DENON

Ver. 5

Please refer to the MODIFICATION NOTICE.

SERVICE MANUAL

MODEL	JP	E3	E2	EK	EA	E1C	E1K	E1C
AVR-4520CI		✓						
AVR-4520			✓			✓		

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.

S0584-1V05DM/DG1211

CONTENTS

ABOUT THIS MANUAL

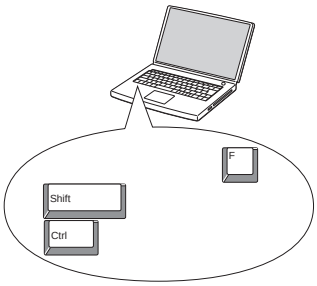
Read the following information before using the service manual.

What you can do with this manual

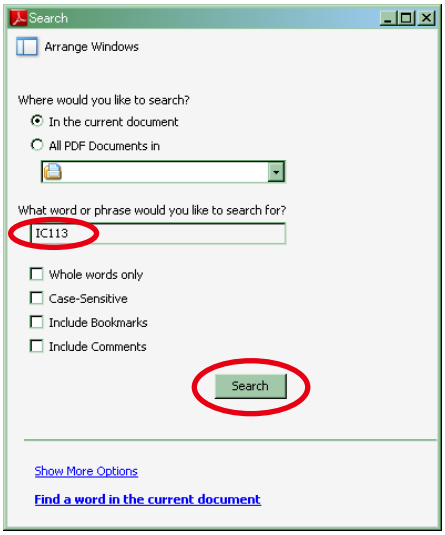
Search for a Ref. No. (phrase) (Ctrl+Shift+F)

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.



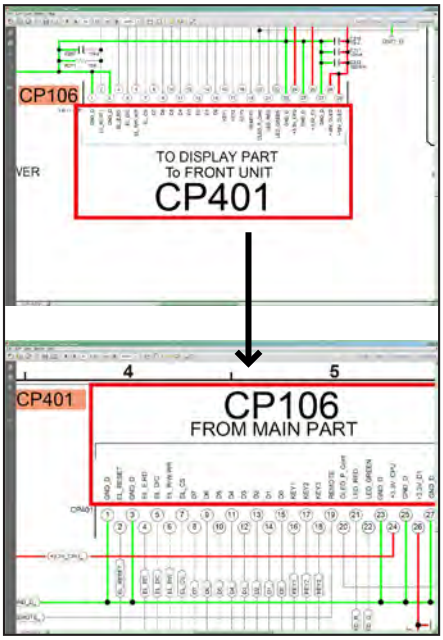
2.Enter the Ref. No. you want to search for in the Search window, and then click the **Search** button.
- A list of search results appears.



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.



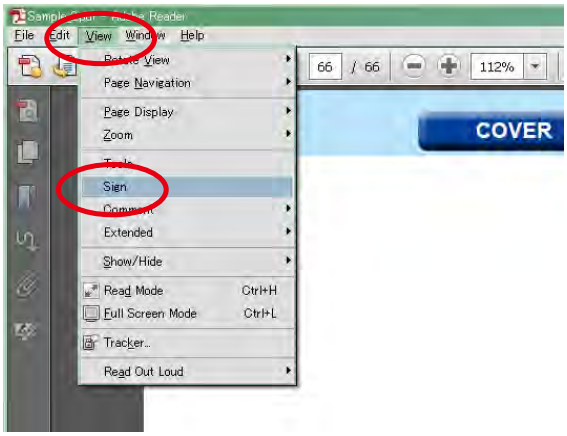
- Page magnification stays the same as before the jump.

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.

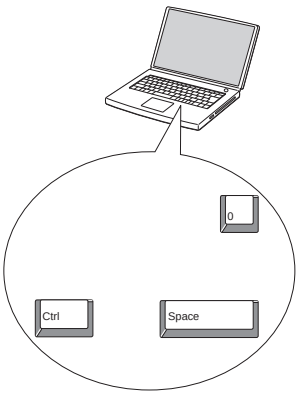
[Example using Adobe Reader X]
On the "**View**" menu, click "**Sign**".
- The Sign pane appears.



[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.

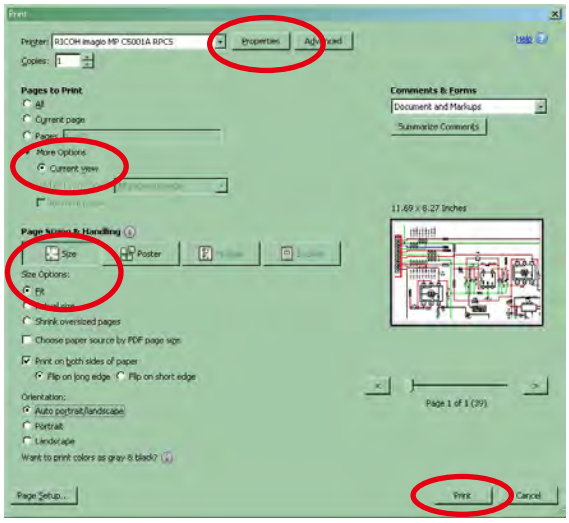


- When you want to move the area shown, hold down **Space** and drag the mouse.
- When you want to show a full page view, press **Ctrl**+**0** on the keyboard.

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.



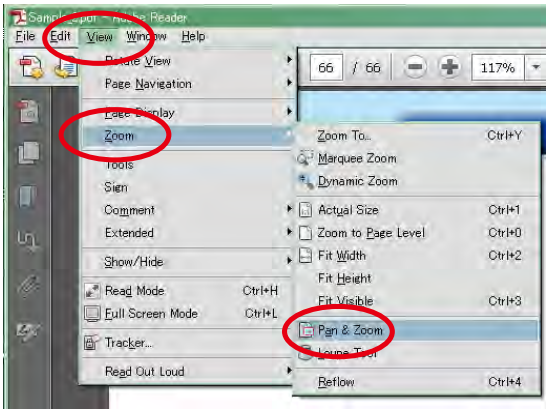
- **Properties**
  Click this button and check that the printer is set to a suitable paper size.
- **Page to print**
  Select the following checkbox.
  "**More Options**" : "**Current View**"
- **Page Sizing & Handling**
  Select the following checkbox.
  "**Size**" / "**Size Options**" : "**Fit**"

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

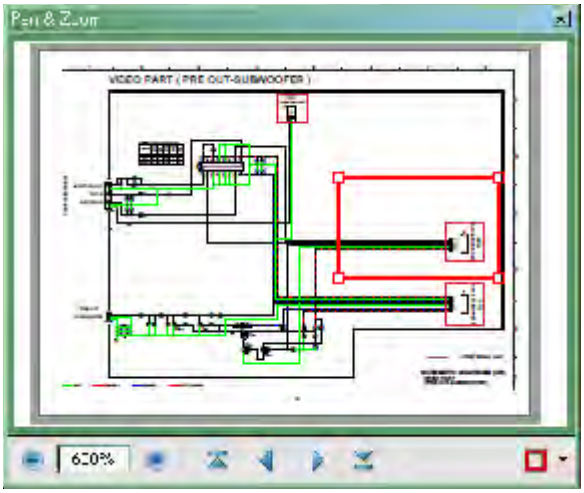
Magnify schematic / printed wiring board diagrams - 2
(Pan & Zoom function)

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

[Example using Adobe Reader X]
On the "**View**" menu, point to "**Zoom**", and then click "**Pan & Zoom**".



- The Pan & Zoom window appears on the screen.

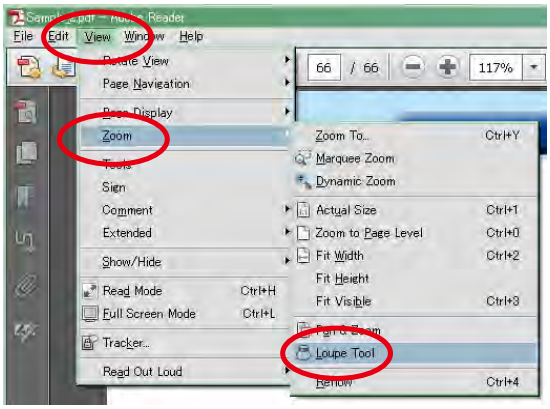


[Example using Adobe Reader 9]
On the "**Tools**" menu, point to "**Select & Zoom**", and then click "**Pan & Zoom Window**".

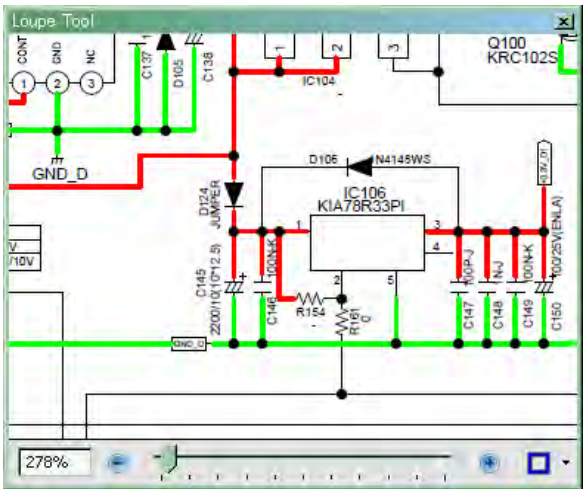
Magnify schematic / printed wiring board diagrams - 3
(Loupe Tool function)

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

[Example using Adobe Reader X]
On the "**View**" menu, point to "**Zoom**", and then click "**Loupe Tool**".



- The Loupe Tool window appears on the screen.



[Example using Adobe Reader 9]
On the "**Tools**" menu, point to "**Select & Zoom**", and then click "**Loupe Tool Window**".

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

TECHNICAL SPECIFICATIONS

❑ Audio Section

- **Power amplifier**

Rated output :

Front :
150 W + 150 W (8 Ω, 20 Hz – 20 kHz with 0.05 % T.H.D.)
190 W + 190 W (6 Ω, 1 kHz with 0.7 % T.H.D.)

Center :
150 W (8 Ω, 20 Hz – 20 kHz with 0.05 % T.H.D.)
190 W (6 Ω, 1 kHz with 0.7 % T.H.D.)

Surround :
150 W + 150 W (8 Ω, 20 Hz – 20 kHz with 0.05 % T.H.D.)
190 W + 190 W (6 Ω, 1 kHz with 0.7 % T.H.D.)

Surround back / Front height / Front wide :
150 W + 150 W (8 Ω, 20 Hz – 20 kHz with 0.05 % T.H.D.)
190 W + 190 W (6 Ω, 1 kHz with 0.7 % T.H.D.)

Dynamic power : 170 W x 2ch (8 Ω)
280 W x 2ch (4 Ω)

Output connectors : 4 – 16 Ω

- **Analog**

Input sensitivity/Input impedance : 200 mV/47 kΩ
Frequency response : 10 Hz – 100 kHz — +1, –3 dB (DIRECT mode)
S/N : 102 dB (IHF–A weighted, DIRECT mode)
Distortion : 0.005 % (20 Hz – 20 kHz) (DIRECT mode)
Rated output : 1.2 V

- **Digital**

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

Digital input : Format — Digital audio interface

- **Phono equalizer (PHONO input — MEDIA PLAYER OUT)**

Input sensitivity : 2.5 mV
RIAA deviation : ±1 dB (20 Hz to 20 kHz)
S/N : 74 dB (IHF–A weighted)
Rated output : 150 mV
Distortion factor : 0.03 % (1 kHz, 3 V)

❑ Video section

- **Standard video connectors**

Input/output level and impedance : 1 Vp-p, 75 Ω
Frequency response : 5 Hz – 10 MHz — 0, –3 dB
(when "Video Conversion" set to "Off")

- **Color component video connector**

Input/output level and impedance : Y signal — 1 Vp-p, 75 Ω
P_B / C_B signal — 0.7 Vp-p, 75 Ω
P_R / C_R signal — 0.7 Vp-p, 75 Ω
Frequency response : 5 Hz – 60 MHz — 0, –3 dB
(when "Video Conversion" set to "Off")

❑ Tuner section (E3 model)

(ANTENNA input – MEDIA PLAYER OUT)
[FM](Note: µV at 75 Ω, 0 dBf = 1 x 10^{-15} W)
Receiving Range :
[FM] 87.5 MHz – 107.9 MHz
[AM] 530 kHz – 1710 kHz
Usable Sensitivity :
[FM]1.5 µV (14.8 dBf)
[AM] 20 µV
S/N (IHF–A weighted) :
[FM]MONO 78 dB
STEREO 68 dB
HD 85 dB
[AM]HD 85 dB
Distortion (1 kHz) :
[FM]MONO 0.1 %
STEREO 0.2 %
HD 0.02 %
[AM]HD 0.02 %

❑ Tuner section (E2,E1C model)

(ANTENNA input – MEDIA PLAYER OUT)
[FM](Note: µV at 75 Ω, 0 dBf = 1 x 10^{-15} W)
Receiving Range :
[FM] 87.5 MHz – 108.0 MHz
Usable Sensitivity :
[FM]1.2 µV (12.8 dBf)
50 dB Quieting Sensitivity :
[FM]MONO 2.0 µ (20.2 dBf)
S/N (IHF–A weighted):
[FM]MONO 70 dB
STEREO 67 dB
Distortion (1 kHz) :
[FM]MONO 0.7 % (1 kHz)
STEREO 1.0 % (1 kHz)

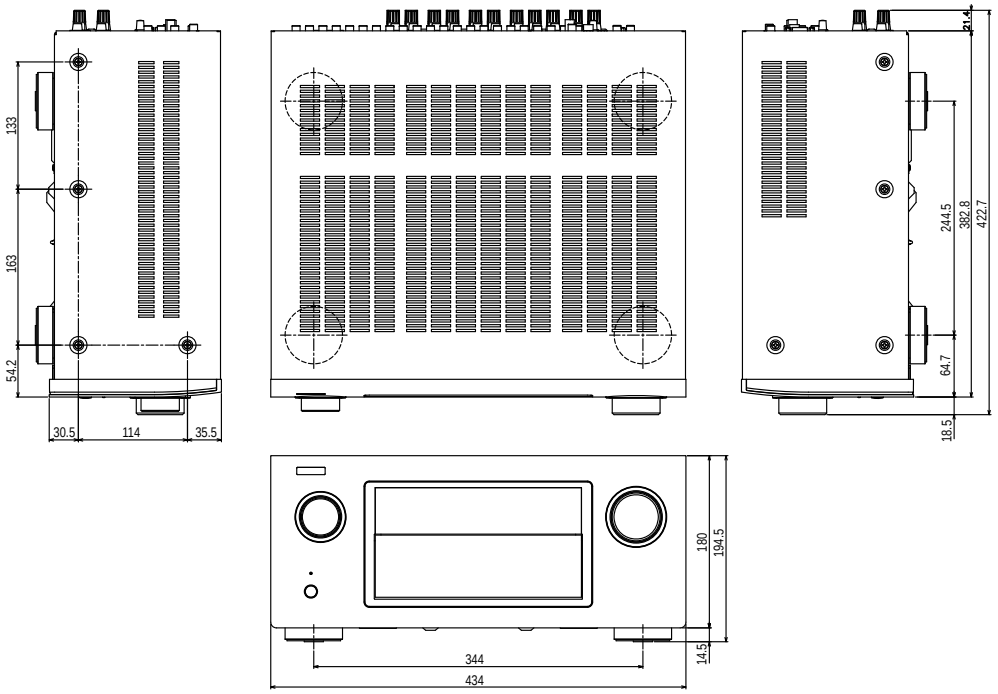
❑ Switching hub

Standard : IEEE 802.3 (10 Base-T)-compliant
IEEE 802.3u (100 Base-TX)-compliant
Number of ports : 4 ports

❑ General

Power supply (for E3 model) **:** AC 120 V, 60 Hz
Power supply (for E2 model) **:** AC 230 V, 50/60 Hz
Power supply (for E1C model) **:** AC 220 V, 50 Hz
Power consumption : 780 W
Power consumption in standby mode : 0.1 W
Power consumption in CEC standby mode : 0.5 W
Power comsumption in network standby mode : 5.1 W
Weight : 16.5 kg

DIMENSION



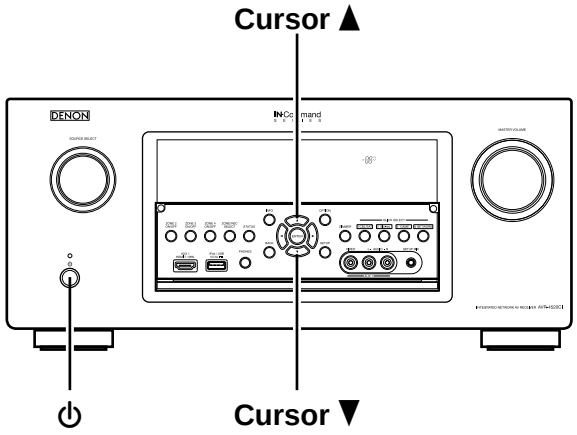
CAUTION IN SERVICING

Initializing INTEGRATED NETWORK AV RECEIVER

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

1. Turn off the power pressing "Power operation (⏻)" button.
2. Press "Power operation (⏻)" button while simultaneously while pressing "Cursor ▲" and "Cursor ▼" 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.



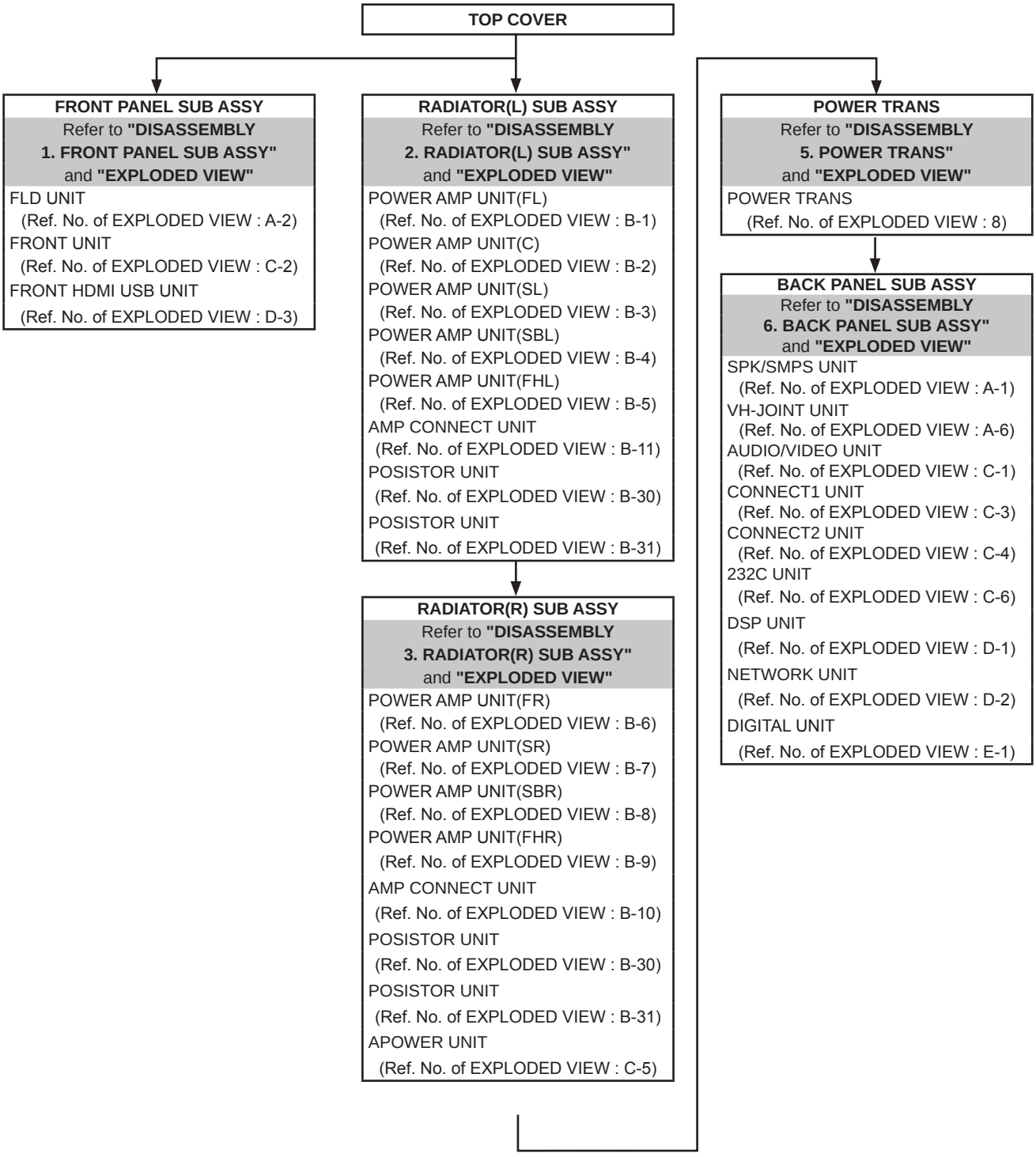
Service Jig

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 : 2 Set

DISASSEMBLY

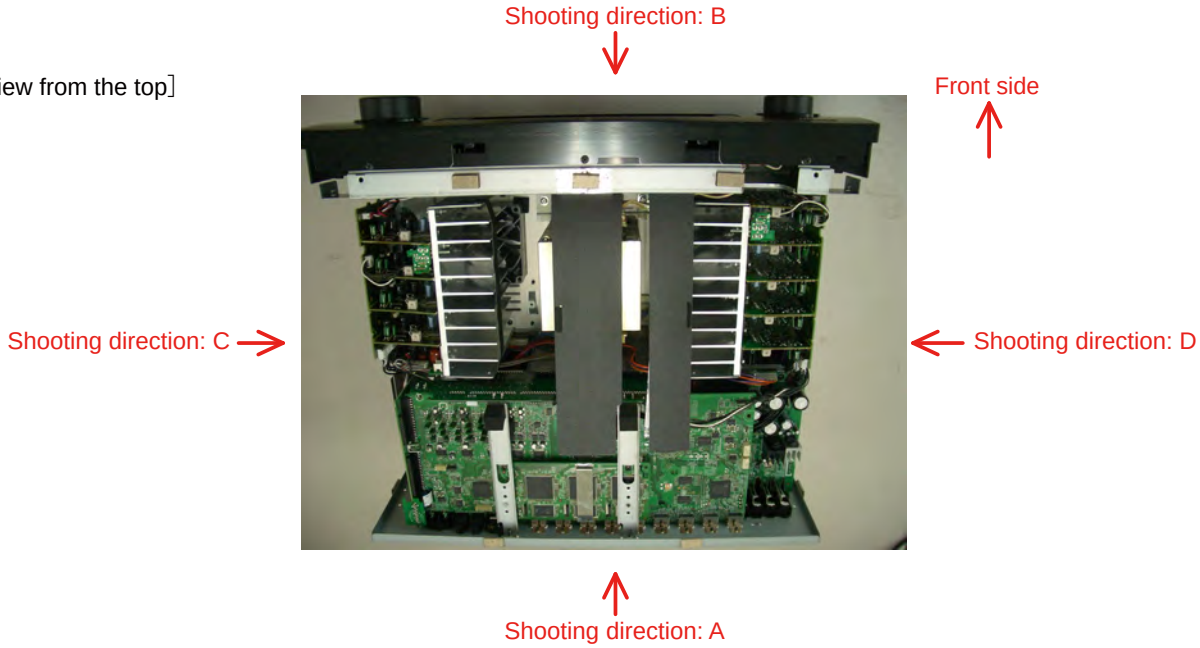
- Disassemble in order of the arrow in the following figure.
- In the case of the re-assembling, assemble it in order of the reverse of the following flow.
- In the case of the reassembling, observe "Caution concerning disassembly and assembly!".
- If wire bundles are untied or moved to perform adjustment 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 photograph is AVR-4520CIE3 model.

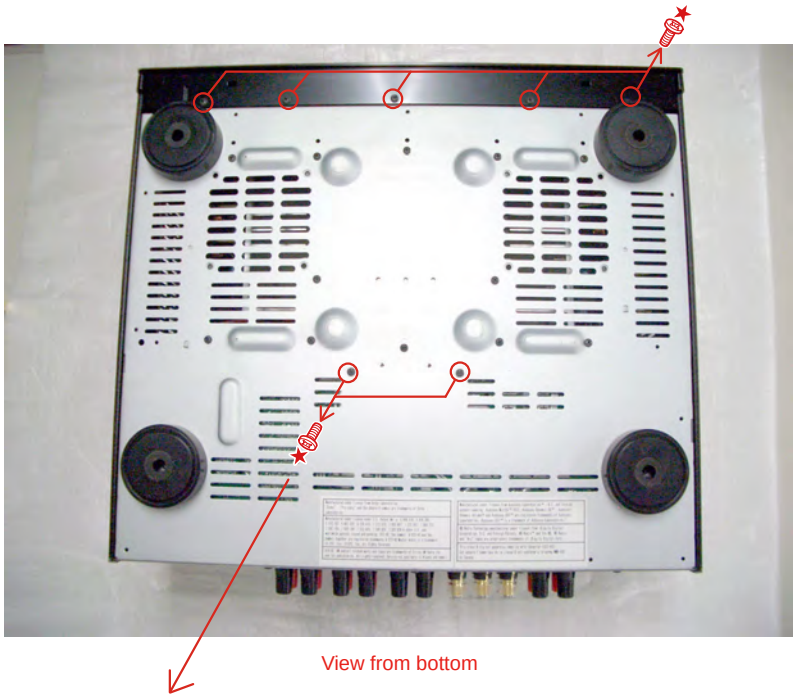
The viewpoint of each photograph (Shooting direction)



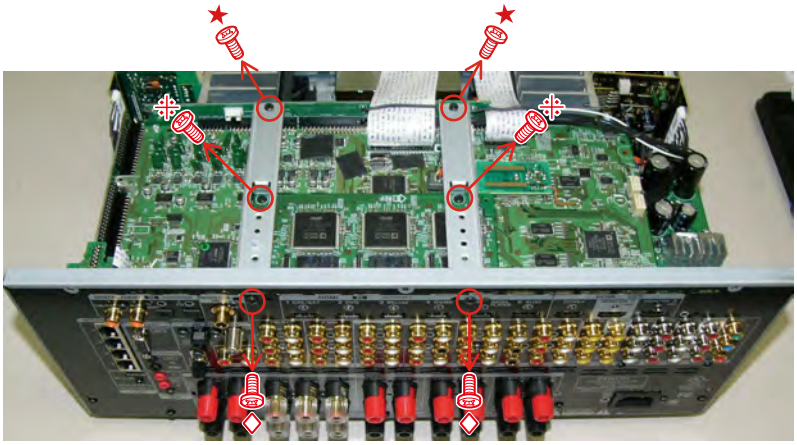
1. FRONT PANEL SUB ASSY

Proceeding : TOP COVER → FRONT PANEL SUB ASSY

(1) Remove the screws.

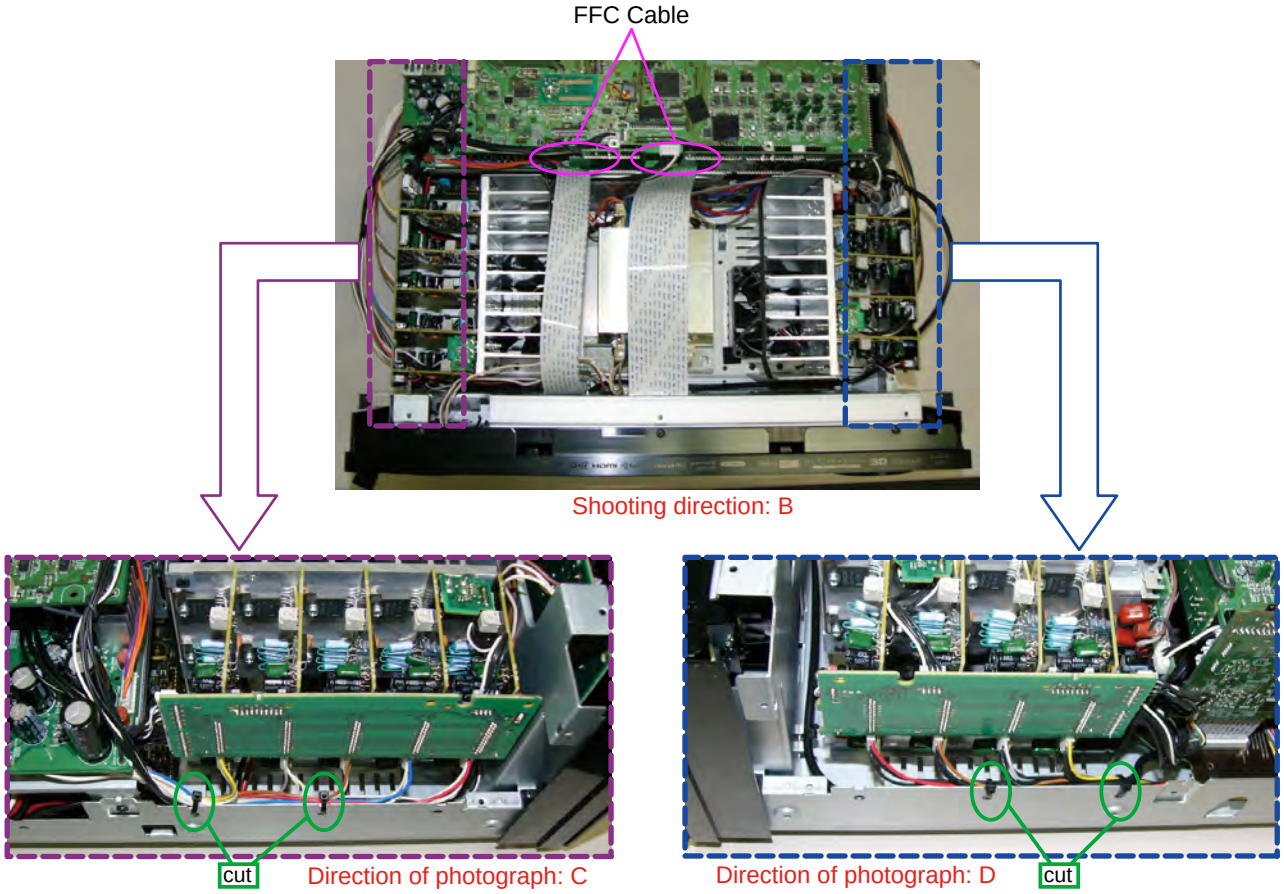


(2) Remove the screws.

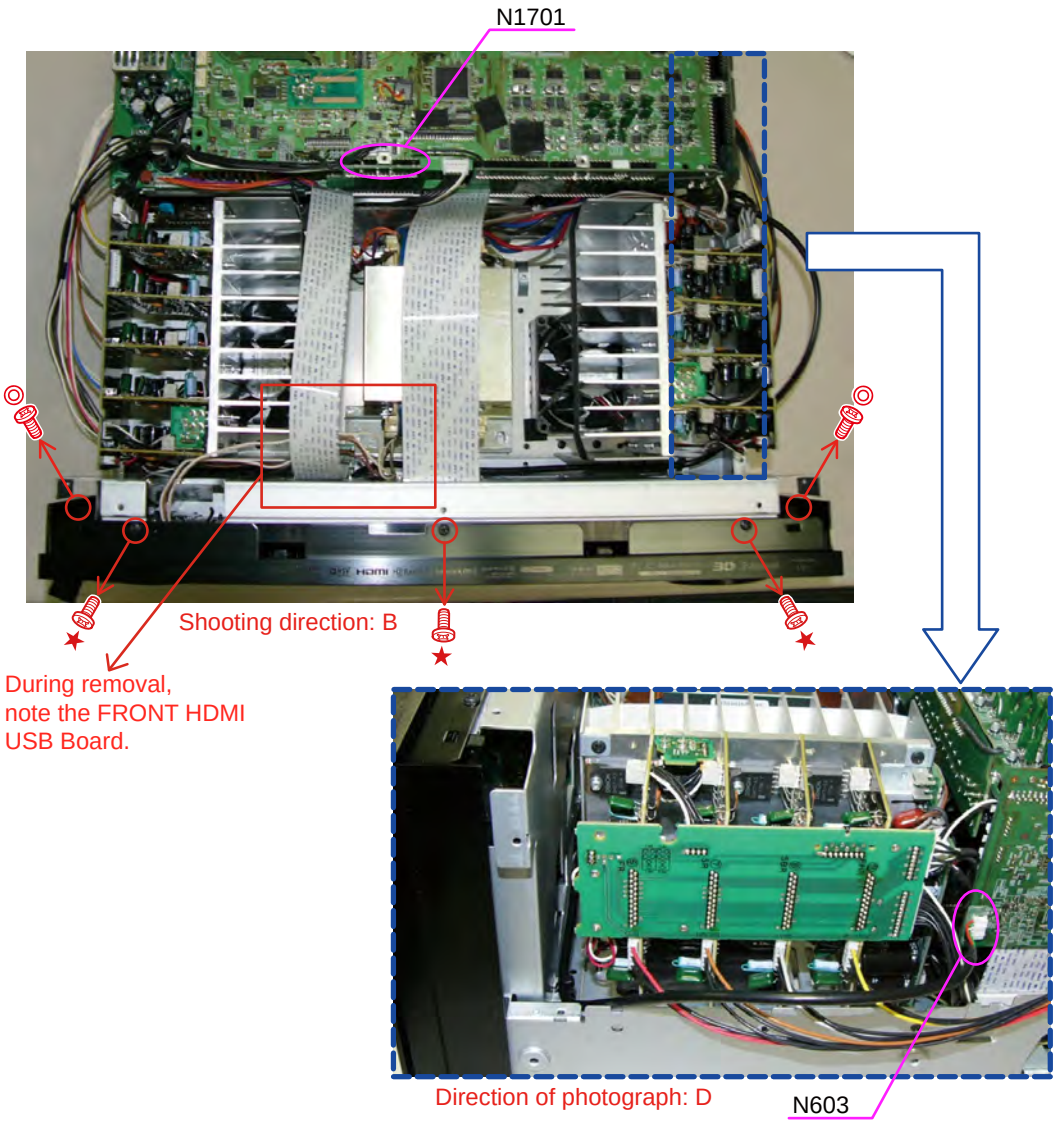


Shooting direction: A

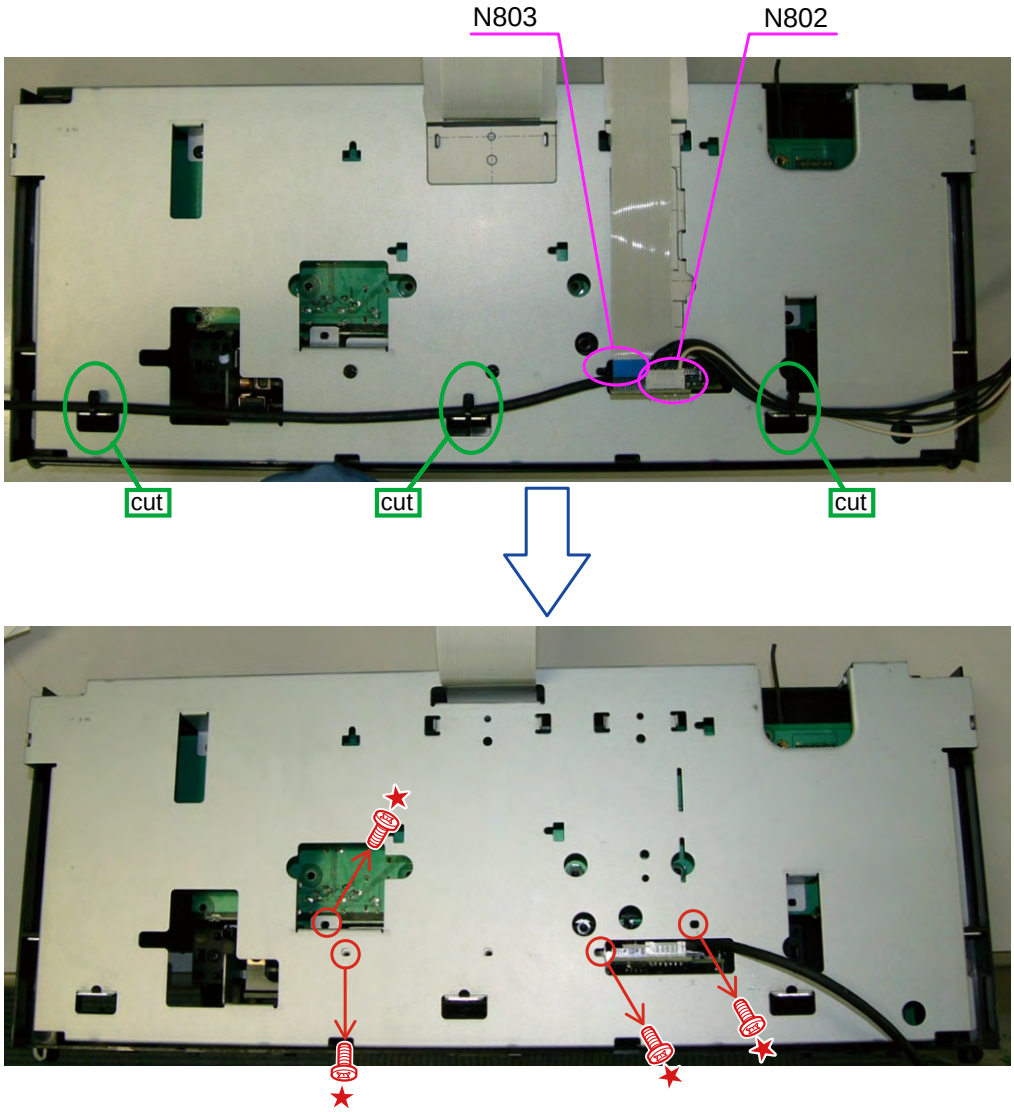
(3) Cut the wire clamp band, then disconnect the FFC cables.



(4) Disconnect the connector wires.



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



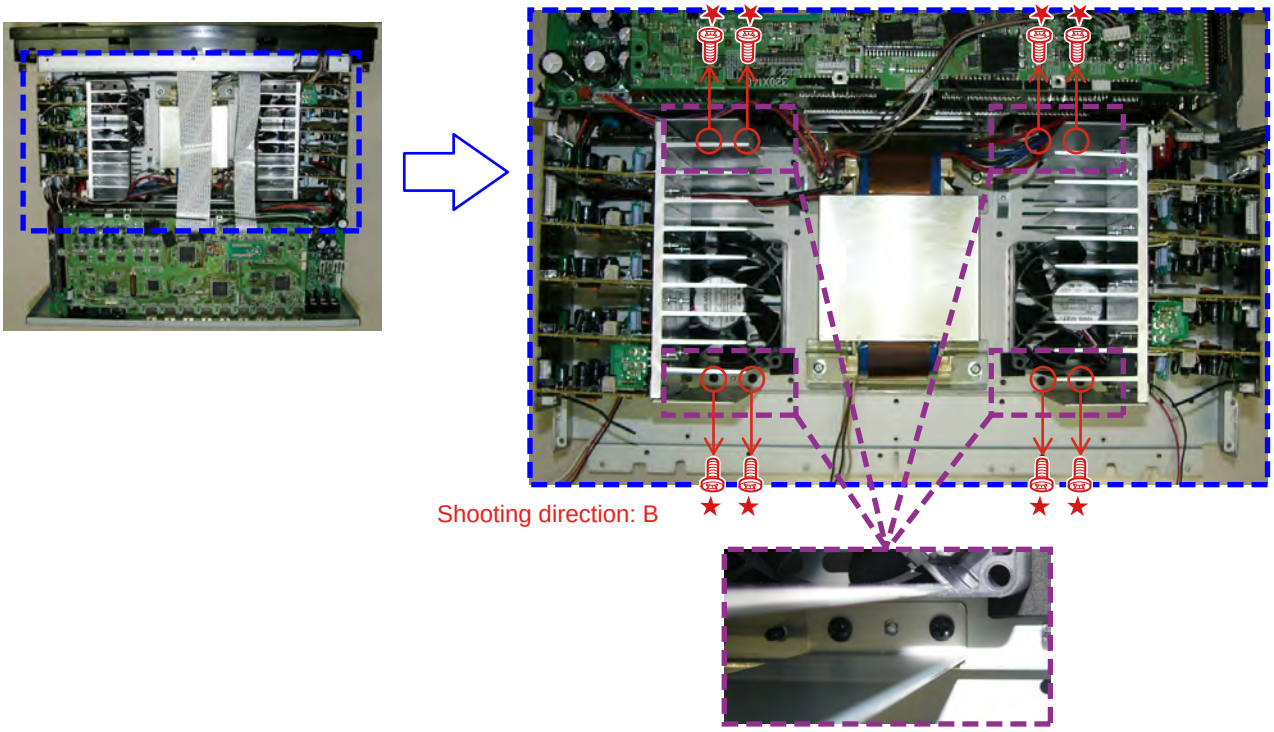
Please refer to "EXPLODED VIEW" for the disassembly method of each PWB included in FRONT PANEL SUB ASSY.

NOTE
DOOR is working ina fully open state.

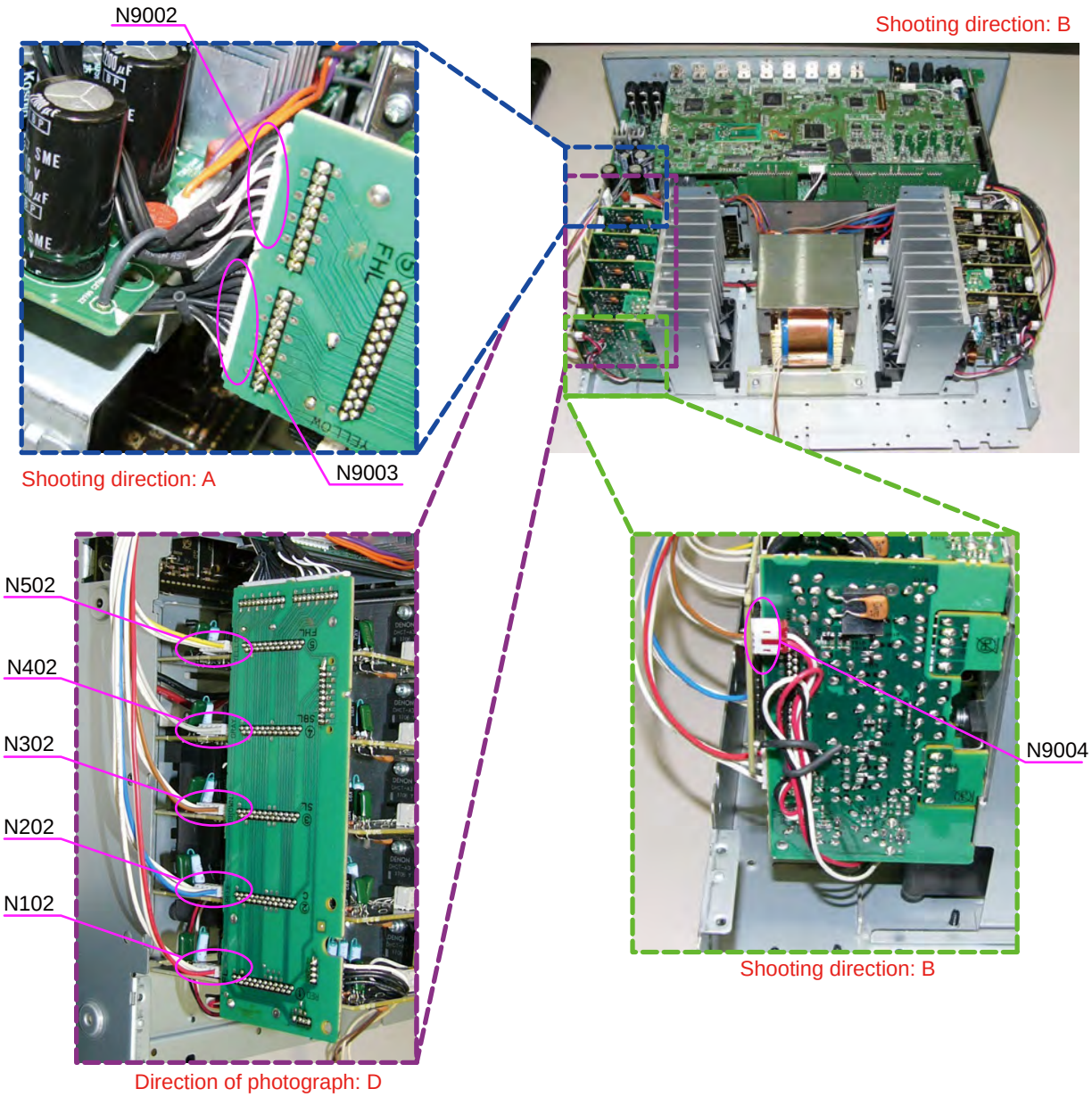
2. RADIATOR(L) SUB ASSY

Proceeding : TOP COVER → RADIATOR(L) SUB ASSY

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



(2) Disconnect the connector wires.

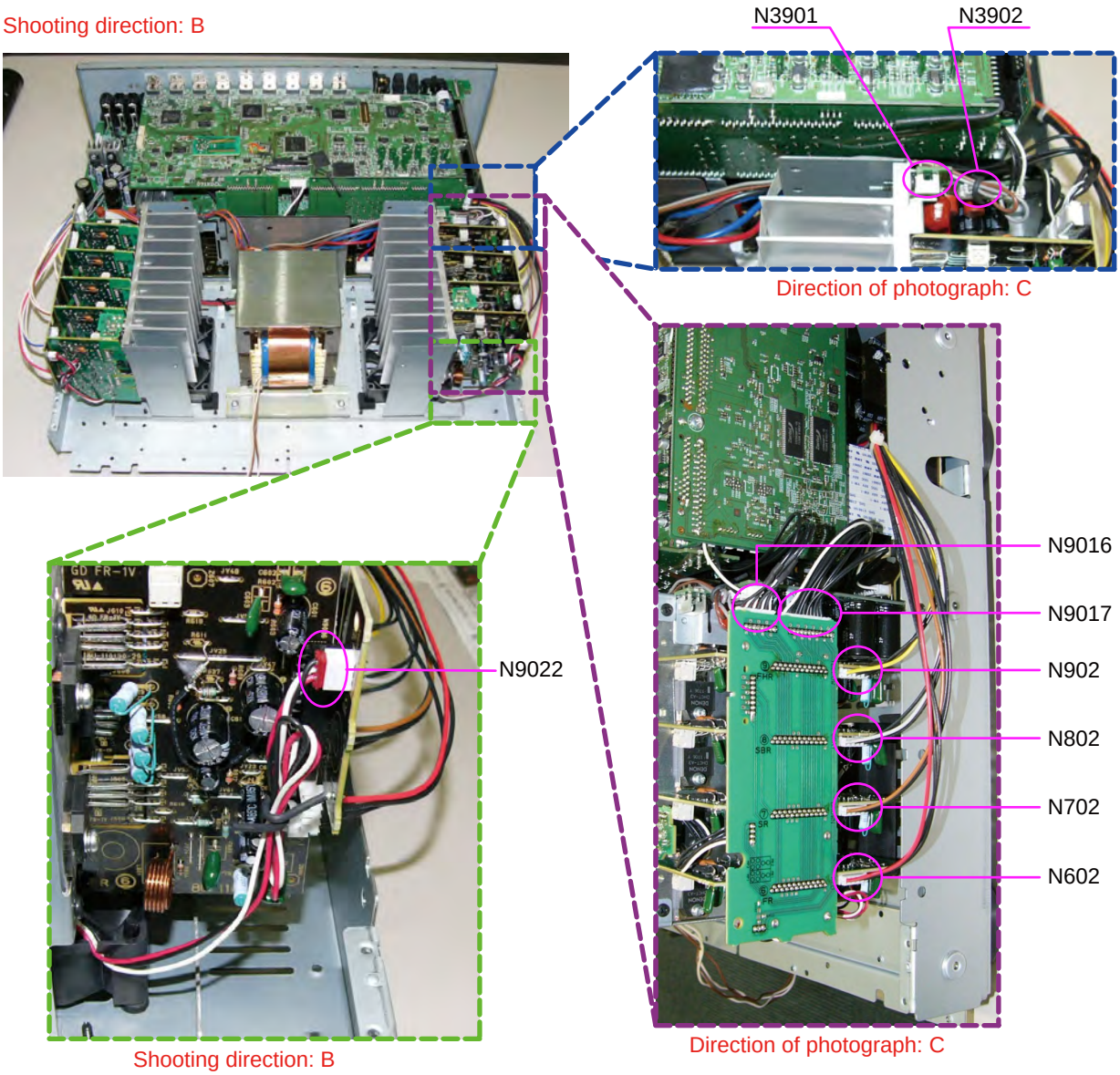


Please refer to "EXPLODED VIEW" for the disassembly method of each PWB included in RADIATOR(L) SUB ASSY.

3. RADIATOR(R) SUB ASSY

Proceeding : TOP COVER → RADIATOR(L) SUB ASSY → RADIATOR(R) SUB ASSY

(1) Disconnect the connector wires.

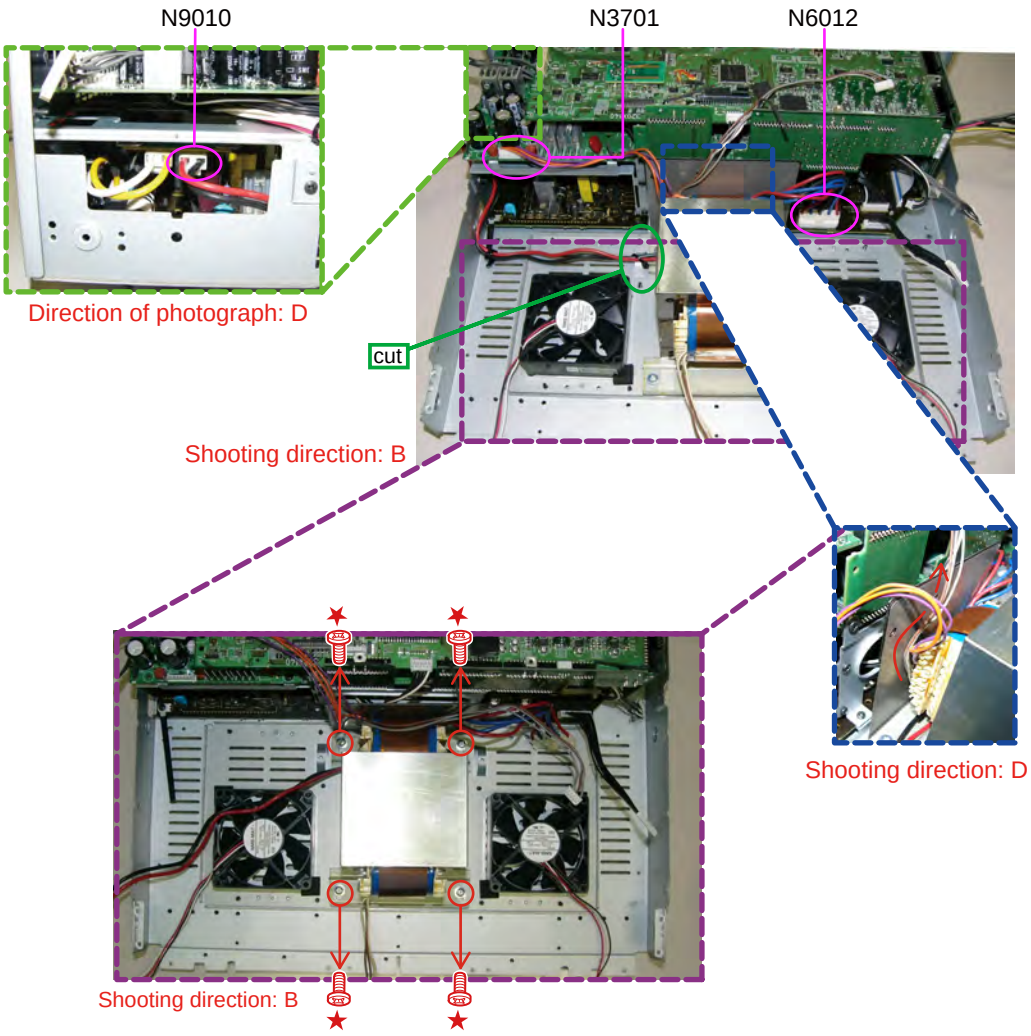


Please refer to "EXPLODED VIEW" for the disassembly method of each PWB included in RADIATOR(R) SUB ASSY.

4. POWER TRANS

Proceeding : TOP COVER → RADIATOR(L) SUB ASSY → RADIATOR(R) SUB ASSY → POWER TRANS

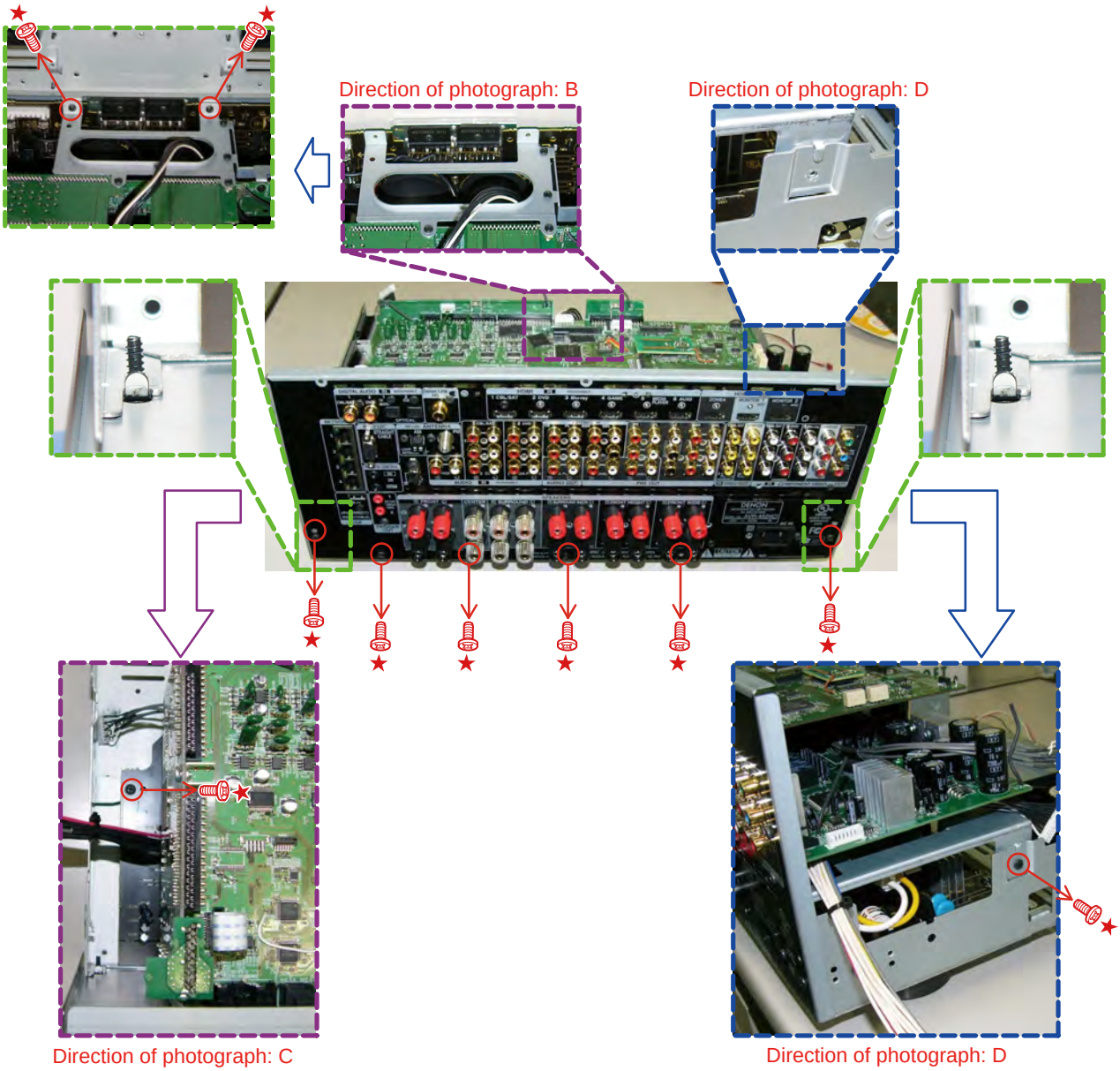
(1) Cut wire clamp band, then disconnect the connector wires and remove the screws.



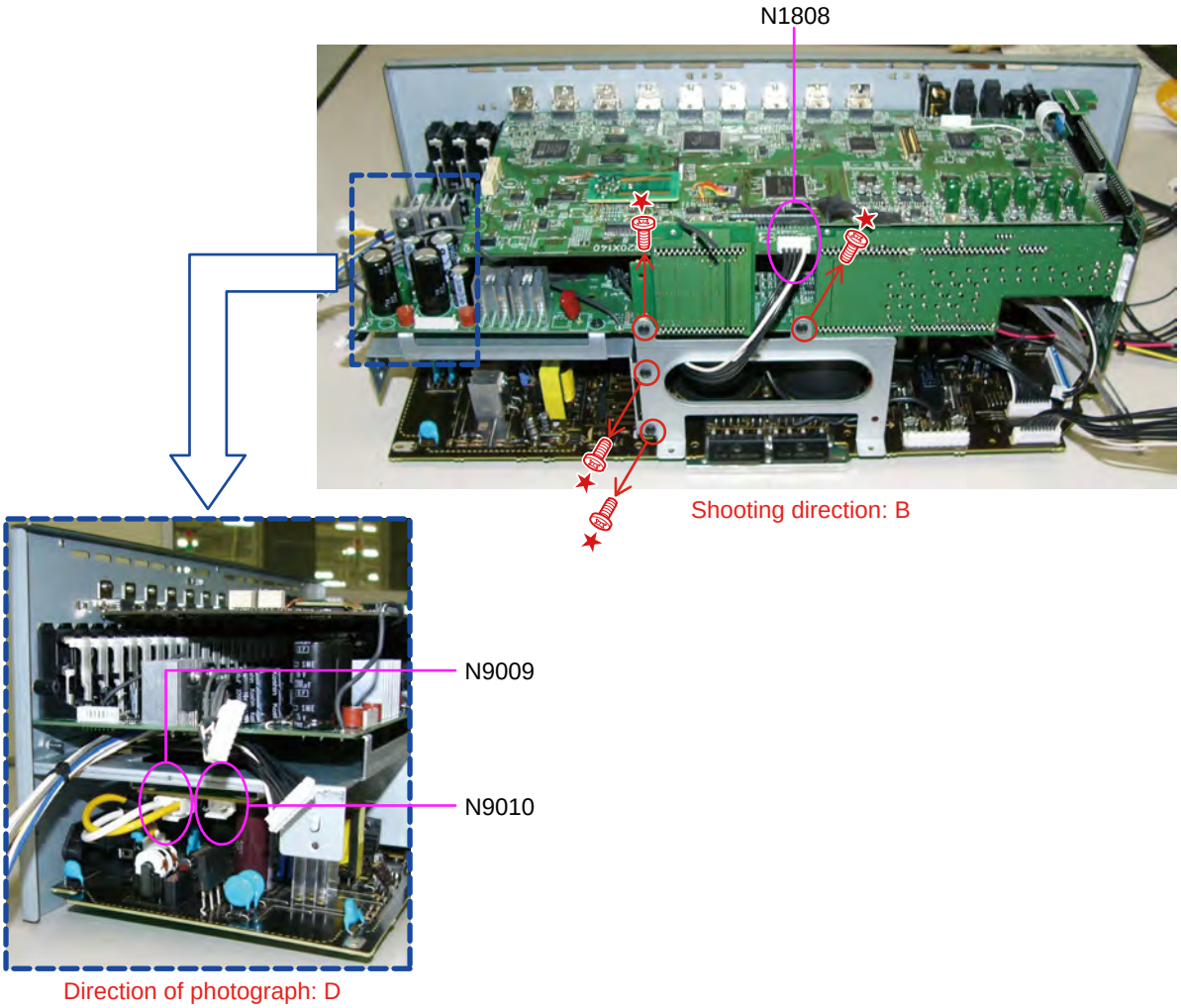
5. BACK PANEL SUB ASSY

Proceeding : TOP COVER → RADIATOR(L) SUB ASSY → RADIATOR(R) SUB ASSY → POWER TRANS → BACK PANEL SUB ASSY

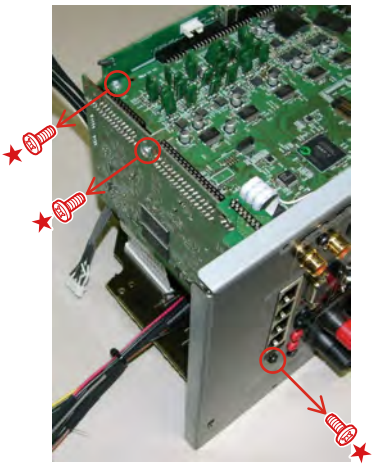
(1) Remove the screws.



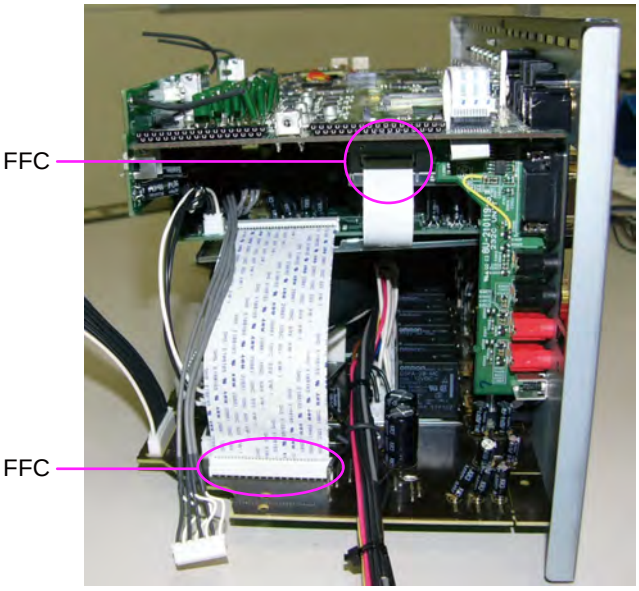
(2) Remove the screws, then disconnect the connector wires.



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



Shooting direction: A



Direction of photograph: C

Please refer to "EXPLODED VIEW" for the disassembly method of each PWB included in BACK PANEL SUB ASSY.

6. REMOVE THE SCREW COVER (41951004800AD:SP)

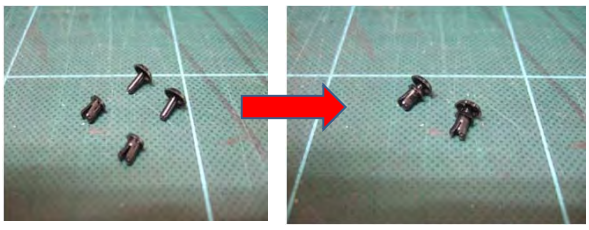
41951004800AD:SP SCREW COVER

00D4790003038:PUSH RIVET

1.Remove : PUSH RIVET(2pcs)

2.Remove : SP SCREW COVER

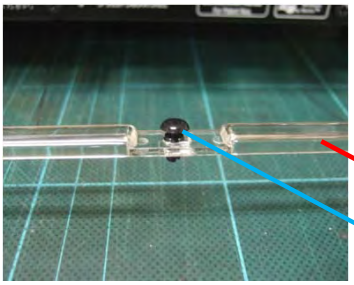
3.Assembly : PUSH RIVET



END

7. PUT THE SCREW COVER (41951004800AD:SP)

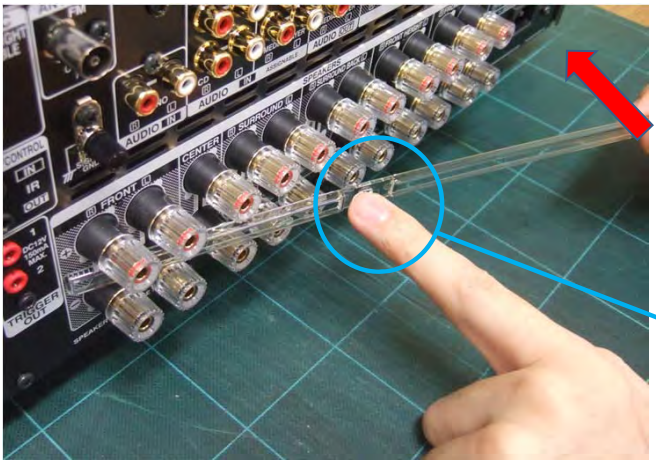
1.Attach : PUSH RIVET



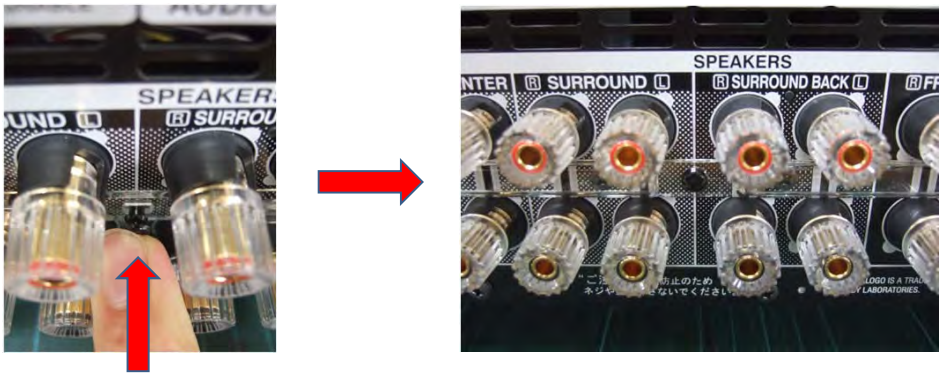
41951004800AD:SP SCREW COVER

00D4790003038:PUSH RIVET

2.Attach : SP SCREW COVER & PUSH RIVET

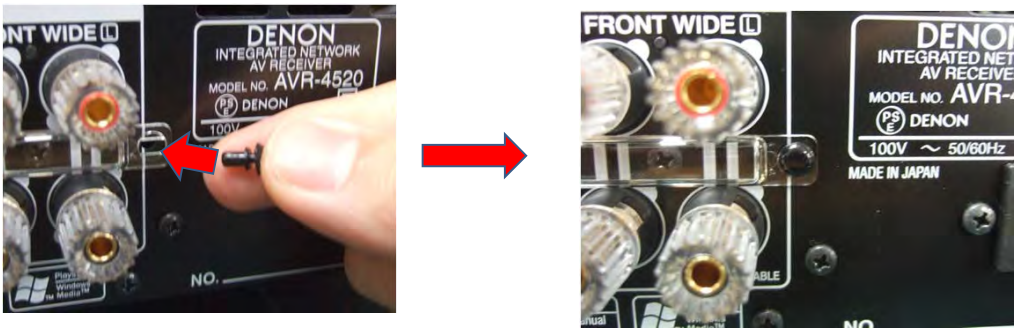


PUSH RIVET is holding a finger.



Attach the PUSH RIVET

3.Attach : PUSH RIVET



Attach the PUSH RIVET

END

SPECIAL MODE

Special mode setting button

※ No.1 - 5, 7-10,13 : 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, 11, 12 : Turn on the power, then press and hold down the A and B buttons for over 3 seconds.

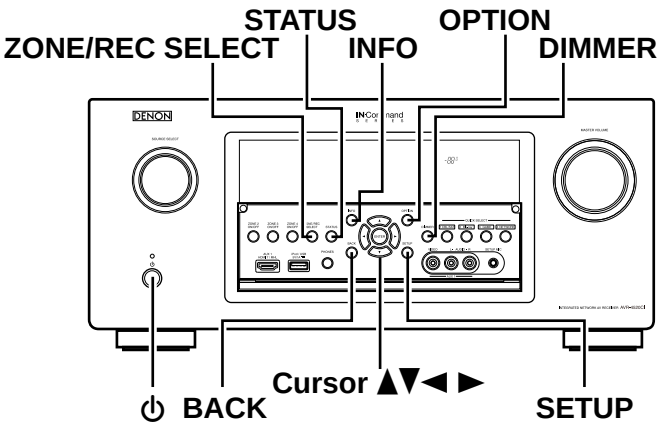
No.	Mode	Button A	Button B	Contents
1	Version display (µcom/DSP Error Display)	SETUP	OPTION	Firmware versions such as Main or DSP are displayed in the FL Display. Errors are displayed when they occur. (Refer to 25 page)
2	User Initialization mode (Installer Setup settings are not initialized.)	INFO	BACK	Backup data initialization is carried out. (Installer Setup settings are not initialized.)
3	Factory Initialization mode (Installer Setup settings are also initialized.)	Cursor ▲	Cursor ▼	Backup data initialization is carried out. (Installer Setup settings are also initialized.)
4	PANEL/REMOTE LOCK Selection mode	STATUS	INFO	Selects to reject operations through panel buttons and the master volume knob on the main unit and operations via the remote control. (Refer to 30 page)
5	Service Related Selection mode	STATUS	ZONE/REC SELECT	Selects the “Diagnostic mode” or “Displaying the protection history mode”. (Refer to 31 page)
6	Remote ID Setup mode	DIMMER	STATUS	When using multiple DENON AV receivers in the same room, make this setting so that only the desired AV receiver operates. (Refer to 65 page)
7	Mode for switching tuner frequency step (E2 model Only)	OPTION	BACK	Change tuner frequency step to FM:50kHz/200kHz
8	Installer Setup mode	Cursor ◄	BACK	Access the Remote Maintenance mode via the internet.Installer Setup is displayed on GUI/Option Menu. ※ Refer to AVR_RemoteMaintenance_.pdf of SDI.
9	Additional Source mode	BACK	Cursor ▼	Adds AUX3-7 as a Source.
10	Prptection pass mode	DIMMER	BACK	Turns the power on with the Protection detection disabled.
11	DM860A Reboot mode	DIMMER	INFO	Restarts DM860.
12	DM860A initial mode	DIMMER	Cursor ►	Enter this mode only after replacing Nand Flash for DM860A and rewriting the firmware.
13	ZONE4 HDMI mode	ENTER	INFO	Assigns and uses ZONE4 HDMI for ZONE2.

△3

NOTE :

When the volume indicator displays " -88 ", the set has entered a special mode for developers. In this case, RS-232C communication cannot be used.

To cancel this special mode, press and hold the "Cursor▼"and "STATUS" buttons for 3 seconds and longer. When the volume indicator returns to the normal display, RS-232C communication can be used.



1. µcom/DSP Version display mode

1.1. Operation specifications

µcom/DSP version display mode:
When the set is started up in this mode, the version information is displayed.

Starting up:

Press the "Power operation (⏻)" button to turn on the power while pressing the "SETUP" and "OPTION" buttons.
Now, press the "OPTION" button to the 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 OSD.

1.2. Display Order

Error information(Refer to **1.3. Error display**) → ① Model destination information/Serial No. →
② Firmware Package Version → ③ Main µ-com/MAIN FBL(1st Boot Loader) Version → ④ Sub µ-com/Sub FBL →
⑤ DSP1/DSP2/DSP3 version → ⑥ Audio PLD → ⑦ GUI SFLASH →
⑧ Ethernet(DM860A) 1st Boot Loader, Hardware ID → ⑨ Ethernet(DM860A) 2nd Boot Loader →
⑩ Ethernet(DM860A) IMAGE → ⑪ Ethernet(DM860A)MAC ADDRESS information →
⑫ HD RADIO SDK/HD RADIO BBP(AVR-4520CIE3 only) →
⑬ MultEQ Pro APP(Displayed when Audyssey Pro is complete) →
⑭ MultEQ Pro ICL(Displayed when Audyssey Pro is complete

① Model destination information/Serial No. :

Upper	A	V	R	4	5	2	0		E	3					
Lower	S	/	N	.			*	*	*	*	*	*	*	*	*	*

② Firmware Package Version :

Upper		F	i	r	m	.		P	a	c	k	a	g	e	
Lower								V	e	r	.	:	*	*	*	*

③ Main µ-com & MAIN FBL version :

Upper		M	a	i	n					:	*	*	.	*	*
Lower		M	a	i	n		F	B	L	:	*	*	.	*	*

④ Sub µ-com & Sub FBL :

Upper		S	u	b				:	*	*	*	*	*	*	*	*
Lower		S	u	b		F	B	L			:	*	*	.	*	*

⑤ DSP1/DSP2 ROM :

Upper		D	S	P	1						:	*	*	.	*	*
Lower		D	S	P	2						:	*	*	.	*	*

DSP3 ROM :

Upper		D	S	P	3						:	*	*	.	*	*
Lower																

⑥ Audio PLD :

Upper		A	u	d	i	o		P	L	D	:	*	*	.	*	*
Lower																

⑦ GUI SFLASH :

Upper		G	U	I				:	*	*	*	*	*	*	*	*
Lower																

⑧ Ethernet(DM860A) 1st Boot Loader, Hardware ID :

Upper		E	t	h	e	r	n	e	t		F	B	L			
Lower	*	*	*	*	*	*	-	A	A							

⑨ Ethernet(DM860A) 2nd Boot Loader :

Upper		E	t	h	e	r	n	e	t		S	B	L			
Lower	*	*	*	*	*	*	*	*	*	*	*	*	*	-	B	B

⑩ Ethernet(DM860A) IMAGE :

Upper		E	t	h	e	r	n	e	t		I	M	G			
Lower	*	*	*	*	*	*	*	*	*	*	*	*	*			

⑪ Ethernet(DM860A)MAC ADDRESS information :

Upper	*	E	t	h	e	r	n	e	t		M	A	C			
Lower		*	*	*	*	*	*	-	*	*	*	*	*	*		

⑫ HD RADIO SDK/HD RADIO BBP (AVR-4520CIE3 onlly) :

Upper	*	H	D	S	D	K	:				*	*	.	*	*	
Lower	*	H	D	B	B	P	:	*	*	*	*	*	.	*	*	*

⑬ MultEQ Pro APP :

Upper	*	M	u	l	t	E	Q		P	r	o		A	P	P	
Lower	*	*	.	*	*	.	*	*	.	*	*	*	*			

⑭ MultEQ Pro ICL :

Upper	*	M	u	l	t	E	Q		P	r	o		I	C	L	
Lower	*	*	.	*	*	.	*	*	.	*	*	*	*			

1.3. Error display

See the following table for each "Error information" display and its explanation (status).
Display order is ①,②,③,④,⑤,⑥,⑦,⑧,⑨.

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. (※1)	FIRM ERROR	• Please check the destination-resistors (R2009/R2010, HDMI B'D). • Please write the firmware of correct destination.
② SUB NG	No response from SUB microcomputer.	SUB ERROR 01	• Please check SUB (U2101) and arroud circuits.
③ V-DECODER NG-1	An error has occurred as a result of the DDR memory communication test while initializing Video Decoder (ADV7850).	V-DECODER ERR 01	• Please check ADV7850 (U1102, HDMI B'D) and arroud circuits.
V-DECODER NG-2	No response from the DDR memory communication test while initializing Video Decoder (ADV7850).	V-DECODER ERR 02	
④ IP SCALER NG	An error has occurred in the i/p Scaler (ADV8003)initial settings. The error is a DDR memory Loopback Test error.	IP SCALER ERR 01	• Please check ADV8003 (U1401, HDMI B'D) and arroud circuits.
	Testing writing data between IP SCALER and DDR resulted in no response.	IP SCALER ERR 02	
⑤ GUI Version NG	Error occurs in GUI version and Main μ-com version.(※2)	GUI VER. ERROR	• Please check the firmware of correct version.
⑥ DIR NG	No response from DIR	DIR ERROR 01	• Please check DIR（U103, U104, HDMI B'D) and around circuits.
⑦ DSP1 NG	When DSP1 code boot is performed, the DSP FLAG0 port does not change to "H" even if DSP reset is executed.	DSP1 ERROR 01	• Please check DSP1（U101, DSP B'D) and around circuits.
	Before DSP1 command is issued, the DSP BUSY port does not change to "L".	DSP1 ERROR 02	
	When DSP1 data read is performed, executing WRITE="L" does not result in ACK="H".	DSP1 ERROR 03	
	When DSP1 data read is performed, executing REQ="L" does not result in ACK="L".	DSP1 ERROR 04	
	When DSP1 data writing is performed, executing WRITE="H" does not result in ACK="H".	DSP1 ERROR 05	
	When DSP1 data writing is performed, executing REQ="L" does not result in ACK="L".	DSP1 ERROR 06	
DSP2 NG	When DSP2 code boot is performed, the DSP FLAG0 port does not change to "H" even if DSP reset is executed.	DSP2 ERROR 01	• Please check DSP2（U201, DSP B'D) and around circuits.
	Before DSP2 command is issued, the DSP BUSY port does not change to "L".	DSP2 ERROR 02	
	When DSP2 data read is performed, executing WRITE="L" does not result in ACK="H".	DSP2 ERROR 03	
	When DSP2 data read is performed, executing REQ="L" does not result in ACK="L".	DSP2 ERROR 04	
	When DSP2 data writing is performed, executing WRITE="H" does not result in ACK="H".	DSP2 ERROR 05	
	When DSP2 data writing is performed, executing REQ="L" does not result in ACK="L".	DSP2 ERROR 06	

Condition	Status	FL Display	Trouble shooting
DSP3 NG	When DSP3 code boot is performed, the DSP FLAG0 port does not change to "H" even if DSP reset is executed.	DSP3 ERROR 01	• Please check DSP3 (U301, DSP B'D) and around circuits.
	Before DSP3 command is issued, the DSP BUSY port does not change to "L".	DSP3 ERROR 02	
	When DSP3 data read is performed, executing WRITE="L" does not result in ACK="H".	DSP3 ERROR 03	
	When DSP3 data read is performed, executing REQ="L" does not result in ACK="L".	DSP3 ERROR 04	
	When DSP3 data writing is performed, executing WRITE="H" does not result in ACK="H".	DSP3 ERROR 05	
	When DSP3 data writing is performed, executing REQ="L" does not result in ACK="L".	DSP3 ERROR 06	
⑧ E2PROM NG	Error occurs in E2PROM checksum.(*** is a block address number.)	E2PROM ERR***	Please check wait 8 seconds after Power ON.
⑨ No error	ALL items of ① to ⑧ are OK.	(No error display, version display only)	

Status	FL Display
※1 The written Firmware and product settings (model name, brand name, destination) are compared. If Firmware that is not designed for this product is written, ▲ is displayed in the first column, as shown on the right.	▲Main :***.***
	▲Sub :********
	▲DSP1 :***.***
	▲DSP2 :***.***
	▲DSP3 :***.***
	▲Audio PLD:***.***
	▲GUI :********
※2 When the version of Serial Flash in GUI does not match the version of Main µcom, the first column displays ▼.	▼GUI :********

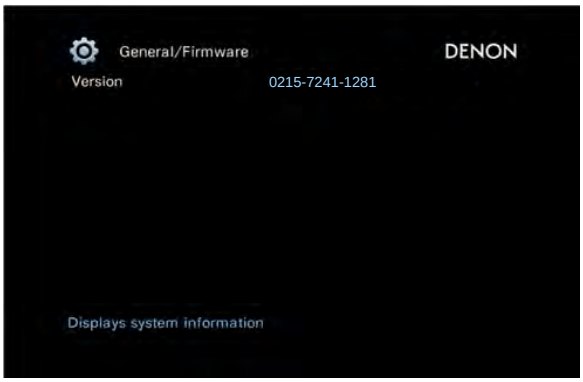
1.4. Version display on the Setup Menu

Use the following procedure to display the firmware version.

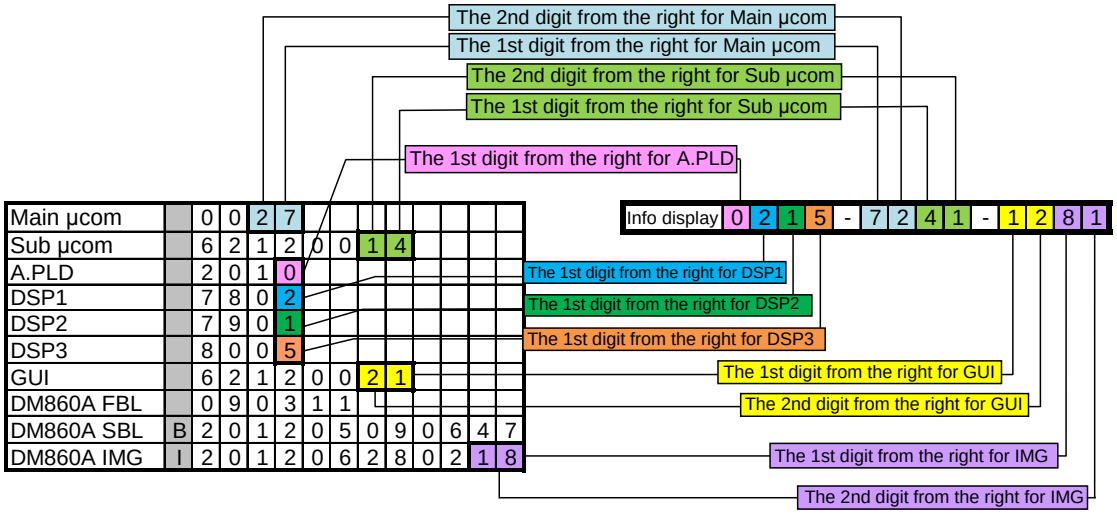
(1) Press the "SETUP" button on the remote control.
(2) Select "General-Information-Firmware".

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

AVR-4520 GUI Image



The displayed 12 digits are derived from each device version as shown below



※ This firmware version No. (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 "STATUS" and "INFO" buttons.
Press the "Cursor ▲/▼" button to select the mode and the "ENTER" button to confirm the selection.

2.3. Mode selection method and how each mode is displayed

Each time you press the "Cursor ▲/▼" button, the mode displayed on the FL DISPLAY changes.
While the desired mode name is displayed on the FL DISPLAY, press the "ENTER" button. The set is restarted and the selected mode takes effect.
The currently set item is marked with " ＊ ".

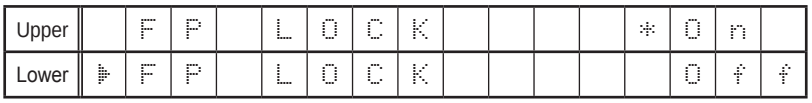
①

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

②

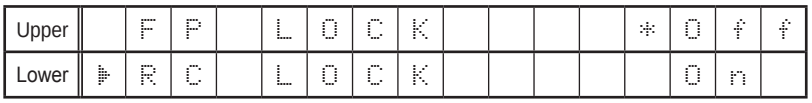
Operations using the main unit panel buttons are rejected.

③



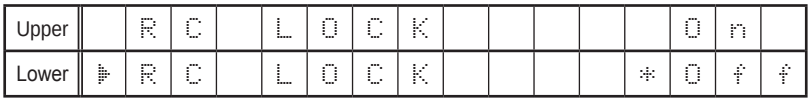
Panel lock mode is cancelled.

④



Operations using the remote control are rejected.

⑤



RC lock mode is cancelled.

3. Service Related Selection mode

3.1. Behavior specifications

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

3.2. Starting up

Press the "Power operation (⏻)" button to turn on power while pressing the "ZONE/REC SELECT" and "STATUS" buttons.
Press the "Cursor ▲/▼" button to select the mode and press the "ENTER" button to restart the set and make the setting take effect.

①

Upper	▶	1	.	S	E	R	V	I	C	E		C	H	E	C	K
Lower		2	.	P	R	O	T	E	C	I	O	N				

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

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

②

Upper		1	.	S	E	R	V	I	C	E		C	H	E	C	K
Lower	▶	2	.	P	R	O	T	E	C	I	O	N				

The protection history can be checked.

③

Upper		2	.	P	R	O	T	E	C	I	O	N				
Lower	▶	3	.	R	S	2	3	2	C		R	E	S	E	T	

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

④

Upper		3	.	R	S	2	3	2	C		R	E	S	E	T	
Lower	▶	4	.	O	P		I	N	F	O						

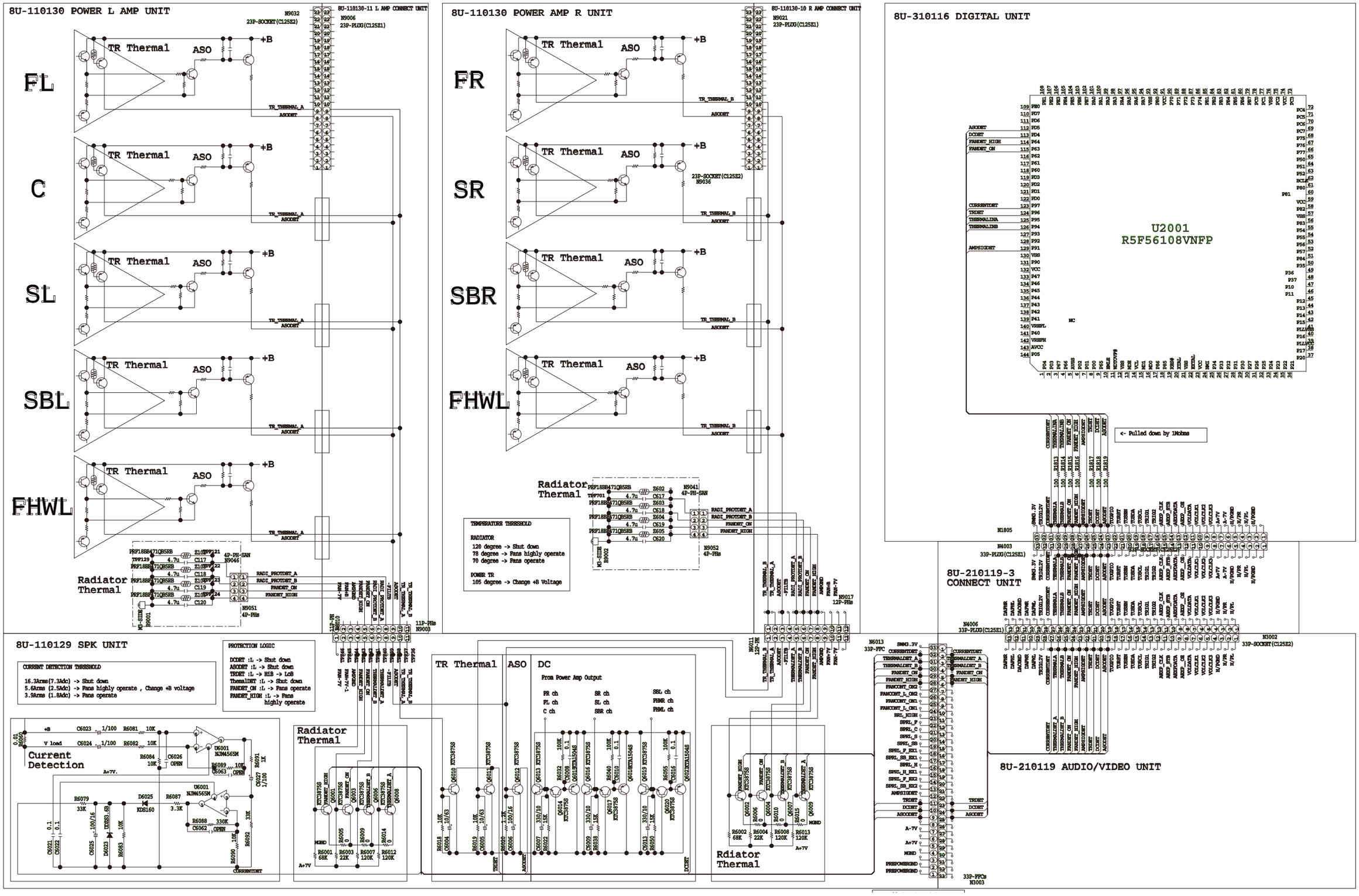
The operation information about the set can be checked.

3.3. Canceling Service Related Selection mode

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

Personal notes:

AVR4520 ASO/DC/THERMAL PROTECTION DIAGRAM



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

3.4.1. 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.

3.4.2. Starting diagnostic mode

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

3.4.3. Canceling diagnostic mode

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

3.4.4. Operation

Use the remote control (RC-1165) that is supplied with the AVR4520 model. Press buttons on the remote control in the order indicated in the “Details of how to operate remote control”[a)] column in the following table to establish the confirmation path.
You will find using another remote control unit with the macro functions very useful. To use the macro functions, program a macro function to output a remote control code in accordance with the steps in the table below.

NOTE
Turn on ZONE2 and ZONE3.
Turn on ZONE4 only when ZONE4 HDMI Pass is checked.

3.4.5. Video system confirmation items

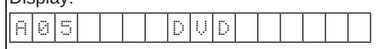
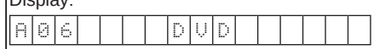
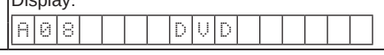
fig.XX : Refer to the block diagram of the fig.XXth.

	Confirmation item	Setting and display	Details of how to operate remote controller *a)	Output sequence of remote control codes ※ It is useful to form a macro program. *b)	Contents of confirmation	Remarks
1	Analog Video (signal) Path **fig.1**	Video Convert (IP Scaler) : OFF , All Sources MAIN ZONE, ZONE2 : ON Display: V 0 1 D V D	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [1/./] 4.Press [DVD]	①KEY 1/CODE1 (Main Zone) Initialization & Video Convert All OFF ②DVD (Main Zone)	·Input : CVBS / Output : CVBS ·Input : CVBS / Output : CVBS RECOUT (MEDIA PLAYER) ·Input : CVBS / Output : CVBS ZONE2 ·Input : Component / Output : Component ·Input : Component / Output : Component ZONE2 ·input ETHERNET (CVBS) / Output :CVBS (※ As the input source, you can switch from DVD to other ones.)	
2	HDMI (signal) Path (Main Zone) **fig.2**	Video Convert(IP Scaler) : OFF, All Sources Display: V 0 1 D V D	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [1/./] 4.Press [DVD]	①KEY1/CODE1 (Main Zone) Initialization & Video Convert All OFF ②DVD (Main Zone)	·Input : HDMI / Output : HDMI (※ As the input source, you can switch from DVD to other ones.)	MHL Path confirm to switch to "AUX1" input source.
3	Analog or HDMI to HDMI (signal) Path **fig.3**	Video Convert(IP Scaler) : ON, All Sources IP Scaler : Analog & HDMI , All Sources Resolution : "AUTO", All Sources Display: V 0 2 D V D	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [2/ABC] 4.Press [ZONE OFF]	①KEY 2/ABC (Main Zone) Initialization & Video Convert All ON & IP Scaler "Analog & HDMI" ②DVD (Main Zone)	·Input CVBS / Through : IP Scaler / Output : HDMI ·Input Component / Through : IP Scaler / Output : HDMI ·Input HDMI / Through : IP Scaler / Output : HDMI ·Input ETHERNET (S) / Through : IP Scaler / Output : HDMI (※ As the input source, you can switch from DVD to other ones.)	Confirm the input pass one by one. Because it becomes only the input of the highest input becomes Convert/IP Scaler (signal) Path if it inputs it at the same time. (HDMI input > Component input > CVBS input)
4	GUI FUNCTION **fig.4**	Video Convert(IP Scaler) : ON, All Sources IP Scaler : Analog & HDMI , All Sources Resolution : "AUTO", All Sources Menu : ON Display: V 0 2 D V D	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [2/ABC] 4.Press [DVD] 5.Press [SETUP]	①KEY 2/ABC (Main Zone) Initialization &VideoConvert All ON & IP Scaler"Analog&HDMI" ②DVD (Main Zone) ③GUI MENU (Main Zone)	·GUI Display / Output : HDMI (※ As the input source, you can switch from DVD to other ones.)	.
5	CEC FUNCTION (Control Monitor : HDMI Monitor1) **fig.5**	HDMI Control : ON Control Monitor : Monitor1 (When checking the HDMI Monitor Out1) Display: V 0 3 D V D	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [3/DEF] 4.Press [DVD]	①KEY 3/DEF (Main Zone) Initialization & CEC Control ON & Select Control Monitor 1 ②DVD (Main Zone)	·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. (※ As the input source, you can switch from DVD to other ones.)	ARC Path confirm to switch to "TV AUDIO" input source
6	CEC FUNCTION (Control Monitor : HDMI Monitor 2) **fig.6**	HDMI Control : ON Control Monitor : Monitor 2 (When checking the HDMI Monitor Out 2) Display: V 0 4 D V D	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [4/GHI] 4.Press [DVD]	①KEY 4/GHI (Main Zone) Initialization & CEC Control ON & Select Control Monitor 2 ②DVD (Main Zone)	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. (※ As the input source, you can switch from DVD to other ones.)	

	Confirmation item	Setting and display	Details of how to operate remote controller *a)	Output sequence of remote control codes ※ It is useful to form a macro program. *b)	Contents of confirmation	Remarks
7	HDMI Audio (signal) Path (Audio : AVR) **fig.7**	Audio : AVR(When checking the audio output from AVR) Display: 	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [5/JKL]	①KEY 5/JKL (Main Zone) Initialization & Select Audio AVR	·Input : HDMI (Signal of PCM2ch, DolbyDigital or DTS) / Output : Speakers ·Input : HDMI (Signal of HD Audio) / Output : Speakers (※ As the input source, you can switch from DVD to other ones.)	
			4.Press [DVD]	②DVD (Main Zone)		
8	HDMI Audio (signal) Path (Audio : TV) **fig.8**	Audio : TV(When checking the audio output from TV) Display: 	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [6/MNO]	①KEY 6/MNO (Main Zone) Initialization & Audio Select TV	·Input : HDMI (Signal of PCM2ch) / Output : HDMI (Audio output from connected TV) (※ As the input source, you can switch from DVD to other ones.)	
			4.Press [DVD]	②DVD (Main Zone)		
9	HDMI (signal) Path (ZONE4) **fig.9**	Video Convert(IP Scaler) : OFF, All Sources MAIN ZONE, ZONE4 : ON Display: 	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [1/./]	①KEY1/CODE1 (Main Zone) Initialization & Video Convert All OFF	·Input : HDMI (ZONE4 Function) / Output : HDMI (ZONE4) (※ As the input source, you can switch from DVD to other ones.)	ZONE4 CEC is confirmed you set below. Setup Menu → Video → HDMI Setup → Control Monitor → ZONE4
			4.Press [DVD]	②DVD (Main Zone)		

3.4.6. Audio system confirmation items

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

	Confirmation item	Setting and display	Details of how to operate remote controller	Output sequence of remote control codes ※ It is useful to form a macro program.	Contents of confirmation	Remarks
1	Analog (signal) Path **fig.10**	Input Mode : Fixed ANALOG SURROUND mode : DIRECT Amp assign : 9.1ch (SB/FH/FW) Display: 	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [7/PQRS]	①KEY 7/PQRS (Main Zone) Initialization & Amp assign 9.1ch (SB/FH/FW) & Input Mode Fixed ANALOG & SURROUND mode DIRECT	·Input : Analog / Output : Speakers (Front L/R) ·Input : Analog / Output : Pre OUT(Front L/R) (※ As the input source, you can switch from DVD to other ones.)	
			4.Press [DVD]	②DVD (Main Zone)		
2	DIGITAL (signal) Path (MAIN) **fig.11**	Input Mode : Fixed DIGITAL Amp assign : 9.1ch (SB/FH/FW) Display: 	1.Press [AVR] 2.Press [ZONE SELECT], Select "ZONE3" 3.Press [8/TUV]	①KEY 8/TUV (Main Zone) Initialization & Amp assign 9.1ch (SB/FH/FW) & Input Mode Fixed DIGITAL	·Input : Digital / Output : Speakers (Front L/R) ·Input : Digital / Output : Pre OUT(Front L/R) (※ As the input source, you can switch from DVD to other ones.)	
			4.Press [DVD]	②DVD (Main Zone)		
3	DIGITAL (signal) Path (ZONE2) **fig.12**	Input Mode : Fixed DIGITAL Amp assign : 7.1ch+ZONE2 Display: 	1.Press [AVR] 2.Press [ZONE SELECT], Select "ZONE3" 3.Press [9/XYZ]	①KEY 9/XYZ (Main Zone) Initialization & Amp assign 7.1ch+ZONE2 & Input Mode Fixed DIGITAL	·Input : Network or iPod/USB / Output : Speakers (Front wide L/R) ·Input : Network or iPod/USB / Output : Pre OUT(ZONE2 L/R) (※ As the input source, comfirm the operation in Network or iPod/USB.)	
			4.Press [NET/USB]	②NET/USB (Main Zone)		
4	HDMI (signal) Path **fig.13**	Input Mode : Fixed HDMI Amp assign : 9.1ch (SB/FH/FW) Display: 	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [MOVIE]	①MOVIE Initialization &Amp assign 9.1ch (SB/FH/FW) & Input Mode Fixed HDMI	·Input : HDMI / Output : Speakers (Front L/R) ·Input : HDMI / Output : Pre OUT(Front L/R) (※ As the input source, you can switch from DVD to other ones.)	
			4.Press [DVD]	②DVD (Main Zone)		
5	A/D (signal) Path (Main Zone) **fig.14**	Amp assign : 9.1ch (SB/FH/FW) SURROUND mode : Multi ch STEREO Vol -20dB Speaker Config : SSSSSSY (Front/Center/Surround/SourroundBack(2sp)/FrontHeight/FrontWide : Small, SW : Yes(2sp)) Display: 	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [MUSIC]	①MUSIC Initialization &Amp assign 9.1ch (SB/FH/FW) & SURROUND mode : Multi ch STEREO & Volume -20dB	·Input : Analog / Output : Speakers (Front L/R) ·Input : Analog / Output : Pre OUT(Front L/R), SW(20Hz) (※ As the input source, you can switch from DVD to other ones.)	
			4.Press [DVD]	②DVD (Main Zone)		
6	Amp Assign (signal) Path (Amp Assign : ZONE2) **fig.15**	Amp assign : 7.1ch+ZONE2 ZONE2 Function : Source Zone2 Vol -20dB Display: 	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [GAME]	①GAME Initialization & Amp assign 7.1ch+ZONE2 & SURROUND mode : Multi ch STEREO & ZONE2 Volume -20dB	·Input : Analog / Output : Speakers (Front wide L/R) ·Input : Analog / Output : Pre OUT (ZONE2 L/R) (※ As the input source, you can switch from DVD to other ones.)	
			4.Press [DVD]	②DVD (Main Zone)		
7	Amp Assign (signal) Path (Amp Assign : ZONE3) **fig.16**	Amp assign : 5.1ch+ZONE2/3 SURROUND mode : Multi ch STEREO Zone3 Vol -20dB Display: 	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [DIRECT]	①DIRECT Initialization & Amp assign 5.1ch+ZONE2/3 & SURROUND mode : Multi ch STEREO & ZONE3 Volume -20dB	·Input : Analog / Output : Speakers (Front wide L/R) ·Input : Analog / Output : Pre OUT (ZONE3 L/R) (※ As the input source, you can switch from DVD to other ones.)	
			4.Press [DVD]	②DVD (Main Zone)		

	Confirmation item	Setting and display	Details of how to operate remote controller	Output sequence of remote control codes ※ It is useful to form a macro program.	Contents of confirmation	Remarks
8	Amp Assign (signal) Path (Amp Assign : ZONE2/ZONE3-MONO) **fig.17**	Amp assign : 7.1ch+ZONE2/3-MONO SURROUND mode : Multi ch STEREO ZONE2 Vol -20dB ZONE3 Vol -20dB Display: A09 DVD	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [◀◀]	①◀◀ Initialization & Amp assign 7.1ch+ZONE2/3-MONO & SURROUND mode : Multi ch STEREO & ZONE2 Volume -20dB & ZONE3 Volume -20dB	·Input : Analog / Output : Speakers (Front wide L/R) ·Input : Analog / Output : Pre OUT (ZONE2 L/R) ·Input : Analog / Output : Pre OUT (ZONE3 L/R) (※ As the input source, you can switch from DVD to other ones.)	
			4.Press [DVD]	②DVD (Main Zone)		
9	Amp Assign (signal) Path (Amp Assign : BiAMP) **fig.18**	Amp assign : 7.1ch(Bi-Amp) SURROUND mode : Multi ch STEREO Vol -20dB Display: A11 DVD	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [I◀◀]	①I◀◀ Initialization & Amp assign 7.1ch(Bi-Amp) & SURROUND mode : Multi ch STEREO & Volume -20dB	·Input : Analog / Output : Speakers (Front wide L/R) (※ As the input source, you can switch from DVD to other ones.)	
			4.Press [DVD]	②DVD (Main Zone)		
10	Front Height (signal) Path **fig.19**	Amp assign : 9.1ch (SB/FH/FW) SURROUND mode : Multi ch STEREO Vol -20dB Surround Parameter-Speaker : S.Back/F.Height Display: A14 DVD	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [▶]	①▶ (Main Zone) Initialization & Amp assign 9.1ch (SB/FH/FW) & SURROUND mode:Multi ch STEREO & Volume -20dB & Surround Parameter-Speaker : S.Back/F.Height	·Input : Analog / Output : Speakers (Front Height L/R) (※ As the input source, you can switch from DVD to other ones.)	
			4.Press [DVD]	②DVD (Main Zone)		
11	Front Wide (signal) Path **fig.20**	Amp assign : 9.1ch (SB/FH/FW) SURROUND mode : Multi ch STEREO Vol -20dB Surround Parameter-Speaker : S.Back/F.Height Display: A15 DVD	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [SLEEP]	①SLEEP MODE Initialization &Amp assign 9.1ch (SB/FH/FW) & SURROUND mode:Multi ch STEREO & Volume -20dB Surround Parameter-Speaker : S.Back/F.Height	·Input : Analog / Output : Speakers (Front wide L/R) (※ As the input source, you can switch from DVD to other ones.)	
			4.Press [DVD]	②DVD (Main Zone)		
12	External in Path **fig.21**	Amp assign : 9.1ch (SB/FH/FW) Input mode : Fixed EXTERNAL IN Vol -20dB Speaker Config : Set as all Speakers=Small/SW=2ch Display: A19 DVD	1.Press [AVR] 2.Press [ZONE SELECT], Select "MAIN" 3.Press [■]	① [■] Initialization &Amp assign 9.1ch (SB/FH/FW) & Input mode : Fixed EXTERNAL IN	·Input: External In / Output: Pre OUT (All CH) (※ As the input source, you can switch from DVD to other ones.)	
			4.Press [DVD]	②DVD (Main Zone)		

BLOCK DIAGRAM

fig.1

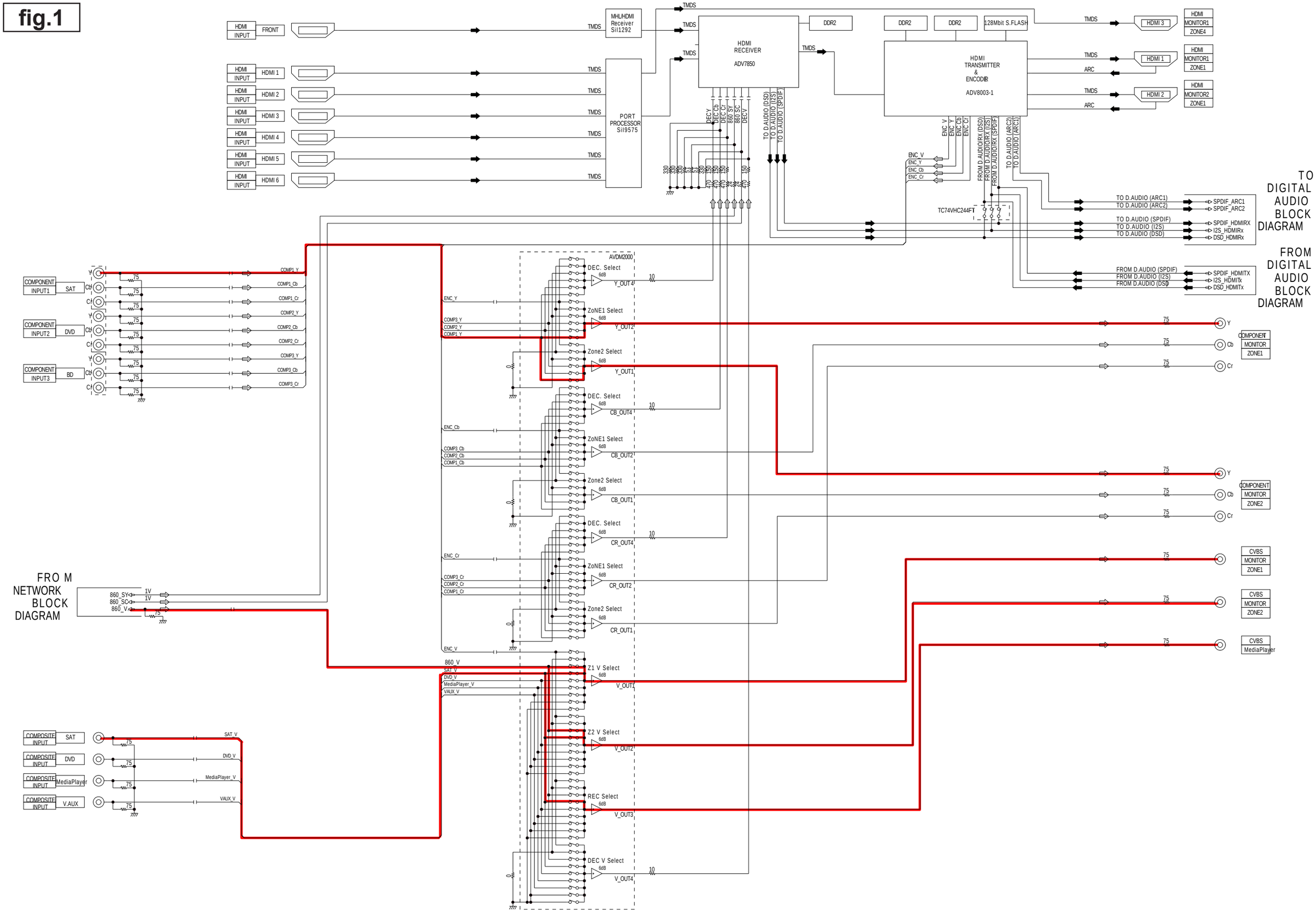
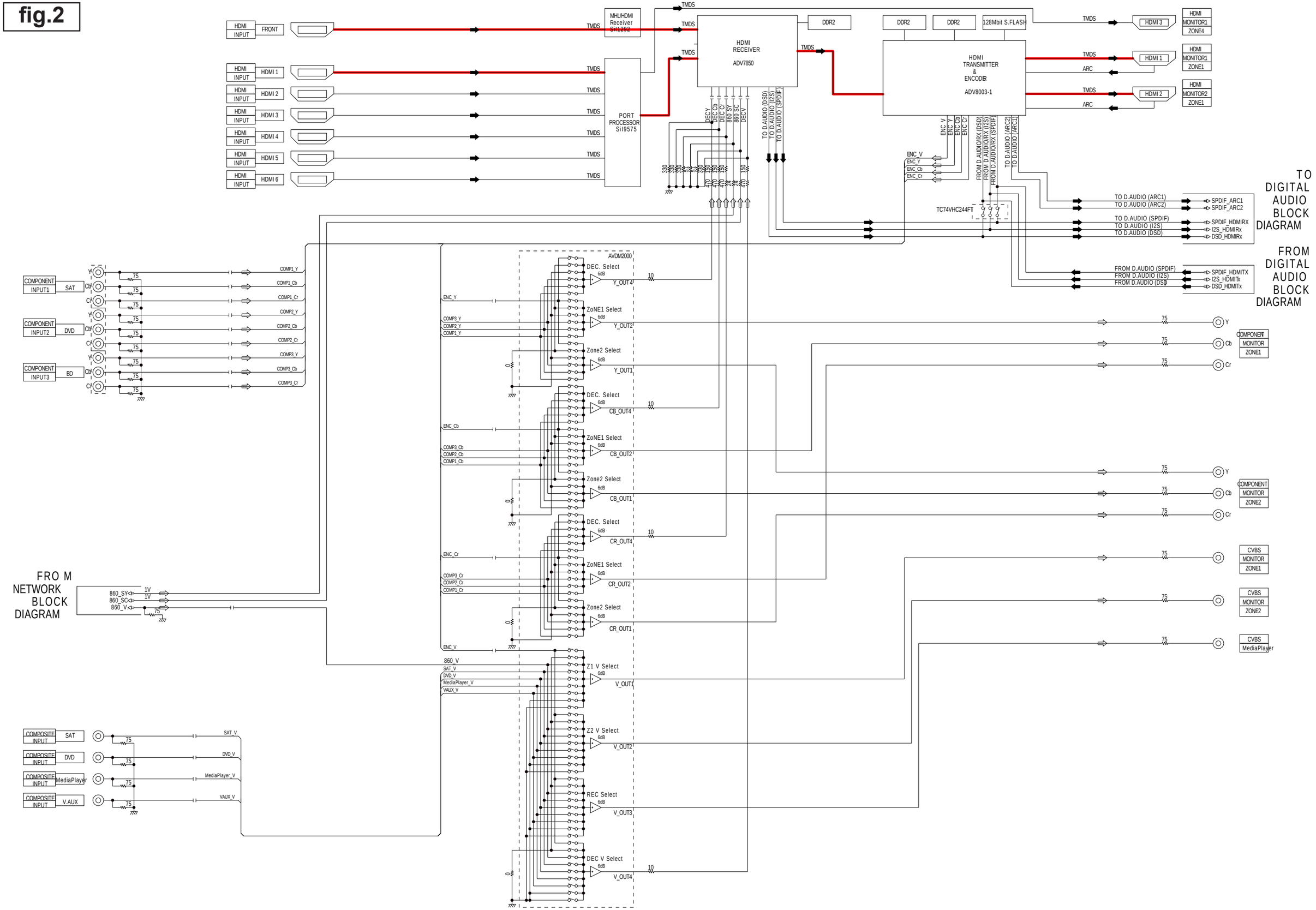


fig.2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HDMI 2
HDMI 3
HDMI 4
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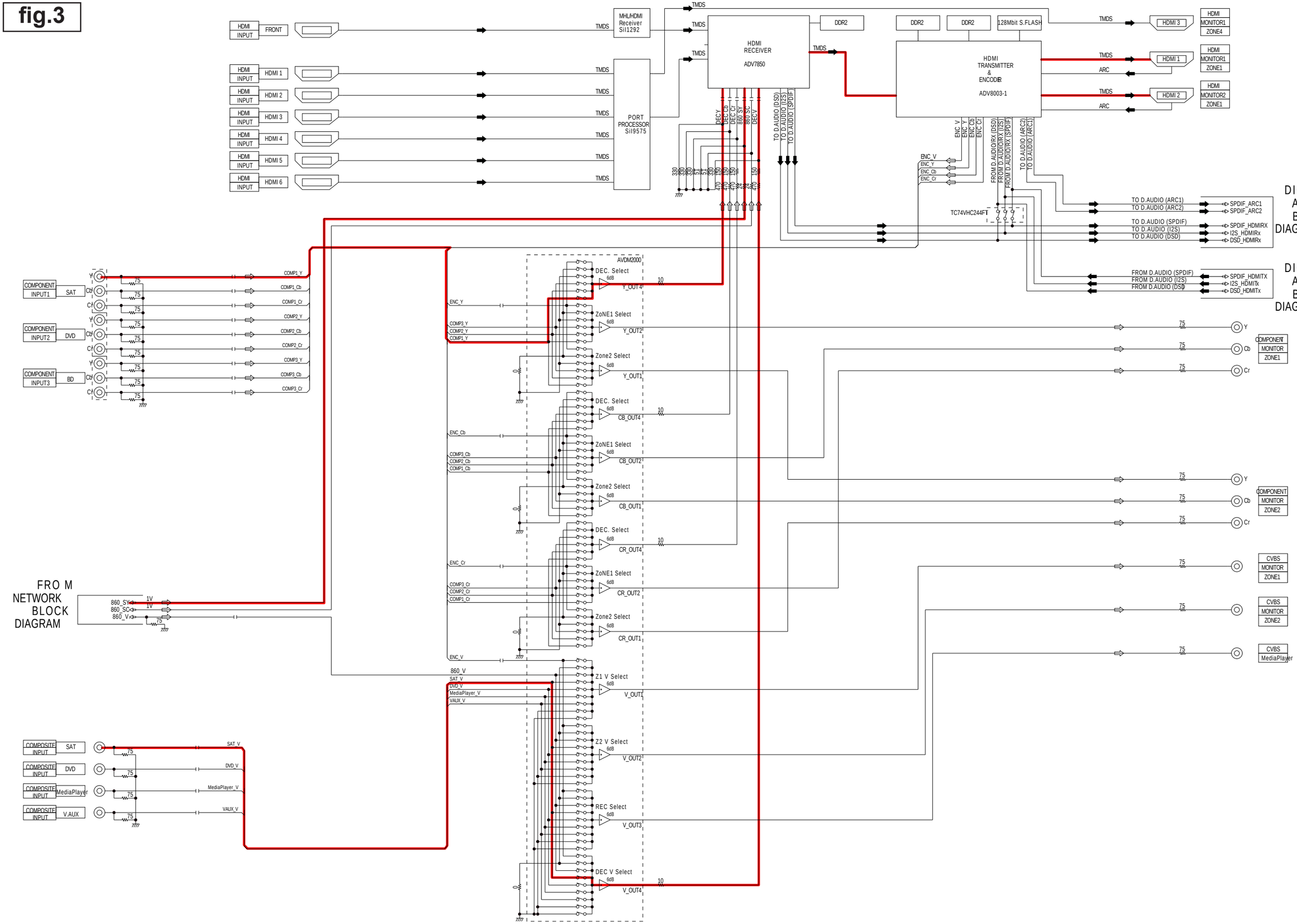
HDMI 6
TMDS
MHL/HDMI Receiver SiI1292
PORT PROCESSOR SII9575
HDMI RECEIVER ADV7850
DDR2
128Mbit S.FLASH
HDMI TRANSMITTER & ENCODER ADV8003-1
HDMI MONITOR1 ZONE4
HDMI MONITOR1 ZONE1
HDMI MONITOR2 ZONE1
ARC
DEC Y
DEC Cb
DEC Cr
860 SY
860 SC
DEC V
TO D.AUDIO (DSD)
TO D.AUDIO (I2S)
TO D.AUDIO (SPDIF)
ENC_V
ENC_Y
ENC_Cb
ENC_Cr
FROM D.AUDIO/RX (DSD)
FROM D.AUDIO/RX (I2S)
FROM D.AUDIO/RX (SPDIF)
TO D.AUDIO (ARC2)
TO D.AUDIO (ARC1)
TC74VHC244FT
TO D.AUDIO (ARC1)
TO D.AUDIO (ARC2)
SPDIF_ARC1
SPDIF_ARC2
TO D.AUDIO (SPDIF)
TO D.AUDIO (I2S)
TO D.AUDIO (DSD)
SPDIF_HDMIRX
I2S_HDMIRx
DSD_HDMIRx
FROM D.AUDIO (SPDIF)
FROM D.AUDIO (I2S)
FROM D.AUDIO (DSD)
SPDIF_HDMITX
I2S_HDMITx
DSD_HDMITx
TO DIGITAL AUDIO BLOCK DIAGRAM
FROM DIGITAL AUDIO BLOCK DIAGRAM
COMPONENT INPUT1
SAT
COMPONENT INPUT2
DVD
COMPONENT INPUT3
BD
COMP1_Y
COMP1_Cb
COMP1_Cr
COMP2_Y
COMP2_Cb
COMP2_Cr
COMP3_Y
COMP3_Cb
COMP3_Cr
AVDM2000
DEC. Select
ZoNE1 Select
Zone2 Select
Y_OUT4
Y_OUT2
Y_OUT1
CB_OUT4
CB_OUT2
CB_OUT1
CR_OUT4
CR_OUT2
CR_OUT1
Z1 V Select
Z2 V Select
REC Select
DEC V Select
V_OUT1
V_OUT2
V_OUT3
V_OUT4
COMPONENT MONITOR ZONE1
COMPONENT MONITOR ZONE2
CVBS MONITOR ZONE1
CVBS MONITOR ZONE2
CVBS MediaPlayer
FRO M NETWORK BLOCK DIAGRAM
860_SY
860_SC
860_V
COMPOSITE INPUT
SAT
DVD
MediaPlayer
V.AUX
SAT_V
DVD_V
MediaPlayer_V
VAUX_V

fig.3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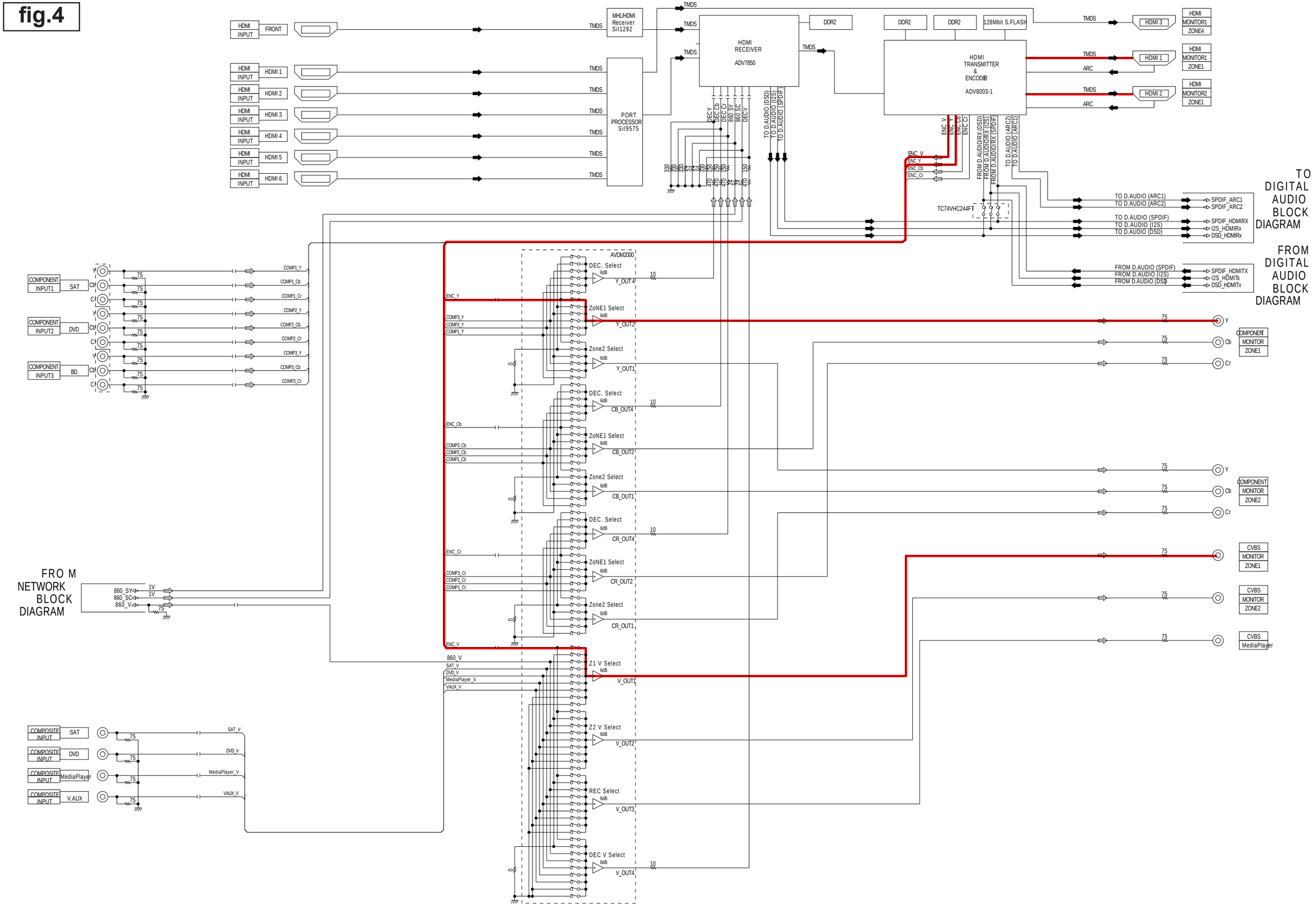
HDMI 3
HDMI 4
HDMI 5
HDMI 6
TMDS
MHL/HDMI Receiver SII1292
PORT PROCESSOR SII9575
HDMI RECEIVER ADV7850
DDR2
128Mbit S.FLASH
HDMI TRANSMITTER & ENCODER ADV8003-1
HDMI 3
HDMI 1
HDMI 2
HDMI MONITOR1 ZONE4
HDMI MONITOR1 ZONE1
HDMI MONITOR2 ZONE1
ARC
DECV
DEC Cb
DEC Cr
860 SY
860 SC
DECV
TO D.AUDIO (DSD)
TO D.AUDIO (I2S)
TO D.AUDIO (SPDIF)
ENC_V
ENC_Y
ENC_Cb
ENC_Cr
FROM D.AUDIO/RX (DSD)
FROM D.AUDIO/RX (I2S)
FROM D.AUDIO/RX (SPDIF)
TO D.AUDIO (ARC2)
TO D.AUDIO (ARC1)
TC74VHC244FT
TO D.AUDIO (ARC1)
TO D.AUDIO (ARC2)
SPDIF_ARC1
SPDIF_ARC2
TO D.AUDIO (SPDIF)
TO D.AUDIO (I2S)
TO D.AUDIO (DSD)
SPDIF_HDMIRX
I2S_HDMIRx
DSD_HDMIRx
FROM D.AUDIO (SPDIF)
FROM D.AUDIO (I2S)
FROM D.AUDIO (DSD)
SPDIF_HDMITX
I2S_HDMITx
DSD_HDMITx
TO DIGITAL AUDIO BLOCK DIAGRAM
FROM DIGITAL AUDIO BLOCK DIAGRAM
COMPONENT INPUT1
SAT
COMPONENT INPUT2
DVD
COMPONENT INPUT3
BD
COMP1_Y
COMP1_Cb
COMP1_Cr
COMP2_Y
COMP2_Cb
COMP2_Cr
COMP3_Y
COMP3_Cb
COMP3_Cr
75
AVDM2000
DEC. Select
ZoNE1 Select
Zone2 Select
6dB
10
Y_OUT4
Y_OUT2
Y_OUT1
CB_OUT4
CB_OUT2
CB_OUT1
CR_OUT4
CR_OUT2
CR_OUT1
Z1 V Select
Z2 V Select
REC Select
DEC V Select
V_OUT1
V_OUT2
V_OUT3
V_OUT4
ENC_Y
ENC_Cb
ENC_Cr
ENC_V
COMP3_Y
COMP2_Y
COMP1_Y
COMP3_Cb
COMP2_Cb
COMP1_Cb
COMP3_Cr
COMP2_Cr
COMP1_Cr
860_V
SAT_V
DVD_V
MediaPlayer_V
VAUX_V
Y
Cb
Cr
COMPONENT MONITOR ZONE1
COMPONENT MONITOR ZONE2
CVBS MONITOR ZONE1
CVBS MONITOR ZONE2
CVBS MediaPlayer
FRO M NETWORK BLOCK DIAGRAM
860_SY
860_SC
860_V
1V
COMPOSITE INPUT
SAT
DVD
MediaPlayer
V.AUX

fig.4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HDMI 3
HDMI 4
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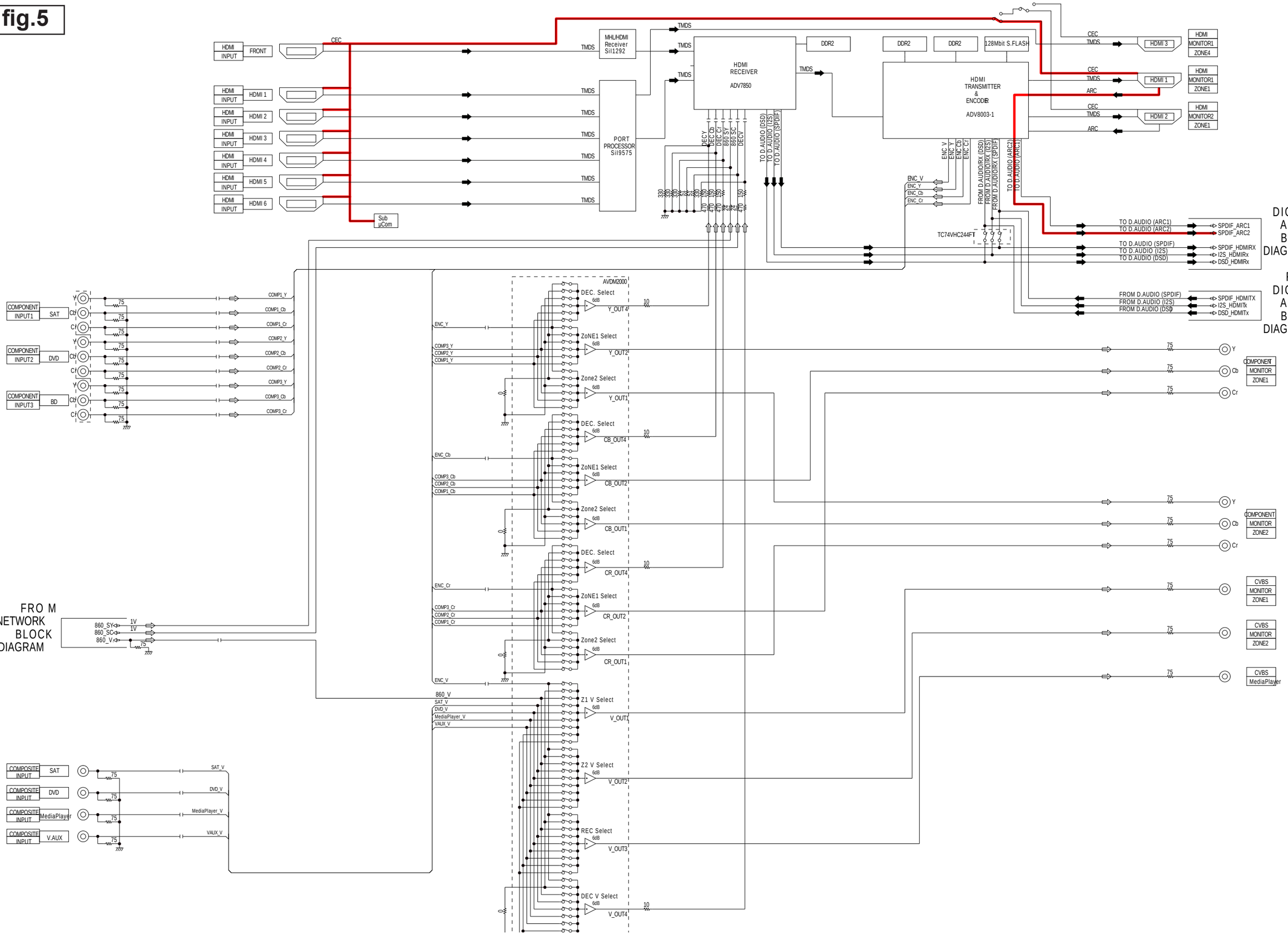
MHL/HDMI Receiver SiI1292
PORT PROCESSOR SiI9575
HDMI RECEIVER ADV7850
DDR2
DDR2
DDR2
128Mbit S.FLASH
HDMI TRANSMITTER & ENCODER ADV8003-1
HDMI 3
HDMI 1
HDMI 2
HDMI MONITOR1 ZONE4
HDMI MONITOR1 ZONE1
HDMI MONITOR2 ZONE1
TMDS
ARC
TO DIGITAL AUDIO BLOCK DIAGRAM
FROM DIGITAL AUDIO BLOCK DIAGRAM
TC74VHC244FT
TO D.AUDIO (ARC1)
TO D.AUDIO (ARC2)
TO D.AUDIO (SPDIF)
TO D.AUDIO (I2S)
TO D.AUDIO (DSD)
SPDIF_ARC1
SPDIF_ARC2
SPDIF_HDMIRX
I2S_HDMIRx
DSD_HDMIRx
FROM D.AUDIO (SPDIF)
FROM D.AUDIO (I2S)
FROM D.AUDIO (DSD)
SPDIF_HDMITX
I2S_HDMITx
DSD_HDMITx
COMPONENT INPUT1 SAT
COMPONENT INPUT2 DVD
COMPONENT INPUT3 BD
COMP1_Y
COMP1_Cb
COMP1_Cr
COMP2_Y
COMP2_Cb
COMP2_Cr
COMP3_Y
COMP3_Cb
COMP3_Cr
AVDM2000
DEC. Select
ZoNE1 Select
Zone2 Select
Y_OUT4
Y_OUT2
Y_OUT1
CB_OUT4
CB_OUT2
CB_OUT1
CR_OUT4
CR_OUT2
CR_OUT1
Z1 V Select
Z2 V Select
REC Select
DEC V Select
V_OUT1
V_OUT2
V_OUT3
V_OUT4
COMPONENT MONITOR ZONE1
COMPONENT MONITOR ZONE2
CVBS MONITOR ZONE1
CVBS MONITOR ZONE2
CVBS MediaPlayer
FRO M NETWORK BLOCK DIAGRAM
860_SY
860_SC
860_V
COMPOSITE INPUT SAT
COMPOSITE INPUT DVD
COMPOSITE INPUT MediaPlayer
COMPOSITE INPUT V.AUX
SAT_V
DVD_V
MediaPlayer_V
VAUX_V

fig.5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CEC
Sub µCom
TMDS
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PORT PROCESSOR Sil9575
HDMI RECEIVER ADV7850
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128Mbit S.FLASH
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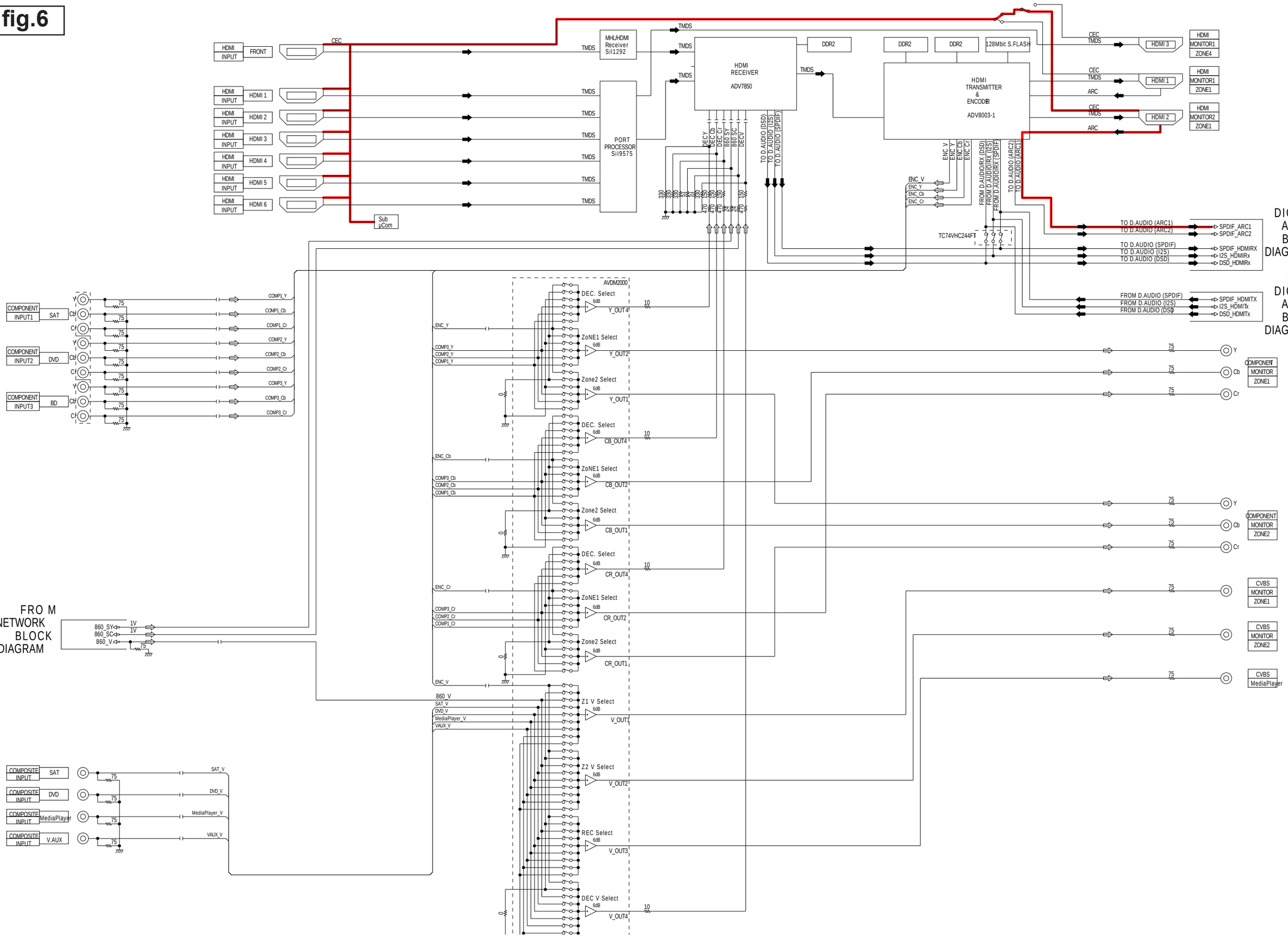
HDMI MONITOR1 ZONE4
HDMI 3
HDMI MONITOR1 ZONE1
HDMI 1
HDMI MONITOR2 ZONE1
HDMI 2
ARC
DEC Y
DEC Cb
DEC Cr
860 SY
860 SC
DECV
330
470
150
TO D.AUDIO (DSD)
TO D.AUDIO (I2S)
TO D.AUDIO (SPDIF)
TO D.AUDIO (ARC2)
TO D.AUDIO (ARC1)
ENC_V
ENC_Y
ENC_Cb
ENC_Cr
FROM D.AUDIO/RX (DSD)
FROM D.AUDIO/RX (I2S)
FROM D.AUDIO/RX (SPDIF)
TC74VHC244FT
TO D.AUDIO (ARC1)
TO D.AUDIO (ARC2)
SPDIF_ARC1
SPDIF_ARC2
TO D.AUDIO (SPDIF)
TO D.AUDIO (I2S)
TO D.AUDIO (DSD)
SPDIF_HDMIRX
I2S_HDMIRx
DSD_HDMIRx
FROM D.AUDIO (SPDIF)
FROM D.AUDIO (I2S)
FROM D.AUDIO (DSD)
SPDIF_HDMITX
I2S_HDMITx
DSD_HDMITx
TO DIGITAL AUDIO BLOCK DIAGRAM
FROM DIGITAL AUDIO BLOCK DIAGRAM
COMPONENT INPUT1
SAT
COMPONENT INPUT2
DVD
COMPONENT INPUT3
BD
COMP1_Y
COMP1_Cb
COMP1_Cr
COMP2_Y
COMP2_Cb
COMP2_Cr
COMP3_Y
COMP3_Cb
COMP3_Cr
75
AVDM2000
DEC. Select
6dB
10
Y_OUT 4
ZoNE1 Select
Y_OUT2
Zone2 Select
Y_OUT1
CB_OUT4
CB_OUT2
CB_OUT1
CR_OUT4
CR_OUT2
CR_OUT1
Z1 V Select
V_OUT1
Z2 V Select
V_OUT2
REC Select
V_OUT3
DEC V Select
V_OUT4
COMPONENT MONITOR ZONE1
COMPONENT MONITOR ZONE2
CVBS MONITOR ZONE1
CVBS MONITOR ZONE2
CVBS MediaPlayer
FRO M NETWORK BLOCK DIAGRAM
860_SY
860_SC
860_V
1V
COMPOSITE INPUT
SAT
DVD
MediaPlayer
V.AUX
SAT_V
DVD_V
MediaPlayer_V
VAUX_V

fig.6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CEC
TMDS
Sub µCom
MHL/HDMI Receiver SiI1292
PORT PROCESSOR SiI9575
HDMI RECEIVER ADV7850
DDR2
128Mbit S.FLASH
HDMI TRANSMITTER & ENCODER ADV8003-1
HDMI MONITOR1 ZONE4
HDMI MONITOR1 ZONE1
HDMI MONITOR2 ZONE1
ARC
TO D.AUDIO (DSD)
TO D.AUDIO (I2S)
TO D.AUDIO (SPDIF)
TO D.AUDIO (ARC2)
TO D.AUDIO (ARC1)
FROM D.AUDIO/RX (DSD)
FROM D.AUDIO/RX (I2S)
FROM D.AUDIO/RX (SPDIF)
ENC_V
ENC_Y
ENC_Cb
ENC_Cr
TC74VHC244FT
TO D.AUDIO (ARC1)
TO D.AUDIO (ARC2)
TO D.AUDIO (SPDIF)
TO D.AUDIO (I2S)
TO D.AUDIO (DSD)
SPDIF_ARC1
SPDIF_ARC2
SPDIF_HDMIRX
I2S_HDMIRx
DSD_HDMIRx
FROM D.AUDIO (SPDIF)
FROM D.AUDIO (I2S)
FROM D.AUDIO (DSD)
SPDIF_HDMITX
I2S_HDMITx
DSD_HDMITx
TO DIGITAL AUDIO BLOCK DIAGRAM
FROM DIGITAL AUDIO BLOCK DIAGRAM
COMPONENT INPUT1 SAT
COMPONENT INPUT2 DVD
COMPONENT INPUT3 BD
COMP1_Y
COMP1_Cb
COMP1_Cr
COMP2_Y
COMP2_Cb
COMP2_Cr
COMP3_Y
COMP3_Cb
COMP3_Cr
AVDM2000
DEC. Select
ZoNE1 Select
Zone2 Select
Y_OUT4
Y_OUT2
Y_OUT1
CB_OUT4
CB_OUT2
CB_OUT1
CR_OUT4
CR_OUT2
CR_OUT1
V_OUT1
V_OUT2
V_OUT3
V_OUT4
REC Select
DEC V Select
Z1 V Select
Z2 V Select
COMPONENT MONITOR ZONE1
COMPONENT MONITOR ZONE2
CVBS MONITOR ZONE1
CVBS MONITOR ZONE2
CVBS MediaPlayer
FRO M NETWORK BLOCK DIAGRAM
860_SY
860_SC
860_V
SAT_V
DVD_V
MediaPlayer_V
VAUX_V
COMPOSITE INPUT SAT
COMPOSITE INPUT DVD
COMPOSITE INPUT MediaPlayer
COMPOSITE INPUT V.AUX

fig.7a

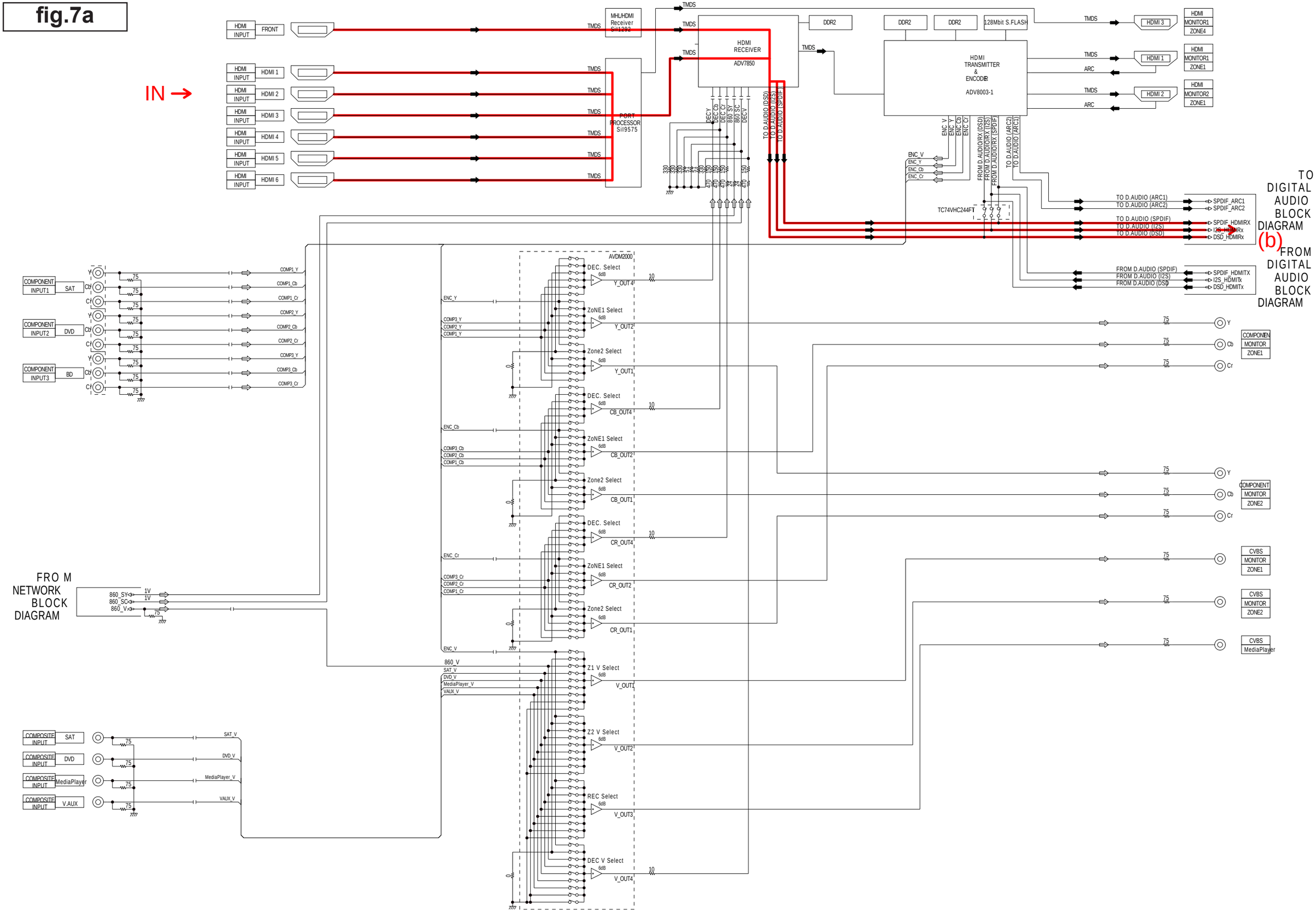

IN
HDMI INPUT
FRONT
HDMI 1
HDMI 2
HDMI 3
HDMI 4
HDMI 5
HDMI 6
TMDS
MHL/HDMI Receiver SII1292
PORT PROCESSOR SII9575
HDMI RECEIVER ADV7850
DDR2
128Mbit S.FLASH
HDMI TRANSMITTER & ENCODER ADV8003-1
HDMI MONITOR1 ZONE4
HDMI MONITOR1 ZONE1
HDMI MONITOR2 ZONE1
ARC
TO D.AUDIO (DSD)
TO D.AUDIO (I2S)
TO D.AUDIO (SPDIF)
TO D.AUDIO (ARC2)
TO D.AUDIO (ARC1)
FROM D.AUDIO/RX (DSD)
FROM D.AUDIO/RX (I2S)
FROM D.AUDIO/RX (SPDIF)
ENC_V
ENC_Y
ENC_Cb
ENC_Cr
TC74VHC244FT
TO D.AUDIO (ARC1)
TO D.AUDIO (ARC2)
TO D.AUDIO (SPDIF)
TO D.AUDIO (I2S)
TO D.AUDIO (DSD)
SPDIF_ARC1
SPDIF_ARC2
SPDIF_HDMIRX
I2S_HDMIRx
DSD_HDMIRx
FROM D.AUDIO (SPDIF)
FROM D.AUDIO (I2S)
FROM D.AUDIO (DSD)
SPDIF_HDMITX
I2S_HDMITx
DSD_HDMITx
TO DIGITAL AUDIO BLOCK DIAGRAM (b)
FROM DIGITAL AUDIO BLOCK DIAGRAM
COMPONENT INPUT1 SAT
COMPONENT INPUT2 DVD
COMPONENT INPUT3 BD
COMP1_Y
COMP1_Cb
COMP1_Cr
COMP2_Y
COMP2_Cb
COMP2_Cr
COMP3_Y
COMP3_Cb
COMP3_Cr
AVDM2000
DEC. Select
ZoNE1 Select
Zone2 Select
Y_OUT4
Y_OUT2
Y_OUT1
CB_OUT4
CB_OUT2
CB_OUT1
CR_OUT4
CR_OUT2
CR_OUT1
Z1 V Select
Z2 V Select
REC Select
DEC V Select
V_OUT1
V_OUT2
V_OUT3
V_OUT4
COMPONENT MONITOR ZONE1
COMPONENT MONITOR ZONE2
CVBS MONITOR ZONE1
CVBS MONITOR ZONE2
CVBS MediaPlayer
FRO M NETWORK BLOCK DIAGRAM
860_SY
860_SC
860_V
COMPOSITE INPUT SAT
COMPOSITE INPUT DVD
COMPOSITE INPUT MediaPlayer
COMPOSITE INPUT V.AUX
SAT_V
DVD_V
MediaPlayer_V
VAUX_V

fig.7b

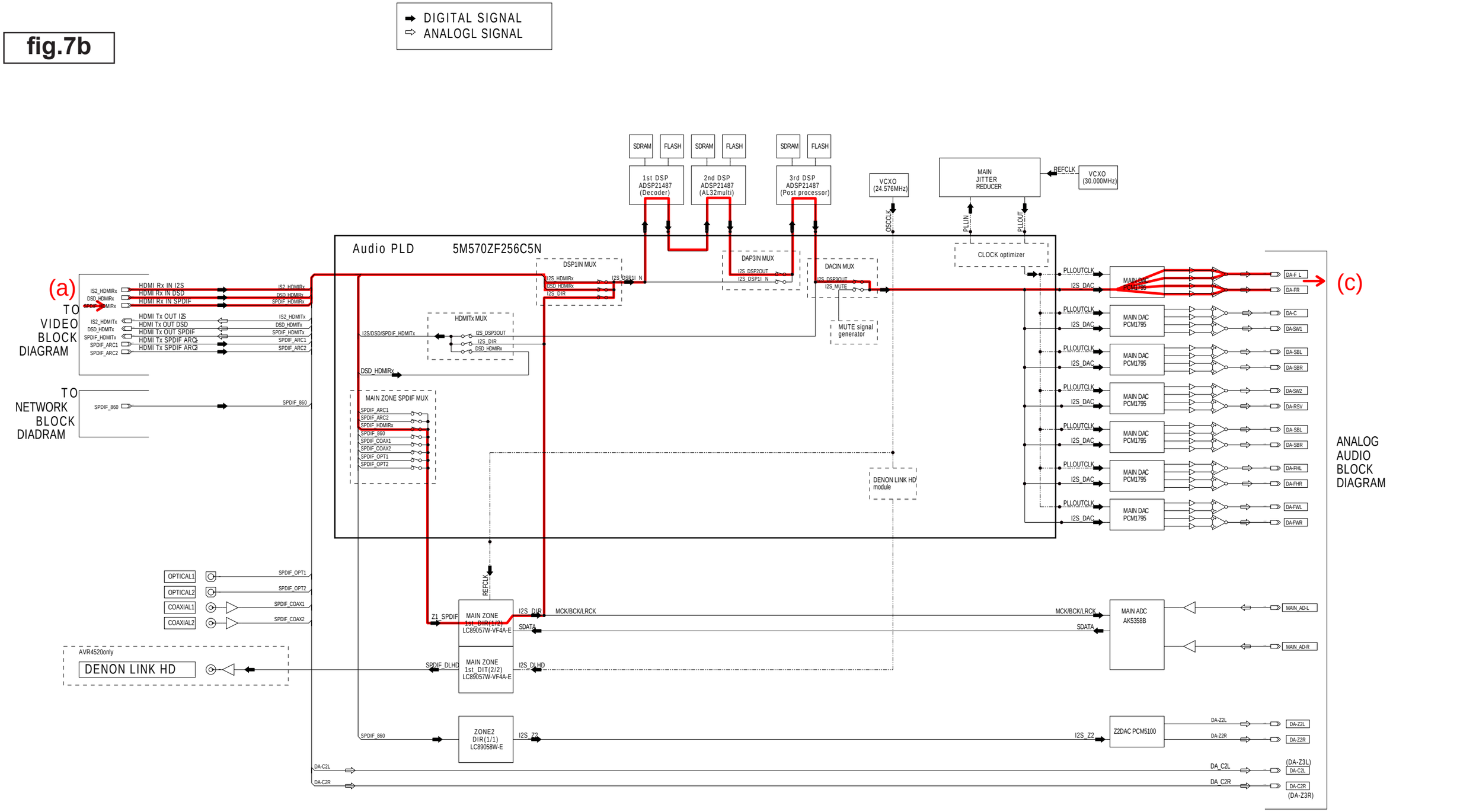

➡ DIGITAL SIGNAL
⇨ ANALOGL SIGNAL
(a)
TO VIDEO BLOCK DIAGRAM
TO NETWORK BLOCK DIADRAM
HDMI Rx IN I2S
HDMI Rx IN DSD
HDMI Rx IN SPDIF
HDMI Tx OUT I2S
HDMI Tx OUT DSD
HDMI Tx OUT SPDIF
HDMI Tx SPDIF ARC1
HDMI Tx SPDIF ARC2
SPDIF_860
SDRAM
FLASH
1st DSP ADSP21487 (Decoder)
2nd DSP ADSP21487 (AL32multi)
3rd DSP ADSP21487 (Post processor)
VCXO (24.576MHz)
MAIN JITTER REDUCER
REFCLK
VCXO (30.000MHz)
Audio PLD 5M570ZF256C5N
DSP1IN MUX
DAP3IN MUX
DACIN MUX
CLOCK optimizer
HDMITx MUX
MUTE signal generator
MAIN ZONE SPDIF MUX
DENON LINK HD module
PLLOUTCLK
I2S_DAC
MAIN DAC PCM1795
DA-F L
DA-FR
DA-C
DA-SW1
DA-SBL
DA-SBR
DA-SW2
DA-RSV
DA-FHL
DA-FHR
DA-FWL
DA-FWR
(c)
ANALOG AUDIO BLOCK DIAGRAM
OPTICAL1
OPTICAL2
COAXIAL1
COAXIAL2
SPDIF_OPT1
SPDIF_OPT2
SPDIF_COAX1
SPDIF_COAX2
AVR4520only
DENON LINK HD
MAIN ZONE 1st DIR(1/2) LC89057W-VF4A-E
MAIN ZONE 1st DIT(2/2) LC89057W-VF4A-E
ZONE2 DIR(1/1) LC89058W-E
MCK/BCK/LRCK
SDATA
MAIN ADC AK5358B
MAIN_AD-L
MAIN_AD-R
Z2DAC PCM5100
DA-Z2L
DA-Z2R
DA_C2L
DA_C2R
(DA-Z3L)
(DA-Z3R)

fig.7c

(b)

TO DIGITAL AUDIO BLOCK DIAGRAN

TO NETWORK BLOCK DIAGRAN

8ch EXT.IN

DAC OUT

ADC INPUT

ZONE_DAC_OUT

AUDIO INPUT

OPEN

VOLUME IC1 R2A15220FP

VOLUME IC 2 R2A15220FP

VOLUME IC 3 R2A15220FP (AVR4820 only)

ZONE2 NJW1194

ZONE3 NJW1194

HDAM Mz ONLY

H/P OUT

PREOUT

9ch AMP SP OUT

AVR4520 SHORT
AVR4820 OPEN

fig.8a

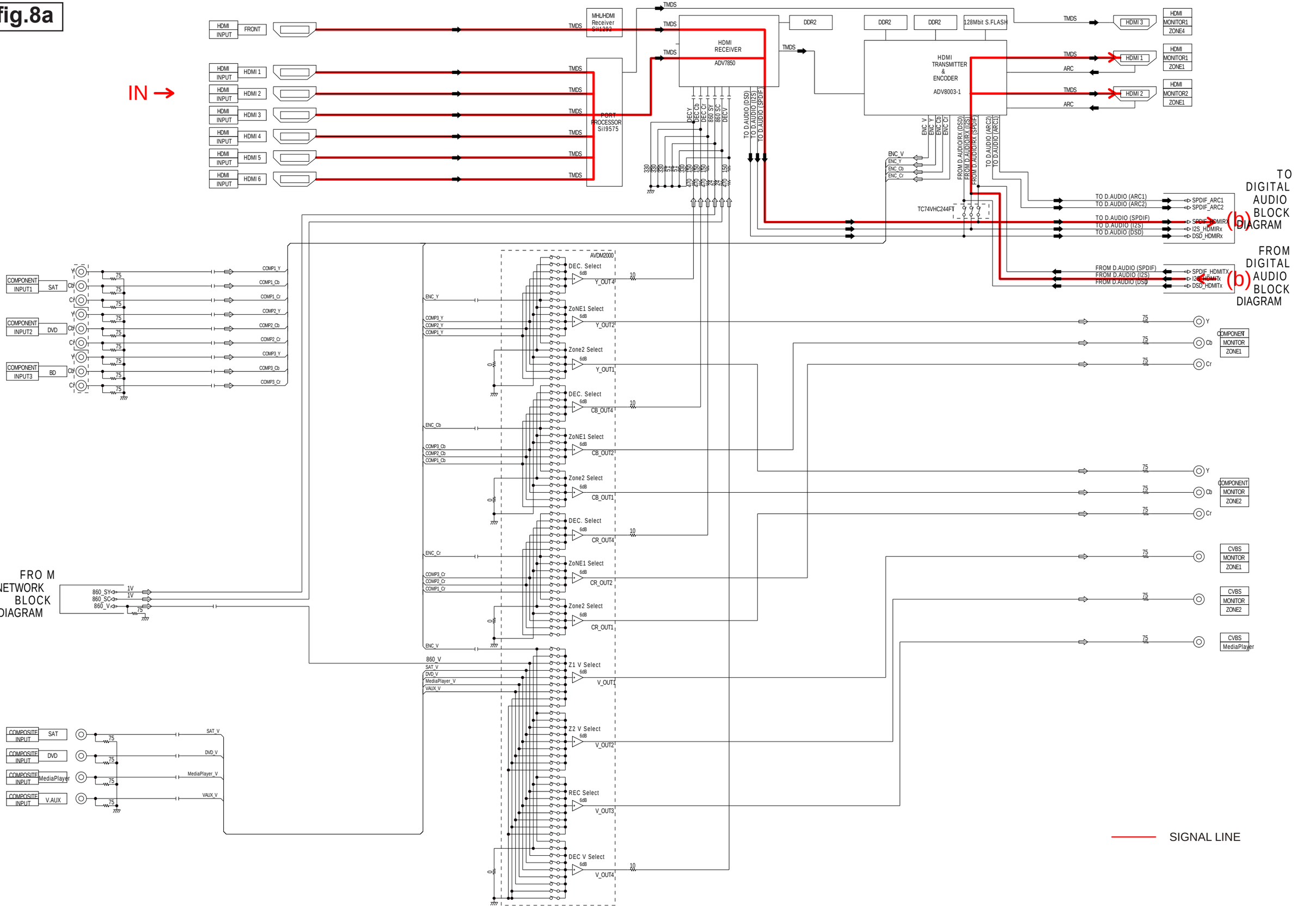

IN
HDMI INPUT
FRONT
HDMI 1
HDMI 2
HDMI 3
HDMI 4
HDMI 5
HDMI 6
MHL/HDMI Receiver SiI1292
PORT PROCESSOR SiI9575
HDMI RECEIVER ADV7850
DDR2
DDR2
DDR2
128Mbit S.FLASH
HDMI TRANSMITTER & ENCODER ADV8003-1
TMDS
ARC
HDMI 3
HDMI 1
HDMI 2
HDMI MONITOR1 ZONE4
HDMI MONITOR1 ZONE1
HDMI MONITOR2 ZONE1
TO D.AUDIO (DSD)
TO D.AUDIO (I2S)
TO D.AUDIO (SPDIF)
TO D.AUDIO (ARC2)
TO D.AUDIO (ARC1)
FROM D.AUDIO/RX (DSD)
FROM D.AUDIO/RX (I2S)
FROM D.AUDIO/RX (SPDIF)
ENC_V
ENC_Y
ENC_Cb
ENC_Cr
TC74VHC244FT
TO D.AUDIO (ARC1)
TO D.AUDIO (ARC2)
TO D.AUDIO (SPDIF)
TO D.AUDIO (I2S)
TO D.AUDIO (DSD)
SPDIF_ARC1
SPDIF_ARC2
SPDIF_HDMIRx
I2S_HDMIRx
DSD_HDMIRx
FROM D.AUDIO (SPDIF)
FROM D.AUDIO (I2S)
FROM D.AUDIO (DSD)
SPDIF_HDMITx
I2S_HDMITx
DSD_HDMITx
TO DIGITAL AUDIO BLOCK DIAGRAM (b)
FROM DIGITAL AUDIO BLOCK DIAGRAM (b)
COMPONENT INPUT1 SAT
COMPONENT INPUT2 DVD
COMPONENT INPUT3 BD
COMP1_Y
COMP1_Cb
COMP1_Cr
COMP2_Y
COMP2_Cb
COMP2_Cr
COMP3_Y
COMP3_Cb
COMP3_Cr
AVDM2000
DEC. Select
ZoNE1 Select
Zone2 Select
Y_OUT4
Y_OUT2
Y_OUT1
CB_OUT4
CB_OUT2
CB_OUT1
CR_OUT4
CR_OUT2
CR_OUT1
Z1 V Select
Z2 V Select
REC Select
DEC V Select
V_OUT1
V_OUT2
V_OUT3
V_OUT4
COMPONENT MONITOR ZONE1
COMPONENT MONITOR ZONE2
CVBS MONITOR ZONE1
CVBS MONITOR ZONE2
CVBS MediaPlayer
FRO M NETWORK BLOCK DIAGRAM
860_SY
860_SC
860_V
COMPOSITE INPUT SAT
COMPOSITE INPUT DVD
COMPOSITE INPUT MediaPlayer
COMPOSITE INPUT V.AUX
SAT_V
DVD_V
MediaPlayer_V
VAUX_V
SIGNAL LINE

fig.8b

➡ DIGITAL SIGNAL
⇨ ANALOGL SIGNAL

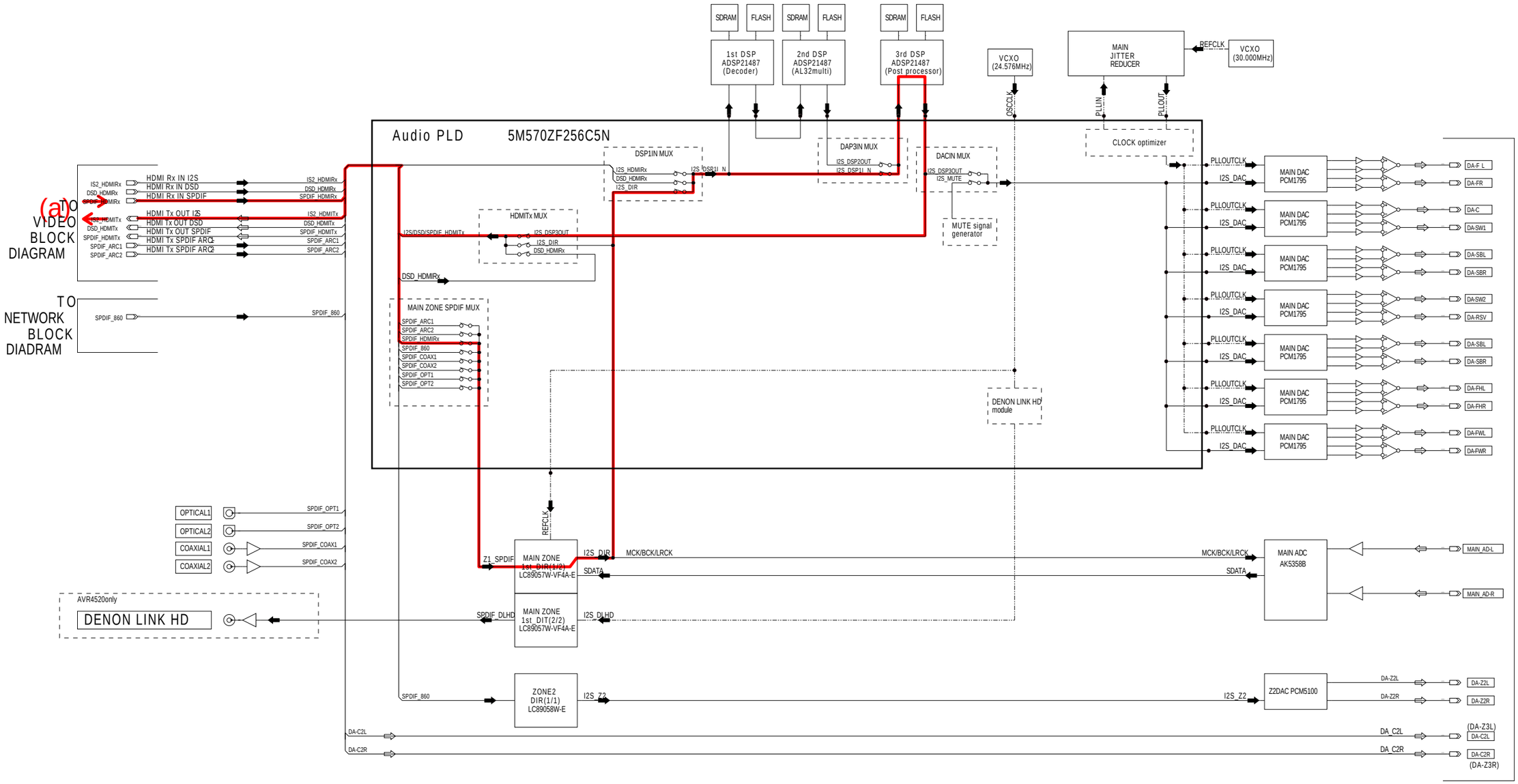


fig.9

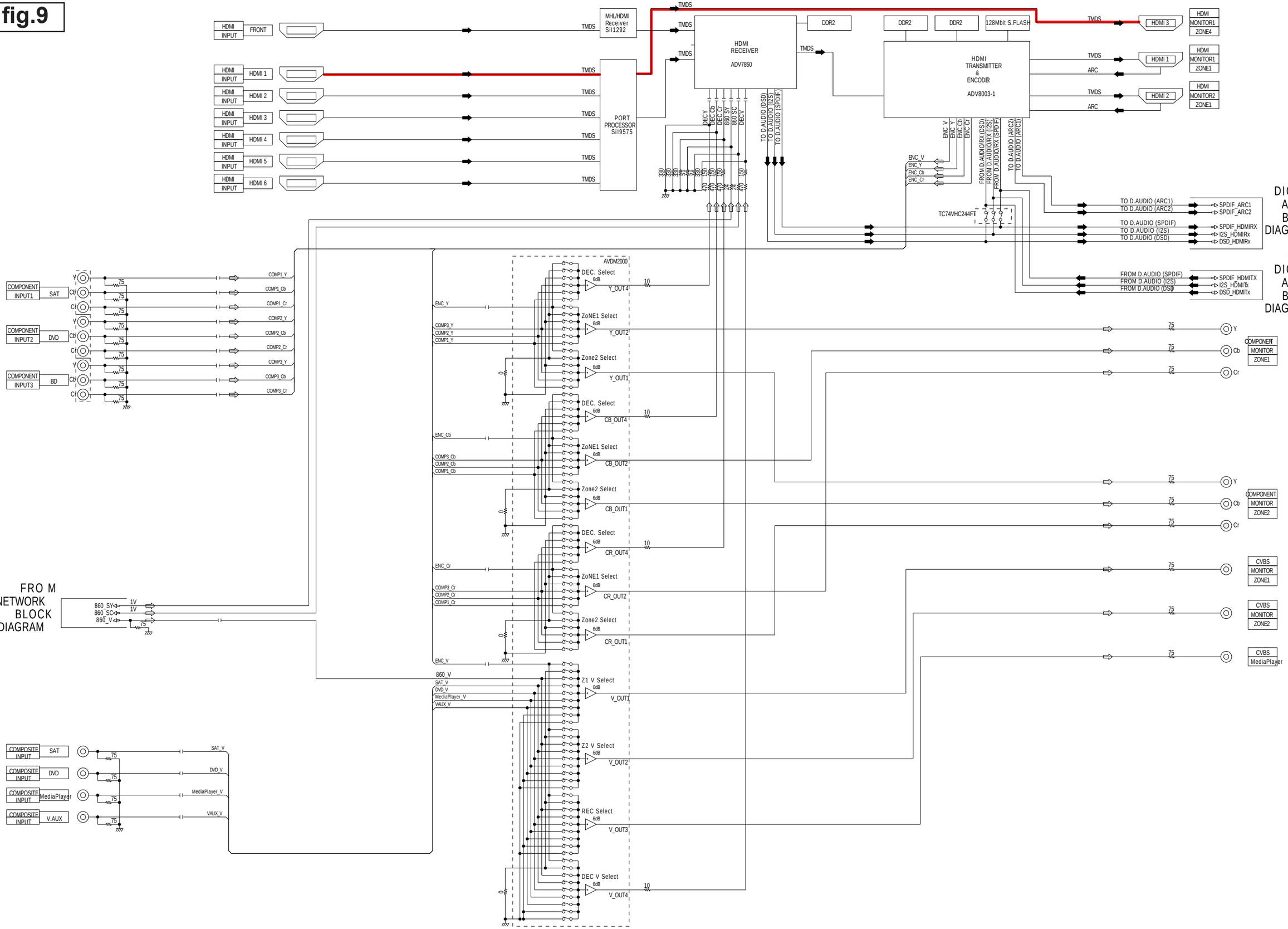

HDMI INPUT
FRONT
HDMI 1
HDMI 2
HDMI 3
HDMI 4
HDMI 5
HDMI 6
TMDS
MHL/HDMI Receiver SiI1292
PORT PROCESSOR SiI9575
HDMI RECEIVER ADV7850
DDR2
128Mbit S.FLASH
HDMI TRANSMITTER & ENCODER ADV8003-1
HDMI MONITOR1 ZONE4
HDMI MONITOR1 ZONE1
HDMI MONITOR2 ZONE1
ARC
TO D.AUDIO (DSD)
TO D.AUDIO (I2S)
TO D.AUDIO (SPDIF)
TO D.AUDIO (ARC2)
TO D.AUDIO (ARC1)
FROM D.AUDIO/RX (DSD)
FROM D.AUDIO/RX (I2S)
FROM D.AUDIO/RX (SPDIF)
ENC_V
ENC_Y
ENC_Cb
ENC_Cr
TC74VHC244FT
TO D.AUDIO (ARC1)
TO D.AUDIO (ARC2)
TO D.AUDIO (SPDIF)
TO D.AUDIO (I2S)
TO D.AUDIO (DSD)
SPDIF_ARC1
SPDIF_ARC2
SPDIF_HDMIRX
I2S_HDMIRx
DSD_HDMIRx
FROM D.AUDIO (SPDIF)
FROM D.AUDIO (I2S)
FROM D.AUDIO (DSD)
SPDIF_HDMITX
I2S_HDMITx
DSD_HDMITx
TO DIGITAL AUDIO BLOCK DIAGRAM
FROM DIGITAL AUDIO BLOCK DIAGRAM
COMPONENT INPUT1 SAT
COMPONENT INPUT2 DVD
COMPONENT INPUT3 BD
COMP1_Y
COMP1_Cb
COMP1_Cr
COMP2_Y
COMP2_Cb
COMP2_Cr
COMP3_Y
COMP3_Cb
COMP3_Cr
AVDM2000
DEC. Select
ZoNE1 Select
Zone2 Select
Y_OUT4
Y_OUT2
Y_OUT1
CB_OUT4
CB_OUT2
CB_OUT1
CR_OUT4
CR_OUT2
CR_OUT1
Z1 V Select
Z2 V Select
REC Select
DEC V Select
V_OUT1
V_OUT2
V_OUT3
V_OUT4
COMPONENT MONITOR ZONE1
COMPONENT MONITOR ZONE2
CVBS MONITOR ZONE1
CVBS MONITOR ZONE2
CVBS MediaPlayer
FRO M NETWORK BLOCK DIAGRAM
860_SY
860_SC
860_V
COMPOSITE INPUT SAT
COMPOSITE INPUT DVD
COMPOSITE INPUT MediaPlayer
COMPOSITE INPUT V.AUX
SAT_V
DVD_V
MediaPlayer_V
VAUX_V

fig.10

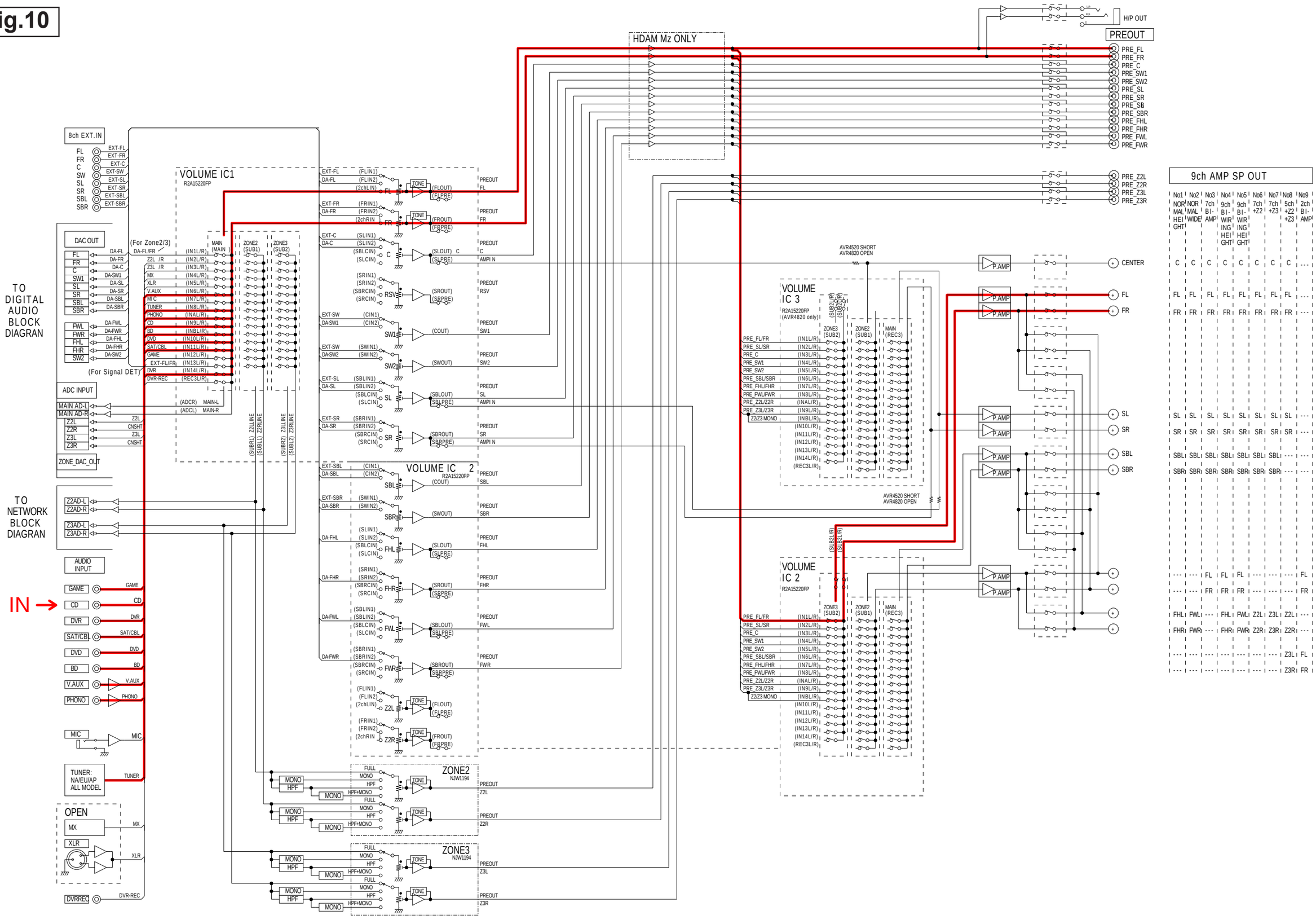

TO DIGITAL AUDIO BLOCK DIAGRAN
TO NETWORK BLOCK DIAGRAN
IN
8ch EXT.IN
FL
FR
C
SW
SL
SR
SBL
SBR
EXT-FL
EXT-FR
EXT-C
EXT-SW
EXT-SL
EXT-SR
EXT-SBL
EXT-SBR
VOLUME IC1
R2A15220FP
DAC OUT
(For Zone2/3)
DA-FL/FR
(For Signal DET)
MAIN (MAIN)
ZONE2 (SUB1)
ZONE3 (SUB2)
ADC INPUT
MAIN AD-L
MAIN AD-R
ZONE_DAC_OUT
Z2AD-L
Z2AD-R
Z3AD-L
Z3AD-R
AUDIO INPUT
GAME
CD
DVR
SAT/CBL
DVD
BD
V.AUX
PHONO
MIC
TUNER: NA/EU/AP ALL MODEL
TUNER
OPEN
MX
XLR
DVRREC
DVR-REC
VOLUME IC 2
R2A15220FP
ZONE2
NJW1194
ZONE3
NJW1194
TONE
HDAM Mz ONLY
PREOUT
H/P OUT
PRE_FL
PRE_FR
PRE_C
PRE_SW1
PRE_SW2
PRE_SL
PRE_SR
PRE_SB
PRE_SBR
PRE_FHL
PRE_FHR
PRE_FWL
PRE_FWR
PRE_Z2L
PRE_Z2R
PRE_Z3L
PRE_Z3R
AVR4520 SHORT
AVR4820 OPEN
VOLUME IC 3
R2A15220FP (AVR4820 only)
P.AMP
CENTER
FL
FR
SL
SR
SBL
SBR
9ch AMP SP OUT
No1 NORMAL HEIGHT
No2 NORMAL WIDE
No3 7ch Bi-AMP
No4 9ch Bi-WIRING HEIGHT
No5 9ch Bi-WIRING HEIGHT
No6 7ch +Z2
No7 7ch +Z3
No8 5ch +Z2 +Z3
No9 2ch Bi-AMP

fig.11a

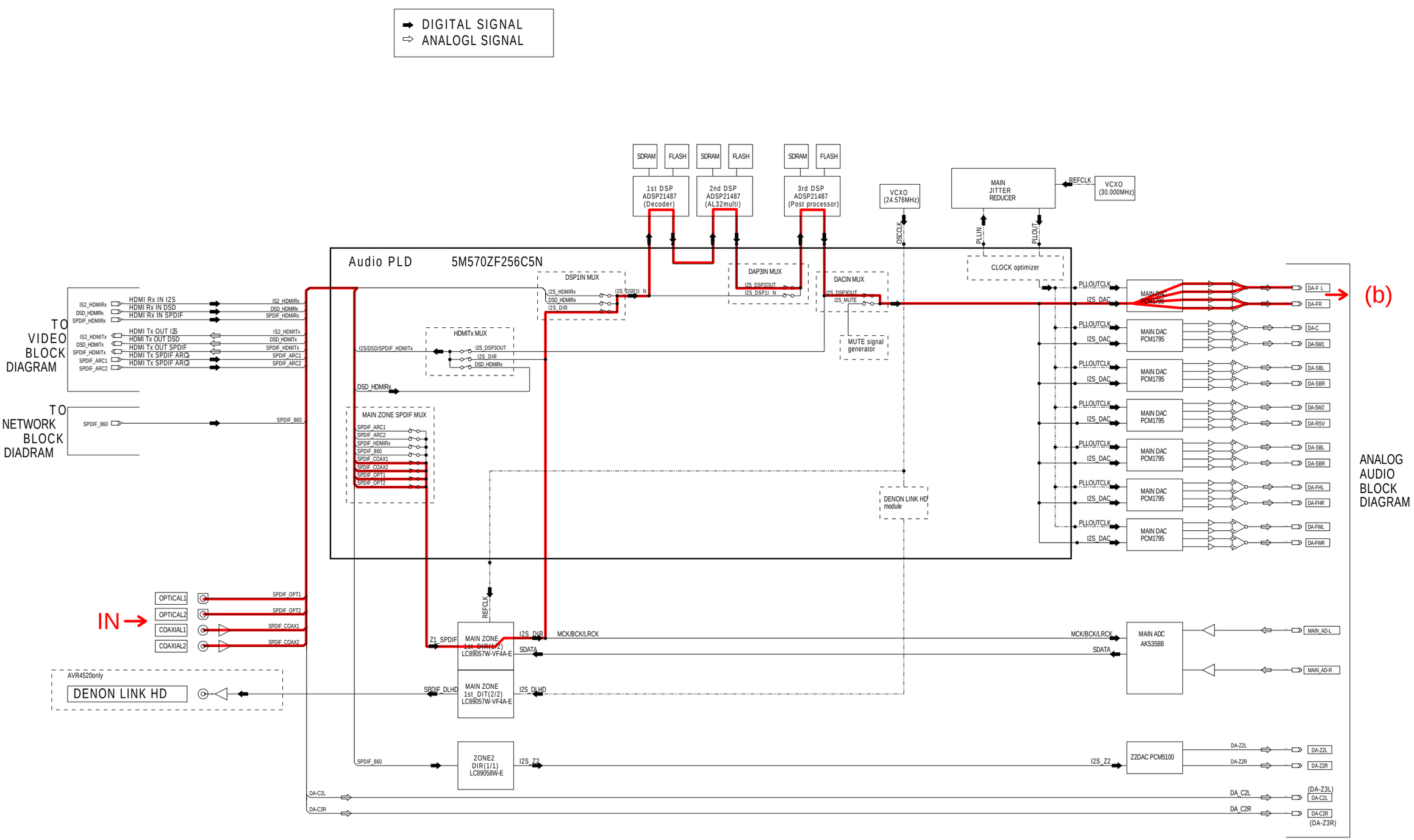

DIGITAL SIGNAL
ANALOGL SIGNAL
SDRAM
FLASH
1st DSP ADSP21487 (Decoder)
2nd DSP ADSP21487 (AL32multi)
3rd DSP ADSP21487 (Post processor)
VCXO (24.576MHz)
MAIN JITTER REDUCER
REFCLK
VCXO (30.000MHz)
OSCCLK
PLLIN
PLLOUT
Audio PLD 5M570ZF256C5N
CLOCK optimizer
DSP1IN MUX
DAP3IN MUX
DACIN MUX
HDMITx MUX
MUTE signal generator
MAIN ZONE SPDIF MUX
DENON LINK HD module
TO VIDEO BLOCK DIAGRAM
HDMI Rx IN I2S
HDMI Rx IN DSD
HDMI Rx IN SPDIF
HDMI Tx OUT I2S
HDMI Tx OUT DSD
HDMI Tx OUT SPDIF
HDMI Tx SPDIF ARC1
HDMI Tx SPDIF ARC2
TO NETWORK BLOCK DIADRAM
SPDIF_860
IN
OPTICAL1
OPTICAL2
COAXIAL1
COAXIAL2
SPDIF_OPT1
SPDIF_OPT2
SPDIF_COAX1
SPDIF_COAX2
AVR4520only
DENON LINK HD
MAIN ZONE 1st DIR(1/2) LC89057W-VF4A-E
MAIN ZONE 1st DIT(2/2) LC89057W-VF4A-E
ZONE2 DIR(1/1) LC89058W-E
MAIN DAC PCM1795
MAIN ADC AK5358B
Z2DAC PCM5100
ANALOG AUDIO BLOCK DIAGRAM
(b)

fig.11b

(b)

TO DIGITAL AUDIO BLOCK DIAGRAN

TO NETWORK BLOCK DIAGRAM

8ch EXT.IN

VOLUME IC1 R2A15220FP

VOLUME IC 2 R2A15220FP

VOLUME IC 3 R2A15220FP (AVR4820 only)

ZONE2 NJW1194

ZONE3 NJW1194

HDAM Mz ONLY

H/P OUT

PREOUT

PRE_FL PRE_FR PRE_C PRE_SW1 PRE_SW2 PRE_SL PRE_SR PRE_SB PRE_SBR PRE_FHL PRE_FHR PRE_FWL PRE_FWR

PRE_Z2L PRE_Z2R PRE_Z3L PRE_Z3R

AVR4520 SHORT AVR4820 OPEN

CENTER FL FR SL SR SBL SBR

9ch AMP SP OUT

No1	No2	No3	No4	No5	No6	No7	No8	N
NORMAL HEIGHT	NORMAL WIDE	7ch BI-AMP	9ch BI-WIRING HEIGHT	9ch BI-WIRING HEIGHT	7ch +Z2	7ch +Z3	5ch +Z2 +Z3	2 E A
C	C	C	C	C	C	C	C	-
FL	FL	FL	FL	FL	FL	FL	FL	-
FR	FR	FR	FR	FR	FR	FR	FR	-
SL	SL	SL	SL	SL	SL	SL	SL	-
SR	SR	SR	SR	SR	SR	SR	SR	-
SBL	SBL	SBL	SBL	SBL	SBL	SBL	---	-
SBR	SBR	SBR	SBR	SBR	SBR	SBR	---	-
---	---	FL	FL	FL	---	---	---	F
---	---	FR	FR	FR	---	---	---	F
FHL	FWL	---	FHL	FWL	Z2L	Z3L	Z2L	-
FHR	FWR	---	FHR	FWR	Z2R	Z3R	Z2R	-
---	---	---	---	---	---	---	Z3L	F
---	---	---	---	---	---	---	Z3R	F

fig.12a

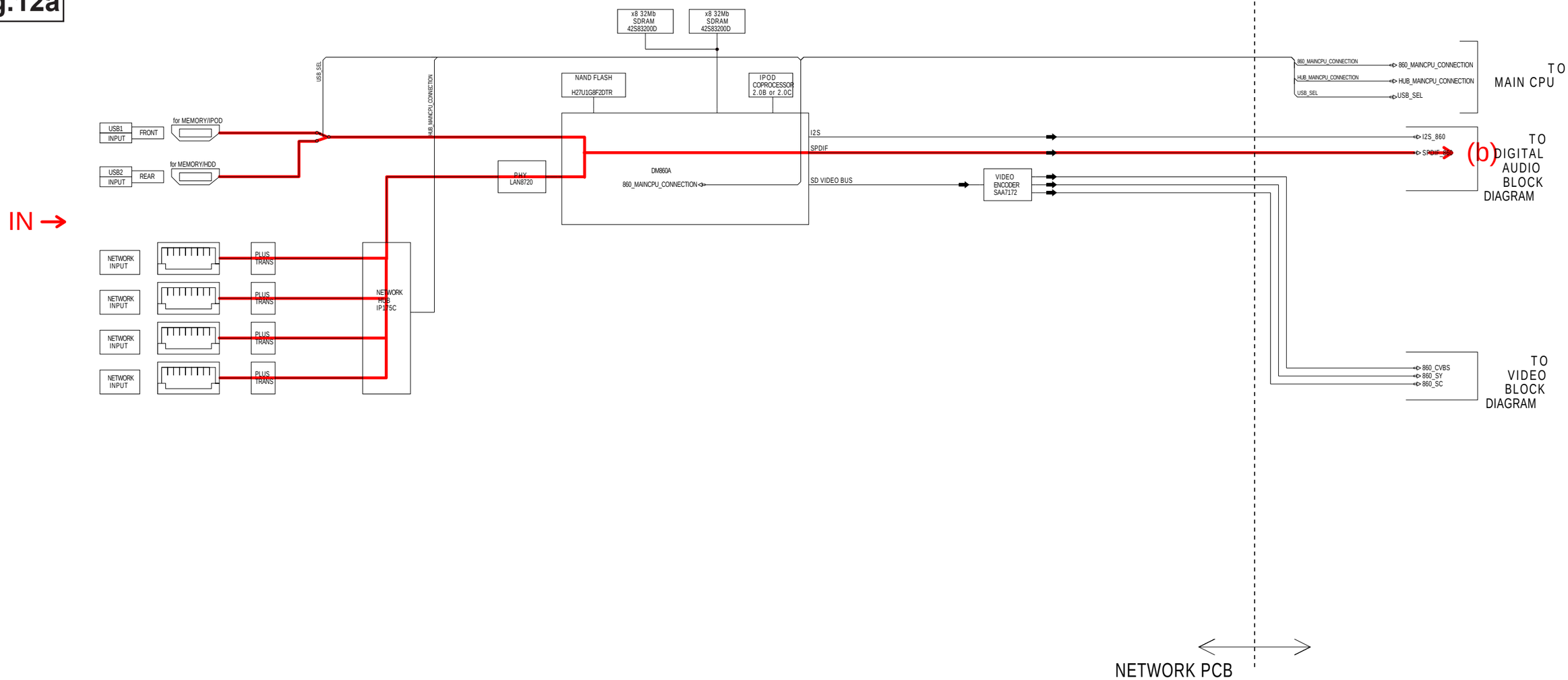

x8 32Mb SDRAM 42S83200D
x8 32Mb SDRAM 42S83200D
USB_SEL
HUB_MAINCPU_CONNECTION
NAND FLASH H27U1G8F2DTR
IPOD COPROCESSOR 2.0B or 2.0C
USB1 INPUT
FRONT
for MEMORY/IPOD
USB2 INPUT
REAR
for MEMORY/HDD
PHY LAN8720
DM860A
860_MAINCPU_CONNECTION
I2S
SPDIF
SD VIDEO BUS
VIDEO ENCODER SAA7172
860_MAINCPU_CONNECTION
HUB_MAINCPU_CONNECTION
USB_SEL
TO MAIN CPU
I2S_860
SPDIF_860
(b)
TO DIGITAL AUDIO BLOCK DIAGRAM
IN
NETWORK INPUT
NETWORK INPUT
NETWORK INPUT
NETWORK INPUT
PLUS TRANS
PLUS TRANS
PLUS TRANS
PLUS TRANS
NETWORK HUB IP175C
860_CVBS
860_SY
860_SC
TO VIDEO BLOCK DIAGRAM
NETWORK PCB

fig.12b

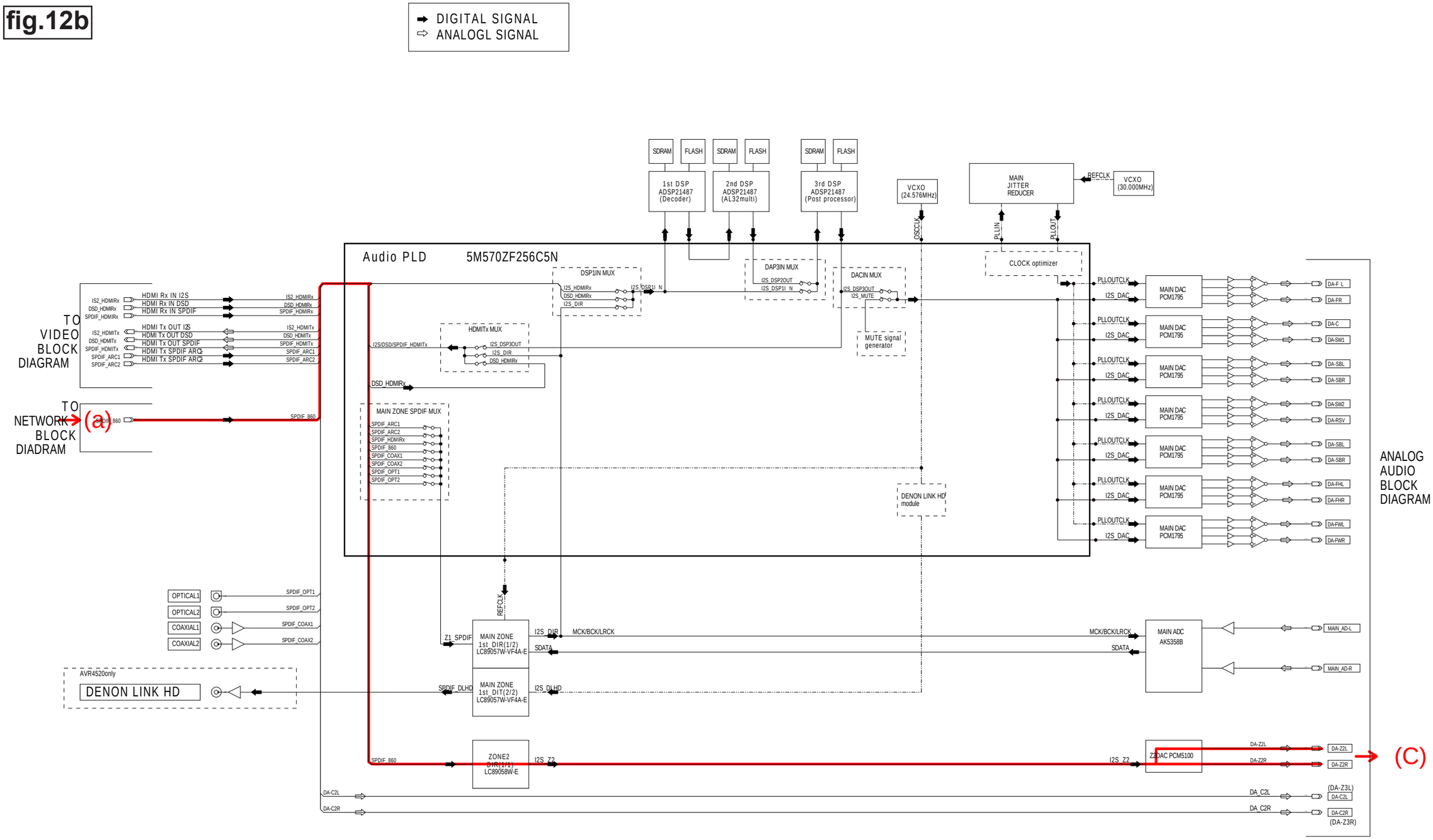

DIGITAL SIGNAL
ANALOGL SIGNAL
SDRAM
FLASH
1st DSP ADSP21487 (Decoder)
2nd DSP ADSP21487 (AL32multi)
3rd DSP ADSP21487 (Post processor)
VCXO (24.576MHz)
MAIN JITTER REDUCER
REFCLK
VCXO (30.000MHz)
OSCCLK
PLLIN
PLLOUT
Audio PLD 5M570ZF256C5N
CLOCK optimizer
DSP1IN MUX
DAP3IN MUX
DACIN MUX
MUTE signal generator
HDMITx MUX
MAIN ZONE SPDIF MUX
DENON LINK HD module
TO VIDEO BLOCK DIAGRAM
HDMI Rx IN I2S
HDMI Rx IN DSD
HDMI Rx IN SPDIF
HDMI Tx OUT I2S
HDMI Tx OUT DSD
HDMI Tx OUT SPDIF
HDMI Tx SPDIF ARC1
HDMI Tx SPDIF ARC2
TO NETWORK BLOCK DIADRAM
(a)
SPDIF_860
PLLOUTCLK
I2S_DAC
MAIN DAC PCM1795
DA-F L
DA-FR
DA-C
DA-SW1
DA-SBL
DA-SBR
DA-SW2
DA-RSV
DA-FHL
DA-FHR
DA-FWL
DA-FWR
ANALOG AUDIO BLOCK DIAGRAM
OPTICAL1
OPTICAL2
COAXIAL1
COAXIAL2
AVR4520only
DENON LINK HD
REFCLK
Z1_SPDIF
MAIN ZONE 1st_DIR(1/2) LC89057W-VF4A-E
MAIN ZONE 1st_DIT(2/2) LC89057W-VF4A-E
I2S_DIR
MCK/BCK/LRCK
SDATA
SPDIF_DLHD
I2S_DLHD
MAIN ADC AK5358B
MAIN_AD-L
MAIN_AD-R
ZONE2 DIR(1/1) LC89058W-E
I2S_Z2
Z2DAC PCM5100
DA-Z2L
DA-Z2R
(C)
DA-C2L
DA-C2R
(DA-Z3L)
(DA-Z3R)

fig.12c

TO DIGITAL AUDIO BLOCK DIAGRAN

→ (b)

TO NETWORK BLOCK DIAGRAN

8ch EXT.IN

FL EXT-FL
FR EXT-FR
C EXT-C
SW EXT-SW
SL EXT-SL
SR EXT-SR
SBL EXT-SBL
SBR EXT-SBR

DAC OUT

(For Zone2/3)

FL DA-FL
FR DA-FR
C DA-C
SW1 DA-SW1
SL DA-SL
SR DA-SR
SBL DA-SBL
SBR DA-SBR
FWL DA-FWL
FWR DA-FWR
FHL DA-FHL
FHR DA-FHR
SW2 DA-SW2

(For Signal DET)

DA-FL/FR

Z2L /R
Z3L /R
MX
XLR
V.AUX
MI C
TUNER
PHONO
CD
BD
DVD
SAT/CBL
GAME
EXT-FL/FR
DVR
DVR-REC

VOLUME IC1
R2A15220FP

MAIN (MAIN) (IN1L/R)
ZONE2 (SUB1) (IN2L/R)
ZONE3 (SUB2) (IN3L/R)
(IN4L/R)
(IN5L/R)
(IN6L/R)
(IN7L/R)
(IN8L/R)
(INAL/R)
(IN9L/R)
(INBL/R)
(IN10L/R)
(IN11L/R)
(IN12L/R)
(IN13L/R)
(IN14L/R)
(REC3L/R)

ADC INPUT

MAIN AD-L (ADCR) MAIN-L
MAIN AD-R (ADCL) MAIN-R

Z2L CNSHT
Z2R
Z3L CNSHT
Z3R

ZONE_DAC_OUT

Z2AD-L
Z2AD-R
Z3AD-L
Z3AD-R

AUDIO INPUT

GAME
CD
DVR
SAT/CBL
DVD
BD
V.AUX
PHONO
MIC

MIC

TUNER: NA/EU/AP ALL MODEL

TUNER

OPEN

MX
XLR

DVRREC

(SUBR1) Z2LINE
(SUBL1) Z2RINE
(SUBR2) Z3LINE
(SUBL2) Z3RINE

EXT-FL (FLIN1)
DA-FL (FLIN2)
(2chLIN) FL
JONE (FLOUT) (FLPRE)
PREOUT FL

EXT-FR (FRIN1)
DA-FR (FRIN2)
(2chRIN FR
JONE (FROUT) (FRPRE)
PREOUT FR

EXT-C (SLIN1)
DA-C (SLIN2)
(SBLCIN) C
(SLCIN)
(SLOUT) C
(SLPRE)
PREOUT C
AMPI N

(SRIN1)
(SRIN2)
(SBRCIN) RSV
(SRCIN)
(SROUT)
(SBRPRE)
PREOUT RSV

EXT-SW (CIN1)
DA-SW1 (CIN2)
SW1
(COUT)
PREOUT SW1

EXT-SW (SWIN1)
DA-SW2 (SWIN2)
SW2
(SWOUT)
PREOUT SW2

EXT-SL (SBLIN1)
DA-SL (SBLIN2)
(SBLCIN) SL
(SLCIN)
(SBLOUT)
SBLPRE)
PREOUT SL
AMPI N

EXT-SR (SBRIN1)
DA-SR (SBRIN2)
(SBRCIN) SR
(SRCIN)
(SBROUT)
SBRPRE)
PREOUT SR
AMPI N

VOLUME IC 2
R2A15220FP

EXT-SBL (CIN1)
DA-SBL (CIN2)
SBL
(COUT)
PREOUT SBL

EXT-SBR (SWIN1)
DA-SBR (SWIN2)
SBR
(SWOUT)
PREOUT SBR

DA-FHL
(SLIN1)
(SLIN2)
(SBLCIN) FHL
(SLCIN)
(SLOUT)
(SLPRE)
PREOUT FHL

DA-FHR
(SRIN1)
(SRIN2)
(SBRCIN) FHR
(SRCIN)
(SROUT)
(SBRPRE)
PREOUT FHR

DA-FWL
(SBLIN1)
(SBLIN2)
(SBLCIN) FWL
(SLCIN)
(SBLOUT)
SBLPRE)
PREOUT FWL

DA-FWR
(SBRIN1)
(SBRIN2)
(SBRCIN) FWR
(SRCIN)
(SBROUT)
SBRPRE)
PREOUT FWR

(FLIN1)
(FLIN2)
(2chLIN)
Z2L
TONE (FLOUT) (FLPRE)

(FRIN1)
(FRIN2)
(2chRIN
Z2R
TONE (FROUT) (FRPRE)

ZONE2 NJW1194

FULL MONO HPF HPF+MONO MONO
TONE
PREOUT Z2L
PREOUT Z2R

ZONE3 NJW1194

FULL MONO HPF HPF+MONO MONO
TONE
PREOUT Z3L
PREOUT Z3R

HDAM Mz ONLY

H/P OUT

PREOUT

PRE_FL
PRE_FR
PRE_C
PRE_SW1
PRE_SW2
PRE_SL
PRE_SR
PRE_SBL
PRE_SBR
PRE_FHL
PRE_FHR
PRE_FWL
PRE_FWR

PRE_Z2L
PRE_Z2R
PRE_Z3L
PRE_Z3R

AVR4520 SHORT
AVR4820 OPEN

VOLUME IC 3
R2A15220FP
(AVR4820 only)

(SUB2L/R) (SUB1L/R)

ZONE3 (SUB2)
ZONE2 (SUB1)
MAIN (REC3)

PRE_FL/FR (IN1L/R)
PRE_SL/SR (IN2L/R)
PRE_C (IN3L/R)
PRE_SW1 (IN4L/R)
PRE_SW2 (IN5L/R)
PRE_SBL/SBR (IN6L/R)
PRE_FHL/FHR (IN7L/R)
PRE_FWL/FWR (IN8L/R)
PRE_Z2L/Z2R (INAL/R)
PRE_Z3L/Z3R (IN9L/R)
Z2/Z3 MONO (INBL/R)
(IN10L/R)
(IN11L/R)
(IN12L/R)
(IN13L/R)
(IN14L/R)
(REC3L/R)

AVR4520 SHORT
AVR4820 OPEN

VOLUME IC 2
R2A15220FP

(SUB2L/R) (SUB2L/R)

ZONE3 (SUB2)
ZONE2 (SUB1)
MAIN (REC3)

P.AMP

CENTER
FL
FR
SL
SR
SBL
SBR

9ch AMP SP OUT

No1 NORMAL HEIGHT	No2 NORMAL WIDE	No3 7ch BI-AMP	No4 9ch BI-WIRING HEIGHT	No5 9ch BI-WIRING HEIGHT	No6 7ch +Z2	No7 7ch +Z3	No8 5ch +Z2 +Z3	No9 2ch BI-AMP
C	C	C	C	C	C	C	C	...
FL	FL	FL	FL	FL	FL	FL	FL	...
FR	FR	FR	FR	FR	FR	FR	FR	...
SL	SL	SL	SL	SL	SL	SL	SL	...
SR	SR	SR	SR	SR	SR	SR	SR	...
SBL	SBL	SBL	SBL	SBL	SBL	SBL	...	...
SBR	SBR	SBR	SBR	SBR	SBR	SBR	...	...
...	...	FL	FL	FL	...	...	...	FL
...	...	FR	FR	FR	...	...	...	FR
FHL	FWL	...	FHL	FWL	Z2L	Z3L	Z2L	...
FHR	FWR	...	FHR	FWR	Z2R	Z3R	Z2R	...
...	...	...	...	...	...	...	Z3L	FL
...	...	...	...	...	...	...	Z3R	FR

fig.13a

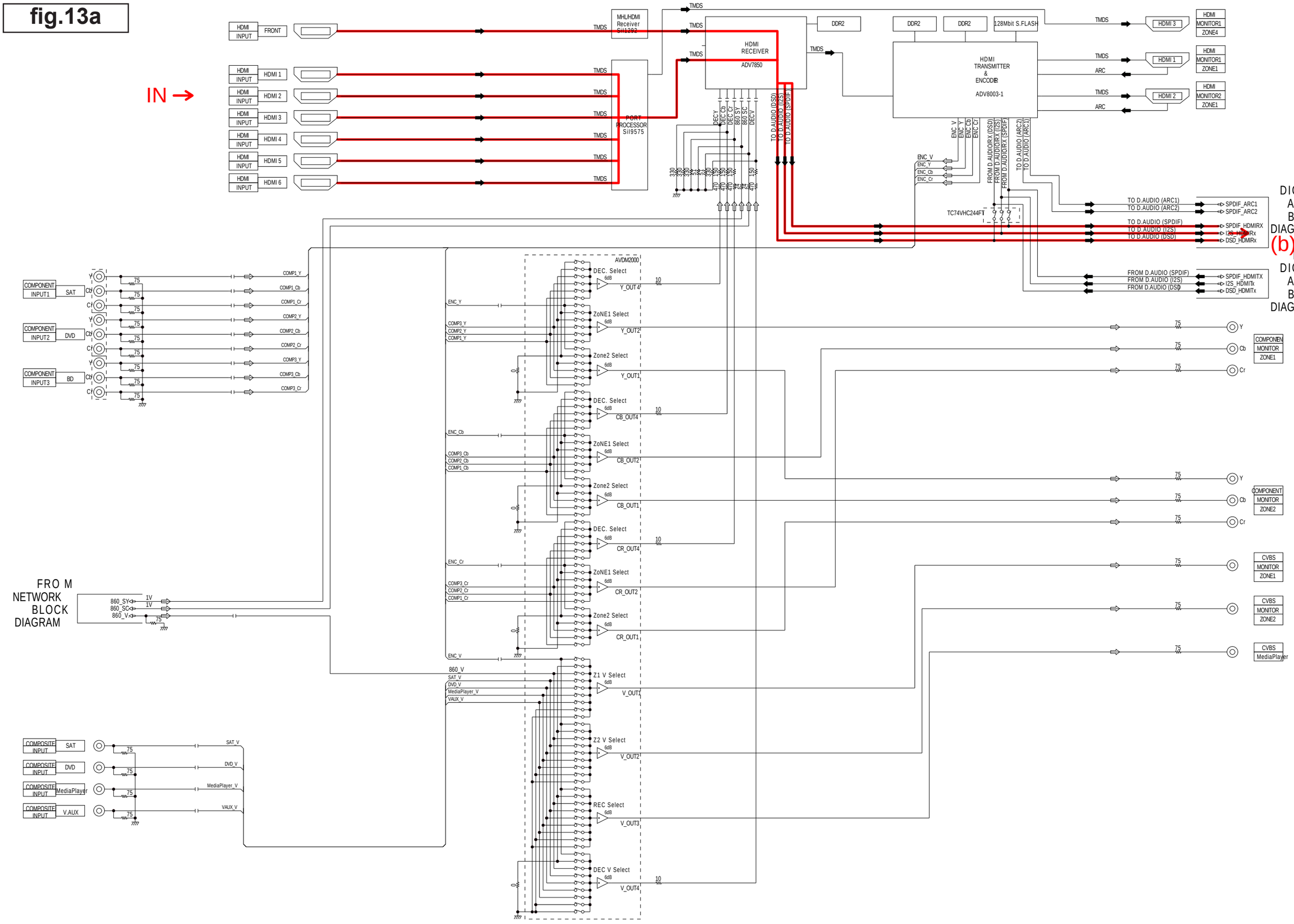

IN
HDMI INPUT
FRONT
HDMI 1
HDMI 2
HDMI 3
HDMI 4
HDMI 5
HDMI 6
MHL/HDMI Receiver SII1292
PORT PROCESSOR SII9575
HDMI RECEIVER ADV7850
TMDS
DDR2
128Mbit S.FLASH
HDMI TRANSMITTER & ENCODER ADV8003-1
HDMI MONITOR1 ZONE4
HDMI MONITOR1 ZONE1
HDMI MONITOR2 ZONE1
ARC
TO D.AUDIO (DSD)
TO D.AUDIO (I2S)
TO D.AUDIO (SPDIF)
TO D.AUDIO (ARC2)
TO D.AUDIO (ARC1)
FROM D.AUDIORX (DSD)
FROM D.AUDIORX (I2S)
FROM D.AUDIORX (SPDIF)
TC74VHC244FT
SPDIF_ARC1
SPDIF_ARC2
SPDIF_HDMIRX
I2S_HDMIRx
DSD_HDMIRx
SPDIF_HDMITX
I2S_HDMITx
DSD_HDMITx
TO DIGITAL AUDIO BLOCK DIAGRAM (b)
FROM DIGITAL AUDIO BLOCK DIAGRAM
COMPONENT INPUT1 SAT
COMPONENT INPUT2 DVD
COMPONENT INPUT3 BD
COMP1_Y
COMP1_Cb
COMP1_Cr
COMP2_Y
COMP2_Cb
COMP2_Cr
COMP3_Y
COMP3_Cb
COMP3_Cr
AVDM2000
DEC. Select
ZoNE1 Select
Zone2 Select
Y_OUT4
Y_OUT2
Y_OUT1
CB_OUT4
CB_OUT2
CB_OUT1
CR_OUT4
CR_OUT2
CR_OUT1
Z1 V Select
Z2 V Select
REC Select
DEC V Select
V_OUT1
V_OUT2
V_OUT3
V_OUT4
COMPONENT MONITOR ZONE1
COMPONENT MONITOR ZONE2
CVBS MONITOR ZONE1
CVBS MONITOR ZONE2
CVBS MediaPlayer
FRO M NETWORK BLOCK DIAGRAM
860_SY
860_SC
860_V
COMPOSITE INPUT SAT
COMPOSITE INPUT DVD
COMPOSITE INPUT MediaPlayer
COMPOSITE INPUT V.AUX
SAT_V
DVD_V
MediaPlayer_V
VAUX_V

fig.13b

➡ DIGITAL SIGNAL
⇨ ANALOGL SIGNAL

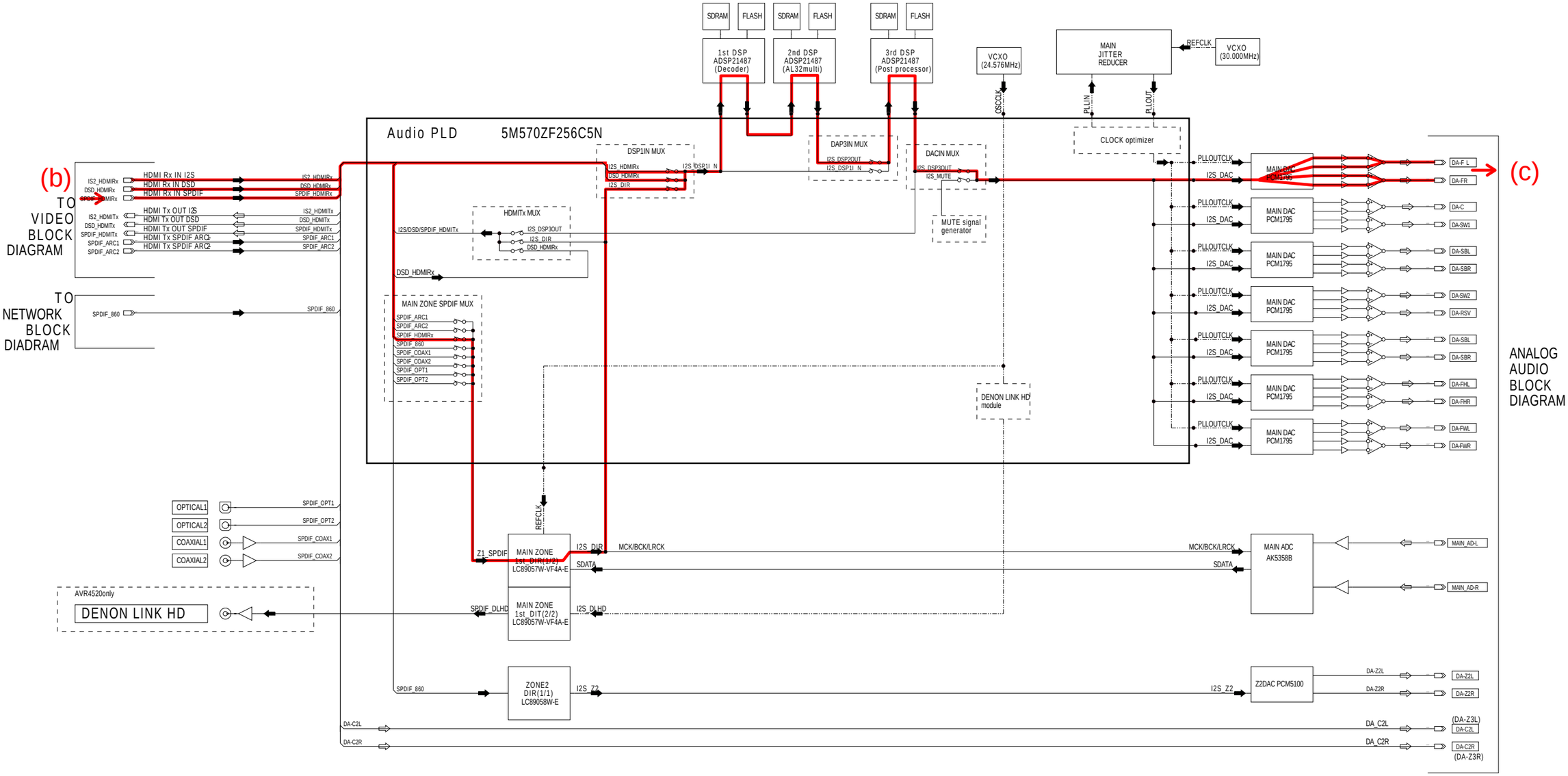


fig.13c

(b)

TO DIGITAL AUDIO BLOCK DIAGRAN

TO NETWORK BLOCK DIAGRAN

8ch EXT.IN

DAC OUT

ADC INPUT

ZONE_DAC_OUT

AUDIO INPUT

OPEN

VOLUME IC1
R2A15220FP

VOLUME IC 2
R2A15220FP

VOLUME IC 3
R2A15220FP
(AVR4820 only)

ZONE2
NJW1194

ZONE3
NJW1194

HDAM Mz ONLY

H/P OUT

PREOUT

AVR4520 SHORT
AVR4820 OPEN

9ch AMP SP OUT

fig.14a

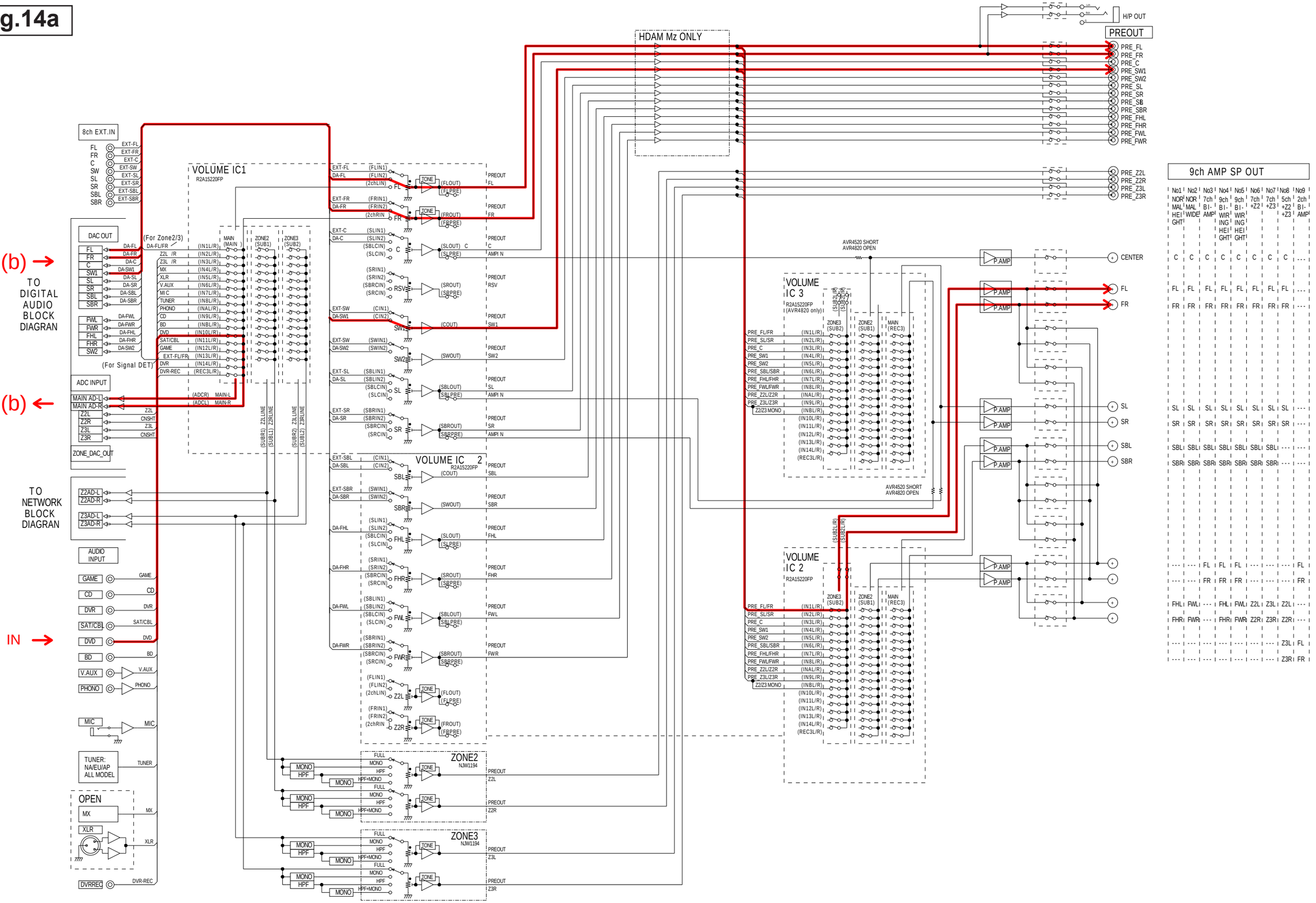

(b) →
TO DIGITAL AUDIO BLOCK DIAGRAN
(b) ←
TO NETWORK BLOCK DIAGRAN
IN →
8ch EXT.IN
VOLUME IC1
R2A15220FP
DAC OUT
(For Zone2/3)
(For Signal DET)
ADC INPUT
ZONE_DAC_OUT
AUDIO INPUT
HDAM Mz ONLY
VOLUME IC 2
R2A15220FP
ZONE2
NJW1194
ZONE3
NJW1194
VOLUME IC 3
R2A15220FP
(AVR4820 only)
AVR4520 SHORT
AVR4820 OPEN
H/P OUT
PREOUT
PRE_FL
PRE_FR
PRE_C
PRE_SW1
PRE_SW2
PRE_SL
PRE_SR
PRE_SB
PRE_SBR
PRE_FHL
PRE_FHR
PRE_FWL
PRE_FWR
PRE_Z2L
PRE_Z2R
PRE_Z3L
PRE_Z3R
P.AMP
CENTER
FL
FR
SL
SR
SBL
SBR
9ch AMP SP OUT
No1 NORMAL HEIGHT
No2 NORMAL WIDE
No3 7ch BI-AMP
No4 9ch BI-WIRING HEIGHT
No5 9ch BI-WIRING HEIGHT
No6 7ch +Z2
No7 7ch +Z3
No8 5ch +Z2 +Z3
No9 2ch BI-AMP

fig.14b

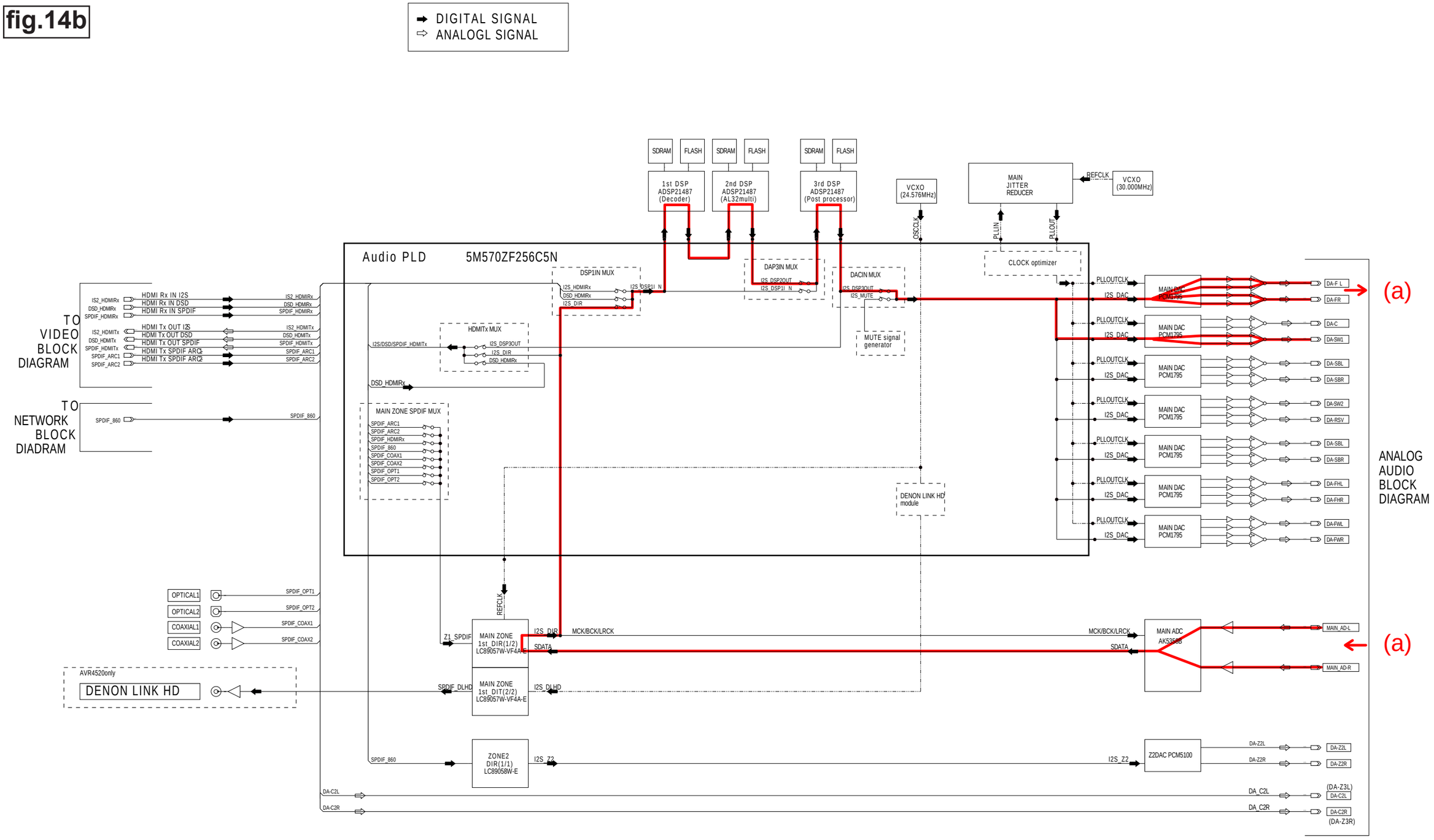

➡ DIGITAL SIGNAL
⇨ ANALOGL SIGNAL
TO VIDEO BLOCK DIAGRAM
TO NETWORK BLOCK DIADRAM
Audio PLD 5M570ZF256C5N
SDRAM
FLASH
1st DSP ADSP21487 (Decoder)
2nd DSP ADSP21487 (AL32multi)
3rd DSP ADSP21487 (Post processor)
VCXO (24.576MHz)
MAIN JITTER REDUCER
REFCLK
VCXO (30.000MHz)
OSCCLK
PLLIN
PLLOUT
CLOCK optimizer
DSP1IN MUX
DAP3IN MUX
DACIN MUX
HDMITx MUX
MUTE signal generator
MAIN ZONE SPDIF MUX
DENON LINK HD module
HDMI Rx IN I2S
HDMI Rx IN DSD
HDMI Rx IN SPDIF
HDMI Tx OUT I2S
HDMI Tx OUT DSD
HDMI Tx OUT SPDIF
HDMI Tx SPDIF ARC1
HDMI Tx SPDIF ARC2
SPDIF_860
PLLOUTCLK
I2S_DAC
MAIN DAC PCM1795
DA-F L
DA-FR
DA-C
DA-SW1
DA-SBL
DA-SBR
DA-SW2
DA-RSV
DA-FHL
DA-FHR
DA-FWL
DA-FWR
(a)
ANALOG AUDIO BLOCK DIAGRAM
OPTICAL1
OPTICAL2
COAXIAL1
COAXIAL2
AVR4520only
DENON LINK HD
MAIN ZONE 1st_DIR(1/2) LC89057W-VF4A-E
MAIN ZONE 1st_DIT(2/2) LC89057W-VF4A-E
ZONE2 DIR(1/1) LC89058W-E
MAIN ADC AK5358B
Z2DAC PCM5100
MAIN_AD-L
MAIN_AD-R
DA-Z2L
DA-Z2R
(DA-Z3L)
(DA-Z3R)
DA-C2L
DA-C2R

fig.15

TO DIGITAL AUDIO BLOCK DIAGRAN

TO NETWORK BLOCK DIAGRAN

8ch EXT.IN

FL FR C SW SL SR SBL SBR

EXT-FL EXT-FR EXT-C EXT-SW EXT-SL EXT-SR EXT-SBL EXT-SBR

DAC OUT

FL FR C SW1 SL SR SBL SBR FWL FWR FHL FHR SW2

DA-FL DA-FR DA-C DA-SW1 DA-SL DA-SR DA-SBL DA-SBR DA-FWL DA-FWR DA-FHL DA-FHR DA-SW2

(For Signal DET)

(For Zone2/3) DA-FL/FR

VOLUME IC1
R2A15220FP

MAIN (MAIN) ZONE2 (SUB1) ZONE3 (SUB2)

Z2L /R Z3L /R MX XLR V.AUX MIC PHONO TUNER CD BD DVD SAT/CBL GAME EXT-FL/FR DVR DVR-REC

(IN1L/R) (IN2L/R) (IN3L/R) (IN4L/R) (IN5L/R) (IN6L/R) (IN7L/R) (IN8L/R) (IN9L/R) (IN10L/R) (IN11L/R) (IN12L/R) (IN13L/R) (IN14L/R) (REC3L/R)

ADC INPUT

MAIN AD-L MAIN AD-R

(ADCR) MAIN-L (ADCL) MAIN-R

Z2L Z2R Z3L Z3R CNSHT

ZONE_DAC_OUT

Z2AD-L Z2AD-R Z3AD-L Z3AD-R

AUDIO INPUT

GAME CD DVR SAT/CBL DVD BD V.AUX PHONO MIC TUNER

OPEN: MX XLR

DVRREC DVR-REC

(SUB1) Z2LINE (SUB1) Z2RLINE (SUB2) Z3LINE (SUB2) Z3RLINE

EXT-FL DA-FL (FLIN1) (FLIN2) (2chLIN) FL TONE (FLOUT) (FLPRE) PREOUT FL

EXT-FR DA-FR (FRIN1) (FRIN2) (2chRIN FR TONE (FROUT) (FRPRE) PREOUT FR

EXT-C DA-C (SLIN1) (SLIN2) (SBLCIN) (SLCIN) C (SLOUT) (SLPRE) PREOUT C AMPI N

(SRIN1) (SRIN2) (SBRCIN) (SRCIN) RSV (SROUT) (SRPRE) PREOUT RSV

EXT-SW DA-SW1 (CIN1) (CIN2) SW1 (COUT) PREOUT SW1

EXT-SW DA-SW2 (SWIN1) (SWIN2) SW2 (SWOUT) PREOUT SW2

EXT-SL DA-SL (SBLIN1) (SBLIN2) (SBLCIN) (SLCIN) SL (SBLOUT) (SBLPRE) PREOUT SL AMPI N

EXT-SR DA-SR (SBRIN1) (SBRIN2) (SBRCIN) (SRCIN) SR (SBROUT) (SBRPRE) PREOUT SR AMPI N

VOLUME IC 2
R2A15220FP

EXT-SBL DA-SBL (CIN1) (CIN2) SBL (COUT) PREOUT SBL

EXT-SBR DA-SBR (SWIN1) (SWIN2) SBR (SWOUT) PREOUT SBR

DA-FHL (SLIN1) (SLIN2) (SBLCIN) (SLCIN) FHL (SLOUT) (SLPRE) PREOUT FHL

DA-FHR (SRIN1) (SRIN2) (SBRCIN) (SRCIN) FHR (SROUT) (SBRPRE) PREOUT FHR

DA-FWL (SBLIN1) (SBLIN2) (SBLCIN) (SLCIN) FWL (SBLOUT) (SBLPRE) PREOUT FWL

DA-FWR (SBRIN1) (SBRIN2) (SBRCIN) (SRCIN) FWR (SBROUT) (SBRPRE) PREOUT FWR

(FLIN1) (FLIN2) (2chLIN) Z2L TONE (FLOUT) (FLPRE)

(FRIN1) (FRIN2) (2chRIN Z2R TONE (FROUT) (FRPRE)

ZONE2
NJW1194

FULL MONO HPF MONO HPF+MONO TONE PREOUT Z2L

FULL MONO HPF MONO HPF+MONO TONE PREOUT Z2R

ZONE3
NJW1194

FULL MONO HPF MONO HPF+MONO TONE PREOUT Z3L

FULL MONO HPF MONO HPF+MONO TONE PREOUT Z3R

HDAM Mz ONLY

H/P OUT

PREOUT

PRE_FL PRE_FR PRE_C PRE_SW1 PRE_SW2 PRE_SL PRE_SR PRE_SBL PRE_SBR PRE_FHL PRE_FHR PRE_FWL PRE_FWR

PRE_Z2L PRE_Z2R PRE_Z3L PRE_Z3R

AVR4520 SHORT
AVR4820 OPEN

VOLUME IC 3
R2A15220FP (AVR4820 only)

ZONE3 (SUB2) ZONE2 (SUB1) MAIN (REC3)

PRE_FL/FR PRE_SL/SR PRE_C PRE_SW1 PRE_SW2 PRE_SBL/SBR PRE_FHL/FHR PRE_FWL/FWR PRE_Z2L/Z2R PRE_Z3L/Z3R Z2/Z3 MONO

(IN1L/R) (IN2L/R) (IN3L/R) (IN4L/R) (IN5L/R) (IN6L/R) (IN7L/R) (IN8L/R) (IN9L/R) (IN10L/R) (IN11L/R) (IN12L/R) (IN13L/R) (IN14L/R) (REC3L/R)

(SUB2L/R) (SUB1L/R)

AVR4520 SHORT
AVR4820 OPEN

VOLUME IC 2
R2A15220FP

ZONE3 (SUB2) ZONE2 (SUB1) MAIN (REC3)

P.AMP

CENTER FL FR SL SR SBL SBR

9ch AMP SP OUT

No1 NORMAL HEIGHT	No2 NORMAL WIDE	No3 7ch BI-AMP	No4 9ch BI-WIRING HEIGHT	No5 9ch BI-WIRING HEIGHT	No6 7ch +Z2	No7 7ch +Z3	No8 5ch +Z2 +Z3	No9 2ch BI-AMP
C	C	C	C	C	C	C	C	...
FL	FL	FL	FL	FL	FL	FL	FL	...
FR	FR	FR	FR	FR	FR	FR	FR	...
SL	SL	SL	SL	SL	SL	SL	SL	...
SR	SR	SR	SR	SR	SR	SR	SR	...
SBL	SBL	SBL	SBL	SBL	SBL	SBL	...	...
SBR	SBR	SBR	SBR	SBR	SBR	SBR	...	...
...	...	FL	FL	FL	...	...	...	FL
...	...	FR	FR	FR	...	...	...	FR
FHL	FWL	...	FHL	FWL	Z2L	Z3L	Z2L	...
FHR	FWR	...	FHR	FWR	Z2R	Z3R	Z2R	...
...	...	...	...	...	...	...	Z3L	FL
...	...	...	...	...	...	...	Z3R	FR

fig.16

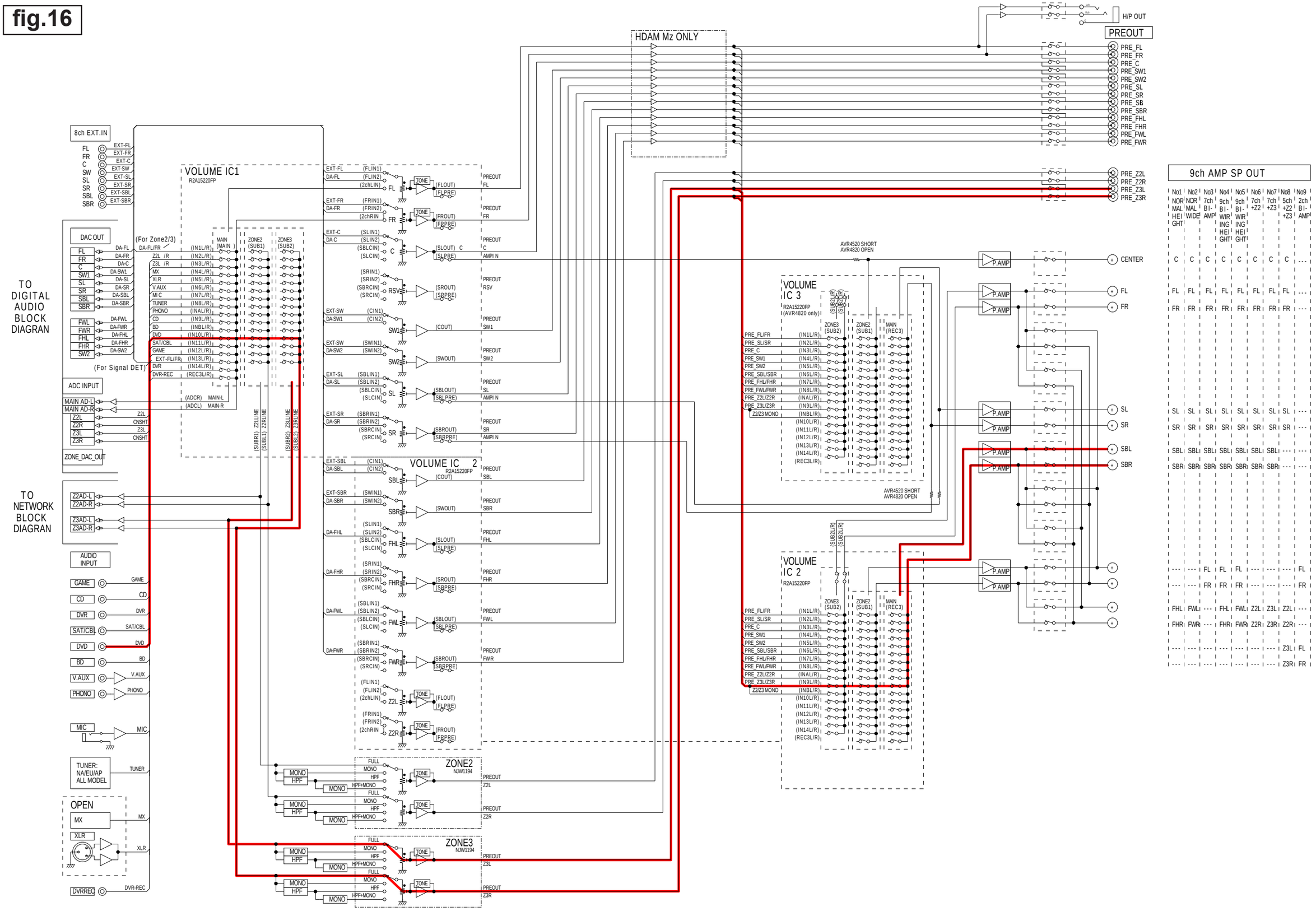

TO DIGITAL AUDIO BLOCK DIAGRAN
TO NETWORK BLOCK DIAGRAN
8ch EXT.IN
DAC OUT
ADC INPUT
ZONE_DAC_OUT
AUDIO INPUT
OPEN
VOLUME IC1
R2A15220FP
VOLUME IC 2
R2A15220FP
VOLUME IC 3
R2A15220FP (AVR4820 only)
ZONE2
NJW1194
ZONE3
NJW1194
HDAM Mz ONLY
H/P OUT
PREOUT
9ch AMP SP OUT
AVR4520 SHORT
AVR4820 OPEN
P.AMP
CENTER
FL
FR
SL
SR
SBL
SBR

fig.17

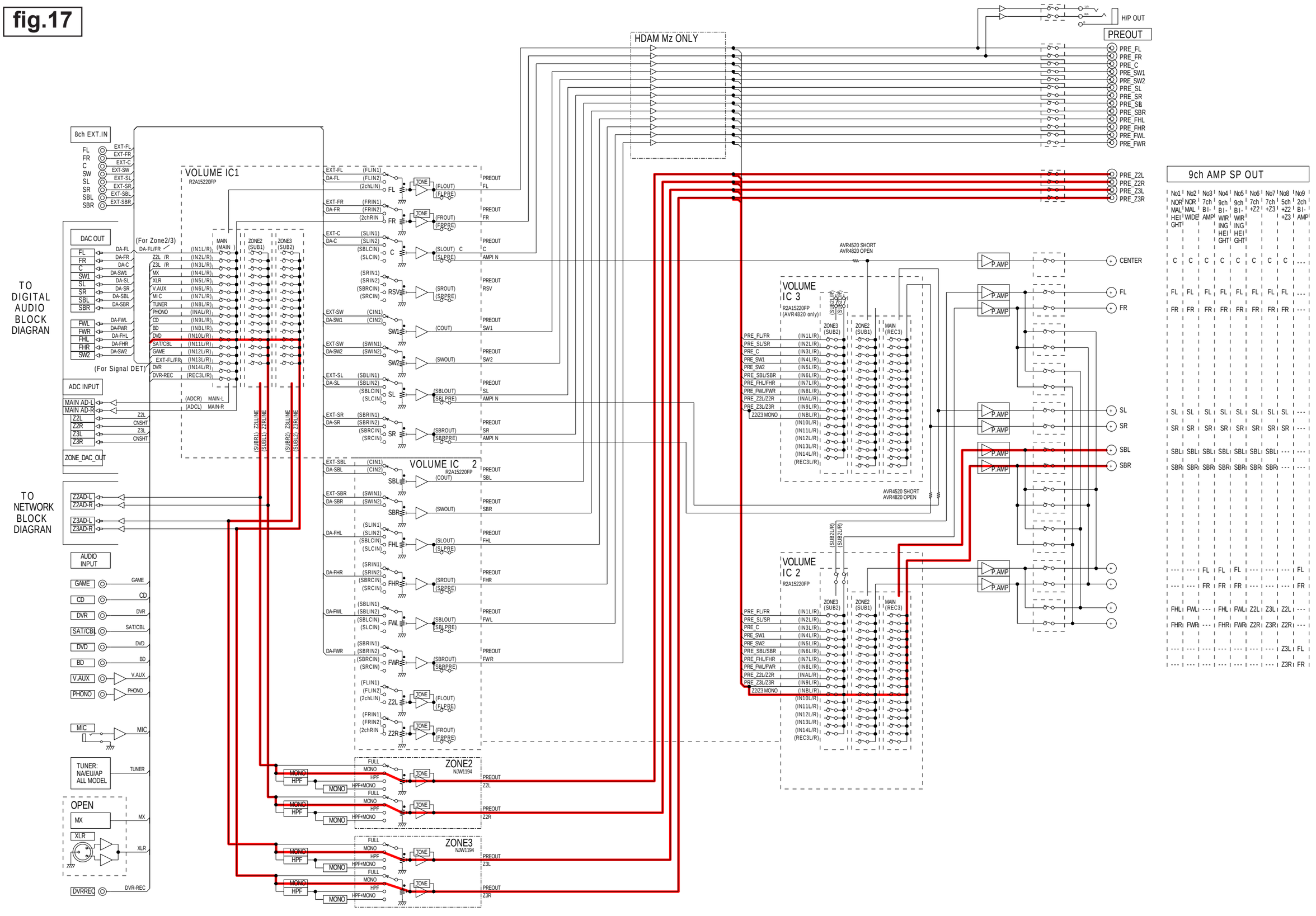

TO DIGITAL AUDIO BLOCK DIAGRAN
TO NETWORK BLOCK DIAGRAN
8ch EXT.IN
FL
FR
C
SW
SL
SR
SBL
SBR
EXT-FL
EXT-FR
EXT-C
EXT-SW
EXT-SL
EXT-SR
EXT-SBL
EXT-SBR
VOLUME IC1
R2A15220FP
DAC OUT
(For Zone2/3)
(For Signal DET)
DA-FL/FR
MAIN (MAIN)
ZONE2 (SUB1)
ZONE3 (SUB2)
Z2L /R
Z3L /R
MX
XLR
V.AUX
TUNER
MI C
PHONO
CD
BD
DVD
SAT/CBL
GAME
EXT-FL/FR
DVR
DVR-REC
FWL
FWR
FHL
FHR
SW2
ADC INPUT
MAIN AD-L
MAIN AD-R
Z2L
Z2R
Z3L
Z3R
CNSHT
ZONE_DAC_OUT
Z2AD-L
Z2AD-R
Z3AD-L
Z3AD-R
AUDIO INPUT
DVRREC
MIC
TUNER: NA/EU/AP ALL MODEL
OPEN
SUBR1) Z2LINE
SUBL1) Z2RLINE
SUBR2) Z3LINE
SUBL2) Z3RLINE
HDAM Mz ONLY
VOLUME IC 2
R2A15220FP
ZONE2
NJW1194
ZONE3
NJW1194
TONE
HPF
MONO
FULL
HPF+MONO
PREOUT
AMPI N
VOLUME IC 3
R2A15220FP (AVR4820 only)
AVR4520 SHORT
AVR4820 OPEN
P.AMP
H/P OUT
PREOUT
PRE_FL
PRE_FR
PRE_C
PRE_SW1
PRE_SW2
PRE_SL
PRE_SR
PRE_SBL
PRE_SBR
PRE_FHL
PRE_FHR
PRE_FWL
PRE_FWR
PRE_Z2L
PRE_Z2R
PRE_Z3L
PRE_Z3R
CENTER
9ch AMP SP OUT
No1 NORMAL HEIGHT
No2 NORMAL WIDE
No3 7ch BI-AMP
No4 9ch BI-WIRING HEIGHT
No5 9ch BI-WIRING HEIGHT
No6 7ch +Z2
No7 7ch +Z3
No8 5ch +Z2 +Z3
No9 2ch BI-AMP

fig.18

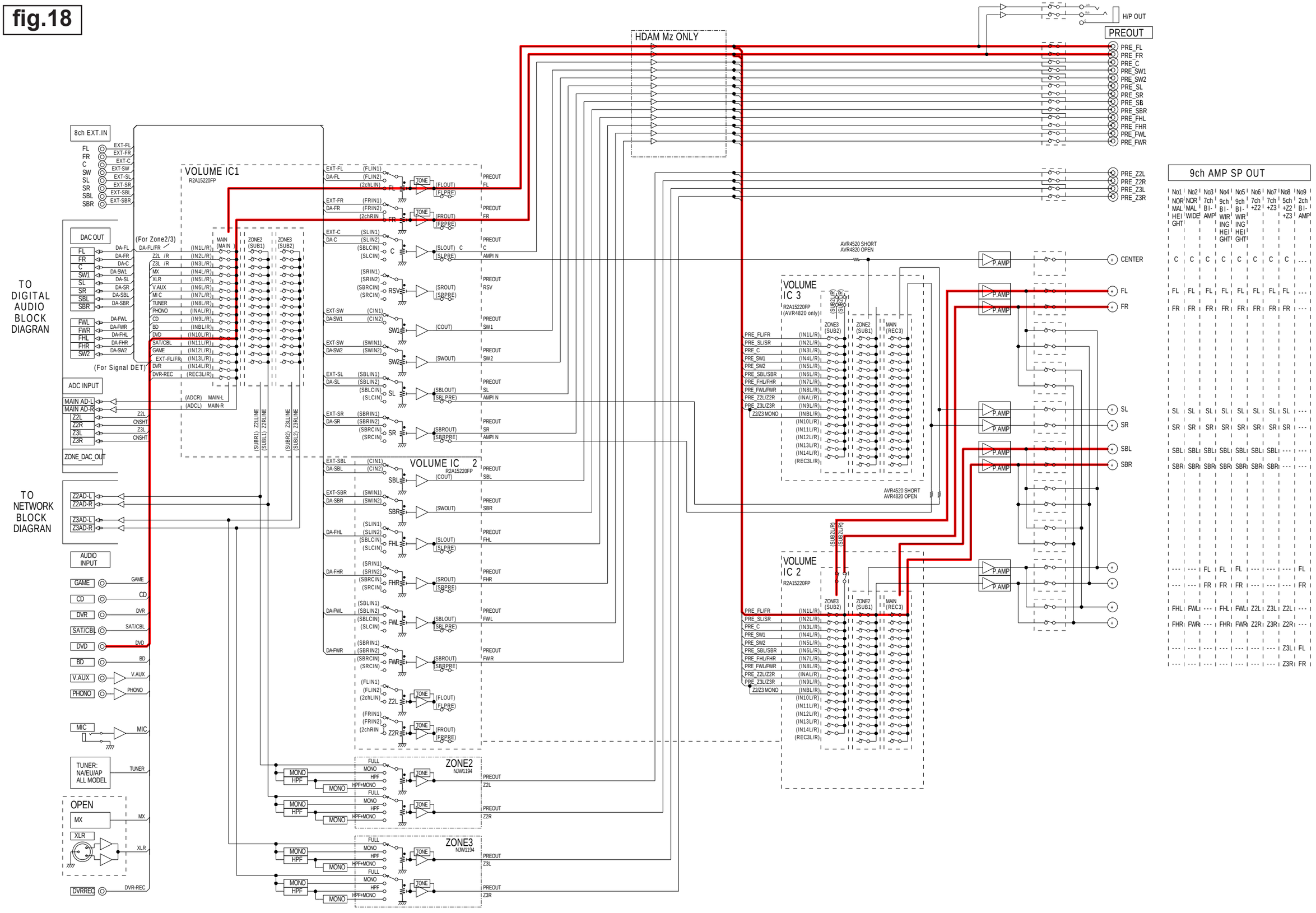

TO DIGITAL AUDIO BLOCK DIAGRAN
TO NETWORK BLOCK DIAGRAN
8ch EXT.IN
FL
FR
C
SW
SL
SR
SBL
SBR
EXT-FL
EXT-FR
EXT-C
EXT-SW
EXT-SL
EXT-SR
EXT-SBL
EXT-SBR
DAC OUT
(For Zone2/3)
(For Signal DET)
DA-FL/FR
MAIN (MAIN)
ZONE2 (SUB1)
ZONE3 (SUB2)
Z2L /R
Z3L /R
MX
XLR
V.AUX
MI C
TUNER
PHONO
CD
BD
DVD
SAT/CBL
GAME
EXT-FL/FR
DVR
DVR-REC
DA-FWL
DA-FWR
DA-FHL
DA-FHR
DA-SW2
ADC INPUT
MAIN AD-L
MAIN AD-R
Z2L
Z2R
Z3L
Z3R
CNSHT
ZONE_DAC_OUT
Z2AD-L
Z2AD-R
Z3AD-L
Z3AD-R
AUDIO INPUT
MIC
TUNER: NA/EU/AP ALL MODEL
OPEN
DVRREQ
VOLUME IC1
R2A15220FP
TONE
FL
FR
C
RSV
SW1
SW2
SL
SR
SBL
SBR
FHL
FWL
FWR
VOLUME IC 2
VOLUME IC 3
ZONE2
NJW1194
ZONE3
NJW1194
FULL
MONO
HPF
HPF+MONO
HDAM Mz ONLY
H/P OUT
PREOUT
PRE_FL
PRE_FR
PRE_C
PRE_SW1
PRE_SW2
PRE_SL
PRE_SR
PRE_SB
PRE_SBR
PRE_FHL
PRE_FHR
PRE_FWL
PRE_FWR
PRE_Z2L
PRE_Z2R
PRE_Z3L
PRE_Z3R
AVR4520 SHORT
AVR4820 OPEN
P.AMP
CENTER
9ch AMP SP OUT
No1 NORMAL HEIGHT
No2 NORMAL WIDE
No3 7ch BI-AMP
No4 9ch BI-WIRING HEIGHT
No5 9ch BI-WIRING HEIGHT
No6 7ch +Z2
No7 7ch +Z3
No8 5ch +Z2 +Z3
No9 2ch BI-AMP

fig.19

TO DIGITAL AUDIO BLOCK DIAGRAN

TO NETWORK BLOCK DIAGRAN

8ch EXT.IN

VOLUME IC1
R2A15220FP

DAC OUT

(For Zone2/3)

(For Signal DET)

ADC INPUT

ZONE_DAC_OUT

AUDIO INPUT

OPEN

VOLUME IC 2
R2A15220FP

ZONE2
NJW1194

ZONE3
NJW1194

HDAM Mz ONLY

H/P OUT

PREOUT

9ch AMP SP OUT

VOLUME IC 3
R2A15220FP
(AVR4820 only)

AVR4520 SHORT
AVR4820 OPEN

fig.20

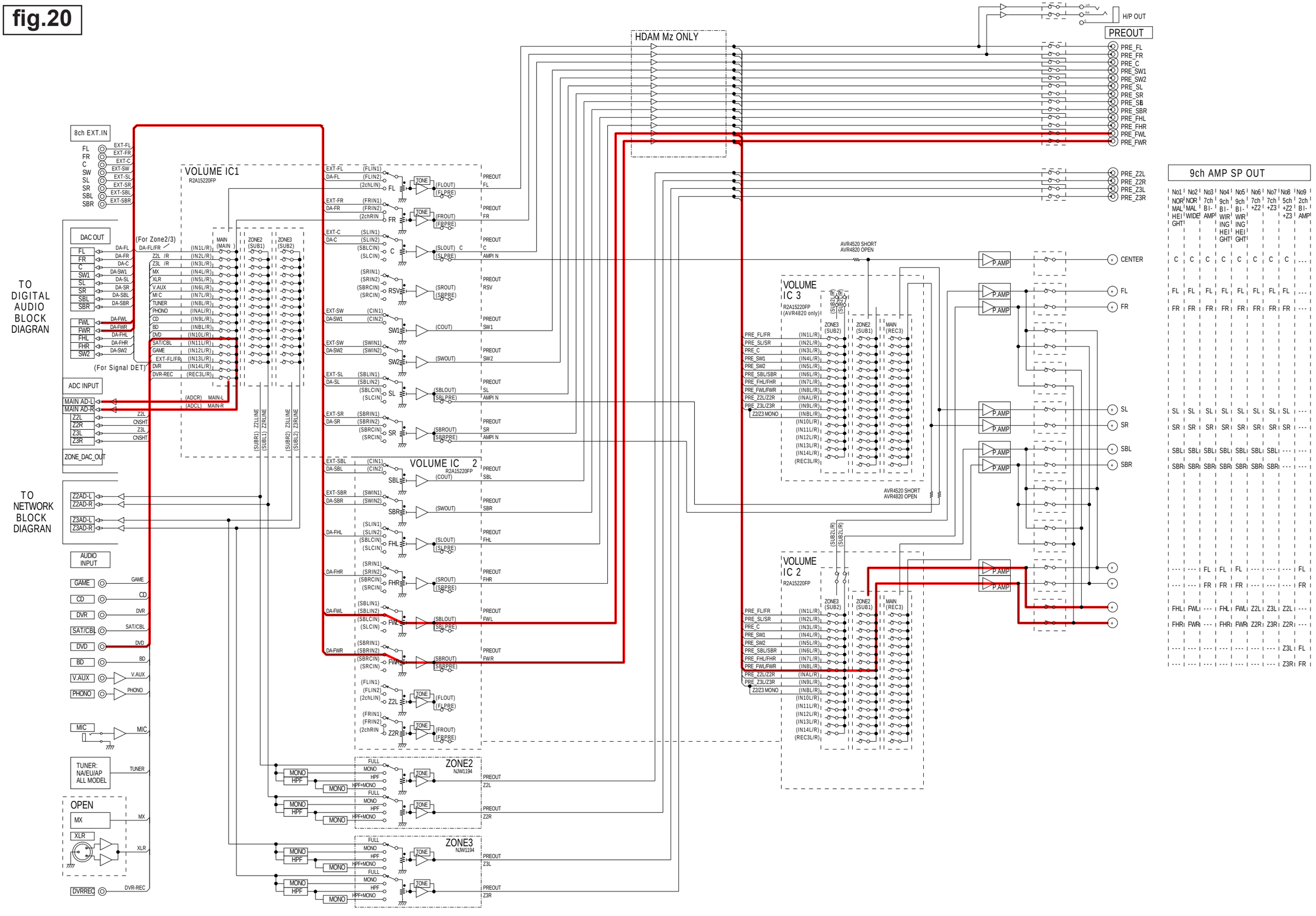
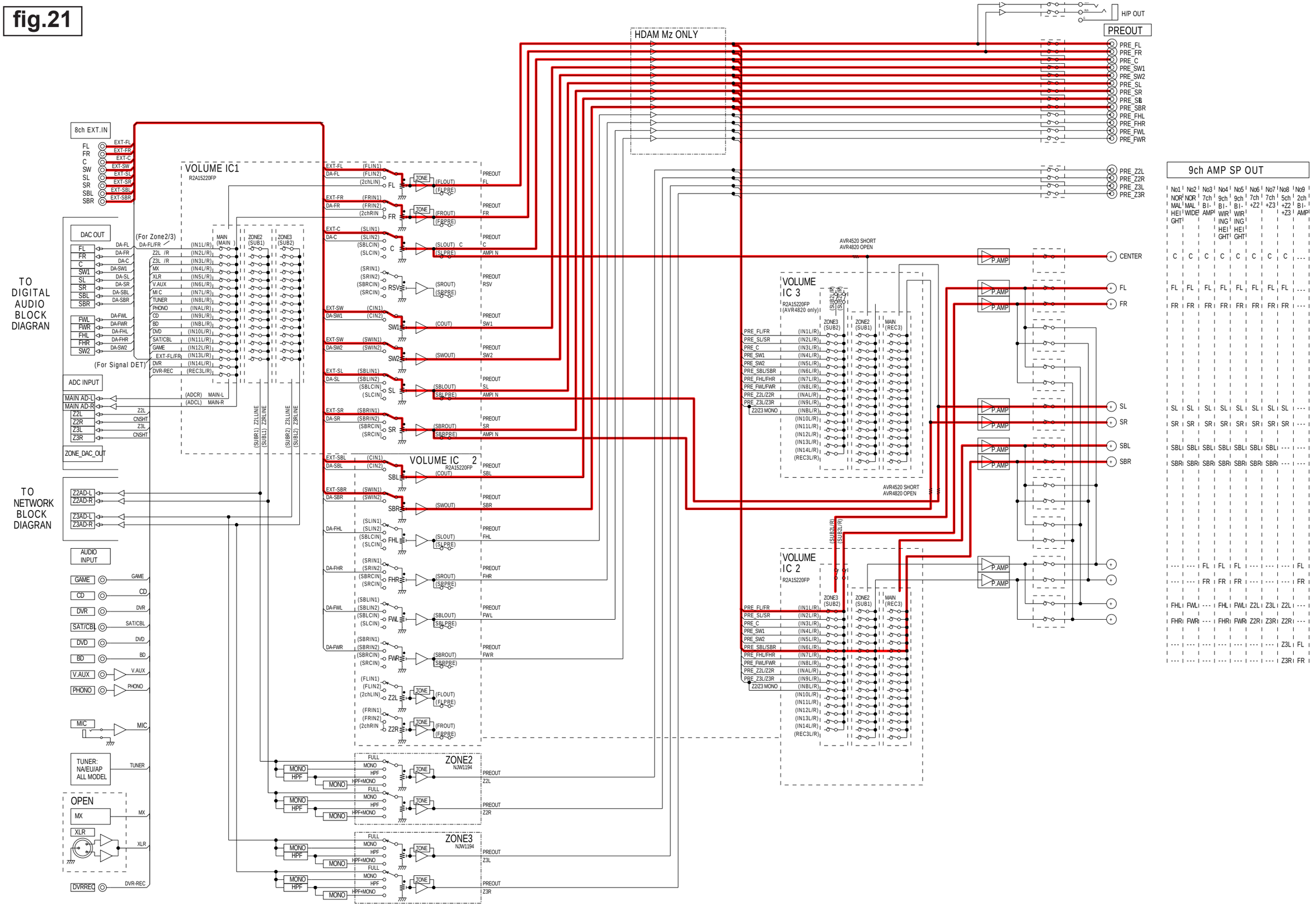

TO DIGITAL AUDIO BLOCK DIAGRAN
TO NETWORK BLOCK DIAGRAN
8ch EXT.IN
FL
FR
C
SW
SL
SR
SBL
SBR
EXT-FL
EXT-FR
EXT-C
EXT-SW
EXT-SL
EXT-SR
EXT-SBL
EXT-SBR
DAC OUT
FL
FR
C
SW1
SL
SR
SBL
SBR
FWL
FWR
FHL
FHR
SW2
DA-FL
DA-FR
DA-C
DA-SW1
DA-SL
DA-SR
DA-SBL
DA-SBR
DA-FWL
DA-FWR
DA-FHL
DA-FHR
DA-SW2
(For Signal DET)
(For Zone2/3)
DA-FL/FR
ADC INPUT
MAIN AD-L
MAIN AD-R
Z2L
Z2R
Z3L
Z3R
ZONE_DAC_OUT
Z2AD-L
Z2AD-R
Z3AD-L
Z3AD-R
AUDIO INPUT
GAME
CD
DVR
SAT/CBL
DVD
BD
V.AUX
PHONO
MIC
TUNER: NA/EU/AP ALL MODEL
TUNER
OPEN
MX
XLR
DVRREQ
DVR-REC
VOLUME IC1
R2A15220FP
(IN1L/R)
(IN2L/R)
(IN3L/R)
(IN4L/R)
(IN5L/R)
(IN6L/R)
(IN7L/R)
(INAL/R)
(IN8L/R)
(IN9L/R)
(INBL/R)
(IN10L/R)
(IN11L/R)
(IN12L/R)
(IN13L/R)
(IN14L/R)
(REC3L/R)
MAIN (MAIN)
ZONE2 (SUB1)
ZONE3 (SUB2)
Z2L /R
Z3L /R
MX
XLR
V.AUX
MI C
TUNER
PHONO
CD
BD
DVD
SAT/CBL
GAME
EXT-FL/FR
DVR
DVR-REC
(ADCR) MAIN-L
(ADCL) MAIN-R
(SUBR1) Z2LLINE
(SUBL1) Z2RLINE
(SUBR2) Z3LLINE
(SUBL2) Z3RLINE
EXT-FL (FLIN1)
DA-FL (FLIN2)
(2chLIN) FL
EXT-FR (FRIN1)
DA-FR (FRIN2)
(2chRIN FR
EXT-C (SLIN1)
DA-C (SLIN2)
(SBLCIN)
(SLCIN) C
(SRIN1)
(SRIN2)
(SBRCIN)
(SRCIN) RSV
EXT-SW (CIN1)
DA-SW1 (CIN2)
SW1
EXT-SW (SWIN1)
DA-SW2 (SWIN2)
SW2
EXT-SL (SBLIN1)
DA-SL (SBLIN2)
(SBLCIN)
(SLCIN) SL
EXT-SR (SBRIN1)
DA-SR (SBRIN2)
(SBRCIN)
(SRCIN) SR
EXT-SBL (CIN1)
DA-SBL (CIN2)
SBL
EXT-SBR (SWIN1)
DA-SBR (SWIN2)
SBR
DA-FHL (SLIN1)
(SLIN2)
(SBLCIN)
(SLCIN) FHL
DA-FHR (SRIN1)
(SRIN2)
(SBRCIN)
(SRCIN) FHR
DA-FWL (SBLIN1)
(SBLIN2)
(SBLCIN)
(SLCIN) FWL
DA-FWR (SBRIN1)
(SBRIN2)
(SBRCIN)
(SRCIN) FWR
(FLIN1)
(FLIN2)
(2chLIN) Z2L
(FRIN1)
(FRIN2)
(2chRIN Z2R
TONE
(FLOUT)
(FLPRE)
(FROUT)
(FRPRE)
(SLOUT) C
(SLPRE)
(SROUT)
(SRPRE)
(COUT)
(SWOUT)
(SBLOUT)
(SBLPRE)
(SBROUT)
(SBRPRE)
VOLUME IC 2
R2A15220FP
ZONE2
NJW1194
ZONE3
NJW1194
FULL
MONO
HPF
HPF+MONO
PREOUT FL
PREOUT FR
PREOUT C
PREOUT SW1
PREOUT SW2
PREOUT SL
PREOUT SR
PREOUT SBL
PREOUT SBR
PREOUT FHL
PREOUT FHR
PREOUT FWL
PREOUT FWR
PREOUT Z2L
PREOUT Z2R
PREOUT Z3L
PREOUT Z3R
AMPI N
HDAM Mz ONLY
H/P OUT
PREOUT
PRE_FL
PRE_FR
PRE_C
PRE_SW1
PRE_SW2
PRE_SL
PRE_SR
PRE_SB
PRE_SBR
PRE_FHL
PRE_FHR
PRE_FWL
PRE_FWR
PRE_Z2L
PRE_Z2R
PRE_Z3L
PRE_Z3R
AVR4520 SHORT
AVR4820 OPEN
VOLUME IC 3
R2A15220FP
(AVR4820 only)
PRE_FL/FR
PRE_SL/SR
PRE_C
PRE_SW1
PRE_SW2
PRE_SBL/SBR
PRE_FHL/FHR
PRE_FWL/FWR
PRE_Z2L/Z2R
PRE_Z3L/Z3R
Z2/Z3 MONO
(SUB1/L/R)
(SUB2/L/R)
ZONE3 (SUB2)
ZONE2 (SUB1)
MAIN (REC3)
P.AMP
CENTER
FL
FR
SL
SR
SBL
SBR
9ch AMP SP OUT
No1 NORMAL HEIGHT
No2 NORMAL WIDE
No3 7ch BI-AMP
No4 9ch BI-WIRING HEIGHT
No5 9ch BI-WIRING HEIGHT
No6 7ch +Z2
No7 7ch +Z3
No8 5ch +Z2 +Z3
No9 2ch BI-AMP

fig.21


TO DIGITAL AUDIO BLOCK DIAGRAN
TO NETWORK BLOCK DIAGRAN
8ch EXT.IN
FL
FR
C
SW
SL
SR
SBL
SBR
EXT-FL
EXT-FR
EXT-C
EXT-SW
EXT-SL
EXT-SR
EXT-SBL
EXT-SBR
VOLUME IC1
R2A15220FP
DAC OUT
(For Zone2/3)
DA-FL/FR
MAIN (MAIN)
ZONE2 (SUB1)
ZONE3 (SUB2)
(For Signal DET)
ADC INPUT
MAIN AD-L
MAIN AD-R
ZONE_DAC_OUT
Z2AD-L
Z2AD-R
Z3AD-L
Z3AD-R
AUDIO INPUT
GAME
CD
DVR
SAT/CBL
DVD
BD
V.AUX
PHONO
MIC
TUNER: NA/EU/AP ALL MODEL
OPEN
MX
XLR
DVRREC
DVR-REC
VOLUME IC 2
R2A15220FP
VOLUME IC 3
R2A15220FP (AVR4820 only)
HDAM Mz ONLY
AVR4520 SHORT
AVR4820 OPEN
ZONE2
NJW1194
ZONE3
NJW1194
MONO
HPF
HPF+MONO
FULL
TONE
P.AMP
H/P OUT
PREOUT
PRE_FL
PRE_FR
PRE_C
PRE_SW1
PRE_SW2
PRE_SL
PRE_SR
PRE_SBL
PRE_SBR
PRE_FHL
PRE_FHR
PRE_FWL
PRE_FWR
PRE_Z2L
PRE_Z2R
PRE_Z3L
PRE_Z3R
CENTER
9ch AMP SP OUT
No1 NORMAL HEIGHT
No2 NORMAL WIDE
No3 7ch BI-AMP
No4 9ch BI-WIRING HEIGHT
No5 9ch BI-WIRING HEIGHT
No6 7ch +Z2
No7 7ch +Z3
No8 5ch +Z2 +Z3
No9 2ch BI-AMP

3.5. Errors checking mode (Displaying the protection history)

3.5.1. Specifications

Error mode (Displaying the protection history):

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

3.5.2. About the display on the FL display

When the "STATUS" button is pressed after 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)

Upper	P	R	O	T	E	C	T		H	I	S	T	O	R	Y	
Lower	:	N	O		P	R	O	T	E	C	T					

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

Upper	P	R	O	T	E	C	T		H	I	S	T	O	R	Y	
Lower	:	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 7 seconds later and the power supply will be shut off.

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

Upper	P	R	O	T	E	C	T		H	I	S	T	O	R	Y	
Lower	:	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 7 seconds later and the power supply will be shut off.

(4) For THERMAL (when the last protection incident was THERMAL protection)

Upper	P	R	O	T	E	C	T		H	I	S	T	O	R	Y	
Lower	:	T	H	E	R	M	A	L		*						

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

If the power is turned on without correcting the abnormality, the protection function will work about 7 seconds later and the power supply will be shut off.

(5) For CURRENT (when the last protection incident was CUIRRENT protection)

Upper	P	R	O	T	E	C	T		H	I	S	T	O	R	Y	
Lower	C	U	R	R	E	N	T									

Cause: Continuous and abnormal output is detected while using speakers with multiple channels.

If the power is turned on without correcting the abnormality, the protection function will work about 1 minute 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" 33 page.)

3.5.3. Clearing the protection history

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

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

Upper	P	R	O	T	E	C	T		H	I	S	T	O	R	Y	
Lower	:	T	H	E	R	M	A	L		A						

Press the "ENTER" button for 3 seconds.

Upper	P	R	O	T	E	C	T		H	I	S	T	O	R	Y	
Lower						C	L	E	A	R						

The above is displayed and the protection history is cleared.

Upper	P	R	O	T	E	C	T		H	I	S	T	O	R	Y	
Lower	:	N	O		P	R	O	T	E	C	T					

(2) Initialize. (Refer to "Initializing INTEGRATED NETWORK AV RECEIVER" 9 page.)

※ If you want to save a backup, perform the method in 2.3.(1) 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) CURRENT PROTECTION : Flashes at intervals of 4 seconds (2 second lit, 2 second off)

3.6. 232C standby clear mode

3.6.1. Specifications

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

3.6.2. Starting up

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

Upper		2	.	P	R	O	T	E	C	T	I	O	N			
Lower	▶	3	.	R	S	2	3	2	C		R	E	S	E	T	

3.7. Operation Info mode

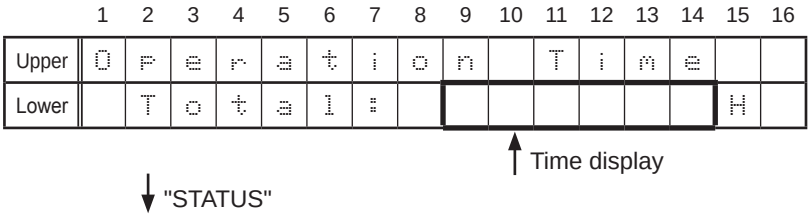
3.7.1. Specifications

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

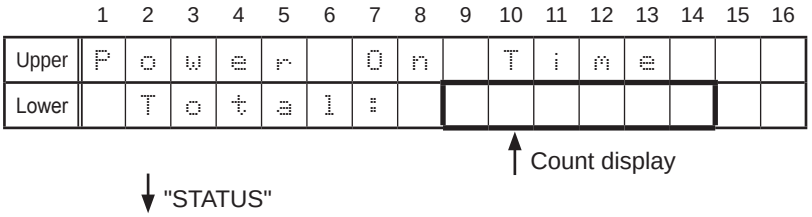
3.7.2. About the display on the FL display

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

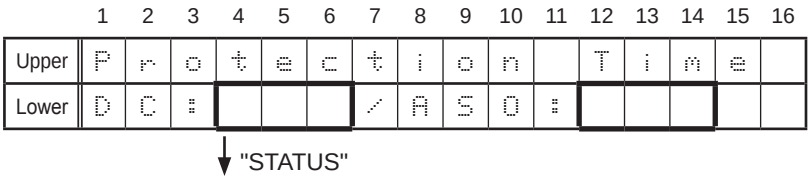
(a) Accumulated operating time



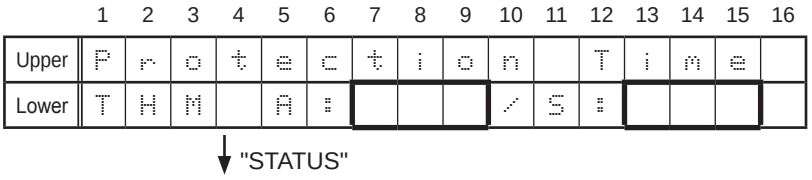
(b) Power on count



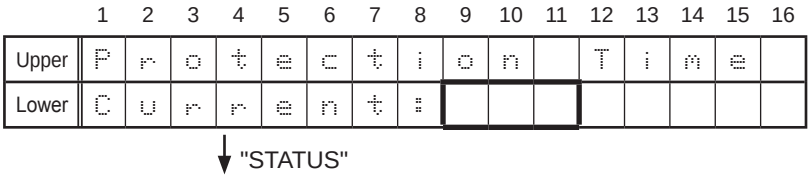
(c) DC/ASO Protection count



(d) Thermal Protection count



(e) Current Protection count



(Returns to normal display)

4. Additional Source mode

4.1. Specifications

- The Additional Source setting is added for the custom installer. When the setting is "ON", AUX3-7 is added as a Source.
  It is possible to add the number of Sources for use by assigning various input connectors in Input Assign Menu.
- The added AUX3-7 is displayed and available for selection in the Source related settings such as Input Setup in Setup Menu.
- The default setting is "OFF".

4.2. Operation

1. Press the "Power Operation (⏻)" button while pressing "BACK" and "CURSOR ▼" buttons on the set to turn the power on.
2. After the POWER ON sequence, FLD displays the indication for the Additional Source mode.
3. Press the "Cursor ◄"/"Cursor ►" buttons to select the setting.
   ON ◄——► OFF

Upper	*	A	d	d		S	o	u	r	c	e		M	o	d	e
Lower				<			O	F	F				>			

- ON is selected

Lower				<				O	N				>			

- OFF is selected

Lower				<			O	F	F				>			

4. Press the "ENTER" button to confirm the setting.

5. Protection Pass mode

5.1. Specifications

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

5.2. Operation

1. Press the "Power Operation (⏻)" button while pressing "DIMMER" and "BACK" buttons on the set to turn the power on.
2. The POWER ON sequence starts. The Protection detection is disabled.

Upper	P	r	o	t	e	c	t	i	o	n		P	a	s	s	
Lower																

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

6. DM860A Reboot mode

6.1. 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.

6.2. Operation

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

FL display while DM860A is being restarted

Upper	N	e	t	w	o	r	k		R	e	s	t	a	r	t	
Lower																

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

7. Remote ID Setup mode

7.1. Specifications

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

7.2. 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.

Upper																
Lower				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	REMOTE ID 1
QUICK SELECT 2	REMOTE ID 2
QUICK SELECT 3	REMOTE ID 3
QUICK SELECT 4	REMOTE ID 4

(3) Turn off the power using "Power operation (⏻)" button.
(4) Turn on the power using "Power operation (⏻)" button.

※ When Remote ID Setup mode is running, operations other than the "QUICK SELECT 1 - 4" buttons or "Power operation (⏻)" buttons on the main unit are not received.
※ Remote ID can also be set at Setup Menu - General - Remote ID.

7.3. Setting the Remote control unit

(1) Press and hold RC SETUP for at least 3 seconds.
"SETUP" and indicator flashes twice on the remote control unit.
(2) Use △▽ to display "RC-ID" on the remote control unit and press ENTER.
(3) Use ui to set the remote ID and press ENTER.
"OK" flashes four times on the remote control unit and the normal operation mode is restored.

Remote control unit display	Remote ID
ID-1	1
ID-2	2
ID-3	3
ID-4	4

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.

8. ZONE4 HDMI mode

8.1. Specifications

When "ZONE4 HDMI mode" is set to "Follow ZONE2", you can use ZONE4 HDMI OUT as ZONE2.
You can assign ZONE2 for Amp Assign to play back speaker audio and HDMI video in ZONE2.

8.2. Operation

(1) Press the "Power Operation (⏻)" button while pressing "ENTER" and "INFO" buttons on the set to turn the power on.
(2) After the POWER ON sequence is displayed, FLD displays the indication for the ZONE4 HDMI mode.
(3) Press the "Cursor ◄"/"Cursor ►" buttons to select the setting.

Discrete ◄——► Follow ZONE2

Upper				Z	O	N	E	4		H	D	M	I			
Lower	<				D	i	s	c	r	e	t	e				>

- "Discrete"(ZONE4) is selected

Lower	<				D	i	s	c	r	e	t	e				>

- "Follow ZONE2" is selected

Lower	<		F	o	l	l	o	w		Z	O	N	E	2		>

4. Press the "ENTER" button to confirm the setting.
AVR will restart.

Notes when Follow ZONE2 is set:
- The backup in this mode is initialized by Factory Initialization, not by User Initialization.
- ZONE4 HDMI OUT is linked with Power ON/OFF and source selection in ZONE2.
- ZONE4 ON/OFF or source selection is not available.
- The CEC function does not work.
- With ZONE2 Power ON, the InstaPrevue function is not available.

JIG FOR SERVICING

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

Note: When the connection which is wrong in the JIG (EXTENSION UNIT KIT) is done it becomes cause of damage.

8U-110084S : EXTENSION UNIT KIT

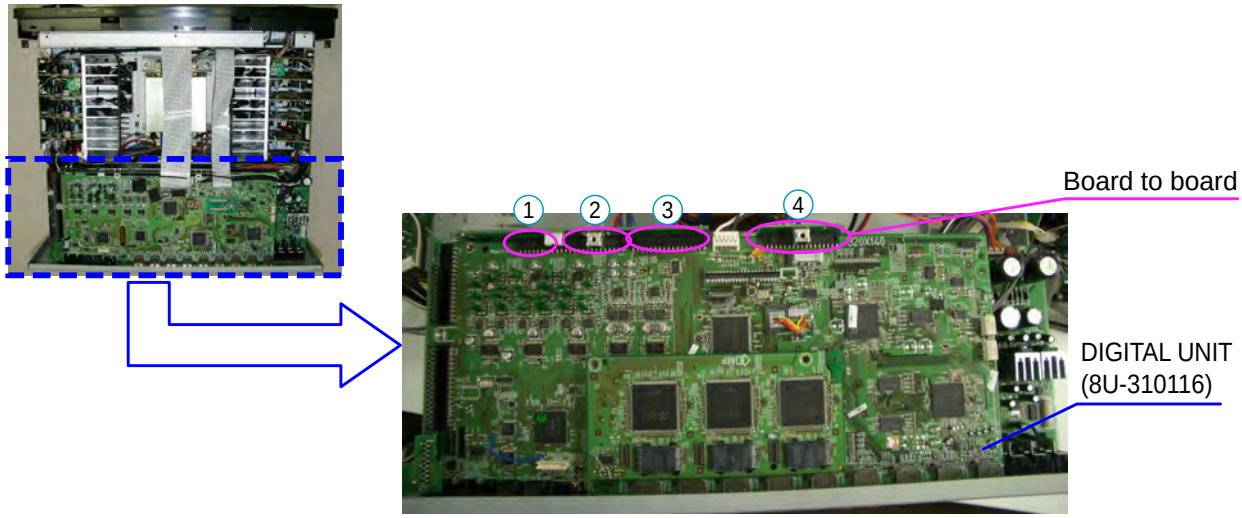
• Connection of PCB HDMI JIG

-Preparation-

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

-Procedures-

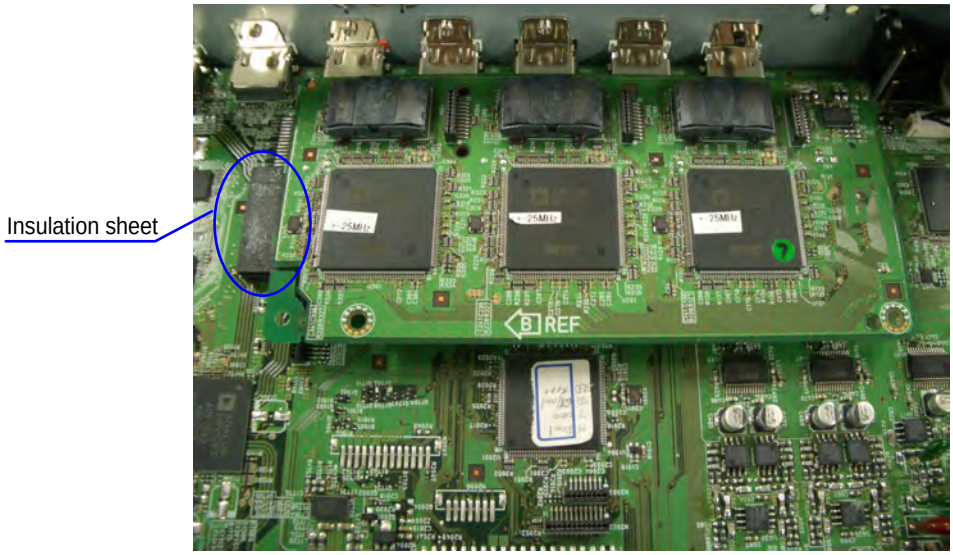
(1) Disconnect the connector board.



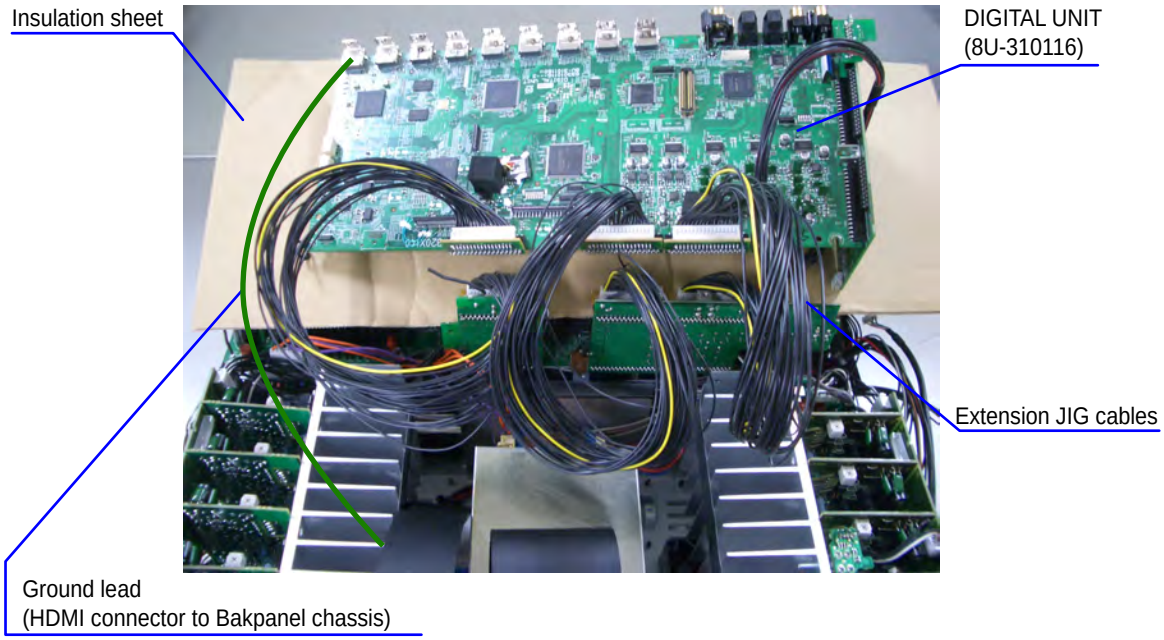
Connection table of Board to Board

No.	Pin	Ref. No.	PCB		Ref. No.	PCB
①	11pin	N4001	FRONT CNT	⟷	N1803	HDMI
②	33pin	N4002	FRONT CNT	⟷	N1804	HDMI
③	33pin	N4003	FRONT CNT	⟷	N1805	HDMI
④	33pin	N4004	FRONT CNT	⟷	N1806	HDMI

(2) When DSP STAY is removed, put some shock absorbing material there so that the DSP board (8U-310115) does not come in contact with the digital board (8U-310116). To verify the element under the DSP board through an oscilloscope, etc., remove the DSP board, pull out the lead, and reinstall the DSP board before verification.
When the set is turned on without installing the DSP board, the SUB microcomputer does not function properly.



(3) PCB HDMI is detached from the chassis, and it puts it into the state turned inside out.
Please pave 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.
Connect the four extension jig cables.



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
HDMI	U2001	R5F56108VNFP	**B**	SOFTWARE: Main
HDMI	U2101	R5F3650KNFB	**B**	SOFTWARE: Sub
DSP	U101	MX29LV160DBTI-70G	**B**	SOFTWARE: DSP1 ROM
DSP	U201	MX29LV160DBTI-70G	**B**	SOFTWARE: DSP2 ROM
DSP	U301	MX29LV160DBTI-70G	**B**	SOFTWARE: DSP3 ROM
HDMI	U301	5M570ZF256C5N	**D**	SOFTWARE: Audio PLD
HDMI	U1404	MX25L12835E	**B**	SOFTWARE: Video GUI ROM
NETWORK	U504	H27U1G8F2BTR-BC	**C**	SOFTWARE: NETWORK

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 : After replacing Nand Flash, always update the software. After the update is completed, initialize DM860A. (24 page)

D : 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 UPDATING THE VERSION OF THE FIRMWARE

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

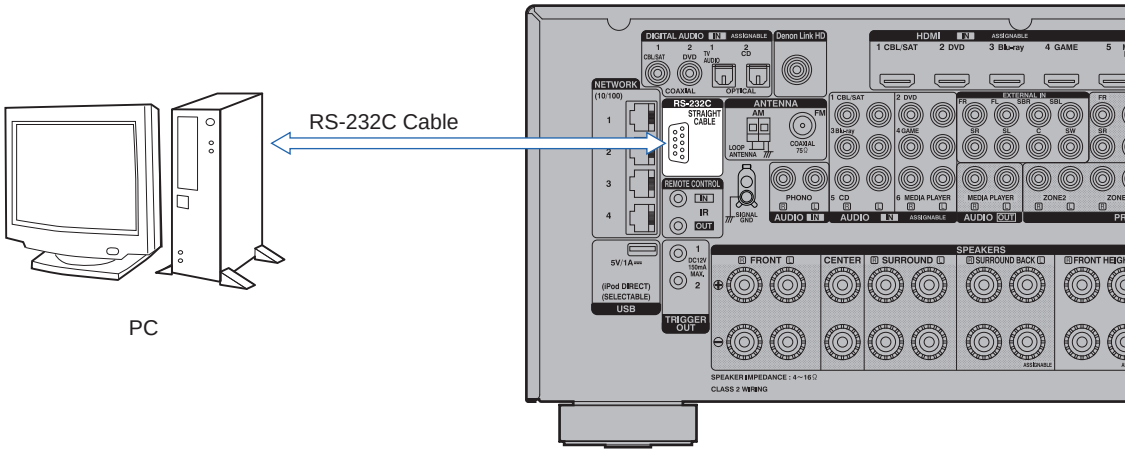
1. How to update by DFW

1.1. Preparations before starting the operation

(1) Personal Computer (Installed "DFW_0062_AVR4520_(Rev.x.x.x).exe".
(2) RS-232C cable (9P (Male), Straight).
NOTE : Refer to "The Operating Manual for updating of DENON AV receiver firmware".

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

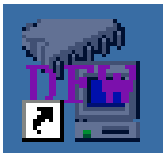
Turn on the AV receiver. When the board is replaced, the Flash ROM is replaced, or rewriting fails, always complete the following steps to force the update.

Forced Update Mode :

(1) Connect the power cable to the AC outlet while simultaneously pushing the "BACK" and "ZONE/REC SELECT" button of the front panel.
(2) Confirm the power indicator is red.

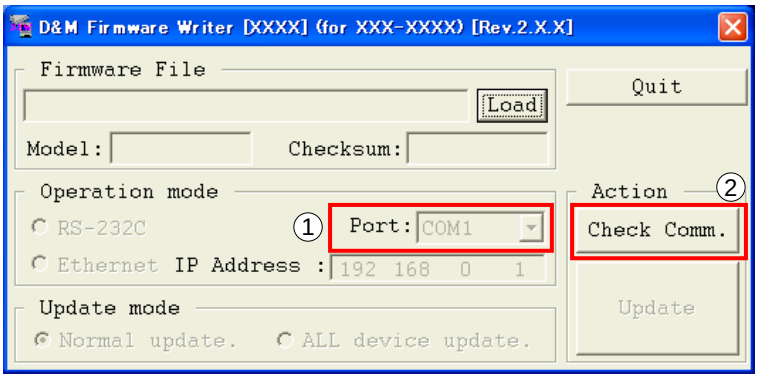
1.4. Run the DFW

Run the "DFW_0062_AVR4520_(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.



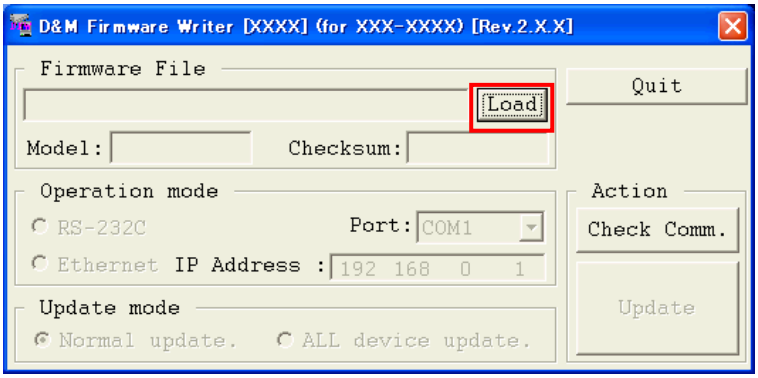
(3) When connection is good, then you can see the "Communication check OK." message.

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

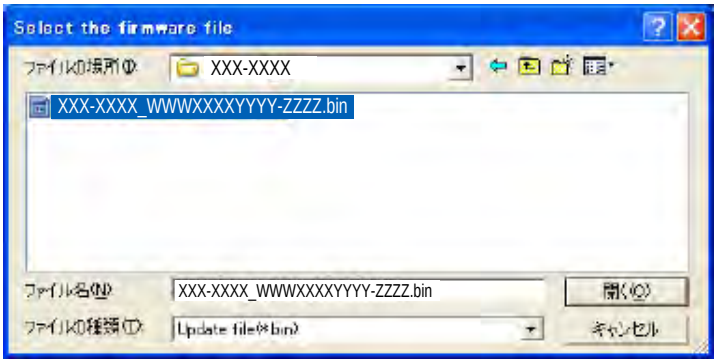
Please confirm the following
(a) Check the connection of the AV receiver and PC. (refer to "**1.2. Connection of the AV receiver**")
(b) Check the operation mode of the AV receiver. (refer to "**1.3.Turn on the AV receiver**")
(c) Check the selection of the RS-232C port number of PC.

1.6. Download the firmware

(1) Click the "Load" button.

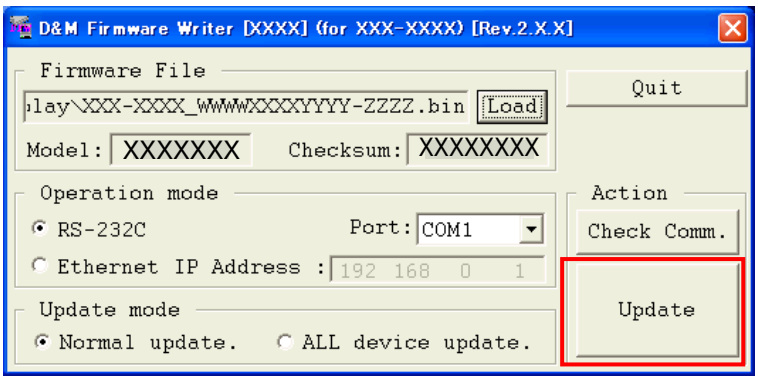


(2) Download the firmware from the specified download source to PC.

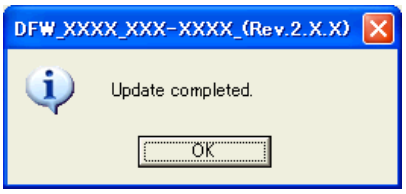


1.7. Complete the firmware updating

(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" (Forced Update Mode).

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**" (25 page).

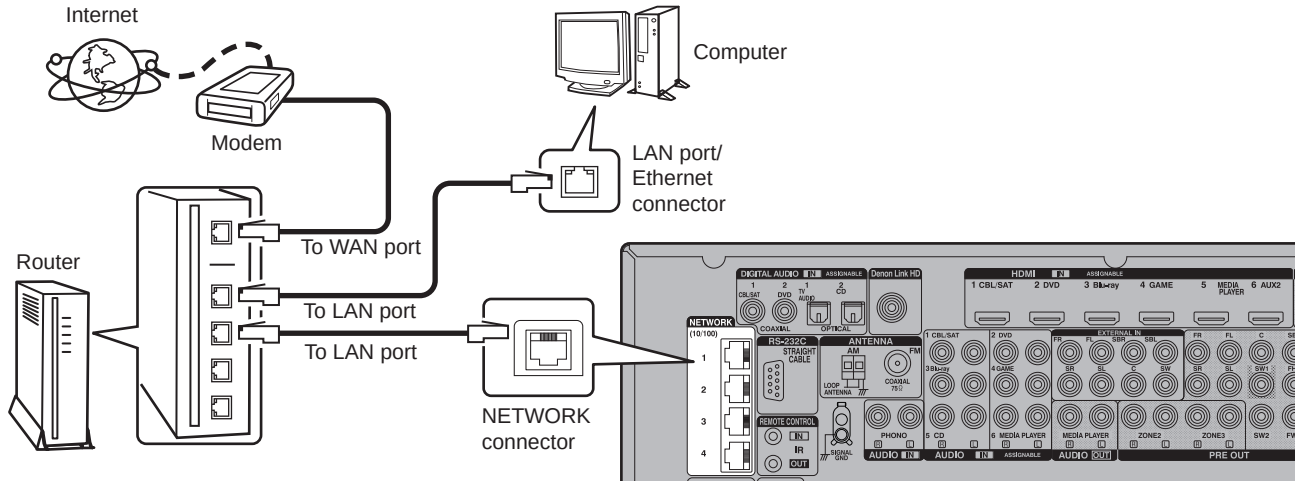
2. How to update by DPMS

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

2.1. Connecting to the Network

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

(2) Setting



2.2. Checking and updating the firmware

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

(1) Press the "SETUP" button on the remote control to display the GUI menu.
(2) Use the cursor buttons to select "GENERAL" → "FIRMWARE" → "Update" → "Check For Update".
(3) Press the "ENTER" button.
- The latest version of the firmware on the website is displayed.
- If the firmware on the website is latest, proceed to (4).
- If the latest firmware has been already installed, press the "SET UP" button to close the menu.

(4) Use the cursor buttons to select "Update", then press the "ENTER" button.
- During update, the power indicator lights in red and the GUI screen disappears. And an approximately remaining time is indicated on the display.
- When updating is complete the power indicator lights in green and normal status is resumed.

--- 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 AVR-4520 cannot be performed until updating is completed. Also, setting items of the GUI menu of AVR-4520 or setting items of the image adjustment may be initialized.
  Note down the settings before updating, and set them again after updating.

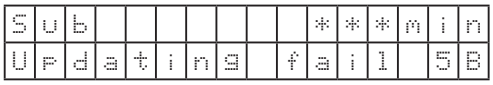
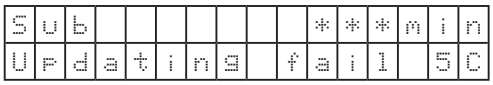
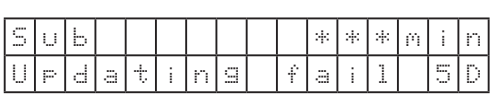
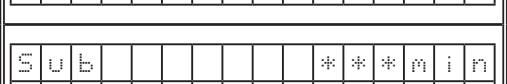
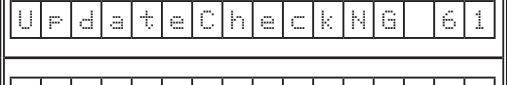
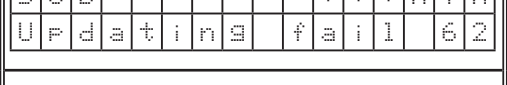
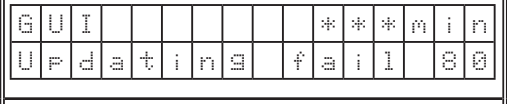
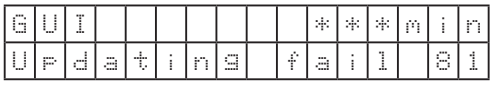
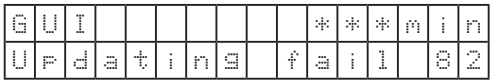
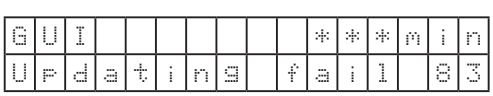
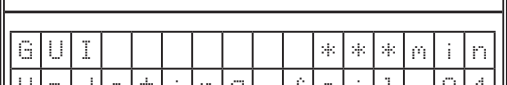
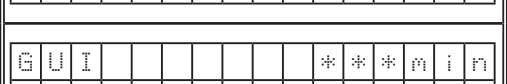
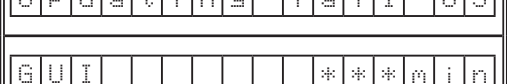
2.3. About the error code

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.	Connection fail 03	Check the network connection. Carry out the update in an environment that has little network load.
04	Failed to obtain entire Firmware information.	Connection fail 04	Check the network connection. Carry out the update in an environment that has little network load.
05	TimeOut while obtaining entire Firmware information.	Connection fail 05	Check the network connection. Carry out the update in an environment that has little network load.
06	Failed to obtain individual Firmware information.	Connection fail 06	Check the network connection. Carry out the update in an environment that has little network load.
07	TimeOut while obtaining entire Firmware information.	Connection fail 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.	Connection fail 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.	Connection fail 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.	Connection fail 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)	Connection fail 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).	Main ***min 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)	Main ***min 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).	Main ***min Updating fail 12	Turn off and on the power. Updating starts automatically.
13	The deletion of block data failed before Main CPU was rewritten.	Main ***min Erase fail 13	Turn off and on the power. Updating starts automatically.
14	The rewriting of block data failed when Main CPU was rewritten.	Main ***min Updating fail 14	Turn off and on the power. Updating starts automatically.
15	The data verification was invalid after Main CPU was rewritten.	Main ***min UpdateCheckNG 15	Turn off and on the power. Updating starts automatically.
20	Failure to acquire (Boot Loader Mode) IP address before rewriting DM860A (AutoIP).	Connection fail 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).	Connection fail 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.	Connection fail 24	Check the network connection. Carry out the update in an environment that has little network load.
25	Mode change failure of DM860A.	Connection fail 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.	Connection fail 27	Reset and update again.
36	Log-in to DPMS failed when Main CPU was rewritten.	Main ***min 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 Main CPU was rewritten.	Main ***min Server is busy 37	Carry out the update in an environment that has little network load.
38	Connection to DPMS failed when Main CPU was rewritten.	Main ***min 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 Main CPU was rewritten.	Main ***min ConnectionFail39	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.	Main ***min 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.	Main ***min 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.	Main ***min 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).	Main ***min ConnectionFail3D	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).	Main ***min ConnectionFail3E	Check the network connection. Carry out the update in an environment that has little network load
3F	Mode change failure of DM860A.	Main ***min ConnectionFail3F	Reset and update again.
50	Log-in to DPMS failed when firmware such as Sub CPU, DSP, GUI and PLD was rewritten.	Sub ***min 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, GUI and PLD was rewritten.	Sub ***min Server is busy51	Carry out the update in an environment that has little network load.
52	Connection to DPMS failed when firmware such as Sub CPU, DSP, GUI and PLD was rewritten.	Sub ***min ConnectionFail52	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, GUI and PLD was rewritten.	Sub ***min 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, GUI and PLD request was made for firmware data after the log-in to DPMS, but it timed out was rewritten.	Sub ***min 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, GUI and PLD was rewritten.	Sub ***min 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, GUI and PLD was rewritten.	Sub ***min 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, GUI and PLD was rewritten.	Sub ***min 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, GUI.	Sub ***min ConnectionFail5A	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.		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).		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).		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).		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).		Turn off and on the power. Updating starts automatically.
60	NACK was received when "P" command sent to Sub CPU, DSP, PLD etc.		Turn off and on the power. Updating starts automatically.
61	NACK was received when "I" command sent to Sub CPU, DSP, PLD etc.		Turn off and on the power. Updating starts automatically.
62	Start of Sub μ-com fail.		Turn off and on the power. Updating starts automatically.
80	Acquisition of serial flash data failed before serial flash was deleted.		Turn off and on the power. Updating starts automatically.
81	Deleting data failed before serial flash was rewritten.		Turn off and on the power. Updating starts automatically.
82	Receiving firmware for rewriting serial flash sent by DM860A failed (when timed out).		Turn off and on the power. Updating starts automatically.
83	Receiving firmwarefor rewriting serial flash sent by DM860A failed (when an error).		Turn off and on the power. Updating starts automatically.
84	Receiving firmwarefor rewriting serial flash sent by DM860A failed (when a Check Sum error).		Turn off and on the power. Updating starts automatically.
85	Receiving firmwarefor rewriting serial flash sent by DM860A failed (when invalid data was received).		Turn off and on the power. Updating starts automatically.
86	The data verification was invalid after serial flash was rewritten.		Turn off and on the power. Updating starts automatically.
A0	Acquisition of (Application Mode) IP address failed before rewriting DM860A was rewritten (AutoIP).		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).	Ether IMG ***min 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).	Ether IMG ***min 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).	Ether IMG ***min 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).	Ether IMG ***min 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).	Ether IMG ***min 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.	Ether IMG ***min 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).	Ether IMG ***min 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).	Ether IMG ***min 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).	Ether IMG ***min 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.	Ether IMG ***min 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	Ether IMG ***min 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. When DM860A related firmware was rewritten. (Timeout failure)	Ether IMG ***min 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	Mode change failure of DM860A. When DM860A related firmware was rewritten. (Boot Loader Mode)	Ether IMG ***min Updating fail B4	Reset and update again.
B5	Mode change failure of DM860A. When DM860A related firmware was rewritten. (Application Mode)	Ether IMG ***min Updating fail B5	Reset and update again.

Device display during firmware update

Target of device when firmware updated.

Target of device	Display	Error cpde
Main	Main ***min Updating **%	10~15 36~3F
Sub	Sub ***min Updating **%	50~52 54~58 5A~62
PLD	APLD ***min Updating **%	50~52 54~58 5A~62
DSP1	DSP1 ***min Updating **%	50~52 54~58 5A~62
DSP2	DSP2 ***min Updating **%	50~52 54~58 5A~62
DSP3	DSP3 ***min Updating **%	50~52 54~58 5A~62
GUI (ADV8003)	GUI ***min Updating **%	50~52 54~58 5A, 62 80~86
DM8x0BootLoader	Ether SBL ***min Updating ***	A0~A4 A6~A7 AE~B5
DM8x0Image	Ether IMG ***min Updating ***	A0~A4 A6~A7 AE~B5
DM8x0Image (EmergencyMode)	Please wait... Update retry	–

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 Network

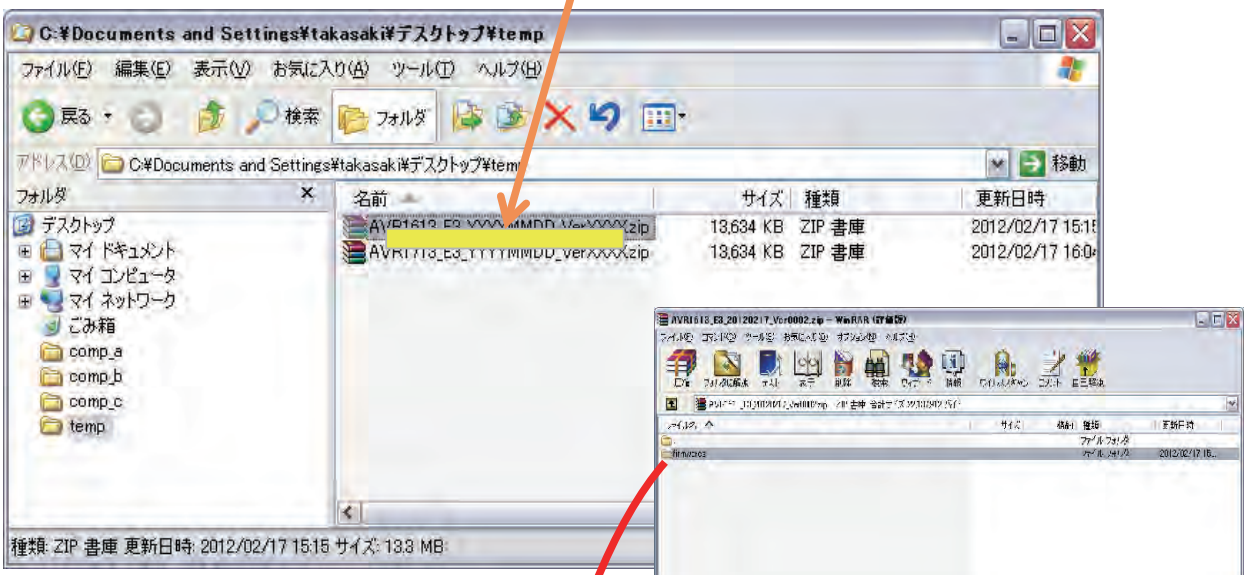
(1) Requirements

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

3.2. Unzip Download File

Pleases unzip the downloaded file on PC.

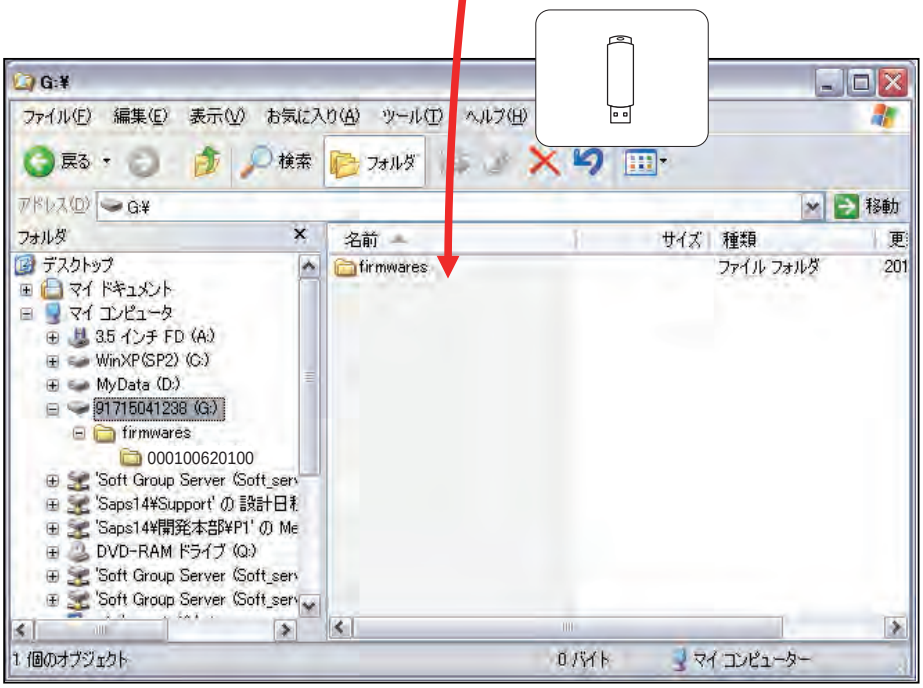
AVR4520 E3	USB_AVR-4520E3_000100620100-0001.zip



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 USB flash drive

3.3. Copy for USB flash drive

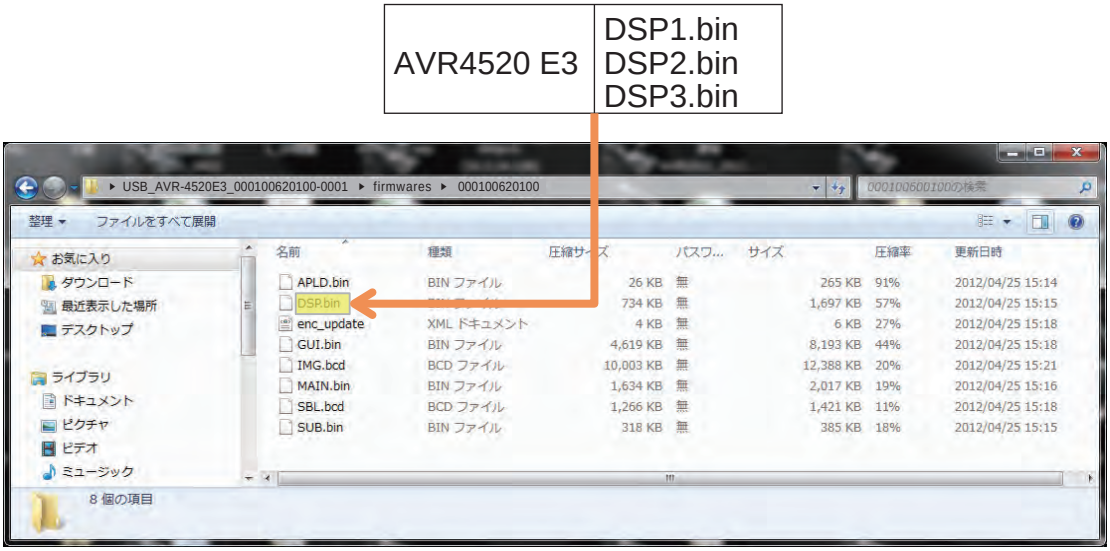


USB location is below

USB memory root

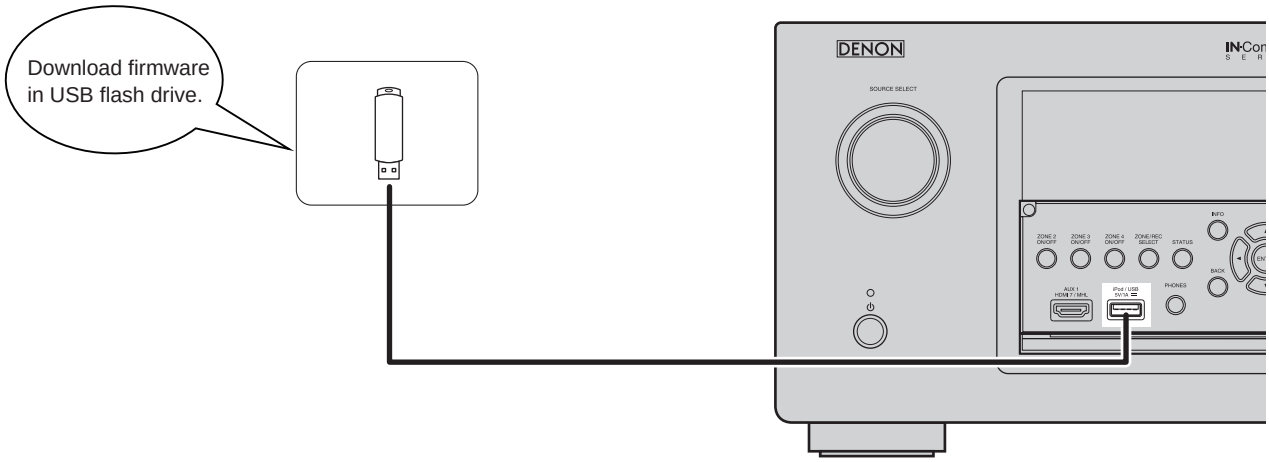
Model Name	Model Area	Product ID
AVR4520	North America (E3)	000100620100
	Europe (E2)	000100620200
	China (E1C)	000100620500

+ firmwares
  + 000100620100
    + APLD.bin
    + DSP1.bin
    + DSP2.bin
    + DSP3.bin
    + enc_update.xml
    + GUI.bin
    + IMG.bcd
    + MAIN.bin
    + SBL.bcd
    + SUB.bin



3.4. Insert the USB memory into a USB port

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



3.5. Start update

Turn on the power of this unit in the "STATUS" + "OPTION" button.

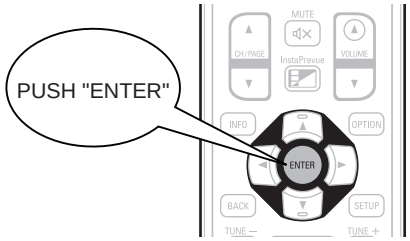
3.6. "USB Update Start" on FL Display

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

FL Display

Upper	*	F	I	R	M	W	A	R	E		U	P	D	A	T	E
Lower	U	S	B		U	p	d	a	t	e		S	t	a	r	t

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



Then start Firmware Update.

FL Display

Upper	P	l	e	a	s	e		w	a	i	t	.	.	.		
Lower	U	p	d	a	t	e	F	i	l	e	C	h	e	c	k	

3.8. Finish firmware update

FL display shows the following message.

FL Display

Upper	F	i	r	m		U	p	d	a	t	e				
Lower	U	p	d	a	t	i	n	g	C	o	m	p	l	e	t	e

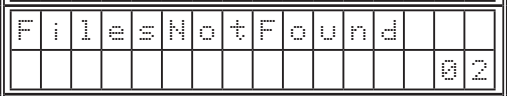
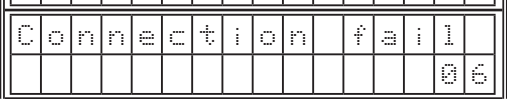
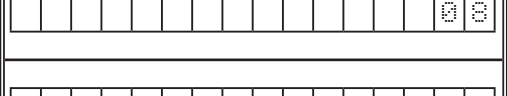
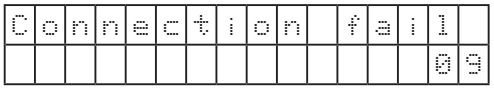
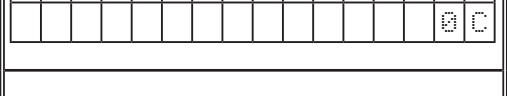
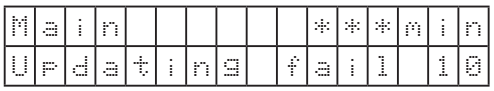
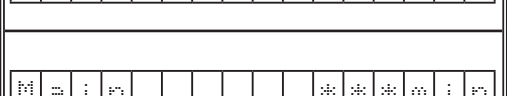
△5

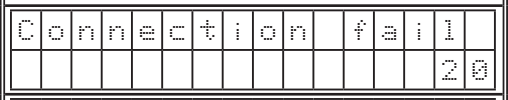
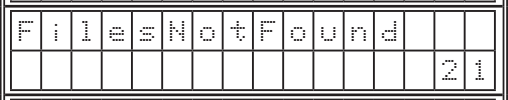
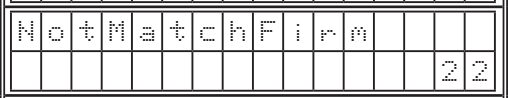
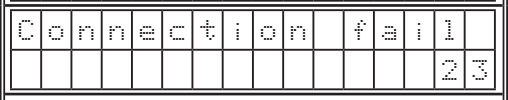
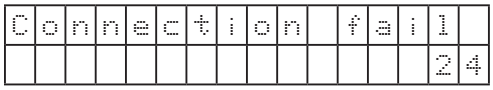
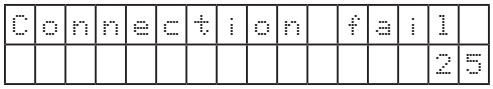
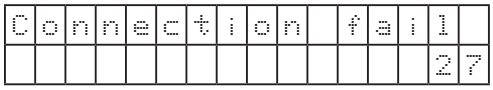
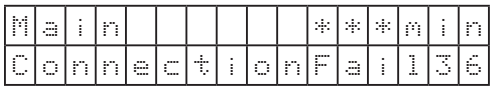
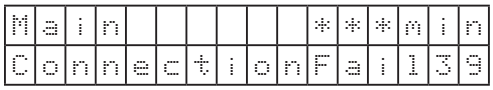
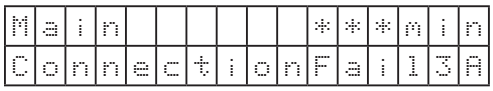
--- Cautions on Firmware Update ---

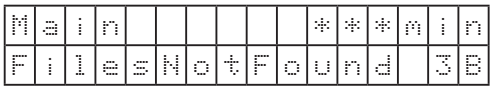
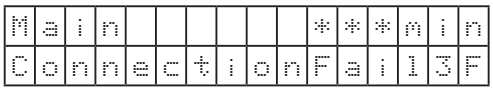
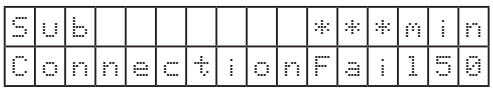
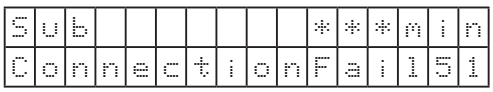
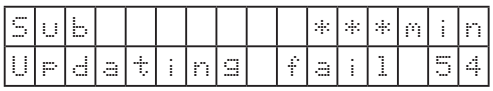
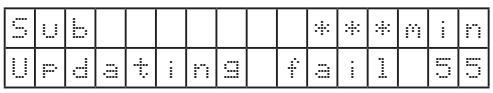
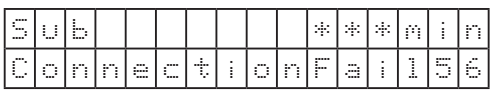
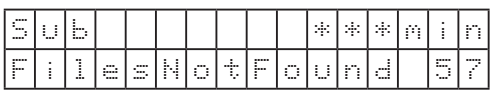
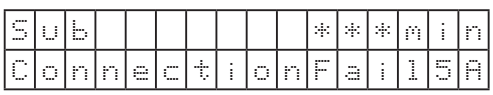
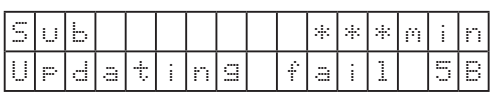
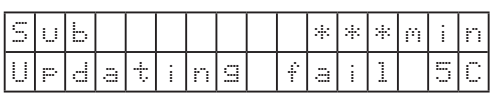
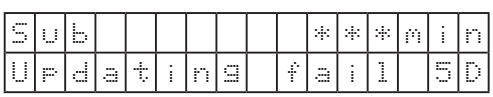
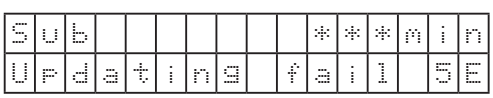
- Do not remove a USB memory until updating is completed.
- Do not turn off the power until updating is completed.
  Approximately 1 hour is required for the updating procedure to be completed.
  Once updating starts, normal operations on the this unit cannot be performed until updating is completed. 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.

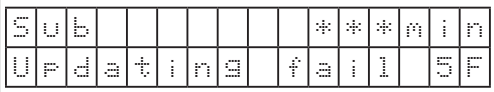
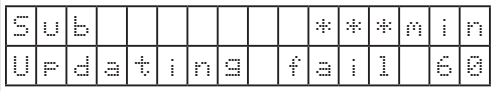
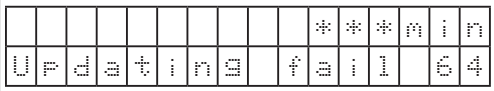
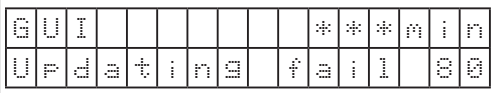
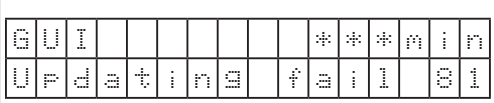
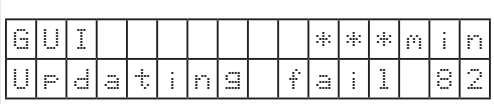
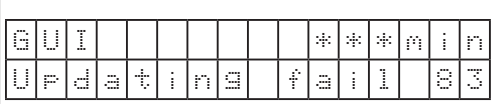
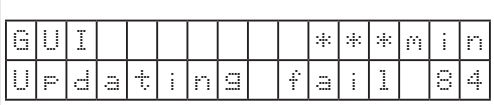
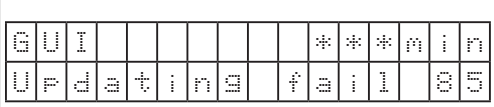
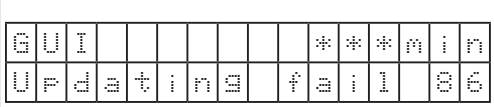
3.9. About the error code

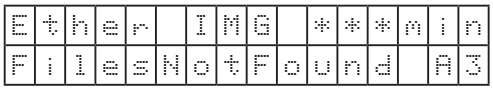
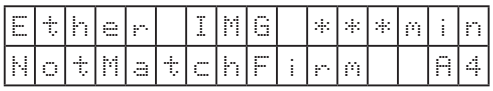
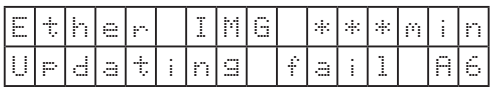
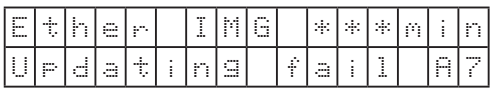
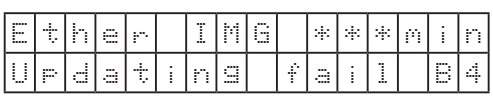
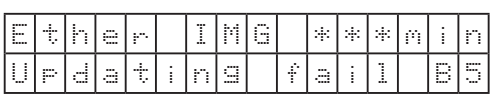
See the table below for error codes and details of faults when the firmware is updated through USB memory.

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

Error Code	Details of Error code	Display	Coping strategies
14	BlockWrite failed while rewriting Main.		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).		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.		Disconnect and connect the USB memory.
21	No FirmwareFile in USB after SBLMode.		Disconnect and connect the USB memory.
22	FirmwareFile in USB after SBLMode for unsupported Model name/area		Check the supported Model name/area for the FirmwareFile.
23	Failed to obtain entire Firmware information after SBLMode.		Disconnect and connect the USB memory.
24	TimeOut while obtaining entire Firmware information after SBLMode		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.		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		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.		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.		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.		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		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		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.		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.		This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds.
3F	Failed to transit to SBLMode.		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.		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.		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		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.		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		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.		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.		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.		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.		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).		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).		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).		This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds.

Error Code	Details of Error code	Display	Coping strategies
5F	Abnormal data in UpdatePacket received from DM860A (DataLength/ DataNo).		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.		This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds.
61	Mismatched CheckSum in response or no response from Sub for "I" command.		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	Sub µ-com failed to start in the POWER ON sequence during Update.		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.		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.		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.		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.		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).		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).		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).		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).		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.		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.		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
A3	No FirmwareFile in USB.		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		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.		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		This unit automatically retries several times. Wait until the FL display stops. If the FL display stops at the Error display, press and hold the "Power operation (⏻)" button for five seconds.
AE	Unable to detect USB for FirmwareDownload.		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.		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		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.		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).		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.		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.		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.

3.10. Device display during firmware update

Display of target device during firmware update.

Target of device	Display	Error cpde
Main	Main ***min Updating **%	10~15 36~3B, 3F
Sub	Sub ***min Updating **%	50~52 54~57 5A~64
PLD	APLD ***min Updating **%	50~52 54~57 5A~64
DSP1	DSP1 ***min Updating **%	50~52 54~57 5A~64
DSP2	DSP2 ***min Updating **%	50~52 54~57 5A~64
DSP3	DSP3 ***min Updating **%	50~52 54~57 5A~64
GUI (ADV8003)	GUI ***min Updating **%	50~52 54~58 5A~64 80~86
DM8x0BootLoader	Ether SBL ***min Updating ***	A2~A4 A6~A7 AE~AF B1~B5
DM8x0Image	Ether IMG ***min Updating ***	A2~A4 A6~A7 AE~AF B1~B5
DM8x0Image (EmergencyMode)	Please wait... Update retry	–

Confirming the firmware's number after upgraded

After updating the firmware, check the version. Refer to "**1. µcom/DSP Version display mode**" (25 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 V101,V201,V301,V401,V501,V601,V701,V801,V901 on 9CH AMP UNIT at fully counterclockwise (c) position.

(2) Connect DC Voltmeter to test points (FRONT-Lch: N9039 9pin-10pin, FRONT-Rch: N9040 1pin-2pin, CENTER ch: N9039 7pin-8pin, SURROUND-Lch: N9039 5pin-6pin, SURROUND-Rch: N9040 3pin-4pin, SURROUND-BACK Lch: N9039 3pin-4pin, SURROUND-BACK Rch: N9040 5pin-6pin, FRONT-HEIGHT Lch: N9039 1pin-2pin, FRONT-HEIGHT Rch: N9040 7pin-8pin.

(3) Connect power cord to AC Line, and turn power switch "ON".

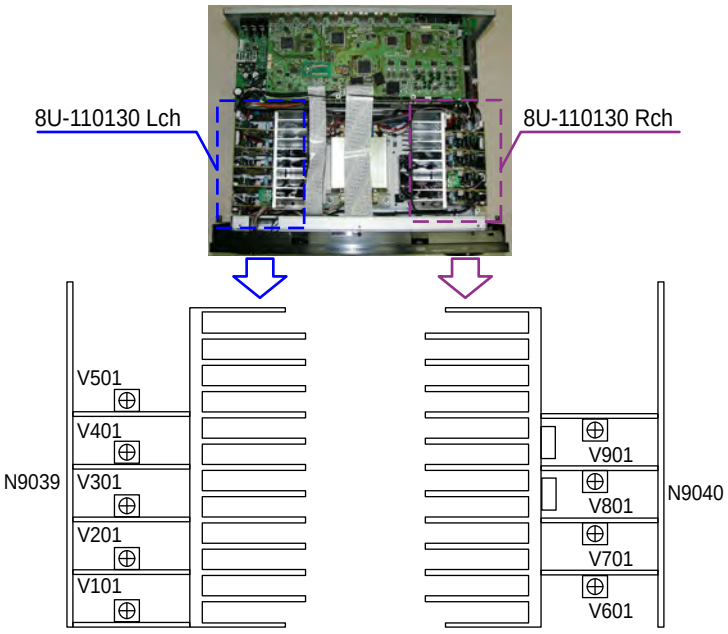
(4) Presetting.

MASTER VOLUME : "---" counterclockwise (ᑎ 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 V101 clockwise (x) to adjust the TEST POINT voltage to 8mV ± 0.5mV DC.

(6) After 10 minutes from the preset above, turn V101 to set the voltage to 12mV ± 0.5mV DC.

(7) Adjust the Variable Resistors of other channels in the same way.



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

Sound modes and surround parameters

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

Symbols in the table

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

Sound Mode	Channel output							Dialog Enhancer	Subwoofer Level
	Front L/R	Center	Surround L/R	Surround back L/R	Front height L/R	Front wide L/R	Subwoofer		
DIRECT/PURE DIRECT (2 channel)*1	○						◎*7		○*7
DIRECT/PURE DIRECT (Multi-channel)*1	○	◎	◎	◎*2	◎*2	◎*2	◎		○
DSD DIRECT (2 channel)*1	○						◎*7		○*7
DSD DIRECT (Multi-channel)*1	○	◎	◎				◎		○
EXTERNAL IN	○	◎	◎	◎			◎		○
STEREO	○						◎	○	○
MULTI CH IN	○	◎	◎	◎	◎*4		◎	○	○
DOLBY PRO LOGIC IIz	○	◎	◎	◎	◎		◎	○	○
DOLBY PRO LOGIC IIx	○	◎	◎	◎			◎	○	○
DOLBY PRO LOGIC II	○	◎	◎				◎	○	○
DOLBY PRO LOGIC IIx A-DSX	○	◎	◎	◎	◎*5	◎*6	◎	○	○
DOLBY PRO LOGIC II A-DSX	○	◎	◎		◎*5	◎*6	◎	○	○
DTS NEO:X	○	◎	◎	◎*3	◎*3	◎*3	◎	○	○
Audyssey DSX®	○	◎	◎	◎	◎*5	◎*6	◎	○	○
DOLBY DIGITAL	○	◎	◎	◎	◎*4		◎	○	○
DOLBY DIGITAL Plus	○	◎	◎	◎*2	◎*2	◎*2	◎	○	○
DOLBY TrueHD	○	◎	◎	◎*2	◎*2	◎*2	◎	○	○
DTS SURROUND	○	◎	◎	◎	◎*4		◎	○	○
DTS 96/24	○	◎	◎	◎	◎*4		◎	○	○
DTS-HD	○	◎	◎	◎*2	◎*2	◎*2	◎	○	○
DTS Express	○	◎	◎	◎	◎*4		◎	○	○
MULTI CH STEREO	○	◎	◎	◎*3	◎*3	◎*3	◎	○	○
WIDE SCREEN	○	◎	◎	◎*3	◎*3	◎*3	◎	○	○
SUPER STADIUM	○	◎	◎	◎*3	◎*3	◎*3	◎	○	○
ROCK ARENA	○	◎	◎	◎*3	◎*3	◎*3	◎	○	○
JAZZ CLUB	○	◎	◎	◎*3	◎*3	◎*3	◎	○	○
CLASSIC CONCERT	○	◎	◎	◎*3	◎*3	◎*3	◎	○	○
MONO MOVIE	○	◎	◎	◎*3	◎*3	◎*3	◎	○	○
VIDEO GAME	○	◎	◎	◎*3	◎*3	◎*3	◎	○	○
MATRIX	○	◎	◎	◎*3	◎*3	◎*3	◎	○	○
VIRTUAL	○						◎	○	○

*1 During playback in PURE DIRECT mode, the surround parameters are the same as in DIRECT mode.
*2 A signal for each channel contained in an input signal is output as audio.
*3 You can select speakers to output audio on the "Speaker Select" setting in the menu.
*4 Audio is output from the front height speaker when the set sound mode name contains "+PLIIz". For information on how to check the sound mode.
*5 Audio is output from the front height speaker when "Audyssey DSX®" in the menu is set to "Wides/Heights" or "Heights".
*6 Audio is output from the front wide speaker when "Audyssey DSX®" in the menu is set to "Wides/Heights" or "Wides".
*7 Only when "Subwoofer Mode" is set to "LFE+Main", sound is output from the subwoofer.

Sound Mode	Surround Parameter									
	Cinema EQ	Loudness Management *10	Dynamic Compression *11	Bass Sync *12	Low Frequency Effects *12	Delay Time	Effect Level	Room Size	Height Gain *13	Speaker Select
DIRECT/PURE DIRECT (2 channel)*1		○	○							
DIRECT/PURE DIRECT (Multi-channel)*1		○	○		○					
DSD DIRECT (2 channel)*1										
DSD DIRECT (Multi-channel)*1					○					
EXTERNAL IN					○					
STEREO		○	○	○	○					
MULTI CH IN	○*8			○	○					
DOLBY PRO LOGIC IIz	○	○	○						○	
DOLBY PRO LOGIC IIx	○*9	○	○							
DOLBY PRO LOGIC II	○*9	○	○							
DOLBY PRO LOGIC IIx A-DSX	○*9	○	○							
DOLBY PRO LOGIC II A-DSX	○*9	○	○							
DTS NEO:X	○*9	○	○							○
Audyssey DSX®	○	○	○	○	○					
DOLBY DIGITAL	○*8		○	○	○				○	
DOLBY DIGITAL Plus	○*8		○	○	○				○	
DOLBY TrueHD	○*8	○	○	○	○				○	
DTS SURROUND	○*8		○	○	○				○	
DTS 96/24	○*8			○	○				○	
DTS-HD	○*8			○	○				○	
DTS Express	○*8			○	○				○	
MULTI CH STEREO		○	○	○	○					○
WIDE SCREEN		○	○	○	○		○			○
SUPER STADIUM		○	○	○	○		○	○		○
ROCK ARENA		○	○	○	○		○	○		○
JAZZ CLUB		○	○	○	○		○	○		○
CLASSIC CONCERT		○	○	○	○		○	○		○
MONO MOVIE		○	○	○	○		○	○		○
VIDEO GAME		○	○	○	○		○	○		○
MATRIX		○	○	○	○	○				○
VIRTUAL		○	○	○	○					

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

*8 This setting is unavailable when the set sound mode name contains "+PLII Music" or "+NEO:X Music". For information on how to check the sound mode

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

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

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

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

*13 This setting is available when the set sound mode name contains "+PLIIz". For information on how to check the sound mode.

Sound Mode	Surround Parameter				Tone ∗14	Audyssey					Restorer ∗18
	PRO LOGIC II/IIx Music mode only			NEO:X mode only							
	Panorama	Dimension	Center Width	Center Gain		MultEQ® XT 32	Dynamic EQ ∗17	Dynamic Volume ∗17	Audyssey LFC™ ∗17	Audyssey DSX®	
DIRECT/PURE DIRECT (2 channel) ∗1											
DIRECT/PURE DIRECT (Multi-channel) ∗1											
DSD DIRECT (2 channel) ∗1											
DSD DIRECT (Multi-channel) ∗1											
EXTERNAL IN											
STEREO					○	○	○	○	○		○
MULTI CH IN					○	○	○	○	○	○	
DOLBY PRO LOGIC IIz					○	○	○	○	○	○	○
DOLBY PRO LOGIC IIx	○	○	○		○	○	○	○	○	○	○
DOLBY PRO LOGIC II	○	○	○		○	○	○	○	○	○	○
DOLBY PRO LOGIC IIx A-DSX	○	○	○		○	○	○	○	○	○	○
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					○	○	○	○	○		○
WIDE SCREEN					○	○	○	○	○		○
SUPER STADIUM					○ ∗15	○	○	○	○		○
ROCK ARENA					○ ∗16	○	○	○	○		○
JAZZ CLUB					○	○	○	○	○		○
CLASSIC CONCERT					○	○	○	○	○		○
MONO MOVIE					○	○	○	○	○		○
VIDEO GAME					○	○	○	○	○		○
MATRIX					○	○	○	○	○		○
VIRTUAL					○	○	○	○	○		○

∗1 During playback in PURE DIRECT mode, the surround parameters are the same as in DIRECT mode.
∗14 This item cannot be set when "Dynamic EQ" is set to "On".
∗15 In this sound mode, bass is +6 dB, and treble is 0 dB (Default).
∗16 In this sound mode, bass is +6 dB, and treble is +4 dB (Default).
∗17 This item cannot be set when "MultEQ® XT 32" is set to "Off" or "Graphic EQ".
∗18 This item can be set when the input signal is analog, PCM 48 kHz or 44.1 kHz.

❑ Types of input signals, and corresponding sound modes

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

Symbols in the table

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

Sound Mode	NOTE	Input signal types and formats																	
		ANALOG	PCM		DTS-HD		DTS					DOLBY		DOLBY DIGITAL				Super Audio CD	
			PCM (multi ch)	PCM (2ch)	DTS-HD Master Audio	DTS-HD High Resolution Audio	DTS EXPRESS	DTS ES DSCRT (With Flag)	DTS ES MTRX (With Flag)	DTS (5.1ch)	DTS 96/24	DOLBY TrueHD	DOLBY DIGITAL Plus	DOLBY DIGITAL EX (With Flag)	DOLBY DIGITAL EX (With no Flag)	DOLBY DIGITAL (5.1ch)	DOLBY DIGITAL (2ch)	DSD (multi ch)	DSD (2ch)
DTS SURROUND																			
DTS-HD MSTR	∗1				●														
DTS-HD HI RES	∗1					●													
DTS ES DSCRT6.1	∗2							●											
DTS ES MTRX6.1	∗2								●										
DTS SURROUND	∗1							○	○	●									
DTS 96/24	∗1										●								
DTS (–HD) + PLIIx Cinema	∗3				○	○	○			○	○								
DTS (–HD) + PLIIx Music	∗2				○	○	○			○	○								
DTS (–HD) + PLIIz	∗4				○	○	○	○	○	○	○								
DTS EXPRESS	∗1						●												
DTS (–HD) + NEO:X Cinema					○	○	○	○	○	○	○								
DTS (–HD) + NEO:X Music					○	○	○	○	○	○	○								
DTS (–HD) + NEO:X Game					○	○	○	○	○	○	○								
DTS NEO:X Cinema	∗1	○		○													○		
DTS NEO:X Music	∗1	○		○													○		
DTS NEO:X Game	∗1	○		○													○		
Audyssey DSX®					○	○	○	○	○	○	○								

∗1 If “Audyssey DSX®” is set to “Wides/Heights”, “Heights” or “Wides”, the Audyssey DSX® effect is added to the sound mode marked with ∗1.
∗2 If “Speaker Config.” – “Surr. Back” is set to “None”, this sound mode cannot be selected.
∗3 If “Speaker Config.” – “Surr. Back” is set to “1spkr” or “None”, this sound mode cannot be selected.
∗4 If “Speaker Config.” – “Front Height” is set to “None”, this sound mode cannot be selected.

Sound Mode	NOTE	Input signal types and formats																	
		ANALOG	PCM		DTS-HD		DTS					DOLBY		DOLBY DIGITAL				Super Audio CD	
			PCM (multi ch)	PCM (2ch)	DTS-HD Master Audio	DTS-HD High Resolution Audio	DTS EXPRESS	DTS ES DSCRT (With Flag)	DTS ES MTRX (With Flag)	DTS (5.1ch)	DTS 96/24	DOLBY TrueHD	DOLBY DIGITAL Plus	DOLBY DIGITAL EX (With Flag)	DOLBY DIGITAL EX (With no Flag)	DOLBY DIGITAL (5.1ch)	DOLBY DIGITAL (2ch)	DSD (multi ch)	DSD (2ch)
DOLBY SURROUND																			
DOLBY TrueHD	∗1											●							
DOLBY DIGITAL+	∗1												●						
DOLBY DIGITAL EX	∗2													○	○	○			
DOLBY (D+) (HD) +EX	∗2											○	○						
DOLBY DIGITAL	∗1													●	●	●			
DOLBY (D) (D+) (HD) + PLⅡx Cinema	∗3											○	○	○	○	○			
DOLBY (D) (D+) (HD) + PLⅡx Music	∗2											○	○	○	○	○			
DOLBY (D) (D+) (HD) + PLⅡz	∗4											○	○	○	○	○			
DOLBY (D) (D+) (HD) + NEO:X Cinema												○	○	○	○	○			
DOLBY (D) (D+) (HD) + NEO:X Music												○	○	○	○	○			
DOLBY (D) (D+) (HD) + NEO:X Game												○	○	○	○	○			
DOLBY PRO LOGIC Ⅱx Cinema	∗2	○		○													○		○
DOLBY PRO LOGIC Ⅱx Music	∗2	○		○													○		○
DOLBY PRO LOGIC Ⅱx Game	∗2	○		○													○		○
DOLBY PRO LOGIC Ⅱx Cinema A-DSX		○		○													○		
DOLBY PRO LOGIC Ⅱx Music A-DSX		○		○													○		
DOLBY PRO LOGIC Ⅱx Game A-DSX		○		○													○		
DOLBY PRO LOGIC Ⅱz	∗4	○		○													○		○
DOLBY PRO LOGIC Ⅱ Cinema	∗1	○		○													○		○
DOLBY PRO LOGIC Ⅱ Music	∗1	○		○													○		○
DOLBY PRO LOGIC Ⅱ Game	∗1	○		○													○		○
DOLBY PRO LOGIC Ⅱ CINEMA A-DSX		○		○													○		
DOLBY PRO LOGIC Ⅱ MUSIC A-DSX		○		○													○		
DOLBY PRO LOGIC Ⅱ GAME A-DSX		○		○													○		
Audyssey DSX®												○	○	○	○	○			

∗1 If “Audyssey DSX®” is set to “Wides/Heights”, “Heights” or “Wides”, the Audyssey DSX® effect is added to the sound mode marked with ∗1.
∗2 If “Speaker Config.” – “Surr. Back” is set to “None”, this sound mode cannot be selected.
∗3 If “Speaker Config.” – “Surr. Back” is set to “1spkr” or “None”, this sound mode cannot be selected.
∗4 If “Speaker Config.” – “Front Height” is set to “None”, this sound mode cannot be selected.

Sound Mode	NOTE	Input signal types and formats																	
		ANALOG	PCM		DTS-HD		DTS					DOLBY		DOLBY DIGITAL				Super Audio CD	
			PCM (multi ch)	PCM (2ch)	DTS-HD Master Audio	DTS-HD High Resolution Audio	DTS EXPRESS	DTS ES DSCRT (With Flag)	DTS ES MTRX (With Flag)	DTS (5.1ch)	DTS 96/24	DOLBY TrueHD	DOLBY DIGITAL Plus	DOLBY DIGITAL EX (With Flag)	DOLBY DIGITAL EX (With no Flag)	DOLBY DIGITAL (5.1ch)	DOLBY DIGITAL (2ch)	DSD (multi ch)	DSD (2ch)
MULTI CH IN																			
MULTI CH IN	∗1		●															○	
MULTI CH IN + PLⅡx Cinema	∗3		○															○	
MULTI CH IN + PLⅡx Music	∗2		○															○	
MULTI CH IN + PLⅡz	∗4		○															○	
MULTI CH IN + NEO:X Cinema			○																
MULTI CH IN + NEO:X Music			○																
MULTI CH IN + NEO:X Game			○																
MULTI CH IN + Dolby EX	∗2		○															○	
MULTI CH IN 7.1	∗2		● (7.1)																
Audyssey DSX®			○															○	
DIRECT																			
DIRECT		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
PURE DIRECT																			
PURE DIRECT		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
DSP SIMULATION																			
MULTI CH STEREO		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
WIDE SCREEN		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
SUPER STADIUM		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
ROCK ARENA		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
JAZZ CLUB		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
CLASSIC CONCERT		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
MONO MOVIE		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
VIDEO GAME		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
MATRIX		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
VIRTUAL		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
STEREO																			
STEREO		●	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

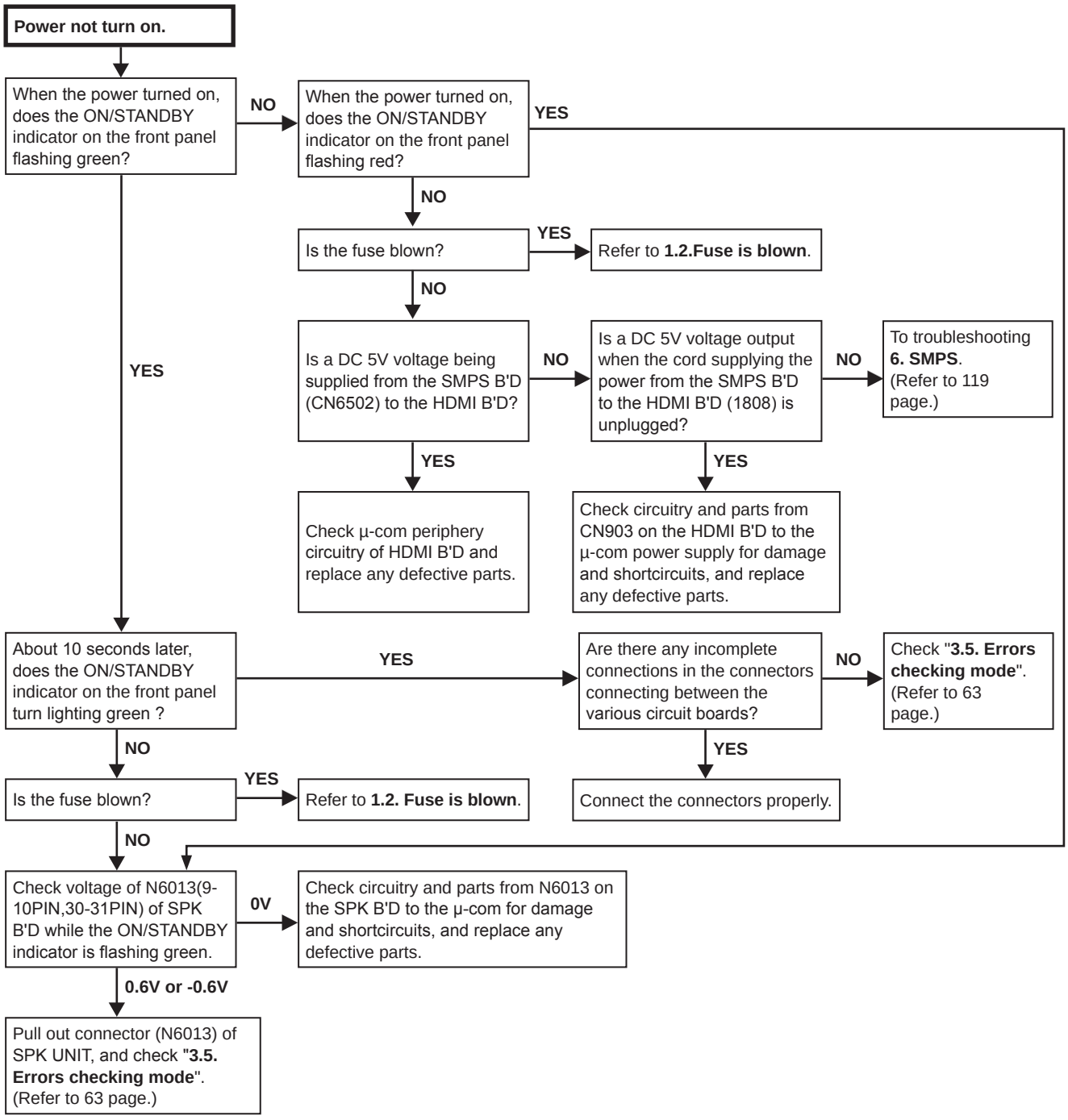
∗1 If "Audyssey DSX®" is set to "Wides/Heights", "Heights" or "Wides", the Audyssey DSX® effect is added to the sound mode marked with ∗1.
∗2 If "Speaker Config." – "Surr. Back" is set to "None", this sound mode cannot be selected.
∗3 If "Speaker Config." – "Surr. Back" is set to "1spkr" or "None", this sound mode cannot be selected.
∗4 If "Speaker Config." – "Front Height" is set to "None", this sound mode cannot be selected.

Personal notes:

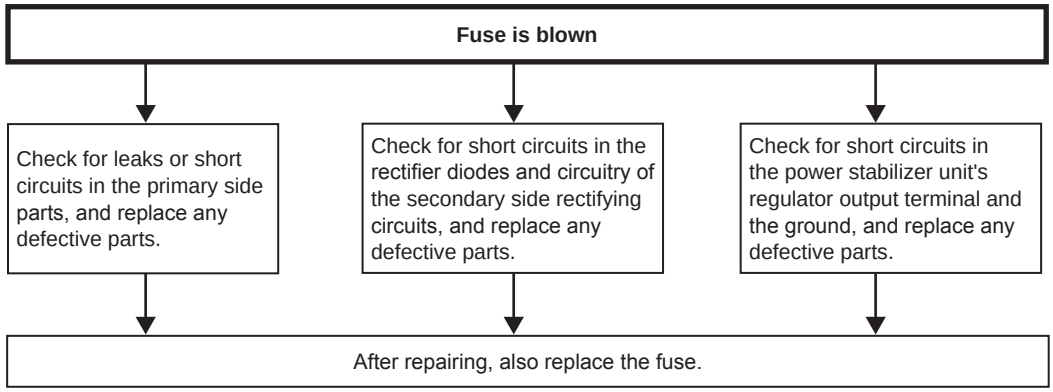
TROUBLE SHOOTING

1. POWER

1.1. Power not turn on



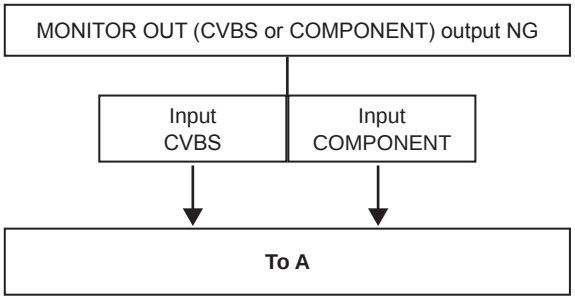
1.2. Fuse is blown

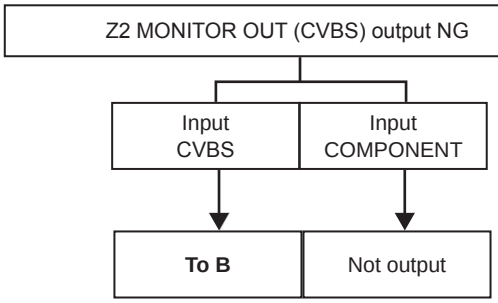


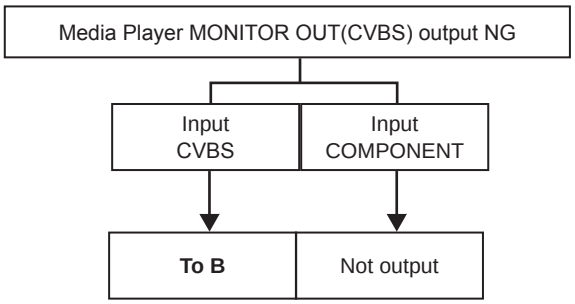
2. Analog video

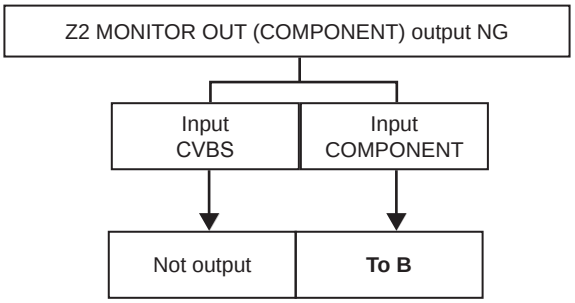
Perform the operation below beforehand.-

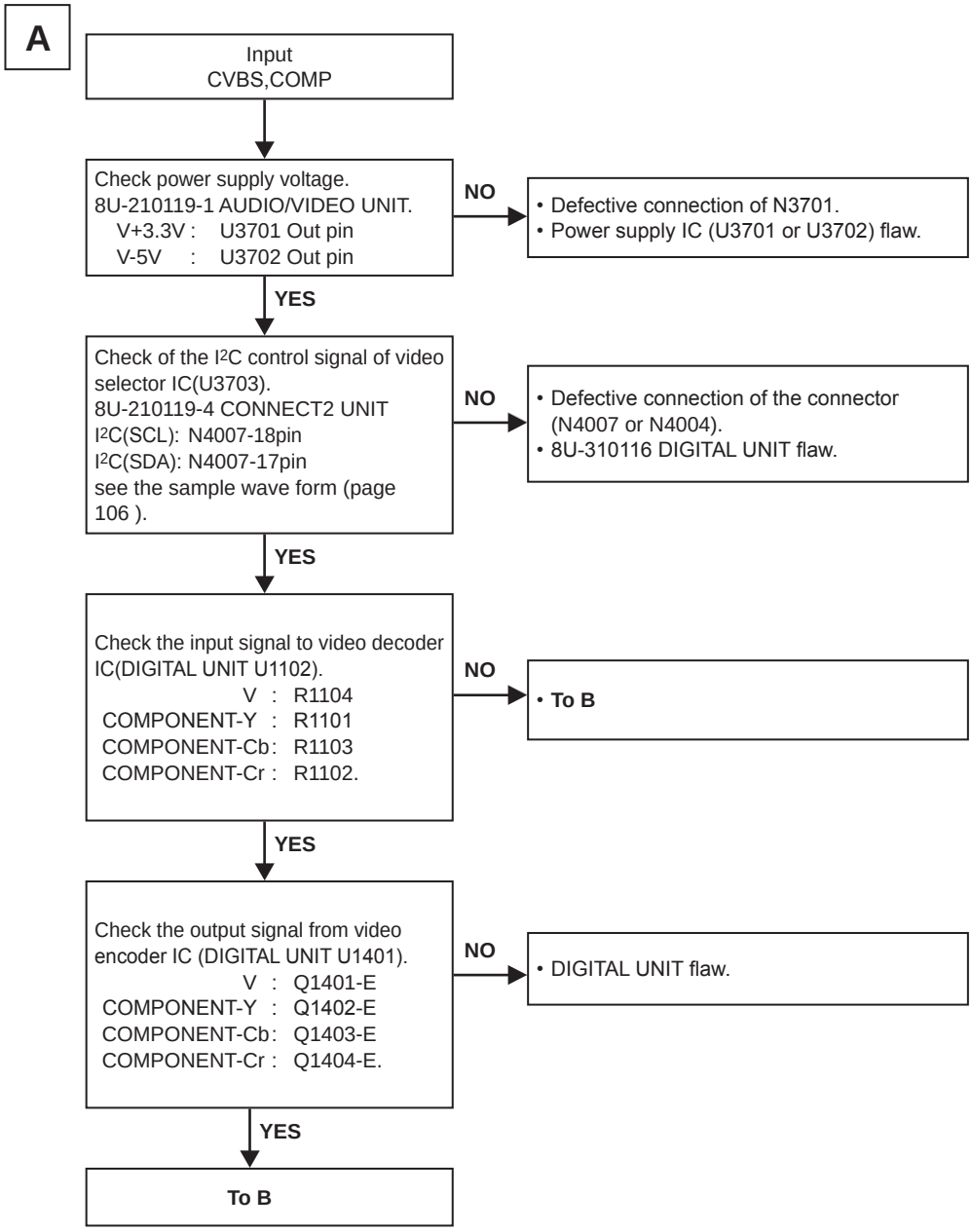
※ Check it whether connection cable and Monitor are normal.
※ VIDEO Convert is set to ON.
※ COMPONENT signal is set to 480i.
※ ZONE2 is set to POWER ON.
※ Function is set to CBL/SAT.










A
Input
CVBS,COMP
Check power supply voltage.
8U-210119-1 AUDIO/VIDEO UNIT.
V+3.3V : U3701 Out pin
V-5V : U3702 Out pin
NO
• Defective connection of N3701.
• Power supply IC (U3701 or U3702) flaw.
YES
Check of the I2C control signal of video selector IC(U3703).
8U-210119-4 CONNECT2 UNIT
I2C(SCL): N4007-18pin
I2C(SDA): N4007-17pin
see the sample wave form (page 106).
NO
• Defective connection of the connector (N4007 or N4004).
• 8U-310116 DIGITAL UNIT flaw.
YES
Check the input signal to video decoder IC(DIGITAL UNIT U1102).
V : R1104
COMPONENT-Y : R1101
COMPONENT-Cb: R1103
COMPONENT-Cr : R1102.
NO
• To B
YES
Check the output signal from video encoder IC (DIGITAL UNIT U1401).
V : Q1401-E
COMPONENT-Y : Q1402-E
COMPONENT-Cb: Q1403-E
COMPONENT-Cr : Q1404-E.
NO
• DIGITAL UNIT flaw.
YES
To B

B

AUDIO/VIDEO UNIT flaw.

↓

Extend DIGITAL UNIT using a jig.

↓

Check power supply voltage and I2C control signal of video selector IC (U3703).

V+3.3V	:	C3748 +	①
V-5V	:	C3749 -	②
I2C (SCL)	:	C3732	③
I2C (SDA)	:	C3733	④

refer to AVIDEO test point (page 107).

NO → Power supply IC (U3701 or U3702) flaw.
Defective connection of N4004 or N4007.
Video selector IC (U3703) flaw.

↓ **YES**

Check the signal input to video selector IC (U3703).

		from input terminal		from DIGITAL UNIT	
V	:	C3714	⑤	C3033	⑨
COMPONENT-Y	:	C3705	⑥	C3034	⑩
COMPONENT-Cb	:	C3706	⑦	C3035	⑪
COMPONENT-Cr	:	C3707	⑧	C3036	⑫

refer to AVIDEO test point (page 107).

NO → Input terminal (K3503) or the parts of between video selector IC (U3703) flaw.
Defective connection of N4004 or N4007 or the parts of between video selector IC (U3703) flaw.
DIGITAL UNIT flaw.

↓ **YES**

Check the signal output from video selector IC (U3703).

V (to Monitor out)	:	R3740	⑬
V (to Z2 Monitor out)	:	R3731	⑭
V (to Media Player out)	:	R3733	⑮
V (to DIGITAL UNIT)	:	R3736	⑯
COMPONENT-Y (to Monitor out)	:	R3742	⑰
COMPONENT-Cb (to Monitor out)	:	R3746	⑱
COMPONENT-Cr (to Monitor out)	:	R3750	⑲
COMPONENT-Y (to Z2 Monitor out)	:	R3762	⑳
COMPONENT-Cb (to Z2 Monitor out)	:	R3745	㉑
COMPONENT-Cr (to Z2 Monitor out)	:	R3749	㉒
COMPONENT-Y (to DIGITAL UNIT)	:	R3744	㉓
COMPONENT-Cb (to DIGITAL UNIT)	:	R3748	㉔
COMPONENT-Cr (to DIGITAL UNIT)	:	R3752	㉕

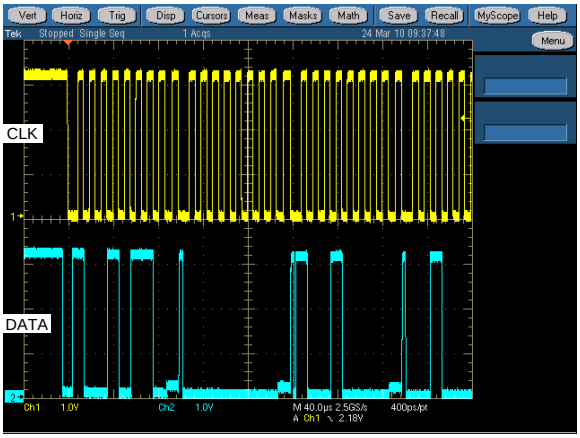
refer to AVIDEO test point (page 107).

NO → Video selector IC (U3703) flaw.

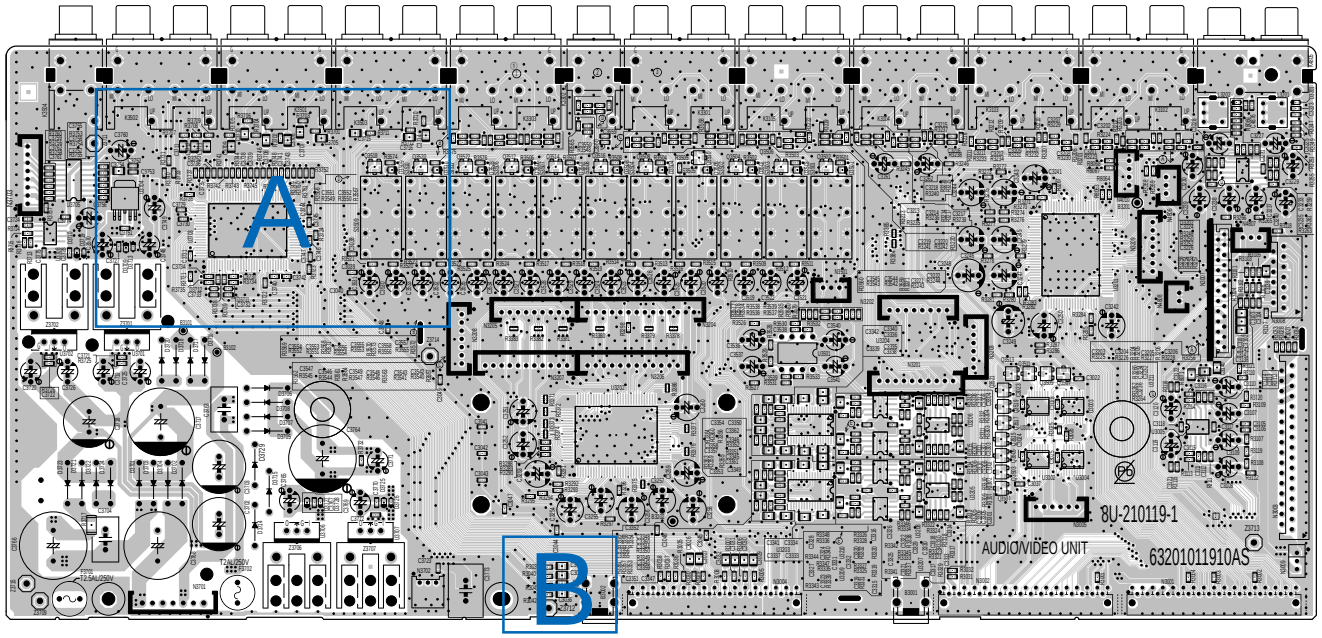
↓ **YES**

Output terminal (K3503 or K3504 or K3502) flaw.
Defective connection of TV Monitor or TV Monitor flaw.

I2C communication wave form (sample)

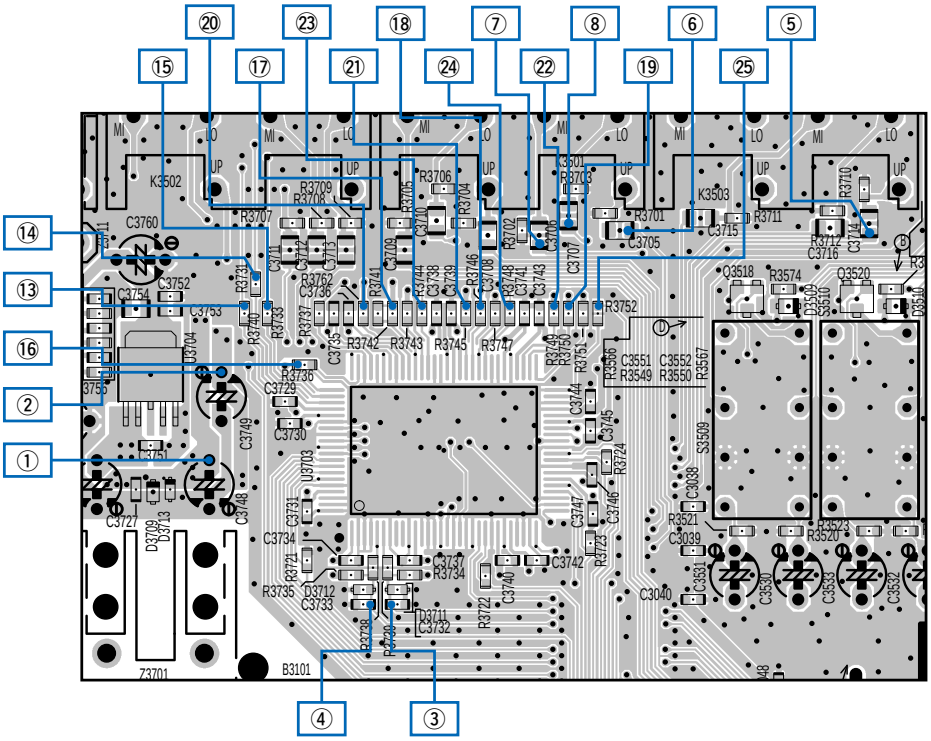


AUDIO/VIDEO UNIT test point

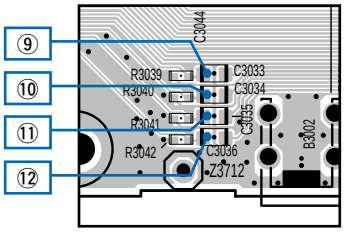


(COMPONENT SIDE)

Detail A

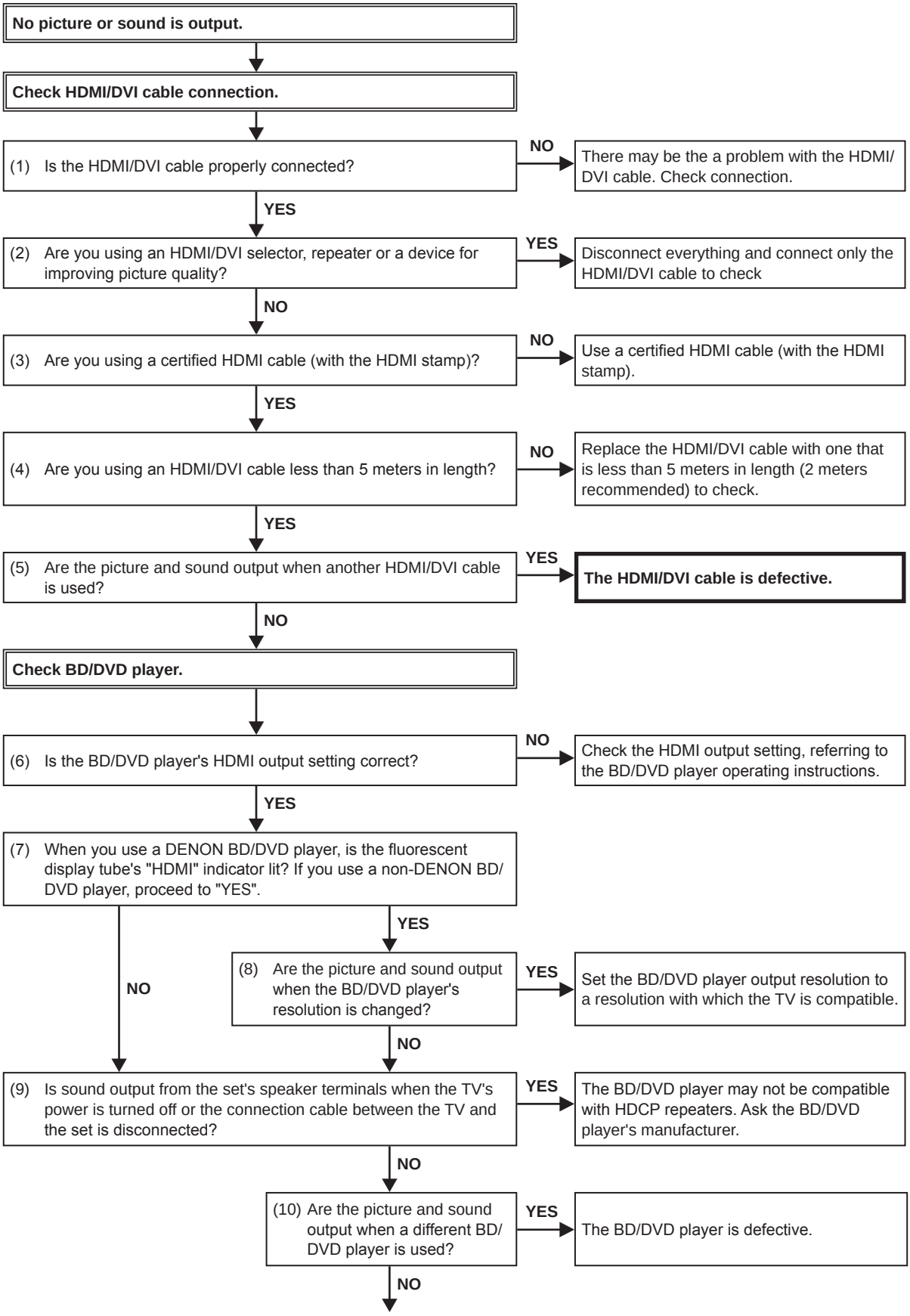


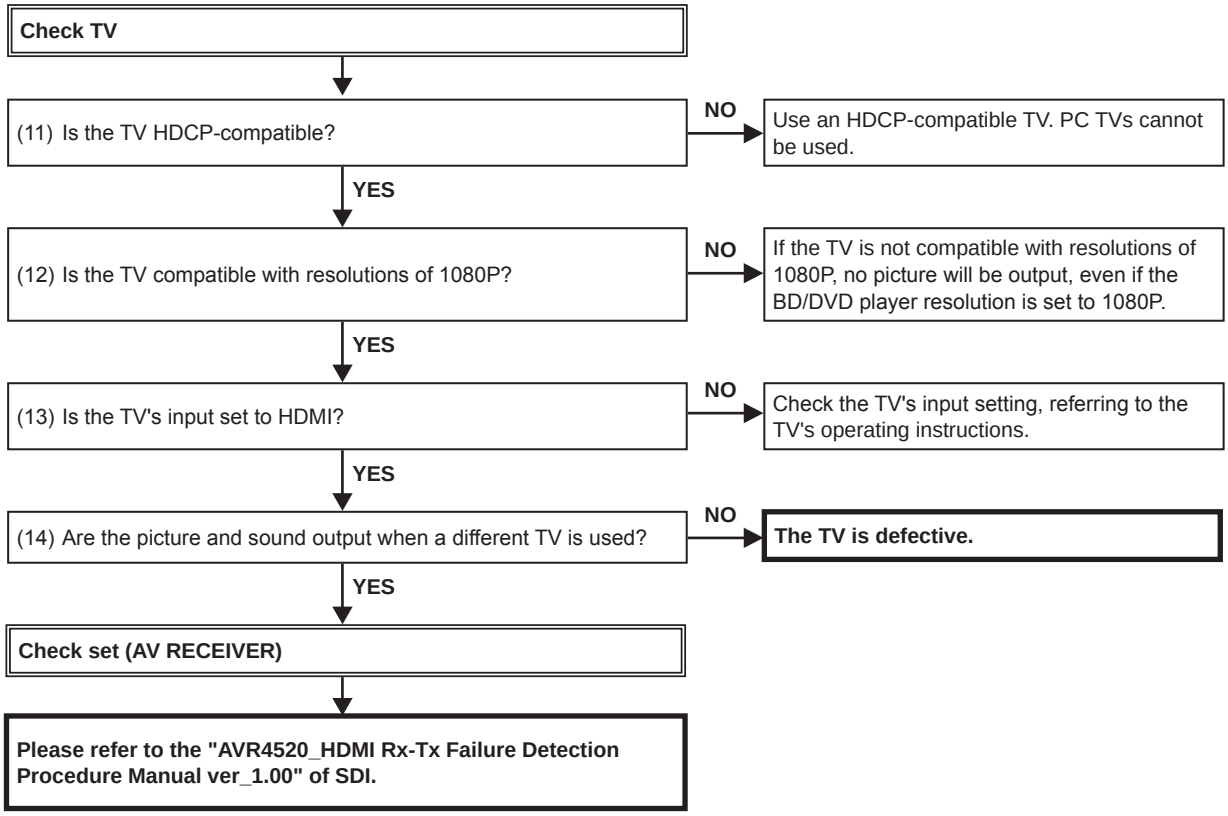
Detail B



3. HDMI/DVI

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




Check TV
(11) Is the TV HDCP-compatible?
NO
Use an HDCP-compatible TV. PC TVs cannot be used.
YES
(12) Is the TV compatible with resolutions of 1080P?
NO
If the TV is not compatible with resolutions of 1080P, no picture will be output, even if the BD/DVD player resolution is set to 1080P.
YES
(13) Is the TV's input set to HDMI?
NO
Check the TV's input setting, referring to the TV's operating instructions.
YES
(14) Are the picture and sound output when a different TV is used?
NO
The TV is defective.
YES
Check set (AV RECEIVER)
Please refer to the "AVR4520_HDMI Rx-Tx Failure Detection Procedure Manual ver_1.00" of SDI.

4. AUDIO

4.1. AUDIO CHECK

Audio output NG. Refer to "**Audio Check PATH**" (117 page).

CHECK1	INPUT	SURROND MODE	SOURCE
Audio output OK?	ANALOG 2CH	DIRECT	ANALOG

NO → Check ANALOG audio BLOCK.

YES

CHECK2	INPUT	SURROND MODE	SOURCE
Audio output OK?	COAX or OPT	Don't care	Legacy (PCM2ch or DolbyDigital or dts…)

NO → Check Digital audio BLOCK.

YES

CHECK3	INPUT	SURROND MODE	SOURCE
Audio output OK?	ANALOG 2CH	MULTICH STEREO	ANALOG

NO → Check ADC BLOCK

YES

CHECK4	INPUT	SURROND MODE	SOURCE
Audio output OK?	HDMI	Don't care	Legacy (PCM2ch or DolbyDigital or dts…)

NO → Check HDMI BLOCK.

YES

CHECK5	INPUT	SURROND MODE	SOURCE
Audio output OK?	HDMI	Don't care	HBR audio (DolbyTrueHD or dtsHD MA)

YES (Digital audio Block is OK) → Check other factors.

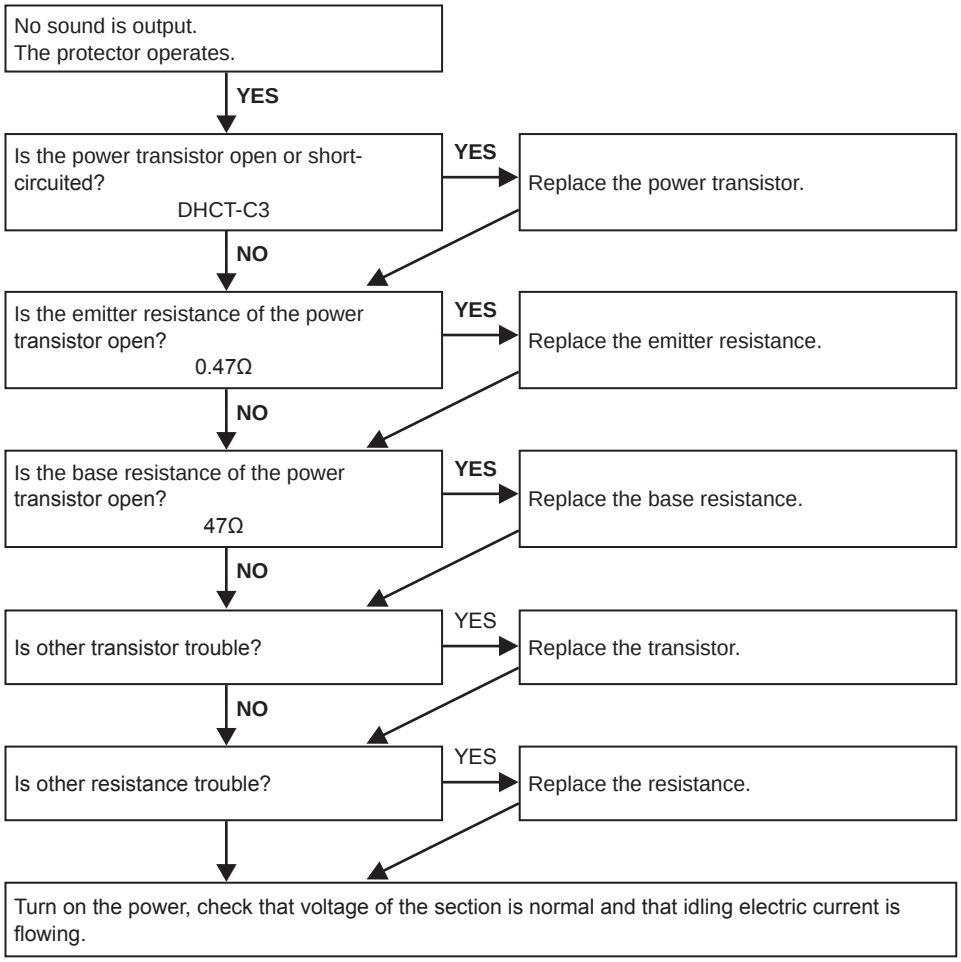
NO

CHECK6	INPUT	Connect	
AVR's (connected in HDMI) audio output OK?	HDMI	This unit's HDMI OUT → Other AVR's HDMI IN	
	Setting	SURROND MODE	SOURCE
	CEC STANDBY	Don't care	HBR audio(DolbyTrueHD or dtsHD MA)

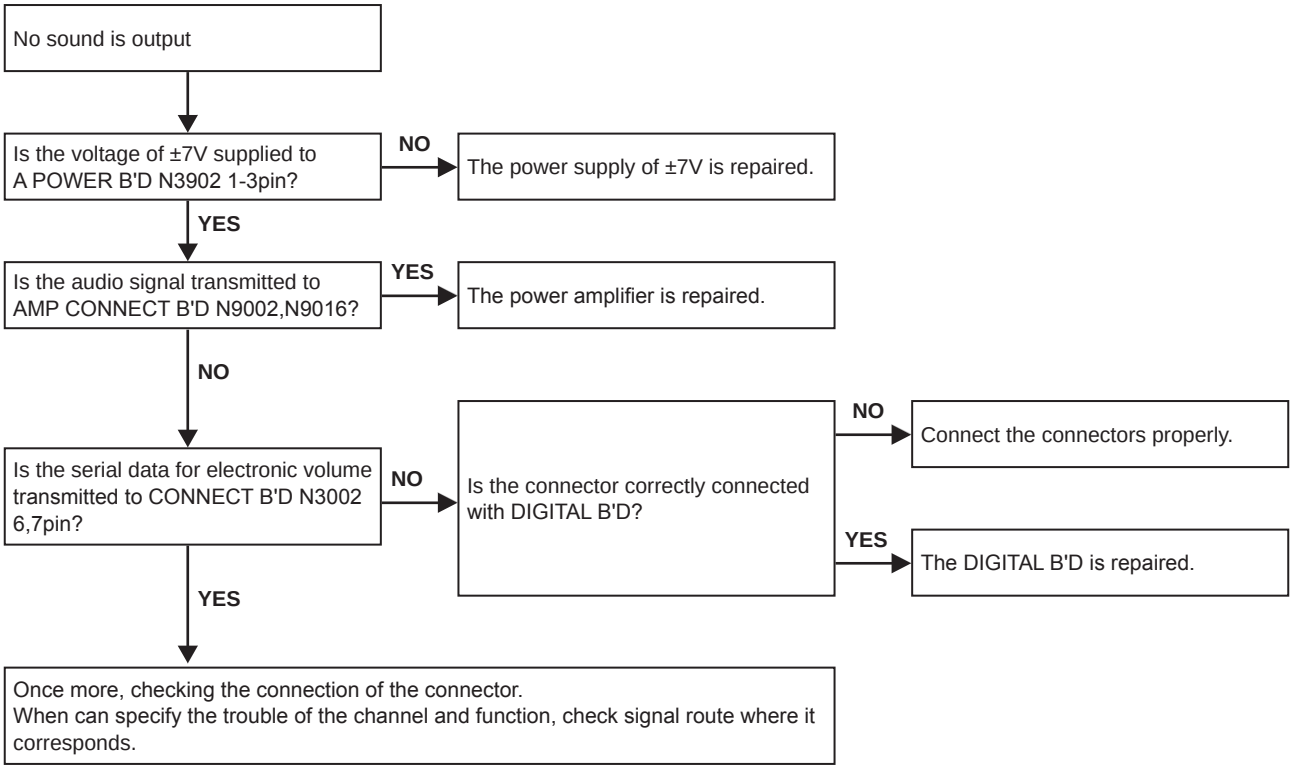
YES → Check Digital audio BLOCK

NO → Check HDMI BLOCK.

4.2. Power AMP (8U-110130-10)

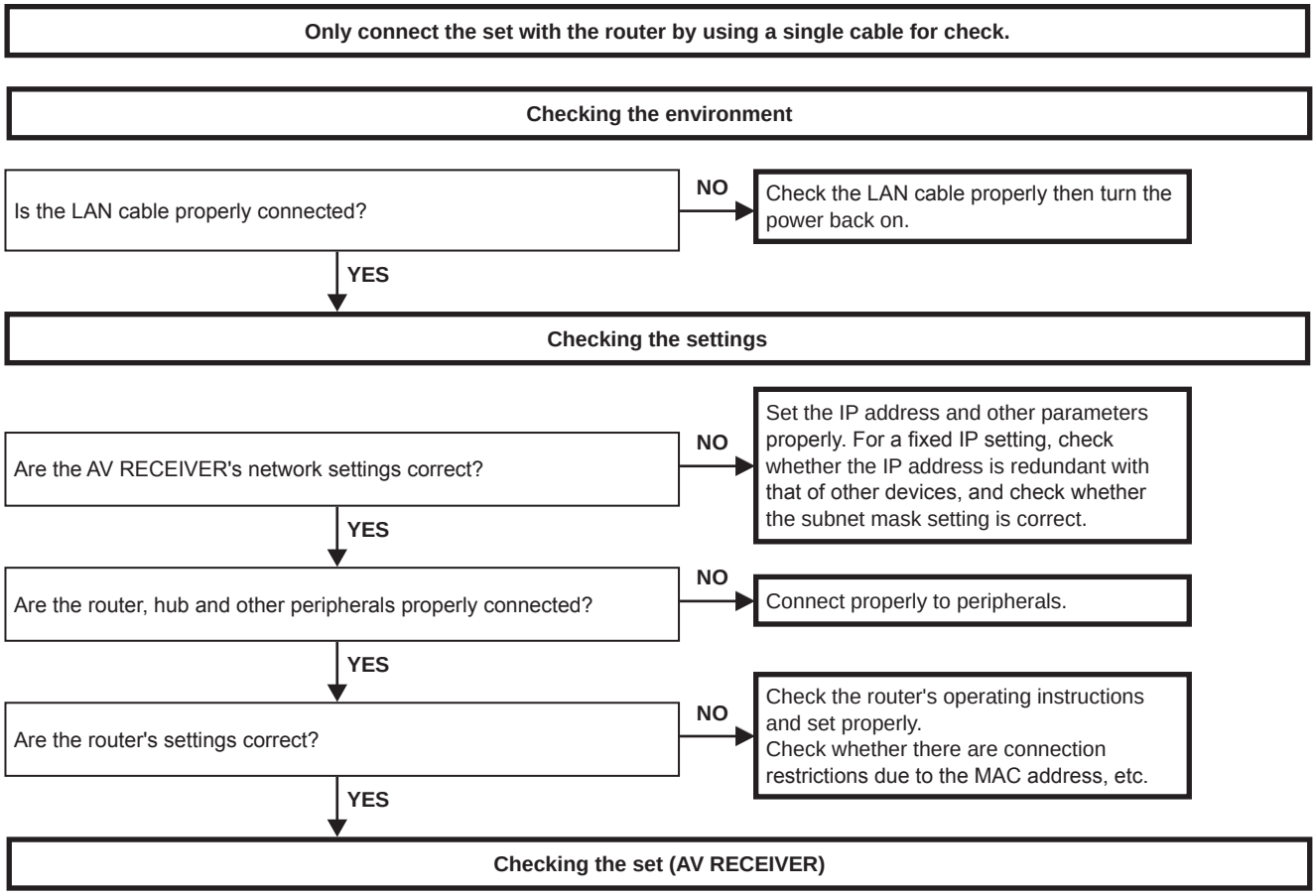


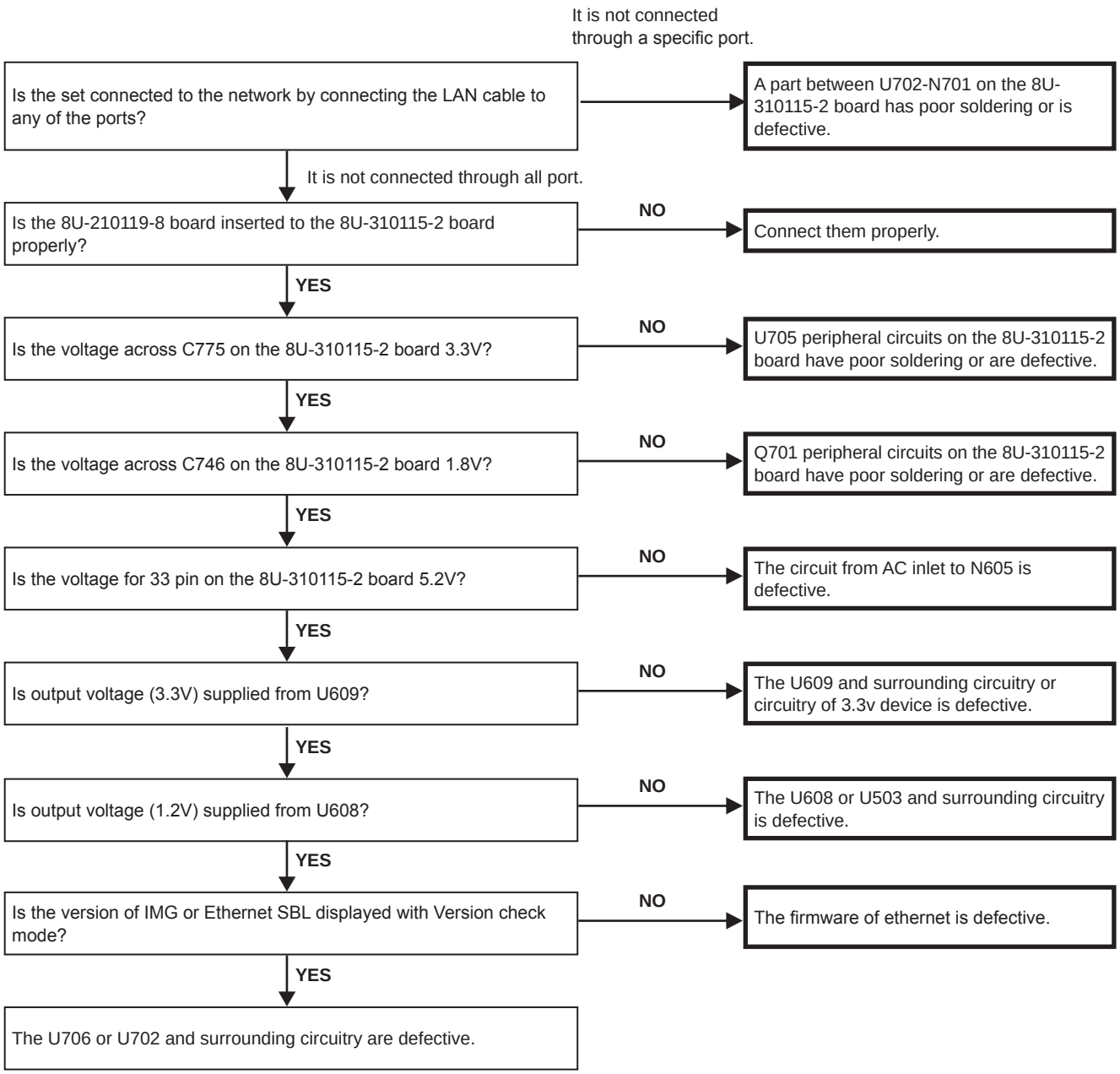
4.3. Analog audio



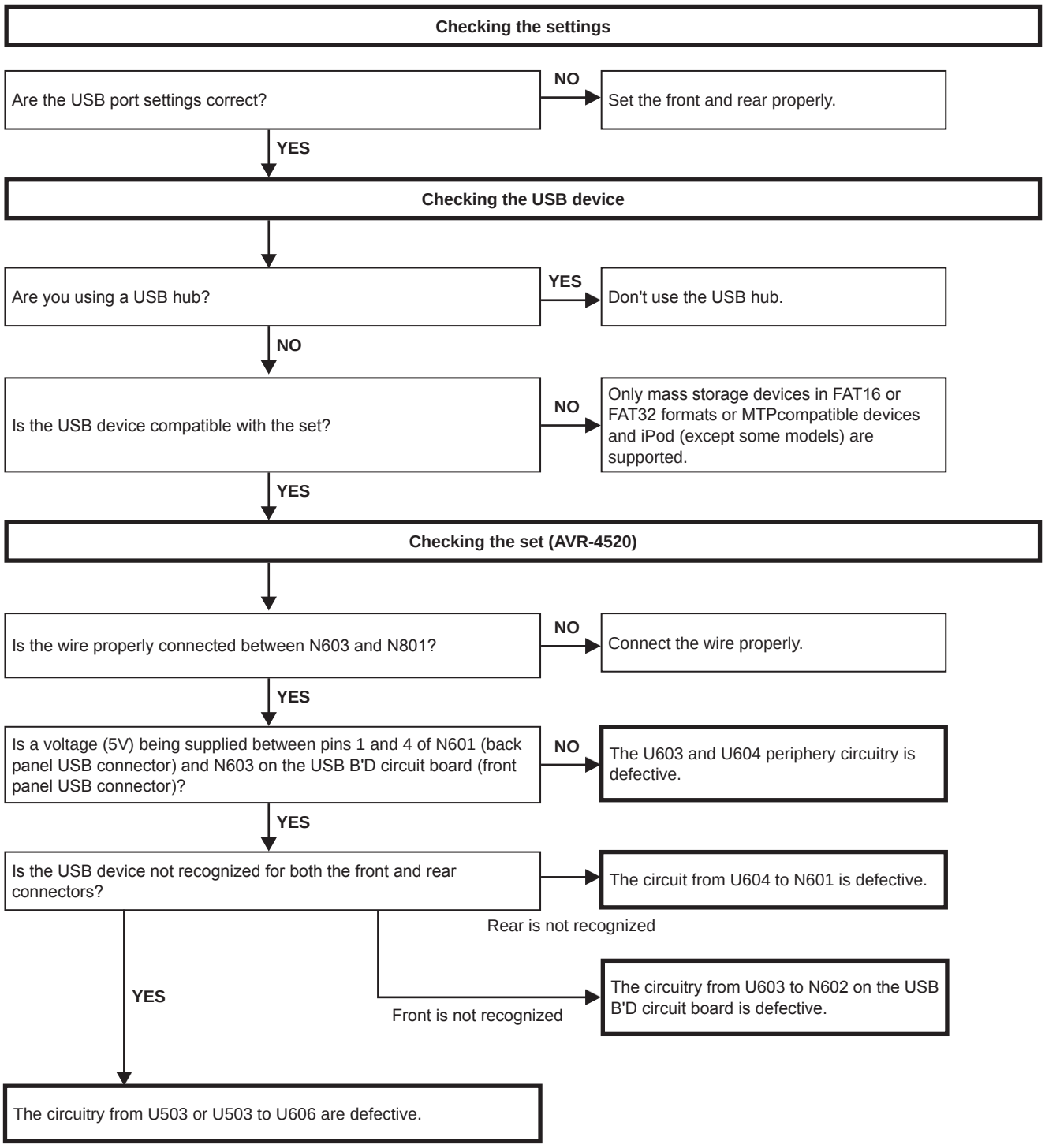
5. Network/USB

5.1. Cannot connect to network

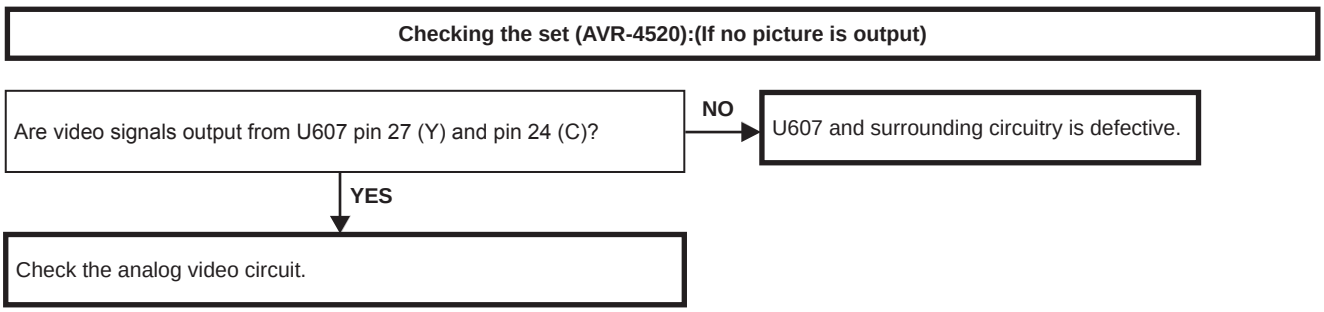


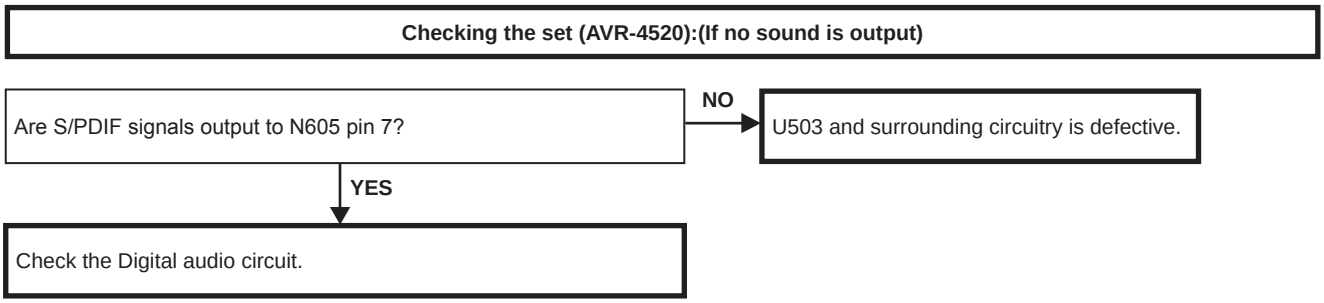

It is not connected through a specific port.
Is the set connected to the network by connecting the LAN cable to any of the ports?
A part between U702-N701 on the 8U-310115-2 board has poor soldering or is defective.
It is not connected through all port.
Is the 8U-210119-8 board inserted to the 8U-310115-2 board properly?
NO
Connect them properly.
YES
Is the voltage across C775 on the 8U-310115-2 board 3.3V?
NO
U705 peripheral circuits on the 8U-310115-2 board have poor soldering or are defective.
YES
Is the voltage across C746 on the 8U-310115-2 board 1.8V?
NO
Q701 peripheral circuits on the 8U-310115-2 board have poor soldering or are defective.
YES
Is the voltage for 33 pin on the 8U-310115-2 board 5.2V?
NO
The circuit from AC inlet to N605 is defective.
YES
Is output voltage (3.3V) supplied from U609?
NO
The U609 and surrounding circuitry or circuitry of 3.3v device is defective.
YES
Is output voltage (1.2V) supplied from U608?
NO
The U608 or U503 and surrounding circuitry is defective.
YES
Is the version of IMG or Ethernet SBL displayed with Version check mode?
NO
The firmware of ethernet is defective.
YES
The U706 or U702 and surrounding circuitry are defective.

5.2. USB device is not recognized

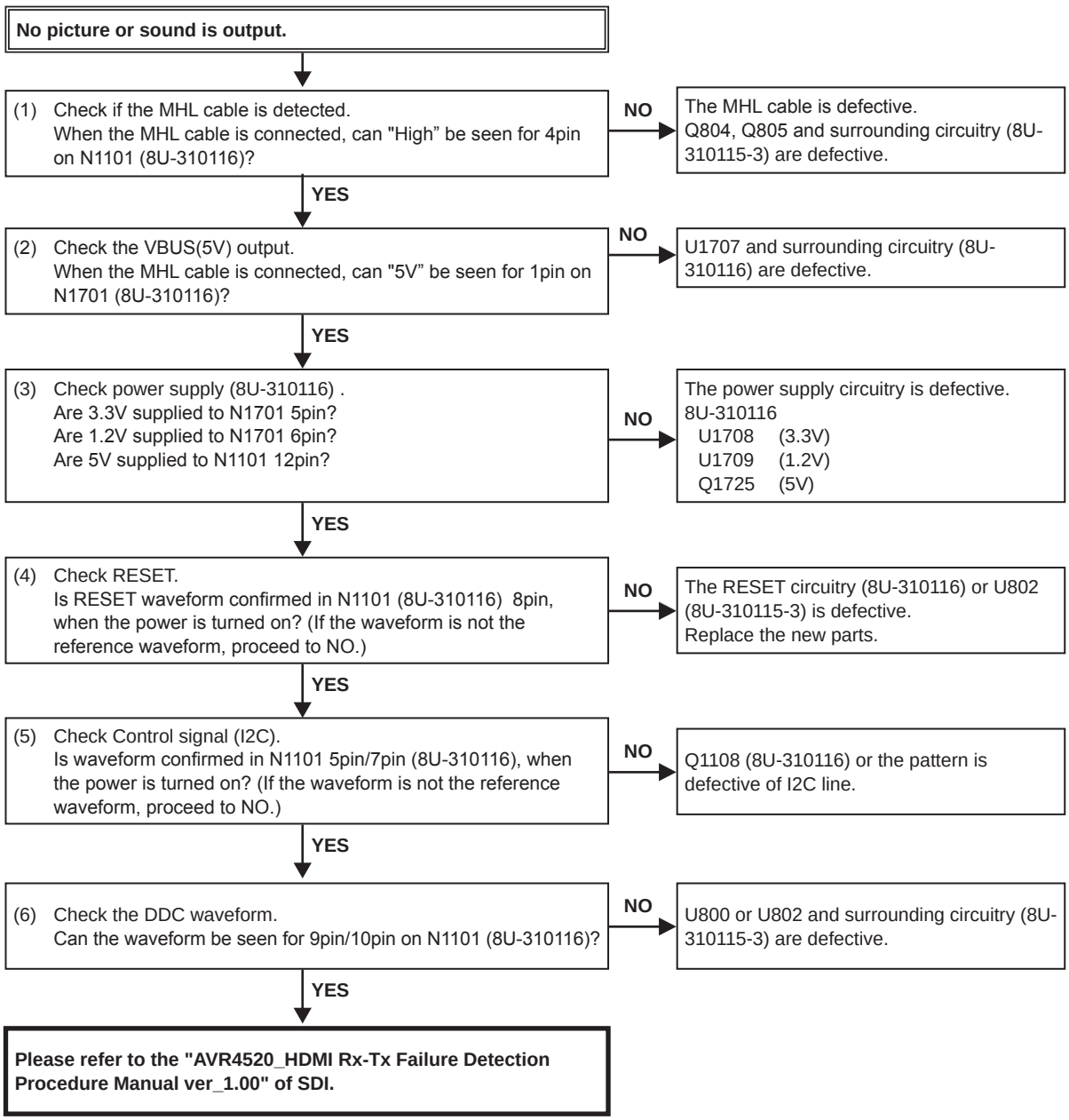


5.3. No picture or sound is output

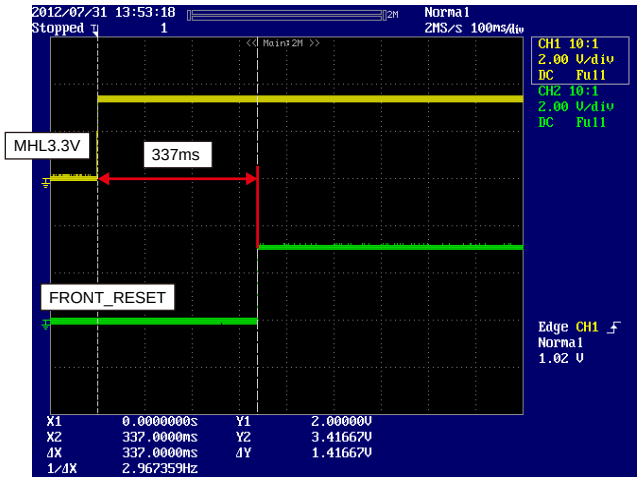




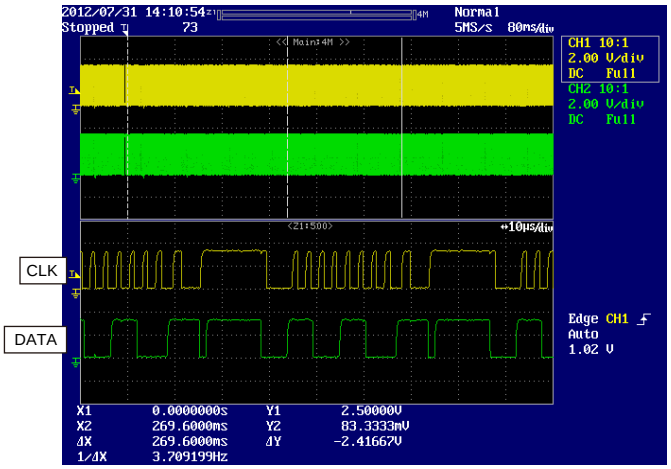
5.4. MHL


No picture or sound is output.
(1) Check if the MHL cable is detected.
When the MHL cable is connected, can "High" be seen for 4pin on N1101 (8U-310116)?
NO
The MHL cable is defective.
Q804, Q805 and surrounding circuitry (8U-310115-3) are defective.
YES
(2) Check the VBUS(5V) output.
When the MHL cable is connected, can "5V" be seen for 1pin on N1701 (8U-310116)?
NO
U1707 and surrounding circuitry (8U-310116) are defective.
YES
(3) Check power supply (8U-310116) .
Are 3.3V supplied to N1701 5pin?
Are 1.2V supplied to N1701 6pin?
Are 5V supplied to N1101 12pin?
NO
The power supply circuitry is defective.
8U-310116
U1708 (3.3V)
U1709 (1.2V)
Q1725 (5V)
YES
(4) Check RESET.
Is RESET waveform confirmed in N1101 (8U-310116) 8pin, when the power is turned on? (If the waveform is not the reference waveform, proceed to NO.)
NO
The RESET circuitry (8U-310116) or U802 (8U-310115-3) is defective.
Replace the new parts.
YES
(5) Check Control signal (I2C).
Is waveform confirmed in N1101 5pin/7pin (8U-310116), when the power is turned on? (If the waveform is not the reference waveform, proceed to NO.)
NO
Q1108 (8U-310116) or the pattern is defective of I2C line.
YES
(6) Check the DDC waveform.
Can the waveform be seen for 9pin/10pin on N1101 (8U-310116)?
NO
U800 or U802 and surrounding circuitry (8U-310115-3) are defective.
YES
Please refer to the "AVR4520_HDMI Rx-Tx Failure Detection Procedure Manual ver_1.00" of SDI.

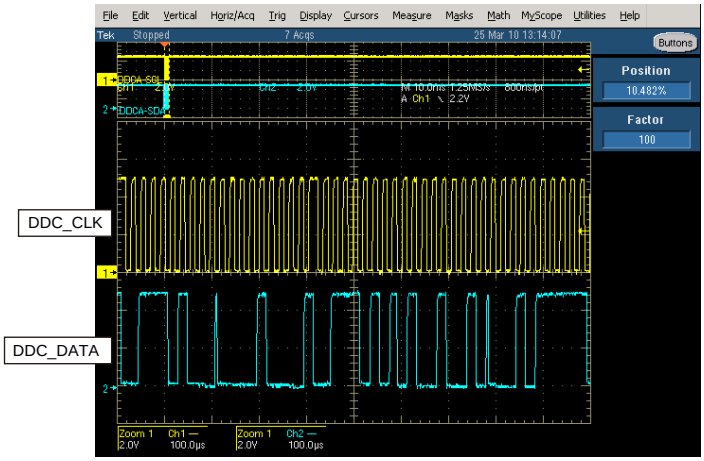
Timing waveform illustration from the start of MHL3.3V to when reset is released : Check items (4)



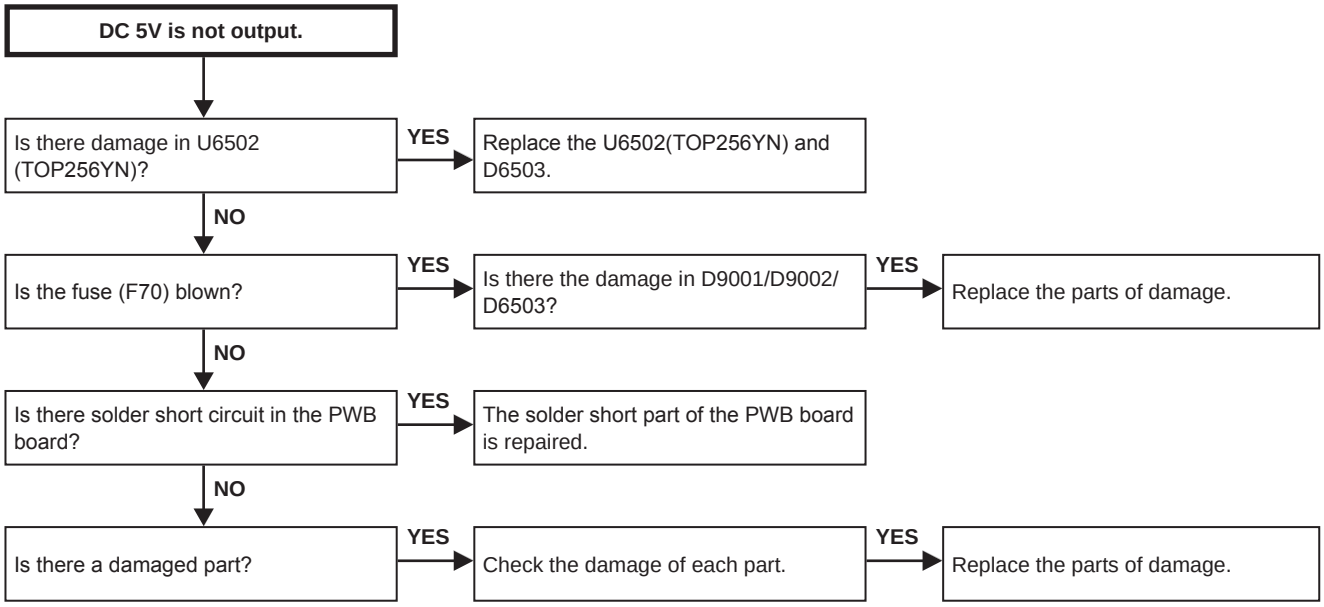
Controlled waveform(I2C), when power is turned on : Check items (5)



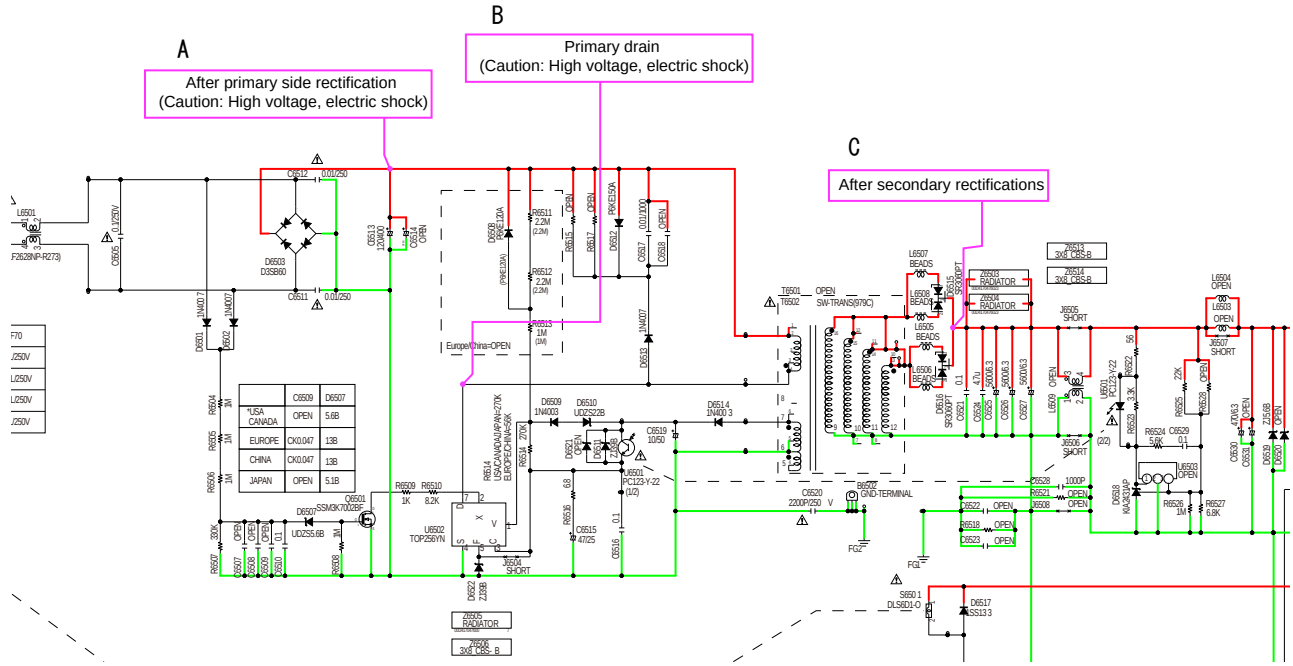
DDC waveform : Check items (6



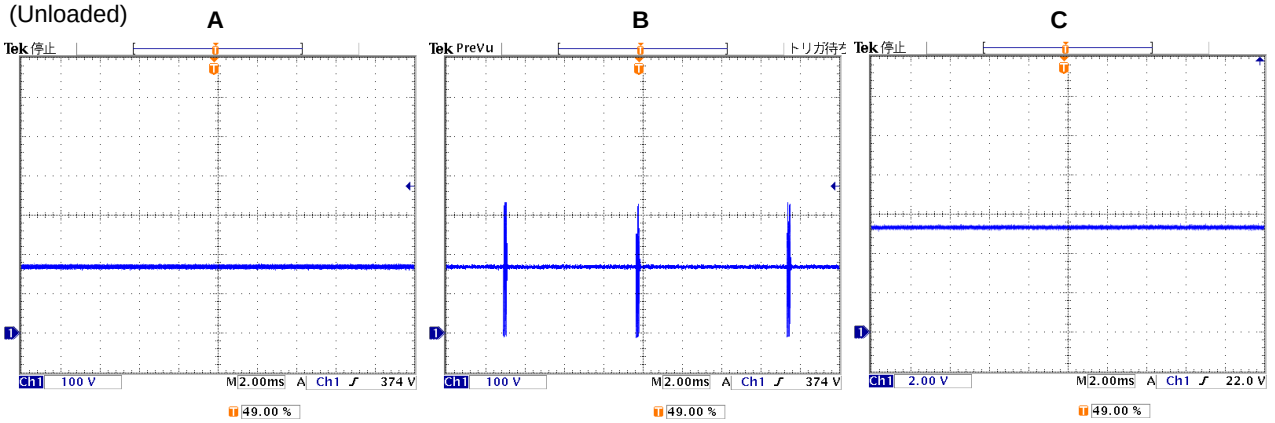
6. SMPS


DC 5V is not output.
Is there damage in U6502 (TOP256YN)?
YES
Replace the U6502(TOP256YN) and D6503.
NO
Is the fuse (F70) blown?
YES
Is there the damage in D9001/D9002/ D6503?
YES
Replace the parts of damage.
NO
Is there solder short circuit in the PWB board?
YES
The solder short part of the PWB board is repaired.
NO
Is there a damaged part?
YES
Check the damage of each part.
YES
Replace the parts of damage.

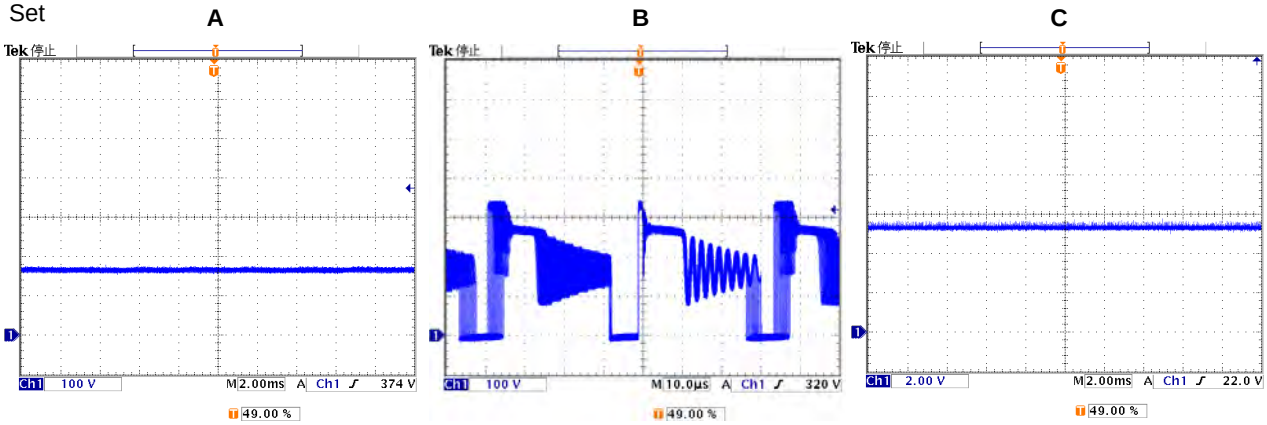
Operation waveform for each part ④



SMPS unit
(Unloaded)

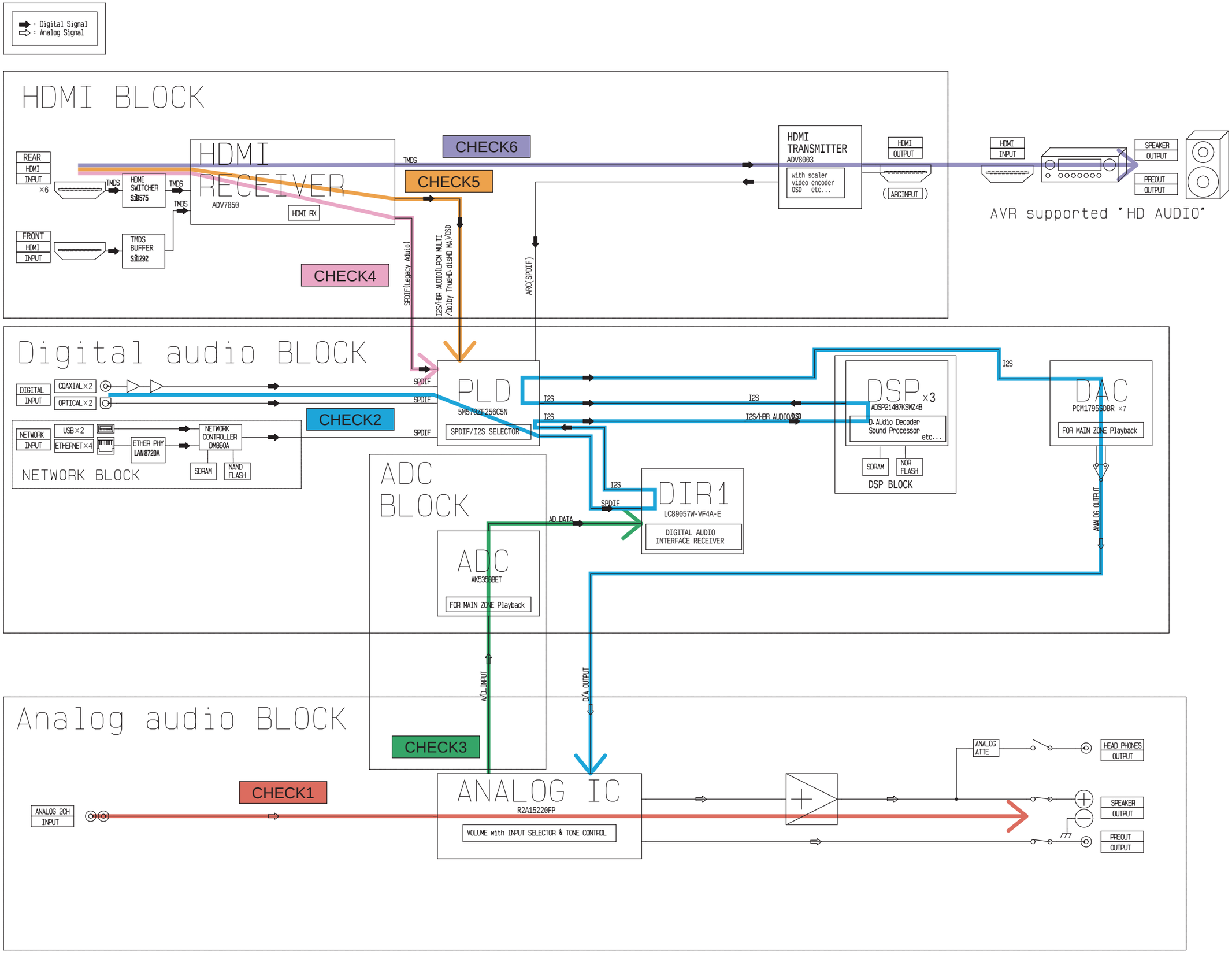


Set



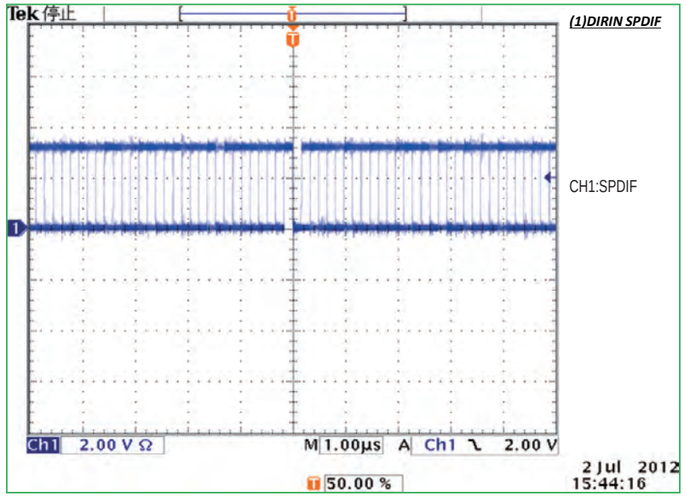
Audio Check PASS

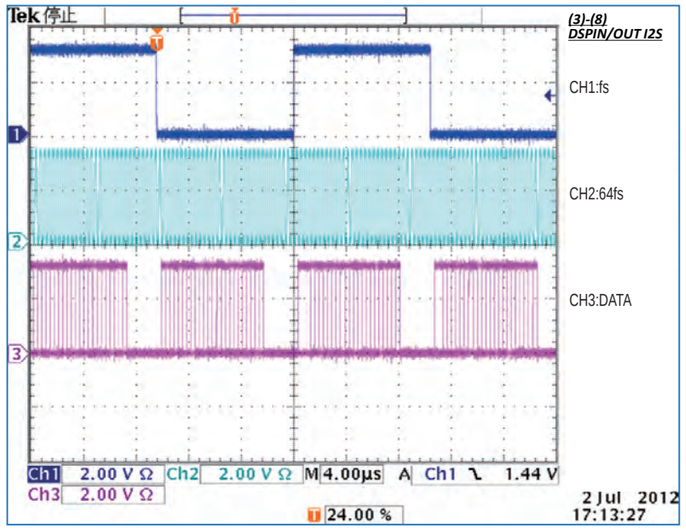
Refer to troubleshooting "**4.1. AUDIO CHECK**"(110 page).

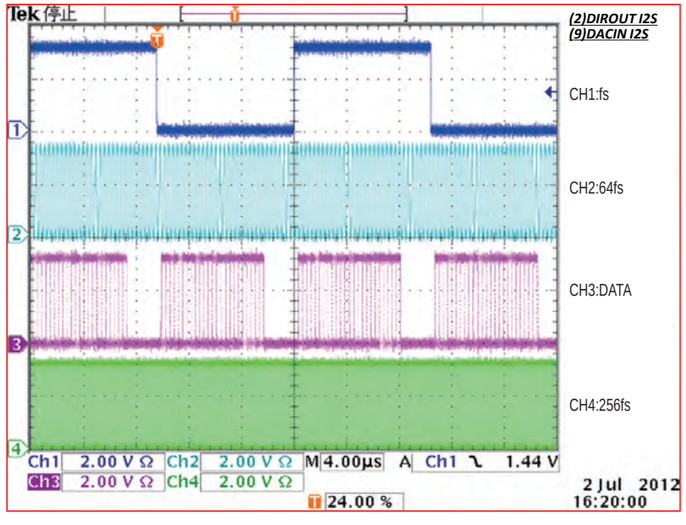


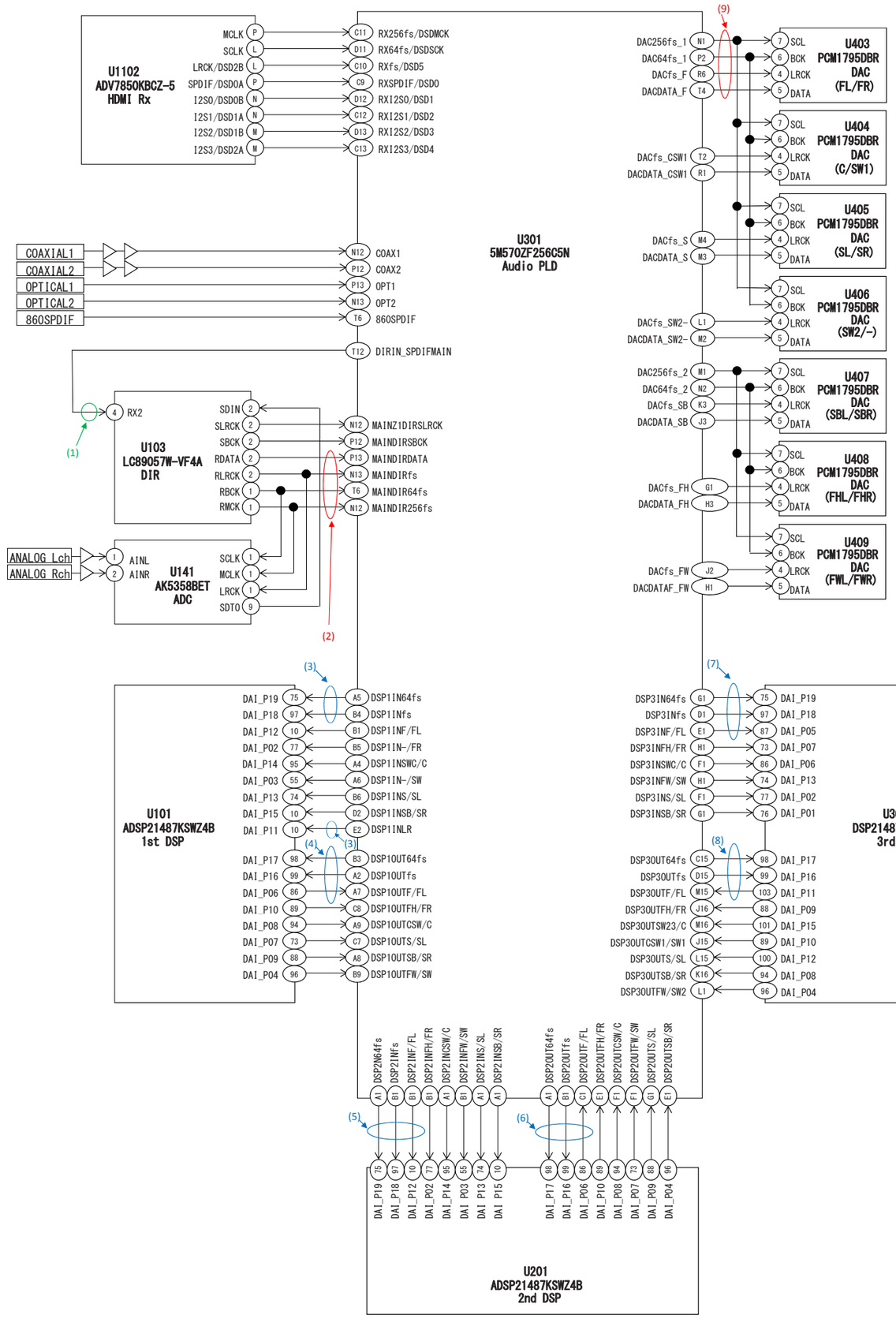
CLOCK FLOW & WAVE FORM IN DIGITAL BLOCK

WAVE FORM



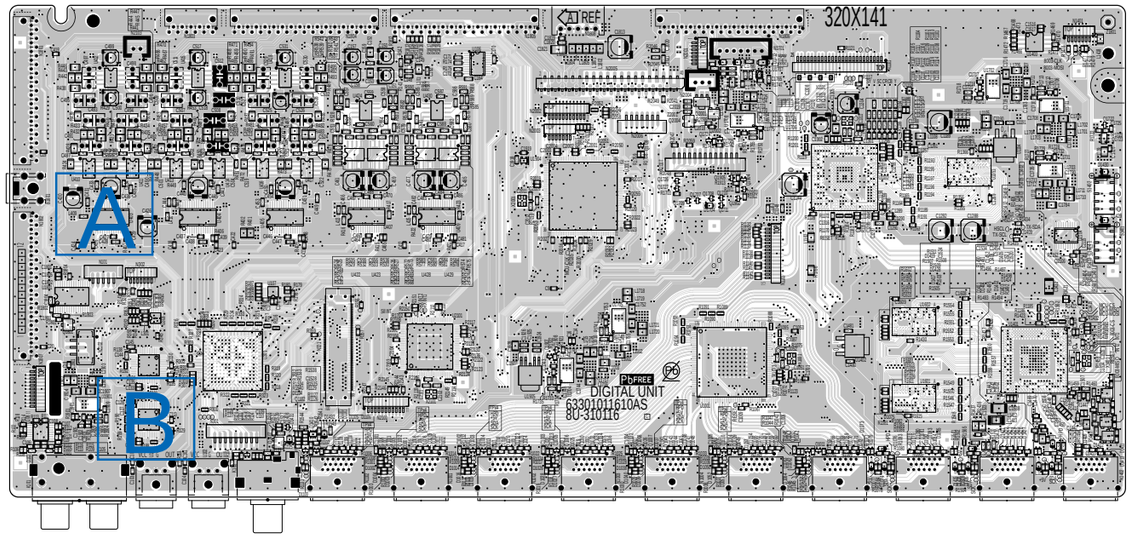




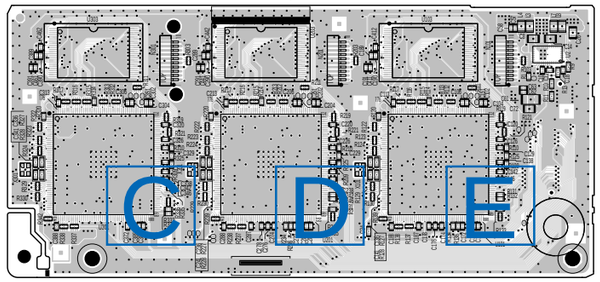


Test point

8U-310116 : DIGITAL (COMPONENT SIDE)

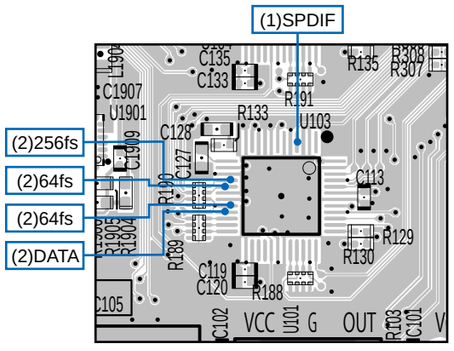


8U-310115:DSP (FOIL SIDE)



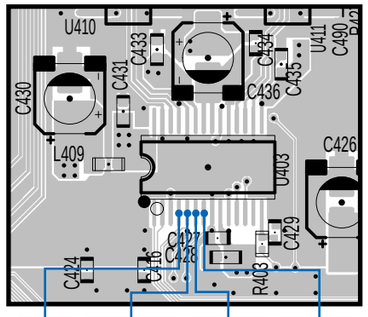
Detail A

(1),(2)DIR



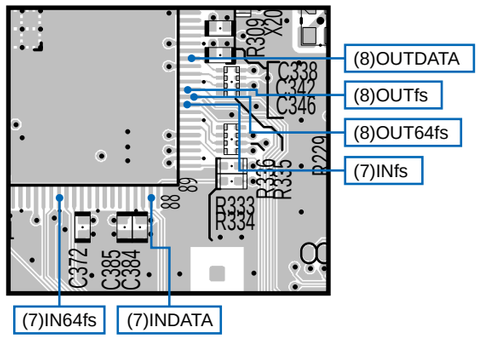
Detail B

(9)DAC



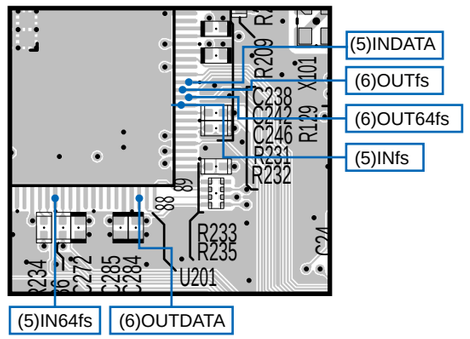
Detail C

(7),(8)3rd DSPIN/OUT



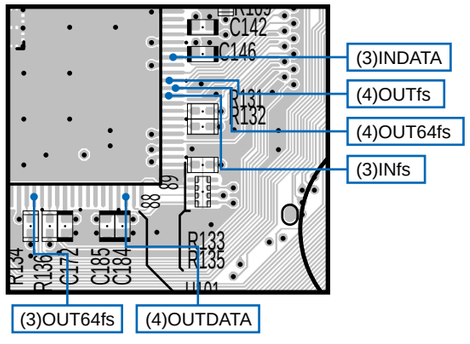
Detail D

(5),(6)2nd DSPIN/OUT



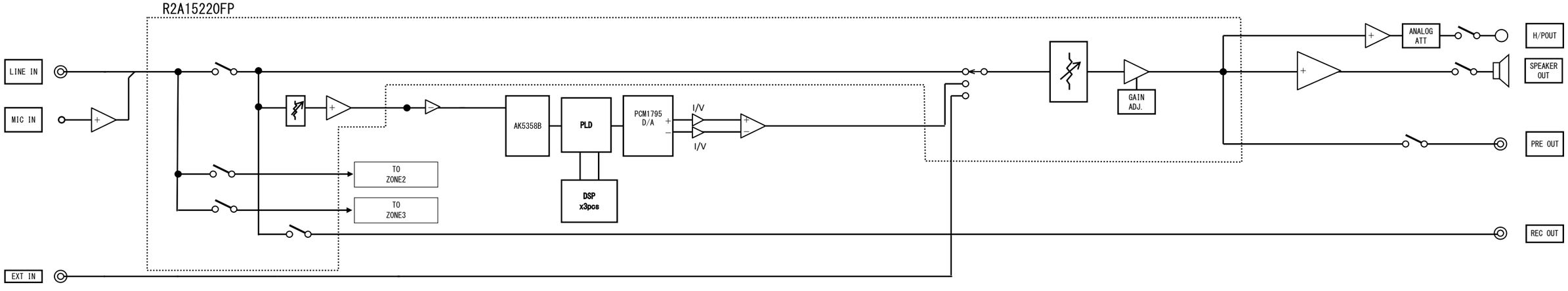
Detail E

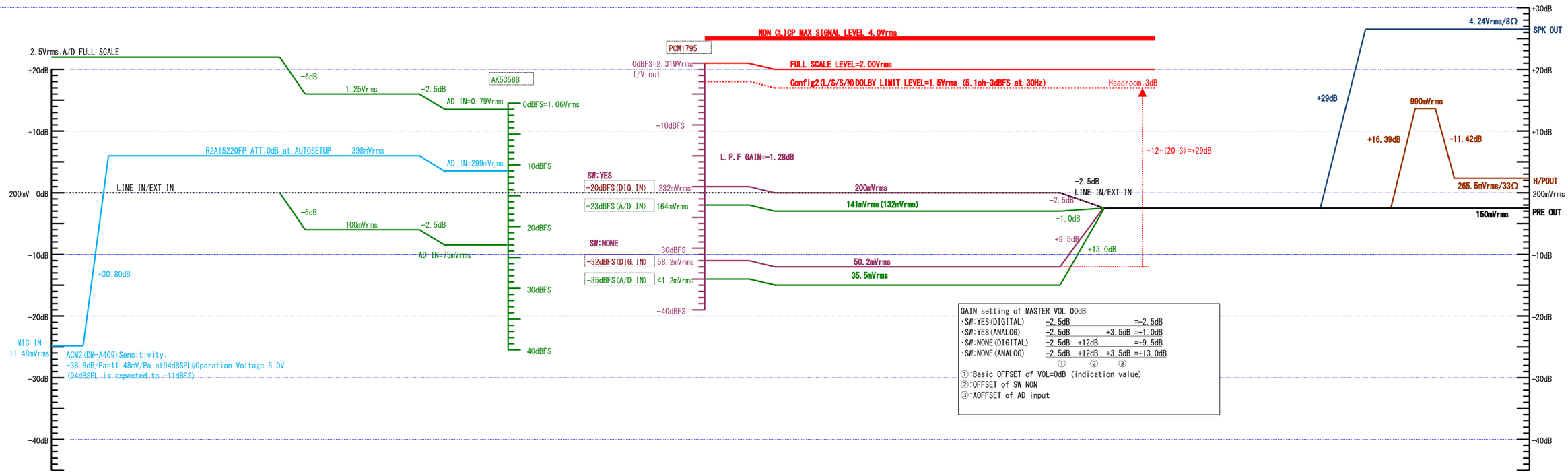
(3),(4)1st DSPIN/OUT



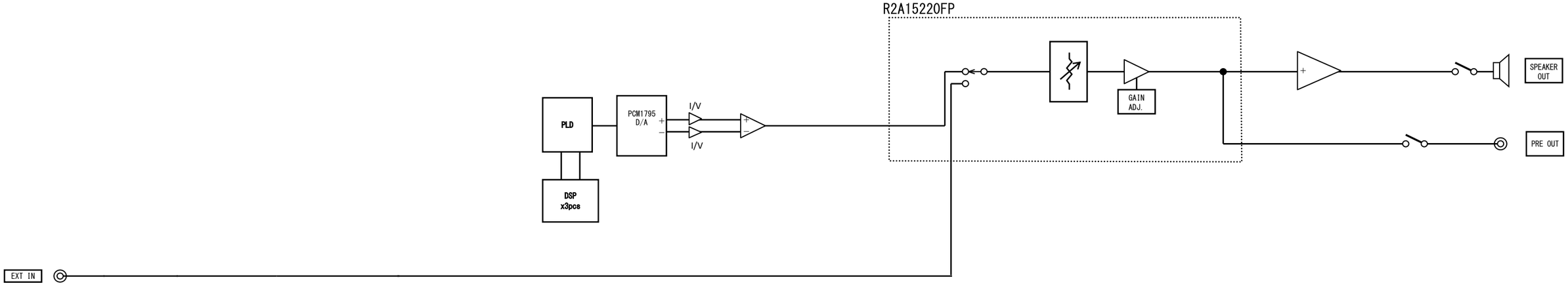
LEVEL DIAGRAM

LEVEL DIAGRAM
FRONT ch

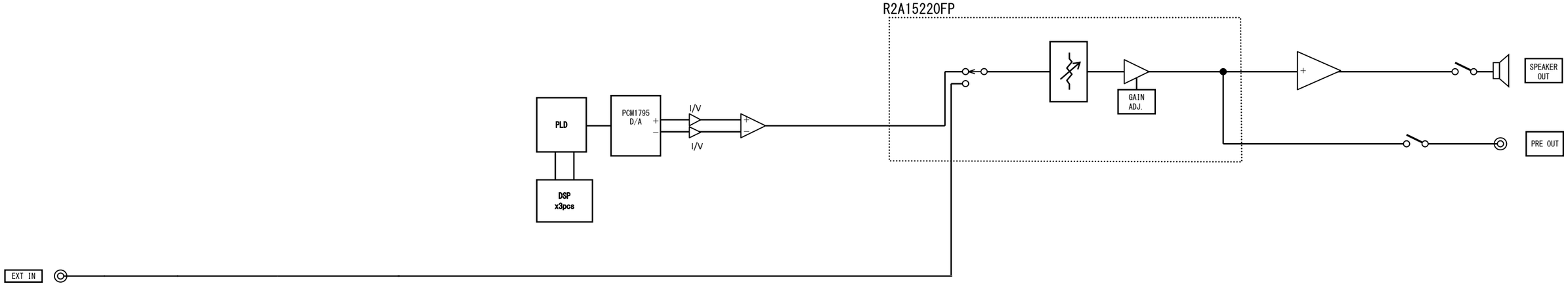


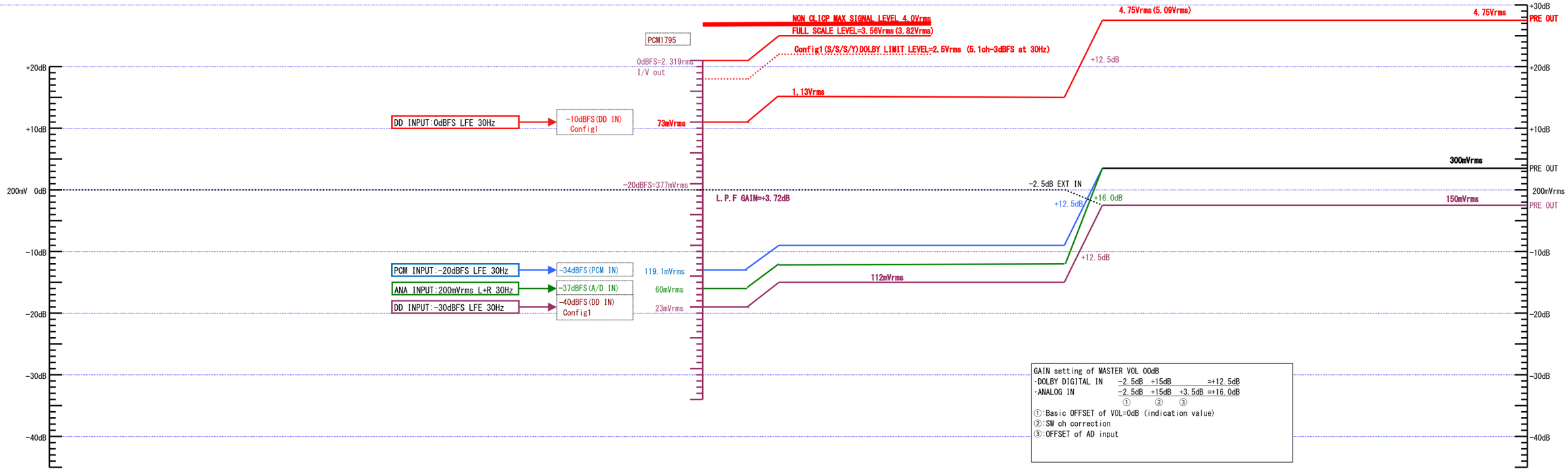


LEVEL DIAGRAM
CENTER ch

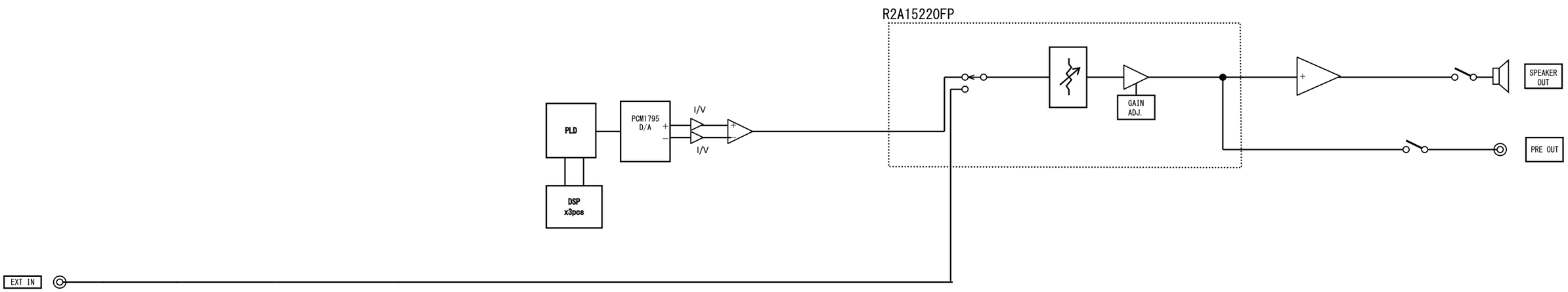


LEVEL DIAGRAM
SUBWOOFER ch

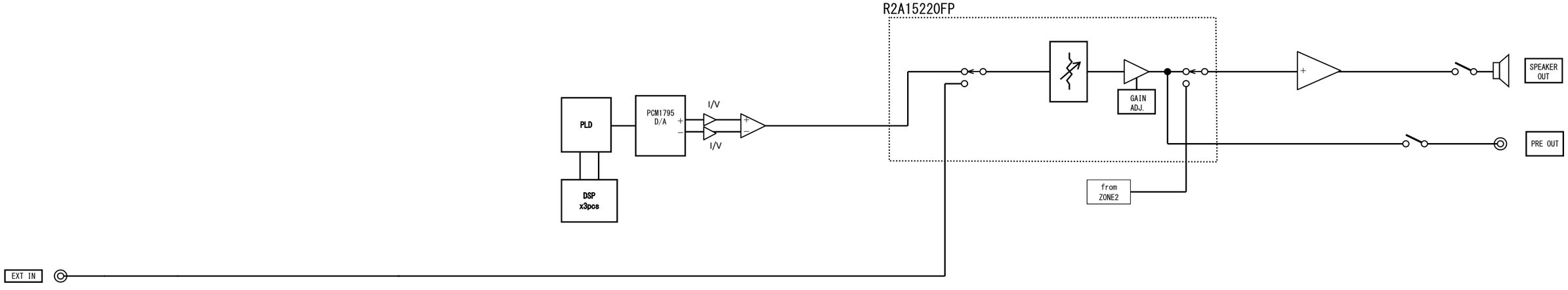




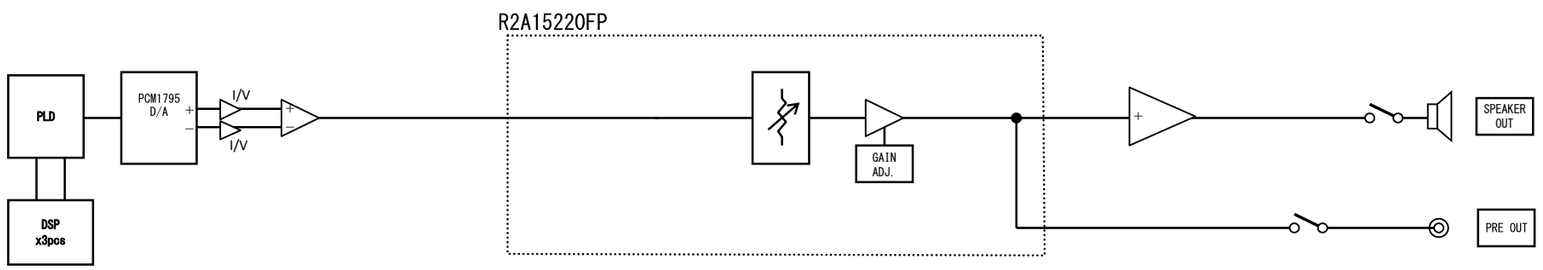
LEVEL DIAGRAM
SURROUND ch



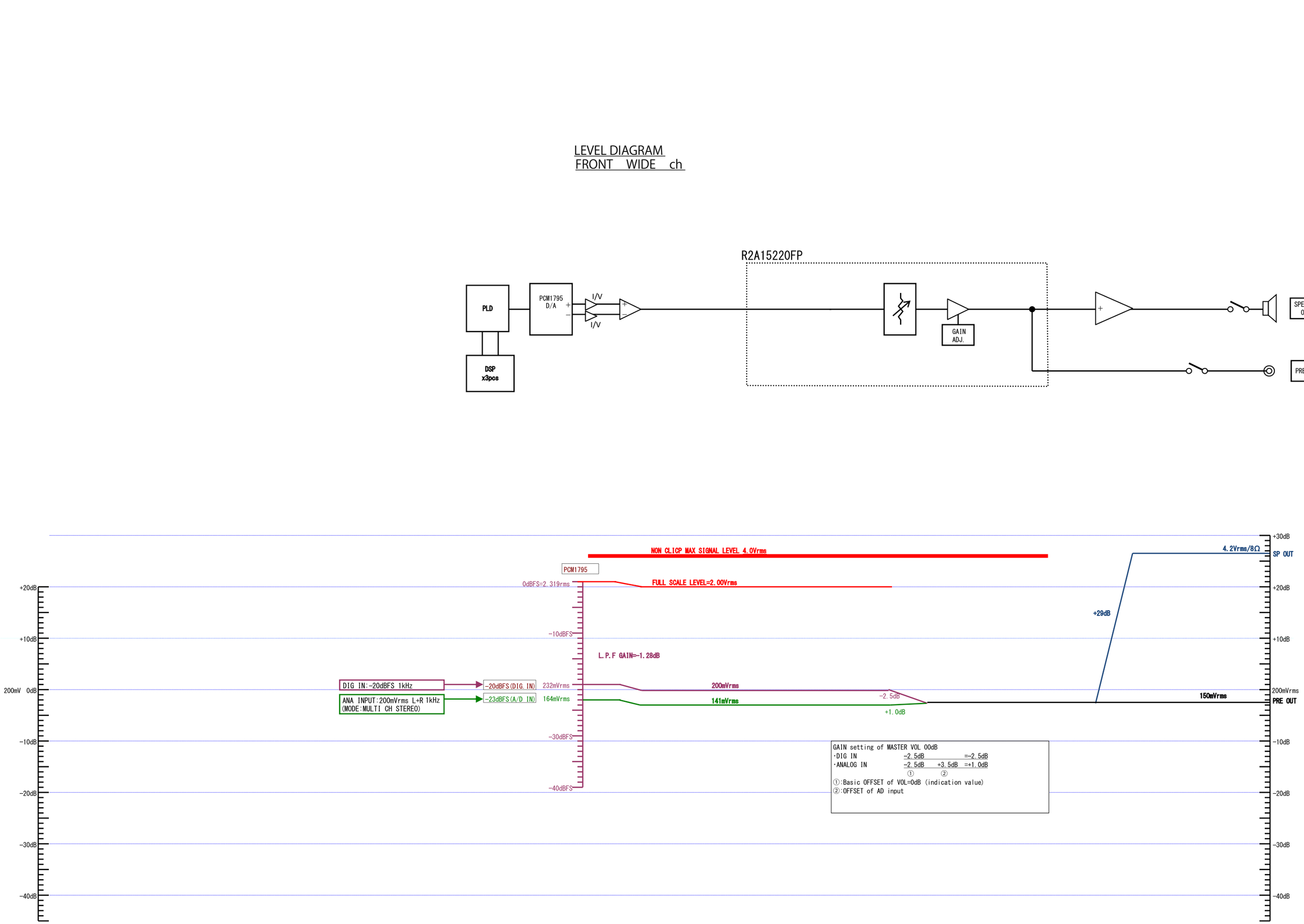
LEVEL DIAGRAM
SURR.BACK ch



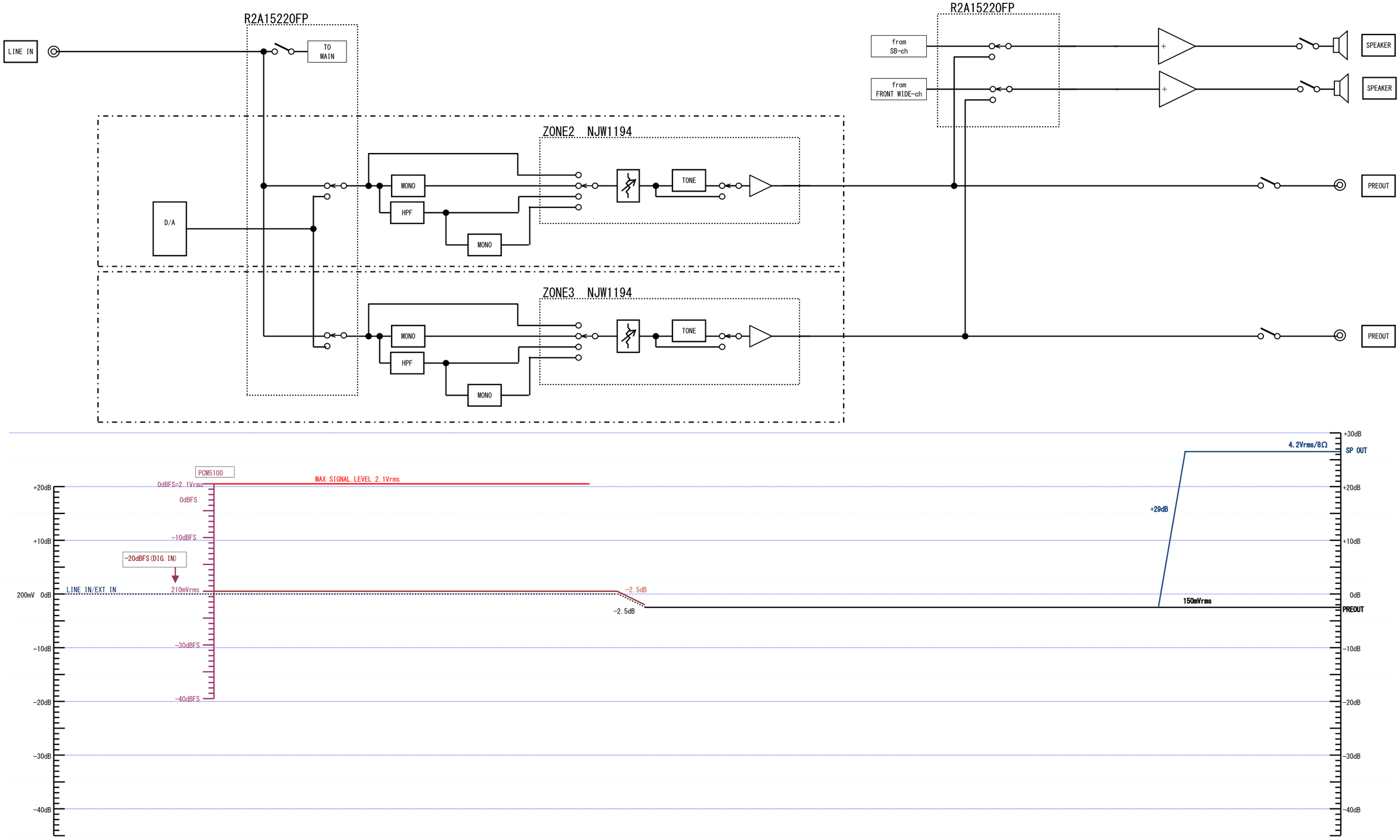
LEVEL DIAGRAM
FRONT HEIDHT ch



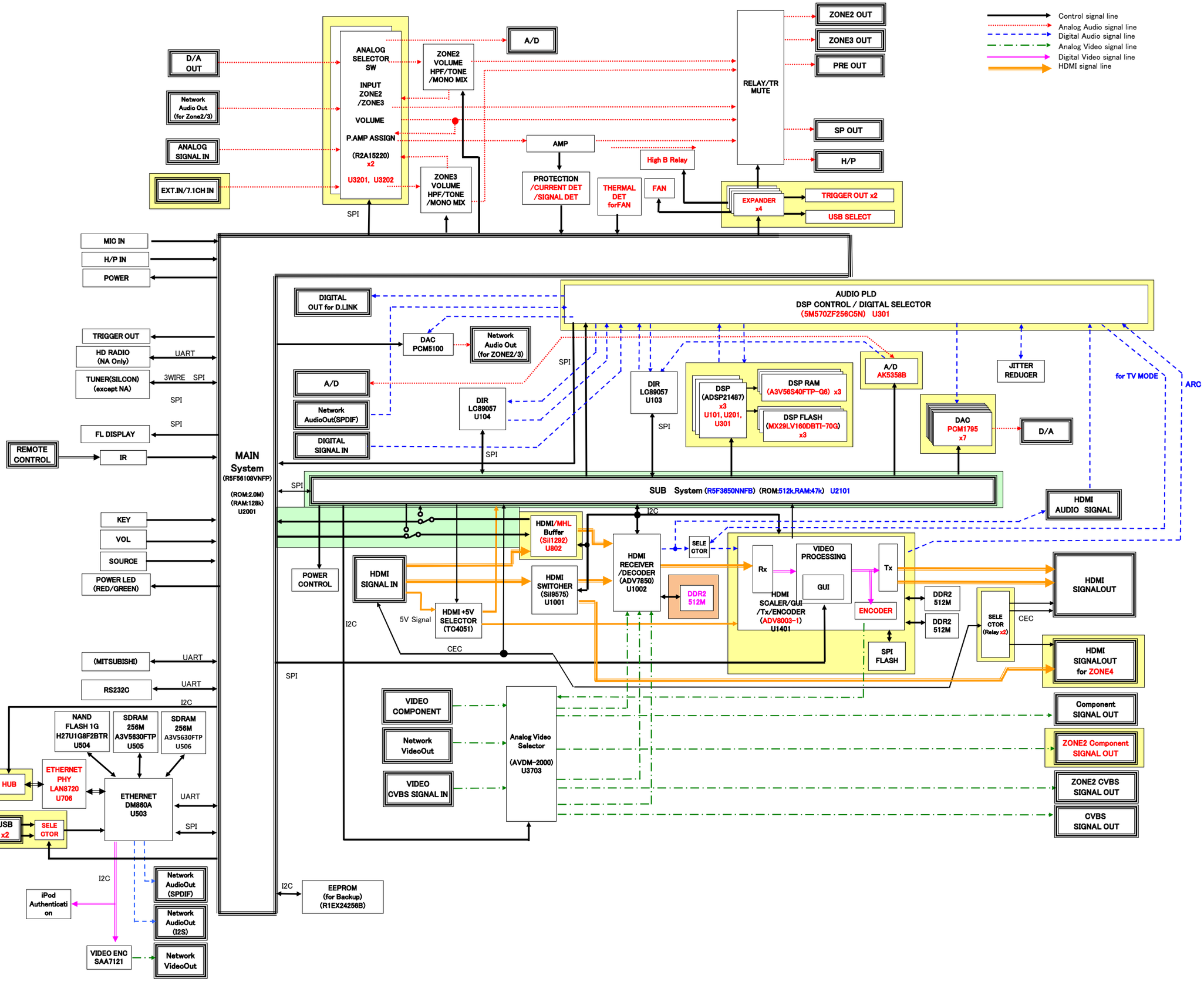
LEVEL DIAGRAM
FRONT　WIDE　ch



LEVEL DIAGRAM
ZONE2/3

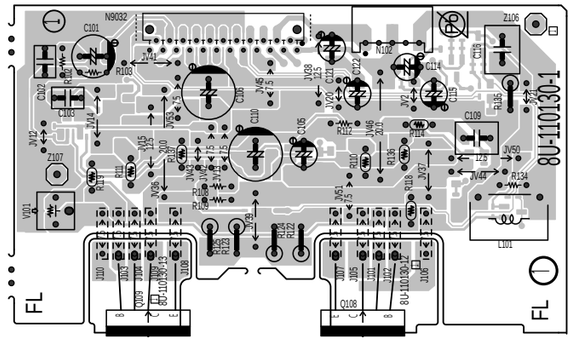


CPU CONTROL BLOCK DIAGRAM

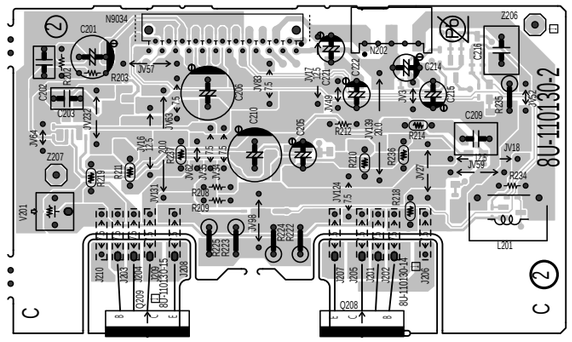


PRINTED WIRING BOARDS

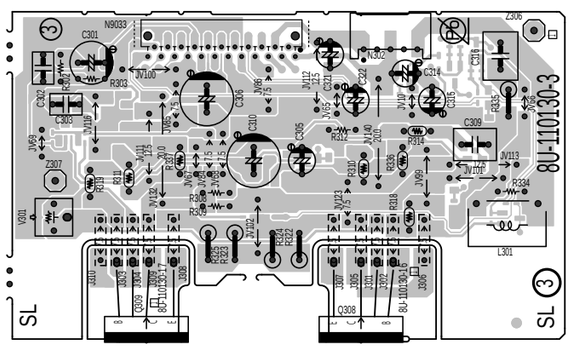
POWER AMP (FL) (COMPONENT SIDE)



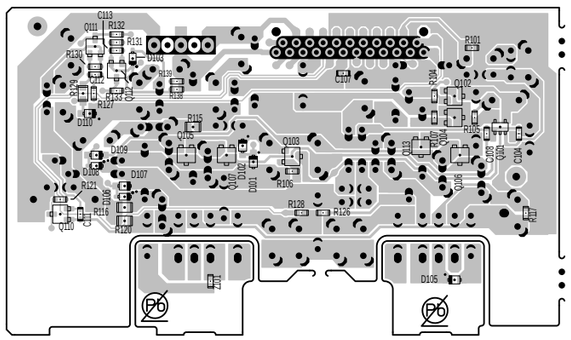
POWER AMP (C) (COMPONENT SIDE)



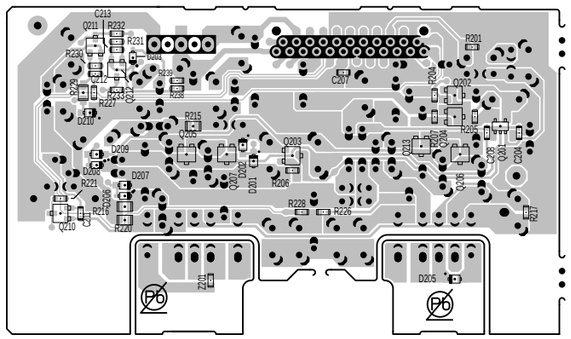
POWER AMP (SL) (COMPONENT SIDE)



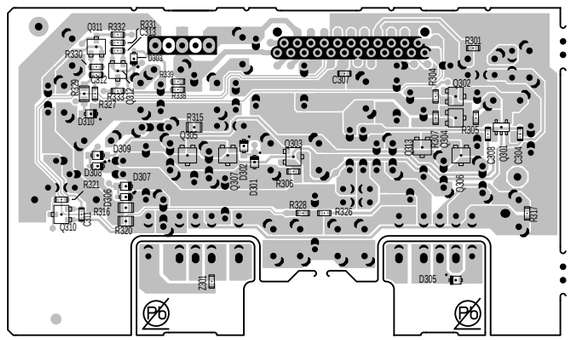
POWER AMP (FL) (FOIL SIDE)



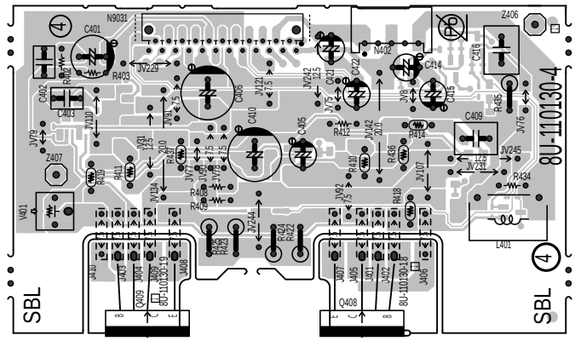
POWER AMP (C) (FOIL SIDE)



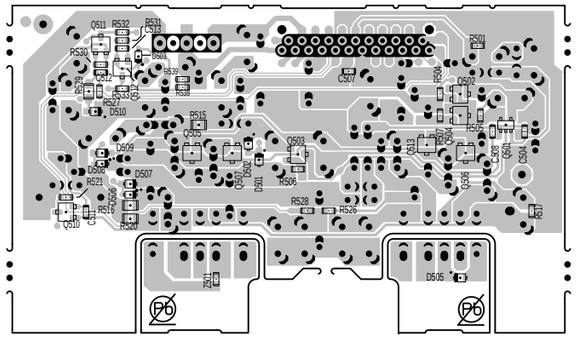
POWER AMP (SL) (FOIL SIDE)



POWER AMP (SBL) (COMPONENT SIDE)



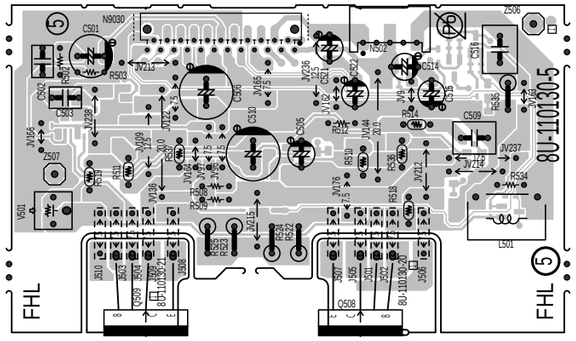
POWER AMP (SBL) (FOIL SIDE)



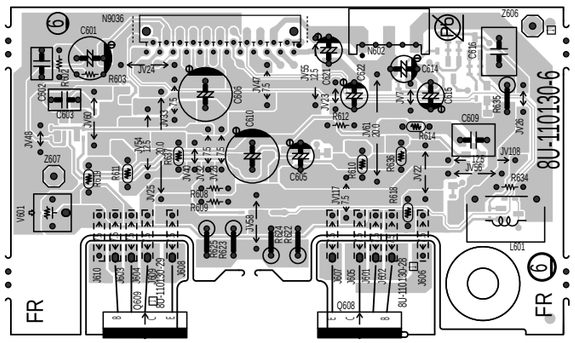
鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

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

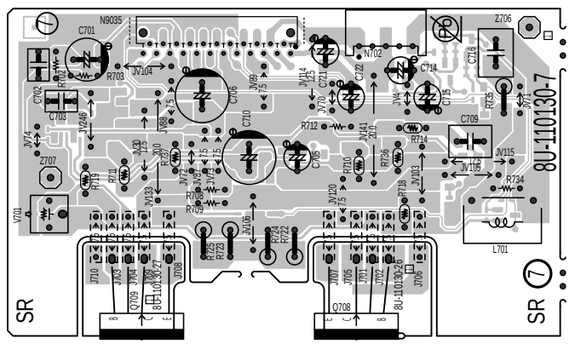
POWER AMP (FHL) (COMPONENT SIDE)



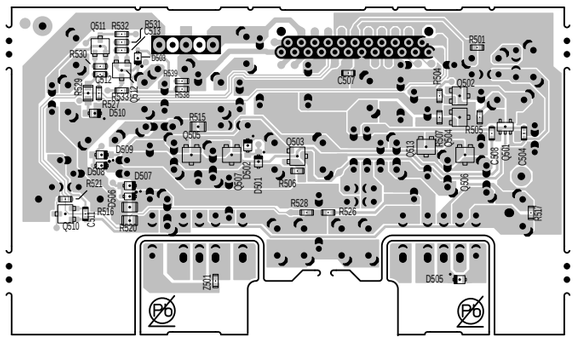
POWER AMP (FR) (COMPONENT SIDE)



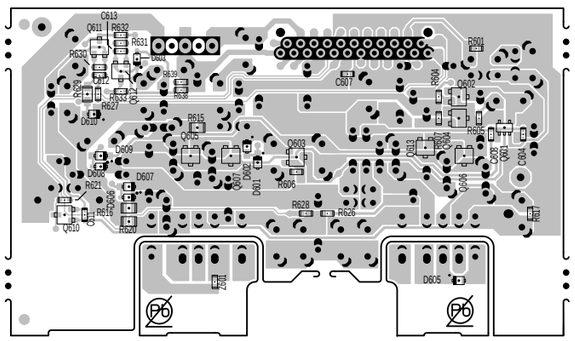
POWER AMP (SR) (COMPONENT SIDE)



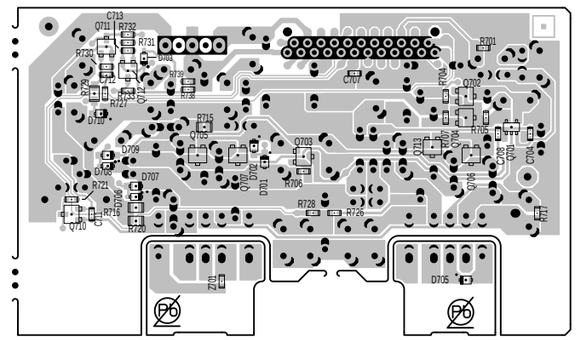
POWER AMP (FHL) (FOIL SIDE)



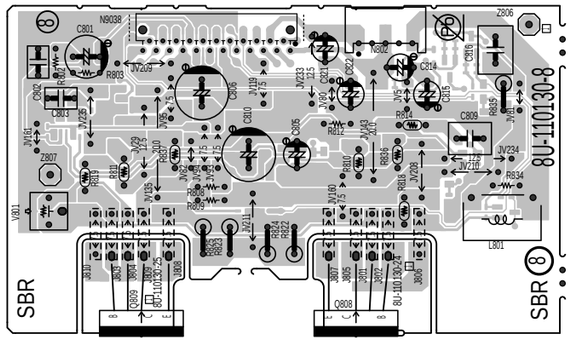
POWER AMP (FR) (FOIL SIDE)



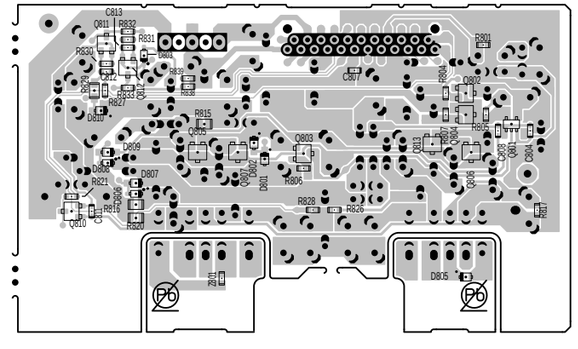
POWER AMP (SR) (FOIL SIDE)



POWER AMP (SBR) (COMPONENT SIDE)



POWER AMP (SBR) (FOIL SIDE)



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Lead-free Solder
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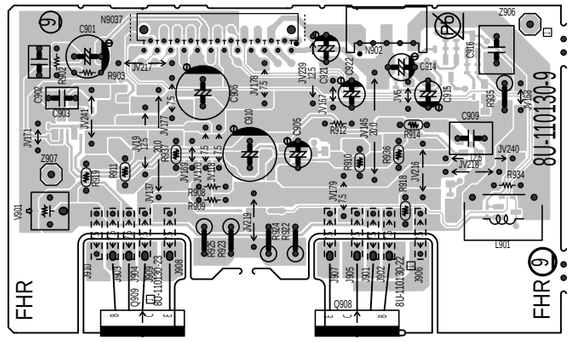
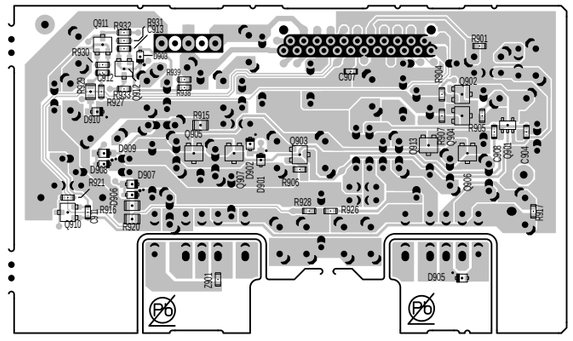
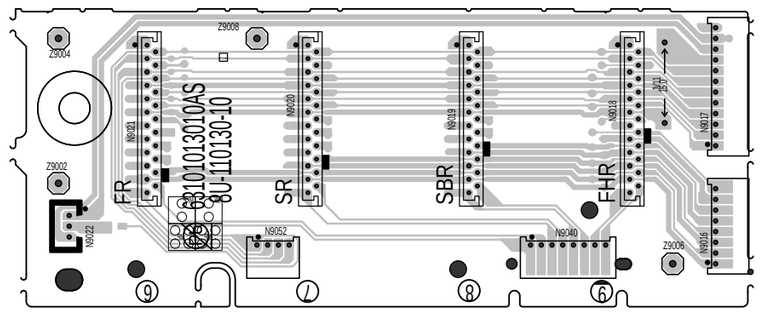
POWER AMP (FHR) (COMPONENT SIDE)



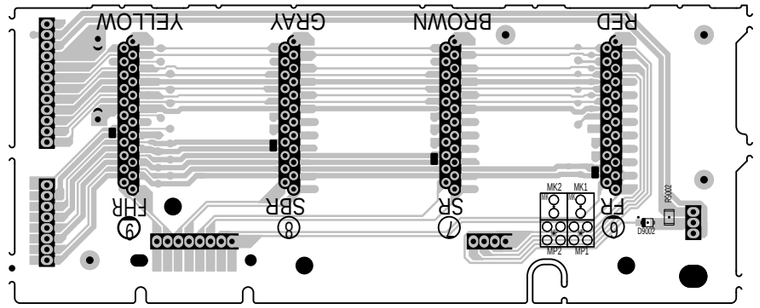
POWER AMP (FHR) (FOIL SIDE)



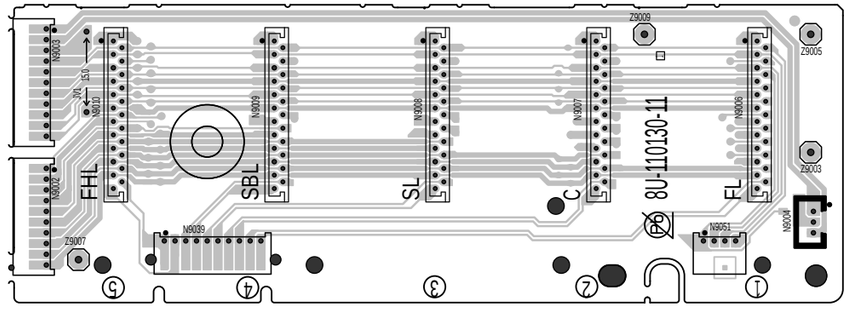
AMP CONNECT UNIT (COMPONENT SIDE)



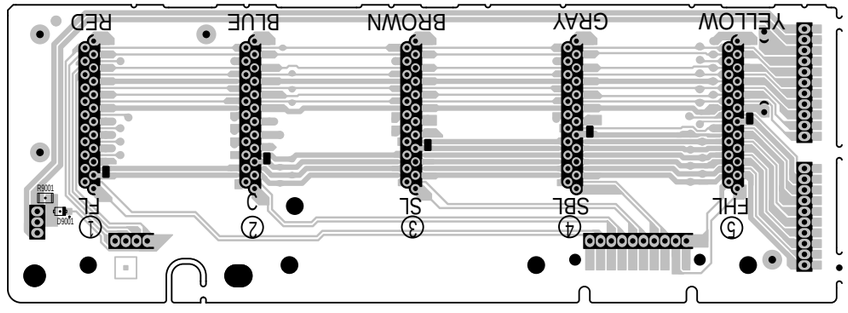
AMP CONNECT UNIT (FOIL SIDE)



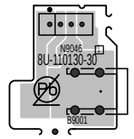
AMP CONNECT UNIT (COMPONENT SIDE)



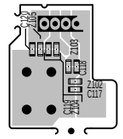
AMP CONNECT UNIT (FOIL SIDE)



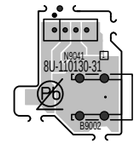
POSISTOR UNIT (COMPONENT SIDE)



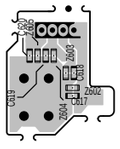
POSISTOR UNIT (FOIL SIDE)



POSISTOR UNIT (COMPONENT SIDE)



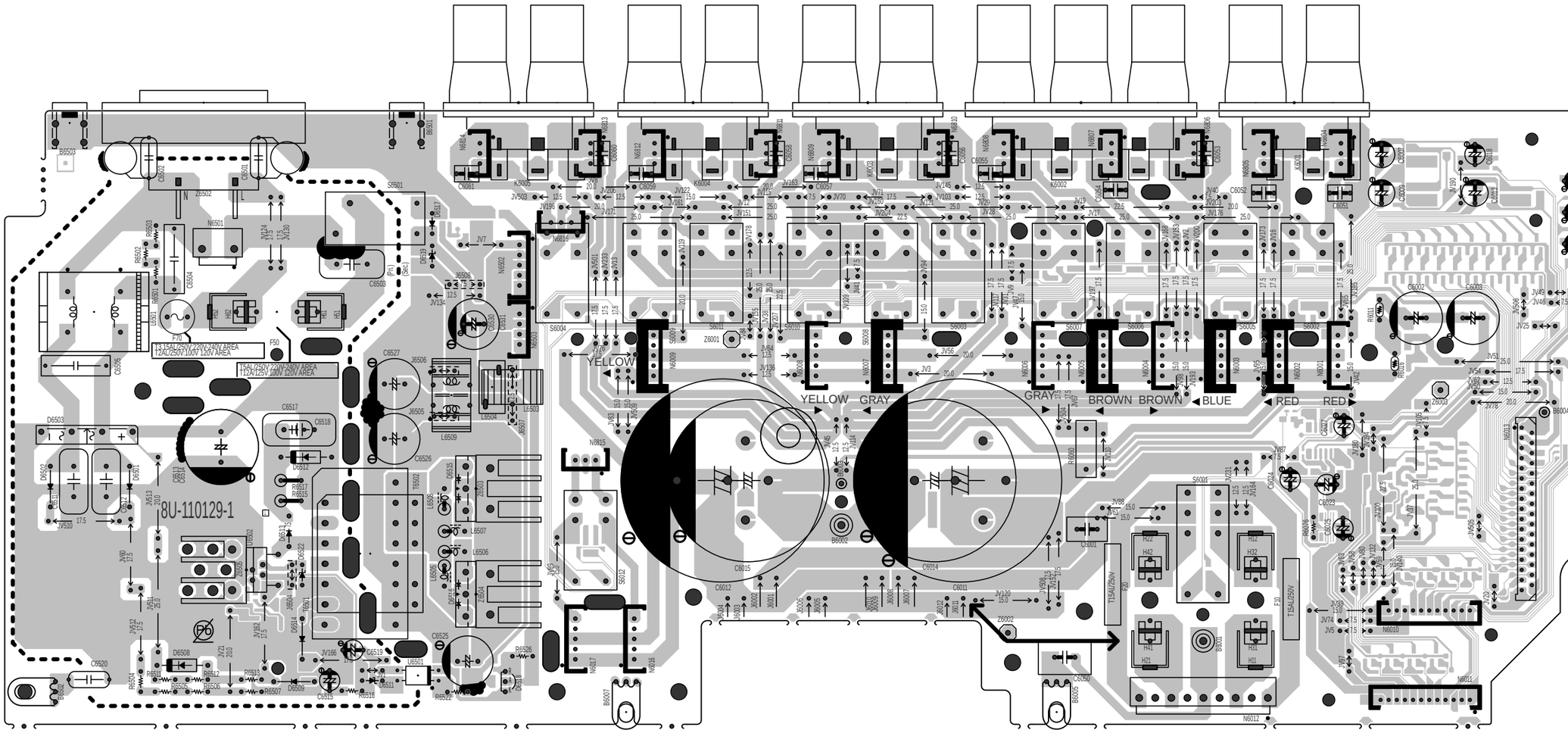
POSISTOR UNIT (FOIL SIDE)



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

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

SPK/SMPS (COMPONENT SIDE)



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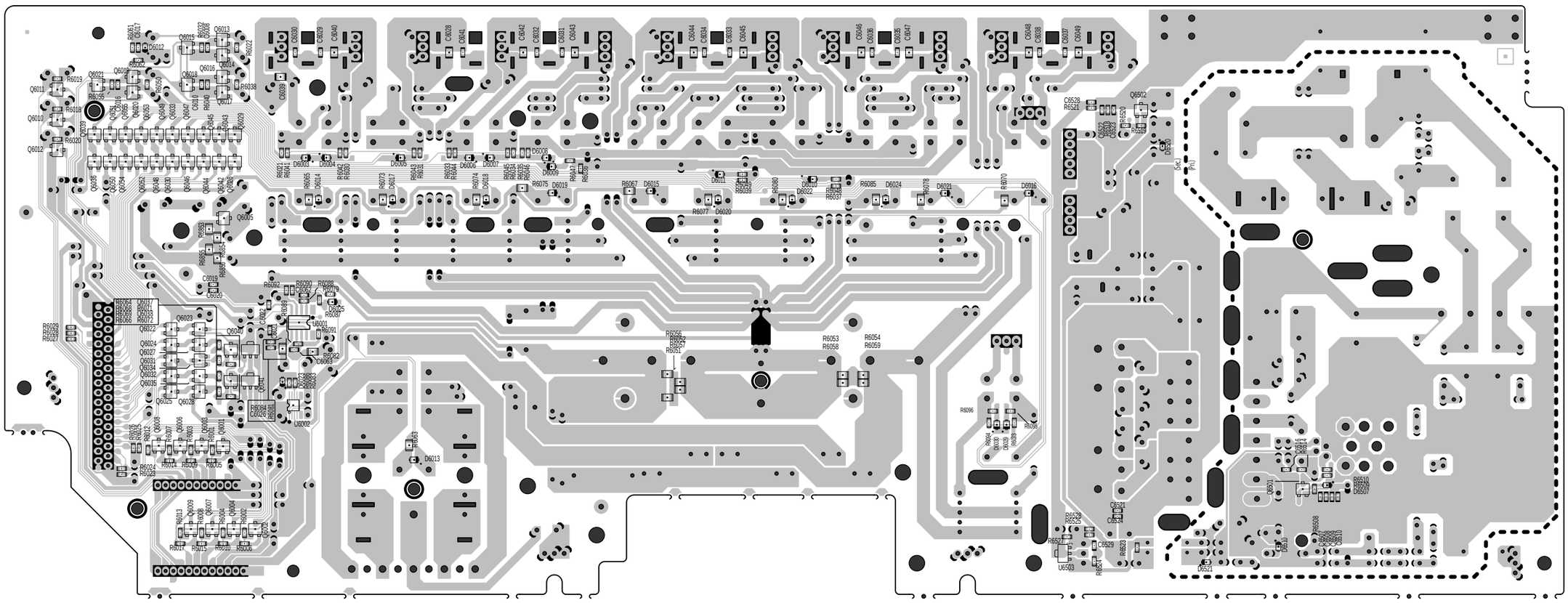

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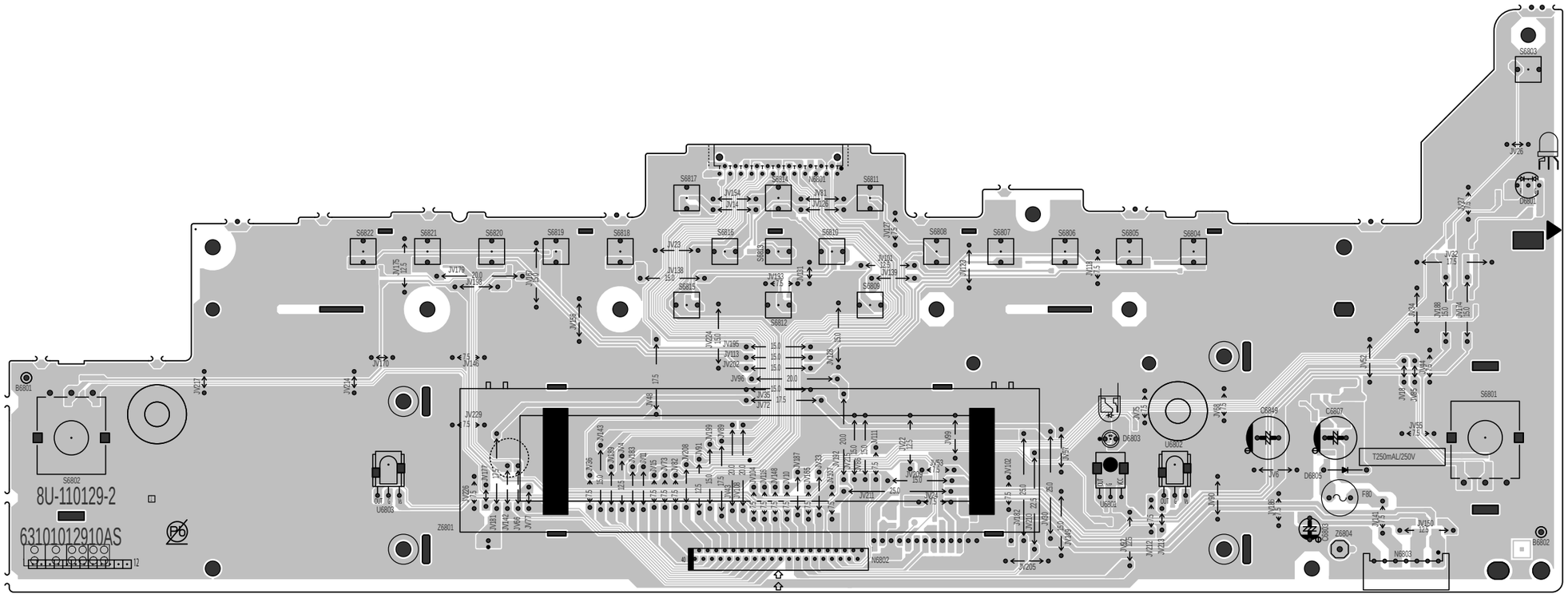
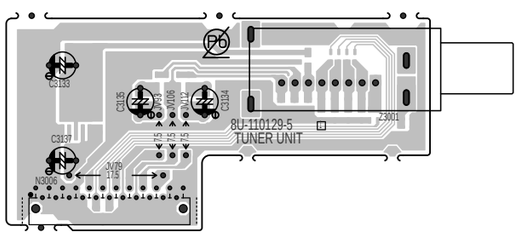
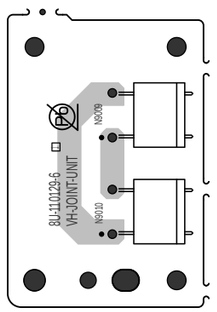
FLD (COMPONENT SIDE)



TUNER (COMPONENT SIDE)



VH-JOINT (COMPONENT SIDE)



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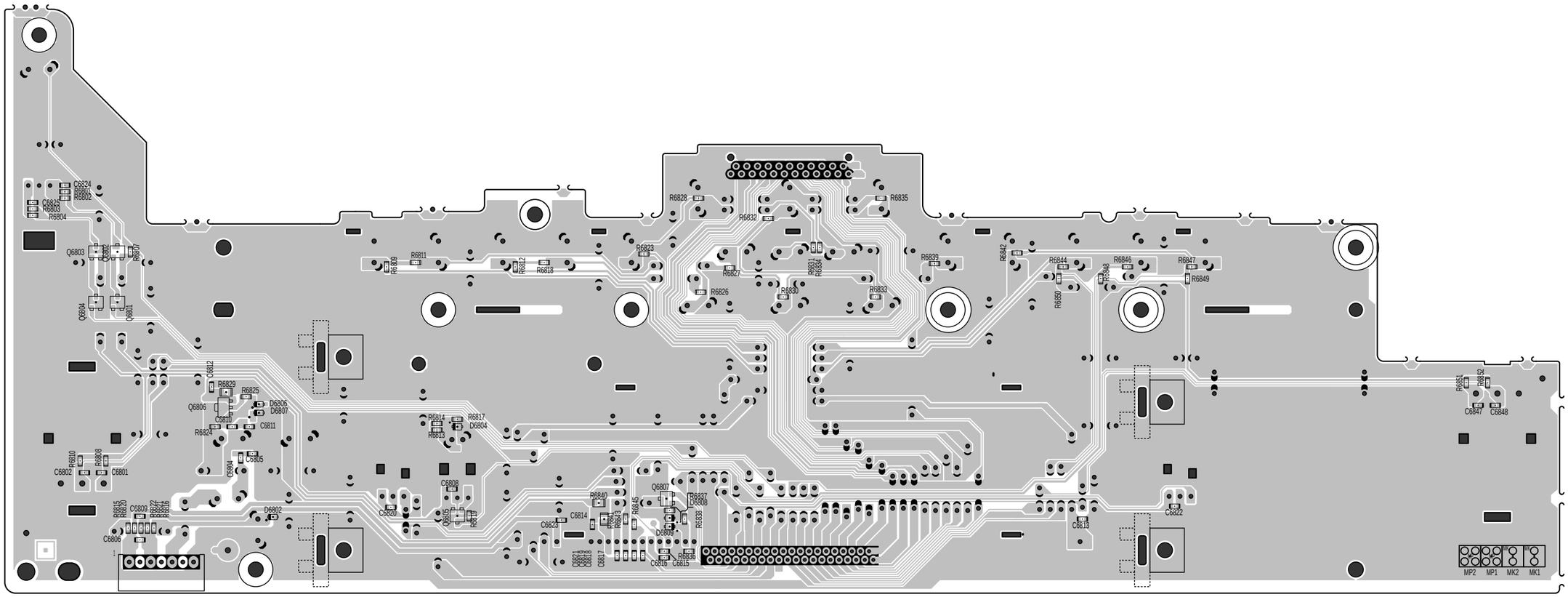
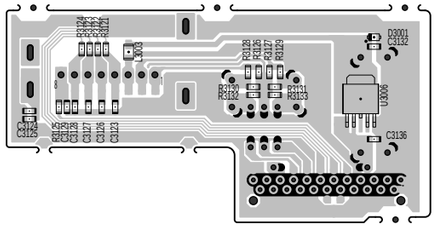
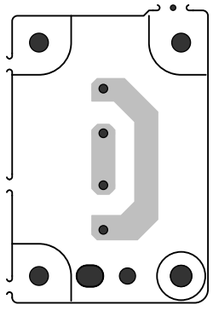
FLD (FOIL SIDE)



TUNER (FOIL SIDE)



VH-JOINT (FOIL SIDE)



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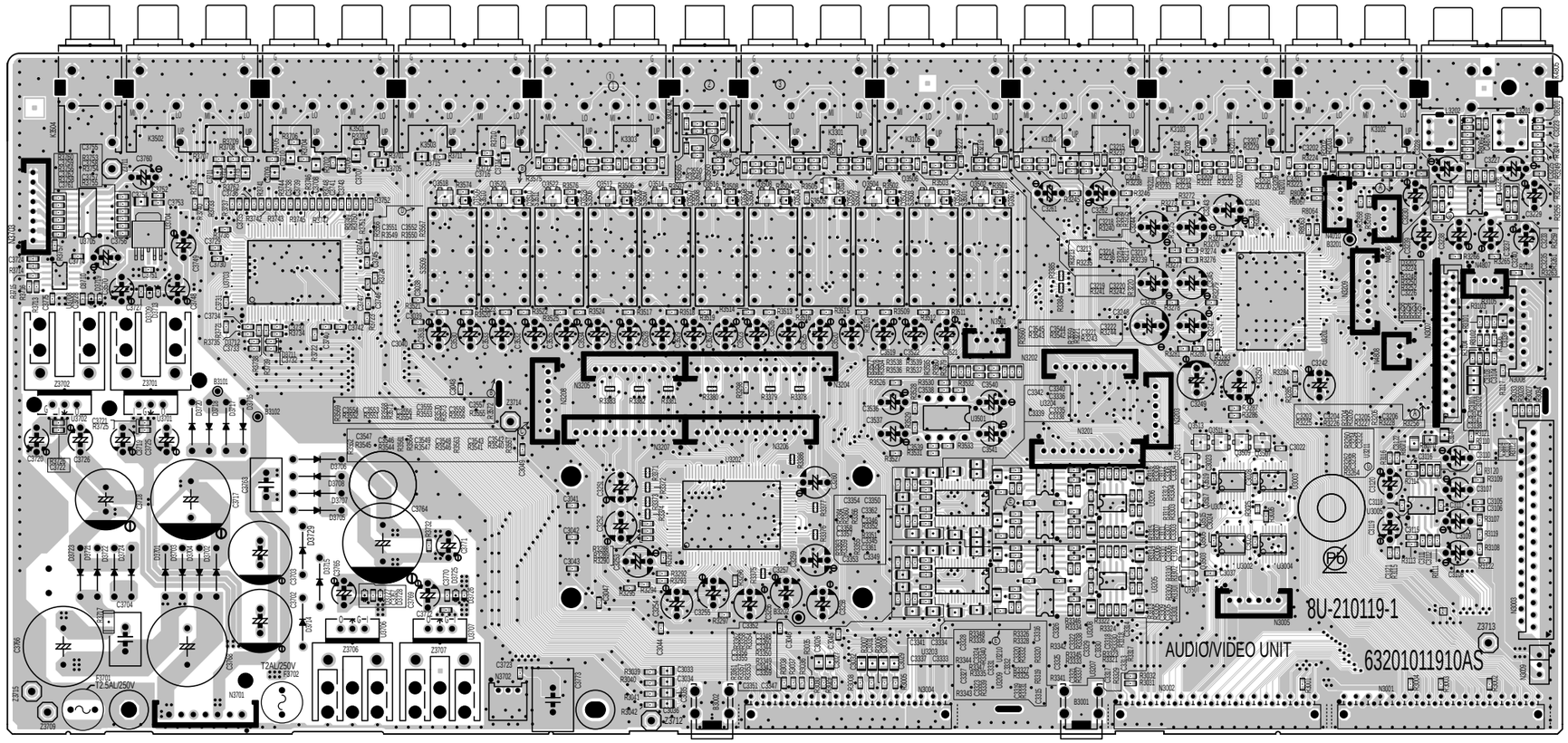
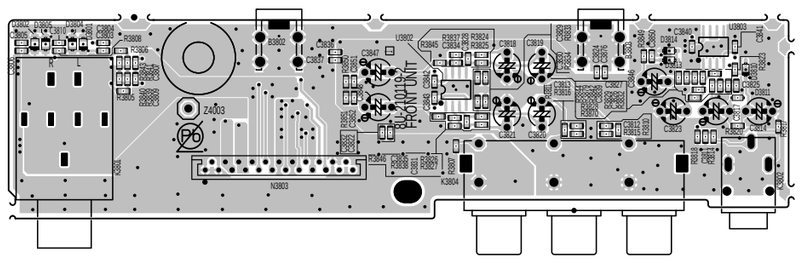
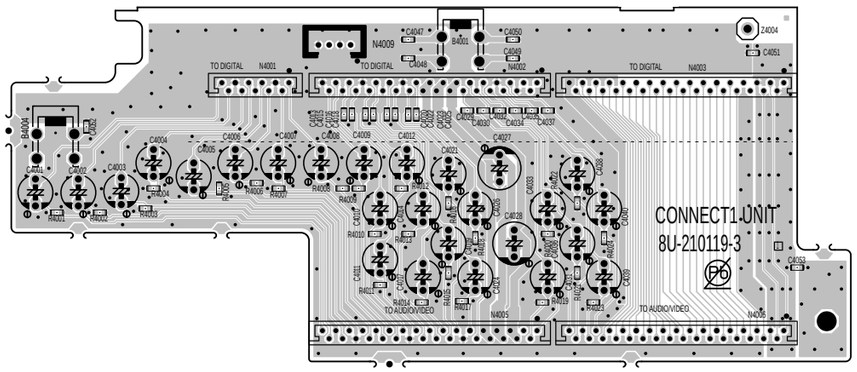
AUDIO/VIDEO (COMPONENT SIDE)



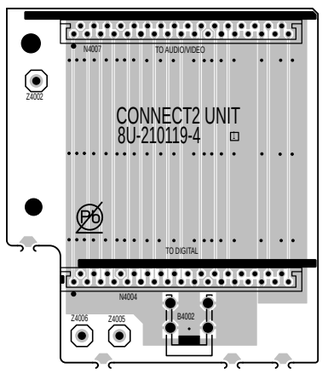
FRONT (COMPONENT SIDE)



CONNECT1 (COMPONENT SIDE)



CONNECT2 (COMPONENT SIDE)



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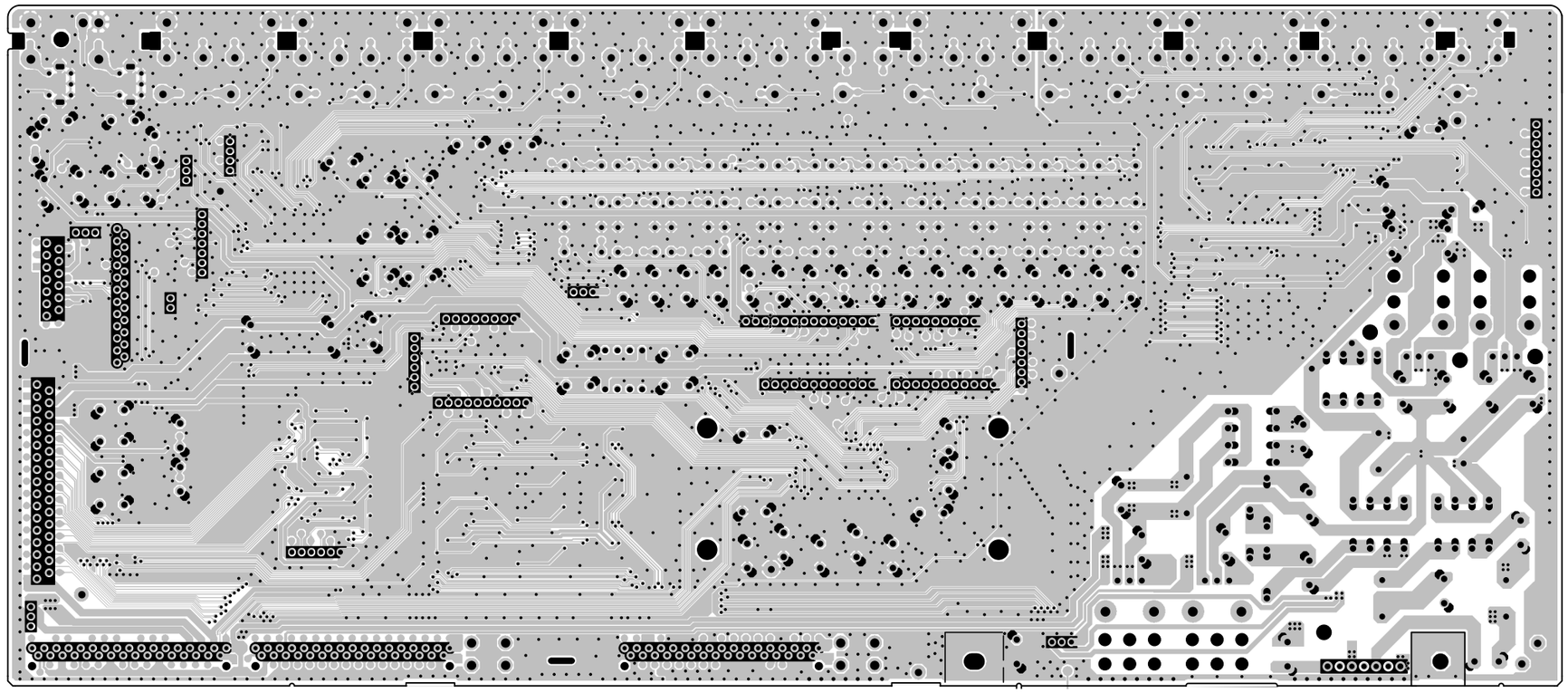
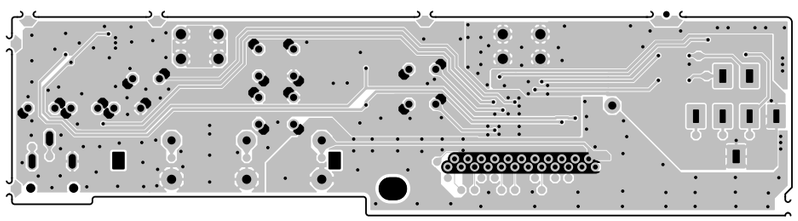
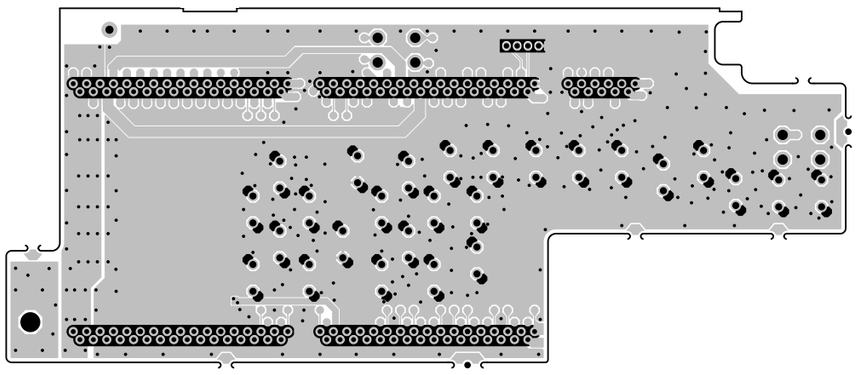
AUDIO/VIDEO (FOIL SIDE)



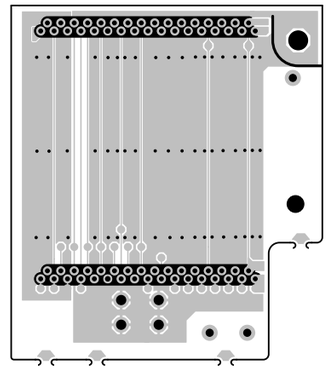
FRONT (FOIL SIDE)



CONNECT1 (FOIL SIDE)



CONNECT2 (FOIL SIDE)



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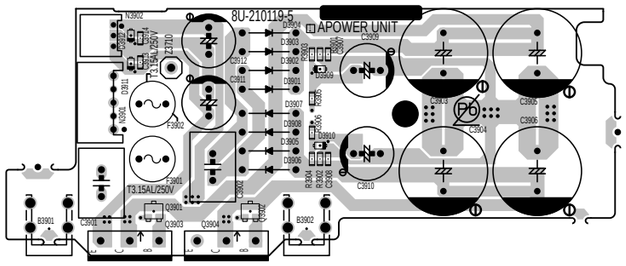
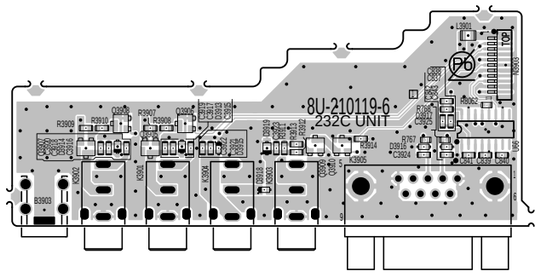
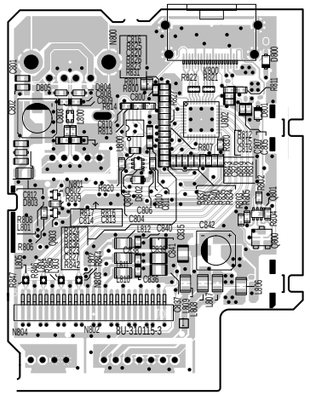
APOWER (COMPONENT SIDE)



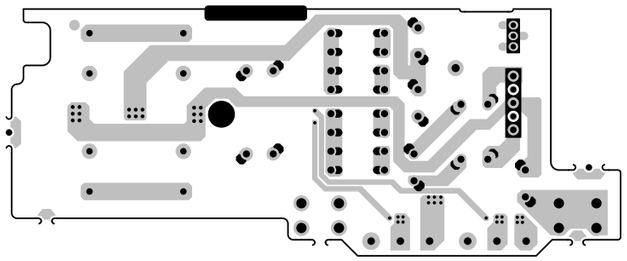
232C (COMPONENT SIDE)



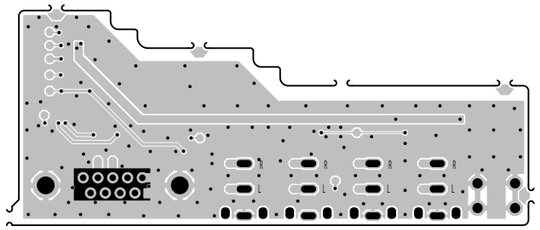
FRONT HDMI USB (COMPONENT SIDE)



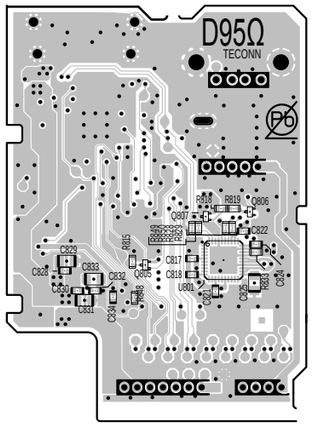
APOWER (FOIL SIDE)



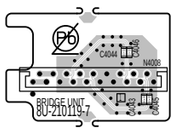
232C (FHL) (FOIL SIDE)



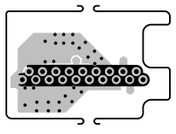
FRONT HDMI USB (FOIL SIDE)



BRIDGE (COMPONENT SIDE)



BRIDGE (FOIL SIDE)



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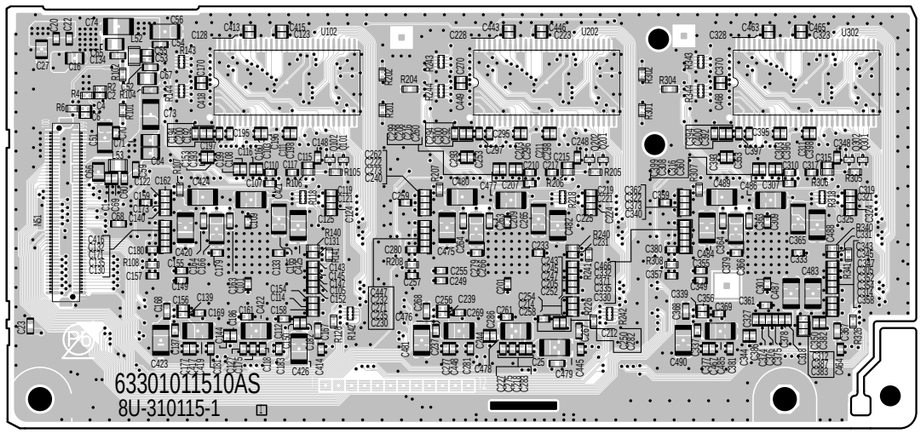
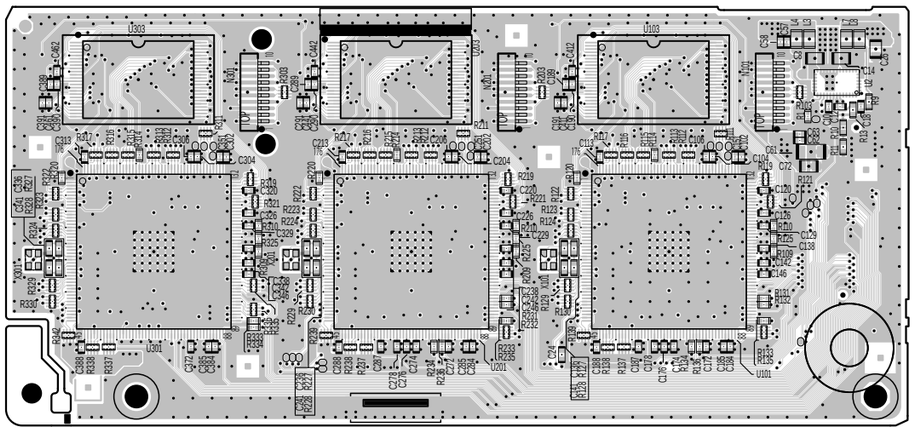
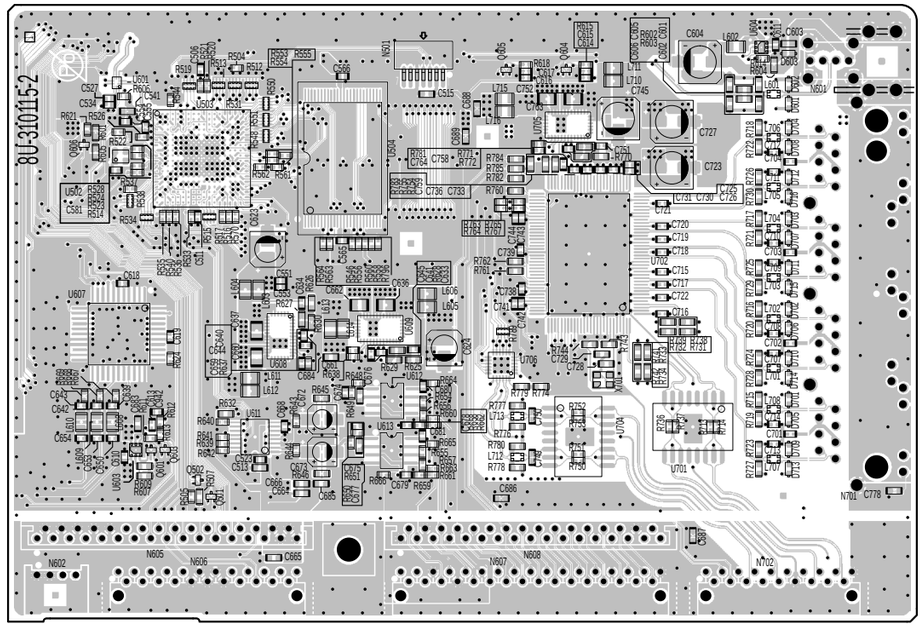
DSP (COMPONENT SIDE)



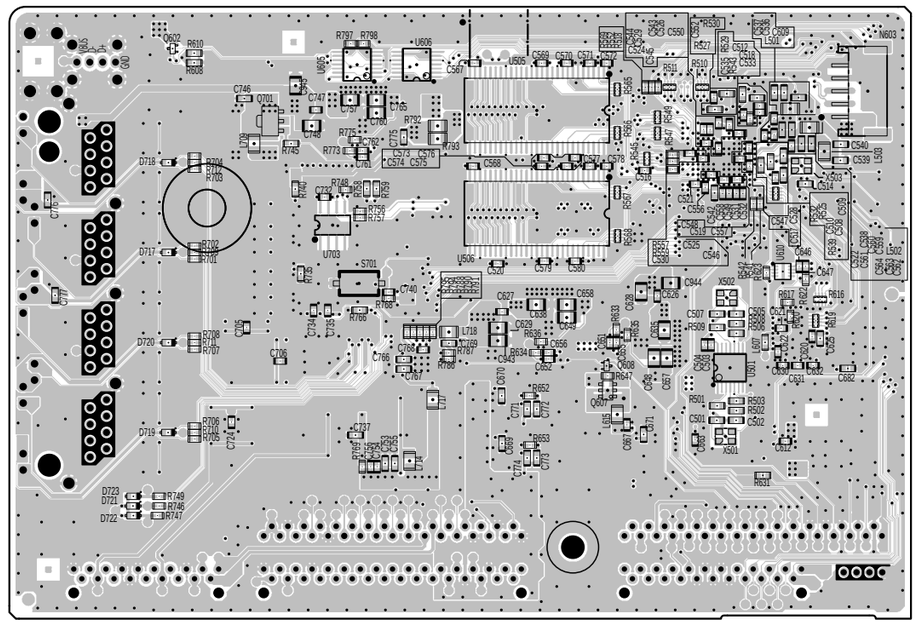
DSP (FOIL SIDE)



NETWORK (COMPONENT SIDE)



NETWORK (FOIL SIDE)



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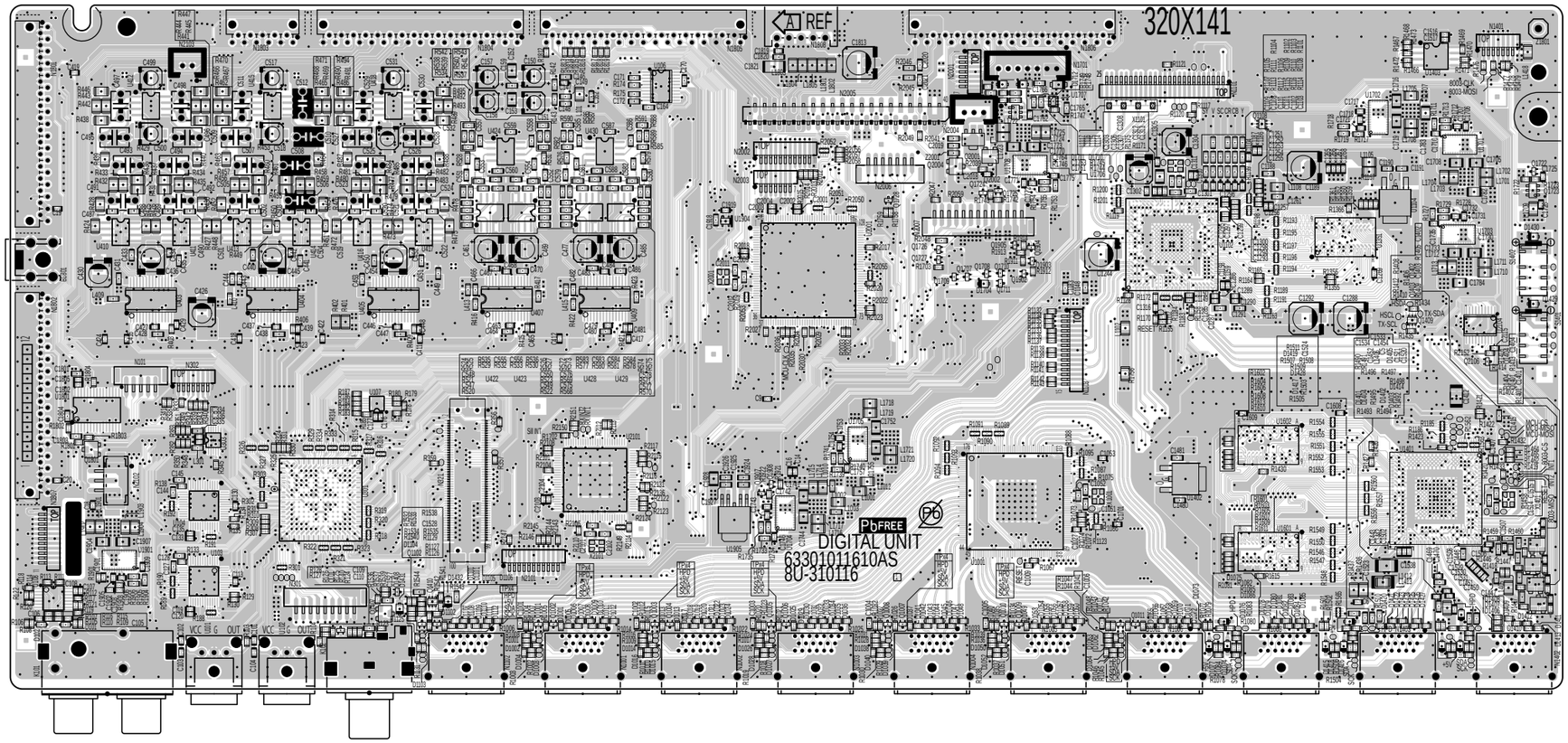
DIGITAL (COMPONENT SIDE)



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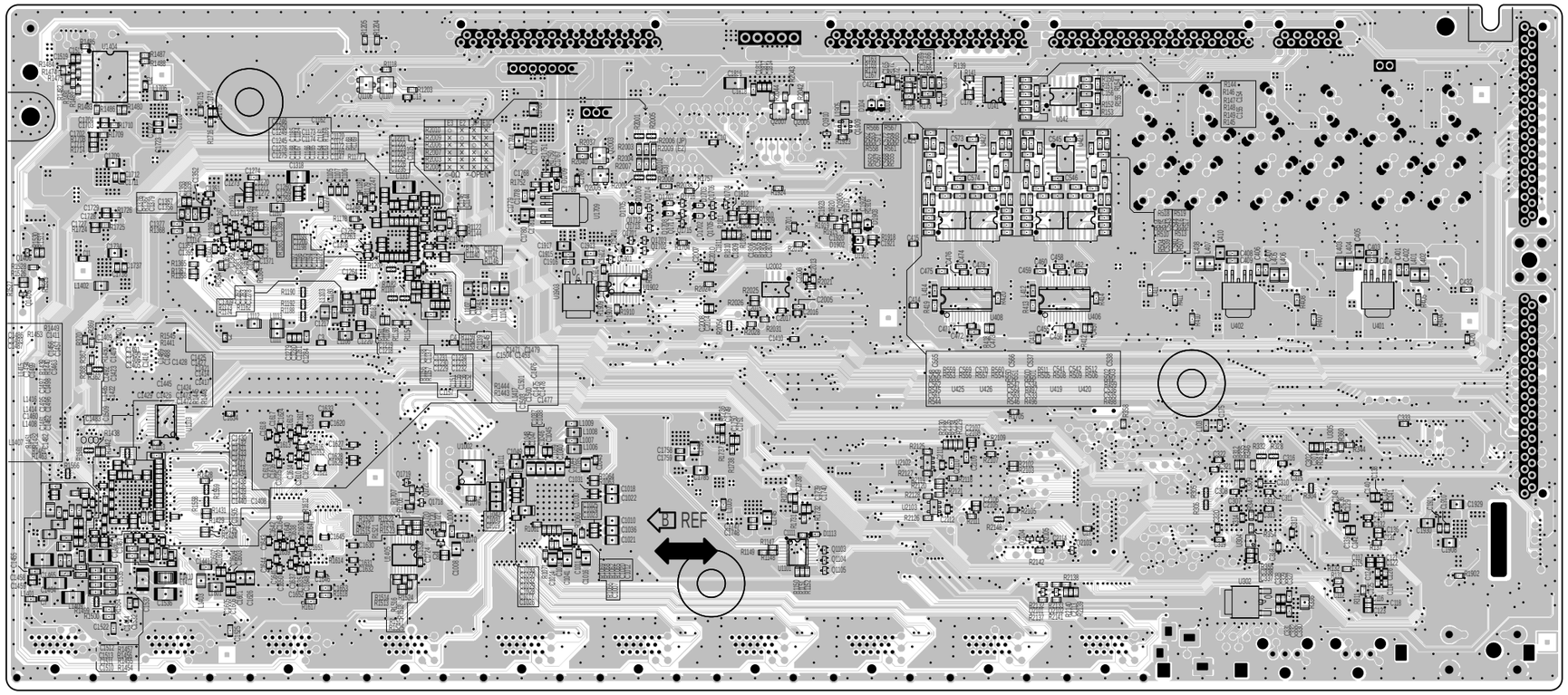

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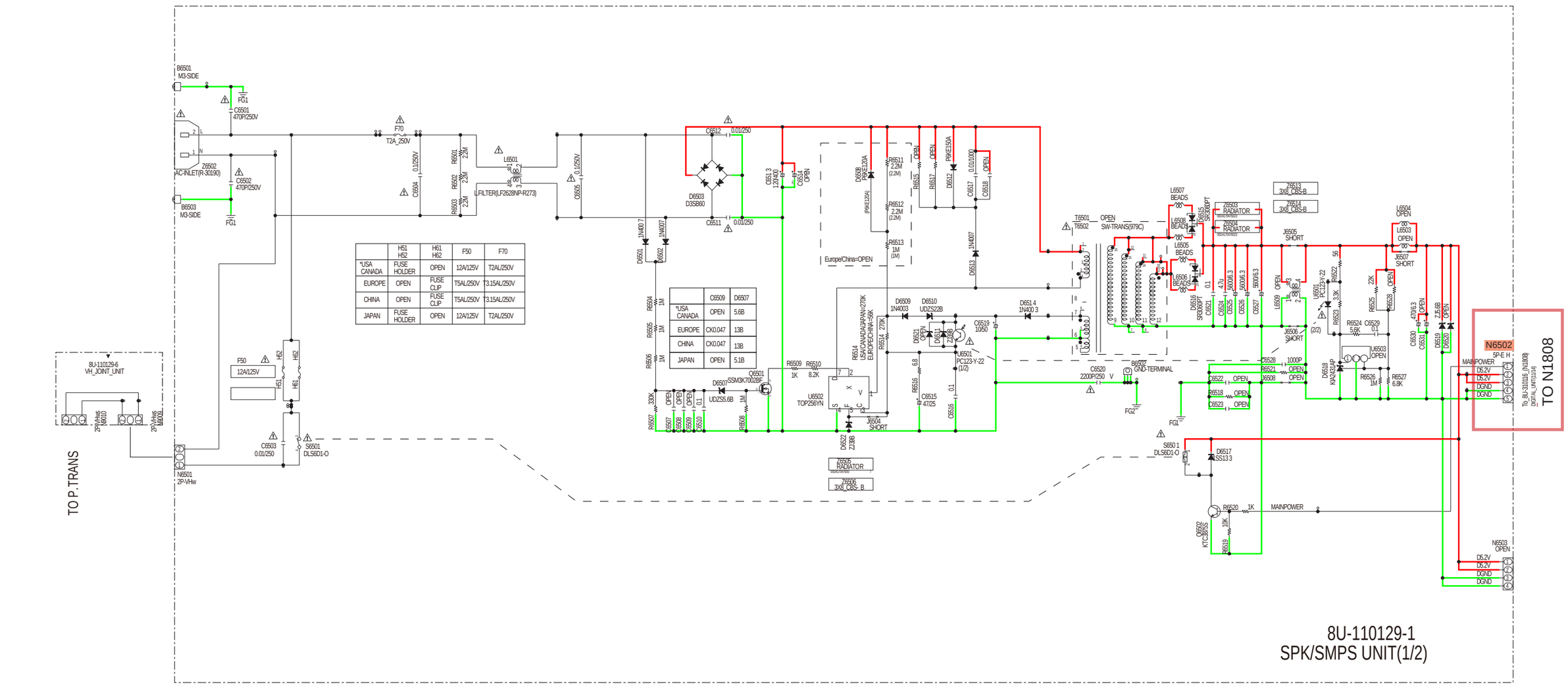


	H51 H52	H61 H62	F50	F70
*USA CANADA	FUSE HOLDER	OPEN	12A/125V	T2AL/250V
EUROPE	OPEN	FUSE CLIP	T5AL/250V	T3.15AL/250V
CHINA	OPEN	FUSE CLIP	T5AL/250V	T3.15AL/250V
JAPAN	FUSE HOLDER	OPEN	12A/125V	T2AL/250V

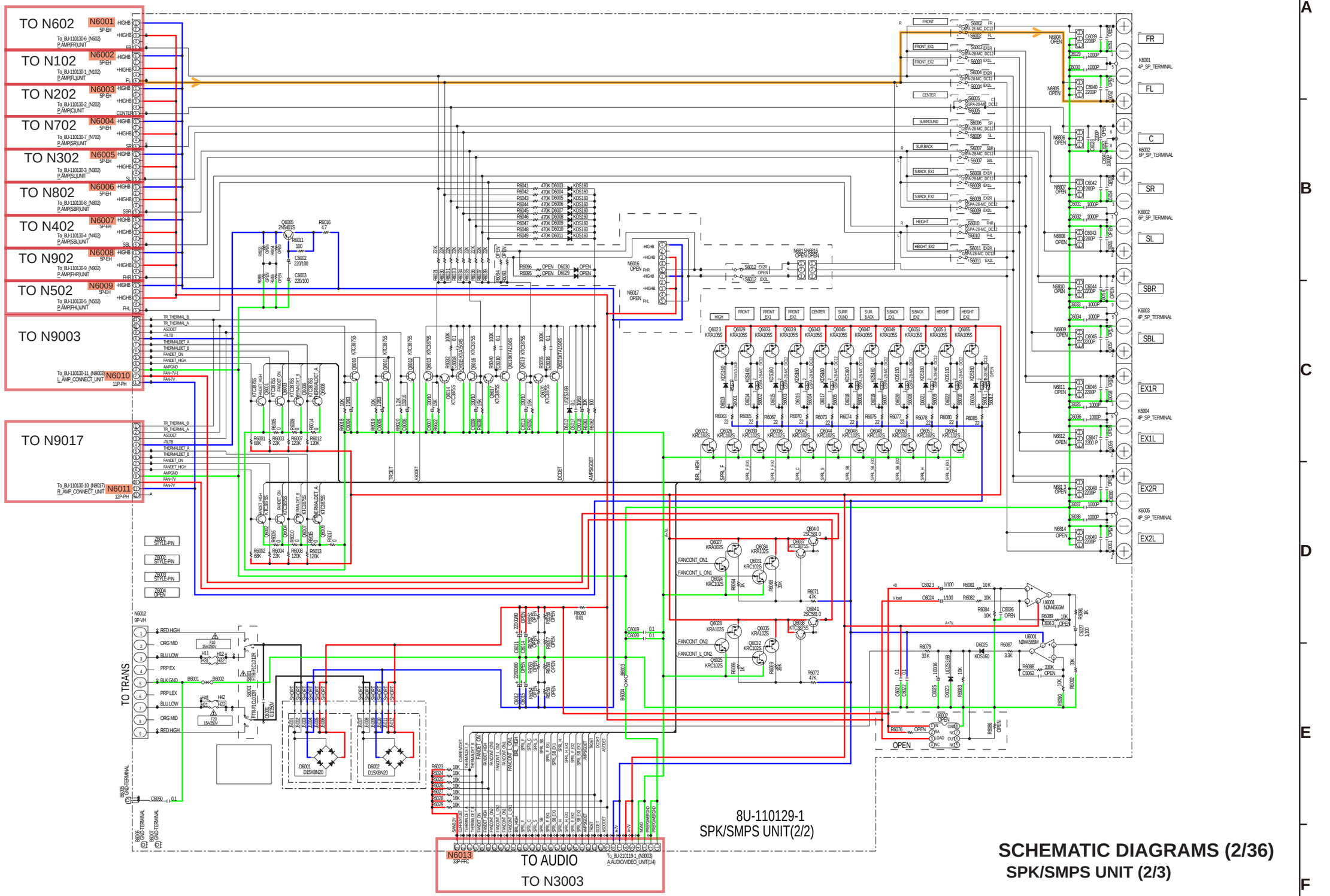
	C6509	D6507
*USA CANADA	OPEN	5.6B
EUROPE	CK0.047	13B
CHINA	CK0.047	13B
JAPAN	OPEN	5.1B

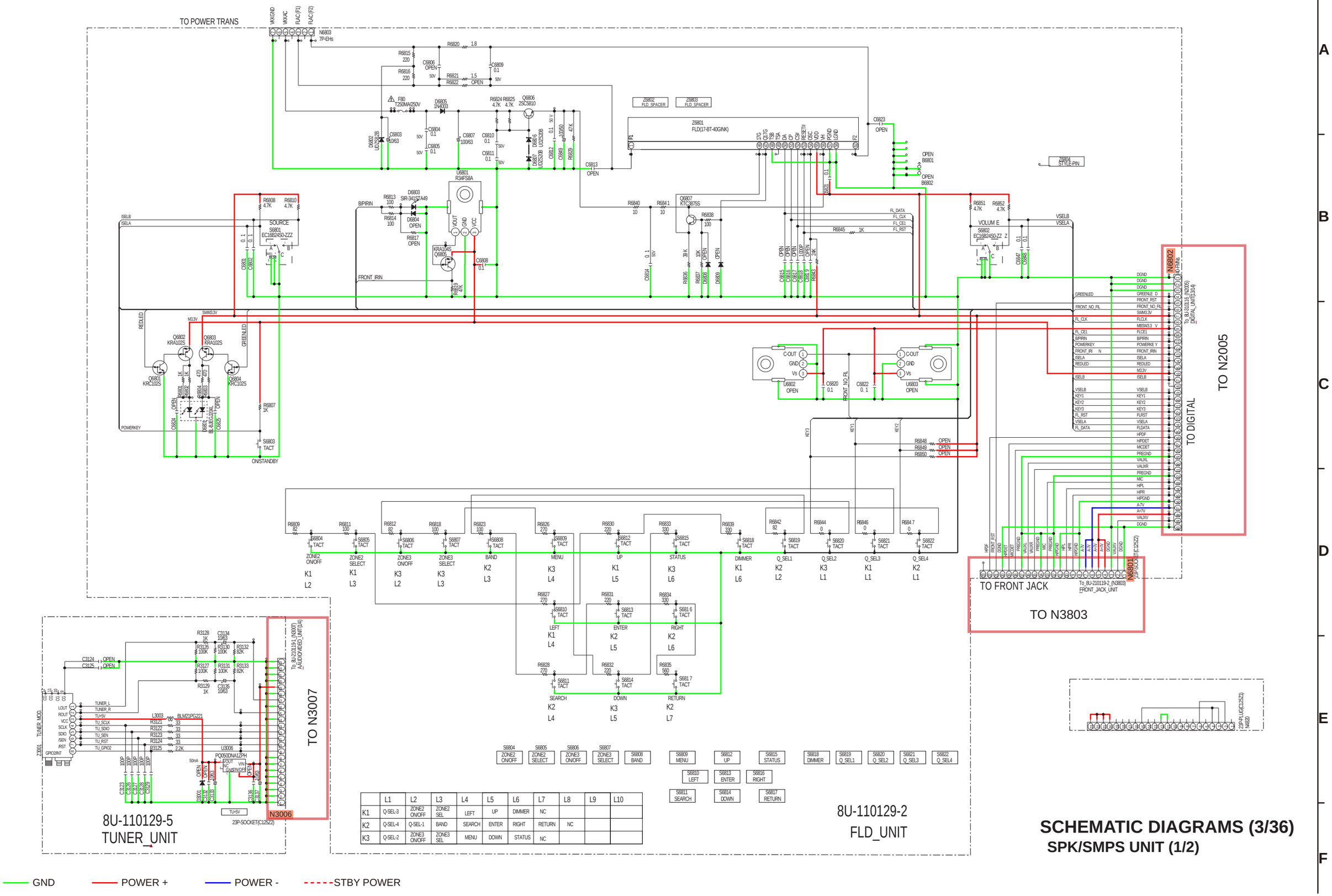
⚠4

SCHEMATIC DIAGRAMS (1/36)

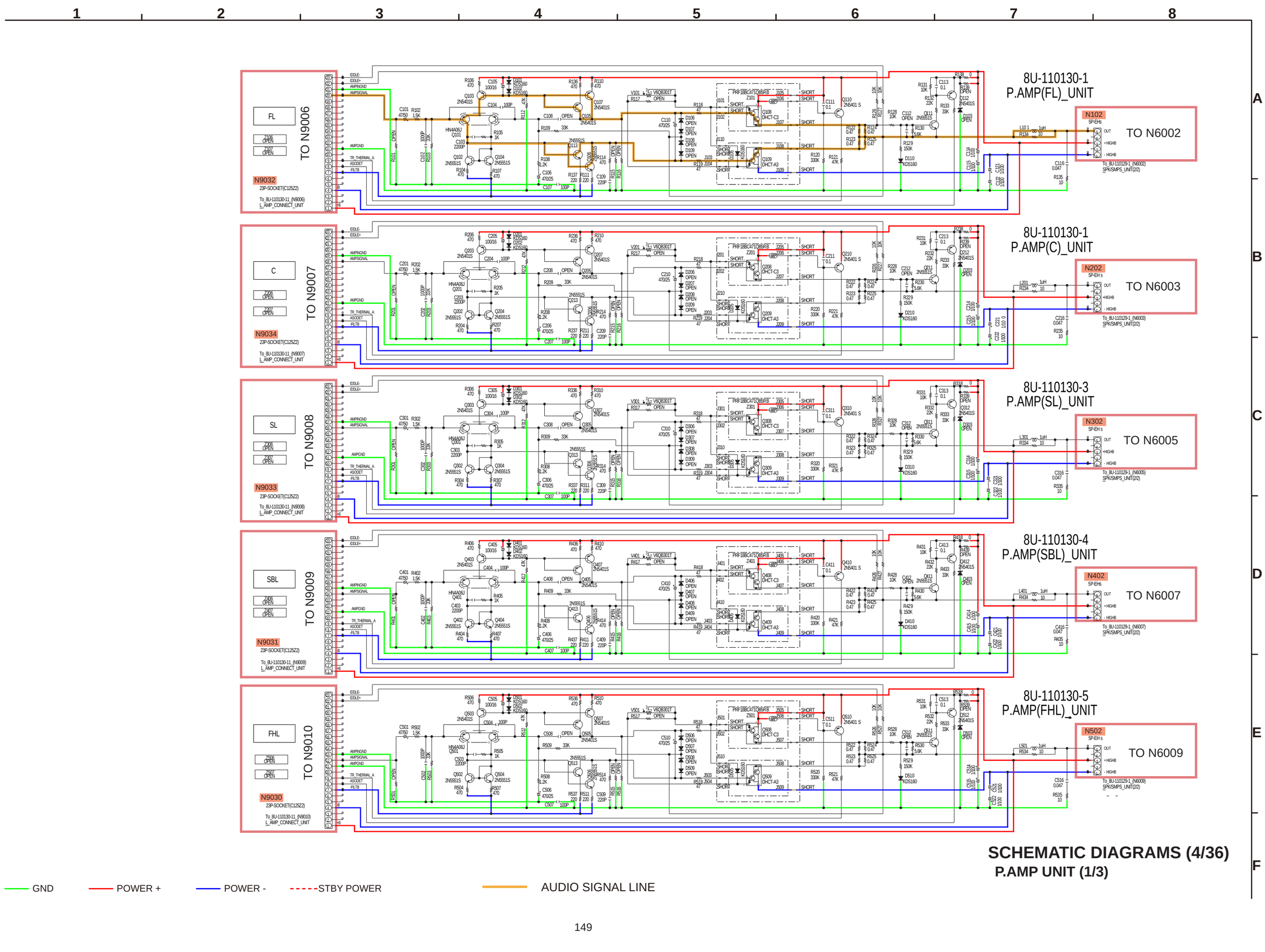
SPK/SMPS UNIT (1/3)

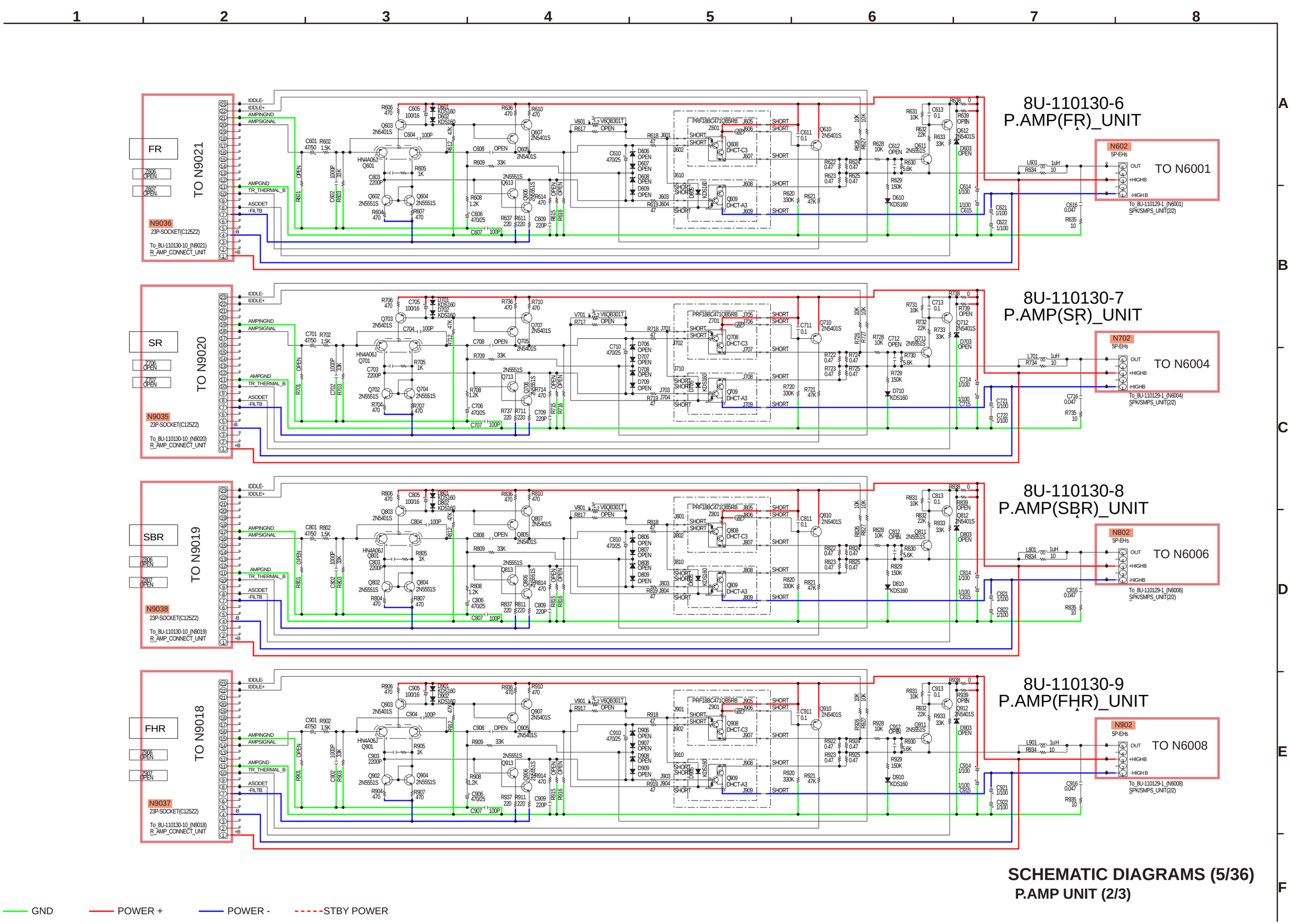
GND — POWER + — POWER - - - - - STBY POWER


TO N602
N6001
TO N102
N6002
TO N202
N6003
TO N702
N6004
TO N302
N6005
TO N802
N6006
TO N402
N6007
TO N902
N6008
TO N502
N6009
TO N9003
N6010
TO N9017
N6011
TO TRANS
N6012
TO AUDIO
TO N3003
N6013
8U-110129-1
SPK/SMPS UNIT(2/2)
FR
FL
C
SR
SL
SBR
SBL
EX1R
EX1L
EX2R
EX2L
SCHEMATIC DIAGRAMS (2/36)
SPK/SMPS UNIT (2/3)
GND
POWER +
POWER -
STBY POWER
AUDIO SIGNAL LINE



	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
K1	Q-SEL-3	ZONE2 ON/OFF	ZONE2 SEL	LEFT	UP	DIMMER	NC			
K2	Q-SEL-4	Q-SEL-1	BAND	SEARCH	ENTER	RIGHT	RETURN	NC		
K3	Q-SEL-2	ZONE3 ON/OFF	ZONE3 SEL	MENU	DOWN	STATUS	NC			


1
2
3
4
5
6
7
8
A
B
C
D
E
F
FL
TO N9006
N9032
23P-SOCKET(C125Z2)
To 8U-110130-11 (N9006)
L_AMP_CONNECT_UNIT
8U-110130-1
P.AMP(FL)_UNIT
N102
5P-EH s
TO N6002
To 8U-110129-1 (N6002)
SPK/SMPS_UNIT(2/2)
C
TO N9007
N9034
23P-SOCKET(C125Z2)
To 8U-110130-11 (N9007)
L_AMP_CONNECT_UNIT
8U-110130-1
P.AMP(C)_UNIT
N202
5P-EH s
TO N6003
To 8U-110129-1 (N6003)
SPK/SMPS_UNIT(2/2)
SL
TO N9008
N9033
23P-SOCKET(C125Z2)
To 8U-110130-11 (N9008)
L_AMP_CONNECT_UNIT
8U-110130-3
P.AMP(SL)_UNIT
N302
5P-EH s
TO N6005
To 8U-110129-1 (N6005)
SPK/SMPS_UNIT(2/2)
SBL
TO N9009
N9031
23P-SOCKET(C125Z2)
To 8U-110130-11 (N9009)
L_AMP_CONNECT_UNIT
8U-110130-4
P.AMP(SBL)_UNIT
N402
5P-EH s
TO N6007
To 8U-110129-1 (N6007)
SPK/SMPS_UNIT(2/2)
FHL
TO N9010
N9030
23P-SOCKET(C125Z2)
To 8U-110130-11 (N9010)
L_AMP_CONNECT_UNIT
8U-110130-5
P.AMP(FHL)_UNIT
N502
5P-EH s
TO N6009
To 8U-110129-1 (N6009)
SPK/SMPS_UNIT(2/2)
IDOLE-
IDOLE+
AMPGND
AMPSIGNAL
TR_THERMAL_A
ASODET
-FILTB
+B
Z106 OPEN
Z107 OPEN
Z206 OPEN
Z207 OPEN
Z306 OPEN
Z307 OPEN
Z406 OPEN
Z407 OPEN
Z506 OPEN
Z507 OPEN
OUT
+HIGHB
- HIGHB
SCHEMATIC DIAGRAMS (4/36)
P.AMP UNIT (1/3)
GND
POWER +
POWER -
STBY POWER
AUDIO SIGNAL LINE


8U-110130-6
P.AMP(FR)_UNIT
FR
TO N9021
N9036
23P-SOCKET(C125Z2)
To_8U-110130-10 (N9021)
R_AMP_CONNECT_UNIT
IDDLE-
IDDLE+
AMPINGND
AMPSIGNAL
AMPGND
TR_THERMAL_B
ASODET
-FILTB
-B
+B
N602
5P-EHs
OUT
+HIGHB
-HIGH B
TO N6001
To_8U-110129-1 (N6001)
SPK/SMPS_UNIT(2/2)
8U-110130-7
P.AMP(SR)_UNIT
SR
TO N9020
N9035
23P-SOCKET(C125Z2)
To_8U-110130-10 (N9020)
R_AMP_CONNECT_UNIT
N702
5P-EHs
TO N6004
To_8U-110129-1 (N6004)
SPK/SMPS_UNIT(2/2)
8U-110130-8
P.AMP(SBR)_UNIT
SBR
TO N9019
N9038
23P-SOCKET(C125Z2)
To_8U-110130-10 (N9019)
R_AMP_CONNECT_UNIT
N802
5P-EHs
TO N6006
To_8U-110129-1 (N6006)
SPK/SMPS_UNIT(2/2)
8U-110130-9
P.AMP(FHR)_UNIT
FHR
TO N9018
N9037
23P-SOCKET(C125Z2)
To_8U-110130-10 (N9018)
R_AMP_CONNECT_UNIT
N902
5P-EHs
TO N6008
To_8U-110129-1 (N6008)
SPK/SMPS_UNIT(2/2)
SCHEMATIC DIAGRAMS (5/36)
P.AMP UNIT (2/3)
GND
POWER +
POWER -
STBY POWER

SCHEMATIC DIAGRAMS (6/36)
P.AMP UNIT (3/3)

8U-110130-11
L_AMP_CONNECT_UNIT

Z9003 OPEN
Z9005 STYLE-PIN
Z9007 OPEN
Z9009 OPEN

N9099 OPEN

To_8U-1101130-1_(N9032) P.AMP(FL)UNIT
To_8U-110130-2_(N9034) P.AMP(C)UNIT
To_8U-110130-3_(N9033) P.AMP(SL)UNIT
To_8U-110130-4_(N9031) P.AMP(SBL)UNIT
To_8U-1101130-5_(N9030) P.AMP(FHL)UNIT

TO N9032 · TO N9034 · TO N9033 · TO N9031 · TO N9030

IDDLE- · IDDLE+ · GND · FL · C · SL · SBL · FHL · AMPGND · TR_THERMAL_B · TR_THERMAL_A · ASODET · -FILTB · RADI_PROTDET_A · RADI_PROTDET_B · -B · FANDET_ON · FANDET_HIGH · +B

D9001 OPEN · R9001 1W OPEN

N9006 · N9007 · N9008 · N9009 · N9010
23P-PLUG(C12521)

TO N3201
To_8U-210119-1_(N3201) A_AUDIO/VIDEO_UNIT(2/4)
N9002 10P-PHS

TO N6010
To_8U-110129-1_(N6010) SPK/SMPS_UNIT(2/2)
N9003 11P-PHS

TO FAN
FAN+B · FANLOCK · FAN-7V
N9004 3P-PH

TO AMP FL · TO AMP C · TO AMP SL · TO AMP SBL · TO AMP FHL

N9061 4P-PHS

PRF18BB471QB5RB 4.7u
Z102 C117 · Z103 C118 · Z104 C119 · Z105 C120
N9046 4P-PH-SAN
M3-SIDE B9001
RADI_PROTDET_A · RADI_PROTDET_B · FANDET_ON · FANDET_HIGH

N9040 OPEN

Z9002 OPEN
Z9004 STYLE-PIN
Z9006 OPEN
Z9008 OPEN

8U-110130-10
R_AMP_CONNECT_UNIT

TO N3202
To_8U-210119-1_(N3202) A_AUDIO/VIDEO_UNIT(2/4)
N9016 8P-PHS
GND · FR · GND · SR · GND · SBR · GND · FHR

TO N6011
To_8U-110129-1_(N6011) SPK/SMPS_UNIT(2/2)
N9017 12P-PHS
TR_THERMAL_B · TR_THERMAL_A · ASODET · -FILTB · RADI_PROTDET_A · RADI_PROTDET_B · FANDET_ON · FANDET_HIGH · AMPGND · FAN+B · FAN-7V

To_8U-110130-9_(N9037) P.AMP(FHR)UNIT
To_8U-110130-8_(N9038) P.AMP(SBR)UNIT
To_8U-110130-7_(N9035) P.AMP(SR)UNIT
To_8U-110130-6_(N9036) P.AMP(FR)UNIT

TO N9037 · TO N9038 · TO N9035 · TO N9036

IDDLE- · IDDLE+ · GND · FHR · SBR · SR · FR · AMPGND · TR_THERMAL_B · TR_THERMAL_A · ASODET · -FILTB · RADI_PROTDET_A · RADI_PROTDET_B · -B · FANDET_ON · FANDET_HIGH · +B

N9018 · N9019 · N9020 · N9021
23P-PLUG(C12521)

OPEN D9002 OPEN · R9002 1W

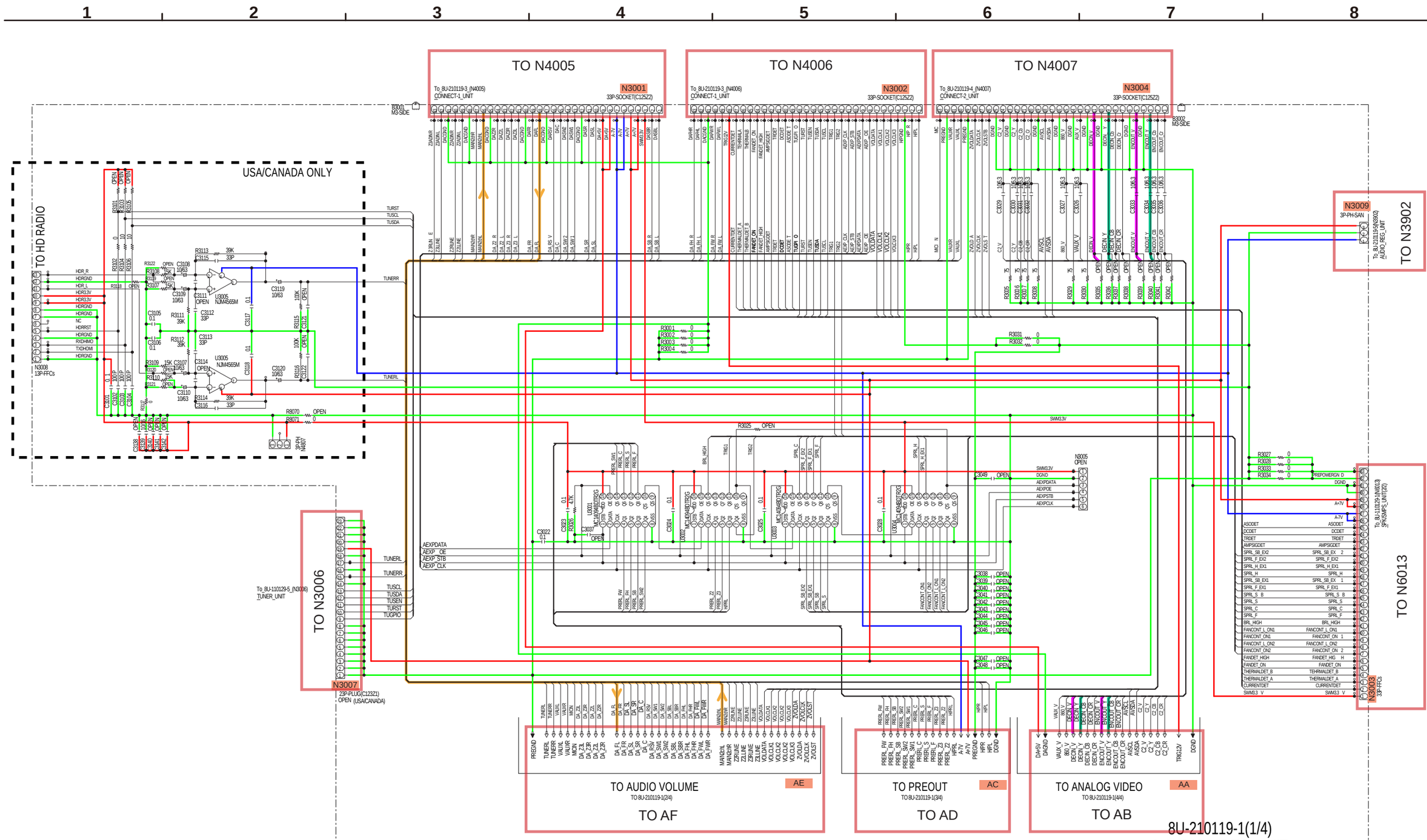
FAN+B · FANLOCK · FAN-7V · TO FAN
N9022 3P-PH

N9062 4P-PHS

PRF18BB471QB5RB 4.7u
Z602 C617 · Z603 C618 · Z604 C619 · Z605 C620
N9041 4P-PH-SAN
M3-SIDE B9002
RADI_PROTDET_A · RADI_PROTDET_B · FANDET_ON · FANDET_HIGH

TO AMP FHR · TO AMP SBR · TO AMP SR · TO AMP FR

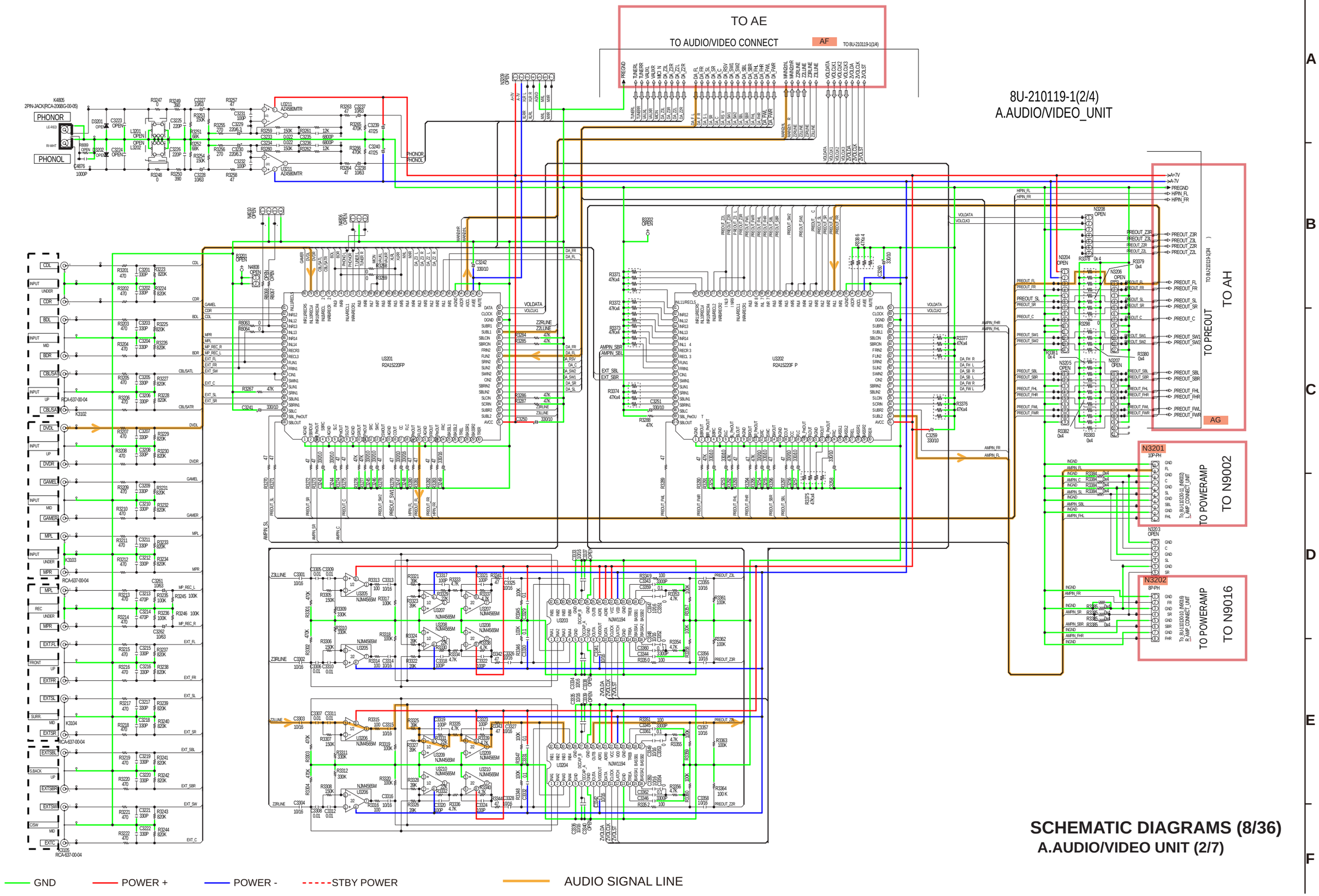
GND · POWER + · POWER - · STBY POWER · AUDIO SIGNAL LINE

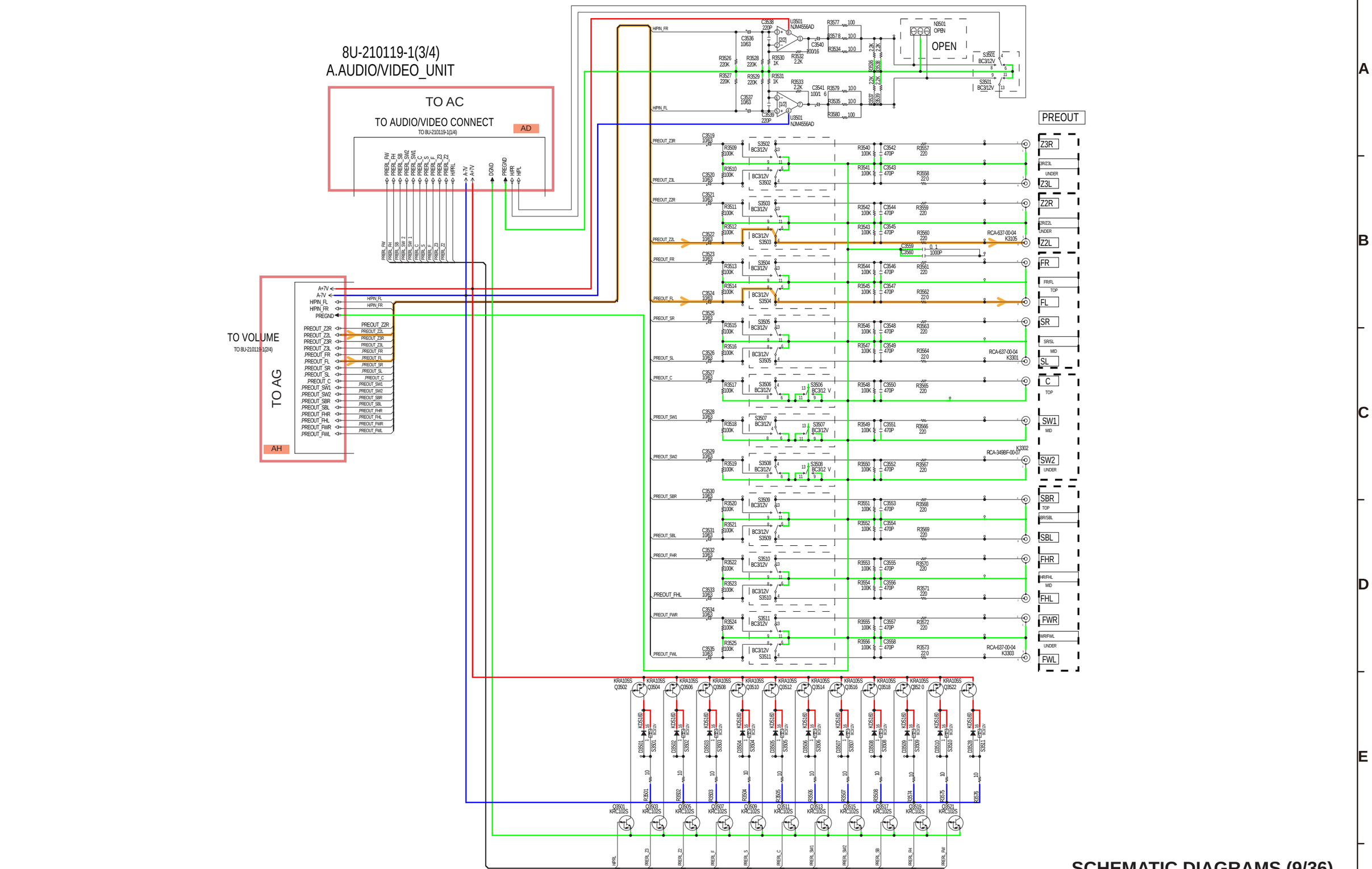


SCHEMATIC DIAGRAMS (7/36)

A.AUDIO/VIDEO UNIT (1/7)

GND — POWER + — POWER - — STBY POWER — AUDIO SIGNAL LINE — VIDEO SIGNAL LINE — COMPONENT (Y) SIGNAL LINE


TO AE
TO AUDIO/VIDEO CONNECT
AF
TO 8U-210119-1(1/4)
8U-210119-1(2/4)
A.AUDIO/VIDEO_UNIT
TO PREOUT
TO AH
TO 8U-210119-1(3/4)
AG
N3201
10P-PH
TO POWERAMP
TO N9002
N3202
8P-PH
TO POWERAMP
TO N9016
SCHEMATIC DIAGRAMS (8/36)
A.AUDIO/VIDEO UNIT (2/7)
GND
POWER +
POWER -
STBY POWER
AUDIO SIGNAL LINE



SCHEMATIC DIAGRAMS (9/36)
A.AUDIO/VIDEO UNIT (3/7)

GND — POWER + — POWER - — STBY POWER — AUDIO SIGNAL LINE

TO AA

TO AUDIO/VIDEO CONNECT

TO 8U-210119-1(1/4)

AB

8U-210119-1(4/4)

A.AUDIO/VIDEO_UNIT

TO TRANS

U3703

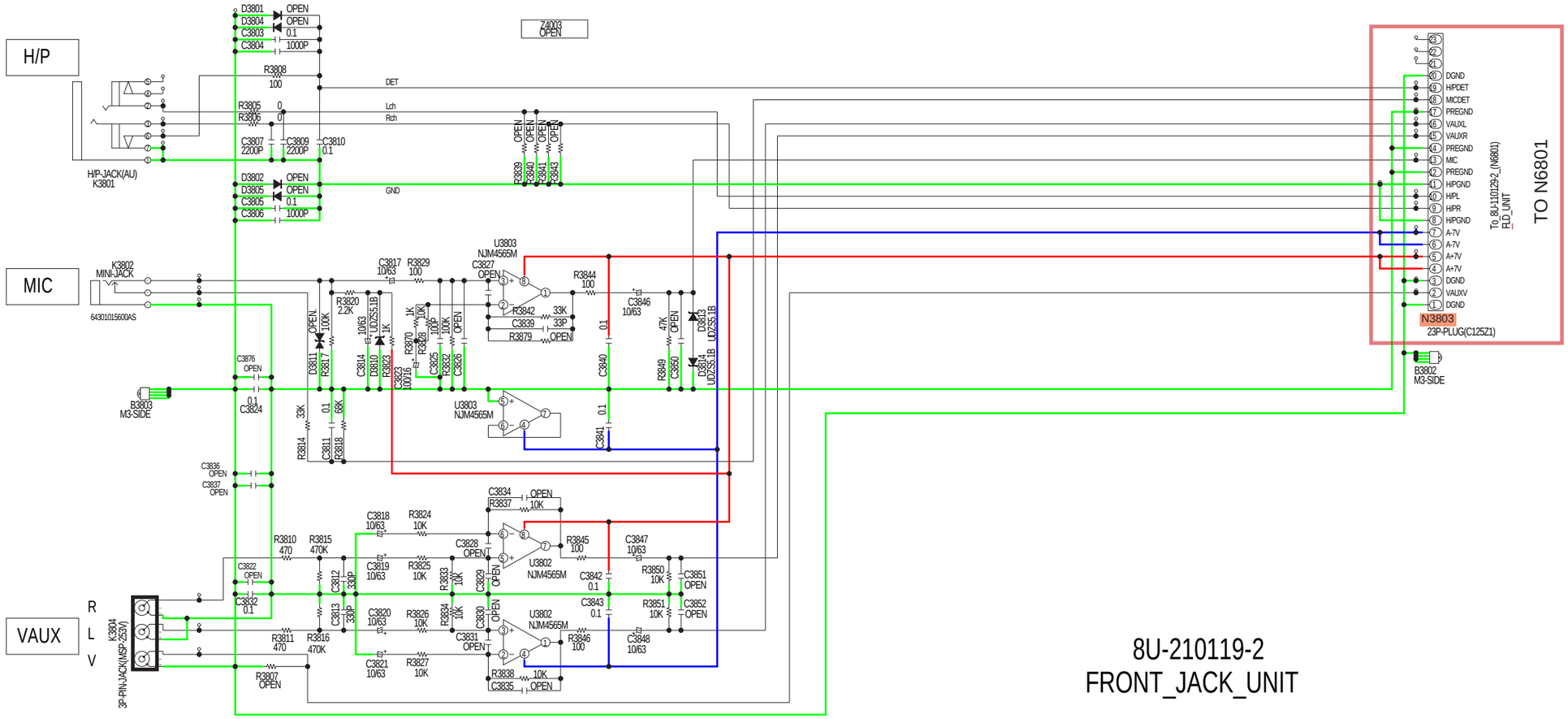
AVDM-2000

VIDEO SELECTOR

SCHEMATIC DIAGRAMS (10/36)

A.AUDIO/VIDEO UNIT (4/7)

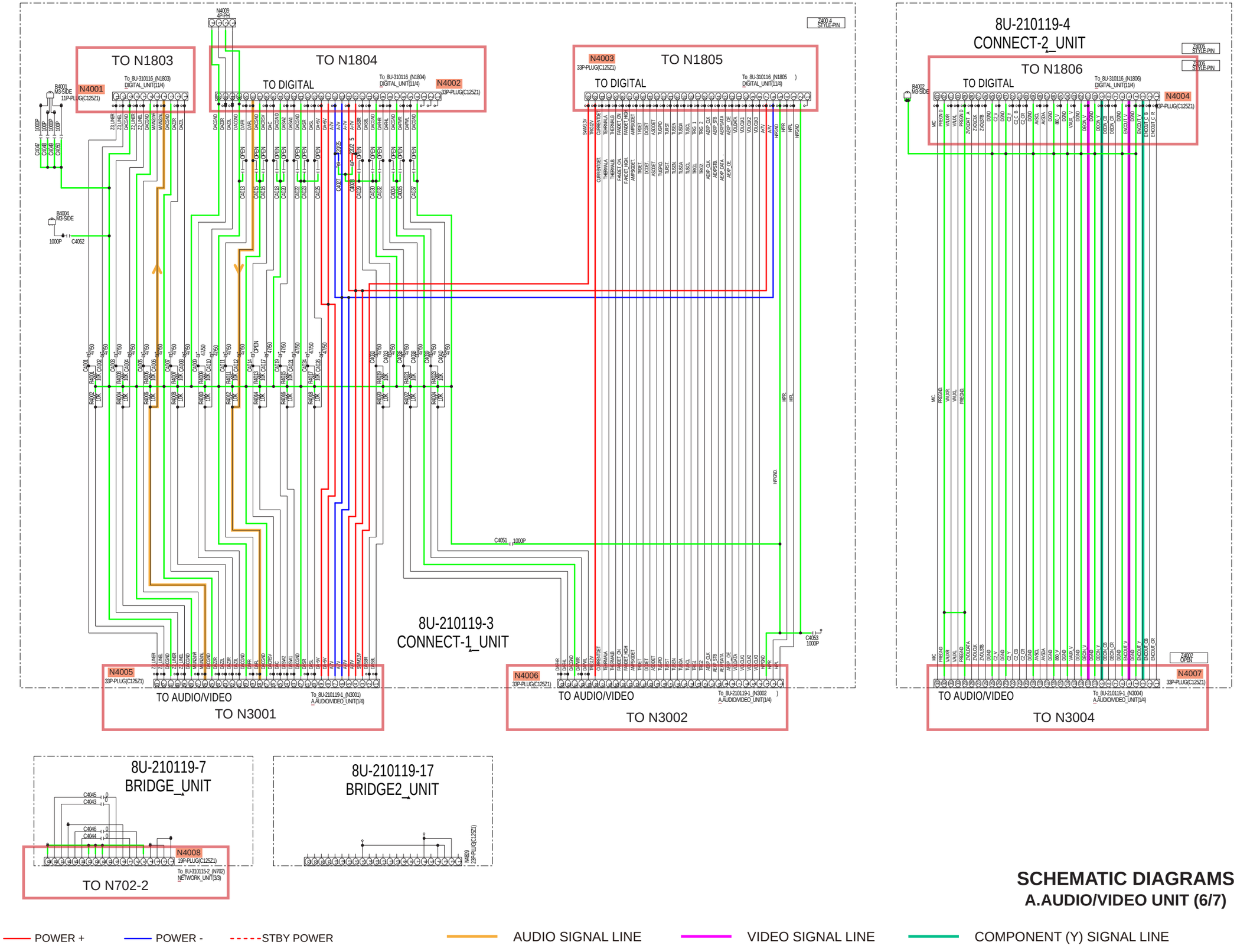
GND — POWER + — POWER - — STBY POWER — VIDEO SIGNAL LINE — COMPONENT (Y) SIGNAL LINE



8U-210119-2
FRONT_JACK_UNIT

SCHEMATIC DIAGRAMS (11/36)
A.AUDIO/VIDEO UNIT (5/7)

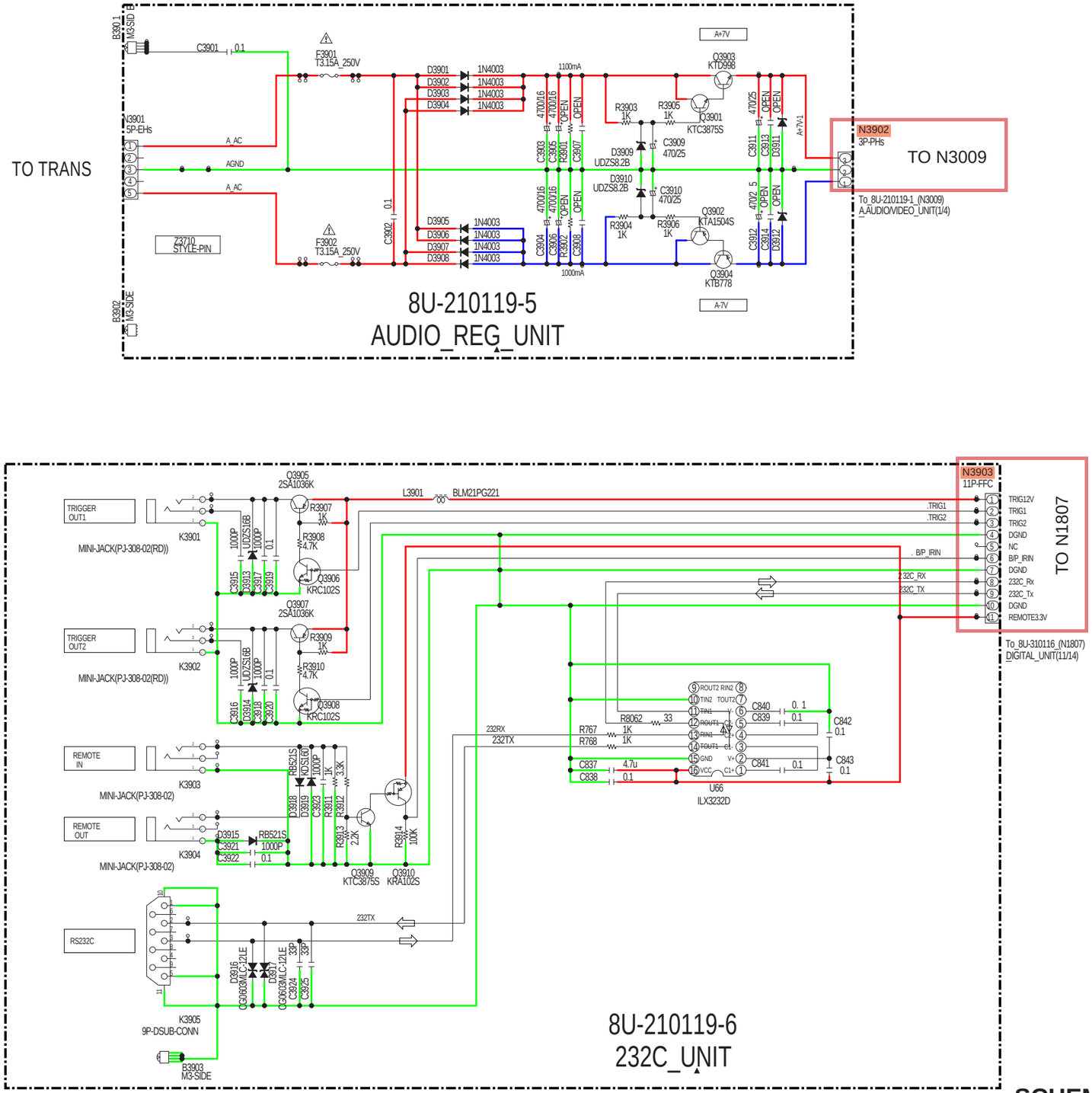
GND POWER + POWER - STBY POWER



SCHEMATIC DIAGRAMS (12/36)

A.AUDIO/VIDEO UNIT (6/7)

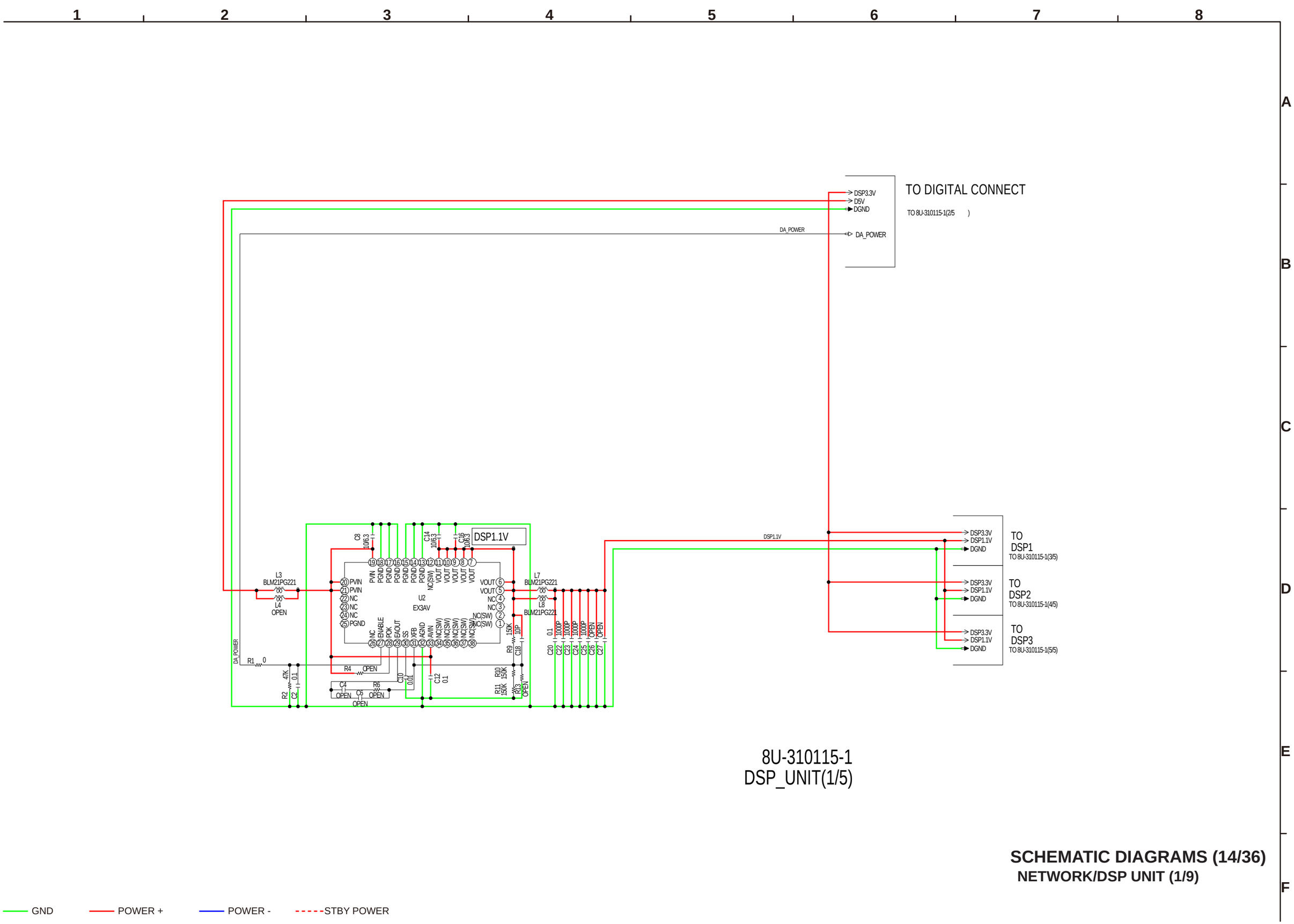
GND — POWER + — POWER - — STBY POWER — AUDIO SIGNAL LINE — VIDEO SIGNAL LINE — COMPONENT (Y) SIGNAL LINE



SCHEMATIC DIAGRAMS (13/36)

A.AUDIO/VIDEO UNIT (7/7)

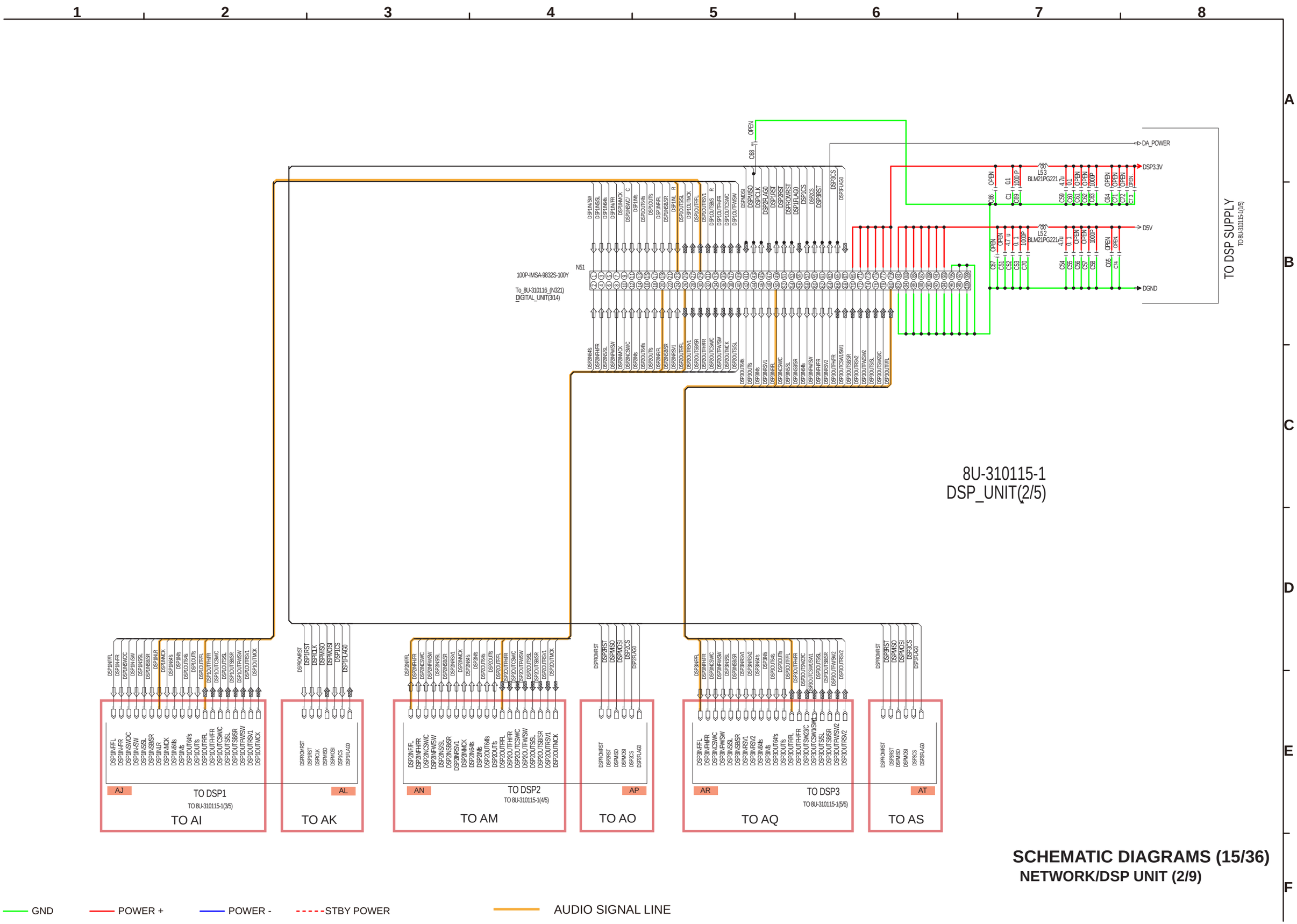
GND POWER + POWER - STBY POWER

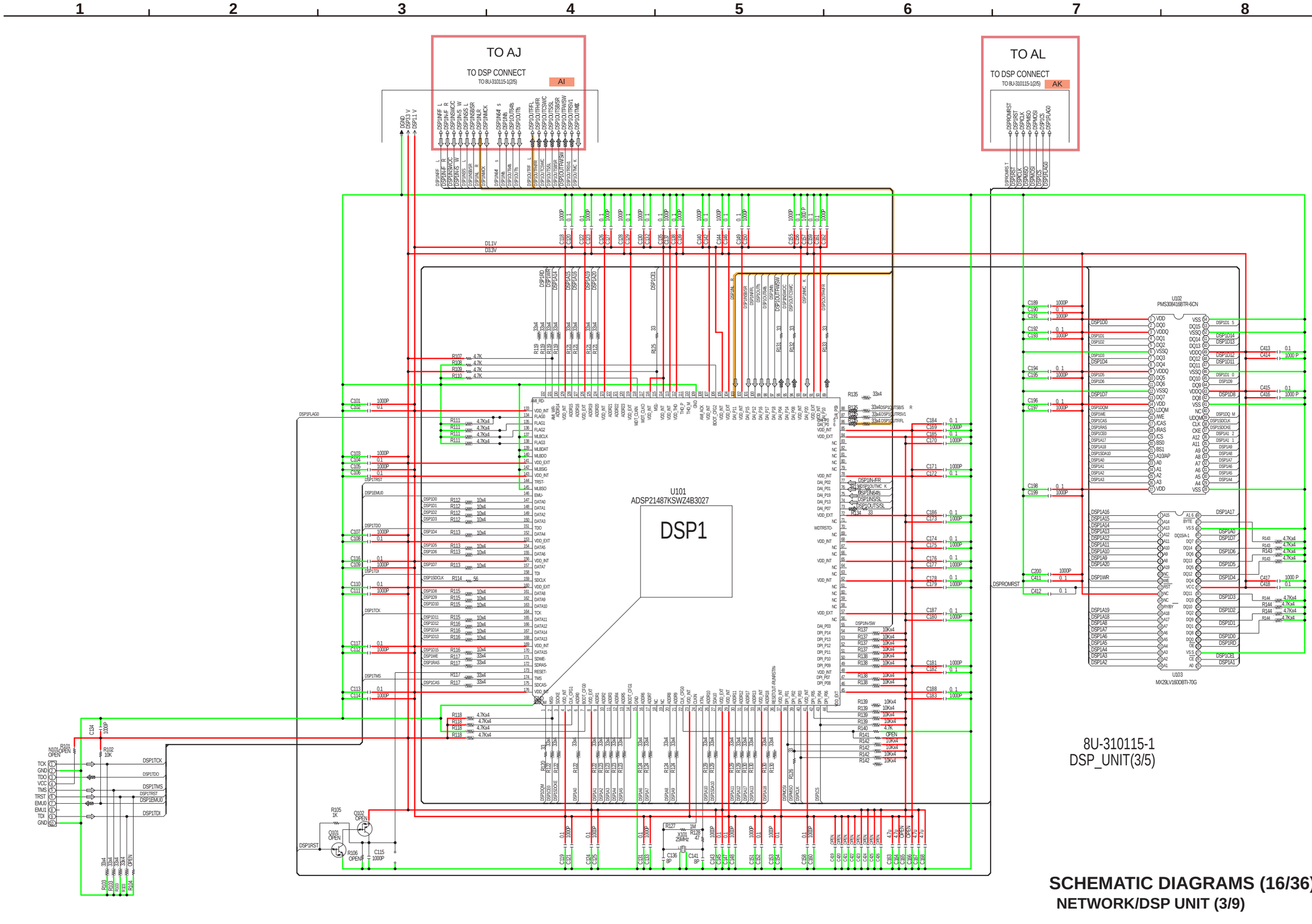


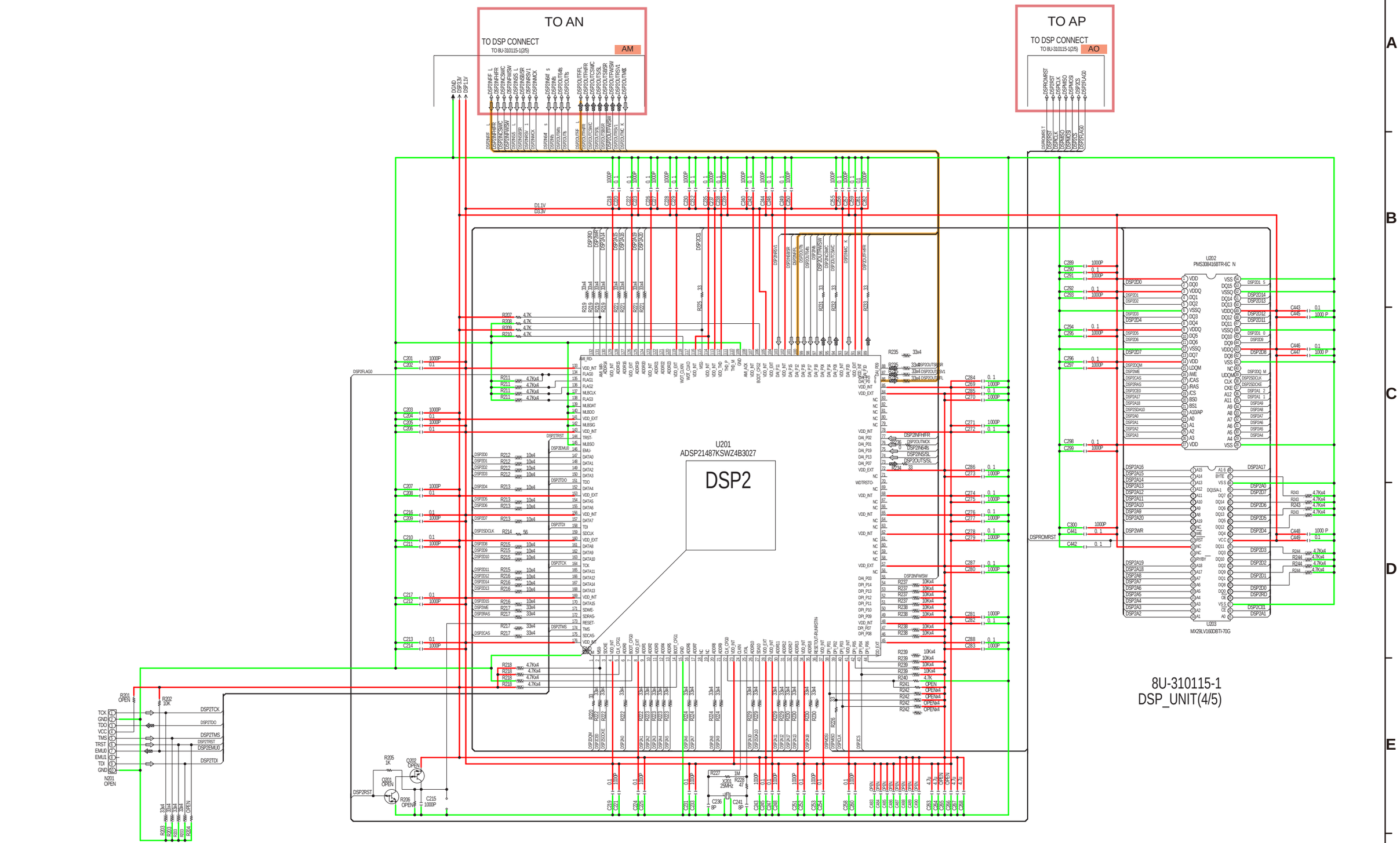
8U-310115-1
DSP_UNIT(1/5)

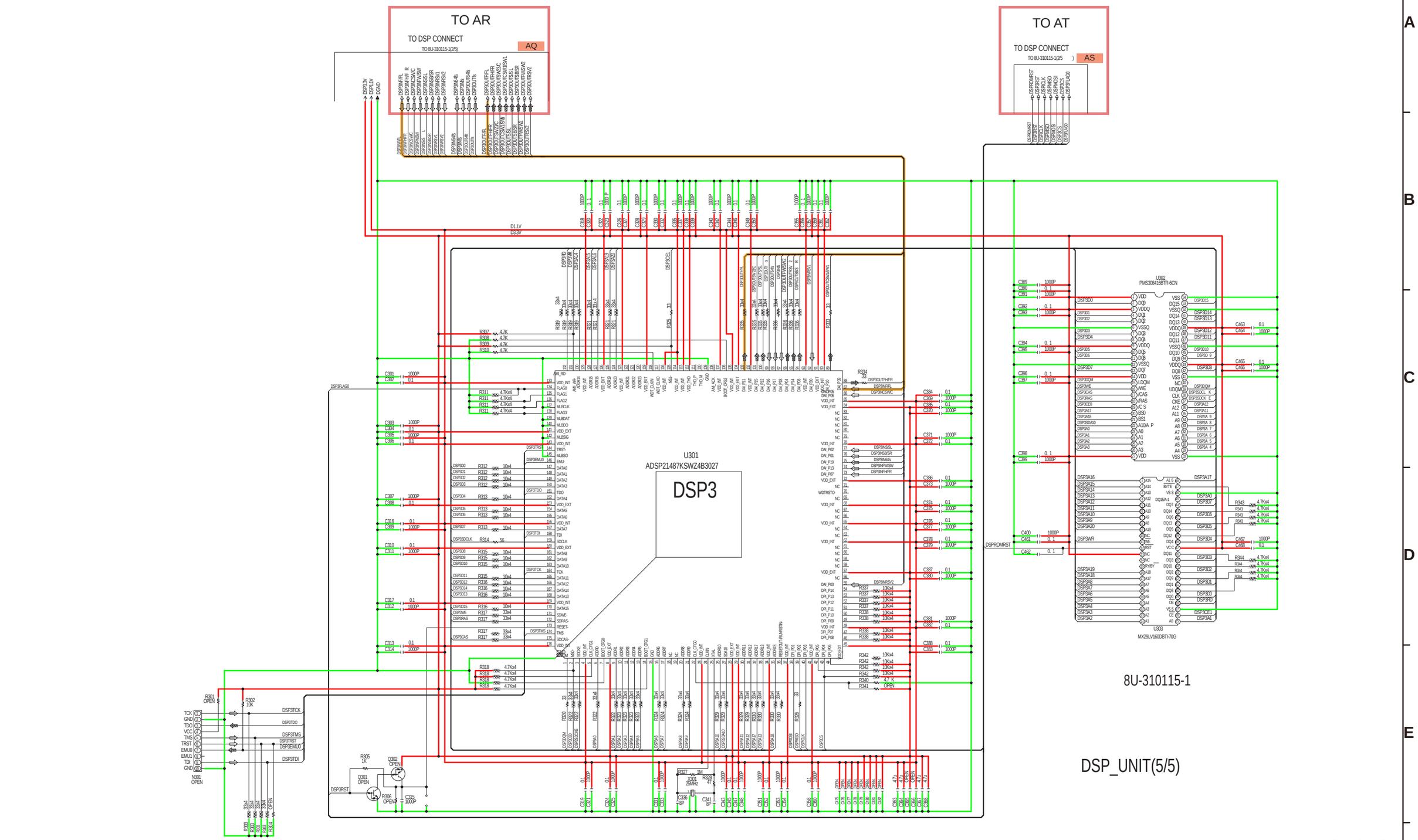
SCHEMATIC DIAGRAMS (14/36)
NETWORK/DSP UNIT (1/9)

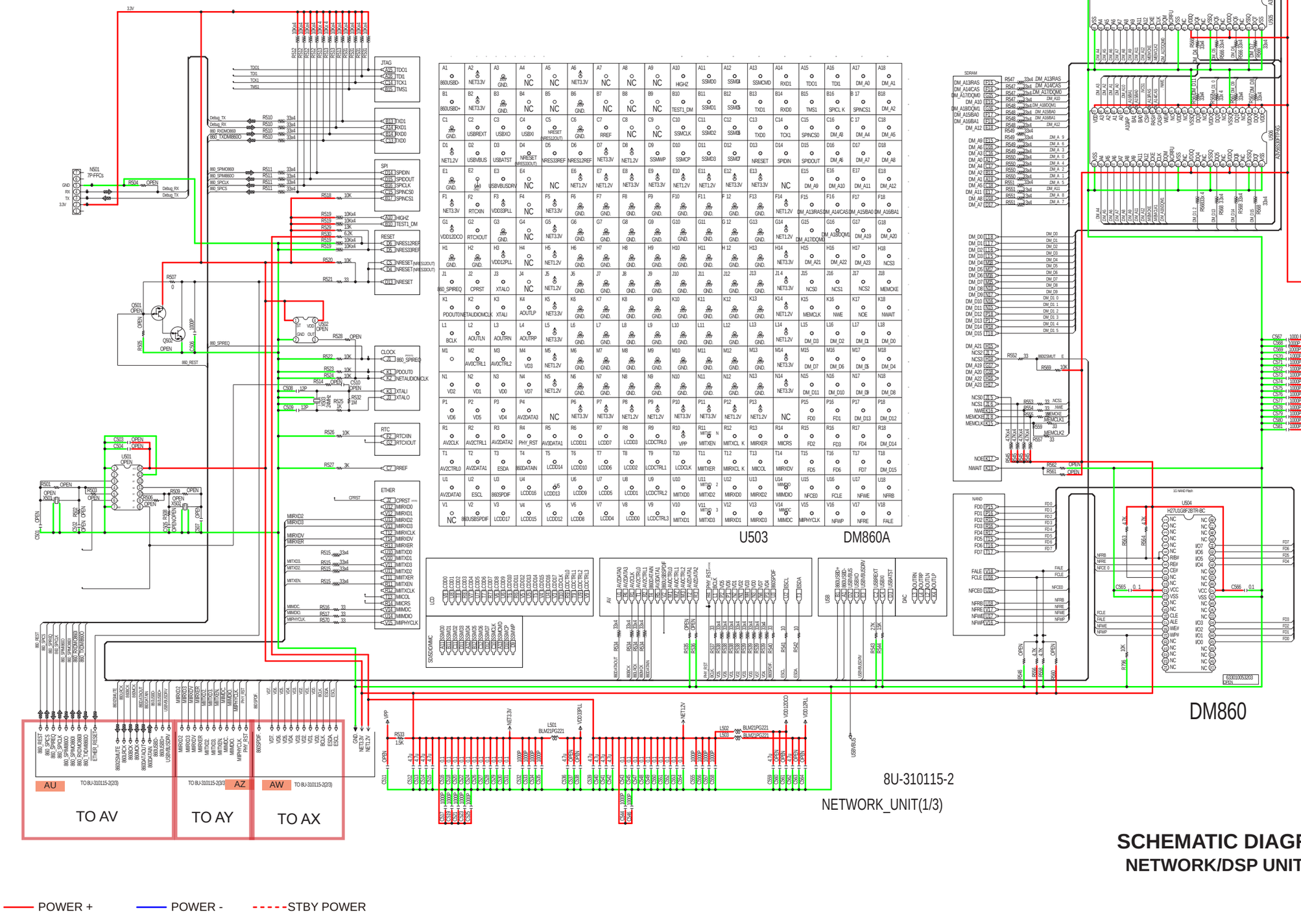
GND POWER + POWER - STBY POWER

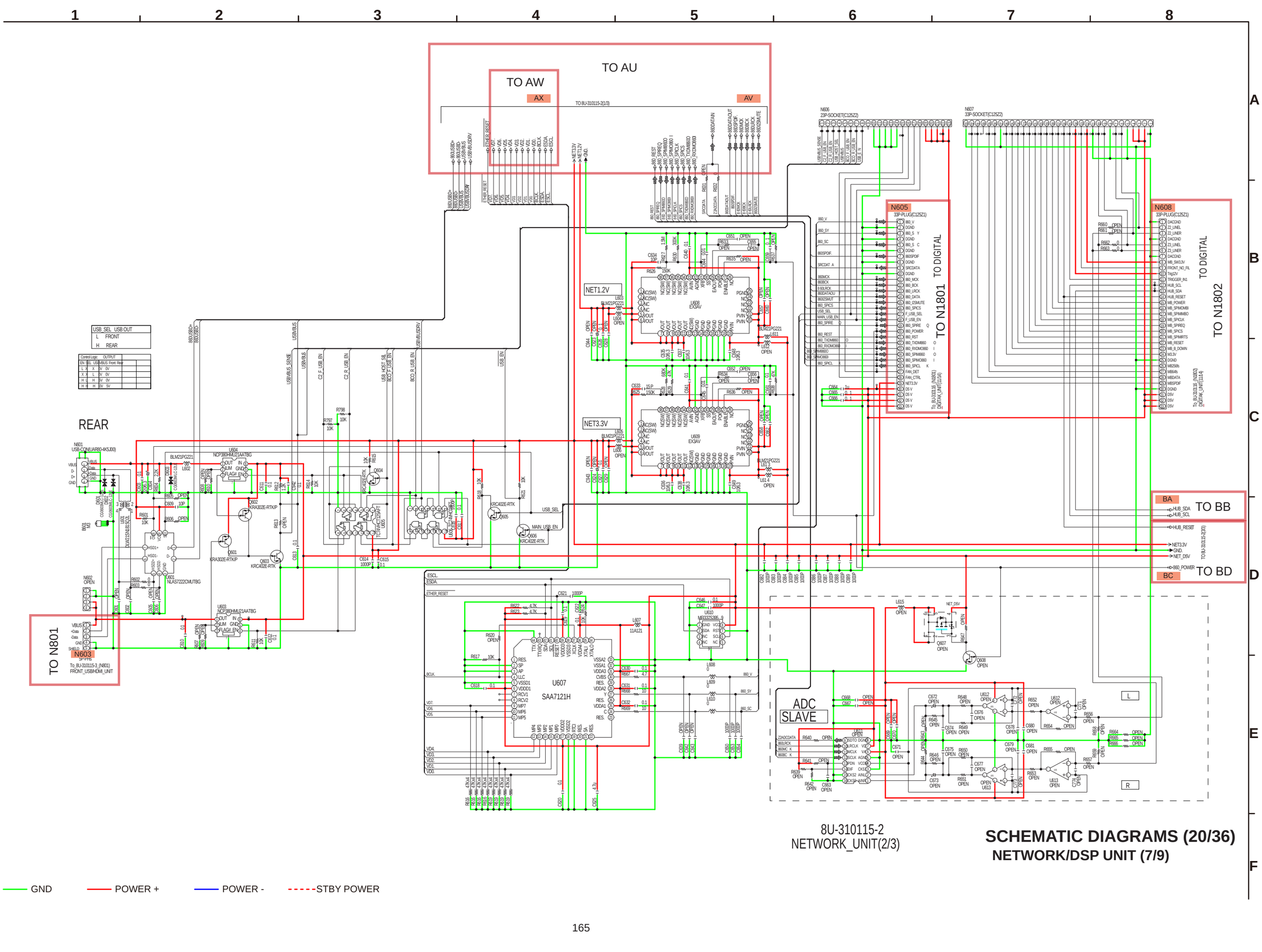

1
2
3
4
5
6
7
8
A
B
C
D
E
F
N51
100P-IMSA-9832S-100Y
To_8U-310116_(N321)
DIGITAL_UNIT(3/14)
OPEN
C68
DA_POWER
DSP3.3V
D5V
DGND
L53
BLM21PG221
L52
BLM21PG221
TO DSP SUPPLY
TO 8U-310115-1(1/5)
8U-310115-1
DSP_UNIT(2/5)
AJ
TO DSP1
TO 8U-310115-1(3/5)
TO AI
AL
TO AK
AN
TO DSP2
TO 8U-310115-1(4/5)
TO AM
AP
TO AO
AR
TO DSP3
TO 8U-310115-1(5/5)
TO AQ
AT
TO AS
SCHEMATIC DIAGRAMS (15/36)
NETWORK/DSP UNIT (2/9)
GND
POWER +
POWER -
STBY POWER
AUDIO SIGNAL LINE

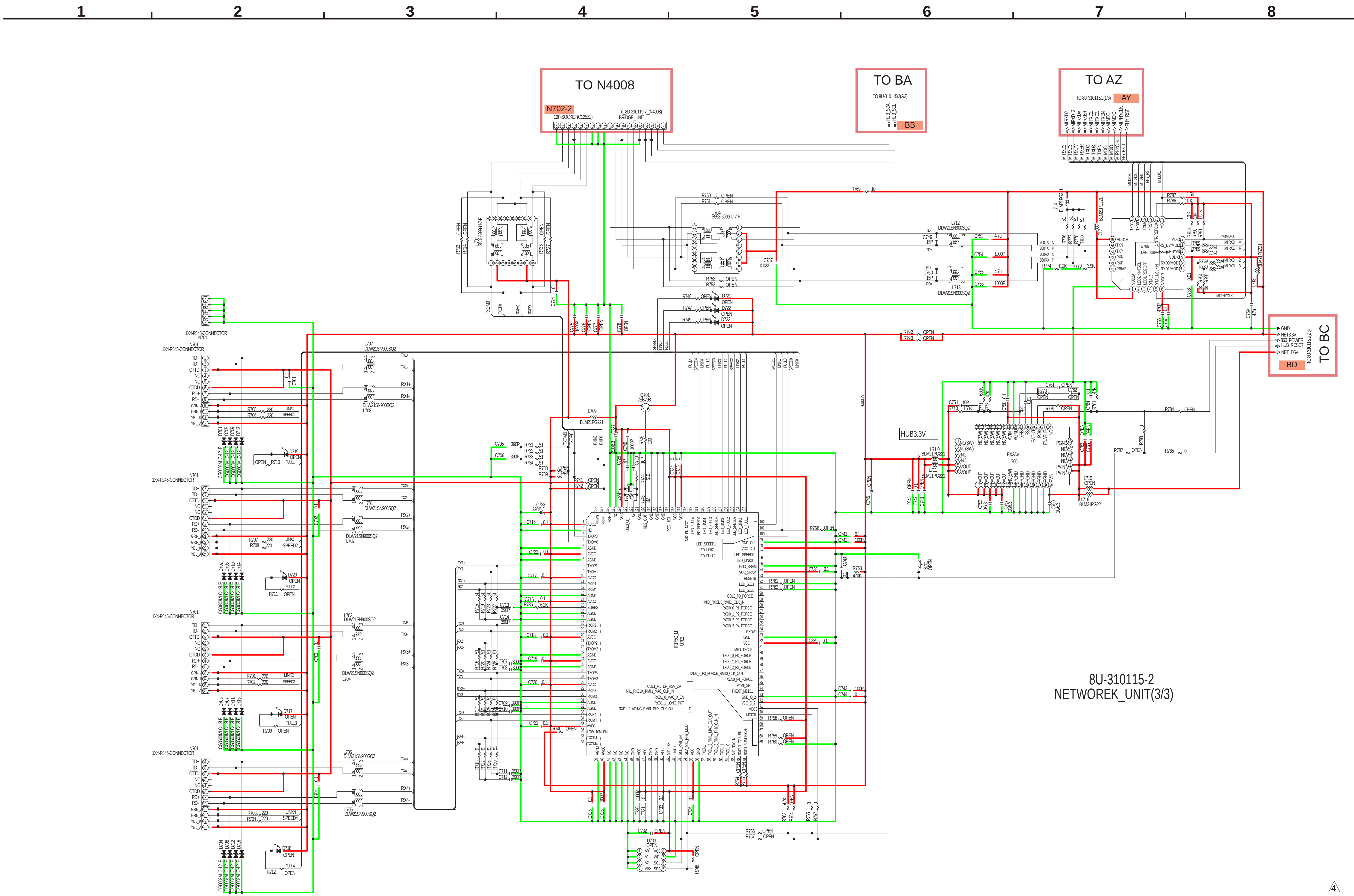

TO AJ
TO DSP CONNECT
TO 8U-310115-1(2/5)
AI
TO AL
TO DSP CONNECT
TO 8U-310115-1(2/5)
AK
U101
ADSP21487KSWZ4B3027
DSP1
U102
PMS308416BTR-6CN
U103
MX29LV160DBTI-70G
8U-310115-1
DSP_UNIT(3/5)
SCHEMATIC DIAGRAMS (16/36)
NETWORK/DSP UNIT (3/9)
GND
POWER +
POWER -
STBY POWER
AUDIO SIGNAL LINE


TO AN
TO DSP CONNECT
TO 8U-310115-1(2/5)
AM
TO AP
TO DSP CONNECT
TO 8U-310115-1(2/5)
AO
U201
ADSP21487KSWZ4B3027
DSP2
U202
PMS308416BTR-6C N
U203
MX29LV160DBTI-70G
8U-310115-1
DSP_UNIT(4/5)
SCHEMATIC DIAGRAMS (17/36)
NETWORK/DSP UNIT (4/9)
GND
POWER +
POWER -
STBY POWER
AUDIO SIGNAL LINE


TO AR
TO DSP CONNECT
TO 8U-310115-1(2/5)
AQ
TO AT
TO DSP CONNECT
TO 8U-310115-1(2/5)
AS
U301
ADSP21487KSWZ4B3027
DSP3
U302
PM530B416BTR-6CN
U303
MX29LV160DBTI-70G
D1.1V
D3.3V
DSP3FLAG0
DSP3RST
DSP3TCK
DSP3TDO
DSP3TMS
DSP3TRST
DSP3EMU0
DSP3TDI
DSPROMRST
8U-310115-1
DSP_UNIT(5/5)
SCHEMATIC DIAGRAMS (18/36)
NETWORK/DSP UNIT (5/9)
GND
POWER +
POWER -
STBY POWER
AUDIO SIGNAL LINE
163


U503
DM860A
DM860
8U-310115-2
NETWORK_UNIT(1/3)
TO AV
TO AY
TO AX
AU
AZ
AW
SCHEMATIC DIAGRAMS (19/36)
NETWORK/DSP UNIT (6/9)
GND
POWER +
POWER -
STBY POWER

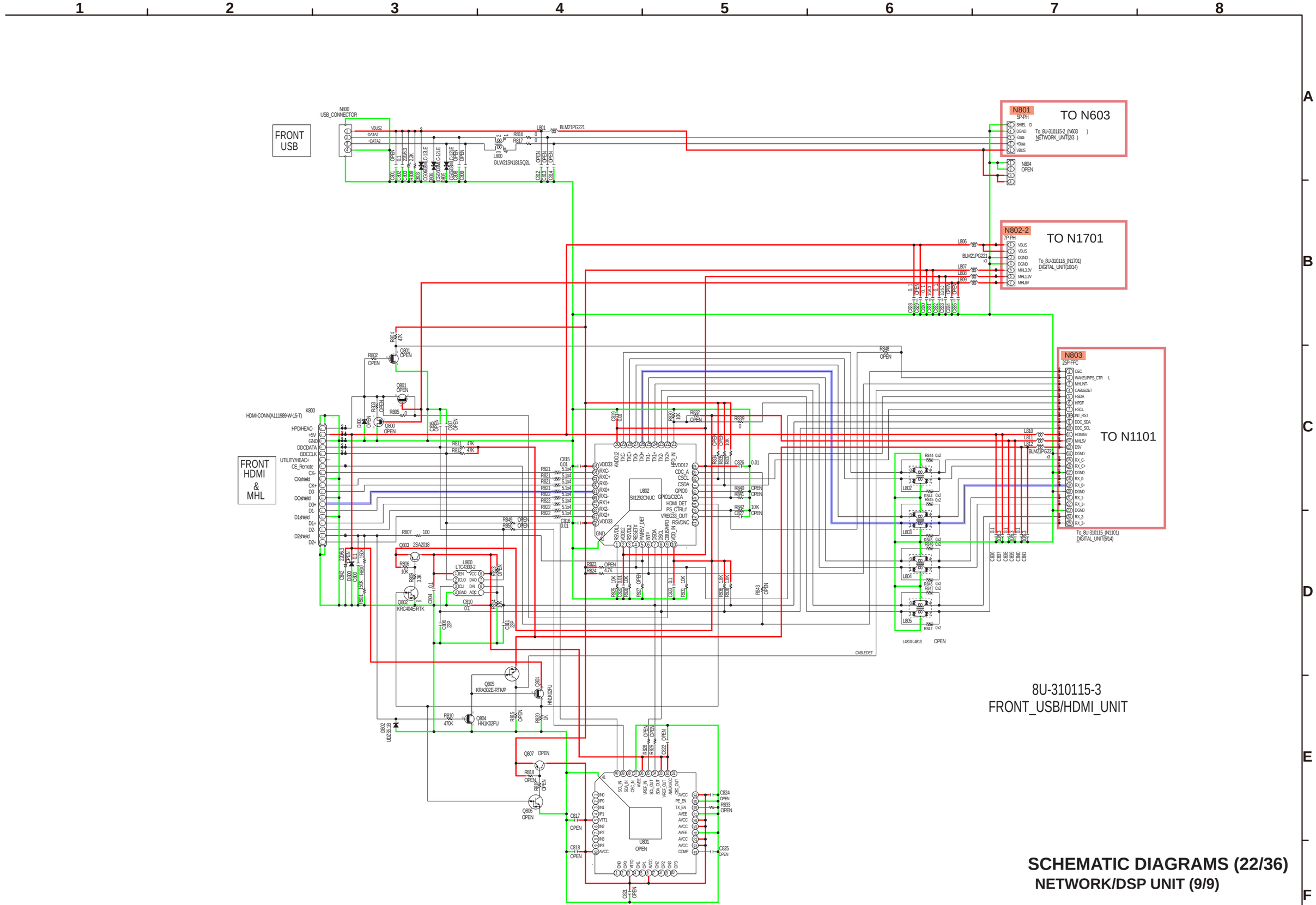

TO AU
TO AW
AX
AV
TO 8U-310115-2(1/3)
REAR
TO N801
N603
To 8U-310115-3 (N801)
FRONT_USB/HDMI_UNIT
USB_SEL USB OUT
L FRONT
H REAR
NET1.2V
NET3.3V
U607
SAA7121H
U608
EX3AV
U609
EX3AV
ADC
SLAVE
N605
33P-PLUG(C125Z1)
TO DIGITAL
TO N1801
N606
33P-SOCKET(C125Z2)
N607
33P-SOCKET(C125Z2)
N608
33P-PLUG(C125Z1)
TO DIGITAL
TO N1802
BA
TO BB
BC
TO BD
L
R
8U-310115-2
NETWORK_UNIT(2/3)
SCHEMATIC DIAGRAMS (20/36)
NETWORK/DSP UNIT (7/9)
GND
POWER +
POWER -
STBY POWER

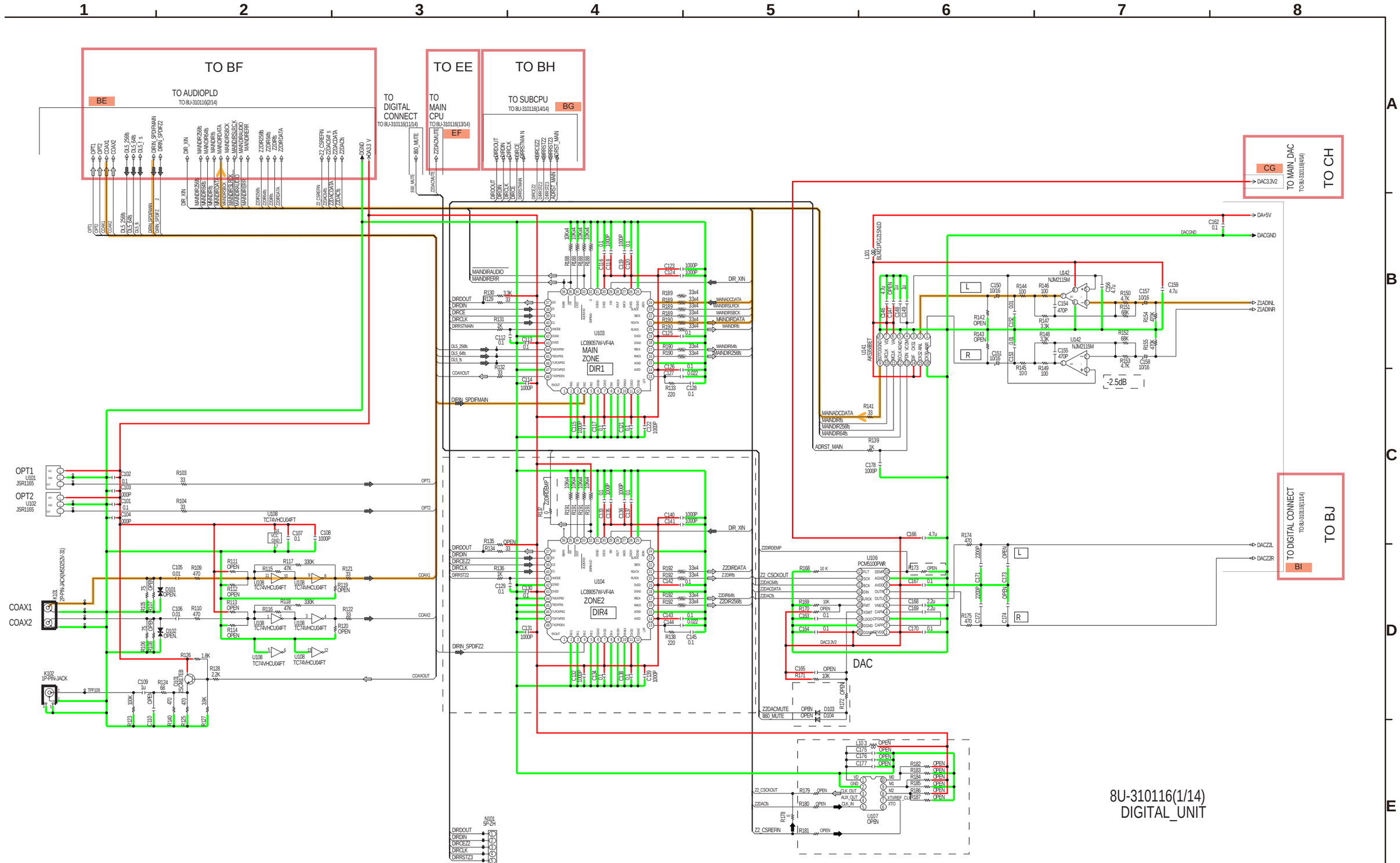


SCHEMATIC DIAGRAMS (21/36)

NETWORK/DSP UNIT (8/9)

GND — POWER + — POWER - — STBY POWER


FRONT USB
FRONT HDMI & MHL
N800
USB_CONNECTOR
N801
5P-PH
TO N603
To_8U-310115-2 (N603)
NETWORK_UNIT(2/3)
N804
OPEN
N802-2
7P-PH
TO N1701
To_8U-310116 (N1701)
DIGITAL_UNIT(10/14)
N803
25P-FFC
TO N1101
To_8U-310115 (N1101)
DIGITAL_UNIT(6/14)
K800
HDMI-CONN(A111989-W-15-T)
U802
SII1292CNUC
U800
LTC4300-2
U801
Q801 OPEN
Q800 OPEN
Q803 2SA2018
Q802 KRC404E-RTK
Q805 KRA302E-RTK/P
Q804 HN1K02FU
Q807 OPEN
Q806 OPEN
L801 BLM21PG221
L800 DLW21SN181SQ2L
L806 BLM21PG221
L810 L811 L812 BLM21PG22
L802 L803 L804 L805
CABLEDET
L481/0-L4813: OPEN
8U-310115-3
FRONT_USB/HDMI_UNIT
SCHEMATIC DIAGRAMS (22/36)
NETWORK/DSP UNIT (9/9)
GND
POWER +
POWER -
STBY POWER
HDMI / TMDS SIGNAL LINE


TO BF
BE
TO AUDIOPLD
TO 8U-310116(2/14)
TO DIGITAL CONNECT
TO 8U-310116(11/14)
TO EE
TO MAIN CPU
TO 8U-310116(13/14)
EF
TO BH
TO SUBCPU
TO 8U-310116(14/14)
BG
CG
TO MAIN_DAC
TO 8U-310116(4/4)
TO CH
TO BJ
TO DIGITAL CONNECT
TO 8U-310116(1/14)
BI
OPT1
OPT2
COAX1
COAX2
DIR_XIN
DIRIN_SPDIFMAIN
DIRIN_SPDIFZ2
MAINDIR256fs
MAINDIR64fs
MAINDIRfs
MAINDIRDATA
MAINDIRSBCK
MAINDIRSLRCK
MAINDIRAUDIO
MAINDIRERR
Z2DIR256fs
Z2DIR64fs
Z2DIRfs
Z2DIRDATA
Z2_CSREFIN
Z2DIAC64fs
Z2DIACDATA
Z2DIACfs
DAC3.3V2
860_MUTE
Z2DIACMUTE
DIROUT
DIRDIN
DIRCLK
DIRCE
DIRRSTMAIN
DIRCEZ2
DIRRST2
DIRRST3
DIRRST_MAIN
U103
LC89057W-VF4A
MAIN
ZONE
DIR1
U104
ZONE2
DIR4
U108
TC74VHCU04FT
U106
PCM5100PWR
U101
JSR1165
U102
JSR1165
U107
OPEN
U141
AK5358ET
U142
NJM2115M
K101
2P-PIN-JACK(NS252A-3L)
K102
1P-PIN-JACK
N101
5P-ZH
L101
BLM21PG121SN1D
MAINADCDATA
MAINDIRSLRCK
MAINDIRSBCK
MAINDIRDATA
MAINDIRfs
MAINDIR64fs
MAINDIR256fs
ADRST_MAIN
Z2DIRDATA
Z2DIRfs
Z2DIRfs64
Z2DIRfs256
Z2_CSCKOUT
Z2DIAC64fs
Z2DIACDATA
Z2DIACfs
Z2DIRDEMP
Z2DACMUTE
860_MUTE
DAC
DACGND
DA+5V
ZIADINL
ZIADINR
DACZ2L
DACZ2R
L
R
-2.5dB
COAX1
COAX2
COAXOUT
OPT1
OPT2
8U-310116(1/14)
DIGITAL_UNIT
SCHEMATIC DIAGRAMS (23/36)
DIGITAL UNIT (1/14)
GND
POWER +
POWER -
STBY POWER
AUDIO SIGNAL LINE

SCHEMATIC DIAGRAMS (24/36)

DIGITAL UNIT (2/14)

TO BL — TO DIGITAL CONNECT — TO 8U-3101116(11/14) — BK

TO BN — TO HDMI TX — TO 8U-3101116(9/14) — BM

TO BP — TO HDMI RX — TO 8U-3101116(9/14) — BO

TO BE — TO DIR/ADC/ZONE_DAC — TO 8U-3101116(12/14) — BF

TO BZ — BY — TO MAIN CPU — TO 8U-3101116(13/14)

TO BX — TO SUBCPU — TO 8U-3101116(14/14) — BW

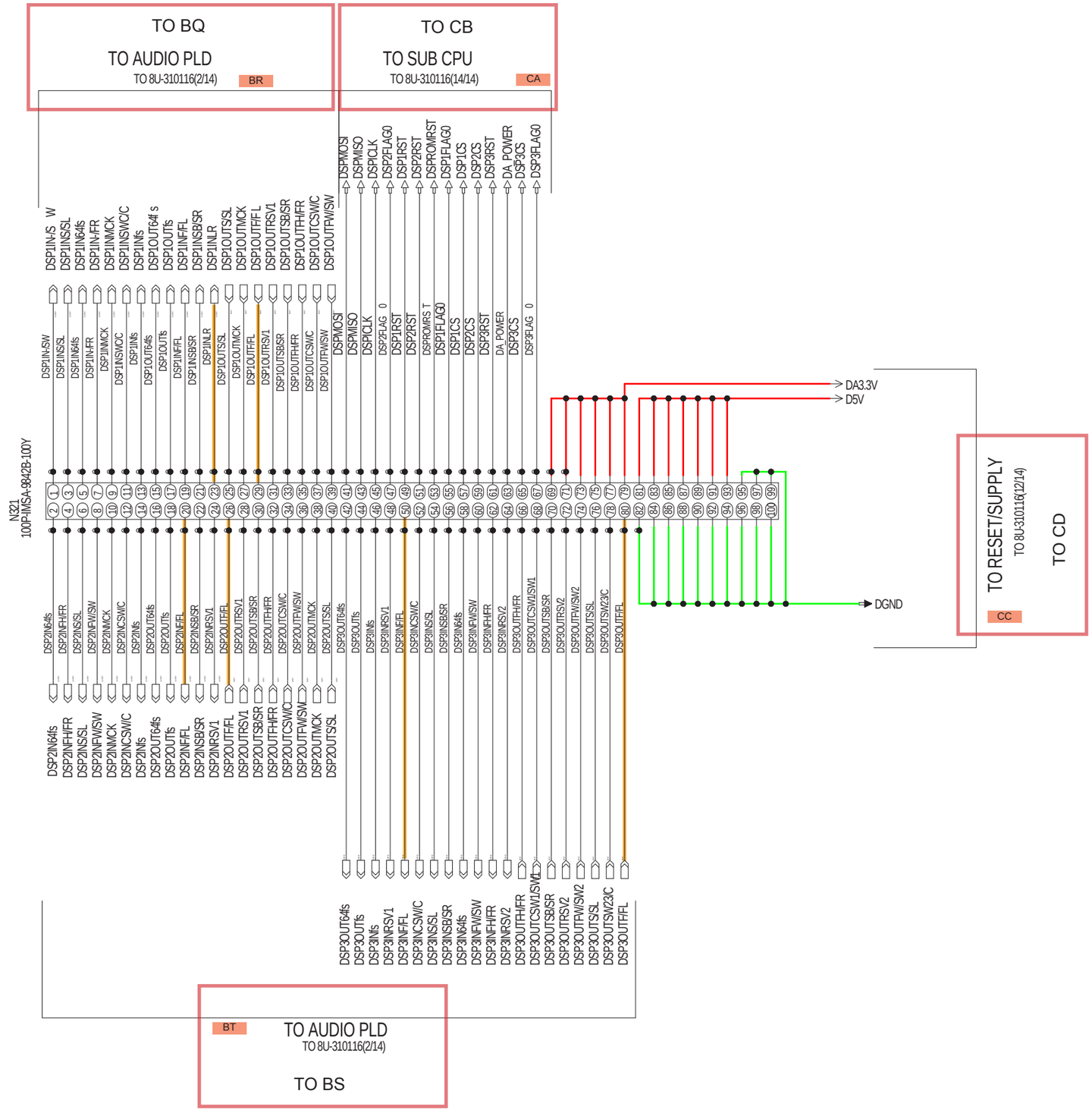
TO RESET /SUPPLY — TO 8U-3101116(12/14)

BQ — TO DSP CONNECT — TO 8U-3101116(3/14) — (TO DSP1) — TO BR

BS — TO DSP CONNECT — TO 8U-3101116(3/14) — (TO DSP2) — (TO DSP3) — TO BT

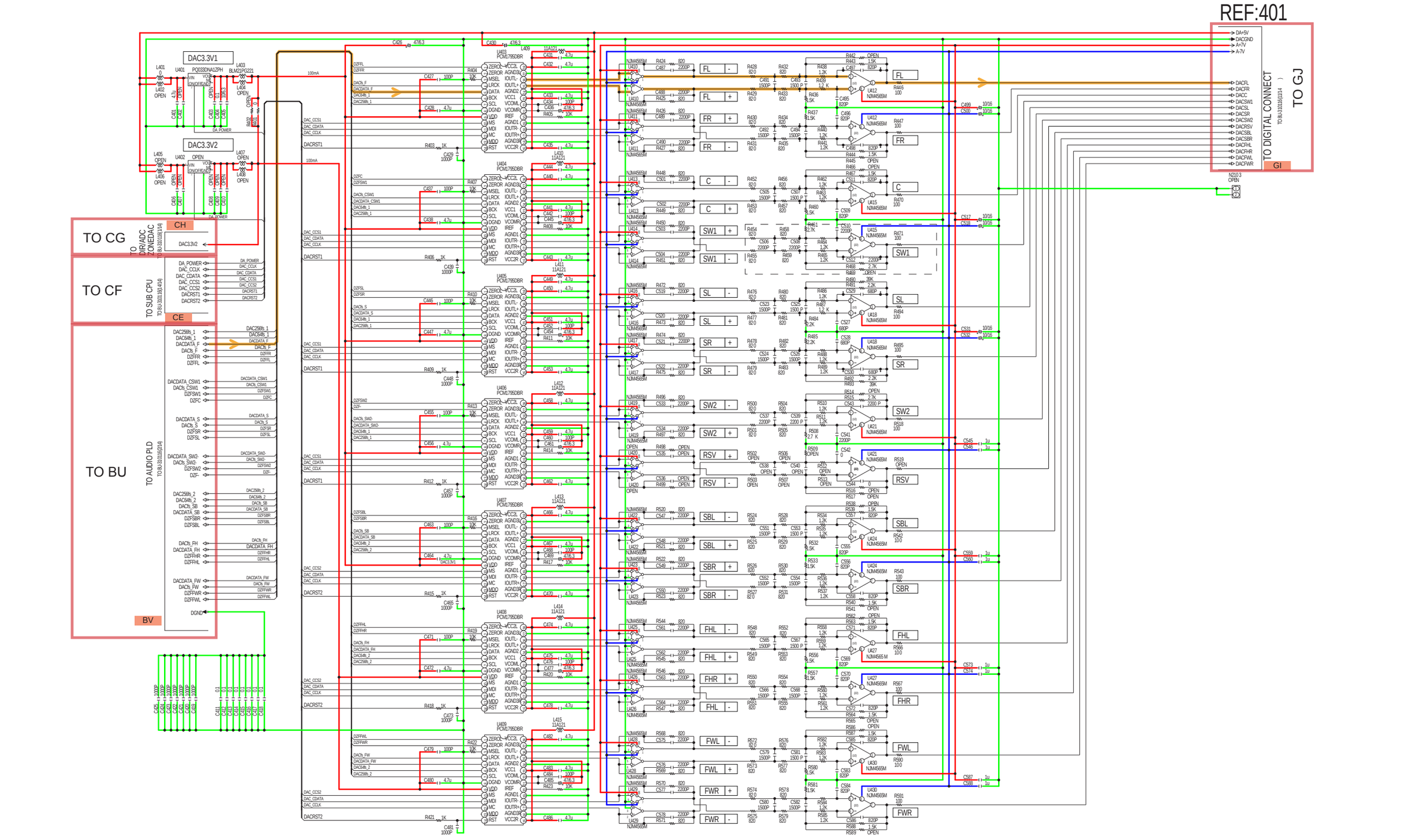
BU — TO DSP CONNECT — TO 8U-3101116(3/14) — TO MAINDAC — TO 8U-3101116(4/14) — TO BV

GND — POWER + — POWER - — STBY POWER — AUDIO SIGNAL LINE



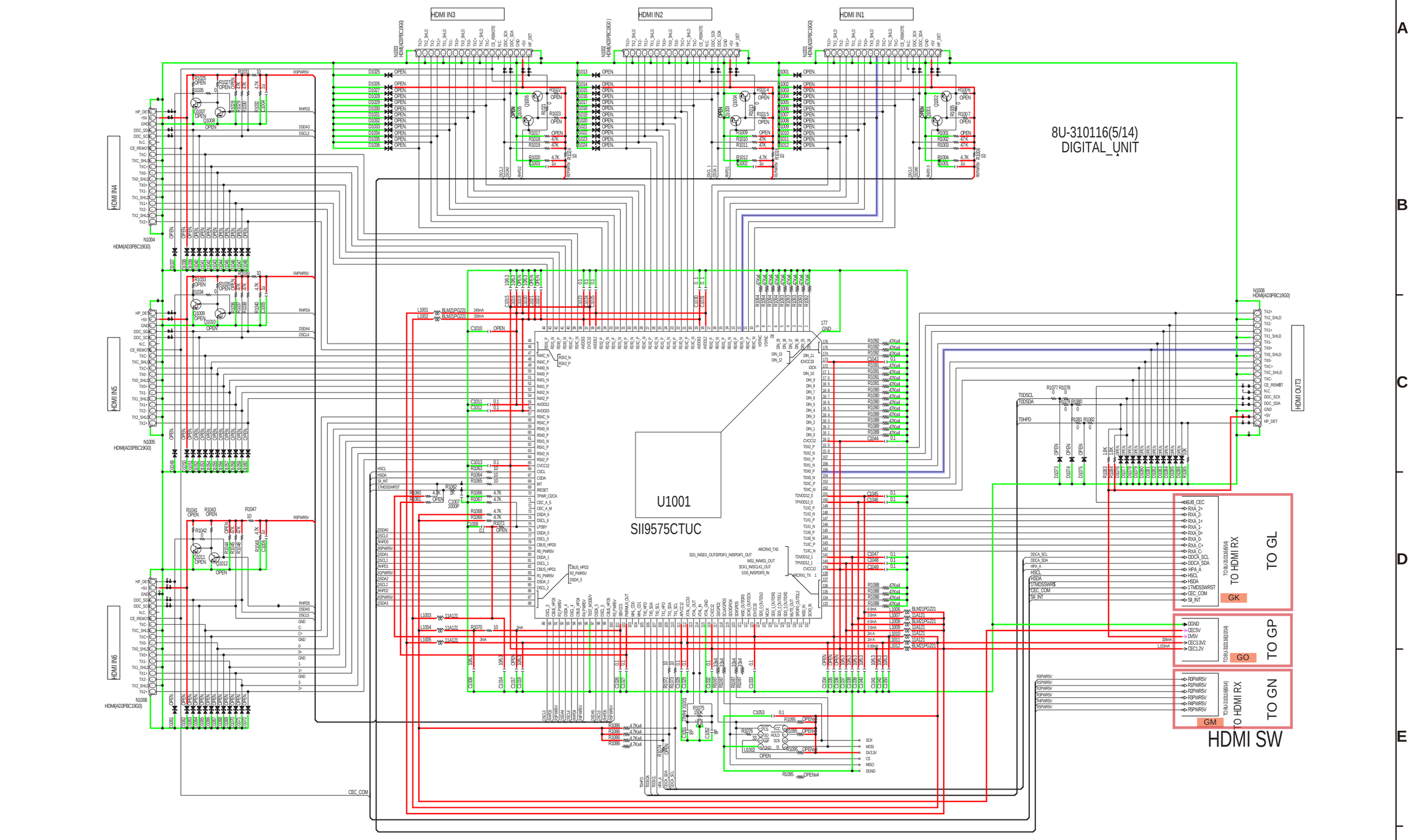
SCHEMATIC DIAGRAMS (25/36)
DIGITAL UNIT (3/14)

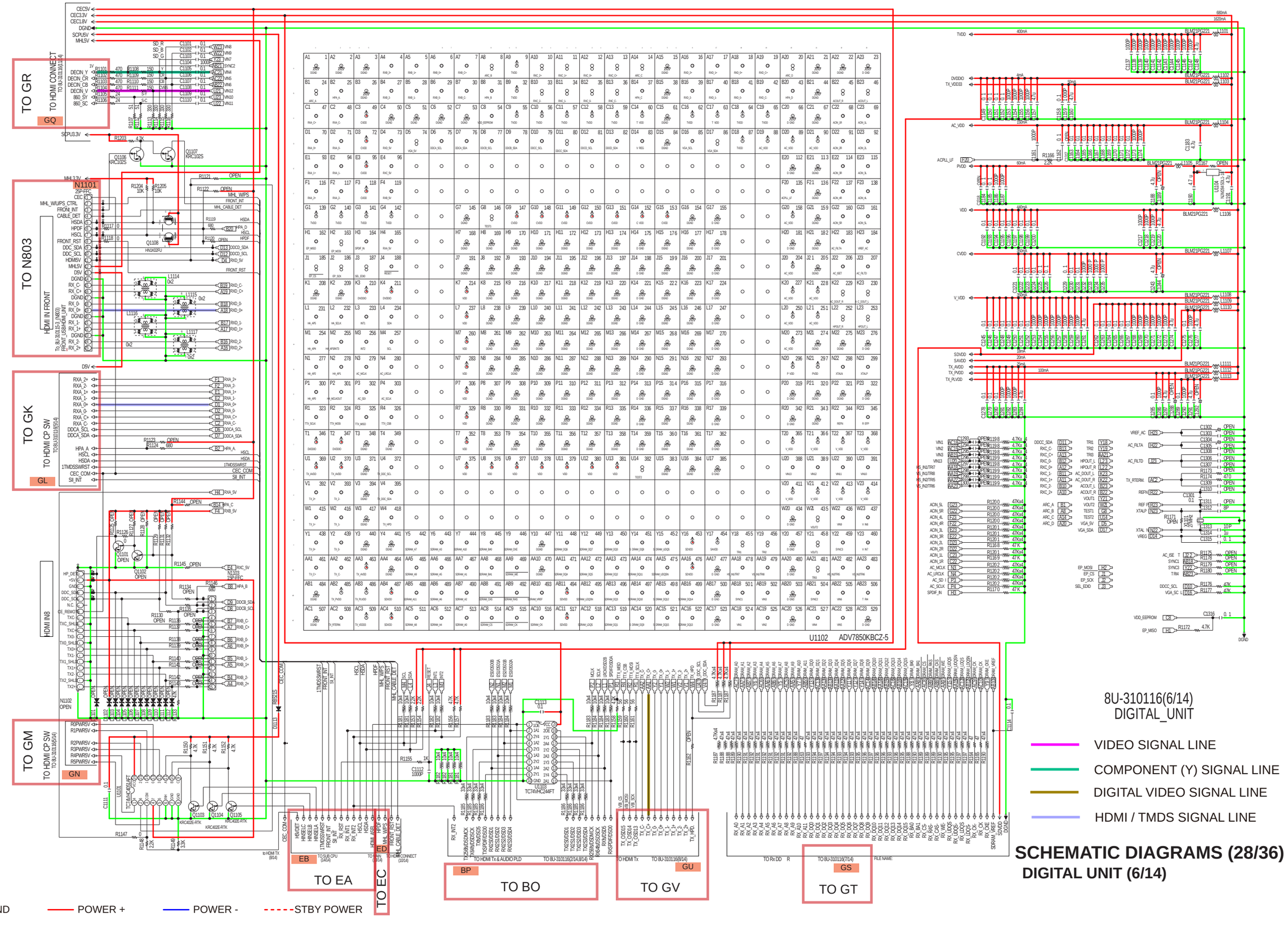
GND POWER + POWER - STBY POWER AUDIO SIGNAL LINE



SCHEMATIC DIAGRAMS (26/36)
DIGITAL UNIT (4/14)

GND — POWER + — POWER - — STBY POWER — AUDIO SIGNAL LINE

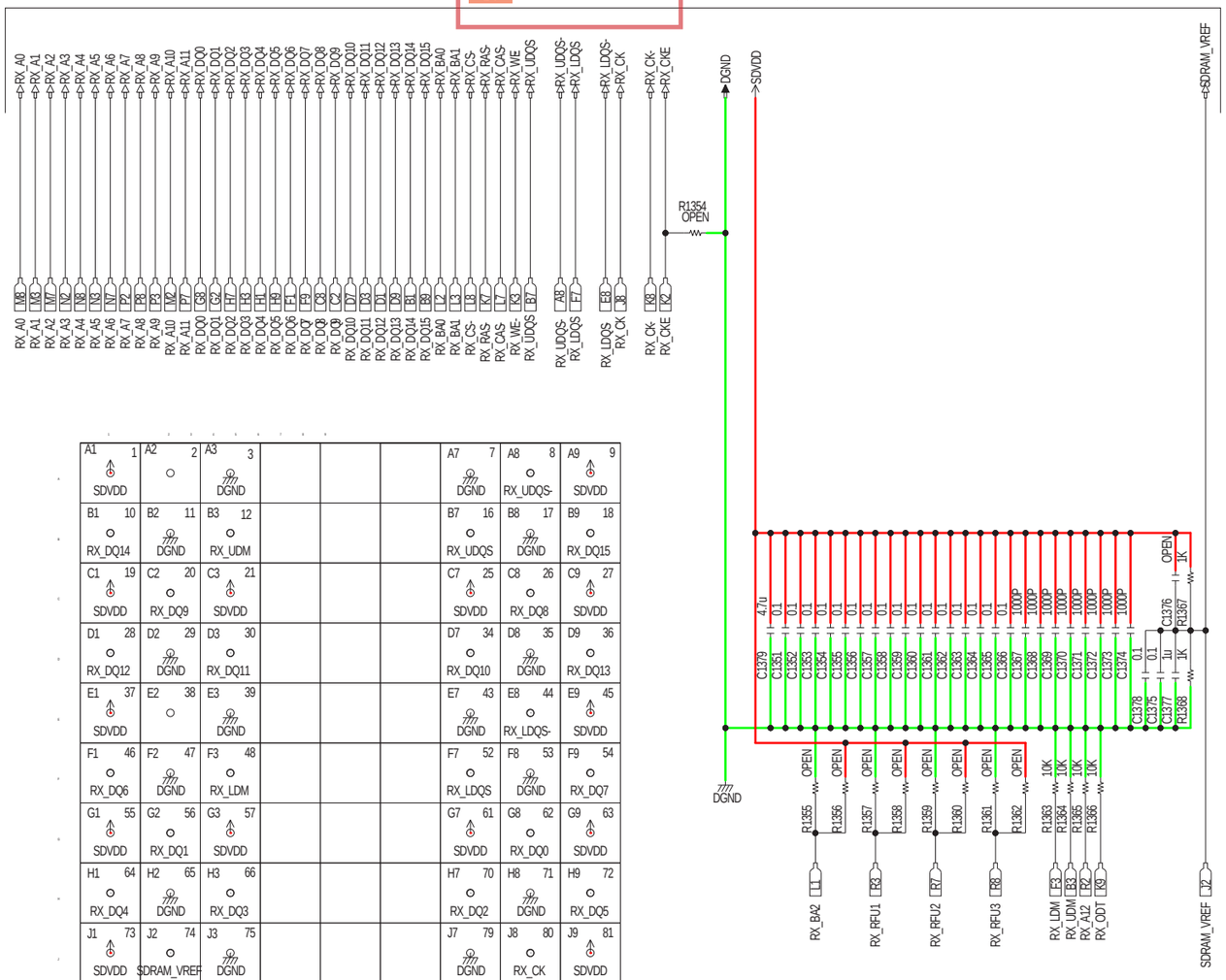

HDMI IN3
HDMI IN2
HDMI IN1
HDMI IN4
HDMI IN5
HDMI IN6
8U-310116(5/14)
DIGITAL_UNIT
U1001
SII9575CTUC
HDMI OUT3
HDMI SW
TO GL
TO GP
TO GN
GK
GO
GM
TO HDMI RX
SCHEMATIC DIAGRAMS (27/36)
DIGITAL UNIT (5/14)
GND
POWER +
POWER -
STBY POWER
HDMI / TMDS SIGNAL LINE


TO GR
TO HDMI CONNECT
TO BJ-310116(1/14)
GQ
TO N803
HDMI IN FRONT
TO BJ-310116-3 (N803)
FRONT_USB/HDMI_CONT
TO GK
TO HDMI CP SW
TO BJ-310116(5/14)
GL
TO GM
TO HDMI CP SW
TO BJ-310116(5/14)
GN
HDMI IN8
TO EA
EB
TO EC
TO BO
BP
TO GV
GU
TO GT
GS
U1102 ADV7850KBCZ-5
8U-310116(6/14)
DIGITAL_UNIT
VIDEO SIGNAL LINE
COMPONENT (Y) SIGNAL LINE
DIGITAL VIDEO SIGNAL LINE
HDMI / TMDS SIGNAL LINE
SCHEMATIC DIAGRAMS (28/36)
DIGITAL UNIT (6/14)
GND
POWER +
POWER -
STBY POWER

TO GS

GT TO HDMI Rx

TO 8U-310116(6/14)

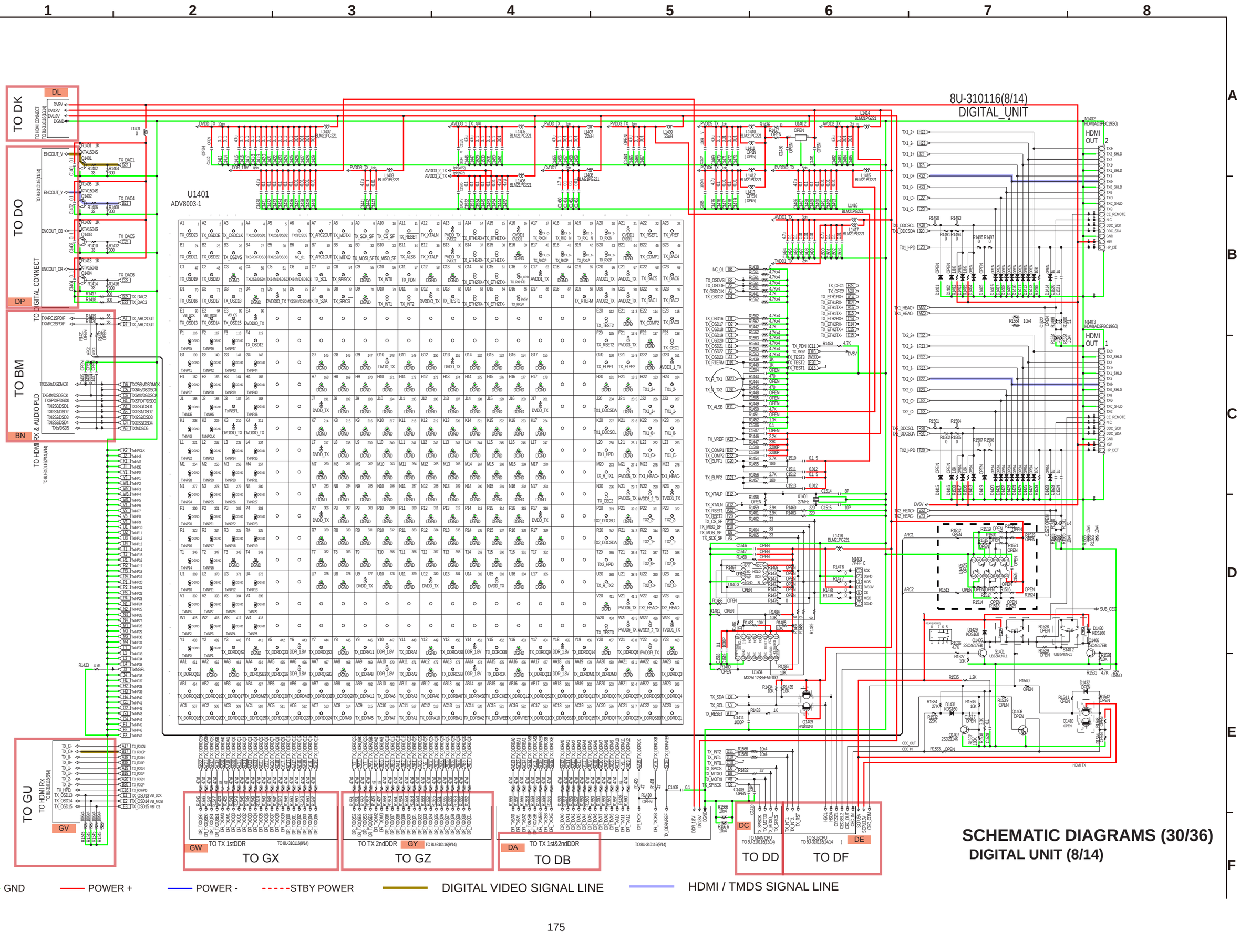


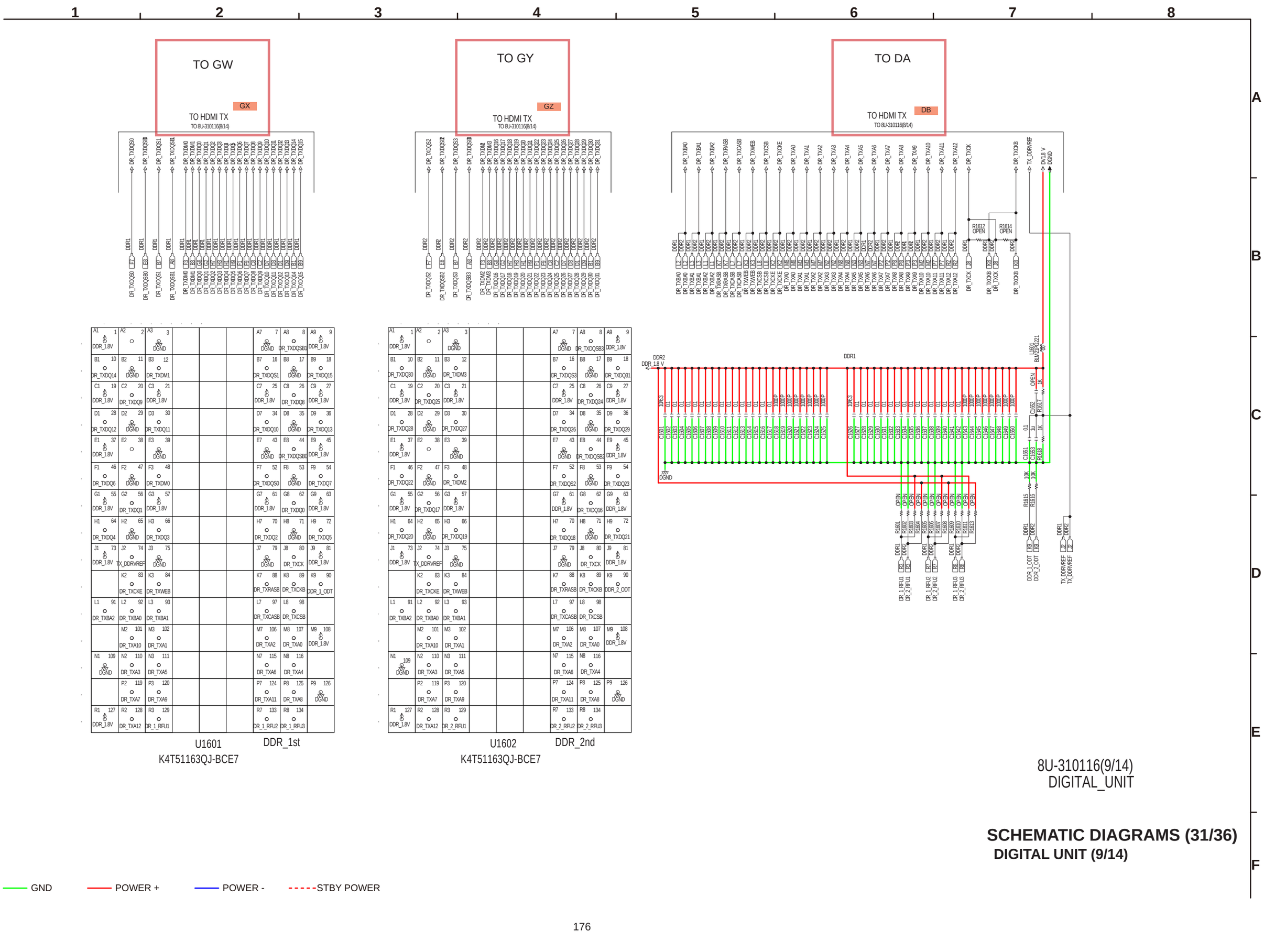
A1 1 SDVDD	A2 2	A3 3 DGND				A7 7 DGND	A8 8 RX_UDQS-	A9 9 SDVDD
B1 10 RX_DQ14	B2 11 DGND	B3 12 RX_UDM				B7 16 RX_UDQS	B8 17 DGND	B9 18 RX_DQ15
C1 19 SDVDD	C2 20 RX_DQ9	C3 21 SDVDD				C7 25 SDVDD	C8 26 RX_DQ8	C9 27 SDVDD
D1 28 RX_DQ12	D2 29 DGND	D3 30 RX_DQ11				D7 34 RX_DQ10	D8 35 DGND	D9 36 RX_DQ13
E1 37 SDVDD	E2 38	E3 39 DGND				E7 43 DGND	E8 44 RX_LDQS-	E9 45 SDVDD
F1 46 RX_DQ6	F2 47 DGND	F3 48 RX_LDM				F7 52 RX_LDQS	F8 53 DGND	F9 54 RX_DQ7
G1 55 SDVDD	G2 56 RX_DQ1	G3 57 SDVDD				G7 61 SDVDD	G8 62 RX_DQ0	G9 63 SDVDD
H1 64 RX_DQ4	H2 65 DGND	H3 66 RX_DQ3				H7 70 RX_DQ2	H8 71 DGND	H9 72 RX_DQ5
J1 73 SDVDD	J2 74 SDRAM_VREF	J3 75 DGND				J7 79 DGND	J8 80 RX_CK	J9 81 SDVDD
	K2 83 RX_CKE	K3 84 RX_WE-				K7 88 RX_RAS-	K8 89 RX_CK-	K9 90 RX_ODT
L1 91 RX_BA2	L2 92 RX_BA0	L3 93 RX_BA1				L7 97 RX_CAS-	L8 98 RX_CS-	
	M2 101 RX_A10	M3 102 RX_A1				M7 106 RX_A2	M8 107 RX_A0	M9 108 SDVDD
N1 109 DGND	N2 110 RX_A3	N3 111 RX_A5				N7 115 RX_A6	N8 116 RX_A4	
	P2 119 RX_A7	P3 120 RX_A9				P7 124 RX_A11	P8 125 RX_A8	P9 126 DGND
R1 127 SDVDD	R2 128 RX_A12	R3 129 RX_RFU1				R7 133 RX_RFU2	R8 134 RX_RFU3	

U1351
K4T51163QJ-BCE7

GND POWER + POWER - STBY POWER

8U-310116(7/14)
DIGITAL_UNIT
SCHEMATIC DIAGRAMS (29/36)
DIGITAL UNIT (7/14)


8U-310116(8/14)
DIGITAL_UNIT
U1401
ADV8003-1
TO DK
TO DO
TO DIGITAL CONNECT
TO BM
TO HDMI RX & AUDIO PLD
TO GU
TO HDMI Rx
GV
TO GX
GW
TO GZ
GY
TO DB
DA
TO DD
DC
TO DF
DE
HDMI OUT 2
HDMI OUT 1
SCHEMATIC DIAGRAMS (30/36)
DIGITAL UNIT (8/14)
GND
POWER +
POWER -
STBY POWER
DIGITAL VIDEO SIGNAL LINE
HDMI / TMDS SIGNAL LINE



8U-310116(9/14)
DIGITAL_UNIT

SCHEMATIC DIAGRAMS (31/36)
DIGITAL UNIT (9/14)

GND POWER + POWER - STBY POWER

8U-310116(10/14)
DIGITAL_UNIT

TO DH

TO SUBCPU

TO 8U-310116(14/14)

DG

DV_POWER1
DV_POWER2
CEC_POWER
MHL_VBUSFLAGS-
MHL_POWERS
MHL_CABLE_DETS
MHL_VBUS_CNTS
FRONT_RSTS

TO DJ

TO MAIN CPU

TO 8U-310116(13/14)

DI

MHL_VBUSFLAGM-
MHL_POWERM
MHL_CABLE_DETM
MHL_VBUS_CNTM
FRONT_RSTM
FRONT_RST
SCPUPOWER_MO
MHL_WU

MHL_VBUSFLAG-
MHL_POWER
MHL_CABLE_DET
MHL_VBUS_CNT

CEC3.3V
CEC1.8V
DV1.8V
CEC3.3V2
CEC1.3V
MHL3.3V

U1701 EX3AV
U1702 EX3AV
U1703 EX3AV
U1704 OPEN
U1705 EX3AV
U1708 EX3AV

N1701 7P-PH
VBUS
VBUS
DGND
DGND
MHL3.3V
MHL1.2V
MHL8V
To_8U-310115-3_(N802 FRONT_USB/HDMI_UNIT
TO N802-2

HDMI CONNECT

GP
TO GO
TO 8U-310116(6/14)

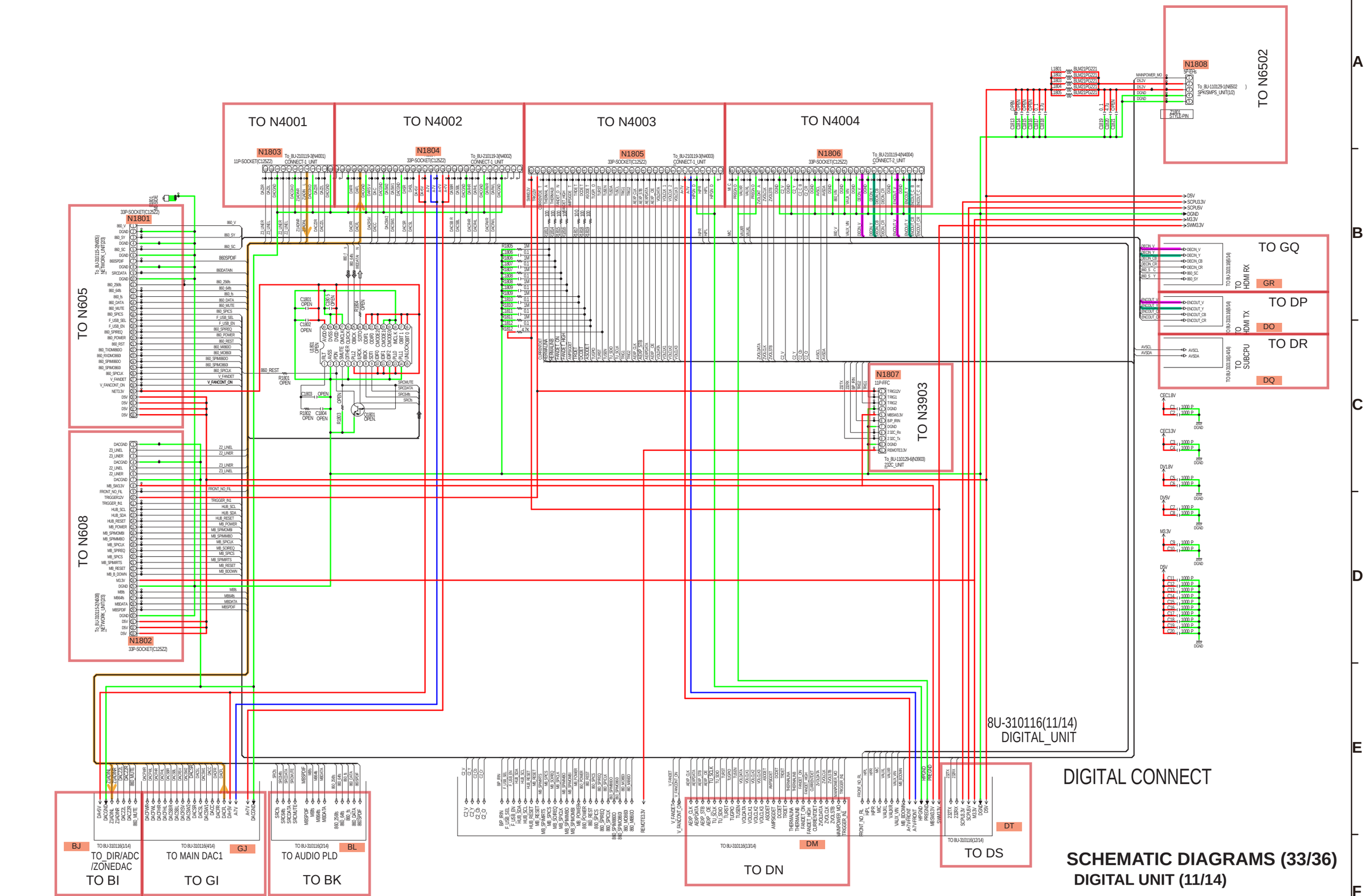
TO HDMI RX

DK
TO DL
TO HDMI TX
TO 8U-310116(8/14)

TO HDMI SW
FILE NAME:

GND
POWER +
POWER -
STBY POWER

SCHEMATIC DIAGRAMS (32/36)
DIGITAL UNIT (10/14)


TO N4001
TO N4002
TO N4003
TO N4004
TO N6502
TO N605
TO N608
TO N3903
TO GQ
TO DP
TO DR
TO DS
TO DN
TO BI
TO GI
TO BK
TO_DIR/ADC /ZONEDAC
TO MAIN DAC1
TO AUDIO PLD
TO SUBCPU
TO HDMI RX
TO HDMI TX
8U-310116(11/14) DIGITAL_UNIT
DIGITAL CONNECT
SCHEMATIC DIAGRAMS (33/36)
DIGITAL UNIT (11/14)
GND
POWER +
POWER -
STBY POWER
AUDIO SIGNAL LINE
VIDEO SIGNAL LINE
COMPONENT (Y) SIGNAL LINE

8U-310116(12/14)
DIGITAL_UNIT

TO DT
TO DIGITAL CONNECT
TO 8U-310116(11/14)
DS
D5V
DGND
REMOTE3.3V
M3.3V
SCPU5V
SCPU3.3V
232RX
232TX

TO CC
TO DSP CONNECT
TO 8U-310116(3/14)
CD
DA3.3V
D5V
DGND
TO_AUDIO_PLD
TO 8U-310116(2/14)

DA3.3V
U1901
EX3AV
L1901 BLM21PG221
L1902 OPEN
L1903 BLM21PG221
L1904 BLM21PG221
PVIN
NC
PGND
VOUT
NC(SW)
ENABLE
PGOOD
EAOUT
VFB
AGND
AVIN
C1904 106.3
C1907 106.3
C1908 106.3
C1909 150K
C1910 15P
C1911 0.1
C1912 0.1
C1905 0.01
C1906 0.1
C1902 OPEN
C1903 OPEN
R1902 OPEN
R1903 OPEN
R1901 47K
R1904 47K
R1905 680K
R1906 680K
DA_POWER

M3.3V
Q1909 FDC608PZ
Q1910 KRC402E-RTK
R1923 47K
R1924 0
L1905 0

REMOTE 3.3V
SWM 3.3V
M3.3V
Q1903 2SA2018
Q1905 OPEN
Q1902 KRC402E-RTK
Q1904 OPEN
R1911 10K
R1912 3.3K
R1913 OPEN
R1914 OPEN
U1903 PQ033DNA12PH
C1913 4.7u
C1914 OPEN
C1915 OPEN
C1916 0.1
C1917 106.3
REMOTEPOWER_MO
CPUPOWER_MO

U1904 PST844 8
VSS
ION
OUT
VDD
C1918 0.015
C1919 0.1
D5.2V
R1915 10K
R1919 100K
C1920 1u
R1916 4.7K
R1920 100
D1901 KDS160
D1902 KDS160
D1903 KDS160
C1921 1000P
C1922 0.1
R1917 47K
Q1906 2SC4617EB
MAIN_BDOWN
MB_BDOWN
SCPU 5V
SCPU 3.3V
Q1908 2SA2018
Q1907 KRC404E-RTK
R1921 10K
R1922 3.3K
C1923 0.1
C1924 4.7u
C1925 OPEN
U1905 PQ033DNA12PH
C1926 OPEN
C1927 0.1
C1928 106.3
MAIN_RESET
SCPUPOWER_MO

R1918 22K

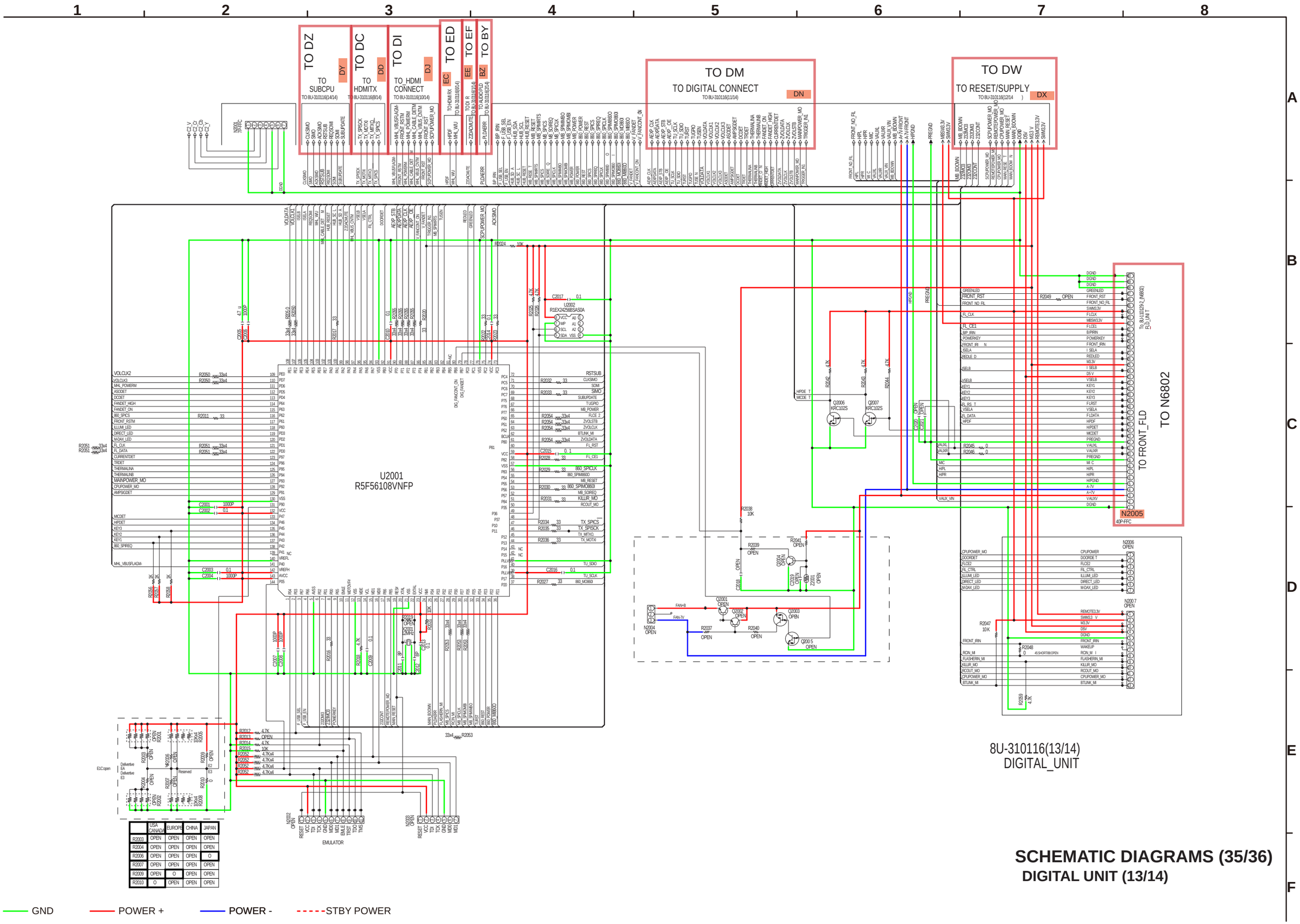
232RX
232TX
R1910 33
Q1901 KRC402E-RTK
R1907 4.7K
R1908 OPEN
R1909 OPEN
U1902 TC7WHR234AFT
C1912 0.1
232CONT
SCPURXD
232MO3
SCPUTXD
232MI3

M8_BDOWN
232MO3
232CONT
SCPUPOWER_MO
REMOTEPOWER_MO
CPUPOWER_MO
MAIN_RESET
MAIN_BDOWN
DGND
D5V
M3.3V
REMOTE3.3V
SWM3.3V
TO MAINCPU DW
TO 8U-310116(13/14)
TO DX

SCPURXD
SCPUTXD
DA_POWER
SUB_BDOWN
DGND
SCPU3.3V
TO SUBCPU DU
TO 8U-310116(14/14)
TO DV

GND
POWER +
POWER -
STBY POWER

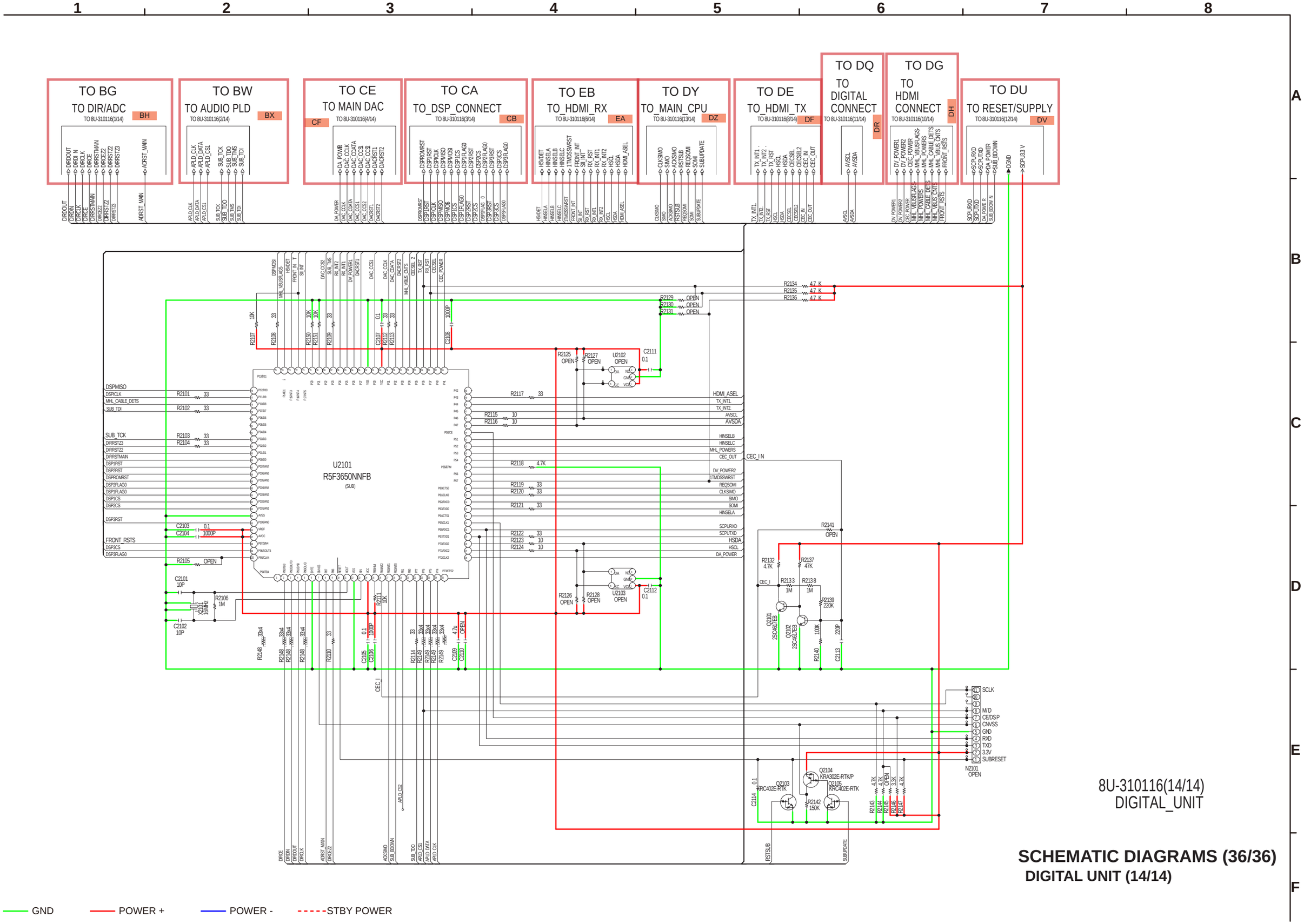
RESET/SUPPLY
SCHEMATIC DIAGRAMS (34/36)
DIGITAL UNIT (12/14)



	USA CANADA	EUROPE	CHINA	JAPAN
R2003	OPEN	OPEN	OPEN	OPEN
R2004	OPEN	OPEN	OPEN	OPEN
R2006	OPEN	OPEN	OPEN	0
R2007	OPEN	OPEN	OPEN	OPEN
R2009	OPEN	0	OPEN	OPEN
R2010	0	OPEN	OPEN	OPEN

8U-310116(13/14)
DIGITAL_UNIT

SCHEMATIC DIAGRAMS (35/36)
DIGITAL UNIT (13/14)



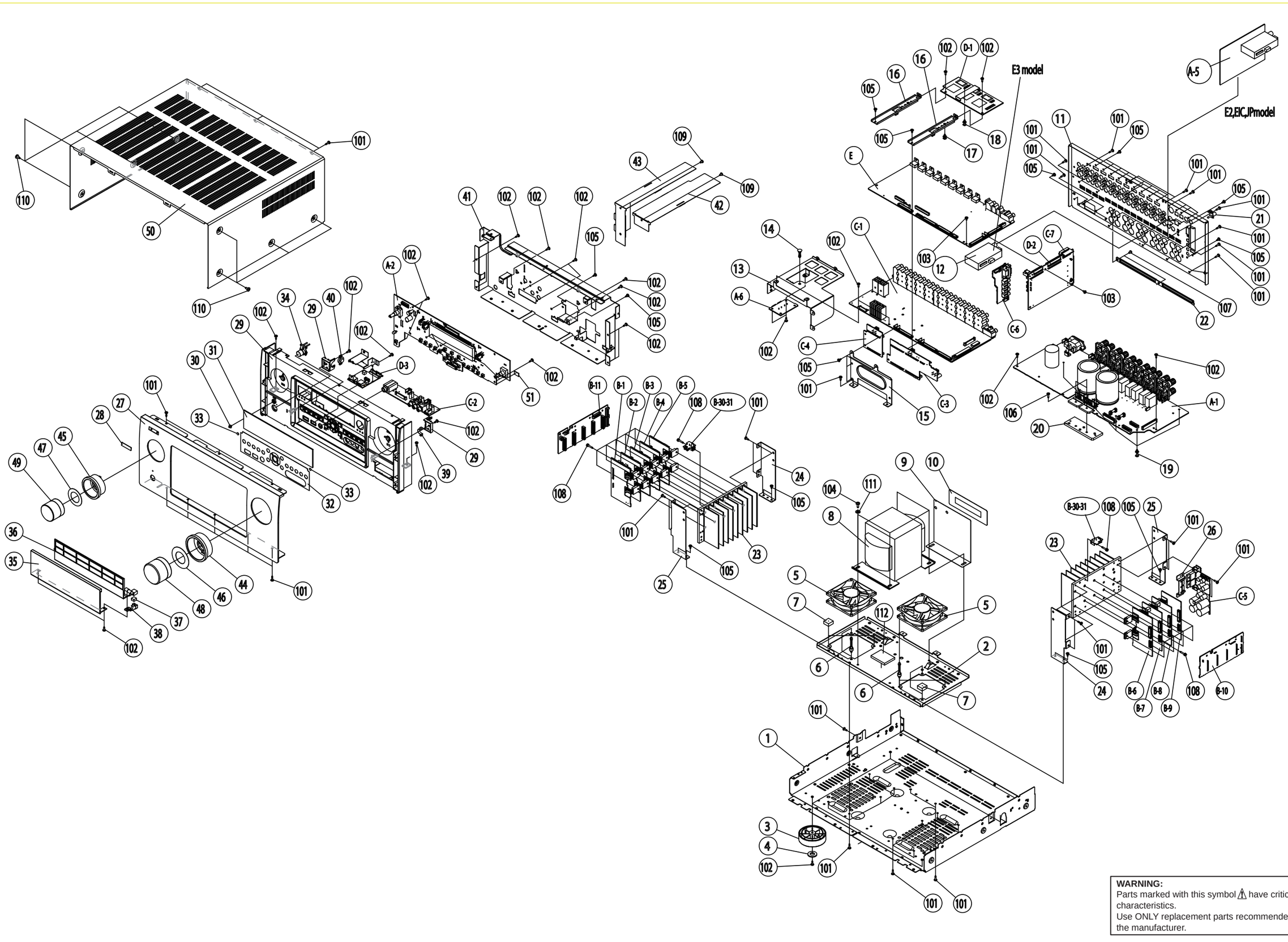
8U-310116(14/14)
DIGITAL_UNIT

SCHEMATIC DIAGRAMS (36/36)

DIGITAL UNIT (14/14)

GND POWER + POWER - STBY POWER

EXPLODED VIEW



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

Personal notes:

Personal notes:

PARTS LIST OF EXPLODED VIEW

∗Parts indicated by "nsp" on this table cannot be supplied.
∗P.W.B. ASS'Y indicated by "nsp" on this table cannot be supplied. When repairing the P.W.B. ASS'Y, check the board parts list and order replacement parts.
∗Parts indicated by the " ★ " mark are not illustrated in the exploded view.
∗The parts listed below are only for maintenance. Therefore they might differ from the parts used in the unit in appearances or dimensions.

Note: The symbols in the column "Remarks" indicate the following destinations.
E3 : U.S.A. & Canada model E2 : Europe model E1C : China model JP : Japan model
BK : Black model SP : Premium Silver model

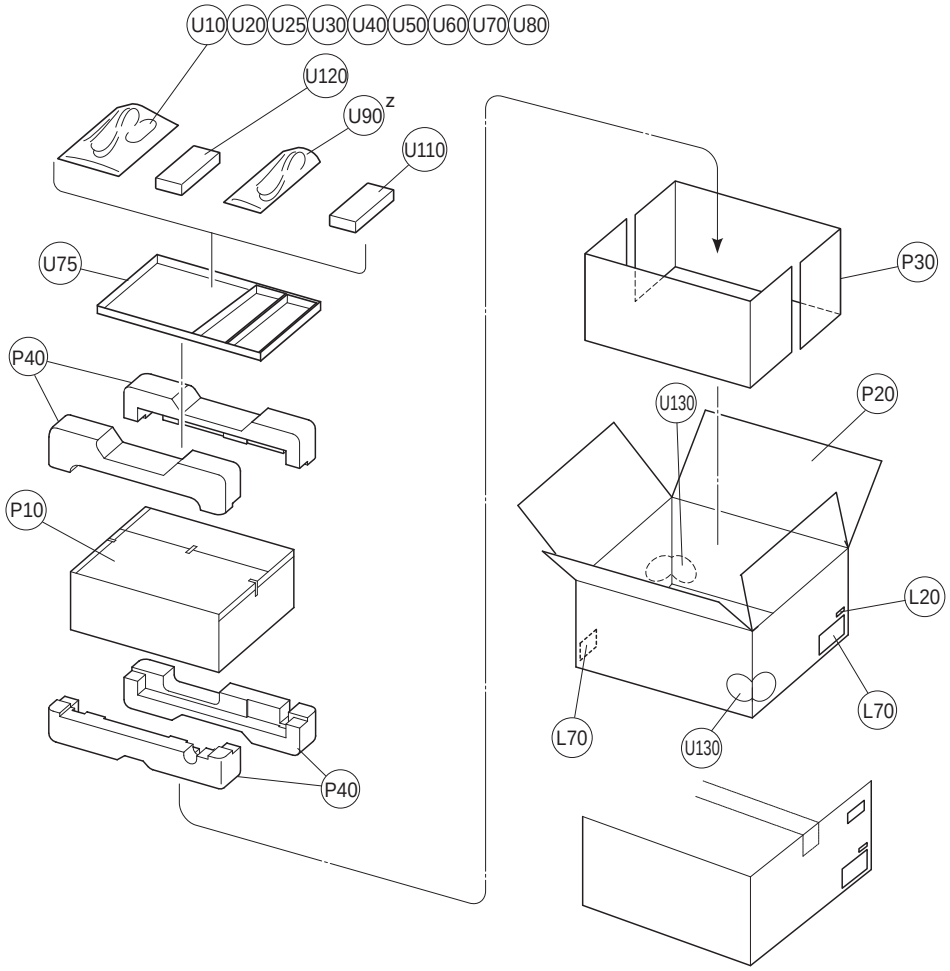
	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	A	nsp	SPK/SMPS PWB ASSY		1	
	A-1	-	SPK/SMPS UNIT			
	A-2	-	FLD UNIT			
	A-3	-	D6001 UNIT			
	A-4	-	D6002 UNIT			
	A-5	-	TUNER UNIT			
	A-6	-	VH-JOINT UNIT			
	B	nsp	P.AMP PWB ASSY			
	B-1	-	POWER AMP(FL) UNIT			
	B-2	-	POWER AMP(C) UNIT			
	B-3	-	POWER AMP(SL) UNIT			
	B-4	-	POWER AMP(SBL) UNIT			
	B-5	-	POWER AMP(FHL) UNIT			
	B-6	-	POWER AMP(FR) UNIT			
	B-7	-	POWER AMP(SR) UNIT			
	B-8	-	POWER AMP(SBR) UNIT			
	B-9	-	POWER AMP(FHR) UNIT			
	B-10	-	R-AMP CONNECT UNIT			
	B-11	-	L-AMP CONNECT UNIT			
	B-30	-	POSISTOR UNIT			
	B-31	-	POSISTOR UNIT			
	C	nsp	A.AUDIO/VIDEO PWB ASSY			
	C-1	-	AUDIO/VIDEO UNIT			
	C-2	-	FRONT JACK UNIT			
	C-3	-	CONNECT-1 UNIT			
	C-4	-	CONNECT-2 UNIT			
	C-5	-	APOWER UNIT			
	C-6	-	232C UNIT			
	C-7	-	BRIDGE UNIT			
	D	8U-310115	NETWORK/DSP PWB ASSY	E3	1	
	D	8U-310115A	NETWORK/DSP PWB ASSY	E2	1	
	D	8U-310115B	NETWORK/DSP PWB ASSY	JP	1	
	D	8U-310115C	NETWORK/DSP PWB ASSY	E1C	1	
	D-1	-	DSP UNIT			
	D-2	-	NETWORK UNIT			
	D-3	-	FRONT USB/HDMI UNIT			
	E	8U-310116	DIGITAL PWB ASSY	E3	1	
	E	8U-310116A	DIGITAL PWB ASSY	E2	1	
	E	8U-310116B	DIGITAL PWB ASSY	JP	1	
	E	8U-310116C	DIGITAL PWB ASSY	E1C	1	
	1	44131007300AD	MAIN CHASSIS		1	

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	2	44631006000AD	TRANS PLATE		1	
	3	00D1040334007	FOOT		5	
	4	00D4610385001	RUBBER PAD		5	
⚠	5	449010013004D	FAN(3110RL-04W-S29-C04_80X80X25)		2	
	6	00D4125441003	FAN HOLDER		4	
	7	47101006200AD	RUBBER SHEET(FAN)		4	
⚠	8	10101015300AS	POWER TRANS(4520E3)	E3	1	
⚠	8	10101015301AS	POWER TRANS(4520E2)	E2	1	
⚠	8	10101015302AS	POWER TRANS(4520E1C)	E1C	1	
⚠	8	10101015303AS	POWER TRANS(4520JP)	JP	1	
	9	44631006100AD	SHIELD PLATE (TRANS)		1	
	10	44551013800AD	PVC SHEET (TRANS)		1	
	11	40631011300AD	BACK PANEL	E3	1	
	11	40631011301AD	BACK PANEL	E2	1	
	11	40631011302AD	BACK PANEL	E1C	1	
	11	40631011303AD	BACK PANEL	JP	1	
	12	183010011100S	HD TUNER (KSM-H7101NNH-000)	E3	1	⚠3
	13	44431029100AD	PWB BRACKET (SMPS COVER)		1	
	14	00D4159016051	P.C.B HOLDER		1	
	15	44431029200AD	PWB BRACKET (CONNECT)		1	
	16	44431029300AD	PWB BRACKET (DSP STAY)		2	
	17	00D4122814044	CARD SPACER (L=6) PWB BRACKET (DSP STAY)		1	
	18	00D4122814002	CARD SPACER (L=8) DSP PCB		1	
	19	00D4122814057	CARD SPACER (L=12) SPK SMPS PWB		5	
	20	44631006200AD	AL PLATE		1	
	21	00D2051116006	TERMINAL ASS		1	
	22	41951004800AD	SP SCREW COVER		1	
	23	44731007000AD	RADIATOR		1	
	23	44731007000AD	RADIATOR		1	
	24	44431028700AD	RADIATOR BRACKET (L)		1	
	24	44431028700AD	RADIATOR BRACKET (L)		1	
	25	44431028800AD	RADIATOR BRACKET (R)		1	
	25	44431028800AD	RADIATOR BRACKET (R)		1	
	26	44431029400AD	PWB BRACKET (A.REG)		1	
	27	40231022100AD	FRONT PANEL	E3	1	
	27	40231022101AD	FRONT PANEL	BKE2	1	
	27	40231022102AD	FRONT PANEL	SPE2	1	
	27	40231022103AD	FRONT PANEL	E1C	1	
	27	40231022104AD	FRONT PANEL	JP	1	
	28	42141002300AD	DENON BADGE	BK	1	
	28	42141002301AD	DENON BADGE	SP	1	
	29	44351005300AD	INNER PANEL	BK	1	
	29	44351005301AD	INNER PANEL	SP	1	
	30	48151002500AD	LENS LENS		1	
	31	41651007400AD	WINDOW		1	
	32	42251004300AD	DOOR SHEET	BK	1	
	32	42251004301AD	DOOR SHEET	SP	1	
	33	471510026002M	BUFFER DOOR UD9004 37AK		2	
	34	41151018100AD	POWER KNOB ASSY	BK	1	
	34	41151018101AD	POWER KNOB ASSY	SP	1	
	35	41531003100AD	DOOR	BK	1	
	35	41531003101AD	DOOR	SP	1	

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	36	41751001900AD	DOOR SUB PANEL	BK	1	
	36	41751001901AD	DOOR SUB PANEL	SP	1	
	37	457010003008M	MAGNET DOOR SR7005 A332		1	
	38	44631006300AD	EARTH PLATE DOOR		1	
	39	44631006700AD	DOOR PLATE		1	
	40	00D4210763010	GEAR DAMPER		1	
	41	44531013600AD	FRONT CHASSIS		1	
	42	44551013900AD	FFC HOLDER (FLD)		1	
	43	44551013700AD	FFC HOLDER (HDMI)		1	
	44	42451002900AD	KNOB RING (M)	BK	1	
	44	42451002901AD	KNOB RING (M)	SP	1	
	45	42451003000AD	KNOB RING (F)	BK	1	
	45	42451003001AD	KNOB RING (F)	SP	1	
	46	45151011700AD	KNOB (M) SPACER KNOB (M) SPACER		1	
	47	45151011800AD	KNOB (F) SPACER KNOB (F) SPACER		1	
	48	41201007500AD	KNOB (M) ASSY	BK	1	
	48	41201007501AD	KNOB (M) ASSY	SP	1	
	49	41201007600AD	KNOB (F) ASSY	BK	1	
	49	41201007601AD	KNOB (F) ASSY	SP	1	
	50	8S4031003800D	TOP COVER SUB ASSY	BK	1	
	50	8S4031003801D	TOP COVER SUB ASSY	SP	1	
	★ 51	00D4458004007	WIRE CLAMPER		10	
	★ 52	00D4458004007	WIRE CLAMPER		3	
	★ 53	0RD4450048003	CORD HOLDER (L76) TRANS WIRE		1	
	★ 54	00M32AK861900	CLEAR LABEL(44X12 T0.05)	E3,E1C	1	
	★ 55	L0020	MAC ADDRESS SUB ASSY		1	
	★ 56	8W5441030800D	LICENSE SUB ASSY	E3	1	
	★ 57	8W5441030801D	LICENSE SUB ASSY	E2,E1C	1	
	★ 58	8W5441030802D	LICENSE SUB ASSY	JP	1	
	★ 59	8W5451018300D	CONT LABEL SUB ASSY	E3	1	
	★ 60	8W5451018301D	CONT LABEL SUB ASSY	BKE2	1	
	★ 61	8W5451018302D	CONT LABEL SUB ASSY	SPE2	1	
	★ 62	8W5451018303D	CONT LABEL SUB ASSY	E1C	1	
	★ 63	8W5451018304D	CONT LABEL SUB ASSY	JP	1	
	★ 64	54411031200AD	POP LABEL (E3)	E3	1	
	★ 65	54411031300AD	POP LABEL (E2)	E2	1	
	★ 66	54411031400AD	POP LABEL (E1C)	E1C	1	
	★ 67	54411031500AD	POP LABEL (JP)	JP	1	
	★ 68	52455000200AS	SP RIVET	E2,E1C	22	
	★ 69	44801002700AS	GASKET NLCG-070100 W10xH7xD20x3pcs for FRONT CHASSIS		1	
	★ 70	44801002604AS	GASKET NLCG-040100 W10xH4xD20x2pcs for REAR SIDE		1	
	★ 71	44801002505AS	GASKET NLCG-015100 W10xH1.5xD20x2pcs for REAR TOP		1	
	★ 72	47101006600AS	RUBBER SHEET (45X15.T6)	E2,E1C,JP	4	
	★ 73	47101006700AS	RUBBER SHEET (15X15.T18)	E2,E1C,JP	4	
SCREWS						
	101	00M51270310U0	SCREW TRANS PLATE		10	
	101	00M51270310U0	SCREW JACK. BRACKET. AC INLET		31	
	101	00M51270310U0	SCREW SPEAKER		6	
	101	00M51270310U0	SCREW		1	

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	101	00M51270310U0	SCREW CHASSIS + BACK PANEL		6	
	101	00M51270310U0	SCREW PWB ASSY + TRANS PLATE		2	
	101	00M51270310U0	SCREW AL PLATE + CHASSIS		2	
	101	00M51270310U0	SCREW SMPS COVER + CHASSIS		1	
	101	00M51270310U0	SCREW RADIATOR BRACKET L/R		4	
	101	00M51270310U0	SCREW PWB BRACKET (A.REG)		2	
	101	00M51270310U0	SCREW RADIATOR BRACKET L/R		4	
	101	00M51270310U0	SCREW F/PANEL + CHASSIS		8	
	101	00M51270310U0	SCREW		3	
	102	00M51280308U0	SCREW-B FOOT		4	
	102	00M51280308U0	SCREW-B		2	
	102	00M51280308U0	SCREW-B SMPS COVER		2	
	102	00M51280308U0	SCREW-B DSP STAY		2	
	102	00M51280308U0	SCREW-B PWB ASSY + CHASSIS		2	
	102	00M51280308U0	SCREW-B DOOR + DOOR SUB PANEL		2	
	102	00M51280308U0	SCREW-B DAMPER		2	
	102	00M51280308U0	SCREW-B FLD PWB		18	
	102	00M51280308U0	SCREW-B F/PANEL + CHASSIS (SIDE)		2	
	103	0RD4713302017	3X5 CBS NETWORK + M3		1	
	103	0RD4713302017	3X5 CBS DIGITAL + M3		1	
	103	0RD4713302017	3X5 CBS BRIDGE PWB		4	
	104	0RD4770312008	4X8 TP SCREW TRANS		4	
	105	0RD4737015005	3X6 CBTS(S)-B HD TUNER		2	
	105	0RD4737015005	3X6 CBTS(S)-B CONNECT + M3		2	
	105	0RD4737015005	3X6 CBTS(S)-B CONNECT + SMPS COVER		2	
	105	0RD4737015005	3X6 CBTS(S)-B DSP STAY + M3		2	
	105	0RD4737015005	3X6 CBTS(S)-B HDMI. M3		12	
	105	0RD4737015005	3X6 CBTS(S)-B RADIATOR SUB		8	
	105	0RD4737015005	3X6 CBTS(S)-B M3		6	
	106	00M51280310U0	B.H.TAPPED EJ330106		2	
	107	00D4790003038	PUSH RIVET SP SCREW COVER		1	
	108	0RD4770153021	3X16 CPTS(B) SW W		9	
	108	0RD4770153021	3X16 CPTS(B) SW W		11	
	109	00D4790003025	PUSH RIVET FFC HOLDER (HDMI)		3	
	110	0RD4738064000	4X8 CBTS(B)-B-3P		8	

PACKING VIEW



PARTS LIST OF PACKING & ACCESSORIES

∗Parts indicated by "nsp" on this table cannot be supplied.
∗Parts indicated by the " ★ " mark are not illustrated in the exploded view.
∗The parts listed below are only for maintenance. Therefore they might differ from the parts used in the unit in appearances or dimensions.

Note: The symbols in the column "Remarks" indicate the following destinations.
E3 : U.S.A. & Canada model
E2 : Europe model
E1C : China mode
JP : Japan model
BK : Black model
SP : Premium Silver model

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	L20	nsp	MAC ADDRESS SUB ASSY			
	L70	nsp	CONT LABEL SUB ASSY			
	P10	nsp	CABINET SHEET		1	
	P20	53111024101AD	CARTON CASE	BKE2	1	
	P20	53111024100AD	CARTON CASE	CIBKE3	1	
	P20	53111024103AD	CARTON CASE	K	1	
	P20	53111024102AD	CARTON CASE	SPE1C	1	
	P20	53111024101AD	CARTON CASE	SPE2	1	
	P30	nsp	SPACER		2	
	P40	nsp	CUSHON ASSY		1	
	U10	nsp	ENVELOPE	BKE2	1	

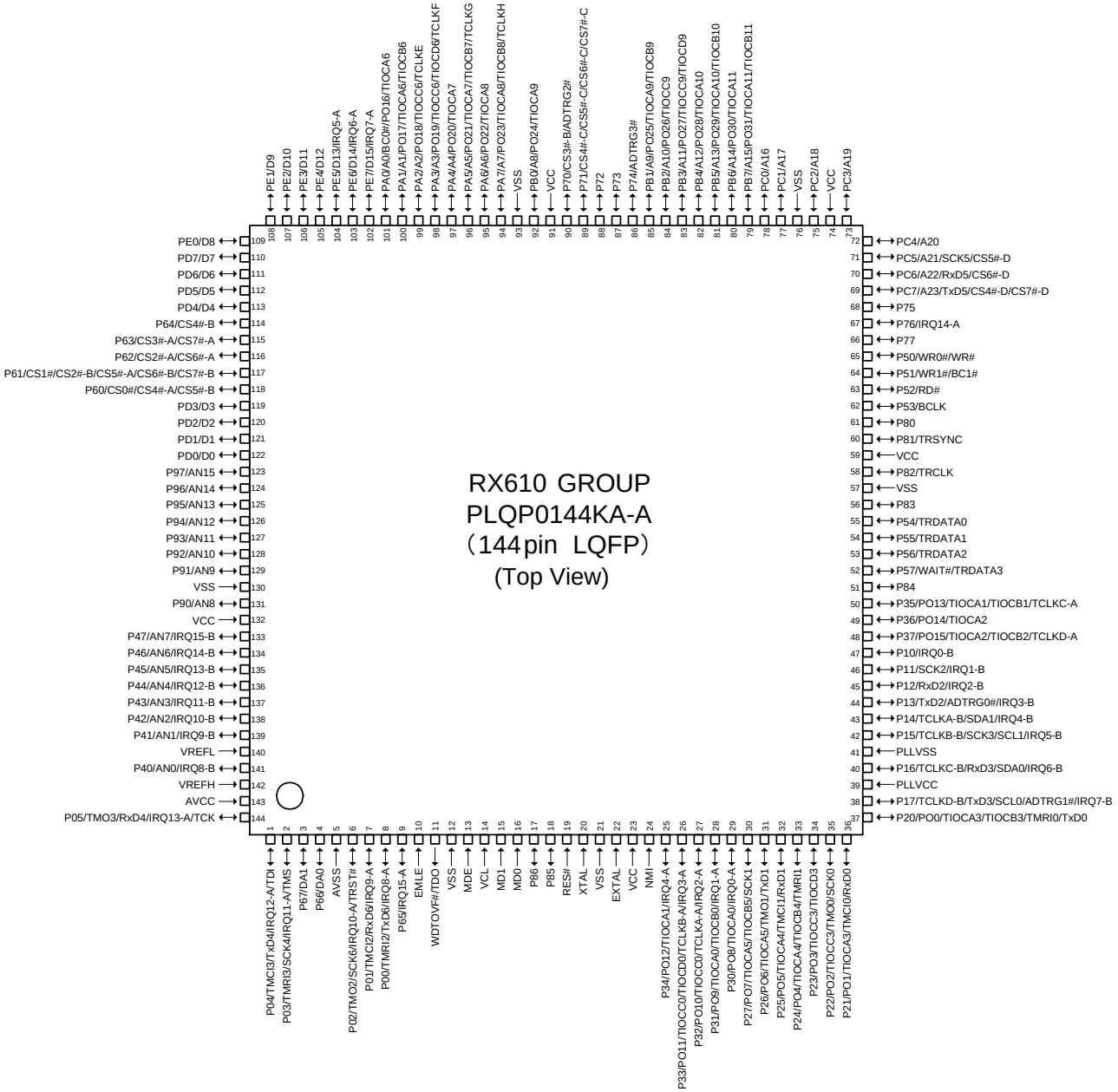
	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	U10	nsp	ENVELOPE	CIBKE3	1	
	U10	nsp	ENVELOPE (ZIPPER A4)	K	1	
	U10	nsp	ENVELOPE	SPE1C	1	
	U10	nsp	ENVELOPE	SPE2	1	
	U20	35201017700AD	INST. MANUAL (E2 CD-ROM)	BKE2	1	
	U20	35201017300AD	INST. MANUAL (CD-ROM)	CIBKE3	1	
	U20	35201017900AD	INST. MANUAL (JP CD-ROM)	K	1	
	U20	35201017800AD	INST. MANUAL (E1C CD-ROM)	SPE1C	1	
	U20	35201017700AD	INST. MANUAL (E2 CD-ROM)	SPE2	1	
	U25	35201018600AD	INST. MANUAL(E2 CD-ROM)	BKE2	1	
	U25	35201018600AD	INST. MANUAL(E2 CD-ROM)	SPE2	1	
	U30	54111094700AD	GETTING STARTED (E2)	BKE2	1	
	U30	54111094000AD	GETTING STARTED	CIBKE3	1	
	U30	54111094900AD	GETTING STARTED (JP)	K	1	
	U30	54111094800AD	GETTING STARTED (E1C)	SPE1C	1	
	U30	54111094700AD	GETTING STARTED (E2)	SPE2	1	
	U40	nsp	S.S.LIST(EX)	BKE2	1	
	U40	nsp	S.S.LIST(EX)	CIBKE3	1	
	U40	nsp	SERVICE STATION LIST	K	1	
	U40	nsp	S.S.LIST(EX)	SPE1C	1	
	U40	nsp	S.S.LIST(EX)	SPE2	1	
	U50	nsp	GUARANTEE(S)SUB ASSY	K	1	
	U50	nsp	WARRANTY FOR CHINA DENON	SPE1C	1	
	U60	11601001400AS	AM ANTENNA(ANTA12G)	CIBKE3	1	
	U70	11601001100AS	FM ANT ASSY	BKE2	1	
	U70	11601001100AS	FM ANT ASSY	CIBKE3	1	
	U70	11601001100AS	FM ANT ASSY	K	1	
	U70	11601001100AS	FM ANT ASSY	SPE1C	1	
	U70	11601001100AS	FM ANT ASSY	SPE2	1	
	U75	nsp	PAD		1	
	U80	nsp	BATTERY(LR6KE2PT)		1	
	U90	00MZC01803080	# 2P AC CORD 10A 250V CLASS2	BKE2	1	
	U90	611050024005S	AC CORD SET(E3) V	CIBKE3	1	
	U90	61105004200AS	OFC AC CORD SET(H20)	K	1	
	U90	00D2062249001	AC CORD (E1C)	SPE1C	1	
	U90	00MZC01803080	# 2P AC CORD 10A 250V CLASS2	SPE2	1	
	U100	nsp	POLY COVER	BKE2	1	
	U100	nsp	POLY COVER	CIBKE3	1	
	U100	nsp	ENVELOPE	K	1	
	U100	nsp	POLY COVER	SPE1C	1	
	U100	nsp	POLY COVER	SPE2	1	
	U110	32401000800AD	MIC AUDYSSEY ACM1HB		1	
	U120	30701010600AD	RC-1165		1	
	U125	nsp	SERVICE CONTRACT SHEET(E3only)	CIBKE3	1	
	U130	nsp	COLOR LABEL	SPE1C	1	
	U130	nsp	COLOR LABEL	SPE2	1	

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 : U2001)



R5F56108VNFP Terminal Functions

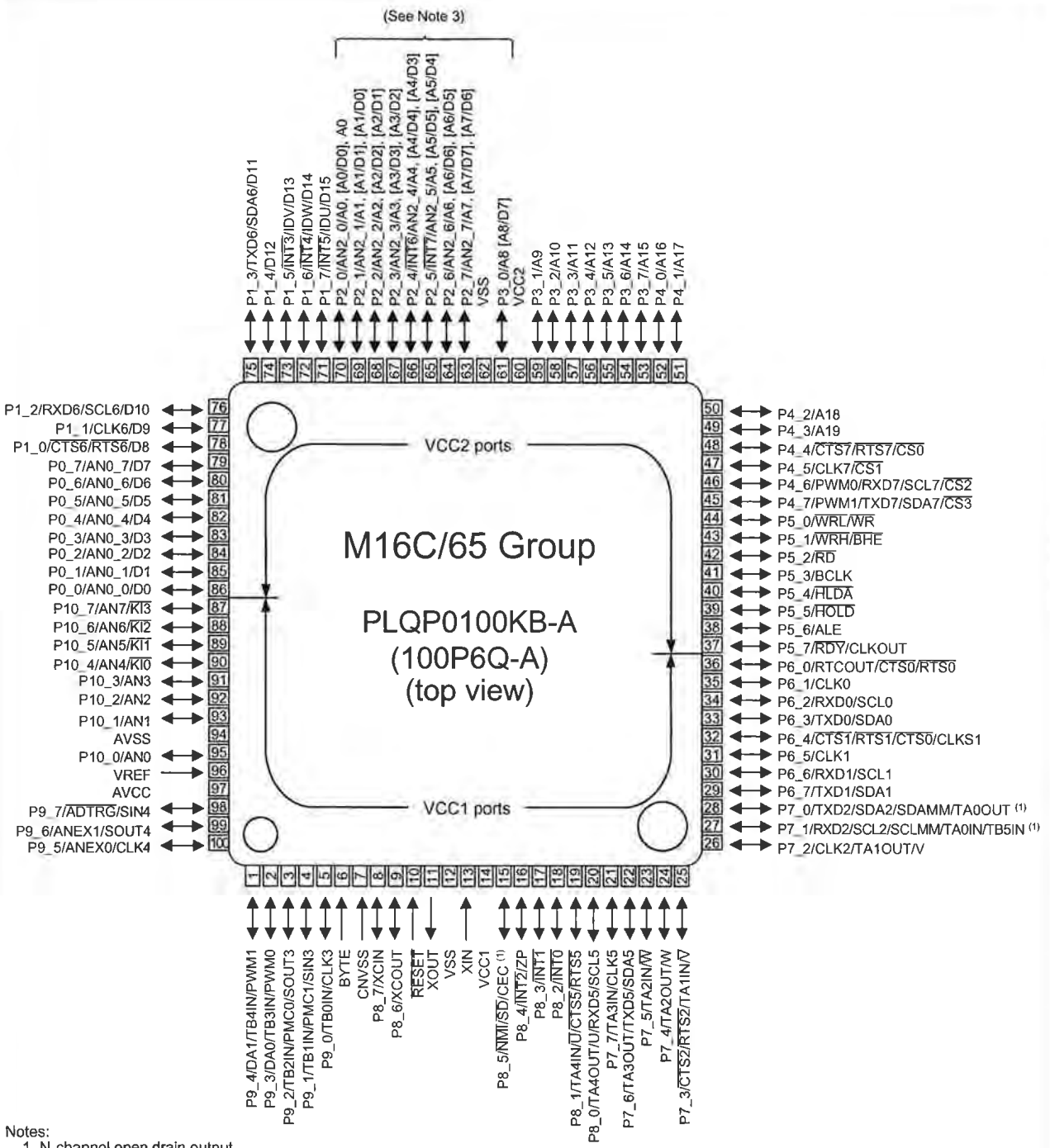
Pin	Pin Name	Symbol	I/O	Pull up/ down	LvCnv	STBY	STOP	CEC STBY	Function
1	P04/IRQ12-A/TMCI3/ TxD4/TDI	TDI/TXD MITSUBISHI/ NC(NORMRAL)	I/O/I	M3VPu		-/-/I	-/-/I	I	E20 Emulator control signal/Mitsubishi Programer/Nomal:Input
2	P03/IRQ11-A/TMRI3/ SCK4/TMS	TMS/ NC(NORMRAL)	I/I	M3VPu		-/I	-/I	I	E20 Emulator control signal/Nomal:Input
3	P67/DA1	USB SEL	O			L	L	L	USB control pin
4	P66/DA0	USB EN	O			L	L	L	USB control pin
5	AVSS	AVSS	-			-	-	-	NC
6	P02/IRQ10-A/TMO2/ SCK6/TRST#	TRST#/ NC(NORMRAL)	I/I	Pd		I/I	I/I	I	E20 Emulator control signal/Nomal:Input
7	P01/IRQ9-A/TMCI2/ RxD6	RXD MI232O	I	M3VPu		I	I	I	Data received from the external pin(AMX)/ Use for firmware upgrading by DFW.:FFC Connect
8	P00/IRQ8-A/TMRI2/ TxD6	TXD MO232I	O			L	L	L	Data transfer to external pin(AMX)/Use for firmware upgrading by DFW.:FFC Connect
9	P65/IRQ15-A	POWER KEY	I	M3VPu		I	I	I	POWER KEY (Waiting Mode cancel, interrupt port)
10	EMLE	EMLE	I	Pd		-	-	-	E20Emulator control signal"H":No OP,"L"OP(When CPU-One chip OP., Need to pull down)
11	WDTOVF#/TDO	TDO/WDTOVF#	O/O			-	-	-	E20Emulator control signal
12	VSS	VSS	I			-	-	-	GND
13	MDE	MDE	I	Pd		-	-	-	Endian select(L:LittleEndian)
14	VCL	VCL	I			-	-	-	VSS need to 0.1μF
15	MD1	MD1	I	M3VPu		-	-	-	Select BootMode,UserBootMode(SingleChipMode:SingleChipMode:MD0=1,MD1=1)/ E20Emulato rcontrol signal
16	MD0	MD0	I	M3VPu		-	-	-	
17	P86	232C CONTROL(SUB LOG MODE)	O			L	L	L	SUB LOG MODE 232C course switching control
18	P85	REMOTE 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(12MHz)
21	VSS	VSS	-			-	-	-	GND
22	EXTAL	EXTAL	-			-	-	-	Clock output(12MHz)
23	VCC	VCC	-			-	-	-	+3.3V
24	NMI	NMI	I	M3VPu		-	-	-	PullUp
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(APLD output)
27	P32/IRQ2-A/PO10/ TIOCC0/TCLKA-A	NC	O/I			L/I	L/I	L/I	NC
28	P31/IRQ1-A/PO9/ TIOCA0/TIOCB0	NC	O			L	L	L	NC
29	P30/IRQ0-A/PO8/ TIOCA0	RC IN	I			I	I	I	Remote control signal input pin
30	P27/PO7/TIOCA5/ TIOCB5/SCK1	NC	O			L	L	L	NC
31	P26/PO6/TIOCA5/ TMO1/TxD1	NC	O			L	L	L	NC
32	P25/PO5/TIOCA4/ TMCI1/RxD1	NC	O			L	L	L	NC
33	P24/PO4/TIOCA4/ TIOCB4/TMRI1	TU RST/HDRADIO RESET	O	SW3VPu		L	L	L	TUNER control pin/HD RADIO control pin
34	P23/PO3/TIOCC3/ TIOCD3	E RESET	O(ODR)	N3VPu		L	L	L	ETHERNET RESET control pin(DM860A)
35	P22/PO2/TIOCC3/ TMO0/SCK0	E POWER	O			L	L	L	ETHER POWER control pin(DM860A)
36	P21/PO1/TIOCA3/ TMCI0/RxD0	E_RXDMIEO	I			I	I	I	ETHERNET communication control pin (DM860A)
37	P20/PO0/TIOCA3/ TIOCB3/TMRI0/TxD0	E_TXDMOEI	O			L	L	L	ETHERNET communication control pin (DM860A)

Pin	Pin Name	Symbol	I/O	Pull up/ down	LvCnv	STBY	STOP	CEC STBY	Function
38	P17/IRQ7-B/TCLKD-B/ TxD3/SCL0/ADTRG1#	HDRADIO MOHI(NA)/TU SCLK	O/I_O			L	L	L	HDRADIO/TUNER control pin
39	PLLVCC	PLLVCC	-			-	-	-	PLL Power
40	P16/IRQ6-B/TCLKC-B/ RxD3/SDA0	HDRADIO MIHO(NA)/TU SDIO	I/I_O			L	L	L	HDRADIO/TUNER control pin
41	PLLVSS	PLLVSS	-			-	-	-	GND
42	P15/IRQ5-B/TCLKB-B/ SCK3/SCL1	NC	O			L	L	L	NC
43	P14/IRQ4-B/TCLKA-B/ SDA1	NC	O			L	L	L	NC
44	P13/IRQ3-B/TxD2/ ADTRG0#	ADV8003 SPI MO	O			L	L	L	GUI control pin(ADV8003)
45	P12/IRQ2-B/RxD2	ADV8003 SPI MI	I			L	L	L	GUI control pin(ADV8003)
46	P11/IRQ1-B/SCK2	ADV8003 SPI CLK	O			L	L	L	GUI control pin(ADV8003)
47	P10/IRQ0-B	ADV8003 SPI CS	O			L	L	L	GUI control pin(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	NC	O			L/H	L/L	L/H	NC
51	P84	NC	O			L	L	L	NC
52	P57/WAIT#/TRDATA3	NC	O			L	L	L	NC
53	P56/TRDATA2	E SPI MOEI	O	N3VPu		L	L	L	ETHERNET communication control pin (DM860A)
54	P55/TRDATA1	NC	O			L	L	L	NC
55	P54/TRDATA0	E SPI MIEO	I	N3VPu		I	L	I	ETHERNET communication control pin (DM860A)
56	P83	E SPI CLK	O	N3VPu		L	L	L	ETHERNET communication control pin (DM860A)
57	VSS	VSS	-			-	-	-	GND
58	P82/TRCLK	FL CE1	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 VOL. Control pin (NJW1194)
62	BCLK/P53	NC	I/I	M3VPu/-		I/I	I/I	I/I	NC
63	P52/RD#	ZVOL CLK	O			L	L	L	ZONE VOL. Control pin (NJW1194)
64	P51/WR1#/BC1#	ZVOLSTB	O			L	L	L	ZONE VOL. Control pin (NJW1194)
65	P50/WR0#/WR#	NC	O			L	L	L	NC
66	P77	NC	O			L	L	L	NC
67	P76/IRQ14-A	TU GPO2_INT	I			L	L	L	TUNER GPIO2 input pin
68	P75	SUB UPDATE	O			L	L	L	SUB UPDATEmode control(DPMS/DENON WRITTER)."L". SUB Program mode "H",then SUB RST.
69	PC7/A23/CS4#-D/ CS7#-D/TxD5	MOSI	O			L	L	L	MAIN-SUB CPU Communication control output
70	PC6/A22/CS6#-D/RxD5	SOMI	I			I	L	I	MAIN-SUB CPU Communication control input
71	PC5/A21/CS5#-D/ SCK5	CLK MO	O			L	L	L	MAIN-SUB CPU Communication control output
72	PC4/A20	RST SUB	O			L	L	L	MAIN-SUB CPU Communication control output
73	PC3/A19	ACK SIMO	O			L	L	L	MAIN-SUB CPU Communication control output
74	VCC	VCC	-			-	-	-	+3.3V
75	PC2/A18	SUB CPU POWER	O			L	L	L	SUB CPU POWER (H:ON)
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/H	L	H	POWER/STANDBY LED control pin (ON:H)
79	PB7/A15/PO31/ TIOCA11/TIOCB11	DIG FANDET	I	M3VPu		I	L	I	NC
80	PB6/A14/PO30/ TIOCA11	DIG FANCONT ON	O			L	L	L	NC
81	PB5/A13/PO29/ TIOCA10/TIOCB10	NC	O			L	L	L	NC
82	PB4/A12/PO28/ TIOCA10	TU_SEN	O			L	L	L	TUNER control pin

Pin	Pin Name	Symbol	I/O	Pull up/ down	LvCnv	STBY	STOP	CEC STBY	Function
83	PB3/A11/PO27/ TIOCC9/TIOCD9	NC	O			L	L	L	NC
84	PB2/A10/PO26/ TIOCC9	C	O			L	L	L	NC
85	PB1/A9/PO25/TIOCA9/ TIOCB9	V FANDET	I	M3VPu		I	L	I	NC
86	P74/ADTRG3#	V FANCONT ON	O			L	L	L	NC
87	P73	AEXP OE	O			L	L	L	EXPANDER control pin(AUDIO MUTE)
88	P72	AEXP CLK	O			L	L	L	EXPANDER control pin(AUDIO MUTE)
89	P71/CS4#-C/CS5#-C/ CS6#-C/CS7#-C	AEXP DATA	O			L	L	L	EXPANDER control pin(AUDIO MUTE)
90	P70/CS3#-B/ADTRG2#	AEXP STB	O			L	L	L	EXPANDER control pin(AUDIO MUTE)
91	VCC	VCC	-			-	-	-	+3.3V
92	PB0/A8/PO24/TIOCA9	NC	O/I			L	L	L	NC
93	VSS	VSS	-			-	-	-	GND
94	PA7/A7/PO23/TIOCA8/ TIOCB8/TCLKH	NC	O			L	L	L	NC
95	PA6/A6/PO22/TIOCA8	VSEL A	I			I	I	I	Master Volume rotation detection pin(Rotary encoder)
96	PA5/A5/PO21/TIOCA7/ TIOCB7/TCLKG	VSEL B	I			I	I	I	Master Volume rotation detection pin(Rotary encoder)
97	PA4/A4/PO20/TIOCA7	MHL VBUS CONT	O			L	L	L	MHL VBUS control pin
98	PA3/A3/PO19/TIOCC6/ TIOCD6/TCLKF	DAC(ETHER) MUTE	O			L	L	L	DAC MUTE control pin(PCM5100 for DM860A),MUTE ON="L"
99	PA2/A2/PO18/TIOCC6/ TCLKE	HUB SDA	O	HUB3VPu		L	L	L	HUB control pin
100	PA1/A1/PO17/TIOCA6/ TIOCB6	HUB SCL	O	HUB3VPu		L	L	L	HUB control pin
101	PA0/A0/BC0#/PO16/ TIOCA6	HUB CONTROL	O			L	L	L	HUB control pin
102	PE7/IRQ7-A/D15	MHL CABLE DET	I			I	I	I	MHL Cable detection pin
103	PE6/IRQ6-A/D14	(MHL W/U)	I			I	I	I	(MHL WakeUp detection pin)
104	PE5/IRQ5-A/D13	REQ SOMI	I			I	L	I	MAIN-SUB CPU Communication control output
105	PE4/D12	ISEL A	I			I	I	I	Input Selector rotation detection pin(Rotary encoder)
106	PE3/D11	ISEL B	I			I	I	I	Input Selector rotation detection pin(Rotary encoder)
107	PE2/D10	VOL CLK1	O			L	L	L	FUNCTION / VOLUME control pin(R2A15220)
108	PE1/D9	VOL DATA	O			L	L	L	FUNCTION / VOLUME control pin(R2A15220)
109	PE0/D8	VOL CLK2	O			L	L	L	FUNCTION / VOLUME control pin(R2A15220)
110	PD7/D7	(VOL CLK3)	O			L	L	L	NC
111	PD6/D6	MHL POWER	O			L	L	L	MHL(Sil1292) power control pin
112	PD5/D5	ASO DET	I			I	I	I	PROTECTION (ASO) (detect:"L")
113	PD4/D4	DC DET	I			I	I	I	PROTECTION (ASO) (detect:"L")
114	P64/CS4#-B	FANDET_HIGH	I/O			I/L	L/L	I/L	FAN control detection pin (detect:"L")
115	P63/CS3#-A/CS7#-A	FANDET_ON	I/O			I/L	L/L	I/L	FAN control detection pin (detect:"L")
116	P62/CS2#-A/CS6#-A	E SPI CS	O	N3VPu		L	L	L	ETHERNET communication control pin (DM860A)
117	P61/CS1#/CS2#-B/ CS5#-A/CS6#-B/ CS7#-B	(FRONT RESET)	O			L	L	L	Reset for Front HDMI(Sil1292)
118	P60/CS0#/CS4#-A/ CS5#-B	NC	O			L	L	L	NC
119	PD3/D3	NC	O			L	L	L	NC
120	PD2/D2	NC	O			L	L	L	NC
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	CURRENT DET	I/O			I/L	L/L	I/L	AMP current detection pin
124	P96/AN14	TR DET (THERMAL)	I/O			I/L	L/L	I/L	TR thermal detection pin
125	P95/AN13	THERMALINA	I/O			I/L	L/L	I/L	PROTECTION detection pin (detect:"L")
126	P94/AN12	THERMALINB	I/O			I/L	L/L	I/L	PROTECTION detection pin (detect:"L")
127	P93/AN11	MAIN POWER	O			L	L	L	MAIN POWER control pin

Pin	Pin Name	Symbol	I/O	Pull up/ down	LvCnv	STBY	STOP	CEC STBY	Function
128	P92/AN10	CPU POWER	O			L	L	L	MAIN CPU POWER control pin(POWER ON:"H",CEC ON STANDBY:"H")
129	P91/AN9	AMPSIGDET	I/O			I/L	L/L	I/L	AMP signal detection 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	MIC DET	I			I	I	I	MIC Detec(Active:H)
134	P46/IRQ14-B/AN6	H/P DET	I			I	I	I	Headphone Detect(Active:H)
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(DM860A)
139	P41/IRQ9-B/AN1	NC	O			L	L	L	NC
140	AVSS	AVSS	-			-	-	-	GND
141	P40/IRQ8-B/AN0	MHL VBUS FLAG	I			I	I	I	MHL VBUS current detection pin
142	VREF	VREF	-			-	-	-	Reference voltage (+3.3V) input pin
143	AVCC	AVCC	-			-	-	-	+3.3V
144	P05/IRQ13-A/TMO3/ RxD4/TCK	TCK/RXD MITSUBISHI/ NC(NORMRAL)	I/I/I	M3VPu		-/-/I	-/-/I	I	E20 Emulator control signal/ Mitsubishi Programer/Nomal OP.:Input

R5F3650NNFB (DIGITAL : U2101)



Notes:
1. N-channel open drain output.
2. Check the position of Pin 1 by referring to appendix 1, Package Dimensions.
3. Pin names in brackets [ ] represent a single functional signal. They should not be considered as two separate functional signals.

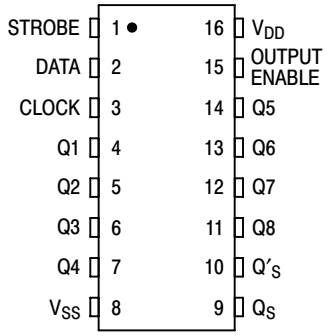
R5F3650NNFB Terminal Functions

Pin	Pin Name	Symbol	I/O	Type	Pu/Pd	STBY	CEC STBY1	CEC STBY2	CEC STBY3	Function
1	P94	NC	O	C	-	Z	-	-	-	NC
2	P93	DIR CE	O	C	-	Z	L	L	L	DIR control pin(LC89057W-VF4A)
3	P92/SOUT3	DIR DIN	O	C	-	Z	L	L	L	DIR control pin(LC89057W-VF4A)
4	P91/SIN3	DIR DOUT	I	-	DA3.3Pu	Z	-	-	-	DIR control pin(LC89057W-VF4A)
5	P90/CLK3	DIR CLK	O	C	-	Z	L	L	L	DIR control pin(LC89057W-VF4A)
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	-	Z	L	L	L	AD control pin(PCM1804)
9	P86	DIR CEZ2	O	C	-	Z	L	L	L	Z2 DIR control pin(LC89057W-VF4A)
10	RESET	SUB RESET	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	-	SCPU3VPu	-	-	-	-	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	-	-	Z	L	L	L	PLD rewriting control (JTAG)
22	P76/(TXD5)	A PLD CS /"D/M"	O	C	Pd	O/L	L	L	L	A PLD control pin/ DENON WRITTER/ MITSUBISHI rewritten for determining (DW :L)
23	P75	A PLD DATA	O	C	-	Z	L	L	L	A PLD control pin
24	P74	A PLD CLK	O	C	-	Z	L	L	L	A PLD control pin
25	P73/CTS2	NC	O	C	-	Z	-	-	-	NC
26	P72/CLK2	DA POWER	O	C	Pd	Z	L	L	L	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	O	L	VIDEO I2C- ADV8003/ADV7850/Sil9575/Sil1292
28	P70(N)/TXD2/SDAMM	HSDA(400k)	I/O	N	CEC3VPu	O/L	O	O	L	VIDEO I2C- ADV8003/ADV7850/Sil9575/Sil1292
29	P67/TXD1	TXD	O	C	-	Z	L	L	L	Data transmission output to external
30	P66/RXD1	RXD	I	-	-	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	NPN Tr	Z	O	O	O	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	1TMDSSWRST RST	O	C	Pd	Z	H	H	L	HDMI SWITCHER Sil9575 Reset pin
38	P56	DV POWER2	O	C	-	Z	H	L	L	DIGITAL.VIDEO power control pin(DV1.8V)
39	P55/EPM	EPM	I	-	Pd	Z	-	-	-	Rewite boot program start:L input set
40	P54	CEC_OUT	O	C	-	Z	O	O	O	CEC-D signal output pin
41	P53	MHL POWER	O	C	-	Z	H	H	L	MHL Sil1212 power control pin
42	P52	HIN SELC	O	C	NPN Tr	Z	O	O	O	For HDMI +5V selection(TC4051)
43	P51	HIN SELB	O	C	NPN Tr	Z	O	O	O	For HDMI +5V selection(TC4051)
44	P50/CE	CE	O/I	C	SCPU3VPu	Z	-	-	-	Rewite boot program start:H input set
45	P47/(TXD7)/SDA7	VSDA	I/O	C	AV3VPu	O/L	L	L	L	VIDEO SELECT IC(ADVM2000)
46	P46/(RXD7)/SCL7	VSCL	I/O	C	AV3VPu	O/L	L	L	L	VIDEO SELECT IC(ADVM2000)
47	P45/(CLK7)	ADV8003 INT2	I	-	-	Z	-	-	-	HDMI ADV8003 INT output
48	P44	ADV8003 INT1	I	-	-	Z	-	-	-	HDMI ADV8003 INT output
49	P43	HDMI A.SEL	O	C	-	Z	L	H	L	HDMI AUDIO switch (H : DSP course, L : HDMI Rx→Tx through)(TC74VHC244)
50	P42	NC	O	C	-	Z	-	-	-	NC
51	P41	CEC POWER	O	C	Pd	Z	H	H	L	Power ON (CEC5V,CEC3.3V,CEC1.8V) for CEC STANDBY
52	P40	CEC SEL	O	C	NPN Tr	Z	O	O	O	CEC output LINE switching
53	P37	ADV7850 RST	O	C	Pd	Z	H	H	L	Reset for HDMI ADV7850
54	P36	ADV8003 RST	O	C	Pd	Z	H	L	L	Reset for HDMI ADV8003
55	P35	CECSEL2	O	C	NPN Tr	Z	O	O	O	CEC output LINE switching
56	P34	MHL VBUS CONT	O	C	-	Z	O	O	O	MHL VBUS control pin
57	P33	DACRST2	O	C	-	Z	L	L	L	DAC control pin(PCM1795)
58	P32	DAC MDI	O	C	-	Z	L	L	L	DAC control pin(PCM1795)
59	P31	DAC MC	O	C	-	Z	L	L	L	DAC control pin(PCM1795)
60	VCC	VCC	-	-	-	-	-	-	-	+3.3V
61	P30	DAC MS1	O	C	-	Z	L	L	L	DAC control pin(PCM1795)

Pin	Pin Name	Symbol	I/O	Type	Pu/Pd	STBY	CEC STBY1	CEC STBY2	CEC STBY3	Function
62	VSS	VSS	-	-	-	-	-	-	-	GND
63	P27	DAC RST1	O	C	-	Z	L	L	L	DAC control pin(PCM1795)
64	P26	DV POWER1	O	C	NPN Tr	Z	H	L	L	DIGITAL VIDEO power control pin (DV5V,DV3.3V)
65	P25/INT7	ADV7850 INT1	I	-	CEC3VPu	Z	-	-	-	HDMI ADV7850 INT output
66	P24/INT6	ADV7850 INT2	I	-	CEC3VPu	Z	-	-	-	HDMI ADV7850 INT output
67	P23	SUB TMS	O	C	DA3.3Pu	Z	L	L	L	PLD rewriting control (JTAG)
68	P22	DAC MS2	O	C	-	Z	L	L	L	DAC control pin(PCM1795)
69	P21	OSR1	O	C	-	Z	L	L	L	AD control pin(PCM1804)
70	P20	OSR2	O	C	-	Z	L	L	L	AD control pin(PCM1804)
71	P17/INT5	SII INT	I	-	CEC3VPu	Z	-	-	-	HDMI Sil9575 INT output
72	P16/INT4	FRONT INT	I	-	SCPU3VPu	Z	-	-	-	INT pin for Front HDMI(Sil1292)
73	P15/INT3	H5V DET	I	-	Pd	Z	-	-	-	HDMI IN 5V DET
74	P14	MHL VBUS FLAG	I	-	Pd	Z	-	-	-	MHL VBUS current detection pin
75	P13/TXD6	DSP MOSI	O	C	DA3VPu	Z	L	L	L	DSP control pin
76	P12/RXD6	DSP MISO	I	-	DA3VPu	Z	-	-	-	DSP control pin
77	P11/CLK6	DSPICLK	O	C	DA3VPu	Z	L	L	L	DSP control pin
78	P10	MHL CABLE DET	I	-	Pd	Z	-	-	-	MHL Cable detection pin
79	P07	SUB TDI	O	C	DA3.3Pu	Z	L	L	L	PLD rewriting control (JTAG)
80	P06	NC	O	C	-	Z	-	-	-	NC
81	P05	NC	O	C	-	Z	-	-	-	NC
82	P04	NC	O	C	-	Z	-	-	-	NC
83	P03	SUB TCK	O	C	Pd	Z	L	L	L	PLD rewriting control (JTAG)
84	P02	NC	O	C	-	Z	-	-	-	NC
85	P01	NC	O	C	-	Z	-	-	-	NC
86	P00	DIR RST1	O	C	-	O/L	L	L	L	DIR control pin (LC89057W-VF4A)
87	P107/(AN7)	DSP1 RST	O	C	-	Z	L	L	L	DSP reset output pin (Reset:L)
88	P106/(AN6)	DSP2 RST	O	C	-	Z	L	L	L	DSP control pin
89	P105/(AN5)	DSP ROMRST	O	C	-	Z	L	L	L	Memory reset for DSP(Reset:L)
90	P104/(AN4)	DSP2 FLAG0	I	-	Pd	Z	-	-	-	DSP control pin
91	P103/(AN3)	DSP1 FLAG0	I	-	Pd	Z	-	-	-	DSP control pin
92	P102/(AN2)	DSP1 CS	O	C	DA3VPu	Z	L	L	L	DSP control pin
93	P101/(AN1)	DSP2 CS	O	C	DA3VPu	Z	L	L	L	DSP control pin
94	AVSS	AVSS	-	-	-	-	-	-	-	AD GND
95	P100/(AN0)	DSP RST3	O	C	-	Z	L	L	L	DSP control pin
96	VREF	VREF	-	-	-	-	-	-	-	AD standard +3.3V
97	AVCC	AVCC	-	-	-	-	-	-	-	AD +3.3V
98	P97/(SIN4)	FRONT RESET	O	C	-	Z	H	H	L	Reset for Front HDMI(Sil1292)
99	P96/(SOUT4)	DSP3 CS	O	C	DA3VPu	Z	L	L	L	DSP control pin
100	P95/(CLK4)	DSP3 FLAG0	I	-	Pd	Z	-	-	-	DSP control pin

MC14094BDTR2G (A.AUDIO/VIDEO : U3001, U3002, U3003, U3004)

PIN ASSIGNMENT



TRUTH TABLE

Clock	Output Enable	Strobe	Data	Parallel Outputs		Serial Outputs	
				Q1	Q_N	Q_S*	Q'_S
⎍	0	X	X	Z	Z	Q7	No Chg.
⎎	0	X	X	Z	Z	No Chg.	Q7
⎍	1	0	X	No Chg.	No Chg.	Q7	No Chg.
⎍	1	1	0	0	Q_N−1	Q7	No Chg.
⎍	1	1	1	1	Q_N−1	Q7	No Chg.
⎎	1	1	1	No Chg.	No Chg.	No Chg.	Q7

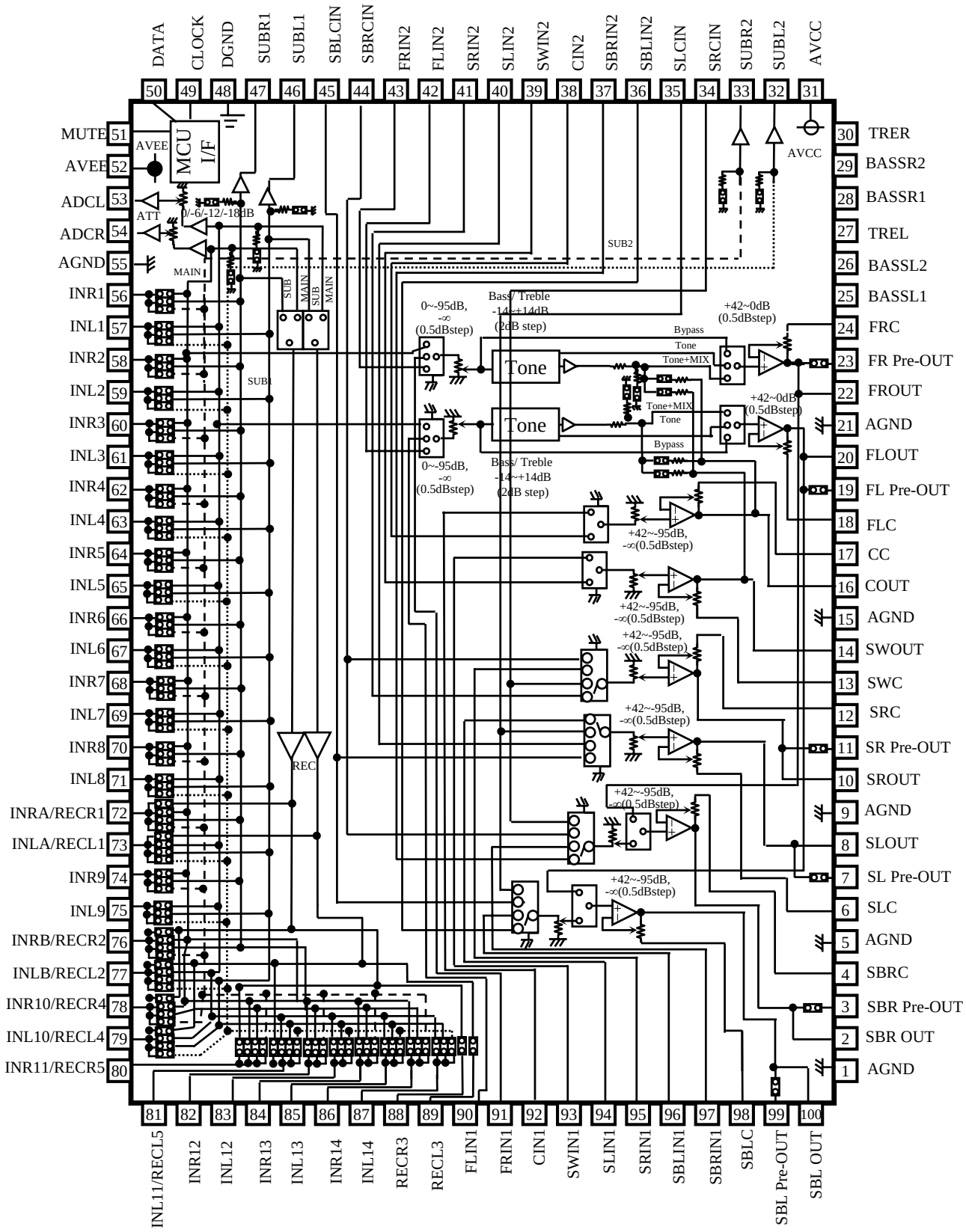
Z = High Impedance X = Don't Care

* At the positive clock edge, information in the 7th shift register stage is transferred to Q8 and Q_S.

MC14094BDTR2G Terminal Functions

Device	Pin Name	I/O	STBY	STOP	CEC STBY	Function
A/V:U3001	PRERL_FW	O	L	L	L	PRE OUT Mute control
	PRERL_FH	O	L	L	L	PRE OUT Mute control
	PRERL_SB	O	L	L	L	PRE OUT Mute control
	PRERL_SW2	O	L	L	L	PRE OUT Mute control
	PRERL_SW1	O	L	L	L	PRE OUT Mute control
	PRERL_C	O	L	L	L	PRE OUT Mute control
	PRERL_S	O	L	L	L	PRE OUT Mute control
	PRERL_F	O	L	L	L	PRE OUT Mute control
A/V:U3002	PRERL_Z2	O	L	L	L	Z2 PRE OUT Mute control
	PRERL_Z3	O	L	L	L	Z3 PRE OUT Mute control
	H/PRL	O	L	L	L	HEADPHONE Relay control
	TRIGGER OUT 2	O	L	L	L	TRIGGER OUT control
	BRL_HIGH	O	L	L	L	HIGH B Relay control
	NC	O	L	L	L	NC
	NC	O	L	L	L	NC
	TRIGGER OUT 1	O	L	L	L	TRIGGER OUT control
A/V:U3003	SPRL_SB_EX2	O	L	L	L	Speaker Relay control
	SPRL_SB_EX1	O	L	L	L	Speaker Relay control
	SPRL_SB	O	L	L	L	Speaker Relay control
	SPRL_S	O	L	L	L	Speaker Relay control
	SPRL_C	O	L	L	L	Speaker Relay control
	SPRL_F_EX2	O	L	L	L	Speaker Relay control
	SPRL_F_EX1	O	L	L	L	Speaker Relay control
	SPRL_F	O	L	L	L	Speaker Relay control
A/V:U3004	FANCONTON_1	O	L	L	L	FAN control
	FANCONTON_2	O	L	L	L	FAN control
	FANCONT L ON 1	O	L	L	L	FAN control
	FANCONT L ON 2	O	L	L	L	FAN control
	SPRL_H	O	L	L	L	Speaker Relay control
	SPRL_H EX1	O	L	L	L	Speaker Relay control
	NC	O	L	L	L	NC
	NC	O	L	L	L	NC

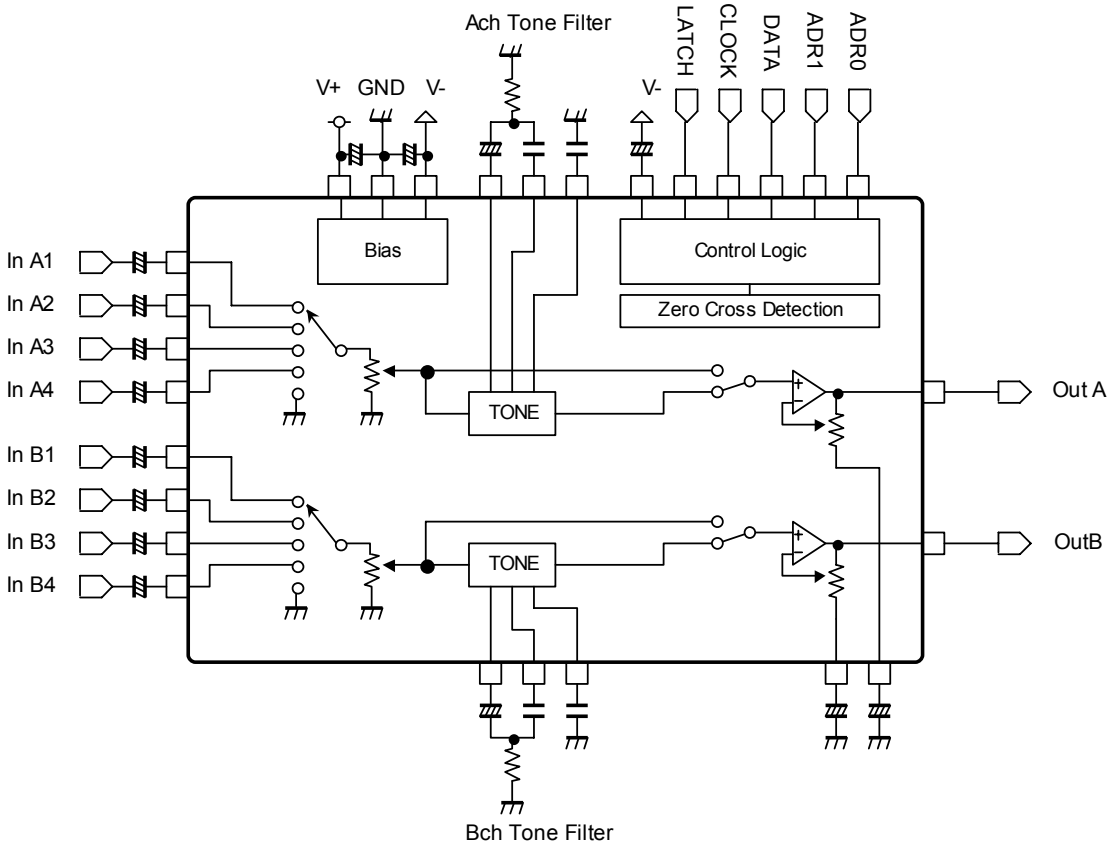
R2A15220FP (A.AUDIO/VIDEO : U3201, U3202)



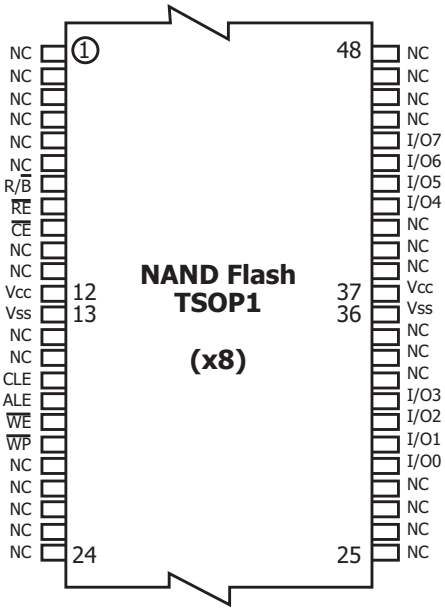
R2A15220FP Pin Function

PIN No.	Name	Function
22,20, 16,14, 10, 8, 2, 100	FROUT,FLOUT, COUT,SWOUT, SROUT, SLOUT, SBROUT,SBLOUT	Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel
23,19, 11, 7, 3, 99	FR Pre-out,FL Pre-out, SR Pre-out, SL Pre-out, SBR Pre-out,SBL Pre-out	Pre-output pin of FL/FR/SL/SR/SBL/SBR channel
24,18, 17,13, 12, 6, 4, 98	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
1,5,9,15, 21,55,98	AGND	Analog ground of internal circuit
27,30	TREL, TRER	Frequency characteristic setting pin of L/R channel tone control (Treble)
25,26, 28,29	BASSL1,BASSL2 BASSR1,BASSR2	Frequency characteristic setting pin of L/R channel tone control (Bass)
31	AVCC	Positive power supply to internal circuit
43,42, 41,40, 39,38, 37,36	FRIN2, FLIN2, SRN2,SLIN2, SWIN2,CIN2, SBRIN2,SBLIN2	Multi Input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
90,91, 92,93, 94,95, 96,97	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
57,59,61,63, 65,67,69,71, 75,83,85,87	INL1,INL2, INL3,INL4, INL5,INL6,INL7,INL8, INL9,INL12,INL13,INL14	Input pin of L/R channel (Input Selector)
56,58,60,62, 64,6668,70, 74,82,84,86	INR1,INR2, INR3,INR4, INR5,INR6,INR7,INR8, INR9,INR12,INR13,INR14	
51	MUTE	Outside Mute Control PIN
44,45 34,35	SBRCIN,SBLCIN SRCIN,SLCIN	3rd Multi Input pin for SBL/SBR/SL/SR channel Volume that is able to swap SBR/SBL with SR/SL
46,47 33,32	SUBL1,SUBR1 SUBL2,SUBR2	Output pin for L/R channel SUB1/SUB2 Output
53,54	ADCL, ADCR	Output pin for L/R channel ADC
88,89	RECR3,RECL3	Output pin for L/R channel REC Output
72,73, 76,77, 78,79 80,81	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

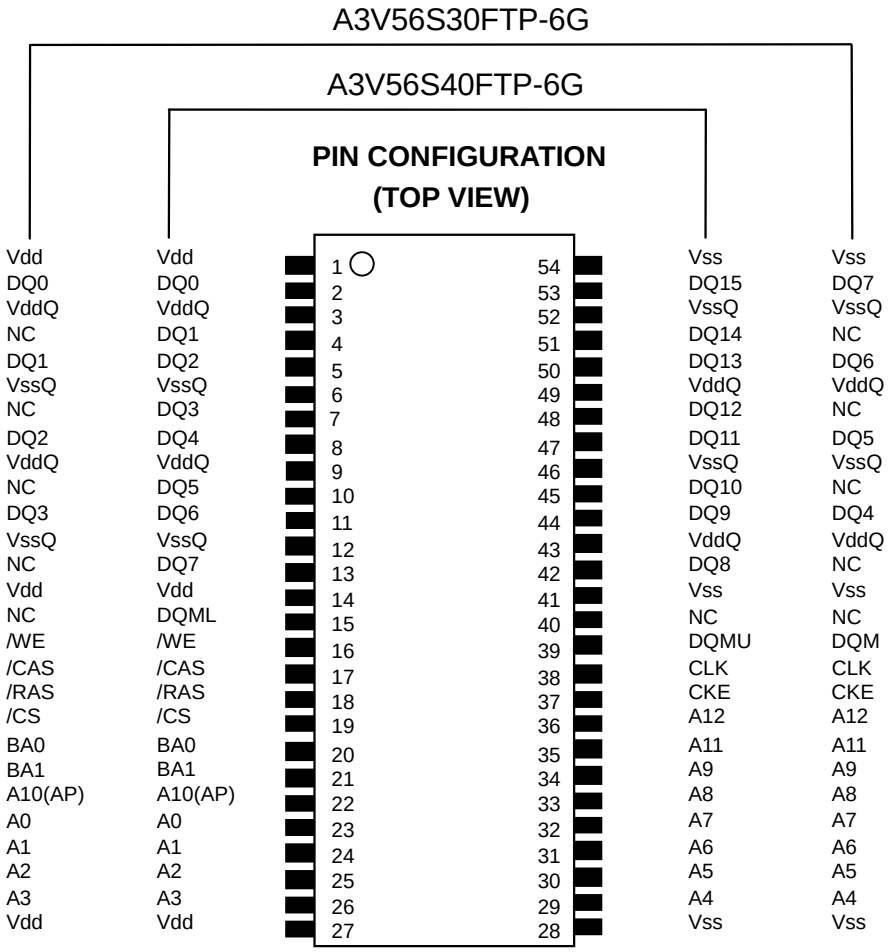
NJW1194A (A.AUDIO/VIDEO : U3203, U3204)



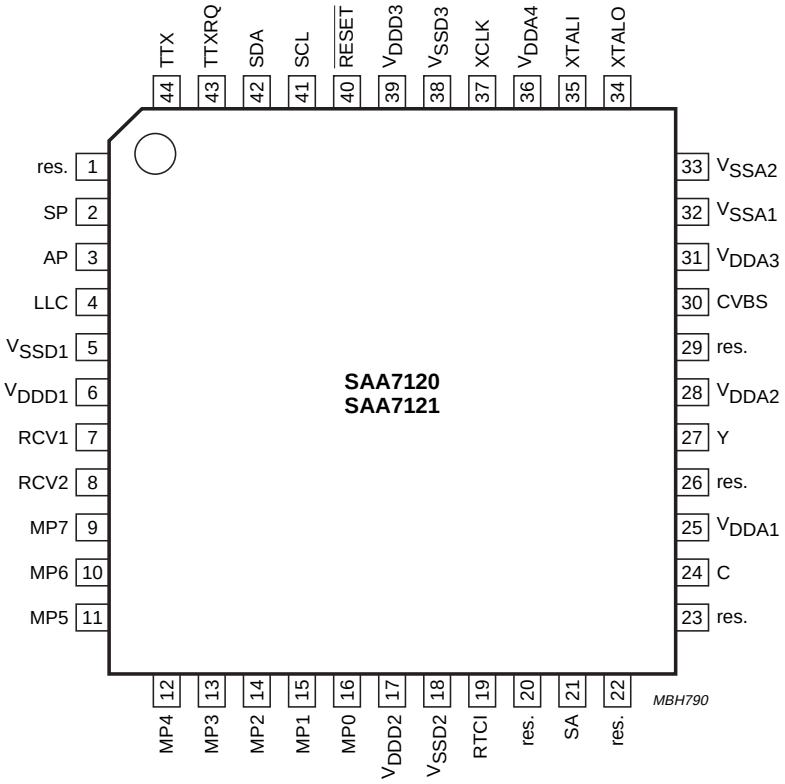
H27U1G8F2BTR-BC (NETWORK/DSP : U0504)



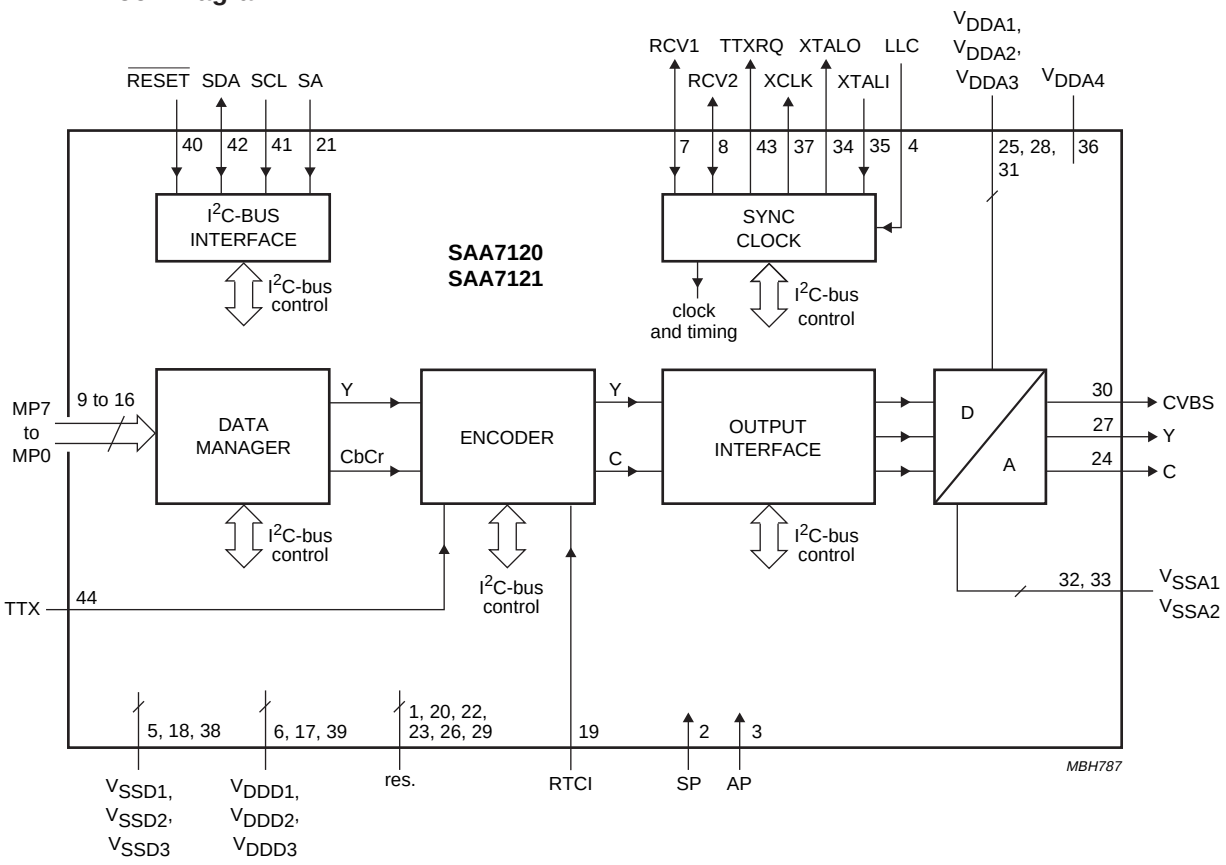
A3V56S30FTP-6G (NETWORK/DSP : U0505, U0506)
A3V56S40FTP-6G (NETWORK/DSP : U0102, U0202, U0302)



SAA7121 (NETWORK/DSP : U0607)



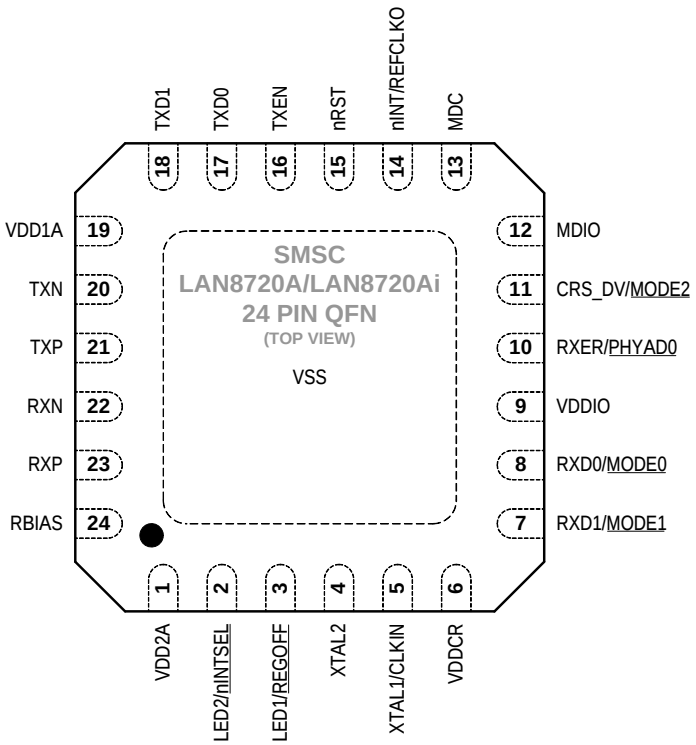
SAA7121 Block Diagram



SAA7121 Pin Description

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

LAN8720A (NETWORK/DSP : U0706)



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/nINTSEL	14	nINT/REFCLKO
3	LED1/REGOFF	15	nRST
4	XTAL2	16	TXEN
5	XTAL1/CLKIN	17	TXD0
6	VDDCR	18	TXD1
7	RXD1/MODE1	19	VDD1A
8	RXD0/MODE0	20	TXN
9	VDDIO	21	TXP
10	RXER/PHYAD0	22	RXN
11	CRS_DV/MODE2	23	RXP
12	MDIO	24	RBIAS

LAN8720A Block Diagram

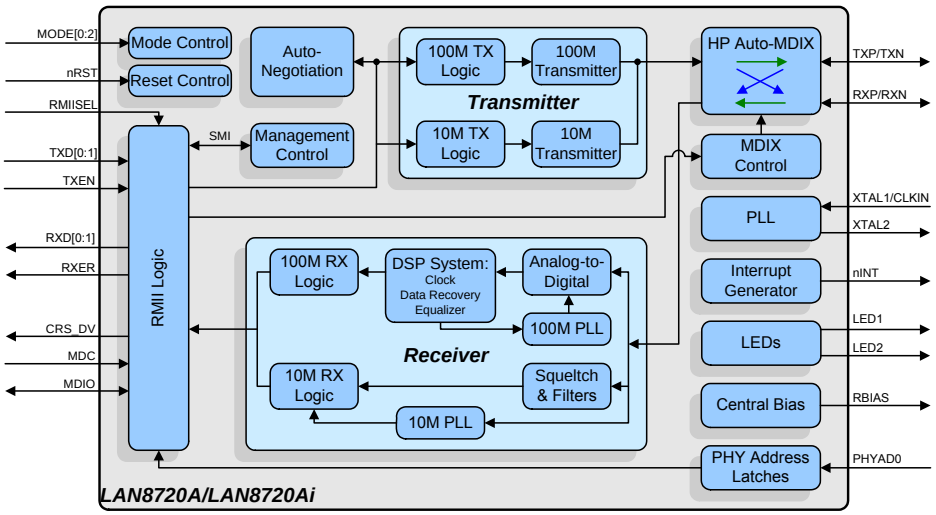
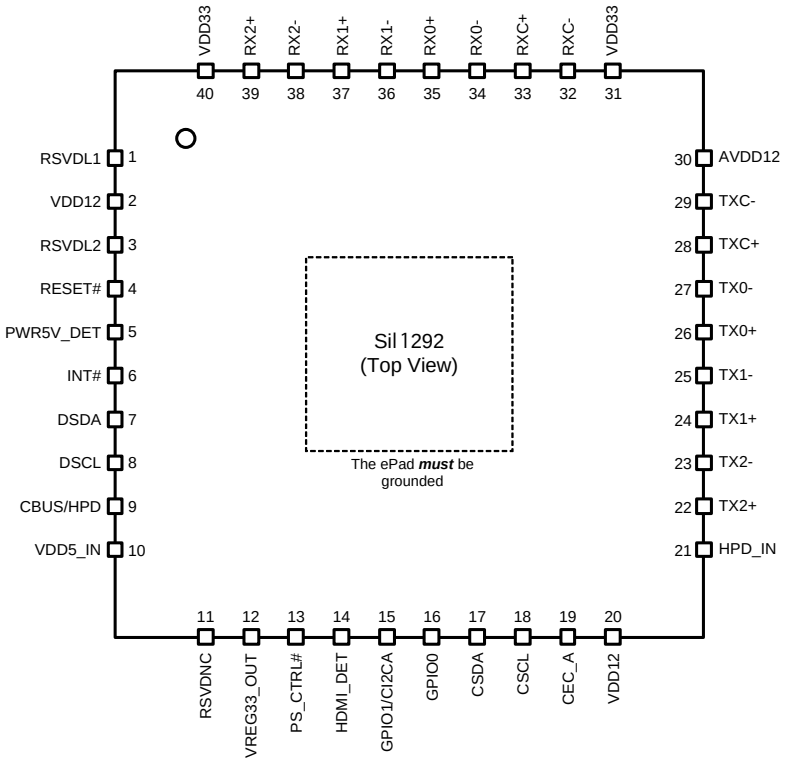
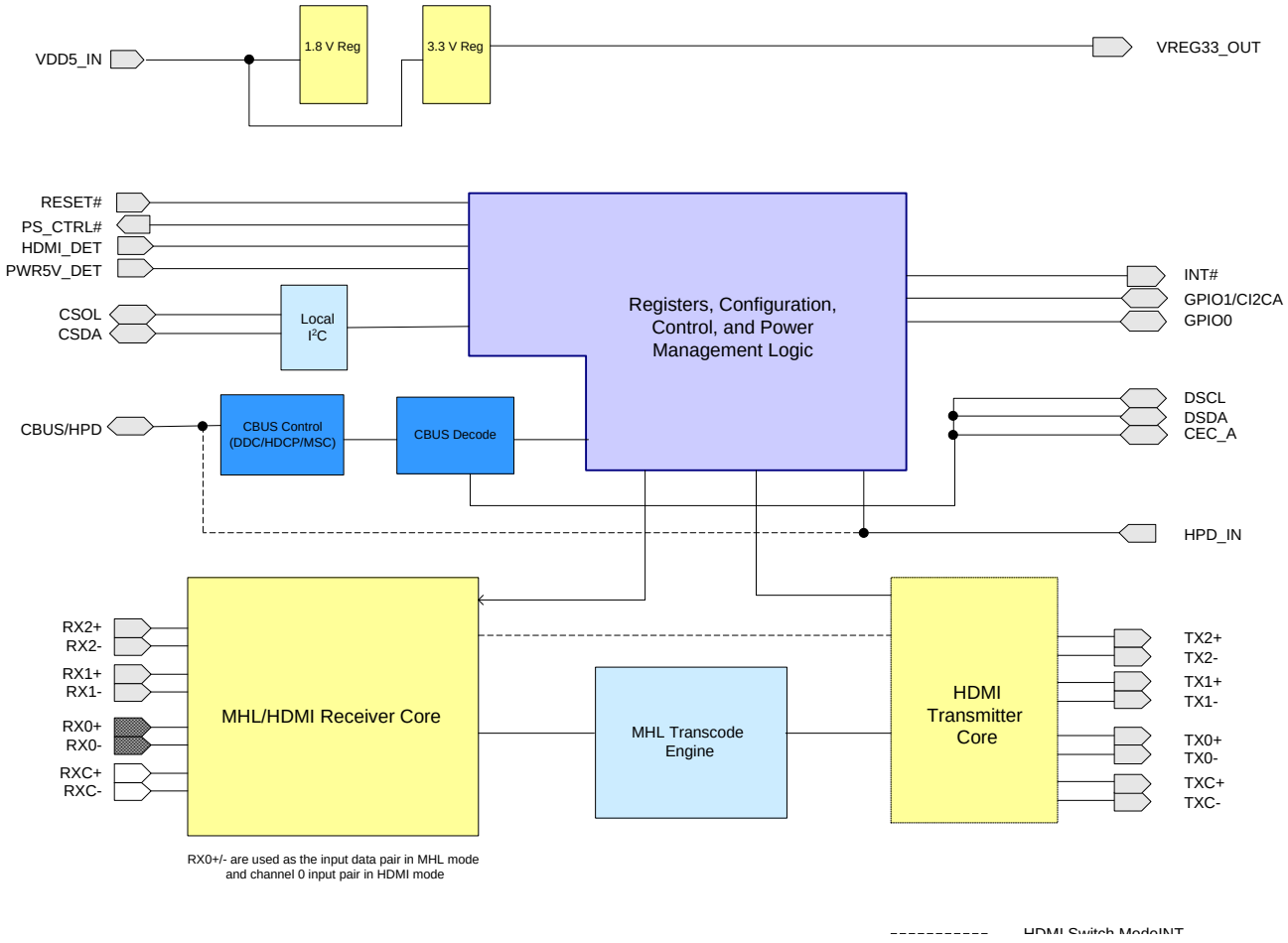


Figure 1.2 Architectural Overview

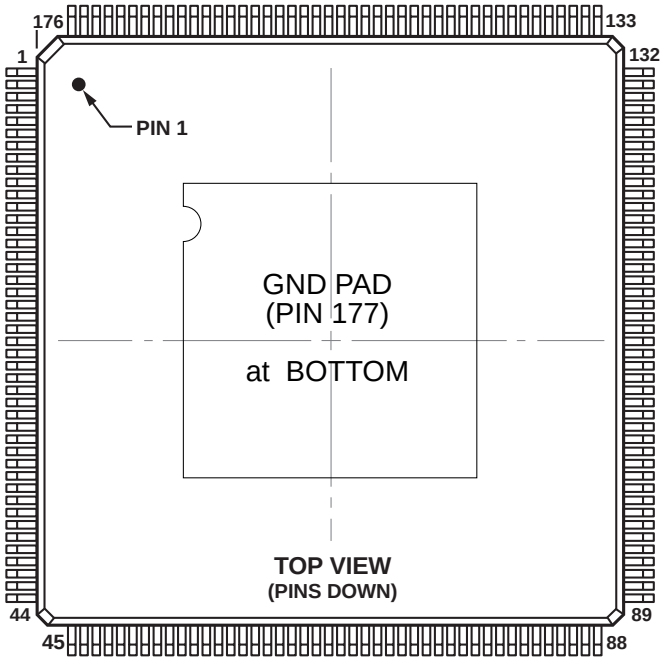
Sil1292CNUC (NETWORK/DSP : U0802)



Sil1292CNUC Block diagram



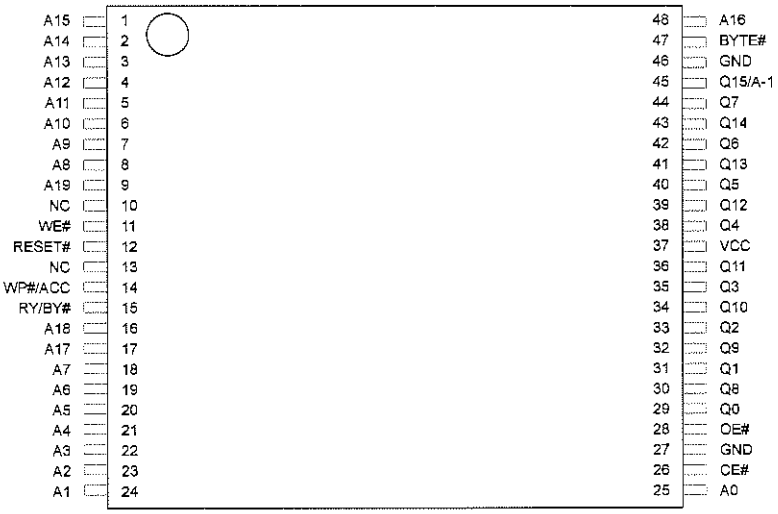
ADSP21487KSWZ4B (NETWORK/DSP : U0101, U0201, U0301)



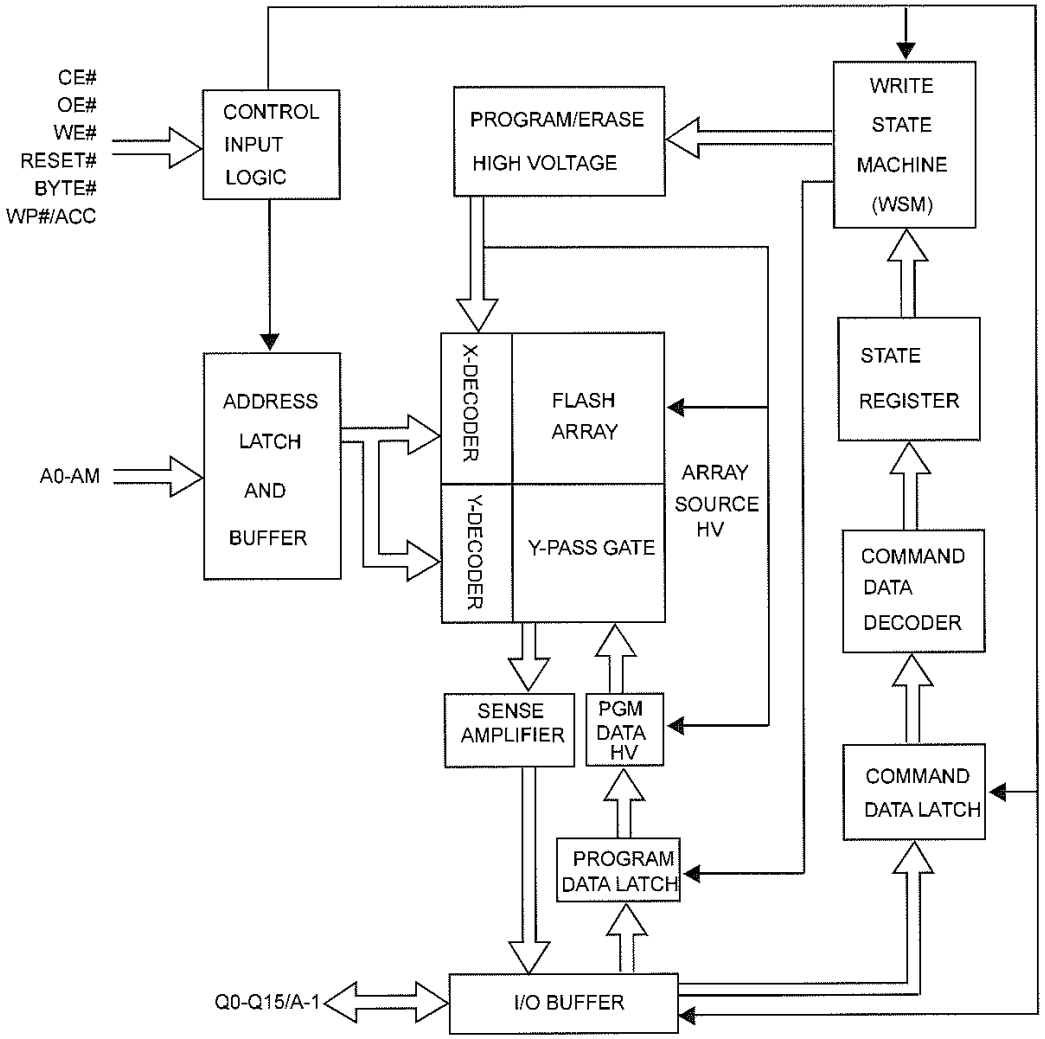
ADSP21487KSWZ4B Terminal Function

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	$\overline{TRST}$	144
ADDR5	13	V_{DD_EXT}	57	DAI_P15	101	NC	145
BOOT_CFG1	14	NC	58	V_{DD_INT}	102	$\overline{EMU}$	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	$\overline{WDTRSTO}$	70	V_{DD_INT}	114	TDI	158
SDA10	27	NC	71	$\overline{MS1}$	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
$\overline{RESETOUT}$/$\overline{RUNRSTIN}$	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	$\overline{RESET}$	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*

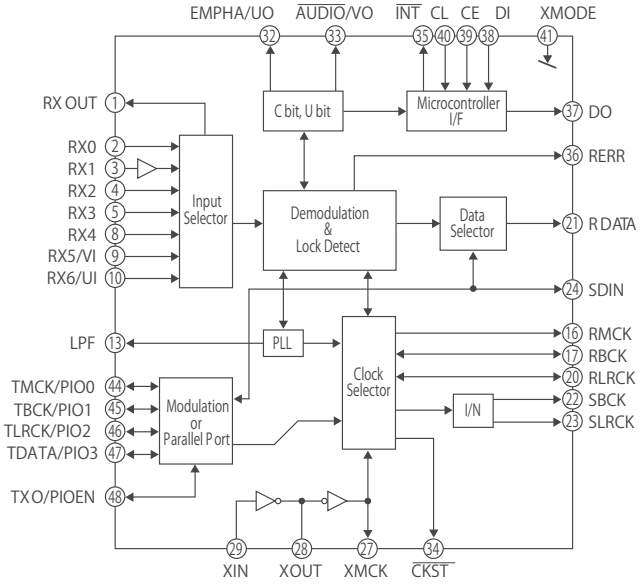
MX29LV160DBTI-70G (NETWORK/DSP : U0103, U0203, U0303)

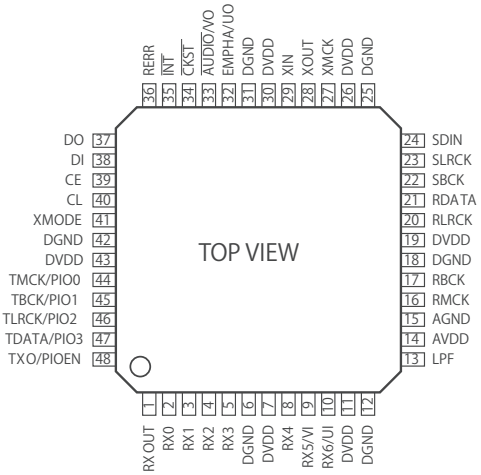


MX29LV160DBTI-70G Block Diagram



LC89057W-VF4A (DIGITAL : U0103, U0104)





LC89057W-VF4A Terminl Function

Pin No.	Pin Name	I/O	Function
1	RXOUT	O	Input bi-phase select data output terminal
2	RX0	I	TTL compatible digital data input terminal
3	RX1	I	Coaxial compatible amp built-in digital data input terminal
4	RX2	I	TTL compatible digital data input terminal
5	RX3	I	TTL compatible digital data input terminal
6	DGND	-	Digital GND
7	DVDD	-	Digital power
8	RX4	I	TTL compatible digital data input terminal
9	RX5/VI	I	TTL compatible digital data/Validity flag input terminal for modulation
10	RX6/UI	I	TTL compatible digital data/User data input terminal for modulation
11	DVDD	-	Digital power for PLL
12	DGND	-	Digital GND for PLL
13	LPF	O	PLL loop filter connecting terminal
14	AVDD	-	Analog power for PLL
15	AGND	-	Analog GND for PLL
16	RMCK	O	RMCK clock output terminal (256fs, 512fs, XIN, VCO)
17	RBCK	O/I	RBCK clock in/output terminal (64fs)
18	DGND	-	Digital GND
19	DVDD	-	Digital power
20	RLRCK	O/I	RLRCK clock in/output terminal (fs)
21	RD ATA	O	Serial audio data output terminal
22	SBCK	O	SBCK clock output terminal (32fs, 64fs, 128fs)
23	SLRCK	O	SLRCK clock output terminal (fs/2, fs, 2fs)
24	SDIN	I	Serial audio data input terminal
25	DGND	-	Digital GND
26	DVDD	-	Digital power
27	XMCK	O	Osc. amp output terminal

Pin No.	Pin Name	I/O	Function
28	XOUT	O	X tal osc. connecting output terminal
29	XIN	I	X tal osc. connection, external clock input terminal (24.576MHz or 12.288MHz)
30	DVDD	-	Digital power
31	DGND	-	Digital GND
32	EMPHA/UO	I/O	Emphasis information/U-data output/Chip address setting terminal
33	AUDIO/VO	I/O	Non-PCM detect/V-flag output/Chip address setting terminal
34	CKST	I/O	Clocwitch transition period output/Demodulation master or slave function switching terminal
35	INT	I/O	Interrupt output for µcom (Interrupt factor selectable)/Modulation or general I/O switching terminal
36	RERR	O	PLL lock error, data error flag output
37	DO	O	µcom I/F, read out data output terminal (3-state)
38	DI	I	µcom I/F, write data input terminal
39	CE	I	µcom I/F, chip enable input terminal
40	CL	I	µcom I/F, clock input terminal
41	XMODE	I	System reset input terminal
42	DGND	-	Digital GND
43	DVDD	-	Digital power
44	TMCK/PIO0	I/O	256fs system clock input for modulation/General I/O in/output terminal
45	TBCK/PIO1	I/O	64fs bit clock input for modulation/General I/O in/output terminal
46	TLRCK/PIO2	I/O	fs clock input for modulation/General I/O in/output terminal
47	TDATA/PIO3	I/O	Serial audio data input for modulation/General I/O in/output terminal
48	TXO/PIOEN	O/I	Modulation data output/ General I/O enable input terminal

* For latch-up countermeasure, perform each power supply ON/OFF in the same timing.

PCM5100PWR (DIGITAL : U0106)

PCM510X (top view)

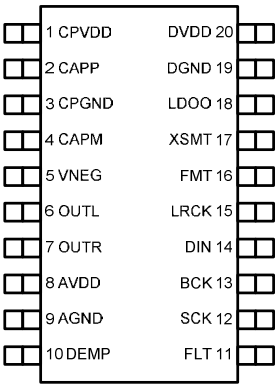


Table 2. TERMINAL FUNCTIONS, PCM510x

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^2S (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

PCM5100PWR Block Diagram

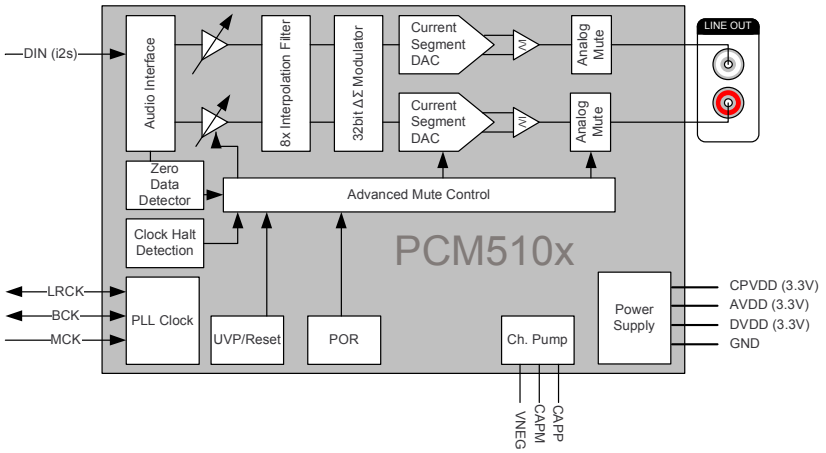
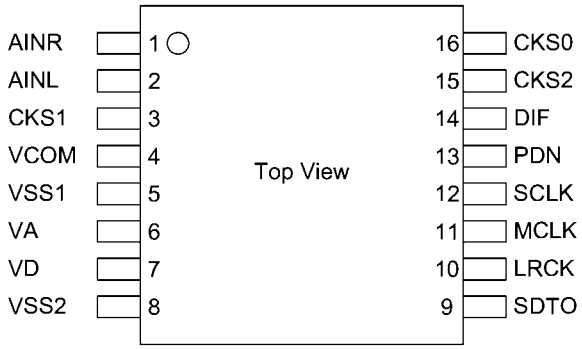


Figure 1. PCM510x Functional Block Diagram

AK5358BET (DIGITAL : U0141)



AK5358BET Pin Function

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

PCM1795 (DIGITAL : U0403, U0404, U0405, U0406, U0407, U0408, U0409)

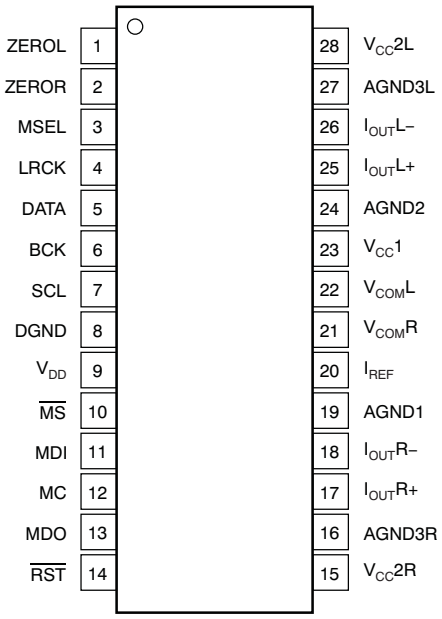


Table 1. TERMINAL FUNCTIONS

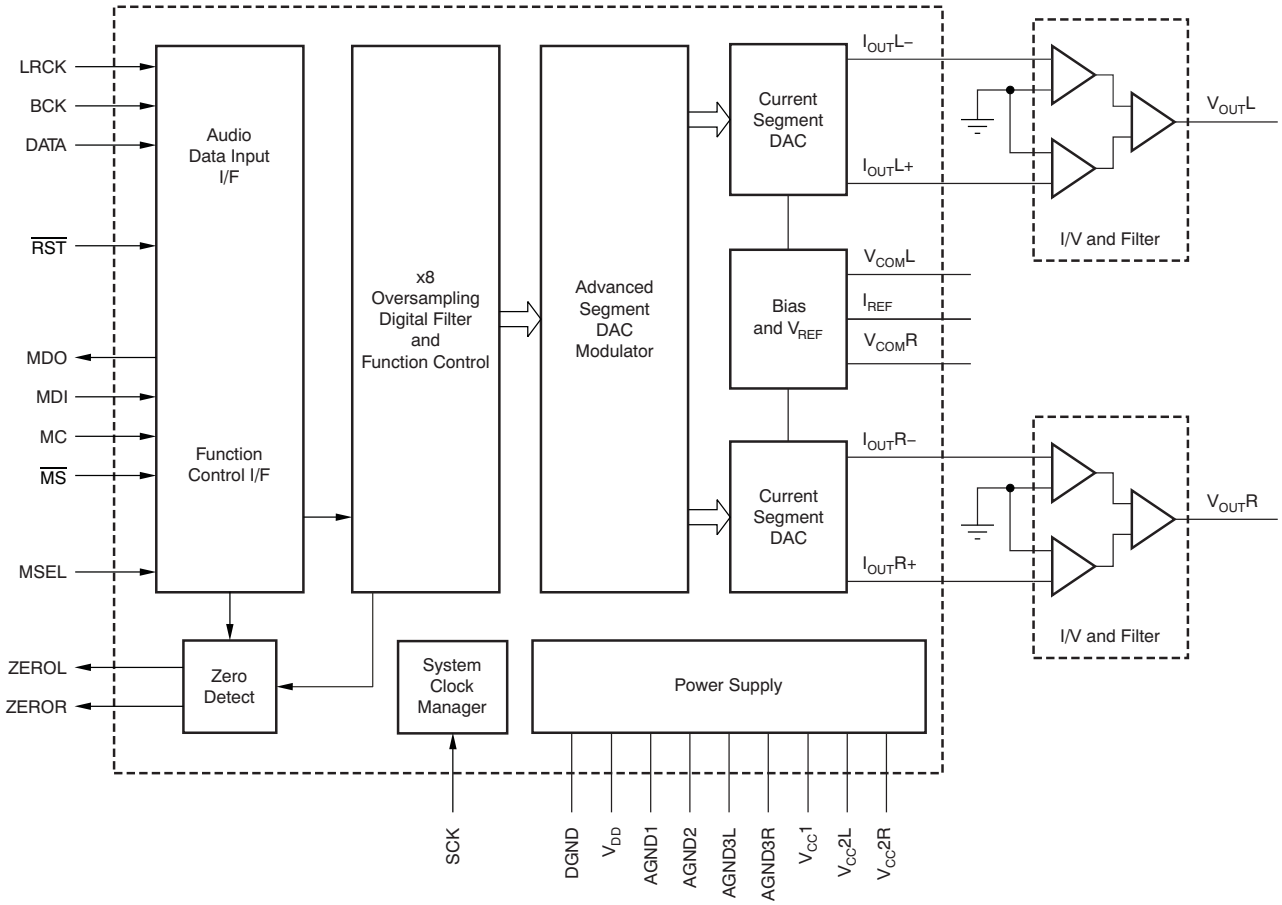
TERMINAL		I/O	DESCRIPTION
NAME	NO.		
AGND1	19	—	Analog ground (internal bias)
AGND2	24	—	Analog ground (internal bias)
AGND3L	27	—	Analog ground (left channel DACFF)
AGND3R	16	—	Analog ground (right channel DACFF)
BCK	6	I	Bit clock input(1)
DATA	5	I	Serial audio data input(2)
DGND	8	—	Digital ground
$I_{OUT}L+$	25	O	Left channel analog current output+
$I_{OUT}L-$	26	O	Left channel analog current output–
$I_{OUT}R+$	17	O	Right channel analog current output+
$I_{OUT}R-$	18	O	Right channel analog current output–
I_{REF}	20	—	Output current reference bias pin
LRCK	4	I	Left and right clock (f_S) input(2)
MC	12	I	Mode control clock input(2)
MDI	11	I	Mode control data input(2)
MDO	13	I/O	Mode control readback data output(3)
$\overline{MS}$	10	I/OI	Mode control chip-select input(4); active low
MSEL	3	I	$I^2C/\overline{SPI}$ select(2); active low SPI select
$\overline{RST}$	14	I	Reset(2); active low

(1) Schmitt-trigger input, 5-V tolerant.
(2) Schmitt-trigger input, 5-V tolerant.
(3) Schmitt-trigger input and output. 5-V tolerant input. In I^2C mode, this pin becomes an open-drain 3-state output; otherwise, this pin is a CMOS output.
(4) Schmitt-trigger input and output. 5-V tolerant input and CMOS output.

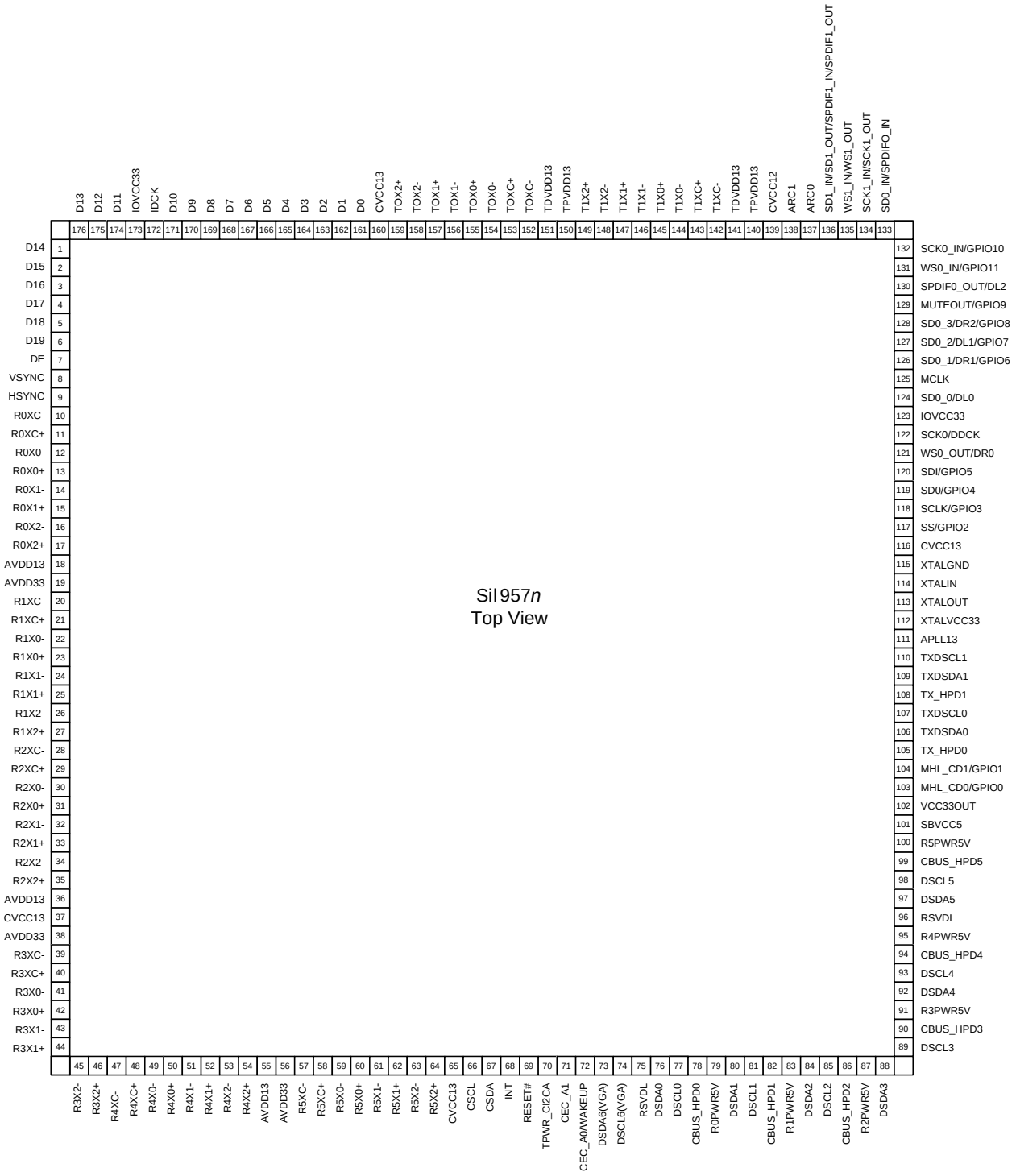
Table 1. TERMINAL FUNCTIONS (continued)

TERMINAL		I/O	DESCRIPTION
NAME	NO.		
SCK	7	I	System clock input(2)
$V_{CC}1$	23	—	Analog power supply, 5 V
$V_{CC}2L$	28	—	Analog power supply (left channel DACFF), 5 V
$V_{CC}2R$	15	—	Analog power supply (right channel DACFF), 5 V
$V_{COM}L$	22	—	Left channel internal bias decoupling pin
$V_{COM}R$	21	—	Right channel internal bias decoupling pin
V_{DD}	9	—	Digital power supply, 3.3 V
ZEROL	1	I/O	Zero flag for left channel(4)
ZEROR	2	I/O	Zero flag for right channel(4)

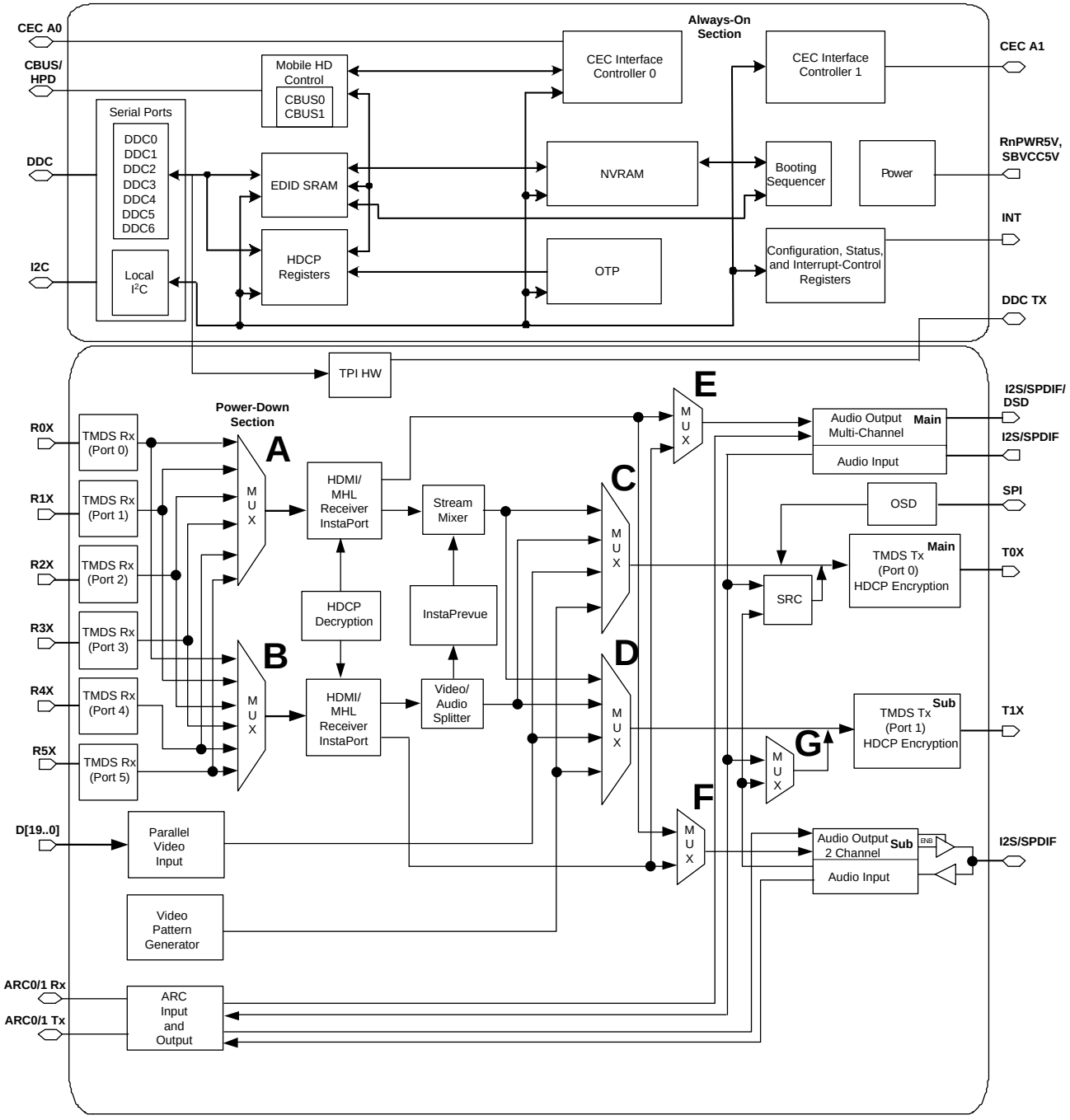
PCM1795 Block Diagram



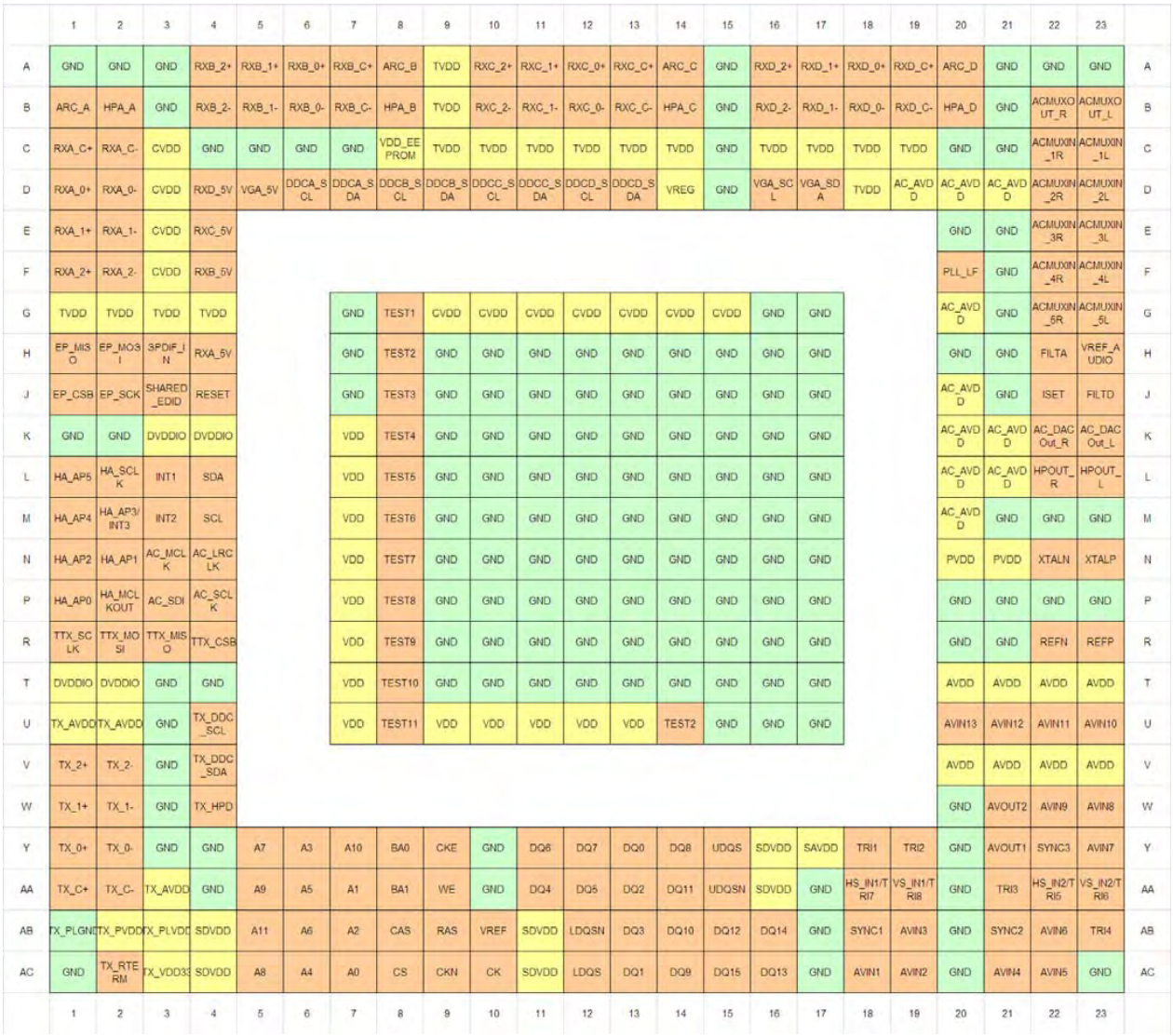
Sil9575CTUC (DIGITAL : U1001)



Sil9575CTUC Block diagram



ADV7850KBCZ-5 (DIGITAL : U1102)



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
A	GND	GND	GND	RXB_2+	RXB_1+	RXB_0+	RXB_C+	ARC_B	TVDD	RXC_2+	RXC_1+	RXC_0+	RXC_C+	ARC_C	GND	RXD_2+	RXD_1+	RXD_0+	RXD_C+	ARC_D	GND	GND	GND	A
B	ARC_A	HPA_A	GND	RXB_2-	RXB_1-	RXB_0-	RXB_C-	HPA_B	TVDD	RXC_2-	RXC_1-	RXC_0-	RXC_C-	HPA_C	GND	RXD_2-	RXD_1-	RXD_0-	RXD_C-	HPA_D	GND	ACMUXOUT_R	ACMUXOUT_L	B
C	RXA_C+	RXA_C-	CVDD	GND	GND	GND	GND	VDD_EEPROM	TVDD	TVDD	TVDD	TVDD	TVDD	TVDD	GND	TVDD	TVDD	TVDD	TVDD	GND	GND	ACMUXIN_1R	ACMUXIN_1L	C
D	RXA_0+	RXA_0-	CVDD	RXD_5V	VGA_5V	DDCA_SCL	DDCA_SDA	DDCB_SCL	DDCB_SDA	DDCC_SCL	DDCC_SDA	DDCD_SCL	DDCD_SDA	VREG	GND	VGA_SCL	VGA_SDA	TVDD	AC_AVDD	AC_AVDD	AC_AVDD	ACMUXIN_2R	ACMUXIN_2L	D
E	RXA_1+	RXA_1-	CVDD	RXC_5V																GND	GND	ACMUXIN_3R	ACMUXIN_3L	E
F	RXA_2+	RXA_2-	CVDD	RXB_5V																PLL_LF	GND	ACMUXIN_4R	ACMUXIN_4L	F
G	TVDD	TVDD	TVDD	TVDD			GND	TEST1	CVDD	CVDD	CVDD	CVDD	CVDD	CVDD	CVDD	GND	GND			AC_AVDD	GND	ACMUXIN_5R	ACMUXIN_5L	G
H	EP_MISO	EP_MOSI	SPDIF_IN	RXA_5V			GND	TEST2	GND	GND	GND	GND	GND	GND	GND	GND	GND			GND	GND	FILTA	VREF_AUDIO	H
J	EP_CSB	EP_SCK	SHARED_EDID	RESET			GND	TEST3	GND	GND	GND	GND	GND	GND	GND	GND	GND			AC_AVDD	GND	ISET	FILTD	J
K	GND	GND	DVDDIO	DVDDIO			VDD	TEST4	GND	GND	GND	GND	GND	GND	GND	GND	GND			AC_AVDD	AC_AVDD	AC_DACOut_R	AC_DACOut_L	K
L	HA_AP5	HA_SCLK	INT1	SDA			VDD	TEST5	GND	GND	GND	GND	GND	GND	GND	GND	GND			AC_AVDD	AC_AVDD	HPOUT_R	HPOUT_L	L
M	HA_AP4	HA_AP3/INT3	INT2	SCL			VDD	TEST6	GND	GND	GND	GND	GND	GND	GND	GND	GND			AC_AVDD	GND	GND	GND	M
N	HA_AP2	HA_AP1	AC_MCLK	AC_LRCLK			VDD	TEST7	GND	GND	GND	GND	GND	GND	GND	GND	GND			PVDD	PVDD	XTALN	XTALP	N
P	HA_AP0	HA_MCLKOUT	AC_SDI	AC_SCLK			VDD	TEST8	GND	GND	GND	GND	GND	GND	GND	GND	GND			GND	GND	GND	GND	P
R	TTX_SCLK	TTX_MOSI	TTX_MISO	TTX_CSB			VDD	TEST9	GND	GND	GND	GND	GND	GND	GND	GND	GND			GND	GND	REFN	REFP	R
T	DVDDIO	DVDDIO	GND	GND			VDD	TEST10	GND	GND	GND	GND	GND	GND	GND	GND	GND			AVDD	AVDD	AVDD	AVDD	T
U	TX_AVDD	TX_AVDD	GND	TX_DDC_SCL			VDD	TEST11	VDD	VDD	VDD	VDD	VDD	TEST2	GND	GND	GND			AVIN13	AVIN12	AVIN11	AVIN10	U
V	TX_2+	TX_2-	GND	TX_DDC_SDA																AVDD	AVDD	AVDD	AVDD	V
W	TX_1+	TX_1-	GND	TX_HPD																GND	AVOUT2	AVIN9	AVIN8	W
Y	TX_0+	TX_0-	GND	GND	A7	A3	A10	BA0	CKE	GND	DQ6	DQ7	DQ0	DQ8	UDQS	SDVDD	SAVDD	TRI1	TRI2	GND	AVOUT1	SYNC3	AVIN7	Y
AA	TX_C+	TX_C-	TX_AVDD	GND	A9	A5	A1	BA1	WE	GND	DQ4	DQ5	DQ2	DQ11	UDQSN	SDVDD	GND	HS_IN1/TRI7	VS_IN1/TRI8	GND	TRI3	HS_IN2/TRI5	VS_IN2/TRI6	AA
AB	TX_PLGND	TX_PVDD	TX_PLVDD	SDVDD	A11	A6	A2	CAS	RAS	VREF	SDVDD	LDQSN	DQ3	DQ10	DQ12	DQ14	GND	SYNC1	AVIN3	GND	SYNC2	AVIN6	TRI4	AB
AC	GND	TX_RTERM	TX_VDD33	SDVDD	A8	A4	A0	CS	CKN	CK	SDVDD	LDQS	DQ1	DQ9	DQ15	DQ13	GND	AVIN1	AVIN2	GND	AVIN4	AVIN5	GND	AC
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	

Pin No.	Mnemonic	Description
A1	GD	Ground
A2	GND	Ground
A3	GND	Ground
A4	RXB_2+	Digital Input Channel 2 true of Port B in the HDMI interface.
A5	RXB_1+	Digital Input Channel 1 true of Port B in the HDMI interface.
A6	RXB_0+	Digital Input Channel 0 true of Port B in the HDMI interface.
A7	RXB_C+	Digital input clock true of Port B in the HDMI interface.
A8	ARC_B	Single ended Audio Return Channel of Port B in the HDMI interface.
A9	TVDD	HDMI termination supply (3.3V)
A10	RXC_2+	Digital Input Channel 2 true of Port C in the HDMI interface.
A11	RXC_1+	Digital Input Channel 1 true of Port C in the HDMI interface.
A12	RXC_0+	Digital Input Channel 0 true of Port C in the HDMI interface.
A13	RXC_C+	Digital input clock true of Port C in the HDMI interface.
A14	ARC_C	Single ended Audio Return Channel of Port C in the HDMI interface.
A15	GND	Ground
A16	RXD_2+	Digital Input Channel 2 true of Port D in the HDMI interface.
A17	RXD_1+	Digital Input Channel 1 true of Port D in the HDMI interface.
A18	RXD_0+	Digital Input Channel 0 true of Port D in the HDMI interface.
A19	RXD_C+	Digital input clock true of Port D in the HDMI interface.
A20	ARC_D	Single ended Audio Return Channel of Port D in the HDMI interface.
A21	GND	Ground
A22	GND	Ground
A23	GND	Ground
B1	ARC_A	Single ended Audio Return Channel of Port A in the HDMI interface.
B2	HPA_A	Hot Plug Assert for Port A.
B3	GND	Ground
B4	RXB_2-	Digital Input Channel 2 complement of Port B in the HDMI interface.
B5	RXB_1-	Digital Input Channel 1 complement of Port B in the HDMI interface.
B6	RXB_0-	Digital Input Channel 0 complement of Port B in the HDMI interface.
B7	RXB_C-	Digital input clock complement of Port B in the HDMI interface.
B8	HPA_B	Hot Plug Assert for Port B.
B9	TVDD	HDMI termination supply (3.3V)
B10	RXC_2-	Digital Input Channel 2 complement of Port C in the HDMI interface.
B11	RXC_1-	Digital Input Channel 1 complement of Port C in the HDMI interface.
B12	RXC_0-	Digital Input Channel 0 complement of Port C in the HDMI interface.
B13	RXC_C-	Digital input clock complement of Port C in the HDMI interface.
B14	HPA_C	Hot Plug Assert for Port C.
B15	GND	Ground
B16	RXD_2-	Digital Input Channel 2 complement of Port D in the HDMI interface.
B17	RXD_1-	Digital Input Channel 1 complement of Port D in the HDMI interface.
B18	RXD_0-	Digital Input Channel 0 complement of Port D in the HDMI interface.
B19	RXD_C-	Digital input clock complement of Port D in the HDMI interface.
B20	HPA_D	Hot Plug Assert for Port D.
B21	GND	Ground
B22	ACMUXOUT_R	Audio Codec Mux Output Right Channel
B23	ACMUXOUT_L	Audio Codec Mux Output Left Channel
C1	RXA_C+	Digital input clock true of Port A in the HDMI interface.
C2	RXA_C-	Digital input clock complement of Port A in the HDMI interface.
C3	CVDD	HDMI comparator supply (1.8V)
C4	GND	Ground
C5	GND	Ground
C6	GND	Ground
C7	GND	Ground
C8	VDD_EEPROM	External EDID EEPROM power supply
C9	TVDD	HDMI termination supply (3.3V)
C10	TVDD	HDMI termination supply (3.3V)
C11	TVDD	HDMI termination supply (3.3V)
C12	TVDD	HDMI termination supply (3.3V)
C13	TVDD	HDMI termination supply (3.3V)
C14	TVDD	HDMI termination supply (3.3V)
C15	GND	Ground
C16	TVDD	HDMI termination supply (3.3V)

Pin No.	Mnemonic	Description
C17	TVDD	HDMI termination supply (3.3V)
C18	TVDD	HDMI termination supply (3.3V)
C19	TVDD	HDMI termination supply (3.3V)
C20	GND	Ground
C21	GND	Ground
C22	ACMUXIN_1R	Audio Codec Mux Input 1 Right Channel
C23	ACMUXIN_1L	Audio Codec Mux Input 1 Left Channel
D1	RXA_0+	Digital Input Channel 0 true of Port A in the HDMI interface.
D2	RXA_0-	Digital Input Channel 0 complement of Port A in the HDMI interface.
D3	CVDD	HDMI comparator supply (1.8V)
D4	RXD_5V	5V detect pin for Port D in the HDMI interface.
D5	VGA_5V	5V detect inout for VGA connector
D6	DDCA_SCL	Serial clock for DDC bus of Port A. DDCA_SCL is 5 V tolerant.
D7	DDCA_SDA	Serial data for DDC bus of Port A. DDCA_SDA is 5 V tolerant.
D8	DDCB_SCL	Serial clock port for DDC bus of Port B. DDCB_SCL is 5 V tolerant.
D9	DDCB_SDA	Serial data port for DDC bus of Port B. DDCB_SDA is 5 V tolerant.
D10	DDCC_SCL	Serial clock port for DDC bus of Port C. DDCC_SCL is 5 V tolerant.
D11	DDCC_SDA	Serial data port for DDC bus of Port C. DDCC_SDA is 5 V tolerant.
D12	DDCD_SCL	Serial clock port for DDC bus of Port D. DDCD_SCL is 5 V tolerant.
D13	DDCD_SDA	Serial data port for DDC bus of Port D. DDCD_SDA is 5 V tolerant.
D14	VREG	Voltage regulator output. Must be decoupled to GND via 1uF capacitor.
D15	GND	Ground
D16	VGA_SCL	Serial clock for VGA interface. VGA_SCL is 5V tolerant.
D17	VGA_SDA	Serial data for VGA interface. VGA_SDA is 5V tolerant.
D18	TVDD	HDMI termination supply (3.3V)
D19	AC_AVDD	Audio block supply (3.3V)
D20	AC_AVDD	Audio block supply (3.3V)
D21	AC_AVDD	Audio block supply (3.3V)
D22	ACMUXIN_2R	Audio Codec Mux Input 2 Right Channel
D23	ACMUXIN_2L	Audio Codec Mux Input 2 Left Channel
E1	RXA_1+	Digital Input Channel 1 true of Port A in the HDMI interface.
E2	RXA_1-	Digital Input Channel 1 complement of Port A in the HDMI interface.
E3	CVDD	HDMI comparator supply (1.8V)
E4	RXC_5V	5V detect pin for Port C in the HDMI interface.
E20	GND	Ground
E21	GND	Ground
E22	ACMUXIN_3R	Audio Codec Mux Input 3 Right Channel
E23	ACMUXIN_3L	Audio Codec Mux Input 3 Left Channel
F1	RXA_2+	Digital Input Channel 2 true of Port A in the HDMI interface.
F2	RXA_2-	Digital Input Channel 2 complement of Port A in the HDMI interface.
F3	CVDD	HDMI comparator supply (1.8V)
F4	RXB_5V	5V detect pin for Port B in the HDMI interface.
F20	PLL_LF	Loop Filter ball for Audio Codec PLL
F21	GND	Ground
F22	ACMUXIN_4R	Audio Codec Mux Input 4 Right Channel
F23	ACMUXIN_4L	Audio Codec Mux Input 4 Left Channel
G1	TVDD	HDMI termination supply (3.3V)
G2	TVDD	HDMI termination supply (3.3V)
G3	TVDD	HDMI termination supply (3.3V)
G4	TVDD	HDMI termination supply (3.3V)
G7	GND	Ground
G8	TEST1	Test pin, do not connect
G9	CVDD	HDMI comparator supply (1.8V)
G10	CVDD	HDMI comparator supply (1.8V)
G11	CVDD	HDMI comparator supply (1.8V)
G12	CVDD	HDMI comparator supply (1.8V)
G13	CVDD	HDMI comparator supply (1.8V)
G14	CVDD	HDMI comparator supply (1.8V)
G15	CVDD	HDMI comparator supply (1.8V)
G16	GND	Ground
G17	GND	Ground
G20	AC_AVDD	Audio block supply (3.3V)
G21	GND	Ground
G22	ACMUXIN_5R	Audio Codec Mux Input 5 Right Channel

Pin No.	Mnemonic	Description
G23	ACMUXIN_5L	Audio Codec Mux Input 5 Left Channel
H1	EP_MISO	External EDID EEPROM interface
H2	EP_MOSI	External EDID EEPROM interface
H3	SPDIF_IN	S/PDIF digital audio input for Audio Return Channel (ARC).
H4	RXA_5V	5V detect pin for Port A in the HDMI interface.
H7	GND	Ground
H8	GND	Ground
H9	GND	Ground
H10	GND	Ground
H11	GND	Ground
H12	GND	Ground
H13	GND	Ground
H14	GND	Ground
H15	GND	Ground
H16	GND	Ground
H17	GND	Ground
H20	GND	Ground
H21	GND	Ground
H22	FILTA	Audio Codec ADC filter capacitor
H23	VREF_AUDIO	Audio Codec block reference voltage capacitor
J1	EP_CSB	External EDID EEPROM interface
J2	EP_SCK	External EDID EEPROM interface
J3	SHARED_EDID	EDID selection signal for HDMI Port D
J4	RESET	Chip Reset. Active low. Minimum low time guarantee reset is 5 ms.
J7	GND	Ground
J8	GND	Ground
J9	GND	Ground
J10	GND	Ground
J11	GND	Ground
J12	GND	Ground
J13	GND	Ground
J14	GND	Ground
J15	GND	Ground
J16	GND	Ground
J17	GND	Ground
J20	AC_AVDD	Audio block supply (3.3V)
J21	GND	Ground
J22	ISET	Audio Codec ADC current settings
J23	FILTD	Audio Codec DAC filter capacitor
K1	GND	Ground
K2	GND	Ground
K3	DVDDIO	I/O supply (3.3V)
K4	DVDDIO	I/O supply (3.3V)
K7	VDD	Video Digital supply (1.8V)
K8	GND	Ground
K9	GND	Ground
K10	GND	Ground
K11	GND	Ground
K12	GND	Ground
K13	GND	Ground
K14	GND	Ground
K15	GND	Ground
K16	GND	Ground
K17	GND	Ground
K20	AC_AVDD	Audio block supply (3.3V)
K21	AC_AVDD	Audio block supply (3.3V)
K22	AC_DACOut_R	Audio Codec DAC output right channel
K23	AC_DACOut_L	Audio Codec DAC output left channel
L1	HA_AP5	HDMI Audio port output
L2	HA_SCLK	HDMI Audio port serial clock output.
L3	INT1	External Interrupt 1.
L4	SDA	I2C port serial data input/output pin.
L7	VDD	Video Digital supply (1.8V)
L8	GND	Ground

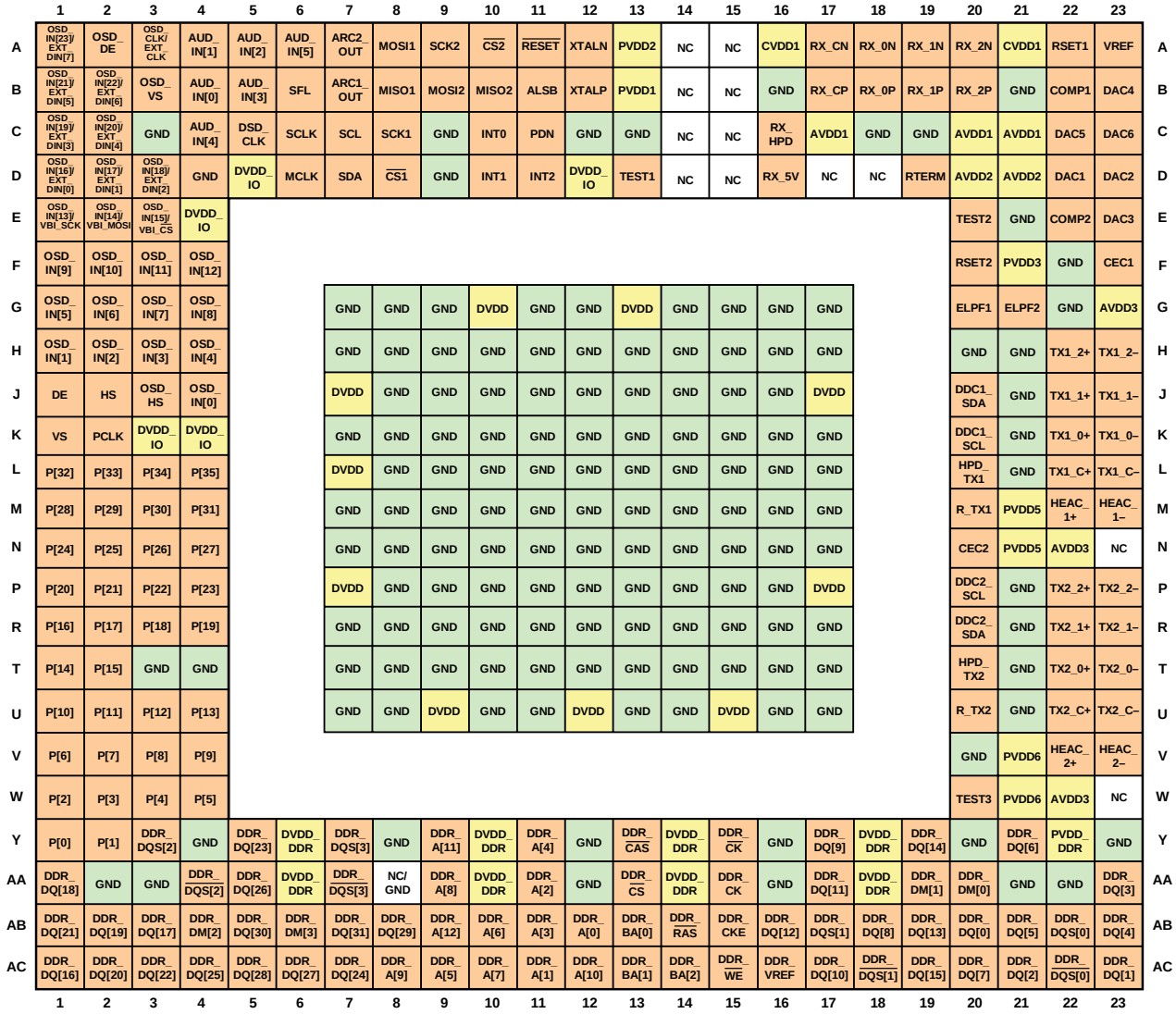
Pin No.	Mnemonic	Description
L9	GND	Ground
L10	GND	Ground
L11	GND	Ground
L12	GND	Ground
L13	GND	Ground
L14	GND	Ground
L15	GND	Ground
L16	GND	Ground
L17	GND	Ground
L20	AC_AVDD	Audio block supply (3.3V)
L21	AC_AVDD	Audio block supply (3.3V)
L22	HPOUT_R	Headphone output right channel
L23	HPOUT_L	Headphone output left channel
M1	HA_AP4	HDMI Audio port output
M2	HA_AP3/INT3	HDMI Audio port output or External Interrupt pin 3. This pin can be configured as a TTL output interrupt pin for the VDP SPI interface.
M3	INT2	External Interrupt 2.
M4	SCL	I2C port serial clock input.
M7	VDD	Video Digital supply (1.8V)
M8	GND	Ground
M9	GND	Ground
M10	GND	Ground
M11	GND	Ground
M12	GND	Ground
M13	GND	Ground
M14	GND	Ground
M15	GND	Ground
M16	GND	Ground
M17	GND	Ground
M20	AC_AVDD	Audio block supply (3.3V)
M21	GND	Ground
M22	GND	Ground
M23	GND	Ground
N1	HA_AP2	HDMI Audio port output
N2	HA_AP1	HDMI Audio port output
N3	AC_MCLK	Audio Codec/DAC clock input
N4	AC_LRCLK	Audio DAC Left/Right clock input
N7	VDD	Video Digital supply (1.8V)
N8	GND	Ground
N9	GND	Ground
N10	GND	Ground
N11	GND	Ground
N12	GND	Ground
N13	GND	Ground
N14	GND	Ground
N15	GND	Ground
N16	GND	Ground
N17	GND	Ground
N20	PVDD	DPLL supply (1.8V)
N21	PVDD	DPLL supply (1.8V)
N22	XTALN	Xtal output
N23	XTALP	Xtal input or external clock input
P1	HA_AP0	HDMI Audio port output
P2	HA_MCLKOUT	HDMI Audio master clock output
P3	AC_SDI	Audio DAC data input
P4	AC_SCLK	Audio DAC SCLK input
P7	VDD	Video Digital supply (1.8V)
P8	GND	Ground
P9	GND	Ground
P10	GND	Ground
P11	GND	Ground
P12	GND	Ground
P13	GND	Ground
P14	GND	Ground

Pin No.	Mnemonic	Description
P15	GND	Ground
P16	GND	Ground
P17	GND	Ground
P20	GND	Ground
P21	GND	Ground
P22	GND	Ground
P23	GND	Ground
R1	TTX_SCLK	VBI data interface
R2	TTX_MOSI	VBI data interface
R3	TTX_MISO	VBI data interface
R4	TTX_CSB	VBI data interface
R7	VDD	Video Digital supply (1.8V)
R8	GND	Ground
R9	GND	Ground
R10	GND	Ground
R11	GND	Ground
R12	GND	Ground
R13	GND	Ground
R14	GND	Ground
R15	GND	Ground
R16	GND	Ground
R17	GND	Ground
R20	GND	Ground
R21	GND	Ground
R22	REFN	Analog video reference output
R23	REFP	Analog video reference output
T1	DVDDIO	I/O supply (3.3V)
T2	DVDDIO	I/O supply (3.3V)
T3	GND	Ground
T4	GND	Ground
T7	VDD	Video Digital supply (1.8V)
T8	GND	Ground
T9	GND	Ground
T10	GND	Ground
T11	GND	Ground
T12	GND	Ground
T13	GND	Ground
T14	GND	Ground
T15	GND	Ground
T16	GND	Ground
T17	GND	Ground
T20	AVDD	Video Analog supply voltage (1.8V)
T21	AVDD	Video Analog supply voltage (1.8V)
T22	AVDD	Video Analog supply voltage (1.8V)
T23	AVDD	Video Analog supply voltage (1.8V)
U1	TX_AVDD	HDMI Tx Analog Supply (1.8V)
U2	TX_AVDD	HDMI Tx Analog Supply (1.8V)
U3	GND	Ground
U4	TX_DDC_SCL	Serial clock for DDC bus of HDMI Tx. TX_DDCA_SCL is 5 V tolerant.
U7	VDD	Video Digital supply (1.8V)
U8	VDD	Video Digital supply (1.8V)
U9	VDD	Video Digital supply (1.8V)
U10	VDD	Video Digital supply (1.8V)
U11	VDD	Video Digital supply (1.8V)
U12	VDD	Video Digital supply (1.8V)
U13	VDD	Video Digital supply (1.8V)
U14	TEST2	Test pin, do not connect
U15	GND	Ground
U16	GND	Ground
U17	GND	Ground
U20	AVIN13	Analog video mux input channel
U21	AVIN12	Analog video mux input channel
U22	AVIN11	Analog video mux input channel
U23	AVIN10	Analog video mux input channel

Pin No.	Mnemonic	Description
V1	TX_2+	Digital Output Channel 2 true of the HDMI Tx.
V2	TX_2-	Digital Output Channel 2 complement of the HDMI Tx.
V3	GND	Ground
V4	TX_DDC_SDA	Serial data for DDC bus of HDMI Tx. TX_DDCA_SDA is 5 V tolerant.
V20	AVDD	Video Analog supply voltage (1.8V)
V21	AVDD	Video Analog supply voltage (1.8V)
V22	AVDD	Video Analog supply voltage (1.8V)
V23	AVDD	Video Analog supply voltage (1.8V)
W1	TX_1+	Digital Output Channel 1 true of the HDMI Tx.
W2	TX_1-	Digital Output Channel 1 complement of the HDMI Tx.
W3	GND	Ground
W4	TX_HPD	Hot Plug Detect signal of the HDMI Tx.
W20	GND	Ground
W21	AVOUT2	Analog Video Mux output 2
W22	AVIN9	Analog video mux input channel
W23	AVIN8	Analog video mux input channel
Y1	TX_0+	Digital Output Channel 0 true of the HDMI Tx.
Y2	TX_0-	Digital Output Channel 0 complement of the HDMI Tx.
Y3	GND	Ground
Y4	GND	Ground
Y5	A7	SDRAM address line
Y6	A3	SDRAM address line
Y7	A10	SDRAM address line
Y8	BA0	SDRAM block address signal
Y9	CKE	SDRAM clock enable
Y10	GND	Ground
Y11	DQ6	SDRAM data line
Y12	DQ7	SDRAM data line
Y13	DQ0	SDRAM data line
Y14	DQ8	SDRAM data line
Y15	UDQS	SDRAM upper data strobe true signal
Y16	SDVDD	Memory interface supply
Y17	SAVDD	SDRAM interface supply
Y18	TRI1	Digital input capable of slicing bi-level or tri-level input from SCART or D-Connector.
Y19	TRI2	Digital input capable of slicing bi-level or tri-level input from SCART or D-Connector.
Y20	GND	Ground
Y21	AVOUT1	Analog Video Mux output 1
Y22	SYNC3	This is a synchronization on green or luma input (SOG/SOY) used in embedded synchronization mode.
Y23	AVIN7	Analog video mux input channel
AA1	TX_C+	Digital Output clock true of the HDMI Tx.
AA2	TX_C-	Digital Output clock complement of the HDMI Tx.
AA3	TX_AVDD	HDMI Tx Analog Supply (1.8V)
AA4	GND	Ground
AA5	A9	SDRAM address line
AA6	A5	SDRAM address line
AA7	A1	SDRAM address line
AA8	BA1	SDRAM block address signal
AA9	WE	SDRAM write enable signal
AA10	GND	Ground
AA11	DQ4	SDRAM data line
AA12	DQ5	SDRAM data line
AA13	DQ2	SDRAM data line
AA14	DQ11	SDRAM data line
AA15	UDQSN	SDRAM upper data strobe compliment signal
AA16	SDVDD	Memory interface supply
AA17	GND	Ground
AA18	HS_IN1/TRI7	HS on Graphics Port. The HS input signal is used for 5-wire timing mode. This ball can also be used as a trilevel/bilevel input on the SCART or D-terminal connector.
AA19	VS_IN1/TRI8	VS on Graphics Port. The VS input signal is used for 5-wire timing mode. This ball can also be used as a trilevel/bilevel input on the SCART or D-terminal connector.
AA20	GND	Ground
AA21	TRI3	Digital input capable of slicing bi-level or tri-level input from SCART or D-Connector.
AA22	HS_IN2/TRI5	The HS input signal is used for 5-wire timing mode. This ball can also be used as a

Pin No.	Mnemonic	Description
		trilevel/bilevel input on the SCART or D-terminal connector.
AA23	VS_IN2/TRI6	The VS input signal is used for 5-wire timing mode. This ball can also be used as a trilevel/bilevel input on the SCART or D-terminal connector.
AB1	GND	Ground
AB2	TX_PVDD	HDMI Tx digital supply (1.8V)
AB3	TX_PLVDD	HDMI Tx PLL digital supply (1.8V). It is important to ensure that this supply pin has a clean voltage input.
AB4	SDVDD	Memory interface supply
AB5	A11	SDRAM address line
AB6	A6	SDRAM address line
AB7	A2	SDRAM address line
AB8	CAS	SDRAM interface Column Address Select Command Signal. One of four command signals to the external SDRAM.
AB9	RAS	SDRAM interface Row Address Select Command Signal. One of four command signals to the external SDRAM.
AB10	VREF	Termination reference voltage for memory interface
AB11	SDVDD	Memory interface supply
AB12	LDQSN	SDRAM lower data strobe compliment signal
AB13	DQ3	SDRAM data line
AB14	DQ10	SDRAM data line
AB15	DQ12	SDRAM data line
AB16	DQ14	SDRAM data line
AB17	GND	Ground
AB18	SYNC1	This is a synchronization on green or luma input (SOG/SOY) used in embedded synchronization mode.
AB19	AVIN3	Analog video mux input channel
AB20	GND	Ground
AB21	SYNC2	This is a synchronization on green or luma input (SOG/SOY) used in embedded synchronization mode.
AB22	AVIN6	Analog video mux input channel
AB23	TRI4	Digital input capable of slicing bi-level or tri-level input from SCART or D-Connector.
AC1	GND	Ground
AC2	TX_RTERM	This signal sets the internal termination resistance. A 500R resistor between this ball and GND should be used.
AC3	TX_VDD33	HDMI Tx PLL Regulator Supply input (3.3V). This pin is an internal voltage regulator input.
AC4	SDVDD	Memory interface supply
AC5	A8	SDRAM address line
AC6	A4	SDRAM address line
AC7	A0	SDRAM address line
AC8	CS	SDRAM interface Chip Select. SDRAM CS Enables and disables the command decoder on the RAM. One of four command signals to the external SDRAM.
AC9	CKN	SDRAM interface Differential Clock Compliment Output. All address and control output signals to the RAM should be sampled on the positive edge of CK and on the negative edge of CKN.
AC10	CK	SDRAM interface Differential Clock Right Output. All address and control output signals to the RAM should be sampled on the positive edge of CK and on the negative edge of CKN.
AC11	SDVDD	Memory interface supply
AC12	LDQS	SDRAM lower data strobe true signal
AC13	DQ1	SDRAM data line
AC14	DQ9	SDRAM data line
AC15	DQ15	SDRAM data line
AC16	DQ13	SDRAM data line
AC17	GND	Ground
AC18	AVIN1	Analog video mux input channel
AC19	AVIN2	Analog video mux input channel
AC20	GND	Ground
AC21	AVIN4	Analog video mux input channel
AC22	AVIN5	Analog video mux input channel
AC23	GND	Ground

ADV8003-1 (DIGITAL : U1401)



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
A	OSD_IN[23]/EXT_DIN[7]	OSD_DE	OSD_CLK/EXT_CLK	AUD_IN[1]	AUD_IN[2]	AUD_IN[5]	ARC2_OUT	MOSI1	SCK2	$\overline{CS2}$	$\overline{RESET}$	XTALN	PVDD2	NC	NC	CVDD1	RX_CN	RX_0N	RX_1N	RX_2N	CVDD1	RSET1	VREF	A
B	OSD_IN[21]/EXT_DIN[5]	OSD_IN[22]/EXT_DIN[6]	OSD_VS	AUD_IN[0]	AUD_IN[3]	SFL	ARC1_OUT	MISO1	MOSI2	MISO2	ALSB	XTALP	PVDD1	NC	NC	GND	RX_CP	RX_0P	RX_1P	RX_2P	GND	COMP1	DAC4	B
C	OSD_IN[19]/EXT_DIN[3]	OSD_IN[20]/EXT_DIN[4]	GND	AUD_IN[4]	DSD_CLK	SCLK	SCL	SCK1	GND	INT0	PDN	GND	GND	NC	NC	RX_HPD	AVDD1	GND	GND	AVDD1	AVDD1	DAC5	DAC6	C
D	OSD_IN[16]/EXT_DIN[0]	OSD_IN[17]/EXT_DIN[1]	OSD_IN[18]/EXT_DIN[2]	GND	DVDD_IO	MCLK	SDA	$\overline{CS1}$	GND	INT1	INT2	DVDD_IO	TEST1	NC	NC	RX_5V	NC	NC	RTERM	AVDD2	AVDD2	DAC1	DAC2	D
E	OSD_IN[13]/VBI_SCK	OSD_IN[14]/VBI_MOSI	OSD_IN[15]/VBI_CS	DVDD_IO																TEST2	GND	COMP2	DAC3	E
F	OSD_IN[9]	OSD_IN[10]	OSD_IN[11]	OSD_IN[12]																RSET2	PVDD3	GND	CEC1	F
G	OSD_IN[5]	OSD_IN[6]	OSD_IN[7]	OSD_IN[8]				GND	GND	GND	DVDD	GND	GND	DVDD	GND	GND	GND	GND	GND	ELPF1	ELPF2	GND	AVDD3	G
H	OSD_IN[1]	OSD_IN[2]	OSD_IN[3]	OSD_IN[4]				GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	TX1_2+	TX1_2–	H
J	DE	HS	OSD_HS	OSD_IN[0]				DVDD	GND	GND	GND	GND	GND	GND	GND	GND	DVDD	GND	GND	DDC1_SDA	GND	TX1_1+	TX1_1–	J
K	VS	PCLK	DVDD_IO	DVDD_IO				GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	DDC1_SCL	GND	TX1_0+	TX1_0–	K
L	P[32]	P[33]	P[34]	P[35]				DVDD	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	HPD_TX1	GND	TX1_C+	TX1_C–	L
M	P[28]	P[29]	P[30]	P[31]				GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	R_TX1	PVDD5	HEAC_1+	HEAC_1–	M
N	P[24]	P[25]	P[26]	P[27]				GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	CEC2	PVDD5	AVDD3	NC	N
P	P[20]	P[21]	P[22]	P[23]				DVDD	GND	GND	GND	GND	GND	GND	GND	GND	DVDD	GND	GND	DDC2_SCL	GND	TX2_2+	TX2_2–	P
R	P[16]	P[17]	P[18]	P[19]				GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	DDC2_SDA	GND	TX2_1+	TX2_1–	R
T	P[14]	P[15]	GND	GND				GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	HPD_TX2	GND	TX2_0+	TX2_0–	T
U	P[10]	P[11]	P[12]	P[13]				GND	GND	DVDD	GND	GND	DVDD	GND	GND	DVDD	GND	GND	GND	R_TX2	GND	TX2_C+	TX2_C–	U
V	P[6]	P[7]	P[8]	P[9]																GND	PVDD6	HEAC_2+	HEAC_2–	V
W	P[2]	P[3]	P[4]	P[5]																TEST3	PVDD6	AVDD3	NC	W
Y	P[0]	P[1]	DDR_DQS[2]	GND	DDR_DQ[23]	DVDD_DDR	DDR_DQS[3]	GND	DDR_A[11]	DVDD_DDR	DDR_A[4]	GND	DDR_$\overline{CAS}$	DVDD_DDR	DDR_$\overline{CK}$	GND	DDR_DQ[9]	DVDD_DDR	DDR_DQ[14]	GND	DDR_DQ[6]	PVDD_DDR	GND	Y
AA	DDR_DQ[18]	GND	GND	DDR_$\overline{DQS[2]}$	DDR_DQ[26]	DVDD_DDR	DDR_$\overline{DQS[3]}$	NC/GND	DDR_A[8]	DVDD_DDR	DDR_A[2]	GND	DDR_$\overline{CS}$	DVDD_DDR	DDR_CK	GND	DDR_DQ[11]	DVDD_DDR	DDR_DM[1]	DDR_DM[0]	GND	GND	DDR_DQ[3]	AA
AB	DDR_DQ[21]	DDR_DQ[19]	DDR_DQ[17]	DDR_DM[2]	DDR_DQ[30]	DDR_DM[3]	DDR_DQ[31]	DDR_DQ[29]	DDR_A[12]	DDR_A[6]	DDR_A[3]	DDR_A[0]	DDR_BA[0]	DDR_$\overline{RAS}$	DDR_CKE	DDR_DQ[12]	DDR_DQS[1]	DDR_DQ[8]	DDR_DQ[13]	DDR_DQ[0]	DDR_DQ[5]	DDR_DQS[0]	DDR_DQ[4]	AB
AC	DDR_DQ[16]	DDR_DQ[20]	DDR_DQ[22]	DDR_DQ[25]	DDR_DQ[28]	DDR_DQ[27]	DDR_DQ[24]	DDR_A[9]	DDR_A[5]	DDR_A[7]	DDR_A[1]	DDR_A[10]	DDR_BA[1]	DDR_BA[2]	DDR_$\overline{WE}$	DDR_VREF	DDR_DQ[10]	DDR_$\overline{DQS[1]}$	DDR_DQ[15]	DDR_DQ[7]	DDR_DQ[2]	DDR_$\overline{DQS[0]}$	DDR_DQ[1]	AC
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	

Pin No.	Mnemonic	Type	Description
A1	OSD_IN[23]/EXT_DIN[7]	OSD video input/ miscellaneous digital	External OSD Video Pixel Input Port (OSD_IN[23])/Additional TTL Input for External CCIR 656 Video Data (EXT_DIN[7]).
A2	OSD_DE	OSD video sync	Data Enable for the OSD Input Port.
A3	OSD_CLK/EXT_CLK	OSD video sync	Pixel Clock for the OSD Input Port (OSD_CLK)/Pixel Clock for External Video Data (EXT_CLK).
A4	AUD_IN[1]	Audio input	I^2S0/DSD1 Audio Input.
A5	AUD_IN[2]	Audio input	I^2S1/DSD2 Audio Input.
A6	AUD_IN[5]	Audio input	LRCLK/DSD5 Audio Input.
A7	ARC2_OUT	Audio output	Audio Return Channel for HDMI Tx2.
A8	MOSI1	Serial port control	Master Out Slave In (Serial Port 1). Serial Port 1 is used for OSD control.
A9	SCK2	Serial port control	Serial Clock (Serial Port 2). Serial Port 2 is used for the external flash ROM.
A10	$\overline{CS2}$	Serial port control	Chip Select (Serial Port 2). Serial Port 2 is used for the external flash ROM.
A11	$\overline{RESET}$	Miscellaneous digital	Reset Pin for the ADV8003.
A12	XTALN	Miscellaneous digital	Crystal Input.
A13	PVDD2	Power	PLL Digital Supply Voltage (1.8 V).
A14	NC	No connect	Do not connect to this pin.
A15	NC	No connect	Do not connect to this pin.
A16	CVDD1	Power	Comparator Supply Voltage (1.8 V).
A17	RX_CN	Rx input	Rx Clock Complement Input.
A18	RX_0N	Rx input	Rx Channel 0 Complement Input.
A19	RX_1N	Rx input	Rx Channel 1 Complement Input.
A20	RX_2N	Rx input	Rx Channel 2 Complement Input.
A21	CVDD1	Power	Comparator Supply Voltage (1.8 V).
A22	RSET1	Miscellaneous analog[1]	Resistor Current Setting for Encoder DACs: DAC1, DAC2, and DAC3. The RSET resistor should be placed as close as possible to the ADV8003.
A23	VREF	Miscellaneous analog[1]	Optional External Voltage Reference Input for DACs or Voltage Reference Output. Place VREF voltage components as close as possible to the ADV8003.
B1	OSD_IN[21]/EXT_DIN[5]	OSD video input/ miscellaneous digital	External OSD Video Pixel Input Port (OSD_IN[21])/Additional TTL Input for External CCIR 656 Video Data (EXT_DIN[5]).
B2	OSD_IN[22]/EXT_DIN[6]	OSD video input/ miscellaneous digital	External OSD Video Pixel Input Port (OSD_IN[22])/Additional TTL Input for External CCIR 656 Video Data (EXT_DIN[6]).
B3	OSD_VS	OSD video sync	Vertical Sync for the OSD Input Port.
B4	AUD_IN[0]	Audio input	S/PDIF/DSD0 Audio Input.
B5	AUD_IN[3]	Audio input	I^2S2/DSD3 Audio Input.
B6	SFL	SFL	Subcarrier Frequency Lock Signal (SFL).
B7	ARC1_OUT	Audio output	Audio Return Channel for HDMI Tx1.
B8	MISO1	Serial port control	Master In Slave Out (Serial Port 1). Serial Port 1 is used for OSD control.
B9	MOSI2	Serial port control	Master Out Slave In (Serial Port 2). Serial Port 2 is used for the external flash ROM.
B10	MISO2	Serial port control	Master In Slave Out (Serial Port 2). Serial Port 2 is used for the external flash ROM.
B11	ALSB	I^2C control	Sets LSB of ADV8003 I^2C address (0x18 with LSB low, 0x1A with LSB high).
B12	XTALP	Miscellaneous digital[1]	ADV8003 Crystal Input.
B13	PVDD1	Power	PLL Analog Supply Voltage (1.8 V).
B14	NC	No connect	Do not connect to this pin.
B15	NC	No connect	Do not connect to this pin.
B16	GND	GND	Ground.
B17	RX_CP	Rx input	Rx Clock True Input.
B18	RX_0P	Rx input	Rx Channel 0 True Input.
B19	RX_1P	Rx input	Rx Channel 1 True Input.
B20	RX_2P	Rx input	Rx Channel 2 True Input.
B21	GND	GND	Ground.
B22	COMP1	Miscellaneous analog[1]	Compensation Pin. Connect a 2.2 nF capacitor to AVDD2.
B23	DAC4	Analog video output	Encoder DAC4 Output.

Pin No.	Mnemonic	Type	Description
C1	OSD_IN[19]/EXT_DIN[3]	OSD video input/ miscellaneous digital	External OSD Video Pixel Input Port (OSD_IN[19])/Additional TTL Input for External CCIR 656 Video Data (EXT_DIN[3]).
C2	OSD_IN[20]/EXT_DIN[4]	OSD video input/ miscellaneous digital	External OSD Video Pixel Input Port (OSD_IN[20])/Additional TTL Input for External CCIR 656 Video Data (EXT_DIN[4]).
C3	GND	GND	Ground.
C4	AUD_IN[4]	Audio input	I^2S3/DSD4 Audio Input.
C5	DSD_CLK	Audio input	DSD Audio Clock Input.
C6	SCLK	Audio input	I^2S Bit Clock Input.
C7	SCL	I^2C control	I^2C Clock Input. This pin is open drain; use a 4.7 kΩ resistor to connect this pin to a 3.3 V supply.
C8	SCK1	Serial port control	Serial Clock (Serial Port 1). Serial Port 1 is used for OSD control.
C9	GND	GND	Ground.
C10	INT0	Miscellaneous digital	Interrupt Pin 0. When status bits change, this pin is triggered.
C11	PDN	Miscellaneous digital	Power-Down. This pin controls the power state of the ADV8003.
C12	GND	GND	Ground.
C13	GND	GND	Ground.
C14	NC	No connect	Do not connect to this pin.
C15	NC	No connect	Do not connect to this pin.
C16	RX_HPD	Rx input	Hot Plug Assert Signal Output for the Rx Input.
C17	AVDD1	Power	HDMI Rx Inputs Analog Supply (3.3 V).
C18	GND	GND	Ground.
C19	GND	GND	Ground.
C20	AVDD1	Power	HDMI Rx Inputs Analog Supply (3.3 V).
C21	AVDD1	Power	HDMI Rx Inputs Analog Supply (3.3 V).
C22	DAC5	Analog video output	Encoder DAC5 Output.
C23	DAC6	Analog video output	Encoder DAC6 Output.
D1	OSD_IN[16]/EXT_DIN[0]	OSD video input/ miscellaneous digital	External OSD Video Pixel Input Port (OSD_IN[16])/Additional TTL Input for External CCIR 656 Video Data (EXT_DIN[0]).
D2	OSD_IN[17]/EXT_DIN[1]	OSD video input/ miscellaneous digital	External OSD Video Pixel Input Port (OSD_IN[17])/Additional TTL Input for External CCIR 656 Video Data (EXT_DIN[1]).
D3	OSD_IN[18]/EXT_DIN[2]	OSD video input/ miscellaneous digital	External OSD Video Pixel Input Port (OSD_IN[18])/Additional TTL Input for External CCIR 656 Video Data (EXT_DIN[2]).
D4	GND	GND	Ground.
D5	DVDD_IO	Power	Digital Interface Supply (3.3 V).
D6	MCLK	Audio input	MCLK for S/PDIF Input Audio.
D7	SDA	I^2C control	I^2C Data Input. This pin is open drain; use a 4.7 kΩ resistor to connect this pin to a 3.3 V supply.
D8	$\overline{CS1}$	Serial port control	Chip Select (Serial Port 1). Serial Port 1 is used for OSD control.
D9	GND	GND	Ground.
D10	INT1	Miscellaneous digital	Interrupt Pin for HDMI Transmitter Outputs. When status bits change, an interrupt is generated on this pin.
D11	INT2	Miscellaneous digital	Interrupt Pin for HDMI Receiver Input Lines. When status bits change, an interrupt is generated on this pin.
D12	DVDD_IO	Power	Digital Interface Supply (3.3 V).
D13	TEST1	Miscellaneous digital	Test Pin.
D14	NC	No connect	Do not connect to this pin.
D15	NC	No connect	Do not connect to this pin.
D16	RX_5V	Rx input	5 V Detect Pin for the Rx Input.
D17	NC	No connect	Do not connect to this pin.
D18	NC	No connect	Do not connect to this pin.
D19	RTERM	HDMI Rx input	This pin sets internal termination resistance. Use a 500 Ω resistor between this pin and GND. Place the RTERM resistor as close as possible to the ADV8003.
D20	AVDD2	Power	Encoder Analog Power Supply (3.3 V).
D21	AVDD2	Power	Encoder Analog Power Supply (3.3 V).

Pin No.	Mnemonic	Type	Description
D22	DAC1	Analog video output	Encoder DAC1 Output.
D23	DAC2	Analog video output	Encoder DAC2 Output.
E1	OSD_IN[13]/VBI_SCK	OSD video input/ miscellaneous digital	External OSD Video Pixel Input Port (OSD_IN[13])/Serial Clock for VBI Data Serial Port (VBI_SCK).
E2	OSD_IN[14]/VBI_MOSI	OSD video input/ miscellaneous digital	External OSD Video Pixel Input Port (OSD_IN[14])/Master Out Slave In for VBI Data Serial Port (VBI_MOSI).
E3	OSD_IN[15]/VBI_$\overline{CS}$	OSD video input/ miscellaneous digital	External OSD Video Pixel Input Port (OSD_IN[15])/Chip Select for VBI Data Serial Port (VBI_$\overline{CS}$).
E4	DVDD_IO	Power	Digital Interface Supply (3.3 V).
E20	TEST2	Miscellaneous analog	Test Pin.
E21	GND	GND	Ground.
E22	COMP2	Miscellaneous analog[1]	Compensation Pin. Connect a 2.2 nF capacitor to AVDD2.
E23	DAC3	Analog video output	Encoder DAC3 Output.
F1	OSD_IN[9]	OSD video input	External OSD Video Pixel Input Port (OSD_IN[9]).
F2	OSD_IN[10]	OSD video input	External OSD Video Pixel Input Port (OSD_IN[10]).
F3	OSD_IN[11]	OSD video input	External OSD Video Pixel Input Port (OSD_IN[11]).
F4	OSD_IN[12]	OSD video input/ miscellaneous digital	External OSD Video Pixel Input Port.
F20	RSET2	Miscellaneous analog[1]	Resistor Current Setting for Encoder DACs: DAC4, DAC5, and DAC6. Place the RSET resistor as close as possible to the ADV8003.
F21	PVDD3	Power	Encoder PLL Supply (1.8 V).
F22	GND	GND	Ground.
F23	CEC1	HDMI Tx1	HDMI Tx1 Consumer Electronics Control (CEC).
G1	OSD_IN[5]	OSD video input	External OSD Video Pixel Input Port (OSD_IN[5]).
G2	OSD_IN[6]	OSD video input	External OSD Video Pixel Input Port (OSD_IN[6]).
G3	OSD_IN[7]	OSD video input	External OSD Video Pixel Input Port (OSD_IN[7]).
G4	OSD_IN[8]	OSD video input	External OSD Video Pixel Input Port (OSD_IN[8]).
G7	GND	GND	Ground.
G8	GND	GND	Ground.
G9	GND	GND	Ground.
G10	DVDD	Power	Digital Power Supply (1.8 V).
G11	GND	GND	Ground.
G12	GND	GND	Ground.
G13	DVDD	Power	Digital Power Supply (1.8 V).
G14	GND	GND	Ground.
G15	GND	GND	Ground.
G16	GND	GND	Ground.
G17	GND	GND	Ground.
G20	ELPF1	Miscellaneous analog[1]	External Loop Filter for Video Encoder PLL 1. Connected to PVDD3.
G21	ELPF2	Miscellaneous analog[1]	External Loop Filter for Video Encoder PLL 2. Connected to PVDD3.
G22	GND	GND	Ground.
G23	AVDD3	Power	HDMI Analog Power Supply (1.8 V).
H1	OSD_IN[1]	OSD video input	External OSD Video Pixel Input Port (OSD_IN[1]).
H2	OSD_IN[2]	OSD video input	External OSD Video Pixel Input Port (OSD_IN[2]).
H3	OSD_IN[3]	OSD video input	External OSD Video Pixel Input Port (OSD_IN[3]).
H4	OSD_IN[4]	OSD video input	External OSD Video Pixel Input Port (OSD_IN[4]).
H7	GND	GND	Ground.
H8	GND	GND	Ground.
H9	GND	GND	Ground.
H10	GND	GND	Ground.
H11	GND	GND	Ground.
H12	GND	GND	Ground.
H13	GND	GND	Ground.

Pin No.	Mnemonic	Type	Description
H14	GND	GND	Ground.
H15	GND	GND	Ground.
H16	GND	GND	Ground.
H17	GND	GND	Ground.
H20	GND	GND	Ground.
H21	GND	GND	Ground.
H22	TX1_2+	HDMI Tx1	HDMI1 Channel 2 True Output.
H23	TX1_2−	HDMI Tx1	HDMI1 Channel 2 Complementary Output.
J1	DE	Digital video sync	Data Enable for Digital Input Video.
J2	HS	Digital video sync	Horizontal Sync for Digital Input Video.
J3	OSD_HS	Digital video sync	Horizontal Sync for the OSD Input Port (OSD_HS).
J4	OSD_IN[0]	OSD video input	External OSD Video Pixel Input Port (OSD_IN[0]).
J7	DVDD	Power	Digital Power Supply (1.8 V).
J8	GND	GND	Ground.
J9	GND	GND	Ground.
J10	GND	GND	Ground.
J11	GND	GND	Ground.
J12	GND	GND	Ground.
J13	GND	GND	Ground.
J14	GND	GND	Ground.
J15	GND	GND	Ground.
J16	GND	GND	Ground.
J17	DVDD	Power	Digital Power Supply (1.8 V).
J20	DDC1_SDA	HDMI Tx1	HDCP Slave Serial Data for HDMI Tx1. This pin is open drain; use a 2 kΩ resistor to connect this pin to the HDMI Tx 5 V supply.
J21	GND	GND	Ground.
J22	TX1_1+	HDMI Tx1	HDMI1 Channel 1 True Output.
J23	TX1_1−	HDMI Tx1	HDMI1 Channel 1 Complementary Output.
K1	VS	Digital video sync	Vertical Sync for Digital Input Video.
K2	PCLK	Digital Video Sync	Pixel Clock for Digital Input Video.
K3	DVDD_IO	Power	Digital Interface Supply (3.3 V).
K4	DVDD_IO	Power	Digital Interface Supply (3.3 V).
K7	GND	GND	Ground.
K8	GND	GND	Ground.
K9	GND	GND	Ground.
K10	GND	GND	Ground.
K11	GND	GND	Ground.
K12	GND	GND	Ground.
K13	GND	GND	Ground.
K14	GND	GND	Ground.
K15	GND	GND	Ground.
K16	GND	GND	Ground.
K17	GND	GND	Ground.
K20	DDC1_SCL	HDMI Tx1	HDCP Slave Serial Clock for HDMI Tx1. This pin is open drain; use a 2 kΩ resistor to connect this pin to the HDMI Tx 5 V supply.
K21	GND	GND	Ground.
K22	TX1_0+	HDMI Tx1	HDMI1 Channel 0 True Output.
K23	TX1_0−	HDMI Tx1	HDMI1 Channel 0 Complementary Output.
L1	P[32]	Digital video input	Digital Video Input Bus[35:0].
L2	P[33]	Digital video input	Digital Video Input Bus[35:0].
L3	P[34]	Digital video input	Digital Video Input Bus[35:0].
L4	P[35]	Digital video input	Digital Video Input Bus[35:0].

Pin No.	Mnemonic	Type	Description
L7	DVDD	Power	Digital Power Supply (1.8 V).
L8	GND	GND	Ground.
L9	GND	GND	Ground.
L10	GND	GND	Ground.
L11	GND	GND	Ground.
L12	GND	GND	Ground.
L13	GND	GND	Ground.
L14	GND	GND	Ground.
L15	GND	GND	Ground.
L16	GND	GND	Ground.
L17	GND	GND	Ground.
L20	HPD_TX1	HDMI Tx1	Hot Plug Assert Signal Input for HDMI Tx1.
L21	GND	GND	Ground.
L22	TX1_C+	HDMI Tx1	HDMI1 Clock True Output.
L23	TX1_C–	HDMI Tx1	HDMI1 Clock Complementary Output.
M1	P[28]	Digital video input	Digital Video Input Bus[35:0].
M2	P[29]	Digital video input	Digital Video Input Bus[35:0].
M3	P[30]	Digital video input	Digital Video Input Bus[35:0].
M4	P[31]	Digital video input	Digital Video Input Bus[35:0].
M7	GND	GND	Ground.
M8	GND	GND	Ground.
M9	GND	GND	Ground.
M10	GND	GND	Ground.
M11	GND	GND	Ground.
M12	GND	GND	Ground.
M13	GND	GND	Ground.
M14	GND	GND	Ground.
M15	GND	GND	Ground.
M16	GND	GND	Ground.
M17	GND	GND	Ground.
M20	R_TX1	HDMI Tx1[1]	Sets Internal Reference Currents. Place a 470 Ω resistor (1% tolerance) between this pin and ground. The external resistor should be placed as close as possible to the ADV8003.
M21	PVDD5	Power	HDMI Tx PLL Power Supply (1.8 V). This pin is a voltage regulator output. Connect a decoupling capacitor between this pin and ground.
M22	HEAC_1+	HDMI Tx1	HDMI Tx1 HEC+ from HDMI Connector.
M23	HEAC_1–	HDMI Tx1	HDMI Tx1 HEC– from HDMI Connector.
N1	P[24]	Digital video input	Digital Video Input Bus[35:0].
N2	P[25]	Digital video input	Digital Video Input Bus[35:0].
N3	P[26]	Digital video input	Digital Video Input Bus[35:0].
N4	P[27]	Digital video input	Digital Video Input Bus[35:0].
N7	GND	GND	Ground.
N8	GND	GND	Ground.
N9	GND	GND	Ground.
N10	GND	GND	Ground.
N11	GND	GND	Ground.
N12	GND	GND	Ground.
N13	GND	GND	Ground.
N14	GND	GND	Ground.
N15	GND	GND	Ground.
N16	GND	GND	Ground.
N17	GND	GND	Ground.

Pin No.	Mnemonic	Type	Description
N20	CEC2	HDMI Tx2	HDMI Tx2 Consumer Electronics Control (CEC).
N21	PVDD5	Power[1]	HDMI Tx PLL Power Supply (1.8 V). This pin is a voltage regulator output. Connect a decoupling capacitor between this pin and ground.
N22	AVDD3	Power	HDMI Analog Power Supply (1.8 V).
N23	NC	No connect	Do not connect to this pin.
P1	P[20]	Digital video input	Digital Video Input Bus[35:0].
P2	P[21]	Digital video input	Digital Video Input Bus[35:0].
P3	P[22]	Digital video input	Digital Video Input Bus[35:0].
P4	P[23]	Digital video input	Digital Video Input Bus[35:0].
P7	DVDD	Power	Digital Power Supply (1.8 V).
P8	GND	GND	Ground.
P9	GND	GND	Ground.
P10	GND	GND	Ground.
P11	GND	GND	Ground.
P12	GND	GND	Ground.
P13	GND	GND	Ground.
P14	GND	GND	Ground.
P15	GND	GND	Ground.
P16	GND	GND	Ground.
P17	DVDD	Power	Digital Power Supply (1.8 V).
P20	DDC2_SCL	HDMI Tx2	HDCP Slave Serial Clock for HDMI Tx2. This pin is open drain; use a 2 kΩ resistor to connect this pin to the HDMI Tx 5 V supply.
P21	GND	GND	Ground.
P22	TX2_2+	HDMI Tx2	HDMI2 Channel 2 True Output.
P23	TX2_2−	HDMI Tx2	HDMI2 Channel 2 Complementary Output.
R1	P[16]	Digital video input	Digital Video Input Bus[35:0].
R2	P[17]	Digital video input	Digital Video Input Bus[35:0].
R3	P[18]	Digital video input	Digital Video Input Bus[35:0].
R4	P[19]	Digital video input	Digital Video Input Bus[35:0].
R7	GND	GND	Ground.
R8	GND	GND	Ground.
R9	GND	GND	Ground.
R10	GND	GND	Ground.
R11	GND	GND	Ground.
R12	GND	GND	Ground.
R13	GND	GND	Ground.
R14	GND	GND	Ground.
R15	GND	GND	Ground.
R16	GND	GND	Ground.
R17	GND	GND	Ground.
R20	DDC2_SDA	HDMI Tx2	HDCP Slave Serial Data for HDMI Tx2. This pin is open drain; use a 2 kΩ resistor to connect this pin to the HDMI Tx 5 V supply.
R21	GND	GND	Ground.
R22	TX2_1+	HDMI Tx2	HDMI2 Channel 1 True Output.
R23	TX2_1−	HDMI Tx2	HDMI2 Channel 1 Complementary Output.
T1	P[14]	Digital video input	Digital Video Input Bus[35:0].
T2	P[15]	Digital video input	Digital Video Input Bus[35:0].
T3	GND	GND	Ground.
T4	GND	GND	Ground.
T7	GND	GND	Ground.
T8	GND	GND	Ground.
T9	GND	GND	Ground.

Pin No.	Mnemonic	Type	Description
T10	GND	GND	Ground.
T11	GND	GND	Ground.
T12	GND	GND	Ground.
T13	GND	GND	Ground.
T14	GND	GND	Ground.
T15	GND	GND	Ground.
T16	GND	GND	Ground.
T17	GND	GND	Ground.
T20	HPD_TX2	HDMI Tx2	Hot Plug Assert Signal Input for HDMI Tx2.
T21	GND	GND	Ground.
T22	TX2_0+	HDMI Tx2	HDMI2 Channel 0 True Output.
T23	TX2_0–	HDMI Tx2	HDMI2 Channel 0 Complementary Output.
U1	P[10]	Digital video input	Digital Video Input Bus[35:0].
U2	P[11]	Digital video input	Digital Video Input Bus[35:0].
U3	P[12]	Digital video input	Digital Video Input Bus[35:0].
U4	P[13]	Digital video input	Digital Video Input Bus[35:0].
U7	GND	GND	Ground.
U8	GND	GND	Ground.
U9	DVDD	Power	Digital Power Supply (1.8 V).
U10	GND	GND	Ground.
U11	GND	GND	Ground.
U12	DVDD	Power	Digital Power Supply (1.8 V).
U13	GND	GND	Ground.
U14	GND	GND	Ground.
U15	DVDD	Power	Digital Power Supply (1.8 V).
U16	GND	GND	Ground.
U17	GND	GND	Ground.
U20	R_TX2	HDMI Tx2[1]	Sets internal reference currents. Place a 470 Ω resistor (1% tolerance) between this pin and ground. The external resistor should be placed as close as possible to the ADV8003.
U21	GND	GND	Ground.
U22	TX2_C+	HDMI Tx2[1]	HDMI2 Clock True Output.
U23	TX2_C–	HDMI Tx2[1]	HDMI2 Clock Complementary Output.
V1	P[6]	Digital video input	Digital Video Input Bus[35:0].
V2	P[7]	Digital video input	Digital Video Input Bus[35:0].
V3	P[8]	Digital video input	Digital Video Input Bus[35:0].
V4	P[9]	Digital video input	Digital Video Input Bus[35:0].
V20	GND	GND	Ground.
V21	PVDD6	Power	HDMI Tx PLL Power Supply (1.8 V). This pin is a voltage regulator output. Connect a decoupling capacitor between this pin and ground.
V22	HEAC_2+	HDMI Tx2	HDMI Tx2 HEC+ from HDMI Connector.
V23	HEAC_2–	HDMI Tx2	HDMI Tx2 HEC– from HDMI Connector.
W1	P[2]	Digital video input	Digital Video Input Bus[35:0].
W2	P[3]	Digital video input	Digital Video Input Bus[35:0].
W3	P[4]	Digital video input	Digital Video Input Bus[35:0].
W4	P[5]	Digital video input	Digital Video Input Bus[35:0].
W20	TEST3	Miscellaneous digital	Test Pin.
W21	PVDD6	Power[1]	HDMI Tx PLL Power Supply (1.8 V). This pin is a voltage regulator output. Connect a decoupling capacitor between this pin and ground.
W22	AVDD3	Power	HDMI Analog Power Supply (1.8 V).
W23	NC	No connect	Do not connect to this pin.
Y1	P[0]	Digital video input	Digital Video Input Bus[35:0].
Y2	P[1]	Digital video input	Digital Video Input Bus[35:0].

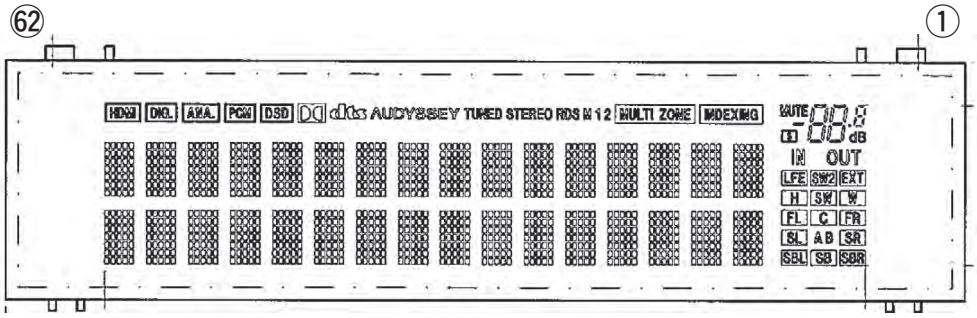
Pin No.	Mnemonic	Type	Description
Y3	DDR_DQS[2]	DDR interface	Data Strobe for DDR Data Byte[23:16].
Y4	GND	GND	Ground.
Y5	DDR_DQ[23]	DDR interface	Data Line. Interface to external RAM data lines.
Y6	DVDD_DDR	Power	DDR Interface Supply (1.8 V).
Y7	DDR_DQS[3]	DDR interface	Data Strobe for DDR Data Byte[31:24].
Y8	GND	GND	Ground.
Y9	DDR_A[11]	DDR interface	Address Line. Interface to external RAM address lines.
Y10	DVDD_DDR	Power	DDR Interface Supply (1.8 V).
Y11	DDR_A[4]	DDR interface	Address Line. Interface to external RAM address lines.
Y12	GND	GND	Ground.
Y13	DDR_$\overline{CAS}$	DDR interface	Column Address Strobe for DDR Memory.
Y14	DVDD_DDR	Power	DDR Interface Supply (1.8 V).
Y15	DDR_$\overline{CK}$	DDR interface	DDR Memory Clock. Interface to external DDR RAM clock lines.
Y16	GND	GND	Ground.
Y17	DDR_DQ[9]	DDR Interface	Data Line. Interface to external RAM data lines.
Y18	DVDD_DDR	Power	DDR Interface Supply (1.8 V).
Y19	DDR_DQ[14]	DDR interface	Data Line. Interface to external RAM data lines.
Y20	GND	GND	Ground.
Y21	DDR_DQ[6]	DDR interface	Data Line. Interface to external RAM data lines.
Y22	PVDD_DDR	Power	DDR Interface PLL Supply (1.8 V).
Y23	GND	GND	Ground.
AA1	DDR_DQ[18]	DDR interface	Data Line. Interface to external RAM data lines.
AA2	GND	GND	Ground.
AA3	GND	GND	Ground.
AA4	DDR_$\overline{DQS[2]}$	DDR interface	Data Strobe for DDR Data Byte[23:16].
AA5	DDR_DQ[26]	DDR interface	Data Line. Interface to external RAM data lines.
AA6	DVDD_DDR	Power	DDR Interface Supply (1.8 V).
AA7	DDR_$\overline{DQS[3]}$	DDR interface	Data Strobe for DDR Data Byte[31:24].
AA8	NC/GND	No connect/GND	For new ADV8003 designs, do not connect to this pin. For designs that must maintain consistency with the ADV8002, this pin can be grounded.
AA9	DDR_A[8]	DDR interface	Address Line. Interface to external RAM address lines.
AA10	DVDD_DDR	Power	DDR Interface Supply (1.8 V).
AA11	DDR_A[2]	DDR interface	Address Line. Interface to external RAM address lines.
AA12	GND	GND	Ground.
AA13	DDR_$\overline{CS}$	DDR interface	DDR Chip Select. Interface to external DDR RAM chip selects.
AA14	DVDD_DDR	Power	DDR Interface Supply (1.8 V).
AA15	DDR_CK	DDR interface	DDR Memory Clock. Interface to external DDR RAM clock lines.
AA16	GND	GND	Ground.
AA17	DDR_DQ[11]	DDR interface	Data Line. Interface to external RAM data lines.
AA18	DVDD_DDR	Power	DDR Interface Supply (1.8 V).
AA19	DDR_DM[1]	DDR interface	Data Mask for Data Lines[15:8].
AA20	DDR_DM[0]	DDR interface	Data Mask for Data Lines[7:0].
AA21	GND	GND	Ground.
AA22	GND	GND	Ground.
AA23	DDR_DQ[3]	DDR interface	Data Line. Interface to external RAM data lines.
AB1	DDR_DQ[21]	DDR interface	Data Line. Interface to external RAM data lines.
AB2	DDR_DQ[19]	DDR interface	Data Line. Interface to external RAM data lines.
AB3	DDR_DQ[17]	DDR interface	Data Line. Interface to external RAM data lines.
AB4	DDR_DM[2]	DDR interface	Data Mask for Data Lines[23:16].
AB5	DDR_DQ[30]	DDR interface	Data Line. Interface to external RAM data lines.
AB6	DDR_DM[3]	DDR interface	Data Mask for Data Lines[31:25].
AB7	DDR_DQ[31]	DDR interface	Data Line. Interface to external RAM data lines.

Pin No.	Mnemonic	Type	Description
AB8	DDR_DQ[29]	DDR interface	Data Line. Interface to external RAM data lines.
AB9	DDR_A[12]	DDR interface	Address Line. Interface to external RAM address lines.
AB10	DDR_A[6]	DDR interface	Address Line. Interface to external RAM address lines.
AB11	DDR_A[3]	DDR interface	Address Line. Interface to external RAM address lines.
AB12	DDR_A[0]	DDR interface	Address Line. Interface to external RAM address lines.
AB13	DDR_BA[0]	DDR interface	Bank Address Line. Indicates which data bank to write/read from.
AB14	DDR_$\overline{\text{RAS}}$	DDR interface	Row Address Strobe for DDR Memory.
AB15	DDR_CKE	DDR interface	Clock Enable for External DDR Memory.
AB16	DDR_DQ[12]	DDR interface	Data Line. Interface to external RAM data lines.
AB17	DDR_DQS[1]	DDR interface	Data Strobe for DDR Data Bytes[15:8].
AB18	DDR_DQ[8]	DDR interface	Data Line. Interface to external RAM data lines.
AB19	DDR_DQ[13]	DDR interface	Data Line. Interface to external RAM data lines.
AB20	DDR_DQ[0]	DDR interface	Data Line. Interface to external RAM data lines.
AB21	DDR_DQ[5]	DDR interface	Data Line. Interface to external RAM data lines.
AB22	DDR_DQS[0]	DDR interface	Data Strobe for DDR Data Bytes[7:0].
AB23	DDR_DQ[4]	DDR interface	Data Line. Interface to external RAM data lines.
AC1	DDR_DQ[16]	DDR interface	Data Line. Interface to external RAM data lines.
AC2	DDR_DQ[20]	DDR interface	Data Line. Interface to external RAM data lines.
AC3	DDR_DQ[22]	DDR interface	Data Line. Interface to external RAM data lines.
AC4	DDR_DQ[25]	DDR interface	Data Line. Interface to external RAM data lines.
AC5	DDR_DQ[28]	DDR interface	Data Line. Interface to external RAM data lines.
AC6	DDR_DQ[27]	DDR interface	Data Line. Interface to external RAM data lines.
AC7	DDR_DQ[24]	DDR interface	Data Line. Interface to external RAM data lines.
AC8	DDR_A[9]	DDR interface	Address Line. Interface to external RAM address lines.
AC9	DDR_A[5]	DDR interface	Address Line. Interface to external RAM address lines.
AC10	DDR_A[7]	DDR interface	Address Line. Interface to external RAM address lines.
AC11	DDR_A[1]	DDR interface	Address Line. Interface to external RAM address lines.
AC12	DDR_A[10]	DDR interface	Address Line. Interface to external RAM address lines.
AC13	DDR_BA[1]	DDR interface	Bank Address Line. Indicates which data bank to write/read from.
AC14	DDR_BA[2]	DDR interface	Bank Address Line. Indicates which data bank to write/read from.
AC15	DDR_$\overline{\text{WE}}$	DDR interface	Write Enable Signal for DDR RAM.
AC16	DDR_VREF	DDR interface[1]	Reference Voltage for DDR RAM.
AC17	DDR_DQ[10]	DDR interface	Data Line. Interface to external RAM data lines.
AC18	DDR_$\overline{\text{DQS}}$[1]	DDR interface	Data Strobe for DDR Data Byte[15:8].
AC19	DDR_DQ[15]	DDR interface	Data Line. Interface to external RAM data lines.
AC20	DDR_DQ[7]	DDR interface	Data Line. Interface to external RAM data lines.
AC21	DDR_DQ[2]	DDR interface	Data Line. Interface to external RAM data lines.
AC22	DDR_$\overline{\text{DQS}}$[0]	DDR interface	Data Strobe for DDR Data Byte[7:0].
AC23	DDR_DQ[1]	DDR interface	Data Line. Interface to external RAM data lines.

[1] Sensitive node. Careful layout is important. The associated circuitry should be kept as close as possible to the ADV8003.

2. FL DISPLAY

FLD(17-BT-40GINK) (SPK/SMPS : Z6801)



PIN CONNECTION

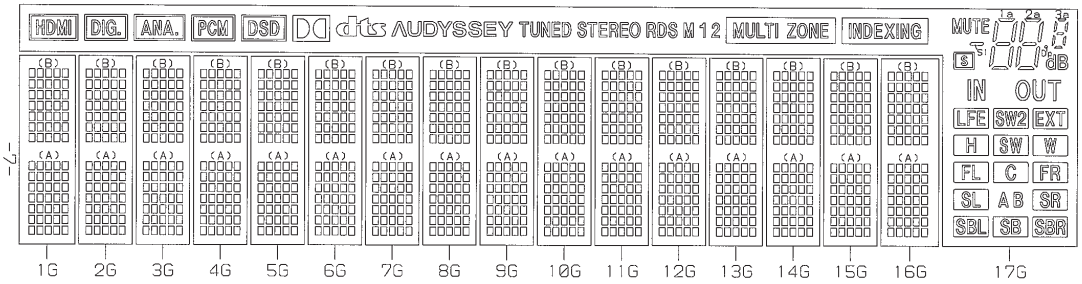
PIN CONNECTION

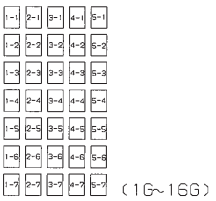
PIN NO.	62	61	60	59	58	57	56	55	54	53	52	51
CONNECTION	F2	NX	NP	NDD	LGND	PGND	VH	VDD	OSC	-RESET	-CS	CP

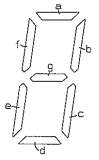
PIN NO.	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CONNECTION	DA	CS	TSB	TSA	Q17G	I17G	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NP	NX	F1

NOTE
1) F1,F2 --- Filament
2) NP ------ No pin
3) DL ------ Datum Line
4) NX ------ No extend pin
5) 17G ----- Grid
6) Q17G ---- Driver Output Port
7) LGND ---- Logic GND pin
8) PGND ---- Power GND pin
9) VH ------ High Voltage Supply pin
10) VDD ----- Logic Voltage Supply pin
11) OSC ----- Pin for self-oscillation
12) RESET --- Reset Input
13) CS ------ Chip Select Input pin
14) CP ------ Shift Register CLock
15) DA ------ Serial Data Input
16) TSA,B --- Test pin
17) Solder composition is Sn-3Ag-0.5Cu.
18) Field of vision is a minimum of 17.6° from the lower side.

GRID ASSIGNMENT







ANODE CONNECTION

	1G~16G	17G
D0A	1-1A	-
D1A	2-1A	-
D2A	3-1A	-
D3A	4-1A	-
D4A	5-1A	-
D5A	1-2A	-
D6A	2-2A	-
D7A	3-2A	-
D8A	4-2A	-
D9A	5-2A	-
D10A	1-3A	dB
D11A	2-3A	Dp
D12A	3-3A	3d
D13A	4-3A	3e
D14A	5-3A	3c
D15A	1-4A	3g
D16A	2-4A	3f
D17A	3-4A	3b
D18A	4-4A	3a
D19A	5-4A	2d
D20A	1-5A	2e
D21A	2-5A	2c
D22A	3-5A	2g
D23A	4-5A	2f
D24A	5-5A	2b
D25A	1-6A	2a
D26A	2-6A	1d
D27A	3-6A	1e
D28A	4-6A	1c
D29A	5-6A	1g
D30A	1-7A	1f
D31A	2-7A	1b
D32A	3-7A	1a
D33A	4-7A	S1
D34A	5-7A	S

	1G~16G	17G
D0B	1-1B	HDMI
D1B	2-1B	DIG.
D2B	3-1B	ANA.
D3B	4-1B	PCM
D4B	5-1B	DSD
D5B	1-2B	DD
D6B	2-2B	dts
D7B	3-2B	AUDYSSEY
D8B	4-2B	TUNED
D9B	5-2B	STEREO
D10B	1-3B	RDS
D11B	2-3B	M
D12B	3-3B	1
D13B	4-3B	2
D14B	5-3B	MULTI ZONE
D15B	1-4B	INDEXING
D16B	2-4B	MUTE
D17B	3-4B	IN
D18B	4-4B	OUT
D19B	5-4B	LFE
D20B	1-5B	SW2
D21B	2-5B	EXT
D22B	3-5B	H
D23B	4-5B	SW
D24B	5-5B	W
D25B	1-6B	FL
D26B	2-6B	C
D27B	3-6B	FR
D28B	4-6B	SL
D29B	5-6B	A
D30B	1-7B	B
D31B	2-7B	SR
D32B	3-7B	SBL
D33B	4-7B	SB
D34B	5-7B	SBR

PARTS LIST OF P.W.B. UNIT

∗Parts indicated by "nsp" on this table cannot be supplied.
∗The parts listed below are only for maintenance. Therefore they might differ from the parts used in the unit in appearances or dimensions.

Note: The symbols in the column "Remarks" indicate the following destinations.
E3 : U.S.A. & Canada model E2 : Europe modelE1C : China model E1C : China model
JP : Japan model

SPK/SMPS PWB ASSY

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP						
	D6001,6002	20305003100AS	D15XBN20			
	D6003-6011	00D2760794900	KDS160-RTK/P			
	D6012	00D2760683943	UDZS3.6B-TE17			
	D6013-6022	00D2760794900	KDS160-RTK/P			
	D6023	00D2760683943	UDZS3.6B-TE17			
	D6024,6025	00D2760794900	KDS160-RTK/P			
	D6501,6502	203050021504S	1N4007			
	D6503	203010001007S	D3SB60			
	D6507	00D2760683901	UDZS5.6B-TE17 +C	E3		
	D6507	00D2760683972	UDZS13B-TE17 +C	E2,E1C		
	D6507	00D2760683930	UDZS5.1B-TE17 +C	JP		
	D6508	20205002710AS	P6KE120A(PANJIT)	E3,JP		
	D6509	20305002730AS	1N4003(HOMI)			
	D6510	00D2760848908	UDZS22B-TE17			
	D6511	20205004900AS	ZENER DIODE 39V_ZJ39B 1/2W			
	D6512	20205004710AS	P6KE150A(PANJIT)			
	D6513	203050021504S	1N4007			
	D6514	20305002730AS	1N4003(HOMI)			
	D6515,6516	20305003200AS	SR3060PT			
	D6517	20105001130AS	1SS133(HOMI)			
	D6518	212050010508S	KIA2431AP			
	D6519	20205004800AS	ZENER DIODE 5.6V_ZJ5.6B 1/2W			
	D6522	20205004900AS	ZENER DIODE 39V_ZJ39B 1/2W			
	D6801	26301006510AS	BL-BJEGJ204L			
	D6802	00D2760798948	UDZS8.2B-TE17			
	D6803	263010032409S	SIR-341STA49			
	D6805	20305002730AS	1N4003(HOMI)			
	D6806,6807	00D2760798935	UDZS20B-TE17			
	Q6001-6004	00D2730464901	KTC3875S-GR-RTK/P			
	Q6005	00D2710318909	2N5401S-RTK/P			
	Q6006-6014	00D2730464901	KTC3875S-GR-RTK/P			
	Q6015	00D2710312905	KTA1504S-GR-RTK/P			
	Q6016,6017	00D2730464901	KTC3875S-GR-RTK/P			
	Q6018	00D2710312905	KTA1504S-GR-RTK/P			
	Q6019,6020	00D2730464901	KTC3875S-GR-RTK/P			
	Q6021	00D2710312905	KTA1504S-GR-RTK/P			
	Q6022	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q6023	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q6024-6026	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q6027,6028	00D2690184907	KRA102S-RTK/P (10K-10K)			
	Q6029	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q6030-6032	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q6033	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q6034,6035	00D2690184907	KRA102S-RTK/P (10K-10K)			
	Q6036	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q6037,6038	00D2730464901	KTC3875S-GR-RTK/P			
	Q6039	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q6040,6041	21385001950AS	2SC5810			
	Q6042	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q6043	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q6044	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q6045	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q6046	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q6047	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q6048	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q6049	21585001550AS	KRA105S-RTK/P(2.2K-47K)			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	Q6050	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q6051	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q6052	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q6053	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q6054	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q6055	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q6501	22985001050AS	SSM3K7002BF			
	Q6502	00D2730464901	KTC3875S-GR-RTK/P			
	Q6801	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q6802,6803	00D2690184907	KRA102S-RTK/P (10K-10K)			
	Q6804	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q6805	00D2690191903	KRA104S-RTK/P (47K-47K)			
	Q6806	21385001950AS	2SC5810			
	Q6807	00D2730464901	KTC3875S-GR-RTK/P			
	U3006	00D2631288901	PQ050DNA1ZPH	E2,E1C,JP		
	U6001	235810050503S	NJM4565M			
⚠	U6501	00D2623047008	PC123Y22			
⚠	U6502	23901007520AS	TOP256YN			
	U6801	262010009000S	R34FS8A			
RESISTORS GROUP						
	R3121-3124	nsp	RM73B--330JT +1608	E2,E1C,JP		
	R3125	nsp	RM73B--222JT +1608	E2,E1C,JP		
	R3126,3127	nsp	RM73B--104JT +1608	E2,E1C,JP		
	R3128,3129	nsp	RM73B--102JT +1608	E2,E1C,JP		
	R3130,3131	nsp	RM73B--104JT +1608	E2,E1C,JP		
	R3132,3133	nsp	RM73B--823JT +1608	E2,E1C,JP		
	R6001,6002	nsp	RM73B--683JT +1608			
	R6003,6004	nsp	RM73B--223JT +1608			
	R6005,6006	nsp	RM73B--0R0KT +1608			
	R6007,6008	nsp	RM73B--124JT +1608			
	R6009,6010	nsp	RM73B--0R0KT +1608			
	R6011	00MGG0510116X	100 OHM +- 5% 1/6W			
	R6012,6013	nsp	RM73B--124JT +1608			
	R6014,6015	nsp	RM73B--0R0KT +1608			
	R6016	00MGG0504716X	4.7 OHM +- 5% 1/6W			
	R6017	nsp	RM73B--0R0KT +1608			
	R6018,6019	nsp	RM73B--103JT +1608			
	R6020	nsp	RM73B--122JT +1608			
	R6021	nsp	RM73B--223JT +1608			
	R6022	nsp	RM73B--153JT +1608			
	R6023-6029	nsp	RM73B--103JT +1608			
	R6030,6031	nsp	RM73B--223JT +1608			
	R6032	nsp	RM73B--104JT +1608			
	R6033-6037	nsp	RM73B--223JT +1608			
	R6038	nsp	RM73B--153JT +1608			
	R6039	nsp	RM73B--223JT +1608			
	R6040	nsp	RM73B--104JT +1608			
	R6041-6049	nsp	RM73B--474JT +1608			
	R6050	nsp	RM73B--153JT +1608			
	R6055	nsp	RM73B--104JT +1608			
	R6060	12905006810AS	RGC502T02			
	R6061	nsp	RM73B--103JT +1608			
	R6062	nsp	RM73B--101JT +1608			
	R6063	nsp	RM73B--220JT +2125			
	R6064	nsp	RM73B--102JT +1608			
	R6065	nsp	RM73B--220JT +2125			
	R6066	nsp	RM73B--102JT +1608			
	R6067	nsp	RM73B--220JT +2125			
	R6068,6069	nsp	RM73B--393JT +1608			
	R6070	nsp	RM73B--220JT +2125			
	R6071,6072	nsp	RM73B--473JT +1608			
	R6073-6075	nsp	RM73B--220JT +2125			
	R6077,6078	nsp	RM73B--220JT +2125			
	R6079	nsp	RM73B--333JT +1608			
	R6080	nsp	RM73B--220JT +2125			
	R6081,6082	nsp	RM73B--103JT +2125			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	R6083,6084	nsp	RM73B--103JT +1608			
	R6085	nsp	RM73B--220JT +2125			
	R6087	nsp	RM73B--332JT +1608			
	R6088	nsp	RM73B--334JT +1608			
	R6089,6090	nsp	RM73B--103JT +1608			
	R6091	nsp	RM73B--102JT +1608			
	R6092	nsp	RM73B--333JT +1608			
	R6501-6503	nsp	RD14B2E225JT(5)			
	R6504-6506	nsp	RD14B2E105JT(5)			
	R6507	nsp	RD14B2E334JT(5)			
	R6508	nsp	RM73B--105JT +1608			
	R6509	nsp	RM73B--102JT +1608			
	R6510	nsp	RM73B--822JT +1608			
	R6511,6512	nsp	RD14B2E225JT(5)	E3,JP		
	R6513	nsp	RD14B2E105JT(5)	E3,JP		
	R6514	nsp	RM73B--274JT +1608	E3,JP		
	R6514	nsp	RM73B--563JT +1608	E2,E1C		
	R6516	nsp	RD14B2E6R8JT(5)			
	R6519	nsp	RM73B--103JT +1608			
	R6520	nsp	RM73B--102JT +1608			
	R6522	nsp	RD14B2E560JT(5)			
	R6523	nsp	RM73B--332JT +1608			
	R6524	nsp	RM73B--562JT +1608			
	R6525	nsp	RM73B--223DT(1608)			
	R6526	nsp	RD14B2E105JT(5)			
	R6527	nsp	RM73B--682DT(1608)			
	R6801,6802	nsp	RM73B--102JT +1608			
	R6803,6804	nsp	RM73B--471JT +1608			
	R6807	nsp	RM73B--102JT +1608			
	R6808	nsp	RM73B--472JT (1608) +1608			
	R6809	nsp	RM73B--820JT +1608			
	R6810	nsp	RM73B--472JT (1608) +1608			
	R6811	nsp	RM73B--101JT +1608			
	R6812	nsp	RM73B--820JT +1608			
	R6813,6814	nsp	RM73B--101JT +1608			
	R6815,6816	nsp	RM73B--221JT +1608			
	R6818	nsp	RM73B--101JT +1608			
	R6819	nsp	RM73B--473JT +1608			
	R6820	nsp	RM73B--1R8KT			
	R6821	nsp	RM73B--1R5KT			
	R6823	nsp	RM73B--101JT +1608			
	R6824,6825	nsp	RM73B--472JT (1608) +1608			
	R6826-6828	nsp	RM73B--271JT +1608			
	R6829	nsp	RM73B--473JT +2125			
	R6830-6832	nsp	RM73B--221JT +1608			
	R6833,6834	nsp	RM73B--331JT (1608) +1608			
	R6835	nsp	RM73B--561JT +1608			
	R6836	nsp	RM73B--393JT +1608			
	R6837	nsp	RM73B--103JT +1608			
	R6838	nsp	RM73B--101JT +1608			
	R6839	nsp	RM73B--331JT (1608) +1608			
	R6840,6841	nsp	RM73B--100JT +2125			
	R6842	nsp	RM73B--820JT +1608			
	R6843	nsp	RM73B--243JT +1608			
	R6844	nsp	RM73B--0R0KT +1608			
	R6845	nsp	RM73B--102JT +1608			
	R6846,6847	nsp	RM73B--0R0KT +1608			
	R6851,6852	nsp	RM73B--472JT (1608) +1608			
CAPACITORS GROUP						
	C3123	nsp	CC73CH1H101JT +1608	E2,E1C,JP		
	C3126-3129	nsp	CC73CH1H101JT +1608	E2,E1C,JP		
	C3133-3135	13405014840AS	CE04W1J100MT(KR3)	E2,E1C,JP		
	C3137	13405014840AS	CE04W1J100MT(KR3)	E2,E1C,JP		
	C6001	133050084507S	CQ93M2E104KT			
	C6002,6003	13405018740AS	CE04W2A221MT(KR3)			
	C6004,6005	13405014840AS	CE04W1J100MT(KR3)			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C6006	13405012940AS	CE04W1C101MT(KR3)			
	C6007	13405012740AS	CE04W1A331MT(KR3)			
	C6008	nsp	CK73B1E104KT +1608			
	C6009	13405012740AS	CE04W1A331MT(KR3)			
	C6010	nsp	CK73B1E104KT +1608			
	C6011,6012	13405018100AS	CE68W==223MDL			
	C6013	13405012740AS	CE04W1A331MT(KR3)			
	C6016	nsp	CK73B1E104KT +1608			
	C6017	00MDK9610430Y	C1608X7R1H104K			
	C6018	13405014840AS	CE04W1J100MT(KR3)			
	C6019-6022	nsp	CK73B1E104KT +1608			
	C6023,6024	13405018640AS	CE04W2A010MT(KR3)			
	C6025	13405012940AS	CE04W1C101MT(KR3)			
	C6027	13405018640AS	CE04W2A010MT(KR3)			
	C6028	00D2570043919	CK73U2J2E222JT(2125)			
	C6029-6038	nsp	CK73B1H102KT +1608			
	C6039,6040	00D2570043919	CK73U2J2E222JT(2125)			
	C6041	nsp	CK73B1H102KT +1608			
	C6042-6049	00D2570043919	CK73U2J2E222JT(2125)			
	C6050	133050090557S	CQ93P2A104JT(PPF)			
⚠	C6501,6502	00D2538029713	CK45F2EAC471KC(KX)			
⚠	C6503	00D2538022707	CK45F2EAC103MC			
⚠	C6504,6505	00D2568039003	CF99--2EAC104K(LEMX)			
	C6509	nsp	CK73B1E473KT +1608	E2,E1C		
	C6510	nsp	CK73B1E104KT +1608			
⚠	C6511,6512	00D2538022707	CK45F2EAC103MC			
	C6513	13405021210AS	CE04W2G121MC(KXG)			
	C6515	134050107502S	CE04W1E470MT(NXA)			
	C6516	00MDK9610430Y	C1608X7R1H104K			
	C6517	13305015020AS	CQ93M3A103H(PHF)			
	C6519	134050106509S	CE04W1H100MT(NXA)			
⚠	C6520	00D2538029700	CK45F2EAC222MC (KX)			
	C6521	nsp	CK73B1E104KT +1608			
	C6524	00D2570522906	CK73B0J475KT +1608			
	C6525-6527	134050105209S	CE04W0J562MC(NXA)			
	C6528	nsp	CK73B1H102KT +1608			
	C6529	nsp	CK73B1E104KT +1608			
	C6530	13405012640AS	CE04W0J471MT(KR3)			
	C6801,6802	nsp	CK73B1E104KT +1608			
	C6803	13405014840AS	CE04W1J100MT(KR3)			
	C6804,6805	00MDK9610430Y	C1608X7R1H104K			
	C6807	13405014940AS	CE04W1J101MT(KR3)			
	C6808,6809	nsp	CK73B1E104KT +1608			
	C6810-6812	00MDK9610430Y	C1608X7R1H104K			
	C6814	00MDK9610430Y	C1608X7R1H104K			
	C6818	nsp	CK73B1H102KT +1608			
	C6820-6822	nsp	CK73B1E104KT +1608			
	C6847,6848	nsp	CK73B1E104KT +1608			
	C6849	13405014440AS	CE04W1H101MT(KR3)			
OTHERS PARTS GROUP						
⚠	F0010	652050008004S	L=30mm 250V TLC15AN4			
⚠	F0020	652050008004S	L=30mm 250V TLC15AN4			
⚠	F0050	00D2061086029	FUSE 12A (UL/CSA/J)	E3,JP		
⚠	F0050	00D2061091014	FUSE(ET5A)	E2,E1C		
⚠	F0070	00MFS20200201	# T2.0A 250V TR5	E3,JP		
⚠	F0070	00MFS20315201	# FUSE 3.15A 250V SEMKO VDE	E2,E1C		
⚠	F0080	00MFS20025201	# T250MA/250V TR5 NO.19372(TP)			
	H0011,0012	nsp	FUSE HOLDER(DPS1)			
	H0021,0022	nsp	FUSE HOLDER(DPS1)			
	H0051,0052	nsp	FUSE HOLDER(DPS1)	E3,JP		
	H0061,0062	00D2020040909	FUSE CLIP(TAPE)	E2,E1C		
	K6001	646010030008S	4P SP TERMINAL			
	K6002	646010030015S	6P SP TERMINAL			
	K6003-6005	646010030008S	4P SP TERMINAL			
	L3003	00D2350147909	E.FIL(BLM21PG221SN1)+2125	E2,E1C,JP		
⚠	L6501	11101004400AS	L.FILTER(LF2628NP-R273)			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New	
	L6505-6508	00D2350049900	BEADS INDUCTOR TAPE				
	N3006	645010057062S	23P SOCKET(C125Z2)	E2,E1C,JP			
	N4809	645010056069S	23P PLUG(C125Z1)				
	N6001-6009	00MYP06010450	B5B-EH				
	N6010	00MYJ06006310	B11B-PH-K-S (LF)(SN)				
	N6011	00MYJ06006320	B12B-PH-K-S (LF)(SN)				
	N6012	00MYP06010990	B9P-VH				
	N6013	00D2050736005	33P FFC BASE				
	N6501	00MYP04000760	CONNECTOR 2P B3P-VH				
	N6502	00MYP06010450	B5B-EH				
	N6801	645010057062S	23P SOCKET(C125Z2)				
	N6802	645010075008S	40FMN-STRK-A(LF)(SN)				
	N6803	00MYP06003960	S7B-EH				
	N9009,9010	00MYP06013300	2P PLUG B2P3S-VH				
	B6001	61205049500AS	1P 130mm SIN-SIN				
	B6003	61205010702AD	1P 200mm SIN-SIN				
	B6005-6007	00MYL01010241	GND TERMINAL FOR PCB				
	B6501	00D2051034007	M3 SCREW TERMINAL				
	B6502	00MYL01010241	GND TERMINAL FOR PCB				
	B6503	00D2051034007	M3 SCREW TERMINAL				
⚠	S6001	68201003000AS	RELAY(FTR-F1CL012R)				
⚠	S6002-6011	682010020007S	G5PA-28-MC DC12				
⚠	S6501	00D2140241002	RELAY DL1SU TV-8				
	S6801,6802	663010005007S	ROT.ENCODER(EC16B24S0-ZZZ)				
	S6803-6822	00D2125611903	TACT SWITCH(TAPE H5)				
⚠	T6502	10201002401AS	SW TRANS(979C/A)				⚠5
	Z3001	18301002800AS	TUNER MODULE (KST-MW104FV1-S63V)	E2			
	Z3001	18301002900AS	TUNER MODULE (KST-MW004FV1-S63)	E1C,JP			
	Z6001-6003	nsp	STYLE PIN				
⚠	Z6502	64105002280AS	AC INLET(R-30190)				
	Z6503,6504	nsp	RADIATOR				
	Z6505	nsp	RADIATOR				
	Z6506	nsp	SCREW				
	Z6513,6514	nsp	SCREW				
	Z6801	17201001300AS	FLD(17-BT-40GINK)				
	Z6802,6803	436010038007D	FLD SPACER				
	Z6804	nsp	STYLE PIN				
	Z6999	nsp	CU PLATE(SPK)				

P.AMP PWB ASSY

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP						
	D0101,0102	00D2760794900	KDS160-RTK/P			
	D0105	00D2760794900	KDS160-RTK/P			
	D0110	00D2760794900	KDS160-RTK/P			
	D0201,0202	00D2760794900	KDS160-RTK/P			
	D0205	00D2760794900	KDS160-RTK/P			
	D0210	00D2760794900	KDS160-RTK/P			
	D0301,0302	00D2760794900	KDS160-RTK/P			
	D0305	00D2760794900	KDS160-RTK/P			
	D0310	00D2760794900	KDS160-RTK/P			
	D0401,0402	00D2760794900	KDS160-RTK/P			
	D0405	00D2760794900	KDS160-RTK/P			
	D0410	00D2760794900	KDS160-RTK/P			
	D0501,0502	00D2760794900	KDS160-RTK/P			
	D0505	00D2760794900	KDS160-RTK/P			
	D0510	00D2760794900	KDS160-RTK/P			
	D0601,0602	00D2760794900	KDS160-RTK/P			
	D0605	00D2760794900	KDS160-RTK/P			
	D0610	00D2760794900	KDS160-RTK/P			
	D0701,0702	00D2760794900	KDS160-RTK/P			
	D0705	00D2760794900	KDS160-RTK/P			
	D0710	00D2760794900	KDS160-RTK/P			
	D0801,0802	00D2760794900	KDS160-RTK/P			
	D0805	00D2760794900	KDS160-RTK/P			
	D0810	00D2760794900	KDS160-RTK/P			
	D0901,0902	00D2760794900	KDS160-RTK/P			
	D0905	00D2760794900	KDS160-RTK/P			
	D0910	00D2760794900	KDS160-RTK/P			
	Q0101	21785000550AS	HN4A06J			
	Q0102	00D2730479909	2N5551S-RTK/P			
	Q0103	00D2710318909	2N5401S-RTK/P			
	Q0104	00D2730479909	2N5551S-RTK/P			
	Q0105	00D2710318909	2N5401S-RTK/P			
	Q0106	00D2730479909	2N5551S-RTK/P			
	Q0107	00D2710318909	2N5401S-RTK/P			
	Q0110	00D2710318909	2N5401S-RTK/P			
	Q0111	00D2730479909	2N5551S-RTK/P			
	Q0112	00D2710318909	2N5401S-RTK/P			
	Q0113	00D2730479909	2N5551S-RTK/P			
	Q0201	21785000550AS	HN4A06J			
	Q0202	00D2730479909	2N5551S-RTK/P			
	Q0203	00D2710318909	2N5401S-RTK/P			
	Q0204	00D2730479909	2N5551S-RTK/P			
	Q0205	00D2710318909	2N5401S-RTK/P			
	Q0206	00D2730479909	2N5551S-RTK/P			
	Q0207	00D2710318909	2N5401S-RTK/P			
	Q0210	00D2710318909	2N5401S-RTK/P			
	Q0211	00D2730479909	2N5551S-RTK/P			
	Q0212	00D2710318909	2N5401S-RTK/P			
	Q0213	00D2730479909	2N5551S-RTK/P			
	Q0301	21785000550AS	HN4A06J			
	Q0302	00D2730479909	2N5551S-RTK/P			
	Q0303	00D2710318909	2N5401S-RTK/P			
	Q0304	00D2730479909	2N5551S-RTK/P			
	Q0305	00D2710318909	2N5401S-RTK/P			
	Q0306	00D2730479909	2N5551S-RTK/P			
	Q0307	00D2710318909	2N5401S-RTK/P			
	Q0310	00D2710318909	2N5401S-RTK/P			
	Q0311	00D2730479909	2N5551S-RTK/P			
	Q0312	00D2710318909	2N5401S-RTK/P			
	Q0313	00D2730479909	2N5551S-RTK/P			
	Q0401	21785000550AS	HN4A06J			
	Q0402	00D2730479909	2N5551S-RTK/P			
	Q0403	00D2710318909	2N5401S-RTK/P			
	Q0404	00D2730479909	2N5551S-RTK/P			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	Q0405	00D2710318909	2N5401S-RTK/P			
	Q0406	00D2730479909	2N5551S-RTK/P			
	Q0407	00D2710318909	2N5401S-RTK/P			
	Q0410	00D2710318909	2N5401S-RTK/P			
	Q0411	00D2730479909	2N5551S-RTK/P			
	Q0412	00D2710318909	2N5401S-RTK/P			
	Q0413	00D2730479909	2N5551S-RTK/P			
	Q0501	21785000550AS	HN4A06J			
	Q0502	00D2730479909	2N5551S-RTK/P			
	Q0503	00D2710318909	2N5401S-RTK/P			
	Q0504	00D2730479909	2N5551S-RTK/P			
	Q0505	00D2710318909	2N5401S-RTK/P			
	Q0506	00D2730479909	2N5551S-RTK/P			
	Q0507	00D2710318909	2N5401S-RTK/P			
	Q0510	00D2710318909	2N5401S-RTK/P			
	Q0511	00D2730479909	2N5551S-RTK/P			
	Q0512	00D2710318909	2N5401S-RTK/P			
	Q0513	00D2730479909	2N5551S-RTK/P			
	Q0601	21785000550AS	HN4A06J			
	Q0602	00D2730479909	2N5551S-RTK/P			
	Q0603	00D2710318909	2N5401S-RTK/P			
	Q0604	00D2730479909	2N5551S-RTK/P			
	Q0605	00D2710318909	2N5401S-RTK/P			
	Q0606	00D2730479909	2N5551S-RTK/P			
	Q0607	00D2710318909	2N5401S-RTK/P			
	Q0610	00D2710318909	2N5401S-RTK/P			
	Q0611	00D2730479909	2N5551S-RTK/P			
	Q0612	00D2710318909	2N5401S-RTK/P			
	Q0613	00D2730479909	2N5551S-RTK/P			
	Q0701	21785000550AS	HN4A06J			
	Q0702	00D2730479909	2N5551S-RTK/P			
	Q0703	00D2710318909	2N5401S-RTK/P			
	Q0704	00D2730479909	2N5551S-RTK/P			
	Q0705	00D2710318909	2N5401S-RTK/P			
	Q0706	00D2730479909	2N5551S-RTK/P			
	Q0707	00D2710318909	2N5401S-RTK/P			
	Q0710	00D2710318909	2N5401S-RTK/P			
	Q0711	00D2730479909	2N5551S-RTK/P			
	Q0712	00D2710318909	2N5401S-RTK/P			
	Q0713	00D2730479909	2N5551S-RTK/P			
	Q0801	21785000550AS	HN4A06J			
	Q0802	00D2730479909	2N5551S-RTK/P			
	Q0803	00D2710318909	2N5401S-RTK/P			
	Q0804	00D2730479909	2N5551S-RTK/P			
	Q0805	00D2710318909	2N5401S-RTK/P			
	Q0806	00D2730479909	2N5551S-RTK/P			
	Q0807	00D2710318909	2N5401S-RTK/P			
	Q0810	00D2710318909	2N5401S-RTK/P			
	Q0811	00D2730479909	2N5551S-RTK/P			
	Q0812	00D2710318909	2N5401S-RTK/P			
	Q0813	00D2730479909	2N5551S-RTK/P			
	Q0901	21785000550AS	HN4A06J			
	Q0902	00D2730479909	2N5551S-RTK/P			
	Q0903	00D2710318909	2N5401S-RTK/P			
	Q0904	00D2730479909	2N5551S-RTK/P			
	Q0905	00D2710318909	2N5401S-RTK/P			
	Q0906	00D2730479909	2N5551S-RTK/P			
	Q0907	00D2710318909	2N5401S-RTK/P			
	Q0910	00D2710318909	2N5401S-RTK/P			
	Q0911	00D2730479909	2N5551S-RTK/P			
	Q0912	00D2710318909	2N5401S-RTK/P			
	Q0913	00D2730479909	2N5551S-RTK/P			
RESISTORS GROUP						
	R0102	nsp	RD14B2E152JT(5)			
	R0103	nsp	RD14B2E333JT(5)			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	R0104	nsp	RM73B--471JT +1608			
	R0105	nsp	RM73B--102JT +1608			
	R0106,0107	nsp	RM73B--471JT +1608			
	R0108	nsp	RD14B2E122JT(5)			
	R0109	nsp	RD14B2E333JT(5)			
	R0110	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0111	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0112	nsp	RD14B2E473JT(5)			
	R0114	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0118,0119	00MGG0547016X	47 OHM +- 5% 1/6W			
	R0120	nsp	RM73B--334JT +2125			
	R0121	nsp	RM73B--473JT +1608			
	R0122-0125	nsp	RS14B3DR47JNBST(S)			
	R0126-0128	nsp	RM73B--103JT +1608			
	R0129	nsp	RM73B--154JT +2125			
	R0130	nsp	RM73B--562JT +1608			
	R0131	nsp	RM73B--103JT +1608			
	R0132	nsp	RM73B--223JT +1608			
	R0133	nsp	RM73B--333JT +1608			
	R0134	nsp	RD14B2E100JT(5)			
	R0135	nsp	RS14B3D100JNBST(S)			
	R0136	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0137	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0138	nsp	RM73B--0R0KT +1608			
	R0202	nsp	RD14B2E152JT(5)			
	R0203	nsp	RD14B2E333JT(5)			
	R0204	nsp	RM73B--471JT +1608			
	R0205	nsp	RM73B--102JT +1608			
	R0206,0207	nsp	RM73B--471JT +1608			
	R0208	nsp	RD14B2E122JT(5)			
	R0209	nsp	RD14B2E333JT(5)			
	R0210	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0211	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0212	nsp	RD14B2E473JT(5)			
	R0214	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0218,0219	00MGG0547016X	47 OHM +- 5% 1/6W			
	R0220	nsp	RM73B--334JT +2125			
	R0221	nsp	RM73B--473JT +1608			
	R0222-0225	nsp	RS14B3DR47JNBST(S)			
	R0226-0228	nsp	RM73B--103JT +1608			
	R0229	nsp	RM73B--154JT +2125			
	R0230	nsp	RM73B--562JT +1608			
	R0231	nsp	RM73B--103JT +1608			
	R0232	nsp	RM73B--223JT +1608			
	R0233	nsp	RM73B--333JT +1608			
	R0234	nsp	RD14B2E100JT(5)			
	R0235	00D2442671901	RS14B3D100JNBST(S)			
	R0236	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0237	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0238	nsp	RM73B--0R0KT +1608			
	R0302	nsp	RD14B2E152JT(5)			
	R0303	nsp	RD14B2E333JT(5)			
	R0304	nsp	RM73B--471JT +1608			
	R0305	nsp	RM73B--102JT +1608			
	R0306,0307	nsp	RM73B--471JT +1608			
	R0308	nsp	RD14B2E122JT(5)			
	R0309	nsp	RD14B2E333JT(5)			
	R0310	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0311	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0312	nsp	RD14B2E473JT(5)			
	R0314	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0318,0319	00MGG0547016X	47 OHM +- 5% 1/6W			
	R0320	nsp	RM73B--334JT +2125			
	R0321	nsp	RM73B--473JT +1608			
	R0322-0325	nsp	RS14B3DR47JNBST(S)			
	R0326-0328	nsp	RM73B--103JT +1608			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	R0329	nsp	RM73B--154JT +2125			
	R0330	nsp	RM73B--562JT +1608			
	R0331	nsp	RM73B--103JT +1608			
	R0332	nsp	RM73B--223JT +1608			
	R0333	nsp	RM73B--333JT +1608			
	R0334	nsp	RD14B2E100JT(5)			
	R0335	nsp	RS14B3D100JNBST(S)			
	R0336	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0337	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0338	nsp	RM73B--0R0KT +1608			
	R0402	nsp	RD14B2E152JT(5)			
	R0403	nsp	RD14B2E333JT(5)			
	R0404	nsp	RM73B--471JT +1608			
	R0405	nsp	RM73B--102JT +1608			
	R0406,0407	nsp	RM73B--471JT +1608			
	R0408	nsp	RD14B2E122JT(5)			
	R0409	nsp	RD14B2E333JT(5)			
	R0410	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0411	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0412	nsp	RD14B2E473JT(5)			
	R0414	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0418,0419	00MGG0547016X	47 OHM +- 5% 1/6W			
	R0420	nsp	RM73B--334JT +2125			
	R0421	nsp	RM73B--473JT +1608			
	R0422-0425	nsp	RS14B3DR47JNBST(S)			
	R0426-0428	nsp	RM73B--103JT +1608			
	R0429	nsp	RM73B--154JT +2125			
	R0430	nsp	RM73B--562JT +1608			
	R0431	nsp	RM73B--103JT +1608			
	R0432	nsp	RM73B--223JT +1608			
	R0433	nsp	RM73B--333JT +1608			
	R0434	nsp	RD14B2E100JT(5)			
	R0435	nsp	RS14B3D100JNBST(S)			
	R0436	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0437	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0438	nsp	RM73B--0R0KT +1608			
	R0502	nsp	RD14B2E152JT(5)			
	R0503	nsp	RD14B2E333JT(5)			
	R0504	nsp	RM73B--471JT +1608			
	R0505	nsp	RM73B--102JT +1608			
	R0506,0507	nsp	RM73B--471JT +1608			
	R0508	nsp	RD14B2E122JT(5)			
	R0509	nsp	RD14B2E333JT(5)			
	R0510	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0511	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0512	nsp	RD14B2E473JT(5)			
	R0514	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0518,0519	00MGG0547016X	47 OHM +- 5% 1/6W			
	R0520	nsp	RM73B--334JT +2125			
	R0521	nsp	RM73B--473JT +1608			
	R0522-0525	nsp	RS14B3DR47JNBST(S)			
	R0526-0528	nsp	RM73B--103JT +1608			
	R0529	nsp	RM73B--154JT +2125			
	R0530	nsp	RM73B--562JT +1608			
	R0531	nsp	RM73B--103JT +1608			
	R0532	nsp	RM73B--223JT +1608			
	R0533	nsp	RM73B--333JT +1608			
	R0534	nsp	RD14B2E100JT(5)			
	R0535	nsp	RS14B3D100JNBST(S)			
	R0536	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0537	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0538	nsp	RM73B--0R0KT +1608			
	R0602	nsp	RD14B2E152JT(5)			
	R0603	nsp	RD14B2E333JT(5)			
	R0604	nsp	RM73B--471JT +1608			
	R0605	nsp	RM73B--102JT +1608			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	R0606,0607	nsp	RM73B--471JT +1608			
	R0608	nsp	RD14B2E122JT(5)			
	R0609	nsp	RD14B2E333JT(5)			
	R0610	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0611	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0612	nsp	RD14B2E473JT(5)			
	R0614	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0618,0619	00MGG0547016X	47 OHM +- 5% 1/6W			
	R0620	nsp	RM73B--334JT +2125			
	R0621	nsp	RM73B--473JT +1608			
	R0622-0625	nsp	RS14B3DR47JNBST(S)			
	R0626-0628	nsp	RM73B--103JT +1608			
	R0629	nsp	RM73B--154JT +2125			
	R0630	nsp	RM73B--562JT +1608			
	R0631	nsp	RM73B--103JT +1608			
	R0632	nsp	RM73B--223JT +1608			
	R0633	nsp	RM73B--333JT +1608			
	R0634	nsp	RD14B2E100JT(5)			
	R0635	00D2442671901	RS14B3D100JNBST(S)			
	R0636	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0637	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0638	nsp	RM73B--0R0KT +1608			
	R0702	nsp	RD14B2E152JT(5)			
	R0703	nsp	RD14B2E333JT(5)			
	R0704	nsp	RM73B--471JT +1608			
	R0705	nsp	RM73B--102JT +1608			
	R0706,0707	nsp	RM73B--471JT +1608			
	R0708	nsp	RD14B2E122JT(5)			
	R0709	nsp	RD14B2E333JT(5)			
	R0710	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0711	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0712	nsp	RD14B2E473JT(5)			
	R0714	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0718,0719	00MGG0547016X	47 OHM +- 5% 1/6W			
	R0720	nsp	RM73B--334JT +2125			
	R0721	nsp	RM73B--473JT +1608			
	R0722-0725	nsp	RS14B3DR47JNBST(S)			
	R0726-0728	nsp	RM73B--103JT +1608			
	R0729	nsp	RM73B--154JT +2125			
	R0730	nsp	RM73B--562JT +1608			
	R0731	nsp	RM73B--103JT +1608			
	R0732	nsp	RM73B--223JT +1608			
	R0733	nsp	RM73B--333JT +1608			
	R0734	nsp	RD14B2E100JT(5)			
	R0735	nsp	RS14B3D100JNBST(S)			
	R0736	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0737	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0738	nsp	RM73B--0R0KT +1608			
	R0802	nsp	RD14B2E152JT(5)			
	R0803	nsp	RD14B2E333JT(5)			
	R0804	nsp	RM73B--471JT +1608			
	R0805	nsp	RM73B--102JT +1608			
	R0806,0807	nsp	RM73B--471JT +1608			
	R0808	nsp	RD14B2E122JT(5)			
	R0809	nsp	RD14B2E333JT(5)			
	R0810	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0811	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0812	nsp	RD14B2E473JT(5)			
	R0814	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0818,0819	00MGG0547016X	47 OHM +- 5% 1/6W			
	R0820	nsp	RM73B--334JT +2125			
	R0821	nsp	RM73B--473JT +1608			
	R0822-0825	nsp	RS14B3DR47JNBST(S)			
	R0826-0828	nsp	RM73B--103JT +1608			
	R0829	nsp	RM73B--154JT +2125			
	R0830	nsp	RM73B--562JT +1608			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	R0831	nsp	RM73B--103JT +1608			
	R0832	nsp	RM73B--223JT +1608			
	R0833	nsp	RM73B--333JT +1608			
	R0834	nsp	RD14B2E100JT(5)			
	R0835	nsp	RS14B3D100JNBST(S)			
	R0836	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0837	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0838	nsp	RM73B--0R0KT +1608			
	R0902	nsp	RD14B2E152JT(5)			
	R0903	nsp	RD14B2E333JT(5)			
	R0904	nsp	RM73B--471JT +1608			
	R0905	nsp	RM73B--102JT +1608			
	R0906,0907	nsp	RM73B--471JT +1608			
	R0908	nsp	RD14B2E122JT(5)			
	R0909	nsp	RD14B2E333JT(5)			
	R0910	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0911	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0912	nsp	RD14B2E473JT(5)			
	R0914	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0918,0919	00MGG0547016X	47 OHM +- 5% 1/6W			
	R0920	nsp	RM73B--334JT +2125			
	R0921	nsp	RM73B--473JT +1608			
	R0922-0925	nsp	RS14B3DR47JNBST(S)			
	R0926-0928	nsp	RM73B--103JT +1608			
	R0929	nsp	RM73B--154JT +2125			
	R0930	nsp	RM73B--562JT +1608			
	R0931	nsp	RM73B--103JT +1608			
	R0932	nsp	RM73B--223JT +1608			
	R0933	nsp	RM73B--333JT +1608			
	R0934	nsp	RD14B2E100JT(5)			
	R0935	nsp	RS14B3D100JNBST(S)			
	R0936	00MGG0547116X	470 OHM +- 5% 1/6W			
	R0937	00MGG0522116X	220 OHM +- 5% 1/6W			
	R0938	nsp	RM73B--0R0KT +1608			
CAPACITORS GROUP						
	C0101	00D2544583971	CE04W1H470MT(ROB)			
	C0102	133050086527S	CQ93M2A102JT(PEF)			
	C0103	133050086565S	CQ93M2A222JT(PEF)			
	C0104	nsp	CC73CH1H101JT +1608			
	C0105	13405012940AS	CE04W1C101MT(KR3)			
	C0106	13405013340AS	CE04W1E471MT(KR3)			
	C0107	nsp	CC73CH1H101JT +1608			
	C0109	133050086503S	CQ93M2A221JT(PEF)			
	C0110	13405013340AS	CE04W1E471MT(KR3)			
	C0111	00MDK9610430Y	C1608X7R1H104K			
	C0113	00MDK9610430Y	C1608X7R1H104K			
	C0114,0115	13405018640AS	CE04W2A010MT(KR3)			
	C0116	133050083504S	CQ93M2A473JT(PEF)			
	C0117-0120	00D2570522906	CK73B0J475KT +1608			
	C0121,0122	13405018640AS	CE04W2A010MT(KR3)			
	C0201	00D2544583971	CE04W1H470MT(ROB)			
	C0202	133050086527S	CQ93M2A102JT(PEF)			
	C0203	133050086565S	CQ93M2A222JT(PEF)			
	C0204	nsp	CC73CH1H101JT +1608			
	C0205	13405012940AS	CE04W1C101MT(KR3)			
	C0206	13405013340AS	CE04W1E471MT(KR3)			
	C0207	nsp	CC73CH1H101JT +1608			
	C0209	133050086503S	CQ93M2A221JT(PEF)			
	C0210	13405013340AS	CE04W1E471MT(KR3)			
	C0211	00MDK9610430Y	C1608X7R1H104K			
	C0213	00MDK9610430Y	C1608X7R1H104K			
	C0214,0215	13405018640AS	CE04W2A010MT(KR3)			
	C0216	133050083504S	CQ93M2A473JT(PEF)			
	C0221,0222	13405018640AS	CE04W2A010MT(KR3)			
	C0301	00D2544583971	CE04W1H470MT(ROB)			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C0302	1330500865275	CQ93M2A102JT(PEF)			
	C0303	1330500865655	CQ93M2A222JT(PEF)			
	C0304	nsp	CC73CH1H101JT +1608			
	C0305	13405012940AS	CE04W1C101MT(KR3)			
	C0306	13405013340AS	CE04W1E471MT(KR3)			
	C0307	nsp	CC73CH1H101JT +1608			
	C0309	1330500865035	CQ93M2A221JT(PEF)			
	C0310	13405013340AS	CE04W1E471MT(KR3)			
	C0311	00MDK9610430Y	C1608X7R1H104K			
	C0313	00MDK9610430Y	C1608X7R1H104K			
	C0314,0315	13405018640AS	CE04W2A010MT(KR3)			
	C0316	1330500835045	CQ93M2A473JT(PEF)			
	C0321,0322	13405018640AS	CE04W2A010MT(KR3)			
	C0401	00D2544583971	CE04W1H470MT(ROB)			
	C0402	1330500865275	CQ93M2A102JT(PEF)			
	C0403	1330500865655	CQ93M2A222JT(PEF)			
	C0404	nsp	CC73CH1H101JT +1608			
	C0405	13405012940AS	CE04W1C101MT(KR3)			
	C0406	13405013340AS	CE04W1E471MT(KR3)			
	C0407	nsp	CC73CH1H101JT +1608			
	C0409	1330500865035	CQ93M2A221JT(PEF)			
	C0410	13405013340AS	CE04W1E471MT(KR3)			
	C0411	00MDK9610430Y	C1608X7R1H104K			
	C0413	00MDK9610430Y	C1608X7R1H104K			
	C0414,0415	13405018640AS	CE04W2A010MT(KR3)			
	C0416	1330500835045	CQ93M2A473JT(PEF)			
	C0421,0422	13405018640AS	CE04W2A010MT(KR3)			
	C0501	00D2544583971	CE04W1H470MT(ROB)			
	C0502	1330500865275	CQ93M2A102JT(PEF)			
	C0503	1330500865655	CQ93M2A222JT(PEF)			
	C0504	nsp	CC73CH1H101JT +1608			
	C0505	13405012940AS	CE04W1C101MT(KR3)			
	C0506	13405013340AS	CE04W1E471MT(KR3)			
	C0507	nsp	CC73CH1H101JT +1608			
	C0509	1330500865035	CQ93M2A221JT(PEF)			
	C0510	13405013340AS	CE04W1E471MT(KR3)			
	C0511	00MDK9610430Y	C1608X7R1H104K			
	C0513	00MDK9610430Y	C1608X7R1H104K			
	C0514,0515	13405018640AS	CE04W2A010MT(KR3)			
	C0516	1330500835045	CQ93M2A473JT(PEF)			
	C0521,0522	13405018640AS	CE04W2A010MT(KR3)			
	C0601	00D2544583971	CE04W1H470MT(ROB)			
	C0602	1330500865275	CQ93M2A102JT(PEF)			
	C0603	1330500865655	CQ93M2A222JT(PEF)			
	C0604	nsp	CC73CH1H101JT +1608			
	C0605	13405012940AS	CE04W1C101MT(KR3)			
	C0606	13405013340AS	CE04W1E471MT(KR3)			
	C0607	nsp	CC73CH1H101JT +1608			
	C0609	1330500865035	CQ93M2A221JT(PEF)			
	C0610	13405013340AS	CE04W1E471MT(KR3)			
	C0611	00MDK9610430Y	C1608X7R1H104K			
	C0613	00MDK9610430Y	C1608X7R1H104K			
	C0614,0615	13405018640AS	CE04W2A010MT(KR3)			
	C0616	1330500835045	CQ93M2A473JT(PEF)			
	C0617-0620	00D2570522906	CK73B0J475KT +1608			
	C0621,0622	13405018640AS	CE04W2A010MT(KR3)			
	C0701	00D2544583971	CE04W1H470MT(ROB)			
	C0702	1330500865275	CQ93M2A102JT(PEF)			
	C0703	1330500865655	CQ93M2A222JT(PEF)			
	C0704	nsp	CC73CH1H101JT +1608			
	C0705	13405012940AS	CE04W1C101MT(KR3)			
	C0706	13405013340AS	CE04W1E471MT(KR3)			
	C0707	nsp	CC73CH1H101JT +1608			
	C0709	1330500865035	CQ93M2A221JT(PEF)			
	C0710	13405013340AS	CE04W1E471MT(KR3)			
	C0711	00MDK9610430Y	C1608X7R1H104K			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C0713	00MDK9610430Y	C1608X7R1H104K			
	C0714,0715	13405018640AS	CE04W2A010MT(KR3)			
	C0716	133050083504S	CQ93M2A473JT(PEF)			
	C0721,0722	13405018640AS	CE04W2A010MT(KR3)			
	C0801	00D2544583971	CE04W1H470MT(ROB)			
	C0802	133050086527S	CQ93M2A102JT(PEF)			
	C0803	133050086565S	CQ93M2A222JT(PEF)			
	C0804	nsp	CC73CH1H101JT +1608			
	C0805	13405012940AS	CE04W1C101MT(KR3)			
	C0806	13405013340AS	CE04W1E471MT(KR3)			
	C0807	nsp	CC73CH1H101JT +1608			
	C0809	133050086503S	CQ93M2A221JT(PEF)			
	C0810	13405013340AS	CE04W1E471MT(KR3)			
	C0811	00MDK9610430Y	C1608X7R1H104K			
	C0813	00MDK9610430Y	C1608X7R1H104K			
	C0814,0815	13405018640AS	CE04W2A010MT(KR3)			
	C0816	133050083504S	CQ93M2A473JT(PEF)			
	C0821,0822	13405018640AS	CE04W2A010MT(KR3)			
	C0901	00D2544583971	CE04W1H470MT(ROB)			
	C0902	133050086527S	CQ93M2A102JT(PEF)			
	C0903	133050086565S	CQ93M2A222JT(PEF)			
	C0904	nsp	CC73CH1H101JT +1608			
	C0905	13405012940AS	CE04W1C101MT(KR3)			
	C0906	13405013340AS	CE04W1E471MT(KR3)			
	C0907	nsp	CC73CH1H101JT +1608			
	C0909	133050086503S	CQ93M2A221JT(PEF)			
	C0910	13405013340AS	CE04W1E471MT(KR3)			
	C0911	00MDK9610430Y	C1608X7R1H104K			
	C0913	00MDK9610430Y	C1608X7R1H104K			
	C0914,0915	13405018640AS	CE04W2A010MT(KR3)			
	C0916	133050083504S	CQ93M2A473JT(PEF)			
	C0921,0922	13405018640AS	CE04W2A010MT(KR3)			
OTHERS PARTS GROUP						
	B9001,9002	00D2051034010	M3 SCREW TERMINAL			
	L0101	00D2350191007	INDUCTOR(1MH)			
	L0201	00D2350191007	INDUCTOR(1MH)			
	L0301	00D2350191007	INDUCTOR(1MH)			
	L0401	00D2350191007	INDUCTOR(1MH)			
	L0501	00D2350191007	INDUCTOR(1MH)			
	L0601	00D2350191007	INDUCTOR(1MH)			
	L0701	00D2350191007	INDUCTOR(1MH)			
	L0801	00D2350191007	INDUCTOR(1MH)			
	L0901	00D2350191007	INDUCTOR(1MH)			
	N0102	00MYP06003950	S5B-EH			
	N0202	00MYP06003950	S5B-EH			
	N0302	00MYP06003950	S5B-EH			
	N0402	00MYP06003950	S5B-EH			
	N0502	00MYP06003950	S5B-EH			
	N0602	00MYP06003950	S5B-EH			
	N0702	00MYP06003950	S5B-EH			
	N0802	00MYP06003950	S5B-EH			
	N0902	00MYP06003950	S5B-EH			
	N9002	00MYJ06006500	S10B-PH-K-S (LF)(SN)			
	N9003	00MYJ06006510	S11B-PH-K-S (LF)(SN)			
	N9004	00MYJ06006230	B3B-PH-K-S (LF)(SN)			
	N9006-9010	645010056069S	23P PLUG(C125Z1)			
	N9016	00MYJ06006480	S8B-PH-K-S (LF)(SN)			
	N9017	00MYJ06006520	S12B-PH-K-S (LF)(SN)			
	N9018-9021	645010056069S	23P PLUG(C125Z1)			
	N9022	00MYJ06006230	B3B-PH-K-S (LF)(SN)			
	N9030-9038	645010057062S	23P SOCKET(C125Z2)			
	N9041	61205049600AS	4P 80mm PH-SAN			
	N9046	61205049600AS	4P 80mm PH-SAN			
	N9051,9052	00MYJ06006440	S4B-PH-K-S (LF)(SN)			
	P0001	63101013000AS	PWB P.AMP A350			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	V0101	1610100064O5S	V6QB301T			
	V0201	1610100064O5S	V6QB301T			
	V0301	1610100064O5S	V6QB301T			
	V0401	1610100064O5S	V6QB301T			
	V0501	1610100064O5S	V6QB301T			
	V0601	1610100064O5S	V6QB301T			
	V0701	1610100064O5S	V6QB301T			
	V0801	1610100064O5S	V6QB301T			
	V0901	1610100064O5S	V6QB301T			
⚠	Z0101	2523100065I3S	PRF18BC471QB5RB			
⚠	Z0102,0103	2523100065O6S	PRF18BB471QB5RB			
⚠	Z0104,0105	2523100065442S	PRF18BF471QB5RB			
⚠	Z0201	2523100065I3S	PRF18BC471QB5RB			
⚠	Z0301	2523100065I3S	PRF18BC471QB5RB			
⚠	Z0401	2523100065I3S	PRF18BC471QB5RB			
⚠	Z0501	2523100065I3S	PRF18BC471QB5RB			
⚠	Z0601	2523100065I3S	PRF18BC471QB5RB			
⚠	Z0602,0603	2523100065O6S	PRF18BB471QB5RB			
⚠	Z0604,0605	2523100065442S	PRF18BF471QB5RB			
⚠	Z0701	2523100065I3S	PRF18BC471QB5RB			
⚠	Z0801	2523100065I3S	PRF18BC471QB5RB			
⚠	Z0901	2523100065I3S	PRF18BC471QB5RB			
	Z9004,9005	nsp	STYLE PIN			
	Q0108,0109	2190500021O2S	DHCT-A3/C3(4310F)			
	Q0208,0209	2190500021O2S	DHCT-A3/C3(4310F)			
	Q0308,0309	2190500021O2S	DHCT-A3/C3(4310F)			
	Q0408,0409	2190500021O2S	DHCT-A3/C3(4310F)			
	Q0508,0509	2190500021O2S	DHCT-A3/C3(4310F)			
	Q0608,0609	2190500021O2S	DHCT-A3/C3(4310F)			
	Q0708,0709	2190500021O2S	DHCT-A3/C3(4310F)			
	Q0808,0809	2190500021O2S	DHCT-A3/C3(4310F)			
	Q0908,0909	2190500021O2S	DHCT-A3/C3(4310F)			

DIGITAL PWB ASSY

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP						
	D1113	00D2760750902	RB521S-30TE61 +REF			
	D1429-1431	00D2760794900	KDS160-RTK/P			
	D1701	00D2760794900	KDS160-RTK/P			
	D1702,1703	201310001503S	KDS160E			
	D1704	00D2760794900	KDS160-RTK/P			
	D1705-1708	201310001503S	KDS160E			
	D1712	00D2760846900	RB060M-30			
	D1901-1903	00D2760794900	KDS160-RTK/P			
	Q0101	213850009503S	2SC4617EBTLR			
	Q1103-1105	00MBA2000399Y	KRC402E-RTK KEC			
	Q1106,1107	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q1108	00D2750110905	HN1K02FU-TE85L			
	Q1401-1404	00D2710312905	KTA1504S-GR-RTK/P			
	Q1405,1406	213850009503S	2SC4617EBTLR			
	Q1407	00D2740195901	2SD2114KT196 +C			
	Q1409	00D2750110905	HN1K02FU-TE85L			
	Q1701	00MBA2000199Y	KRC404E-RTK KEC STANDARD			
	Q1702,1703	21535001250AS	KRA302E-RTK/P			
	Q1704	00MBA2000199Y	KRC404E-RTK KEC STANDARD			
	Q1705,1706	21535001250AS	KRA302E-RTK/P			
	Q1707	00MBA2000199Y	KRC404E-RTK KEC STANDARD			
	Q1708-1710	21535001250AS	KRA302E-RTK/P			
	Q1711	00MBA2000399Y	KRC402E-RTK KEC			
	Q1712	00MBA2000199Y	KRC404E-RTK KEC STANDARD			
	Q1713,1714	21535001250AS	KRA302E-RTK/P			
	Q1715	00MBA2000199Y	KRC404E-RTK KEC STANDARD			
	Q1716,1717	21535001250AS	KRA302E-RTK/P			
	Q1718	211850008504S	2SA2018TL			
	Q1719	00MBA2000199Y	KRC404E-RTK KEC STANDARD			
	Q1720	211850008504S	2SA2018TL			
	Q1721,1722	00MBA2000199Y	KRC404E-RTK KEC STANDARD			
	Q1723	00D2757001907	FDC608PZ			
	Q1724	00MBA2000199Y	KRC404E-RTK KEC STANDARD			
	Q1725	211850008504S	2SA2018TL			
	Q1726	21535001250AS	KRA302E-RTK/P			
	Q1727	00MBA2000199Y	KRC404E-RTK KEC STANDARD			
	Q1901,1902	00MBA2000399Y	KRC402E-RTK KEC			
	Q1903	211850008504S	2SA2018TL			
	Q1906	213850009503S	2SC4617EBTLR			
	Q1907	00MBA2000199Y	KRC404E-RTK KEC STANDARD			
	Q1908	211850008504S	2SA2018TL			
	Q1909	00D2757001907	FDC608PZ			
	Q1910	00MBA2000399Y	KRC402E-RTK KEC			
	Q2006,2007	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q2101,2102	213850009503S	2SC4617EBTLR			
	Q2103	00MBA2000399Y	KRC402E-RTK KEC			
	Q2104	21535001250AS	KRA302E-RTK/P			
	Q2105,2106	00MBA2000399Y	KRC402E-RTK KEC			
	U0101,0102	262010006704S	JSR1165			
	U0103,0104	00D2623449004	LC89057W-VF4A			
	U0106	23681012050AS	PCM5100PWR			
	U0108	00D2623077900	TC74VHCU04FT +REF			
	U0141	236810086505S	AK5358BET			
	U0142	00D2631047906	NJM2115M-TE1 +C			
	U0301	23681011960AS	5M570ZF256C5N			
	U0302	231810017504S	TK73318WTL-G			
	U0303	236810083506S	CS2100-10-CZZR			
	U0304	236810012504S	FCXO-05B(24.576MHz)			
	U0305	141810003503S	FCXO-05 (30.00MHz)			
	U0401	231310009508S	PQ033DNA1ZPH			
	U0403-0409	236810081500S	PCM1795			
	U0410-0419	235810050503S	NJM4565M			
	U0421-0430	235810050503S	NJM4565M			
	U1001	23681012860AS	SII9575CTUC			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	U1101	23381000450AS	TC74VHC4051AFT			
	U1102	23681012760AS	ADV7850KBCZ-5			
	U1103	00D2623436907	TC74VHC244FT			
	U1104	231810017504S	TK73318WTL-G			
	U1351	23981007960AS	K4T51163QJ-BCE7			
	U1401	23681012960AS	ADV8003-1			
	U1404	8R2481014500S	GUI ROM SUB ASSY(AVR4520E3/E2/JP) (MX25L12835EMI-10G)	E3,E2,JP		
	U1404	8R2481014501S	GUI ROM SUB ASSY(AVR4520E1C) (MX25L12835EMI-10G)	E1C		
	U1601,1602	23981007960AS	K4T51163QJ-BCE7			
	U1701-1703	231810089509S	EX3AV			
	U1705	231810089509S	EX3AV			
	U1707	23681013550AS	NCP380HMUAJAATBG			
	U1708	231810089509S	EX3AV			
	U1709	231810071508S	PQ012ENB1ZPH			
	U1901	231810089509S	EX3AV			
	U1902	00D2623436907	TC74VHC244FT			
	U1903	23171011750AS	NJM2845DL1-33			
	U1904	23981007450AS	PST8448(SC-82AB)			
	U1905	231310009508S	PQ033DNA1ZPH			
	U2001	8R2431009400S	MAIN CPU SUB ASSY (R5F56108VNFP)			
	U2002	24681007550AS	R1EX24256BSAS0A			
	U2101	8R2431009500S	SUB CPU SUB ASSY (R5F3650NNFB)			
	U2104	00D2623436907	TC74VHC244FT			
RESISTORS GROUP						
	R0103,0104	nsp	RM73B--330JT +1005			
	R0105,0106	nsp	RM73B--750JT			
	R0109,0110	nsp	RM73B--471JT			
	R0115,0116	nsp	RM73B--473JT+1005			
	R0117,0118	nsp	RM73B--334JT +1005			
	R0121,0122	nsp	RM73B--330JT +1005			
	R0123	nsp	RM73B--104JT			
	R0124	nsp	RM73B--680JT			
	R0125	nsp	RM73B--471JT			
	R0126	nsp	RM73B--182JT			
	R0127	nsp	RM73B--392JT +1005			
	R0128	nsp	RM73B--222JT			
	R0129	nsp	RM73B--330JT +1005			
	R0130	nsp	RM73B--332JT			
	R0131	nsp	RM73B--102JT			
	R0132	nsp	RM73B--330JT +1005			
	R0133	nsp	RM73B--221JT +1005			
	R0134	nsp	RM73B--330JT +1005			
	R0136	nsp	RM73B--102JT			
	R0137	nsp	RM73B--0R0KT+1005			
	R0138	nsp	RM73B--221JT +1005			
	R0139	nsp	RM73B--102JT			
	R0140	nsp	RM73B--471JT			
	R0141	nsp	RM73B--330JT +1005			
	R0144-0146	nsp	RM73B--101JT +1608			
	R0147,0148	nsp	RM73B--332JT +1608			
	R0149	nsp	RM73B--101JT +1608			
	R0150	nsp	RM73B--472JT (1608) +1608			
	R0151,0152	nsp	RM73B--683JT +1608			
	R0153	nsp	RM73B--472JT (1608) +1608			
	R0154,0155	nsp	RM73B--474JT +1608			
	R0168,0169	nsp	RM73B--103JT +1005			
	R0171	nsp	RM73B--103JT +1005			
	R0174,0175	nsp	RM73B--471JT +1608			
	R0178	nsp	RM73B--0R0KT+1005			
	R0188	126210008536S	MNR04=103(1005X4)			
	R0189,0190	126210002538S	MNR04=330(1005X4)			
	R0191	126210008536S	MNR04=103(1005X4)			
	R0192	126210002538S	MNR04=330(1005X4)			
	R0301	126250001502S	PRB3T4=0R0(1005X4)			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	R0302	126210003555S	MNR04=101(1005X4)			
	R0304	126250001502S	PRB3T4=0R0(1005X4)			
	R0305,0306	126210002538S	MNR04=330(1005X4)			
	R0307-0313	nsp	RM73B--330JT +1005			
	R0314-0323	126210003555S	MNR04=101(1005X4)			
	R0324,0325	nsp	RM73B--330JT +1005			
	R0326-0329	126210003555S	MNR04=101(1005X4)			
	R0330,0331	nsp	RM73B--330JT +1005			
	R0332-0334	126210003555S	MNR04=101(1005X4)			
	R0335	nsp	RM73B--330JT +1005			
	R0337-0340	nsp	RM73B--101JT+1005			
	R0341	nsp	RM73B--102JT			
	R0342,0343	nsp	RM73B--103JT +1005			
	R0344-0346	nsp	RM73B--330JT +1005			
	R0348	nsp	RM73B--103JT +1005			
	R0351	nsp	RM73B--103JT +1005			
	R0353	nsp	RM73B--103JT +1005			
	R0354	nsp	RM73B--330JT +1005			
	R0355	nsp	RM73B--103JT +1005			
	R0356-0359	nsp	RM73B--0R0KT+1005			
	R0360	nsp	RM73B--330JT +1005			
	R0361	nsp	RM73B--103JT +1005			
	R0362	126210002538S	MNR04=330(1005X4)			
	R0367-0370	nsp	RM73B--330JT +1005			
	R0401	nsp	RM73B--0R0KT +2125			
	R0403	nsp	RM73B--102JT			
	R0404,0405	nsp	RM73B--103JT +1608			
	R0406	nsp	RM73B--102JT			
	R0407,0408	nsp	RM73B--103JT +1608			
	R0409	nsp	RM73B--102JT			
	R0410,0411	nsp	RM73B--103JT +1608			
	R0412	nsp	RM73B--102JT			
	R0413,0414	nsp	RM73B--103JT +1608			
	R0415	nsp	RM73B--102JT			
	R0416,0417	nsp	RM73B--103JT +1608			
	R0418	nsp	RM73B--102JT			
	R0419,0420	nsp	RM73B--103JT +1608			
	R0421	nsp	RM73B--102JT			
	R0422,0423	nsp	RM73B--103JT +1608			
	R0424-0435	nsp	RM73B--821JT +2125			
	R0436,0437	nsp	RM73B--152JT +2125			
	R0438-0441	nsp	RM73B--122JT +2125			
	R0443,0444	nsp	RM73B--152JT +2125			
	R0446,0447	nsp	RM73B--101JT +2125			
	R0448,0449	nsp	RM73B--821JT +2125			
	R0450,0451	nsp	RM73B--821JT +1608			
	R0452-0459	nsp	RM73B--821JT +2125			
	R0460	nsp	RM73B--152JT +2125			
	R0461	nsp	RM73B--272JT +2125			
	R0462-0465	nsp	RM73B--122JT +2125			
	R0467	nsp	RM73B--152JT +2125			
	R0468	nsp	RM73B--272JT +2125			
	R0470,0471	nsp	RM73B--101JT +2125			
	R0472-0483	nsp	RM73B--821JT +2125			
	R0484,0485	nsp	RM73B--222JT +2125			
	R0486-0489	nsp	RM73B--122JT +2125			
	R0490	nsp	RM73B--393JT +2125			
	R0491,0492	nsp	RM73B--222JT +2125			
	R0493	nsp	RM73B--393JT +2125			
	R0494,0495	nsp	RM73B--101JT +2125			
	R0496,0497	nsp	RM73B--821JT +1608			
	R0500,0501	nsp	RM73B--821JT +1608			
	R0504,0505	nsp	RM73B--821JT +1608			
	R0508	nsp	RM73B--272JT +1608			
	R0510,0511	nsp	RM73B--122JT +1608			
	R0515	nsp	RM73B--272JT +1608			
	R0518	nsp	RM73B--101JT +1608			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	R0520-0531	nsp	RM73B--821JT +1608			
	R0532,0533	nsp	RM73B--152JT +1608			
	R0534-0537	nsp	RM73B--122JT +1608			
	R0539,0540	nsp	RM73B--152JT +1608			
	R0542,0543	nsp	RM73B--101JT +1608			
	R0544-0555	nsp	RM73B--821JT +1608			
	R0556,0557	nsp	RM73B--152JT +1608			
	R0558-0561	nsp	RM73B--122JT +1608			
	R0563,0564	nsp	RM73B--152JT +1608			
	R0566,0567	nsp	RM73B--101JT +1608			
	R0568-0579	nsp	RM73B--821JT +1608			
	R0580,0581	nsp	RM73B--152JT +1608			
	R0582-0585	nsp	RM73B--122JT +1608			
	R0587,0588	nsp	RM73B--152JT +1608			
	R0590,0591	nsp	RM73B--101JT +1608			
	R1002,1003	nsp	RM73B--473JT+1005			
	R1004	nsp	RM73B--472JT+1005			
	R1005	nsp	RM73B--0R0KT+1005			
	R1008	nsp	RM73B--100JT			
	R1010,1011	nsp	RM73B--473JT+1005			
	R1012	nsp	RM73B--472JT+1005			
	R1013	nsp	RM73B--0R0KT+1005			
	R1016	nsp	RM73B--100JT			
	R1018,1019	nsp	RM73B--473JT+1005			
	R1020	nsp	RM73B--472JT+1005			
	R1021	nsp	RM73B--0R0KT+1005			
	R1024	nsp	RM73B--100JT			
	R1026	nsp	RM73B--0R0KT+1005			
	R1029,1030	nsp	RM73B--473JT+1005			
	R1031	nsp	RM73B--100JT			
	R1032	nsp	RM73B--472JT+1005			
	R1034	nsp	RM73B--0R0KT+1005			
	R1037,1038	nsp	RM73B--473JT+1005			
	R1039	nsp	RM73B--100JT			
	R1040	nsp	RM73B--472JT+1005			
	R1042	nsp	RM73B--0R0KT+1005			
	R1045,1046	nsp	RM73B--473JT+1005			
	R1047	nsp	RM73B--100JT			
	R1048	nsp	RM73B--472JT+1005			
	R1060	nsp	RM73B--472JT+1005			
	R1062	nsp	RM73B--102JT			
	R1063-1065	nsp	RM73B--100JT			
	R1066-1069	nsp	RM73B--472JT+1005			
	R1070	nsp	RM73B--100JT +1608			
	R1072,1073	nsp	RM73B--100JT			
	R1075	nsp	RM73B--154JT +1608			
	R1076	nsp	RM73B--330JT +1005			
	R1077-1082	nsp	RM73B--0R0KT+1005			
	R1083,1084	nsp	RM73B--182JT			
	R1085	nsp	RM73B--103JT +1005			
	R1086	126210007557S	MNR04=472(1005X4)			
	R1087	126210002538S	MNR04=330(1005X4)			
	R1088-1094	126210009591S	MNR04=473(1005X4)			
	R1101-1104	122350001547S	RM73B--471DT(1608)			
	R1105,1106	00D2472030994	RM73B--240DT(1608)			
	R1107	00D2472031977	RM73B--510DT(1608)			
	R1108-1111	00D2472032976	RM73B--151DT(1608)			
	R1112	00D2472031977	RM73B--510DT(1608)			
	R1113-1116	122350001530S	RM73B--331DT(1608)			
	R1117,1118	nsp	RM73B--0R0KT+1005			
	R1119	nsp	RM73B--681JT			
	R1124	nsp	RM73B--681JT			
	R1126	nsp	RM73B--0R0KT+1005			
	R1133	nsp	RM73B--473JT+1005			
	R1146	nsp	RM73B--681JT			
	R1147	nsp	RM73B--0R0KT+1005			
	R1148	nsp	RM73B--222JT			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	R1149	nsp	RM73B--332JT			
	R1150-1152	nsp	RM73B--472JT+1005			
	R1153,1154	nsp	RM73B--222JT			
	R1155	nsp	RM73B--102JT			
	R1156-1158	nsp	RM73B--472JT+1005			
	R1159-1161	nsp	RM73B--560JT			
	R1163-1165	nsp	RM73B--470JT +1005			
	R1166	nsp	RM73B--222JT			
	R1168-1170	nsp	RM73B--473JT+1005			
	R1172	nsp	RM73B--472JT+1005			
	R1174	122350001547S	RM73B--471DT(1608)			
	R1176,1177	nsp	RM73B--473JT+1005			
	R1181-1184	126210001511S	MNR04=100(1005X4)			
	R1185,1186	126210002538S	MNR04=330(1005X4)			
	R1187	126210007557S	MNR04=472(1005X4)			
	R1188-1197	126210002576S	MNR04=470(1005X4)			
	R1198,1199	126210007557S	MNR04=472(1005X4)			
	R1200-1202	126210009591S	MNR04=473(1005X4)			
	R1203	nsp	RM73B--472JT+1005			
	R1204,1205	nsp	RM73B--103JT +1005			
	R1363-1366	nsp	RM73B--103JT +1005			
	R1367,1368	00D2472034974	RM73B--102DT(1608)			
	R1401	nsp	RM73B--102JT			
	R1402	nsp	RM73B--330JT +1005			
	R1404	00D2472033946	RM73B--301DT(1608)			
	R1405	nsp	RM73B--102JT			
	R1406	nsp	RM73B--330JT +1005			
	R1408	00D2472033946	RM73B--301DT(1608)			
	R1409	nsp	RM73B--102JT			
	R1410	nsp	RM73B--330JT +1005			
	R1412	00D2472033946	RM73B--301DT(1608)			
	R1413	nsp	RM73B--102JT			
	R1414	nsp	RM73B--330JT +1005			
	R1416	00D2472033946	RM73B--301DT(1608)			
	R1417,1418	nsp	RM73B--301JT			
	R1419,1420	nsp	RM73B--560JT			
	R1423	nsp	RM73B--472JT+1005			
	R1424-1429	nsp	RM73B--470JT +1005			
	R1431,1432	nsp	RM73B--470JT +1005			
	R1433	nsp	RM73B--102JT			
	R1434,1435	nsp	RM73B--103JT +1005			
	R1436	nsp	RM73B--0R0KT +2125			
	R1438	nsp	RM73B--0R0KT+1005			
	R1439,1440	00D2472034974	RM73B--102DT(1608)			
	R1441,1442	nsp	RM73B--472JT+1005			
	R1443	122350001547S	RM73B--471DT(1608)			
	R1445	122350001547S	RM73B--471DT(1608)			
	R1446	00D2472035957	RM73B--222DT(1608)			
	R1447	nsp	RM73B--333JT +1608			
	R1450	nsp	RM73B--472JT+1005			
	R1452	nsp	RM73B--132DT(1608)			
	R1453	nsp	RM73B--472JT+1005			
	R1454	00D2472035960	RM73B--272DT(1608)			
	R1455	00D2472032992	RM73B--181DT(1608)			
	R1456	00D2472035960	RM73B--272DT(1608)			
	R1457	00D2472032992	RM73B--181DT(1608)			
	R1459	00D2472041909	RM73B--392DT(1608)			
	R1460	00D2472033917	RM73B--221DT(1608)			
	R1461	00D2472041909	RM73B--392DT(1608)			
	R1462	nsp	RM73B--330JT +1005			
	R1463	00D2472033917	RM73B--221DT(1608)			
	R1464,1465	nsp	RM73B--330JT +1005			
	R1475-1479	nsp	RM73B--0R0KT+1005			
	R1482	nsp	RM73B--330JT +1005			
	R1483-1486	nsp	RM73B--103JT +1005			
	R1487-1491	nsp	RM73B--0R0KT+1005			
	R1492	nsp	RM73B--182JT			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	R1493,1494	nsp	RM73B--0R0KT+1005			
	R1495	nsp	RM73B--182JT			
	R1496,1497	nsp	RM73B--0R0KT+1005			
	R1498	nsp	RM73B--103JT +1005			
	R1499,1500	00D2472031977	RM73B--510DT(1608)			
	R1501,1502	nsp	RM73B--0R0KT+1005			
	R1503	nsp	RM73B--182JT			
	R1504,1505	nsp	RM73B--0R0KT+1005			
	R1506	nsp	RM73B--182JT			
	R1507,1508	nsp	RM73B--0R0KT+1005			
	R1509	nsp	RM73B--103JT +1005			
	R1510,1511	00D2472031977	RM73B--510DT(1608)			
	R1526	nsp	RM73B--472JT+1005			
	R1527	nsp	RM73B--103JT +1005			
	R1530	nsp	RM73B--103JT +1005			
	R1531	nsp	RM73B--472JT+1005			
	R1532	nsp	RM73B--224JT			
	R1534	nsp	RM73B--273JT			
	R1535	nsp	RM73B--122JT +1005			
	R1536	nsp	RM73B--103JT +1005			
	R1537	nsp	RM73B--104JT			
	R1538	nsp	RM73B--332JT			
	R1545	126210008536S	MNR04=103(1005X4)			
	R1546-1560	126210002576S	MNR04=470(1005X4)			
	R1561-1563	126210007557S	MNR04=472(1005X4)			
	R1564-1566	126210001511S	MNR04=100(1005X4)			
	R1615,1616	nsp	RM73B--103JT +1005			
	R1617,1618	00D2472034974	RM73B--102DT(1608)			
	R1701,1702	nsp	RM73B--104JT			
	R1703-1706	nsp	RM73B--103JT +1005			
	R1707	nsp	RM73B--332JT			
	R1708	nsp	RM73B--473JT+1005			
	R1711	00D2472038925	RM73B--154DT(1608)			
	R1712	00D2472037900	RM73B--473DT(1608)			
	R1713	nsp	RM73B--684JT +1608			
	R1717	00D2472038925	RM73B--154DT(1608)			
	R1718	00D2472038909	RM73B--124DT(1608)			
	R1719	nsp	RM73B--105JT +1608			
	R1720	nsp	RM73B--103JT +1005			
	R1721	nsp	RM73B--332JT			
	R1722,1723	nsp	RM73B--103JT +1005			
	R1727	00D2472038925	RM73B--154DT(1608)			
	R1728	00D2472038909	RM73B--124DT(1608)			
	R1729	nsp	RM73B--824JT +1608			
	R1736	nsp	RM73B--473JT+1005			
	R1739	00D2472038925	RM73B--154DT(1608)			
	R1740	00D2472038967	RM73B--224DT(1608)			
	R1741	nsp	RM73B--225KT +1608			
	R1742	nsp	RM73B--103JT +1005			
	R1743	nsp	RM73B--332JT			
	R1747	nsp	RM73B--473JT+1005			
	R1749	nsp	RM73B--153JT +1608			
	R1753	00D2472038925	RM73B--154DT(1608)			
	R1754	00D2472037900	RM73B--473DT(1608)			
	R1755	nsp	RM73B--684JT +1608			
	R1756	nsp	RM73B--0R0KT +2125			
	R1757	nsp	RM73B--0R0KT+1005			
	R1758	nsp	RM73B--473JT+1005			
	R1805-1811	nsp	RM73B--105KT +1005			
	R1812	nsp	RM73B--472JT+1005			
	R1813-1819	nsp	RM73B--101JT+1005			
	R1901	nsp	RM73B--473JT+1005			
	R1904	00D2472038925	RM73B--154DT(1608)			
	R1905	00D2472037900	RM73B--473DT(1608)			
	R1906	nsp	RM73B--684JT +1608			
	R1907	nsp	RM73B--472JT+1005			
	R1910	nsp	RM73B--330JT +1005			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	R1911	nsp	RM73B--103JT +1005			
	R1912	nsp	RM73B--332JT			
	R1915	nsp	RM73B--103JT +1005			
	R1916	nsp	RM73B--472JT+1005			
	R1917	nsp	RM73B--473JT+1005			
	R1918	nsp	RM73B--223JT			
	R1919	nsp	RM73B--104JT			
	R1920	nsp	RM73B--101JT+1005			
	R1921	nsp	RM73B--103JT +1005			
	R1922	nsp	RM73B--332JT			
	R1923	nsp	RM73B--473JT+1005			
	R1924	nsp	RM73B--0R0KT+1005			
	R2005	126210008536S	MNR04=103(1005X4)			
	R2006	nsp	RM73B--0R0KT +1608	JP		
	R2008	126210008536S	MNR04=103(1005X4)			
	R2009	nsp	RM73B--0R0KT +1608	E2		
	R2010	nsp	RM73B--0R0KT +1608	E3		
	R2011	nsp	RM73B--330JT +1005			
	R2012	nsp	RM73B--472JT+1005			
	R2014	nsp	RM73B--472JT+1005			
	R2015	nsp	RM73B--103JT +1005			
	R2016,2017	nsp	RM73B--330JT +1005			
	R2018	nsp	RM73B--472JT+1005			
	R2020	nsp	RM73B--330JT +1005			
	R2021	nsp	RM73B--103JT +1005			
	R2022,2023	nsp	RM73B--330JT +1005			
	R2024	nsp	RM73B--103JT +1005			
	R2025,2026	nsp	RM73B--472JT+1005			
	R2027-2036	nsp	RM73B--330JT +1005			
	R2038	nsp	RM73B--103JT +1608			
	R2042-2044	nsp	RM73B--472JT+1005			
	R2045,2046	nsp	RM73B--0R0KT +1608			
	R2047	nsp	RM73B--103JT +1005			
	R2048	nsp	RM73B--0R0KT +1608			
	R2050,2051	nsp	MNR04=330(1005X4)			
	R2052	nsp	MNR04=472(1005X4)			
	R2053-2055	nsp	MNR04=330(1005X4)			
	R2056-2058	nsp	RM73B--102JT			
	R2059	nsp	RM73B--472JT+1005			
	R2101-2104	nsp	RM73B--330JT +1005			
	R2106	nsp	RM73B--105JT +1608			
	R2107	nsp	RM73B--103JT +1005			
	R2108-2110	nsp	RM73B--330JT +1005			
	R2111	nsp	RM73B--103JT +1005			
	R2112-2114	nsp	RM73B--330JT +1005			
	R2115,2116	nsp	RM73B--100JT			
	R2117	nsp	RM73B--330JT +1005			
	R2118	nsp	RM73B--472JT+1005			
	R2119-2122	nsp	RM73B--330JT +1005			
	R2123,2124	nsp	RM73B--100JT			
	R2132	nsp	RM73B--472JT+1005			
	R2133	nsp	RM73B--105KT +1005			
	R2134-2136	nsp	RM73B--472JT+1005			
	R2137	nsp	RM73B--473JT+1005			
	R2138	nsp	RM73B--105KT +1005			
	R2139	nsp	RM73B--224JT			
	R2140	nsp	RM73B--104JT			
	R2142	nsp	RM73B--154JT			
	R2143,2144	nsp	RM73B--472JT+1005			
	R2146	nsp	RM73B--332JT			
	R2147	nsp	RM73B--472JT+1005			
	R2148,2149	nsp	MNR04=330(1005X4)			
	R2150-2152	nsp	RM73B--103JT +1005			
CAPACITORS GROUP						
	C0001-0020	nsp	CK73B1H102KT +1005			
	C0101,0102	nsp	CK73B1A104KT +1005			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C0103,0104	nsp	CK73B1H102KT +1005			
	C0105,0106	nsp	CK73B1E103KT(1005)			
	C0107	nsp	CK73B1A104KT +1005			
	C0108	nsp	CK73B1H102KT +1005			
	C0109	nsp	CK73B1A105KT +1608			
	C0112,0113	nsp	CK73B1A104KT +1005			
	C0114,0115	nsp	CK73B1H102KT +1005			
	C0116,0117	nsp	CK73B1A104KT +1005			
	C0118,0119	nsp	CK73B1H102KT +1005			
	C0120,0121	nsp	CK73B1A104KT +1005			
	C0122-0124	nsp	CK73B1H102KT +1005			
	C0125,0126	nsp	CK73B1A104KT +1005			
	C0127	nsp	CK73B1E223KT +1608			
	C0128	nsp	CK73B1E104KT +1608			
	C0129,0130	nsp	CK73B1A104KT +1005			
	C0131,0132	nsp	CK73B1H102KT +1005			
	C0133,0134	nsp	CK73B1A104KT +1005			
	C0135,0136	nsp	CK73B1H102KT +1005			
	C0137,0138	nsp	CK73B1A104KT +1005			
	C0139-0141	nsp	CK73B1H102KT +1005			
	C0142,0143	nsp	CK73B1A104KT +1005			
	C0144	nsp	CK73B1E223KT +1608			
	C0145	nsp	CK73B1E104KT +1608			
	C0146	nsp	CK73B0J475KT +1608			
	C0148,0149	nsp	CK73B1A105KT +1608			
	C0150,0151	nsp	CE67C1C100MT(RV2)			
	C0152,0153	nsp	CC73CH1H103JT +2125			
	C0154,0155	nsp	CC73CH1H471JT +1608			
	C0156	nsp	CK73B0J475KT +1608			
	C0157,0158	nsp	CE67C1C100MT(RV2)			
	C0159	nsp	CK73B0J475KT +1608			
	C0162-0164	nsp	CK73B1E104KT +1608			
	C0166	nsp	CK73B0J475KT +1608			
	C0167	nsp	CK73B1E104KT +1608			
	C0168,0169	nsp	CK73B1A225KT 1608			
	C0170	nsp	CK73B1E104KT +1608			
	C0171,0172	nsp	CC73CH1H222JT +1608			
	C0178	nsp	CK73B1H102KT +1005			
	C0301	nsp	CK73B1H102KT +1005			
	C0302	nsp	CK73B1A104KT +1005			
	C0307-0316	nsp	CK73B1A104KT +1005			
	C0317-0322	nsp	CK73B1H102KT +1005			
	C0327	nsp	CK73B0J475KT +1608			
	C0328	nsp	CK73B1A104KT +1005			
	C0329	nsp	CK73B1H102KT +1005			
	C0330	nsp	CK73B0J475KT +1608			
	C0331	nsp	CK73B1A104KT +1005			
	C0332	nsp	CK73B1H102KT +1005			
	C0333	nsp	CC73CH1H101JT +1005			
	C0334	nsp	CK73B0J475KT +1608			
	C0335	nsp	CK73B1A104KT +1005			
	C0336,0337	nsp	CK73B1H102KT +1005			
	C0338	nsp	CK73B1A104KT +1005			
	C0401	nsp	CK73B0J475KT +1608			
	C0404	nsp	CK73B1E104KT +1608			
	C0405	nsp	CK73X5R0J106MT(2125)			
	C0411-0418	nsp	CK73B1A104KT +1005			
	C0419-0425	nsp	CK73B1H102KT +1005			
	C0426	00D2544655922	CE67C0J470MT (RV2) +REF			
	C0427	nsp	CC73CH1H101JT +1005			
	C0428	nsp	CK73B0J475KT +1608			
	C0429	nsp	CK73B1H102KT +1005			
	C0430	00D2544655922	CE67C0J470MT (RV2) +REF			
	C0431-0433	nsp	CK73B0J475KT +1608			
	C0434	nsp	CC73CH1H101JT +1005			
	C0435	nsp	CK73B0J475KT +1608			
	C0436	00D2544655922	CE67C0J470MT (RV2) +REF			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C0437	nsp	CC73CH1H101JT +1005			
	C0438	nsp	CK73B0J475KT +1608			
	C0439	nsp	CK73B1H102KT +1005			
	C0440,0441	nsp	CK73B0J475KT +1608			
	C0442	nsp	CC73CH1H101JT +1005			
	C0443,0444	nsp	CK73B0J475KT +1608			
	C0445	00D2544655922	CE67C0J470MT (RV2) +REF			
	C0446	nsp	CC73CH1H101JT +1005			
	C0447	nsp	CK73B0J475KT +1608			
	C0448	nsp	CK73B1H102KT +1005			
	C0449-0451	nsp	CK73B0J475KT +1608			
	C0452	nsp	CC73CH1H101JT +1005			
	C0453	nsp	CK73B0J475KT +1608			
	C0454	00D2544655922	CE67C0J470MT (RV2) +REF			
	C0455	nsp	CC73CH1H101JT +1005			
	C0456	nsp	CK73B0J475KT +1608			
	C0457	nsp	CK73B1H102KT +1005			
	C0458,0459	nsp	CK73B0J475KT +1608			
	C0460	nsp	CC73CH1H101JT +1005			
	C0461	00D2544655922	CE67C0J470MT (RV2) +REF			
	C0462	nsp	CK73B0J475KT +1608			
	C0463	nsp	CC73CH1H101JT +1005			
	C0464	nsp	CK73B0J475KT +1608			
	C0465	nsp	CK73B1H102KT +1005			
	C0466,0467	nsp	CK73B0J475KT +1608			
	C0468	nsp	CC73CH1H101JT +1005			
	C0469	00D2544655922	CE67C0J470MT (RV2) +REF			
	C0470	nsp	CK73B0J475KT +1608			
	C0471	nsp	CC73CH1H101JT +1005			
	C0472	nsp	CK73B0J475KT +1608			
	C0473	nsp	CK73B1H102KT +1005			
	C0474,0475	nsp	CK73B0J475KT +1608			
	C0476	nsp	CC73CH1H101JT +1005			
	C0477	00D2544655922	CE67C0J470MT (RV2) +REF			
	C0478	nsp	CK73B0J475KT +1608			
	C0479	nsp	CC73CH1H101JT +1005			
	C0480	nsp	CK73B0J475KT +1608			
	C0481	nsp	CK73B1H102KT +1005			
	C0482,0483	nsp	CK73B0J475KT +1608			
	C0484	nsp	CC73CH1H101JT +1005			
	C0485	00D2544655922	CE67C0J470MT (RV2) +REF			
	C0486	nsp	CK73B0J475KT +1608			
	C0487-0490	nsp	CC73CH1H222JT +1608			
	C0491-0494	133050086541S	CQ93M2A152JT(PEF)			
	C0495-0498	13305014941AS	CQ93M2A821JT(PEF)			
	C0499,0500	00D2544657904	CE67C1C100MT(RV2)			
	C0501-0504	nsp	CC73CH1H222JT +1608			
	C0505	133050086541S	CQ93M2A152JT(PEF)			
	C0506	133050086565S	CQ93M2A222JT(PEF)			
	C0507	133050086541S	CQ93M2A152JT(PEF)			
	C0508	133050086565S	CQ93M2A222JT(PEF)			
	C0509	13305014941AS	CQ93M2A821JT(PEF)			
	C0510	133050086565S	CQ93M2A222JT(PEF)			
	C0511	13305014941AS	CQ93M2A821JT(PEF)			
	C0512	133050086565S	CQ93M2A222JT(PEF)			
	C0517,0518	00D2544657904	CE67C1C100MT(RV2)			
	C0519-0522	nsp	CC73CH1H222JT +1608			
	C0523-0526	133050086541S	CQ93M2A152JT(PEF)			
	C0527-0530	13305014940AS	CQ93M2A681JT(PEF)			
	C0531,0532	00D2544657904	CE67C1C100MT(RV2)			
	C0533,0534	nsp	CC73CH1H222JT +1608			
	C0537	nsp	CC73CH1H222JT +1608			
	C0539	nsp	CC73CH1H222JT +1608			
	C0541	nsp	CC73CH1H222JT +1608			
	C0542	nsp	RM73B--0R0KT +1608			
	C0543	nsp	CC73CH1H222JT +1608			
	C0544	nsp	RM73B--0R0KT +1608			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C0545,0546	nsp	CK73B1A105KT +1608			
	C0547-0550	nsp	CC73CH1H222JT +1608			
	C0551-0554	nsp	CC73CH1H152JT +1608			
	C0555-0558	nsp	CC73CH1H821JT +1608			
	C0559,0560	nsp	CK73B1A105KT +1608			
	C0561-0564	nsp	CC73CH1H222JT +1608			
	C0565-0568	nsp	CC73CH1H152JT +1608			
	C0569-0572	nsp	CC73CH1H821JT +1608			
	C0573,0574	nsp	CK73B1A105KT +1608			
	C0575-0578	nsp	CC73CH1H222JT +1608			
	C0579-0582	nsp	CC73CH1H152JT +1608			
	C0583-0586	nsp	CC73CH1H821JT +1608			
	C0587,0588	nsp	CK73B1A105KT +1608			
	C1001-1006	nsp	CK73B1A105KT +1608			
	C1007	nsp	CK73B1H102KT +1005			
	C1008	nsp	CK73X5R0J106MT(2125)			
	C1009	nsp	CK73B1A104KT +1005			
	C1011-1013	nsp	CK73B1A104KT +1005			
	C1014-1016	nsp	CK73X5R0J106MT(2125)			
	C1019,1020	nsp	CK73X5R0J106MT(2125)			
	C1023-1033	nsp	CK73B1A104KT +1005			
	C1037-1042	nsp	CK73X5R0J106MT(2125)			
	C1043-1049	nsp	CK73B1A104KT +1005			
	C1050	nsp	CK73X5R0J106MT(2125)			
	C1051,1052	nsp	CC73CH1H8R0DT +1608			
	C1053	nsp	CK73B1A104KT +1005			
	C1101-1103	nsp	CK73B1A104KT +1005			
	C1104	nsp	CK73B1H102KT +1005			
	C1105-1111	nsp	CK73B1A104KT +1005			
	C1112	nsp	CK73B1H102KT +1005			
	C1113,1114	nsp	CK73B1A104KT +1005			
	C1137-1147	nsp	CK73B1H102KT +1005			
	C1148	nsp	CK73B0J475KT +1608			
	C1149-1152	nsp	CK73B1A104KT +1005			
	C1153-1156	nsp	CK73B1H102KT +1005			
	C1157	nsp	CK73B0J475KT +1608			
	C1158	nsp	CK73B1A104KT +1005			
	C1159	nsp	CK73B1H102KT +1005			
	C1160	nsp	CK73B0J475KT +1608			
	C1161	nsp	CK73B1H102KT +1005			
	C1162-1172	nsp	CK73B1A104KT +1005			
	C1173,1174	nsp	CK73B1H102KT +1005			
	C1183	nsp	CK73B0J475KT +1608			
	C1184,1185	nsp	CK73B1A104KT +1005			
	C1186,1187	nsp	CK73B1H102KT +1005			
	C1188	nsp	CK73B0J475KT +1608			
	C1190,1191	nsp	CK73B0J475KT +1608			
	C1192-1200	nsp	CK73B1A104KT +1005			
	C1217-1219	nsp	CK73B1H102KT +1005			
	C1220	nsp	CK73B0J475KT +1608			
	C1221-1226	nsp	CK73B1A104KT +1005			
	C1229-1231	nsp	CK73B1A104KT +1005			
	C1232-1235	nsp	CK73B1H102KT +1005			
	C1243	nsp	CK73B0J475KT +1608			
	C1245-1252	nsp	CK73B1A104KT +1005			
	C1253-1260	nsp	CK73B1H102KT +1005			
	C1261	nsp	CK73B0J475KT +1608			
	C1262-1267	nsp	CK73B1A104KT +1005			
	C1268-1273	nsp	CK73B1H102KT +1005			
	C1274	nsp	CK73B0J475KT +1608			
	C1275	nsp	CK73B1A104KT +1005			
	C1276	nsp	CK73B1H102KT +1005			
	C1277	nsp	CK73B0J475KT +1608			
	C1278-1280	nsp	CK73B1A104KT +1005			
	C1281-1283	nsp	CK73B1H102KT +1005			
	C1284	nsp	CK73B0J475KT +1608			
	C1285	nsp	CK73B1A104KT +1005			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C1286	nsp	CK73B1H102KT +1005			
	C1287	nsp	CK73B0J475KT +1608			
	C1289	nsp	CK73B1A104KT +1005			
	C1290	nsp	CK73B1H102KT +1005			
	C1291	nsp	CK73B0J475KT +1608			
	C1301	nsp	CK73B1E104KT +1608			
	C1312	nsp	CC73CH1H8R0DT +1608			
	C1313	nsp	CC73CH1H100DT +1608			
	C1314	nsp	CK73B1A105KT +1608			
	C1315,1316	nsp	CK73B1A104KT +1005			
	C1351-1366	nsp	CK73B1A104KT +1005			
	C1367-1374	nsp	CK73B1H102KT +1005			
	C1375	nsp	CK73B1A104KT +1005			
	C1377	nsp	CK73B1A105KT +1608			
	C1378	nsp	CK73B1A104KT +1005			
	C1379	nsp	CK73B0J475KT +1608			
	C1401-1404	nsp	CK73B1A104KT +1005			
	C1408	nsp	CK73B1A104KT +1005			
	C1410	nsp	CC73CH1H330JT +1005			
	C1411	nsp	CK73B1H102KT +1005			
	C1413,1414	nsp	CK73B1A104KT +1005			
	C1415	nsp	CK73B0J475KT +1608			
	C1416-1425	nsp	CK73B1A104KT +1005			
	C1426-1429	nsp	CK73B1E103KT(1005)			
	C1430	nsp	CK73B0J475KT +1608			
	C1431-1436	nsp	CK73B1A104KT +1005			
	C1437-1440	nsp	CK73B1E103KT(1005)			
	C1441	nsp	CK73B0J475KT +1608			
	C1442	nsp	CK73B1A104KT +1005			
	C1443	nsp	CK73B1E103KT(1005)			
	C1444	nsp	CK73B0J475KT +1608			
	C1445	nsp	CK73B1A104KT +1005			
	C1446,1447	nsp	CK73B0J475KT +1608			
	C1450	nsp	CK73B1A104KT +1005			
	C1451	nsp	CK73B1E103KT(1005)			
	C1452	nsp	CK73B0J475KT +1608			
	C1453	nsp	CK73B1A104KT +1005			
	C1454	nsp	CK73B1E103KT(1005)			
	C1455	nsp	CK73B0J475KT +1608			
	C1456	nsp	CK73B1A104KT +1005			
	C1457	nsp	CK73B1E103KT(1005)			
	C1458	nsp	CK73B1A104KT +1005			
	C1459	nsp	CK73B1E103KT(1005)			
	C1460	nsp	CK73B0J475KT +1608			
	C1461,1462	nsp	CK73B1A104KT +1005			
	C1463	nsp	CK73B1E103KT(1005)			
	C1465	nsp	CK73B0J475KT +1608			
	C1466	nsp	CK73B1A104KT +1005			
	C1467	nsp	CK73B1E103KT(1005)			
	C1469	nsp	CK73B0J475KT +1608			
	C1470	nsp	CK73B1A104KT +1005			
	C1471	nsp	CK73B1E103KT(1005)			
	C1472	nsp	CK73B1A104KT +1005			
	C1473	nsp	CK73B1E103KT(1005)			
	C1475	nsp	CK73B0J475KT +1608			
	C1476	nsp	CK73B1A104KT +1005			
	C1477	nsp	CK73B1E103KT(1005)			
	C1478	nsp	CK73B1A104KT +1005			
	C1479	nsp	CK73B1E103KT(1005)			
	C1482	nsp	CK73B0J475KT +1608			
	C1483	nsp	CK73B1A104KT +1005			
	C1484,1485	nsp	CK73B1E103KT(1005)			
	C1486	nsp	CK73B0J475KT +1608			
	C1487-1490	nsp	CK73B1A104KT +1005			
	C1491-1493	nsp	CK73B1E103KT(1005)			
	C1494	nsp	CK73B0J475KT +1608			
	C1495,1496	nsp	CK73B1A104KT +1005			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C1497-1499	nsp	CK73B1E103KT(1005)			
	C1500	nsp	CK73B0J475KT +1608			
	C1501,1502	nsp	CK73B1A104KT +1005			
	C1503	nsp	CK73B1E103KT(1005)			
	C1506	nsp	CK73B1A104KT +1005			
	C1508,1509	nsp	CK73B1H222KT +1005			
	C1510	nsp	CK73B1A154KT +1608			
	C1511	nsp	CK73B1H123KT +1608			
	C1512	nsp	CK73B1A154KT +1608			
	C1513	nsp	CK73B1H123KT +1608			
	C1514	nsp	CC73CH1H8R0DT +1608			
	C1515	nsp	CC73CH1H100DT +1608			
	C1518	nsp	CK73B1A104KT +1005			
	C1519	nsp	CK73B1H102KT +1005			
	C1520,1521	nsp	CK73B1A105KT +1608			
	C1523,1524	nsp	CK73B1A105KT +1608			
	C1528-1534	nsp	CK73B1A104KT +1005			
	C1535-1538	nsp	CK73X7U0G107MT(3225)			
	C1601	nsp	CK73X5R0J106MT(2125)			
	C1602-1617	nsp	CK73B1A104KT +1005			
	C1618-1625	nsp	CK73B1H102KT +1005			
	C1626	nsp	CK73X5R0J106MT(2125)			
	C1627-1642	nsp	CK73B1A104KT +1005			
	C1643-1650	nsp	CK73B1H102KT +1005			
	C1651	nsp	CK73B1A104KT +1005			
	C1653	nsp	CK73B1A105KT +1608			
	C1701,1702	nsp	CK73B1A104KT +1005			
	C1705	nsp	CK73X5R0J106MT(2125)			
	C1706	nsp	CK73B1E103KT(1005)			
	C1707	nsp	CK73B1A104KT +1005			
	C1708,1709	nsp	CK73X5R0J106MT(2125)			
	C1710	nsp	CC73CH1H150JT +1005			
	C1711	nsp	CK73B1A104KT +1005			
	C1712	nsp	CK73B1H102KT +1005			
	C1713	nsp	CK73B1A104KT +1005			
	C1716	nsp	CK73X5R0J106MT(2125)			
	C1717	nsp	CK73B1E103KT(1005)			
	C1718	nsp	CK73B1A104KT +1005			
	C1719,1720	nsp	CK73X5R0J106MT(2125)			
	C1721	nsp	CC73CH1H100DT +1005			
	C1722	nsp	CK73B1A104KT +1005			
	C1723	nsp	CK73B1H102KT +1005			
	C1724-1727	nsp	CK73B1A104KT +1005			
	C1730	nsp	CK73X5R0J106MT(2125)			
	C1731	nsp	CK73B1E103KT(1005)			
	C1732	nsp	CK73B1A104KT +1005			
	C1733,1734	nsp	CK73X5R0J106MT(2125)			
	C1735	nsp	CC73CH1H100DT +1005			
	C1736	nsp	CK73B1A104KT +1005			
	C1737	nsp	CK73B1H102KT +1005			
	C1749	nsp	CK73B1A104KT +1005			
	C1752	nsp	CK73X5R0J106MT(2125)			
	C1753	nsp	CK73B1E103KT(1005)			
	C1754	nsp	CK73B1A104KT +1005			
	C1755,1756	nsp	CK73X5R0J106MT(2125)			
	C1757	nsp	CC73CH1H100DT +1005			
	C1758	nsp	CK73B1A104KT +1005			
	C1759	nsp	CK73B1H102KT +1005			
	C1760	nsp	CK73B1A104KT +1005			
	C1765,1766	nsp	CK73B1A105KT +1608			
	C1767	nsp	CK73B1A104KT +1005			
	C1770	nsp	CK73X5R0J106MT(2125)			
	C1771	nsp	CK73B1E103KT(1005)			
	C1772	nsp	CK73B1A104KT +1005			
	C1773,1774	nsp	CK73X5R0J106MT(2125)			
	C1775	nsp	CC73CH1H150JT +1005			
	C1776	nsp	CK73B1A104KT +1005			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C1777	nsp	CK73B1H102KT +1005			
	C1778	nsp	CK73B0J475KT +1608			
	C1779	nsp	CK73B1A104KT +1005			
	C1780	nsp	CK73X5R0J106MT(2125)			
	C1781	nsp	CK73B1A104KT +1005			
	C1806-1812	nsp	CK73B1A104KT +1005			
	C1817	nsp	CK73B1A104KT +1005			
	C1818	nsp	CK73B0J475KT +1608			
	C1819	nsp	CK73B1A104KT +1005			
	C1820	nsp	CK73B0J475KT +1608			
	C1901	nsp	CK73B1A104KT +1005			
	C1904	nsp	CK73X5R0J106MT(2125)			
	C1905	nsp	CK73B1E103KT(1005)			
	C1906	nsp	CK73B1A104KT +1005			
	C1907,1908	nsp	CK73X5R0J106MT(2125)			
	C1909	nsp	CC73CH1H150JT +1005			
	C1910	nsp	CK73B1A104KT +1005			
	C1911	nsp	CK73B1H102KT +1005			
	C1912	nsp	CK73B1A104KT +1005			
	C1913	nsp	CK73B0J475KT +1608			
	C1916	nsp	CK73B1E104KT +1608			
	C1917	nsp	CK73X5R0J106MT(2125)			
	C1918	nsp	CK73B1H153KT +1608			
	C1919	nsp	CK73B1A104KT +1005			
	C1920	nsp	CK73B1A105KT +1608			
	C1921	nsp	CK73B1H102KT +1005			
	C1922,1923	nsp	CK73B1A104KT +1005			
	C1924	nsp	CK73B0J475KT +1608			
	C1927	nsp	CK73B1E104KT +1608			
	C1928	nsp	CK73X5R0J106MT(2125)			
	C2001	nsp	CK73B1H102KT +1005			
	C2002,2003	nsp	CK73B1A104KT +1005			
	C2004	nsp	CK73B1H102KT +1005			
	C2005	nsp	CK73B0J475KT +1608			
	C2006-2008	nsp	CK73B1H102KT +1005			
	C2009,2010	nsp	CK73B1A104KT +1005			
	C2011,2012	nsp	CC73CH1H8R0DT +1608			
	C2013-2017	nsp	CK73B1A104KT +1005			
	C2101,2102	nsp	CC73CH1H100DT +1608			
	C2103	nsp	CK73B1A104KT +1005			
	C2104	nsp	CK73B1H102KT +1005			
	C2105	nsp	CK73B1A104KT +1005			
	C2106	nsp	CK73B1H102KT +1005			
	C2107	nsp	CK73B1A104KT +1005			
	C2108	nsp	CK73B1H102KT +1005			
	C2109	nsp	CK73B0J475KT +1608			
	C2111,2112	nsp	CK73B1A104KT +1005			
	C2113	nsp	CK73B1H221KT +1005			
	C2114,2115	nsp	CK73B1A104KT +1005			
OTHERS PARTS GROUP						
	B1801	nsp	M3 SCREW TERMINAL			
	K0101	646010018015S	2P PIN JACK(MSD-252V-31)-AU-O			
	K0102	64301018100AS	1P PIN JACK(RJ-0111R-00T)			
	L0101	119410009508S	BLM21PG121SN1D			
	L0301	00D2350130903	CHIP EMIFIL(11A121) +1608			
	L0401	00D2470018905	RM73B--0R0KT +2125			
	L0403	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L0409-0415	00D2350130903	CHIP EMIFIL(11A121) +1608			
	L1001,1002	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1003-1005	00D2350130903	CHIP EMIFIL(11A121) +1608			
	L1006	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1007	00D2350130903	CHIP EMIFIL(11A121) +1608			
	L1008	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1009-1011	00D2350130903	CHIP EMIFIL(11A121) +1608			
	L1012	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1101-1113	00D2350147909	E.FIL(BLM21PG221SN1)+2125			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	L1114-1117	12625000450AS	MNR02=000(1005X2)			
	L1401	00D2472018903	RM73B--0R0KT +1608			
	L1402,1403	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1405,1406	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1407	111810003502S	NLCV32T-220J-PF			
	L1408	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1409	111810003502S	NLCV32T-220J-PF			
	L1410	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1412	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1414-1418	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1601	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1701-1713	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1718-1725	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1801-1805	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1901	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1903,1904	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L1905	00D2470018905	RM73B--0R0KT +2125			
	N0101	00MYP0601515Y	B5B-ZR-SM4-TF(LF)(SN)			
	N0301	00D2051154990	9P ZH-ZR CON.BASE-T			
	N0321	64501008250AS	100P IMSA-9842B-100Y903			
	N1001-1006	64401014000AS	HDMI CONNECTOR(AD3PBC19G0)			
	N1008	64401014000AS	HDMI CONNECTOR(AD3PBC19G0)			
	N1101	00D2051313906	25P FFC.BASE(9610SCA +REF			
	N1103	00D2051343934	15P FFC BASE(9610SC)			
	N1401	00D2051343950	7P FFC BASE(9610SC)			
	N1402,1403	64401014000AS	HDMI CONNECTOR(AD3PBC19G0)			
	N1701	00MYJ06006270	B7B-PH-K-S (LF)(SN)			
	N1801,1802	645010057093S	33P SOCKET(C125Z2)			
	N1803	645010057000S	11P SOCKET(C125Z2)			
	N1804-1806	645010057093S	33P SOCKET(C125Z2)			
	N1807	00D2051343905	11P FFC BASE(9610SCA			
	N1808	00MYP06003950	S5B-EH			
	N2001	00D2051343950	7P FFC BASE(9610SC)			
	N2005	645010076506S	40FMN-BMTTR-A-TBT(LF)(SN)			
	N2102	00MYJ0701973Y	B3B-PH-SM4-TB (LF) (SN)			⚠4
	S1401,1402	00D2140238918	RELAY(UB2-5NUN-L1)			
	X1001	14181006950AS	TXC 7V(27MHZ)			
	X1101	14181006950AS	TXC 7V(27MHZ)			
	X1401	14181006950AS	TXC 7V(27MHZ)			
	X2001	14181006550AS	TXC 7V(12MHZ)			
	X2101	14181006650AS	TXC 7V(16MHZ)			
	Z1801	nsp	STYLE PIN			

A.AUDIO/VIDEO PWB ASSY

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP						
	D3501-3510	00D2760794900	KDS160-RTK/P			
	D3528	00D2760794900	KDS160-RTK/P			
	D3701-3708	20305002730AS	1N4003(HOMI)			
	D3713	00D2760750902	RB521S-30TE61 +REF			
	D3714-3718	20305002730AS	1N4003(HOMI)			
	D3719	00D2760750902	RB521S-30TE61 +REF			
	D3720-3724	20305002730AS	1N4003(HOMI)			
	D3726	00D2760750902	RB521S-30TE61 +REF			
	D3728	00D2760750902	RB521S-30TE61 +REF			
	D3729	20305002730AS	1N4003(HOMI)			
	D3810	00D2760683930	UDZS5.1B-TE17 +C			
	D3813,3814	00D2760683930	UDZS5.1B-TE17 +C			
	D3901-3908	20305002730AS	1N4003(HOMI)			
	D3909,3910	00D2760798948	UDZS8.2B-TE17			
	D3913,3914	00D2760683998	UDZS16B-TE17 +C			
	D3915	00D2760750902	RB521S-30TE61 +REF			
	D3916,3917	251310004507S	CG0603MLC-12LE			
	D3918	00D2760750902	RB521S-30TE61 +REF			
	D3919	00D2760794900	KDS160-RTK/P			
	Q3501	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q3502	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q3503	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q3504	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q3505	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q3506	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q3507	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q3508	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q3509	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q3510	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q3511	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q3512	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q3513	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q3514	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q3515	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q3516	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q3517	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q3518	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q3519	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q3520	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q3521	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q3522	21585001550AS	KRA105S-RTK/P(2.2K-47K)			
	Q3901	00D2730464901	KTC3875S-GR-RTK/P			
	Q3902	00D2710312905	KTA1504S-GR-RTK/P			
	Q3903	00D2740198005	KTD998-O-U/P			
	Q3904	00D2720158007	KTB778-O-U/P			
	Q3905	00D2710260905	2SA1036KT146(S/R) +C			
	Q3906	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q3907	00D2710260905	2SA1036KT146(S/R) +C			
	Q3908	00D2690192902	KRC102S-RTK/P (10K-10K)			
	Q3909	00D2730464901	KTC3875S-GR-RTK/P			
	Q3910	00D2690184907	KRA102S-RTK/P (10K-10K)			
	U0066	236810090504S	ILX3232D			
	U3001-3004	234810014504S	MC14094BDTR2G			
	U3005	235810050503S	NJM4565M	E3		
	U3201,3202	235810045600S	R2A15220FP			
	U3203,3204	00D2623727904	NJW1194V-TE1			
	U3205-3210	235810050503S	NJM4565M			
	U3211	00D2631289900	AZ4580MTR-E1			
	U3501	00D2630995004	NJM4556AD +T			
	U3701	00D2631048002	BA033T			
	U3702	00D2630554005	NJM7905FA			
	U3703	235810046603S	AVDM-2000			
	U3706	00D2630801004	NJM7812FA(S)			
	U3707	00D2630809006	NJM7805FA(S)			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	U3802,3803	235810050503S	NJM4565M			
RESISTORS GROUP						
	R0767,0768	nsp	RM73B--102JT			
	R3001-3004	nsp	RM73B--0R0KT +1608			
	R3005-3008	nsp	RM73B--750JT +1608			
	R3026	nsp	RM73B--472JT (1608) +1608			
	R3027,3028	nsp	RM73B--0R0KT +1608			
	R3029,3030	00D2472032905	RM73B--750DT(1608)			
	R3031-3034	nsp	RM73B--0R0KT +1608			
	R3102	nsp	RM73B--0R0KT +1608			
	R3104	nsp	RM73B--100JT +1608	E3		
	R3106	nsp	RM73B--100JT +1608	E3		
	R3107-3110	nsp	RM73B--153JT +1608	E3		
	R3111-3114	nsp	RM73B--393JT +1608	E3		
	R3115,3116	nsp	RM73B--104JT +1608	E3		
	R3117	nsp	RM73B--0R0KT +1608	E3		
	R3201-3222	nsp	RM73B--471JT +1608			
	R3223-3234	nsp	RM73B--824JT +1608			
	R3235,3236	nsp	RM73B--104JT +1608			
	R3237-3244	nsp	RM73B--824JT +1608			
	R3245,3246	nsp	RM73B--104JT +1608			
	R3247,3248	nsp	RM73B--0R0KT +1608	E3,JP		
	R3247,3248	nsp	RM73B--472JT (1608) +1608	E2,E1C		
	R3249,3250	nsp	RM73B--391JT +1608			
	R3251,3252	nsp	RM73B--683JT +1608			
	R3253,3254	nsp	RM73B--154JT +1608			
	R3255,3256	nsp	RM73B--271JT +1608			
	R3257,3258	nsp	RM73B--470JT +1608			
	R3259,3260	nsp	RM73B--154JT +1608			
	R3261,3262	nsp	RM73B--123JT +1608			
	R3263,3264	nsp	RM73B--470JT +1608			
	R3265,3266	nsp	RM73B--474JT +1608			
	R3267	nsp	RM73B--473JT +1608			
	R3268,3269	nsp	RM73B--0R0KT +1608			
	R3270-3275	nsp	RM73B--470JT +1608			
	R3276,3277	nsp	RM73B--473JT +1608			
	R3278-3283	nsp	RM73B--470JT +1608			
	R3284-3288	nsp	RM73B--473JT +1608			
	R3289,3290	nsp	RM73B--470JT +1608			
	R3291,3292	nsp	RM73B--473JT +1608			
	R3293,3294	nsp	RM73B--470JT +1608			
	R3295	nsp	RM73B--473JT +1608			
	R3296,3297	nsp	RM73B--470JT +1608			
	R3298	nsp	RM73B--0R0KT +1608			
	R3301-3304	nsp	RM73B--474JT +1608			
	R3305-3308	nsp	RM73B--154JT +1608			
	R3309-3312	nsp	RM73B--334JT +1608			
	R3313-3316	nsp	RM73B--101JT +1608			
	R3317-3320	nsp	RM73B--104JT +1608			
	R3321-3328	nsp	RM73B--393JT +1608			
	R3329-3332	nsp	RM73B--223JT +1608			
	R3333-3340	nsp	RM73B--472JT (1608) +1608			
	R3341-3344	nsp	RM73B--470JT +1608			
	R3345-3348	nsp	RM73B--104JT +1608			
	R3349-3352	nsp	RM73B--101JT +1608			
	R3353-3356	nsp	RM73B--472JT (1608) +1608			
	R3357-3364	nsp	RM73B--104JT +1608			
	R3371-3377	1262100095915	MNR04=473(1005X4)			
	R3378-3385	1262500015025	PRB3T4=0R0(1005X4)			
	R3386	1262100095915	MNR04=473(1005X4)			
	R3501-3508	nsp	RM73B--100JT +1608			
	R3509-3525	nsp	RM73B--104JT +1608			
	R3526-3529	nsp	RM73B--224JT +1608			
	R3530,3531	nsp	RM73B--102JT +1608			
	R3532,3533	nsp	RM73B--222JT +1608			
	R3534,3535	nsp	RM73B--101JT +1608			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	R3536-3539	nsp	RM73B--222JT +1608			
	R3540-3556	nsp	RM73B--104JT +1608			
	R3557-3573	nsp	RM73B--221JT +1608			
	R3574-3576	nsp	RM73B--100JT +1608			
	R3577-3580	nsp	RM73B--101JT +1608			
	R3701-3712	00D2472032905	RM73B--750DT(1608)			
	R3713	nsp	RM73B--101JT +1608			
	R3716	nsp	RM73B--104JT +1608			
	R3717	nsp	RM73B2B0R0KT +3216			
	R3725,3726	nsp	RM73B--473JT +1608			
	R3731	00D2472032905	RM73B--750DT(1608)			
	R3732	nsp	RM73B--473JT +1608			
	R3733	00D2472032905	RM73B--750DT(1608)			
	R3734,3735	nsp	RM73B--472JT (1608) +1608			
	R3736,3737	nsp	RM73B--100JT +1608			
	R3738,3739	nsp	RM73B--101JT +1608			
	R3740	00D2472032905	RM73B--750DT(1608)			
	R3741	nsp	RM73B--472JT (1608) +1608			
	R3742	00D2472032905	RM73B--750DT(1608)			
	R3743,3744	nsp	RM73B--100JT +1608			
	R3745,3746	00D2472032905	RM73B--750DT(1608)			
	R3747,3748	nsp	RM73B--100JT +1608			
	R3749,3750	00D2472032905	RM73B--750DT(1608)			
	R3751,3752	nsp	RM73B--100JT +1608			
	R3753-3755	nsp	RM73B--102JT +1608			
	R3762	00D2472032905	RM73B--750DT(1608)			
	R3805,3806	nsp	RM73B--0R0KT +1608			
	R3808	nsp	RM73B--101JT +1608			
	R3810,3811	nsp	RM73B--471JT +1608			
	R3814	nsp	RM73B--333JT +1608			
	R3815,3816	nsp	RM73B--474JT +1608			
	R3817	nsp	RM73B--104JT +1608			
	R3818	nsp	RM73B--683JT +1608			
	R3820	nsp	RM73B--222JT +1608			
	R3823	nsp	RM73B--102JT +1608			
	R3824-3828	nsp	RM73B--103JT +1608			
	R3829	nsp	RM73B--101JT +1608			
	R3832	nsp	RM73B--104JT +1608			
	R3833,3834	nsp	RM73B--103JT +1608			
	R3837,3838	nsp	RM73B--103JT +1608			
	R3842	nsp	RM73B--333JT +1608			
	R3844-3846	nsp	RM73B--101JT +1608			
	R3849	nsp	RM73B--473JT +1608			
	R3850,3851	nsp	RM73B--103JT +1608			
	R3870	nsp	RM73B--102JT +1608			
	R3903-3907	nsp	RM73B--102JT +1608			
	R3908	nsp	RM73B--472JT (1608) +1608			
	R3909	nsp	RM73B--102JT +1608			
	R3910	nsp	RM73B--472JT (1608) +1608			
	R3911	nsp	RM73B--102JT +1608			
	R3912	nsp	RM73B--332JT +1608			
	R3913	nsp	RM73B--222JT +1608			
	R3914	nsp	RM73B--104JT +1608			
	R4001-4024	nsp	RM73B--103JT +1608			
	R8062	nsp	RM73B--330JT +1005			
	R8063,8064	nsp	RM73B--0R0KT +1608			
	R8071	nsp	RM73B--0R0KT +2125	E3		
CAPACITORS GROUP						
	C0837	nsp	CK73B0J475KT +1608			
	C0838-0843	nsp	CK73B1E104KT +1608			
	C3022-3025	nsp	CK73B1E104KT +1608			
	C3026,3027	nsp	CK73X5R0J106MT(2125)			
	C3028	nsp	CK73B1E104KT +1608			
	C3029-3036	nsp	CK73X5R0J106MT(2125)			
	C3101	nsp	CK73B1E104KT +1608	E3		
	C3102-3104	nsp	CC73CH1H101JT +1608	E3		

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C3105,3106	nsp	CK73B1E104KT +1608	E3		
	C3107-3110	13405014840AS	CE04W1J100MT(KR3)	E3		
	C3112,3113	nsp	CC73CH1H330JT +1608	E3		
	C3115,3116	nsp	CC73CH1H330JT +1608	E3		
	C3117,3118	nsp	CK73B1E104KT +1608	E3		
	C3119,3120	13405014840AS	CE04W1J100MT(KR3)	E3		
	C3139	13245005950AS	CK73X5R1C106KT(2125)	E3		
	C3201-3212	nsp	CC73CH1H331JT +1608			
	C3213,3214	nsp	CC73CH1H471JT +1608			
	C3215-3222	nsp	CC73CH1H331JT +1608			
	C3225,3226	nsp	CC73CH1H221JT +1608			
	C3227,3228	13405014840AS	CE04W1J100MT(KR3)			
	C3229,3230	13405012440AS	CE04W0J221MT(KR3)			
	C3231,3232	nsp	CC73CH1H101JT +1608			
	C3233,3234	nsp	CK73B1E223KT +1608			
	C3235,3236	nsp	CK73B1H682KT +1608			
	C3237,3238	13405014840AS	CE04W1J100MT(KR3)			
	C3239,3240	13405013240AS	CE04W1E470MT(KR3)			
	C3241-3247	13405012740AS	CE04W1A331MT(KR3)			
	C3248,3249	00D2544577961	CE04W1C331MT(RA3)			
	C3250-3260	13405012740AS	CE04W1A331MT(KR3)			
	C3261,3262	13405014840AS	CE04W1J100MT(KR3)			
	C3301-3304	nsp	CK73X5R1C106KT(2125)			
	C3305-3312	nsp	CK73B1H103KT (1608) +1608			
	C3313-3316	nsp	CK73X5R1C106KT(2125)			
	C3317-3324	nsp	CC73CH1H101JT +1608			
	C3325-3328	nsp	CK73X5R1C106KT(2125)			
	C3329-3332	nsp	CK73B1E104KT +1608			
	C3333-3336	nsp	CK73X5R1C106KT(2125)			
	C3341,3342	nsp	CK73X5R1C106KT(2125)			
	C3343-3346	nsp	CK73B1H332KT +1608			
	C3347-3350	nsp	CK73X5R1C106KT(2125)			
	C3351-3354	nsp	RM73B--0R0KT +2125			
	C3355-3358	nsp	CK73X5R1C106KT(2125)			
	C3359-3362	nsp	CK73B1E104KT +1608			
	C3519-3537	nsp	CE04W1J100MT(KR3)			
	C3538,3539	nsp	CC73CH1H221JT +1608			
	C3540,3541	nsp	CE04W1C101MT(KR3)			
	C3542-3558	nsp	CC73CH1H471JT +1608			
	C3559	nsp	CK73B1E104KT +1608			
	C3560	nsp	CK73B1H102KT +1608			
	C3702,3703	13405013540AS	CE04W1V102MT(KR3)			
	C3704	133050083511S	CQ93M2A104JT(PEF)			
	C3705-3716	nsp	CK73X5R0J106MT(2125)			
	C3717	13405018320AS	CE04W1C472MC(KR1)			
	C3718	13405018220AS	CE04W1C222MC(KR1)			
	C3719,3720	13405014840AS	CE04W1J100MT(KR3)			
	C3725,3726	13405014840AS	CE04W1J100MT(KR3)			
	C3729-3731	nsp	CK73B1E104KT +1608			
	C3734-3747	nsp	CK73B1E104KT +1608			
	C3748,3749	13405012840AS	CE04W1A101MT(KR3)			
	C3763	133050083511S	CQ93M2A104JT(PEF)			
	C3764	00D2544761735	CE04W1C472MC(SMQ)			
	C3765	13405014840AS	CE04W1J100MT(KR3)			
	C3766	13405018420AS	CE04D1C222MBPC(SME)			
	C3768	13405018420AS	CE04D1C222MBPC(SME)			
	C3769	13405014840AS	CE04W1J100MT(KR3)			
	C3771	13405014840AS	CE04W1J100MT(KR3)			
	C3773	133050090557S	CQ93P2A104JT(PPF)			
	C3803	nsp	CK73B1E104KT +1608			
	C3804	nsp	CK73B1H102KT +1608			
	C3805	nsp	CK73B1E104KT +1608			
	C3806	nsp	CK73B1H102KT +1608			
	C3807	nsp	CK73B1H222KT +1608			
	C3809	nsp	CK73B1H222KT +1608			
	C3810,3811	nsp	CK73B1E104KT +1608			
	C3812,3813	nsp	CC73CH1H331JT +1608			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C3814	13405014840AS	CE04W1J100MT(KR3)			
	C3817-3821	13405014840AS	CE04W1J100MT(KR3)			
	C3823	13405012940AS	CE04W1C101MT(KR3)			
	C3824	nsp	CK73B1E104KT +1608			
	C3825	nsp	CC73CH1H101JT +1608			
	C3832	nsp	CK73B1E104KT +1608			
	C3839	nsp	CC73CH1H330JT +1608			
	C3840-3843	nsp	CK73B1E104KT +1608			
	C3846-3848	13405014840AS	CE04W1J100MT(KR3)			
	C3901,3902	133050090557S	CQ93P2A104JT(PPF)			
	C3903-3906	00D2544761735	CE04W1C472MC(SMQ)			
	C3909-3912	13405013340AS	CE04W1E471MT(KR3)			
	C3915-3918	nsp	CK73B1H102KT +1608			
	C3919,3920	nsp	CK73B1E104KT +1608			
	C3921	nsp	CK73B1H102KT +1608			
	C3922	nsp	CK73B1E104KT +1608			
	C3923	nsp	CK73B1H102KT +1608			
	C3924,3925	nsp	CC73CH1H330JT +1608			
	C4001-4012	13405014340AS	CE04W1H470MT(KR3)			
	C4017	13405014340AS	CE04W1H470MT(KR3)			
	C4019	13405014340AS	CE04W1H470MT(KR3)			
	C4021	13405014340AS	CE04W1H470MT(KR3)			
	C4024	13405014340AS	CE04W1H470MT(KR3)			
	C4026	13405014340AS	CE04W1H470MT(KR3)			
	C4027,4028	13405013040AS	CE04W1E221MT(KR3)			
	C4031	13405014340AS	CE04W1H470MT(KR3)			
	C4033	13405014340AS	CE04W1H470MT(KR3)			
	C4036	13405014340AS	CE04W1H470MT(KR3)			
	C4038-4040	13405014340AS	CE04W1H470MT(KR3)			
	C4043-4046	nsp	RM73B--0R0KT+1005			
	C4047	nsp	CK73B1H102KT +1608			
	C4048	nsp	CC73CH1H101JT +1608			
	C4049	nsp	CK73B1H102KT +1608			
	C4050	nsp	CC73CH1H101JT +1608			
	C4051-4053	nsp	CK73B1H102KT +1608			
	C4876	nsp	CC73CH1H102JT +1608			
OTHERS PARTS GROUP						
⚠	F3701	00MFS20250201	# T2.5A/250V TR5 NO.19372 (T			
⚠	F3702	00MFS20200201	# T2.0A 250V TR5			
⚠	F3901,3902	00MFS20315201	# FUSE 3.15A 250V SEMKO VDE			
	K3102-3104	64301016600AS	6P PIN JACK(RCA-637G)-AU-RW			
	K3105	64301016700AS	6P PIN JACK(RCA-637G)-AU-RWB			
	K3301	64301016600AS	6P PIN JACK(RCA-637G)-AU-RW			
	K3302	64301016800AS	3P PIN JACK(RCA-349BG)-AU-WBB			
	K3303	64301016600AS	6P PIN JACK(RCA-637G)-AU-RW			
	K3501,3502	64301017000AS	6P PIN JACK(RCA-637G)-AU-GBR			
	K3503	64301016900AS	6P PIN JACK(RCA-637G)-AU-Y			
	K3504	64301017100AS	3P PIN JACK(RCA-349BG)-AU-GBR			
	K3801	64301017400AS	H/P JACK(PJ-612AG-7)-AU			
	K3802	64301017300AS	MINI JACK(MSJ-035)			
	K3804	00D2048754002	3P PIN JACK(MSP-253V)-AU-B3			
	K3901,3902	643010086019S	MINI JACK(PJ-308-02(RD))			
	K3903,3904	643010086002S	MINI JACK(PJ-308-02)			
	K3905	64301017200AS	9P D-SUB CONNECTOR(D227FD009S100BY)			
	K4805	64301000710AS	2PIN PIN JACK(RCA-206BG-00-05)-AU-RD/WH			
	L3201,3202	00D2359003002	FTZ CHOKE COIL	E2,E1C		
	L3901	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	N3001,3002	645010057093S	33P SOCKET(C125Z2)			
	N3003	00D2050770058	33PFFC BASE (SIDE)			
	N3004	645010057093S	33P SOCKET(C125Z2)			
	N3007	645010056069S	23P PLUG(C125Z1)	E2,E1C,JP		
	N3008	00D2051318011	13 FFC BASE(9604F)	E3		
	N3009	61205049900AS	3P 120mm PH-SAN			
	N3201	00MYJ06006300	B10B-PH-K-S (LF)(SN)			
	N3202	00MYJ06006280	B8B-PH-K-S (LF)(SN)			
	N3701	00MYP06010460	B7B-EH			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	N3803	645010056069S	23P PLUG(C125Z1)			
	N3901	00MYP06003950	S5B-EH			
	N3902	00MYJ06006430	S3B-PH-K-S (LF)(SN)			
	N3903	00D2051343905	11P FFC BASE(9610SCA			
	N4001	645010056007S	11P PLUG(C125Z1)			
	N4002-4007	645010056090S	33P PLUG(C125Z1)			
	N4008	645010056045S	19P PLUG(C125Z1)			
	N4009	00MYJ06006240	B4B-PH-K-S (LF)(SN)			
	N4807	61205053600AS	3P 250mm PH-SAN			④
	B3001,3002	nsp	M3 SCREW TERMINAL			
	B3802,3803	nsp	M3 SCREW TERMINAL			
	B3901,3902	nsp	M3 SCREW TERMINAL			
	B3903	nsp	M3 SCREW TERMINAL			
	B4001,4002	nsp	M3 SCREW TERMINAL			
	B4004	nsp	M3 SCREW TERMINAL			
	S3501-3511	682010021000S	RELAY(BC3-12)			
	Z3701	nsp	RADIATOR			
	Z3702	nsp	RADIATOR			
	Z3703-3705	nsp	SCREW			
	Z3706,3707	nsp	RADIATOR			
	Z3708	nsp	SCREW			
	Z3709,3710	nsp	STYLE PIN			
	Z3712-3714	nsp	STYLE PIN			
	Z4004-4006	nsp	STYLE PIN			

NETWORK/DSP PWB ASSY

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New	
SEMICONDUCTORS GROUP							
	D0601-0603	251310004507S	CG0603MLC-12LE				
	D0701-0716	251310004507S	CG0603MLC-12LE				
	D0802	00D2760683930	UDZS5.1B-TE17 +C				
	D0803-0805	251310004507S	CG0603MLC-12LE				
	Q0601,0602	21535001250AS	KRA302E-RTK/P				
	Q0603-0606	00MBA2000399Y	KRC402E-RTK KEC				
	Q0701	00D2720166905	2SB798(DL/DK)-T1 +C				
	Q0802	00MBA2000199Y	KRC404E-RTK KEC STANDARD				
	Q0803	211850008504S	2SA2018TL				
	Q0804	00D2750110905	HN1K02FU-TE85L				
	Q0805	21535001250AS	KRA302E-RTK/P				
	U0002	231810089509S	EX3AV				
	U0101	24581002961AS	ADSP21487KSWZ4B3027				
	U0102	24681007360AS	A3V56S40FTP-6G				
	U0103	8R2481011300S	DSP1 ROM SUB ASSY (MX29LV160DBTI-70G)				
	U0201	24581002961AS	ADSP21487KSWZ4B3027				
	U0202	24681007360AS	A3V56S40FTP-6G				
	U0203	8R2481011400S	DSP2 ROM SUB ASSY (MX29LV160DBTI-70G)				
	U0301	24581002961AS	ADSP21487KSWZ4B3027				
	U0302	24681007360AS	A3V56S40FTP-6G				
	U0303	8R2481011500S	DSP3 ROM SUB ASSY (MX29LV160DBTI-70G)				
	U0503	23681011260AS	DM860A				
	U0504	8R2481014100S	DM860 ROM SUB AVR18/21/23/3313_AVR4520 (H27U1G8F2BTR-BC)				
	U0505,0506	24681007660AS	A3V56S30FTP-6G				
	U0601	236810071503S	NLAS7222CMUTBG				
	U0603,0604	23681012650AS	NCP380HMU21AATBG				
	U0605	00MHC007805KZ	TC74VHCT125AFT OUAD BUS BUFFER				
	U0606	00D2623444902	TC74VHC08FT				
	U0607	00D2623711907	SAA7121H/V2.518				
	U0608,0609	231810089509S	EX3AV				
	U0610	23671011050AS	MFI337S3959 IPOD COPROCESSOR 2.0C CLASS6				
	U0701	103810002508S	PULSE-TRANS (S558-5999-U-7-F)				⚠4
	U0702	23681012560AS	IP175C LF				
	U0704	103810002508S	PULSE-TRANS (S558-5999-U-7-F)				⚠4
	U0705	231810089509S	EX3AV				
	U0706	23681012350AS	LAN8720A-CP-TR				
	U0800	00D2623425905	LTC4300-2CMS8				
	U0802	23681013060AS	SII1292CNUC				
RESISTORS GROUP							
	R0001	nsp	RM73B--0R0KT+1005				
	R0002	nsp	RM73B--473JT+1005				
	R0009-0011	00D2472038925	RM73B--154DT(1608)				
	R0102	nsp	RM73B--103JT +1005				
	R0103	126210002538S	MNR04=330(1005X4)				
	R0105	nsp	RM73B--102JT				
	R0107-0110	nsp	RM73B--472JT+1005				
	R0111	126210007557S	MNR04=472(1005X4)				
	R0112,0113	126210001511S	MNR04=100(1005X4)				
	R0114	nsp	RM73B--560JT				
	R0115,0116	126210001511S	MNR04=100(1005X4)				
	R0117	126210002538S	MNR04=330(1005X4)				
	R0118	126210007557S	MNR04=472(1005X4)				
	R0119	126210002538S	MNR04=330(1005X4)				
	R0120	nsp	RM73B--330JT +1005				
	R0121-0124	126210002538S	MNR04=330(1005X4)				
	R0125	nsp	RM73B--330JT +1005				
	R0127	nsp	RM73B--105JT +1608				
	R0128	nsp	RM73B--470JT +1608				
	R0129,0130	126210002538S	MNR04=330(1005X4)				

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	R0131-0134	nsp	RM73B--330JT +1005			
	R0135	126210002538S	MNR04=330(1005X4)			
	R0136	nsp	RM73B--0R0KT+1005			
	R0137-0139	126210008536S	MNR04=103(1005X4)			
	R0140	nsp	RM73B--472JT+1005			
	R0142	126210008536S	MNR04=103(1005X4)			
	R0143,0144	126210007557S	MNR04=472(1005X4)			
	R0202	nsp	RM73B--103JT +1005			
	R0203	126210002538S	MNR04=330(1005X4)			
	R0205	nsp	RM73B--102JT			
	R0207-0210	00D2473010900	RM73B--472JT+1005			
	R0211	126210007557S	MNR04=472(1005X4)			
	R0212,0213	126210001511S	MNR04=100(1005X4)			
	R0214	nsp	RM73B--560JT			
	R0215,0216	126210001511S	MNR04=100(1005X4)			
	R0217	126210002538S	MNR04=330(1005X4)			
	R0218	126210007557S	MNR04=472(1005X4)			
	R0219	126210002538S	MNR04=330(1005X4)			
	R0220	nsp	RM73B--330JT +1005			
	R0221-0224	126210002538S	MNR04=330(1005X4)			
	R0225	nsp	RM73B--330JT +1005			
	R0227	nsp	RM73B--105JT +1608			
	R0228	nsp	RM73B--470JT +1608			
	R0229,0230	126210002538S	MNR04=330(1005X4)			
	R0231-0234	nsp	RM73B--330JT +1005			
	R0235	126210002538S	MNR04=330(1005X4)			
	R0236	nsp	RM73B--0R0KT+1005			
	R0237-0239	126210008536S	MNR04=103(1005X4)			
	R0240	nsp	RM73B--472JT+1005			
	R0243,0244	126210007557S	MNR04=472(1005X4)			
	R0302	nsp	RM73B--103JT +1005			
	R0303	126210002538S	MNR04=330(1005X4)			
	R0305	nsp	RM73B--102JT			
	R0307-0310	nsp	RM73B--472JT+1005			
	R0311	126210007557S	MNR04=472(1005X4)			
	R0312,0313	126210001511S	MNR04=100(1005X4)			
	R0314	nsp	RM73B--560JT			
	R0315,0316	126210001511S	MNR04=100(1005X4)			
	R0317	126210002538S	MNR04=330(1005X4)			
	R0318	126210007557S	MNR04=472(1005X4)			
	R0319	126210002538S	MNR04=330(1005X4)			
	R0320	nsp	RM73B--330JT +1005			
	R0321-0324	126210002538S	MNR04=330(1005X4)			
	R0325	nsp	RM73B--330JT +1005			
	R0327	nsp	RM73B--105JT +1608			
	R0328	nsp	RM73B--470JT +1608			
	R0329,0330	126210002538S	MNR04=330(1005X4)			
	R0333,0334	nsp	RM73B--330JT +1005			
	R0335,0336	126210002538S	MNR04=330(1005X4)			
	R0337,0338	126210008536S	MNR04=103(1005X4)			
	R0340	nsp	RM73B--472JT+1005			
	R0342	126210008536S	MNR04=103(1005X4)			
	R0343,0344	126210007557S	MNR04=472(1005X4)			
	R0507	nsp	RM73B--0R0KT +1608			
	R0510,0511	126210002538S	MNR04=330(1005X4)			
	R0512,0513	126210008536S	MNR04=103(1005X4)			
	R0515	126210002538S	MNR04=330(1005X4)			
	R0516,0517	nsp	RM73B--330JT +1005			
	R0518	nsp	RM73B--103JT +1005			
	R0519	126210008536S	MNR04=103(1005X4)			
	R0520	nsp	RM73B--103JT +1005			
	R0521	nsp	RM73B--330JT +1005			
	R0522-0524	nsp	RM73B--103JT +1005			
	R0525	nsp	RM73B--102JT +1608			
	R0526	nsp	RM73B--103JT +1005			
	R0527	00D2472035973	RM73B--302DT(1608)			
	R0529	00D2472042924	RM73B--133DT(1608)			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	R0530	00D2472041954	RM73B--622DT(1608)			
	R0531	126210008536S	MNR04=103(1005X4)			
	R0532	nsp	RM73B--105JT +1608			
	R0533	nsp	RM73B--152JT			
	R0534	126210002538S	MNR04=330(1005X4)			
	R0537	nsp	RM73B--330JT +1005			
	R0538,0539	126210002538S	MNR04=330(1005X4)			
	R0540	nsp	RM73B--330JT +1005			
	R0541,0542	nsp	RM73B--100JT			
	R0543	nsp	RM73B--272JT			
	R0544	nsp	RM73B--152JT			
	R0545	126210007557S	MNR04=472(1005X4)			
	R0547-0551	126210002538S	MNR04=330(1005X4)			
	R0552-0555	nsp	RM73B--330JT +1005			
	R0556	nsp	RM73B--472JT+1005			
	R0557	nsp	RM73B--330JT +1005			
	R0558	nsp	RM73B--472JT+1005			
	R0559	nsp	RM73B--330JT +1005			
	R0563,0564	nsp	RM73B--472JT+1005			
	R0565-0568	126210002538S	MNR04=330(1005X4)			
	R0569	nsp	RM73B--103JT +1005			
	R0570	nsp	RM73B--330JT +1005			
	R0601	nsp	RM73B--103JT +1608			
	R0602,0603	nsp	RM73B--0R0KT +1608			
	R0604	nsp	RM73B--222JT +1608			
	R0611	nsp	RM73B--103JT +1005			
	R0612	nsp	RM73B--122JT +1005			
	R0614,0615	nsp	RM73B--103JT +1005			
	R0616	126210009591S	MNR04=473(1005X4)			
	R0617,0618	nsp	RM73B--103JT +1005			
	R0619	126210009591S	MNR04=473(1005X4)			
	R0621	nsp	RM73B--103JT +1005			
	R0622,0623	nsp	RM73B--472JT+1005			
	R0624	nsp	RM73B--103JT +1005			
	R0625,0626	00D2472038925	RM73B--154DT(1608)			
	R0627	nsp	RM73B--155KT +1608			
	R0628	nsp	RM73B--684JT +1608			
	R0629	00D2472037900	RM73B--473DT(1608)			
	R0630	00D2472038996	RM73B--304DT(1608)			
	R0632	nsp	RM73B--0R0KT +1608			
	R0638	nsp	RM73B--473JT+1005			
	R0662,0663	nsp	RM73B--0R0KT+1005			
	R0667	nsp	RM73B--4R7KT			
	R0668,0669	nsp	RM73B--100JT			
	R0701-0708	nsp	RM73B--221JT +1005			
	R0715-0734	00D2472031977	RM73B--510DT(1608)			
	R0735	00D2472041954	RM73B--622DT(1608)			
	R0743	nsp	RM73B--105JT +1608			
	R0744	nsp	RM73B--511JT +1608			
	R0745	nsp	RM73B--101JT +1608			
	R0763	nsp	RM73B--472JT+1005			
	R0765	nsp	RM73B--0R0KT+1005			
	R0767	nsp	RM73B--0R0KT+1005			
	R0768	nsp	RM73B--474JT			
	R0769	nsp	RM73B--100JT			
	R0770	00D2472038925	RM73B--154DT(1608)			
	R0771	nsp	RM73B--684JT +1608			
	R0772	00D2472037900	RM73B--473DT(1608)			
	R0774	00D2472041983	RM73B--822DT(1608)			
	R0776-0778	00D2472031977	RM73B--510DT(1608)			
	R0779	00D2472041909	RM73B--392DT(1608)			
	R0780	00D2472031977	RM73B--510DT(1608)			
	R0781	nsp	RM73B--473JT+1005			
	R0783	nsp	RM73B--0R0KT +1608			
	R0785	nsp	RM73B--0R0KT +1608			
	R0786	nsp	RM73B--103JT +1005			
	R0787	nsp	RM73B--152JT			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	R0788	nsp	RM73B--103JT +1005			
	R0789	126210002538S	MNR04=330(1005X4)			
	R0790	nsp	RM73B--103JT +1005			
	R0791	nsp	RM73B--152JT			
	R0794-0798	nsp	RM73B--103JT +1005			
	R0800,0801	nsp	RM73B--154JT			
	R0804	nsp	RM73B--473JT+1005			
	R0805	nsp	RM73B--0R0KT+1005			
	R0806	nsp	RM73B--103JT +1005			
	R0807	nsp	RM73B--101JT+1005			
	R0808	nsp	RM73B--222JT +1608			
	R0809	nsp	RM73B--332JT			
	R0810	nsp	RM73B--474JT			
	R0811,0812	nsp	RM73B--473JT+1005			
	R0814	nsp	RM73B--103JT +1005			
	R0816,0817	nsp	RM73B--0R0KT+1005			
	R0820	nsp	RM73B--102JT			
	R0821,0822	12625000550AS	MNR04=5R1(1005X4)			
	R0824	nsp	RM73B--472JT+1005			
	R0825,0826	nsp	RM73B--103JT +1005			
	R0830,0831	nsp	RM73B--103JT +1005			
	R0836	nsp	RM73B--182JT			
	R0837	nsp	RM73B--103JT +1005			
	R0838	nsp	RM73B--182JT			
	R0839	nsp	RM73B--0R0KT+1005			
	R0842	nsp	RM73B--103JT +1005			
	R0844-0847	12625000450AS	MNR02=000(1005X2)			
CAPACITORS GROUP						
	C0001,0002	nsp	CK73B1A104KT +1005			
	C0008	nsp	CK73X5R0J106MT(2125)			
	C0010	nsp	CK73B1E103KT(1005)			
	C0012	nsp	CK73B1A104KT +1005			
	C0014	nsp	CK73X5R0J106MT(2125)			
	C0016	nsp	CK73X5R0J106MT(2125)			
	C0018	nsp	CC73CH1H100DT +1005			
	C0020	nsp	CK73B1A104KT +1005			
	C0022	nsp	CK73B1H102KT +1005			
	C0023-0025	nsp	CK73B1H102KT +1608			
	C0052	nsp	CK73B0J475KT +1608			
	C0053	nsp	CK73B1A104KT +1005			
	C0054	nsp	CK73B0J475KT +1608			
	C0055	nsp	CK73B1A104KT +1005			
	C0058	nsp	CK73B1H102KT +1005			
	C0059	nsp	CK73B0J475KT +1608			
	C0060	nsp	CK73B1A104KT +1005			
	C0063	nsp	CK73B1H102KT +1005			
	C0069,0070	nsp	CK73B1H102KT +1005			
	C0101	nsp	CK73B1H102KT +1005			
	C0102	nsp	CK73B1A104KT +1005			
	C0103	nsp	CK73B1H102KT +1005			
	C0104	nsp	CK73B1A104KT +1005			
	C0105	nsp	CK73B1H102KT +1005			
	C0106	nsp	CK73B1A104KT +1005			
	C0107	nsp	CK73B1H102KT +1005			
	C0108	nsp	CK73B1A104KT +1005			
	C0109	nsp	CK73B1H102KT +1005			
	C0110	nsp	CK73B1A104KT +1005			
	C0111,0112	nsp	CK73B1H102KT +1005			
	C0113	nsp	CK73B1A104KT +1005			
	C0114,0115	nsp	CK73B1H102KT +1005			
	C0116,0117	nsp	CK73B1A104KT +1005			
	C0118	nsp	CK73B1H102KT +1005			
	C0119,0120	nsp	CK73B1A104KT +1005			
	C0121	nsp	CK73B1H102KT +1005			
	C0122	nsp	CK73B1A104KT +1005			
	C0123	nsp	CK73B1H102KT +1005			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C0124	nsp	CK73B1A104KT +1005			
	C0125	nsp	CK73B1H102KT +1005			
	C0126	nsp	CK73B1A104KT +1005			
	C0127,0128	nsp	CK73B1H102KT +1005			
	C0129	nsp	CK73B1A104KT +1005			
	C0130	nsp	CK73B1H102KT +1005			
	C0131,0132	nsp	CK73B1A104KT +1005			
	C0133	nsp	CK73B1H102KT +1005			
	C0134	nsp	CK73B1H102KT +1608			
	C0135	nsp	CK73B1A104KT +1005			
	C0136	nsp	CC73CH1H8R0DT +1608			
	C0137	nsp	CK73B1H102KT +1005			
	C0138	nsp	CK73B1A104KT +1005			
	C0139,0140	nsp	CK73B1H102KT +1005			
	C0141	nsp	CC73CH1H8R0DT +1608			
	C0142	nsp	CK73B1A104KT +1005			
	C0143,0144	nsp	CK73B1H102KT +1005			
	C0145-0147	nsp	CK73B1A104KT +1005			
	C0148	nsp	CK73B1H102KT +1005			
	C0149	nsp	CK73B1A104KT +1005			
	C0150,0151	nsp	CK73B1H102KT +1005			
	C0152	nsp	CK73B1A104KT +1005			
	C0153	nsp	CK73B1H102KT +1005			
	C0154	nsp	CK73B1A104KT +1005			
	C0155	nsp	CK73B1H102KT +1005			
	C0156	nsp	CK73B1A104KT +1005			
	C0157	nsp	CK73B1H102KT +1005			
	C0158,0159	nsp	CK73B1A104KT +1005			
	C0160	nsp	CK73B1H102KT +1005			
	C0161	nsp	CK73B1A104KT +1005			
	C0162	nsp	CK73B1H102KT +1005			
	C0163,0164	nsp	CK73B0J475KT +1608			
	C0167,0168	nsp	CK73B0J475KT +1608			
	C0169-0171	nsp	CK73B1H102KT +1005			
	C0172	nsp	CK73B1A104KT +1005			
	C0173	nsp	CK73B1H102KT +1005			
	C0174	nsp	CK73B1A104KT +1005			
	C0175	nsp	CK73B1H102KT +1005			
	C0176	nsp	CK73B1A104KT +1005			
	C0177	nsp	CK73B1H102KT +1005			
	C0178	nsp	CK73B1A104KT +1005			
	C0179-0181	nsp	CK73B1H102KT +1005			
	C0182	nsp	CK73B1A104KT +1005			
	C0183	nsp	CK73B1H102KT +1005			
	C0184-0188	nsp	CK73B1A104KT +1005			
	C0189	nsp	CK73B1H102KT +1005			
	C0190	nsp	CK73B1A104KT +1005			
	C0191	nsp	CK73B1H102KT +1005			
	C0192	nsp	CK73B1A104KT +1005			
	C0193	nsp	CK73B1H102KT +1005			
	C0194	nsp	CK73B1A104KT +1005			
	C0195	nsp	CK73B1H102KT +1005			
	C0196	nsp	CK73B1A104KT +1005			
	C0197	nsp	CK73B1H102KT +1005			
	C0198	nsp	CK73B1A104KT +1005			
	C0199-0201	nsp	CK73B1H102KT +1005			
	C0202	nsp	CK73B1A104KT +1005			
	C0203	nsp	CK73B1H102KT +1005			
	C0204	nsp	CK73B1A104KT +1005			
	C0205	nsp	CK73B1H102KT +1005			
	C0206	nsp	CK73B1A104KT +1005			
	C0207	nsp	CK73B1H102KT +1005			
	C0208	nsp	CK73B1A104KT +1005			
	C0209	nsp	CK73B1H102KT +1005			
	C0210	nsp	CK73B1A104KT +1005			
	C0211,0212	nsp	CK73B1H102KT +1005			
	C0213	nsp	CK73B1A104KT +1005			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C0214,0215	nsp	CK73B1H102KT +1005			
	C0216,0217	nsp	CK73B1A104KT +1005			
	C0218	nsp	CK73B1H102KT +1005			
	C0219,0220	nsp	CK73B1A104KT +1005			
	C0221	nsp	CK73B1H102KT +1005			
	C0222	nsp	CK73B1A104KT +1005			
	C0223	nsp	CK73B1H102KT +1005			
	C0224	nsp	CK73B1A104KT +1005			
	C0225	nsp	CK73B1H102KT +1005			
	C0226	nsp	CK73B1A104KT +1005			
	C0227,0228	nsp	CK73B1H102KT +1005			
	C0229	nsp	CK73B1A104KT +1005			
	C0230	nsp	CK73B1H102KT +1005			
	C0231,0232	nsp	CK73B1A104KT +1005			
	C0233	nsp	CK73B1H102KT +1005			
	C0235	nsp	CK73B1A104KT +1005			
	C0236	nsp	CC73CH1H8R0DT +1608			
	C0237	nsp	CK73B1H102KT +1005			
	C0238	nsp	CK73B1A104KT +1005			
	C0239,0240	nsp	CK73B1H102KT +1005			
	C0241	nsp	CC73CH1H8R0DT +1608			
	C0242	nsp	CK73B1A104KT +1005			
	C0243,0244	nsp	CK73B1H102KT +1005			
	C0245-0247	nsp	CK73B1A104KT +1005			
	C0248	nsp	CK73B1H102KT +1005			
	C0249	nsp	CK73B1A104KT +1005			
	C0250,0251	nsp	CK73B1H102KT +1005			
	C0252	nsp	CK73B1A104KT +1005			
	C0253	nsp	CK73B1H102KT +1005			
	C0254	nsp	CK73B1A104KT +1005			
	C0255	nsp	CK73B1H102KT +1005			
	C0256	nsp	CK73B1A104KT +1005			
	C0257	nsp	CK73B1H102KT +1005			
	C0258,0259	nsp	CK73B1A104KT +1005			
	C0260	nsp	CK73B1H102KT +1005			
	C0261	nsp	CK73B1A104KT +1005			
	C0262	nsp	CK73B1H102KT +1005			
	C0263,0264	nsp	CK73B0J475KT +1608			
	C0267,0268	nsp	CK73B0J475KT +1608			
	C0269-0271	nsp	CK73B1H102KT +1005			
	C0272	nsp	CK73B1A104KT +1005			
	C0273	nsp	CK73B1H102KT +1005			
	C0274	nsp	CK73B1A104KT +1005			
	C0275	nsp	CK73B1H102KT +1005			
	C0276	nsp	CK73B1A104KT +1005			
	C0277	nsp	CK73B1H102KT +1005			
	C0278	nsp	CK73B1A104KT +1005			
	C0279-0281	nsp	CK73B1H102KT +1005			
	C0282	nsp	CK73B1A104KT +1005			
	C0283	nsp	CK73B1H102KT +1005			
	C0284-0288	nsp	CK73B1A104KT +1005			
	C0289	nsp	CK73B1H102KT +1005			
	C0290	nsp	CK73B1A104KT +1005			
	C0291	nsp	CK73B1H102KT +1005			
	C0292	nsp	CK73B1A104KT +1005			
	C0293	nsp	CK73B1H102KT +1005			
	C0294	nsp	CK73B1A104KT +1005			
	C0295	nsp	CK73B1H102KT +1005			
	C0296	nsp	CK73B1A104KT +1005			
	C0297	nsp	CK73B1H102KT +1005			
	C0298	nsp	CK73B1A104KT +1005			
	C0299-0301	nsp	CK73B1H102KT +1005			
	C0302	nsp	CK73B1A104KT +1005			
	C0303	nsp	CK73B1H102KT +1005			
	C0304	nsp	CK73B1A104KT +1005			
	C0305	nsp	CK73B1H102KT +1005			
	C0306	nsp	CK73B1A104KT +1005			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C0307	nsp	CK73B1H102KT +1005			
	C0308	nsp	CK73B1A104KT +1005			
	C0309	nsp	CK73B1H102KT +1005			
	C0310	nsp	CK73B1A104KT +1005			
	C0311,0312	nsp	CK73B1H102KT +1005			
	C0313	nsp	CK73B1A104KT +1005			
	C0314,0315	nsp	CK73B1H102KT +1005			
	C0316,0317	nsp	CK73B1A104KT +1005			
	C0318	nsp	CK73B1H102KT +1005			
	C0319,0320	nsp	CK73B1A104KT +1005			
	C0321	nsp	CK73B1H102KT +1005			
	C0322	nsp	CK73B1A104KT +1005			
	C0323	nsp	CK73B1H102KT +1005			
	C0324	nsp	CK73B1A104KT +1005			
	C0325	nsp	CK73B1H102KT +1005			
	C0326	nsp	CK73B1A104KT +1005			
	C0327,0328	nsp	CK73B1H102KT +1005			
	C0329	nsp	CK73B1A104KT +1005			
	C0330	nsp	CK73B1H102KT +1005			
	C0331,0332	nsp	CK73B1A104KT +1005			
	C0333	nsp	CK73B1H102KT +1005			
	C0335	nsp	CK73B1A104KT +1005			
	C0336	nsp	CC73CH1H8R0DT +1608			
	C0337	nsp	CK73B1H102KT +1005			
	C0338	nsp	CK73B1A104KT +1005			
	C0339,0340	nsp	CK73B1H102KT +1005			
	C0341	nsp	CC73CH1H8R0DT +1608			
	C0342	nsp	CK73B1A104KT +1005			
	C0343,0344	nsp	CK73B1H102KT +1005			
	C0345-0347	nsp	CK73B1A104KT +1005			
	C0348	nsp	CK73B1H102KT +1005			
	C0349	nsp	CK73B1A104KT +1005			
	C0350,0351	nsp	CK73B1H102KT +1005			
	C0352	nsp	CK73B1A104KT +1005			
	C0353	nsp	CK73B1H102KT +1005			
	C0354	nsp	CK73B1A104KT +1005			
	C0355	nsp	CK73B1H102KT +1005			
	C0356	nsp	CK73B1A104KT +1005			
	C0357	nsp	CK73B1H102KT +1005			
	C0358,0359	nsp	CK73B1A104KT +1005			
	C0360	nsp	CK73B1H102KT +1005			
	C0361	nsp	CK73B1A104KT +1005			
	C0362	nsp	CK73B1H102KT +1005			
	C0363,0364	nsp	CK73B0J475KT +1608			
	C0367,0368	nsp	CK73B0J475KT +1608			
	C0369-0371	nsp	CK73B1H102KT +1005			
	C0372	nsp	CK73B1A104KT +1005			
	C0373	nsp	CK73B1H102KT +1005			
	C0374	nsp	CK73B1A104KT +1005			
	C0375	nsp	CK73B1H102KT +1005			
	C0376	nsp	CK73B1A104KT +1005			
	C0377	nsp	CK73B1H102KT +1005			
	C0378	nsp	CK73B1A104KT +1005			
	C0379-0381	nsp	CK73B1H102KT +1005			
	C0382	nsp	CK73B1A104KT +1005			
	C0383	nsp	CK73B1H102KT +1005			
	C0384-0388	nsp	CK73B1A104KT +1005			
	C0389	nsp	CK73B1H102KT +1005			
	C0390	nsp	CK73B1A104KT +1005			
	C0391	nsp	CK73B1H102KT +1005			
	C0392	nsp	CK73B1A104KT +1005			
	C0393	nsp	CK73B1H102KT +1005			
	C0394	nsp	CK73B1A104KT +1005			
	C0395	nsp	CK73B1H102KT +1005			
	C0396	nsp	CK73B1A104KT +1005			
	C0397	nsp	CK73B1H102KT +1005			
	C0398	nsp	CK73B1A104KT +1005			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C0399,0400	nsp	CK73B1H102KT +1005			
	C0411-0413	nsp	CK73B1A104KT +1005			
	C0414	nsp	CK73B1H102KT +1005			
	C0415	nsp	CK73B1A104KT +1005			
	C0416,0417	nsp	CK73B1H102KT +1005			
	C0418	nsp	CK73B1A104KT +1005			
	C0441-0443	nsp	CK73B1A104KT +1005			
	C0445	nsp	CK73B1H102KT +1005			
	C0446	nsp	CK73B1A104KT +1005			
	C0447,0448	nsp	CK73B1H102KT +1005			
	C0449	nsp	CK73B1A104KT +1005			
	C0461-0463	nsp	CK73B1A104KT +1005			
	C0464	nsp	CK73B1H102KT +1005			
	C0465	nsp	CK73B1A104KT +1005			
	C0466,0467	nsp	CK73B1H102KT +1005			
	C0468	nsp	CK73B1A104KT +1005			
	C0506	nsp	CK73B1H102KT +1005			
	C0508,0509	nsp	CC73CH1H120JT +1608			
	C0512-0515	nsp	CK73B0J475KT +1608			
	C0516	nsp	CK73B1A104KT +1005			
	C0517	nsp	CK73B1H102KT +1005			
	C0518	nsp	CK73B1A104KT +1005			
	C0519	nsp	CK73B1H102KT +1005			
	C0520	nsp	CK73B1A104KT +1005			
	C0521	nsp	CK73B1H102KT +1005			
	C0522	nsp	CK73B1A104KT +1005			
	C0523	nsp	CK73B1H102KT +1005			
	C0524	nsp	CK73B1A104KT +1005			
	C0525	nsp	CK73B1H102KT +1005			
	C0526-0531	nsp	CK73B1A104KT +1005			
	C0532-0535	nsp	CK73B1H102KT +1005			
	C0536	nsp	CK73B0J475KT +1608			
	C0539-0542	nsp	CK73B0J475KT +1608			
	C0543	nsp	CK73B1A104KT +1005			
	C0544	nsp	CK73B1H102KT +1005			
	C0545	nsp	CK73B1A104KT +1005			
	C0546	nsp	CK73B1H102KT +1005			
	C0547-0554	nsp	CK73B1A104KT +1005			
	C0555-0558	nsp	CK73B1H102KT +1005			
	C0559	nsp	CK73B0J475KT +1608			
	C0562	nsp	CK73B0J475KT +1608			
	C0565,0566	nsp	CK73B1A104KT +1005			
	C0567-0581	nsp	CK73B1H102KT +1005			
	C0603	nsp	CK73B1E104KT +1608			
	C0604	00D2544645903	CE67C0J221MT(MVA) +REF			
	C0609	nsp	CC73CH1H100DT +1608			
	C0610-0613	nsp	CK73B1A104KT +1005			
	C0614	nsp	CK73B1H102KT +1005			
	C0615	nsp	CK73B1A104KT +1005			
	C0616	nsp	CK73B1H102KT +1005			
	C0617-0620	nsp	CK73B1A104KT +1005			
	C0621	nsp	CK73B1H102KT +1005			
	C0622	nsp	CK73B1A104KT +1005			
	C0625	nsp	CK73B0J475KT +1608			
	C0626,0627	nsp	CK73B1A104KT +1005			
	C0630-0632	nsp	CK73B1A104KT +1005			
	C0633	nsp	CC73CH1H150JT +1005			
	C0634	nsp	CC73CH1H100DT +1005			
	C0635-0638	nsp	CK73X5R0J106MT(2125)			
	C0640,0641	nsp	CK73B1A104KT +1005			
	C0644,0645	nsp	CK73B1E103KT(1005)			
	C0646	nsp	CK73B1A104KT +1005			
	C0647	nsp	CK73B1H102KT +1005			
	C0648,0649	nsp	CK73X5R0J106MT(2125)			
	C0650	nsp	CK73B1H102KT +1005			
	C0653,0654	nsp	CK73B1H102KT +1005			
	C0659	nsp	CK73B1A104KT +1005			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C0661	nsp	CK73B1A104KT +1005			
	C0664	nsp	CK73B1A105KT +1608			
	C0665,0666	nsp	CK73B1E104KT +1608			
	C0682-0689	nsp	CK73B1H102KT +1608			
	C0701-0704	nsp	CK73B1A104KT +1005			
	C0705-0714	nsp	CC73CH1H391JT +1005			
	C0715-0722	nsp	CK73B1A104KT +1005			
	C0723	00D2544645903	CE67C0J221MT(MVA) +REF			
	C0724,0725	nsp	CK73B1A104KT +1005			
	C0726	nsp	CC73CH1H101JT +1005			
	C0727	00D2544645903	CE67C0J221MT(MVA) +REF			
	C0728	nsp	CC73CH1H7R0DT +1608			
	C0729	nsp	CC73CH1H100DT +1608			
	C0730	nsp	CC73CH1H101JT +1005			
	C0731	nsp	CK73B1A104KT +1005			
	C0733-0736	nsp	CK73B1A104KT +1005			
	C0737	nsp	CK73B1E223KT +1608			
	C0738-0741	nsp	CK73B1A104KT +1005			
	C0742,0743	nsp	CC73CH1H101JT +1005			
	C0744	nsp	CK73B1A104KT +1005			
	C0746	nsp	CK73B1H102KT +1608			
	C0747	nsp	CK73B1A104KT +1005			
	C0749,0750	nsp	CC73CH1H150JT +1608			
	C0751	nsp	CC73CH1H150JT +1005			
	C0752	nsp	CK73X5R0J106MT(2125)			
	C0753	nsp	CK73B0J475KT +1608			
	C0754	nsp	CK73B1H102KT +1005			
	C0755	nsp	CK73B0J475KT +1608			
	C0756	nsp	CK73B1H102KT +1005			
	C0757	nsp	CK73X5R0J106MT(2125)			
	C0758	nsp	CK73B1A104KT +1005			
	C0759	nsp	CK73B1E103KT(1005)			
	C0760	nsp	CK73X5R0J106MT(2125)			
	C0764	nsp	CK73B1A104KT +1005			
	C0766	nsp	CC73CH1H471JT +1608			
	C0767	nsp	CK73B1A105KT +1608			
	C0768	nsp	CK73B1E103KT(1005)			
	C0769	nsp	CK73B0J475KT +1608			
	C0775	nsp	CK73B1H102KT +1608			
	C0800	nsp	CK73B1A104KT +1005			
	C0802	nsp	CK73B1E104KT +1608			
	C0803	00D2544645903	CE67C0J221MT(MVA) +REF			
	C0804	nsp	CK73B1A104KT +1005			
	C0806	nsp	CC73CH1H220JT +1005			
	C0810	nsp	CK73B1A104KT +1005			
	C0811	nsp	CC73CH1H220JT +1005			
	C0815,0816	nsp	CK73B1E103KT(1005)			
	C0819,0820	nsp	CK73B1E103KT(1005)			
	C0823	nsp	CK73B1A104KT +1005			
	C0826	nsp	CK73B1E103KT(1005)			
	C0828	nsp	CK73B1A104KT +1005			
	C0830	nsp	CK73B1A104KT +1005			
	C0831	nsp	CK73X5R0J106MT(2125)			
	C0832	nsp	CK73B1A104KT +1005			
	C0833	nsp	CK73X5R0J106MT(2125)			
	C0836	nsp	CK73B1A104KT +1005			
	C0837	nsp	CK73X5R0J106MT(2125)			
	C0838	nsp	CK73B1A104KT +1005			
	C0839	nsp	CK73X5R0J106MT(2125)			
	C0840	nsp	CK73B1A104KT +1005			
	C0841	nsp	CK73X5R0J106MT(2125)			
	C0842	00D2544645903	CE67C0J221MT(MVA) +REF			
	C0942	nsp	CK73B1A104KT +1005			
OTHERS PARTS GROUP						
	B0601	44431029600AD	PWB BRACKET (USB)			
	K0800	64401015560AS	HDMI CONNECTOR(A111989-W-15-T)			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	L0003	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L0007,0008	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L0052,0053	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L0501-0503	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L0601	113410007504S	DLW21SN181SQ2L			
	L0602,0603	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L0605	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L0607	00D2350130903	CHIP EMIFIL(11A121) +1608			
	L0608-0610	00D2470018905	RM73B--0R0KT +2125			
	L0611	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L0613	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L0701-0708	113410001506S	DLW21SN900HQ2L			
	L0709-0711	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L0712,0713	113410001506S	DLW21SN900HQ2L			
	L0714	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L0716-0718	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L0800	113410007504S	DLW21SN181SQ2L			
	L0801	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L0806-0808	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	L0810-0812	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
	N0051	64501008150AS	100P IMSA-9832S-100Y903			
	N0501	00D2051257978	7P FFC BASE (9610SD)			
	N0601	64401015000AS	USB CONNECTOR(UAR80-4K5J00)			
	N0603	00MYJ0701855Y	S5B-PH-SM4-TB (LF)(SN)			
	N0605	645010056090S	33P PLUG(C125Z1)			
	N0606	645010057062S	23P SOCKET(C125Z2)			
	N0607	645010057093S	33P SOCKET(C125Z2)			
	N0608	645010056090S	33P PLUG(C125Z1)			
	N0701	64401015110AS	1X4 RJ45 CONNECTOR(640-007BC)			
	N0702	645010057048S	19P SOCKET(C125Z2)			
	N0800	00D2051381103	USB CONNECTOR			
	N0801	00MYJ06006250	B5B-PH-K-S (LF)(SN)			
	N0802	00MYJ06006270	B7B-PH-K-S (LF)(SN)			
	N0803	00D2051313906	25P FFC.BASE(9610SCA +REF			
	X0101	14181006850AS	TXC 7V(25MHZ)			
	X0201	14181006850AS	TXC 7V(25MHZ)			
	X0301	14181006850AS	TXC 7V(25MHZ)			
	X0503	14181006750AS	TXC 7V(24MHZ)			
	X0701	14181006850AS	TXC 7V(25MHZ)			
	Z3801	44431029700AD	HDMI USB BRACKET			
	Z9999	44531014300AD	SHIELD PLATE (DSP)			