

SERVICE MANUAL

MODEL	JP	E3	E2	EK	EA	E1	E1K	E1C
AVR-X3000		✓	✓					✓

INTEGRATED NETWORK AV 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.

DENON

D&M Holdings Inc.

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ABOUT THIS MANUAL

Read the following information before using the service manual.

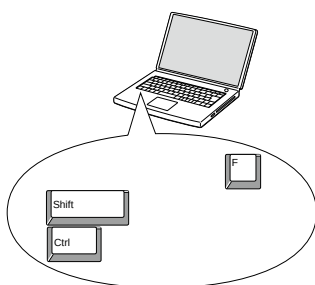
What you can do with this manual

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

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

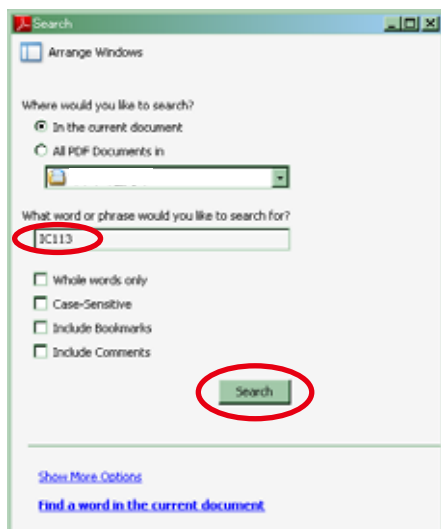
1. Press **Ctrl+Shift+F** on the keyboard.

- The Search window appears.



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

- A list of search results appears.



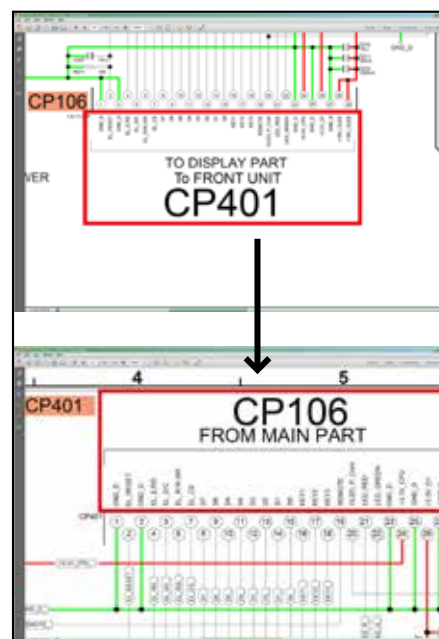
3. Click an item on the list.

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

Jump to the target of a schematic diagram connector

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

- The screen jumps to the target connector.



- Page magnification stays the same as before the jump.

Using Adobe Reader (Windows version)

Add notes to this data (Sign)

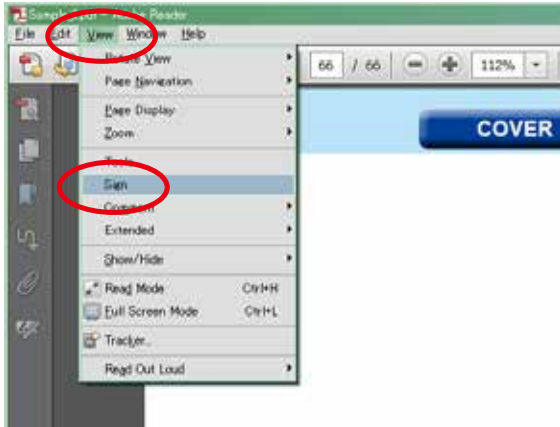
The Sign function lets you add notes to the data in this manual.

Save the file once you have finished adding notes.

[Example using Adobe Reader X]

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

- The Sign pane appears.



[Example using Adobe Reader 9]

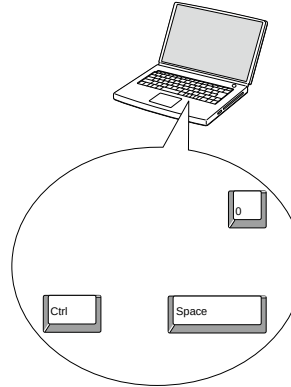
On the "**Document**" menu, click "**Sign**".

Magnify schematic / printed wiring board diagrams - 1

(Ctrl+Space, mouse operation)

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

- The selected area is magnified.

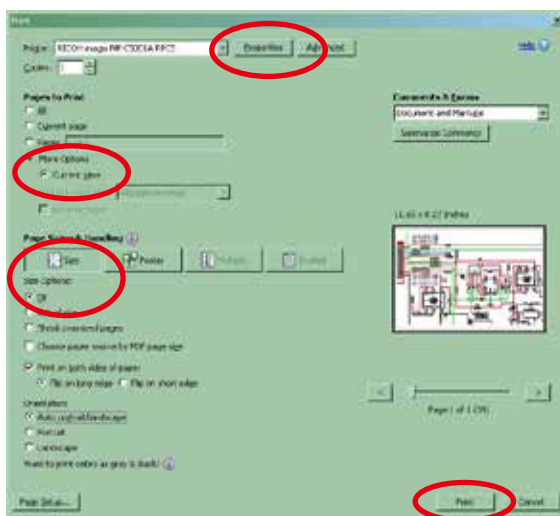


- When you want to move the area shown, hold down **Space** and drag the mouse.
- When you want to show a full page view, press **Ctrl+0** on the keyboard.

Print a magnified part of the manual

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

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



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

• Properties

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

• Page to print

Select the following checkbox.

"More Options" : "Current View"

• Page Sizing & Handling

Select the following checkbox.

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

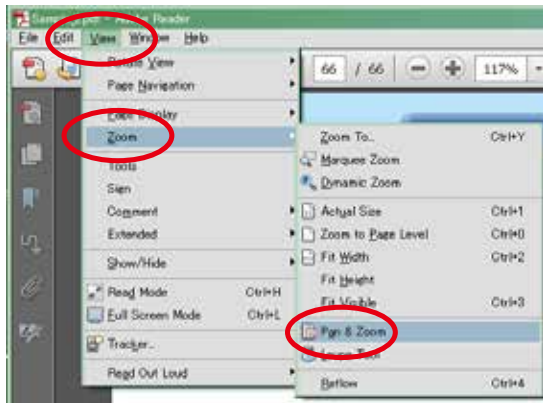
Magnify schematic / printed wiring board diagrams - 2

(Pan & Zoom function)

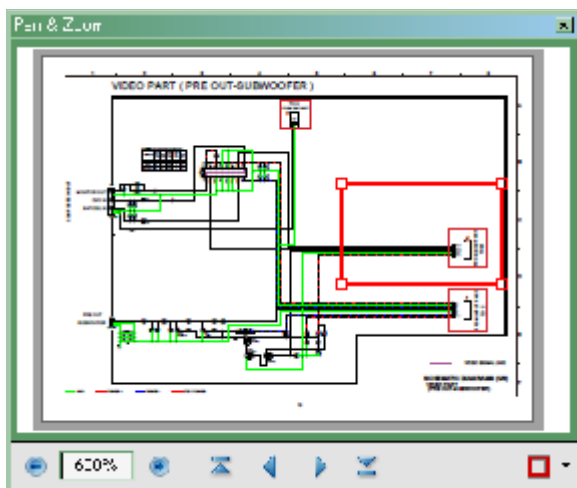
The Pan & Zoom function lets you see which part of a magnified diagram is being shown in a separate window.

[Example using Adobe Reader X]

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



- The Pan & Zoom window appears on the screen.



[Example using Adobe Reader 9]

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

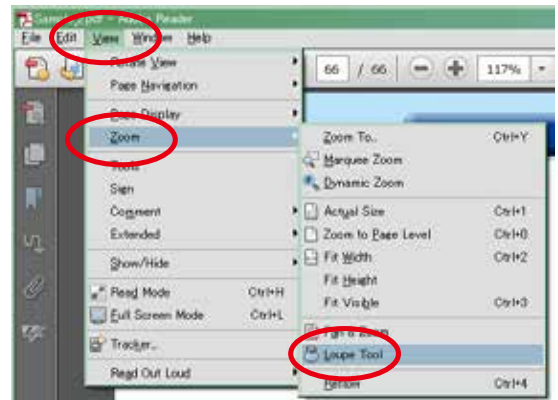
Magnify schematic / printed wiring board diagrams - 3

(Loupe Tool function)

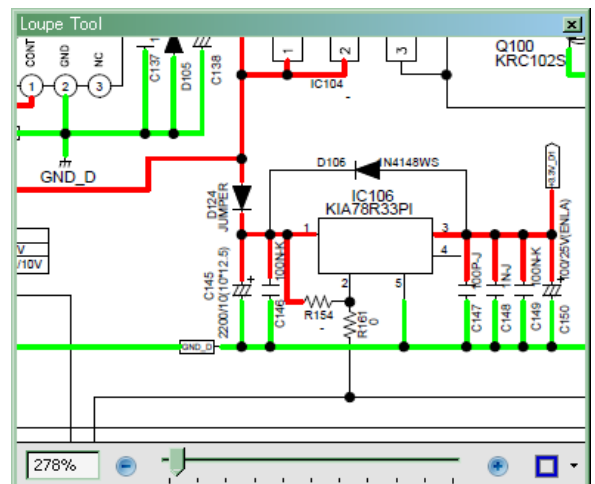
The Loupe Tool function lets you magnify a specific part of a diagram in a separate window.

[Example using Adobe Reader X]

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



- The Loupe Tool window appears on the screen.



[Example using Adobe Reader 9]

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

SAFETY PRECAUTIONS

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

leakage current check

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

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

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

⊙ Heed the cautions!

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

⊙ Cautions concerning electric shock!

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

⊙ Caution concerning disassembly and assembly!

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

⊙ Use only designated parts!

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

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

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

⊙ Make a safety check after servicing!

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

(Insulation check procedure)

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

CAUTION Concerning important safety parts

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

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

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

NOTE FOR SCHEMATIC DIAGRAM

WARNING:

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

CAUTION:

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

WARNING:

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

NOTICE:

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

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

NOTE FOR PARTS LIST

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

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

INSTRUCTIONS FOR HANDLING SEMI-CONDUCTORS AND OPTICAL UNIT

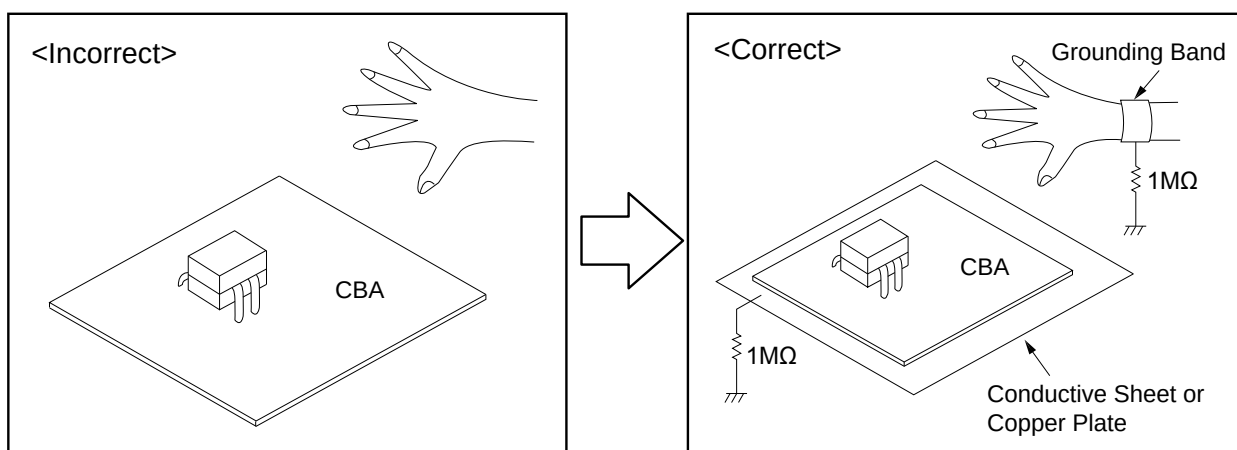
Electrostatic breakdown of the semi-conductors or optical pickup may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

1. Ground for Human Body

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

2. Ground for Workbench

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



[illegible]

TECHNICAL SPECIFICATIONS

Audio section

Power amplifier

Rated output:

Front:

105 W + 105 W (8 Ω /ohms, 20 Hz – 20 kHz with 0.08 % T.H.D.)
135 W + 135 W (6 Ω /ohms, 1 kHz with 0.7 % T.H.D.)

Center:

105 W (8 Ω /ohms, 20 Hz – 20 kHz with 0.08 % T.H.D.)
135 W (6 Ω /ohms, 1 kHz with 0.7 % T.H.D.)

Surround:

105 W + 105 W (8 Ω /ohms, 20 Hz – 20 kHz with 0.08 % T.H.D.)
135 W + 135 W (6 Ω /ohms, 1 kHz with 0.7 % T.H.D.)

Surround back:

105 W + 105 W (8 Ω /ohms, 20 Hz – 20 kHz with 0.08 % T.H.D.)
135 W + 135 W (6 Ω /ohms, 1 kHz with 0.7 % T.H.D.)

Output connectors: 6 – 16 Ω /ohms

Analog

Input sensitivity/Input impedance: 200 mV/47 k Ω /kohms

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

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

Tuner section

(Note: μ V at 75 Ω /ohms, 0 dBf = 1×10^{-15} W)

Receiving Range: FM 87.5 MHz – 107.9 MHz
AM 530 kHz – 1710 kHz

Usable Sensitivity: FM 1.2 μ V (12.8 dBf)
AM 18 μ V

50 dB Quieting Sensitivity: MONO 2.8 μ V (20.2 dBf)

S/N : MONO 70 dB (IHF–A weighted, DIRECT mode)
STEREO 67 dB (IHF–A weighted, DIRECT mode)

Total harmonic Distortion: MONO 0.7 % (1 kHz)

STEREO 1.0 % (1 kHz)

General

Power supply: AC 120 V, 60 Hz
AC 230 V, 50/60 Hz

Power consumption: 600 W

Power consumption in standby mode: 0.1 W

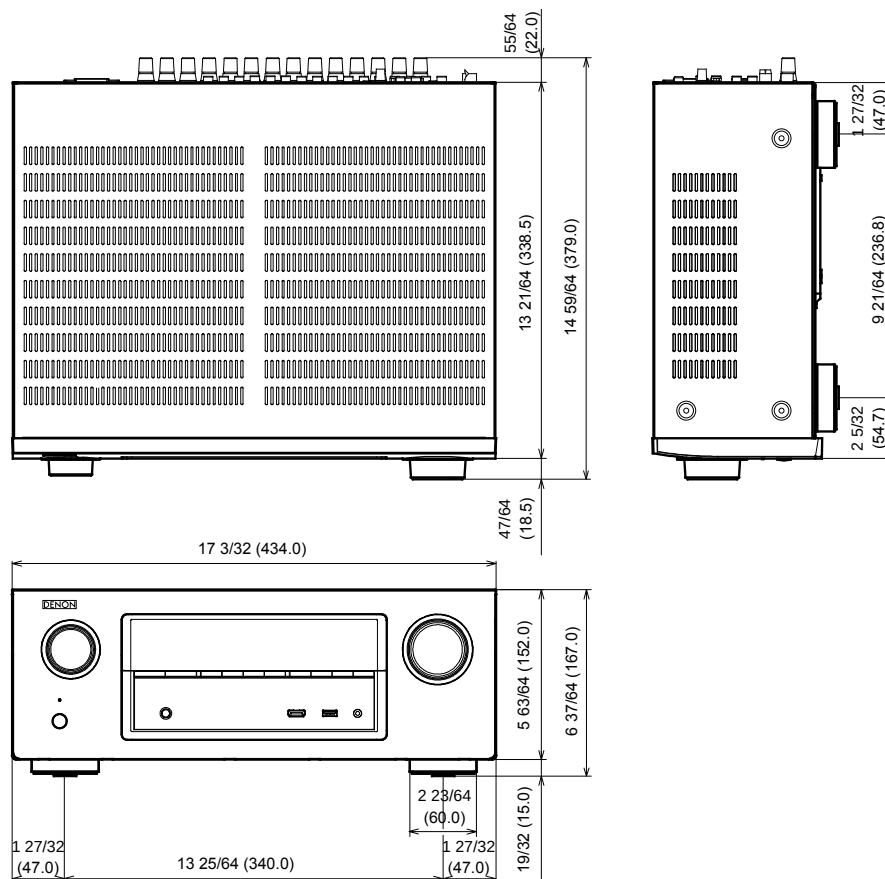
Power consumption in CEC standby mode: 0.5 W

Power consumption in network standby mode: 2.7 W

DIMENSION

Unit : in. (mm)

Weight : 23 lbs 9 oz (10.7 kg)



CAUTION IN SERVICING

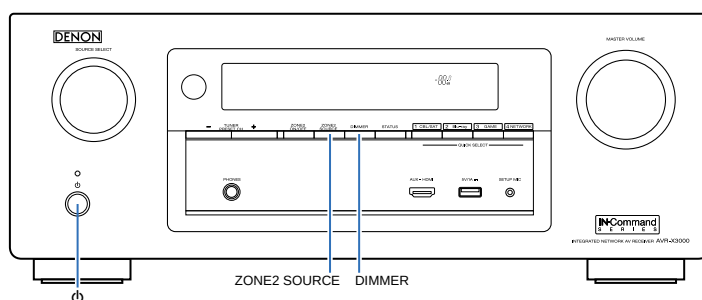
Initializing INTEGRATED NETWORK AV RECEIVER

INTEGRATED NETWORK AV RECEIVER initialization should be performed when the μ com, peripheral parts of μ com, and Digital P.W.B. were replaced.

1. Turn off the power pressing "⏻" button.
2. Press "⏻" button while simultaneously while pressing "ZONE2 SOURCE" and "DIMMER" 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.



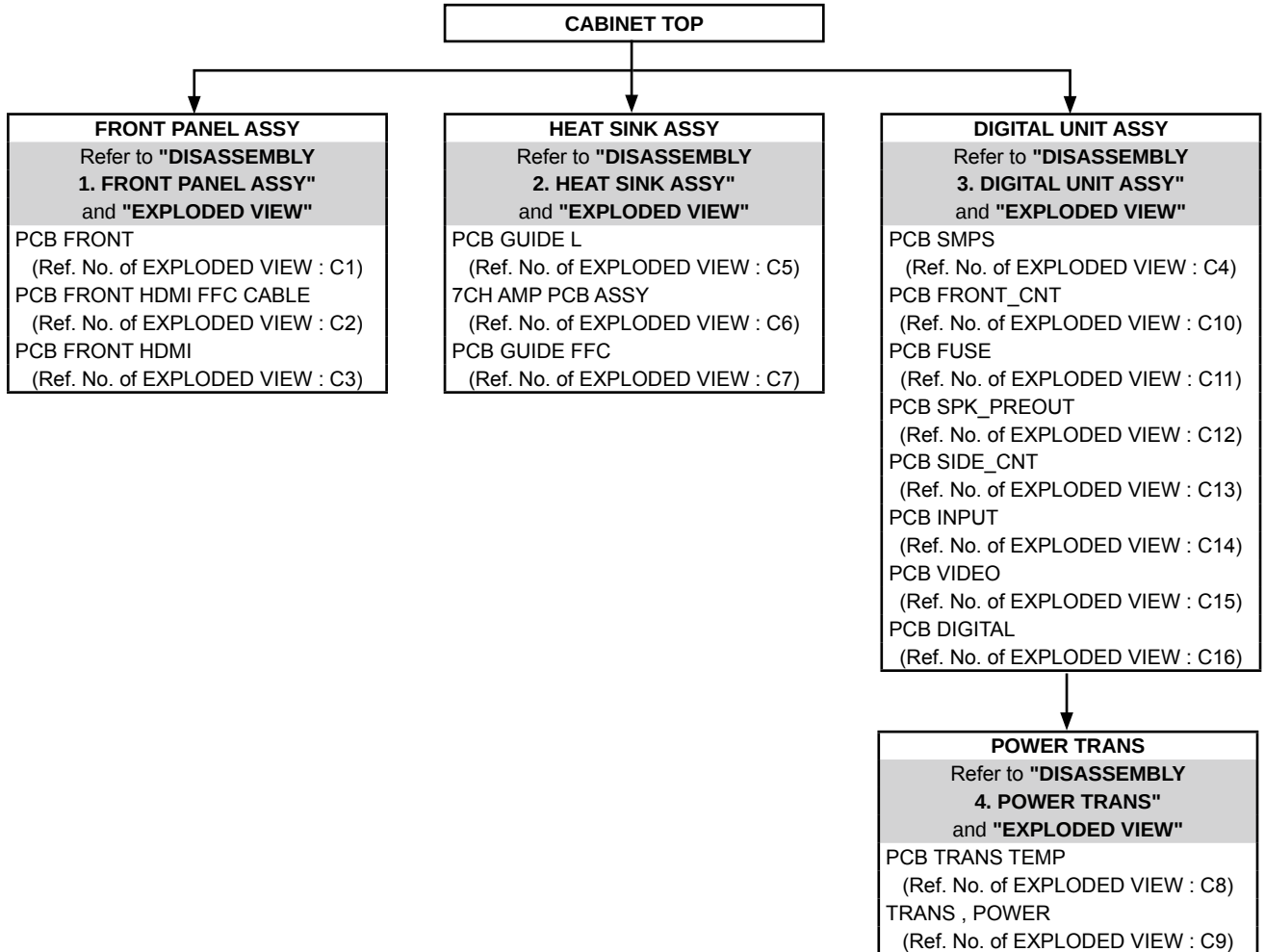
Service Jig

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

8U-110084S : EXTENSION UNIT KIT : 1 Set
(Refer to 58 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.

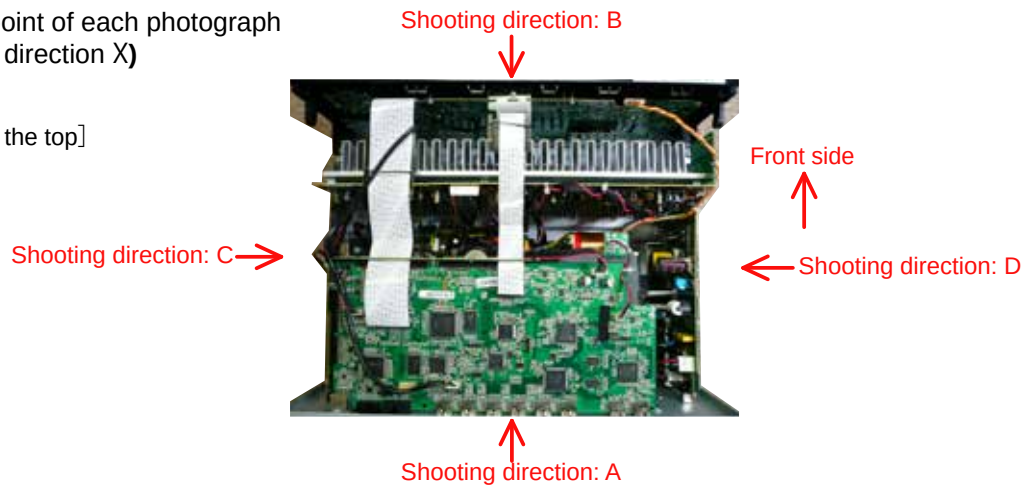


About the photos used for "descriptions of the DISASSEMBLY" section

- 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 X)

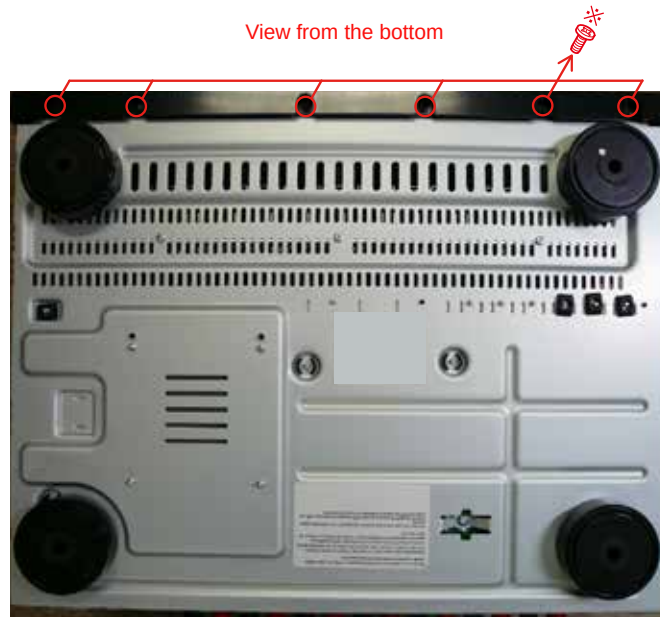
[View from the top]



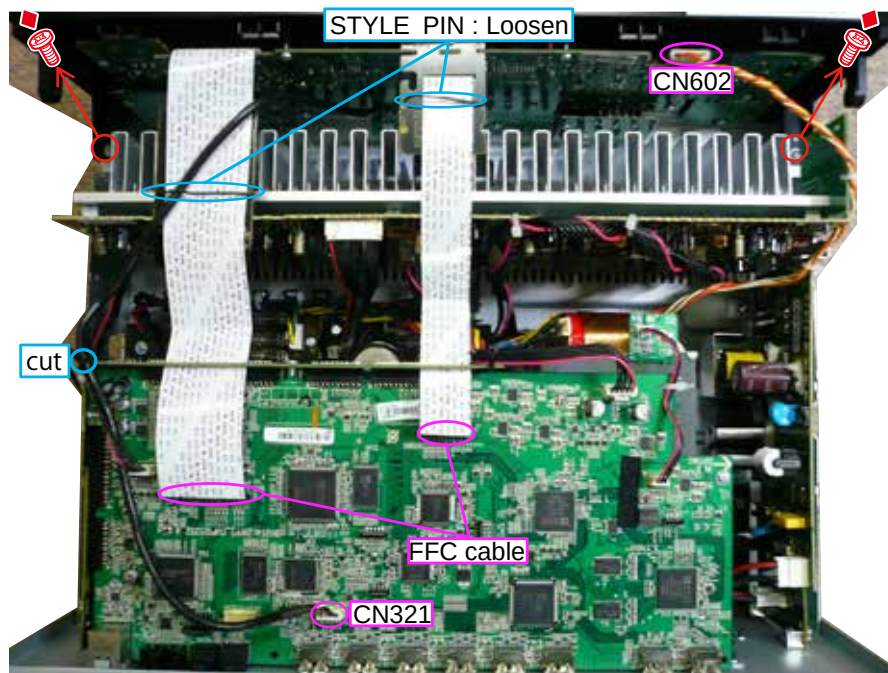
1. FRONT PANEL ASSY

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

(1) Remove the screws.



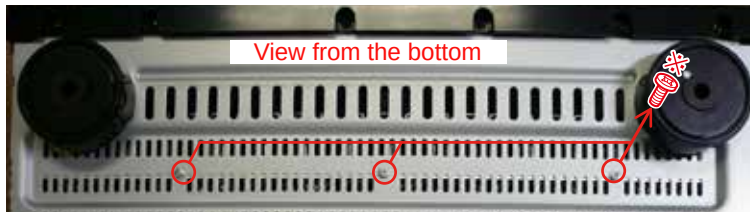
(2) Disconnect the connector wires and FFC. Remove the Style pin and screws.



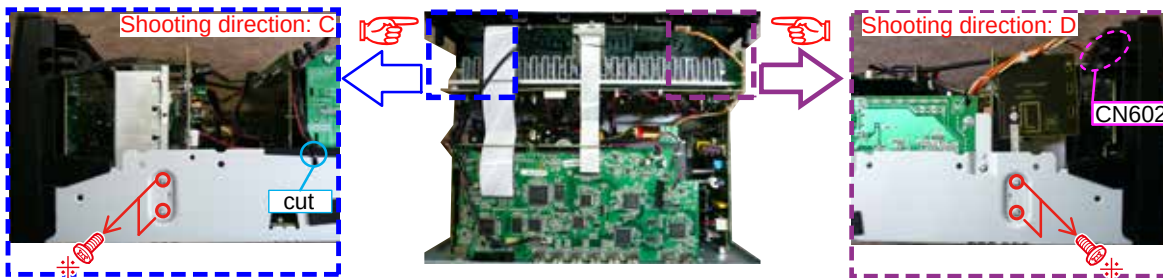
2. HEAT SINK ASSY

Proceeding : **CABINET TOP** → **HEAT SINK ASSY**

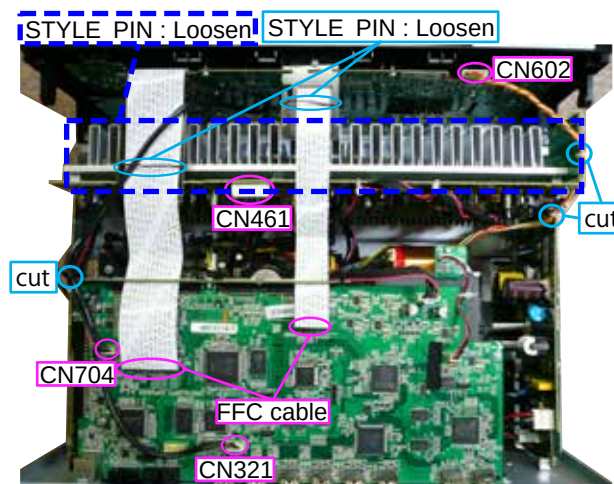
- (1) Remove the screws.



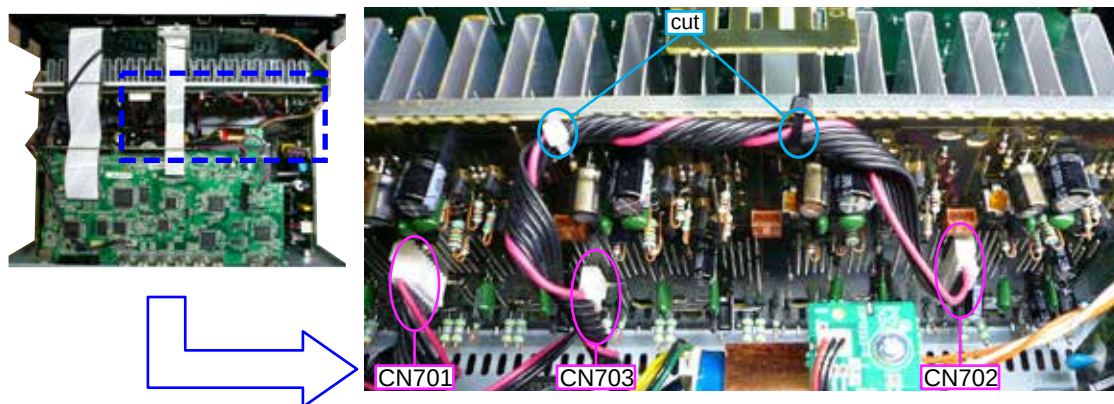
- (2) Cut the wire clamp band, then remove the screws. Disconnect the connector wires.



- (3) Cut the wire clamp band, then disconnect the connector wire and FFC cables .



- (4) Cut the wire clamp bands, then disconnect the connector wires.

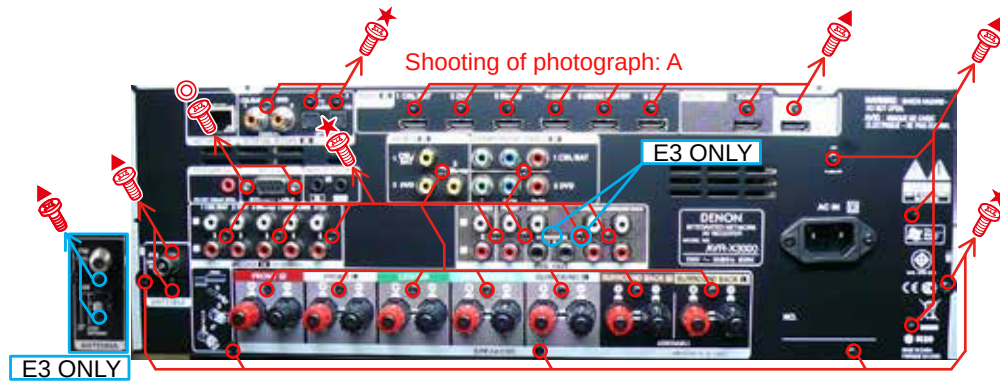


Please refer to "EXPLODED VIEW" for the disassembly method of each P.W.B included in HEAT SINK ASSY.

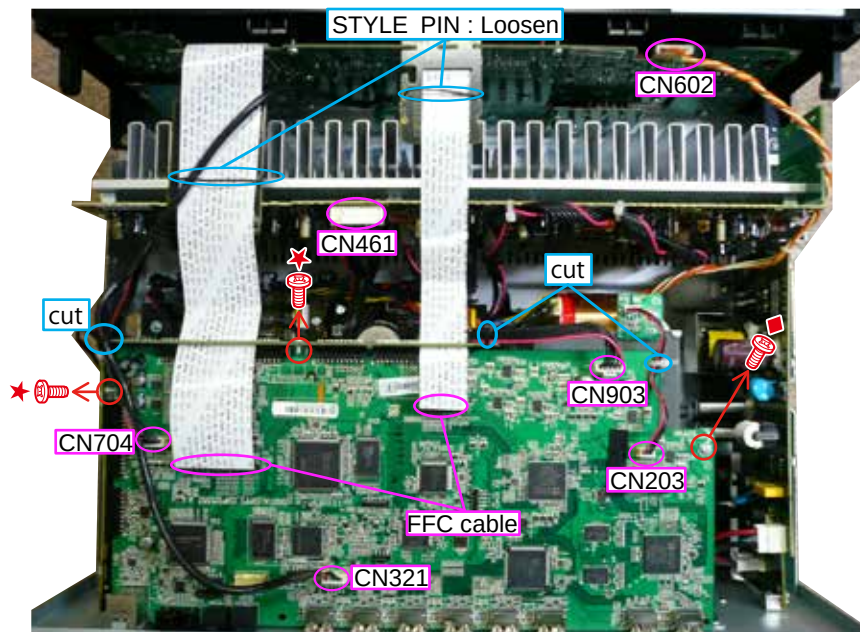
3. DIGITAL UNIT ASSY

Proceeding : **CABINET TOP** → **DIGITAL UNIT ASSY**

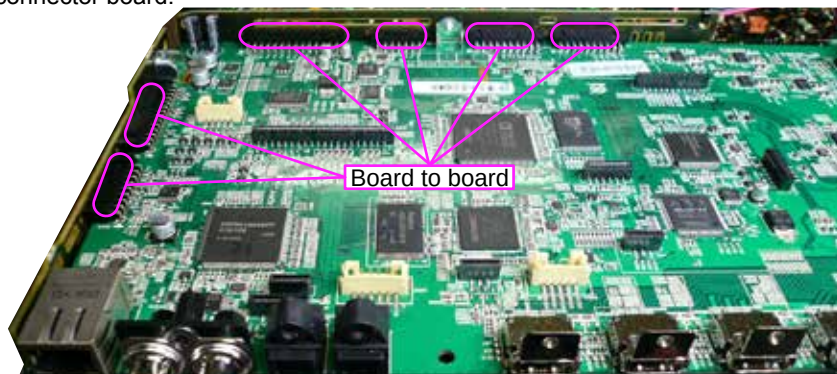
- (1) Remove the screws, then remove the BACK PANEL and the DIGITAL BRACKET.



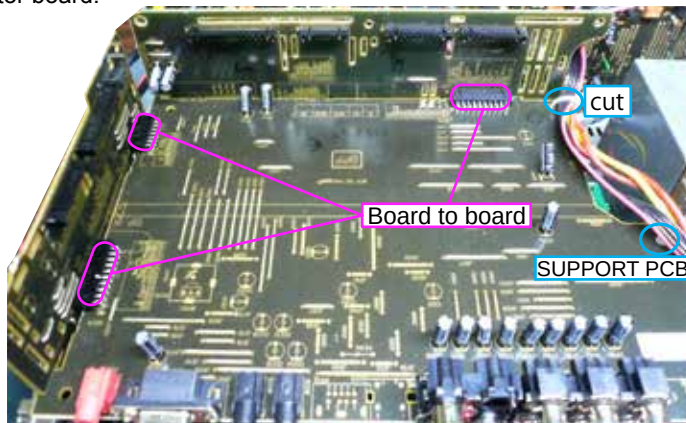
- (2) Cut the wire clamp band, then remove the screws. Disconnect the connector wires and FFC cables.



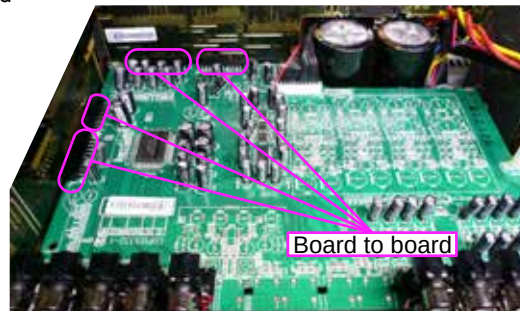
- (3) Disconnect the connector board.



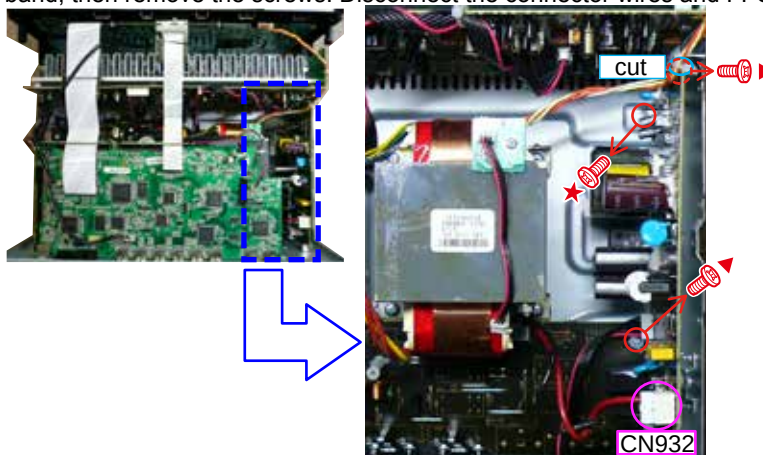
(4) Disconnect the connector board.



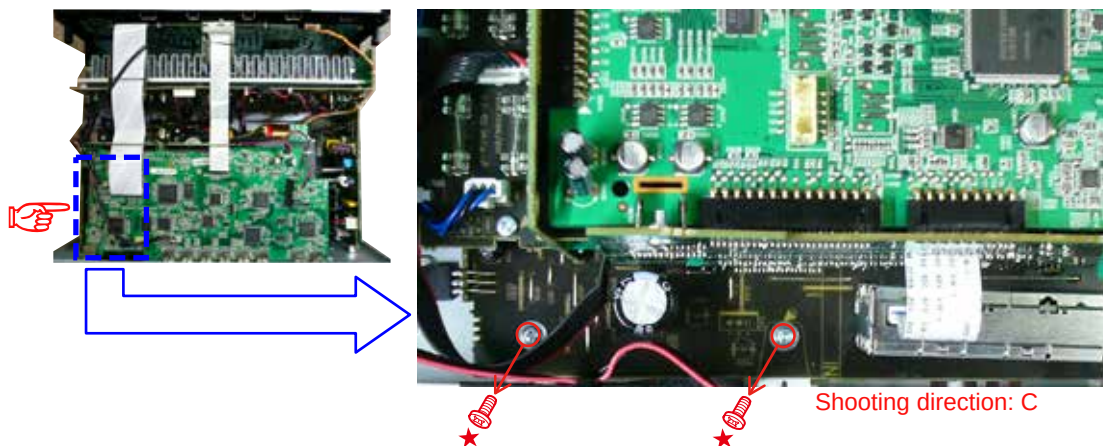
(5) Disconnect the connector board



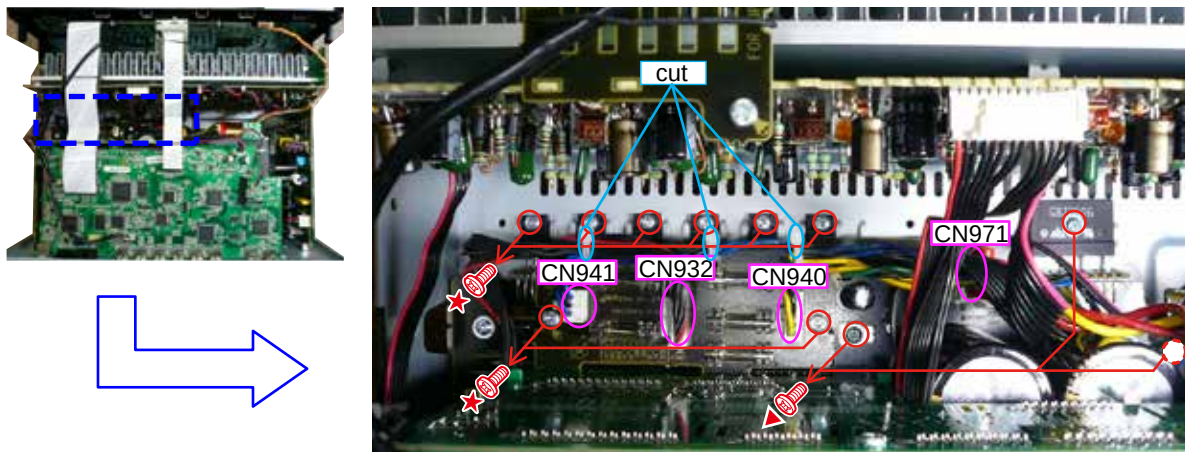
(6) Cut the wire clamp band, then remove the screws. Disconnect the connector wires and FFC cables.



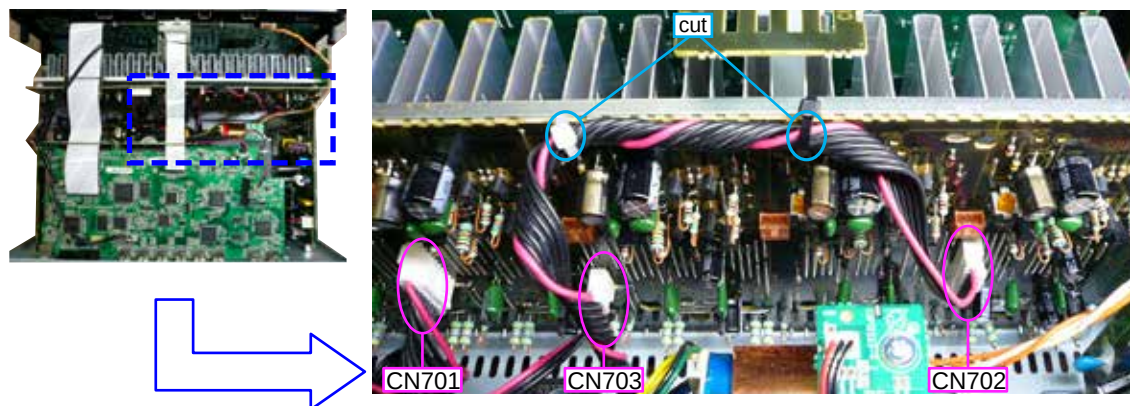
(7) Disconnect the connector wire.



(8) Cut the wire clamp band, then remove the screws. Disconnect the connector wires.



(9) Cut the wire clamp band, then disconnect the connector wires.



(10) Remove the screw.



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

4. TRANS MAIN

Proceeding : CABINET TOP → DIGITAL UNIT ASSY → POWER TRANS

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

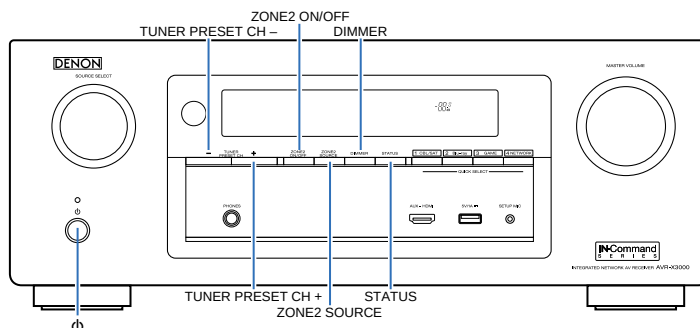
SPECIAL MODE

Special mode setting button

※No.1 - 5, 7, 8 : Press the "Power operation (⏻)" button to turn on the power while pressing both the buttons A and the button B at the same time.

※No.6 : Turn on the power, then press and hold down the A and B buttons for over 3 seconds.

No.	Mode	Button A	Button B	Button C	Contents
1	Version display (μcom/DSP Error Display)	STATUS	DIMMER	-	Firmware versions such as Main or DSP are displayed in the FL Display. Errors are displayed when they occur. (Refer to 21 page)
2	User Initialization mode (Installer Setup settings are not initialized.)	TUNER PRESET CH +	TUNER PRESET CH -	-	Backup data initialization is carried out. (Installer Setup settings are not initialized.)
3	Factory Initialization mode (Installer Setup settings are also initialized.)	ZONE2 SOURCE	DIMMER	-	Backup data initialization is carried out. (Installer Setup settings are also initialized.)
4	PANEL/REMOTE LOCK Selection mode	ZONE2 SOURCE	TUNER PRESET CH +	-	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 SOURCE	DIMMER	STATUS	Selects the "Diagnostic mode" or "Displaying the protection history mode". (Refer to 54 page)
6	Remote ID Setup mode	STATUS	DIMMER	-	When using multiple DENON AV receivers in the same room, make this setting so that only the desired AV receiver operates. (Refer to 57 page)
7	Mode for switching tuner frequency step (E2 model Only)	TUNER PRESET CH +	DIMMER	-	Change tuner frequency step to FM:50kHz/200kHz
8	Installer Setup mode	ZONE2 SOURCE	TUNER PRESET CH -	-	Access the Remote Maintenance mode via the internet. Installer Setup is displayed on GUI/Option Menu. ※ Refer to AVR_RemoteMaintenance_.pdf of SDI.



1. μ com/DSP Version display mode

1.1. Operation specifications

μ com/DSP version display mode:

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

Starting up:

Press the "Power operation (⏻)" button to turn on the power while pressing the "STATUS" and "DIMMER" 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 Serial Number
→ ③ Firmware Package Version → ④ Main μ -com → ⑤ Main 1st Boot Loader → ⑥ Sub μ -com
→ ⑦ Sub 1st Boot Loader → ⑧ DSP ROM → ⑨ Audio PLD → ⑩ GUI SFLASH
→ ⑪ Ethernet(DM860A) 1st Boot Loader, Hardware ID → ⑫ Ethernet(DM860A) 2nd Boot Loader
→ ⑬ Ethernet(DM860A) IMAGE → ⑭ Ethernet(DM860A)MAC ADDRESS information

① Model destination information :

Model	FLD
AVR-X3000 E3 model	A V R - X 3 0 0 0 E 3
AVR-X3000 E2 model	A V R - X 3 0 0 0 E 2
AVR-X3000 E1C model	A V R - X 3 0 0 0 E 1 C

② Serial Number :

FLD	S	/	N	.		*	*	*	*	*	*	*	*	*	*
-----	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---

③ Firmware Package Version :

FLD	P	a	c	k	a	g	e				:	*	*	*	*
-----	---	---	---	---	---	---	---	--	--	--	---	---	---	---	---

④ Main μ -com :

FLD		M	a	i	n		:	*	*	*	*	*	*	*	*
-----	--	---	---	---	---	--	---	---	---	---	---	---	---	---	---

⑤ Main 1st Boot Loader :

FLD		M	a	i	n	F	B	L		:	*	*	.	*	*
-----	--	---	---	---	---	---	---	---	--	---	---	---	---	---	---

⑥ Sub μ -com :

FLD		S	u	b			:	*	*	*	*	*	*	*	*
-----	--	---	---	---	--	--	---	---	---	---	---	---	---	---	---

⑦ Sub 1st Boot Loader :

FLD		S	u	b	F	B	L		:	*	*	.	*	*
-----	--	---	---	---	---	---	---	--	---	---	---	---	---	---

⑧ DSP ROM :

FLD		D	S	P				:	*	*	.	*	*
-----	--	---	---	---	--	--	--	---	---	---	---	---	---

⑨ Audio PLD :

FLD		A	u	d	i	o	F	L	D	:	*	*	.	*	*
-----	--	---	---	---	---	---	---	---	---	---	---	---	---	---	---

⑩ GUI SFLASH :

Model	FLD
AVR-X3000 E3 model	GUI : 6511*****
AVR-X3000 E2 model	GUI : 6512*****
AVR-X3000 E1C model	GUI : 6515*****

⑪ Ethernet(DM860A) 1st Boot Loader, Hardware ID :

FLD	E	t	h	e	r	n	e	t	F	B	L				
-----	---	---	---	---	---	---	---	---	---	---	---	--	--	--	--

Press the "STATUS" button.

FLD	*	*	*	*	*	*	-	b	d						
-----	---	---	---	---	---	---	---	---	---	--	--	--	--	--	--

⑫ Ethernet(DM860A) 2nd Boot Loader :

FLD	E	t	h	e	r	n	e	t	S	B	L				
-----	---	---	---	---	---	---	---	---	---	---	---	--	--	--	--

Press the "STATUS" button.

FLD	*	*	*	*	*	*	*	*	*	*	*	*	*	-	0	A
-----	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

⑬ Ethernet(DM860A) IMAGE :

FLD	E	t	h	e	r	n	e	t	I	M	G				
-----	---	---	---	---	---	---	---	---	---	---	---	--	--	--	--

Press the "STATUS" button.

FLD	*	*	*	*	*	*	*	*	*	*	*	*	*			
-----	---	---	---	---	---	---	---	---	---	---	---	---	---	--	--	--

⑭ Ethernet(DM860A)MAC ADDRESS information :

FLD	*	E	t	h	e	r	n	e	t	M	A	C				
-----	---	---	---	---	---	---	---	---	---	---	---	---	--	--	--	--

Press the "STATUS" button.

FLD	*	*	*	*	*	*	-	*	*	*	*	*	*			
-----	---	---	---	---	---	---	---	---	---	---	---	---	---	--	--	--

1.3. Error display

See the following table for each "Error information" display and its explanation (status).

Display order is ①,②,③,④,⑤,⑥,⑦

Condition	Status	FL Display	Trouble shooting
① 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. (※)	F I R M E R R O R	- Please check the destination-resistors (R2060/R2061, DIGITAL B'D). - Please write the firmware of correct destination.
② SUB NG	No response from SUB microcomputer.	S U B E R R O R 0 1	Please check SUB (IC231) and around circuits.
③ IP SCALER NG	An error occurred in testing writing data between IP SCALER and DDR.	I P S C A L E R E R R 0 1	Please check IP SCALER (IC151, DIGITAL PCB) and around circuits.
	Testing writing data between IP SCALER and DRR resulted in no response.	I P S C A L E R E R R 0 2	
④ GUI Version NG	Error occurs in GUI version and Main μ-com version.(※)	G U I V E R . E R R O R	Please check the firmware of correct version.
⑤ DIR NG	No response from DIR	D I R E R R O R 0 1	Please check DIR (IC403, DIGITAL B'D) and around circuits.
⑥ DSP NG	When DSP code boot is performed, the DSP FLAG0 port does not change to "H" even if DSP reset is executed.	D S P 1 E R R O R 0 1	Please check DSP (IC408, DIGITAL B'D) and around circuits.
	Before DSP command is issued, the DSP BUSY port does not change to "L".	D S P 1 E R R O R 0 2	
	When DSP data read is performed, executing WRITE="L" does not result in ACK="H".	D S P 1 E R R O R 0 3	
	When DSP data read is performed, executing REQ="L" does not result in ACK="L".	D S P 1 E R R O R 0 4	
	When DSP data writing is performed, executing WRITE="H" does not result in ACK="H".	D S P 1 E R R O R 0 5	
	When DSP data writing is performed, executing REQ="L" does not result in ACK="L".	D S P 1 E R R O R 0 6	
⑦ EEPROM NG	Error occurs in EEPROM checksum.(*** is a block address number.)	E 2 P R O M E R R * * *	

Status	FL Display
※ The written Firmware and product settings (model name, brand name, destination) are compared. If Firmware that is not designed for this product is written, ▲ or ▼ is displayed in the first column, as shown on the right.	▲ M a i n : * * * * * * * *
	▲ S U B : * * * . * *
	▲ D S P : * * * . * *
	▲ A u d i o P L D : * * * . * *

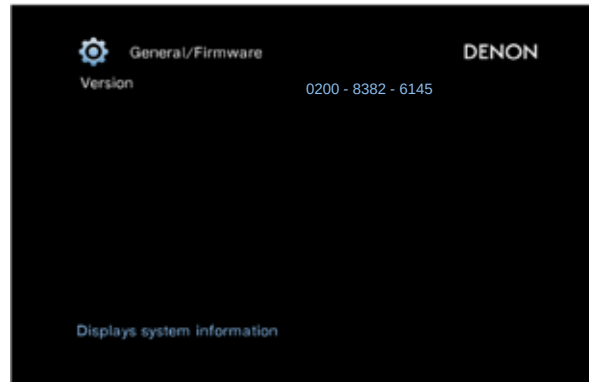
1.4. Version display on the Setup Menu

Use the following procedure to display the firmware version.

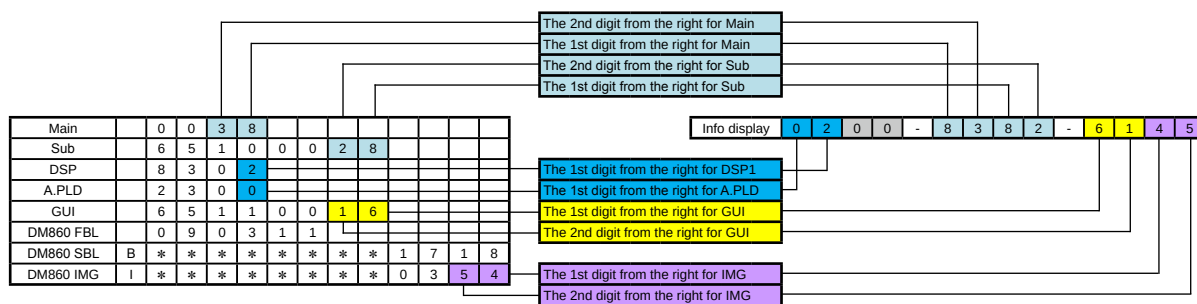
- (1) Press the **"SETUP"** button on the remote control.
- (2) Select "General-Information-Firmware".

A version with 12 digits is displayed as shown in the following image.

GUI Image



The displayed 12 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 12 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 "Power operation (⏻)" button to turn on power while pressing the "ZONE2 SOURCE" and "TUNER PRESET CH +" buttons.

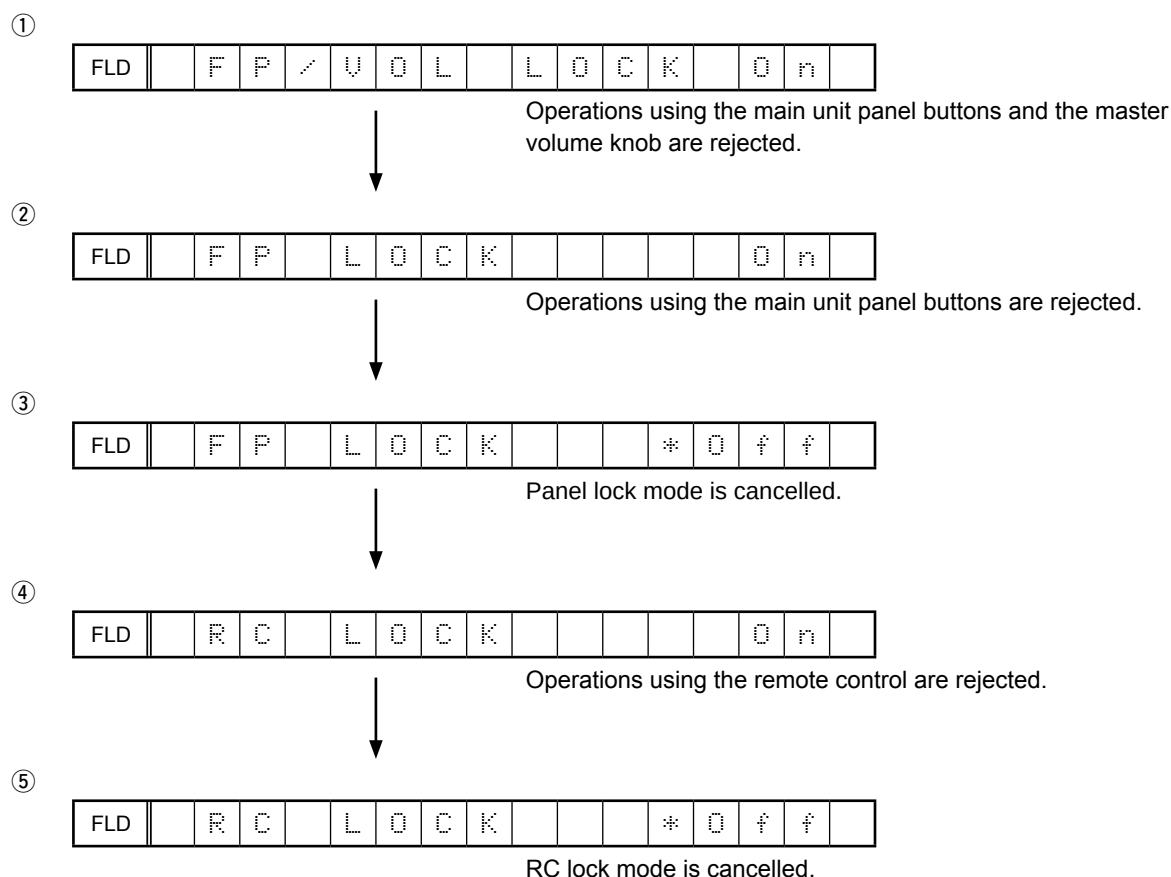
Press the "TUNER PRESET CH +" button to select the mode and the "STATUS" button to confirm the selection.

2.3. Mode selection method and how each mode is displayed

Each time you press the "TUNER 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 "*".



3. Service Related Selection mode

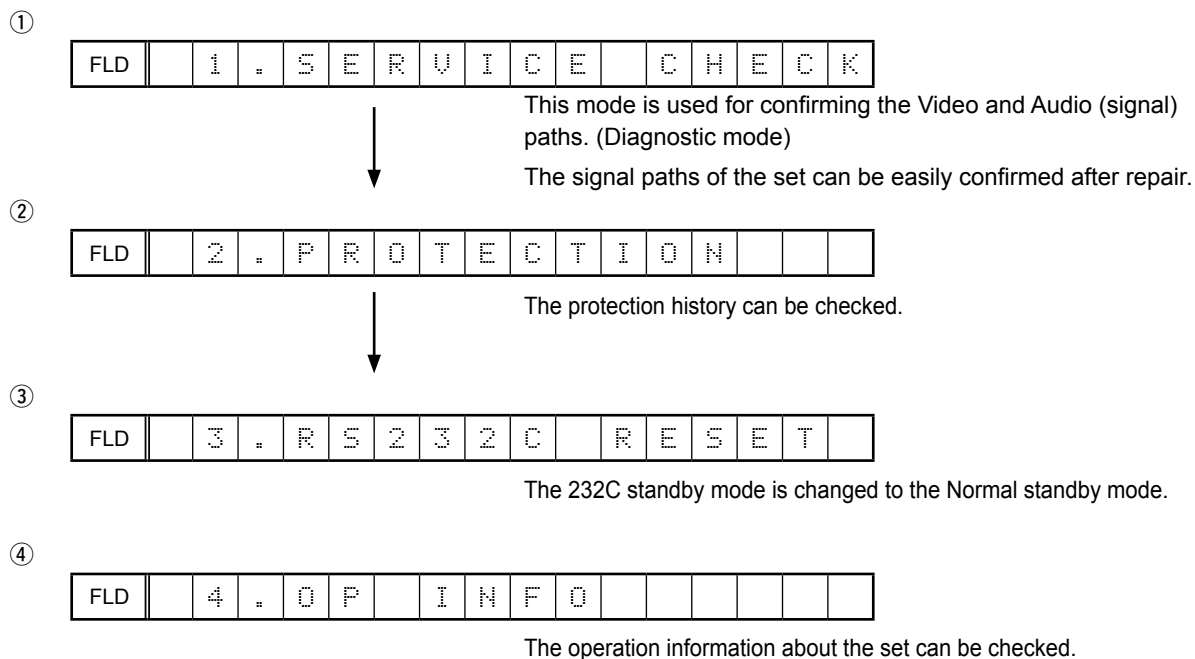
3.1. Behavior specifications

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 "**Power operation (⏻)**" button to turn on power while pressing the "**ZONE2 SOURCE**" and "**DIMMER**" and "**STATUS**" buttons.

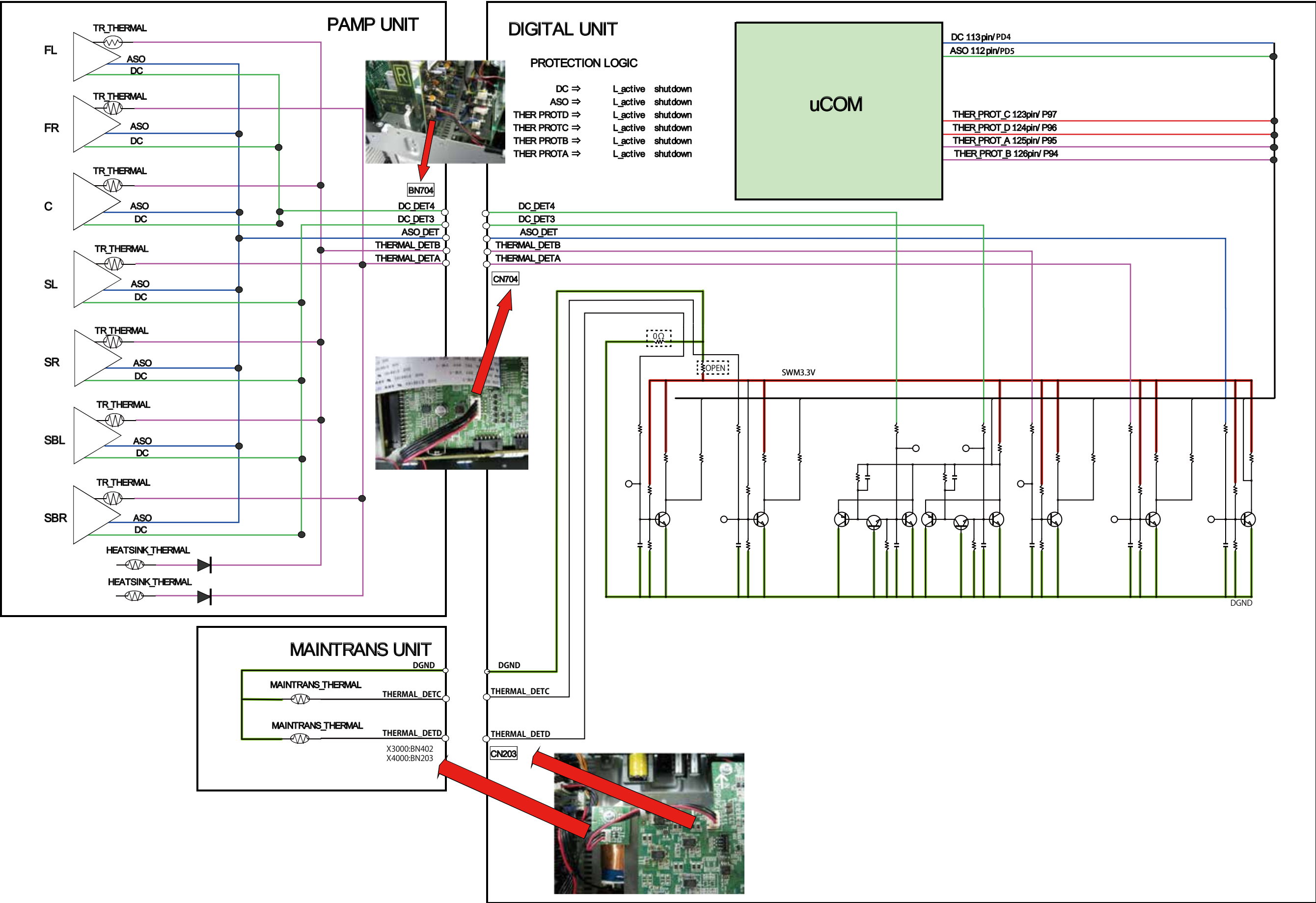
Press the "**TUNER PRESET CH +**" button to select the mode and press the "**STATUS**" button to restart the set and make the setting take effect.



3.3. Canceling diagnostic mode

Turn off the power by pressing the "**Power operation (⏻)**" button.

3.4. PROTECTION DIAGRAM



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

3.5.1. Specification

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.

3.5.2. Starting diagnostic mode

Press the "Power operation (⏻)" button to turn on power while pressing the "STATUS" and "ZONE2 SOURCE" and "DIMMER" buttons.
Select "1. SERVICE CHECK" and press "STATUS" to start the set in the Diagnostic mode.
In this mode, TUNED, STEREO and RDS are lit in FL display.

3.5.3. Canceling diagnostic mode

Turn off the power by pressing the "Power operation (⏻)" button.

3.5.4 Selecting items

Press ① button to switch between video items and audio items.
Press ② or ③ button to select previous or next items.

This unit			remote controller		
①	②	③	①	②	③
audio ⇄ video	previous	next	audio ⇄ video	previous	next
DIMMER	QUICK SELECT 1	QUICK SELECT 2	SLEEP	CURSOR LEFT	CURSOR RIGHT

3.5.5 Video system confirmation items

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

Confirmation item		FL display	settings	Contents of confirmationRemarks
V02	video convert (analog or HDMI ⇒ HDMI) fig.01	V02:V.CONVERT	Input Source : CBL/SAT Video Convert(IP Scaler) : ON, All sources IP Scaler : "Analog&HDMI", All sources Resolution : "Auto", All sources MAIN ZONE : ON ZONE2 : OFF	·CVBS input ⇒ IP Scaler Through ⇒ HDMI output ·Component input ⇒ IP Scaler Through ⇒ HDMI output ·HDMI input ⇒ IP Scaler Through ⇒ HDMI output ·ETHERNET input ⇒ IP Scaler Through ⇒ HDMI output ※Confirm the input pass one by on. (※As the input source, you can switch from CBL/SAT to other ones.)
V03	HDMI (signal) Path (Main Zone) fig.02	V03:HDMI PASS	Input Source : CBL/SAT Video Convert (IP Scaler) : OFF , All Sources MAIN ZONE : ON ZONE2 : OFF	·HDMI input ⇒ HDMI output (※As the input source, you can switch from CBL/SAT to other ones.)
V04	CEC FUNCTION (Control Monitor : HDMI Monitor1) fig.03	V04:HDMI DEC	Input Source : CBL/SAT HDMI Control : ON MAIN ZONE : ON ZONE2 : 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. ·To check ARC path, switch the input source to "TV AUDIO". (※As the input source, you can switch from CBL/SAT to other ones.)
V05	HDMI audio (audio: AVR) fig.04	V05:H.AUDIO-AVR	Input Source : CBL/SAT HDMI Control : OFF HDMI Audio : AVR	·HDMI input(PCM , DolbyDigital , DTS) ⇒ Speaker output ·HDMI input(HD audio) ⇒ Speaker output (※As the input source, you can switch from CBL/SAT to other ones.)
V06	HDMI audio (audio: TV) fig.05	V06:H.AUDIO-TV	Input Source : CBL/SAT HDMI Control : OFF HDMI Audio : TV	·HDMI input(PCM , DolbyDigital , DTS) ⇒ HDMI output (audio output from connected TV) (※As the input source, you can switch from CBL/SAT to other ones.)
V07	GUI menu fig.06	V07:GUI MENU ON	Input Source : CBL/SAT Video Convert(IP Scaler) : ON, All sources IP Scaler : "Analog&HDMI", All sources Resolution : "AUTO", All sources MAIN ZONE : ON ZONE2 : OFF	·GUI display ⇒ HDMI output (※As the input source, you can switch from CBL/SAT to other ones.)
V08	HDMI (signal) Path (ZONE2) fig.07	V08:ZONE2 HDMI	Input Source : CBL/SAT ZONE2 Source : Source MAIN ZONE : ON ZONE2 : ON	·HDMI input (ZONE2 Function) ⇒ HDMI output (ZONE2) (※As the input source, you can switch from CBL/SAT to other ones.)

3.5.6 Audio system confirmation items

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

Confirmation item		FL display	settings	Contents of confirmationRemarks
A01	Analog (signal) Path fig.08	A01:ANALOG PASS	Input Source : CBL/SAT Input Mode : ANALOG(fixed) Sound mode : DIRECT Amp assign : Surround Back ZONE2 : OFF	·Analog input ⇒ Speaker output (FRONT L,R) ·Analog input ⇒ Preout output (FRONT L,R) [except E3] (※As the input source, you can switch from CBL/SAT to other ones.)
A02	Digital (signal) Path (MAIN ZONE) fig.09	A02:DIGITAL	Input Source : CBL/SAT Input Mode : DIGITAL(fixed) Sound mode: MULTI CH STEREO Amp assign : Surround Back ZONE2 : OFF	·Digital input ⇒ Speaker output (Front L/R, Center, Surround L/R, Surround Back L/R) ·Digital input ⇒ Preout output (Front L/R, Center, Subwoofer1/2, Surround L/R, Surround Back L/R) [except E3] (※As the input source, you can switch from CBL/SAT to other ones.)
A03	Digital (signal) Path (ZONE2) fig.10	A03:DIGITAL-Z2	Input Source : NETWORK Input Mode : Auto Sound mode: STEREO Amp assign : ZONE2 ZONE2 : ON ZONE2 Source : Source	·Digital(PCM) input ⇒ Speaker output (Surround Back L/R) ·Digital(PCM) input ⇒ Preout output (ZONE2 L/R) (※As the input source, you can switch from NETWORK to other ones.)
A05	HDMI (signal) Path fig.11	A05:HDMI	Input Source : CBL/SAT Input Mode : HDMI(fixed) Sound mode: STEREO Amp assign : Surround Back ZONE2 : OFF	·HDMI Input ⇒ Speaker output (Front L/R) ·HDMI Input ⇒ Preout output (Front L/R) [except E3] (※As the input source, you can switch from CBL/SAT to other ones.)
A06	A/D (signal) Path (MAIN ZONE) fig.12	A06:AD	Input Source : CBL/SAT Input Mode : Analog(fixed) Sound mode: MULTI CH STEREO Amp assign : Surround Back ZONE2 : OFF	·Analog input ⇒ Speaker output (Front L/R, Center, Surround L/R, Surround Back L/R) ·Analog input ⇒ Preout output (Subwoofer1/2) [E3] ·Analog input ⇒ Preout output (Front L/R, Center, Subwoofer1/2, Surround L/R, Surround Back L/R) [except E3] (※As the input source, you can switch from CBL/SAT to other ones.)
A07	Amp Assign (signal) Path (Amp Assign : ZONE2) fig.13	A07:ASSIGN-Z2	Input Source : CBL/SAT Input Mode : Auto Sound mode : STEREO Amp assign : ZONE2 ZONE2 : ON ZONE2 Source : Source	·Analog input ⇒ Speaker output (Surround Back L/R) ·Analog input ⇒ Preout output (ZONE2 L/R) (※As the input source, you can switch from CBL/SAT to other ones.)
A11	Amp Assign (signal) Path (Amp Assign : 5.1ch (Bi-Amp)) fig.14	A11:ASSIGN-BiAMP	Input Source : CBL/SAT Input Mode : Auto Sound mode: MULTI CH STEREO Amp assign : (Bi-Amp) ZONE2 OFF	·Analog input ⇒ Speaker output (Surround Back L/R) (※As the input source, you can switch from CBL/SAT to other ones.)
A14	Front Height (signal) Path fig.15	A14:FRONT HEIGHT	Input Source : CBL/SAT Input Mode : Auto Sound mode: MULTI CH STEREO Amp assign : Front Height ZONE2 OFF	·Analog input ⇒ Speaker output (Surround Back L/R) (※As the input source, you can switch from CBL/SAT to other ones.)
A15	Front Wide (signal) Path fig.16	A15:FRONT WIDE	Input Source : CBL/SAT Input Mode : Auto Sound mode: MULTI CH STEREO Amp assign : Front Wide ZONE2 OFF	·Analog input ⇒ Speaker output (Surround Back L/R) (※As the input source, you can switch from CBL/SAT to other ones.)

fig.01a

AVR-X3000 ANALOG VIDEO BLOCK

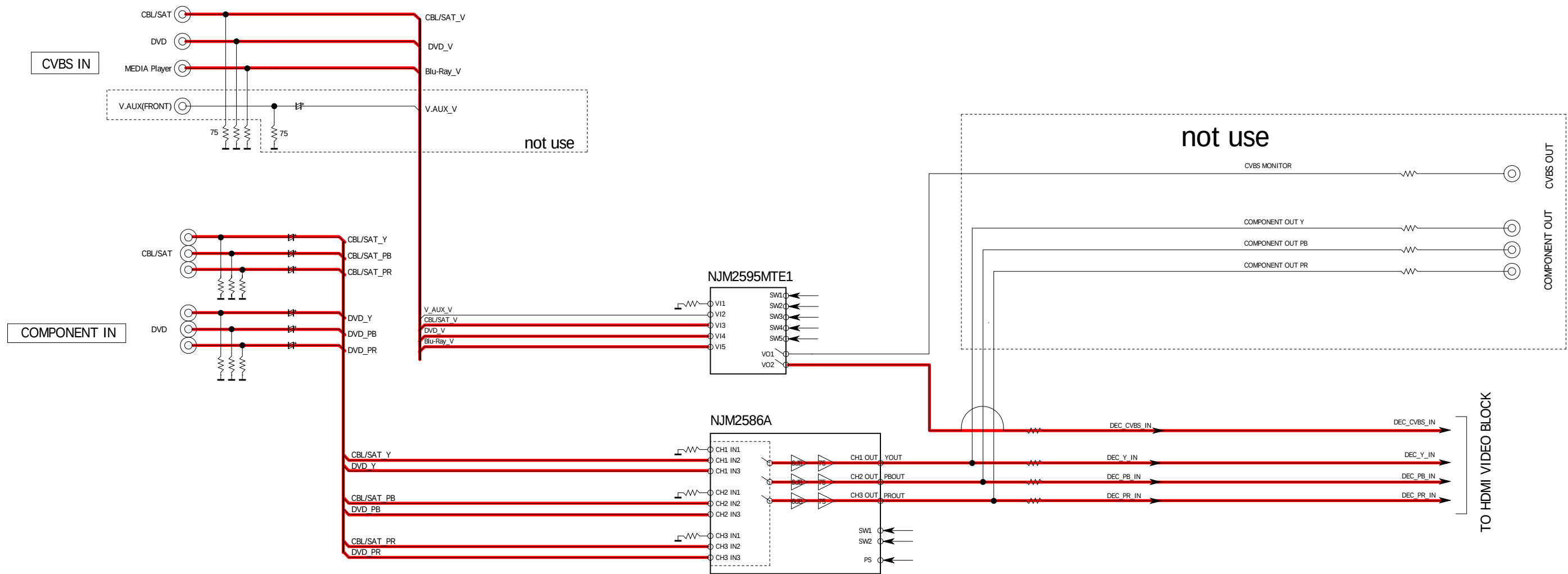


fig.01b

AVR-X3000 HDMI VIDEO BLOCK

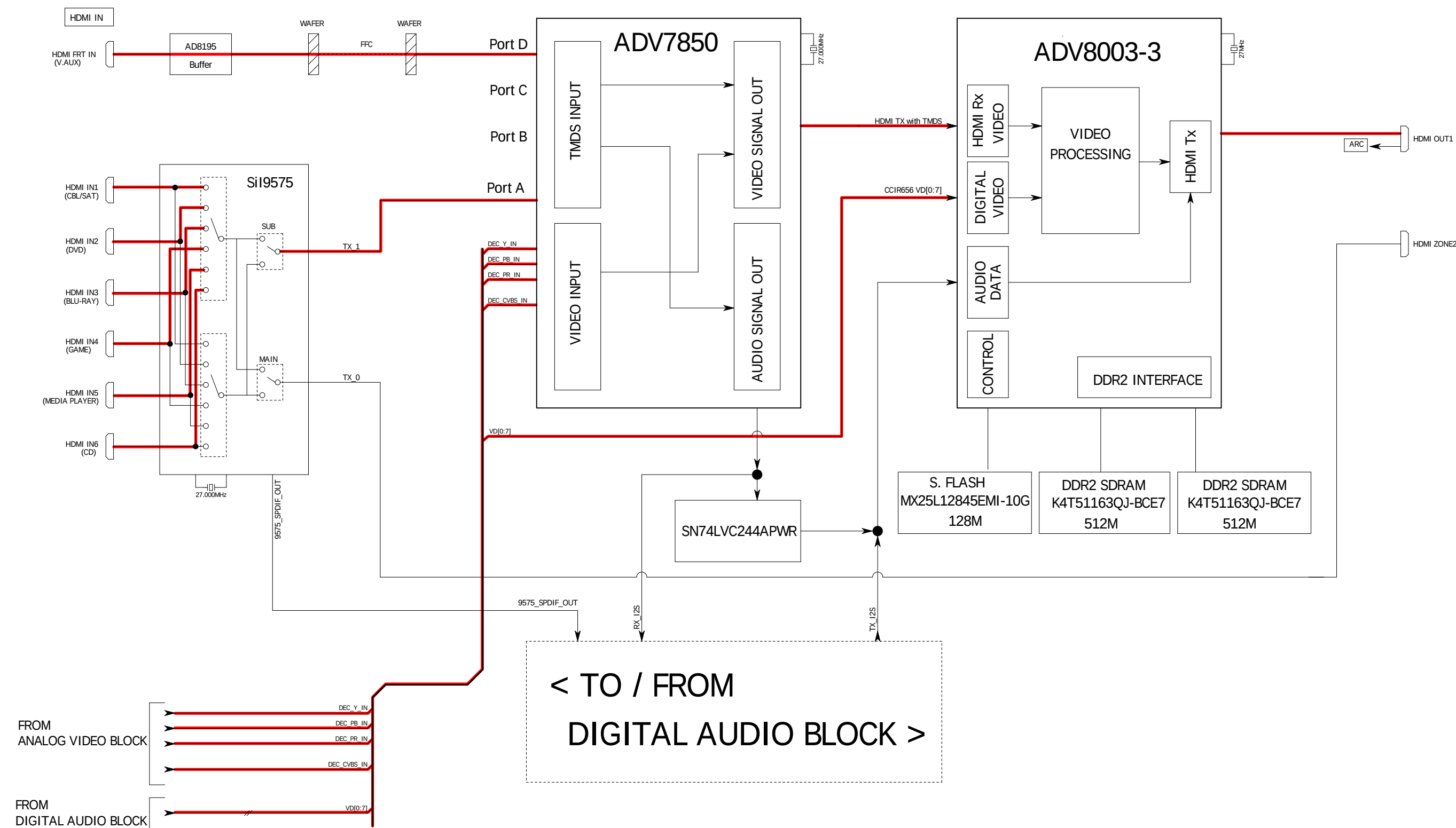


fig.02

AVR-X3000 HDMI VIDEO BLOCK

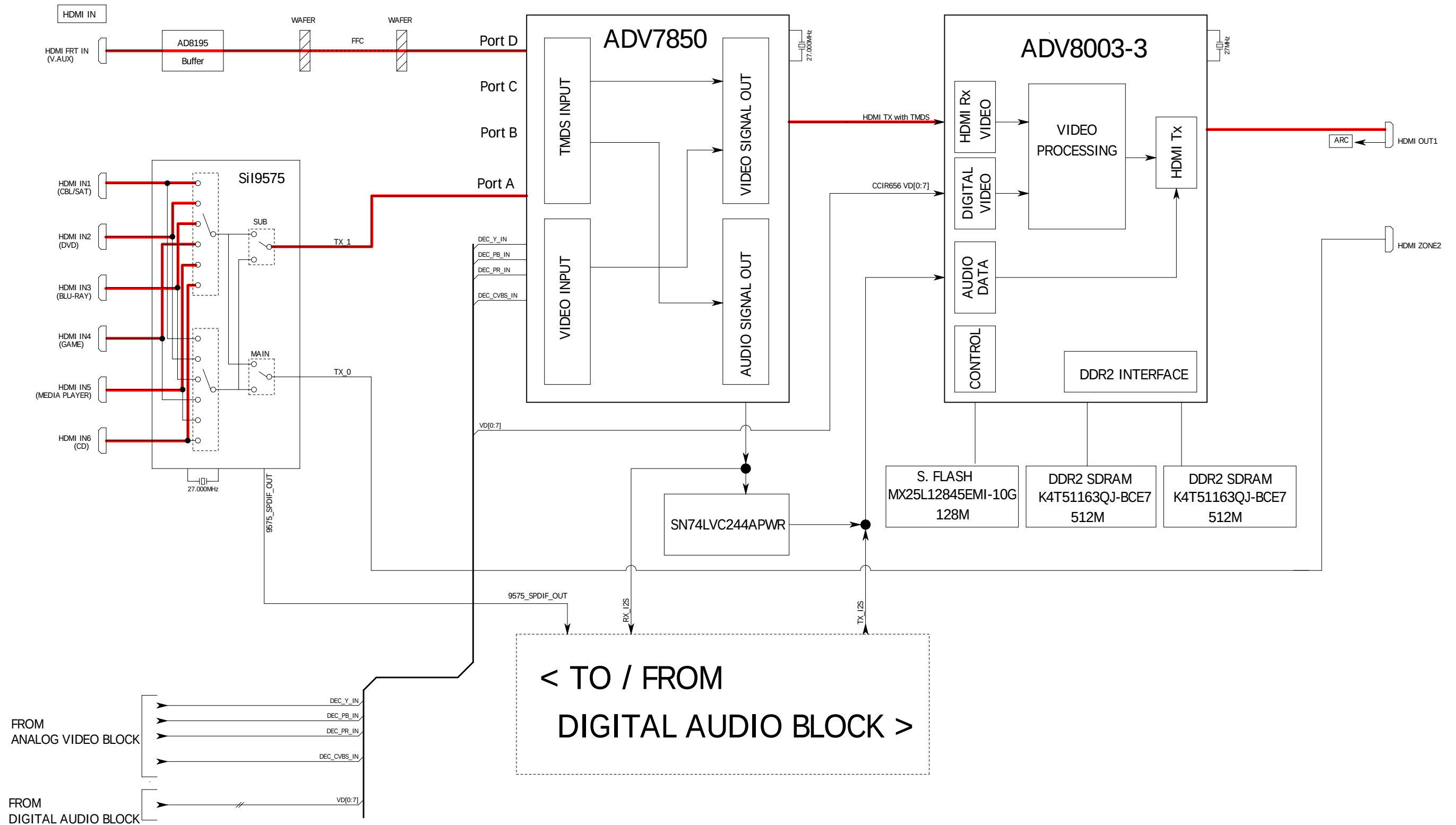


fig.03

AVR-X3000 HDMI VIDEO BLOCK

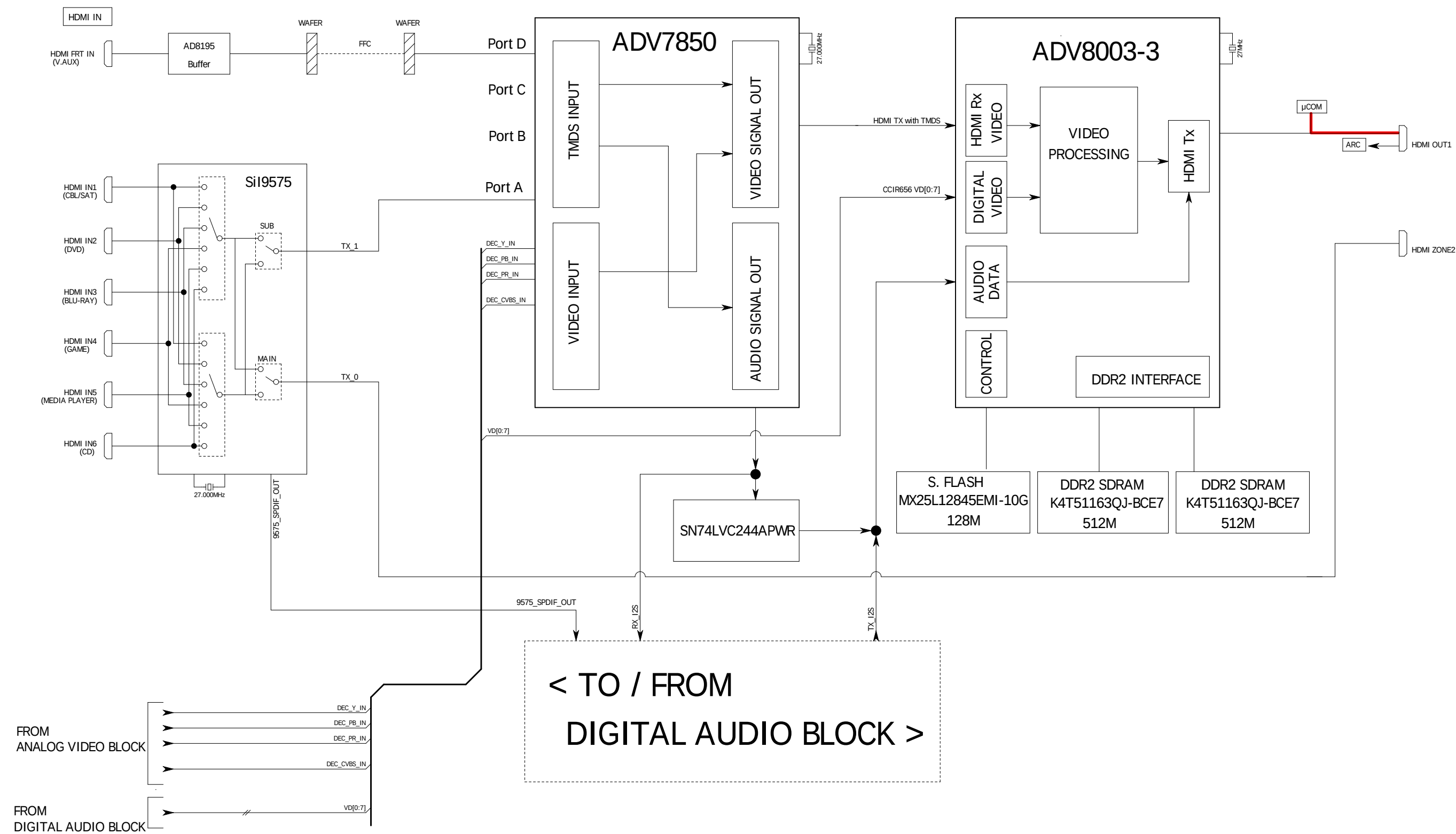


fig.04a

AVRX3000 DIGITAL AUDIO BLOCK

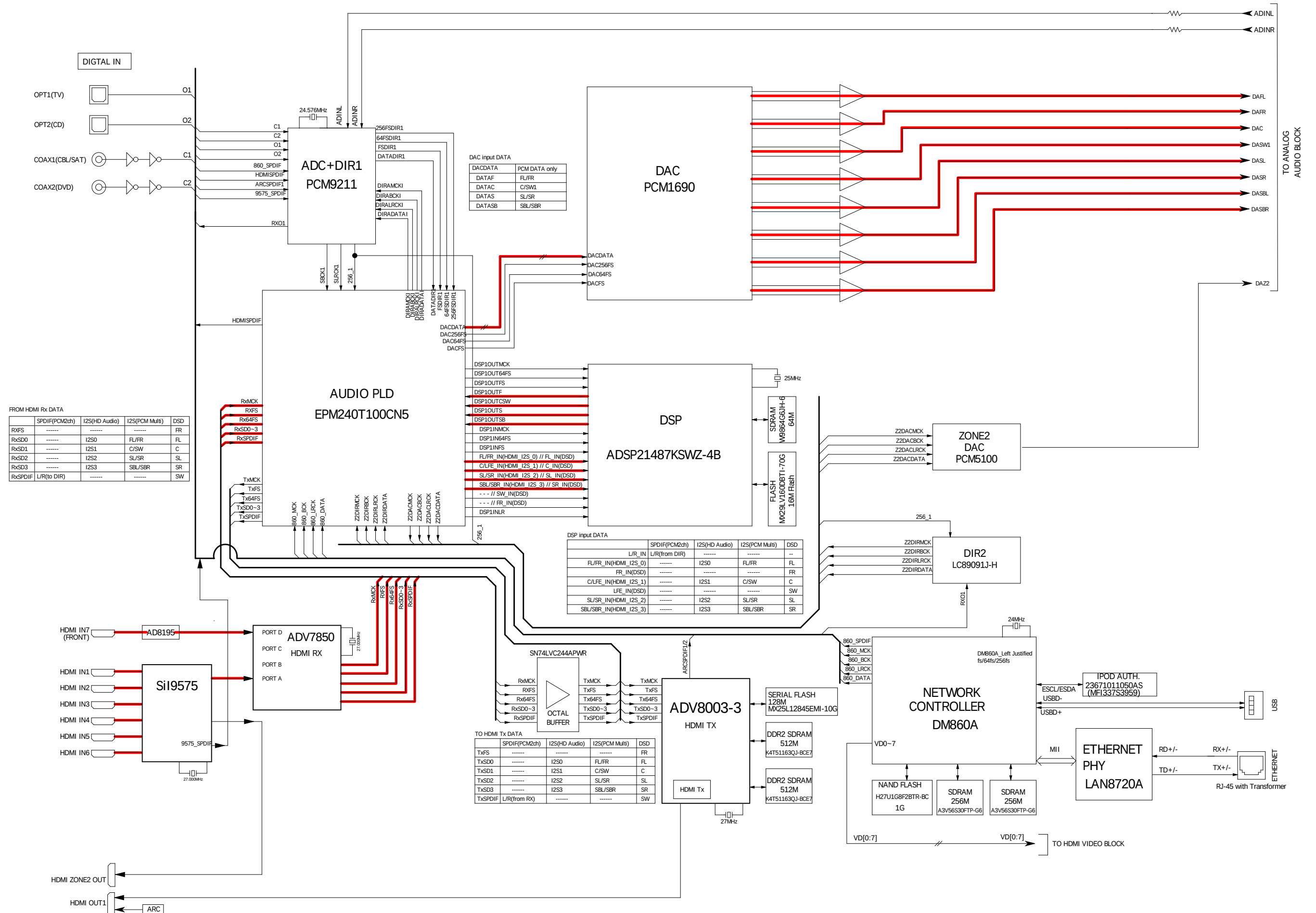


fig.04b

AVRX3000 ANALOG AUDIO BLOCK

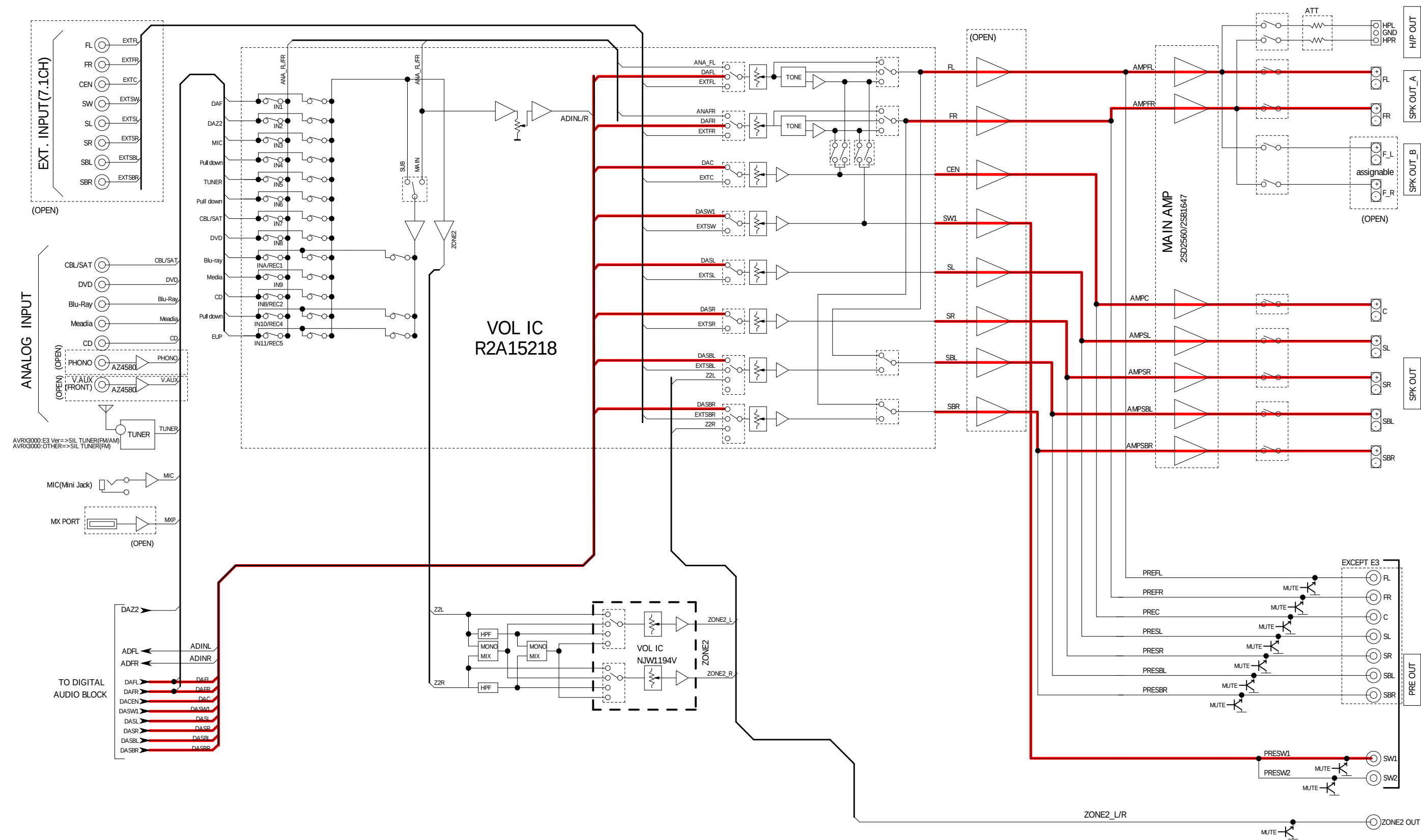


fig.05

AVRX3000 DIGITAL AUDIO BLOCK

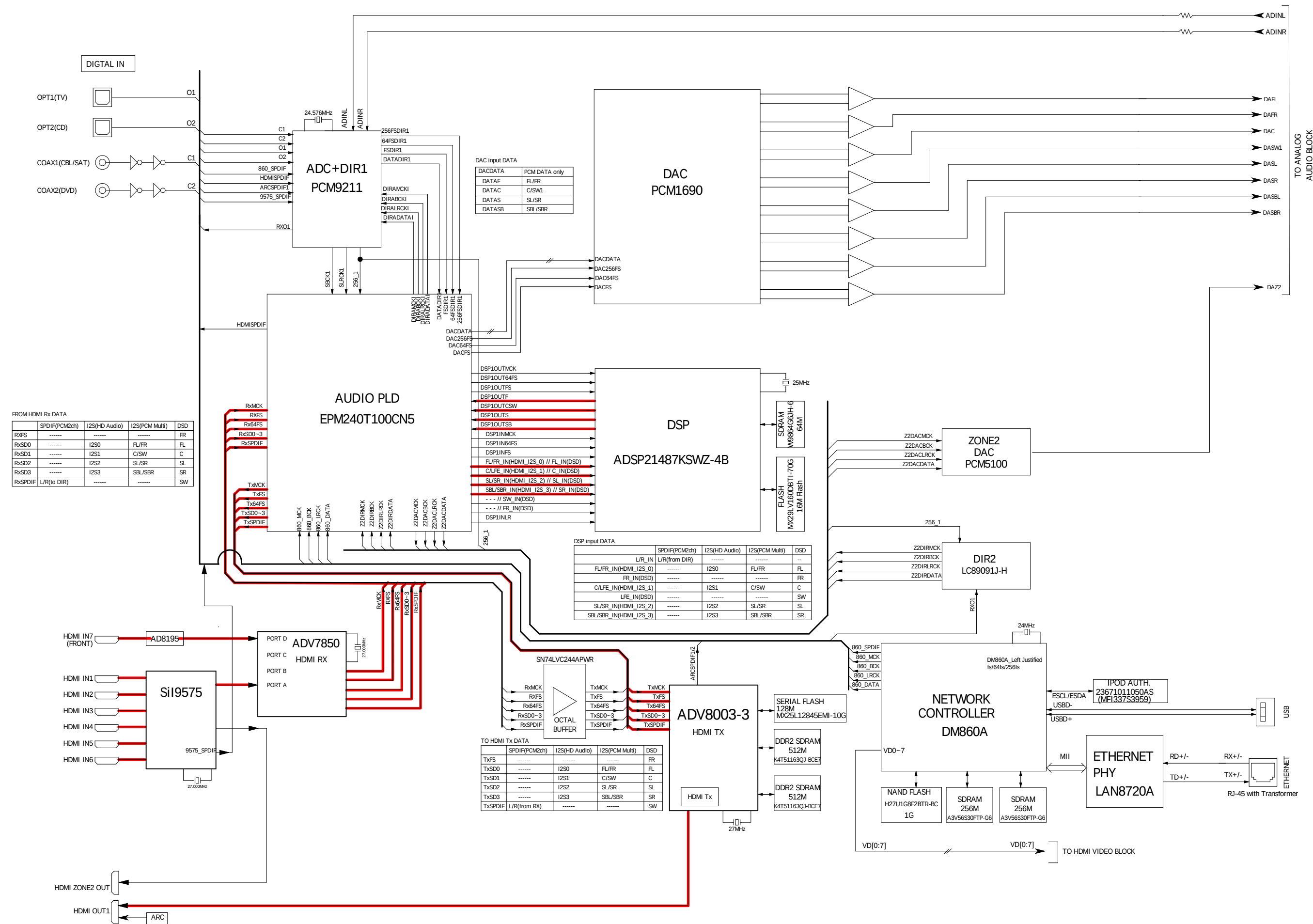


fig.06

AVR-X3000 HDMI VIDEO BLOCK

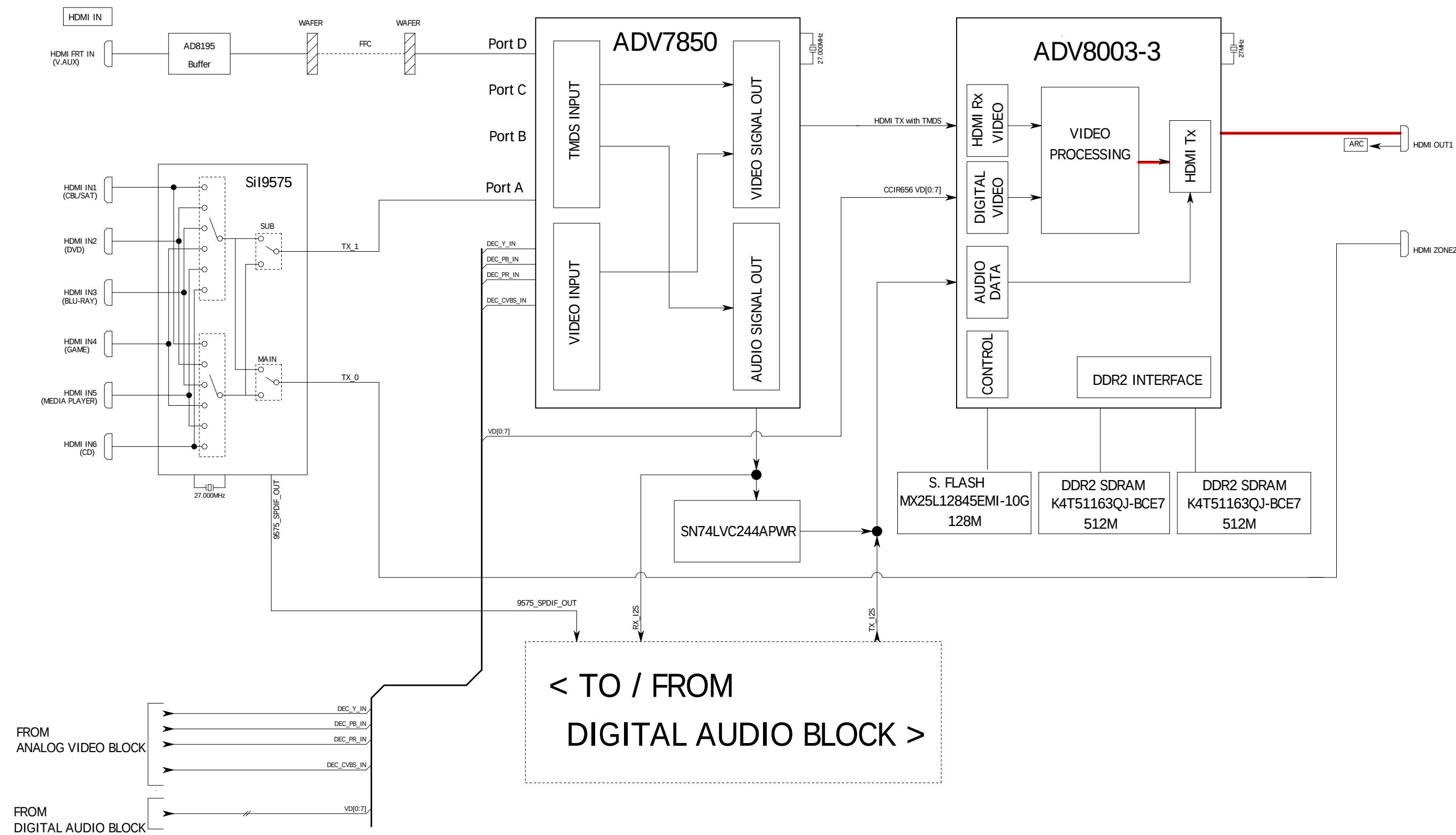


fig.07

AVR-X3000 HDMI VIDEO BLOCK

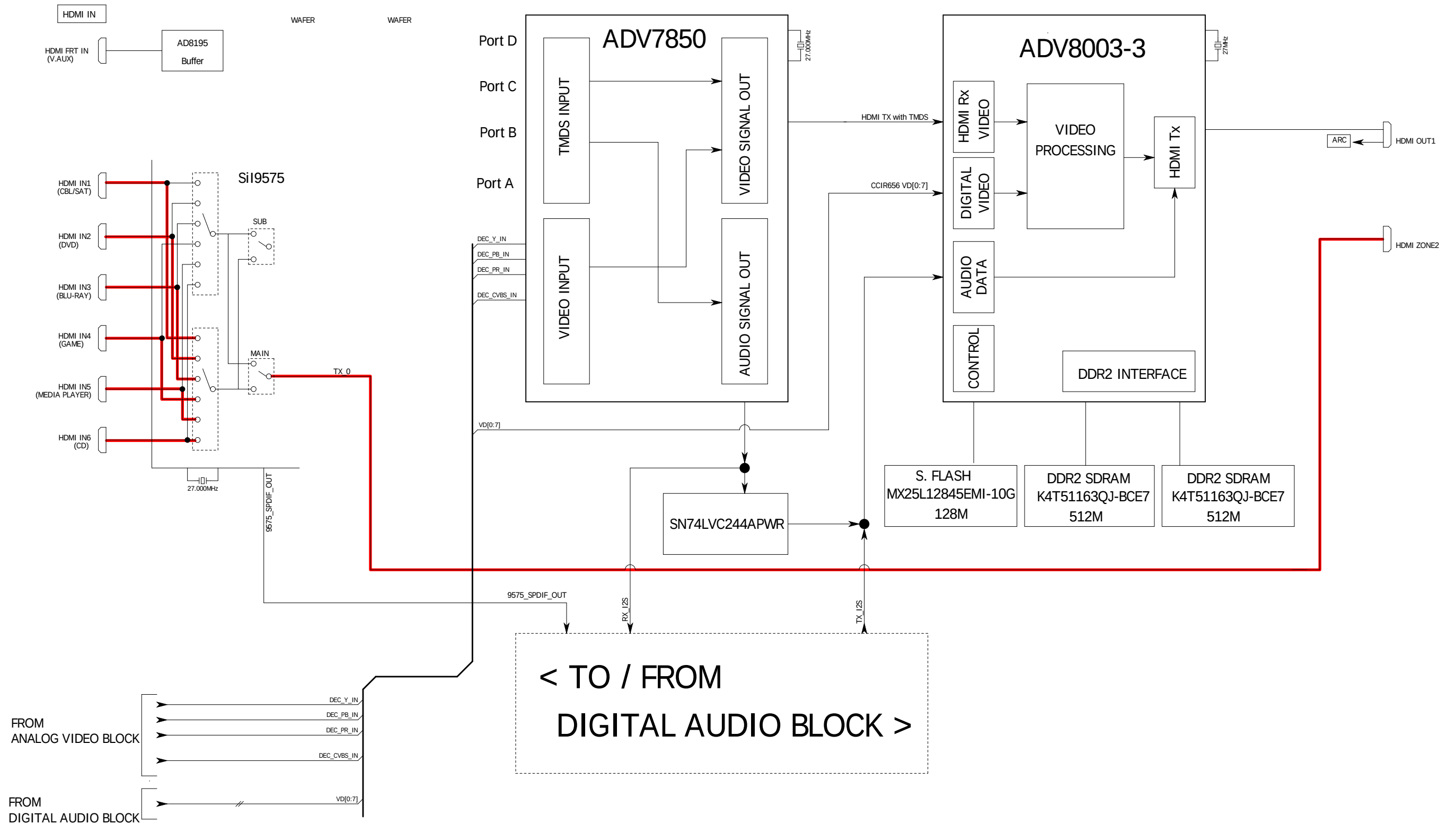


fig.08

AVRX3000 ANALOG AUDIO BLOCK

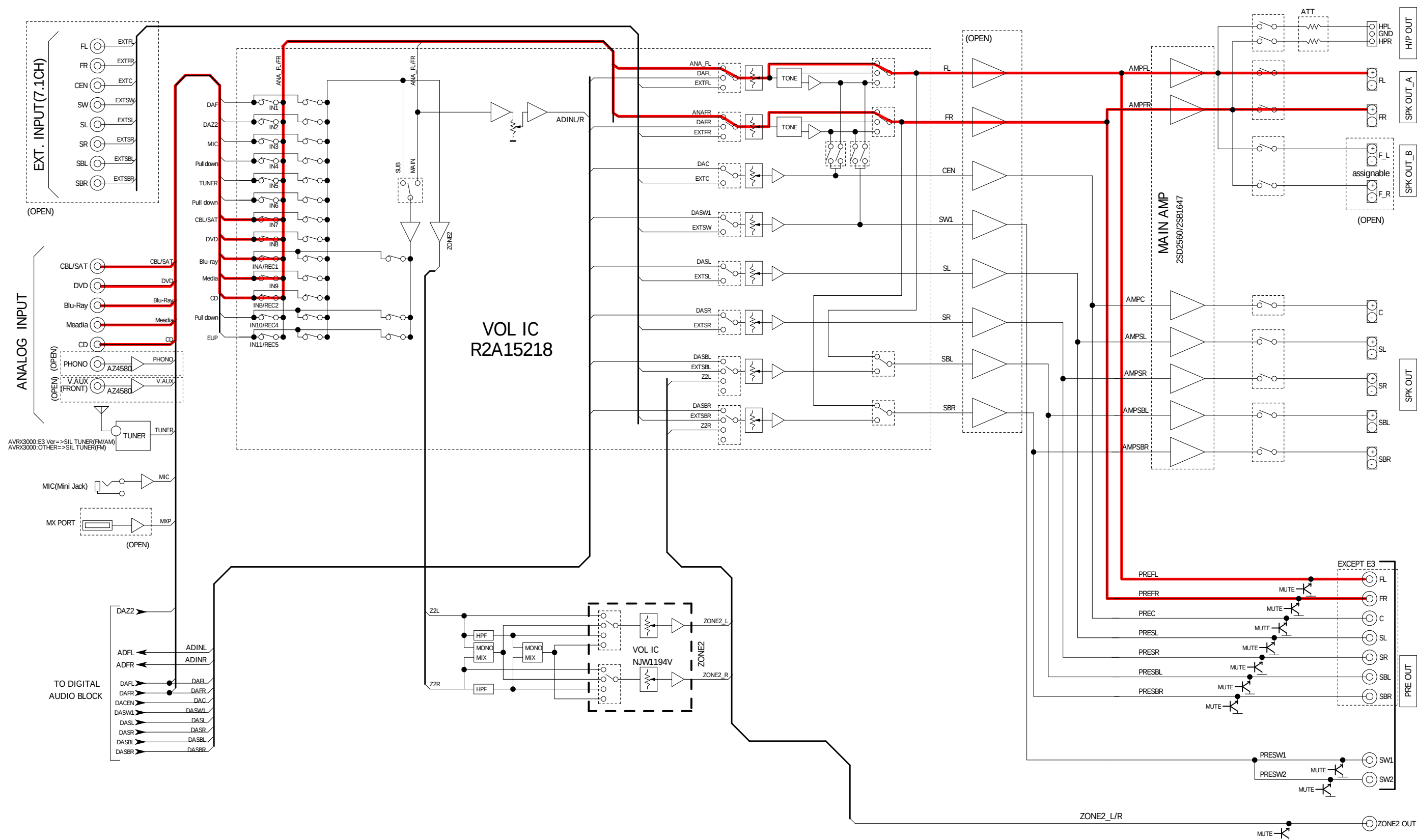


fig.09a

AVRX3000 ANALOG AUDIO BLOCK

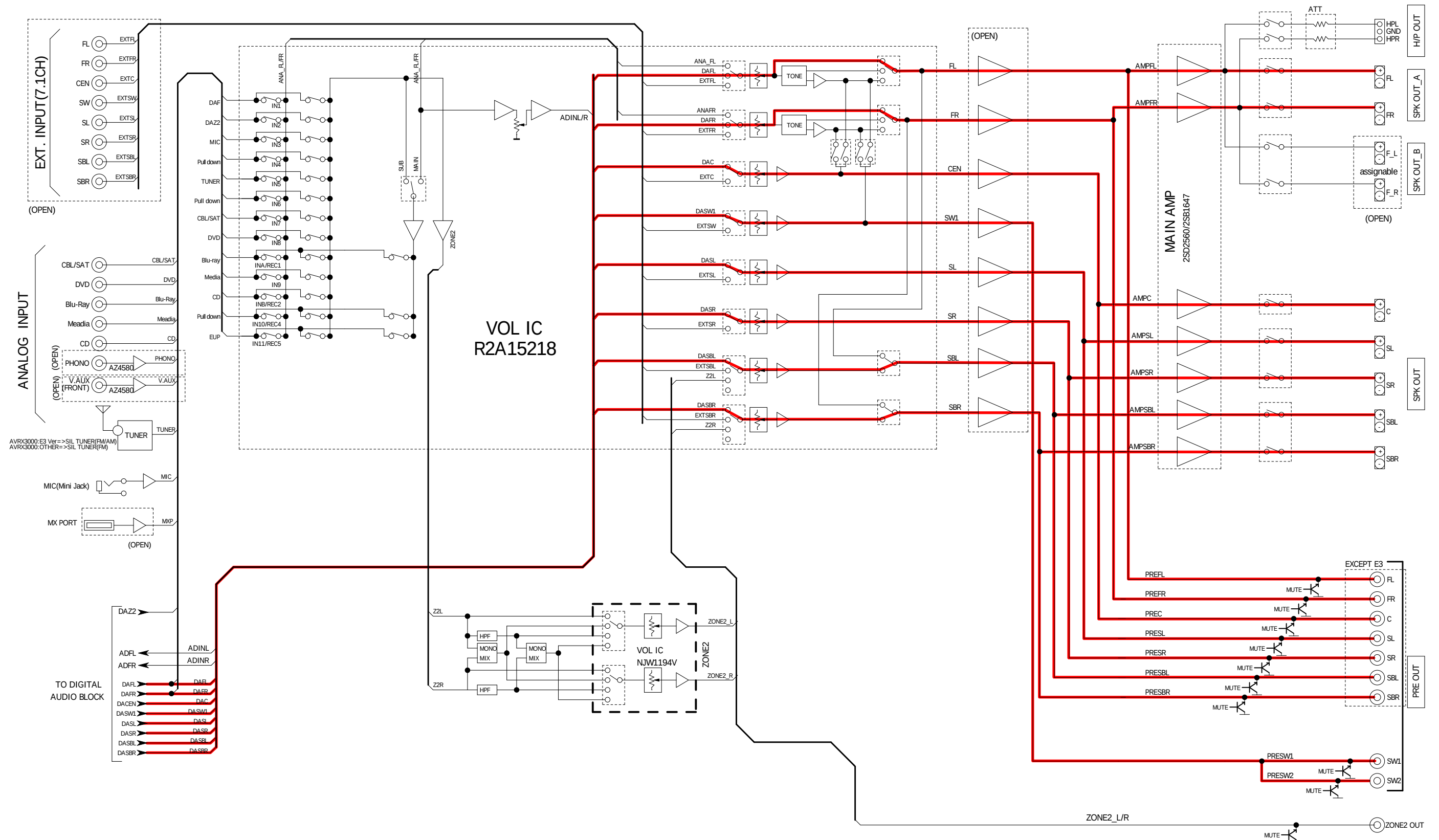


fig.09b

AVRX3000 DIGITAL AUDIO BLOCK

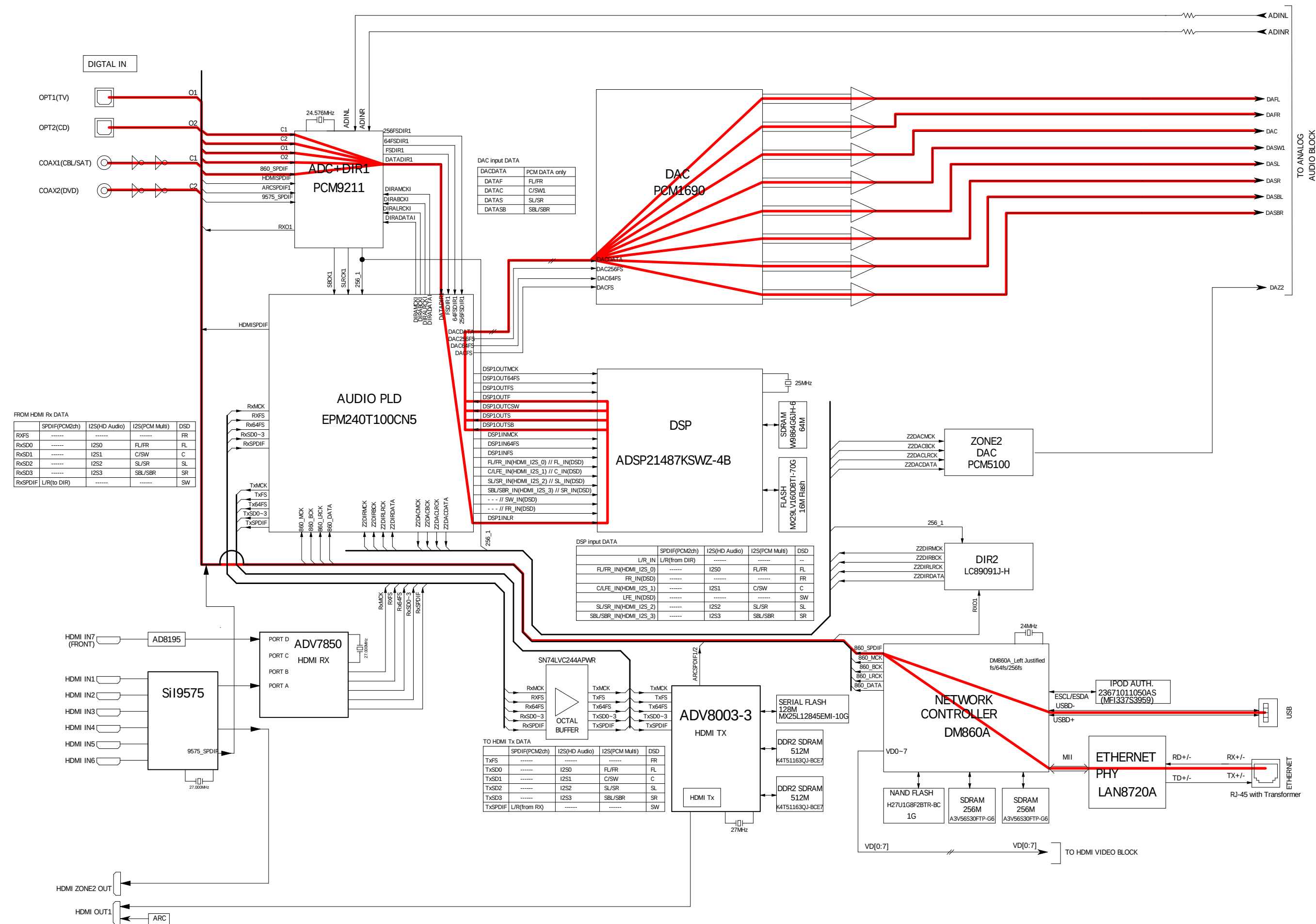


fig.10a

AVRX3000 ANALOG AUDIO BLOCK

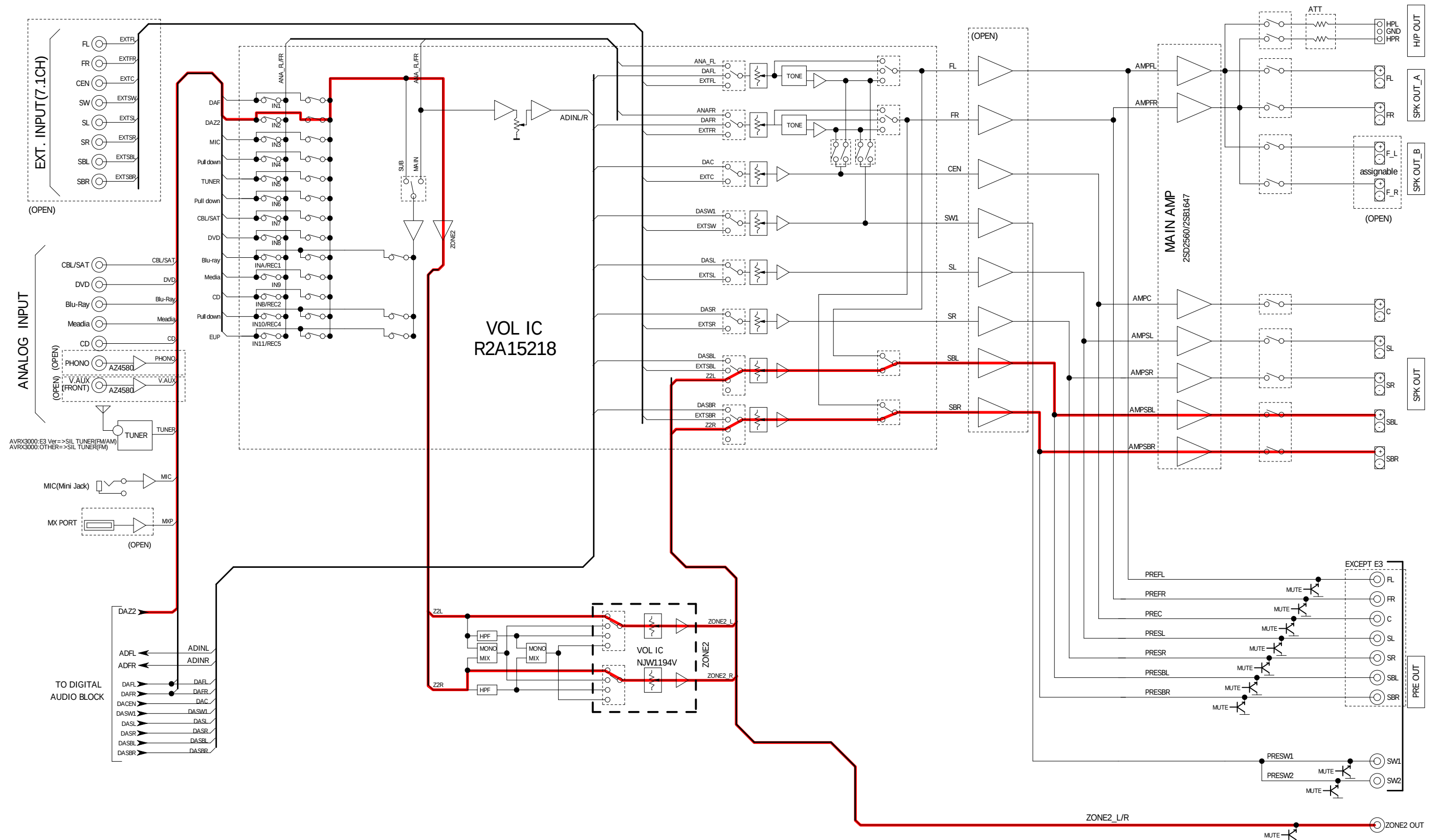


fig.10b

AVRX3000 DIGITAL AUDIO BLOCK

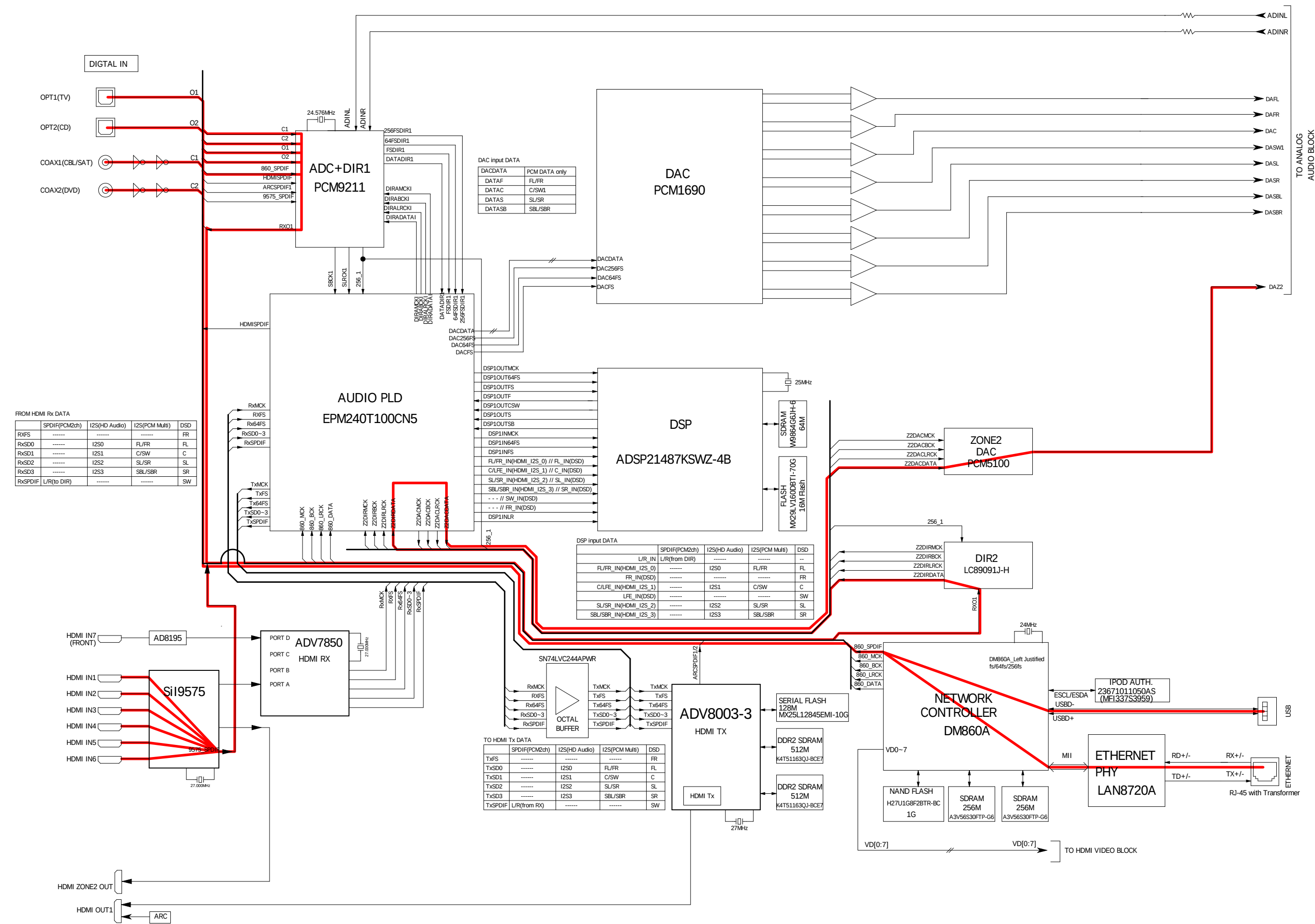


fig.11a

AVRX3000 ANALOG AUDIO BLOCK

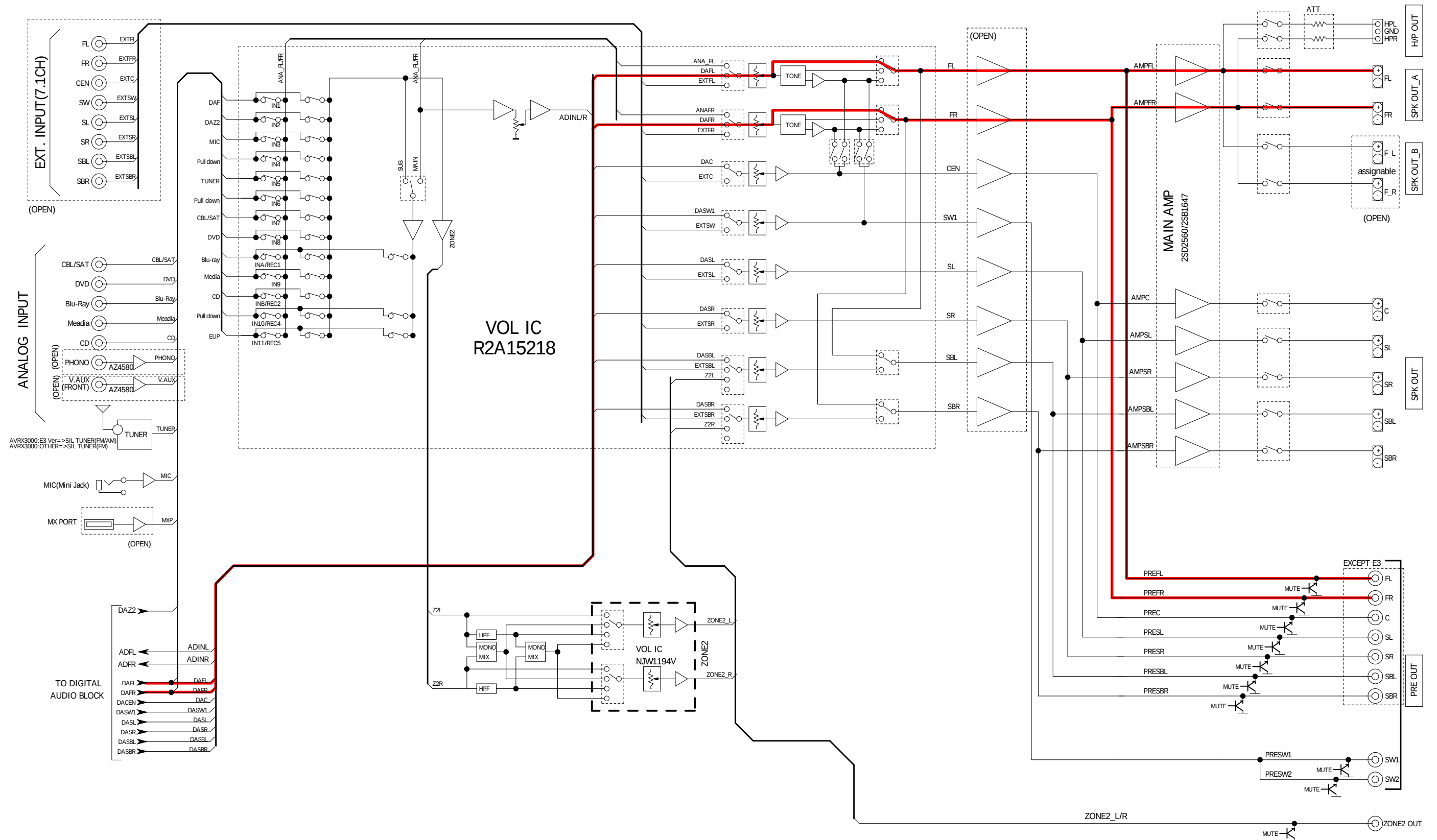


fig.11b

AVRX3000 DIGITAL AUDIO BLOCK

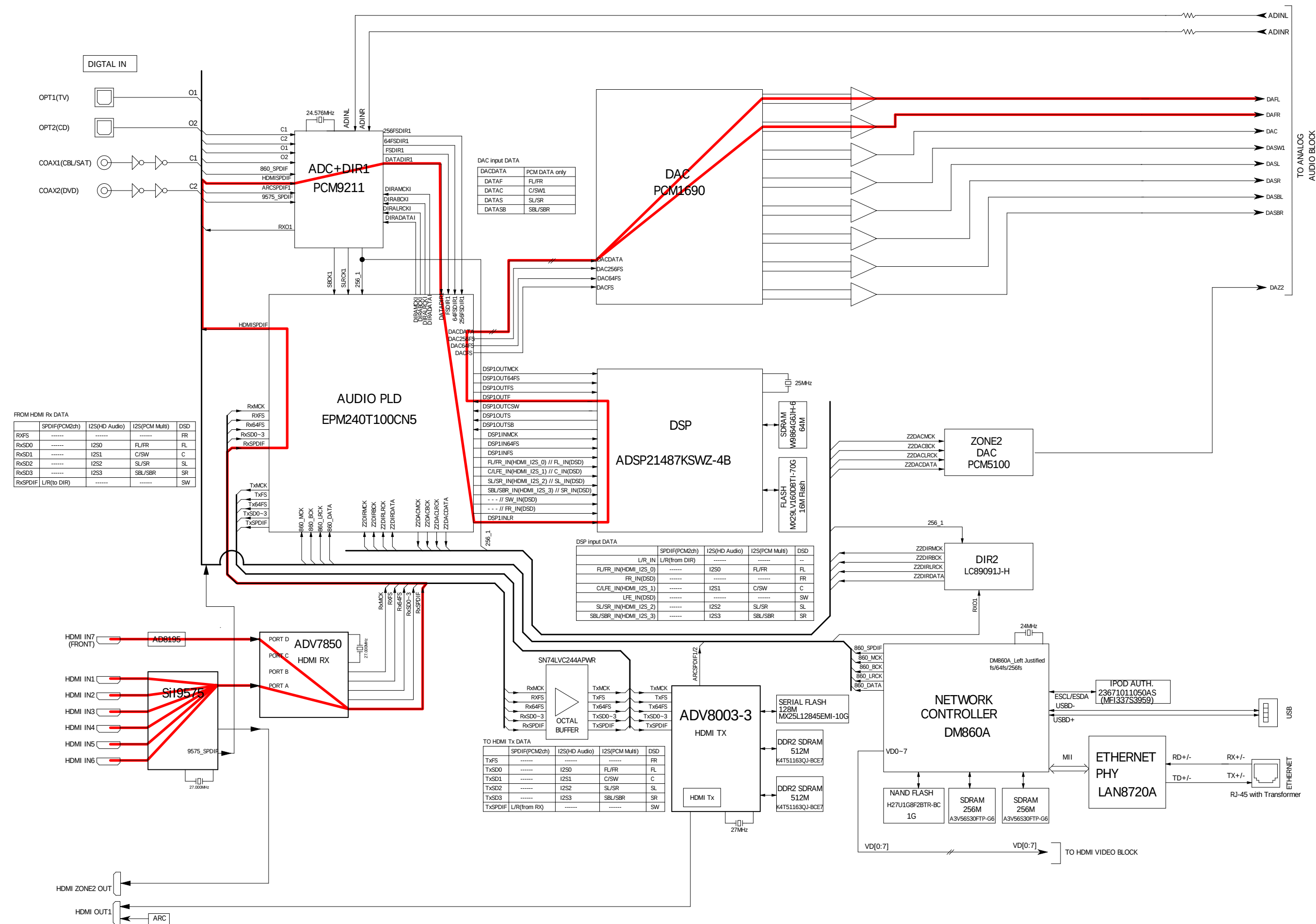


fig.12a

AVRX3000 ANALOG AUDIO BLOCK

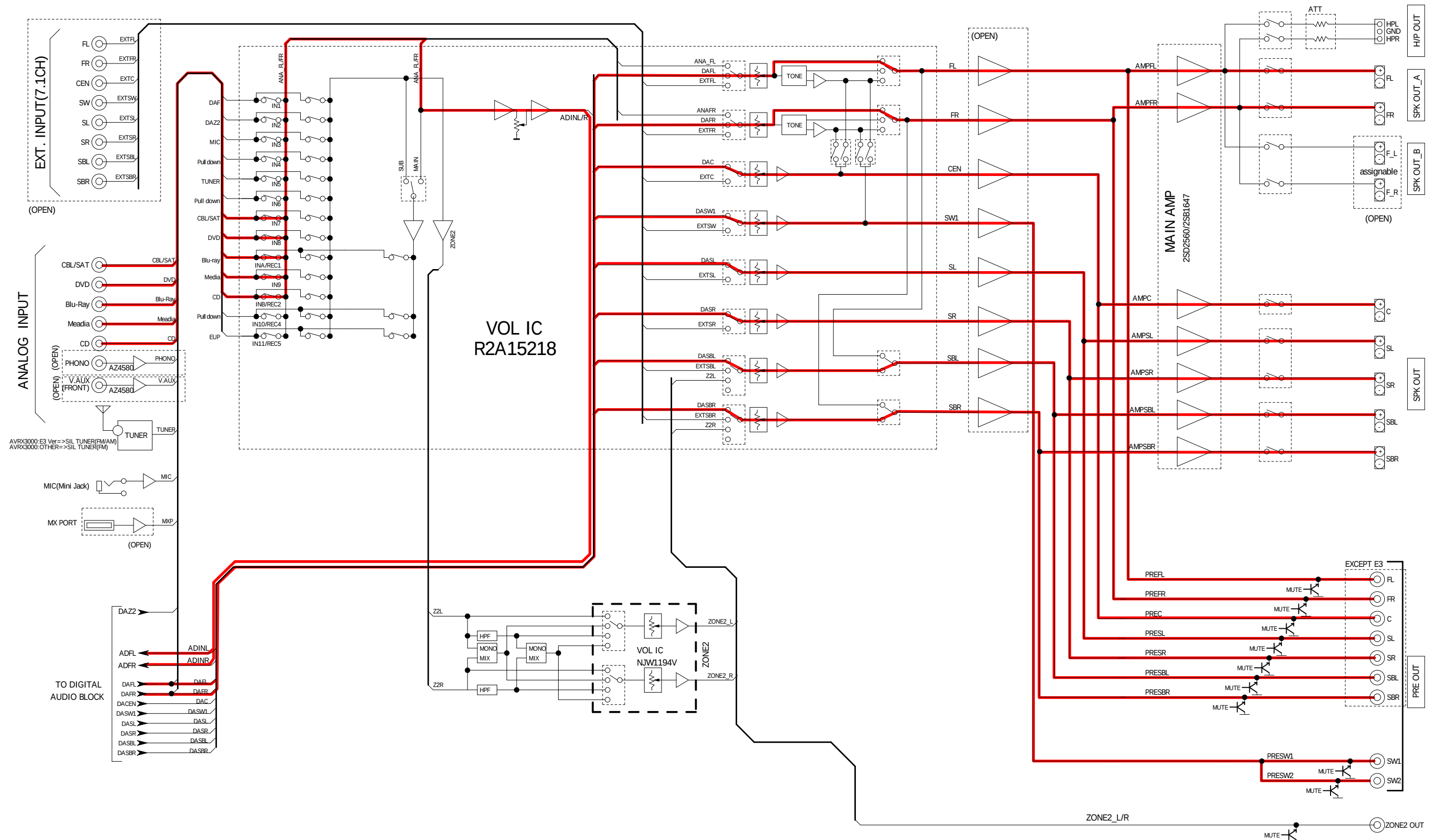


fig.12b

AVRX3000 DIGITAL AUDIO BLOCK

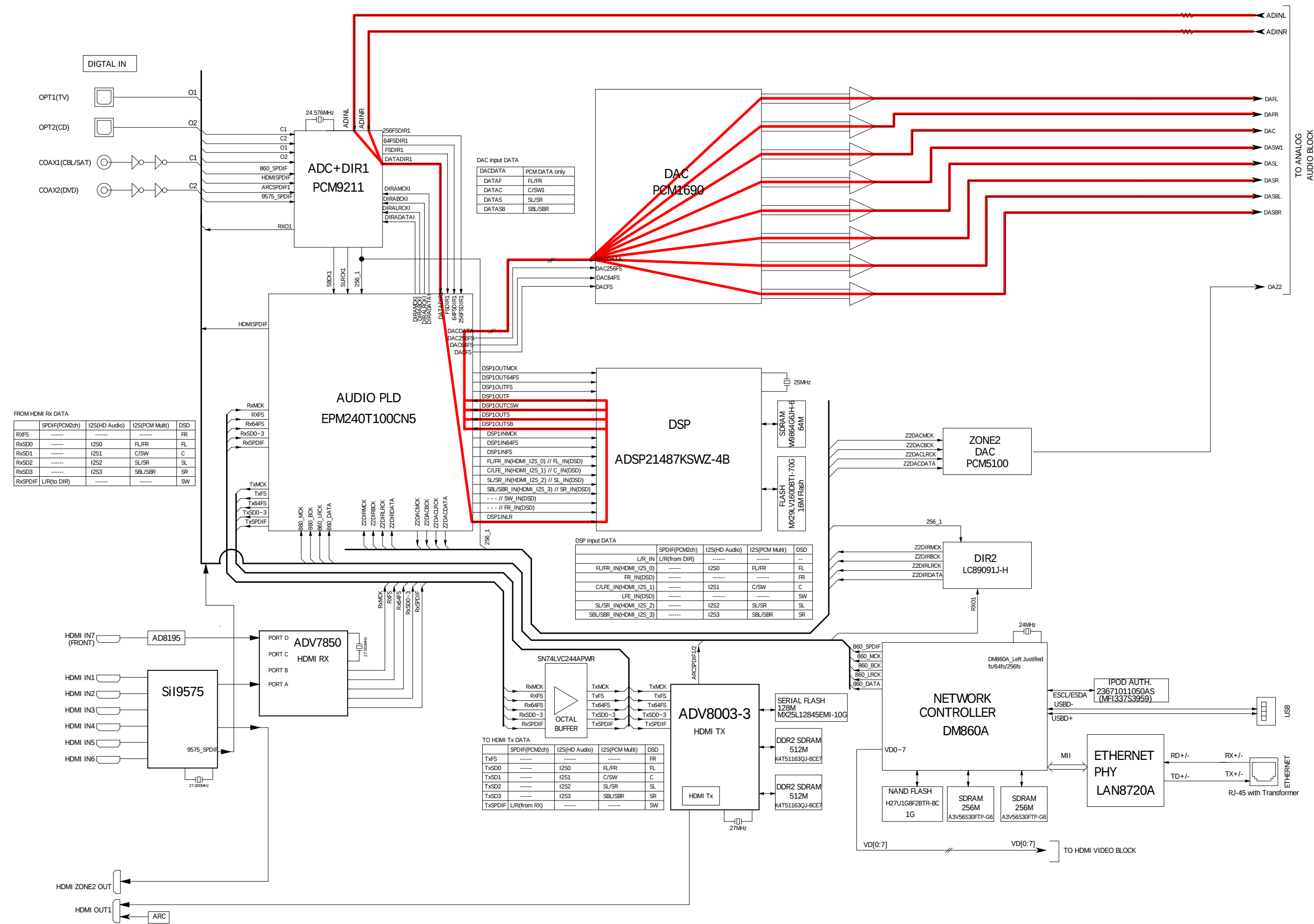


fig.13

AVRX3000 ANALOG AUDIO BLOCK

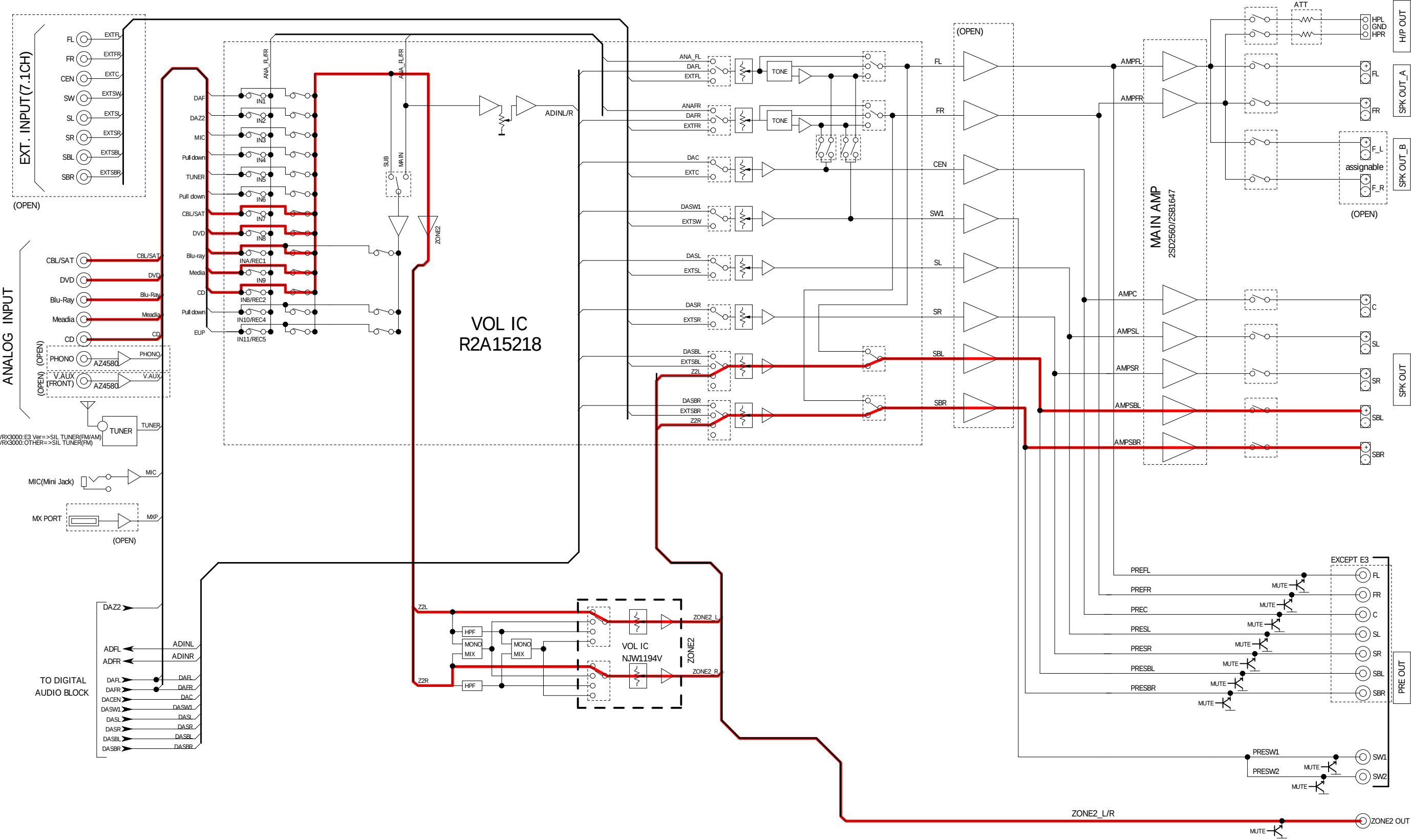


fig.14a

AVRX3000 ANALOG AUDIO BLOCK

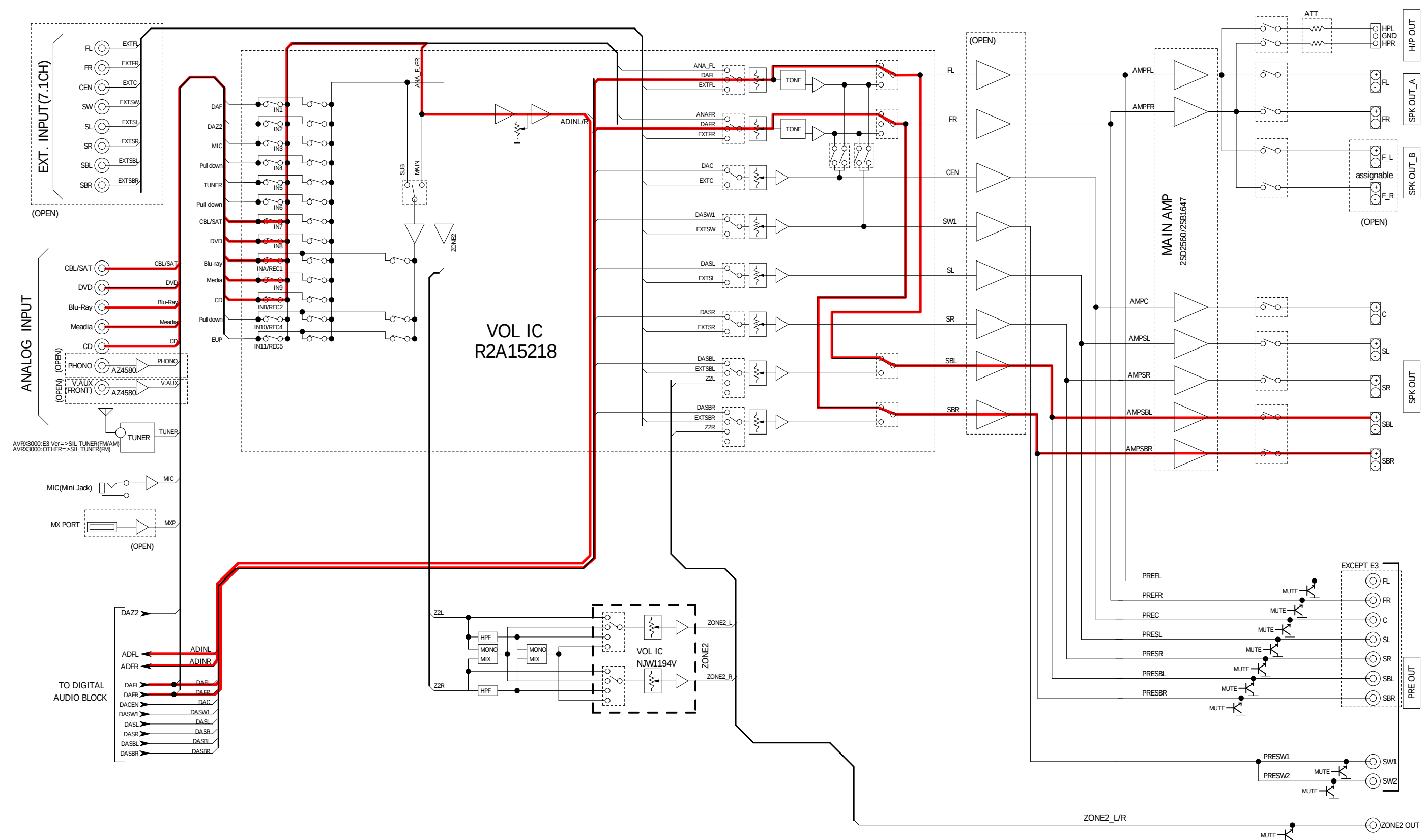


fig.14b

AVRX3000 DIGITAL AUDIO BLOCK

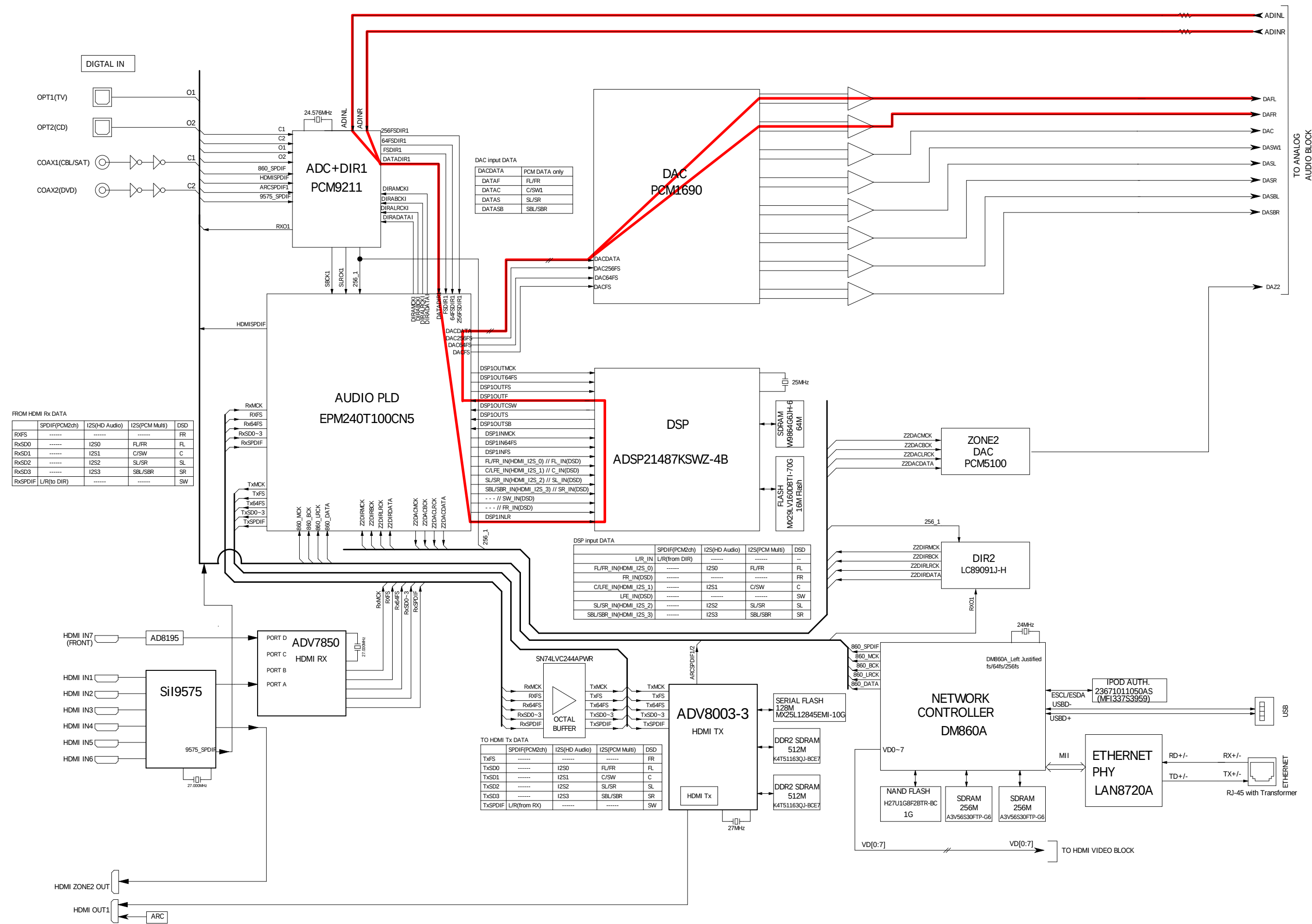


fig.15a

AVRX3000 ANALOG AUDIO BLOCK

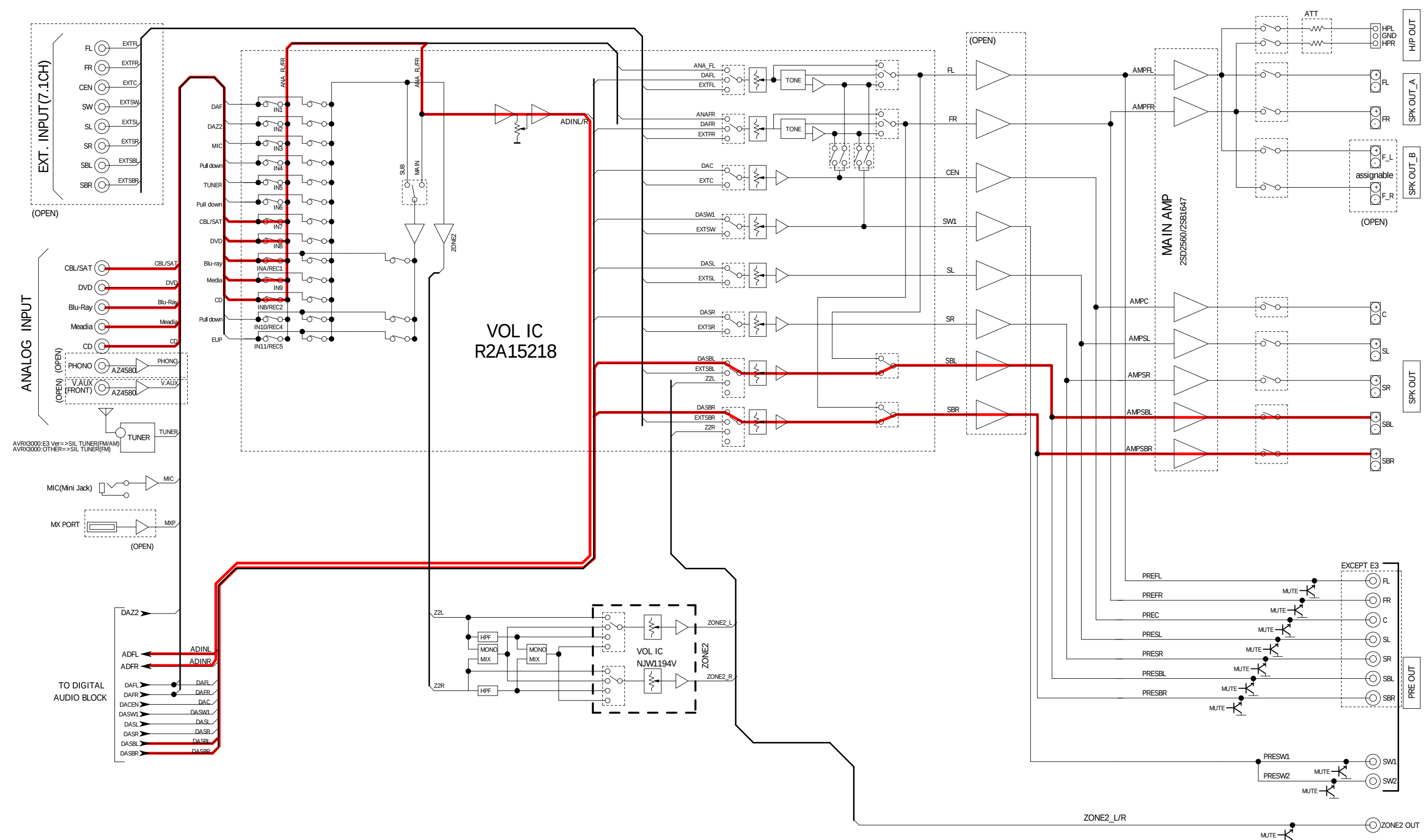


fig.15b

AVRX3000 DIGITAL AUDIO BLOCK

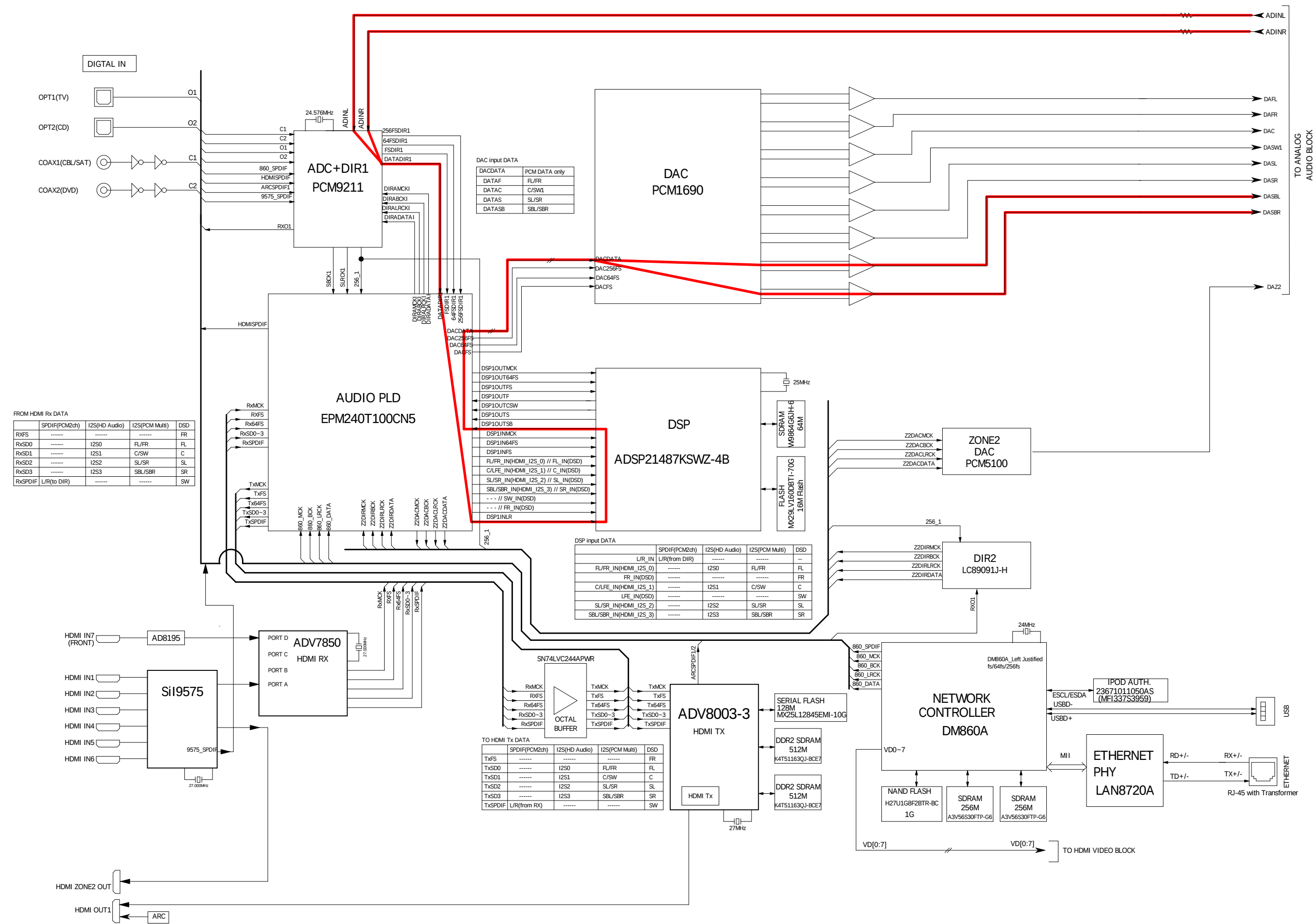


fig.16a

AVRX3000 ANALOG AUDIO BLOCK

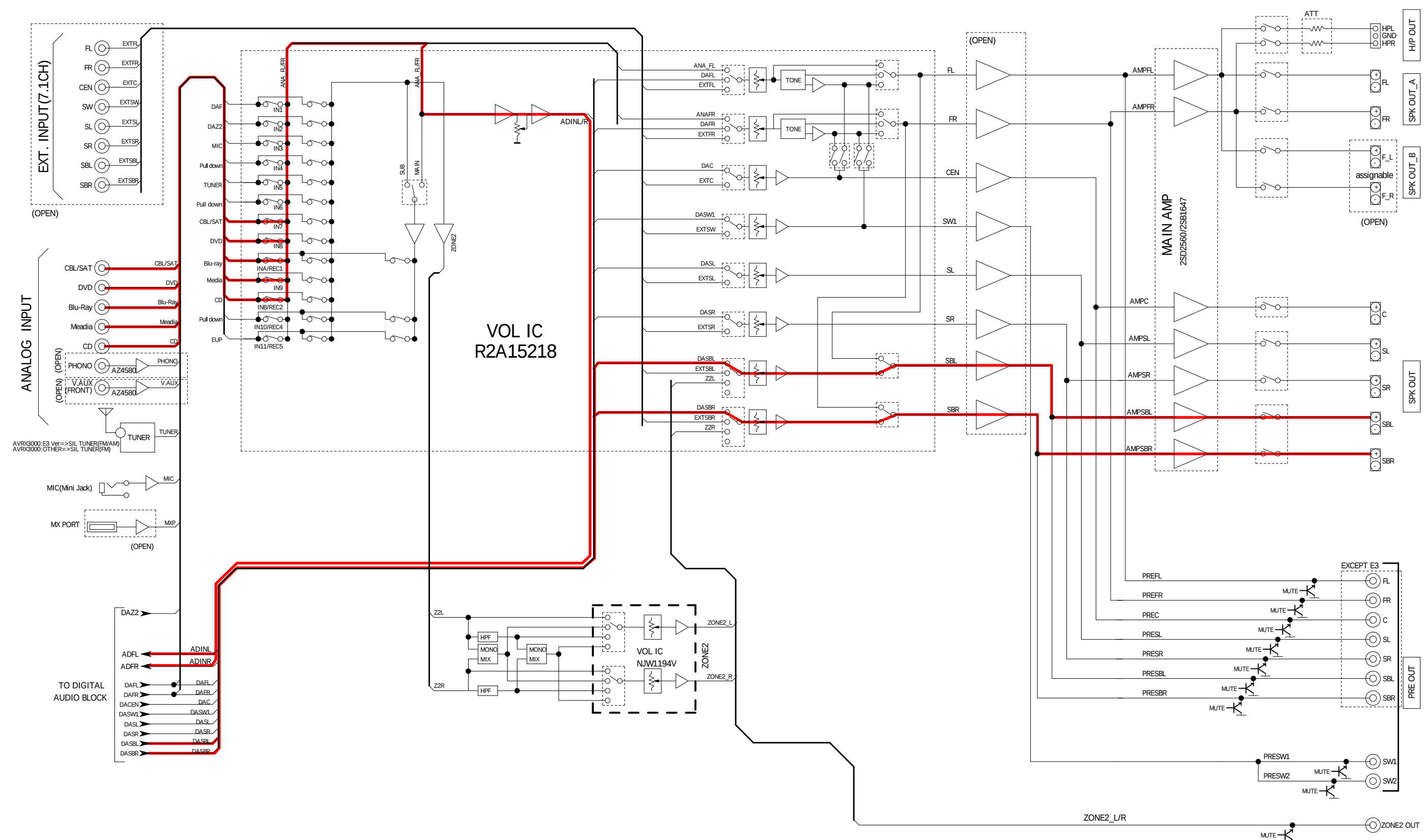
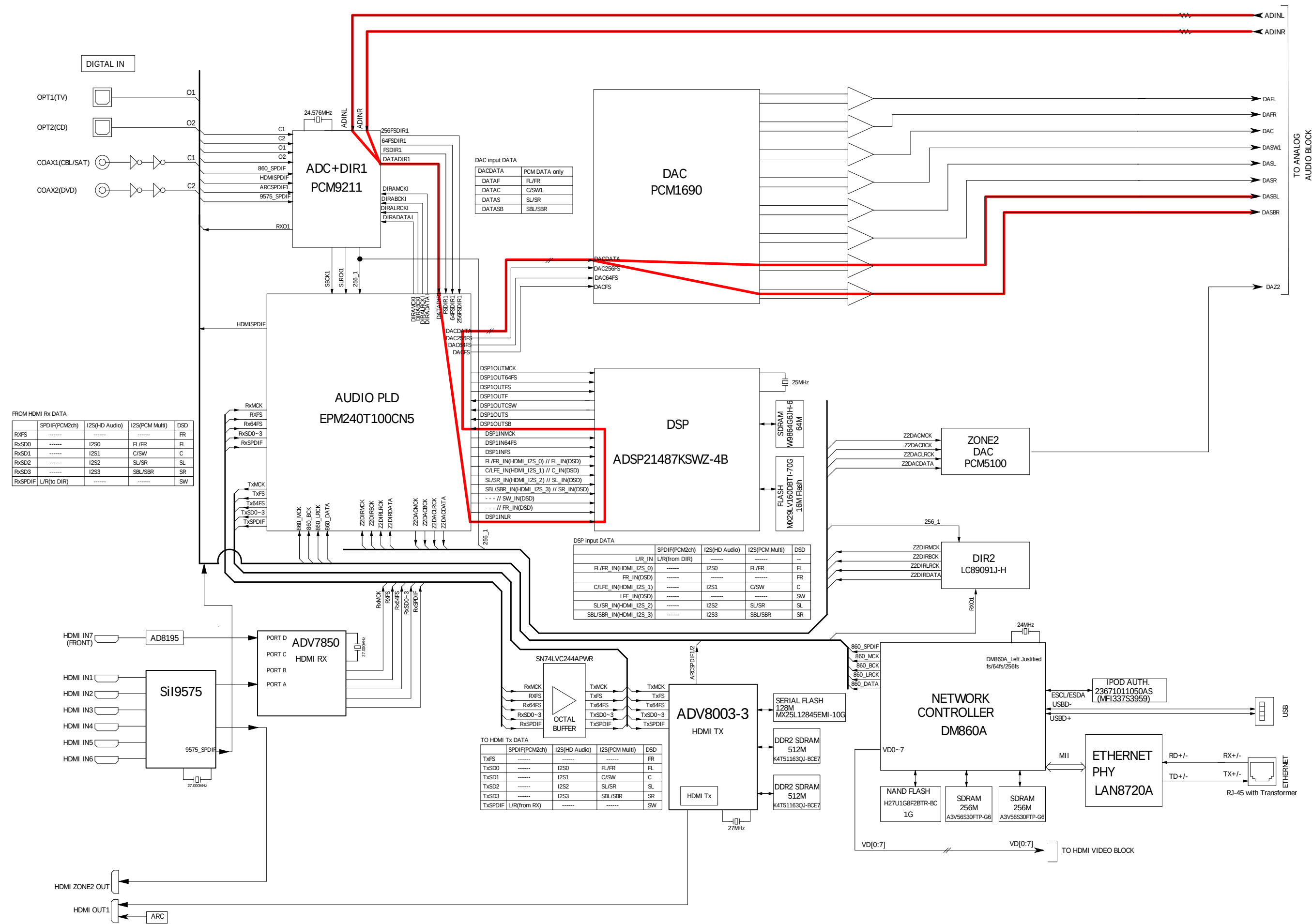


fig.16b

AVRX3000 DIGITAL AUDIO BLOCK



3.6. Errors checking mode (Displaying the protection history)

3.6.1. Operation specifications

Error mode (Displaying the protection history):

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

3.6.2. About the display on the FL display

When the "STATUS" button is pressed after setting 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	N	O		P	R	O	T	E	C	T					
-----	---	---	--	---	---	---	---	---	---	---	--	--	--	--	--

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

FLD	P	R	T	:	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	T	:	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 protection)

FLD	P	R	T	:	T	H	E	R	M	A	L		*		
-----	---	---	---	---	---	---	---	---	---	---	---	--	---	--	--

*: A~D

Cause: The temperature of the heat sink and POWER TRANS 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 above protection history as shown above is displayed, the normal display reappears. (Refer to "PROTECTION DIAGRAM" [25 page](#).)

3.6.3. 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 **"DIMMER"** button for 3 seconds.

FLD	P	R	T	:	D	C								
-----	---	---	---	---	---	---	--	--	--	--	--	--	--	--

Press the **"DIMMER"** button for 3 seconds.

FLD	P	R	T	:	C	L	E	A	R					
-----	---	---	---	---	---	---	---	---	---	--	--	--	--	--

The above is displayed and the protection history is cleared.

FLD	N	O		P	R	O	T	E	C	T				
-----	---	---	--	---	---	---	---	---	---	---	--	--	--	--

- (2) Initialize. (Refer to **"Initializing INTEGRATED NETWORK AV RECEIVER"** [10 page.](#))

※ If you want to save a backup, perform the method in 2.3. above.

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)

3.7. 232C standby clear mode

3.7.1. 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
-----	--	---	---	---	---	---	---	---	---	--	---	---	---	---	---

3.8. Operation Info mode

3.8.1. Specifications

This mode displays the accumulated operating time, power on count, counts for each protection on the set.

3.8.2. About the display on the FL display

When the set has started in the Operation Info mode, press the "STATUS" button to display information in the following order.

(a) Accumulated operating time

FLD	O	P		T	i	m	e										H
-----	---	---	--	---	---	---	---	--	--	--	--	--	--	--	--	--	---

↑ Time display

"STATUS"

(b) Power on count

FLD	P	.	O	n		T	i	m	e								
-----	---	---	---	---	--	---	---	---	---	--	--	--	--	--	--	--	--

↑ Count display

"STATUS"

(c) DC /ASO Protection count

FLD	D	C	:				/	A	S	O	:						
-----	---	---	---	--	--	--	---	---	---	---	---	--	--	--	--	--	--

"STATUS"

(d) Thermal Protection count

FLD	T	H	M		A	:				/	B						
-----	---	---	---	--	---	---	--	--	--	---	---	--	--	--	--	--	--

"STATUS"

(Returns to normal display)

4. Protection Pass mode

4.1. Specifications

- Turn the power on with Protection disabled.
Except for disabling the Protection detection, this operation is the same as the normal power on.

4.2. Operation

1. Press the "Power Operation (⏻)" button while pressing
"ZONE2 SOURCE" and "STATUS" and "TUNER PRESET CH -" buttons on the set to turn the power on.
2. The POWER ON sequence starts. The Protection detection is disabled.

FLD	P	r	o	t	e	c	t	i	o	n	P	a	s	s
-----	---	---	---	---	---	---	---	---	---	---	---	---	---	---

This is displayed for 5 seconds before returning to the normal display.

5. DM860A Reboot mode

5.1. Specifications

- When DM860A is hung up, DM860A is restarted.
Even when Network standby is set (Setup Menu - Network - Network - Always ON), DM860A can be reset.

5.2. Operation

1. Turn on MAIN ZONE button, and select NETWORK for the input source.
2. Press and hold the "TUNER PRESET CH +" and "TUNER PRESET CH -" buttons for 3 seconds and longer.
3. DM860A is restarted and returns to the normal display.

FLD	N	e	t	w	o	r	k	R	e	s	t	a	r	t
-----	---	---	---	---	---	---	---	---	---	---	---	---	---	---

NOTE:

The same operation cannot be accepted for one minute after the last 860 Reboot.

6. Remote ID Setup mode

6.1. Specifications

When using multiple DENON AV receivers in the same room, make this setting so that only the desired AV receiver operates.

6.2. Setting the AV receivers

Starting up:

Turn on the power, then press and hold down the **"STATUS"** and **"DIMMER"** buttons for over 3 seconds.

- (1) When Remote ID Setup mode is started, the following is displayed.

FLD					R	E	M	O	T	E		I	D		?		
-----	--	--	--	--	---	---	---	---	---	---	--	---	---	--	---	--	--

- (2) Press the **"QUICK SELECT 1 - 4"** button that corresponds to the number you want to set.

Button	FL Display																
QUICK SELECT 1					R	E	M	O	T	E		I	D		1		
QUICK SELECT 2					R	E	M	O	T	E		I	D		2		
QUICK SELECT 3					R	E	M	O	T	E		I	D		3		
QUICK SELECT 4					R	E	M	O	T	E		I	D		4		

- (3) Turn off the power using **"Power operation (b)"** button.

- (4) Turn on the power using **"Power operation (b)"** button.

- ※ When Remote ID Setup mode is running, operations other than the **"QUICK SELECT 1 - 4"** buttons or **"Power operation (b)"** buttons on the main unit are not received.
- ※ For the remote control that is supplied with this unit, you cannot change the REMOTE ID.

NOTE:

If the IDs do not match, **"AVAMP*"** (* is the main unit's remote control ID) appears on the display when the remote control unit is operated.

JIG FOR SERVICING

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

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

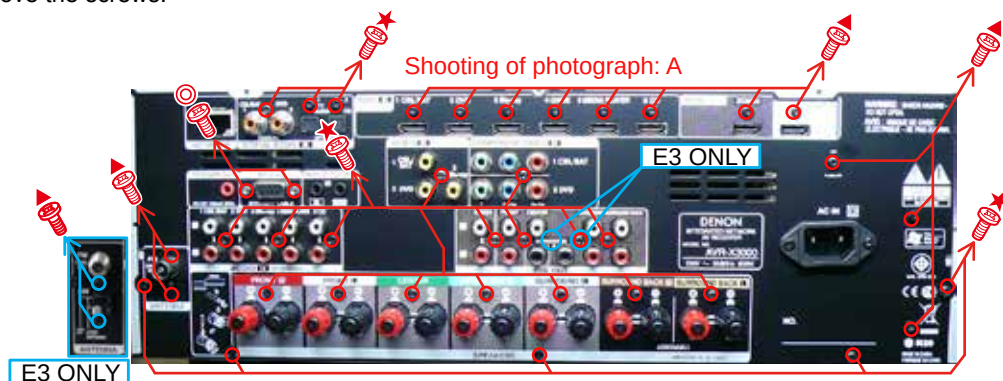
• Connection of PCB HDMI JIG

-Preparation-

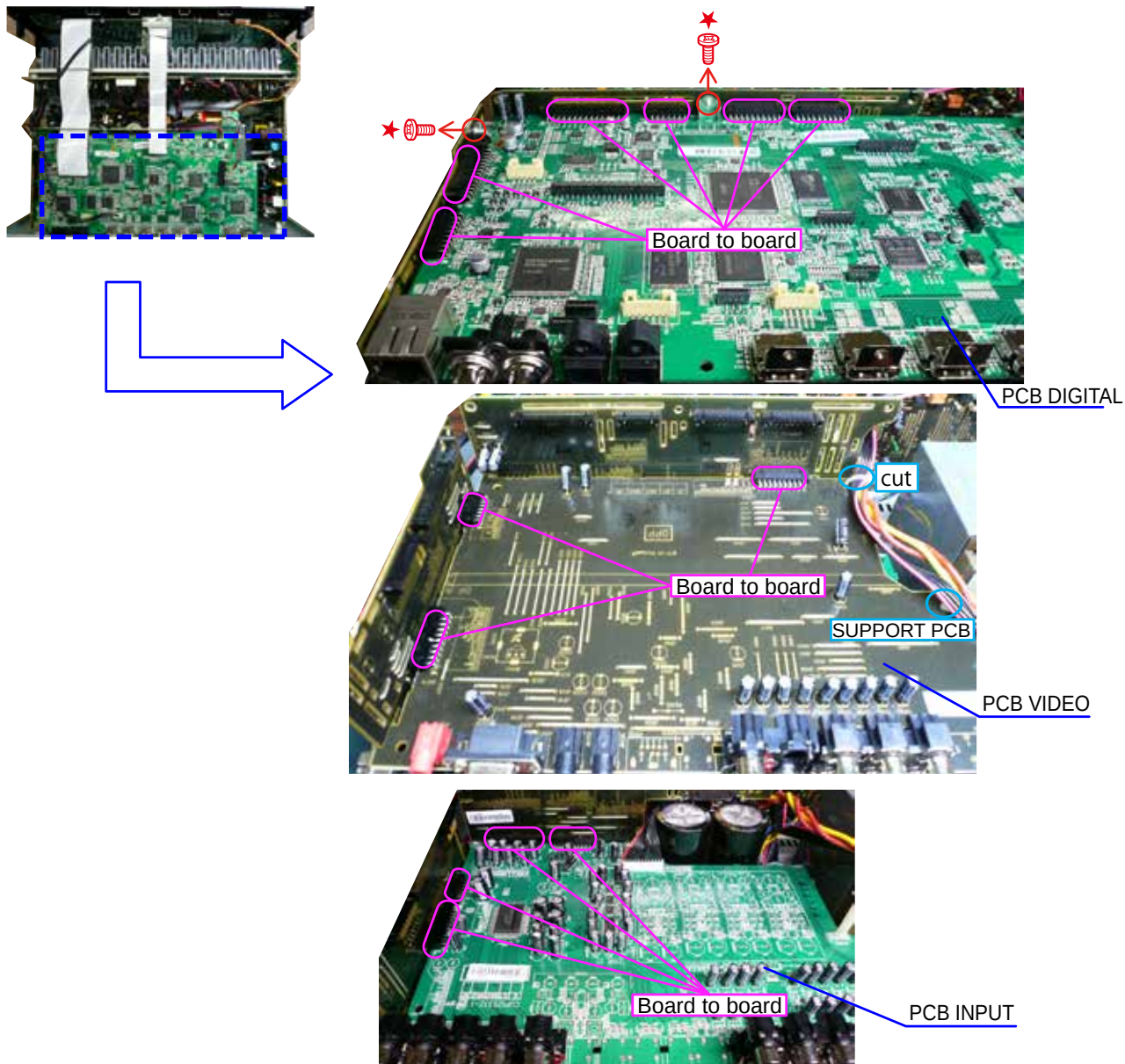
8U-110084S : EXTENSION UNIT KIT : 1 Set
Insulation sheet (Do not supply it) : 3 sheets
Ground lead (Do not supply it) : 3 pcs

-Procedures-

(1) Remove the screws.



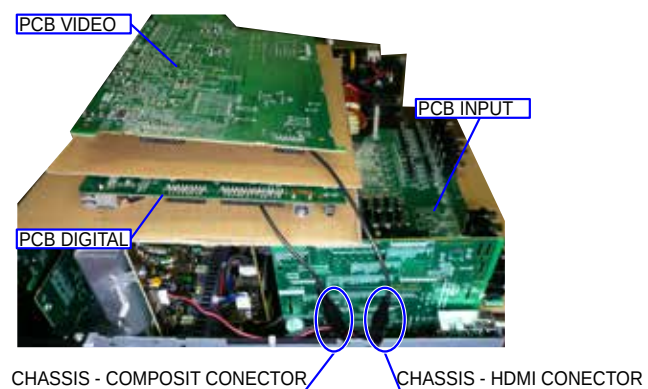
(2) Disconnect the connector board.



(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 six extension jig cables.



Connection table of Board to Board

No.	Pin	Ref. No.	PCB		Ref. No.	PCB
①	17pin	CN27A	SIDE CNT	↔	BN27A	DIGITAL
②	27pin	CN23A	SIDE CNT	↔	BN23A	DIGITAL
③	27pin	CN24A	FRT CNT	↔	BN24A	DIGITAL
④	13pin	CN26A	FRT CNT	↔	BN26A	DIGITAL
⑤	19pin	CN25A	FRT CNT	↔	BN25A	DIGITAL
⑥	19pin	CN21A	FRT CNT	↔	BN21A	DIGITAL
⑦	19pin	CN27B	SIDE CNT	↔	BN27B	VIDEO
⑧	13pin	CN28B	SIDE CNT	↔	BN28B	VIDEO
⑨	19pin	CN21B	FRT CNT	↔	BN21B	VIDEO
⑩	19pin	CN23B	SIDE CNT	↔	BN23B	INPUT
⑪	15pin	CN64B	SIDE CNT	↔	BN64B	INPUT
⑫	27pin	CN24B	FRT CNT	↔	BN24B	INPUT
⑬	19pin	CN26B	FRT CNT	↔	BN26B	INPUT

WHEN THE MICROPROCESSOR IS REPLACED WITH A NEW ONE

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

PWB Name	Ref. No.	Description	After replaced	Remark
DIGITAL	IC201	R5F56108VNFP	B	SOFTWARE: Main
DIGITAL	IC231	R5F3650KNFB	B	SOFTWARE: Sub
DIGITAL	IC410	MX25L1606EM2I-12G	B	SOFTWARE: DSP
DIGITAL	IC406	EPM240T100C5N	B	SOFTWARE: Audio PLD
DIGITAL	IC155	MX29LV160DBTI-70G	B	SOFTWARE: GUI Serial Flash

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

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

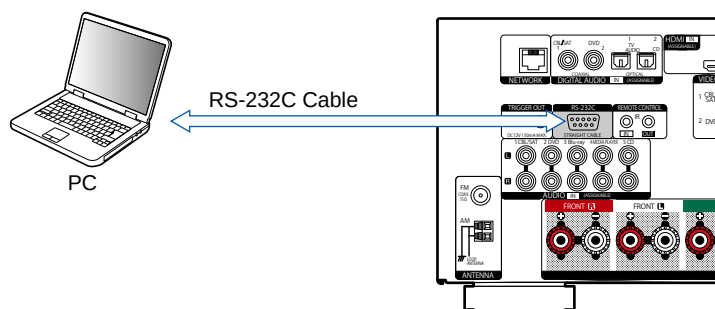
1. How to update by DFW

1.1. Preparations before starting the operation

- (1) Personal Computer (Installed "**DFW_0065_AVRX3000_(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 "**TUNER PRESET CH +**" and "**TUNER PRESET CH -**" and "**ZONE2 SOURCE**" button of the front panel.
- (2) Confirm the power indicator is red.

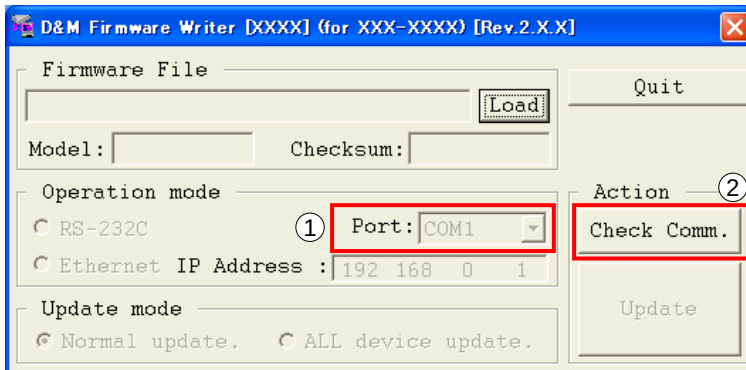
1.4. Run the DFW

Run the "DFW_0065_AVRX3000_(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.

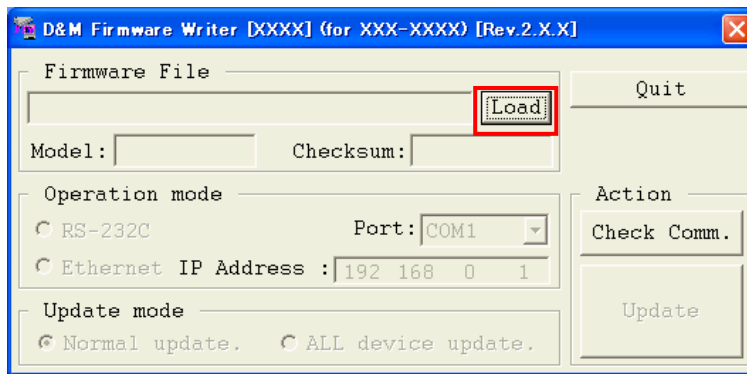


Please confirm the following

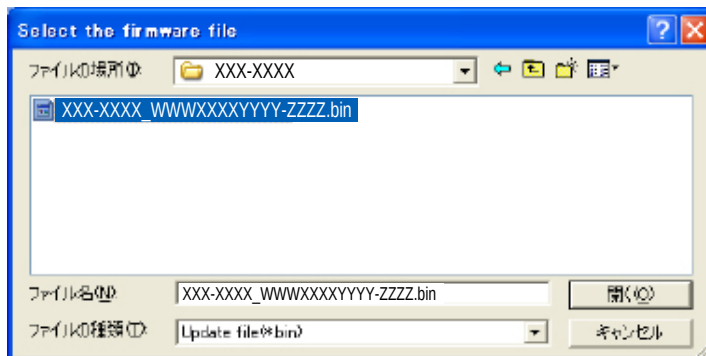
- (a) Check the connection of the AV receiver and PC. (refer to "1.2. Connection of the AV receiver")
- (b) Check the operation mode of the AV receiver. (refer to "1.3.Turn on the AV receiver")
- (c) Check the selection of the RS-232C port number of PC.

1.6. Download the firmware

- (1) Click the "Load" button.

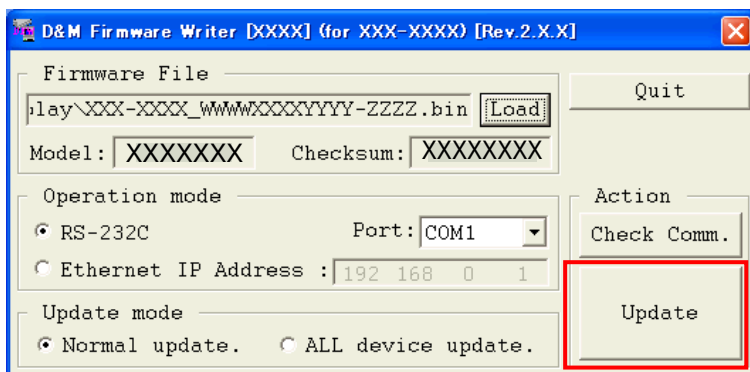


- (2) Download the firmware from the specified download source to PC.

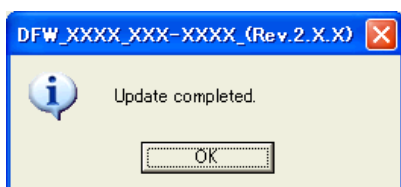


1.7. Complete the firmware updating

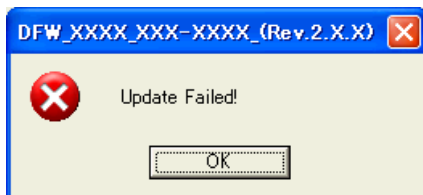
- (1) Click the **"Update"** button.



- (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. [μcom/DSP Version display mode](#)" (19 page).

2. How to update by DPMS

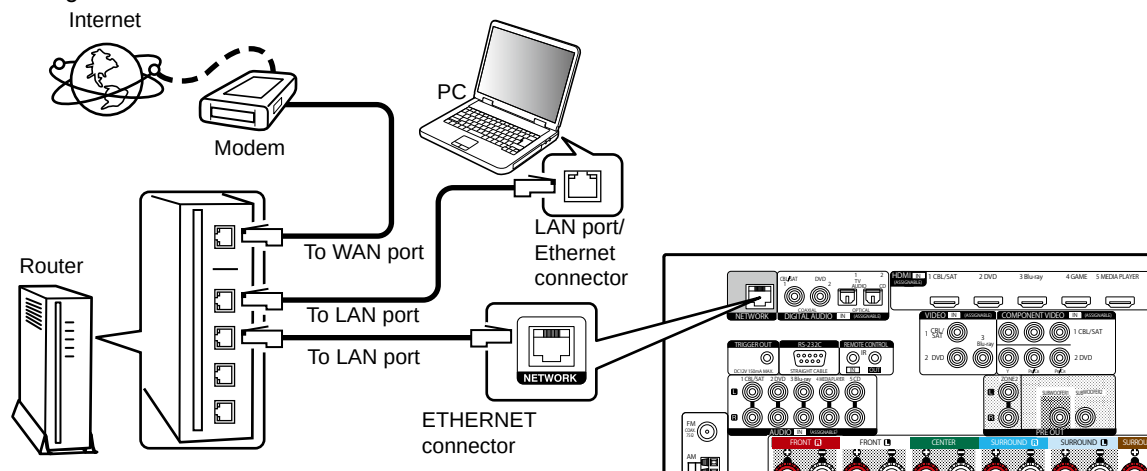
You can update the firmware by downloading the latest version from the Internet.

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 **"Start"**, 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 updating is complete the power indicator lights in green and normal status is resumed.
- (5) Press the **"MENU"** button to close the menu.

--- 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 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.

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 (Denon Product Management Server).

Error Code	Details of Error code	Display	Coping strategies
01	Log-in to DPMS has failed.	Login failed 01	Reset and update again. Carry out the update in an environment that has little network load.
02	Line, etc., is busy when logging into DPMS.	Server is busy 02	Carry out the update in an environment that has little network load.
03	Connection to DPMS failed.	ConnectionFailed 03	Check the network connection. Carry out the update in an environment that has little network load.
04	Firmware file data was requested but error message was received.	ConnectionFailed 04	Check the network connection. Carry out the update in an environment that has little network load.
05	Firmware file data was requested but it timed out.	ConnectionFailed 05	Check the network connection. Carry out the update in an environment that has little network load.
06	Firmware file data was requested but error message was received.	ConnectionFailed 06	Check the network connection. Carry out the update in an environment that has little network load.
07	All firmware file data was requested but it timed out.	ConnectionFailed 07	Check the network connection. 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.	ConnectionFailed 08	Check the network connection. 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.	ConnectionFailed 09	Check the network connection. 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.	Download fail 0A	Check the network connection. 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.	Download fail 0B	Check the network connection. 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.	Download fail 0C	Check the network connection. Carry out the update in an environment that has little network load.
0D	Received Package Version is wrong.	ConnectionFailed 0D	Check the network connection. Carry out the update in an environment that has little network load.
0E	Connection to DPMS failed. (can not get NTP)	ConnectionFailed 0E	Check the network connection. 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).	Updating fail 10	Turn off and on the power. Updating starts automatically.

Error Code	Details of Error code	Display	Coping strategies
11	Main CPU failed to receive firmware for rewriting sent from DM860A (when an error occurred)	Updating fail 11	Turn off and on the power. 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).	Updating fail 12	Turn off and on the power. Updating starts automatically.
13	The deletion of block data failed before Main CPU was rewritten.	Erase fail 13	Turn off and on the power. Updating starts automatically.
14	The rewriting of block data failed when Main CPU was rewritten.	Updating fail 14	Turn off and on the power. Updating starts automatically.
15	The data verification was invalid after Main CPU was rewritten.	UpdateCheckNG 15	Turn off and on the power. Updating starts automatically.
20	Failure to acquire (Boot Loader Mode) IP address before rewriting DM860A (AutoIP).	ConnectionFail 20	Check the network connection. 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).	ConnectionFail 21	Check the network connection. Carry out the update in an environment that has little network load.
22	Log-in to DPMS failed.	Login failed 22	Reset and update again. Carry out the update in an environment that has little network load.
23	Line, etc., is busy when logging into DPMS.	Server is busy 23	Carry out the update in an environment that has little network load.
24	Connection to DPMS failed.	ConnectionFail 24	Check the network connection. Carry out the update in an environment that has little network load.
25	Mode change failure of DM860A.	ConnectionFail 25	Reset and update again.
26	Data acquisition failed (timed out) when firmware of Main CPU was downloaded. Received Package Version is wrong.	Download fail 26	Check the network connection. Carry out the update in an environment that has little network load.
27	Mode change failure of DM860A.	ConnectionFail 27	Reset and update again.
36	Log-in to DPMS ailed when firmware such as Sub CPU, DSP, FPGA, and PLD was rewritten.	Login failed 36	Carry out the update in an environment that has little network load.
37	Line, etc., is busy when logging into DPMS when firmware such as Sub CPU, DSP, FPGA, and PLD was rewritten.	Server is busy 37	Carry out the update in an environment that has little network load.
38	Connection to DPMS failed when firmware such as Sub CPU, DSP, FPGA, and PLD was rewritten..	ConnectionFail 38	Check the network connection. Carry out the update in an environment that has little network load.

Error Code	Details of Error code	Display	Coping strategies
39	Connection to DPMS timed out when firmware such as Sub CPU, DSP, FPGA, and PLD was rewritten.	ConnectionFail139	Check the network connection. 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.	Download fail 3A	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
3B	Error (line congestion) message received when firmware was downloaded or Main CPU was rewritten.	Download fail 3B	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
3C	Error (connection failure) message received when firmware was downloaded or Main CPU was rewritten.	Download fail 3C	Turn off and on the power. Updating starts automatically. 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).	ConnectionFail13D	Check the network connection. 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).	ConnectionFail13E	Check the network connection. Carry out the update in an environment that has little network load.
3F	Mode change failure of DM860A.	ConnectionFail13F	Reset and update again.
50	Log-in to DPMS failed when firmware such as Sub CPU, DSP and PLD was rewritten.	Login failed 50	Carry out the update in an environment that has little network load.
51	Line, etc., is busy when log-in into DPMS when firmware such as Sub CPU, DSP and PLD was rewritten.	Server is busy 51	Carry out the update in an environment that has little network load.
52	Connection to DPMS failed when firmware such as Sub CPU, DSP and PLD was rewritten.	ConnectionFail152	Check the network connection. 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 Sub CPU, DSP and PLD was rewritten.	Updating fail 54	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
55	When firmware such as Sub CPU, DSP and PLD, request was made for firmware data after the log-in to DPMS, but it timed out was rewritten.	Updating fail 55	Turn off and on the power. Updating starts automatically. 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 Sub CPU, DSP and PLD was rewritten.	Download fail 56	Turn off and on the power. Updating starts automatically. 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 rewriting firmware such as Sub CPU, DSP and PLD was rewritten.	Download fail 57	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
58	Firmware download error was received (connection failure) after the log-in to DPMS when firmware such as Sub CPU, DSP and PLD was rewritten.	Download fail 58	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
5A	NACK was received when "C" command sent to Sub CPU, DSP PLD etc.	ConnectionFail15A	Turn off and on the power. Updating starts automatically.

Error Code	Details of Error code	Display	Coping strategies
5B	NACK was received when "L" command sent to Sub CPU, DSP, PLD etc.	Updating fail 5B	Turn off and on the power. Updating starts automatically.
5C	Sub CPU, DSP, PLD etc. failed to receive firmware for rewriting sent from DM860A (when timed out).	Updating fail 5C	Turn off and on the power. Updating starts automatically.
5D	Sub CPU, DSP, PLD etc. failed to receive firmware for rewriting sent from DM860A (when an error occurred).	Updating fail 5D	Turn off and on the power. Updating starts automatically.
5E	Data in firmware such as Sub CPU, DSP and PLD for rewriting sent from DM860A was invalid (when a Check Sum error occurred).	Updating fail 5E	Turn off and on the power. Updating starts automatically.
5F	Invalid data in firmware such as Sub CPU, DSP and PLD for rewriting sent from DM860A was invalid (invalid data was received).	Updating fail 5F	Turn off and on the power. Updating starts automatically.
60	NACK was received when "P" command sent to Sub CPU, DSP, PLD etc.	Updating fail 60	Turn off and on the power. Updating starts automatically.
61	NACK was received when "I" command sent to Sub CPU, DSP, PLD etc.	UpdateCheckNG 61	Turn off and on the power. Updating starts automatically.
62	Start of Sub μ -com fail.	Updating fail 62	Turn off and on the power. Updating starts automatically.
80	Acquisition of serial flash data failed before serial flash was deleted.	Updating fail 80	Turn off and on the power. Updating starts automatically.
81	Deleting data failed before serial flash was rewritten.	Updating fail 81	Turn off and on the power. Updating starts automatically.
82	Receiving firmware for rewriting serial flash sent by DM860A failed (when timed out).	Updating fail 82	Turn off and on the power. Updating starts automatically.
83	Receiving firmware for rewriting serial flash sent by DM860A failed (when an error).	Updating fail 83	Turn off and on the power. Updating starts automatically.
84	Receiving firmware for rewriting serial flash sent by DM860A failed (when a Check Sum error).	Updating fail 84	Turn off and on the power. Updating starts automatically.
85	Receiving firmware for rewriting serial flash sent by DM860A failed (when invalid data was received).	Updating fail 85	Turn off and on the power. Updating starts automatically.
86	The data verification was invalid after serial flash was rewritten.	Updating fail 86	Turn off and on the power. Updating starts automatically.
A0	Acquisition of (Application Mode) IP address failed before rewriting DM860A was rewritten (AutoIP).	ConnectionFailA0	Check the network connection. Carry out the update in an environment that has little network load.

Error Code	Details of Error code	Display	Coping strategies
A1	Acquisition of (Application Mode) IP address failed before rewriting DM860A was rewritten (when timed out).	ConnectionFailA1	Check the network connection. Carry out the update in an environment that has little network load.
A2	Invalid login via DPMS access was notified DM860A related firmware was rewritten (Application Mode).	Login failed A2	Check the network connection. Carry out the update in an environment that has little network load.
A3	Line congestion via DPMS access was notified DM860A related firmware was rewritten (Application Mode).	Server is busy A3	Check the network connection. Carry out the update in an environment that has little network load.
A4	Connection failure via DPMS access was notified DM860A related firmware was rewritten (Application Mode).	ConnectionFailA4	Check the network connection. 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).	Updating fail A6	Turn off and on the power. Updating starts automatically. 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.	Updating fail A7	Turn off and on the power. Updating starts automatically. 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).	Download fail AE	Turn off and on the power. Updating starts automatically. 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).	Download fail AF	Turn off and on the power. Updating starts automatically. 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).	Download fail B0	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
B1	Firmware download error (timed out) when DM860A related firmware was rewritten.	Download fail B1	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
B2	Error message received when DM860A related firmware was rewritten	Updating fail B2	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
B3	Firmware writing error message. (Timeout failure)	Updating fail B3	Turn off and on the power. Updating starts automatically. Carry out the update in an environment that has little network load.
B4	Error message received when DM860A related firmware was rewritten	Updating fail B4	Reset and update again.
B5	Mode change failure of DM860A. (Application Mode)	Updating fail B5	Reset and update again.

Device display during firmware update

Target of device when firmware updated.

Target of device	Display	Error code when an error occurs
Main	Main:***%***min	10~15 36~3F
Sub	Sub:***%***min	50~52 54~58 5A~62
Audio PLD	APLD:***%***min	50~52 54~58 5A~62
DSP	DSP:***%***min	50~52 54~58 5A~62
GUI Serial Flash	GUI:***%***min	50~52 54~58 5A,62 80~86
DM860A Boot Loader	ESBL:***%***min	A0~A4 A6~A7 AE~B5
DM860A Image	EIMG:***%***min	A0~A4 A6~A7 AE~B5
DM860A Image (Emergency Mode)	Update retry	—

Confirming the firmware's number after upgraded

After updating the firmware, check the version. Refer to "1. μ com/DSP Version display mode" ([19 page](#)).

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

- The USB memory device format should be set to FAT16 or FAT32.
- 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.

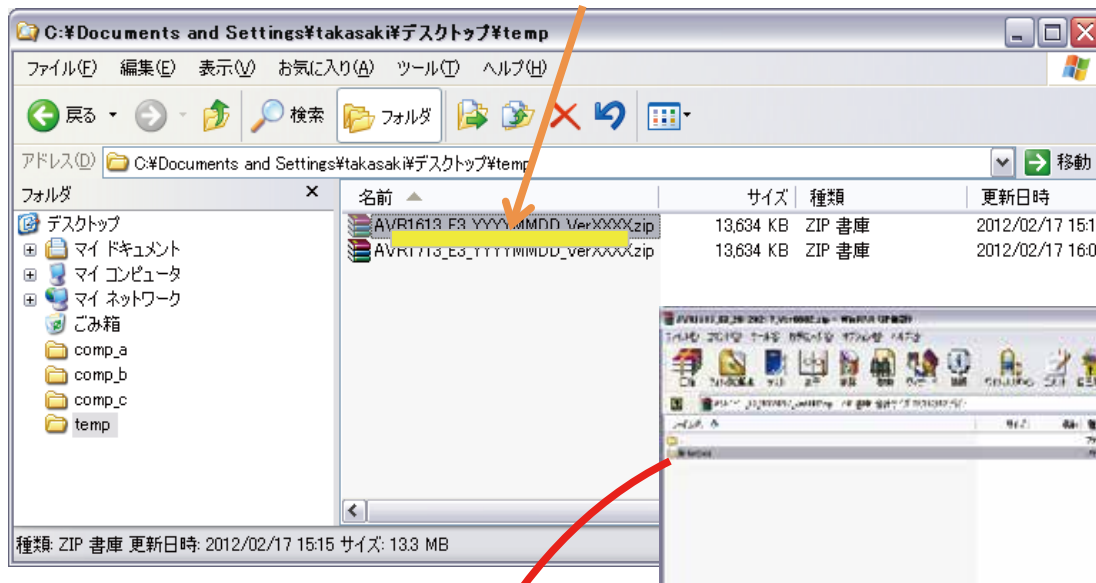
This may cause radio interference.

3.2. Unzip Download File

Please unzip the downloaded file on PC.

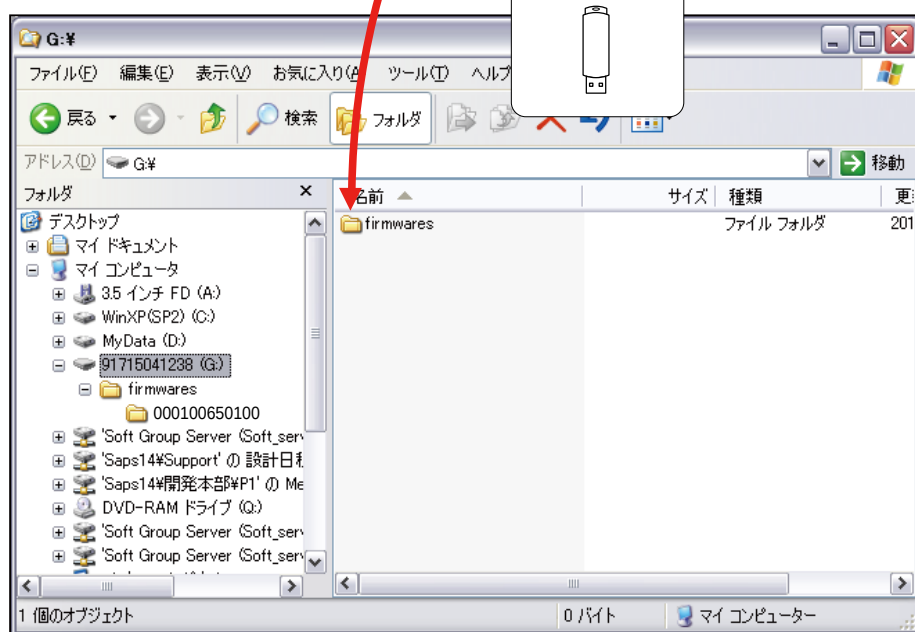
AVR-X3000E3

USB_AVR-X3000_000100650100-0001.zip



You can find "firmwares" folder after unzipped. Please copy that folder to USB flash drive. You have to put "firmwares" folder on root directly on USB flash drive(memory).

copy to USBflash drive



USB location is below

USB memory root

Model Name	Model Area	Product ID
AVRX3000	North America (E3)	000100650100
	Europe (E2)	000100650200
	China (E1C)	000100650500

+ firmwares

+ 000100650100

+ APLD.bin

+ DSP.bin

+ enc_update.xml

+ GUI.bin

+ IMG.bcd

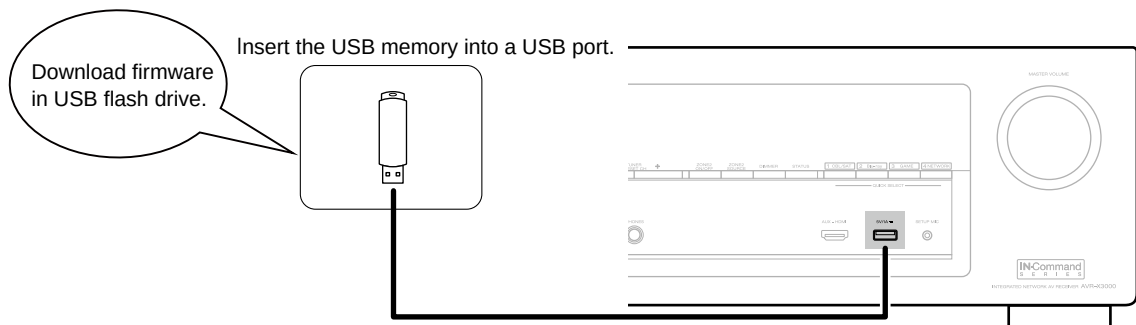
+ MAIN.bin

+ SBL.bcd



3.3. Insert the USB memory into a USB port

NOTE: Please UNPLUG LAN cable from the unit during update.



3.4. Start update

Turn on the power of this unit in the "STATUS" + "TUNER PRESET CH -" button.

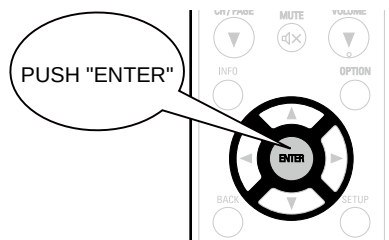
3.5. "USB Update Start" on FL Display

After around half minutes, FL display shows the following message.

FL Display

FLD	U	S	B		U	P	d	a	t	e		S	t	a	r	t
-----	---	---	---	--	---	---	---	---	---	---	--	---	---	---	---	---

3.6. Push "ENTER" key on RC or Main unit



Then start Firmware Update.

FL Display

FLD	U	P	d	a	t	e	F	i	l	e	C	h	e	c	k	
-----	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--

3.7. Finish firmware update

FL display shows the following message.

FL Display

FLD	U	P	d	a	t	i	n	g	C	o	m	p	l	e	t	e
-----	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

--- 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.

3.8. 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.	ConnectionFail:101	Disconnect and connect the USB memory.
02	No FirmwareFile in USB.	FilesNotFound 02	Make sure that the FirmwareFile is in the USB memory.
03	FirmwareFile in USB for unsupported Model name/area	NotMatchFirm 03	Check the supported Model name/area for the FirmwareFile.
04	Failed to obtain entire Firmware information.	ConnectionFail:104	Start the USB Update again.
05	TimeOut while obtaining entire Firmware information	ConnectionFail:105	Start the USB Update again.
06	Failed to obtain individual Firmware information.	ConnectionFail:106	Start the USB Update again.
07	TimeOut while obtaining individual Firmware information	ConnectionFail:107	Start the USB Update again.
08	Error notification received while requesting FirmwareInfo.	ConnectionFail:108	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	ConnectionFail:109	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.	ConnectionFail:10A	Disconnect and connect the USB memory.
0B	No FirmwareFile for FirmwareDownload.	FilesNotFound 0B	Disconnect and connect the USB memory.
0C	Received value with invalid PackageVersion.	ConnectionFail:10C	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).	Updating fail:1 10	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).	Updating fail:1 11	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).	Updating fail:1 12	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
13	BlockErase failed before rewriting Main.	Erase fail 13	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.
14	BlockWrite failed while rewriting Main.	Updating fail 14	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).	UpdateCheckNG 15	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.	ConnectionFail 120	Disconnect and connect the USB memory.
21	No FirmwareFile in USB after SBLMode.	FilesNotFound 21	Disconnect and connect the USB memory.
22	FirmwareFile in USB after SBLMode for unsupported Model name/area	NotMatchFirm 22	Check the supported Model name/area for the FirmwareFile.
23	Failed to obtain entire Firmware information after SBLMode.	ConnectionFail 123	Disconnect and connect the USB memory.
24	TimeOut while obtaining entire Firmware information after SBLMode	ConnectionFail 124	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.	ConnectionFail 125	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	Download fail 26	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.	ConnectionFail 127	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.	ConnectionFail 136	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.	FilesNotFound 37	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	NotMatchFirm 38	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	ConnectionFail 139	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.	ConnectionFail 13A	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.	FilesNotFound 3B	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 SBMode.	ConnectionFail 13F	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.	ConnectionFail 150	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.	FilesNotFound 51	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	NotMatchFirm 52	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.	Updating fail 1 54	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	Updating fail 1 55	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.	ConnectionFail 156	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.	FilesNotFound 57	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.	ConnectionFail 15A	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.	Updating fail 1 5B	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).	Updating fail 1 5C	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).	Updating fail 1 5D	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).	Updating fail 1 5E	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.
5F	Abnormal data in UpdatePacket received from DM860A (DataLength/DataNo).	Updating fail 1 5F	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.	Updating fail 1 60	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
61	Mismatched CheckSum in response or no response from Sub for I command.	UpdateCheckNG 61	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.
62	Failed to start up Sub in PowerOn sequence during Update.	Updating fail 62	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.	Updating fail 63	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.	Updating fail 64	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.	Updating fail 80	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.	Updating fail 81	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).	Updating fail 82	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).	Updating fail 83	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).	Updating fail 84	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).	Updating fail 85	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.	Updating fail 86	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.	ConnectionFail 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.	FilesNotFound 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.
A4	FirmwareFile in USB for unsupported Model name/area	NotMatchFirm 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.	Updating fail A6	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	Updating fail A7	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
AE	Unable to detect USB for FirmwareDownload.	ConnectionFailure 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 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	Download fail 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.	Updating fail B2	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).	Updating fail B3	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.	Updating fail B4	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.	Updating fail B5	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.

3.9. Device display during firmware update

Display of target device during firmware update.

Target of device	Display	Error code when an error occurs
Main	Main : ***% **min	10~15 36~3F
Sub	Sub : ***% **min	50~52 54~58 5A~62
Audio PLD	APLD : ***% **min	50~52 54~58 5A~62
DSP	DSP : ***% **min	50~52 54~58 5A~62
GUI Serial Flash	GUI : ***% **min	50~52 54~58 5A, 62 80~86
DM860A Boot Loader	ESBL : ***% **min	A0~A4 A6~A7 AE~B5
DM860A Image	EIMG : ***% **min	A0~A4 A6~A7 AE~B5
DM860A Image (Emergency Mode)	Update retry	–

Confirming the firmware's number after upgraded

After updating the firmware, check the version. Refer to "1. μ com/DSP Version display mode" ([19 page](#)).

ADJUSTMENT

Audio Section

Adjusting Idling Current

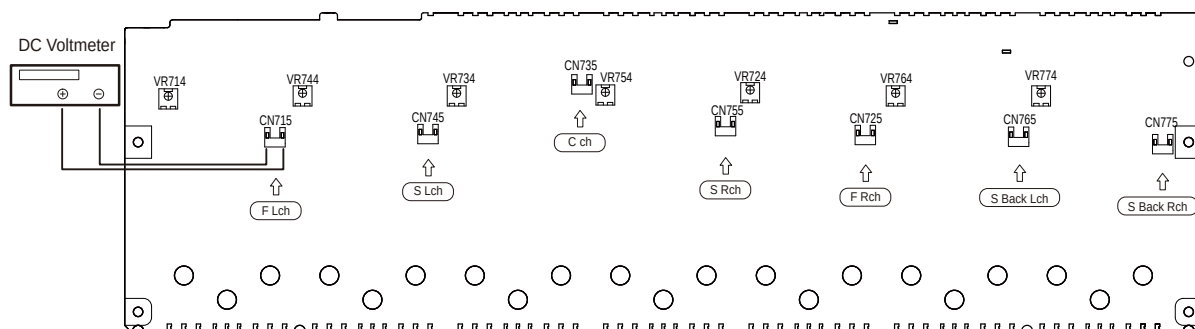
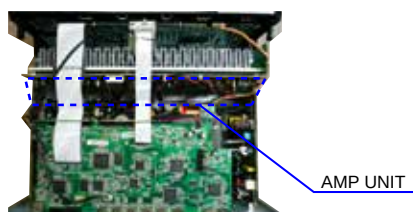
Required measurement equipment: DC Voltmeter

1. Preparation

- (1) Avoid direct blow from an air conditioner or an electric fan, and adjust the unit at normal room temperature 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 top cover and set VR714, VR724, VR734, VR744, VR754, VR764, VR774 on 7CH AMP UNIT at fully counterclockwise (⌚ min) position.
- (2) Connect DC Voltmeter to test points (FRONT-Lch: CN715, FRONT-Rch: CN725, CENTER ch: CN735, SURROUND-Lch: CN745, SURROUND-Rch: CN755, SURROUND-BACK Lch: CN765, SURROUND-BACK Rch: CN775).
- (3) Connect power cord to AC Line, and turn power switch "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 VR714 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 VR714 to set the voltage to $8\text{mV} \pm 0.5\text{mV DC}$.
- (7) Adjust the Variable Resistors of other channels in the same way.



SOUND MODES AND CHANNEL OUTPUT

- 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						
	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)	○						◎*4
DIRECT/PURE DIRECT (Multi-channel)	○	◎	◎	◎*1	◎*1	◎*1	◎
DSD DIRECT (2-channel)	○						◎*4
DSD DIRECT (Multi-channel)	○	◎	◎				◎
STEREO	○						◎
MULTI CH IN	○	◎	◎	◎*1	◎*2		◎
DOLBY PRO LOGIC IIz	○	◎	◎		◎		◎
DOLBY PRO LOGIC IIx	○	◎	◎	◎			◎
DOLBY PRO LOGIC II	○	◎	◎				◎
DOLBY PRO LOGIC II A-DSX	○	◎	◎		◎*3	◎*3	◎
DTS NEO:X	○	◎	◎	◎	◎	◎	◎
Audyssey DSX®	○	◎	◎		◎*3	◎*3	◎
DOLBY DIGITAL	○	◎	◎	◎	◎*2		◎
DOLBY DIGITAL Plus	○	◎	◎	◎*1	◎*1	◎*1	◎
DOLBY TrueHD	○	◎	◎	◎*1	◎*1	◎*1	◎
DTS SURROUND	○	◎	◎	◎	◎*2		◎
DTS 96/24	○	◎	◎	◎	◎*2		◎
DTS-HD	○	◎	◎	◎*1	◎*1	◎*1	◎
DTS Express	○	◎	◎	◎	◎*2		◎
MULTI CH STEREO	○	◎	◎	◎	◎	◎	◎
ROCK ARENA	○	◎	◎	◎	◎	◎	◎
JAZZ CLUB	○	◎	◎	◎	◎	◎	◎
MONO MOVIE	○	◎	◎	◎	◎	◎	◎
VIDEO GAME	○	◎	◎	◎	◎	◎	◎
MATRIX	○	◎	◎	◎	◎	◎	◎
VIRTUAL	○						◎

*1 A signal for each channel contained in an input signal is output as audio.

*2 Audio is output when the set sound mode name contains "+PLIIz".

*3 Audio is output from the speakers specified in the "Audyssey DSX®" settings.

*4 Audio is output when "Subwoofer Mode" in the menu is set to "LFE+Main".

Sound modes and surround parameters

Sound mode	Surround Parameter									
	Dialog Level	Subwoofer Level	Cinema EQ	Loudness anagement *5	Dynamic ompression *6	Low Frequency Effects *7	Delay Time	Effect Level	Room Size	Height Gain *8
DIRECT/PURE DIRECT (2-channel)*1		◎*2		○	○					
DIRECT/PURE DIRECT (Multi-channel)*1	○	○		○	○	○				
DSD DIRECT (2-channel)*1		◎*2								
DSD DIRECT (Multi-channel)*1	○	○				○				
STEREO		○		○	○	○				
MULTI CH IN	○	○	◎*3			○				
DOLBY PRO LOGIC IIz	○	○	○	○	○					○
DOLBY PRO LOGIC IIx	○	○	◎*4	○	○					
DOLBY PRO LOGIC II	○	○	◎*4	○	○					
DOLBY PRO LOGIC II A-DSX	○	○	◎*4	○	○					
DTS NEO:X	○	○	◎*4	○	○					
Audyssey DSX®	○	○	○	○	○	○				
DOLBY DIGITAL	○	○	◎*3		○	○				○
DOLBY DIGITAL Plus	○	○	◎*3		○	○				○
DOLBY TrueHD	○	○	◎*3	○	○	○				○
DTS SURROUND	○	○	◎*3		○	○				○
DTS 96/24	○	○	◎*3			○				○
DTS-HD	○	○	◎*3			○				○
DTS Express	○	○	◎*3			○				○
MULTI CH STEREO	○	○		○	○	○				
ROCK ARENA	○	○		○	○	○		○	○	
JAZZ CLUB	○	○		○	○	○		○	○	
MONO MOVIE	○	○		○	○	○		○	○	
VIDEO GAME	○	○		○	○	○		○	○	
MATRIX	○	○		○	○	○	○			
VIRTUAL	○	○		○	○	○				

*1 - *8

Sound mode	Surround Parameter				Tone *9	Audyssey				Restorer *12
	PRO LOGIC II/IIx Music mode only			NEO:X mode only		MultEQ® XT *10	Dynamic EQ *11	Dynamic Volume *11	Audyssey DSX®	
	Panorama	Dimension	Center Width	Center Gain						
DIRECT/PURE DIRECT (2-channel)*1										
DIRECT/PURE DIRECT (Multi-channel)*1										
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 II A-DSX	○	○	○		○	○	○	○	○	○
DTS NEO:X				○	○	○	○	○		○
Audyssey DSX®					○	○	○	○	○	○
DOLBY DIGITAL					○	○	○	○	○	
DOLBY DIGITAL Plus					○	○	○	○	○	
DOLBY TrueHD					○	○	○	○	○	
DTS SURROUND					○	○	○	○	○	
DTS 96/24					○	○	○	○	○	
DTS-HD					○	○	○	○	○	
DTS Express					○	○	○	○	○	
MULTI CH STEREO					○	○	○	○		○
ROCK ARENA					○*13	○	○	○		○
JAZZ CLUB					○	○	○	○		○
MONO MOVIE					○	○	○	○		○
VIDEO GAME					○	○	○	○		○
MATRIX					○	○	○	○		○
VIRTUAL					○	○	○	○		○

*1, *9 – *13

*1 During playback in PURE DIRECT mode, the surround parameters are the same as in DIRECT mode.

*2 Audio is output when "Subwoofer Mode" in the menu is set to "LFE+Main".

*3 This setting is unavailable when the set sound mode name contains "+PLII Music" or "+NEO:X Music".

*4 This setting is possible when the sound mode is "Cinema" mode.

*5 This item can be selected when a Dolby TrueHD signal is played.

*6 This item can be selected when a Dolby Digital or DTS signal is played.

*7 This item can be selected when a Dolby Digital or DTS signal or DVD-Audio is played.

*8 This setting is available when the set sound mode name contains "+PLIIz".

*9 This item cannot be set when "Dynamic EQ" is set to "On".

*10 This item cannot be set when Audyssey® Setup (Speaker Calibration) has not been performed.

*11 This item cannot be set when "MultEQ® XT" is set to "Off" or "Graphic EQ".

*12 This item can be set when the input signal is analog, PCM 48 kHz or 44.1 kHz.

*13 In this sound mode, bass is +6 dB, and treble is +4 dB. (Default)

Types of input signals, and corresponding sound modes

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

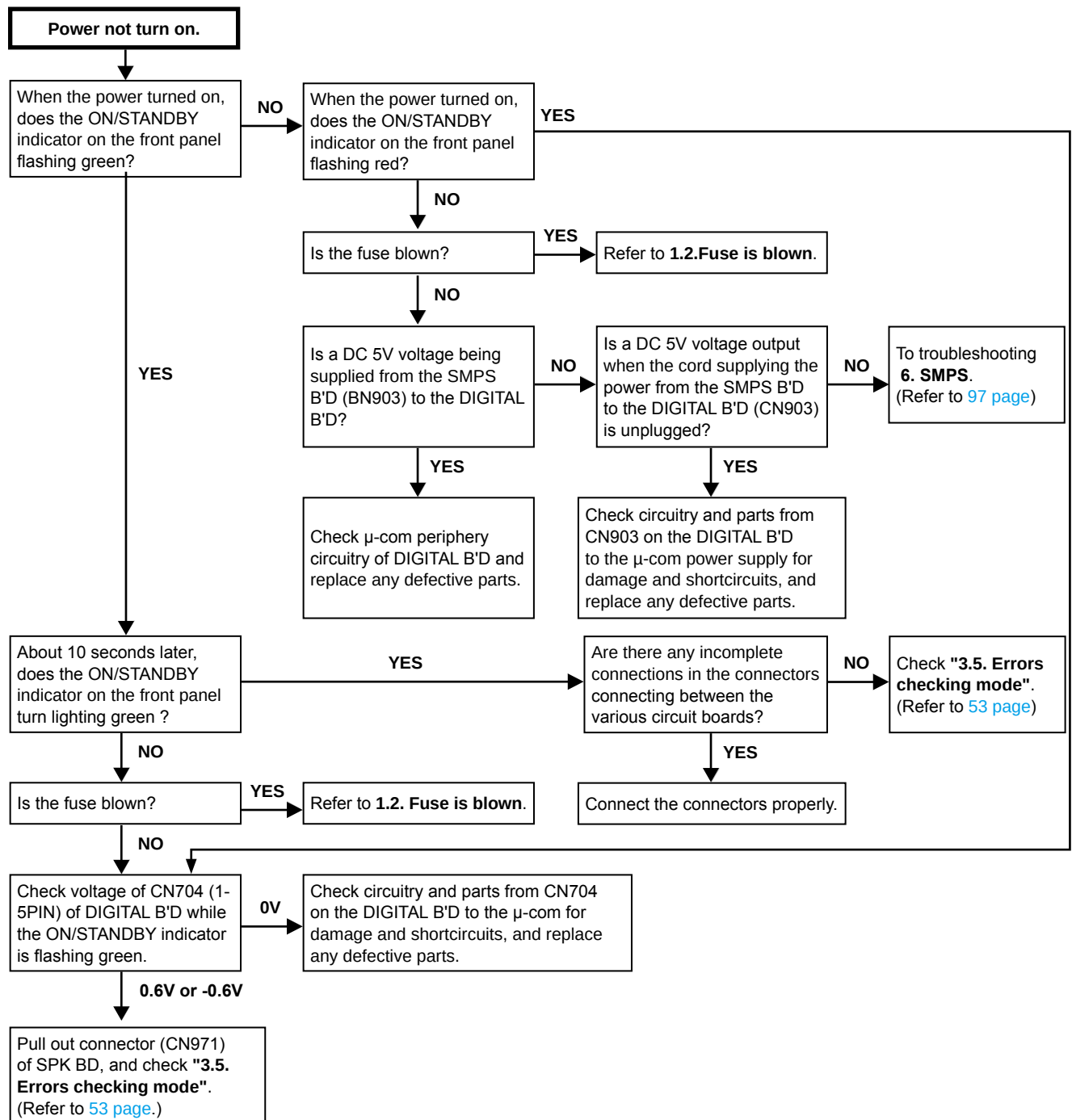
Sound mode	NOTE	2-channel signal			Multi-channel signal										
		Analog /PCM	Dolby Digital (+/HD) / DTS (-HD)	DSD (Super Audio CD)	PCM Multi	DTS-HD	DTS Express	DTS ES DSCRT 6.1	DTS ES MTRIX 6.1	DTS	DOLBY TrueHD	DOLBY DIGITAL Plus	DOLBY DIGITAL EX	DOLBY DIGITAL	DSD (Super Audio CD)
DTS SURROUND															
DTS-HD MSTR						●*6									
DTS-HD HI RES						●*7									
DTS ES DSCRT6.1	*1							●							
DTS ES MTRX6.1	*1								●						
DTS SURROUND								○	○	●					
DTS 96/24										●*8					
DTS (-HD) + PLIIx	*1*2					○	○			○					
DTS (-HD) + PLIIz	*3					○	○	○	○	○					
DTS Express							●								
DTS (-HD) + NEO:X	*4					○	○	○	○	○					
DTS NEO:X	*5	○	○												
DOLBY SURROUND															
DOLBY TrueHD											●				
DOLBY DIGITAL+												●			
DOLBY DIGITAL EX	*1												○	○	
DOLBY (D+) (HD) +EX	*1										○	○			
DOLBY DIGITAL													●	●	
DOLBY (D) (D+) (HD) + PLIIx	*1*2										○	○	○	○	
DOLBY (D) (D+) (HD) + PLIIz	*3										○	○	○	○	
DOLBY (D) (D+) (HD) + NEO:X	*4										○	○	○	○	
DOLBY PRO LOGIC II/IIx	*5	○	○	○											
DOLBY PRO LOGIC IIz	*3	○	○	○											
MULTI CH IN															
MULTI CH IN					●										●
MULTI CH IN + DOLBY EX	*1				○										○
MULTI CH IN + PLIIx	*1*2				○										○
MULTI CH IN + PLIIz	*3				○										○
MULTI CH IN + NEO:X	*4				○										
MULTI CH IN 7.1	*1				●*10										
Audyssey															
Audyssey DSX®					○	○	○	○	○	○	○	○	○	○	
DOLBY PLII A-DSX	*5	○	○												
DIRECT															
DIRECT		○*9	○	○	○	○	○	○	○	○	○	○	○	○	○
PURE DIRECT															
PURE DIRECT		○	○	○	○	○	○	○	○	○	○	○	○	○	○
DSP SIMULATION															
MULTI CH STEREO		○	○		○	○	○	○	○	○	○	○	○	○	
ROCK ARENA		○	○		○	○	○	○	○	○	○	○	○	○	
JAZZ CLUB		○	○		○	○	○	○	○	○	○	○	○	○	
MONO MOVIE		○	○		○	○	○	○	○	○	○	○	○	○	
VIDEO GAME		○	○		○	○	○	○	○	○	○	○	○	○	
MATRIX		○	○		○	○	○	○	○	○	○	○	○	○	
VIRTUAL		○	○		○	○	○	○	○	○	○	○	○	○	
STEREO															
STEREO		●	○	○	○	○	○	○	○	○	○	○	○	○	○

- *1 This item can be selected when surround back speakers are used.
 *2 The Cinema mode or Music mode can be selected. When using a single surround back speaker, the Music mode is used.
 *3 This item can be selected when front height speakers are used.
 *4 The Cinema mode, Music mode or Game mode can be selected. This item can be selected when using any of the Surround back, Front height or Front wide speaker.
 *5 The Cinema mode, Music mode or Game mode can be selected.
 *6 This item can be selected when the input signal is DTS-HD MASTER AUDIO.
 *7 This item can be selected when the input signal is DTS-HD HI RESOLUTION.
 *8 This item can be selected when the input signal is DTS 96/24.
 *9 The default sound mode for the AirPlay playback is DIRECT. (Default)
 *10 This item can be selected when the input signals contain surround back signals.

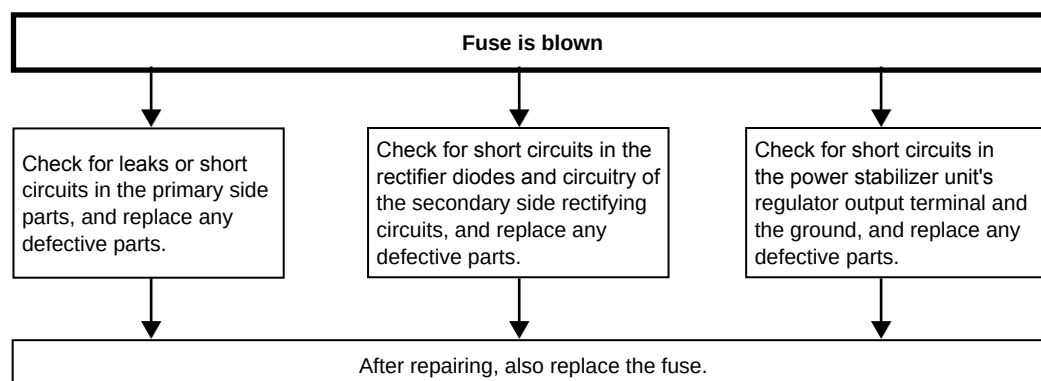
TROUBLE SHOOTING

1. POWER

1.1. Power not turn on



1.2. Fuse is blown



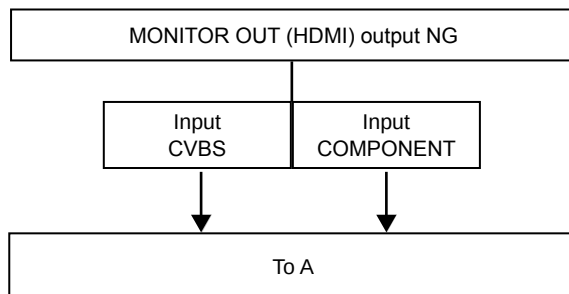
2. Analog video

Perform the operation below beforehand.

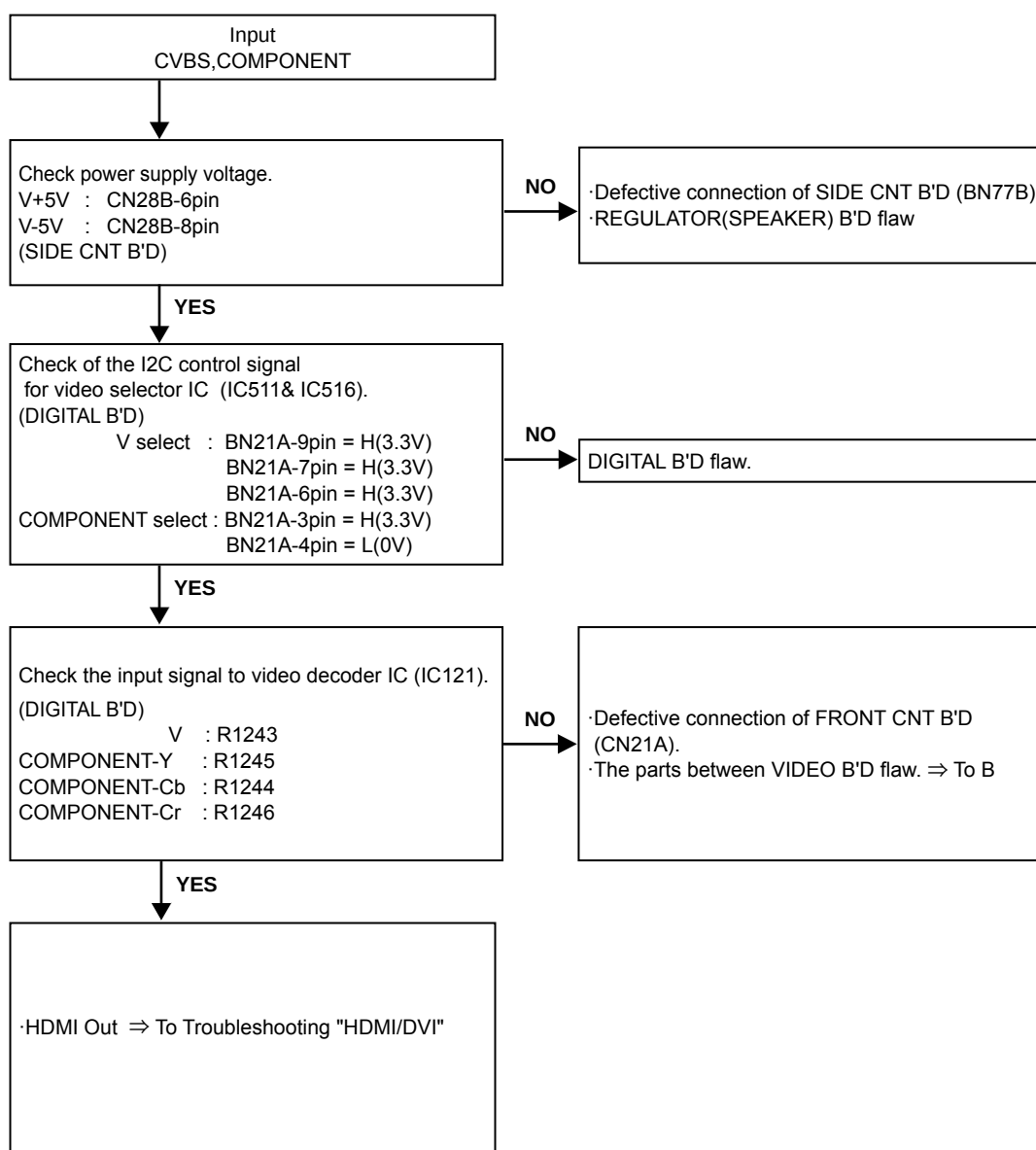
※ Check that the connection cable and the Monitor are normal.

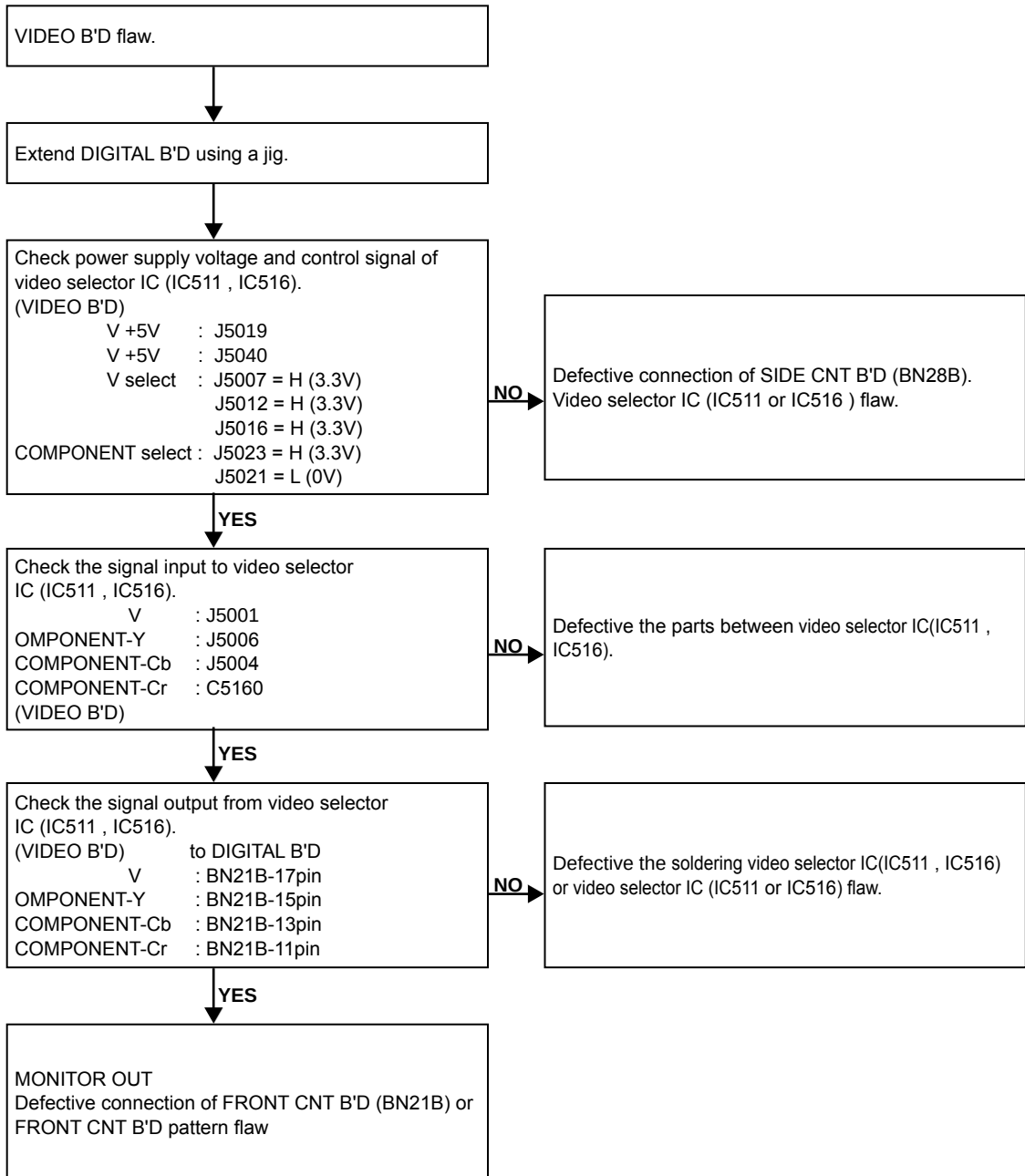
※ Set VIDEO CONVERT ON.

※ Set Function to the CBL/SAT

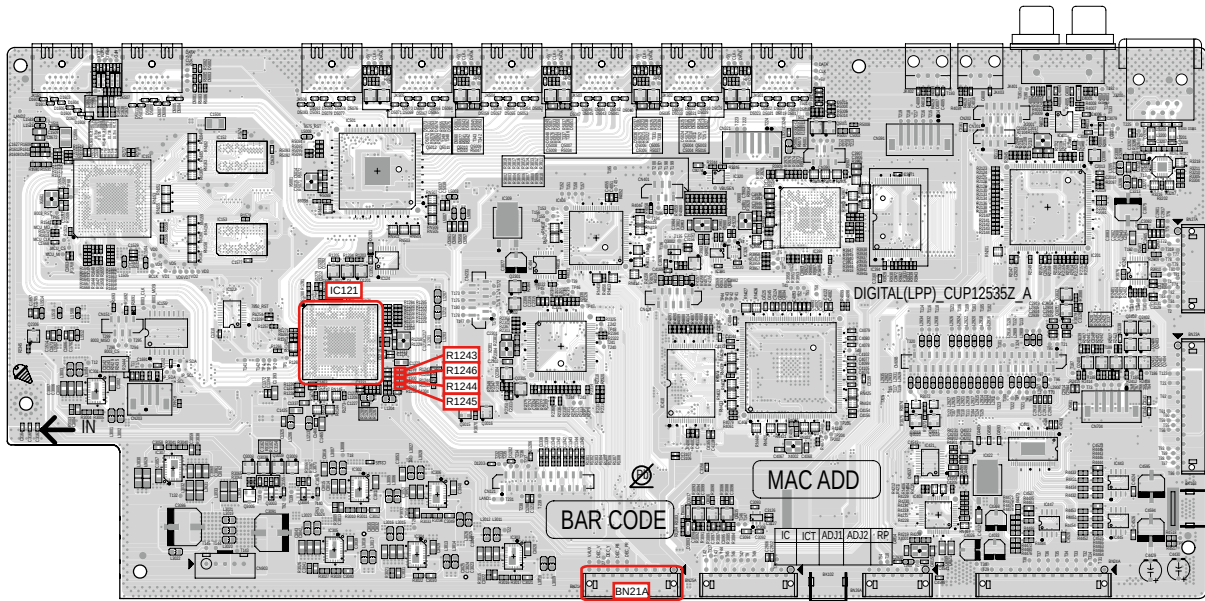


A



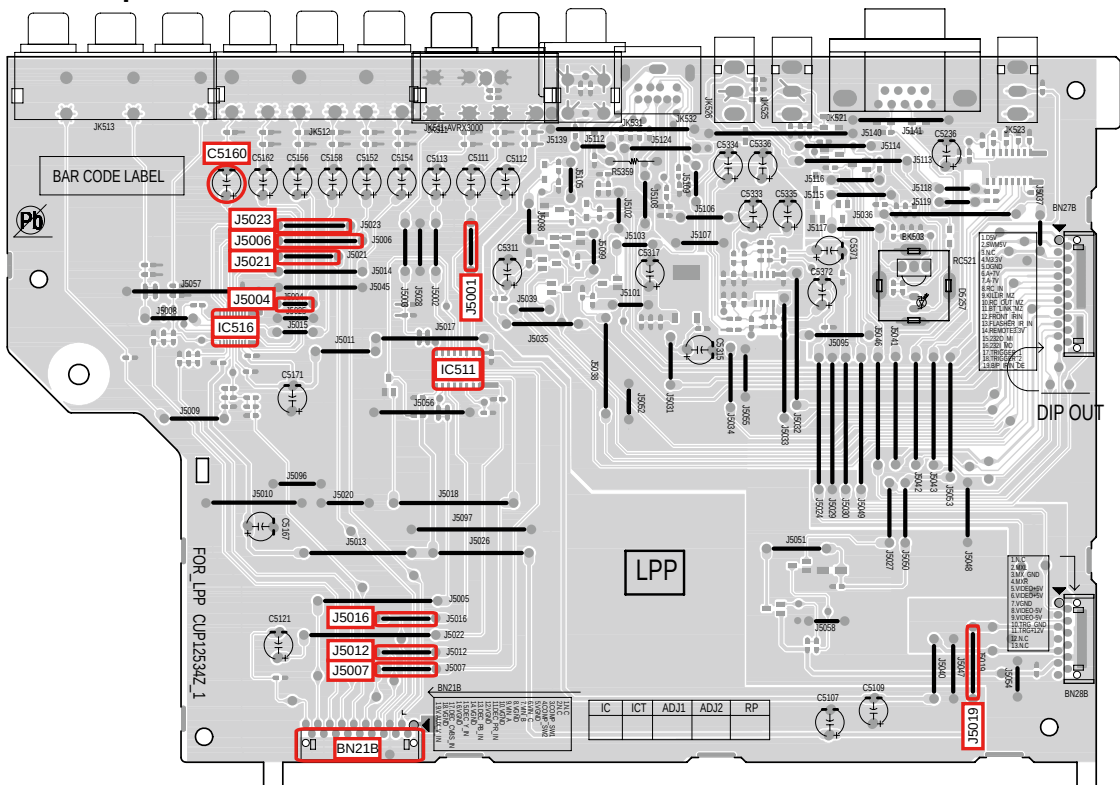
B

DIGITAL test point



(A SIDE)

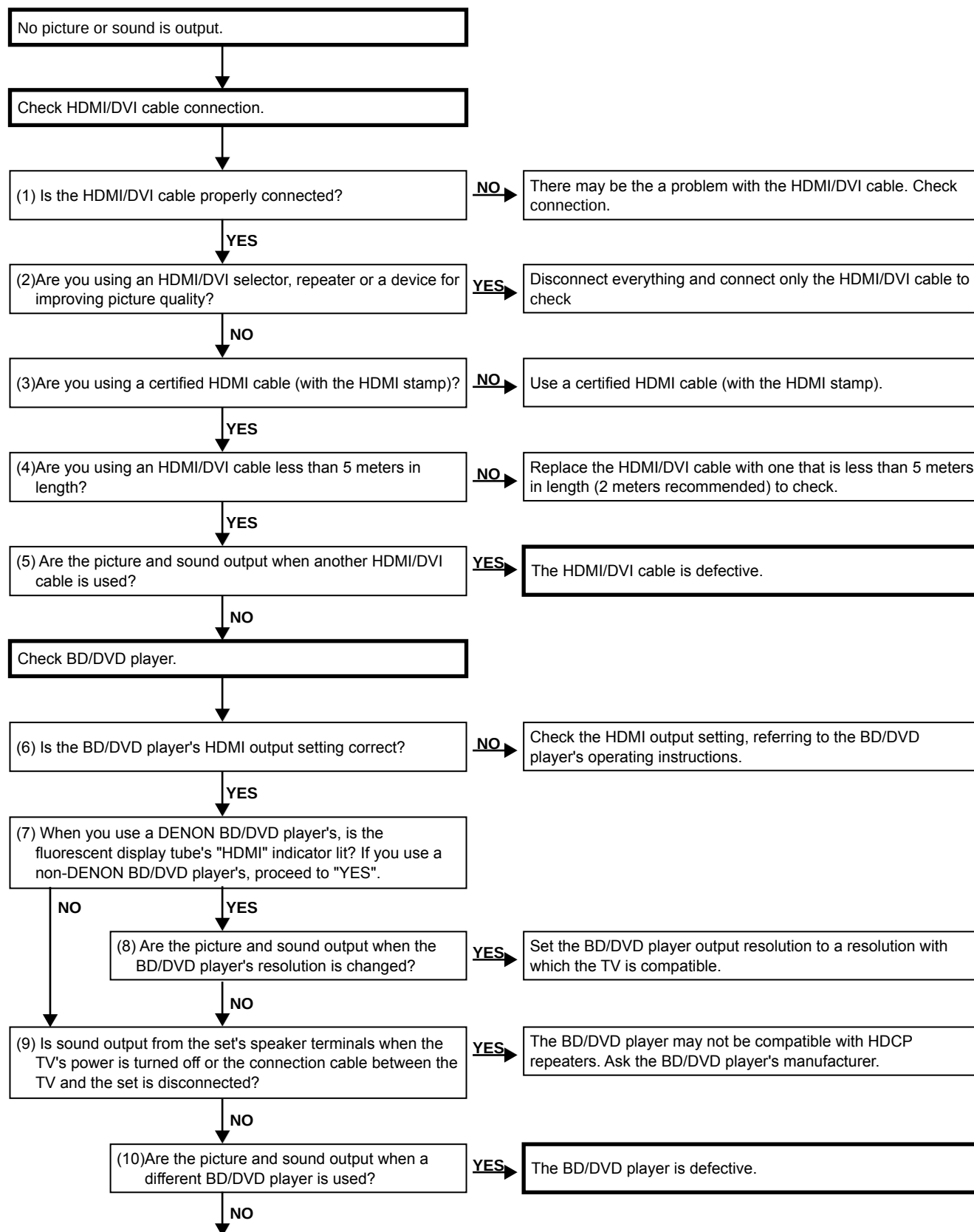
VIDEO test point

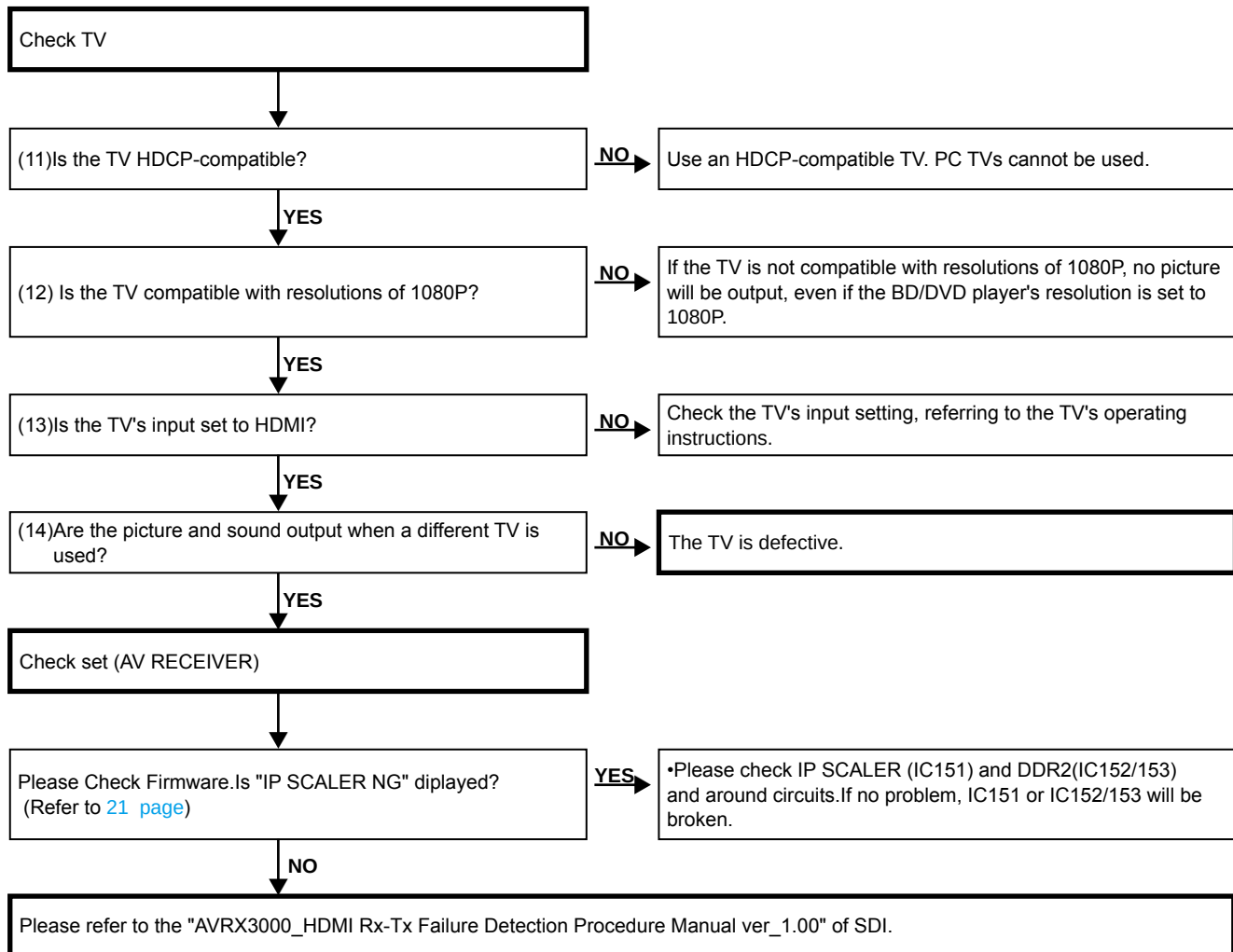


(A SIDE)

3. HDMI/DVI

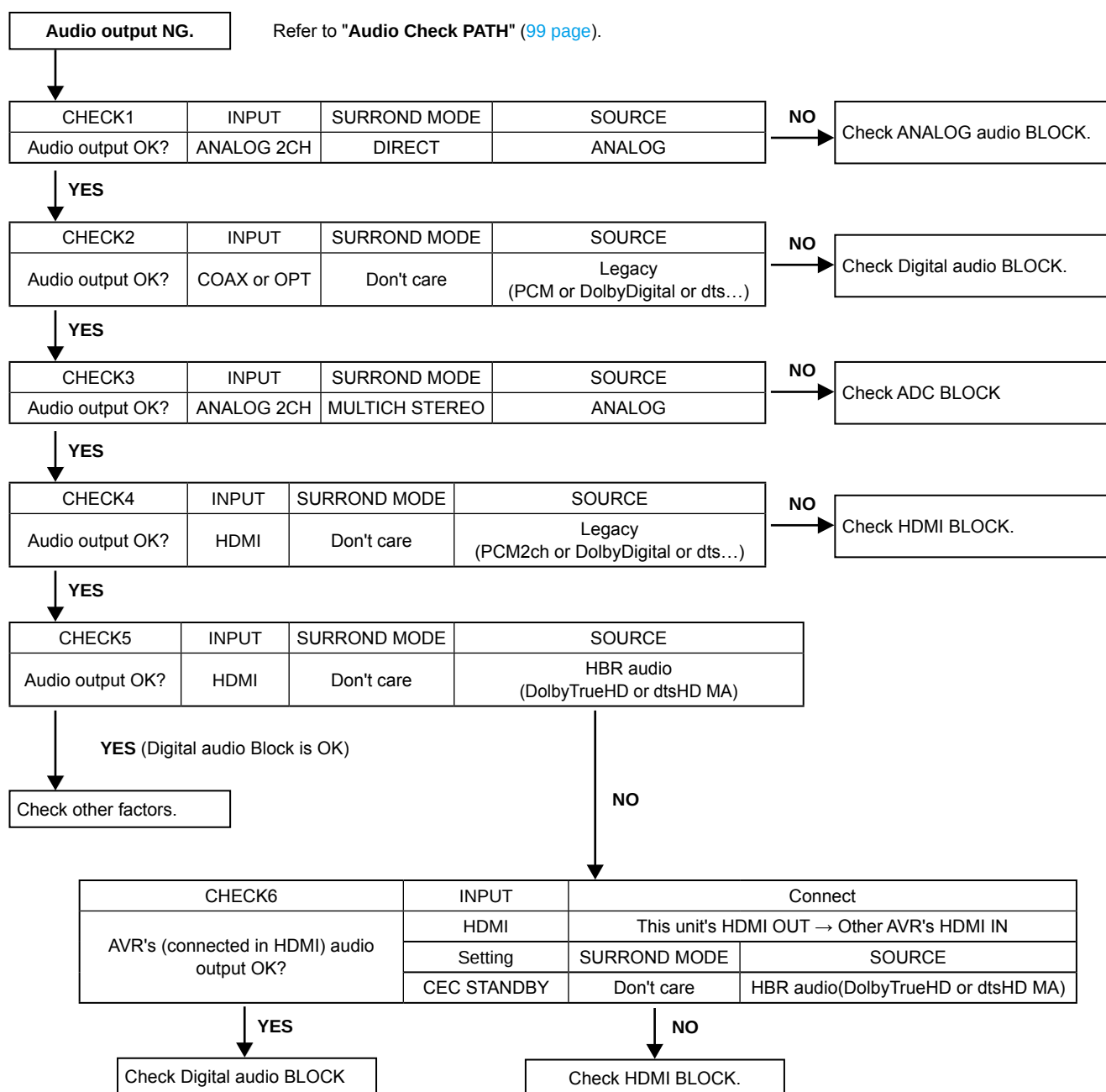
3.1. No picture or sound is output (HDMI to HDMI)



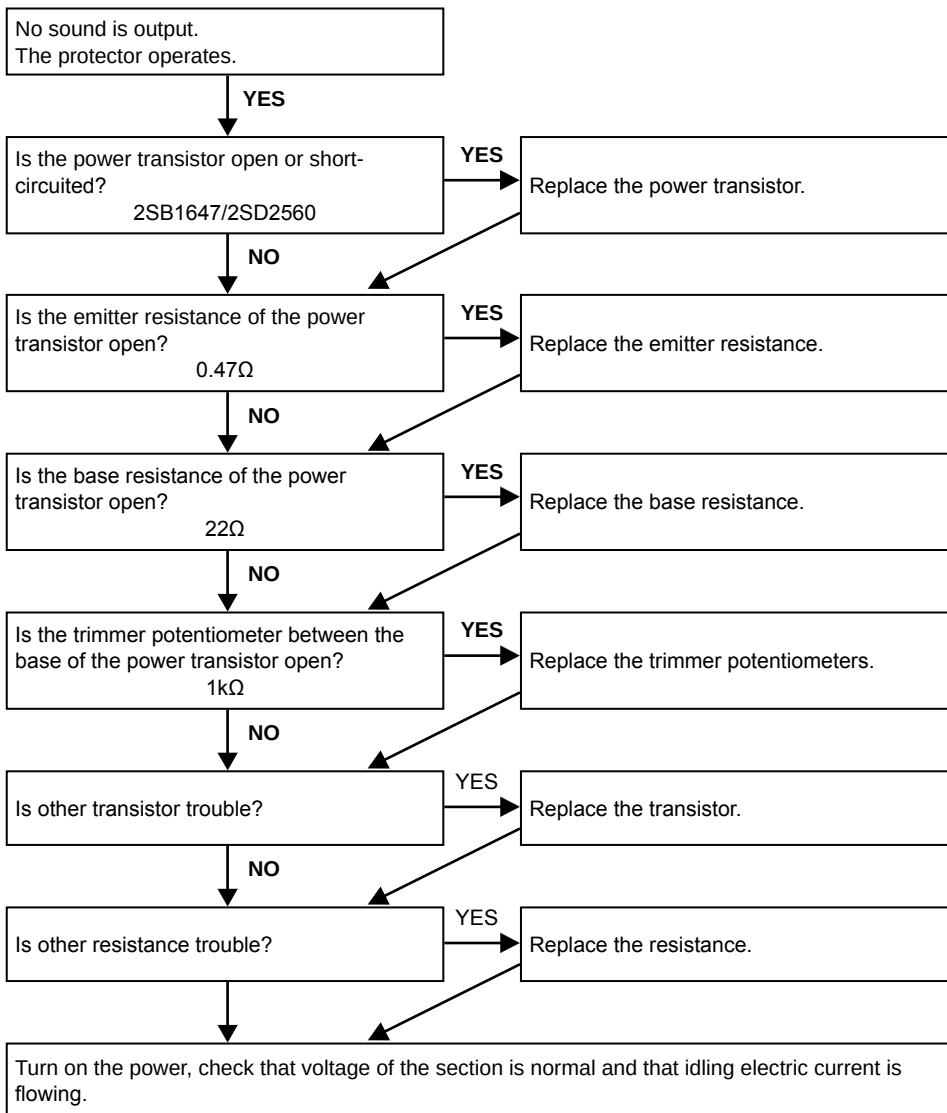


4. AUDIO

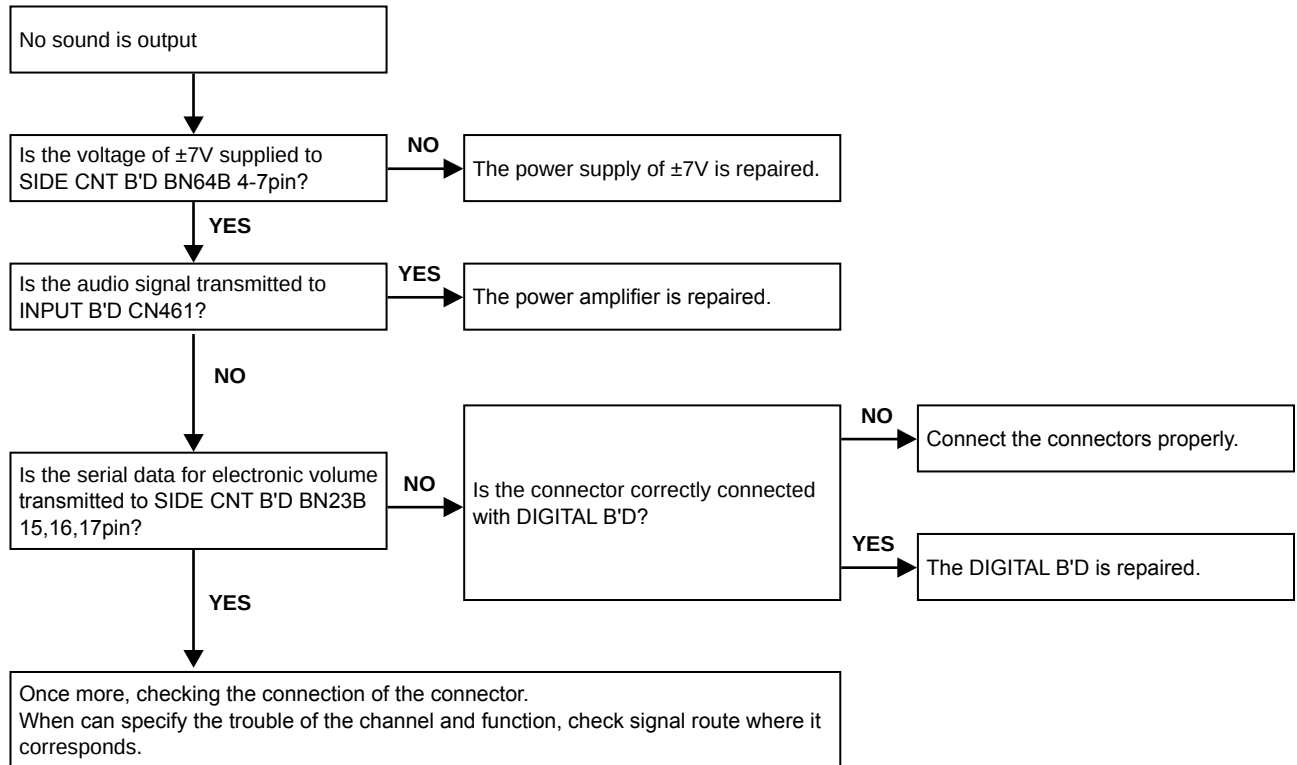
4.1. AUDIO CHECK



4.2. Power AMP

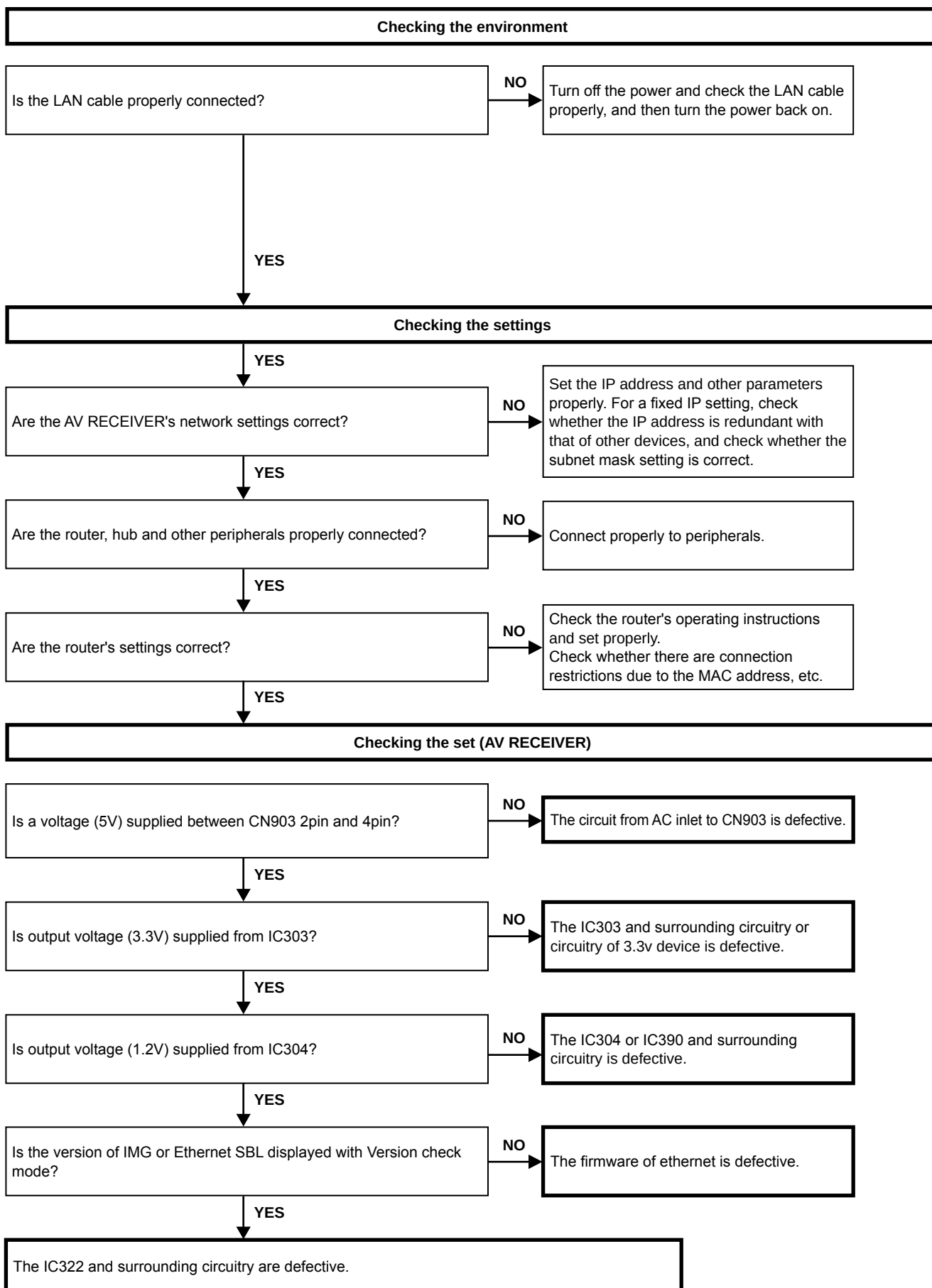


4.3. Analog audio

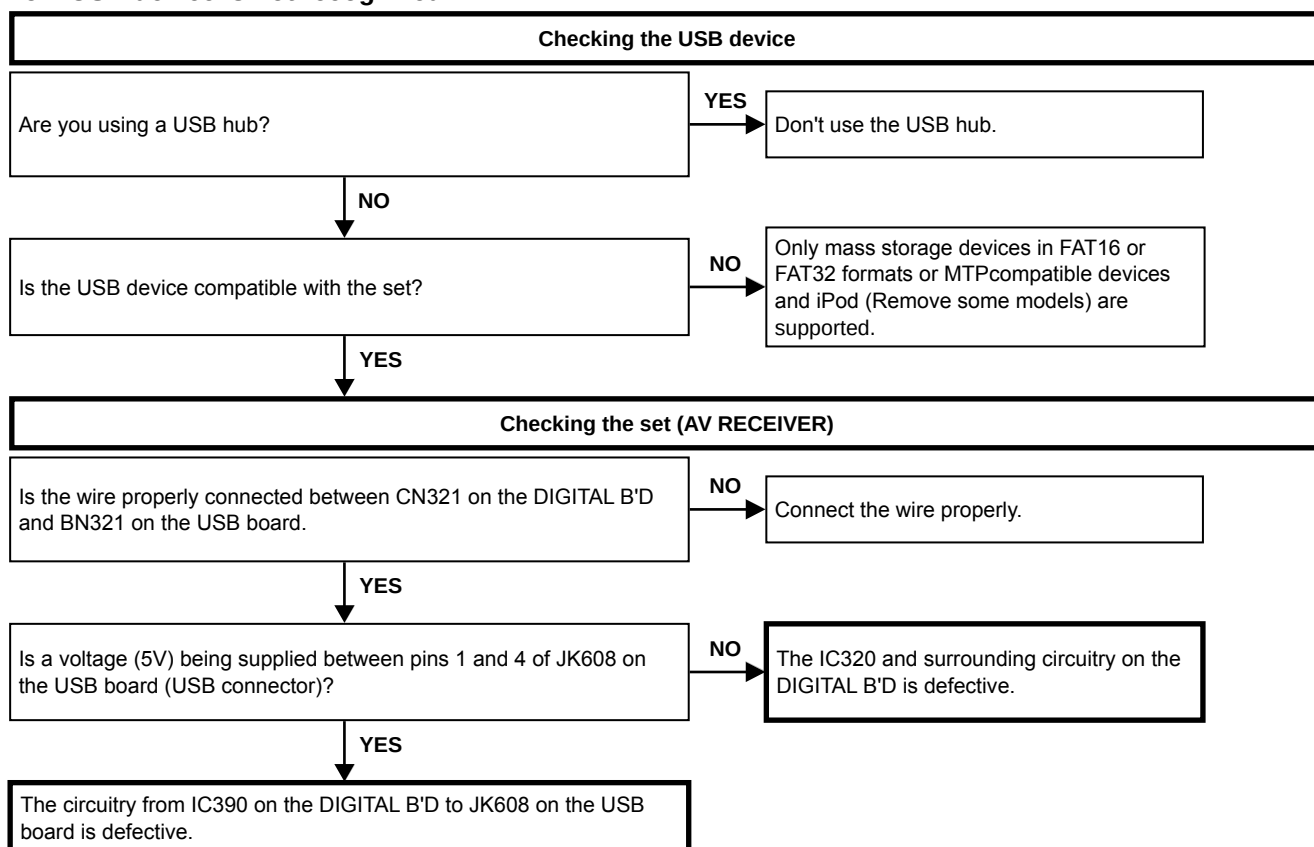


5. Network/USB

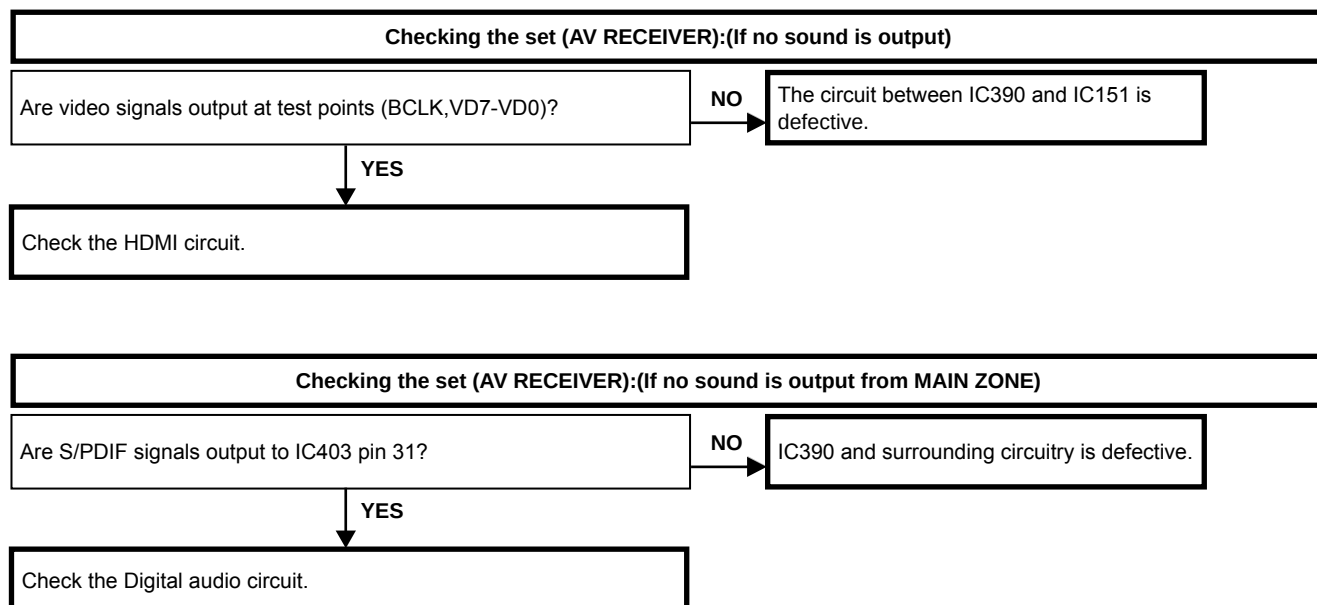
5.1. Cannot connect to network



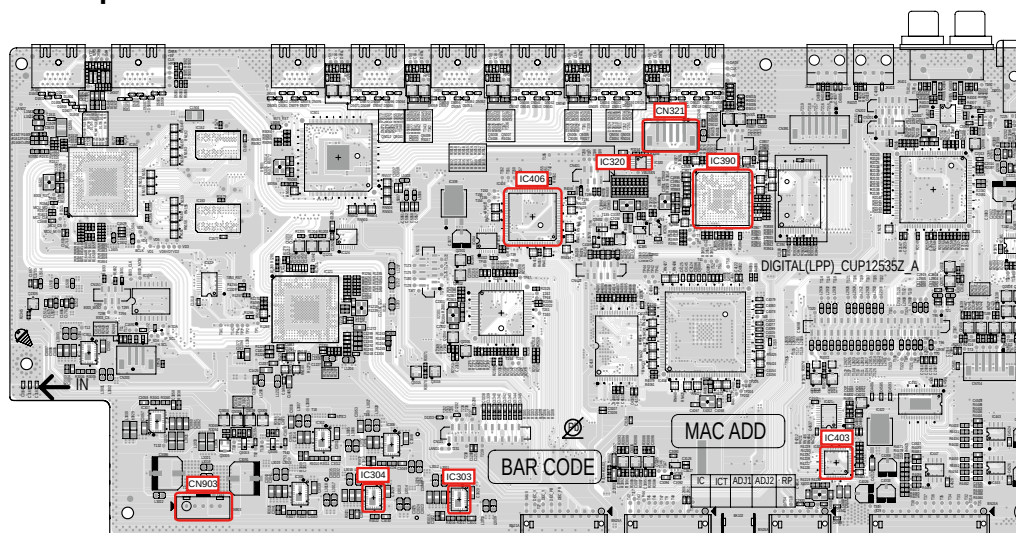
5.2.USB device is not recognized



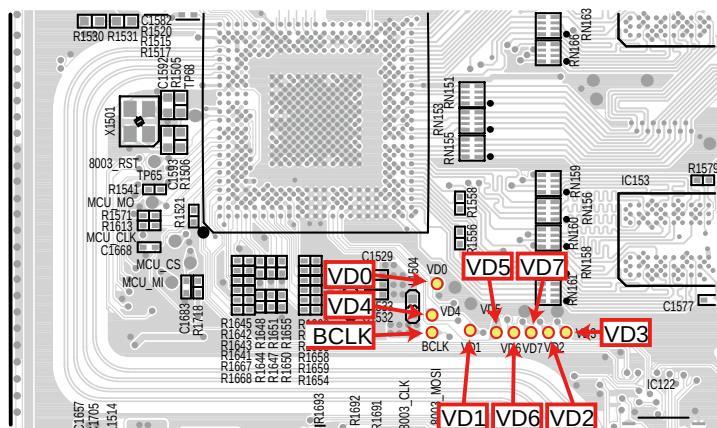
5.3. No picture or sound is output



DIGITAL test point

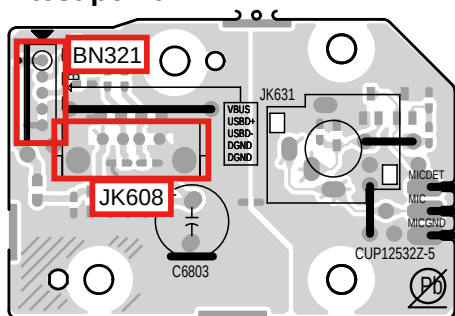


(A SIDE)



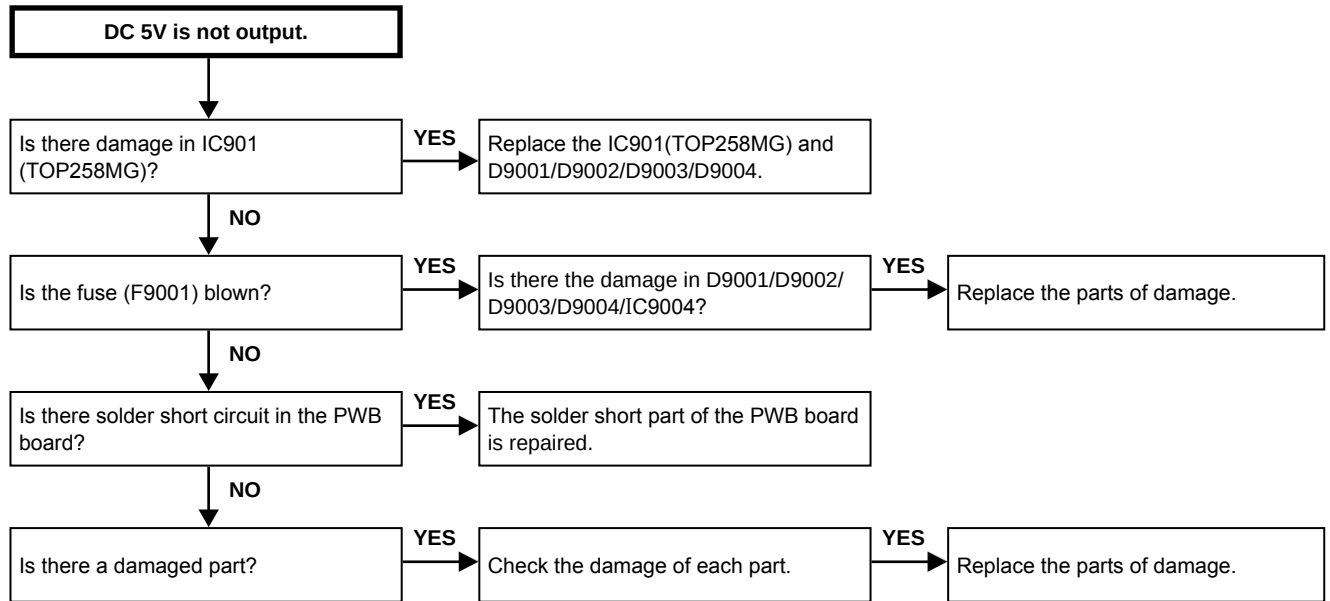
(A SIDE)

USB test point

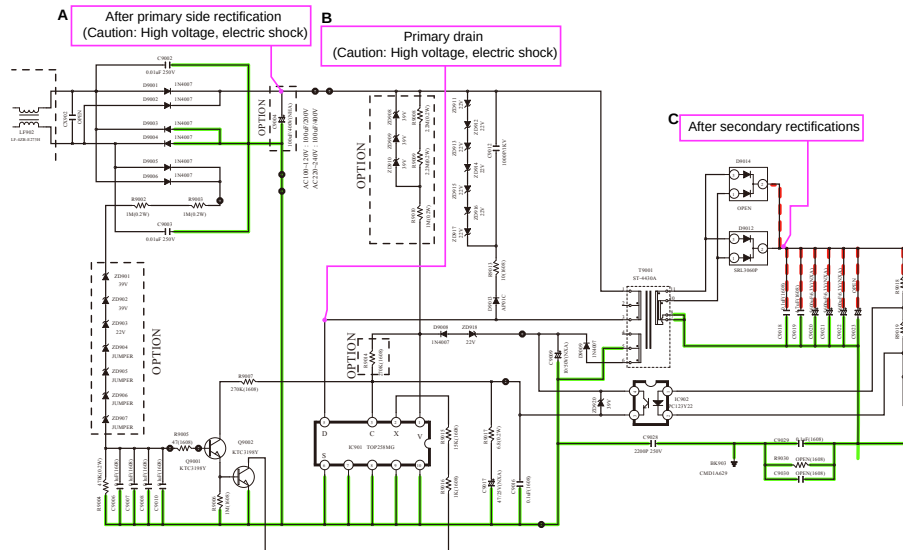
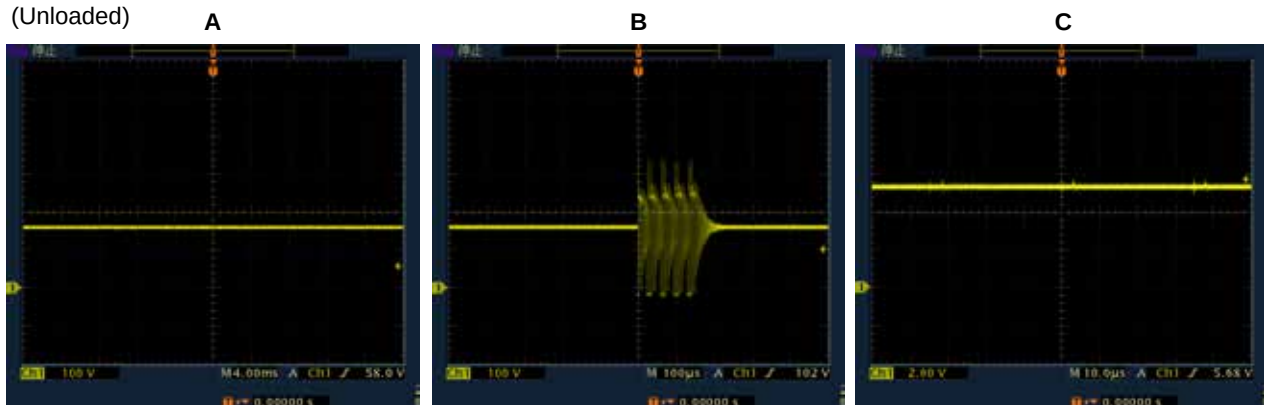


(A SIDE)

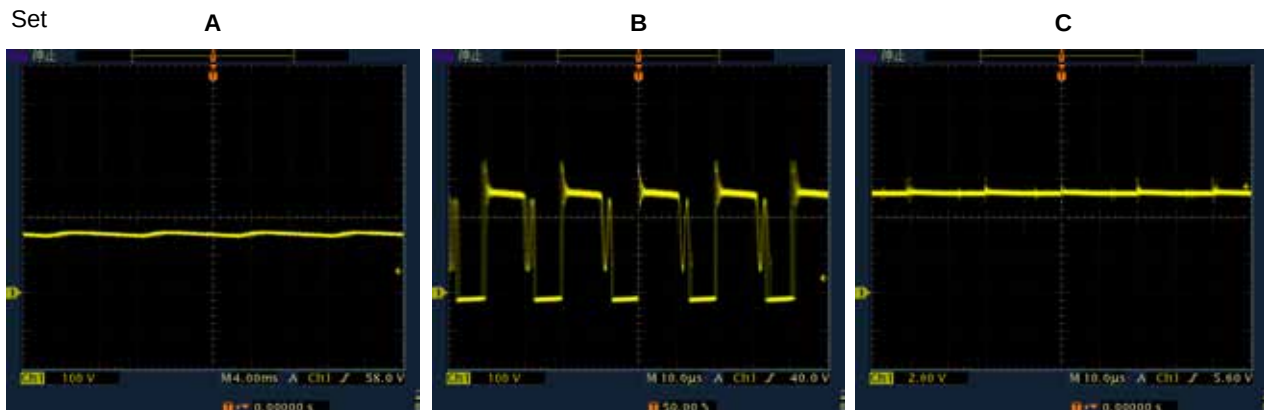
6. SMPS



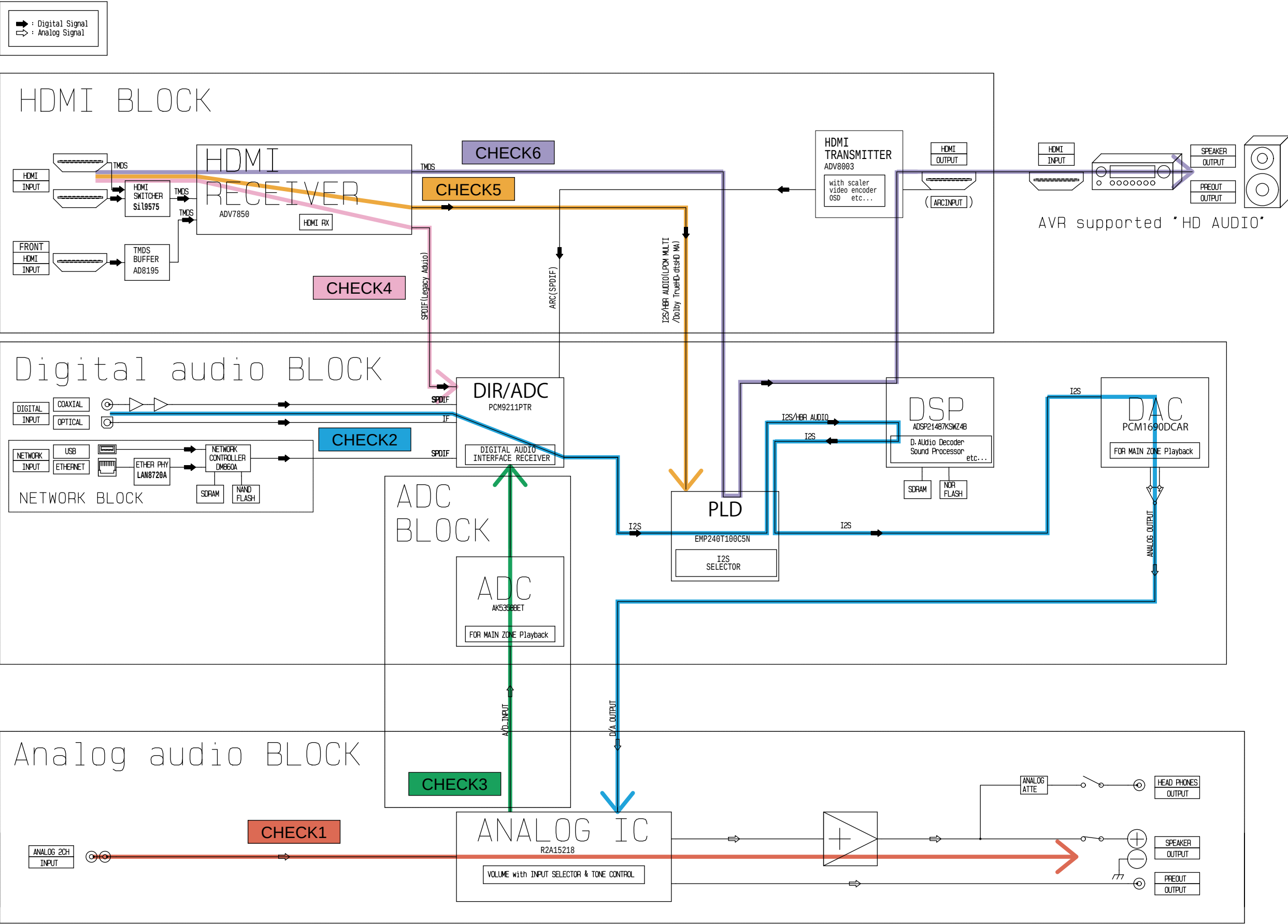
Operation waveform for each part

SMPS unit
(Unloaded)

Set

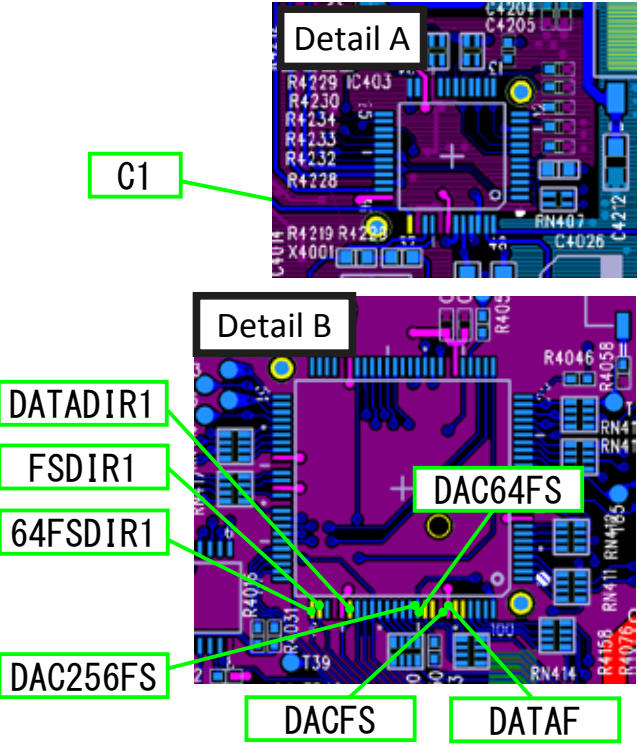
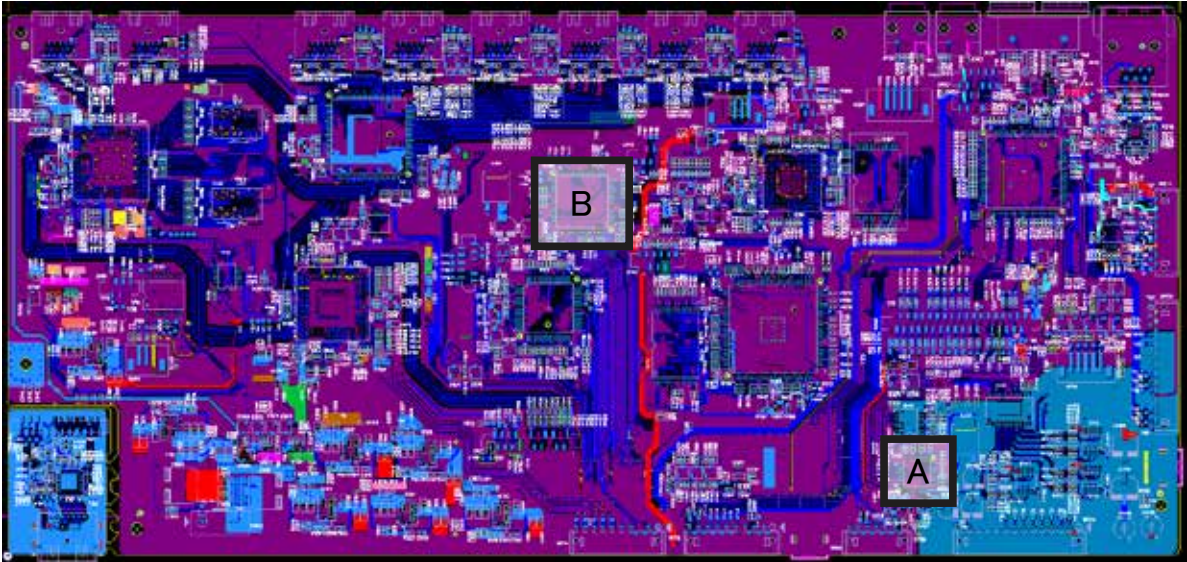
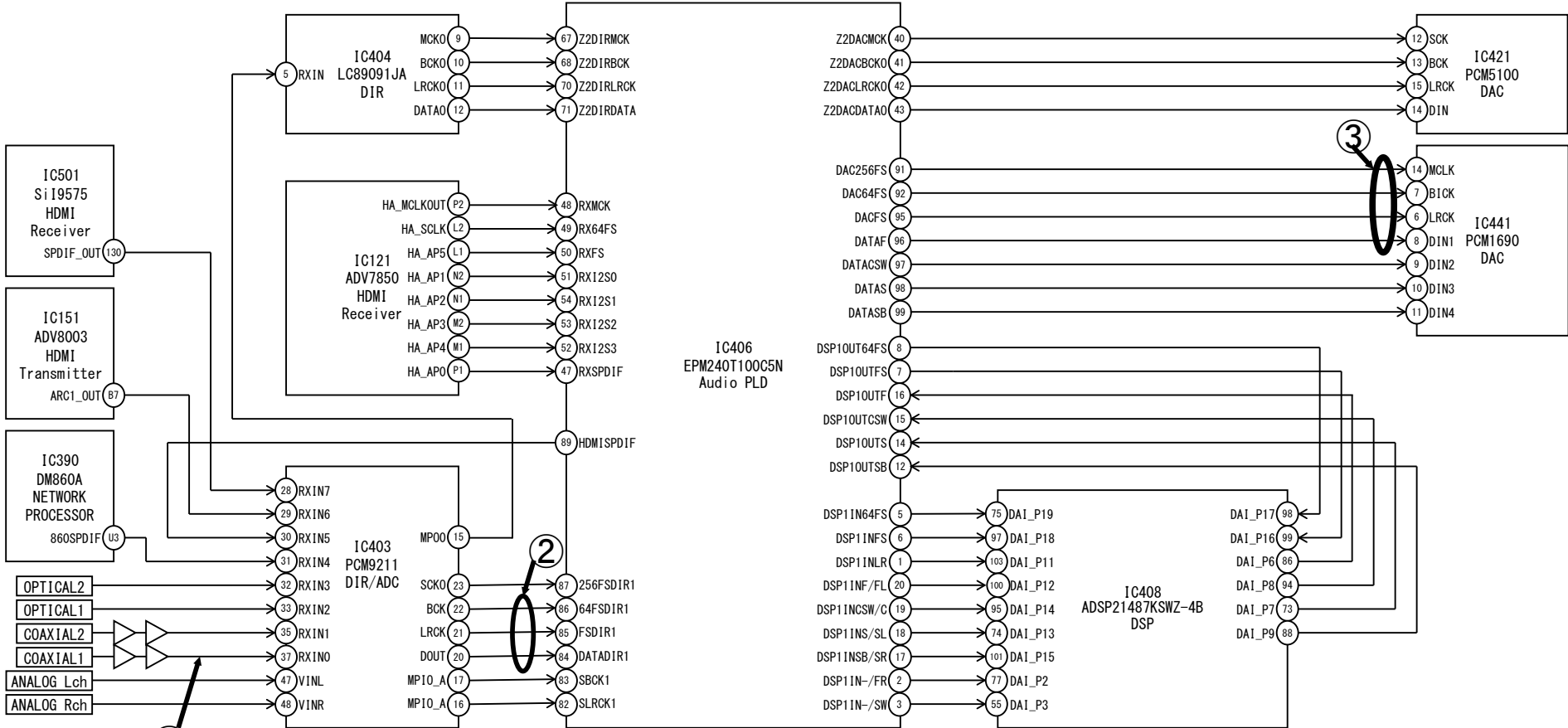
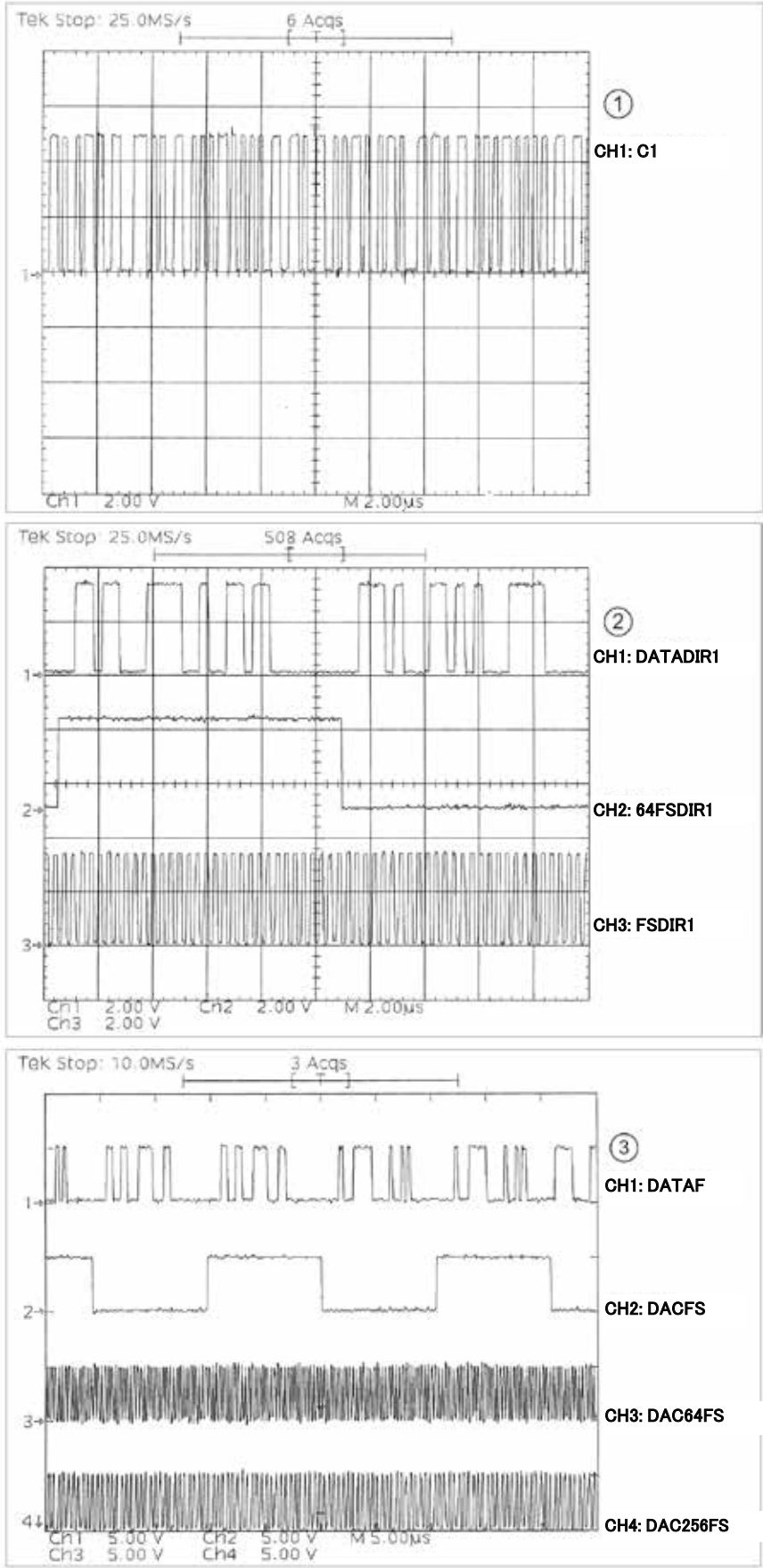


AUDIO CHECK PASS
Refer to troubleshooting "4.1. AUDIO CHECK"(91 page).



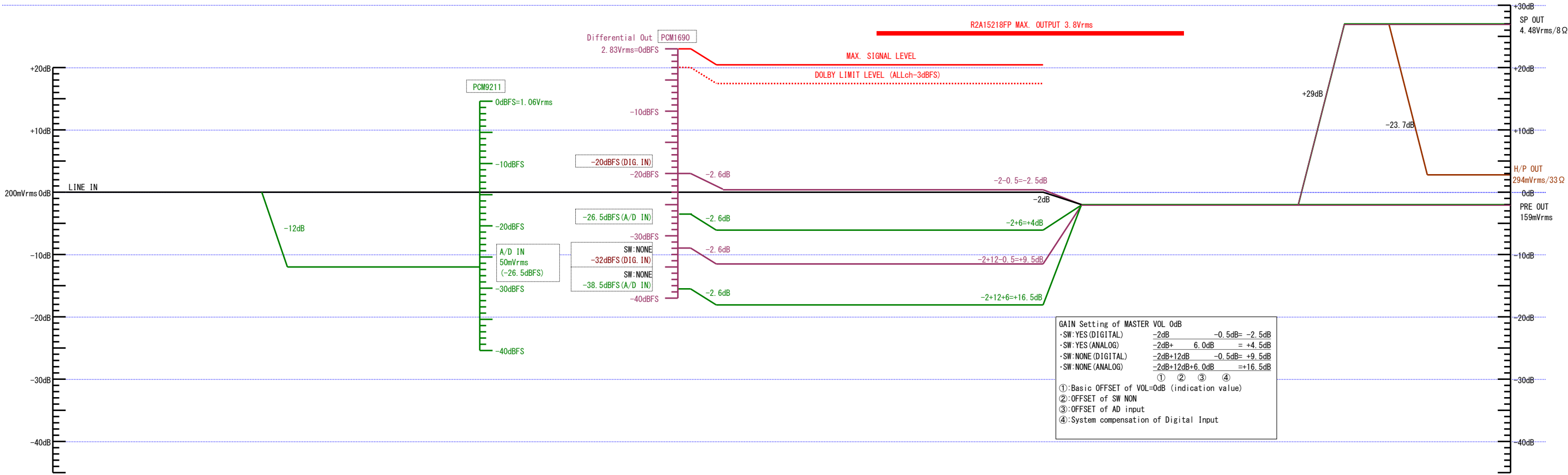
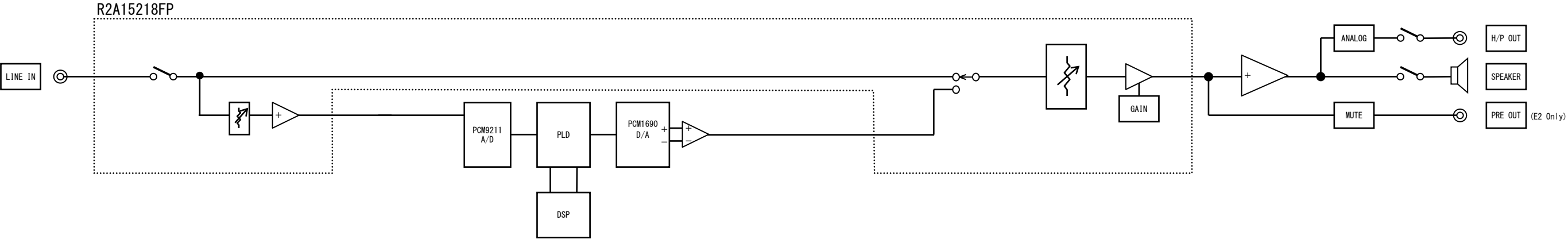
CLOCK FLOW & WAVE FORM IN DIGITAL BLOCK

WAVE FORM

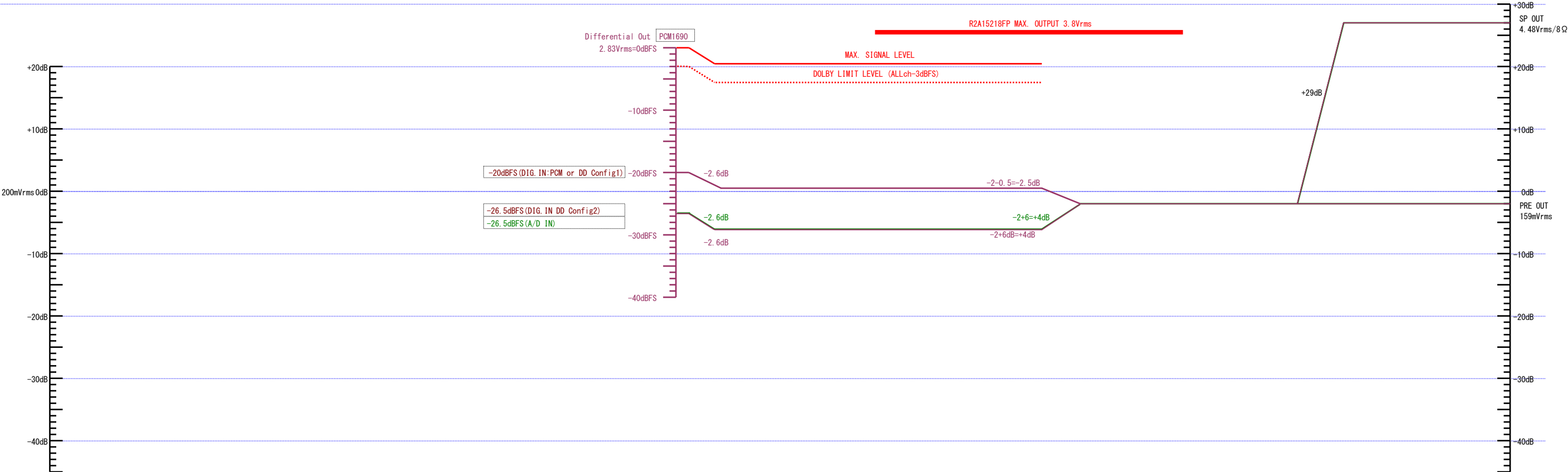
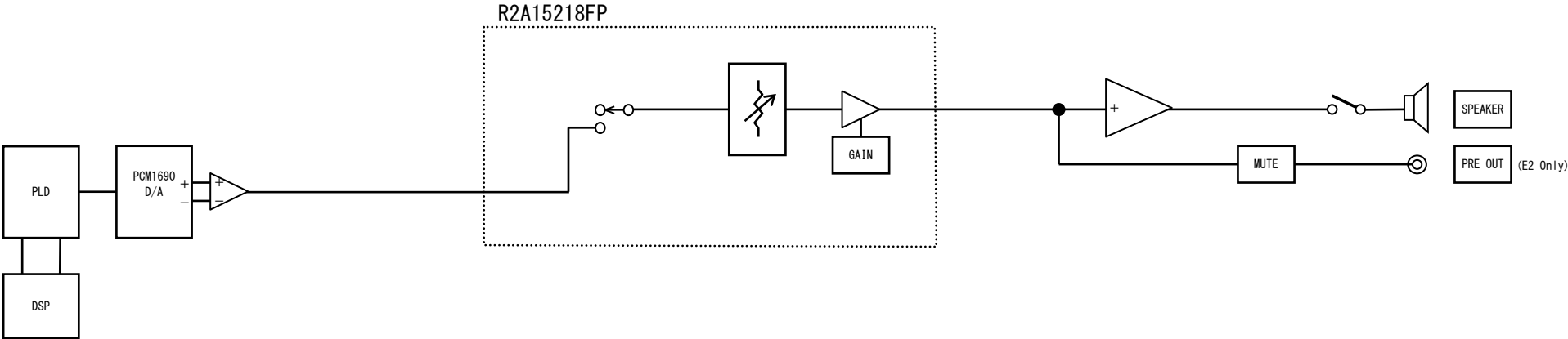


LEVEL DIAGRAM

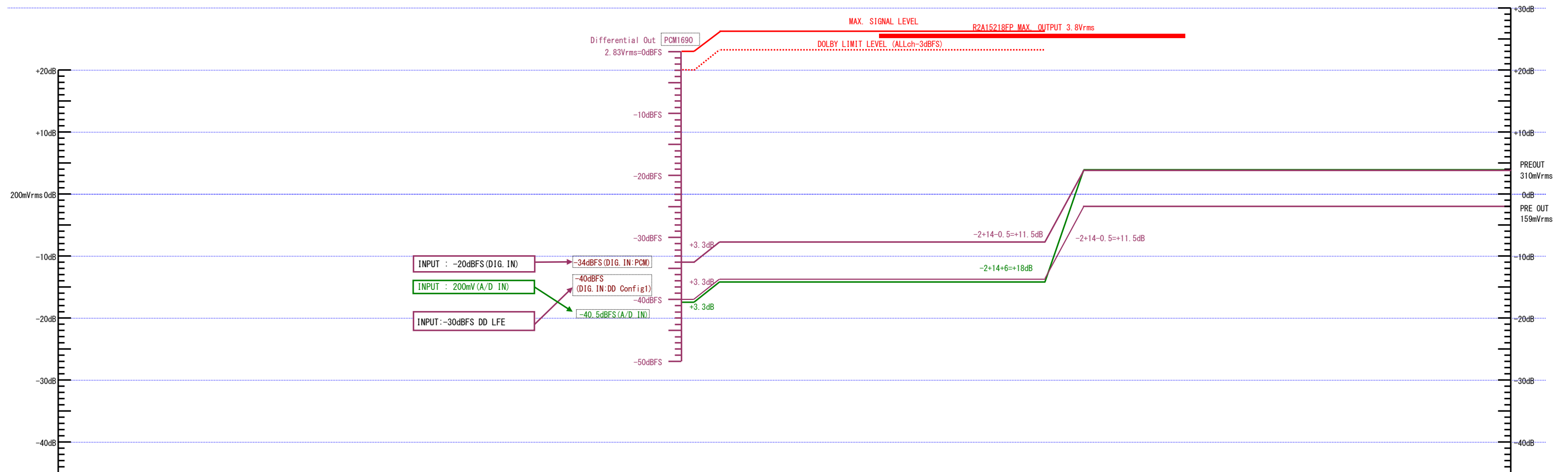
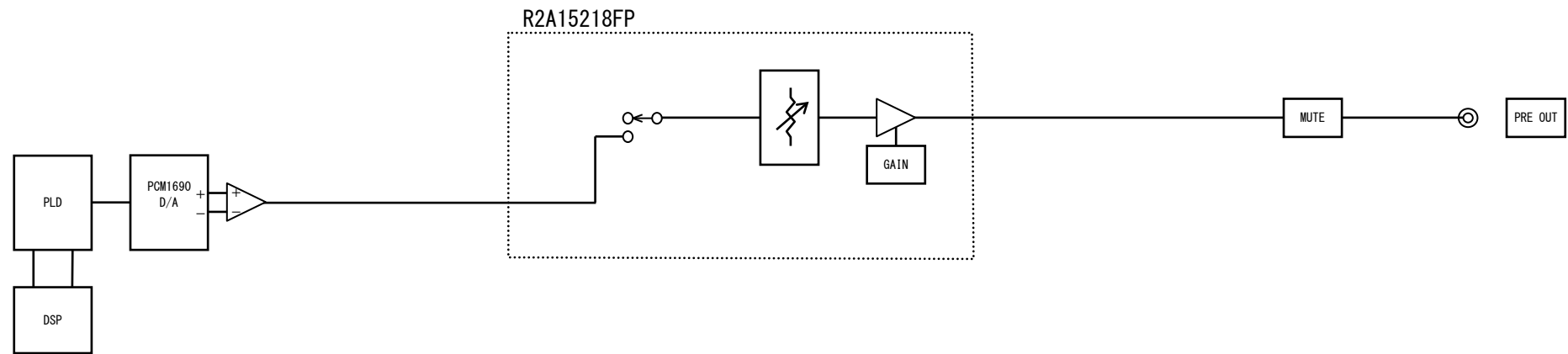
AVR-X3000
LEVEL DIAGRAM
FRONT ch



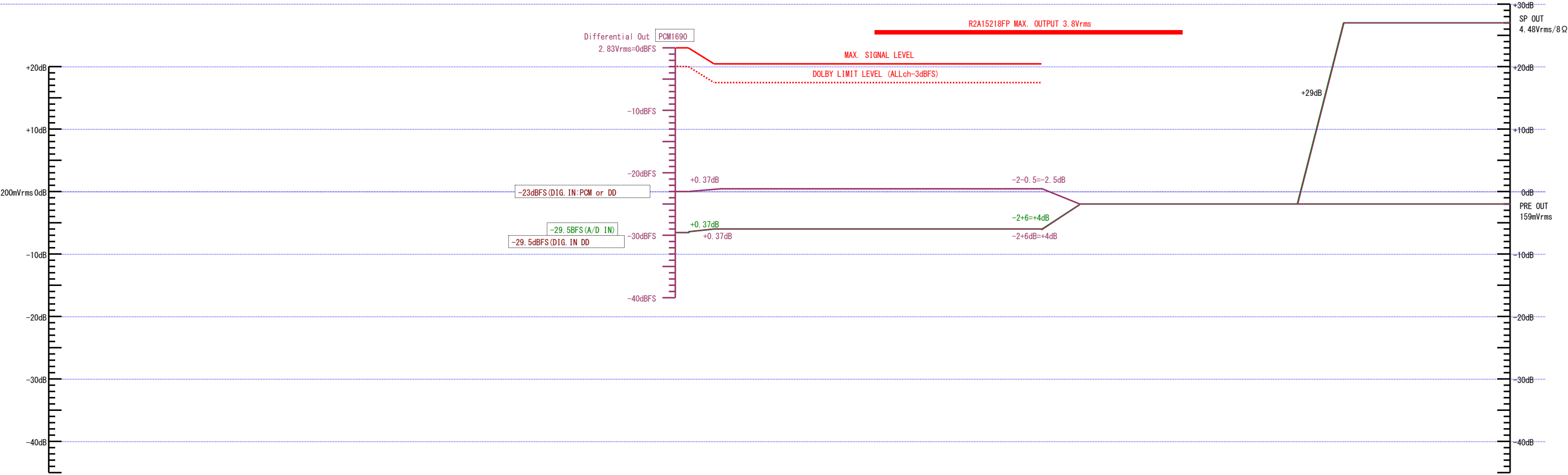
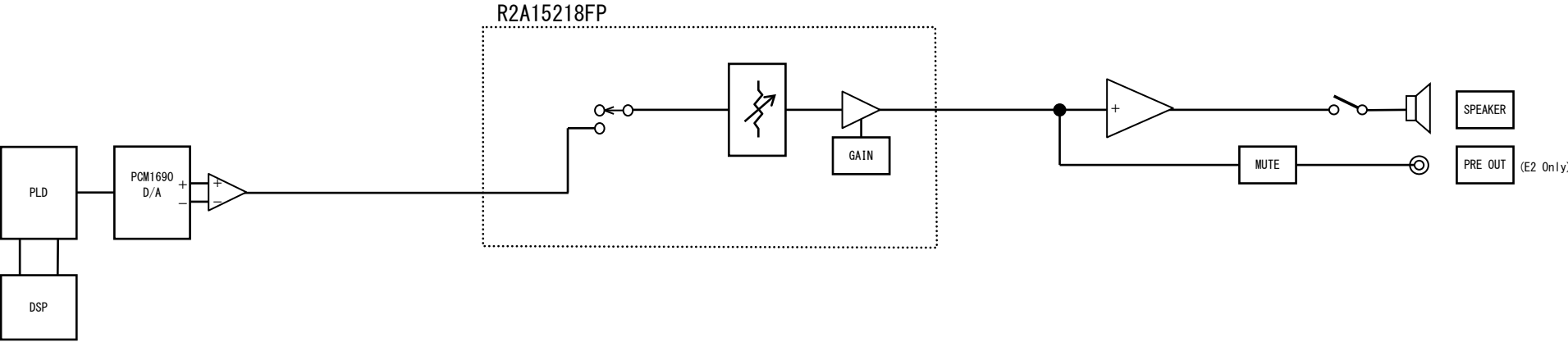
AVR-X3000
LEVEL DIAGRAM
CENTER ch



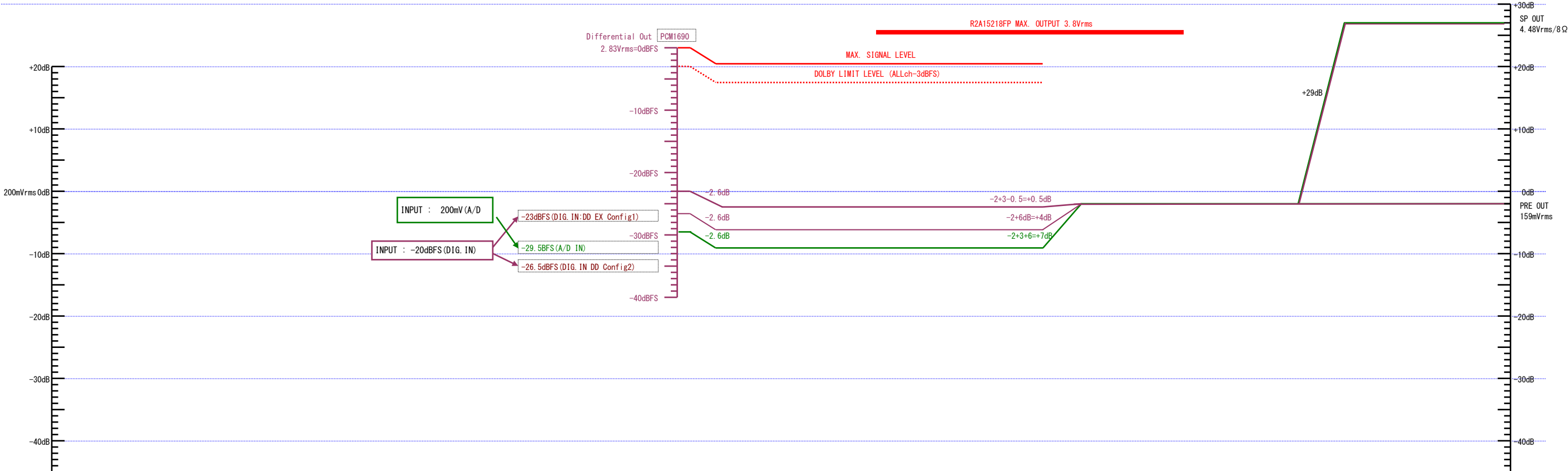
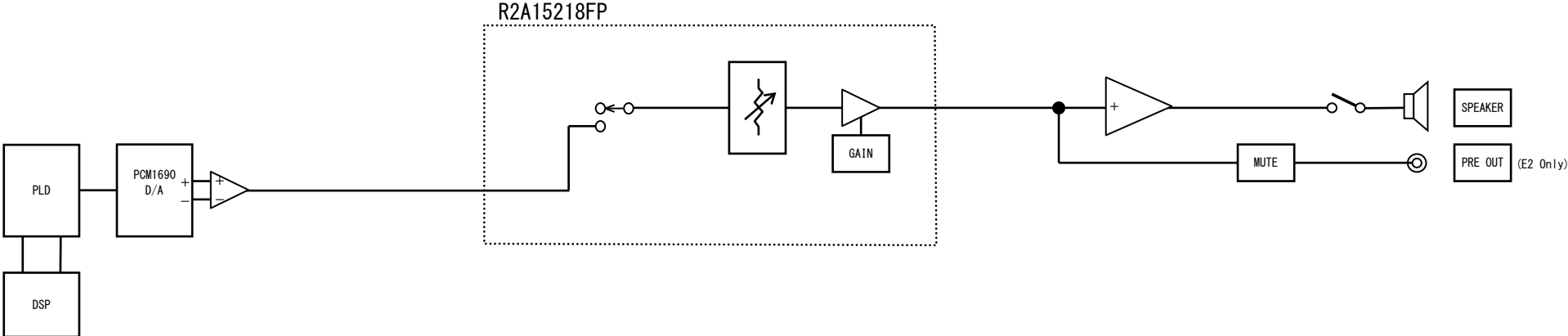
AVR-X3000
LEVEL DIAGRAM
SUBWOOFER ch



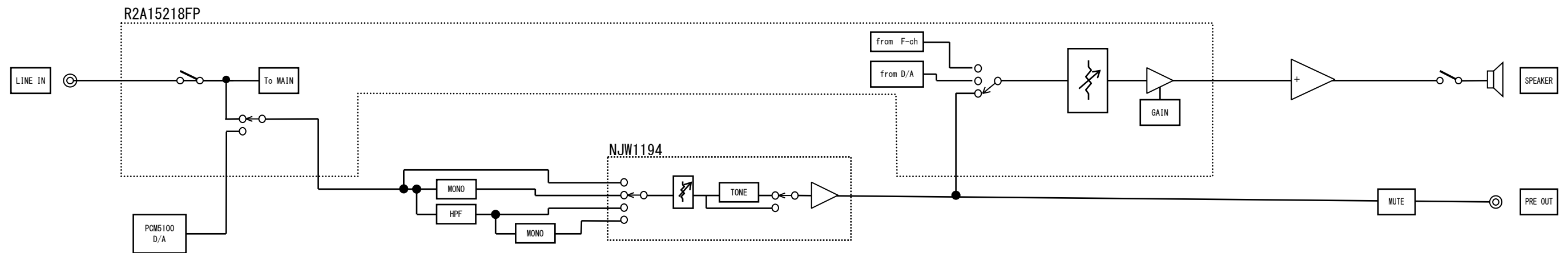
AVR-X3000
LEVEL DIAGRAM
SURROUND ch



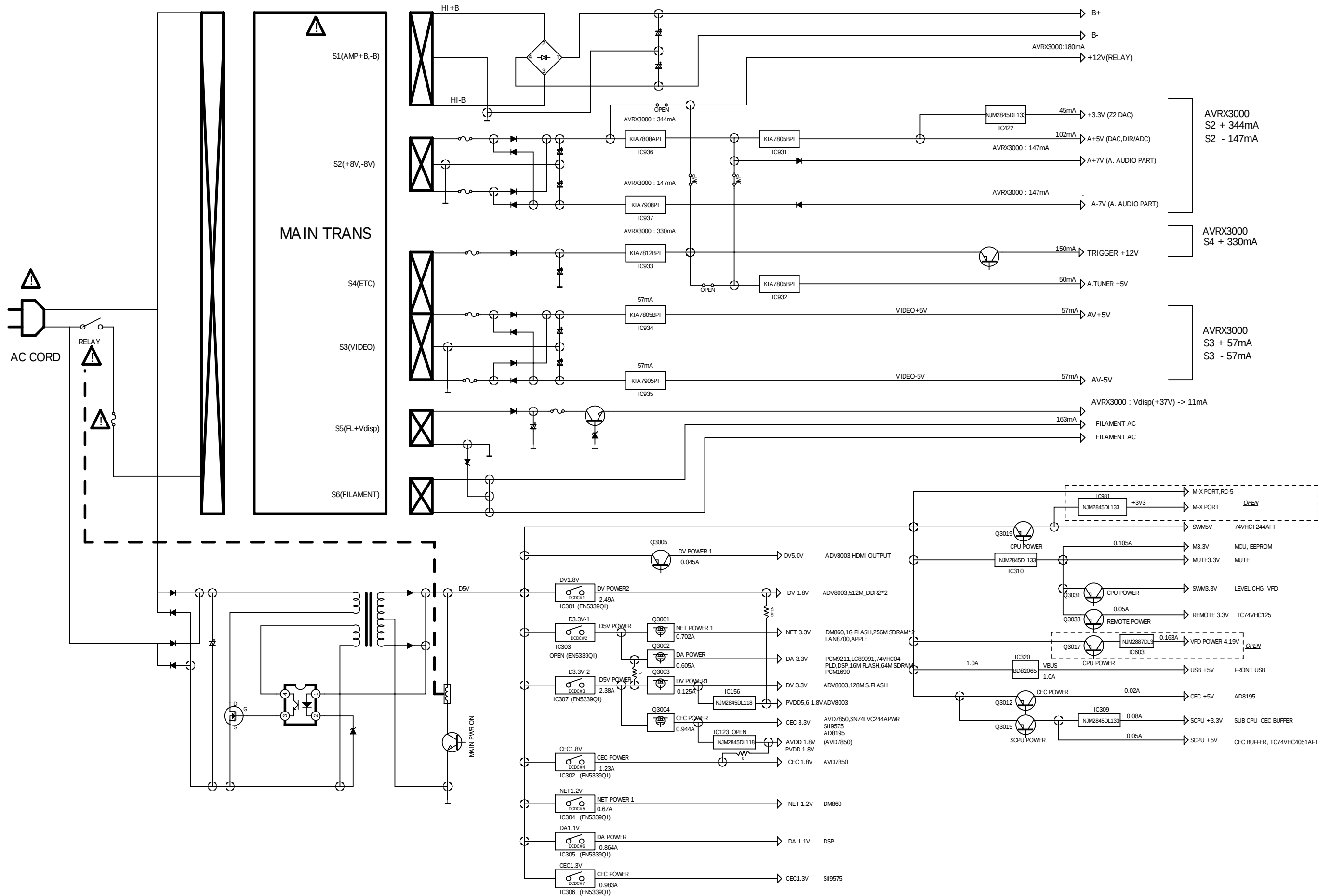
AVR-X3000
LEVEL DIAGRAM
SURR.BACK ch



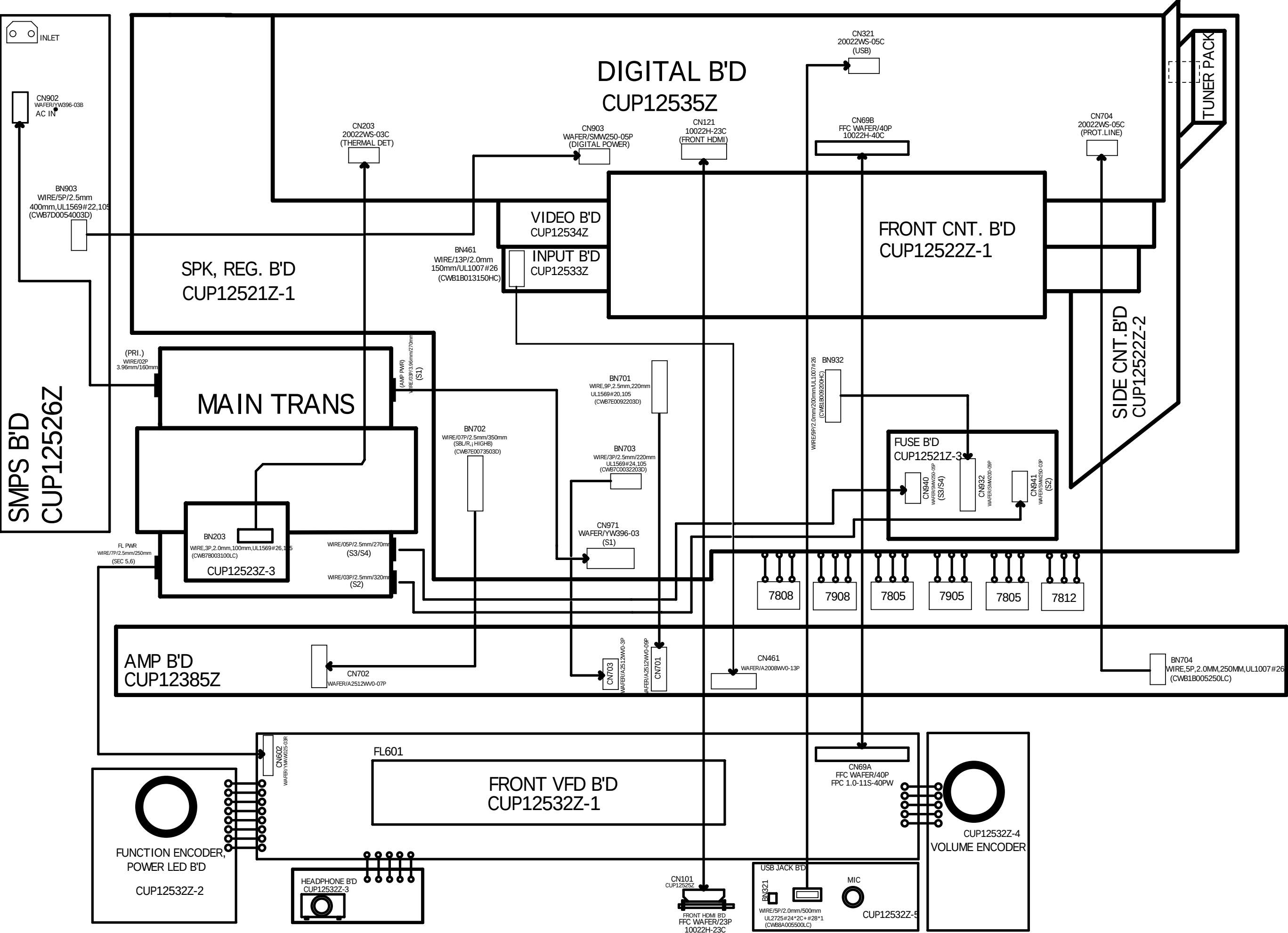
**AVR-X3000
LEVEL DIAGRAM
ZONE2**



POWER DIAGRAM



WIRING DIAGRAM



PRINTED WIRING BOARDS

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

A

B

C

D

E

F

G

H

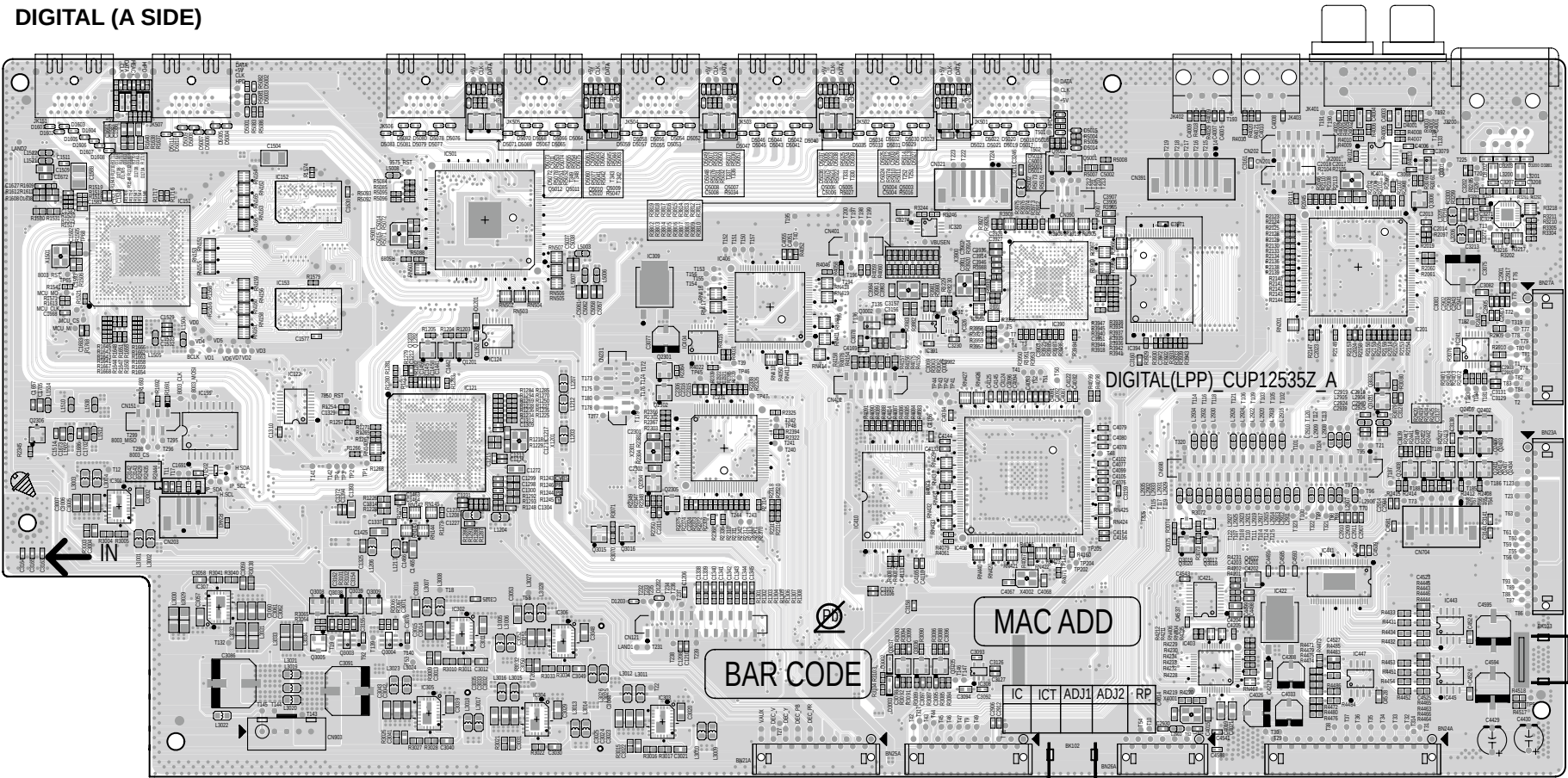
J

K

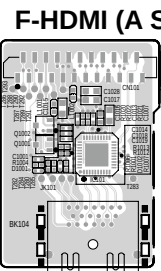
L

M

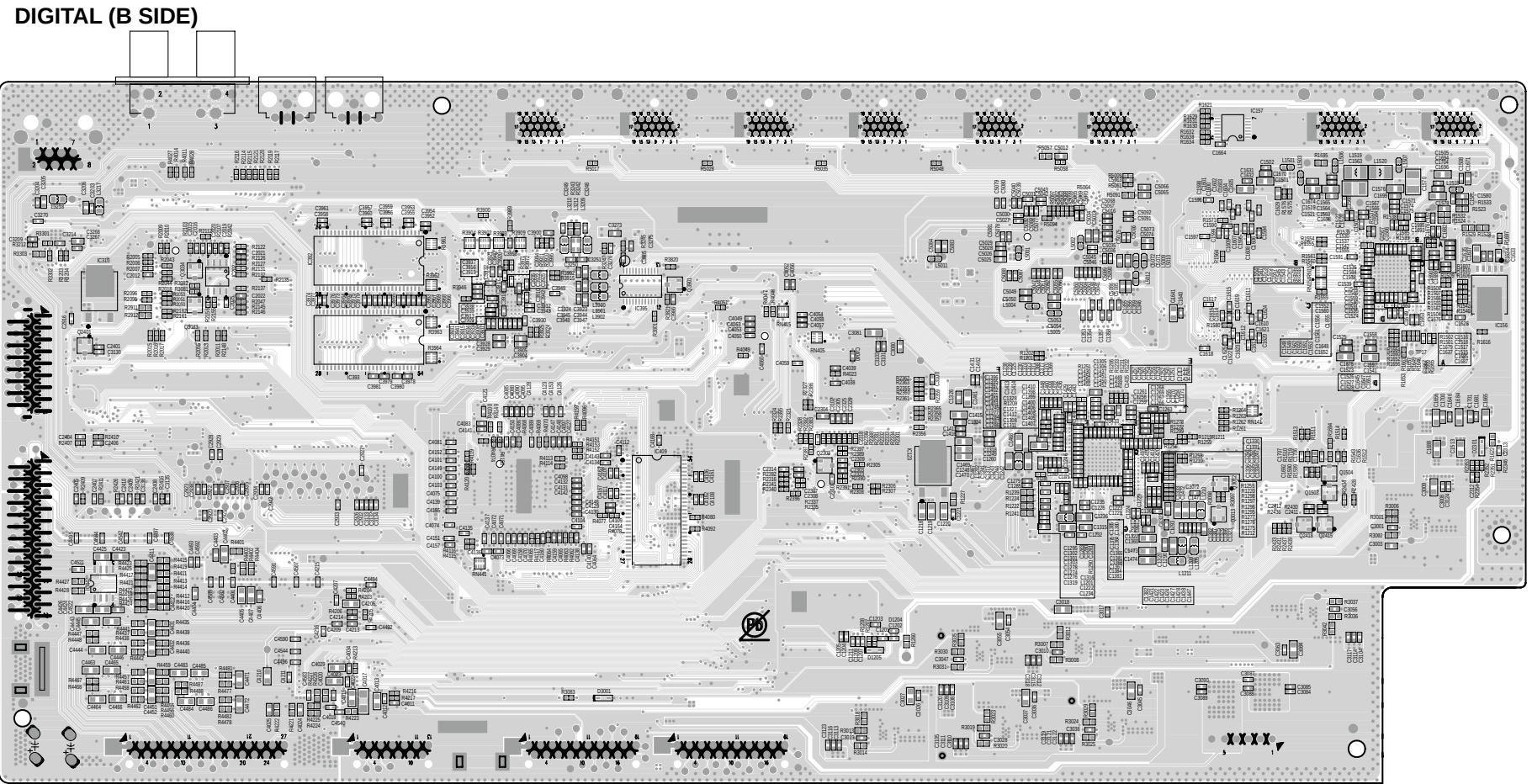
DIGITAL (A SIDE)



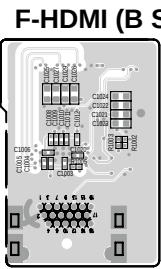
F-HDMI (A SIDE)

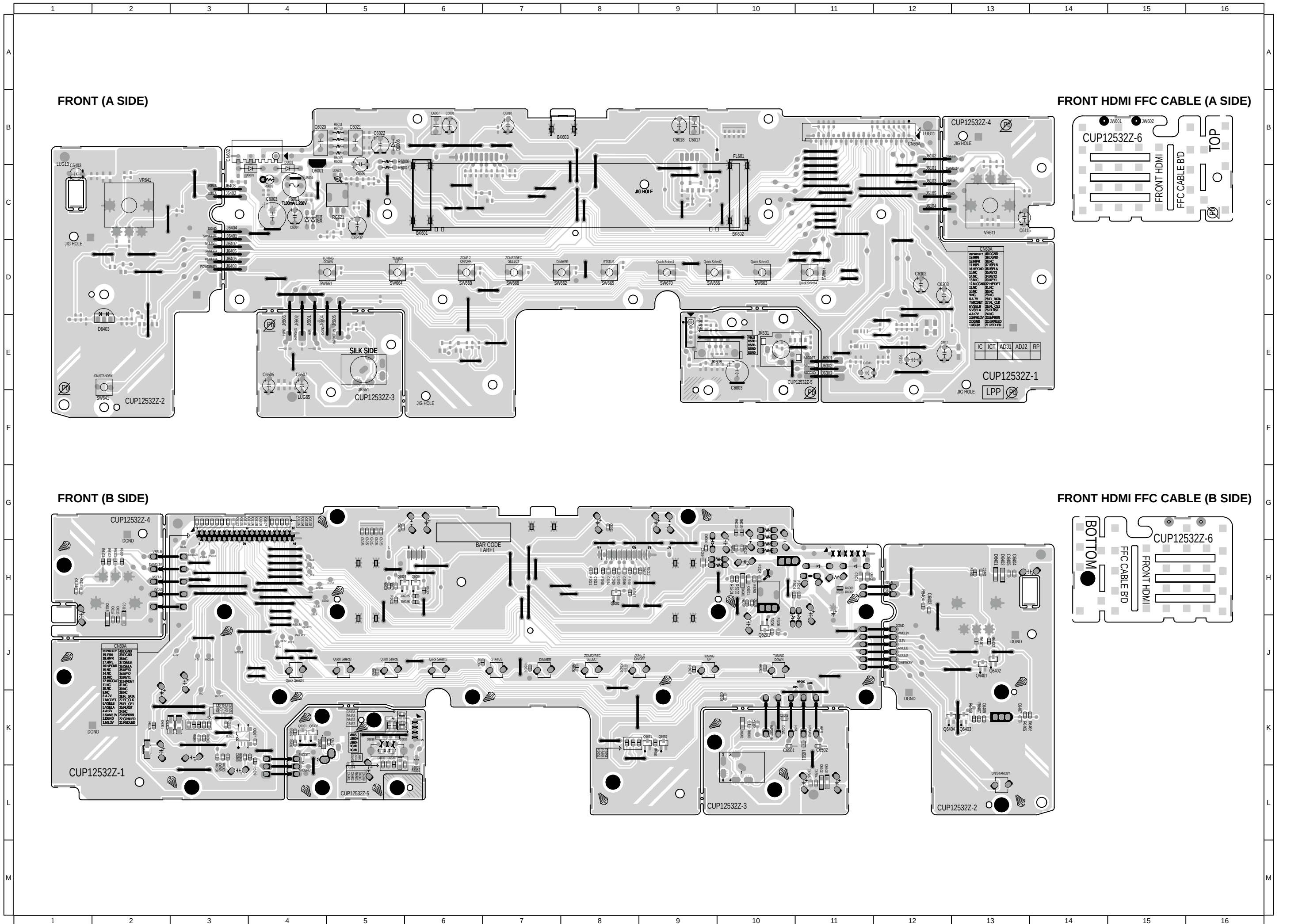


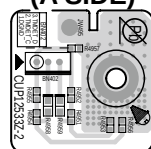
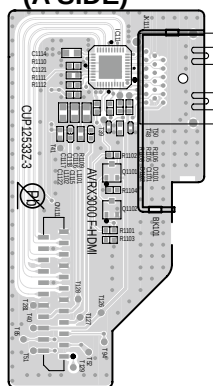
DIGITAL (B SIDE)

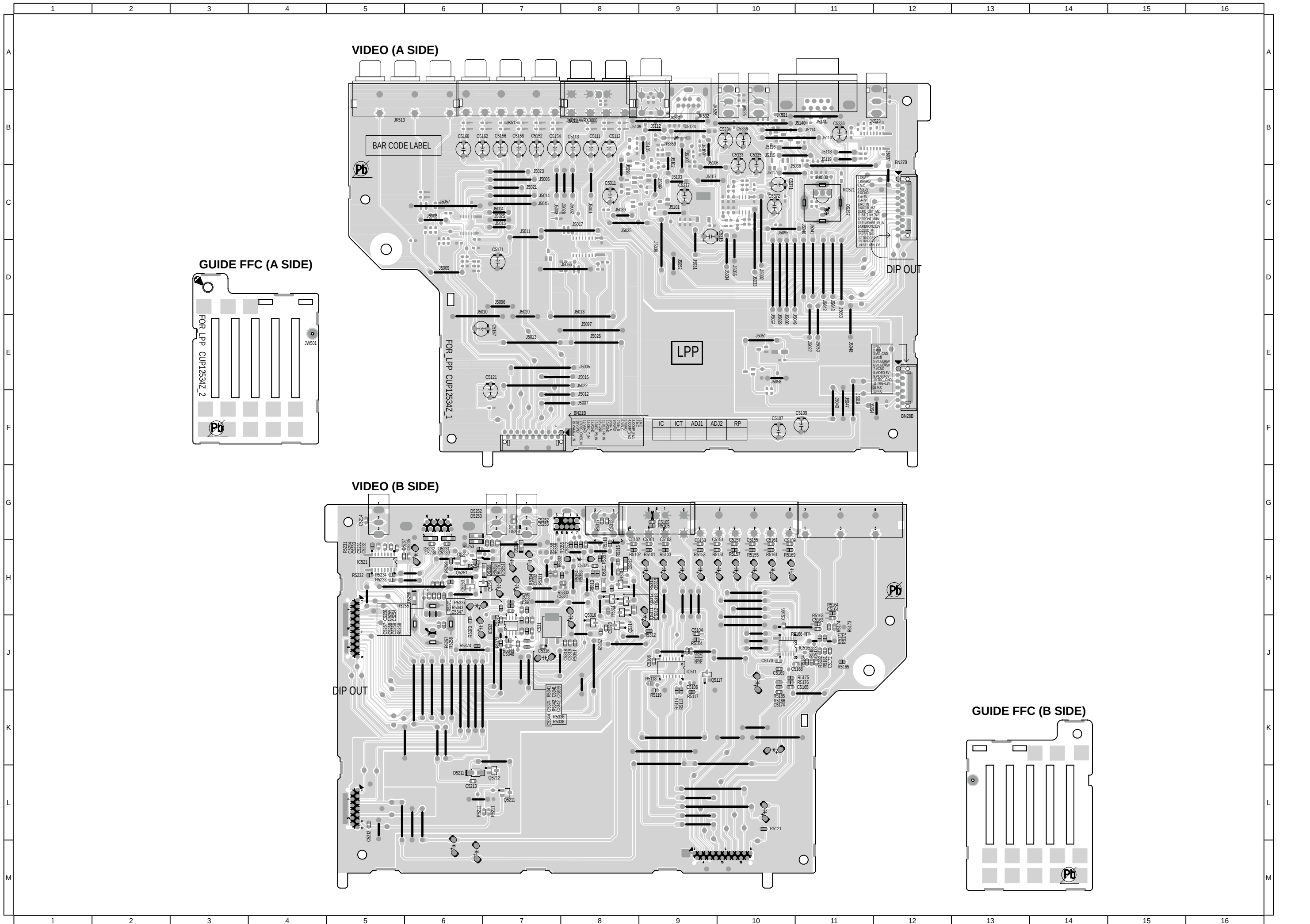


F-HDMI (B SIDE)









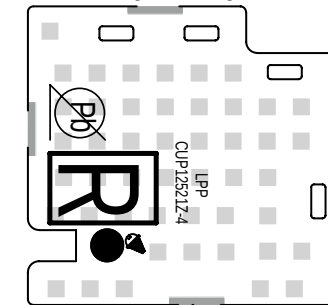
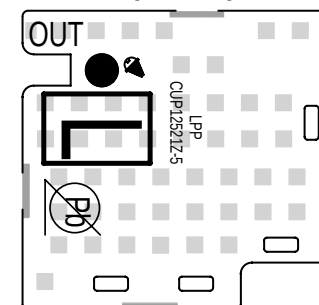
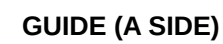
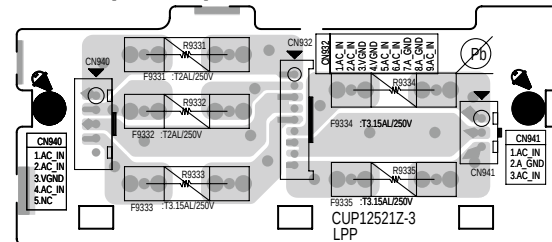
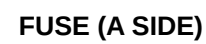
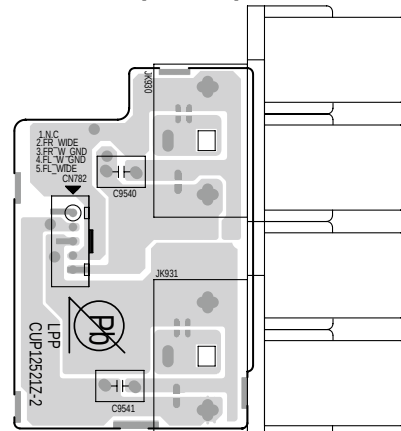
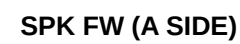
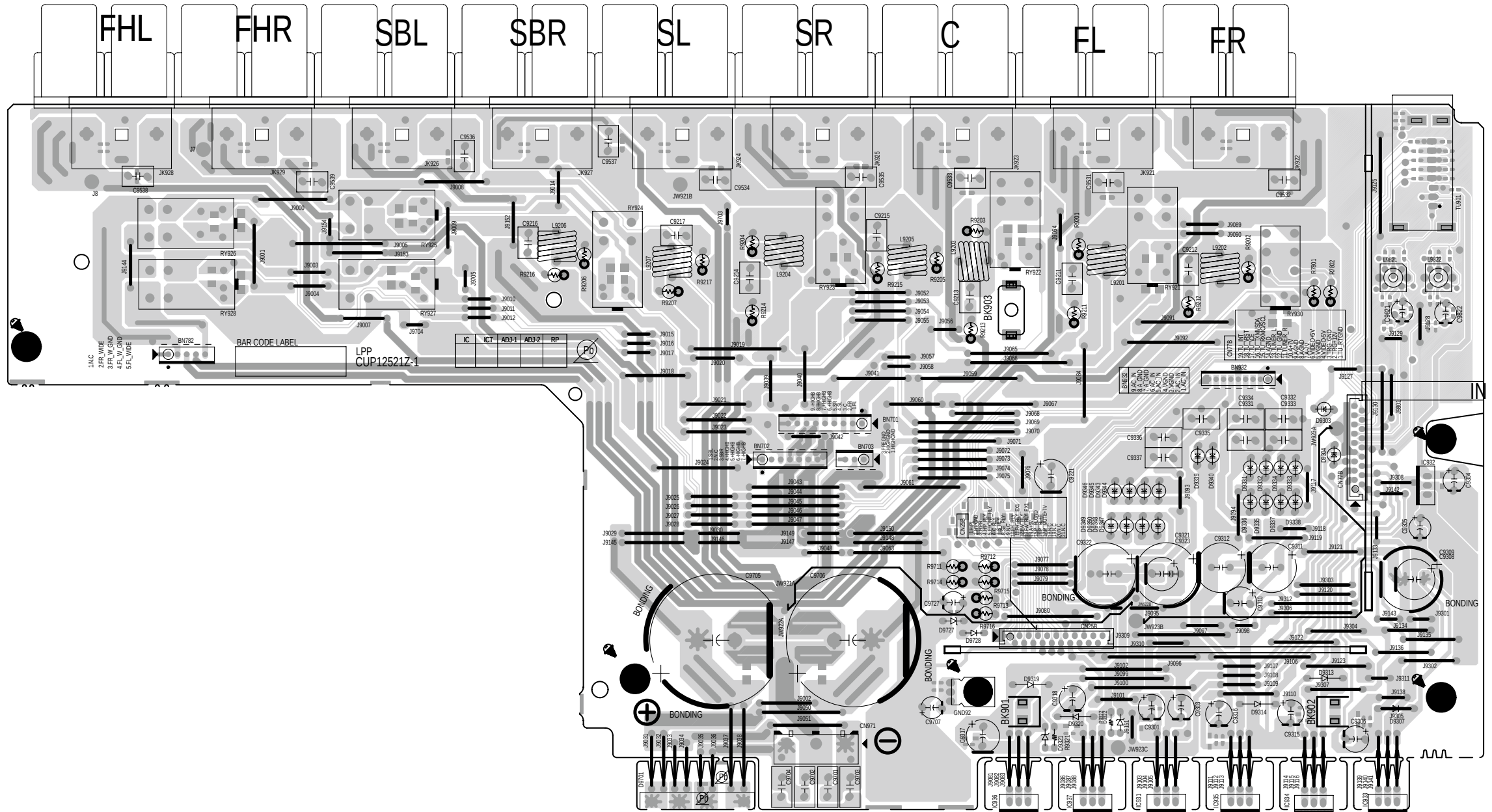
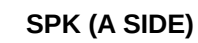
VIDEO (A SIDE)

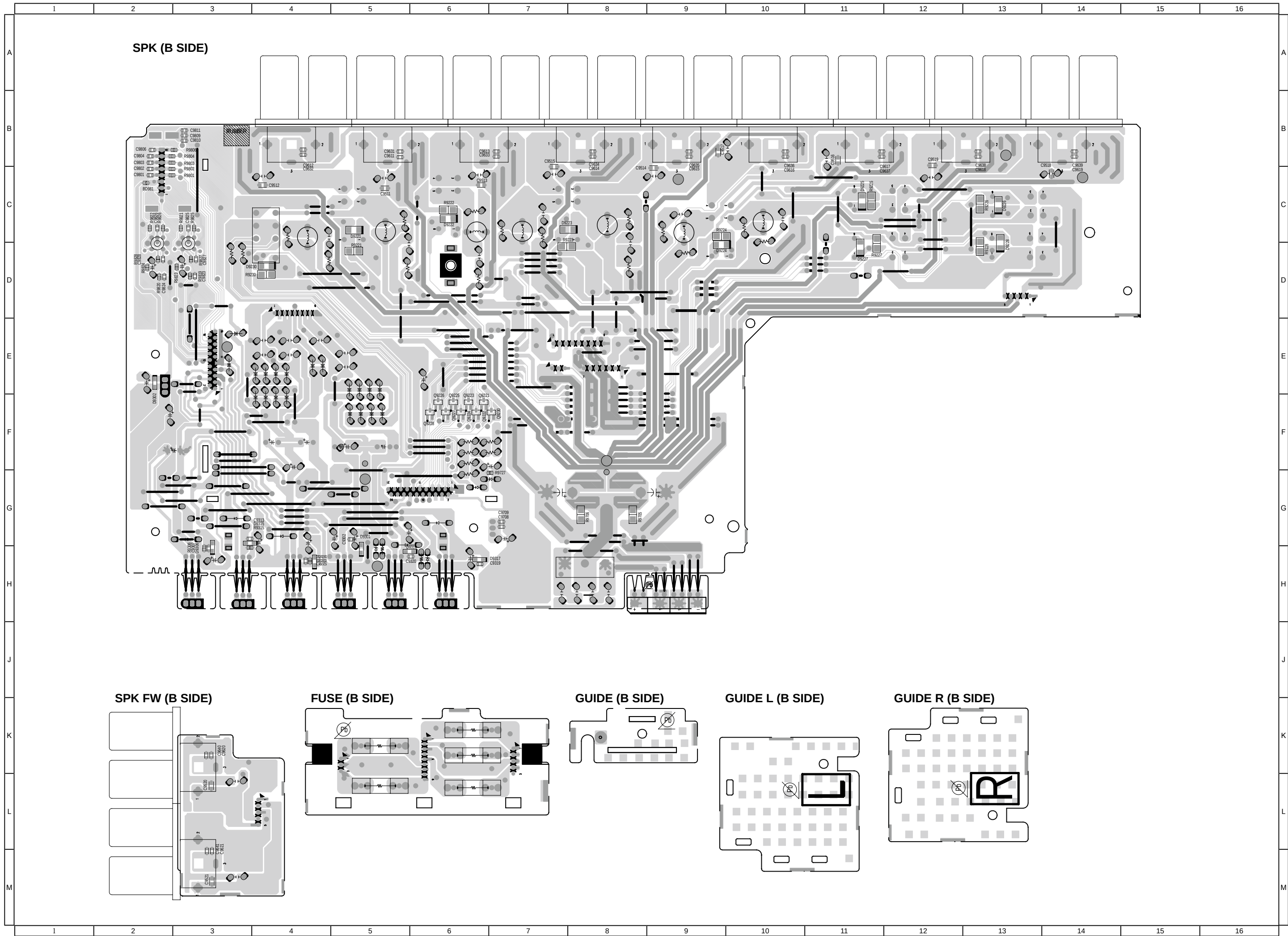
GUIDE FFC (A SIDE)

VIDEO (B SIDE)

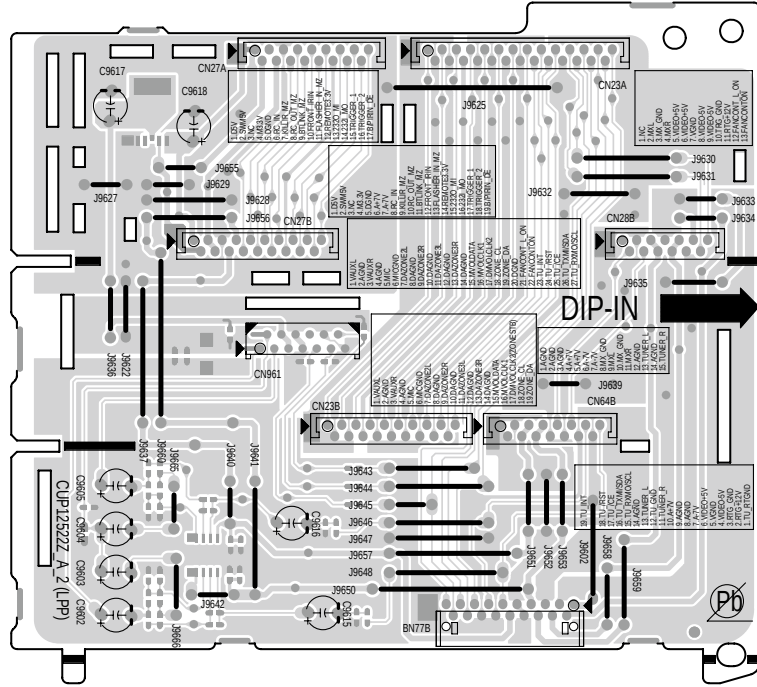
GUIDE FFC (B SIDE)

AMP(B SIDE)

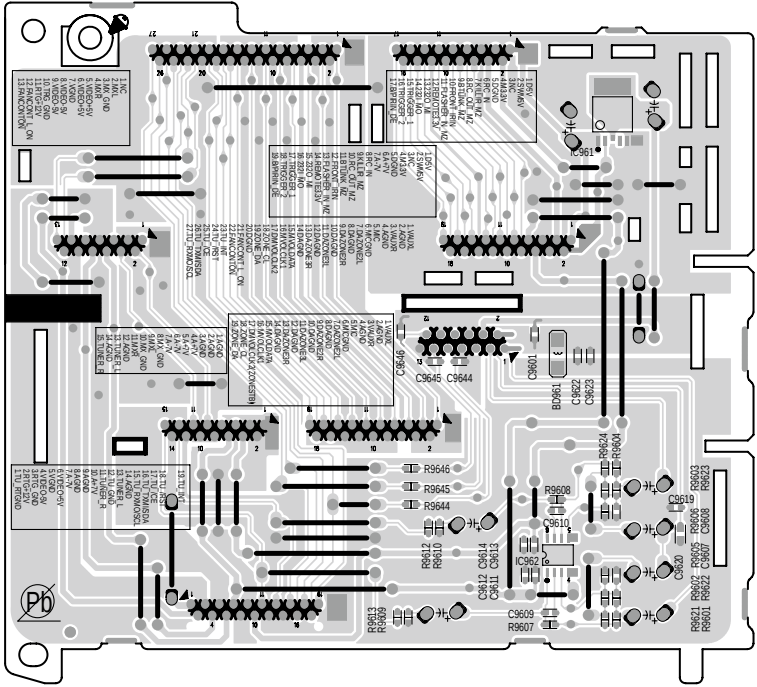




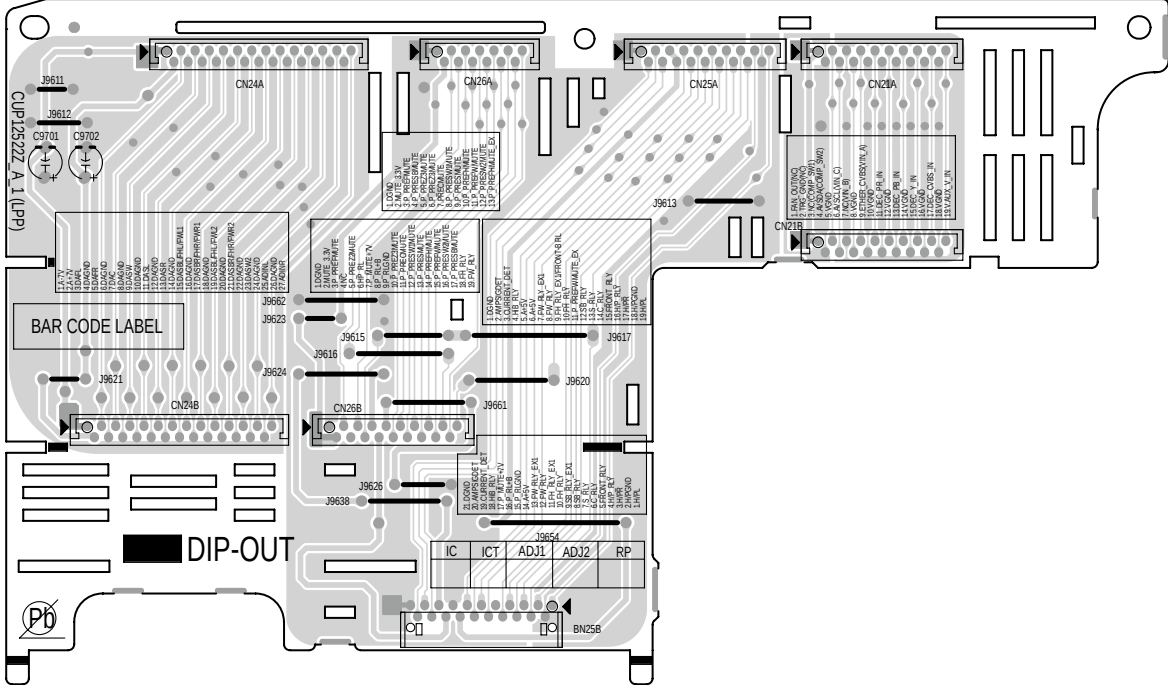
FRONT_CNT (A SIDE)



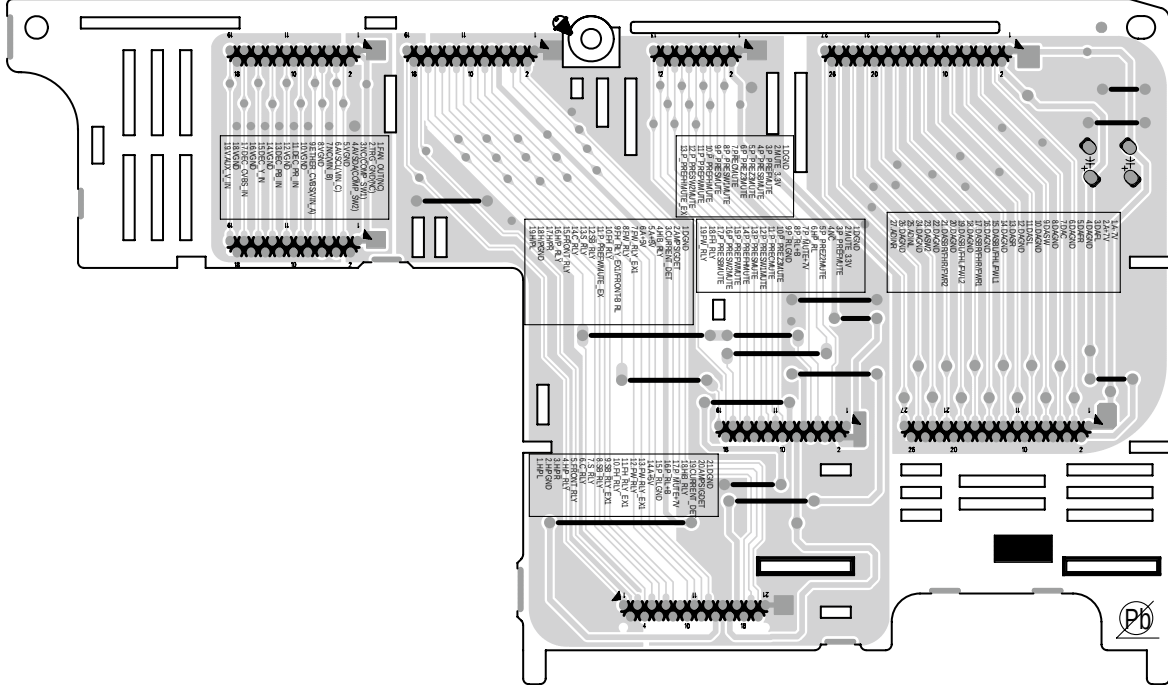
FRONT_CNT (B SIDE)

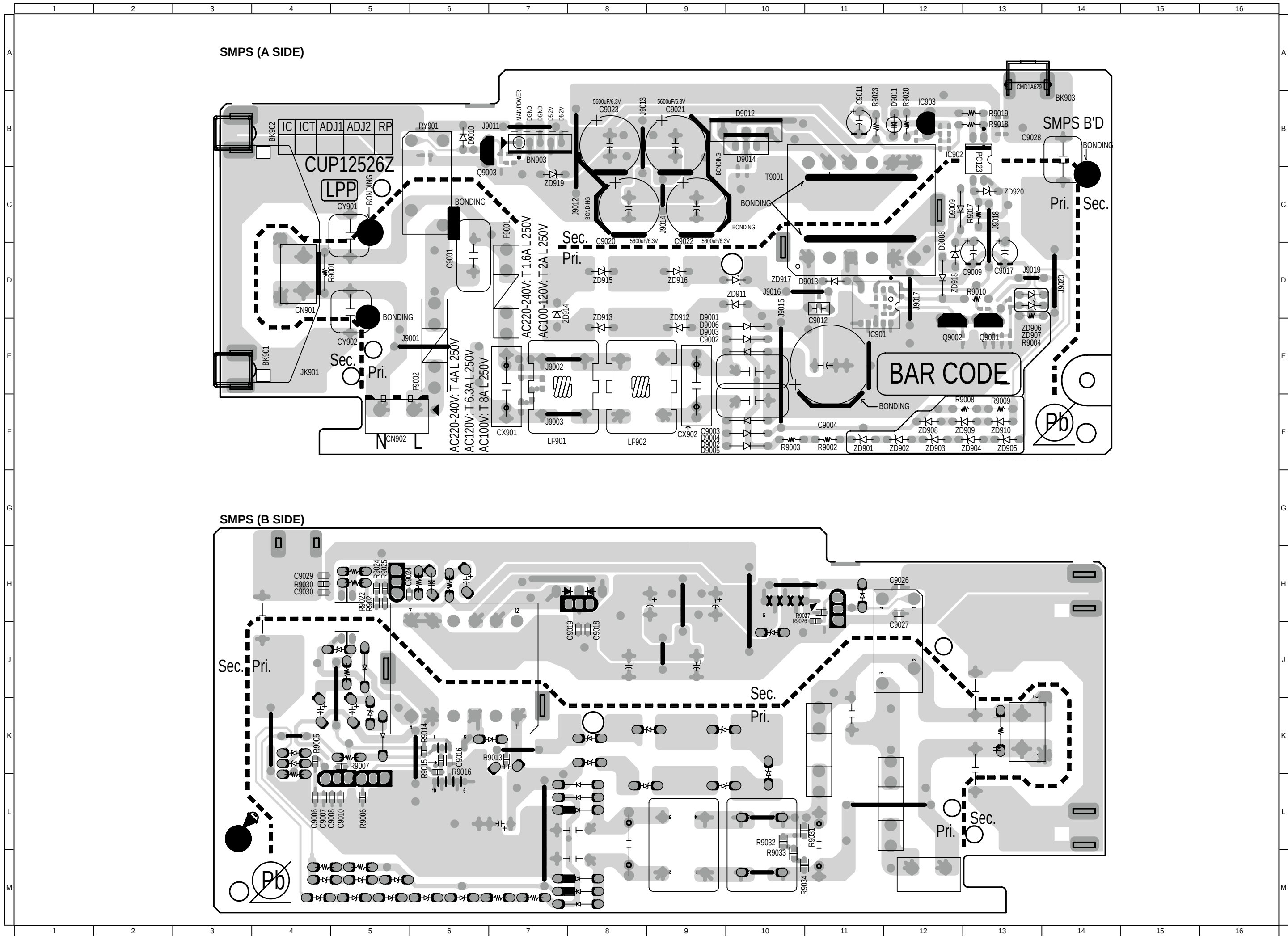


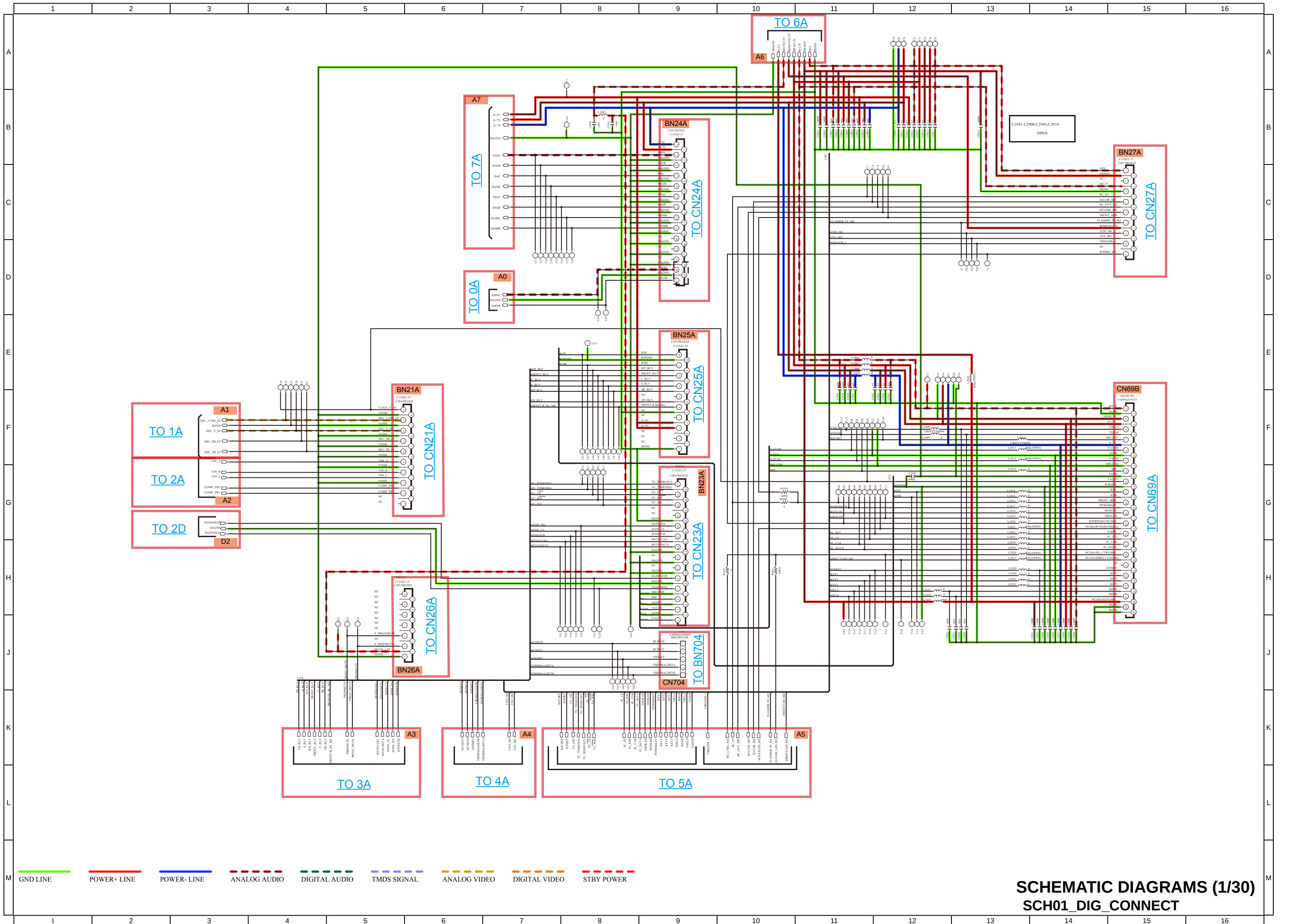
SIDE_CNT (A SIDE)



SIDE_CNT (B SIDE)

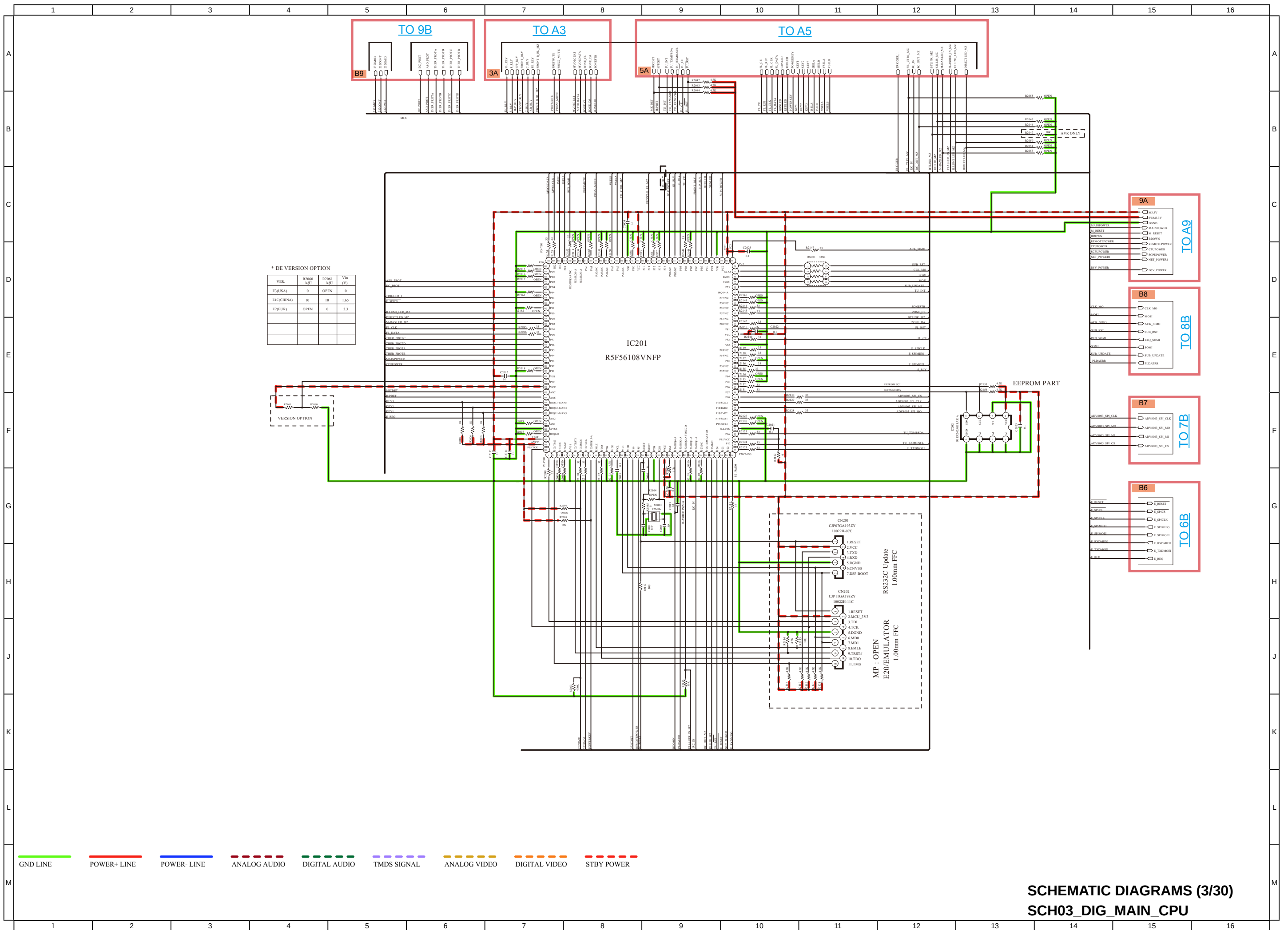


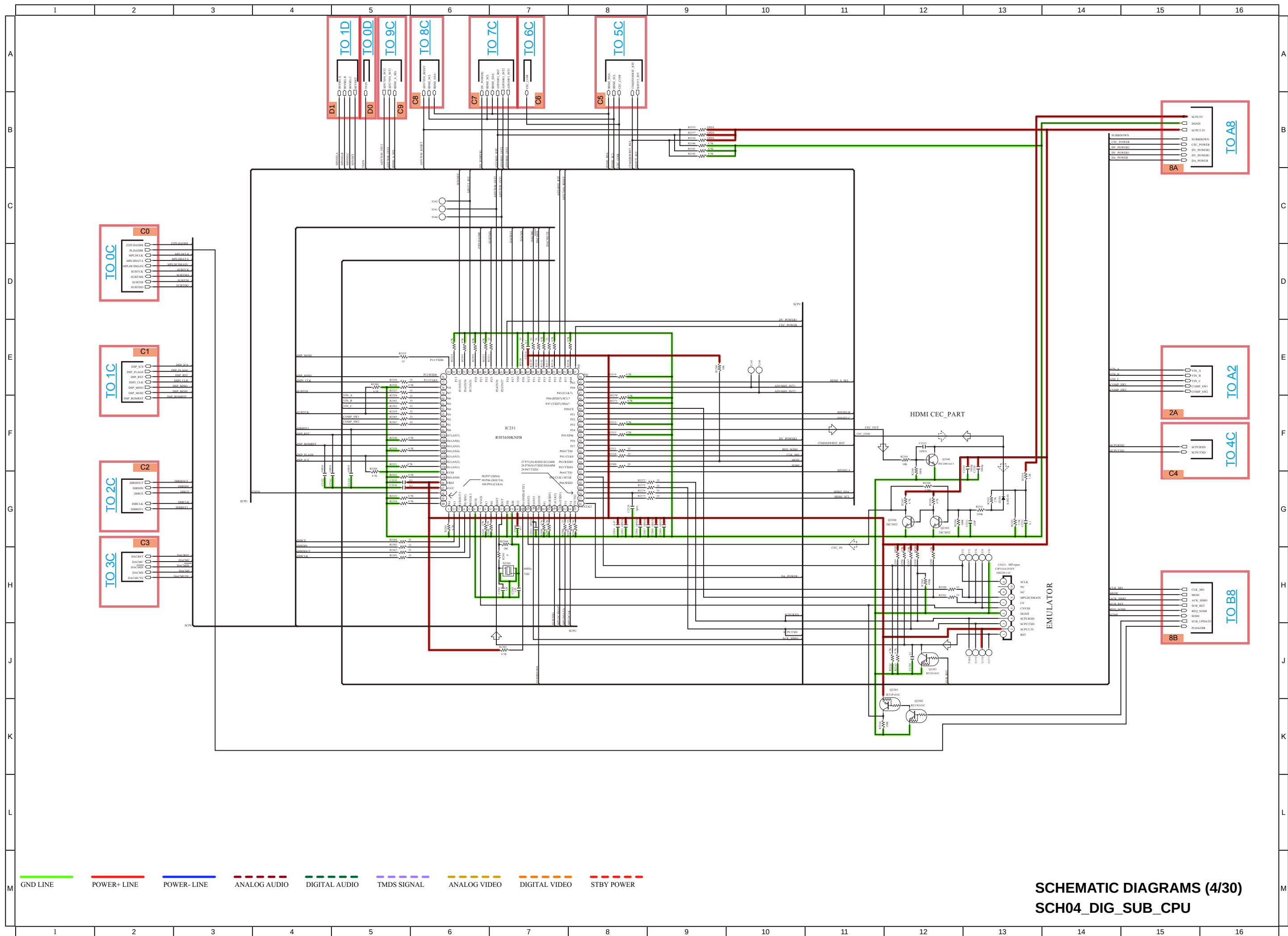




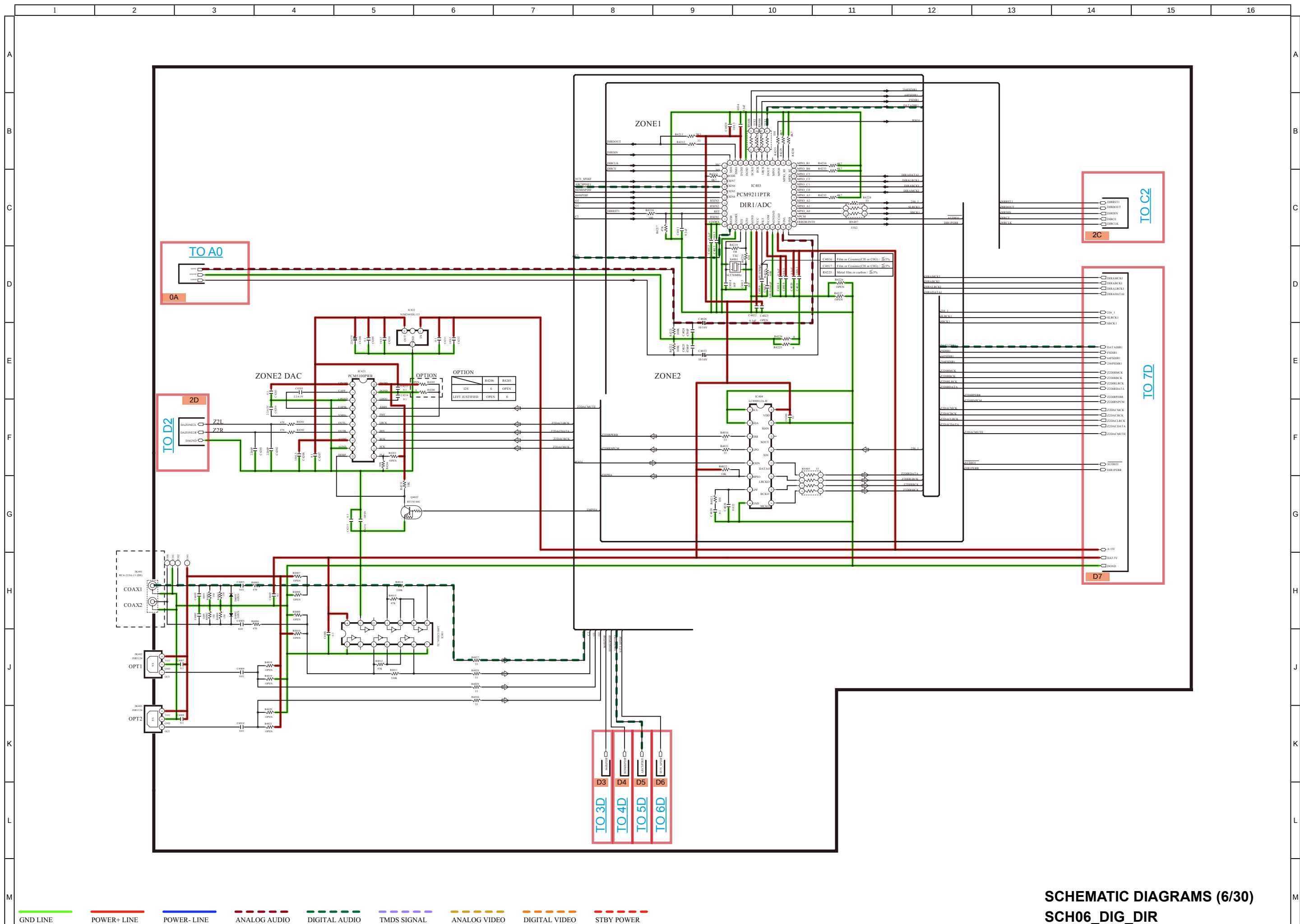
SCHEMATIC DIAGRAMS (1/30)
SCH01_DIG_CONNECT

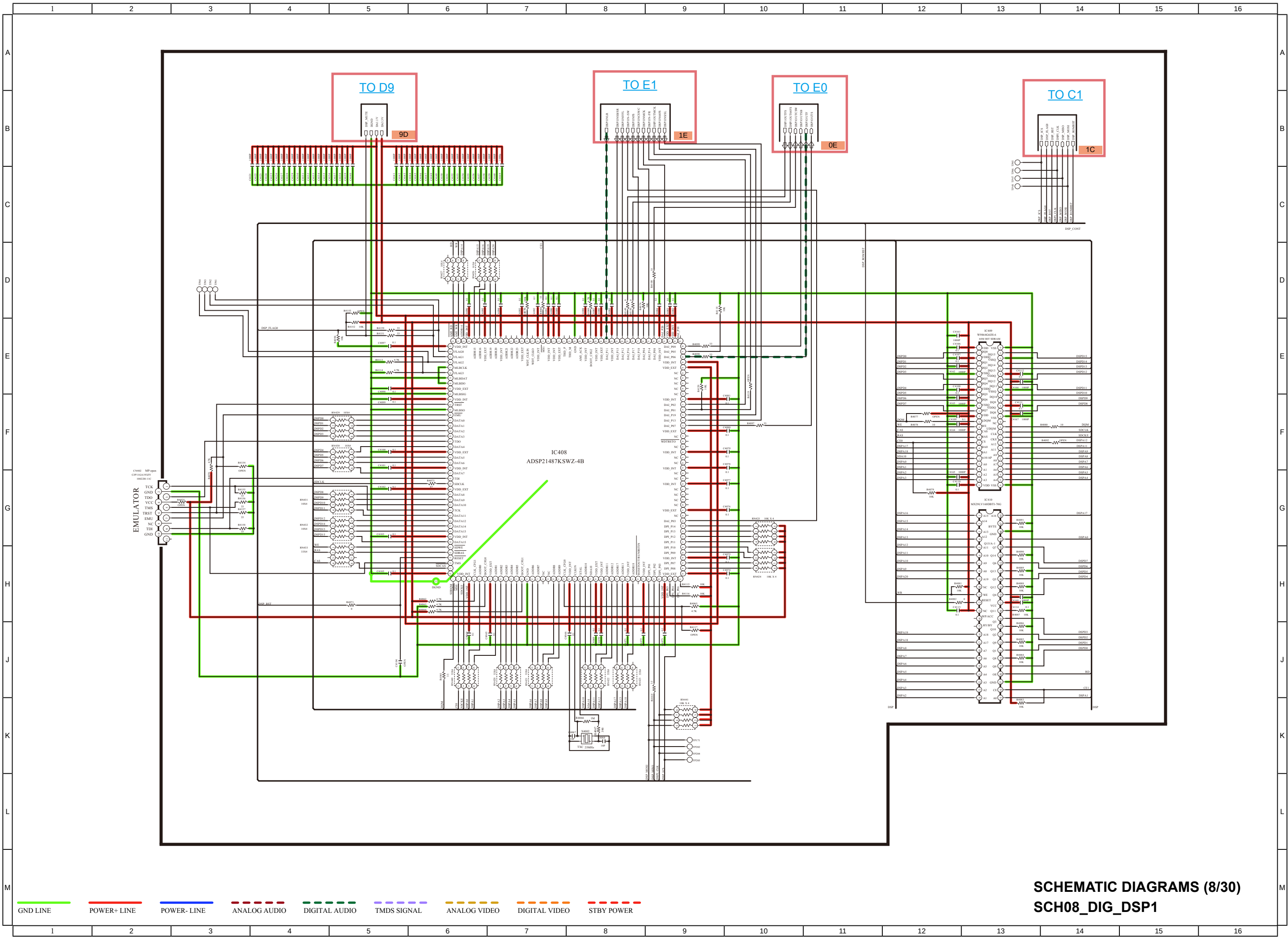


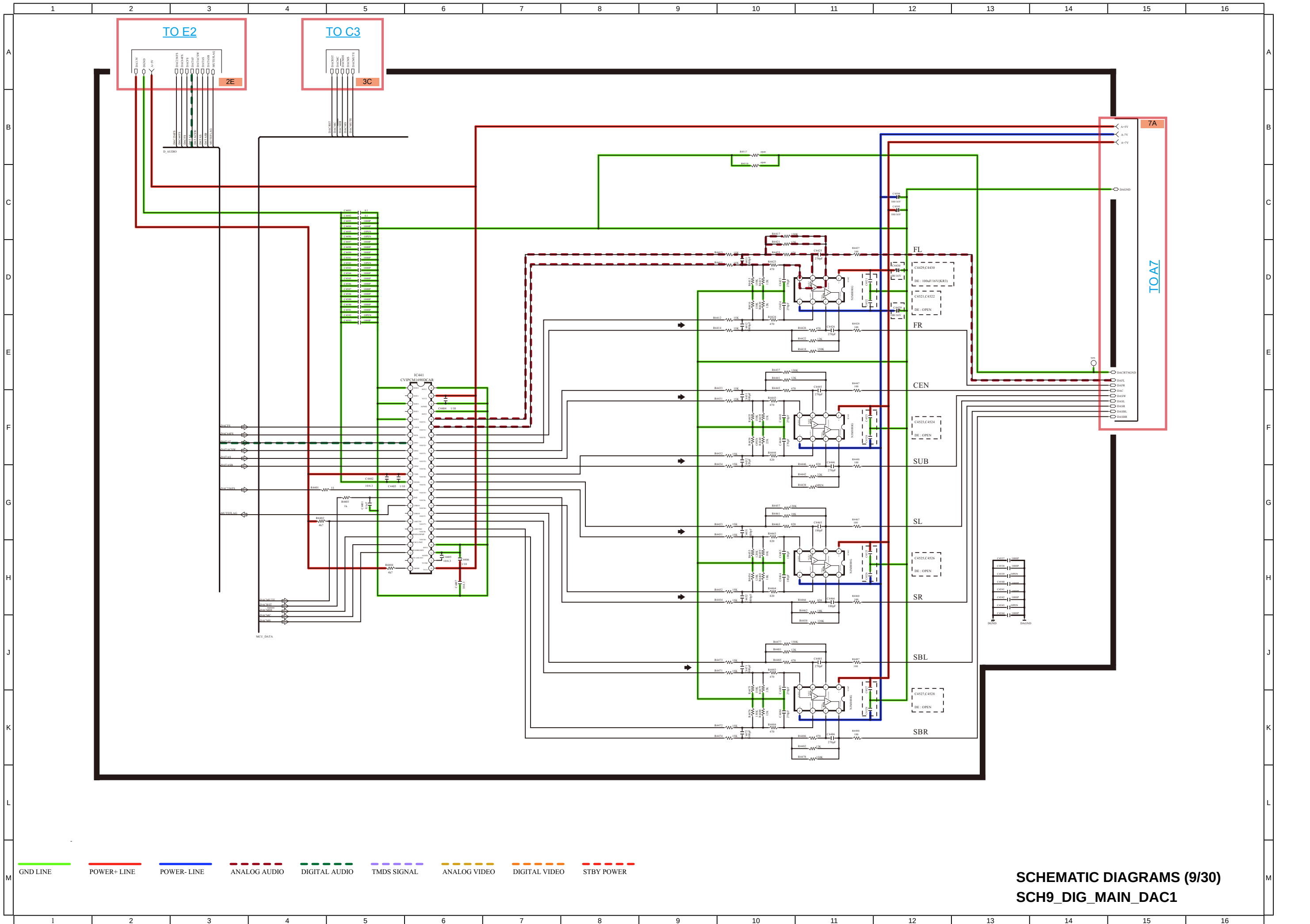




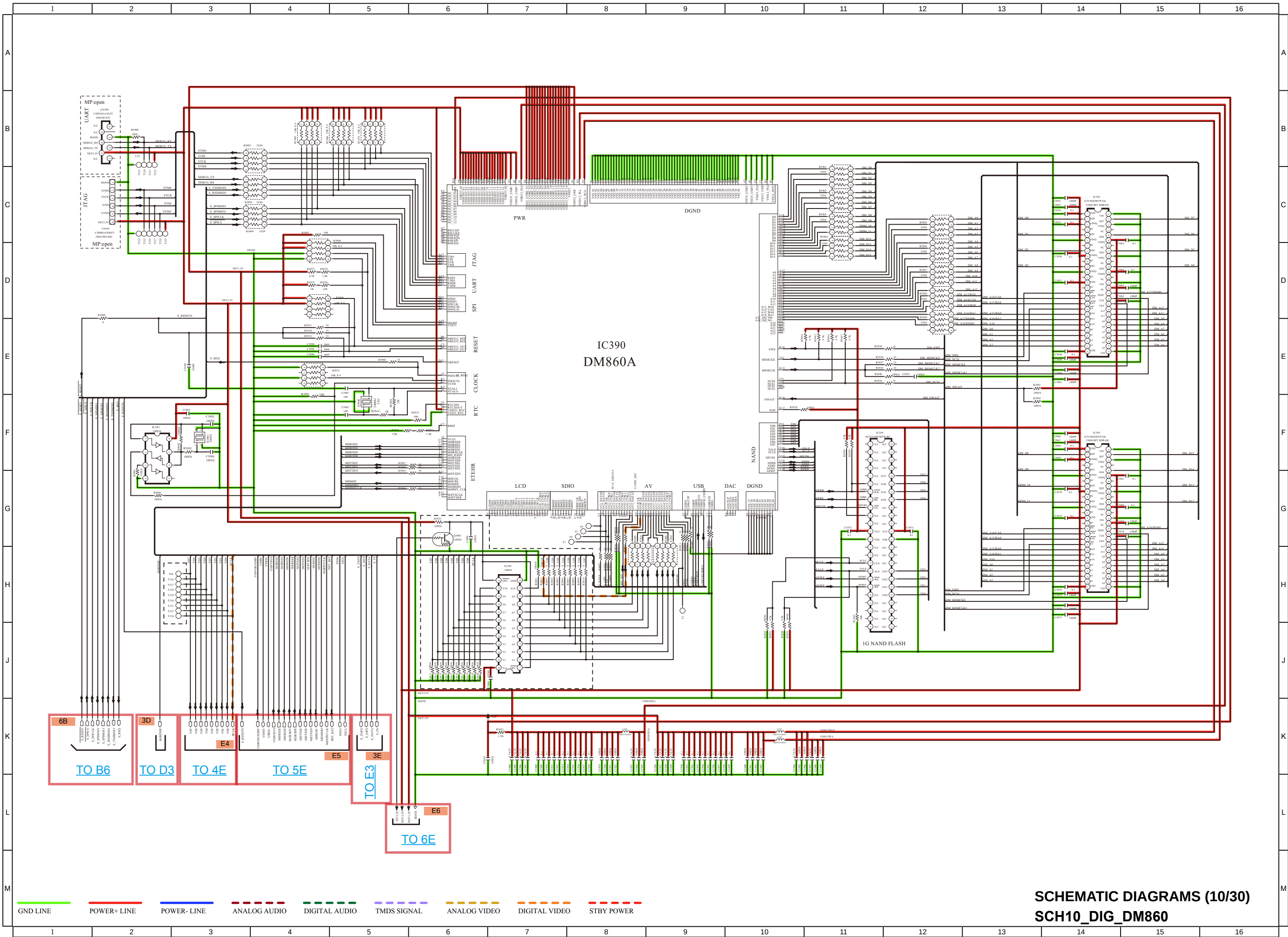


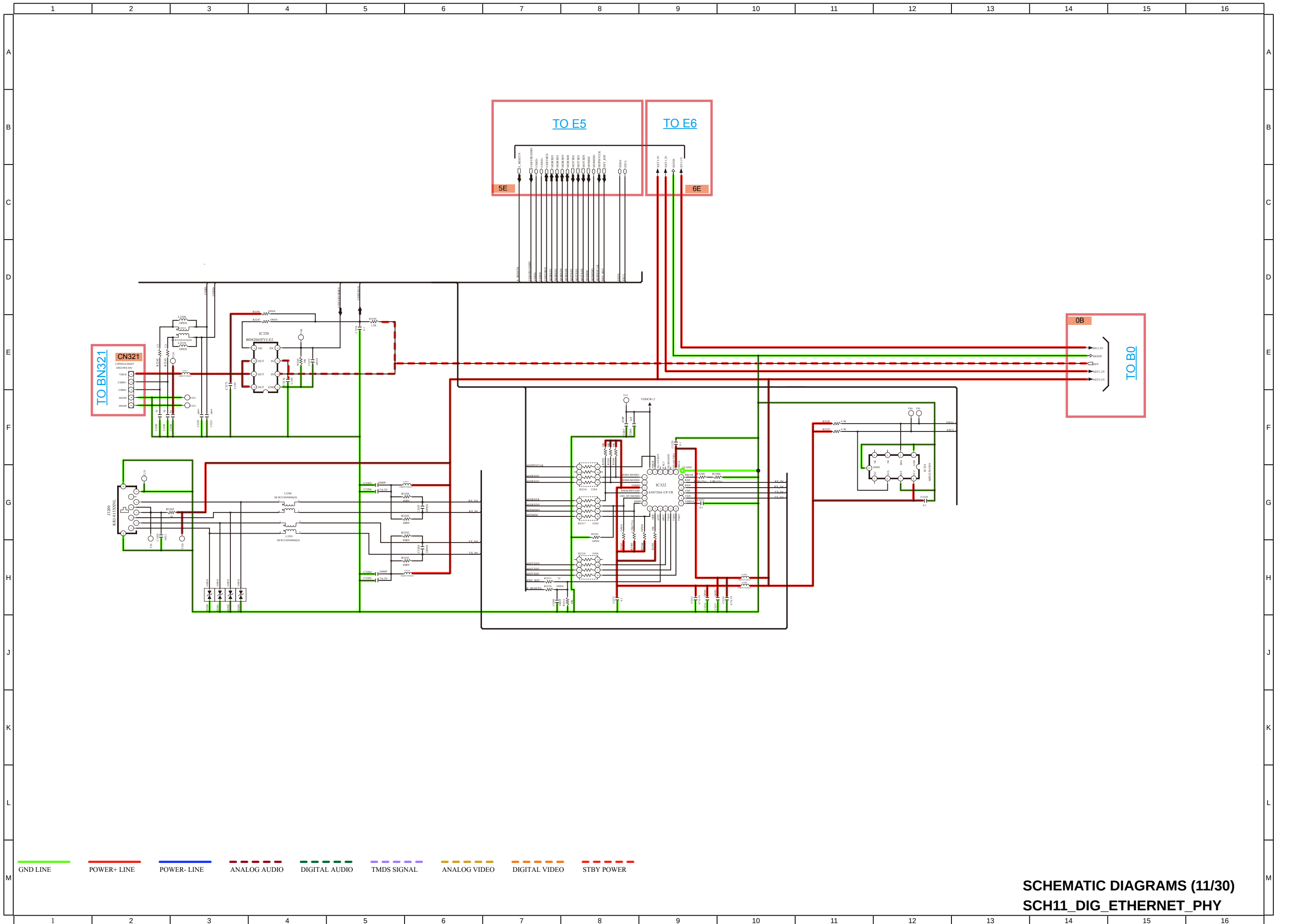




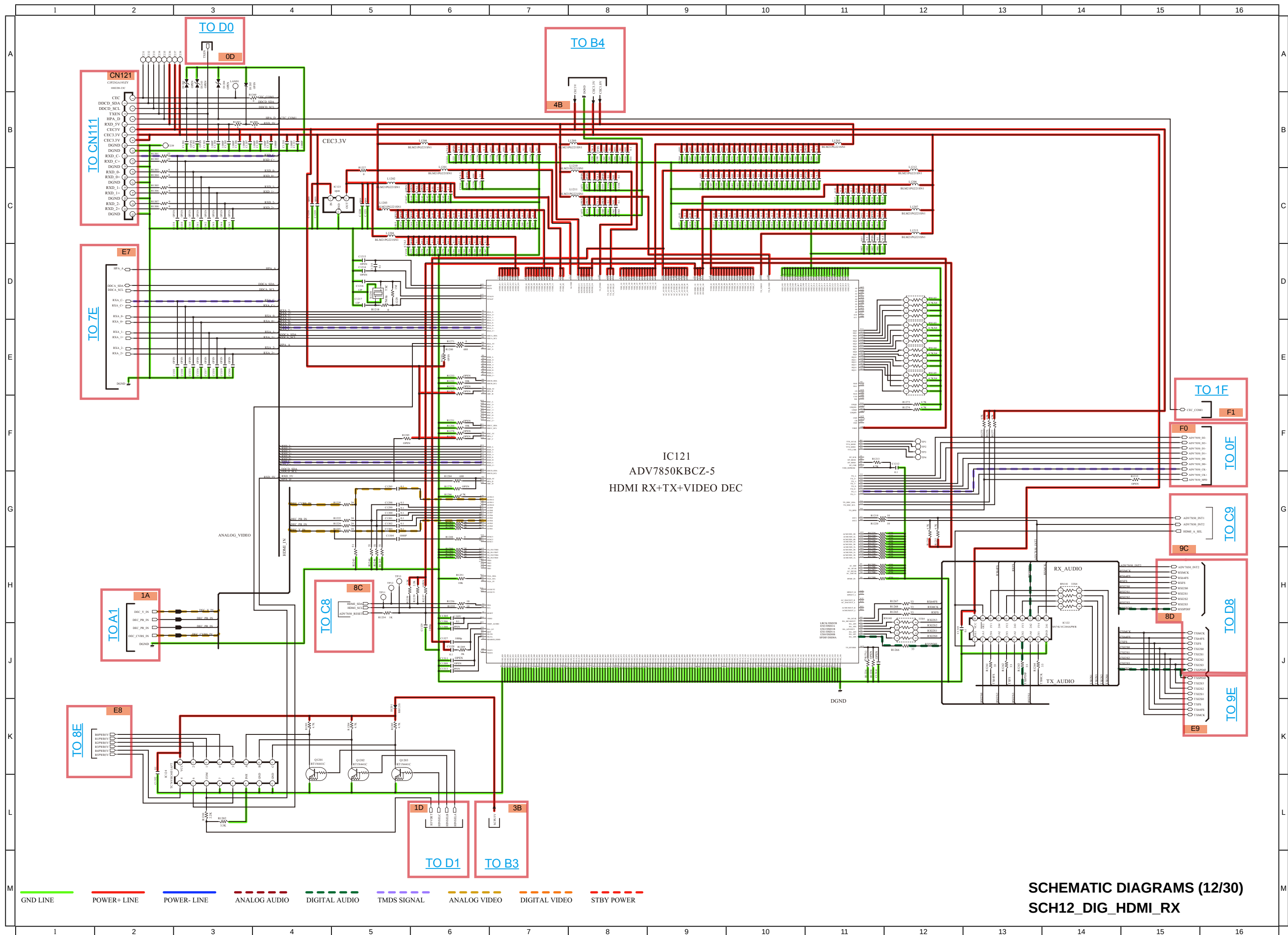


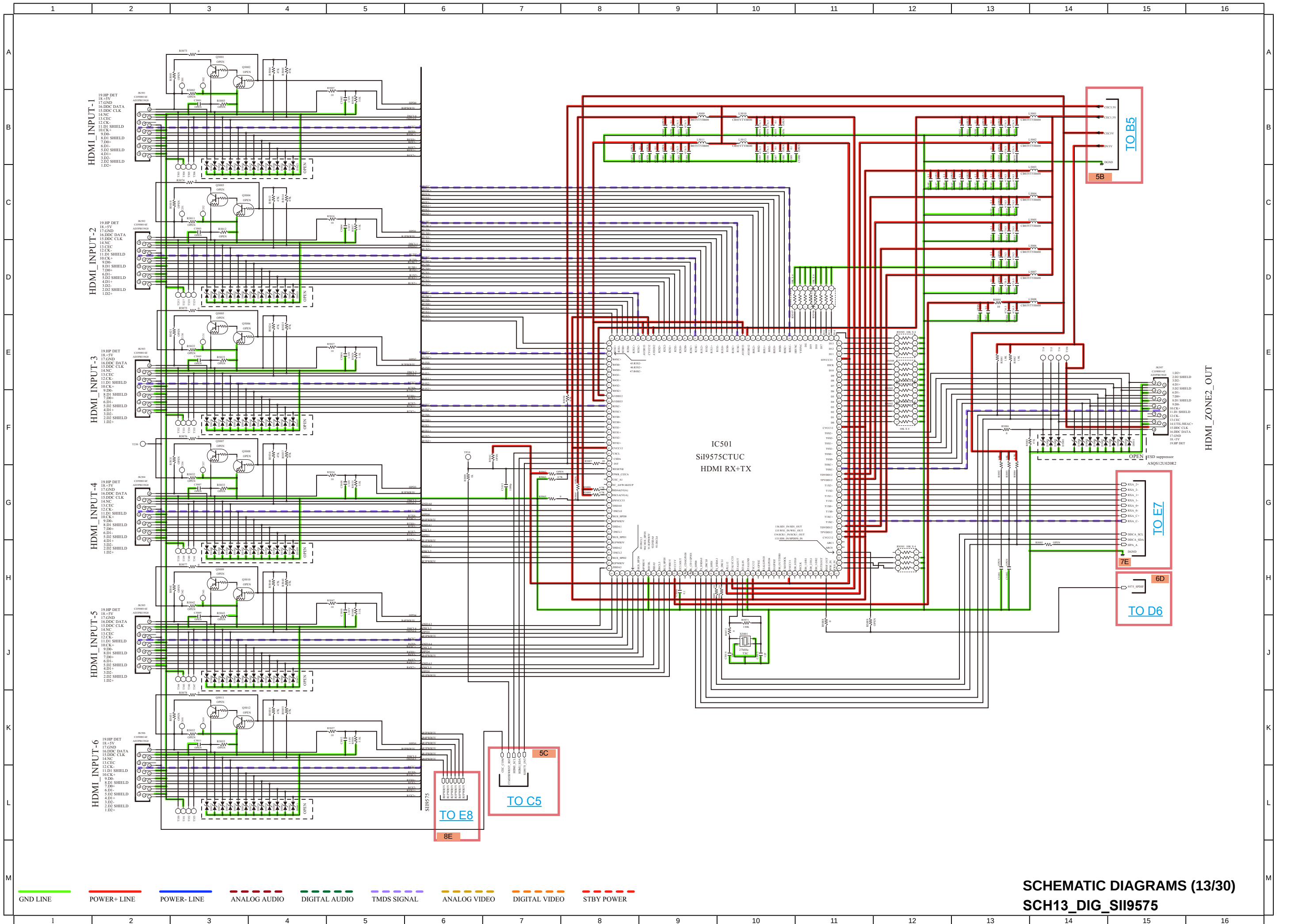
SCHEMATIC DIAGRAMS (9/30)
SCH9_DIG_MAIN_DAC1



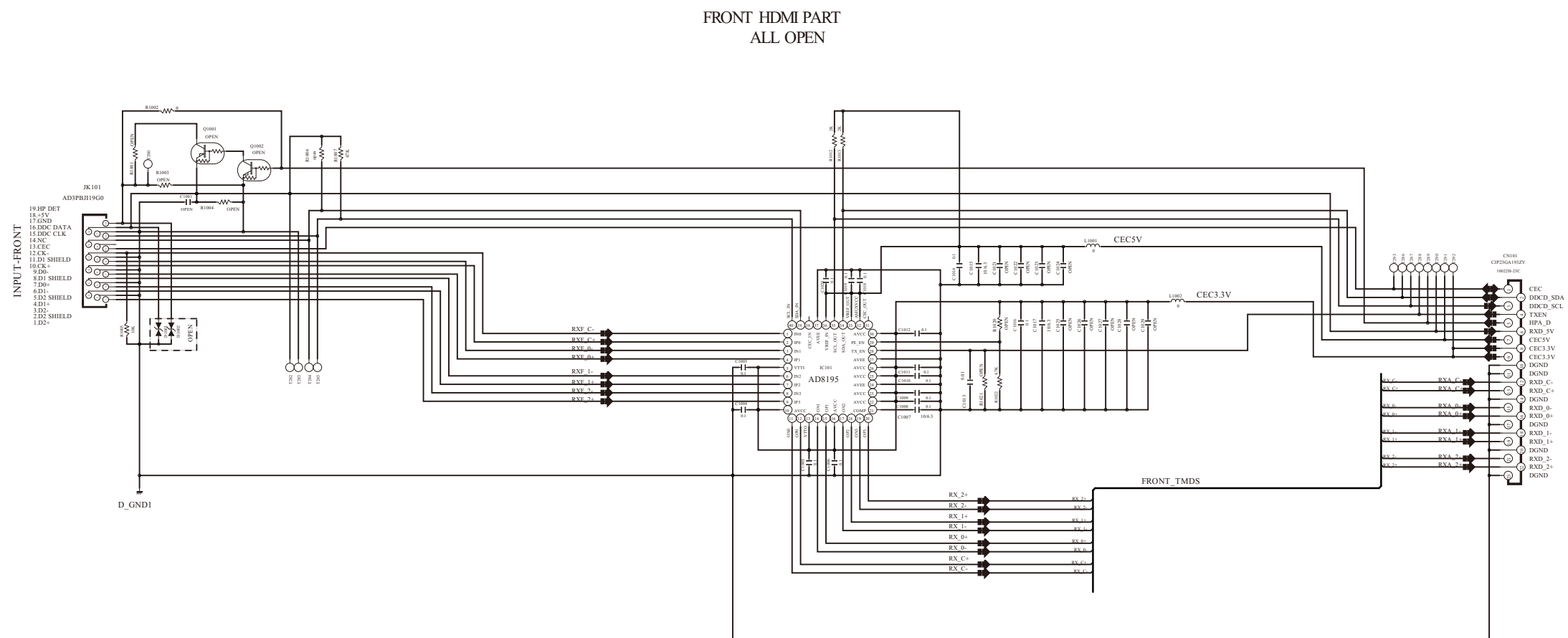


SCHEMATIC DIAGRAMS (11/30)
SCH11_DIG_ETHERNET_PHY

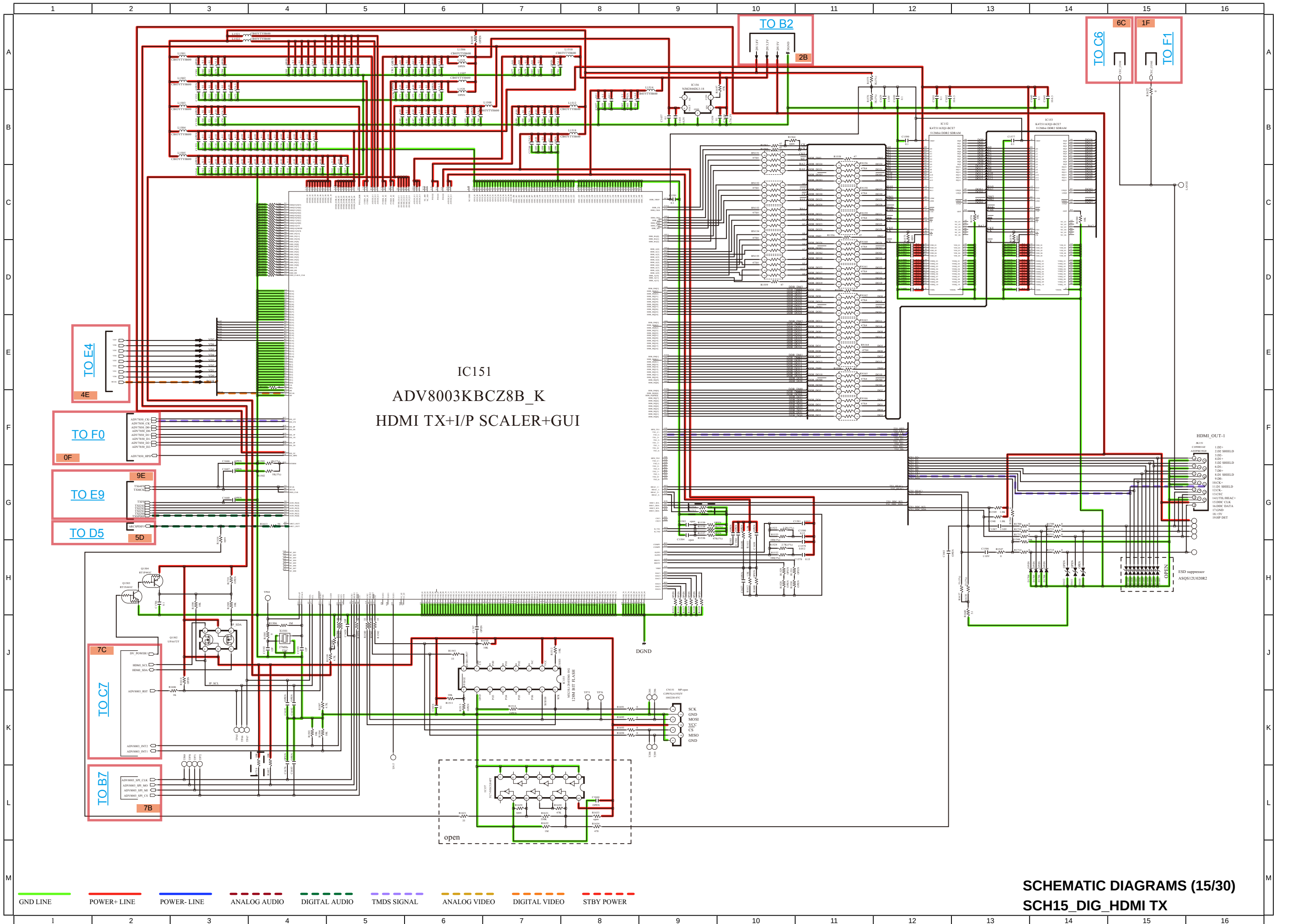




SCHEMATIC DIAGRAMS (13/30)
SCH13_DIG_SII9575

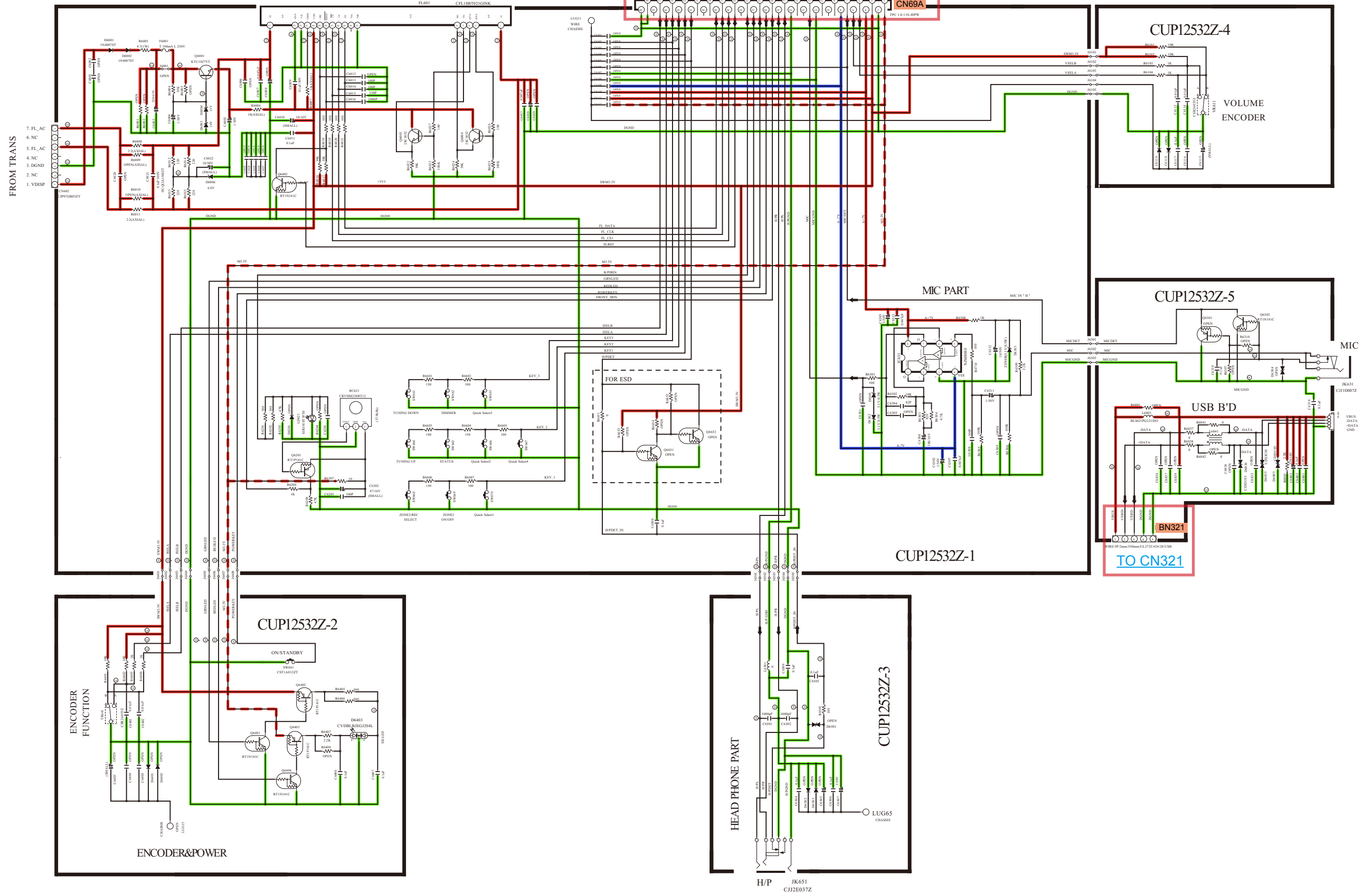


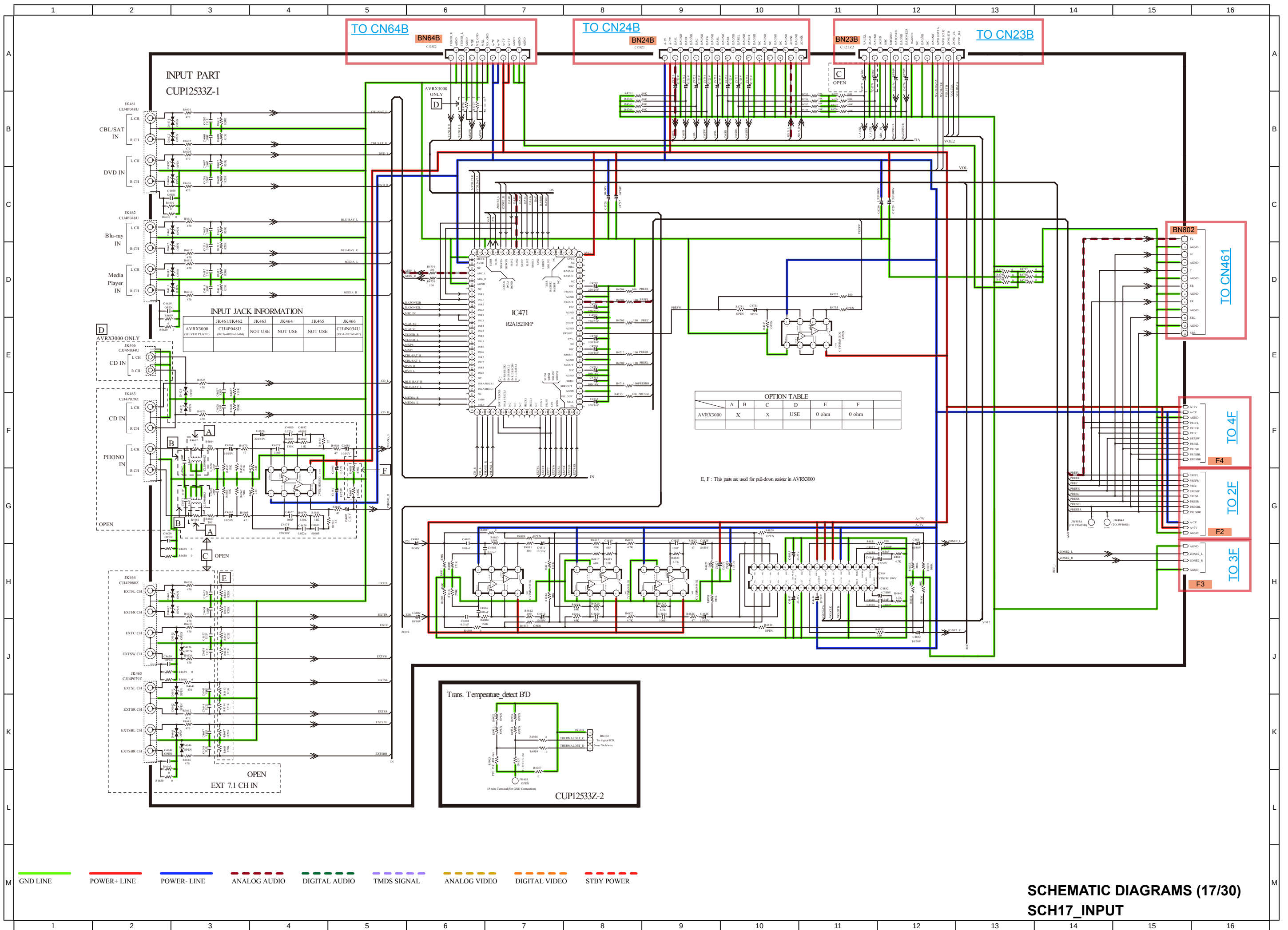
TO HDMI RX
PAGE 25_D6

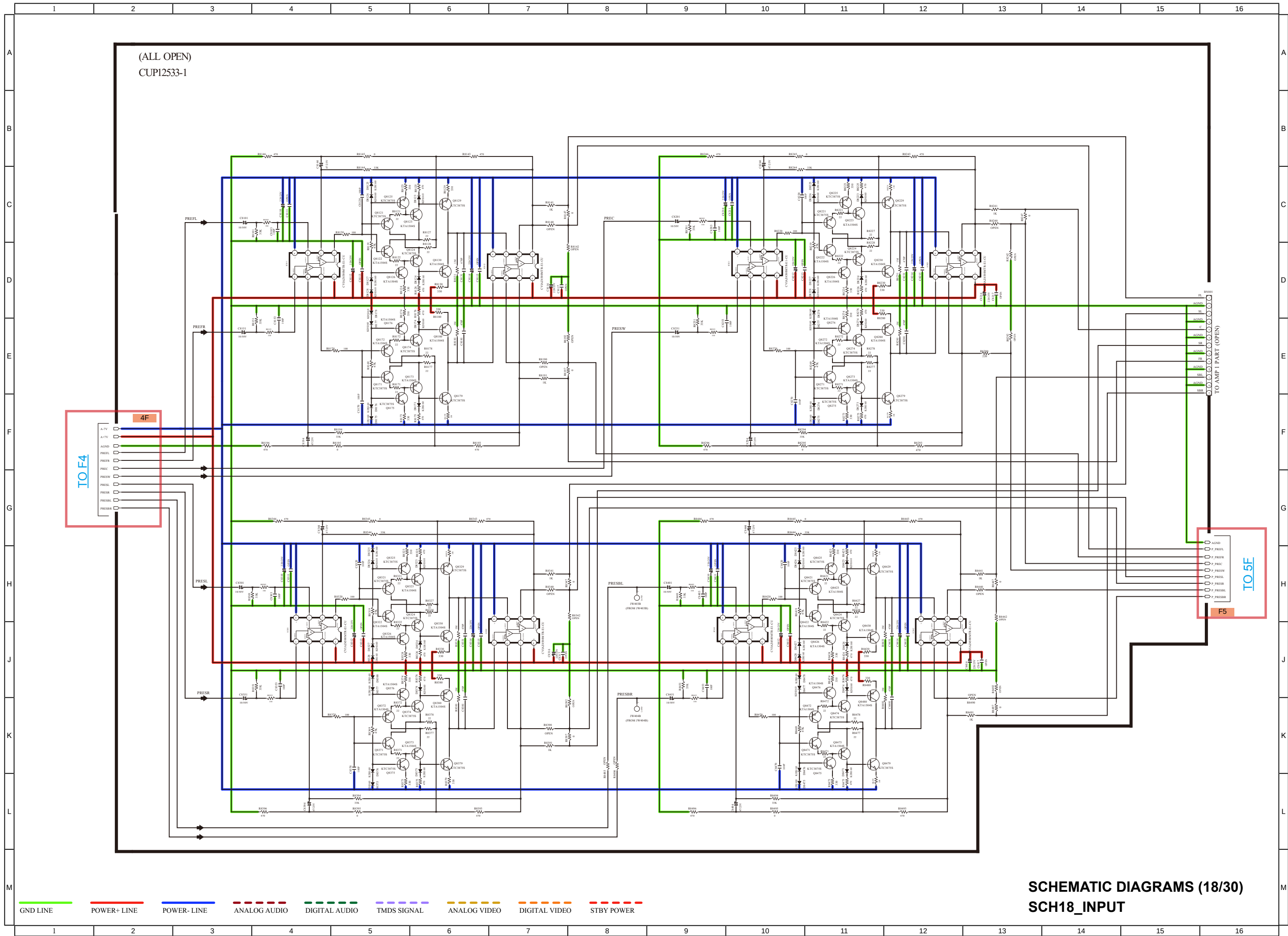


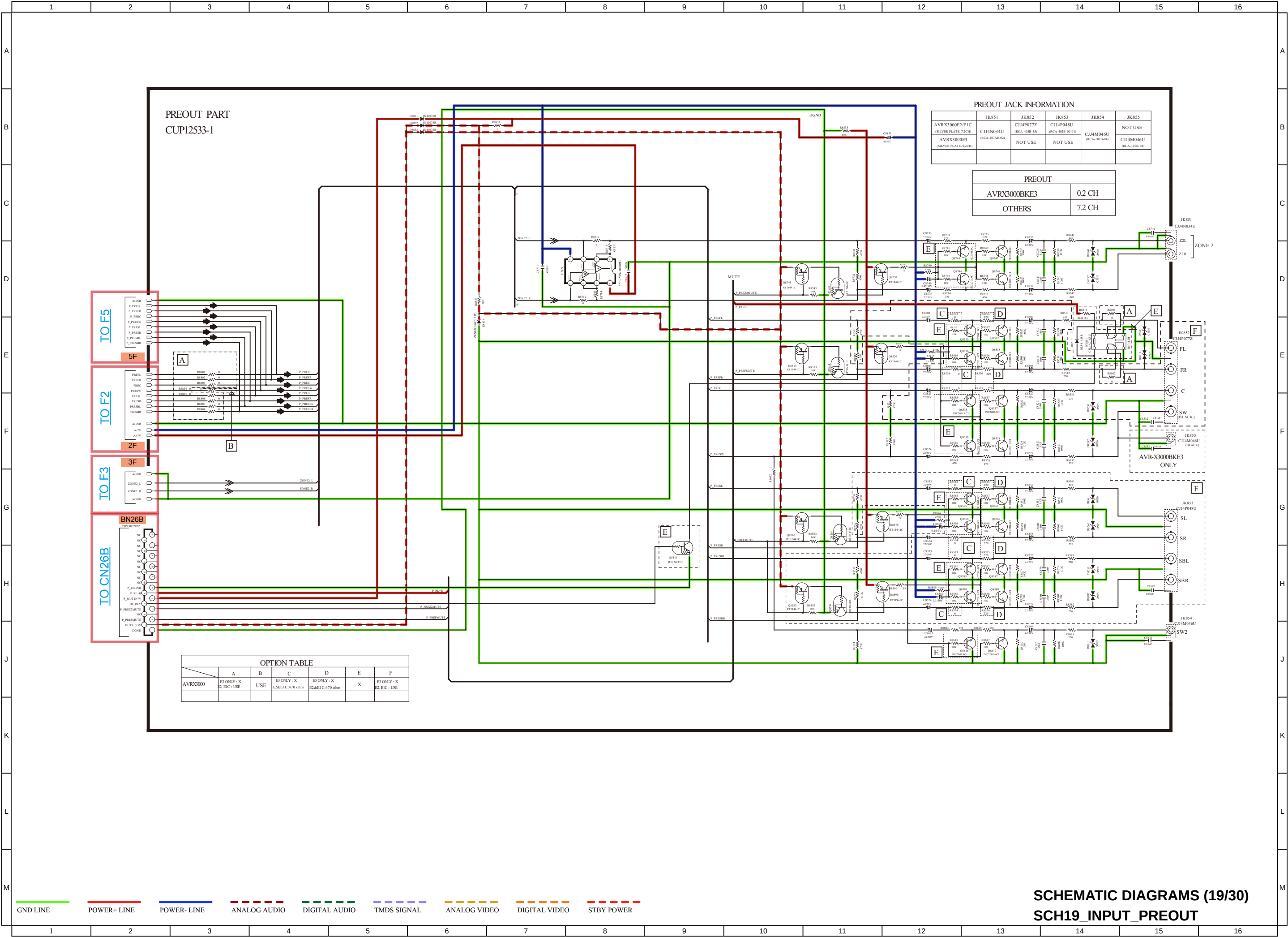
SCHEMATIC DIAGRAMS (15/30)
SCH15_DIG_HDMI TX

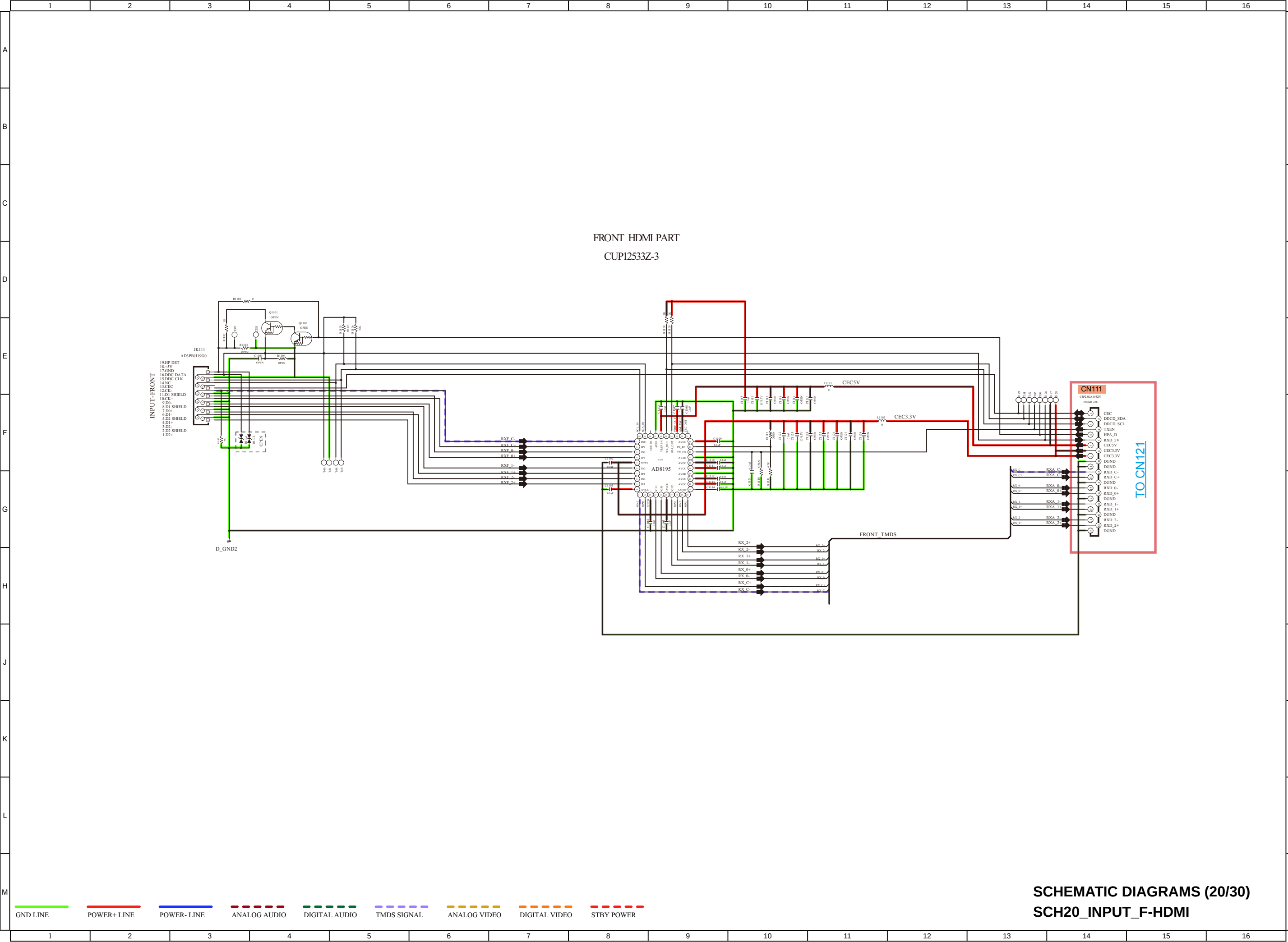
AVRX3000 FRONT PART



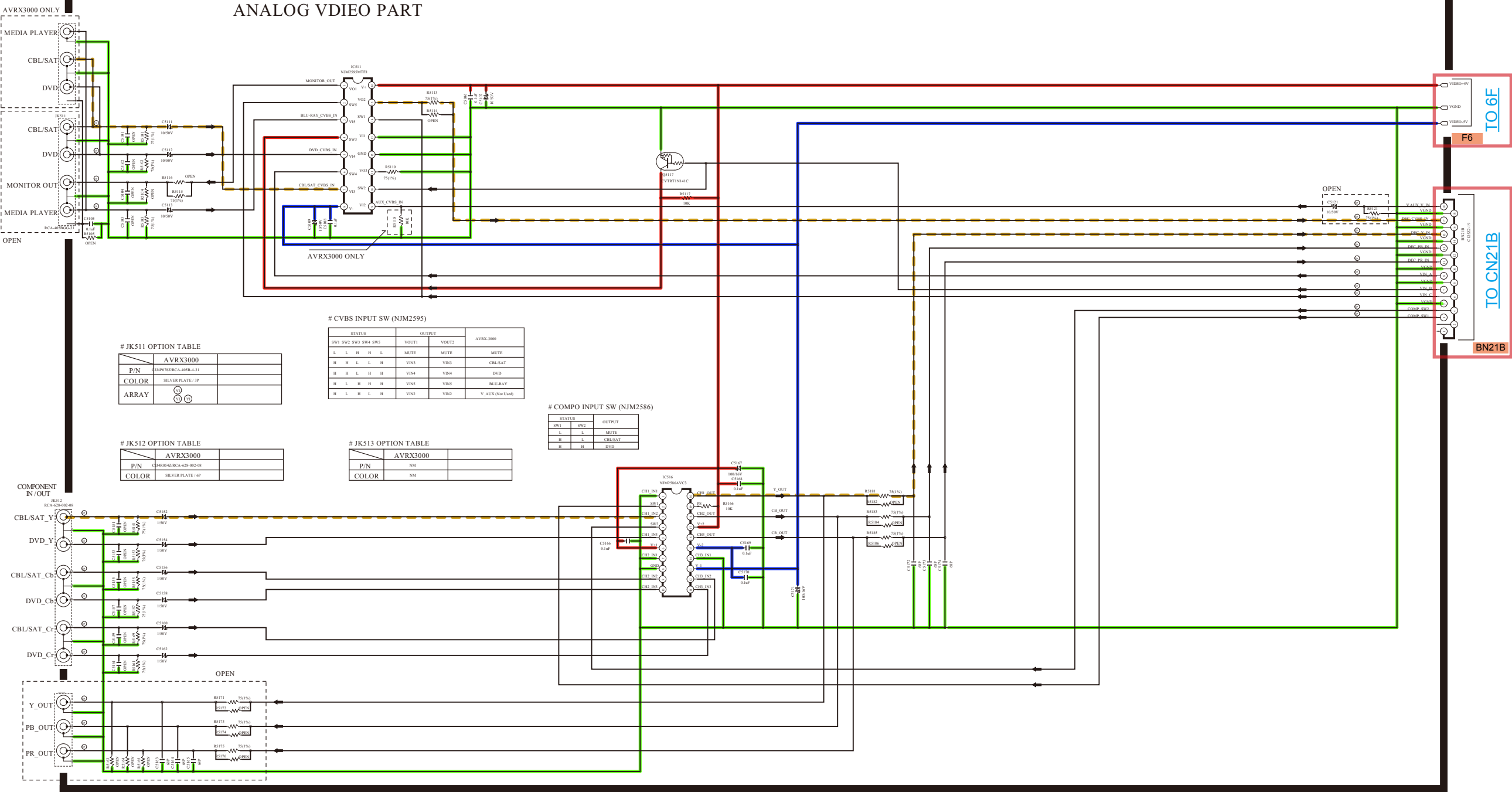


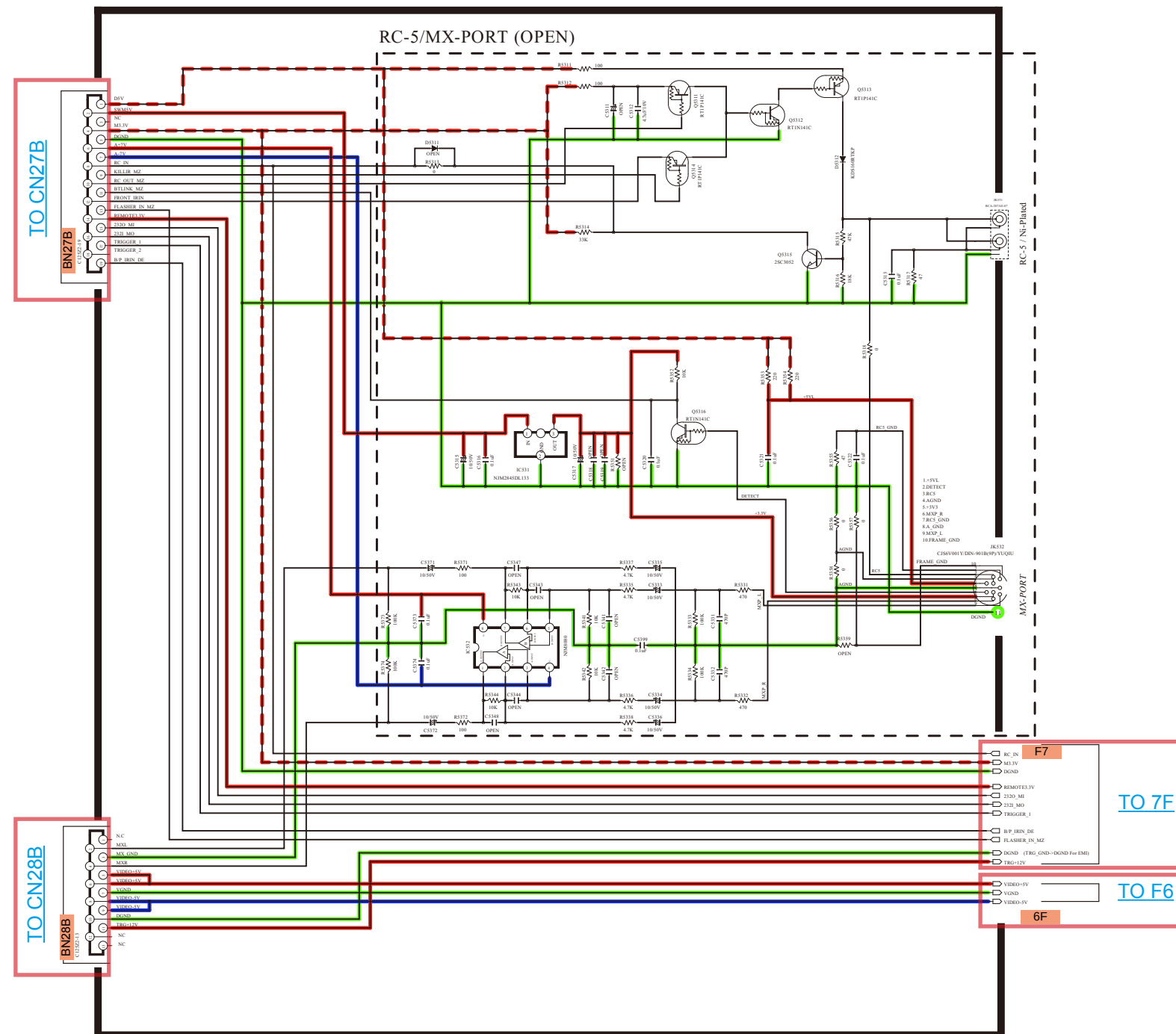


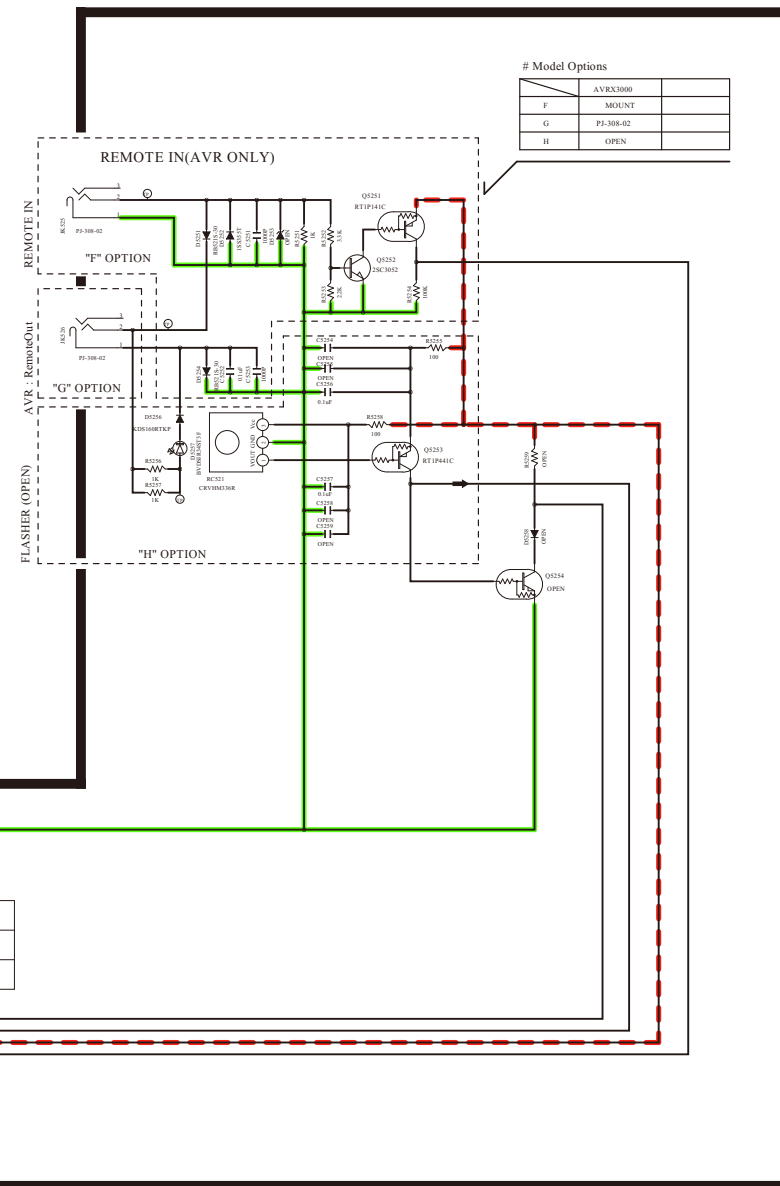
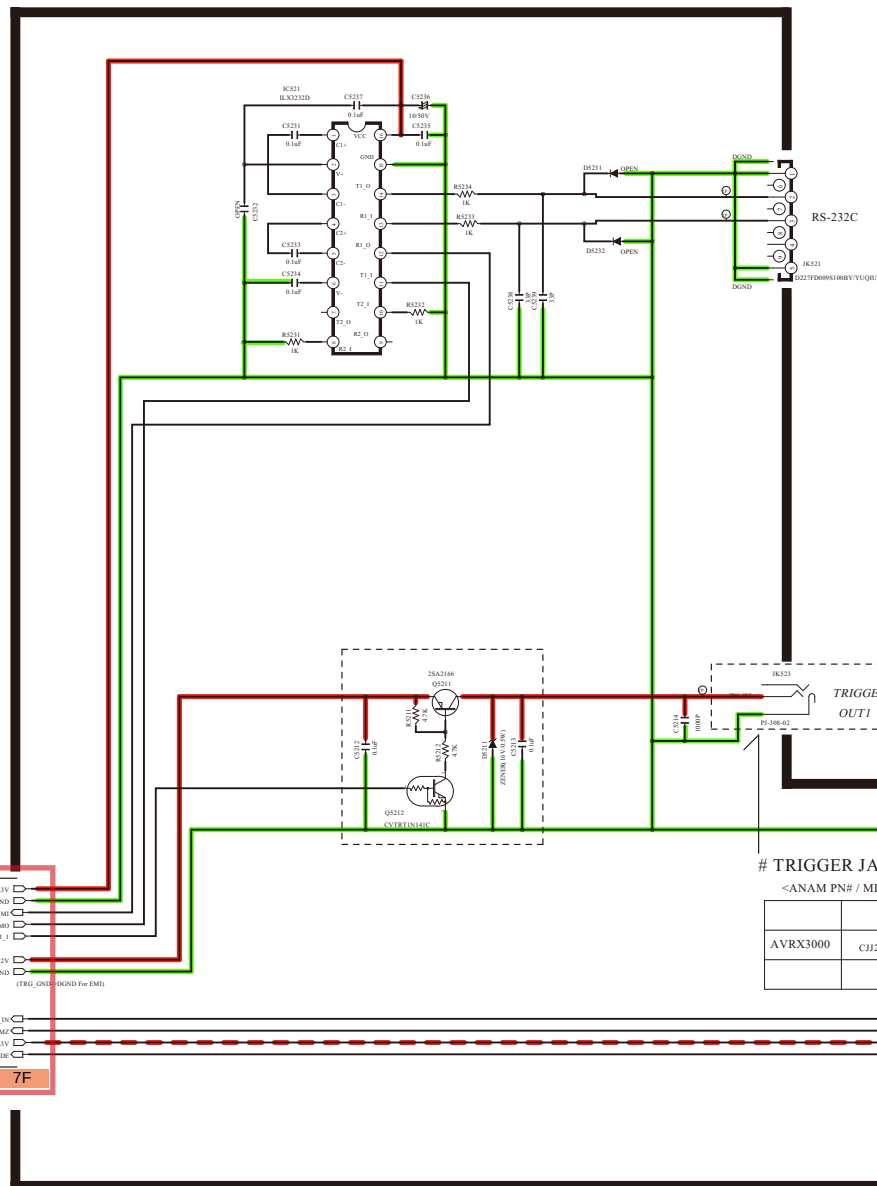




ANALOG VDIEO PART







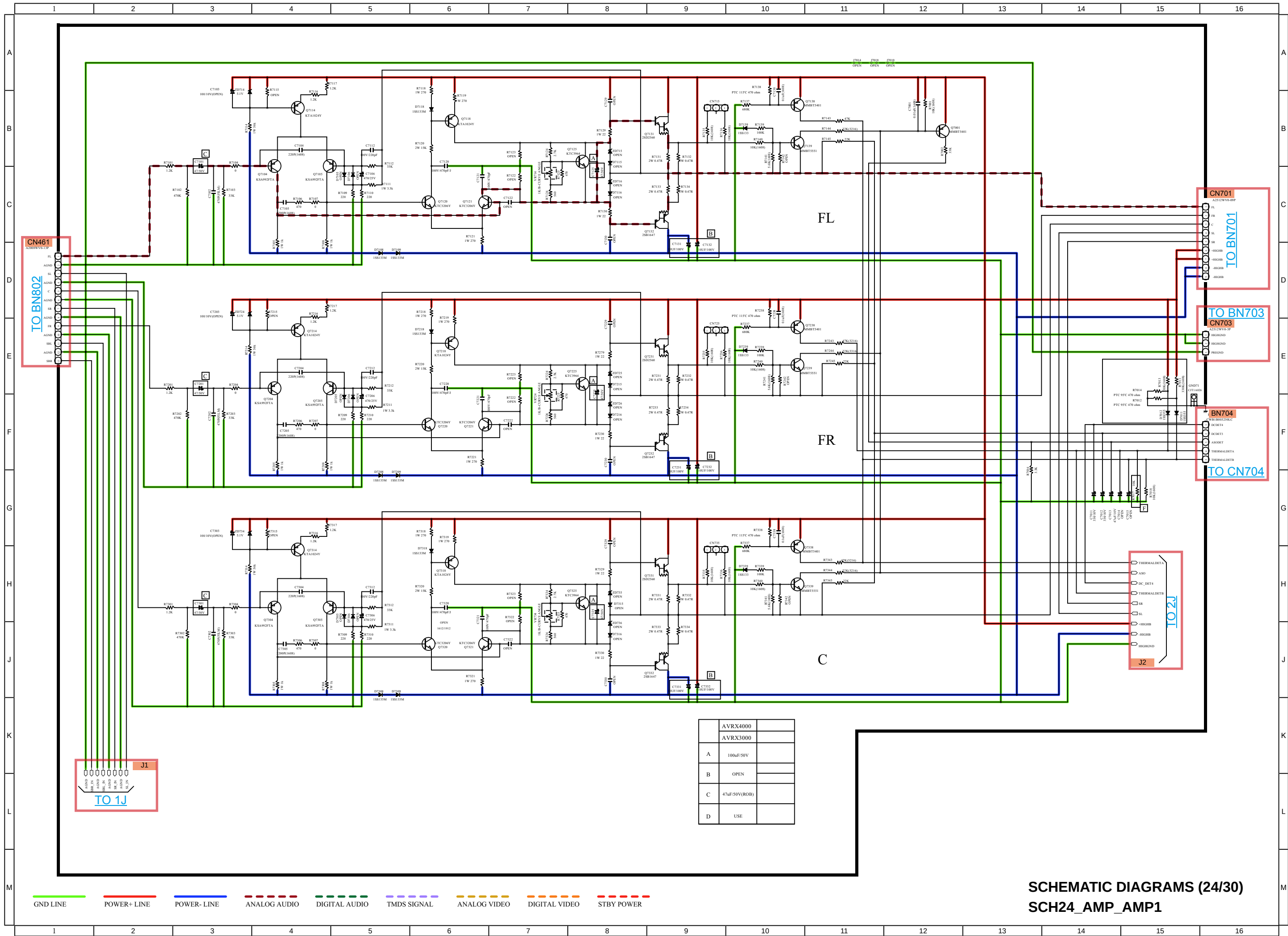
TRIGGER JACK OPTION

<ANAM PN# / MFG PN# / Color>

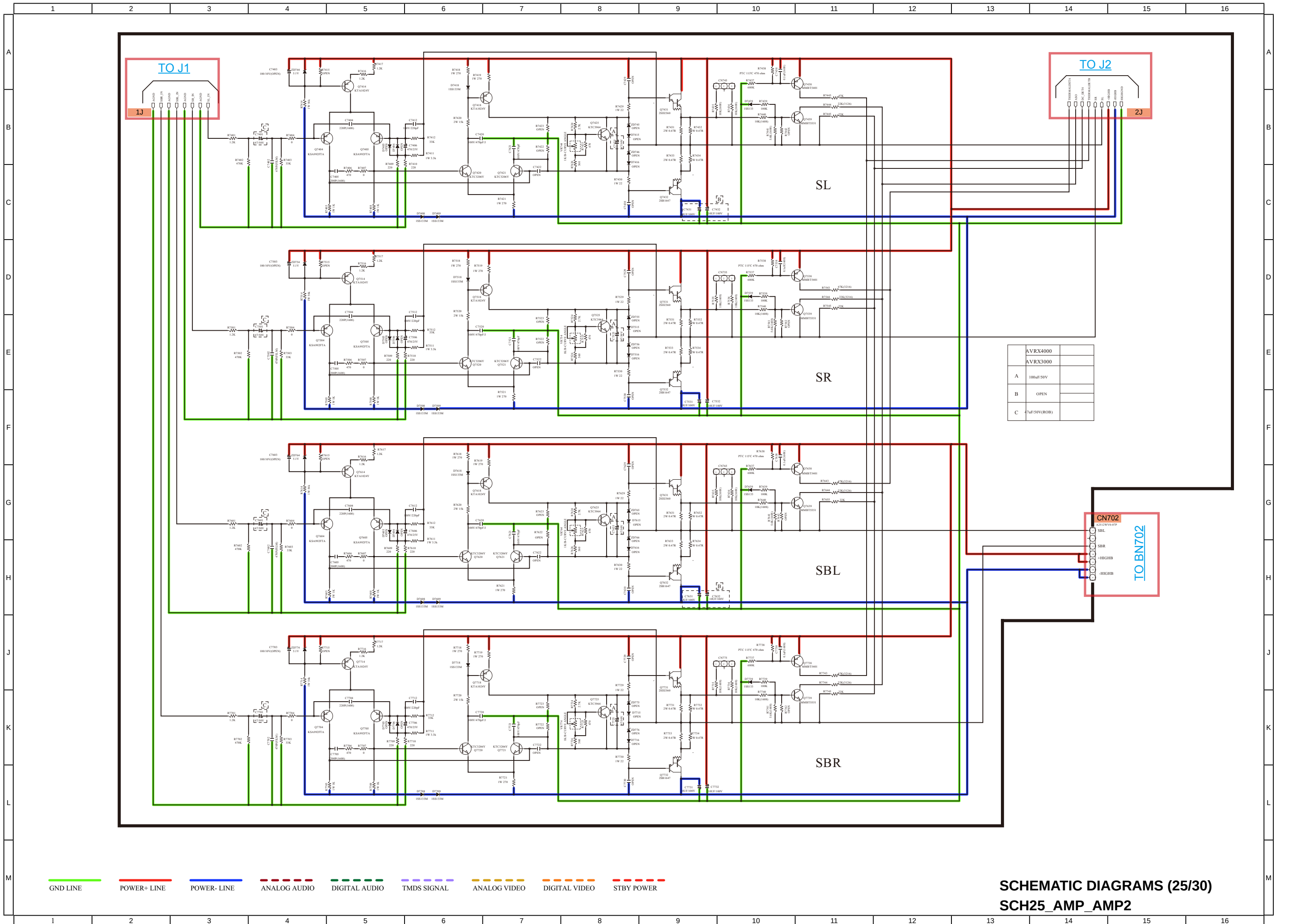
	JK523(TRGOUT1)
AVRX3000	CJJ2D019Z / PJ-308-02-RD / RED

7F

SCHEMATIC DIAGRAMS (23/30)
SCH23_VIDEO_RS232C_TRIGGER



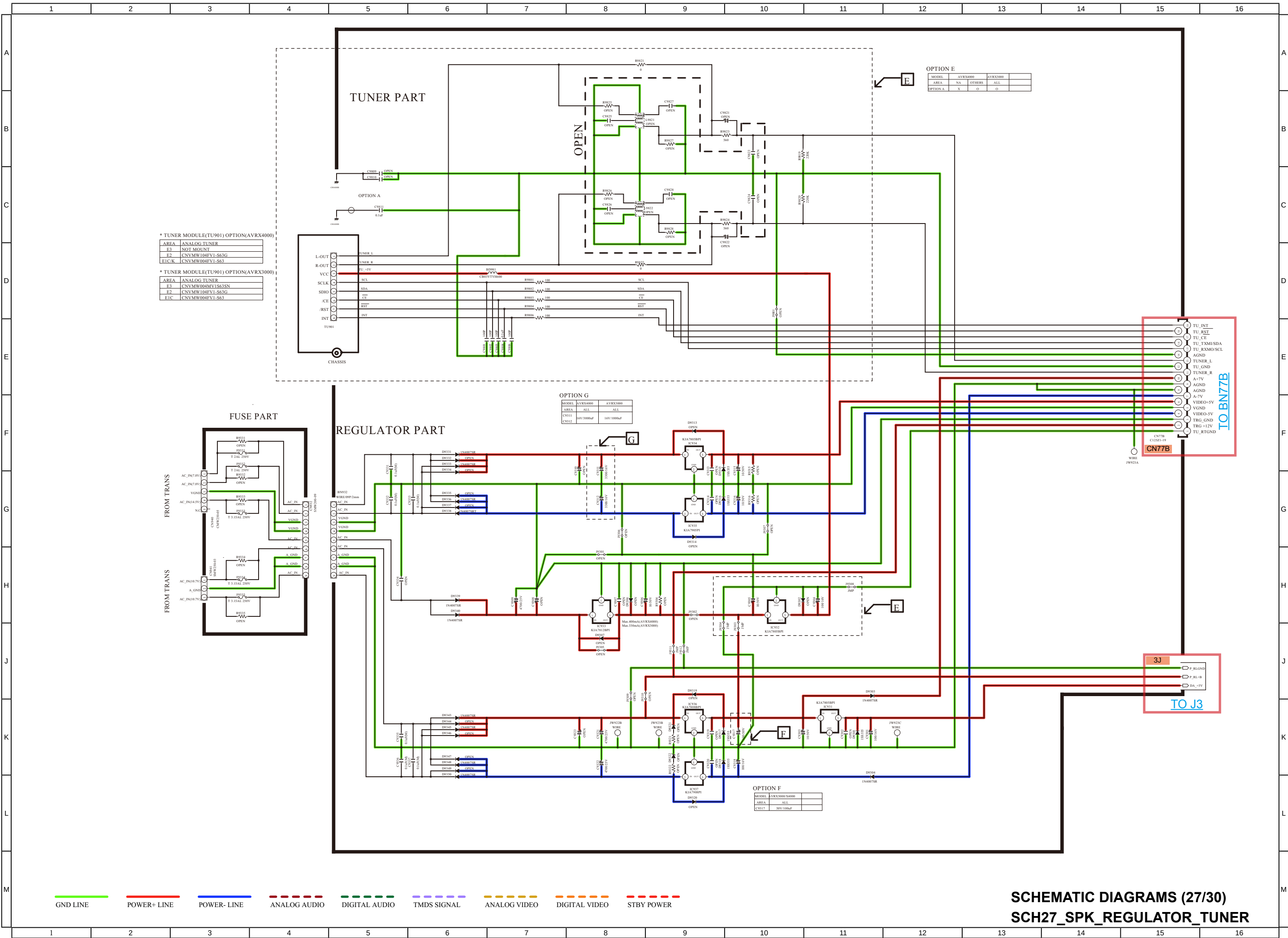
SCHEMATIC DIAGRAMS (24/30)
SCH24_AMP_AMP1



GND LINE POWER+ LINE POWER- LINE ANALOG AUDIO DIGITAL AUDIO TMDs SIGNAL ANALOG VIDEO DIGITAL VIDEO STBY POWER

SCHEMATIC DIAGRAMS (25/30)
SCH25_AMP_AMP2





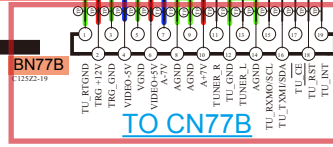
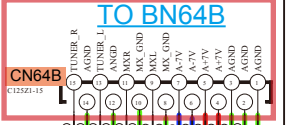
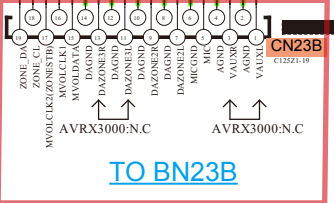
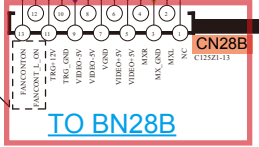
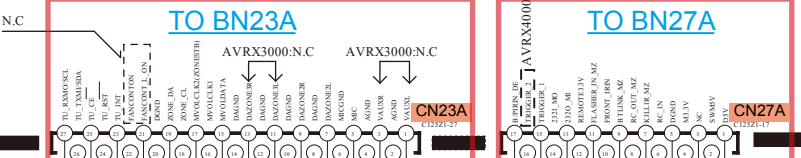
SCHEMATIC DIAGRAMS (27/30)
SCH27_SPK_REGULATOR_TUNER

SIDE CNT_CUP12522Z(CONNECT A)

AVRX4000 USA VER. ONLY

TO HD RADIO

OPTION	E3	OTHERS
AVRX4000	HD TUNER	ANALOG TUNER

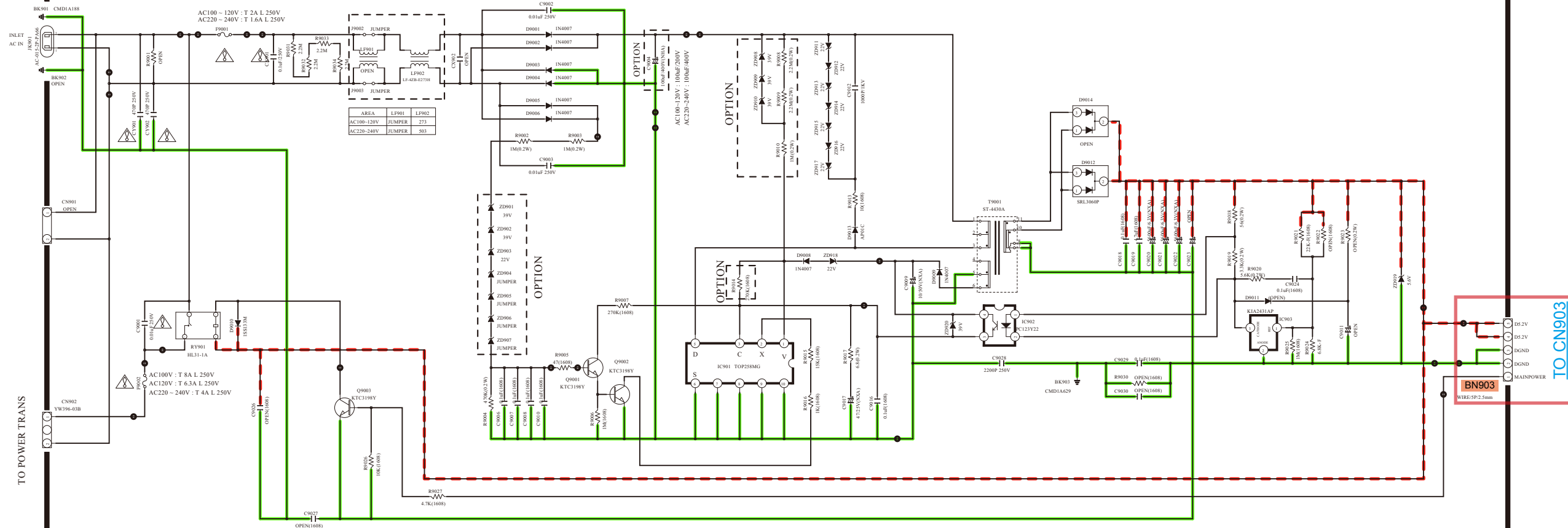


GND LINE POWER+ LINE POWER- LINE ANALOG AUDIO DIGITAL AUDIO TMS SIGNAL ANALOG VIDEO DIGITAL VIDEO STBY POWER

SCHEMATIC DIAGRAMS (28/30)
SCH28_CNT_CONNECT_A

[illegible]

SMPS B'D



FUSE OPTION

AREA	F9001	F9002
AC100V	T2A L 250V	T8A L 250V
AC120V	T2A L 250V	T6.3A L 250V
AC220 ~ 240V	T1.6A L 250V	T4A L 250V

OPTION

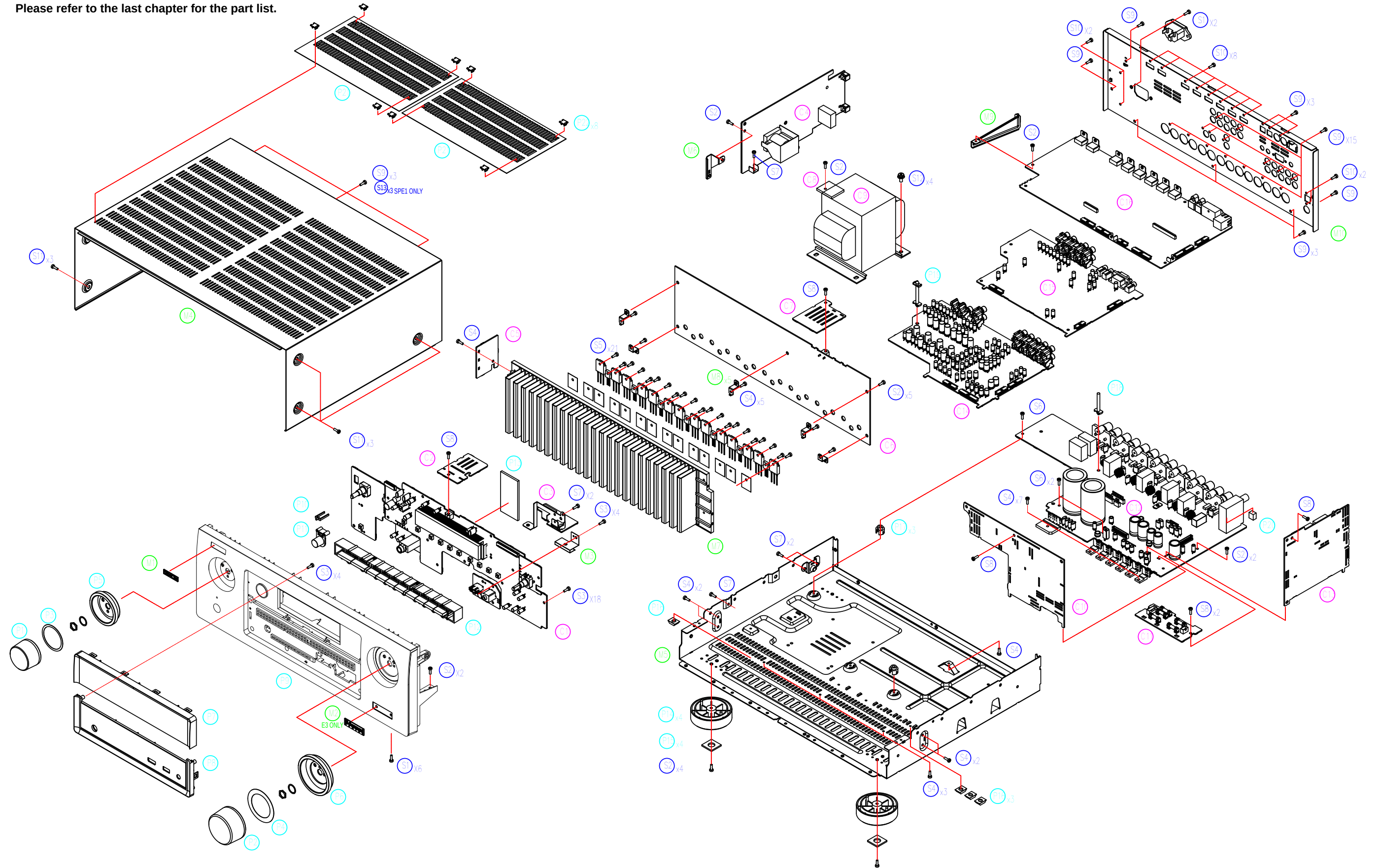
AREA	ZD901	ZD902	ZD903	ZD904	ZD905	ZD906	ZD907	ZD908	ZD909	ZD910	R9008	R9009	R9010	R9014
AC100V	ZJ39B	ZJ39B	JUMPER	JUMPER	JUMPER	JUMPER	JUMPER	ZJ39B	ZJ39B	ZJ39B	2M2(0.2W)	2M2(0.2W)	1M(0.2W)	270K
AC120V	ZJ39B	ZJ39B	ZJ22B	JUMPER	JUMPER	JUMPER	JUMPER	ZJ39B	ZJ39B	ZJ39B	2M2(0.2W)	2M2(0.2W)	1M(0.2W)	270K
AC220 ~ 240V	1M(0.2W)	1M(0.2W)	ZJ39B	ZJ39B	ZJ39B	ZJ39B	ZJ39B	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	56K

— GND LINE
 — POWER+ LINE
 — POWER- LINE
 --- ANALOG AUDIO
 --- DIGITAL AUDIO
 --- TMD5 SIGNAL
 --- ANALOG VIDEO
 --- DIGITAL VIDEO
 --- STBY POWER

SCHEMATIC DIAGRAMS (30/30)
 SCH30_SMPS

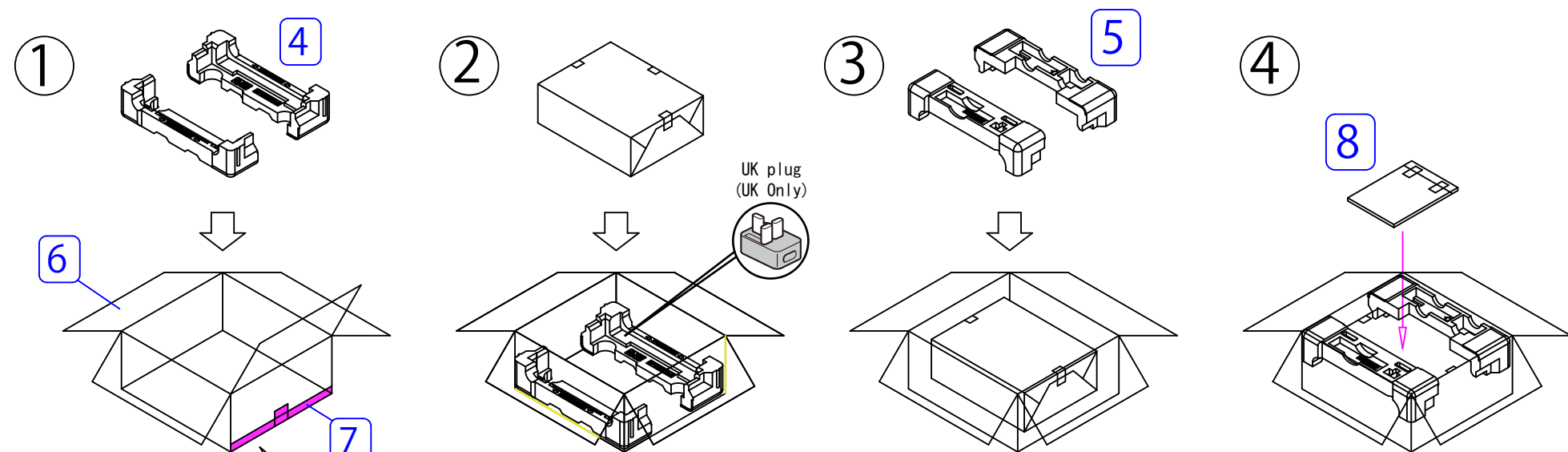
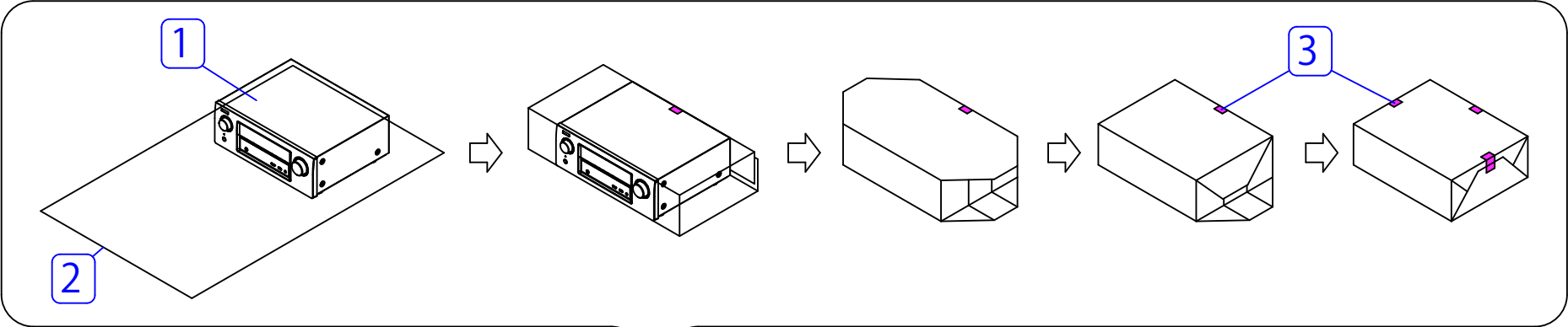
EXPLODED VIEW

Please refer to the last chapter for the part list.

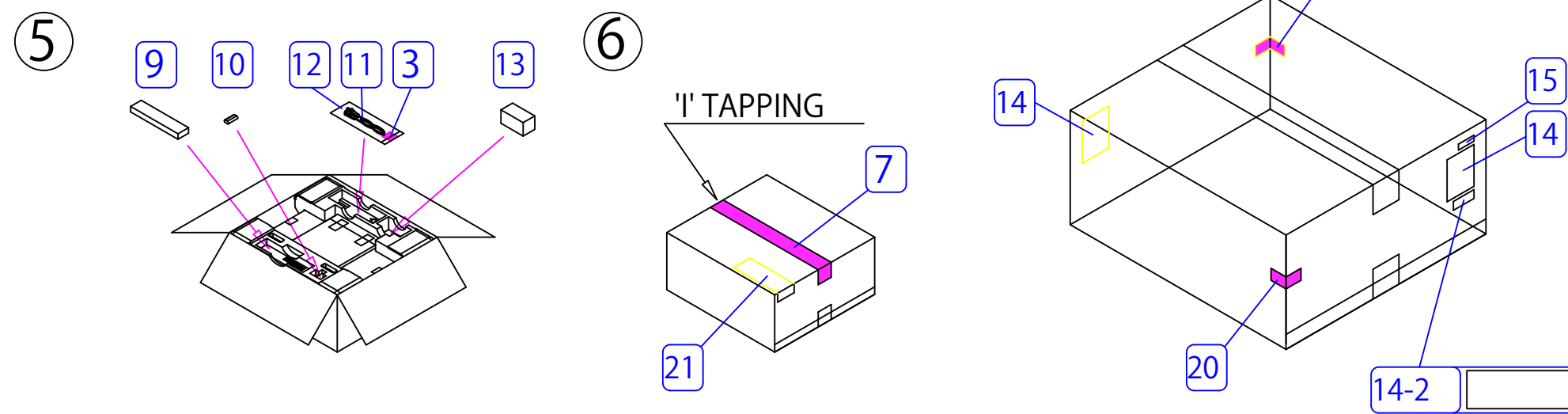


WARNING:
Parts marked with this symbol  have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

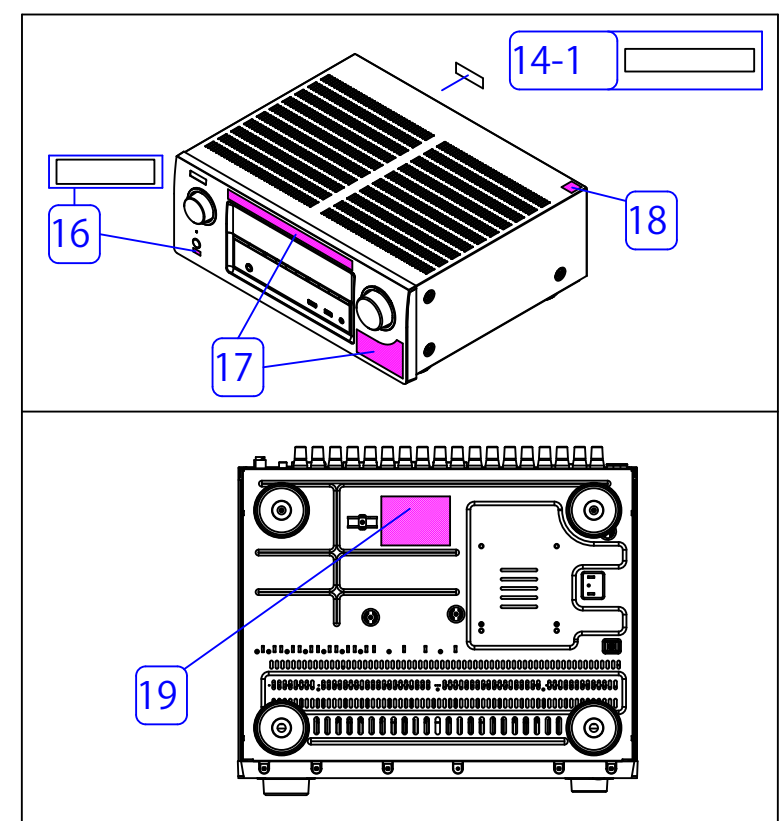
PACKING VIEW
Please refer to the last chapter for the part list.



'H' TAPPING



'I' TAPPING



[illegible]

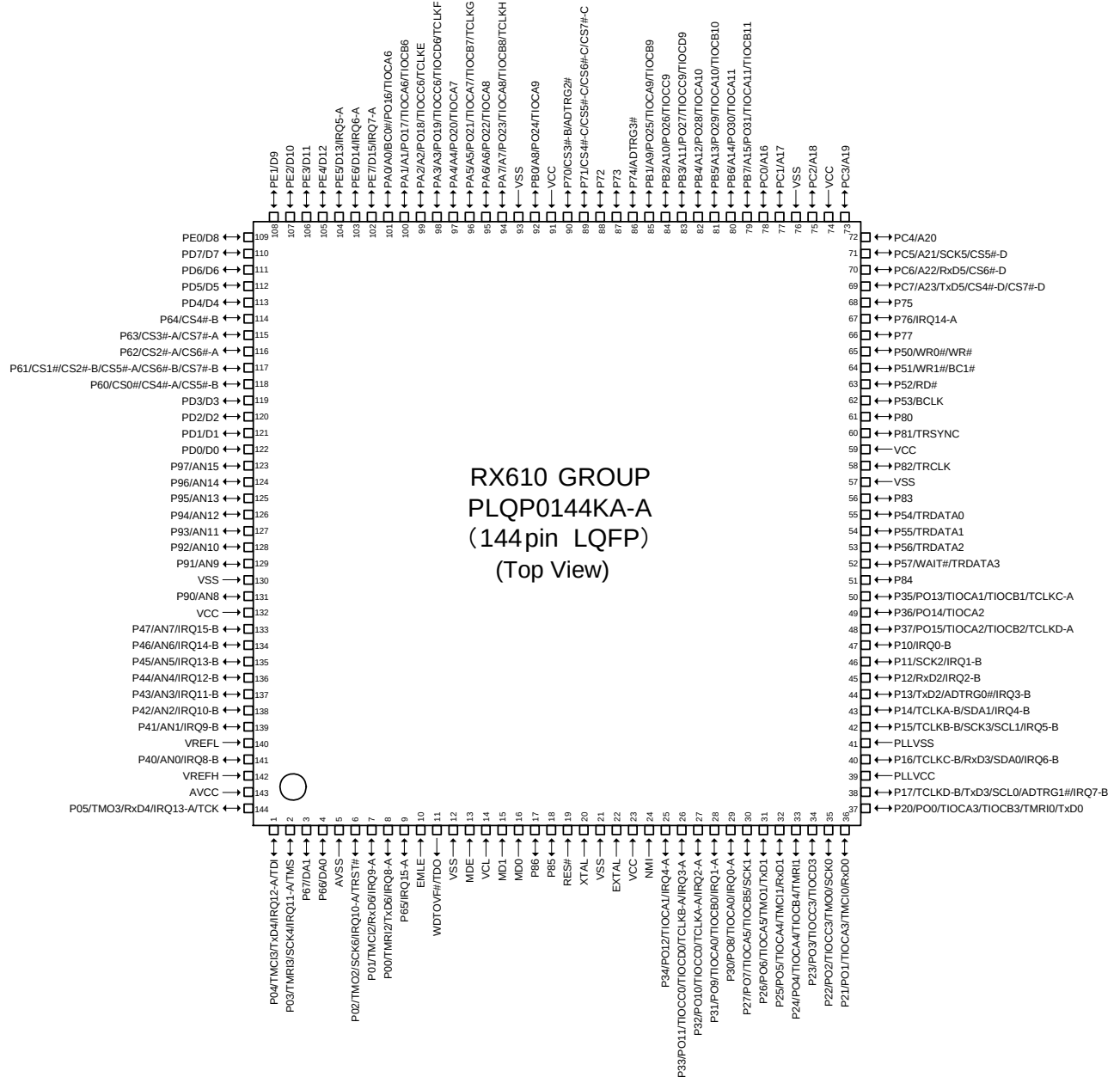
This image shows a full page of blank, lined paper. It features approximately 28 evenly spaced horizontal grey lines across the entire width of the page, providing a guide for writing. The background is a solid off-white color. There are no margins, text, or other markings present.

SEMICONDUCTORS

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.

1. IC's

R5F56108VNFP (DIGITAL:IC201)



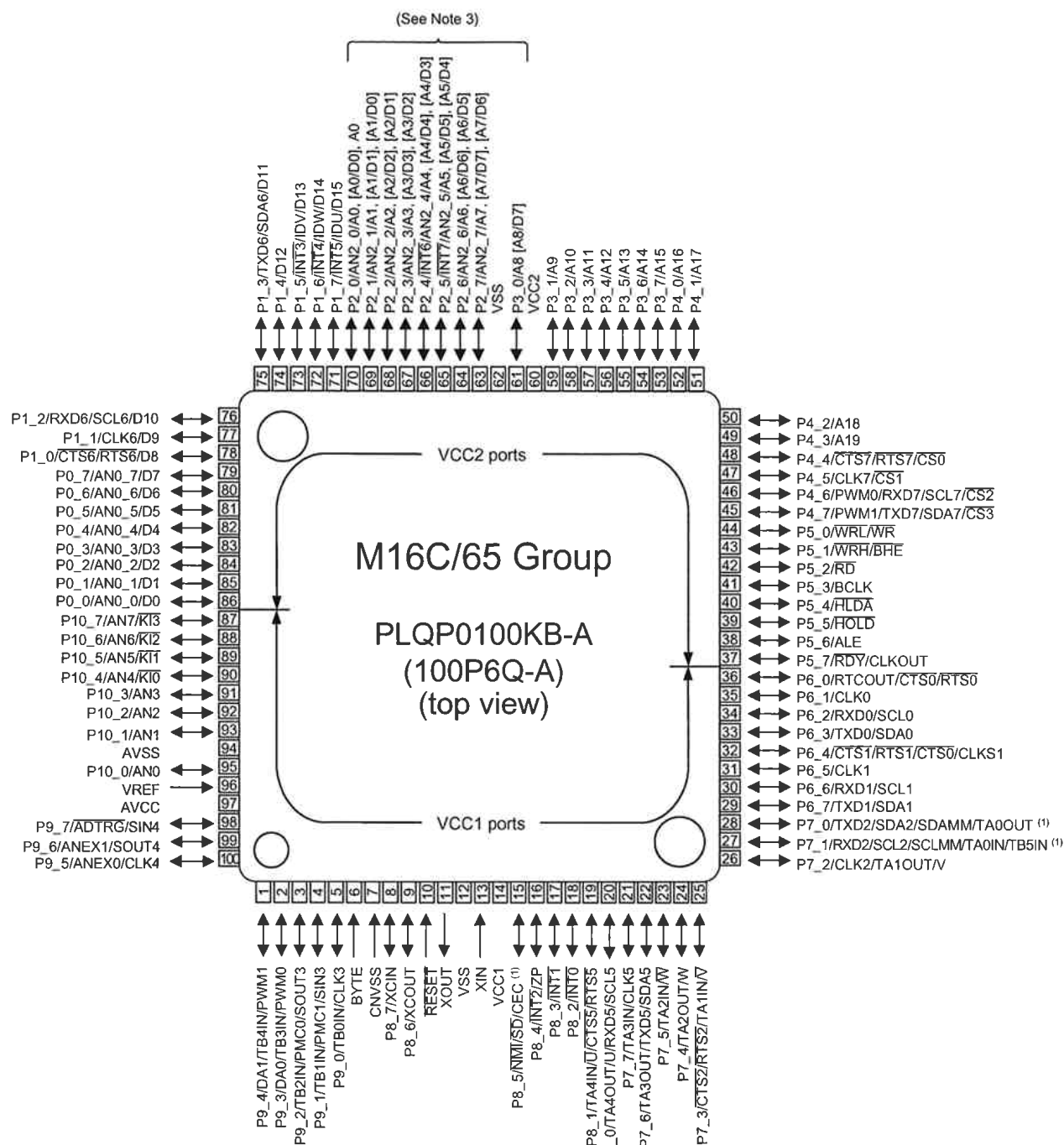
Pin	Pin Name	Symbol	I/O	Pull up/ down	LvCnv	STBY	STOP	CEC STBY	Function
6	P02/IRQ10-A/TMO2/ SCK6/TRST#	NC	I	Pd	-	I	I	I	NC
7	P01/IRQ9-A/TMC12/ RxD6	RXD MI232O	I	M3VPu	-	I	I	I	Data received from the external pin(AMX)/Use for firmware upgrading by DFW.
8	P00/IRQ8-A/TMR12/ TxD6	TXD MO232I	O	-	-	L	L	L	Data transfer to external pin(AMX)/Use for firmware upgrading by DFW.
9	P65/IRQ15-A	POWER KEY	I	M3VPu	-	I	I	I	POWER KEY (Waiting Mode cancel, 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	R E M O T E POWER(232C)	O	-	-	L	L	L	232C POWER SUPPLY (REMOTE 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/ TIOCA1	BDOWN	I	-	-	I	I	I	Power failure detection pin(Power failure:L)
26	P33/IRQ3-A/PO11/ TIOCC0/TIOCD0/ TCLKB-A	PLDAERR	I	-	-	L	L	L	PLD ERROR detection pin
27	P32/IRQ2-A/PO10/ TIOCC0/TCLKA-A	NC	O	-	-	L	O	L	Unused
28	P31/IRQ1-A/PO9/ TIOCA0/TIOCB0	ADV8003 INT1	I	-	-	I	I	I	HDMI transmitter / OSD (ADV8003) INT1 Input pin
29	P30/IRQ0-A/PO8/ TIOCA0	RC IN	I	-	-	I	I	I	Remote control signal input pin
30	P27/PO7/TIOCA5/ TIOCB5/SCK1	HDMI A SEL	O	-	-	L	L	L	TC74VHCT244AFT control pin. (Control the HDMI Audio input. H : DSP signal path / L : HDMI Rx -> Tx)
31	P26/PO6/TIOCA5/ TMO1/TxD1	NC	O	-	-	L	L	L	Unused
32	P25/PO5/TIOCA4/ TMC1/RxD1	NC	O	-	-	L	L	L	Unused
33	P24/PO4/TIOCA4/ TIOCB4/TMR11	TU RST	O	SW3VPu	-	L	L	L	TUNER RESET pin (E3 model)
34	P23/PO3/TIOCC3/ TIOCD3	E RESET	O	N3VPu	-	L	L	L	ETHERNET RESET control pin (DM860)
35	P22/PO2/TIOCC3/ TMO0/SCK0	E POWER	O	-/-	-	L	L	L	ETHERNET POWER SUPPLY (NET3.3V) control pin.(ON:H)
36	P21/PO1/TIOCA3/ TMC10/RxD0	E_RXDMIEO	I	-/-	-	I	I	I	ETHERNET communication control pin (DM860)
37	P20/PO0/TIOCA3/ TIOCB3/TMR10/TxD0	E_TXDMOEI	O	-/-	-	L	L	L	ETHERNET communication control pin (DM860)
38	P 1 7 / I R Q 7 - B / TCLKD-B/TxD3/ SCL0/ADTRG1#	TU SCLK	O	-	-	L	L	L	TUNER control pin
39	PLLVC	PLLVC	-	-	-	-	-	-	+3.3V
40	P 1 6 / I R Q 6 - B / TCLKC-B/RxD3/ SDA0	TU SDIO	I_O	-	-	L	L	L	TUNER control pin
41	PLLVS	PLLVS	-	-	-	-	-	-	GND
42	P 1 5 / I R Q 5 - B / TCLKB-B/SCK3/ SCL1	HSCL (400k)	O	CEC3VPu	-	L	L	L	VIDEO I2C Control for - HDMI SW (ADV3002) / HDMI RX , A to H Decoder (ADV7850) / HDMI ip Scaler , TX (ADV8003)
43	P 1 4 / I R Q 4 - B / TCLKA-B/SDA1	HSDA (400k)	I_O	CEC3VPu	-	L	L	L	VIDEO I2C Control for - HDMI SW (ADV3002) / HDMI RX , A to H Decoder (ADV7850) / HDMI ip Scaler , TX (ADV8003)
44	P13/IRQ3-B/TxD2/ ADTRG0#	ADV8003 SPI MO	O	-	-	L	L	L	OSD control pin (ADV8002 or ADV8003)

Pin	Pin Name	Symbol	I/O	Pull up/ down	LvCnv	STBY	STOP	CEC STBY	Function
45	P12/IRQ2-B/RxD2	ADV8003 SPI MI	I	-	-	L	L	L	OSD control pin (ADV8002 or ADV8003)
46	P11/IRQ1-B/SCK2	ADV8003 SPI CLK	O	-	-	L	L	L	OSD control pin (ADV8002 or ADV8003)
47	P10/IRQ0-B	ADV8003 SPI CS	O	-	-	L	L	L	OSD control pin (ADV8002 or ADV8003)
48	P37/PO15/TIOCA2/ 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/ TIOCB1/TCLKC-A	ADV7850 RST	O	-	-	L	L	L	HDMI RX , A to H Decoder (ADV7850) RESET control pin
51	P84	CEC_OUT	O	-	-	L	L	-	CEC-D signal output pin
52	P 5 7 / W A I T # / TRDATA3	ADV3002 RST	O	SW3VPu	-	L	L	L	HDMI switcher RESET control pin (ADV3002)
53	P56/TRDATA2	E SPI MOEI	O	N3VPu	-	L	L	L	ETHERNET communication control pin (DM860)
54	P55/TRDATA1	ADV8003 RST	O	SW3VPu	-	L	L	L	HDMI Tx/ip Scaler/OSD RESET control pin (ADV8003)
55	P54/TRDATA0	E SPI MIEO	I	N3VPu	-	I	L	I	ETHERNET communication control pin (DM860)
56	P83	E SPI CLK	O	N3VPu	-	L	L	L	ETHERNET communication control pin (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	NC	I	-	-	I	I	I	NC
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/ CS7#-D/TxD5	DSP MOSI	O	DA3VPu	-	L	L	L	DSP control pin (ADSP21487KSWZ- 3B)
70	PC6/A22/CS6#-D/ RxD5	DSP MISO	I	DA3VPu	-	L	L	L	DSP control pin (ADSP21487KSWZ- 3B)
71	PC5/A21/CS5#-D/ SCK5	DSPI CLK	O	DA3VPu	-	L	L	L	DSP control pin (ADSP21487KSWZ- 3B)
72	PC4/A20	DSP RST	O	-	-	L	L	L	DSP(ADSP21487KSWZ-3B) reset output pin (Reset : L)
73	PC3/A19	DSP FLAG0	I	Pd	-	L	L	L	DSP control pin (ADSP21487KSWZ- 3B)
74	VCC	VCC	-	-	-	-	-	-	+3.3V
75	PC2/A18	DSP ICS	O	DA3VPu	-	L	L	L	DSP control pin (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 (ON:H)
79	PB7/A15/PO31/ TIOCA11/TIOCB11	H/P RLY	O	-	-	L	L	L	HEADPHONE RLY control pin
80	PB6/A14/PO30/ TIOCA11	FRONT RLY	O	-	-	L	L	L	FRONT Ch RELAY control pin
81	PB5/A13/PO29/ TIOCA10/TIOCB10	HIN SELC	O	-	-	L	L	L	TC74VHC4051AFT control pin. (Control the detection of HDMI 5V INPUT for CEC STANDBY.)
82	PB4/A12/PO28/ TIOCA10	TU_SEN	O	-	-	L	L	L	TUNER control pin
83	PB3/A11/PO27/ TIOCC9/TIOCD9	C/S RLY	O	-	-	L	L	L	CENTER/SURROUND Ch RELAY control pin
84	PB2/A10/PO26/ TIOCC9	SB RLY	O	-	-	L	L	L	SURROUND-BACK Ch RELAY control pin
85	PB1/A9/PO25/ TIOCA9/TIOCB9	D5V POWER	O	-	-	L	L	L	DIGITAL POWER SUPPLY (D3.3V) control pin (ON:H)
86	P74/ADTRG3#	DIR CE	O	-	-	L	L	L	DIR control pin (LC89058W-E)
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)

Pin	Pin Name	Symbol	I/O	Pull up/ down	LvCnv	STBY	STOP	CEC STBY	Function
89	P 7 1 / C S 4 # - C / CS5#-C/CS6#-C/ CS7#-C	DIR CLK	O	-	-	L	L	L	DIR control pin (LC89058W-E)
90	P 7 0 / C S 3 # - B / ADTRG2#	DIR RST	O	-	-	L	L	L	DIR RESET pin (LC89058W-E)
91	VCC	VCC	-	-	-	-	-	-	+3.3V
92	P B 0 / A 8 / P O 2 4 / TIOCA9	CEC SEL	O	-	-	L	L	L	CEC output LINE switching
93	VSS	VSS	-	-	-	-	-	-	GND
94	P A 7 / A 7 / P O 2 3 / TIOCA8/TIOCB8/ TCLKH	NC	O/O	-/-	-	L	L	L	Unused
95	P A 6 / A 6 / P O 2 2 / TIOCA8	VSELA	I	-	-	I	I	I	Master Volume rotation detection pin(Rotary encoder)
96	P A 5 / A 5 / P O 2 1 / TIOCA7/TIOCB7/ TCLKG	VSEL B	I	-	-	I	I	I	Master Volume rotation detection pin(Rotary encoder)
97	P A 4 / A 4 / P O 2 0 / TIOCA7	E P O W E R 2 (Reserve)	O	-/-	-	L	L	L	Unused
98	P A 3 / A 3 / P O 1 9 / TIOCC6/TIOCD6/ TCLKF	D A C (E T H E R) MUTE	O	-	-	L	L	L	DAC (ETHER) MUTE control pin (PCM5100 for DM860)
99	P A 2 / A 2 / P O 1 8 / TIOCC6/TCLKE	PRE Z2 MUTE	O	-	-	L	L	L	Z2 PRE OUT MUTE control pin
100	P A 1 / A 1 / P O 1 7 / TIOCA6/TIOCB6	NC	O	-	-	L	L	L	Unused
101	PA0/A0/BC0#/PO16/ TIOCA6	PRE MUTE	O	-	-	L	L	L	Sub Woofer PRE OUT MUTE control 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 pin(Rotary encoder)
106	PE3/D11	ISEL B	I/O	-	-	I/L	I/L	I/L	Input Selector rotation detection pin(Rotary encoder)
107	PE2/D10	VOL CLK	O	-	-	L	L	L	FUNCTION / VOLUME control pin (R2A15218)
108	PE1/D9	VOL DATA	O	-	-	L	L	L	FUNCTION / VOLUME control pin (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 CS	O/O	-	-	L	L	L	A.PLD rewriting & control pin
112	PD5/D5	JTAG TDI/APLD DATA/DAC DATA	O/O	-	-	L	L	L	A.PLD rewriting & control /DAC control pin
113	PD4/D4	JTAG TCK/APLD CLK/DAC CLK	O/O	-	-	L	L	L	A.PLD rewriting & control /DAC control 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 pin(DM860)
117	P61/CS1#-A/CS2#-B/ CS5#-A/CS6#-B/ CS7#-B	DAC MS	O	-	-	L	L	L	D/A converter control pin (AK4358VQ)
118	P60/CS0#-A/CS4#-A/ CS5#-B	DAC RST	O	-	-	L	L	L	D/A converter control pin (AK4358VQ)
119	PD3/D3	NC	O	-	-	L	L	L	Unused
120	PD2/D2	NC	O	-	-	L	L	L	Unused
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 (DA3.3V & DA1.2V) control pin.(ON:H)
124	P96/AN14	CEC POWER	O	-	-	L	L	H	HDMI CEC POWER SUPPLY (CEC5V & CEC3.3V & CEC1.8V) control pin. (ON:H)
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

Pin	Pin Name	Symbol	I/O	Pull up/ down	LvCnv	STBY	STOP	CEC STBY	Function
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

R5F3650KNFB (DIGITAL : IC231)

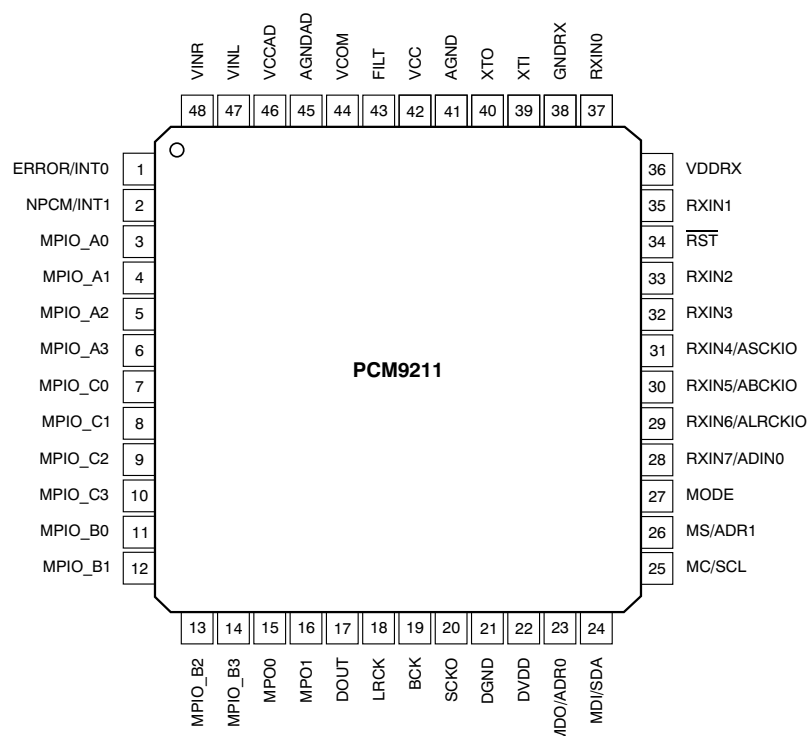


R5F3650KNFB Terminal Functions

Pin	Pin Name	Synbol	I/O	Type	Pu/Pd (Ext.)	CEC STBY	P0FF	Function
1	P94	NC	I	-	Pd	-	Z	NC
2	P93	DIR CE	O	C	-	O/L	Z	DIR control pin
3	P92/SOUT3	DIR DIN	O	C	-	O/L	Z	DIR control pin
4	P91/SIN3	DIR DOUT	I	-	DA3.3Pu	-	Z	DIR control pin
5	P90/CLK3	DIR CLK	O	C	-	O/L	Z	DIR control pin
6	BYTE	BYTE	-	-	-	-	-	GND(Ext. data bus bit width switching, 16bit : L)
7	CNVCS	CNVSS	-	-	Pd	-	-	Single-chip/Micro-processor mode switching (Normal single-chip : L, Rewrite boot program start : H input set)
8	P87	ADC RST	O	C	-	O/L	Z	AD control pin
9	P86	NC	O	C	-	O/L	Z	NC
10	RESET	SUBRESET	I	-	SCPU3VPu	-	Z	Reset input
11	XOUT	X1	O	-	-	-	-	Oscillator connection
12	VSS	VSS	-	-	-	-	-	GND
13	XIN	X2	I	-	-	-	-	Oscillator connection
14	VCC	VCC	-	-	-	-	-	+3.3V
15	P85(N)/(NMI)/ (CEC)	NC	I	-	Pd	-	-	NC
16	P84/INT2	CEC_IN	I	-	SCPU3VPu	-	Z	CEC-D signal input pin
17	P83/INT1	ACK SIMO	I	-	-	-	Z	MAIN-SUB ucom communication control input pin MAIN ucom Hack from the main "L" Return)
18	P82/INT0	SUB BDOWN	I	-	-	-	Z	Power failure detect(Power failure:L)
19	P81	NC	O	C	-	-	Z	NC
20	P80/(RXD5)	NC	O	C	-	-	Z	NC
21	P77/(CLK5)	SUB TDO	I	-	-	O/L	Z	PLD rewriting control (JTAG)
22	P76/(TXD5)	A PLD CS "D/M"	O	C	-	-	O/L	A PLD control pin/ DENON WRITTER/ MITSUBISHI rewritten for determining (DW :L)
23	P75	A PLD DATA	O	C	-	O/L	Z	A PLD control pin
24	P74	A PLD CLK	O	C	-	O/L	Z	A PLD control pin
25	P73/CTS2	NC	I	-	Pd	-	Z	NC
26	P72/CLK2	DA POWER	O	C	-	-	Z	DIGITAL power (DA3.3V,DA1.1V) ON/OFF control (H: ON)
27	P71(N)/RXD2/ SCLMM	HSCL(400k)	I/O	N	CEC3VPu	O/L	O/L	VIDEO I2C- ADV8003/ADV7850/Sil9575
28	P70(N)/TXD2/ SDAMM	HSDA(400k)	I/O	N	CEC3VPu	O/L	O/L	VIDEO I2C- ADV8003/ADV7850/Sil9575
29	P67/TXD1	TXD	O	C	SCPU3VPu	-	Z	Data transmission output to external
30	P66/RXD1	RXD	I	-	SCPU3VPu	-	Z	Data reception input from the external
31	P65/CLK1/SCLK	SCLK	I	-	Pd	-	Z	Emulator communication pin
32	P64/CTS1	HIN SELA	O	C	-	O/L	Z	For HDMI +5V selection(TC4051)
33	P63/TXD0	SOMI	O	C	-	-	Z	MAIN-SUB ucom communication control pin
34	P62/RXD0	SIMO	I	-	-	-	Z	MAIN-SUB ucom communication control pin
35	P61/CLK0	CLK SIMO	I	-	-	-	Z	MAIN-SUB ucom communication control pin
36	P60/CTS0	REQ SOMI	O	C	-	-	Z	MAIN-SUB ucom communication control pin
37	P57	TMDS SW RST RST	O	C	SCPU3VPu	-	Z	HDMI SWITCHER TMDS SW RST RST Reset pin
38	P56	DV POWER2	O	C	-	-	Z	DIGITAL.VIDEO power control pin (DV1.8V)
39	P55/EPM	EPM	I	-	Pd	-	Z	Rewrite boot program start:L input set
40	P54	CEC_OUT	O	C	-	-	Z	CEC-D signal output pin
41	P53	NC	I	-	Pd	I	Z	NC
42	P52	HIN SELC	I	-	SCPU3VPu	I	Z	For HDMI +5V selection(TC4051)
43	P51	HIN SELB	O	C	-	O/L	Z	For HDMI +5V selection(TC4051)
44	P50/CE	CE	O/I	C	SCPU3VPu	-	Z	Rewrite boot program start:H input set
45	P47/(TXD7)/ SDA7	VSDA	I/O	C	DV3VPu	-	O/L	VIDEO SELECT IC(ADVM2000)
46	P46/(RXD7)/ SCL7	VSCL	I/O	C	DV3VPu	-	O/L	VIDEO SELECT IC(ADVM2000)
47	P45/(CLK7)	ADV8003 INT1	I	-	-	-	Z	HDMI ADV8003 INT output
48	P44	ADV8003 INT2	I	-	-	-	Z	HDMI ADV8003 INT output
49	P43	HDMI A.SEL	O	C	-	O/L	Z	HDMI AUDIO switch (H : DSP course, L : HDMI Rx→Tx through)(TC74VHC244)
50	P42	NC	I	-	Pd	I	Z	NC
51	P41	CEC POWER	O	C	-	O/H	Z	Power ON (CEC5V,CEC3.3V,CEC1.8V) for CEC STANDBY
52	P40	CEC SEL(33)	I	-	Pd	-	Z	CEC output LINE switching
53	P37	ADV7850 RST	O	C	SCPU3VPu	-	Z	Reset for HDMI(ADV7850)

Pin	Pin Name	Synbol	I/O	Type	Pu/Pd (Ext.)	CEC STBY	P.OFF	Function
54	P36	ADV8003 RST	O	C	SCPU3VPu	-	Z	Reset for HDMI(ADV8003)
55	P35	NC	O	C	-	-	Z	NC
56	P34	NC	O	C	-	-	Z	S signal presence detection input (Connected: H)
57	P33	NC	O	C	-	-	Z	NC
58	P32	DAC MDI	O	C	-	O/L	Z	DAC control pin(ASK4358)
59	P31	DAC MC	O	C	-	O/L	Z	DAC control pin(ASK4358)
60	VCC	VCC	-	-	-	-	-	+3.3V
61	P30	DAC MS	O	C	-	O/L	Z	DAC control pin(ASK4358)
62	VSS	VSS	-	-	-	-	-	GND
63	P27	DAC RST	O	C	-	O/L	Z	DAC control pin(ASK4358)
64	P26	DV POWER	O	C	-	MODE1=O/ MODE2=O/ L	Z	DIGITAL VIDEO power control pin (DV5V,DV3.3V)
65	P25/INT7	ADV7850 INT1	I	-	-	-	Z	HDMI RECEIVER(ADV7850)INT output
66	P24/INT6	ADV7850 INT2	I	-	-	-	Z	HDMI RECEIVER(ADV7850)INT output
67	P23	SUB TMS	O	C	DA3.3Pu	-	Z	PLD rewriting control (JTAG)
68	P22	NC	I	-	Pd	-	Z	NC
69	P21	NC	O	C	-	-	Z	NC
70	P20	NC	O	C	-	-	Z	NC
71	P17/INT5	SII INT	I	-	-	-	Z	HDMI SiI9575 INT output
72	P16/INT4	NC	O	-	-	-	Z	NC
73	P15/INT3	H5V DET	I	-	-	-	Z	HDMI IN 5V DET
74	P14	NC	I	-	Pd	-	Z	NC
75	P13/TXD6	DSP MOSI	O	C	DA3VPu	O/L	Z	DSP control pin
76	P12/RXD6	DSP MISO	I	-	DA3VPu	-	Z	DSP control pin
77	P11/CLK6	DSPICLK	O	C	DA3VPu	O/L	Z	DSP control pin
78	P10	NC	O	C	-	-	Z	VIDEO IN signal presence detection input(Signal input:H)
79	P07	SUB TDI	O	C	DA3.3Pu	O/L	Z	PLD rewriting control (JTAG)
80	P06	NC	O	C	-	-	Z	NC
81	P05	NC	O	C	-	O/L	Z	ZONE2 image input switch (INPUT select)
82	P04	NC	O	C	-	O/L	Z	ZONE2 image input switch (INPUT select)
83	P03	SUB TCK	O	C	Pd	-	Z	PLD rewriting control (JTAG)
84	P02	NC	O	C	-	O/L	O/L	NC
85	P01	NC	O	C	-	O/L	O/L	NC
86	P00	DIR RST1	O	C	-	O/L	O/L	DIR control pin (LC89058W-VF4A)
87	P107/(AN7)	DSP RST	O	C	-	O/L	Z	DSP reset output pin (Reset:L)
88	P106/(AN6)	NC	I	-	Pd	-	Z	NC
89	P105/(AN5)	DSP ROMRST	O	C	-	O/L	Z	Memory reset for DSP(Reset:L)
90	P104/(AN4)	NC	O	-	-	-	Z	NC
91	P103/(AN3)	DSP FLAG0	I	-	Pd	-	Z	DSP control pin
92	P102/(AN2)	DSPICS	O	C	DA3VPu	O/L	Z	DSP control pin
93	P101/(AN1)	NC	I	-	Pd	-	Z	NC
94	AVSS	AVSS	-	-	-	-	-	AD GND
95	P100/(AN0)	NC	I	-	Pd	-	Z	NC
96	VREF	VREF	-	-	-	-	-	AD standard +3.3V
97	AVCC	AVCC	-	-	-	-	-	AD +3.3V
98	P97/(SIN4)	Tx EN	O	C	-	-	Z	AD8195 ENABLE pin for Front HDMI control
99	P96/(SOUT4)	NC	I	-	Pd	-	Z	NC
100	P95/(CLK4)	NC	I	-	Pd	-	Z	NC

PCM9211 (DIGITAL : IC403)



PIN Functions

PIN				DESCRIPTION
NO.	NAME	I/O	5-V TOLERANT	
1	ERROR/INT0	O	No	DIR Error detection output / Interrupt0 output
2	NPCM/INT1	O	No	DIR Non-PCM detection output / Interrupt1 output
3	MPIO_A0	I/O	Yes	Multipurpose I/O, Group A(1)
4	MPIO_A1	I/O	Yes	Multipurpose I/O, Group A(1)
5	MPIO_A2	I/O	Yes	Multipurpose I/O, Group A(1)
6	MPIO_A3	I/O	Yes	Multipurpose I/O, Group A(1)
7	MPIO_C0	I/O	Yes	Multipurpose I/O, Group C(1)
8	MPIO_C1	I/O	Yes	Multipurpose I/O, Group C(1)
9	MPIO_C2	I/O	Yes	Multipurpose I/O, Group C(1)
10	MPIO_C3	I/O	Yes	Multipurpose I/O, Group C(1)
11	MPIO_B0	I/O	Yes	Multipurpose I/O, Group B(1)
12	MPIO_B1	I/O	Yes	Multipurpose I/O, Group B(1)
13	MPIO_B2	I/O	Yes	Multipurpose I/O, Group B(1)
14	MPIO_B3	I/O	Yes	Multipurpose I/O, Group B(1)
15	MPO0	O	No	Multipurpose output 0
16	MPO1	O	No	Multipurpose output 1
17	DOUT	O	No	Main output port, serial digital audio data output
18	LRCK	O	No	Main output port, LR clock output
19	BCK	O	No	Main output port, Bit clock output
20	SCKO	O	No	Main output port, System clock output
21	DGND	—	—	Ground, for digital
22	DVDD	—	—	Power supply, 3.3 V (typ.), for digital
23	MDO/ADR0	I/O	Yes	Software control I/F, SPI data output / I2C slave address setting0(2)
24	MDI/SDA	I/O	Yes	Software control I/F, SPI data input / I2C data input/output(2) (3)
25	MC/SCL	I	Yes	Software control I/F, SPI clock input / I2C clock input(2)
26	MS/ADR1	I	Yes	Software control I/F, SPI chip select / I2C slave address setting1(2)
27	MODE	I	No	Control mode setting, (see the Serial Control Mode section, Control Mode Pin Setting)
28	RXIN7/ADIN0	I	Yes	Biphase signal, input 7 / AUXIN0, serial audio data input(2)
29	RXIN6/ALRCKIO	I	Yes	Biphase signal, input 6 / AUXIN0, LR clock input(2)
30	RXIN5/ABCKIO	I	Yes	Biphase signal, input 5 / AUXIN0, bit clock input(2)
31	RXIN4/ASCKIO	I	Yes	Biphase signal, input 4 / AUXIN0, system clock input(2)
32	RXIN3	I	Yes	Biphase signal, input 3(2)
33	RXIN2	I	Yes	Biphase signal, input 2(2)

PIN				DESCRIPTION
NO.	NAME	I/O	5-V TOLERANT	
34	RST	I	Yes	Reset Input, active low(2) (4)
35	RXIN1	I	Yes	Biphase signal, input 1, built-in coaxial amplifier
36	VDDRX	—	—	Power supply, 3.3 V (typ.), for RXIN0 and RXIN1.
37	RXIN0	I	Yes	Biphase signal, input 0, built-in coaxial amplifier
38	GNDRX	-	-	Ground, for RXIN
39	XTI	I	No	Oscillation circuit input for crystal resonator or external XTI clock source input(5)
40	XTO	O	No	Oscillation circuit output for crystal resonator
41	AGND	—	—	Ground, for PLL analog
42	VCC	—	—	Power supply, 3.3 V (typ.), for PLL analog
43	FILT	O	No	External PLL loop filter connection terminal; must connect recommended filter
44	VCOM	O	No	ADC common voltage output; must connect external decoupling capacitor
45	AGNDAD	—	—	Ground, for ADC analog
46	VCCAD	—	—	Power supply, 5.0 V (typ.), for ADC analog
47	VINL	I	No	ADC analog voltage input, left channel
48	VINR	I	No	ADC analog voltage input, right channel

(1) Schmitt trigger input

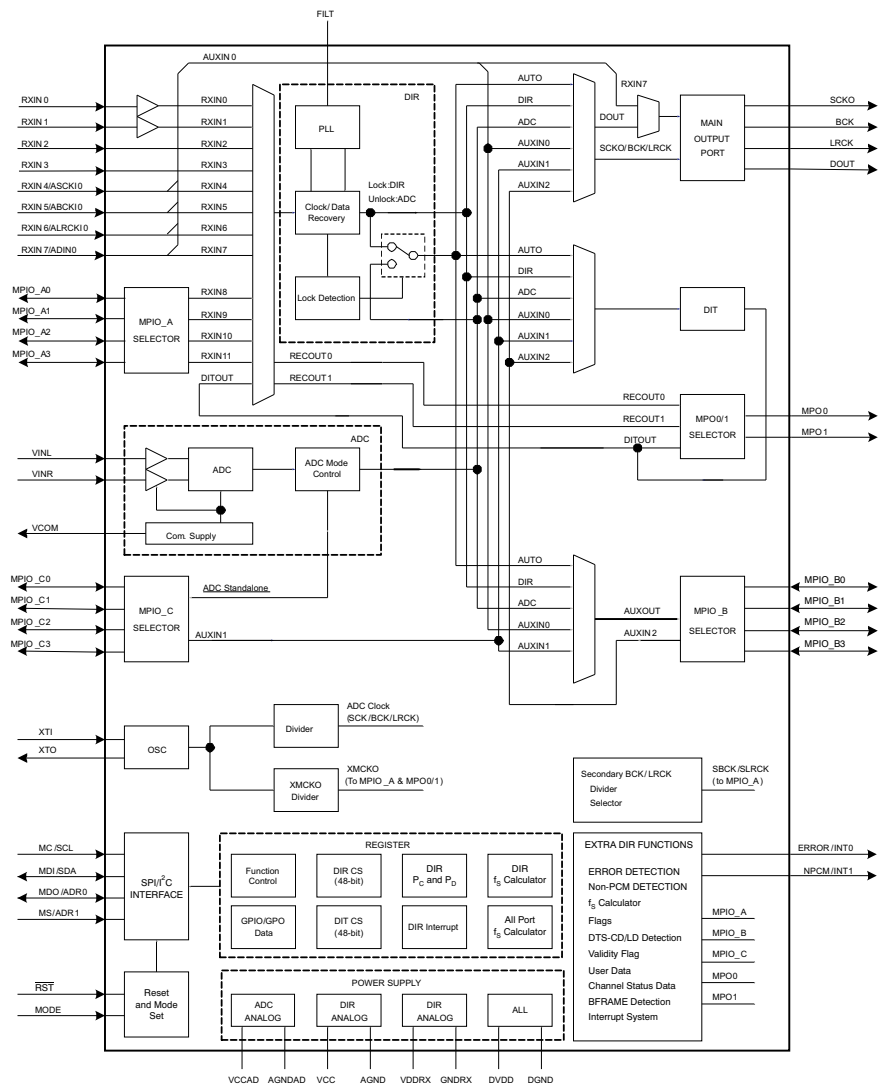
(2) Schmitt trigger input

(3) Open-drain configuration in I2C mode

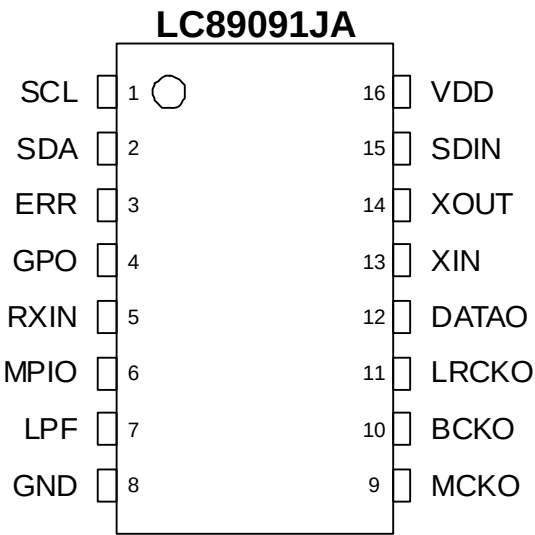
(4) Onboard pull-down resistor (50 kΩ, typical)

(5) CMOS Schmitt trigger input

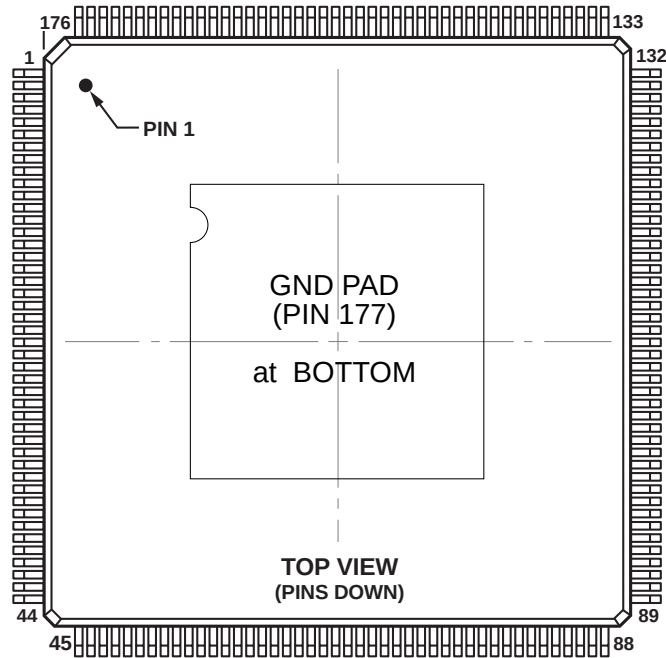
PCM9211 BLOCK DIAGRAM



LC89091JA (DIGITAL : IC404)



ADSP21487KSWZ4B (DIGITAL:IC408)



ADSP21487KSWZ3B Terminal Function

Pin Name	Pin No.	Pin Name	Pin No.	Pin Name	Pin No.	Pin Name	Pin No.
SDDQM	1	V _{DD_EXT}	45	DAI_P10	89	V _{DD_INT}	133
$\overline{MS0}$	2	DPI_P08	46	V _{DD_INT}	90	FLAG0	134
SDCKE	3	DPI_P07	47	V _{DD_EXT}	91	FLAG1	135
V _{DD_INT}	4	V _{DD_INT}	48	DAI_P20	92	FLAG2	136
CLK_CFG1	5	DPI_P09	49	V _{DD_INT}	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 _{DD_EXT}	8	DPI_P12	52	DAI_P04	96	NC	140
ADDR1	9	DPI_P13	53	DAI_P18	97	V _{DD_EXT}	141
ADDR2	10	DPI_P14	54	DAI_P17	98	NC	142
ADDR3	11	DAI_P03	55	DAI_P16	99	V _{DD_INT}	143
ADDR4	12	NC	56	DAI_P12	100	TRST	144
ADDR5	13	V _{DD_EXT}	57	DAI_P15	101	NC	145
BOOT_CFG1	14	NC	58	V _{DD_INT}	102	EMU	146
GND	15	NC	59	DAI_P11	103	DATA0	147
ADDR6	16	NC	60	V _{DD_EXT}	104	DATA1	148
ADDR7	17	NC	61	V _{DD_INT}	105	DATA2	149
NC	18	V _{DD_INT}	62	BOOT_CFG2	106	DATA3	150
NC	19	NC	63	V _{DD_INT}	107	TDO	151
ADDR8	20	NC	64	AMI_ACK	108	DATA4	152
ADDR9	21	V _{DD_INT}	65	GND	109	V _{DD_EXT}	153
CLK_CFG0	22	NC	66	THD_M	110	DATA5	154
V _{DD_INT}	23	NC	67	THD_P	111	DATA6	155
CLKIN	24	V _{DD_INT}	68	V _{DD_THD}	112	V _{DD_INT}	156
XTAL	25	NC	69	V _{DD_INT}	113	DATA7	157
ADDR10	26	WDRSTO	70	V _{DD_INT}	114	TDI	158
SDA10	27	NC	71	MST	115	SDCLK	159
V _{DD_EXT}	28	V _{DD_EXT}	72	V _{DD_INT}	116	V _{DD_EXT}	160
V _{DD_INT}	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 _{DD_EXT}	119	DATA10	163
ADDR17	32	DAI_P01	76	ADDR23	120	TCK	164
ADDR13	33	DAI_P02	77	ADDR22	121	DATA11	165
V _{DD_INT}	34	V _{DD_INT}	78	ADDR21	122	DATA12	166
ADDR18	35	NC	79	V _{DD_INT}	123	DATA14	167
RESETOUT/RUNRSTIN	36	NC	80	ADDR20	124	DATA13	168
V _{DD_INT}	37	NC	81	ADDR19	125	V _{DD_INT}	169
DPI_P01	38	NC	82	V _{DD_EXT}	126	DATA15	170
DPI_P02	39	NC	83	ADDR16	127	$\overline{SDWE}$	171
DPI_P03	40	V _{DD_EXT}	84	ADDR15	128	$\overline{SDRAS}$	172
V _{DD_INT}	41	V _{DD_INT}	85	V _{DD_INT}	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 _{DD_INT}	176
						GND	177*

* at BOTTOM

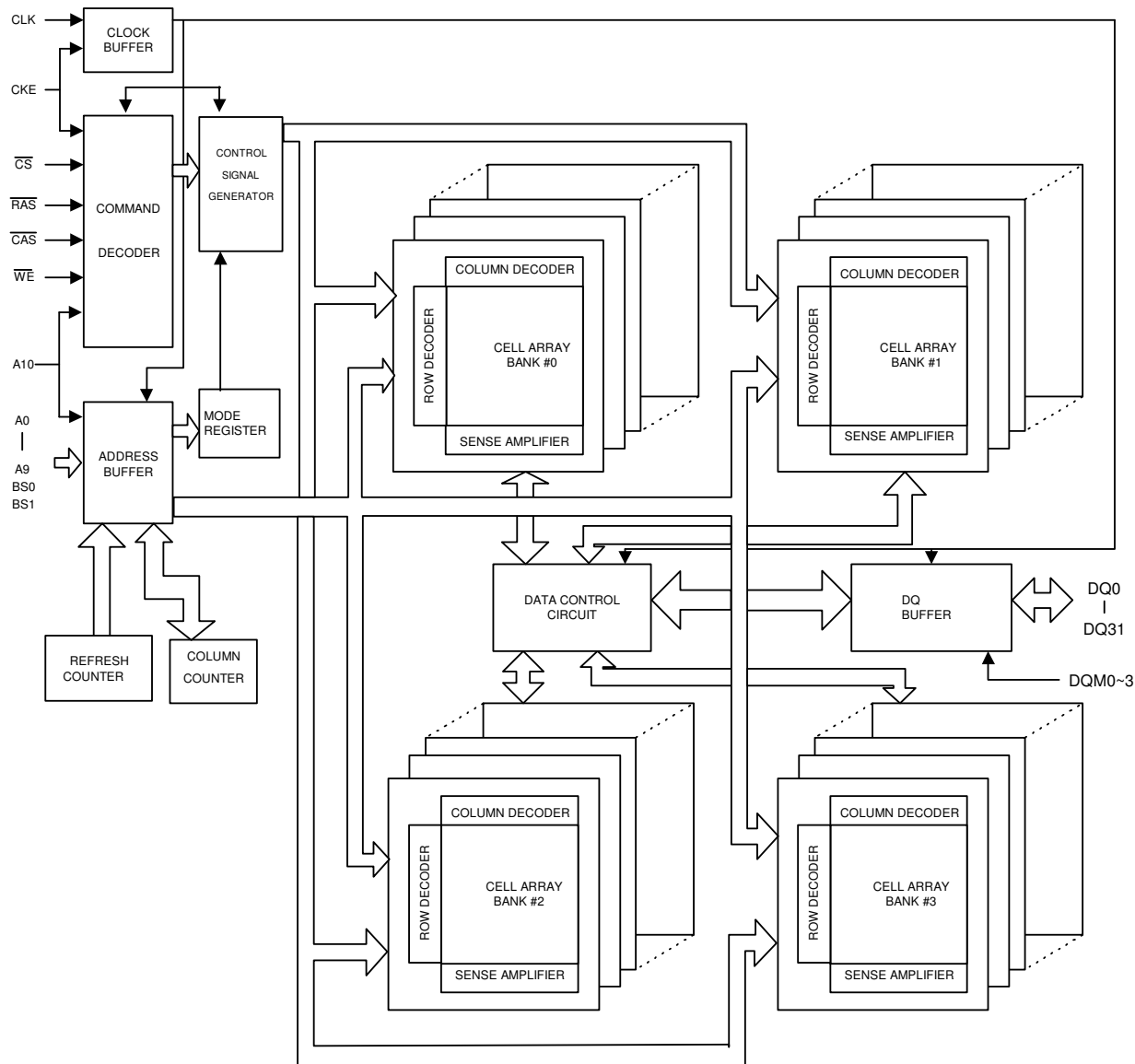
W9864G6JH-6 (DIGITAL:IC409)

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

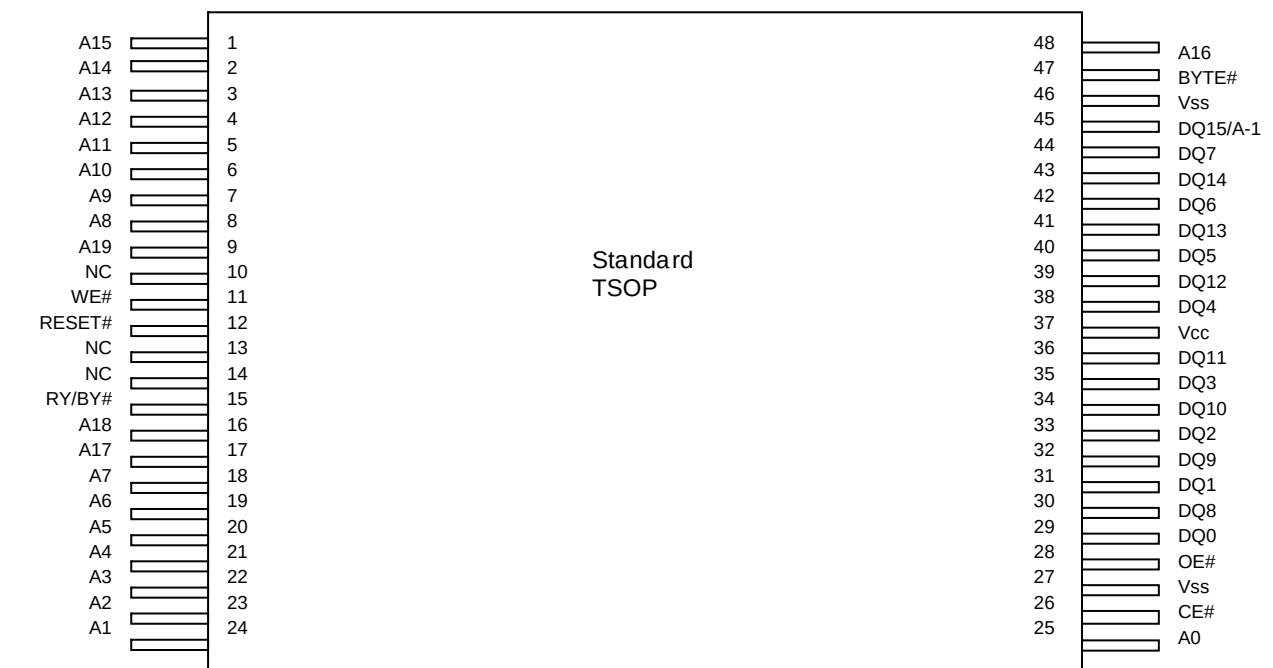
W9864G6JH-6 Pin description

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.

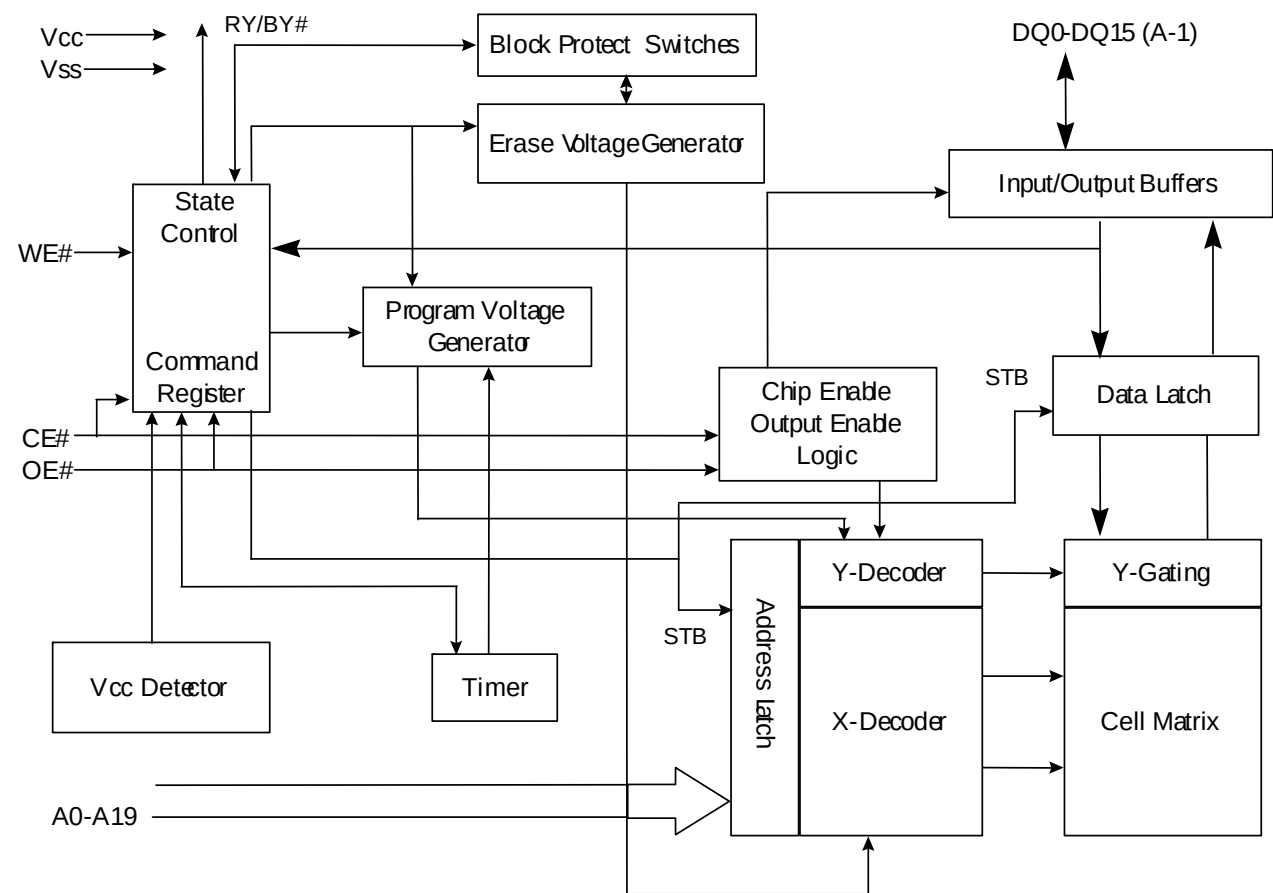
W9864G6JH-6 Block diagram



MX29LV160DBTI-70G (DIGITAL : IC410)



MX29LV160DBTI-70G Block Diagram



PCM5100 (DIGITAL:IC421)

PCM510X (top view)

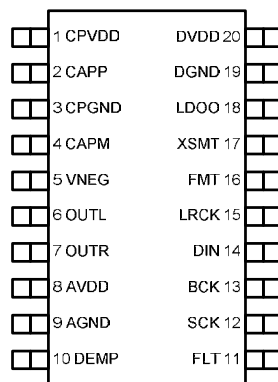


Table 2. TERMINAL FUNCTIONS, PCM510x

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 ⁽¹⁾ : 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 ² 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

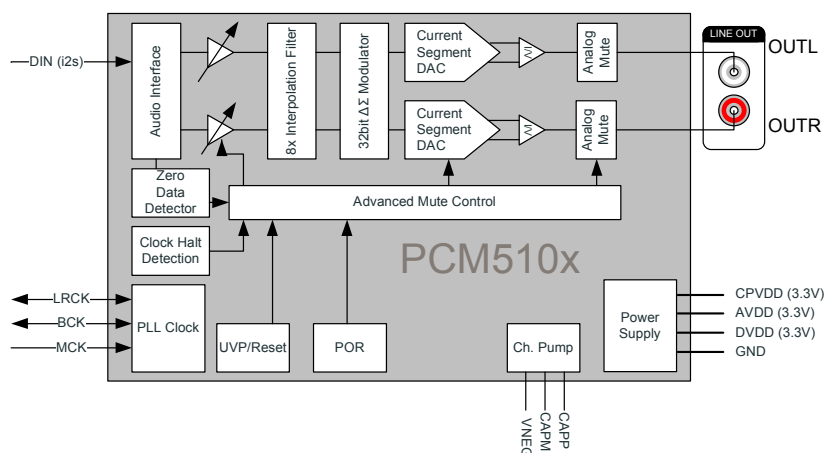
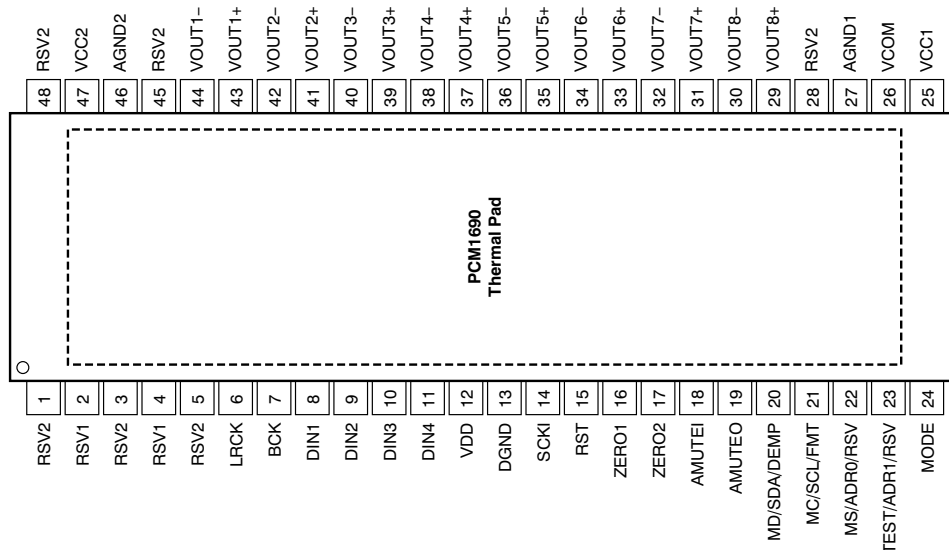


Figure 1. PCM510x Functional Block Diagram

PCM1690(DIGITAL:IC441)



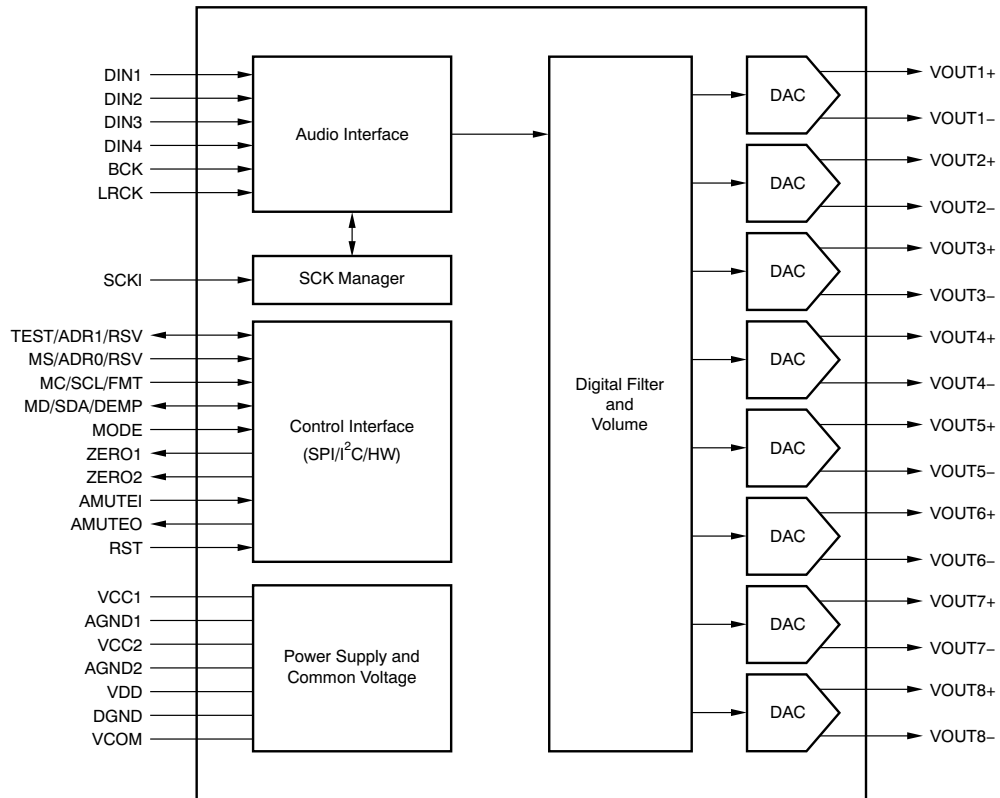
PCM1690 Pin Function

TERMINAL NAME	PIN	I/O	PULL-DOWN	5-V TOLERANT	DESCRIPTION
RSV2	1	—	—	—	Reserved, tied to analog ground
RSV1	2	—	—	—	Reserved, left open
RSV2	3	—	—	—	Reserved, tied to analog ground
RSV1	4	—	—	—	Reserved, left open
RSV2	5	—	—	—	Reserved, tied to analog ground
LRCK	6	I	Yes	No	Audio data word clock input
BCK	7	I	Yes	No	Audio data bit clock input
DIN1	8	I	No	No	Audio data input for DAC1 and DAC2
DIN2	9	I	No	No	Audio data input for DAC3 and DAC4
DIN3	10	I	No	No	Audio data input for DAC5 and DAC6
DIN4	11	I	No	No	Audio data input for DAC7 and DAC8
VDD	12	—	—	—	Digital power supply, +3.3 V
DGND	13	—	—	—	Digital ground
SCKI	14	I	No	Yes	System clock input
RST	15	I	Yes	Yes	Reset and power-down control input with active low
ZERO1	16	O	No	No	Zero detect flag output 1
ZERO2	17	O	No	No	Zero detect flag output 2
AMUTEI	18	I	No	Yes	Analog mute control input with active low
AMUTEO	19	O	No	Yes	Analog mute status output(1) with active low
MD/SDA/DEMP	20	I/O	No	Yes	Input data for SPI, data for I2C(1), de-emphasis control for hardware control mode
MC/SCL/FMT	21	I	No	Yes	Clock for SPI, clock for I2C, format select for hardware control mode
MS/ADR0/RSV	22	I	Yes	Yes	Chip Select for SPI, address select 0 for I2C, reserve (set low) for hardware control mode
TEST/ADR1/RSV	23	I/O	No	Yes	Test (factory use, left open) for SPI, address select 1 for I2C, reserve (set low) for hardware control mode
MODE	24	I	No	No	Control port mode selection. Tied to VDD: SPI, left open: H/W mode, tied to DGND: I2C
VCC1	25	—	—	—	Analog power supply 1, +5 V
VCOM	26	—	—	—	Voltage common decoupling
AGND1	27	—	—	—	Analog ground 1
RSV2	28	—	—	—	Reserved, tied to analog ground
VOUT8+	29	O	No	No	Positive analog output from DAC8
VOUT8-	30	O	No	No	Negative analog output from DAC8
VOUT7+	31	O	No	No	Positive analog output from DAC7
VOUT7-	32	O	No	No	Negative analog output from DAC7
VOUT6+	33	O	No	No	Positive analog output from DAC6
VOUT6-	34	O	No	No	Negative analog output from DAC6
VOUT5+	35	O	No	No	Positive analog output from DAC5
VOUT5-	36	O	No	No	Negative analog output from DAC5
VOUT4+	37	O	No	No	Positive analog output from DAC4
VOUT4-	38	O	No	No	Negative analog output from DAC4
VOUT3+	39	O	No	No	Positive analog output from DAC3
VOUT3-	40	O	No	No	Negative analog output from DAC3
VOUT2+	41	O	No	No	Positive analog output from DAC2
VOUT2-	42	O	No	No	Negative analog output from DAC2

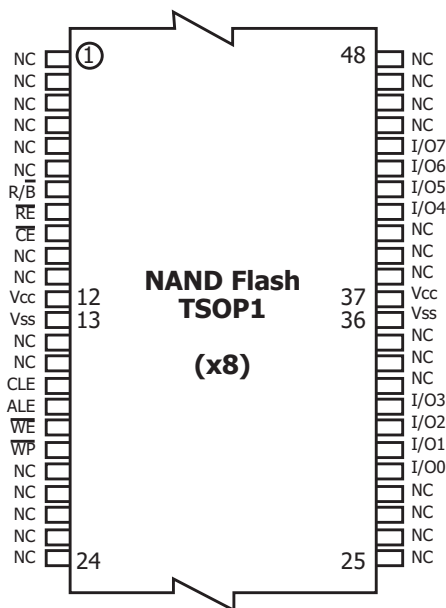
TERMINAL		I/O	PULL-DOWN	5-V TOLERANT	DESCRIPTION
NAME	PIN				
VOUT1+	43	O	No	No	Positive analog output from DAC1
VOUT1-	44	O	No	No	Negative analog output from DAC1
RSV2	45	—	—	—	Reserved, tied to analog ground
AGND2	46	—	—	—	Analog ground 2
VCC2	47	—	—	—	Analog power supply 2, +5 V
RSV2	48	—	—	—	Reserved, tied to analog ground

(1) Open-drain configuration in out mode.

PCM1690 FUNCTIONAL BLOCK DIAGRAM



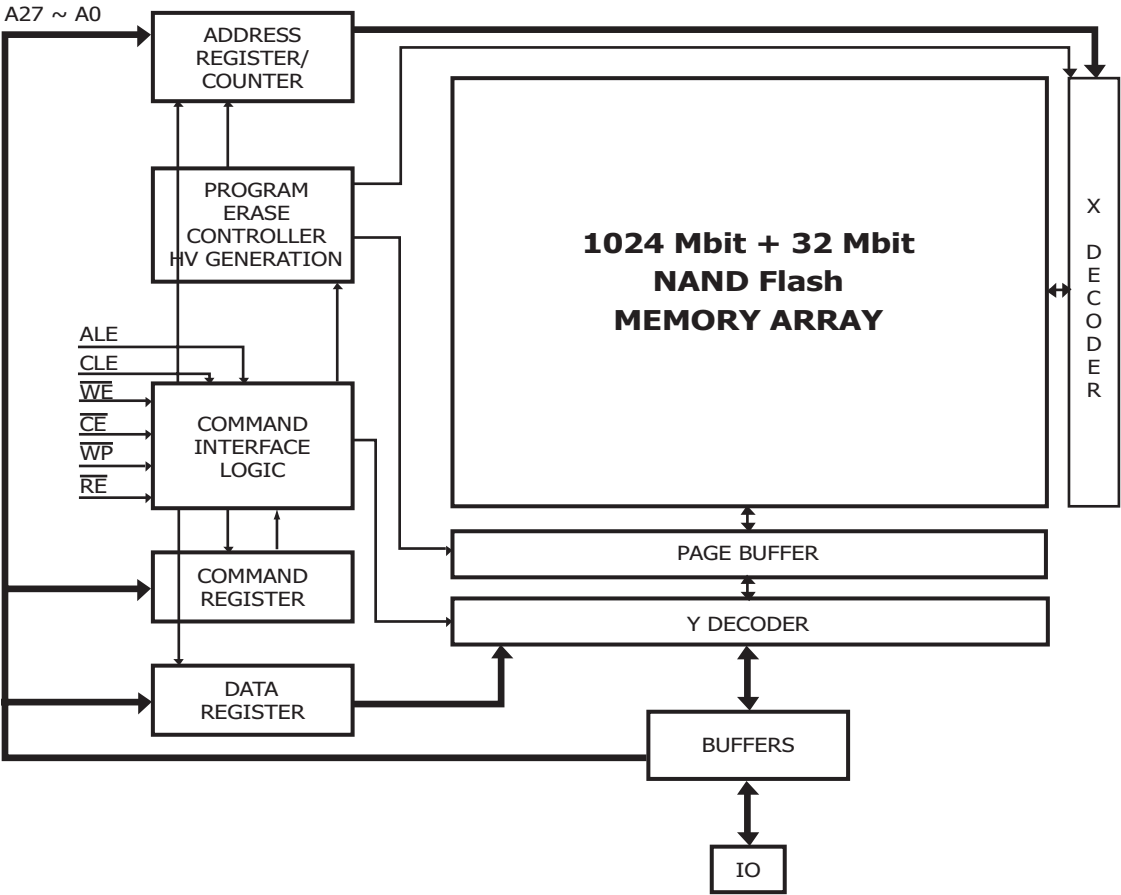
H27U1G8F2BTR-BC (DIGITAL:IC394)



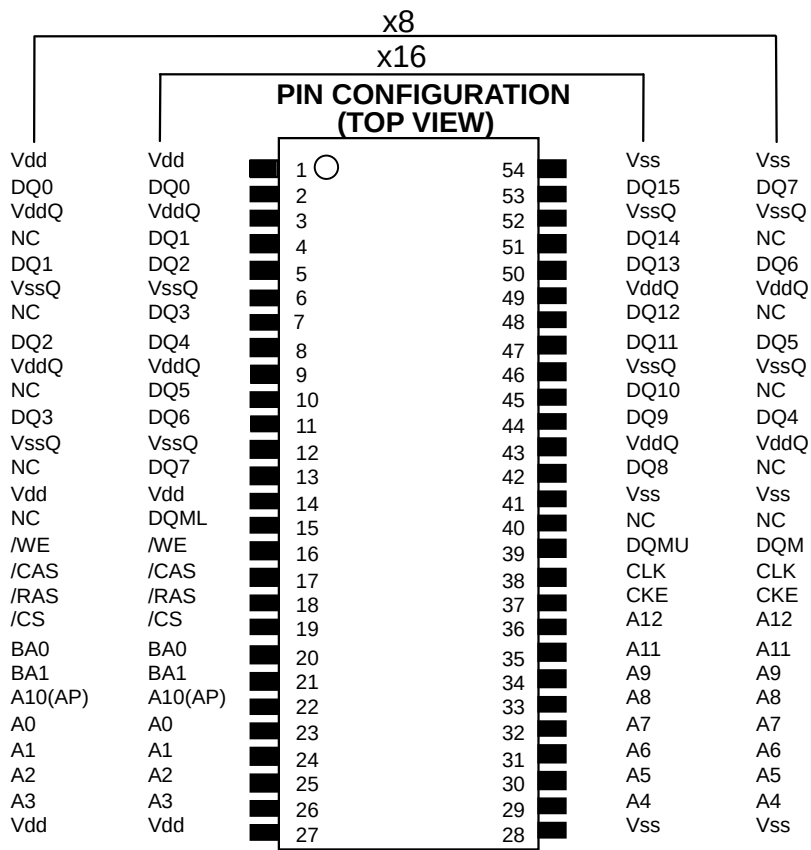
H27U1G8F2BTR-BC Pin Function

Pin Name	Description
IO0 ~ IO7	DATA INPUTS/OUTPUTS The IO pins allow to input command, address and data and to output data during read / program operations. The inputs are latched on the rising edge of Write Enable (WE). The I/O buffer float to High-Z when the device is deselected or the outputs are disabled.
CLE	COMMAND LATCH ENABLE This input activates the latching of the IO inputs inside the Command Register on the Rising edge of Write Enable (WE).
ALE	ADDRESS LATCH ENABLE This input activates the latching of the IO inputs inside the Address Register on the Rising edge of Write Enable (WE).
$\overline{CE}$	CHIP ENABLE This input controls the selection of the device.
$\overline{WE}$	WRITE ENABLE This input acts as clock to latch Command, Address and Data. The IO inputs are latched on the rise edge of WE.
$\overline{RE}$	READ ENABLE The $\overline{RE}$ input is the serial data-out control, and when active drives the data onto the I/O bus. Data is valid tREA after the falling edge of $\overline{RE}$ which also increments the internal column address counter by one.
$\overline{WP}$	WRITE PROTECT The WP pin, when Low, provides an Hardware protection against undesired modify (program / erase) operations.
R/ $\overline{B}$	READY BUSY The Ready/Busy output is an Open Drain pin that signals the state of the memory.
Vcc	SUPPLY VOLTAGE The Vcc supplies the power for all the operations (Read, Write, Erase).
Vss	GROUND
NC	NO CONNECTION

H27U1G8F2BTR-BC Block Diagram



PIN CONFIGURATION (TOP VIEW)

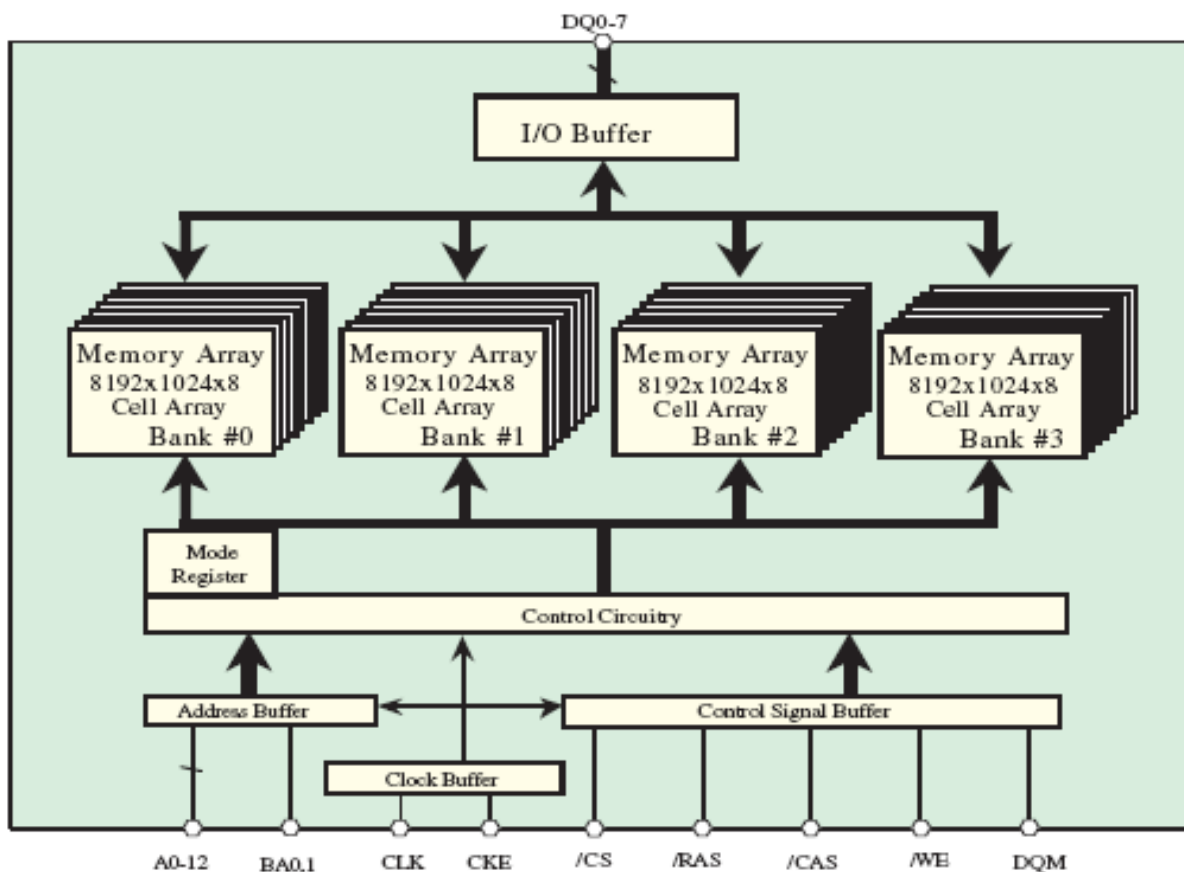


A3V56S30FTP-G6 Pin Function

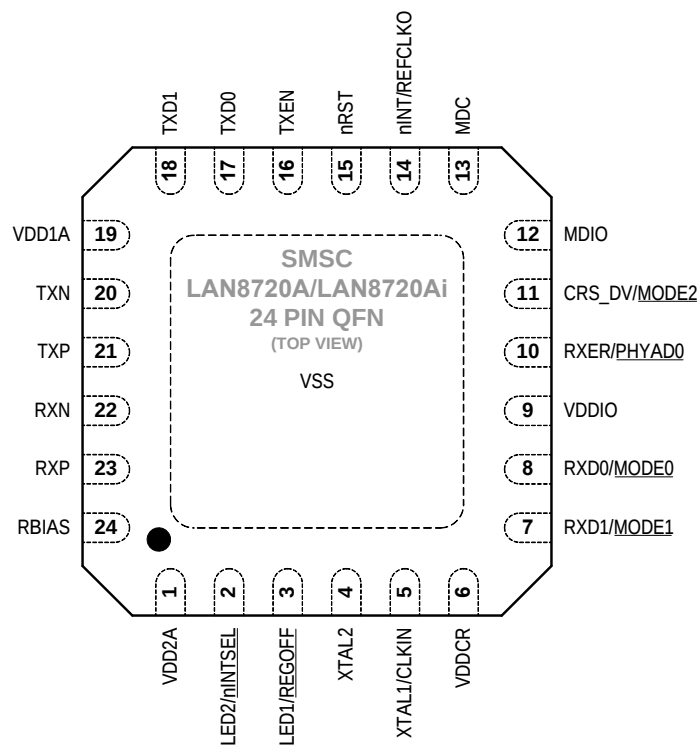
Pin Descriptions

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, /RAS, /WE	Input	Command Inputs: /CAS, /RAS, and /WE (along with /CS) define the command being entered.
DQM, DQML, 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 or 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

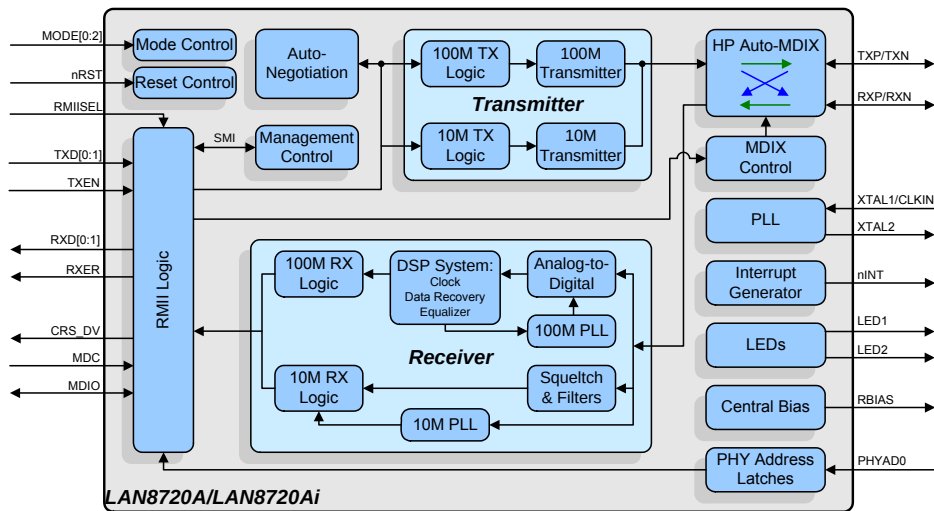
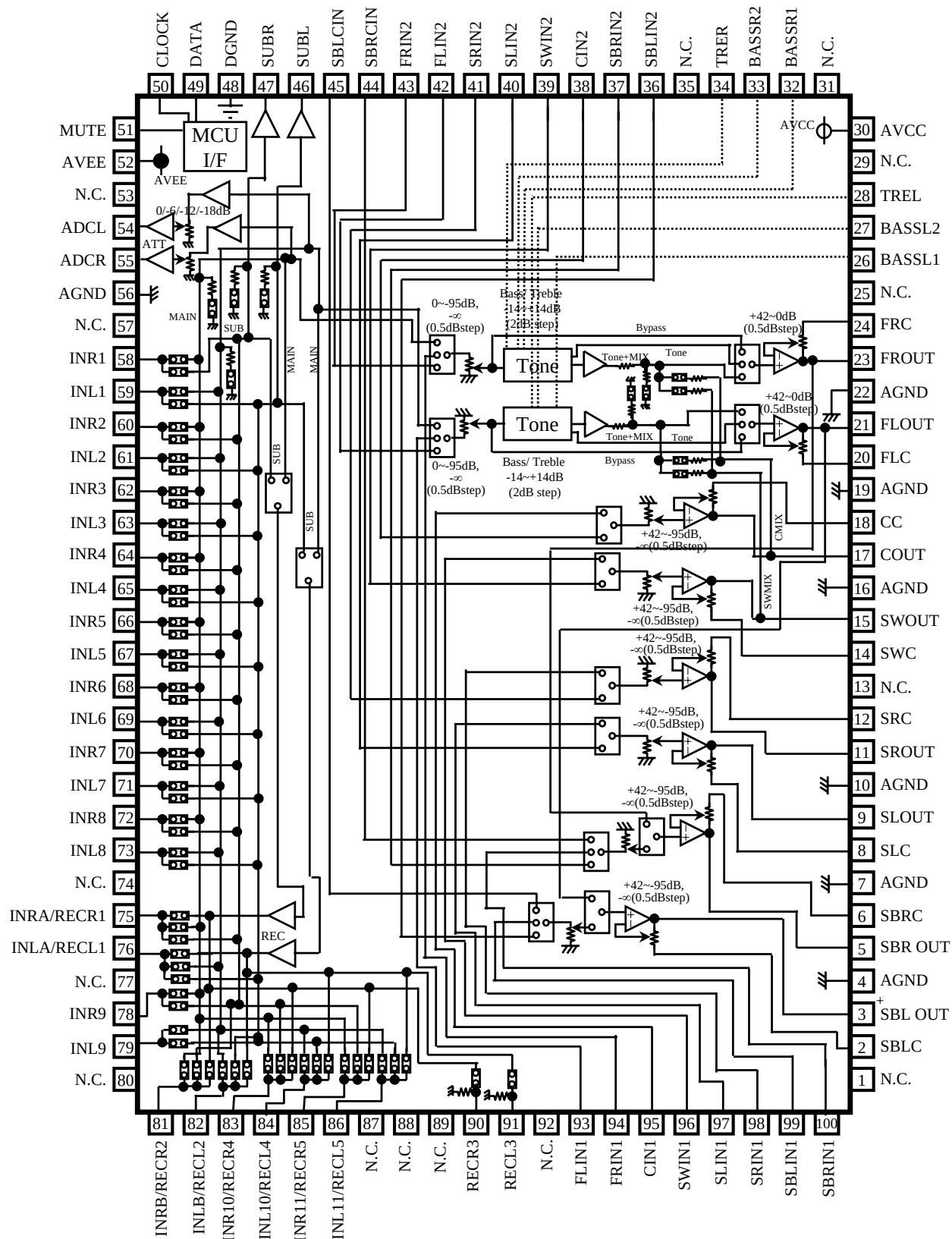


Figure 1.2 Architectural Overview

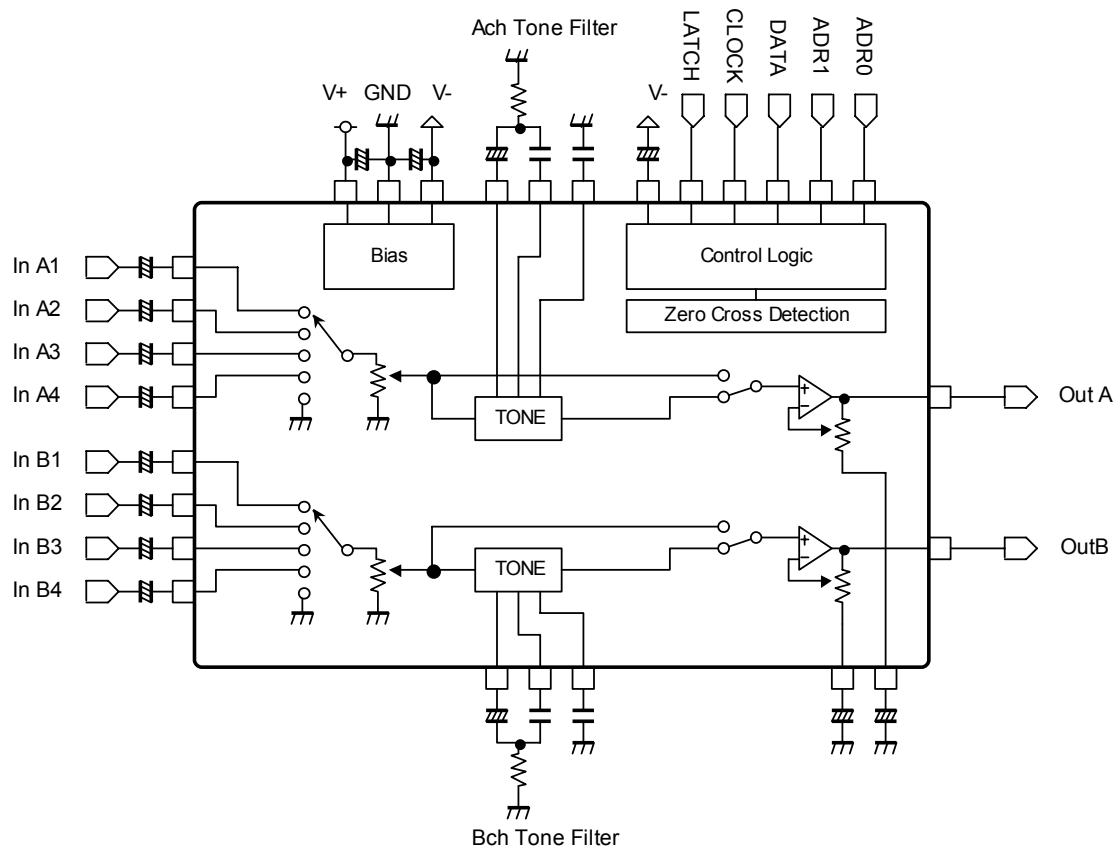
R2A15218FP (INPUT : IC471)



R2A15218FP Pin Function

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

NJW1194A (INPUT : IC484)



FLD (018BT021GINK) (FRONT : FL601)



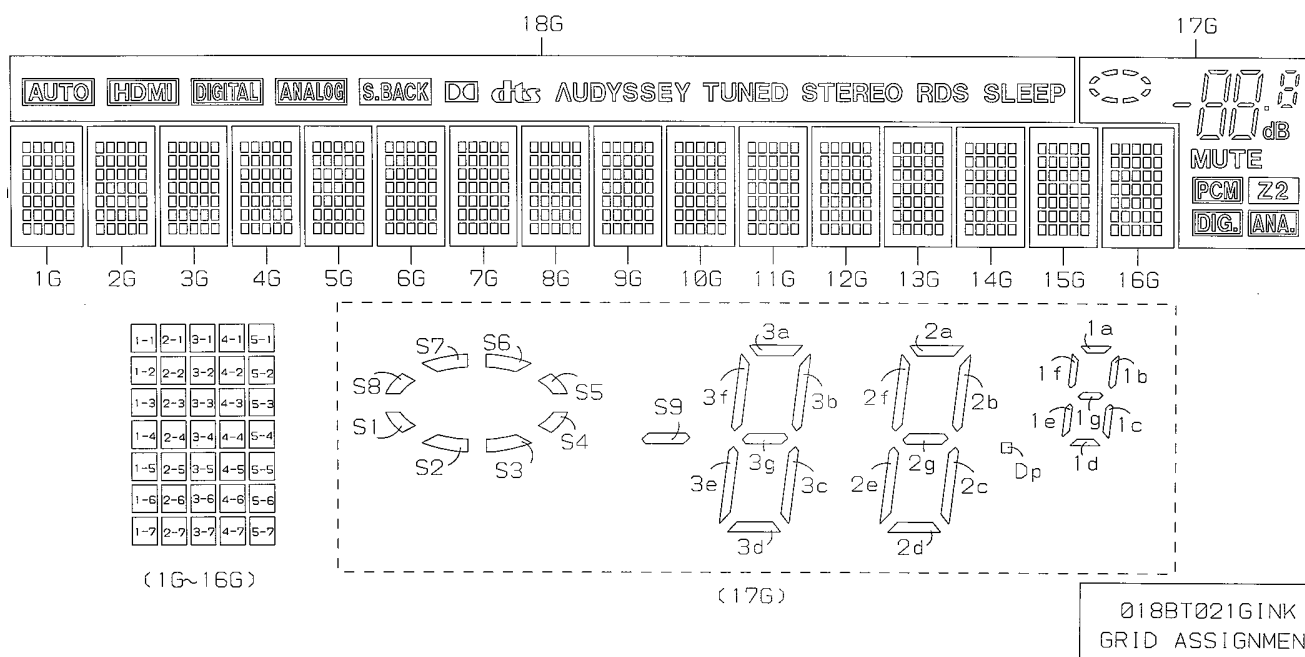
PIN CONNECTION		5	5	5	5	5
PIN NO.		7	6	5	4	3
CONNECTION		F	N	N	N	P
		2	P	P	P	V

```

NOTE  1) F1,F2 --- Filament
      2) NP ----- No pin
      3) DL ----- Datum Line
      4) NX ----- No extend pin
      5) LGND -----Logic GND pin
      6) PGND -----Power GND pin
      7) VH ----- High Voltage Supply pin
      8) VDD ----- Logic Voltage Supply pin
      9) CP ----- Shift Register Clock
     10) DA ----- Serial Data Input
     11) ISA,B --- Test pin
     12) CS ----- Chip Select Input pin
     13) RESET --- Reset Input
     14) OSC ----- Pin for self-oscillation
     15) Solder composition is Sn-3Ag-0.5Cu.
     16) 17G,18G ----- Grid
     17) Q17G,Q18G ----- Driver Output Port.
     18) Field of vision is a minimum of 21.8° from the lower side.

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GRID ASSIGNMENT



ANODE CONNECTION

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G	14G	15G	16G	17G	18G
																	(AD3)	(AD4)
D0	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	S9	-
D1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	3d	-
D2	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	2d	-
D3	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	3e	-
D4	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	2e	-
D5	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	3c	-
D6	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2c	-
D7	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3g	-
D8	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	2g	-
D9	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	3f	-
D10	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	2f	-
D11	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	3b	-
D12	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	2b	-
D13	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	3a	-
D14	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	2a	-
D15	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	Dp	-
D16	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	dB	-
D17	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	1d	-
D18	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	1e	-
D19	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	1c	-
D20	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1g	-
D21	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	1f	-
D22	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	1b	-
D23	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	1a	AUTO
D24	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	S1	MONI
D25	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	S2	TOTAL
D26	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	S3	ANAL
D27	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	S4	S.BACK
D28	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	S5	DC
D29	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	S6	dB
D30	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	S7	AUDIOSBY
D31	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	S8	TUNED
D32	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	MUTE	STEREO
D33	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	PCM	RDS
D34	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	Z2	SLEEP
AD1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DIG.	-
AD2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANA.	-

FRONT PCB ASS'Y

※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.

E3 : U.S.A. & Canada model E2 : Europe model E1C : China model E1 : Asia model K : Japan model

BK : Black model SP : Premium Silver model

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
SEMICONDUCTORS GROUP						
D6001,6002	00D9630328409	DIODE , RECTIFIER, AXIAL		CVD1N4007ST	2	
D6003	00D9430087209	DIODE , ZENER ,1/2W, 24V ZJ24B/HOMI(H.K) COMPANY LTD		CVDZJ24BT	1	
D6004	90M-HD302450R	DIODE , ZENER ,1/2W, 13V ZJ13B/HOMI(H.K) COMPANY LTD		CVDZJ13BT	1	
D6006	90M-HD302360R	DIODE , ZENER ,1/2W, 6.8V ZJ6.8B/HOMI(H.K) COMPANY LTD		CVDZJ6.8BT	1	
D6301-6303	943202500730S	DIODE , ZENER(5.1V/0.5W, SOD-123)		CVDMM1Z5V1H	3	
D6403	943176010090S	L.E.D (GREEN/RED 5PI) BL-BJEGJ204-L/BRIGHT		CVDBLBJEGJ204L	1	
D6803	963209003510S	DIODE , RELIABLE ESD PROTECTION CDS3C05HDM1		CVDCDS3C05HDM1	1	
D6835,6836	963209003510S	DIODE , RELIABLE ESD PROTECTION CDS3C05HDM1		CVDCDS3C05HDM1	2	
IC631	943232100380S	I.C , DUAL OPAMP(SOP-8P) NJM8080G		CVINJM8080G	1	
LD621	963262010460S	L.E.D (Infrared light emitting diode) SIR-341ST3F / ROHM ROHM		CVDSIR341ST3FT0	1	
Q6001	943219006820S	T.R		CVTKTC1027YT	1	
Q6002	943216500020S	T.R,RT1N141C(10K-10K) RT1N141C(NPN,SC-59,SISAHAYA		CVTRT1N141C	1	
Q6003,6004	943214500020S	T.R,2SC3052 2SC3052(NPN,SC-59,GEISAHAYA		CVT2SC3052	2	
Q6201	943215500020S	T.R,RT1P141C(10K-10K) RT1P141C(PNP,SC-59,SISAHAYA		CVTRT1P141C	1	
Q6302	943216500020S	T.R,RT1N141C(10K-10K) RT1N141C(NPN,SC-59,SISAHAYA		CVTRT1N141C	1	
Q6401	943216500020S	T.R,RT1N141C(10K-10K) RT1N141C(NPN,SC-59,SISAHAYA		CVTRT1N141C	1	
Q6402,6403	943215500020S	T.R,RT1P141C(10K-10K) RT1P141C(PNP,SC-59,SISAHAYA		CVTRT1P141C	2	
Q6404	943216500020S	T.R,RT1N141C(10K-10K) RT1N141C(NPN,SC-59,SISAHAYA		CVTRT1N141C	1	
RC621	943262100140S	SENSOR, REMOTE(37.9KHz) HM238R T-12 GOOD TAKE		CRVHM238RT12	1	
RESISTOR GROUP						
L6501	nsp	RES. CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1	
R6003	nsp	RES. M-OXIDE FILM(1W/4.7ohm)		CRGISANJAR7RT	1	
R6004	nsp	RES. CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R6006,6007	nsp	RES. CARBON(1/5W,10ohm,J)		CRD20TJ100T	2	
R6008	nsp	RES. CARBON(1/5W,2.2ohm,J)		CRD20TJ2R2T	1	*
R6011	nsp	RES. CARBON(1/5W,2.2ohm,J)		CRD20TJ2R2T	1	*
R6012-6015	nsp	RES. CHIP(1608/5%/220ohm)		CRJ10DJ221T	4	
R6016	nsp	RES. CHIP(1608/5%/39Kohm)		CRJ10DJ393T	1	
R6017	nsp	RES. CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R6018-6021	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	4	
R6022	nsp	RES. CHIP(1608/5%/39Kohm)		CRJ10DJ393T	1	
R6023	nsp	RES. CHIP(1608/5%/100Kohm)		CRJ10DJ104T	1	
R6024	nsp	RES. CHIP(1608/5%/39Kohm)		CRJ10DJ393T	1	
R6025	nsp	RES. CHIP(1608/5%/100Kohm)		CRJ10DJ104T	1	
R6026,6027	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	2	
R6101,6102	nsp	RES. CHIP(1608/5%/10Kohm)		CRJ10DJ103T	2	
R6103,6104	nsp	RES. CHIP(1608/5%/1Kohm)		CRJ10DJ102T	2	
R6201,6202	nsp	RES. CHIP(1608/5%/390ohm)		CRJ10DJ391T	2	
R6203	nsp	RES. CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1	
R6206	nsp	RES. CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1	
R6207	nsp	RES. CHIP(1608/5%/10ohm)		CRJ10DJ100T	1	
R6208	nsp	RES. CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1	
R6301	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	1	
R6302	nsp	RES. CHIP(1608/5%/18Kohm)		CRJ10DJ183T	1	
R6303	nsp	RES. CHIP(1608/5%/820ohm)		CRJ10DJ821T	1	
R6304	nsp	RES. CHIP(1608/5%/4.7Kohm)		CRJ10DJ472T	1	
R6305,6306	nsp	RES. CHIP(1608/5%/100Kohm)		CRJ10DJ104T	2	
R6308	nsp	RES. CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1	
R6309	nsp	RES. CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	1	
R6401,6402	nsp	RES. CHIP(1608/5%/10Kohm)		CRJ10DJ103T	2	
R6403,6404	nsp	RES. CHIP(1608/5%/1Kohm)		CRJ10DJ102T	2	
R6405,6406	nsp	RES. CHIP(1608/5%/560ohm)		CRJ10DJ561T	2	
R6407	nsp	RES. CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	1	
R6501	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	1	
R6601	nsp	RES. CHIP(1608/5%/150ohm)		CRJ10DJ151T	1	
R6602	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	1	
R6603	nsp	RES. CHIP(1608/5%/180ohm)		CRJ10DJ181T	1	
R6604	nsp	RES. CHIP(1608/5%/150ohm)		CRJ10DJ151T	1	
R6605	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	1	
R6606	nsp	RES. CHIP(1608/5%/150ohm)		CRJ10DJ151T	1	
R6607	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	1	
R6651	nsp	RES. CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1	
R6718	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	1	
R6803	nsp	RES. CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	1	
R6837,6838	nsp	RES. CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	2	
R6841,6842	nsp	RES. CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	2	
CAPACITORS GROUP						
C6003	nsp	CAP , ELECT(63V/220uF)		CCEA1JH221E	1	
C6004,6005	nsp	CAP. ELECT(50V/1uF)		CCEA1HH1R0T	2	
C6007	nsp	CAP. METAL-FILM(100V/0.047uF)		CCME2A473JXT	1	
C6009	nsp	CAP. CHIP(2012, 50V/0.1uF)		CCUC1H104KC	1	
C6010	nsp	CAP. ELECT(16V/10uF)-S		CCEA1CKS100T	1	
C6011	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1	
C6013,6014	nsp	CAP. CHIP(1608, 50V/100pF)		CCUS1H101JA	2	
C6015	nsp	CAP. CHIP(1608, 50V/330pF)		CCUS1H331JA	1	
C6016	nsp	CAP. CHIP(1608, 50V/1000pF)		CCUS1H102KC	1	
C6017	nsp	CAP. METAL-FILM(100V/0.047uF)		CCME2A473JXT	1	
C6021	nsp	CAP. MYLAR(100V/0.1uF/J)		HCQI2A104JZT	1	*
C6022	nsp	CAP. ELECT(50V/10uF)-S		CCEA1HKS100T	1	
C6113,6114	nsp	CAP. CHIP(1608, 50V/0.01uF)		CCUS1H103KC	2	
C6117	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1	
C6202	nsp	CAP. ELECT(16V/47uF)-S		CCEA1CKS470T	1	
C6203	nsp	CAP. CHIP(1608, 50V/100pF)		CCUS1H101JA	1	
C6302,6303	nsp	CAP. ELECT(50V/1uF)		CCEA1HH1R0T	2	
C6304	nsp	CAP. CHIP(1608, 50V/82pF)		CCUS1H820JA	1	
C6306	13405012940AS	CAP. ELECT(16V/100uF)		CCEA1CH101T	1	
C6307	nsp	CAP. CHIP(1608, 50V/0.047uF)		CCUS1H473KC	1	
C6308	nsp	CAP. CHIP(1608, 50V/100pF)		CCUS1H101JA	1	
C6310	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1	
C6311	nsp	CAP. ELECT(50V/1uF)-S		CCEA1HKS1R0T	1	
C6312	nsp	CAP. ELECT(50V/10uF)		CCEA1HH100T	1	
C6313	nsp	CAP. CHIP(1608, 50V/0.047uF)		CCUS1H473KC	1	
C6314	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1	
C6401,6402	nsp	CAP. CHIP(1608, 50V/0.01uF)		CCUS1H103KC	2	
C6406,6407	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2	
C6501,6502	nsp	CAP. CHIP(1608, 50V/1000pF)		CCUS1H102KC	2	

REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
C6503,6504	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
C6506	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
C6507	nsp	CAP. ELECT(50V/1uF)-S		CCEA1HKS1R0T	1		
C6508,6509	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
C6802	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
C6803	nsp	CAP. ELECT(10V/220uF)-S KC3-10V221MA5(8*5L)		CCEA1AKS221T	1		
OTHER PARTS GROUP							
BK601,602	nsp	BRACKET , FIP		CMD1A572-V1	2		
BK603	nsp	BRACKET , PCB		CMD1A569-V1	1		
BN321	nsp	WIRE ASS'Y (5P, 500mm, 2mm PITCH, UL2725, #24/28)		CWB8A005500LC	1		
CN602	nsp	WAFER/ANGLE/2.5mm/07P YMAW025-07R/YEONHO		CJP07GB03ZY	1		
CN69A	nsp	WAFER, FFC(40P-1mm,ANGLE) FPC 1.0-11S-40PW/ JCS		CJP40GB284ZN	1		
! F6001	943652000620S	FUSE(372 Series/100mA/TR5) 0.1A, 372 SERIES/TR5		CBA2D0100A3EYT	1		
FL601	943172100150S	V.F.D (FUTABA, 18-BT-02GINK) FUTABA		CFL18BT021GINK	1		
JK608	943643101590S	JACK, USB STRAIGHT(BLACK 1.5A) YS-UA-002-13 YAOSHENG		CJJ9X010Z	1		
JK631	943643102440D	JACK, MIC(3.5mm, MONO, STRAIGHT) PJ-362HA-4		CJJ1D007Z	1	*	
JK651	943643102450D	JACK, HEADPHONE(6.35mm, SILVER LING, STRAIGHT) PJ-621HA		CJJ2E037Z	1	*	
JW602	nsp	WIRE ASS'Y (1P, 80MM,BLK,#22)		CWE5202080A	1		
L6801	nsp	FERRITE CHIP BEAD(2012/220R) BLM21PG221SN1/MURATA		CLZBLM21PG221SN1	1		
LUG65	nsp	WIRE ASS'Y		CWE8202120RV	1		
SW641	00D9430004402	SW , TACT SKHV10910G		CST1A0122T	1		
SW661-670	00D9430004402	SW , TACT SKHV10910G		CST1A0122T	10		
VR611	943671010330S	ENCODER(16MM, 24PULSES),W/CLICK EC16B24SAAD4ZZZ		CSR2A055Z	1		
VR641	943671010330S	ENCODER(16MM, 24PULSES),W/CLICK EC16B24SAAD4ZZZ		CSR2A055Z	1		

AMP PCB ASS'Y

※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.

E3 : U.S.A. & Canada model E2 : Europe model E1C : China model E1 : Asia model K : Japan model

BK : Black model SP : Premium Silver model

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
SEMICONDUCTORS GROUP						
D7011,7012	943209001080S	DIODE , CHIP , SWITCHING 1SS355/HOMI(HK) COMPANY LTD	CVD1SS355T	2		
D7108,7109	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	2		
D7118	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
D7139	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
D7208,7209	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	2		
D7218	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
D7239	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
D7308,7309	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	2		
D7318	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
D7339	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
D7408,7409	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	2		
D7418	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
D7439	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
D7508,7509	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	2		
D7518	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
D7539	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
D7608,7609	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	2		
D7618	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
D7639	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
D7708,7709	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	2		
D7718	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
D7739	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
Q7001	943212500020S	High Voltage PNP Transistors(SOT-23)	CVTMMBT5401	1		
Q7104,7105	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD KSA992FTA HFE F(300-600)	CVTKSA992FTA	2		
Q7114	00D2710314903	T.R	HVTKTA1024YT	1		
Q7118	00D2710314903	T.R	HVTKTA1024YT	1		
Q7120,7121	00D2730471907	T.R	HVTKTC3206YAT	2		
Q7125	963219003340S	T.R , BIAS KTC3964/TO-126	CVTKTC3964	1		
Q7131	00D9630235301	T.R , POWER(Pc 130W) 2SD2560 SANKEN	HVT2SD2560	1		
Q7132	00D9630235204	T.R , POWER(Pc 130W) 2SB1647 SANKEN	HVT2SB1647	1		
Q7138	943212500020S	High Voltage PNP Transistors(SOT-23)	CVTMMBT5401	1		
Q7139	943214500040S	High Voltage NPN Transistors(SOT-23)	CVTMMBT5551	1		
Q7204,7205	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD KSA992FTA HFE F(300-600)	CVTKSA992FTA	2		
Q7214	00D2710314903	T.R	HVTKTA1024YT	1		
Q7218	00D2710314903	T.R	HVTKTA1024YT	1		
Q7220,7221	00D2730471907	T.R	HVTKTC3206YAT	2		
Q7225	963219003340S	T.R , BIAS KTC3964/TO-126	CVTKTC3964	1		
Q7231	00D9630235301	T.R , POWER(Pc 130W) 2SD2560 SANKEN	HVT2SD2560	1		
Q7232	00D9630235204	T.R , POWER(Pc 130W) 2SB1647 SANKEN	HVT2SB1647	1		
Q7238	943212500020S	High Voltage PNP Transistors(SOT-23)	CVTMMBT5401	1		
Q7239	943214500040S	High Voltage NPN Transistors(SOT-23)	CVTMMBT5551	1		
Q7304,7305	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD KSA992FTA HFE F(300-600)	CVTKSA992FTA	2		
Q7314	00D2710314903	T.R	HVTKTA1024YT	1		
Q7318	00D2710314903	T.R	HVTKTA1024YT	1		
Q7320,7321	00D2730471907	T.R	HVTKTC3206YAT	2		
Q7325	963219003340S	T.R , BIAS KTC3964/TO-126	CVTKTC3964	1		
Q7331	00D9630235301	T.R , POWER(Pc 130W) 2SD2560 SANKEN	HVT2SD2560	1		
Q7332	00D9630235204	T.R , POWER(Pc 130W) 2SB1647 SANKEN	HVT2SB1647	1		
Q7338	943212500020S	High Voltage PNP Transistors(SOT-23)	CVTMMBT5401	1		
Q7339	943214500040S	High Voltage NPN Transistors(SOT-23)	CVTMMBT5551	1		
Q7404,7405	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD KSA992FTA HFE F(300-600)	CVTKSA992FTA	2		
Q7414	00D2710314903	T.R	HVTKTA1024YT	1		
Q7418	00D2710314903	T.R	HVTKTA1024YT	1		
Q7420,7421	00D2730471907	T.R	HVTKTC3206YAT	2		
Q7425	963219003340S	T.R , BIAS KTC3964/TO-126	CVTKTC3964	1		
Q7431	00D9630235301	T.R , POWER(Pc 130W) 2SD2560 SANKEN	HVT2SD2560	1		
Q7432	00D9630235204	T.R , POWER(Pc 130W) 2SB1647 SANKEN	HVT2SB1647	1		
Q7438	943212500020S	High Voltage PNP Transistors(SOT-23)	CVTMMBT5401	1		
Q7439	943214500040S	High Voltage NPN Transistors(SOT-23)	CVTMMBT5551	1		
Q7504,7505	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD KSA992FTA HFE F(300-600)	CVTKSA992FTA	2		
Q7514	00D2710314903	T.R	HVTKTA1024YT	1		
Q7518	00D2710314903	T.R	HVTKTA1024YT	1		
Q7520,7521	00D2730471907	T.R	HVTKTC3206YAT	2		
Q7525	963219003340S	T.R , BIAS KTC3964/TO-126	CVTKTC3964	1		
Q7531	00D9630235301	T.R , POWER(Pc 130W) 2SD2560 SANKEN	HVT2SD2560	1		
Q7532	00D9630235204	T.R , POWER(Pc 130W) 2SB1647 SANKEN	HVT2SB1647	1		
Q7538	943212500020S	High Voltage PNP Transistors(SOT-23)	CVTMMBT5401	1		
Q7539	943214500040S	High Voltage NPN Transistors(SOT-23)	CVTMMBT5551	1		
Q7604,7605	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD KSA992FTA HFE F(300-600)	CVTKSA992FTA	2		
Q7614	00D2710314903	T.R	HVTKTA1024YT	1		
Q7618	00D2710314903	T.R	HVTKTA1024YT	1		
Q7620,7621	00D2730471907	T.R	HVTKTC3206YAT	2		
Q7625	963219003340S	T.R , BIAS KTC3964/TO-126	CVTKTC3964	1		
Q7631	00D9630235301	T.R , POWER(Pc 130W) 2SD2560 SANKEN	HVT2SD2560	1		
Q7632	00D9630235204	T.R , POWER(Pc 130W) 2SB1647 SANKEN	HVT2SB1647	1		
Q7638	943212500020S	High Voltage PNP Transistors(SOT-23)	CVTMMBT5401	1		
Q7639	943214500040S	High Voltage NPN Transistors(SOT-23)	CVTMMBT5551	1		
Q7704,7705	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD KSA992FTA HFE F(300-600)	CVTKSA992FTA	2		
Q7714	00D2710314903	T.R	HVTKTA1024YT	1		
Q7718	00D2710314903	T.R	HVTKTA1024YT	1		
Q7720,7721	00D2730471907	T.R	HVTKTC3206YAT	2		
Q7725	963219003340S	T.R , BIAS KTC3964/TO-126	CVTKTC3964	1		
Q7731	00D9630235301	T.R , POWER(Pc 130W) 2SD2560 SANKEN	HVT2SD2560	1		
Q7732	00D9630235204	T.R , POWER(Pc 130W) 2SB1647 SANKEN	HVT2SB1647	1		
Q7738	943212500020S	High Voltage PNP Transistors(SOT-23)	CVTMMBT5401	1		
Q7739	943214500040S	High Voltage NPN Transistors(SOT-23)	CVTMMBT5551	1		
ZD714	943202010080S	DIODE , ZENER ,1/2W, 5.1V ZJ5.1B/HOMI(H.K) COMPANY LTD	CVDZJ5.1BT	1		
ZD724	943202010080S	DIODE , ZENER ,1/2W, 5.1V ZJ5.1B/HOMI(H.K) COMPANY LTD	CVDZJ5.1BT	1		
ZD734	943202010080S	DIODE , ZENER ,1/2W, 5.1V ZJ5.1B/HOMI(H.K) COMPANY LTD	CVDZJ5.1BT	1		
ZD744	943202010080S	DIODE , ZENER ,1/2W, 5.1V ZJ5.1B/HOMI(H.K) COMPANY LTD	CVDZJ5.1BT	1		
ZD754	943202010080S	DIODE , ZENER ,1/2W, 5.1V ZJ5.1B/HOMI(H.K) COMPANY LTD	CVDZJ5.1BT	1		
ZD764	943202010080S	DIODE , ZENER ,1/2W, 5.1V ZJ5.1B/HOMI(H.K) COMPANY LTD	CVDZJ5.1BT	1		

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
ZD774	943202010080S	DIODE , ZENER ,1/2W, 5.1V ZJ5.1B/HOMI(H.K) COMPANY LTD		CVDZJ5.1BT	1	
RESISTOR GROUP						
R7001	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R7002	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)		CRD20TJ333T	1	
R7011	nsp	RES, CHIP(1608/5%/330Kohm)		CRJ10DJ334T	1	
! R7012	252310006520S	PTC THERMISTORS, CHIP(95°C) PRF18BD471QB5RB		CRTPRF18BD471QB5RB	1	
R7013	nsp	RES, CHIP(1608/5%/330Kohm)		CRJ10DJ334T	1	
! R7014	252310006520S	PTC THERMISTORS, CHIP(95°C) PRF18BD471QB5RB		CRTPRF18BD471QB5RB	1	
R7016	nsp	RES, CARBON(1/5W,3.3Kohm,J)		CRD20TJ332T	1	
R7017	nsp	RES, CARBON(1/5W,10Kohm,J)		CRD20TJ103T	1	
R7018	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R7101	00MGD05122160	RES, CARBON(1/5W,1.2Kohm,J)		CRD20TJ122T	1	
R7102	00MGD05474160	RES, CARBON(1/5W,470Kohm,J)		CRD20TJ474T	1	
R7103	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)		CRD20TJ333T	1	
R7104	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6		C3A206	0.02	
R7105	nsp	RES, M-OXIDE FILM(1W/1Kohm)		CRG1SANJ102RT	1	
R7106	nsp	RES, CARBON(1/5W,470ohm,J)		CRD20TJ471T	1	
R7107	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6		C3A206	0.02	
R7108	nsp	RES, M-OXIDE FILM(1W/1Kohm)		CRG1SANJ102RT	1	
R7109,7110	nsp	RES, CARBON(1/5W,220ohm,J)		CRD20TJ221T	2	
R7111	nsp	RES, M-OXIDE FILM(1W/3.3Kohm)		CRG1SANJ332RT	1	
R7112	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)		CRD20TJ333T	1	
R7114	nsp	RES, M-OXIDE FILM(1W/56Kohm)		CRG1SANJ563RT	1	
R7116,7117	00MGD05122160	RES, CARBON(1/5W,1.2Kohm,J)		CRD20TJ122T	2	
R7118,7119	nsp	RES, M-OXIDE FILM(1W/270ohm)		CRG1SANJ271RT	2	
R7120	nsp	RES, M-OXIDE FILM(2W/15Kohm)		CRG2SANJ153RT	1	
R7121	nsp	RES, M-OXIDE FILM(1W/270ohm)		CRG1SANJ271RT	1	
R7124	00MGD05272160	RES, CARBON(1/5W,2.7Kohm,J)		CRD20TJ272T	1	
R7125	nsp	RES, CARBON(1/5W,470ohm,J)		CRD20TJ471T	1	
R7126	00MGD05561160	RES, CARBON(1/5W,560ohm,J)		CRD20TJ561T	1	
R7129,7130	943124500240S	RES, M-OXIDE FILM(1W/22ohm)		CRG1SANJ220RT	2	
R7131-7134	943124500050S	RES, M-OXIDE FILM(2W/0.47ohm)		CRG2SANJR47RT	4	
R7135,7136	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	2	
R7137	nsp	RES, CARBON(1/5W,680Kohm,J)		CRD20TJ684T	1	
! R7138	252310006506S	PTC THERMISTORS, CHIP(115°C) PRF18BB471QB5RB		CRTPRF18BB471QB5RB	1	
R7139	nsp	RES, CHIP(1608/5%/100Kohm)		CRJ10DJ104T	1	
R7140	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R7141	00MNN05562610	RES, CHIP(1608/5%/5.6Kohm)		CRJ10DJ562T	1	
R7143	nsp	RES, CARBON(1/5W,47Kohm,J)		CRD20TJ473T	1	
R7144	nsp	RES, CHIP(3216/5%/22Kohm)		CRJ14CJ223T	1	
R7145	nsp	RES, CARBON(1/5W,22Kohm,J)		CRD20TJ223T	1	
R7201	00MGD05122160	RES, CARBON(1/5W,1.2Kohm,J)		CRD20TJ122T	1	
R7202	00MGD05474160	RES, CARBON(1/5W,470Kohm,J)		CRD20TJ474T	1	
R7203	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)		CRD20TJ333T	1	
R7204	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6		C3A206	0.02	
R7205	nsp	RES, M-OXIDE FILM(1W/1Kohm)		CRG1SANJ102RT	1	
R7206	nsp	RES, CARBON(1/5W,470ohm,J)		CRD20TJ471T	1	
R7207	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6		C3A206	0.02	
R7208	nsp	RES, M-OXIDE FILM(1W/1Kohm)		CRG1SANJ102RT	1	
R7209,7210	nsp	RES, CARBON(1/5W,220ohm,J)		CRD20TJ221T	2	
R7211	nsp	RES, M-OXIDE FILM(1W/3.3Kohm)		CRG1SANJ332RT	1	
R7212	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)		CRD20TJ333T	1	
R7214	nsp	RES, M-OXIDE FILM(1W/56Kohm)		CRG1SANJ563RT	1	
R7216,7217	00MGD05122160	RES, CARBON(1/5W,1.2Kohm,J)		CRD20TJ122T	2	
R7218,7219	nsp	RES, M-OXIDE FILM(1W/270ohm)		CRG1SANJ271RT	2	
R7220	nsp	RES, M-OXIDE FILM(2W/15Kohm)		CRG2SANJ153RT	1	
R7221	nsp	RES, M-OXIDE FILM(1W/270ohm)		CRG1SANJ271RT	1	
R7224	00MGD05272160	RES, CARBON(1/5W,2.7Kohm,J)		CRD20TJ272T	1	
R7225	nsp	RES, CARBON(1/5W,470ohm,J)		CRD20TJ471T	1	
R7226	00MGD05561160	RES, CARBON(1/5W,560ohm,J)		CRD20TJ561T	1	
R7230	943124500240S	RES, M-OXIDE FILM(1W/22ohm)		CRG1SANJ220RT	1	
R7231-7234	943124500050S	RES, M-OXIDE FILM(2W/0.47ohm)		CRG2SANJR47RT	4	
R7235,7236	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	2	
R7237	nsp	RES, CARBON(1/5W,680Kohm,J)		CRD20TJ684T	1	
! R7238	252310006506S	PTC THERMISTORS, CHIP(115°C) PRF18BB471QB5RB		CRTPRF18BB471QB5RB	1	
R7239	nsp	RES, CHIP(1608/5%/100Kohm)		CRJ10DJ104T	1	
R7240	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R7241	00MNN05562610	RES, CHIP(1608/5%/5.6Kohm)		CRJ10DJ562T	1	
R7243	nsp	RES, CHIP(3216/5%/47Kohm)		CRJ14CJ473T	1	
R7244	nsp	RES, CHIP(3216/5%/22Kohm)		CRJ14CJ223T	1	
R7245	nsp	RES, CARBON(1/5W,22Kohm,J)		CRD20TJ223T	1	
R7279	943124500240S	RES, M-OXIDE FILM(1W/22ohm)		CRG1SANJ220RT	1	
R7301	00MGD05122160	RES, CARBON(1/5W,1.2Kohm,J)		CRD20TJ122T	1	
R7302	00MGD05474160	RES, CARBON(1/5W,470Kohm,J)		CRD20TJ474T	1	
R7303	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)		CRD20TJ333T	1	
R7304	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6		C3A206	0.02	
R7305	nsp	RES, M-OXIDE FILM(1W/1Kohm)		CRG1SANJ102RT	1	
R7306	nsp	RES, CARBON(1/5W,470ohm,J)		CRD20TJ471T	1	
R7307	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6		C3A206	0.02	
R7308	nsp	RES, M-OXIDE FILM(1W/1Kohm)		CRG1SANJ102RT	1	
R7309,7310	nsp	RES, CARBON(1/5W,220ohm,J)		CRD20TJ221T	2	
R7311	nsp	RES, M-OXIDE FILM(1W/3.3Kohm)		CRG1SANJ332RT	1	
R7312	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)		CRD20TJ333T	1	
R7314	nsp	RES, M-OXIDE FILM(1W/56Kohm)		CRG1SANJ563RT	1	
R7316,7317	00MGD05122160	RES, CARBON(1/5W,1.2Kohm,J)		CRD20TJ122T	2	
R7318,7319	nsp	RES, M-OXIDE FILM(1W/270ohm)		CRG1SANJ271RT	2	
R7320	nsp	RES, M-OXIDE FILM(2W/15Kohm)		CRG2SANJ153RT	1	
R7321	nsp	RES, M-OXIDE FILM(1W/270ohm)		CRG1SANJ271RT	1	
R7324	00MGD05272160	RES, CARBON(1/5W,2.7Kohm,J)		CRD20TJ272T	1	
R7325	nsp	RES, CARBON(1/5W,470ohm,J)		CRD20TJ471T	1	
R7326	00MGD05561160	RES, CARBON(1/5W,560ohm,J)		CRD20TJ561T	1	
R7329,7330	943124500240S	RES, M-OXIDE FILM(1W/22ohm)		CRG1SANJ220RT	2	
R7331-7334	943124500050S	RES, M-OXIDE FILM(2W/0.47ohm)		CRG2SANJR47RT	4	
R7335,7336	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	2	
R7337	nsp	RES, CARBON(1/5W,680Kohm,J)		CRD20TJ684T	1	
! R7338	252310006506S	PTC THERMISTORS, CHIP(115°C) PRF18BB471QB5RB		CRTPRF18BB471QB5RB	1	
R7339	nsp	RES, CHIP(1608/5%/100Kohm)		CRJ10DJ104T	1	
R7340	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R7341	00MNN05562610	RES, CHIP(1608/5%/5.6Kohm)		CRJ10DJ562T	1	
R7343	nsp	RES, CHIP(3216/5%/47Kohm)		CRJ14CJ473T	1	
R7344	nsp	RES, CHIP(3216/5%/22Kohm)		CRJ14CJ223T	1	
R7345	nsp	RES, CARBON(1/5W,22Kohm,J)		CRD20TJ223T	1	

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
R7401	00MGD05122160	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	1		
R7402	00MGD05474160	RES, CARBON(1/5W,470Kohm,J)	CRD20TJ474T	1		
R7403	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)	CRD20TJ333T	1		
R7404	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6	C3A206	0.02		
R7405	nsp	RES, M-OXIDE FILM(1W/1Kohm)	CRG1SANJ102RT	1		
R7406	nsp	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1		
R7407	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6	C3A206	0.02		
R7408	nsp	RES, M-OXIDE FILM(1W/1Kohm)	CRG1SANJ102RT	1		
R7409,7410	nsp	RES, CARBON(1/5W,220ohm,J)	CRD20TJ221T	2		
R7411	nsp	RES, M-OXIDE FILM(1W/3.3Kohm)	CRG1SANJ332RT	1		
R7412	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)	CRD20TJ333T	1		
R7414	nsp	RES, M-OXIDE FILM(1W/56Kohm)	CRG1SANJ563RT	1		
R7416,7417	00MGD05122160	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	2		
R7418,7419	nsp	RES, M-OXIDE FILM(1W/270ohm)	CRG1SANJ271RT	2		
R7420	nsp	RES, M-OXIDE FILM(2W/15Kohm)	CRG2SANJ153RT	1		
R7421	nsp	RES, M-OXIDE FILM(1W/270ohm)	CRG1SANJ271RT	1		
R7424	00MGD05272160	RES, CARBON(1/5W,2.7Kohm,J)	CRD20TJ272T	1		
R7425	nsp	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1		
R7426	00MGD05561160	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1		
R7429,7430	943124500240S	RES, M-OXIDE FILM(1W/22ohm)	CRG1SANJ220RT	2		
R7431-7434	943124500050S	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	4		
R7435,7436	nsp	RES, CHIP(1608/5%/10Kohm)	CRJ10D3J103T	2		
R7437	nsp	RES, CARBON(1/5W,680Kohm,J)	CRD20TJ684T	1		
R7438	252310006506S	PTC THERMISTORS, CHIP(115°C) PRF18BB471QB5RB	CRTPRF18BB471QB5RB	1		
R7439	nsp	RES, CHIP(1608/5%/100Kohm)	CRJ10D3J104T	1		
R7440	nsp	RES, CHIP(1608/5%/10Kohm)	CRJ10D3J103T	1		
R7441	00MNN05562610	RES, CHIP(1608/5%/5.6Kohm)	CRJ10D3J562T	1		
R7443	nsp	RES, CARBON(1/5W,47Kohm,J)	CRD20TJ473T	1		
R7444	nsp	RES, CHIP(3216/5%/22Kohm)	CRJ14CJ223T	1		
R7445	nsp	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1		
R7501	00MGD05122160	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	1		
R7502	00MGD05474160	RES, CARBON(1/5W,470Kohm,J)	CRD20TJ474T	1		
R7503	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)	CRD20TJ333T	1		
R7504	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6	C3A206	0.02		
R7505	nsp	RES, M-OXIDE FILM(1W/1Kohm)	CRG1SANJ102RT	1		
R7506	nsp	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1		
R7507	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6	C3A206	0.02		
R7508	nsp	RES, M-OXIDE FILM(1W/1Kohm)	CRG1SANJ102RT	1		
R7509,7510	nsp	RES, CARBON(1/5W,220ohm,J)	CRD20TJ221T	2		
R7511	nsp	RES, M-OXIDE FILM(1W/3.3Kohm)	CRG1SANJ332RT	1		
R7512	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)	CRD20TJ333T	1		
R7514	nsp	RES, M-OXIDE FILM(1W/56Kohm)	CRG1SANJ563RT	1		
R7516,7517	00MGD05122160	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	2		
R7518,7519	nsp	RES, M-OXIDE FILM(1W/270ohm)	CRG1SANJ271RT	2		
R7520	nsp	RES, M-OXIDE FILM(2W/15Kohm)	CRG2SANJ153RT	1		
R7521	nsp	RES, M-OXIDE FILM(1W/270ohm)	CRG1SANJ271RT	1		
R7524	00MGD05272160	RES, CARBON(1/5W,2.7Kohm,J)	CRD20TJ272T	1		
R7525	nsp	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1		
R7526	00MGD05561160	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1		
R7529,7530	943124500240S	RES, M-OXIDE FILM(1W/22ohm)	CRG1SANJ220RT	2		
R7531-7534	943124500050S	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	4		
R7535,7536	nsp	RES, CHIP(1608/5%/10Kohm)	CRJ10D3J103T	2		
R7537	nsp	RES, CARBON(1/5W,680Kohm,J)	CRD20TJ684T	1		
R7538	252310006506S	PTC THERMISTORS, CHIP(115°C) PRF18BB471QB5RB	CRTPRF18BB471QB5RB	1		
R7539	nsp	RES, CHIP(1608/5%/100Kohm)	CRJ10D3J104T	1		
R7540	nsp	RES, CHIP(1608/5%/10Kohm)	CRJ10D3J103T	1		
R7541	00MNN05562610	RES, CHIP(1608/5%/5.6Kohm)	CRJ10D3J562T	1		
R7543	nsp	RES, CHIP(3216/5%/47Kohm)	CRJ14CJ473T	1		
R7544	nsp	RES, CHIP(3216/5%/22Kohm)	CRJ14CJ223T	1		
R7545	nsp	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1		
R7601	00MGD05122160	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	1		
R7602	00MGD05474160	RES, CARBON(1/5W,470Kohm,J)	CRD20TJ474T	1		
R7603	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)	CRD20TJ333T	1		
R7604	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6	C3A206	0.02		
R7605	nsp	RES, M-OXIDE FILM(1W/1Kohm)	CRG1SANJ102RT	1		
R7606	nsp	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1		
R7607	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6	C3A206	0.02		
R7608	nsp	RES, M-OXIDE FILM(1W/1Kohm)	CRG1SANJ102RT	1		
R7609,7610	nsp	RES, CARBON(1/5W,220ohm,J)	CRD20TJ221T	2		
R7611	nsp	RES, M-OXIDE FILM(1W/3.3Kohm)	CRG1SANJ332RT	1		
R7612	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)	CRD20TJ333T	1		
R7614	nsp	RES, M-OXIDE FILM(1W/56Kohm)	CRG1SANJ563RT	1		
R7616,7617	00MGD05122160	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	2		
R7618,7619	nsp	RES, M-OXIDE FILM(1W/270ohm)	CRG1SANJ271RT	2		
R7620	nsp	RES, M-OXIDE FILM(2W/15Kohm)	CRG2SANJ153RT	1		
R7621	nsp	RES, M-OXIDE FILM(1W/270ohm)	CRG1SANJ271RT	1		
R7624	00MGD05272160	RES, CARBON(1/5W,2.7Kohm,J)	CRD20TJ272T	1		
R7625	nsp	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1		
R7626	00MGD05561160	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1		
R7629,7630	943124500240S	RES, M-OXIDE FILM(1W/22ohm)	CRG1SANJ220RT	2		
R7631-7634	943124500050S	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	4		
R7635,7636	nsp	RES, CHIP(1608/5%/10Kohm)	CRJ10D3J103T	2		
R7637	nsp	RES, CARBON(1/5W,680Kohm,J)	CRD20TJ684T	1		
R7638	252310006506S	PTC THERMISTORS, CHIP(115°C) PRF18BB471QB5RB	CRTPRF18BB471QB5RB	1		
R7639	nsp	RES, CHIP(1608/5%/100Kohm)	CRJ10D3J104T	1		
R7640	nsp	RES, CHIP(1608/5%/10Kohm)	CRJ10D3J103T	1		
R7641	00MNN05562610	RES, CHIP(1608/5%/5.6Kohm)	CRJ10D3J562T	1		
R7643	nsp	RES, CHIP(3216/5%/47Kohm)	CRJ14CJ473T	1		
R7644	nsp	RES, CHIP(3216/5%/22Kohm)	CRJ14CJ223T	1		
R7655	nsp	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1		
R7701	00MGD05122160	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	1		
R7702	00MGD05474160	RES, CARBON(1/5W,470Kohm,J)	CRD20TJ474T	1		
R7703	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)	CRD20TJ333T	1		
R7704	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6	C3A206	0.02		
R7705	nsp	RES, M-OXIDE FILM(1W/1Kohm)	CRG1SANJ102RT	1		
R7706	nsp	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1		
R7707	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6	C3A206	0.02		
R7708	nsp	RES, M-OXIDE FILM(1W/1Kohm)	CRG1SANJ102RT	1		
R7709,7710	nsp	RES, CARBON(1/5W,220ohm,J)	CRD20TJ221T	2		
R7711	nsp	RES, M-OXIDE FILM(1W/3.3Kohm)	CRG1SANJ332RT	1		
R7712	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)	CRD20TJ333T	1		
R7714	nsp	RES, M-OXIDE FILM(1W/56Kohm)	CRG1SANJ563RT	1		

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
R7716,7717	00MGD05122160	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	2		
R7718,7719	nsp	RES, M-OXIDE FILM(1W/270ohm)	CRG1SANJ271RT	2		
R7720	nsp	RES, M-OXIDE FILM(2W/15Kohm)	CRG2SANJ153RT	1		
R7721	nsp	RES, M-OXIDE FILM(1W/270ohm)	CRG1SANJ271RT	1		
R7724	00MGD05272160	RES, CARBON(1/5W,2.7Kohm,J)	CRD20TJ272T	1		
R7725	nsp	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1		
R7726	00MGD05561160	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1		
R7729,7730	943124500240S	RES, M-OXIDE FILM(1W/22ohm)	CRG1SANJ220RT	2		
R7731-7734	943124500050S	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	4		
R7735,7736	nsp	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	2		
R7737	nsp	RES, CARBON(1/5W,680Kohm,J)	CRD20TJ684T	1		
R7738	252310006506S	PTC THERMISTORS, CHIP(115°C) PRF18BB471QB5RB	CRTPRF18BB471QB5RB	1		
R7739	nsp	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1		
R7740	nsp	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1		
R7741	00MNN05562610	RES, CHIP(1608/5%/5.6Kohm)	CRJ10DJ362T	1		
R7743	nsp	RES, CHIP(3216/5%/47Kohm)	CRJ14CJ3473T	1		
R7744	nsp	RES, CHIP(3216/5%/22Kohm)	CRJ14CJ223T	1		
R7745	nsp	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1		
VR714	963161012400S	RES, SEMI FIXED(1K/B-CURVE) ANGLE PANASONIC	CVN1RE102B01T	1		
VR724	963161012400S	RES, SEMI FIXED(1K/B-CURVE) ANGLE PANASONIC	CVN1RE102B01T	1		
VR734	963161012400S	RES, SEMI FIXED(1K/B-CURVE) ANGLE PANASONIC	CVN1RE102B01T	1		
VR744	963161012400S	RES, SEMI FIXED(1K/B-CURVE) ANGLE PANASONIC	CVN1RE102B01T	1		
VR754	963161012400S	RES, SEMI FIXED(1K/B-CURVE) ANGLE PANASONIC	CVN1RE102B01T	1		
VR764	963161012400S	RES, SEMI FIXED(1K/B-CURVE) ANGLE PANASONIC	CVN1RE102B01T	1		
VR774	963161012400S	RES, SEMI FIXED(1K/B-CURVE) ANGLE PANASONIC	CVN1RE102B01T	1		
CAPACITORS GROUP						
C7001	nsp	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1		
C7011,7012	943134501570S	CAP, ELECT(10V/330uF) KR3-10V331MB(6.3*11L)	CCEA1AH331T	2		
C7013	nsp	CAP, ELECT(10V/47uF) KR3-10V470MA(5*11L)	CCEA1AH470T	1		
C7101	00D2544583971	CAP, ELEC(ELNA ROB SERIES, 47uF/50V) ROB-50V470MG3#9-T2	CCEA1HROB470T	1		
C7102	nsp	CAP, PE-FILM(100V/470pF/J) PEFA471J100/S & A ENTERPRISES	CMCE2A471J3R11T	1		
C7104	nsp	CAP, CHIP(1608, 50V/220pF)	CCUS1H221JA	1		
C7105	nsp	CAP, CHIP(1608, 50V/2200pF)	CCUS1H222KC	1		
C7106	00MOA47702520	CAP, ELECT(25V/470uF)	CCEA1EH471T	1		
C7112	nsp	CAP, PE-FILM(100V/220pF/J) PEFA221J100/S & A ENTERPRISES	CMCE2A221J3R11T	1		
C7120,7121	nsp	CAP, PE-FILM(100V/470pF/J) PEFA471J100/S & A ENTERPRISES	CMCE2A471J3R11T	2		
C7125	13405014440AS	CAP, ELECT(50V/100uF)	CCEA1HH101T	1		
C7138	nsp	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1		
C7201	00D2544583971	CAP, ELEC(ELNA ROB SERIES, 47uF/50V) ROB-50V470MG3#9-T2	CCEA1HROB470T	1		
C7202	nsp	CAP, PE-FILM(100V/470pF/J) PEFA471J100/S & A ENTERPRISES	CMCE2A471J3R11T	1		
C7204	nsp	CAP, CHIP(1608, 50V/220pF)	CCUS1H221JA	1		
C7205	nsp	CAP, CHIP(1608, 50V/2200pF)	CCUS1H222KC	1		
C7206	00MOA47702520	CAP, ELECT(25V/470uF)	CCEA1EH471T	1		
C7212	nsp	CAP, PE-FILM(100V/220pF/J) PEFA221J100/S & A ENTERPRISES	CMCE2A221J3R11T	1		
C7220,7221	nsp	CAP, PE-FILM(100V/470pF/J) PEFA471J100/S & A ENTERPRISES	CMCE2A471J3R11T	2		
C7225	13405014440AS	CAP, ELECT(50V/100uF)	CCEA1HH101T	1		
C7238	nsp	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1		
C7301	00D2544583971	CAP, ELEC(ELNA ROB SERIES, 47uF/50V) ROB-50V470MG3#9-T2	CCEA1HROB470T	1		
C7302	nsp	CAP, PE-FILM(100V/470pF/J) PEFA471J100/S & A ENTERPRISES	CMCE2A471J3R11T	1		
C7304	nsp	CAP, CHIP(1608, 50V/220pF)	CCUS1H221JA	1		
C7305	nsp	CAP, CHIP(1608, 50V/2200pF)	CCUS1H222KC	1		
C7306	00MOA47702520	CAP, ELECT(25V/470uF)	CCEA1EH471T	1		
C7312	nsp	CAP, PE-FILM(100V/220pF/J) PEFA221J100/S & A ENTERPRISES	CMCE2A221J3R11T	1		
C7320,7321	nsp	CAP, PE-FILM(100V/470pF/J) PEFA471J100/S & A ENTERPRISES	CMCE2A471J3R11T	2		
C7325	13405014440AS	CAP, ELECT(50V/100uF)	CCEA1HH101T	1		
C7338	nsp	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1		
C7401	00D2544583971	CAP, ELEC(ELNA ROB SERIES, 47uF/50V) ROB-50V470MG3#9-T2	CCEA1HROB470T	1		
C7402	nsp	CAP, PE-FILM(100V/470pF/J) PEFA471J100/S & A ENTERPRISES	CMCE2A471J3R11T	1		
C7404	nsp	CAP, CHIP(1608, 50V/220pF)	CCUS1H221JA	1		
C7405	nsp	CAP, CHIP(1608, 50V/2200pF)	CCUS1H222KC	1		
C7406	00MOA47702520	CAP, ELECT(25V/470uF)	CCEA1EH471T	1		
C7412	nsp	CAP, PE-FILM(100V/220pF/J) PEFA221J100/S & A ENTERPRISES	CMCE2A221J3R11T	1		
C7420,7421	nsp	CAP, PE-FILM(100V/470pF/J) PEFA471J100/S & A ENTERPRISES	CMCE2A471J3R11T	2		
C7425	13405014440AS	CAP, ELECT(50V/100uF)	CCEA1HH101T	1		
C7438	nsp	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1		
C7501	00D2544583971	CAP, ELEC(ELNA ROB SERIES, 47uF/50V) ROB-50V470MG3#9-T2	CCEA1HROB470T	1		
C7502	nsp	CAP, PE-FILM(100V/470pF/J) PEFA471J100/S & A ENTERPRISES	CMCE2A471J3R11T	1		
C7504	nsp	CAP, CHIP(1608, 50V/220pF)	CCUS1H221JA	1		
C7505	nsp	CAP, CHIP(1608, 50V/2200pF)	CCUS1H222KC	1		
C7506	00MOA47702520	CAP, ELECT(25V/470uF)	CCEA1EH471T	1		
C7512	nsp	CAP, PE-FILM(100V/220pF/J) PEFA221J100/S & A ENTERPRISES	CMCE2A221J3R11T	1		
C7520,7521	nsp	CAP, PE-FILM(100V/470pF/J) PEFA471J100/S & A ENTERPRISES	CMCE2A471J3R11T	2		
C7525	13405014440AS	CAP, ELECT(50V/100uF)	CCEA1HH101T	1		
C7531,7532	943134500070S	CAP, ELECT(100V/10uF)	CCEA2AH100T	2		
C7538	nsp	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1		
C7601	00D2544583971	CAP, ELEC(ELNA ROB SERIES, 47uF/50V) ROB-50V470MG3#9-T2	CCEA1HROB470T	1		
C7602	nsp	CAP, PE-FILM(100V/470pF/J) PEFA471J100/S & A ENTERPRISES	CMCE2A471J3R11T	1		
C7604	nsp	CAP, CHIP(1608, 50V/220pF)	CCUS1H221JA	1		
C7605	nsp	CAP, CHIP(1608, 50V/2200pF)	CCUS1H222KC	1		
C7606	00MOA47702520	CAP, ELECT(25V/470uF)	CCEA1EH471T	1		
C7612	nsp	CAP, PE-FILM(100V/220pF/J) PEFA221J100/S & A ENTERPRISES	CMCE2A221J3R11T	1		
C7620,7621	nsp	CAP, PE-FILM(100V/470pF/J) PEFA471J100/S & A ENTERPRISES	CMCE2A471J3R11T	2		
C7625	13405014440AS	CAP, ELECT(50V/100uF)	CCEA1HH101T	1		
C7638	nsp	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1		
C7701	00D2544583971	CAP, ELEC(ELNA ROB SERIES, 47uF/50V) ROB-50V470MG3#9-T2	CCEA1HROB470T	1		
C7702	nsp	CAP, PE-FILM(100V/470pF/J) PEFA471J100/S & A ENTERPRISES	CMCE2A471J3R11T	1		
C7704	nsp	CAP, CHIP(1608, 50V/220pF)	CCUS1H221JA	1		
C7705	nsp	CAP, CHIP(1608, 50V/2200pF)	CCUS1H222KC	1		
C7706	00MOA47702520	CAP, ELECT(25V/470uF)	CCEA1EH471T	1		
C7712	nsp	CAP, PE-FILM(100V/220pF/J) PEFA221J100/S & A ENTERPRISES	CMCE2A221J3R11T	1		
C7720,7721	nsp	CAP, PE-FILM(100V/470pF/J) PEFA471J100/S & A ENTERPRISES	CMCE2A471J3R11T	2		
C7725	13405014440AS	CAP, ELECT(50V/100uF)	CCEA1HH101T	1		
C7731,7732	943134500070S	CAP, ELECT(100V/10uF)	CCEA2AH100T	2		
C7738	nsp	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1		
OTHER PARTS GROUP						
BK701	nsp	BRACKET, PCB	CMD1A569-V1	1		
BN704	nsp	WIRE ASS'Y (5P, 2.0MM, 250MM, UL1007#26) 20010HS-05P/CKM2002HV-05P	CWB1B005250LC	1		
CN461	nsp	LOCK-WAFER/STRAIGHT/2MM PITCH/13PIN SMW200-13	CJP13GI2882Y	1		
CN701	nsp	LOCK-WAFER/STRAIGHT/2.5MM PITCH/9PIN SMW250-09	CJP09GI2892Y	1		
CN702	nsp	LOCK-WAFER/STRAIGHT/2.5MM PITCH/7PIN SMW250-07	CJP07GI2892Y	1		
CN703	nsp	LOCK-WAFER/STRAIGHT/2.5MM PITCH/3PIN SMW250-03	CJP03GI2892Y	1		
CN715	nsp	WAFER (3PIN, AN, 2MM, JWT) GIL-S-03P-S2L2-EF, JWT	CJP03GB48ZW	1		

REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
CN725	nsp	WAFER (3PIN, AN, 2MM, JWT) GIL-S-03P-S2L2-EF, JWT		CJP03GB48ZW	1		
CN735	nsp	WAFER (3PIN, AN, 2MM, JWT) GIL-S-03P-S2L2-EF, JWT		CJP03GB48ZW	1		
CN745	nsp	WAFER (3PIN, AN, 2MM, JWT) GIL-S-03P-S2L2-EF, JWT		CJP03GB48ZW	1		
CN755	nsp	WAFER (3PIN, AN, 2MM, JWT) GIL-S-03P-S2L2-EF, JWT		CJP03GB48ZW	1		
CN765	nsp	WAFER (3PIN, AN, 2MM, JWT) GIL-S-03P-S2L2-EF, JWT		CJP03GB48ZW	1		
CN775	nsp	WAFER (3PIN, AN, 2MM, JWT) GIL-S-03P-S2L2-EF, JWT		CJP03GB48ZW	1		
GND71	nsp	PLATE , EARTH(TRONIC ELECTRONICS)		CJT1A026	1		
★	nsp	HEAT SINK ASSY		CMY1A372ZA	1		
★	nsp	SCREW , SPECIAL		CHD3A012R	21		
★	nsp	BRACKET , AMP PCB		CMD1A796	5		
★	nsp	HEAT SINK		CMY1A372-V1	1		
★	nsp	SCREW		CTB3+8JR	5		
★	nsp	SCREW		CTW3+8JR	5		

SPK PCB ASS'Y

※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.

E3 : U.S.A. & Canada model E2 : Europe model E1C : China model E1 : Asia model K : Japan model

BK : Black model SP : Premium Silver model

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
SEMICONDUCTORS GROUP						
D9221-9224	90M-HZ200190R	DIODE, SWITCHING, SMD TYPE RLS4148 TE-11	HVDRLS4148SR	4		
D9230	90M-HZ200190R	DIODE, SWITCHING, SMD TYPE RLS4148 TE-11	HVDRLS4148SR	1		
D9301	943209001080S	DIODE, CHIP, SWITCHING 1SS355/HOMI(HK) COMPANY LTD	CVD1SS355T	1		
D9303,9304	943203003150S	DIODE, RECTIFIER, RADIAL	CVD1N4007SRT	2		
D9315-9318	943209001080S	DIODE, CHIP, SWITCHING 1SS355/HOMI(HK) COMPANY LTD	CVD1SS355T	4		
D9331	943203003150S	DIODE, RECTIFIER, RADIAL	CVD1N4007SRT	1		
D9333	943203003150S	DIODE, RECTIFIER, RADIAL	CVD1N4007SRT	1		
D9336	943203003150S	DIODE, RECTIFIER, RADIAL	CVD1N4007SRT	1		
D9338-9340	943203003150S	DIODE, RECTIFIER, RADIAL	CVD1N4007SRT	3		
D9343	943203003150S	DIODE, RECTIFIER, RADIAL	CVD1N4007SRT	1		
D9345	943203003150S	DIODE, RECTIFIER, RADIAL	CVD1N4007SRT	1		
D9348	943203003150S	DIODE, RECTIFIER, RADIAL	CVD1N4007SRT	1		
D9350	943203003150S	DIODE, RECTIFIER, RADIAL	CVD1N4007SRT	1		
D9701	90M-HE200390R	DIODE, BRIDGE, (600V/25A) GBJ2506	CVDPGBJ2506	1		
D9727	00D9430196306	DIODE, ZENER, 1/2W, 7.5V ZJ7.5B/HOMI(H.K) COMPANY LTD	CVDZJ7.5BT	1		
D9728	00D9430182609	DIODE, SWITCHING 1SS133/HOMI(HK) COMPANY LTD	CVD1SS133MT	1		
IC931,932	943231010390S	I.C.REGULATOR(+5V,T0220S) KIA7805BPI (KEC)	CVKIA7805BPI	2		
IC933	943232100370S	I.C.REGULATOR(+12V,T0220)	CVKIA7812BPI	1		
IC934	943231010390S	I.C.REGULATOR(+5V,T0220S) KIA7805BPI (KEC)	CVKIA7805BPI	1		
IC935	00D2631099006	I.C.REGULATOR(-5V,T0220S) KIA7905PI (KEC)	CVKIA7905PI	1		
IC936	00D2631100050	I.C.REGULATOR(+8V,T0220S) KIA7808BPI(KEC)	CVKIA7808BPI	1		
IC937	00D2631251006	I.C.REGULATOR(-8V,T0220S) KIA7908PI (KEC)	CVKIA7908PI	1		
Q9221-9224	943213500160S	T.R.RT1N237C(2.2K-47K) RT1N237C(NPN,SC-59,SISAHAYA	CVTR1N237C	4		
Q9230	943213500160S	T.R.RT1N237C(2.2K-47K) RT1N237C(NPN,SC-59,SISAHAYA	CVTR1N237C	1		
RESISTOR GROUP						
R7801,7802	nsp	RES, M-OXIDE FILM(2W/470ohm)	CRG2SANJ471RT	2		
R9201-9207	nsp	RES, CARBON(1/5W,10ohm,J)	CRD20TJ100T	7		
R9211-9217	nsp	RES, M-OXIDE FILM(2W/10ohm)	CRG2SANJ100RT	7		
R9221-9224	nsp	RES, CHIP(3216/5%/0ohm)	CRJ14CJ0R0T	4		
R9230	nsp	RES, CHIP(3216/5%/0ohm)	CRJ14CJ0R0T	1		
R9705,9706	nsp	RES, CHIP(3216/5%/470Kohm)	CRJ14CJ474T	2	*	
R9711-9713	nsp	RES, M-OXIDE FILM(1W/1Kohm)	CRG1SANJ102RT	3		
R9727	nsp	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1		
R9801-9804	nsp	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	4		
R9806	nsp	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1		
R9819,9820	00MNN05224610	RES, CHIP(1608/5%/220Kohm)	CRJ10DJ224T	2		
R9821,9822	nsp	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	2		
R9823,9824	00MNN05561610	RES, CHIP(1608/5%/560ohm)	CRJ10DJ561T	2		
CAPACITORS GROUP						
C9211-9217	nsp	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	7		
C9221	13405014440AS	CAP, ELECT(50V/100uF)	CCEA1HH101T	1		
C9301	nsp	CAP, ELECT(16V/100uF)-S	CCEA1CKS101T	1		
C9303	nsp	CAP, ELECT(50V/10uF)-S	CCEA1HKS100T	1		
C9304	13405012940AS	CAP, ELECT(16V/100uF)	CCEA1CH101T	1		
C9305	nsp	CAP, ELECT(50V/10uF)	CCEA1HH100T	1		
C9306	nsp	CAP, ELECT(50V/10uF)-S	CCEA1HKS100T	1		
C9309	943134010620S	CAP, ELECT(25V/4700uF)	CCEA1EH472E	1		
C9311,9312	00MOA10801620	CAP, ELECT(16V/1000uF)	CCEA1CH102E	2		
C9315,9316	nsp	CAP, ELECT(50V/10uF)-S	CCEA1HKS100T	2		
C9317	13405014440AS	CAP, ELECT(50V/100uF)	CCEA1HH101T	1		
C9318	nsp	CAP, ELECT(16V/100uF)-S	CCEA1CKS101T	1		
C9321,9322	943134010620S	CAP, ELECT(25V/4700uF)	CCEA1EH472E	2		
C9331-9333	nsp	CAP, MYLAR(50V/0.1uF/J)	HCQI1H104JZT	3		
C9335-9337	nsp	CAP, MYLAR(50V/0.1uF/J)	HCQI1H104JZT	3		
C9511-9517	nsp	CAP, CHIP(2012, 250V/0.01uF)	CCUC2E103KC	7		
C9631-9637	nsp	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	7		
C9701,9702	90M-OF100490R	CAP, METAL PE FILM(250V/0.1uF)	KCME2E104JP04T	2		
C9705,9706	963134010180S	CAP, ELECT(71V/12000uF),35*58L,NICHICON LKSH2123MESDZT NICHICON	CCET71VLKS123N	2		
C9708	nsp	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1		
C9727	nsp	CAP, ELECT(50V/10uF)	CCEA1HH100T	1		
C9801-9803	nsp	CAP, CHIP(1608, 50V/100pF)	CCUS1H101JA	3		
C9804	nsp	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1		
C9806	nsp	CAP, CHIP(1608, 50V/100pF)	CCUS1H101JA	1		
C9811	nsp	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1		
OTHER PARTS GROUP						
BD981	nsp	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1	*	
BK901,902	nsp	BRACKET, PCB(FUSE)	CMD1A730	2		
BK903	nsp	PLATE, MAIN PCB	CMC2A424	1		
BN701	nsp	WIRE ASS'Y LOCKING (9P,2.5MM,180MM,UL1569#20,105)	CWB7E0091803D	1	*	
BN702	nsp	WIRE ASS'Y LOCKING (7P,2.5MM,400MM,UL1569#20,105)	CWB7E0074003D	1	*	
BN703	nsp	WIRE ASS'Y LOCKING (3P,2.5MM,220MM,UL1569#24,105) SMH250-03P/CKM2509HV-03P	CWB7C0032203D	1		
BN932	nsp	WIRE ASS'Y LOCKING (9P,2.0MM,220MM,UL1007#26)	CWB1B009220HC	1	*	
CN25B	nsp	PIN HEADER (21P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS	CJP21G1281Z	1		
CN77B	nsp	PIN HEADER (19P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS	CJP19G1281Z	1		
CN932	nsp	LOCK-WAFER/STRAIGHT/2MM PITCH/9PIN SMW200-09	CJP09GI288ZY	1		
CN940	nsp	LOCK-WAFER/STRAIGHT/2.5MM PITCH/5PIN SMW250-05	CJP05GI289ZY	1		
CN941	nsp	LOCK-WAFER/STRAIGHT/2.5MM PITCH/3PIN SMW250-03	CJP03GI289ZY	1		
CN971	nsp	WAFER,YW396-03AB(7.92mm)	CJP03GA89ZY	1		
F9331-9335	nsp	HOLDER, FUSE	CJCFCS5	5		
GND92	nsp	PLATE, EARTH(TRONIC ELECTRONICS)	CJT1A026	1		
JK921-927	943643102420S	2P, SCREW SPK(R/B) SJ2003S-A006-00A200B	CJJ5N023Z	7		
JW922	nsp	WIRE ASS'Y(1P, 150mm, BLUE, UL1007#24)	CWE420I150AA	1	*	
JW923	nsp	WIRE ASS'Y(1P, 120mm, BLK, UL1015#20, CKM-T)	CWE7102120TT	1	*	
L9201-9207	943115010260S	COIL, SPEAKER(0.5uH) SPRING COIL 8TS/KSE	CLEYOR5KAK	7		
RY921-924	682010023006S	RELAY,HL3-2A-12S,DC12V,2C1P HL3-2A12S/HANDOUK	CSL3A021ZU	4		
RY930	943682000810S	RELAY,BC3-12H,DC12V,2C2P BC3-12H/HANDOUK	CSLA4016ZU	1		
TU901	943183010320S	TUNER(USA) FM(SCREW: F TYPE), AM(S/LAB)	CNVNMW004MV1S63SN	1		
TU901	943183100360D	TUNER, RDS, FM(PAL TYPE), SI4705-B20 KST-MW104FV1-S63G	CNVMW104FV1-S63G	1	*	
TU901	943183100220S	TUNER, NO RDS, FM(PAL TYPE), SI4704- B20 KST-MW004FV1-S63	CNVMW004FV1-S63	1		

CNT PCB ASS'Y

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

E3 : U.S.A. & Canada model E2 : Europe model E1C : China model E1 : Asia model K : Japan model

BK : Black model SP : Premium Silver model

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
CAPACITORS GROUP						
C9701,9702	13405012940AS	CAP. ELECT(16V/100uF)		CCEA1CH101T	2	
OTHER PARTS GROUP						
BN25B	nsp	PIN SOCKET (21P,1.25mm,ANGLE, B-TO-B)		CJP21HJ282Z	1	
BN77B	nsp	PIN SOCKET (19P,1.25mm,ANGLE, B-TO-B) C125Z2/COSMOS		CJP19HJ282Z	1	
CN21A	nsp	PIN HEADER (19P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS		CJP19GI281Z	1	
CN21B	nsp	PIN HEADER (19P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS		CJP19GI281Z	1	
CN23A	nsp	PIN HEADER (27P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS		CJP27GI281Z	1	
CN23B	nsp	PIN HEADER (19P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS		CJP19GI281Z	1	
CN24A	nsp	PIN HEADER (27P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS		CJP27GI281Z	1	
CN24B	nsp	PIN HEADER (27P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS		CJP27GI281Z	1	
CN25A	nsp	PIN HEADER (19P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS		CJP19GI281Z	1	
CN26A	nsp	PIN HEADER (13P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS		CJP13GI281Z	1	
CN26B	nsp	PIN HEADER (19P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS		CJP19GI281Z	1	
CN27A	nsp	PIN HEADER (17P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS		CJP17GI281Z	1	
CN27B	nsp	PIN HEADER (19P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS		CJP19GI281Z	1	
CN28B	nsp	PIN HEADER (13P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS		CJP13GI281Z	1	
CN64B	nsp	PIN HEADER (15P,1.25mm,STRAIGHT,B-TO-B) C125Z1/COSMOS		CJP15GI281Z	1	

INPUT PCB ASS'Y

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

E3 : U.S.A. & Canada model E2 : Europe model E1C : China model E1 : Asia model K : Japan model

BK : Black model SP : Premium Silver model

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
SEMICONDUCTORS GROUP						
D8831-8833	943203003150S	DIODE , RECTIFIER, RADIAL		CVD1N4007SRT	3	
D8834	943202500720S	DIODE , ZENER(3.6V/0.5W, SOD-123)		CVDMM123V6H	1	
IC111	963236101380P	I.C. , HDMI BUFFER AD8195ACPZ ADI		CVIAD8195ACPZ	1	*
IC471	943235003810S	I.C. , INPUT WITH 8CH VOLUME(100P QFP) RENESAS		CVIR2A15218FP	1	
IC481-483	943232100380S	I.C. , DUAL OPAMP(SOP-8P) NJM8080G		CVINJM8080G	3	
IC484	00D2623727904	I.C. , 2CH VOLUME		CVINJW1194V	1	
Q8513	943215500030S	T.R.RT1P441C(47K-47K) RT1P441C(PNP,SC-59,SISAHAYA		CVTRT1P441C	1	
Q8514	943216500050S	T.R.RT1N441C(47K-47K) RT1N441C(NPN,SC-59,SISAHAYA		CVTRTN1N441C	1	
Q8517,8518	943214500030S	T.R. , MUTE INC2001AC1(NPN,SC-59ISAHAYA	E2/E1C	CVTINC2001AC1	2	
Q8520	943215500030S	T.R.RT1P441C(47K-47K) RT1P441C(PNP,SC-59,SISAHAYA		CVTRT1P441C	1	
Q8537,8538	943214500030S	T.R. , MUTE INC2001AC1(NPN,SC-59ISAHAYA	E2/E1C	CVTINC2001AC1	2	
Q8563	943215500030S	T.R.RT1P441C(47K-47K) RT1P441C(PNP,SC-59,SISAHAYA		CVTRT1P441C	1	
Q8564	943216500050S	T.R.RT1N441C(47K-47K) RT1N441C(NPN,SC-59,SISAHAYA		CVTRTN1N441C	1	
Q8567,8568	943214500030S	T.R. , MUTE INC2001AC1(NPN,SC-59ISAHAYA	E2/E1C	CVTINC2001AC1	2	
Q8570	943215500030S	T.R.RT1P441C(47K-47K) RT1P441C(PNP,SC-59,SISAHAYA		CVTRT1P441C	1	
Q8583	943215500030S	T.R.RT1P441C(47K-47K) RT1P441C(PNP,SC-59,SISAHAYA	E2/E1C	CVTRT1P441C	1	
Q8584	943216500050S	T.R.RT1N441C(47K-47K) RT1N441C(NPN,SC-59,SISAHAYA	E2/E1C	CVTRTN1N441C	1	
Q8587,8588	943214500030S	T.R. , MUTE INC2001AC1(NPN,SC-59ISAHAYA	E2/E1C	CVTINC2001AC1	2	
Q8590	943215500030S	T.R.RT1P441C(47K-47K) RT1P441C(PNP,SC-59,SISAHAYA	E2/E1C	CVTRT1P441C	1	
Q8617	943214500030S	T.R. , MUTE INC2001AC1(NPN,SC-59ISAHAYA		CVTINC2001AC1	1	
Q8743	943215500030S	T.R.RT1P441C(47K-47K) RT1P441C(PNP,SC-59,SISAHAYA		CVTRT1P441C	1	
Q8744	943216500050S	T.R.RT1N441C(47K-47K) RT1N441C(NPN,SC-59,SISAHAYA		CVTRTN1N441C	1	
Q8747,8748	943214500030S	T.R. , MUTE INC2001AC1(NPN,SC-59ISAHAYA		CVTINC2001AC1	2	
Q8750	943215500030S	T.R.RT1P441C(47K-47K) RT1P441C(PNP,SC-59,SISAHAYA		CVTRT1P441C	1	
RESISTOR GROUP						
L1101,1102	nsp	RES. CHIP(1608/5%/0ohm) .		CRJ10DJ0R0T	2	
R1101	nsp	RES. CHIP(1608/5%/0ohm) .		CRJ10DJ0R0T	1	
R1102	nsp	RES. CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1	
R1106	nsp	RES. CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1	
R1107	nsp	RES. CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R1108,1109	nsp	RES. CHIP(1608/5%/2Kohm)		CRJ10DJ202T	2	
R1111	nsp	RES. CHIP(1608/5%/4.7Kohm)		CRJ10DJ472T	1	
R4601,4602	nsp	RES. CHIP(1608/5%/470ohm)		CRJ10DJ471T	2	
R4603,4604	nsp	RES. CHIP(1608/5%/820Kohm)		CRJ10DJ824T	2	
R4605,4606	nsp	RES. CHIP(1608/5%/470ohm)		CRJ10DJ471T	2	
R4607,4608	nsp	RES. CHIP(1608/5%/820Kohm)		CRJ10DJ824T	2	
R4609,4610	nsp	RES. CHIP(1608/5%/0ohm) .		CRJ10DJ0R0T	2	
R4611,4612	nsp	RES. CHIP(1608/5%/470ohm)		CRJ10DJ471T	2	
R4613,4614	nsp	RES. CHIP(1608/5%/820Kohm)		CRJ10DJ824T	2	
R4615,4616	nsp	RES. CHIP(1608/5%/470ohm)		CRJ10DJ471T	2	
R4617,4618	nsp	RES. CHIP(1608/5%/820Kohm)		CRJ10DJ824T	2	
R4619,4620	nsp	RES. CHIP(1608/5%/0ohm) .		CRJ10DJ0R0T	2	
R4625,4626	nsp	RES. CHIP(1608/5%/470ohm)		CRJ10DJ471T	2	
R4627,4628	nsp	RES. CHIP(1608/5%/820Kohm)		CRJ10DJ824T	2	
R4629,4630	nsp	RES. CHIP(1608/5%/0ohm) .		CRJ10DJ0R0T	2	
R4633,4634	nsp	RES. CHIP(1608/5%/0ohm) .		CRJ10DJ0R0T	2	
R4637,4638	nsp	RES. CHIP(1608/5%/0ohm) .		CRJ10DJ0R0T	2	
R4643,4644	nsp	RES. CHIP(1608/5%/0ohm) .		CRJ10DJ0R0T	2	
R4647,4648	nsp	RES. CHIP(1608/5%/0ohm) .		CRJ10DJ0R0T	2	
R4687,4688	nsp	RES. CHIP(1608/5%/0ohm) .		CRJ10DJ0R0T	2	
R4701	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	1	
R4704,4705	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	2	
R4709	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	1	
R4712,4713	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	2	
R4716	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	1	
R4719,4720	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	2	
R4737	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	1	
R4761-4768	nsp	RES. CHIP(1608/5%/10Kohm)		CRJ10DJ103T	8	
R4773-4776	nsp	RES. CHIP(1608/5%/100Kohm)		CRJ10DJ104T	4	
R4777,4778	nsp	RES. CHIP(1608/5%/0ohm) .		CRJ10DJ0R0T	2	
R4794-4799	nsp	RES. CHIP(1608/5%/0ohm) .		CRJ10DJ0R0T	6	
R4801,4802	nsp	RES. CHIP(1608/5%/470Kohm)		CRJ10DJ474T	2	
R4803,4804	nsp	RES. CHIP(1608/5%/150Kohm)		CRJ10DJ154T	2	
R4805,4806	nsp	RES. CHIP(1608/5%/270Kohm)		CRJ10DJ274T	2	*
R4807,4808	nsp	RES. CHIP(1608/5%/0ohm) .		CRJ10DJ0R0T	2	
R4811,4812	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	2	
R4813,4814	nsp	RES. CHIP(1608/5%/100Kohm)		CRJ10DJ104T	2	
R4815-4818	nsp	RES. CHIP(1608/5%/68Kohm)		CRJ10DJ683T	4	*
R4819,4820	nsp	RES. CHIP(1608/5%/33Kohm)		CRJ10DJ333T	2	
R4821-4824	nsp	RES. CHIP(1608/5%/4.7Kohm)		CRJ10DJ472T	4	
R4825,4826	nsp	RES. CHIP(1608/5%/47ohm)		CRJ10DJ470T	2	
R4827,4828	nsp	RES. CHIP(1608/5%/100Kohm)		CRJ10DJ104T	2	
R4831,4832	nsp	RES. CHIP(1608/5%/100ohm)		CRJ10DJ101T	2	
R4833-4836	nsp	RES. CHIP(1608/5%/100Kohm)		CRJ10DJ104T	4	
R4841,4842	nsp	RES. CHIP(1608/5%/4.7Kohm)		CRJ10DJ472T	2	
! R4953	252310006537S	PTC THERMISTORS, CHIP(85°C) PRF18BE471QB5RB BRAND		CRTPRF18BE471QB5RB	1	
! R4956	252310006537S	PTC THERMISTORS, CHIP(85°C) PRF18BE471QB5RB BRAND		CRTPRF18BE471QB5RB	1	
R4957	nsp	RES. CHIP(1608/5%/0ohm) .		CRJ10DJ0R0T	1	
R4958,4959	nsp	RES. CHIP(2012/5%/0ohm)		CRJ18AJ0R0T	2	
R8501,8502	nsp	RES. CHIP(1608/5%/470Kohm)	E2/E1C	CRJ10DJ474T	2	
R8503-8506	nsp	RES. CHIP(1608/5%/470ohm)	E2/E1C	CRJ10DJ471T	4	
R8507-8510	nsp	RES. CHIP(1608/5%/100Kohm)	E2/E1C	CRJ10DJ104T	4	
R8511,8512	nsp	RES. CHIP(1608/5%/220ohm)	E2/E1C	CRJ10DJ221T	2	
R8513	nsp	RES. CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R8517,8518	nsp	RES. CHIP(1608/5%/10Kohm)	E2/E1C	CRJ10DJ103T	2	
R8519	nsp	RES. CHIP(1608/5%/470Kohm)		CRJ10DJ474T	1	
R8520	nsp	RES. CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1	
R8521,8522	nsp	RES. CHIP(1608/5%/470Kohm)	E2/E1C	CRJ10DJ474T	2	
R8523-8526	nsp	RES. CHIP(1608/5%/470ohm)	E2/E1C	CRJ10DJ471T	4	
R8527-8530	nsp	RES. CHIP(1608/5%/100Kohm)	E2/E1C	CRJ10DJ104T	4	
R8531,8532	nsp	RES. CHIP(1608/5%/220ohm)	E2/E1C	CRJ10DJ221T	2	
R8537,8538	nsp	RES. CHIP(1608/5%/10Kohm)	E2/E1C	CRJ10DJ103T	2	
R8551,8552	nsp	RES. CHIP(1608/5%/470Kohm)	E2/E1C	CRJ10DJ474T	2	
R8553-8556	nsp	RES. CHIP(1608/5%/470ohm)	E2/E1C	CRJ10DJ471T	4	
R8557-8560	nsp	RES. CHIP(1608/5%/100Kohm)	E2/E1C	CRJ10DJ104T	4	
R8561,8562	nsp	RES. CHIP(1608/5%/220ohm)	E2/E1C	CRJ10DJ221T	2	

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
R8563	nsp	RES, CHIP(1608/5%/10Kohm)		1		
R8567,8568	nsp	RES, CHIP(1608/5%/10Kohm)	E2/E1C	2		
R8569	nsp	RES, CHIP(1608/5%/470Kohm)		1		
R8570	nsp	RES, CHIP(1608/5%/1Kohm)		1		
R8571,8572	nsp	RES, CHIP(1608/5%/470Kohm)	E2/E1C	2		
R8573-8576	nsp	RES, CHIP(1608/5%/470ohm)	E2/E1C	4		
R8577-8580	nsp	RES, CHIP(1608/5%/100Kohm)	E2/E1C	4		
R8581,8582	nsp	RES, CHIP(1608/5%/220ohm)	E2/E1C	2		
R8583	nsp	RES, CHIP(1608/5%/10Kohm)	E2/E1C	1		
R8587,8588	nsp	RES, CHIP(1608/5%/10Kohm)	E2/E1C	2		
R8589	nsp	RES, CHIP(1608/5%/470Kohm)	E2/E1C	1		
R8590	nsp	RES, CHIP(1608/5%/1Kohm)	E2/E1C	1		
R8601	nsp	RES, CHIP(1608/5%/470Kohm)		1		
R8603	nsp	RES, CHIP(1608/5%/470ohm)		1		
R8605	nsp	RES, CHIP(1608/5%/470ohm)		1		
R8607	nsp	RES, CHIP(1608/5%/100Kohm)		1		
R8609	nsp	RES, CHIP(1608/5%/100Kohm)		1		
R8611	nsp	RES, CHIP(1608/5%/220ohm)		1		
R8612	nsp	RES, CHIP(1608/5%/0ohm)		1		
R8617	nsp	RES, CHIP(1608/5%/10Kohm)		1		
R8711,8712	nsp	RES, CHIP(1608/5%/0ohm)		2		
R8731,8732	nsp	RES, CHIP(1608/5%/470Kohm)		2		
R8733-8736	nsp	RES, CHIP(1608/5%/470ohm)		4		
R8737-8740	nsp	RES, CHIP(1608/5%/100Kohm)		4		
R8741,8742	nsp	RES, CHIP(1608/5%/220ohm)		2		
R8743	nsp	RES, CHIP(1608/5%/10Kohm)		1		
R8747,8748	nsp	RES, CHIP(1608/5%/10Kohm)		2		
R8749	nsp	RES, CHIP(1608/5%/470Kohm)		1		
R8750	nsp	RES, CHIP(1608/5%/1Kohm)		1		
R8801-8808	nsp	RES, CHIP(1608/5%/0ohm)	E2/E1C	8		
R8833	nsp	RES, CHIP(1608/5%/0ohm)		1		
R8834	nsp	RES, CHIP(1608/5%/820ohm)		1		
R8835	nsp	RES, CHIP(1608/5%/10Kohm)		1		
R8901,8902	nsp	RES, CHIP(1608/5%/0ohm)	E2/E1C	2		
CAPACITORS GROUP						
C1102-1113	nsp	CAP, CHIP(1608, 50V/0.1uF)		12		
C1114	nsp	CAP, CHIP(2012, 6.3V/10uF, X7R)		1		
C1115	nsp	CAP, CHIP(1608, 50V/0.1uF)		1		
C1116	nsp	CAP, CHIP(2012, 6.3V/10uF, X7R)		1		
C1121	nsp	CAP, CHIP(1608, 50V/0.01uF)		1		
C1122	nsp	CAP, CHIP(1608, 50V/0.1uF)		1		
C1123	nsp	CAP, CHIP(2012, 6.3V/10uF, X7R)		1		
C4603,4604	nsp	CAP, CHIP(1608, 50V/330pF)		2		
C4607,4608	nsp	CAP, CHIP(1608, 50V/330pF)		2		
C4613,4614	nsp	CAP, CHIP(1608, 50V/330pF)		2		
C4617,4618	nsp	CAP, CHIP(1608, 50V/330pF)		2		
C4627,4628	nsp	CAP, CHIP(1608, 50V/330pF)		2		
C4701,4702	00MOA22702520	CAP, ELECT(25V/220uF)		2		
C4705	00MOA22702520	CAP, ELECT(25V/220uF)		1		
C4706	13405012940AS	CAP, ELECT(16V/100uF)		1		
C4710,4711	13405012940AS	CAP, ELECT(16V/100uF)		2		
C4713,4714	13405012940AS	CAP, ELECT(16V/100uF)		2		
C4727,4728	13405014440AS	CAP, ELECT(50V/100uF)		2		
C4729,4730	943134500070S	CAP, ELECT(100V/10uF)		2		
C4761,4762	00D9430148708	CAP, ELECT(50V/47uF)		2		
C4763-4768	00D9430175001	CAP, ELECT(25V/47uF)		6		
C4775,4776	nsp	CAP, ELECT(50V/10uF)		2		
C4801,4802	nsp	CAP, ELECT(50V/10uF)		2		
C4803-4806	nsp	CAP, CHIP(1608, 50V/0.01uF)		4		
C4811,4812	nsp	CAP, ELECT(50V/10uF)		2		
C4819,4820	nsp	CAP, CHIP(1608, 50V/68pF)		2		
C4823,4824	nsp	CAP, CHIP(1608, 50V/100pF)		2		
C4825-4828	nsp	CAP, ELECT(50V/10uF)		4		
C4831,4832	nsp	CAP, ELECT(50V/10uF)		2		
C4837,4838	nsp	CAP, CHIP(1608, 50V/3300pF)		2		
C4839,4840	nsp	CAP, CHIP(1608, 50V/0.1uF)		2		
C4841,4842	nsp	CAP, ELECT(50V/4.7uF)		2		
C4843	943134501580S	CAP, ELECT(25V/33uF)		1		
C4844	nsp	CAP, ELECT(50V/10uF)		1		
C4845	943134501580S	CAP, ELECT(25V/33uF)		1		
C8503,8504	nsp	CAP, ELECT(50V/22uF)	E2/E1C	2		
C8507,8508	nsp	CAP, ELECT(50V/22uF)	E2/E1C	2		
C8509,8510	nsp	CAP, CHIP(1608, 50V/330pF)	E2/E1C	2		
C8519	nsp	CAP, ELECT(50V/0.1uF)		1		
C8523,8524	nsp	CAP, ELECT(50V/22uF)	E2/E1C	2		
C8527,8528	nsp	CAP, ELECT(50V/22uF)	E2/E1C	2		
C8529,8530	nsp	CAP, CHIP(1608, 50V/330pF)	E2/E1C	2		
C8532,8533	nsp	CAP, CHIP(1608, 50V/0.01uF)	E2/E1C	2		
C8553,8554	nsp	CAP, ELECT(50V/22uF)	E2/E1C	2		
C8557,8558	nsp	CAP, ELECT(50V/22uF)	E2/E1C	2		
C8559,8560	nsp	CAP, CHIP(1608, 50V/330pF)	E2/E1C	2		
C8569	nsp	CAP, ELECT(50V/0.1uF)		1		
C8573,8574	nsp	CAP, ELECT(50V/22uF)	E2/E1C	2		
C8577,8578	nsp	CAP, ELECT(50V/22uF)	E2/E1C	2		
C8579,8580	nsp	CAP, CHIP(1608, 50V/330pF)	E2/E1C	2		
C8582	nsp	CAP, CHIP(1608, 50V/0.01uF)	E2/E1C	1		
C8589	nsp	CAP, ELECT(50V/0.1uF)	E2/E1C	1		
C8603,8604	nsp	CAP, ELECT(50V/22uF)		2		
C8606	nsp	CAP, CHIP(1608, 50V/330pF)		1		
C8611	nsp	CAP, CHIP(1608, 50V/0.01uF)		1		
C8733,8734	nsp	CAP, ELECT(50V/22uF)		2		
C8737,8738	nsp	CAP, ELECT(50V/22uF)		2		
C8739,8740	nsp	CAP, CHIP(1608, 50V/330pF)		2		
C8742	nsp	CAP, CHIP(1608, 50V/0.01uF)		1		
C8749	nsp	CAP, ELECT(50V/0.47uF)		1		
C8831	nsp	CAP, ELECT(50V/10uF)		1		
OTHER PARTS GROUP						
BK101	nsp	BRACKET, HDMI		1		
BN23B	nsp	PIN SOCKET (19P,1.25mm,ANGLE, B-TO-B) C125Z2/COSMOS		1		
BN24B	nsp	PIN SOCKET (27P,1.25mm,ANGLE, B-TO-B) C125Z2/COSMOS		1		
BN26B	nsp	PIN SOCKET (19P,1.25mm,ANGLE, B-TO-B) C125Z2/COSMOS		1		
BN402	nsp	WIRE ASS'Y (3P,2.0MM,100MM,UL1569#26,105) 20010HS-03P/CKM2002HV-03P		1		
BN64B	nsp	PIN SOCKET (15P,1.25mm,ANGLE, B-TO-B) C125Z2/COSMOS		1		
BN802	nsp	WIRE ASS'Y Locking (YH) (13P,2MM,150MM,#26)		1		
CN111	nsp	WAFER, FFC, SMD(23P-1mm, STRAIGHT)		1		
JK111	943644101840D	JACK, HDMI(KSI-TWI, W/O FLANGE) AD3PBJ19G0		1	*	

REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
JK461,462	943643101570S	JACK, 4P(W/R,W/R),SEPA-GND RCA-405B-00-04		CJJ4P048U	2		
JK466	943643010150S	JACK, 2P(W/R),SEPA-GND, SILVER RCA-207AE-02/YUQIU		CJJ4N034U	1		
JK851	943643010150S	JACK, 2P(W/R),SEPA-GND, SILVER RCA-207AE-02/YUQIU		CJJ4N034U	1		
JK852	643010079004S	JACK, 4P(W/R,W/B),SEPA-GND, SILVER RCA-405B-55/YUQIU	E2/E1C	CJJ4P077Z	1		
JK853	943643101570S	JACK, 4P(W/R,W/R),SEPA-GND RCA-405B-00-04	E2/E1C	CJJ4P048U	1		
JK854,855	943643010160S	JACK, 1P(BK),SEPA-GND, SILVER RCA-107B-04/YUQIU		CJJ4M046U	2		

VIDEO PCB ASS'Y

※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.

E3 : U.S.A. & Canada model E2 : Europe model E1C : China model E1 : Asia model K : Japan model

BK : Black model SP : Premium Silver model

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
SEMICONDUCTORS GROUP						
D5211	943202500740D	DIODE, ZENER(16V/0.5W, SOD-123) MM1Z16		CVDDMM1Z16H	1	
D5251	00D2760718902	DIODE, SCHOTTKY, 30V RB521S-30, ROHM ROHM		CVDRB521S-30	1	
D5252	943209001080S	DIODE, CHIP, SWITCHING 1SS355/HOMI(HK) COMPANY LTD		CVD1SS355T	1	
D5254	00D2760718902	DIODE, SCHOTTKY, 30V RB521S-30, ROHM ROHM		CVDRB521S-30	1	
IC511	90M-HC109700R	I.C., VIDEO S/W (JRC)		CVINJM2595MTE1	1	
IC516	963235100630S	I.C., VIDEO SW(3IN.1OUT,SSOP-20P) NJM2586AVC3		CVINJM2586AVC3	1	
IC521	963239008800S	I.C., RS232 (3.3V) ILX3232D		CVIILX3232DT	1	
Q5117	943216500020S	T.R,RT1N141C(10K-10K) RT1N141C(NPN,SC-59,SISAHAYA		CVTRT1N141C	1	
Q5211	943212500220D	T.R, 2SA2166, PNP, TO-236, ISAHAYA		CVT2SA2166	1	*
Q5212	943216500020S	T.R,RT1N141C(10K-10K) RT1N141C(NPN,SC-59,SISAHAYA		CVTRT1N141C	1	
Q5251	943215500020S	T.R,RT1P141C(10K-10K) RT1P141C(PNP,SC-59,SISAHAYA		CVTRT1P141C	1	
Q5252	943214500020S	T.R,2SC3052 2SC3052(NPN,SC-59,GEISAHAYA		CVT2SC3052	1	
RESISTOR GROUP						
R5101-5103	nsp	RES. CHIP(1608/1%/75ohm)		CRJ10DF75R0T	3	
R5113	nsp	RES. CHIP(1608/1%/75ohm)		CRJ10DF75R0T	1	
R5117,5118	nsp	RES. CHIP(1608/5%/10Kohm)		CRJ10DJ103T	2	
R5119	nsp	RES. CHIP(1608/1%/75ohm)		CRJ10DF75R0T	1	
R5151	nsp	RES. CHIP(1608/1%/75ohm)		CRJ10DF75R0T	1	
R5153	nsp	RES. CHIP(1608/1%/75ohm)		CRJ10DF75R0T	1	
R5155	nsp	RES. CHIP(1608/1%/75ohm)		CRJ10DF75R0T	1	
R5157	nsp	RES. CHIP(1608/1%/75ohm)		CRJ10DF75R0T	1	
R5161	nsp	RES. CHIP(1608/1%/75ohm)		CRJ10DF75R0T	1	
R5166	nsp	RES. CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R5169	nsp	RES. CHIP(1608/1%/75ohm)		CRJ10DF75R0T	1	
R5181	nsp	RES. CHIP(1608/1%/75ohm)		CRJ10DF75R0T	1	
R5183	nsp	RES. CHIP(1608/1%/75ohm)		CRJ10DF75R0T	1	
R5185	nsp	RES. CHIP(1608/1%/75ohm)		CRJ10DF75R0T	1	
R5211,5212	nsp	RES. CHIP(1608/5%/4.7Kohm)		CRJ10DJ472T	2	
R5231-5234	nsp	RES. CHIP(1608/5%/1Kohm)		CRJ10DJ102T	4	
R5251	nsp	RES. CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1	
R5252	nsp	RES. CHIP(1608/5%/3.3Kohm)		CRJ10DJ332T	1	
R5253	nsp	RES. CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	1	
R5254	nsp	RES. CHIP(1608/5%/100Kohm)		CRJ10DJ104T	1	
CAPACITORS GROUP						
C5105,5106	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2	
C5107	nsp	CAP. ELECT(50V/10uF)		CCEA1HH100T	1	
C5108	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1	
C5109	nsp	CAP. ELECT(50V/10uF)		CCEA1HH100T	1	
C5111-5113	nsp	CAP. ELECT(50V/10uF)		CCEA1HH100T	3	
C5152	nsp	CAP. ELECT(50V/1uF)		CCEA1HH1R0T	1	
C5154	nsp	CAP. ELECT(50V/1uF)		CCEA1HH1R0T	1	
C5156	nsp	CAP. ELECT(50V/1uF)		CCEA1HH1R0T	1	
C5158	nsp	CAP. ELECT(50V/1uF)		CCEA1HH1R0T	1	
C5160	nsp	CAP. ELECT(50V/1uF)		CCEA1HH1R0T	1	
C5162	nsp	CAP. ELECT(50V/1uF)		CCEA1HH1R0T	1	
C5166	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1	
C5167	13405012940AS	CAP. ELECT(16V/100uF)		CCEA1CH101T	1	
C5168-5170	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	3	
C5171	13405012940AS	CAP. ELECT(16V/100uF)		CCEA1CH101T	1	
C5172-5174	nsp	CAP. CHIP(1608, 50V/68pF)		CCUS1H680JA	3	
C5212,5213	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2	
C5214	nsp	CAP. CHIP(1608, 50V/1000pF)		CCUS1H102KC	1	
C5231	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1	
C5233-5235	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	3	
C5236	nsp	CAP. ELECT(50V/10uF)		CCEA1HH100T	1	
C5237	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1	
C5238,5239	nsp	CAP. CHIP(1608, 50V/33pF)		CCUS1H330JA	2	
C5251	nsp	CAP. CHIP(1608, 50V/1000pF)		CCUS1H102KC	1	
C5252	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1	
C5253	nsp	CAP. CHIP(1608, 50V/1000pF)		CCUS1H102KC	1	
OTHER PARTS GROUP						
BN21B	nsp	PIN SOCKET (19P,1.25mm,ANGLE, B-TO-B)		CJP19HJ282Z	1	
BN27B	nsp	PIN SOCKET (19P,1.25mm,ANGLE, B-TO-B) C125Z2/COSMOS		CJP19HJ282Z	1	
BN28B	nsp	PIN SOCKET (13P,1.25mm,ANGLE, B-TO-B) C125Z2/COSMOS		CJP13HJ282Z	1	
JK511	943643101090S	JACK, 4P(YL, 3P),SEPA-GND,SILVER RCA-405B-4-31/YUQIU		CJ34P078Z	1	
JK512	943643101910S	JACK, 6P(G/G,B/B,R/R), SILVER RCA-628-002-08		CJ34R054Z	1	
JK521	943646100420S	JACK, 9P D-SUB FEMALE(RS-232C) D227FD009S100BY/YUQIU		CJJ9W001Z	1	
JK523	643010086019S	JACK, STEREO (RED MOLD) PJ-308-02-RD/YUQIU		CJJ2D019Z	1	
JK525,526	90M-YT004860R	JACK, STEREO (BLK MOLD) PJ-308-02/YUQIU		CJJ2D008Z	2	
JW501	nsp	WIRE ASS'Y (1P, 80MM,BLK,#22)		CWE5202080A	1	

DIGITAL PCB ASS'Y

※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.

E3 : U.S.A. & Canada model E2 : Europe model E1C : China model E1 : Asia model K : Japan model

BK : Black model SP : Premium Silver model

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
SEMICONDUCTORS GROUP						
D1201	00D2760718902	DIODE, SCHOTTKY, 30V, R8521S-30, ROHM ROHM		1		
D2301	201310001503S	DIODE, ULTRA-HIGH SPEED KDS160-RTK/P, KEC		1		
D3001,3002	201310001503S	DIODE, ULTRA-HIGH SPEED KDS160-RTK/P, KEC		2		
D3003	943209001080S	DIODE, CHIP, SWITCHING 1SS355/HOMI(HK) COMPANY LTD		1		
IC121	963236101220D	I.C., HDMI RX, ADV7850KBCZ-5 ADI		1		
IC122	963239002150S	I.C., OCTAL BUFFER/DRIVER SN74LVC244APWR		1		
IC124	943239100760S	I.C., DE/MUX (8CH ANALOG, TSSOP-16P) TOSHIBA		1		
IC151	963236101320S	I.C., VSP(WITH HDMI TX, FROM KAGA) ADV8003KBCZ-8B		1		
IC152,153	23981007960AS	I.C., DDR2 SDRAM(512M, FBGA-84P) K4T51163QJ-BCE7 SAMSUNG		2	*	
IC155	943248101960D	I.C., SERIAL FLASH(128M, SOP-16) MX25L12845EMI10G	E3 / E2	1	*	
IC155	943248101970D	I.C., SERIAL FLASH(128M, SOP-16) MX25L12845EMI10G	E1C	1	*	
IC156	963231101500S	I.C., LOW DROP REGULATOR(1.8V, TO-252-5) NJM2846DL3-18		1		
IC201	943243101660D	I.C., CPU(2M/PLQP0144KA-A) R5F56108VNF RENESAS	E3 / E2	1	*	
IC201	943243101670D	I.C., CPU(2M/PLQP0144KA-A) R5F56108VNF RENESAS	E1C	1		
IC202	943239100720S	I.C., EEPROM(256KBIT, SOP-8P) R1EX24256BSAS0A RENESAS		1		
IC231	943243101680D	I.C., CPU(384K/PLQP0100KB-A) R5F3650KNFB RENESAS		1	*	
IC241	00D2623448908	I.C., 3STATE QUAD BUFFER TC74VHC125FT TOSHIBA		1		
IC301,302	943239101070S	I.C., DC-DC CONVERTER (3A, OFN T&R-24P)		2		
IC304-307	943239101070S	I.C., DC-DC CONVERTER (3A, OFN T&R-24P)		4		
IC308	943239100730S	I.C., SYSTEM RESET(4.8V, SOT-25A) PST8448NR LELON		1		
IC309,310	943239010400S	I.C., REGULATOR(3.3V/TO-252) NJM2845DL1-33(Te1) JRC		2		
IC320	943239101090S	I.C., High side switch (TSSOP-8P) ROHM		1		
IC322	943239100700S	I.C., Ethernet Transceiver(QFN-24P) LAN8720A-CP-TR		1		
IC326	23671011050AS	I.C., IP0D AUTHENTICATION FROM D&M MFI337S3959		1		
IC390	23681011260AS	I.C., Network Media processor(LFBGA-320P) DM860A SMSC		1		
IC392,393	963246100740D	I.C., SDRAM(256M, 8BIT, TSOP-54P) A3V56S30FTP-G6 ZENTEL		2		
IC394	943248101980D	1G NAND FLASH(48P-TSOP1) H2U71G8F2BTR-BC/HYNIHYNIX	E3	1	*	
IC394	943248101990D	1G NAND FLASH(48P-TSOP1) H2U71G8F2BTR-BC/HYNIHYNIX	E2	1	*	
IC394	943248102000D	1G NAND FLASH(48P-TSOP1) H2U71G8F2BTR-BC/HYNIHYNIX	E1C	1	*	
IC401	00D2623077900	I.C., HEX INVERTER TOSHIBA		1		
IC403	943236101350D	I.C., DIR/DIT(WITH ADC, LQFP-48P) PCM9211PTR		1		
IC404	943236101520D	I.C., DIR(SSOP-16) LC89091JA-H		1	*	
IC406	943249100020D	I.C., P-TERM PLD(TQFP-100P) EPM240T100C5N		1	*	
IC408	943245100370D	I.C., DSP(LQFP-176P/400M) ADSP21487KSWZ-4B		1	*	
IC409	943246012690S	I.C., 64M SDRAM W9864G6JH-6		1		
IC410	943248102010D	I.C., FLASH MEMORY(16MBIT, TSOP-48P) MX29LV160DBT1-70G		1	*	
IC421	943239100690S	I.C., 2CH DAC(32BIT, 384KHZ, TSSOP-20P) PCM5100PWR		1		
IC422	943239010400S	I.C., REGULATOR(3.3V/TO-252) NJM2845DL1-33(Te1) JRC		1		
IC441	943239101080S	I.C., DAC (8CH, HTSSOP-48)		1		
IC442,443	943232100380S	I.C., DUAL OPAMP(SOP-8P) NJM8080G		2		
IC445	943232100380S	I.C., DUAL OPAMP(SOP-8P) NJM8080G		1		
IC447	943232100380S	I.C., DUAL OPAMP(SOP-8P) NJM8080G		1		
IC501	943236101530D	I.C., HDMI PORT PROCESSOR SI9575CTUC SILICON IM		1		
Q1201-1203	943216500050S	T.R, RT1N441C(47K-47K) RT1N441C(NPN, SC-59, SISAHAYA		3		
Q1502	90M-HY200050R	F.E.T (NEC)		1		
Q1503	943216500050S	T.R, RT1N441C(47K-47K) RT1N441C(NPN, SC-59, SISAHAYA		1		
Q1504	943215500030S	T.R, RT1P441C(47K-47K) RT1P441C(PNP, SC-59, SISAHAYA		1		
Q2301	943215500020S	T.R, RT1P141C(10K-10K) RT1P141C(PNP, SC-59, SISAHAYA		1		
Q2302,2303	943216500020S	T.R, RT1N141C(10K-10K) RT1N141C(NPN, SC-59, SISAHAYA		2		
Q2304,2305	943214500020S	T.R, 2SC3052 2SC3052(NPN, SC-59, GEISAHAYA		2		
Q2306	943214500030S	T.R, MUTE INC2001AC1(NPN, SC-59, SISAHAYA		1		
Q2401	943216500020S	T.R, RT1N141C(10K-10K) RT1N141C(NPN, SC-59, SISAHAYA		1		
Q2402	963212500030S	T.R, ISA1530AC1 ISA1530AC1(PNP, SC-59, SISAHAYA		1		
Q2403,2404	943214500020S	T.R, 2SC3052 2SC3052(NPN, SC-59, GEISAHAYA		2		
Q2405	963212500030S	T.R, ISA1530AC1 ISA1530AC1(PNP, SC-59, SISAHAYA		1		
Q2406-2408	943214500020S	T.R, 2SC3052 2SC3052(NPN, SC-59, GEISAHAYA		3		
Q2411	943214500020S	T.R, 2SC3052 2SC3052(NPN, SC-59, GEISAHAYA		1		
Q2414,2415	943214500020S	T.R, 2SC3052 2SC3052(NPN, SC-59, GEISAHAYA		2		
Q2418	943214500020S	T.R, 2SC3052 2SC3052(NPN, SC-59, GEISAHAYA		1		
Q3001-3004	943229500020S	MOSFET, TPC6111(P-CH, U-MOSV) TPC6111 TOSHIBA		4		
Q3005	943212500220D	T.R, 2SA2166, PNP, TO-236, ISAHAYA		1	*	
Q3006,3007	943216500050S	T.R, RT1N441C(47K-47K) RT1N441C(NPN, SC-59, SISAHAYA		2		
Q3008	943216500020S	T.R, RT1N141C(10K-10K) RT1N141C(NPN, SC-59, SISAHAYA		1		
Q3009	943216500050S	T.R, RT1N441C(47K-47K) RT1N441C(NPN, SC-59, SISAHAYA		1		
Q3012	943212500220D	T.R, 2SA2166, PNP, TO-236, ISAHAYA		1	*	
Q3013	943216500020S	T.R, RT1N141C(10K-10K) RT1N141C(NPN, SC-59, SISAHAYA		1		
Q3015	943212500220D	T.R, 2SA2166, PNP, TO-236, ISAHAYA		1	*	
Q3016	943216500020S	T.R, RT1N141C(10K-10K) RT1N141C(NPN, SC-59, SISAHAYA		1		
Q3031	943212500220D	T.R, 2SA2166, PNP, TO-236, ISAHAYA		1	*	
Q3032	943216500020S	T.R, RT1N141C(10K-10K) RT1N141C(NPN, SC-59, SISAHAYA		1		
Q3033	943212500220D	T.R, 2SA2166, PNP, TO-236, ISAHAYA		1	*	
Q3034	943216500020S	T.R, RT1N141C(10K-10K) RT1N141C(NPN, SC-59, SISAHAYA		1		
Q3035	943214500020S	T.R, 2SC3052 2SC3052(NPN, SC-59, GEISAHAYA		1		
Q3038,3039	943216500050S	T.R, RT1N441C(47K-47K) RT1N441C(NPN, SC-59, SISAHAYA		2		
Q4022	963216500060S	T.R, RT1N144C(10K-47K) RT1N144C(NPN, SC-59, SISAHAYA		1		
RESISTOR GROUP						
R1201	nsp	RES, CHIP(1005/5%/2.2Kohm)	CRJ06J222T	1		
R1202	nsp	RES, CHIP(1005/5%/3.3Kohm)	CRJ06J332T	1		
R1203-1205	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	3		
R1206	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R1207,1208	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06J0R0T	2		
R1209	nsp	RES, CHIP(1005/5%/2Kohm)	CRJ06J202T	1		
R1210,1211	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	2		
R1213	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	1		
R1218	nsp	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R1219,1220	nsp	RES, CHIP(1005/5%/10ohm)	CRJ06J100T	2		
R1222	943129007280M	RES, CHIP(1608/5%/24ohm)	CRJ10DJ240T	1		
R1224	943129007280M	RES, CHIP(1608/5%/24ohm)	CRJ10DJ240T	1		
R1225	nsp	RES, CHIP(1005/5%/47Kohm)	CRJ06J473T	1		
R1226	nsp	RES, CHIP(1608/1%/470ohm)	CRJ10DF4700T	1		
R1227	nsp	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R1229	nsp	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1		
R1232	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R1234-1238	nsp	RES, CHIP(1005/5%/47Kohm)	CRJ06J473T	5		
R1239	943129007280M	RES, CHIP(1608/5%/24ohm)	CRJ10DJ240T	1		
R1241	943129007280M	RES, CHIP(1608/5%/24ohm)	CRJ10DJ240T	1		

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
R1243-1246	nsp	RES, CHIP(1608/5%/51ohm)	CRJ10DJ510T	4		
R1248	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06J0R0T	1		
R1250	nsp	RES, CHIP(1005/5%/47Kohm)	CRJ06J473T	1		
R1251	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R1254	nsp	RES, CHIP(1005/5%/1Kohm)	CRJ06J102T	1		
R1255,1256	nsp	RES, CHIP(1005/5%/10ohm)	CRJ06J100T	2		
R1258,1259	nsp	RES, CHIP(1005/5%/2.2Kohm)	CRJ06J222T	2		
R1260	nsp	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R1261-1268	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	8		
R1269,1270	nsp	RES, CHIP(1005/5%/47Kohm)	CRJ06J473T	2		
R1271	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06J0R0T	1		
R1273-1277	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	5		
R1280	nsp	RES, CHIP(1005/5%/680ohm)	CRJ06J681T	1		
R1284	nsp	RES, CHIP(1005/5%/680ohm)	CRJ06J681T	1		
R1286-1293	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	8		
R1294-1299	nsp	RES, CHIP(1005/5%/47Kohm)	CRJ06J473T	6		
R1301,1302	90M-NP000010R	RES, CHIP(1005/5%/22ohm)	CRJ06J220T	2		
R1303-1308	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06J0R0T	6		
R1501,1502	nsp	RES, CHIP(1005/1%/1Kohm)	CRJ06JF1001T	2		
R1503,1504	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	2		
R1505	nsp	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R1506	nsp	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1		
R1507	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	1		
R1509	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	1		
R1510-1512	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	3		
R1521	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06J0R0T	1		
R1523,1524	nsp	RES, CHIP(1608/1%/2.7Kohm)	CRJ10DF2701T	2		
R1532,1533	nsp	RES, CHIP(1608/1%/180ohm)	CRJ10DF1800T	2		
R1536	nsp	RES, CHIP(1608/1%/470ohm)	CRJ10DF4700T	1		
R1538	nsp	RES, CHIP(1608/1%/470ohm)	CRJ10DF4700T	1		
R1540-1543	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	4		
R1544	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06J0R0T	1		
R1546	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R1547	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06J0R0T	1		
R1548,1549	nsp	RES, CHIP(1005/5%/1.8Kohm)	CRJ06J182T	2		
R1554-1556	nsp	RES, CHIP(1005/5%/47ohm)	CRJ06J470T	3		
R1558-1561	nsp	RES, CHIP(1005/5%/47ohm)	CRJ06J470T	4		
R1566,1567	nsp	RES, CHIP(1005/5%/10ohm)	CRJ06J100T	2		
R1571	nsp	RES, CHIP(1005/5%/39ohm)	CRJ06J390T	1		
R1574	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R1575,1576	nsp	RES, CHIP(1005/1%/1Kohm)	CRJ06JF1001T	2		
R1580	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R1589,1590	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	2		
R1606	nsp	RES, CHIP(1005/5%/1Kohm)	CRJ06J102T	1		
R1607	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R1611	nsp	RES, CHIP(1608/5%/2.2Kohm)	CRJ10DJ222T	1		
R1612	nsp	RES, CHIP(1608/5%/1.3Kohm)	CRJ10DJ132T	1		
R1613	nsp	RES, CHIP(1005/5%/56ohm)	CRJ06J560T	1		
R1622	nsp	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R1637,1638	nsp	RES, CHIP(1608/1%/51ohm)	CRJ10DF51R0T	2		
R1640	nsp	RES, CHIP(1608/5%/5.1ohm)	CRJ10DJ5R1T	1		
R1641-1668	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	28		
R1691-1694	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06J0R0T	4		
R1697	nsp	RES, CHIP(1005/5%/47Kohm)	CRJ06J473T	1		
R1708-1715	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06J0R0T	8		
R1716,1717	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	2		
R1718	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R2005-2007	nsp	RES, CHIP(1005/5%/1Kohm)	CRJ06J102T	3		
R2008	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R2042-2044	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	3		
R2047	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R2060	nsp	RES, CHIP(1608/5%/0ohm)	E3 CRJ10DJ0R0T	1		
R2060	nsp	RES, CHIP(1608/5%/10Kohm)	E1C CRJ10DJ103T	1		
R2061	nsp	RES, CHIP(1608/5%/0ohm)	E2 CRJ10DJ0R0T	1		
R2061	nsp	RES, CHIP(1608/5%/10Kohm)	E1C CRJ10DJ103T	1		
R2095,2096	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	2		
R2098	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	1		
R2100-2102	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	3		
R2103	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	1		
R2105	nsp	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R2107	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R2111	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	1		
R2112	nsp	RES, CHIP(1005/5%/100ohm)	CRJ06J101T	1		
R2113	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R2114	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	1		
R2115	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	1		
R2116,2117	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	2		
R2119-2121	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	3		
R2122	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06J0R0T	1		
R2123-2125	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	3		
R2128-2132	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	5		
R2135,2136	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	2		
R2138-2140	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	3		
R2141	nsp	RES, CHIP(1005/5%/1Kohm)	CRJ06J102T	1		
R2142-2144	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	3		
R2147	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	1		
R2149	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	1		
R2152-2154	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	3		
R2155,2156	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	2		
R2163	nsp	RES, CHIP(1005/5%/470Kohm)	CRJ06J474T	1		
R2301	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	1		
R2302,2303	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	2		
R2304	nsp	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1		
R2305	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	1		
R2306,2307	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	2		
R2308	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	1		
R2309-2311	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	3		
R2312-2314	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	3		
R2316	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	1		
R2317-2321	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	5		
R2322	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	1		
R2324	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	1		
R2325-2329	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06J330T	5		
R2330-2334	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	5		
R2338-2342	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06J472T	5		
R2345	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06J103T	1		

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
R2346	nsp	RES, CHIP(1005/5%/100Kohm)		1		
R2347	nsp	RES, CHIP(1005/5%/4.7Kohm)		1		
R2348	nsp	RES, CHIP(1005/5%/2.2Mohm)		1		
R2349	nsp	RES, CHIP(1005/5%/47Kohm)		1		
R2350	nsp	RES, CHIP(1005/5%/100Kohm)		1		
R2351	nsp	RES, CHIP(1005/5%/220Kohm)		1		
R2352	nsp	RES, CHIP(1005/5%/27Kohm)		1		
R2353	nsp	RES, CHIP(1005/5%/3.3Kohm)		1		
R2354	nsp	RES, CHIP(1005/5%/1.2Kohm)		1		
R2356,2357	nsp	RES, CHIP(1005/5%/4.7Kohm)		2		
R2359	nsp	RES, CHIP(1005/5%/3.3Kohm)		1		
R2360,2361	nsp	RES, CHIP(1005/5%/33ohm)		2		
R2362,2363	nsp	RES, CHIP(1005/5%/4.7Kohm)		2		
R2364	nsp	RES, CHIP(1005/5%/150Kohm)		1		
R2365	nsp	RES, CHIP(1005/5%/470Kohm)		1		
R2366,2367	nsp	RES, CHIP(1005/5%/33ohm)		2		
R2368	nsp	RES, CHIP(1005/5%/10Kohm)		1		
R2370,2371	nsp	RES, CHIP(1005/5%/4.7Kohm)		2		
R2372-2375	nsp	RES, CHIP(1005/5%/33ohm)		4		
R2381	nsp	RES, CHIP(1608/5%/0ohm)		1		
R2382,2383	nsp	RES, CHIP(1005/5%/33ohm)		2		
R2385	nsp	RES, CHIP(1005/5%/33ohm)		1		
R2386	nsp	RES, CHIP(1005/5%/4.7Kohm)		1		
R2387	nsp	RES, CHIP(1005/5%/33ohm)		1		
R2388-2392	nsp	RES, CHIP(1005/5%/4.7Kohm)		5		
R2394-2397	nsp	RES, CHIP(1005/5%/4.7Kohm)		4		
R2401,2402	nsp	RES, CHIP(1005/5%/4.7Kohm)		2		
R2403,2404	nsp	RES, CHIP(1005/5%/33ohm)		2		
R2407	nsp	RES, CHIP(1005/5%/100Kohm)		1		
R2408	nsp	RES, CHIP(1005/5%/100ohm)		1		
R2409	nsp	RES, CHIP(1005/5%/33Kohm)		1		
R2410	nsp	RES, CHIP(1005/5%/100Kohm)		1		
R2411	nsp	RES, CHIP(1005/5%/15Kohm)		1		
R2412	nsp	RES, CHIP(1005/5%/100ohm)		1		
R2413	nsp	RES, CHIP(1005/5%/22Kohm)		1		
R2414	nsp	RES, CHIP(1005/5%/100ohm)		1		
R2415	nsp	RES, CHIP(1005/5%/470Kohm)		1		
R2417	nsp	RES, CHIP(1005/5%/22Kohm)		1		
R2419	nsp	RES, CHIP(1005/5%/100ohm)		1		
R2420	nsp	RES, CHIP(1005/5%/470Kohm)		1		
R2422	nsp	RES, CHIP(1005/5%/22Kohm)		1		
R2424	nsp	RES, CHIP(1005/5%/100ohm)		1		
R2427	nsp	RES, CHIP(1005/5%/22Kohm)		1		
R2428	nsp	RES, CHIP(1005/5%/100ohm)		1		
R2429	nsp	RES, CHIP(1005/5%/27Kohm)	E3	1		
R2429	nsp	RES, CHIP(1005/5%/39Kohm)	E2/E1C	1		
R2431	nsp	RES, CHIP(1005/5%/22Kohm)		1		
R2433	nsp	RES, CHIP(1005/5%/0ohm)		1		
R2434	nsp	RES, CHIP(1005/5%/100ohm)		1		
R2435	nsp	RES, CHIP(1005/5%/27Kohm)	E3	1		
R2435	nsp	RES, CHIP(1005/5%/39Kohm)	E2/E1C	1		
R2437	nsp	RES, CHIP(1005/5%/22Kohm)		1		
R2439	nsp	RES, CHIP(1005/5%/0ohm)		1		
R2441-2443	nsp	RES, CHIP(1005/5%/0ohm)		3		
R2909	nsp	RES, CHIP(1608/5%/0ohm)		1		
R2912	nsp	RES, CHIP(1608/5%/0ohm)		1		
R3001	nsp	RES, CHIP(1608/5%/4.7Kohm)		1		
R3002	nsp	RES, CHIP(1608/5%/100Kohm)		1		
R3003	nsp	RES, CHIP(1608/1%/348Kohm)		1		
R3004	nsp	RES, CHIP(1608/1%/169Kohm) RM10FT1693		1		
R3005	nsp	RES, CHIP(1608/5%/0ohm)		1		
R3006	nsp	RES, CHIP(1608/5%/10ohm)		1		
R3008	nsp	RES, CHIP(1608/5%/100Kohm)		1		
R3009	nsp	RES, CHIP(1608/1%/348Kohm)		1		
R3010	nsp	RES, CHIP(1608/1%/169Kohm) RM10FT1693		1		
R3011	nsp	RES, CHIP(1608/1%/2Kohm)		1		
R3012	nsp	RES, CHIP(1608/5%/10Kohm)		1		
R3020	nsp	RES, CHIP(1608/5%/100Kohm)		1		
R3021,3022	nsp	RES, CHIP(1608/1%/348Kohm)		2		
R3023	nsp	RES, CHIP(1608/5%/1Kohm)		1		
R3024	nsp	RES, CHIP(1608/5%/4.7Kohm)		1		
R3025	nsp	RES, CHIP(1608/5%/100Kohm)		1		
R3026	nsp	RES, CHIP(1608/1%/348Kohm)		1		
R3027	nsp	RES, CHIP(1608/1%/412Kohm)		1		
R3028	nsp	RES, CHIP(1608/5%/0ohm)		1		
R3029	nsp	RES, CHIP(1608/5%/10ohm)		1		
R3031	nsp	RES, CHIP(1608/5%/100Kohm)		1		
R3032	nsp	RES, CHIP(1608/1%/348Kohm)		1		
R3033	nsp	RES, CHIP(1608/1%/294Kohm) RM10FT2943		1		
R3034	nsp	RES, CHIP(1608/5%/0ohm)		1		
R3035	nsp	RES, CHIP(1608/5%/10Kohm)		1		
R3036	nsp	RES, CHIP(1608/5%/4.7Kohm)		1		
R3037	nsp	RES, CHIP(1608/5%/100Kohm)		1		
R3038	nsp	RES, CHIP(1608/1%/348Kohm)		1		
R3040	nsp	RES, CHIP(1608/1%/76.8Kohm)		1		
R3041	nsp	RES, CHIP(1608/5%/0ohm)		1		
R3042	nsp	RES, CHIP(1608/5%/10ohm)		1		
R3060-3064	nsp	RES, CHIP(1005/5%/10Kohm)		5		
R3065	nsp	RES, CHIP(1005/5%/1Kohm)		1		
R3066,3067	nsp	RES, CHIP(1005/5%/10Kohm)		2		
R3070	nsp	RES, CHIP(1005/5%/10Kohm)		1		
R3071	nsp	RES, CHIP(1005/5%/3.3Kohm)		1		
R3076	nsp	RES, CHIP(1608/5%/0ohm)		1		
R3079	nsp	RES, CHIP(1005/5%/10Kohm)		1		
R3080	nsp	RES, CHIP(1005/5%/3.3Kohm)		1		
R3081	nsp	RES, CHIP(1005/5%/10Kohm)		1		
R3082	nsp	RES, CHIP(1005/5%/3.3Kohm)		1		
R3083	nsp	RES, CHIP(1005/5%/10Kohm)		1		
R3084	nsp	RES, CHIP(1005/5%/4.7Kohm)		1		
R3085	nsp	RES, CHIP(1005/5%/47Kohm)		1		
R3086	nsp	RES, CHIP(1005/5%/100Kohm)		1		
R3088	nsp	RES, CHIP(1005/5%/100ohm)		1		
R3093	nsp	RES, CHIP(1005/5%/22Kohm)		1		
R3094	nsp	RES, CHIP(1005/5%/100ohm)		1		
R3097	nsp	RES, CHIP(1005/5%/10Kohm)		1		
R3098	nsp	RES, CHIP(1005/5%/3.3Kohm)		1		

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
R3101-3103	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	3		
R3202-3204	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	3		
R3205	nsp	RES, CHIP(1005/5%/10ohm)	CRJ06IJ100T	1		
R3211	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1		
R3212	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R3216-3218	nsp	RES, CHIP(1005/5%/33ohm*4)	CRJ06IJ330T	3		
R3229,3230	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	2		
R3242,3243	nsp	RES, CHIP(1608/5%/3.3ohm)	CRJ10DJ3R3T	2		
R3244	nsp	RES, CHIP(1005/5%/1.2Kohm)	CRJ06IJ122T	1		
R3245	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R3291-3294	nsp	RES, CHIP(1608/1%/49.9ohm)	CRJ10DF49R9T	4		
R3299	nsp	RES, CHIP(1608/1%/8.2Kohm)	CRJ10DF8201T	1		
R3300	nsp	RES, CHIP(1608/1%/3.9Kohm)	CRJ10DF3901T	1		
R3303	nsp	RES, CHIP(1608/1%/1.5Kohm)	CRJ10DF1501T	1		
R3305	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R3802-3810	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	9		
R3902-3904	nsp	RES, CHIP(1005/5%/33ohm*4)	CRJ06IJ330T	3		
R3905,3906	nsp	RES, CHIP(1005/5%/10Kohm*4)	CRJ06IJ103T	2		
R3907	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R3908,3909	nsp	RES, CHIP(1005/5%/10Kohm*4)	CRJ06IJ103T	2		
R3910-3912	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	3		
R3913	nsp	RES, CHIP(1005/5%/10Kohm*4)	CRJ06IJ103T	1		
R3914	nsp	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1		
R3915	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R3919	nsp	RES, CHIP(1005/5%/10Kohm*4)	CRJ06IJ103T	1		
R3920	nsp	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1		
R3921	nsp	RES, CHIP(1005/5%/1.5Kohm)	CRJ06IJ152T	1		
R3923	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1		
R3927	nsp	RES, CHIP(1005/5%/2.7Kohm)	CRJ06IJ272T	1		
R3928	nsp	RES, CHIP(1005/5%/1.5Kohm)	CRJ06IJ152T	1		
R3929-3931	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	3		
R3934-3938	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	5		
R3939	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1		
R3943	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R3944-3947	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	4		
R3950,3951	nsp	RES, CHIP(1005/5%/10ohm)	CRJ06IJ100T	2		
R3953,3954	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	2		
R3955,3956	nsp	RES, CHIP(1005/5%/47ohm*4)	CRJ06IJ470T	2		
R3957-3959	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	3		
R3961-3969	nsp	RES, CHIP(1005/5%/33ohm*4)	CRJ06IJ330T	9		
R3971	nsp	RES, CHIP(1005/5%/1.8Kohm)	CRJ06IJ182T	1		
R3972	nsp	RES, CHIP(1005/5%/1.2Kohm)	CRJ06IJ122T	1		
R3973	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1		
R3974	nsp	RES, CHIP(1005/5%/1.5Kohm)	CRJ06IJ152T	1		
R3975	nsp	RES, CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1		
R3976	nsp	RES, CHIP(1005/5%/12Kohm)	CRJ06IJ123T	1		
R3984-3988	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	5		
R3989	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1		
R3991	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R3992	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1		
R4001-4004	nsp	RES, CHIP(1005/5%/150ohm)	CRJ06IJ151T	4		
R4005,4006	nsp	RES, CHIP(1005/5%/470ohm)	CRJ06IJ471T	2		
R4011	nsp	RES, CHIP(1005/5%/330Kohm)	CRJ06IJ334T	1		
R4012,4013	nsp	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	2		
R4014	nsp	RES, CHIP(1005/5%/330Kohm)	CRJ06IJ334T	1		
R4016	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1		
R4022	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R4023	nsp	RES, CHIP(1005/5%/100ohm)	CRJ06IJ101T	1		
R4027-4031	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	5		
R4046-4052	nsp	RES, CHIP(1005/5%/100ohm)	CRJ06IJ101T	7		
R4058	nsp	RES, CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1		
R4059,4060	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	2		
R4061	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1		
R4062-4065	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	4		
R4066	nsp	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1		
R4067	nsp	RES, CHIP(1608/5%/390ohm)	CRJ10DJ391T	1		
R4068	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1		
R4069	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1		
R4070	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R4071	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1		
R4073	nsp	RES, CHIP(1005/5%/47ohm)	CRJ06IJ470T	1		
R4074	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R4076	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1		
R4078	nsp	RES, CHIP(1005/5%/10ohm)	CRJ06IJ100T	1		
R4079	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R4080	nsp	RES, CHIP(1005/5%/10ohm)	CRJ06IJ100T	1		
R4081	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R4082	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1		
R4083-4091	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	9		
R4096	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R4097-4100	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	4		
R4113,4114	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	2		
R4115,4116	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	2		
R4118	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R4120	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R4149,4150	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	2		
R4151	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1		
R4152	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R4155-4158	nsp	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	4		
R4159,4160	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	2		
R4201,4202	nsp	RES, CHIP(1005/5%/470ohm)	CRJ06IJ471T	2		
R4204	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		
R4206	nsp	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1		
R4211	nsp	RES, CHIP(1005/5%/3.3Kohm)	CRJ06IJ332T	1		
R4212	nsp	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1		
R4213	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1		
R4216	nsp	RES, CHIP(1005/5%/100ohm)	CRJ06IJ101T	1		
R4217	nsp	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1		
R4219	nsp	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1		
R4220	nsp	RES, CHIP(1608/5%/820ohm)	CRJ10DJ821T	1		
R4221,4222	nsp	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	2		
R4223	nsp	RES, CHIP(1608/5%/680ohm)	CRJ10DJ681T	1		
R4224,4225	nsp	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	2		
R4228	nsp	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1		
R4229,4230	nsp	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	2		
R4231	nsp	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1		

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
R4232-4234	nsp	RES. CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	3		
R4235	nsp	RES. CHIP(1005/5%/100ohm)	CRJ06IJ101T	1		
R4401	nsp	RES. CHIP(1608/5%/33ohm)	CRJ10DJ330T	1		
R4402	nsp	RES. CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1		
R4403	nsp	RES. CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1		
R4404	nsp	RES. CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1		
R4411-4414	nsp	RES. CHIP(1608/5%/15Kohm)	CRJ10DJ153T	4		
R4415-4418	nsp	RES. CHIP(1608/5%/150Kohm)	CRJ10DJ154T	4		
R4419-4422	nsp	RES. CHIP(1608/5%/12Kohm)	CRJ10DJ123T	4		
R4423-4426	nsp	RES. CHIP(1608/5%/470ohm)	CRJ10DJ471T	4		
R4427-4428	nsp	RES. CHIP(1608/5%/100ohm)	CRJ10DJ101T	2		
R4431-4434	nsp	RES. CHIP(1608/5%/15Kohm)	CRJ10DJ153T	4		
R4435	nsp	RES. CHIP(1608/5%/150Kohm)	CRJ10DJ154T	1		
R4437	nsp	RES. CHIP(1608/5%/150Kohm)	CRJ10DJ154T	1		
R4439	nsp	RES. CHIP(1608/5%/12Kohm)	CRJ10DJ123T	1		
R4440	nsp	RES. CHIP(1608/5%/22Kohm)	CRJ10DJ223T	1		
R4441	nsp	RES. CHIP(1608/5%/12Kohm)	CRJ10DJ123T	1		
R4442	nsp	RES. CHIP(1608/5%/22Kohm)	CRJ10DJ223T	1		
R4443	nsp	RES. CHIP(1608/5%/470ohm)	CRJ10DJ471T	1		
R4444	nsp	RES. CHIP(1608/5%/820ohm)	CRJ10DJ821T	1		
R4445	nsp	RES. CHIP(1608/5%/470ohm)	CRJ10DJ471T	1		
R4446	nsp	RES. CHIP(1608/5%/820ohm)	CRJ10DJ821T	1		
R4447-4448	nsp	RES. CHIP(1608/5%/100ohm)	CRJ10DJ101T	2		
R4451-4454	nsp	RES. CHIP(1608/5%/15Kohm)	CRJ10DJ153T	4		
R4455-4458	nsp	RES. CHIP(1608/5%/120Kohm)	CRJ10DJ124T	4		
R4459-4462	nsp	RES. CHIP(1608/5%/18Kohm)	CRJ10DJ183T	4		
R4463-4466	nsp	RES. CHIP(1608/5%/820ohm)	CRJ10DJ821T	4		
R4467-4468	nsp	RES. CHIP(1608/5%/100ohm)	CRJ10DJ101T	2		
R4471-4474	nsp	RES. CHIP(1608/5%/15Kohm)	CRJ10DJ153T	4		
R4475-4478	nsp	RES. CHIP(1608/5%/150Kohm)	CRJ10DJ154T	4		
R4479-4482	nsp	RES. CHIP(1608/5%/12Kohm)	CRJ10DJ123T	4		
R4483-4486	nsp	RES. CHIP(1608/5%/470ohm)	CRJ10DJ471T	4		
R4487-4488	nsp	RES. CHIP(1608/5%/100ohm)	CRJ10DJ101T	2		
R5004-5005	nsp	RES. CHIP(1005/5%/47Kohm)	CRJ06IJ473T	2		
R5007	nsp	RES. CHIP(1608/5%/10ohm)	CRJ10DJ100T	1		
R5008	nsp	RES. CHIP(1005/5%/5.1Kohm)	CRJ06IJ512T	1		
R5009	nsp	RES. CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1		
R5013-5014	nsp	RES. CHIP(1005/5%/47Kohm)	CRJ06IJ473T	2		
R5016	nsp	RES. CHIP(1608/5%/10ohm)	CRJ10DJ100T	1		
R5017	nsp	RES. CHIP(1005/5%/5.1Kohm)	CRJ06IJ512T	1		
R5024-5025	nsp	RES. CHIP(1005/5%/47Kohm)	CRJ06IJ473T	2		
R5027	nsp	RES. CHIP(1608/5%/10ohm)	CRJ10DJ100T	1		
R5028	nsp	RES. CHIP(1005/5%/5.1Kohm)	CRJ06IJ512T	1		
R5034	nsp	RES. CHIP(1608/5%/10ohm)	CRJ10DJ100T	1		
R5035	nsp	RES. CHIP(1005/5%/5.1Kohm)	CRJ06IJ512T	1		
R5036-5037	nsp	RES. CHIP(1005/5%/47Kohm)	CRJ06IJ473T	2		
R5044-5045	nsp	RES. CHIP(1005/5%/47Kohm)	CRJ06IJ473T	2		
R5047	nsp	RES. CHIP(1608/5%/10ohm)	CRJ10DJ100T	1		
R5048	nsp	RES. CHIP(1005/5%/5.1Kohm)	CRJ06IJ512T	1		
R5054-5055	nsp	RES. CHIP(1005/5%/47Kohm)	CRJ06IJ473T	2		
R5057	nsp	RES. CHIP(1608/5%/10ohm)	CRJ10DJ100T	1		
R5058	nsp	RES. CHIP(1005/5%/5.1Kohm)	CRJ06IJ512T	1		
R5063	nsp	RES. CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1		
R5065	nsp	RES. CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1		
R5071	nsp	RES. CHIP(1608/5%/130Kohm)	CRJ10DJ134T	1		
R5072	nsp	RES. CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1		
R5073-5078	nsp	RES. CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	6		
R5081-5082	nsp	RES. CHIP(1005/5%/1.8Kohm)	CRJ06IJ182T	2		
R5083	nsp	RES. CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1		
R5084	nsp	RES. CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1		
R5086	nsp	RES. CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1		
R5088	nsp	RES. CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1		
R5091	nsp	RES. CHIP(1608/5%/10ohm)	CRJ10DJ100T	1		
R5092-5093	nsp	RES. CHIP(1005/5%/1.8Kohm)	CRJ06IJ182T	2		
R5094	nsp	RES. CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1		
R5095-5097	nsp	RES. CHIP(1005/5%/10ohm)	CRJ06IJ100T	3		
R5098-5099	nsp	RES. CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	2		
RN140-141	nsp	RES. CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	2		
RN142-145	nsp	RES. CHIP(1005/5%/4.7Kohm*4)	CRJ064IJ472T	4		
RN151-156	nsp	RES. CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	6		
RN158-166	nsp	RES. CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	9		
RN201	nsp	RES. CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1		
RN404	nsp	RES. CHIP(1005/5%/33ohm*2)	CRJ062IJ330T	1		
RN405	nsp	RES. CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1		
RN406-407	nsp	RES. CHIP(1005/5%/33ohm*2)	CRJ062IJ330T	2		
RN410-419	nsp	RES. CHIP(1005/5%/100ohm*4)	CRJ064IJ101T	10		
RN420-423	nsp	RES. CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	4		
RN424-425	nsp	RES. CHIP(1005/5%/10Kohm*4)	CRJ064IJ103T	2		
RN426-427	nsp	RES. CHIP(1005/5%/10ohm*4)	CRJ064IJ100T	2		
RN429-432	nsp	RES. CHIP(1005/5%/10ohm*4)	CRJ064IJ100T	4		
RN433	nsp	RES. CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1		
RN440	nsp	RES. CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1		
RN441	nsp	RES. CHIP(1005/5%/10Kohm*4)	CRJ064IJ103T	1		
RN501-507	nsp	RES. CHIP(1005/5%/10Kohm*4)	CRJ064IJ103T	7		
CAPACITORS GROUP						
C1203-1211	nsp	CAP. CHIP(1005, 50V/1000pF)	CCU11H102KC	9		
C1212	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCU11C104KC	1		
C1215	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCU11C104KC	1		
C1216-1217	nsp	CAP. CHIP(1608, 50V/12pF)	CCUS1H120JA	2		
C1223	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCU11C104KC	1		
C1224	nsp	CAP. CHIP(1005, 25V/0.01uF)	CCU11E103KC	1		
C1225	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCU11C104KC	1		
C1226	nsp	CAP. CHIP(1005, 25V/0.01uF)	CCU11E103KC	1		
C1227	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCU11C104KC	1		
C1228	nsp	CAP. CHIP(1005, 25V/0.01uF)	CCU11E103KC	1		
C1229	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCU11C104KC	1		
C1230	nsp	CAP. CHIP(1005, 25V/0.01uF)	CCU11E103KC	1		
C1231	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCU11C104KC	1		
C1232	nsp	CAP. CHIP(1005, 25V/0.01uF)	CCU11E103KC	1		
C1233	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCU11C104KC	1		
C1234	nsp	CAP. CHIP(1005, 25V/0.01uF)	CCU11E103KC	1		
C1235	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCU11C104KC	1		
C1238	nsp	CAP. CHIP(1005, 25V/0.01uF)	CCU11E103KC	1		
C1239	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCU11C104KC	1		
C1242	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCU11C104KC	1		
C1243	nsp	CAP. CHIP(1005, 25V/0.01uF)	CCU11E103KC	1		

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
C1244	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1245	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1246,1247	nsp	CAP. CHIP(1005, 16V/0.1uF)		2		
C1249	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1250	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1251	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1252	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1253	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1254	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1255	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1256	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1257	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1258	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1259	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1260	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1261	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1262	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1263	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1264	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1265	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1266	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1267	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1268	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1269	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1270	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1271	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1273	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1274	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1276	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1277	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1278	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1279	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1280	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1281	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1282	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1283	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1284	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1285	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1286	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1287	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1292	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1293	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1294	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1295	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1298-1303	nsp	CAP. CHIP(1005, 16V/0.1uF)		6		
C1304	nsp	CAP. CHIP(1005, 50V/1000pF)		1		
C1305	nsp	CAP. CHIP(1608, 10V/1uF)		1		
C1306	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1310	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1315-1326	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		12		
C1327	nsp	CAP. CHIP(1005, 50V/1000pF)		1		
C1328	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1329	nsp	CAP. CHIP(1005, 50V/1000pF)		1		
C1330	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1331	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1334	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1335	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1336	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1337	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		1		
C1352	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1361	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1362	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1363	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1364	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1365	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1367	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1368	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1369	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1370	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1371	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1372	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1373	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1374	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1375	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1376	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1377	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1379	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1380	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1381	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1382	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1383	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1384	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1385	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1386	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1387	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1388	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1392	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1394	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1395	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1396	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1397	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1398	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1399	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1400	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1401	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1402	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1403	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1404	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1405	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1406	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1407	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1408	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1409	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1410	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		
C1411	nsp	CAP. CHIP(1005, 25V/0.01uF)		1		
C1412	nsp	CAP. CHIP(1005, 16V/0.1uF)		1		

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
C1413	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1414	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1416	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1417	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1418	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1419	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1420	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1421	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1422	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1423	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1424	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1427	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1428	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1429	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1430	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1431	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1432	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1433	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1434	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1435	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1436	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1437	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1438	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1439	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1440	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1441	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1442	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1443	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1444	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1445	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1446	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1447	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1448	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1449	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1450	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1451	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1452	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1453	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1454	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1455	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1456	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1457	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1458	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1459	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1460	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1462	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1463	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1464	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1466	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1502,1503	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	2		
C1506,1507	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	2		
C1508	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1510	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1511	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1512	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1514,1515	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	2		
C1516	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1517	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1518	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1520,1521	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	2		
C1522	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1524,1525	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	2		
C1526	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1527	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1528	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1529	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1530	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1531	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1532	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1533	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1534	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1535	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1536	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1537	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1538	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1539	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1540	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1542,1543	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	2		
C1544	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1545	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1546	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1547	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1548	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1549	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1550	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1551	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1552	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1553	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1554	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1555	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1556	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1557	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1558	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1559	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1560	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1561	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1562	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1564	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1565	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1566	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1567,1568	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	2		
C1571	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1572	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		
C1573	nsp	CAP, CHIP(1005, 25V/0.01uF)	CCU1E103KC	1		
C1574,1575	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	2		
C1577	nsp	CAP, CHIP(1005, 16V/0.1uF)	CCU1C104KC	1		

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
C1578	nsp	CAP. CHIP(1608, 16V/0.15uF)		CCUS1C154KC	1	
C1579	nsp	CAP. CHIP(1005, 25V/0.012uF)		CCUI1E123KC	1	
C1580	nsp	CAP. CHIP(1608, 16V/0.15uF)		CCUS1C154KC	1	
C1581	nsp	CAP. CHIP(1005, 25V/0.012uF)		CCUI1E123KC	1	
C1586,1587	nsp	CAP. CHIP(1608, 10V/1uF)		CCUS1A105KC	2	
C1590,1591	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	2	
C1592,1593	nsp	CAP. CHIP(1608, 50V/12pF)		CCUS1H120JA	2	
C1594-1625	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	32	
C1628	nsp	CAP. CHIP(1005, 50V/33pF)		CCUIH330JA	1	
C1629	nsp	CAP. CHIP(1608, 10V/1uF)		CCUS1A105KC	1	
C1630,1631	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	2	
C1632	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C1633	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	1	
C1634	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C1635	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C1636,1637	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	2	
C1640	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C1641	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C1645	nsp	CAP. CHIP(1005, 25V/0.01uF)		CCUI1E103KC	1	
C1646	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C1647	nsp	CAP. CHIP(1005, 25V/0.01uF)		CCUI1E103KC	1	
C1648	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C1649	nsp	CAP. CHIP(1005, 25V/0.01uF)		CCUI1E103KC	1	
C1650	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C1651	nsp	CAP. CHIP(1005, 25V/0.01uF)		CCUI1E103KC	1	
C1652	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C1653	nsp	CAP. CHIP(1005, 25V/0.01uF)		CCUI1E103KC	1	
C1655	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C1657	nsp	CAP. CHIP(1005, 25V/0.01uF)		CCUI1E103KC	1	
C1658	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C1659	nsp	CAP. CHIP(1005, 25V/0.01uF)		CCUI1E103KC	1	
C1663	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C1670-1675	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	6	
C1677	nsp	CAP. CHIP(1005, 25V/0.01uF)		CCUI1E103KC	1	
C1678	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C1679	nsp	CAP. CHIP(1005, 25V/0.01uF)		CCUI1E103KC	1	
C1681	nsp	CAP. CHIP(1005, 25V/0.01uF)		CCUI1E103KC	1	
C1682	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C1685	nsp	CAP. CHIP(1005, 25V/0.01uF)		CCUI1E103KC	1	
C1686,1687	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	2	
C1689	nsp	CAP. CHIP(1005, 25V/0.01uF)		CCUI1E103KC	1	
C1690	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C1693	nsp	CAP. CHIP(1005, 25V/0.01uF)		CCUI1E103KC	1	
C1694,1695	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	2	
C1697-1702	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	6	
C1704,1705	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	2	
C1706	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C2012-2016	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	5	
C2017,2018	nsp	CAP. CHIP(1608, 50V/15pF)		CCUS1H150JA	2	
C2019-2025	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	7	
C2301,2302	nsp	CAP. CHIP(1608, 50V/12pF)		CCUS1H120JA	2	
C2303	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C2304	nsp	CAP. CHIP(1608, 10V/0.47uF)		CCUS1A474KC	1	
C2310	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C2311	nsp	CAP. CHIP(1005, 50V/220pF)		CCUIH221JA	1	
C2312	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C2314-2316	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	3	
C2325,2326	nsp	CAP. CHIP(1005, 50V/1000pF)		CCUIH102KC	2	
C2401	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C2404-2412	nsp	CAP. CHIP(1005, 25V/0.01uF)		CCUI1E103KC	9	
C2910-2915	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	6	
C2917	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C2922-2925	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	4	
C2932-2940	nsp	CAP. CHIP(1005, 50V/1000pF)		CCUIH102KC	9	
C2942	nsp	CAP. CHIP(1005, 50V/1000pF)		CCUIH102KC	1	
C3001	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C3002	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C3003	nsp	CAP. CHIP(1608, 10V/1uF)		CCUS1A105KC	1	
C3004	nsp	CAP. CHIP(1608, 50V/5pF)		CCUS1H050CA	1	
C3005	nsp	CAP. CHIP(2012, 6.3V/22uF, X7R)		CCUC0J226KC	1	
C3006	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C3010	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C3011	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C3012	nsp	CAP. CHIP(1608, 10V/1uF)		CCUS1A105KC	1	
C3013	nsp	CAP. CHIP(1608, 50V/5pF)		CCUS1H050CA	1	
C3014	nsp	CAP. CHIP(2012, 6.3V/22uF, X7R)		CCUC0J226KC	1	
C3015	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C3028	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C3029	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C3030	nsp	CAP. CHIP(1608, 10V/1uF)		CCUS1A105KC	1	
C3031	nsp	CAP. CHIP(1608, 50V/5pF)		CCUS1H050CA	1	
C3032	nsp	CAP. CHIP(2012, 6.3V/22uF, X7R)		CCUC0J226KC	1	
C3033	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C3038	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C3039	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C3040	nsp	CAP. CHIP(1608, 10V/1uF)		CCUS1A105KC	1	
C3041	nsp	CAP. CHIP(1608, 50V/5pF)		CCUS1H050CA	1	
C3042	nsp	CAP. CHIP(2012, 6.3V/22uF, X7R)		CCUC0J226KC	1	
C3043	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C3047	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C3048	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C3049	nsp	CAP. CHIP(1608, 10V/1uF)		CCUS1A105KC	1	
C3050	nsp	CAP. CHIP(1608, 50V/5pF)		CCUS1H050CA	1	
C3051	nsp	CAP. CHIP(2012, 6.3V/22uF, X7R)		CCUC0J226KC	1	
C3052	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C3056	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C3057	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C3058	nsp	CAP. CHIP(1608, 10V/1uF)		CCUS1A105KC	1	
C3059	nsp	CAP. CHIP(1608, 50V/3.3pF)		CCUS1H3R3JA	1	
C3060	nsp	CAP. CHIP(2012, 6.3V/22uF, X7R)		CCUC0J226KC	1	
C3061	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)		CCUC0J106KC	1	
C3068	nsp	CAP. CHIP(1005, 25V/0.022uF)		CCUI1E223KC	1	
C3069	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C3071,3072	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	2	
C3075	943134500040S	CAP. SMD ELECT(16V/100uF) LELON		HCEC1CRV2101T	1	
C3076	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
C3077	nsp	CAP. SMD ELECT(16V/10uF) LELON	HCEC1CRV2100T	1		
C3078,3079	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	2		
C3080	nsp	CAP. CHIP(1608, 10V/1uF)	CCUS1A105KC	1		
C3081	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1		
C3082	nsp	CAP. CHIP(1608, 10V/1uF)	CCUS1A105KC	1		
C3083	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1		
C3086	943134500030S	CAP. SMD ELECT(16V/470uF) MANLEX RV, 10X10L LELON	CCEC1CRV471T	1		
C3087	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C3089	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C3091	943134500030S	CAP. SMD ELECT(16V/470uF) MANLEX RV, 10X10L LELON	CCEC1CRV471T	1		
C3092	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C3093	nsp	CAP. CHIP(1005, 25V/0.015uF)	CCUI1E153KC	1		
C3094	nsp	CAP. CHIP(1608, 10V/1uF)	CCUS1A105KC	1		
C3095,3096	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	2		
C3099	nsp	CAP. CHIP(1005, 50V/1000pF)	CCUI1H102KC	1		
C3154,3155	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	2		
C3156-3162	nsp	CAP. CHIP(1005, 50V/1000pF)	CCUI1H102KC	7		
C3163-3165	nsp	RES. CHIP(1005/5%/0ohm)	CRJ061J0R0T	3		
C3202	nsp	CAP. CHIP(1005, 25V/0.022uF)	CCUI1E223KC	1		
C3203,3204	nsp	CAP. CHIP(1005, 50V/1000pF)	CCUI1H102KC	2		
C3205,3206	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	2		
C3209	nsp	CAP. CHIP(1005, 50V/1000pF)	CCUI1H102KC	1		
C3213	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1		
C3218	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1		
C3230	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C3246	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C3248,3249	nsp	CAP. CHIP(1005, 50V/1pF)	CCUI1H1R0CA	2		
C3267	nsp	CAP. CHIP(1005, 50V/470pF)	CCUI1H471JA	1		
C3268	nsp	CAP. CHIP(1608, 10V/1uF)	CCUS1A105KC	1		
C3270-3272	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	3		
C3273,3274	nsp	CAP. CHIP(1608, 10V/1uF)	CCUS1A105KC	2		
C3276	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C3900	nsp	CAP. CHIP(1005, 50V/1000pF)	CCUI1H102KC	1		
C3901,3902	nsp	CAP. CHIP(1608, 50V/100pF)	CCUS1H100JA	2		
C3904-3907	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	4		
C3908-3918	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	11		
C3923	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1		
C3926-3929	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	4		
C3930-3939	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	10		
C3944	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1		
C3947	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1		
C3952,3953	nsp	CAP. CHIP(1005, 50V/1000pF)	CCUI1H102KC	2		
C3954-3958	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	5		
C3959-3963	nsp	CAP. CHIP(1005, 50V/1000pF)	CCUI1H102KC	5		
C3964,3965	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	2		
C3966,3967	nsp	CAP. CHIP(1005, 50V/1000pF)	CCUI1H102KC	2		
C3968-3974	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	7		
C3975-3979	nsp	CAP. CHIP(1005, 50V/1000pF)	CCUI1H102KC	5		
C3980,3981	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	2		
C4003,4004	nsp	CAP. CHIP(1005, 25V/0.01uF)	CCUI1E103KC	2		
C4005-4008	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	4		
C4009,4010	nsp	CAP. CHIP(1005, 25V/0.01uF)	CCUI1E103KC	2		
C4011,4012	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	2		
C4013	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1		
C4014,4015	nsp	CAP. CHIP(1608, 50V/18pF)	CCUS1H180JA	2		
C4016	nsp	CAP. CHIP(2012, 50V/4700pF, MURATA GRM21) GRM2162C1H472JA01 MURATA	CCUMUC1H472JAM	1		
C4017	nsp	CAP. CHIP(3216, 50V/0.068uF, MURATA GRM31) GRM31C2C1H683JA01 MURATA	CCUMUP1H683JAM	1		
C4018	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C4019	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1		
C4020	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C4021	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1		
C4022	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C4024,4025	nsp	CAP. CHIP(1608, 50V/4700pF)	CCUS1H472KC	2		
C4026	nsp	CAP. SMD ELECT(16V/10uF) LELON	HCEC1CRV2100T	1		
C4029	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1		
C4033	nsp	CAP. SMD ELECT(16V/10uF) LELON	HCEC1CRV2100T	1		
C4034	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C4038	nsp	CAP. CHIP(1005, 25V/0.022uF)	CCUI1E223KC	1		
C4039,4040	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	2		
C4049-4051	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	3		
C4052	nsp	CAP. CHIP(1005, 50V/1000pF)	CCUI1H102KC	1		
C4053,4054	nsp	CAP. CHIP(1005, 50V/100pF)	CCUI1H101JA	2		
C4055-4060	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	6		
C4063	nsp	CAP. CHIP(1005, 50V/100pF)	CCUI1H101JA	1		
C4064-4066	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	3		
C4067,4068	nsp	CAP. CHIP(1608, 50V/18pF)	CCUS1H180JA	2		
C4069-4103	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	35		
C4105-4114	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	10		
C4121-4169	nsp	CAP. CHIP(1005, 50V/1000pF)	CCUI1H102KC	49		
C4201,4202	nsp	CAP. CHIP(1005, 50V/2200pF)	CCUI1H222KC	2		
C4203	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C4204,4205	nsp	CAP. CHIP(1608, 6.3V/2.2uF)	CCUS0J225KC	2		
C4206	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1		
C4207	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C4208	943134005160M	CAP. SMD ELECT(6.3V/22uF)	HCEC0JRV2220T	1		
C4209	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C4210	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1		
C4211	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C4212	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1		
C4213-4215	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	3		
C4401	nsp	CAP. CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1		
C4402	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1		
C4403,4404	nsp	CAP. CHIP(1608, 10V/1uF)	CCUS1A105KC	2		
C4405	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1		
C4406	nsp	CAP. CHIP(1608, 10V/1uF)	CCUS1A105KC	1		
C4407	nsp	CAP. CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1		
C4411,4412	nsp	CAP. CHIP(2012, 50V/1800pF, MURATA GRM21) GRM2165C1H182JA01	CCUMUC1H182JAM	2		
C4423-4426	nsp	CAP. CHIP(2012, 50V/270pF, MURATA GRM21) GRM2165C1H271JA01	CCUMUC1H271JAM	4		
C4429,4430	13405012940AS	CAP. ELECT(16V/100uF)	CCEA1CH101T	2		
C4431	nsp	CAP. CHIP(2012, 50V/1800pF, MURATA GRM21) GRM2165C1H182JA01	CCUMUC1H182JAM	1		
C4432	nsp	CAP. CHIP(2012, 50V/820pF, MURATA GRM21) GRM2165C1H821JA01	CCUMUC1H821JAM	1		
C4443-4446	nsp	CAP. CHIP(2012, 50V/270pF, MURATA GRM21) GRM2165C1H271JA01	CCUMUC1H271JAM	4		
C4451,4452	nsp	CAP. CHIP(2012, 50V/1000pF, MURATA GRM21) GRM2165C1H102JA01	CCUMUC1H102JAM	2		
C4463-4466	nsp	CAP. CHIP(2012, 50V/180pF, MURATA GRM21) GRM2165C1H181JA01	CCUMUC1H181JAM	4		
C4471,4472	nsp	CAP. CHIP(2012, 50V/1800pF, MURATA GRM21) GRM2165C1H182JA01	CCUMUC1H182JAM	2		
C4483-4486	nsp	CAP. CHIP(2012, 50V/270pF, MURATA GRM21) GRM2165C1H271JA01	CCUMUC1H271JAM	4		

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
C4491,4492	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	2	
C4493,4494	nsp	CAP. CHIP(1005, 50V/1000pF)		CCUI1H102KC	2	
C4497-4499	nsp	CAP. CHIP(1005, 50V/1000pF)		CCUI1H102KC	3	
C4537,4538	nsp	CAP. CHIP(1005, 50V/1000pF)		CCUI1H102KC	2	
C4540-4542	nsp	CAP. CHIP(1005, 50V/1000pF)		CCUI1H102KC	3	
C4544	nsp	CAP. CHIP(1005, 50V/1000pF)		CCUI1H102KC	1	
C4581	nsp	CAP. CHIP(1005, 50V/1000pF)		CCUI1H102KC	1	
C4583-4591	nsp	CAP. CHIP(1005, 50V/1000pF)		CCUI1H102KC	9	
C4593	nsp	CAP. CHIP(1005, 50V/1000pF)		CCUI1H102KC	1	
C4594,4595	943134500040S	CAP. SMD ELECT(16V/100uF) LELON		HCEC1CRV2101T	2	
C5002	nsp	CAP. CHIP(1608, 10V/1uF)		CCUS1A105KC	1	
C5004	nsp	CAP. CHIP(1608, 10V/1uF)		CCUS1A105KC	1	
C5006	nsp	CAP. CHIP(1608, 10V/1uF)		CCUS1A105KC	1	
C5008	nsp	CAP. CHIP(1608, 10V/1uF)		CCUS1A105KC	1	
C5010	nsp	CAP. CHIP(1608, 10V/1uF)		CCUS1A105KC	1	
C5012	nsp	CAP. CHIP(1608, 10V/1uF)		CCUS1A105KC	1	
C5013	nsp	CAP. CHIP(1005, 50V/1000pF)		CCUI1H102KC	1	
C5014,5015	nsp	CAP. CHIP(1608, 50V/12pF)		CCUS1H120JA	2	
C5016	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5025,5026	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	2	
C5028	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5030	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5032	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5033,5034	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	2	
C5036	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5037,5038	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	2	
C5040	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5042	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5044	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5046	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5048	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5049,5050	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	2	
C5052	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5053,5054	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	2	
C5056	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5057,5058	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	2	
C5060	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5061,5062	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	2	
C5064	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5065,5066	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	2	
C5067	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5070	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5071-5074	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	4	
C5075	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5078	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5080	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5082	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5083-5086	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	4	
C5087	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
C5089	nsp	CAP. CHIP(1005, 16V/0.1uF)		CCUI1C104KC	1	
OTHER PARTS GROUP						
BK102,103	nsp	BRACKET , PCB		CMD1A569-V1	2	
BN21A	nsp	PIN SOCKET (19P,1.25mm,ANGLE, B-TO-B) C125Z2/COSMOS		CJP19HJ282Z	1	
BN23A,24	nsp	PIN SOCKET (27P,1.25mm,ANGLE B-TO-B) C125Z2/COSMOS		CJP27HJ282Z	2	
BN25A	nsp	PIN SOCKET (19P,1.25mm,ANGLE, B-TO-B) C125Z2/COSMOS		CJP19HJ282Z	1	
BN26A	nsp	PIN SOCKET (13P,1.25mm,ANGLE, B-TO-B) C125Z2/COSMOS		CJP13HJ282Z	1	
BN27A	nsp	PIN SOCKET (17P,1.25mm,ANGLE B-TO-B) C125Z2/COSMOS		CJP17HJ282Z	1	
CN121	nsp	WAFER, FFC, SMD(23P-1mm, STRAIGHT)		CJP23GA193ZY	1	
CN151	nsp	WAFER, FFC, SMD(07P-1mm, STRAIGHT)		CJP07GA193ZY	1	
CN201	nsp	WAFER, FFC, SMD(07P-1mm, STRAIGHT)		CJP07GA193ZY	1	
CN202	nsp	WAFER, FFC, SMD(11P-1mm, STRAIGHT)		CJP11GA193ZY	1	
CN203	nsp	WAFER , SMD (2MM PITCH)-3P 2002WS-03C		CJP03GA208ZY	1	
CN231	nsp	WAFER, FFC, SMD(11P-1mm, STRAIGHT)		CJP11GA193ZY	1	
CN321	nsp	WAFER , SMD (2MM PITCH) 2002WS-NN		CJP05GA208ZY	1	
CN390	nsp	WAFER, FFC, SMD(07P-1mm, STRAIGHT)		CJP07GA193ZY	1	
CN391	nsp	WAFER , SMD (2MM PITCH) 2002WS-NN		CJP06GA208ZY	1	
CN401	nsp	WAFER, FFC, SMD(07P-1mm, STRAIGHT)		CJP07GA193ZY	1	
CN402	nsp	WAFER, FFC, SMD(11P-1mm, STRAIGHT)		CJP11GA193ZY	1	
CN69B	nsp	WAFER, FFC, SMD(40P-1mm, STRAIGHT)		CJP40GA193ZY	1	
CN704	nsp	WAFER , SMD (2MM PITCH) 2002WS-NN		CJP05GA208ZY	1	
CN903	nsp	LOCK-WAFER/STRAIGHT/2.5MM PITCH/SPIN SMW250-05		CJP05GI289ZY	1	
J3200	943643102430S	JACK , RJ-45 W/TRANSFORMER KRJ-015XXNL		CJ9J029Z	1	
JK151	943643100040S	JACK, HDMI(KSI-TWI, W/ FLANGE) AD3PBC19G0		CJ9H016Z	1	
JK401	943643101110S	JACK, 2P(ORG)SILVER RCA-215A-00-01/YUQIU		CJ4N068Y	1	
JK402,403	943262100150S	MODULE , OPTICAL(RX 16MHz)		CJSJR1124	2	
JK501-507	943643100040S	JACK, HDMI(KSI-TWI, W/ FLANGE) AD3PBC19G0		CJ9H016Z	7	
L1201-1213	nsp	FERRITE CHIP BEAD(2012/220R) BLM21PG221SN1/MURATA		CLZBLM21PG221SN1	13	
L1501-1508	nsp	FERRITE CHIP BEAD(1608/60R, CB03YTYH600) CB03YTYH600		CLZ9R005V	8	*
L1510	nsp	FERRITE CHIP BEAD(1608/60R, CB03YTYH600) CB03YTYH600		CLZ9R005V	1	*
L1512	nsp	FERRITE CHIP BEAD(1608/60R, CB03YTYH600) CB03YTYH600		CLZ9R005V	1	*
L1514	nsp	FERRITE CHIP BEAD(1608/60R, CB03YTYH600) CB03YTYH600		CLZ9R005V	1	*
L1518	nsp	FERRITE CHIP BEAD(1608/60R, CB03YTYH600) CB03YTYH600		CLZ9R005V	1	*
L1521,1522	nsp	FERRITE CHIP BEAD(1608/60R, CB03YTYH600) CB03YTYH600		CLZ9R005V	2	*
L2903-2907	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	5	
L2908	nsp	FERRITE CHIP BEAD(1608/60R, CB03YTYH600) CB03YTYH600		CLZ9R005V	1	*
L2909	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1	
L2910	nsp	FERRITE CHIP BEAD(1608/60R, CB03YTYH600) CB03YTYH600		CLZ9R005V	1	*
L2913-2920	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	8	
L2922-2925	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	4	
L2929-2934	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	6	
L3001-3008	nsp	FERRITE CHIP BEAD(2012/220R, CB05YTYH221) CB05YTYH221		CLZ9R018V	8	*
L3013-3018	nsp	FERRITE CHIP BEAD(2012/220R, CB05YTYH221) CB05YTYH221		CLZ9R018V	6	*
L3019-3021	nsp	FERRITE CHIP BEAD(2012/220R) BLM21PG221SN1/MURATA		CLZBLM21PG221SN1	3	
L3022	nsp	FERRITE CHIP BEAD(2012/120R) BLM21AG121SN1/MURATA		CLZBLM21AG121SN1	1	
L3023-3032	nsp	FERRITE CHIP BEAD(2012/220R, CB05YTYH221) CB05YTYH221		CLZ9R018V	10	*
L3033,3034	nsp	RES, CHIP(3216/5%/0ohm)		CRJ14CJ0R0T	2	
L3200,3201	nsp	COIL, CHOKE CHIP(2012/90R) DLW21SN900SQ2L/MURATA		CLZ9Z128Z	2	
L3205,3206	nsp	FERRITE CHIP BEAD(2012/220R, CB05YTYH221) CB05YTYH221		CLZ9R018V	2	*
L3211	nsp	RES, CHIP(2012/5%/0ohm)		CRJ18AJ0R0T	1	
L3212	nsp	COIL, CHOKE CHIP(2012/180R) DLW21SN181SQ2L/MURATA		CLZ9Z127Z	1	
L3217,3218	nsp	FERRITE CHIP BEAD(2012/220R, CB05YTYH221) CB05YTYH221		CLZ9R018V	2	*
L3900-3902	nsp	FERRITE CHIP BEAD(2012/220R, CB05YTYH221) CB05YTYH221		CLZ9R018V	3	*
L5001-5012	nsp	FERRITE CHIP BEAD(1608/60R, CB03YTYH600) CB03YTYH600		CLZ9R005V	12	*
X1201	943141100720S	X-TAL, SMD 3.2X2.5, 27.000MHz, 10PF 7V27000050	TXC	COX27000100ST	1	
X1501	943141100720S	X-TAL, SMD 3.2X2.5, 27.000MHz, 10PF 7V27000050	TXC	COX27000100ST	1	
X2001	943141100610S	X-TAL, SMD 3.2X2.5, 12.000MHz, 10PF 7V12000005	TXC	COX12000100ST	1	

REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
X2301	943141100730S	X-TAL, SMD 3.2X2.5, 16.000MHz, 9PF 7V16000001 TXC		COX16000I090ST	1		
X3900	943141100640S	X-TAL, SMD 3.2X2.5, 24.000MHz, 8PF 7V24000002 TXC		COX24000I080ST	1		
X4001	943141100620S	X-TAL, SMD 3.2X2.5, 24.576MHz, 12PF 7V24500006 TXC		COX24576I120ST	1		
X4002	943141100740S	X-TAL, SMD 3.2X2.5, 25.000MHz, 12PF 7V25000009 TXC		COX25000I120ST	1		
X5001	943141100720S	X-TAL, SMD 3.2X2.5, 27.000MHz, 10PF 7V27000050 TXC		COX27000I100ST	1		

SMPS PCB ASS'Y

※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.

E3 : U.S.A. & Canada model E2 : Europe model E1C : China model E1 : Asia model K : Japan model

BK : Black model SP : Premium Silver model

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
SEMICONDUCTORS GROUP						
D9001-9006	00D9630328409	DIODE , RECTIFIER, AXIAL		CVD1N4007ST	6	
D9008,9009	00D9630328409	DIODE , RECTIFIER, AXIAL		CVD1N4007ST	2	
D9010	00D9430182609	DIODE , SWITCHING 1SS133/HOMI(HK) COMPANY LTD		CVD1SS133MT	1	
D9012	943209500030S	DIODE, LOW FORWARD SCHOTTKY RECTIFIER SRL3060P/MIC		CVDSRL3060P	1	
D9013	963209010430S	DIODE, RECTIFIER (1000V) AP01C		CVDAP01CT	1	
! IC901	231010091708S	I.C. , OFF-LINE POWER SWITCH TOP258MG PI		CVITOP258MG	1	
! IC902	963239010480S	I.C. , PHOTOCOUPLER PC123Y22F20F BRAND		CVIPC123Y22F20F	1	
IC903	212050010508S	I.C.SHUNT REGULATOR(TO-92) KIA2431AP		CVKIA2431AP	1	
Q9001-9003	00D9430154404	T.R KTC3198Y		HVTKTC3198YT	3	
ZD901	00D2760762958	DIODE , ZENER ,1/2W, 39V ZJ39B/HOMI(H.K) COMPANY LTD	E3	CVDZJ39BT	1	
ZD902	00D2760762958	DIODE , ZENER ,1/2W, 39V ZJ39B/HOMI(H.K) COMPANY LTD	E3	CVDZJ39BT	1	
ZD903	963202010440S	DIODE , ZENER ,1/2W, 22V ZJ22B/HOMI(H.K) COMPANY LTD	E3	CVDZJ22BT	1	
ZD903	00D2760762958	DIODE , ZENER ,1/2W, 39V ZJ39B/HOMI(H.K) COMPANY LTD	E2/E1C	CVDZJ39BT	1	
ZD904	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6	E3	C3A206	0.02	
ZD904	00D2760762958	DIODE , ZENER ,1/2W, 39V ZJ39B/HOMI(H.K) COMPANY LTD	E2/E1C	CVDZJ39BT	1	
ZD905	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6	E3	C3A206	0.02	
ZD905	00D2760762958	DIODE , ZENER ,1/2W, 39V ZJ39B/HOMI(H.K) COMPANY LTD	E2/E1C	CVDZJ39BT	1	
ZD906	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6	E3	C3A206	0.02	
ZD906	00D2760762958	DIODE , ZENER ,1/2W, 39V ZJ39B/HOMI(H.K) COMPANY LTD	E2/E1C	CVDZJ39BT	1	
ZD907	00D9430101101	WIRE, COPPER(D0.6) CU97.8/SN2.1, D0.6	E3	C3A206	0.02	
ZD907-910	00D2760762958	DIODE , ZENER ,1/2W, 39V ZJ39B/HOMI(H.K) COMPANY LTD	E2/E1C	CVDZJ39BT	4	
ZD911-918	963202010440S	DIODE , ZENER ,1/2W, 22V ZJ22B/HOMI(H.K) COMPANY LTD		CVDZJ22BT	8	
ZD919	00D960095607	DIODE , ZENER ,1/2W, 5.6V ZJ5.6B/HOMI(H.K) COMPANY LTD		CVDZJ5.6BT	1	
ZD920	00D2760762958	DIODE , ZENER ,1/2W, 39V ZJ39B/HOMI(H.K) COMPANY LTD		CVDZJ39BT	1	
RESISTOR GROUP						
R9002,9003	nsp	RES. CARBON(1/5W,1Mohm,J)		CRD20TJ105T	2	
R9004	nsp	RES. CARBON(1/5W,470Kohm,J)		CRD20TJ474T	1	
R9005	nsp	RES. CHIP(1608/5%/47ohm)		CRJ10DJ470T	1	
R9006	nsp	RES. CHIP(1608/5%/1Mohm)		CRJ10DJ105T	1	
R9007	nsp	RES. CHIP(1608/5%/270Kohm)		CRJ10DJ274T	1	
R9008,9009	nsp	RES. CARBON(1/5W,2.2Mohm,J)	E3	CRD20TJ225T	2	
R9010	nsp	RES. CARBON(1/5W,1Mohm,J)	E3	CRD20TJ105T	1	
R9013	nsp	RES. CHIP(1608/5%/10ohm)		CRJ10DJ100T	1	
R9014	nsp	RES. CHIP(1608/5%/270Kohm)	E3	CRJ10DJ274T	1	
R9014	nsp	RES. CHIP(1608/5%/56Kohm)	E2/E1C	CRJ10DJ563T	1	
R9015	nsp	RES. CHIP(1608/5%/15Kohm)		CRJ10DJ153T	1	
R9016	nsp	RES. CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1	
R9017	nsp	RES. CARBON(1/5W,6.8ohm,J)		CRD20TJ688T	1	
R9018	nsp	RES. CARBON(1/5W,56ohm,J)		CRD20TJ560T	1	
R9019	nsp	RES. CARBON(1/5W,3.3Kohm,J)		CRD20TJ332T	1	
R9020	nsp	RES. CARBON(1/5W,5.6Kohm,J)		CRD20TJ562T	1	
R9021	nsp	RES. CHIP(1608/1%/22Kohm)		CRJ10DF2202T	1	
R9024	nsp	RES. CHIP(1608/1%/6.8Kohm)		CRJ10DF6801T	1	
R9025	nsp	RES. CHIP(1608/5%/1Mohm)		CRJ10DJ105T	1	
R9026	nsp	RES. CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R9027	nsp	RES. CHIP(1608/5%/4.7Kohm)		CRJ10DJ472T	1	
! R9031-9034	943121500030S	RES. CHIP(2012/5%/2.2Mohm)		CRJ18AJ225T	4	
ZD901	nsp	RES. CARBON(1/5W,1Mohm,J)	E2/E1C	CRD20TJ105T	1	
ZD902	nsp	RES. CARBON(1/5W,1Mohm,J)	E2/E1C	CRD20TJ105T	1	
! C9001-9003	963132011940S	CAP. CERAMIC(X1/Y2,0.01uF,AC250V) DE2F3KY103MB3BM02		CCKDKY103MFM	3	
C9004	943134501590S	CAP. ELECT(200V/100uF),105C NHA 200VB 100M(16*20L)	E3	CCET200NHA101ES	1	
C9004	963134010200S	CAP. ELECT (400V/100UF, 18X40, NHA) NHA400VB100M/SAMYOUNG	E2/E1C	CCET400NHA101ES	1	
C9006-9008	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	3	
C9009	00D9430175108	CAP. ELECT(50V/10uF),105C 5X11L/105/NXA/SAMYOUNG		CCEA1HNXA100TS	1	
C9010	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1	
C9012	963132010120S	CAP. CERAMIC(DC1KV/1000pF) DEHR33A102KB2B		CCKDDEH102KCM	1	
C9016	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1	
C9017	00MOA47602520	CAP. ELECT(25V/47uF),105C 5X11L/105/NXA/SAMYOUNG		CCEA1ENXA470TS	1	
C9018	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1	
C9019	nsp	CAP. CHIP(1608, 6.3V/4.7uF, MURATA GRM18)		CCUS0J475KC	1	
C9020-9022	963134010220S	CAP. ELECT(6.3V/5600uF) NXA6.3VB 5600M 5.0MC(12.5*35L)		CCEA0JNXA562ES	3	
C9024	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1	
! C9028	963132011930S	CAP. CERAMIC(X1/Y1,2200P,AC250V) DE1E3KX222MB4BL01		CCKDKX222MEM	1	
C9029	nsp	CAP. CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1	
! CX901	943139500020S	CAP. POLYPROPYLENE FILM (0.1uF/275VAC) M-CMP2D104ML12T		CCQF2E104KZE-T	1	
! CY901,902	963134011730S	CAP. CERAMIC(X1/Y1,470P,AC250V) DE1B3KX471KB4BL01		CCKDKX471KBM	2	
OTHER PARTS GROUP						
BK901,902	nsp	BRACKET , PCB M3		CMD1A834	2	
BK903	nsp	BRACKET , PCB		CMD1A629	1	
BN903	nsp	WIRE ASS'Y LOCKING (5P,2.5MM,400MM,UL1569#22,105)		CWB7D0054003D	1	*
CN901	nsp	WAFER, 2P, 3.96mm		CJP02KA060ZY	1	
CN902	nsp	WAFER, 2P, 7.92mm YW396-02AB/YEONHO		CJP02GA89ZY	1	
F9001,9002	nsp	HOLDER , FUSE		CJCFCS5	2	
! LF902	963111010230S	LINE FILTER, 27uH LF-4ZB-E273H/KORIN	E3	CLZ92126Z	1	
! LF902	943111100410S	LINE FILTER, 50uH LF-4ZB-E503H/KORIN	E2/E1C	CLZ92133Z	1	
! RY901	963682010370S	RELAY,HL31-1AT-5H,DC5V,1C1P HL31-1AT-5H/HANDOUK		CSL1C006ZE	1	
! T9001	943102100350S	TRANS , SWITCHING STR28L-979C XINHUA		CLT92093ZE	1	
★	nsp	RUBBER , TRANS		CHG1A587	1	*
★	nsp	SHEILD , TRANS COVER		CMC1A445	1	*

EXPLODED

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

E3 : U.S.A. & Canada model E2 : Europe model E1C : China model E1 : Asia model K : Japan model

BK : Black model SP : Premium Silver model

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
C1	nsp	FRONT PCB ASS'Y	E3/E2	1	*	
C1	nsp	FRONT PCB ASS'Y	E1C	1	*	
C6	nsp	AMP PCB MANUAL ASS'Y	E3/E2	1	*	
C6	nsp	AMP PCB MANUAL ASS'Y	E1C	1	*	
-	nsp	SPK PCB MANUAL ASS'Y	E3	1	*	
-	nsp	SPK PCB MANUAL ASS'Y	E2	1	*	
-	nsp	SPK PCB MANUAL ASS'Y	E1C	1	*	
C12	-	SPK PCB MANUAL ASS'Y	-	1	*	
C11	-	SPK PCB MANUAL ASS'Y	-	1	*	
C5	-	SPK PCB MANUAL ASS'Y	-	1	*	
-	nsp	CNT PCB MANUAL ASS'Y	E3/E2	1	*	
-	nsp	CNT PCB MANUAL ASS'Y	E1C	1	*	
C10	-	CNT PCB MANUAL ASS'Y	-	1	*	
C13	-	CNT PCB MANUAL ASS'Y	-	1	*	
C4	nsp	SMPS PCB MANUAL ASS'Y	E3	1	*	
C4	nsp	SMPS PCB MANUAL ASS'Y	E2	1	*	
C4	nsp	SMPS PCB MANUAL ASS'Y	E1C	1	*	
-	943639101050D	INPUT PCB MANUAL ASS'Y	E3	1	*	
-	943639101060D	INPUT PCB MANUAL ASS'Y	E2	1	*	
-	943639101070D	INPUT PCB MANUAL ASS'Y	E1C	1	*	
C14	-	INPUT PCB MANUAL ASS'Y	-	1	*	
C8	-	INPUT PCB MANUAL ASS'Y	-	1	*	
C3	-	INPUT PCB MANUAL ASS'Y	-	1	*	
-	nsp	VIDEO PCB MANUAL ASS'Y	E3/E2	1	*	
-	nsp	VIDEO PCB MANUAL ASS'Y	E1C	1	*	
C15	-	VIDEO PCB MANUAL ASS'Y	-	1	*	
C7	-	VIDEO PCB MANUAL ASS'Y	-	1	*	
C16	9U6391011100D	DIGITAL PCB MANUAL ASS'Y	E3	1	*	
C16	9U6391011200D	DIGITAL PCB MANUAL ASS'Y	E2	1	*	
C16	9U6391011300D	DIGITAL PCB MANUAL ASS'Y	E1C	1	*	
M1	42141002400AD	BADGE , DENON	BK	1	*	
M1	42141002401AD	BADGE , DENON	SP	1	*	
M2	42141002600AD	BADGE , IN COMMAND	E3	1	*	
M3	nsp	EARTH , USB		1	*	
M4	00M07BW257010	CABINET , TOP	BK	1	*	
M4	943403002040M	CABINET , TOP	SP	1	*	
M5	nsp	CHASSIS , BOTTOM		1	*	
M6	nsp	SMPS BRACKET		1	*	
M7	nsp	HEATSINK		1	*	
M8	nsp	BRACKET , PCB (AMP)		5	*	
M9	nsp	PCB BRACKET (HDMI)		1	*	
M10	nsp	PANEL , REAR	E3	1	*	
M10	nsp	PANEL , REAR	E2	1	*	
M10	nsp	PANEL , REAR	E1C	1	*	
P1	963412100880D	KNOB , FUNCTION	BK	1	*	
P1	963412100890D	KNOB , FUNCTION	SP	1	*	
P2	963412100860D	KNOB , VOLUME	BK	1	*	
P2	963412100870D	KNOB , VOLUME	SP	1	*	
P3	963451101200D	SHEET , FUNCTION KNOB		1	*	
P4	963451101190D	SHEET , VOLUME KNOB		1	*	
P5	963424100330D	RING , FUNCTION KNOB	BK	1	*	
P5	963424100340D	RING , FUNCTION KNOB	SP	1	*	
P6	963424100310D	RING , VOLUME KNOB	BK	1	*	
P6	963424100320D	RING , VOLUME KNOB	SP	1	*	
P7	963416100980D	WINDOW		1	*	
P8	963443100510D	PANEL , SUB		1	*	
P9	943402103680D	PANEL , FRONT	E3	1	*	
P9	943402103690D	PANEL , FRONT	E2	1	*	
P9	943402103700D	PANEL , FRONT	E1C	1	*	
P10	963481100240D	INDICATOR , POWER		1	*	
P11	943411102530D	BUTTON , POWER	BK	1	*	
P11	943411102540D	BUTTON , POWER	SP	1	*	
P12	963411101780D	BUTTON , 10KEY		1	*	
P13	nsp	CUSHION		1	*	
P14	943416009700D	FOOT		4	*	
P15	nsp	CUSHION , FOOT		4	*	
P16	nsp	RUBBER		4	*	
P17	nsp	HOLDER , PCB		3	*	
P18	nsp	SUPPORT , PCB		1	*	
P19	nsp	SUPPORT , PCB 31		1	*	
P20	nsp	SUPPORT , RUBBER		1	*	
P21	943419100250D	SHEET , TOP	BK	2	*	
P21	943419100260D	SHEET , TOP	SP	2	*	
P22	45451000500AM	STOPPER , SHEET	BK	8	*	
P22	45451000501AM	STOPPER , SHEET	SP	8	*	
C9	943101102070S	TRANS	E3	1	*	
C9	943101102080S	TRANS	E2	1	*	
C9	943101102090S	TRANS	E1C	1	*	
S1	nsp	SCREW		8	*	
S2	nsp	SCREW		15	*	
S3	nsp	SCREW		26	*	
S4	nsp	SCREW	BK	21	*	
S4	nsp	SCREW	SP	27	*	
S5	nsp	SCREW , SPECIAL		21	*	
S6	nsp	SCREW		3	*	
S7	nsp	SCREW		4	*	
S8	nsp	SCREW		6	*	
S9S	nsp	SCREW , DOT	BK	27	*	
S9S	nsp	SCREW , DOT	SP	24	*	
S10	nsp	SCREW , DOT	E3	12	*	
S10	nsp	SCREW , DOT	E2, E1C	11	*	
S11	nsp	SCREW , DOT		6	*	
S12	nsp	SCREW , TRANS		4	*	

	S13	nsp	SCREW , DOT	E1C	CTBD3+8JFN	3		
	★	943606501600S	CARD CABLE(1mm/23P/300mm/B)		CWC4F2A23A300B10	1		
	★	943606502040D	CARD CABLE(1mm/40P/250mm/B/sheild)		CWC4F2A40A250B08001	1	*	
	★	nsp	2P WIRE ASS'Y(100MM)		CWZPM5003TW91	1		
	★	nsp	2P WIRE ASS'Y(100MM)		CWZPM5003TW91A	1		
	★	nsp	ORNAMENT , REAR PANEL		CGX1A487Z	1		
	★	nsp	CUSHION , SUPPORT		CHG1A305	2		
	★	nsp	LOCKER SH08M790BO	E2/E1C	CRE1A037	14		
	★	nsp	BOTTOM CHASSIS ASS'Y	E3	CUAAVRX3000BKE3	1		
	★	nsp	BOTTOM CHASSIS ASS'Y	E2	CUAAVRX3000BKE2	1		
	★	nsp	BOTTOM CHASSIS ASS'Y	E1C	CUAAVRX3000SPE1C	1		
	★	00MYJ04002640	RECEPTACLE , AC(15A/250V.R-301.B21) R-301(B21)		CJ38A006ZW	1		
!	F9001	963652010510S	FUSE(S506 Series, 250V,2A) S506-2A	E3	CBA2C2000TLEC	1		
!	F9001	963652010500S	FUSE(S506 Series, 250V,1.6A) S506-1.6A	E2/E1C	CBA2C1600TLEC	1		
!	F9002	90M-FS001430R	FUSE(218Series, 250V/6.3A) 021806.3.MXP	E3	KBA2C6300TLEY	1		
!	F9002	90M-FS001490R	FUSE(218Series, 250V/4A) 0218004.MXP	E2/E1C	KBA2C4000TLEY	1		
!	F9331	963652010510S	FUSE(S506 Series, 250V,2A) S506-2A		CBA2C2000TLEC	1		
!	F9332	963652010510S	FUSE(S506 Series, 250V,2A) S506-2A		CBA2C2000TLEC	1		
!	F9333	963652010910S	FUSE(S506 Series, 250V,3.15A) S506-3.15A		CBA2C3150TLEC	1		
!	F9334	963652010910S	FUSE(S506 Series, 250V,3.15A) S506-3.15A		CBA2C3150TLEC	1		
!	F9335	963652010910S	FUSE(S506 Series, 250V,3.15A) S506-3.15A		CBA2C3150TLEC	1		

PACKING

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REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
2	nsp	POLY SHEET		1		
4	943533101760D	PAD, SNOW BOTTOM		1	*	
5	943533101770D	PAD, SNOW TOP		1	*	
6	943531103660D	BOX, OUT CARTON	E3	1	*	
6	943531103670D	BOX, OUT CARTON	E2	1	*	
6	943531103680D	BOX, OUT CARTON	E1C	1	*	
8	nsp	INSTRUCTION MANUAL ASS'Y		1		
	35201021900AD	CD M ANUAL ASS'Y	E3	1		
	35201022000AD	CD M ANUAL ASS'Y	E2	1		
	35201022200AD	CD M ANUAL ASS'Y	E1C	1		
	nsp	BAG, POLY(MANUAL)		1		
	943419100580D	LABEL, SPEAKER CABLE		1	*	
	nsp	CARD, WARRANTY	E3	1		
	nsp	SHEET, INSERTION	E3	1		
	54111101900AD	MANUAL, GUIDE	E3	1	*	
	54111102000AD	MANUAL, GUIDE	E2	1	*	
	54111102100AD	MANUAL, GUIDE	E1C	1	*	
	963116100070S	ANT, AM LOOP(9.5uH/5T)	E3	1		
	943116100170D	FM 1 POLE ANT (UL TYPE)		1		
	nsp	CARD FOR CHINA IDENTIFICATION	E1C	1		
9	30701013700AD	REMOCON ASS'Y (RC-1184)	E3	1	*	
10	nsp	BATTERY, AAA	E3	1		
!	11	943611500750D	CORD, POWER	E3	1	*
!	11	943611500760D	CORD, POWER	E2	1	*
!	11	943611500770D	CORD, POWER	E1C	1	*
12	nsp	BAG, POLY		1		
13	32401000800AD	MIC AUDYSSEY		1		
14	nsp	LABEL, CONTROL		1		
14-1	nsp	LABEL, SERIAL No		1		
15	nsp	LABEL, MAC ADDRESS		1		
16	nsp	LABEL, POP	E3	1		
17	nsp	LABEL, POP	E3	1		
17	nsp	LABEL, POP	E2	1		
17	nsp	LABEL, POP	E1C	1		
18	nsp	LABEL, HOT	E2	1		
18	nsp	LABEL, HOT	E1C	1		
19	nsp	LABEL, LICENSE	E3	1		
19	nsp	LABEL, LICENSE	E2	1		
19	nsp	LABEL, LICENSE	E1C	1		
20	nsp	LABEL, COLOR LABEL(WHITE)	E1C	1		
21	nsp	WARRANTY CARD, CHINA	E1C	1		