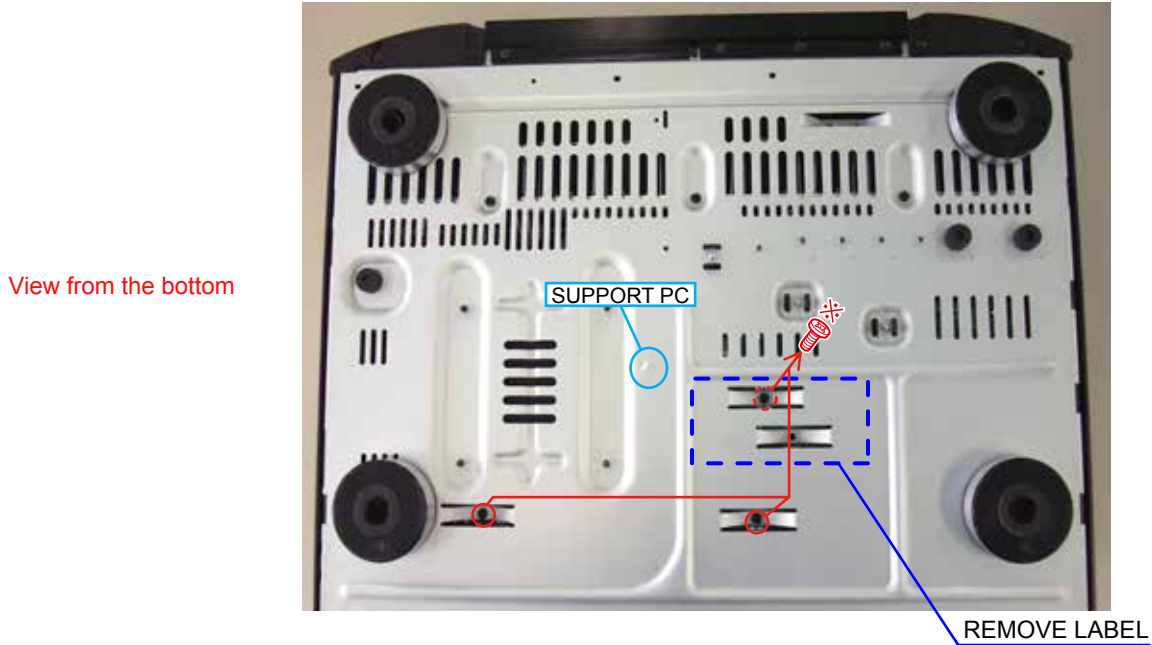
(1) Remove the screws, then disconnect the connector wires



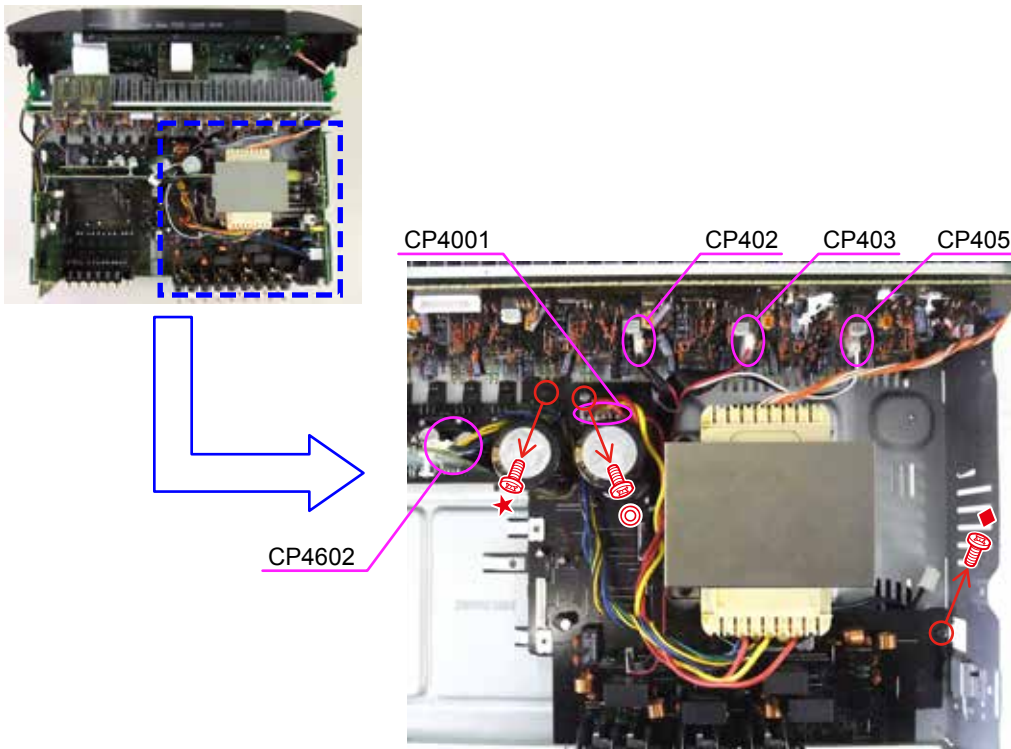
## 9. PCB SPK

Proceeding : **TOP COVER** → **BACK CHASSIS** → **PCB MX PORT/PCB RS232C**  
→ **PCB HDMI** → **PCB SMPS ASSY** → **PCB VIDEO** → **PCB AUDIO**  
→ **PCB SPK**

(1) Remove the screws and SUPPORT PC.



(2) Remove the screws, then disconnect the connector wires.

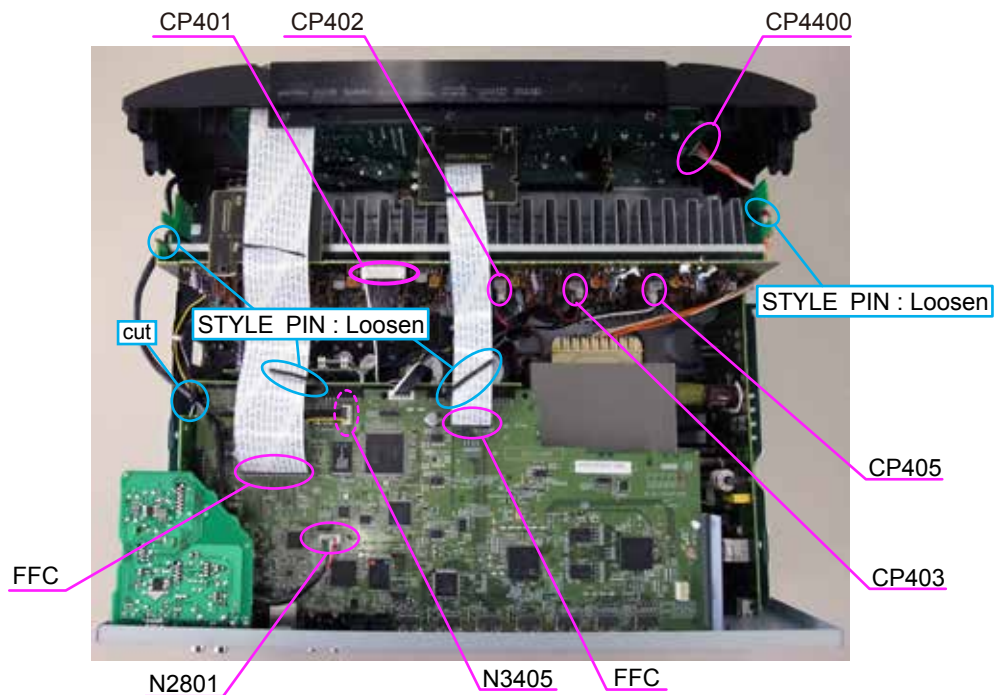




## 10.RADIATOR ASSY

Proceeding : **TOP COVER** → **RADIATOR ASSY**

(1) Cut the wire clamp band. Remove the screws, then disconnect the connector wires.

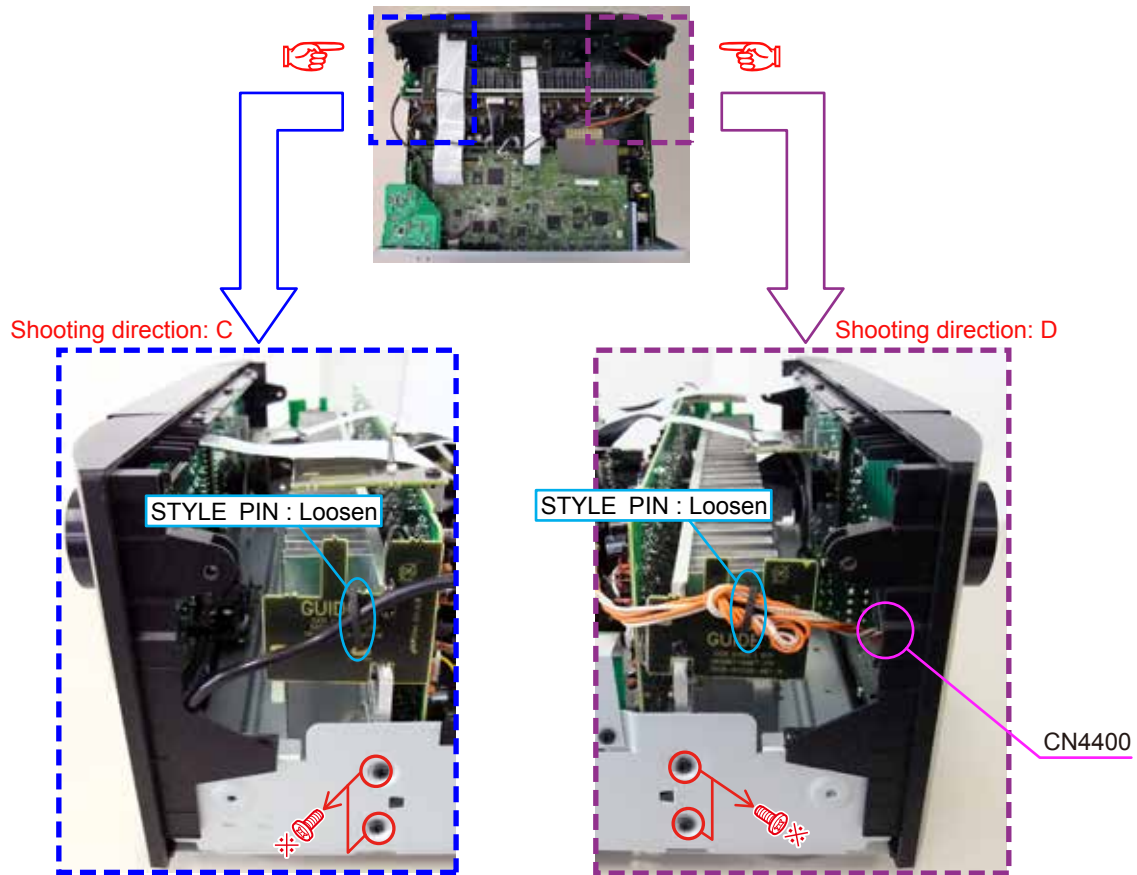


(2) Remove the screws.

View from the bottom



(3) Remove the screws, then disconnect the connector wire.

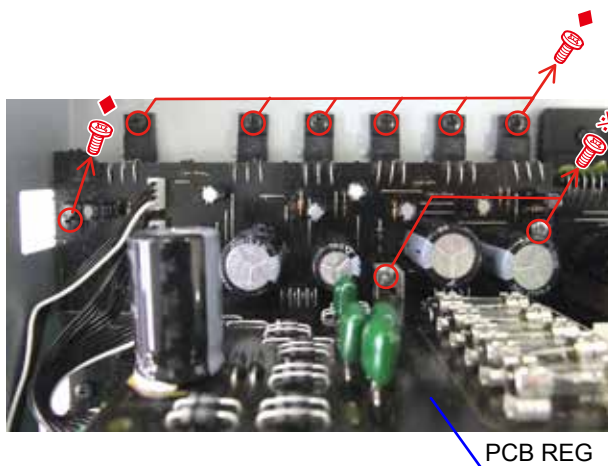
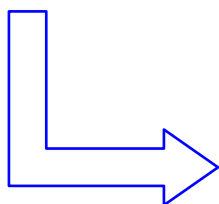
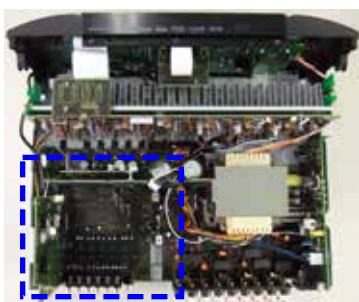


Please refer to "EXPLODED VIEW" for the disassembly method of each P.W.B included in RADIATOR ASSY.

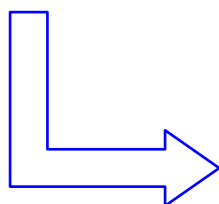
## 11.PCB REG/REG\_CNT ASSY

Proceeding : **TOP COVER** → **RADIATOR ASSY** → **PCB REG/REG\_CNT ASSY**

(1) Remove the screws.

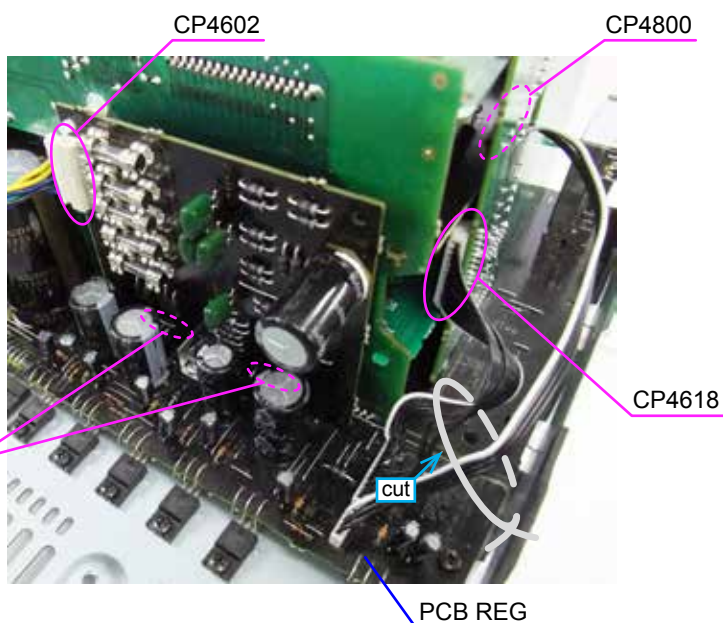


(2) Cut the wire clamp band, then disconnect the connector wire and connector board.



Shooting of photograph: B

Board to Board



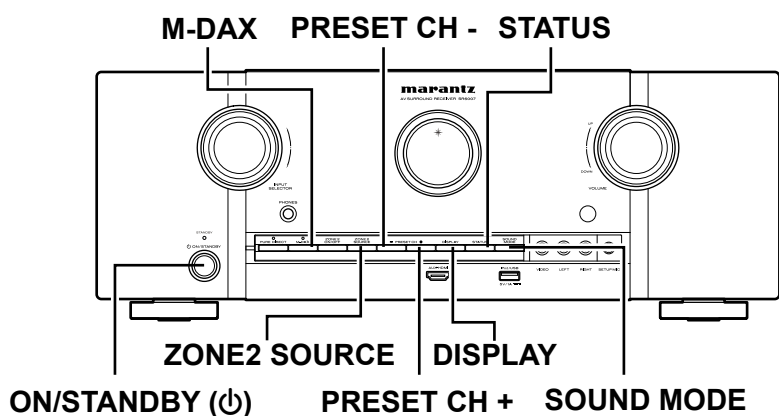
Please refer to "EXPLODED VIEW" for the disassembly method of each PCB.

## SPECIAL MODE

### Special mode setting button

- ※ No.1 - 7 : Press the "ON/STANDBY (⏻)" button to turn on the power while pressing both the button A and the button B at the same time.
- ※ No.8 - 10 : Turn on the power, then press and hold down the button A and button B for over 3 seconds.

| No. | Mode                                                                            | Button A        | Button B       | Contents                                                                                                                                                 |
|-----|---------------------------------------------------------------------------------|-----------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Version display<br>(μcom/DSP Error Display)                                     | DISPLAY         | STATUS         | Firmware versions such as Main or DSP are displayed in the FL Display.<br>Errors are displayed when they occur. (Refer to 25 page)                       |
| 2   | User Initialization mode<br>(Installer Setup settings are not initialized.)     | ZONE2<br>SOURCE | M-DAX          | Backup data initialization is carried out.<br>(Installer Setup settings are not initialized.)                                                            |
| 3   | Factory Initialization mode<br>(Installer Setup settings are also initialized.) | PRESET<br>CH +  | PRESET<br>CH - | Backup data initialization is carried out.<br>(Installer Setup settings are also initialized.)                                                           |
| 4   | PANEL/REMOTE LOCK Selection mode                                                | DISPLAY         | M-DAX          | Selects to reject operations through panel buttons and the master volume knob on the main unit and operations via the remote control.                    |
| 5   | Service Related Selection mode                                                  | ZONE2<br>SOURCE | STATUS         | Selects the "Diagnostic mode" or "Displaying the protection history mode".                                                                               |
| 6   | Mode for switching tuner frequency step<br>(U/N model only)                     | DISPLAY         | PRESET<br>CH - | Change tuner frequency step to FM:50kHz/200kHz                                                                                                           |
| 7   | Installer Setup mode                                                            | SOUND<br>MODE   | STATUS         | Access the Remote Maintenance mode via the internet.<br>Installer Setup is displayed on GUI/Option Menu.<br>※ Refer to SR_RemoteMaintenance_.pdf of SDI. |
| 8   | Memory Backup                                                                   | PRESET<br>CH +  | PRESET<br>CH - | Backup of DUAL BACKUP MEMORY is performed. (Refer to 37 page)                                                                                            |
| 9   | Memory Recovery                                                                 | PRESET<br>CH +  | DISPLAY        | Recovery of DUAL BACKUP MEMORY is performed. (Refer to 37 page)                                                                                          |
| 10  | Memory Backup Clear                                                             | SOUND<br>MODE   | PRESET<br>CH - | Backup of DUAL BACKUP MEMORY is cleared. (Refer to 37 page)                                                                                              |



# 1. µcom/DSP Version display mode

## 1.1. Operation specifications

### µcom/DSP version display mode:

When the set is started up in this mode, the version information is displayed.

### Starting up:

Press the "ON/STANDBY (⏻)" button to turn on the power while pressing the "DISPLAY" and "STATUS" buttons. Now, press the "STATUS" button to display the 2nd item information on the FL Display.

※ When the version is displayed on the FL Display, the version list is also displayed on the GUI.

## 1.2. Display Order

Error information(Refer to 1.3. Error display) → ① Model destination information → ② Firmware Package Version → ③ Main µ-com / FBL(1st Boot Loader) Version → ④ DSP ROM Version → ⑤ Audio PLD Version → ⑥ GUI SFLASH Version → ⑦ Ethernet(DM860A) 1st Boot Loader, Hardware ID → ⑧ Ethernet(DM860A) 2nd Boot Loader → ⑨ Ethernet(DM860A) IMAGE → ⑩ Ethernet(DM860A)MAC ADDRESS information

### ① Model destination information :

SR6007 U model

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | S | R | 6 | 0 | 0 | 7 |   | U |
|     |   | S | N | - | * | * | * | * |
|     |   |   | * | * | * | * | * | * |

SR6007 N model

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | S | R | 6 | 0 | 0 | 7 |   | N |
|     |   | S | N | - | * | * | * | * |
|     |   |   | * | * | * | * | * | * |

SR6007 K model

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | S | R | 6 | 0 | 0 | 7 |   | K |
|     |   | S | N | - | * | * | * | * |
|     |   |   | * | * | * | * | * | * |

### ⑥ GUI S-FLASH Version :

SR6007 U model

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | G | U | I |   |   |   |   |   |
|     | 1 | 5 | 2 | 1 | * | * | * | * |
|     |   |   |   |   |   |   |   |   |

SR6007 N model

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | G | U | I |   |   |   |   |   |
|     | 1 | 5 | 2 | 2 | * | * | * | * |
|     |   |   |   |   |   |   |   |   |

SR6007 K model

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | G | U | I |   |   |   |   |   |
|     | 1 | 5 | 2 | 5 | * | * | * | * |
|     |   |   |   |   |   |   |   |   |

### ② Firmware Package Version :

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | P | A | C | K | A | G | E |   |
|     |   |   |   |   |   |   |   |   |
|     |   |   |   |   | 0 | 0 | 0 | 0 |

### ⑦ Ethernet(DM860A) 1st Boot Loader, Hardware ID :

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | N | E | T |   | F | B | L |   |
|     | * | * | * | * | * | * |   |   |
|     |   |   |   |   |   | - | b | d |

### ③ Main µ-com / FBL(1st Boot Loader) Version :

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | M | A | I | N |   |   |   |   |
|     | * | * | * | * | * | * | * | * |
|     | B | L | - | * | * | . | * | * |

### ⑧ Ethernet(DM860A) 2nd Boot Loader :

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | N | E | T |   | S | B | L |   |
|     | * | * | * | * | * | * | * | * |
|     | * | * | * | * | * | - | 0 | A |

### ④ DSP ROM Version :

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | D | S | P |   |   |   |   |   |
|     |   |   |   |   |   |   |   |   |
|     |   |   |   | * | * | . | * | * |

### ⑨ Ethernet(DM860A) IMAGE :

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | N | E | T |   | I | M | G |   |
|     | * | * | * | * | * | * | * | * |
|     | * | * | * | * | * |   |   |   |

### ⑤ Audio PLD Version :

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | A | . | P | L | D |   |   |   |
|     |   |   |   |   |   |   |   |   |
|     |   |   |   | * | * | . | * | * |

### ⑩ Ethernet(DM860A) MAC ADDRESS information :

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | N | E | T |   | M | A | C |   |
|     |   |   | * | * | * | * | * | * |
|     |   | - | * | * | * | * | * | * |

### 1.3. Error display

See the following table for each "Error information" display and its explanation (status).  
Display order is ①,②,③,④,⑤.

| Condition          | Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | FL Display           | Trouble shooting                                                                                                                                                                 |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ①<br>Firm Check NG | Compared with the destination setting on the board. This is displayed when the model name or destination information written into the firmware does not match. (※)                                                                                                                                                                                                                                                                                                                                                                                                |                      | <ul style="list-style-type: none"> <li>• Please check the destination-resistors (R3017/R3018, HDMI PCB).</li> <li>• Please write the firmware of correct destination.</li> </ul> |
| ②<br>DIR NG        | No response from DIR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                      | <ul style="list-style-type: none"> <li>• Please check DIR (U2205, HDMI PCB) and around circuits.</li> </ul>                                                                      |
| ③<br>DSP NG        | <p>When DSP code boot is performed, the DSP FLAG0 port does not change to "H" even if DSP reset is executed.</p> <p>Before DSP command is issued, the DSP BUSY port does not change to "L".</p> <p>When DSP data read is performed, executing WRITE="L" does not result in ACK="H".</p> <p>When DSP data read is performed, executing REQ="L" does not result in ACK="L".</p> <p>When DSP data writing is performed, executing WRITE="H" does not result in ACK="H".</p> <p>When DSP data writing is performed, executing REQ="L" does not result in ACK="L".</p> | <br><br><br><br><br> | <ul style="list-style-type: none"> <li>• Please check DSP (U2001, HDMI PCB) and around circuits.</li> </ul>                                                                      |
| ④<br>IP SCALER NG  | <p>An error occurred in testing writing data between IP SCALER and DRR.</p> <p>Testing writing data between IP SCALER and DRR resulted in no response.</p>                                                                                                                                                                                                                                                                                                                                                                                                        | <br>                 | <ul style="list-style-type: none"> <li>• Please check IP SCALER (U1601, HDMI PCB) and around circuits.</li> </ul>                                                                |
| ⑤<br>EEPROM NG     | Error occurs in EEPROM checksum. (***) is a block address number.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                      |                                                                                                                                                                                  |

| Status                                                                                                                                                                                                                                       | FL Display   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <p>※</p> <p>The written Firmware and product settings (model name, brand name, destination) are compared. If Firmware that is not designed for this product is written, ▲ is displayed in the upper right column, as shown on the right.</p> | <br><br><br> |

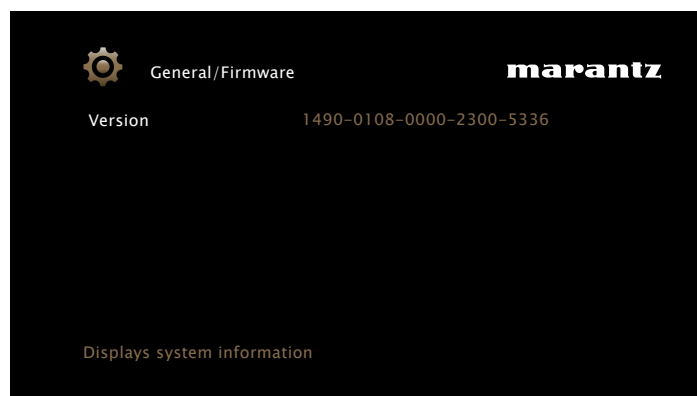


## 1.4. Version display on the Setup Menu

Use the following procedure to display the firmware version.

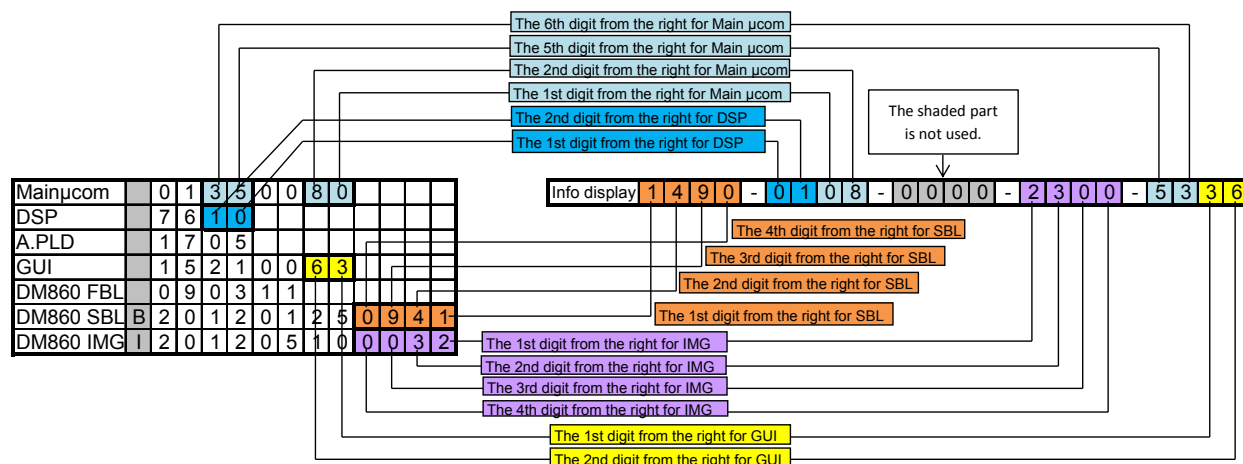
- (1) Press the "SETUP" button on the remote control.
- (2) Select "General-Information-Firmware".

A version with 20 digits is displayed as shown in the following image.



GUI Image

The displayed 20 digits are derived from each device version as shown below.



- ※ This firmware version No. (xxxx-xxxx-xxxx-xxxx) is included in the service contact document. These 20 digits are also included in the document.

## 2. PANEL/REMOTE LOCK Selection mode

### 2.1. Behavior specifications

In this mode, you can switch between the PANEL LOCK MODE and the Mode for preventing remote control acceptance.

### 2.2. Starting up

Press the "ON/STANDBY (⏻)" button to turn on power while pressing the "DISPLAY" and "M-DAX" buttons.

Press the "PRESET CH +" button to select the mode and the "STATUS" button to confirm the selection.

### 2.3. Mode selection method and how each mode is displayed

Each time you press the "PRESET CH +" button, the mode displayed on the FL DISPLAY changes.

While the desired mode name is displayed on the FL DISPLAY, press the "STATUS" button. The set is restarted and the selected mode takes effect.

The currently set item is marked with " \* ".

①

|     |     |   |   |  |   |   |   |   |
|-----|-----|---|---|--|---|---|---|---|
| FLD | P   | / | V |  | L | O | C | K |
|     | * O | N |   |  |   |   |   |   |
|     |     |   |   |  |   |   |   |   |

Operations using the main unit panel buttons and the master volume knob are rejected.

②

|     |   |   |   |  |   |   |   |   |
|-----|---|---|---|--|---|---|---|---|
| FLD | F | P |   |  | L | O | C | K |
|     |   | O | N |  |   |   |   |   |
|     |   |   |   |  |   |   |   |   |

Operations using the main unit panel buttons are rejected.

③

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | F | P |   |   | L | O | C | K |
|     |   | O | F | F |   |   |   |   |
|     |   |   |   |   |   |   |   |   |

Panel lock mode is cancelled.

④

|     |   |   |   |  |   |   |   |   |
|-----|---|---|---|--|---|---|---|---|
| FLD | R | C |   |  | L | O | C | K |
|     |   | O | N |  |   |   |   |   |
|     |   |   |   |  |   |   |   |   |

Operations using the remote control are rejected.

⑤

|     |     |   |   |  |   |   |   |   |
|-----|-----|---|---|--|---|---|---|---|
| FLD | R   | C |   |  | L | O | C | K |
|     | * O | F | F |  |   |   |   |   |
|     |     |   |   |  |   |   |   |   |

RC lock mode is cancelled.

### 3. Service Related Selection mode

#### 3.1. Behavior specifications

In this mode, you can switch between the Diagnostic mode (SERVICE CHECK), the Displaying the protection mode (PROTECTION) and the 232C clear mode (RS232C RESET).

#### 3.2. Starting up

Press the "ON/STANDBY (⏻)" button to turn on power while pressing the "ZONE2 SOURCE" and "STATUS" buttons. Press the "PRESET CH +" button to select the mode and press the "STATUS" button to restart the set and make the setting take effect.

①

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | 1 | S | E | R | V | I | C | E |
|     |   | C | H | E | C | K |   |   |
|     |   |   |   |   |   |   |   |   |



This mode is used for confirming the Video and Audio (signal) paths. (Diagnostic mode)

The signal paths of the set can be easily confirmed after repair.

②

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | 2 | P | R | O | T | E | C | T |
|     |   |   |   |   |   |   |   |   |
|     |   |   |   |   |   |   |   |   |



The protection history can be checked.

③

|     |   |  |   |   |   |   |   |   |
|-----|---|--|---|---|---|---|---|---|
| FLD | 3 |  | R | S | 2 | 3 | 2 | C |
|     |   |  | R | E | S | E | T |   |
|     |   |  |   |   |   |   |   |   |

The 232C standby mode is changed to the Normal standby mode.

#### 3.3. Canceling diagnostic mode

Turn off the power by pressing the "ON/STANDBY (⏻)" button.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

### 3.4. DIAGNOSTIC MODE (Video/Audio (signal) path confirmation mode)

This mode is used for confirming the Video and Audio (signal) paths. (Troubleshooting)

Confirming the operation of unit can be easily done after repair.

Backup data will not be lost.

#### 3.4.1. Starting diagnostic mode

Press the "Power operation (b)" button to turn on power while pressing the "ZONE2 SOURCE" and "STATUS" buttons.

The " " appears on the lower row of FL display section.(Refer to 29 page.)

#### 3.4.2. Canceling diagnostic mode

Turn off the power by pressing the ON/Standby button.

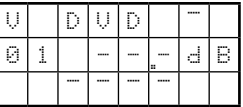
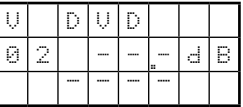
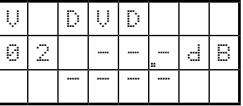
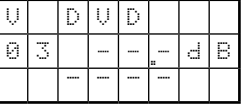
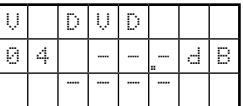
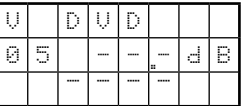
#### 3.4.3. Operation

Use the remote control (RC014SR) that is supplied with the SRxx06 model. Press buttons on the remote control in the order indicated in the "Details of how to operate remote control" column in the following table to establish the confirmation path.

You will find using another remote control unit with the macro functions very useful. To use the macro functions, program a macro function to output a remote control code in accordance with the steps in the table below.

#### 3.4.4. Video system confirmation items

fig.XX : Refer to the block diagram of the fig.XXth.

| Confirmation item |                                                   | Setting and display                                                                                                                                                                                            | Details of how to operate remote controller *a)    | Output sequence of remote control codes<br>※ It is useful to form a macro program. *b)           | Contents of confirmation                                                                                                                                                                                             | Remarks                                                                                                                                                                |
|-------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                 | Analog Video (signal) Path                        | Video Convert (IP Scaler) : OFF<br>All ZONE : ON<br>Display:<br>                                                              | 1.Press [AMP]<br>2.Press [Z2]<br>3.Press [STANDBY] | ①ZONE2 POWER OFF                                                                                 | ·Input : CVBS / Output : CVBS<br>·Input : Component / Output : Component<br>·Input : USB (Picture) / Output : CVBS<br>·Input HDMI / Output : HDMI<br>(※ As the input source, you can switch from DVD to other ones.) |                                                                                                                                                                        |
|                   |                                                   |                                                                                                                                                                                                                | 4.Press [AMP]<br>5.Press [1/AUTO]                  | ②KEY1/AUTO (Main Zone)<br>(Initialization & Video Convert All OFF)                               |                                                                                                                                                                                                                      |                                                                                                                                                                        |
|                   |                                                   |                                                                                                                                                                                                                | 6.Press [Z2]<br>7.Press [POWER ON]                 | ③ZONE2 POWER ON                                                                                  |                                                                                                                                                                                                                      |                                                                                                                                                                        |
|                   |                                                   |                                                                                                                                                                                                                | 8.Press [AMP]<br>9.Press [DVD] twice               | ④DVD (Main Zone)                                                                                 |                                                                                                                                                                                                                      |                                                                                                                                                                        |
| 2                 | Analog or HDMI to HDMI (signal) Path              | Video Convert (IP Scaler) : ON<br>IP Scaler : Analog&HDMI<br>Resolution : Auto<br>Display:<br>                               | 1.Press [AMP]<br>2.Press [Z2]<br>3.Press [STANDBY] | ①ZONE2 POWER OFF                                                                                 | ·Input : CVBS / Output : HDMI<br>·Input : Component / Output : HDMI<br>·Input : HDMI / Output : HDMI<br>·Input : USB (Picture) / Output : HDMI<br>(※ As the input source, you can switch from DVD to other ones.)    | Confirm the input pass one by one.<br>Because it becomes only the input of the highest input becomes Convert/IP Scaler (signal) Path if it inputs it at the same time. |
|                   |                                                   |                                                                                                                                                                                                                | 4.Press [AMP]<br>5.Press [2/STEREO]                | ②KEY2/STEREO (Main Zone)<br>(Initialization & Video Convert All OFF & IP Scaler "Analog & HDMI") |                                                                                                                                                                                                                      |                                                                                                                                                                        |
|                   |                                                   |                                                                                                                                                                                                                | 6.Press [DVD] twice                                | ③DVD (Main Zone)                                                                                 |                                                                                                                                                                                                                      |                                                                                                                                                                        |
| 3                 | GUI FUNCTION                                      | Video Convert (IP Scaler) : ON<br>IP Scaler : Analog&HDMI<br>Resolution : Auto<br>Menu : ON<br>All ZONE :ON<br>Display:<br> | 1.Press [AMP]<br>2.Press [Z2]<br>3.Press [STANDBY] | ①ZONE2 POWER OFF                                                                                 | ·GUI Display / Output : HDMI<br>(※ As the input source, you can switch from DVD to other ones.)                                                                                                                      |                                                                                                                                                                        |
|                   |                                                   |                                                                                                                                                                                                                | 4.Press [AMP]<br>5.Press [2/STEREO]                | ②KEY2/STEREO (Main Zone)<br>(Initialization & Video Convert All OFF & IP Scaler "Analog & HDMI") |                                                                                                                                                                                                                      |                                                                                                                                                                        |
|                   |                                                   |                                                                                                                                                                                                                | 6.Press [Z2]<br>7.Press [POWER ON]                 | ③ZONE2 POWER ON                                                                                  |                                                                                                                                                                                                                      |                                                                                                                                                                        |
|                   |                                                   |                                                                                                                                                                                                                | 8.Press [AMP]<br>9.Press [DVD] twice               | ④DVD (Main Zone)                                                                                 |                                                                                                                                                                                                                      |                                                                                                                                                                        |
|                   |                                                   |                                                                                                                                                                                                                | 10.Press [AMP MENU]                                | ⑤GUI MENU (Main Zone)                                                                            |                                                                                                                                                                                                                      |                                                                                                                                                                        |
| 4                 | CEC FUNCTION<br>(Control Monitor : HDMI Monitor1) | HDMI Control : ON<br>Display:<br>                                                                                           | 1.Press [AMP]<br>2.Press [Z2]<br>3.Press [STANDBY] | ①ZONE2 POWER OFF                                                                                 | ·When the power supply of a TV is put in the standby mode, make sure that the power supply of this unit is also put in the standby mode.<br>(※ As the input source, you can switch from DVD to other ones.)          |                                                                                                                                                                        |
|                   |                                                   |                                                                                                                                                                                                                | 4.Press [AMP]<br>5.Press [3/M-DAX]                 | ②KEY3/M-DAX (Main Zone)<br>(Initialization & CEC Control ON & Select Control Monitor 1)          |                                                                                                                                                                                                                      |                                                                                                                                                                        |
|                   |                                                   |                                                                                                                                                                                                                | 6.Press [DVD] twice                                | ③DVD (Main Zone)                                                                                 |                                                                                                                                                                                                                      |                                                                                                                                                                        |
| 5                 | CEC FUNCTION<br>(Control Monitor : HDMI Monitor2) | HDMI Control : ON<br>Control Monitor Monitor2<br>(When checking the HDMI Monitor Out2)<br>Display:<br>                      | 1.Press [AMP]<br>2.Press [Z2]<br>3.Press [STANDBY] | ①ZONE2 POWER OFF                                                                                 |                                                                                                                                                                                                                      |                                                                                                                                                                        |
|                   |                                                   |                                                                                                                                                                                                                | 4.Press [AMP]<br>5.Press [4/DYN VOL]               | ②KEY4/DYN VOL (Main Zone)<br>(Initialization & CEC Control ON & Select Control Monitor 2)        |                                                                                                                                                                                                                      |                                                                                                                                                                        |
|                   |                                                   |                                                                                                                                                                                                                | 6.Press [DVD] twice                                | ③DVD (Main Zone)                                                                                 |                                                                                                                                                                                                                      |                                                                                                                                                                        |
| 6                 | HDMI Audio (signal) Path<br>(Audio : AMP)         | Audio : AMP(When checking the audio output from AMP)<br>Display:<br>                                                        | 1.Press [AMP]<br>2.Press [Z2]<br>3.Press [STANDBY] | ①ZONE2 POWER OFF                                                                                 | ·Input : HDMI (Signal of PCM, DolbyDigital or DTS) / Output : Speakers<br>·Input : HDMI (Signal of HD Audio) / Output : Speakers<br>(※ As the input source, you can switch from DVD to other ones.)                  |                                                                                                                                                                        |
|                   |                                                   |                                                                                                                                                                                                                | 4.Press [AMP]<br>5.Press [5/HT-EQ]                 | ②KEY5/HT-EQ (Main Zone)<br>(Initialization & Select Audio AMP)                                   |                                                                                                                                                                                                                      |                                                                                                                                                                        |
|                   |                                                   |                                                                                                                                                                                                                | 6.Press [DVD] twice                                | ③DVD (Main Zone)                                                                                 |                                                                                                                                                                                                                      |                                                                                                                                                                        |

| Confirmation item |                                          | Setting and display                                                                                                                                                                                                                                                                                                                                                                                                    | Details of how to operate remote controller *a)    | Output sequence of remote control codes<br>※ It is useful to form a macro program. *b) | Contents of confirmation                                                                                                            | Remarks |
|-------------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------|
| 7                 | HDMI Audio (signal) Path<br>(Audio : TV) | Audio : TV(When checking the audio output from TV)<br>Display:<br><div> <div>U</div> <div>D</div> <div>V</div> <div>D</div> <div></div> <div></div> <div></div> <div></div> </div> <div> <div>0</div> <div>6</div> <div>-</div> <div>-</div> <div>-</div> <div>d</div> <div>B</div> <div></div> </div> <div> <div></div> <div></div> <div>-</div> <div>-</div> <div>-</div> <div></div> <div></div> <div></div> </div> | 1.Press [AMP]<br>2.Press [Z2]<br>3.Press [STANDBY] | ①ZONE2 POWER OFF                                                                       | ·Input : HDMI (Signal of PCM, DolbyDigital or DTS) / Output : TV<br>(※ As the input source, you can switch from DVD to other ones.) |         |
|                   |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                        | 4.Press [AMP]<br>5.Press [6/V.SEL]                 | ②KEY6/V.SEL (Main Zone)<br>(Initialization & Select Audio TV)                          |                                                                                                                                     |         |
|                   |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                        | 6.Press [DVD] twice                                | ③DVD (Main Zone)                                                                       |                                                                                                                                     |         |

### 3.4.5. Audio system confirmation items

fig.XX : Refer to the block diagram of the fig.XXth.

| Confirmation item |                                                  | Setting and display                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Details of how to operate remote controller        | Output sequence of remote control codes<br>※ It is useful to form a macro program.                                       | Contents of confirmation                                                                                                                                                      | Remarks |
|-------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 1                 | Analog (signal) Path                             | Input Mode : Fixed ANALOG<br>SURROUND mode : DIRECT<br>Amp assign : Surround Back<br>Display:<br><div> <div>A</div> <div>D</div> <div>V</div> <div>D</div> <div></div> <div></div> <div></div> <div></div> </div> <div> <div>0</div> <div>1</div> <div>-</div> <div>-</div> <div>-</div> <div>d</div> <div>B</div> <div></div> </div> <div> <div></div> <div></div> <div>-</div> <div>-</div> <div>-</div> <div></div> <div></div> <div></div> </div>                                                                               | 1.Press [AMP]<br>2.Press [Z2]<br>3.Press [STANDBY] | ①ZONE2 POWER OFF                                                                                                         | ·Input : Analog / Output : Speakers (Front L/R)<br>·Input : Analog / Output : Pre OUT(Front L/R)<br>(※ As the input source, you can switch from DVD to other ones.)           |         |
|                   |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.Press [AMP]<br>5.Press [7/T.TONE]                | ②KEY7/T.TONE (Main Zone)<br>(Initialization & Amp assign Surround Back & Input Mode Fixed ANALOG & SURROUND mode DIRECT) |                                                                                                                                                                               |         |
|                   |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 6.Press [DVD] twice                                | ③DVD (Main Zone)                                                                                                         |                                                                                                                                                                               |         |
| 2                 | DIGITAL (signal) Path<br>(MAIN)                  | Input Mode : Fixed DIGITAL<br>Amp assign : Surround Back<br>Display:<br><div> <div>A</div> <div>D</div> <div>V</div> <div>D</div> <div></div> <div></div> <div></div> <div></div> </div> <div> <div>0</div> <div>2</div> <div>-</div> <div>-</div> <div>-</div> <div>d</div> <div>B</div> <div></div> </div> <div> <div></div> <div></div> <div>-</div> <div>-</div> <div>-</div> <div></div> <div></div> <div></div> </div>                                                                                                        | 1.Press [AMP]<br>2.Press [Z2]<br>3.Press [STANDBY] | ①ZONE2 POWER OFF                                                                                                         | ·Input : Digital / Output : Speakers (Front L/R)<br>·Input : Digital / Output : Pre OUT(Front L/R)<br>(※ As the input source, you can switch from DVD to other ones.)         |         |
|                   |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.Press [AMP]<br>5.Press [8/CH LVL]                | ②KEY8/CH LVL (Main Zone)<br>(Initialization & Amp assign Surround Back & Input Mode Fixed DIGITAL)                       |                                                                                                                                                                               |         |
|                   |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 6.Press [DVD] twice                                | ③DVD (Main Zone)                                                                                                         |                                                                                                                                                                               |         |
| 3                 | HDMI (signal) Path                               | Input Mode : Fixed HDMI<br>Amp assign : Surround Back<br>Display:<br><div> <div>A</div> <div>D</div> <div>V</div> <div>D</div> <div></div> <div></div> <div></div> <div></div> </div> <div> <div>0</div> <div>5</div> <div>-</div> <div>-</div> <div>-</div> <div>d</div> <div>B</div> <div></div> </div> <div> <div></div> <div></div> <div>-</div> <div>-</div> <div>-</div> <div></div> <div></div> <div></div> </div>                                                                                                           | 1.Press [AMP]<br>2.Press [Z2]<br>3.Press [STANDBY] | ①ZONE2 POWER OFF                                                                                                         | ·Input : HDMI / Output : Speakers (Front L/R)<br>·Input : HDMI / Output : Pre OUT(Front L/R)<br>(※ As the input source, you can switch from DVD to other ones.)               |         |
|                   |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.Press [AMP]<br>5.Press [SURROUND]                | ②SURROUND<br>(Initialization & Amp assign Surround Back & Input Mode Fixed HDMI)                                         |                                                                                                                                                                               |         |
|                   |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 6.Press [DVD] twice                                | ③DVD (Main Zone)                                                                                                         |                                                                                                                                                                               |         |
| 4                 | A/D (signal) Path<br>(Main Zone)                 | Amp assign : Surround Back<br>SURROUND mode : Multi ch STEREO<br>Vol -20dB<br>Speaker Config : SSSSY<br>(Front/Center/Surround/SourroundBack : Small, SW : Yes)<br>Display:<br><div> <div>A</div> <div></div> <div>D</div> <div>V</div> <div>D</div> <div></div> <div></div> <div></div> </div> <div> <div>0</div> <div>6</div> <div>-</div> <div>-</div> <div>-</div> <div>d</div> <div>B</div> <div></div> </div> <div> <div></div> <div></div> <div>-</div> <div>-</div> <div>-</div> <div></div> <div></div> <div></div> </div> | 1.Press [AMP]<br>2.Press [Z2]<br>3.Press [STANDBY] | ①ZONE2 POWER OFF                                                                                                         | ·Input : Analog / Output : Speakers (Front L/R)<br>·Input : Analog / Output : Pre OUT(Front L/R), SW(20Hz)<br>(※ As the input source, you can switch from DVD to other ones.) |         |
|                   |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.Press [AMP]<br>5.Press [PURE DIRECT]             | ②PURE DIRECT<br>(Initialization & Amp assign Surround Back & SURROUND mode : Multi ch STEREO & Volume -20dB)             |                                                                                                                                                                               |         |
|                   |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 6.Press [DVD] twice                                | ③DVD (Main Zone)                                                                                                         |                                                                                                                                                                               |         |
| 5                 | Analog Audio (signal) Path<br>(ZONE2)            | Amp assign : ZONE2<br>ZONE2 Function : Source<br>Zone2 Vol -20dB<br>Display:<br><div> <div>A</div> <div>D</div> <div>V</div> <div>D</div> <div></div> <div></div> <div></div> <div></div> </div> <div> <div>0</div> <div>7</div> <div>-</div> <div>-</div> <div>-</div> <div>d</div> <div>B</div> <div></div> </div> <div> <div></div> <div></div> <div>-</div> <div>-</div> <div>-</div> <div></div> <div></div> <div></div> </div>                                                                                                | 1.Press [AMP]<br>2.Press [Z2]<br>3.Press [STANDBY] | ①ZONE2 POWER OFF                                                                                                         | ·Input : Analog / Output : Speakers (SURRE BACK L/R)<br>·Input : Analog / Output : Pre OUT(ZONE2 L/R)<br>(※ As the input source, you can switch from DVD to other ones.)      |         |
|                   |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.Press [AMP]<br>5.Press [P2]                      | ②P2<br>(Initialization & Amp assign ZONE2 & SURROUND mode : Multi ch STEREO & ZONE2 Volume -20dB)                        |                                                                                                                                                                               |         |
|                   |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 6.Press [Z2]<br>7.Press [POWER ON]                 | ③ZONE2 POWER ON                                                                                                          |                                                                                                                                                                               |         |
| 6                 | Amp Assign (signal) Path<br>(Amp Assign : BiAMP) | Amp assign : BiAMP<br>SURROUND mode : Multi ch STEREO<br>Vol -20dB<br>Display:<br><div> <div>A</div> <div>D</div> <div>V</div> <div>D</div> <div></div> <div></div> <div></div> <div></div> </div> <div> <div>1</div> <div>1</div> <div>-</div> <div>-</div> <div>-</div> <div>d</div> <div>B</div> <div></div> </div> <div> <div></div> <div></div> <div>-</div> <div>-</div> <div>-</div> <div></div> <div></div> <div></div> </div>                                                                                              | 1.Press [AMP]<br>2.Press [Z2]<br>3.Press [STANDBY] | ①ZONE2 POWER OFF                                                                                                         | ·Input : Analog / Output : Speakers (SURRE BACK L/R)<br>(※ As the input source, you can switch from DVD to other ones.)                                                       |         |
|                   |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.Press [AMP]<br>5.Press [DISP]                    | ②DISPLAY<br>(Initialization & Amp assign BiAMP & SURROUND mode : Multi ch STEREO & Volume -20dB)                         |                                                                                                                                                                               |         |
|                   |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 6.Press [DVD] twice                                | ③DVD (Main Zone)                                                                                                         |                                                                                                                                                                               |         |





[illegible][illegible]

### 3.5. Errors checking mode (Displaying the protection history)

#### 3.5.1. Operation specifications

##### Error mode (Displaying the protection history):

When the set is started up in this mode, the error information is displayed.

#### 3.5.2. About the display on the FL display

When the "STATUS" button is pressed after the error (protection history display) mode is set, a history like the one shown below is displayed, depending on the conditions.

(1) Normal (when there has been no protection incident)

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | P | R | O | T | E | C | T |   |
|     |   | H | I | S | T | O | R | Y |
|     | : | N | O |   |   |   |   |   |

(2) For ASO (when the last protection incident was ASO protection)

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | P | R | O | T | E | C | T |   |
|     |   | H | I | S | T | O | R | Y |
|     | : | A | S | O |   |   |   |   |

**Cause:** The line between speaker terminals is shorted, or speakers with impedance of less than the rated value.

**Supplementary information:** As the excess current is detected after operation of the speaker relay, a short on the speaker terminal and the connected speaker can be identified.

If the power is turned on without correcting the abnormality, the protection function will work about 5 seconds later and the power supply will be shut off.

(3) For DC (when the last protection incident was DC protection)

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | P | R | O | T | E | C | T |   |
|     |   | H | I | S | T | O | R | Y |
|     | : | D | C |   |   |   |   |   |

**Cause:** DC output of the power amplifier is abnormal.

If the power is turned on without correcting the abnormality, the protection function will work about 5 seconds later and the power supply will be shut off.

(4) For THERMAL (when the last protection incident was THERMAL(A) or THERMAL(B) protection)

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | P | R | O | T | E | C | T |   |
|     |   | H | I | S | T | O | R | Y |
|     | : | T | H | M | A |   |   |   |

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | P | R | O | T | E | C | T |   |
|     |   | H | I | S | T | O | R | Y |
|     | : | T | H | M | B |   |   |   |

**Cause:** The temperature of the heat sink is excessive.

If the power is turned on without correcting the abnormality, the protection function will work about 5 seconds later and the power supply will be shut off.

※ Additional causes of protection can be due to loose connections, associated components, Microprocessor, etc.

When the "STATUS" button is pressed again after the protection history as shown above is displayed, the normal display reappears.

### 3.5.3. Clearing the protection history

There are two ways to clear the protection history, as described below.

- (1) Start up the set in error (protection display) mode and display the error, then press and hold down the "DISPLAY" button for 3 seconds.

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | P | R | O | T | E | C | T |   |
|     |   | H | I | S | T | O | R | Y |
|     | = | D | C |   |   |   |   |   |



Press and hold down "DISPLAY" button for 3 seconds.

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | P | R | O | T | E | C | T |   |
|     |   | H | I | S | T | O | R | Y |
|     |   | C | L | E | A | R |   |   |



The above is displayed and the protection history is cleared.

|     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| FLD | P | R | O | T | E | C | T |   |
|     |   | H | I | S | T | O | R | Y |
|     | = | N | D |   |   |   |   |   |

- (2) Initialize. (Refer to "Initializing AV Surround Receiver" 10 page.)

※ If you want to save a backup, perform the method in 2.3.(1).

### Warning indication by the POWER LED

If the power is turned off when a protection incident has been detected, the POWER LED (red) flashes as a warning according to the conditions in which the protection incident occurred.

- (1) ASO/DC PROTECTION : Flashes at intervals of 0.5 seconds (0.25 seconds lit, 0.25 seconds off)
- (2) THERMAL (A/B) PROTECTION : Flashes at intervals of 2 seconds (1 second lit, 1 second off)

### 3.6. 232C standby clear mode

#### 3.6.1. Operation specifications

##### 232C standby clear mode:

This switches the 232C standby mode to the Normal standby mode.

##### Starting up:

Press the "STATUS" button while the following is displayed to switch to the Normal standby mode.

|     |   |  |   |   |   |   |   |   |
|-----|---|--|---|---|---|---|---|---|
| FLD | 3 |  | R | S | 2 | 3 | 2 | C |
|     |   |  | R | E | S | E | T |   |
|     |   |  |   |   |   |   |   |   |

## 4. DUAL BACKUP MEMORY

This product has a Dual Backup Memory function. The conventional Backup functions to memorize, in the EEPROM (U3003) in the circuit, a current setting of the moment the main power is turned off so that it can be restored when it is turned ON again. Meanwhile, the DUAL BACKUP MEMORY is capable of memorizing any arbitrary setting that is configured while the product is in operation so as to restore it at any time. When servicing units returned from end-users for repairs, use this function to back up the current setting (e.g. Tuner Preset). This will enable the units to be returned to the users after repairs, with the setting unchanged.

**NOTE:** If end-users use this function, the data will be overwritten.

The contents of the memory do not disappear even if you initialize this unit.

If you want to erase, please refer to **3.2. SERVICE PRECAUTIONS**.

### 4.1. HOW TO OPERATE

#### -Backup-

- (1) Configure a setting you would like to save in the MEMORY and hold down the "PRESET CH +" and "PRESET CH –" buttons on the Front Panel at the same time for 3 seconds or more.
- (2) The FL Display indicates "MEMORY SAVING" while the Recovery is being performed.

|     |  |   |   |   |   |   |   |  |
|-----|--|---|---|---|---|---|---|--|
| FLD |  | M | E | M | O | R | Y |  |
|     |  | S | A | V | I | N | G |  |

- (3) The FL Display indicates "COMPLETE" when the Backup is completed.

|     |  |   |   |   |   |   |   |   |   |
|-----|--|---|---|---|---|---|---|---|---|
| FLD |  | C | O | M | P | L | E | T | E |
|     |  |   |   |   |   |   |   |   |   |

#### -Recovery-

- (1) Hold down the "PRESET CH +" and "DISPLAY" buttons at the same time for 3 seconds or more.
- (2) The FL Display indicates "MEMORY LOAD" while the Backup is being performed.

|     |  |   |   |   |   |   |   |  |
|-----|--|---|---|---|---|---|---|--|
| FLD |  | M | E | M | O | R | Y |  |
|     |  | L | O | A | D |   |   |  |

- (3) After the FL Display indicates "COMPLETE", the product goes into Standby mode. When the power is restored, the Recovery is completed.

|     |  |   |   |   |   |   |   |   |   |
|-----|--|---|---|---|---|---|---|---|---|
| FLD |  | C | O | M | P | L | E | T | E |
|     |  |   |   |   |   |   |   |   |   |

The FL Display indicates "NO BACKUP" if the DUAL BACKUP MEMORY has not been activated with no data to be recovered saved in the Memory.

|     |  |   |   |   |   |   |   |  |
|-----|--|---|---|---|---|---|---|--|
| FLD |  | N | O |   |   |   |   |  |
|     |  | B | A | C | K | U | P |  |

### 4.2. SERVICE PRECAUTIONS

When the Flash Rom (U3003) on the HDMI PWB is replaced make sure, in order to maintain consistency with the Backup Memory, to clear the DUAL BACKUP MEMORY in the following way :

#### -How to clear the Backup Memory-

- (1) Hold down the "SOUND MODE" and "PRESET CH –" buttons at the same time for 3 seconds or more.
- (2) The FL Display indicates "BACKUP CLEAR" while the memory is being cleared.

|     |  |   |   |   |   |   |   |  |
|-----|--|---|---|---|---|---|---|--|
| FLD |  | B | A | C | K | U | P |  |
|     |  | C | L | E | A | R |   |  |

- (3) After the FL Display indicates "COMPLETE", the operation is completed.

|     |  |   |   |   |   |   |   |   |   |
|-----|--|---|---|---|---|---|---|---|---|
| FLD |  | C | O | M | P | L | E | T | E |
|     |  |   |   |   |   |   |   |   |   |

[illegible]

BLOCK DIAGRAM

fig.1

VIDEO DIAGRAM

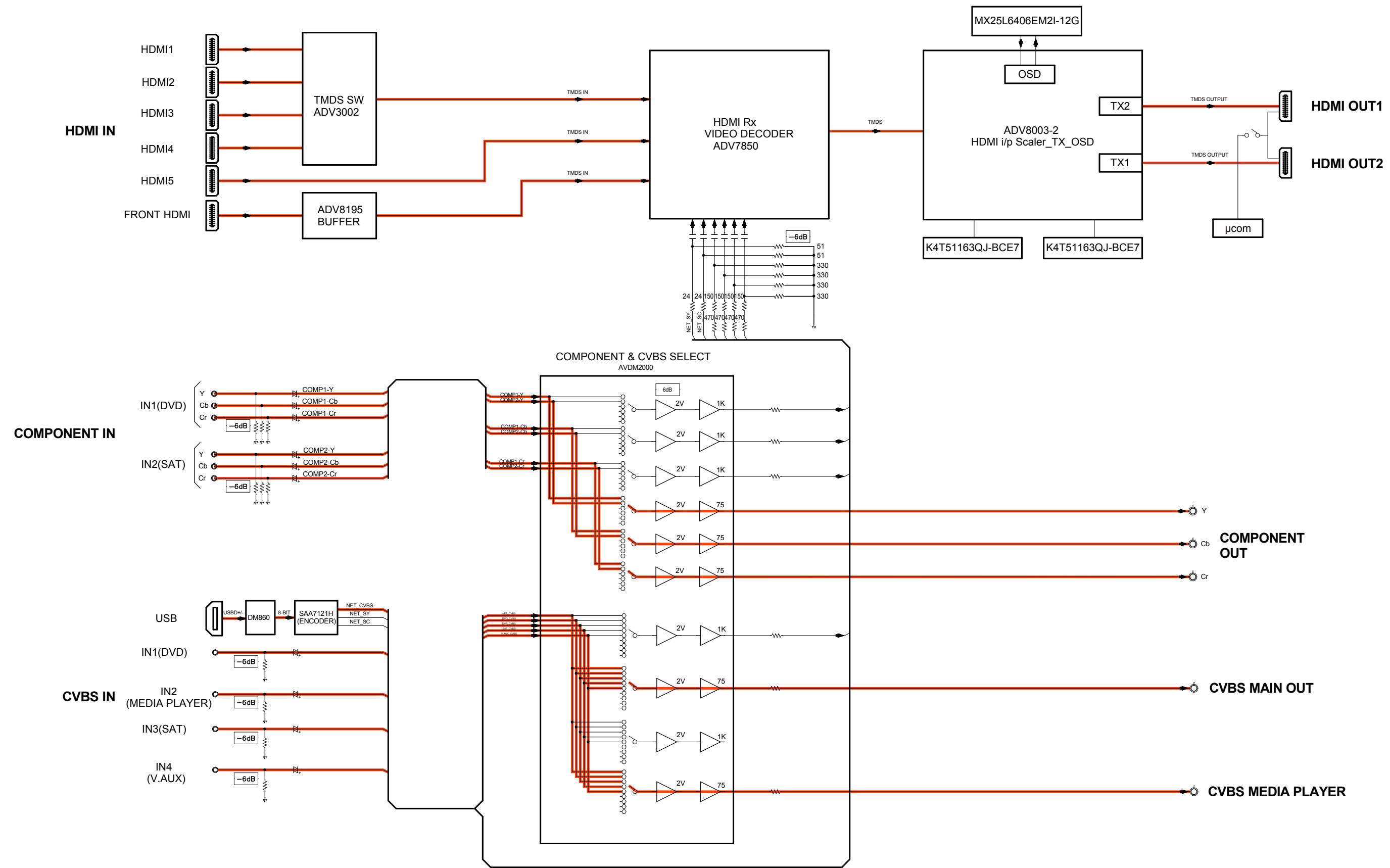




fig.2

# VIDEO DIAGRAM

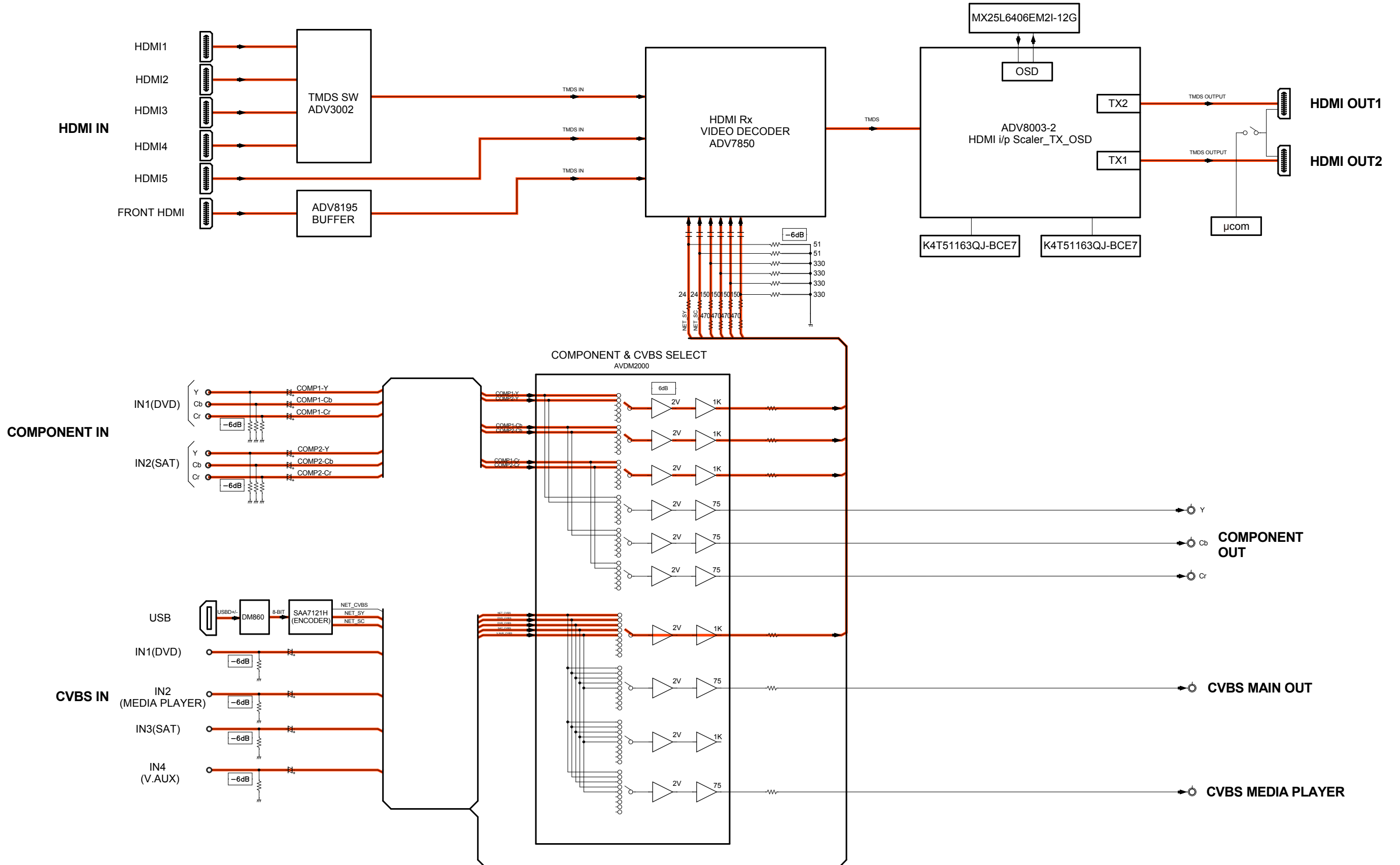
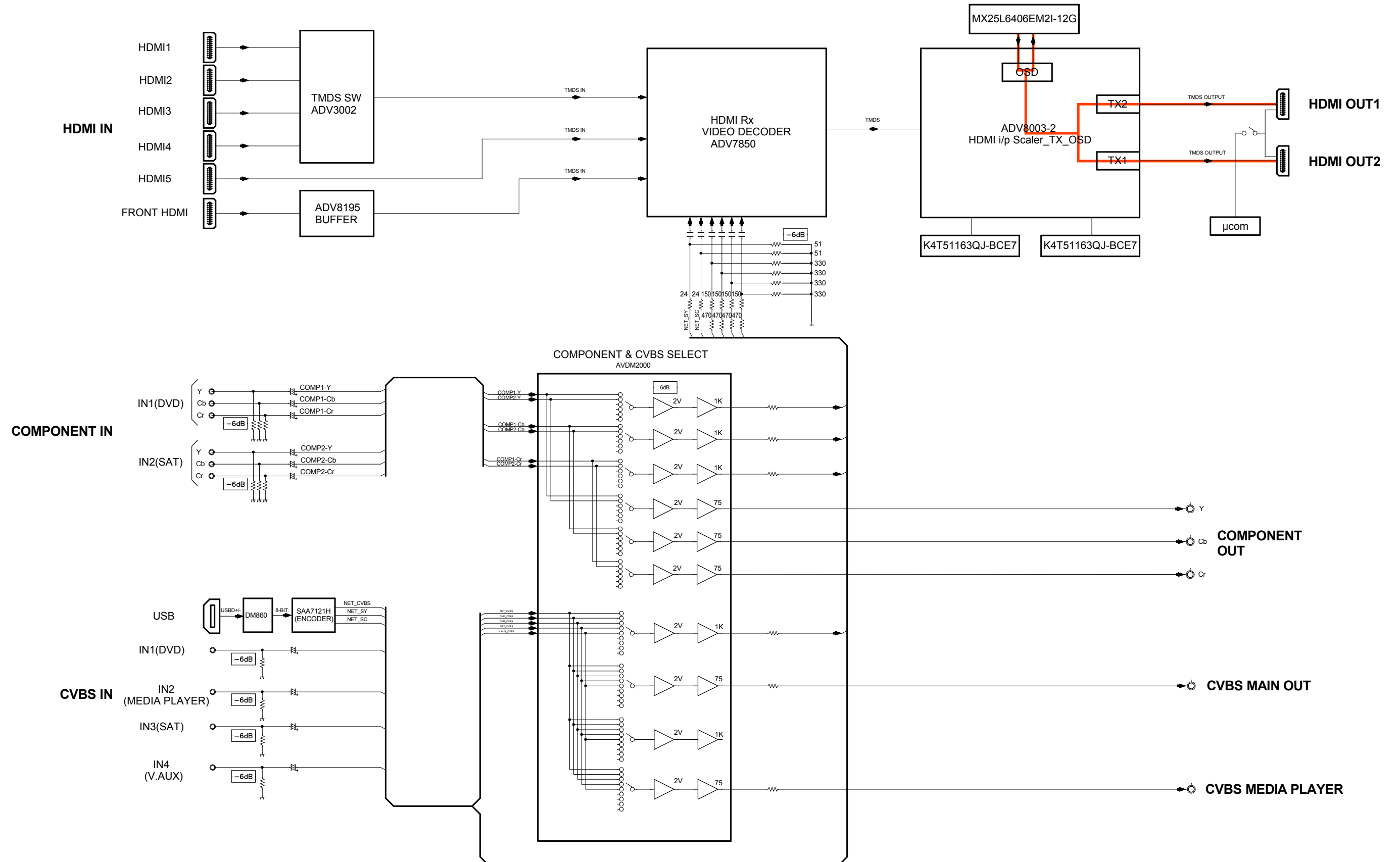


fig.3

# VIDEO DIAGRAM



**fig.4**

# VIDEO DIAGRAM

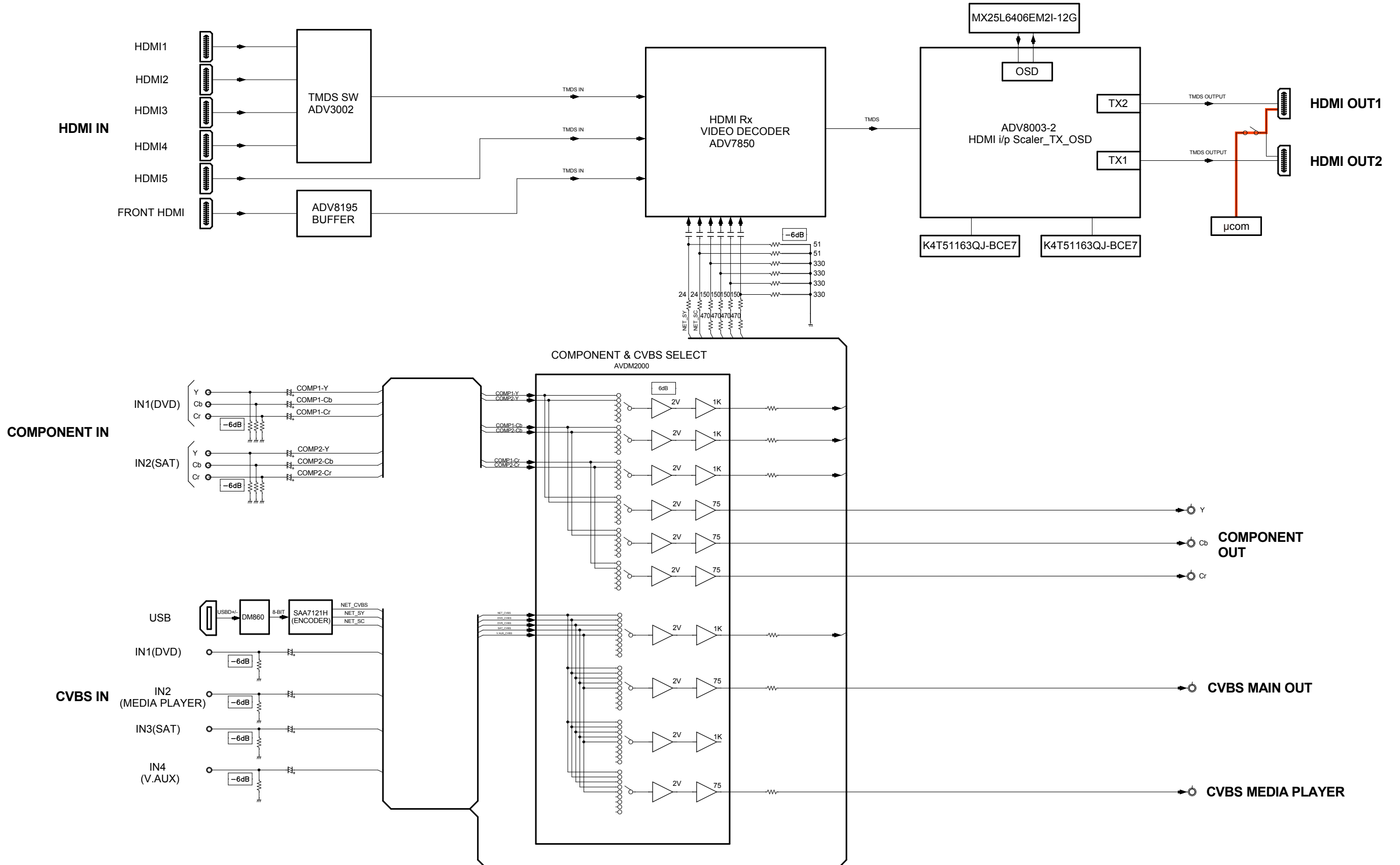


fig.5

# VIDEO DIAGRAM

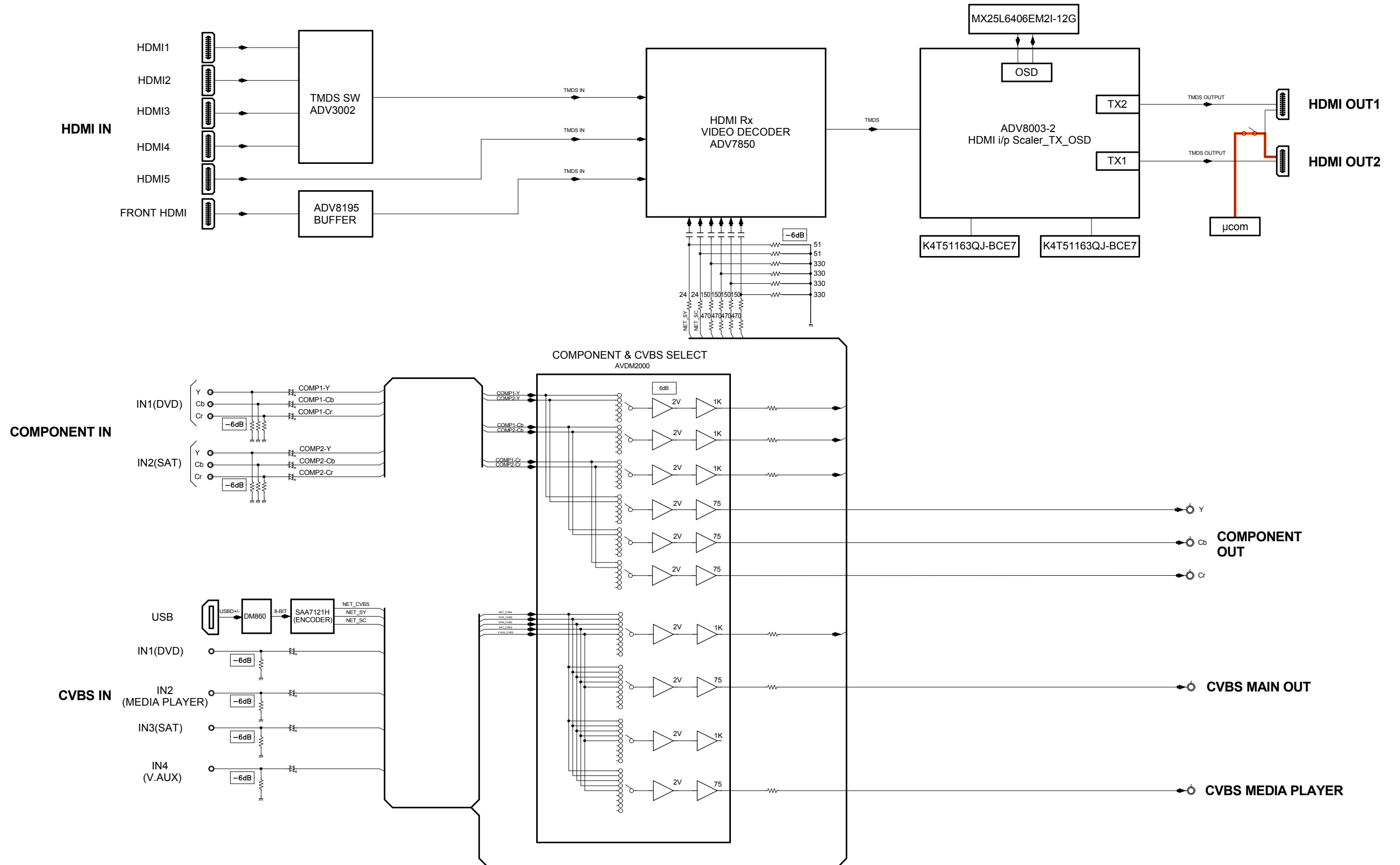
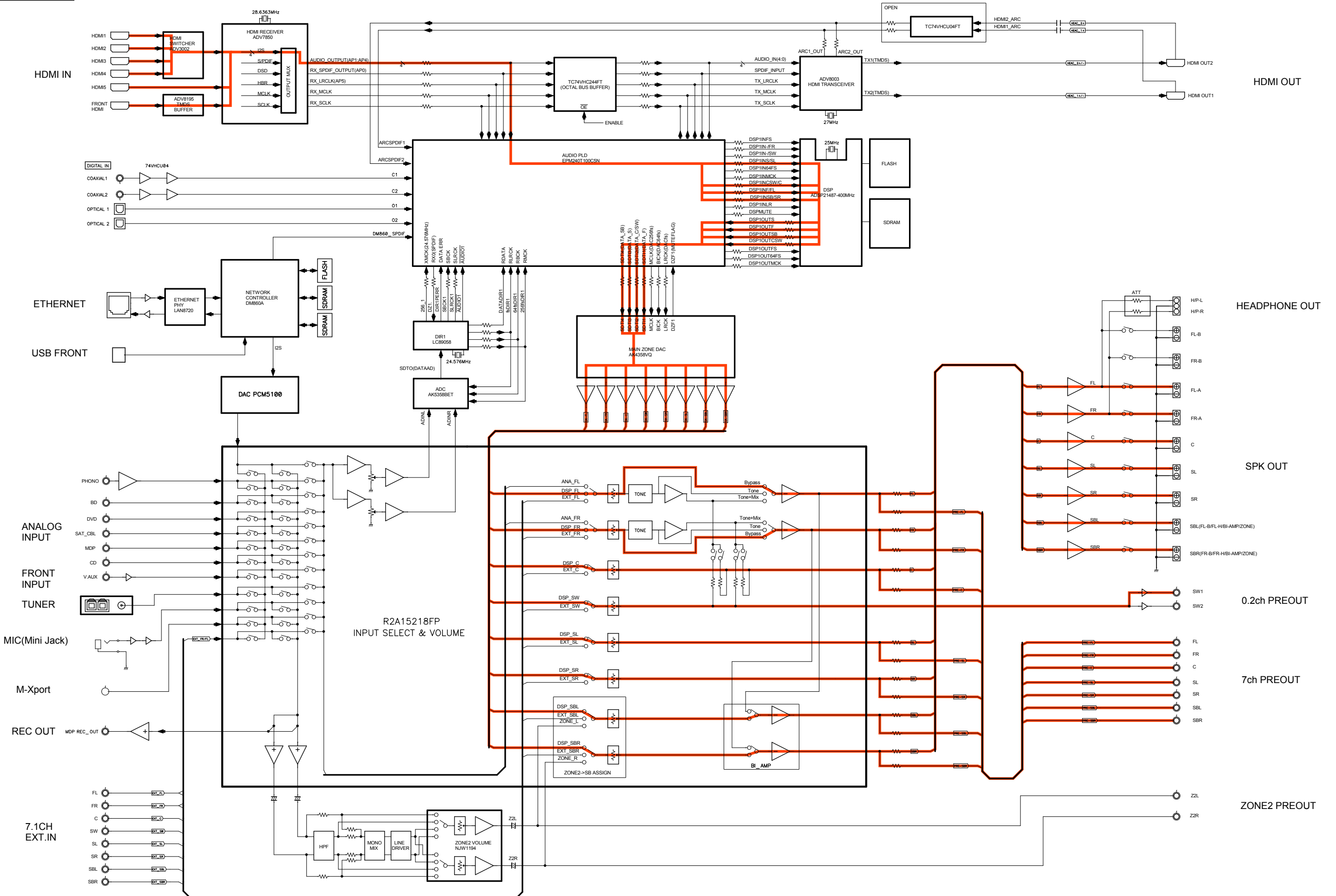


fig.6

# AUDIO DIAGRAM



**fig.7**

## AUDIO DIAGRAM

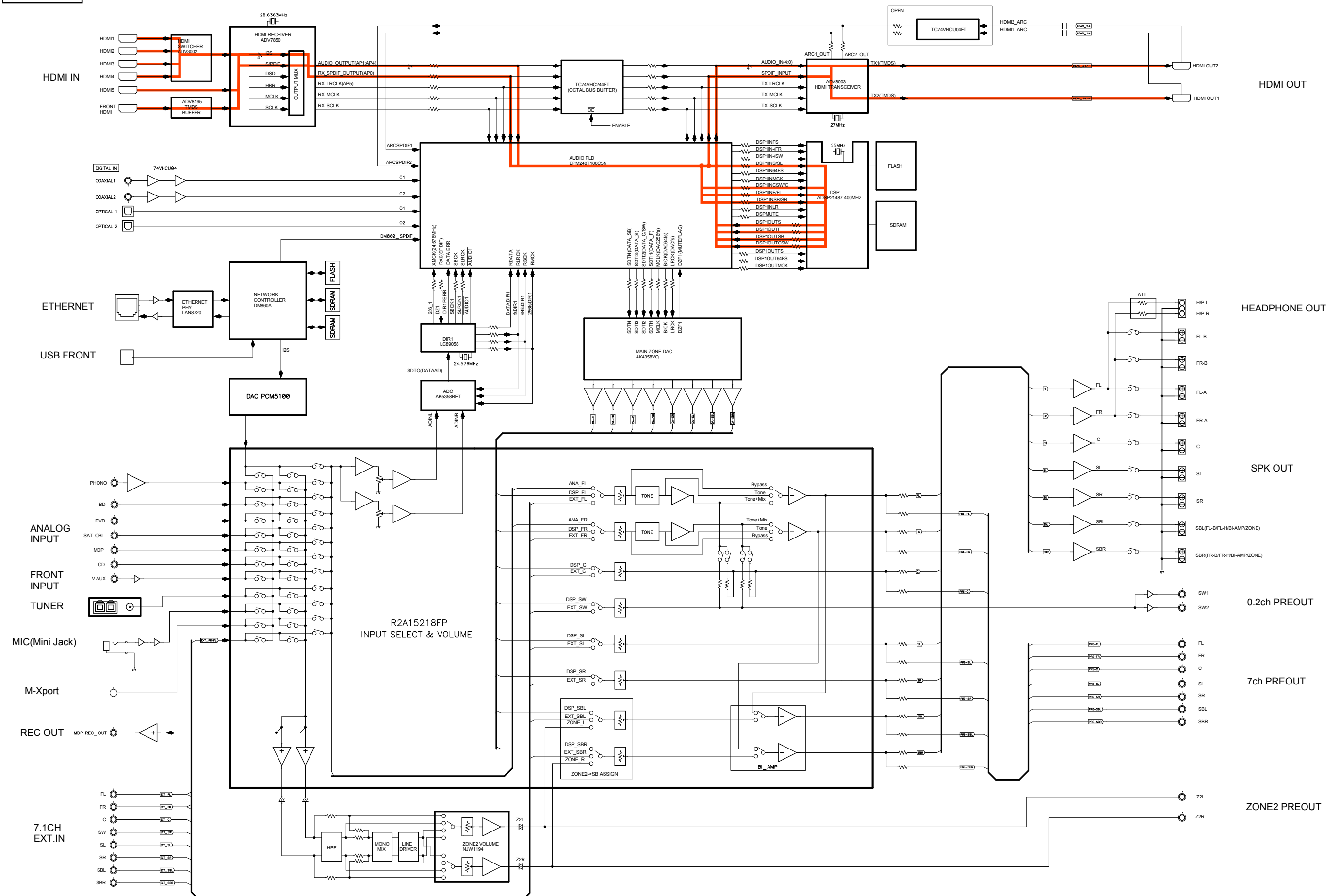




fig.8

# AUDIO DIAGRAM

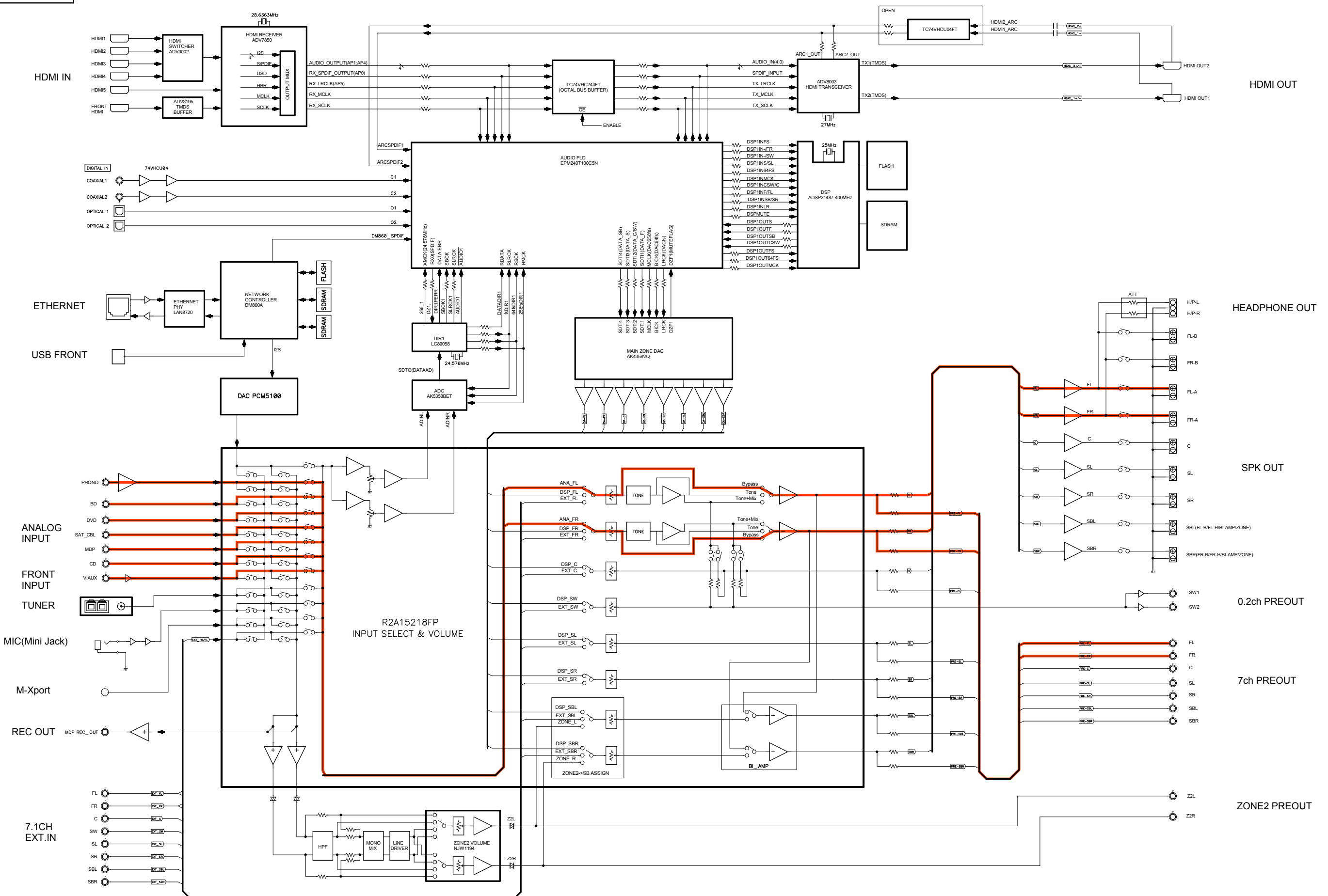


fig.9

# AUDIO DIAGRAM

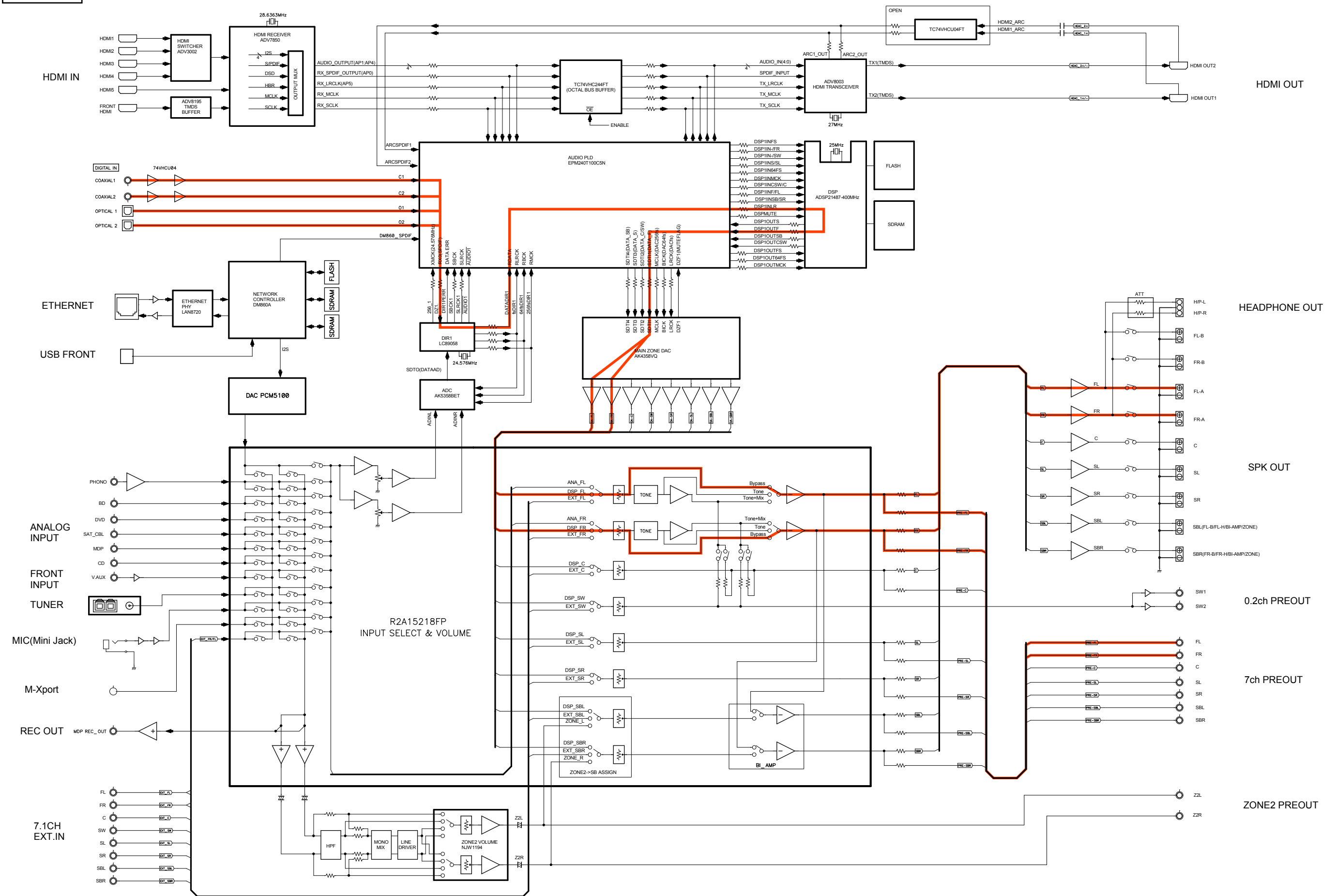




fig.10

AUDIO DIAGRAM

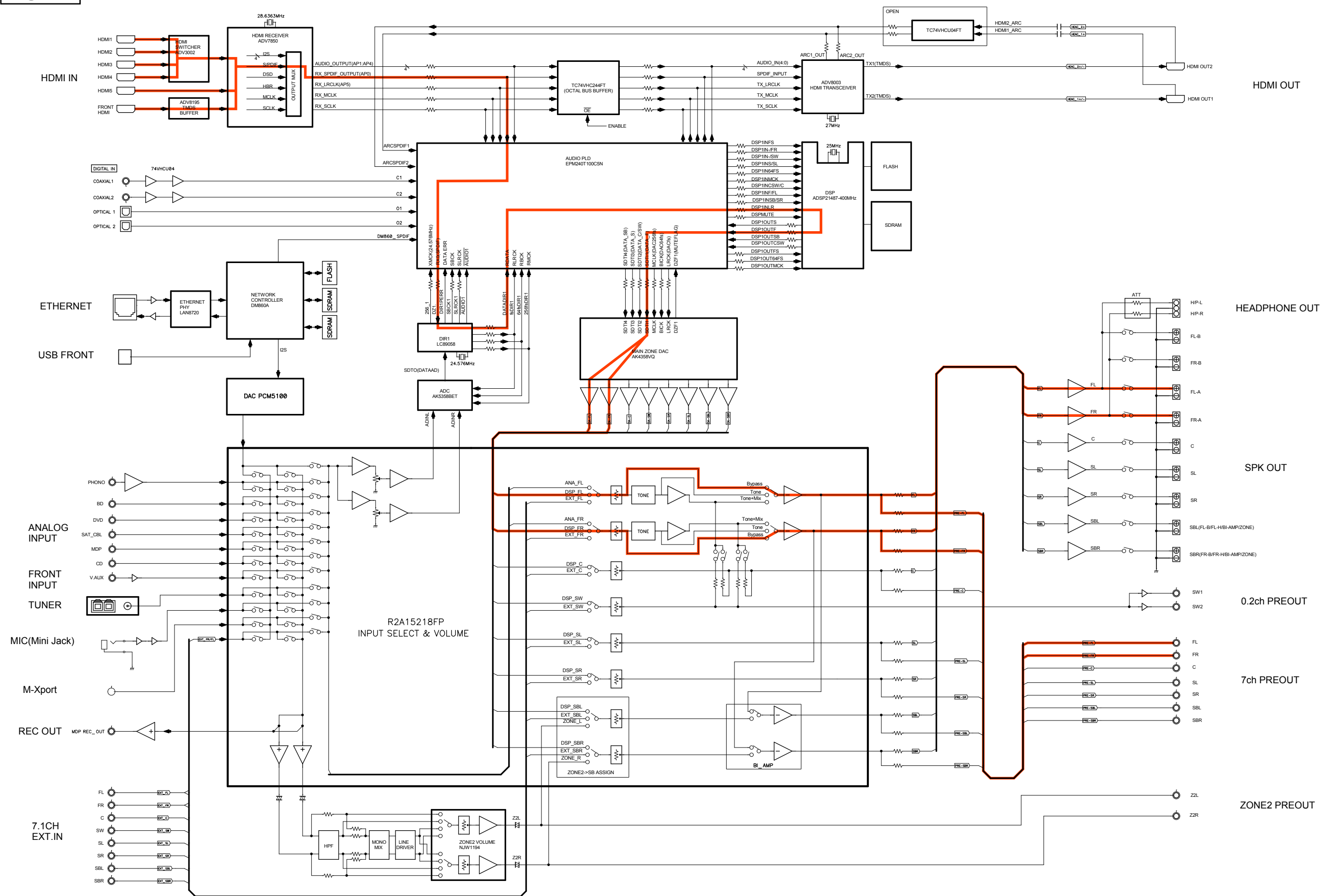


fig.11

# AUDIO DIAGRAM

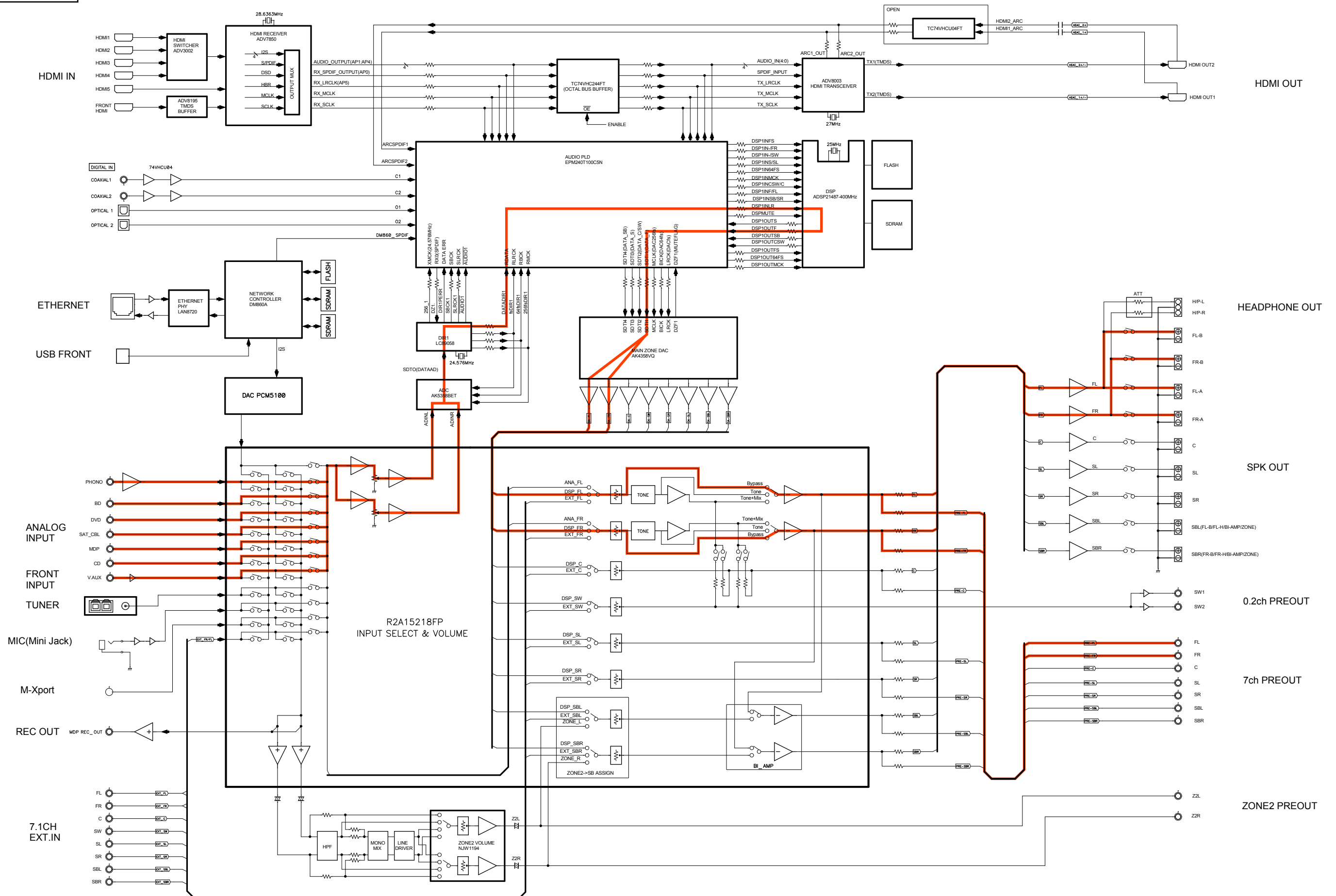
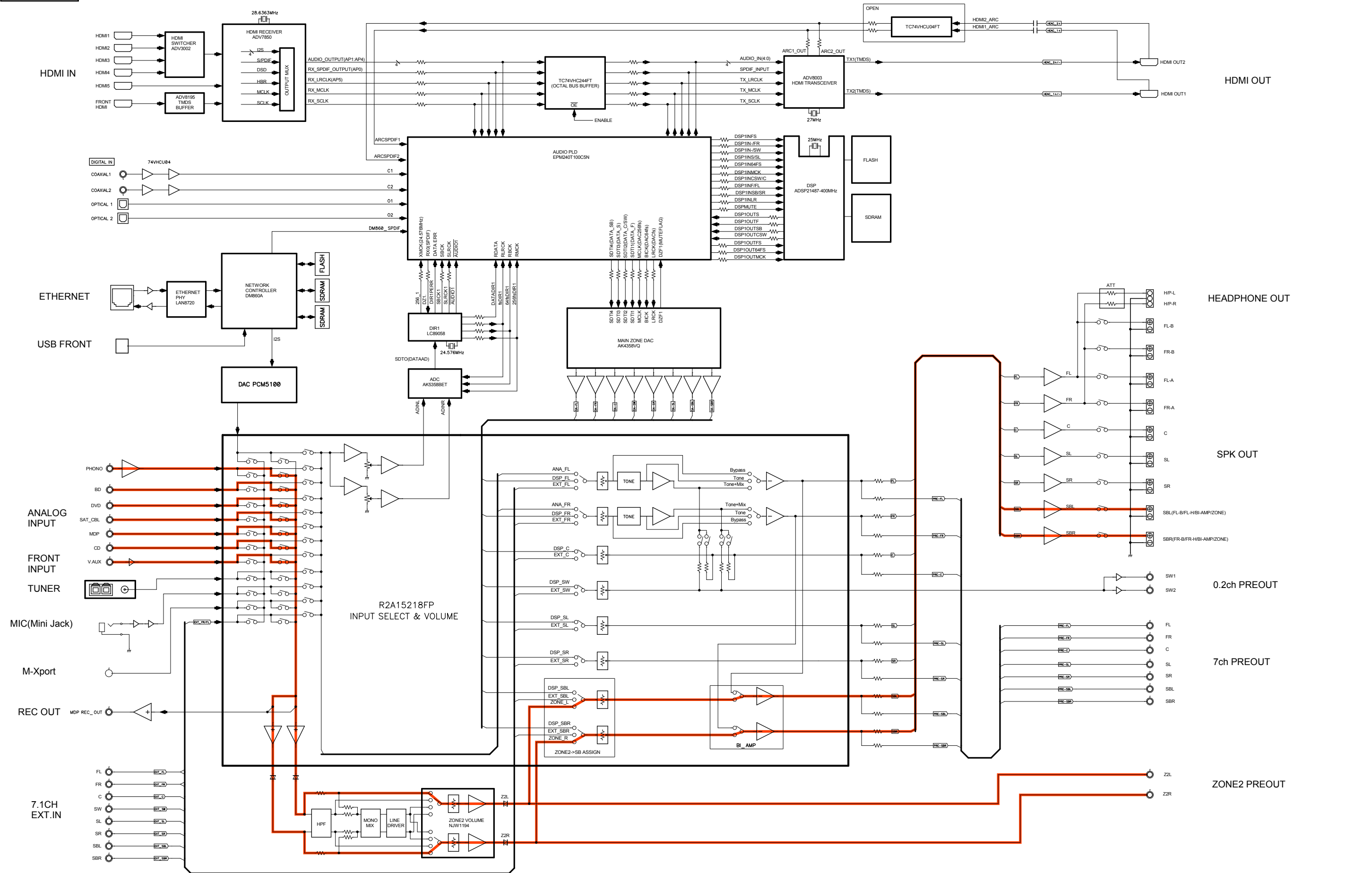


fig.12

AUDIO DIAGRAM



**fig.13**

## AUDIO DIAGRAM

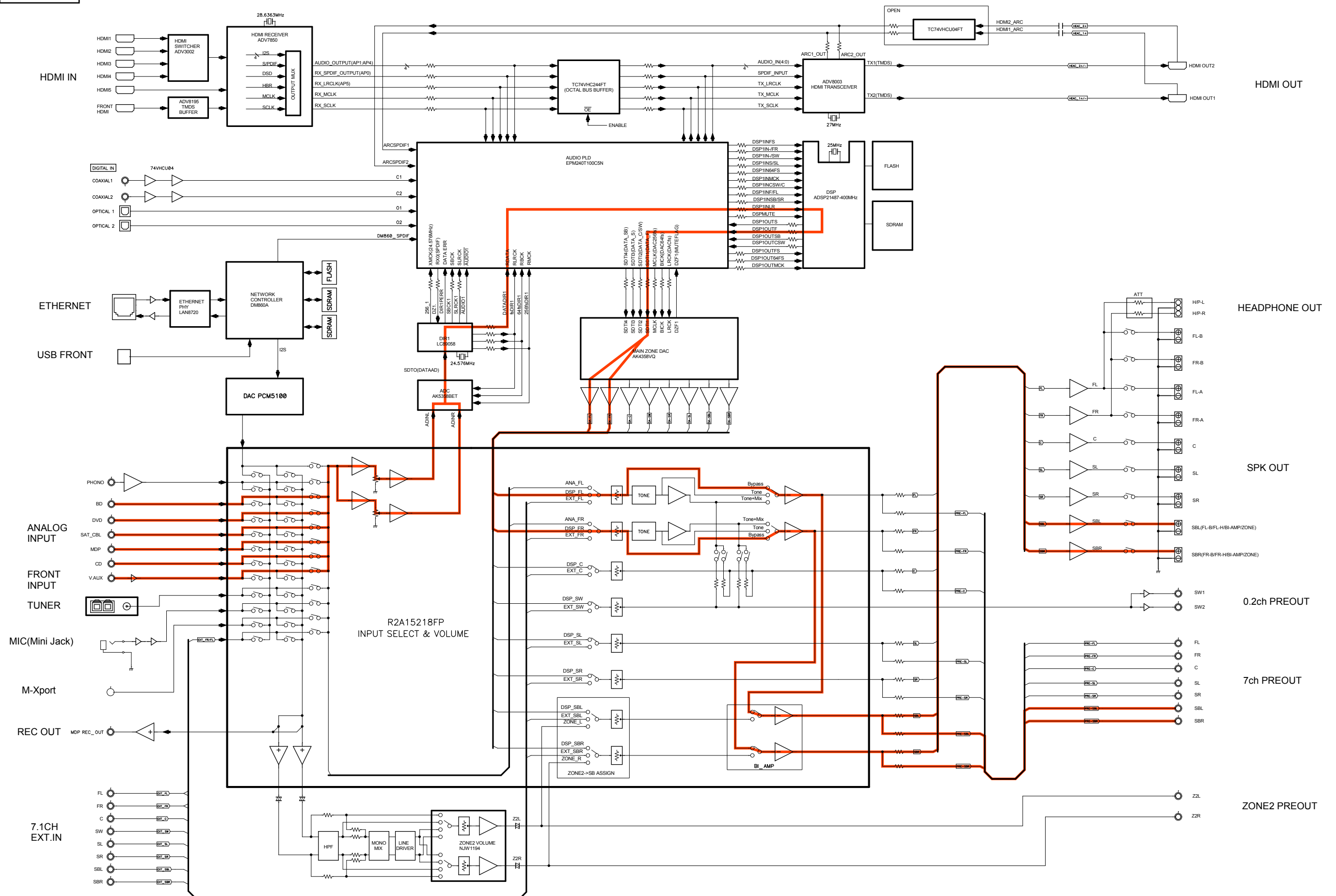


fig.14

AUDIO DIAGRAM

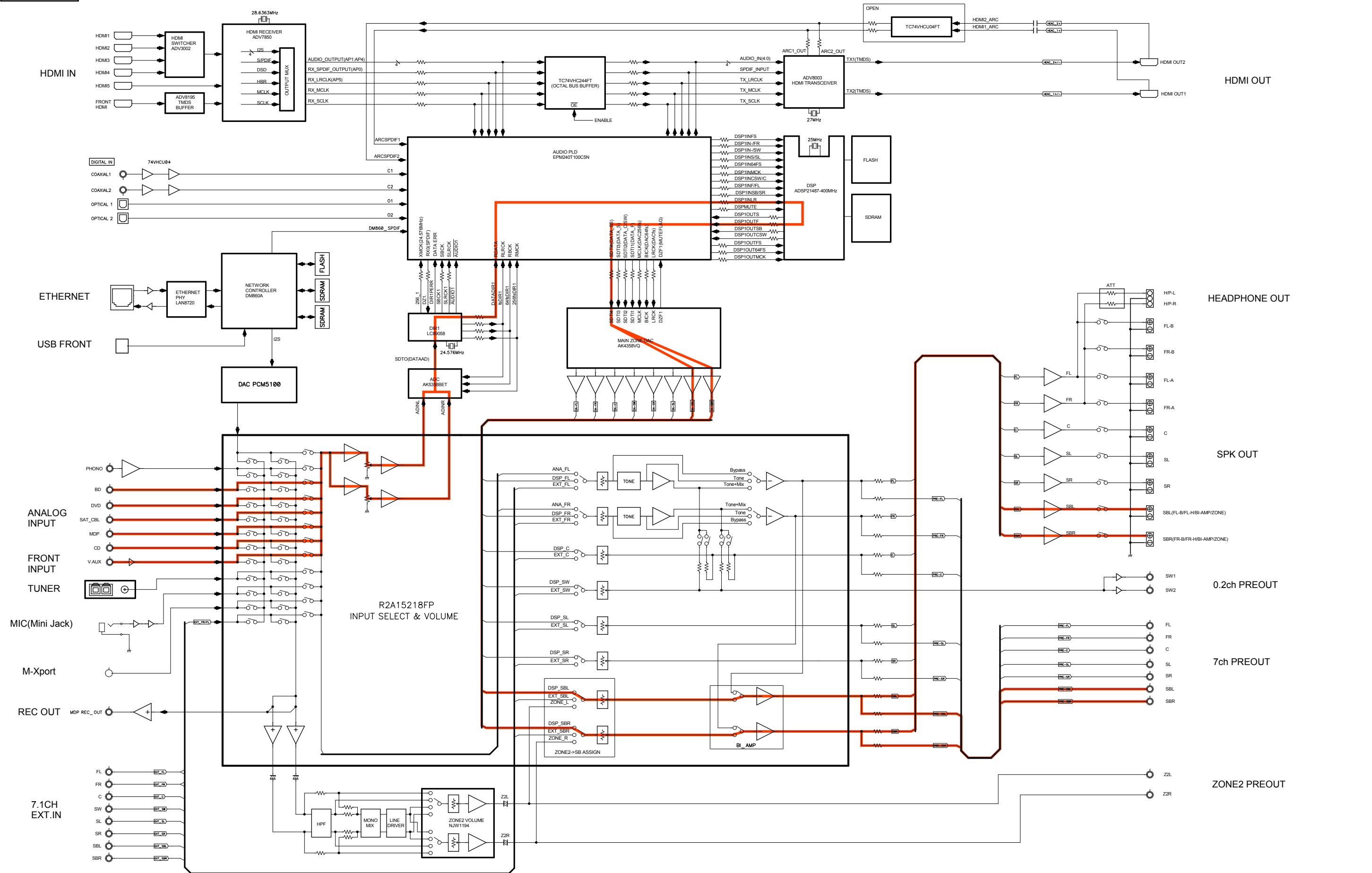
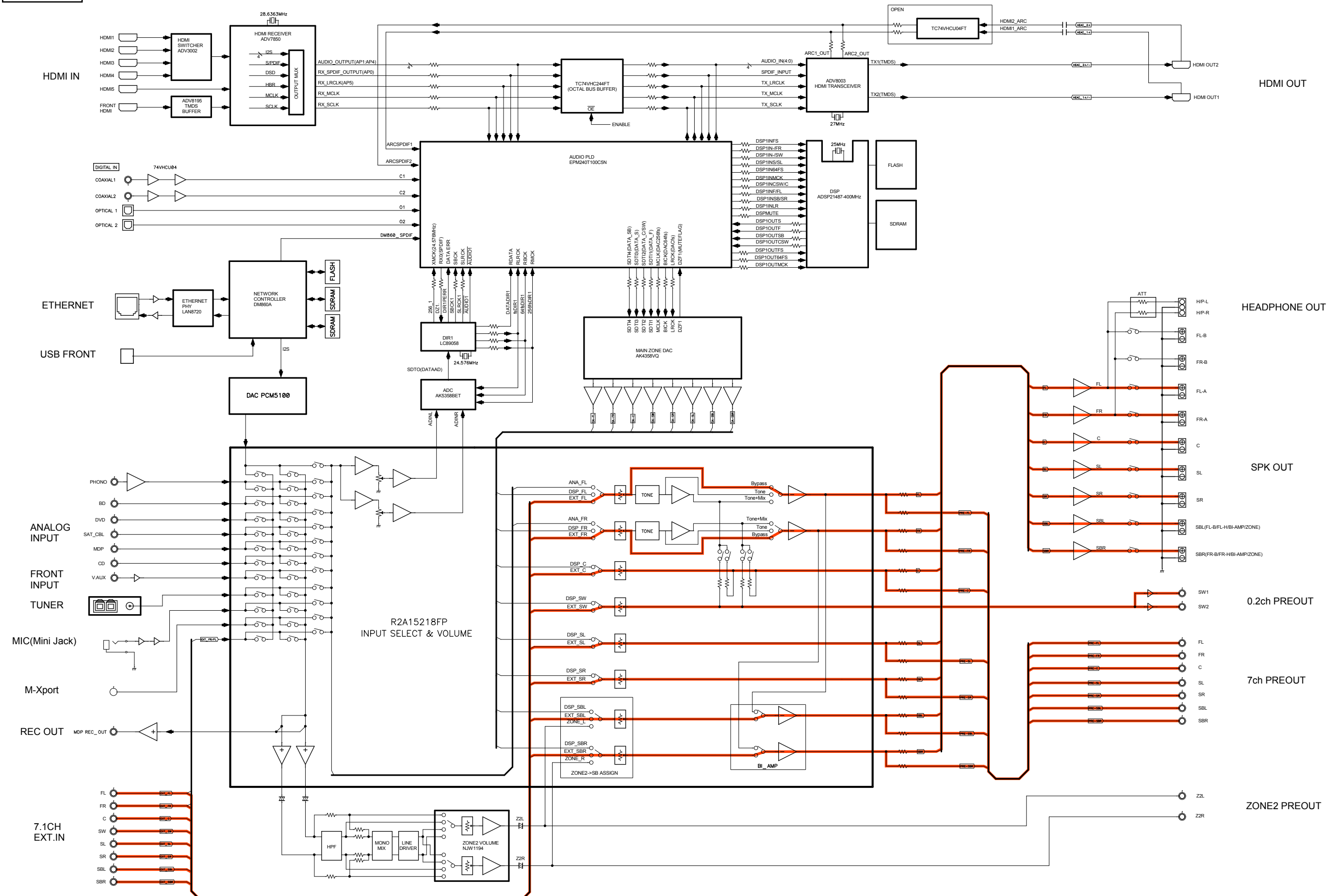


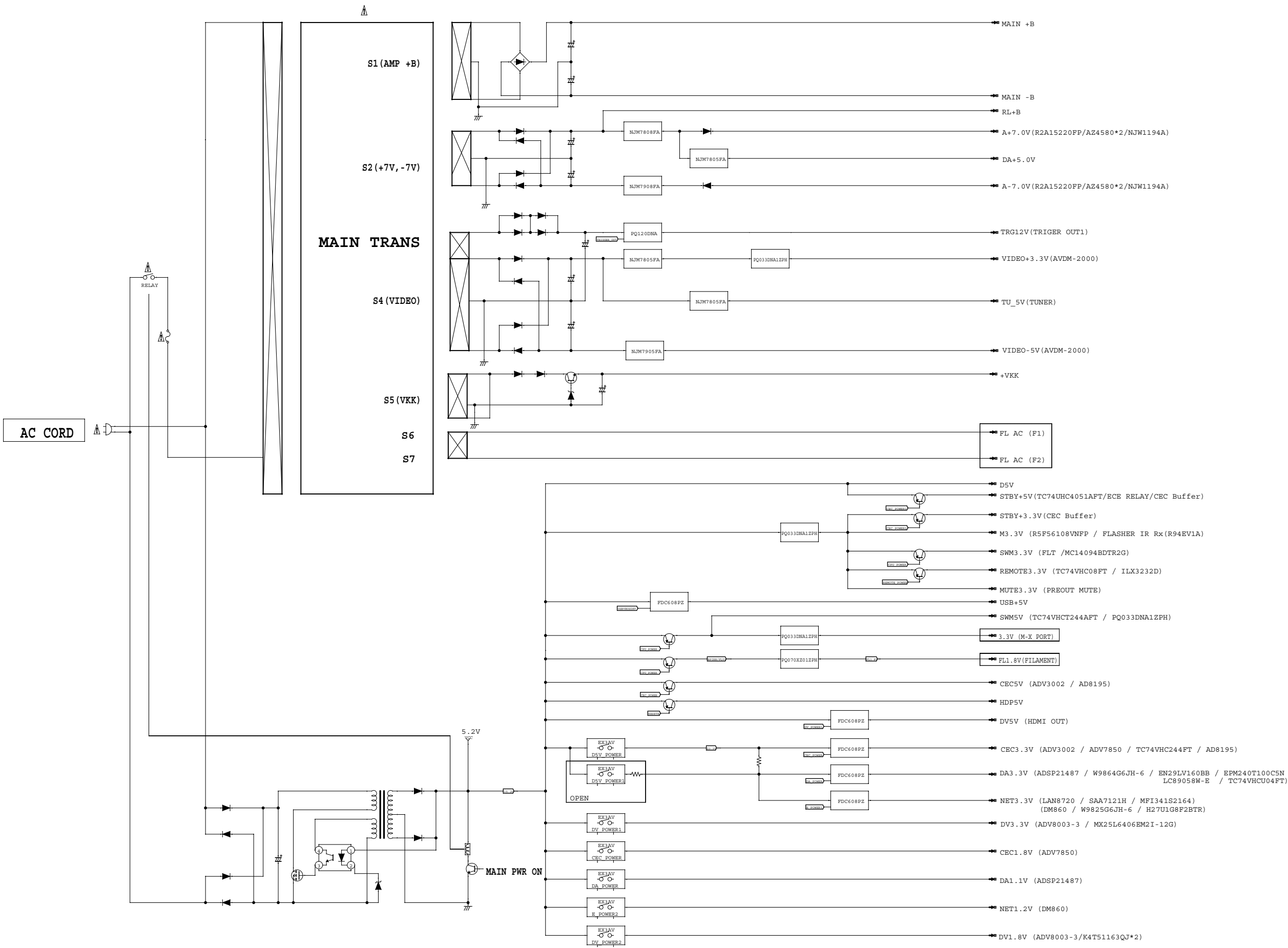
fig.15

# AUDIO DIAGRAM





VCC DIAGRAM





## JIG FOR SERVICING

When you repair the printing board, you can use the following JIG (Extension cable kit). Please order it from marantz Official Service. Distributor in your region if necessary.

**NOTE:** The incorrect connection with in the JIG (EXTENSION UNIT KIT) may cause damage.

8U-110084S : EXTENSION UNIT KIT : 1 Set

- **Connection of PCB HDMI JIG**

### -Preparation-

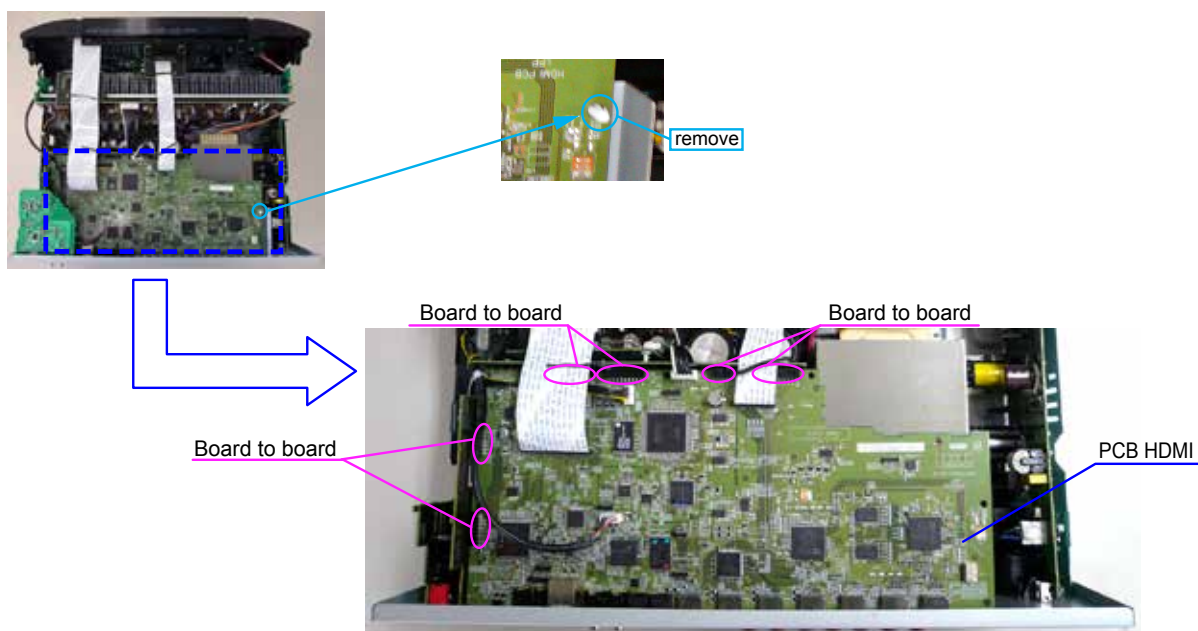
8U-110084S : EXTENSION UNIT KIT : 1 Set  
Insulation sheet (Do not supply it) : 1 sheet  
Ground lead (Do not supply it) : 2 pc

## -Procedures-

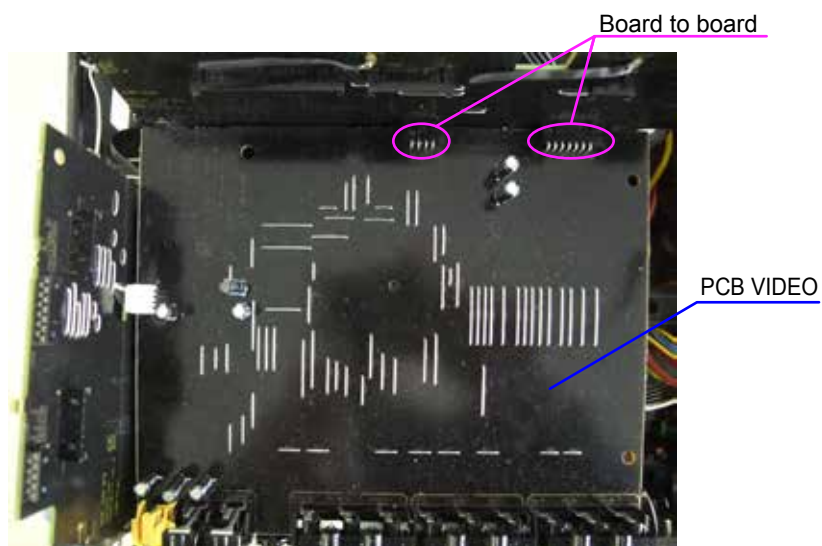
(1) Remove the screws.



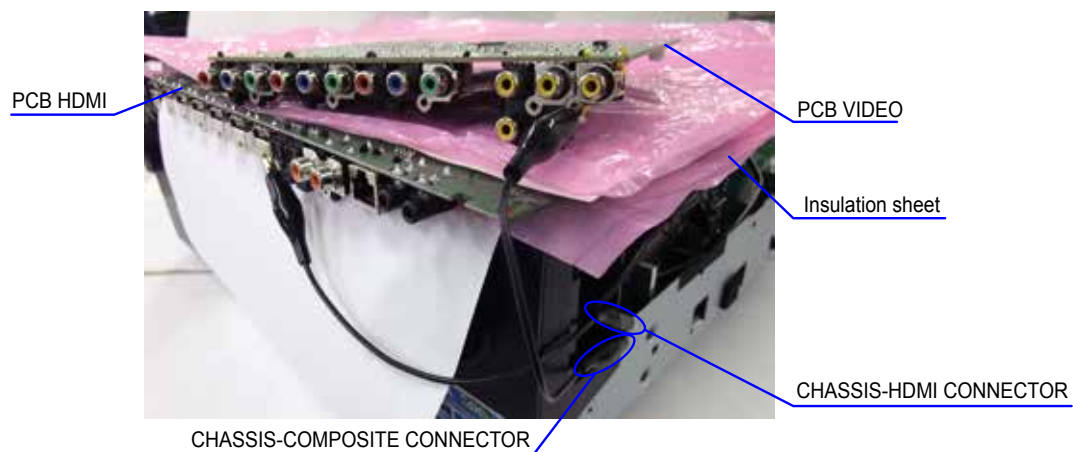
(2) Disconnect the connector board.



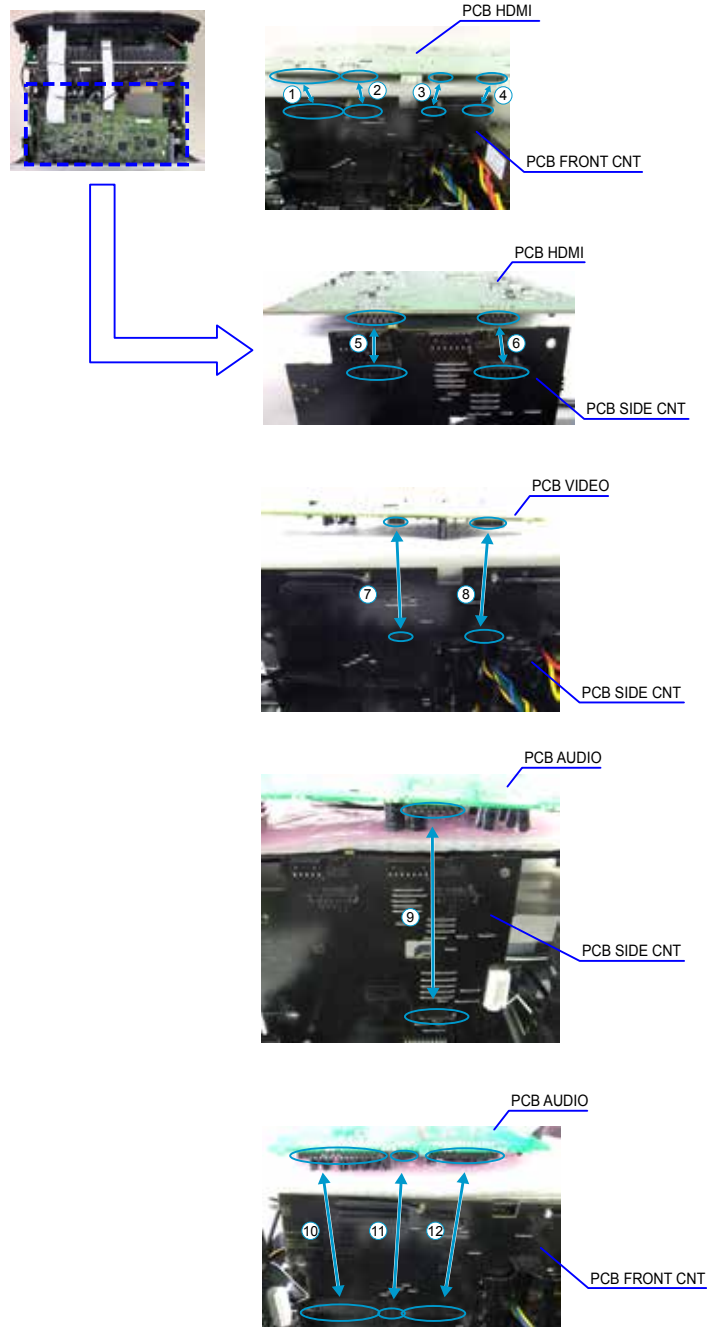




- (3) Detach PCB HDMI from the chassis, and turn it over.  
 Please put an insulation sheet that is larger than PCB HDMI under PCB.  
 ※ Connect the ground point of PCB to the chassis with a ground lead or the like.



(4) Connect the 12 extension jig cables.



**Connection table of Board to Board**

| No. | Pin   | Ref. No. | PCB       |   | Ref. No. | PCB   |
|-----|-------|----------|-----------|---|----------|-------|
| ①   | 33pin | CP3403   | FRONT CNT | ↔ | N3403    | HDMI  |
| ②   | 17pin | CP3404   | FRONT CNT | ↔ | N3404    | HDMI  |
| ③   | 7pin  | CP3402   | FRONT CNT | ↔ | N3402    | HDMI  |
| ④   | 13pin | CP3401   | FRONT CNT | ↔ | N3401    | HDMI  |
| ⑤   | 13pin | CP3407   | SIDE CNT  | ↔ | N3407    | HDMI  |
| ⑥   | 11pin | CP3406   | SIDE CNT  | ↔ | N3406    | HDMI  |
| ⑦   | 7pin  | CP4614   | FRONT CNT | ↔ | CN4614   | VIDEO |
| ⑧   | 13pin | CP4613   | FRONT CNT | ↔ | CN4613   | VIDEO |
| ⑨   | 15pin | CP4605   | SIDE CNT  | ↔ | CN4605   | AUDIO |
| ⑩   | 33pin | CP4617   | FRONT CNT | ↔ | CN4617   | AUDIO |
| ⑪   | 7pin  | CP4615   | FRONT CNT | ↔ | CN4615   | AUDIO |
| ⑫   | 27pin | CP4612   | FRONT CNT | ↔ | CN4612   | AUDIO |

## WHEN THE MICROPROCESSOR IS REPLACED WITH A NEW ONE

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

| PCB Name | Ref. No. | Description       | After replaced | Remark              |
|----------|----------|-------------------|----------------|---------------------|
| HDMI     | U3002    | R5F56108VNFP      | <b>B</b>       | SOFTWARE: Main      |
| HDMI     | U2003    | EN29LV160BB-70TIP | <b>B</b>       | SOFTWARE: DSP ROM   |
| HDMI     | U2206    | EPM240T100C5N     | <b>B</b>       | SOFTWARE: AUDIO PLD |
| HDMI     | U1602    | MX25L6406EM2I-12G | <b>C</b>       | SOFTWARE: GUI ROM   |

After replacing

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

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

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

## PROCEDURE FOR UPGRADING THE VERSION OF THE FIRMWARE

**NOTE:** When the following are replaced, always rewrite with updated firmware using DFW. (Refer to parts list of "HDMI • PCB HDMI ASSY

- U1602 (MX25L6406EM2I-12G)
- U2206 (EPM240T100C5N)
- U3002 (R5F56108VNFP)
- U2003 (EN29LV160BB-70TIP)

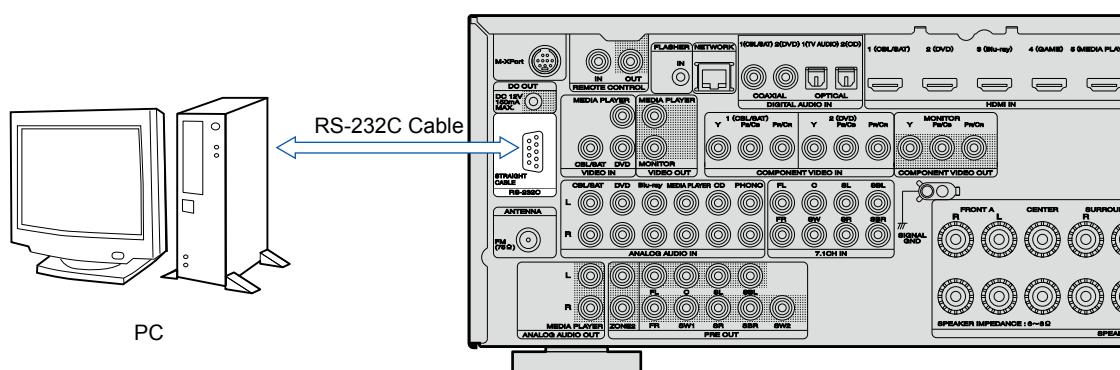
### 1. How to update by DFW

#### 1.1. Preparations before starting the operation

- (1) Personal Computer (Installed "DFW\_0015\_SR6007\_(Rev.X.X.X).exe".
- (2) RS-232C cable (9P (Male), Straight).

#### 1.2. Connection of AV receiver

- (1) Confirm the power on/off switch of the AV receiver is turning off.
- (2) Connect the RS-232C cable from PC with the "RS232C Terminal of AV receiver".



### 1.3. Turn on the AV receiver

Operate the following. Turn on the AV receiver.

- (1) Connect the power cable to the AC outlet while simultaneously pushing the "SOUND MODE" button and the "M-DAX" button of the front panel.
- (2) Confirm the power indicator is red.

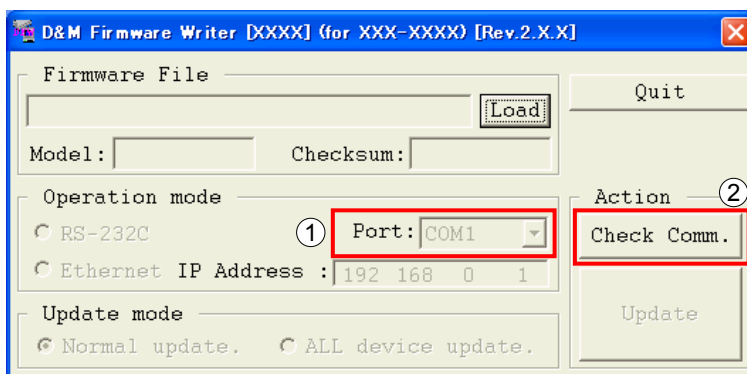
### 1.4. Run the DFW

Run the "DFW\_0015\_SR6007\_(Rev.X.X.X).exe" on desktop of PC.



### 1.5. Communication check

- (1) Select the serial port number of RS-232C in PC.
- (2) Click the "Check Comm." button.



- (3) When connection is good, then you can see the "Communication check OK." message.



- (4) If connection is not good, then you can see the "Communication check NG" message.

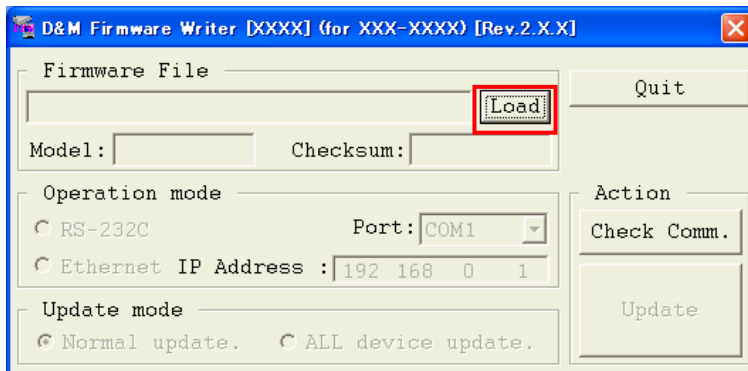


Please confirm the following

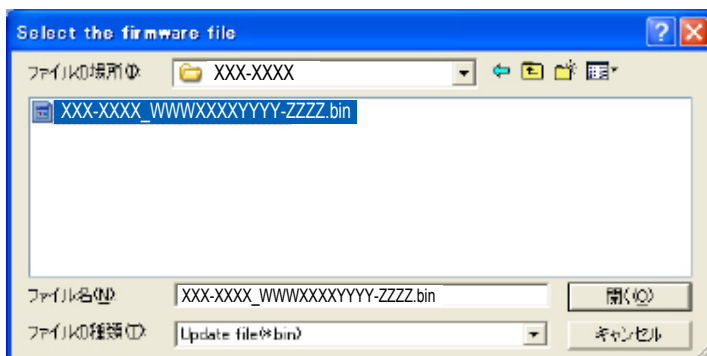
- (a) Check the connection of the AV receiver and PC. (refer to "1.2. Connection of the AV receiver" )
- (b) Check the operation mode of the AV receiver. (refer to "1.3. Turn on the AV receiver")
- (c) Check the selection of the RS-232C port number of PC.

## 1.6. Download the firmware

- (1) Click the "Load" button.

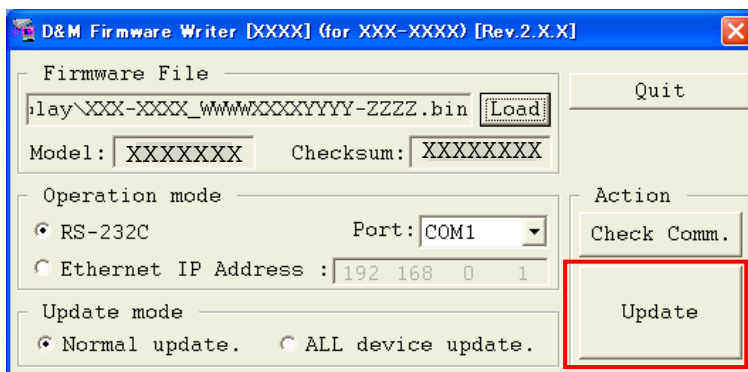


- (2) Download the firmware from the specified download source to PC.

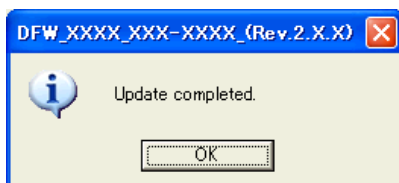


## 1.7. Complete the firmware updating

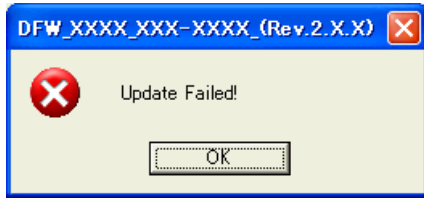
- (1) Click the "Update" button.



- (2) When writing of the firmware is completed, the power of AV receiver turns on automatically and you can see the "Update completed" message.



- (3) If you can't complete the firmware update, please retry the firmware update from "1.3. Turn on the AV receiver".



### 1.8. Notice:

Please keep the following notice for firmware update.

- (a) Keep the PC environment
- (b) Avoid the communication cable from the electrical noise source.  
(e.g. telephone cable, AC line, a fluorescent light)
- (c) Don't remove cable during update.
- (d) Don't turn off the power during update.
- (e) Don't run other PC application during update.
- (f) Stop the resident program on PC (Virus checker and System check utility, etc)
- (g) Stop the screen saver on PC.
- (h) Stop the power save ability on PC.
- (i) In case of laptop PC, Use the AC adaptor.

### Confirming the firmware's number after upgraded

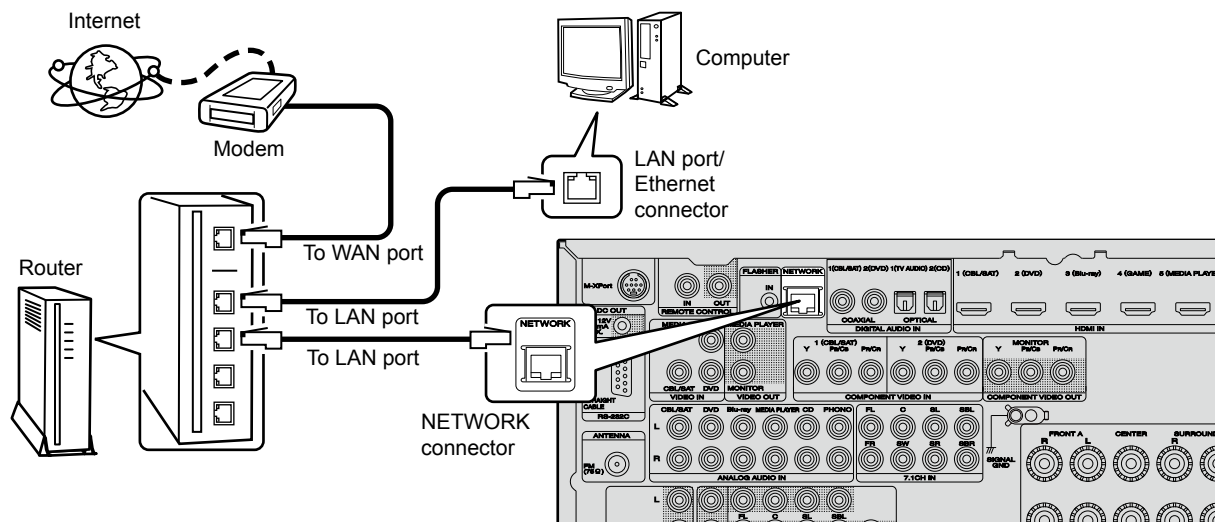
After updating the firmware, check the version. Refer to "1.  $\mu$ com/DSP Version display mode" (25 page ).

## 2. How to update by DPMS

You can update the firmware by downloading the latest version from the Internet.

### 2.1. Connecting to the Network

- (1) System requirements
  - Internet Connection by Broadband Circuit
  - Modem
  - Router
  - Ethernet cable (CAT-5 or greater recommended)
- (2) Setting



### 2.2. Checking and updating the firmware

Check if the latest firmware exists. You can also check approximately time required to complete an update.

- (1) Press the "SETUP" button on the remote control to display the GUI menu.
- (2) Use the cursor buttons to select "General" → "Firmware" → "Update" → "Check for Update".
- (3) Press the "ENTER" button.
  - The latest version of the firmware on the website is displayed.
  - If the firmware on the website is latest, proceed to (4).
  - If the latest firmware has been already installed, press the "SETUP" button to close the menu.
- (4) Use the cursor buttons to select "Update", then press the "ENTER" button.
  - During update, the power indicator lights in red and the GUI screen disappears. And an approximately remaining time is indicated on the display.
  - When the update is completed, "Updateing Complete" appears in the FL Display and then this unit returns to the normal state.

#### --- Cautions on Firmware Update ---

- In order to update the firmware, you must have the correct system requirements and settings for a broadband Internet connection.
- Do not turn off the power until updating is completed.
- Even with a broadband connection to the Internet, approximately 1 hour is required for the updating procedure to be completed.

Once updating starts, normal operations on the SR6007 cannot be performed until updating is completed. Also, setting items of the GUI menu of SR6007 or setting items of the image adjustment may be initialized.

Note down the settings before updating, and set them again after updating.

### 2.3. About the error code

See the table below for error codes, details of faults, and coping strategies when the firmware is updated through DPMS.

| Error Code | Details of Error code                                                                     | Display<br>(Eight digits or more are the scrolling displays.)         | Coping strategies                                                                                     |
|------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 01         | Log-in to DPMS failed.                                                                    | <div> <div>Log in failed</div> <div>01</div> </div>                   | Reset and update again.<br>Carry out the update in an environment that has little network load.       |
| 02         | Line, etc., is busy when logging into DPMS.                                               | <div> <div>Server is busy</div> <div>02</div> </div>                  | Carry out the update in an environment that has little network load.                                  |
| 03         | Connection to DPMS failed.                                                                | <div> <div>ConnectionFailed</div> <div>03</div> </div>                | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 04         | Firmware file data was requested but error message was received.                          | <div> <div>ConnectionFailed</div> <div>04</div> </div>                | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 05         | Firmware file data was requested but it timed out.                                        | <div> <div>ConnectionFailed</div> <div>05</div> </div>                | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 06         | Firmware file data was requested but error message was received.                          | <div> <div>ConnectionFailed</div> <div>06</div> </div>                | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 07         | All firmware file data was requested but it timed out.                                    | <div> <div>ConnectionFailed</div> <div>07</div> </div>                | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 08         | Firmware file data of Main CPU was requested but error message was received.              | <div> <div>ConnectionFailed</div> <div>08</div> </div>                | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 09         | Firmware file data of Main CPU was requested but it timed out.                            | <div> <div>ConnectionFailed</div> <div>09</div> </div>                | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 0A         | Error (NG) message was received when firmware of Main CPU was downloaded.                 | <div> <div>Downloaded fail</div> <div>0A</div> </div>                 | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 0B         | Error (line congestion) message was received when firmware of Main CPU was downloaded.    | <div> <div>Downloaded fail</div> <div>0B</div> </div>                 | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 0C         | Error (connection failure) message was received when firmware of Main CPU was downloaded. | <div> <div>Downloaded fail</div> <div>0C</div> </div>                 | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 0D         | Received Package Version is wrong.                                                        | <div> <div>Connection fail</div> <div>0D</div> </div>                 | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 0E         | Connection to DPMS failed.<br>(can not get NTP)                                           | <div> <div>Connection fail</div> <div>0E</div> </div>                 | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 10         | Main CPU failed to receive firmware for rewriting sent from DM860A (when timed out).      | <div> <div>Main 10</div> <div>Updating</div> <div>failed</div> </div> | Turn off and on the power. Updating starts automatically.                                             |



| Error Code | Details of Error code                                                                                                | Display<br>(Eight digits or more are the scrolling displays.) | Coping strategies                                                                                     |
|------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 11         | Main CPU failed to receive firmware for rewriting sent from DM860A (when an error occurred).                         | <div>Main CPU 11</div> <div>Updating</div> <div>Failed</div>  | Turn off and on the power.<br>Updating starts automatically.                                          |
| 12         | There was invalid data in the firmware for rewriting sent from DM860A to Main CPU (when a Check Sum error occurred). | <div>Main CPU 12</div> <div>Updating</div> <div>Failed</div>  | Turn off and on the power.<br>Updating starts automatically.                                          |
| 13         | The deletion of block data failed before Main CPU was rewritten.                                                     | <div>Main CPU 13</div> <div>Erase</div> <div>Failed</div>     | Turn off and on the power.<br>Updating starts automatically.                                          |
| 14         | The rewriting of block data failed when Main CPU was rewritten.                                                      | <div>Main CPU 14</div> <div>Updating</div> <div>Failed</div>  | Turn off and on the power.<br>Updating starts automatically.                                          |
| 15         | The data verification was invalid after Main CPU was rewritten.                                                      | <div>Main CPU 15</div> <div>Update</div> <div>Checking</div>  | Turn off and on the power.<br>Updating starts automatically.                                          |
| 20         | Failure to acquire (Boot Loader Mode) IP address before rewriting DM860A (AutoIP).                                   | <div>Connection fail</div> <div>20</div>                      | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 21         | Failure to acquire (Boot Loader Mode) IP address before rewriting DM860A (when timed out).                           | <div>Connection fail</div> <div>21</div>                      | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 22         | Log-in to DPMS failed.                                                                                               | <div>Login failed</div> <div>22</div>                         | Reset and update again.<br>Carry out the update in an environment that has little network load.       |
| 23         | Line, etc., is busy when logging into DPMS.                                                                          | <div>Server is busy</div> <div>23</div>                       | Carry out the update in an environment that has little network load.                                  |
| 24         | Connection to DPMS failed.                                                                                           | <div>Connection fail</div> <div>24</div>                      | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 25         | Mode change failure of DM860A.                                                                                       | <div>Connection fail</div> <div>25</div>                      | Reset and update again.                                                                               |
| 26         | Data acquisition failed (timed out) when firmware of Main CPU was downloaded. Received Package Version is wrong.     | <div>Download fail</div> <div>26</div>                        | Check the network connection.<br>Carry out the update in an environment that has little network load. |
| 27         | Mode change failure of DM860A.                                                                                       | <div>Connection fail</div> <div>27</div>                      | Reset and update again.                                                                               |
| 36         | Log-in to DPMS failed when Main CPU was rewritten.                                                                   | <div>Main CPU 36</div> <div>Login</div> <div>Failed</div>     | Carry out the update in an environment that has little network load.                                  |
| 37         | Line, etc., is busy when logging into DPMS when Main CPU was rewritten.                                              | <div>Main CPU 37</div> <div>Server</div> <div>is busy</div>   | Carry out the update in an environment that has little network load.                                  |

| Error Code | Details of Error code                                                                                                           | Display<br>(Eight digits or more are the scrolling displays.) | Coping strategies                                                                                                                    |
|------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 38         | Connection to DPMS failed when Main CPU was rewritten.                                                                          | Main CPU 38<br>Connect<br>failed                              | Check the network connection.<br>Carry out the update in an environment that has little network load.                                |
| 39         | Connection to DPMS timed out when Main CPU was rewritten.                                                                       | Main CPU 39<br>Connect<br>failed                              | Check the network connection.<br>Carry out the update in an environment that has little network load.                                |
| 3A         | Error (NG) message was received when firmware was downloaded or Main CPU was rewritten.                                         | Main CPU 3A<br>Download<br>failed                             | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |
| 3B         | Error (line congestion) message received when downloading firmware when Main CPU was rewritten.                                 | Main CPU 3B<br>Download<br>failed                             | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |
| 3C         | Error (connection failure) message received when downloading firmware when Main CPU was rewritten.                              | Main CPU 3C<br>Download<br>failed                             | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |
| 3D         | Failure to acquire (Boot Loader Mode) IP address before rewriting DM860A (AutoIP).                                              | Main CPU 3D<br>Connect<br>failed                              | Check the network connection.<br>Carry out the update in an environment that has little network load.                                |
| 3E         | Failure to acquire (Boot Loader Mode) IP address before rewriting DM860A (when timed out).                                      | Main CPU 3E<br>Connect<br>failed                              | Check the network connection.<br>Carry out the update in an environment that has little network load.                                |
| 50         | Log-in to DPMS failed when firmware such as DSP and PLD was rewritten.                                                          | DSP 50<br>Login<br>failed                                     | Carry out the update in an environment that has little network load.                                                                 |
| 51         | Line, etc., is busy when the log-in to DPMS when firmware such as DSP and PLD was rewritten.                                    | DSP 51<br>Server<br>is busy                                   | Carry out the update in an environment that has little network load.                                                                 |
| 52         | Connection to DPMS failed when firmware such as DSP and PLD was rewritten.                                                      | DSP 52<br>Connect<br>failed                                   | Check the network connection.<br>Carry out the update in an environment that has little network load.                                |
| 54         | Error message received regarding firmware data after the log-in to DPMS when firmware such as DSP and PLD was rewritten.        | DSP 54<br>Updating<br>failed                                  | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |
| 55         | When firmware such as DSP and PLD was rewritten, request was made for firmware data after the log-in to DPMS, but it timed out. | DSP 55<br>Updating<br>failed                                  | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |
| 56         | Downloading firmware failed after the log-in to DPMS when firmware such as DSP and PLD was rewritten.                           | DSP 56<br>Download<br>failed                                  | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |
| 57         | Firmware download error received (line congestion) after the log-in to DPMS when firmware such as DSP and PLD was rewritten.    | DSP 57<br>Download<br>failed                                  | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |

| Error Code | Details of Error code                                                                                                           | Display<br>(Eight digits or more are the scrolling displays.) | Coping strategies                                                                                                                    |
|------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 58         | Firmware download error received (connection failure) after the log-in to DPMS when firmware such as DSP and PLD was rewritten. | DSP      58<br>DownLoad<br>failed                             | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |
| 5A         | NACK was received when "C" command sent to DSP, PLD etc.                                                                        | DSP      5A<br>Connect<br>failed                              | Turn off and on the power.<br>Updating starts automatically.                                                                         |
| 5B         | NACK was received when "L" command sent to DSP, PLD etc.                                                                        | DSP      5B<br>Updating<br>failed                             | Turn off and on the power.<br>Updating starts automatically.                                                                         |
| 5C         | DSP, PLD etc. failed to receive firmware for rewriting sent from DM860A (when timed out).                                       | DSP      5C<br>Updating<br>failed                             | Turn off and on the power.<br>Updating starts automatically.                                                                         |
| 5D         | DSP, PLD etc. failed to receive firmware for rewriting sent from DM860A (when an error occurred).                               | DSP      5D<br>Updating<br>failed                             | Turn off and on the power.<br>Updating starts automatically.                                                                         |
| 5E         | Data in firmware such as DSP and PLD for rewriting sent from DM860A was invalid (when a Check Sum error occurred).              | DSP      5E<br>Updating<br>failed                             | Turn off and on the power.<br>Updating starts automatically.                                                                         |
| 5F         | Invalid data in firmware such as DSP and PLD for rewriting sent from DM860A was invalid (invalid data was received).            | DSP      5F<br>Updating<br>failed                             | Turn off and on the power.<br>Updating starts automatically.                                                                         |
| 60         | NACK was received when "P" command sent to DSP, PLD etc.                                                                        | DSP      60<br>Updating<br>failed                             | Turn off and on the power.<br>Updating starts automatically.                                                                         |
| 61         | NACK was received when "I" command sent to DSP, PLD etc.                                                                        | DSP      61<br>Update<br>Checking                             | Turn off and on the power.<br>Updating starts automatically.                                                                         |
| 80         | Acquisition of serial flash data failed before serial flash was deleted.                                                        | GUI      80<br>Updating<br>failed                             | Turn off and on the power.<br>Updating starts automatically.                                                                         |
| 81         | Deleting data failed before serial flash was rewritten.                                                                         | GUI      81<br>Updating<br>failed                             | Turn off and on the power.<br>Updating starts automatically.                                                                         |
| 82         | Receiving firmware for rewriting serial flash sent by DM860A failed (when timed out).                                           | GUI      82<br>Updating<br>failed                             | Turn off and on the power.<br>Updating starts automatically.                                                                         |
| 83         | Receiving firmware for rewriting serial flash sent by DM860A failed (when an error).                                            | GUI      83<br>Updating<br>failed                             | Turn off and on the power.<br>Updating starts automatically.                                                                         |
| 84         | Receiving firmware for rewriting serial flash sent by DM860A failed (when a Check Sum error).                                   | GUI      84<br>Updating<br>failed                             | Turn off and on the power.<br>Updating starts automatically.                                                                         |

| Error Code | Details of Error code                                                                                                                | Display<br>(Eight digits or more are the scrolling displays.) | Coping strategies                                                                                                                    |
|------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 85         | Receiving firmware for rewriting serial flash sent by DM860A failed (when invalid data was received).                                | GUI 85<br>Updating<br>failed                                  | Turn off and on the power.<br>Updating starts automatically.                                                                         |
| 86         | The data verification was invalid after serial flash was rewritten.                                                                  | GUI 86<br>Updating<br>failed                                  | Turn off and on the power.<br>Updating starts automatically.                                                                         |
| A0         | Acquisition of (Application Mode) IP address failed before DM860A was rewritten (AutoIP).                                            | EIMG A0<br>Connect<br>failed                                  | Check the network connection.<br>Carry out the update in an environment that has little network load.                                |
| A1         | Acquisition of (Application Mode) IP address failed before DM860A was rewritten (when timed out).                                    | EIMG A1<br>Connect<br>failed                                  | Check the network connection.<br>Carry out the update in an environment that has little network load.                                |
| A2         | Invalid login via DPMS access was notified when DM860A related firmware was rewritten (Application Mode).                            | EIMG A2<br>Login<br>failed                                    | Check the network connection.<br>Carry out the update in an environment that has little network load.                                |
| A3         | Line congestion via DPMS access was notified when DM860A related firmware was rewritten (Application Mode).                          | EIMG A3<br>Server<br>is busy                                  | Check the network connection.<br>Carry out the update in an environment that has little network load.                                |
| A4         | Connection failure via DPMS access was notified when DM860A related firmware was rewritten (Application Mode).                       | EIMG A4<br>Connect<br>failed                                  | Check the network connection.<br>Carry out the update in an environment that has little network load.                                |
| A6         | Firmware data error message was received after DPMS login when DM860A related firmware was rewritten (Application Mode).             | EIMG A6<br>Updating<br>failed                                 | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |
| A7         | When DM860A related firmware was rewritten (Application Mode), request was made for firmware data after DPMS login but it timed out. | EIMG A7<br>Updating<br>failed                                 | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |
| AE         | Firmware download error message received (when download fails) when DM860A related firmware was rewritten (Boot Loader Mode).        | EIMG AE<br>Download<br>failed                                 | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |
| AF         | Firmware download error message received (line congestion) when DM860A related firmware was rewritten (Boot Loader Mode).            | EIMG AF<br>Download<br>failed                                 | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |
| B0         | Firmware download error message received (connection failure) when DM860A related firmware was rewritten (Boot Loader Mode).         | EIMG B0<br>Download<br>failed                                 | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |
| B1         | DM860A related firmware download error message. (Timeout failure)                                                                    | EIMG B1<br>Download<br>failed                                 | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |
| B2         | Error message received when DM860A related firmware was rewritten.                                                                   | EIMG B2<br>Updating<br>failed                                 | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |

| Error Code | Details of Error code                                 | Display<br>(Eight digits or more are the scrolling displays.) | Coping strategies                                                                                                                    |
|------------|-------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| B3         | Firmware writing error message.<br>(Timeout failure ) |                                                               | Turn off and on the power.<br>Updating starts automatically.<br>Carry out the update in an environment that has little network load. |
| B4         | Mode change failure of DM860A.<br>(Boot Loader Mode)  |                                                               | Reset and update again.                                                                                                              |
| B5         | Mode change failure of DM860A.<br>(Application Mode)  |                                                               | Reset and update again.                                                                                                              |

## Device display during firmware update

Display of target device during firmware update.

| Target device                 | Display | Error code when an error occurs          |
|-------------------------------|---------|------------------------------------------|
| Main                          |         | 08 - 0C<br>10 - 15<br>22 - 24<br>36 - 3E |
| Audio PLD                     |         | 50 - 52<br>54 - 58<br>5A - 61            |
| DSP                           |         | 50 - 52<br>54 - 58<br>5A - 61            |
| GUI Serial Flash              |         | 50 - 52<br>54 - 58<br>5A - 61<br>80 - 86 |
| DM860A Boot Loader            |         | A0 - A4<br>A6 - A7<br>AE - B5            |
| DM860A Image                  |         | A0 - A4<br>A6 - A7<br>AE - B5            |
| DM860A Image (Emergency Mode) |         | —                                        |

### 3. How to update by USB Memory

You can update the firmware by downloading the latest version with USB Memory.

#### 3.1. Connecting to the USB Memory

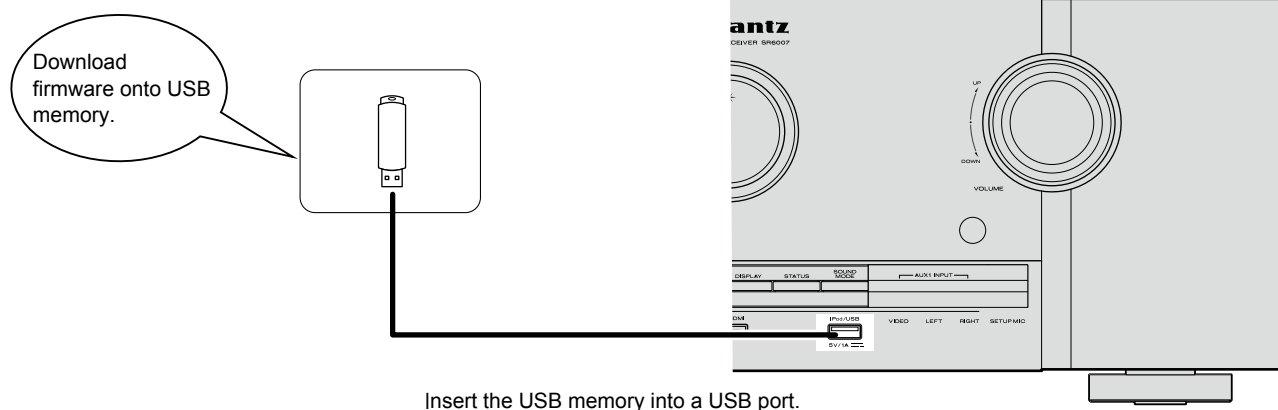
##### (1) Requirements

- USB Memory capacity : FAT16 : 2 GB, FAT32 : 2 TB
- USB memory devices will not work via a USB hub.
- It is not possible to use this unit by connecting the unit's USB port to a PC via a USB cable.
- Do not use an extension cable when connecting a USB memory device.  
This may cause radio interference.

Place the USB update File in an appropriate folder. The folder name should be the Product ID based on the Model name/area.

| Model Name | Model Area        | Product ID   |
|------------|-------------------|--------------|
| SR6007     | North America (U) | 100100150100 |
|            | Europe (N)        | 100100150200 |
|            | China (K)         | 100100150500 |

##### (2) Setting



#### 3.2. Download the firmware

- (1) While pressing the "STATUS" button and the "TUNER PRESET CH +" button at the same time, power on this unit.
- (2) "USB Update Start" appears in the GUI.
- (3) Press the "ENTER" button on remote control. "UpdateFileCheck" appears in the FL Display and the Update of the Firmware starts.
- (4) During the update, the power indicator lights in red and the GUI screen display disappears.  
The remaining update time appears in the display on the main unit.  
When the update is completed, "Updateing Complete" appears in the FL Display and then this unit returns to the normal state.
- (5) Execute a initialization (Refer to 10 page).

#### --- Cautions on Firmware Update ---

- Do not remove a USB memory until updating is completed.
  - Do not turn off the power until updating is completed.
- Approximately 1 hour is required for the updating procedure to be completed.  
Once updating starts, normal operations on the this unit cannot be performed until updating is completed. Also, setting items of the GUI menu of this unit or setting items of the image adjustment may be initialized.  
Note down the settings before updating, and set them again after updating.

### 3.3. About the error code

See the table below for error codes and details of faults when the firmware is updated through USB memory.

| Error Code | Details of Error code                                               | Display                    | Coping strategies                                                                                                                                                                               |
|------------|---------------------------------------------------------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01         | Unable to detect USB.                                               | Connect:ionFail<br>01      | Disconnect and connect the USB memory.                                                                                                                                                          |
| 02         | No FirmwareFile in USB.                                             | FilesNotFoun<br>02         | Make sure that the FirmwareFile is in the USB memory.                                                                                                                                           |
| 03         | FirmwareFile in USB for unsupported Model name/area                 | NotMatchFirm<br>03         | Check the supported Model name/area for the FirmwareFile.                                                                                                                                       |
| 04         | Failed to obtain entire Firmware information.                       | Connect:ionFail<br>04      | Start the USB Update again.                                                                                                                                                                     |
| 05         | TimeOut while obtaining entire Firmware information                 | Connect:ionFail<br>05      | Start the USB Update again.                                                                                                                                                                     |
| 06         | Failed to obtain individual Firmware information.                   | Connect:ionFail<br>06      | Start the USB Update again.                                                                                                                                                                     |
| 07         | TimeOut while obtaining individual Firmware information             | Connect:ionFail<br>07      | Start the USB Update again.                                                                                                                                                                     |
| 08         | Error notification received while requesting FirmwareInfo.          | Connect:ionFail<br>08      | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 09         | TimeOut while obtaining Firmware information                        | Connect:ionFail<br>09      | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 0A         | Unable to detect USB for FirmwareDownload.                          | Connect:ionFail<br>0A      | Disconnect and connect the USB memory.                                                                                                                                                          |
| 0B         | No FirmwareFile for FirmwareDownload.                               | FilesNotFoun<br>0B         | Disconnect and connect the USB memory.                                                                                                                                                          |
| 0C         | Received value with invalid PackageVersion.                         | Connect:ionFail<br>0C      | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 10         | No UpdatePacket received from DM860A (TimeOut).                     | Main<br>Updating<br>Failed | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 11         | Abnormal data in UpdatePacket received from DM860A (FormatError).   | Main<br>Updating<br>Failed | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 12         | Abnormal data in UpdatePacket received from DM860A (ChecksumError). | Main<br>Updating<br>Failed | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 13         | BlockErase failed before rewriting Main.                            | Main<br>Erase<br>Failed    | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |

| Error Code | Details of Error code                                             | Display                                                  | Coping strategies                                                                                                                                                                               |
|------------|-------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14         | BlockWrite failed while rewriting Main.                           | <div>Main 14</div> <div>Updating</div> <div>Failed</div> | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (Ⓟ)" button for five seconds. |
| 15         | Error in Verify after rewriting Main (ChecksumError).             | <div>Main 15</div> <div>Update</div> <div>CheckNG</div>  | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (Ⓟ)" button for five seconds. |
| 20         | Unable to detect USB after SBLMode.                               | <div>Connection fail</div> <div>20</div>                 | Disconnect and connect the USB memory.                                                                                                                                                          |
| 21         | No FirmwareFile in USB after SBLMode.                             | <div>FilesNotFound</div> <div>21</div>                   | Disconnect and connect the USB memory.                                                                                                                                                          |
| 22         | FirmwareFile in USB after SBLMode for unsupported Model name/area | <div>NotMatchFirm</div> <div>22</div>                    | Check the supported Model name/area for the FirmwareFile.                                                                                                                                       |
| 23         | Failed to obtain entire Firmware information after SBLMode.       | <div>ConnectionFail</div> <div>23</div>                  | Disconnect and connect the USB memory.                                                                                                                                                          |
| 24         | TimeOut while obtaining entire Firmware information after SBLMode | <div>Connection fail</div> <div>24</div>                 | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (Ⓟ)" button for five seconds. |
| 25         | Failed to transit to SBLMode.                                     | <div>Connection fail</div> <div>25</div>                 | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (Ⓟ)" button for five seconds. |
| 26         | TimeOut in Download (writing to SDRAM) for FirmwareDownload       | <div>Download fail</div> <div>26</div>                   | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (Ⓟ)" button for five seconds. |
| 27         | Failed to write to EEPROM after SBLMode.                          | <div>Connection fail</div> <div>27</div>                 | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (Ⓟ)" button for five seconds. |
| 36         | Unable to detect USB.                                             | <div>Connection fail</div> <div>36</div>                 | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the POWER button for five seconds.                 |
| 37         | No FirmwareFile in USB.                                           | <div>FilesNotFound</div> <div>37</div>                   | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (Ⓟ)" button for five seconds. |
| 38         | FirmwareFile in USB for unsupported Model name/area               | <div>NotMatchFirm</div> <div>38</div>                    | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (Ⓟ)" button for five seconds. |
| 39         | TimeOut in USBCheck                                               | <div>Connection fail</div> <div>39</div>                 | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (Ⓟ)" button for five seconds. |
| 3A         | Unable to detect USB for FirmwareDownload.                        | <div>Connection fail</div> <div>3A</div>                 | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (Ⓟ)" button for five seconds. |



| Error Code | Details of Error code                                               | Display                                                 | Coping strategies                                                                                                                                                                               |
|------------|---------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3B         | No FirmwareFile for FirmwareDownload.                               | <div>FilesNot Found</div> <div>3B</div>                 | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 3F         | Failed to transit to SBLMode.                                       | <div>Main 3F</div> <div>Connect</div> <div>failed</div> | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 50         | Unable to detect USB.                                               | <div>Connection fail</div> <div>50</div>                | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 51         | No FirmwareFile in USB.                                             | <div>FilesNot Found</div> <div>51</div>                 | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 52         | FirmwareFile in USB for unsupported Model name/area                 | <div>NotMatch Firm</div> <div>52</div>                  | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 54         | Error notification received while requesting FirmwareInfo.          | <div>DSP 54</div> <div>Updating</div> <div>failed</div> | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 55         | TimeOut while obtaining Firmware                                    | <div>DSP 55</div> <div>Updating</div> <div>failed</div> | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 56         | Unable to detect USB for FirmwareDownload.                          | <div>Connection fail</div> <div>56</div>                | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 57         | No FirmwareFile for FirmwareDownload.                               | <div>FilesNot Found</div> <div>57</div>                 | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 5A         | Invalid DeviceID in response or no response from Sub for C command. | <div>DSP 5A</div> <div>Connect</div> <div>failed</div>  | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 5B         | NACK received in response or no response from Sub for L command.    | <div>DSP 5B</div> <div>Updating</div> <div>failed</div> | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 5C         | No UpdatePacket received from DM860A (TimeOut).                     | <div>DSP 5C</div> <div>Updating</div> <div>failed</div> | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 5D         | Abnormal data in UpdatePacket received from DM860A (FormatError).   | <div>DSP 5D</div> <div>Updating</div> <div>failed</div> | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 5E         | Abnormal data in UpdatePacket received from DM860A (ChecksumError). | <div>DSP 5E</div> <div>Updating</div> <div>failed</div> | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |

| Error Code | Details of Error code                                                   | Display                           | Coping strategies                                                                                                                                                                               |
|------------|-------------------------------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5F         | Abnormal data in UpdatePacket received from DM860A (DataLength/DataNo). | DSP      5F<br>Updating<br>failed | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 60         | NACK received in response or no response from Sub for P command.        | DSP      60<br>Updating<br>failed | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 61         | Mismatched CheckSum in response or no response from Sub for I command.  | DSP      61<br>Update<br>CheckNG  | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 63         | Failed to transit to ApplicationMode.                                   | DSP      63<br>Update<br>CheckNG  | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 64         | Failed to transit to BootLoaderMode.                                    | DSP      64<br>Update<br>CheckNG  | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 80         | WriteEnableLatchBit not set in Read after issuing WREN command.         | GUI      80<br>Updating<br>failed | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 81         | BlockErase failed in Read after issuing BE command.                     | GUI      81<br>Updating<br>failed | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 82         | No UpdatePacket received from DM860A (TimeOut).                         | GUI      82<br>Updating<br>failed | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 83         | Abnormal data in UpdatePacket received from DM860A (FormatError).       | GUI      83<br>Updating<br>failed | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 84         | Abnormal data in UpdatePacket received from DM860A (ChecksumError).     | GUI      84<br>Updating<br>failed | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 85         | Abnormal data in UpdatePacket received from DM860A (DataLength/DataNo). | GUI      85<br>Updating<br>failed | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| 86         | Mismatched CheckSum in CheckSum comparison after rewriting.             | GUI      86<br>Updating<br>failed | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| A2         | Unable to detect USB.                                                   | Connection fail<br>A2             | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| A3         | No FirmwareFile in USB.                                                 | FilesNot Found<br>A3              | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |

| Error Code | Details of Error code                                       | Display              | Coping strategies                                                                                                                                                                               |
|------------|-------------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A4         | FirmwareFile in USB for unsupported Model name/area         | NotMatchFirm<br>A4   | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| A6         | Error notification received while requesting FirmwareInfo.  | FWInfoReq<br>Failed  | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| A7         | TimeOut while obtaining Firmware                            | FWInfoReq<br>Failed  | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| AE         | Unable to detect USB for FirmwareDownload.                  | ConnectionFail<br>AE | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| AF         | No FirmwareFile for FirmwareDownload.                       | FilesNotFound<br>AF  | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| B1         | TimeOut in Download (writing to SDRAM) for FirmwareDownload | DownloadFail<br>B1   | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| B2         | Error notification received after rewriting DM860A Firm.    | FWUpdate<br>Failed   | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| B3         | Error in FirmwareUpdate (TimeOut).                          | FWUpdate<br>Failed   | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| B4         | Failed to transit to BootLoaderMode.                        | FWUpdate<br>Failed   | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |
| B5         | Failed to transit to ApplicationMode.                       | FWUpdate<br>Failed   | This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds. |

### --- Cautions on Firmware Update ---

When an error code as shown above appears in the DISPLAY, check the following:

- Check whether the Firmware downloaded to the USB memory is correct (whether the MODEL name and area of the downloaded Firmware match those for the product, and whether the USB Memory contains data other than the latest Firmware).
- Update after resetting the product.
- Use a different USB memory.

### 3.4. Device display during firmware update

Display of target device during firmware update.

| Target device                 | Display                                                                                                                                                                                                                                              | Error code when an error occurs |   |   |   |   |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---|---|---|---|---|--|---|---|---|---|---|---|---|--|--|--|--|---|---|---|------------------------------------------------|
| Main CPU                      | <table><tr><td>M</td><td>a</td><td>i</td><td>n</td><td></td><td></td><td></td></tr><tr><td></td><td>*</td><td>*</td><td>*</td><td>n</td><td>i</td><td>n</td></tr><tr><td></td><td></td><td></td><td></td><td>*</td><td>*</td><td>%</td></tr></table> | M                               | a | i | n |   |   |  |   | * | * | * | n | i | n |  |  |  |  | * | * | % | 08 - 0B<br>10 - 15<br>20 - 27<br>36 - 3B<br>3F |
| M                             | a                                                                                                                                                                                                                                                    | i                               | n |   |   |   |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
|                               | *                                                                                                                                                                                                                                                    | *                               | * | n | i | n |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
|                               |                                                                                                                                                                                                                                                      |                                 |   | * | * | % |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
| Audio PLD                     | <table><tr><td>A</td><td>P</td><td>L</td><td>D</td><td></td><td></td><td></td></tr><tr><td></td><td>*</td><td>*</td><td>*</td><td>n</td><td>i</td><td>n</td></tr><tr><td></td><td></td><td></td><td></td><td>*</td><td>*</td><td>%</td></tr></table> | A                               | P | L | D |   |   |  |   | * | * | * | n | i | n |  |  |  |  | * | * | % | 50 - 52<br>54 - 58<br>5A - 64                  |
| A                             | P                                                                                                                                                                                                                                                    | L                               | D |   |   |   |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
|                               | *                                                                                                                                                                                                                                                    | *                               | * | n | i | n |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
|                               |                                                                                                                                                                                                                                                      |                                 |   | * | * | % |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
| DSP                           | <table><tr><td>D</td><td>S</td><td>P</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>*</td><td>*</td><td>*</td><td>n</td><td>i</td><td>n</td></tr><tr><td></td><td></td><td></td><td></td><td>*</td><td>*</td><td>%</td></tr></table>  | D                               | S | P |   |   |   |  |   | * | * | * | n | i | n |  |  |  |  | * | * | % | 50 - 52<br>54 - 58<br>5A - 64                  |
| D                             | S                                                                                                                                                                                                                                                    | P                               |   |   |   |   |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
|                               | *                                                                                                                                                                                                                                                    | *                               | * | n | i | n |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
|                               |                                                                                                                                                                                                                                                      |                                 |   | * | * | % |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
| GUI Serial Flash              | <table><tr><td>G</td><td>U</td><td>I</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>*</td><td>*</td><td>*</td><td>n</td><td>i</td><td>n</td></tr><tr><td></td><td></td><td></td><td></td><td>*</td><td>*</td><td>%</td></tr></table>  | G                               | U | I |   |   |   |  |   | * | * | * | n | i | n |  |  |  |  | * | * | % | 50 - 52<br>54 - 58<br>5A<br>62 - 64<br>80 - 86 |
| G                             | U                                                                                                                                                                                                                                                    | I                               |   |   |   |   |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
|                               | *                                                                                                                                                                                                                                                    | *                               | * | n | i | n |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
|                               |                                                                                                                                                                                                                                                      |                                 |   | * | * | % |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
| DM860A Boot Loader            | <table><tr><td>E</td><td>S</td><td>B</td><td>L</td><td></td><td></td><td></td></tr><tr><td></td><td>*</td><td>*</td><td>*</td><td>n</td><td>i</td><td>n</td></tr><tr><td></td><td></td><td></td><td></td><td>*</td><td>*</td><td>*</td></tr></table> | E                               | S | B | L |   |   |  |   | * | * | * | n | i | n |  |  |  |  | * | * | * | A0 - A4<br>A6 - A7<br>AE - B5                  |
| E                             | S                                                                                                                                                                                                                                                    | B                               | L |   |   |   |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
|                               | *                                                                                                                                                                                                                                                    | *                               | * | n | i | n |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
|                               |                                                                                                                                                                                                                                                      |                                 |   | * | * | * |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
| DM860A Image                  | <table><tr><td>E</td><td>I</td><td>M</td><td>G</td><td></td><td></td><td></td></tr><tr><td></td><td>*</td><td>*</td><td>*</td><td>n</td><td>i</td><td>n</td></tr><tr><td></td><td></td><td></td><td></td><td>*</td><td>*</td><td>*</td></tr></table> | E                               | I | M | G |   |   |  |   | * | * | * | n | i | n |  |  |  |  | * | * | * | A0 - A4<br>A6 - A7<br>AE - B5                  |
| E                             | I                                                                                                                                                                                                                                                    | M                               | G |   |   |   |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
|                               | *                                                                                                                                                                                                                                                    | *                               | * | n | i | n |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
|                               |                                                                                                                                                                                                                                                      |                                 |   | * | * | * |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
| DM860A Image (Emergency Mode) | <table><tr><td>U</td><td>p</td><td>d</td><td>a</td><td>t</td><td>e</td><td></td></tr><tr><td>R</td><td>e</td><td>t</td><td>r</td><td>y</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>   | U                               | p | d | a | t | e |  | R | e | t | r | y |   |   |  |  |  |  |   |   |   | —                                              |
| U                             | p                                                                                                                                                                                                                                                    | d                               | a | t | e |   |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
| R                             | e                                                                                                                                                                                                                                                    | t                               | r | y |   |   |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |
|                               |                                                                                                                                                                                                                                                      |                                 |   |   |   |   |   |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |                                                |

### Confirming the firmware's number after upgraded

After updating the firmware, check the version. Refer to "1.  $\mu$ com/DSP Version display mode" (25 page ).

# ADJUSTMENT

## Audio Section

### Adjusting Idling Current

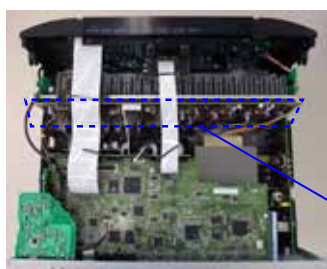
Required measurement equipment: DC Voltmeter

#### 1. Preparation

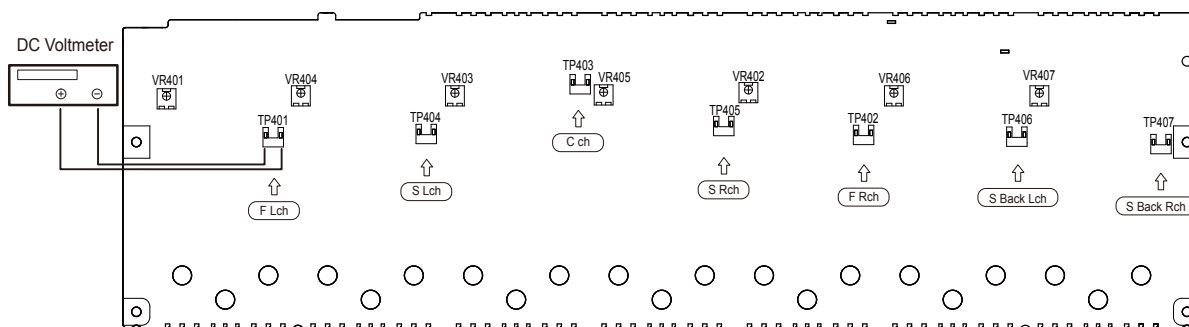
- (1) Temperature should be at avoid direct blow from an air conditioner or an electric fan and humidity should be moderate, and place the set at normal usage environment.  
15 °C ~ 30 °C (59 °F ~ 86 °F)
- (2) Presetting
  - POWER (Power source switch)      STANDBY
  - SPEAKER (Speaker terminal)      No load  
(Do not connect speaker, dummy resistor, etc.)

#### 2. Adjustment

- (1) Remove the top cover and set VR401, VR402, VR403, VR404, VR405, VR406, VR407 on at fully 7CH AMP UNIT at fully counterclockwise (↺) position.
- (2) Connect DC Voltmeter to test points (FRONT-Lch: TP401, FRONT-Rch: TP402, CENTER ch: TP403, SURROUND-Lch: TP404, SURROUND-Rch: TP405, SURROUND-BACK Lch: TP406, SURROUND-BACK Rch: TP407).
- (3) Connect the power cord to AC Line, and set the power switch to "ON".
- (4) Presetting.
  - MASTER VOLUME      : "---" counterclockwise (↺ min.)
  - SPEAKER (Speaker terminal) : No load  
(Do not connect speaker, dummy resistor, etc.)
  - MODE      : MCH STEREO
  - FUNCTION      : DVD
- (5) Within 2 minutes after the power on, turn VR401 clockwise (↻) to adjust the TEST POINT voltage to  $6.5\text{mV} \pm 0.5\text{mV DC}$ .
- (6) After 10 minutes from the preset above, turn VR401 to set the voltage to  $8.0\text{mV} \pm 0.5\text{mV DC}$ .
- (7) Adjust the Variable Resistors of each channel in the same way.



7CH AMP UNIT



# SURROUND MODES AND PARAMETERS

## Surround

This unit is equipped with a digital signal processing circuit that lets you play program sources in the sound mode to achieve the same sense of presence as in a movie theater.

## Sound modes and surround parameters

This table shows the speakers that can be used in each sound mode and the surround parameters adjustable in each sound mode.

### Symbols in the table

- This indicates the audio output channels or surround parameters that can be set.
- ⊙ This indicates the audio output channels. The output channels depend on the settings of "Speaker Config."

| Sound Mode                        | Channel output |        |              |                   |                  | Surround Parameter |           |
|-----------------------------------|----------------|--------|--------------|-------------------|------------------|--------------------|-----------|
|                                   | Front L/R      | Center | Surround L/R | Surround back L/R | Front height L/R | Front wide L/R     | Subwoofer |
| DIRECT/PURE DIRECT (2 channel) *1 | ○              |        |              | ⊙ *5              | ⊙ *5             | ⊙ *5               | ⊙ *4      |
| DSD DIRECT (2 channel) *1         | ○              |        |              |                   |                  |                    | ⊙ *4      |
| DSD DIRECT (2 channel) *1         | ○              | ⊙      | ⊙            | ⊙ *5              | ⊙ *5             |                    |           |
| STEREO                            | ○              |        |              |                   |                  |                    |           |
| MULTI CH IN                       | ○              | ⊙      | ⊙            | ⊙                 | ⊙ *6             |                    |           |
| DOLBY PRO LOGIC IIz               | ○              | ⊙      | ⊙            |                   | ⊙                |                    |           |
| DOLBY PRO LOGIC IIx               | ○              | ⊙      | ⊙            | ⊙                 |                  | ⊙ *7               |           |
| DOLBY PRO LOGIC II                | ○              | ⊙      | ⊙            |                   |                  | ⊙ *8               |           |
| DOLBY PRO LOGIC                   | ○              | ⊙      | ⊙            |                   |                  | ⊙ *9               |           |
| DOLBY PRO LOGIC II A-DSX          | ○              | ⊙      | ⊙            |                   | ⊙ *10            | ⊙ *11              |           |
| DOLBY PRO LOGIC A-DSX             | ○              | ⊙      | ⊙            |                   | ⊙ *10            | ⊙ *11              |           |
| DTS NEO6                          | ○              | ⊙      | ⊙            | ⊙                 |                  | ⊙ *8               |           |
| DTS NEO6 A-DSX                    | ○              | ⊙      | ⊙            |                   | ⊙ *10            | ⊙ *11              |           |
| Audyssey DSX®                     | ○              | ⊙      | ⊙            |                   | ⊙ *6             | ⊙ *7               |           |
| DOLBY DIGITAL                     | ○              | ⊙      | ⊙            | ⊙                 | ⊙ *6             | ⊙ *7               |           |
| DOLBY DIGITAL Plus                | ○              | ⊙      | ⊙            | ⊙                 | ⊙ *6             | ⊙ *7               |           |
| DOLBY TrueHD                      | ○              | ⊙      | ⊙            | ⊙                 | ⊙ *6             | ⊙ *7               |           |
| DTS SURROUND                      | ○              | ⊙      | ⊙            | ⊙                 | ⊙ *6             | ⊙ *7               |           |
| DTS 96/24                         | ○              | ⊙      | ⊙            | ⊙                 | ⊙ *6             | ⊙ *7               |           |
| DTS-HD                            | ○              | ⊙      | ⊙            | ⊙                 | ⊙ *6             | ⊙ *7               |           |
| DTS Express                       | ○              | ⊙      | ⊙            | ⊙                 | ⊙ *13            | ⊙ *14              |           |
| MULTI CH STEREO                   | ○              | ⊙      | ⊙            | ⊙ *12             |                  |                    | ⊙         |
| VIRTUAL                           | ○              |        |              |                   |                  |                    | ⊙         |

- \*1 During playback in PURE DIRECT mode, the surround parameters are the same as in DIRECT mode.
- \*2 This item cannot be selected during DSD (SA-CD) signal playback.
- \*3 This item can be selected when a Dolby TrueHD signal is played.
- \*4 Only when "Subwoofer Mode" is set to "LFE+Main", sound is output from the subwoofer.
- \*5 A signal for each channel contained in an input signal is output as audio.
- \*6 Audio is output from the front height speaker when the set sound mode name contains "+PLIIZ". For information on how to check the sound mode, see.
- \*7 This setting is unavailable when the set sound mode name contains "+PLIIX Music". For information on how to check the sound mode, see.
- \*8 This setting is possible when the sound mode is "PLIIX Cinema" or "DTS NEO6 Cinema".
- \*9 This setting is possible when the sound mode is "PLI Cinema" or "Pro Logic".
- \*10 Audio is output from the front height speaker when "Assign Mode" in the menu is set to "Front Height" and "Audyssey DSX®" is set to "On".
- \*11 Audio is output from the front wide speaker when "Assign Mode" in the menu is set to "Front Wide" and "Audyssey DSX®" is set to "On".
- \*12 Audio is output from the surround back speaker when "Assign Mode" in the menu is set to "Surround Back".
- \*13 Audio is output from the front height speaker when "Assign Mode" in the menu is set to "Front Height".
- \*14 Audio is output from the front wide speaker when "Assign Mode" in the menu is set to "Front Wide".

- \*1 During playback in PURE DIRECT mode, the surround parameters are the same as in DIRECT mode.
- \*15 This item can be selected when a Dolby Digital or DTS signal is played.
- \*16 This item can be selected when a Dolby Digital or DTS signal or DVD-Audio is played.
- \*17 This setting is available when the set sound mode name contains ".+PLIIz". For information on how to check the sound mode, see.

| Sound Mode                            | Surround Parameter          |                               |                     |                                  |           |                       |
|---------------------------------------|-----------------------------|-------------------------------|---------------------|----------------------------------|-----------|-----------------------|
|                                       | Dynamic Compression<br>* 15 | Low Frequency Effects<br>* 16 | Height Gain<br>* 17 | PRO LOGIC II/IIx Music mode only |           |                       |
|                                       |                             |                               |                     | Panorama                         | Dimension | Center Width          |
| DIRECT/PURE DIRECT (2 channel) *1     | ○                           |                               |                     |                                  |           | NEO:6 Music mode only |
| DIRECT/PURE DIRECT (Multi-channel) *1 | ○                           | ○                             |                     |                                  |           | Center Image          |
| DSD DIRECT (2 channel) *1             | ○                           |                               |                     |                                  |           |                       |
| DSD DIRECT (Multi-channel) *1         | ○                           | ○                             |                     |                                  |           |                       |
| STEREO                                | ○                           | ○                             |                     |                                  |           |                       |
| MULTI CH IN                           |                             | ○                             | ○                   |                                  |           |                       |
| DOLBY PRO LOGIC IIz                   | ○                           |                               | ○                   |                                  |           |                       |
| DOLBY PRO LOGIC IIx                   | ○                           |                               |                     | ○                                | ○         |                       |
| DOLBY PRO LOGIC II                    | ○                           |                               |                     | ○                                | ○         |                       |
| DOLBY PRO LOGIC                       | ○                           |                               |                     |                                  |           |                       |
| DOLBY PRO LOGIC II A-DSX              |                             |                               |                     | ○                                | ○         |                       |
| DOLBY PRO LOGIC A-DSX                 |                             |                               |                     | ○                                | ○         |                       |
| DTS NEO:6                             | ○                           |                               |                     |                                  |           | ○                     |
| DTS NEO:6 A-DSX                       |                             |                               |                     |                                  |           | ○                     |
| Audyssey DSX®                         | ○                           | ○                             |                     |                                  |           |                       |
| DOLBY DIGITAL                         | ○                           | ○                             | ○                   |                                  |           |                       |
| DOLBY DIGITAL Plus                    | ○                           | ○                             | ○                   |                                  |           |                       |
| DOLBY TrueHD                          | ○                           | ○                             | ○                   |                                  |           |                       |
| DTS SURROUND                          | ○                           | ○                             | ○                   |                                  |           |                       |
| DTS 96/24                             |                             | ○                             | ○                   |                                  |           |                       |
| DTS-HD                                |                             | ○                             | ○                   |                                  |           |                       |
| DTS Express                           |                             | ○                             | ○                   |                                  |           |                       |
| MULTI CH STEREO                       | ○                           | ○                             |                     |                                  |           |                       |
| VIRTUAL                               | ○                           | ○                             |                     |                                  |           |                       |

| Sound Mode                            | Subwoofer                | Tone<br>*18           | Audyssey              |                       |                       | M-DAX<br>*21          |
|---------------------------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                       |                          |                       | MultEQ® XT *19        | Dynamic EQ<br>*20     | Dynamic Volume<br>*20 | Audyssey DSX®<br>*19  |
| DIRECT/PURE DIRECT (2 channel) *1     | <input type="radio"/> *5 |                       |                       |                       |                       |                       |
| DIRECT/PURE DIRECT (Multi-channel) *1 |                          |                       |                       |                       |                       |                       |
| DSD DIRECT (2 channel) *1             | <input type="radio"/> *5 |                       |                       |                       |                       |                       |
| DSD DIRECT (Multi-channel) *1         |                          |                       |                       |                       |                       |                       |
| STEREO                                |                          |                       |                       |                       |                       |                       |
| MULTI CH IN                           |                          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DOLBY PRO LOGIC IIz                   | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DOLBY PRO LOGIC IIx                   | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DOLBY PRO LOGIC II                    | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DOLBY PRO LOGIC                       | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DOLBY PRO LOGIC II A-DSX              | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DOLBY PRO LOGIC A-DSX                 | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DTS NEO6                              | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DTS NEO6 A-DSX                        | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Audyssey DSX®                         | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DOLBY DIGITAL                         | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DOLBY DIGITAL Plus                    | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DOLBY TrueHD                          | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DTS SURROUND                          | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DTS 96/24                             | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DTS-HD                                | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| DTS Express                           | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| MULTI CH STEREO                       | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| VIRTUAL                               | <input type="radio"/>    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

- \*1 During playback in PURE DIRECT mode, the surround parameters are the same as in DIRECT mode.
- \*5 Only when "Subwoofer Mode" is set to "LFE+Main", sound is output from the subwoofer.
- \*18 This item cannot be set when "Dynamic EQ" is set to "On".
- \*19 This item cannot be set for HD audio exceeding a frequency of 96kHz or during DSD(SA-CD) signal playback.
- \*20 This item cannot be set when "MultEQ® XT" is set to "Off" or "Graphic EQ".
- \*21 This item can be set when the input signal is analog, PCM 48 kHz or 44.1 kHz.



## Types of input signals, and corresponding sound modes

This table shows the input signal that can be played in each sound mode. Check the audio signal of the input source then select the sound mode.

### Symbols in the table

- This indicates the default sound mode.
- This indicates the selectable sound mode.

| Sound Mode               | NOTE   | Input signal types and formats |                |           |                     |                              |             |                          |                         |             |           |               |                    |                                 |                       |                     |                |           |
|--------------------------|--------|--------------------------------|----------------|-----------|---------------------|------------------------------|-------------|--------------------------|-------------------------|-------------|-----------|---------------|--------------------|---------------------------------|-----------------------|---------------------|----------------|-----------|
|                          |        | PCM                            |                | DTS-HD    |                     | DTS                          |             |                          |                         | DOLBY       |           | DOLBY DIGITAL |                    |                                 |                       | Super Audio CD      |                |           |
|                          |        | ANALOG                         | PCM (multi ch) | PCM (2ch) | DTS-HD Master Audio | DTS-HD High Resolution Audio | DTS EXPRESS | DTS ES DSRCT (With Flag) | DTS ES MTRX (With Flag) | DTS (5.1ch) | DTS 96/24 | DOLBY TrueHD  | DOLBY DIGITAL Plus | DOLBY DIGITAL EX (With no Flag) | DOLBY DIGITAL (5.1ch) | DOLBY DIGITAL (2ch) | DSD (multi ch) | DSD (2ch) |
| DTS SURROUND             |        |                                |                |           |                     |                              |             |                          |                         |             |           |               |                    |                                 |                       |                     |                |           |
| DTS-HD MSTR              | * 1    |                                |                |           |                     |                              |             |                          |                         |             |           |               |                    |                                 |                       |                     |                |           |
| DTS-HD HI RES            | * 1    |                                |                |           | ●                   |                              |             |                          |                         |             |           |               |                    |                                 |                       |                     |                |           |
| DTS ES DSRCT6.1          | * 2* 3 |                                |                |           |                     |                              |             | ●                        |                         |             |           |               |                    |                                 |                       |                     |                |           |
| DTS ES MTRX6.1           | * 2* 3 |                                |                |           |                     |                              |             |                          | ●                       |             |           |               |                    |                                 |                       |                     |                |           |
| DTS SURROUND             | * 1    |                                |                |           |                     |                              |             | ○                        |                         |             |           |               |                    |                                 |                       |                     |                |           |
| DTS 96/24                | * 1    |                                |                |           |                     |                              |             |                          |                         |             | ●         |               |                    |                                 |                       |                     |                |           |
| DTS (L-HD) + PLIIX MOVIE | * 2* 4 |                                |                |           | ○                   |                              |             |                          |                         |             | ○         |               |                    |                                 |                       |                     |                |           |
| DTS (L-HD) + PLIIX MUSIC | * 2* 3 |                                |                |           | ○                   |                              |             |                          |                         |             | ○         |               |                    |                                 |                       |                     |                |           |
| DTS (L-HD) + PLIIZ       | * 5* 6 |                                |                |           | ○                   |                              |             | ○                        |                         |             | ○         |               |                    |                                 |                       |                     |                |           |
| DTS EXPRESS              | * 1    |                                |                |           |                     |                              |             |                          |                         |             | ●         |               |                    |                                 |                       |                     |                |           |
| DTS (L-HD) + NEO:6       | * 2* 3 |                                |                |           | ○                   |                              |             |                          |                         |             | ○         |               |                    |                                 |                       |                     |                |           |
| DTS NEO:6 CINEMA         | * 1    | ○                              |                |           |                     |                              |             |                          |                         |             |           |               |                    |                                 |                       | ○                   |                | ○         |
| DTS NEO:6 MUSIC          | * 1    | ○                              |                |           |                     |                              |             |                          |                         |             |           |               |                    |                                 |                       | ○                   |                | ○         |
| DTS NEO:6 CINEMA A-DSX   | ○      | ○                              |                |           |                     |                              |             |                          |                         |             |           |               |                    |                                 |                       | ○                   |                |           |
| DTS NEO:6 MUSIC A-DSX    | ○      | ○                              |                |           |                     |                              |             |                          |                         |             |           |               |                    |                                 |                       | ○                   |                |           |
| Audyssey DSX®            |        |                                |                |           | ○                   |                              |             |                          |                         |             |           |               |                    |                                 |                       |                     |                |           |

\*1 If "Audyssey DSX®" is set to "On", the Audyssey DSX® effect is added to the sound mode marked with \*1.

\*2 This sound mode can be selected when "Assign Mode" is set to "Surround Back".

\*3 If "Speaker Config." - "Surround Back" is set to "None", this sound mode cannot be selected.

\*4 If "Speaker Config." - "Surround Back" is set to "1spkr" or "None", this sound mode cannot be selected.

\*5 If "Speaker Config." - "Front Height" is set to "None", this sound mode cannot be selected.

\*6 This sound mode can be selected when "Assign Mode" is set to "Front Height".

| Sound Mode                      | NOTE | Input signal types and formats |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    | Super Audio CD |   |                                          |                                        |
|---------------------------------|------|--------------------------------|--|-------------------|--------------|---------------------------|---------------------------------------|----------------|--------------------------------|-------------------------------|----------------|--------------|-----------------|--------------------------|------------------------------------|----------------|---|------------------------------------------|----------------------------------------|
|                                 |      | ANALOG                         |  | PCM               |              | DTS-HD                    |                                       | DTS            |                                |                               | DOLBY          |              | DOLBY DIGITAL   |                          |                                    |                |   |                                          |                                        |
|                                 |      |                                |  | PCM<br>(multi ch) | PCM<br>(2ch) | DTS-HD<br>Master<br>Audio | DTS-HD<br>High<br>Resolution<br>Audio | DTS<br>EXPRESS | DTS ES<br>DSCRT<br>(With Flag) | DTS ES<br>MTRX<br>(With Flag) | DTS<br>(5.1ch) | DTS<br>96/24 | DOLBY<br>TrueHD | DOLBY<br>DIGITAL<br>Plus | DOLBY<br>DIGITAL EX<br>(With Flag) |                |   | DOLBY<br>DIGITAL EX<br>(With no<br>Flag) | DOLBY<br>DIGITAL<br>DIGITAL<br>(5.1ch) |
| DOLBY SURROUND                  |      | *1                             |  |                   |              |                           |                                       |                |                                |                               |                | ●            |                 |                          |                                    |                |   |                                          |                                        |
| DOLBY TrueHD                    |      |                                |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   |                                          |                                        |
| DOLBY DIGITAL+                  | *1   |                                |  |                   |              |                           |                                       |                |                                |                               |                |              | ●               |                          |                                    |                |   |                                          |                                        |
| DOLBY DIGITAL EX                | *2*3 |                                |  |                   |              |                           |                                       |                |                                |                               |                |              |                 | ○                        |                                    |                | ○ |                                          |                                        |
| DOLBY (D+)(HD)+EX               | *2*3 |                                |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   |                                          |                                        |
| DOLBY DIGITAL                   | *1   |                                |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   |                                          |                                        |
| DOLBY (D) (D+)(HD) +PLI x MOVIE | *2*4 |                                |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          | ●                                  |                |   |                                          |                                        |
| DOLBY (D) (D+)(HD) +PLI x MUSIC | *2*3 |                                |  |                   |              |                           |                                       |                |                                |                               |                |              | ○               |                          | ○                                  |                | ○ |                                          |                                        |
| DOLBY (D) (D+)(HD) +PLI z       | *5   |                                |  |                   |              |                           |                                       |                |                                |                               |                |              | ○               |                          | ○                                  |                | ○ |                                          |                                        |
| DOLBY PRO LOGIC II x MOVIE      | *2*3 | ○                              |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   | ○                                        | ○                                      |
| DOLBY PRO LOGIC II x MUSIC      | *2*3 | ○                              |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   | ○                                        | ○                                      |
| DOLBY PRO LOGIC II x GAME       | *2*3 | ○                              |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   | ○                                        | ○                                      |
| DOLBY PRO LOGIC II z            | *5*6 | ○                              |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   | ○                                        | ○                                      |
| DOLBY PRO LOGIC II MOVIE        | *1   | ○                              |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   | ○                                        | ○                                      |
| DOLBY PRO LOGIC II MUSIC        | *1   | ○                              |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   | ○                                        | ○                                      |
| DOLBY PRO LOGIC II GAME         | *1   | ○                              |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   | ○                                        | ○                                      |
| DOLBY PRO LOGIC                 | *1   | ○                              |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   | ○                                        | ○                                      |
| DOLBY PRO LOGIC II MOVIE A-DSX  |      | ○                              |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   | ○                                        |                                        |
| DOLBY PRO LOGIC II MUSIC A-DSX  |      | ○                              |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   | ○                                        |                                        |
| DOLBY PRO LOGIC II GAME A-DSX   |      | ○                              |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   | ○                                        |                                        |
| DOLBY PRO LOGIC A-DSX           |      | ○                              |  |                   |              |                           |                                       |                |                                |                               |                |              |                 |                          |                                    |                |   | ○                                        |                                        |
| Audyssey DSX®                   |      |                                |  |                   |              |                           |                                       |                |                                |                               |                |              | ○               | ○                        | ○                                  | ○              | ○ |                                          |                                        |

\*1 If "Audyssey DSX®" is set to "On", the Audyssey DSX® effect is added to the sound mode marked with \*1.

\*2 This sound mode can be selected when "Assign Mode" is set to "Surround Back".

\*3 If "Speaker Config." - "Surr. Back" is set to "None", this sound mode cannot be selected.

\*4 If "Speaker Config." - "Surr. Back" is set to "1spkr" or "None", this sound mode cannot be selected.

\*5 If "Speaker Config." - "Front Height" is set to "None", this sound mode cannot be selected.

\*6 This sound mode can be selected when "Assign Mode" is set to "Front Height".

| Sound Mode                | NOTE | Input signal types and formats |                   |              |                           |                                       |                |                                 |                               |                |           |                 |                          |                                       | Super Audio CD |   |                                       |
|---------------------------|------|--------------------------------|-------------------|--------------|---------------------------|---------------------------------------|----------------|---------------------------------|-------------------------------|----------------|-----------|-----------------|--------------------------|---------------------------------------|----------------|---|---------------------------------------|
|                           |      | ANALOG                         | PCM               |              | DTS-HD                    |                                       | DTS            |                                 |                               | DOLBY          |           | DOLBY DIGITAL   |                          |                                       |                |   |                                       |
|                           |      |                                | PCM<br>(multi ch) | PCM<br>(2ch) | DTS-HD<br>Master<br>Audio | DTS-HD<br>High<br>Resolution<br>Audio | DTS<br>EXPRESS | DTS ES<br>DSORIT<br>(With Flag) | DTS ES<br>MTRX<br>(With Flag) | DTS<br>(5.1ch) | DTS 96/24 | DOLBY<br>TrueHD | DOLBY<br>DIGITAL<br>Plus | DOLBY<br>DIGITAL<br>EX<br>(With Flag) |                |   | DOLBY DIGITAL<br>EX<br>(With no Flag) |
| MULTI CH IN               |      |                                |                   |              |                           |                                       |                |                                 |                               |                |           |                 |                          |                                       |                |   |                                       |
| MULTI CH IN               | *1   | ●                              |                   |              |                           |                                       |                |                                 |                               |                |           |                 |                          |                                       |                |   | ○                                     |
| MULTI CH IN + PLIIx MOVIE | *2*4 | ○                              |                   |              |                           |                                       |                |                                 |                               |                |           |                 |                          |                                       |                |   | ○                                     |
| MULTI CH IN + PLIIx MUSIC | *2*3 | ○                              |                   |              |                           |                                       |                |                                 |                               |                |           |                 |                          |                                       |                |   | ○                                     |
| MULTI CH IN + PLIIz       | *5*6 | ○                              |                   |              |                           |                                       |                |                                 |                               |                |           |                 |                          |                                       |                |   | ○                                     |
| MULTI CH IN + Dolby EX    | *2*3 | ○                              |                   |              |                           |                                       |                |                                 |                               |                |           |                 |                          |                                       |                |   | ○                                     |
| MULTI CH IN 7.1           | *2*3 | ● (7.1)                        |                   |              |                           |                                       |                |                                 |                               |                |           |                 |                          |                                       |                |   |                                       |
| Audyssey DSX®             |      | ○                              |                   |              |                           |                                       |                |                                 |                               |                |           |                 |                          |                                       |                |   |                                       |
| DIRECT                    |      |                                |                   |              |                           |                                       |                |                                 |                               |                |           |                 |                          |                                       |                |   |                                       |
| DIRECT                    |      | ○                              | ○                 | ○            | ○                         | ○                                     | ○              | ○                               | ○                             | ○              | ○         | ○               | ○                        | ○                                     | ○              | ○ | ○                                     |
| DSD DIRECT                |      |                                |                   |              |                           |                                       |                |                                 |                               |                |           |                 |                          |                                       |                |   | ○                                     |
| PURE DIRECT               |      |                                |                   |              |                           |                                       |                |                                 |                               |                |           |                 |                          |                                       |                |   | ○                                     |
| PURE DIRECT               |      | ○                              | ○                 | ○            | ○                         | ○                                     | ○              | ○                               | ○                             | ○              | ○         | ○               | ○                        | ○                                     | ○              | ○ | ○                                     |
| DSP SIMULATION            |      |                                |                   |              |                           |                                       |                |                                 |                               |                |           |                 |                          |                                       |                |   |                                       |
| MULTI CH STEREO           |      | ○                              | ○                 | ○            | ○                         | ○                                     | ○              | ○                               | ○                             | ○              | ○         | ○               | ○                        | ○                                     | ○              | ○ |                                       |
| VIRTUAL                   |      | ○                              | ○                 | ○            | ○                         | ○                                     | ○              | ○                               | ○                             | ○              | ○         | ○               | ○                        | ○                                     | ○              | ○ |                                       |
| STEREO                    |      |                                |                   |              |                           |                                       |                |                                 |                               |                |           |                 |                          |                                       |                |   |                                       |
| STEREO                    |      | ●                              | ○                 | ○            | ○                         | ○                                     | ○              | ○                               | ○                             | ○              | ○         | ○               | ○                        | ○                                     | ○              | ○ | ○                                     |

\*1 If "Audyssey DSX®" is set to "On", the Audyssey DSX® effect is added to the sound mode marked with \*1.

\*2 This sound mode can be selected when "Assign Mode" is set to "Surround Back".

\*3 If "Speaker Config." – "Surr. Back" is set to "None", this sound mode cannot be selected.

\*4 If "Speaker Config." – "Surr. Back" is set to "1spkr" or "None", this sound mode cannot be selected.

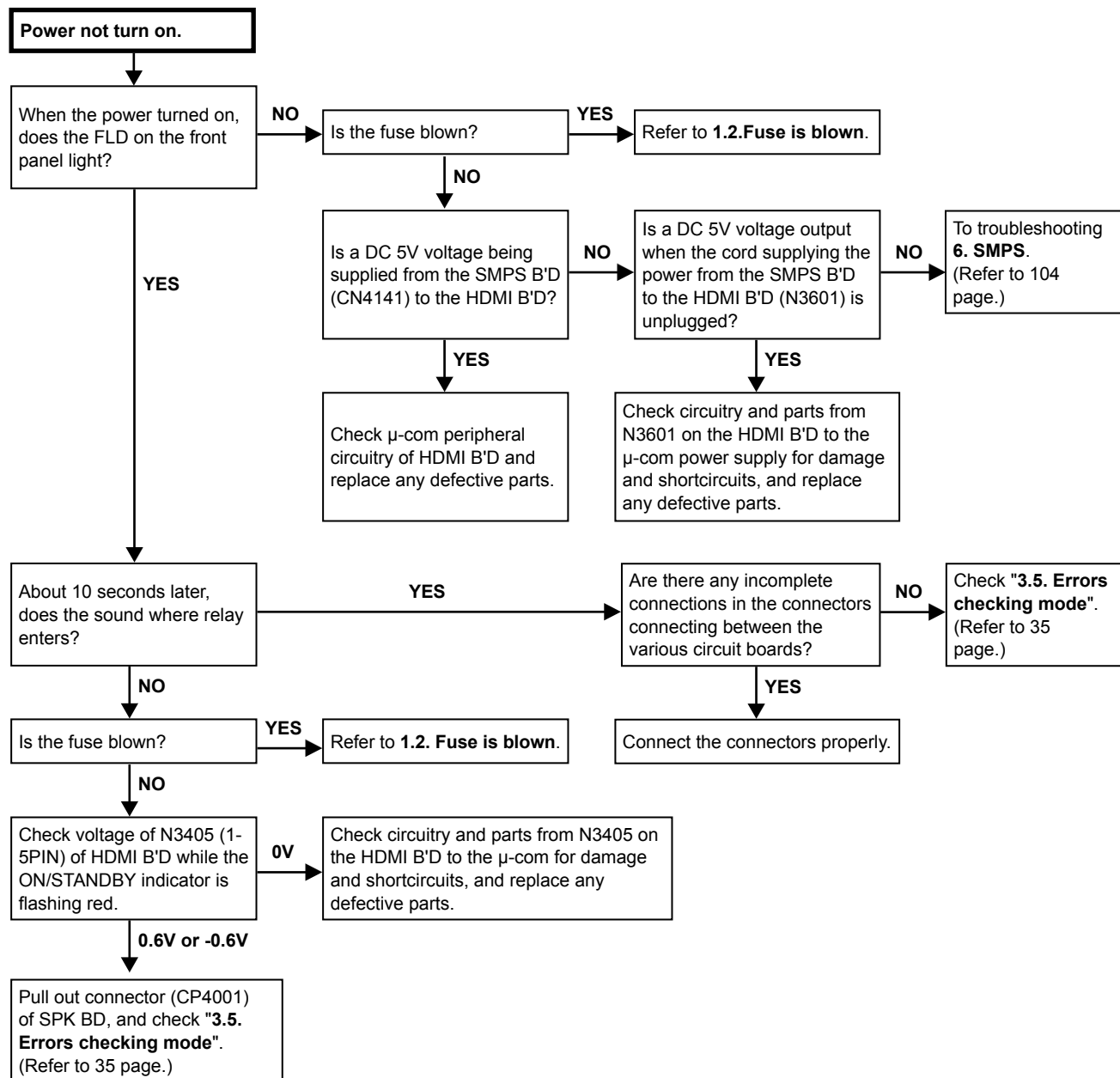
\*5 If "Speaker Config." – "Front Height" is set to "None", this sound mode cannot be selected.

\*6 This sound mode can be selected when "Assign Mode" is set to "Front Height".

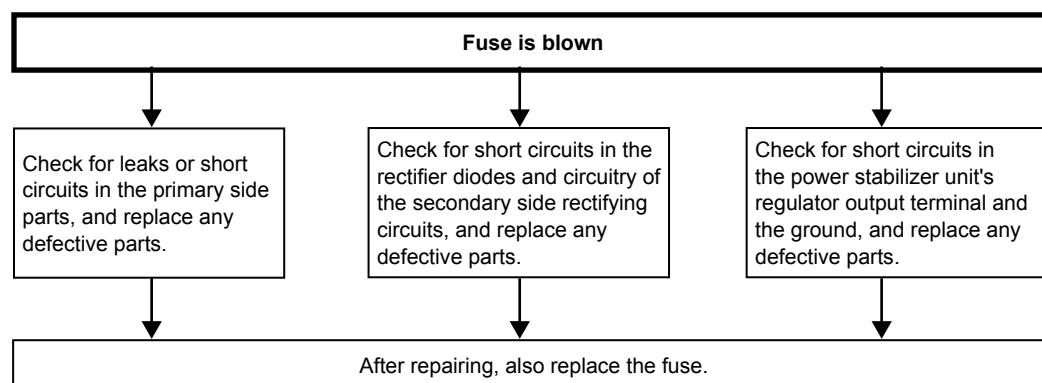
# TROUBLE SHOOTING

## 1. POWER

### 1.1. Power not turn on



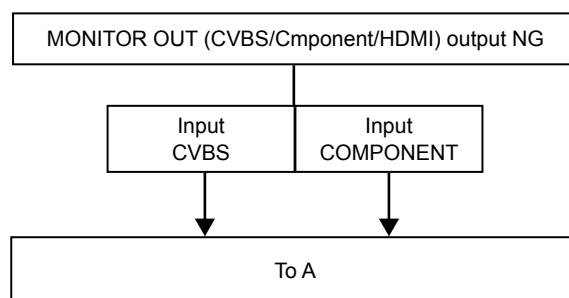
### 1.2. Fuse is blown

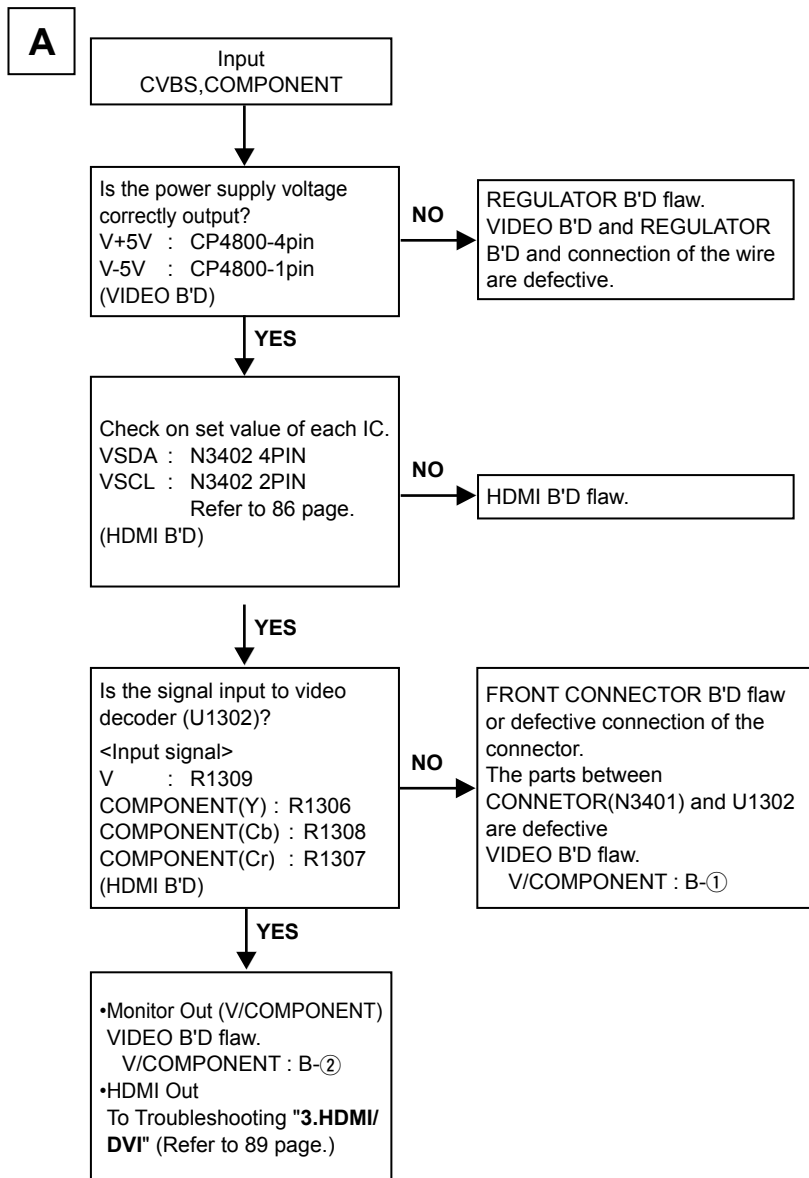


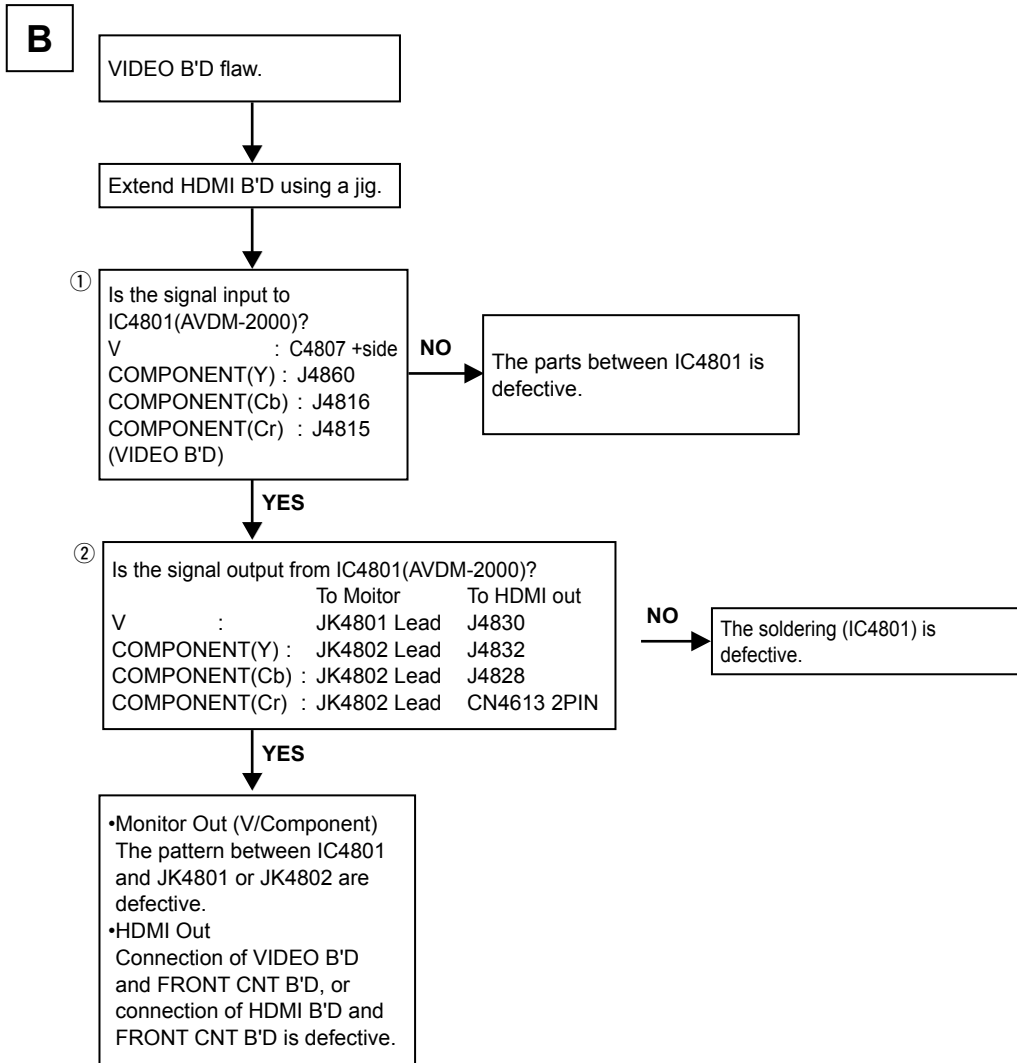
## 2. Analog video

**Perform the operation below beforehand.**

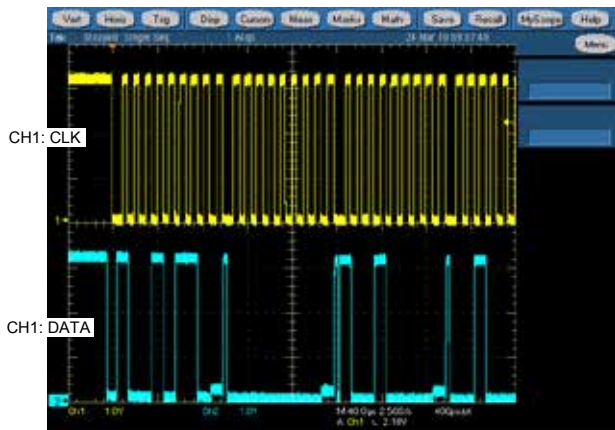
- ※ Check that the connection cable and the Monitor are normal.
- ※ Set VIDEO CONVERSION ON.
- ※ Set COMPONENT signal to 480i.
- ※ Set Function to the following.
  - V : SAT
  - COMPONENT : SAT



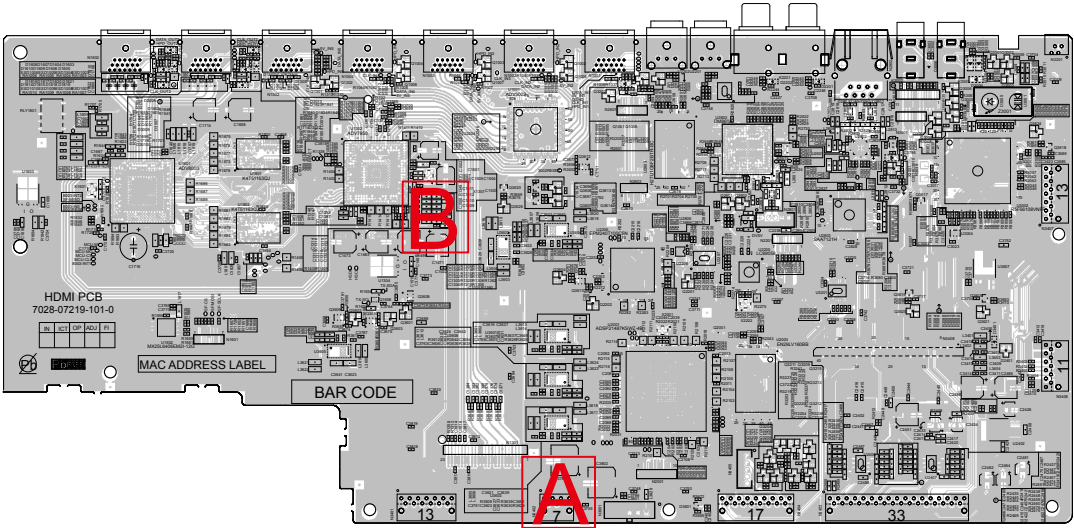




## I2C communication wave form

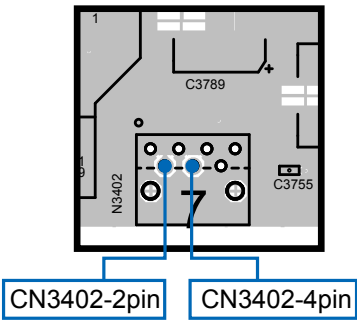


HDMI test point

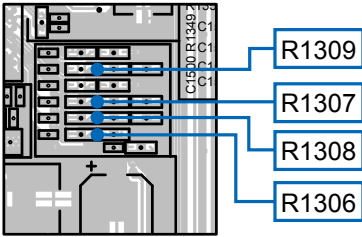


(COMPONENT SIDE)

Detail A

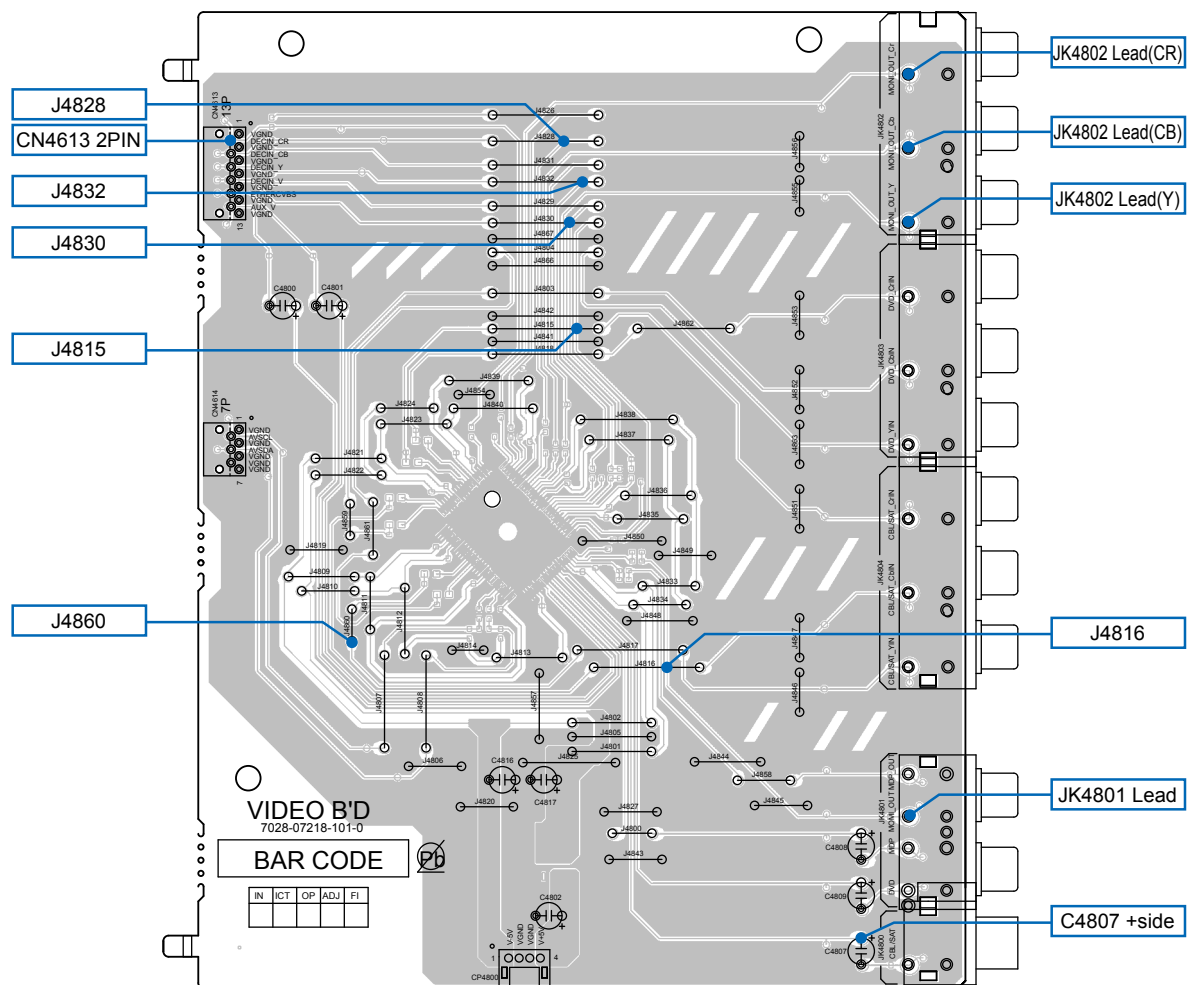


Detail B



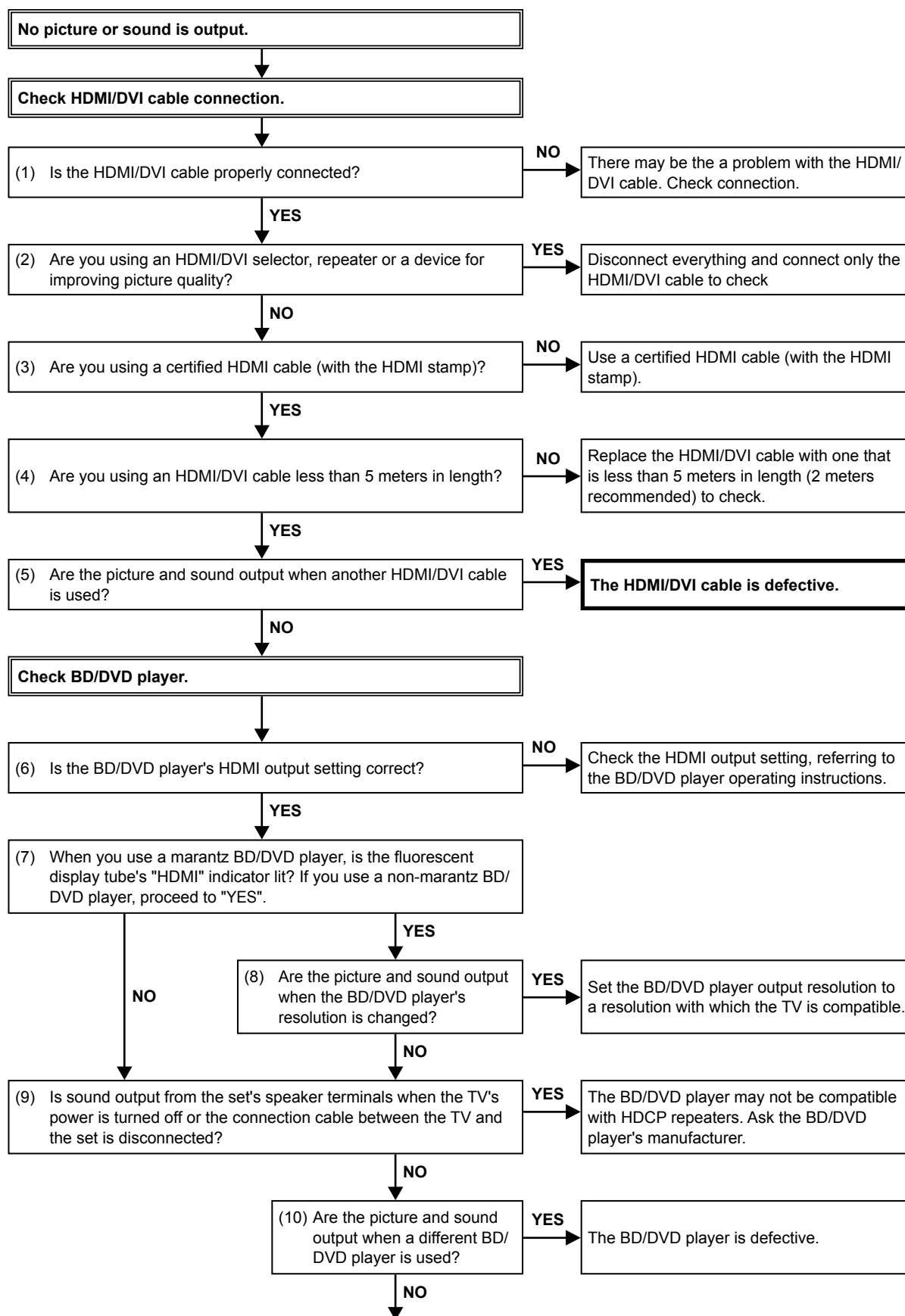


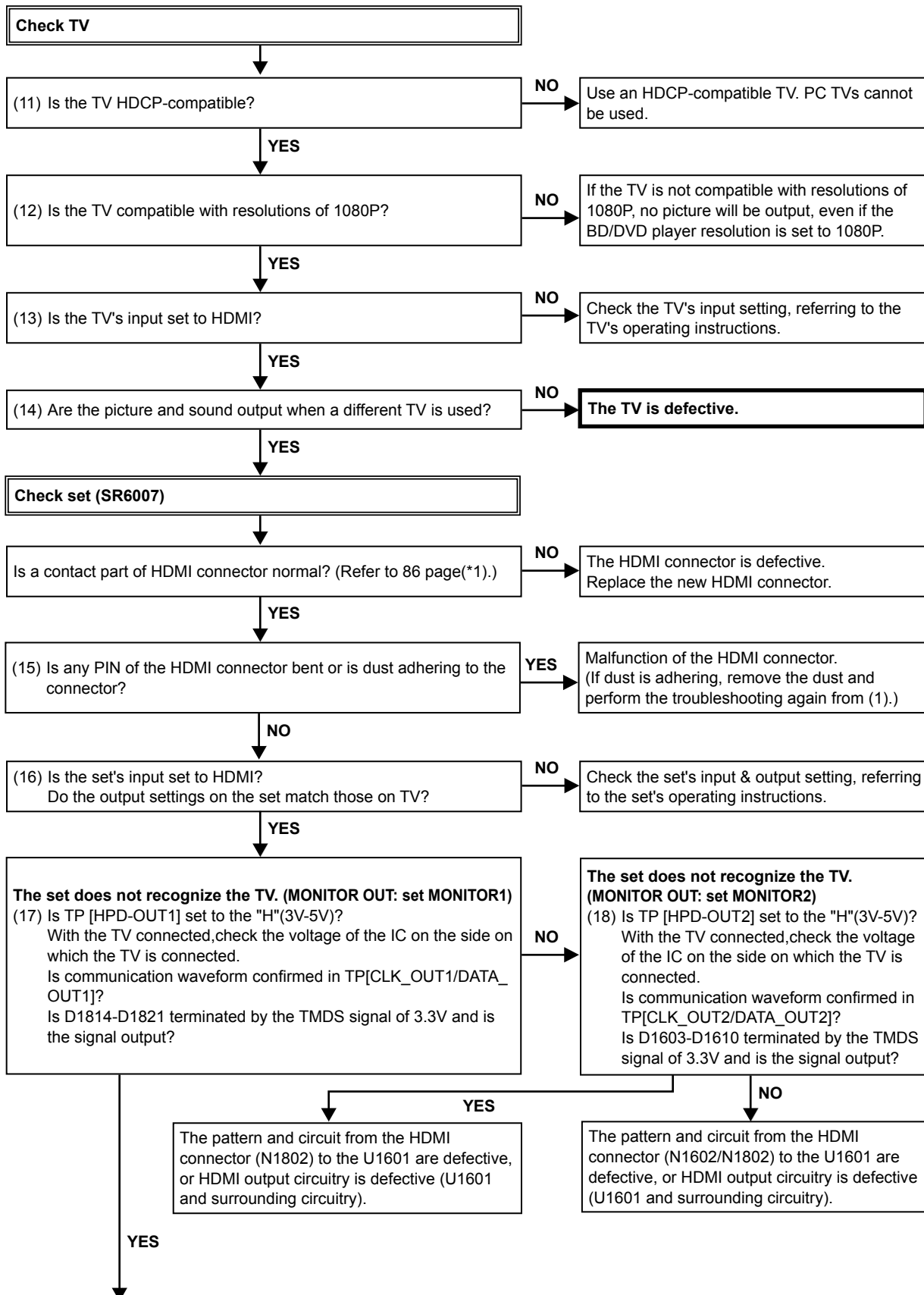
## VIDEO test point

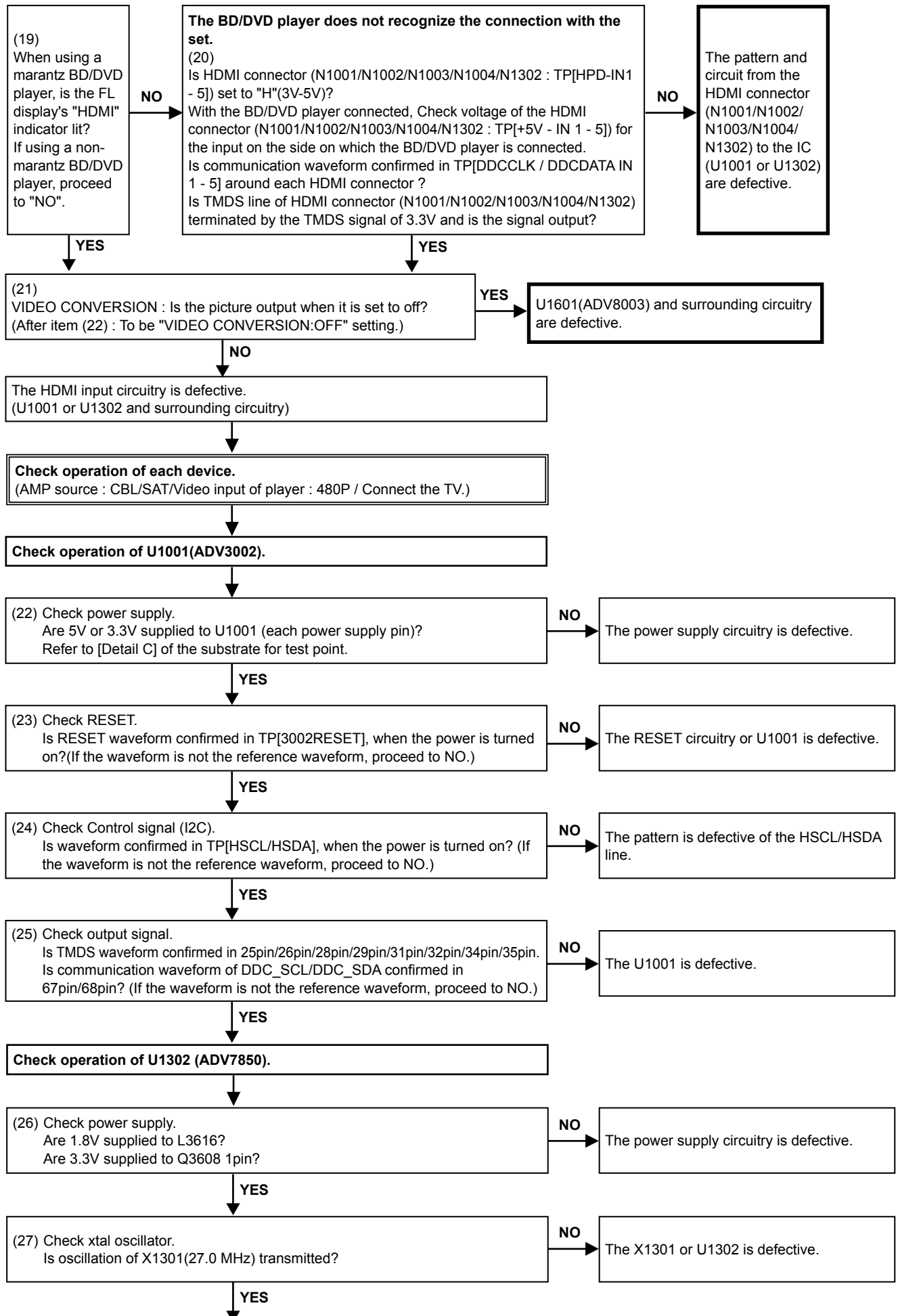


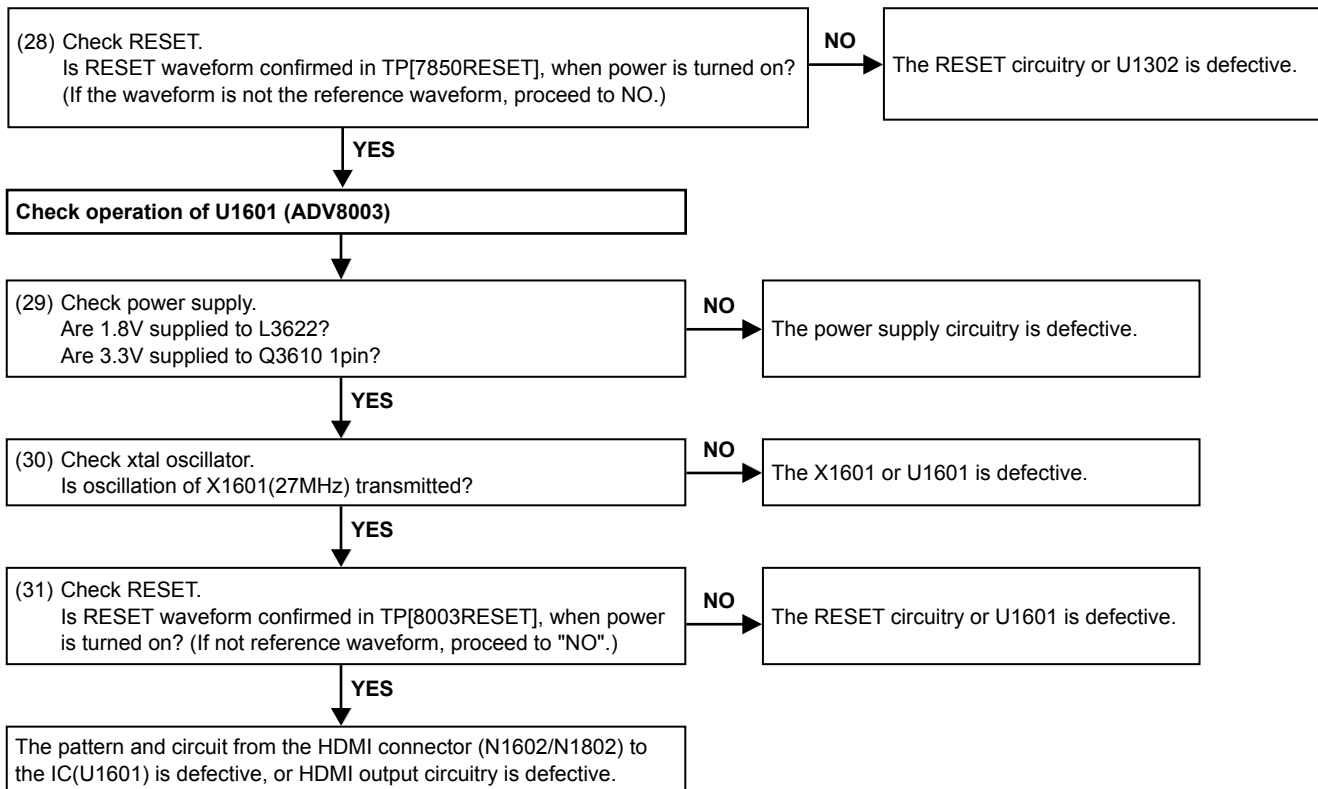
### 3. HDMI/DVI

#### 3.1. No picture or sound is output (HDMI to HDMI)

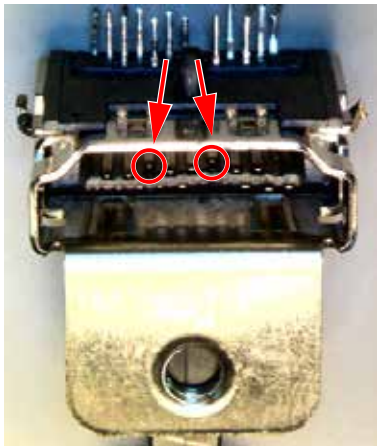




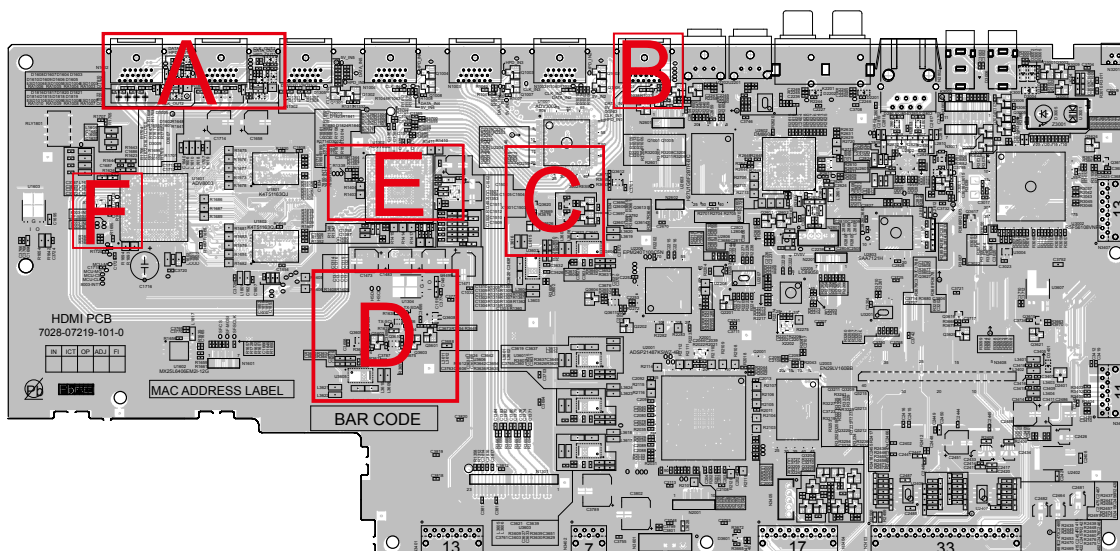




(\*1) Abnormal sample of HDMI connector : The internal terminal has bent.

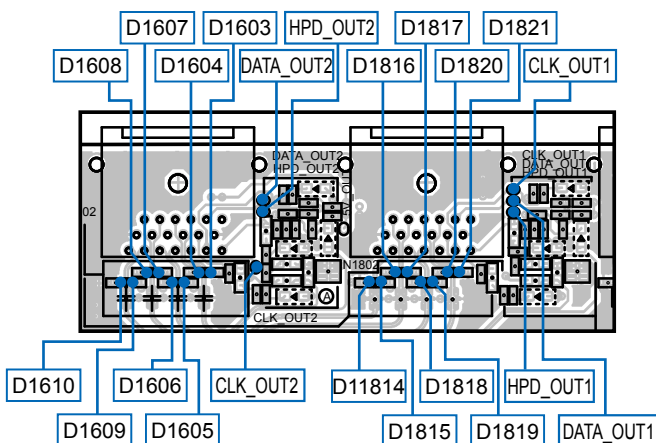


### 3.2. HDMI test point and waveforms

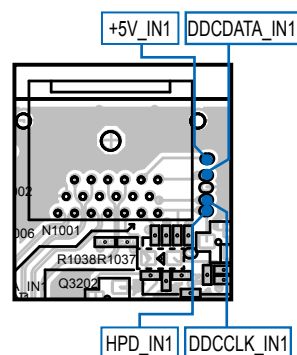


(COMPONENT SIDE)

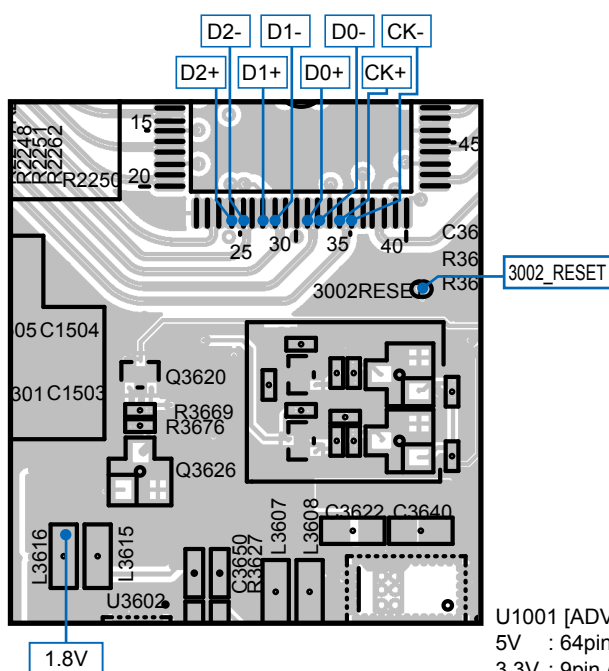
Detail A



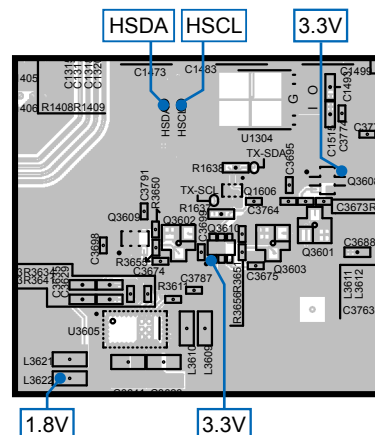
Detail B



Detail C



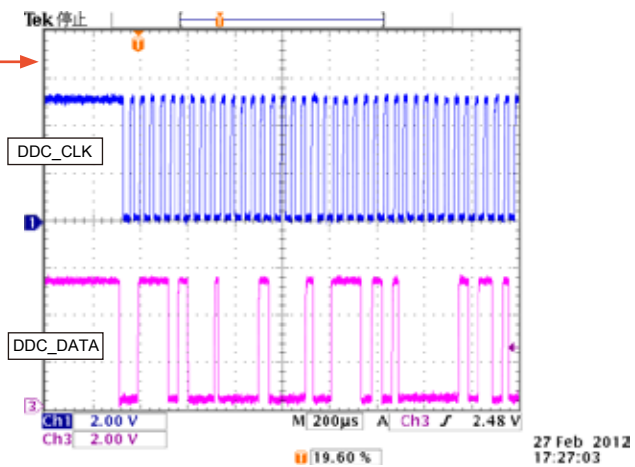
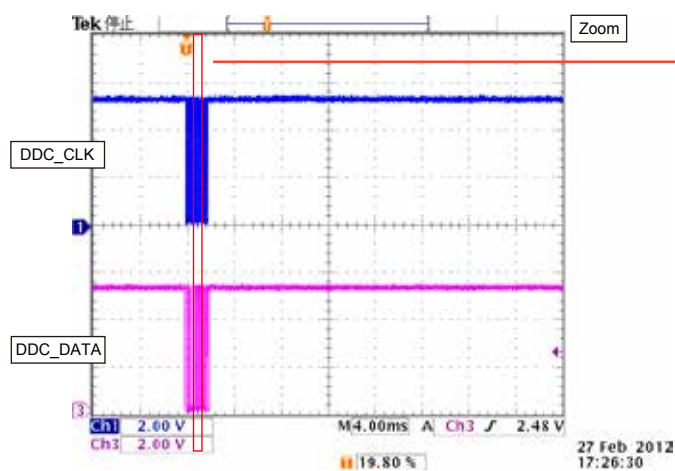
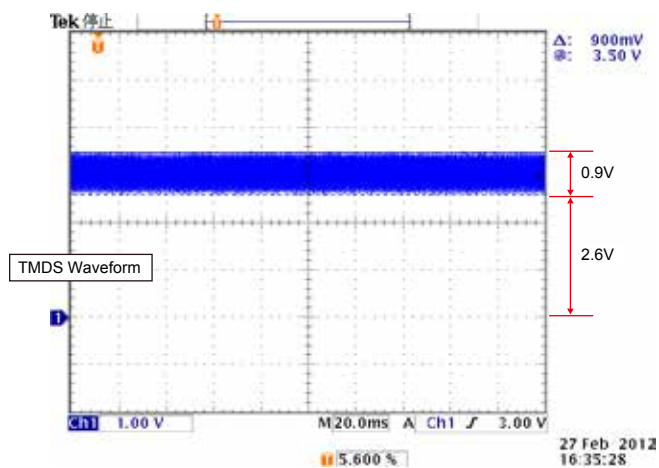
Detail D



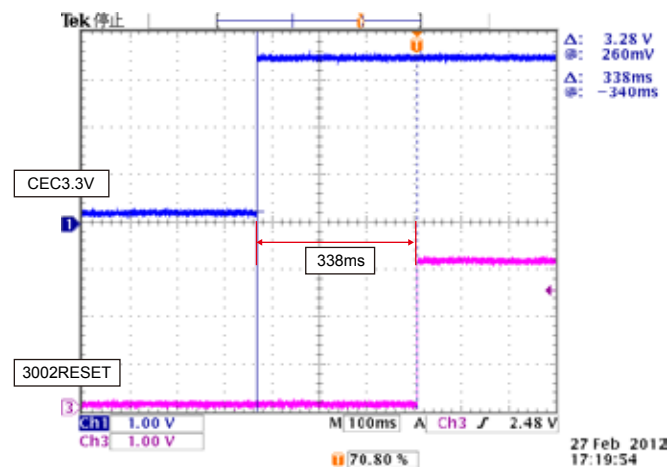
U1001 [ADV3002] Power pin  
 5V : 64pin  
 3.3V : 9pin / 18pin / 33pin / 43pin / 52pin

A micrograph of the ADV7850 chip. A blue line points from the label '7850RESET' to a pin on the left side of the chip. Another blue line points from the label 'X1301' to a component on the right side of the chip. The chip is labeled 'ADV7850' in the center. Various other components and pins are visible, including 'C381', 'R1338', 'R1339', 'R1340', 'R1341', 'R1342', 'R1343', 'R1344', 'R1345', 'R1346', 'R1347', 'R1348', 'R1349', 'R1350', 'R1351', 'R1352', 'R1353', 'R1354', 'R1355', 'R1356', 'R1357', 'R1358', 'R1359', 'R1360', 'R1361', 'R1362', 'R1363', 'R1364', 'R1365', 'R1366', 'R1367', 'R1368', 'R1369', 'R1370', 'R1371', 'R1372', 'R1373', 'R1374', 'R1375', 'R1376', 'R1377', 'R1378', 'R1379', 'R1380', 'R1381', 'R1382', 'R1383', 'R1384', 'R1385', 'R1386', 'R1387', 'R1388', 'R1389', 'R1390', 'R1391', 'R1392', 'R1393', 'R1394', 'R1395', 'R1396', 'R1397', 'R1398', 'R1399', 'R1400', 'R1401', 'R1402', 'R1403', 'R1404', 'R1405', 'R1406', 'R1407', 'R1408', 'R1409', 'R1410', 'R1411', 'R1412', 'R1413', 'R1414', 'R1415', 'R1416', 'R1417', 'R1418', 'R1419', 'R1420', 'R1421', 'R1422', 'R1423', 'R1424', 'R1425', 'R1426', 'R1427', 'R1428', 'R1429', 'R1430', 'R1431', 'R1432', 'R1433', 'R1434', 'R1435', 'R1436', 'R1437', 'R1438', 'R1439', 'R1440', 'R1441', 'R1442', 'R1443', 'R1444', 'R1445', 'R1446', 'R1447', 'R1448', 'R1449', 'R1450', 'R1451', 'R1452', 'R1453', 'R1454', 'R1455', 'R1456', 'R1457', 'R1458', 'R1459', 'R1460', 'R1461', 'R1462', 'R1463', 'R1464', 'R1465', 'R1466', 'R1467', 'R1468', 'R1469', 'R1470', 'R1471', 'R1472', 'R1473', 'R1474', 'R1475', 'R1476', 'R1477', 'R1478', 'R1479', 'R1480', 'R1481', 'R1482', 'R1483', 'R1484', 'R1485', 'R1486', 'R1487', 'R1488', 'R1489', 'R1490', 'R1491', 'R1492', 'R1493', 'R1494', 'R1495', 'R1496', 'R1497', 'R1498', 'R1499', 'R1500', 'R1501', 'R1502', 'R1503', 'R1504', 'R1505', 'R1506', 'R1507', 'R1508', 'R1509', 'R1510', 'R1511', 'R1512', 'R1513', 'R1514', 'R1515', 'R1516', 'R1517', 'R1518', 'R1519', 'R1520', 'R1521', 'R1522', 'R1523', 'R1524', 'R1525', 'R1526', 'R1527', 'R1528', 'R1529', 'R1530', 'R1531', 'R1532', 'R1533', 'R1534', 'R1535', 'R1536', 'R1537', 'R1538', 'R1539', 'R1540', 'R1541', 'R1542', 'R1543', 'R1544', 'R1545', 'R1546', 'R1547', 'R1548', 'R1549', 'R1550', 'R1551', 'R1552', 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DDC\_CLK/DDC\_DATA/TMDS : Check items HDMI to HDMI (17)/(18)/(20)/(25)

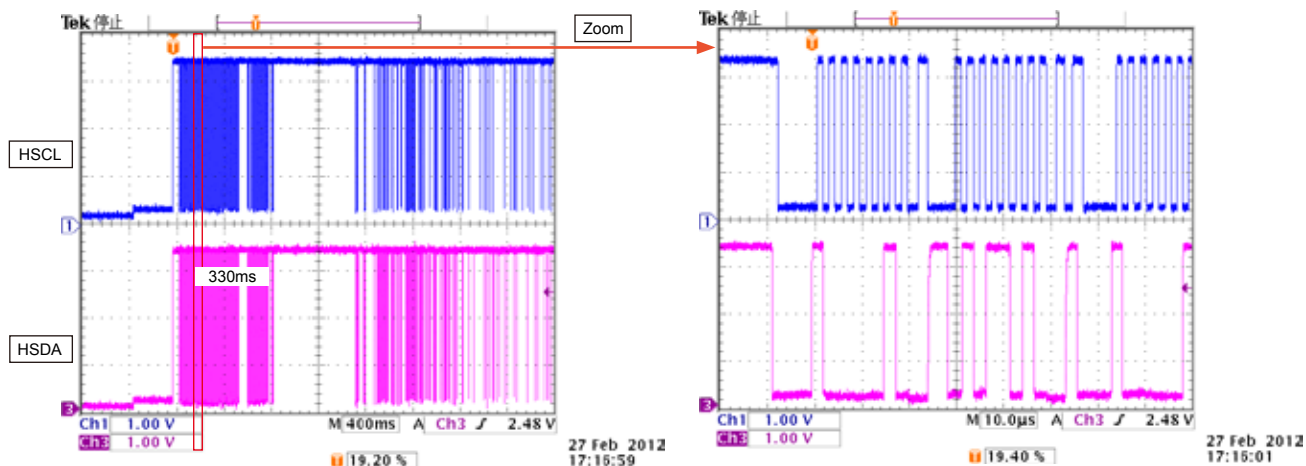


Timing waveform illustration from the start of CEC3.3V to when reset is released : Check items (23)

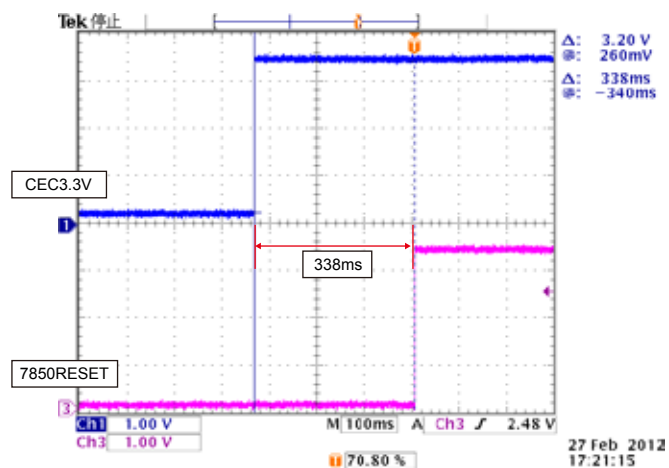




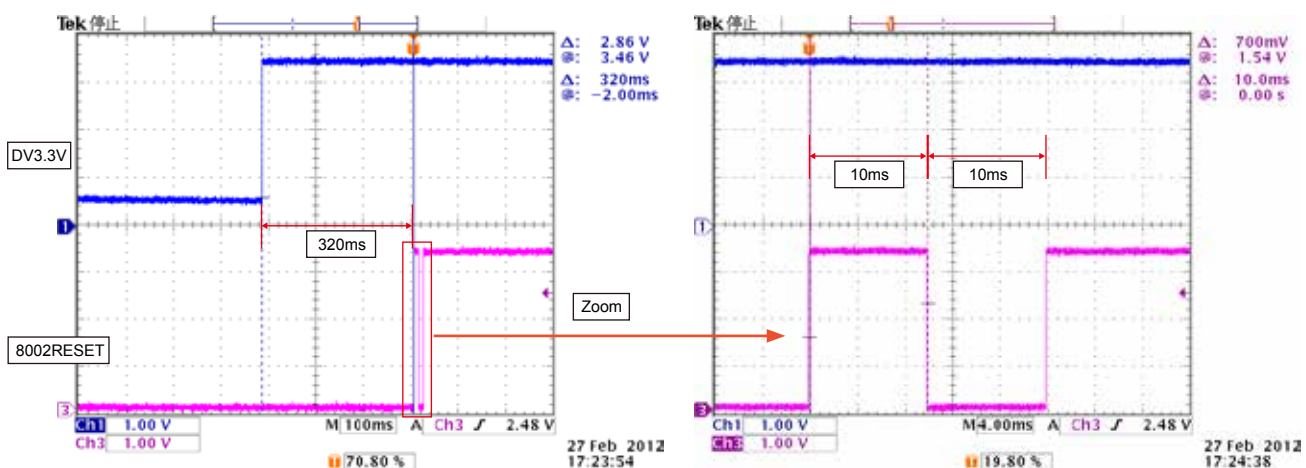
Controlled waveform (I2C), when power is turned on : Check items (24)



Timing waveform illustration from the start of CEC3.3V to when reset is released : Check items (28)

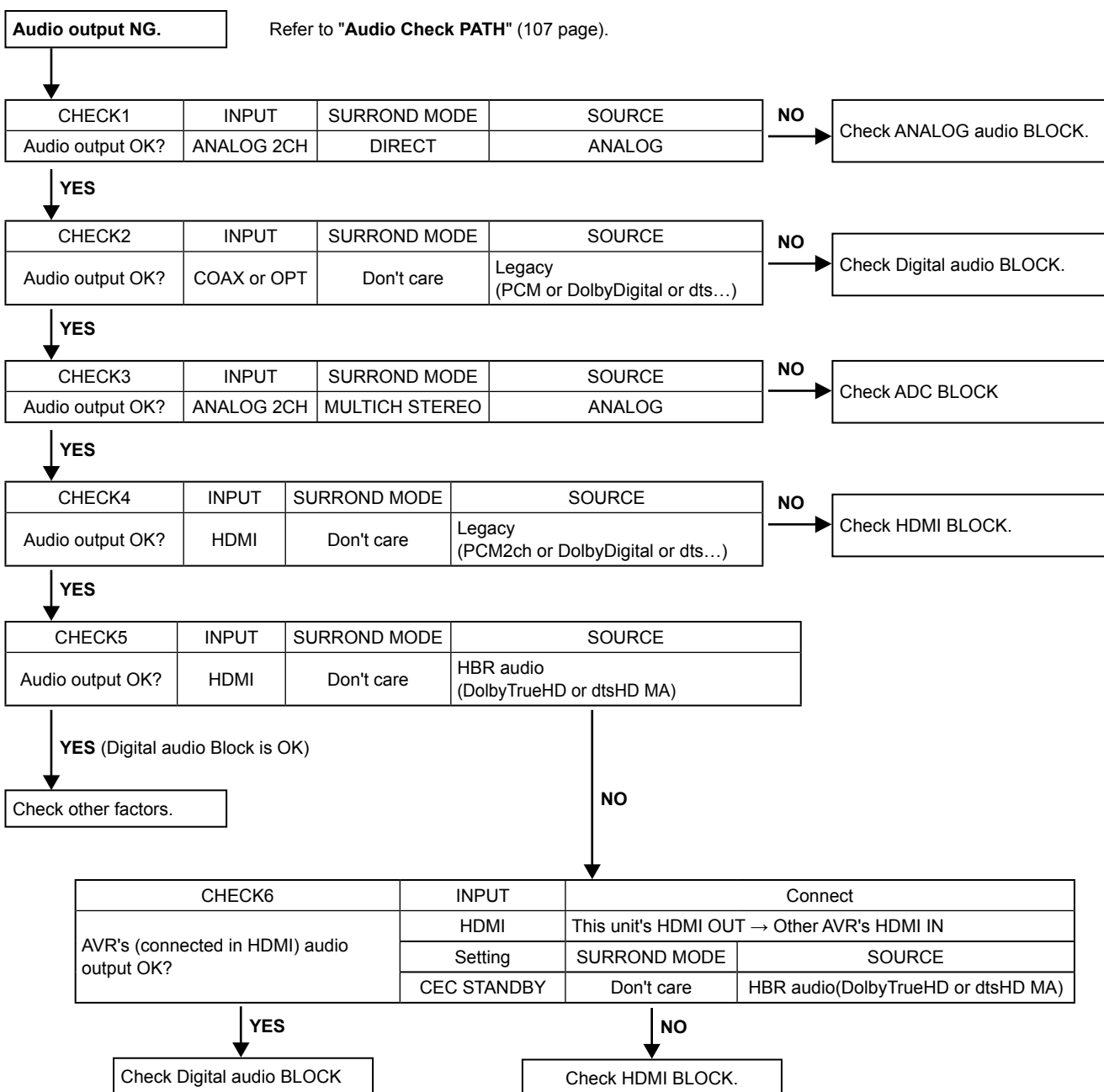


Timing waveform illustration from the start of CEC3.3V to when reset is released : Check items (31)

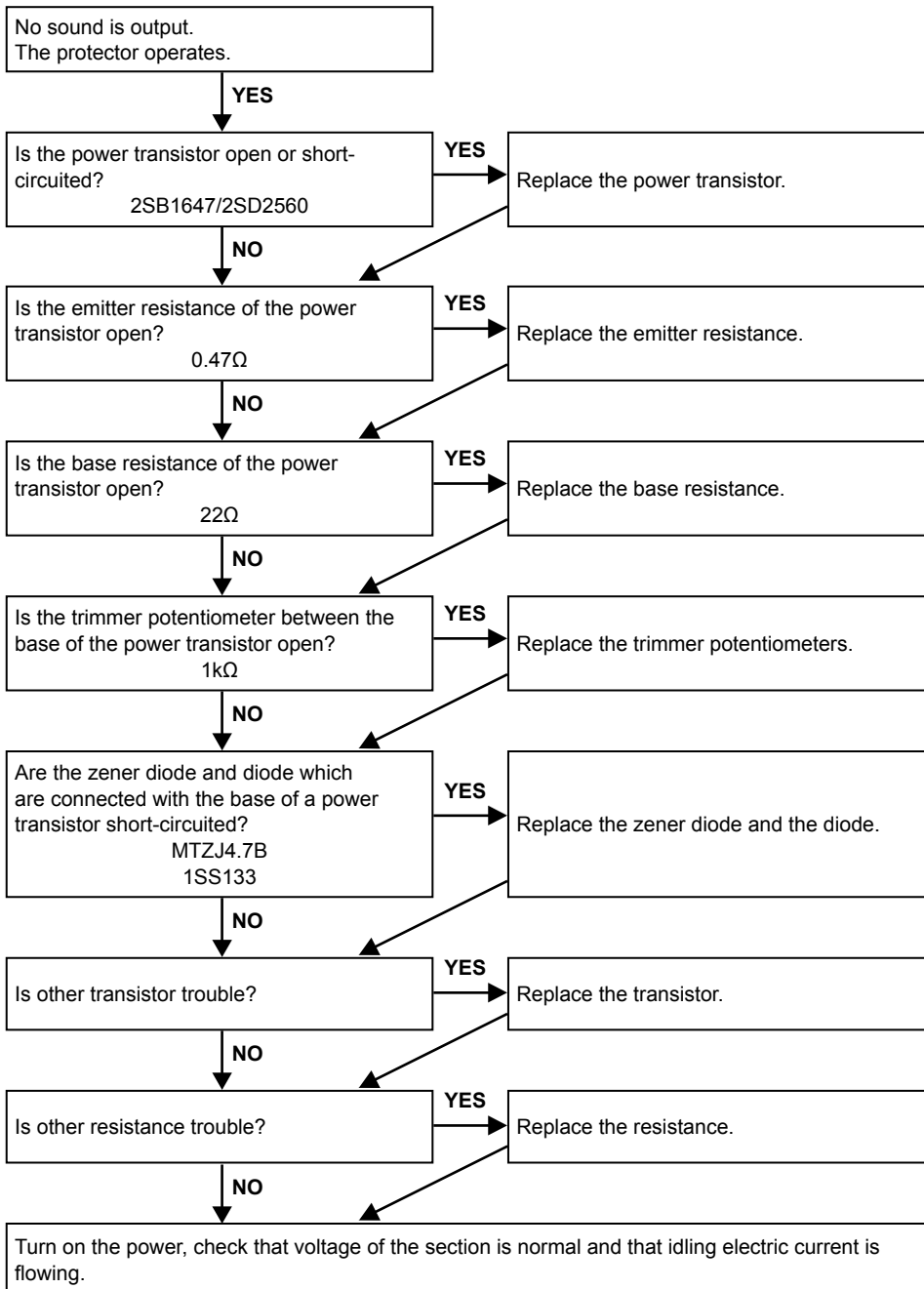


## 4. AUDIO

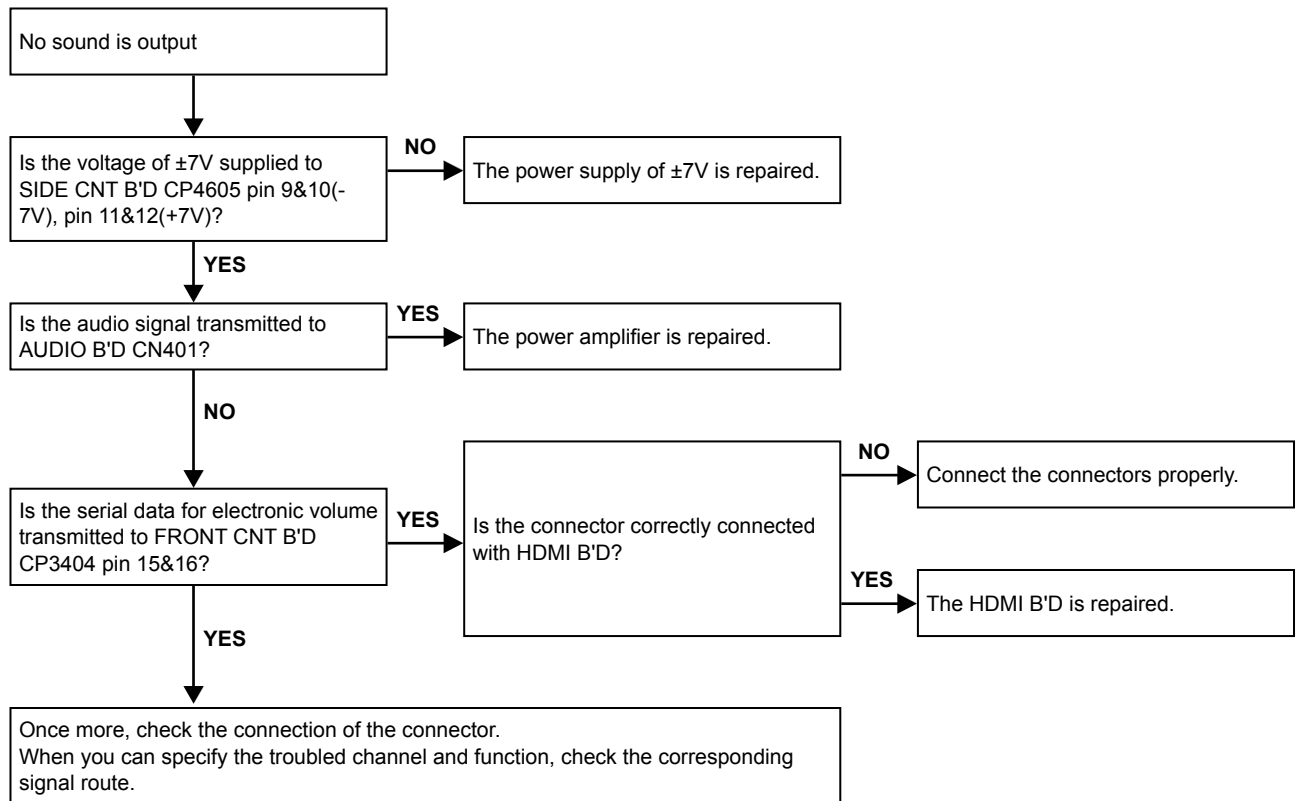
### 4.1. AUDIO CHECK



## 4.2. Power AMP (AMP UNIT)

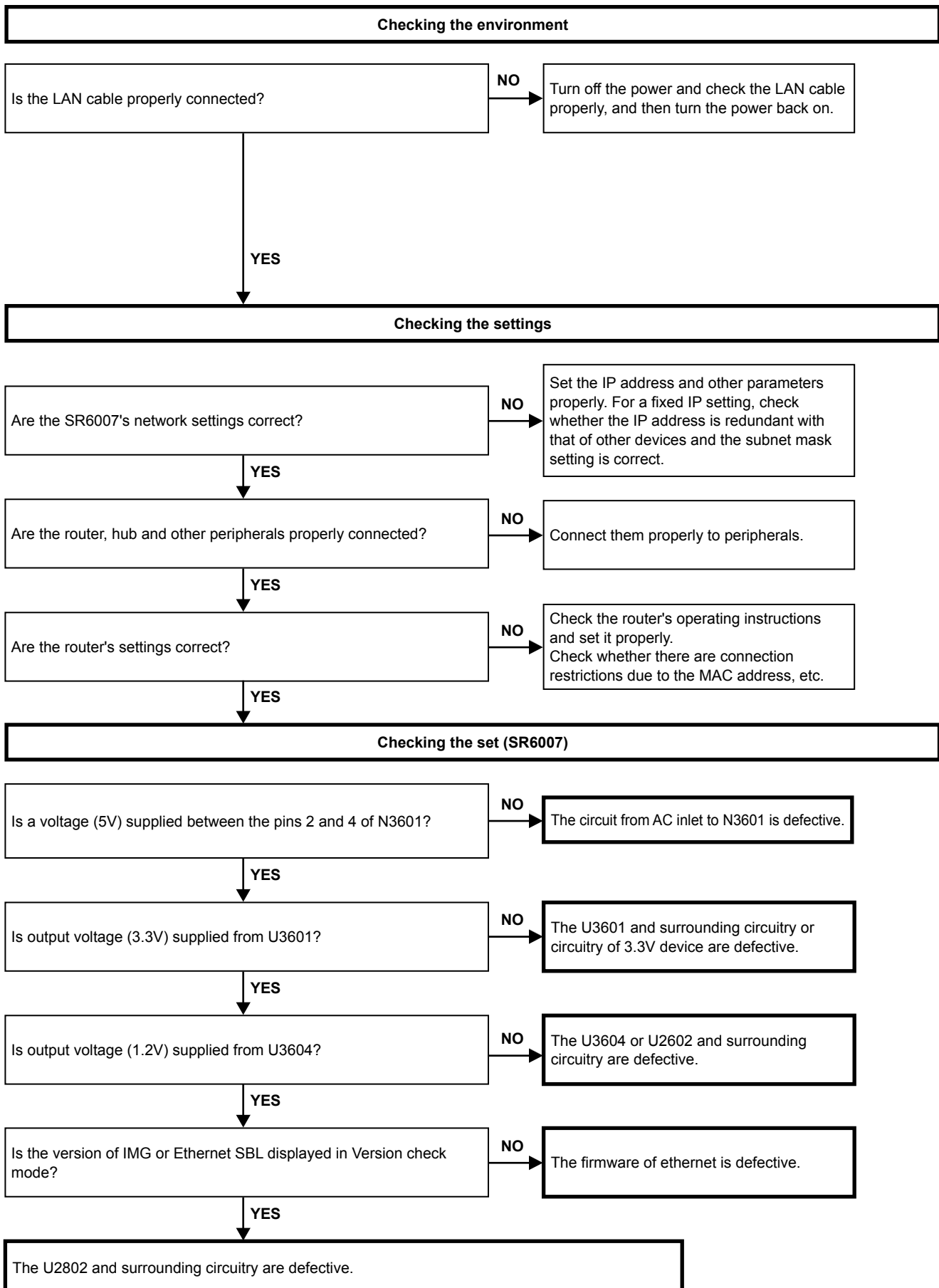


### 4.3. Analog audio

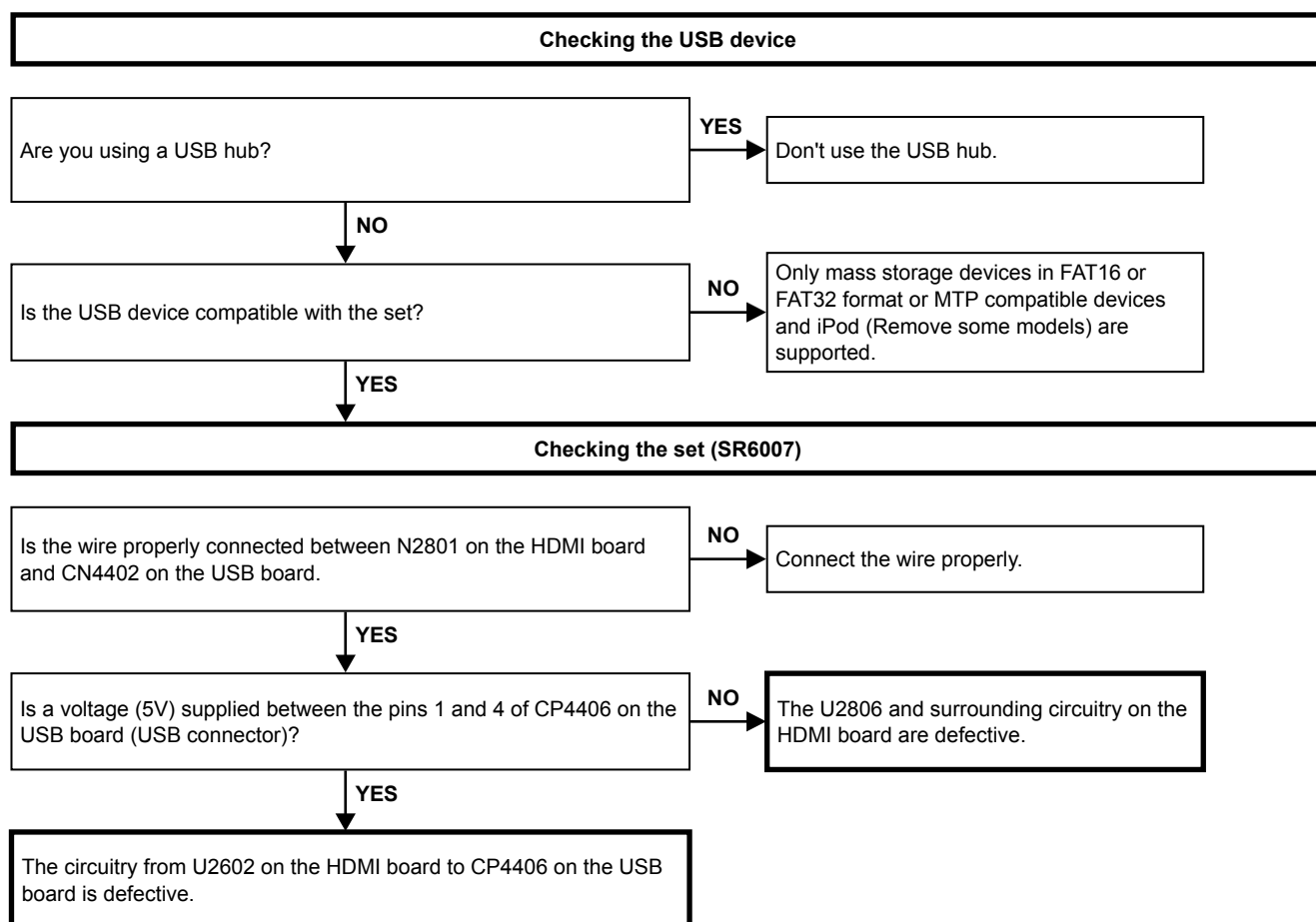


## 5. Network/USB

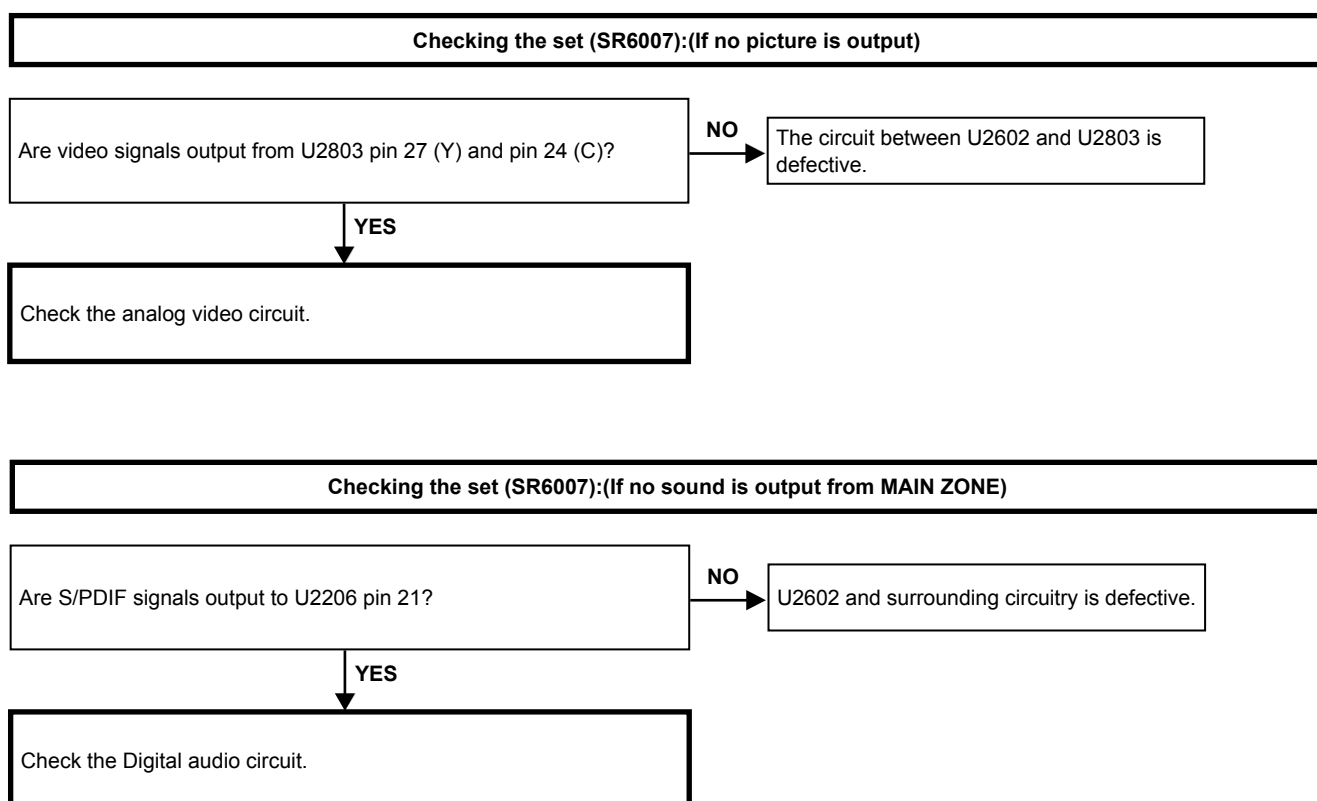
### 5.1. Cannot connect to network



## 5.2. USB device is not recognized



## 5.3. No picture or no sound is output



**Checking the set (SR6007):(if no sound is output from ZONE2)**

Are signals input to U2401 pin 12, pin 13, pin 14 and pin 15?

NO

The U2602 and surrounding circuitry are defective.

YES

Are audio signals output from U2401 pin 7 and pin 6?

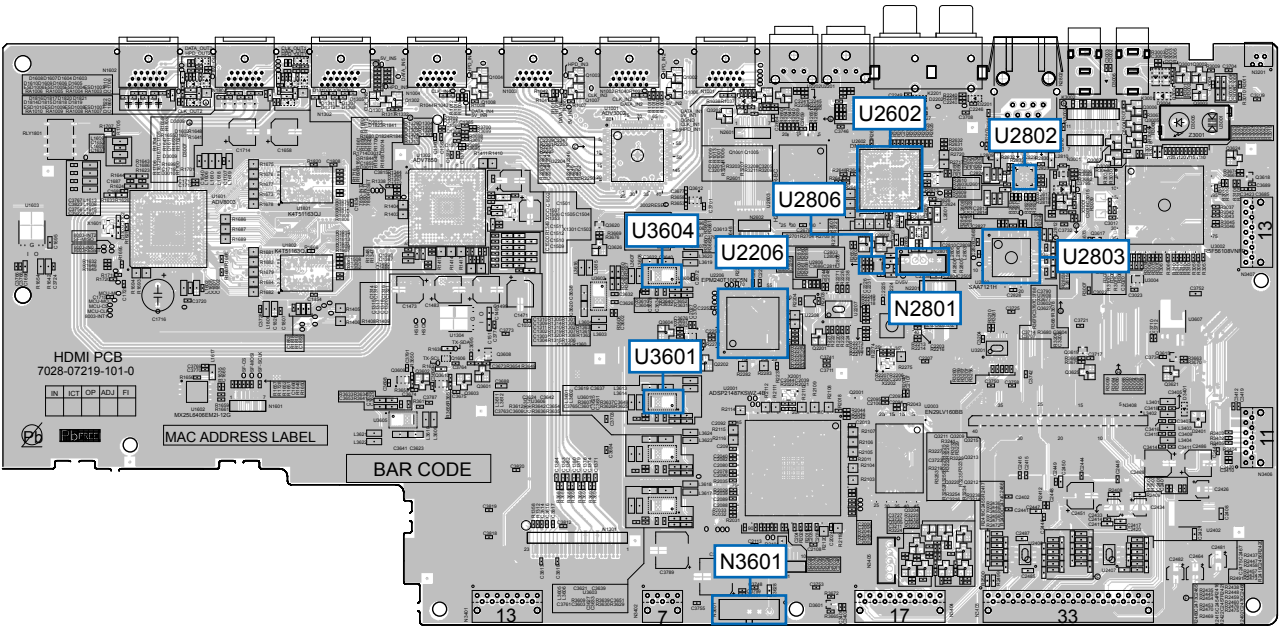
NO

The U2401 and surrounding circuitry are defective.

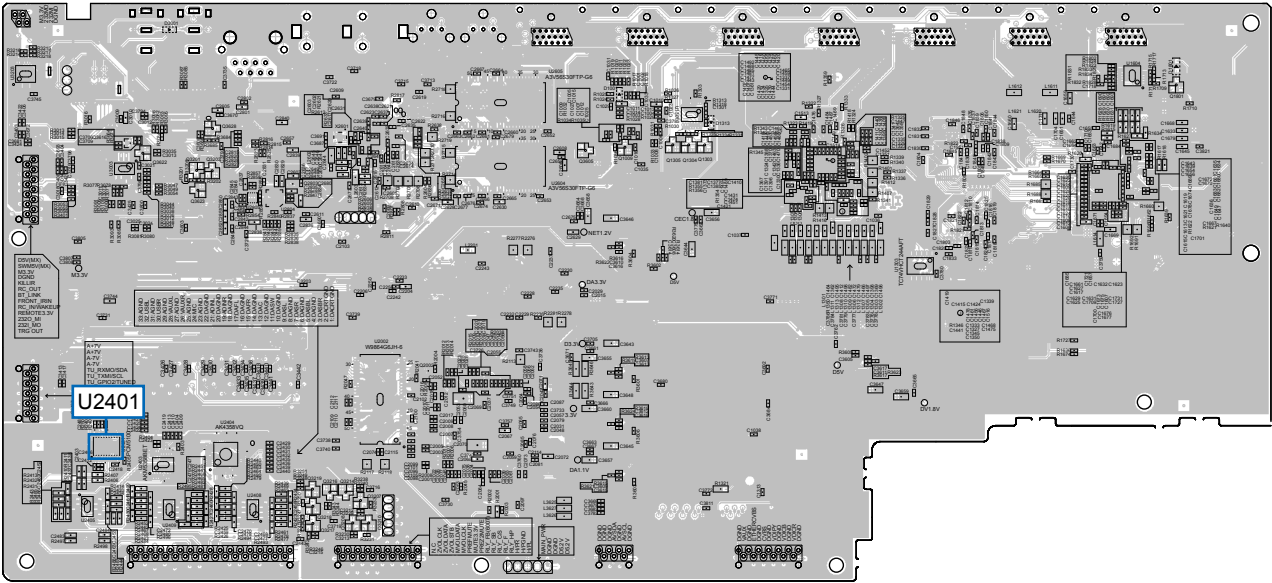
YES

Check "**4.1 AUDIO CHECK**" Procedure.(Refer to 97 page.)

HDMI test point

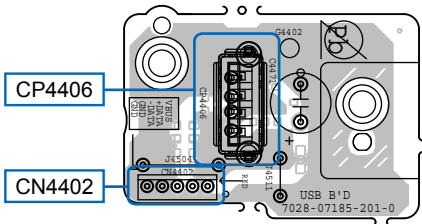


(COMPONENT SIDE)



(FOIL SIDE)

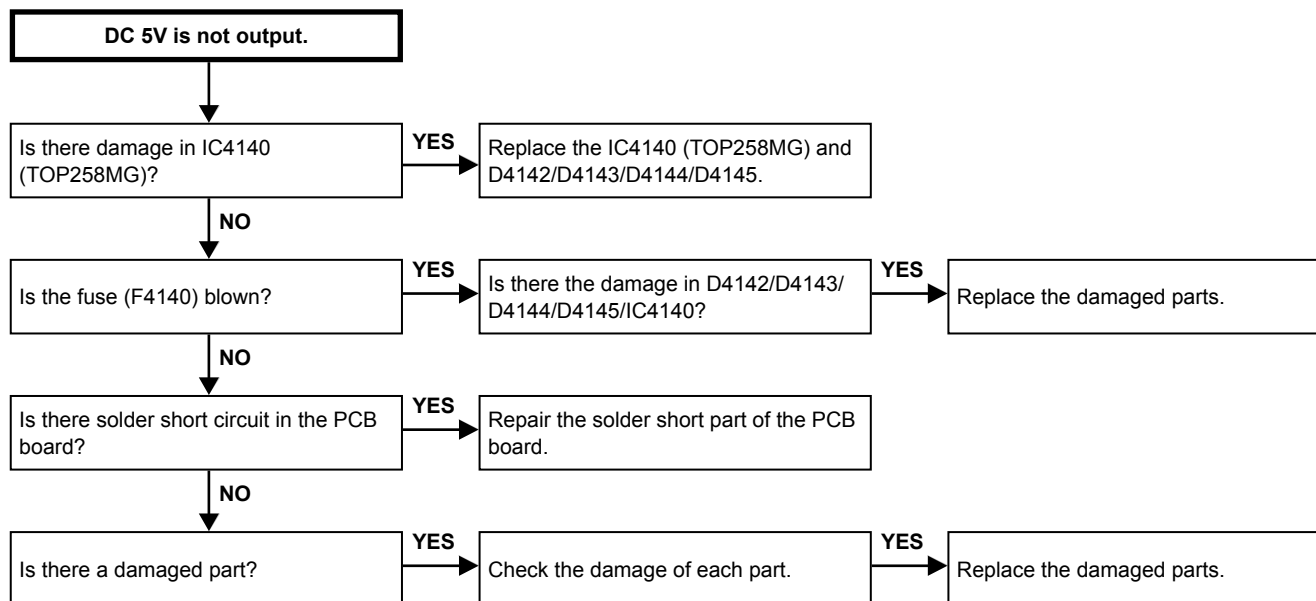
USB test point



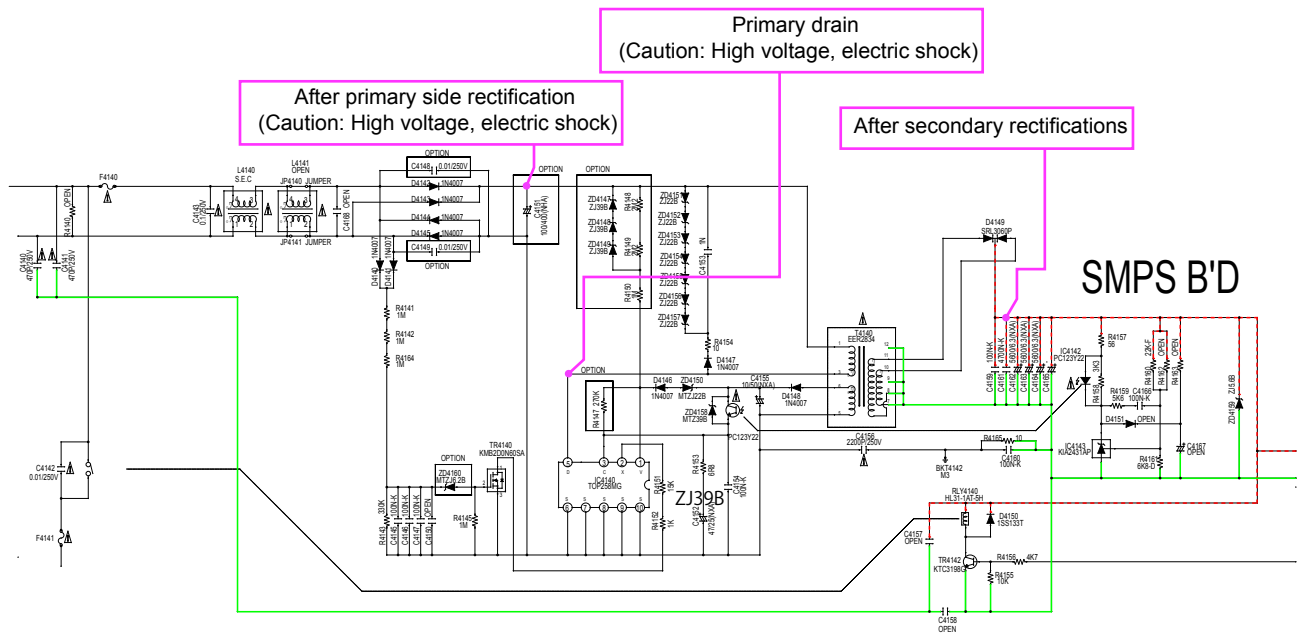
(COMPONENT SIDE)



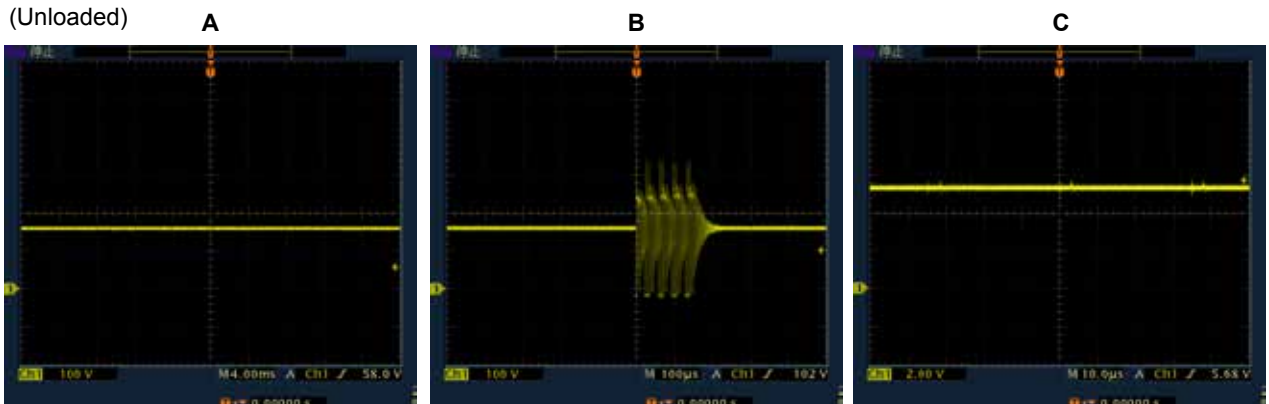
## 6. SMPS



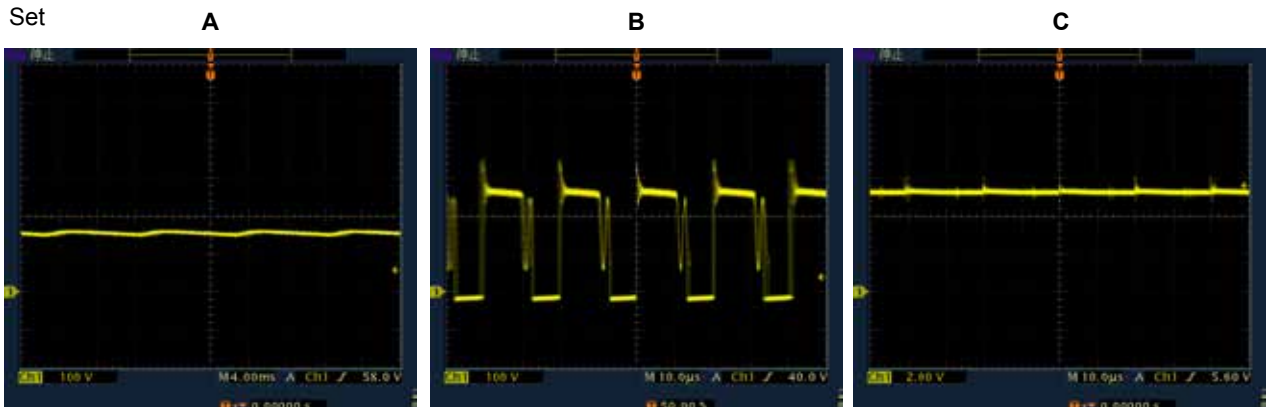
## Operation waveform for each part



SMPS unit  
(Unloaded)

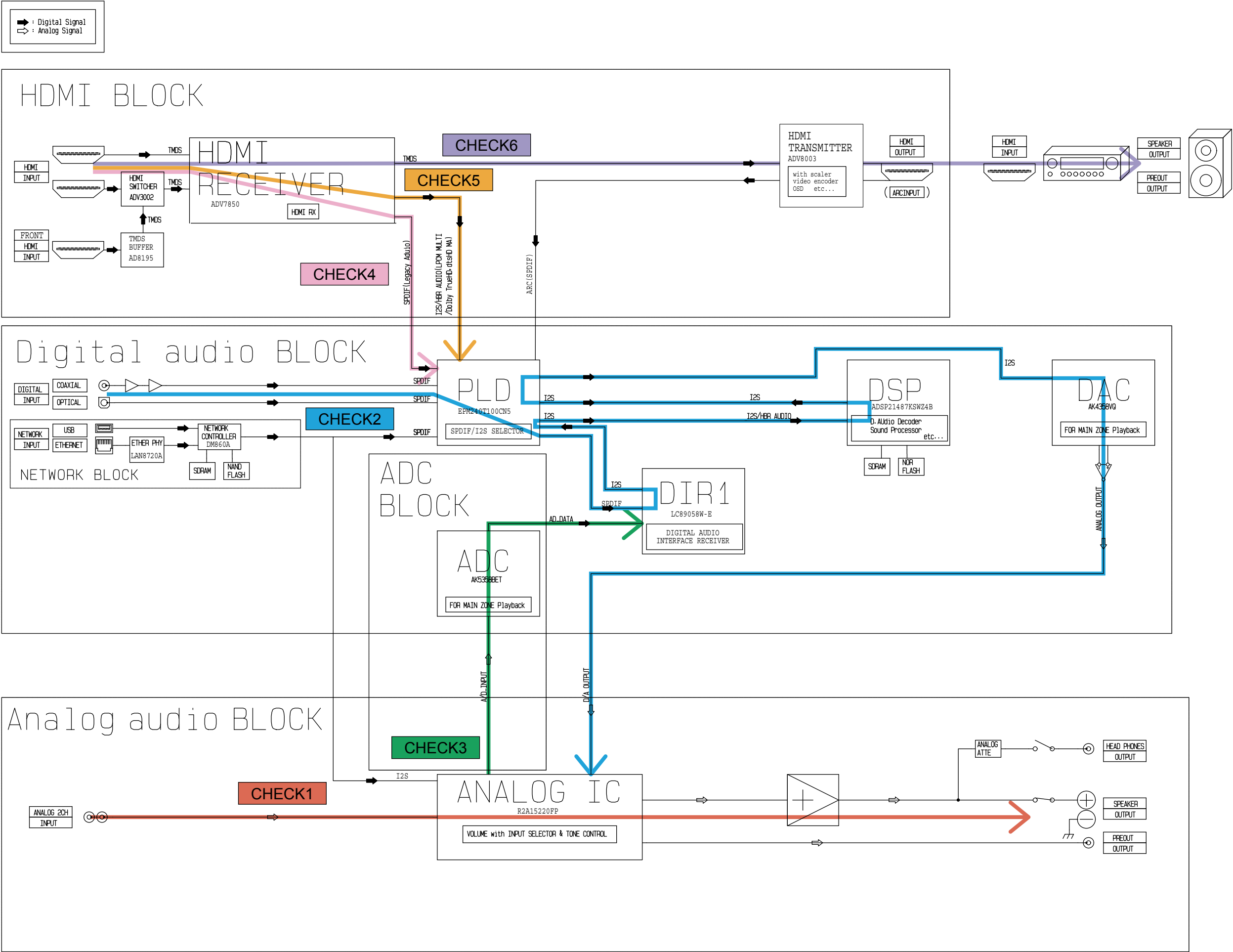


Set



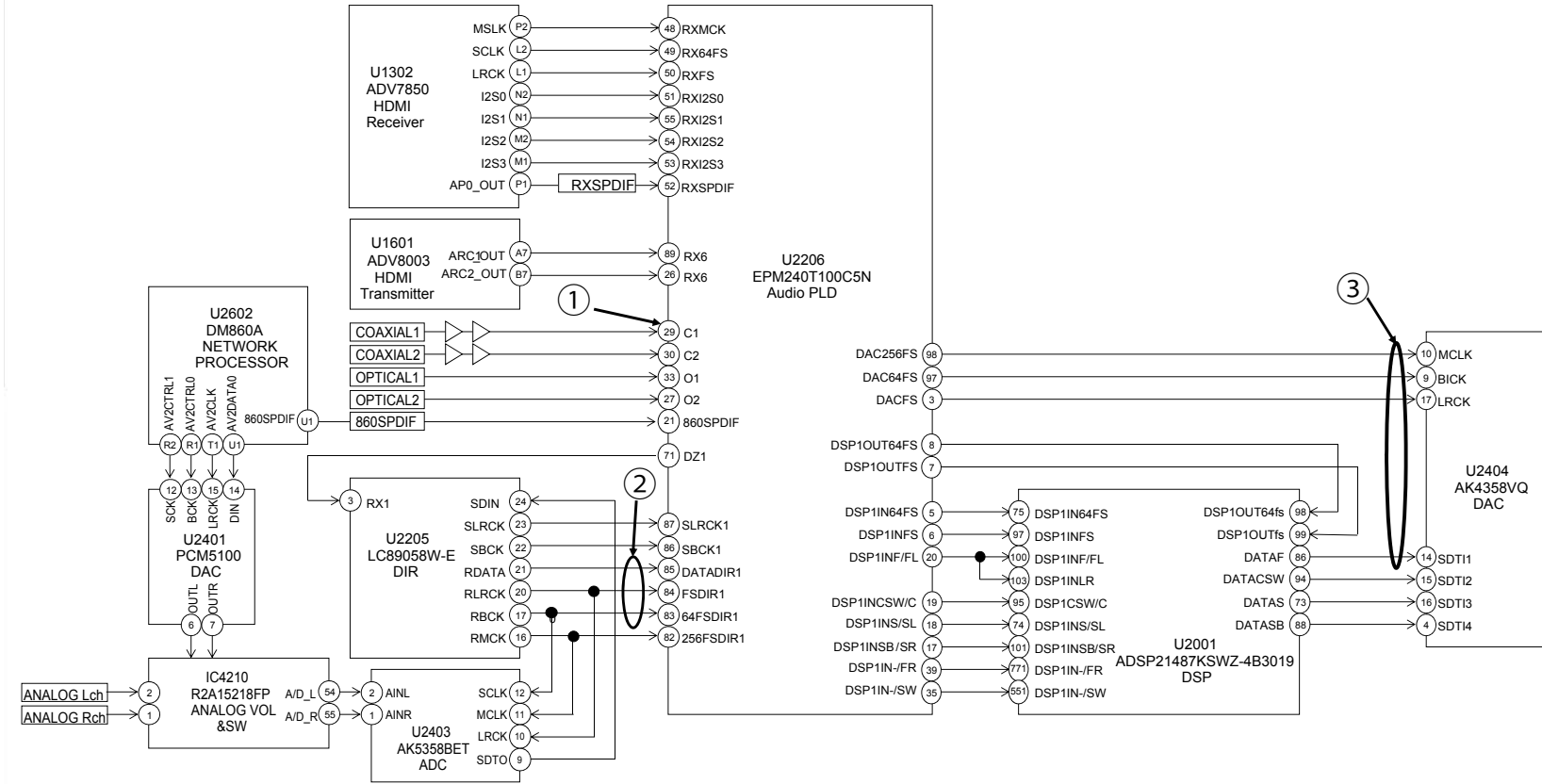
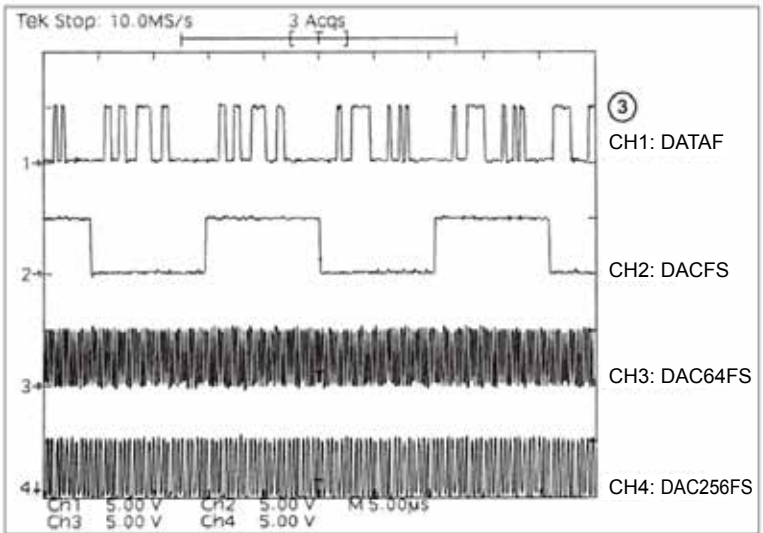
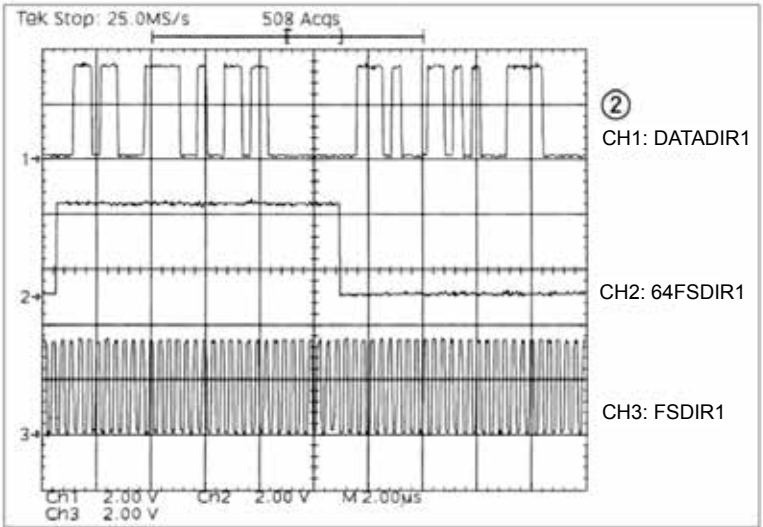
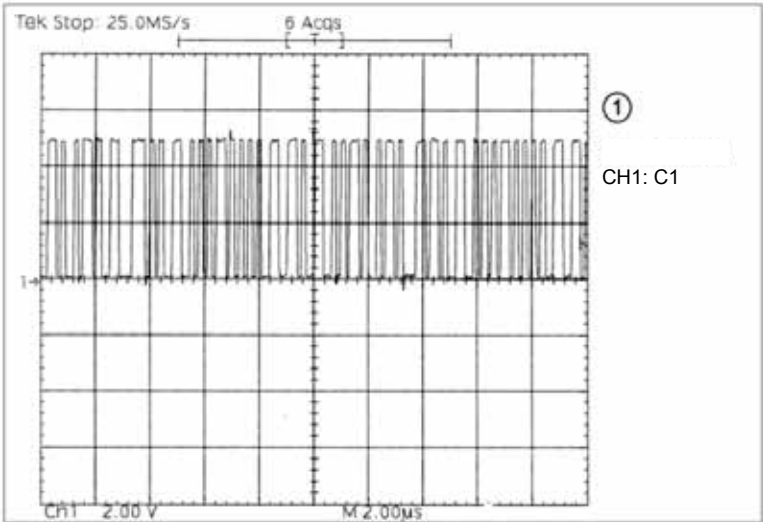
This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

**Audio Check PATH**  
Refer to troubleshooting "4.1. AUDIO CHECK"(97 page).

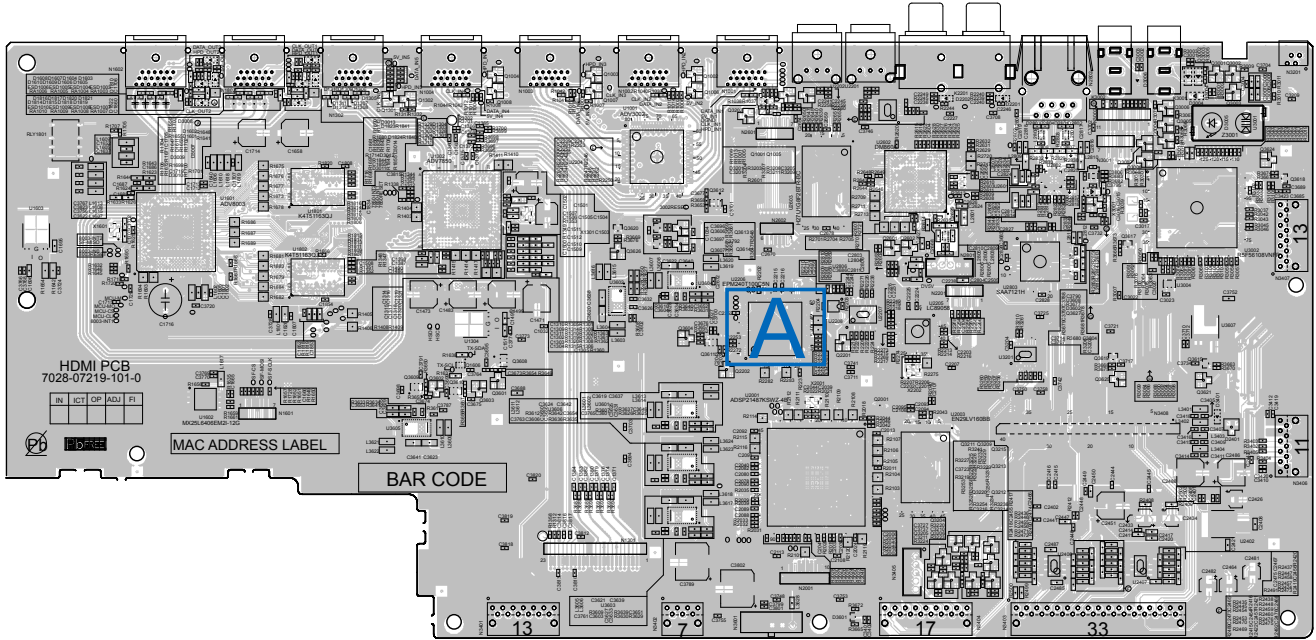


CLOCK FLOW & WAVE FORM IN DIGITAL BLOCK

WAVE FORM

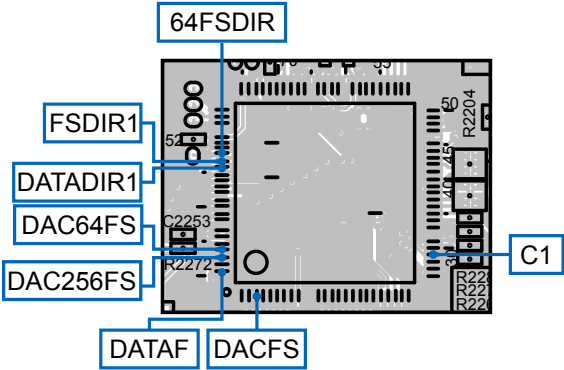


Test point



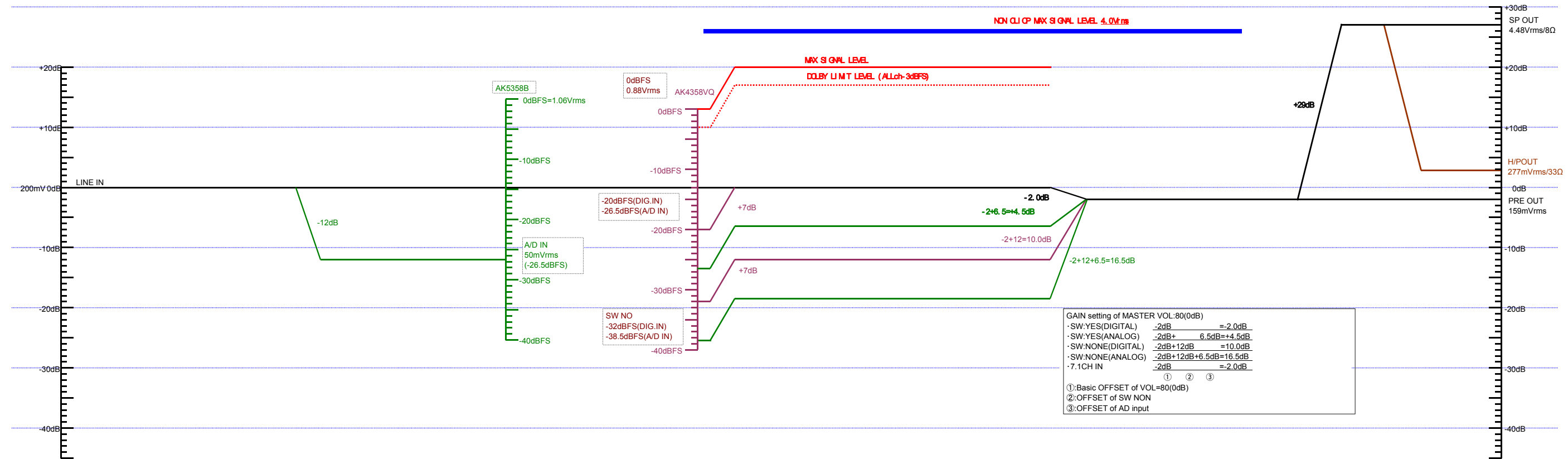
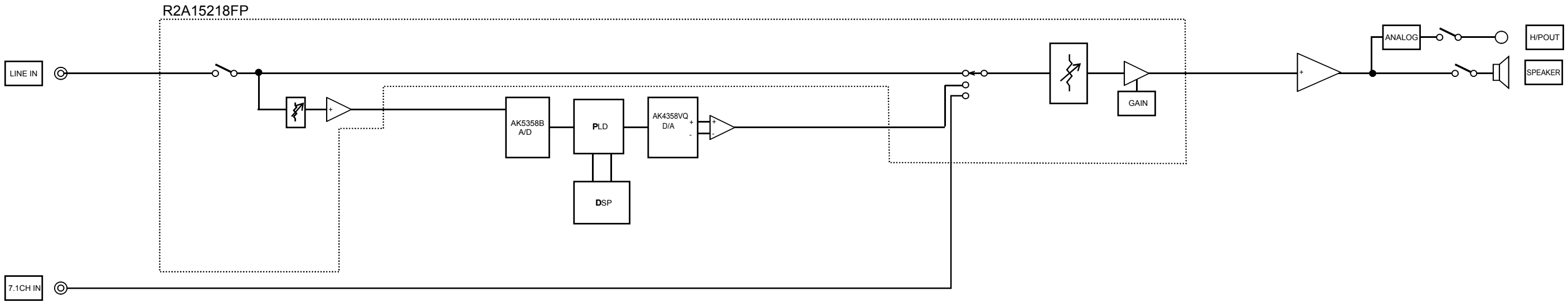
HDMI (COMPONENT SIDE)

Detail A

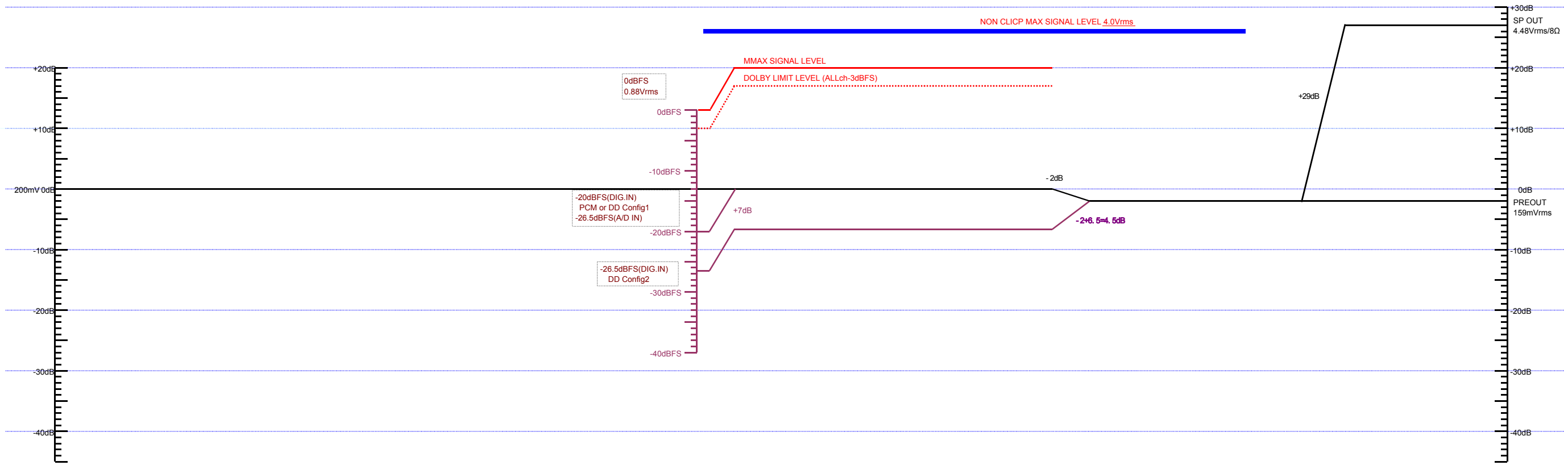
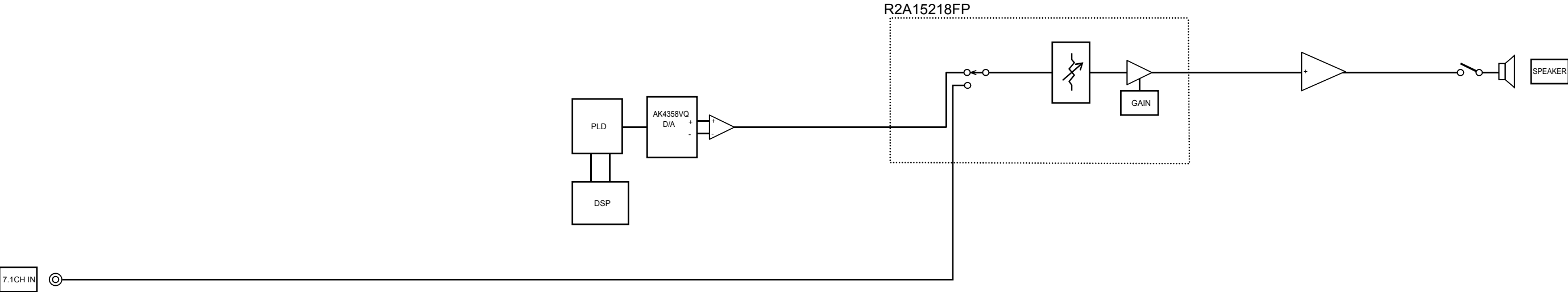


LEVEL DIAGRAM

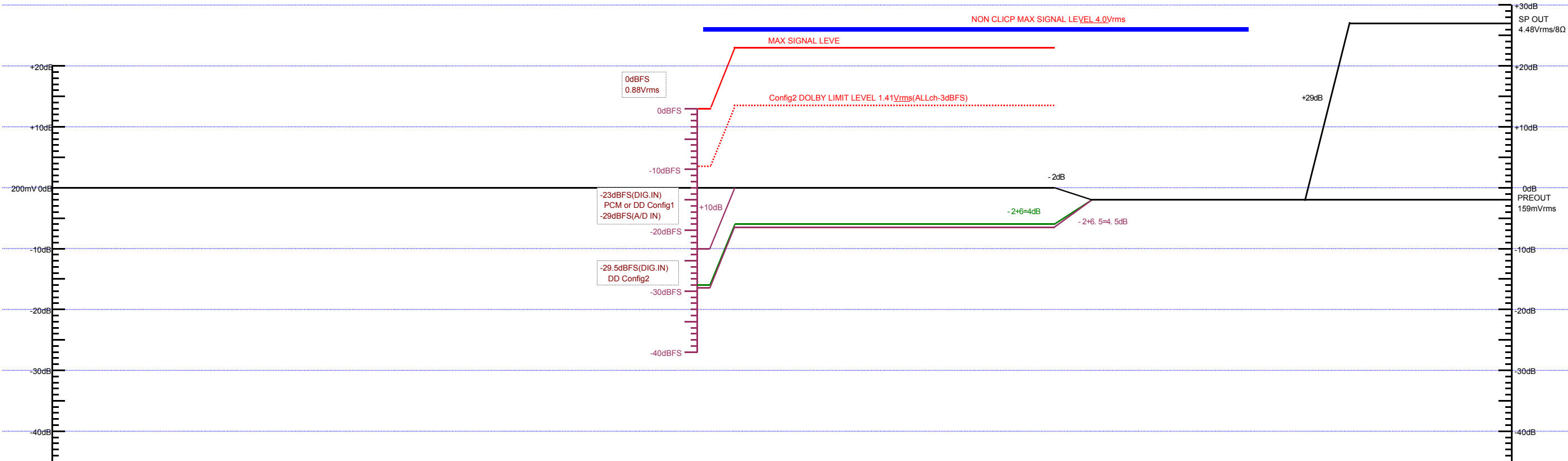
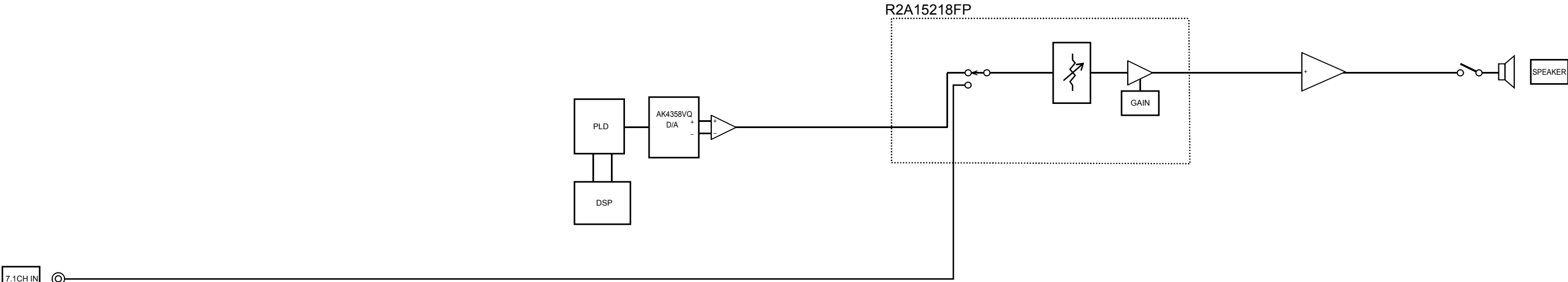
SR6007  
LEVEL DIAGRAM  
FRONT ch



**SR6007**  
**LEVEL DIAGRAM**  
**CENTER ch**

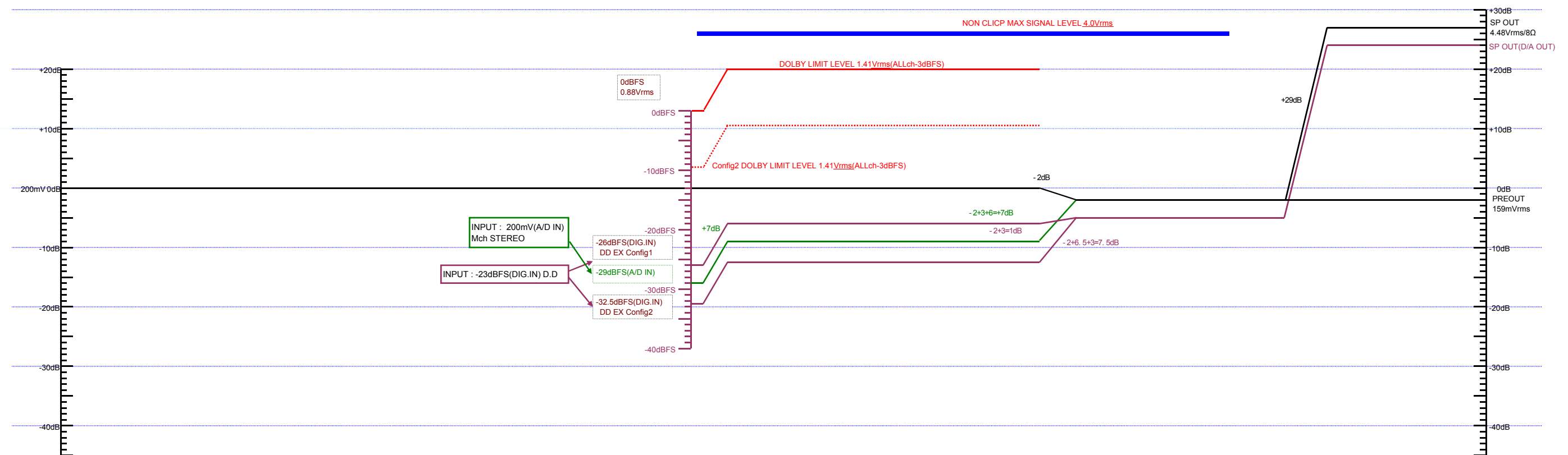
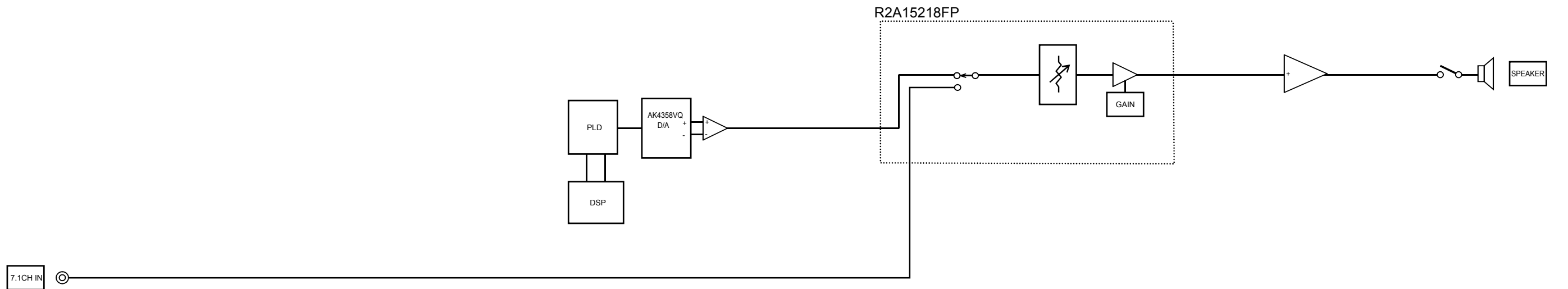


**SR6007**  
**LEVEL DIAGRAM**  
**SURROUND ch**

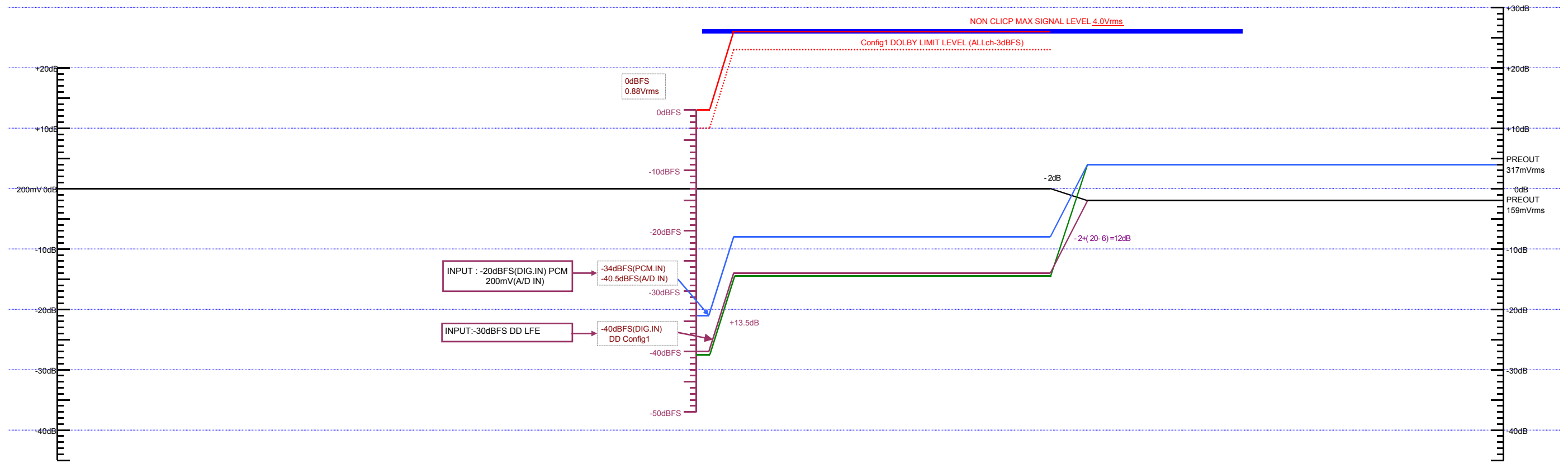
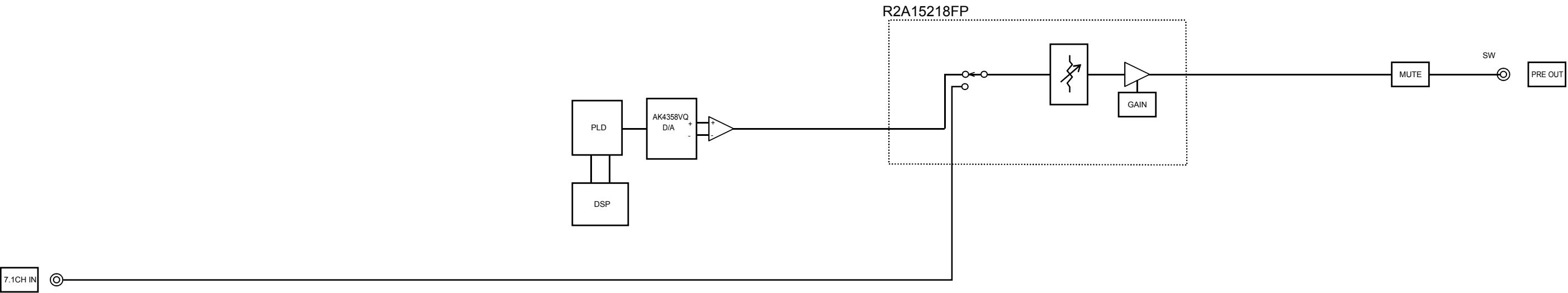


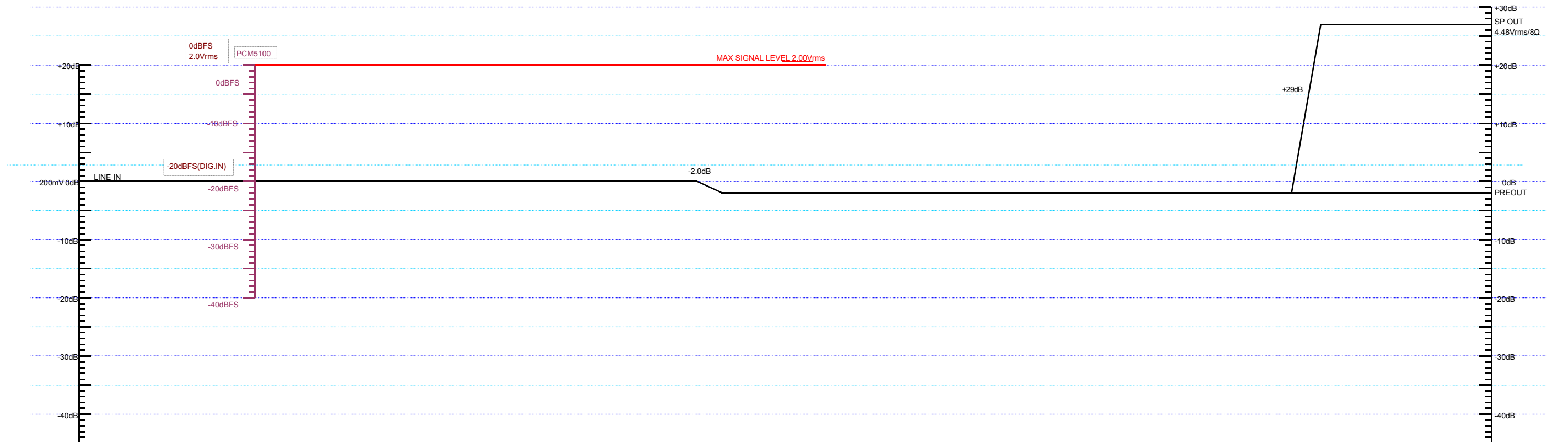
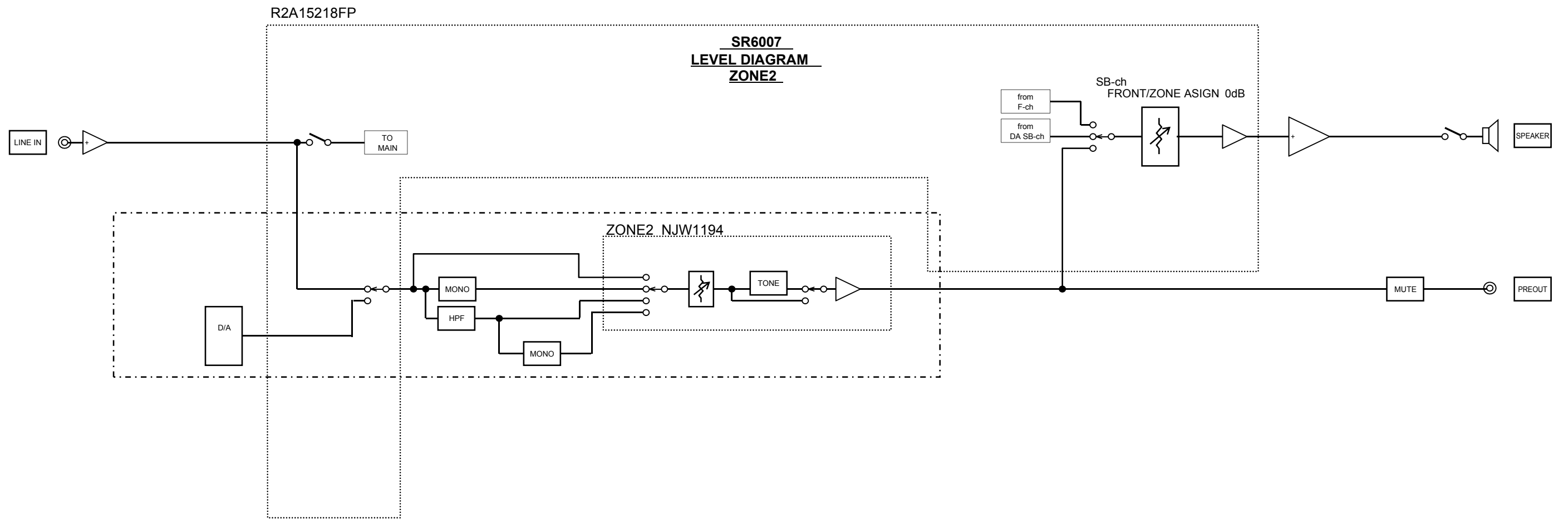


**SR6007**  
**LEVEL DIAGRAM**  
**SURR.BACK ch**



**SR6007**  
**LEVEL DIAGRAM**  
**SUBWOOFER ch**



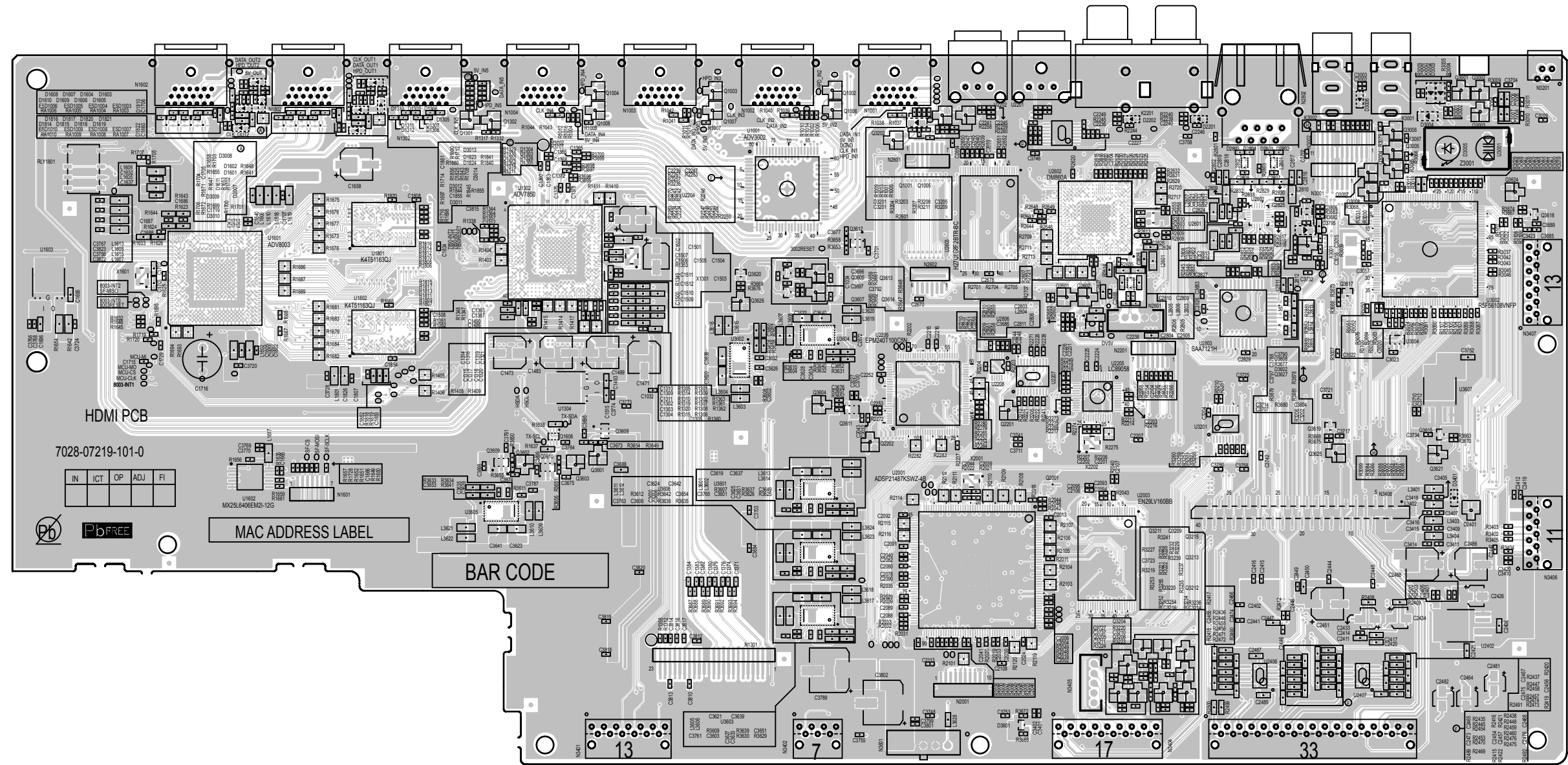


PRINTED WIRING BOARDS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

HDMI  
(COMPONENT SIDE)

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

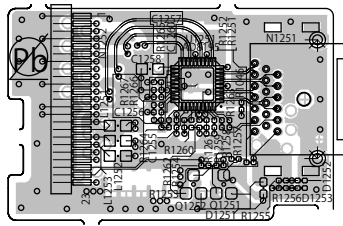


鉛フリー半田  
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

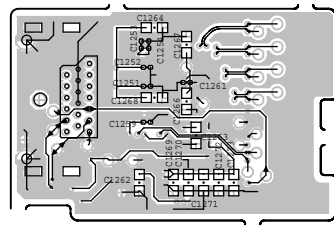
Lead-free Solder  
When soldering, use the Lead-free Solder (Sn-Ag-Cu).

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

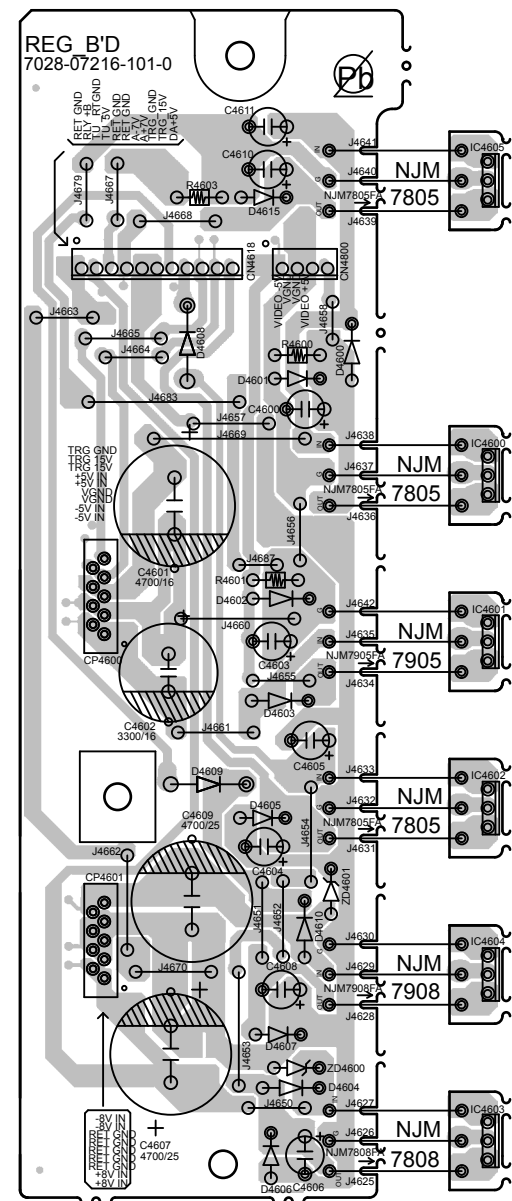
FRONT HDMI  
(COMPONENT SIDE)



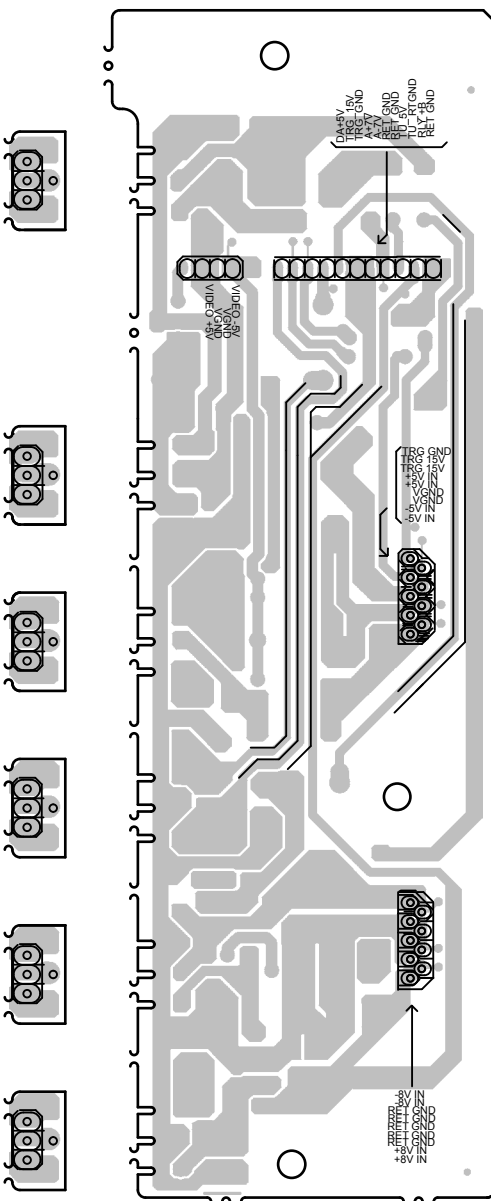
FRONT HDMI  
(FOIL SIDE)



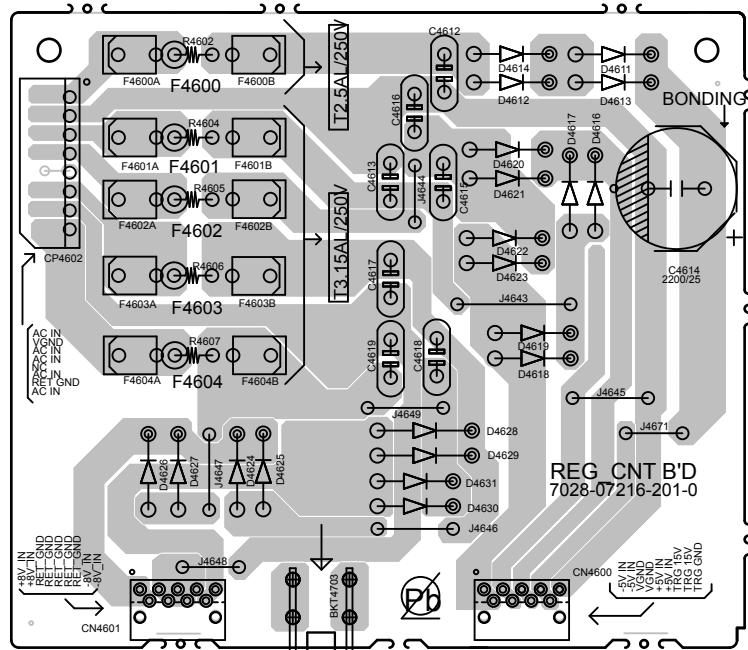
REG  
(COMPONENT SIDE)



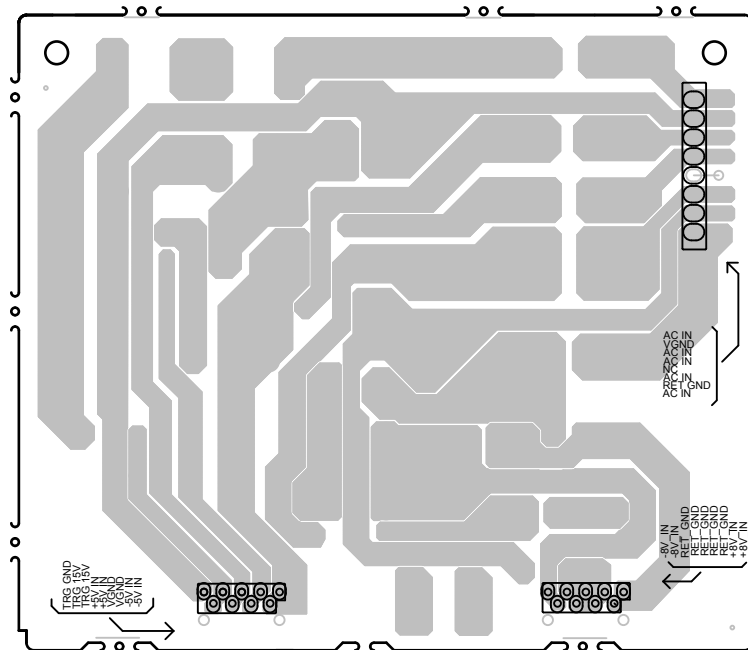
REG  
(FOIL SIDE)



REG CNT  
(COMPONENT SIDE)



REG CNT  
(FOIL SIDE)



**鉛フリー半田**  
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

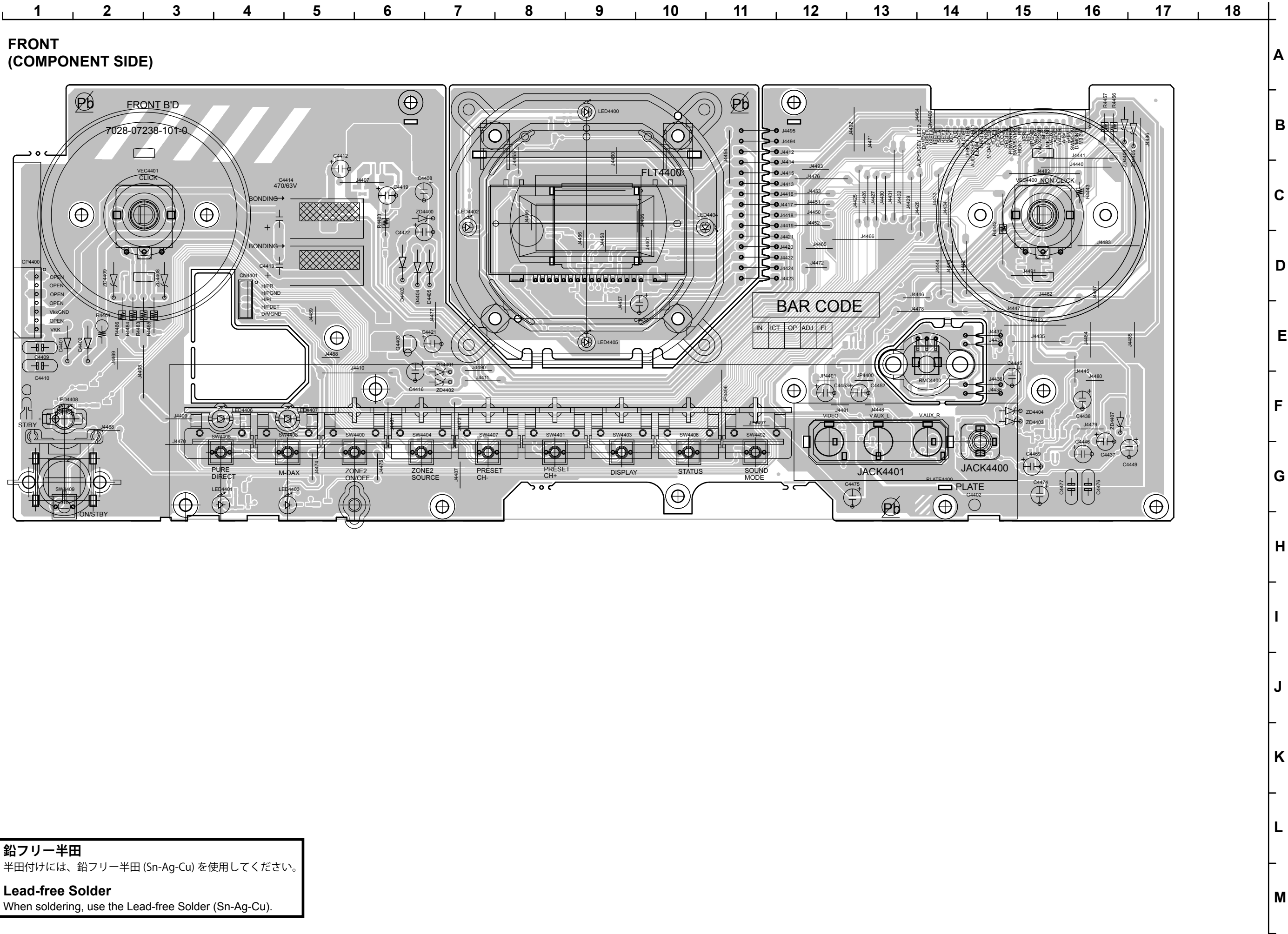
**Lead-free Solder**  
When soldering, use the Lead-free Solder (Sn-Ag-Cu).



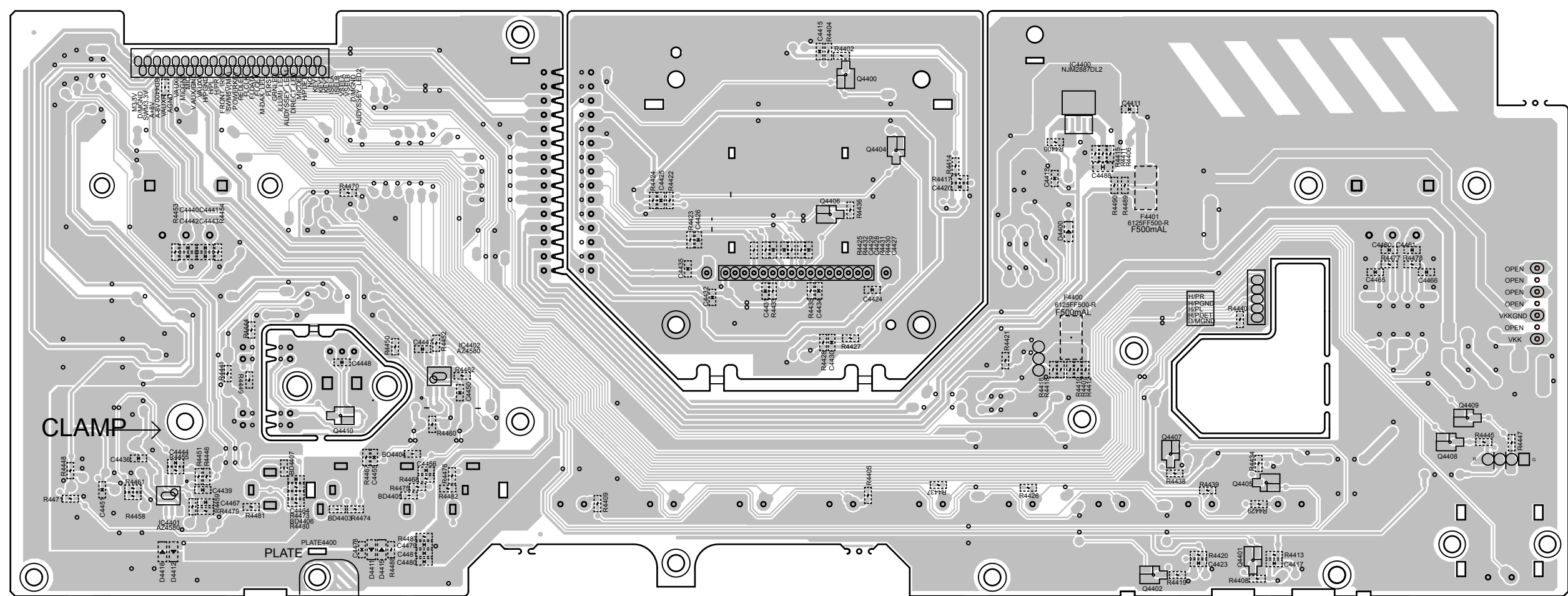
118





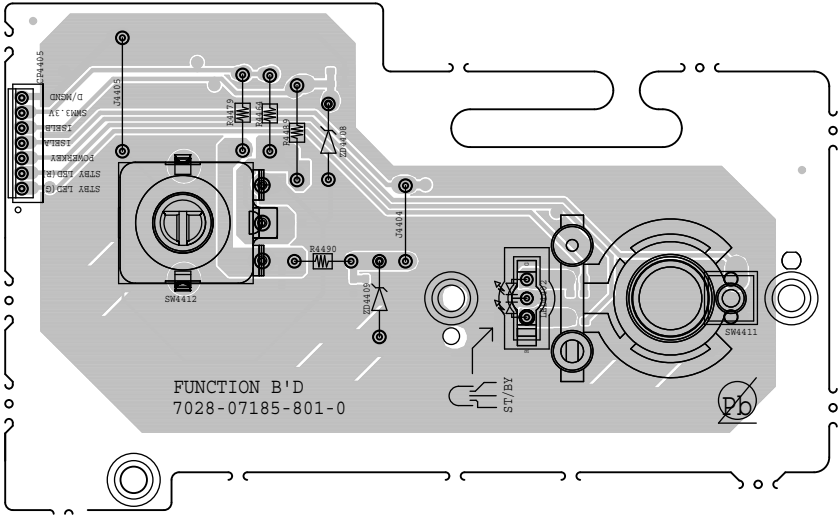
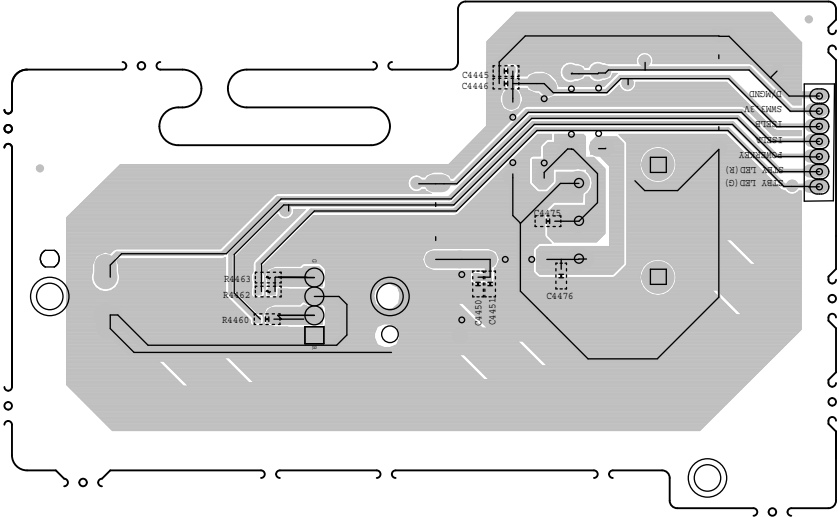
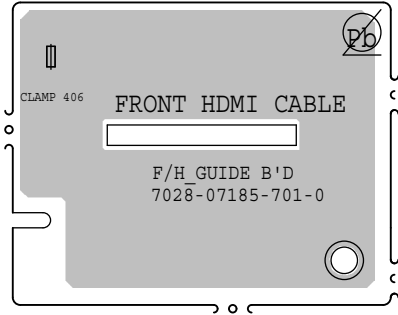
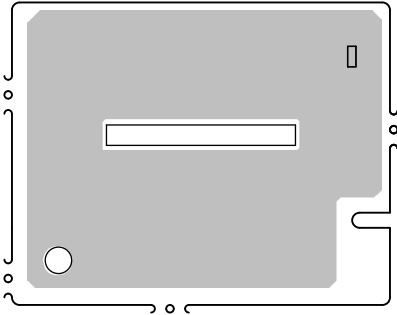
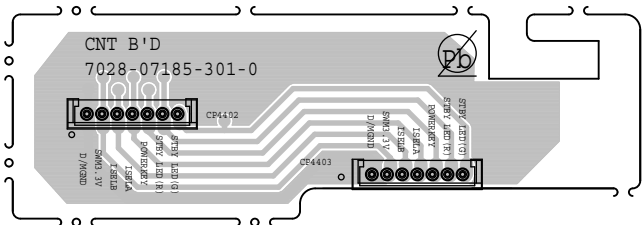
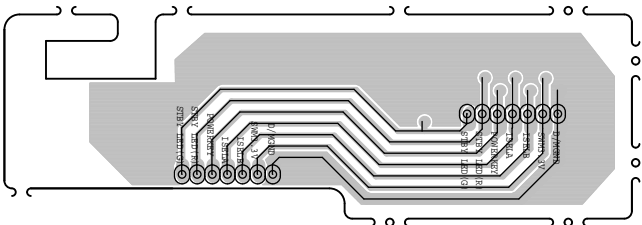


FRONT  
(FOIL SIDE)



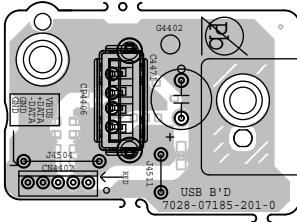
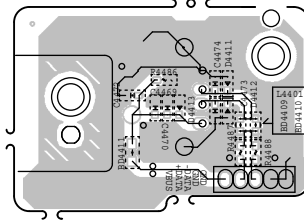
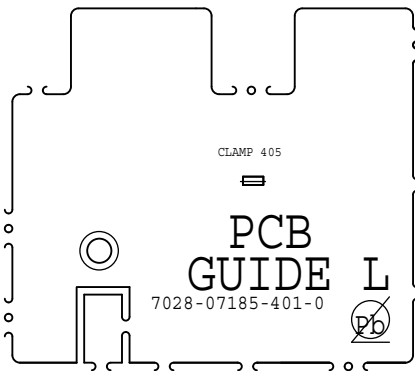
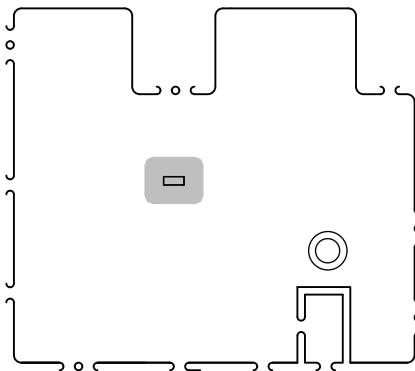
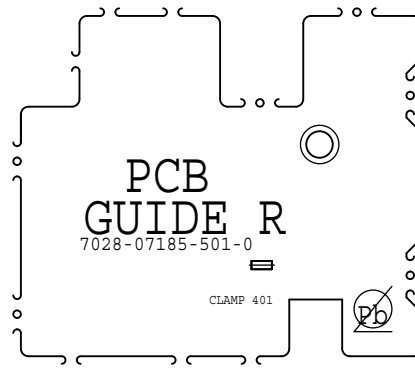
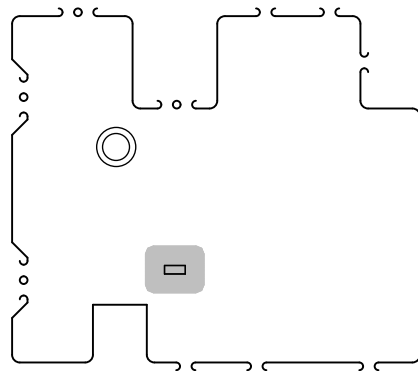
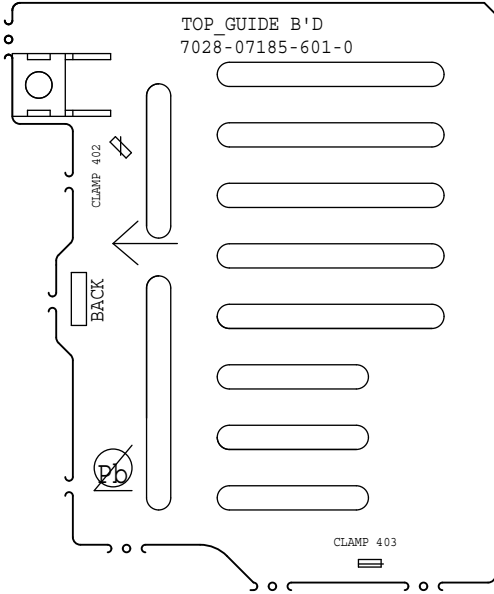
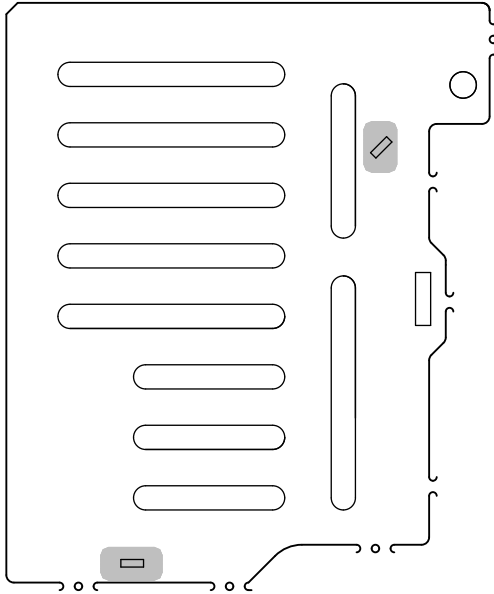
**鉛フリー半田**  
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

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

| 1                                                                                                                                                                                                                                                                                            | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|---|
| <div> <div> <div>FUNCTION<br/>(COMPONENT SIDE)</div>  </div> <div> <div>FUNCTION<br/>(FOIL SIDE)</div>  </div> </div>     |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | A |
| <div> <div> <div>F/H_GUIDE<br/>(COMPONENT SIDE)</div>  </div> <div> <div>F/H_GUIDE<br/>(FOIL SIDE)</div>  </div> </div> |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | B |
| <div> <div> <div>CNT<br/>(COMPONENT SIDE)</div>  </div> <div> <div>CNT<br/>(FOIL SIDE)</div>  </div> </div>           |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | C |
|                                                                                                                                                                                                                                                                                              |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | D |
|                                                                                                                                                                                                                                                                                              |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | E |
|                                                                                                                                                                                                                                                                                              |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | F |
|                                                                                                                                                                                                                                                                                              |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | G |
|                                                                                                                                                                                                                                                                                              |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | H |
|                                                                                                                                                                                                                                                                                              |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | I |
|                                                                                                                                                                                                                                                                                              |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | J |
|                                                                                                                                                                                                                                                                                              |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | K |
|                                                                                                                                                                                                                                                                                              |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | L |
|                                                                                                                                                                                                                                                                                              |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | M |

鉛フリー半田  
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

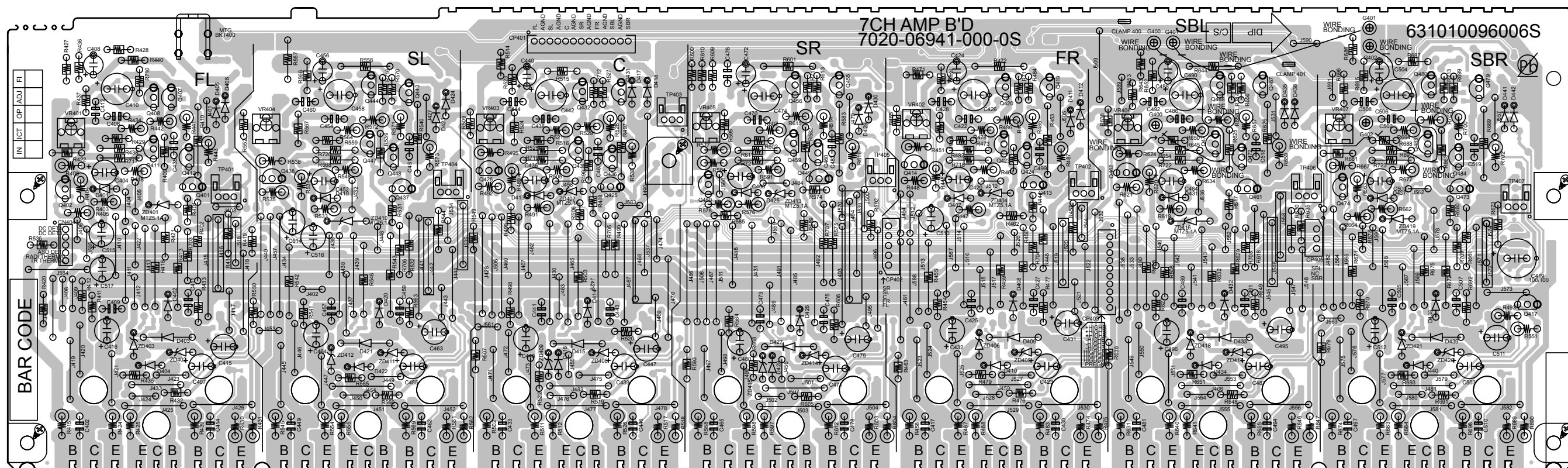
**Lead-free Solder**  
When soldering, use the Lead-free Solder (Sn-Ag-Cu).

| 1                                                                                    | 2 | 3                                                                                    | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |   |
|--------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|---|
| USB<br>(COMPONENT SIDE)                                                              |   | USB<br>(FOIL SIDE)                                                                   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | A |
|     |   |    |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | B |
|                                                                                      |   |                                                                                      |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | C |
| GUIDE L<br>(COMPONENT SIDE)                                                          |   | GUIDE L<br>(FOIL SIDE)                                                               |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | D |
|    |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | E |
|                                                                                      |   |                                                                                      |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | F |
| GUIDE R<br>(COMPONENT SIDE)                                                          |   | GUIDE R<br>(FOIL SIDE)                                                               |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | G |
|  |   |  |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | H |
|                                                                                      |   |                                                                                      |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | I |
| TOP_GUIDE<br>(COMPONENT SIDE)                                                        |   | TOP_GUIDE<br>(FOIL SIDE)                                                             |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | J |
|   |   |  |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | K |
|                                                                                      |   |                                                                                      |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | L |
|                                                                                      |   |                                                                                      |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | M |

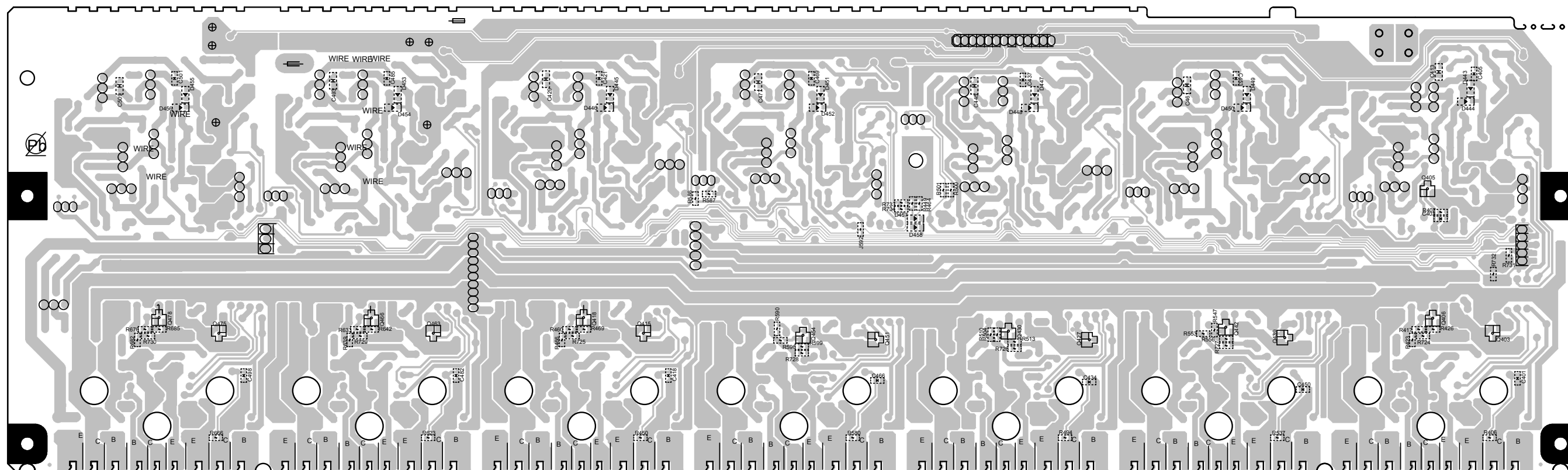
**鉛フリー半田**  
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

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

## 7CH AMP (COMPONENT SIDE)



**7CH AMP  
(FOIL SIDE)**



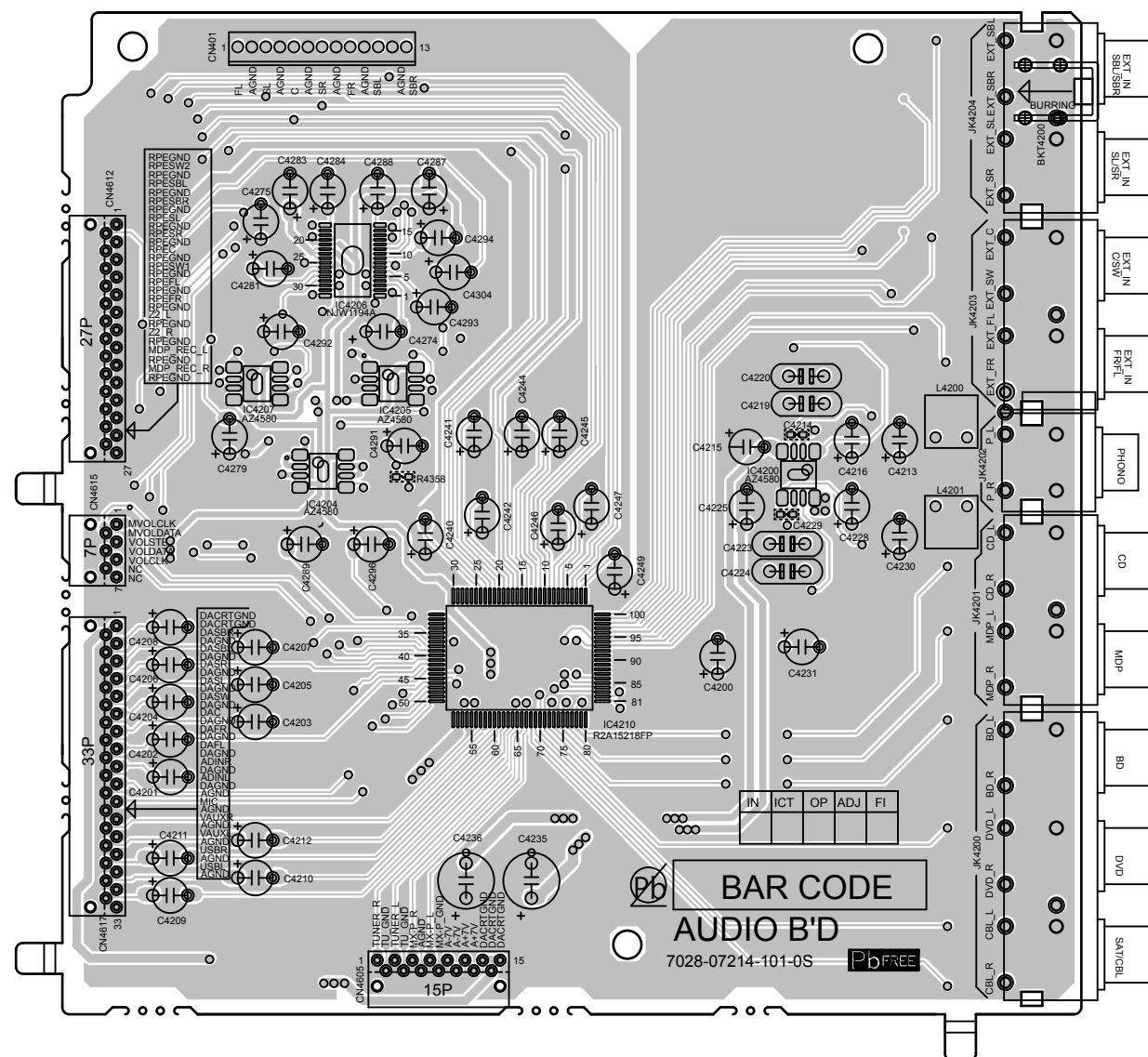
**鉛フリー半田**

半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

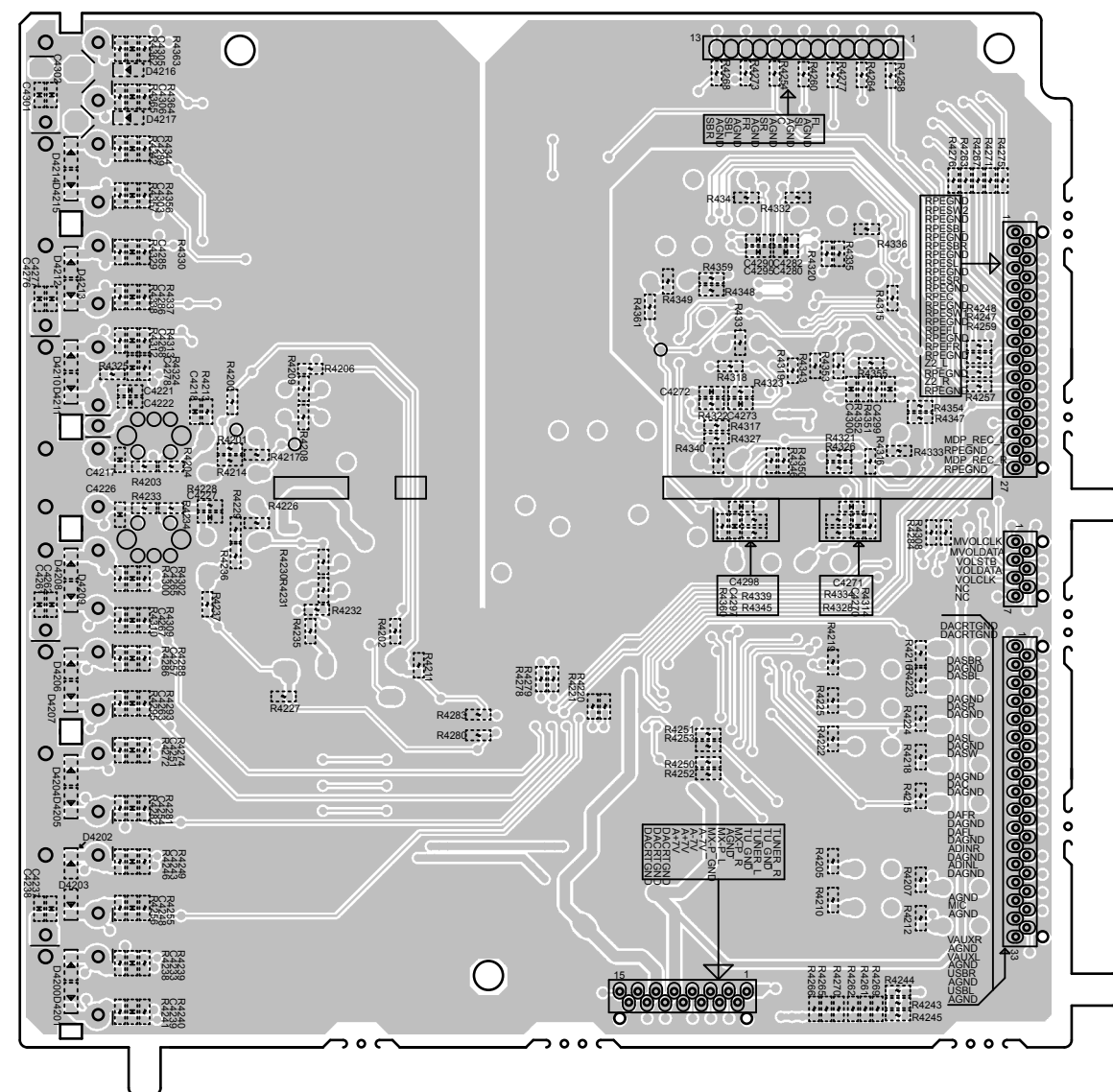
## Lead-free Solder

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

**AUDIO**  
**(COMPONENT SIDE)**



**AUDIO  
(FOIL SIDE)**



**鉛フリー半田**

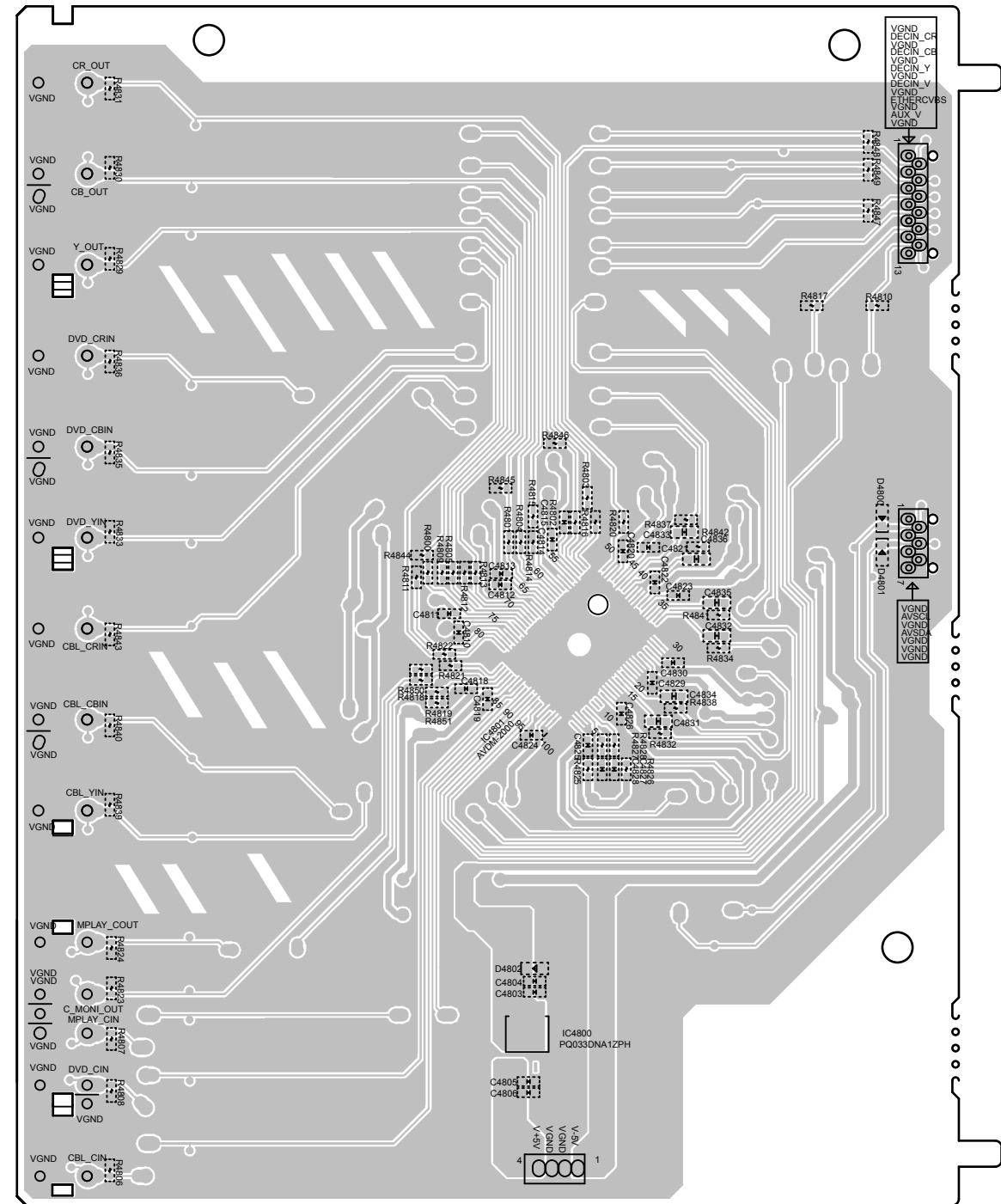
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

## Lead-free Solder

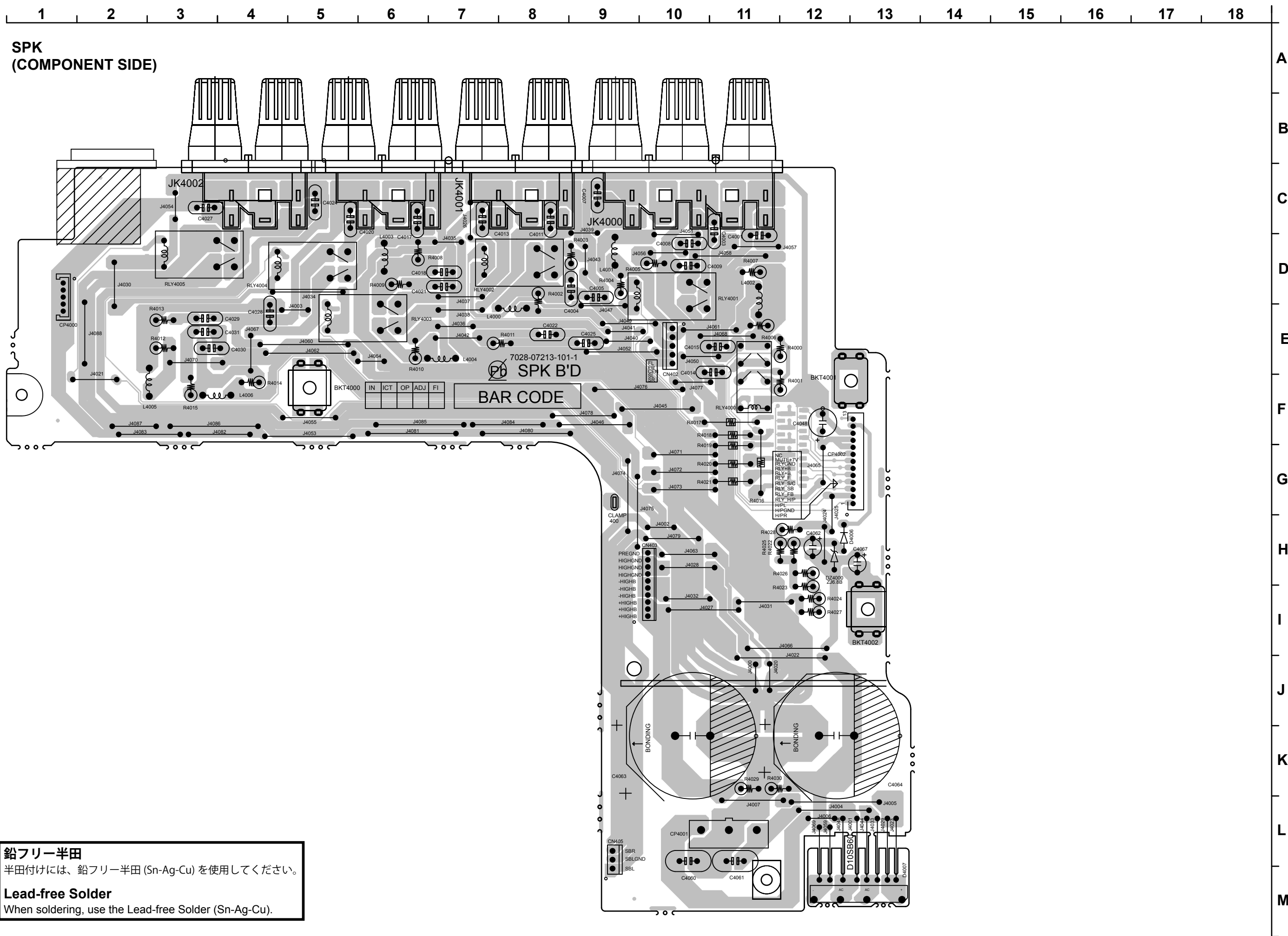
When soldering, use the Lead-free Solder (Sn-Ag-Cu).



**VIDEO  
(FOIL SIDE)**



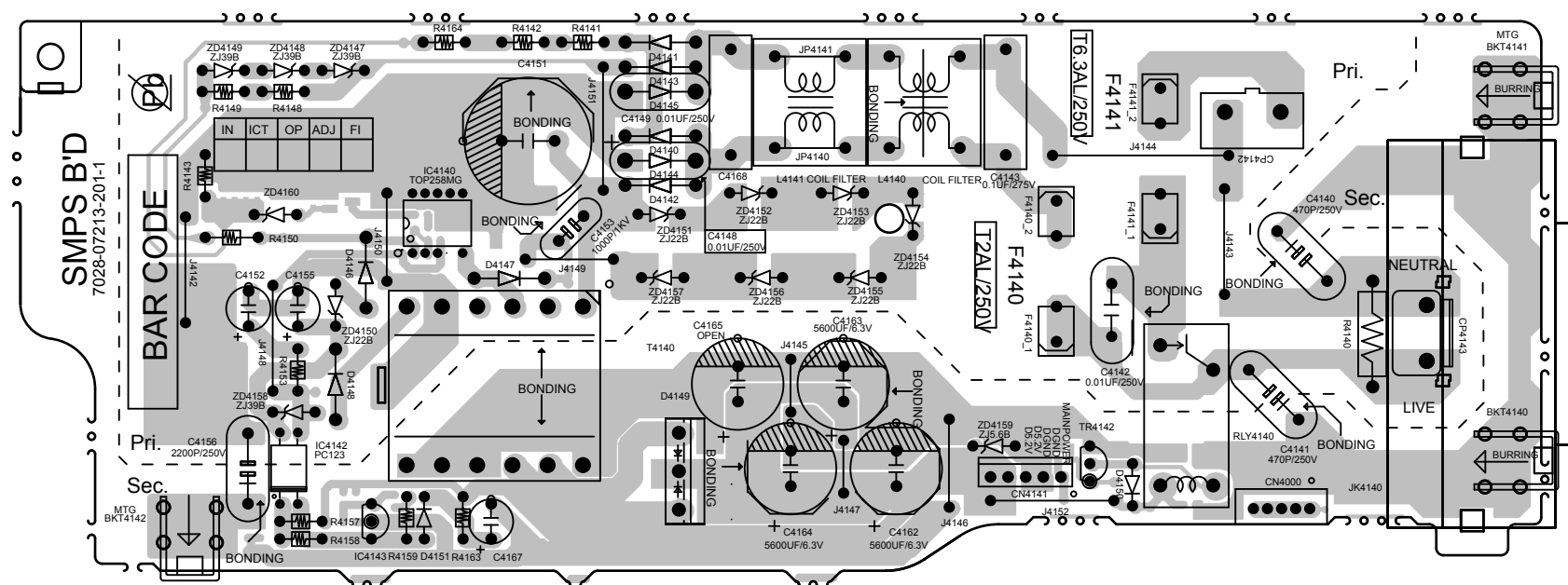
126



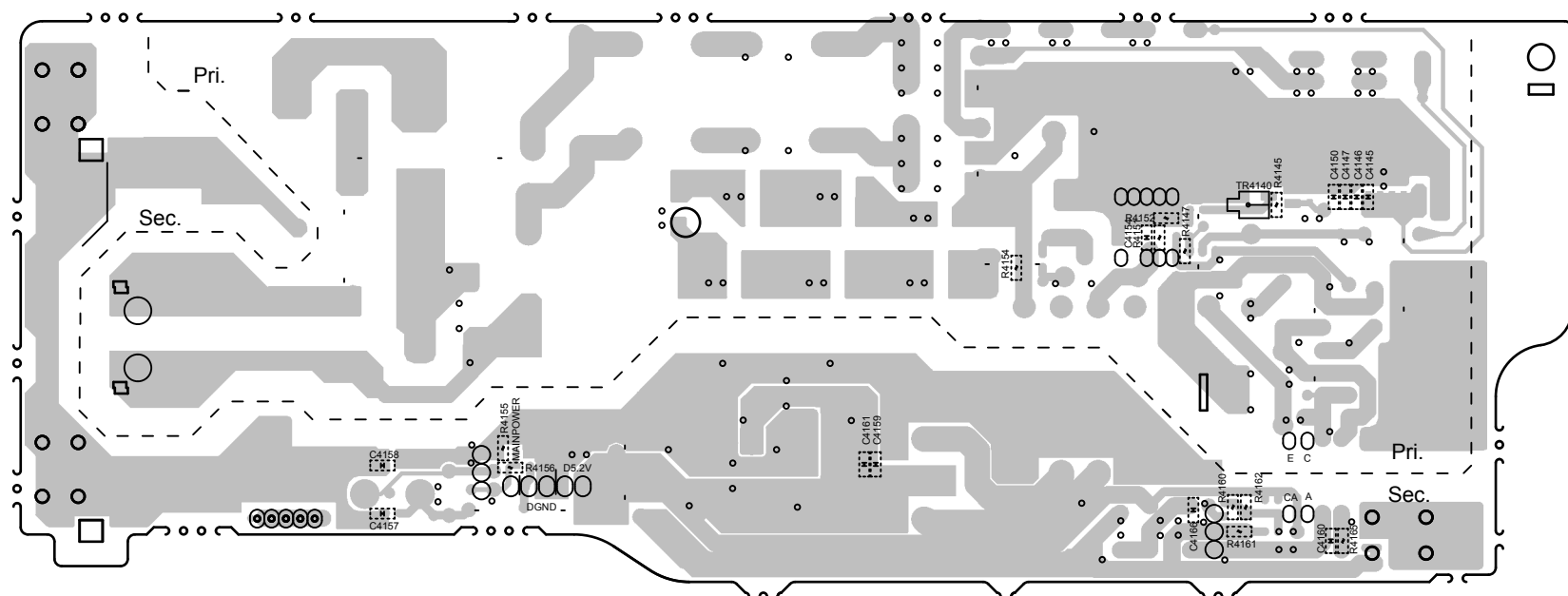




## SMPS (COMPONENT SIDE)



**SMPS  
(FOIL SIDE)**



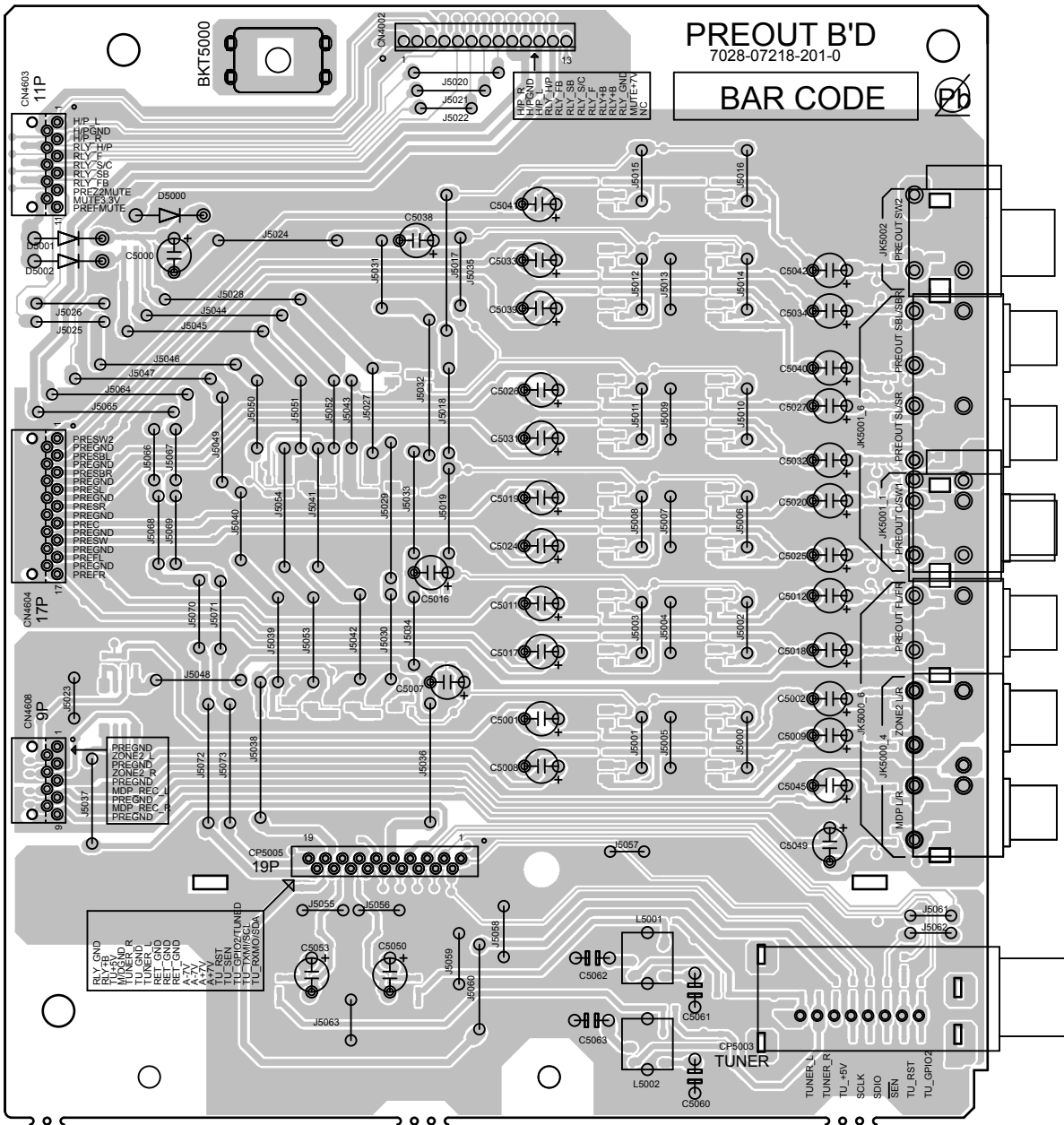
**鉛フリー半田**

半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

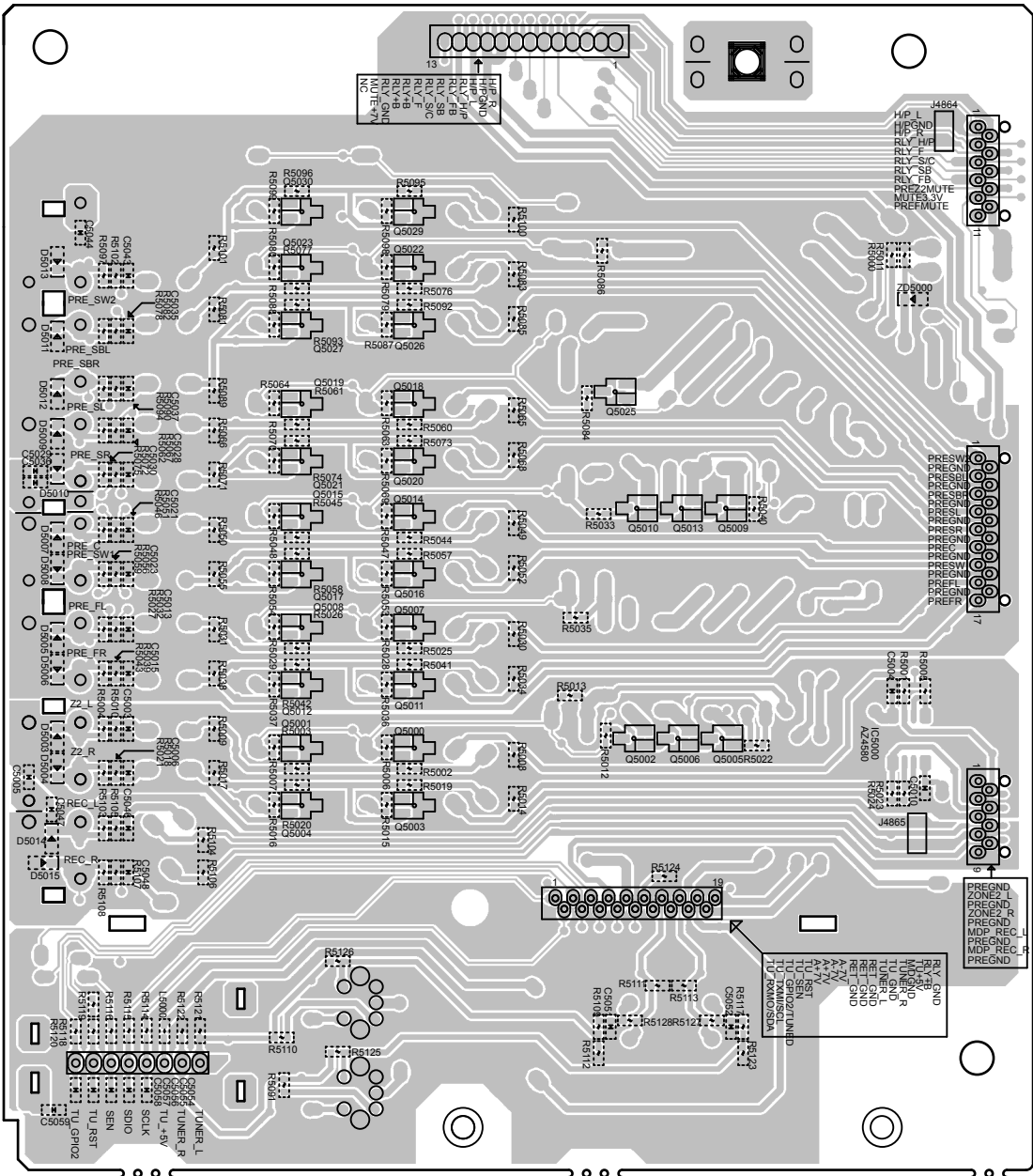
## Lead-free Solder

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

# PREOUT (COMPONENT SIDE)

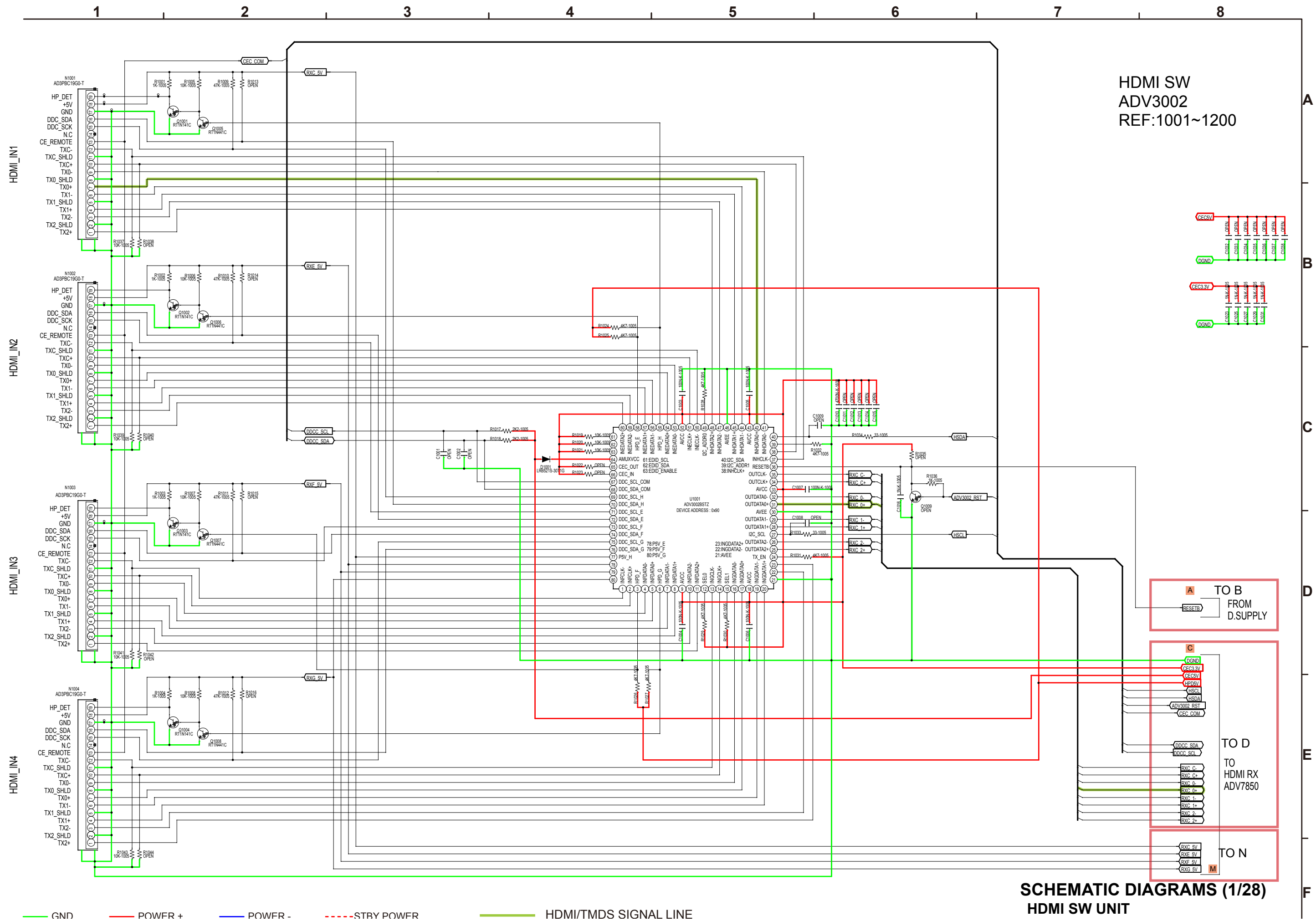


# PREOUT (FOIL SIDE)



**鉛フリー半田**  
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

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

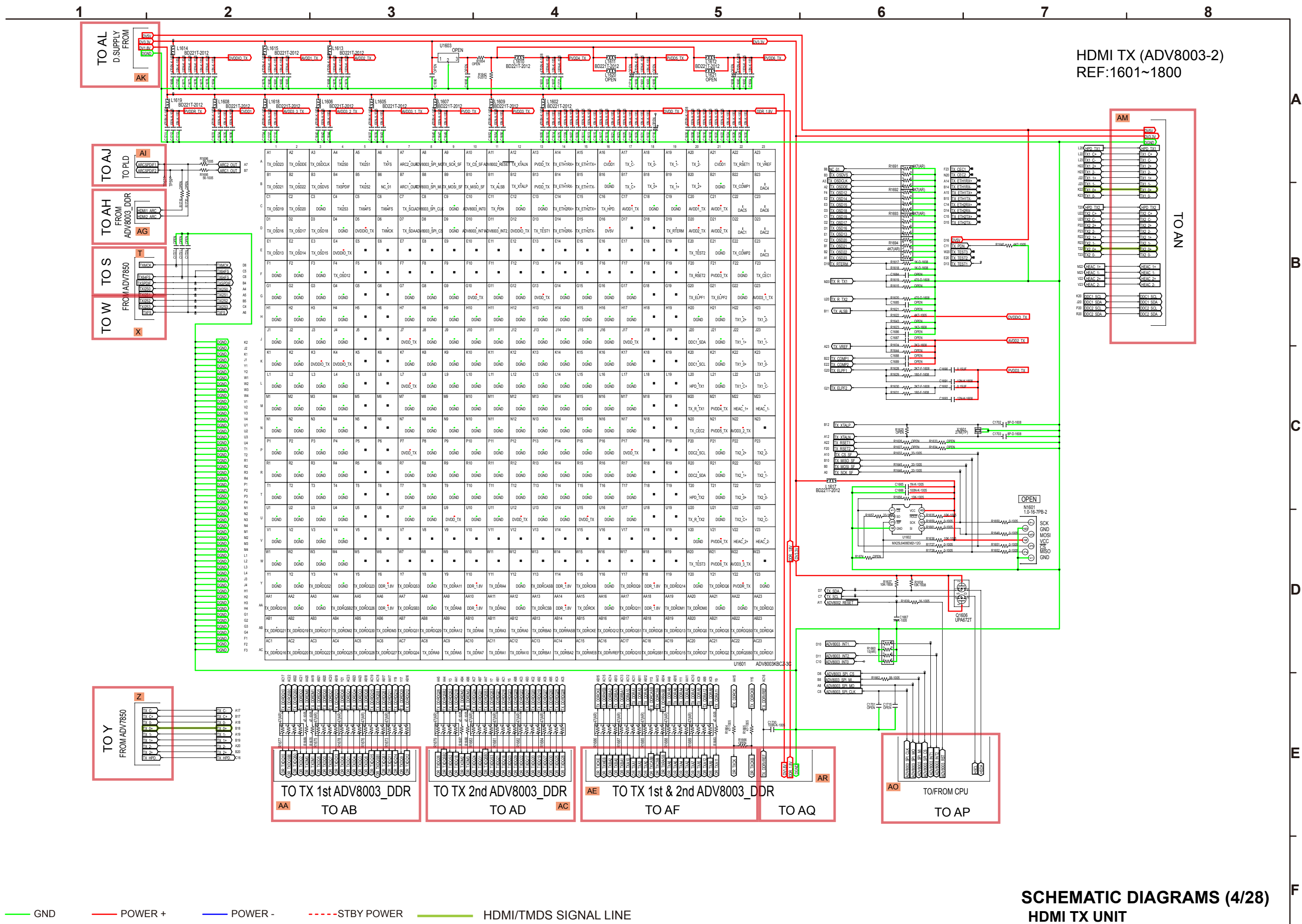


**SCHEMATIC DIAGRAMS (1/28)**  
**HDMI SW UNIT**



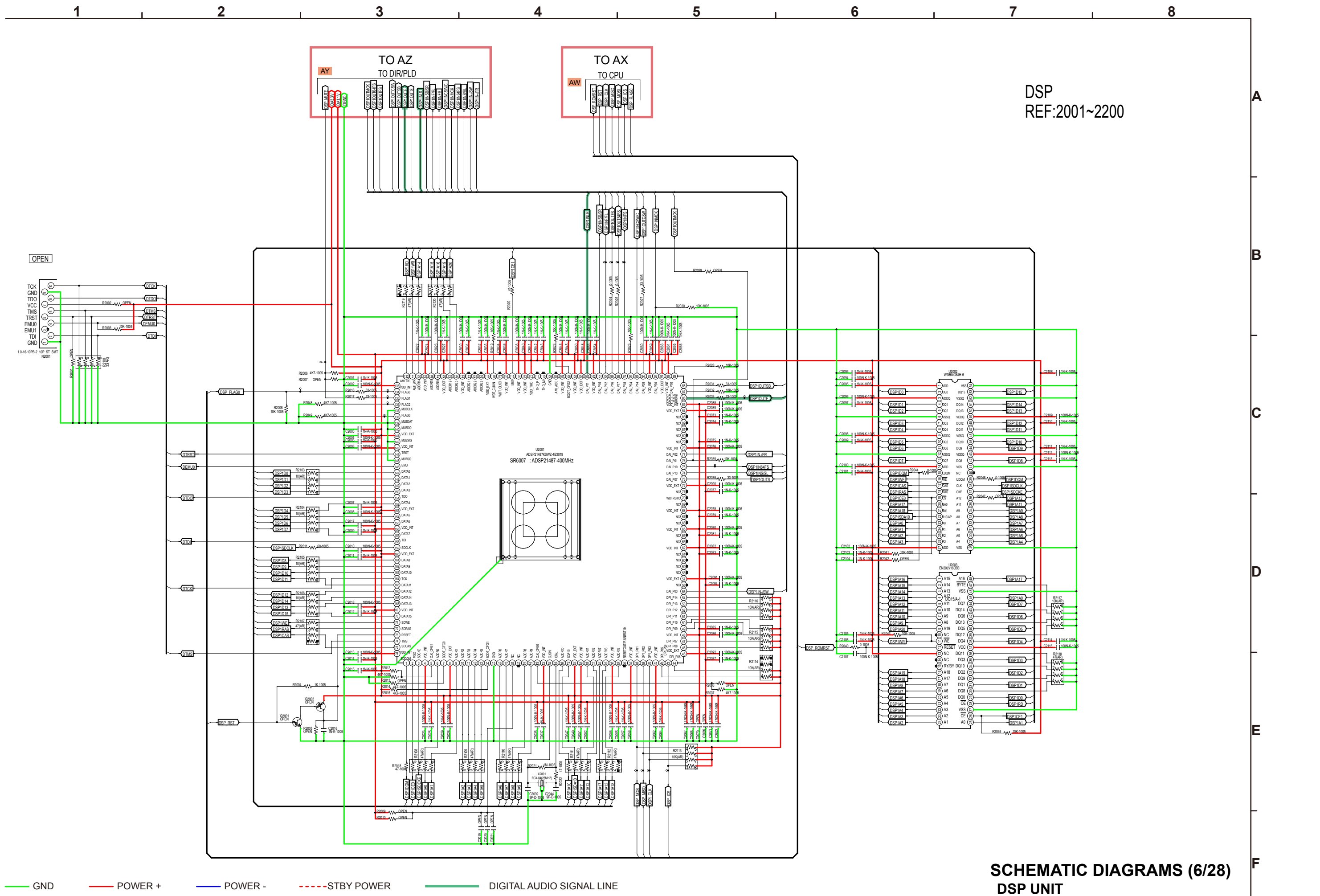








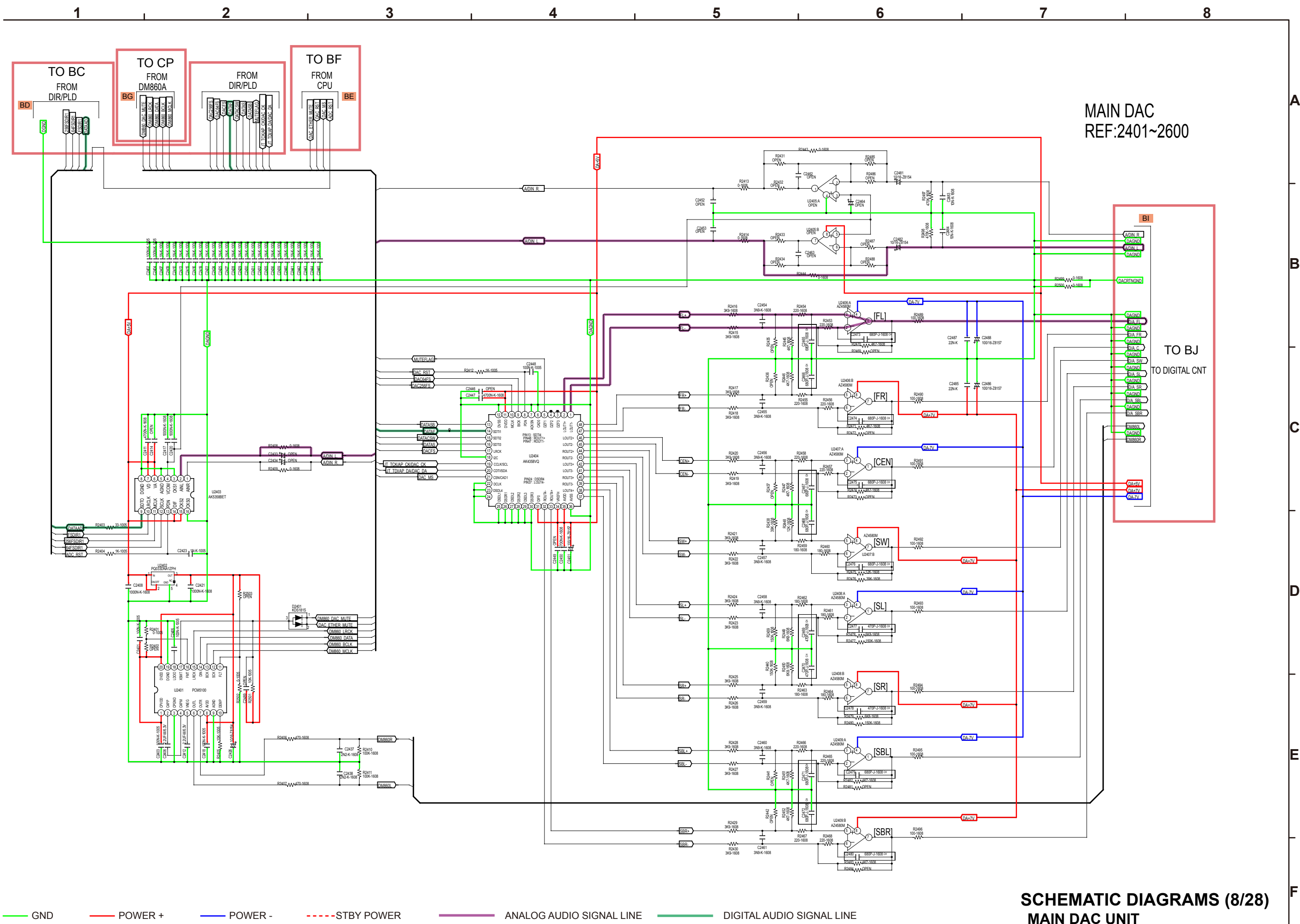




DSP  
REF:2001~2200

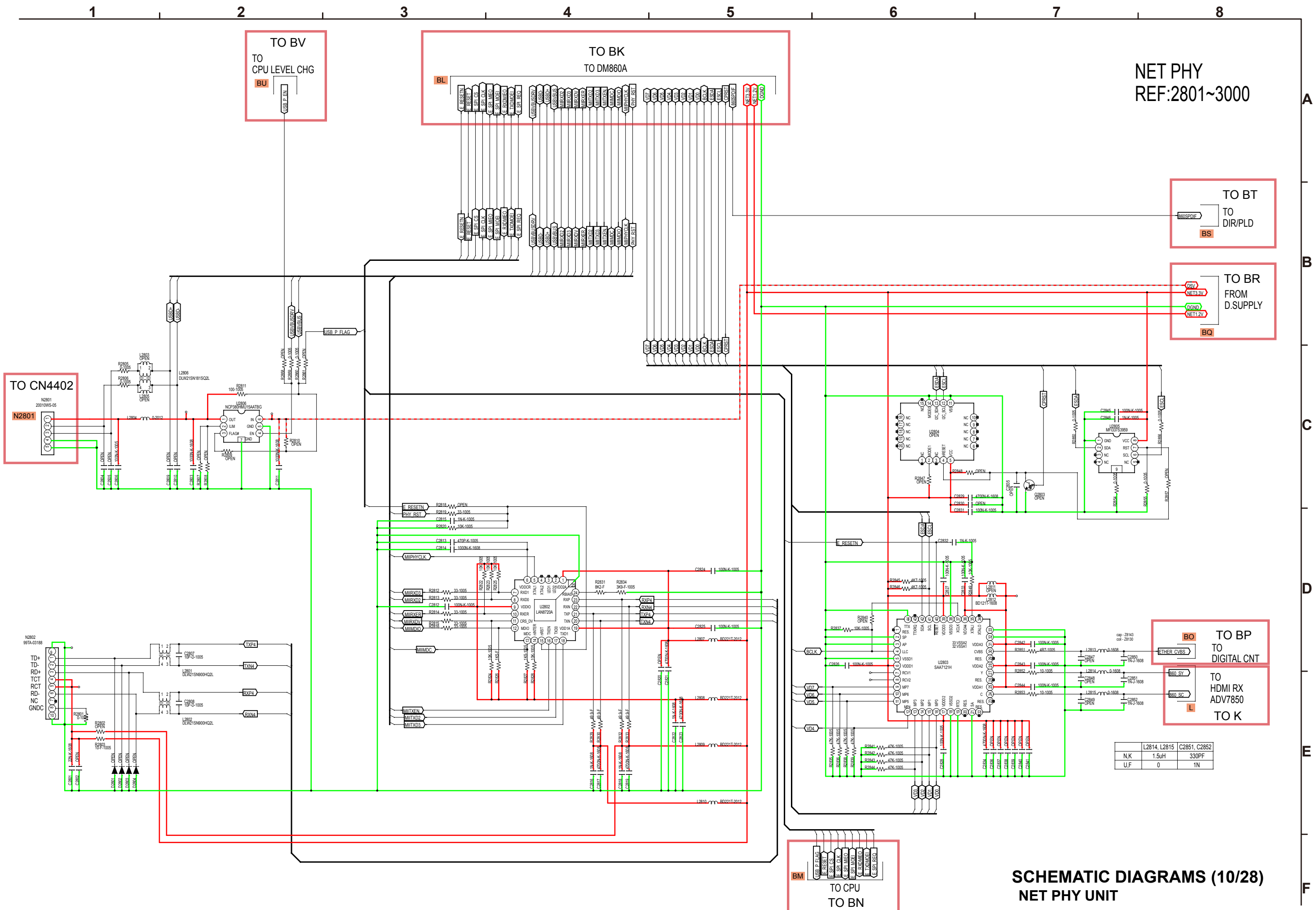
SCHEMATIC DIAGRAMS (6/28)  
DSP UNIT



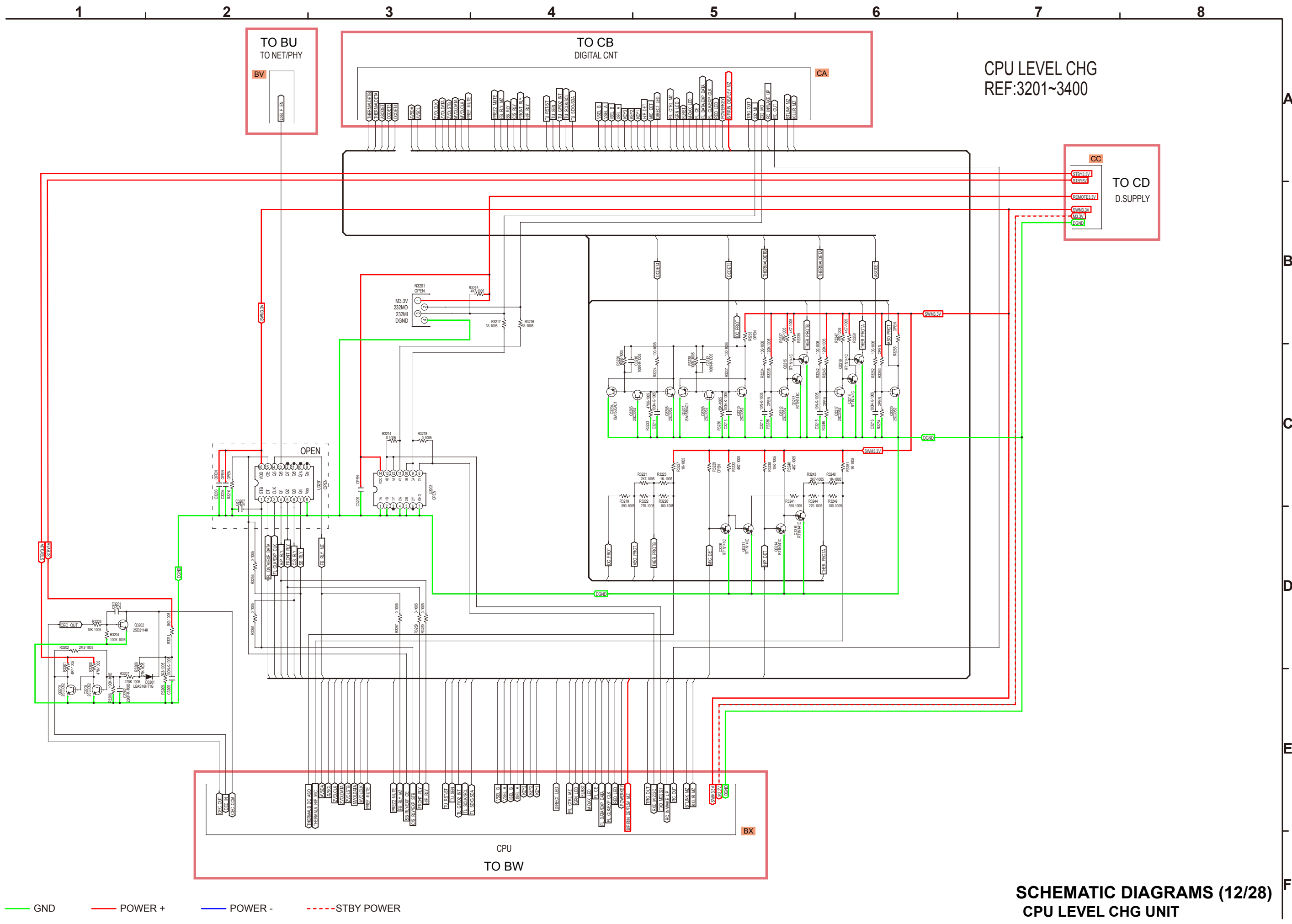












**SCHEMATIC DIAGRAMS (12/28)**  
**CPU LEVEL CHG UNIT**

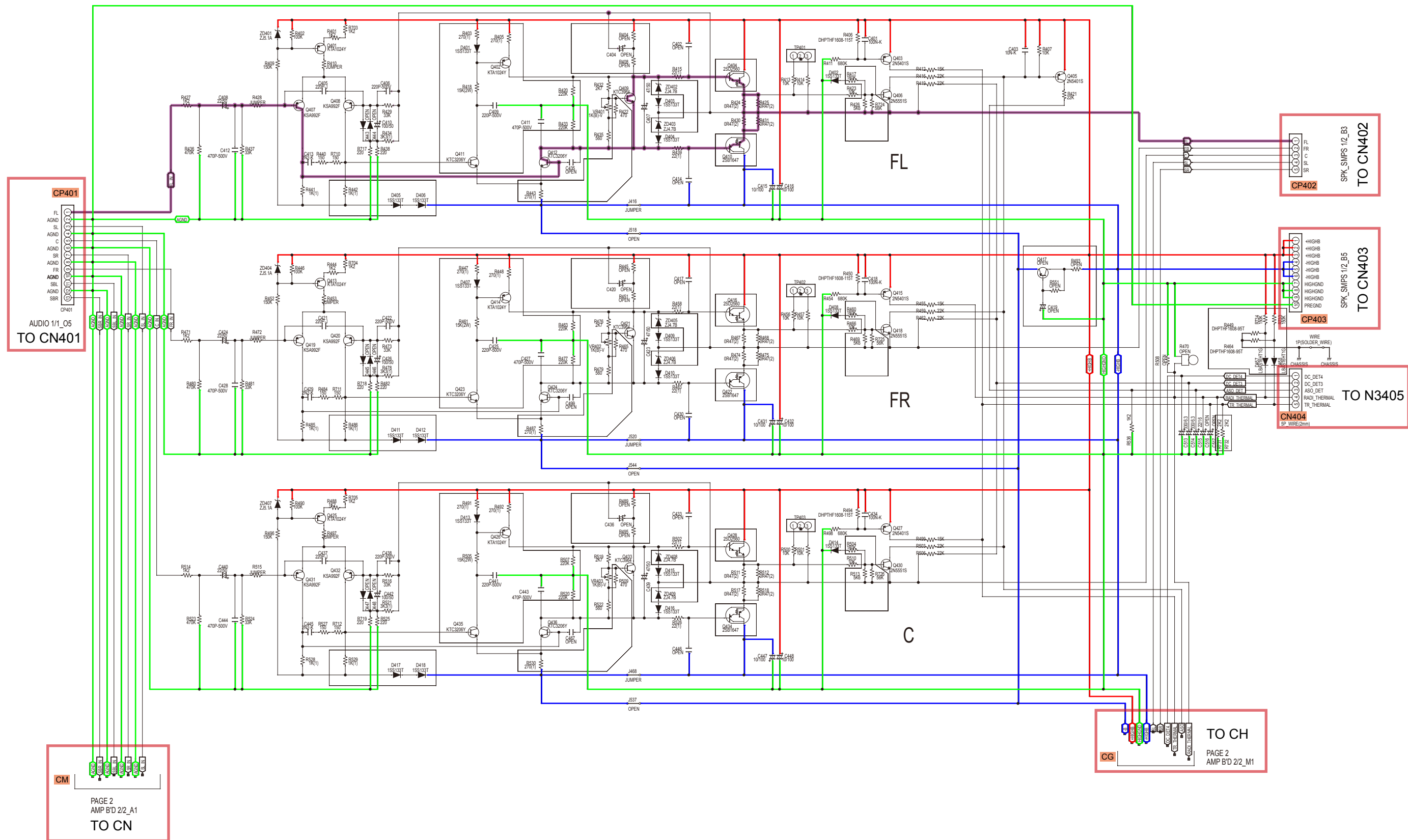






AMP B'D 1/2

PAGE 1

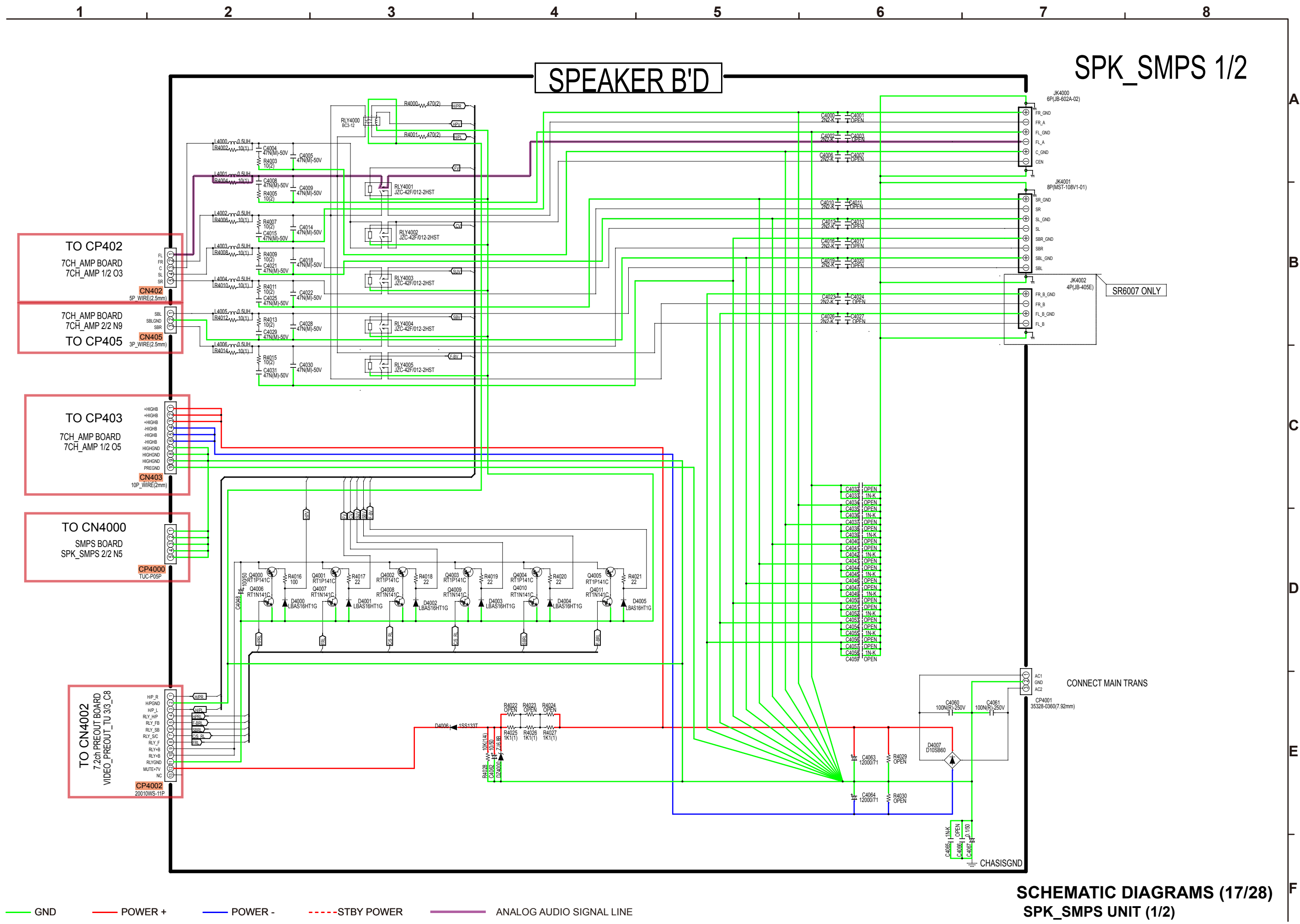




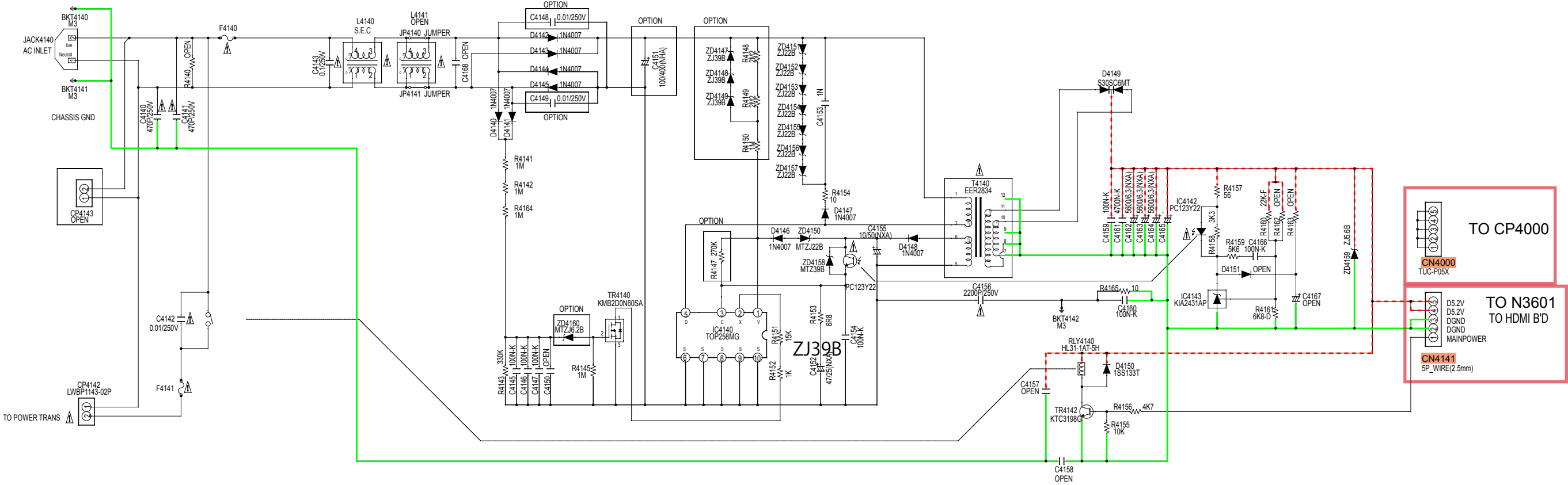
## SCHEMATIC DIAGRAMS (16/28)

### 7CH-AMP UNIT (2/2)

146



SMPS B'D



| FUSE OPTION |        |                |       |       |
|-------------|--------|----------------|-------|-------|
|             | U1B/FB | N1SG, N1B, K1B |       |       |
|             | F4140  | F4141          | F4140 | F4141 |
| SR6007      | 2A     | 6.3A           | 1.6A  | 3.15A |

| OPTION TABLE | ZD4160   | ZD4147 | ZD4148 | ZD4149 | R4148   | R4149   | R4150  | R4147 | C4148 | C4149 | C4151   |
|--------------|----------|--------|--------|--------|---------|---------|--------|-------|-------|-------|---------|
| U model      | MTZJ6.2B | ZJ39B  | ZJ39B  | ZJ39B  | 2M2 (5) | 2M2 (5) | 1M (5) | 270K  | OPEN  | OPEN  | 100/200 |
| N,K model    | MTZJ16B  | OPEN   | OPEN   | OPEN   | OPEN    | OPEN    | OPEN   | 56K   | 0.01  | 0.01  | 100/400 |
| F model      | MTZJ5.6B | ZJ39B  | ZJ39B  | ZJ39B  | 2M2 (5) | 2M2 (5) | 1M (5) | 270K  | OPEN  | OPEN  | 100/200 |

|                   |     |
|-------------------|-----|
|                   | ALL |
| T4140 SHIELD CASE | 0   |

⚠ INDICATES SAFETY CRITICAL COMPONENTS.  
TO REDUCE THE RISK OF ELECTRIC SHOCK, LEAKAGE  
CURRENT OR RESISTANCE MEASUREMENTS SHALL BE  
CARRIED OUT ( EXPOSED PARTS ARE ACCEPTABLY  
INSULATED FROM THE SUPPLY CIRCUIT ) BEFORE  
THE APPLIANCE RETURNED TO THE CUSTOMER.

GND

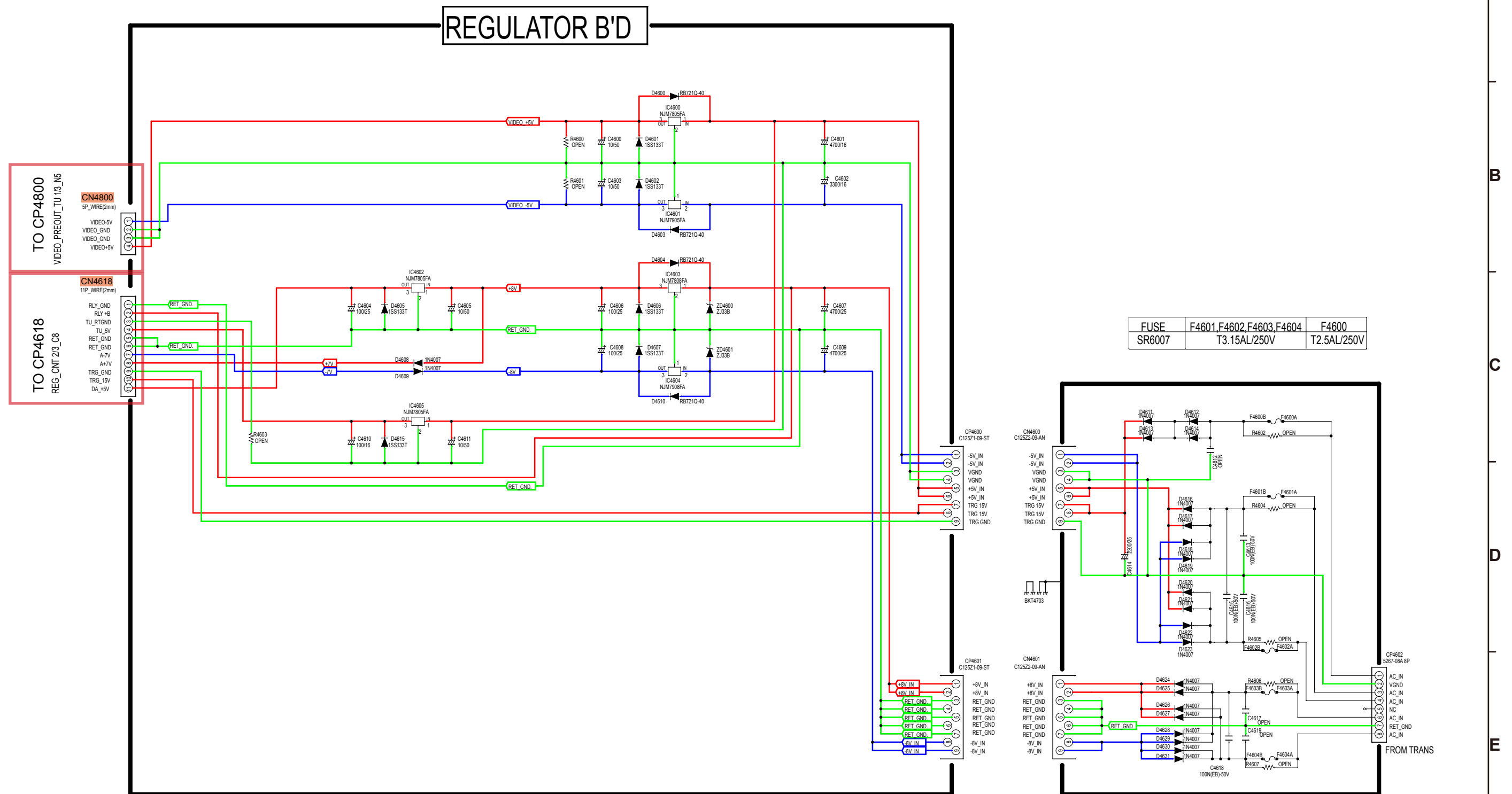
POWER +

POWER -

STBY POWER

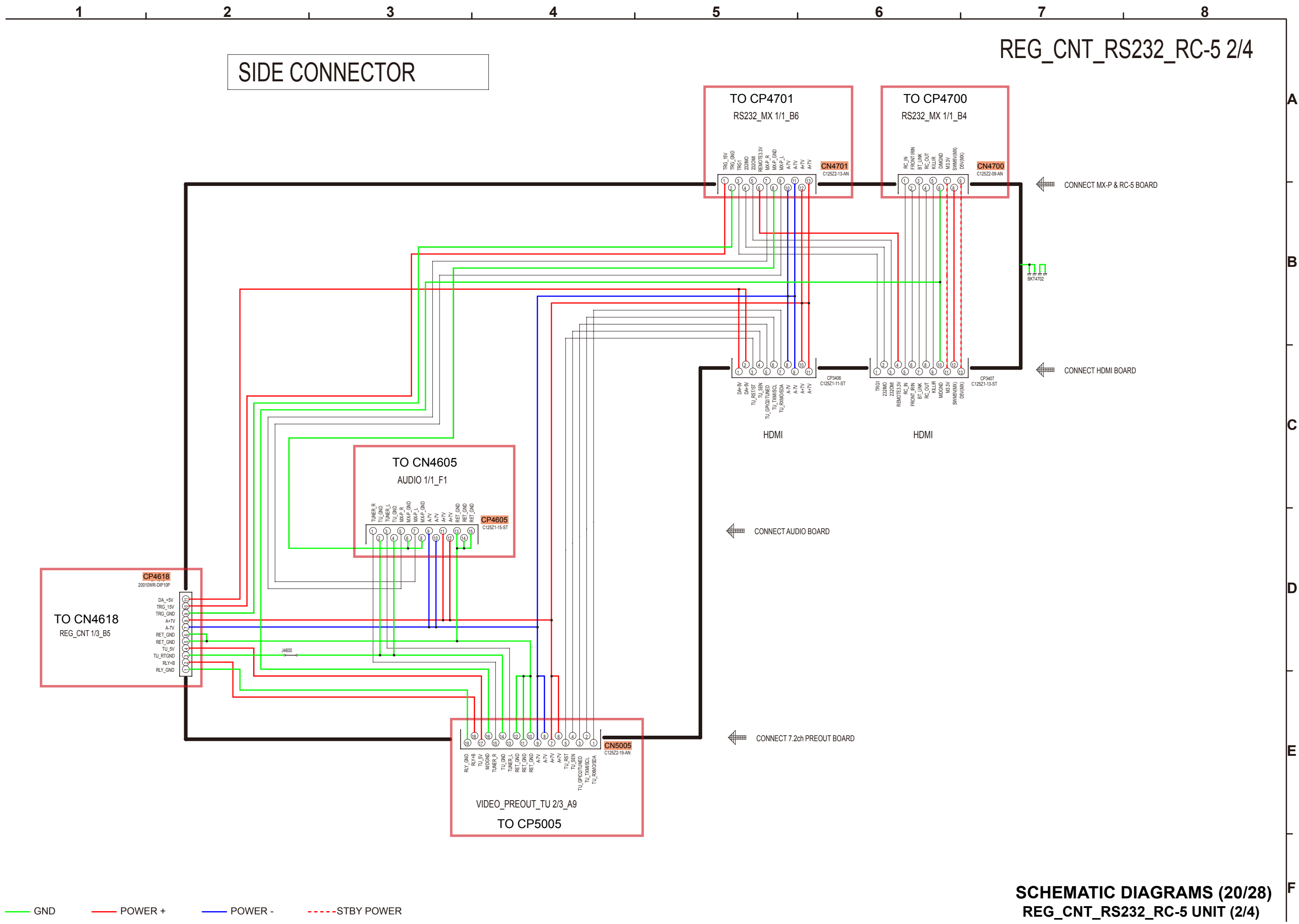


# REG\_CNT\_RS232\_RC-5 1/4

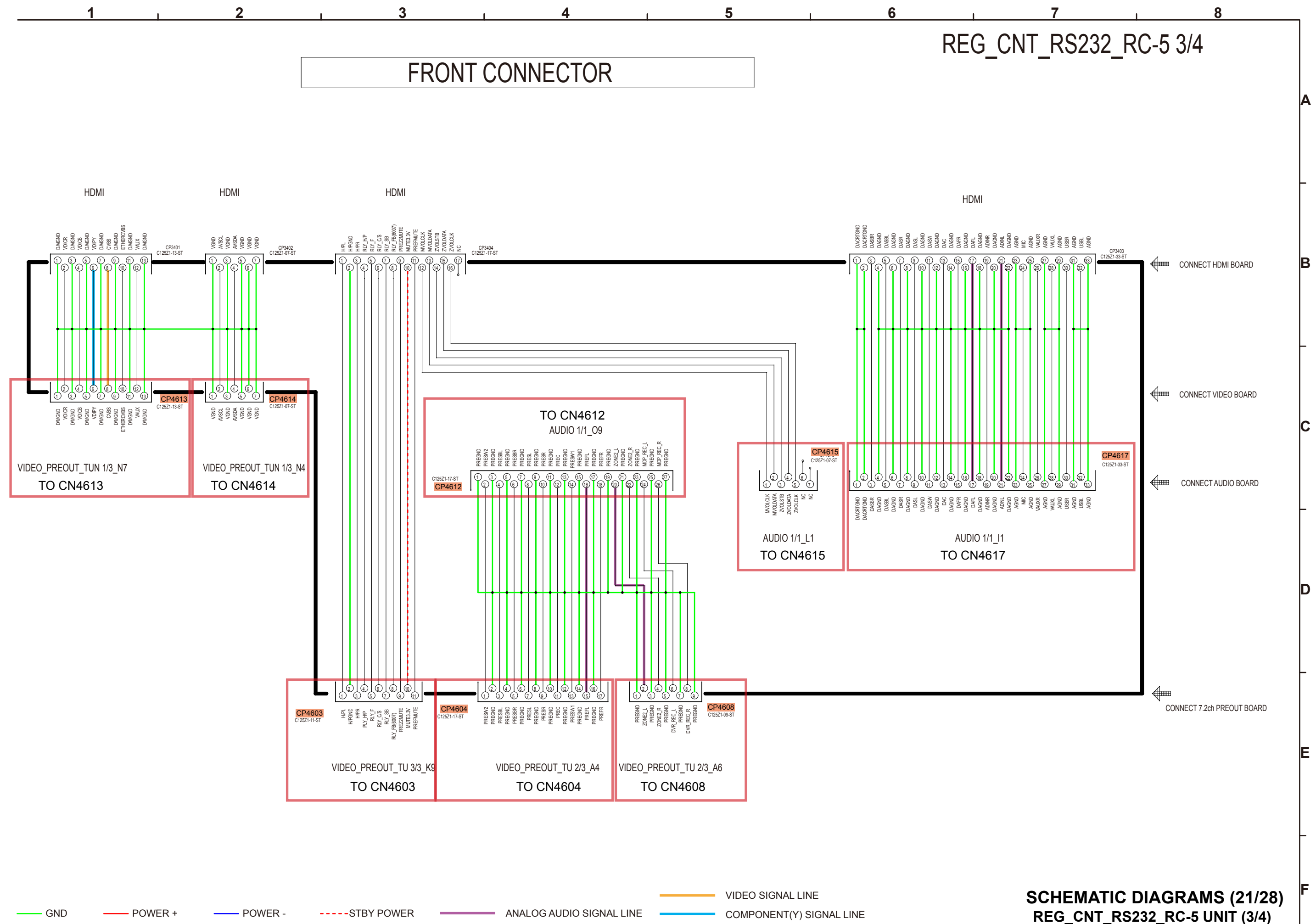


— GND — POWER + — POWER - - - - STBY POWER

**SCHEMATIC DIAGRAMS (19/28)**  
**REG\_CNT\_RS232\_RC-5 UNIT (1/4)**



**SCHEMATIC DIAGRAMS (20/28)**  
**REG\_CNT\_RS232\_RC-5 UNIT (2/4)**

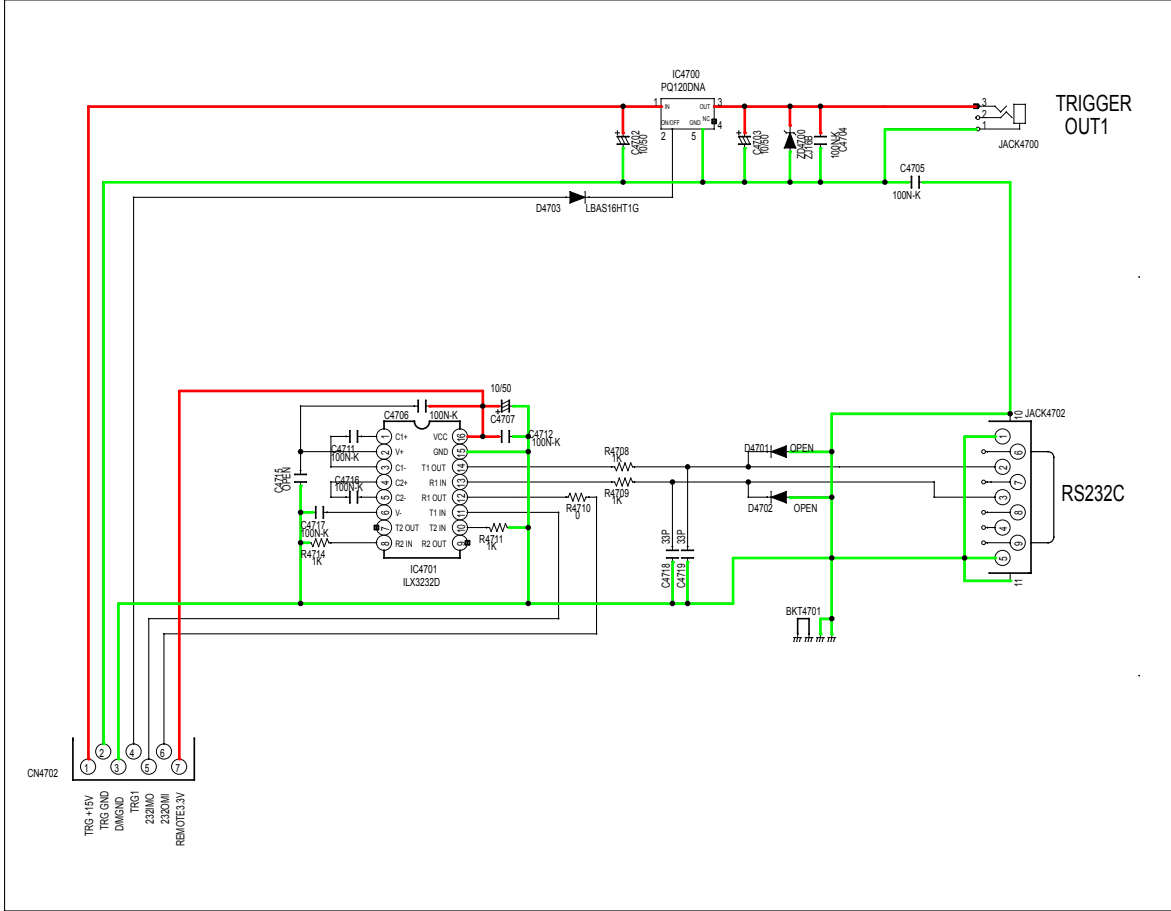
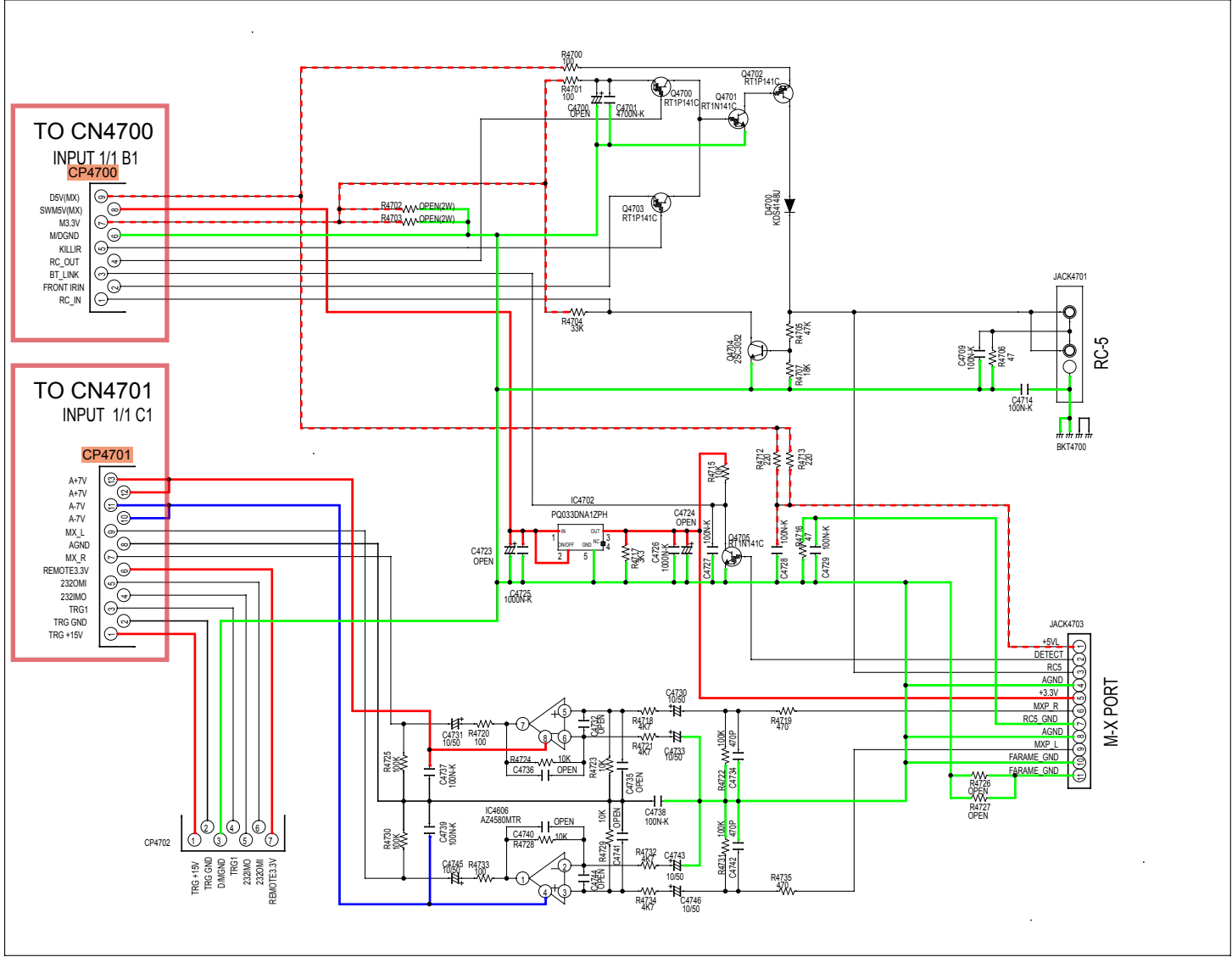


**SCHEMATIC DIAGRAMS (21/28)**  
**REG\_CNT\_RS232\_RC-5 UNIT (3/4)**

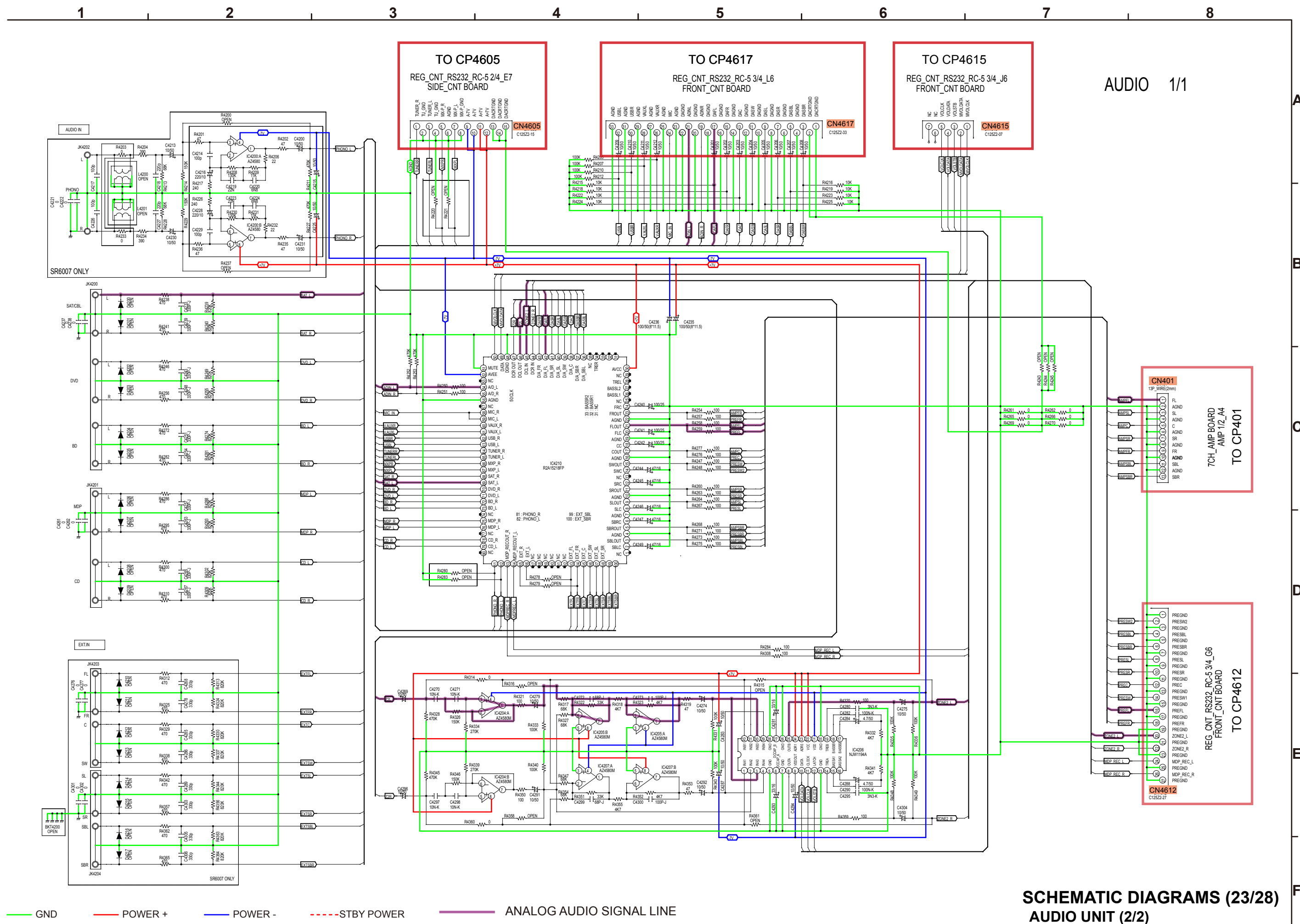


RC-5 / M-X PRAT

RS232 / TRI PART



— GND — POWER + — POWER - - - - STBY POWER

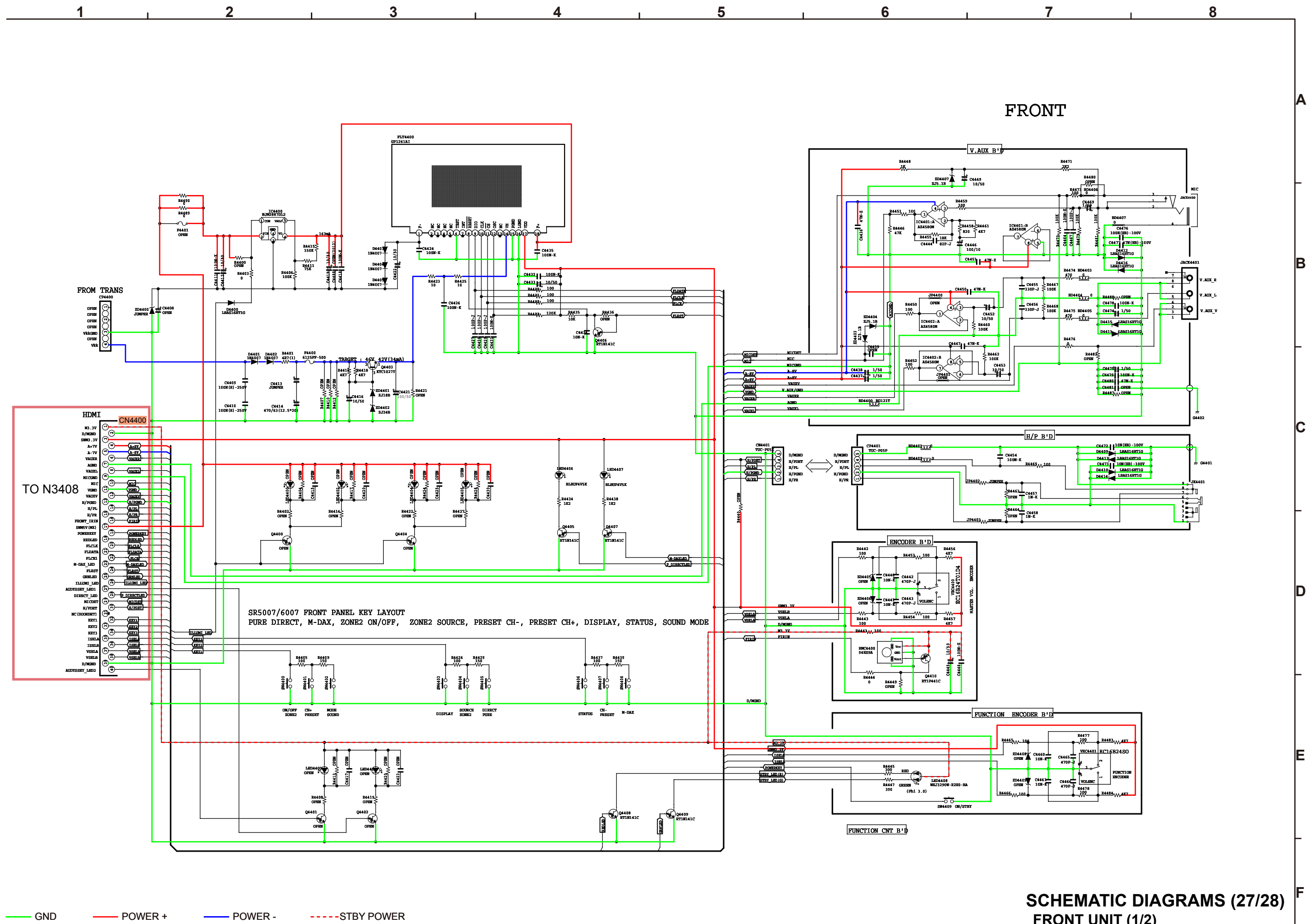


**SCHEMATIC DIAGRAMS (23/28)**  
**AUDIO UNIT (2/2)**

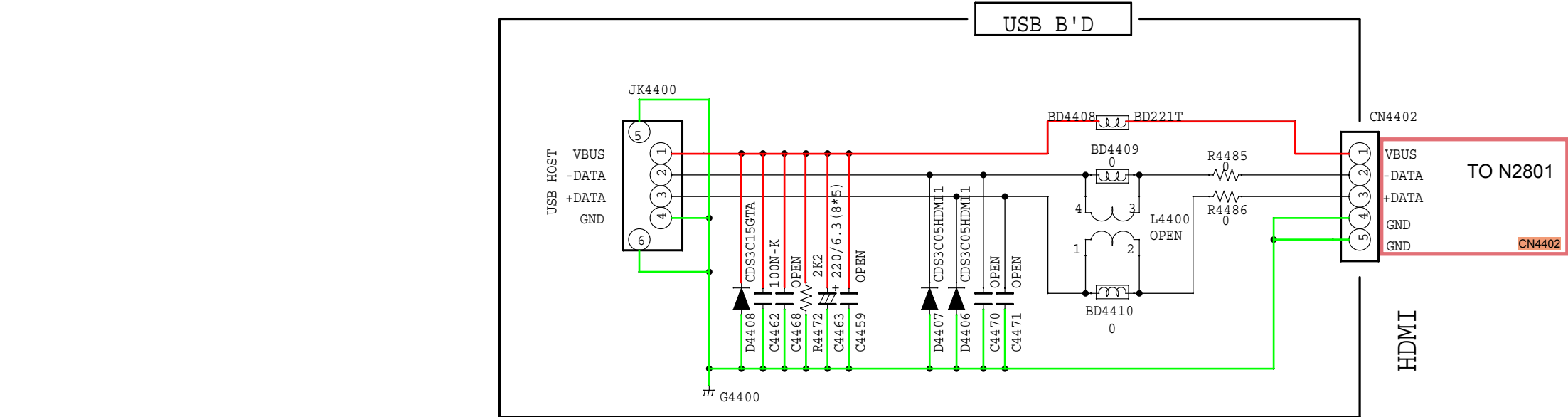






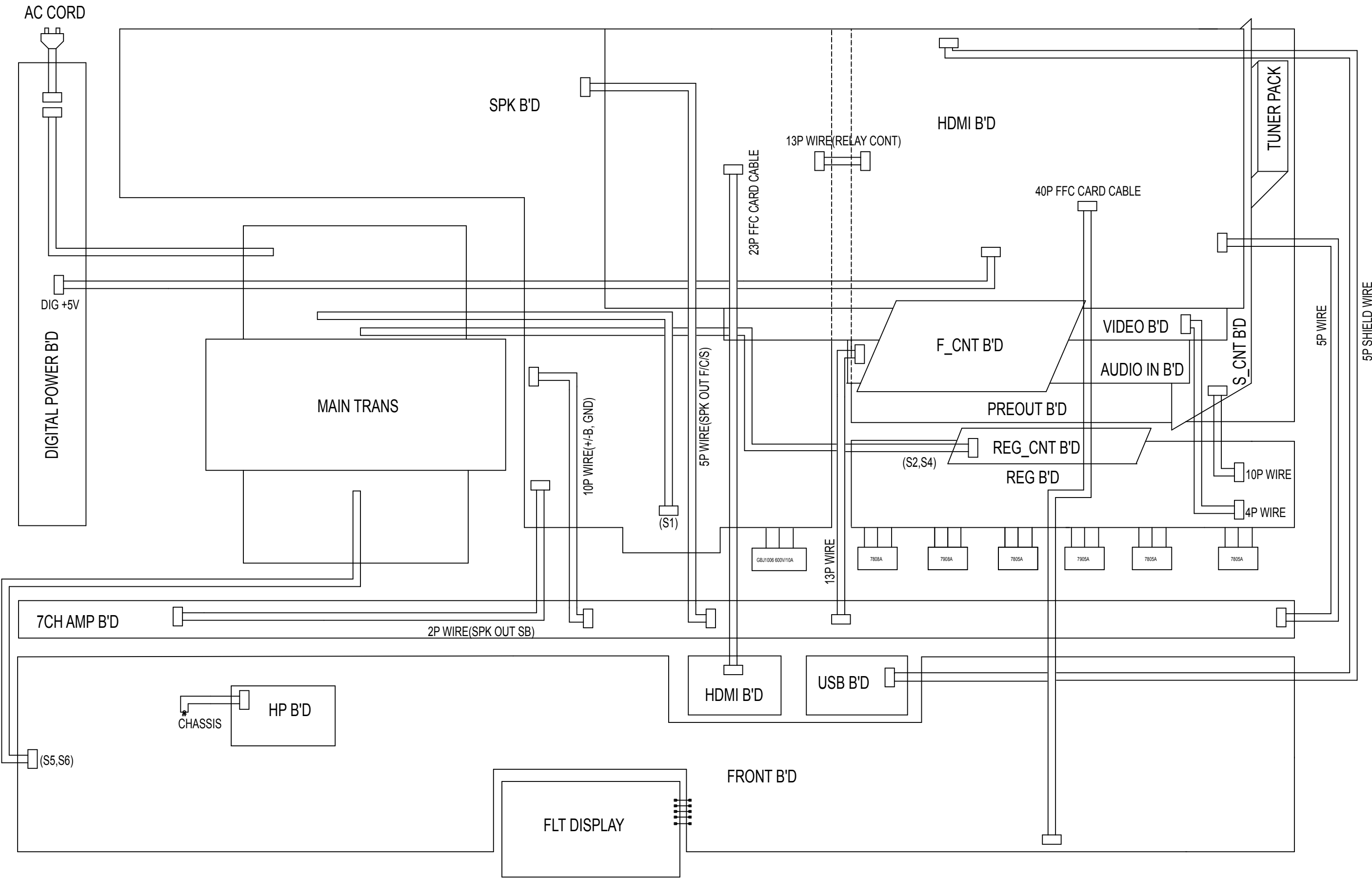






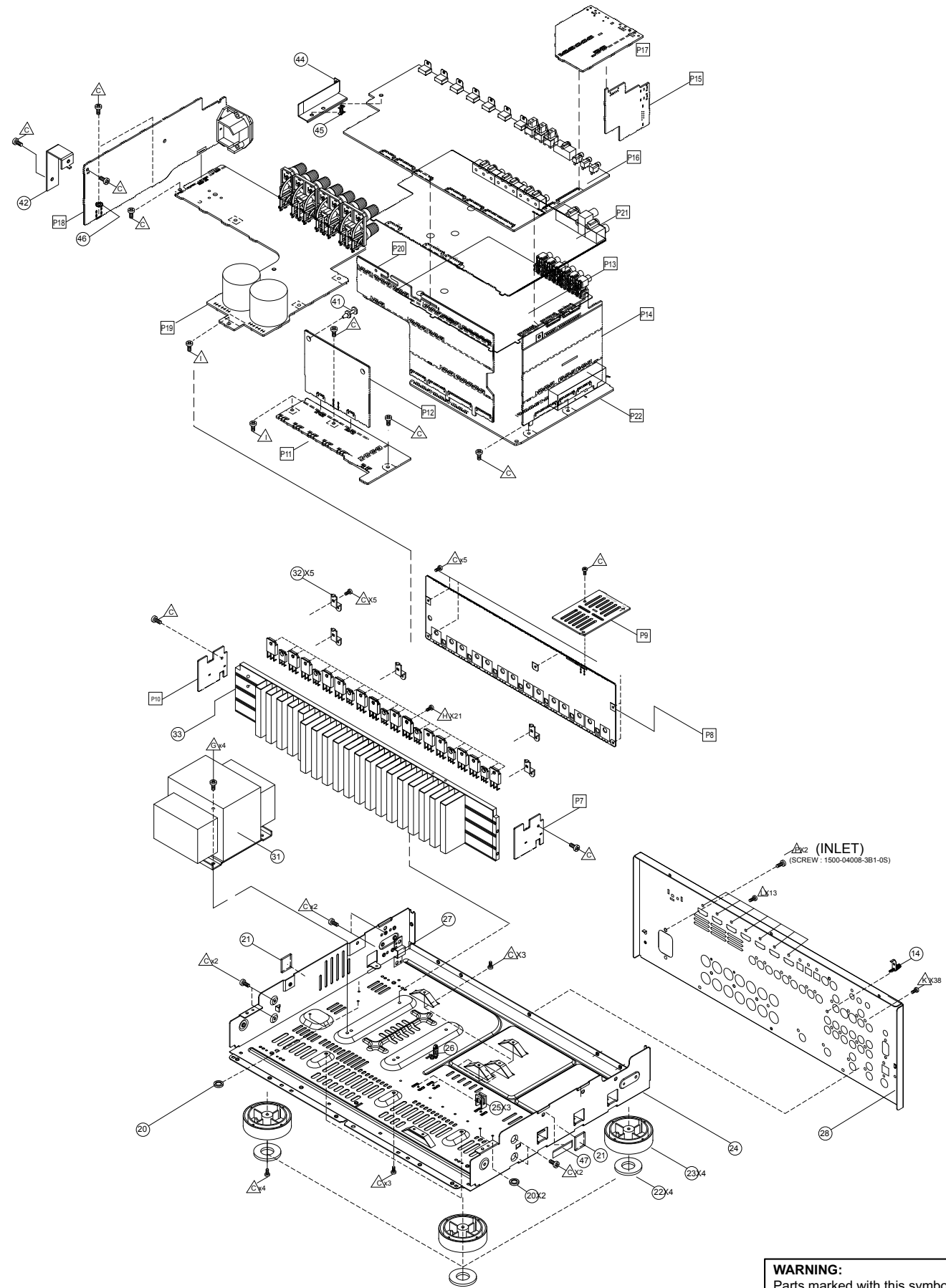
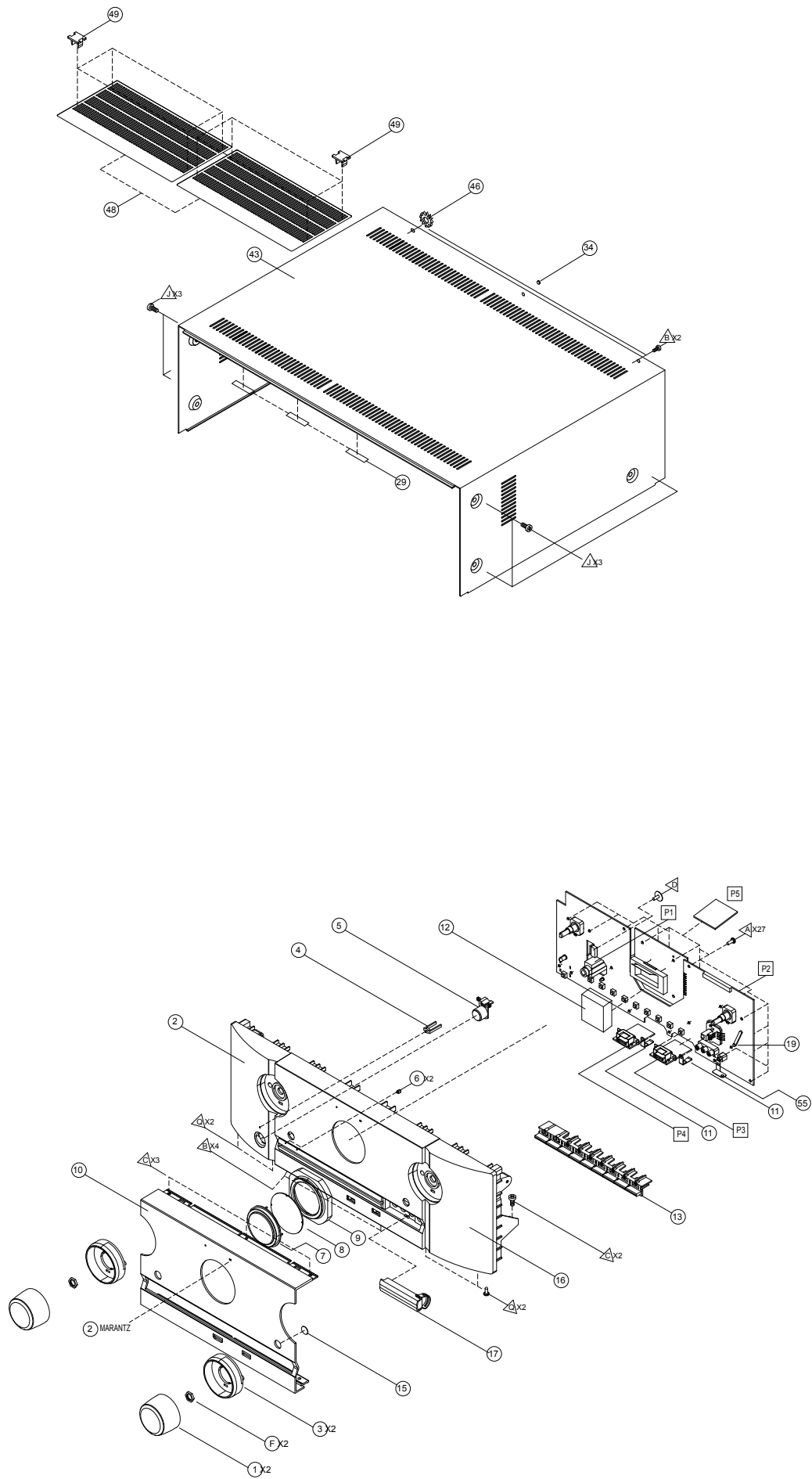
GND POWER + POWER - STBY POWER

WIRING DIAGRAM





## EXPLODED VIEW



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

## PARTS LIST OF EXPLODED VIEW

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

\*PCB ASS'Y indicated by "nsp" on this table cannot be supplied. When repairing the PCB ASS'Y, check the board parts list and order replacement parts.

\*Parts indicated by the "★" mark are not illustrated in the exploded view.

\*The parts listed below are only for maintenance. Therefore they might differ from the parts used in the unit in appearances or dimensions.

NOTE: The symbols in the column "Remarks" indicate the following destinations.

U1B : U.S.A. & Canada model

N1B : Europe model

K1B : China model

B : Black model

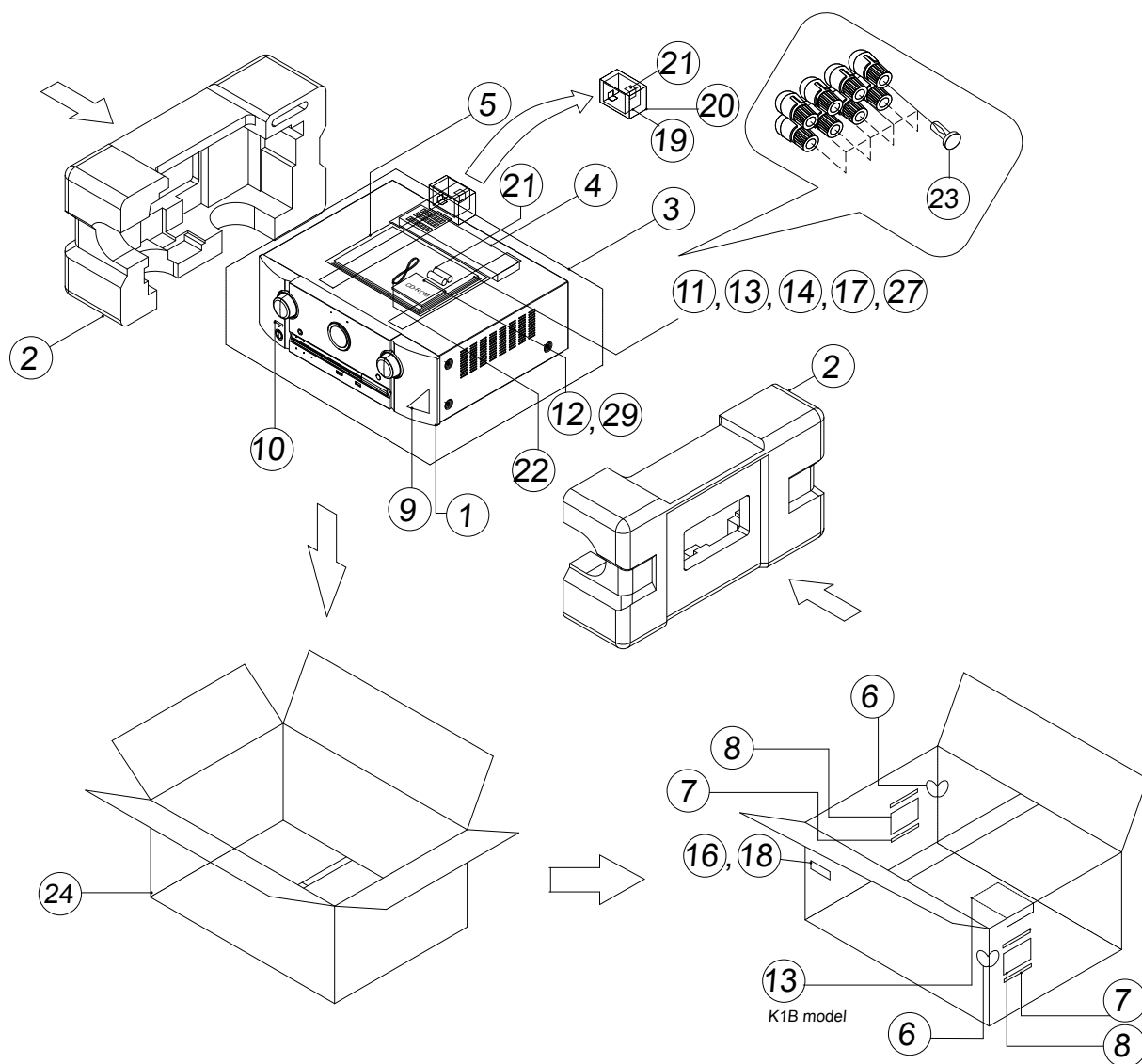
SG : Silver gold model

| Ref. No. | Part No.      | Part Name                  | Remarks |                 | Q'ty | New |
|----------|---------------|----------------------------|---------|-----------------|------|-----|
| P1A      | nsp           | FRONT PCB UNIT ASS'Y       |         | 7025HK1116023   | 1    |     |
| P1       | -             | PCB H/P                    |         | -               |      |     |
| P2       | -             | PCB FRONT                  |         | -               |      |     |
| P3       | -             | PCB USB                    |         | -               |      |     |
| P5       | -             | PCB HDMI GUIDE             |         | -               |      |     |
| P7       | -             | PCB GUIDE R                |         | -               |      |     |
| P9       | -             | PCB TOP GUIDE              |         | -               |      |     |
| P10      | -             | PCB GUIDE L                |         | -               |      |     |
| P8       | nsp           | 7CH_AMP PCB UNIT ASS'Y     | U       | 7025HK1116010   | 1    |     |
| P8       | nsp           | 7CH_AMP PCB UNIT ASS'Y     | N,K     | 7025HK1116020   | 1    |     |
| P11A     | nsp           | R232 PCB UNIT ASS'Y        |         | 7025HK1116022   | 1    | *   |
| P11      | -             | PCB REG.                   |         | -               |      |     |
| P12      | -             | PCB REG_CNT                |         | -               |      |     |
| P14      | -             | PCB SIDE_CNT               |         | -               |      |     |
| P15      | -             | PCB RS232C                 |         | -               |      |     |
| P17      | -             | PCB RC5_MXPORT             |         | -               |      |     |
| P20      | -             | PCB FRONT_CNT              |         | -               |      |     |
| P13      | nsp           | AUDIO PCB UNIT ASS'Y       |         | 7025HK1116024   | 1    | *   |
| P16A     | 8U6391002900M | HDMI PCB UNIT ASS'Y        | U       | 7025HK1116016   | 1    | *   |
| P16A     | 8U6391003600M | HDMI PCB UNIT ASS'Y        | N       | 7025HK1116026   | 1    | *   |
| P16A     | 8U6391005500M | HDMI PCB UNIT ASS'Y        | K       | 7025HK1116056   | 1    | *   |
| P4       | -             | PCB F HDMI                 |         | -               |      |     |
| P16      | -             | PCB HDMI                   |         | -               |      |     |
| P18A     | nsp           | SPK PCB UNIT ASS'Y         |         | 7025HK1116021   | 1    | *   |
| P18      | -             | PCB SMPS                   |         | -               |      |     |
| P19      | -             | PCB SPK                    |         | -               |      |     |
| P21A     | nsp           | VPT PCB UNIT ASS'Y         |         | 7025HK1116025   | 1    | *   |
| P21      | -             | PCB VIDEO                  |         | -               |      |     |
| P22      | -             | PCB PREOUT                 |         | -               |      |     |
| 1        | 412410005014M | KNOB ASSY VOLUME           | B       | 5088212398000SZ | 2    |     |
| 1        | 943412002020M | KNOB ASSY VOLUME           | SG      | 5088212398010SZ | 2    |     |
| 2        | 963421006200M | BADGE(MARANTZ) SILVER/GRAY |         | 5630210678000S  | 1    |     |
| 3        | 424510002017M | DECORATION,RING KNOB       | B       | 5120210971000S  | 2    |     |
| 3        | 943424002030M | DECORATION,RING KNOB       | SG      | 5127210971100S  | 2    |     |
| 4        | 00M10BW355010 | LENS POWER                 |         | 3710211083000S  | 1    |     |
| 5        | 411510021005M | BUTTON POWER               | B       | 5090213961000S  | 1    |     |
| 5        | 943411001970M | BUTTON POWER               | SG      | 5097213961100S  | 1    |     |

|   | Ref. No. | Part No.      | Part Name                                           | Remarks                                |                 | Q'ty | New |
|---|----------|---------------|-----------------------------------------------------|----------------------------------------|-----------------|------|-----|
|   | 6        | 943423100290M | LENS BUTTON                                         |                                        | 3710211183000S  | 2    |     |
|   | 7        | 416510046009M | WINDOW CENTER SR7005 A332                           |                                        | 5070213183000S  | 1    |     |
|   | 8        | 416510047101M | WINDOW FILTER SR7005 A332                           |                                        | 1217211562000S  | 1    |     |
|   | 9        | 943424100250M | HOLDER WINDOW                                       | U1B,N1B,K1B                            | 4320211091000S  | 1    |     |
|   | 9        | 943424100260M | HOLDER WINDOW                                       | N1SG                                   | 4320211091100S  | 1    |     |
|   | 10       | 963402102560M | PANEL,FRONT                                         | U1B                                    | 3067215688000S  | 1    | *   |
|   | 10       | 963402102570M | PANEL,FRONT                                         | N1B,K1B                                | 3067215688030S  | 1    | *   |
|   | 10       | 963402102580M | PANEL,FRONT                                         | N1SG                                   | 3067215688010S  | 1    | *   |
|   | 11       | nsp           | PLATE,SR6007U1B SPTE t0.3/ GND H                    |                                        | 4470212526000S  | 2    | *   |
|   | 12       | nsp           | CUSHION,FRONT FFC                                   |                                        | 4050214335000S  | 1    |     |
|   | 13       | 943411101410M | BUTTON 9KEY                                         | B                                      | 50972147111000S | 1    |     |
|   | 13       | 943411101420M | BUTTON 9KEY                                         | SG                                     | 50972147111100S | 1    |     |
|   | 14       | 00D9600183807 | TERMINAL                                            |                                        | 3790000090000S  | 1    |     |
|   | 15       | 481510019100M | LENS IR BL SR7005 A332                              | U1B,N1B,K1B                            | 3710211173000S  | 1    |     |
|   | 15       | 481510019131M | LENS,REMOCON                                        | N1SG                                   | 3710211173100S  | 1    |     |
|   | 16       | 963402102590M | PANEL,FRAME                                         | B                                      | 3067215671000S  | 1    | *   |
|   | 16       | 963402102600M | PANEL,FRAME                                         | SG                                     | 3067215671200S  | 1    | *   |
|   | 17       | 943419100320M | COVER ASSY                                          | B                                      | 4318215411010   | 1    |     |
|   | 17       | 943419100330M | COVER ASSY                                          | SG                                     | 4318215411110   | 1    |     |
|   | 19       | nsp           | CLAMP                                               |                                        | 4330000310000S  | 1    |     |
|   | 20       | nsp           | CUSHION SCREW                                       |                                        | 4050213025000S  | 3    |     |
|   | 21       | nsp           | CUSHION SIDE                                        |                                        | 4050213095000S  | 2    |     |
|   | 22       | 90M46BW056010 | CUSHION FOOT                                        |                                        | 4050211175000S  | 4    |     |
|   | 23       | 00M46BW057210 | FOOT FRONT                                          |                                        | 4007210321000S  | 4    |     |
|   | 24       | nsp           | CHASSIS,MAIN                                        |                                        | 3200213506700S  | 1    |     |
|   | 25       | nsp           | SUPPORTER P.C.                                      |                                        | 4070001601010S  | 3    |     |
|   | 26       | nsp           | SUPPORTER P.C.                                      |                                        | 4070210192000S  | 1    |     |
|   | 27       | nsp           | SIDE BRACKET                                        |                                        | 4010210686000S  | 1    |     |
|   | 28       | nsp           | CHASSIS,BACK                                        | U1B                                    | 3207214256300S  | 1    | *   |
|   | 28       | nsp           | CHASSIS,BACK                                        | N1B,N1SG                               | 3207214256310S  | 1    | *   |
|   | 28       | nsp           | CHASSIS,BACK                                        | K1B                                    | 3207214256320S  | 1    | *   |
|   | 29       | nsp           | CABINET SHEET                                       |                                        | 1210210235000S  | 3    |     |
| ⚠ | 31       | 963101101600S | POWER TRANS                                         | U1B                                    | 8200960660810S  | 1    |     |
| ⚠ | 31       | 963101101610S | POWER TRANS                                         | N1B,N1SG                               | 8200960660820S  | 1    |     |
| ⚠ | 31       | 963101101620S | POWER TRANS                                         | K1B                                    | 8200960660830S  | 1    |     |
|   | 32       | nsp           | BRACKET HEAT SINK                                   |                                        | 4010056906010S  | 5    |     |
|   | 33       | nsp           | HEAT SINK                                           |                                        | 2120212048000S  | 1    |     |
|   | 34       | nsp           | MASK                                                |                                        | 1210211362000S  | 1    |     |
|   | 41       | nsp           | SPACER CARD                                         |                                        | 4300210062000S  | 1    |     |
|   | 42       | nsp           | SMPS BRACKET                                        |                                        | 401021488600DS  | 1    |     |
|   | 43       | 963403100020S | CABINET TOP                                         | B                                      | 3007211916000S  | 1    |     |
|   | 43       | 963403100480S | CABINET TOP                                         | SG                                     | 3007211916010S  | 1    |     |
|   | 44       | nsp           | BRACKET HDMI                                        |                                        | 4010215226000S  | 1    |     |
|   | 45       | nsp           | SUPPORTER(4.8mm)                                    |                                        | 4070211653000S  | 1    |     |
|   | 46       | nsp           | TOOTHED WASHER                                      |                                        | 1530210126000S  | 2    |     |
|   | 47       | nsp           | TAPE,ACETATE CLOTH                                  |                                        | 1220210059010S  | 1    |     |
|   | 48       | 943419100250D | COVER,SAFETY                                        | N1B,K1B                                | 4310215731000S  | 2    |     |
|   | 48       | 943419100260D | COVER,SAFETY                                        | N1SG                                   | 4310215731100S  | 2    |     |
|   | 49       | 45451000500AM | COVER,HOLDER                                        | N1B,K1B                                | 4310215741000S  | 8    |     |
|   | 49       | 45451000501AM | COVER,HOLDER                                        | N1SG                                   | 4310215741100S  | 8    |     |
|   | ★ 51     | nsp           | CLAMP CABLE                                         | N1B                                    | 4330040343010S  | 5    |     |
|   | ★ 52     | 963219003340S | TR 2SC KTC3964/TO126S-BULK<br>(MAIN HEAT SINK TR-2) | Q409,Q421,Q433,Q4<br>45,Q457,Q469,Q481 | J502396400010S  | 1    |     |

|               | Ref. No. | Part No.      | Part Name                               | Remarks                            |                | Q'ty | New |
|---------------|----------|---------------|-----------------------------------------|------------------------------------|----------------|------|-----|
|               | ★ 53     | 00D9630235301 | TR 2SD2560Y                             | Q404,Q416,Q428,Q440,Q452,Q464,Q476 | J5032560Y0170S | 1    |     |
|               | ★ 54     | 00D9630235204 | TR 2SB1647Y                             | Q410,Q422,Q434,Q446,Q458,Q470,Q482 | J5011647Y0170S | 1    |     |
|               | 55       | nsp           | PLATE AUX                               |                                    | 4470212636000S | 1    | *   |
|               |          |               |                                         |                                    |                |      |     |
|               |          |               |                                         |                                    |                |      |     |
| <b>SCREWS</b> |          |               |                                         |                                    |                |      |     |
|               | A        | nsp           | SCREW +2S 3X10 B-TYPE ZNW/BH)           |                                    | B020030101B10S | 27   |     |
|               | B        | nsp           | SCREW +2S 3*8 B-TYPE(DOT) BK/BH         | B                                  | B020030083B11S | 6    |     |
|               | B        | nsp           | SCREW +2S 3*8 B-TYPE(DOT) NI/BH         | SG                                 | B020030084B12S | 6    |     |
|               | C        | nsp           | SCREW (+2S 3*8(ROUND BK/BH)             |                                    | B020230083B10S | 48   |     |
|               | D        | nsp           | SCREW +2S 3X8 ZnY WASHER PI12           |                                    | 1500001456010S | 1    |     |
|               | F        | nsp           | NUT                                     |                                    | -              | 2    |     |
|               | G        | nsp           | SCREW (+3S 4*10 P+S-WASHER(ROUND)BK/BH) |                                    | B028940101B11S | 4    |     |
|               | H        | nsp           | SCREW +2S 3X14 P(Φ6)+S-WASHER ZNY/HH    |                                    | B018230141H11D | 21   |     |
|               | I        | nsp           | SCREW (+2S 3*17 B-TYPE ZNW/BH)          |                                    | B020030171B10S | 3    |     |
|               | J        | nsp           | SCREW (+2S 4*8 B-TYPE(DOT) BK/BH)       | B                                  | 1500040083B10S | 6    |     |
|               | J        | nsp           | SCREW(+2S 4X8 NI/BH DOT)                | SG                                 | 1500040084B10S | 6    |     |
|               | K        | nsp           | SCREW +2S 3X10 B-TYPE(DOT) BK/BH        |                                    | B020030103B11S | 35   |     |
|               | L        | nsp           | SCREW (+3S 3*6 DOT BK/BH)               |                                    | B020930063B10S | 11   |     |
|               | P        | nsp           | SCREW (+2S 4*8 B-TYPE(DOT) BK/BH)       |                                    | 1500040083B10S | 2    |     |
|               | Q        | nsp           | SCREW (+2S 3*8(ROUND BK/BH)             | B                                  | B020230083B10S | 4    |     |
|               | Q        | nsp           | SCREW (+2S 3*8(ROUND NI/BH)             | SG                                 | B020030084B10S | 4    |     |
|               |          |               |                                         |                                    |                |      |     |
|               |          |               |                                         |                                    |                |      |     |
| <b>SCREWS</b> |          |               |                                         |                                    |                |      |     |
|               | ★ 101    | 963606501590S | CABLE,FLAT CARD 1.0MM 23P               |                                    | N711232912490S | 1    |     |
|               | ★ 102    | 963606501630S | CABLE,FLAT CARD 1.0MM,105C              |                                    | N711402612490S | 1    | *   |

## PACKING VIEW



## PARTS LIST OF PACKING & ACCESSORIES

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

\*Parts indicated by the "★" mark are not illustrated in the exploded view.

\*The parts listed below are only for maintenance. Therefore they might differ from the parts used in the unit in appearances or dimensions.

NOTE: The symbols in the column "Remarks" indicate the following destinations.

U1B : U.S.A. & Canada model

N1B : Europe model

K1B : China model

B : Black model

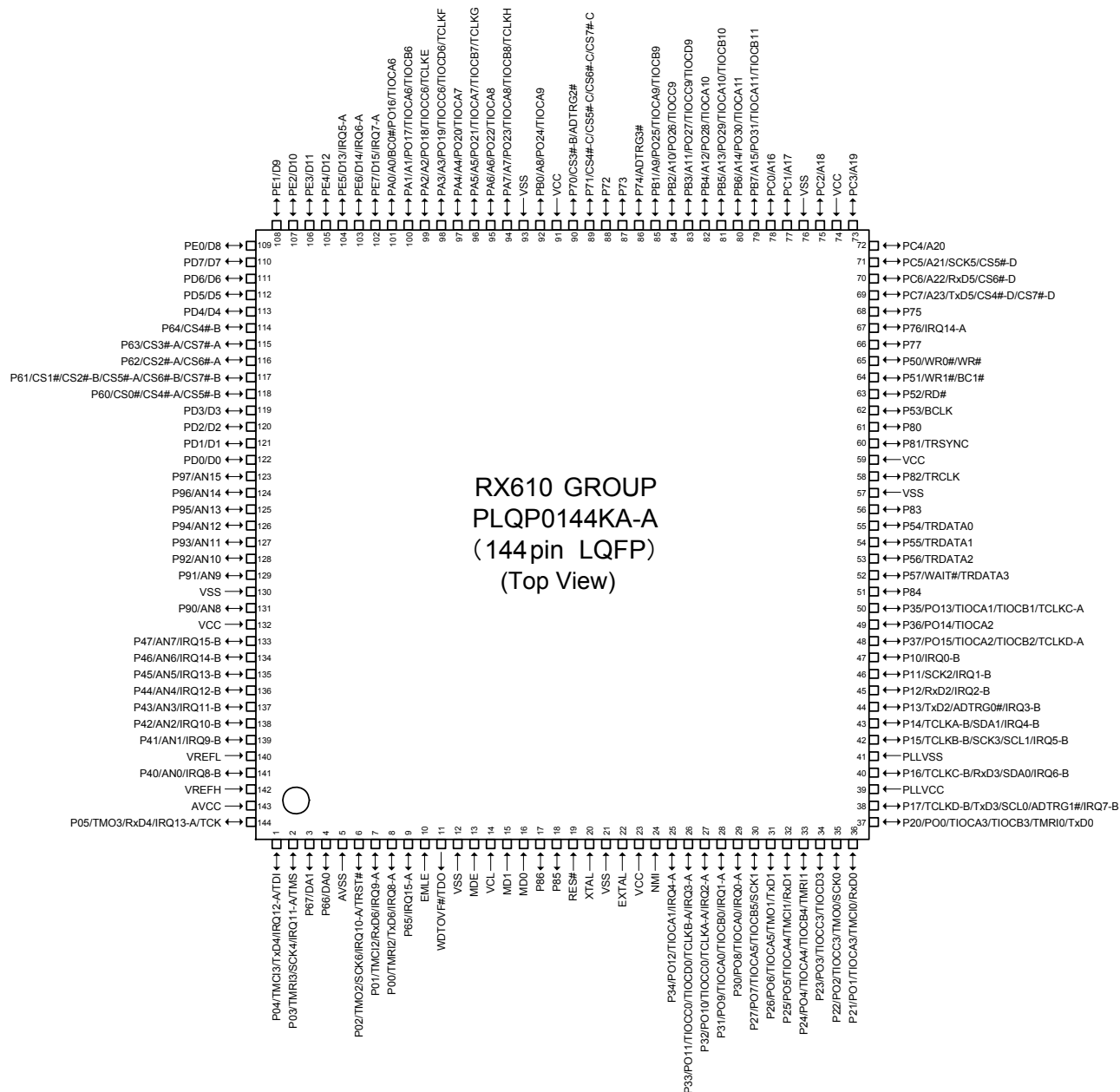
SG : Silver gold model

| Ref. No. | Part No.      | Part Name         | Remarks        | Q'ty            | New |
|----------|---------------|-------------------|----------------|-----------------|-----|
| 1        | -             | set               | -              | 1               | *   |
| 2        | 963533101180M | CUSHION,SNOW L/R  | 6230213214000S | 1               | *   |
| 3        | nsp           | PE SHEET          | 6327040059000S | 1               |     |
| 4        | 30701009900AM | REMOCON           | 8300017000010S | 1               |     |
| 5        | nsp           | POLY BAG          | 6337000240010S | 1               |     |
| 6        | nsp           | LABEL COLOR       | N1SG           | 5507000004600S  | 2   |
| 7        | nsp           | LABEL MAC ADDRESS |                | 55070000009710S | 3   |
| 8        | nsp           | SHIPPING LABEL    |                | 55000000007770S | 1   |
| 9        | nsp           | LABEL,POP         | U1B,N1B,N1SG   | 55070000009650S | 1   |

|   | Ref. No. | Part No.      | Part Name               | Remarks      |                | Q'ty | New |
|---|----------|---------------|-------------------------|--------------|----------------|------|-----|
|   | 9        | nsp           | LABEL,POP               | K1B          | 5507000010120S | 1    | *   |
|   | 10       | nsp           | LABEL(POWER S/W)        | K1B          | 5507000005270S | 1    |     |
|   | 11       | 54111079300AM | Quick Manual (U1B)      | U1B          | 5707000007200S | 2    | *   |
|   | 11       | 54111080400AM | Quick Manual (N1B/N1SG) | N1B, N1SG    | 5707000007210S | 1    | *   |
|   | 11       | 54111079600AM | Quick Manual (K1B)      | K1B          | 5707000007220S | 1    | *   |
|   | 12       | 35201009900AM | CD MANUAL (U1B)         | U1B          | 6517000000940S | 2    | *   |
|   | 12       | 35201010000AM | CD MANUAL 1 (N1B/N1SG)  | N1B, N1SG    | 6517000000950S | 1    | *   |
|   | 29       | 35201018400AM | CD MANUAL 2 (N1B/N1SG)  | N1B, N1SG    | 6517000001090S | 1    | *   |
|   | 12       | 35201010200AM | CD MANUAL (K1B)         | K1B          | 6517000000960S | 1    | *   |
|   | 13       | nsp           | WARRANTY CARD           | U1B          | 5727000000111S | 1    |     |
|   | 13       | nsp           | WARRANTY CARD           | K1B          | 5727000000300S | 1    |     |
|   | 14       | nsp           | CARD WARRANTY(CANADA)   | U1B          | 5727041650142S | 2    |     |
|   | 16       | nsp           | LAST FM LABEL           | N1B,N1SG     | 5507000009900S | 1    | *   |
|   | 17       | nsp           | CARD PASS               | K1B          | 5777000000020S | 1    |     |
|   | 18       | nsp           | SIRIUS XM LABEL         | U1B          | 5507000009890S | 2    | *   |
|   | 19       | 32401000800AD | SETUP MIC               |              | M040000310080S | 1    |     |
|   | 20       | nsp           | POLY BAG ACCESSORY      |              | 6330210222000S | 1    |     |
|   | 21       | nsp           | BATTERY DRY             |              | G670001R50240S | 2    |     |
|   | 22       | 963116100080S | ANTENNA WIRE (FM)       |              | E605010140010S | 1    |     |
|   | 23       | nsp           | BUSHING TERMINAL        | N1B,N1SG,K1B | 2410040353010S | 18   |     |
|   | 24       | 53121021300AM | BOX,GIFT                |              | 6007212160030S | 1    | *   |
| ⚠ | ★ 25     | 90M-ZC000470R | AC CORD                 | U1B          | L068125130010S | 2    |     |
| ⚠ | ★ 25     | 90M-ZC000600R | CORD ASSY               | N1B,N1SG     | L068250160020S | 1    |     |
| ⚠ | ★ 25     | 963611004880S | AC CORD                 | K1B          | L068250100050S | 1    |     |
|   | ★ 26     | nsp           | LABEL,LICENSE           |              | 5507000009670S | 1    |     |
|   | 27       | nsp           | SAFETY INSTRUCTION      | U1B          | 5227000007640S | 2    |     |
|   | 27       | nsp           | SAFETY INSTRUCTION      | N1B,N1SG     | 5227000007610S | 1    |     |
|   | 27       | nsp           | SAFETY INSTRUCTION      | K1B          | 5227000007620S | 1    |     |
|   | ★ 28     | 544510081006M | LABEL HOT-SURFACE       | U1B          | 5507000003730S | 2    |     |

Only major semiconductors are shown. General semiconductors etc. are omitted from list.  
The semiconductors which have a detailed drawing in a schematic diagram are omitted from list.

**R5F56108VNFP (HDMI : U3002)**



| Pin | Pin Name                   | Symbol   | I/O | Pull up/<br>down | LvCnv | STBY | STOP | CEC<br>STBY | Function                                                                                     |
|-----|----------------------------|----------|-----|------------------|-------|------|------|-------------|----------------------------------------------------------------------------------------------|
| 1   | P04/IRQ12-A/TMC13/TxD4/TDI | NC       | I   | M3VPu            | -     | I    | I    | I           | NC                                                                                           |
| 2   | P03/IRQ11-A/TMRI3/SCK4/TMS | NC       | I   | M3VPu            | -     | I    | I    | I           | NC                                                                                           |
| 3   | P67/DA1                    | HIN SELA | O   | -                | -     | L    | L    | L           | TC74VHC4051AFT control pin.<br>(Control the detection of HDMI 5V<br>INPUT for CEC STANDBY. ) |
| 4   | P66/DA0                    | HIN SELB | O   | -                | -     | L    | L    | L           | TC74VHC4051AFT control pin.<br>(Control the detection of HDMI 5V<br>INPUT for CEC STANDBY. ) |
| 5   | AVSS                       | AVSS     | -   | -                | -     | -    | -    | -           | GND                                                                                          |

| Pin | Pin Name                                      | Symbol                | I/O | Pull up/<br>down | LvCnv | STBY | STOP | CEC<br>STBY | Function                                                                                                                |
|-----|-----------------------------------------------|-----------------------|-----|------------------|-------|------|------|-------------|-------------------------------------------------------------------------------------------------------------------------|
| 6   | P02/IRQ10-A/TMO2/<br>SCK6/TRST#               | NC                    | I   | Pd               | -     | I    | I    | I           | NC                                                                                                                      |
| 7   | P01/IRQ9-A/TMC12/<br>RxD6                     | RXD MI232O            | I   | M3VPu            | -     | I    | I    | I           | Data received from the external<br>pin(AMX)/Use for firmware upgrading<br>by DFW.                                       |
| 8   | P00/IRQ8-A/TMRI2/<br>TxD6                     | TXD MO232I            | O   | -                | -     | L    | L    | L           | Data transfer to external pin(AMX)/Use<br>for firmware upgrading by DFW.                                                |
| 9   | P65/IRQ15-A                                   | POWER KEY             | I   | M3VPu            | -     | I    | I    | I           | POWER KEY (Waiting Mode cancel,<br>interrupt port)                                                                      |
| 10  | EMLE                                          | NC                    | I   | Pd               | -     | -    | -    | -           | NC                                                                                                                      |
| 11  | WDTOVF#/TDO                                   | NC                    | O/O | -                | -     | -    | -    | -           | NC                                                                                                                      |
| 12  | VSS                                           | VSS                   | I   | -                | -     | -    | -    | -           | GND                                                                                                                     |
| 13  | MDE                                           | MDE                   | I   | Pd               | -     | -    | -    | -           | NC                                                                                                                      |
| 14  | VCL                                           | VCL                   | I   | -                | -     | -    | -    | -           | Smoothing capacitor connection pin                                                                                      |
| 15  | MD1                                           | MD1                   | I   | M3VPu            | -     | -    | -    | -           | NC                                                                                                                      |
| 16  | MD0                                           | MD0                   | I   | M3VPu            | -     | -    | -    | -           | NC                                                                                                                      |
| 17  | P86                                           | (CEC POWER2)          | O   | -                | -     | L    | L    | H           | Reserve (CEC POWER2 control)                                                                                            |
| 18  | P85                                           | REMOTE<br>POWER(232C) | O   | -                | -     | L    | L    | L           | 232C POWER SUPPLY (REMOTE<br>3.3V) control pin.(ON: H)                                                                  |
| 19  | RES#                                          | RESET                 | I   | -                | -     | -    | -    | -           | Reset input (reset: L)                                                                                                  |
| 20  | XTAL                                          | XTAL                  | I   | -                | -     | -    | -    | -           | Clock input                                                                                                             |
| 21  | VSS                                           | VSS                   | -   | -                | -     | -    | -    | -           | GND                                                                                                                     |
| 22  | EXTAL                                         | EXTAL                 | -   | -                | -     | -    | -    | -           | Clock output                                                                                                            |
| 23  | VCC                                           | VCC                   | -   | -                | -     | -    | -    | -           | +3.3V                                                                                                                   |
| 24  | NMI                                           | NMI                   | I   | M3VPu            | -     | -    | -    | -           | NC                                                                                                                      |
| 25  | P34/IRQ4-A/PO12/<br>TIOCA1                    | BDOWN                 | I   | -                | -     | I    | I    | I           | Power failure detection pin(Power<br>failure:L)                                                                         |
| 26  | P33/IRQ3-A/PO11/<br>TIOCC0/TIOCD0/<br>TCLKB-A | PLDAERR               | I   | -                | -     | L    | L    | L           | PLD ERROR detection pin                                                                                                 |
| 27  | P32/IRQ2-A/PO10/<br>TIOCC0/TCLKA-A            | NC                    | O   | -                | -     | L    | O    | L           | Unused                                                                                                                  |
| 28  | P31/IRQ1-A/PO9/<br>TIOCA0/TIOCB0              | ADV8003 INT1          | I   | -                | -     | I    | I    | I           | HDMI transmitter / OSD (ADV8003)<br>INT1 Input pin                                                                      |
| 29  | P30/IRQ0-A/PO8/<br>TIOCA0                     | RC IN                 | I   | -                | -     | I    | I    | I           | Remote control signal input pin                                                                                         |
| 30  | P27/PO7/TIOCA5/<br>TIOCB5/SCK1                | HDMI A SEL            | O   | -                | -     | L    | L    | L           | TC74VHCT244AFT control pin.<br>(Control the HDMI Audio input. H : DSP<br>signal path / L : HDMI Rx -> Tx )              |
| 31  | P26/PO6/TIOCA5/<br>TMO1/TxD1                  | RC OUT                | O   | -                | -     | H    | L    | H           | RC-5 CODE output pin                                                                                                    |
| 32  | P25/PO5/TIOCA4/<br>TMC1/RxD1                  | KILL IR               | O   | -                | -     | L    | L    | L           | RC input Disable/Enable control pin                                                                                     |
| 33  | P24/PO4/TIOCA4/<br>TIOCB4/TMRI1               | TU RST                | O   | SW3VPu           | -     | L    | L    | L           | TUNER RESET pin (E3 model)                                                                                              |
| 34  | P23/PO3/TIOCC3/<br>TIOCD3                     | E RESET               | O   | N3VPu            | -     | L    | L    | L           | ETHERNET RESET control pin<br>(DM860)                                                                                   |
| 35  | P22/PO2/TIOCC3/<br>TMO0/SCK0                  | E POWER               | O   | -/-              | -     | L    | L    | L           | ETHERNET POWER SUPPLY<br>(NET3.3V) control pin.(ON:H)                                                                   |
| 36  | P21/PO1/TIOCA3/<br>TMC10/RxD0                 | E_RXDMIEO             | I   | -/-              | -     | I    | I    | I           | ETHERNET communication control pin<br>(DM860)                                                                           |
| 37  | P20/PO0/TIOCA3/<br>TIOCB3/TMRI0/TxD0          | E_TXDMOEI             | O   | -/-              | -     | L    | L    | L           | ETHERNET communication control pin<br>(DM860)                                                                           |
| 38  | P17/IRQ7-B/<br>TCLKD-B/TxD3/<br>SCL0/ADTRG1#  | TU SCLK               | O   | -                | -     | L    | L    | L           | TUNER control pin                                                                                                       |
| 39  | PLLVC                                         | PLLVC                 | -   | -                | -     | -    | -    | -           | +3.3V                                                                                                                   |
| 40  | P16/IRQ6-B/<br>TCLKC-B/RxD3/<br>SDA0          | TU SDIO               | I_O | -                | -     | L    | L    | L           | TUNER control pin                                                                                                       |
| 41  | PLLVS                                         | PLLVS                 | -   | -                | -     | -    | -    | -           | GND                                                                                                                     |
| 42  | P15/IRQ5-B/<br>TCLKB-B/SCK3/<br>SCL1          | HSCL (400k)           | O   | CEC3VPu          | -     | L    | L    | L           | VIDEO I2C Control for - HDMI SW<br>(ADV3002) / HDMI RX , A to H<br>Decoder (ADV7850) / HDMI ip Scaler ,<br>TX (ADV8003) |
| 43  | P14/IRQ4-B/<br>TCLKA-B/SDA1                   | HSCL (400k)           | I_O | CEC3VPu          | -     | L    | L    | L           | VIDEO I2C Control for - HDMI SW<br>(ADV3002) / HDMI RX , A to H<br>Decoder (ADV7850) / HDMI ip Scaler ,<br>TX (ADV8003) |

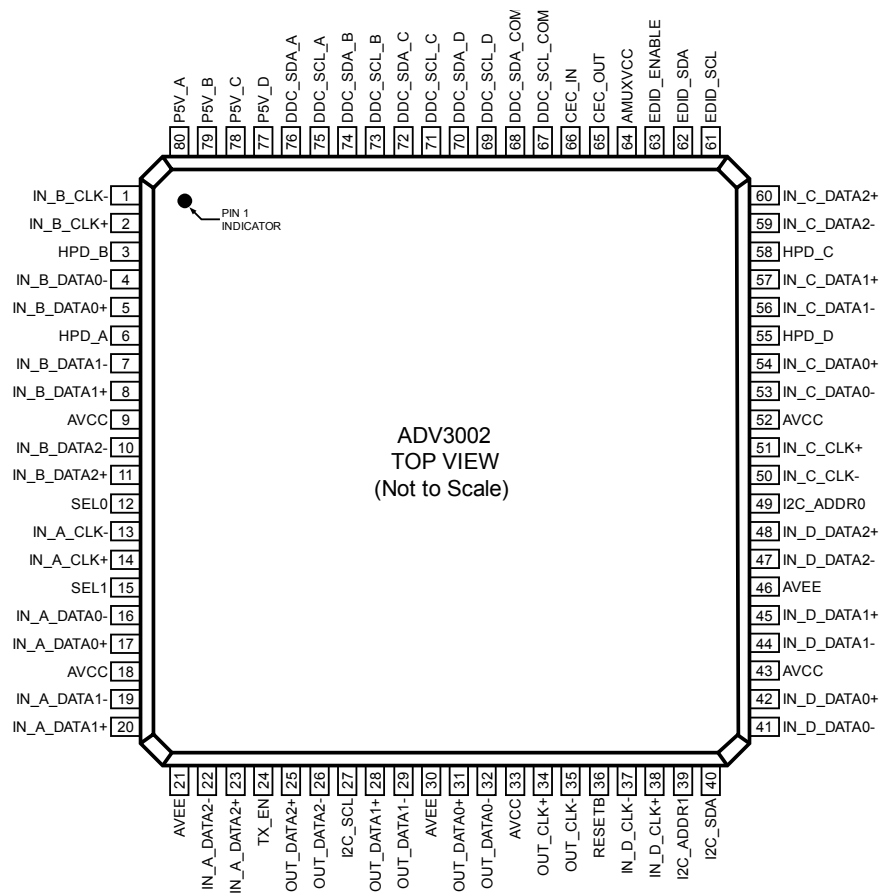


| Pin | Pin Name                           | Symbol          | I/O | Pull up/<br>down | LvCnv | STBY | STOP | CEC<br>STBY | Function                                                                                     |
|-----|------------------------------------|-----------------|-----|------------------|-------|------|------|-------------|----------------------------------------------------------------------------------------------|
| 44  | P13/IRQ3-B/TxD2/<br>ADTRG0#        | ADV8003 SPI MO  | O   | -                | -     | L    | L    | L           | OSD control pin (ADV8002 or<br>ADV8003)                                                      |
| 45  | P12/IRQ2-B/RxD2                    | ADV8003 SPI MI  | I   | -                | -     | L    | L    | L           | OSD control pin (ADV8002 or<br>ADV8003)                                                      |
| 46  | P11/IRQ1-B/SCK2                    | ADV8003 SPI CLK | O   | -                | -     | L    | L    | L           | OSD control pin (ADV8002 or<br>ADV8003)                                                      |
| 47  | P10/IRQ0-B                         | ADV8003 SPI CS  | O   | -                | -     | L    | L    | L           | OSD control pin (ADV8002 or<br>ADV8003)                                                      |
| 48  | P37/PO15/TIOCA2/<br>TIOCB2/TCLKD-A | EEPROM SDA      | I_O | M3VPu            | -     | I    | I    | I           | EEPROM control pin                                                                           |
| 49  | P36/PO14/TIOCA2                    | EEPROM SCL      | O   | M3VPu            | -     | I    | I    | I           | EEPROM control pin                                                                           |
| 50  | P35/PO13/TIOCA1/<br>TIOCB1/TCLKC-A | ADV7850 RST     | O   | -                | -     | L    | L    | L           | HDMI RX , A to H Decoder (ADV7850)<br>RESET control pin                                      |
| 51  | P84                                | CEC_OUT         | O   | -                | -     | L    | L    | -           | CEC-D signal output pin                                                                      |
| 52  | P57/WAIT#/<br>TRDATA3              | ADV3002 RST     | O   | SW3VPu           | -     | L    | L    | L           | HDMI switcher RESET control pin<br>(ADV3002)                                                 |
| 53  | P56/TRDATA2                        | E SPI MOEI      | O   | N3VPu            | -     | L    | L    | L           | ETHERNET communication control pin<br>(DM860)                                                |
| 54  | P55/TRDATA1                        | ADV8003 RST     | O   | SW3VPu           | -     | L    | L    | L           | HDMI Tx/ip Scaler/OSD RESET control<br>pin (ADV8003)                                         |
| 55  | P54/TRDATA0                        | E SPI MIEO      | I   | N3VPu            | -     | I    | L    | I           | ETHERNET communication control pin<br>(DM860)                                                |
| 56  | P83                                | E SPI CLK       | O   | N3VPu            | -     | L    | L    | L           | ETHERNET communication control pin<br>(DM860)                                                |
| 57  | VSS                                | VSS             | -   | -                | -     | -    | -    | -           | GND                                                                                          |
| 58  | P82/TRCLK                          | FL CE           | O   | -                | -     | L    | L    | L           | VFD control pin                                                                              |
| 59  | VCC                                | VCC             | -   | -                | -     | -    | -    | -           | +3.3V                                                                                        |
| 60  | P81/TRSYNC                         | FL RST          | O   | -                | -     | L    | L    | L           | VFD control pin                                                                              |
| 61  | P80                                | ZVOL DATA       | O   | -                | -     | L    | L    | L           | ZONE VOLUME control pin (NJW1194)                                                            |
| 62  | BCLK/P53                           | BT LINK         | I   | -                | -     | I    | I    | I           | Bluetooth (M-Xport) detection pin                                                            |
| 63  | P52/RD#                            | ZVOL CLK        | O   | -                | -     | L    | L    | L           | ZONE VOLUME control pin (NJW1194)                                                            |
| 64  | P51/WR1#/#BC1#                     | ZVOL STB        | O   | -                | -     | L    | L    | L           | ZONE VOLUME control pin (NJW1194)                                                            |
| 65  | P50/WR0#/#WR#                      | V SDA           | O   | -                | -     | L    | L    | L           | A-VIDEO switcher control pin (AVDM-2000)                                                     |
| 66  | P77                                | V SCL           | O   | -                | -     | L    | L    | L           | A-VIDEO switcher control pin (AVDM-2000)                                                     |
| 67  | P76/IRQ14-A                        | TU GPO2_INT     | I   | -                | -     | L    | L    | L           | TUNER GPIO2 input pin                                                                        |
| 68  | P75                                | DSP ROMRST      | O   | -                | -     | I    | I    | I           | Memory reset for DSP (Reset : L)                                                             |
| 69  | PC7/A23/CS4#-D/<br>CS7#-D/TxD5     | DSP MOSI        | O   | DA3VPu           | -     | L    | L    | L           | DSP control pin<br>(ADSP21487KSWZ-3B)                                                        |
| 70  | PC6/A22/CS6#-D/<br>RxD5            | DSP MISO        | I   | DA3VPu           | -     | L    | L    | L           | DSP control pin<br>(ADSP21487KSWZ-3B)                                                        |
| 71  | PC5/A21/CS5#-D/<br>SCK5            | DSPI CLK        | O   | DA3VPu           | -     | L    | L    | L           | DSP control pin<br>(ADSP21487KSWZ-3B)                                                        |
| 72  | PC4/A20                            | DSP RST         | O   | -                | -     | L    | L    | L           | DSP(ADSP21487KSWZ-3B) reset<br>output pin (Reset : L)                                        |
| 73  | PC3/A19                            | DSP FLAG0       | I   | Pd               | -     | L    | L    | L           | DSP control pin<br>(ADSP21487KSWZ-3B)                                                        |
| 74  | VCC                                | VCC             | -   | -                | -     | -    | -    | -           | +3.3V                                                                                        |
| 75  | PC2/A18                            | DSP ICS         | O   | DA3VPu           | -     | L    | L    | L           | DSP control pin<br>(ADSP21487KSWZ-3B)                                                        |
| 76  | VSS                                | VSS             | -   | -                | -     | -    | -    | -           | GND                                                                                          |
| 77  | PC1/A17                            | GRN LED         | O   | -                | -     | L    | L    | L           | POWER LED control pin(ON:H)                                                                  |
| 78  | PC0/A16                            | RED LED         | O   | -                | -     | L    | L    | H           | POWER/STANDBY LED control pin<br>(ON:H)                                                      |
| 79  | PB7/A15/PO31/<br>TIOCA11/TIOCB11   | H/P RLY         | O   | -                | -     | L    | L    | L           | HEADPHONE RLY control pin                                                                    |
| 80  | PB6/A14/PO30/<br>TIOCA11           | FRONT RLY       | O   | -                | -     | L    | L    | L           | FRONT Ch RELAY control pin                                                                   |
| 81  | PB5/A13/PO29/<br>TIOCA10/TIOCB10   | HIN SELC        | O   | -                | -     | L    | L    | L           | TC74VHC4051AFT control pin.<br>(Control the detection of HDMI 5V<br>INPUT for CEC STANDBY. ) |
| 82  | PB4/A12/PO28/<br>TIOCA10           | TU_SEN          | O   | -                | -     | L    | L    | L           | TUNER control pin                                                                            |
| 83  | PB3/A11/PO27/<br>TIOCC9/TIOCD9     | C/S RLY         | O   | -                | -     | L    | L    | L           | CENTER/SURROUND Ch RELAY<br>control pin                                                      |
| 84  | PB2/A10/PO26/<br>TIOCC9            | SB RLY          | O   | -                | -     | L    | L    | L           | SURROUND-BACK Ch RELAY control<br>pin                                                        |
| 85  | PB1/A9/PO25/<br>TIOCA9/TIOCB9      | D5V POWER       | O   | -                | -     | L    | L    | L           | DIGITAL POWER SUPPLY (D3.3V)<br>control pin (ON:H)                                           |
| 86  | P74/ADTRG3#                        | DIR CE          | O   | -                | -     | L    | L    | L           | DIR control pin (LC89058W-E)                                                                 |

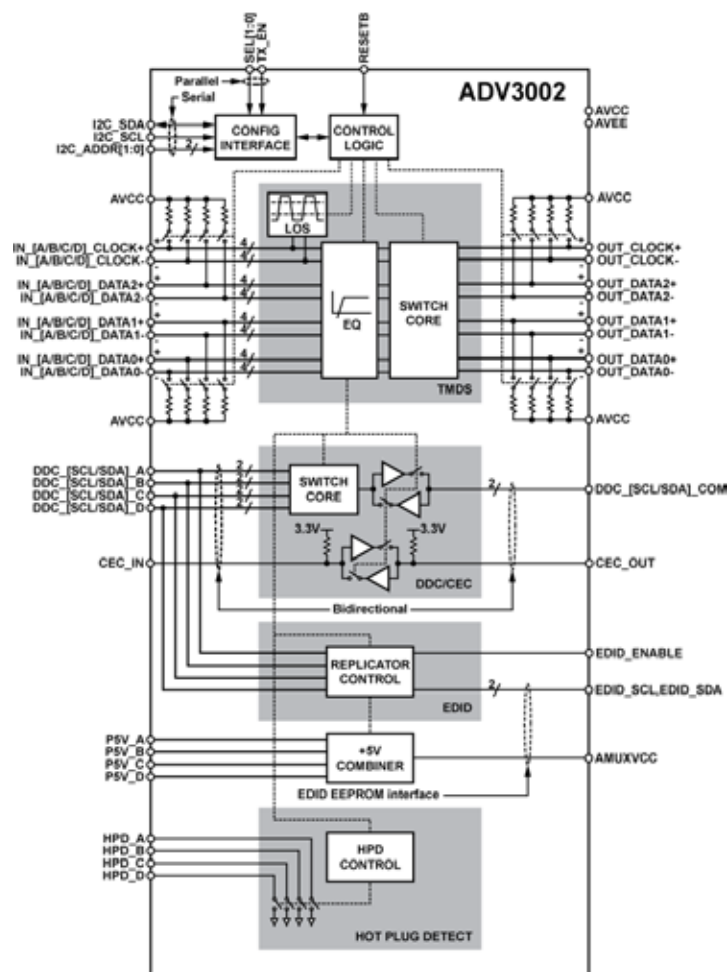
| Pin | Pin Name                                     | Symbol                         | I/O | Pull up/<br>down | LvCnv | STBY | STOP | CEC<br>STBY | Function                                                                    |
|-----|----------------------------------------------|--------------------------------|-----|------------------|-------|------|------|-------------|-----------------------------------------------------------------------------|
| 87  | P73                                          | DIR DIN                        | O   | -                | -     | L    | L    | L           | DIR control pin (LC89058W-E)                                                |
| 88  | P72                                          | DIR DOUT                       | I   | DA3VPu           | -     | I    | I    | I           | DIR control pin (LC89058W-E)                                                |
| 89  | P71/CS4#-C/<br>CS5#-C/CS6#-C/<br>CS7#-C      | DIR CLK                        | O   | -                | -     | L    | L    | L           | DIR control pin (LC89058W-E)                                                |
| 90  | P70/CS3#-B/<br>ADTRG2#                       | DIR RST                        | O   | -                | -     | L    | L    | L           | DIR RESET pin (LC89058W-E)                                                  |
| 91  | VCC                                          | VCC                            | -   | -                | -     | -    | -    | -           | +3.3V                                                                       |
| 92  | PB0/A8/PO24/<br>TIOCA9                       | CEC SEL                        | O   | -                | -     | L    | L    | L           | CEC output LINE switching                                                   |
| 93  | VSS                                          | VSS                            | -   | -                | -     | -    | -    | -           | GND                                                                         |
| 94  | PA7/A7/PO23/<br>TIOCA8/TIOCB8/<br>TCLKH      | FIL_CTRL<br>(SR6007 Only)      | O   | -/-              | -     | L    | L    | L           | FLD Filament voltage on/off pin<br>(SR6007 only)                            |
| 95  | PA6/A6/PO22/<br>TIOCA8                       | VSEL A                         | I   | -                | -     | I    | I    | I           | Master Volume rotation detection<br>pin(Rotary encoder)                     |
| 96  | PA5/A5/PO21/<br>TIOCA7/TIOCB7/<br>TCLKG      | VSEL B                         | I   | -                | -     | I    | I    | I           | Master Volume rotation detection<br>pin(Rotary encoder)                     |
| 97  | PA4/A4/PO20/<br>TIOCA7                       | E POWER 2<br>(Reserve)         | O   | -/-              | -     | L    | L    | L           | Unused                                                                      |
| 98  | PA3/A3/PO19/<br>TIOCC6/TIOCD6/<br>TCLKF      | DAC(ETHER)<br>MUTE             | O   | -                | -     | L    | L    | L           | DAC (ETHER) MUTE control pin<br>(PCM5100 for DM860)                         |
| 99  | PA2/A2/PO18/<br>TIOCC6/TCLKE                 | PRE Z2 MUTE                    | O   | -                | -     | L    | L    | L           | Z2 PRE OUT MUTE control pin                                                 |
| 100 | PA1/A1/PO17/<br>TIOCA6/TIOCB6                | FRONT B RL                     | O   | -                | -     | L    | L    | L           | Front B RELAY control pin                                                   |
| 101 | PA0/A0/BC0#/PO16/<br>TIOCA6                  | PRE MUTE                       | O   | -                | -     | L    | L    | L           | Sub Woofer PRE OUT MUTE control<br>pin                                      |
| 102 | PE7/IRQ7-A/D15                               | ADV8003 INT2                   | I   | -                | -     | I    | I    | I           | HDMI TX1.0SD INT2 input pin (ADV8003)                                       |
| 103 | PE6/IRQ6-A/D14                               | ADV7850 INT1                   | I   | -                | -     | I    | I    | I           | HDMI RX INT1 input pin (ADV7850)                                            |
| 104 | PE5/IRQ5-A/D13                               | ADV7850 INT2                   | I   | -                | -     | L    | L    | L           | HDMI RX INT2 input pin (ADV7850)                                            |
| 105 | PE4/D12                                      | ISEL A                         | I/O | -                | -     | I/L  | I/L  | I/L         | Input Selector rotation detection<br>pin(Rotary encoder)                    |
| 106 | PE3/D11                                      | ISEL B                         | I/O | -                | -     | I/L  | I/L  | I/L         | Input Selector rotation detection<br>pin(Rotary encoder)                    |
| 107 | PE2/D10                                      | VOL CLK                        | O   | -                | -     | L    | L    | L           | FUNCTION / VOLUME control pin<br>(R2A15218)                                 |
| 108 | PE1/D9                                       | VOL DATA                       | O   | -                | -     | L    | L    | L           | FUNCTION / VOLUME control pin<br>(R2A15218)                                 |
| 109 | PE0/D8                                       | PLD WRITE                      | O   | -                | -     | L    | L    | L           | A.PLD /JTAG switching control pin                                           |
| 110 | PD7/D7                                       | JTAG TDO                       | I   | -                | -     | L    | L    | L           | A.PLD rewriting control pin (JTAG)                                          |
| 111 | PD6/D6                                       | JTAG TMS/APLD<br>CS            | O/O | -                | -     | L    | L    | L           | A.PLD rewriting & control pin                                               |
| 112 | PD5/D5                                       | JTAG TDI/APLD<br>DATA/DAC DATA | O/O | -                | -     | L    | L    | L           | A.PLD rewriting & control /DAC control<br>pin                               |
| 113 | PD4/D4                                       | JTAG TCK/APLD<br>CLK/DAC CLK   | O/O | -                | -     | L    | L    | L           | A.PLD rewriting & control /DAC control<br>pin                               |
| 114 | P64/CS4#-B                                   | ADC RST                        | O   | -                | -     | L    | L    | L           | A/D converter control pin (AK5358B)                                         |
| 115 | P63/CS3#-A/CS7#-A                            | NC                             | O   | -                | -     | L    | L    | L           | Unused                                                                      |
| 116 | P62/CS2#-A/CS6#-A                            | E SPI CS                       | O   | N3VPu            | -     | L    | L    | L           | ETHERNET communication control<br>pin(DM860)                                |
| 117 | P61/CS1#/CS2#-B/<br>CS5#-A/CS6#-B/<br>CS7#-B | DAC MS                         | O   | -                | -     | L    | L    | L           | D/A converter control pin (AK4358VQ)                                        |
| 118 | P60/CS0#/CS4#-A/<br>CS5#-B                   | DAC RST                        | O   | -                | -     | L    | L    | L           | D/A converter control pin (AK4358VQ)                                        |
| 119 | PD3/D3                                       | DIRECT LED                     | O   | -                | -     | L    | L    | L           | DIRECT LED Control pin                                                      |
| 120 | PD2/D2                                       | M-DAX LED                      | O   | -                | -     | L    | L    | L           | M-DAX LED Control pin                                                       |
| 121 | PD1/D1                                       | FL CLK                         | O   | -                | -     | L    | L    | L           | VFD control pin                                                             |
| 122 | PD0/D0                                       | FL DATA                        | O   | -                | -     | L    | L    | L           | VFD control pin                                                             |
| 123 | P97/AN15                                     | DA POWER                       | O   | -                | -     | L    | L    | L           | DIGITAL AUDIO POWER SUPPLY<br>(DA3.3V & DA1.2V) control pin.(ON:H)          |
| 124 | P96/AN14                                     | CEC POWER                      | O   | -                | -     | L    | L    | H           | HDMI CEC POWER SUPPLY (CEC5V<br>& CEC3.3V & CEC1.8V) control pin.<br>(ON:H) |

| Pin | Pin Name                  | Symbol                      | I/O | Pull up/<br>down | LvCnv | STBY | STOP | CEC<br>STBY | Function                                                                                           |
|-----|---------------------------|-----------------------------|-----|------------------|-------|------|------|-------------|----------------------------------------------------------------------------------------------------|
| 125 | P95/AN13                  | DV POWER1                   | O   | -                | -     | L    | L    | ※           | Digital VIDEO POWER SUPPLY (DV5V & DV3.3V) control pin. *CEC STANDBY : MODE1=H , MODE2=L , MODE3=L |
| 126 | P94/AN12                  | DV POWER2                   | O   | -                | -     | L    | L    | ※           | Digital VIDEO POWER SUPPLY (DV1.8V) control pin. *CEC STANDBY : MODE1=H , MODE2=L , MODE3=L        |
| 127 | P93/AN11                  | MAIN POWER                  | O   | -                | -     | L    | L    | L           | MAIN POWER control pin                                                                             |
| 128 | P92/AN10                  | CPU POWER                   | O   | -                | -     | L    | L    | L           | CPU INTERFACE POWER SUPPLY (SWM3.3V & SWM5V) control pin (POWER ON: H , CEC ON STANDBY: H)         |
| 129 | P91/AN9                   | TX EN                       | O   | -                | -     | L    | L    | L           | Front HDMI INPUT (AD8195) control pin                                                              |
| 130 | VSS                       | VSS                         | -   | -                | -     | -    | -    | -           | GND                                                                                                |
| 131 | P90/AN8                   | MODE                        | I   | -                | -     | I    | I    | I           | Destination detection pin                                                                          |
| 132 | VCC                       | VCC                         | -   | -                | -     | -    | -    | -           | +3.3V                                                                                              |
| 133 | P47/IRQ15-B/AN7           | THERMAL B/DC DET/ASO        | I   | -                | -     | I    | I    | I           | ASO PROTECT / DC PROTECT / HEAT PROTECT-B detection pin                                            |
| 134 | P46/IRQ14-B/AN6           | H/P DET / MIC DET/THERMAL A | I   | -                | -     | I    | I    | I           | MIC detection / Headphone detection / HEAT PROTECT-A detection pin                                 |
| 135 | P45/IRQ13-B/AN5           | KEY3                        | I   | SW3VPu           | -     | I    | I    | I           | Button input 3                                                                                     |
| 136 | P44/IRQ12-B/AN4           | KEY2                        | I   | SW3VPu           | -     | I    | I    | I           | Button input 2                                                                                     |
| 137 | P43/IRQ11-B/AN3           | KEY1                        | I   | SW3VPu           | -     | I    | I    | I           | Button input 1                                                                                     |
| 138 | P42/IRQ10-B/AN2           | E SPI REQ                   | I   | Pd               | -     | I    | L    | I           | ETHERNET communication control pin(DM860)                                                          |
| 139 | P41/IRQ9-B/AN1            | HDMI IN 5V SET              | I   | -                | -     | I    | I    | I           | HDMI INPUT 5V (for EDID / HOT PLUG) detection pin                                                  |
| 140 | AVSS                      | AVSS                        | -   | -                | -     | -    | -    | -           | GND                                                                                                |
| 141 | P40/IRQ8-B/AN0            | CEC_IN                      | I   | SW3VPu           | -     | I    | I    | I           | CEC-D signal input pin                                                                             |
| 142 | VREF                      | VREF                        | -   | -                | -     | -    | -    | -           | Reference voltage (+3.3V) input pin for A/D port                                                   |
| 143 | AVCC                      | AVCC                        | -   | -                | -     | -    | -    | -           | +3.3V                                                                                              |
| 144 | P05/IRQ13-A/TMO3/RxD4/TCK | NC                          | I   | M3VPu            | -     | I    | I    | I           | NC                                                                                                 |

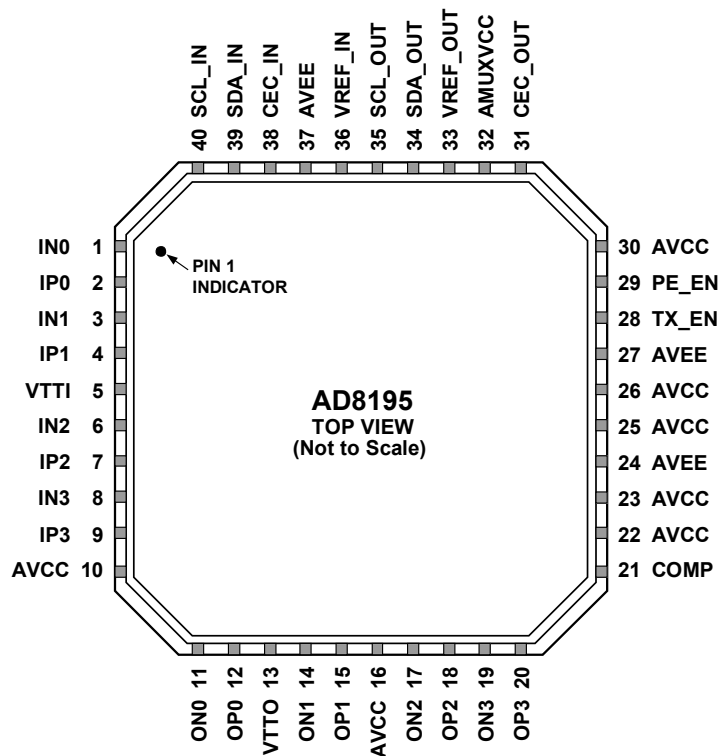
ADV3002BSTZ (HDMI : U1001)



ADV3002BSTZ Block diagram



AD8195ACPZ (HDMI : U1201)



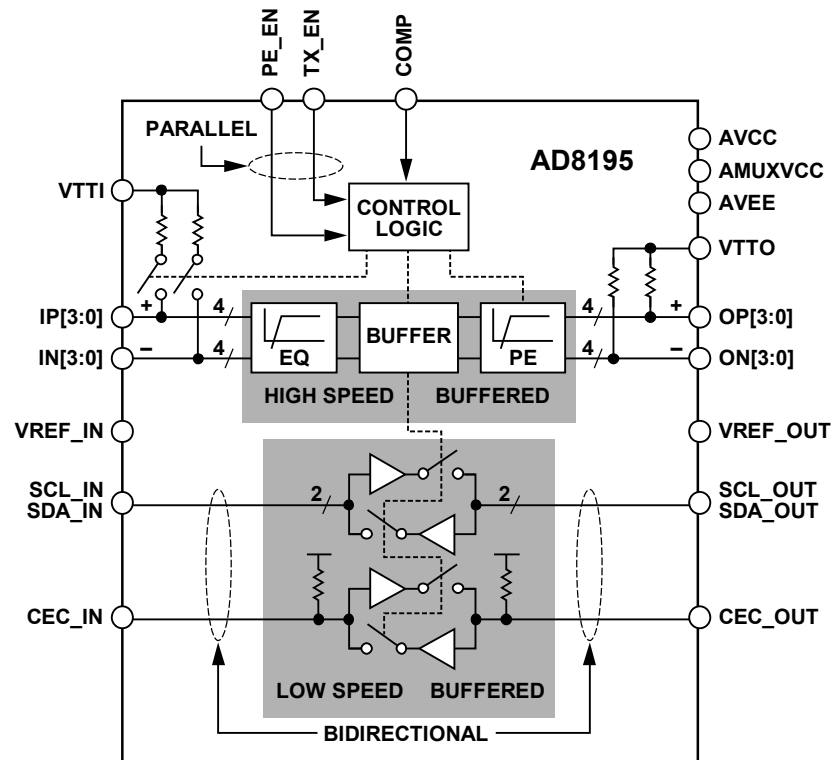
NOTES  
1. THE AD8195 LFCSP HAS AN EXPOSED PAD ON THE UNDERSIDE OF THE PACKAGE THAT AIDS IN HEAT DISSIPATION. THE PAD MUST BE ELECTRICALLY CONNECTED TO THE AVEE SUPPLY PLANE IN ORDER TO MEET THERMAL SPECIFICATIONS.

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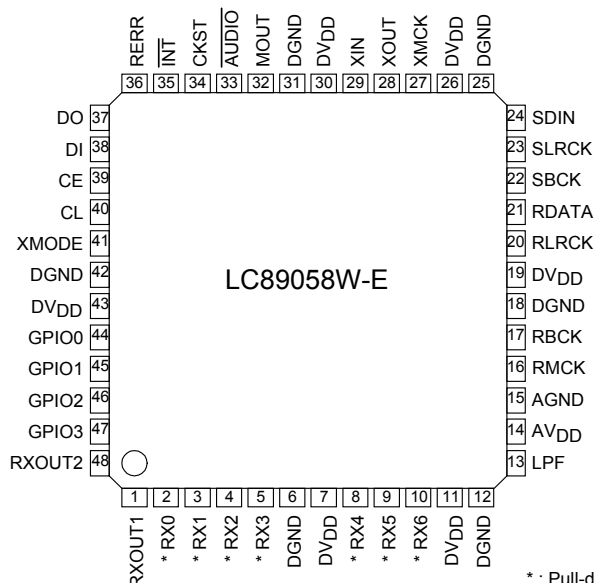
AD8195ACPZ Termini Function

| Pin No.                    | Mnemonic | Type <sup>1</sup> | Description                                                                 |
|----------------------------|----------|-------------------|-----------------------------------------------------------------------------|
| 1                          | IN0      | HS I              | High Speed Input Complement.                                                |
| 2                          | IP0      | HS I              | High Speed Input.                                                           |
| 3                          | IN1      | HS I              | High Speed Input Complement.                                                |
| 4                          | IP1      | HS I              | High Speed Input.                                                           |
| 5                          | VTTI     | Power             | Input Termination Supply. Nominally connected to AVCC.                      |
| 6                          | IN2      | HS I              | High Speed Input Complement.                                                |
| 7                          | IP2      | HS I              | High Speed Input.                                                           |
| 8                          | IN3      | HS I              | High Speed Input Complement.                                                |
| 9                          | IP3      | HS I              | High Speed Input.                                                           |
| 10, 16, 22, 23, 25, 26, 30 | AVCC     | Power             | Positive Analog Supply. 3.3 V nominal.                                      |
| 11                         | ON0      | HS O              | High Speed Output Complement.                                               |
| 12                         | OP0      | HS O              | High Speed Output.                                                          |
| 13                         | VTTO     | Power             | Output Termination Supply. Nominally connected to AVCC.                     |
| 14                         | ON1      | HS O              | High Speed Output Complement.                                               |
| 15                         | OP1      | HS O              | High Speed Output.                                                          |
| 17                         | ON2      | HS O              | High Speed Output Complement.                                               |
| 18                         | OP2      | HS O              | High Speed Output.                                                          |
| 19                         | ON3      | HS O              | High Speed Output Complement.                                               |
| 20                         | OP3      | HS O              | High Speed Output.                                                          |
| 21                         | COMP     | Control           | Power-On Compensation Pin. Bypass to ground through a 10 $\mu$ F capacitor. |
| 24, 27, 37, Exposed Pad    | AVEE     | Power             | Negative Analog Supply. 0 V nominal.                                        |
| 28                         | TX_EN    | Control           | High Speed Output Enable Parallel Interface.                                |
| 29                         | PE_EN    | Control           | High Speed Preemphasis Enable Parallel Interface.                           |
| 31                         | CEC_OUT  | LS I/O            | CEC Output Side.                                                            |
| 32                         | AMUXVCC  | Power             | Positive Auxiliary Buffer Supply. 5 V nominal.                              |

## AD8195ACPZ Block diagram



## LC89058W-E (HDMI : U2205)



\* : Pull-down resistor internal at no selection

### Pin Functions

| Pin No. | Name             | I/O                 | Function                                                                                            |
|---------|------------------|---------------------|-----------------------------------------------------------------------------------------------------|
| 1       | RXOUT1           | O                   | RX0-6 input S/PDIF through output pin 1                                                             |
| 2       | RX0              | I <sub>s</sub> (pd) | 5V withstand voltage TTL input level compatible S/PDIF input pin (connected to GND when RX1 is set) |
| 3       | RX1              | I(p)                | Co-axial compatible S/PDIF input pin (supported demodulation sampling frequency of up to 96kHz)     |
| 4       | RX2              | I <sub>s</sub> (pd) | 5V withstand voltage TTL input level compatible S/PDIF input pin (connected to GND when RX1 is set) |
| 5       | RX3              | I <sub>s</sub> (pd) | 5V withstand voltage TTL input level compatible S/PDIF input pin                                    |
| 6       | DGND             |                     | Digital GND                                                                                         |
| 7       | DV <sub>DD</sub> |                     | Digital power supply (3.3V)                                                                         |
| 8       | RX4              | I <sub>s</sub> (pd) | 5V tolerable TTL input level compatible S/PDIF input pin                                            |
| 9       | RX5              | I <sub>s</sub> (pd) | 5V tolerable TTL input level compatible S/PDIF input pin                                            |
| 10      | RX6              | I <sub>s</sub> (pd) | 5V tolerable TTL input level compatible S/PDIF input pin                                            |
| 11      | DV <sub>DD</sub> |                     | Digital power supply (3.3V)                                                                         |
| 12      | DGND             |                     | Digital GND                                                                                         |
| 13      | LPF              | O                   | PLL loop filter connection pin                                                                      |
| 14      | AV <sub>DD</sub> |                     | Analog power supply (3.3V)                                                                          |
| 15      | AGND             |                     | Analog GND                                                                                          |
| 16      | RMCK             | O                   | R system clock output pin (VCO, 512fs, XIN)                                                         |
| 17      | RBCK             | O/I                 | R system bit clock I/O pin (64fs)                                                                   |
| 18      | DGND             |                     | Digital GND                                                                                         |
| 19      | DV <sub>DD</sub> |                     | Digital power supply (3.3V)                                                                         |
| 20      | RLRCK            | O/I                 | R system LR clock I/O pin (fs)                                                                      |
| 21      | RDATA            | O                   | Serial audio data output pin                                                                        |
| 22      | SBCK             | O                   | S system bit clock output pin (16fs, 32fs, 64fs, 128fs)                                             |
| 23      | SLRCK            | O                   | S system LR clock output pin (fs/4, fs/2, fs, 2fs)                                                  |
| 24      | SDIN             | I <sub>s</sub>      | External serial audio data input pin                                                                |

| Pin No. | Name   | I/O            | Function                                                                          |
|---------|--------|----------------|-----------------------------------------------------------------------------------|
| 25      | DGND   |                | Digital GND                                                                       |
| 26      | DVDD   |                | Digital power supply (3.3V)                                                       |
| 27      | XMCK   | O              | Oscillation amplifier clock output pin                                            |
| 28      | XOUT   | O              | Output pin connected to the resonator                                             |
| 29      | XIN    | I              | External clock input pin, connected to the resonator (12.288MHz/24.576MHz)        |
| 30      | DVDD   |                | Digital power supply                                                              |
| 31      | DGND   |                | Digital GND                                                                       |
| 32      | MOUT   | I/O            | Emphasis information    Input fs monitor output    Chip address setting input pin |
| 33      | AUDIO  | I/O            | Channel status bit 1 output    Chip address setting input pin                     |
| 34      | CKST   | I/O            | Clock switching transition period signal output    Master/slave setting input pin |
| 35      | INT    | I/O            | Microcontroller interrupt signal output    Pins44-48 I/O setting input pin        |
| 36      | RERR   | O              | PLL lock error, data error flag output pin                                        |
| 37      | DO     | O              | CCB microcontroller I/F, read data output pin (3-state)                           |
| 38      | DI     | I <sub>s</sub> | CCB microcontroller I/F, write data input pin                                     |
| 39      | CE     | I <sub>s</sub> | CCB microcontroller I/F, chip enable input pin                                    |
| 40      | CL     | I <sub>s</sub> | CCB microcontroller I/F, clock input pin                                          |
| 41      | XMODE  | I <sub>s</sub> | System reset input pin                                                            |
| 42      | DGND   |                | Digital GND                                                                       |
| 43      | DVDD   |                | Digital power supply (3.3V)                                                       |
| 44      | GPIO0  | O/I            | General-purpose I/O pin    Selector input pin (output referred to RDATA pin)      |
| 45      | GPIO1  | O/I            | General-purpose I/O pin    Selector input pin (output referred to RLRCK pin)      |
| 46      | GPIO2  | O/I            | General-purpose I/O pin    Selector input pin (output referred to RBCK pin)       |
| 47      | GPIO3  | O/I            | General-purpose I/O pin    Selector input pin (output referred to RMCK pin)       |
| 48      | RXOUT2 | O              | RX0-6 input S/PDIF through output pin 2                                           |

\* Input voltage: I= -0.3 to 3.6V, I<sub>s</sub> = -0.3 to 5.5V

\* Output voltage: O= -0.3 to 3.6V

\* Pins 2, 4, 5, 8, 9, 10, 24, 38, 39, 40, and 41 have an internal pull-down resistor (pd).

Their level is fixed when they are unselected.

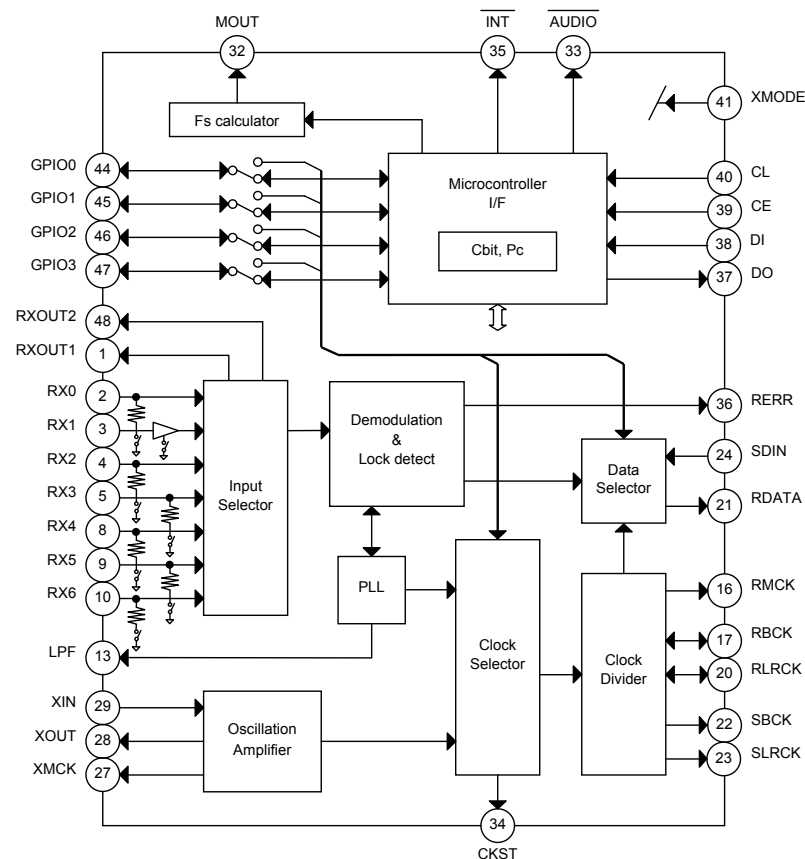
\* Pins 32 and 33 are input pins for chip address setting when pin 41 is held at the low level.

\* Pin 34 serves as the input pin for designating as the master or slave when pin 41 is held at the low level.

\* Pin 35 serves as the input pin for configuring the I/O of pins 44 to 47 when pin 41 is held at the low level.

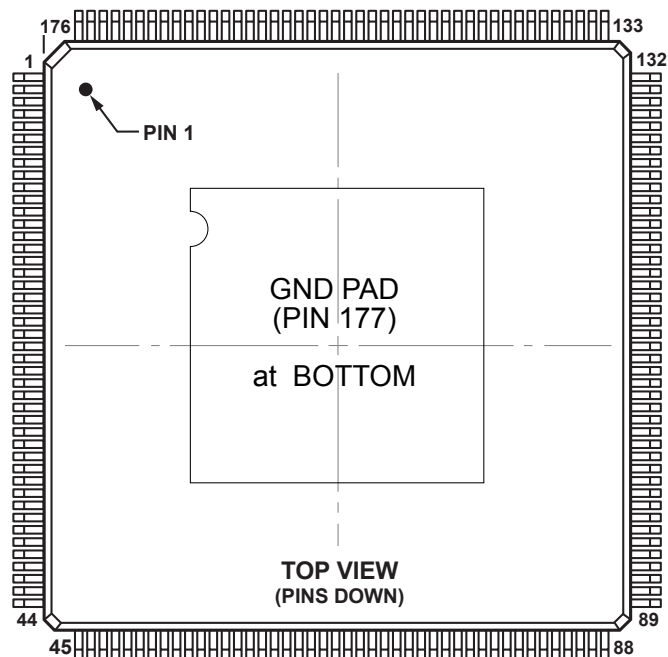
\* The DVDD and AVDD pins must be held at the same level and turned on and off at the same timing to preclude Latch-up conditions.

## LC89058W-E Block diagram





## ADSP21487KSWZ4B (HDMI : U2001)



## ADSP21487KSWZ3B Terminal Function

| Pin Name            | Pin No. | Pin Name            | Pin No. | Pin Name             | Pin No. | Pin Name            | Pin No. |
|---------------------|---------|---------------------|---------|----------------------|---------|---------------------|---------|
| SDDQM               | 1       | V <sub>DD_EXT</sub> | 45      | DAI_P10              | 89      | V <sub>DD_INT</sub> | 133     |
| $\overline{MS0}$    | 2       | DPI_P08             | 46      | V <sub>DD_INT</sub>  | 90      | FLAG0               | 134     |
| SDCKE               | 3       | DPI_P07             | 47      | V <sub>DD_EXT</sub>  | 91      | FLAG1               | 135     |
| V <sub>DD_INT</sub> | 4       | V <sub>DD_INT</sub> | 48      | DAI_P20              | 92      | FLAG2               | 136     |
| CLK_CFG1            | 5       | DPI_P09             | 49      | V <sub>DD_INT</sub>  | 93      | NC                  | 137     |
| ADDR0               | 6       | DPI_P10             | 50      | DAI_P08              | 94      | FLAG3               | 138     |
| BOOT_CFG0           | 7       | DPI_P11             | 51      | DAI_P14              | 95      | NC                  | 139     |
| V <sub>DD_EXT</sub> | 8       | DPI_P12             | 52      | DAI_P04              | 96      | NC                  | 140     |
| ADDR1               | 9       | DPI_P13             | 53      | DAI_P18              | 97      | V <sub>DD_EXT</sub> | 141     |
| ADDR2               | 10      | DPI_P14             | 54      | DAI_P17              | 98      | NC                  | 142     |
| ADDR3               | 11      | DAI_P03             | 55      | DAI_P16              | 99      | V <sub>DD_INT</sub> | 143     |
| ADDR4               | 12      | NC                  | 56      | DAI_P12              | 100     | TRST                | 144     |
| ADDR5               | 13      | V <sub>DD_EXT</sub> | 57      | DAI_P15              | 101     | NC                  | 145     |
| BOOT_CFG1           | 14      | NC                  | 58      | V <sub>DD_INT</sub>  | 102     | EMU                 | 146     |
| GND                 | 15      | NC                  | 59      | DAI_P11              | 103     | DATA0               | 147     |
| ADDR6               | 16      | NC                  | 60      | V <sub>DD_EXT</sub>  | 104     | DATA1               | 148     |
| ADDR7               | 17      | NC                  | 61      | V <sub>DD_INT</sub>  | 105     | DATA2               | 149     |
| NC                  | 18      | V <sub>DD_INT</sub> | 62      | BOOT_CFG2            | 106     | DATA3               | 150     |
| NC                  | 19      | NC                  | 63      | V <sub>DD_INT</sub>  | 107     | TDO                 | 151     |
| ADDR8               | 20      | NC                  | 64      | AMI_ACK              | 108     | DATA4               | 152     |
| ADDR9               | 21      | V <sub>DD_INT</sub> | 65      | GND                  | 109     | V <sub>DD_EXT</sub> | 153     |
| CLK_CFG0            | 22      | NC                  | 66      | THD_M                | 110     | DATA5               | 154     |
| V <sub>DD_INT</sub> | 23      | NC                  | 67      | THD_P                | 111     | DATA6               | 155     |
| CLKIN               | 24      | V <sub>DD_INT</sub> | 68      | V <sub>DD_THD</sub>  | 112     | V <sub>DD_INT</sub> | 156     |
| XTAL                | 25      | NC                  | 69      | V <sub>DD_INT</sub>  | 113     | DATA7               | 157     |
| ADDR10              | 26      | WDTRSTO             | 70      | V <sub>DD_INT</sub>  | 114     | TDI                 | 158     |
| SDA10               | 27      | NC                  | 71      | MST                  | 115     | SDCLK               | 159     |
| V <sub>DD_EXT</sub> | 28      | V <sub>DD_EXT</sub> | 72      | V <sub>DD_INT</sub>  | 116     | V <sub>DD_EXT</sub> | 160     |
| V <sub>DD_INT</sub> | 29      | DAI_P07             | 73      | WDT_CLKO             | 117     | DATA8               | 161     |
| ADDR11              | 30      | DAI_P13             | 74      | WDT_CLKIN            | 118     | DATA9               | 162     |
| ADDR12              | 31      | DAI_P19             | 75      | V <sub>DD_EXT</sub>  | 119     | DATA10              | 163     |
| ADDR17              | 32      | DAI_P01             | 76      | ADDR23               | 120     | TCK                 | 164     |
| ADDR13              | 33      | DAI_P02             | 77      | ADDR22               | 121     | DATA11              | 165     |
| V <sub>DD_INT</sub> | 34      | V <sub>DD_INT</sub> | 78      | ADDR21               | 122     | DATA12              | 166     |
| ADDR18              | 35      | NC                  | 79      | V <sub>DD_INT</sub>  | 123     | DATA14              | 167     |
| RESETOUT/RUNRSTIN   | 36      | NC                  | 80      | ADDR20               | 124     | DATA13              | 168     |
| V <sub>DD_INT</sub> | 37      | NC                  | 81      | ADDR19               | 125     | V <sub>DD_INT</sub> | 169     |
| DPI_P01             | 38      | NC                  | 82      | V <sub>DD_EXT</sub>  | 126     | DATA15              | 170     |
| DPI_P02             | 39      | NC                  | 83      | ADDR16               | 127     | $\overline{SDWE}$   | 171     |
| DPI_P03             | 40      | V <sub>DD_EXT</sub> | 84      | ADDR15               | 128     | $\overline{SDRAS}$  | 172     |
| V <sub>DD_INT</sub> | 41      | V <sub>DD_INT</sub> | 85      | V <sub>DD_INT</sub>  | 129     | RESET               | 173     |
| DPI_P05             | 42      | DAI_P06             | 86      | ADDR14               | 130     | TMS                 | 174     |
| DPI_P04             | 43      | DAI_P05             | 87      | $\overline{AMI\_WR}$ | 131     | $\overline{SDCAS}$  | 175     |
| DPI_P06             | 44      | DAI_P09             | 88      | $\overline{AMI\_RD}$ | 132     | V <sub>DD_INT</sub> | 176     |
|                     |         |                     |         |                      |         | GND                 | 177*    |

\* at BOTTOM

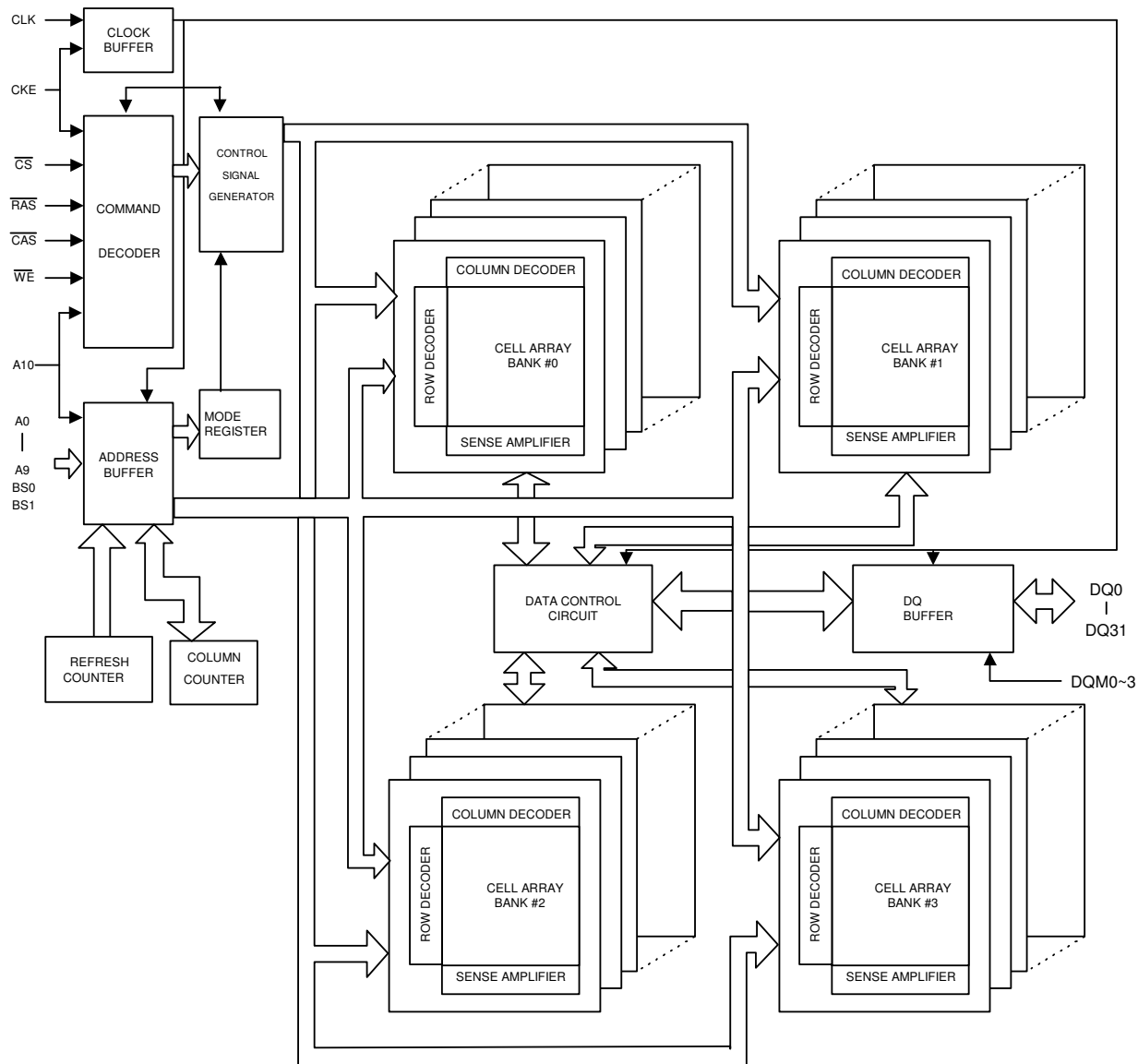
# W9864G6JH-6 (HDMI : U2002)

|                         |  |    |  |    |  |      |
|-------------------------|--|----|--|----|--|------|
| VDD                     |  | 1  |  | 86 |  | Vss  |
| DQ0                     |  | 2  |  | 85 |  | DQ15 |
| VDDQ                    |  | 3  |  | 84 |  | VssQ |
| DQ1                     |  | 4  |  | 83 |  | DQ14 |
| DQ2                     |  | 5  |  | 82 |  | DQ13 |
| VssQ                    |  | 6  |  | 81 |  | VDDQ |
| DQ3                     |  | 7  |  | 80 |  | DQ12 |
| DQ4                     |  | 8  |  | 79 |  | DQ11 |
| VDDQ                    |  | 9  |  | 78 |  | VssQ |
| DQ5                     |  | 10 |  | 77 |  | DQ10 |
| DQ6                     |  | 11 |  | 76 |  | DQ9  |
| VssQ                    |  | 12 |  | 75 |  | VDDQ |
| DQ7                     |  | 13 |  | 74 |  | DQ8  |
| NC                      |  | 14 |  | 73 |  | NC   |
| VDD                     |  | 15 |  | 72 |  | Vss  |
| DQM0                    |  | 16 |  | 71 |  | DQM1 |
| $\overline{\text{WE}}$  |  | 17 |  | 70 |  | NC   |
| $\overline{\text{CAS}}$ |  | 18 |  | 69 |  | NC   |
| $\overline{\text{RAS}}$ |  | 19 |  | 68 |  | CLK  |
| $\overline{\text{CS}}$  |  | 20 |  | 67 |  | CKE  |
| NC                      |  | 21 |  | 66 |  | A9   |
| BS0                     |  | 22 |  | 65 |  | A8   |
| BS1                     |  | 23 |  | 64 |  | A7   |
| A10/AP                  |  | 24 |  | 63 |  | A6   |
| A0                      |  | 25 |  | 62 |  | A5   |
| A1                      |  | 26 |  | 61 |  | A4   |
| A2                      |  | 27 |  | 60 |  | A3   |
| DQM2                    |  | 28 |  | 59 |  | DQM3 |
| VDD                     |  | 29 |  | 58 |  | Vss  |
| NC                      |  | 30 |  | 57 |  | NC   |
| DQ16                    |  | 31 |  | 56 |  | DQ31 |
| VssQ                    |  | 32 |  | 55 |  | VDDQ |
| DQ17                    |  | 33 |  | 54 |  | DQ30 |
| DQ18                    |  | 34 |  | 53 |  | DQ29 |
| VDDQ                    |  | 35 |  | 52 |  | VssQ |
| DQ19                    |  | 36 |  | 51 |  | DQ28 |
| DQ20                    |  | 37 |  | 50 |  | DQ27 |
| VssQ                    |  | 38 |  | 49 |  | VDDQ |
| DQ21                    |  | 39 |  | 48 |  | DQ26 |
| DQ22                    |  | 40 |  | 47 |  | DQ25 |
| VDDQ                    |  | 41 |  | 46 |  | VssQ |
| DQ23                    |  | 42 |  | 45 |  | DQ24 |
| VDD                     |  | 43 |  | 44 |  | Vss  |

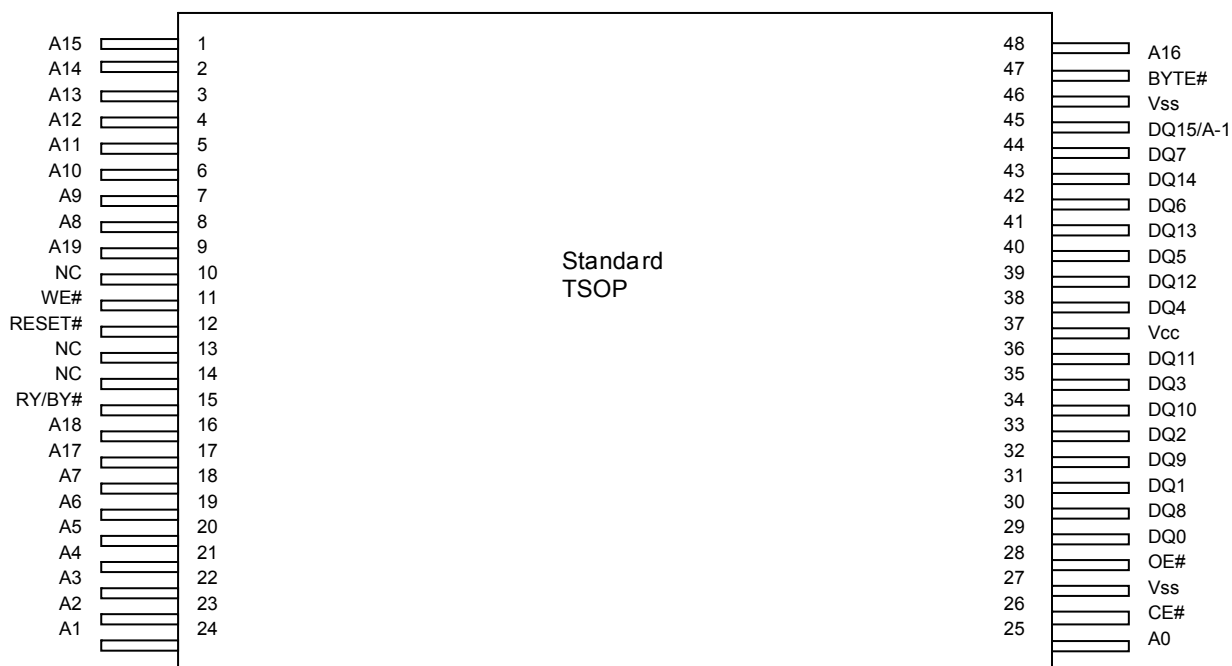
## W9864G6JH-6 Pin description

| PIN NUMBER                                                                                                                | PIN NAME                | FUNCTION              | DESCRIPTION                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 24, 25, 26, 27, 60, 61, 62, 63, 64, 65, 66                                                                                | A0–A10                  | Address               | Multiplexed pins for row and column address. Row address: A0–A10. Column address: A0–A7. A10 is sampled during a precharge command to determine if all banks are to be precharged or bank selected by BS0, BS1. |
| 22, 23                                                                                                                    | BS0, BS1                | Bank Select           | Select bank to activate during row address latch time, or bank to read/write during address latch time.                                                                                                         |
| 2, 4, 5, 7, 8, 10, 11, 13, 31, 33, 34, 36, 37, 39, 40, 42, 45, 47, 48, 50, 51, 53, 54, 56, 74, 76, 77, 79, 80, 82, 83, 85 | DQ0–DQ31                | Data Input/ Output    | Multiplexed pins for data output and input.                                                                                                                                                                     |
| 20                                                                                                                        | $\overline{\text{CS}}$  | Chip Select           | Disable or enable the command decoder. When command decoder is disabled, new command is ignored and previous operation continues.                                                                               |
| 19                                                                                                                        | $\overline{\text{RAS}}$ | Row Address Strobe    | Command input. When sampled at the rising edge of the clock $\overline{\text{RAS}}$ , $\overline{\text{CAS}}$ and $\overline{\text{WE}}$ define the operation to be executed.                                   |
| 18                                                                                                                        | $\overline{\text{CAS}}$ | Column Address Strobe | Referred to $\overline{\text{RAS}}$                                                                                                                                                                             |
| 17                                                                                                                        | $\overline{\text{WE}}$  | Write Enable          | Referred to $\overline{\text{RAS}}$                                                                                                                                                                             |
| 16, 28, 59, 71                                                                                                            | DQM0–DQM3               | Input/Output Mask     | The output buffer is placed at Hi-Z (with latency of 2) when DQM is sampled high in read cycle. In write cycle, sampling DQM high will block the write operation with zero latency.                             |
| 68                                                                                                                        | CLK                     | Clock Inputs          | System clock used to sample inputs on the rising edge of clock.                                                                                                                                                 |
| 67                                                                                                                        | CKE                     | Clock Enable          | CKE controls the clock activation and deactivation. When CKE is low, Power Down mode, Suspend mode, or Self Refresh mode is entered.                                                                            |
| 1, 15, 29, 43                                                                                                             | VDD                     | Power                 | Power for input buffers and logic circuit inside DRAM.                                                                                                                                                          |
| 44, 58, 72, 86                                                                                                            | VSS                     | Ground                | Ground for input buffers and logic circuit inside DRAM.                                                                                                                                                         |
| 3, 9, 35, 41, 49, 55, 75, 81                                                                                              | VDDQ                    | Power for I/O Buffer  | Separated power from VDD, to improve DQ noise immunity.                                                                                                                                                         |
| 6, 12, 32, 38, 46, 52, 78, 84                                                                                             | VSSQ                    | Ground for I/O Buffer | Separated ground from VSS, to improve DQ noise immunity.                                                                                                                                                        |
| 14, 21, 30, 57, 69, 70, 73                                                                                                | NC                      | No Connection         | No connection.                                                                                                                                                                                                  |

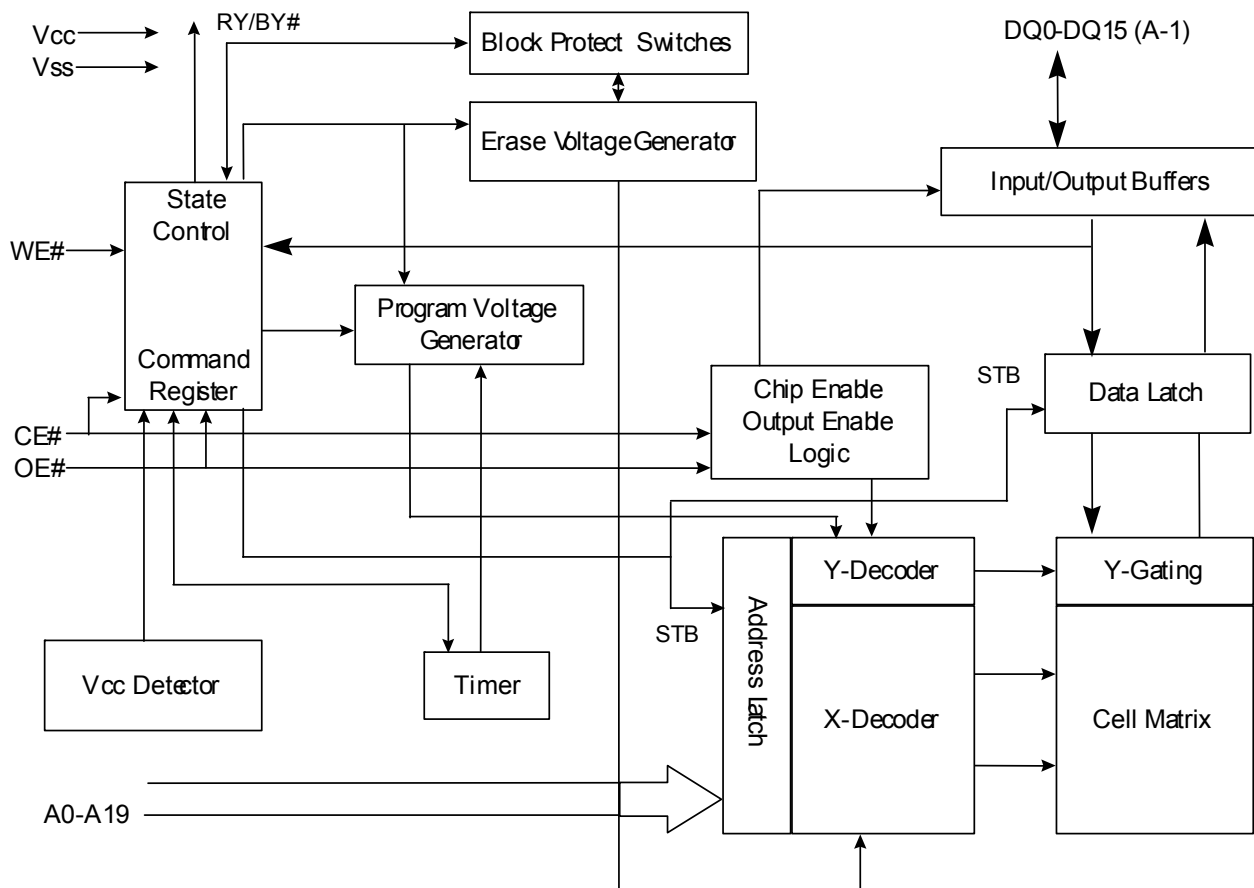
**W9864G6JH-6 Block diagram**



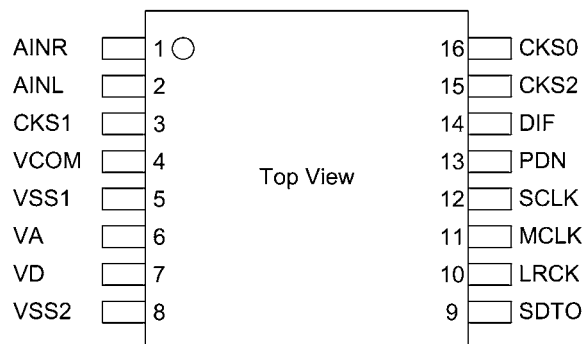
## EN29LV160BB-70TIP (HDMI : U2003)



## EN29LV160BB-70TIP Block Diagram



## AK5358BET (HDMI : U2403)



### AK5358BET Pin Function

| No. | Pin Name | I/O | Function                                                                                       |
|-----|----------|-----|------------------------------------------------------------------------------------------------|
| 1   | AINR     | I   | Rch Analog Input Pin                                                                           |
| 2   | AINL     | I   | Lch Analog Input Pin                                                                           |
| 3   | CKS1     | I   | Mode Select 1 Pin                                                                              |
| 4   | VCOM     | O   | Common Voltage Output Pin, VA/2<br>Bias voltage of ADC input.                                  |
| 5   | VSS1     | -   | Ground Pin                                                                                     |
| 6   | VA       | -   | Analog Power Supply Pin, 4.5 ~ 5.5V                                                            |
| 7   | VD       | -   | Digital Power Supply Pin, 2.7 ~ 5.5V                                                           |
| 8   | VSS2     | -   | Ground Pin                                                                                     |
| 9   | SDTO     | O   | Audio Serial Data Output Pin<br>“L” Output at Power-down mode.                                 |
| 10  | LRCK     | I/O | Output Channel Clock Pin<br>“L” Output in Master Mode at Power-down mode.                      |
| 11  | MCLK     | I   | Master Clock Input Pin                                                                         |
| 12  | SCLK     | I/O | Audio Serial Data Clock Pin<br>“L” Output in Master Mode at Power-down mode.                   |
| 13  | PDN      | I   | Power Down Mode & Reset Pin<br>“H”: Power up, “L”: Power down & Reset                          |
| 14  | DIF      | I   | Audio Interface Format Pin<br>“H”: 24bit I <sup>2</sup> S Compatible, “L”: 24bit MSB justified |
| 15  | CKS2     | I   | Mode Select 2 Pin                                                                              |
| 16  | CKS0     | I   | Mode Select 0 Pin                                                                              |

PCM5100 (HDMI:U2401)

PCM510X (top view)

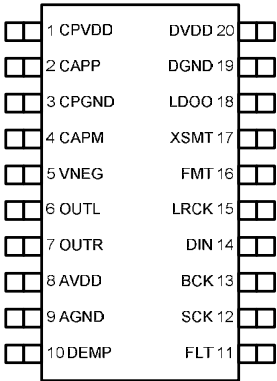


Table 2. TERMINAL FUNCTIONS, PCM510x

| TERMINAL |     | I/O | DESCRIPTION                                                                          |
|----------|-----|-----|--------------------------------------------------------------------------------------|
| NAME     | NO. |     |                                                                                      |
| CPVDD    | 1   | -   | Charge pump power supply, 3.3V                                                       |
| CAPP     | 2   | O   | Charge pump flying capacitor terminal for positive rail                              |
| CPGND    | 3   | -   | Charge pump ground                                                                   |
| CAPM     | 4   | O   | Charge pump flying capacitor terminal for negative rail                              |
| VNEG     | 5   | O   | Negative charge pump rail terminal for decoupling, -3.3V                             |
| OUTL     | 6   | O   | Analog output from DAC left channel                                                  |
| OUTR     | 7   | O   | Analog output from DAC right channel                                                 |
| AVDD     | 8   | -   | Analog power supply, 3.3V                                                            |
| AGND     | 9   | -   | Analog ground                                                                        |
| DEMP     | 10  | I   | De-emphasis control for 44.1kHz sampling rate <sup>(1)</sup> : Off (Low) / On (High) |
| FLT      | 11  | I   | Filter select : Normal latency (Low) / Low latency (High)                            |
| SCK      | 12  | I   | System clock input                                                                   |
| BCK      | 13  | I   | Audio data bit clock input                                                           |
| DIN      | 14  | I   | Audio data input                                                                     |
| LRCK     | 15  | I   | Audio data word clock input                                                          |
| FMT      | 16  | I   | Audio format selection : I <sup>2</sup> S (Low) / Left justified (High)              |
| XSMT     | 17  | I   | Soft mute control : Soft mute (Low) / soft un-mute (High)                            |
| LDOO     | 18  | -   | Internal logic supply rail terminal for decoupling                                   |
| DGND     | 19  | -   | Digital ground                                                                       |
| DVDD     | 20  | -   | Digital power supply, 3.3V                                                           |

(1) Failsafe LVCMOS Schmitt trigger input

PCM5100 Block Diagram

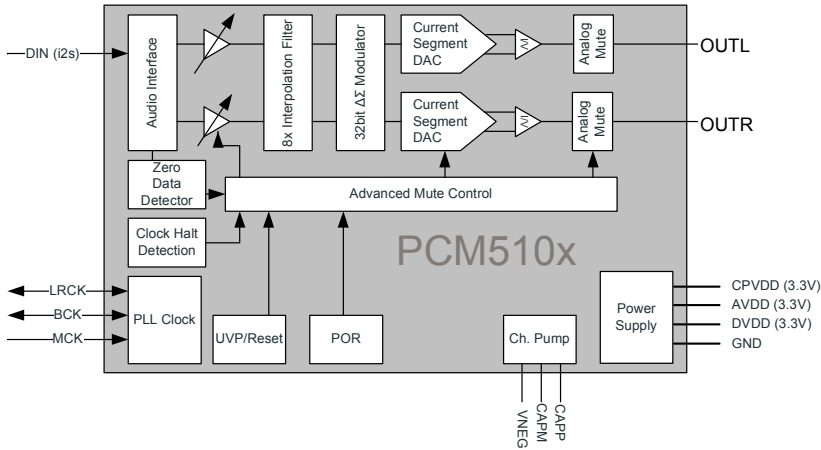
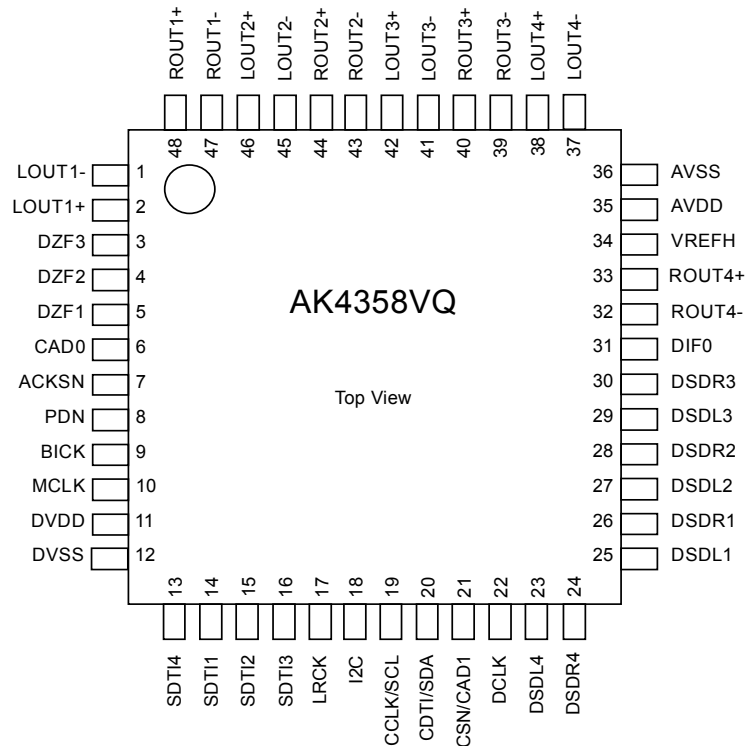


Figure 1. PCM510x Functional Block Diagram

## AK4358VQ (HDMI : U2404)



### AK4358VQ Pin Function

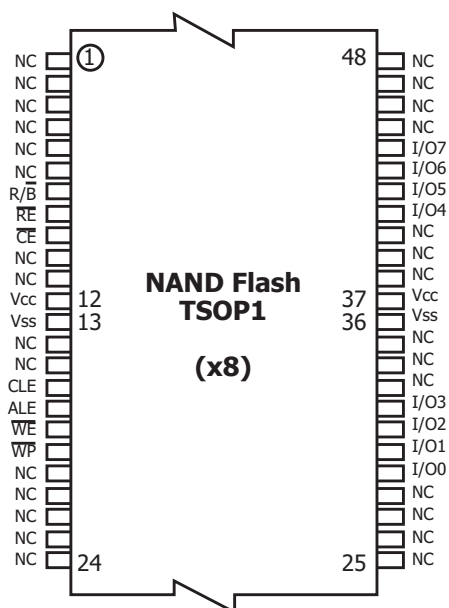
| No. | Pin Name | I/O | Function                                                                                                                                           |
|-----|----------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | LOUT1-   | O   | DAC1 Lch Negative Analog Output Pin                                                                                                                |
| 2   | LOUT1+   | O   | DAC1 Lch Positive Analog Output Pin                                                                                                                |
| 3   | DZF3     | O   | Zero Input Detect 3 Pin                                                                                                                            |
| 4   | DZF2     | O   | Zero Input Detect 2 Pin                                                                                                                            |
| 5   | DZF1     | O   | Zero Input Detect 1 Pin                                                                                                                            |
| 6   | CAD0     | I   | Chip Address 0 Pin                                                                                                                                 |
| 7   | ACKSN    | I   | Auto Setting Mode Disable Pin (Pull-down Pin)<br>“L”: Auto Setting Mode, “H”: Manual Setting Mode                                                  |
| 8   | PDN      | I   | Power-Down Mode Pin<br>When at “L”, the AK4358 is in the power-down mode and is held in reset.<br>The AK4358 should always be reset upon power-up. |
| 9   | BICK     | I   | Audio Serial Data Clock Pin                                                                                                                        |
| 10  | MCLK     | I   | Master Clock Input Pin<br>An external TTL clock should be input on this pin.                                                                       |
| 11  | DVDD     | -   | Digital Power Supply Pin, +4.75~+5.25V                                                                                                             |
| 12  | DVSS     | -   | Digital Ground Pin                                                                                                                                 |
| 13  | SDTI4    | I   | DAC4 Audio Serial Data Input Pin                                                                                                                   |
| 14  | SDTI1    | I   | DAC1 Audio Serial Data Input Pin                                                                                                                   |
| 15  | SDTI2    | I   | DAC2 Audio Serial Data Input Pin                                                                                                                   |
| 16  | SDTI3    | I   | DAC3 Audio Serial Data Input Pin                                                                                                                   |
| 17  | LRCK     | I   | L/R Clock Pin                                                                                                                                      |
| 18  | I2C      | I   | Control Mode Select Pin<br>“L”: 3-wire Serial, “H”: I <sup>2</sup> C Bus                                                                           |
| 19  | CCLK/SCL | I   | Control Data Clock Pin<br>I2C = “L”: CCLK (3-wire Serial), I2C = “H”: SCL (I <sup>2</sup> C Bus)                                                   |
| 20  | CDTI/SDA | I/O | Control Data Input Pin<br>I2C = “L”: CDTI (3-wire Serial), I2C = “H”: SDA (I <sup>2</sup> C Bus)                                                   |
| 21  | CSN/CAD1 | I   | Chip Select Pin<br>I2C = “L”: CSN (3-wire Serial), I2C = “H”: CAD1 (I <sup>2</sup> C Bus)                                                          |
| 22  | DCLK     | I   | DSD Clock Pin                                                                                                                                      |
| 23  | DSDL4    | I   | DAC4 DSD Lch Data Input Pin                                                                                                                        |
| 24  | DSDR4    | I   | DAC4 DSD Rch Data Input Pin                                                                                                                        |
| 25  | DSDL1    | I   | DAC1 DSD Lch Data Input Pin                                                                                                                        |
| 26  | DSDR1    | I   | DAC1 DSD Rch Data Input Pin                                                                                                                        |
| 27  | DSDL2    | I   | DAC2DSD Lch Data Input Pin                                                                                                                         |
| 28  | DSDR2    | I   | DAC2 DSD Rch Data Input Pin                                                                                                                        |



|    |        |   |                                       |
|----|--------|---|---------------------------------------|
| 29 | DSDL3  | I | DAC3 DSD Lch Data Input Pin           |
| 30 | DSDR3  | I | DAC3 DSD Rch Data Input Pin           |
| 31 | DIF0   | I | Audio Data Interface Format 0 Pin     |
| 32 | ROUT4- | O | DAC4 Rch Negative Analog Output Pin   |
| 33 | ROUT4+ | O | DAC4 Rch Positive Analog Output Pin   |
| 34 | VREFH  | I | Positive Voltage Reference Input Pin  |
| 35 | AVDD   | - | Analog Power Supply Pin, +4.75~+5.25V |
| 36 | AVSS   | - | Analog Ground Pin                     |
| 37 | LOUT4- | O | DAC4 Lch Negative Analog Output Pin   |
| 38 | LOUT4+ | O | DAC4 Lch Positive Analog Output Pin   |
| 39 | ROUT3- | O | DAC3 Rch Negative Analog Output Pin   |
| 40 | ROUT3+ | O | DAC3 Rch Positive Analog Output Pin   |
| 41 | LOUT3- | O | DAC3 Lch Negative Analog Output Pin   |
| 42 | LOUT3+ | O | DAC3 Lch Positive Analog Output Pin   |
| 43 | ROUT2- | O | DAC2 Rch Negative Analog Output Pin   |
| 44 | ROUT2+ | O | DAC2 Rch Positive Analog Output Pin   |
| 45 | LOUT2- | O | DAC2 Lch Negative Analog Output Pin   |
| 46 | LOUT2+ | O | DAC2 Lch Positive Analog Output Pin   |
| 47 | ROUT1- | O | DAC1 Rch Negative Analog Output Pin   |
| 48 | ROUT1+ | O | DAC1 Rch Positive Analog Output Pin   |

Note: All input pins except pull-down pin should not be left floating.

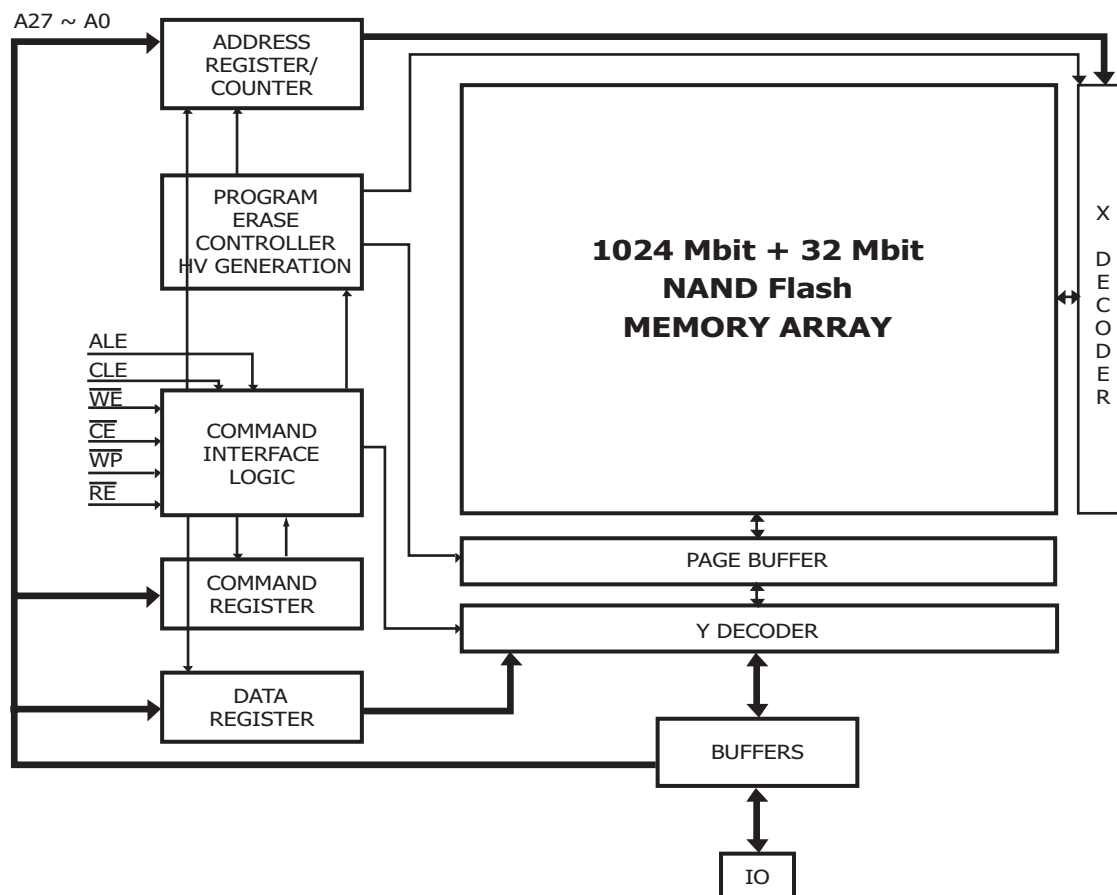
**H27U1G8F2BTR-BC (HDMI : U2603)**



### H27U1G8F2BTR-BC Pin Function

| Pin Name          | Description                                                                                                                                                                                                                                                                                                              |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I/O0 ~ I/O7       | <b>DATA INPUTS/OUTPUTS</b><br>The I/O pins allow to input command, address and data and to output <u>data</u> during read / program operations. The inputs are latched on the rising edge of Write Enable ( $\overline{WE}$ ). The I/O buffer float to High-Z when the device is deselected or the outputs are disabled. |
| CLE               | <b>COMMAND LATCH ENABLE</b><br>This input activates the latching of the I/O inputs inside the Command Register on the Rising edge of Write Enable ( $\overline{WE}$ ).                                                                                                                                                   |
| ALE               | <b>ADDRESS LATCH ENABLE</b><br>This input activates the latching of the I/O inputs inside the Address Register on the Rising edge of Write Enable ( $\overline{WE}$ ).                                                                                                                                                   |
| $\overline{CE}$   | <b>CHIP ENABLE</b><br>This input controls the selection of the device.                                                                                                                                                                                                                                                   |
| $\overline{WE}$   | <b>WRITE ENABLE</b><br>This input acts as clock to latch Command, Address and Data. The I/O inputs are latched on the rising edge of $\overline{WE}$ .                                                                                                                                                                   |
| $\overline{RE}$   | <b>READ ENABLE</b><br>The $\overline{RE}$ input is the serial data-out control, and when active drives the data onto the I/O bus. Data is valid t <sub>REA</sub> after the falling edge of $\overline{RE}$ which also increments the internal column address counter by one.                                             |
| $\overline{WP}$   | <b>WRITE PROTECT</b><br>The $\overline{WP}$ pin, when Low, provides an Hardware protection against undesired modify (program / erase) operations.                                                                                                                                                                        |
| R/ $\overline{B}$ | <b>READY BUSY</b><br>The Ready/Busy output is an Open Drain pin that signals the state of the memory.                                                                                                                                                                                                                    |
| V <sub>cc</sub>   | <b>SUPPLY VOLTAGE</b><br>The V <sub>cc</sub> supplies the power for all the operations (Read, Write, Erase).                                                                                                                                                                                                             |
| V <sub>ss</sub>   | GROUND                                                                                                                                                                                                                                                                                                                   |
| NC                | NO CONNECTION                                                                                                                                                                                                                                                                                                            |

## H27U1G8F2BTR-BC Block Diagram



# A3V56S30FTP-G6 (HDMI:U2604,2605)

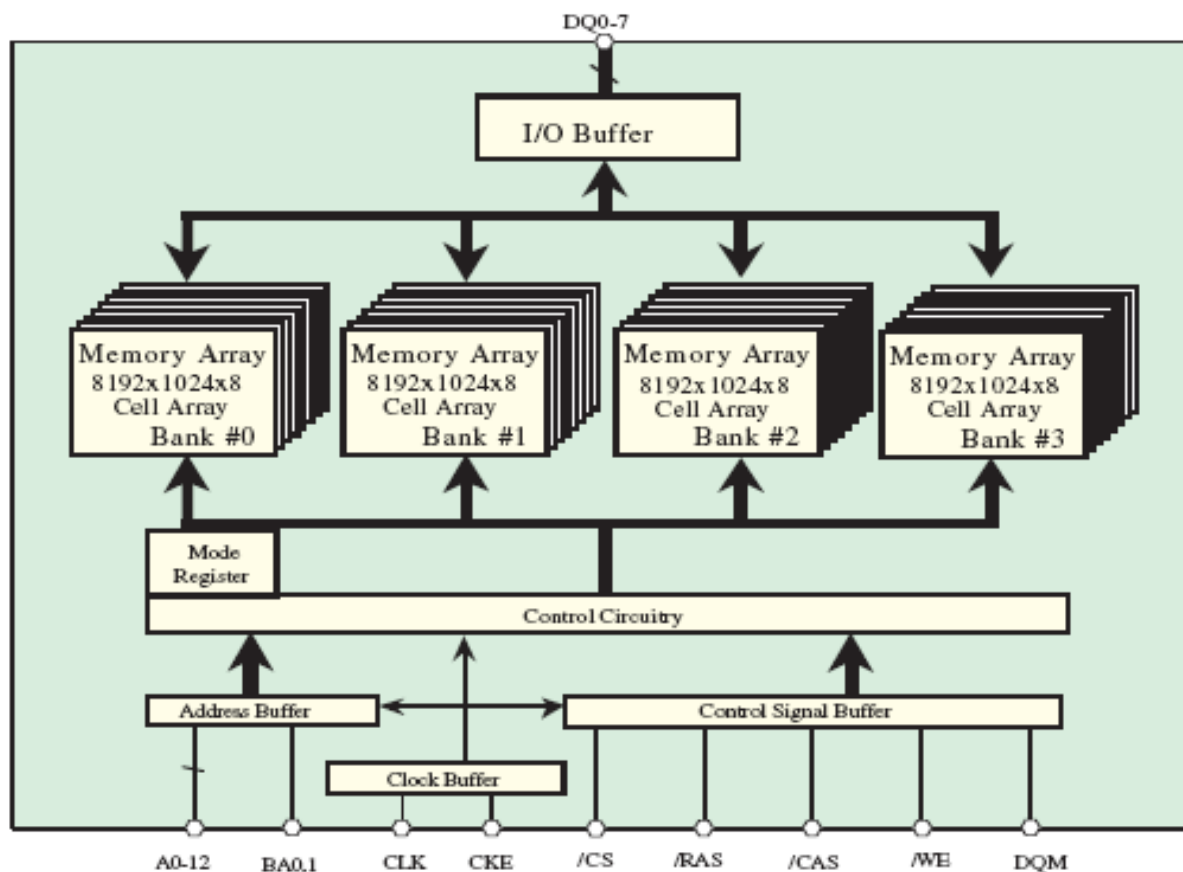
|         |    |    |      |
|---------|----|----|------|
| Vdd     | 1  | 54 | Vss  |
| DQ0     | 2  | 53 | DQ7  |
| VddQ    | 3  | 52 | VssQ |
| NC      | 4  | 51 | NC   |
| DQ1     | 5  | 50 | DQ6  |
| VssQ    | 6  | 49 | VddQ |
| NC      | 7  | 48 | NC   |
| DQ2     | 8  | 47 | DQ5  |
| VddQ    | 9  | 46 | VssQ |
| NC      | 10 | 45 | NC   |
| DQ3     | 11 | 44 | DQ4  |
| VssQ    | 12 | 43 | VddQ |
| NC      | 13 | 42 | NC   |
| Vdd     | 14 | 41 | Vss  |
| NC      | 15 | 40 | NC   |
| /WE     | 16 | 39 | DQM  |
| /CAS    | 17 | 38 | CLK  |
| /RAS    | 18 | 37 | CKE  |
| /CS     | 19 | 36 | A12  |
| BA0     | 20 | 35 | A11  |
| BA1     | 21 | 34 | A9   |
| A10(AP) | 22 | 33 | A8   |
| A0      | 23 | 32 | A7   |
| A1      | 24 | 31 | A6   |
| A2      | 25 | 30 | A5   |
| A3      | 26 | 29 | A4   |
| Vdd     | 27 | 28 | Vss  |

## A3V56S30FTP-G6 Pin Function

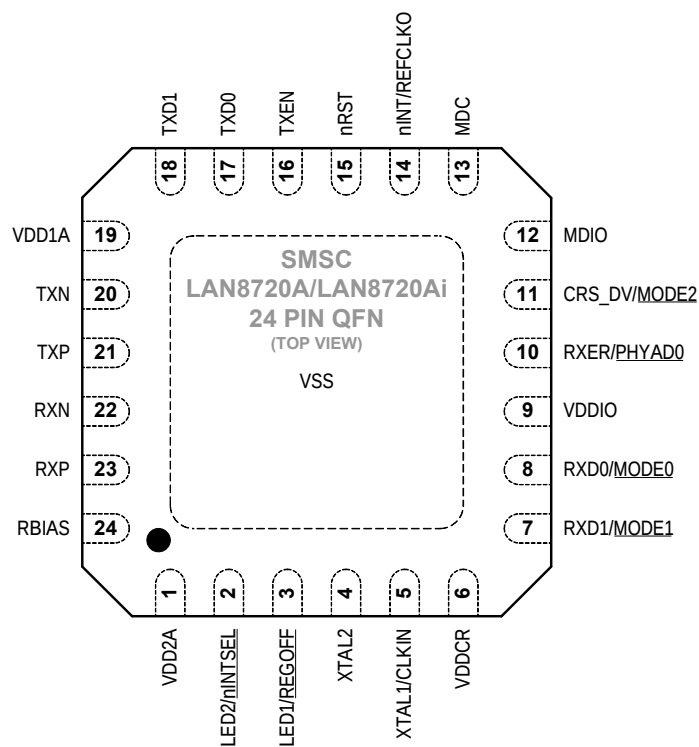
### Pin Descriptions

| SYMBOL                 | TYPE   | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CLK                    | Input  | Clock: CLK is driven by the system clock. All SDRAM input signals are sampled on the positive edge of CLK. CLK also increments the internal burst counter and controls the output registers.                                                                                                                                                                                                                                                                                                                                                       |
| CKE                    | Input  | Clock Enable: CKE activates (HIGH) and deactivates (LOW) the CLK signal. Deactivating the clock provides PRECHARGE POWER-DOWN and SELF REFRESH operation (all banks idle), ACTIVE POWER-DOWN (row active in any bank), or CLOCK SUSPEND operation (burst / access in progress). CKE is synchronous except after the device enters self refresh mode, where CKE becomes asynchronous until after exiting the same mode. The input buffers, including CLK, are disabled during self refresh mode, providing low standby power. CKE may be tied HIGH. |
| /CS                    | Input  | Chip Select: /CS enables (registered LOW) and disables (registered HIGH) the command decoder. All commands are masked when /CS is registered HIGH. /CS provides for external bank selection on systems with multiple banks. /CS is considered part of the command code.                                                                                                                                                                                                                                                                            |
| /CAS,<br>/RAS,<br>/WE  | Input  | Command Inputs: /CAS, /RAS, and /WE (along with /CS) define the command being entered.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| DQM,<br>DQML,<br>DQMU, | Input  | Input / Output Mask: DQM is sampled HIGH and is an input mask signal for write accesses and an output disable signal for read accesses. Input data is masked during a WRITE cycle. The output buffers are placed in a High-Z state (two-clock latency) when during a READ cycle. DQM corresponds to DQ0–DQ7 (A3V56S30FTP). DQML corresponds to DQ0–DQ7, DQMU corresponds to DQ8–DQ15 (A3V56S40FTP).                                                                                                                                                |
| BA0, BA1               | Input  | Bank Address Input(s): BA0 and BA1 define to which bank the ACTIVE, READ, WRITE or PRECHARGE command is being applied.                                                                                                                                                                                                                                                                                                                                                                                                                             |
| A0–A12                 | Input  | A0–12 specify the Row / Column Address in conjunction with BA0,1. The Row Address is specified by A0–12. The Column Address is specified by A0–9(x8) and A0–8(x16). A10 is also used to indicate precharge option. When A10 is high at a read / write command, an auto precharge is performed. When A10 is high at a precharge command, all banks are precharged.                                                                                                                                                                                  |
| DQ0–DQ15               | I/O    | Data Input / Output: Data bus.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| NC                     | –      | Internally Not Connected: These could be left unconnected, but it is recommended they be connected to Vss.                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| VddQ                   | Supply | Data Output Power: Provide isolated power to output buffers for improved noise immunity.                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| VssQ                   | Supply | Data Output Ground: Provide isolated ground to output buffers for improved noise immunity.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Vdd                    | Supply | Power for the input buffers and core logic.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Vss                    | Supply | Ground for the input buffers and core logic.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## A3V56S30FTP-G6 Block Diagram



## LAN8720A (HDMI:U2802)



## LAN8720A Pin Function

Table 2.8 24-QFN Package Pin Assignments

| PIN NUM | PIN NAME             | PIN NUM | PIN NAME     |
|---------|----------------------|---------|--------------|
| 1       | VDD2A                | 13      | MDC          |
| 2       | LED2/ <u>nINTSEL</u> | 14      | nINT/REFCLKO |
| 3       | LED1/ <u>REGOFF</u>  | 15      | nRST         |
| 4       | XTAL2                | 16      | TXEN         |
| 5       | XTAL1/CLKIN          | 17      | TXD0         |
| 6       | VDDCR                | 18      | TXD1         |
| 7       | RXD1/ <u>MODE1</u>   | 19      | VDD1A        |
| 8       | RXD0/ <u>MODE0</u>   | 20      | TXN          |
| 9       | VDDIO                | 21      | TXP          |
| 10      | RXER/ <u>PHYAD0</u>  | 22      | RXN          |
| 11      | CRS_DV/ <u>MODE2</u> | 23      | RXP          |
| 12      | MDIO                 | 24      | RBIAS        |

## LAN8720A Block Diagram

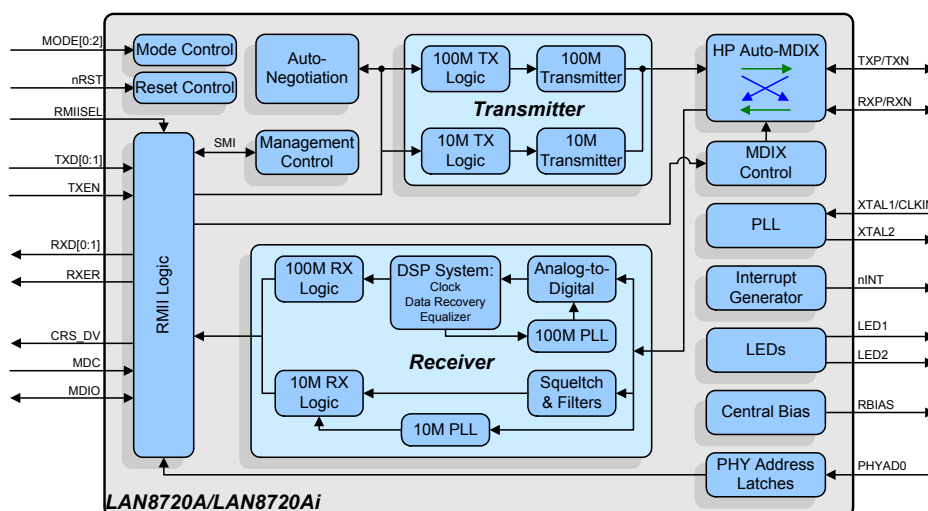
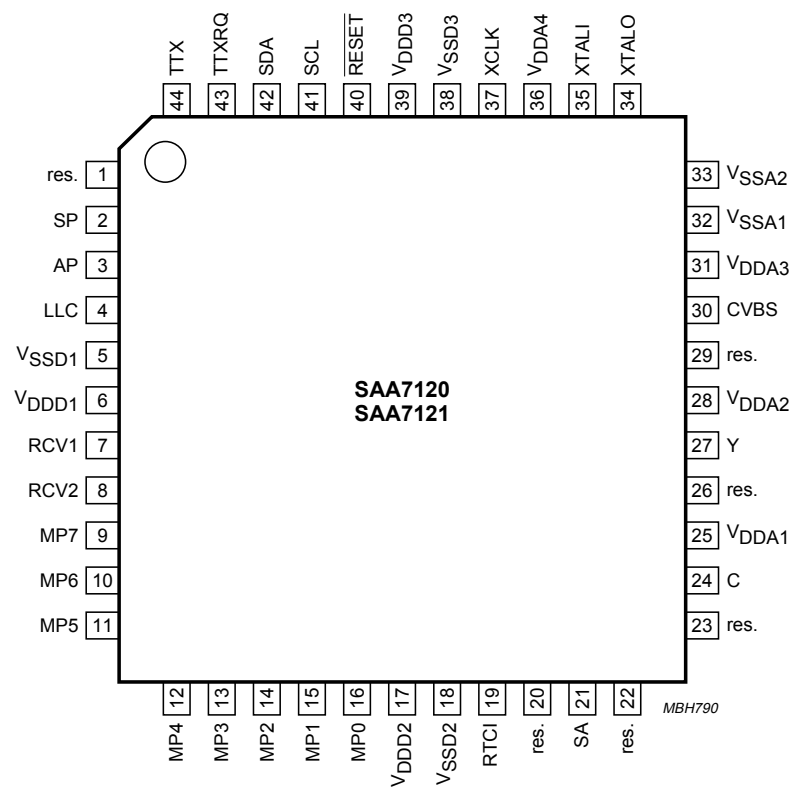
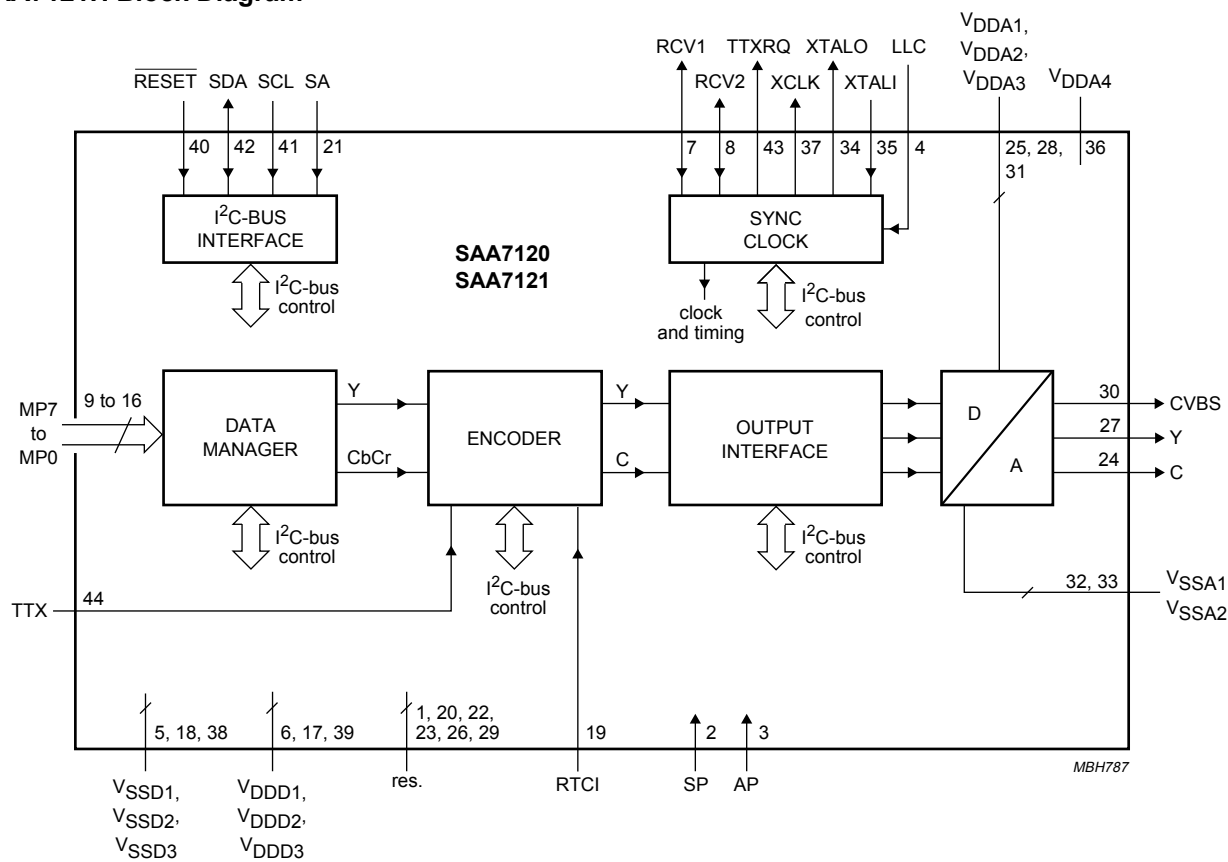


Figure 1.2 Architectural Overview

SAA7121H (HDMI : U2803)



SAA7121H Block Diagram

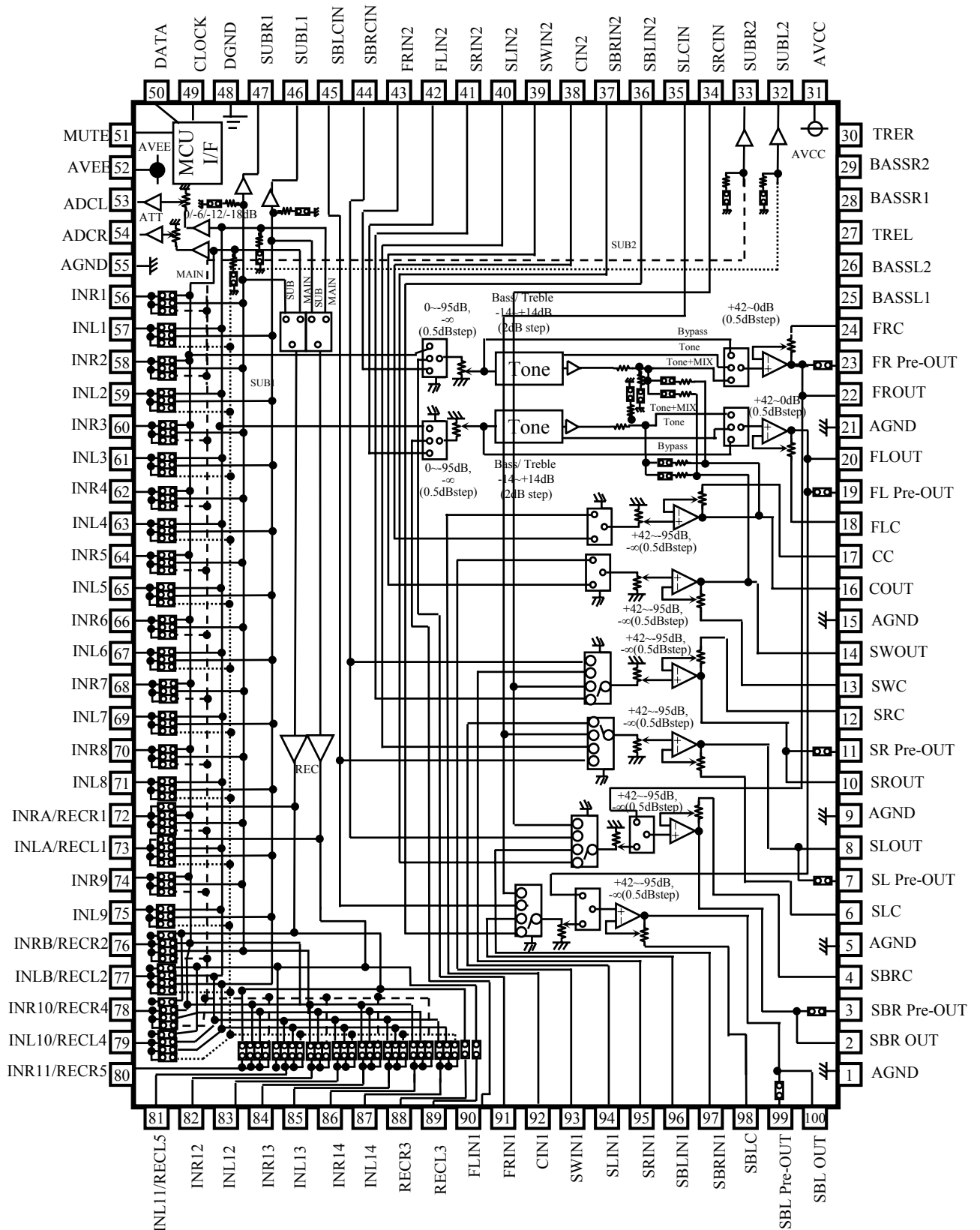




## SAA7121H Pin Description

| SYMBOL            | PIN | I/O | DESCRIPTION                                                                                                                                                        |
|-------------------|-----|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| res.              | 1   | –   | reserved                                                                                                                                                           |
| SP                | 2   | I   | test pin; connected to digital ground for normal operation                                                                                                         |
| AP                | 3   | I   | test pin; connected to digital ground for normal operation                                                                                                         |
| LLC               | 4   | I   | line-locked clock; this is the 27 MHz master clock for the encoder                                                                                                 |
| V <sub>SSD1</sub> | 5   | I   | digital ground 1                                                                                                                                                   |
| V <sub>DDD1</sub> | 6   | I   | digital supply voltage 1                                                                                                                                           |
| RCV1              | 7   | I/O | raster control 1 for video port; this pin receives/provides a VS/FS/FSEQ signal                                                                                    |
| RCV2              | 8   | I/O | raster control 2 for video port; this pin provides an HS pulse of programmable length or receives an HS pulse                                                      |
| MP7               | 9   | I   | MPEG port; it is an input for “CCIR 656” style multiplexed Cb Y, Cr data                                                                                           |
| MP6               | 10  | I   |                                                                                                                                                                    |
| MP5               | 11  | I   |                                                                                                                                                                    |
| MP4               | 12  | I   |                                                                                                                                                                    |
| MP3               | 13  | I   |                                                                                                                                                                    |
| MP2               | 14  | I   |                                                                                                                                                                    |
| MP1               | 15  | I   |                                                                                                                                                                    |
| MP0               | 16  | I   |                                                                                                                                                                    |
| V <sub>DDD2</sub> | 17  | I   | digital supply voltage 2                                                                                                                                           |
| V <sub>SSD2</sub> | 18  | I   | digital ground 2                                                                                                                                                   |
| RTCI              | 19  | I   | Real Time Control input; if the LLC clock is provided by an SAA7111 or SAA7151B, RTCI should be connected to pin RTCO of the decoder to improve the signal quality |
| res.              | 20  | –   | reserved                                                                                                                                                           |
| SA                | 21  | I   | the I <sup>2</sup> C-bus slave address select input pin; LOW: slave address = 88H, HIGH = 8CH                                                                      |
| res.              | 22  | –   | reserved                                                                                                                                                           |
| res.              | 23  | –   | reserved                                                                                                                                                           |
| C                 | 24  | O   | analog output of the chrominance signal                                                                                                                            |
| V <sub>DDA1</sub> | 25  | I   | analog supply voltage 1 for the C DAC                                                                                                                              |
| res.              | 26  | –   | reserved                                                                                                                                                           |
| Y                 | 27  | O   | analog output of VBS signal                                                                                                                                        |
| V <sub>DDA2</sub> | 28  | I   | analog supply voltage 2 for the Y DAC                                                                                                                              |
| res.              | 29  | –   | reserved                                                                                                                                                           |
| CVBS              | 30  | O   | analog output of the CVBS signal                                                                                                                                   |
| V <sub>DDA3</sub> | 31  | I   | analog supply voltage 3 for the CVBS DAC                                                                                                                           |
| V <sub>SSA1</sub> | 32  | I   | analog ground 1 for the DACs                                                                                                                                       |
| V <sub>SSA2</sub> | 33  | I   | analog ground 2 for the oscillator and reference voltage                                                                                                           |
| XTALO             | 34  | O   | crystal oscillator output (to crystal)                                                                                                                             |
| XTALI             | 35  | I   | crystal oscillator input (from crystal); if the oscillator is not used, this pin should be connected to ground                                                     |
| V <sub>DDA4</sub> | 36  | I   | analog supply voltage 4 for the oscillator and reference voltage                                                                                                   |
| XCLK              | 37  | O   | clock output of the crystal oscillator                                                                                                                             |

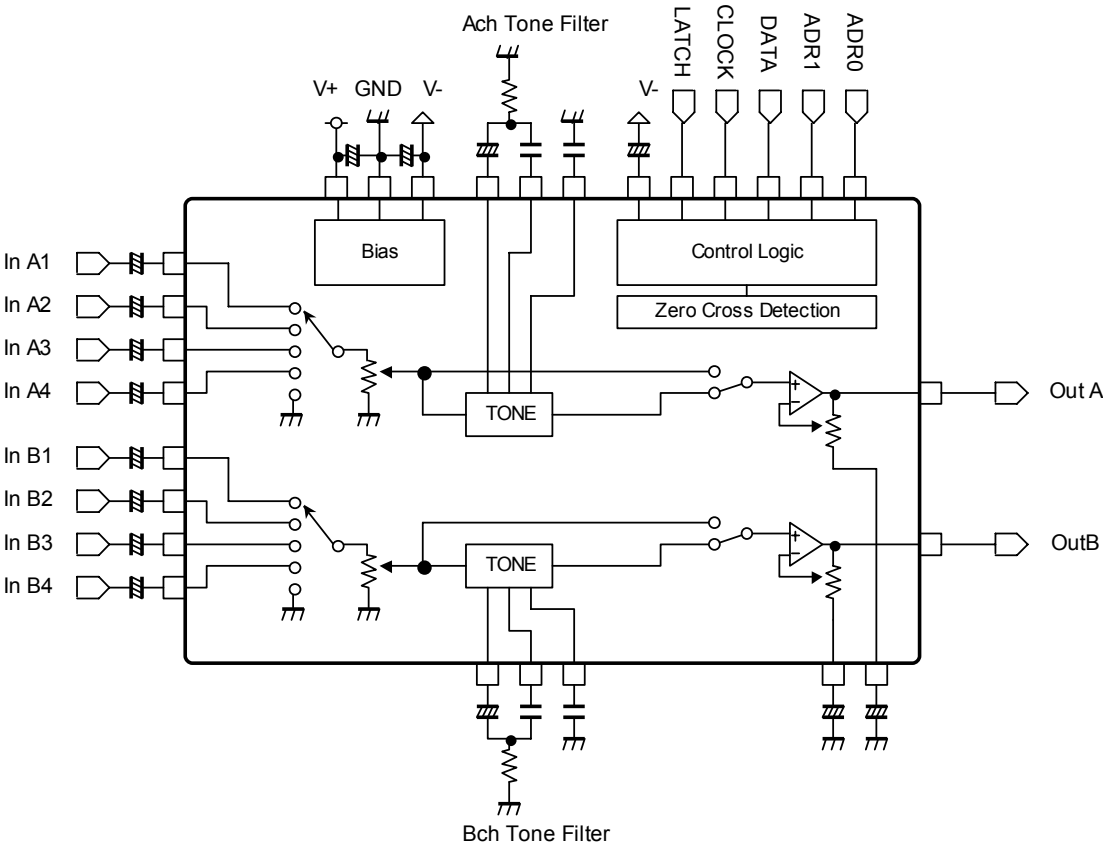
# R2A15218FP (INPUT : IC4210)



## R2A15218FP Pin Function

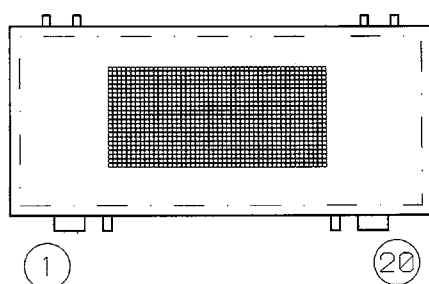
| PIN No.                                     | Name                                                                                                    | Function                                                                                                    |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| 22,20,<br>16,14,<br>10, 8,<br>2, 100        | FROUT,FLOUT,<br>COUT,SWOUT,<br>SROUT, SLOUT,<br>SBROUT,SBLOUT                                           | Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel                                                              |
| 23,19,<br>11, 7,<br>3, 99                   | FR Pre-out,FL Pre-out,<br>SR Pre-out, SL Pre-out,<br>SBR Pre-out,SBL Pre-out                            | Pre-output pin of FL/FR/SL/SR/SBL/SBR channel                                                               |
| 24,18,<br>17,13,<br>12, 6,<br>4, 98         | FRC,FLC,<br>CC,SWC,<br>SRC,SLC,<br>SBRC,SBLC                                                            | Connects capacitor for reducing click noise of<br>L/R/C/SW/SL/SR/SBL/SBR channel volume                     |
| 1,5,9,15,<br>21,55,98                       | AGND                                                                                                    | Analog ground of internal circuit                                                                           |
| 27,30                                       | TREL, TRER                                                                                              | Frequency characteristic setting pin of L/R channel tone control (Treble)                                   |
| 25,26,<br>28,29                             | BASSL1,BASSL2<br>BASSR1,BASSR2                                                                          | Frequency characteristic setting pin of L/R channel tone control (Bass)                                     |
| 31                                          | AVCC                                                                                                    | Positive power supply to internal circuit                                                                   |
| 43,42,<br>41,40,<br>39,38,<br>37,36         | FRIN2, FLIN2,<br>SRN2,SLIN2,<br>SWIN2,CIN2,<br>SBRIN2,SBLIN2                                            | Multi Input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)                                            |
| 90,91,<br>92,93,<br>94,95,<br>96,97         | FLIN1, FRIN1,<br>CIN1,SWIN1,<br>SLIN1,SRIN1,<br>SBLIN1,SBRIN1                                           |                                                                                                             |
| 48                                          | DGND                                                                                                    | Digital ground of internal circuit                                                                          |
| 49                                          | DATA                                                                                                    | Input pin of control data                                                                                   |
| 50                                          | CLOCK                                                                                                   | Input pin of control clock                                                                                  |
| 52                                          | AVEE                                                                                                    | Negative power supply to internal circuit                                                                   |
| 57,59,61,63,<br>65,67,69,71,<br>75,83,85,87 | INL1,INL2, INL3,INL4,<br>INL5,INL6,INL7,INL8,<br>INL9,INL12,INL13,INL14                                 | Input pin of L/R channel (Input Selector)                                                                   |
| 56,58,60,62,<br>64,66,68,70,<br>74,82,84,86 | INR1,INR2, INR3,INR4,<br>INR5,INR6,INR7,INR8,<br>INR9,INR12,INR13,INR14                                 |                                                                                                             |
| 51                                          | MUTE                                                                                                    | Outside Mute Control PIN                                                                                    |
| 44,45<br>34,35                              | SBRCIN,SBLCIN<br>SRCIN,SLCIN                                                                            | 3 <sup>rd</sup> Multi Input pin for SBL/SBR/SL/SR channel Volume<br>that is able to swap SBR/SBL with SR/SL |
| 46,47<br>33,32                              | SUBL1,SUBR1<br>SUBL2,SUBR2                                                                              | Output pin for L/R channel SUB1/SUB2 Output                                                                 |
| 53,54                                       | ADCL, ADCR                                                                                              | Output pin for L/R channel ADC                                                                              |
| 88,89                                       | RECR3,RECL3                                                                                             | Output pin for L/R channel REC Output                                                                       |
| 72,73,<br>76,77,<br>78,79<br>80,81          | INRA/RECR1,INLA/RECL1,<br>INRB/RECR2,INLB/RECL2,<br>INR10/RECR4,INL10/RECL4,<br>INR11/RECR5,INL11/RECL5 | Input pin of L/R channel (Input Selector)/<br>Output pin for L/R channel REC Output                         |

NJW1194A (AUDIO : IC4206)



## 2. FL DISPLAY

### FLD (GP1261AI) (FRONT : FLT4400)



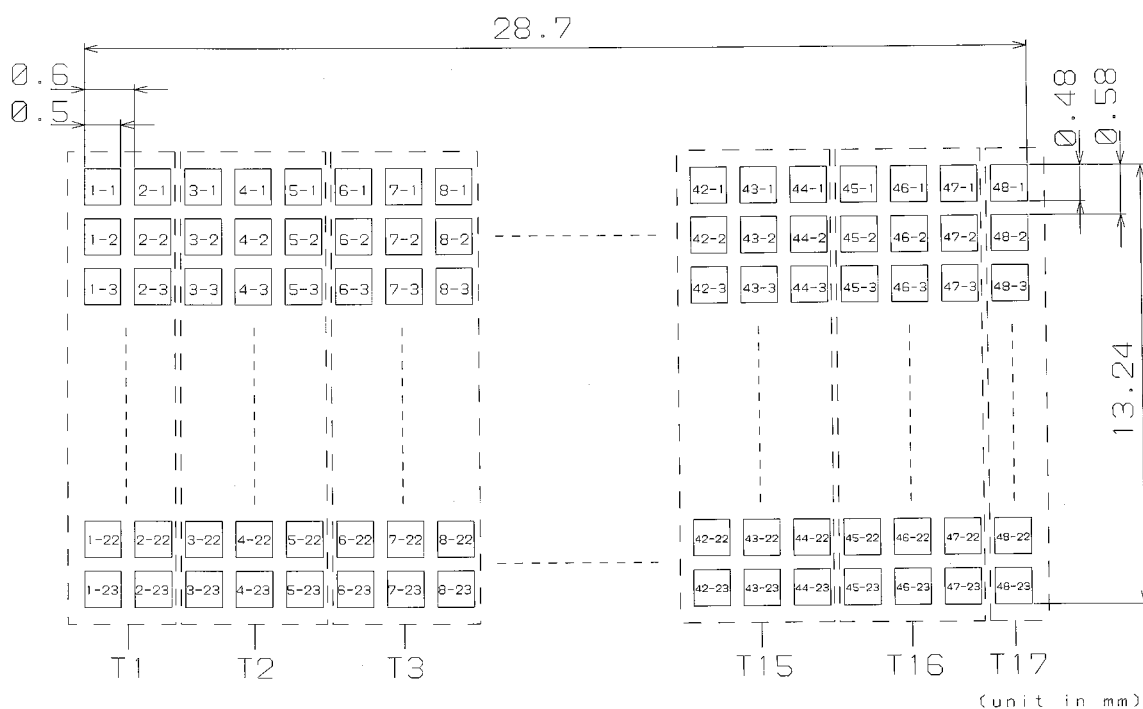
#### PIN CONNECTION

| PIN NO.    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |   |   |   |   |   |
|------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|---|---|---|---|---|
| CONNECTION | F | N | N | N | N | N | N | S | T | R  | E  | S  | E  | T  | I  | L  | C  | S  | N  | V  | N | N | D | N | F |

NOTE 1) F-,F+ --- Filament  
 2) NP ----- No pin  
 3) DL ----- Datum Line  
 4) VDD ----- Logic Voltage Supply pin  
 5) LGND ----- Logic GND pin  
 6) PGND ----- Power GND pin  
 7) VH ----- High Voltage Supply pin  
 8) OSC ----- Pin for self-oscillation  
 9) CS ----- Chip Select Input pin  
 10) CLK ----- Shift Register Clock

- 11) DIO ----- Serial Data Input  
 12) RESET --- Reset Input  
 13) INT --- Int pin  
 14) TEST --- Test pin  
 15) Solder composition is Sn-3Ag-0.5Cu.  
 16) NC ----- No connection  
 (NC pin should be electrically open on the PC board)

#### PATTERN DETAIL



#### COLOR OF ILLUMINATION

Green (G. x=0.24,y=0.41) - - - - All graphics.

## PARTS LIST OF PCB UNIT

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

\*The parts listed below are only for maintenance. Therefore they might differ from the parts used in the unit in appearances or dimensions.

NOTE: The symbols in the column "Remarks" indicate the following destinations.

U : U.S.A. & Canada model

N : Europe model

K : China model

### 7CH\_AMP PCB UNIT ASS'Y

| Ref. No.                    | Part No.      | Part Name                           | Remarks        | Q'ty | New |
|-----------------------------|---------------|-------------------------------------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |               |                                     |                |      |     |
| Q401,402                    | 00D2710314903 | TR 2SA KTA1024Y                     | J5001024Y0050S |      |     |
| Q403                        | 00D2710318909 | TR 2SA 2N5401S                      | J520254010010S |      |     |
| Q405                        | 00D2710318909 | TR 2SA 2N5401S                      | J520254010010S |      |     |
| Q406                        | 00D2730479909 | TR 2SC 2N5551S                      | J522255510010S |      |     |
| Q407,408                    | 00D9600196205 | TR 2SA KSA992F                      | J5000992F0050S |      |     |
| Q411,412                    | 00D2730471907 | TR 2SC KTC3206Y                     | J5023206Y0050S |      |     |
| Q413,414                    | 00D2710314903 | TR 2SA KTA1024Y                     | J5001024Y0050S |      |     |
| Q415                        | 00D2710318909 | TR 2SA 2N5401S                      | J520254010010S |      |     |
| Q418                        | 00D2730479909 | TR 2SC 2N5551S                      | J522255510010S |      |     |
| Q419,420                    | 00D9600196205 | TR 2SA KSA992F                      | J5000992F0050S |      |     |
| Q423,424                    | 00D2730471907 | TR 2SC KTC3206Y                     | J5023206Y0050S |      |     |
| Q425,426                    | 00D2710314903 | TR 2SA KTA1024Y                     | J5001024Y0050S |      |     |
| Q427                        | 00D2710318909 | TR 2SA 2N5401S                      | J520254010010S |      |     |
| Q430                        | 00D2730479909 | TR 2SC 2N5551S                      | J522255510010S |      |     |
| Q431,432                    | 00D9600196205 | TR 2SA KSA992F                      | J5000992F0050S |      |     |
| Q435,436                    | 00D2730471907 | TR 2SC KTC3206Y                     | J5023206Y0050S |      |     |
| Q437,438                    | 00D2710314903 | TR 2SA KTA1024Y                     | J5001024Y0050S |      |     |
| Q439                        | 00D2710318909 | TR 2SA 2N5401S                      | J520254010010S |      |     |
| Q442                        | 00D2730479909 | TR 2SC 2N5551S                      | J522255510010S |      |     |
| Q443,444                    | 00D9600196205 | TR 2SA KSA992F                      | J5000992F0050S |      |     |
| Q447,448                    | 00D2730471907 | TR 2SC KTC3206Y                     | J5023206Y0050S |      |     |
| Q449,450                    | 00D2710314903 | TR 2SA KTA1024Y                     | J5001024Y0050S |      |     |
| Q451                        | 00D2710318909 | TR 2SA 2N5401S                      | J520254010010S |      |     |
| Q454                        | 00D2730479909 | TR 2SC 2N5551S                      | J522255510010S |      |     |
| Q455,456                    | 00D9600196205 | TR 2SA KSA992F                      | J5000992F0050S |      |     |
| Q459,460                    | 00D2730471907 | TR 2SC KTC3206Y                     | J5023206Y0050S |      |     |
| Q461,462                    | 00D2710314903 | TR 2SA KTA1024Y                     | J5001024Y0050S |      |     |
| Q463                        | 00D2710318909 | TR 2SA 2N5401S                      | J520254010010S |      |     |
| Q466                        | 00D2730479909 | TR 2SC 2N5551S                      | J522255510010S |      |     |
| Q467,468                    | 00D9600196205 | TR 2SA KSA992F                      | J5000992F0050S |      |     |
| Q471,472                    | 00D2730471907 | TR 2SC KTC3206Y                     | J5023206Y0050S |      |     |
| Q473,474                    | 00D2710314903 | TR 2SA KTA1024Y                     | J5001024Y0050S |      |     |
| Q475                        | 00D2710318909 | TR 2SA 2N5401S                      | J520254010010S |      |     |
| Q478                        | 00D2730479909 | TR 2SC 2N5551S                      | J522255510010S |      |     |
| Q479,480                    | 00D9600196205 | TR 2SA KSA992F                      | J5000992F0050S |      |     |
| Q483,484                    | 00D2730471907 | TR 2SC KTC3206Y                     | J5023206Y0050S |      |     |
|                             |               |                                     |                |      |     |
| D401-442                    | 00D2760401905 | D,SWITCHING 1SS133T                 | K000013300520S |      |     |
| D457,458                    | 963201500170D | D,SWITCHING CHIP<br>LBAS16HT1G FAST | K005041480230S |      |     |
|                             |               |                                     |                |      |     |
| ZD401                       | 963202500300D | D,ZENER ZJ5.1A-0.5W                 | K06005R134522S |      |     |
| ZD402,403                   | 963202500410S | D,ZENER ZJ4.7B-0.5W                 | K06004R744522S |      |     |
| ZD404                       | 963202500300D | D,ZENER ZJ5.1A-0.5W                 | K06005R134522S |      |     |
| ZD405,406                   | 963202500410S | D,ZENER ZJ4.7B-0.5W                 | K06004R744522S |      |     |
| ZD407                       | 963202500300D | D,ZENER ZJ5.1A-0.5W                 | K06005R134522S |      |     |

|                        | Ref. No.  | Part No.      | Part Name                                            | Remarks        |                | Q'ty | New |
|------------------------|-----------|---------------|------------------------------------------------------|----------------|----------------|------|-----|
|                        | ZD408,409 | 963202500410S | D,ZENER ZJ4.7B-0.5W                                  |                | K06004R744522S |      |     |
|                        | ZD410     | 963202500300D | D,ZENER ZJ5.1A-0.5W                                  |                | K06005R134522S |      |     |
|                        | ZD411,412 | 963202500410S | D,ZENER ZJ4.7B-0.5W                                  |                | K06004R744522S |      |     |
|                        | ZD413     | 963202500300D | D,ZENER ZJ5.1A-0.5W                                  |                | K06005R134522S |      |     |
|                        | ZD414,415 | 963202500410S | D,ZENER ZJ4.7B-0.5W                                  |                | K06004R744522S |      |     |
|                        | ZD416     | 963202500300D | D,ZENER ZJ5.1A-0.5W                                  |                | K06005R134522S |      |     |
|                        | ZD417,418 | 963202500410S | D,ZENER ZJ4.7B-0.5W                                  |                | K06004R744522S |      |     |
|                        | ZD419     | 963202500300D | D,ZENER ZJ5.1A-0.5W                                  |                | K06005R134522S |      |     |
|                        | ZD420,421 | 963202500410S | D,ZENER ZJ4.7B-0.5W                                  |                | K06004R744522S |      |     |
|                        |           |               |                                                      |                |                |      |     |
|                        |           |               |                                                      |                |                |      |     |
| <b>RESISTORS GROUP</b> |           |               |                                                      |                |                |      |     |
|                        | R403      | nsp           | R,METAL FILM 270-J,1W                                |                | C060027165060S |      |     |
|                        | R405      | nsp           | R,METAL FILM 270-J,1W                                |                | C060027165060S |      |     |
|                        | R406      | 963252100150S | POSISTOR,I9DHPHF1608 471P<br>115T SMD PTC THERMISTOR |                | F320471001150S |      |     |
|                        | R410      | nsp           | JUMPER (0.6/52MM)                                    |                | L045084006040S |      |     |
|                        | R415      | 963125012630S | R,METAL FILM 22-J,1W                                 | FLAMERETARDANT | C060022065050S |      |     |
|                        | R418      | 963125010690S | R,METAL FILM 15K-J,2W                                |                | C060015366050S |      |     |
|                        | R424,425  | 00D9630345903 | R,FIXED 2WJ-0.47                                     | FLAMERETARDANT | N113136647820S |      |     |
|                        | R428      | nsp           | JUMPER (0.6/52MM)                                    |                | L045084006040S |      |     |
|                        | R430,431  | 00D9630345903 | R,FIXED 2WJ-0.47                                     | FLAMERETARDANT | N113136647820S |      |     |
|                        | R434      | nsp           | R,METAL FILM 3.3K-J,1W                               |                | C060033265050S |      |     |
|                        | R439      | 963125012630S | R,METAL FILM 22-J,1W                                 | FLAMERETARDANT | C060022065050S |      |     |
|                        | R441,442  | nsp           | R,METAL FILM 1K-J,1W                                 |                | C060010265050S |      |     |
|                        | R443      | nsp           | R,METAL FILM 270-J,1W                                |                | C060027165060S |      |     |
|                        | R447,448  | nsp           | R,METAL FILM 270-J,1W                                |                | C060027165060S |      |     |
|                        | R449      | 963252100160S | POSISTOR DHPHF1608 471P 95T                          |                | F320471000950S |      |     |
|                        | R450      | 963252100150S | POSISTOR,I9DHPHF1608 471P<br>115T SMD PTC THERMISTOR |                | F320471001150S |      |     |
|                        | R453      | nsp           | JUMPER (0.6/52MM)                                    |                | L045084006040S |      |     |
|                        | R458      | 963125012630S | R,METAL FILM 22-J,1W                                 | FLAMERETARDANT | C060022065050S |      |     |
|                        | R461      | 963125010690S | R,METAL FILM 15K-J,2W                                |                | C060015366050S |      |     |
|                        | R464      | 963252100160S | POSISTOR DHPHF1608 471P 95T                          |                | F320471000950S |      |     |
|                        | R467,468  | 00D9630345903 | R,FIXED 2WJ-0.47                                     | FLAMERETARDANT | N113136647820S |      |     |
|                        | R472      | nsp           | JUMPER (0.6/52MM)                                    |                | L045084006040S |      |     |
|                        | R474,475  | 00D9630345903 | R,FIXED 2WJ-0.47                                     | FLAMERETARDANT | N113136647820S |      |     |
|                        | R483      | 963125012630S | R,METAL FILM 22-J,1W                                 | FLAMERETARDANT | C060022065050S |      |     |
|                        | R485,486  | nsp           | R,METAL FILM 1K-J,1W                                 |                | C060010265050S |      |     |
|                        | R487      | nsp           | R,METAL FILM 270-J,1W                                |                | C060027165060S |      |     |
|                        | R491,492  | nsp           | R,METAL FILM 270-J,1W                                |                | C060027165060S |      |     |
|                        | R494      | 963252100150S | POSISTOR,I9DHPHF1608 471P<br>115T SMD PTC THERMISTOR |                | F320471001150S |      |     |
|                        | R497      | nsp           | JUMPER (0.6/52MM)                                    |                | L045084006040S |      |     |
|                        | R502      | 963125012630S | R,METAL FILM 22-J,1W                                 | FLAMERETARDANT | C060022065050S |      |     |
|                        | R505      | 963125010690S | R,METAL FILM 15K-J,2W                                |                | C060015366050S |      |     |
|                        | R511,512  | 00D9630345903 | R,FIXED 2WJ-0.47                                     | FLAMERETARDANT | N113136647820S |      |     |
|                        | R515      | nsp           | JUMPER (0.6/52MM)                                    |                | L045084006040S |      |     |
|                        | R517,518  | 00D9630345903 | R,FIXED 2WJ-0.47                                     | FLAMERETARDANT | N113136647820S |      |     |
|                        | R521      | nsp           | R,METAL FILM 3.3K-J,1W                               |                | C060033265050S |      |     |
|                        | R526      | 963125012630S | R,METAL FILM 22-J,1W                                 | FLAMERETARDANT | C060022065050S |      |     |
|                        | R528,529  | nsp           | R,METAL FILM 1K-J,1W                                 |                | C060010265050S |      |     |
|                        | R530      | nsp           | R,METAL FILM 270-J,1W                                |                | C060027165060S |      |     |
|                        | R533      | nsp           | R,METAL FILM 270-J,1W                                |                | C060027165060S |      |     |

|  | Ref. No. | Part No.      | Part Name                                             | Remarks        |                | Q'ty | New |
|--|----------|---------------|-------------------------------------------------------|----------------|----------------|------|-----|
|  | R535     | nsp           | R,METAL FILM 270-J,1W                                 |                | C060027165060S |      |     |
|  | R537     | 963252100150S | POSISTOR,I9DHPTHF1608 471P<br>115T SMD PTC THERMISTOR |                | F320471001150S |      |     |
|  | R540     | nsp           | JUMPER (0.6/52MM)                                     |                | L045084006040S |      |     |
|  | R545     | 963125012630S | R,METAL FILM 22-J,1W                                  | FLAMERETARDANT | C060022065050S |      |     |
|  | R554,555 | 00D9630345903 | R,FIXED 2WJ-0.47                                      | FLAMERETARDANT | N113136647820S |      |     |
|  | R558     | nsp           | JUMPER (0.6/52MM)                                     |                | L045084006040S |      |     |
|  | R561,562 | 00D9630345903 | R,FIXED 2WJ-0.47                                      | FLAMERETARDANT | N113136647820S |      |     |
|  | R564     | nsp           | R,METAL FILM 3.3K-J,1W                                |                | C060033265050S |      |     |
|  | R569     | 963125012630S | R,METAL FILM 22-J,1W                                  | FLAMERETARDANT | C060022065050S |      |     |
|  | R571,572 | nsp           | R,METAL FILM 1K-J,1W                                  |                | C060010265050S |      |     |
|  | R573     | nsp           | R,METAL FILM 270-J,1W                                 |                | C060027165060S |      |     |
|  | R576     | nsp           | R,METAL FILM 270-J,1W                                 |                | C060027165060S |      |     |
|  | R578     | nsp           | R,METAL FILM 270-J,1W                                 |                | C060027165060S |      |     |
|  | R580     | 963252100150S | POSISTOR,I9DHPTHF1608 471P<br>115T SMD PTC THERMISTOR |                | F320471001150S |      |     |
|  | R583     | nsp           | JUMPER (0.6/52MM)                                     |                | L045084006040S |      |     |
|  | R588     | 963125012630S | R,METAL FILM 22-J,1W                                  | FLAMERETARDANT | C060022065050S |      |     |
|  | R591     | 963125010690S | R,METAL FILM 15K-J,2W                                 |                | C060015366050S |      |     |
|  | R597,598 | 00D9630345903 | R,FIXED 2WJ-0.47                                      | FLAMERETARDANT | N113136647820S |      |     |
|  | R601     | nsp           | JUMPER (0.6/52MM)                                     |                | L045084006040S |      |     |
|  | R603,604 | 00D9630345903 | R,FIXED 2WJ-0.47                                      | FLAMERETARDANT | N113136647820S |      |     |
|  | R607     | nsp           | R,METAL FILM 3.3K-J,1W                                |                | C060033265050S |      |     |
|  | R612     | 963125012630S | R,METAL FILM 22-J,1W                                  | FLAMERETARDANT | C060022065050S |      |     |
|  | R614,615 | nsp           | R,METAL FILM 1K-J,1W                                  |                | C060010265050S |      |     |
|  | R616     | nsp           | R,METAL FILM 270-J,1W                                 |                | C060027165060S |      |     |
|  | R619     | nsp           | R,METAL FILM 270-J,1W                                 |                | C060027165060S |      |     |
|  | R621     | nsp           | R,METAL FILM 270-J,1W                                 |                | C060027165060S |      |     |
|  | R623     | 963252100150S | POSISTOR,I9DHPTHF1608 471P<br>115T SMD PTC THERMISTOR |                | F320471001150S |      |     |
|  | R626     | nsp           | JUMPER (0.6/52MM)                                     |                | L045084006040S |      |     |
|  | R631     | 963125012630S | R,METAL FILM 22-J,1W                                  | FLAMERETARDANT | C060022065050S |      |     |
|  | R634     | 963125010690S | R,METAL FILM 15K-J,2W                                 |                | C060015366050S |      |     |
|  | R640,641 | 00D9630345903 | R,FIXED 2WJ-0.47                                      | FLAMERETARDANT | N113136647820S |      |     |
|  | R644     | nsp           | JUMPER (0.6/52MM)                                     |                | L045084006040S |      |     |
|  | R646,647 | 00D9630345903 | R,FIXED 2WJ-0.47                                      | FLAMERETARDANT | N113136647820S |      |     |
|  | R650     | nsp           | R,METAL FILM 3.3K-J,1W                                |                | C060033265050S |      |     |
|  | R655     | 963125012630S | R,METAL FILM 22-J,1W                                  | FLAMERETARDANT | C060022065050S |      |     |
|  | R657,658 | nsp           | R,METAL FILM 1K-J,1W                                  |                | C060010265050S |      |     |
|  | R659     | nsp           | R,METAL FILM 270-J,1W                                 |                | C060027165060S |      |     |
|  | R662     | nsp           | R,METAL FILM 270-J,1W                                 |                | C060027165060S |      |     |
|  | R664     | nsp           | R,METAL FILM 270-J,1W                                 |                | C060027165060S |      |     |
|  | R666     | 963252100150S | POSISTOR,I9DHPTHF1608 471P<br>115T SMD PTC THERMISTOR |                | F320471001150S |      |     |
|  | R669     | nsp           | JUMPER (0.6/52MM)                                     |                | L045084006040S |      |     |
|  | R674     | 963125012630S | R,METAL FILM 22-J,1W                                  | FLAMERETARDANT | C060022065050S |      |     |
|  | R677     | 963125010690S | R,METAL FILM 15K-J,2W                                 |                | C060015366050S |      |     |
|  | R683,684 | 00D9630345903 | R,FIXED 2WJ-0.47                                      | FLAMERETARDANT | N113136647820S |      |     |
|  | R687     | nsp           | JUMPER (0.6/52MM)                                     |                | L045084006040S |      |     |
|  | R689,690 | 00D9630345903 | R,FIXED 2WJ-0.47                                      | FLAMERETARDANT | N113136647820S |      |     |
|  | R694     | nsp           | R,METAL FILM 3.3K-J,1W                                |                | C060033265050S |      |     |
|  | R698     | 963125012630S | R,METAL FILM 22-J,1W                                  | FLAMERETARDANT | C060022065050S |      |     |
|  | R700,701 | nsp           | R,METAL FILM 1K-J,1W                                  |                | C060010265050S |      |     |
|  | R702     | nsp           | R,METAL FILM 270-J,1W                                 |                | C060027165060S |      |     |



|                         | Ref. No.  | Part No.      | Part Name                      | Remarks |                | Q'ty | New |
|-------------------------|-----------|---------------|--------------------------------|---------|----------------|------|-----|
|                         | VR401-407 | 963161012400S | VR,SEMI CARBON EVN-DCAA03B 1KB |         | C541102315000S |      |     |
|                         |           |               |                                |         |                |      |     |
|                         |           |               |                                |         |                |      |     |
| <b>CAPACITORS GROUP</b> |           |               |                                |         |                |      |     |
|                         | C401      | nsp           | C,CERAMIC 0.1UF-K/50V          |         | D011104577160S |      |     |
|                         | C403      | nsp           | C,CERAMIC 0.01UF-K/50V         |         | D010103777160S |      |     |
|                         | C405      | nsp           | C,CERAMIC 220PF-J/50V          |         | D010221167160S |      |     |
|                         | C406      | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
|                         | C407      | 00D2544574919 | C,ELECT 47UF-M/50V (Pb Free)   |         | D040470087070S |      |     |
|                         | C408      | 00D2544573994 | C,ELECT 22UF-M/50V             |         | D040220087330S |      |     |
|                         | C409      | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
|                         | C410      | 00D2544574922 | C,ELECT 100UF-M/50V            |         | D040101087060S |      |     |
|                         | C411,412  | nsp           | C,CERAMIC 470PF-K/500V         |         | D00447127D050S |      |     |
|                         | C413      | nsp           | C,CERAMIC X7R2200PF-K/50V      |         | D011222777200S |      |     |
|                         | C415,416  | 00D9630234302 | C,ELECT 10UF-M/100V            |         | D04010008C050S |      |     |
|                         | C418      | nsp           | C,CERAMIC 0.1UF-K/50V          |         | D011104577160S |      |     |
|                         | C421      | nsp           | C,CERAMIC 220PF-J/50V          |         | D010221167160S |      |     |
|                         | C422      | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
|                         | C423      | 00D2544574919 | C,ELECT 47UF-M/50V (Pb Free)   |         | D040470087070S |      |     |
|                         | C424      | 00D2544573994 | C,ELECT 22UF-M/50V             |         | D040220087330S |      |     |
|                         | C425      | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
|                         | C426      | 00D2544574922 | C,ELECT 100UF-M/50V            |         | D040101087060S |      |     |
|                         | C427,428  | nsp           | C,CERAMIC 470PF-K/500V         |         | D00447127D050S |      |     |
|                         | C429      | nsp           | C,CERAMIC X7R2200PF-K/50V      |         | D011222777200S |      |     |
|                         | C431,432  | 00D9630234302 | C,ELECT 10UF-M/100V            |         | D04010008C050S |      |     |
|                         | C434      | nsp           | C,CERAMIC 0.1UF-K/50V          |         | D011104577160S |      |     |
|                         | C437      | nsp           | C,CERAMIC 220PF-J/50V          |         | D010221167160S |      |     |
|                         | C438      | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
|                         | C439      | 00D2544574919 | C,ELECT 47UF-M/50V (Pb Free)   |         | D040470087070S |      |     |
|                         | C440      | 00D2544573994 | C,ELECT 22UF-M/50V             |         | D040220087330S |      |     |
|                         | C441      | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
|                         | C442      | 00D2544574922 | C,ELECT 100UF-M/50V            |         | D040101087060S |      |     |
|                         | C443,444  | nsp           | C,CERAMIC 470PF-K/500V         |         | D00447127D050S |      |     |
|                         | C445      | nsp           | C,CERAMIC X7R2200PF-K/50V      |         | D011222777200S |      |     |
|                         | C447,448  | 00D9630234302 | C,ELECT 10UF-M/100V            |         | D04010008C050S |      |     |
|                         | C450      | nsp           | C,CERAMIC 0.1UF-K/50V          |         | D011104577160S |      |     |
|                         | C453      | nsp           | C,CERAMIC 220PF-J/50V          |         | D010221167160S |      |     |
|                         | C454      | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
|                         | C455      | 00D2544574919 | C,ELECT 47UF-M/50V (Pb Free)   |         | D040470087070S |      |     |
|                         | C456      | 00D9630224503 | C,ELECT 22UF-M/50V             |         | D040220087060S |      |     |
|                         | C457      | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
|                         | C458      | 00D2544574922 | C,ELECT 100UF-M/50V            |         | D040101087060S |      |     |
|                         | C459,460  | nsp           | C,CERAMIC 470PF-K/500V         |         | D00447127D050S |      |     |
|                         | C461      | nsp           | C,CERAMIC X7R2200PF-K/50V      |         | D011222777200S |      |     |
|                         | C463,464  | 00D9630234302 | C,ELECT 10UF-M/100V            |         | D04010008C050S |      |     |
|                         | C466      | nsp           | C,CERAMIC 0.1UF-K/50V          |         | D011104577160S |      |     |
|                         | C469      | nsp           | C,CERAMIC 220PF-J/50V          |         | D010221167160S |      |     |
|                         | C470      | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
|                         | C471      | 00D2544574919 | C,ELECT 47UF-M/50V (Pb Free)   |         | D040470087070S |      |     |
|                         | C472      | 00D9630224503 | C,ELECT 22UF-M/50V             |         | D040220087060S |      |     |
|                         | C473      | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
|                         | C474      | 00D2544574922 | C,ELECT 100UF-M/50V            |         | D040101087060S |      |     |

| Ref. No.                  | Part No.      | Part Name                    | Remarks |                | Q'ty | New |
|---------------------------|---------------|------------------------------|---------|----------------|------|-----|
| C475,476                  | nsp           | C,CERAMIC 470PF-K/500V       |         | D00447127D050S |      |     |
| C477                      | nsp           | C,CERAMIC X7R2200PF-K/50V    |         | D011222777200S |      |     |
| C479,480                  | 00D9630234302 | C,ELECT 10UF-M/100V          |         | D04010008C050S |      |     |
| C482                      | nsp           | C,CERAMIC 0.1UF-K/50V        |         | D011104577160S |      |     |
| C485                      | nsp           | C,CERAMIC 220PF-J/50V        |         | D010221167160S |      |     |
| C486                      | nsp           | C,CERAMIC SL220PF-J/500V     |         | D00022106D051S |      |     |
| C487                      | 00D2544574919 | C,ELECT 47UF-M/50V (Pb Free) |         | D040470087070S |      |     |
| C488                      | 00D9630224503 | C,ELECT 22UF-M/50V           |         | D040220087060S |      |     |
| C489                      | nsp           | C,CERAMIC SL220PF-J/500V     |         | D00022106D051S |      |     |
| C490                      | 00D2544574922 | C,ELECT 100UF-M/50V          |         | D040101087060S |      |     |
| C491,492                  | nsp           | C,CERAMIC 470PF-K/500V       |         | D00447127D050S |      |     |
| C493                      | nsp           | C,CERAMIC X7R2200PF-K/50V    |         | D011222777200S |      |     |
| C495,496                  | 00D9630234302 | C,ELECT 10UF-M/100V          |         | D04010008C050S |      |     |
| C498                      | nsp           | C,CERAMIC 0.1UF-K/50V        |         | D011104577160S |      |     |
| C501                      | nsp           | C,CERAMIC 220PF-J/50V        |         | D010221167160S |      |     |
| C502                      | nsp           | C,CERAMIC SL220PF-J/500V     |         | D00022106D051S |      |     |
| C503                      | 00D2544574919 | C,ELECT 47UF-M/50V (Pb Free) |         | D040470087070S |      |     |
| C504                      | 00D9630224503 | C,ELECT 22UF-M/50V           |         | D040220087060S |      |     |
| C505                      | nsp           | C,CERAMIC SL220PF-J/500V     |         | D00022106D051S |      |     |
| C506                      | 00D2544574922 | C,ELECT 100UF-M/50V          |         | D040101087060S |      |     |
| C507,508                  | nsp           | C,CERAMIC 470PF-K/500V       |         | D00447127D050S |      |     |
| C509                      | nsp           | C,CERAMIC X7R2200PF-K/50V    |         | D011222777200S |      |     |
| C511,512                  | 00D9630234302 | C,ELECT 10UF-M/100V          |         | D04010008C050S |      |     |
| C513,514                  | 00D9630338402 | C,ELECT 330UF-M/6.3V         |         | D040331081050S |      |     |
| C515                      | 00D2544538913 | C,ELECT 22UF-M/16V           |         | D040220083070S |      |     |
|                           |               |                              |         |                |      |     |
|                           |               |                              |         |                |      |     |
| <b>OTHERS PARTS GROUP</b> |               |                              |         |                |      |     |
| BKT400                    | nsp           | BRACKET 0.8t/SCREW           |         | 4010210196100S |      |     |
|                           |               |                              |         |                |      |     |
| CN404                     | nsp           | CN,WIRE 2MM,I9CN,WIRE 2MM    |         | L002241050090S |      |     |
|                           |               |                              |         |                |      |     |
| CP401                     | nsp           | CN.WAFER 13P STRAIGHT        |         | L101200101310S |      |     |
| CP402                     | nsp           | CN.WAFER 5P 5267-05A         |         | L102526700500S |      |     |
| CP403                     | nsp           | CN.WAFER 10P STRAIGHT        |         | L101200101010S |      |     |
| CP405                     | nsp           | CN.WAFER 3P 5267-03A         |         | L102526700300S |      |     |
|                           |               |                              |         |                |      |     |
| G400-402                  | nsp           | CN,WIRE 1P                   |         | L000600010050S |      |     |
|                           |               |                              |         |                |      |     |
| TP401-407                 | nsp           | CN.WAFER 3P                  |         | L101200100320S |      |     |
|                           |               |                              |         |                |      |     |
|                           | nsp           | RING,TER WIRE,I9210MM/1P     |         | 8410211010020S |      |     |

## SPK\_SMPS PCB UNIT ASS'Y

|                             | Ref. No.    | Part No.      | Part Name                        | Remarks |                | Q'ty | New |
|-----------------------------|-------------|---------------|----------------------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |             |               |                                  |         |                |      |     |
| ⚠                           | IC4140      | 231010091708S | IC,LINEAR POWER TOP258MG SDIP10  |         | J122258001010S |      |     |
| ⚠                           | IC4142      | 00D2623047008 | IC PC123X2YFZ (DIP4P SHARP)      |         | K614123000010S |      |     |
|                             | IC4143      | 212050010508S | IC KIA2431AP                     |         | J126243118010S |      |     |
|                             |             |               |                                  |         |                |      |     |
|                             | Q4000-4005  | 943215500020S | TR 2SA RT1P141C                  |         | J520101411210S |      |     |
|                             | Q4006-4011  | 943216500020S | TR 2SC RT1N141C                  |         | J522101411210S |      |     |
|                             |             |               |                                  |         |                |      |     |
|                             | D4000-4005  | 963201500170D | D,SWITCHING CHIP LBAS16HT1G FAST |         | K005041480230S |      |     |
|                             | D4006       | 00D2760401905 | D,SWITCHING 1SS133T              |         | K000013300520S |      |     |
|                             | D4007       | 963203500300D | D,RECTIFIER BRIDGE DIODE         |         | K047100600220S |      |     |
|                             | D4140-4148  | 963201500160D | D,SWITCHING 1N4007 52REEL        |         | K000400700220S |      |     |
|                             | D4149       | 963204500210D | D,SCHOTTKY S30SC6MT 60V 30A      |         | K120300600010S |      |     |
|                             | D4150       | 00D2760401905 | D,SWITCHING 1SS133T              |         | K000013300520S |      |     |
|                             |             |               |                                  |         |                |      |     |
|                             | ZD4147-4149 | 963202500370D | D,ZENER ZJ39B-0.5W/5MA-52MM      | U       | K06039R044522S |      |     |
|                             | ZD4150-4157 | 963202500350D | D,ZENER ZJ22B-0.5W               |         | K06022R044522S |      |     |
|                             | ZD4158      | 963202500370D | D,ZENER ZJ39B-0.5W/5MA-52MM      |         | K06039R044522S |      |     |
|                             | ZD4159      | 963202500320D | D,ZENER ZJ5.6B-0.5W/5MA-52MM     |         | K06005R644522S |      |     |
|                             | ZD4160      | 00D9600095704 | ZENER DIODE MTZJ6.2B-0.5W        | U       | K06006R244520S |      |     |
|                             | ZD4160      | 00D2760665903 | ZENER DIODE MTZJ16B-0.5W         | N,K     | K06016R044520S |      |     |
|                             |             |               |                                  |         |                |      |     |
|                             | TR4140      | 963222500150D | SEMI,FET CHIP KMB2D0N60SA        |         | J543206005510S |      |     |
|                             | TR4142      | 963213500170D | SEMI,TR/GE NPN 2SC KTC3198G      |         | J5023198G0000S |      |     |
|                             |             |               |                                  |         |                |      |     |
|                             |             |               |                                  |         |                |      |     |
| <b>RESISTORS GROUP</b>      |             |               |                                  |         |                |      |     |
|                             | R4000,4001  | 963125010110S | R,METAL FILM 470-J,2W            |         | C060047166060S |      |     |
|                             | R4002       | nsp           | R,METAL FILM 10-J,1W             |         | C060010065050S |      |     |
|                             | R4003       | 963125010100S | R,METAL FILM 10-J 2W             |         | C060010066050S |      |     |
|                             | R4004       | nsp           | R,METAL FILM 10-J,1W             |         | C060010065050S |      |     |
|                             | R4005       | 963125010100S | R,METAL FILM 10-J 2W             |         | C060010066050S |      |     |
|                             | R4006       | nsp           | R,METAL FILM 10-J,1W             |         | C060010065050S |      |     |
|                             | R4007       | 963125010100S | R,METAL FILM 10-J 2W             |         | C060010066050S |      |     |
|                             | R4008       | nsp           | R,METAL FILM 10-J,1W             |         | C060010065050S |      |     |
|                             | R4009       | 963125010100S | R,METAL FILM 10-J 2W             |         | C060010066050S |      |     |
|                             | R4010       | nsp           | R,METAL FILM 10-J,1W             |         | C060010065050S |      |     |
|                             | R4011       | 963125010100S | R,METAL FILM 10-J 2W             |         | C060010066050S |      |     |
|                             | R4012       | nsp           | R,METAL FILM 10-J,1W             |         | C060010065050S |      |     |
|                             | R4013       | 963125010100S | R,METAL FILM 10-J 2W             |         | C060010066050S |      |     |
|                             | R4014       | nsp           | R,METAL FILM 10-J,1W             |         | C060010065050S |      |     |
|                             | R4015       | 963125010100S | R,METAL FILM 10-J 2W             |         | C060010066050S |      |     |
|                             | R4025-4027  | 963125500070D | R,METAL FILM 100PPM 1.1K-J       |         | C060011265050S |      |     |
|                             | R4028       | nsp           | R,METAL FILM 10K-J,1/4W          |         | C060103063050S |      |     |
|                             | R4147       | nsp           | 56K-J,1/16W-1608                 | N,K     | C20005636M160S |      |     |
|                             | R4147       | nsp           | 270K-J,1/16W-1608                | U       | C20002746M160S |      |     |
|                             | R4148,4149  | nsp           | 2.2M-J,1/5W-52RE-AX              | U       | C00002256P520S |      |     |
|                             | R4150       | nsp           | 1M-J,1/5W-52RE-AX                | U       | C00001056P520S |      |     |
|                             |             |               |                                  |         |                |      |     |
|                             |             |               |                                  |         |                |      |     |
|                             |             |               |                                  |         |                |      |     |

|                         | Ref. No.   | Part No.      | Part Name                                          | Remarks |                | Q'ty | New |
|-------------------------|------------|---------------|----------------------------------------------------|---------|----------------|------|-----|
| <b>CAPACITORS GROUP</b> |            |               |                                                    |         |                |      |     |
|                         | C4000      | nsp           | C,CERAMIC CHIP HIK,I9X7R<br>0.01UF-K/200V-2012REEL |         | D01110317G200S |      |     |
|                         | C4002      | nsp           | C,CERAMIC CHIP HIK,I9X7R<br>0.01UF-K/200V-2012REEL |         | D01110317G200S |      |     |
|                         | C4004      | nsp           | C,FILM MI-0.047UF-J/50V                            |         | D020473167050S |      |     |
|                         | C4006      | nsp           | C,CERAMIC CHIP HIK,I9X7R<br>0.01UF-K/200V-2012REEL |         | D01110317G200S |      |     |
|                         | C4008      | nsp           | C,FILM MI-0.047UF-J/50V                            |         | D020473167050S |      |     |
|                         | C4010      | nsp           | C,CERAMIC CHIP HIK,I9X7R<br>0.01UF-K/200V-2012REEL |         | D01110317G200S |      |     |
|                         | C4012      | nsp           | C,CERAMIC CHIP HIK,I9X7R<br>0.01UF-K/200V-2012REEL |         | D01110317G200S |      |     |
|                         | C4015      | nsp           | C,FILM MI-0.047UF-J/50V                            |         | D020473167050S |      |     |
|                         | C4016      | nsp           | C,CERAMIC CHIP HIK,I9X7R<br>0.01UF-K/200V-2012REEL |         | D01110317G200S |      |     |
|                         | C4019      | nsp           | C,CERAMIC CHIP HIK,I9X7R<br>0.01UF-K/200V-2012REEL |         | D01110317G200S |      |     |
|                         | C4021      | nsp           | C,FILM MI-0.047UF-J/50V                            |         | D020473167050S |      |     |
|                         | C4023      | nsp           | C,CERAMIC CHIP HIK,I9X7R<br>0.01UF-K/200V-2012REEL |         | D01110317G200S |      |     |
|                         | C4025      | nsp           | C,FILM MI-0.047UF-J/50V                            |         | D020473167050S |      |     |
|                         | C4026      | nsp           | C,CERAMIC CHIP HIK,I9X7R<br>0.01UF-K/200V-2012REEL |         | D01110317G200S |      |     |
|                         | C4029      | nsp           | C,FILM MI-0.047UF-J/50V                            |         | D020473167050S |      |     |
|                         | C4031      | nsp           | C,FILM MI-0.047UF-J/50V                            |         | D020473167050S |      |     |
|                         | C4033      | nsp           | C,CERAMIC 1000PF-K/50V                             |         | D011102777160S |      |     |
|                         | C4036      | nsp           | C,CERAMIC 1000PF-K/50V                             |         | D011102777160S |      |     |
|                         | C4039      | nsp           | C,CERAMIC 1000PF-K/50V                             |         | D011102777160S |      |     |
|                         | C4042      | nsp           | C,CERAMIC 1000PF-K/50V                             |         | D011102777160S |      |     |
|                         | C4045      | nsp           | C,CERAMIC 1000PF-K/50V                             |         | D011102777160S |      |     |
|                         | C4048      | 00D2544574922 | C,ELECT 100UF-M/50V                                |         | D040101087060S |      |     |
|                         | C4049      | nsp           | C,CERAMIC 1000PF-K/50V                             |         | D011102777160S |      |     |
|                         | C4052      | nsp           | C,CERAMIC 1000PF-K/50V                             |         | D011102777160S |      |     |
|                         | C4055      | nsp           | C,CERAMIC 1000PF-K/50V                             |         | D011102777160S |      |     |
|                         | C4058      | nsp           | C,CERAMIC 1000PF-K/50V                             |         | D011102777160S |      |     |
|                         | C4060,4061 | nsp           | C,FILM 0.1UF-K/250V                                |         | D02010407H080S |      |     |
|                         | C4062      | 00D2544573981 | C,ELECT 10UF-M/50V                                 |         | D040100087070S |      |     |
|                         | C4063,4064 | 963134010180S | C,ELECT 12000UF-M/71V                              |         | D040123089550S |      |     |
|                         | C4065      | nsp           | C,CERAMIC 1000PF-K/50V                             |         | D011102777160S |      |     |
|                         | C4067      | 00D9630244606 | C,ELECT 0.1UF-M/50V (Pb Free)                      |         | D040R10087080S |      |     |
| △                       | C4140,4141 | 963134011730S | C,CERAMIC DE1B3KX471KB4BL01                        |         | D00847127H010S |      |     |
| △                       | C4142      | 963132011940S | C,CERAMIC DE2F3KY103MB3BM02                        |         | D008103589010S |      |     |
| △                       | C4143      | nsp           | C,FILM 0.1UF-K/275V                                |         | D02110407H010S |      |     |
|                         | C4145-4147 | nsp           | C,CERAMIC 0.1UF-K/50V                              |         | D011104577160S |      |     |
| △                       | C4148,4149 | 963132011940S | C,CERAMIC DE2F3KY103MB3BM02                        | N,K     | D008103589010S |      |     |
|                         | C4151      | 963134010200S | C,ELECT 100UF-M/400V                               | N,K     | D04110108K000S |      |     |
|                         | C4151      | 943134501590S | C,ELECT GE 105C 100UF-M/200V                       | U       | D04110108G000S |      |     |
|                         | C4152      | 963134010210S | C,ELECT 47UF-M/25V                                 |         | D041470084050S |      |     |
|                         | C4153      | 963132010120S | C,CERAMIC DEHR33A102KB2B                           |         | D00810207Q010S |      |     |
|                         | C4154      | nsp           | C,CERAMIC 0.1UF-K/50V                              |         | D011104577160S |      |     |
|                         | C4155      | 963134010190S | C,ELECT 10UF-M/50V                                 |         | D041100087050S |      |     |
| △                       | C4156      | 963132011930S | C,CERAMIC DE1E3KX222MB4BL01                        |         | D00822248H010S |      |     |
|                         | C4159,4160 | nsp           | C,CERAMIC 0.1UF-K/50V                              |         | D011104577160S |      |     |
|                         | C4161      | nsp           | C,CERAMIC 4.7UF-K/6.3V                             |         | D011475571160S |      |     |
|                         | C4162-4164 | 963134010220S | C,ELECT5600UF-M/6.3V                               |         | D041562081001S |      |     |

|                           | Ref. No.     | Part No.      | Part Name                                      | Remarks |                | Q'ty | New |
|---------------------------|--------------|---------------|------------------------------------------------|---------|----------------|------|-----|
|                           | C4166        | nsp           | C,CERAMIC 0.1UF-K/50V                          |         | D011104577160S |      |     |
|                           |              |               |                                                |         |                |      |     |
|                           |              |               |                                                |         |                |      |     |
| <b>OTHERS PARTS GROUP</b> |              |               |                                                |         |                |      |     |
|                           | BKT4000-4002 | nsp           | BRACKET t1.0+Sn plating /PCB MTG               |         | 4010214876000S |      |     |
|                           | BKT4141      | nsp           | BRACKET 0.8t/SCREW                             |         | 4010210196100S |      |     |
|                           | BKT4142      | nsp           | BRACKET SCREW                                  |         | 4010210196000S |      |     |
|                           |              |               |                                                |         |                |      |     |
|                           | CLAMP400     | nsp           | CLAMP WIRE(SOLDER)                             |         | 4330000120000S |      |     |
|                           |              |               |                                                |         |                |      |     |
|                           | CN402        | nsp           | CN,WIRE 230MM/5P 5264-05                       |         | L000231050050S |      |     |
|                           | CN403        | nsp           | CN,WIRE 2MM 170MM/10P 20010HS-10               |         | L002171100050S |      |     |
|                           | CN405        | nsp           | CN,WIRE,I9CN,WIRE                              |         | L000161030050S |      |     |
|                           | CN4141       | nsp           | CN,WIRE 370MM/5P                               |         | L000371050010S |      |     |
|                           |              |               |                                                |         |                |      |     |
|                           | CP4001       | nsp           | CN.WAFER 7.92MM 35328-0360                     |         | L108353280360S |      |     |
|                           | CP4002       | nsp           | CN.WAFER 13P STRAIGHT                          |         | L101200101310S |      |     |
|                           | CP4142       | nsp           | CN.WAFER 7.92MM LWBP1143-02P                   |         | L108011430210S |      |     |
|                           |              |               |                                                |         |                |      |     |
|                           | DZ4000       | 963202500330D | D,ZENER ZJ6.8B-0.5W                            |         | K06006R844522S |      |     |
|                           |              |               |                                                |         |                |      |     |
| ⚠                         | F4140        | 963652010500S | FUSE 1.6A/250V                                 | N,K     | N751501601160S |      |     |
| ⚠                         | F4140        | 963652010510S | FUSE T2A/250V                                  | U       | N751502001160S |      |     |
| ⚠                         | F4141        | 963652010910S | FUSE T3.15A/250V                               | N,K     | N751503151160S |      |     |
| ⚠                         | F4141        | 963652010520S | FUSE T6.3A/250V                                | U       | N751506301160S |      |     |
|                           |              |               |                                                |         |                |      |     |
|                           | JK4000       | 963646100480S | TER,BOARD SCREW 6P(3RD/3BK)                    |         | G613602A1WG0YS |      | *   |
|                           | JK4001       | 963646100490S | TER,BOARD SCREW<br>8P(RD,RD,RD,RD,BK,BK,BK,BK) |         | G614801AWG02YS |      | *   |
|                           | JK4002       | 963646100500S | TER,BOARD SCREW 4P(2RD/BK)                     |         | G612405EWG02YS |      | *   |
| ⚠                         | JK4140       | 963641011240S | SOCKET,POWER AC (INLET JACK)                   |         | G4300152P0001S |      |     |
|                           |              |               |                                                |         |                |      |     |
|                           | JP4140,4141  | nsp           | JUMPER (0.6/52MM)                              |         | L045084006040S |      |     |
|                           |              |               |                                                |         |                |      |     |
|                           | L4000-4006   | nsp           | SP-2507 1.0 PI*2UEW TURNS                      |         | D330900001330S |      |     |
| ⚠                         | L4140        | 963111100420D | COIL,LINE FILTER SQ2014 27mH                   |         | D320201405510S |      |     |
|                           |              |               |                                                |         |                |      |     |
|                           | RLY4000      | 00D9630218409 | RELAY BC3-12 24V 2A                            |         | G680240202030S |      |     |
|                           | RLY4001-4005 | 963682100280D | RELAY JZC-42F/012-2HST                         |         | G680060103010S |      |     |
| ⚠                         | RLY4140      | 963682100290D | RELAY JZC-36FD/005-HLT                         |         | G680060103030S |      |     |
|                           |              |               |                                                |         |                |      |     |
| ⚠                         | T4140        | 963102100020S | TRANS,SWITCHING EER2834                        |         | E060283405520S |      |     |
|                           |              | nsp           | FUSE LABEL T1.6A/250V                          | N,K     | 5507000006790S |      |     |
|                           |              | nsp           | FUSE LABEL T3.15A/250V                         | N,K     | 5507000006800S |      |     |
|                           |              | nsp           | SHIELD,CASE                                    |         | 3070210596000S |      |     |
|                           |              | nsp           | HOLDER,FUSE CLIP                               | F4140_1 | G645000050010S |      |     |
|                           |              | nsp           | HOLDER,FUSE CLIP                               | F4140_2 | G645000050010S |      |     |
|                           |              | nsp           | HOLDER,FUSE CLIP                               | F4141_1 | G645000050010S |      |     |
|                           |              | nsp           | HOLDER,FUSE CLIP                               | F4141_2 | G645000050010S |      |     |

## REG\_CNT PCB UNIT ASS'Y

|                             | Ref. No.    | Part No.      | Part Name                        | Remarks |                | Q'ty | New |
|-----------------------------|-------------|---------------|----------------------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |             |               |                                  |         |                |      |     |
|                             | IC4600      | 00D2630553006 | IC NJM7805FA                     |         | J126780500130S |      |     |
|                             | IC4601      | 00D2630554005 | IC NJM7905FA                     |         | J126790500020S |      |     |
|                             | IC4602      | 00D2630553006 | IC NJM7805FA                     |         | J126780500130S |      |     |
|                             | IC4603      | 00D2630810008 | IC NJM7808FA                     |         | J126780800030S |      |     |
|                             | IC4604      | 00D2630503001 | IC NJM7908FA                     |         | J126790800020S |      |     |
|                             | IC4605      | 00D2630553006 | IC NJM7805FA                     |         | J126780500130S |      |     |
|                             | IC4606      | 00D2631289900 | IC AZ4580M                       |         | J121458000020S |      |     |
|                             | IC4700      | 00D2631286903 | IC PQ120DNA1ZPH 12V 1A           |         | J126120010010S |      |     |
|                             | IC4701      | 236810090504S | IC ILX3232D                      |         | J046323200020S |      |     |
|                             | IC4702      | 231310009508S | IC PQ033DNA1ZPH                  |         | J126033010010S |      |     |
|                             |             |               |                                  |         |                |      |     |
|                             | D4600       | 00D9630236504 | D,SCHOTTKY RB721Q-40             |         | K120072140010S |      |     |
|                             | D4601,4602  | 00D2760401905 | D,SWITCHING 1SS133T              |         | K000013300520S |      |     |
|                             | D4603,4604  | 00D9630236504 | D,SCHOTTKY RB721Q-40             |         | K120072140010S |      |     |
|                             | D4605-4607  | 00D2760401905 | D,SWITCHING 1SS133T              |         | K000013300520S |      |     |
|                             | D4608,4609  | 963201500160D | D,SWITCHING 1N4007 52REEL        |         | K000400700220S |      |     |
|                             | D4610       | 00D9630236504 | D,SCHOTTKY RB721Q-40             |         | K120072140010S |      |     |
|                             | D4611-4614  | 963201500160D | D,SWITCHING 1N4007 52REEL        |         | K000400700220S |      |     |
|                             | D4615       | 00D2760401905 | D,SWITCHING 1SS133T              |         | K000013300520S |      |     |
|                             | D4616-4631  | 963201500160D | D,SWITCHING 1N4007 52REEL        |         | K000400700220S |      |     |
|                             | D4700       | 963201500170D | D,SWITCHING CHIP LBAS16HT1G FAST |         | K005041480230S |      |     |
|                             | D4703       | 963201500170D | D,SWITCHING CHIP LBAS16HT1G FAST |         | K005041480230S |      |     |
|                             |             |               |                                  |         |                |      |     |
|                             | ZD4600,4601 | 963202500360D | D,ZENER ZJ33B-0.5W/5MA-52MM      |         | K06033R044522S |      |     |
|                             | ZD4700      | 963202500400S | D,ZENER,ZJ16B-0.5W/5MA-52MM      |         | K06016R044522S |      |     |
|                             |             |               |                                  |         |                |      |     |
|                             |             |               |                                  |         |                |      |     |
| <b>CAPACITORS GROUP</b>     |             |               |                                  |         |                |      |     |
|                             | C4600       | 00D2544573981 | C,ELECT 10UF-M/50V               |         | D040100087070S |      |     |
|                             | C4601       | 963134011290S | C,ELECT 4700UF-M/16V             |         | D040472083020S |      |     |
|                             | C4602       | 00D9630217002 | C,ELECT 3300UF-M/16V             |         | D040332083010S |      |     |
|                             | C4603       | 00D2544573981 | C,ELECT 10UF-M/50V               |         | D040100087070S |      |     |
|                             | C4604       | 963134501900S | C,ELECT GE 85C 100UF-M/25V       |         | D040101084210S |      |     |
|                             | C4605       | 00D2544573981 | C,ELECT 10UF-M/50V               |         | D040100087070S |      |     |
|                             | C4606       | 963134501900S | C,ELECT GE 85C 100UF-M/25V       |         | D040101084210S |      |     |
|                             | C4607       | 90M-OA000500R | C,ELECT 4700UF-M/25V(MHA)        |         | D040472084240S |      |     |
|                             | C4608       | 963134501900S | C,ELECT GE 85C 100UF-M/25V       |         | D040101084210S |      |     |
|                             | C4609       | 90M-OA000500R | C,ELECT 4700UF-M/25V(MHA)        |         | D040472084240S |      |     |
|                             | C4610       | 00D9630333203 | C,ELECT 100UF-M/16V              |         | D040101083090S |      |     |
|                             | C4611       | 00D2544573981 | C,ELECT 10UF-M/50V               |         | D040100087070S |      |     |
|                             | C4613       | nsp           | C,FILM 0.1UF-J/50V               |         | D020104167050S |      |     |
|                             | C4614       | 963134010700S | C,ELECT 2200UF-M/25V             |         | D040222084030S |      |     |
|                             | C4615,4616  | nsp           | C,FILM 0.1UF-J/50V               |         | D020104167050S |      |     |
|                             | C4618       | nsp           | C,FILM 0.1UF-J/50V               |         | D020104167050S |      |     |
|                             | C4701       | nsp           | C,CERAMIC 4.7UF-K/6.3V           |         | D011475571160S |      |     |
|                             | C4702,4703  | 00D2544573981 | C,ELECT 10UF-M/50V               |         | D040100087070S |      |     |
|                             | C4704-4706  | nsp           | C,CERAMIC 0.1UF-K/50V            |         | D011104577160S |      |     |
|                             | C4707       | 00D2544573981 | C,ELECT 10UF-M/50V               |         | D040100087070S |      |     |
|                             | C4709       | nsp           | C,CERAMIC 0.1UF-K/50V            |         | D011104577160S |      |     |
|                             | C4711,4712  | nsp           | C,CERAMIC 0.1UF-K/50V            |         | D011104577160S |      |     |

|                           | Ref. No.     | Part No.      | Part Name                                                | Remarks |                | Q'ty | New |
|---------------------------|--------------|---------------|----------------------------------------------------------|---------|----------------|------|-----|
|                           | C4714        | nsp           | C,CERAMIC 0.1UF-K/50V                                    |         | D011104577160S |      |     |
|                           | C4716,4717   | nsp           | C,CERAMIC 0.1UF-K/50V                                    |         | D011104577160S |      |     |
|                           | C4718,4719   | nsp           | C,CERAMIC 33PF-J/50V                                     |         | D010330167160S |      |     |
|                           | C4725,4726   | nsp           | C,CERAMIC 1UF-K/16V                                      |         | D011105173161S |      |     |
|                           | C4727,4728   | nsp           | C,CERAMIC 0.1UF-K/25V                                    |         | D011104774161S |      |     |
|                           | C4729        | nsp           | C,CERAMIC 0.1UF-K/50V                                    |         | D011104577160S |      |     |
|                           | C4730,4731   | 00D2544573981 | C,ELECT 10UF-M/50V                                       |         | D040100087070S |      |     |
|                           | C4733        | 00D2544573981 | C,ELECT 10UF-M/50V                                       |         | D040100087070S |      |     |
|                           | C4734        | nsp           | C,CERAMIC 470PF-J/50V                                    |         | D010471167160S |      |     |
|                           | C4737-4739   | nsp           | C,CERAMIC 0.1UF-K/50V                                    |         | D011104577160S |      |     |
|                           | C4742        | nsp           | C,CERAMIC 470PF-J/50V                                    |         | D010471167160S |      |     |
|                           | C4743        | 00D2544573981 | C,ELECT 10UF-M/50V                                       |         | D040100087070S |      |     |
|                           | C4745,4746   | 00D2544573981 | C,ELECT 10UF-M/50V                                       |         | D040100087070S |      |     |
|                           |              |               |                                                          |         |                |      |     |
|                           |              |               |                                                          |         |                |      |     |
| <b>OTHERS PARTS GROUP</b> |              |               |                                                          |         |                |      |     |
|                           | BKT4703      | nsp           | BRACKET SCREW                                            |         | 4010210196000S |      |     |
|                           |              |               |                                                          |         |                |      |     |
|                           | CLAMP460,461 | nsp           | CLAMP WIRE(SOLDER)                                       |         | 4330000120000S |      |     |
|                           |              |               |                                                          |         |                |      |     |
|                           | CN4600,4601  | nsp           | CN,WAFER,I9C125Z2-09 9P BtoB<br>SOCKET(FEMALE) P=1.25MM  |         | L109012520920S |      |     |
|                           | CN4618       | nsp           | CN,WIRE 2MM,I9CN,WIRE 2MM                                |         | L002800112620S |      |     |
|                           | CN4700       | nsp           | CN,WAFER,I9C125Z2-09 9P BtoB<br>SOCKET(FEMALE) P=1.25MM  |         | L109012520920S |      |     |
|                           | CN4701       | nsp           | CN,WAFER,I9C125Z2-13 13P BtoB<br>SOCKET(FEMALE) P=1.25MM |         | L109012521320S |      |     |
|                           | CN4702       | nsp           | CN,WAFER,I9C125Z2-07 7P BtoB<br>SOCKET(FEMALE) P=1.25MM  |         | L109012520720S |      |     |
|                           | CN4800       | nsp           | CN,WIRE 2MM,I9CN,WIRE 2MM                                |         | L002181040090S |      |     |
|                           | CN5005       | nsp           | CN,WAFER,I9C125Z2-19 19P BtoB<br>SOCKET(FEMALE) P=1.25MM |         | L109012521920S |      |     |
|                           |              |               |                                                          |         |                |      |     |
|                           | CP3401       | nsp           | CN,WAFER C125Z1-13 13P                                   |         | L109012511320S |      |     |
|                           | CP3402       | nsp           | CN,WAFER C125Z1-07 7P                                    |         | L109012510720S |      |     |
|                           | CP3403       | nsp           | CN,WAFER ,I9C125Z1-33 33P BtoB<br>HEADER(MALE) P=1.25MM  |         | L109012513320S |      |     |
|                           | CP3404       | nsp           | CN,WAFER C125Z1-17 17P                                   |         | L109012511720S |      |     |
|                           | CP3406       | nsp           | CN,WAFER C125Z1-11 11P                                   |         | L109012511120S |      |     |
|                           | CP3407       | nsp           | CN,WAFER C125Z1-13 13P                                   |         | L109012511320S |      |     |
|                           | CP4600,4601  | nsp           | CN,WAFER C125Z1-09 9P                                    |         | L109012510920S |      |     |
|                           | CP4602       | nsp           | CN,WAFER 2.5MM 8P                                        |         | L102526808010S |      |     |
|                           | CP4603       | nsp           | CN,WAFER C125Z1-11 11P                                   |         | L109012511120S |      |     |
|                           | CP4604       | nsp           | CN,WAFER C125Z1-17 17P                                   |         | L109012511720S |      |     |
|                           | CP4605       | nsp           | CN,WAFER C125Z1-15 15P                                   |         | L109012511520S |      |     |
|                           | CP4608       | nsp           | CN,WAFER C125Z1-09 9P                                    |         | L109012510920S |      |     |
|                           | CP4612       | nsp           | CN,WAFER,I9C125Z1-27 27P BtoB<br>HEADER(MALE) P=1.25MM   |         | L109012512720S |      |     |
|                           | CP4613       | nsp           | CN,WAFER C125Z1-13 13P                                   |         | L109012511320S |      |     |
|                           | CP4614,4615  | nsp           | CN,WAFER C125Z1-07 7P                                    |         | L109012510720S |      |     |
|                           | CP4617       | nsp           | CN,WAFER ,I9C125Z1-33 33P BtoB<br>HEADER(MALE) P=1.25MM  |         | L109012513320S |      |     |
|                           | CP4618       | nsp           | CN,WAFER 11P                                             |         | L101200101120S |      |     |
|                           | CP4700       | nsp           | CN,WAFER C125Z1-09 9P                                    |         | L109012510920S |      |     |
|                           | CP4701       | nsp           | CN,WAFER C125Z1-13 13P                                   |         | L109012511320S |      |     |
|                           | CP4702       | nsp           | CN,WAFER C125Z1-07 7P                                    |         | L109012510720S |      |     |

|   | Ref. No.   | Part No.      | Part Name                                                 | Remarks      |                | Q'ty | New |
|---|------------|---------------|-----------------------------------------------------------|--------------|----------------|------|-----|
|   |            |               |                                                           |              |                |      |     |
| ⚠ | F4600      | 963652500220S | FUSE GLASS TUBE<br>20MM,I9T2.5A/250V-<br>IVBSUCPCcUR S506 |              | N751502501160S |      |     |
| ⚠ | F4601-4604 | 963652010910S | FUSE T3.15A/250V                                          |              | N751503151160S |      |     |
|   |            |               |                                                           |              |                |      |     |
|   | JACK4700   | 00D9630244703 | JACK,D3.5 EARPHONE                                        |              | G40130802000YS |      |     |
|   | JACK4701   | 963646012090S | TER RCA 2PIN RCA-206B-<br>02(OR,OR)                       |              | G601206B0200YS |      |     |
|   | JACK4702   | 00D2051305008 | CN.WAFER 9P                                               |              | L103090090030S |      |     |
|   | JACK4703   | 963643012080M | JACK,DIN DIN-901B(MXJACK)                                 |              | G403901B0000YS |      |     |
|   |            |               |                                                           |              |                |      |     |
|   | Q4700      | 943215500020S | TR 2SA RT1P141C                                           |              | J520101411210S |      |     |
|   | Q4701      | 943216500020S | TR 2SC RT1N141C                                           |              | J522101411210S |      |     |
|   | Q4702,4703 | 943215500020S | TR 2SA RT1P141C                                           |              | J520101411210S |      |     |
|   | Q4704      | 943214500020S | TR 2SC 2SC3052                                            |              | J522305200050S |      |     |
|   | Q4705      | 943216500020S | TR 2SC RT1N141C                                           |              | J522101411210S |      |     |
|   |            |               |                                                           |              |                |      |     |
|   |            | nsp           | HOLDER,FUSE CLIP                                          | F4600A-4604A | G645000050010S |      |     |
|   |            | nsp           | HOLDER,FUSE CLIP                                          | F4600B-4604B | G645000050010S |      |     |



## FRONT PCB UNIT ASS'Y

|                             | Ref. No.     | Part No.      | Part Name                            | Remarks |                | Q'ty | New |
|-----------------------------|--------------|---------------|--------------------------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |              |               |                                      |         |                |      |     |
|                             | IC4400       | 963231101200S | IC,LINEAR-REGULATOR                  |         | J126288700010S |      |     |
|                             | IC4401,4402  | 00D2631289900 | IC AZ4580M                           |         | J121458000020S |      |     |
|                             |              |               |                                      |         |                |      |     |
|                             | Q4403        | 00D9630226705 | TR KTC1027Y                          |         | J5021027Y0020S |      |     |
|                             | Q4405-4409   | 943216500020S | TR 2SC RT1N141C                      |         | J522101411210S |      |     |
|                             | Q4410        | 943215500030S | TR 2SA RT1P441C                      |         | J520104411210S |      |     |
|                             |              |               |                                      |         |                |      |     |
|                             | D4400        | 963201500170D | D,SWITCHING CHIP LBAS16HT1G FAST     |         | K005041480230S |      |     |
|                             | D4401-4405   | 963201500160D | D,SWITCHING 1N4007 52REEL            |         | K000400700220S |      |     |
|                             | D4406,4407   | 963209003510S | D,ESD CDS3C05HDMI1                   |         | K067030500010S |      |     |
|                             | D4408        | 963209500020S | D,ESD CDS3C15GTA                     |         | K067031500010S |      |     |
|                             | D4409-4416   | 963201500170D | D,SWITCHING CHIP LBAS16HT1G FAST     |         | K005041480230S |      |     |
|                             |              |               |                                      |         |                |      |     |
|                             | ZD4400       | nsp           | JUMPER (0.6/52MM)                    |         | L045084006040S |      |     |
|                             | ZD4401       | 963202500420S | D,ZENER ZJ18B-0.5W                   |         | K06018R044522S |      |     |
|                             | ZD4402       | 963202500430S | D,ZENER ZJ24B-0.5W                   |         | K06024R044522S |      |     |
|                             | ZD4403,4404  | 963202500310D | D,ZENER ZJ5.1B-0.5W                  |         | K06005R144522S |      |     |
|                             | ZD4407       | 963202500310D | D,ZENER ZJ5.1B-0.5W                  |         | K06005R144522S |      |     |
|                             |              |               |                                      |         |                |      |     |
|                             | LED4406,4407 | 963263012110S | LED BL-BUF4V5K-1-AV-FP3.5 3PI<br>RED |         | K500032000160S |      |     |
|                             | LED4408      | 963263100510S | LED WEJ3290W-R2H0-BA 3PI             |         | K500032451010S |      |     |
|                             |              |               |                                      |         |                |      |     |
|                             | FLT4400      | 172010008005S | DISPLAY,FLT GP1261AI                 |         | K530126100010S |      |     |
|                             |              |               |                                      |         |                |      |     |
|                             |              |               |                                      |         |                |      |     |
| <b>RESISTORS GROUP</b>      |              |               |                                      |         |                |      |     |
|                             | R4401        | 00D9639006272 | R,FIXED RSD-R1-1WJ-4.7               |         | N113135647920S |      |     |
|                             |              |               |                                      |         |                |      |     |
|                             |              |               |                                      |         |                |      |     |
| <b>CAPACITORS GROUP</b>     |              |               |                                      |         |                |      |     |
|                             | C4409,4410   | nsp           | C,FILM 0.1UF-K/250V                  |         | D02010407H080S |      |     |
|                             | C4411        | nsp           | C,CERAMIC 0.1UF-K/50V                |         | D011104577160S |      |     |
|                             | C4412        | 00D2544573981 | C,ELECT 10UF-M/50V                   |         | D040100087070S |      |     |
|                             | C4413        | nsp           | JUMPER (0.6/52MM)                    |         | L045084006040S |      |     |
|                             | C4414        | 00D9630157900 | C,ELECT 470UF-M/63V                  |         | D040471088010S |      |     |
|                             | C4416        | 00D2544573981 | C,ELECT 10UF-M/50V                   |         | D040100087070S |      |     |
|                             | C4418        | nsp           | C,CERAMIC 0.1UF-K/50V                |         | D011104577160S |      |     |
|                             | C4419        | 00D2544573981 | C,ELECT 10UF-M/50V                   |         | D040100087070S |      |     |
|                             | C4421        | 00D2544574922 | C,ELECT 100UF-M/50V                  |         | D040101087060S |      |     |
|                             | C4422        | 00D2544573981 | C,ELECT 10UF-M/50V                   |         | D040100087070S |      |     |
|                             | C4424        | nsp           | C,CERAMIC 0.1UF-K/50V                |         | D011104577160S |      |     |
|                             | C4426        | nsp           | C,CERAMIC 0.1UF-K/50V                |         | D011104577160S |      |     |
|                             | C4427-4429   | nsp           | C,CERAMIC 100PF-J/50V                |         | D010101167160S |      |     |
|                             | C4431,4432   | nsp           | C,CERAMIC 0.1UF-K/50V                |         | D011104577160S |      |     |
|                             | C4433        | 00D2544573981 | C,ELECT 10UF-M/50V                   |         | D040100087070S |      |     |
|                             | C4434        | nsp           | C,CERAMIC0.01UF-K/50V                |         | D011103777160S |      |     |
|                             | C4435        | nsp           | C,CERAMIC 0.1UF-K/50V                |         | D011104577160S |      |     |
|                             | C4436        | nsp           | C,CERAMIC 0.047UF-Z/50V              |         | D011473597160S |      |     |
|                             | C4437,4438   | 00D9630293602 | C,ELECT 1UF-M/50V (Pb Free)          |         | D040010087150S |      |     |

| Ref. No.                  | Part No.      | Part Name                                            | Remarks |                | Q'ty | New |
|---------------------------|---------------|------------------------------------------------------|---------|----------------|------|-----|
| C4440,4441                | nsp           | C,CERAMIC CHIP<br>HIK,X7R)0.01UF-K/100V-<br>1608REEL |         | D01110377C161S |      |     |
| C4442,4443                | nsp           | C,CERAMIC 470PF-J/50V                                |         | D010471167160S |      |     |
| C4444                     | nsp           | C,CERAMIC COG82PF-J/50V                              |         | D010820167160S |      |     |
| C4445                     | 00D2544573981 | C,ELECT 10UF-M/50V                                   |         | D040100087070S |      |     |
| C4446                     | 00D9630293709 | C,ELECT 100UF-M/10V                                  |         | D040101082070S |      |     |
| C4447                     | nsp           | C,CERAMIC0.047UF-K/25V                               |         | D011473774161S |      |     |
| C4448                     | nsp           | C,CERAMIC 0.1UF-K/50V                                |         | D011104577160S |      |     |
| C4449                     | 00D2544573981 | C,ELECT 10UF-M/50V                                   |         | D040100087070S |      |     |
| C4450                     | nsp           | C,CERAMIC0.047UF-K/25V                               |         | D011473774161S |      |     |
| C4451                     | nsp           | C,CERAMIC 0.047UF-Z/50V                              |         | D011473597160S |      |     |
| C4452,4453                | 00D2544573981 | C,ELECT 10UF-M/50V                                   |         | D040100087070S |      |     |
| C4454                     | nsp           | C,CERAMIC 0.1UF-K/50V                                |         | D011104577160S |      |     |
| C4455,4456                | nsp           | C,CERAMIC 330PF-K/50V                                |         | D010331167160S |      |     |
| C4457,4458                | nsp           | C,CERAMIC 1000PF-K/50V                               |         | D011102777160S |      |     |
| C4460,4461                | nsp           | C,CERAMIC0.01UF-K/50V                                |         | D011103777160S |      |     |
| C4462                     | nsp           | C,CERAMIC 0.1UF-K/50V                                |         | D011104577160S |      |     |
| C4463                     | nsp           | C,ELECT 220UF-M/6.3V                                 |         | D040221081070S |      |     |
| C4464                     | nsp           | C,CERAMIC 0.1UF-K/50V                                |         | D011104577160S |      |     |
| C4465,4466                | nsp           | C,CERAMIC 470PF-J/50V                                |         | D010471167160S |      |     |
| C4467                     | nsp           | C,CERAMIC 100PF-J/50V                                |         | D010101167160S |      |     |
| C4469                     | 00D9630293602 | C,ELECT 1UF-M/50V (Pb Free)                          |         | D040010087150S |      |     |
| C4472,4473                | nsp           | C,FILM ST-0.01UF-J/100V                              |         | D02010306C060S |      |     |
| C4474,4475                | 00D9630293602 | C,ELECT 1UF-M/50V (Pb Free)                          |         | D040010087150S |      |     |
| C4476                     | nsp           | C,FILM 0.1UF-J/100V                                  |         | D02010406C060S |      |     |
| C4477                     | nsp           | C,FILM 0.047UF-J/100V                                |         | D02047306C060S |      |     |
| C4478,4479                | nsp           | C,CERAMIC 0.1UF-K/50V                                |         | D011104577160S |      |     |
| C4480                     | nsp           | C,CERAMIC 0.047UF-Z/50V                              |         | D011473597160S |      |     |
|                           |               |                                                      |         |                |      |     |
|                           |               |                                                      |         |                |      |     |
| <b>OTHERS PARTS GROUP</b> |               |                                                      |         |                |      |     |
| BD4400                    | nsp           | COIL,BEAD CBW160808U121T                             |         | D340160811210S |      |     |
| BD4401-4407               | nsp           | CHIP RES. 0-J 1/16W-1608REEL                         |         | C20000006M160S |      |     |
| BD4408                    | nsp           | COIL,BEAD BLM21PG221SN1                              |         | D340201212210S |      |     |
| BD4409,4410               | nsp           | CHIP RES. 0-J 1/16W-1608REEL                         |         | C20000006M160S |      |     |
|                           |               |                                                      |         |                |      |     |
| BKT4001                   | nsp           | BRACKET USB                                          |         | 4010215216000S |      |     |
| BKT4400,4401              | nsp           | BRACKET SCREW                                        |         | 4010210196000S |      |     |
|                           |               |                                                      |         |                |      |     |
| CLAMP401                  | nsp           | CLAMP WIRE(SOLDER)                                   |         | 4330000120000S |      |     |
| CLAMP403                  | nsp           | CLAMP WIRE(SOLDER)                                   |         | 4330000120000S |      |     |
| CLAMP405,406              | nsp           | CLAMP WIRE(SOLDER)                                   |         | 4330000120000S |      |     |
|                           |               |                                                      |         |                |      |     |
| CN4400                    | nsp           | CN.FPC 1.0MM 1.0-11S-40PW 40P                        |         | L130100114050S |      |     |
| CN4401                    | nsp           | CN.WAFER 5P TUC-P05X                                 |         | L101100030510S |      |     |
| CN4402                    | nsp           | CN,WIRE 2MM,590MM/5P                                 |         | L002591050010S |      |     |
|                           |               |                                                      |         |                |      |     |
| CP4400                    | nsp           | CN.WAFER 5268-07A 7P                                 |         | L102526800700S |      |     |
| CP4401                    | nsp           | CN.WAFER 5P TUC-P05P                                 |         | L101100040510S |      |     |
|                           |               |                                                      |         |                |      |     |
| ⚠ F4400                   | 963652500020S | FUSE 6125FF500-R 500mA                               |         | G657612505030S |      |     |
|                           |               |                                                      |         |                |      |     |
| FLT4400                   | 172010008005S | DISPLAY,FLT GP1261AI                                 |         | K530126100010S |      |     |

|  | Ref. No.    | Part No.      | Part Name                            | Remarks |                | Q'ty | New |
|--|-------------|---------------|--------------------------------------|---------|----------------|------|-----|
|  |             |               |                                      |         |                |      |     |
|  | G4401       | nsp           | RING,TER WIRE,I9150MM/1P             |         | 8410151010190S |      |     |
|  |             |               |                                      |         |                |      |     |
|  | HOLDER1     | nsp           | HOLDER ASSY<br>SR6007U1B(MARANTZ)    |         | 4328211106000  |      |     |
|  |             |               |                                      |         |                |      |     |
|  | JACK4400    | 963643101150S | JACK,D3.5 JALCO(YKB21-5442V)         |         | G401KB215442VS |      |     |
|  | JACK4401    | 963643101160S | TER,RCA 3PIN RCA-328H-1-03(BK,BK,BK) |         | G606328H0300YS |      |     |
|  |             |               |                                      |         |                |      |     |
|  | JK4400      | 963643101840S | CN,PLUG CONTACT USB A                |         | G480040001010S |      |     |
|  | JK4401      | 963643101120S | JACK,D6.5 PHONE (YUQIU) D6.5 9P      |         | G402PJ612A09YS |      |     |
|  |             |               |                                      |         |                |      |     |
|  | JP4402,4403 | nsp           | JUMPER (0.6/52MM)                    |         | L045084006040S |      |     |
|  | JP4496,4497 | nsp           | JUMPER (0.6/52MM)                    |         | L045084006040S |      |     |
|  |             |               |                                      |         |                |      |     |
|  | RMC4400     | 963262012130S | MODULE,REMOCON R34ES9A               |         | E940349003610S |      |     |
|  |             |               |                                      |         |                |      |     |
|  | SW4400-4409 | 00D9630095305 | SW,TACT SKHV10910D01                 |         | G180040500010S |      |     |
|  |             |               |                                      |         |                |      |     |
|  | VEC4400     | 963667012360S | SW,ENCODER<br>EC16B24T01D4ZZZ        |         | G121162400060S |      |     |
|  | VEC4401     | 00D9630387408 | SW,ENCODER EC16B24SO                 |         | G121162400070S |      |     |

## AUDIO PCB UNIT ASS'Y

|                             | Ref. No.    | Part No.      | Part Name                           | Remarks |                | Q'ty | New |
|-----------------------------|-------------|---------------|-------------------------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |             |               |                                     |         |                |      |     |
|                             | IC4200      | 00D2631289900 | IC AZ4580M                          |         | J121458000020S |      |     |
|                             | IC4204,4205 | 00D2631289900 | IC AZ4580M                          |         | J121458000020S |      |     |
|                             | IC4206      | 00D2623727904 | IC NJW1194A                         |         | J084119400010S |      |     |
|                             | IC4207      | 00D2631289900 | IC AZ4580M                          |         | J121458000020S |      |     |
|                             | IC4210      | 963239000650S | IC R2A15218FP                       |         | J084152180010S |      |     |
|                             |             |               |                                     |         |                |      |     |
|                             |             |               |                                     |         |                |      |     |
| <b>CAPACITORS GROUP</b>     |             |               |                                     |         |                |      |     |
|                             | C4200       | 00D2544573981 | C,ELECT 10UF-M/50V                  |         | D040100087070S |      |     |
|                             | C4201-4203  | 963134501230S | C,ELECT 10UF-M/50V RA3              |         | D040100087380S |      |     |
|                             | C4204-4213  | 00D2544573981 | C,ELECT 10UF-M/50V                  |         | D040100087070S |      |     |
|                             | C4214       | nsp           | C,CERAMIC 100PF-J/50V               |         | D010101167160S |      |     |
|                             | C4215       | 00D2544573981 | C,ELECT 10UF-M/50V                  |         | D040100087070S |      |     |
|                             | C4216       | 00D9630276603 | C,ELECT 220UF-M/10V                 |         | D040221082080S |      |     |
|                             | C4217       | nsp           | C,CERAMIC 100PF-J/50V               |         | D010101167160S |      |     |
|                             | C4218       | nsp           | C,CERAMIC 220PF-J/50V               |         | D010221167160S |      |     |
|                             | C4219       | 00D9609008640 | C,FILM 0.022UF-J/100V               |         | D02022306C060S |      |     |
|                             | C4220       | nsp           | C,FILM POLYESTER ST-0.0068UF-J/100V |         | D02068206C060S |      |     |
|                             | C4221,4222  | nsp           | CHIP RES. 0-J 1/16W-1608REEL        |         | C20000006M160S |      |     |
|                             | C4223       | 00D9609008640 | C,FILM 0.022UF-J/100V               |         | D02022306C060S |      |     |
|                             | C4224       | nsp           | C,FILM POLYESTER ST-0.0068UF-J/100V |         | D02068206C060S |      |     |
|                             | C4225       | 00D2544573981 | C,ELECT 10UF-M/50V                  |         | D040100087070S |      |     |
|                             | C4226       | nsp           | C,CERAMIC 100PF-J/50V               |         | D010101167160S |      |     |
|                             | C4227       | nsp           | C,CERAMIC 220PF-J/50V               |         | D010221167160S |      |     |
|                             | C4228       | 00D9630276603 | C,ELECT 220UF-M/10V                 |         | D040221082080S |      |     |
|                             | C4229       | nsp           | C,CERAMIC 100PF-J/50V               |         | D010101167160S |      |     |
|                             | C4230,4231  | 00D2544573981 | C,ELECT 10UF-M/50V                  |         | D040100087070S |      |     |
|                             | C4233       | nsp           | C,CERAMIC 330PF-K/50V               |         | D010331167160S |      |     |
|                             | C4235,4236  | 00D2544574922 | C,ELECT 100UF-M/50V                 |         | D040101087060S |      |     |
|                             | C4237,4238  | nsp           | CHIP RES. 0-J 1/16W-1608REEL        |         | C20000006M160S |      |     |
|                             | C4239       | nsp           | C,CERAMIC 330PF-K/50V               |         | D010331167160S |      |     |
|                             | C4240-4242  | 963134501900S | C,ELECT GE 85C 100UF-M/25V          |         | D040101084210S |      |     |
|                             | C4243       | nsp           | C,CERAMIC 330PF-K/50V               |         | D010331167160S |      |     |
|                             | C4244-4247  | nsp           | C,ELECT 47UF-M/16V                  |         | D040470083080S |      |     |
|                             | C4248       | nsp           | C,CERAMIC 330PF-K/50V               |         | D010331167160S |      |     |
|                             | C4249       | nsp           | C,ELECT 47UF-M/16V                  |         | D040470083080S |      |     |
|                             | C4251       | nsp           | C,CERAMIC 330PF-K/50V               |         | D010331167160S |      |     |
|                             | C4254       | nsp           | C,CERAMIC 330PF-K/50V               |         | D010331167160S |      |     |
|                             | C4257       | nsp           | C,CERAMIC 330PF-K/50V               |         | D010331167160S |      |     |
|                             | C4261,4262  | nsp           | CHIP RES. 0-J 1/16W-1608REEL        |         | C20000006M160S |      |     |
|                             | C4263       | nsp           | C,CERAMIC 330PF-K/50V               |         | D010331167160S |      |     |
|                             | C4265       | nsp           | C,CERAMIC 330PF-K/50V               |         | D010331167160S |      |     |
|                             | C4267,4268  | nsp           | C,CERAMIC 330PF-K/50V               |         | D010331167160S |      |     |
|                             | C4269       | 00D2544573981 | C,ELECT 10UF-M/50V                  |         | D040100087070S |      |     |
|                             | C4270,4271  | nsp           | C,CERAMIC 0.01UF-K/50V              |         | D010103777160S |      |     |
|                             | C4272       | nsp           | C,CERAMIC 68PF-J/50V                |         | D010680167160S |      |     |
|                             | C4273       | nsp           | C,CERAMIC 100PF-J/50V               |         | D010101167160S |      |     |
|                             | C4274,4275  | 00D2544573981 | C,ELECT 10UF-M/50V                  |         | D040100087070S |      |     |
|                             | C4276,4277  | nsp           | CHIP RES. 0-J 1/16W-1608REEL        |         | C20000006M160S |      |     |
|                             | C4278       | nsp           | C,CERAMIC 330PF-K/50V               |         | D010331167160S |      |     |
|                             | C4279       | 00D2544573981 | C,ELECT 10UF-M/50V                  |         | D040100087070S |      |     |

|                           | Ref. No.   | Part No.      | Part Name                                                   | Remarks |                | Q'ty | New |
|---------------------------|------------|---------------|-------------------------------------------------------------|---------|----------------|------|-----|
|                           | C4280      | nsp           | C,CERAMIC 3300PF-K/50V                                      |         | D011332777160S |      |     |
|                           | C4281      | nsp           | ELECT. CAP. 33UF-M/16V -5RE SY                              |         | D040330083050S |      |     |
|                           | C4282      | nsp           | C,CERAMIC 0.1UF-K/50V                                       |         | D011104577160S |      |     |
|                           | C4283      | 00D2544573981 | C,ELECT 10UF-M/50V                                          |         | D040100087070S |      |     |
|                           | C4284      | 00D9639006476 | C,ELECT 4.7UF-M/50V                                         |         | D0404R7087250S |      |     |
|                           | C4285,4286 | nsp           | C,CERAMIC 330PF-K/50V                                       |         | D010331167160S |      |     |
|                           | C4287      | 00D2544573981 | C,ELECT 10UF-M/50V                                          |         | D040100087070S |      |     |
|                           | C4288      | 00D9639006476 | C,ELECT 4.7UF-M/50V                                         |         | D0404R7087250S |      |     |
|                           | C4289      | nsp           | C,CERAMIC 330PF-K/50V                                       |         | D010331167160S |      |     |
|                           | C4290      | nsp           | C,CERAMIC 0.1UF-K/50V                                       |         | D011104577160S |      |     |
|                           | C4291,4292 | 00D2544573981 | C,ELECT 10UF-M/50V                                          |         | D040100087070S |      |     |
|                           | C4293      | nsp           | ELECT. CAP. 33UF-M/16V -5RE SY                              |         | D040330083050S |      |     |
|                           | C4294      | 00D2544573981 | C,ELECT 10UF-M/50V                                          |         | D040100087070S |      |     |
|                           | C4295      | nsp           | C,CERAMIC 3300PF-K/50V                                      |         | D011332777160S |      |     |
|                           | C4296      | 00D2544573981 | C,ELECT 10UF-M/50V                                          |         | D040100087070S |      |     |
|                           | C4297,4298 | nsp           | C,CERAMIC 0.01UF-K/50V                                      |         | D010103777160S |      |     |
|                           | C4299      | nsp           | C,CERAMIC 68PF-J/50V                                        |         | D010680167160S |      |     |
|                           | C4300      | nsp           | C,CERAMIC 100PF-J/50V                                       |         | D010101167160S |      |     |
|                           | C4301,4302 | nsp           | CHIP RES. 0-J 1/16W-1608REEL                                |         | C20000006M160S |      |     |
|                           | C4303      | nsp           | C,CERAMIC 330PF-K/50V                                       |         | D010331167160S |      |     |
|                           | C4304      | 00D2544573981 | C,ELECT 10UF-M/50V                                          |         | D040100087070S |      |     |
|                           | C4305,4306 | nsp           | C,CERAMIC 330PF-K/50V                                       |         | D010331167160S |      |     |
|                           |            |               |                                                             |         |                |      |     |
|                           |            |               |                                                             |         |                |      |     |
| <b>OTHERS PARTS GROUP</b> |            |               |                                                             |         |                |      |     |
|                           | CN401      | nsp           | CN,WIRE 2MM,I9CN,WIRE 2MM                                   |         | L002171132620S |      |     |
|                           | CN4605     | nsp           | CN,WAFER,I9C125Z2-15 15P<br>BtoB SOCKET(FEMALE)<br>P=1.25MM |         | L109012521520S |      |     |
|                           | CN4612     | nsp           | CN,WAFER,I9C125Z2-27 27P<br>BtoB SOCKET(FEMALE)<br>P=1.25MM |         | L109012522720S |      |     |
|                           | CN4615     | nsp           | CN,WAFER,I9C125Z2-07 7P BtoB<br>SOCKET(FEMALE) P=1.25MM     |         | L109012520720S |      |     |
|                           | CN4617     | nsp           | CN.WAFER ,I9C125Z2-33 33P BtoB<br>SOCKET(FEMALE) P=1.25MM   |         | L109012523320S |      |     |
|                           |            |               |                                                             |         |                |      |     |
|                           | JK4200     | 963643101990S | TER,RCA 6PIN,RCA-603BG1-<br>05G(WH,WH,WH,RD,RD,RD)          |         | G603603BG105YS |      | *   |
|                           | JK4201     | 963643102000S | TER,RCA 4PIN,RCA-405BG-<br>04(WH,WH,RD,RD)-YUQIU            |         | G602405BG040YS |      | *   |
|                           | JK4202     | 963643102010S | TER,RCA 2PIN,RCA-207AEG1-02G<br>(WH,RD)                     |         | G601207AEG02YS |      | *   |
|                           | JK4203     | 963643102020S | TER,RCA 4PIN,RCA-405BGG-<br>55(W,W,BK,RD GOLD)              |         | G602405BGG55YS |      | *   |
|                           | JK4204     | 963643102030S | TER,RCA 4PIN,RCA-405BG-<br>04(WH,WH,RD,RD)-YUQIU            |         | G602405BG040YS |      | *   |

## VPT PCB UNIT ASS'Y

|                             | Ref. No.   | Part No.      | Part Name                         | Remarks |                | Q'ty | New |
|-----------------------------|------------|---------------|-----------------------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |            |               |                                   |         |                |      |     |
|                             | IC4800     | 231310009508S | IC PQ033DNA1ZPH                   |         | J126033010010S |      |     |
|                             | IC4801     | 235810046603S | IC AVDM2000(NJW1327)              |         | J171132700010S |      |     |
|                             |            |               |                                   |         |                |      |     |
|                             | D4802      | 963201500170D | D,SWITCHING CHIP LBAS16HT1G FAST  |         | K005041480230S |      |     |
|                             | D5000-5002 | 963201500160D | D,SWITCHING 1N4007 52REEL         |         | K000400700220S |      |     |
|                             |            |               |                                   |         |                |      |     |
|                             | Q5001      | 943214500030S | TR 2SC INC2001AC1                 |         | J522020011210S |      |     |
|                             | Q5002      | 943215500030S | TR 2SA RT1P441C                   |         | J520104411210S |      |     |
|                             | Q5004      | 943214500030S | TR 2SC INC2001AC1                 |         | J522020011210S |      |     |
|                             | Q5005      | 943215500030S | TR 2SA RT1P441C                   |         | J520104411210S |      |     |
|                             | Q5006      | 943216500050S | TR 2SC RT1N441C                   |         | J522104411210S |      |     |
|                             | Q5008      | 943214500030S | TR 2SC INC2001AC1                 |         | J522020011210S |      |     |
|                             | Q5009,5010 | 943215500030S | TR 2SA RT1P441C                   |         | J520104411210S |      |     |
|                             | Q5012      | 943214500030S | TR 2SC INC2001AC1                 |         | J522020011210S |      |     |
|                             | Q5013      | 943216500050S | TR 2SC RT1N441C                   |         | J522104411210S |      |     |
|                             | Q5015      | 943214500030S | TR 2SC INC2001AC1                 |         | J522020011210S |      |     |
|                             | Q5017      | 943214500030S | TR 2SC INC2001AC1                 |         | J522020011210S |      |     |
|                             | Q5019      | 943214500030S | TR 2SC INC2001AC1                 |         | J522020011210S |      |     |
|                             | Q5021      | 943214500030S | TR 2SC INC2001AC1                 |         | J522020011210S |      |     |
|                             | Q5023      | 943214500030S | TR 2SC INC2001AC1                 |         | J522020011210S |      |     |
|                             | Q5025      | 943215500030S | TR 2SA RT1P441C                   |         | J520104411210S |      |     |
|                             | Q5027      | 943214500030S | TR 2SC INC2001AC1                 |         | J522020011210S |      |     |
|                             | Q5030      | 943214500030S | TR 2SC INC2001AC1                 |         | J522020011210S |      |     |
|                             |            |               |                                   |         |                |      |     |
|                             | ZD5000     | 00D9630295503 | ZENER DIODE 0.2W 3.6V (UMD2 TYPE) |         | K06603R64P400S |      |     |
|                             |            |               |                                   |         |                |      |     |
|                             |            |               |                                   |         |                |      |     |
| <b>CAPACITORS GROUP</b>     |            |               |                                   |         |                |      |     |
|                             | C4800,4801 | 963134002740S | C,ELECT 10UF-M/16V                |         | D040100083100S |      |     |
|                             | C4802      | nsp           | C,ELECT 47UF-M/16V                |         | D040470083080S |      |     |
|                             | C4803      | nsp           | C,CERAMIC 1UF-K/16V               |         | D011105173161S |      |     |
|                             | C4806      | nsp           | C,CERAMIC 1UF-K/16V               |         | D011105173161S |      |     |
|                             | C4807-4809 | 963134002740S | C,ELECT 10UF-M/16V                |         | D040100083100S |      |     |
|                             | C4810-4815 | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104577160S |      |     |
|                             | C4816,4817 | nsp           | C,ELECT 47UF-M/16V                |         | D040470083080S |      |     |
|                             | C4818-4826 | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104577160S |      |     |
|                             | C4829,4830 | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104577160S |      |     |
|                             | C4831-4836 | nsp           | C,CERAMIC 10UF-K/16V              |         | D011106573200S |      |     |
|                             | C5000      | 00D2544573981 | C,ELECT 10UF-M/50V                |         | D040100087070S |      |     |
|                             | C5001,5002 | 00D9630224503 | C,ELECT 22UF-M/50V                |         | D040220087060S |      |     |
|                             | C5003      | nsp           | C,CERAMIC 330PF-J/50V             |         | D010331167160S |      |     |
|                             | C5005      | nsp           | C,CERAMIC 0.01UF-K/50V            |         | D010103777160S |      |     |
|                             | C5006      | nsp           | C,CERAMIC 330PF-J/50V             |         | D010331167160S |      |     |
|                             | C5007      | 00D9630244606 | C,ELECT 0.1UF-M/50V (Pb Free)     |         | D040R10087080S |      |     |
|                             | C5008,5009 | 00D9630224503 | C,ELECT 22UF-M/50V                |         | D040220087060S |      |     |
|                             | C5011,5012 | 00D9630224503 | C,ELECT 22UF-M/50V                |         | D040220087060S |      |     |
|                             | C5013      | nsp           | C,CERAMIC 330PF-J/50V             |         | D010331167160S |      |     |
|                             | C5015      | nsp           | C,CERAMIC 330PF-J/50V             |         | D010331167160S |      |     |
|                             | C5016      | 00D9630244606 | C,ELECT 0.1UF-M/50V (Pb Free)     |         | D040R10087080S |      |     |
|                             | C5017-5020 | 00D9630224503 | C,ELECT 22UF-M/50V                |         | D040220087060S |      |     |
|                             | C5021      | nsp           | C,CERAMIC 330PF-J/50V             |         | D010331167160S |      |     |

|                           | Ref. No.    | Part No.      | Part Name                                                        | Remarks |                | Q'ty | New |
|---------------------------|-------------|---------------|------------------------------------------------------------------|---------|----------------|------|-----|
|                           | C5023       | nsp           | C,CERAMIC 330PF-J/50V                                            |         | D010331167160S |      |     |
|                           | C5024,5025  | 00D9630224503 | C,ELECT 22UF-M/50V                                               |         | D040220087060S |      |     |
|                           | C5026,5027  | 00D9630224503 | C,ELECT 22UF-M/50V                                               |         | D040220087060S |      |     |
|                           | C5029       | nsp           | C,CERAMIC 0.01UF-K/50V                                           |         | D010103777160S |      |     |
|                           | C5030       | nsp           | C,CERAMIC 330PF-J/50V                                            |         | D010331167160S |      |     |
|                           | C5031-5034  | 00D9630224503 | C,ELECT 22UF-M/50V                                               |         | D040220087060S |      |     |
|                           | C5035       | nsp           | C,CERAMIC 330PF-J/50V                                            |         | D010331167160S |      |     |
|                           | C5036       | nsp           | C,CERAMIC 0.01UF-K/50V                                           |         | D010103777160S |      |     |
|                           | C5037       | nsp           | C,CERAMIC 330PF-J/50V                                            |         | D010331167160S |      |     |
|                           | C5038       | nsp           | C,CERAMIC 0.1UF-K/50V                                            |         | D011104577160S |      |     |
|                           | C5039,5040  | 00D9630224503 | C,ELECT 22UF-M/50V                                               |         | D040220087060S |      |     |
|                           | C5041,5042  | 00D9630224503 | C,ELECT 22UF-M/50V                                               |         | D040220087060S |      |     |
|                           | C5043       | nsp           | C,CERAMIC 330PF-J/50V                                            |         | D010331167160S |      |     |
|                           | C5044       | nsp           | C,CERAMIC 0.01UF-K/50V                                           |         | D010103777160S |      |     |
|                           | C5045       | 00D2544573981 | C,ELECT 10UF-M/50V                                               |         | D040100087070S |      |     |
|                           | C5046       | nsp           | C,CERAMIC 100PF-J/50V                                            |         | D010101167160S |      |     |
|                           | C5047       | nsp           | C,CERAMIC 0.01UF-K/50V                                           |         | D010103777160S |      |     |
|                           | C5048       | nsp           | C,CERAMIC 100PF-J/50V                                            |         | D010101167160S |      |     |
|                           | C5049       | 00D2544573981 | C,ELECT 10UF-M/50V                                               |         | D040100087070S |      |     |
|                           | C5054-5058  | nsp           | C,CERAMIC 100PF-J/50V                                            |         | D010101167160S |      |     |
|                           | C5059       | nsp           | C,CERAMIC 0.1UF-K/50V                                            |         | D011104577160S |      |     |
|                           |             |               |                                                                  |         |                |      |     |
|                           |             |               |                                                                  |         |                |      |     |
| <b>OTHERS PARTS GROUP</b> |             |               |                                                                  |         |                |      |     |
|                           | CN4002      | nsp           | CN,WIRE 2MM,I950MM/13P<br>20010HS-13=CKM2002HV-13 WH1007#26 TAPE |         | L002500130040S |      |     |
|                           | CN4603      | nsp           | CN,WAFER,I9C125Z2-11 11P BtoB<br>SOCKET(FEMALE) P=1.25MM         |         | L109012521120S |      |     |
|                           | CN4604      | nsp           | CN,WAFER,I9C125Z2-17 17P BtoB<br>SOCKET(FEMALE) P=1.25MM         |         | L109012521720S |      |     |
|                           | CN4608      | nsp           | CN,WAFER,I9C125Z2-09 9P BtoB<br>SOCKET(FEMALE) P=1.25MM          |         | L109012520920S |      |     |
|                           | CN4613      | nsp           | CN,WAFER,I9C125Z2-13 13P BtoB<br>SOCKET(FEMALE) P=1.25MM         |         | L109012521320S |      |     |
|                           | CN4614      | nsp           | CN,WAFER,I9C125Z2-07 7P BtoB<br>SOCKET(FEMALE) P=1.25MM          |         | L109012520720S |      |     |
|                           |             |               |                                                                  |         |                |      |     |
|                           | CP4800      | nsp           | CN.WAFER 4P 20010WR-04                                           |         | L101200100420S |      |     |
|                           | CP5003      | 943183100200S | TUNER,FM,I9KST-MW004FV1-S63SV<br>4GANG+FM ONLY+50US              | U       | E900004010030S |      |     |
|                           | CP5003      | 943183100210S | TUNER,FM,I9KST-MW104FV1-S63V                                     | N       | E900104011630S |      |     |
|                           | CP5003      | 943183100220S | TUNER,FM,I9KST-MW004FV1-S63                                      | K       | E900004010630S |      |     |
|                           | CP5005      | nsp           | CN,WAFER,I9C125Z1-19 19P BtoB<br>HEADER(MALE) P=1.25MM           |         | L109012511920S |      |     |
|                           |             |               |                                                                  |         |                |      |     |
|                           | JK4800      | 963643102040S | TER,RCA 1PIN,RCA-107AGY(YL)                                      |         | G600107AGY00YS |      | *   |
|                           | JK4801      | 963643102050S | TER,RCA 4PIN,RCA-405BEGG-<br>31(YL,YL,YL,YL GOLD)                |         | G602405BEGG3YS |      | *   |
|                           | JK4802-4804 | 963643102060S | TER,RCA 3PIN,RCA-303B1GG-08(G,B,R GOLD)                          |         | G606303B1GG0YS |      | *   |
|                           | JK5000_6    | 963643101990S | TER,RCA 6PIN,RCA-603BG1-<br>05G(WH,WH,WH,RD,RD,RD)               |         | G603603BG105YS |      | *   |
|                           | JK5001_6    | 963643102070S | TER,RCA 6PIN,RCA-603BGG-96(WWW/<br>BK,R,R) GOLD PLATE            |         | G603603BGG96YS |      | *   |
|                           | JK5002      | 963643102080S | TER,RCA 1PIN,RCA-107AGG(BK)                                      |         | G600107AGF00YS |      | *   |
|                           |             |               |                                                                  |         |                |      |     |
|                           | L5000       | nsp           | COIL,BEAD CBW160808U121T                                         |         | D340160811210S |      |     |

## HDMI PCB UNIT ASS'Y

**NOTE:** When replacing the U3002 or U1602, use the U3002(963243101040M) or U1602(963248100710S).  
When the following are replaced, always rewrite with updated firmware using DFW.  
(Refer to "PROCEDURE FOR UPGRADING THE VERSION OF THE FIRMWARE" (58 page).)

- HDMI PCB UNIT ASS'Y
- U1602 (MX25L6406EM2I-12G)
- U2206 (EPM240T100C5N)
- U3002 (R5F56108VNFP)
- U2003 (MX29LV160DBTI-70G) 

| Ref. No.                    | Part No.      | Part Name                                                         | Remarks                                                                                                                  | Q'ty           | New |
|-----------------------------|---------------|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------|-----|
| <b>SEMICONDUCTORS GROUP</b> |               |                                                                   |                                                                                                                          |                |     |
| U1001                       | 236810057606S | IC LOGIC ADV3002BSTZ                                              |                                                                                                                          | J040300205510S |     |
| U1251                       | nsp           | IC, LOGIC AD8195                                                  |                                                                                                                          | J040819505510S |     |
| U1301                       | 943239100760S | IC, LOGIC TC74VHC4051AFT TOSHIBA                                  |                                                                                                                          | J040744051360S |     |
| U1302                       | 963236101220D | IC, LOGIC ADV7850 HDMI 1.4A                                       |                                                                                                                          | J040785005510S |     |
| U1303                       | 00D2623436907 | IC, LOGIC TC74VHC244FT                                            |                                                                                                                          | J040742445530S |     |
| U1601                       | 963236101310S | IC, LOGIC-ENCODER, I9ADV8003-2 BGA425 ADV8003KBCZ-3C DUAL HDMI TX |                                                                                                                          | J045800302010S |     |
| U1602                       | 963248100710S | IC MEMORY FLASH (MX25L6406EM2I-12G)                               |                                                                                                                          | J005256401210S |     |
| U1801,1802                  | nsp           | IC, MEMORY-RAM K4T51163QJ-BCE7                                    |                                                                                                                          | J001451163370S |     |
| U2001                       | nsp           | IC, ANALOG, ADSP21487KSWZ-4B3019 SHARC PROCESSOR LQFP176          |                                                                                                                          | J080214875590S |     |
| U2002                       | 943246012690S | IC MEMORY-RAM(W9864G6JH-6)                                        |                                                                                                                          | J001986466010S |     |
| U2003                       | 963248101700S | MX29LV160DBTI-70G                                                 |                                                                                                                          | 8952400000240  | *   |
| U2201,2202                  | 00D9630237503 | MODULE JSR1165-C                                                  |                                                                                                                          | E100116500040S |     |
| U2204                       | 00D2623077900 | IC TC74VHC04FT                                                    |                                                                                                                          | J040740405580S |     |
| U2205                       | 236810062608S | IC, LOGIC-INTERFACE LC89058WA-E                                   |                                                                                                                          | J046890580030S |     |
| U2206                       | 963243101020S | IC, PAL/PLD, EPM240T100C5N TQFP100                                |                                                                                                                          | 8952231300040  |     |
| U2207                       | 963239002150S | IC SN74LVC244APWR                                                 |                                                                                                                          | J040742440230S |     |
| U2401                       | 943239100690S | IC, LOGIC-D/A CONVER PCM5100                                      |                                                                                                                          | J042510005510S |     |
| U2402                       | 231310009508S | IC PQ033DNA1ZPH                                                   | <b>NOTE :</b><br>When update Firmware, please confirm a last version in SDI.<br>Use the service board after updating it. | J126033010010S |     |
| U2403                       | 236810086505S | IC AK5358BET-E2                                                   |                                                                                                                          | J043535805520S |     |
| U2404                       | 236810073509S | IC AK4358VQ-L                                                     |                                                                                                                          | J042435800010S |     |
| U2406-2409                  | 00D2631289900 | IC AZ4580M                                                        |                                                                                                                          | J121458000020S |     |
| U2602                       | 23681011260AS | IC, ANALOG DM860A NETWORKED                                       |                                                                                                                          | J080860A05510S |     |
| U2603                       | nsp           | IC MEMORY FLASH (H27U1G8F2BTR)                                    |                                                                                                                          | J005270820020S |     |
| U2604,2605                  | 963246100740D | IC, MEMORY-RAM A3V56S30FTP-G6                                     |                                                                                                                          | J001030563060S |     |
| U2802                       | nsp           | IC, LINEAR-DRIVER LAN8720A                                        |                                                                                                                          | J127872005510S |     |
| U2803                       | 00D2623711004 | IC LOGIC SAA7121H                                                 |                                                                                                                          | J045712100010S |     |
| U2805                       | nsp           | IC, LOGIC-DECODER MFI337S3959                                     |                                                                                                                          | J044337395910S |     |
| U2806                       | nsp           | IC, LINEAR-DRIVER NCP380HMu                                       |                                                                                                                          | J127380150010S |     |
| U3001                       | 963262012150M | MODULE REMOCON R94EV1A                                            |                                                                                                                          | E940941003610S |     |
| U3002                       | 963243101040M | IC CPU MICRO PROCESS (R5F56108VNFP)                               |                                                                                                                          | 8952600700010  | *   |
| U3003                       | 943239100720S | IC, MEMORY-EEPROM R1EX24256BSAS0A                                 |                                                                                                                          | J000242565570S |     |
| U3601-3605                  | nsp           | IC EX3AV                                                          |                                                                                                                          | J048030030010S |     |
| U3607                       | 231310009508S | IC PQ033DNA1ZPH                                                   |                                                                                                                          | J126033010010S |     |
| U3608                       | 943239100730S | IC, LINEAR-RESET PST8448UR                                        |                                                                                                                          | J125844800010S |     |
| Q1001-1004                  | 943216500020S | TR 2SC RT1N141C                                                   |                                                                                                                          | J522101411210S |     |
| Q1005-1008                  | 943216500050S | TR 2SC RT1N441C                                                   |                                                                                                                          | J522104411210S |     |
| Q1303-1305                  | 943216500020S | TR 2SC RT1N141C                                                   |                                                                                                                          | J522101411210S |     |
| Q1606                       | 963223500020D | SEMI, FET CHIP UPA672T-T1-A SC-70                                 |                                                                                                                          | J543672001010S |     |
| Q1801                       | 943214500020S | TR 2SC 2SC3052                                                    |                                                                                                                          | J522305200050S |     |
| Q2201,2202                  | 943216500020S | TR 2SC RT1N141C                                                   |                                                                                                                          | J522101411210S |     |
| Q3003                       | 943215500020S | TR 2SA RT1P141C                                                   |                                                                                                                          | J520101411210S |     |
| Q3201                       | 943214500020S | TR 2SC 2SC3052                                                    |                                                                                                                          | J522305200050S |     |
| Q3202                       | 963219002180S | TR 2SD2114KT146W                                                  |                                                                                                                          | J5232114K0010S |     |



|                        | Ref. No.    | Part No.      | Part Name                         | Remarks |                | Q'ty | New |
|------------------------|-------------|---------------|-----------------------------------|---------|----------------|------|-----|
|                        | Q3203       | 943214500020S | TR 2SC 2SC3052                    |         | J522305200050S |      |     |
|                        | Q3204       | 963212500030S | TR 2SA ISA1530AC1                 |         | J520015301210S |      |     |
|                        | Q3205,3206  | 943214500020S | TR 2SC 2SC3052                    |         | J522305200050S |      |     |
|                        | Q3207       | 963212500030S | TR 2SA ISA1530AC1                 |         | J520015301210S |      |     |
|                        | Q3208       | 943214500020S | TR 2SC 2SC3052                    |         | J522305200050S |      |     |
|                        | Q3209       | 943216500020S | TR 2SC RT1N141C                   |         | J522101411210S |      |     |
|                        | Q3210       | 943214500020S | TR 2SC 2SC3052                    |         | J522305200050S |      |     |
|                        | Q3211       | 943216500020S | TR 2SC RT1N141C                   |         | J522101411210S |      |     |
|                        | Q3212       | 943214500020S | TR 2SC 2SC3052                    |         | J522305200050S |      |     |
|                        | Q3213-3216  | 943216500020S | TR 2SC RT1N141C                   |         | J522101411210S |      |     |
|                        | Q3217       | 943214500020S | TR 2SC 2SC3052                    |         | J522305200050S |      |     |
|                        | Q3218,3219  | 943216500020S | TR 2SC RT1N141C                   |         | J522101411210S |      |     |
|                        | Q3220       | 943214500020S | TR 2SC 2SC3052                    |         | J522305200050S |      |     |
|                        | Q3601-3605  | 943216500050S | TR 2SC RT1N441C                   |         | J522104411210S |      |     |
|                        | Q3606,3607  | 963211500160D | SEMI,CHIP TR/PNP 2SB PBSS5140U    |         | J521051401010S |      |     |
|                        | Q3608-3612  | 963219004200S | CHIP FDC608PZ P-CH                |         | J543608000010S |      |     |
|                        | Q3613       | 943216500020S | TR 2SC RT1N141C                   |         | J522101411210S |      |     |
|                        | Q3614       | 943216500050S | TR 2SC RT1N441C                   |         | J522104411210S |      |     |
|                        | Q3615-3618  | 963211500160D | SEMI,CHIP TR/PNP 2SB PBSS5140U    |         | J521051401010S |      |     |
|                        | Q3619       | 00D2710326904 | TR 2SA 2SA1954                    |         | J520195405510S |      |     |
|                        | Q3620       | 963211500160D | SEMI,CHIP TR/PNP 2SB PBSS5140U    |         | J521051401010S |      |     |
|                        | Q3621-3626  | 943216500020S | TR 2SC RT1N141C                   |         | J522101411210S |      |     |
|                        | Q3627       | 943214500020S | TR 2SC 2SC3052                    |         | J522305200050S |      |     |
|                        |             |               |                                   |         |                |      |     |
|                        | D1001       | 963204500220D | D,SCHOTTKY CHIP LRB521S-30T1G     |         | K125521305230S |      |     |
|                        | D1313       | 963204500220D | D,SCHOTTKY CHIP LRB521S-30T1G     |         | K125521305230S |      |     |
|                        | D1801       | 963201500170D | D,SWITCHING CHIP LBAS16HT1G FAST  |         | K005041480230S |      |     |
|                        | D2401       | 00D2760739907 | D,SWITCHING CHIP KDS181S(B)-THICK |         | K005018100040S |      |     |
|                        | D3004       | 963201500170D | D,SWITCHING CHIP LBAS16HT1G FAST  |         | K005041480230S |      |     |
|                        | D3005       | 90M-HI200030R | LED,IR SIR-34ST3F 3PI 2.5MM       |         | K505343000010S |      |     |
|                        | D3201       | 963201500170D | D,SWITCHING CHIP LBAS16HT1G FAST  |         | K005041480230S |      |     |
|                        | D3401       | 963204500220D | D,SCHOTTKY CHIP LRB521S-30T1G     |         | K125521305230S |      |     |
|                        | D3602       | 963201500170D | D,SWITCHING CHIP LBAS16HT1G FAST  |         | K005041480230S |      |     |
|                        |             |               |                                   |         |                |      |     |
|                        | RA1003-1010 | nsp           | R,NETWORK A-TYPE 0-J*2 1/16W      |         | C180000022100S |      |     |
|                        |             |               |                                   |         |                |      |     |
|                        |             |               |                                   |         |                |      |     |
| <b>RESISTORS GROUP</b> |             |               |                                   |         |                |      |     |
|                        | R1001-1004  | nsp           | CHIP RES. 1KJ 1/16W1005REEL       |         | C20001026M101S |      |     |
|                        | R1005-1008  | nsp           | R,CHIP 10K-J,1/16W                |         | C20001036M111S |      |     |
|                        | R1009-1012  | nsp           | CHIP RES. 47KJ 1/16W1005REEL      |         | C20004736M101S |      |     |
|                        | R1017,1018  | nsp           | CHIP RES. 2.2K-J 1/16W-1005REEL   |         | C20002226M101S |      |     |
|                        | R1019-1021  | nsp           | R,CHIP 10K-J,1/16W                |         | C20001036M111S |      |     |
|                        | R1024-1032  | nsp           | R,CHIP THICK 4.7K-J,1/16W         |         | C20004726M101S |      |     |
|                        | R1033,1034  | nsp           | R,CHIP 33-J, 1/16W                |         | C20003306M101S |      |     |
|                        | R1036       | nsp           | CHIP RES. 1KJ 1/16W1005REEL       |         | C20001026M101S |      |     |
|                        | R1037       | nsp           | R,CHIP 10K-J,1/16W                |         | C20001036M111S |      |     |
|                        | R1039       | nsp           | R,CHIP 10K-J,1/16W                |         | C20001036M111S |      |     |
|                        | R1041       | nsp           | R,CHIP 10K-J,1/16W                |         | C20001036M111S |      |     |
|                        | R1043       | nsp           | R,CHIP 10K-J,1/16W                |         | C20001036M111S |      |     |
|                        | R1046       | nsp           | R,CHIP 10K-J,1/16W                |         | C20001036M111S |      |     |
|                        | R1252       | nsp           | R,CHIP 0-J,1/16W                  |         | C20000006M101S |      |     |
|                        | R1254       | nsp           | R,CHIP 0-J,1/16W                  |         | C20000006M101S |      |     |
|                        | R1255       | nsp           | CHIP RES. 47KJ 1/16W1005REEL      |         | C20004736M101S |      |     |
|                        | R1257,1258  | nsp           | R,CHIP 0-J,1/16W                  |         | C20000006M101S |      |     |
|                        | R1260,1261  | nsp           | CHIP RES. 2.2K-J 1/16W-1005REEL   |         | C20002226M101S |      |     |
|                        | R1262,1263  | nsp           | R,CHIP 0-J,1/16W                  |         | C20000006M101S |      |     |
|                        | R1267       | nsp           | R,CHIP 0-J,1/16W                  |         | C20000006M101S |      |     |
|                        | R1301,1302  | nsp           | CHIP RES. 24-J 1/16W-1608REEL     |         | C20002406M160S |      |     |

| Ref. No.   | Part No. | Part Name                            | Remarks |                | Q'ty | New |
|------------|----------|--------------------------------------|---------|----------------|------|-----|
| R1303      | nsp      | R,CHIP 0-J,1/16W                     |         | C20000006M101S |      |     |
| R1305      | nsp      | CHIP RES. 51-J 1/16W-1608REEL        |         | C20005106M160S |      |     |
| R1306-1309 | nsp      | CHIP RES. 150-J 1/16W-1608REEL       |         | C20001516M160S |      |     |
| R1310      | nsp      | CHIP RES. 51-J 1/16W-1608REEL        |         | C20005106M160S |      |     |
| R1311,1312 | nsp      | R,CHIP 0-J,1/16W                     |         | C20000006M101S |      |     |
| R1313      | nsp      | CHIP RES. 2.2K-J 1/16W-1005REEL      |         | C20002226M101S |      |     |
| R1314,1315 | nsp      | 330-J,1/16W-1608REEL                 |         | C20003316M160S |      |     |
| R1317      | nsp      | R,CHIP 0-J,1/16W                     |         | C20000006M101S |      |     |
| R1318      | nsp      | CHIP RES. 3.3KJ 1/16W1005REEL        |         | C20003326M101S |      |     |
| R1319,1320 | nsp      | 330-J,1/16W-1608REEL                 |         | C20003316M160S |      |     |
| R1323      | nsp      | R,CHIP THICK 680-J,1/16W-1005REEL    |         | C20006816M101S |      |     |
| R1329      | nsp      | CHIP RES. 47KJ 1/16W1005REEL         |         | C20004736M101S |      |     |
| R1331      | nsp      | R,CHIP THICK 4.7K-J,1/16W            |         | C20004726M101S |      |     |
| R1333      | nsp      | R,CHIP THICK 680-J,1/16W-1005REEL    |         | C20006816M101S |      |     |
| R1334,1335 | nsp      | R,CHIP THICK 4.7K-J,1/16W            |         | C20004726M101S |      |     |
| R1336,1337 | nsp      | CHIP RES. 2.2K-J 1/16W-1005REEL      |         | C20002226M101S |      |     |
| R1338      | nsp      | CHIP RES. 1KJ 1/16W1005REEL          |         | C20001026M101S |      |     |
| R1339,1340 | nsp      | R,CHIP THICK 4.7K-J,1/16W            |         | C20004726M101S |      |     |
| R1342-1344 | nsp      | CHIP RES. 47KJ 1/16W1005REEL         |         | C20004736M101S |      |     |
| R1345      | nsp      | CHIP RES. 2.2K-J 1/16W-1005REEL      |         | C20002226M101S |      |     |
| R1346,1347 | nsp      | CHIP RES. 0-J 1/16W-1608REEL         |         | C20000006M160S |      |     |
| R1350      | nsp      | R,CHIP THICK 0-J,1/10W               |         | C200000060200S |      |     |
| R1352      | nsp      | R,CHIP THICK,I9470-D,1/16W-1608REEL  |         | C20004711M160S |      |     |
| R1358,1359 | nsp      | R,CHIP 0-J,1/16W                     |         | C20000006M101S |      |     |
| R1360-1363 | nsp      | 470-J,1/16W-1608                     |         | C20004716M160S |      |     |
| R1364      | nsp      | R,CHIP THICK 4.7K-J,1/16W            |         | C20004726M101S |      |     |
| R1401,1402 | nsp      | R,NETWORK A-TYPE 10-J 1/16W          |         | C180100042100S |      |     |
| R1403,1404 | nsp      | R,NETWORK A-TYPE 33-J 1/16W          |         | C180330042100S |      |     |
| R1405,1406 | nsp      | R,NETWORK A-TYPE 10-J 1/16W          |         | C180100042100S |      |     |
| R1407-1409 | nsp      | R,NETWORK A-TYPE 4.7K-J 1/16W        |         | C180472042100S |      |     |
| R1410-1412 | nsp      | R,NETWORK A-TYPE 47K-J 1/16W         |         | C180473042100S |      |     |
| R1413-1417 | nsp      | R,NETWORK A-TYPE 4.7K-J 1/16W        |         | C180472042100S |      |     |
| R1418,1419 | nsp      | R,CHIP 10K-J,1/16W                   |         | C20001036M111S |      |     |
| R1617,1618 | nsp      | R,CHIP THICK 1K-D,1/16W-1608REEL     |         | C20001021M160S |      |     |
| R1619,1620 | nsp      | R,CHIP THICK,I9470-D,1/16W-1608REEL  |         | C20004711M160S |      |     |
| R1622      | nsp      | R,CHIP THICK 4.7K-J,1/16W            |         | C20004726M101S |      |     |
| R1623      | nsp      | CHIP RES. 1.3KJ 1/16W1608REEL        |         | C20001326M160S |      |     |
| R1624      | nsp      | CHIP RES. 2.2K-J 1/16W-1608REEL      |         | C20002226M160S |      |     |
| R1628      | nsp      | R,CHIP THICK,I92.7K-F,1/16W-1608REEL |         | C20002724M161S |      |     |
| R1629      | nsp      | R,CHIP THICK,I9180-F,1/16W-1608REEL  |         | C20001814M160S |      |     |
| R1630      | nsp      | R,CHIP THICK,I92.7K-F,1/16W-1608REEL |         | C20002724M161S |      |     |
| R1631      | nsp      | R,CHIP THICK,I9180-F,1/16W-1608REEL  |         | C20001814M160S |      |     |
| R1632      | nsp      | R,CHIP 33-J, 1/16W                   |         | C20003306M101S |      |     |
| R1635,1636 | nsp      | R,CHIP 10K-J,1/16W                   |         | C20001036M111S |      |     |
| R1637,1638 | nsp      | CHIP RES. 10K-J 1/16W-1608REEL       |         | C20001036M160S |      |     |
| R1639      | nsp      | CHIP RES. 1KJ 1/16W1005REEL          |         | C20001026M101S |      |     |
| R1640      | nsp      | R,CHIP THICK 4.7K-J,1/16W            |         | C20004726M101S |      |     |
| R1641      | nsp      | CHIP RES. 1.8K-J 1/16W-1005REEL      |         | C20001826M101S |      |     |
| R1642      | nsp      | R,CHIP THICK 0-J,1/10W               |         | C200000060200S |      |     |
| R1645,1646 | nsp      | R,CHIP 33-J, 1/16W                   |         | C20003306M101S |      |     |
| R1647      | nsp      | R,CHIP 0-J,1/16W                     |         | C20000006M101S |      |     |
| R1648      | nsp      | CHIP RES. 1.8K-J 1/16W-1005REEL      |         | C20001826M101S |      |     |
| R1649-1652 | nsp      | R,CHIP 0-J,1/16W                     |         | C20000006M101S |      |     |
| R1653      | nsp      | R,CHIP 10K-J,1/16W                   |         | C20001036M111S |      |     |
| R1655      | nsp      | R,CHIP 0-J,1/16W                     |         | C20000006M101S |      |     |
| R1656      | nsp      | R,CHIP 10K-J,1/16W                   |         | C20001036M111S |      |     |
| R1657      | nsp      | R,CHIP 33-J, 1/16W                   |         | C20003306M101S |      |     |
| R1658,1659 | nsp      | R,CHIP 0-J,1/16W                     |         | C20000006M101S |      |     |
| R1660      | nsp      | R,NETWORK A-TYPE 10-J 1/16W          |         | C180100042100S |      |     |

|  | Ref. No.   | Part No. | Part Name                        | Remarks |                | Q'ty | New |
|--|------------|----------|----------------------------------|---------|----------------|------|-----|
|  | R1661      | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R1662      | nsp      | CHIP RES. 56-J 1/16W-1005REEL    |         | C20005606M101S |      |     |
|  | R1663-1665 | nsp      | CHIP RES. 47-J 1/16W-1005REEL    |         | C20004706M101S |      |     |
|  | R1667-1670 | nsp      | CHIP RES. 47-J 1/16W-1005REEL    |         | C20004706M101S |      |     |
|  | R1671,1672 | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R1673      | nsp      | R,NETWORK A-TYPE 47-J 1/16W      |         | C180470042100S |      |     |
|  | R1675-1679 | nsp      | R,NETWORK A-TYPE 47-J 1/16W      |         | C180470042100S |      |     |
|  | R1680      | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R1681-1689 | nsp      | R,NETWORK A-TYPE 47-J 1/16W      |         | C180470042100S |      |     |
|  | R1690      | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R1691-1694 | nsp      | R,NETWORK A-TYPE 4.7K-J 1/16W    |         | C180472042100S |      |     |
|  | R1695,1696 | nsp      | CHIP RES. 56-J 1/16W-1005REEL    |         | C20005606M101S |      |     |
|  | R1697,1698 | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R1699,1700 | nsp      | R,CHIP THICK 51-D,1/16W-1608REEL |         | C20005101M160S |      |     |
|  | R1701      | nsp      | R,NETWORK A-TYPE 10-J 1/16W      |         | C180100042100S |      |     |
|  | R1702-1704 | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R1706      | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R1708      | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R1712      | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R1714      | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R1716      | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R1727,1728 | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R1818,1819 | nsp      | R,CHIP THICK 1K-D,1/16W-1608REEL |         | C20001021M160S |      |     |
|  | R1820,1821 | nsp      | R,CHIP 10K-J,1/16W               |         | C20001036M111S |      |     |
|  | R1831      | nsp      | R,CHIP THICK 4.7K-J,1/16W        |         | C20004726M101S |      |     |
|  | R1832      | nsp      | R,CHIP 10K-J,1/16W               |         | C20001036M111S |      |     |
|  | R1840,1841 | nsp      | CHIP RES. 1.8K-J 1/16W-1005REEL  |         | C20001826M101S |      |     |
|  | R1843      | nsp      | R,CHIP 10K-J,1/16W               |         | C20001036M111S |      |     |
|  | R1844,1845 | nsp      | R,CHIP THICK 51-D,1/16W-1608REEL |         | C20005101M160S |      |     |
|  | R1855      | nsp      | R,NETWORK A-TYPE 10-J 1/16W      |         | C180100042100S |      |     |
|  | R1856      | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R2003      | nsp      | R,CHIP 10K-J,1/16W               |         | C20001036M111S |      |     |
|  | R2004      | nsp      | CHIP RES. 1KJ 1/16W1005REEL      |         | C20001026M101S |      |     |
|  | R2006      | nsp      | R,CHIP THICK 4.7K-J,1/16W        |         | C20004726M101S |      |     |
|  | R2008      | nsp      | R,CHIP 10K-J,1/16W               |         | C20001036M111S |      |     |
|  | R2011      | nsp      | R,CHIP 68-J,1/16W-1005REEL       |         | C20006806M101S |      |     |
|  | R2012      | nsp      | R,CHIP THICK 4.7K-J,1/16W        |         | C20004726M101S |      |     |
|  | R2014,2015 | nsp      | R,CHIP THICK 4.7K-J,1/16W        |         | C20004726M101S |      |     |
|  | R2016,2017 | nsp      | R,CHIP 33-J, 1/16W               |         | C20003306M101S |      |     |
|  | R2018      | nsp      | CHIP RES. 47-J 1/16W-1005REEL    |         | C20004706M101S |      |     |
|  | R2019      | nsp      | R,CHIP 10K-J,1/16W               |         | C20001036M111S |      |     |
|  | R2020      | nsp      | CHIP RES. 47-J 1/16W-1005REEL    |         | C20004706M101S |      |     |
|  | R2021      | nsp      | CHIP RES. 1M-J 1/16W-1005REEL    |         | C20001056M101S |      |     |
|  | R2022      | nsp      | CHIP RES. 47-J 1/16W-1005REEL    |         | C20004706M101S |      |     |
|  | R2023      | nsp      | R,CHIP 10K-J,1/16W               |         | C20001036M111S |      |     |
|  | R2024,2025 | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R2026      | nsp      | R,CHIP 10K-J,1/16W               |         | C20001036M111S |      |     |
|  | R2027      | nsp      | R,CHIP 33-J, 1/16W               |         | C20003306M101S |      |     |
|  | R2028      | nsp      | R,CHIP 10K-J,1/16W               |         | C20001036M111S |      |     |
|  | R2030      | nsp      | R,CHIP 10K-J,1/16W               |         | C20001036M111S |      |     |
|  | R2031      | nsp      | R,CHIP 33-J, 1/16W               |         | C20003306M101S |      |     |
|  | R2032      | nsp      | R,CHIP 10K-J,1/16W               |         | C20001036M111S |      |     |
|  | R2033      | nsp      | R,CHIP 33-J, 1/16W               |         | C20003306M101S |      |     |
|  | R2035      | nsp      | R,CHIP 33-J, 1/16W               |         | C20003306M101S |      |     |
|  | R2037      | nsp      | R,CHIP THICK 4.7K-J,1/16W        |         | C20004726M101S |      |     |
|  | R2039      | nsp      | R,CHIP 10K-J,1/16W               |         | C20001036M111S |      |     |
|  | R2040      | nsp      | R,CHIP 0-J,1/16W                 |         | C20000006M101S |      |     |
|  | R2041      | nsp      | R,CHIP 10K-J,1/16W               |         | C20001036M111S |      |     |
|  | R2043      | nsp      | R,CHIP 10K-J,1/16W               |         | C20001036M111S |      |     |

| Ref. No.   | Part No. | Part Name                                        | Remarks |                | Q'ty | New |
|------------|----------|--------------------------------------------------|---------|----------------|------|-----|
| R2044      | nsp      | R,CHIP 0-J,1/16W                                 |         | C20000006M101S |      |     |
| R2045      | nsp      | R,CHIP 10K-J,1/16W                               |         | C20001036M111S |      |     |
| R2046      | nsp      | R,CHIP 0-J,1/16W                                 |         | C20000006M101S |      |     |
| R2048,2049 | nsp      | R,CHIP THICK 4.7K-J,1/16W                        |         | C20004726M101S |      |     |
| R2101      | nsp      | R,NETWORK A-TYPE 33-J 1/16W                      |         | C180330042100S |      |     |
| R2103-2106 | nsp      | R,NETWORK A-TYPE 10-J 1/16W                      |         | C180100042100S |      |     |
| R2107-2112 | nsp      | R,NETWORK A-TYPE 47-J 1/16W                      |         | C180470042100S |      |     |
| R2113-2117 | nsp      | R,NETWORK 10K-J*4 1/16W                          |         | C180103042100S |      |     |
| R2118-2120 | nsp      | R,NETWORK A-TYPE 47-J 1/16W                      |         | C180470042100S |      |     |
| R2202      | nsp      | CHIP RES. 100J 1/16W1005REEL                     |         | C20001016M101S |      |     |
| R2205      | nsp      | CHIP RES. 100J 1/16W1005REEL                     |         | C20001016M101S |      |     |
| R2206      | nsp      | CHIP RES. 1M-J 1/16W-1005REEL                    |         | C20001056M101S |      |     |
| R2207      | nsp      | CHIP RES. 1KJ 1/16W1005REEL                      |         | C20001026M101S |      |     |
| R2212      | nsp      | R,CHIP THICK 4.7K-J,1/16W                        |         | C20004726M101S |      |     |
| R2213      | nsp      | R,CHIP 33-J, 1/16W                               |         | C20003306M101S |      |     |
| R2214      | nsp      | CHIP RES. 3.3KJ 1/16W1005REEL                    |         | C20003326M101S |      |     |
| R2215      | nsp      | R,CHIP 33-J, 1/16W                               |         | C20003306M101S |      |     |
| R2216      | nsp      | CHIP RES. 1KJ 1/16W1005REEL                      |         | C20001026M101S |      |     |
| R2217-2219 | nsp      | R,CHIP 33-J, 1/16W                               |         | C20003306M101S |      |     |
| R2221,2222 | nsp      | CHIP RES. 100J 1/16W1005REEL                     |         | C20001016M101S |      |     |
| R2226      | nsp      | R,CHIP 10K-J,1/16W                               |         | C20001036M111S |      |     |
| R2234      | nsp      | CHIP RES. 470J 1/16W1005REEL                     |         | C20004716M101S |      |     |
| R2235      | nsp      | R,CHIP 33-J, 1/16W                               |         | C20003306M101S |      |     |
| R2236,2237 | nsp      | CHIP RES. 100J 1/16W1005REEL                     |         | C20001016M101S |      |     |
| R2238      | nsp      | R,CHIP 10K-J,1/16W                               |         | C20001036M111S |      |     |
| R2239,2240 | nsp      | CHIP RES. 150-J 1/16W-1005REEL                   |         | C20001516M101S |      |     |
| R2241      | nsp      | CHIP RES. 100J 1/16W1005REEL                     |         | C20001016M101S |      |     |
| R2242      | nsp      | CHIP RES. 47KJ 1/16W1005REEL                     |         | C20004736M101S |      |     |
| R2243      | nsp      | R,CHIP THICK 330K-J,1/16W-1005REEL               |         | C20003346M101S |      |     |
| R2244,2245 | nsp      | CHIP RES. 150-J 1/16W-1005REEL                   |         | C20001516M101S |      |     |
| R2246      | nsp      | R,CHIP 33-J, 1/16W                               |         | C20003306M101S |      |     |
| R2247      | nsp      | CHIP RES. 47KJ 1/16W1005REEL                     |         | C20004736M101S |      |     |
| R2248      | nsp      | R,CHIP THICK 330K-J,1/16W-1005REEL               |         | C20003346M101S |      |     |
| R2249      | nsp      | CHIP RES. 220-J 1/16W-1005REEL                   |         | C20002216M101S |      |     |
| R2250      | nsp      | CHIP RES. 470J 1/16W1005REEL                     |         | C20004716M101S |      |     |
| R2252      | nsp      | CHIP RES. 100J 1/16W1005REEL                     |         | C20001016M101S |      |     |
| R2254      | nsp      | CHIP RES. 1KJ 1/16W1005REEL                      |         | C20001026M101S |      |     |
| R2255,2256 | nsp      | R,CHIP 10K-J,1/16W                               |         | C20001036M111S |      |     |
| R2257      | nsp      | R,CHIP 33-J, 1/16W                               |         | C20003306M101S |      |     |
| R2260      | nsp      | R,CHIP 33-J, 1/16W                               |         | C20003306M101S |      |     |
| R2264-2268 | nsp      | CHIP RES. 100J 1/16W1005REEL                     |         | C20001016M101S |      |     |
| R2269      | nsp      | R,CHIP 33-J, 1/16W                               |         | C20003306M101S |      |     |
| R2271      | nsp      | R,CHIP 10K-J,1/16W                               |         | C20001036M111S |      |     |
| R2272      | nsp      | CHIP RES. 100J 1/16W1005REEL                     |         | C20001016M101S |      |     |
| R2273,2274 | nsp      | R,CHIP 33-J, 1/16W                               |         | C20003306M101S |      |     |
| R2275      | nsp      | R,NETWORK 10K-J*4 1/16W                          |         | C180103042100S |      |     |
| R2276-2279 | nsp      | R,NETWORK A-TYPE,100-J*4 1/16W<br>SMD(1005) WA04 |         | C180101040500S |      |     |
| R2281-2283 | nsp      | R,NETWORK A-TYPE,100-J*4 1/16W<br>SMD(1005) WA04 |         | C180101040500S |      |     |
| R2401      | nsp      | R,CHIP 0-J,1/16W                                 |         | C20000006M101S |      |     |
| R2403      | nsp      | R,CHIP 33-J, 1/16W                               |         | C20003306M101S |      |     |
| R2404      | nsp      | CHIP RES. 1KJ 1/16W1005REEL                      |         | C20001026M101S |      |     |
| R2405      | nsp      | R,CHIP 10K-J,1/16W                               |         | C20001036M111S |      |     |
| R2406,2407 | nsp      | 470-J,1/16W-1608                                 |         | C20004716M160S |      |     |
| R2408,2409 | nsp      | CHIP RES. 0-J 1/16W-1608REEL                     |         | C20000006M160S |      |     |
| R2410,2411 | nsp      | 100K-J,1/16W-1608                                |         | C20001046M160S |      |     |
| R2412      | nsp      | CHIP RES. 1KJ 1/16W1005REEL                      |         | C20001026M101S |      |     |
| R2413,2414 | nsp      | CHIP RES. 0-J 1/16W-1608REEL                     |         | C20000006M160S |      |     |

|  | Ref. No.   | Part No. | Part Name                          | Remarks      |                | Q'ty | New |
|--|------------|----------|------------------------------------|--------------|----------------|------|-----|
|  | R2415-2430 | nsp      | CHIP RES. 3.9K-J 1/16W-1608REEL    |              | C20003926M160S |      |     |
|  | R2438      | nsp      | 39K-J,1/16W-1608REEL               | R,CHIP THICK | C20003936M160S |      |     |
|  | R2439,2440 | nsp      | CHIP RES. 150K-J 1/16W-1608REEL    |              | C20001546M160S |      |     |
|  | R2443,2444 | nsp      | CHIP RES. 0-J 1/16W-1608REEL       |              | C20000006M160S |      |     |
|  | R2445-2447 | nsp      | CHIP RES. 4.7K-J 1/16W-1608REEL    |              | C20004726M160S |      |     |
|  | R2448      | nsp      | CHIP THICK 12K-J,1/16W-1608REEL    |              | C20001236M160S |      |     |
|  | R2449,2450 | nsp      | CHIP RES. 6.8K-J 1/16W-1608REEL    |              | C20006826M160S |      |     |
|  | R2451,2452 | nsp      | CHIP RES. 4.7K-J 1/16W-1608REEL    |              | C20004726M160S |      |     |
|  | R2453-2458 | nsp      | 220-J,1/16W-1608                   |              | C20002216M160S |      |     |
|  | R2459-2464 | nsp      | R,CHIP THICK 180-J,1/16W-1608REEL  |              | C20001816M160S |      |     |
|  | R2465-2468 | nsp      | 220-J,1/16W-1608                   |              | C20002216M160S |      |     |
|  | R2470,2471 | nsp      | CHIP RES. 4.7K-J 1/16W-1608REEL    |              | C20004726M160S |      |     |
|  | R2474      | nsp      | CHIP RES. 4.7K-J 1/16W-1608REEL    |              | C20004726M160S |      |     |
|  | R2475      | nsp      | CHIP THICK 12K-J,1/16W-1608REEL    |              | C20001236M160S |      |     |
|  | R2476      | nsp      | 39K-J,1/16W-1608REEL               | R,CHIP THICK | C20003936M160S |      |     |
|  | R2477      | nsp      | CHIP RES. 150K-J 1/16W-1608REEL    |              | C20001546M160S |      |     |
|  | R2478,2479 | nsp      | CHIP RES. 6.8K-J 1/16W-1608REEL    |              | C20006826M160S |      |     |
|  | R2480      | nsp      | CHIP RES. 150K-J 1/16W-1608REEL    |              | C20001546M160S |      |     |
|  | R2482,2483 | nsp      | CHIP RES. 4.7K-J 1/16W-1608REEL    |              | C20004726M160S |      |     |
|  | R2489-2496 | nsp      | CHIP RES. 100-J 1/16W-1608REEL     |              | C20001016M160S |      |     |
|  | R2497,2498 | nsp      | 470K-J,1/16W-1608                  |              | C20004746M160S |      |     |
|  | R2499,2500 | nsp      | CHIP RES. 0-J 1/16W-1608REEL       |              | C20000006M160S |      |     |
|  | R2501      | nsp      | R,CHIP 10K-J,1/16W                 |              | C20001036M111S |      |     |
|  | R2502      | nsp      | R,CHIP 0-J,1/16W                   |              | C20000006M101S |      |     |
|  | R2604      | nsp      | R,CHIP 10K-J,1/16W                 |              | C20001036M111S |      |     |
|  | R2605-2608 | nsp      | R,CHIP 33-J, 1/16W                 |              | C20003306M101S |      |     |
|  | R2609-2611 | nsp      | R,CHIP 10K-J,1/16W                 |              | C20001036M111S |      |     |
|  | R2612      | nsp      | CHIP RES. 1KJ 1/16W1005REEL        |              | C20001026M101S |      |     |
|  | R2613      | nsp      | R,CHIP 10K-J,1/16W                 |              | C20001036M111S |      |     |
|  | R2614      | nsp      | R,CHIP THICK,3K-F,1/16W-1608REEL   |              | C20003024M161S |      |     |
|  | R2615-2617 | nsp      | R,CHIP 33-J, 1/16W                 |              | C20003306M101S |      |     |
|  | R2618      | nsp      | R,CHIP THICK 13K-D,1/16W-1608REEL  |              | C20001331M160S |      |     |
|  | R2619      | nsp      | R,CHIP THICK,6.2K-D,1/16W-1608REEL |              | C20006221M160S |      |     |
|  | R2620      | nsp      | R,CHIP 33-J, 1/16W                 |              | C20003306M101S |      |     |
|  | R2621      | nsp      | CHIP RES. 1M-J 1/16W-1005REEL      |              | C20001056M101S |      |     |
|  | R2622      | nsp      | CHIP RES. 1.5K-J 1/16W-1005REEL    |              | C20001526M101S |      |     |
|  | R2623-2626 | nsp      | R,CHIP 33-J, 1/16W                 |              | C20003306M101S |      |     |
|  | R2629,2630 | nsp      | R,CHIP 33-J, 1/16W                 |              | C20003306M101S |      |     |
|  | R2631,2632 | nsp      | 10-J,1/16W-1005REEL                |              | C20001006M101S |      |     |
|  | R2633      | nsp      | R,CHIP 0-J,1/16W                   |              | C20000006M101S |      |     |
|  | R2634      | nsp      | CHIP RES. 2.7K-J 1/16W-1005REEL    |              | C20002726M101S |      |     |
|  | R2635      | nsp      | CHIP RES. 1.5K-J 1/16W-1005REEL    |              | C20001526M101S |      |     |
|  | R2636      | nsp      | R,CHIP 33-J, 1/16W                 |              | C20003306M101S |      |     |
|  | R2640      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |              | C20004726M101S |      |     |
|  | R2641-2644 | nsp      | R,CHIP 33-J, 1/16W                 |              | C20003306M101S |      |     |
|  | R2646      | nsp      | R,CHIP 33-J, 1/16W                 |              | C20003306M101S |      |     |
|  | R2647      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |              | C20004726M101S |      |     |
|  | R2650      | nsp      | R,CHIP 10K-J,1/16W                 |              | C20001036M111S |      |     |
|  | R2651,2652 | nsp      | R,CHIP THICK 4.7K-J,1/16W          |              | C20004726M101S |      |     |
|  | R2653      | nsp      | R,CHIP 0-J,1/16W                   |              | C20000006M101S |      |     |
|  | R2701-2703 | nsp      | R,NETWORK 10K-J*4 1/16W            |              | C180103042100S |      |     |
|  | R2704-2706 | nsp      | R,NETWORK A-TYPE 33-J 1/16W        |              | C180330042100S |      |     |
|  | R2707      | nsp      | R,CHIP 10K-J,1/16W                 |              | C20001036M111S |      |     |
|  | R2708      | nsp      | R,NETWORK 10K-J*4 1/16W            |              | C180103042100S |      |     |
|  | R2709-2718 | nsp      | R,NETWORK A-TYPE 33-J 1/16W        |              | C180330042100S |      |     |
|  | R2719      | nsp      | R,NETWORK A-TYPE 4.7K-J 1/16W      |              | C180472042100S |      |     |
|  | R2720      | nsp      | R,NETWORK A-TYPE 33-J 1/16W        |              | C180330042100S |      |     |
|  | R2721      | nsp      | R,CHIP 10K-J,1/16W                 |              | C20001036M111S |      |     |
|  | R2801      | nsp      | R,CHIP 0-J,1/16W                   |              | C20000006M101S |      |     |

| Ref. No.   | Part No. | Part Name                          | Remarks |                | Q'ty | New |
|------------|----------|------------------------------------|---------|----------------|------|-----|
| R2803      | nsp      | R,CHIP THICK 10-F,1/16W-1005REEL   |         | C20001004M100S |      |     |
| R2805,2806 | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R2811      | nsp      | CHIP RES. 100J 1/16W1005REEL       |         | C20001016M101S |      |     |
| R2812-2816 | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R2817      | nsp      | CHIP RES. 100J 1/16W1005REEL       |         | C20001016M101S |      |     |
| R2819      | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R2820      | nsp      | R,CHIP 10K-J,1/16W                 |         | C20001036M111S |      |     |
| R2822-2825 | nsp      | R,CHIP 10K-J,1/16W                 |         | C20001036M111S |      |     |
| R2826      | nsp      | R,CHIP THICK 1.5K-F,1/16W-1005REEL |         | C20001524M100S |      |     |
| R2827      | nsp      | CHIP RES. 1.5K-J 1/16W-1005REEL    |         | C20001526M101S |      |     |
| R2828      | nsp      | R,CHIP 10K-J,1/16W                 |         | C20001036M111S |      |     |
| R2829,2830 | nsp      | R,CHIP THICK 49.9-F,1/16W-1608REEL |         | C20049R94M161S |      |     |
| R2831      | nsp      | R,CHIP THICK 8.2K-F,1/16W-1005REEL |         | C20008224M101S |      |     |
| R2832,2833 | nsp      | R,CHIP THICK 49.9-F,1/16W-1608REEL |         | C20049R94M161S |      |     |
| R2834      | nsp      | R,CHIP THICK 3.9K-F,1/16W-1005REEL |         | C20003924M100S |      |     |
| R2835,2836 | nsp      | CHIP RES. 47KJ 1/16W1005REEL       |         | C20004736M101S |      |     |
| R2837      | nsp      | R,CHIP 10K-J,1/16W                 |         | C20001036M111S |      |     |
| R2838,2839 | nsp      | CHIP RES. 47KJ 1/16W1005REEL       |         | C20004736M101S |      |     |
| R2841-2844 | nsp      | CHIP RES. 47KJ 1/16W1005REEL       |         | C20004736M101S |      |     |
| R2845,2846 | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R2849      | nsp      | R,CHIP 10K-J,1/16W                 |         | C20001036M111S |      |     |
| R2850      | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R2851      | nsp      | CHIP RES. 4.7-J 1/16W-1005REEL     |         | C2004R706M101S |      |     |
| R2852,2853 | nsp      | 10-J,1/16W-1005REEL                |         | C20001006M101S |      |     |
| R2854-2856 | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R2859,2860 | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R3001,3002 | nsp      | CHIP RES. 1KJ 1/16W1005REEL        |         | C20001026M101S |      |     |
| R3010,3011 | nsp      | CHIP RES. 100J 1/16W1005REEL       |         | C20001016M101S |      |     |
| R3012      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3017      | nsp      | CHIP RES. 0-J 1/16W-1608REEL       | N       | C20000006M160S |      |     |
| R3017      | nsp      | CHIP RES. 10K-J 1/16W-1608REEL     | K       | C20001036M160S |      |     |
| R3018      | nsp      | CHIP RES. 0-J 1/16W-1608REEL       | U       | C20000006M160S |      |     |
| R3018      | nsp      | CHIP RES. 10K-J 1/16W-1608REEL     | K       | C20001036M160S |      |     |
| R3019-3022 | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R3023      | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R3024-3029 | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R3030,3031 | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R3032-3034 | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R3035      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3037      | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R3038      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3041      | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R3042,3043 | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R3044      | nsp      | R,CHIP 10K-J,1/16W                 |         | C20001036M111S |      |     |
| R3045,3046 | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R3048      | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R3050      | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R3051      | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R3058-3064 | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R3065-3067 | nsp      | CHIP RES. 1KJ 1/16W1005REEL        |         | C20001026M101S |      |     |
| R3068      | nsp      | R,CHIP 10K-J,1/16W                 |         | C20001036M111S |      |     |
| R3070-3076 | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R3077,3078 | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3084      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3086      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3088      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3090      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3092      | nsp      | R,CHIP 10K-J,1/16W                 |         | C20001036M111S |      |     |
| R3094      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |

| Ref. No.   | Part No. | Part Name                          | Remarks |                | Q'ty | New |
|------------|----------|------------------------------------|---------|----------------|------|-----|
| R3098      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3100      | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R3103-3107 | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R3109      | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R3201      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3202      | nsp      | CHIP RES. 2.2MJ 1/16W1005REEL      |         | C20002256M101S |      |     |
| R3203      | nsp      | R,CHIP 10K-J,1/16W                 |         | C20001036M111S |      |     |
| R3204      | nsp      | CHIP RES. 100KJ 1/16W1005REEL      |         | C20001046M101S |      |     |
| R3205      | nsp      | CHIP RES. 47KJ 1/16W1005REEL       |         | C20004736M101S |      |     |
| R3206      | nsp      | CHIP RES. 100KJ 1/16W1005REEL      |         | C20001046M101S |      |     |
| R3207      | nsp      | CHIP RES. 220KJ 1/16W1005REEL      |         | C20002246M101S |      |     |
| R3208      | nsp      | CHIP RES. 27K-J 1/16W-1005REEL     |         | C20002736M101S |      |     |
| R3209      | nsp      | CHIP RES. 3.3KJ 1/16W1005REEL      |         | C20003326M101S |      |     |
| R3211      | nsp      | CHIP RES. 1.2K-J 1/16W-1005REEL    |         | C20001226M101S |      |     |
| R3214      | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R3215      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3216,3217 | nsp      | R,CHIP 33-J, 1/16W                 |         | C20003306M101S |      |     |
| R3218      | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R3219      | nsp      | CHIP RES. 390J 1/16W1005REEL       |         | C20003916M101S |      |     |
| R3220      | nsp      | CHIP RES. 100KJ 1/16W1005REEL      |         | C20001046M101S |      |     |
| R3221      | nsp      | CHIP RES. 2.7K-J 1/16W-1005REEL    |         | C20002726M101S |      |     |
| R3222      | nsp      | CHIP RES. 270-J 1/16W-1005REEL     |         | C20002716M101S |      |     |
| R3223      | nsp      | R,CHIP THICK 470K-J,1/16W-1005REEL |         | C20004746M101S |      |     |
| R3224      | nsp      | CHIP RES. 100J 1/16W1005REEL       |         | C20001016M101S |      |     |
| R3225      | nsp      | CHIP RES. 1KJ 1/16W1005REEL        |         | C20001026M101S |      |     |
| R3226      | nsp      | CHIP RES. 100J 1/16W1005REEL       |         | C20001016M101S |      |     |
| R3227      | nsp      | CHIP RES. 1KJ 1/16W1005REEL        |         | C20001026M101S |      |     |
| R3228      | nsp      | CHIP RES. 100KJ 1/16W1005REEL      |         | C20001046M101S |      |     |
| R3230      | nsp      | R,CHIP 15K-J,1/16W-1005REEL        |         | C20001536M101S |      |     |
| R3231      | nsp      | CHIP RES. 100J 1/16W1005REEL       |         | C20001016M101S |      |     |
| R3232      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3234      | nsp      | CHIP RES. 100J 1/16W1005REEL       |         | C20001016M101S |      |     |
| R3235      | nsp      | R,CHIP THICK 120K-J,1/16W-1005REEL |         | C20001246M101S |      |     |
| R3237      | nsp      | CHIP RES. 470J 1/16W1005REEL       |         | C20004716M101S |      |     |
| R3238      | nsp      | R,CHIP 10K-J,1/16W                 |         | C20001036M111S |      |     |
| R3239,3240 | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3241      | nsp      | CHIP RES. 390J 1/16W1005REEL       |         | C20003916M101S |      |     |
| R3242      | nsp      | CHIP RES. 100J 1/16W1005REEL       |         | C20001016M101S |      |     |
| R3243      | nsp      | CHIP RES. 2.7K-J 1/16W-1005REEL    |         | C20002726M101S |      |     |
| R3244      | nsp      | CHIP RES. 270-J 1/16W-1005REEL     |         | C20002716M101S |      |     |
| R3245      | nsp      | R,CHIP THICK 120K-J,1/16W-1005REEL |         | C20001246M101S |      |     |
| R3247      | nsp      | CHIP RES. 470J 1/16W1005REEL       |         | C20004716M101S |      |     |
| R3248      | nsp      | CHIP RES. 1KJ 1/16W1005REEL        |         | C20001026M101S |      |     |
| R3249      | nsp      | CHIP RES. 100J 1/16W1005REEL       |         | C20001016M101S |      |     |
| R3250      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3251      | nsp      | CHIP RES. 1KJ 1/16W1005REEL        |         | C20001026M101S |      |     |
| R3252      | nsp      | CHIP RES. 100J 1/16W1005REEL       |         | C20001016M101S |      |     |
| R3256,3257 | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R3259-3261 | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R3601      | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R3602      | nsp      | R,CHIP 10K-J,1/16W                 |         | C20001036M111S |      |     |
| R3603-3605 | nsp      | R,CHIP 0-J,1/16W                   |         | C20000006M101S |      |     |
| R3607      | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3609-3611 | nsp      | R,CHIP THICK 4.7K-J,1/16W          |         | C20004726M101S |      |     |
| R3625      | nsp      | R,CHIP 150K-D,1/16W-1608REEL       |         | C20001541M160S |      |     |
| R3626      | nsp      | R,CHIP THICK 47K-D,1/16W-1608REEL  |         | C20004731M160S |      |     |
| R3627      | nsp      | R,CHIP 150K-D,1/16W-1608REEL       |         | C20001541M160S |      |     |
| R3628      | nsp      | R,CHIP THICK 120K-D,1/16W-1608REEL |         | C20001241M160S |      |     |
| R3629      | nsp      | R,CHIP 150K-D,1/16W-1608REEL       |         | C20001541M160S |      |     |

| Ref. No.                | Part No. | Part Name                            | Remarks |                | Q'ty | New |
|-------------------------|----------|--------------------------------------|---------|----------------|------|-----|
| R3630                   | nsp      | R,CHIP THICK,I9470K-D,1/16W-1608REEL |         | C20004741M160S |      |     |
| R3631                   | nsp      | R,CHIP 150K-D,1/16W-1608REEL         |         | C20001541M160S |      |     |
| R3632                   | nsp      | R,CHIP THICK 300K-D,1/16W-1608REEL   |         | C20003041M160S |      |     |
| R3633                   | nsp      | R,CHIP 150K-D,1/16W-1608REEL         |         | C20001541M160S |      |     |
| R3634                   | nsp      | R,CHIP THICK 120K-D,1/16W-1608REEL   |         | C20001241M160S |      |     |
| R3637                   | nsp      | R,CHIP THICK,680K-J,1/16W-1608REEL   |         | C20006846M160S |      |     |
| R3638,3639              | nsp      | CHIP RES. 1M-J 1/16W-1608REEL        |         | C20001056M160S |      |     |
| R3640                   | nsp      | R,CHIP THICK,1.5M-J,1/16W-1608REEL   |         | C20001556M160S |      |     |
| R3641                   | nsp      | R,CHIP THICK,820K-J,1/16W-1608REEL   |         | C20008246M160S |      |     |
| R3645,3646              | nsp      | R,CHIP THICK 0-J,1/10W               |         | C200000060200S |      |     |
| R3647                   | nsp      | R,CHIP 0-J,1/16W                     |         | C20000006M101S |      |     |
| R3649-3660              | nsp      | R,CHIP 10K-J,1/16W                   |         | C20001036M111S |      |     |
| R3661,3662              | nsp      | CHIP RES. 3.3KJ 1/16W1005REEL        |         | C20003326M101S |      |     |
| R3663,3664              | nsp      | R,CHIP 10K-J,1/16W                   |         | C20001036M111S |      |     |
| R3666-3669              | nsp      | R,CHIP 10K-J,1/16W                   |         | C20001036M111S |      |     |
| R3670,3671              | nsp      | CHIP RES. 3.3KJ 1/16W1005REEL        |         | C20003326M101S |      |     |
| R3672                   | nsp      | R,CHIP 0-J,1/16W                     |         | C20000006M101S |      |     |
| R3673-3676              | nsp      | CHIP RES. 3.3KJ 1/16W1005REEL        |         | C20003326M101S |      |     |
| R3677                   | nsp      | R,CHIP 10K-J,1/16W                   |         | C20001036M111S |      |     |
| R3678                   | nsp      | R,CHIP THICK 4.7K-J,1/16W            |         | C20004726M101S |      |     |
| R3679                   | nsp      | CHIP RES. 47KJ 1/16W1005REEL         |         | C20004736M101S |      |     |
| R3680                   | nsp      | CHIP RES. 100KJ 1/16W1005REEL        |         | C20001046M101S |      |     |
| R3681                   | nsp      | CHIP RES. 100J 1/16W1005REEL         |         | C20001016M101S |      |     |
| R3687,3688              | nsp      | CHIP RES. 22-J 1/16W-1005REEL        |         | C20002206M101S |      |     |
| R3689-3702              | nsp      | R,CHIP 0-J,1/16W                     |         | C20000006M101S |      |     |
|                         |          |                                      |         |                |      |     |
|                         |          |                                      |         |                |      |     |
| <b>CAPACITORS GROUP</b> |          |                                      |         |                |      |     |
| C1003-1007              | nsp      | C,CERAMIC 0.1UF-K/50V                |         | D011104177101S |      |     |
| C1010                   | nsp      | C,CERAMIC 4.7UF-K/6.3V               |         | D011475571160S |      |     |
| C1016                   | nsp      | C,CERAMIC 1000PF-K/50V               |         | D011102177101S |      |     |
| C1023                   | nsp      | C,CERAMIC 1000PF-K/50V               |         | D011102177101S |      |     |
| C1025                   | nsp      | C,CERAMIC 1000PF-K/50V               |         | D011102177101S |      |     |
| C1027                   | nsp      | C,CERAMIC 1000PF-K/50V               |         | D011102177101S |      |     |
| C1029                   | nsp      | C,CERAMIC 1000PF-K/50V               |         | D011102177101S |      |     |
| C1031                   | nsp      | C,CERAMIC 1000PF-K/50V               |         | D011102177101S |      |     |
| C1251-1257              | nsp      | C,CERAMIC 0.1UF-K/50V                |         | D011104177101S |      |     |
| C1258                   | nsp      | C,CERAMIC 10UF-K/16V                 |         | D011106573200S |      |     |
| C1259                   | nsp      | C,CERAMIC 1000PF-K/50V               |         | D011102177101S |      |     |
| C1260                   | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL    |         | D011103174101S |      |     |
| C1261                   | nsp      | C,CERAMIC 1000PF-K/50V               |         | D011102177101S |      |     |
| C1262                   | nsp      | C,CERAMIC 10UF-K/16V                 |         | D011106573200S |      |     |
| C1269                   | nsp      | C,CERAMIC 10UF-K/16V                 |         | D011106573200S |      |     |
| C1301-1304              | nsp      | C,CERAMIC 0.1UF-K/50V                |         | D011104177101S |      |     |
| C1305                   | nsp      | C,CERAMIC 1000PF-K/50V               |         | D011102177101S |      |     |
| C1306-1311              | nsp      | C,CERAMIC 0.1UF-K/50V                |         | D011104177101S |      |     |
| C1312                   | nsp      | C,CERAMIC 1000PF-K/50V               |         | D011102177101S |      |     |
| C1314-1321              | nsp      | R,CHIP 0-J,1/16W                     |         | C20000006M101S |      |     |
| C1323-1325              | nsp      | C,CERAMIC 0.1UF-K/50V                |         | D011104177101S |      |     |
| C1327                   | nsp      | C,CERAMIC 0.1UF-K/50V                |         | D011104177101S |      |     |
| C1329-1331              | nsp      | C,CERAMIC 0.1UF-K/50V                |         | D011104177101S |      |     |
| C1333                   | nsp      | C,CERAMIC 0.1UF-K/50V                |         | D011104177101S |      |     |
| C1335,1336              | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL    |         | D011103174101S |      |     |
| C1337                   | nsp      | C,CERAMIC 0.1UF-K/50V                |         | D011104177101S |      |     |
| C1339                   | nsp      | C,CERAMIC 0.1UF-K/50V                |         | D011104177101S |      |     |
| C1341                   | nsp      | C,CERAMIC 0.1UF-K/50V                |         | D011104177101S |      |     |
| C1342                   | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL    |         | D011103174101S |      |     |
| C1345                   | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL    |         | D011103174101S |      |     |
| C1350                   | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL    |         | D011103174101S |      |     |



|  | Ref. No.   | Part No. | Part Name                         | Remarks |                | Q'ty | New |
|--|------------|----------|-----------------------------------|---------|----------------|------|-----|
|  | C1351      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1358      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1361      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1362      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C1364      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1367      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1369      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C1370      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C1373      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1377      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1381      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1385      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1387,1388 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1391      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1393      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1395      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1396      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1398      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C1401      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1402      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1407      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1410      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1411      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1412      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C1415      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1416      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1418      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1419      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1420,1421 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1424      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1425      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1429      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1430      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1431      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1434,1435 | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1439,1440 | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1441      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1443,1444 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1445      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1446,1447 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1448      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1449      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1450,1451 | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1452,1453 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1454-1461 | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1462,1463 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1464      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C1465      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1466      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C1467      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1468,1469 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1470      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1472      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C1474,1475 | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1476      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1477,1478 | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1479      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C1480      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1481      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |

| Ref. No.   | Part No. | Part Name                         | Remarks |                | Q'ty | New |
|------------|----------|-----------------------------------|---------|----------------|------|-----|
| C1482      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C1484      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1485      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1486-1489 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1490      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1491      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1492      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1494      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1495-1498 | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C1500      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104577160S |      |     |
| C1511,1512 | nsp      | C,CERAMIC 8PF-D/50V               |         | D010080117160S |      |     |
| C1513      | nsp      | C,CERAMIC 1UF-K/10V               |         | D011105772161S |      |     |
| C1514      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1516      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1605,1606 | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C1607-1609 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1610      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1611-1613 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1614,1615 | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1616-1620 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1621      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1622,1623 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1624      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1625      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1626-1632 | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1633      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C1634      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1635      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1636      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1637      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C1639      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1640      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C1642      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1643,1644 | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1645      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C1647      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1649      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1651,1652 | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C1653,1654 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1656,1657 | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1659,1660 | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C1661,1662 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1663,1664 | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1665      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C1666      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1667      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C1668,1669 | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C1670,1671 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1672      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1673,1674 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1675      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1676      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1677      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1678      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1679      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C1680      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1681,1682 | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C1683      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C1690      | nsp      | C,CERAMIC 0.15uF-K/10V-1608REEL   |         | D011154172160S |      |     |

|  | Ref. No.   | Part No. | Part Name                         | Remarks |                | Q'ty | New |
|--|------------|----------|-----------------------------------|---------|----------------|------|-----|
|  | C1691      | nsp      | C,CERAMIC 0.012uF-K/50V-1608REEL  |         | D011123177161S |      |     |
|  | C1692      | nsp      | C,CERAMIC 0.15uF-K/10V-1608REEL   |         | D011154172160S |      |     |
|  | C1693      | nsp      | C,CERAMIC 0.012uF-K/50V-1608REEL  |         | D011123177161S |      |     |
|  | C1694      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1700      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1702,1703 | nsp      | C,CERAMIC 8PF-D/50V               |         | D010080117160S |      |     |
|  | C1704      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C1705,1706 | nsp      | C,CERAMIC 1UF-K/10V               |         | D011105772161S |      |     |
|  | C1707      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1709      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1710      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1711      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C1712      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1713      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C1721      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1730      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1801      | nsp      | C,CERAMIC 10UF-K/16V              |         | D011106573200S |      |     |
|  | C1810-1825 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1826      | nsp      | C,CERAMIC 10UF-K/16V              |         | D011106573200S |      |     |
|  | C1835-1851 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1853      | nsp      | C,CERAMIC 1UF-K/10V               |         | D011105772161S |      |     |
|  | C1854      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C1860,1861 | nsp      | C,CERAMIC 1UF-K/10V               |         | D011105772161S |      |     |
|  | C2001      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2002      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2003      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2004      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2005      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2006      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2007      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2008      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2009      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2010      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2011,2012 | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2013      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2014-2016 | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2017,2018 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2022      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2023,2024 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2025      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2026      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2027      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2028      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2029      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2030      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2031,2032 | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2033      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2034      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2035,2036 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2037      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2038      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2039      | nsp      | C,CERAMIC 9PF-D/50V               |         | D011090117101S |      |     |
|  | C2040      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2041      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2042,2043 | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2044      | nsp      | C,CERAMIC 9PF-D/50V               |         | D011090117101S |      |     |
|  | C2045      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2046      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2047,2048 | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |

| Ref. No.   | Part No. | Part Name                         | Remarks |                | Q'ty | New |
|------------|----------|-----------------------------------|---------|----------------|------|-----|
| C2049-2051 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2052      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2053      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2054,2055 | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2056      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2057      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2058      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2059      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2060      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2061      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2062,2063 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2064      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2065      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2066      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2067,2068 | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C2071,2072 | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C2073-2075 | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2076      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2077      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2078      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2079      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2080      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2081      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2082      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2083-2085 | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2086      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2087      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2088-2092 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2093      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2094      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2095      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2096      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2097      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2098      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2099      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2100      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2101      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2102      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2103-2106 | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2107      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2108      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2109      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2110,2111 | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2112      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2113,2114 | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2115      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2201,2202 | nsp      | C,CERAMIC 12PF-J/50V              |         | D011120167101S |      |     |
| C2203      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2204      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C2207      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2215,2216 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2224-2230 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2231      | nsp      | C,CERAMIC 0.022UF-K/25V           |         | D011223174100S |      |     |
| C2232      | nsp      | C,CERAMIC 100PF-J/50V             |         | D011101167101S |      |     |
| C2233,2234 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2235      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2236      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C2237      | nsp      | C,CERAMIC 100PF-J/50V             |         | D011101167101S |      |     |
| C2238      | nsp      | C,CERAMIC 100PF-J/50V             |         | D010101167160S |      |     |

|  | Ref. No.   | Part No.      | Part Name                         | Remarks |                | Q'ty | New |
|--|------------|---------------|-----------------------------------|---------|----------------|------|-----|
|  | C2239-2241 | nsp           | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
|  | C2242-2245 | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2247      | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2248      | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2250      | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2252-2254 | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2256      | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2401-2405 | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2406      | nsp           | C,CERAMIC 2.2UF-M/6.3V-1005REEL   |         | D011225581100S |      |     |
|  | C2407      | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2408      | nsp           | C,CERAMIC 1UF-K/10V               |         | D011105772161S |      |     |
|  | C2409,2410 | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2411      | nsp           | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C2412      | nsp           | C,CERAMIC 2.2UF-M/6.3V-1005REEL   |         | D011225581100S |      |     |
|  | C2413      | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2415,2416 | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2417      | nsp           | C,CERAMIC 1UF-K/10V               |         | D011105772161S |      |     |
|  | C2418      | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2419      | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2420,2421 | nsp           | C,CERAMIC 1UF-K/10V               |         | D011105772161S |      |     |
|  | C2422-2425 | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2426      | 00D9630338606 | C,ELECT 10UF-MVG/16V              |         | D050100083470S |      |     |
|  | C2427-2432 | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2435,2436 | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2437,2438 | nsp           | C,CERAMIC 2200PF-K/50V            |         | D011222777160S |      |     |
|  | C2439-2445 | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2447      | nsp           | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C2448      | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2450      | nsp           | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C2451      | 963134000450S | C,ELECT 100UF-MVG/16V             |         | D050101083660S |      |     |
|  | C2454-2461 | nsp           | C,CERAMIC X7R3900PF-K/50V         |         | D011392777160S |      |     |
|  | C2465-2468 | nsp           | C,CERAMIC 680pF-J 50V             |         | D010681167160S |      |     |
|  | C2469,2470 | nsp           | C,CERAMIC 470PF-J/50V             |         | D010471167160S |      |     |
|  | C2471-2476 | nsp           | C,CERAMIC 680pF-J 50V             |         | D010681167160S |      |     |
|  | C2477,2478 | nsp           | C,CERAMIC 470PF-J/50V             |         | D010471167160S |      |     |
|  | C2479,2480 | nsp           | C,CERAMIC 680pF-J 50V             |         | D010681167160S |      |     |
|  | C2481,2482 | 00D9630338606 | C,ELECT 10UF-MVG/16V              |         | D050100083470S |      |     |
|  | C2483,2484 | nsp           | C,CERAMIC0.01UF-K/50V             |         | D011103777160S |      |     |
|  | C2485      | nsp           | C,CERAMIC 0.022UF-K/25V           |         | D011223777160S |      |     |
|  | C2486      | 963134000450S | C,ELECT 100UF-MVG/16V             |         | D050101083660S |      |     |
|  | C2487      | nsp           | C,CERAMIC 0.022UF-K/25V           |         | D011223777160S |      |     |
|  | C2488      | 963134000450S | C,ELECT 100UF-MVG/16V             |         | D050101083660S |      |     |
|  | C2601      | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2602,2603 | nsp           | C,CERAMIC 12PF-J/50V              |         | D011120167101S |      |     |
|  | C2605-2608 | nsp           | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C2609-2619 | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2620-2622 | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2623      | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2624      | nsp           | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C2627-2630 | nsp           | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C2631-2640 | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2641-2643 | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2645      | nsp           | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C2648      | nsp           | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
|  | C2652,2653 | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2657      | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2659      | nsp           | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
|  | C2660-2667 | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
|  | C2676,2677 | nsp           | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |

| Ref. No.   | Part No. | Part Name                         | Remarks |                | Q'ty | New |
|------------|----------|-----------------------------------|---------|----------------|------|-----|
| C2678      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2679,2680 | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2801      | nsp      | C,CERAMIC 0.022UF-K/25V           |         | D011223777160S |      |     |
| C2803      | nsp      | C,CERAMIC 1UF-K/10V               |         | D011105772161S |      |     |
| C2806      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2807,2808 | nsp      | C,CERAMIC 10PF-D/50V              |         | D011100117101S |      |     |
| C2811      | nsp      | C,CERAMIC 1UF-K/10V               |         | D011105772161S |      |     |
| C2812      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2813      | nsp      | C,CERAMIC 470PF-K/50V             |         | D011471177101S |      |     |
| C2814      | nsp      | C,CERAMIC 1UF-K/10V               |         | D011105772161S |      |     |
| C2815      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2816      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102777160S |      |     |
| C2817      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C2818      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102777160S |      |     |
| C2819      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C2821      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C2822      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102777160S |      |     |
| C2823      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C2824-2828 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2829      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C2831      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2832      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2833      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2834      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C2842-2845 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C2846      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C2850      | nsp      | C,CERAMIC 0.001UF-J/50V           |         | D010102167160S |      |     |
| C2851,2852 | nsp      | C,CERAMIC 0.001UF-J/50V           | U       | D010102167160S |      |     |
| C2851,2852 | nsp      | C,CERAMIC 330PF-K/50V             | N,K     | D010331167160S |      |     |
| C3005      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C3007      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C3009      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C3010      | nsp      | C,CERAMIC 4.7UF-K/6.3V            |         | D011475571160S |      |     |
| C3011-3014 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C3015,3016 | nsp      | C,CERAMIC 12PF-J/50V              |         | D011120167101S |      |     |
| C3017-3019 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C3021,3022 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C3202      | nsp      | C,CERAMIC 220PF-K/50V             |         | D011221177101S |      |     |
| C3205      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C3210-3213 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C3214,3215 | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C3216      | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C3414-3416 | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C3417      | nsp      | C,CERAMIC 100PF-J/50V             |         | D011101167101S |      |     |
| C3418      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C3419-3424 | nsp      | C,CERAMIC 100PF-J/50V             |         | D011101167101S |      |     |
| C3601-3605 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C3619-3623 | nsp      | C,CERAMIC 10UF-K/16V              |         | D011106573200S |      |     |
| C3625-3629 | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C3631-3635 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C3637-3641 | nsp      | C,CERAMIC 10UF-K/16V              |         | D011106573200S |      |     |
| C3643-3647 | nsp      | C,CERAMIC 10UF-K/16V              |         | D011106573200S |      |     |
| C3649,3650 | nsp      | C,CERAMIC 10PF-J/50V              |         | D010100167161S |      |     |
| C3651-3653 | nsp      | C,CERAMIC 15PF-J/50V              |         | D010150167160S |      |     |
| C3667-3669 | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C3673-3676 | nsp      | C,CERAMIC 0.1UF-K/50V             |         | D011104177101S |      |     |
| C3677      | nsp      | CER. CAP. X7R)0.01UFK/25V1005REEL |         | D011103174101S |      |     |
| C3678      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |
| C3682      | nsp      | C,CERAMIC 1000PF-K/50V            |         | D011102177101S |      |     |

|                           | Ref. No.   | Part No.      | Part Name                                              | Remarks |                | Q'ty | New |
|---------------------------|------------|---------------|--------------------------------------------------------|---------|----------------|------|-----|
|                           | C3695-3701 | nsp           | C,CERAMIC 0.1UF-K/50V                                  |         | D011104177101S |      |     |
|                           | C3744      | nsp           | C,CERAMIC 1UF-K/10V                                    |         | D011105772161S |      |     |
|                           | C3752      | nsp           | C,CERAMIC 1UF-K/10V                                    |         | D011105772161S |      |     |
|                           | C3780      | nsp           | C,CERAMIC 0.1UF-K/50V                                  |         | D011104177101S |      |     |
|                           | C3788      | nsp           | C,CERAMIC CHIP HIK,I9X7R)15000PF-K/16V-1005REEL        |         | D011153773100S |      |     |
|                           | C3789      | 00D9630325402 | C,ELECT 470UF-MVG/6.3V                                 |         | D050471081200S |      |     |
|                           | C3790      | nsp           | C,CERAMIC 0.1UF-K/50V                                  |         | D011104177101S |      |     |
|                           | C3792      | nsp           | C,CERAMIC 0.1UF-K/50V                                  |         | D011104177101S |      |     |
|                           | C3795      | nsp           | C,CERAMIC 1UF-K/10V                                    |         | D011105772161S |      |     |
|                           | C3797      | nsp           | C,CERAMIC 0.1UF-K/50V                                  |         | D011104177101S |      |     |
|                           | C3799      | nsp           | C,CERAMIC 0.1UF-K/50V                                  |         | D011104177101S |      |     |
|                           | C3802      | 963134501220S | C,ELECT 470UF-MVG/6.3V (RV0)                           |         | D050471081330S |      |     |
|                           | C3804      | nsp           | C,CERAMIC 0.1UF-K/50V                                  |         | D011104177101S |      |     |
|                           | C3815      | nsp           | C,CERAMIC 0.1UF-K/50V                                  |         | D011104177101S |      |     |
|                           |            |               |                                                        |         |                |      |     |
|                           |            |               |                                                        |         |                |      |     |
| <b>OTHERS PARTS GROUP</b> |            |               |                                                        |         |                |      |     |
|                           | K2201      | 963643102100S | TER,RCA 2PIN,RCA-206AGG-07(BK,BK GOLD)                 |         | G601206AGG07YS |      |     |
|                           | K3002      | 00D9630244703 | JACK,D3.5 EARPHONE                                     |         | G40130802000YS |      |     |
|                           |            |               |                                                        |         |                |      |     |
|                           | L1251-1253 | nsp           | R,CHIP THICK 0-J,1/10W                                 |         | C200000060200S |      |     |
|                           | L1301-1313 | nsp           | COIL,BEAD BLM21PG221SN1                                |         | D340201212210S |      |     |
|                           | L1602      | nsp           | COIL,BEAD BLM21PG221SN1                                |         | D340201212210S |      |     |
|                           | L1605-1615 | nsp           | COIL,BEAD BLM21PG221SN1                                |         | D340201212210S |      |     |
|                           | L1617-1619 | nsp           | COIL,BEAD BLM21PG221SN1                                |         | D340201212210S |      |     |
|                           | L1801      | nsp           | COIL,BEAD BLM21PG221SN1                                |         | D340201212210S |      |     |
|                           | L2601-2603 | nsp           | COIL,BEAD BLM21PG221SN1                                |         | D340201212210S |      |     |
|                           | L2801,2802 | nsp           | COIL,CHIP DLW21SN900HQ2L                               |         | D311201219000S |      |     |
|                           | L2804      | nsp           | R,CHIP THICK 0-J,1/10W                                 |         | C200000060200S |      |     |
|                           | L2806      | nsp           | COIL,CHIP DLW21SN181SQ2L                               |         | D311201211810S |      |     |
|                           | L2807-2810 | nsp           | COIL,BEAD BLM21PG221SN1                                |         | D340201212210S |      |     |
|                           | L2812      | nsp           | COIL,BEAD CBW160808U121T                               |         | D340160811210S |      |     |
|                           | L2813      | nsp           | CHIP RES. 0-J 1/16W-1608REEL                           |         | C20000006M160S |      |     |
|                           | L2814,2815 | nsp           | CHIP RES. 0-J 1/16W-1608REEL                           | U       | C20000006M160S |      |     |
|                           | L2814,2815 | nsp           | CHIP RES. 1.5UH-J 1/16W-1608REEL                       | N,K     | D311160811520S |      |     |
|                           | L3401-3404 | nsp           | R,CHIP THICK 0-J,1/10W                                 |         | C200000060200S |      |     |
|                           | L3601-3610 | nsp           | R,CHIP THICK 0-J,1/10W                                 |         | C200000060200S |      |     |
|                           | L3613-3622 | nsp           | R,CHIP THICK 0-J,1/10W                                 |         | C200000060200S |      |     |
|                           | L3625-3627 | nsp           | COIL,BEAD BLM21PG221SN1                                |         | D340201212210S |      |     |
|                           | L3628      | nsp           | COIL,BEAD CBW160808U121T                               |         | D340160811210S |      |     |
|                           |            |               |                                                        |         |                |      |     |
|                           | N1001-1004 | 963612504750D | CN.WAFER AD3PBC19G0-T                                  |         | L109100190190S |      |     |
|                           | N1251      | 963643102090S | CN.WAFER AD3PBJ19GO-REV_B                              |         | L109100190170S |      |     |
|                           | N1252      | nsp           | CN.FPC 23P                                             |         | L130100162330S |      |     |
|                           | N1301      | nsp           | CN.FPC 23P                                             |         | L130100162330S |      |     |
|                           | N1302      | 963612504750D | CN.WAFER AD3PBC19G0-T                                  |         | L109100190190S |      |     |
|                           | N1602      | 963612504750D | CN.WAFER AD3PBC19G0-T                                  |         | L109100190190S |      |     |
|                           | N1802      | 963612504750D | CN.WAFER AD3PBC19G0-T                                  |         | L109100190190S |      |     |
|                           | N2801      | nsp           | CN.WAFER 5P 20010-05                                   |         | L101200100510S |      |     |
|                           | N2802      | 963643100130S | JACK,MODULAR RJ45                                      |         | G4060RJ450120S |      |     |
|                           | N3401      | nsp           | CN,WAFER,I9C125Z2-13 13P BtoB SOCKET(FEMALE) P=1.25MM  |         | L109012521320S |      |     |
|                           | N3402      | nsp           | CN,WAFER,I9C125Z2-07 7P BtoB SOCKET(FEMALE) P=1.25MM   |         | L109012520720S |      |     |
|                           | N3403      | nsp           | CN.WAFER ,I9C125Z2-33 33P BtoB SOCKET(FEMALE) P=1.25MM |         | L109012523320S |      |     |
|                           | N3404      | nsp           | CN,WAFER,I9C125Z2-17 17P BtoB SOCKET(FEMALE) P=1.25MM  |         | L109012521720S |      |     |
|                           | N3405      | nsp           | CN.WAFER 5P 20010-05                                   |         | L101200100510S |      |     |

|  | Ref. No. | Part No.      | Part Name                                                | Remarks |                | Q'ty | New |
|--|----------|---------------|----------------------------------------------------------|---------|----------------|------|-----|
|  | N3406    | nsp           | CN,WAFER,I9C125Z2-11 11P BtoB<br>SOCKET(FEMALE) P=1.25MM |         | L109012521120S |      |     |
|  | N3407    | nsp           | CN,WAFER,I9C125Z2-13 13P BtoB<br>SOCKET(FEMALE) P=1.25MM |         | L109012521320S |      |     |
|  | N3408    | nsp           | CN.FPC 40P 10022HS-40C                                   |         | L130100220400S |      |     |
|  | N3601    | nsp           | CN.WAFER 5P SMW250-5P                                    |         | L102050010040S |      |     |
|  |          |               |                                                          |         |                |      |     |
|  | RLY1801  | 943682100250S | RELAY,I9BC1-5S-R DC5V SMT SINGLE-<br>SIDE STABLE RELAY   |         | G680050202020S |      |     |
|  |          |               |                                                          |         |                |      |     |
|  | X1301    | 141810045507S | CRYSTAL CHIP FCX-04(27MHz)                               |         | E80527R000080S |      |     |
|  | X1601    | 141810045507S | CRYSTAL CHIP FCX-04(27MHz)                               |         | E80527R000080S |      |     |
|  | X2001    | 141810050509S | CRYSTAL CHIP,I9FCX-04(25MHz) CL=7PF<br>SMD3225 RIVER     |         | E80525R000080S |      |     |
|  | X2202    | 141810046500S | CRYSTAL CHIP FCX-04(24.576MHz)                           |         | E80524R576080S |      |     |
|  | X2601    | 141810049509S | CRYSTAL CHIP FCX-04(24MHz)                               |         | E80524R000080S |      |     |
|  | X3001    | 00D3991038900 | CRYSTAL CHIP FCX-03(12MHz)                               |         | E805120000020S |      |     |
|  |          |               |                                                          |         |                |      |     |
|  | Z3001    | nsp           | SHIELD CASE t0.3 A4                                      |         | 3070210646000S |      |     |
|  |          |               |                                                          |         |                |      |     |
|  |          | nsp           | BRACKET SR5007U1B SPTH                                   |         | 4010215566000S |      |     |



This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.