

DENON

Ver. 5

Please refer to the
MODIFICATION NOTICE.

SERVICE MANUAL

MODEL	JP	EU	EC	E2	E3	E2A	E1C	EUT
AVR-3310CI		✓	✓					
AVR-3310				✓ ²				
AVR-990					✓ ²			

AV SURROUND RECEIVER

MODEL	JP	EU	EC	E2	E3	E2A	E1C	EUT
AVC-3310							✓ ²	

AV SURROUND AMPLIFIER

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

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

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

DENON

D&M Holdings Inc.

SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Before returning the unit to the customer, make sure you make 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 unit is defective.

CAUTION Please heed the points listed below during servicing and inspection.

⊙ Heed the cautions!

Spots requiring particular attention when servicing, such as the cabinet, parts, chassis, etc., have cautions indicated on labels or seals. Be sure to heed these cautions and the cautions indicated in the handling instructions.

⊙ Caution concerning electric shock!

- (1) An AC voltage is impressed on this set, so touching internal metal parts when the set is energized could cause electric shock. Take care to avoid electric shock, by for example using an isolating transformer and gloves when servicing while the set is energized, unplugging the power cord when replacing parts, etc.
- (2) There are high voltage parts inside. Handle with extra care when the set is energized.

⊙ Caution concerning disassembly and assembly!

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

⊙ Only use designated parts!

The set's parts have specific safety properties (fire resistance, voltage resistance, etc.). For replacement parts, be sure to use parts which have the same properties. In particular, for the important safety parts that are marked \triangle on wiring diagrams and parts lists, be sure to use the designated parts.

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

For safety reasons, some parts use tape, 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 inside and clamps are used to keep wires away from heating and high voltage parts, so be sure to set everything back as it was originally.

⊙ Inspect for safety after servicing!

Check that all screws, parts and wires removed or disconnected for servicing have been put back in their original positions, inspect that no parts around the area that has been serviced have been negatively affected, conduct 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 turn the power switch on. Using a 500V insulation resistance tester, check that the insulation resistance between the terminals of the power plug and the externally exposed metal parts (antenna terminal, headphones terminal, microphone terminal, input terminal, etc.) is $1M\Omega$ or greater. If it is less, the set must be inspected and repaired.

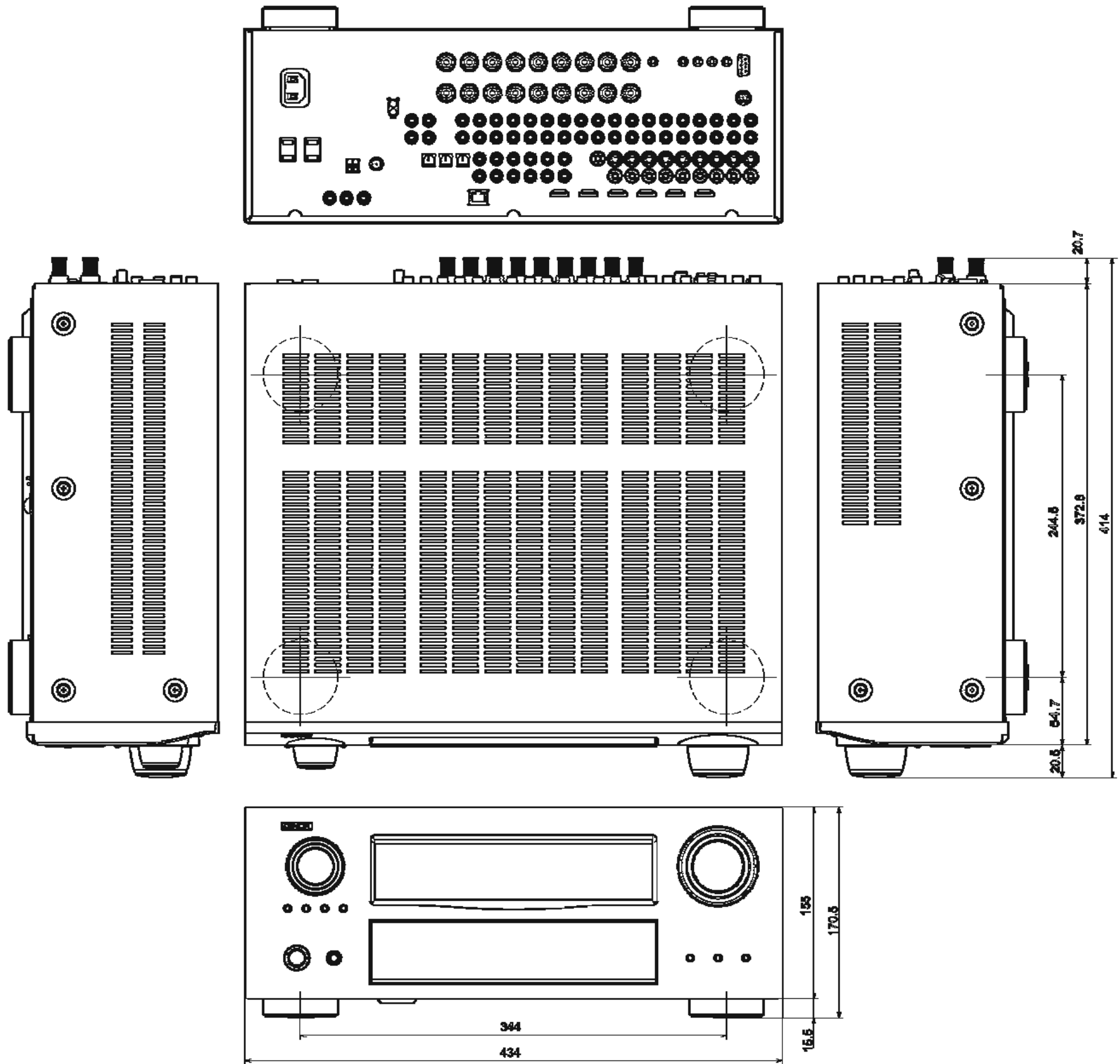
CAUTION Concerning important safety parts

Many of the electric and structural parts used in the set have special safety properties. In most cases these properties are difficult to distinguish by sight, and using 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 parts lists in this service manual. Be sure to replace them with parts with the designated part number.

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

Using parts other than the designated parts could result in electric shock, fires or other dangerous situations.

DIMENSION
AVR-3310CI/AVR-3310/AVR-990/AVC-3310



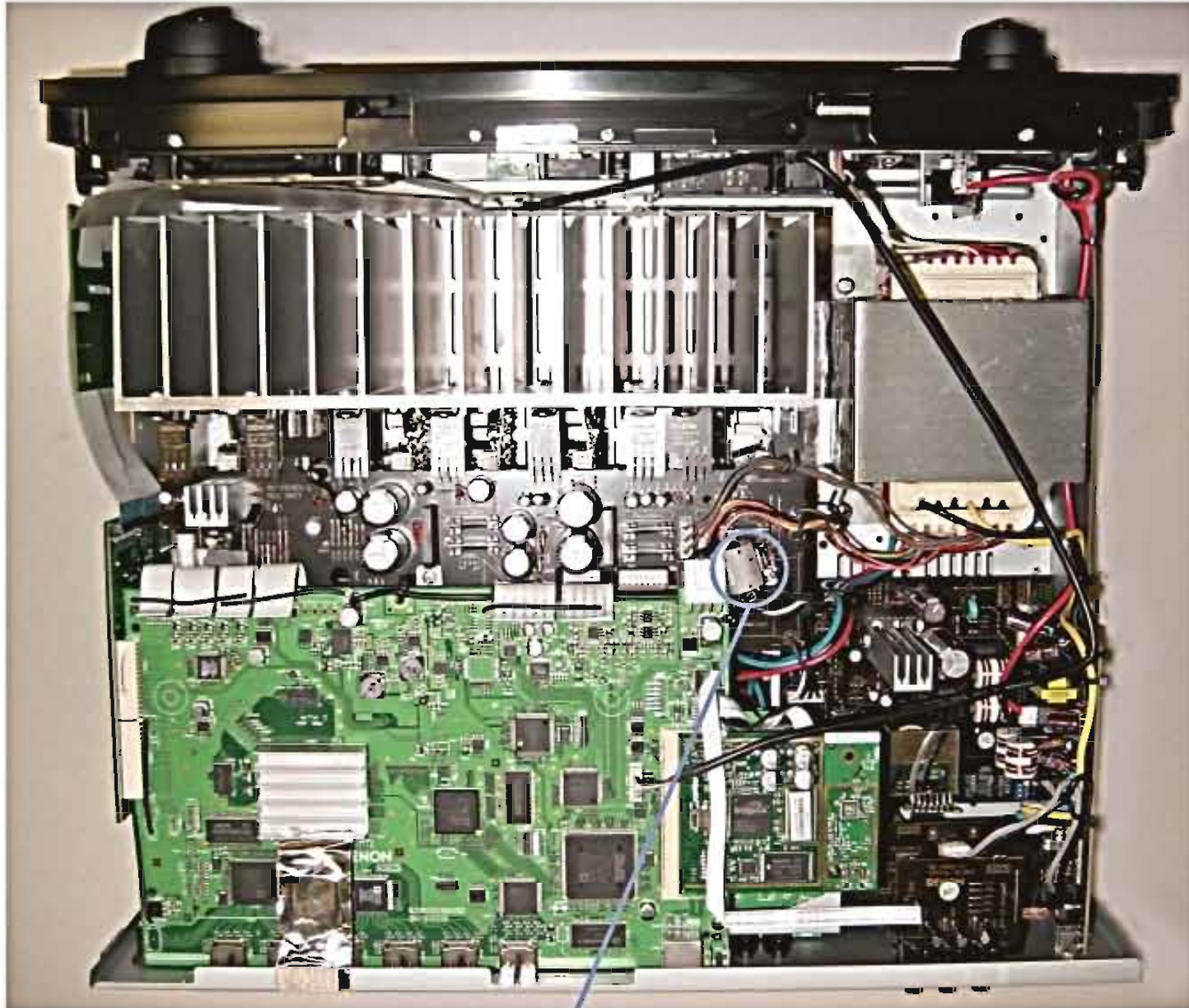
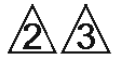
WIRE ARRANGEMENT

If wire bundles are untied or moved to perform adjustment or parts replacement 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.

Wire arrangement viewed from the top

Front Panel side



Except AVR-3310CI, AVR-990 model

Back Panel side

CAUTION IN SERVICING

Before the Digital P.W.B. are replaced

If you cannot specify the cause of the digital PWB defect, carry out "Initializing" → "Update to latest firmware".
The defect may be cleared.

- See the following for the method of initializing the μ com.

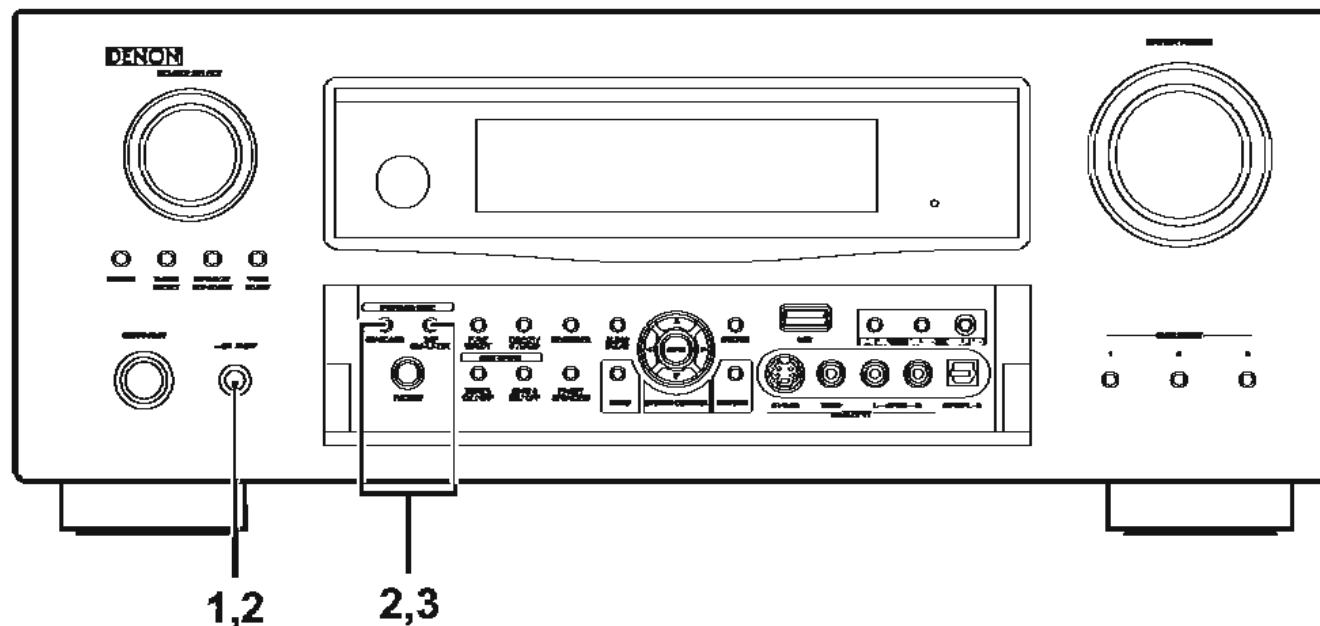
Initializing AV SURROUND RECEIVER

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

1. Switch off the unit.
2. Hold the following STANDARD button and DSP SIMULATION button, and switch on the unit.
3. Check that the entire display is flashing with an interval of about 1 second, and release your fingers from the 2 buttons and the microprocessor will be initialized.

Note: • If step 3 does not work, start over from step 1.

- All user settings will be lost and this factory setting will be recovered when this initialization mode. So make sure to memorize your setting for restoring after the initialization.



JIG to use for servicing

When you repair the printing board, you can use the following JIG. Please order to Denon Official Service Distributor in your region if necessary.

Extension cable kit

- 00D SPK- 561 EXTENSION UNIT KIT : 1 Set
- 00D SPK- 562 TUCP CONN. JOINT KIT : 1 Set

Extension cable for Idling Current

Parts Number for Extension Cables and Quantity of Unit.

Parts Number	Parts Name	Q'ty / unit	Remarks
612050082004D	6P 250mm NH	1	L=250mm 6P NH Cable
612050083007D	8P 250mm NH	1	L=250mm 8P NH Cable

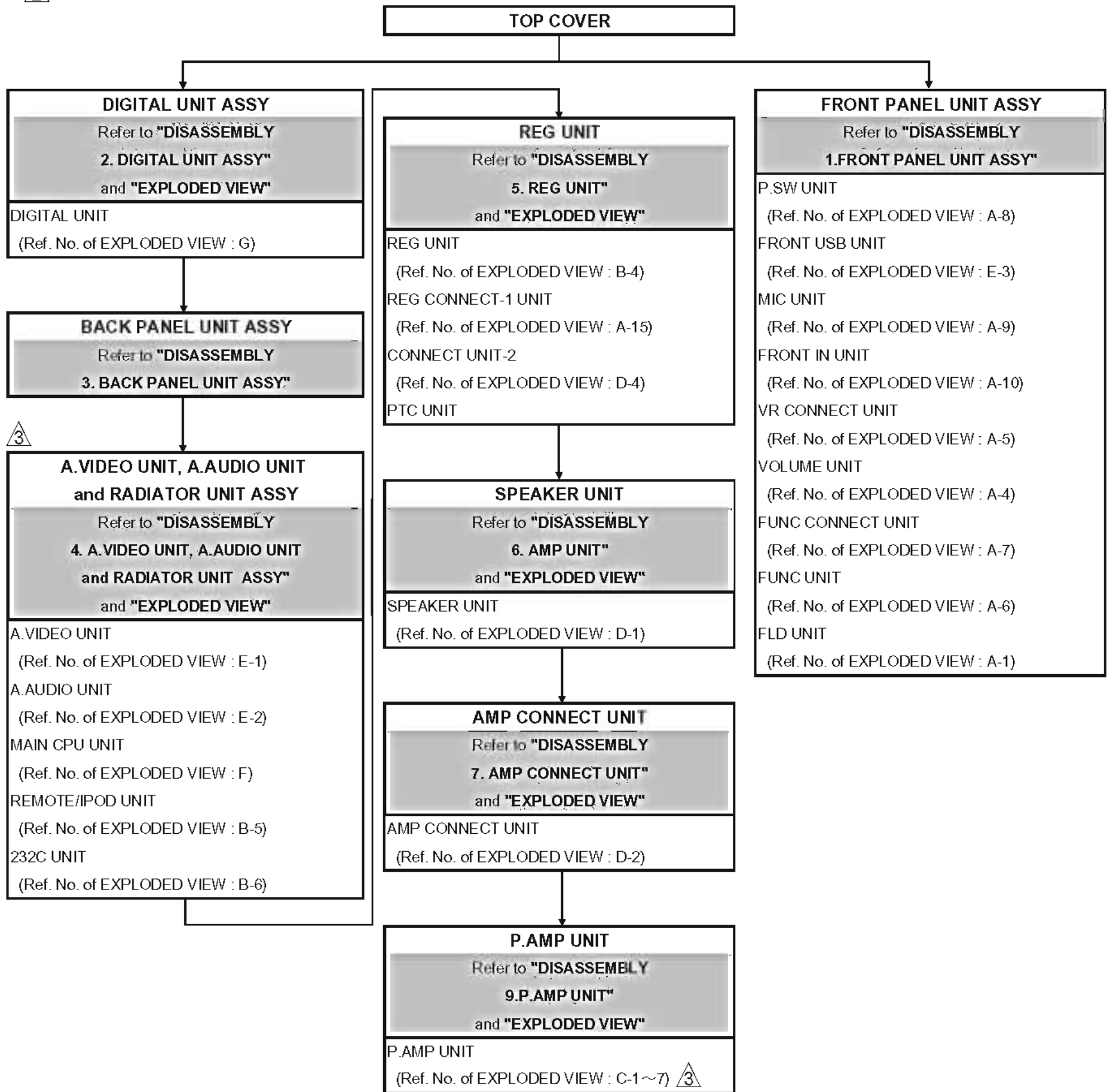
How to use and Adjust Idle Current.

1. The thin and hard plate (ex. Ruler) is fixed with the tape behind the cable.
2. The voltmeter is connected with the other side of the extension cable.
3. Refer to ADJUSTMENT (Idling Current).

DISASSEMBLY



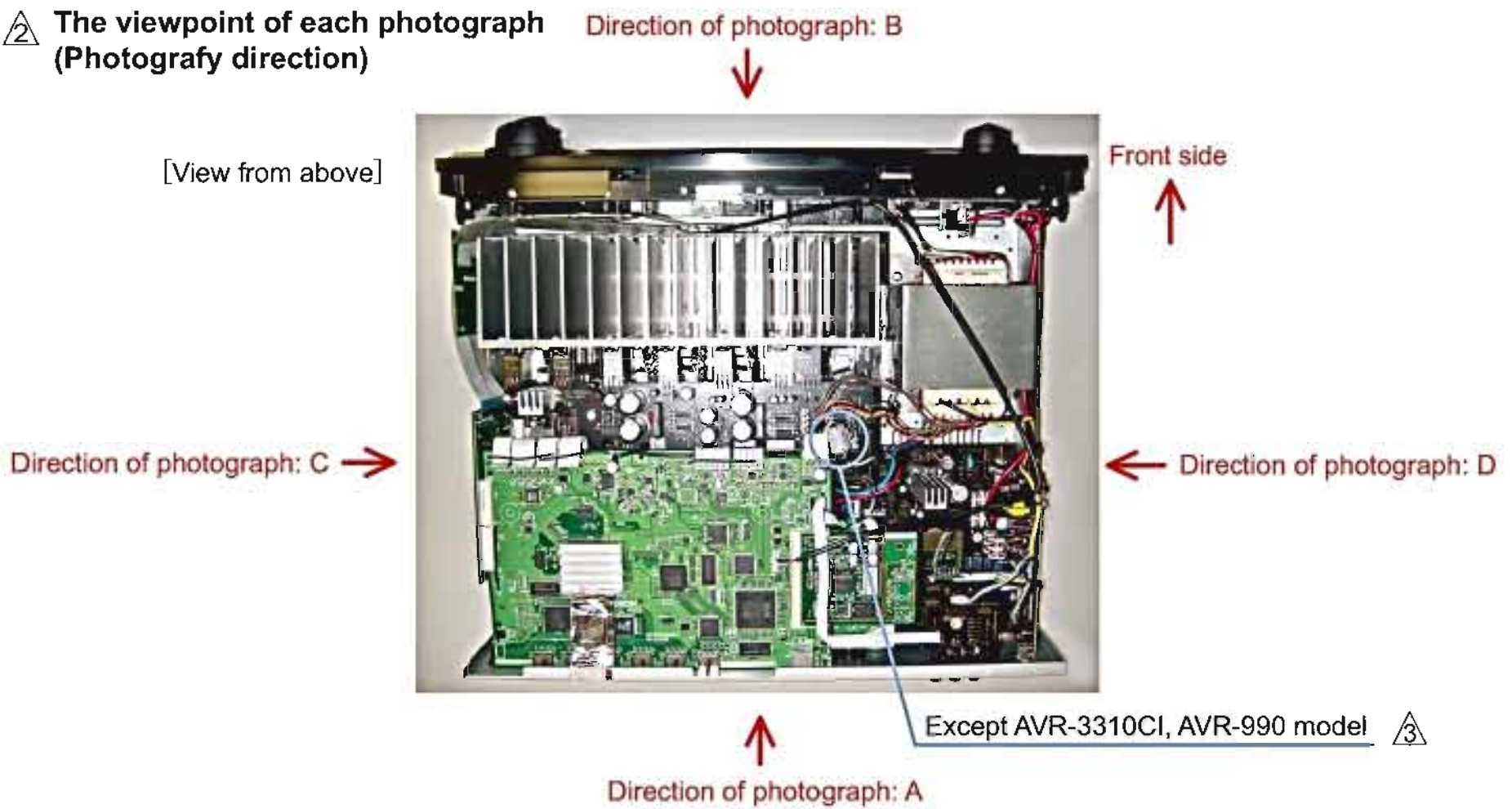
- Disassemble in order of the arrow of the figure of following flow.
- In the case of the re-assembling, assemble it in order of the reverse of the following flow.
- In the case of the re-assembling, observe "attention of assembling" it.



About the photos used for descriptions in the “DISASSEMBLY” section.

- The direction from which the photographs used herein were photographed is indicated at "Direction of photograph: ***" at the left of the respective photographs.
- Refer to the table below for a description of the direction in which the photos were taken.
- Photographs for which no direction is indicated were taken from above the product.

② The viewpoint of each photograph (Photography direction)



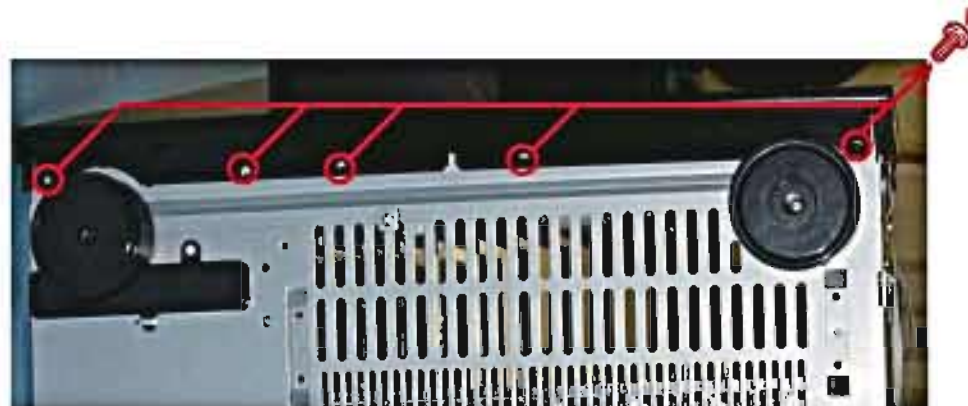
1. FRONT PANEL UNIT ASSY

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

- (1) Remove the screws.

③

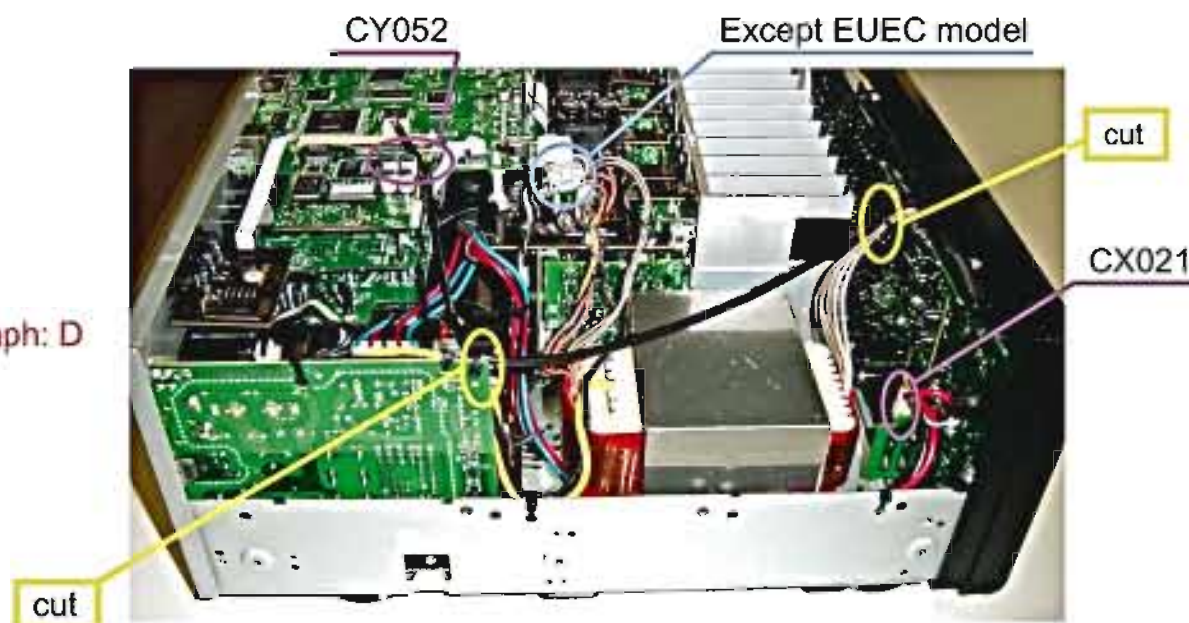
View from bottom



- (2) Cut the wire clampers then disconnect the connector wires.

②

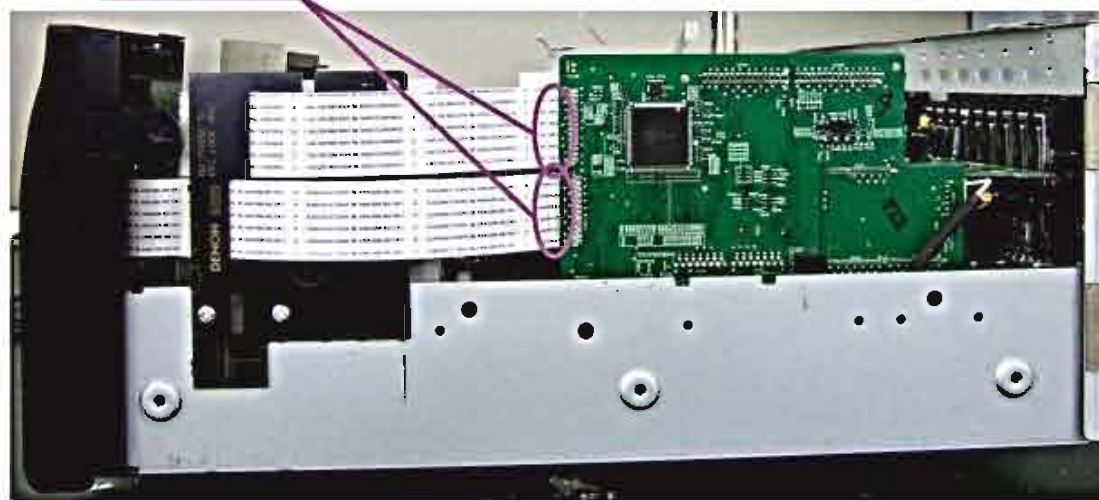
Direction of photograph: D



(3) Disconnect the FFC Cables.

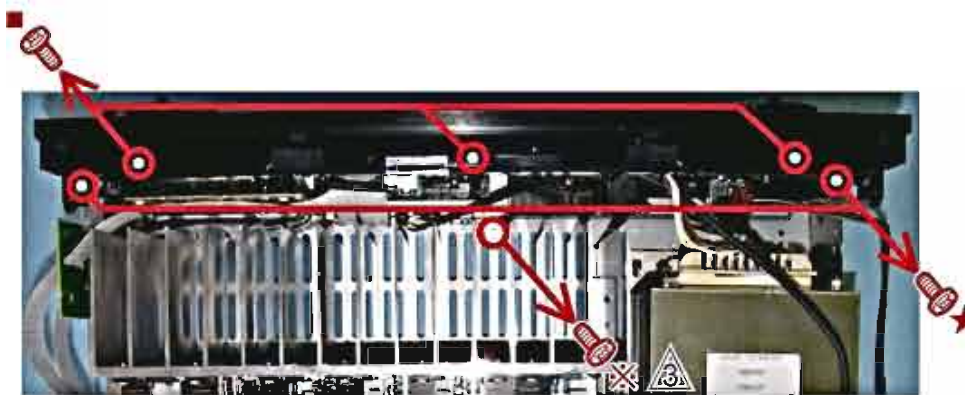


FFC Cable



Direction of photograph: C

(4) Remove the screws



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

[Attention of assembling]

When mounting the FRONT PANEL ASSY on the CHASSIS, do so with the DOOR open so as to prevent breaking the EARTH PLATE(DOOR).

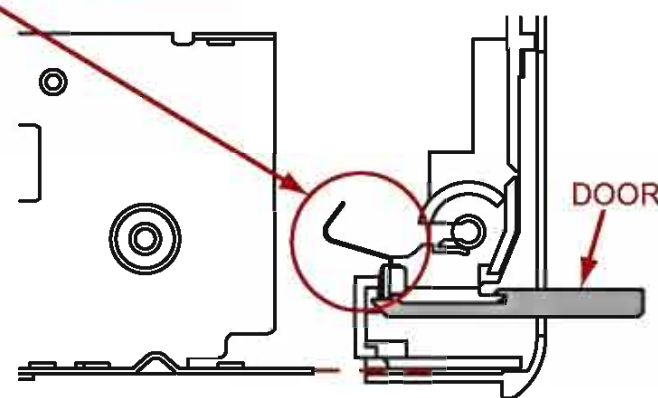
If the FRONT PANEL ASSY is mounted on the chassis with the DOOR closed, the EARTH PLATE(DOOR) will hit the CHASSIS and break.

DOOR open

Direction of photograph: A



EARTH PLATE (DOOR)

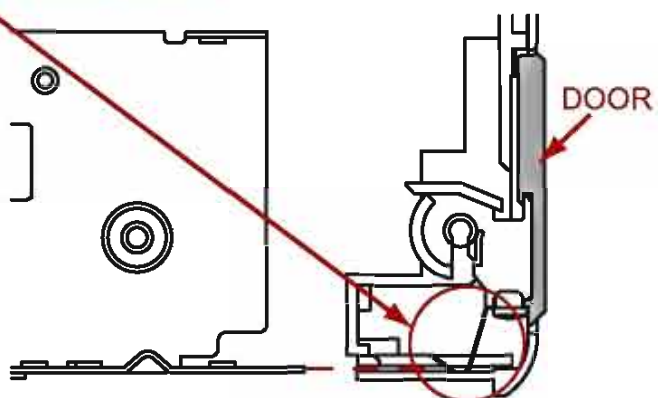


DOOR closed (EARTH PLATE (DOOR) will be broken.)

Direction of photograph: A



EARTH PLATE (DOOR)



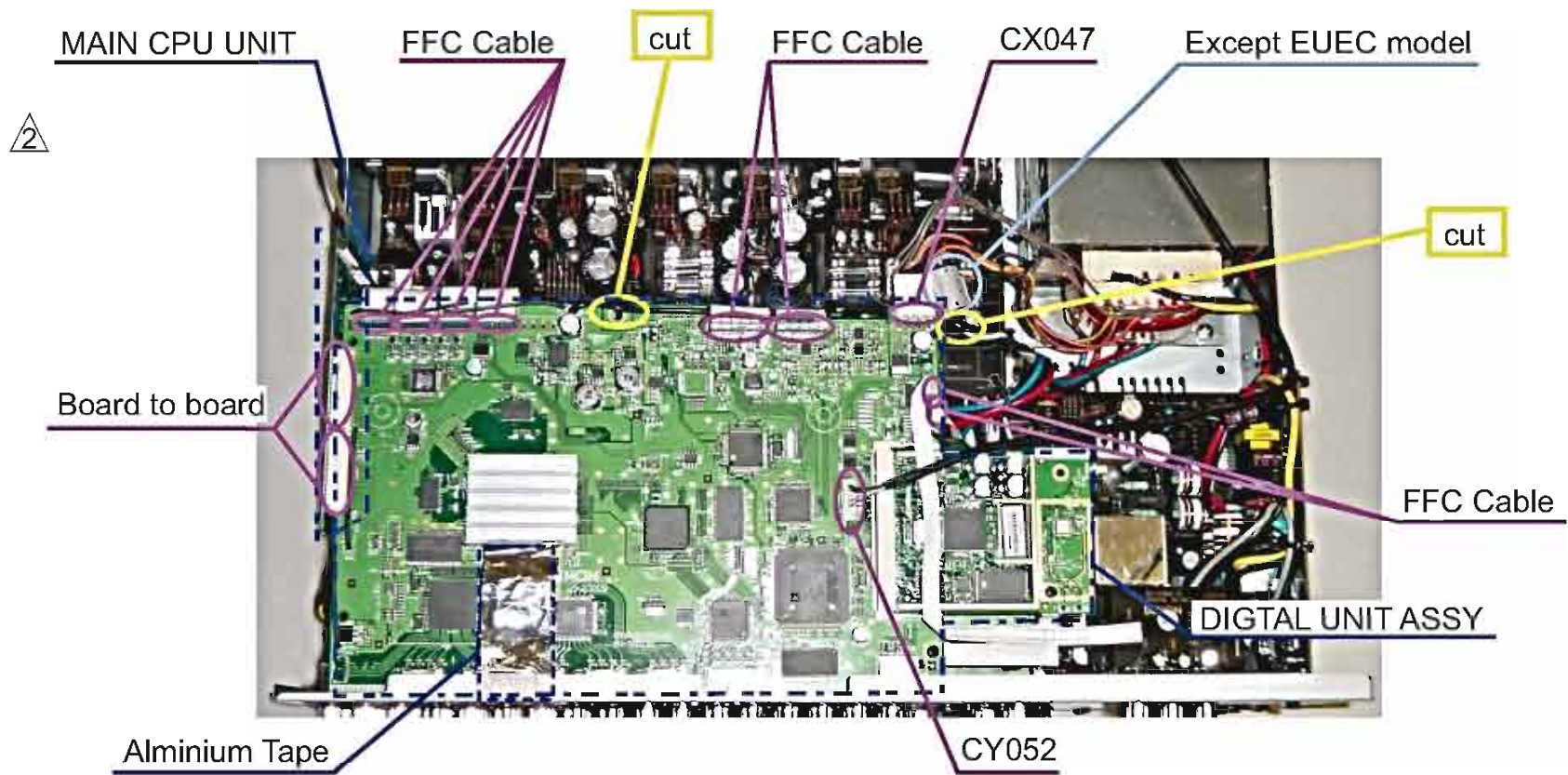
2. DIGITAL UNIT ASSY

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

(1) Remove the screws.



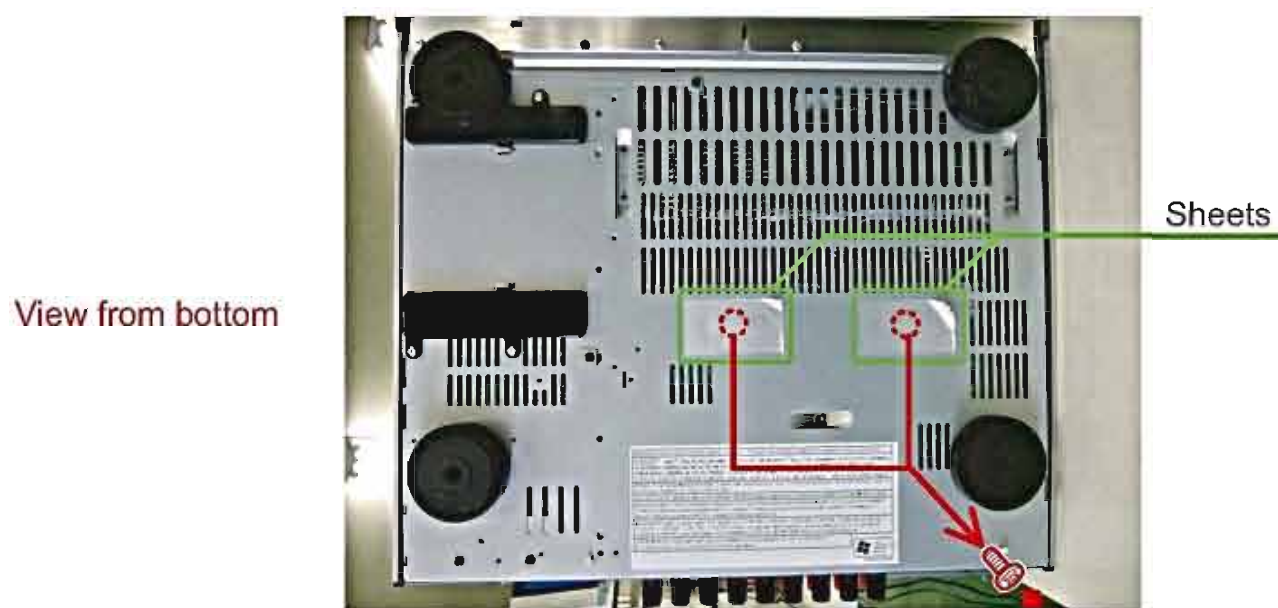
(2) Remove the aluminium tape, then cut the wire clampers. Disconnect the connector wire, FFC Cables, and board to board.



3. BACK PANEL UNIT ASSY

Proceeding : **TOP COVER** → **DIGITAL UNIT ASSY** → **BACK PANEL UNIT ASSY**

Remove the Sheets, then remove the screws.



Remove the screws.

EUEC model

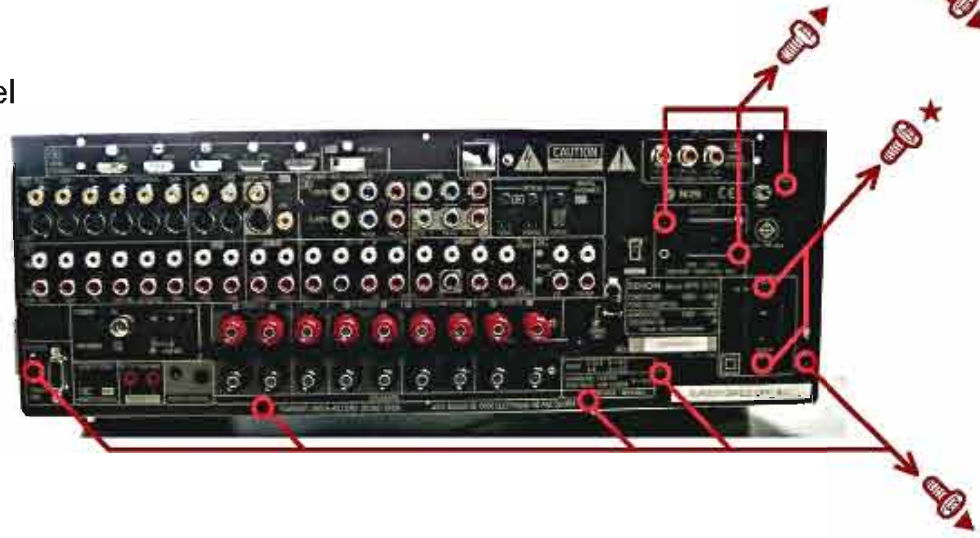
Direction of photograph: A



2

E2 model

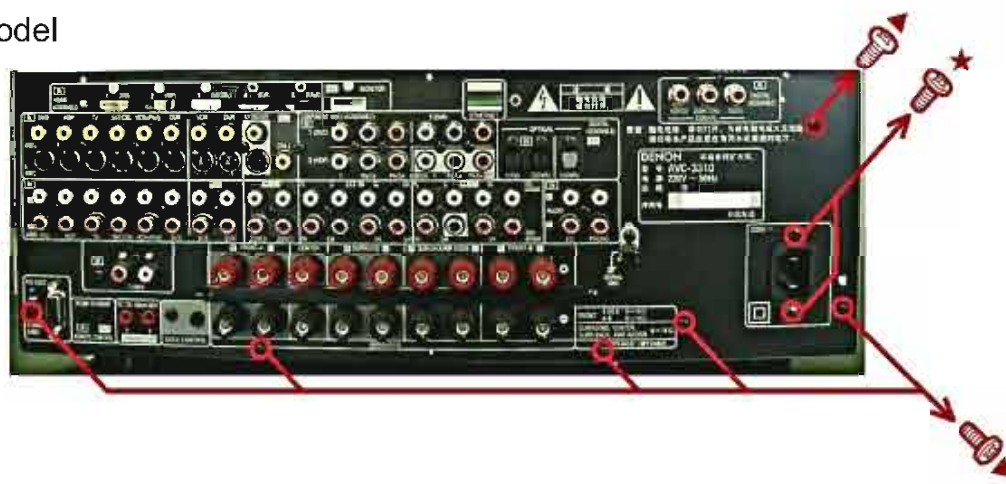
Direction of photograph: A



3

E1C model

Direction of photograph: A

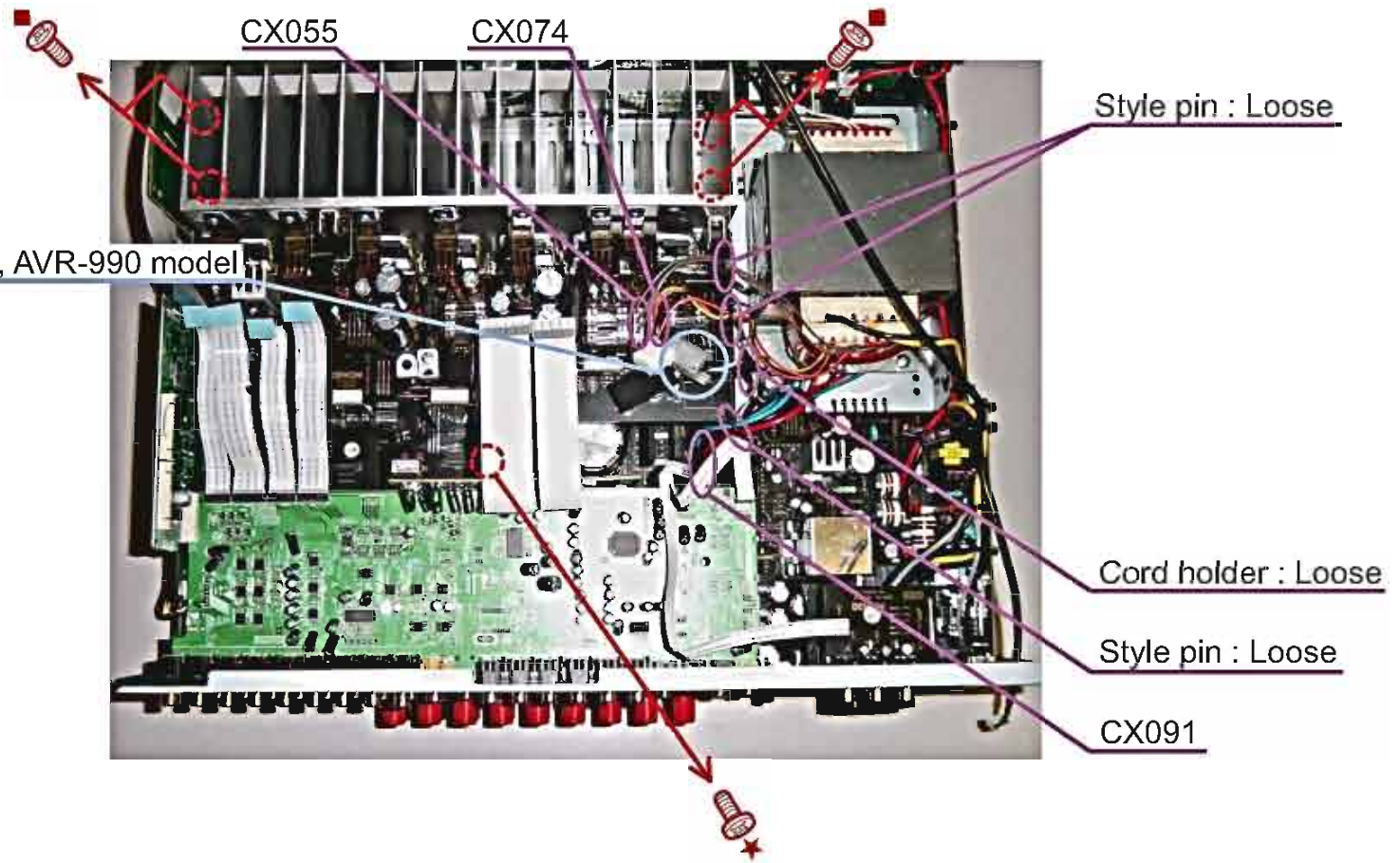


(3) Disconnect the connector wires and FFC Cable, then remove the screws.

2

3

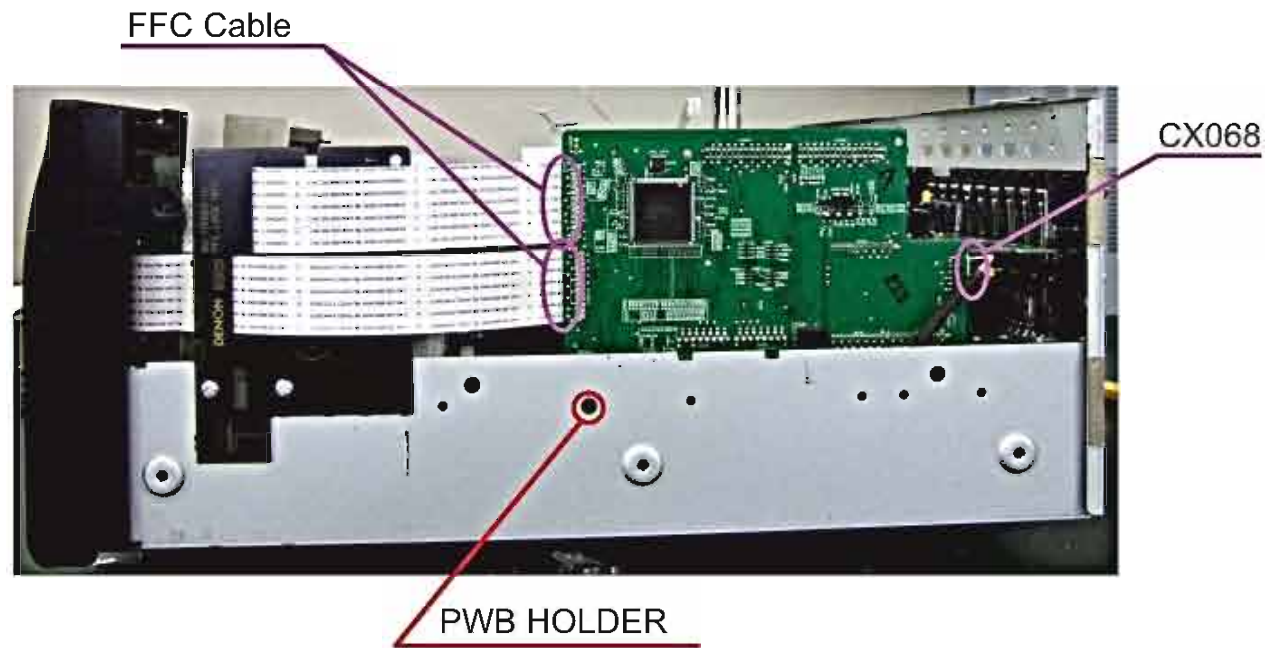
Except AVR-3310CI, AVR-990 model



(4) Remove the PWB HOLDER. Disconnect the connector wire and FFC Cable.

3

Direction of photograph: C



4. A.VIDEO UNIT, AUDIO UNIT and RADIATOR UNIT ASSY

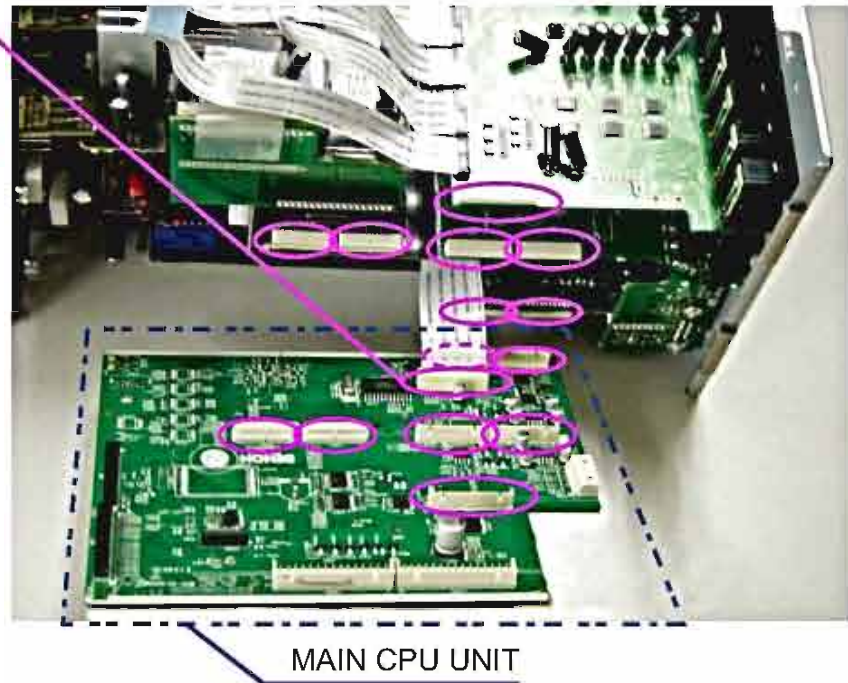
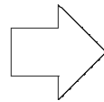
Proceeding : **TOP COVER** → **BACK PANEL UNIT ASSY** → **DIGITAL UNIT ASSY**
 → **A.VIDEO UNIT, A.AUDIO UNIT and RADIATOR UNIT ASSY** ⚠

(1) Disconnect the board to board and FFC Cable.

Except E1C model

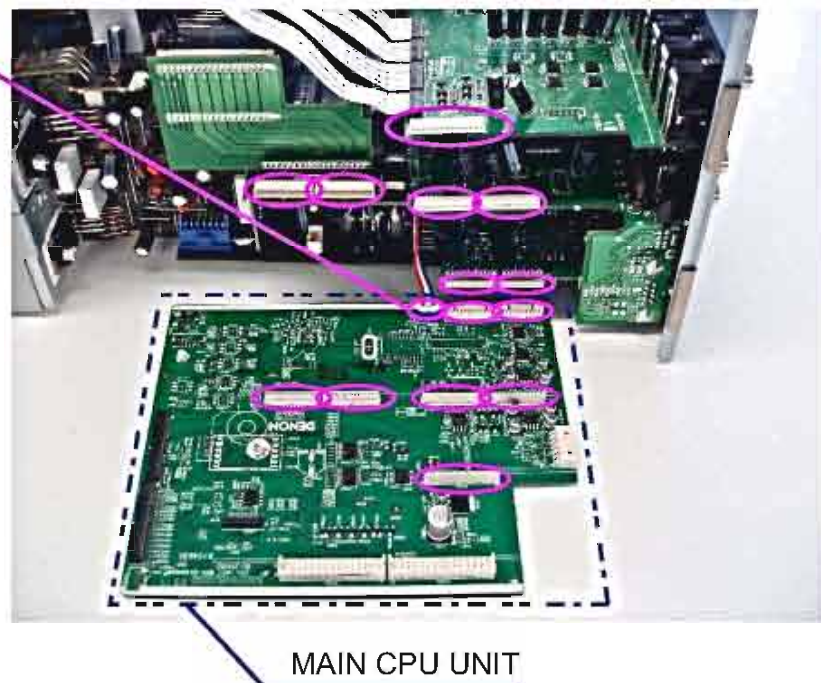
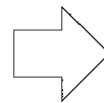
FFC Cable

Direction of photograph: C



⚠
E1C model

CY034

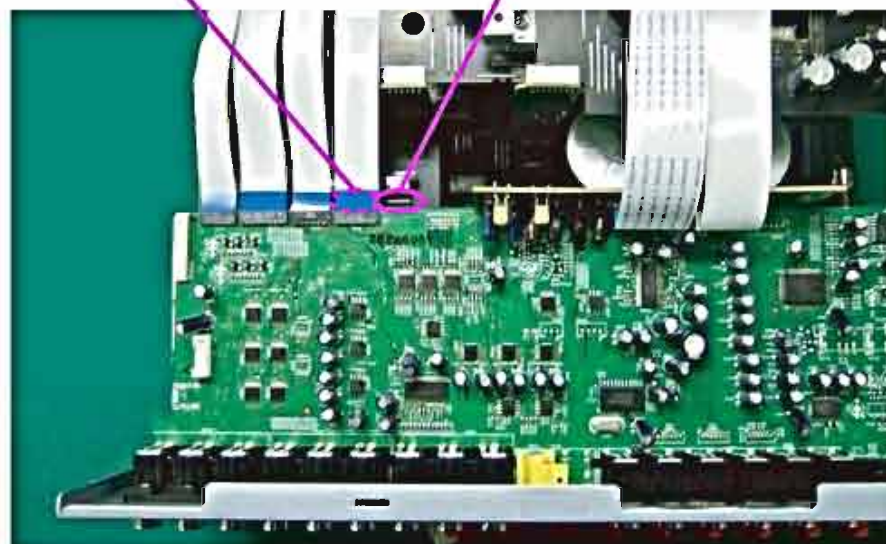


Direction of photograph: C

(2) Disconnect the connector wires.

CX192

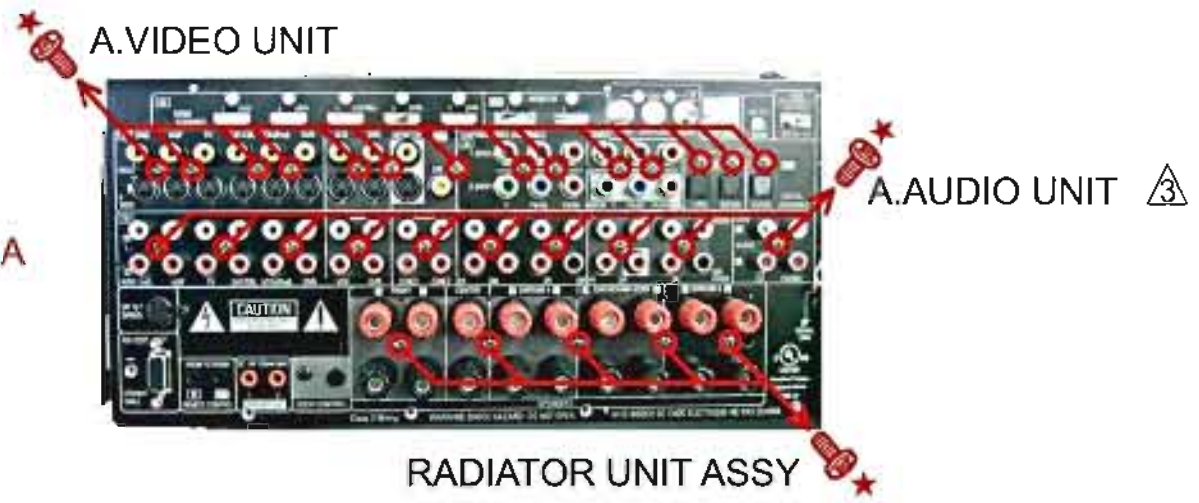
CX073



(3) Remove the screws.

EUEC model

Direction of photograph: A



⚠ E2 model

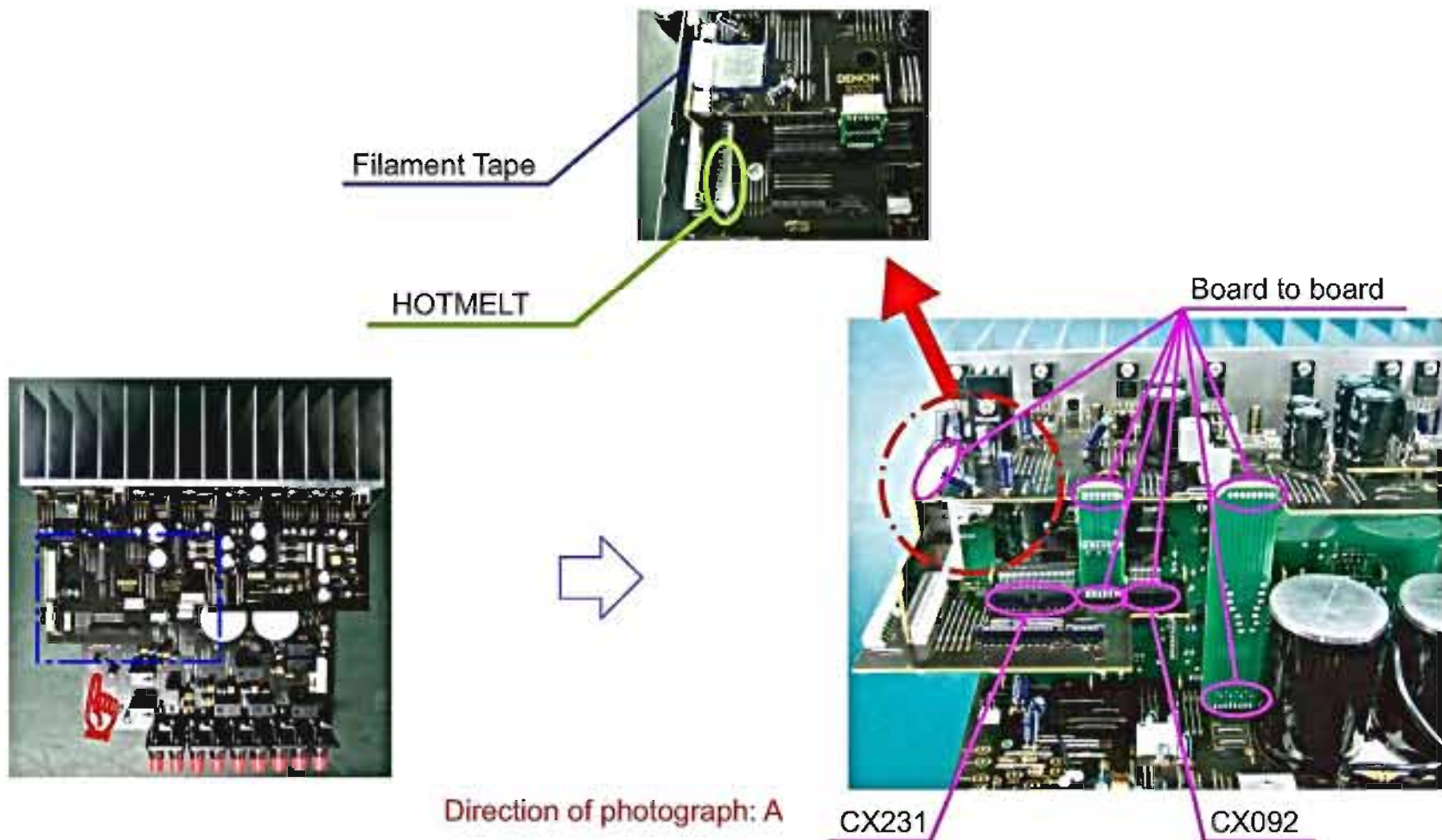
Direction of photograph: A



5. REG UNIT

Proceeding : **TOP COVER** → **BACK PANEL UNIT ASSY** → **DIGITAL UNIT ASSY**
 → **A.VIDEO UNIT, A.AUDIO UNIT and RADIATOR UNIT ASSY** ⚠
 → **REG UNIT**

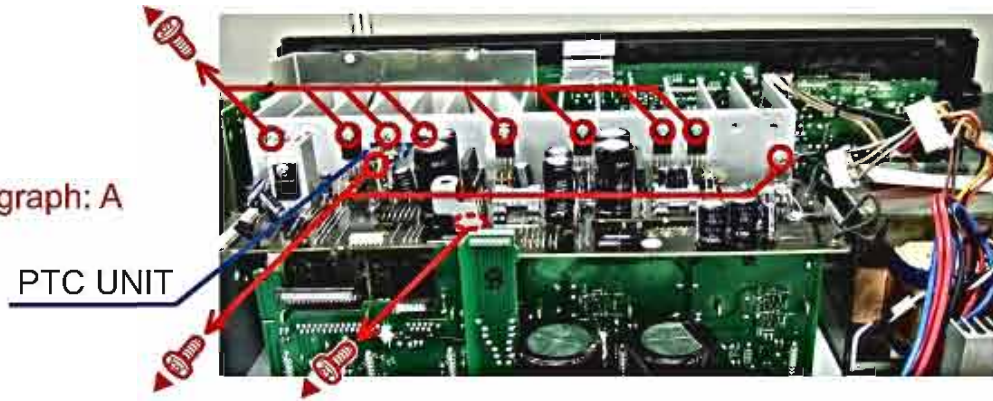
(1) Disconnect the board to board and connector wires. Remove the Filament Tape.



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

②

Direction of photograph: A

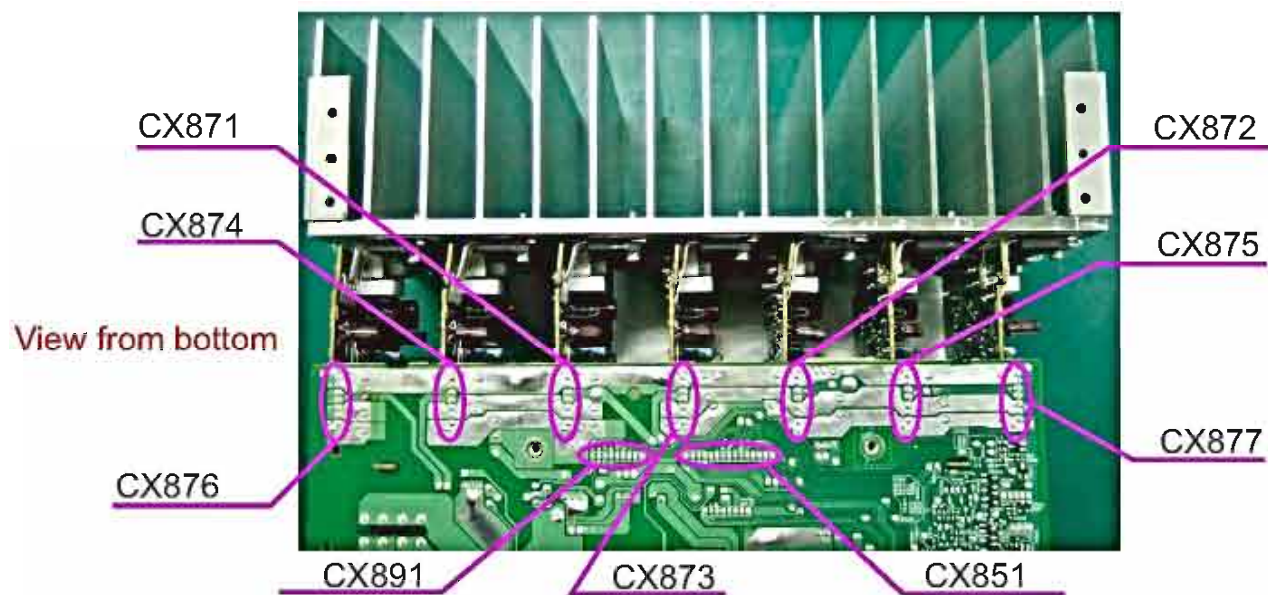


6. SPEAKER UNIT

②

Proceeding : **TOP COVER** → **BACK PANEL UNIT ASSY** → **DIGITAL UNIT ASSY**
 → **A.VIDEO UNIT, A.AUDIO UNIT and RADIATOR UNIT ASSY** ③
 → **REG UNIT** → **SPEAKER UNIT**

(1) Disconnect the VH connector and connector.



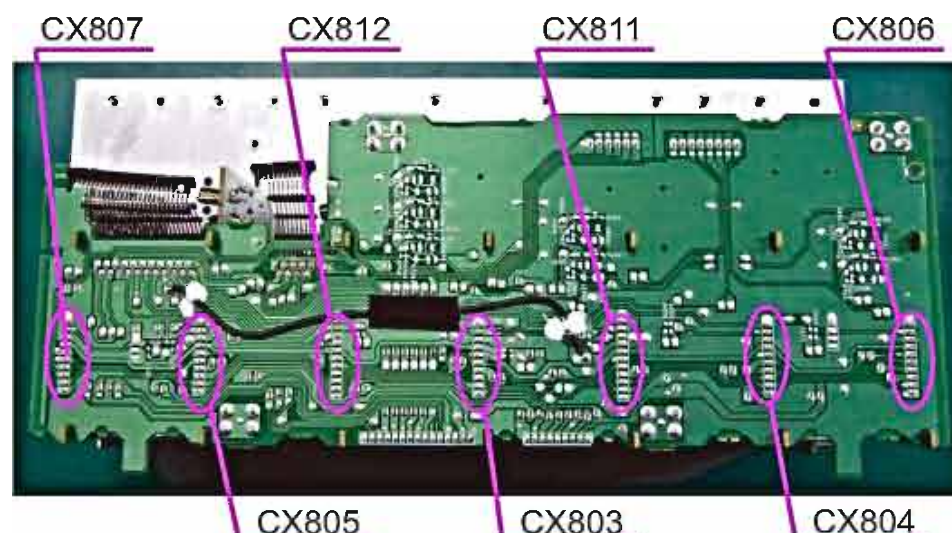
7. AMP CONNECT UNIT

②


Proceeding : **TOP COVER** → **BACK PANEL UNIT ASSY** → **DIGITAL UNIT ASSY**
 → **A.VIDEO UNIT, A.AUDIO UNIT and RADIATOR UNIT ASSY** ③
 → **REG UNIT** → **SPEAKER UNIT** → **AMP CONNECT UNIT**

(1) Disconnect the connector.

Direction of photograph: A

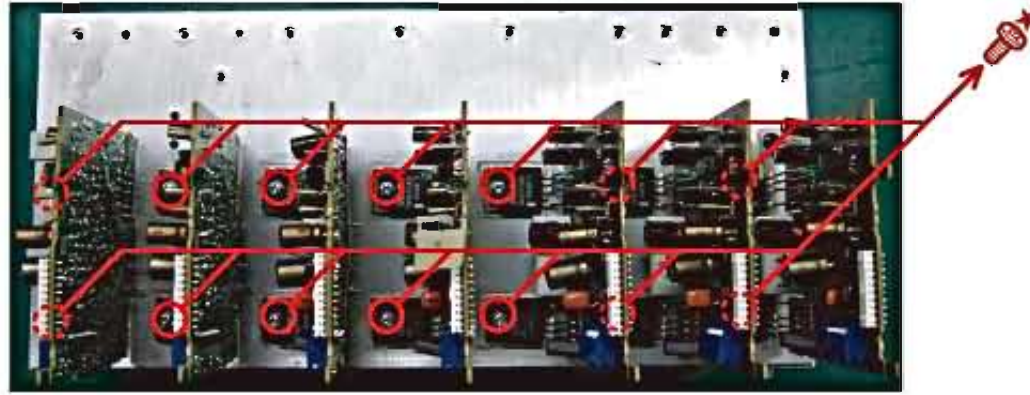


8. P.AMP UNIT

Proceeding : **TOP COVER** → **BACK PANEL UNIT ASSY** → **DIGITAL UNIT ASSY**
→ **A.VIDEO UNIT, A.AUDIO UNIT and RADIATOR UNIT ASSY** 
→ **REG UNIT** → **SPEAKER UNIT** → **AMP CONNECT UNIT**
→ **P.AMP UNIT**

(1) Remove the screws.

Direction of photograph: B



SPECIAL MODE

Special mode setting button

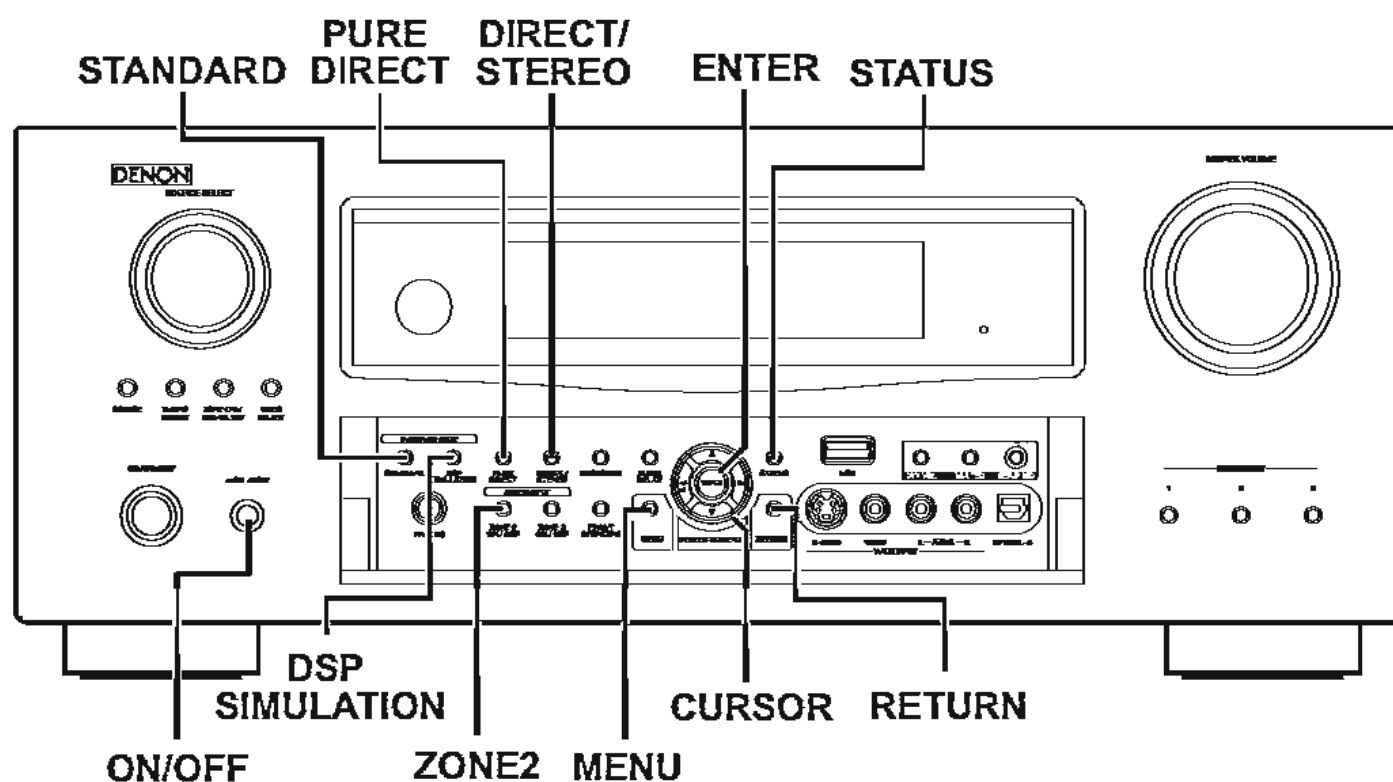
※ Press the ON/OFF button to turn on while pressing both buttons A and B at the same time.

Mode	Button A	Button B	contents
Version display (μcom/DSP Error Display)	STATUS	RETURN	Serial No. and firmware versions such as Main, Sub, DSP are displayed in the FL manager. Errors are displayed when they occur. (Refer to 16 page.)
Displaying the protection history mode	STATUS	MENU	Displaying the protection history (Refer to 18 page.)
Initialization mode (Remove settings for Installer Setup.)	STANDARD	DSP SIMULATION	Backup data initialization is carried out. (Remove settings for Installer Setup.)
Initialization mode (Includes settings for Installer Setup)	CURSOR UP	CURSOR DOWN	Backup data initialization is carried out. (Includes settings for Installer Setup)
Mode for switching tuner frequency step	STANDARD	DIRECT/ STEREO	—E2 model only— Change tuner frequency step to FM:200kHz/AM:10kHzSTEP \triangle
Mode for preventing remote control acceptance	STATUS	ENTER	Operations using remote control are rejected. (Mode cancellation: Turn off power and execute the same button operations as when performing setup.)
Panel lock mode	DSP SIMULATION	ZONE2	Operations using main unit panel buttons or master volume are rejected.
Panel lock mode (Remove Master volume)	DIRECT/ STEREO	ZONE2	Operations using main unit panel buttons are rejected.
Cancellation of panel lock mode	PURE DIRECT	ZONE2	Panel lock mode is cancelled.
Installer Setup mode	MENU	CURSOR LEFT	Access Remote Maintenance mode via the internet. Installer Setup is displayed on GUI/Option Menu. ※ Refer to AVR_RemoteMaintenance_.pdf of SDI.

Note:

If "s" is displayed on the fluorescent display, the unit is set to the special developer's mode and RS-232C communications are not possible.

Press and hold in the "STATUS" and "▽" buttons for over 3 seconds with the power turned on to turn the "s" display off. RS-232C communications are now enabled.



1. Version display (μcom/DSP Error Display)

1.1. Operation Spec

μcom version display mode:

When the following conditions are satisfied at its starting state, error information is displayed before version information.

Starting method (same as μcom version display):

Press the ON/OFF button to turn on while pressing both buttons STATUS and RETURN at the same time.

("Error information" is displayed after about 10 seconds.)

The FL display changes in the order given in item-1.2. each time you press the STATUS button.

1.2. Display Order

Error information(Refer to 1.3. Error display) → ①Model destination information ②Main-μcom version information/
Main1st Boot Loader ③Sub μcom ④DSP version information ⑤Audio PLD ⑥OSD FPGA Config ⑦OSD Pro-
gram ⑧OSD Font Data ⑨ETHER(DM860) First BootLoafer, HardwareID ⑩ETHER(DM860) Second BootLoader,
RhapsodyFlag ⑪ETHER(DM860) IMAGE ⑫ETHER(DM860) MAC ADDRESS information ⑬HD RADIO SDK /HD
RADIO DSP(E2 model only) ⑭MultEQ Pro APP (Displayed when Audyssey Pro is complete)
⑮MultEQ Pro ICL (Displayed when Audyssey Pro is complete)

No.	Display item	Display
①	Model destination	AVR3310E3
	Cereal No.	S/N. 0123456789
②	Main-μcom	Main
	Main 1st Boot Loder	Main FBL
③	Sub-μcom	Sub
④	DSP	DSP
⑤	Audio PLD	Audio PLD
⑥	FPGA	OSD Config
⑦	OSD Program	OSD PRG
⑧	OSD Font Data	OSD DAT
⑨	DM860 1st Bootloader - Hard ID	Ether FBL
⑩	DM860 2nd Bootloader - Rhapsody Flag	Ether SBL
⑪	DM860 Image	Ether IMG
⑫	ETHER MAC ADDRESS	*Ethernet MAC
⑬	HD RADIO SDK	*HDSKD
	HD RADIO DSP	*HDSDP:00002.000
⑭	MultEQ Pro APP	*MultEQ Pro APP
⑮	MultEQ Pro ICL	*MultEQ Pro ICL

1.3. Error display

See the following table for each "Error information" display and its contents (status).
 Display order is ①②③④⑤.

Condition	State	Display
① Sub-μcom NG	No response from Sub-μcom	"□SUB□□ERROR□01□□"
② DIR NG	No response from DIR	"□DIR□□ERROR□01□□"
③ DSP1 NG	When DSP boot, executing DSP reset makes no change to DSP1 FLAG0 port "H".	"□DSP□□ERROR□01□□"
	No change to DSP FLAG0 port "H" before issuing DSP command.	"□DSP□□ERROR□02□□"
	When DSP data read, executing WRITE="L" makes no change to ACK="H".	"□DSP□□ERROR□03□□"
	When DSP data read, executing REQ="L" makes no change to ACK="L".	"□DSP□□ERROR□04□□"
	When DSP data write, executing WRITE="H" makes no change to ACK="H".	"□DSP□□ERROR□05□□"
	When DSP data write, executing REQ="L" makes no change to ACK="L".	"□DSP□□ERROR□06□□"
	When DSP special code boot, executing DSP reset makes no change to DSP FLAG0 port "H".	"□DSP□□ERROR□11□□"
	No change to DSP FLAG0 port "H" before issuing DSP special read command.	"□DSP□□ERROR□12□□"
	No change to DSP FLAG0 port "H" before DSP version read.	"□DSP□□ERROR□13□□"
④ EEPROM NG	Error appeared in EEPROM checksum.(*** is a block address number.)	"□EEPROM□ERR***□□"
⑤ Both SUB/DSP /EEPROM OK		(No error display, version display only)

2. Displaying the protection history mode

2.1. Operation specifications

ERROR MODE(displaying the protection history)
 When started up, the error information is displayed.

Starting up:

With the "MENU" and "STATUS" buttons pressed, press the "ON/OFF" button to turn the power on. The error (protection history display) mode is set.
 Then, press the "STATUS" button to turn on the FL display.

2.2. About the display on the FL display

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

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

```

PROTECT HISTORY
AND PROTECT
    
```

(2) For ASO/DC (when the last protection incident was ASO or DC protection)

```

PROTECT HISTORY
ASO/DC
    
```

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

```

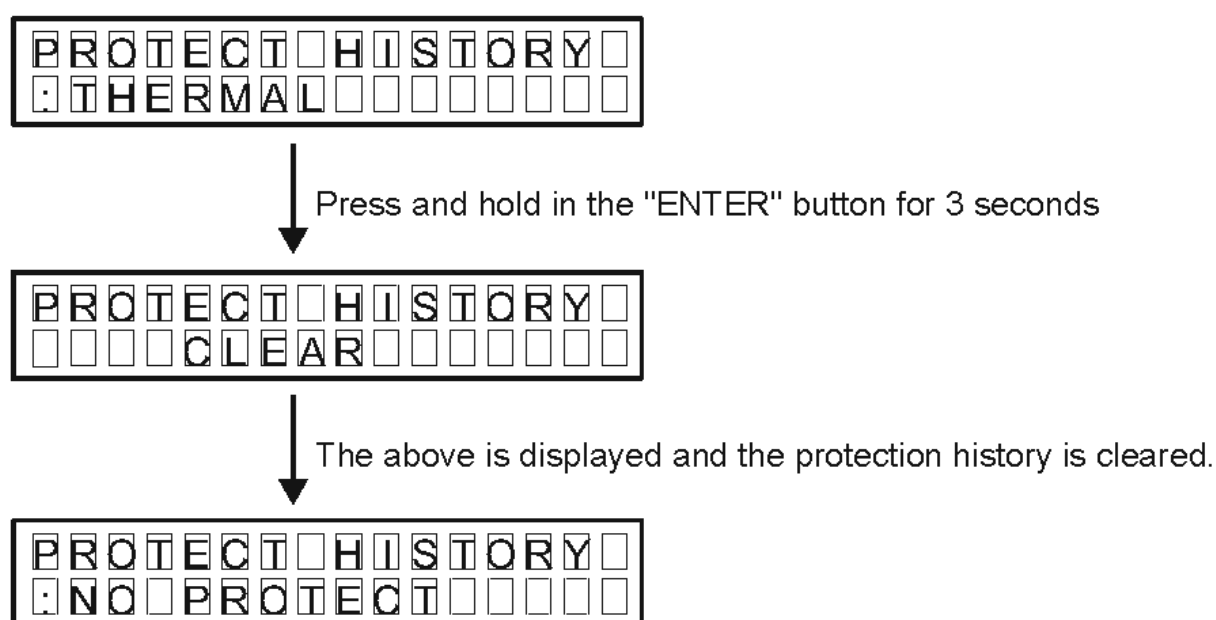
PROTECT HISTORY
THERMAL
    
```

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

2.3. Clearing the protection history

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

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



- (2) Initialize.

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

Warning indication by the STANDBY LED

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

- (1) ASO/DC PROTECTION : Flashes in cycles of 0.5 seconds (0.25 seconds lit, 0.25 seconds off)
- (2) THERMAL PROTECTION : Flashes in cycles of 2 seconds (1 second lit, 1 second off)

3. Mode for switching tuner frequency step ---E2 model only---

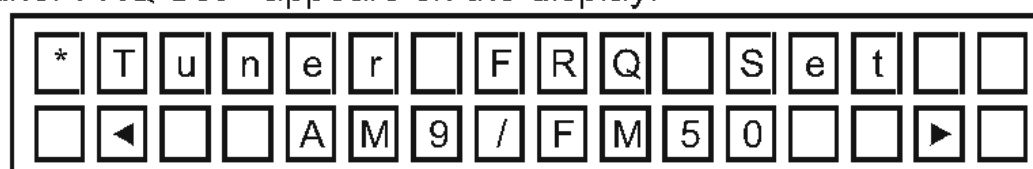
3.1. Operation specification

Change tuner frequency step to FM:200kHz/AM:10kHz STEP.

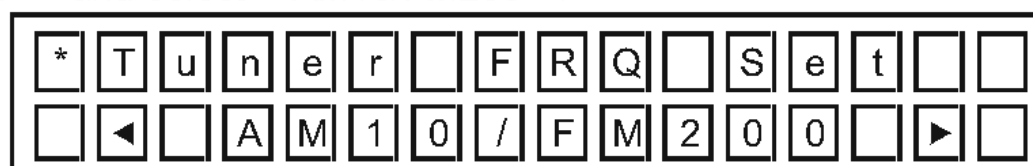
Starting up:

1. With the "STANDARD" and "DIRECT/STEREO" buttons pressed, press the "ON/OFF" button to turn the power on.

**Tuner FRQ Set" appears on the display.



2. Use  and select "<AM10/FM200>".



3. Press the "ENTER" button.
4. Press the "ON/OFF" button to turn the power off.
5. Then, press the "ON/OFF" button to turn the power on.

NOTE : Backup data(Remove settings for Installer Setup) initialization is carried out automatically.

VERSION UPGRADE PROCEDURE OF FIRMWARE

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

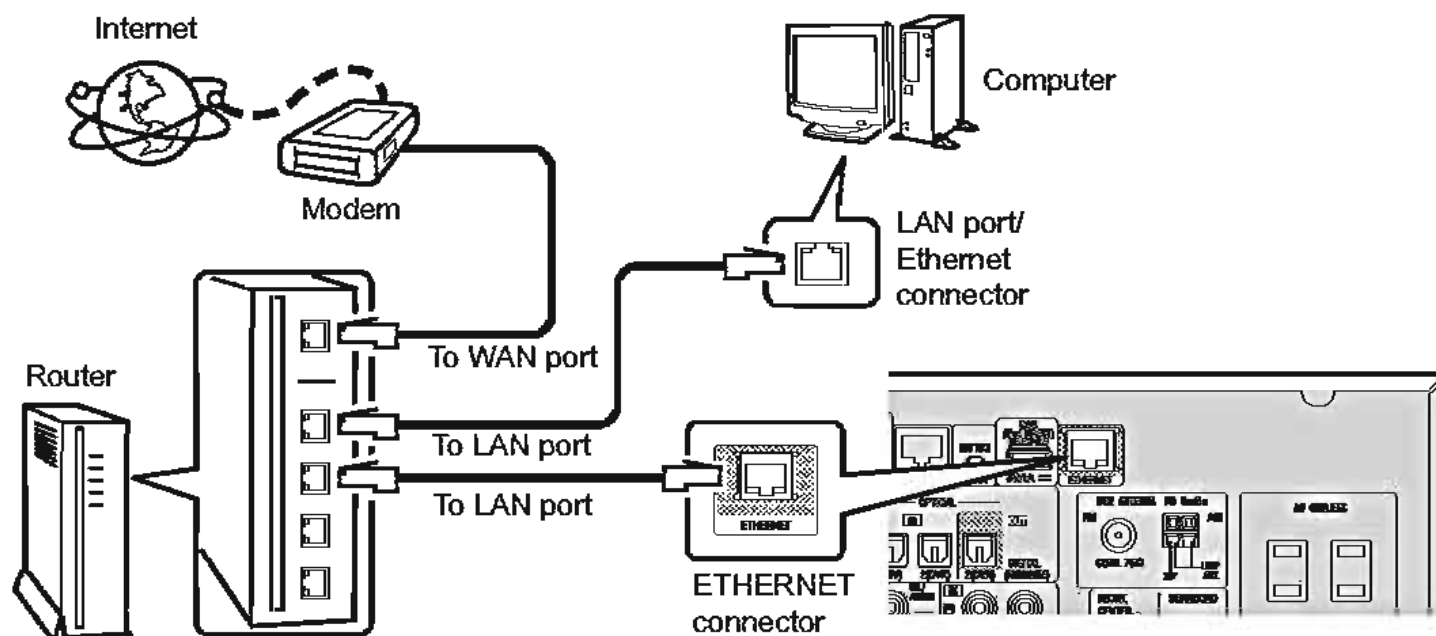
1. Update from the Internet

1.1. Connecting to the Network

(1) System Requirement

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

(2) Setting



1.2. Check for Update and Update

Check if the latest firmware exists. You can also check approximately how long it will take to complete an update.

- (1) Press the MENU button on the remote control to display the GUI menu.
- (2) Use the cursor buttons to select "Manual Setup" → "Option Setup" → "Firmware Update" → "Update Check".
- (3) Press the ENTER button.
 - The latest version of the firmware uploaded to the web is displayed.
 - If the latest firmware version is on the web, proceed to (4).
 - If the latest firmware is already installed, press the MENU button to close the menu.
- (4) Use the cursor buttons to select "Update", then press the ENTER button.
 - During update, the power indicator lights red and the GUI screen is shut down. And a rough remaining time is indicated on the display.
 - When updating is complete the power indicator lights green and normal status is resumed.
- (5) Press the MENU button to close the menu.

— Cautions on Firmware Update —

- In order to use these functions, 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 about 1 hour is required for the updating procedure to be completed.

Once updating starts, normal operations on the AVR-3310 cannot be performed until updating is completed. Also, setting items of the GUI menu of AVR-3310 or setting items of the image adjustment may be initialized.

Make a note of the settings before updating, and set them again after updating.

1.3. About the error code

See the chart below for error codes, details of faults, and coping strategies when firmware updates are performed through DPMS (Denon Product Management Server).

Error code	Details of Error code	Display	Coping strategies
01	Log-in to DPMS has failed.	Log in 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	Firmware file data was requested but error message was received.	Connection fail 04	Check the network connection. Carry out the update in an environment that has little network load.
05	Firmware file data was requested but it timed out.	Connection fail 05	Check the network connection. Carry out the update in an environment that has little network load.
06	Firmware file data was requested but error message was received.	Connection fail 06	Check the network connection. Carry out the update in an environment that has little network load.
07	All firmware file data was requested but it timed out.	Connection fail 07	Check the network connection. Carry out the update in an environment that has little network load.
08	Main CPU firmware file data 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	Main CPU firmware file data 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 received when downloading Main CPU firmware.	Download fail 0A	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
0B	Error (line congestion) message received when downloading Main CPU firmware.	Download fail 0B	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
0C	Error (connection failure) message received when downloading Main CPU firmware.	Download fail 0C	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
0D	Data acquisition failed (timed out) when downloading Main CPU firmware.	Connection fail 0D	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
30	Main CPU failed to receive firmware for rewriting sent from DM860 (when timed out).	Main Firm***min Updating fail 30	Turn the power off then back on. Updating starts automatically.

Error code	Details of Error code	Display	Coping strategies
31	Main CPU failed to receive firmware for rewriting sent from DM860 (when an error)	Main Firmware Updating fail 31	Turn the power off then back on. Updating starts automatically.
32	There was invalid data in the firmware for rewriting sent from DM860 to Main CPU (when a Check Sum error).	Main Firmware Updating fail 32	Turn the power off then back on. Updating starts automatically.
33	The deletion of block data failed before rewriting Main CPU.	Main Firmware Erase fail 33	Turn the power off then back on. Updating starts automatically.
34	The rewriting of block data failed when rewriting Main CPU.	Main Firmware Updating fail 34	Turn the power off then back on. Updating starts automatically.
35	The data verification was invalid after rewriting Main CPU.	Main Firmware Update CheckNG 35	Turn the power off then back on. Updating starts automatically.
36	Log-in to DPMS has failed when rewriting firmware such as Sub CPU, DSP, FPGA, and PLD.	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 rewriting firmware such as Sub CPU, DSP, FPGA, and PLD.	Server is busy 37	Carry out the update in an environment that has little network load.
38	Connection to DPMS failed when rewriting firmware such as Sub CPU, DSP, FPGA, and PLD.	Connection fail 38	Check the network connection. Carry out the update in an environment that has little network load.
39	Connection to DPMS timed out when rewriting firmware such as Sub CPU, DSP, FPGA, and PLD.	Connection fail 39	Check the network connection. Carry out the update in an environment that has little network load.
3A	Error (NG) message received when downloading firmware when rewriting Main CPU.	Download fail 3A	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
3B	Error (line congestion) message received when downloading firmware when rewriting Main CPU.	Download fail 3B	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
3C	Error (connection failure) message received when downloading firmware when rewriting Main CPU.	Download fail 3C	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
3D	Data acquisition failed (timed out) when downloading firmware when rewriting Main CPU.	Connection fail 3D	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
3E	Error message received regarding firmware data when rewriting Main CPU.	Connection fail 3E	Check the network connection. Carry out the update in an environment that has little network load.
3F	Firmware file data was requested but it timed out when rewriting Main CPU.	Connection fail 3F	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
50	Log-in to DPMS has failed when rewriting firmware such as Sub CPU, DSP, FPGA, and PLD.	Sub *****min Login failed 50	Carry out the update in an environment that has little network load.
51	Line, etc., is busy when logging into DPMS when rewriting firmware such as Sub CPU, DSP, FPGA, and PLD.	Sub *****min Server is busy 51	Carry out the update in an environment that has little network load.
52	Connection to DPMS failed when rewriting firmware such as Sub CPU, DSP, FPGA, and PLD.	Sub *****min Connection Fail 52	Check the network connection. Carry out the update in an environment that has little network load.
53	Connection to DPMS timed out when rewriting firmware such as Sub CPU, DSP, FPGA, and PLD.	Sub *****min Connection Fail 53	Check the network connection. Carry out the update in an environment that has little network load.
54	Error message received regarding firmware data after logging in to DPMS when rewriting firmware such as Sub CPU, DSP, FPGA, and PLD.	Sub *****min Updating fail 54	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
55	When rewriting firmware such as Sub CPU, DSP, FPGA, and PLD, request was made for firmware data after logging in to DPMS, but it timed out.	Sub *****min Updating fail 55	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
56	Failure to download firmware after logging in to DPMS when rewriting firmware such as Sub CPU, DSP, FPGA, and PLD.	Sub *****min Download fail 56	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
57	Firmware download error received (line congestion) after logging in to DPMS when rewriting firmware such as Sub CPU, DSP, FPGA, and PLD.	Sub *****min Server is busy 57	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
58	Firmware download error received (connection failure) after logging in to DPMS when rewriting firmware such as Sub CPU, DSP, FPGA, and PLD.	Sub *****min Connection Fail 58	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
59	When rewriting firmware such as Sub CPU, DSP, FPGA, and PLD, request was made for downloading firmware after logging in to DPMS, but it timed out.	Sub *****min Download fail 59	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
5A	NACK received when "C" command sent to Sub CPU, DSP, FPGA, PLD etc.	Sub *****min Connection Fail 5A	Turn the power off then back on. Updating starts automatically.
5B	NACK received when "L" command sent to Sub CPU, DSP, FPGA, PLD etc.	Sub *****min Updating fail 5B	Turn the power off then back on. Updating starts automatically.
5C	Sub CPU, DSP, FPGA, PLD etc. failed to receive firmware for rewriting sent from DM860 (when timed out).	Sub *****min Updating fail 5C	Turn the power off then back on. Updating starts automatically.
5D	Sub CPU, DSP, FPGA, PLD etc. failed to receive firmware for rewriting sent from DM860 (when an error).	Sub *****min Updating fail 5D	Turn the power off then back on. Updating starts automatically.
5E	Invalid data in firmware such as Sub CPU, DSP, FPGA, and PLD for rewriting sent from DM860 (when a Check Sum error).	Sub *****min Updating fail 5E	Turn the power off then back on. Updating starts automatically.

Error code	Details of Error code	Display	Coping strategies
5F	Invalid data in firmware such as Sub CPU, DSP, FPGA, and PLD for rewriting sent from DM860 (invalid data received).	Sub***min Updating fail 5F	Turn the power off then back on. Updating starts automatically.
60	NACK received when "P" command sent to Sub CPU, DSP, FPGA, PLD etc.	Sub***min Updating fail 60	Turn the power off then back on. Updating starts automatically.
61	NACK received when "I" command sent to Sub CPU, DSP, FPGA, PLD etc.	Sub***min UpdateCheckNG 61	Turn the power off then back on. Updating starts automatically.
80	Failure to acquire serial flash data and before deleting serial flash.	GUFlash***min Updating fail 80	Turn the power off then back on. Updating starts automatically.
81	Failure to delete data before rewriting serial flash.	GUFlash***min Updating fail 81	Turn the power off then back on. Updating starts automatically.
82	Failure to receive firmware for serial flash rewriting sent by DM860 (when timed out).	GUFlash***min Updating fail 82	Turn the power off then back on. Updating starts automatically.
83	Failure to receive firmware for serial flash rewriting sent by DM860 (when an error).	GUFlash***min Updating fail 83	Turn the power off then back on. Updating starts automatically.
84	Failure to receive firmware for serial flash rewriting sent by DM860 (when a Check Sum error).	GUFlash***min Updating fail 84	Turn the power off then back on. Updating starts automatically.
85	Failure to receive firmware for serial flash rewriting sent by DM860 (when invalid data received).	GUFlash***min Updating fail 85	Turn the power off then back on. Updating starts automatically.
86	Failure to rewrite when writing data in serial flash.	GUFlash***min Updating fail 86	Turn the power off then back on. Updating starts automatically.
A0	Failure to acquire (Application Mode) IP address before rewriting DM860 (AutoIP).	EtherIMG***min ConnectionFail A0	Check the network connection. Carry out the update in an environment that has little network load.
A1	Failure to acquire (Application Mode) IP address before rewriting DM860 (when timed out).	EtherIMG***min ConnectionFail A1	Check the network connection. Carry out the update in an environment that has little network load.
A2	Notification of invalid login via DPMS access when rewriting DM860 related firmware (Application Mode).	EtherIMG***min Login failed A2	Check the network connection. Carry out the update in an environment that has little network load.
A3	Notification of line congestion via DPMS access when rewriting DM860 related firmware (Application Mode).	EtherIMG***min Server is busy A3	Check the network connection. Carry out the update in an environment that has little network load.
A4	Notification of connection failure via DPMS access when rewriting DM860 related firmware (Application Mode).	EtherIMG***min ConnectionFail A4	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
A5	Connection through DPMS access timed out when rewriting DM860 related firmware (Application Mode).	EtherIMG***min ConnectionFailA5	Check the network connection. Carry out the update in an environment that has little network load.
A6	Firmware data error message received after DPMS login when rewriting DM860 related firmware (Application Mode).	EtherIMG***min UpdatingfailA6	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
A7	When rewriting DM860 related firmware (Application Mode), request was made for firmware data after DPMS login but it timed out.	EtherIMG***min UpdatingfailA7	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
A8	Failure to acquire (Boot Loader Mode) IP address before rewriting DM860 (AutoIP).	EtherIMG***min ConnectionFailA8	Check the network connection. Carry out the update in an environment that has little network load.
A9	Failure to acquire (Boot Loader Mode) IP address before rewriting DM860 (when timed out).	EtherIMG***min ConnectionFailA9	Check the network connection. Carry out the update in an environment that has little network load.
AA	Notification of invalid login via DPMS access when rewriting DM860 related firmware (Boot Loader Mode).	EtherIMG***min LoginfailedAA	Check the network connection. Carry out the update in an environment that has little network load.
AB	Notification of line congestion via DPMS access when rewriting DM860 related firmware (Boot Loader Mode).	EtherIMG***min ServerisbusyAB	Check the network connection. Carry out the update in an environment that has little network load.
AC	Notification of connection failure via DPMS access when rewriting DM860 related firmware (Boot Loader Mode).	EtherIMG***min ConnectionFailAC	Check the network connection. Carry out the update in an environment that has little network load.
AD	Connection through DPMS access timed out when rewriting DM860 related firmware (Boot Loader Mode).	EtherIMG***min ConnectionFailAD	Check the network connection. Carry out the update in an environment that has little network load.
AE	Firmware download error message received (when download fails) when rewriting DM860 related firmware (Boot Loader Mode).	EtherIMG***min DownloadfailAE	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
AF	Firmware download error message received (line congestion) when rewriting DM860 related firmware (Boot Loader Mode).	EtherIMG***min ServerisbusyAF	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
B0	Firmware download error message received (connection failure) when rewriting DM860 related firmware (Boot Loader Mode).	EtherIMG***min ConnectionFailB0	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
B1	When rewriting DM860 related firmware (Boot Loader Mode), request was made for firmware download but it timed out.	EtherIMG***min DownloadfailB1	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.
B2	Error message received when rewriting DM860 related firmware.	EtherIMG***min UpdatingfailB2	Turn the power off then back on. Updating starts automatically. Carry out the update in an environment that has little network load.

Device display when firmware updated

Target of device when firmware updated.

Target of device	Display	Error cpde
Main	<pre> Main Firm ***min Updating </pre>	30 ~ 35
Sub	<pre> Sub ***min Updating </pre>	50 ~ 61
Audio PLD	<pre> APLD ***min Updating </pre>	50 ~ 61
DSP	<pre> DSP ***min Updating </pre>	50 ~ 61
OSD (FPGA/Program/ Font Data)	<pre> OSD ***min Updating </pre>	80 ~ 86
DM860 Boot Loader	<pre> Ether SBL ***min Updating </pre>	A0 ~ B2
DM860 Image	<pre> Ether IMG ***min Updating </pre>	A0 ~ B2

ADJUSTMENT

Audio Section

Idling Current (8U-110062, 8U-110063-3)

Required measurement equipment: DC Voltmeter

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

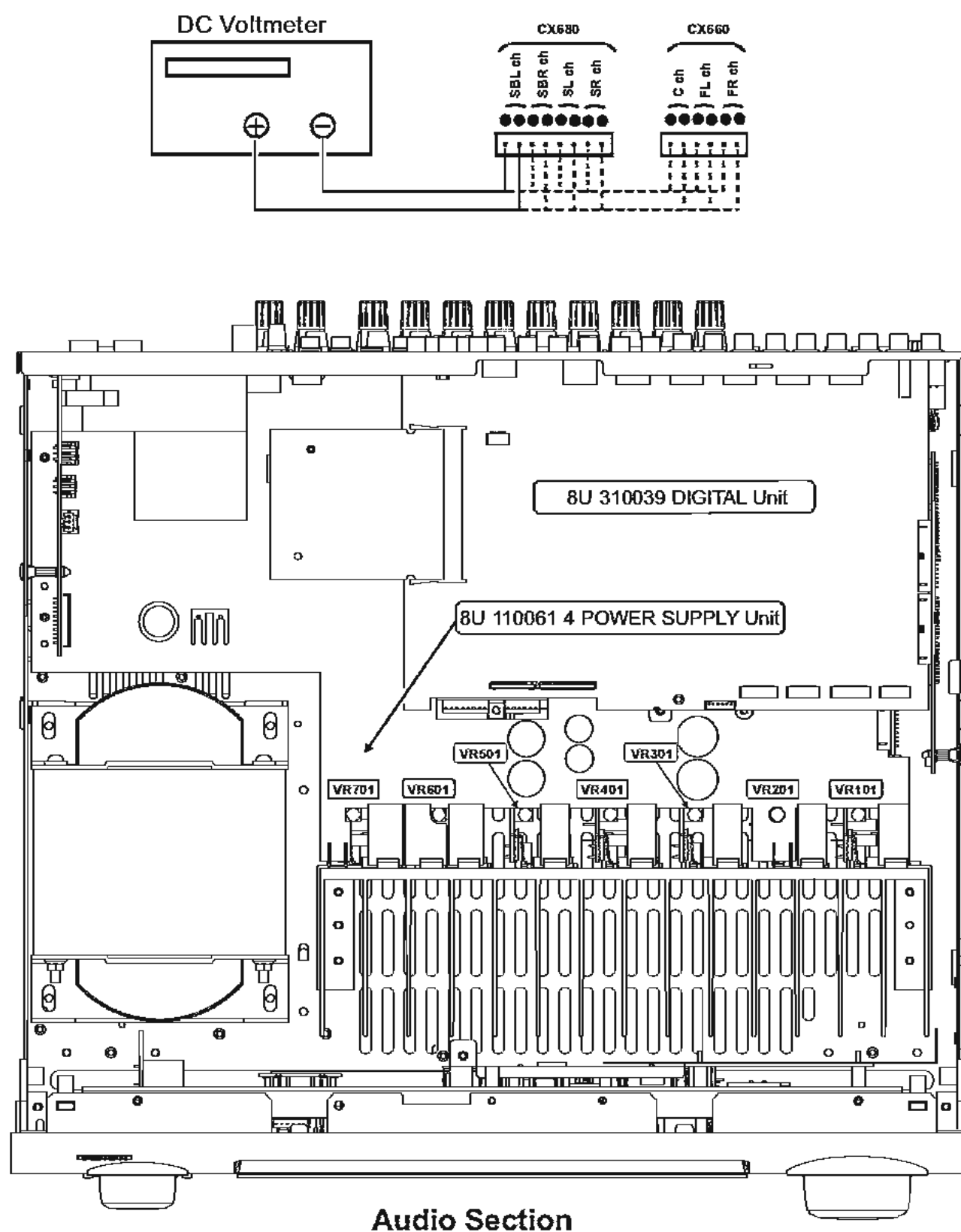
POWER (Power source switch)	OFF
SPEAKER (Speaker terminal)	No load

(Do not connect speaker, dummy resistor, etc.)

Adjustment

- (1) Remove top cover and set VR101, VR201, VR301, VR401, VR501, VR601, VR701, on 8U-110062 (POWER AMP Unit) at fully counterclockwise (○).
- (2) Connect DC Voltmeter to test points(8U-110063-3).
 - FRONT-Lch: CX660 ③ ④ pin
 - FRONT-Rch: CX660 ⑤ ⑥ pin
 - CENTER ch: CX660 ① ② pin
 - SURROUND-Lch: CX680 ⑤ ⑥ pin
 - SURROUND-Rch: CX680 ⑦ ⑧ pin
 - SURROUND BACK-Lch: CX680 ① ② pin
 - SURROUND BACK-Rch: CX680 ③ ④ pin)
- (3) Connect power cord to AC Line, and turn power switch "ON".
- (4) Presetting.

MASTER VOLUME	: "—" counterclockwise (○ min.)
MODE	: 7CH STEREO
FUNCTION	: CD
- (5) Allow 2 minutes, and turn VR101 clockwise (○) to adjust the TEST POINT voltage to 8 mV ± 0.5 mV DC.
- (6) After 10 minutes from preset, turn VR101 to set the voltage to 8 mV ± 0.5 mV DC.
- (7) Adjust the Variable Resistors of other channels in the same way.
- (8) After 5 minutes from (6), turn VR101 to set the voltage to 8 mV ± 0.5 mV DC.
- (9) Adjust the Variable Resistors of other channels in the same way.



Adjustment volume is set for 8U-110062-1 ~ 7. The test point is at 8U-110063-3.

Insert an adjustment driver / connection terminal from an adjustment aperture of 8U-110061-4(POWER SUPPLY Unit)P.W.B..

SURROUND MODES AND PARAMETERS

Surround Modes and Parameters

Surround Mode	Channel output										Parameter (default values are shown in parentheses)					
	Front L/R	Center	Surround L/R	Surround Back L/R	Subwoofer	Front Wide L/R	Front Height L/R	D. COMP #1	DRC #2	LFE #3	AFDM #1	Surround Back	Cinema EQ.	Mode	Room Size	Effect Level
PURE DIRECT, DIRECT (2ch)	○	×	×	×	⊙*4	×	×	○ (OFF)	○ (Auto)	○ (0 dB)	×	×	×	×	×	×
DSD DIRECT	○	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
DSD MULTI DIRECT	○	⊙	⊙	⊙	⊙	×	×	×	×	○ (ON)	○	×	×	×	×	×
MULTI CH DIRECT	○	⊙	⊙	⊙	⊙	×	×	○ (OFF)	○ (Auto)	○ (0 dB)	×	×	×	×	×	×
STEREO	○	×	×	×	⊙	×	×	○ (OFF)	×	×	×	×	×	×	×	×
EXT. IN	○	⊙	⊙	⊙	⊙	×	×	×	×	×	×	×	×	×	×	×
MULTI CH IN	○	⊙	⊙	⊙	⊙	⊙ (NOTE4)	⊙ (NOTE4)	×	×	○ (ON)	○	○ (OFF)	○ (OFF)	○	×	○ (ON, 10)
WIDE SCREEN	○	⊙	⊙	⊙	⊙	⊙	⊙	○ (OFF)	○ (Auto)	○ (0 dB)	×	×	×	○ (Height)	×	×
DOLBY PRO LOGIC IIz	○	⊙	⊙	⊙	⊙	×	×	○ (OFF)	○ (Auto)	○ (0 dB)	×	×	×	○ (Cinema)	×	×
DOLBY PRO LOGIC IIx	○	⊙	⊙	⊙	⊙	×	×	○ (OFF)	○ (Auto)	○ (0 dB)	×	×	×	○ (Cinema)	×	×
DOLBY PRO LOGIC II	○	⊙	⊙	⊙	⊙	⊙ (NOTE4)	⊙ (NOTE4)	○ (OFF)	○ (Auto)	×	×	×	×	○ (Cinema)	×	×
DTS NEO:6	○	⊙	⊙	⊙	⊙	⊙ (NOTE4)	⊙ (NOTE4)	○ (OFF)	○ (Auto)	×	×	×	×	○ (Cinema)	×	×
DOLBY DIGITAL	○	⊙	⊙	⊙	⊙	⊙ (NOTE4)	⊙ (NOTE4)	○ (OFF)	○ (Auto)	×	×	×	×	○ (Cinema)	×	×
DOLBY DIGITAL Plus	○	⊙	⊙	⊙	⊙	⊙ (NOTE4)	⊙ (NOTE4)	○ (OFF)	○ (Auto)	×	×	×	×	○ (Cinema)	×	×
DOLBY TrueHD	○	⊙	⊙	⊙	⊙	⊙ (NOTE4)	⊙ (NOTE4)	×	×	○ (0 dB)	○ (ON)	○	○ (OFF)	×	×	×
DTS SURROUND	○	⊙	⊙	⊙	⊙	⊙ (NOTE4)	⊙ (NOTE4)	○ (OFF)	×	○ (0 dB)	○ (ON)	○	○ (OFF)	×	×	×
DTS 96/24	○	⊙	⊙	⊙	⊙	⊙ (NOTE4)	⊙ (NOTE4)	○ (OFF)	×	○ (0 dB)	○ (ON)	○	○ (OFF)	×	×	×
DTS-HD	○	⊙	⊙	⊙	⊙	⊙ (NOTE4)	⊙ (NOTE4)	○ (OFF)	×	○ (0 dB)	○ (ON)	○	○ (OFF)	×	×	×
DTS EXPRESS	○	⊙	⊙	⊙	⊙	⊙ (NOTE4)	⊙ (NOTE4)	○ (OFF)	×	○ (0 dB)	○ (ON)	○	○ (OFF)	×	×	×
neutral	○	⊙	⊙	⊙	⊙	⊙ (NOTE4)	⊙ (NOTE4)	×	×	×	×	×	×	×	×	×
7CH STEREO	○	⊙	⊙	⊙	⊙	⊙	⊙	○ (OFF)	○ (Auto)	○ (0 dB)	×	×	×	×	○ (Medium)	○ (10)
SUPER STADIUM	○	⊙	⊙	⊙	⊙	⊙	⊙	○ (OFF)	○ (Auto)	○ (0 dB)	×	×	×	×	○ (Medium)	○ (10)
ROCK ARENA	○	⊙	⊙	⊙	⊙	⊙	⊙	○ (OFF)	○ (Auto)	○ (0 dB)	×	×	×	×	○ (Medium)	○ (10)
JAZZ CLUB	○	⊙	⊙	⊙	⊙	⊙	⊙	○ (OFF)	○ (Auto)	○ (0 dB)	×	×	×	×	○ (Medium)	○ (10)
CLASSIC CONCERT	○	⊙	⊙	⊙	⊙	⊙	⊙	○ (OFF)	○ (Auto)	○ (0 dB)	×	×	×	×	○ (Medium)	○ (10)
MONO MOVIE	○	⊙	⊙	⊙	⊙	⊙	⊙	○ (OFF)	○ (Auto)	○ (0 dB)	×	×	×	×	○ (Medium)	○ (10)
VIDEO GAME	○	⊙	⊙	⊙	⊙	⊙	⊙	○ (OFF)	○ (Auto)	○ (0 dB)	×	×	×	×	○ (Medium)	○ (10)
MATRIX	○	⊙	⊙	⊙	⊙	⊙	⊙	○ (OFF)	○ (Auto)	○ (0 dB)	×	×	×	×	○ (Medium)	○ (10)
VIRTUAL	○	×	×	×	⊙	×	×	○ (OFF)	○ (Auto)	○ (0 dB)	×	×	×	×	×	×

○ : Signal / Adjustable

× : No signal / Not adjustable

⊙ : Turned on or off by speaker configuration setting

NOTE1 : This parameter is available when the "Mode" is set to "Cinema" (page 73).

NOTE2 : This parameter is available when the "Mode" is set to "Cinema" or "ProLogic" (page 73).

NOTE3 : This parameter is available when the "Front Height" is set to "ON" or "DSX" is set to "ON" (page 74, 76).

NOTE4 : This parameter is available when the "DSX" is set to "ON" (page 76).

NOTE:

*1 : When playing Dolby Digital and DTS signals.

*2 : When playing Dolby TrueHD signal.

*3 : When playing Dolby Digital, DTS, DVD-Audio and Super Audio CD.

*4 : When the "Subwoofer Mode" is set to "LFE+Main" (page 35) only.

Surround Mode	Signals and adjustability in the different modes											DSX		
	Delay Time	Subwoofer	Front Height	PRO LOGIC II/IIx MUSIC mode only			NEO:6 MUSIC mode only		Tone Control	MultEQ XT	Dynamic EQ		Dynamic Volume	RESTORER
				Panorama	Dimension	Center Width	Center Image	EXT. IN only						
PURE DIRECT, DIRECT (2ch)	X	○	X	X	X	X	X	X	X	X	X	X	X	
DSD DIRECT	X	X	X	X	X	X	X	X	X	X	X	X	X	
DSD MULTI DIRECT	X	X	X	X	X	X	X	X	X	X	X	X	X	
MULTI CH DIRECT	X	X	X	X	X	X	X	X	X	X	X	X	X	
STEREO	X	X	X	X	X	X	X	○ (OFF)	○ (OFF)	○	○	○	○	
EXT. IN	X	X	X	X	X	X	X	○	X	○	X	X	○	
MULTI CH IN	X	X	○	X	X	X	X	X	○ (OFF)	○	○	○	○	
WIDE SCREEN	X	X	X	X	X	X	X	X	○ (OFF)	○	○	○	○	
DOLBY PRO LOGIC IIz	X	X	○	X	X	X	X	X	○ (OFF)	○	○	○	○	
DOLBY PRO LOGIC IIx	X	X	○	X	X	X	X	X	○ (OFF)	○	○	○	○	
DOLBY PRO LOGIC II	X	X	○	X	X	X	X	X	○ (OFF)	○	○	○	○	
DTS NEO:6	X	X	X	X	X	X	X	X	○ (OFF)	○	○	○	○	
DOLBY DIGITAL	X	X	○	X	X	X	X	X	○ (OFF)	○	○	○	○	
DOLBY DIGITAL Plus	X	X	○	X	X	X	X	X	○ (OFF)	○	○	○	○	
DOLBY TrueHD	X	X	○	X	X	X	X	X	○ (OFF)	○	○	○	○	
DTS SURROUND	X	X	○	X	X	X	X	X	○ (OFF)	○	○	○	○	
DTS 96/24	X	X	○	X	X	X	X	X	○ (OFF)	○	○	○	○	
DTS-HD	X	X	○	X	X	X	X	X	○ (OFF)	○	○	○	○	
DTS EXPRESS	X	X	○	X	X	X	X	X	○ (OFF)	○	○	○	○	
neutral	X	X	X	X	X	X	X	X	○ (OFF)	○	○	○	○	
7CH STEREO	X	X	X	X	X	X	X	X	○ (OFF)	○	○	○	○	
SUPER STADIUM	X	X	X	X	X	X	X	X	○ (OFF)	○	○	○	○	
ROCK ARENA	X	X	X	X	X	X	X	X	○ (NOTE6)	○	○	○	○	
JAZZ CLUB	X	X	X	X	X	X	X	X	○ (NOTE6)	○	○	○	○	
CLASSIC CONCERT	X	X	X	X	X	X	X	X	○ (OFF)	○	○	○	○	
MONO MOVIE	X	X	X	X	X	X	X	X	○ (OFF)	○	○	○	○	
VIDEO GAME	X	X	X	X	X	X	X	X	○ (OFF)	○	○	○	○	
MATRIX	○ (30 ms)	X	X	X	X	X	X	X	○ (OFF)	○	○	○	○	
VIRTUAL	X	X	X	X	X	X	X	X	○ (OFF)	○	○	○	○	

○ : Signal / Adjustable
 X : No signal / Not adjustable
 NOTE5 : BASS +6 dB, TREBLE 0 dB
 NOTE6 : BASS +6 dB, TREBLE +4 dB

Button	Surround Mode	Note	Input signals																				
			ANALOG	LINEAR PCM / WAV	WMA (Windows Media Audio) / MP3 / MPEG-4 AAC / FLAC	DTS-HD		DTS			DOLBY		DOLBY DIGITAL			MULTI CH PCM		Super Audio CD					
						DTS-HD Master Audio	DTS-HD High Resolution Audio	DTS EXPRESS	DTS ES DSORT (With Flag)	DTS ES MTRX (With Flag)	DTS (5.1ch)	DTS 96/24	DOLBY TrueHD	DOLBY DIGITAL Plus	DOLBY DIGITAL EX (With no Flag)	DOLBY DIGITAL EX (5.1/5/4ch)	DOLBY DIGITAL (4/3ch)	DOLBY DIGITAL (2ch)	PCM (multi ch)	PCM (2ch)	DSD (multi ch)	DSD (2ch)	
STANDARD			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DTS SURROUND		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DTS-HD MSTR		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DTS-HD HI RES		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DTS ES DSCRT6.1	*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DTS ES MTRX6.1	*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DTS SURROUND		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DTS 96/24		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DTS (-HD) + PLIIx CINEMA	*2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DTS (-HD) + PLIIx MUSIC	*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DTS (-HD) + PLIIz HEIGHT	*3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DTS EXPRESS		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DTS (-HD) + NEO:6	*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DTS NEO:6 CINEMA		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DTS NEO:6 MUSIC		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DOLBY SURROUND			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY TrueHD		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY DIGITAL+		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY DIGITAL EX	*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY (D+) (HD) +EX	*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY DIGITAL		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY (D) (D+) (HD) +PLIIx CINEMA	*2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY (D) (D+) (HD) +PLIIx MUSIC	*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY (D) (D+) (HD) +PLIIz HEIGHT	*3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY PRO LOGIC IIz HEIGHT	*3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY PRO LOGIC IIx CINEMA	*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY PRO LOGIC IIx MUSIC	*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY PRO LOGIC IIx GAME	*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY PRO LOGIC II CINEMA		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY PRO LOGIC II MUSIC		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY PRO LOGIC II GAME		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DOLBY PRO LOGIC		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	neutral		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

NOTE:
 ● : Mode selectable in initial status
 ⊙ : Mode fixed when "AFDM" is "ON"
 ○ : Selectable mode
 X : Non-selectable mode

*1: This mode is not available when the surround back speaker setup is set to "None".
 *2: This mode is not available when the surround back speaker setup is set to "1spkr" or "None".
 *3: This mode is not available when the front height speaker setup is set to "None".

Button	Surround Mode	Note	Input signals																					
			ANALOG	LINEAR PCM / WAV	WMA (Windows Media Audio) / MP3 / MPEG-4 AAC / FLAC	DTS-HD		DTS				DOLBY		DOLBY DIGITAL				MULTI CH PCM		Super Audio CD				
						DTS-HD Master Audio	DTS-HD High Resolution Audio	DTS EXPRESS	DTS ES DSRT (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 (5.1/5.4ch)	DOLBY DIGITAL (4/3ch)	DOLBY DIGITAL (2ch)	PCM (multi ch)	PCM (2ch)	DSD (multi ch)	DSD (2ch)	
STANDARD			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MULTI CH IN			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MULTI IN + PLIIx CINEMA		*2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MULTI IN + PLIIx MUSIC		*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MULTI IN + PLIIz HEIGHT		*3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MULTI IN + DOLBY EX		*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MULTI CH IN 7.1		*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DIRECT			O	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DIRECT			O	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DSD DIRECT			O	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DSD MULTI DIRECT			O	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MULTI CH DIRECT			O	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
M DIRECT + PLIIx CINEMA		*2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
M DIRECT + PLIIx MUSIC		*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
M DIRECT + PLIIz HEIGHT		*3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
M DIRECT + DOLBY EX		*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
M DIRECT 7.1		*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PURE DIRECT			O	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PURE DIRECT			O	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DSD MULTI PURE DIRECT			O	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MULTI CH PURE DIRECT			O	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
M PURE D + PLIIx CINEMA		*2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
M PURE D + PLIIx MUSIC		*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
M PURE D + PLIIz HEIGHT		*3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
M PURE D + DOLBY EX		*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
M CH PURE DIRECT 7.1		*1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

NOTE :
 ● : Mode selectable in initial status
 ○ : Selectable mode
 X : Non-selectable mode

*1: This mode is not available when the surround back speaker setup is set to "None".
 *2: This mode is not available when the surround back speaker setup is set to "1spkr" or "None".
 *3: This mode is not available when the front height speaker setup is set to "None".

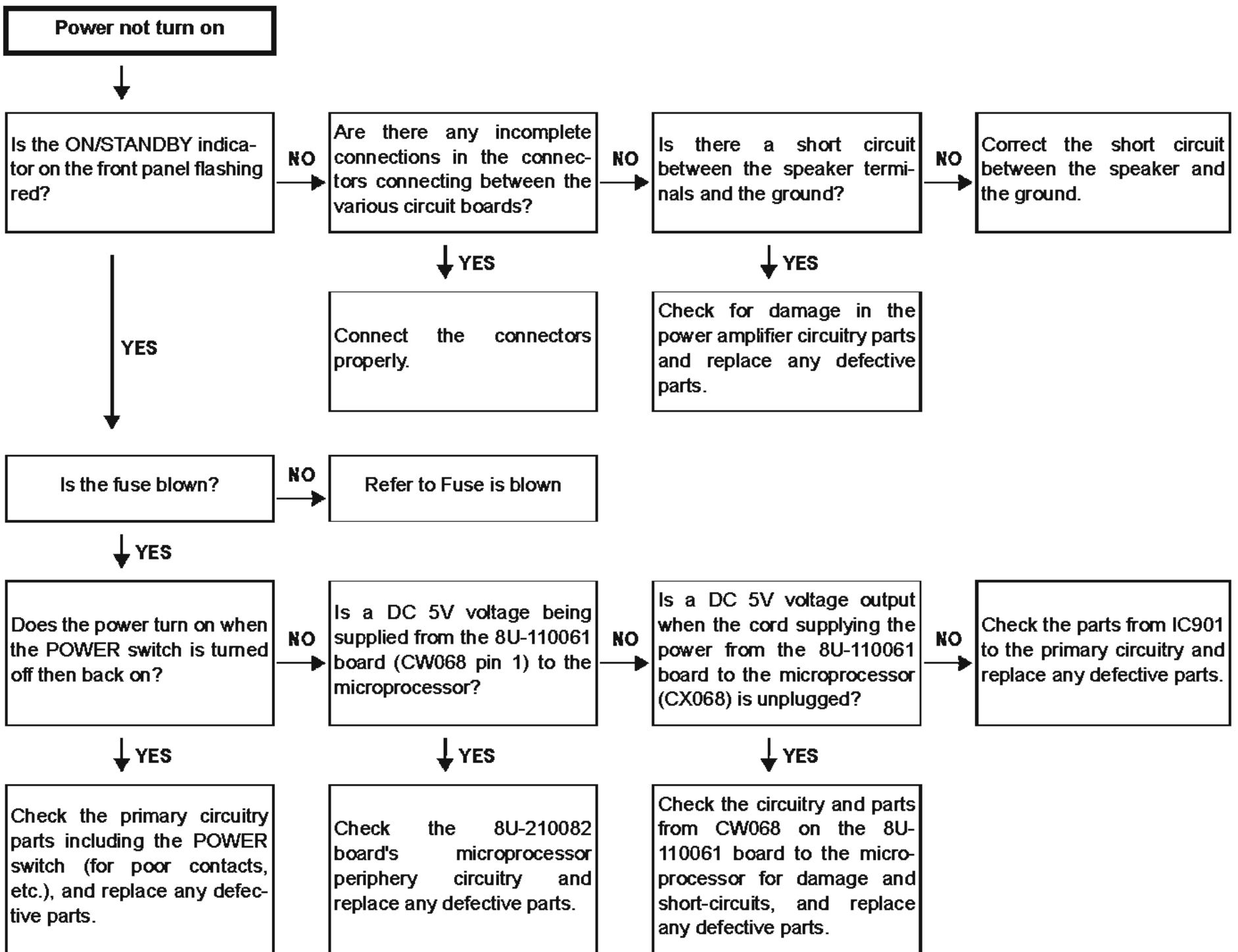
Button	Surround Mode	Note	Input signals																						
			ANALOG		LINEAR PCM / WAV		WMA (Windows Media Audio) / MP3 / MPEG-4 AAC / FLAC		DTS-HD		DTS				DOLBY		DOLBY DIGITAL				MULTI CH PCM		Super Audio CD		
							DTS-HD Master Audio	DTS-HD High Resolution Audio	DTS EXPRESS	DTS DSCRT (With Flag)	DTS ES MTRX (With Flag)	DTS (5.1ch)	DTS 96/24	DOLBY TrueHD	DOLBY DIGITAL Plus	DOLBY DIGITAL EX (With no Flag)	DOLBY DIGITAL EX (With Flag)	DOLBY DIGITAL (5.1/5.4ch)	DOLBY DIGITAL (4/3ch)	DOLBY DIGITAL (2ch)	PCM (multi ch)	PCM (2ch)	DSD (multi ch)	DSD (2ch)	
	DSP SIMULATION	*4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	7CH STEREO		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	WIDE SCREEN		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	SUPER STADIUM		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	ROCK ARENA		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	JAZZ CLUB		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	CLASSIC CONCERT		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	MONO MOVIE		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	VIDEO GAME		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	MATRIX		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	VIRTUAL		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	STEREO		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	STEREO		<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

NOTE :
*4 : If the surround back, front wide and front height speaker setup is set to "None", then "5CH STEREO" is displayed.

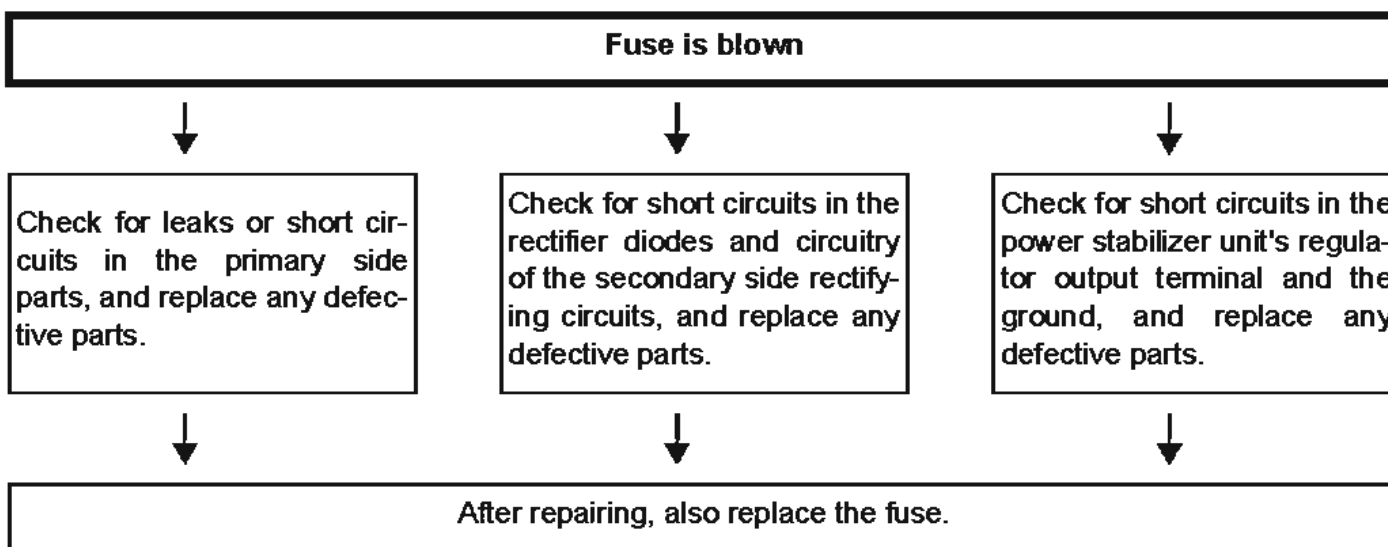
TROUBLE SHOOTING

1. POWER

1.1. Power not turn on

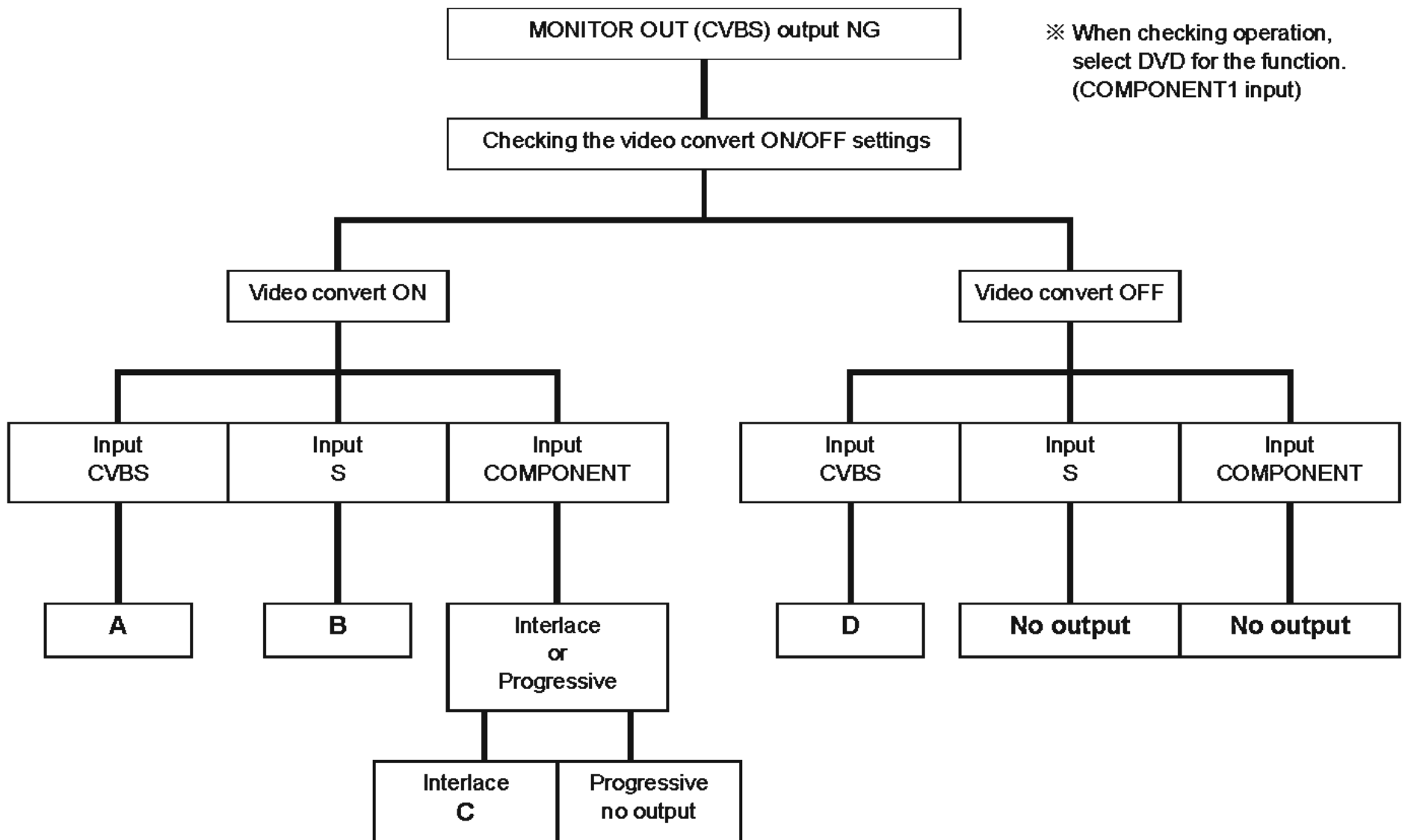


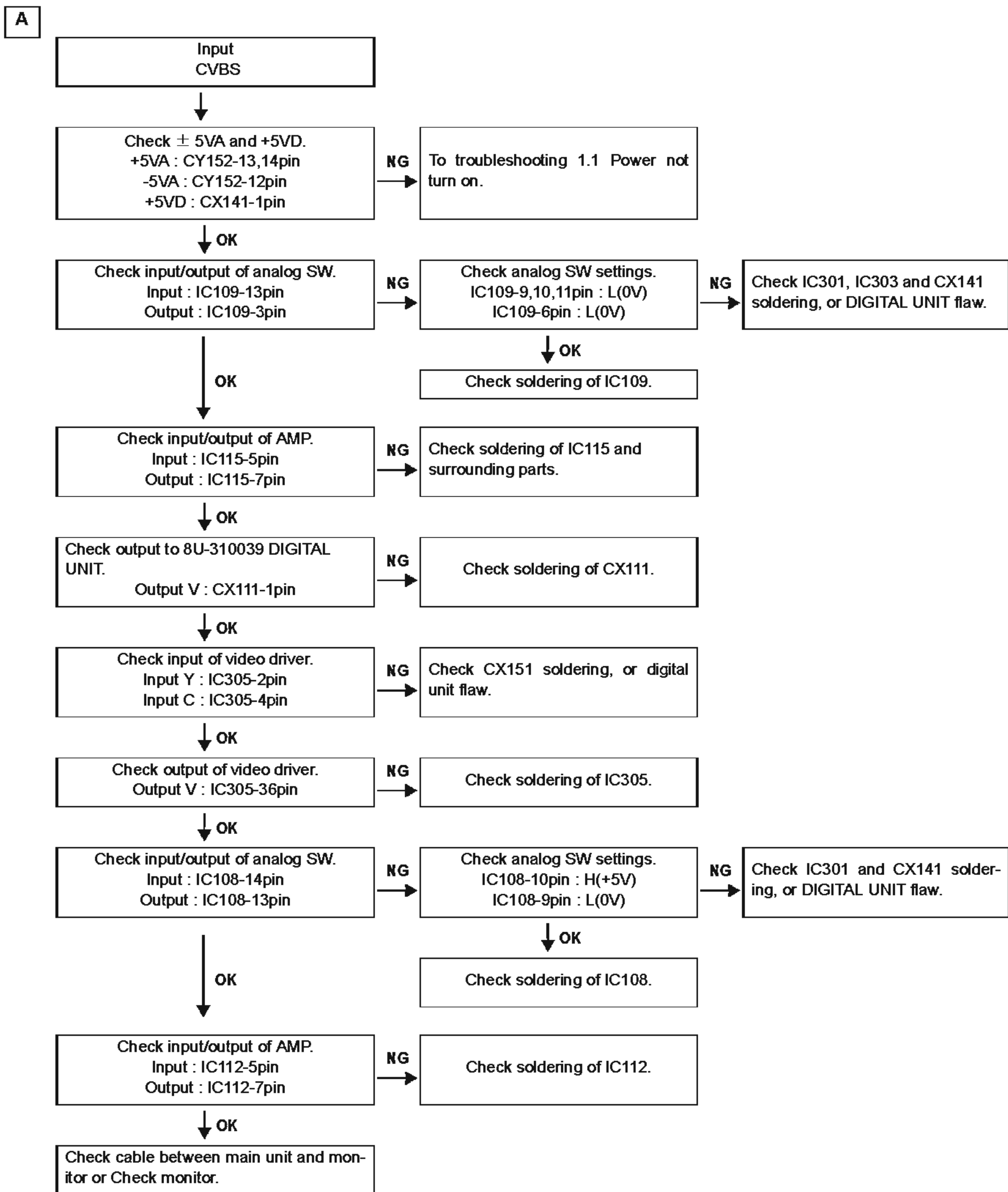
1.2. Fuse is blown



2. Analog video

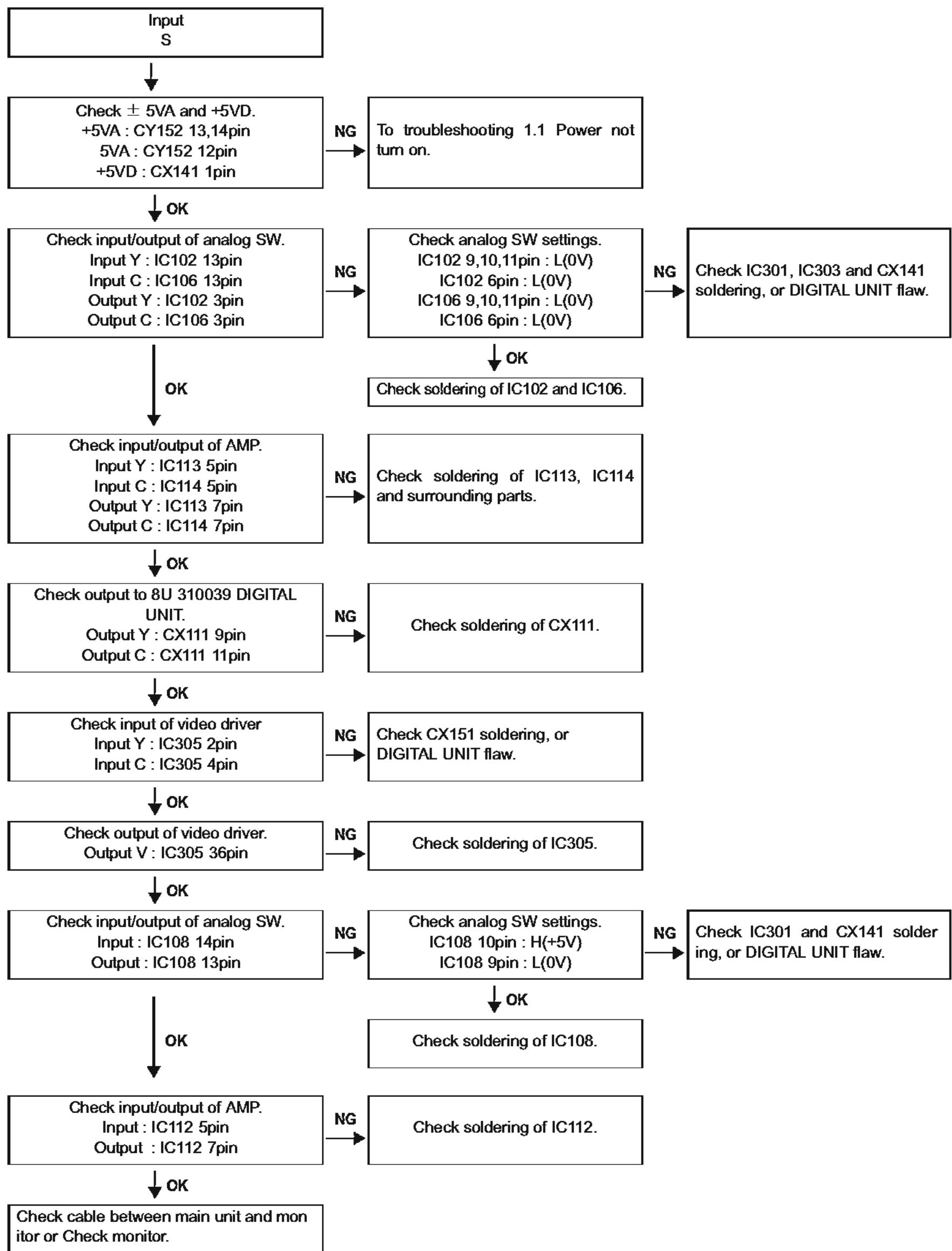
2.1. MONITOR OUT (CVBS) output NG





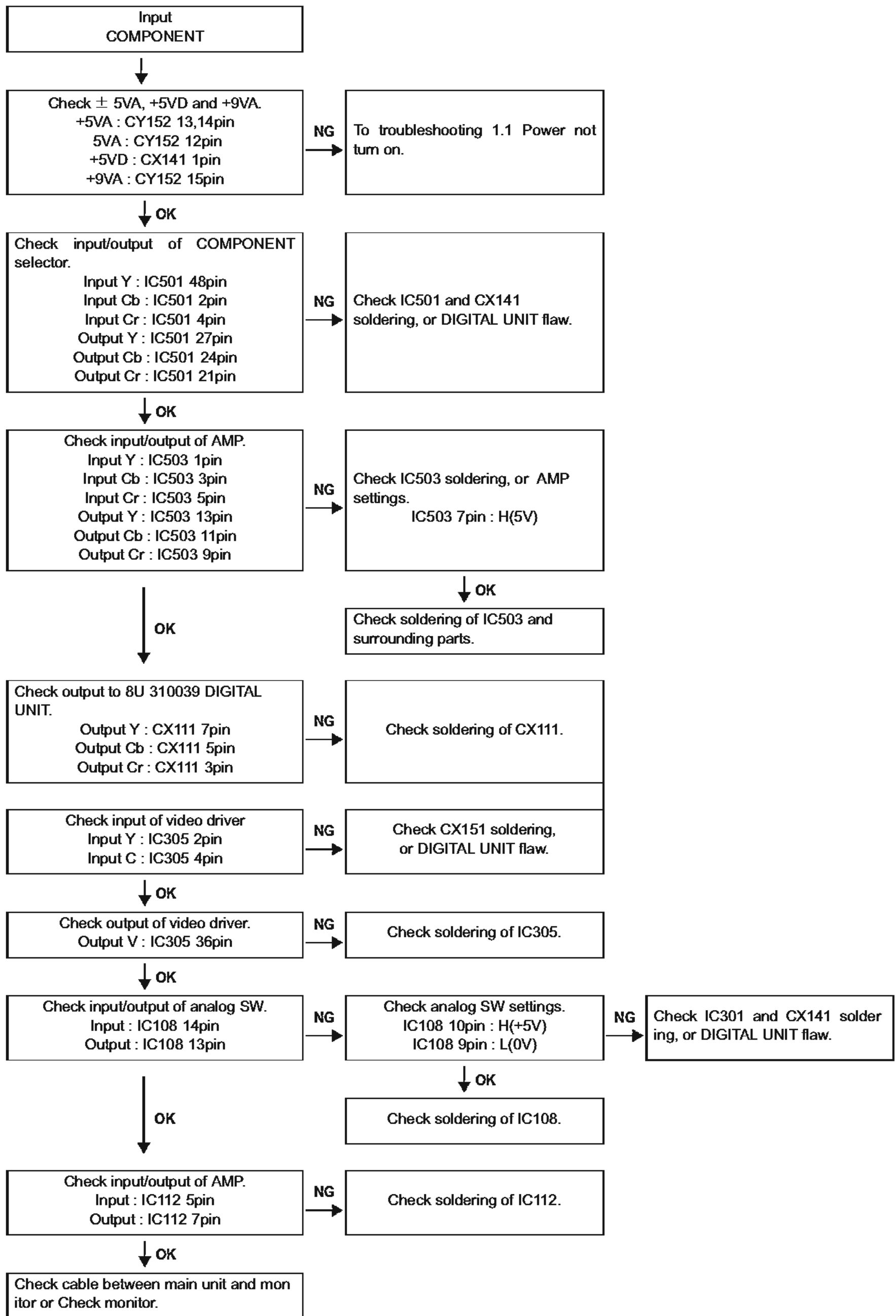
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

B



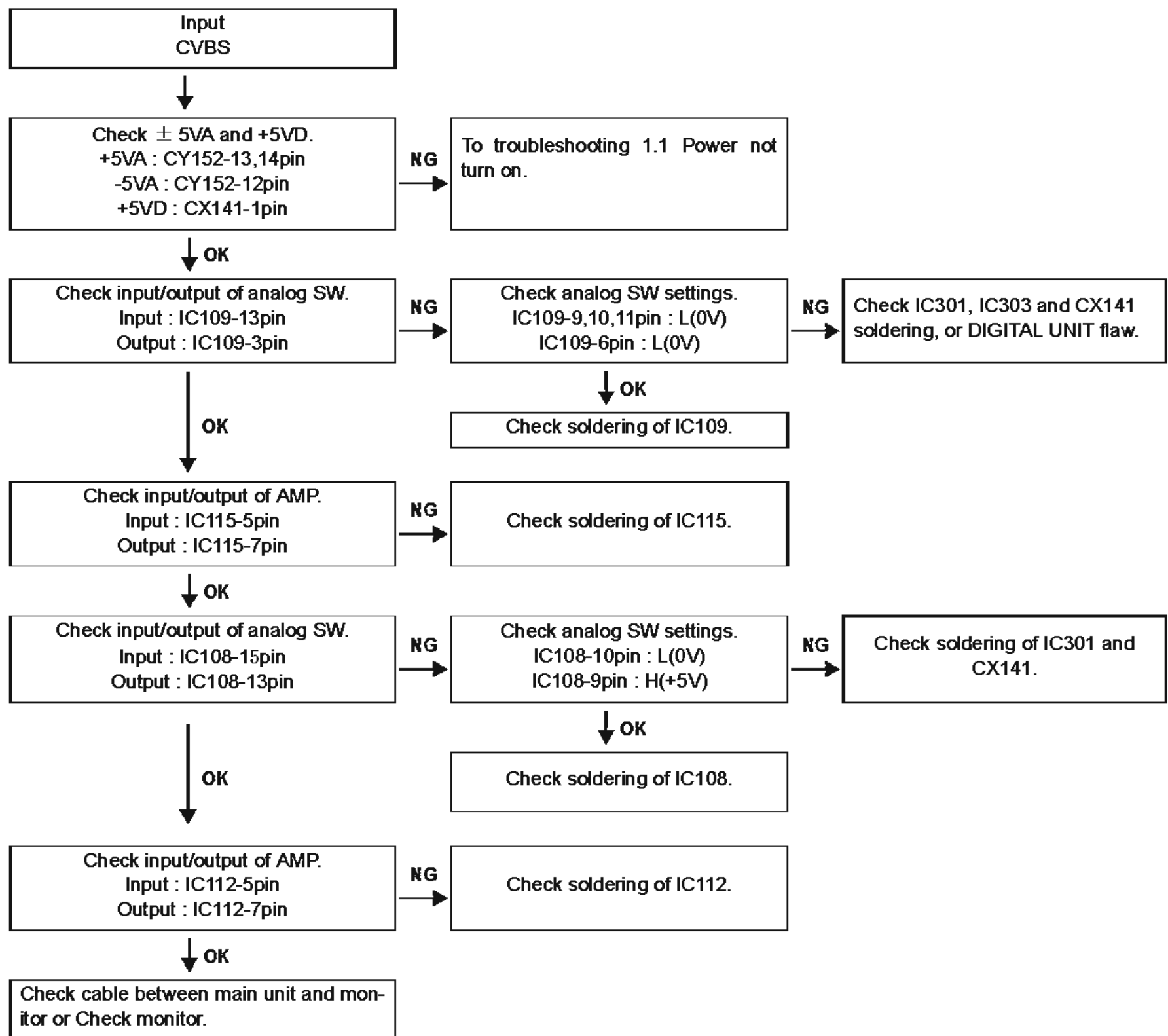
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

C



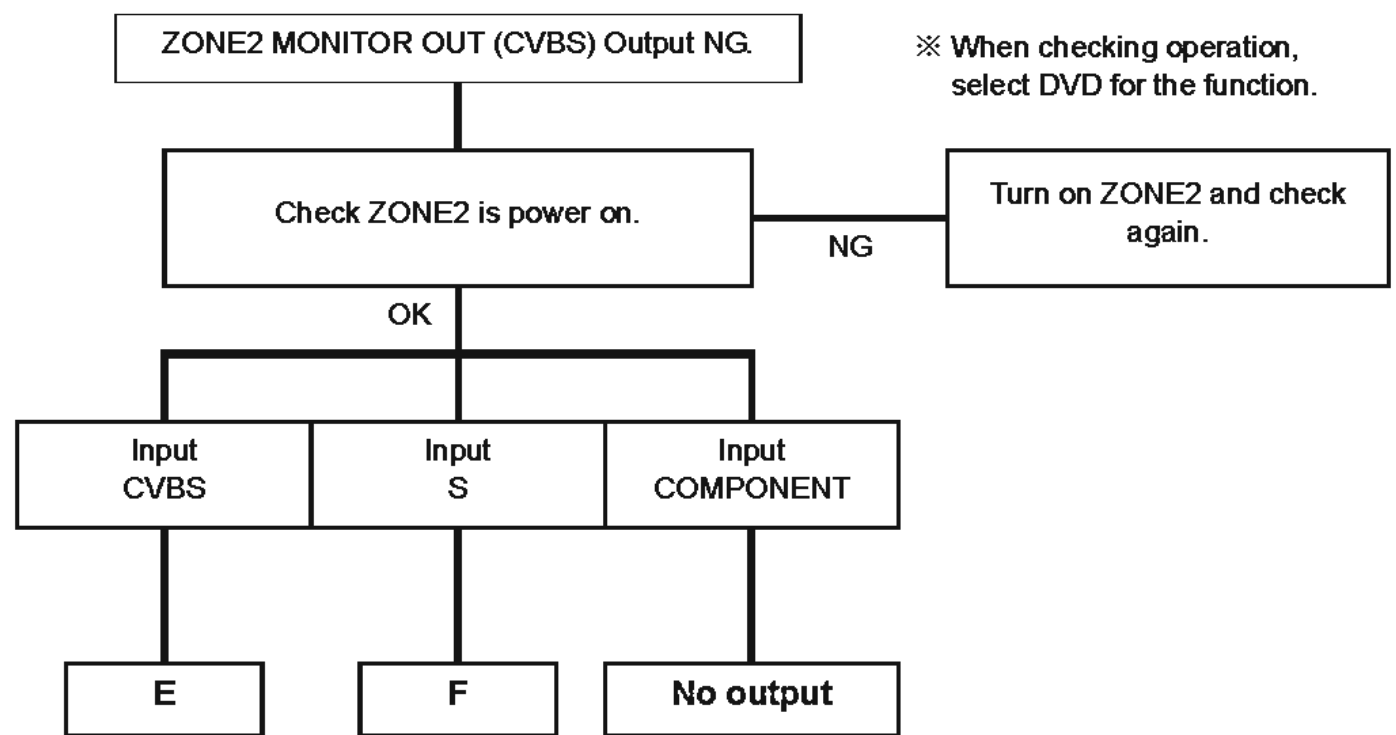
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

D

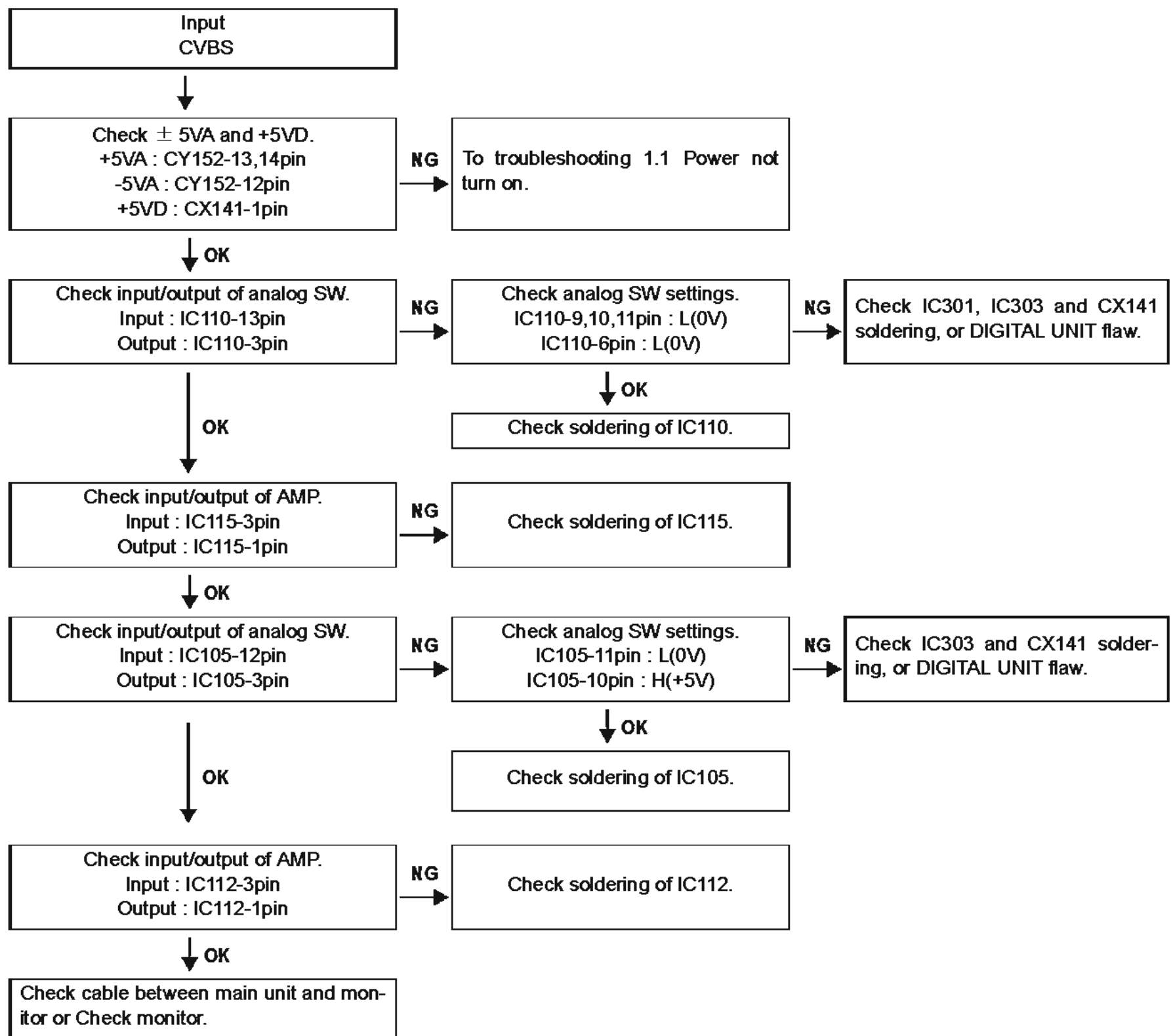


※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

2.2. ZONE2 MONITOR OUT (CVBS) Output NG

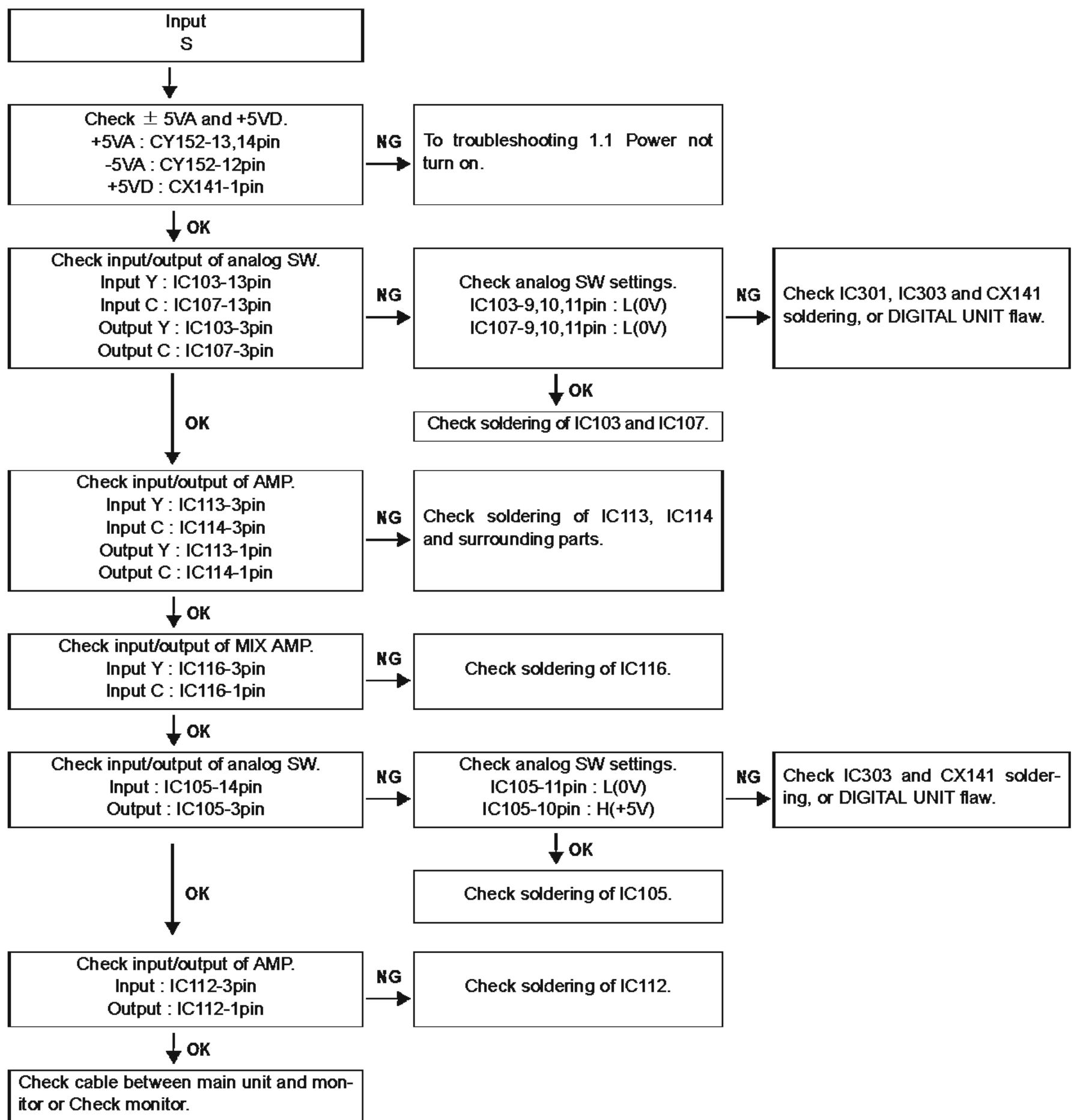


E



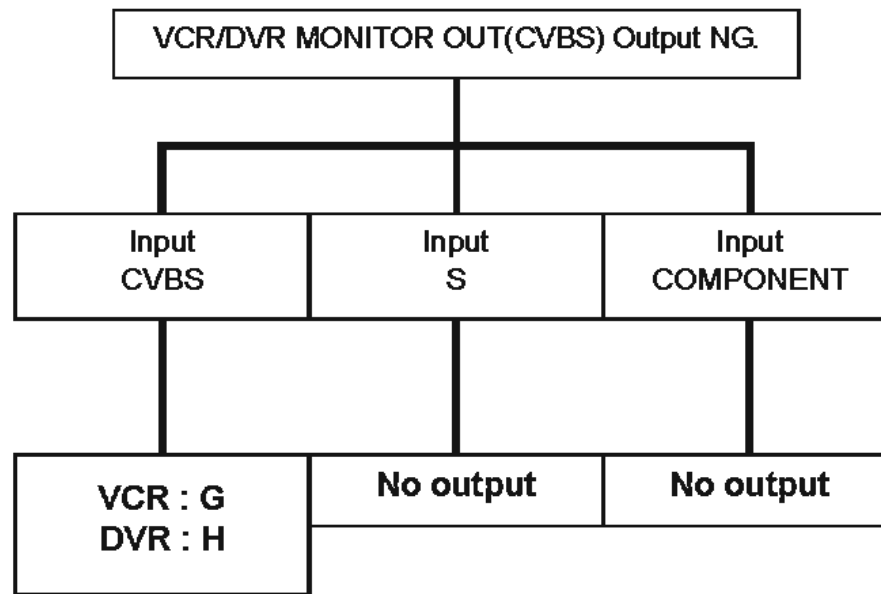
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

F



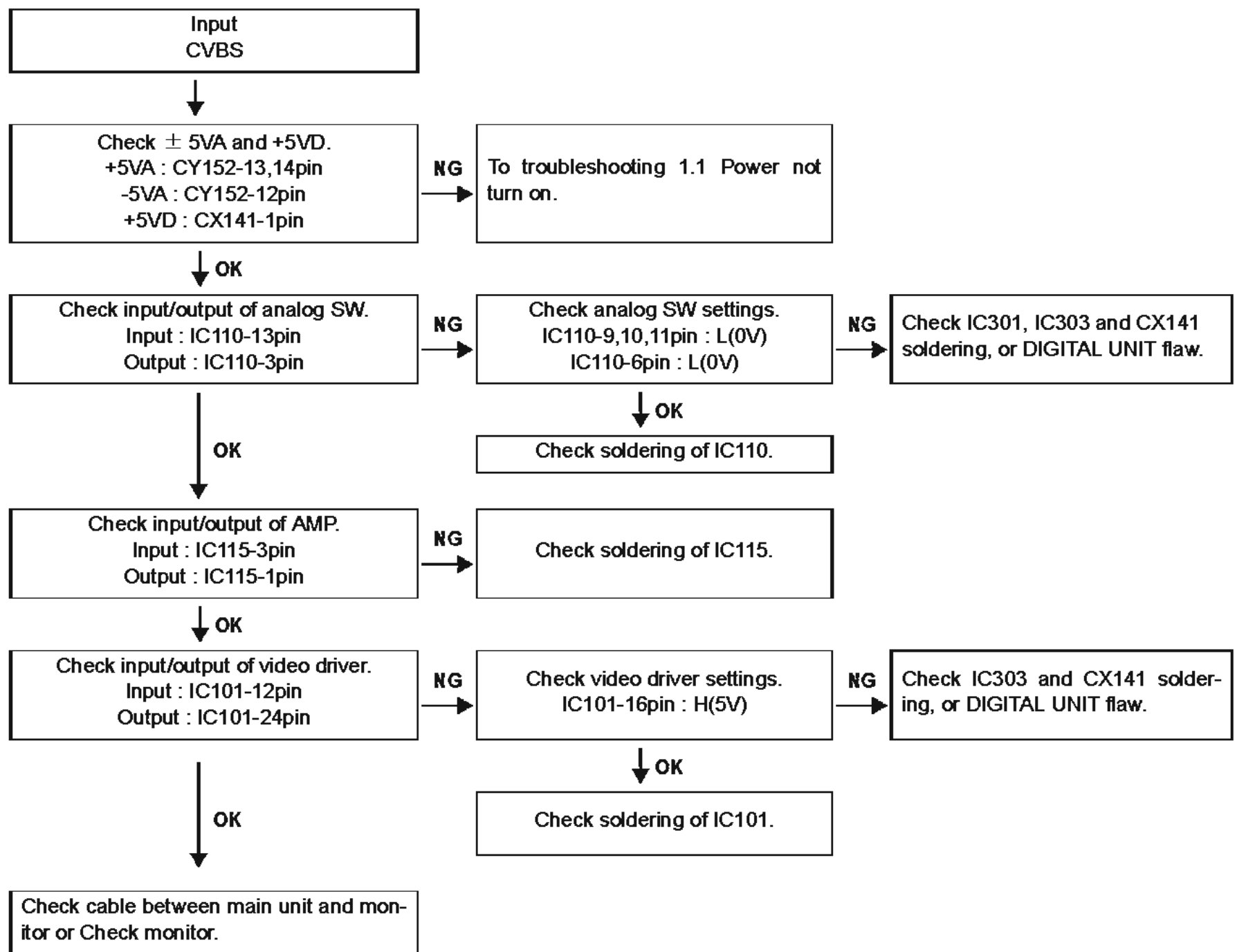
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

2.3. VCR/DVR MONITOR OUT(CVBS) Output NG



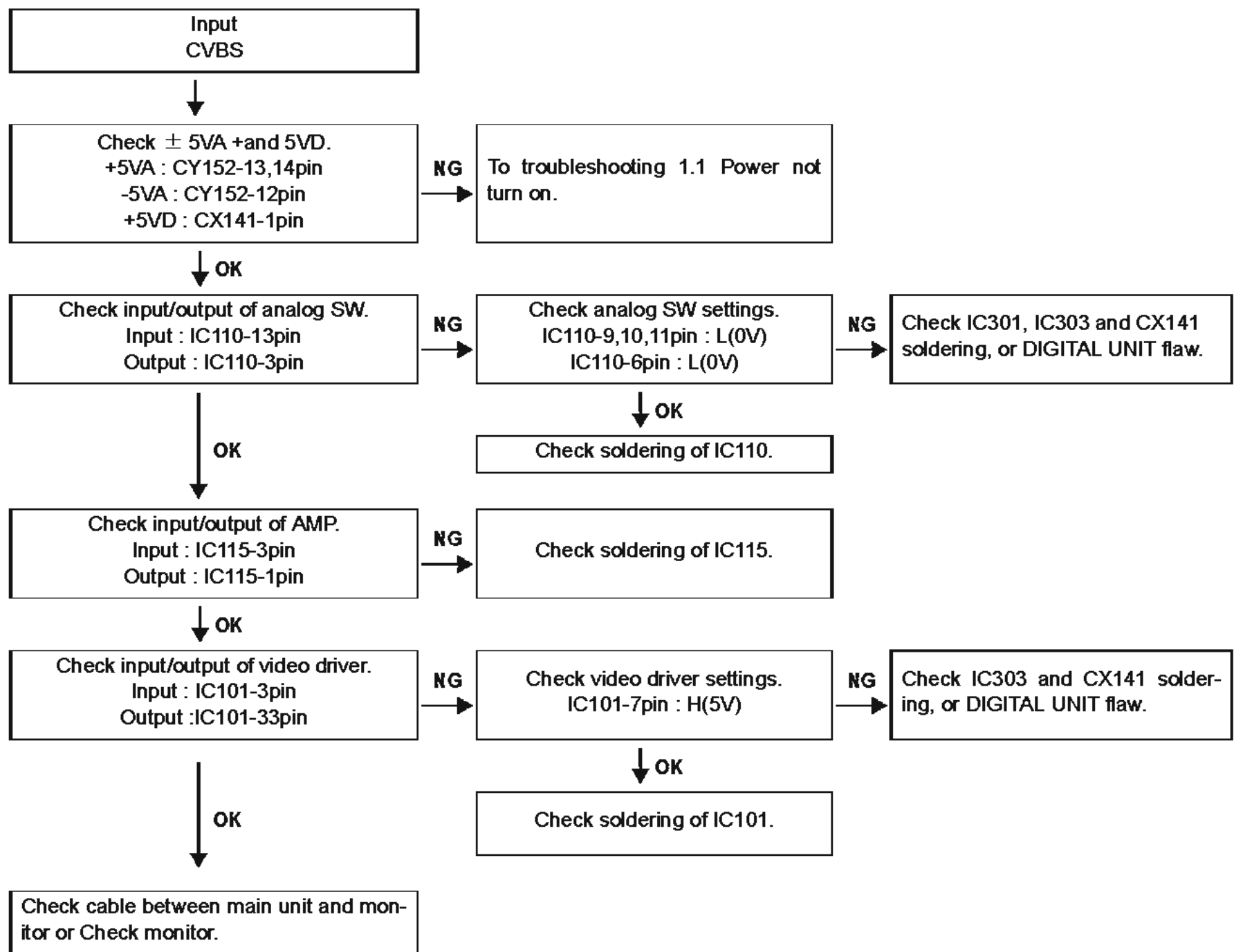
※ When checking operation,
select DVD for the function.

G



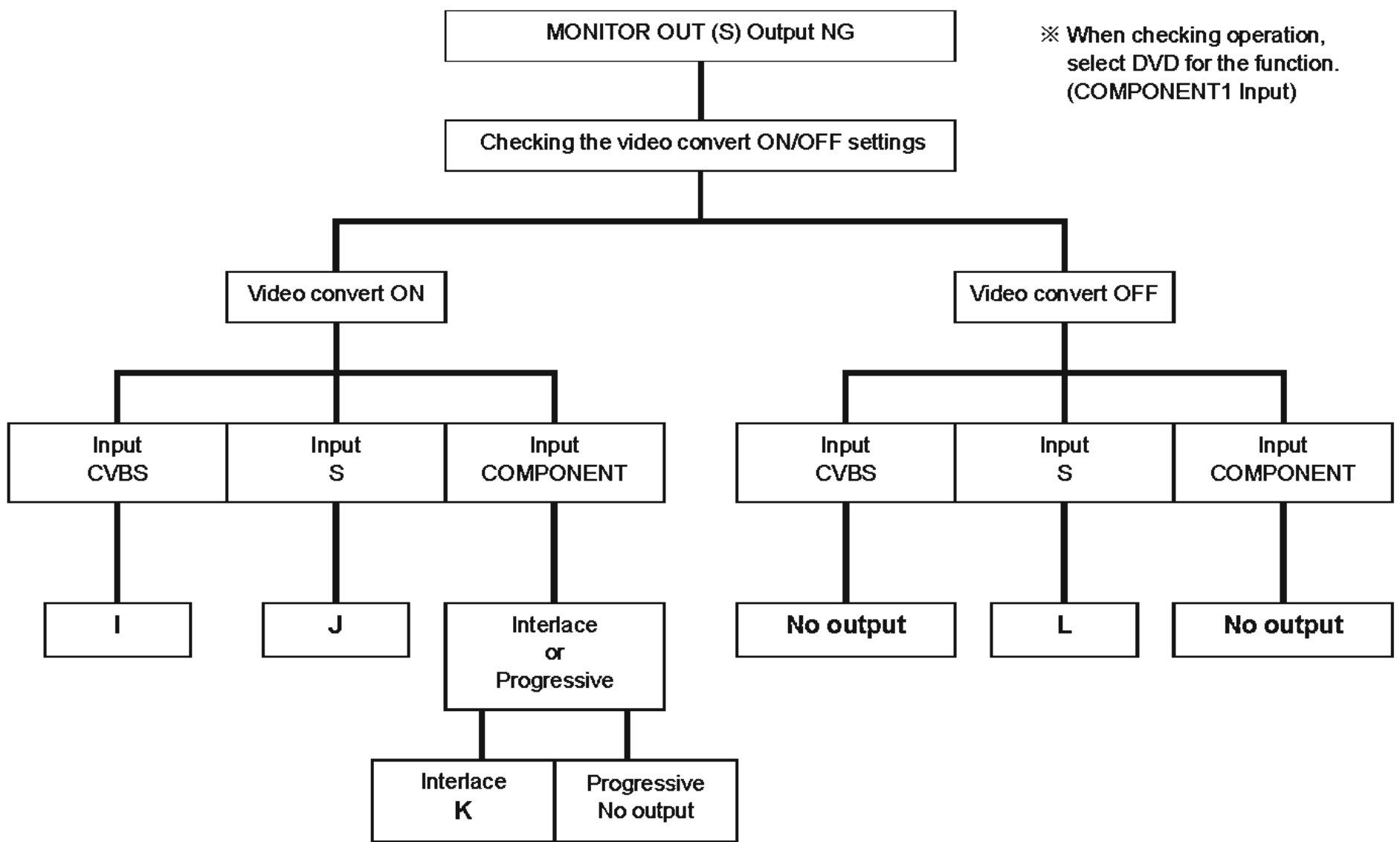
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

H

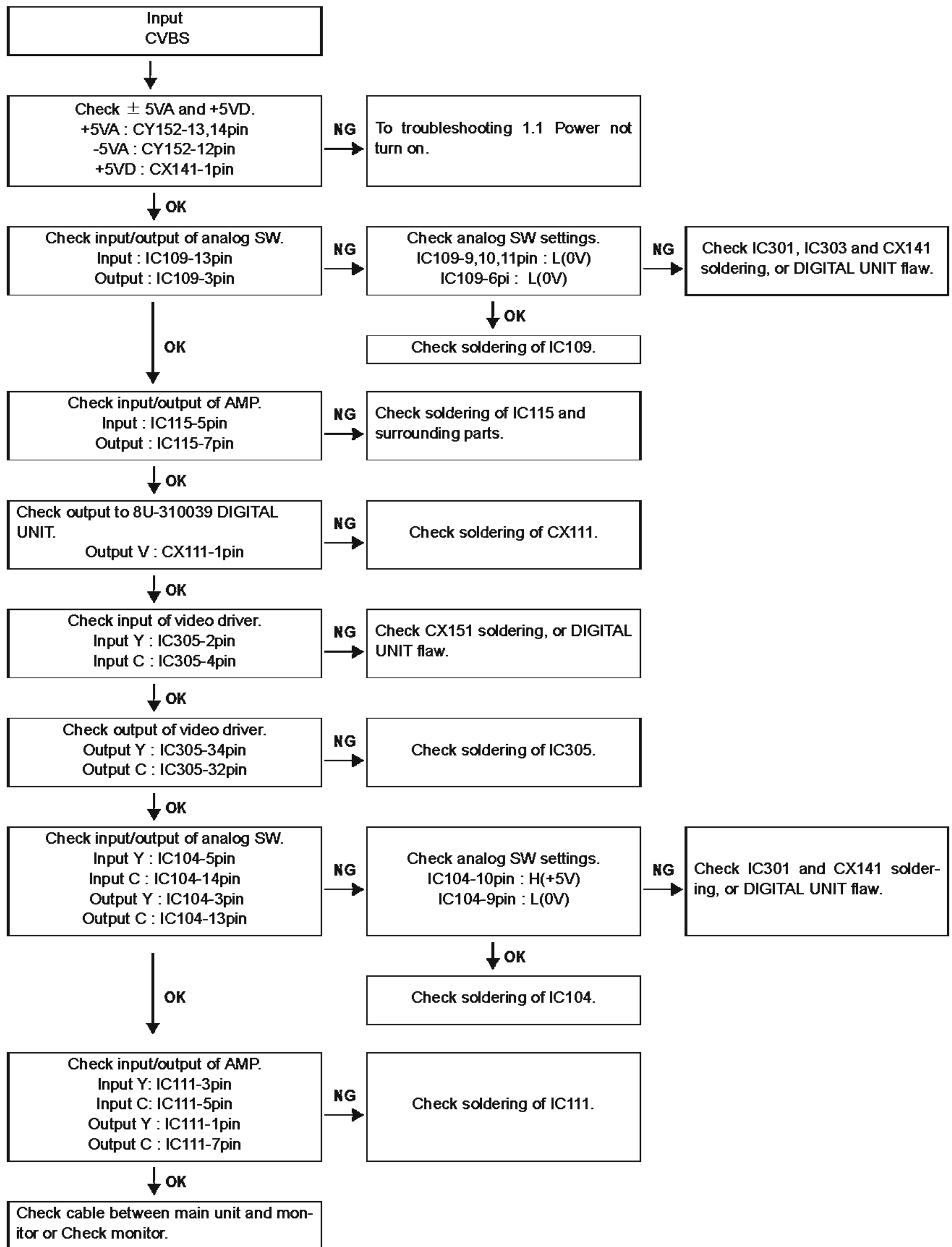


※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

2.4. MONITOR OUT (S) Output NG

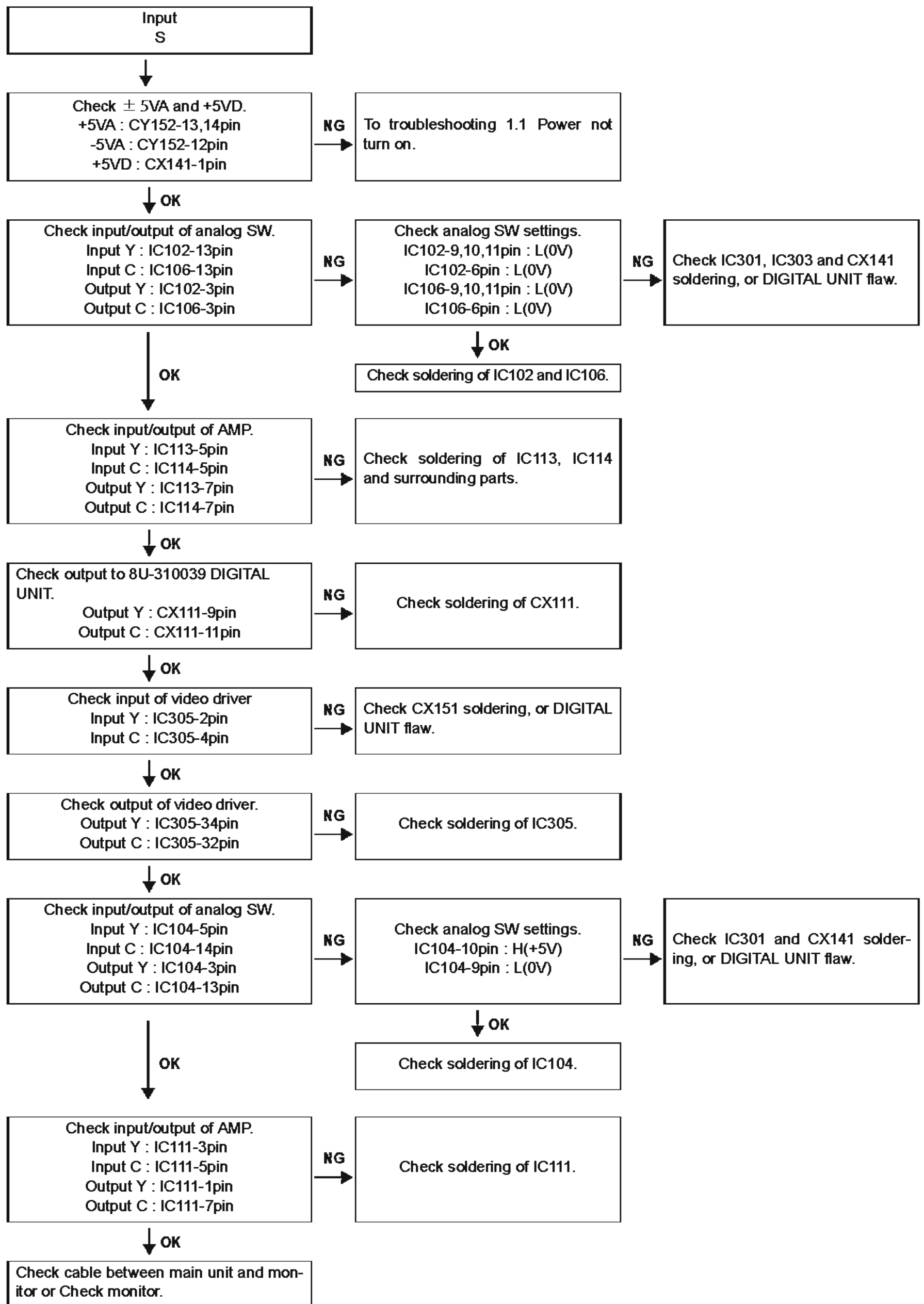


I



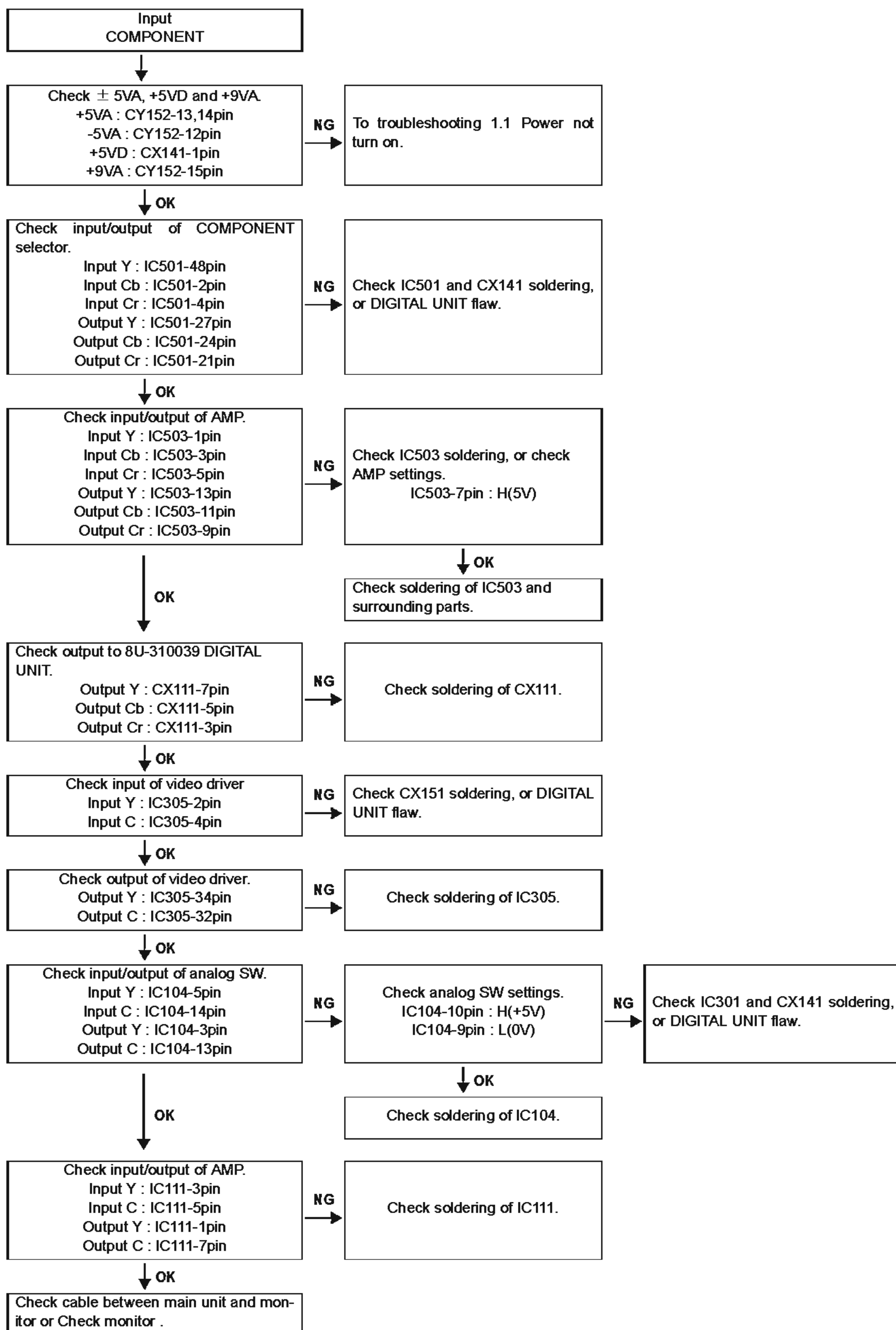
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

J



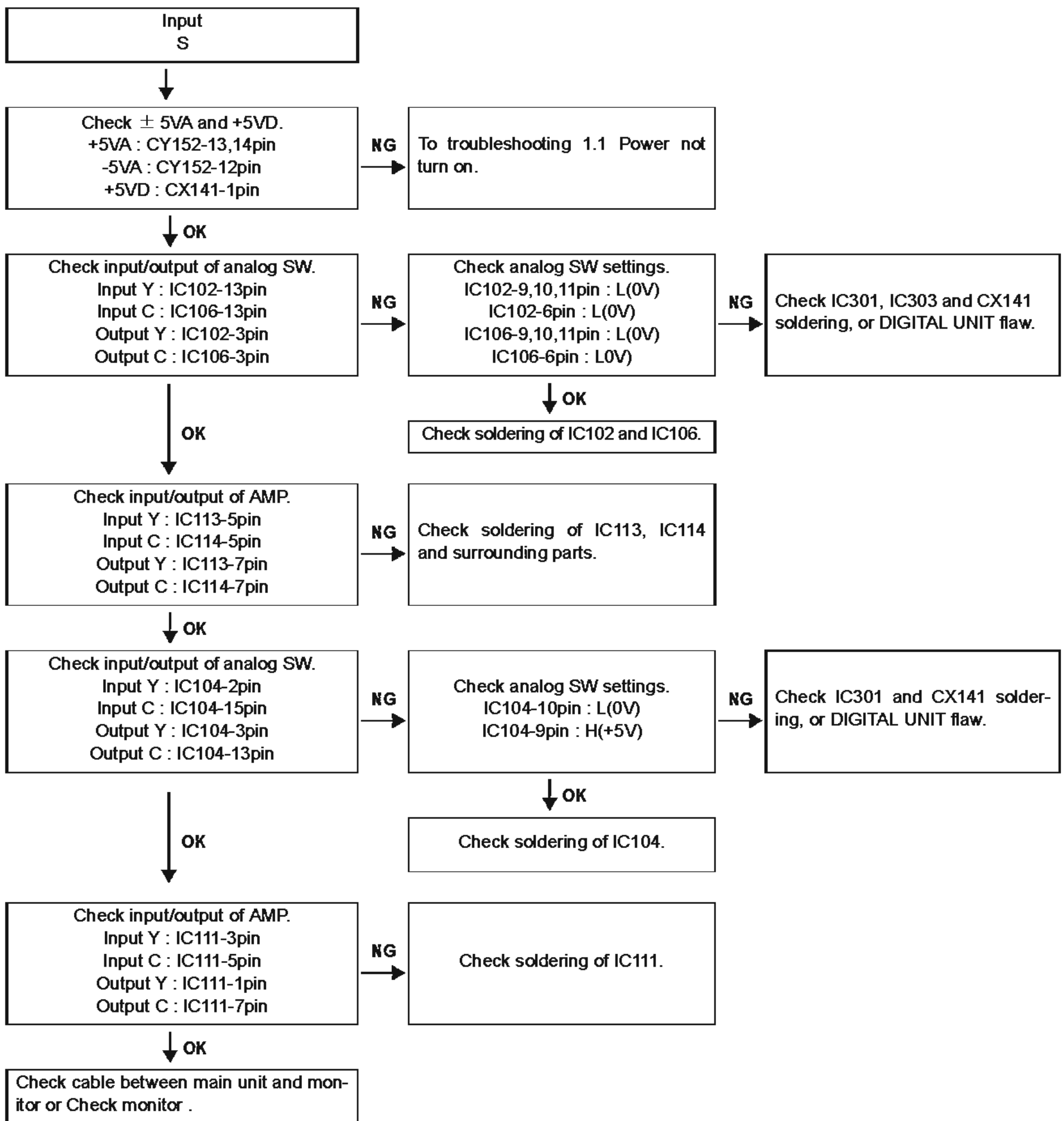
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

K



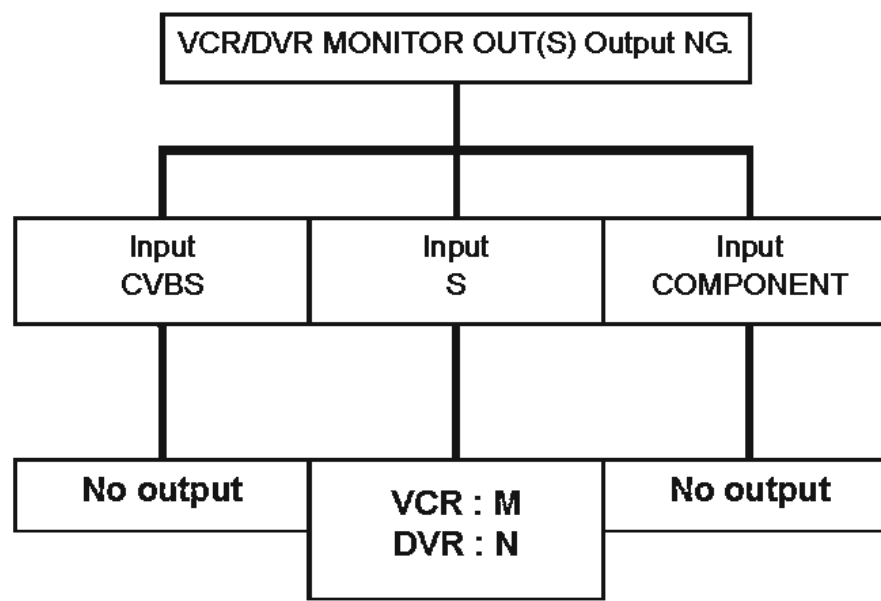
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

L



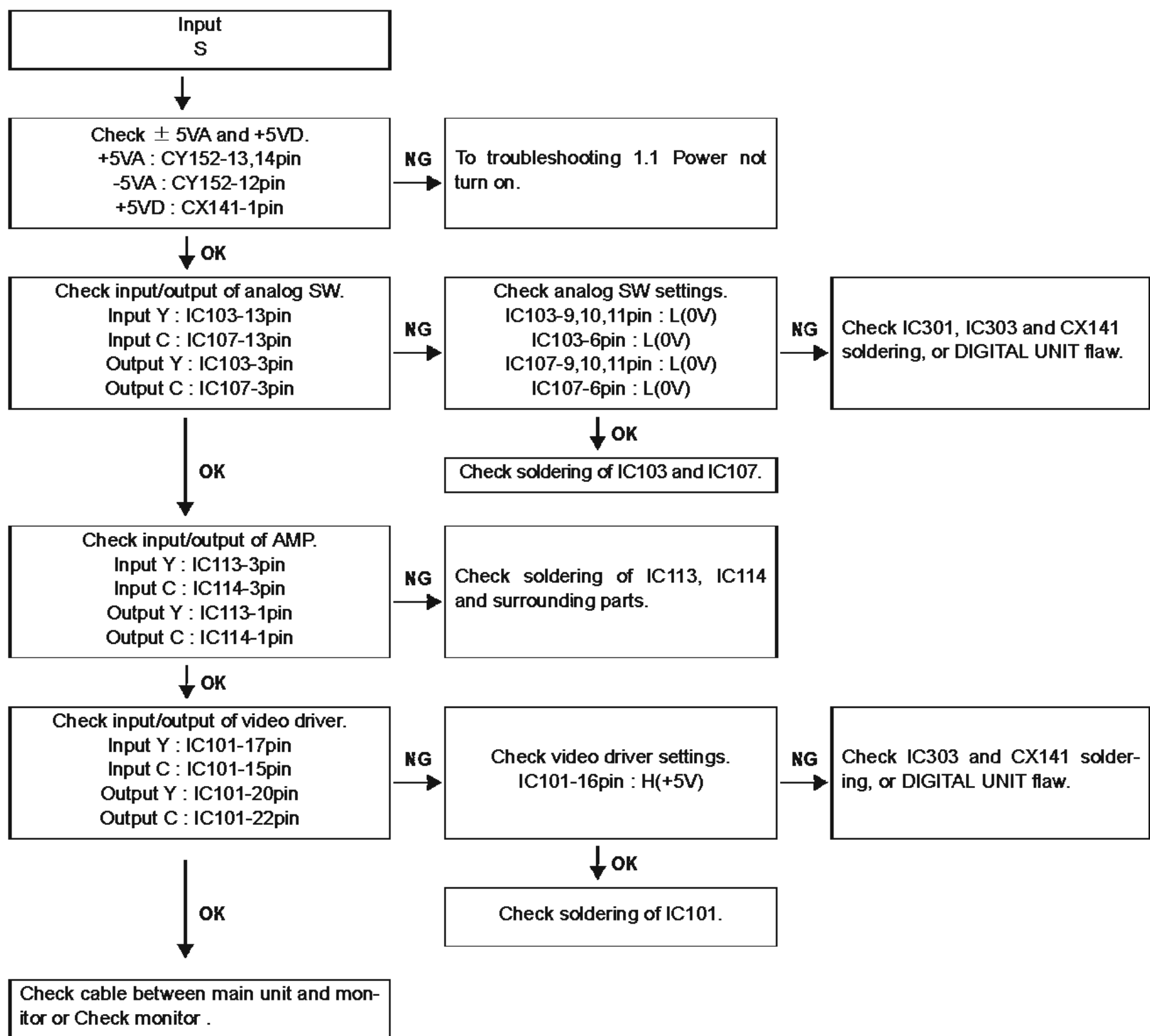
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

2.5. VCR/DVR MONITOR OUT(S) Output NG



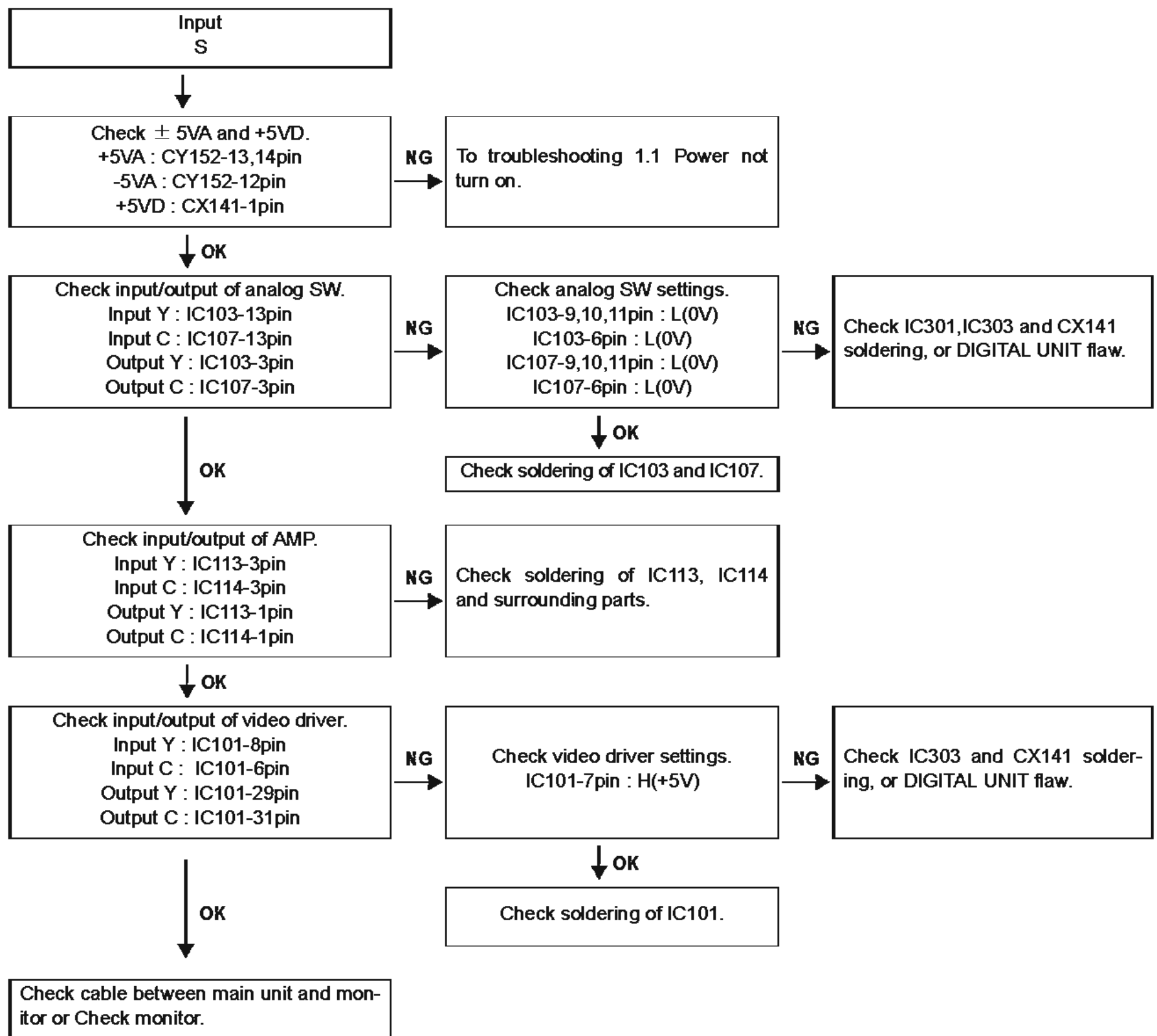
※ When checking operation,
select DVD for the function.

M



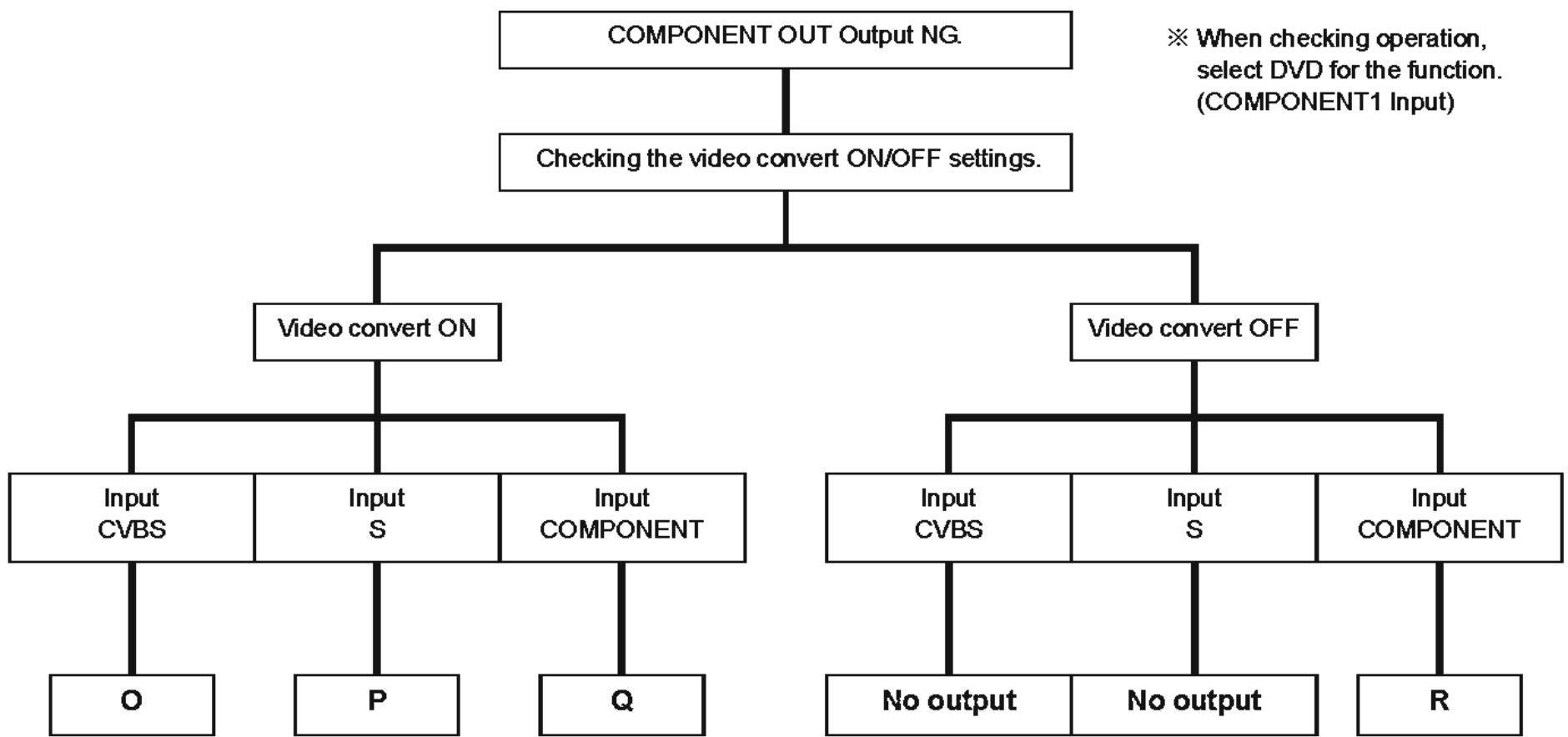
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

N

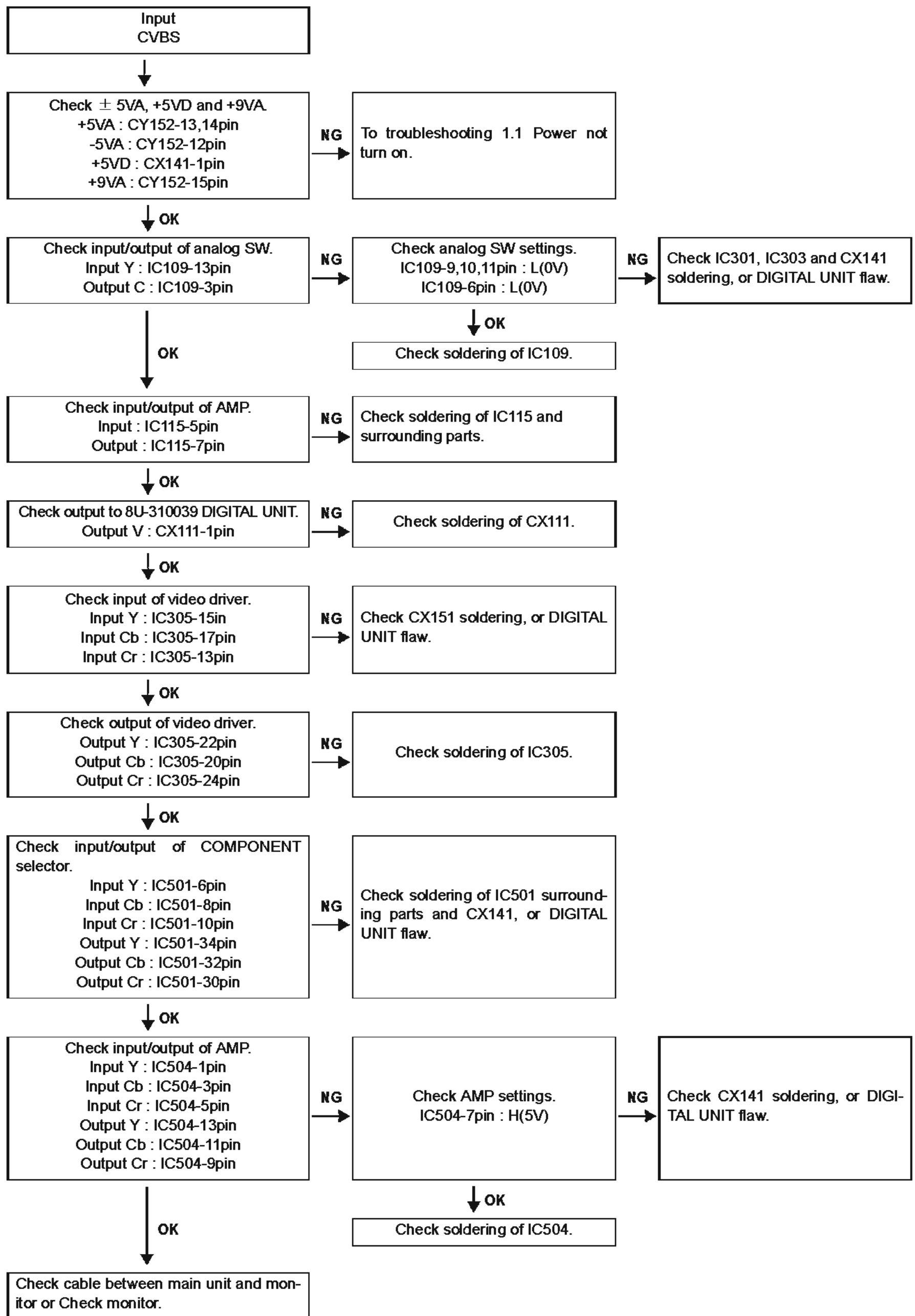


※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

2.6. COMPONENT OUT Output NG

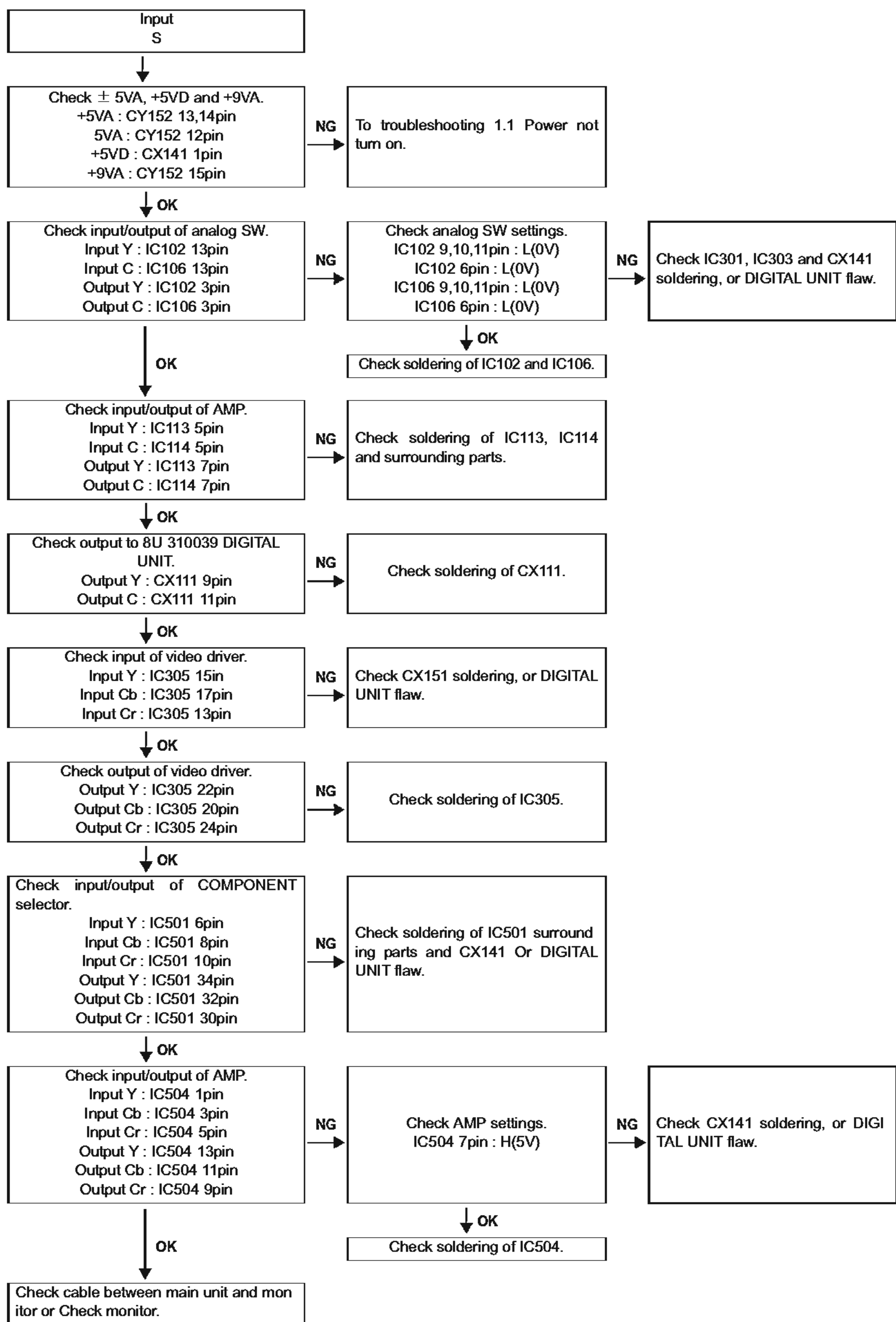


○



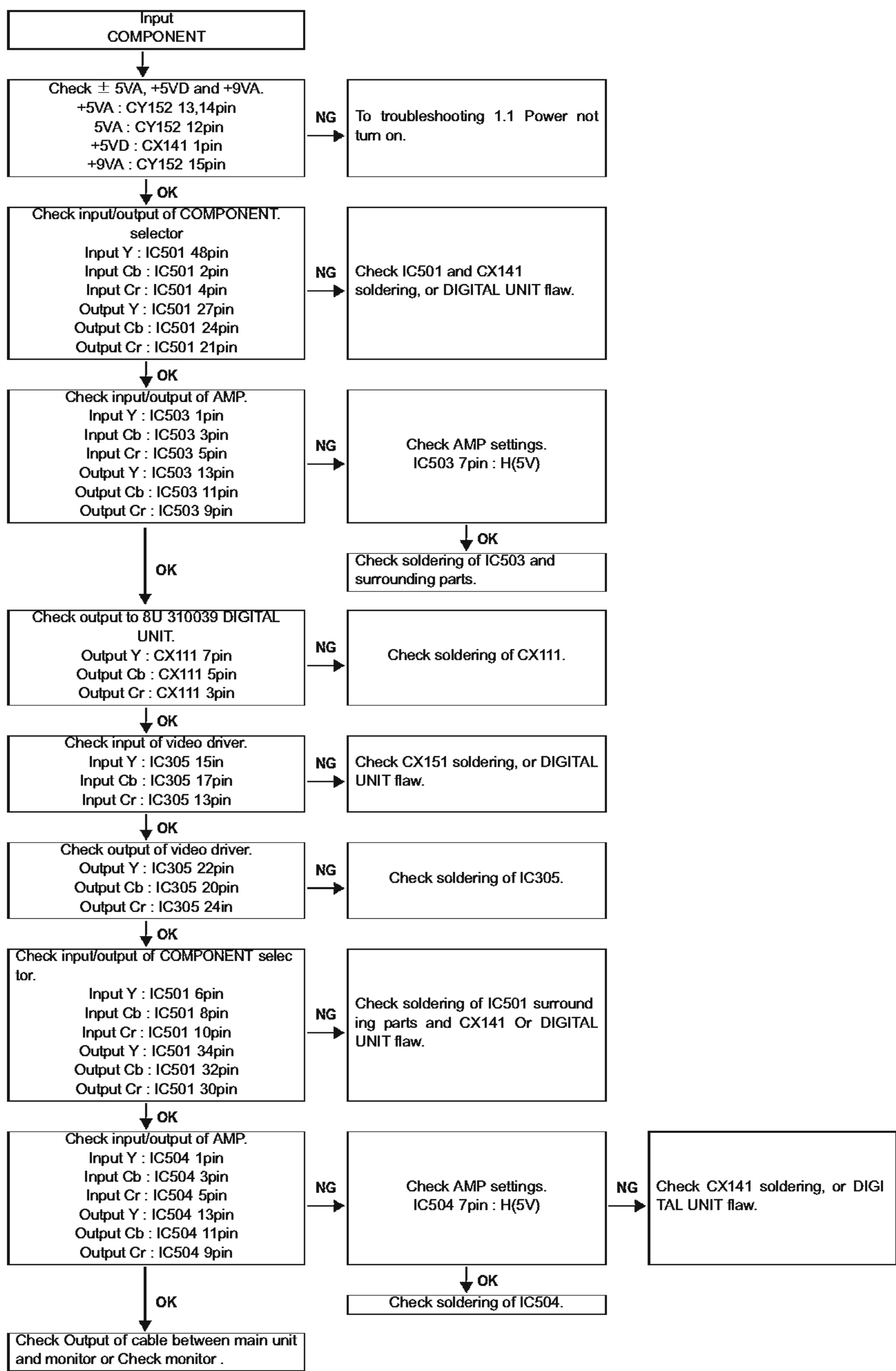
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

P



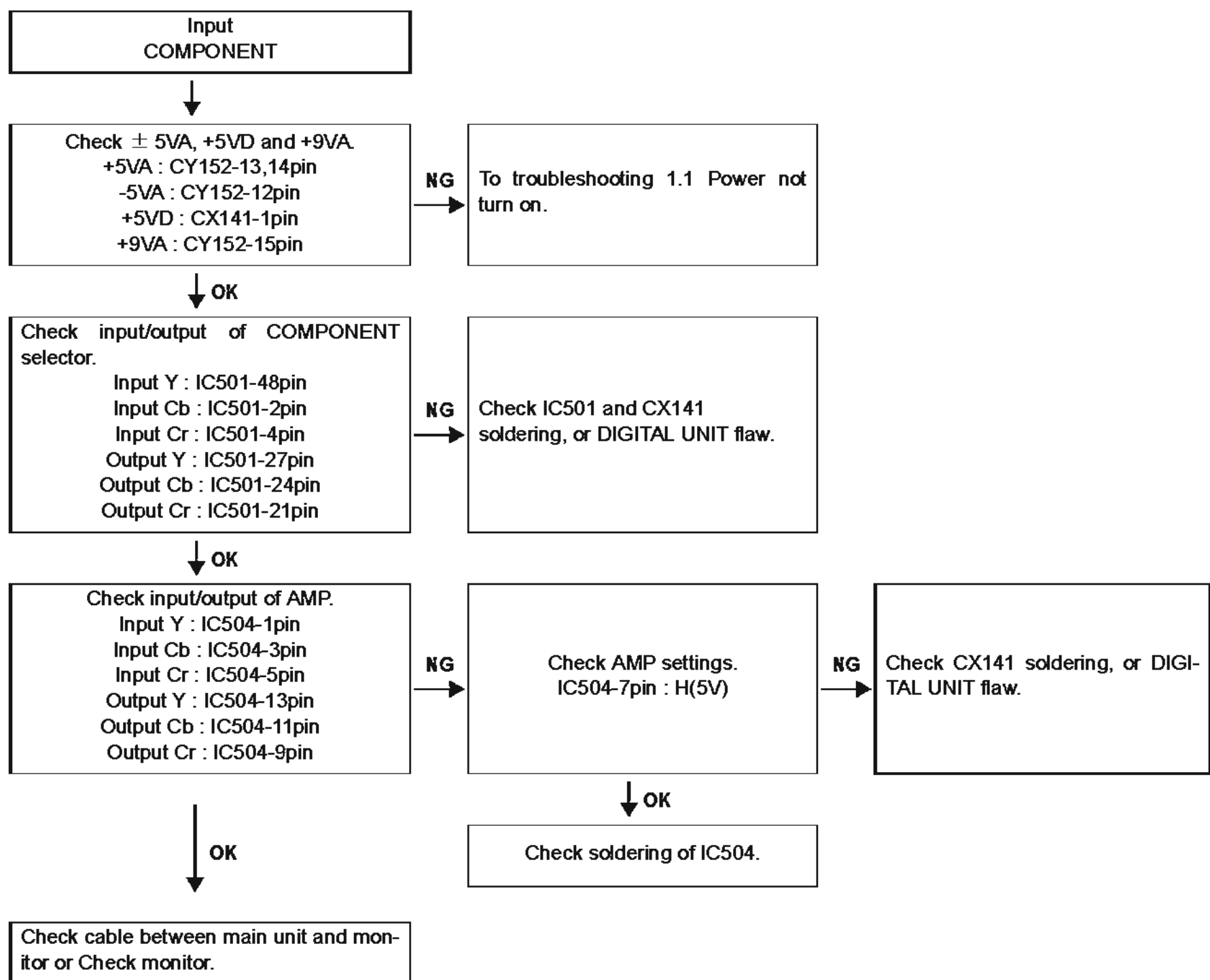
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

Q



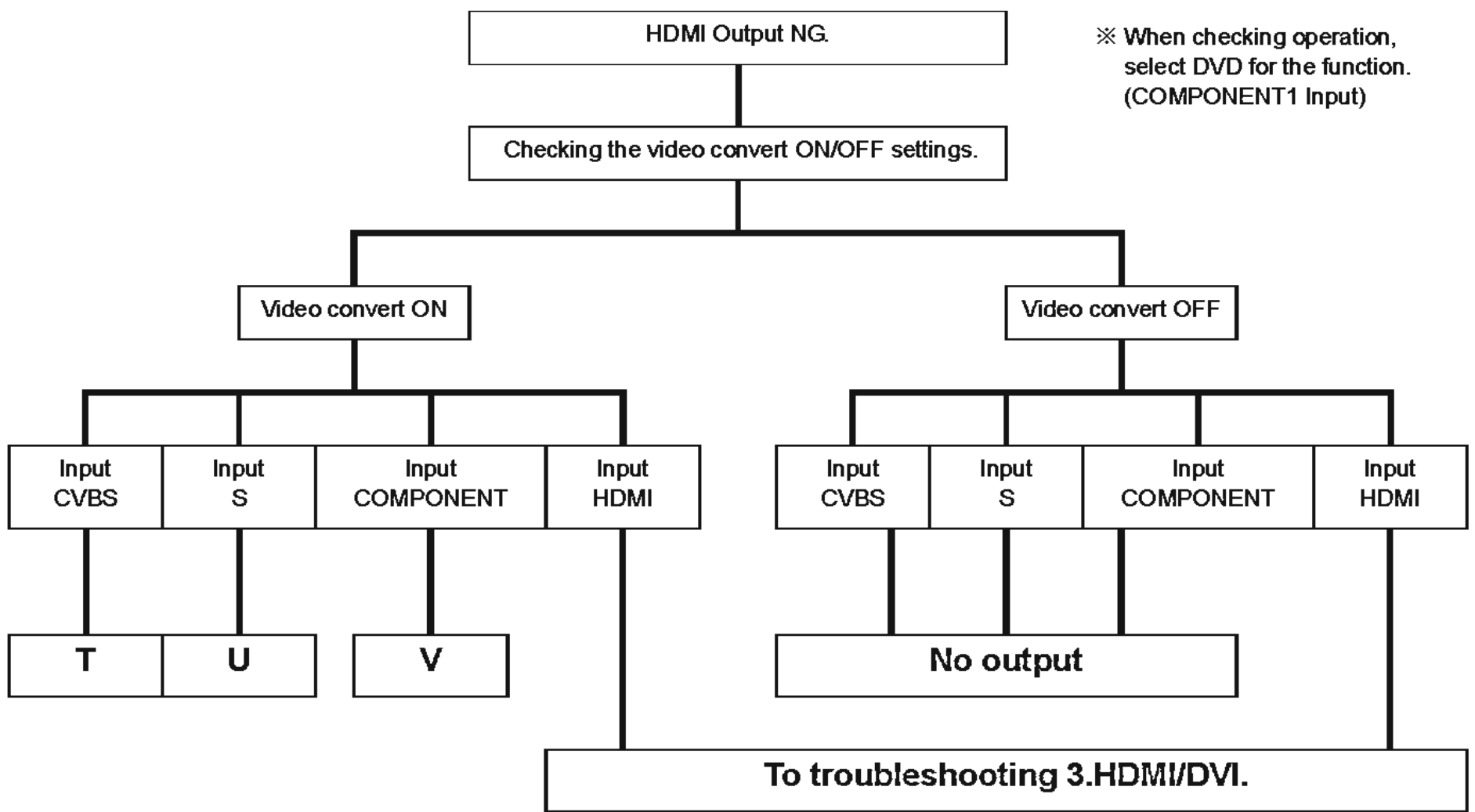
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

R

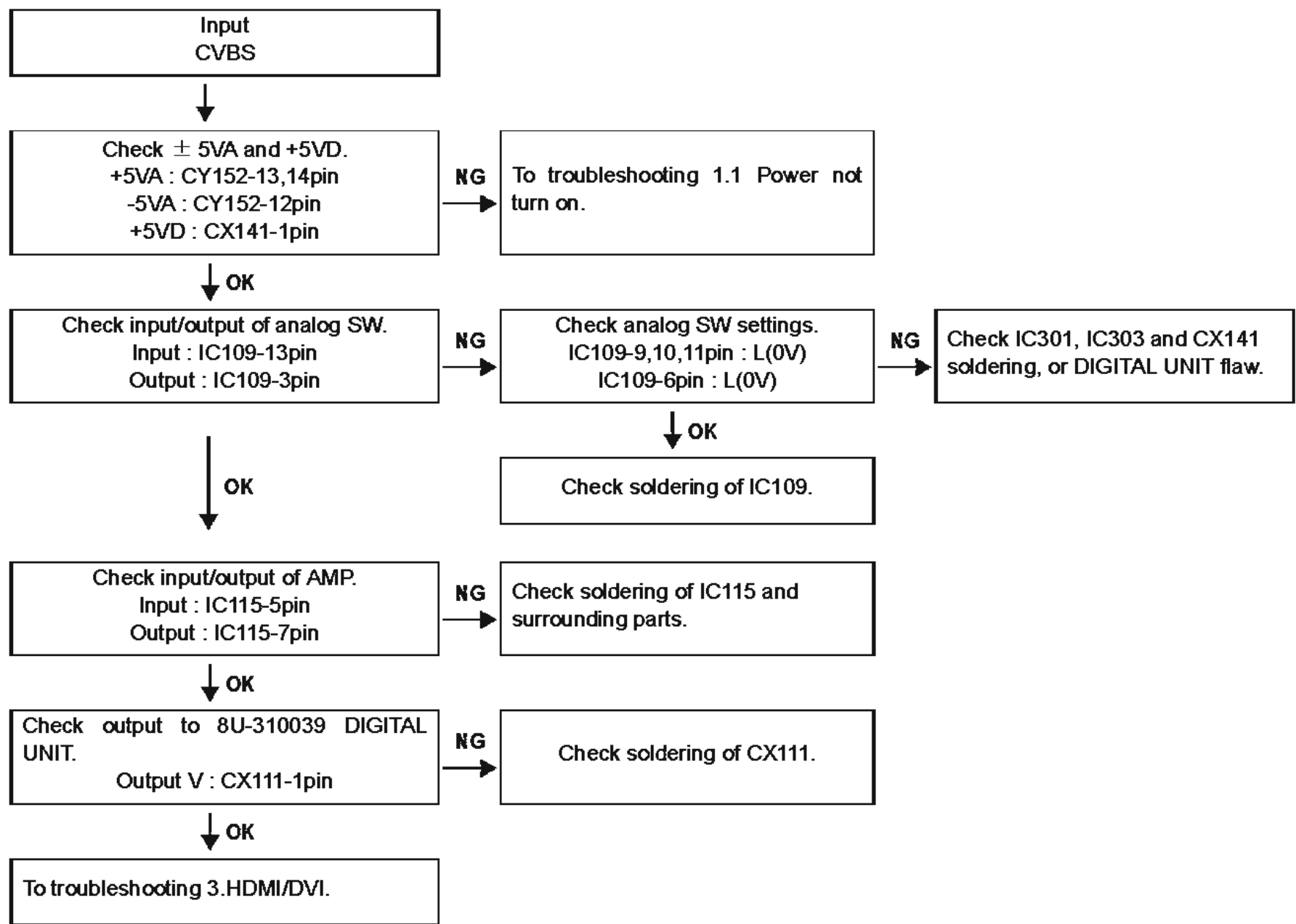


※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

2.7. HDMI Output NG

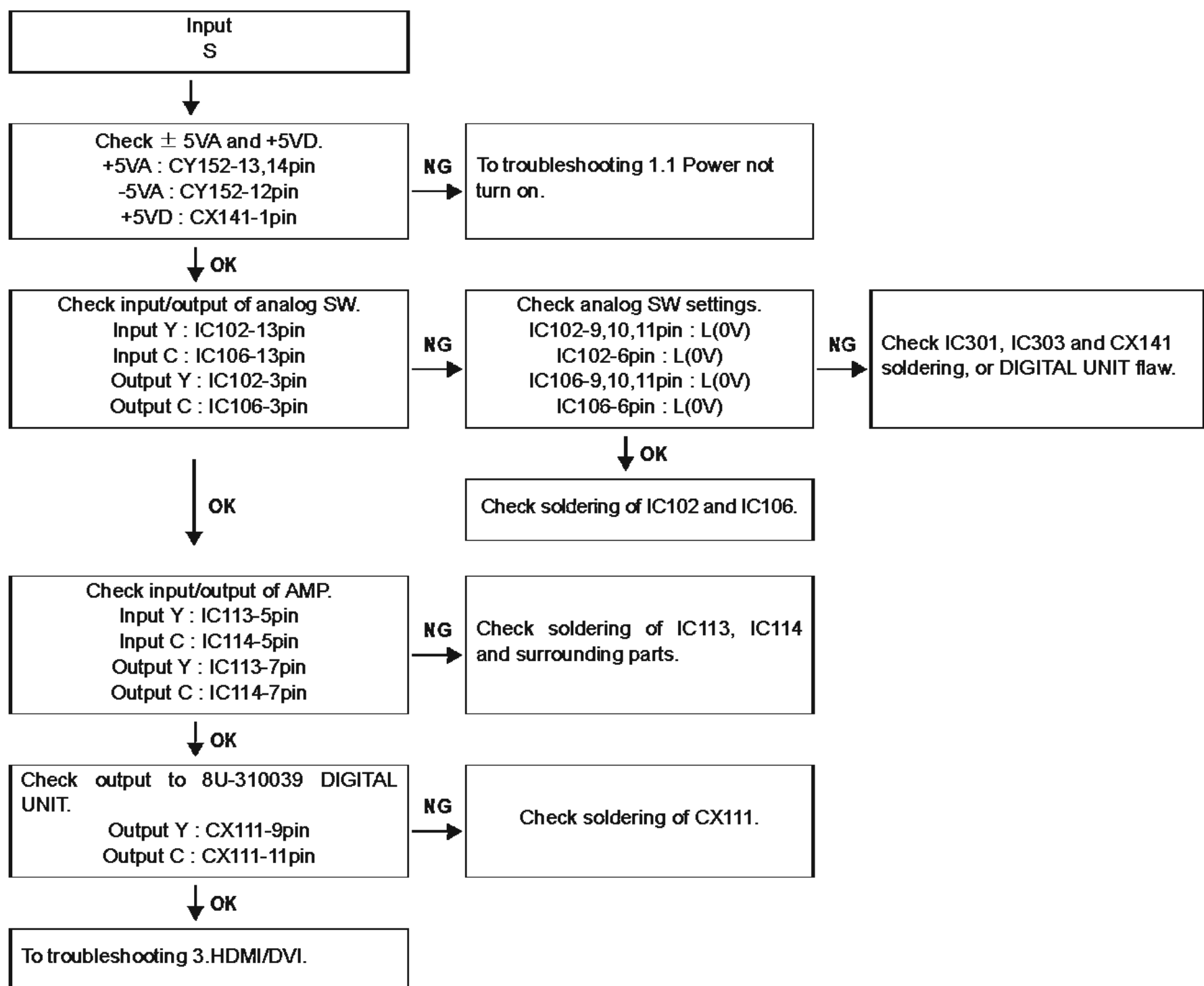


T



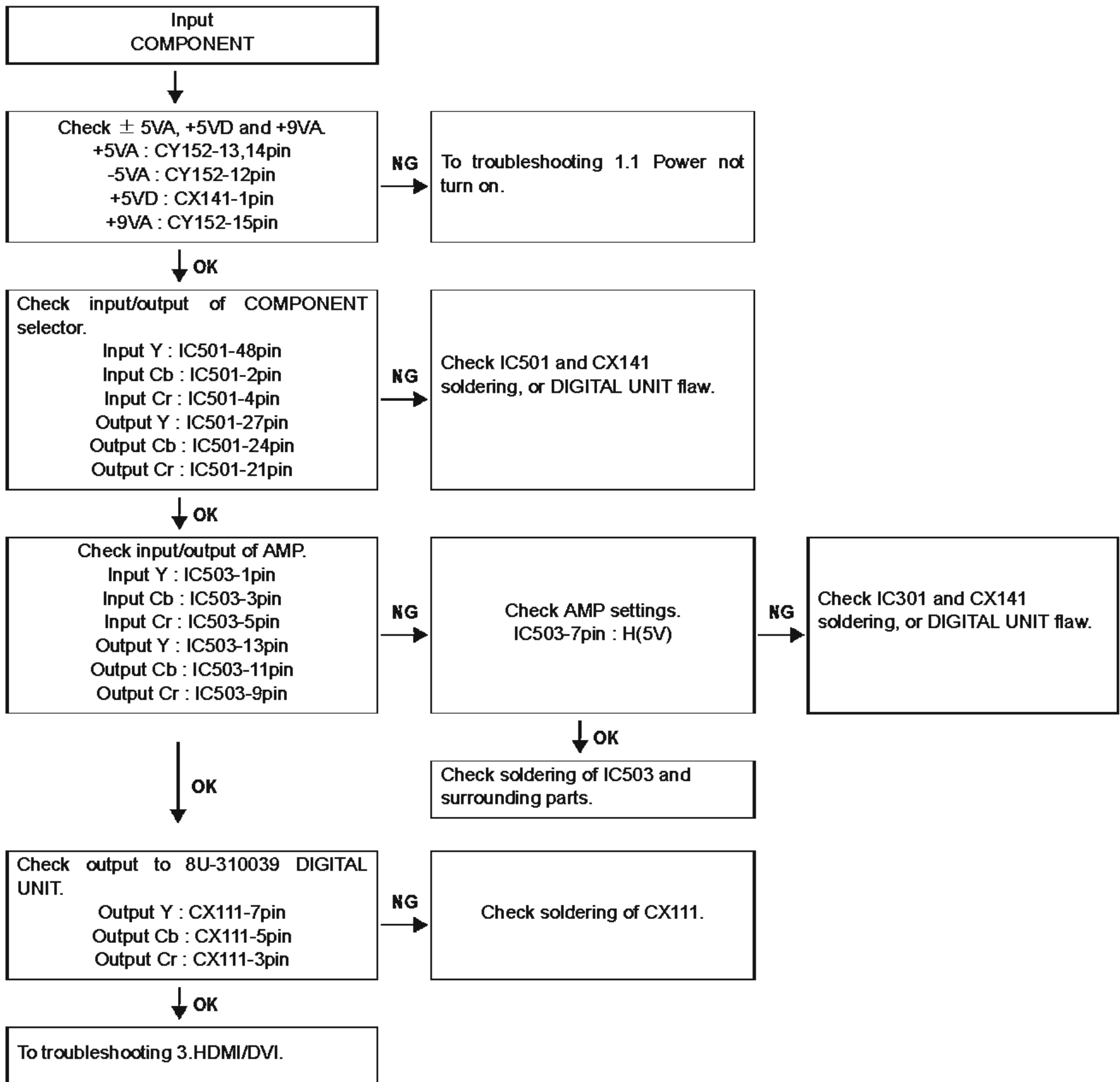
※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

U



※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

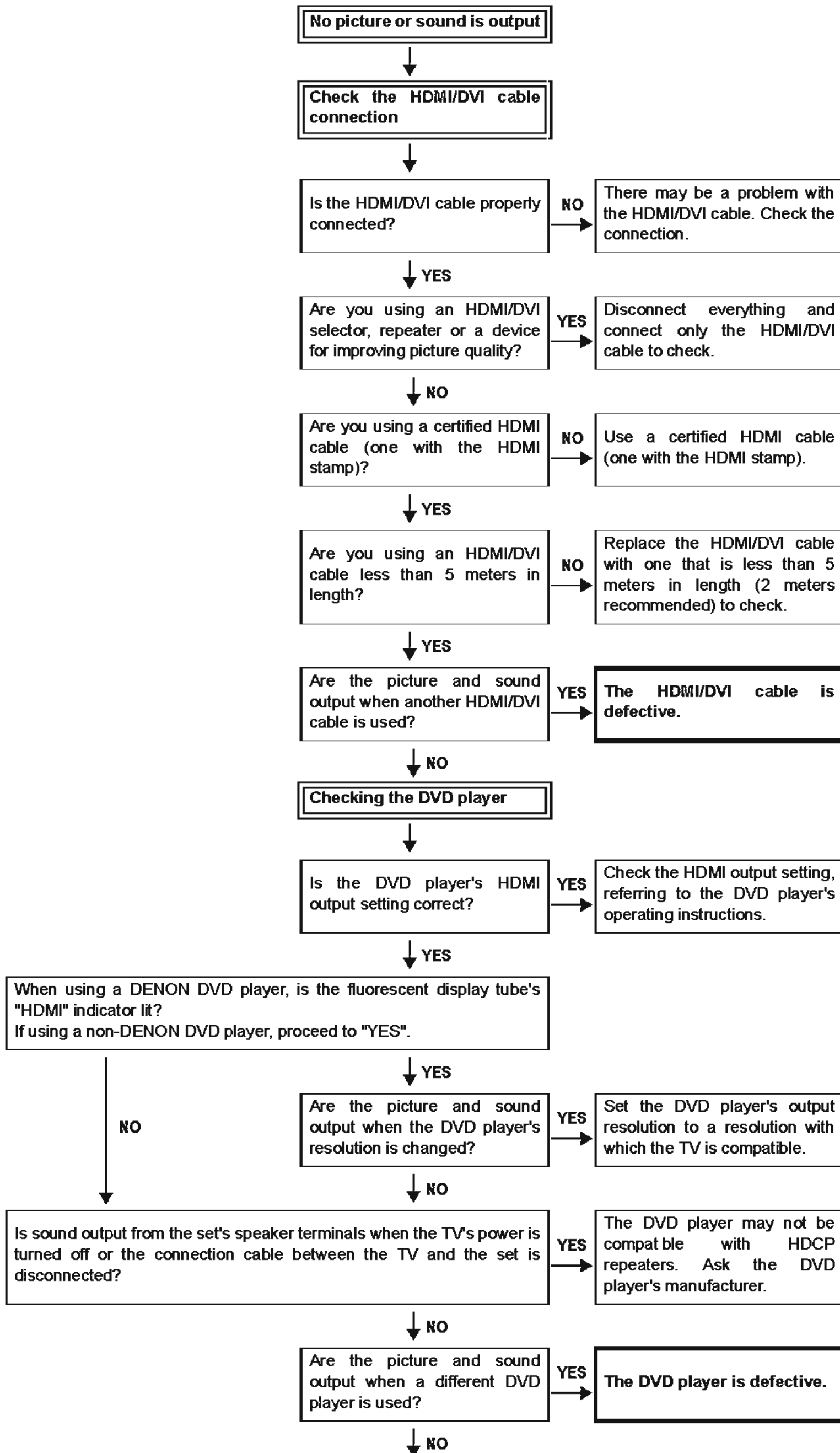
V

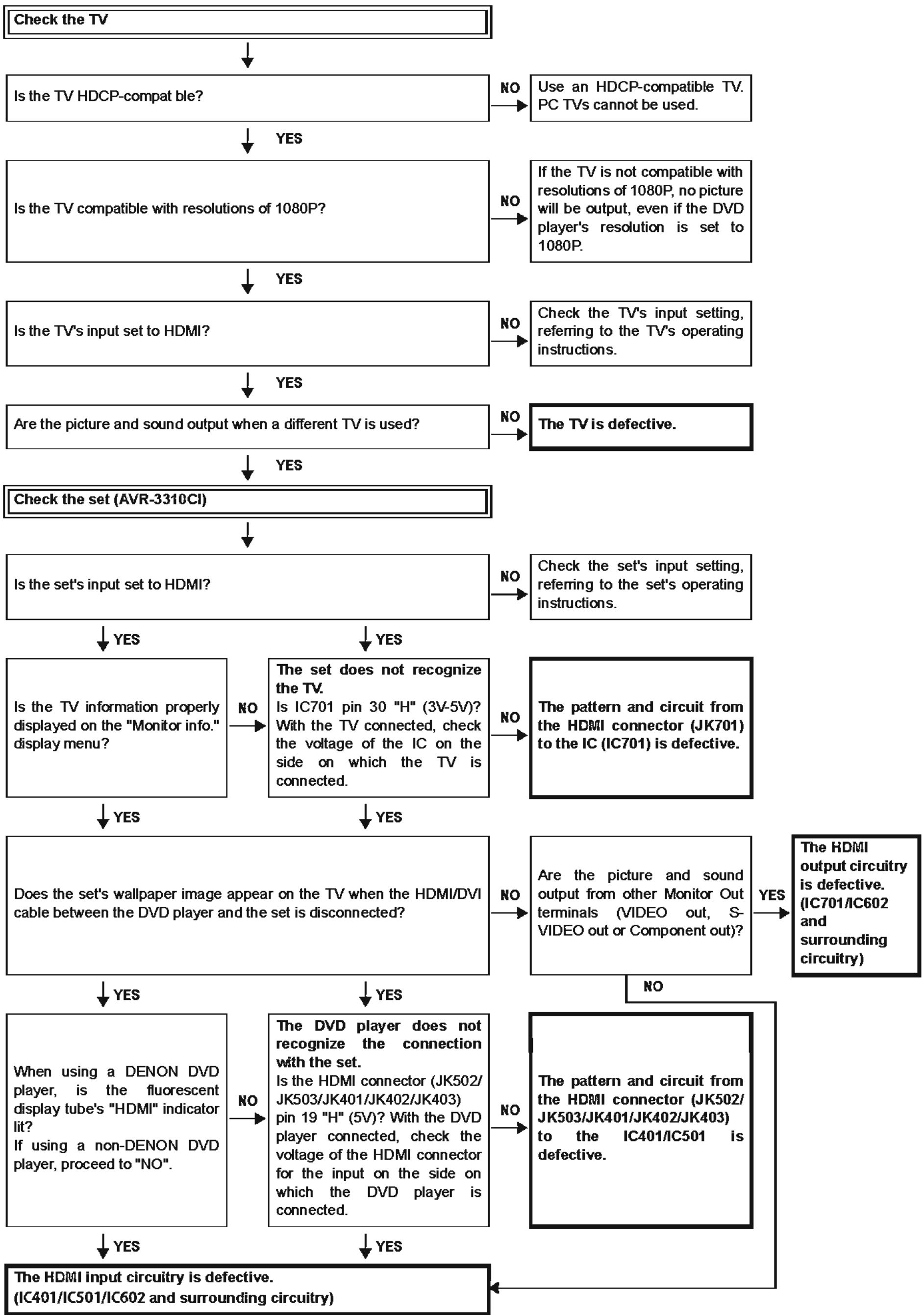


※ Unless specified, 8U-210081-1 A.VIDEO UNIT part.

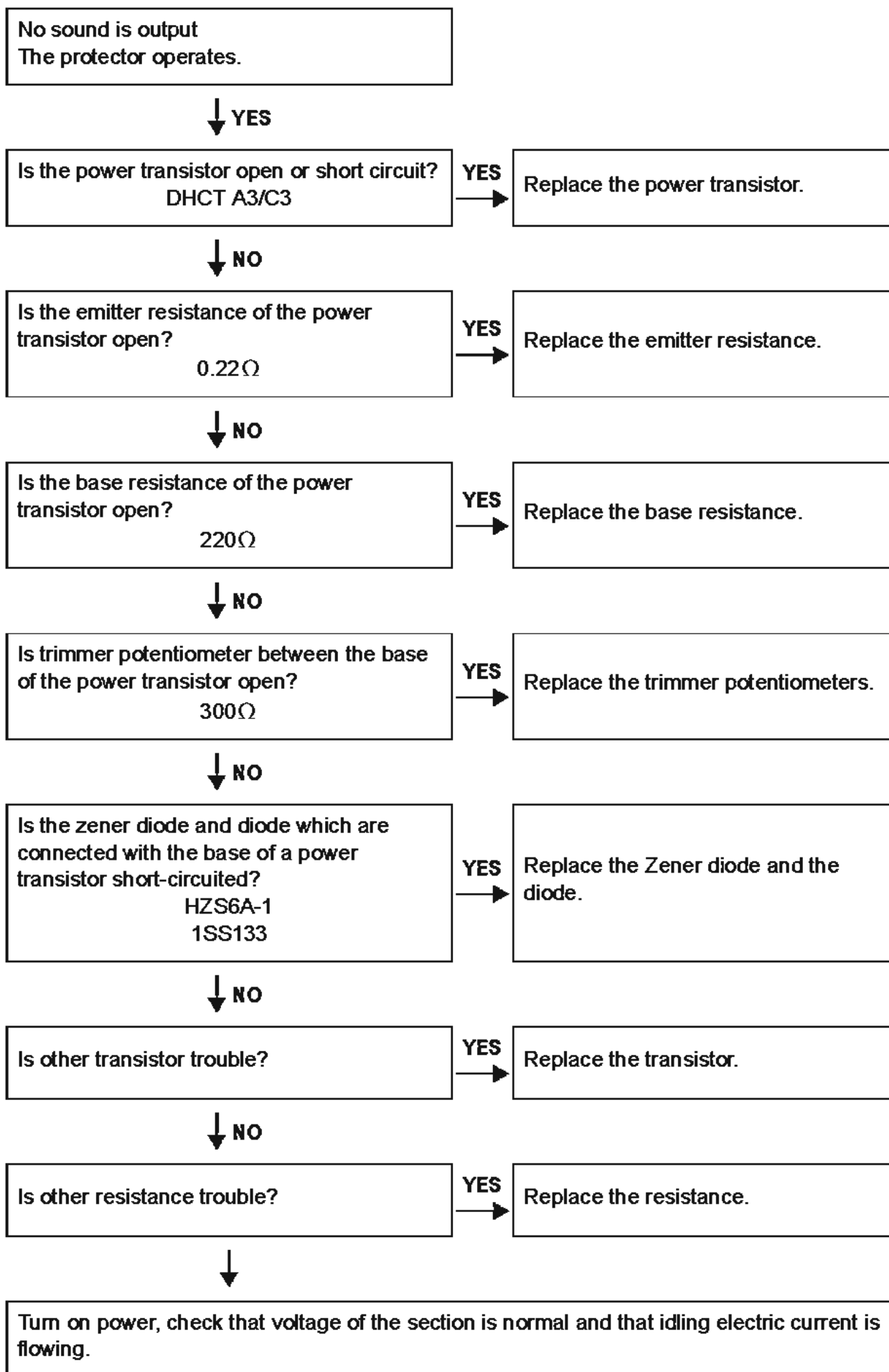
3. HDMI/DVI

3.1. No picture or sound is output



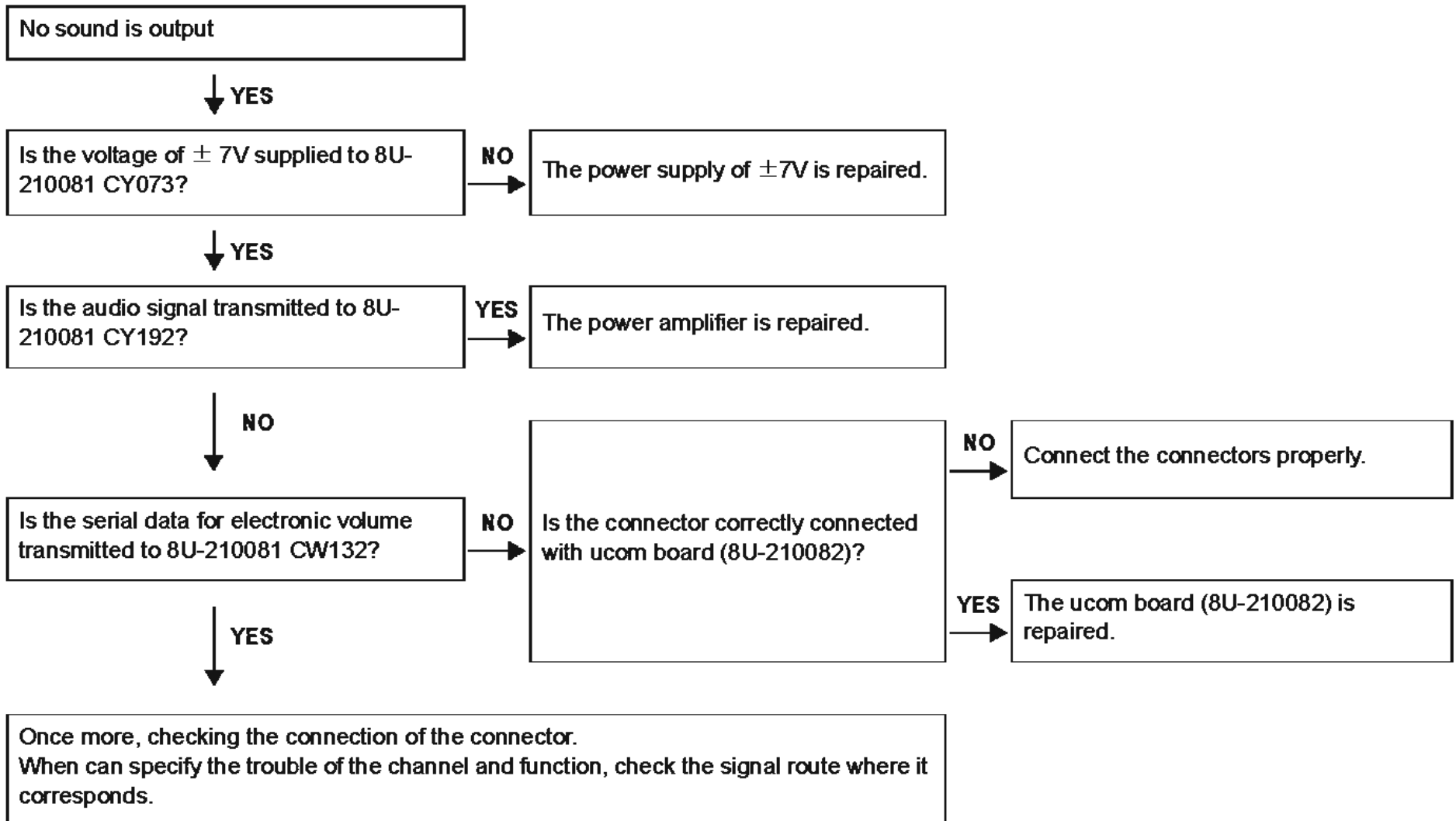


4. Power AMP (8U-110062, 8U-110063)



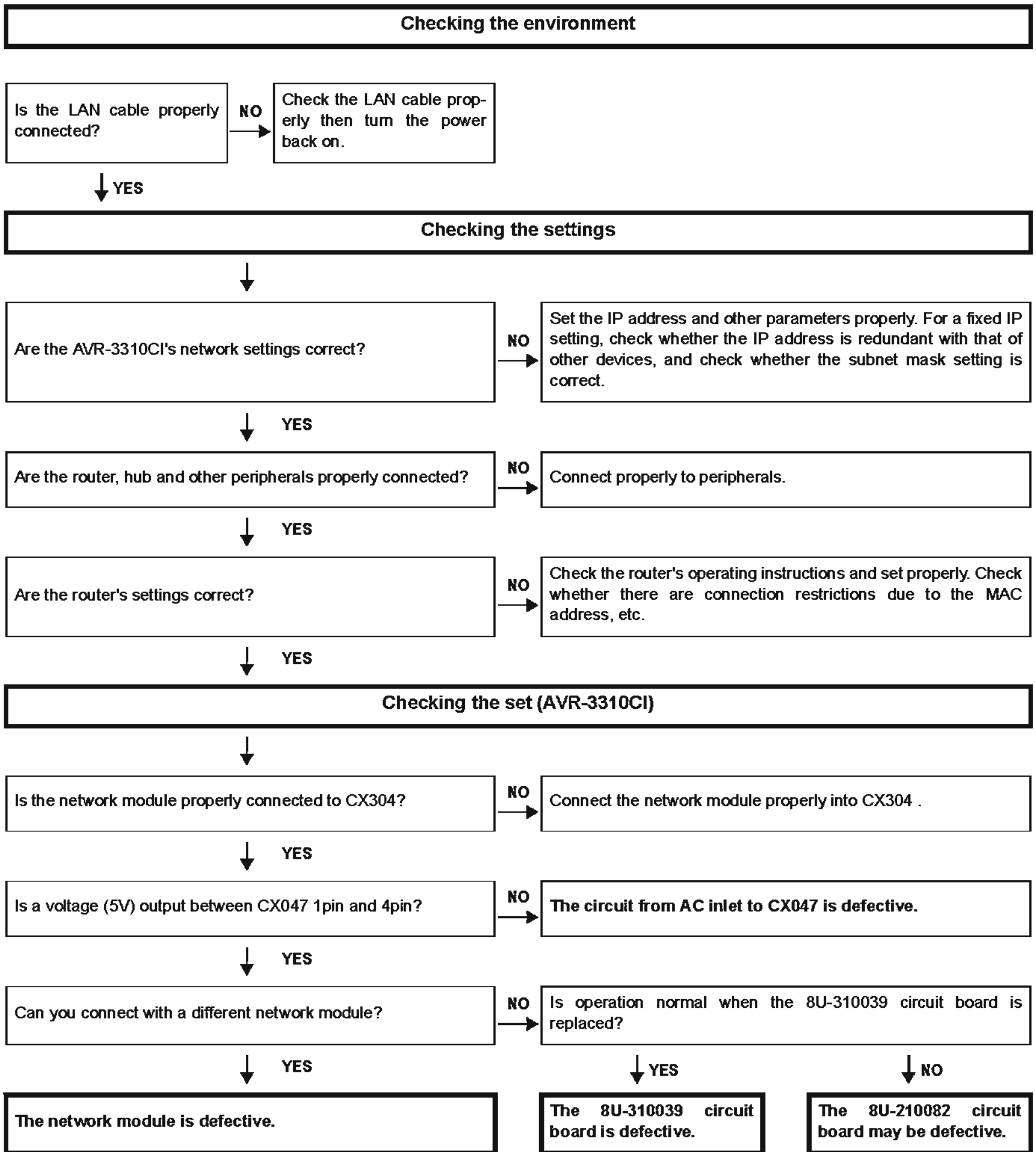
5. Analog audio

5.1. 8U-210081

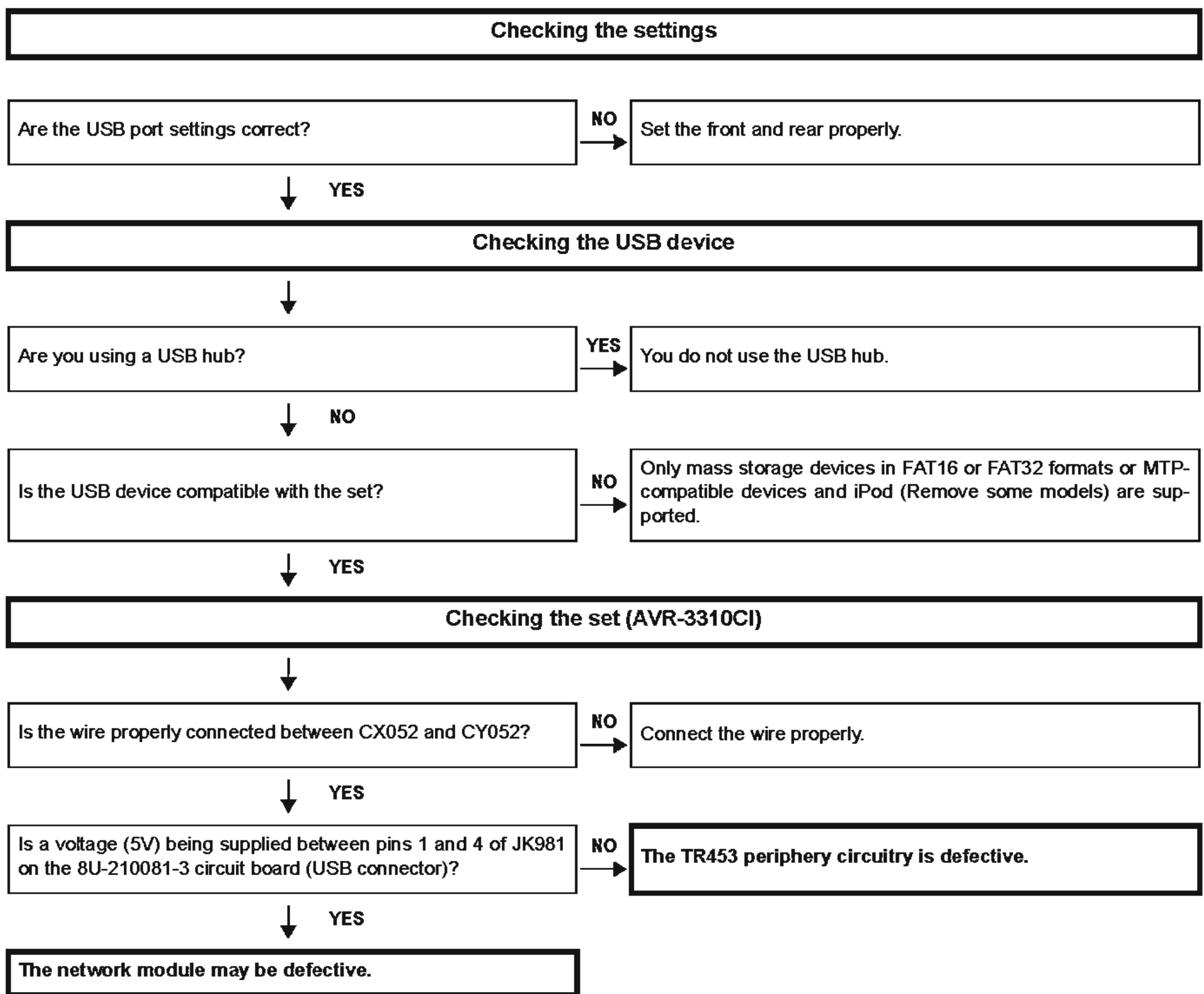


6. Network/USB

6.1. Cannot connect to network

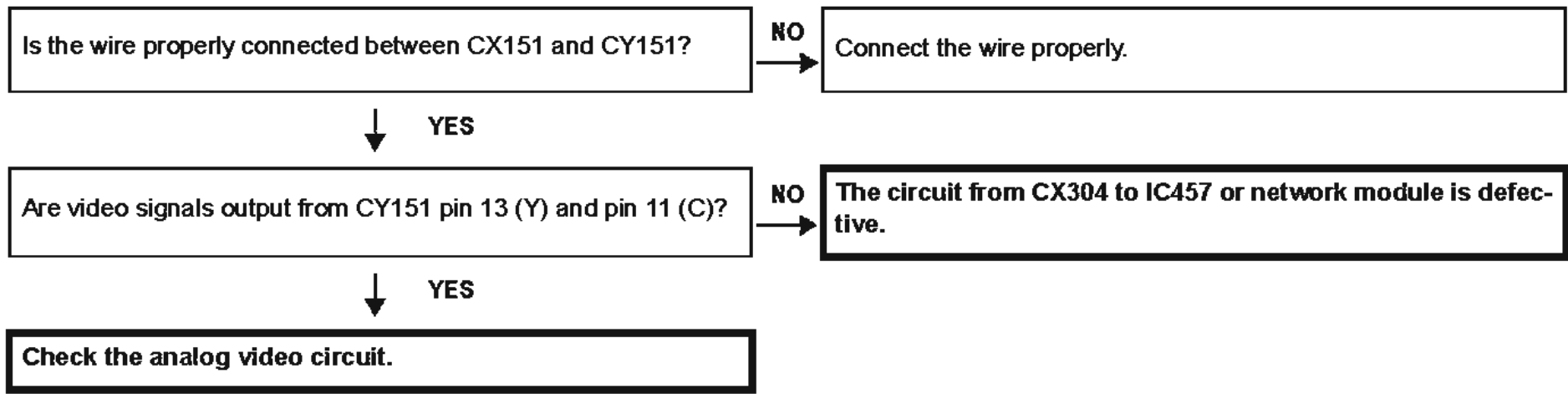


6.2. USB device is not recognized

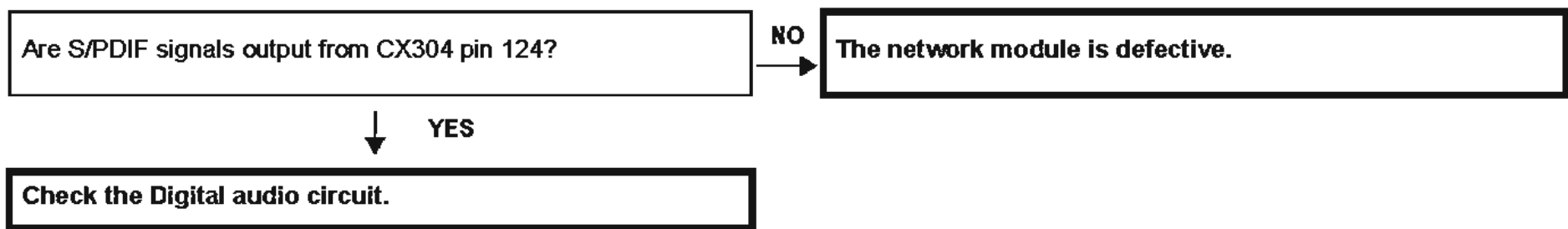


6.3. No picture or sound is output

Checking the set (AVR-3310CI):(If no picture is output)



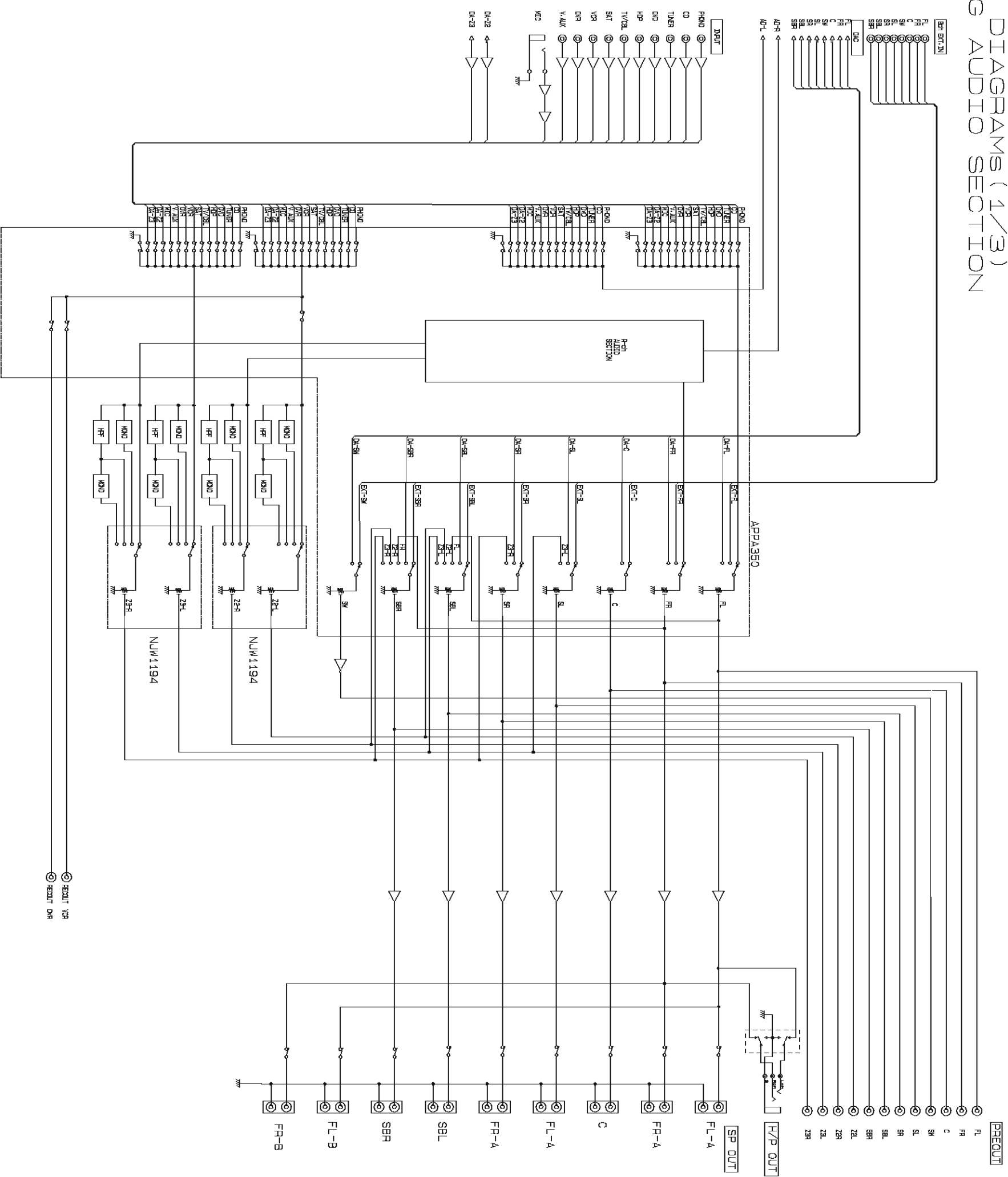
Checking the set (AVR-3310CI):(If no sound is output)



--MEMO--

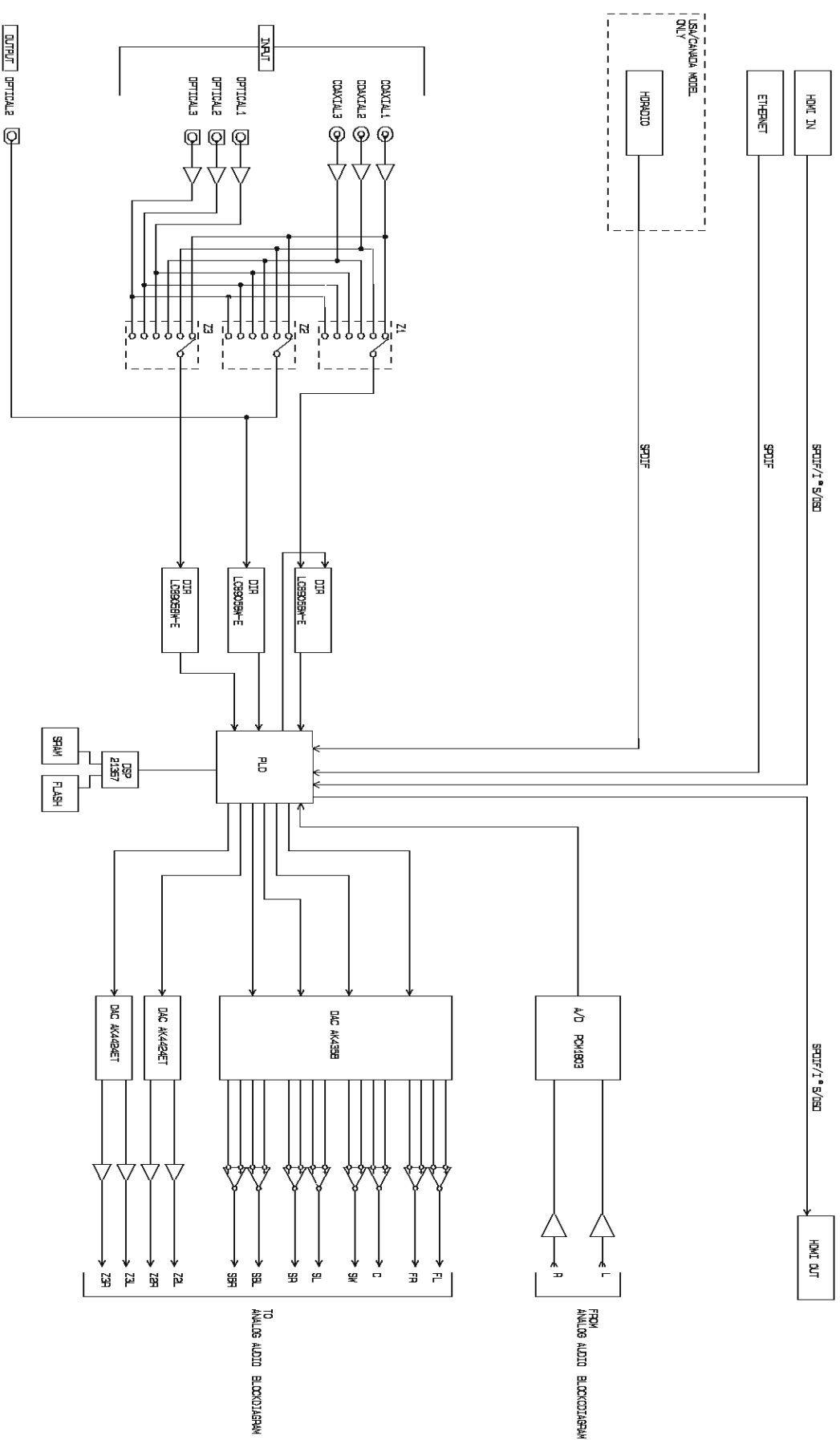
**BLOCK DIAGRAMS (1/3)
ANALOG AUDIO BLOCK DIAGRAM**

**AVR3310
BLOCK DIAGRAMS (1/3)
ANALOG AUDIO SECTION**



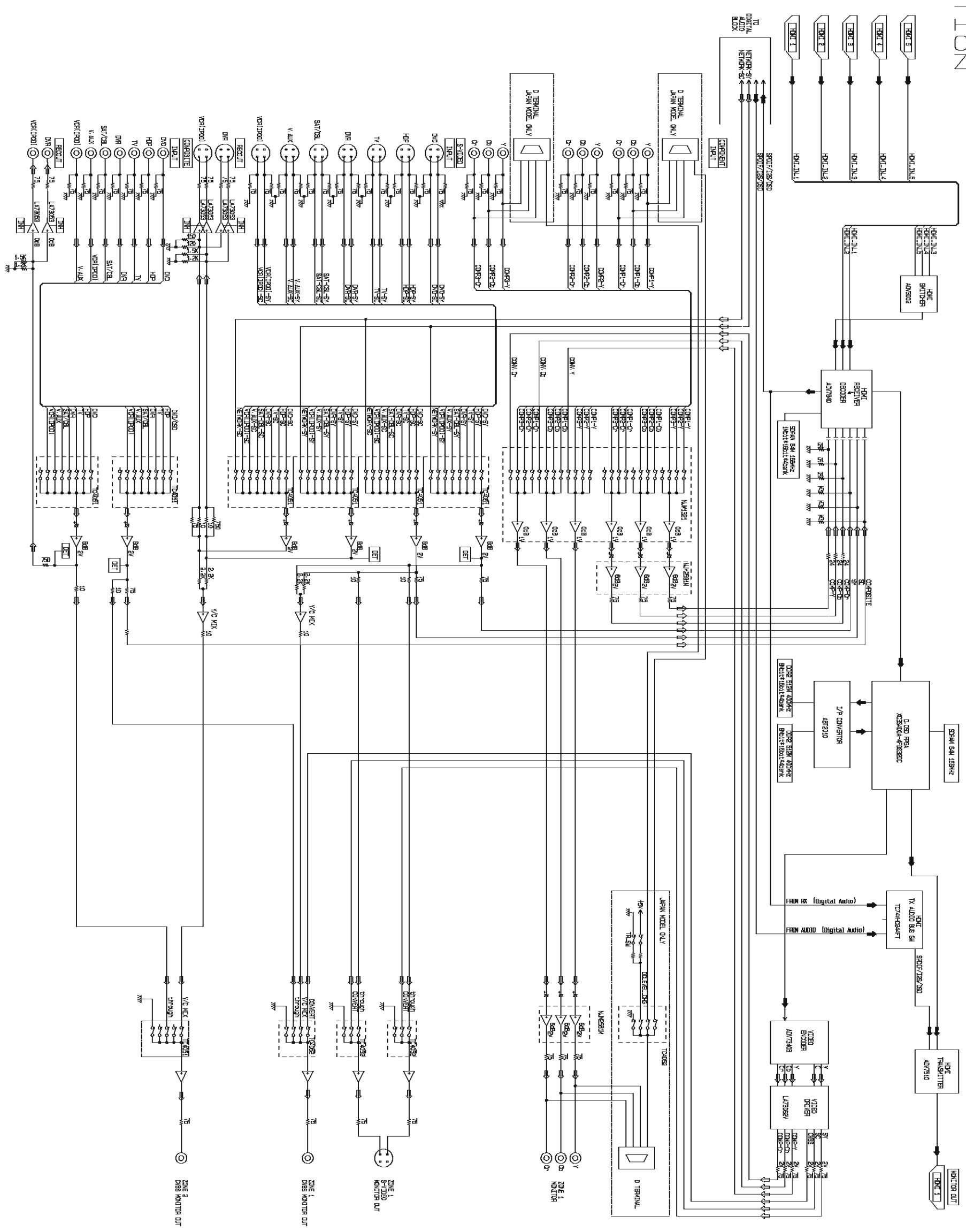
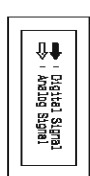
BLOCK DIAGRAMS (2/3)
DIGITAL AUDIO BLOCK DIAGRAM

AVR3310
BLOCK DIAGRAMS (2/3)
DIGITAL AUDIO SECTION

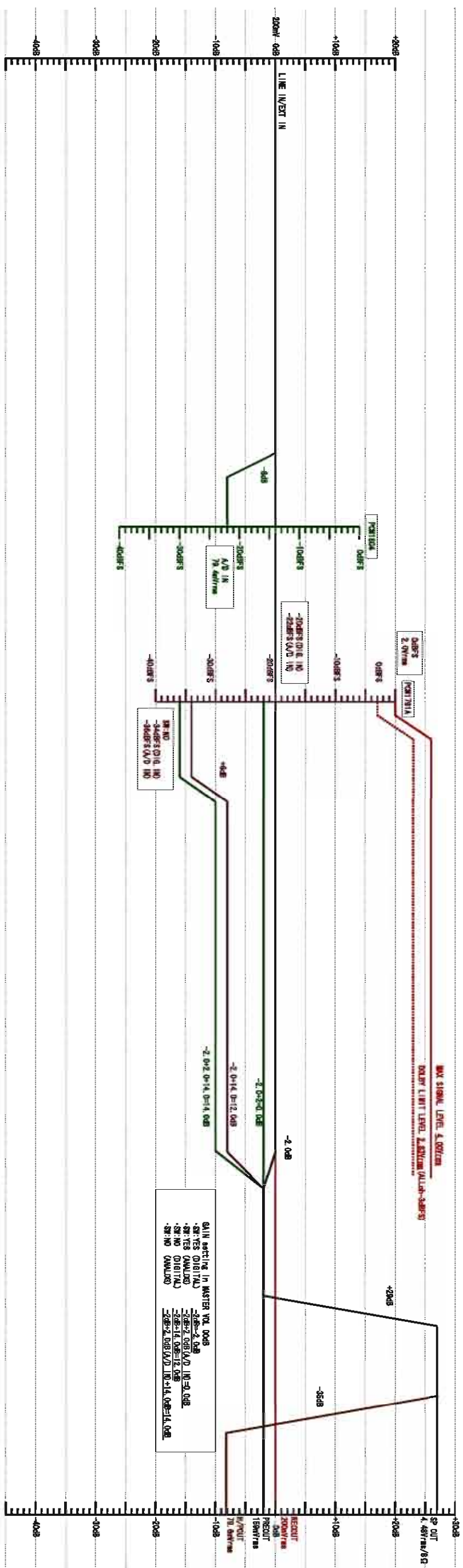
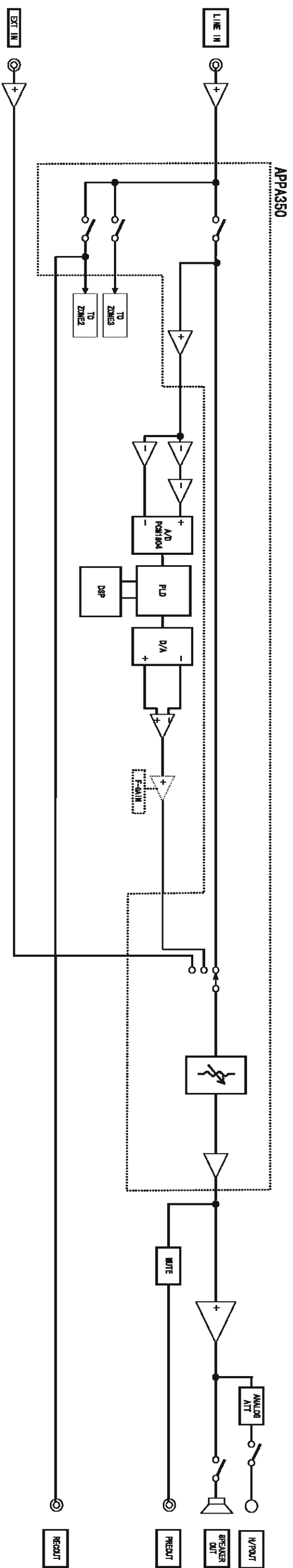


BLOCK DIAGRAMS (3/3) VIDEO BLOCK DIAGRAM

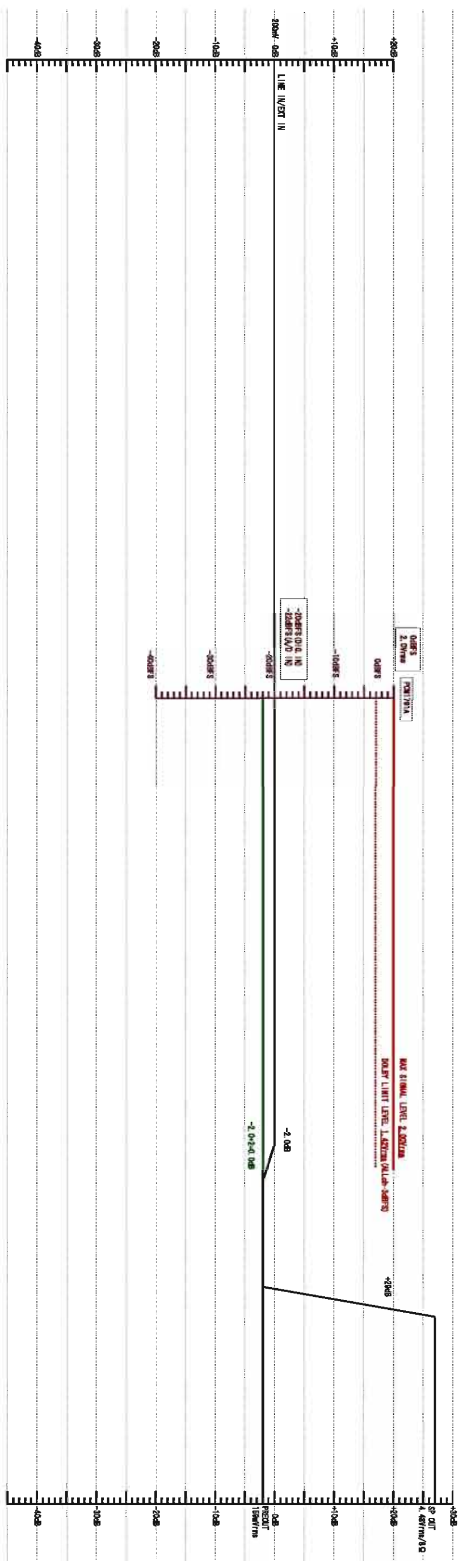
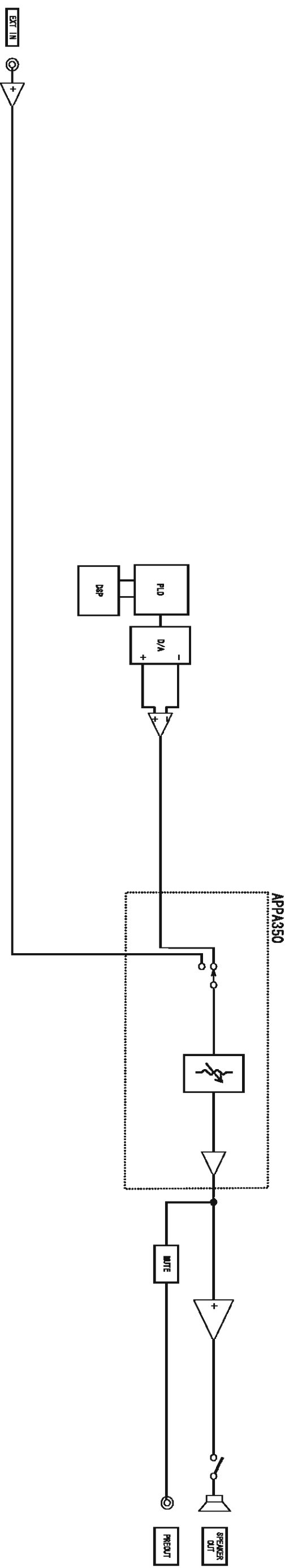
AVR3310CI DIAGRAMS VIDEO SECTION



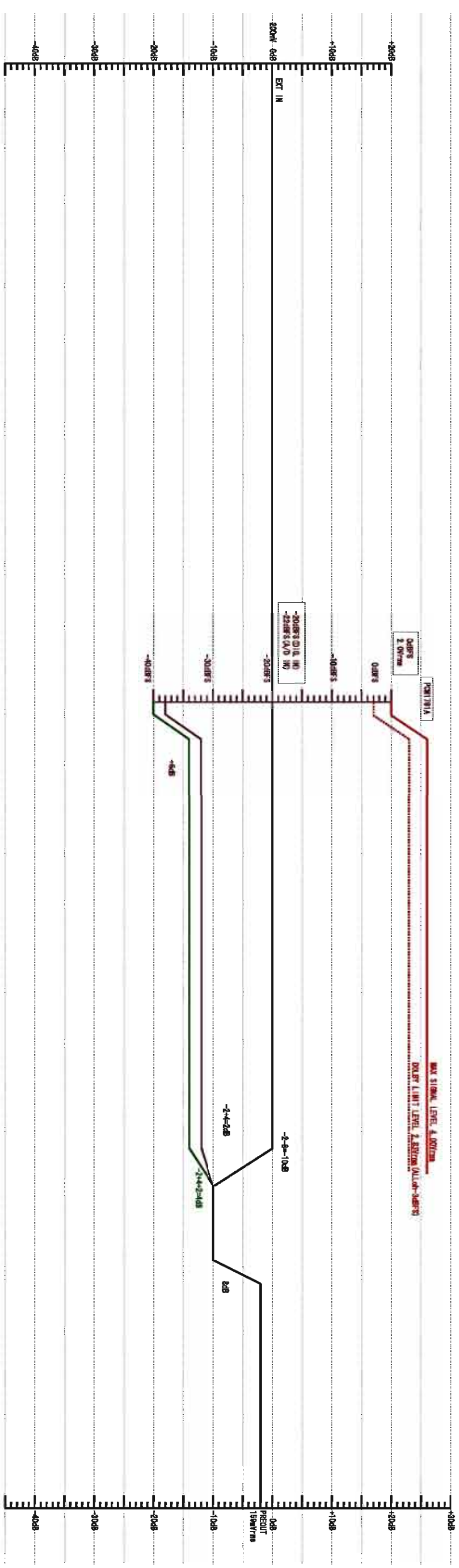
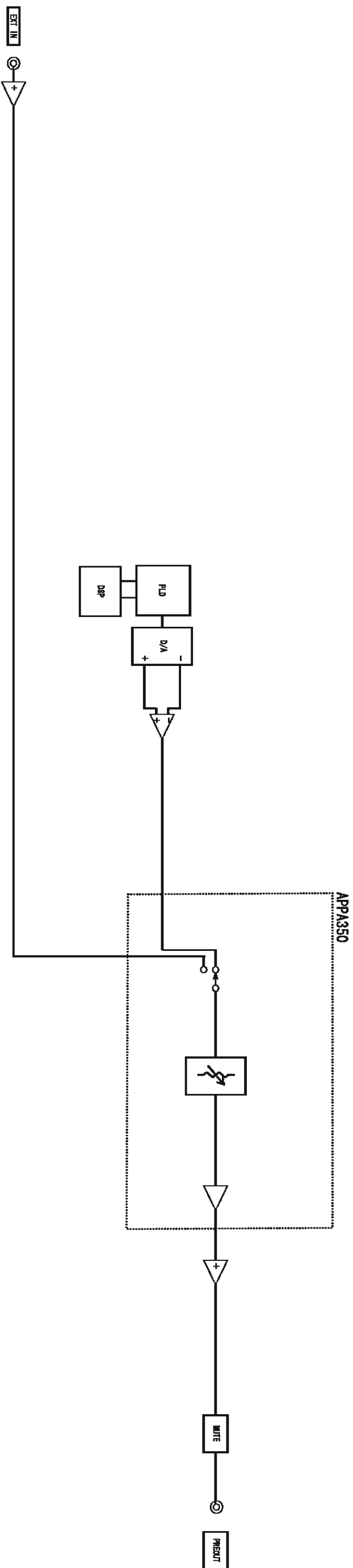
AVR-3310CI
LEVEL DIAGRAM
FRONT ch



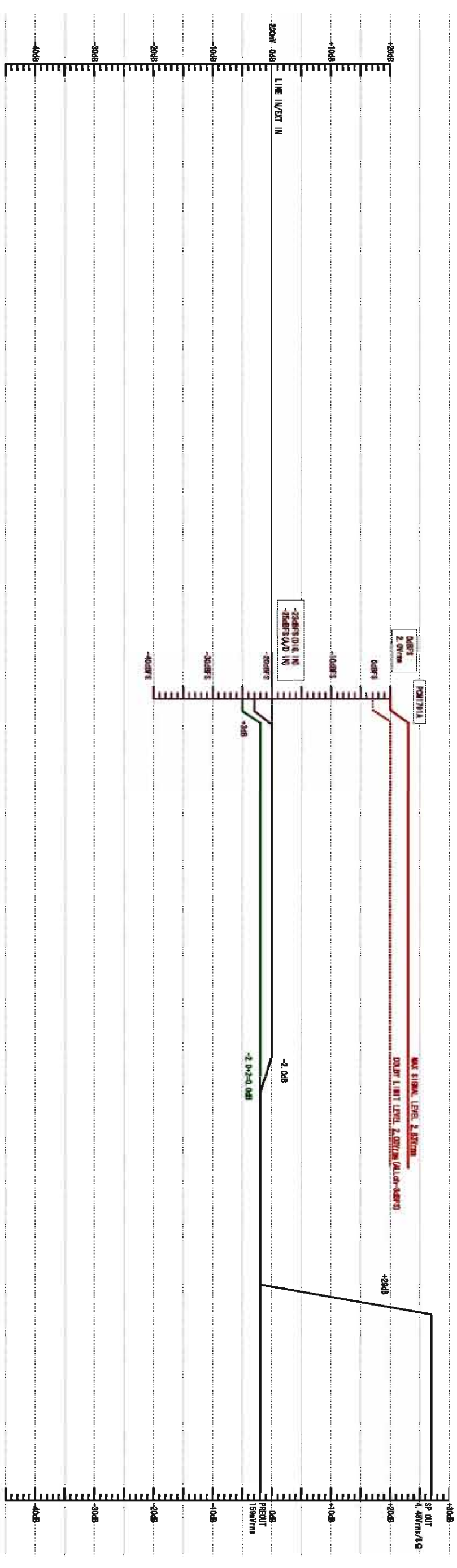
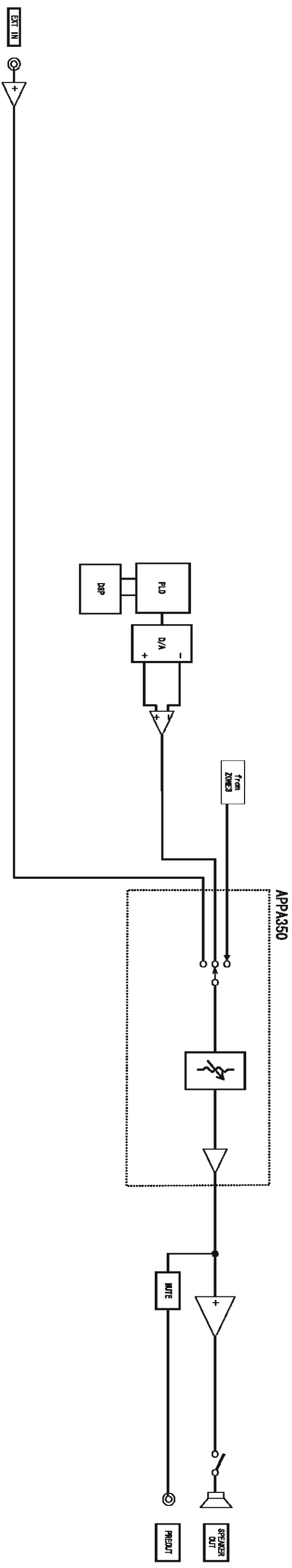
AVR-3310CI
LEVEL DIAGRAM
CENTER ch



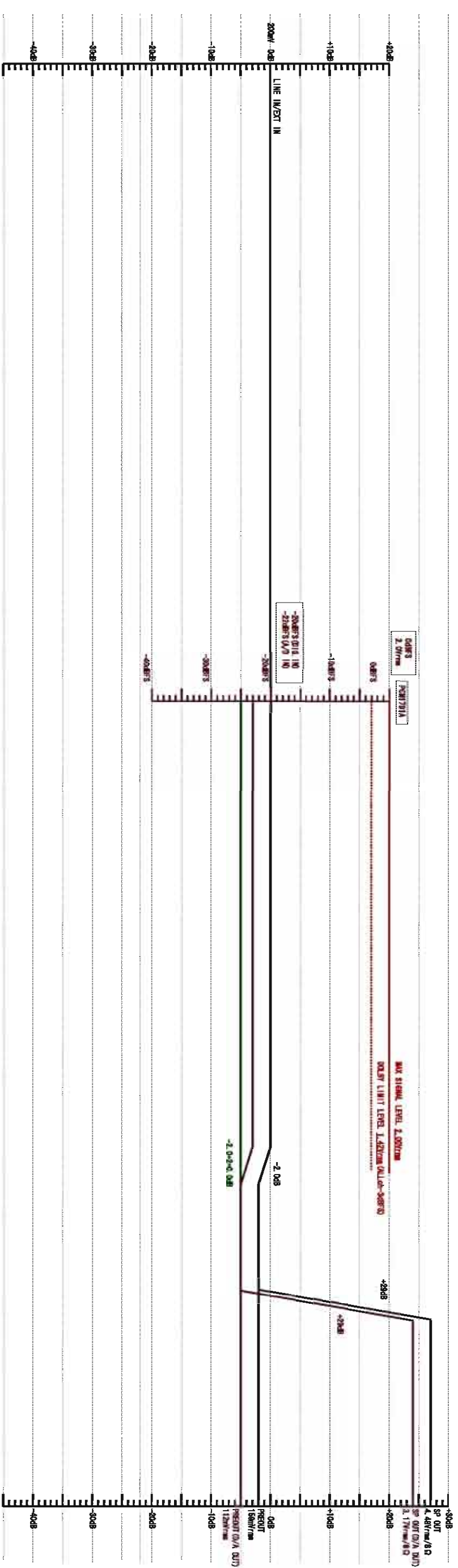
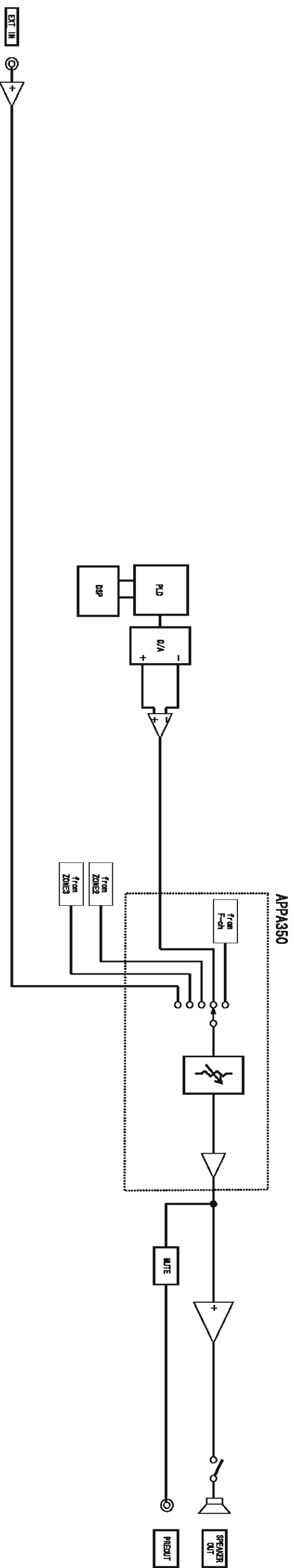
AVR-3310CI
LEVEL DIAGRAM
SUBWOOFER ch



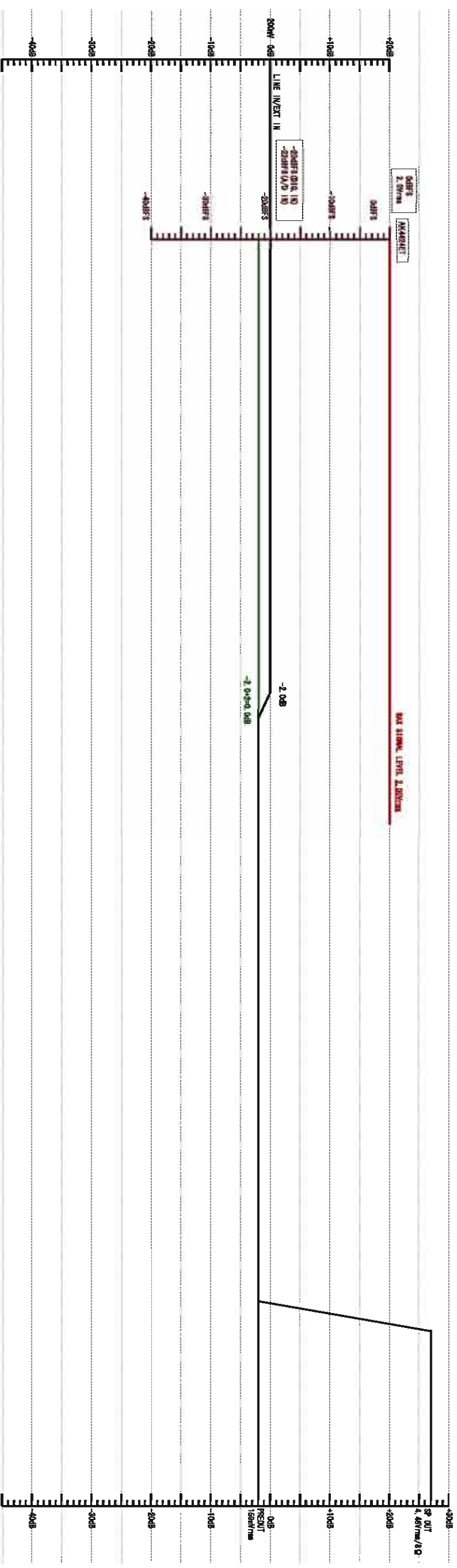
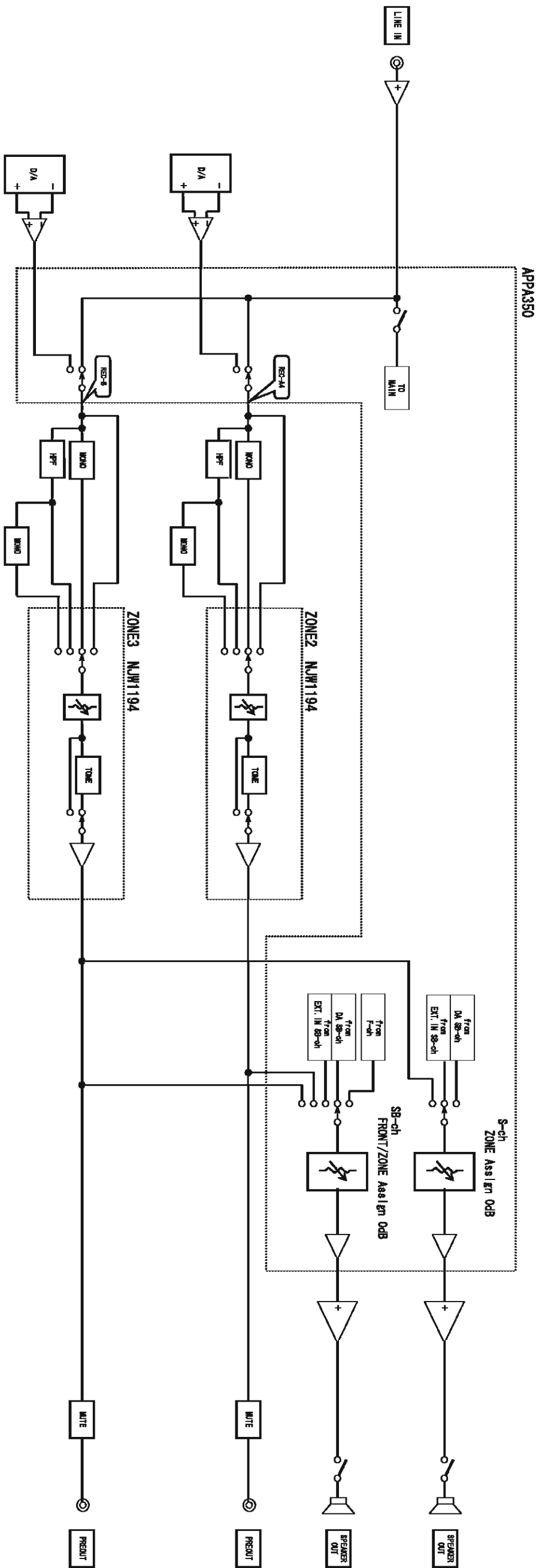
AVR-3310CI
LEVEL DIAGRAM
SURROUND ch



AVR-3310CI
LEVEL DIAGRAM
SURROUND BACK ch



AVR-3310CI
LEVEL DIAGRAM
ZONE 2/3



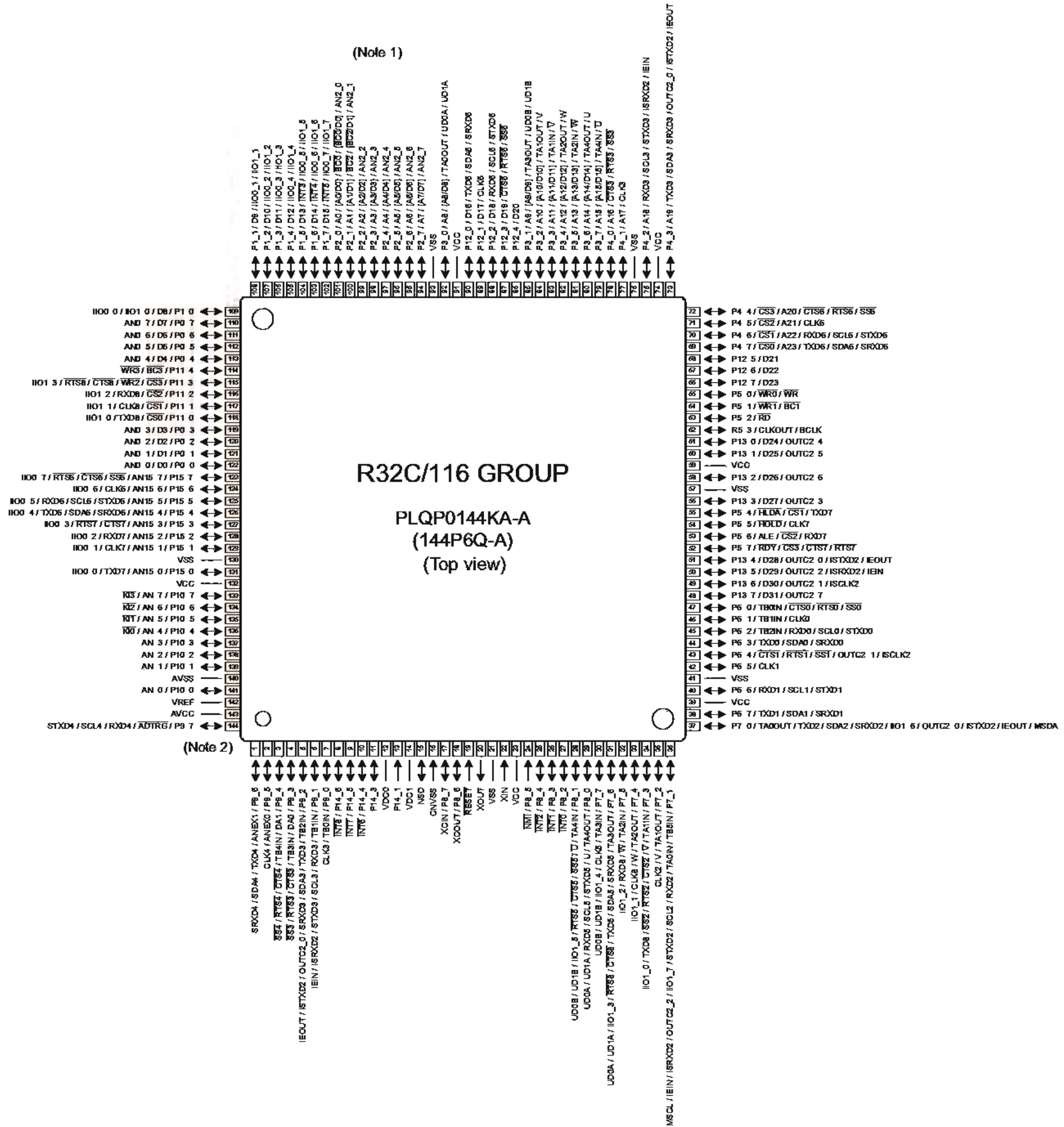
SEMICONDUCTORS

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

1. IC's

Note : Abbreviation ahead of IC No. indicates the name of P.W.B., etc.
DI : DIGITAL P.W.B. MA ; MAIN CPU P.W.B.
AV : A.AUDIO/ VIDEO P.W.B.

R5F64169DFD (MA: IC701)



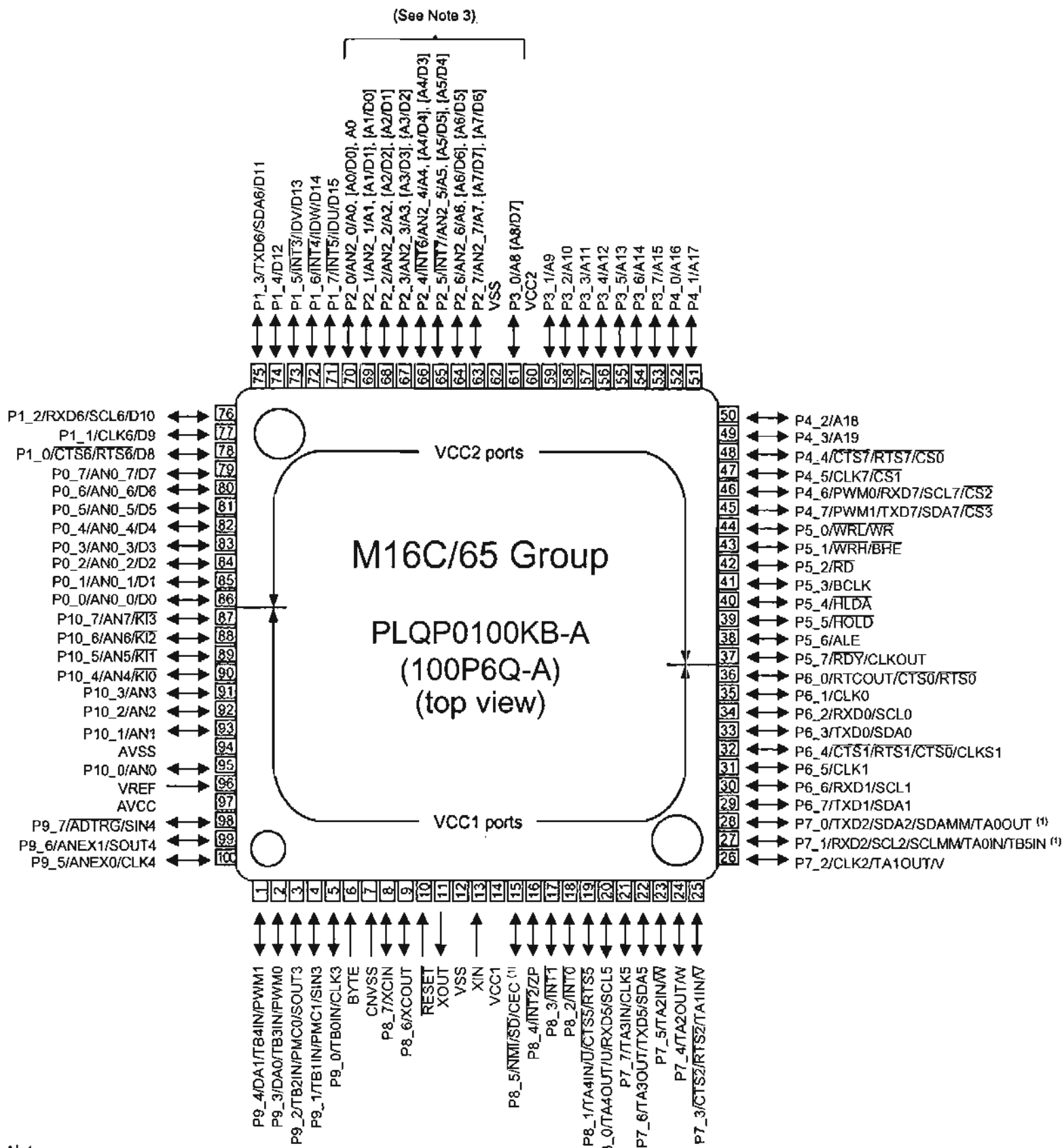
R5F64169DFD Terminal

Pin	Pin Name	Symbol	I/O	Type	Pu&uPup	LvCnv	STBY	stop	Function
1	P96/TXD4	NC	0	C	-	-	O/L	O/L	
2	P95/(CLK4)	NC	0	C	-	-	O/L	O/L	
3	P94/(CTS4)	TU STB	0	C	-	3/5	O/L	O/L	PLL control pin(LC72131 & LC72720)
4	P93/(CTS3)	D.OSD M FO_BUSY	I	-	-	-	O/L	O/L	D.OSD CPU control pin
5	P92/TXD3	HDRADIO MOHI	0	C	-	-	O/L	O/L	HD RADIO control
6	P91/RXD3	HDRADIO MIHO	I	-	-	-	O/L	O/L	HD RADIO control
7	P90/(CLK3)	E POWER	0	C	-	-	O/L	O/L	ETHER POWER control pin
8	P146/INT8	POWER KEY	I	-	M3VPu	-	I	I	POWER KEY(WAIT MODE cancel interrupt port)
9	P145/INT7	(B.DOWN2)	I	-	M3VPu	-	I	I	Not used(Power down detect (Power down : L))
10	P144/INT6	PROTECTION (ASO/DC)	I	-	(3Vin)	-	I	I	PROTECTION detect pin(ASO/DC)
11	P143	CPU POWER	0	C	-	-	O/L	O/L	MAIN CPU POWER control pin (POWER ON: H)(ETHER=ON or CEC ON:STANDBY: H)
12	VDC0	VDC0	-	-	-	-	-	-	Smoothing capacitor connection pin
13	P141(NPUT ONLY)	REQ SOMI	I	-	-	-	I	O/L	MAIN-SUB μ com communication control output pin
14	VDC1	VDC1	-	-	-	-	-	-	Smoothing capacitor connection pin
15	NSD	NSD	-	-	M3VPu	-	-	-	Emulator communication pin
16	CNVss	CNVSS	-	-	Pd	-	-	-	Single-chip / Micro-processor mode switching (Normal single-chip: L, Rewrite boot program star: H input set)
17	P87/(XC N)	E RESET	0	C	Pd	-	O/L	O/L	ETHERNET RESET control pin
18	P86/(XCOUT)	232C POWER/REMOTE PWR	0	C	-	-	O/L	O/L	232C POWER control pin(ON: H)REMOTE POWER
19	RESET	RESET	-	-	M3VPu	-	-	-	Reset input (reset: L)
20	XOUT	X2	-	-	-	-	-	-	Clock output
21	VSS	VSS	-	-	-	-	-	-	GND
22	XIN	X1	-	-	-	-	-	-	Clock input
23	VCC	VCC1	-	-	-	-	-	-	+3V
24	P85/NMI	NMI	I	-	M3V	-	I	I	Not used(Fixed to H)
25	P84/NT2	REMOTE DET	I	-	(3Vin)	-	I	I	ROOM TO ROOM signal detect pin(detected: H)
26	P83/NT1	B.DOWN	I	-	(3Vin)	-	I	I	Power down detect (Power down : L)
27	P82/NT0	REMOCON	I	-	3Vin/Pd	-	I	I	Remote control signal input
28	P81	FL CE1	0	C	-	(3/5)	O/L	O/L	FL display unit control pin
29	P80/RXD5	iPod RXD MIO	I	N	(5Vin)	-	O/L	O/L	IPOD communication control pin
30	P77/CLK5	TU/RDS CLK	0	C	SW5VPu	3/5	O/L	O/L	PLL & RDS control pin (LC72131 & LC72720)
31	P76/TXD5	iPod TXD MOII	0	C	(5Vin)	3/5	O/L	O/L	IPOD communication control pin
32	P75/RXD8	(SIRIUS MI)RDS DOUT	I	N	5Vin	-	O/L	O/L	SIRIUS control pin/RDS data inputpin(LC72720)
33	P74/CLK8	EXP DATA	0	C	-	(3/5)	O/L	O/L	Extended EXP control pin
34	P73/TXD8	(SIRIUS MO)RDS CE	0	C	SW5VPu	3/5	O/L	O/L	SIRIUS control pin/RDS control pin(LC72720)
35	P72/CLK2	D.OSD CPU CLK	0	C	-	-	O/L	O/L	D.OSD CPU control pin
36	P71/RXD2/ (MSCL)	D.OSD CPU RX	I	-	-	-	O/L	O/L	D.OSD CPU control pin
37	P70/TXD2/ (MSDA)	D.OSD CPU TX	0	C	-	-	O/L	O/L	D.OSD CPU control pin
38	P67/TXD1	TXD MO232I	0	C	-	(3/5)	O/L	O/L	Data transfer pin to outside (AMX)MITSUBISHI writer rewrite
39	VCC	VCC1	-	-	-	-	-	-	+3V
40	P66/RXD1	RXD MI232O	I	-	-	-	I	O/L	Date receive pin from outside(AMX)MITSUBISHI writer rewrite
41	VSS	VSS	-	-	-	-	-	-	GND
42	P65/CLK1/ SCLK(L)	EXP CLK	0	C	-	-	O/L	O/L	Extended EXP control pin
43	P64/BUSY	TU DOUT	I	N	(5Vin)	-	O/L	O/L	TUNER PLL data inputpin (LC72131)
44	P63/TXD0	E_TXDMOEI	0	C	-	-	O/L	O/L	ETHERNET comm. control pin
45	P62/RXD0	E_RXDMIEO	I	-	-	-	I	O/L	ETHERNET comm. control pin
46	P61/CLK0	FL CLK	0	C	-	-	O/L	O/L	FL display unit control pin
47	P60/CTS0	FL DATA	0	C	-	-	O/L	O/L	FL display unit control pin
48	P137	ACK S MO	0	C	-	-	O/L	O/L	MAIN-SUB μ com comm. control output pin
49	P136/ISCLK2	CLKMO	0	C	-	-	O/L	O/L	MAIN-SUB μ com comm. control output pin
50	P135/ISRXD2	SOMI	I	-	-	-	I	O/L	MAIN-SUB μ com comm. control output pin
51	P134/ISTXD2	MOSI	0	C	-	-	O/L	O/L	MAIN-SUB μ com comm. control output pin
52	P57/(RDY)	NC	0	C	M3VPu	-	I	I	
53	P56/(ALE)	NC	0	C	-	-	O/L	O/L	
54	P55/(HOLD)/ EPM	FRASH EPM	I	C	M3VPu	-	I	I	Rewrite boot program start : L input set
55	P54/(HLDA)	NC	0	C	-	-	O/L	O/L	
56	P133	MUTE POWER	0	C	-	-	O/L	O/L	MUTE +B control pin
57	VSS	VSS	-	-	-	-	-	-	GND
58	P132	D.OSD MOFI_BUSY	0	C	-	-	O/L	O/L	D.OSD CPU control pin

Pin	Pin Name	Symbol	I/O	Type	PuUp	LvCnv	STBY	stop	Function
59	VCC	VCC2	-	-	-	-	-	-	+3V
60	P131	NC	0	C	-	-	0/L	0/L	
61	P130	NC	0	C	-	-	0/L	0/L	
62	P53/(BCLK)	NC	0	C	-	-	0/L	0/L	
63	P52/(RD)	NC	0	C	-	-	0/L	0/L	
64	P51/(WR1)/ (BC1)	NC	0	C	-	-	0/L	0/L	
65	P50/(WR0)/ (WR)/CE	FRASH CE	I	C	Pd	-	0/L	0/L	Rewrite boot program start : H input set
66	P127	VSEL A	I	-	SW3VPu	-	I	I	Master Volume rotation detect input (Rotary encoder)
67	P126	VSEL B	I	-	SW3VPu	-	I	I	Master Volume rotation detect input (Rotary encoder)
68	P125	PROTECTION (THERMAL)	I	-	-	-	0/L	0/L	PROTECTION detect pin(THERMAL)
69	P47/(CS0)/(A23)	NC	0	C	-	-	0/L	0/L	
70	P46/(CS1)/ (A22)	NC	0	C	-	-	0/L	0/L	
71	P45/(CS2)/ (A21)	DYNAMIC EQ LED RED	0	C	-	-	0/L	0/L	Dynamic EQ RED LED control pin
72	P44/(CS3)/ (A20)	DYNAMIC EQ LED GRN	0	C	-	-	0/L	0/L	Dynamic EQ RED LED control pin
73	P43/(A19)	PRE SBR MUTE	0	C	-	-	0/L	0/L	PRE OUT MUTE control
74	VCC	VCC	-	-	-	-	-	-	+3V
75	P42/(A18)	THERMAL ON	I	-	SW3VPu	-	0/L	0/L	Thermal detect pin(HIGH B RL control)
76	VSS	VSS	-	-	-	-	-	-	GND
77	P41/(A17)	THERMAL OFF	I	-	SW3VPu	-	0/L	0/L	Thermal detect pin(HIGH B RL control)
78	P40/(A16)	FAN DET	I	-	-	-	0/L	0/L	
79	P37/(A15)	iPod DOCK DET	I	-	SW3VPu	-	0/L	0/L	MINI JACK connected detection pin for DOCK connection (connected:H)
80	P36/(A14)	NC	0	C	-	-	0/L	0/L	
81	P35/(A13)	NC	0	C	-	-	0/L	0/L	
82	P34/(A12)	TUNED	I	-	SW3VPu	-	0/L	0/L	TUNER tuned detect (Detected : L)
83	P33/(A11)	232C CONTROL	0	C	-	-	0/L	0/L	232C control pin
84	P32/(A10)	PRE Z3 MUTE	0	C	-	-	0/L	0/L	Z3 PRE OUT MUTE control
85	P31/(A9)	PRE Z2 MUTE	0	C	-	-	0/L	0/L	Z2 PRE OUT MUTE control
86	P124	EXP STB	0	C	-	-	0/L	0/L	Extended EXP control pin
87	P123	EXP OE	0	C	Pd	-	0/L	0/L	Extended EXP control pin
88	P122/(RXD6)	EEPROM SCL	I/O	C	-	-	0/L	I	EEPROM control pin
89	P121/(CLK6)	EEPROM SDA	I/O	C	-	-	0/L	I	EEPROM control pin
90	P120/(TXD6)	TU/RDS D N	0	C	SW5VPu	-	0/L	0/L	PLL & RDS control pin (LC72131 & LC72720)
91	VCC	VCC	-	-	-	-	-	-	+3V
92	P30/(A8)	PRE SWMUTE	0	C	-	-	0/L	0/L	PRE OUT MUTE control
93	VSS	VSS	-	-	-	-	-	-	GND
94	P27/(A7)	PRE SBL MUTE	0	C	-	-	0/L	0/L	PRE OUT MUTE control
95	P26/(A6)	PRE S MUTE	0	C	-	-	0/L	0/L	PRE OUT MUTE control
96	P25/(A5)	PRE C MUTE	0	C	-	-	0/L	0/L	PRE OUT MUTE control
97	P24/(A4)	PRE F MUTE	0	C	-	-	0/L	0/L	PRE OUT MUTE control
98	P23/(A3)	SCPU POWER	0	C	-	-	0/L	0/L	SUB CPU POWER ON/OFF switching (H : ON)
99	P22/(A2)	D5V POWER	0	C	-	-	0/L	0/L	DIGITAL 5V power control pin
100	P21/(A1)	STEREO	I	-	SW3VPu	-	0/L	0/L	TUNER FM stereo receive : L
101	P20/(A0)	SIRIUS RESET/RDS RESET	0	C	-	-	0/L	0/L	SIRIUS control pin/RDS control pin(LC72720)
102	P17/(D15)	FL RST	0	C	-	-	0/L	0/L	FL display unit control pin
103	P16/(D14)	MAIN POWER	0	C	-	-	0/L	0/L	ETHERNET control pin
104	P15/(D13)	TMUTE	0	C	-	-	0/L	0/L	TUNER MUTE control (MUTE:L)
105	P14/(D12)	HD POWER	0	C	-	-	0/L	0/L	HDRADIO POWER control pin
106	P13/(D11)	RST SUB	0	C	-	-	0/L	0/L	SUB- μ com reset output
107	P12/(D10)	D.OSD CPU RST	0	C	-	-	0/L	0/L	D.OSD CPU control pin
108	P11/(D9)	NC	0	C	-	-	0/L	0/L	
109	P10/(D8)	NC	0	C	-	-	0/L	0/L	
110	P07/(D7)	TRIGGER 2	0	C	-	-	0/L	0/L	TRIGGER OUT control pin
111	P06/(D6)	TRIGGER 1	0	C	-	-	0/L	0/L	TRIGGER OUT control pin
112	P05/(D5)	NC	0	C	-	-	0/L	0/L	
113	P04/(D4)	HDRADIO RESET	0	C	-	-	0/L	0/L	HDRADIO control pin
114	P114	ISEL A	I	-	SW3VPu	-	I	I	Input Selector rotation detect input (Rotary encoder)
115	P113	ISEL B	I	-	SW3VPu	-	I	I	Input Selector rotation detect input (Rotary encoder)
116	P112/(RXD8)	VOL STB1/VOL STB2	0	C	-	(3/5)	0/L	0/L	FUNCTION/VOLUME control(NJW1199)(NJW1194)
117	P111/	VOL CLK	0	C	-	(3/5)	0/L	0/L	FUNCTION/VOLUME control(NJW1199)(NJW1194)
118	P110/(TXD8)	VOL DATA	0	C	-	(3/5)	0/L	0/L	FUNCTION/VOLUME control(NJW1199)(NJW1194)
119	P03/(D3)	HD AUDIO LED	0	C	-	-	0/L	0/L	HD AUDIO LED control pin
120	P02/(D2)	GRNLED	0	C	-	-	0/L	0/L	POWER/STANDBY LED control pin(ON:H)

Pin	Pin Name	Symbol	I/O	Type	Pu/Up	LvCnv	STBY	stop	Function
121	P01/(D1)	A+B LIMIT	0	C	-	-	0/L	0/L	A+B LIMIT control (SURROUND SPEAKER A+B:H)
122	P00/(D0)	LIMIT	0	C	-	-	0/L	0/L	LIMIT control(7ch ST or EXT.IN: H)or(LIMIT DET=45sec L: H)
123	P157	(iPod Det_HD)	I	-	-	-	0/L	0/L	Not used(iPod Det from HD Radio)
124	P156	E SPI REQ	I	-	Pd	-	0/L	0/L	ETHERNET comm. control pin
125	P155/RXD6	NC	0	C	-	-	0/L	0/L	
126	P154/TXD6	NC	0	C	-	-	0/L	0/L	
127	P153	E SPI CS	0	C	-	-	0/L	0/L	ETHERNET comm. control pin
128	P152/RXD7	E SPI MIO	I	-	Pd	-	0/L	0/L	ETHERNET comm. control pin
129	P151/CLK7	E SPI CLK	0	C	Pd	-	0/L	0/L	ETHERNET comm. control pin
130	VSS	VSS	-	-	-	-	-	-	GND
131	P150/TXD7	E SPI MIOEI	0	C	Pd	-	0/L	0/L	ETHERNET comm. control pin
132	VCC	VCC	-	-	-	-	-	-	+3V
133	P107/(AN7)/ (K13)	D.OSD WRITE	0	C	-	-	0/L	0/L	D.OSD rewrite control pin
134	P106/AN6/K12	KEY3	I	-	M3VPu	-	I	I	Button input3
135	P105/AN5/K11	KEY2	I	-	M3VPu	-	I	I	Button input2
136	P104/AN4/K10	KEY1	I	-	M3VPu	-	I	I	Button input1
137	P103/AN3	SUB UPDATE	0	C	-	-	0/L	0/L	SUB UPDATE mode control(DPMS/DENON WRITER) (MAN: L/ SIB: H)
138	P102/AN2	MIC DET/H/P DET/X2 PROT/LIMIT	I	-	SW3VPu	-	0/L	0/L	MIC detect pin/Headphone/voltage-doubler detect pin/LIMIT judge signal detect input (A/D detect)
139	P101/(AN1)	REDLED	0	C	-	-	0/H	0/L	POWER/STANDBY LED control pin(ON: H)
140	AVSS	AVSS	-	-	-	-	-	-	Analog GND
141	P100/AN0	MODE	I	-	M3VPu	-	I	I	Destination switching input
142	VREF	VREF	-	-	-	-	-	-	Ref. power supply input +3V
143	AVCC	AVCC	-	-	-	-	-	-	Analog Power supply +3V
144	P97/RXD4	NC	0	C	-	-	0/L	0/L	

R5F3650TNFB (DI: IC901)



- 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.

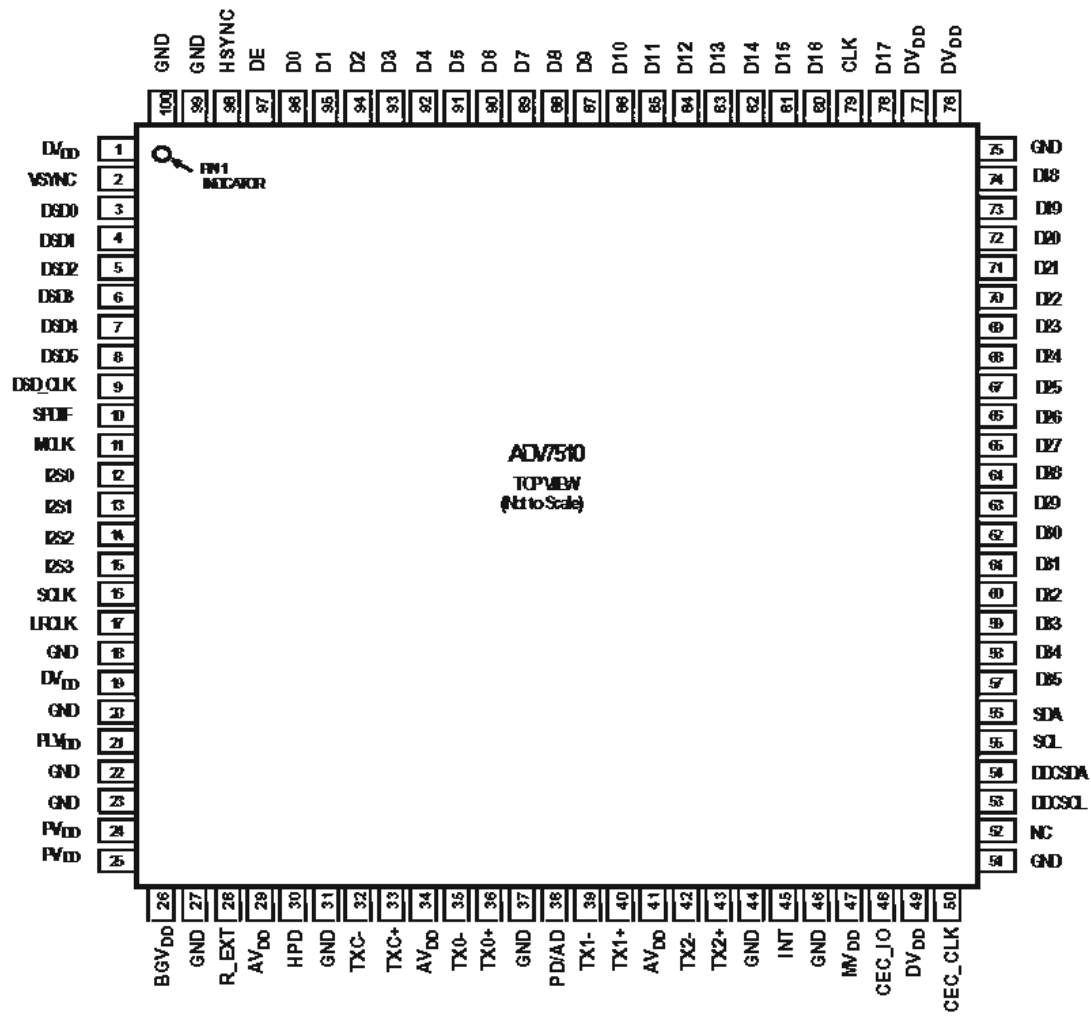
R5F3650TNFB Terminal Function

Pin	Pin Name	Symbol	I/O	Type	Det	Op (Int.)	Pu/Pd (Ext.)	Res	PURE D	CEC STBY	P.OFF	Function
1	P94	VPLD DATA	O	C	-	-	-	Z	O/L	O/L	Z	VIDEO PLD control pin
2	P93	DIR CE	O	C	-	-	-	Z	O/L	O/L	Z	D R control pin (LC89058W-VF4A)
3	P92/SOUT3	DIR DIN	O	C	-	-	-	Z	O/L	O/L	Z	D R control pin (LC89058W-VF4A)
4	P91/SIN3	DIR DOUT	I	-	Lv	-	Eu	Z	-	-	Z	D R control pin (LC89058W-VF4A)
5	P90/CLK3	DIR CLK	O	C	-	-	-	Z	O/L	O/L	Z	D R control pin (LC89058W-VF4A)
6	BYTE	BYTE	-	-	-	-	-	-	-	-	-	GND(Ext. data bus bit width switching, 16bit : L)
7	CNVCS	CNVSS	-	-	-	-	Ed47k	-	-	-	-	Single-chip / Micro-processor mode switching (Normal single-chip : L, Rewrite boot program start : H input set)
8	P87	OSR2	O	C	-	-	Eu	Z	O/H	O/L	Z	A/D control pin
9	P86	DIR CE4	O	C	-	-	-	Z	O/L	O/L	Z	D R control pin (LC89058W-VF4A)
10	RESET	SUBRESET	I	-	Lv	-	Eu	L	-	-	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/NMI/(CEC)	NMI/(CEC_IN)	I	-	-	-	-	-	-	-	-	Fixed to H
16	P84/NT2	CEC_N	I	-	E↓ & L	-	Eu	Z	-	-	Z	CEC-D signal input pin
17	P83/INT1	ACK S MO	I	-	E↓ & L	-	Ed	Z	-	-	Z	MAIN-SUB μcom comm. control input pin

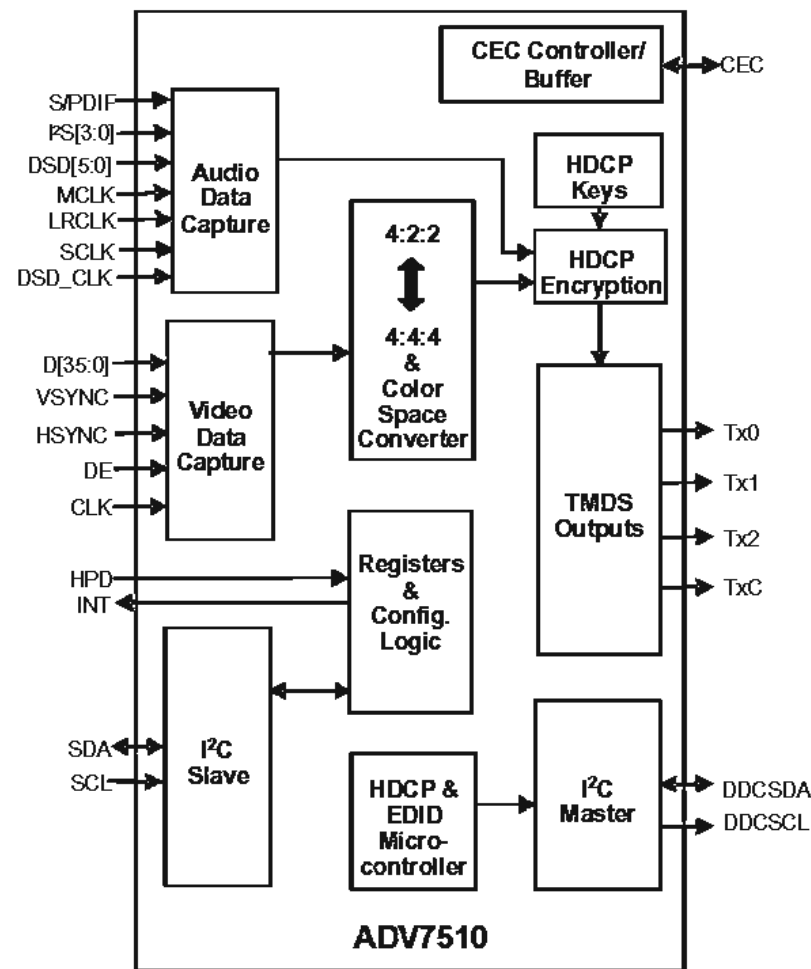
Pin	Pin Name	Symbol	I/O	Type	Det	Op (Int.)	Pu/Pd (Ext.)	Res	PURED	CEC STBY	P.OFF	Function
18	P82/INT0	SUB BDOWN	I	-	E↓ &L		Eu	Z	-	-	Z	Power down detect (Power down: L)
19	P81	IP RST	O	C	-	-	-	Z	O/H	O/H	Z	IP CONV(ABT2010) reset
20	P80/RXD5)	VZ2INH	O	C	-	-	-	Z	O/L	O/L	Z	Video input switching(Z2 INPUT NH selection)
21	P77/(CLK5)	/TDO	I	-	-	-	-	Z	O/L	O/L	Z	/PLDrewrite control (JTAG)
22	P76/(TXD5)	A PLD CS /TMS/ "DM"	O	C	-	-	Eu	Z	O/L	-	O/L	A PLD control pin /PLD rewrite (JTAG)/DENON WRITER/For MITSUBISHI rewrite distinction (DW="L")
23	P75	A PLD DATA/TDI	O	C	-	-	-	Z	O/L	O/L	Z	A PLD control pin /PLDrewrite control (JTAG)
24	P74	A PLD CLK/ MTCK	O	C	-	-	-	Z	O/L	O/L	Z	A PLD control pin /PLDrewrite control (JTAG)
25	P73/CTS2	ANALOG VIDEO POWER	O	C	-	-	-	Z	O/L	O/L	Z	VIDEO power ON/OFF control (H: ON)
26	P72/CLK2	DIGITAL POWER	O	C	-	-	Ed	Z	Z	-	Z	DIGITAL power ON/OFF control (H: ON)
27	P71/RXD2/ SCLMM	HSCL(400k)	I/O	N	-	-	Eu	Z	O/L	O/L	O/L	VIDEO I2C- IP CONV(ABT2010)/ HDMI_RECEMER(ADV7840)/HDMI TRANSMITTER1 (ADV7510)
28	P70/TXD2/ SDAMM	HSDA(400k)	I/O	N	-	-	Eu	Z	O/L	O/L	O/L	VIDEO I2C- IP CONV(ABT2010)/ HDMI_RECEMER(ADV7840)/HDMI TRANSMITTER1 (ADV7510)
29	P67/TXD1	TXD	O	C	-	-	Eu	Z	-	-	Z	Data transfer output to outside
30	P66/RXD1	RXD	I	-	Lv	-	Eu	Z	-	-	Z	Data receive input from outside
31	P65/CLK1	FGAN	O	C	-	-	Ed	Z	-	O/L	Z	FGAIN control pin
32	P64/CTS1	CFSEL0	I	-	Lv	-	-	Z	-	-	Z	COMPONENT HD OUT Filter switching
33	P63/TXD0	SOMI	O	C	-	-	-	Z	-	-	Z	MAIN-SUB μ com comm. control pin
34	P62/RXD0	SIMO	I	-	-	-	Ed	Z	-	-	Z	MAIN-SUB μ com comm. control pin
35	P61/CLK0	CLK SIMO	I	-	-	-	Ed	Z	-	-	Z	MAIN-SUB μ com comm. control pin
36	P60/CTS0	REQ SOMI	O	C	-	-	Ed	Z	-	-	Z	MAIN-SUB μ com comm. control pin
37	P57	1TMSD SWRST	O	C	-	-	-	Z	O/H	-	Z	HDMI SWITCHER ADV3002 Reset pin
38	P56	HPD2	O	C	-	-	-	Z	O/L	-	Z	HD DET control pin
39	P55/EPM	ADC RST/EPM	O	C	-	-	Ed	Z	-	-	Z	AD(PCM1804) control pin /Rewrite boot start : L input set
40	P54	CEC_OUT	O	C	-	-	-	Z	O/L	-	Z	CEC-D signal output pin
41	P53	MONI DIS	O	C	-	-	-	Z	O/L	O/L	Z	COMPONENT MONITOR OUT output control pin
42	P52	DVR INH	O	C	-	-	-	Z	O/L	O/L	Z	DVR OUT output INH control(LMUTE)
43	P51	VCR INH	O	C	-	-	-	Z	O/L	O/L	Z	VCR OUT output INH control(LMUTE)
44	P50/CE	/CE	O	-	-	-	Eu	Z	O/L	-	Z	pin/ rewrite boot program start : H input set
45	P47/(TXD7)/ SDA7	VSDA	I/O	C	-	-	Eu	Z	O/L	-	O/L	ENCODER ADV7340 I2C/COMPONENT SELECT IC(NJW1321FP1)
46	P46/(RXD7)/ SCL7	VSCL	I/O	C	-	-	Eu	Z	O/L	-	O/L	ENCODER ADV7340 I2C/COMPONENT SELECT IC(NJW1321FP1)
47	P45/(CLK7)	HPD1	O	C	-	-	Ed	Z	O/L	-	Z	HD DET control pin
48	P44	Z2 MONIA	O	C	-	-	Ed	Z	O/L	O/L	Z	ZONE2 MONITOR OUT select
49	P43	HDMI ASEL	O	C	-	-	Ed	Z	O/L	O/L	Z	HDMI AUDIO control (H: FDSP route, L: FHDMI Rx \hat{A} Tx through)
50	P42	Z2SSIG.DET	I	-	Lv	-	Ed	Z	I	I	Z	ZONE2 S signal detect input (Connected: H)
51	P41	CEC PWR	O	C	-	-	Ed	Z	O/L	O/H	Z	H:CEC STANDBY Power ON
52	P40	Z1 SMONIA	O	C	-	-	-	Z	O/L	O/L	Z	Z1 S MONITOR select
53	P37	HDMIR_RST	O	C	-	-	Eu	Z	O/H	-	Z	HDMI RECEMER(ADV7840) reset
54	P36	1TX RST	O	C	-	-	Eu	Z	O/H	-	Z	HDMI TRANSMITTER1 (ADV7510) reset
55	P35	Z1 SMONIB	O	C	-	-	Ed	Z	O/L	O/L	Z	Z1 S MONITOR select
56	P34	Z1 SSIGDET	I	-	-	-	Eu	Z	-	-	Z	S signal detect input (Connected: H)
57	P33	VZ1INH	O	C	-	-	Ed	Z	O/L	-	Z	Video input switching(Z1 INPUT NH select)
58	P32	DAC MDI	O	C	-	-	-	Z	O/L	O/L	Z	DAC control pin (AK4358)
59	P31	DAC MC	O	C	-	-	-	Z	O/L	O/L	Z	DAC control pin (AK4358)
60	VCC	VCC	-	-	-	-	-	-	-	-	-	+3.3V
61	P30	DAC MS	O	C	-	-	-	Z	O/L	O/L	Z	DAC control pin (AK4358)
62	VSS	VSS	-	-	-	-	-	-	-	-	-	GND
63	P27	DAC RST	O	C	-	-	-	Z	O/H	O/L	Z	DAC control pin (AK4358)
64	P26	DIG VIDEO POWER	O	C	-	-	-	Z	O/L	MODE1=O/H MODE2=O/L	Z	DIGITAL VIDEO power control pin
65	P25/NT7	OSD CPU BUSYSI	I	-	Lv	-	-	Z	-	-	Z	OSD CPU control pin
66	P24/NT6	1TX NT	I	-	Lv	-	-	Z	-	-	Z	HDMI OUT1 signal detect input (HDMI TRANS1 ADV7510)
67	P23	NC	O	C	-	-	-	Z	O/L	O/L	Z	NC
68	P22	VEXP STB	O	C	-	-	-	Z	O/L	O/L	Z	VIDEO expander control pin output(BU4094BCFV)
69	P21	VEXP OE	O	C	-	-	Ed	Z	O/L	O/L	Z	VIDEO expander control pin output(BU4094BCFV)
70	P20	VEXP CLK	O	C	-	-	-	Z	O/L	O/L	Z	VIDEO expander control CLK output(BU4094BCFV)
71	P17/NT5	ADVINT1	I	-	E↓ &L	-	-	Z	-	-	Z	HDMI RECEMER(ADV7840)NT1 output
72	P16/NT4	ADVINT2	I	-	E↓ &L	-	-	Z	-	-	Z	HDMI RECEMER(ADV7840)NT2 output

Pin	Pin Name	Symbol	I/O	Type	Det	Op (Int.)	Pu/Pd (Ext.)	Res	PURED	CEC STBY	P.OFF	Function
73	P15/NT3	ADVINT3	I	-	E↓ &L	-	-	Z	-	-	Z	HDMI RECEIVER(ADV7840)NT3 output
74	P14	Z2 MON B	O	C	-	-	Eu	Z	O/L	O/L	Z	ZONE2 MONITOR OUT select
75	P13/TXD6	DSP MOSI	O	C	-	-	Eu	Z	O/L	O/L	Z	DSP control pin (ADSP-21367-333)
76	P12/RXD6	DSP MISO	I	-	-	-	Eu	Z	-	-	Z	DSP control pin (ADSP-21367-333)
77	P11/CLK6	DSPICLK	O	C	-	-	Eu	Z	O/L	O/L	Z	DSP control pin (ADSP-21367-333)
78	P10	Z1V SIG.DET	I	-	Lv	-	Eu	Z	-	-	Z	VIDEO IN signal detect input (Detected : H)
79	P07	PLD WRITE	O	C	-	-	-	Z	O/L	O/L	Z	PLD JTAGLINE ON/OFF control
80	P06	VPLD CE	O	C	-	-	Ed	Z	O/L	MODE1=O/H MODE2=O/L	Z	VIDEO PLD control pin
81	P05	HPD3	O	C	-	-	-	Z	O/L	-	Z	HD DET control pin
82	P04	HPD4	O	C	-	-	-	Z	O/L	-	Z	HD DET control pin
83	P03	HPD5	O	C	-	-	-	Z	O/L	-	Z	HD DET control pin
84	P02	DIR RST3	I	-	Lv	-	-	Z	-	-	Z	D R control pin (LC89058W-VF4A)
85	P01	DIR RST2	O	C	-	-	-	Z	O/L	O/L	O/L	D R control pin (LC89058W-VF4A)
86	P00	DIR RST1	O	C	-	-	-	Z	O/L	O/L	O/L	D R control pin (LC89058W-VF4A)
87	P107/(AN7)	DSP RST	O	C	-	-	-	Z	O/L	O/L	Z	DSP2(ADSP-21367-333) reset output pin(Reset:L)
88	P106/(AN6)		O	C	-	-	-	Z	O/L	O/L	Z	
89	P105/(AN5)	DSP ROMRST	O	C	-	-	Ed	Z	O/L	O/L	Z	DSP memory reset(reset: L)
90	P104/(AN4)	COMPS DET	I	-	Lv	-	Eu	Z	-	-	Z	COMPONENT N signal detect input
91	P103/(AN3)	DSP FLAG0	I	-	Lv	-	Ed	Z	-	-	Z	DSP control pin (ADSP-21367-333)
92	P102/(AN2)	DSPICCS	O	C	-	-	Eu	Z	O/L	O/L	Z	DSP control pin (ADSP-21367-333)
93	P101/(AN1)		O	C	-	-	Eu	Z	O/L	O/L	Z	
94	AVSS	AVSS	-	-	-	-	-	-	-	-	-	AD GND
95	P100/(AN0)	VPLD CLK	O	C	-	-	-	Z	O/L	O/L	Z	VIDEO PLD control pin
96	VREF	VREF	-	-	-	-	-	-	-	-	-	AD ref. +3.3V
97	AVCC	AVCC	-	-	-	-	-	-	-	-	-	AD +3.3V
98	P97/(SIN4)		O	C	-	-	-	Z	O/L	-	Z	
99	P96/(SOUT4)	OSD CPU BUSYSO	O	C	-	-	-	Z	O/L	O/L	Z	OSD CPU control pin
100	P95/(CLK4)	VEXP DIN	O	C	-	-	-	Z	O/L	O/L	Z	VIDEO expander control DATA output(BU4094BCFV)

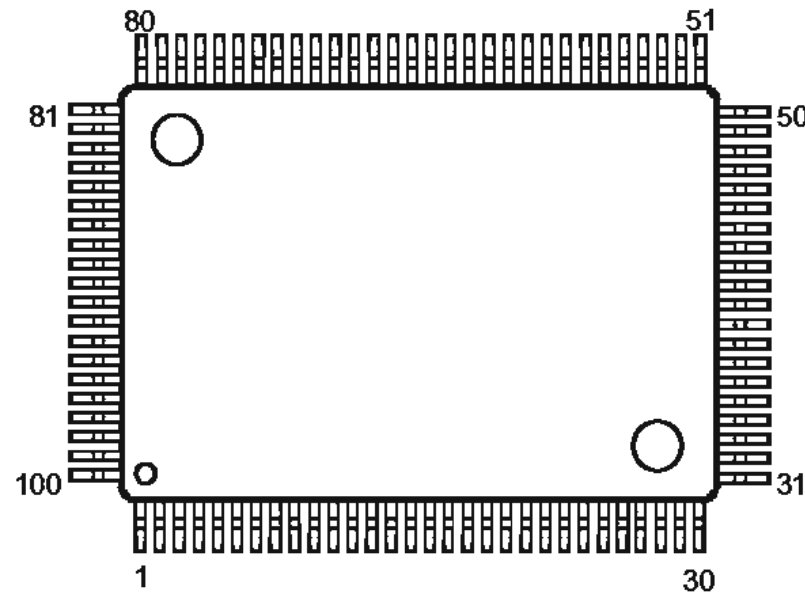
ADV7510BSTZ-225 (DI: IC701)



ADV7510BSTZ-225 Terminal Function

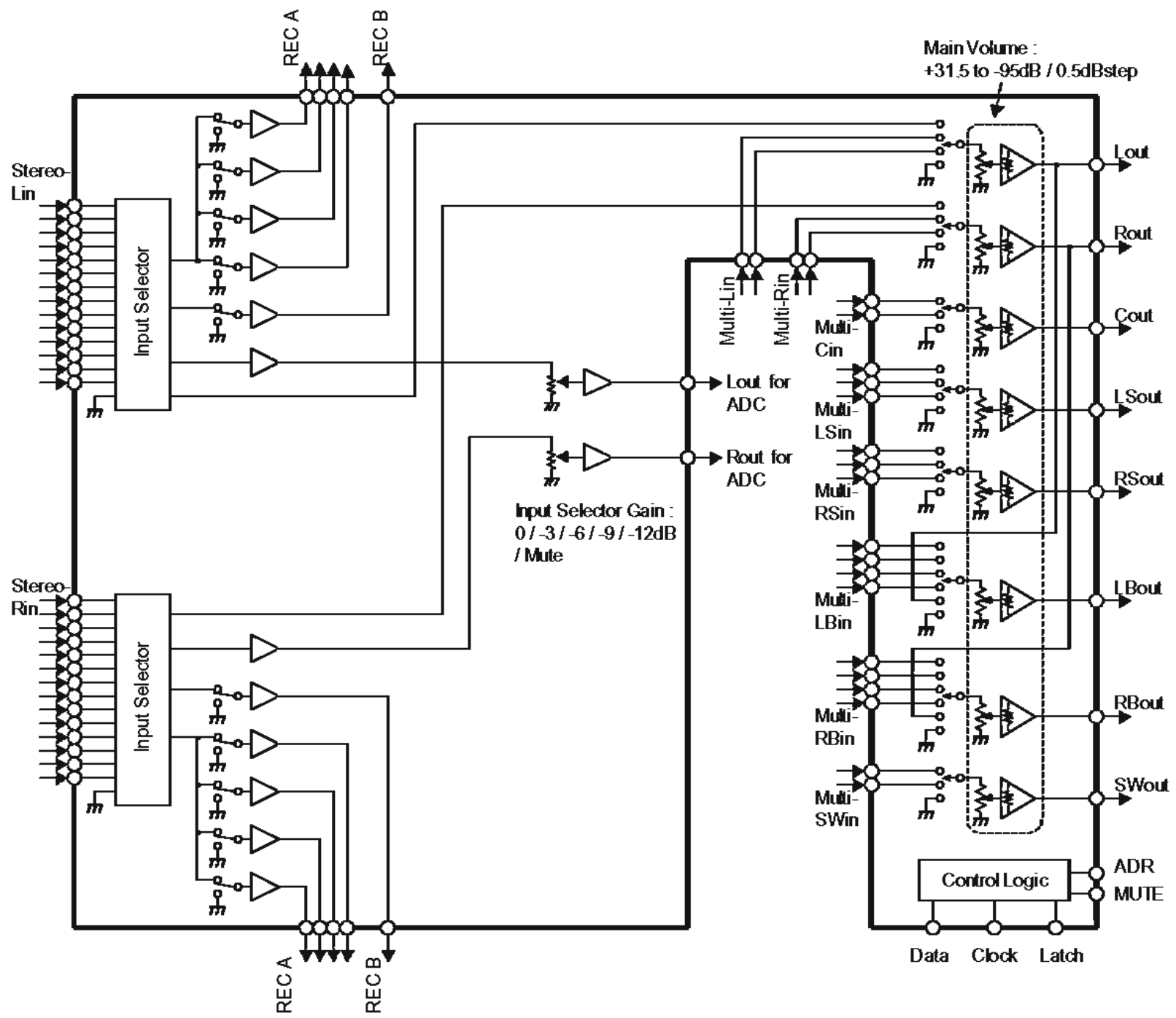


APPA350 (NJW1299) (AV : IC616)

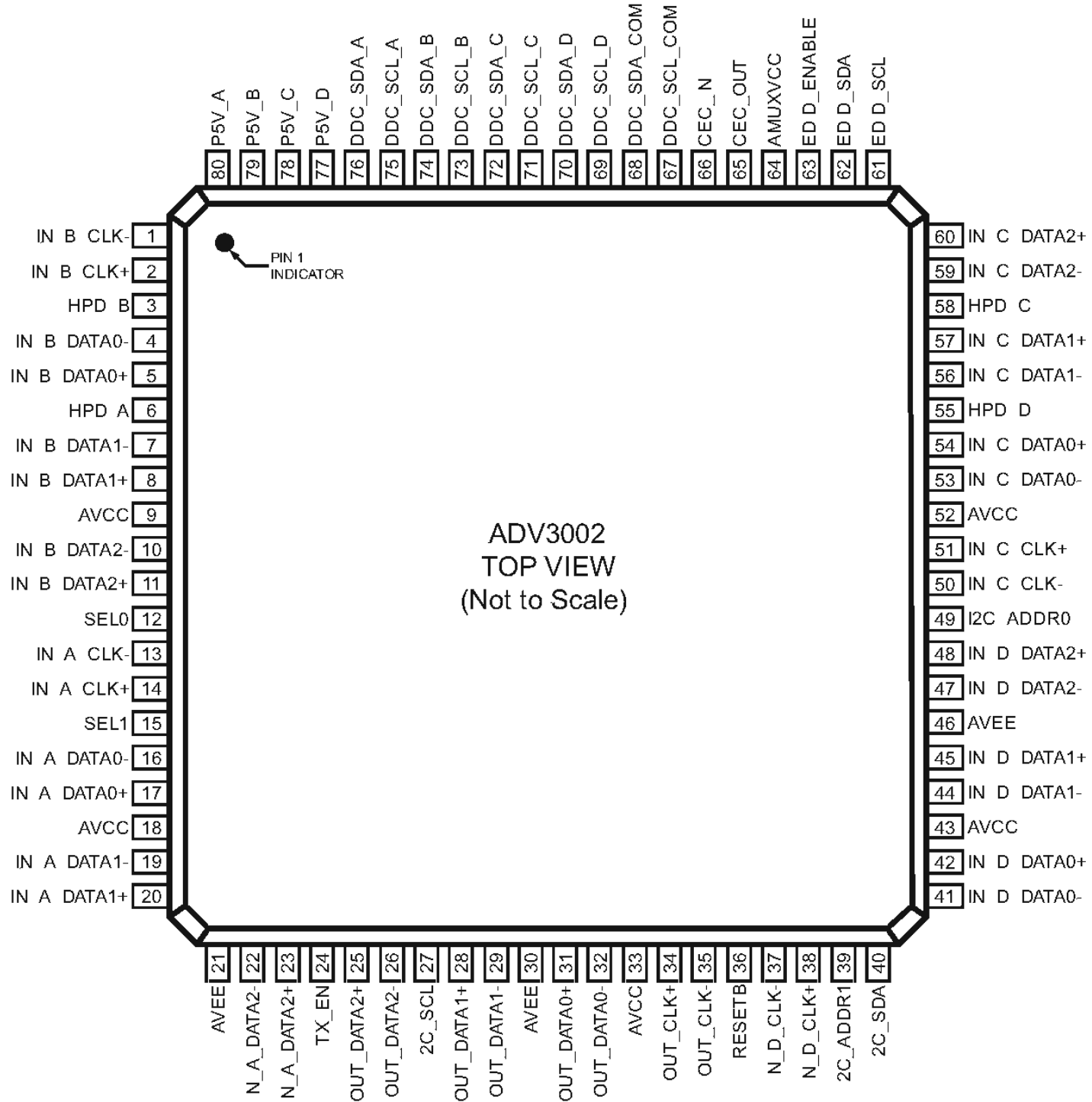


No.	PIN NAME	Function	No.	PIN NAME	Function
1	ROUT	Rch output	51	R10IN	Input selector Rch Input 10
2	COUT	Cch output	52	L13IN	Input selector Lch Input 13
3	LS OUT	LSch output	53	L11IN	Input selector Lch Input 11
4	RS OUT	RSch output	54	R13IN	Input selector Rch Input 13
5	LB OUT	LBch output	55	R11IN	Input selector Rch Input 11
6	RB OUT	RBch output	56	GND	GND terminal
7	SWOUT	SWch output	57	REC_B1R	Input selector Rch REC output B1
8	N.C.	Non	58	REC_B1L	Input selector Lch REC output B1
9	N.C.	Non	59	REC_A4R	Input selector Rch REC output A4
10	N.C.	Non	60	REC_A4L	Input selector Lch REC output A4
11	N.C.	Non	61	REC_A3R	Input selector Rch REC output A3
12	V+	+ Power-supply voltage	62	REC_A3L	Input selector Lch REC output A3
13	L1IN	Input selector Lch Input 1	63	REC_A2R	Input selector Rch REC output A2
14	V-	- Power-supply voltage	64	REC_A2L	Input selector Lch REC output A2
15	R1IN	Input selector Rch Input 1	65	REC_A1R	Input selector Rch REC output A1
16	ADR	Terminal for address selection	66	REC_A1L	Input selector Lch REC output A1
17	L2IN	Input selector Lch Input 2	67	VDDOUT	Logic power supply output terminal
18	DCCAP_L	ICapacitor for volume control switching noise removal Lch	68	DATA	IC control data input
19	R2IN	Input selector Rch Input 2	69	CLOCK	IC control clock input
20	DCCAP_R	ICapacitor for volume control switching noise removal Rch	70	LATCH	IC control latch input
21	L3IN	Input selector Lch Input 3	71	MUTE	External mute control
22	DCCAP_C	ICapacitor for volume control switching noise removal Cch	72	ROUT_ADC	Rch output for ADC
23	R3IN	Input selector Rch Input 3	73	LOUT_ADC	Lch output for ADC
24	DCCAP_LS	ICapacitor for volume control switching noise removal LSch	74	GND	GND terminal
25	L4IN	Input selector Lch Input 4	75	LBDIN	Multichannel LBch input D
26	DCCAP_RS	ICapacitor for volume control switching noise removal RSch	76	RBDIN	Multichannel RBch input D
27	R4IN	Input selector Rch Input 4	77	LSCIN	Multichannel LSch input C
28	DCCAP_LB	ICapacitor for volume control switching noise removal LBch	78	RSCIN	Multichannel RSch input C
29	L5IN	Input selector Lch Input 5	79	LBCIN	Multichannel LBch input C
30	DCCAP_RB	ICapacitor for volume control switching noise removal RBch	80	RBCIN	Multichannel RBch input C
31	R5IN	Input selector Rch Input 5	81	GND	GND terminal
32	DCCAP_SW	ICapacitor for volume control switching noise removal SWch	82	LAIN	Multichannel Lch input A
33	L6IN	Input selector Lch Input 6	83	RAIN	Multichannel Rch input A
34	L14 N	Input selector Lch Input 14	84	CAIN	Multichannel Cch input A
35	R6IN	Input selector Rch Input 6	85	LSAIN	Multichannel LSch input A
36	R14 N	Input selector Rch Input 14	86	RSAIN	Multichannel RSch input A
37	L7IN	Input selector Lch Input 7	87	LBAIN	Multichannel LBch input A
38	GND	GND terminal	88	RBAIN	Multichannel RBch input A
39	R7IN	Input selector Rch Input 7	89	SWAIN	Multichannel SWch input A
40	GND	GND terminal	90	GND	GND terminal
41	L8IN	Input selector Lch Input 8	91	LBIN	Multichannel Lch input B
42	GND	GND terminal	92	RBIN	Multichannel Rch input B
43	R8IN	Input selector Rch Input 8	93	CBIN	Multichannel Cch input B
44	GND	GND terminal	94	LSBIN	Multichannel LSch input B
45	L9IN	Input selector Lch Input 9	95	RSBIN	Multichannel RSch input B
46	GND	GND terminal	96	LBBIN	Multichannel LBch input B
47	R9IN	Input selector Rch Input 9	97	RBBIN	Multichannel RBch input B
48	L12IN	Input selector Lch Input 12	98	SWBIN	Multichannel SWch input B
49	L10IN	Input selector Lch Input 10	99	GND	GND terminal
50	R12IN	Input selector Rch Input 12	100	LOUT	Lch output

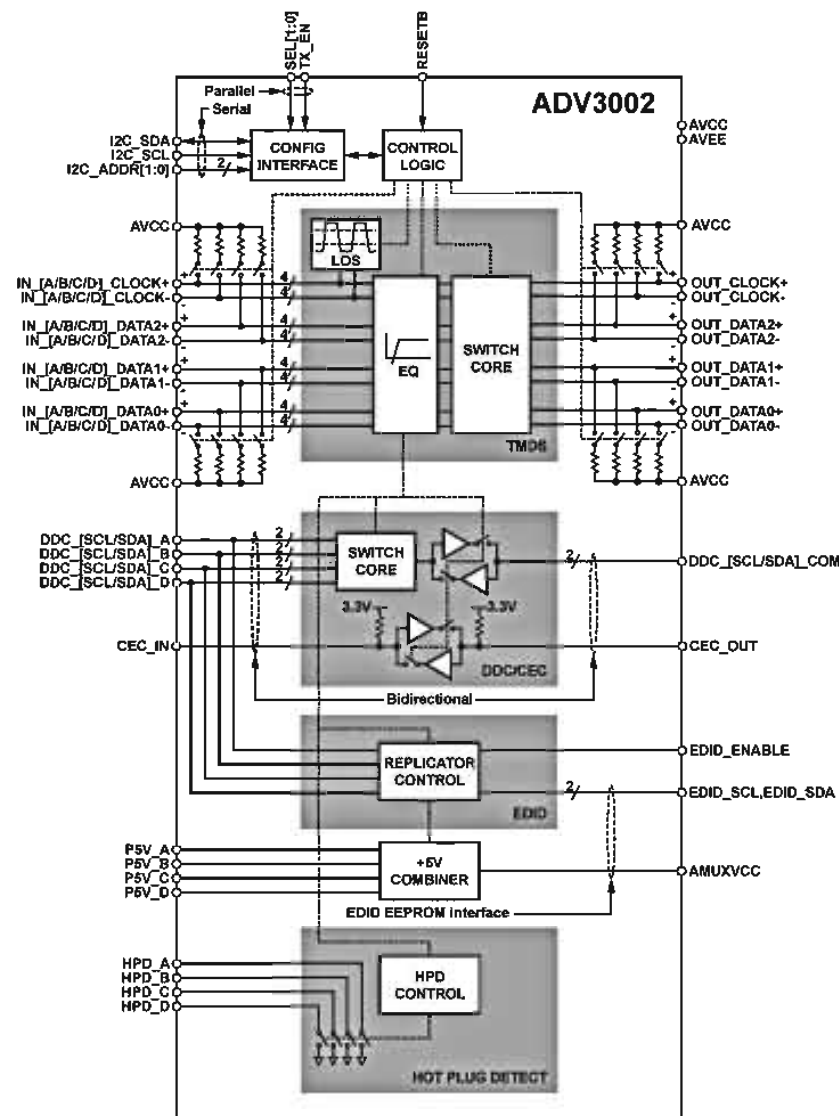
Functional Block Diagram



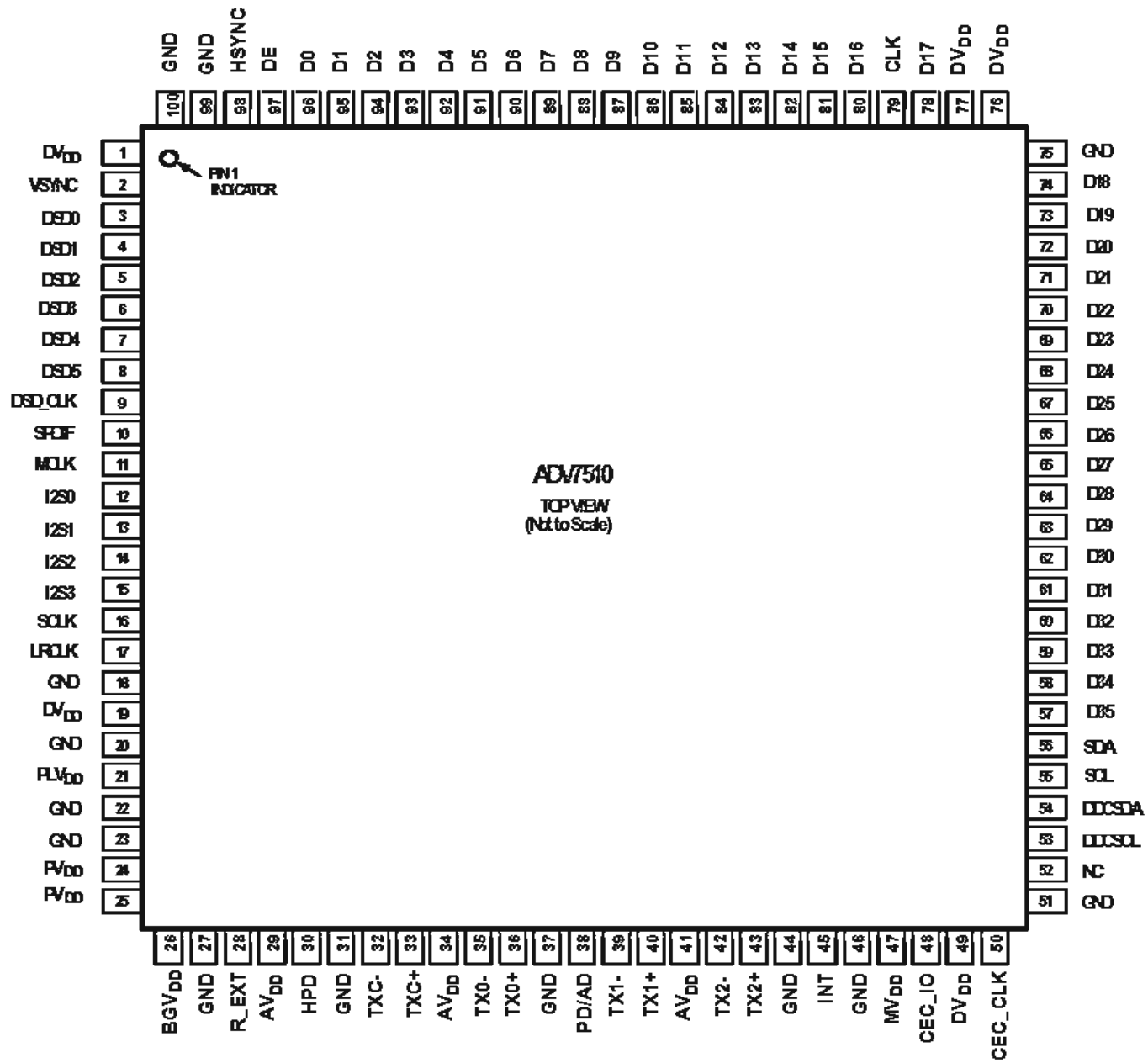
ADV3002BSTZ (DI : IC401)



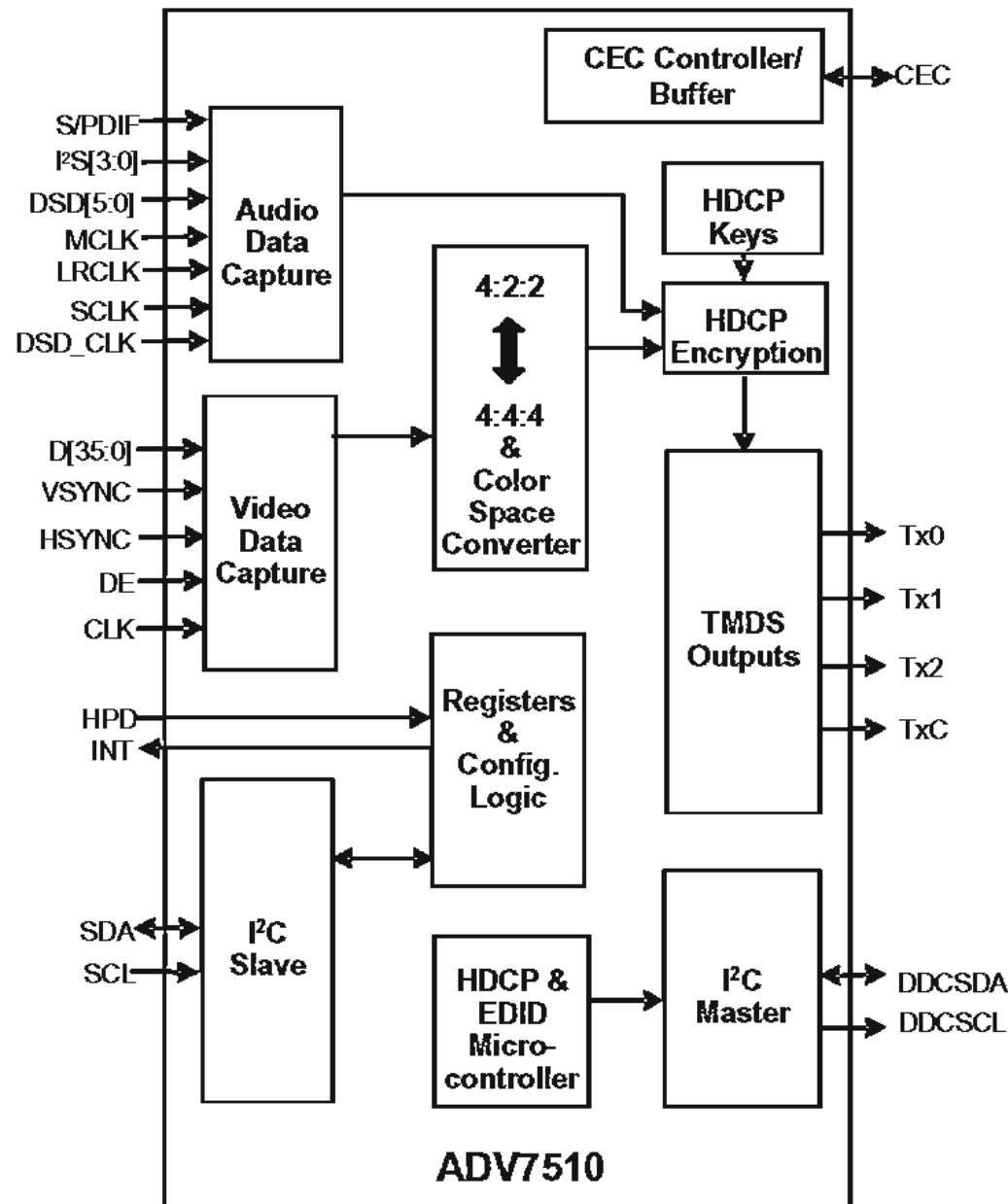
Functional Block Diagram



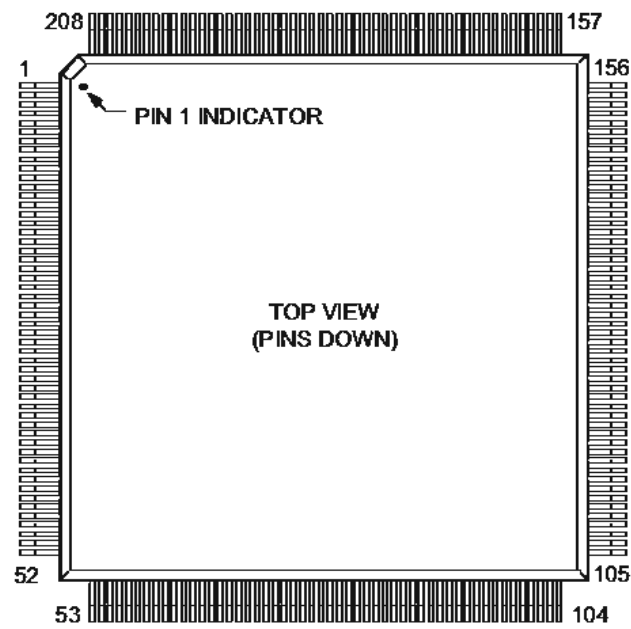
ADV7340BSTZ-3 (DI : IC952)



Functional Block Diagram



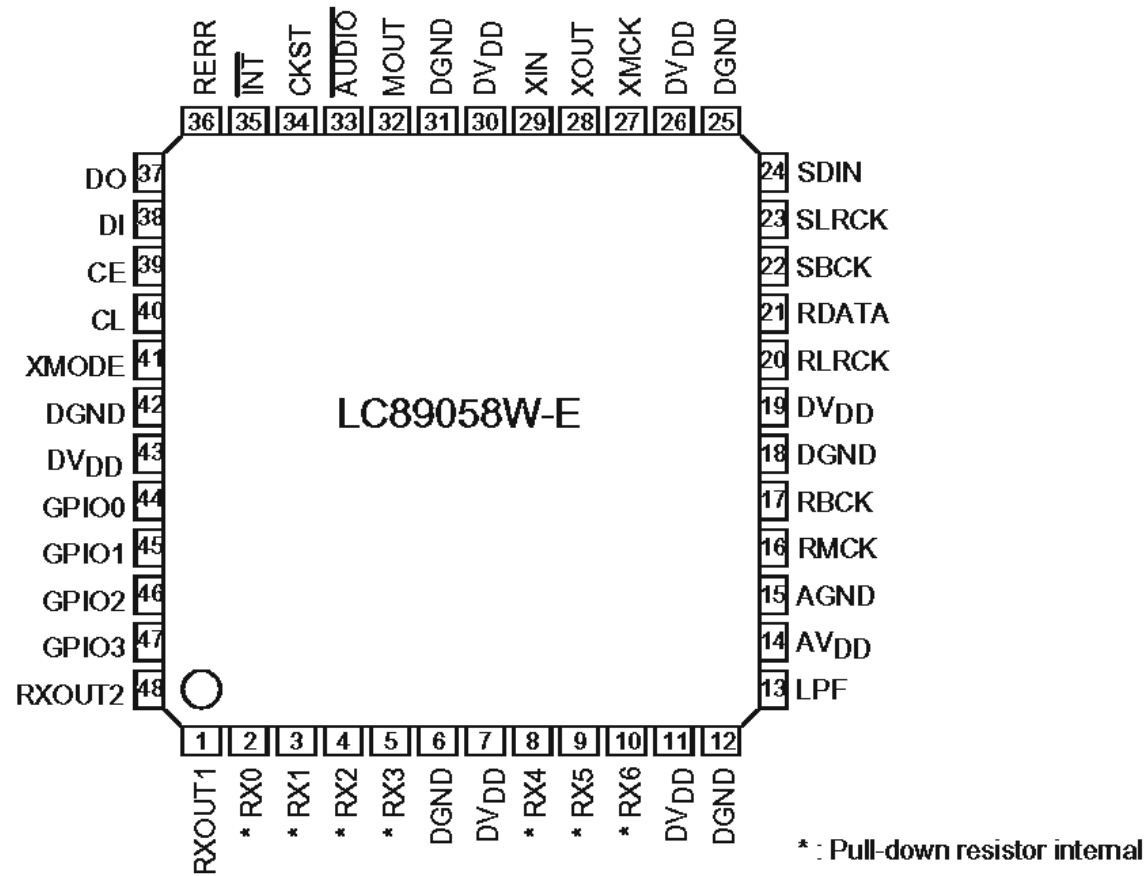
ADSP21367KSWZ2A1165 (DI : IC204)



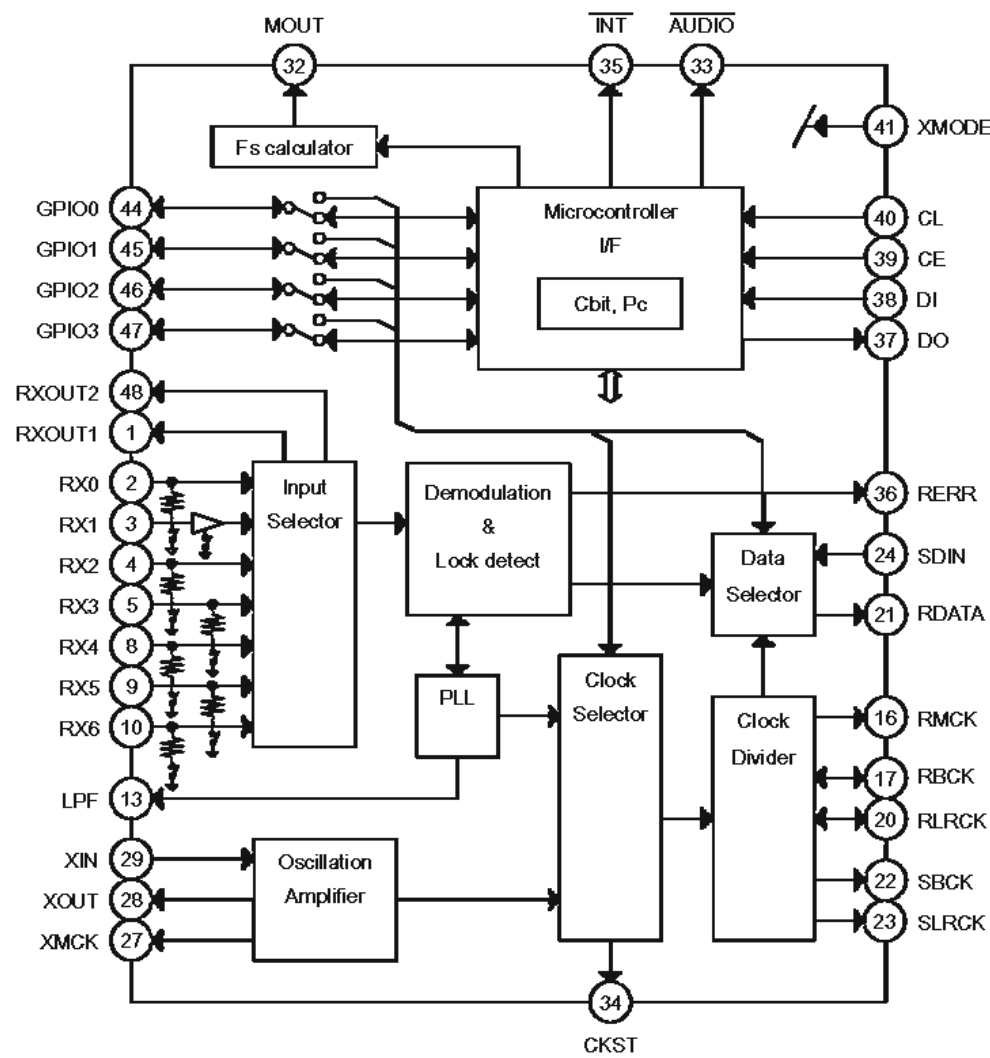
ADSP21367KSWZ2A1164 Terminal Function

Pin No.	Signal	Pin No.	Signal	Pin No.	Signal	Pin No.	Signal
1	VDD	53	VDD	105	VDD	157	VDD
2	DATA28	54	GND	106	GND	158	VDD
3	DATA27	55	IOVDD	107	IOVDD	159	GND
4	GND	56	ADDR0	108	$\overline{\text{SDCAS}}$	160	VDD
5	IOVDD	57	ADDR2	109	$\overline{\text{SDRAS}}$	161	VDD
6	DATA26	58	ADDR1	110	$\overline{\text{SDCKE}}$	162	VDD
7	DATA25	59	ADDR4	111	$\overline{\text{SDWE}}$	163	TDI
8	DATA24	60	ADDR3	112	$\overline{\text{WR}}$	164	$\overline{\text{TRST}}$
9	DATA23	61	ADDR5	113	SDA10	165	TCK
10	GND	62	GND	114	GND	166	GND
11	VDD	63	VDD	115	IOVDD	167	VDD
12	DATA22	64	GND	116	SDCLK0	168	TMS
13	DATA21	65	IOVDD	117	GND	169	CLK_CFG0
14	DATA20	66	ADDR6	118	VDD	170	BOOTCFG0
15	IOVDD	67	ADDR7	119	$\overline{\text{RD}}$	171	CLK_CFG1
16	GND	68	ADDR8	120	ACK	172	$\overline{\text{EMU}}$
17	DATA19	69	ADDR9	121	FLAG3	173	BOOTCFG1
18	DATA18	70	ADDR10	122	FLAG2	174	TDO
19	VDD	71	GND	123	FLAG1	175	DAI4
20	GND	72	VDD	124	FLAG0	176	DAI2
21	DATA17	73	GND	125	DAI20	177	DAI3
22	VDD	74	IOVDD	126	GND	178	DAI1
23	GND	75	ADDR11	127	VDD	179	IOVDD
24	VDD	76	ADDR12	128	GND	180	GND
25	GND	77	ADDR13	129	IOVDD	181	VDD
26	DATA16	78	GND	130	DAI19	182	GND
27	DATA15	79	VDD	131	DAI18	183	DPI14
28	DATA14	80	AVSS	132	DAI17	184	DPI13
29	DATA13	81	AVDD	133	DAI16	185	DPI12
30	DATA12	82	GND	134	DAI15	186	DPI11
31	IOVDD	83	CLKIN	135	DAI14	187	DPI10
32	GND	84	XTAL2	136	DAI13	188	DPI9
33	VDD	85	IOVDD	137	DAI12	189	DPI8
34	GND	86	GND	138	VDD	190	DPI7
35	DATA11	87	VDD	139	IOVDD	191	IOVDD
36	DATA10	88	ADDR14	140	GND	192	GND
37	DATA9	89	GND	141	VDD	193	VDD
38	DATA8	90	IOVDD	142	GND	194	GND
39	DATA7	91	ADDR15	143	DAI11	195	DPI6
40	DATA6	92	ADDR16	144	DAI10	196	DPI5
41	IOVDD	93	ADDR17	145	DAI8	197	DPI4
42	GND	94	ADDR18	146	DAI9	198	DPI3
43	VDD	95	GND	147	DAI6	199	DPI1
44	DATA4	96	IOVDD	148	DAI7	200	DPI2
45	DATA5	97	ADDR19	149	DAI5	201	CLKOUT
46	DATA2	98	ADDR20	150	IOVDD	202	$\overline{\text{RESET}}$
47	DATA3	99	ADDR21	151	GND	203	IOVDD
48	DATA0	100	ADDR23	152	VDD	204	GND
49	DATA1	101	ADDR22	153	GND	205	DATA30
50	IOVDD	102	$\overline{\text{MST}}$	154	VDD	206	DATA31
51	GND	103	$\overline{\text{MS0}}$	155	GND	207	DATA29
52	VDD	104	VDD	156	VDD	208	VDD

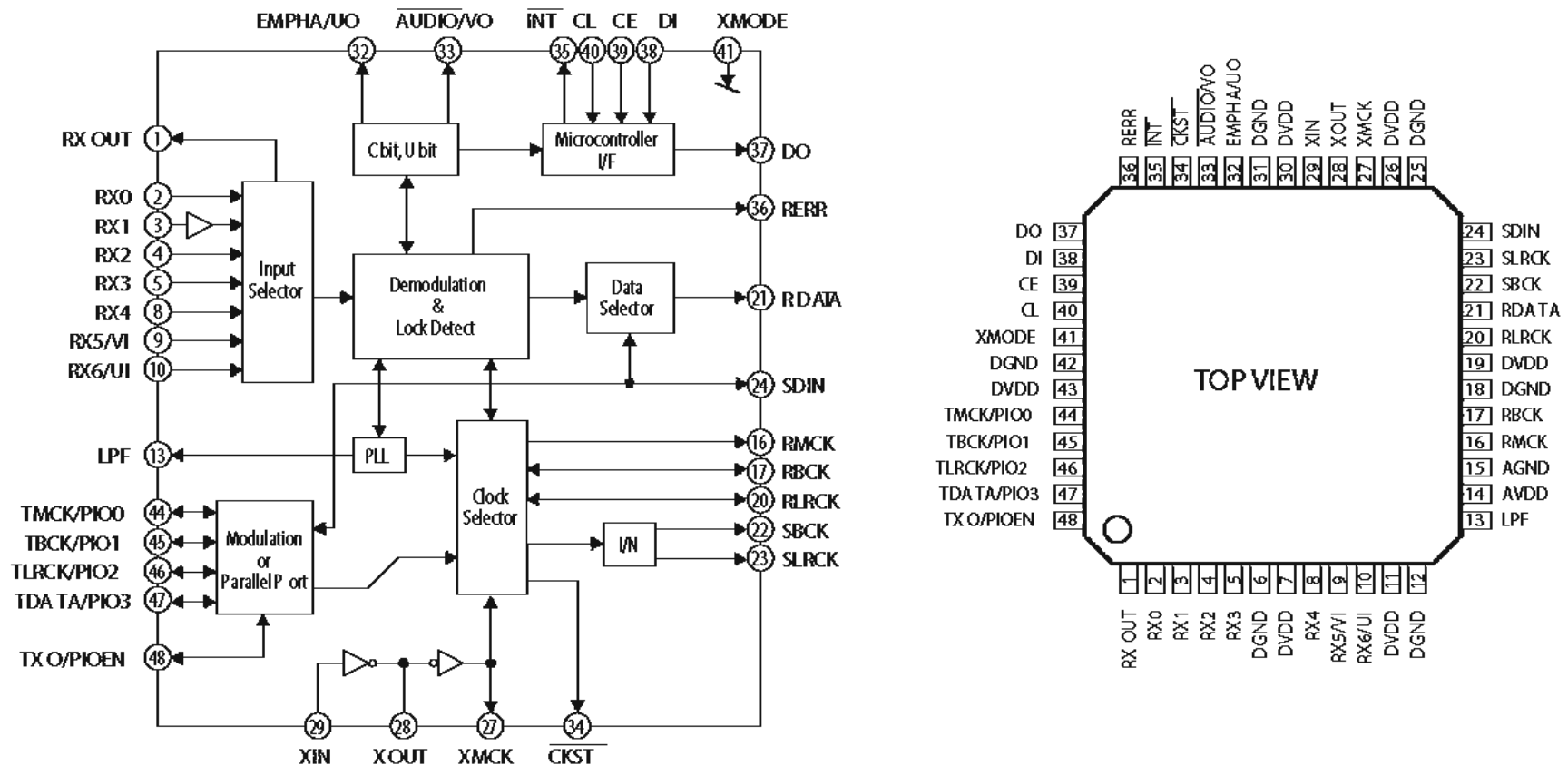
LC89058W-E (DI : IC101, IC104, IC105)



Functional Block Diagram



LC89057W-VF4A (DI : IC102, IC103)



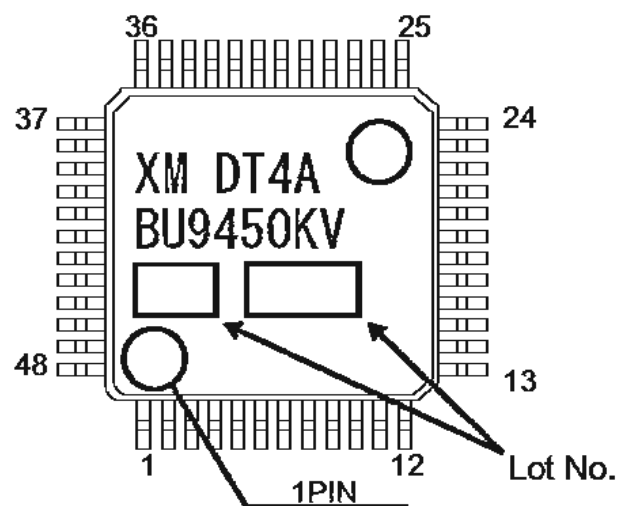
LC89057W-VF4A Terminal Function

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 amplitude-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	RDATA	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	Xtal osc. connecting output terminal
29	XIN	I	Xtal 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/V O	I/O	Non-PCM detect/V-flag output/Chip address setting terminal
34	CKST	I/O	Clock switch transition period output/Demodulation master or slave function switching terminal
35	INT	I/O	Interrupt output for ω com (Interrupt factor selectable)/Modulation or general I/O switching terminal
36	RERR	O	PLL lock error, data error flag output
37	DO	O	ω com I/F, read out data output terminal (3-state)
38	DI	I	ω com I/F, write data input terminal
39	CE	I	ω com I/F, chip enable input terminal
40	CL	I	ω com 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.

BU9450KV-E2 (DI : IC106)



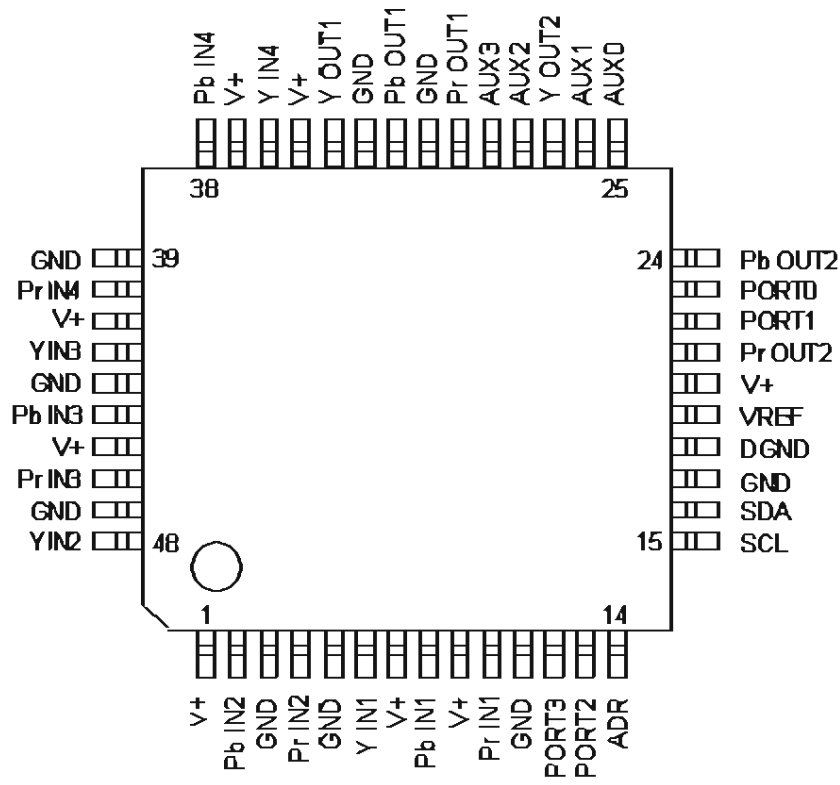
BU9450KV-E2 Terminal Function

No.	Name	Diagram	I/O		Note
			Slave Mode	Master Mode	
1	LSDP	G	I	O	
3	SC_TX_OUT	B	O	O	
5	SC_RX_IN	A	I	I	
6	RFU(I2C-SCL)	G	I	I	
7	RFU(I2C-SDA)	G	I	I	
9	ANT_REV	H	n/u	O	
11	RESET#	A	I	I	
12	SLAVE_SEL	A	I	I	
13	I2S_RATE	H	O	O	
14	LINKACTIVE	H	O	O	
15	COMM_TX_EN	G	O	O	
18	COMM_TXRX_P	D	I/O	I/O	This pin is shorted on the die with pin23.
19	COMM_TXRX_M	C	I/O	I/O	This pin is shorted on the die with pin22.
22	COMM_TXRX_M	C	I/O	I/O	This pin is shorted on the die with pin19.
23	COMM_TXRX_P	D	I/O	I/O	This pin is shorted on the die with pin18.
26	OSC_OUT	F	O	O	
27	N.C.	-	-	-	Not connected
28	OSC_IN	E	I	I	
29	SC_RATE	G	O	I	
30	TEST	A	I	I	Must be connected to ground.
31	TEST2	A	I	I	Must be connected to ground.
32	HSDP_DATA	G	I	O	
34	HSDP_CLK	G	I	O	
35	DT4_MODE	A	I	I	
36	HSDP_EN#	G	I	O	
37	I2S_DATA	G	I	O	
39	I2S_SCLK	G	I	O	
41	I2S_LRCLK	G	I	O	
43	I2S_OCLK	H	O	O	
44	MUTE	G	n/u	O	
45	SAII_CLK	G	O	I	
47	SAII_DATA	G	O	I	
48	SAII_REQ	G	I	O	

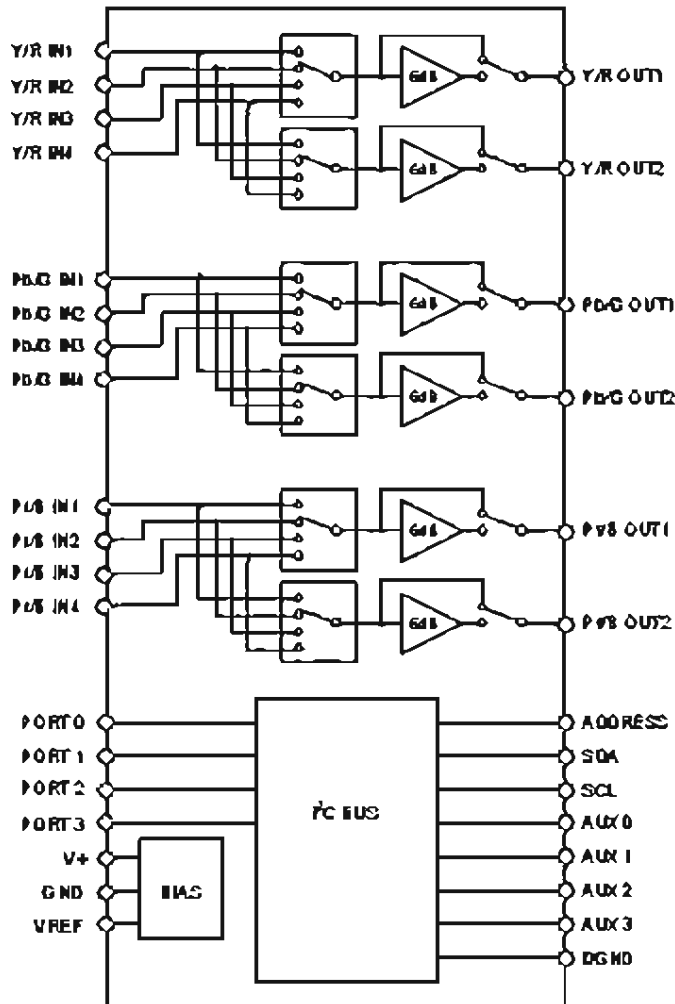
I: input, O: output
n/u: not used

Pin No.	Pin name	Function
4, 8, 17, 20, 33, 40, 46	VDD	3.3V Supply Voltage
2, 10, 16, 21, 24, 25, 38, 42	VSS	Ground

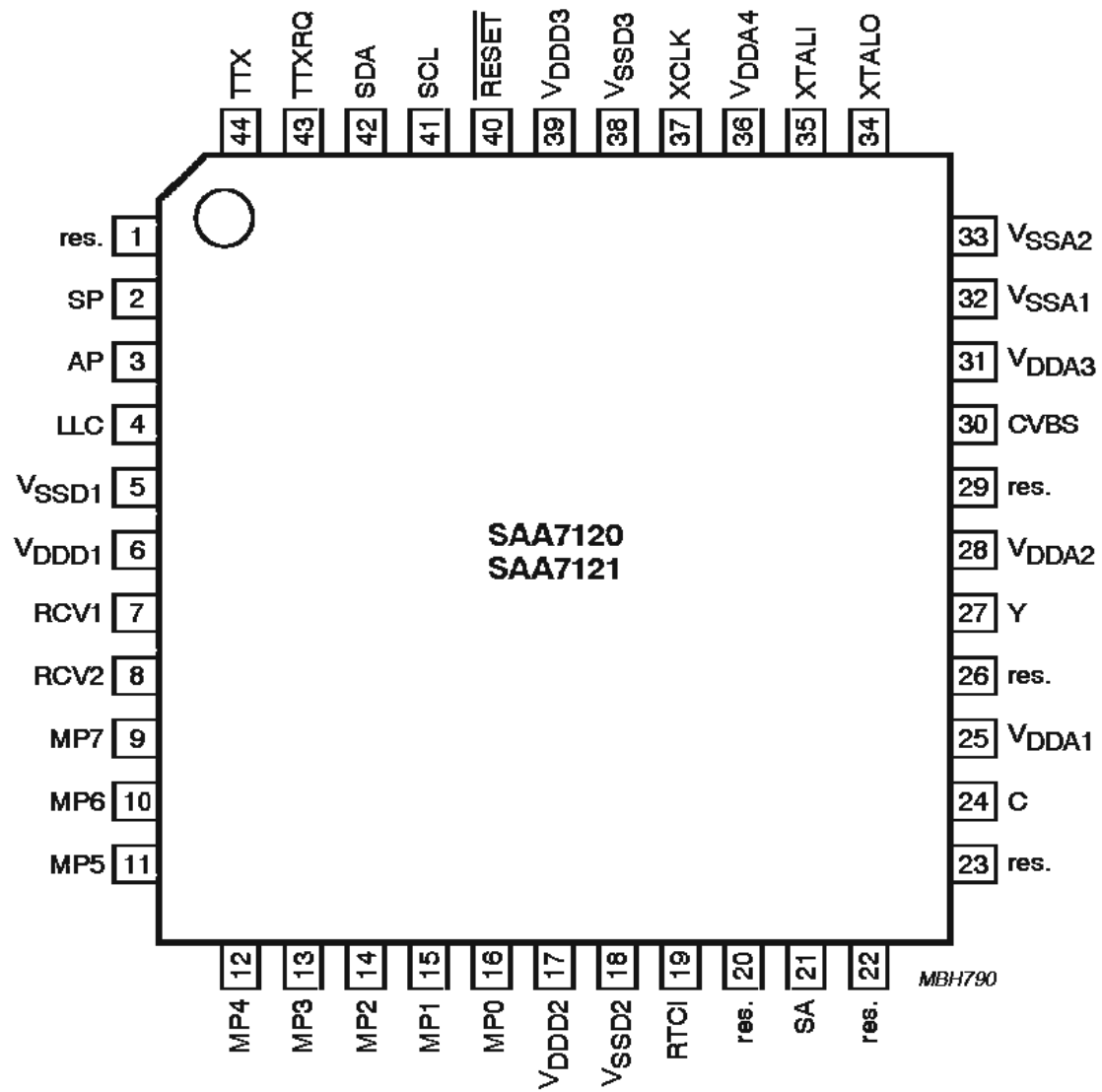
NJW1321FP1 (AV : IC501)



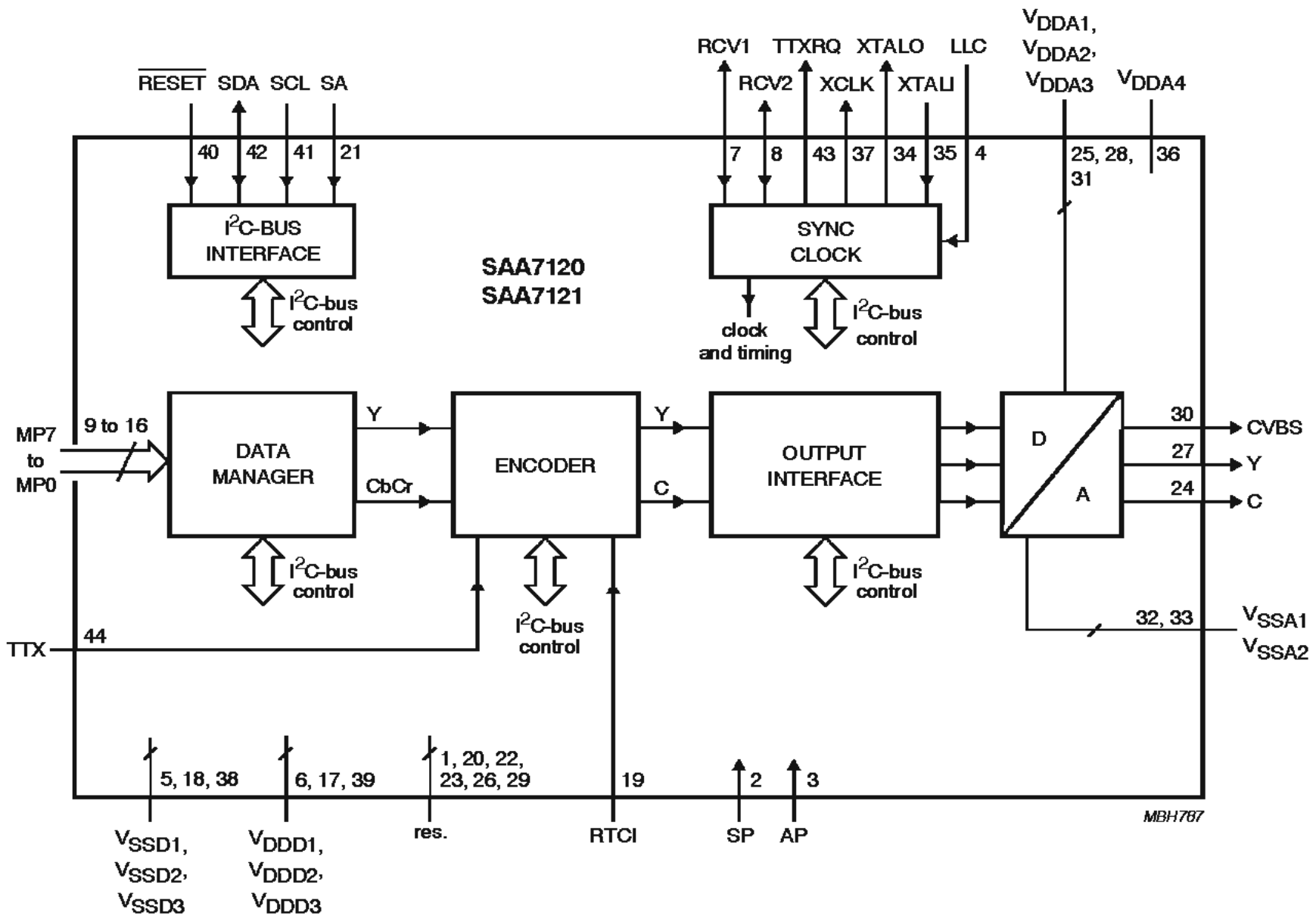
Functional Block Diagram



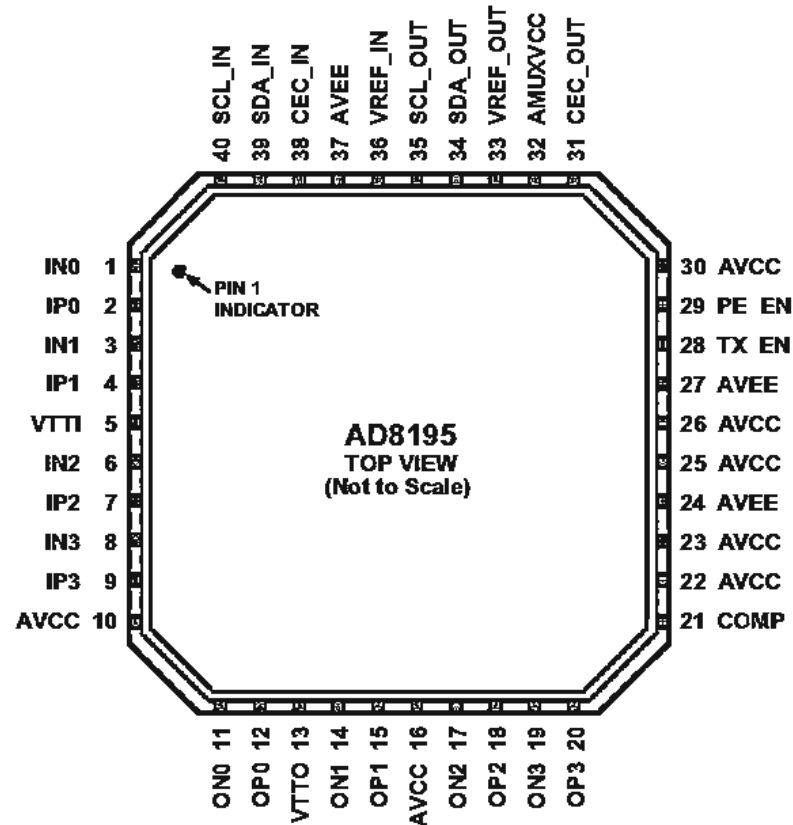
SAA7121H (DI : IC457)



Functional Block Diagram

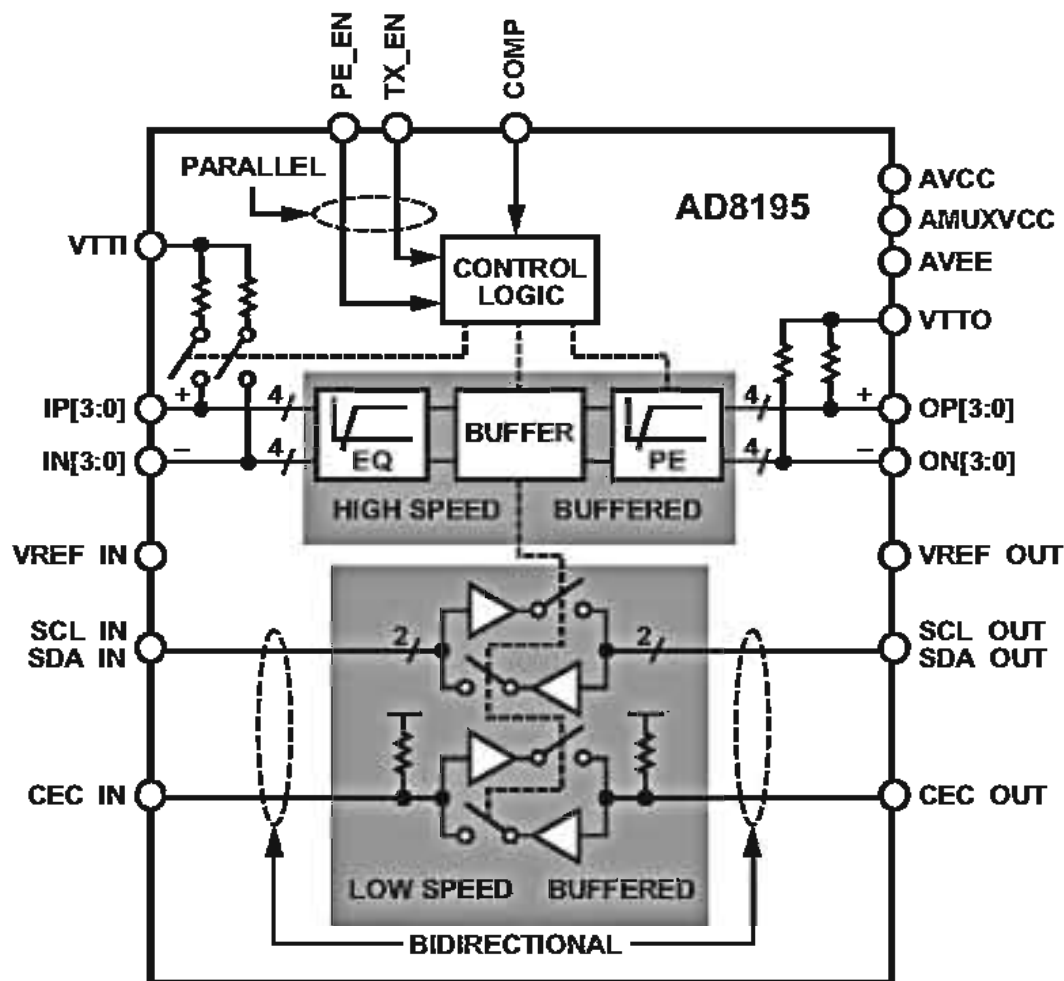


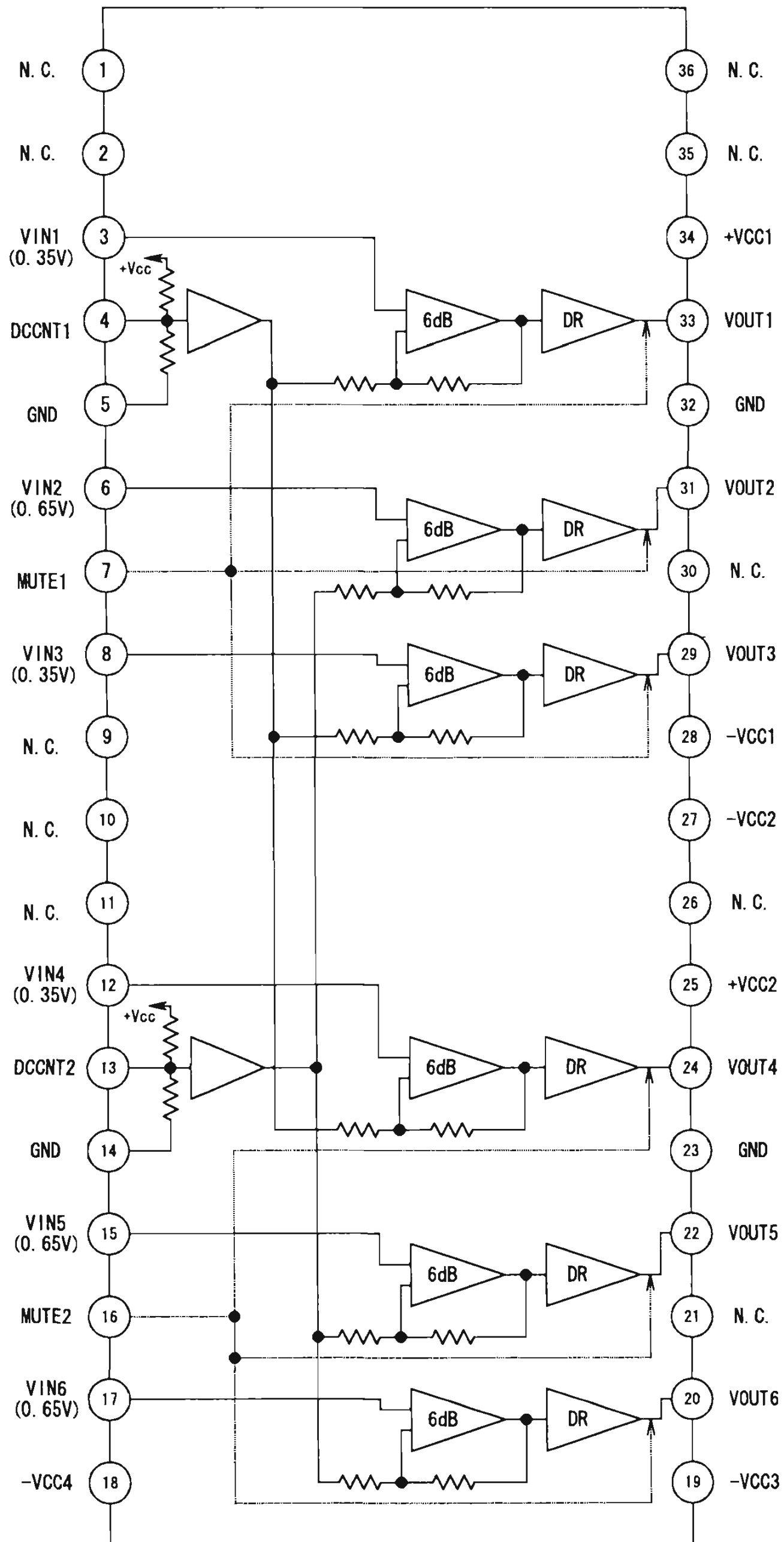
AD8195ACPZ (AV : IC451)



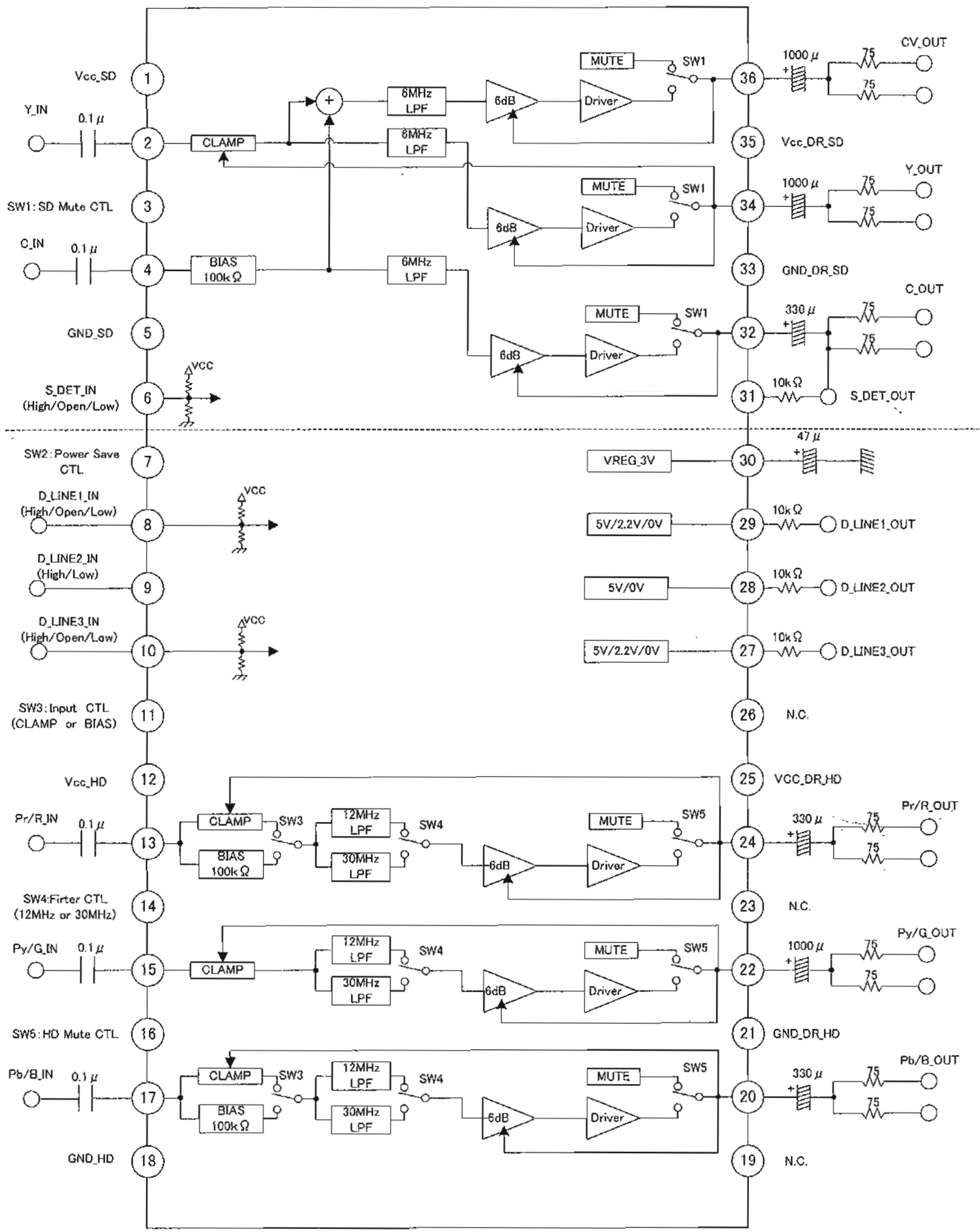
NOTES
 1. THE AD8195 LFCSP HAS AN EXPOSED PAD ON THE UNDERSIDE OF THE PACKAGE THAT AIDS IN HEAT DISSIPATION. THE PAD MUST BE ELECTRICALLY CONNECTED TO THE AVEE SUPPLY PLANE IN ORDER TO MEET THERMAL SPECIFICATIONS.

Functional Block Diagram

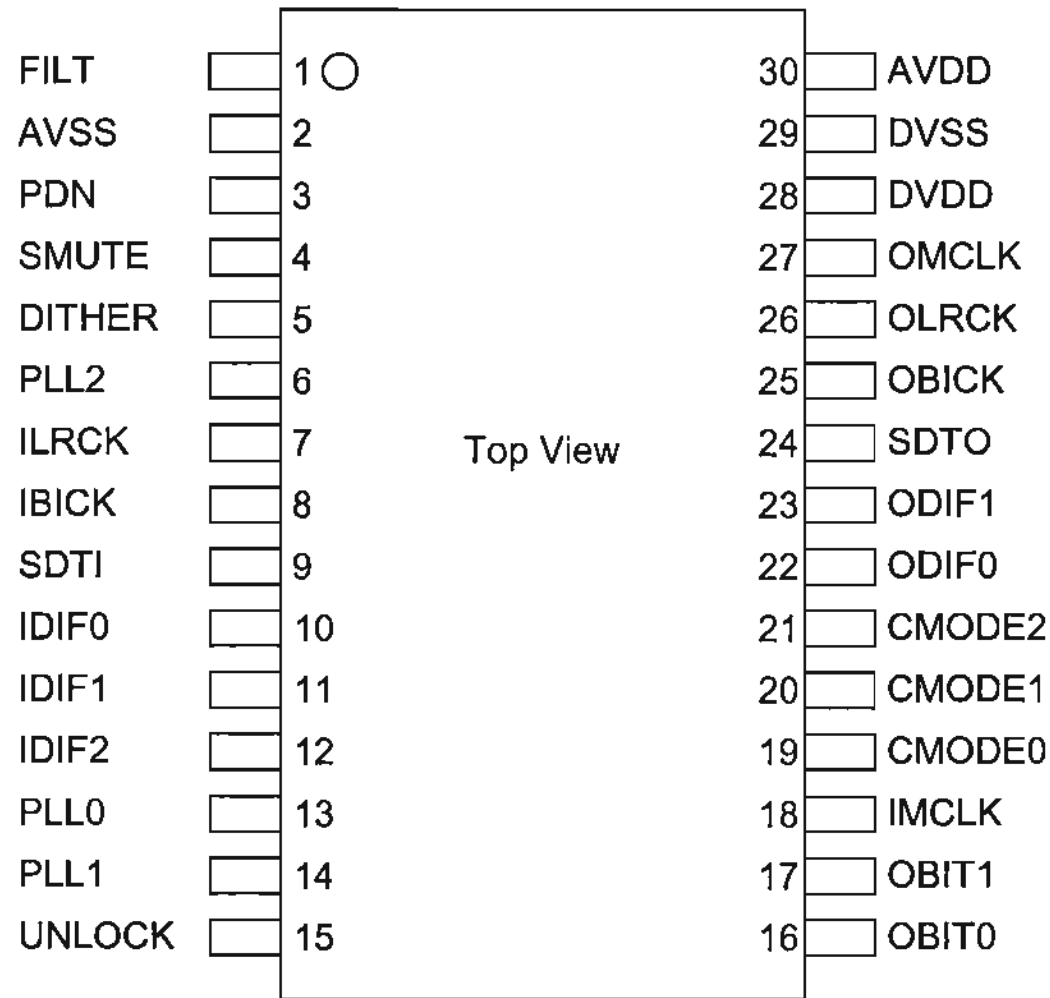




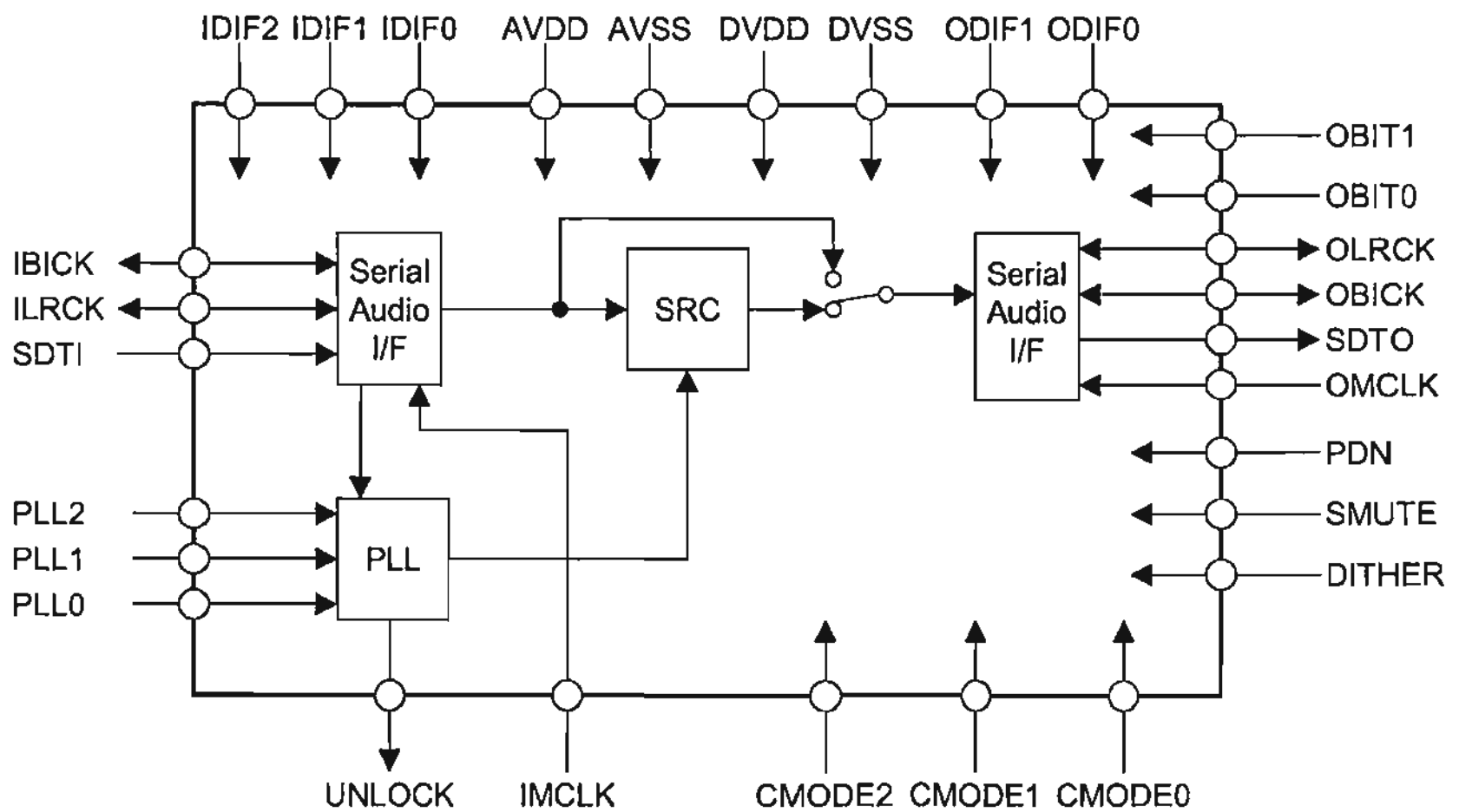
LA73062V-TLM-E (AV : IC305)



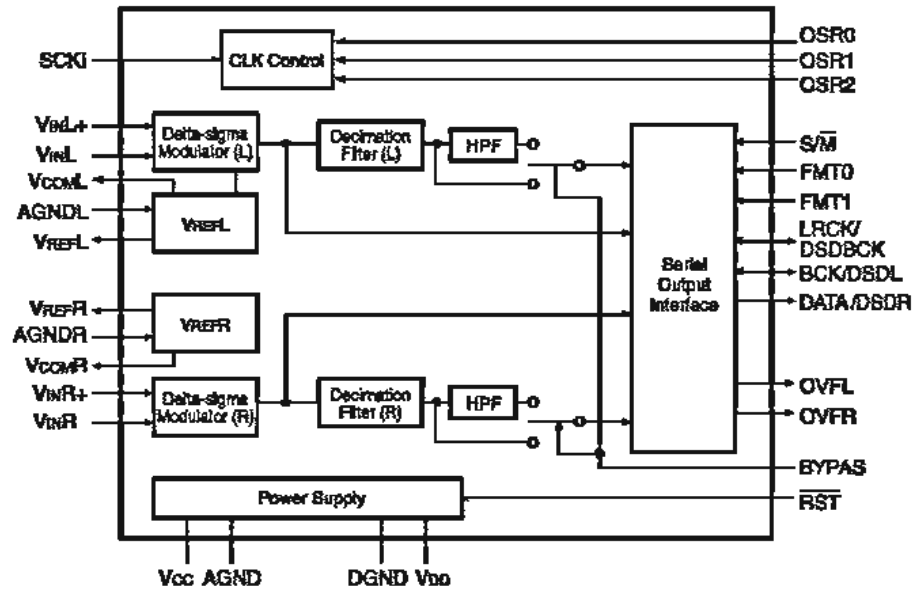
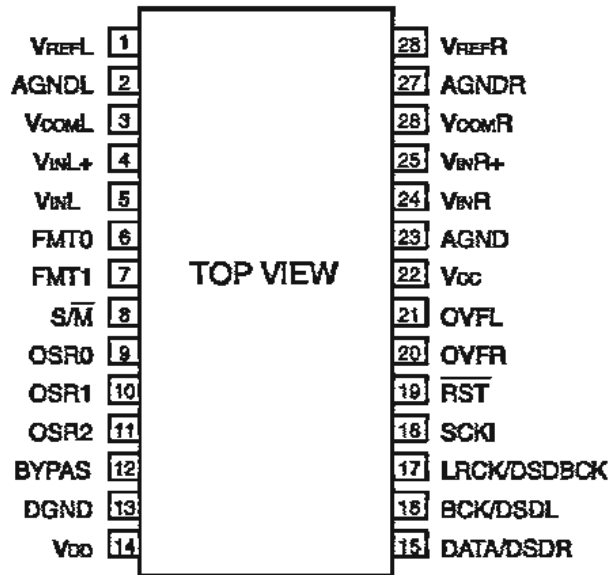
AK4125VF (DI : IC466)



Functional Block Diagram



PCM1804 (DI : IC302)



PCM1804 Terminal Function

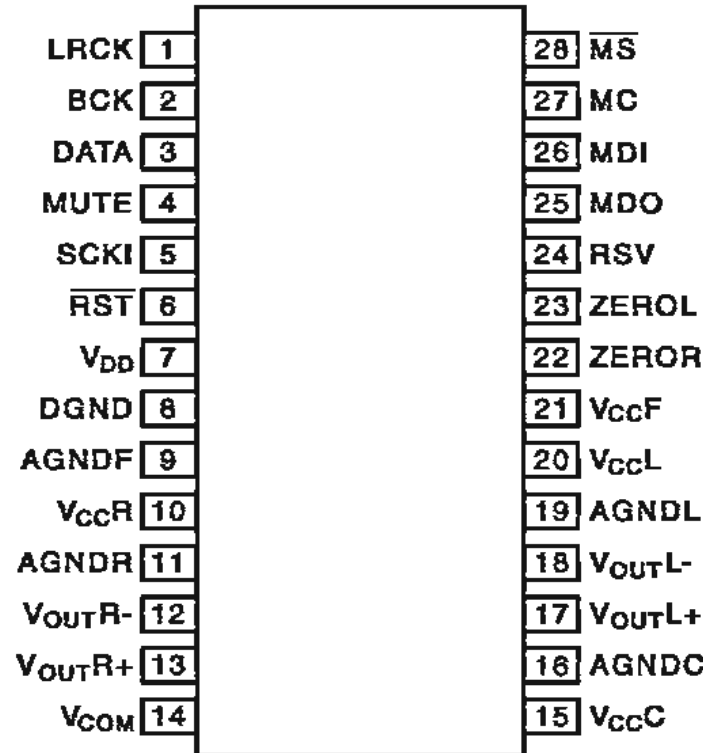
Pin No.	Pin Name	I/O	Function
1	VREFL		L-channel voltage reference output, requires capacitors for decoupling to AGND.
2	AGNDL		Analog ground for VREFL.
3	VCOML		L-channel analog common mode output.
4	VINL+	I	L-channel analog input, positive pin.
5	VINL	I	L-channel analog input, negative pin.
6	FMT0	I	Audio data format 0. See TABLE V. *
7	FMT1	I	Audio data format 1. See TABLE V. *
8	S/M	I	Master/slave mode selection. See TABLE IV. *
9	OSR0	I	Oversampling ratio 0. See TABLE I. TABLE II. *
10	OSR1	I	Oversampling ratio 1. See TABLE I. TABLE II. *
11	OSR2	I	Oversampling ratio 2. See TABLE I. TABLE II. *
12	BYPAS	I	HPF bypass control. HIGH: HPF disable, LOW: HPF enable. ***
13	DGND		Digital ground.
14	VDD		Digital power supply.
15	DATA/SDR	O	L-channel and R-channel audio data output in PCM mode. R-channel Audio data output in DSD mode.(DSD output, when DSD mode)
16	BCK/DSDL	I/O	Bit clock input/output in PCM mode. L-channel audio data output in DSD mode. ***
17	LRCK/DSDBCK	I/O	Sampling clock input/output in PCM and DSD mode. ***
18	SCKI	I	System clock input; 128fs, 256fs, 384fs, 512fs or 768fs. **
19	RST	I	Reset, power down input, active LOW. *
20	OVFR	O	Overflow signal of R-channel in PCM mode. This is available in PCM mode only.
21	OVFL	O	Overflow signal of L-channel in PCM mode. This is available in PCM mode only.
22	VCC		Analog power supply.
23	AGND		Analog ground.
24	VINR	I	R-channel analog input, negative pin.
25	VINR+	I	R-channel analog input, positive pin.
26	VCOMR		R-channel analog common mode output.
27	AGNDR		Analog ground for VREFR.
28	VREFR		R-channel voltage reference output, requires capacitors for decoupling to AGND.

* Schmitt trigger input with internal pull-down (51kohm typically), 5V tolerant.

** Schmitt trigger input, 5V tolerant.

*** Schmitt trigger input.

PCM1791ADB (DI : IC301, IC304, IC305, IC306)



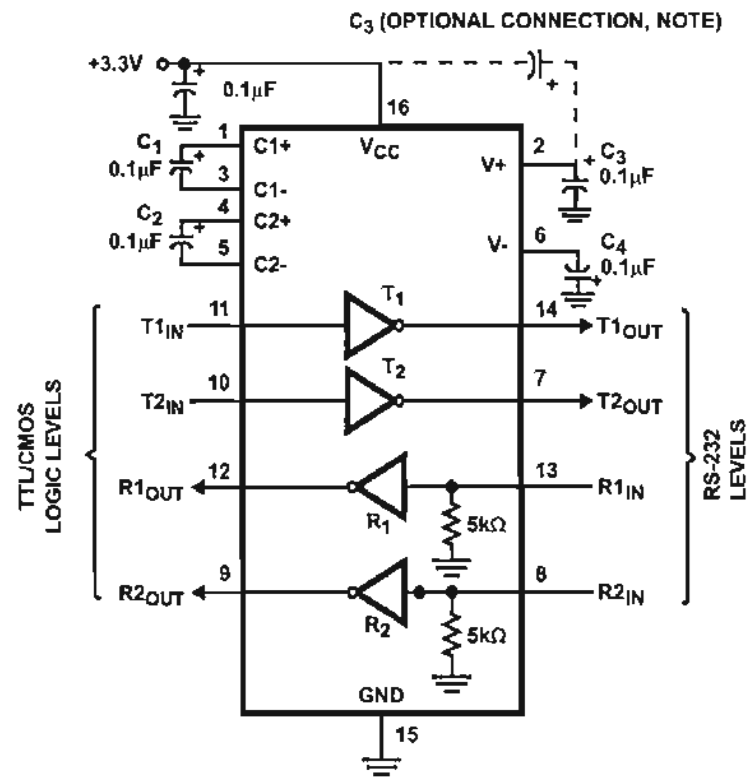
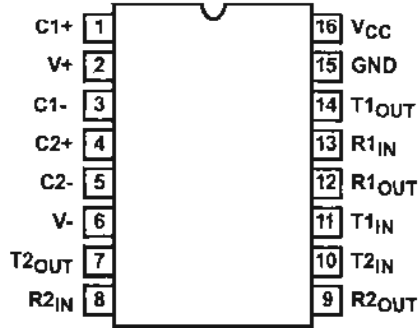
PCM1791ADB Terminal Function

Pin No.	Pin Name	I/O	DESCRIPTIONS
1	LRCK	I	Left and right clock (f_s) input for normal operation. WDCK clock input in external DF mode. Connected to GND in DSD mode*
2	BCK	I	Bit clock input. Connected GND for DSD mode*
3	DATA	I	Serial audio data input for normal operation. L-channel audio data input for external DF and DSD modes*
4	MUTE	I	Analog output mute control for normal operation. R-channel audio data input for external DF and DSD modes*
5	SCKI	I	System Clock Input. BCK ($64f_s$) clock input for DSD mode*
6	RST	I	Reset*
7	VDD	.	Digital power supply, +3.3 V
8	DGND	.	Digital ground
9	AGNDF	.	Analog ground (DACFF)
10	VccR	.	Analog power supply (R-channel DAC), +5.0 V
11	AGNDR	.	Analog ground (R-channel DAC)
12	VOUTR-	O	R-channel analog voltage output-
13	VOUTR+	O	R-channel analog voltage output+
14	VCOM	.	Internal bias de-coupling pin
15	VccC	.	Analog power supply (internal bias), +5.0 V
16	AGNDC	.	Analog ground (internal bias)
17	VOUTL+	O	L-channel analog voltage output+
18	VOUTL-	O	L-channel analog voltage output-
19	AGNDL	.	Analog ground (L-channel DAC)
20	VccL	.	Analog power supply (L-channel DAC), +5.0 V
21	VccF	.	Analog power supply (DACFF), +5.0 V
22	ZEROR	O	Zero flag for R-channel
23	ZEROL	O	Zero flag for L-channel
24	RSV	.	Reserved pin. It must be open.
25	MDO	O	Serial data output for function control register**
26	MDI	I	Serial data input for function control register*
27	MC	I	Shift clock for function control register*
28	MS	I	Mode control chip select and latch signal*

* Schmitt trigger input, 5V tolerant.

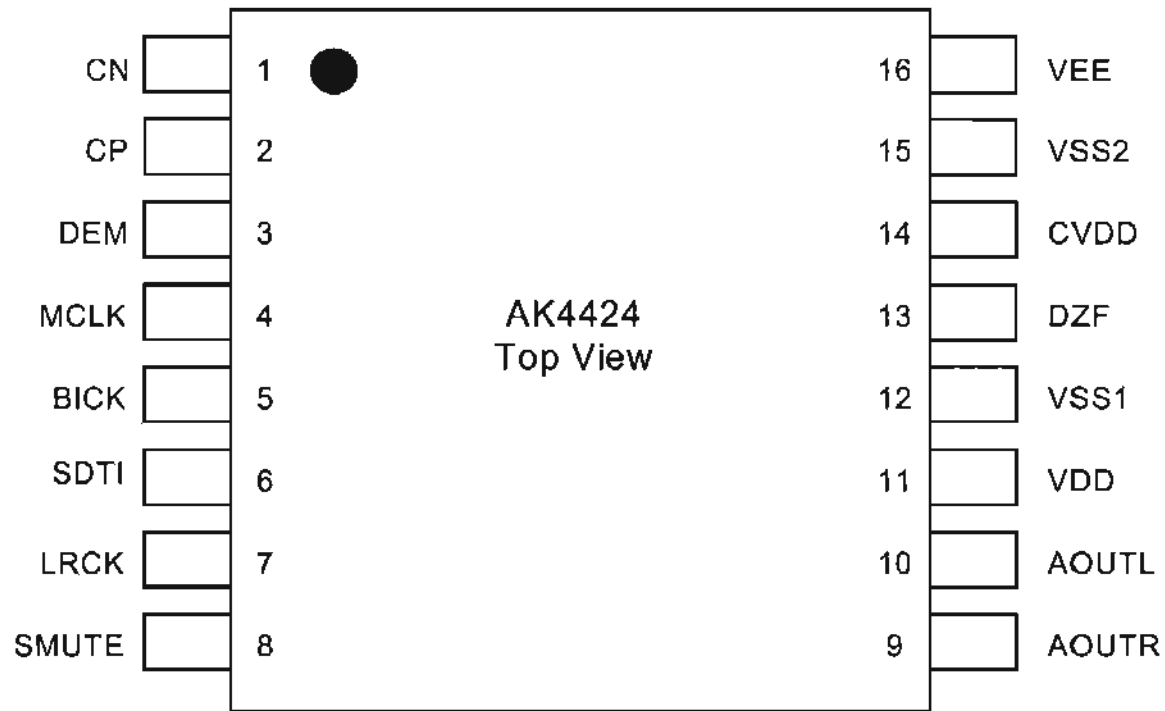
** Tristate output.

ICL3232CVZ-T (MA : IC101)

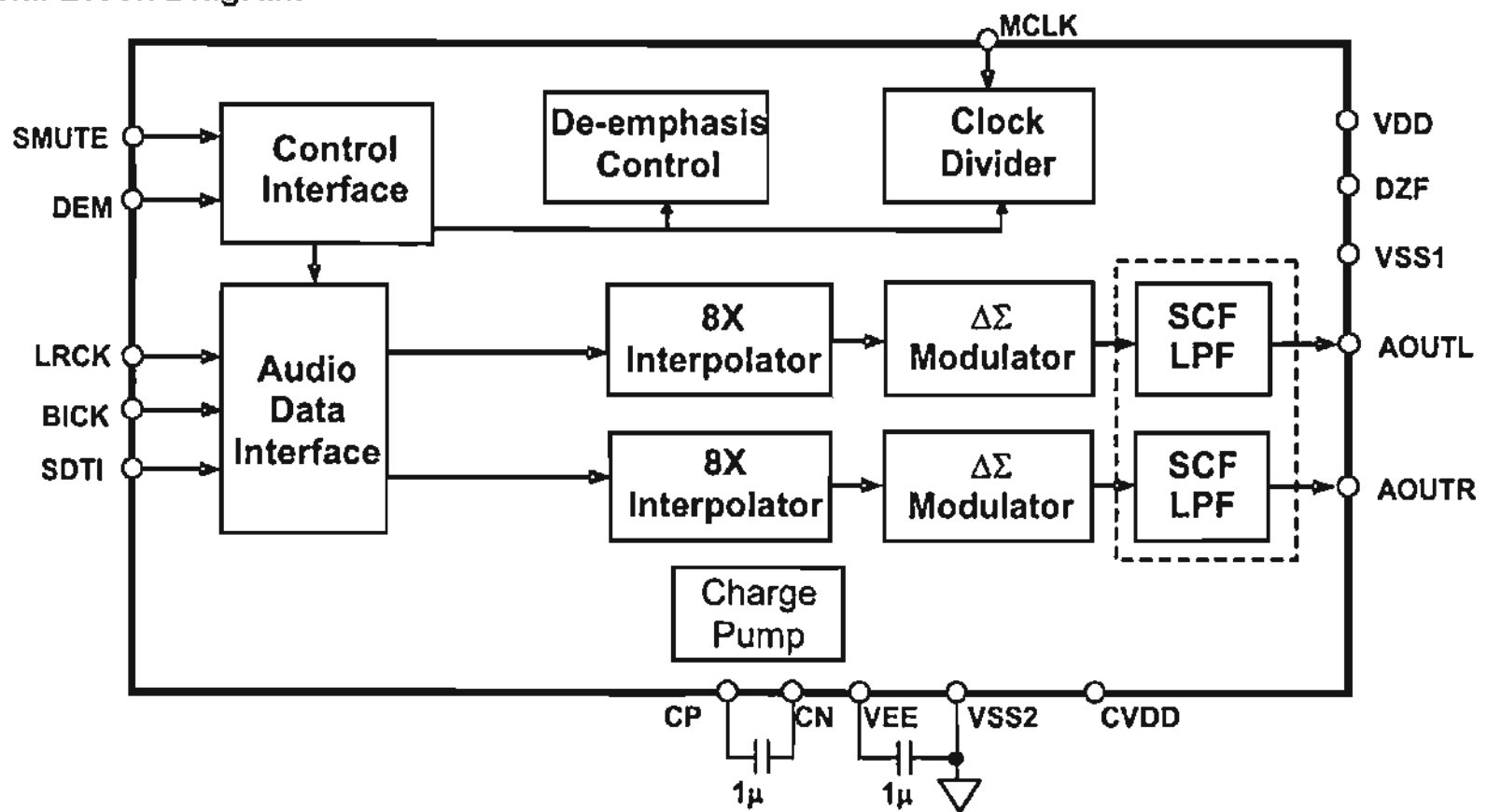


NOTE: The negative terminal of C₃ can be connected to either V_{CC} or GND

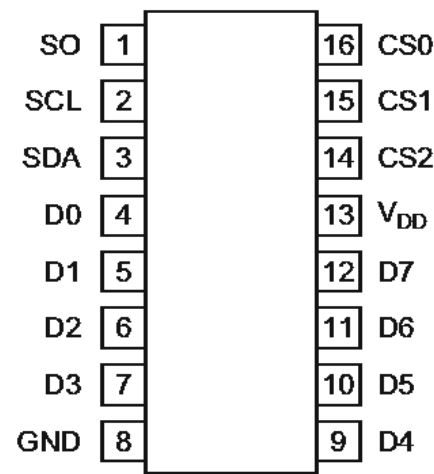
AK4424ET (DI : IC351, IC352)



Functional Block Diagram

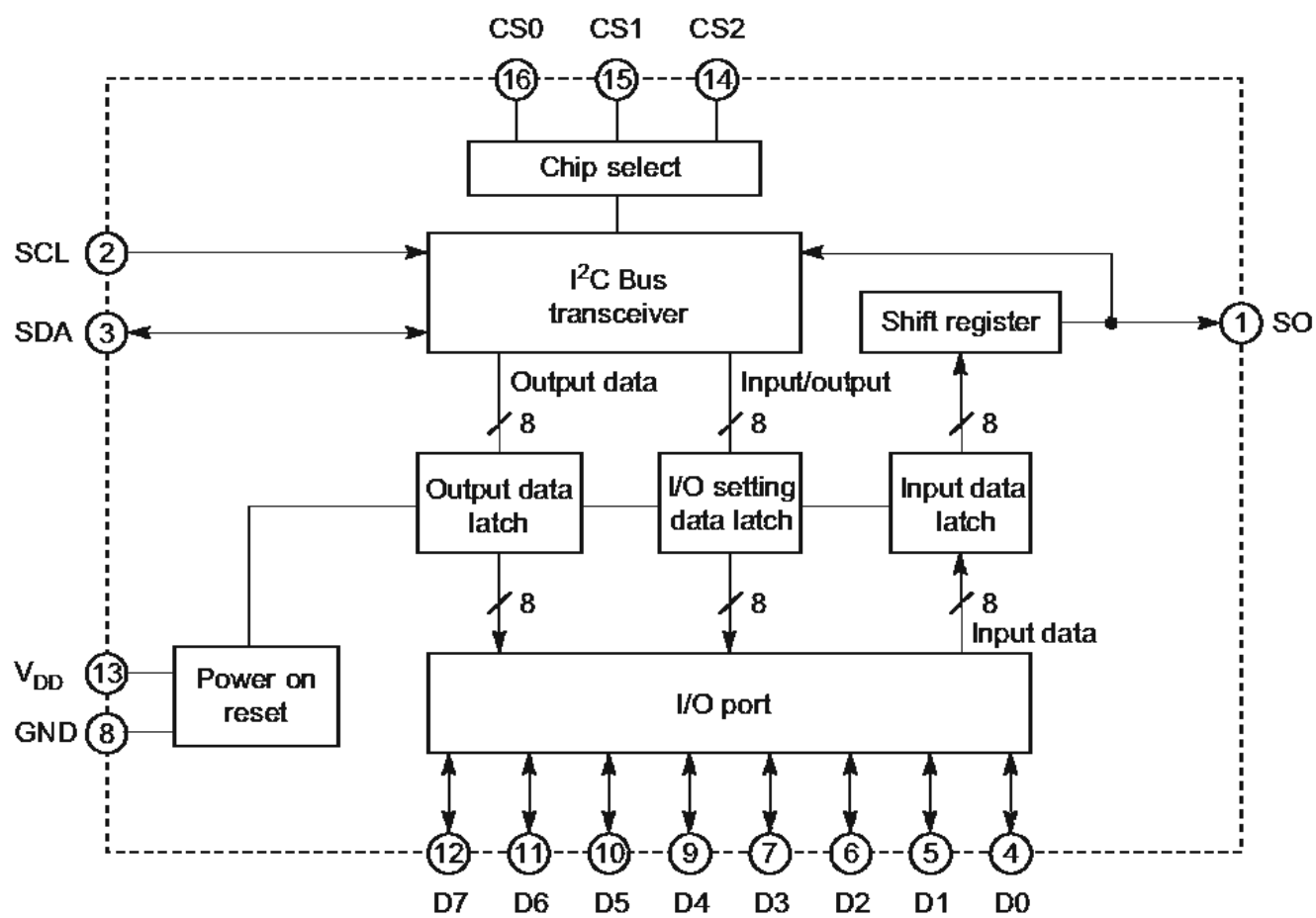


M62320GP (MA : IC703)

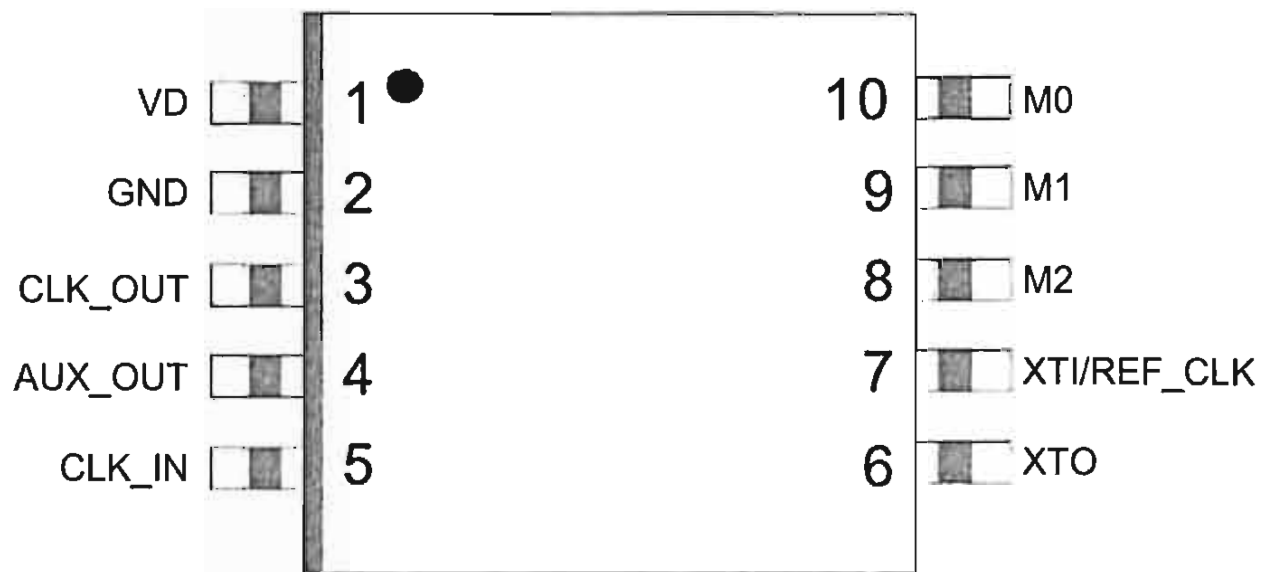


Pin No.	Pin Name	I/O	Function
2	SCL	Input	Serial clock input
3	SDA	Input/Output	Serial data input/output
1	SO	Output	Serial data output
16	CS0	Input	Chip select data input
15	CS1		
14	CS2		
4	D0	Input/Output	Parallel data input/output
5	D1		
6	D2		
7	D3		
9	D4		
10	D5		
11	D6		
12	D7		
13	V _{DD}	—	Power supply
8	GND	—	GND

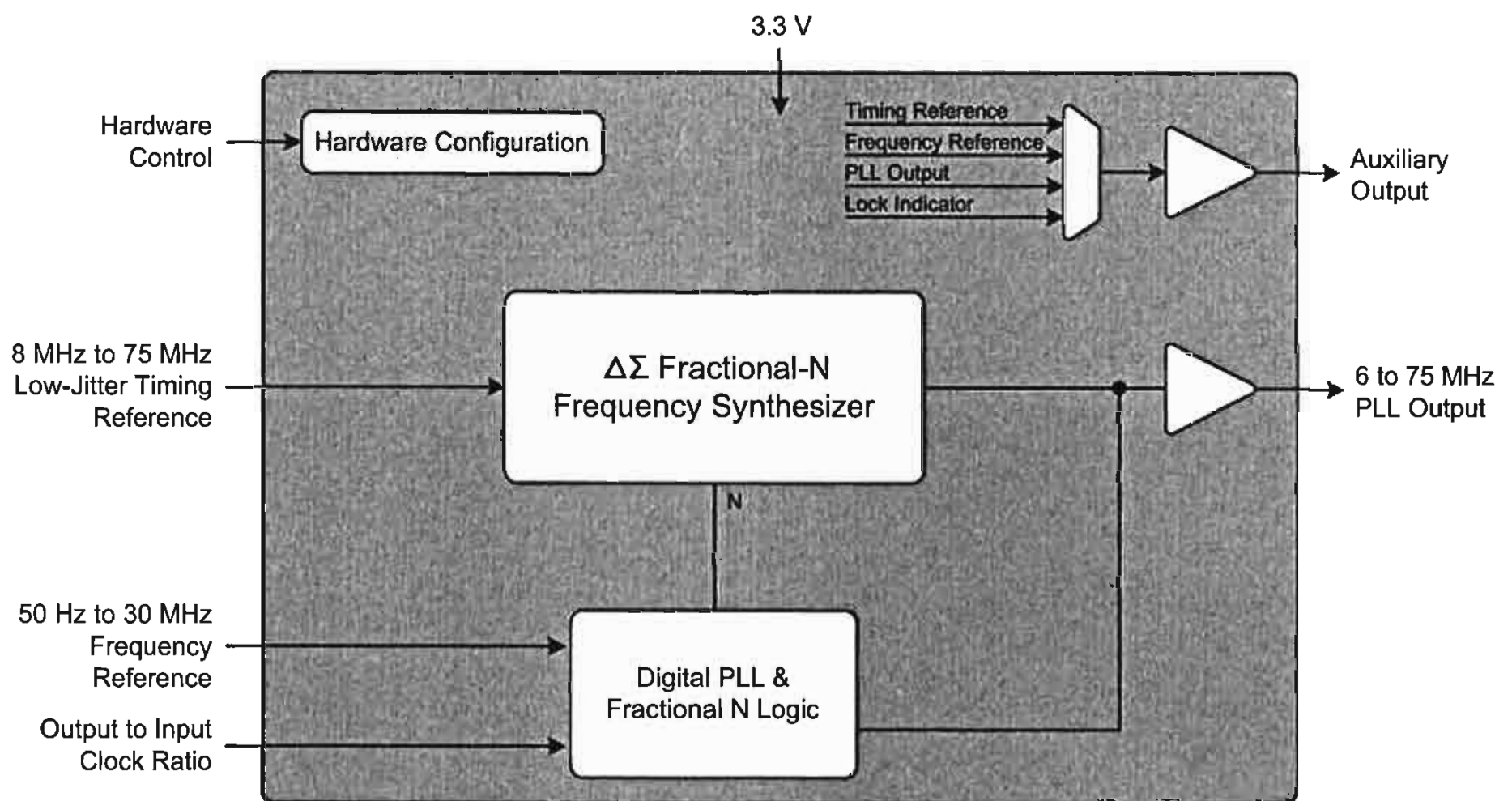
Functional Block Diagram



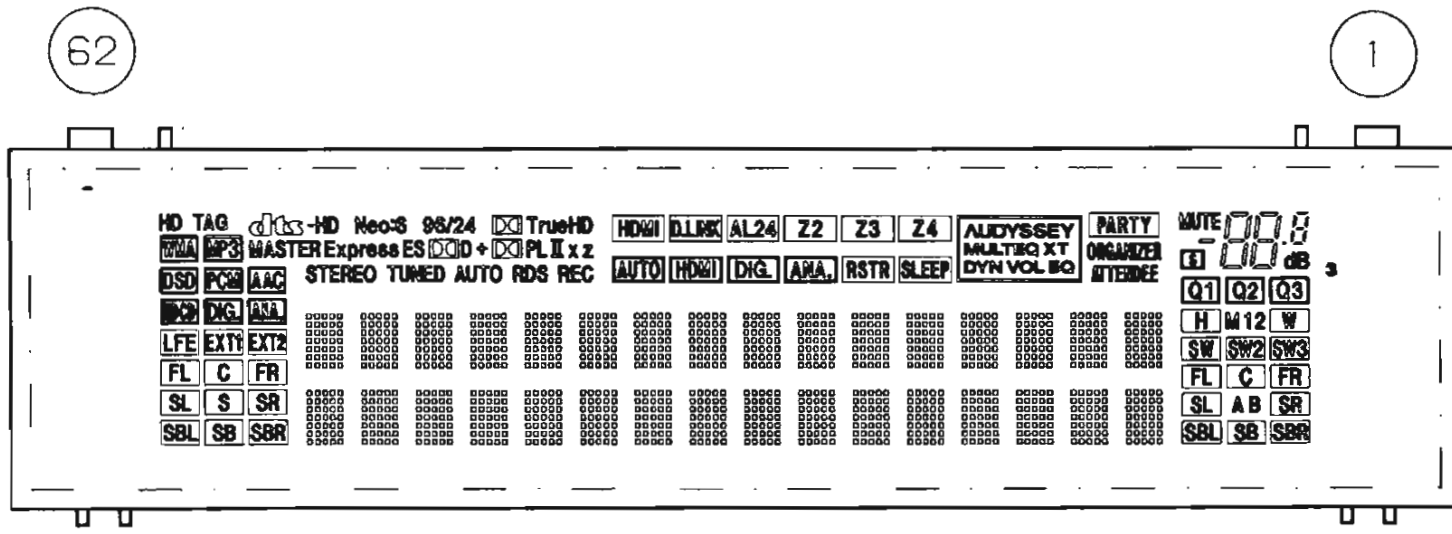
CS2100**-CZZR (DI : IC154)



Functional Block Diagram



2.FL DISPLAY FLD (19-ST-02GINK) (FR: FL101)



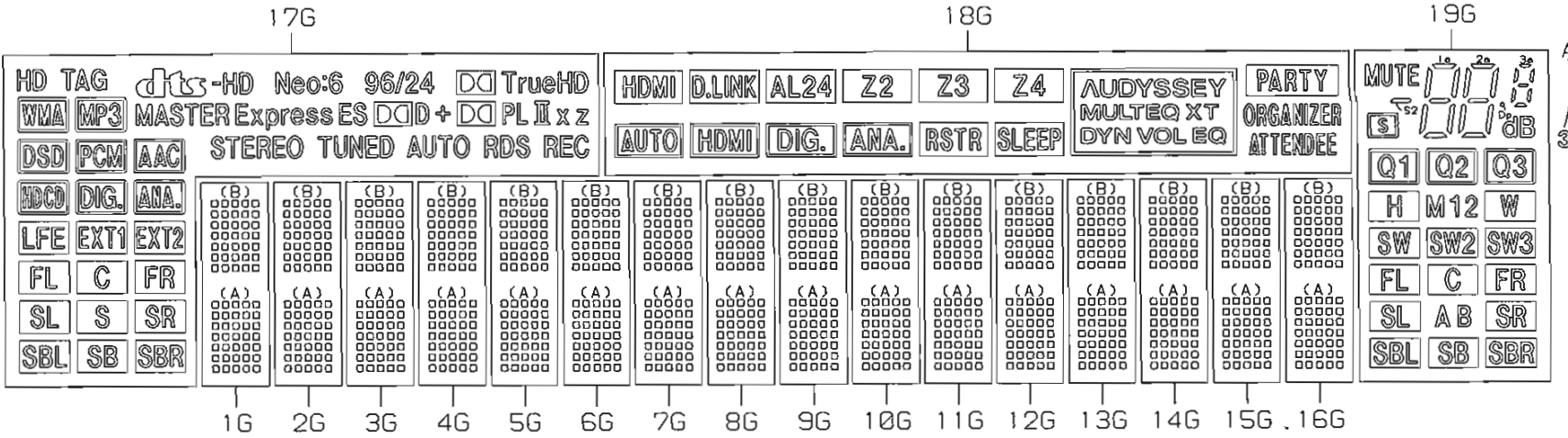
PIN CONNECTION

PIN NO.	6	6	5	5	5	5	5	5	5
CONNECTION				L	P			V	RESE
	F	N	N	N	N	N	N	N	N
	2	X	P	D	D	H	C	T	S

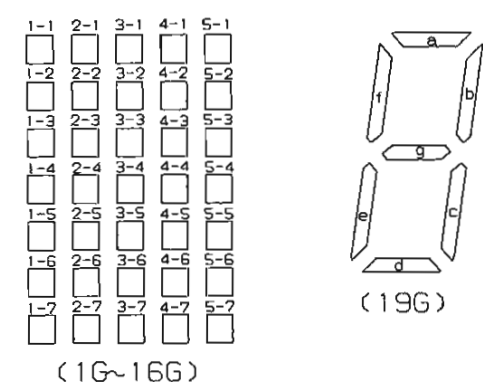
PIN NO.	5	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	1	1	1	1	1	1	1	0	9	8	7	6	5	4	3	2	1												
CONNECTION	D	S	S	S	8	7	7	8	9	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	F
	A	A	B	G	G	G	G	G	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	X	1

- NOTE
- 1) F1, F2 --- Filament
 - 2) NP ----- No pin
 - 3) DL ----- Datum Line
 - 4) NX ----- No extend pin
 - 5) 17G~19G --- Grid
 - 6) Q17G~Q19G --- 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.

GRID ASSIGNMENT



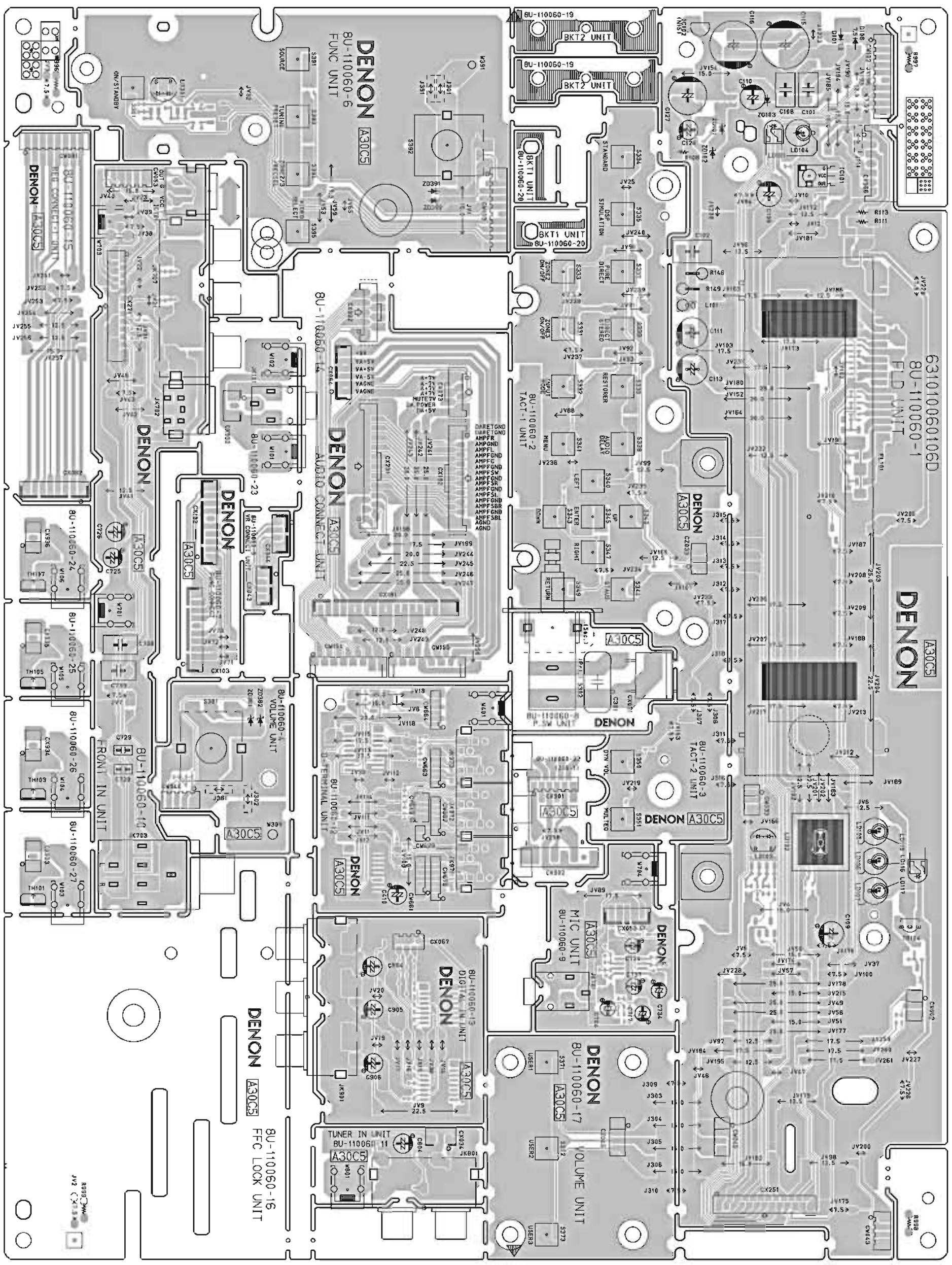
NOTE) The mark "A" is used to distinguish between very similar displays. This mark is electrically isolated from the wiring pattern.

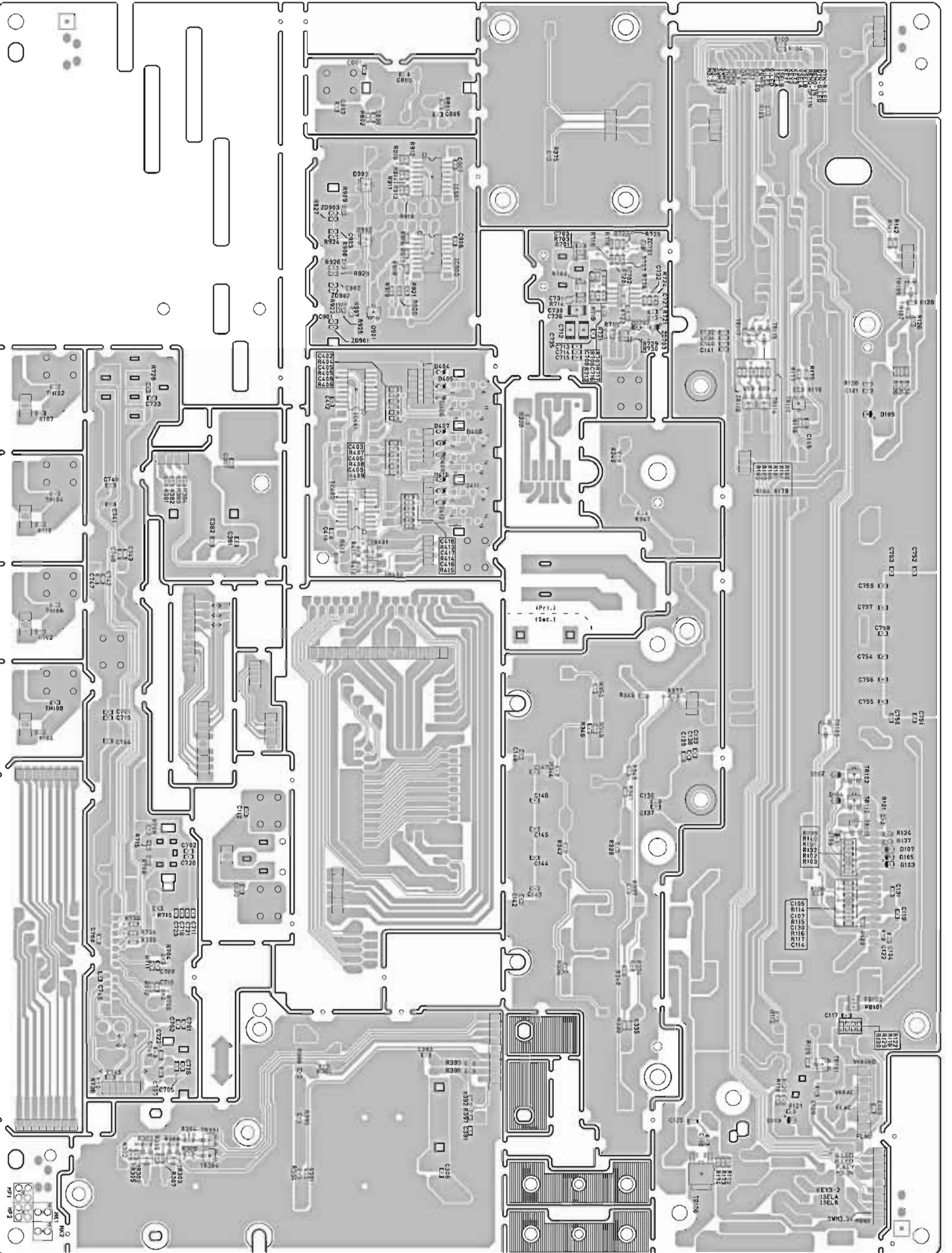


ANODE CONNECTION

	1G~16G	17G	18G	19G		1G~16G	17G	18G	19G
D0A	1-1A	-	-	-	D0B	1-1B	REC	-	-
D1A	2-1A	-	-	-	D1B	2-1B	RDS	-	-
D2A	3-1A	-	-	-	D2B	3-1B	AUTO	-	-
D3A	4-1A	-	-	-	D3B	4-1B	TUNED	-	-
D4A	5-1A	-	-	-	D4B	5-1B	DCI	-	-
D5A	1-2A	-	-	-	D5B	1-2B	DCD	-	-
D6A	2-2A	-	-	-	D6B	2-2B	TrueHD	-	-
D7A	3-2A	-	-	-	D7B	3-2B	96/24	-	-
D8A	4-2A	-	-	-	D8B	4-2B	Express	-	-
D9A	5-2A	-	-	-	D9B	5-2B	Nec:6	-	-
D10A	1-3A	-	-	-	D10B	1-3B	STEREO	-	-
D11A	2-3A	-	-	dB	D11B	2-3B	MASTER	-	-
D12A	3-3A	-	-	Dp	D12B	3-3B	-HD	-	MUTE
D13A	4-3A	-	-	3d	D13B	4-3B	ATTENDEE	S	
D14A	5-3A	-	-	3e	D14B	5-3B	TAG	ORGANIZER	Q3
D15A	1-4A	-	-	3c	D15B	1-4B	MP3	PARTY	Q2
D16A	2-4A	-	-	3g	D16B	2-4B	RMA	EQ	Q1
D17A	3-4A	-	-	3f	D17B	3-4B	AAC	VOL	W
D18A	4-4A	-	-	3b	D18B	4-4B	PCM	DYN	2
D19A	5-4A	-	-	3a	D19B	5-4B	DSD	XT	1
D20A	1-5A	-	-	2d	D20B	1-5B	ANA	MULTEQ	M
D21A	2-5A	-	-	2e	D21B	2-5B	DIG	AUDYSSEY	H
D22A	3-5A	-	-	2c	D22B	3-5B	HDCN	S1	SW3
D23A	4-5A	-	-	2g	D23B	4-5B	EXT2	SLEEP	SW2
D24A	5-5A	-	-	2f	D24B	5-5B	EXT1	RSTR	SW
D25A	1-6A	-	-	2b	D25B	1-6B	LFE	ANA	FR
D26A	2-6A	-	-	2a	D26B	2-6B	FR	DIG	C
D27A	3-6A	-	-	1d	D27B	3-6B	C	HDWI	FL
D28A	4-6A	Z	-	1e	D28B	4-6B	FL	AUTO	SR
D29A	5-6A	X	-	1c	D29B	5-6B	SR	Z4	B
D30A	1-7A	II	-	1g	D30B	1-7B	S	Z3	A
D31A	2-7A	PL	-	1f	D31B	2-7B	SL	Z2	SL
D32A	3-7A	+	-	1b	D32B	3-7B	SBR	AL24	SBR
D33A	4-7A	ES	-	1a	D33B	4-7B	SB	DLWR	SB
D34A	5-7A	HD	-	S2	D34B	5-7B	SBL	HDWI	SBL

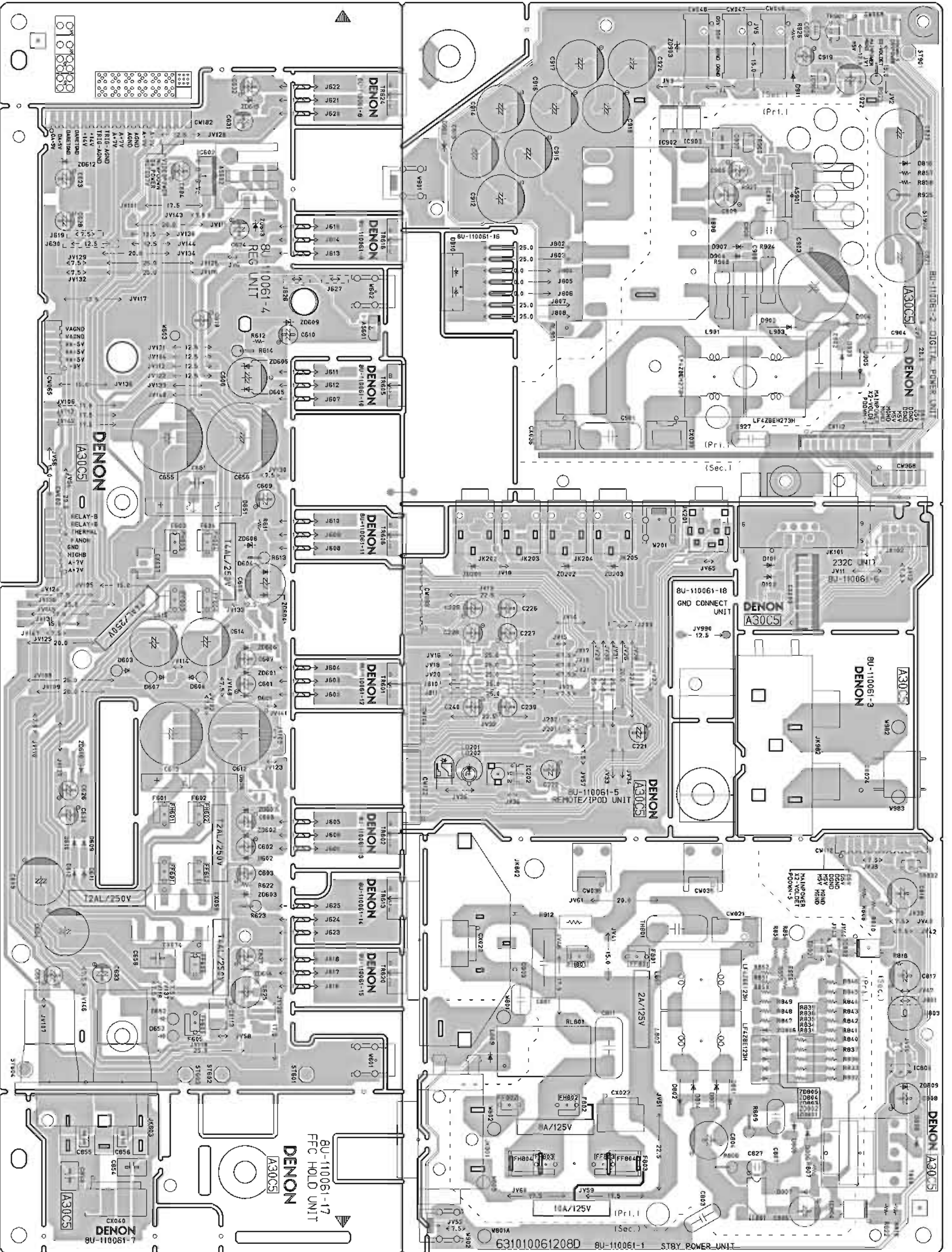
--MEMO--



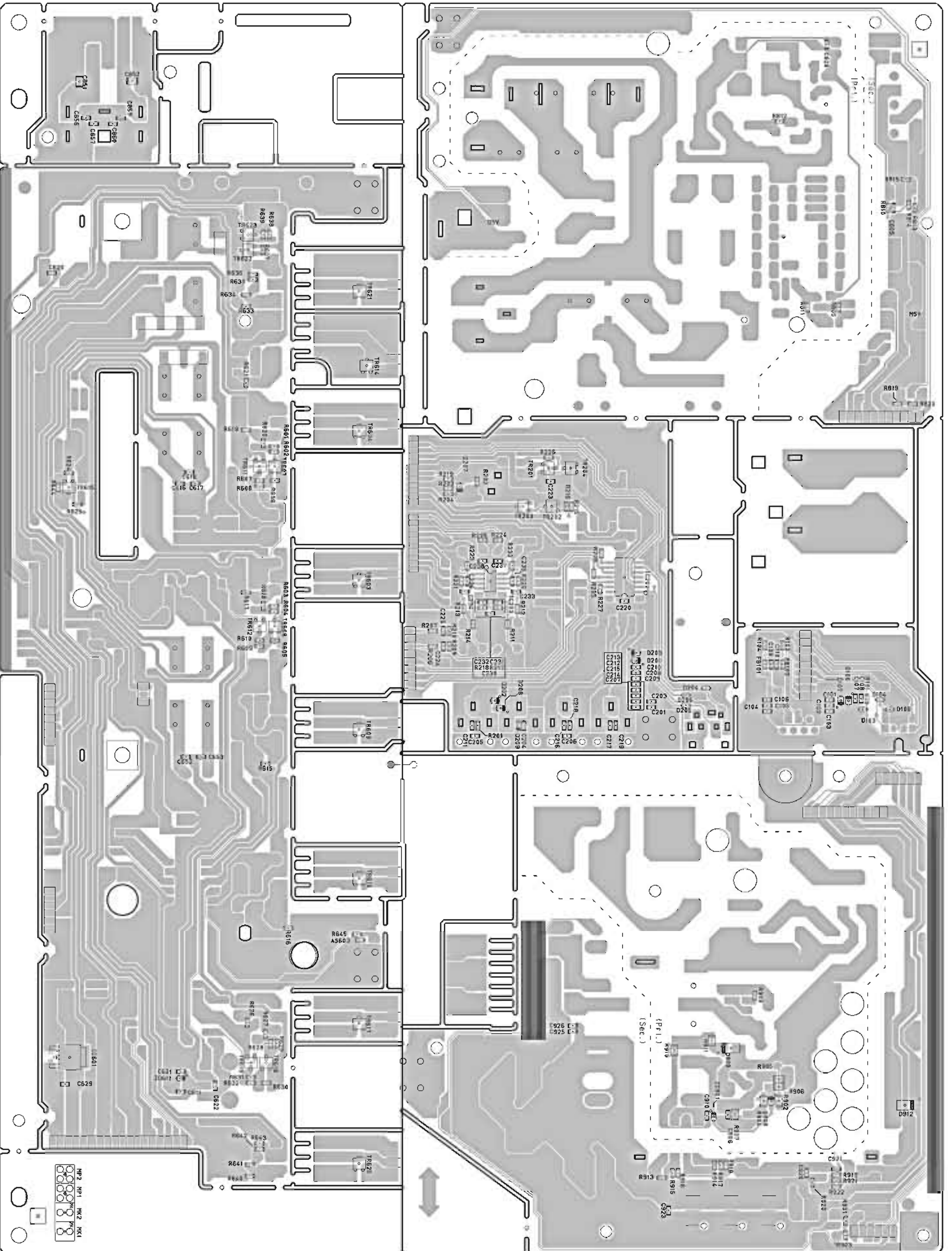


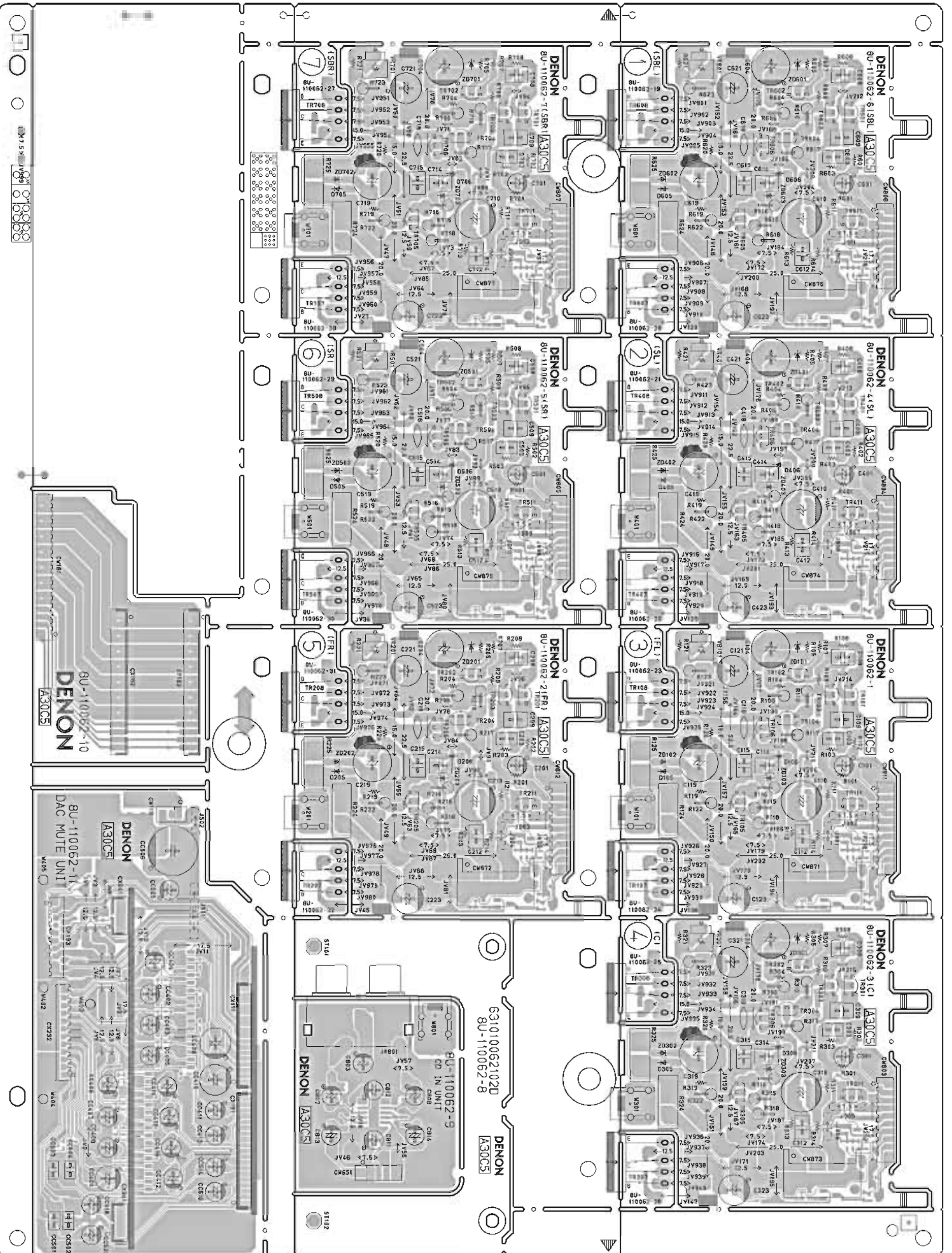
AVR-3310C/AVR-3310/AVR990/AVC-3310

FOIL SIDE



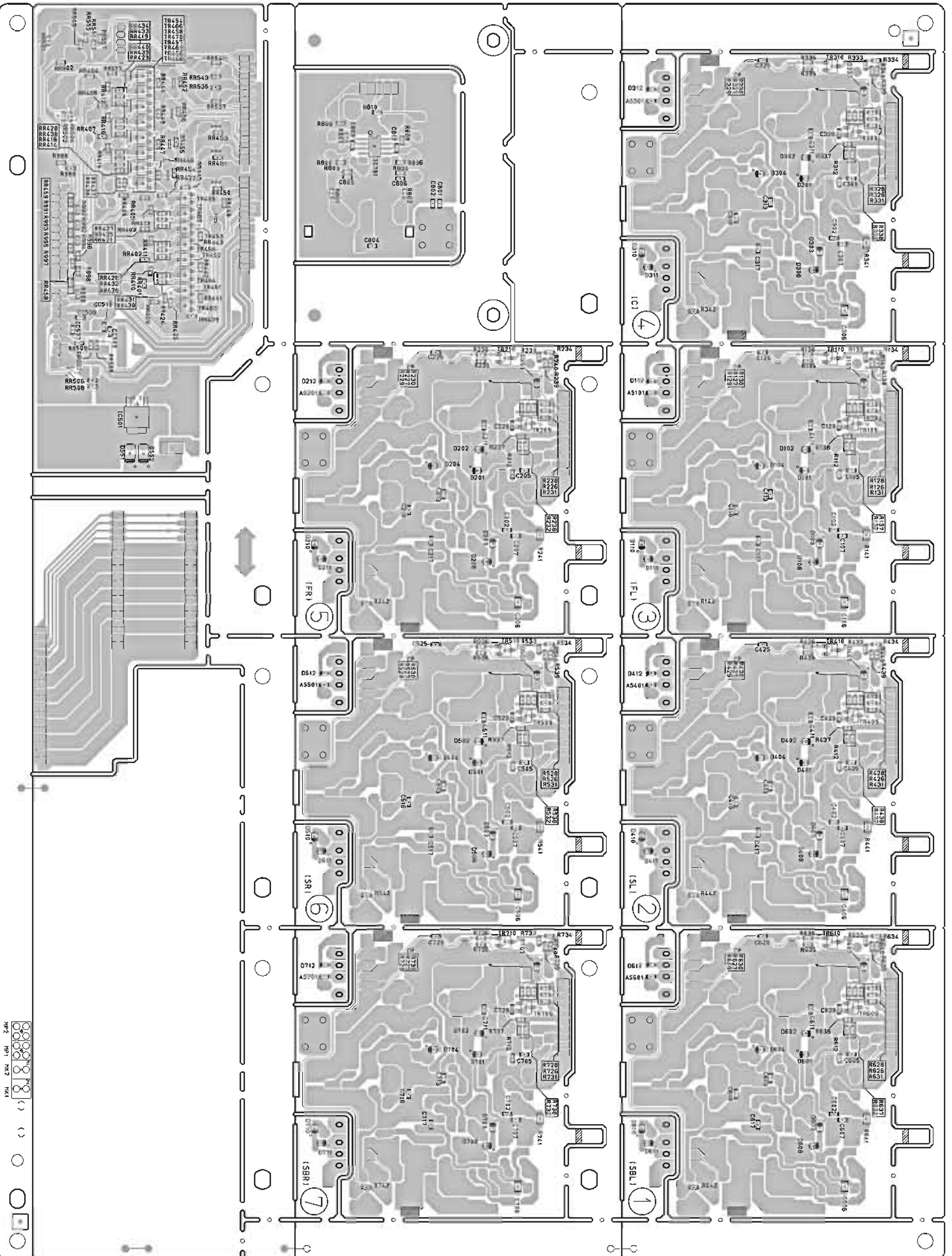
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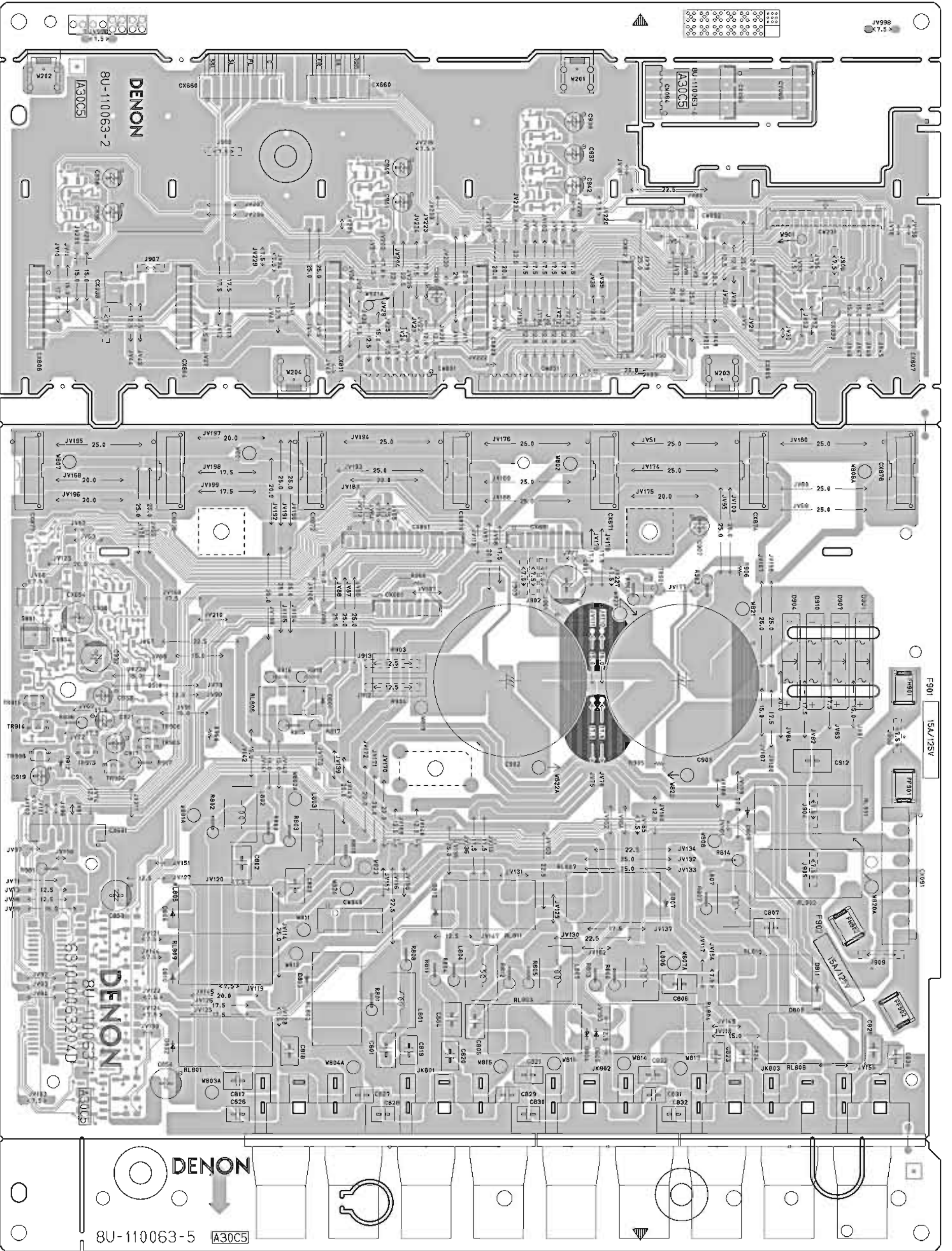


AVR-3310C/AVR-3310/AVR990/AVC-3310

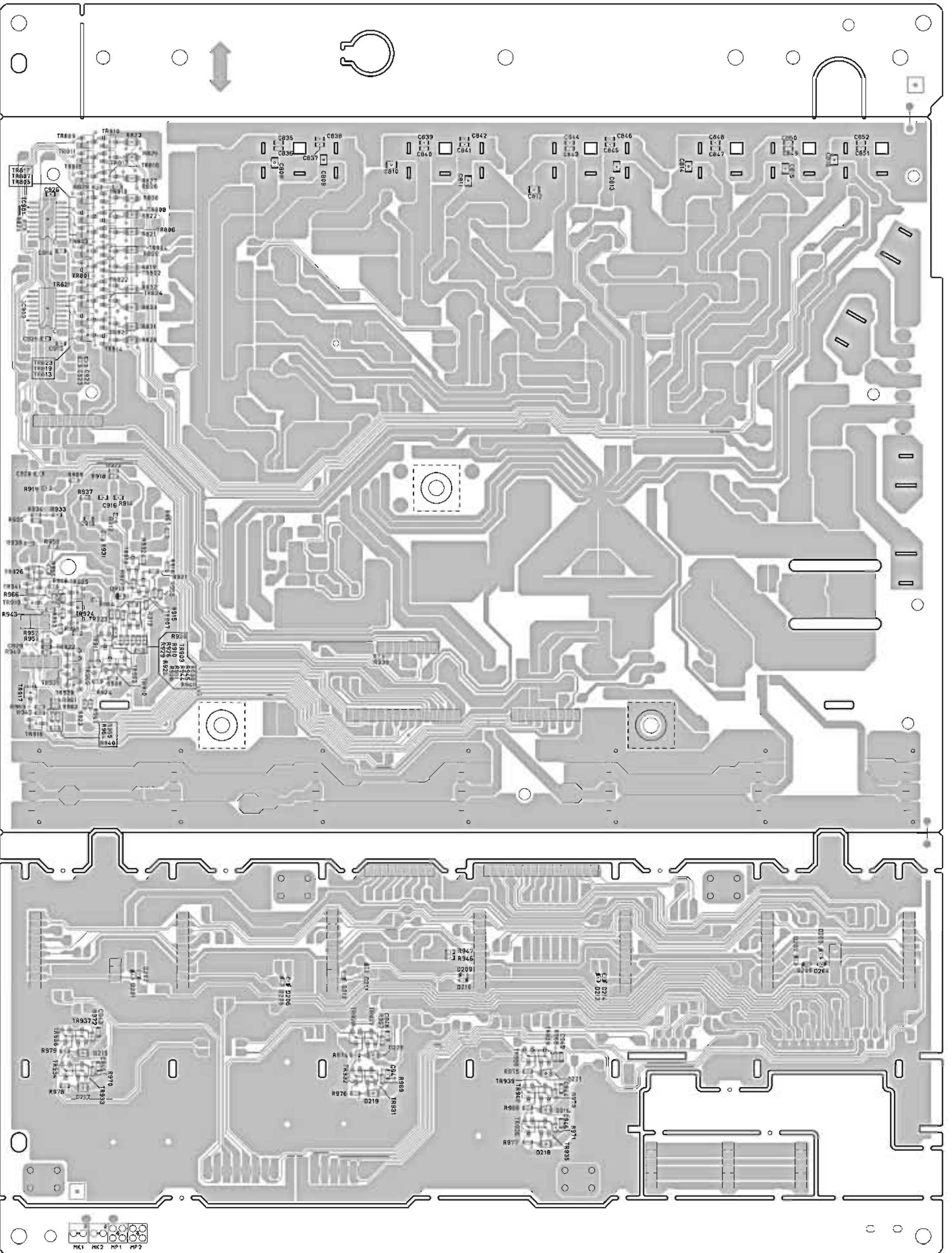
COMPONENT SIDE



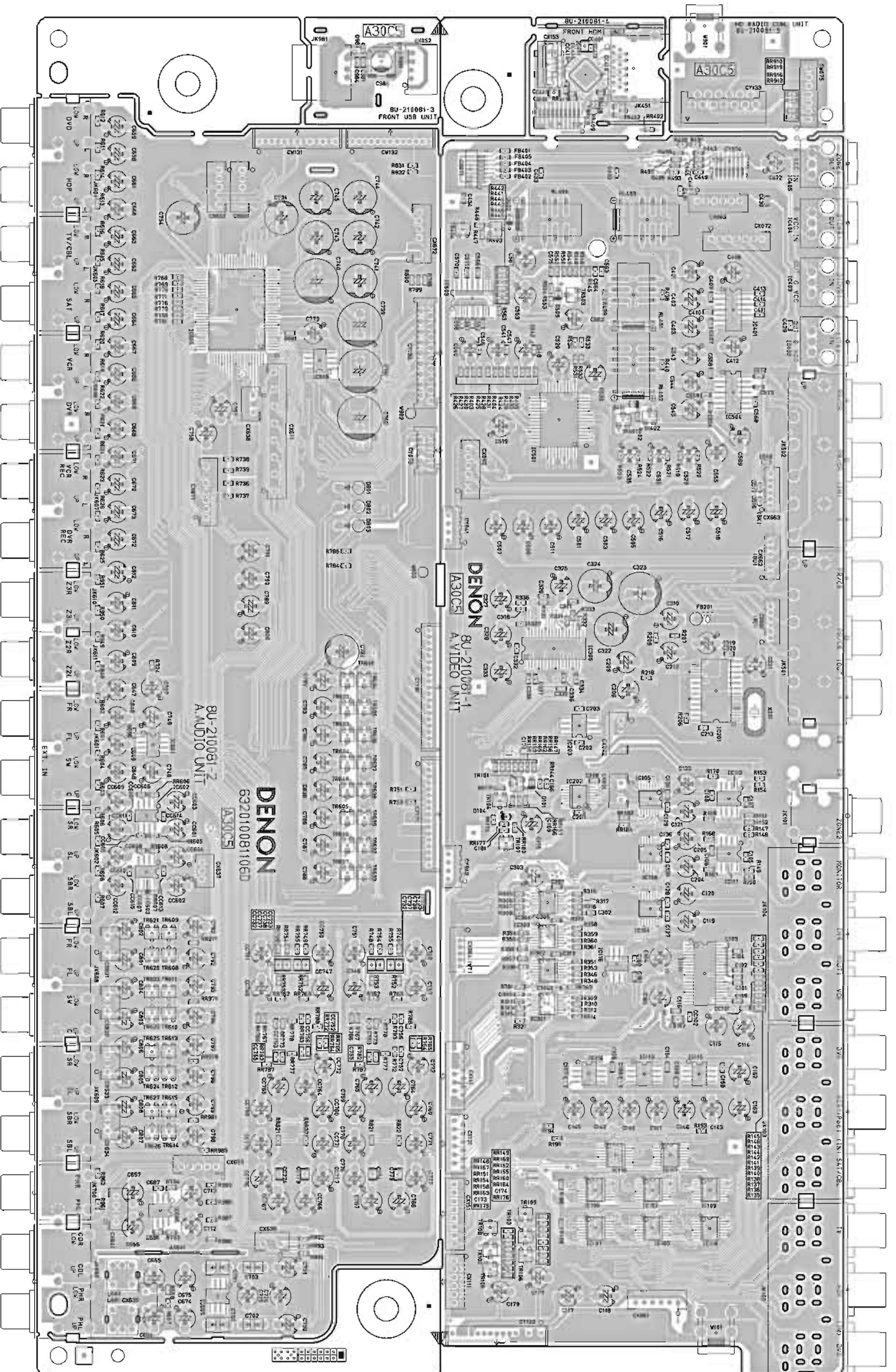
AVR-3310C/AVR-3310/AVR990/AVC-3310



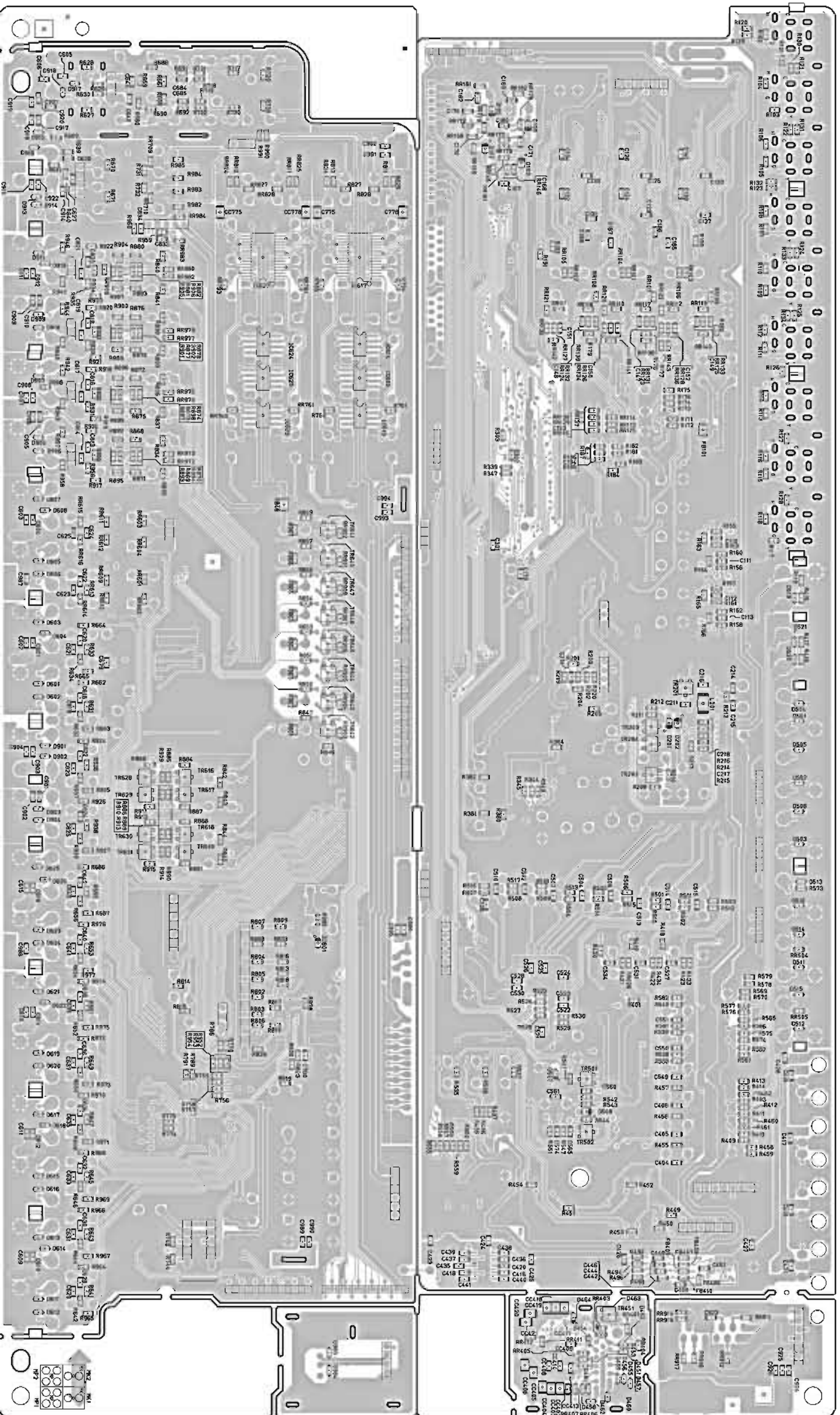
AVR-3310C/AVR-3310/AVR990/AVC-3310



AVR-3310C/AVR-3310/AVR990/AVC-3310

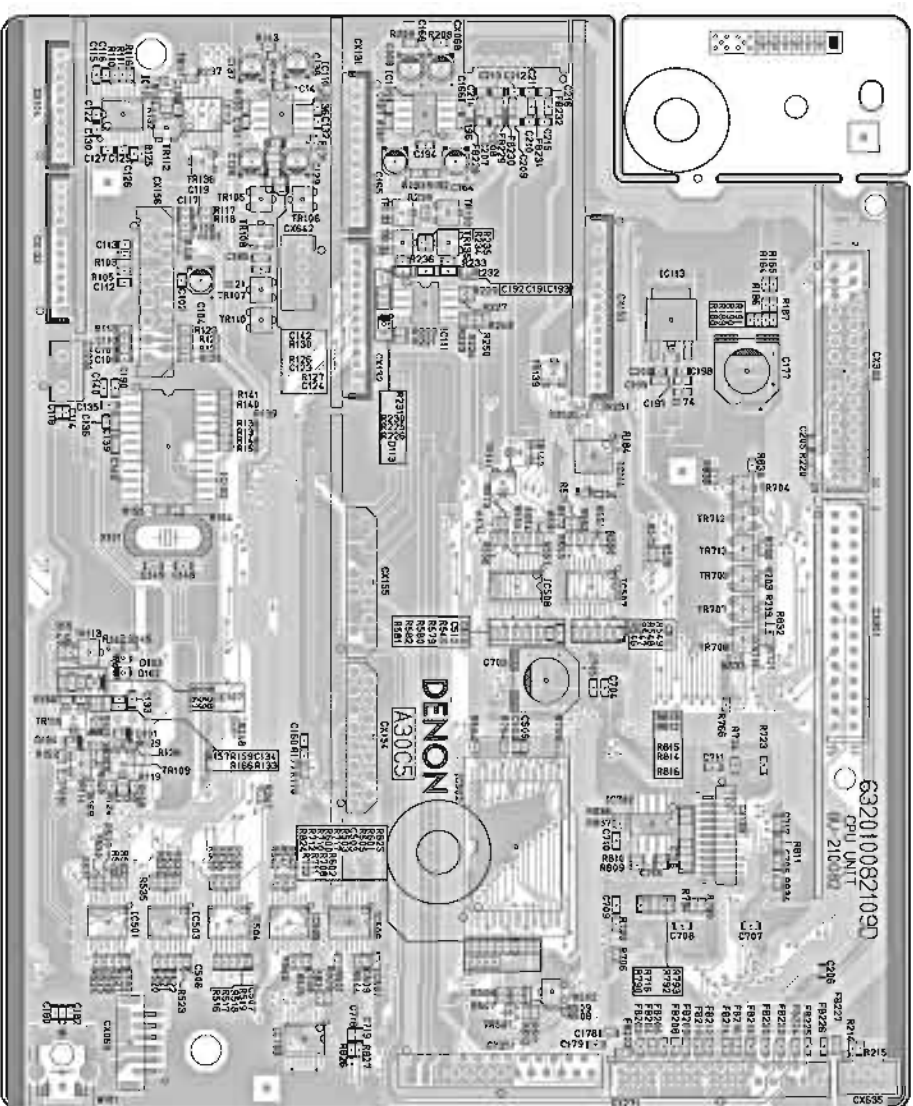


AVR-3310C/AVR-3310/AVR990/AVC-3310

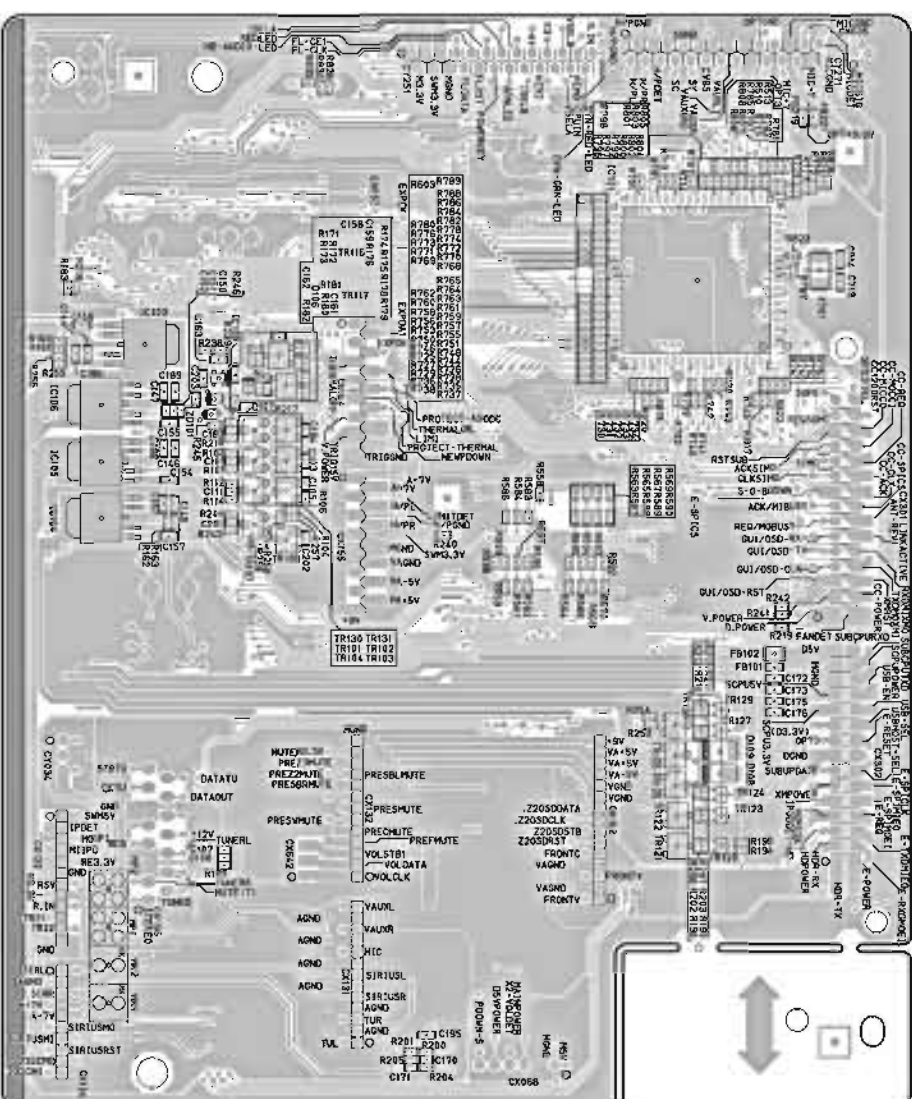


AVR-3310C/AVR-3310/AVR990/AVC-3310

8U-210082 MAIN CPU P.W.B. UNIT

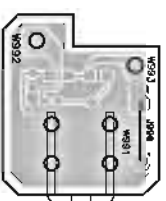


COMPONENT SIDE

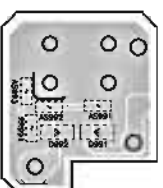


FOIL SIDE

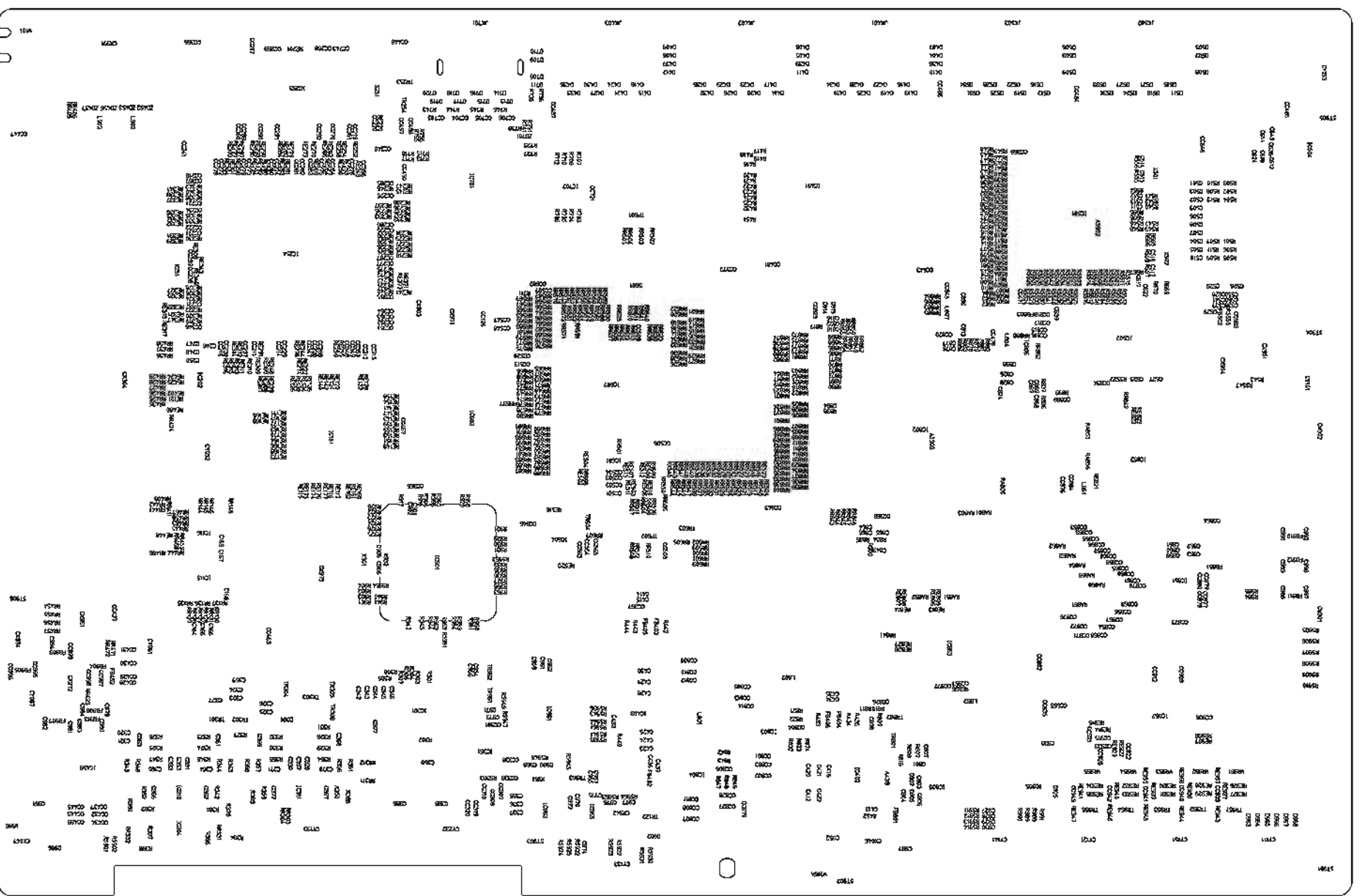
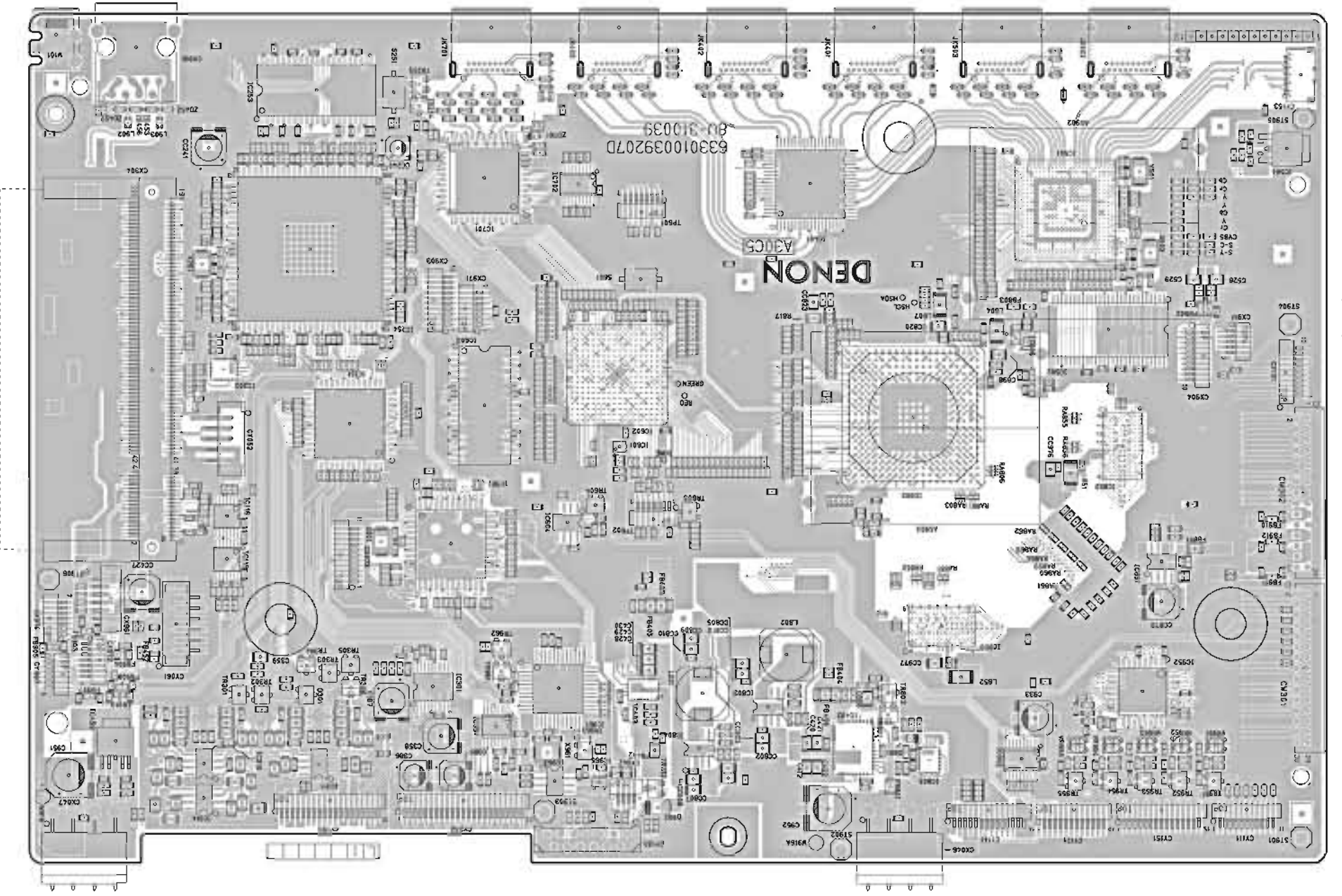
PTC P.W.B. UNIT 



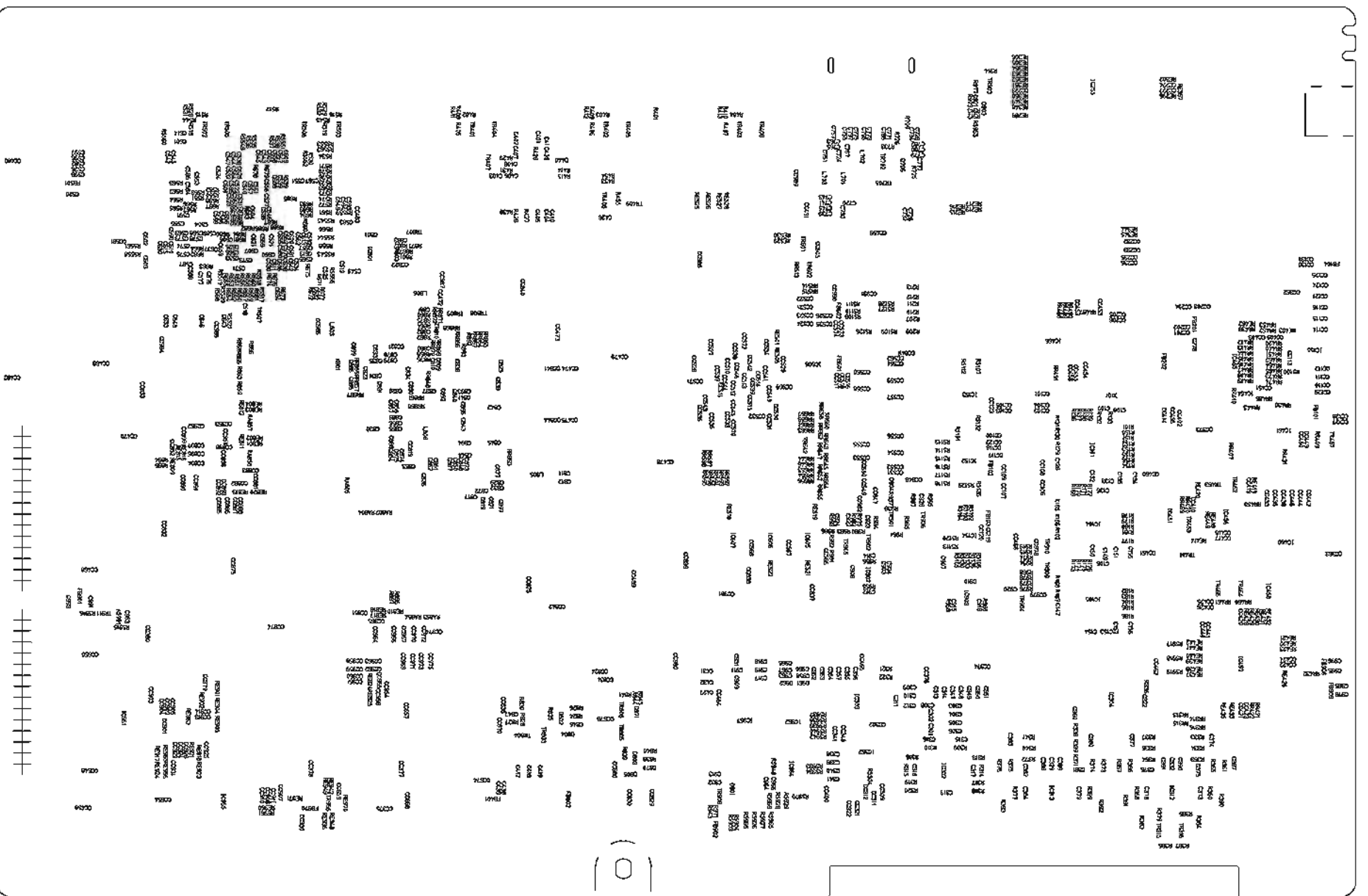
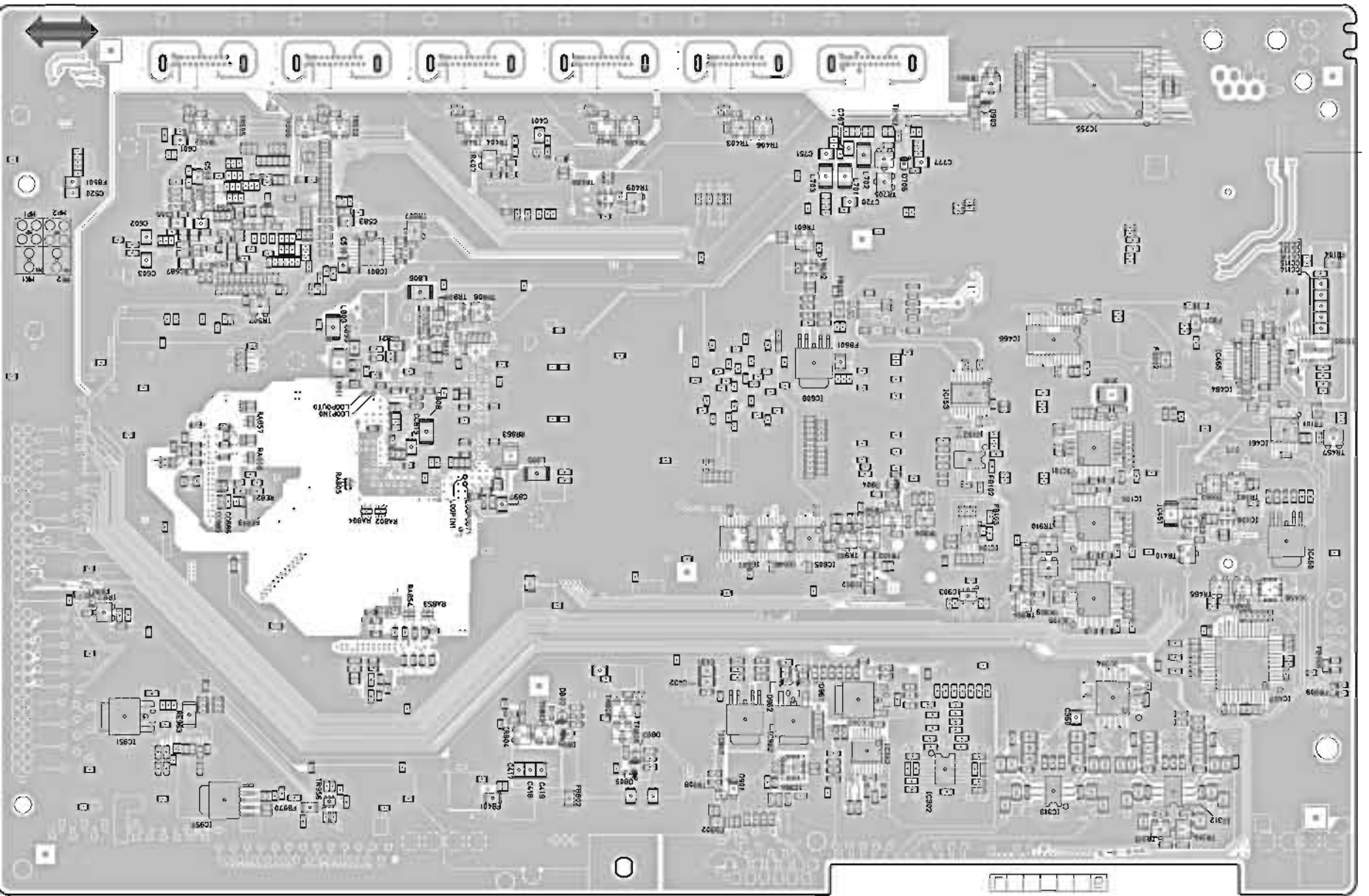
COMPONENT SIDE



FOIL SIDE



COMPONENT SIDE



FOIL SIDE

NOTE FOR PARTS LIST

1. Parts for which "nsp" is indicated on this table cannot be supplied.
2. When ordering of part, clearly indicate "1" and "1" (i) to avoid mis-supplying.
3. Ordering part without stating its part number can not be supplied.
4. Part indicated with the mark "★" is not illustrated in the exploded view.
5. Not including General-purpose Carbon Film Resistor in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)
6. Not including General-purpose Carbon Chip Resistor in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

WARNING:

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

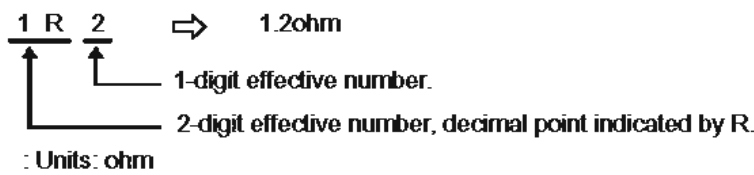
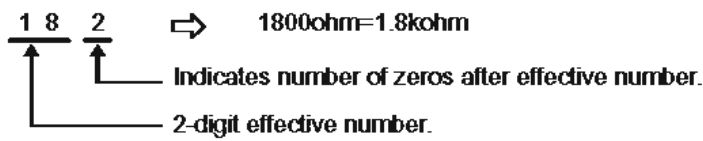
● Resistors

Ex.: RN 14K 2E 182 G FR

Type Shape and performance Power Resistance Allowable error Others

RD : Carbon	2B : 1/8 W	F : ±1%	P : Pulse-resistant type
RC : Composition	2E : 1/4 W	G : ±2%	NL : Low noise type
RS : Metal oxide film	2H : 1/2 W	J : ±5%	NB : Non-burning type
RW : winding	3A : 1 W	K : ±10%	FR : Fuse-resistor
RN : Metal film	3D : 2 W	M : ±20%	F : Lead wire forming
RK : Metal mixture	3F : 3 W		
	3H : 5 W		

* Resistance



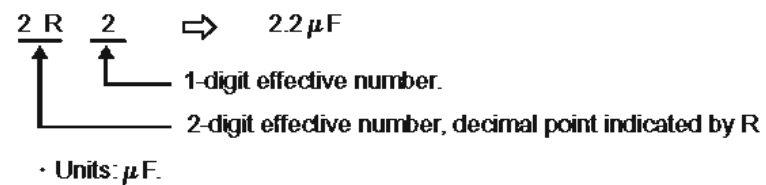
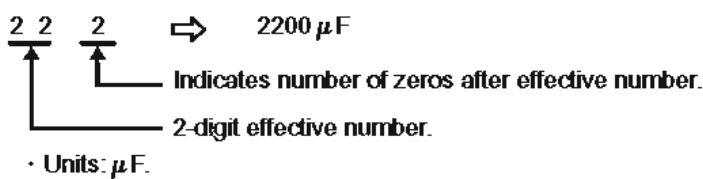
● Capacitors

Ex.: CE 04W 1H 3R2 M BP

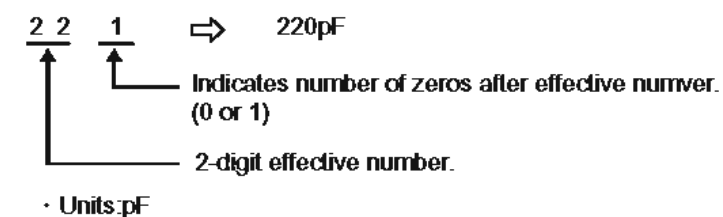
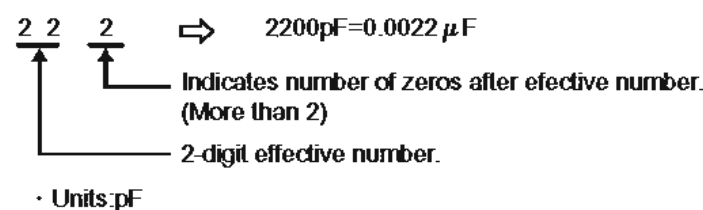
Type Shape and performance Dielectric strength Capacity Allowable error Others

CE : Aluminum foil electrolytic	0J : 6.3 V	F : ±1%	HS : High stability type
CA : Aluminium solid electrolytic	1A : 10 V	G : ±2%	BP : Non-polar type
CS : Tantalum electrolytic	1C : 16 V	J : ±5%	HR : Ripple-resistant type
CQ : Film	1E : 25 V	K : ±10%	DL : For charge and discharge
CK : Ceramic	1V : 35 V	M : ±20%	HF : For assuring high frequency
CC : Ceramic	1H : 50 V	Z : ±80%	U : UL part
CP : Oil	2A : 100 V	: -20%	C : CSA part
CM : Mica	2B : 125 V	P : +100%	W : UL-CSA part
CF : Metallized	2C : 160 V	C : ±0.25pF	F : Lead wire forming
CH : Metallized	2D : 200 V	D : ±0.5pF	
	2E : 250 V	= : Others	
	2H : 500 V		
	2J : 630 V		

* Capacity (electrolyte only)



* Capacity (except electrolyte)



· When the dielectric strength is indicated in AC, "AC" is included after the dielectric strength value.

PARTS LIST OF P.W.B. UNIT

* Parts for which "nsp" is indicated on this table cannot be supplied.

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

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

EU(AVR-3310) : U.S.A. model

EC(AVR-3310) : Canada model

E2(AVR-3310) : Europe model

E1C(AVC-3310) : China model

990E3(AVR-990) : U.S.A. & Canada model

8U-110060 FRONT P.W.B. UNIT ASS'Y (for EU,EC,E2 model)

8U-110060B FRONT P.W.B. UNIT ASS'Y (for 990E3 model)

8U-110060C FRONT P.W.B. UNIT ASS'Y (for E1C model)

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP					
△ IC101	00D2623602003	GP1UE271XKVF			
△ IC102	00D2680073905	ICP-N15T			
IC701	00D2690240003	GP1FMV31RK0F			
IC702	00D2631289900	AZ4580MTR-E1			
IC901	00D2621205907	TC74HCU04AF(TP1) +C			
IC902	00D2623561908	TC74VHC14F			
TR101	00D2690191903	KRA104S-RTK/P (47K-47K)			
TR102	00D2730464901	KTC3875S-GR-RTK/P			
TR103	00D2690193901	KRC104S-RTK/P (47K-47K)			
TR106	00D2730494900	KTC2022D-Y-RTF/P			
TR111-113	00D2730464901	KTC3875S-GR-RTK/P			
TR114	00D2710312905	KTA1504S-GR-RTK/P			
TR115	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR116	00D2710312905	KTA1504S-GR-RTK/P			
TR117	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR301	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR302,303	00D2710312905	KTA1504S-GR-RTK/P			
TR304	00D2690193901	KRC104S-RTK/P (47K-47K)			
D101	00D2760704916	1SR35-400A(T82)			
D103	00D2760794900	KDS160-RTK/P			
D105	00D2760794900	KDS160-RTK/P			
D107	00D2760794900	KDS160-RTK/P			
D108	00D2760704916	1SR35-400A(T82)			
D901	00D2760738908	KDS226-RTK/P (A-K)			
D902	00D2760738908	KDS226-RTK/P (A-K)			
D903	00D2760738908	KDS226-RTK/P (A-K)			
ZD101	00D2760761975	MTZJ18B T77			
ZD102	00D2760762903	MTZJ24B T77			
ZD103	00D2760636903	MTZJ8.2BT77			
ZD701-703	00D2760683930	UDZS5.1B-TE17 +C			
LD101	263010032409S	SIR-341STA49			
LD102	176010001402S	SELT5E20C-S(TP15)			
LD103	00D9630366108	LED BL-BEG204-L 5PI			K500052004010S
LD301	00D9630366108	LED BL-BEG204-L 5PI			K500052004010S
FL101	172010006108D	FLD(19-ST-02GINK)			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
RESISTORS GROUP					
R146	00D2442043937	RS14B3A100JNBST(S)			
R149	00D2442043937	RS14B3A100JNBST(S)			
CAPACITORS GROUP					
C102	00D2561042903	CF93A2E104KT			
C103,104	nsp	CK73B1E104KT +1608			
C105	nsp	CC73CH1H101JT +1608			
C106	00D2544737989	CE04W1H100MT(SF)			
C107	nsp	CC73CH1H101JT +1608			
C109	00D2544302974	CE04W1A101MT(SRE)			
C110	00D2544737989	CE04W1H100MT(SF)			
C114	nsp	CC73CH1H300JT +1608			
C115,116	00D2544812707	CE04W1H471MC(SRG/K15)			
C119	nsp	CK73B1E473KT +1608			
C126	00D2544586978	CE04W2A010MT(RA3)			
C127	00D2544725920	CE04W1J101MT(GR)			
C129	nsp	CK73B1H103KT (1608) +1608			
C130	nsp	CC73CH1H101JT +1608			
C131	nsp	CK73B1H103KT (1608) +1608			
C137	nsp	CK73B1E104KT +1608			
C139	nsp	CK73B1E104KT +1608			
C141	nsp	CK73B1E104KT +1608			
C142,143	nsp	RM73B-0R0KT +1608			
C145	nsp	RM73B-0R0KT +1608			
C147,148	nsp	RM73B-0R0KT +1608			
C149	nsp	CK73B1E104KT +1608			
C306,307	nsp	CK73B1E104KT +1608			
C381,382	nsp	CK73B1E104KT +1608			
C391,392	nsp	CK73B1E104KT +1608			
C701	nsp	CK73B1E104KT +1608			
C702	nsp	CK73B1H102KT +1608			
C704	00D2544737947	CE04W1H010MT(SF)			
C705	nsp	CC73CH1H101JT +1608			
C706	nsp	CK73B1H102KT +1608			
C707	nsp	CK73B1A105KT +1608			
C708	nsp	CC73CH1H101JT +1608			
C709,710	nsp	CC73CH1H331JT +1608			
C711	nsp	CK73B1H102KT +1608			
C713	nsp	CK73B1E104KT +1608			
C714	nsp	CK73B1H102KT +1608			
C715	nsp	CC73CH1H101JT +1608			
C716	nsp	CC73CH1H910JT +1608			
C717	00D2544737947	CE04W1H010MT(SF)			
C718,719	nsp	CC73CH1H101JT +1608			
C720,721	nsp	CK73B1E104KT +1608			
C722,723	nsp	CK73B1H102KT +1608			
C724	00D2544737947	CE04W1H010MT(SF)			
C725,726	00D2544722949	CE04W1H010MT(GR)			
C727	nsp	CC73CH1H101JT +1608			
C731	nsp	CK73B1E104KT +1608			
C732	nsp	CC73CH1H910JT +1608			
C733	nsp	CC73CH1H101JT +1608			
C734	00D2544737947	CE04W1H010MT(SF)			
C735	nsp	CK73B1E104KT +1608			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C737	00D2544737947	CE04W1H010MT(SF)			
C740,741	nsp	CC73CH1H102JT +1608			
C742,743	nsp	CK73B1E104KT +1608			
C745,746	nsp	CC73CH1H101JT +1608			
C747	nsp	CK73B1H102KT +1608			
C748	nsp	CC73CH1H101JT +1608			
C749	nsp	CK73B1H102KT +1608			
C751,752	nsp	CC73CH1H221JT +1608			
C756,757	nsp	CC73CH1H221JT +1608			
C760	nsp	CK73B1E104KT +1608			
C761	nsp	CK73B1H102KT +1608			
C762	nsp	CC73CH1H101JT +1608			
C801	nsp	CC73CH1H221JT	E1C		
C802	nsp	CK73B1H103KT (1608) +1608	E1C		
C803	nsp	CC73CH1H221JT	E1C		
C804	00D2544722949	CE04W1H010MT(GR)	E1C		
C805.806	nsp	CC73CH1H331JT	E1C		
C904-906	00D2544722978	CE04W1H4R7MT(GR)			
C-907,908	nsp	CK73B1E104KT +1608			
OTHERS PARTS GROUP					
AS101,102	00D4610862045	FL SPACER (T=5)			
CW043,044	nsp	4P CON.SOCKET(TUC-P)			
CW053	nsp	5P CON.SOCKET TUC-P			
CW081	nsp	8P CON.SOCKET(TUC-P)			
CW102,103	nsp	10P CON.SOCKET TUC-P			
CW154,155	nsp	15P JE CON.PLUG			
CX021	nsp	2P VH CONN.BASE(L)RD	E1C		
CX034	nsp	3P CONN.BASE(KR-PH)			
CX043,044	nsp	4P CON.BASE(TUC-P)			
CX053	nsp	5P CON.BASE TUC-P			
CX064	nsp	6P CON.BASE(TUC-P)			
CX066	nsp	5268-07A 7P ANGLE		L102526800700S	
CX067	nsp	6P FFC BASE(9610SA)			
CX073	nsp	7P CON BASE TWG-P			
CX082	nsp	8P CON BASE(TUC-P)			
CX092	nsp	9P CON.BASE TWG-P			
CX102,103	nsp	10P CON.BASE TUC-P			
CX181	nsp	18P CON.BASE TUC-P			
CX192	nsp	19P CON.BASE(TWG-P)			
CX231	nsp	23P CON.BASE TWG-P			
CX251	00D2051316000	25P FFC BASE(9610S)Y			
CX271	00D2051329000	27P FFC BASE(9610SB)			
FB101,102	nsp	RM73B-0R0KT +2125			
JK701	00D2048260004	MINI JACK			
JK702	00D2048757009	1P PIN S-JACK(MDC-074V)-AU			
JK703	00D2048217031	H/P JACK (BK(AU))			
JK707	963643005070S	TERMINAL RCA 3PIN		G606303G0500YS	
JK801	00D2048760009	2P PIN JACK(NI)	E1C		
JK901	963643005340S	RCA-303A-02 OR OR OR CAP		G606303A0200YS	

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Ref. No.	Part No.	Part Name	Remarks		Q'ty	New
S301	00D9630095305	SW,TACT SKHV10910D01		G180040500010S		
S302	90M-SP001380R	SDDL-005-S(C-UL)		G000122006060S		
S331	00D9630095305	SW,TACT SKHV10910D01	EU, EC, E2, E1C	G180040500010S		
S332-345	00D9630095305	SW,TACT SKHV10910D01		G180040500010S		
S347	00D9630095305	SW,TACT SKHV10910D01		G180040500010S		
S349-351	00D9630095305	SW,TACT SKHV10910D01		G180040500010S		
S371-373	00D9630095305	SW,TACT SKHV10910D01		G180040500010S		
S381	00D9630387408	SW,ENCODER EC16B24SO		G121162400070S		
S391	00D9630095305	SW,TACT SKHV10910D01		G180040500010S		
S392	00D9630387408	SW,ENCODER EC16B24SO		G121162400070S		
S393	00D9630095305	SW,TACT SKHV10910D01	EU, EC, 990E3, E2	G180040500010S		
S394.395	00D9630095305	SW,TACT SKHV10910D01		G180040500010S		
W701	nsp	M3 SCREW TERMINAL				
W703,704	nsp	M3 SCREW TERMINAL				

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8U-110061 POWER SUPPLY P.W.B. UNIT ASS'Y (for EU,EC,990E3 model)
8U-110061A POWER SUPPLY P.W.B. UNIT ASS'Y (for E2 model)
8U-110061C POWER SUPPLY P.W.B. UNIT ASS'Y (for E1C model)

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP					
IC201	00D2623676903	TC74VHCT08AF(E,K,F)			
IC203	00D2631289900	AZ4580MTR-E1	EU, EC, 990E3		
IC601	00D2631275901	UPC2905BT1D			
IC602	00D2631274012	NJM2396F09			
IC801	231010063000S	STR-A6079			
IC802	00D2623047008	PC123Y22	EU, EC, 990E3		
IC804	00D2623047008	PC123Y22			
IC805	00D2631256904	TA76432S(TPE6,F)			
IC901	232810025706S	TOP248YN	EU, EC, 990E3		
IC901	00D2650123005	TOP246YN	E2, E1C		
IC902,903	00D2623047008	PC123Y22			
IC904	00D2631256904	TA76432S(TPE6,F)			
TR202	00D2730464901	KTC3875S-GR-RTK/P			
TR203	00D2690191903	KRA104S-RTK/P (47K-47K)			
TR601	214050006000S	2SC4935			
TR602	212050008000S	2SA1869			
TR603	00D2730464901	KTC3875S-GR-RTK/P			
TR604	00D2710312905	KTA1504S-GR-RTK/P			
TR605	212050008000S	2SA1869			
TR606	214050006000S	2SC4935			
TR607	00D2730464901	KTC3875S-GR-RTK/P			
TR608	00D2710312905	KTA1504S-GR-RTK/P			
TR609	00D2730464901	KTC3875S-GR-RTK/P			
TR610,611	00D2710312905	KTA1504S-GR-RTK/P			
TR612	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR613	214050006000S	2SC4935			
TR614	00D2730464901	KTC3875S-GR-RTK/P			
TR616	214050006000S	2SC4935			
TR617	00D2730464901	KTC3875S-GR-RTK/P			
TR618	00D2710312905	KTA1504S-GR-RTK/P			
TR619	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR624	00D2730442004	2SC4793 (Y)			
TR625	00D2730479909	2N5551S-RTK/P			
TR801	214050007409S	2SC5549	EU, EC, 990E3		
TR802	00D2730468907	KTC3199-GR-AT/P			
TR901	00D2730468907	KTC3199-GR-AT/P			
D103	251310004507S	CG0603MLC-12LE	EU, EC, 990E3		
D104	251310004507S	CG0603MLC-12LE	EU, EC, 990E3		
D104	00D2472018903	RM73B-0R0KT	E2, E1C		
D105	251310004507S	CG0603MLC-12LE	EU, EC, 990E3		
D201-203	00D2760794900	KDS160-RTK/P			
D204-206	251310004507S	CG0603MLC-12LE			
D208	00D2760794900	KDS160-RTK/P			
D209	00D2760750902	RB521S-30TE61 +REF			
D603	00D2760704903	1SR35-400A(T93X)			
D606	00D2760855001	D3SB20-7103			
D607,608	00D2760704903	1SR35-400A(T93X)			
D651	00D2760855001	D3SB20-7103			
D652,653	00D2760704903	1SR35-400A(T93X)			
D801-804	00D2760729904	EM01AT (V1)			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
D805,806	00D2760813001	AP01C			
D807,808	201050006301S	RF101A2S			
D809	00D2760401905	1SS133T77 (TAPE)			
D901	00D2760401905	1SS133T77 (TAPE)			
D902-905	00D2760729904	EM01AT (V1)			
D906,907	00D2760813001	AP01C			
D909	00D2760751901	1SR154-400TE25 +REF			
D910	203050018706S	D25SC6M			
D911	00D2760401905	1SS133T77 (TAPE)			
D912	00D2760684900	RB051L-40TE25 +C			
ZD201	00D2760760963	MTZJ6.2B T77			
ZD603	00D2760477900	HZS16-1 TD(TAPE)			
ZD606,607	00D2760464900	HZS7A-1TD			
ZD608,609	00D2760468906	HZS9B-1TD			
ZD613	00D2760466908	HZS7C-1TD			
ZD615	00D2760468906	HZS9B-1TD			
ZD801-806	00D2760485905	HZS36-1TD	EU, EC, 990E3		
ZD903	00D2760760950	MTZJ5.6B T77			
TH801	00D2790044002	NTH11D8R0LA			
RESISTORS GROUP					
R613,614	00D2442051974	RS14B3A102JNBST(S)			
R623	00D2442051974	RS14B3A102JNBST(S)			
R808	00D2442043979	RS14B3A5R6JNBST(S)			
R809	00D2442686909	RS14B3D154JNBST(S)			
R810	nsp	RM73B-273FT_1608			
R814	nsp	RM73B-273FT_1608			
R815	nsp	RM73B-103FT +1608			
R908	00D2442675732	RS14B3D104JNBF(ERG)			
R912	121050030705S	RC05GF2H106K(UL)			
R920	00D2472041970	RM73B-752DT(1608)			
R924	00D2442675732	RS14B3D104JNBF(ERG)			
R925	00D2442043924	RS14B3A680JNBST (S)			
CAPACITORS GROUP					
C106,107	nsp	CK73B1E104KT +1608			
C108	nsp	CK73B1H102KT +1608	EU, EC, 990E3		
C109,110	nsp	CC73CH1H101JT +1608			
C201	nsp	CK73B1E104KT +1608			
C203	nsp	CC73CH1H221JT +1608			
C204-207	nsp	CK73B1E104KT +1608			
C208	nsp	CC73CH1H221JT +1608			
C209,210	nsp	CK73B1E104KT +1608			
C211	nsp	CK73B1H102KT +1608			
C212	nsp	CC73CH1H221JT +1608			
C213	nsp	CK73B1E104KT +1608			
C214	nsp	CC73CH1H221JT +1608			
C216,217	nsp	CC73CH1H221JT +1608			
C218,219	nsp	CK73B1E104KT +1608			
C220	nsp	CK73B1H102KT +1608			
C221	00D2544722981	CE04W1H100MT(GR)			
C224,225	nsp	CC73CH1H331JT +1608	EU, EC, 990E3		

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C226-229	00D2544722981	CE04W1H100MT(GR)	EU, EC, 990E3		
C230	nsp	CK73B1E104KT +1608	EU, EC, 990E3		
C237,238	nsp	CK73B1E104KT +1608	EU, EC, 990E3		
C239,240	00D2544722981	CE04W1H100MT(GR)	EU, EC, 990E3		
C601,602	00D2544722994	CE04W1H220MT(GR)			
C603	00D2544722981	CE04W1H100MT(GR)			
C604	00D2544722994	CE04W1H220MT(GR)			
C605,606	00D2544723922	CE04W1H101MT(GR)	EU, EC, 990E3		
C605,606	00D2544580712	CE04W1H101MC(ROB)	E2, E1C		
C607,608	00D2544722981	CE04W1H100MT(GR)			
C609,610	00D2544722981	CE04W1H100MT(GR)	EU, EC, 990E3		
C609,610	00D2544583942	CE04W1H100MT(ROB)	E2, E1C		
C611	nsp	CK73B1E104KT +1608			
C612,613	00D2544761735	CE04W1C472MC(SMQ)			
C614,615	00D2544522796	CE04W1V102MC SMG/RE3			
C618	nsp	CK73B1H104KT +1608			
C619	00D2544722949	CE04W1H010MT(GR)			
C621	nsp	CK73B1E104KT +1608			
C622	nsp	CK73B1H104KT +1608			
C623	00D2544722994	CE04W1H220MT(GR)			
C624	00D2544722981	CE04W1H100MT(GR)			
C628	00D2544722994	CE04W1H220MT(GR)			
C629	nsp	CK73B1E104KT +1608			
C631	00D2544722994	CE04W1H220MT(GR)			
C632,633	00D2544722981	CE04W1H100MT(GR)			
C651	00D2561042903	CF93A2E104KT			
C654	00D2544812707	CE04W1H471MC(SRG/K15)			
C655,656	134050080201S	CE04W1E472M(R0)			
C657	00D2544722949	CE04W1H010MT(GR)			
C658	00MDF15104351	0.1UF,J,N,50V			
C659	00D2544812707	CE04W1H471MC(SRG/K15)			
△ C801	00D2568038004	CF99-2EAC104M			
△ C803	00D2538029713	CK45F2EAC471KC(KX)			
C804	134050085404S	CE04W2G3R3MT(KMG)	EU, EC, 990E3		
C804	134050091409S	CE04W2G1R0MT(KMG)	E2, E1C		
C805	nsp	CK73B1A224KT +1608			
C806	134050069402S	CE04W2AH270MT EB5(KY)			
△ C807	00D2534548706	CC45R3A102KC			
C808	00D2544651913	CE04W0J102MT H15(KY)			
△ C809	00D2538032700	CK452EAC102MC(KX)			
△ C811	00D2538022707	CK45F2EAC103MC			
C817	00D2544651913	CE04W0J102MT H15(KY)			
C821	134050084203S	CE04W0J682MC(KMG)K25S			
C827	132050037201S	CC45SL3D150JC			
C828	nsp	CK73B1H103KT (1608) +1608			
△ C901	00D2538022707	CK45F2EAC103MC			
△ C902	00D2568038004	CF99-2EAC104M			
C903	00D2544588714	CE04W2D221MC(KMG)	EU, EC, 990E3		
C903	00D2544589713	CE04W2G101MC(KMG)	E2, E1C		
△ C904	00D2538029700	CK45F2EAC222MC (KX)			
C905	00D2544654907	CE04W1H220MT E11(KY)			
△ C908	00D2568038004	CF99-2EAC104M			
C909	00D2544525913	CE04W1H470MT SMG/RE3			
C912-916	00D2544770700	CE04W0J562MC K35(KY)			
C919	00D2544722981	CE04W1H100MT(GR)			
C921	nsp	CK73B1A224KT +1608			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C923 C925,926 C928	nsp nsp 132010087406S	CK73B1E104KT +1608 CK73B0J475KT +1608 CK45R1H103KT			
OTHERS PARTS GROUP					
AS602 AS901	00D4170476023 nsp	RADIATOR RADIATOR			
CW021 CW035,036 CW047 CW065 CW068	nsp nsp nsp nsp nsp	2P-3P L=500mm VA-SDN JL CONNECTOR(F-E) 4P L=210mm VH-SDN 6P CON.SOCKET(TUC-P 20010WS-06A00		L101200100610S	
CW082 CW093 CW104 CW112 CW122	nsp nsp nsp nsp nsp	8P CON.SOCKET(TUC-P) 9P CON.SOCKET TUC-P 10P SOCKET(9120) 11P CON.SOCKET TUC-P 12P SOCKET(9120)			
CW182 CX022 CX024 CX035,036	nsp nsp nsp nsp	18P CON.SOCKET TUC-P 2P VH CON BASE (Blue) 2P VH CONN. BASE (L) JL CONNECTOR(BT-E)	E2		△
CX055 CX074 CX093 CX112	nsp nsp nsp nsp	5P EH CONNECTOR BASE 7P EH CONNECTOR BASE 9P CON.BASE TUC-P 11P CON.BASE TUC-P			
△ F601,602 △ F603,604 △ F605 △ F605 △ F801	00D2061096022 00D2061096051 00D2061096051 00D2061096022 00D2061094037	FUSE(218)T2AL250V FUSE(218)T4AL250V FUSE(218)T4AL250V FUSE(218)T2AL250V FUSE(233)T2AL125V	EU, EC, 990E3 E2, E1C EU, EC, 990E3		△ △ △ △ △
△ F801 △ F802 △ F802 △ F803 △ F803	00D2061087073 00D2061096080 00D2061096035 00D2061046043 00D2061015087	FUSE(ET1.6A) FUSE(218)T8AL250V FUSE(218)T2.5AL250V FUSE (10A) FUSE(4.0A)	E2, E1C EU, EC, 990E3 E2 EU, EC, 990E3 E2, E1C		△ △ △ △ △
FB101,102 FF601-605 FF801	nsp nsp nsp	RM73B-0R0KT +1608 FUSE CLIP(TAPE) FUSE CLIP(TAPE)			
FF802 FF803 FH601-605 FH801	nsp nsp nsp nsp	FUSE CLIP(TAPE) FUSE CLIP(TAPE) FUSE CLIP(TAPE) FUSE CLIP(TAPE)	EU, EC, 990E3, E2		△ △
FH802 FH803 JK101	nsp nsp 00D2051305008	FUSE CLIP(TAPE) FUSE CLIP(TAPE) 9P D-SUB CONNECTOR	EU, EC, 990E3, E2 EU, EC, 990E3		△ △
JK102	00D9630333601	MINI DIN CONNECTOR 8P YKF51-5397N		G403515397000S	

	Ref. No.	Part No.	Part Name	Remarks		Q'ty	New
	JK201	00D9630294601	JACK,D3.5 EARPHONE		G40100350000YS		
	JK202,203	00D2048260004	MINI JACK				
	JK204,205	00D2048649007	MINI JACK (RD)				
△	JK801	00D2033976002	AC OUTLET(2P)	EU, EC, 990E3			△
△	JK802	00D2033958004	AC_INLET/E3-DIP	EU, EC, 990E3, E2			△
△	JK802	00D2033958004	AC_INLET/E3-DIP	E1C			△
△	JK982	641050012003D	AC OUTLET SEMCO	E2			△
△	L801,802	00D2390035042	L.FILTER(LF4ZBE123H)				
△	L901	00D2390035026	L.FILTER(LF4ZBE273H)				
△	L903	00D2390035026	L.FILTER(LF4ZBE273H)				
△	RL801	00D2140241002	RELAY DL1SU TV-8				
△	RL901	00D2140242014	RELAY(DLS5D1-O_M)				
	ST601-604	nsp	STYLE PIN				
	ST901,902	nsp	STYLE PIN				
△	T806	102010014018S	MINI-SW-TRANS				
△	T808	102010014001S	SW-TRANS	EU, EC, 990E3			△
△	T808	102010017000S	SW-TRANS(E2)	E2, E1C			△
	W201	nsp	M3 SCREW TERMINAL				
	W601,602	nsp	M3 SCREW TERMINAL				
	W802	nsp	2P VA-SIN UL1672 AWG20	E2			△
	W901,902	nsp	M3 SCREW TERMINAL				
		nsp	SHIELD CASE				
		ORD4713304015	3X8 CBS-Z				
		nsp	FUSE LABEL(T1.6AL)	E2, E1C			△
		nsp	FUSE LABEL(T2.5AL)	E2			△
		nsp	FUSE LABEL(T4AL)	E2, E1C			△
		nsp	FUSE LABEL(T2AL)	E2, E1C			△

8U-110062 P.AMP P.W.B. UNIT ASS'Y (for EU,EC model)
8U-110062A P.AMP P.W.B. UNIT ASS'Y (for E2,E1C model)
8U-110062B P.AMP P.W.B. UNIT ASS'Y (for 990E3 model)

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP					
TR101	00D2710301903	KTA1268-BL-AT/P			
TR102	00D2710314903	KTA1024-Y-AT/P			
TR103	00D2710301903	KTA1268-BL-AT/P			
TR104	00D2730471907	KTC3206-Y-AT/P			
TR105	00D2710314903	KTA1024-Y-AT/P			
TR106	00D2730471907	KTC3206-Y-AT/P			
TR109	00D2730479909	2N5551S-RTK/P			
TR110	00D2710318909	2N5401S-RTK/P			
TR111	00D2710301903	KTA1268-BL-AT/P			
TR201	00D2710301903	KTA1268-BL-AT/P			
TR202	00D2710314903	KTA1024-Y-AT/P			
TR203	00D2710301903	KTA1268-BL-AT/P			
TR204	00D2730471907	KTC3206-Y-AT/P			
TR205	00D2710314903	KTA1024-Y-AT/P			
TR206	00D2730471907	KTC3206-Y-AT/P			
TR209	00D2730479909	2N5551S-RTK/P			
TR210	00D2710318909	2N5401S-RTK/P			
TR211	00D2710301903	KTA1268-BL-AT/P			
TR301	00D2710301903	KTA1268-BL-AT/P			
TR302	00D2710314903	KTA1024-Y-AT/P			
TR303	00D2710301903	KTA1268-BL-AT/P			
TR304	00D2730471907	KTC3206-Y-AT/P			
TR305	00D2710314903	KTA1024-Y-AT/P			
TR306	00D2730471907	KTC3206-Y-AT/P			
TR309	00D2730479909	2N5551S-RTK/P			
TR310	00D2710318909	2N5401S-RTK/P			
TR311	00D2710301903	KTA1268-BL-AT/P			
TR401	00D2710301903	KTA1268-BL-AT/P			
TR402	00D2710314903	KTA1024-Y-AT/P			
TR403	00D2710301903	KTA1268-BL-AT/P			
TR404	00D2730471907	KTC3206-Y-AT/P			
TR405	00D2710314903	KTA1024-Y-AT/P			
TR406	00D2730471907	KTC3206-Y-AT/P			
TR409	00D2730479909	2N5551S-RTK/P			
TR410	00D2710318909	2N5401S-RTK/P			
TR411	00D2710301903	KTA1268-BL-AT/P			
TR501	00D2710301903	KTA1268-BL-AT/P			
TR502	00D2710314903	KTA1024-Y-AT/P			
TR503	00D2710301903	KTA1268-BL-AT/P			
TR504	00D2730471907	KTC3206-Y-AT/P			
TR505	00D2710314903	KTA1024-Y-AT/P			
TR506	00D2730471907	KTC3206-Y-AT/P			
TR509	00D2730479909	2N5551S-RTK/P			
TR510	00D2710318909	2N5401S-RTK/P			
TR511	00D2710301903	KTA1268-BL-AT/P			
TR601	00D2710301903	KTA1268-BL-AT/P			
TR602	00D2710314903	KTA1024-Y-AT/P			
TR603	00D2710301903	KTA1268-BL-AT/P			
TR604	00D2730471907	KTC3206-Y-AT/P			
TR605	00D2710314903	KTA1024-Y-AT/P			
TR606	00D2730471907	KTC3206-Y-AT/P			
TR609	00D2730479909	2N5551S-RTK/P			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
TR610	00D2710318909	2N5401S-RTK/P			
TR611	00D2710301903	KTA1268-BL-AT/P			
TR701	00D2710301903	KTA1268-BL-AT/P			
TR702	00D2710314903	KTA1024-Y-AT/P			
TR703	00D2710301903	KTA1268-BL-AT/P			
TR704	00D2730471907	KTC3206-Y-AT/P			
TR705	00D2710314903	KTA1024-Y-AT/P			
TR706	00D2730471907	KTC3206-Y-AT/P			
TR709	00D2730479909	2N5551S-RTK/P			
TR710	00D2710318909	2N5401S-RTK/P			
TR711	00D2710301903	KTA1268-BL-AT/P			
D101,102	00D2760794900	KDS160-RTK/P			
D104	00D2760794900	KDS160-RTK/P			
D105,106	00D2760401905	1SS133T77 (TAPE)			
D107	00D2760794900	KDS160-RTK/P			
D110,111	00D2760794900	KDS160-RTK/P			
D112	204350014506S	KDR720E			
D201,202	00D2760794900	KDS160-RTK/P			
D204	00D2760794900	KDS160-RTK/P			
D205,206	00D2760401905	1SS133T77 (TAPE)			
D207	00D2760794900	KDS160-RTK/P			
D210,211	00D2760794900	KDS160-RTK/P			
D212	204350014506S	KDR720E			
D301,302	00D2760794900	KDS160-RTK/P			
D304	00D2760794900	KDS160-RTK/P			
D305,306	00D2760401905	1SS133T77 (TAPE)			
D307	00D2760794900	KDS160-RTK/P			
D310,311	00D2760794900	KDS160-RTK/P			
D312	204350014506S	KDR720E			
D401,402	00D2760794900	KDS160-RTK/P			
D404	00D2760794900	KDS160-RTK/P			
D405,406	00D2760401905	1SS133T77 (TAPE)			
D407	00D2760794900	KDS160-RTK/P			
D410,411	00D2760794900	KDS160-RTK/P			
D412	204350014506S	KDR720E			
D501,502	00D2760794900	KDS160-RTK/P			
D504	00D2760794900	KDS160-RTK/P			
D505,506	00D2760401905	1SS133T77 (TAPE)			
D507	00D2760794900	KDS160-RTK/P			
D510,511	00D2760794900	KDS160-RTK/P			
D512	204350014506S	KDR720E			
D601,602	00D2760794900	KDS160-RTK/P			
D604	00D2760794900	KDS160-RTK/P			
D605,606	00D2760401905	1SS133T77 (TAPE)			
D607	00D2760794900	KDS160-RTK/P			
D610,611	00D2760794900	KDS160-RTK/P			
D612	204350014506S	KDR720E			
D701,702	00D2760794900	KDS160-RTK/P			
D704	00D2760794900	KDS160-RTK/P			
D705,706	00D2760401905	1SS133T77 (TAPE)			
D707	00D2760794900	KDS160-RTK/P			
D710,711	00D2760794900	KDS160-RTK/P			
D712	204350014506S	KDR720E			
ZD101	00D2760459928	HZS5B-3TD			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
ZD102,103	00D2760461903	HZS6A-1TD			
ZD201	00D2760459928	HZS5B-3TD			
ZD202,203	00D2760461903	HZS6A-1TD			
ZD301	00D2760459928	HZS5B-3TD			
ZD302,303	00D2760461903	HZS6A-1TD			
ZD401	00D2760459928	HZS5B-3TD			
ZD402,403	00D2760461903	HZS6A-1TD			
ZD501	00D2760459928	HZS5B-3TD			
ZD502,503	00D2760461903	HZS6A-1TD			
ZD601	00D2760459928	HZS5B-3TD			
ZD602,603	00D2760461903	HZS6A-1TD			
ZD701	00D2760459928	HZS5B-3TD			
ZD702,703	00D2760461903	HZS6A-1TD			
RESISTORS GROUP					
R106	00D2412379987	RD14B2E102JNBST			
R110	00D2412379987	RD14B2E102JNBST			
R115	00D2412378946	RD14B2E271JNBST			
R116	00D2442671914	RS14B3D153JNBST(S)			
R117,118	00D2412378946	RD14B2E271JNBST			
R122,123	00D2412378920	RD14B2E221JNBST			
R124,125	125050003002S	RK92=3F0R22JS			
R206	00D2412379987	RD14B2E102JNBST			
R210	00D2412379987	RD14B2E102JNBST			
R215	00D2412378946	RD14B2E271JNBST			
R216	00D2442671914	RS14B3D153JNBST(S)			
R217,218	00D2412378946	RD14B2E271JNBST			
R222,223	00D2412378920	RD14B2E221JNBST			
R224,225	125050003002S	RK92=3F0R22JS			
R306	00D2412379987	RD14B2E102JNBST			
R310	00D2412379987	RD14B2E102JNBST			
R315	00D2412378946	RD14B2E271JNBST			
R316	00D2442671914	RS14B3D153JNBST(S)			
R317,318	00D2412378946	RD14B2E271JNBST			
R322,323	00D2412378920	RD14B2E221JNBST			
R324,325	125050003002S	RK92=3F0R22JS			
R406	00D2412379987	RD14B2E102JNBST			
R410	00D2412379987	RD14B2E102JNBST			
R415	00D2412378946	RD14B2E271JNBST			
R416	00D2442671914	RS14B3D153JNBST(S)			
R417,418	00D2412378946	RD14B2E271JNBST			
R422,423	00D2412378920	RD14B2E221JNBST			
R424,425	125050003002S	RK92=3F0R22JS			
R506	00D2412379987	RD14B2E102JNBST			
R510	00D2412379987	RD14B2E102JNBST			
R515	00D2412378946	RD14B2E271JNBST			
R516	00D2442671914	RS14B3D153JNBST(S)			
R517,518	00D2412378946	RD14B2E271JNBST			
R522,523	00D2412378920	RD14B2E221JNBST			
R524,525	125050003002S	RK92=3F0R22JS			
R606	00D2412379987	RD14B2E102JNBST			
R610	00D2412379987	RD14B2E102JNBST			
R615	00D2412378946	RD14B2E271JNBST			
R616	00D2442671914	RS14B3D153JNBST(S)			
R617,618	00D2412378946	RD14B2E271JNBST			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
R622,623	00D2412378920	RD14B2E221JNBST			
R624,625	125050003002S	RK92=3F0R22JS			
R706	00D2412379987	RD14B2E102JNBST			
R710	00D2412379987	RD14B2E102JNBST			
R715	00D2412378946	RD14B2E271JNBST			
R716	00D2442671914	RS14B3D153JNBST(S)			
R717,718	00D2412378946	RD14B2E271JNBST			
R722,723	00D2412378920	RD14B2E221JNBST			
R724,725	125050003002S	RK92=3F0R22JS			
VR101	00D9630366407	VR,SEMI CARBON EVN-DCAA03B 1KB		C541102315000S	
VR201	00D9630366407	VR,SEMI CARBON EVN-DCAA03B 1KB		C541102315000S	
VR301	00D9630366407	VR,SEMI CARBON EVN-DCAA03B 1KB		C541102315000S	
VR401	00D9630366407	VR,SEMI CARBON EVN-DCAA03B 1KB		C541102315000S	
VR501	00D9630366407	VR,SEMI CARBON EVN-DCAA03B 1KB		C541102315000S	
VR601	00D9630366407	VR,SEMI CARBON EVN-DCAA03B 1KB		C541102315000S	
VR701	00D9630366407	VR,SEMI CARBON EVN-DCAA03B 1KB		C541102315000S	
CAPACITORS GROUP					
C101	00D2544722994	CE04W1H220MT(GR)	EU, EC, 990E3		⚠
C101	00D2544583955	CE04W1H220MT(ROB)	E2, E1C		⚠
C103	nsp	0.00022UF J M 50V			⚠
C104	00D2544722981	CE04W1H100MT(GR)	EU, EC, 990E3		⚠
C104	00D2544583942	CE04W1H100MT(ROB)	E2, E1C		⚠
C105	nsp	CK73B1H103KT (1608) +1608			⚠
C106	nsp	CK73B1H222KT +2125	EU, EC, 990E3		⚠
C107	nsp	CC73CH1H221JT +1608	EU, EC, 990E3		⚠
C108	00MDF15222351	0.0022UF,J,M,50V	E2, E1C		⚠
C109	00MDF15221351	0.00022UF J M 50V	E2, E1C		⚠
C110	00D2544723919	CE04W1H470MT(GR)	EU, EC, 990E3		⚠
C110	00D2544583971	CE04W1H470MT(ROB)	E2, E1C		⚠
C112	133050077400S	CQ93M2A221JT(AMZ)			
C114	133050077400S	CQ93M2A221JT(AMZ)			
C115	00MOF15471541	APSV 471J,470PF(TP) 100V PP			
C119	00D2544802908	CE04W1J101MT(RA3)			
C121	00D2544586949	CE04W2A100MT(RA3)			
C123	00D2544586949	CE04W2A100MT(RA3)			
C125	nsp	CK73B1E104KT +1608			
C201	00D2544722994	CE04W1H220MT(GR)	EU, EC, 990E3		⚠
C201	00D2544583955	CE04W1H220MT(ROB)	E2, E1C		⚠
C203	nsp	0.00022UF J M 50V			⚠
C204	00D2544722981	CE04W1H100MT(GR)	EU, EC, 990E3		⚠
C204	00D2544583942	CE04W1H100MT(ROB)	E2, E1C		⚠
C205	nsp	CK73B1H103KT (1608) +1608			
C206	nsp	CK73B1H222KT +2125	EU, EC, 990E3		⚠
C207	nsp	CC73CH1H221JT +1608	EU, EC, 990E3		⚠
C208	00MDF15222351	0.0022UF,J,M,50V	E2, E1C		⚠
C209	00MDF15221351	0.00022UF J M 50V	E2, E1C		⚠
C210	00D2544723919	CE04W1H470MT(GR)	EU, EC, 990E3		⚠
C210	00D2544583971	CE04W1H470MT(ROB)	E2, E1C		⚠
C212	133050077400S	CQ93M2A221JT(AMZ)			
C214	133050077400S	CQ93M2A221JT(AMZ)			
C215	00MOF15471541	APSV 471J,470PF(TP) 100V PP			
C219	00D2544802908	CE04W1J101MT(RA3)			
C221	00D2544586949	CE04W2A100MT(RA3)			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C223	00D2544586949	CE04W2A100MT(RA3)			
C225	nsp	CK73B1E104KT +1608			
C301	00D2544722994	CE04W1H220MT(GR)	EU, EC, 990E3		
C301	00D2544583955	CE04W1H220MT(ROB)	E2, E1C		
C303	nsp	0.00022UF J M 50V			
C304	00D2544722981	CE04W1H100MT(GR)	EU, EC, 990E3		
C304	00D2544583942	CE04W1H100MT(ROB)	E2, E1C		
C305	nsp	CK73B1H103KT (1608) +1608			
C306	nsp	CK73B1H222KT +2125	EU, EC, 990E3		
C307	nsp	CC73CH1H221JT +1608	EU, EC, 990E3		
C308	00MDF15222351	0.0022UF,J,M,50V	E2, E1C		
C309	00MDF15221351	0.00022UF J M 50V	E2, E1C		
C310	00D2544723919	CE04W1H470MT(GR)	EU, EC, 990E3		
C310	00D2544583971	CE04W1H470MT(ROB)	E2, E1C		
C312	133050077400S	CQ93M2A221JT(AMZ)			
C314	133050077400S	CQ93M2A221JT(AMZ)			
C315	00MOF15471541	APSV 471J,470PF(TP) 100V PP			
C319	00D2544802908	CE04W1J101MT(RA3)			
C321	00D2544586949	CE04W2A100MT(RA3)			
C323	00D2544586949	CE04W2A100MT(RA3)			
C325	nsp	CK73B1E104KT +1608			
C401	00D2544722994	CE04W1H220MT(GR)	EU, EC, 990E3		
C401	00D2544583955	CE04W1H220MT(ROB)	E2, E1C		
C403	00MDF15221351	0.00022UF J M 50V			
C404	00D2544722981	CE04W1H100MT(GR)	EU, EC, 990E3		
C404	00D2544583942	CE04W1H100MT(ROB)	E2, E1C		
C405	nsp	CK73B1H103KT (1608) +1608			
C406	nsp	CK73B1H222KT +2125	EU, EC, 990E3		
C407	nsp	CC73CH1H221JT +1608	EU, EC, 990E3		
C408	00MDF15222351	0.0022UF,J,M,50V	E2, E1C		
C409	00MDF15221351	0.00022UF J M 50V	E2, E1C		
C410	00D2544723919	CE04W1H470MT(GR)	EU, EC, 990E3		
C410	00D2544583971	CE04W1H470MT(ROB)	E2, E1C		
C412	133050077400S	CQ93M2A221JT(AMZ)			
C414	133050077400S	CQ93M2A221JT(AMZ)			
C415	00MOF15471541	APSV 471J,470PF(TP) 100V PP			
C419	00D2544802908	CE04W1J101MT(RA3)			
C421	00D2544586949	CE04W2A100MT(RA3)			
C423	00D2544586949	CE04W2A100MT(RA3)			
C425	nsp	CK73B1E104KT +1608			
C501	00D2544722994	CE04W1H220MT(GR)	EU, EC, 990E3		
C501	00D2544583955	CE04W1H220MT(ROB)	E2, E1C		
C503	00MDF15221351	0.00022UF J M 50V			
C504	00D2544722981	CE04W1H100MT(GR)	EU, EC, 990E3		
C504	00D2544583942	CE04W1H100MT(ROB)	E2, E1C		
C505	nsp	CK73B1H103KT (1608) +1608			
C506	nsp	CK73B1H222KT +2125	EU, EC, 990E3		
C507	nsp	CC73CH1H221JT +1608	EU, EC, 990E3		
C508	00MDF15222351	0.0022UF,J,M,50V	E2, E1C		
C509	00MDF15221351	0.00022UF J M 50V	E2, E1C		
C510	00D2544723919	CE04W1H470MT(GR)	EU, EC, 990E3		
C510	00D2544583971	CE04W1H470MT(ROB)	E2, E1C		
C512	133050077400S	CQ93M2A221JT(AMZ)			
C514	133050077400S	CQ93M2A221JT(AMZ)			
C515	00MOF15471541	APSV 471J,470PF(TP) 100V PP			
C519	00D2544802908	CE04W1J101MT(RA3)			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C521	00D2544586949	CE04W2A100MT(RA3)			
C523	00D2544586949	CE04W2A100MT(RA3)			
C525	nsp	CK73B1E104KT +1608			
C601	00D2544722994	CE04W1H220MT(GR)	EU, EC, 990E3		
C601	00D2544583955	CE04W1H220MT(ROB)	E2, E1C		
C603	00MDF15221351	0.00022UF J M 50V			
C604	00D2544722981	CE04W1H100MT(GR)	EU, EC, 990E3		
C604	00D2544583942	CE04W1H100MT(ROB)	E2, E1C		
C605	nsp	CK73B1H103KT (1608) +1608			
C606	nsp	CK73B1H222KT +2125	EU, EC, 990E3		
C607	nsp	CC73CH1H221JT +1608	EU, EC, 990E3		
C608	00MDF15222351	0.0022UF,J,M,50V	E2, E1C		
C609	00MDF15221351	0.00022UF J M 50V	E2, E1C		
C610	00D2544723919	CE04W1H470MT(GR)	EU, EC, 990E3		
C610	00D2544583971	CE04W1H470MT(ROB)	E2, E1C		
C612	133050077400S	CQ93M2A221JT(AMZ)			
C614	133050077400S	CQ93M2A221JT(AMZ)			
C615	00MOF15471541	APSV 471J,470PF(TP) 100V PP			
C619	00D2544802908	CE04W1J101MT(RA3)			
C621	00D2544586949	CE04W2A100MT(RA3)			
C623	00D2544586949	CE04W2A100MT(RA3)			
C625	nsp	CK73B1E104KT +1608			
C701	00D2544722994	CE04W1H220MT(GR)	EU, EC, 990E3		
C701	00D2544583955	CE04W1H220MT(ROB)	E2, E1C		
C703	00MDF15221351	0.00022UF J M 50V			
C704	00D2544722981	CE04W1H100MT(GR)	EU, EC, 990E3		
C704	00D2544583942	CE04W1H100MT(ROB)	E2, E1C		
C705	nsp	CK73B1H103KT (1608) +1608			
C706	nsp	CK73B1H222KT +2125	EU, EC, 990E3		
C707	nsp	CC73CH1H221JT +1608	EU, EC, 990E3		
C708	00MDF15222351	0.0022UF,J,M,50V	E2, E1C		
C709	00MDF15221351	0.00022UF J M 50V	E2, E1C		
C710	00D2544723919	CE04W1H470MT(GR)	EU, EC, 990E3		
C710	00D2544583971	CE04W1H470MT(ROB)	E2, E1C		
C712	133050077400S	CQ93M2A221JT(AMZ)			
C714	133050077400S	CQ93M2A221JT(AMZ)			
C715	00MOF15471541	APSV 471J,470PF(TP) 100V PP			
C719	00D2544802908	CE04W1J101MT(RA3)			
C721	00D2544586949	CE04W2A100MT(RA3)			
C723	00D2544586949	CE04W2A100MT(RA3)			
C725	nsp	CK73B1E104KT +1608			
CC401-403	00D2544722978	CE04W1H4R7MT(GR)	EU, EC, 990E3		
CC401-403	00D2544583939	CE04W1H4R7MT(ROB)	E2, E1C		
CC404	00D2544722978	CE04W1H4R7MT(GR)			
CC405-408	00D2544722978	CE04W1H4R7MT(GR)	EU, EC, 990E3		
CC405-408	00D2544583939	CE04W1H4R7MT(ROB)	E2, E1C		
CC501,502	nsp	0.0022UF,J,M,50V			
CC503,304	nsp	0.0022UF,J,M,50V	EU, EC, E2, E1C		
CC514	00D2544722981	CE04W1H100MT(GR)	EU, EC, E2, E1C		
CC516	00D2544722981	CE04W1H100MT(GR)	EU, EC, E2, E1C		
CC518	00D2544722981	CE04W1H100MT(GR)			
CC520	00D2544722981	CE04W1H100MT(GR)			

	Ref. No.	Part No.	Part Name	Remarks		Q'ty	New
OTHERS PARTS GROUP							
△	AS101	252310006506S	PRF18BB471QB5RB				
△	AS201	252310006506S	PRF18BB471QB5RB				
△	AS301	252310006506S	PRF18BB471QB5RB				
△	AS401	252310006506S	PRF18BB471QB5RB				
△	AS501	252310006506S	PRF18BB471QB5RB				
△	AS601	252310006506S	PRF18BB471QB5RB				
△	AS701	252310006506S	PRF18BB471QB5RB				
	CW181	nsp	18P CON.SOCKET TUC-P				
	CW803-807	nsp	10P CON.SOCKET TUC-P				
	CW811,812	nsp	11P CON.SOCKET TUC-P				
	CW871-877	nsp	JL CONNECTOR(F-E)				
	CX041	nsp	4P CON.BASE(TUC-P)				
	CX171	nsp	17P PIN HEADER(9120)				
	CX191	nsp	19P PIN HEADER(9120)				
	CX193	00D2050892020	19P FFC BASE (P=1)				
	CX232	00D2051100009	23P FFC BASE(P=1)				
	CX941	nsp	4P CON.BASE(TUC-P)				
	CY182	nsp	18P CON.BASE TUC-P				
	ST101,102	nsp	STYLE PIN				
	W101	nsp	M3 SCREW TERMINAL				
	W201	nsp	M3 SCREW TERMINAL				
	W301	nsp	M3 SCREW TERMINAL				
	W401	nsp	M3 SCREW TERMINAL				
	W501	nsp	M3 SCREW TERMINAL				
	W601	nsp	M3 SCREW TERMINAL				
	W701	nsp	M3 SCREW TERMINAL				
		219050002102S	DHCT-A3/C3(4310F)				

8U-110063 SPEAKER P.W.B. UNIT ASS'Y (for EU,EC,990E3 model)
8U-110063A SPEAKER P.W.B. UNIT ASS'Y (for E2,E1C model)

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP					
IC901	00D2622375904	IC, TC4094BF(TP1) +C			
TR801	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR802	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR803	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR804	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR805	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR806	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR807	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR808	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR809	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR810	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR811	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR812	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR817	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR818	00D2710312905	KTA1504S-GR-RTK/P			
TR916,917	00D2730464901	KTC3875S-GR-RTK/P			
TR919,920	00D2730464901	KTC3875S-GR-RTK/P			
TR921	00D2710312905	KTA1504S-GR-RTK/P			
TR922,923	00D2730464901	KTC3875S-GR-RTK/P			
TR924	00D2710312905	KTA1504S-GR-RTK/P			
TR925	00D2730464901	KTC3875S-GR-RTK/P			
TR926	00D2690193901	KRC104S-RTK/P (47K-47K)			
TR941	00D2690193901	KRC104S-RTK/P (47K-47K)			
D215-221	nsp	RM73B-0R0KT +2125			
D801-806	00D2760401905	1SS133T77 (TAPE)			
D809	00D2760401905	1SS133T77 (TAPE)			
D901	00D2760855001	D3SB20-7103			
D904	00D2760855001	D3SB20-7103			
RESISTORS GROUP					
R801-814	00D2442671901	RS14B3D100JNBST(S)			
R815-818	00D2442052960	RS14B3A221JNBST(S)			
R981	00D2442671930	RS14B3D200JNBST(S)			
CAPACITORS GROUP					
C801-807	00MDF15104350	0.1UF,J,N,50V			
C808-816	nsp	CK73U2J2E222JT(2125)			
C817-825	nsp	0.047UF,J,N,50V			
C835	nsp	CK73B1H102KT +1608			
C837	nsp	CK73B1H102KT +1608			
C839	nsp	CK73B1H102KT +1608			
C841	nsp	CK73B1H102KT +1608			
C843	nsp	CK73B1H102KT +1608			
C845	nsp	CK73B1H102KT +1608			
C847	nsp	CK73B1H102KT +1608			
C849	nsp	CK73B1H102KT +1608			
C851	nsp	CK73B1H102KT +1608			
C853,854	00D2544723922	CE04W1H101MT(GR)			
C902,903	00D2546276008	CE68W==123M(DL)	EU, EC, 990E3		



Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C902,903	134050062005D	CE68W==153M(LAO)	E2, E1C		
C907	00D2544722949	CE04W1H010MT(GR)			
C912	nsp	CF93A2E104KT			
C915	nsp	CK73B1H102KT +1608			
C922,923	nsp	CK73B1E104KT +1608			
C924	nsp	RS14B3D200JNBST(S)			
C925,926	nsp	CK73B0J475KT(P) +1608			
C928	00D2544718940	CE04W1C101MT(GR)			
C929	nsp	CK73B1E104KT +1608			
C930	00D2544716926	CE04W0J331MT(GR)			
C931	nsp	CK73B1E104KT +1608			
C932	00D2544716926	CE04W0J331MT(GR)			
C933	00D2544722981	CE04W1H100MT(GR)			
OTHERS PARTS GROUP					
CW064	nsp	6P CON.SOCKET(TUC-P)			
CW092	nsp	9P CON.PLUG TWG-P(LONG)			
CW231	nsp	23P CON.PLUG TWG-P(LONG)			
CW851	nsp	15P CON.SOCKET TUC-P			
CW891	nsp	9P CON.SOCKET TUC-P			
CX081	nsp	8P CON BASE(TUC-P)			
CX091	nsp	9P VH CONNECTOR BASE			
CX660	nsp	6P NH CONNECTOR BASE			
CX680	nsp	8P NH CONNECTOR BASE			
CX803-807	nsp	10P CON.BASE TUC-P			
CX811,812	nsp	11P CON.BASE TUC-P			
CX851	nsp	15P CON.BASE TUC-P			
CX871-877	nsp	JL CONNECTOR(BT-E)			
CX891	nsp	9P CON.BASE TUC-P			
CX904	nsp	3P NH CONNECTOR BASE			
CY065	nsp	6P CON.BASE(TUC-P)			
△ F901,902	00D2061086032	FUSE 15A (UL/CSA/J)	EU, EC, 990E3		
△ F901,902	652050008004S	L=30mm 250V TLC15AN4	E2, E1C		
FF901,902	nsp	FUSE HOLDER			
FH901,902	nsp	FUSE HOLDER			
JK801	963646001690S	8P SPEAKER TERMINAL		G614108V1010MS	
JK802	963646001690S	8P SPEAKER TERMINAL		G614108V1010MS	
JK803	00D9630158608	2P SPEAKER TERMINAL		G611201A0200YS	
L801-807	00D2350191007	INDUCTOR(1MH)			
RL801-804	682010015012S	RELAY(G5PA-28-MC DC24)			
RL806	00D2140208003	RELAY(NA24W-K)			
RL807	682010015012S	RELAY(G5PA-28-MC DC24)			
RL901,902	682010013009S	RELAY(FTR-H1CA24)			
W201-204	nsp	M3 SCREW TERMINAL			
W806	nsp	1P L=250mm UL1430 AWG18			
W807	nsp	1P L=250mm UL1430 AWG18			

	Ref. No.	Part No.	Part Name	Remarks		Q'ty	New
	W820	nsp	1P SIN CORD ASSY(L=195mm)				
	W822	nsp	1P SIN CORD ASSY(L=75mm)				
	W901	nsp	130mm UL1430 AWG24				
		nsp	FUSE LABEL(T15AL/250V)	E2, E1C			



8U-210081 A.AUDIO/VIDEO P.W.B. UNIT ASS'Y (for EU,EC model)
8U-210081A A.AUDIO/VIDEO P.W.B. UNIT ASS'Y (for E2,E1C model)
8U-210081B A.AUDIO/VIDEO P.W.B. UNIT ASS'Y (for 990E3 model)

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP					
IC101	00D2623756904	LA73053-TLM-E			
IC102,103	00D2623445901	TC4051BFT			
IC104	00D2623446900	TC4052BFT			
IC105-107	00D2623445901	TC4051BFT			
IC108	00D2623446900	TC4052BFT			
IC109,110	00D2623445901	TC4051BFT			
IC111-116	232810005504S	BD7628F-E2			
IC301	234810014504S	MC14094BDTR2G			
IC305	00D2623755905	LA73062V-TLM-E			
IC402,403	262010004005S	TORX147L(25M,F,T,J)			
IC404	263010017004S	TOTX147L(25M,F,T,J)			
IC501	00D2623551002	NJW1321FP1			
IC503,504	00D2631225906	NJM2581M-TE1			
IC601-603	00D2631289900	AZ4580MTR-E1			
IC605	00D2630896909	NJM2068MD-TE1 +C			
IC606	00D2631289900	AZ4580MTR-E1			
IC613-615	00D2631289900	AZ4580MTR-E1	EU, EC, E2, E1C		△
IC616	235810022607S	APPA350 (NJW1299)			
IC617	00D2623727904	NJW1194V-TE1			
IC618	00D2631289900	AZ4580MTR-E1			
IC623-625	00D2631289900	AZ4580MTR-E1	EU, EC, E2, E1C		△
IC627	00D2623727904	NJW1194V-TE1	EU, EC, E2, E1C		△
TR101-103	00D2710312905	KTA1504S-GR-RTK/P			
TR104-109	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR501	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR502	00D2690144905	DTC114YKA-T146 +C			
TR503	00D2710312905	KTA1504S-GR-RTK/P			
TR601-606	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR607	00D2690184907	KRA102S-RTK/P (10K-10K)	EU, EC, E2, E1C		△
TR608-617	00D2730460905	KTC2875-B-RTK/P			
TR618,619	00D2730460905	KTC2875-B-RTK/P	EU, EC, E2, E1C		△
TR620-629	00D2730460905	KTC2875-B-RTK/P			
TR630,631	00D2730460905	KTC2875-B-RTK/P	EU, EC, E2, E1C		△
TR632	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR633	00D2690184907	KRA102S-RTK/P (10K-10K)	EU, EC, E2, E1C		△
TR634-637	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR639	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR640	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR641	00D2690192902	KRC102S-RTK/P (10K-10K)	EU, EC, E2, E1C		△
TR642-645	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR647	00D2690192902	KRC102S-RTK/P (10K-10K)			
D101-106	00D2760794900	KDS160-RTK/P			
D508,509	00D2760794900	KDS160-RTK/P			
D801-803	00D2760704903	1SR35-400A(T93X)			
D981	251310004507S	CG0603MLC-12LE			
D983,984	251310004507S	CG0603MLC-12LE			
ZD801	00D2760683943	UDZS3.6B-TE17			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
RESISTORS GROUP					
R101-112	00D2472019928	RM73B-750FT			
R120-125	00D2472019928	RM73B-750FT			
R147-152	nsp	RM73B-151FT_1608			
R178-180	00D2472019928	RM73B-750FT			
R332-334	00D2472019928	RM73B-750FT			
R501-509	00D2472019928	RM73B-750FT			
R519-524	nsp	RM73B-151FT_1608			
R555	nsp	RM73B-161FT_1608			
R556	nsp	RM73B-151FT_1608			
R557	nsp	RM73B-161FT_1608			
R558	nsp	RM73B-151FT_1608			
R559	nsp	RM73B-161FT_1608			
R560	nsp	RM73B-151FT_1608			
R561	nsp	RM73B-161FT_1608			
R562	nsp	RM73B-151FT_1608			
R565	nsp	RM73B-161FT_1608			
R566	nsp	RM73B-151FT_1608			
R569	nsp	RM73B-161FT_1608			
R570	nsp	RM73B-151FT_1608			
RR117-119	nsp	RM73B-681FT +1608			
RR123-125	00D2472025909	RM73B-821FT			
CAPACITORS GROUP					
C101-109	nsp	CK73B1H103KT (1608) +1608			
C114,115	00D2544717925	CE04W1A101MT(GR)			
C116	nsp	CK73B1H103KT (1608) +1608			
C117-122	00D2544718924	CE04W1C330MT(GR)			
C123-140	nsp	CK73B1H103KT (1608) +1608			
C141-146	00D2544717925	CE04W1A101MT(GR)			
C154-161	nsp	CK73B1H103KT (1608) +1608			
C162-165	00D2544718924	CE04W1C330MT(GR)			
C166-168	nsp	CK73B1E473KT +1608			
C169-171	nsp	CK73B1E104KT +1608			
C172-174	nsp	CK73B1E473KT +1608			
C176	nsp	CK73B1A105KT +1608			
C178	nsp	CK73B1A105KT +1608			
C180	nsp	CK73B1A105KT +1608			
C181-183	nsp	CK73B1E473KT +1608			
C303	00D2544718924	CE04W1C330MT(GR)			
C304	nsp	CK73B1H103KT (1608) +1608			
C306	nsp	CK73B1H103KT (1608) +1608			
C310	nsp	CK73B1H103KT (1608) +1608			
C317,318	nsp	CK73B1H103KT (1608) +1608			
C322	00D2544716926	CE04W0J331MT(GR)			
C323	00D2544716942	CE04W0J102MT(GR)			
C324	00D2544716926	CE04W0J331MT(GR)			
C325	00D2544718937	CE04W1C470MT(GR)			
C326	nsp	CK73B1E104KT +1608			
C327,328	00D2544717925	CE04W1A101MT(GR)			
C332	nsp	CK73B1E104KT +1608			
C333	00D2544717925	CE04W1A101MT(GR)			
C334-338	nsp	CK73B1E104KT +1608			
C415	nsp	CK73B1E104KT +1608			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C417	nsp	CK73B1E104KT +1608			
C419	nsp	CK73B1E104KT +1608			
C422	00D2544717925	CE04W1A101MT(GR)			
C423-428	nsp	CC73CH1H102JT +1608			
C429-434	nsp	CC73CH1H101JT +1608			
C501	00D2544722981	CE04W1H100MT(GR)			
C503	00D2544722981	CE04W1H100MT(GR)			
C505	00D2544722981	CE04W1H100MT(GR)			
C507	00D2544722981	CE04W1H100MT(GR)			
C509	00D2544722981	CE04W1H100MT(GR)			
C511	00D2544722981	CE04W1H100MT(GR)			
C516-518	00D2544722981	CE04W1H100MT(GR)			
C519,520	00D2544718940	CE04W1C101MT(GR)			
C521-526	nsp	CK73B1E104KT +1608			
C528	nsp	CK73B1E104KT +1608			
C529	00D2544722981	CE04W1H100MT(GR)			
C530	nsp	CK73B1E104KT +1608			
C532	00D2544722981	CE04W1H100MT(GR)			
C535	00D2544722981	CE04W1H100MT(GR)			
C539	00D2544722949	CE04W1H010MT(GR)			
C540-545	00D2544717925	CE04W1A101MT(GR)			
C552	nsp	CK73B1H103KT (1608) +1608			
C553	00D2544718924	CE04W1C330MT(GR)			
C554	nsp	CK73B1H103KT (1608) +1608			
C555	00D2544718924	CE04W1C330MT(GR)			
C556-559	nsp	CK73B1H103KT (1608) +1608			
C560	nsp	CK73B1E473KT +1608			
C561	nsp	CK73B1A105KT +1608			
C563	nsp	CK73B1E473KT +1608			
C565	nsp	CC73CH1H221JT +1608			
C566	nsp	CK73B1H103KT (1608) +1608			
C567	00D2544718924	CE04W1C330MT(GR)			
C568	nsp	CK73B1H103KT (1608) +1608			
C569	00D2544718924	CE04W1C330MT(GR)			
C570-574	nsp	CK73B1H103KT (1608) +1608			
C575	nsp	CK73B1E473KT +1608			
C601-604	nsp	CK73B1H103KT (1608) +1608			
C609-616	nsp	RM73B-0R0KT +1608			
C618-639	nsp	CC73CH1H331JT +1608			
C640-643	nsp	CC73CH1H101JT +1608			
C644,645	nsp	CC73CH1H221JT +1608			
C646-673	00D2544722981	CE04W1H100MT(GR)			
C674,675	00D2544536931	CE04W1A221MT SMG/RE3			
C684,685	nsp	CC73CH1H101JT +1608			
C700,701	nsp	0.022UF,J,M,50V			
C702,703	nsp	0.0068UF,J,M,50V			
C704,705	00D2544722981	CE04W1H100MT(GR)			
C707	00D2544722981	CE04W1H100MT(GR)			
C712,713	00D2544722981	CE04W1H100MT(GR)			
C730,731	00D2544722981	CE04W1H100MT(GR)			
C732,733	nsp	CK73B1H103KT +2125	EU, EC, E2, E1C		
C734	00D2544723922	CE04W1H101MT(GR)			
C737,738	nsp	CK73B1H103KT +2125	EU, EC, E2, E1C		
C739,740	00D2544723922	CE04W1H101MT(GR)	EU, EC, 990E3		
C739,740	00D2544580712	CE04W1H101MC(ROB)	E2, E1C		
C741-745	00D2544723922	CE04W1H101MT(GR)			



Ref. No.	Part No.	Part Name	Remarks	Q'ty	New	
C746,747	00D2544722981	CE04W1H100MT(GR)	EU, EC, E2, E1C			△
C748-751	00D2544722981	CE04W1H100MT(GR)				△
C752,753	nsp	CC73CH1H680JT +1608	EU, EC, E2, E1C			△
C754	00D2544723922	CE04W1H101MT(GR)				△
C755,756	nsp	CC73CH1H101JT +1608	EU, EC, E2, E1C			△
C757,758	00D2544722981	CE04W1H100MT(GR)				△
C759,760	00D2544722981	CE04W1H100MT(GR)	EU, EC, E2, E1C			△
C761,762	00D2544723922	CE04W1H101MT(GR)	EU, EC, 990E3			△
C761,762	00D2544580712	CE04W1H101MC(ROB)	E2, E1C			△
C764-767	00D2544722981	CE04W1H100MT(GR)				
C770,771	00D2544718924	CE04W1C330MT(GR)				
C772,773	00D2544722981	CE04W1H100MT(GR)				
C774	nsp	CC73CH1H332JT +2125				
C775	nsp	CK73B1H104KT +2125				
C776,777	00D2544722978	CE04W1H4R7MT(GR)				
C778	nsp	CK73B1H104KT +2125				
C779	nsp	CC73CH1H332JT +2125				
C780	nsp	CC73CH1H121JT +1608				
C781	00D2544723922	CE04W1H101MT(GR)				
C782-787	00D2544722907	CE04W1H0R1MT(GR)				
C788	00D2544722907	CE04W1H0R1MT(GR)	EU, EC, E2, E1C			△
C789	00D2544722994	CE04W1H220MT(GR)				△
C790,791	00D2544722994	CE04W1H220MT(GR)	EU, EC, E2, E1C			△
C792-810	00D2544722994	CE04W1H220MT(GR)				△
C811,812	00D2544722994	CE04W1H220MT(GR)	EU, EC, E2, E1C			△
C813,814	nsp	CC73CH1H331JT +1608				△
C816-823	nsp	CC73CH1H331JT +1608				△
C824,825	nsp	CC73CH1H331JT +1608	EU, EC, E2, E1C			△
C836	00D2544722907	CE04W1H0R1MT(GR)				△
C901,902	nsp	CK73B1H103KT (1608) +1608	EU, EC, E2, E1C			△
C903-912	nsp	CK73B1H103KT (1608) +1608				
C917-920	nsp	CK73B1H103KT (1608) +1608				
C921	nsp	CK73B1A105KT +1608				
C984	nsp	CK73B1E104KT +1608				
C985	00D2544645903	CE67C0J221MT(MVA) +REF				
CC101,102	nsp	CK73B1E104KT +1608				
CC601-604	00D2544722981	CE04W1H100MT(GR)				
CC609-612	00D2544722981	CE04W1H100MT(GR)				
CC613-616	nsp	CK73B1A105KT +1608				
CC732,733	nsp	CK73B1H103KT +2125	EU, EC, E2, E1C			△
CC737,738	nsp	CK73B1H103KT +2125	EU, EC, E2, E1C			△
CC746,747	00D2544722981	CE04W1H100MT(GR)	EU, EC, E2, E1C			△
CC750,751	00D2544722981	CE04W1H100MT(GR)	EU, EC, E2, E1C			△
CC752,753	nsp	CC73CH1H680JT +1608	EU, EC, E2, E1C			△
CC755,756	nsp	CC73CH1H101JT +1608	EU, EC, E2, E1C			△
CC759,760	00D2544722981	CE04W1H100MT(GR)	EU, EC, E2, E1C			△
CC764-767	00D2544722981	CE04W1H100MT(GR)	EU, EC, E2, E1C			△
CC770,771	00D2544718924	CE04W1C330MT(GR)	EU, EC, E2, E1C			△
CC772	00D2544722981	CE04W1H100MT(GR)	EU, EC, E2, E1C			△
CC774	nsp	CC73CH1H332JT +2125	EU, EC, E2, E1C			△
CC775	nsp	CK73B1H104KT +2125	EU, EC, E2, E1C			△
CC776,777	00D2544722978	CE04W1H4R7MT(GR)	EU, EC, E2, E1C			△
CC778	nsp	CK73B1H104KT +2125	EU, EC, E2, E1C			△
CC779	nsp	CC73CH1H332JT +2125	EU, EC, E2, E1C			△

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
OTHERS PARTS GROUP					
AS601	nsp	SHIELD PLATE			
CW131,132	nsp	13P SOCKET(9120)			
CX052	nsp	20010WR-05A00		L101200100520S	
CX071	00D2051343950	7P FFC BASE(9610SC)			
CX111	00D2051377007	11P FFC BASE(9610SB)			
CX121	00D2051329042	12P FFC BASE(9610SB)			
CX141	00D2051329055	14P FFC BASE(9610SB)			
CX151	00D2051006051	15P FFC BASE(P=1)			
CY041	nsp	4P CON.SOCKET(TUC-P)			
CY073	nsp	7P CON PLUG TWG-P			
CY152	nsp	15P SOCKET(9120)			
CY171	nsp	17P SOCKT(9120)			
CY191	nsp	19P SOCKT(9120)			
CY192	nsp	19P CON.PLUG(TWG-P)			
CY942	nsp	4P CON.SOCKET(TUC-P)			
FB101,102	nsp	RM73B-0R0KT +2125			
FB401-405	nsp	RM73B-0R0KT +1608			
JK101	963643005090S	TERMINAL RCA 1PIN		G600107AY000YS	
JK102-104	00D9630218108	TERMINAL 3PINRCA&DIN30401		G60630401000YS	
JK501,502	963643005350S	RCA-628B(NI)-08(GN,B,R,GN,B,R)		G603628NI080YS	
JK601	00D9630387505	TERMINAL RCA WH_WH_RD_BK		G602405B5500YS	
JK602	00D9630132103	TERMINAL RCA 4PIN		G602405B0400YS	
JK604	00D9630132103	TERMINAL RCA 4PIN		G602405B0400YS	
JK605	00D9630132103	TERMINAL RCA 4PIN		G602405B0400YS	
JK606	00D9630132103	TERMINAL RCA 4PIN		G602405B0400YS	
JK607	00D9630132103	TERMINAL RCA 4PIN		G602405B0400YS	
JK608	00D9630387505	TERMINAL RCA WH_WH_RD_BK		G602405B5500YS	
JK609	00D9630132103	TERMINAL RCA 4PIN		G602405B0400YS	
JK610	00D9630132103	TERMINAL RCA 4PIN	EU, EC, E2, E1C	G602405B0400YS	
JK610	90M-YT004640R	TERMINAL RCA 2PIN	990E3	G601207AE020YS	
JK699	00D9630132103	TERMINAL RCA 4PIN		G602405B0400YS	
JK981	00D2051381006	USB CONNECTOR			
L601,602	00D2359003002	FTZ CHOKE COIL	E2, E1C		
	nsp	USB BRACKET			

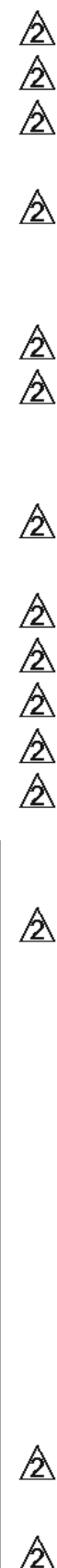
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8U-210082 MAIN CPU P.W.B. UNIT ASS'Y (for EU,EC model)
8U-210082A MAIN CPU P.W.B. UNIT ASS'Y (for E2 model)
8U-210082B MAIN CPU P.W.B. UNIT ASS'Y (for 990E3 model)
8U-210082C MAIN CPU P.W.B. UNIT ASS'Y (for E1C model)

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP					
IC101	236810072506S	ICL3232CVZ-T			
IC102	00D2623360905	LC72722PM-TLM	E2		△
IC103	231310009508S	PQ033DNA1ZPH			
IC104	00D2631286903	PQ120DNA1ZPH	E2		△
IC105,106	00D2631286903	PQ120DNA1ZPH			
IC108	234810015507S	BU4248F-TR			
IC109	00D2631289900	AZ4580MTR-E1			
IC110	00D2631289900	AZ4580MTR-E1	E2, E1C		△
IC111	00D2630706905	NJM2903M-TE1 +C			
IC112	00MHC007805K0	TC74VHCT125AFT OUAD BUS BUFFER			
IC113	231810017528S	TK73333WTL-G			
IC114	00MHC007805K0	TC74VHCT125AFT OUAD BUS BUFFER			
IC507,508	00D2623437906	TC74VHCT244AFT			
IC701	8R2431004300D	MAIN CPU SUB ASSY (R5F64169DFD)	EU, EC, 990E3, E1C		△
IC701	8R2431004301D	MAIN CPU SUB ASSY (R5F64169DFD)	E2		△
IC702	246810026500S	R1EX24256ASAS0A			
TR101	00D2690191903	KRA104S-RTK/P (47K-47K)			
TR102,103	00D2730464901	KTC3875S-GR-RTK/P			
TR104	00D2690191903	KRA104S-RTK/P (47K-47K)			
TR105,106	00D2690066902	DTC323TKT96	E2		△
TR107	00D2690192902	KRC102S-RTK/P (10K-10K)	E2		△
TR108	00D2690086908	DTA114TKT96	E2		△
TR110	00D2690192902	KRC102S-RTK/P (10K-10K)	E2		△
TR111	00D2710326904	2SA1954(B)-TE85L			
TR112	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR116,117	00D2730464901	KTC3875S-GR-RTK/P			
TR124	00D2710326904	2SA1954(B)-TE85L			
TR125,126	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR127	00D2710326904	2SA1954(B)-TE85L			
TR128	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR129	00D2710326904	2SA1954(B)-TE85L			
TR130	00D2690191903	KRA104S-RTK/P (47K-47K)			
TR131	00D2730464901	KTC3875S-GR-RTK/P			
TR132	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR133	00D2690193901	KRC104S-RTK/P (47K-47K)			
TR134,135	00D2730464901	KTC3875S-GR-RTK/P			
TR136	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR139,140	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR141	00D2690191903	KRA104S-RTK/P (47K-47K)			
TR704	00D2690193901	KRC104S-RTK/P (47K-47K)			
TR705-707	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR712	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR713	00D2690192902	KRC102S-RTK/P (10K-10K)			
D106	00D2760794900	KDS160-RTK/P			
D108,109	00D2760684900	RB051L-40TE25 +C			
D113	nsp	RM73B--0R0KT +2125			

NOTE :
When update Firmware, please confirm a last version in SDI.
Use the service board after updating it.

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
CAPACITORS GROUP					
C101	nsp	CK73B1H102KT +1005			
C102	nsp	CK73B1H102KT +1005	E2		
C104	00D2544572908	CE67C1C100MT(MV-B)	E2		
C110	nsp	CC73CH1H101JT	E2		
C111	nsp	CK73B1H102KT +1005			
C113,114	nsp	CK73B1H102KT +1005	E2		
C115	nsp	CK73B0J475KT(P) +1608			
C116	nsp	CK73B1A104KT +1005			
C117-119	nsp	CK73B1H102KT +1005	E2		
C121	nsp	CK73B0J475KT(P) +1608	E2		
C122	nsp	CK73B1A104KT +1005			
C125-127	nsp	CK73B1A104KT +1005			
C128,129	00D2544572908	CE67C1C100MT(MV-B)	E2, E1C		
C130	nsp	CK73B1A104KT +1005			
C135	nsp	CC73CH1H331JT	E2		
C136	nsp	CK73B1A104KT +1005	E2		
C137,138	00D2544572908	CE67C1C100MT(MV-B)	E2, E1C		
C139,140	nsp	CK73B0J475KT(P) +1608	E2		
C143	nsp	CC73CH1H561JT	E2		
C144	nsp	CK73B0J475KT(P) +1608			
C146,147	nsp	CK73B0J475KT(P) +1608			
C148,149	nsp	CC73CH1H220JT	E2		
C156	nsp	CK73B0J475KT(P) +1608			
C158-161	nsp	CK73B1A104KT +1005			
C162	nsp	CK73B1A105KT +1608			
C163	nsp	CK73B0J475KT(P) +1608			
C164,165	00D2544572908	CE67C1C100MT(MV-B) +REF			
C168,169	00D2544572908	CE67C1C100MT(MV-B) +REF			
C174	nsp	CK73B0J475KT(P) +1608			
C176	nsp	CK73B0J475KT(P) +1608			
C177	00D2544464919	CE67C0J471MT +REF			
C178,179	nsp	CC73CH1H471JT +1608			
C183	nsp	CK73B1H102KT +1005			
C185	nsp	CK73B0J475KT(P) +1608	E2		
C188,189	nsp	CK73B0J475KT(P) +1608			
C190	nsp	CK73B0J475KT(P) +1608	E2		
C191-194	nsp	CK73B1E104KT +1608			
C195	nsp	CK73B1H104KT +1608			
C196	nsp	CK73B1A104KT +1005			
C197	nsp	CK73B0J475KT(P) +1608			
C198	nsp	CK73B1A104KT +1005			
C199	nsp	CK73B0J475KT(P) +1608			
C200	nsp	CK73B1A104KT +1005			
C201	nsp	CK73B1H102KT +1005			
C203	nsp	CK73B1H153KT +1608			
C204	nsp	CK73B1A104KT +1005			
C206	nsp	CK73B1H102KT +1005			
C510	nsp	CK73B1A105KT +1608			
C511,512	nsp	CK73B1A104KT +1005			
C704,705	nsp	CK73B0J475KT(P) +1608			
C706,707	nsp	CK73B1H102KT +1608			
C712	nsp	CK73B0J475KT(P) +1608			
C713,714	nsp	CC73CH1H150JT +1608			
C715	nsp	CK73B1H102KT +1005			
C716	nsp	CK73B1A104KT +1005			



Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C718	nsp	CK73B1H102KT +1005			
C719	nsp	CK73B1A104KT +1005			
OTHERS PARTS GROUP					
CX068	nsp	20010WR-06A00		L101200100620S	
CX104	nsp	10P PIN HEADER(9120)			
CX122	nsp	12P PIN HEADER(9120)			
CX123	00D2051343905	11P FFC BASE(9610SCA			
CX131,132	nsp	13P PIN HEADER(9120)			
CX152	nsp	15P PIN HEADER(9120)			
CX154,155	nsp	15P JE CON.BASE			
CX156	00D2050736076	15P FFC CON.BASE	E2		
CX301,302	nsp	30P CONN.BASE			
CY134	nsp	3P CONN.BASE(KR-PH)	E1C		
CY251	00D2051316000	25P FFC BASE(9610S)Y			
CY271	00D2051329000	27P FFC BASE(9610SB)			
FB101	00D2350158901	CHIP BEADS(18PG121) +1608			
FB202-204	nsp	RM73B-0R0KT +1608			
FB206	nsp	RM73B-0R0KT +1608			
FB208-210	nsp	RM73B-0R0KT +1608			
FB212	nsp	RM73B-0R0KT +1608			
FB214-216	nsp	RM73B-0R0KT +1608			
FB219-222	nsp	RM73B-0R0KT +1608			
FB224-232	nsp	RM73B-0R0KT +1608			
X101	141010001208S	HC-49(4.332MHZ)	E2		
X701	141810019508S	TXC 7A(16MHZ)			

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8U-310039 DIGITAL P.W.B. UNIT ASS'Y (for EU,EC model)
8U-310039A DIGITAL P.W.B. UNIT ASS'Y (for E2,E1C model)
8U-310039B DIGITAL P.W.B. UNIT ASS'Y (for 990E3 model)

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP					
IC101	236810062608S	LC89058W-E			
IC104	236810062608S	LC89058W-E			
IC105	236810062608S	LC89058W-E	EU, EC, E2, E1C		
IC115	00D2623077900	TC74VHCU04FT +REF			
IC116	00D2623412905	TC74VHC14FT			
IC151	00D2623590005	EPM240T100C5N			
IC153	00D2623436907	TC74VHC244FT			
IC154	236810074502S	CS2100**-CZZR			
IC155	nsp	EN5322QI-T			
IC202	nsp	EN5311QI-T			
IC253	246810009604S	W9864G2GH-6			
IC254	nsp	ADSP21367KSWZ2A1165			
IC255	8R2481004000D	DSP ROM SUB ASSY (EN29LV160BB-70TIP)			
IC301	00D2623501900	PCM1803DBR			
IC302	00D2631047906	NJM2115M-TE1 +C			
IC303	231810017528S	TK73333WTL-G			
IC304	236810073509S	AK4358VQ			
IC310-314	00D2631289900	AZ4580MTR-E1	EU, EC, 990E3		
IC310-314	00D2623555901	SA5532ADR	E2, E1C		
IC351	236810070500S	AK4424ET			
IC352	236810070500S	AK4424ET	EU, EC, E2, E1C		
IC401	236810057606S	ADV3002BSTZ			
IC402	nsp	EN5335QI-T			
IC403	nsp	EN5322QI-T			
IC451	652850007508S	PRCP-USMF150			
IC457	00D2623711004	SAA7121H			
IC459	231310009508S	PQ033DNA1ZPH			
IC501	nsp	ADV7840BBCZ-5			
IC502	247810004602S	K4S641632N-LC60			
IC504	231810017504S	TK73318WTL-G			
IC601	141810027509S	TXC 8W(48MHZ)			
IC602	nsp	XC3S400A-4FGG320C			
IC603	246810010604D	IS42S32200E-6TL			
IC604	248810026506S	M25P40-VMN6PB(****)			
IC605-607	00MHC007805K0	TC74VHCT125AFT OUAD BUS BUFFER			
IC608	231810071508S	PQ012ENB1ZPH			
IC701	236810059008S	ADV7510BSTZ-225			
IC702	00D2623436907	TC74VHC244FT			
IC801	00D2622557900	SN74LV14APW-EL2 +REF			
IC802	nsp	ABT2010			
IC803,804	231810069505S	A0Z1021AI			
IC805	nsp	EN5311QI-T			
IC806	141810003503S	FCXO-05 (30.00MHz)			
IC851	00D2623617904	LP2996MX			
IC852,853	nsp	K4T51163QG-HCE7			
IC901	8R2431004400D	SUB CPU SUB ASSY (R5F3650TNFB)			
IC903	00D2623424906	LTC1694CS5			
IC905	00D2623437906	TC74VHCT244AFT			
IC951	231810017504S	TK73318WTL-G			
IC952	236810058609S	ADV7340BSTZ-3			

NOTE :
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Use the service board after updating it.



Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
IC955	231310009508S	PQ033DNA1ZPH			
IC957	231310009508S	PQ033DNA1ZPH			
TR122	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR253	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR254	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR315,316	00D2730460905	KTC2875-B-RTK/P			
TR401-403	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR404-407	00D2690193901	KRC104S-RTK/P (47K-47K)			
TR408	00D2757001907	FDC608PZ			
TR409,410	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR453	00D2757001907	FDC608PZ			
TR462	00D2690193901	KRC104S-RTK/P (47K-47K)			
TR463	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR502,503	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR505-507	00D2690193901	KRC104S-RTK/P (47K-47K)			
TR601	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR602	00D2757001907	FDC608PZ			
TR603	00D2690193901	KRC104S-RTK/P (47K-47K)			
TR604	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR702	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR705	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR801	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR802	00D2730464901	KTC3875S-GR-RTK/P			
TR803	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR804	00D2730464901	KTC3875S-GR-RTK/P			
TR805	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR806	00D2730464901	KTC3875S-GR-RTK/P			
TR807	00D2690193901	KRC104S-RTK/P (47K-47K)			
TR810	00D2750110905	HN1K02FU-TE85L			
TR902	00D2730384900	2SC2412KT96(S) +C			
TR903	00D2740195901	2SD2114KT196 +C			
TR904	00D2690193901	KRC104S-RTK/P (47K-47K)			
TR905	00D2730384900	2SC2412KT96(S) +C			
TR906	00D2730464901	KTC3875S-GR-RTK/P			
TR908	00D2710326904	2SA1954(B)-TE85L			
TR909	00D2690184907	KRA102S-RTK/P (10K-10K)			
TR910	00D2690192902	KRC102S-RTK/P (10K-10K)			
TR951-955	00D2710293901	2SA1022-B +C			
TR956	00D2750110905	HN1K02FU-TE85L			
D404-436	251310004507S	CG0603MLC-12LE			
D440	00D2760750902	RB521S-30TE61 +REF			
D502,503	251310004507S	CG0603MLC-12LE			
D505,506	251310004507S	CG0603MLC-12LE			
D508,509	251310004507S	CG0603MLC-12LE			
D511,512	00D2760833900	ESD PROTECTOR(6802)			
D515,516	00D2760833900	ESD PROTECTOR(6802)			
D518,519	00D2760833900	ESD PROTECTOR(6802)			
D521,522	00D2760833900	ESD PROTECTOR(6802)			
D524,525	00D2760833900	ESD PROTECTOR(6802)			
D527,528	00D2760833900	ESD PROTECTOR(6802)			
D530,531	00D2760833900	ESD PROTECTOR(6802)			
D533,534	00D2760833900	ESD PROTECTOR(6802)			
D709-711	251310004507S	CG0603MLC-12LE			
D713-720	00D2760833900	ESD PROTECTOR(6802)			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
D801-805 D901 D903	00D2760794900 00D2760847909 00D2760794900	KDS160-RTK/P RSX101M-30 KDS160-RTK/P			
ZD452,453 ZD456,457 ZD701	251310004507S 251310004507S 00D2760683930	CG0603MLC-12LE CG0603MLC-12LE UDZS5.1B-TE17 +C			
RESISTORS GROUP					
R669,670 R723 R727	00D2472019902 00D2472035944 00D2472035928	RM73B-102FT +1608 RM73B-202DT(1608) RM73B-162DT(1608)			
R823 R832 R834-837 R846 R847	00D2472042937 00D2472023914 00D2472019902 00D2472035973 00D2472042911	RM73B-153DT(1608) RM73B-103DT(1608) +1608 RM73B-102FT +1608 RM73B-302DT(1608) RM73B-123DT(1608)			
RE819,820 RE824,825 RE914 RE918	00D2472019902 00D2472019902 00D2472046904 00D2472041909	RM73B-102FT +1608 RM73B-102FT +1608 RM73B-181FT_1608 RM73B-392DT(1608)			
RE920 RE923 RE924 RE933 RE935	00D2472046904 00D2472025941 00D2472027907 00D2472045934 00D2472045934	RM73B-181FT_1608 RM73B-221FT RM73B-511FT +1608 RM73B-271FT_1608 RM73B-271FT_1608			
RE957-959 RE963 RR860 RR861	00D2472031948 nsp 00D2472033959 00D2472035960	RM73B-390DT(1608) RM73B2B0R0KT +3216 RM73B-331DT(1608) RM73B-272DT(1608)			
RR863 RA801-806 RA851-858 RA859-864	129650030505S 126250001502S 126250001502S 126250001519S	RM73B2H49R9FT +3225 PRB3T4=0R0(1005X4) PRB3T4=0R0(1005X4) PRB3T4=151J(1005X4)			
CAPACITORS GROUP					
C106 C107,108	nsp nsp	CK73B0J475KT(P) +1608 CC73CH1H9R0DT +1608			
C128 C132 C133 C134 C135	nsp nsp nsp nsp nsp	CK73B1A104KT +1005 CK73B1A104KT +1005 CK73B1H102KT +1005 CK73B1E104KT +1608 CK73B1E223KT +1608			
C136 C147 C149 C150 C151	nsp nsp nsp nsp nsp	CK73B0J475KT(P) +1608 CK73B1A104KT +1005 CK73B1A104KT +1005 CK73B1H102KT +1005 CK73B1E223KT +1608	EU, EC, E2, E1C		
C153 C154 C155	nsp nsp nsp	CK73B1A104KT +1005 CK73B1H102KT +1005 CK73B1E104KT +1608	EU, EC, E2, E1C EU, EC, E2, E1C		

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C156	nsp	CK73B1E104KT +1608	EU, EC, E2, E1C		
C157	nsp	CK73B1E223KT +1608	EU, EC, E2, E1C		
C164-166	nsp	CK73B1H103KT (1608) +1608			
C167	nsp	CK73B0J475KT(P) +1608			
C168,169	nsp	CK73B1A104KT +1005			
C246-248	nsp	CK73B0J475KT(P) +1608			
C250	nsp	CK73B1E104KT +1608			
C278	nsp	CK73B1E104KT +1608			
C301	nsp	CK73B0J475KT(P) +1608			
C302	nsp	CK73B1E104KT +1608			
C303	nsp	CK73B1H103KT (1608) +1608			
C306	nsp	CK73B1H103KT (1608) +1608			
C310	nsp	CK73B0J475KT(P) +1608			
C312	nsp	CK73B1E104KT +1608			
C314-316	nsp	CK73B1H103KT (1608) +1608			
C317,318	nsp	CC73CH1H101JT +1608			
C319	nsp	CK73B0J475KT(P) +1608			
C320	nsp	CK73B1E104KT +1608			
C321	nsp	CK73B1H102KT +1005			
C322	nsp	CK73B1E104KT +1608			
C323	nsp	CK73B0J475KT(P) +1608			
C324,325	nsp	CK73B1E104KT +1608			
C326,327	nsp	CK73B0J475KT(P) +1608			
C328	nsp	CK73B1H102KT +1005			
C329	nsp	CK73B1H103KT (1608) +1608			
C330	nsp	CK73B1E104KT +1608			
C331	nsp	CK73B1H102KT +1005			
C332	nsp	CK73B1H103KT (1608) +1608			
C333	nsp	CK73B1E104KT +1608			
C335	nsp	CC73CH1H102JT +1608			
C335-357	nsp	CK73B1E104KT +1608			
C338,339	nsp	CK73B1E104KT +1608			
C358	00D2544645903	CE67C0J221MT(MVA) +REF			
C359,360	nsp	CK73B0J106MT			
C361	nsp	CK73B1H392KT +1608			
C362	nsp	CC73CH1H471JT +1608			
C363	nsp	CK73B1H392KT +1608			
C364-367	nsp	CC73CH1H471JT +1608			
C368,369	nsp	CK73B1H392KT +1608			
C370-373	nsp	CC73CH1H471JT +1608			
C374	nsp	CK73B1H392KT +1608			
C375,376	nsp	CC73CH1H471JT +1608			
C377	nsp	CK73B1H392KT +1608			
C378,379	nsp	CC73CH1H471JT +1608			
C380	nsp	CK73B1H392KT +1608			
C381,382	nsp	CC73CH1H471JT +1608			
C383	nsp	CK73B1H392KT +1608			
C384	nsp	CC73CH1H471JT +1608			
C385,386	00D2544603916	CE67W1E100MT(P.CAP) +REF			
C387-393	nsp	CC73CH1H101JT +1608			
C401	nsp	CK73X5R0J106MT(2125)			
C402-404	nsp	CK73B1A104KT +1005			
C405-409	nsp	CK73B1H102KT +1005			
C410,411	nsp	CK73B1A104KT +1005			
C412	nsp	CK73X5R0J106MT(2125)			
C413	nsp	CK73B1H153KT +1608			



Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C414	nsp	CC73CH1H101JT +1608			
C415	nsp	CK73B1H102KT +1005			
C416	nsp	CK73B1E104KT +1608			
C417-422	nsp	CK73X5R0J106MT(2125)			
C423,424	nsp	CK73B0J475KT(P) +1608			
C425	nsp	CK73B1E104KT +1608			
C426	nsp	CK73B1A104KT +1005			
C427	nsp	CK73B1E104KT +1608			
C428-432	nsp	CK73X5R0J106MT(2125)			
C433	nsp	CK73B1A105KT +1608			
C434	nsp	CC73CH1H101JT +1005			
C435	nsp	CK73B1H102KT +1005			
C436	nsp	CC73CH1H101JT +1005			
C437	nsp	CK73B1H102KT +1005			
C438	nsp	CC73CH1H101JT +1005			
C439	nsp	CK73B1H102KT +1005			
C501-508	nsp	CK73B1E104KT +1608			
C509	nsp	CK73B1H103KT (1608) +1608			
C510	nsp	CK73B1E104KT +1608			
C511-513	nsp	CK73B1A104KT +1005			
C514,515	nsp	CC73CH1H120JT +1005			
C516,517	nsp	CC73CH1H150JT +1005			
C518	nsp	CK73B1H102KT +1005			
C519,520	nsp	CK73X5R0J106MT(2125)			
C521,522	nsp	CK73B1H102KT +1005			
C523-527	nsp	CK73B1A104KT +1005			
C528,529	nsp	CK73X5R0J106MT(2125)			
C530,531	nsp	CK73B1A104KT +1005			
C532	nsp	CK73B1H102KT +1005			
C533	nsp	CC73CH1H101JT +1005			
C534	nsp	CK73B1E103KT(1005)			
C535-543	nsp	CK73B1A104KT +1005			
C544-547	nsp	CK73B1E103KT(1005)			
C548	nsp	CK73B1A104KT +1005			
C549,550	nsp	CK73B1E103KT(1005)			
C551,552	nsp	CK73B1A104KT +1005			
C553-555	nsp	CK73X5R0J106MT(2125)			
C556,557	nsp	CK73B1E103KT(1005)			
C558,559	nsp	CK73B1A104KT +1005			
C560	nsp	CK73B1H102KT +1005			
C561	nsp	CC73CH1H101JT +1005			
C562	nsp	CK73B1A104KT +1005			
C563,564	nsp	CK73B1E103KT(1005)			
C565	nsp	CK73B1A104KT +1005			
C566,567	nsp	CK73B1E103KT(1005)			
C568,569	nsp	CK73B1A104KT +1005			
C570	nsp	CK73B1E103KT(1005)			
C571	nsp	CK73X5R0J106MT(2125)			
C572	nsp	CK73B1E103KT(1005)			
C573	nsp	CK73B1A104KT +1005			
C574	nsp	CK73B1C823KT +1608			
C575	nsp	CK73B1H103KT (1608) +1608			
C576	nsp	CK73B1A824KT +1608			
C577	nsp	CK73B1E393KT(1608)			
C578-581	nsp	CK73B1E103KT(1005)			
C582	nsp	CK73B1A104KT +1005			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C583	nsp	CK73X5R0J106MT(2125)			
C584-586	nsp	CK73B1A104KT +1005			
C587	nsp	CK73X5R0J106MT(2125)			
C588-591	nsp	CK73B1A104KT +1005			
C592	nsp	CK73B1H102KT +1005			
C593-595	nsp	CK73B1A104KT +1005			
C596-599	nsp	CK73B1E103KT(1005)			
C600	nsp	CC73CH1H101JT +1005			
C601-603	nsp	CK73X5R0J106MT(2125)			
C604	nsp	CK73B1E103KT(1005)			
C605-607	nsp	CK73B1H102KT +1005			
C608	nsp	CK73B1E103KT(1005)			
C609-612	nsp	CK73B1A104KT +1005			
C613	nsp	CK73B1E103KT(1005)			
C614-616	nsp	CK73B1A104KT +1005			
C618	nsp	CK73B0J475KT(P) +1608			
C619,620	nsp	CK73B1E103KT(1005)			
C621	nsp	CC73CH1H101JT +1005			
C623	nsp	CK73B1A104KT +1005			
C624	nsp	CK73B0J475KT(P) +1608			
C625-627	nsp	CK73B1A104KT +1005			
C628-630	nsp	CK73B1E103KT(1005)			
C633	nsp	CK73B1A104KT +1005			
C637,638	nsp	CK73B1E103KT(1005)			
C639	nsp	CK73B1A104KT +1005			
C642	nsp	CK73B1E103KT(1005)			
C643	nsp	CK73B1A104KT +1005			
C645	nsp	CK73B1E103KT(1005)			
C646	nsp	CK73B1H102KT +1005			
C647	nsp	CK73B1E103KT(1005)			
C648,649	nsp	CK73B1H102KT +1005			
C651	nsp	CK73B0J475KT(P) +1608			
C655,656	nsp	CK73B1H102KT +1005			
C657-660	nsp	CC73CH1H101JT +1005			
C720	nsp	CK73X5R0J106MT(2125)			
C724	nsp	CC73CH1H101JT +1005			
C726	nsp	CK73B1A104KT +1005			
C728	nsp	CK73B1A104KT +1005			
C730	nsp	CK73B1A104KT +1005			
C732	nsp	CK73B1H102KT +1005			
C734	nsp	CK73B1H102KT +1005			
C739	nsp	CK73B1A104KT +1005			
C741	nsp	CK73B1A104KT +1005			
C743	nsp	CK73B1A104KT +1005			
C745	nsp	CK73B1H102KT +1005			
C751	nsp	CK73X5R0J106MT(2125)			
C755	nsp	CC73CH1H101JT +1005			
C757	nsp	CK73B1A104KT +1005			
C763	nsp	CK73B1H102KT +1005			
C765	nsp	CK73B1H102KT +1005			
C767	nsp	CK73X5R0J106MT(2125)			
C771	nsp	CC73CH1H101JT +1005			
C773	nsp	CK73B1A104KT +1005			
C775	nsp	CK73B1A104KT +1005			
C777	nsp	CK73X5R0J106MT(2125)			
C779-780	nsp	CK73B1H102KT +1005			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C782	nsp	CC73CH1H101JT +1005			
C785	nsp	CK73B1A104KT +1005			
C795	nsp	CK73B1H102KT +1005			
C797	nsp	CK73B1H102KT +1005			
C801	nsp	CK73B1A104KT +1005			
C802	nsp	CK73B0J475KT(P) +1608			
C803	nsp	CK73B1A104KT +1005			
C804,805	nsp	CK73B0J475KT(P) +1608			
C806	nsp	CK73B1A104KT +1005			
C807	nsp	CK73B1A224KT +1608			
C808	nsp	CK73X5R0J106MT(2125)			
C809,810	nsp	CK73B1A104KT +1005			
C811-815	nsp	CK73B0J475KT(P) +1608			
C816-818	nsp	CK73B1A104KT +1005			
C819	nsp	CK73B1H103KT (1608) +1608			
C820	nsp	CK73B1A104KT +1005			
C821	nsp	CK73B1H102KT +1608			
C822-825	nsp	CK73B1A104KT +1005			
C826	nsp	CK73B1H103KT (1608) +1608			
C827	nsp	CK73B1A104KT +1005			
C828	nsp	CK73B1H102KT +1608			
C829-832	nsp	CK73B1A104KT +1005			
C833	nsp	CK73B1H103KT (1608) +1608			
C834	nsp	CK73B1A104KT +1005			
C835	nsp	CK73B1H102KT +1608			
C836-845	nsp	CK73B1A104KT +1005			
C846	nsp	CK73B1A224KT +1608			
C847	nsp	CK73B0J475KT(P) +1608			
C848-861	nsp	CK73B1A104KT +1005			
C862,863	nsp	CK73B0J475KT(P) +1608			
C864-869	nsp	CK73B1A104KT +1005			
C870	nsp	CK73B1A105KT +1608			
C871	nsp	CK73B1A224KT +1608			
C872-874	nsp	CK73B1A104KT +1005			
C875	nsp	CK73B1H102KT +1005			
C876	nsp	CK73B1A104KT +1005			
C877	nsp	CK73B1H102KT +1005			
C878	nsp	CK73B1A104KT +1005			
C879	nsp	CK73B1H102KT +1005			
C883	nsp	CK73B1A104KT +1005			
C884	nsp	CC73CH1H5R0CT +1005			
C887-895	nsp	CK73B1A104KT +1005			
C896	nsp	CK73B0J475KT(P) +1608			
C897-899	nsp	CK73X5R0J106MT(2125)			
C901	nsp	CK73B1A104KT +1005			
C902	nsp	CK73B1H102KT +1005			
C903,904	nsp	CC73CH1H101JT +1005			
C905	nsp	CC73CH1H120JT +1608			
C906	nsp	CC73CH1H150JT +1608			
C907	nsp	CK73B1H102KT +1005			
C909	nsp	CK73B0J475KT(P) +1608			
C910	nsp	CK73B1A104KT +1005			
C911	nsp	CK73B0J475KT(P) +1608			
C913	nsp	CK73B0J475KT(P) +1608			
C917	nsp	CK73B1H102KT +1608			
C918,919	nsp	CK73B0J475KT(P) +1608			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C920	nsp	CK73B1A104KT +1005			
C922	nsp	CK73B1H221KT +1005			
C923	nsp	CK73B1H103KT (1608) +1608			
C924,925	nsp	CK73B1A104KT +1005			
C927	nsp	CC73CH1H101JT +1005			
C928,929	nsp	CK73B1A104KT +1005			
C930	nsp	CK73B1H102KT +1005			
C931	nsp	CK73B1H102KT +1608			
C932	nsp	CK73B0J475KT(P) +1608			
C933	00D2574017909	CE67C0J101MT(PXA)			
C951,952	00D2544601918	CE67W0J471MT(P.CAP) +REF			
C974	nsp	CK73B1H102KT +1005			
C978	nsp	CC73CH1H101JT +1005			
C986-993	nsp	CC73CH1H101JT +1005			
C995-998	nsp	CC73CH1H101JT +1005			
CC100	nsp	CK73B1A104KT +1005			
CC101	nsp	CK73B0J475KT(P) +1608			
CC102-104	nsp	CK73B1A104KT +1005			
CC105	nsp	CC73CH1H101JT +1005			
CC106	nsp	CK73B1A104KT +1005			
CC107	nsp	CK73B1H102KT +1005			
CC108	nsp	CK73B1A104KT +1005			
CC109	nsp	CC73CH1H101JT +1005			
CC110,111	nsp	CK73B0J475KT(P) +1608			
CC112	nsp	CK73B1E104KT +1608			
CC113	nsp	CK73B1A105KT +1608			
CC114-116	nsp	CK73X5R0J106MT(2125)			
CC119	nsp	CK73B0J475KT(P) +1608			
CC120	nsp	CK73B1H102KT +1005			
CC121	nsp	CK73X5R0J106MT(2125)			
CC123	nsp	CK73B1A104KT +1005			
CC124	nsp	CK73X5R0J106MT(2125)			
CC125	nsp	CK73B1E104KT +1608			
CC126	nsp	CC73CH1H101JT +1005			
CC127	nsp	CK73B1H102KT +1005			
CC128,129	nsp	CC73CH1H101JT +1005			
CC130	nsp	CK73B1H102KT +1005			
CC131	nsp	CC73CH1H101JT +1005			
CC201	nsp	CK73B1H102KT +1005			
CC202	nsp	CC73CH1H101JT +1005			
CC203	nsp	CK73B1H102KT +1005			
CC204	nsp	CC73CH1H101JT +1005			
CC205	nsp	CK73B1H102KT +1005			
CC206	nsp	CC73CH1H101JT +1005			
CC212,213	nsp	CK73B0J475KT(P) +1608			
CC214-216	nsp	CC73CH1H101JT +1005			
CC217-231	nsp	CK73B1A104KT +1005			
CC232,233	nsp	CK73B0J475KT(P) +1608			
CC234	nsp	CK73B1A104KT +1005			
CC236,237	nsp	CK73B1A104KT +1005			
CC238,239	nsp	CC73CH1H7R0DT +1005			
CC241	00D2574011905	CE67C0J101MT (RV2) +REF			
CC243	nsp	CC73CH1H101JT +1005			
CC268-292	nsp	CC73CH1H101JT +1005			
CC301	nsp	CK73B1A105KT +1608			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
CC302	nsp	CK73B1A105KT +1608	EU, EC, E2, E1C		
CC307	nsp	CK73B1A105KT +1608			
CC308	nsp	CK73B0J475KT(P) +1608			
CC309	nsp	CK73B1A105KT +1608	EU, EC, E2, E1C		
CC310	nsp	CK73B0J475KT(P) +1608			
CC311,312	nsp	CK73B0J475KT(P) +1608	EU, EC, E2, E1C		
CC338	nsp	CK73B1E104KT +1608			
CC339	nsp	CK73B1H102KT +1608			
CC340	nsp	CC73CH1H101JT +1608			
CC346-357	nsp	CC73CH1H101JT +1005			
CC360-363	nsp	CC73CH1H101JT +1005			
CC365-368	nsp	CC73CH1H101JT +1005			
CC372-380	nsp	CC73CH1H101JT +1005			
CC400	nsp	CC73CH1H101JT +1005			
CC402	nsp	CK73B1A104KT +1005			
CC410	nsp	CK73B1A104KT +1005			
CC414	nsp	CK73B0J475KT(P) +1608			
CC419	nsp	CK73B1H102KT +1005			
CC420,421	nsp	CC73CH1H101JT +1005			
CC422-424	nsp	CK73B1H102KT +1005			
CC428-431	nsp	CK73B1A104KT +1005			
CC432	nsp	CK73B0J475KT(P) +1608			
CC434,435	nsp	CK73B0J475KT(P) +1608			
CC437	nsp	CK73B1A104KT +1005			
CC439	nsp	CK73B0J475KT(P) +1608			
CC443	nsp	CK73B0J475KT(P) +1608			
CC445	nsp	CK73B1A104KT +1005			
CC447,448	nsp	CC73CH1H101JT +1005			
CC457-476	nsp	CC73CH1H101JT +1005			
CC478-491	nsp	CC73CH1H101JT +1005			
CC501,502	nsp	CK73B0J475KT(P) +1608			
CC503	nsp	CK73B1E103KT(1005)			
CC504	nsp	CC73CH1H101JT +1005			
CC505	nsp	CK73B1A104KT +1005			
CC508	nsp	CK73B1H102KT +1005			
CC510	nsp	CK73B0J475KT(P) +1608			
CC512-515	nsp	CC73CH1H101JT +1005			
CC516,517	nsp	CK73B1H102KT +1005			
CC518	nsp	CK73B1A104KT +1005			
CC519-526	nsp	CK73B0J475KT(P) +1608			
CC527-541	nsp	CK73B1A104KT +1005			
CC542-546	nsp	CC73CH1H101JT +1005			
CC547-549	nsp	CK73B0J475KT(P) +1608			
CC550-556	nsp	CK73B1A104KT +1005			
CC557-562	nsp	CC73CH1H101JT +1005			
CC563	nsp	CK73B1A104KT +1005			
CC564,565	nsp	CK73B0J475KT(P) +1608			
CC566-568	nsp	CK73B1A104KT +1005			
CC569-572	nsp	CC73CH1H101JT +1005			
CC573,574	nsp	CK73B1H102KT +1005			
CC643	nsp	CC73CH1H101JT +1005			
CC646	nsp	CC73CH1H101JT +1005			
CC648	nsp	CC73CH1H101JT +1005			
CC650	nsp	CC73CH1H101JT +1005			
CC654,655	nsp	CC73CH1H101JT +1005			
CC657	nsp	CC73CH1H101JT +1005			





Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
CC659	nsp	CC73CH1H101JT +1005			
CC668	nsp	CC73CH1H101JT +1005			
CC670	nsp	CC73CH1H101JT +1005			
CC674	nsp	CC73CH1H101JT +1005			
CC678-682	nsp	CC73CH1H101JT +1005			
CC721	nsp	CK73B1A104KT +1005			
CC801	nsp	CK73B1A104KT +1005			
CC802,803	nsp	CK73X5R0J106MT(2125)			
CC804	nsp	CK73B1H222KT +1608			
CC805	nsp	CK73X5R0J106MT(2125)			
CC806	nsp	CK73B1H222KT +1608			
CC807-810	nsp	CK73X5R0J106MT(2125)			
CC811,812	nsp	CK73B1A104KT +1005			
CC813	nsp	CK73X5R0J106MT(2125)			
CC814,815	nsp	CK73B1A104KT +1005			
CC816	nsp	CK73B1H102KT +1005			
CC817,818	nsp	CK73B0J475KT(P) +1608			
CC819-821	nsp	CK73X5R0J106MT(2125)			
CC823-825	nsp	CK73X5R0J106MT(2125)			
CC827-830	nsp	CK73X5R0J106MT(2125)			
CC831-849	nsp	CC73CH1H101JT +1005			
CC851-872	nsp	CK73B1A104KT +1005			
CC873	00D2574011905	CE67C0J101MT (RV2) +REF			
CC874,875	nsp	CK73B0J475KT(P) +1608			
CC876-878	nsp	CK73B1A104KT +1005			
CC879	nsp	CK73B0J475KT(P) +1608			
CC880-884	nsp	CK73B1A104KT +1005			
CC885,886	nsp	CK73B0J475KT(P) +1608			
CC887-895	nsp	CK73B1A104KT +1005			
CC896-899	nsp	CK73B1H102KT +1005			
CC901	nsp	CK73B1A104KT +1005			
CC902	nsp	CK73B1H102KT +1005			
CC903	nsp	CK73B0J475KT(P) +1608			
CC904	nsp	CC73CH1H101JT +1005			
CC905,906	nsp	CK73B1A104KT +1005			
CC907	nsp	CK73B0J475KT(P) +1608			
CC908	nsp	CK73B1H102KT +1005			
CC909	nsp	CK73B1A104KT +1005			
CC910	nsp	CC73CH1H101JT +1005			
CC911,912	nsp	CK73B1A104KT +1005			
CC915	nsp	CK73B1H123KT +1608			
CC921	nsp	CK73B1A154KT +1608			
CC922	nsp	CK73B1H123KT +1608			
CC924,925	nsp	CK73B1H222KT +1005			
CC926	nsp	CK73B1A104KT +1005			
CC928	nsp	CK73B1E103KT(1005)			
CC931	nsp	CK73B1A104KT +1005			
CC933	nsp	CK73B1A154KT +1608			
CC939-943	nsp	CK73B1A104KT +1005			
CC951-953	nsp	CK73B1H102KT +1005			
CC954-957	nsp	CK73B1A104KT +1005			
CC958,959	nsp	CK73B0J475KT(P) +1608			
CC960-968	nsp	CK73B1A104KT +1005			
CC969-975	nsp	CK73B1H102KT +1005			
CC976,977	nsp	CK73X5R0J106MT(2125)			
CC978-991	nsp	CC73CH1H101JT +1005			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
OTHERS PARTS GROUP					
AS903	nsp	HEAT SINK(10FSH036)			
CW301,302	nsp	30P CONN. SOCKET			
CX047	nsp	4P VH CONNECTOR BASE			
CX304	645010041609S	DDR2_SO-DIMM_SOCKET			
CX971,972	00D2051343950	7P FFC BASE(9610SC)			
CX973	00D2051343905	11P FFC BASE(9610SCA)			
CX974	00D2051343950	7P FFC BASE(9610SC)			
CX991	00D2051222000	RJ-45 JACK(GND)			
CY052	nsp	20022WS-05C		L101200220510S	
CY067	nsp	6P FFC BASE(9610SC)			
CY111	00D2051343905	11P FFC BASE(9610SCA)			
CY121	00D2051313935	12P FFC BASE(9610SC)			
CY133	00D2051258045	13P FFC BASE(9604SC)	EU, EC, 990E3		
CY141	00MYJ0704001Y	IMSA-9610S-14Y919			
CY151	00D2051343934	15P FFC BASE(9610SC)			
CY193	00D2051313951	19P FFC BASE(9610SC)			
CY232	00D2051343918	23P FFC BASE(9610SCA)			
FB101	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
FB103	00D2350130903	CHIP EMIFIL(11A121) +1608			
FB104	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
FB201,202	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
FB401,402	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
FB452	00D2350130903	CHIP EMIFIL(11A121) +1608			
FB501	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
FB502	00D2350130903	CHIP EMIFIL(11A121) +1608			
FB601,602	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
FB801,802	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
FB803	00D2350130903	CHIP EMIFIL(11A121) +1608			
FB851	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
FB901	00D2350130903	CHIP EMIFIL(11A121) +1608			
FB902	00D2350147909	E.FIL(BLM21PG221SN1)+2125			
FB903-909	nsp	RM73B-0R0KT +1608			
FB910-912	00D2350130903	CHIP EMIFIL(11A121) +1608			
FB913	nsp	RM73B-0R0KT +1608			
JK401-403	00D2051447005	19P-HDMI-CONNECTOR			
JK502,503	00D2051447005	19P-HDMI-CONNECTOR			
JK701	00D2051447005	19P-HDMI-CONNECTOR			
L701-703	00D2350125905	INDUCTOR(FLC32C220K)+3216			
L801,802	111810014502S	INDUCTOR 10UH(7E10H)			
L803-808	00D2350125905	INDUCTOR(FLC32C220K)+3216			
L851,852	00D2350125905	INDUCTOR(FLC32C220K)+3216			
L902,903	113410001506S	DLW21SN900HQ2L			
ST901-903	nsp	STYLE PIN			
ST906	nsp	STYLE PIN			
W101	nsp	M3 SCREW TERMINAL			
W916	nsp	1P SIN CORD ASSY (L=190mm)			

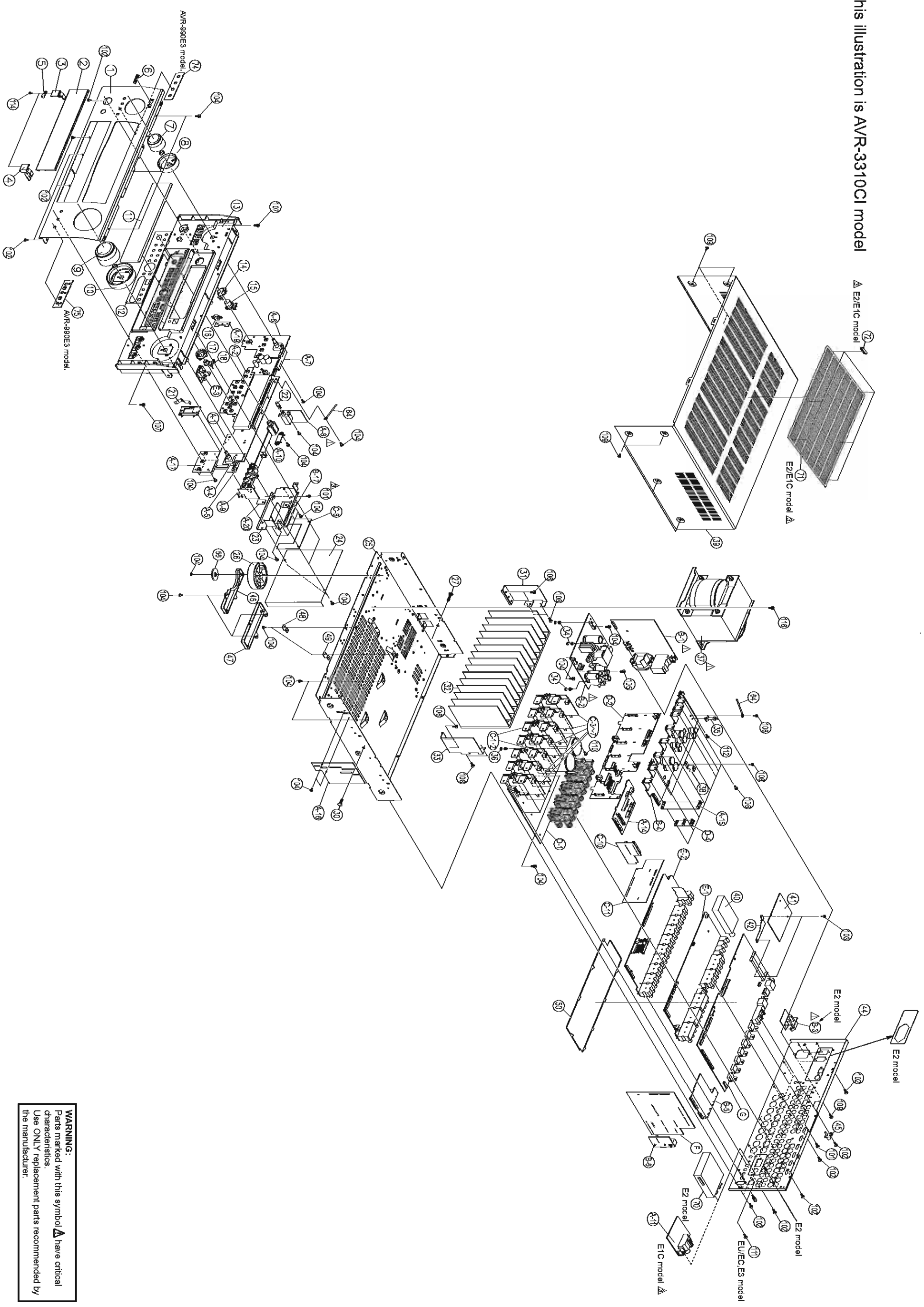
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
	Ref. No.	Part No.	Part Name	Remarks		Q'ty	New
	X101	00D3991053901	FCX-03(24.576MHz)				
	X251	00D3991054900	FCX-03(20.815MHz)				
	X501,502	00D3991052902	FCX-03(28.6363MHz)				
	X901	141810019508S	TXC 7A(16MHZ)				
	TP601	00D2051343950	7P FFC BASE(9610SC)				
		nsp	COOLPROVIDE(CPVS-1.0)				

PTC P.W.B. UNIT ASS'Y 

	Ref. No.	Part No.	Part Name	Remarks		Q'ty	New
OTHERS PARTS GROUP							
	 AS991	252310006513S	PRF18BC471QB5RB				
	 AS992	252310006513S	PRF18BC471QB5RB				
	W991	nsp	M3 SCREW TERMINAL				
	W992	nsp	CN,WIRE				

This illustration is AVR-3310CI model



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

PARTS LIST OF EXPLODED VIEW

* Parts for which "nsp" is indicated on this table cannot be supplied.

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

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

BK : Black model

SP : Premium Silver model

EU(AVR-3310) : U.S.A. model

EC(AVR-3310) : Canada model

E2(AVR-3310) : Europe model

E1C(AVC-3310) : China model

990E3(AVR-990) : U.S.A. & Canada mode



Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
A	nsp	FRONT UNIT			
A-1	-	FLD UNIT		1	*
A-2	-	TACT-1 UNIT		1	*
★ A-3	-	TACT-2 UNIT		1	*
A-4	-	VOLUME UNIT		1	*
A-5	-	VR CONNECT UNIT		1	*
A-6	-	FUNC UNIT		1	*
A-7	-	FUNC CONNECT UNIT		1	*
A-8	-	P.SW UNIT		1	*
A-9	-	MIC UNIT		1	*
A-10	-	FRONT IN UNIT		1	*
A-11	-	TUNER IN UNIT	E1C	1	*
★ A-13	-	DIGITAL IN UNIT		1	*
A-14	-	AUDIO CONNECT UNIT		1	*
A-15	-	REG CONNECT-1 UNIT		1	*
A-16	-	FFC LOCK UNIT		1	*
A-17	-	VOLUME UNIT		1	*
A-19	-	BKT2 UNIT(CUT PWB BOARD)		1	*
A-20	-	BKT1 UNIT(CUT PWB BOARD)		1	*
B	nsp	POWER SUPPLY UNIT			
B-1	-	STANDBY POWER UNIT		1	*
B-2	-	DIGITAL POWER UNIT		1	*
B-3	-	E2 OUTLET UNIT	E2	1	*
B-4	-	REG UNIT		1	*
B-5	-	REMOTE/IPOD UNIT		1	*
B-6	-	232C UNIT		1	*
★ B-7	-	PTC UNIT		1	*
B-17	-	FFC HOLDER UNIT		1	*
C	nsp	P.AMP UNIT			
C-1·2	-	P.AMP UNIT		2	*
C-3~7	-	P.AMP UNIT		5	*
C-8	-	FFC HOLD UNIT		1	*
C-10	-	CONNECT UNIT-1		1	*
C-11	-	DAC MUTE UNIT		1	*
D	nsp	SPEAKER UNIT			
D-1	-	SPEAKER UNIT		1	*
D-2	-	AMP CONNECT UNIT		1	*
D-4	-	CONNECT UNIT-2		1	*
E	nsp	A.AUDIO/VIDEO UNIT			
E-1	-	A.VIDEO UNIT		1	*
E-2	-	A.AUDIO UNIT		1	*
E-3	-	FRONT USB UNIT		1	*
F	nsp	MAIN CPU UNIT		1	*

Ref. No.	Part No.	Part Name	Remarks		Q'ty	New
G	963189005390D	DIGITAL UNIT	EU, EC	7025HK0905011	1	*
G	963189005400D	DIGITAL UNIT	990E3	7025HK0905031	1	*
G	963189007930D	DIGITAL UNIT	E2, E1C	7025HK0905051	1	*
★ H	nsp	PTC UNIT			1	*
1	963402005010D	FRONT PANEL	EU, EC	3067214538000S	1	*
1	963402006440D	FRONT PANEL	990E3	3067214548000S	1	*
1	963402006450D	FRONT PANEL	BKE2	3067214538010S	1	*
1	963402006460D	FRONT PANEL	SPE2	3067214538020S	1	*
1	963402006480D	FRONT PANEL	SPE1C	3067214538100S	1	*
2	963415005020D	DOOR	EU, EC,990E3	5047210558000S	1	*
2	963415006550D	DOOR	BKE2	5047210558010S	1	*
2	963415006560D	DOOR	SPE2	5047210558020S	1	*
2	963415006580D	DOOR	SPE1C	5047210558030S	1	*
3	00D4010195202	HINGE (L)	BK		1	
3	00D4010195231	HINGE (L)	SP		1	
4	00D4010196201	HINGE (R)	BK		1	
4	00D4010196230	HINGE (R)	SP		1	
5	nsp	EARTH PLATE(DOOR)		446410034015D	1	*
6	00D1310169038	DENON BADGE	BK		1	
6	00D1310169041	DENON BADGE	SP		1	
7	963412006590D	KNOB(F) ASSY	BK	5088212078000SZ	1	
7	963412006600D	KNOB(F) ASSY	SP	5088212078010SZ	1	
8	00D1140203009	KNOB RING(F)	EU, EC, BKE2		1	
8	424510007005D	KNOB RING(F)	990E3		1	
8	00D1140203025	KNOB RING(F)	SP		1	
9	963412006620D	KNOB(M) ASSY	BK	5088-21206-810-0SZ	1	
9	963412006630D	KNOB(M) ASSY	SP	5088-21206-811-0SZ	1	
10	424510006002D	KNOB RING(M)	EU, EC, BKE2		1	
10	424510008008D	KNOB RING(M)	990E3		1	
10	424510006019D	KNOB RING(M)	SP		1	
11	963416005030D	WINDOW		5077212783000S	1	*
12	00D1431293139	DOOR SHEET	EU, EC, BKE2	1217210952000S	1	*
12	00D1431293155	DOOR SHEET	990E3	1217210952100S	1	*
12	00D1431293142	DOOR SHEET	SPE2, SPE1C	1217210952010S	1	*
13	963443005280D	INNER PANEL	EU, EC, BKE2	3067214551000S	1	*
13	963443006650D	INNER PANEL	990E3	3067214701000S	1	*
13	963443006660D	INNER PANEL	SPE2	3067214551100S	1	*
13	963443006690D	INNER PANEL	SPE1C	3067214551400S	1	*
14	00D1431255009	LENS (POWER)		3710210863000S	1	
15	00D1131992109	P.KNOB ASSY(SUB)	BK	5098214028000SZ	1	
15	00D1131992138	P.KNOB ASSY(SUB)	SP	5098214028010SZ	1	
16	00D4210763010	GEAR DAMPER			1	
17	00D1131996202	CURSOR KNOB	BK		1	
17	00D1131996231	CURSOR KNOB	SP		1	
18	00D1131995054	ENTER KNOB	BK		1	*
18	00D1131995067	ENTER KNOB	SP		1	*
21	00D4125083102	DOOR STOPPER			1	
22	00D1131994107	P.KNOB ASSY(MAIN)	BK	5098214038000SZ	1	
22	00D1131994149	P.KNOB ASSY(MAIN)	SP	5098214038010SZ	1	
23	nsp	FRONT BRACKET			1	*
24	nsp	FFC GUARD (FRONT)			1	*
25	nsp	MAIN CHASSIS		3200213166000S	1	*
26	963407003330D	FOOT		4000210261000S	4	
27	nsp	LOCKING CARD SPACER (H=14)	KGLS-14RT		1	



	Ref. No.	Part No.	Part Name	Remarks		Q'ty	New
	30	nsp	P.C.B HOLDER	KGLS-10RT		1	
	31	nsp	RADIATOR BRACKET(L)		444310192015D	1	*
	32	nsp	RADIATOR			1	*
	33	nsp	RADIATOR BRACKET(R)		444310193018D	1	*
	34	nsp	CARD SPACER (L=12)	MPS-12-0		3	
	35	nsp	P.C.B HOLDER	KGLS-12S		1	
	36	nsp	CARD SPACER (L=8)	MPS-8-0		1	
⚠	37	963101005040D	MAIN TRANS(3310CIEU)	EU, EC, 990E3	8200960750140S	1	*
⚠	37	963101006700S	MAIN TRANS(3310E2)	E2	8200960750160S	1	*
⚠	37	963101006710S	MAIN TRANS(3310E1C)	E1C	8200960750170S	1	*
	38	nsp	BRACKET DIGITAL		444310196215D	1	*
	39	8S4031003000D	TOP COVER SUB ASSY	BK		1	
	39	8S4031003001D	TOP COVER SUB ASSY	SP		1	
	40	183010010008S	HD TUNER(H6101)	EU, EC, 990E3		1	*
	41	8R1891001200D	DM860 SUB ASSY	EU, EC		1	*
	41	8R1891001202D	DM860 SUB ASSY	990E3		1	*
	41	8R1891001201D	DM860 SUB ASSY	E2		1	*
	41	8R1891001203D	DM860 SUB ASSY	E1C		1	*
	42	nsp	BRACKET (870)		444310197119D	1	*
	44	963406005050D	BACK PANEL	EU, EC	3207212996000S	1	*
	44	963406006720D	BACK PANEL	990E3	3207212996100S	1	*
	44	963406006740D	BACK PANEL	E2	3207212996200S	1	*
	44	963406006750D	BACK PANEL	E1C	3207212996300S	1	*
	45	00D2051116006	TERMINAL ASS			1	
	46	nsp	BOTTOM PLATE		446510024109D	1	*
	47	nsp	BOTTOM PLATE REAR		446510026006D	1	*
	48	nsp	BRACKET			1	
	49	nsp	BRACKET POWER			1	*
	50	nsp	SHIELD PLATE		445310085011D	1	*
	★ 51	nsp	EMIGASKET RFSG020050	25+25		-	
	★ 52	nsp	EMIGASKET RFSG010100	25		-	
	★ 53	nsp	ALUMINUM TAPE	50+70		-	
	★ 55	00D3420032053	FERRITE CLAMP(RFC-7W)	E2, E1C		1	
	56	00D4610385001	RUBBER PAD			4	
	★ 57	nsp	LICENSE SUB ASSY	EU, EC, 990E3		1	*
	★ 57	nsp	LICENSE SUB ASSY	E2, E1C		1	*
	★ 59	nsp	RATING LABEL BASE			2	
	★ 60	nsp	CUPPER TAPE(W=15)	30mm		-	
	★ 61	nsp	RUBBER FOAM			1	
	★ 62	nsp	RUBBER SHEET			2	
	★ 63	nsp	RUBBER SHEET			2	
	64	nsp	CORD HOLDER (L50)			2	
	★ 65	nsp	CUSHION CPU			1	
	★ 66	nsp	LABEL (HOT SURFACE CAUTION)	EU, EC, 990E3		1	*
	★ 67	nsp	SERIAL NO. SHEET			1	
	★ 68	nsp	SCREW COVER			1	
	★ 69	nsp	WIRE CLAMPER	EU, EC, 990E3		9	
	★ 69	nsp	WIRE CLAMPER	E2, E1C		10	
	70	00D2160125108	FM AM TUNER (E2)	E2		1	
	71	00D4141058014	SAFETY COVER	BKE2		1	
	71	00D4141058001	SAFETY COVER	SPE2,SPE1C		1	
	72	00D4490139105	COVER HOLDER	BKE2		6	
	72	00D4490139118	COVER HOLDER	SPE2,SPE1C		6	
	74	424510010001D	KNOB GUIDE (A)	990E3		1	
	75	424510011004D	KNOB GUIDE (B)	990E3		1	

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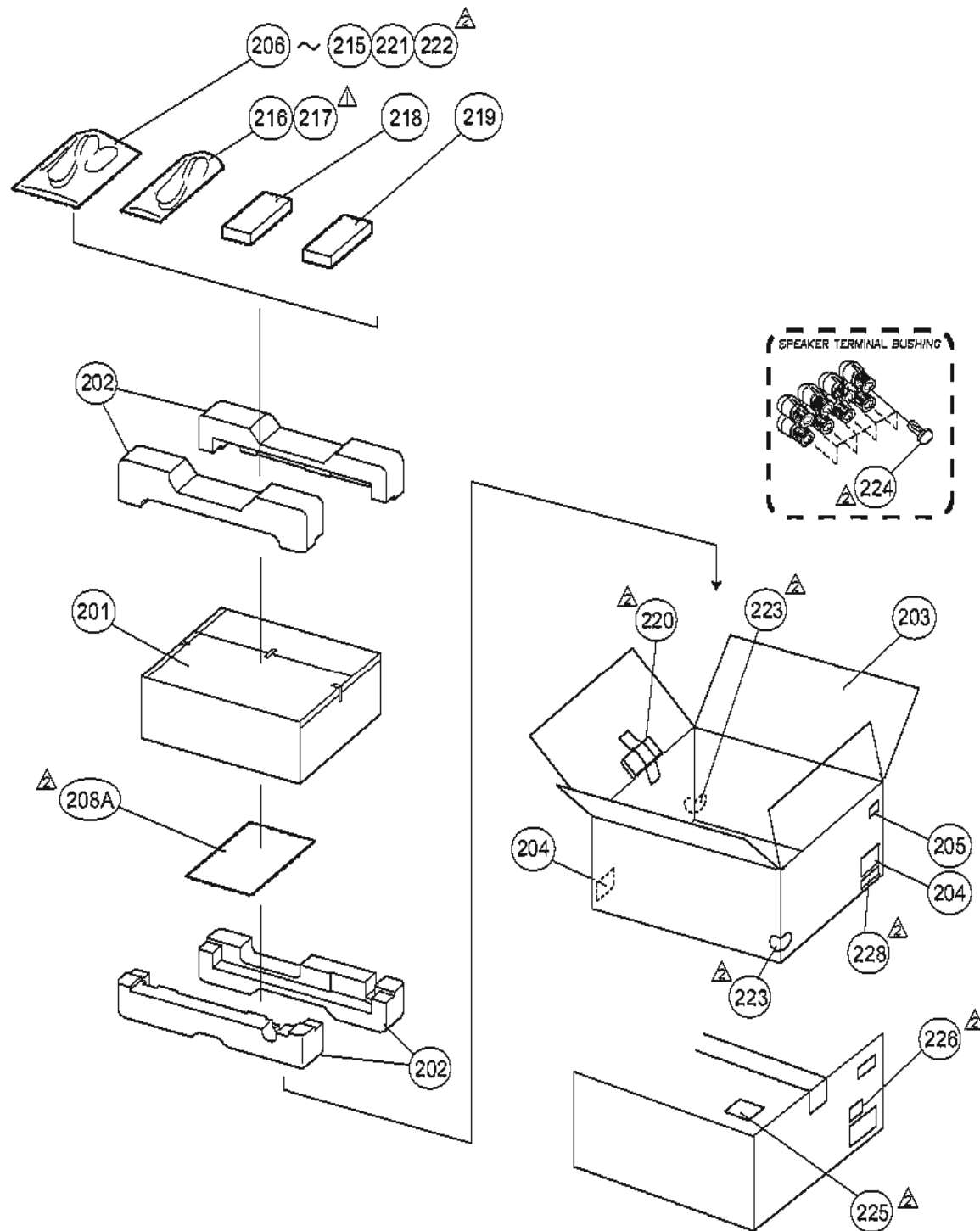
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Ref. No.	Part No.	Part Name	Remarks		Q'ty	New
★ 76	nsp	CroHS LABEL SET	E1C	5507000000830S	1	
★ 80	nsp	MAC ADDRESS SUB ASSY			1	
★ 81	nsp	SP RIVET			1	
SCREWS						
101	nsp	3X8 CBTS(S)-B		B020930083B10S	7	
102	nsp	SCREW +2S 3*10 B-TYPE(DOT) BK/BH	EU, EC, E3, E2	B020030103B11S	52	
102	nsp	SCREW +2S 3*10 B-TYPE(DOT) BK/BH	E1C	B020030103B11S	50	
103	nsp	SCREW +2S 2.6x8 B-TYPE BK/BH		B020026083B10S	2	
104	nsp	SCREW,TAP TITE +2S 3*8 B-TYPE ZNW/BH		B020030081B10S	56	
105	nsp	SCREW +2S 3x8(ROUND) BK/BH		B020230083B10S	1	
106	nsp	SCREW +2S 3x6 B-TYPE BK/BH		B020030063B10S	4	
107	nsp	SCREW +2S 3*8 PI9.5 B-TYPE ZNW		1500001206010S	2	
108	nsp	3X10 CBTS(B)-Z		B020030101B10S	16	
109	00D9630048307	4X8 CBTS(B)-B-3P	BK	1500040083B10S	10	
109	00D9630048307	4X8 CBTS(B)-B-3P	SP	1500040083B10S	2	
109	00D9639004012	4X8 CBTS(B)-N-3P	SP	1500040084B10S	8	
110	nsp	3X16 CPTS(B) SW W		B018230141H11S	14	
111	nsp	SCREW +M 3x10 BK/B	EU, EC, E3	B000030103B10S	1	
114	nsp	SCREW +2S 3*8 B-TYPE BK/FH		B020030083F10S	2	
116	nsp	SCREW +3S 4x10 P+S-WASHER ZNW/BH		B028940101B10S	4	
WIRES						
	nsp	5P PH-PH CON.CORD (L=580mm)	CX052 to CY052		1	
	nsp	6P PH-PH CON.CORD(UL TUBE)	CW068 to CX068		1	
	606050061002S	FFC 19P 140mm 1mm		N711191433810S	1	
	606050062005S	FFC 23P 140mm 1mm		N711231433810S	1	
	606050063008S	FFC 11P 125mm 1mm		N711111233810S	1	
	606050064001S	FFC 15P 125mm 1mm		N711151233810S	1	
	606050065004S	FFC 14P 125mm 1mm		N711141233810S	1	
	606050066007S	FFC 12P 125mm 1mm		N711121233810S	1	
	606050068003S	FFC 25P 185mm 1mm		N711251833810S	1	
	606050069006S	FFC 27P 370mm 1mm		N711273733810S	1	
	963606007950S	FFC 7P 100mm 1mm		N711071033810S	1	
	963606007960S	FFC 13P 380mm 1.25mm	EU, EC, E3	N712133833810S	1	
	963606007970S	FFC 6P 210mm 1mm		N711062133810S	1	
	963606007980S	FFC 15P 210mm 1.25mm	E2	N712152133810S	1	

PACKING VIEW



PARTS LIST OF PACKING & ACCESSORIES

* Parts for which "nsp" is indicated on this table cannot be supplied.

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

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

EU(AVR-3310) : U.S.A. model

EC(AVR-3310) : Canada model

E2(AVR-3310) : Europe model

E1C(AVC-3310) : China model

990E3(AVR-990) : U.S.A. & Canada model

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
201	nsp	CABINET SHEET		1	
202	nsp	CUSHION ASSY		1	*
203	963531005320D	BOX,GIFT	EU, EC	1	*
203	963531007470D	BOX,GIFT	990E3	1	*
203	963531007480D	BOX,GIFT	E2	1	*
203	963531007490D	BOX,GIFT	E1C	1	*
204	nsp	CONT.CARD(L)SUB ASSY		1	
205	nsp	BAR CODE LABEL ASSY		1	
206	nsp	ENVELOPE	EU, EC, 990E3, E1C	1	
206	nsp	ENVELOPE	E2	2	
207	963541005330D	INST. MANUAL(EU)	EU, EC	1	*
208	963541005420D	INST. MANUAL (EC)	EC	1	*
208	963541007520D	INST. MANUAL (990)	990E3	1	*
208	963541007550D	INST. MANUAL (E1C)	E1C	1	*
208	963541007570D	INST. MANUAL (E2-3)	E2(3)	1	*
208A	963541007940D	INST. MANUAL (E2-4)	E2(4)	1	*
209	00D3950033001	FM ANTENNA (DIPOLE)	EU, EC, 990E3	1	

	Ref. No.	Part No.	Part Name	Remarks		Q'ty	New	
	209	00D3950029002	FM ANT ASSY(F/ETRO)	E2		1		△
	210	116010001004S	AM LOOP ANTENNA(HD-10)	EU, EC, 990E3		1		△
	210	00D2310089007	AM LOOP ANTENNA	E2		1		△
	211	-	BATTERY(AAAX2)	EU, EC, E2, E1C for RC-1121		1		△
	212	-	BATTERY(AAX2)	for RC-1118		1		
	214	nsp	S.S.LIST (EX)			1		
	215	nsp	WARRANTY (HOME)	EU, EC, 990E3		1		△
	216	nsp	POLY COVER			1		
△	217	90M-ZC000470R	CORD ASSY	EU, EC, 990E3	L068125130010S	1	*	△△
△	217	90M-ZC000600R	CORD ASSY	E2	L068250160020S	1	*	△△
△	217	963611004880S	CORD ASSY	E1C	L068250100050S	1	*	△△
	218	307010045008D	RC-1121	EU, EC, E2, E1C		1	*	△
	219	307010042009D	RC-1118	MAIN		1	*	
	220	324010001003D	DM-A409EM			1		
	220A	nsp	POLY BAG ACCESSORY		6330210222000S	1		
	221	963541005360D	GETTING STARTED(33EU)	EU, EC, 990E3	5227000001040S	1	*	△
	221	963541007580D	GETTING STARTED(33E2)	E2	5227000001330S	1	*	△
	221	963541007590D	GETTING STARTED(33E1C)	E1C	5227000001340S	1	*	△
	222	543110064002D	SIRIUS SHEET			1		
	223	00D5139111030	LABEL COLOR	SP	5507020170680S	2		△
	224	nsp	BUSHING TERMINAL	E2, E1C	2410040353010S	18		△
	225	nsp	LABEL CARTON	E1C		1	*	△△
	226	nsp	LABEL DATE	E1C	5507000000850S	1		△
	228	nsp	MAC ADDRESS SUB ASSY			1		

--MEMO--

NOTE FOR SCHEMATIC DIAGRAM

WARNING:

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

CAUTION:

Before returning the unit to the customer, make sure you make 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 unit is defective.

WARNING:

DO NOT return the unit to the customer until the problem is located and corrected.

NOTICE:

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

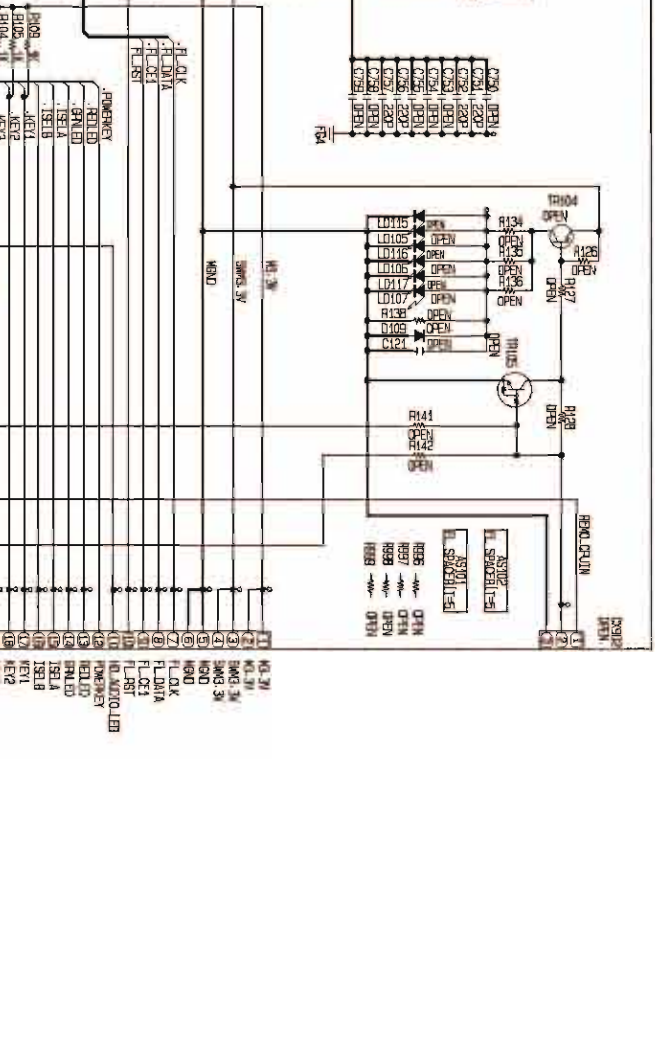
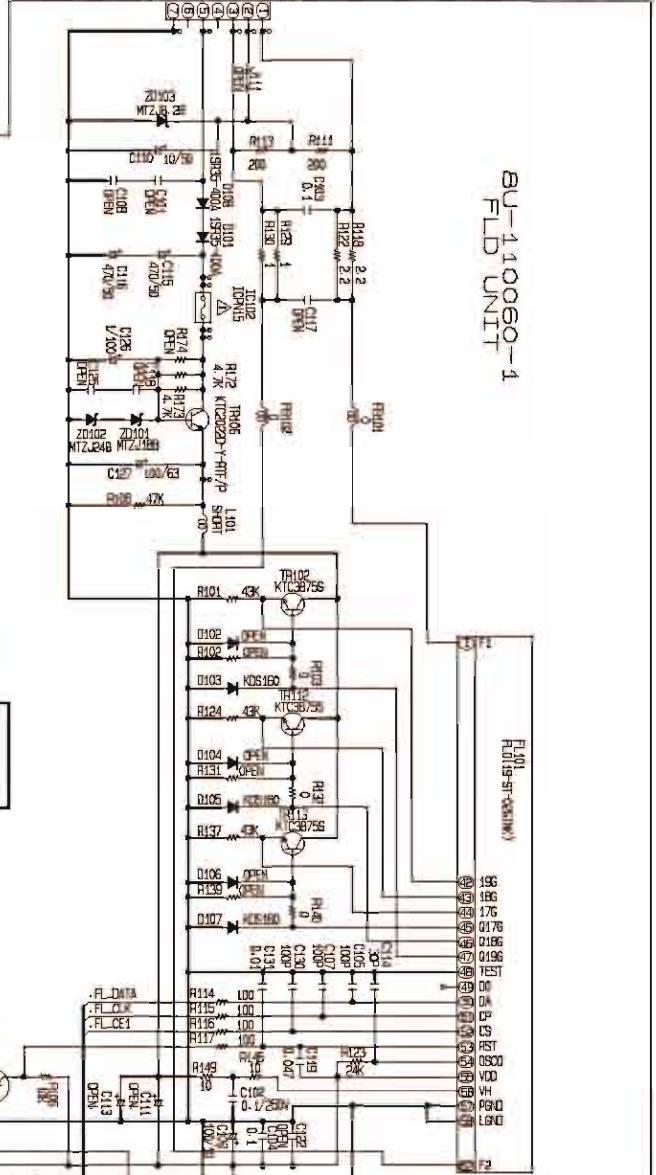
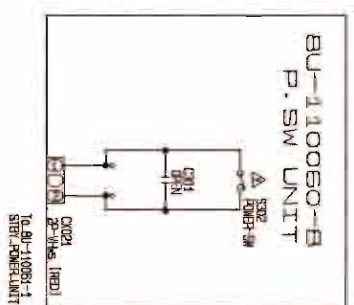
M=1,000,000 OHM

ALL CAPACITANCE VALUES IN MICRO FARAD.

P=MICRO-MICRO FARAD

EACH VOLTAGE AND CURRENT ARE MEASURED AT
NO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE
WITHOUT PRIOR NOTICE.



BU-110060-B
P. SW UNIT

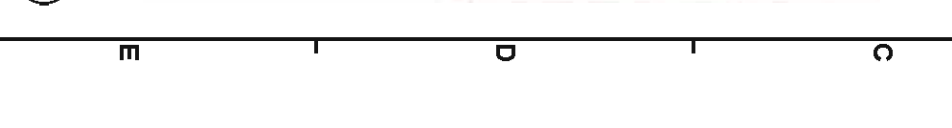
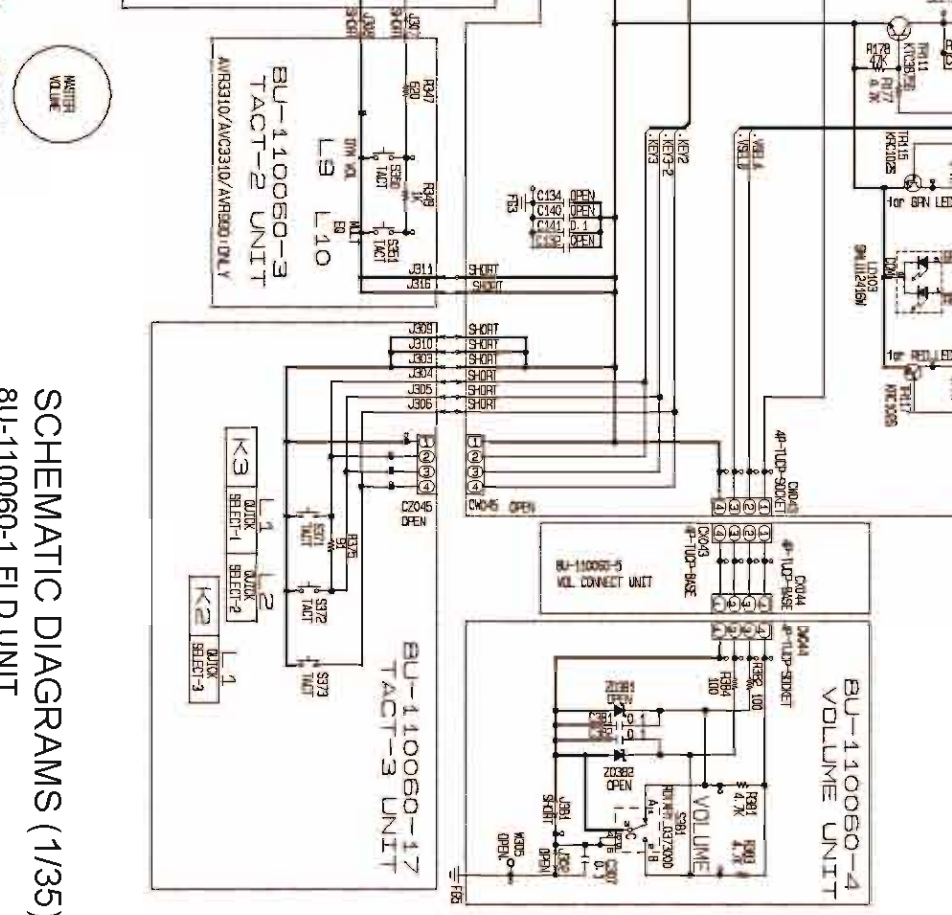
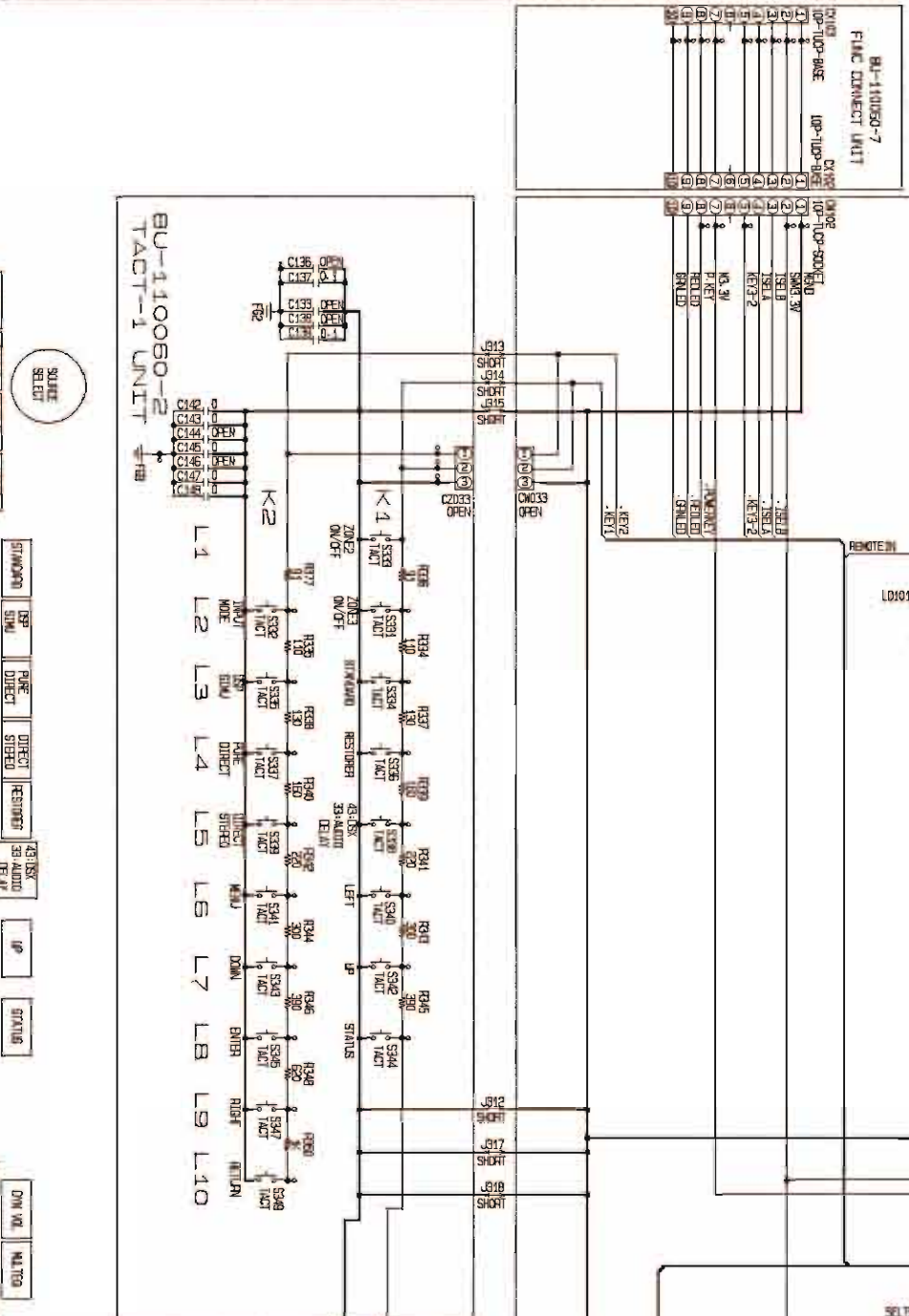
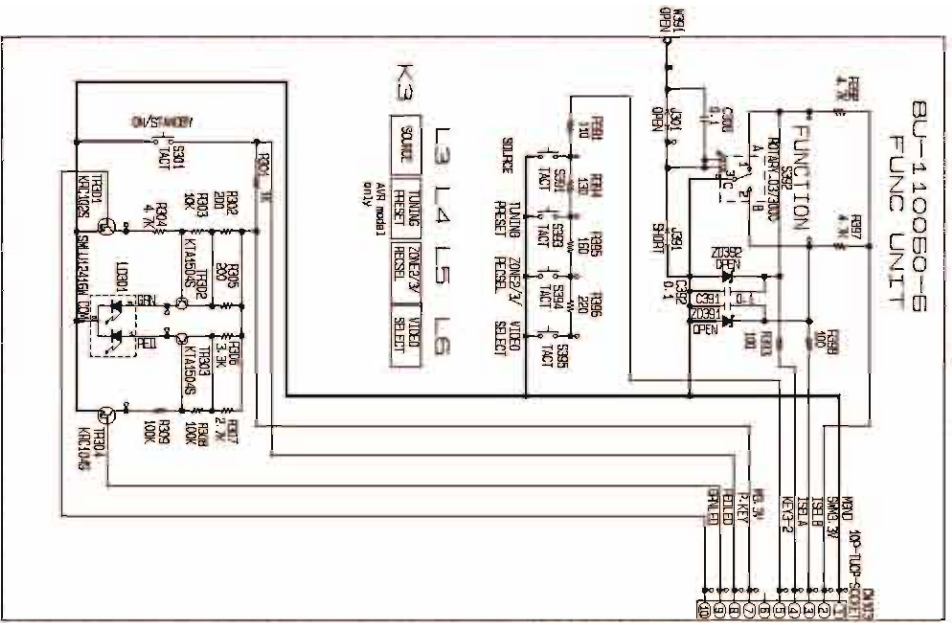
TO POWER TRANS

BU-110060-1
FLD UNIT

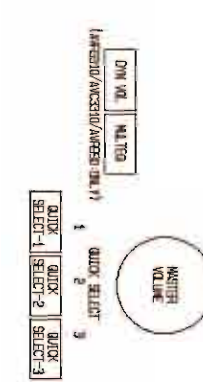
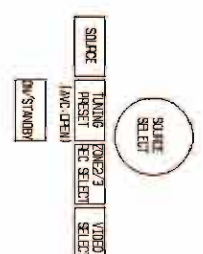
BU-110060-7
FUNC CONNECT UNIT

BU-110060-3
TACT-2 UNIT

BU-110060-4
VOLUME UNIT

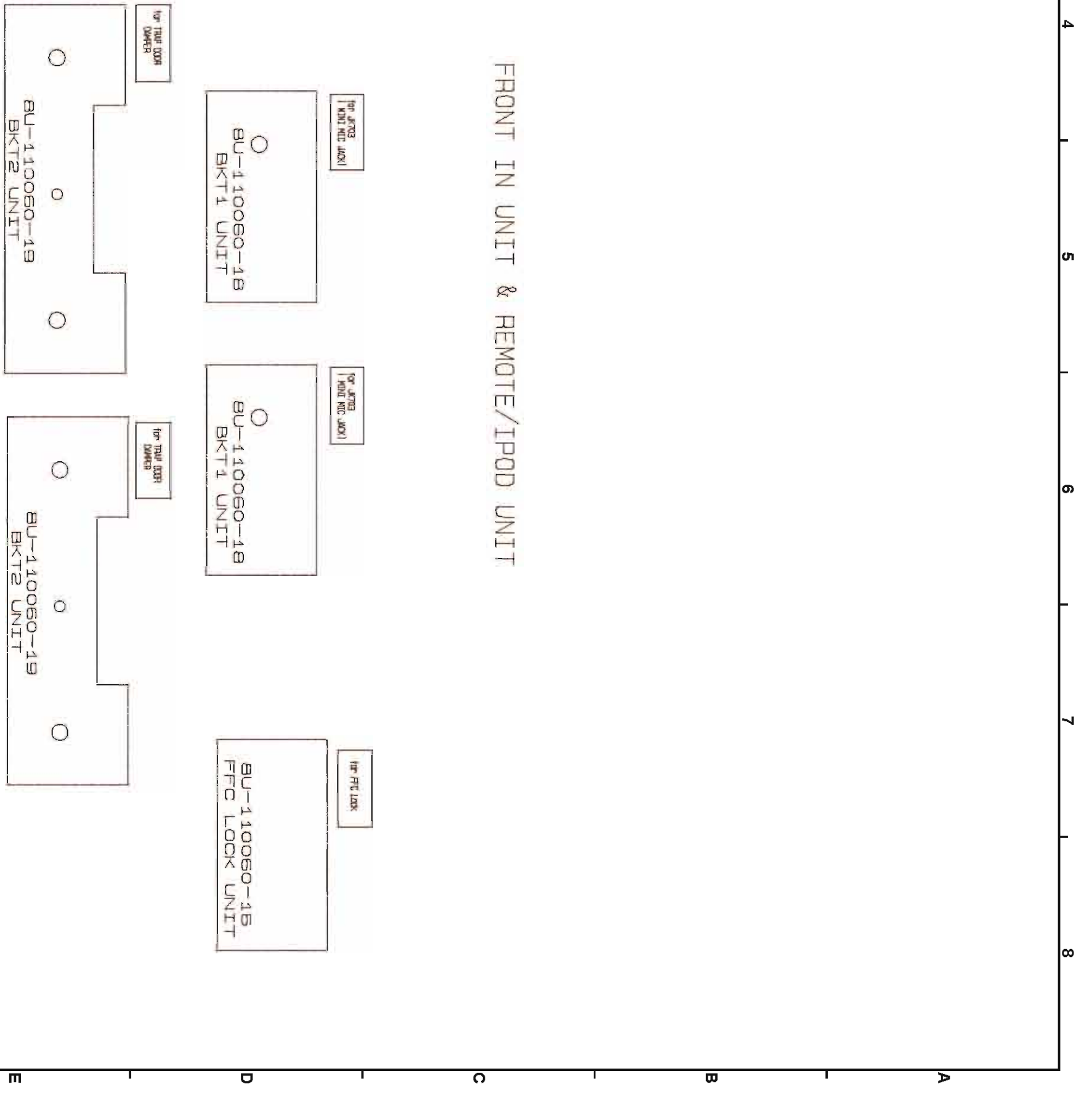
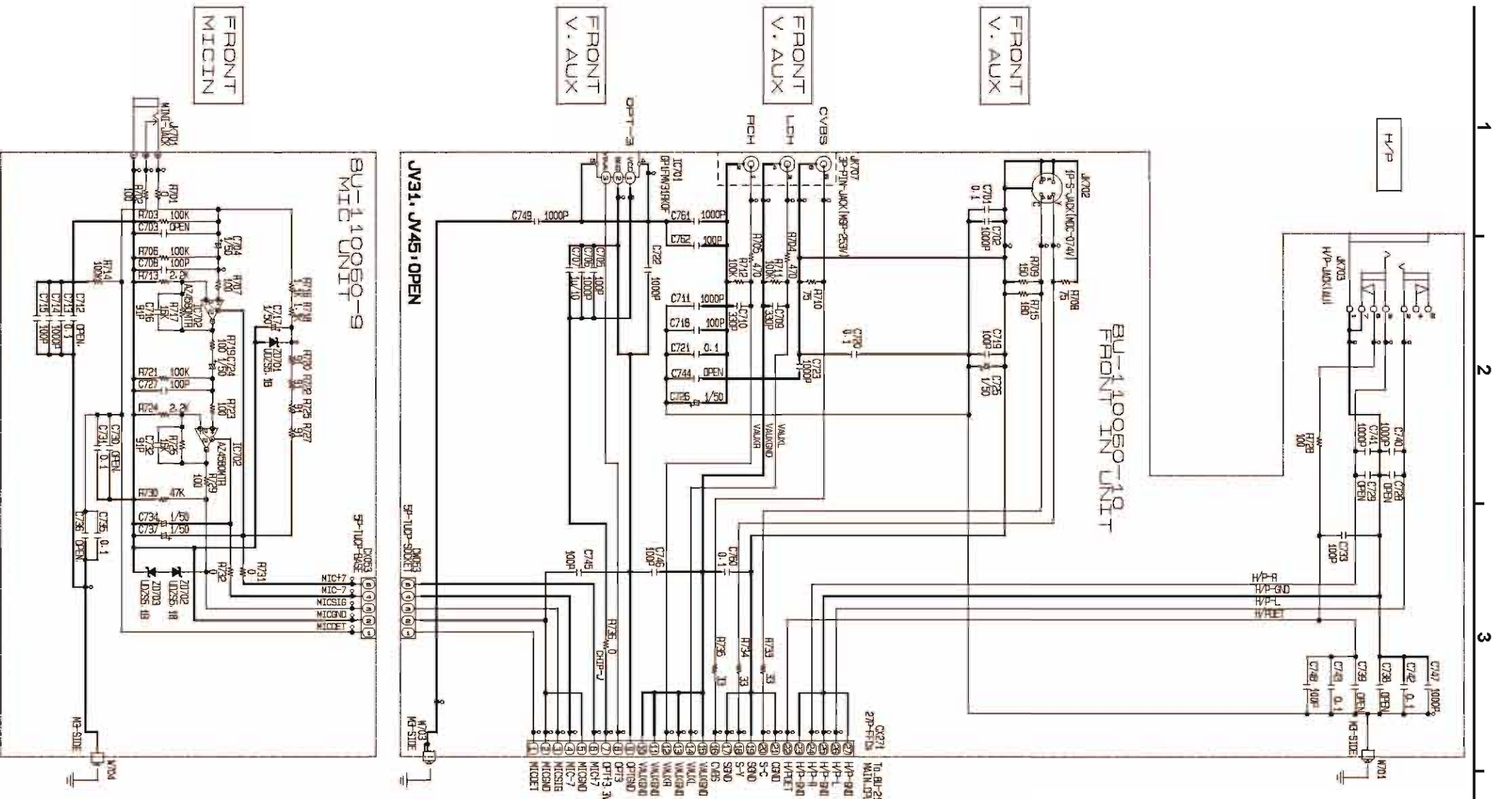


L1	ZONE 2	ZONE 3	STANDBY	RESTORE	RECALL	LEFT	UP	STATUS	DOWN	RETURN
K1	ZONE 2	ZONE 3	STANDBY	RESTORE	RECALL	LEFT	UP	STATUS	DOWN	RETURN
K2	ZONE 2	ZONE 3	STANDBY	RESTORE	RECALL	LEFT	UP	STATUS	DOWN	RETURN
K3	ZONE 2	ZONE 3	STANDBY	RESTORE	RECALL	LEFT	UP	STATUS	DOWN	RETURN



SCHEMATIC DIAGRAMS (1/35)

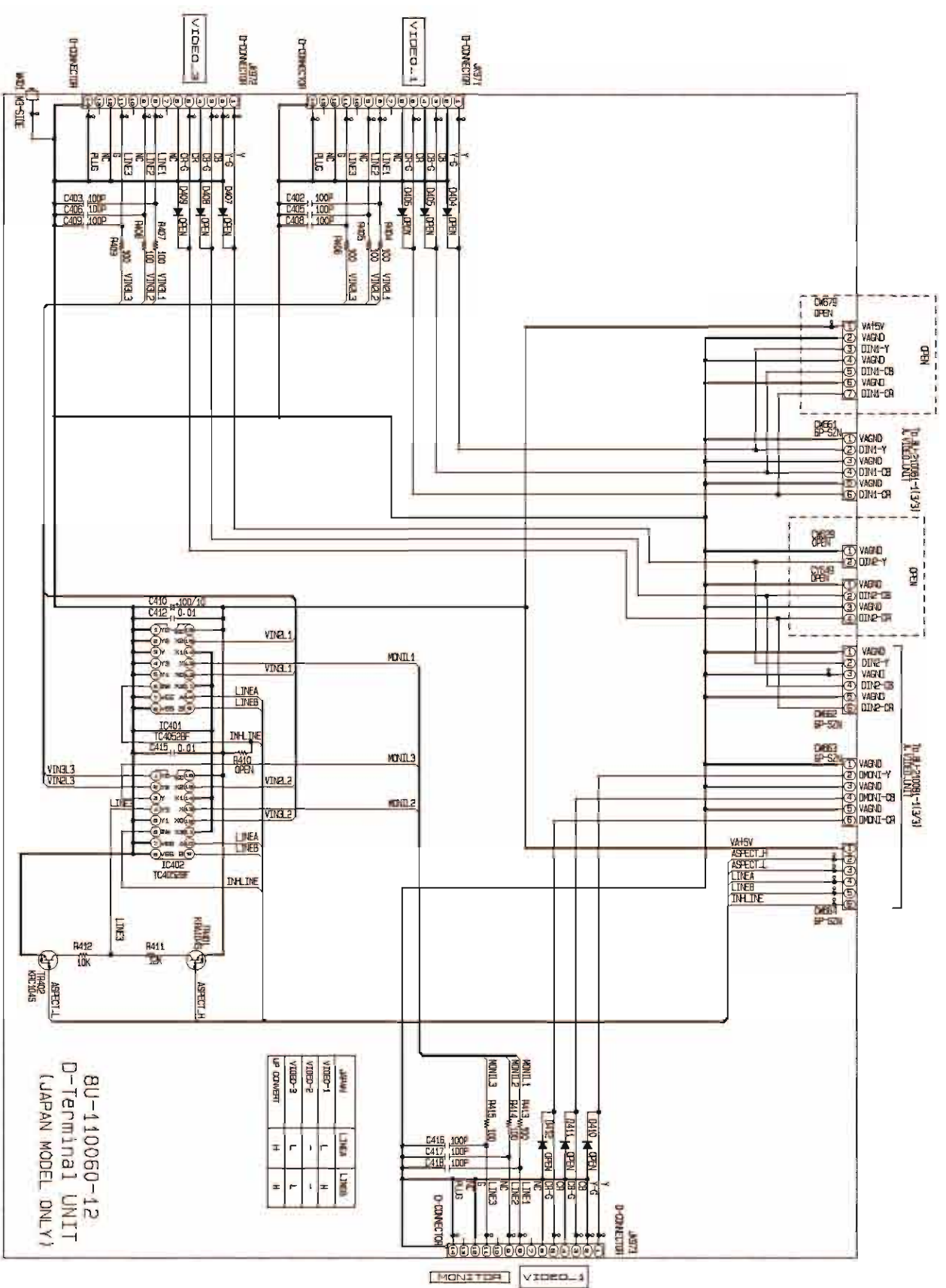
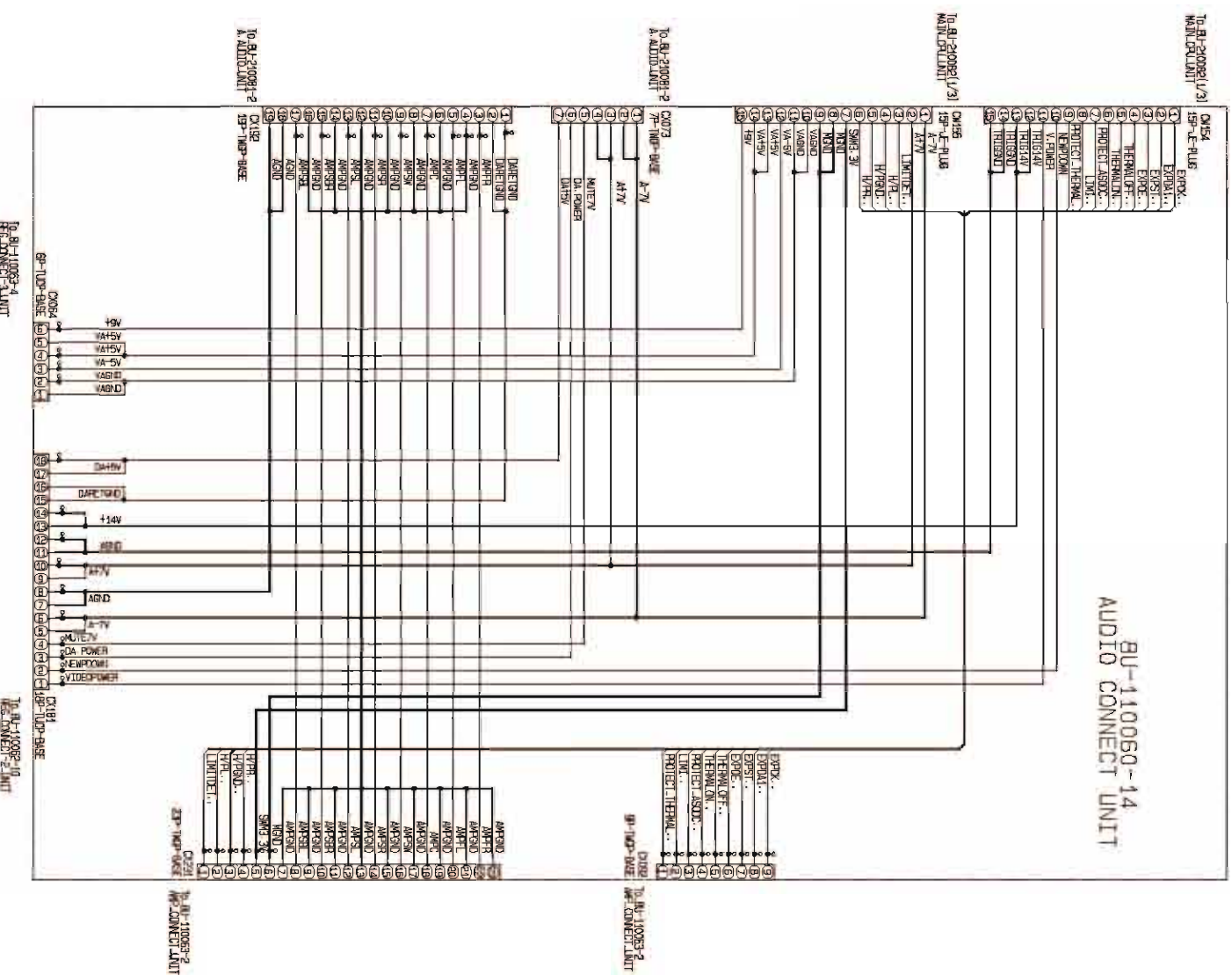
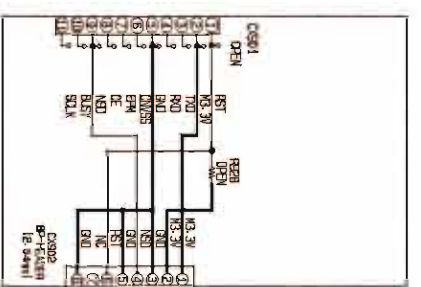
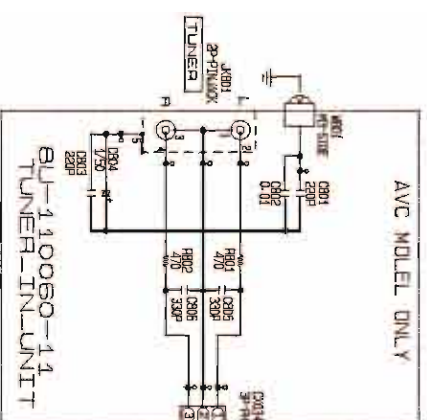
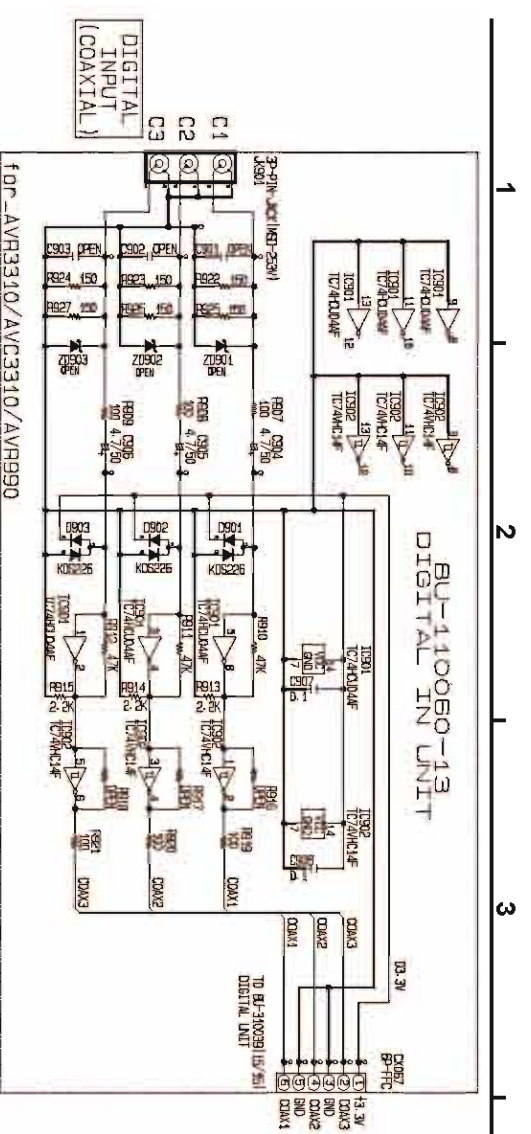
- 8U-110060-1 FLD UNIT
- 8U-110060-2 TACT-1 UNIT
- 8U-110060-3 TACT-2 UNIT
- 8U-110060-4 VOLUME UNIT
- 8U-110060-5 VOL CONNECT UNIT
- 8U-110060-6 FUNC UNIT
- 8U-110060-7 FUNC CONNECT UNIT
- 8U-110060-8 PSW UNIT
- 8U-110060-17 TACT-3 UNIT
- AVR-3310CI/AVR-3310/AVR-990/AVC-3310



SCHEMATIC DIAGRAMS (2/35)

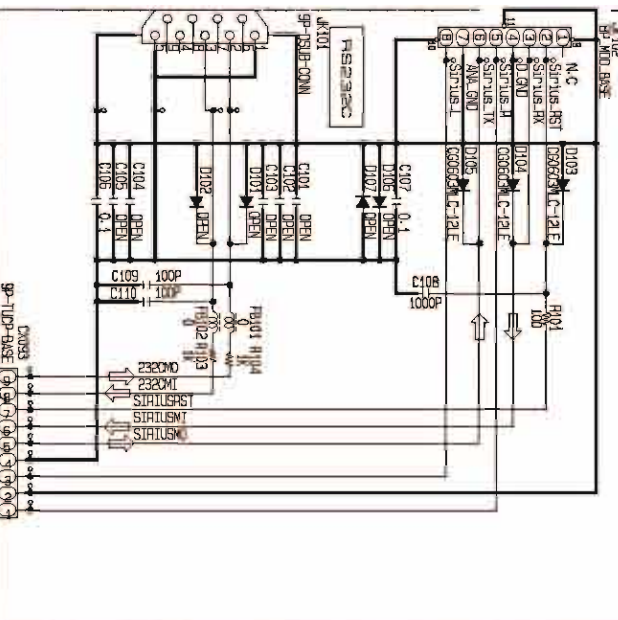
- 8U-110060-9 MIC UNIT
- 8U-110060-10 FRONT IN UNIT
- 8U-110060-16 FCC LOCK UNIT
- 8U-110060-18 BKT1 UNIT

AVR-3310CI/AVR-3310/AVR-990/AVC-3310

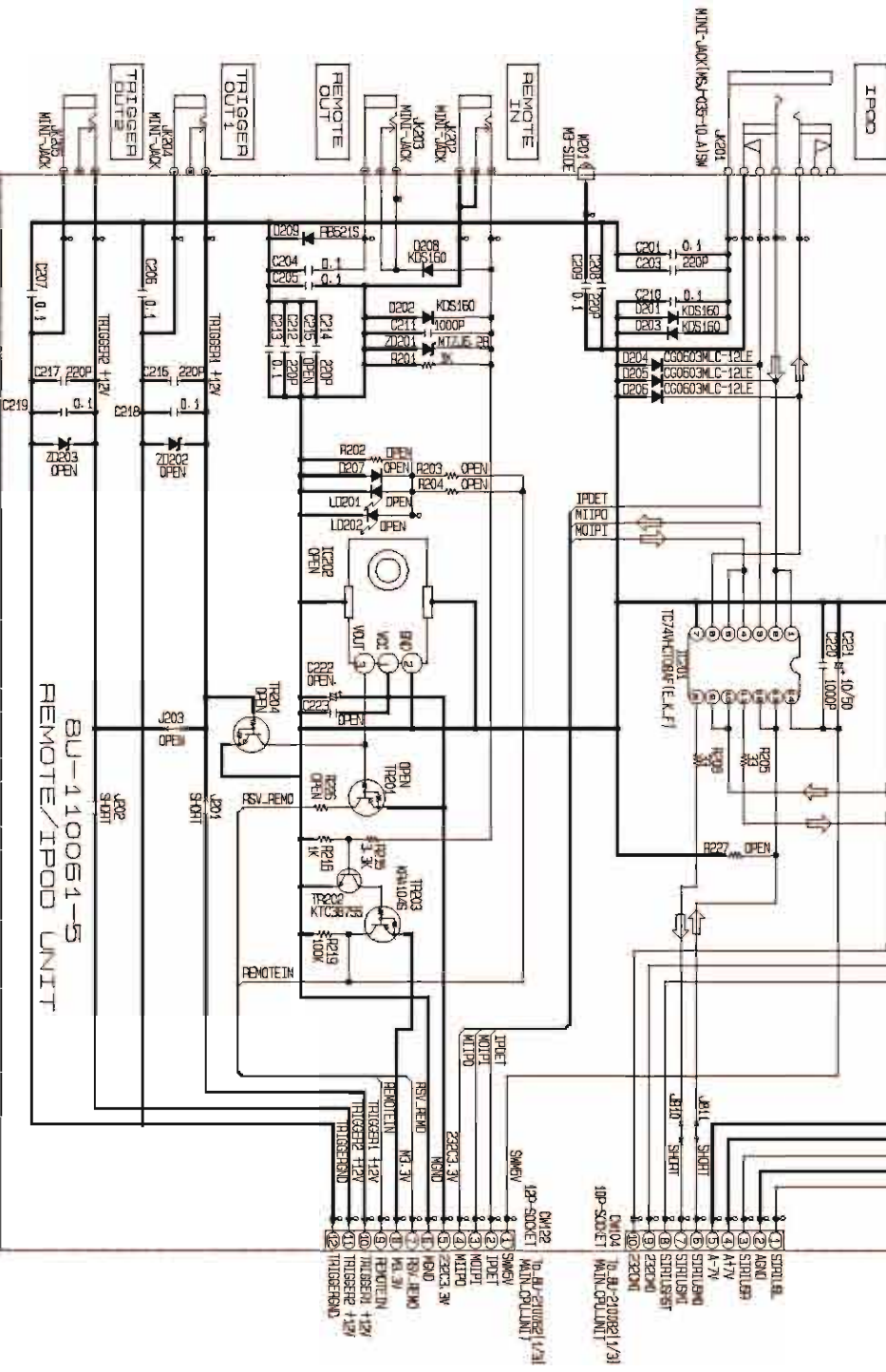


SCHEMATIC DIAGRAMS (3/35)
 8U-110060-11 TUNER IN UNIT for AVC-3310
 8U-110060-12 D-TERMINAL UNIT for Japan
 8U-110060-13 DIGITAL IN UNIT
 8U-110060-14 AUDIO CONNECT UNIT
 8U-110060-15 REG CONNECT-1 UNIT
 AVR-3310CI/AVR-3310/AVR-990/AVC-3310

BU-110061-5
232C UNIT



TELE	JB10	JB11	REZ7
DATA	SHORT	SHORT	OPEN
ELCDE	OPEN	OPEN	0
DATA	OPEN	OPEN	0
DATA	OPEN	OPEN	0

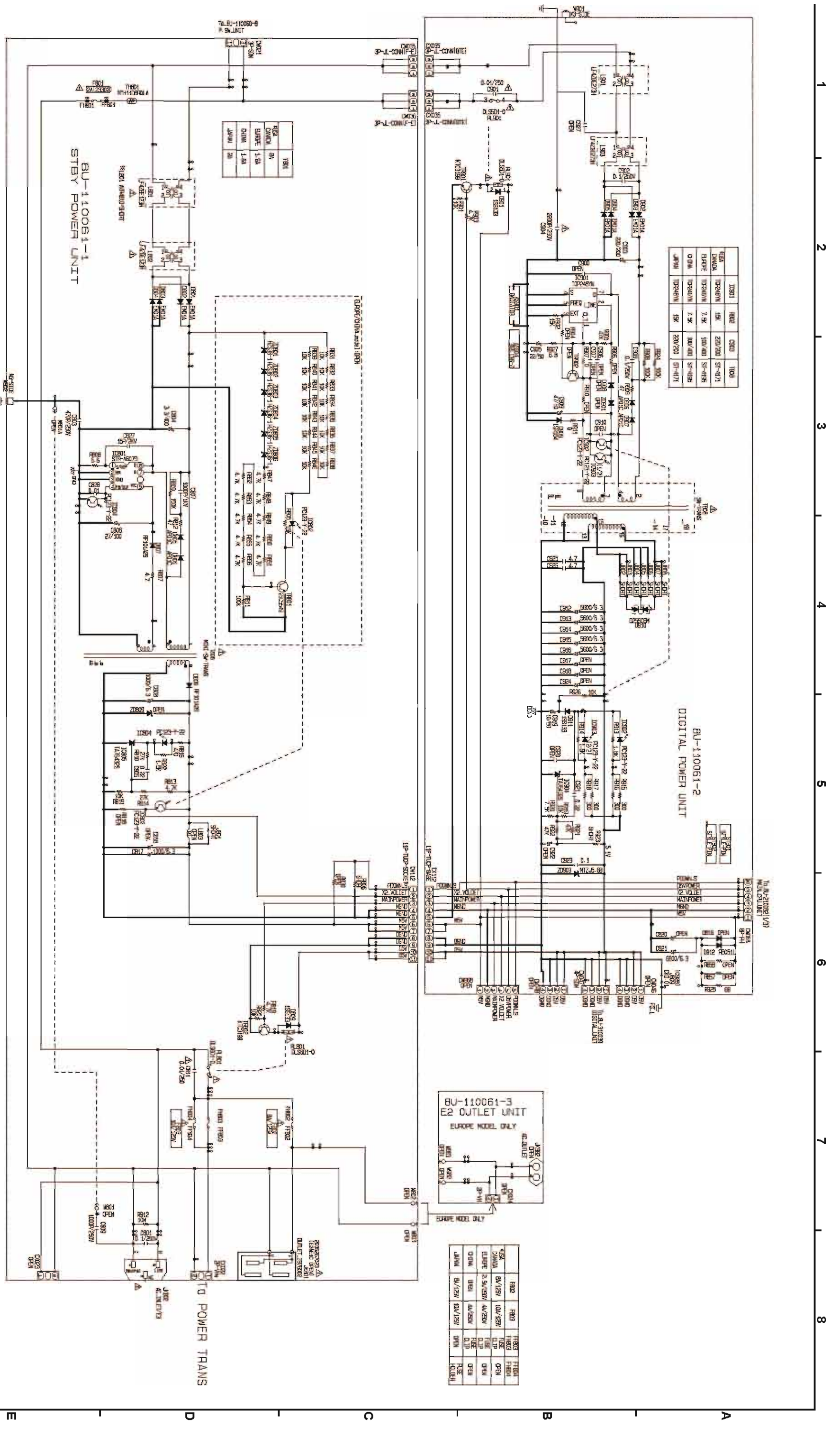


SCHEMATIC DIAGRAMS (4/35)

8U-110061-5 REMOTE/IPOD UNIT

8U-110061-6 232C UNIT

AVR-3310CI/AVR-3310/AVR-990/AVC-3310



RES	10001	R1002	C1003	T1004
DIODE	10P240N	14K	220/200	ST-4171
DIODE	10P240N	7.5K	100/400	ST-4185
CAP	10P240N	7.5K	100/400	ST-4189
DIODE	10P240N	15K	220/200	ST-4171

BU-110061-2
DIGITAL POWER UNIT

RES	R1002	R1003	T1004	T1005
DIODE	8V/125V	10V/125V	115V	OPEN
DIODE	3.5V/250V	4V/250V	0.1P	OPEN
DIODE	10V	4V/250V	RISE	OPEN
DIODE	5V/250V	10V/125V	OPEN	RISE
DIODE	5V/250V	10V/125V	OPEN	COLLECT

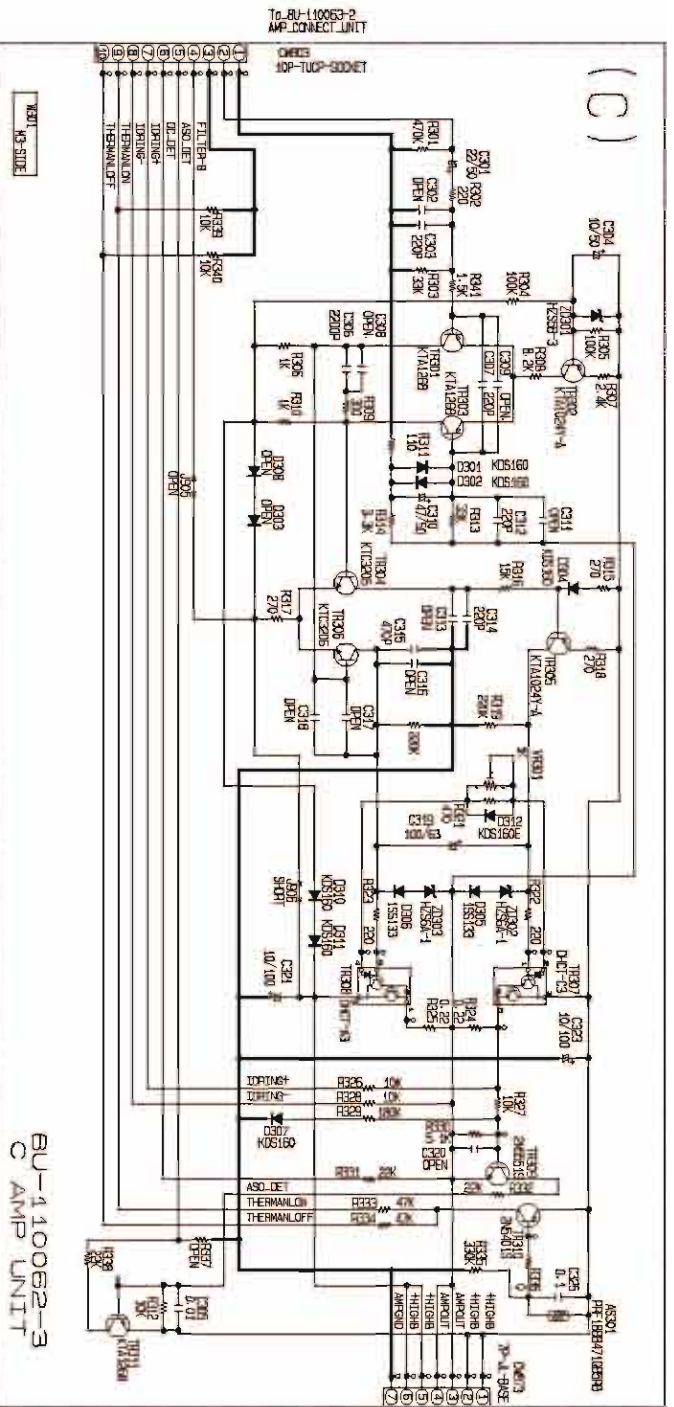
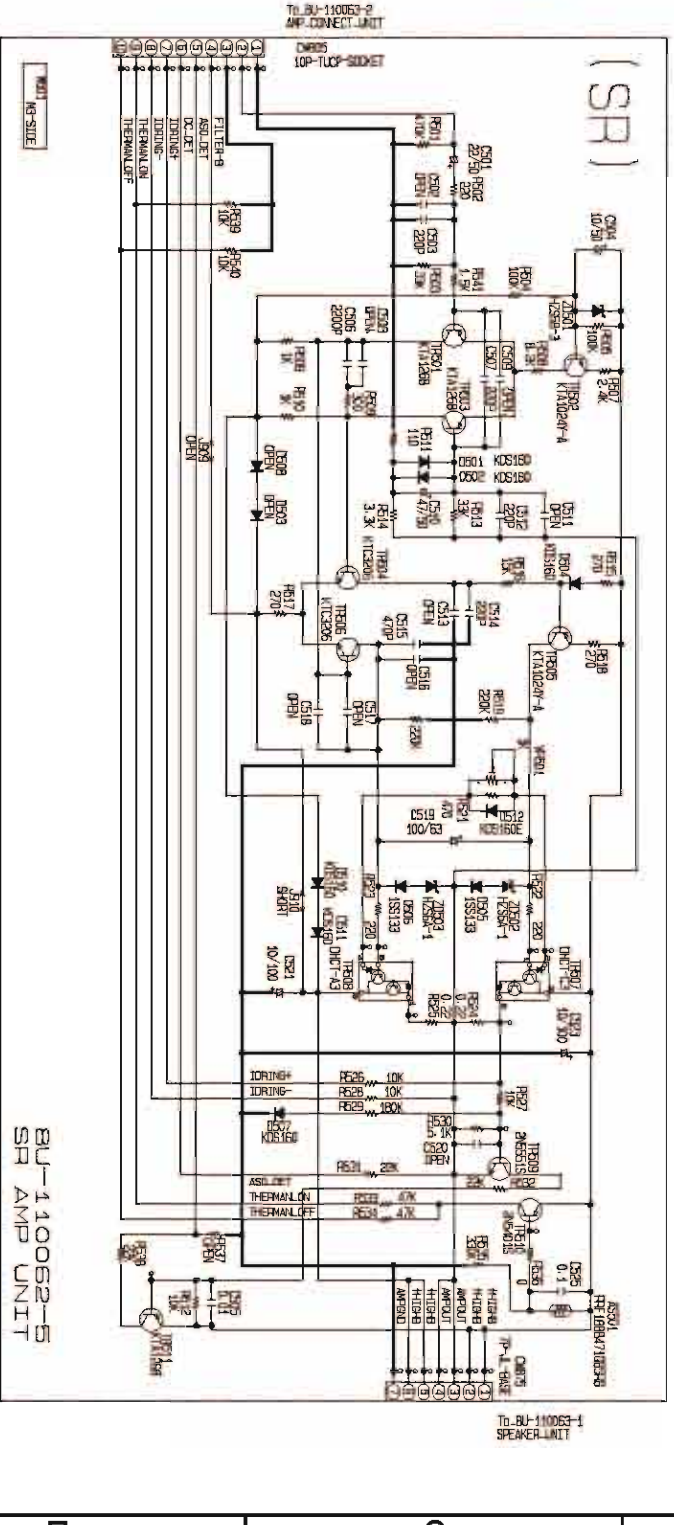
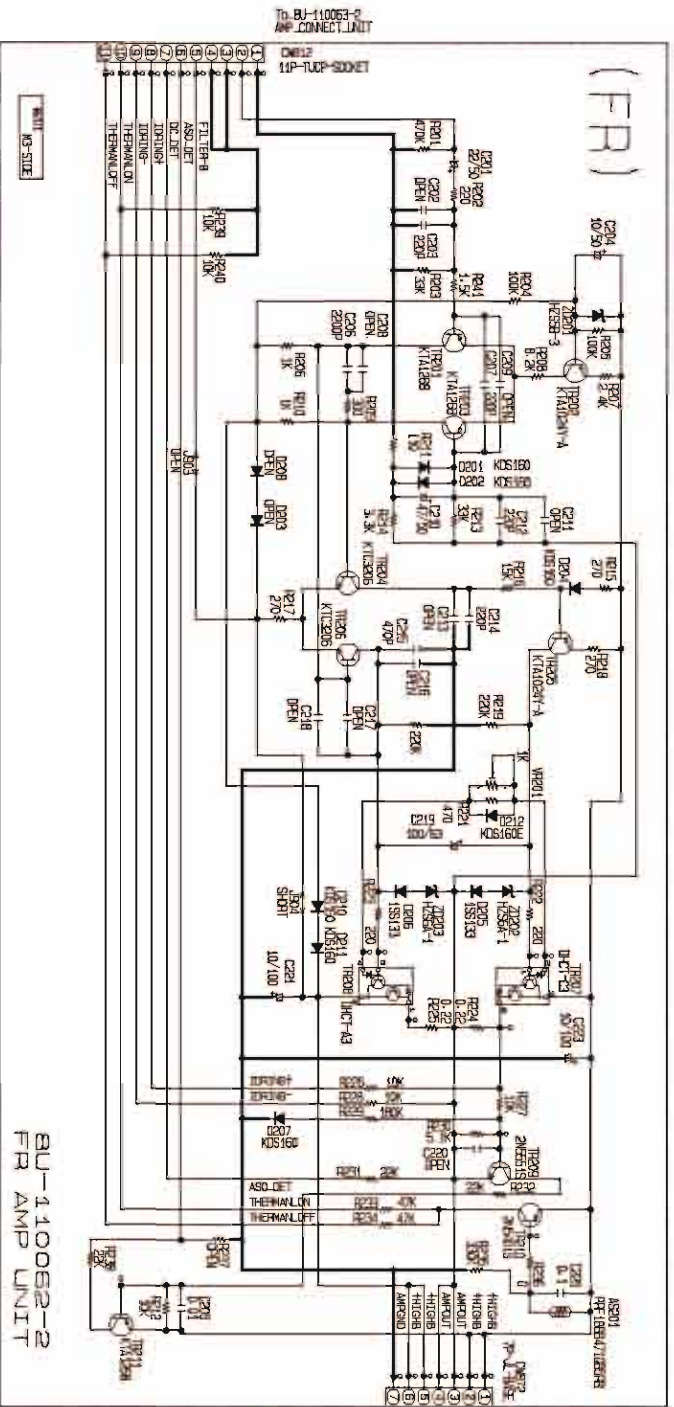
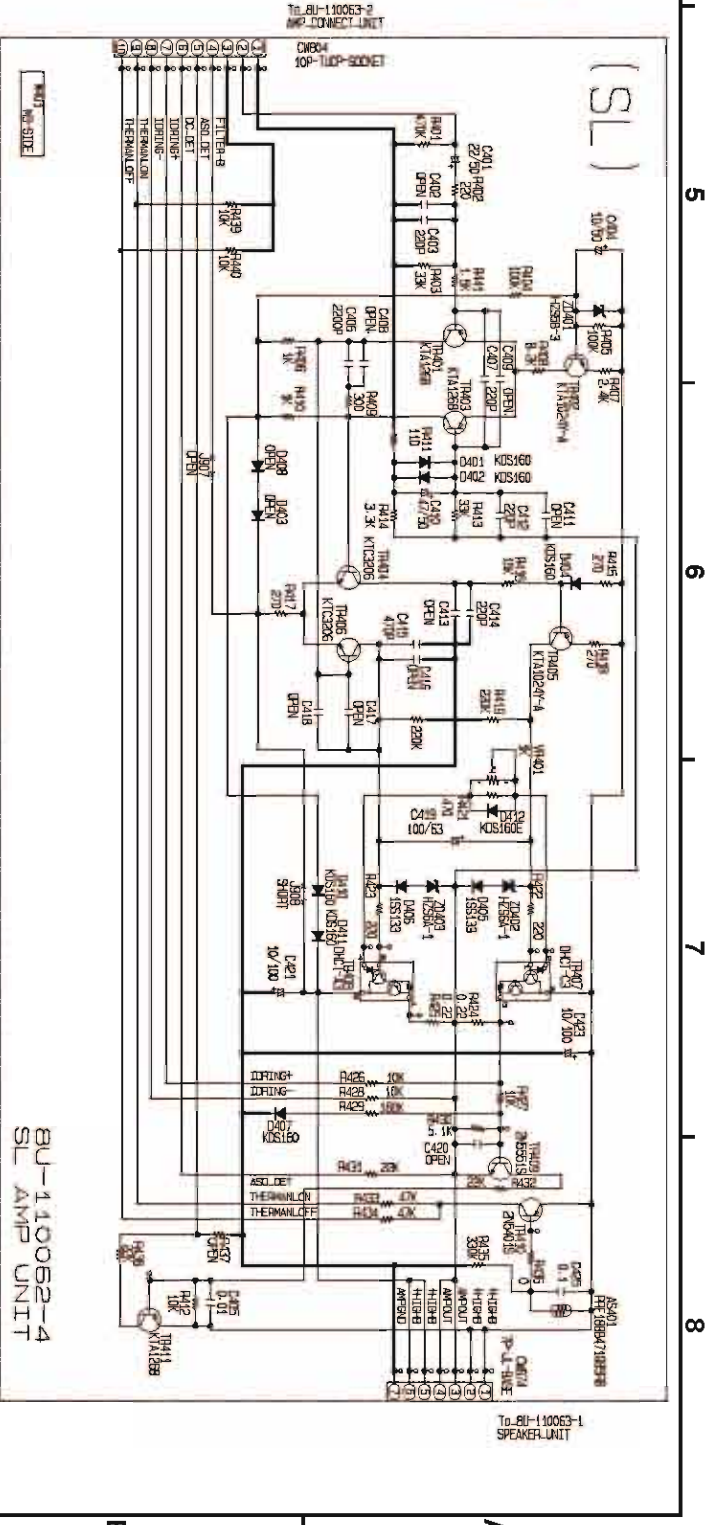
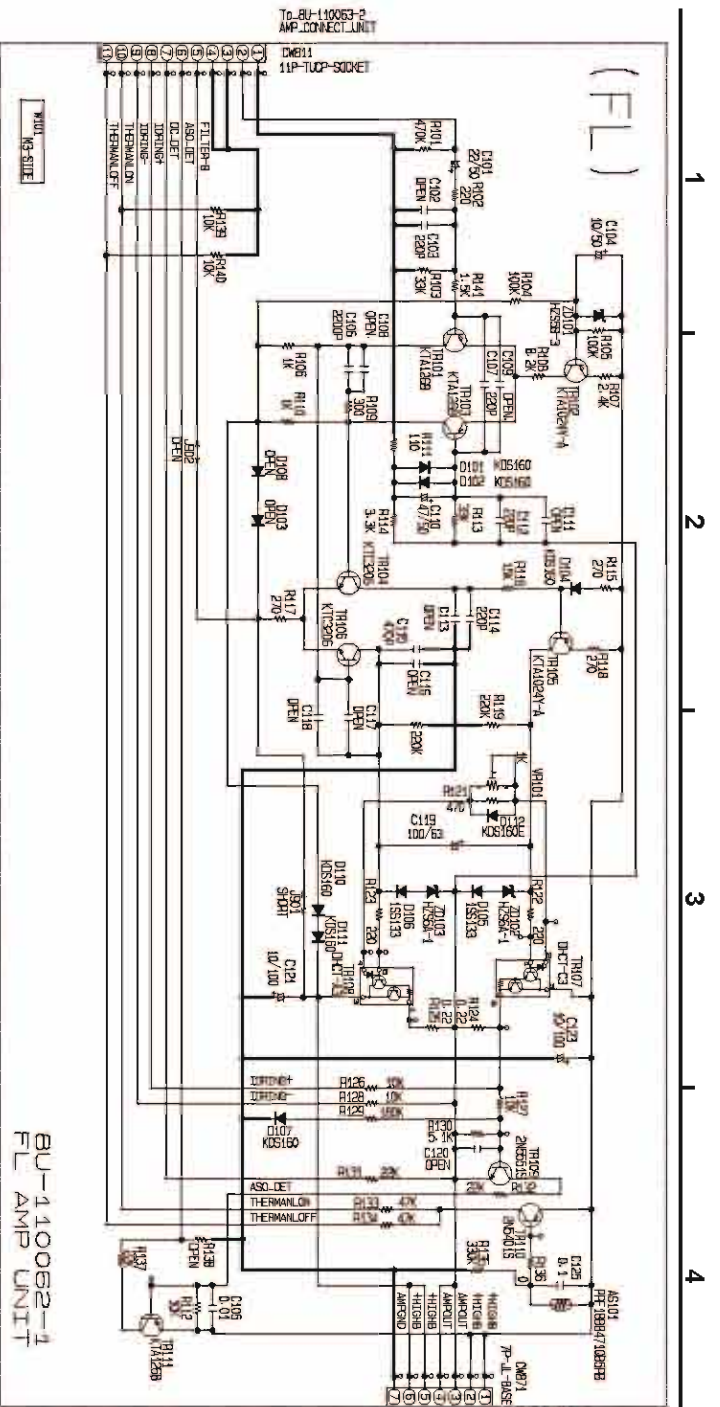
RES	R1001	R1002	R1003	R1004
DIODE	8V	1.5V	0.25V	1.5V
DIODE	0.25V	1.5V	1.5V	1.5V
DIODE	2V			

BU-110061-1
STBY POWER UNIT

BU-110061-3
E2 OUTLET UNIT
EUROPE MODEL ONLY

TO POWER TRANS

SCHEMATIC DIAGRAMS (5/35)
 8U-110061-1 STBY POWER UNIT
 8U-110061-2 DIGITAL POWER UNIT
 8U-110061-3 E2 OUTLET UNIT
 AVR-3310CI/AVR-3310/AVR-990/AVC-3310

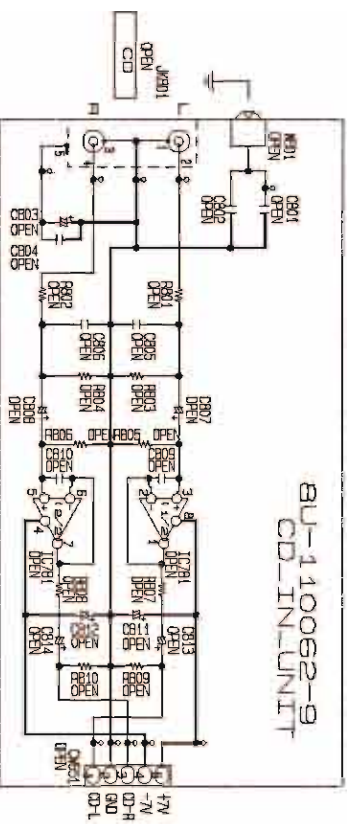
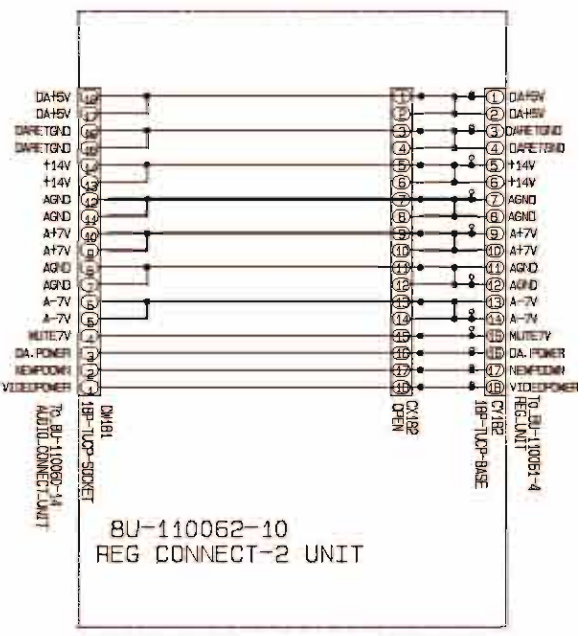
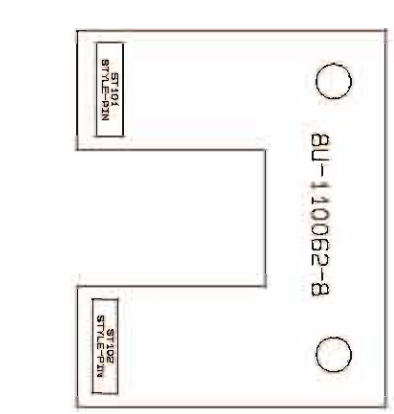
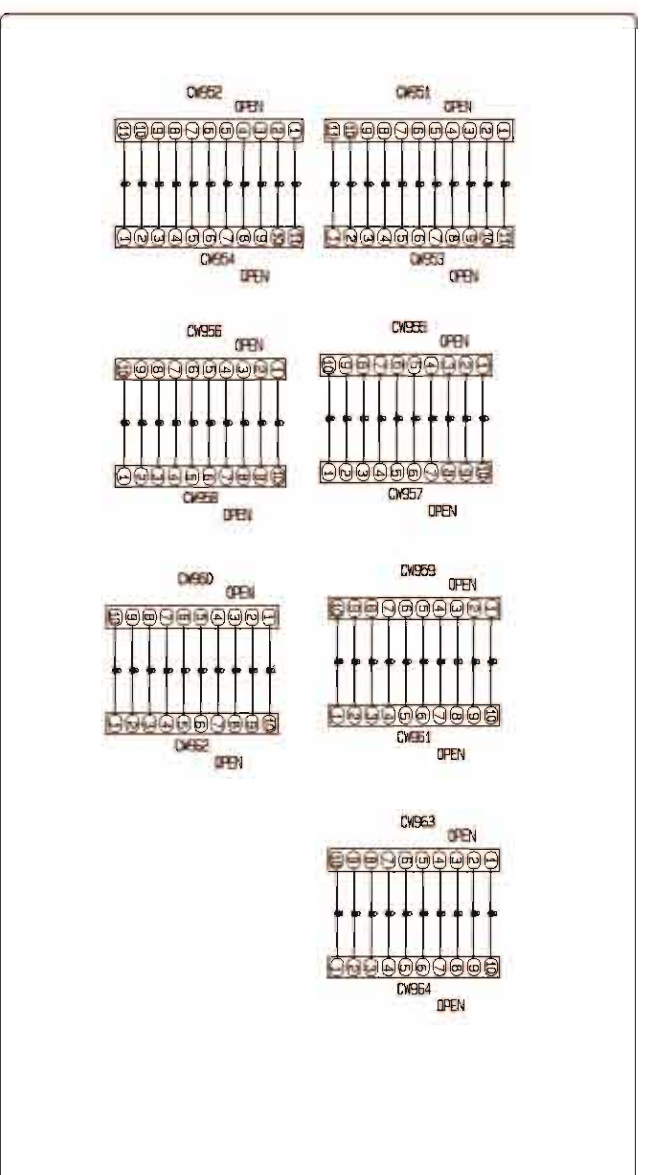
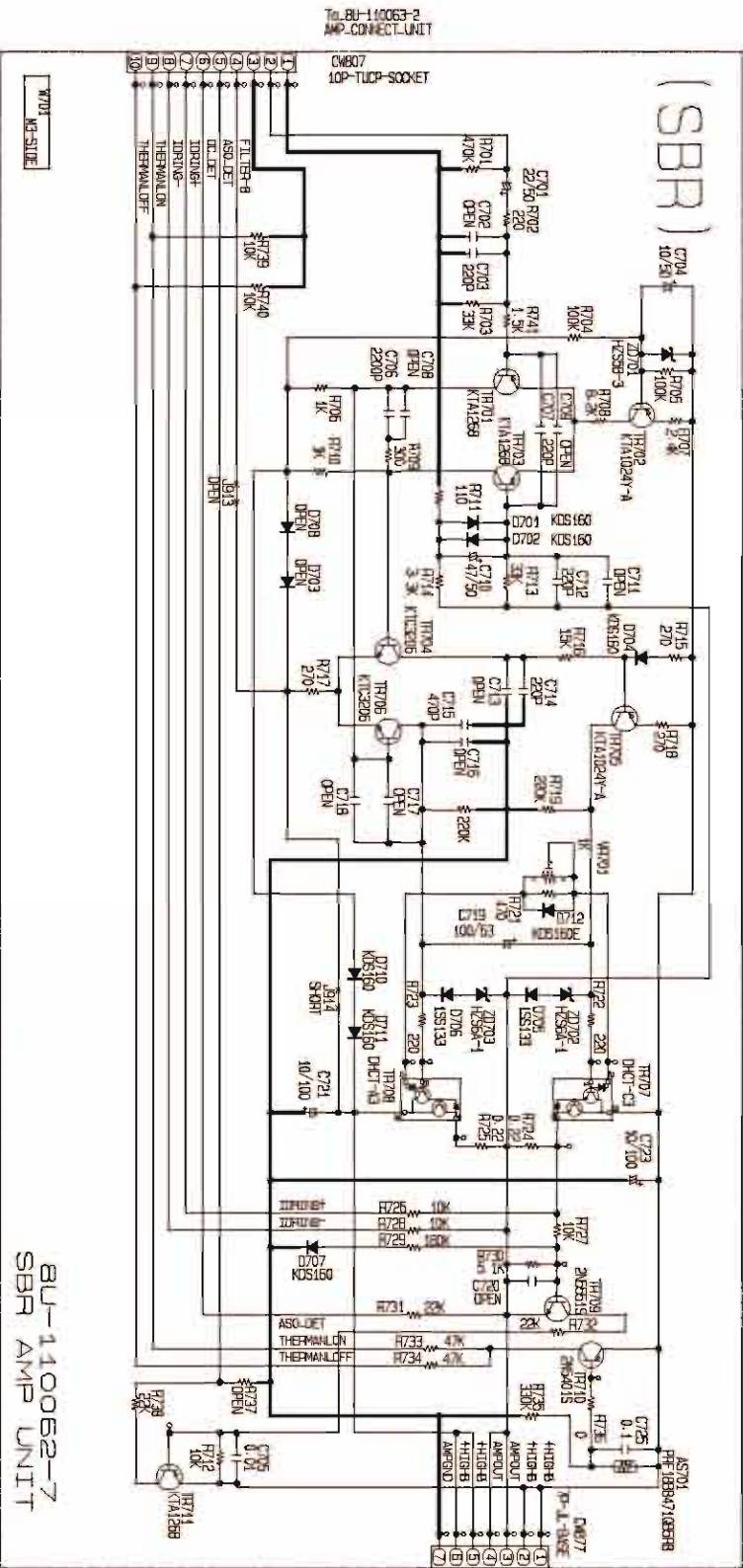
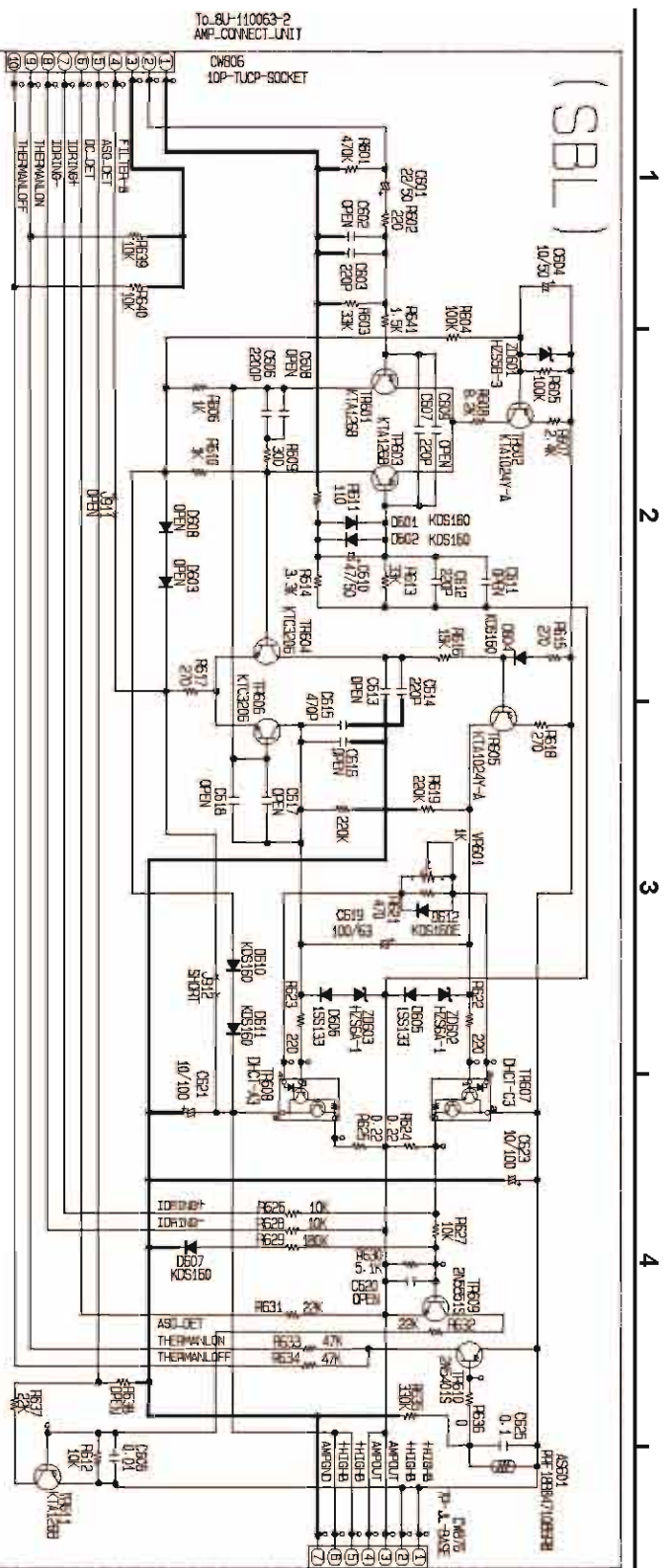


SCHEMATIC DIAGRAMS (7/35)

- 8U-110062-1 FL AMP UNIT
- 8U-110062-2 FR AMP UNIT
- 8U-110062-3 C AMP UNIT
- 8U-110062-4 SL AMP UNIT
- 8U-110062-5 SR AMP UNIT
- AVR-3310CI/AVR-3310/AVR-990/AVC-3310

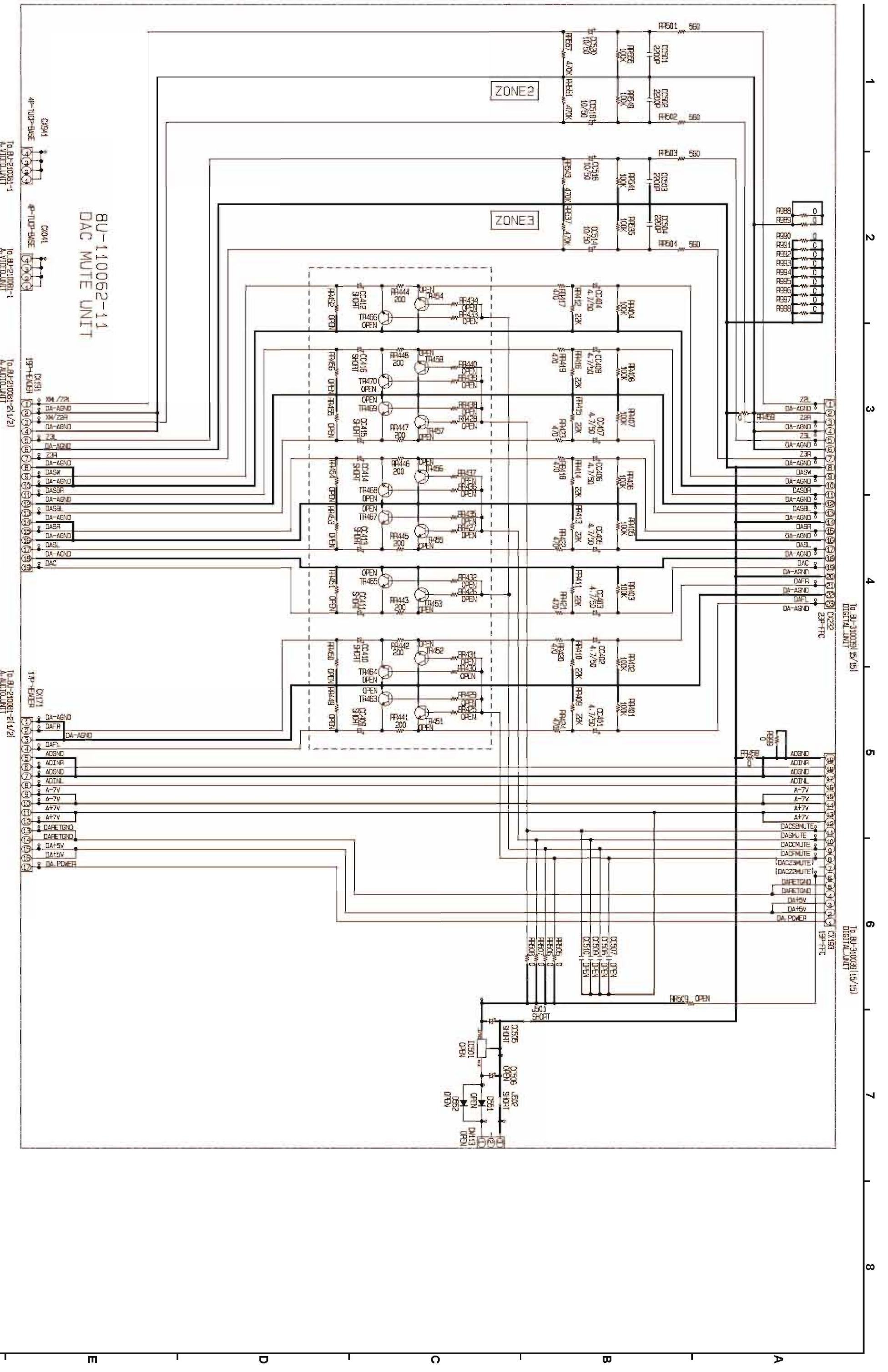
1 2 3 4 5 6 7 8

F E D C B A



SCHEMATIC DIAGRAMS (8/35)

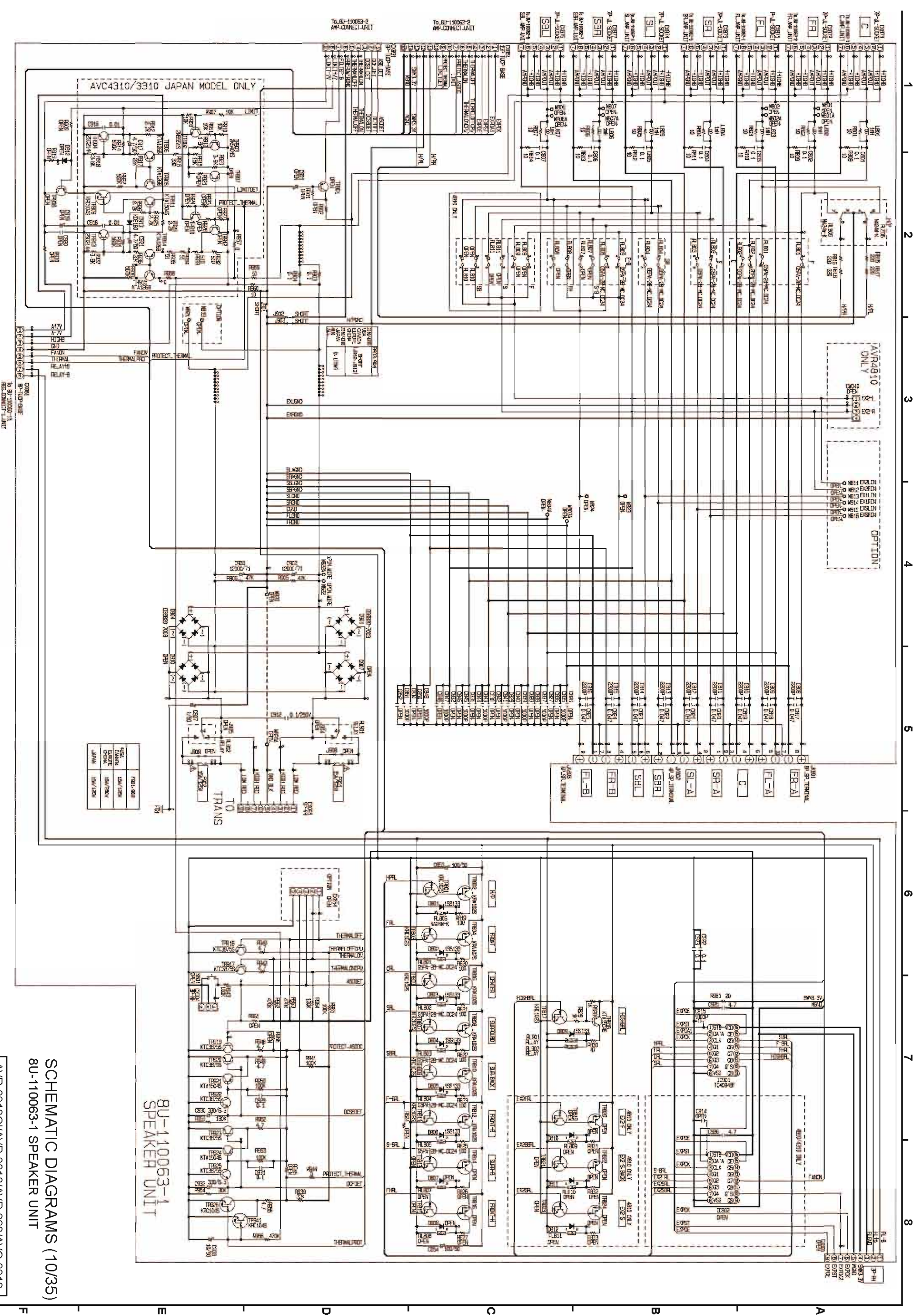
- 8U-110062-6 SBL AMP UNIT
- 8U-110062-7 SBR AMP UNIT
- 8U-110062-8 FCC HOLD UNIT
- 8U-110062-9 CD IN UNIT
- 8U-110062-10 REG CONNECT-2 UNIT
- AVR-3310CI/AVR-3310/AVR-990/AVC-3310



BU-110062-11
DAC MUTE UNIT

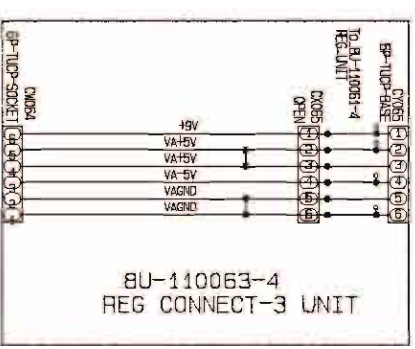
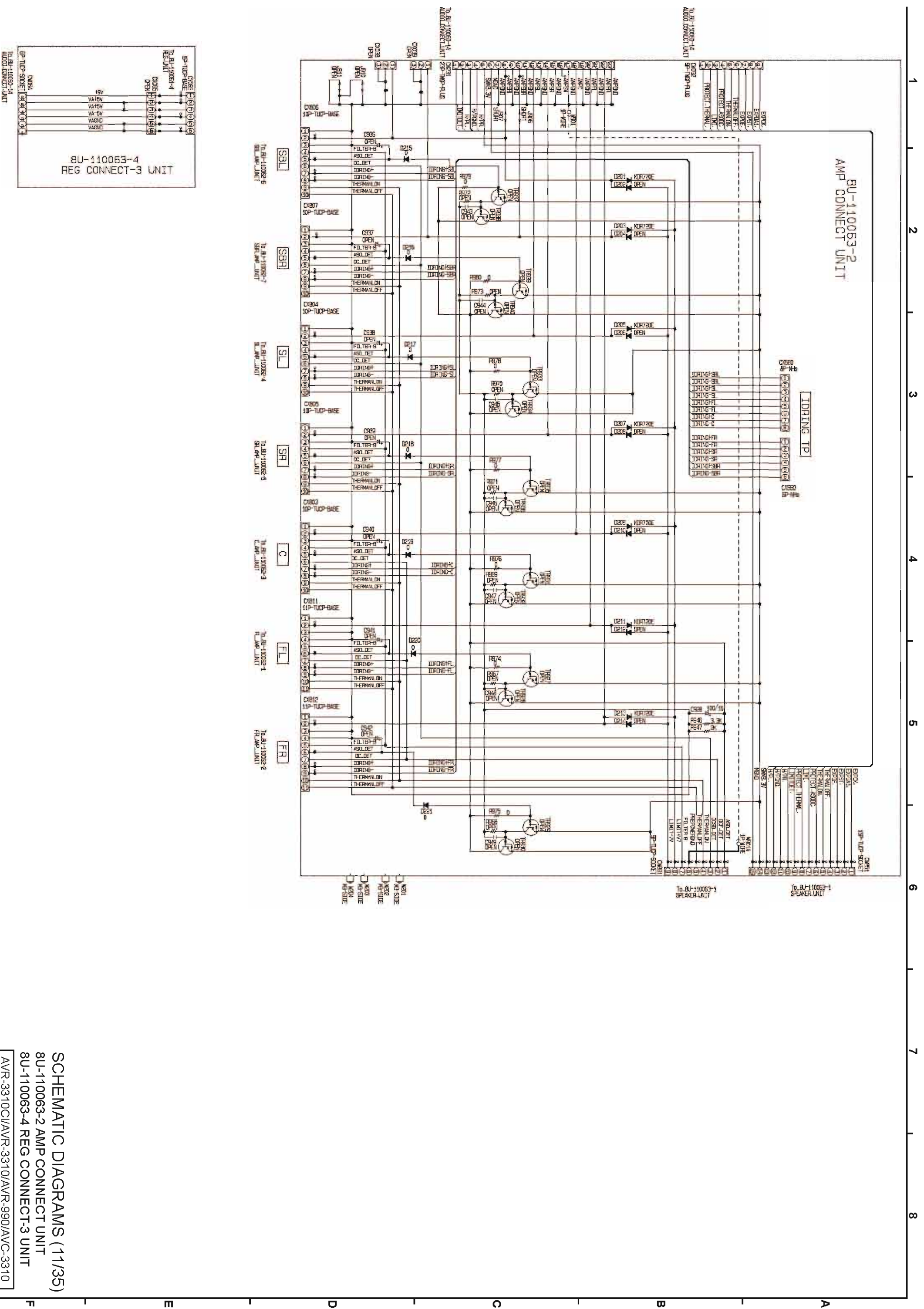
SCHEMATIC DIAGRAMS (9/35)
8U-110062-11 DAC MUTE UNIT

AVR-3310CI/AVR-3310/AVR-990/AVC-3310



SCHEMATIC DIAGRAMS (10/35)
 8U-110063-1 SPEAKER UNIT

AVR-3310CI/AVR-3310/AVR-990/AVC-3310

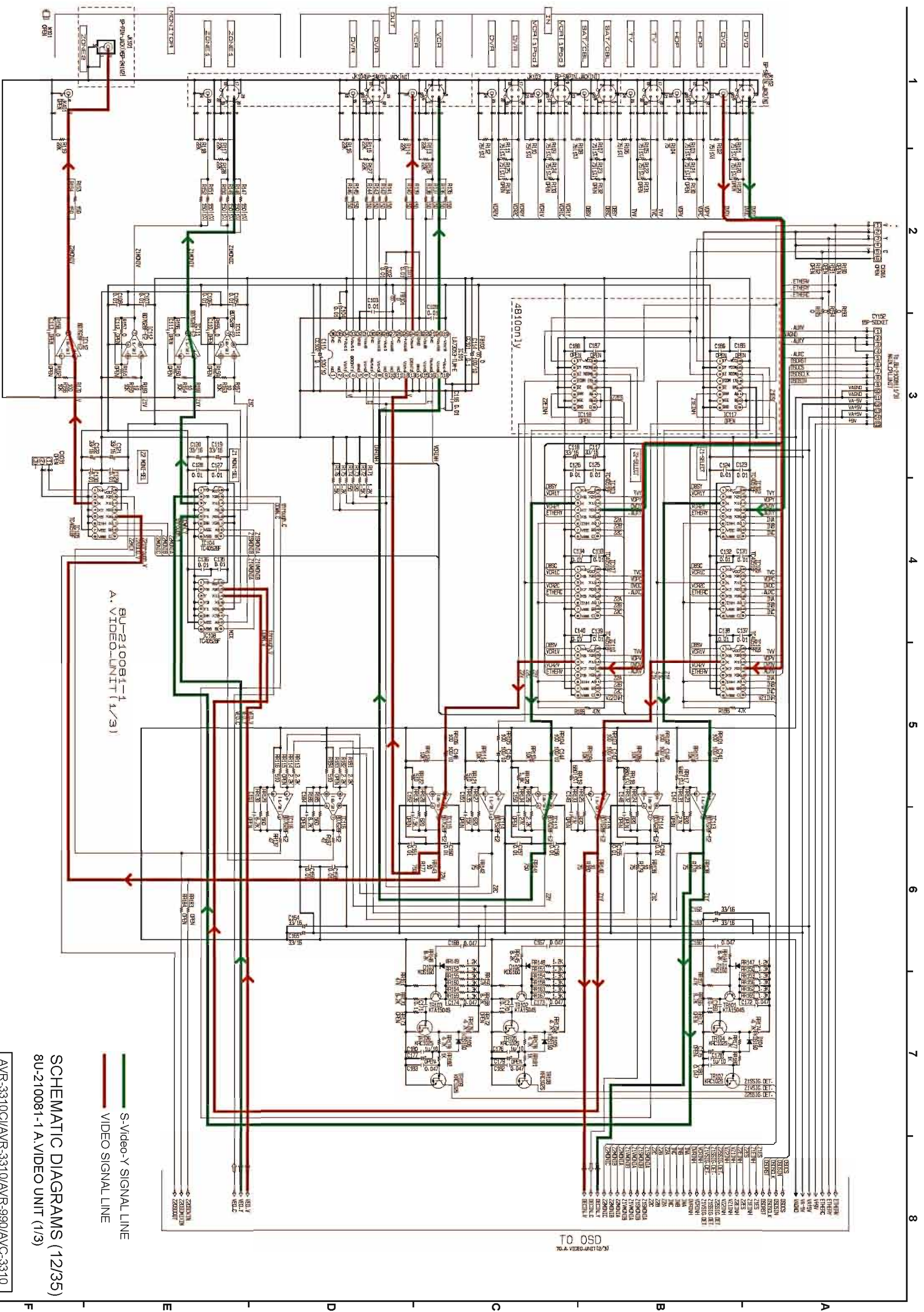


SCHEMATIC DIAGRAMS (11/35)

8U-110063-2 AMP CONNECT UNIT

8U-110063-4 REG CONNECT-3 UNIT

AVR-3310CI/AVR-3310I/AVR-990/AVC-3310



— S-Video-Y SIGNAL LINE
— VIDEO SIGNAL LINE

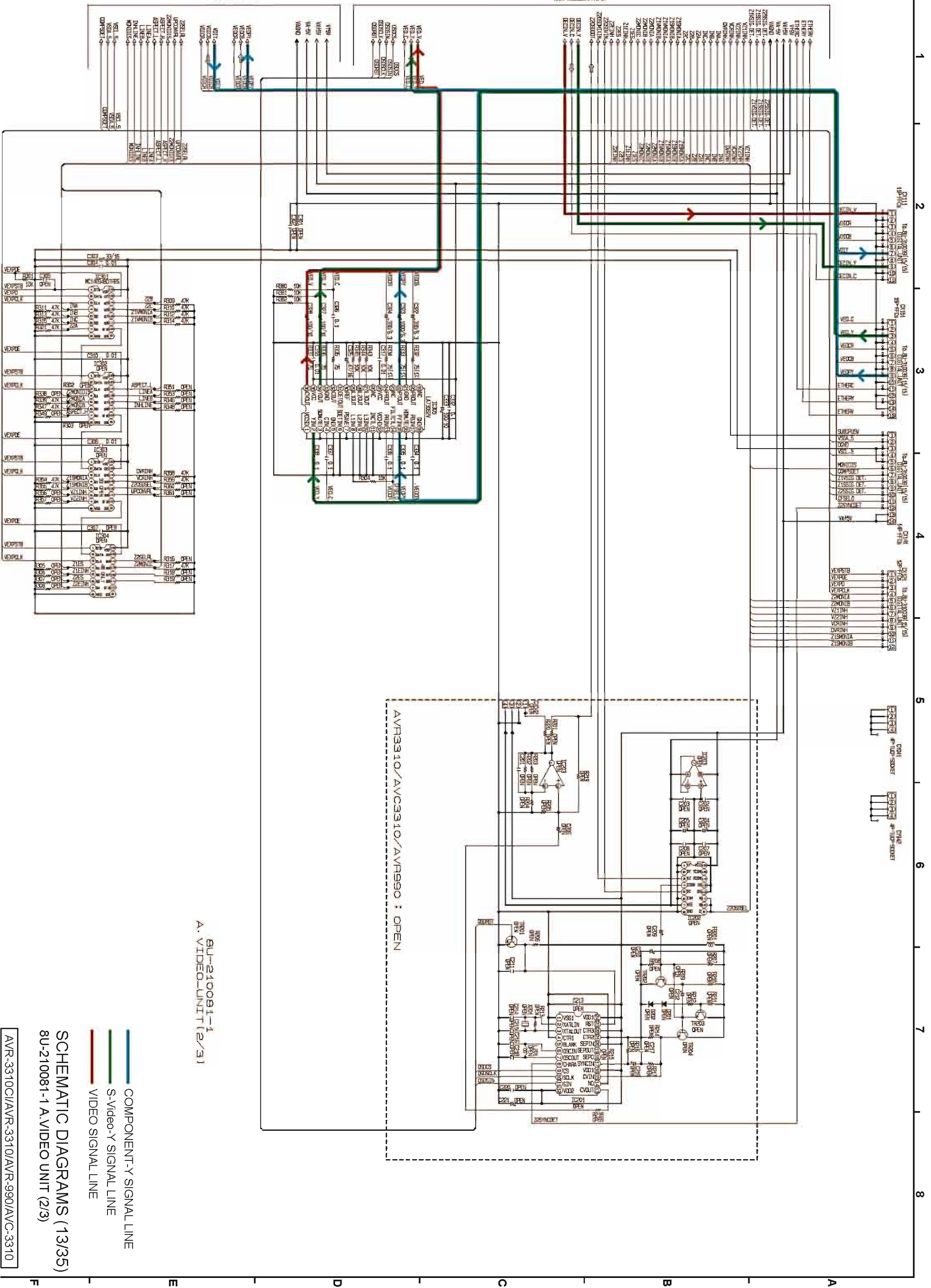
SCHEMATIC DIAGRAMS (12/35)
 8U-210081-1 A.VIDEO UNIT (1/3)

AVR-3310CI/AVR-3310/AVR-990/AVC-3310

TO OSD

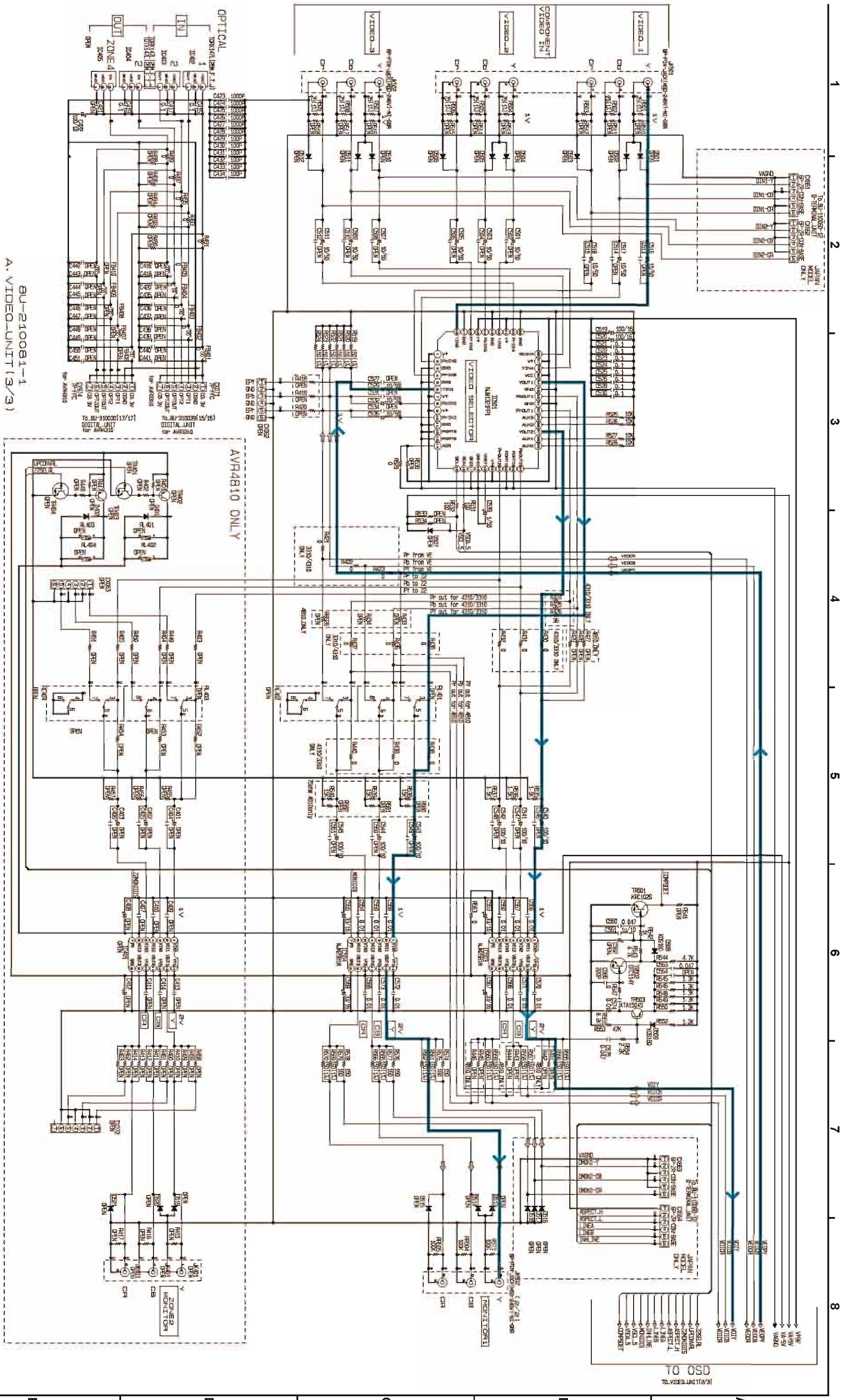
TO COMPONENT
TO A-VIDEO UNIT (2/3)

TO S&CVBS
TO A-VIDEO UNIT (1/3)



1 2 3 4 5 6 7 8

F E D C B A

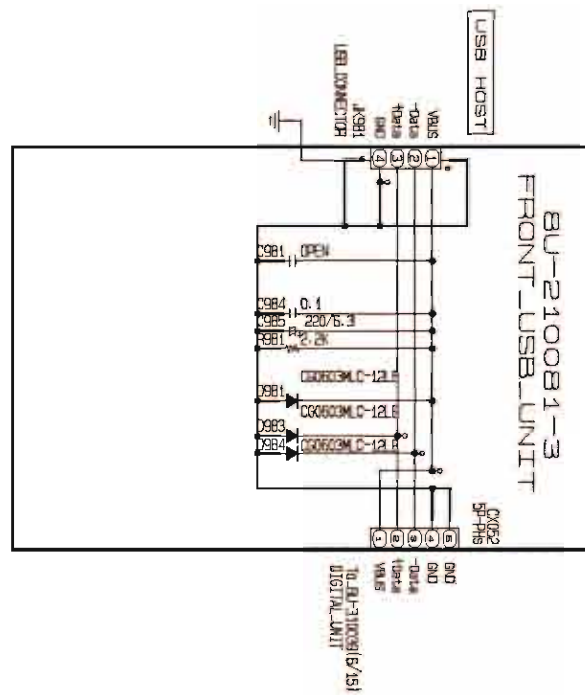


8U-210081-1
A. VIDEO-UNIT (3/3)

COMPONENT-Y SIGNAL LINE
SCHEMATIC DIAGRAMS (14/35)
8U-210081-1 A.VIDEO UNIT (3/3)

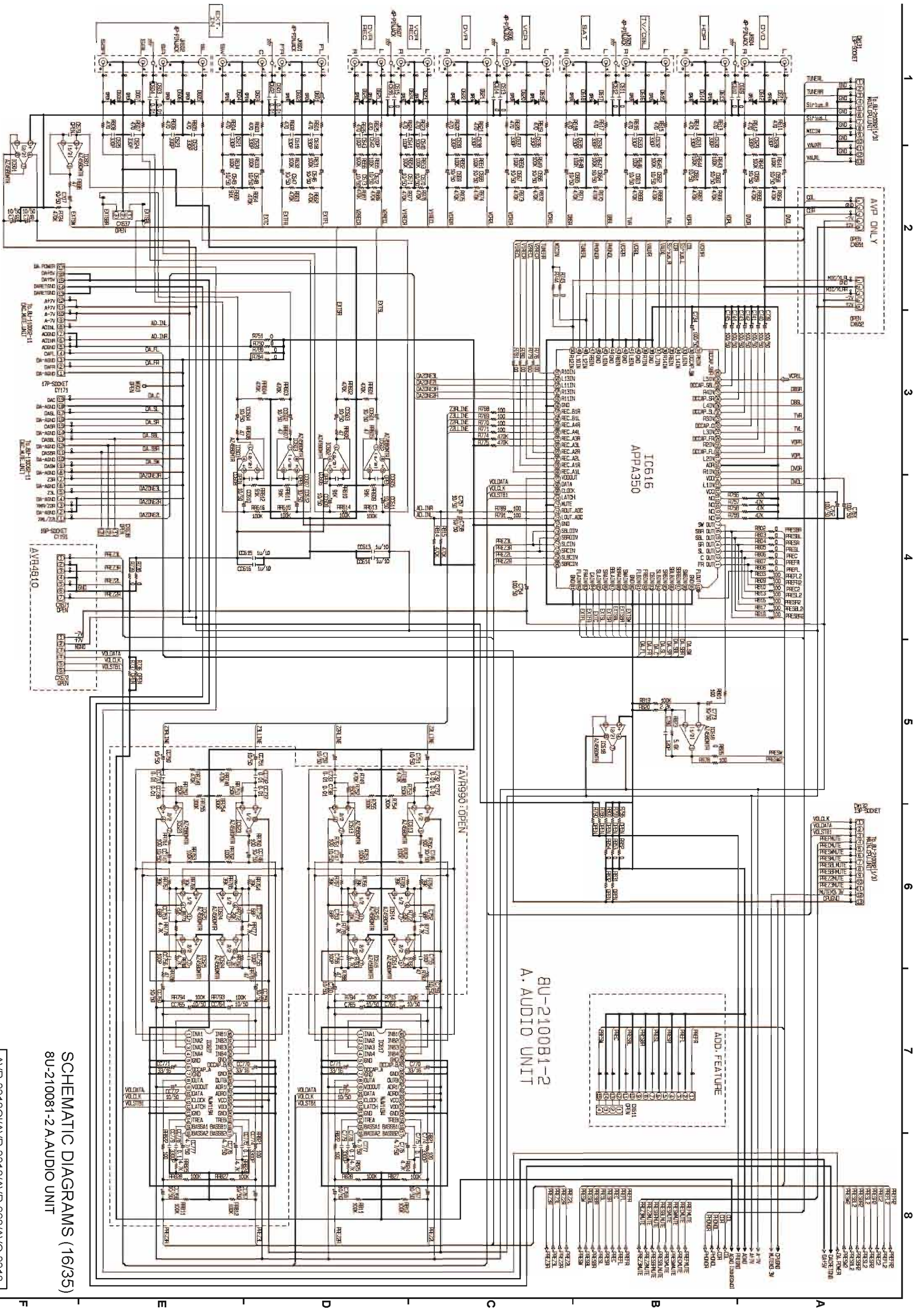
AVR-3310CI/AVR-3310/AVR-990/AVC-3310

1 2 3 4 5 6 7 8



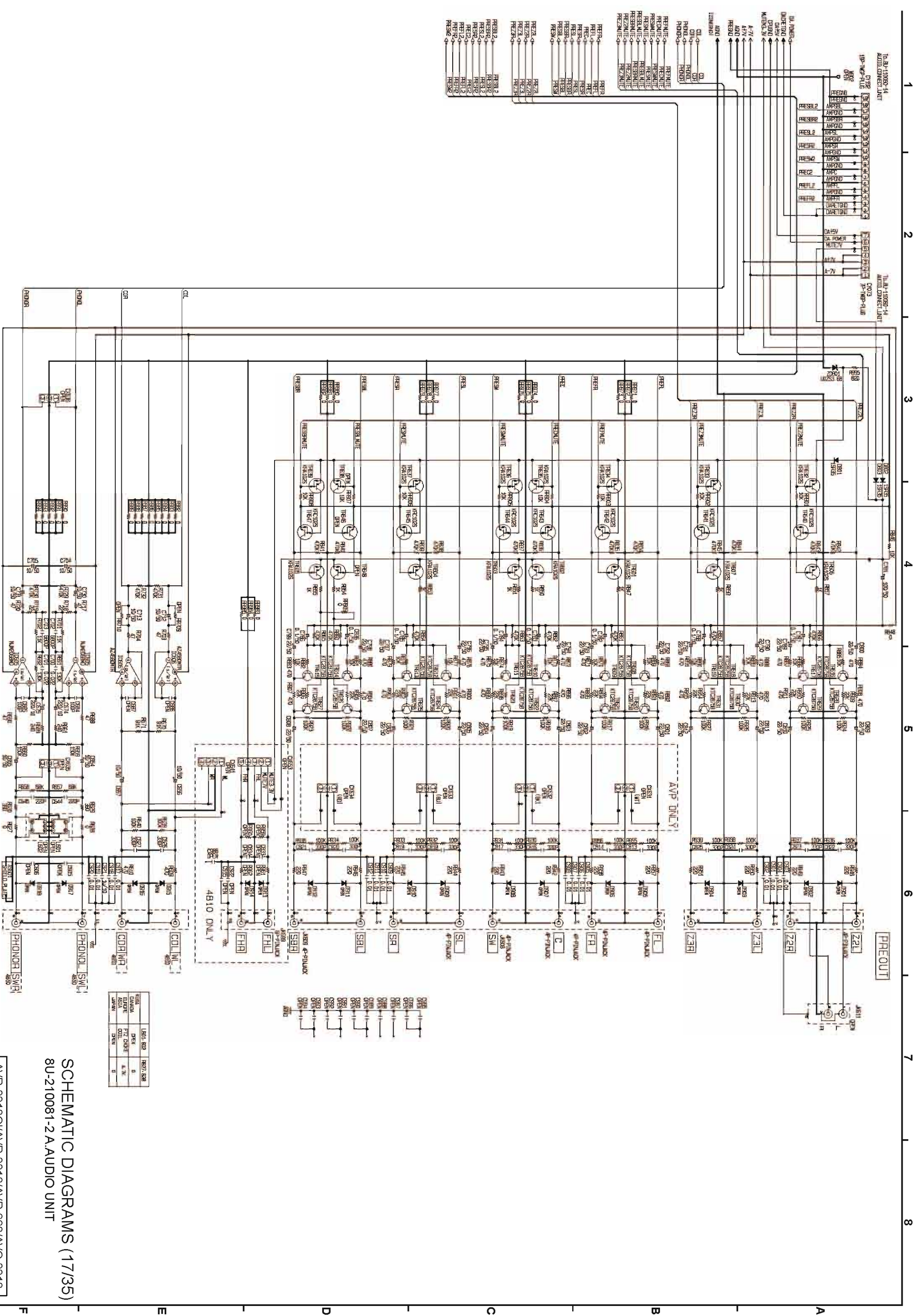
SCHEMATIC DIAGRAMS (15/35)
 8U-210081-3 FRONT USB UNIT

F E D C B A



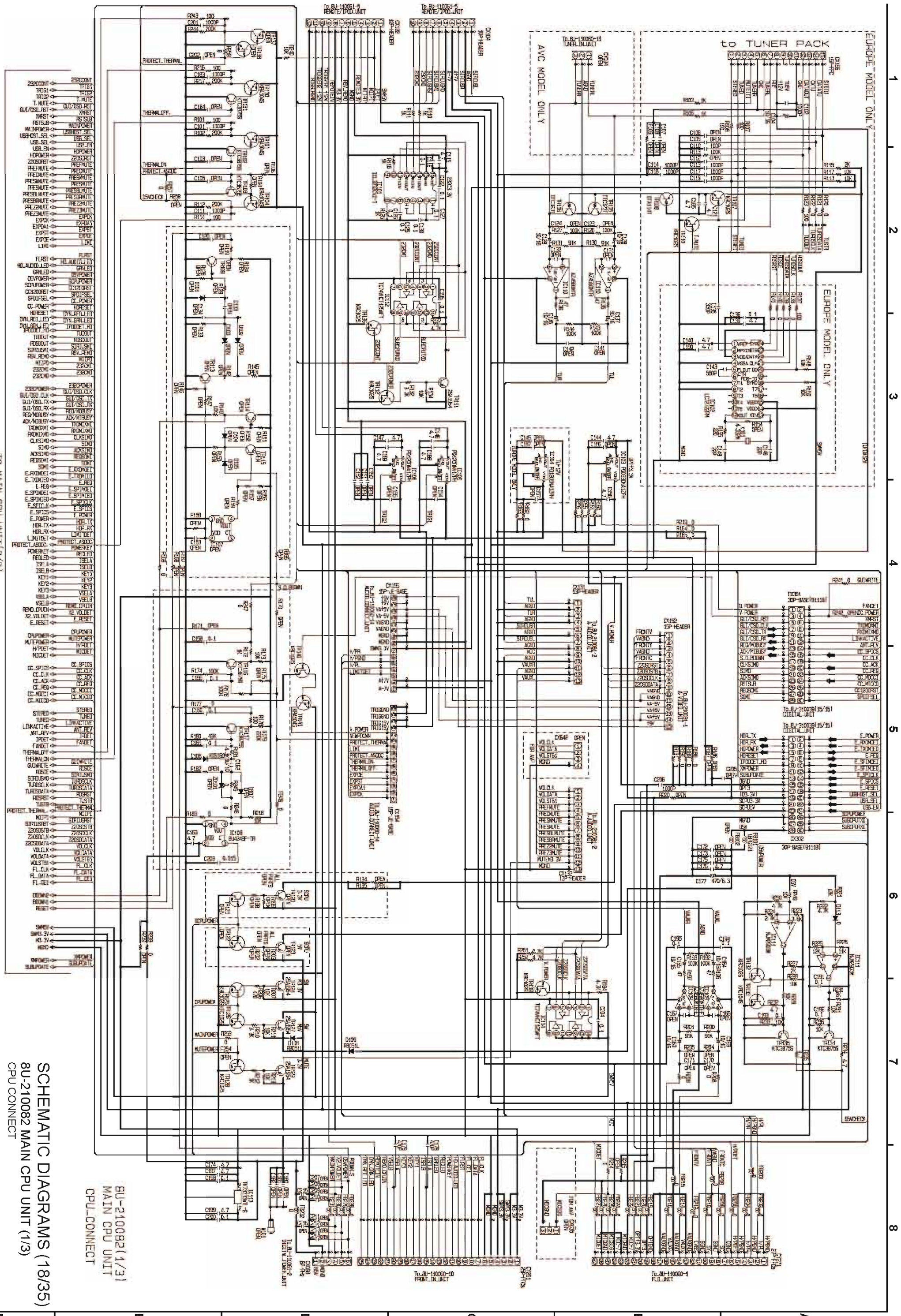
SCHEMATIC DIAGRAMS (16/35)
 8U-2100B1-2 A.AUDIO UNIT

AVR-3310CI/AVR-3310/AVR-990/AVC-3310



SCHEMATIC DIAGRAMS (17/35)
8U-210081-2 A.AUDIO UNIT

AVR-3310CI/AVR-3310/AVR-990/AVC-3310

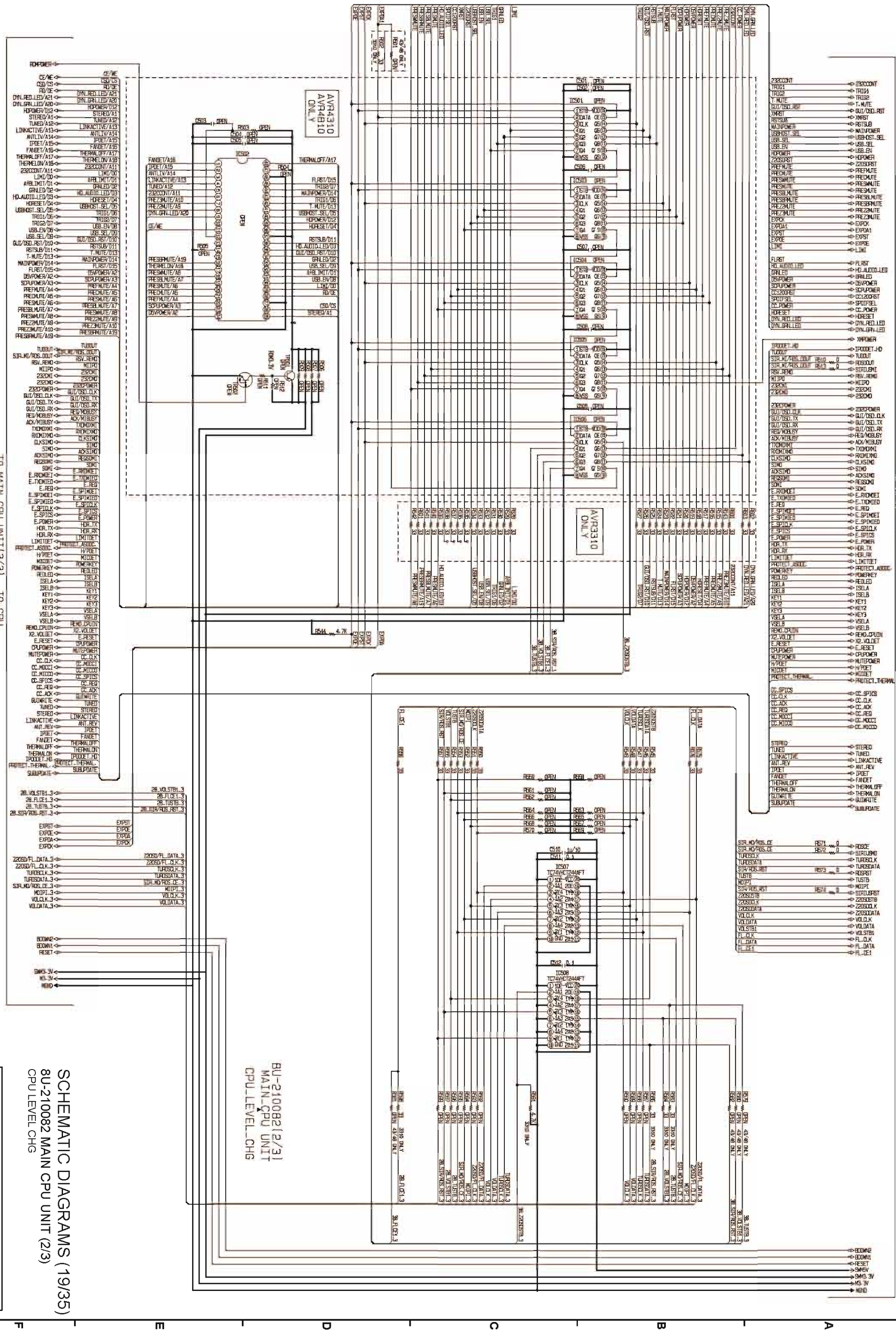


TO MAIN-CPU UNIT (2/3)
TO CPU-LEVEL-CHG

BU-2100B2(1/3)
MAIN CPU UNIT
CPU-CONNECT

SCHEMATIC DIAGRAMS (18/35)
8U-210082 MAIN CPU UNIT (1/3)
CPU CONNECT

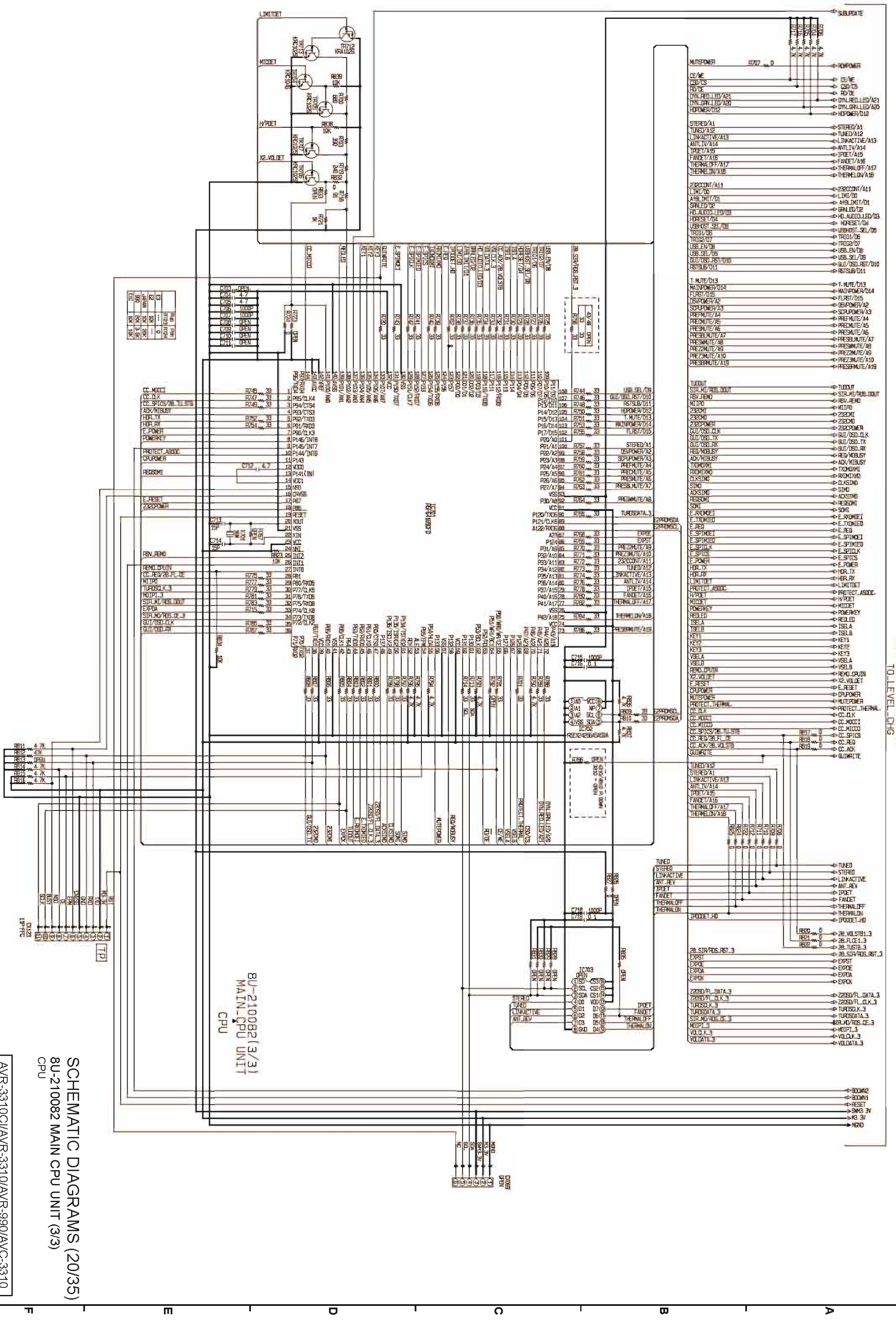
AVR-3310CI/AVR-3310I/AVR-990/AVC-3310



BU-210082(2/3)
 MAIN-CPU UNIT
 CPU-LEVEL-CHG

SCHEMATIC DIAGRAMS (19/35)
 8U-210082 MAIN CPU UNIT (2/3)
 CPU-LEVEL-CHG

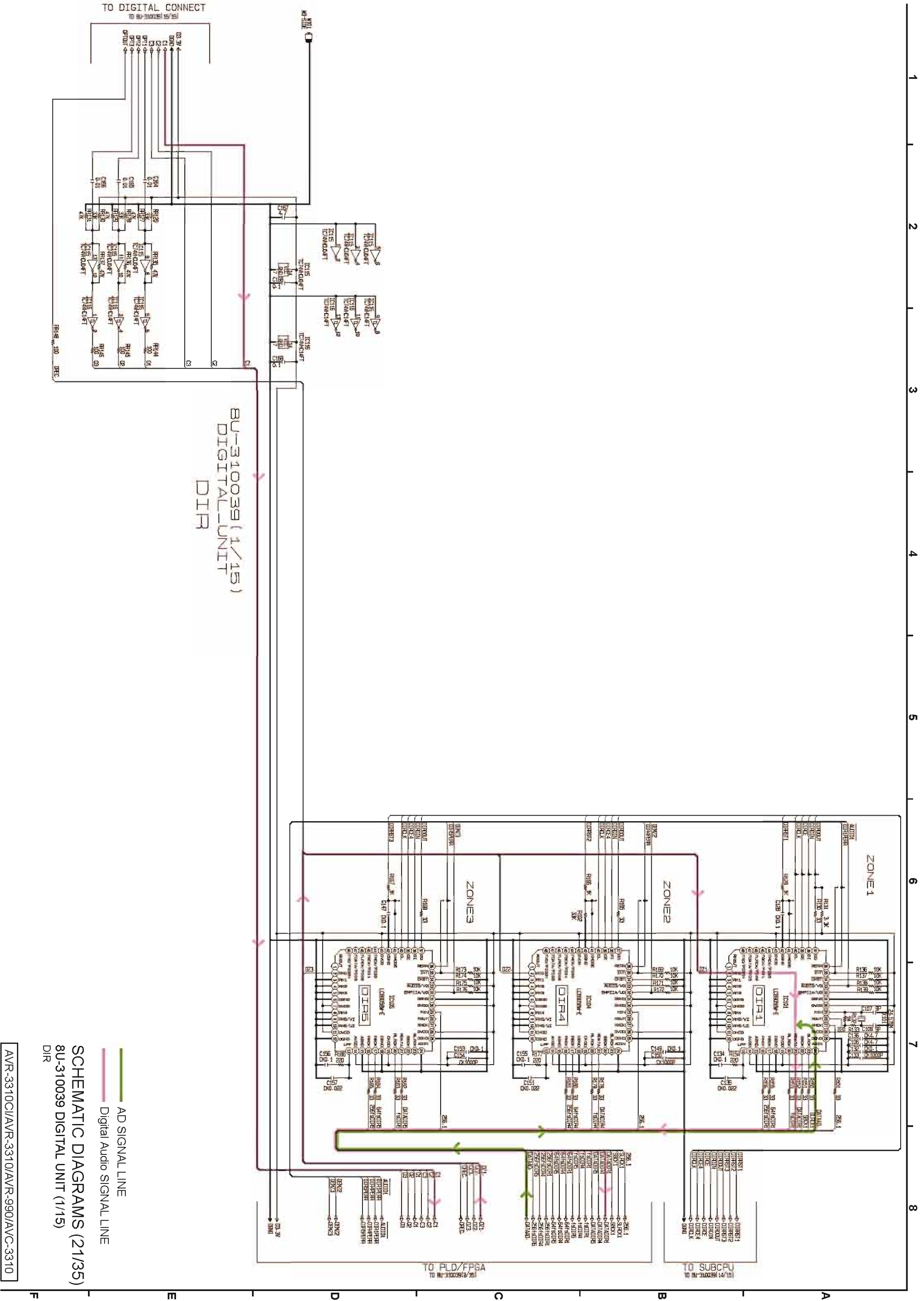
AVR-3310CI/AVR-3310I/AVR-990/AVC-3310



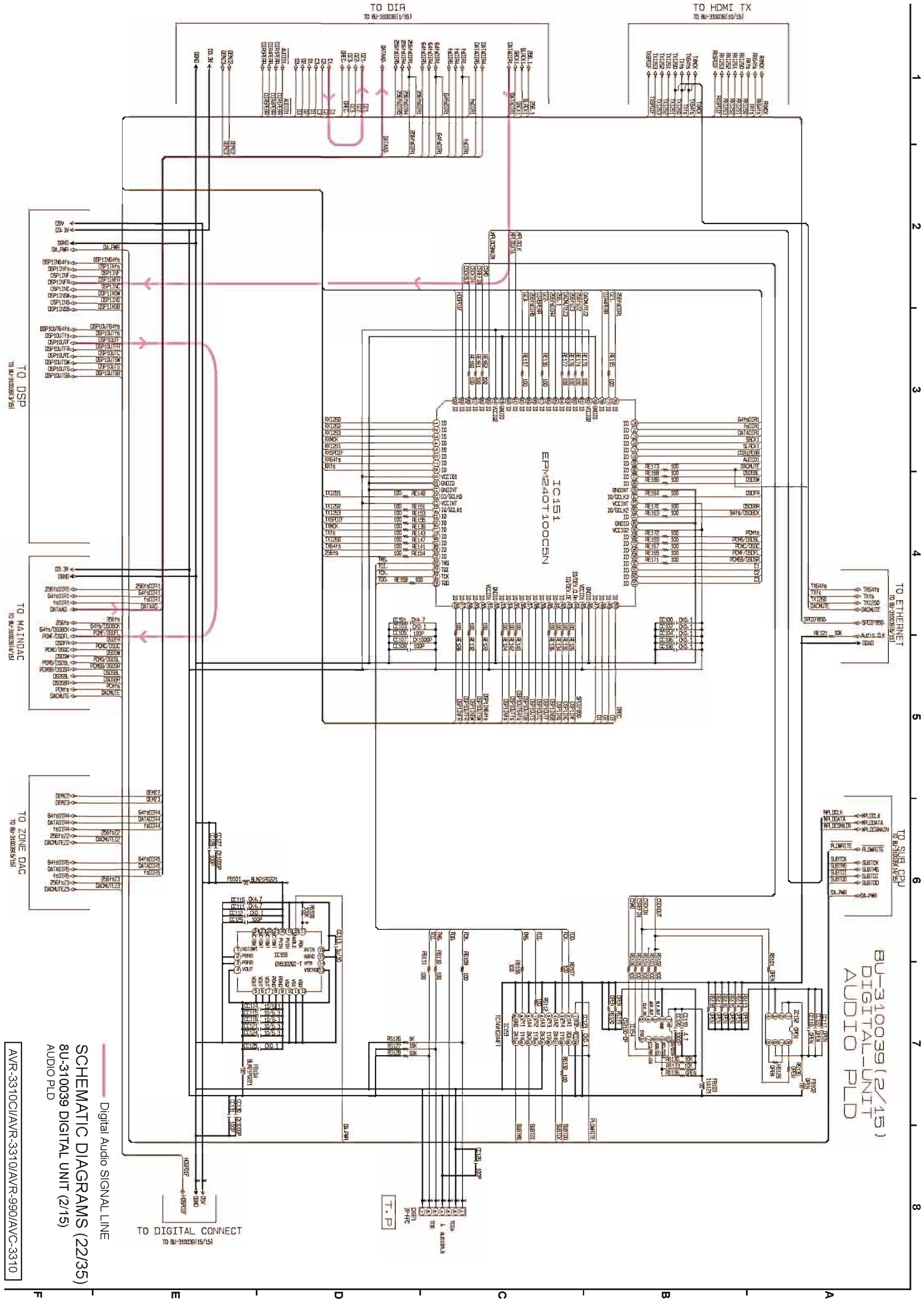
TO-MAIN-CPU UNIT(2/3)
TO-LEVEL-CHG

SCHEMATIC DIAGRAMS (20/35)
8U-210082 MAIN CPU UNIT (3/3)
CPU

AVR-3310CI/AVR-3310I/AVR-990/AVC-3310



AVR-3310CI/AVR-3310/AVR-990/AVC-3310

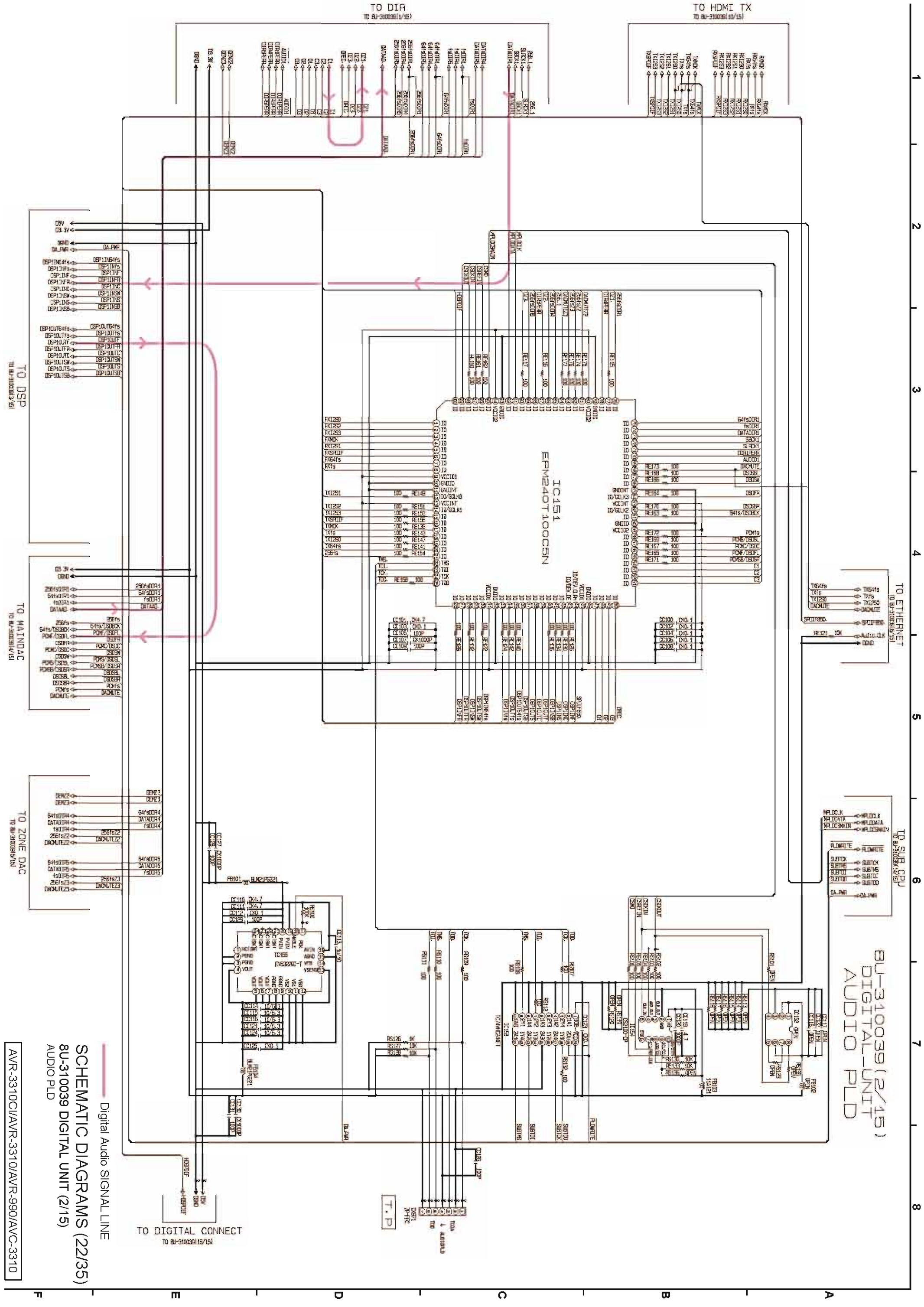


BU-310039 (2/15)
DIGITAL-UNIT
AUDIO PLD

Digital Audio Signal Line

SCHEMATIC DIAGRAMS (22/35)
8U-310039 DIGITAL UNIT (2/15)
AUDIO PLD

AVR-3310039/AVR-3310039/AVR-990/AVC-3310

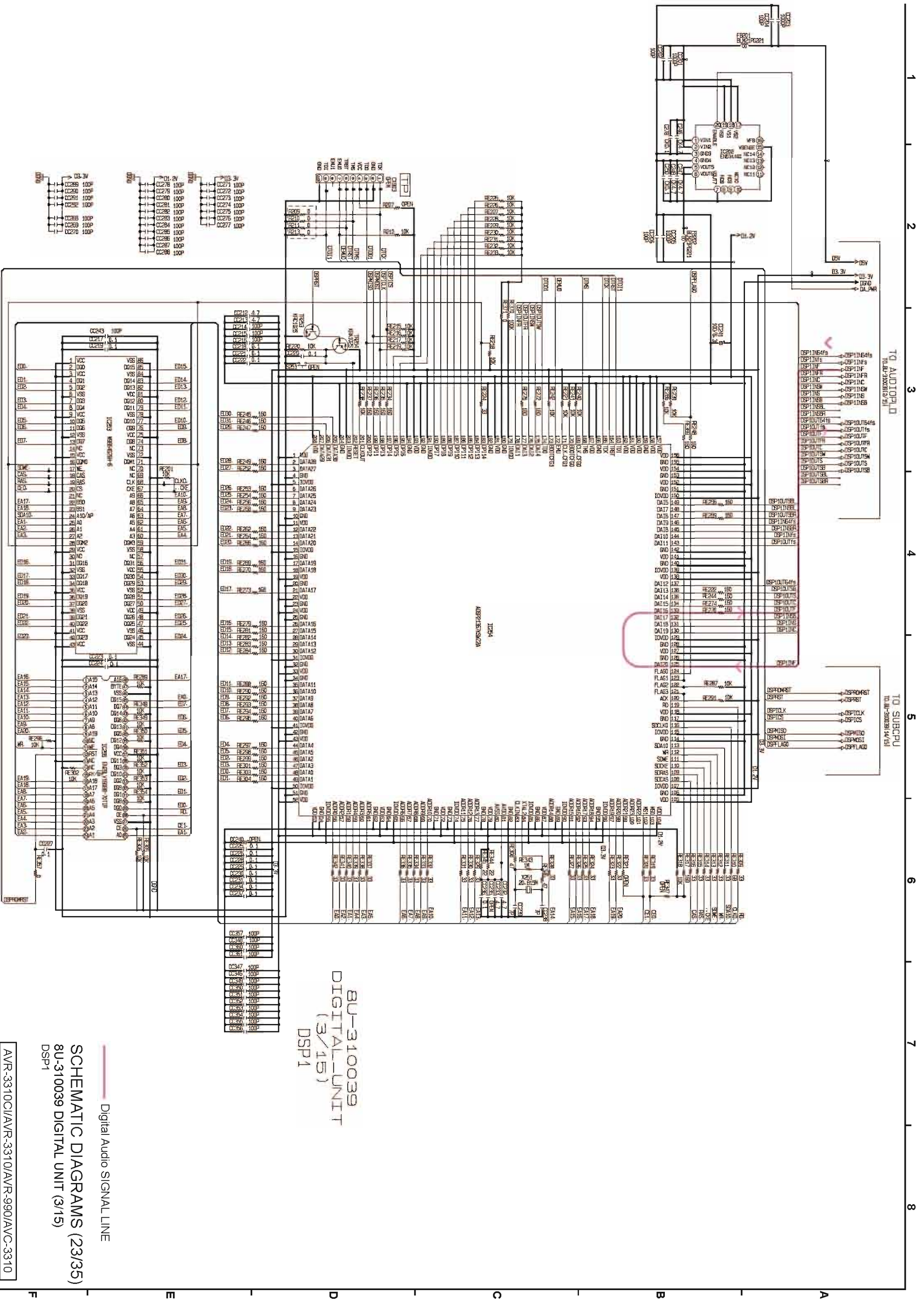


BU-310039 (2/15)
DIGITAL-UNIT
AUDIO PLD

Digital Audio Signal Line

SCHEMATIC DIAGRAMS (22/35)
8U-310039 DIGITAL UNIT (2/15)
AUDIO PLD

AVR-3310039/AVR-3310039/AVR-990/AVC-3310



BU-310039
DIGITAL UNIT
(3/15)
DSP1

Digital Audio SIGNAL LINE

SCHEMATIC DIAGRAMS (23/35)
8U-310039 DIGITAL UNIT (3/15)
DSP1

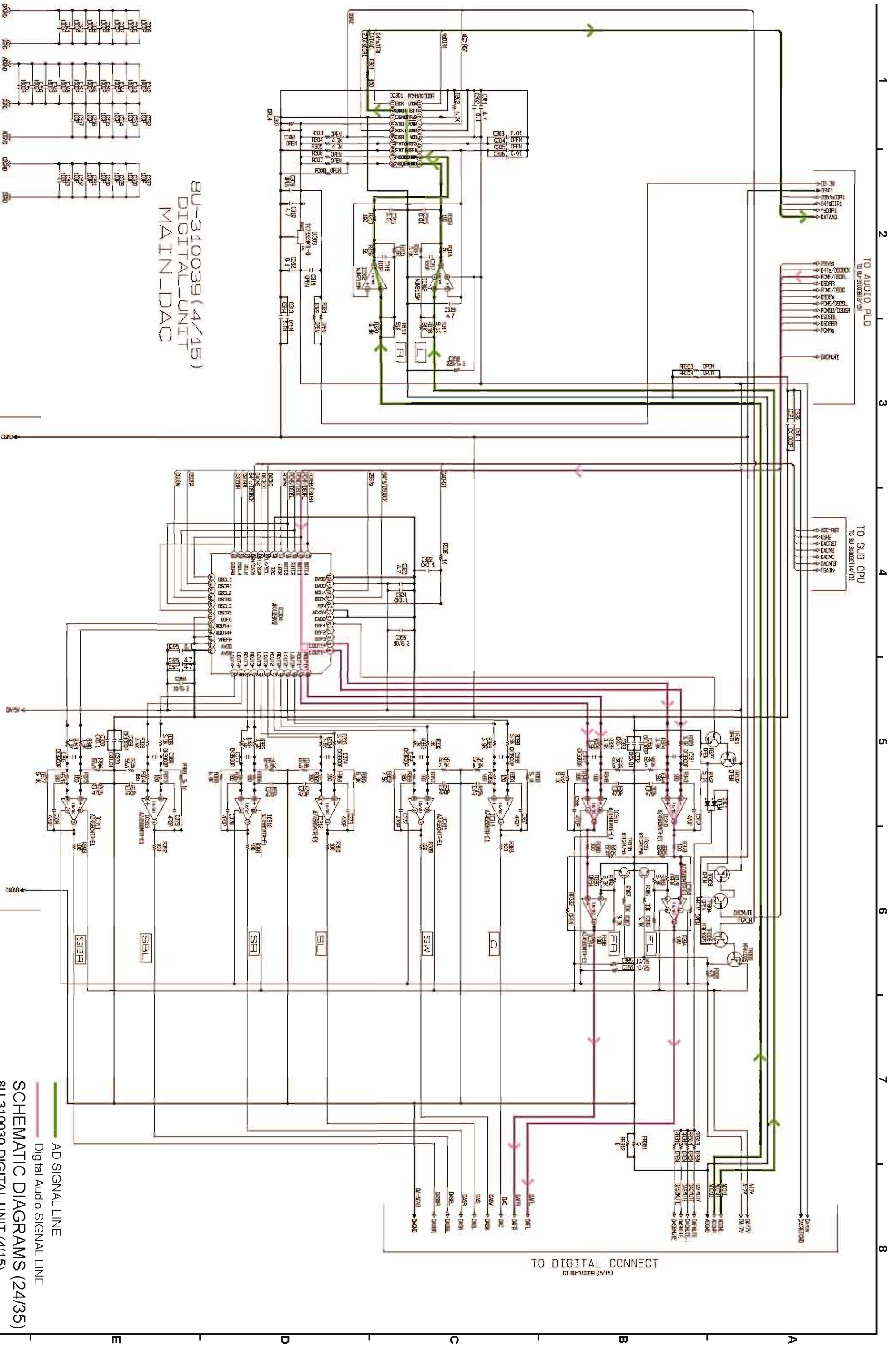
AVR-3310CI/AVR-3310/AVR-990/AVC-3310

TD AUDIOP/D
TD:BU-310039(2/15)

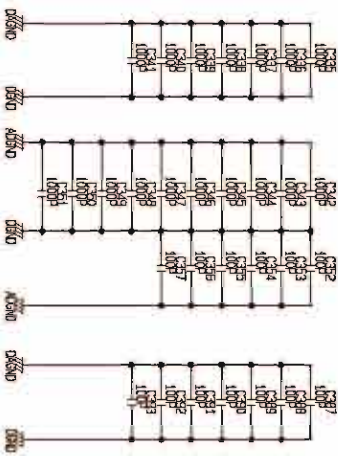
TD SUBCPU
TD:BU-310039(14/15)

1 2 3 4 5 6 7 8

F E D C B A



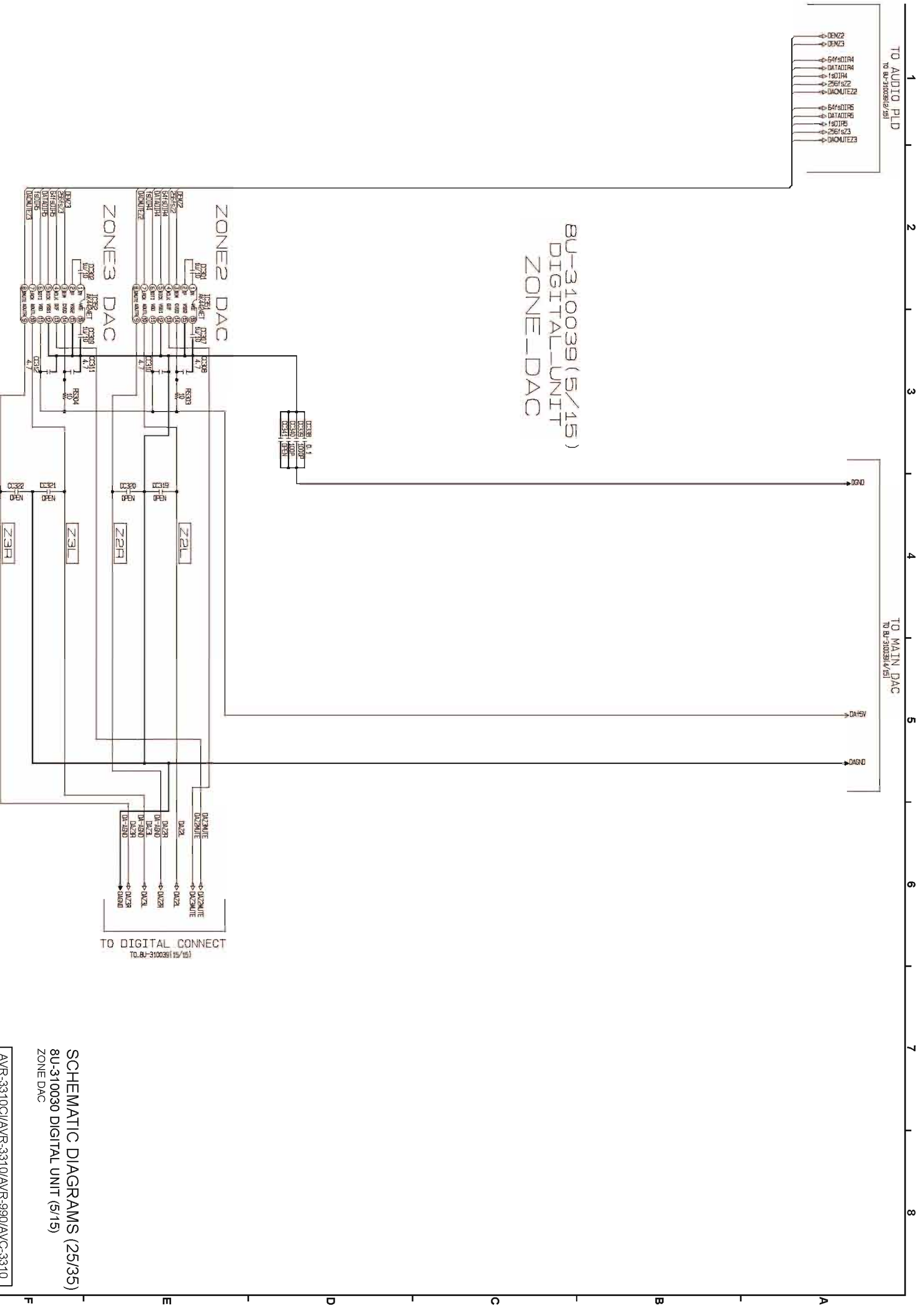
BU-310039 (4/15)
DIGITAL_UNIT
MAIN_DAC



TO ZONE DAC
TO BU-310039 (4/15)

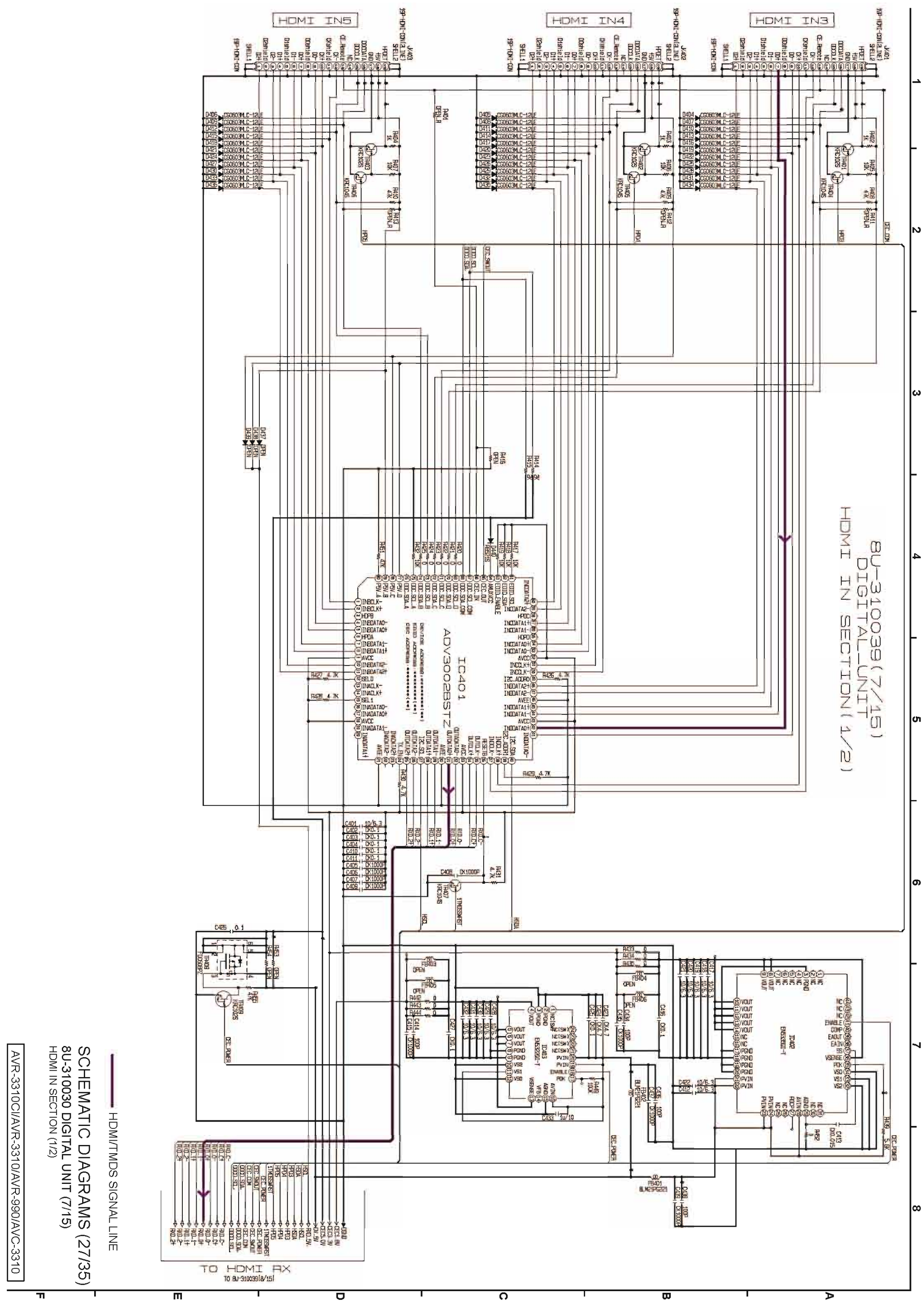
TO DIGITAL CONNECT
TO BU-310039 (4/15)

- AD SIGNAL LINE
 - Digital Audio SIGNAL LINE
- SCHEMATIC DIAGRAMS (24/35)**
8U-310030 DIGITAL UNIT (4/15)
MAIN DAC
- AVR-3310CI/AVR-3310I/AVR-990/AVC-3310



SCHEMATIC DIAGRAMS (25/35)
 8U-310030 DIGITAL UNIT (5/15)
 ZONE DAC

AVR-3310CI/AVR-3310/AVR-990/AVC-3310



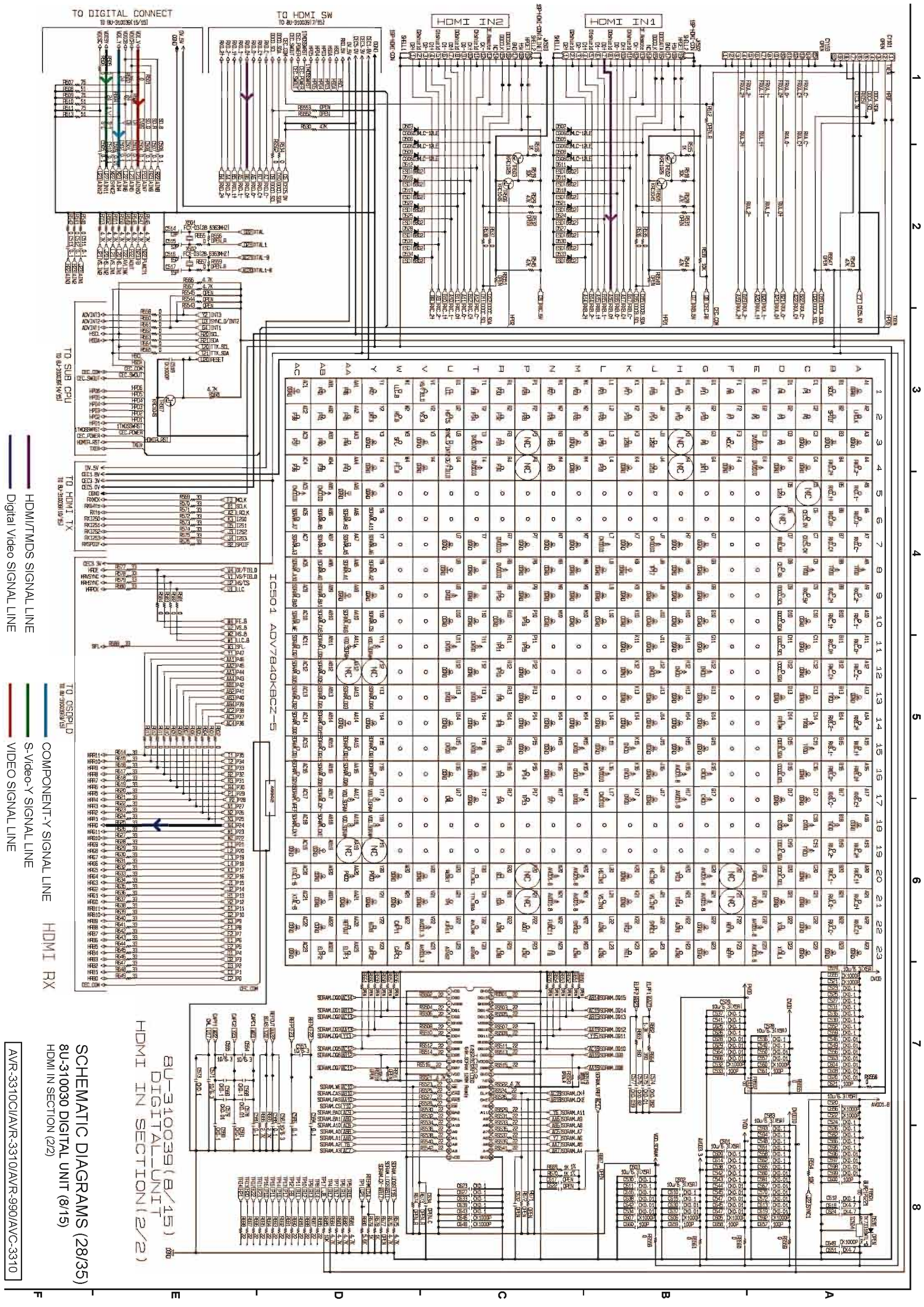
8U-310039 (7/15)
DIGITAL UNIT
HDMI IN SECTION (1/2)

— HDMI/TMDS SIGNAL LINE

SCHEMATIC DIAGRAMS (27/35)
8U-310030 DIGITAL UNIT (7/15)
HDMI IN SECTION (1/2)

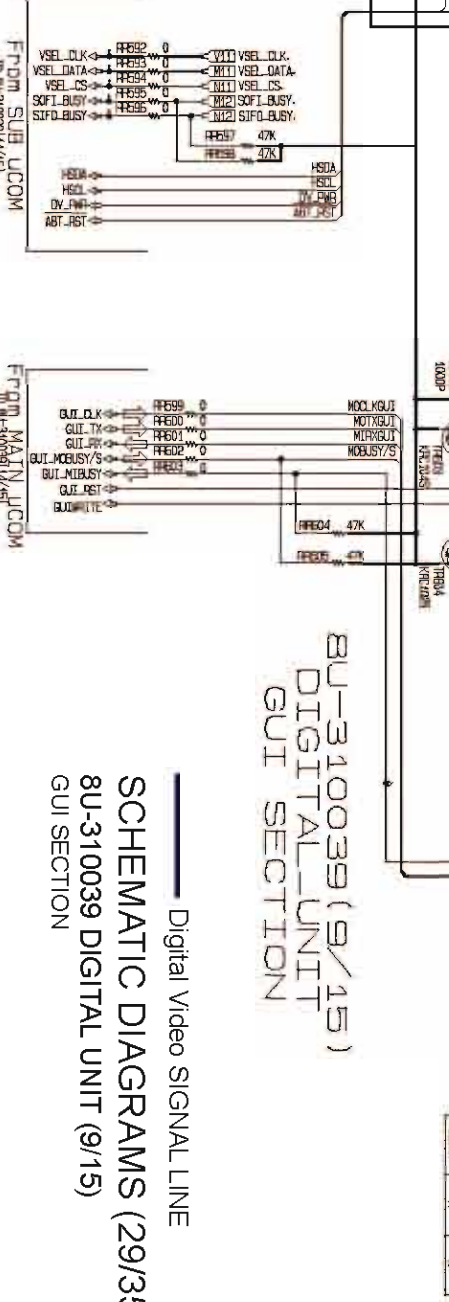
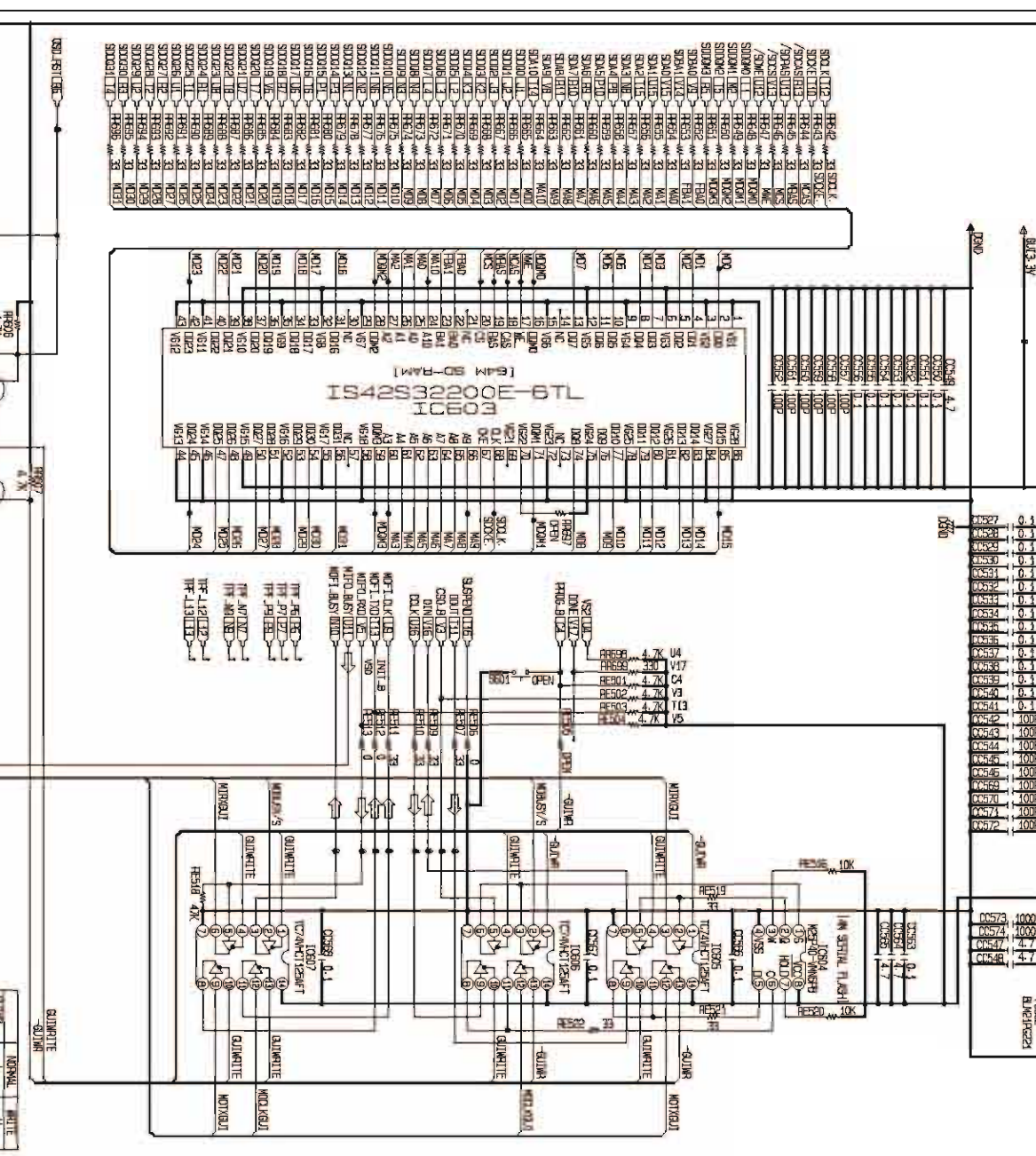
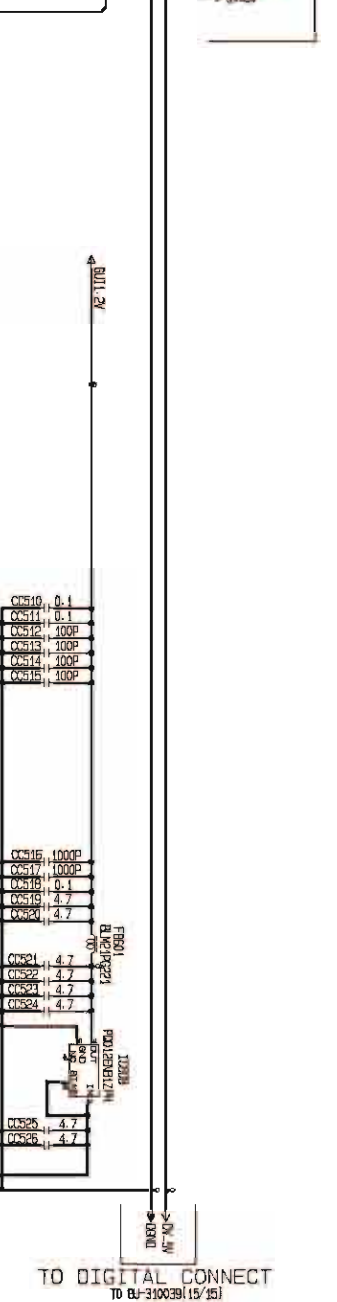
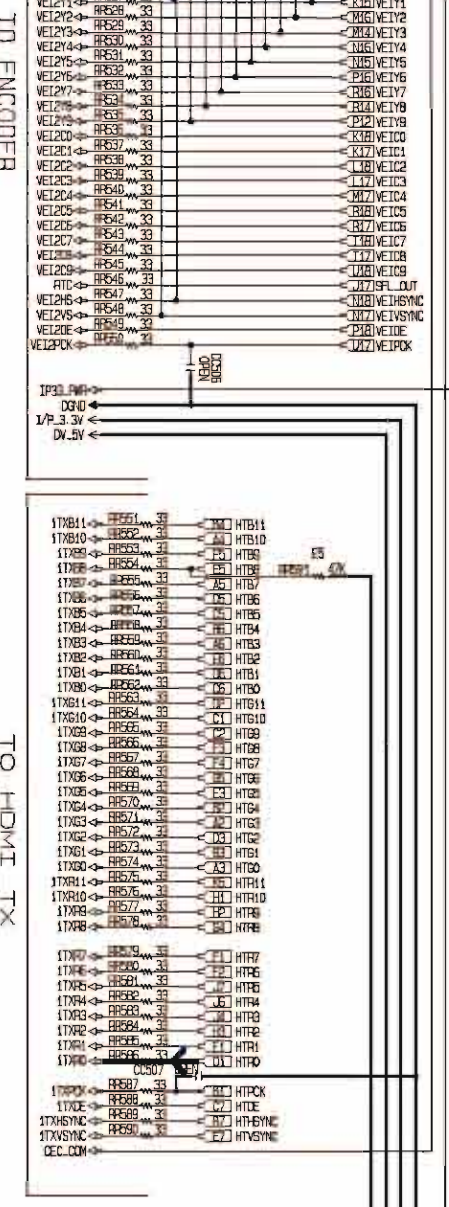
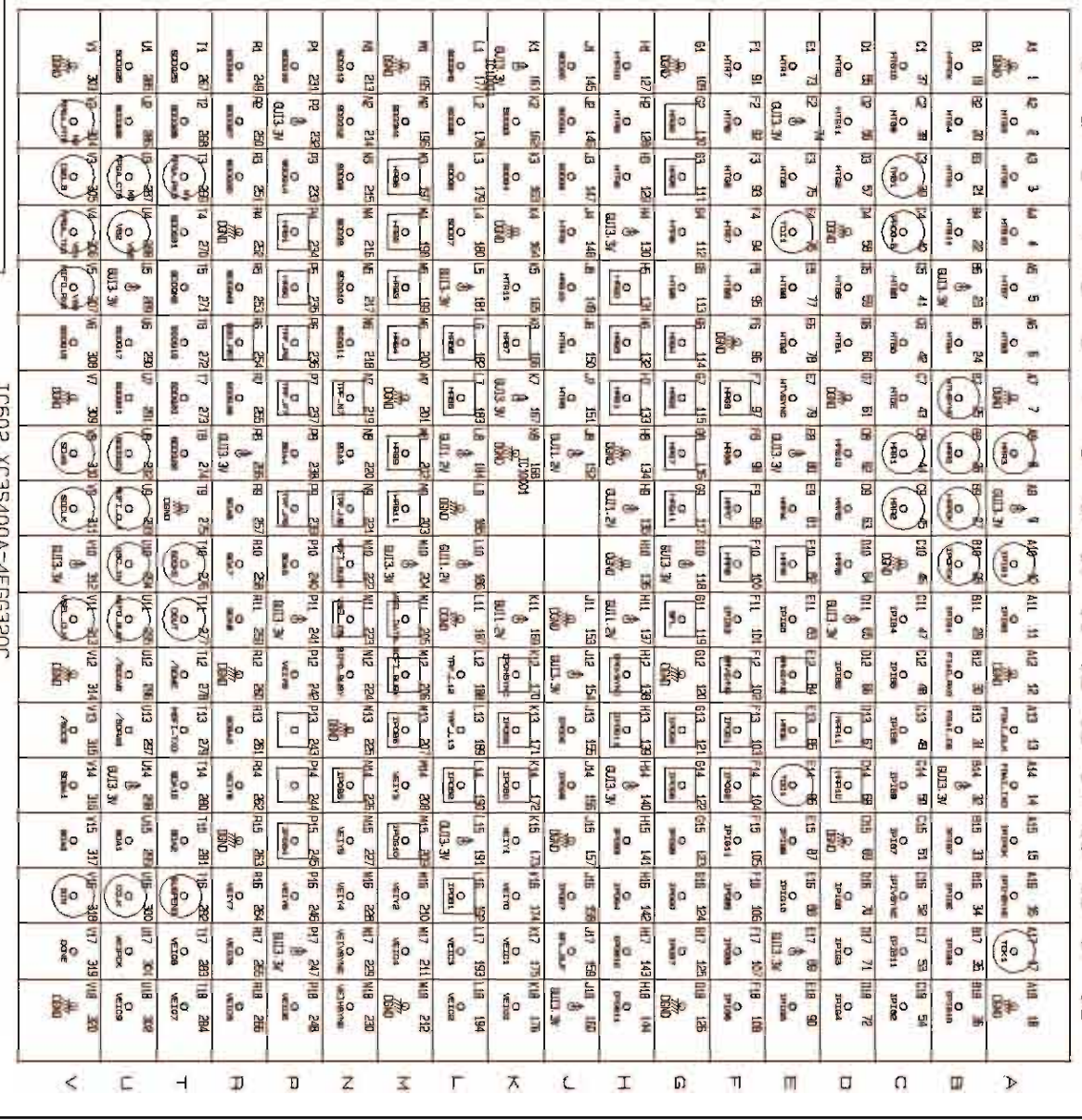
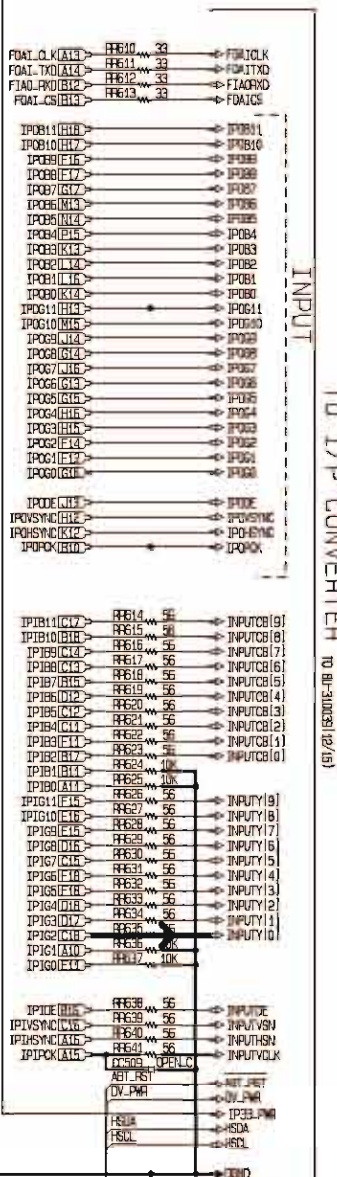
AVR-3310CI/AVR-3310I/AVR-990/AVC-3310

TO HDMI RX
TO 8U-310039(8/15)



— HDMI/TMDS SIGNAL LINE
— Digital Video SIGNAL LINE
— COMPONENT-Y SIGNAL LINE
— S-Video-Y SIGNAL LINE
— VIDEO SIGNAL LINE
— HDMI RX

1 2 3 4 5 6 7 8



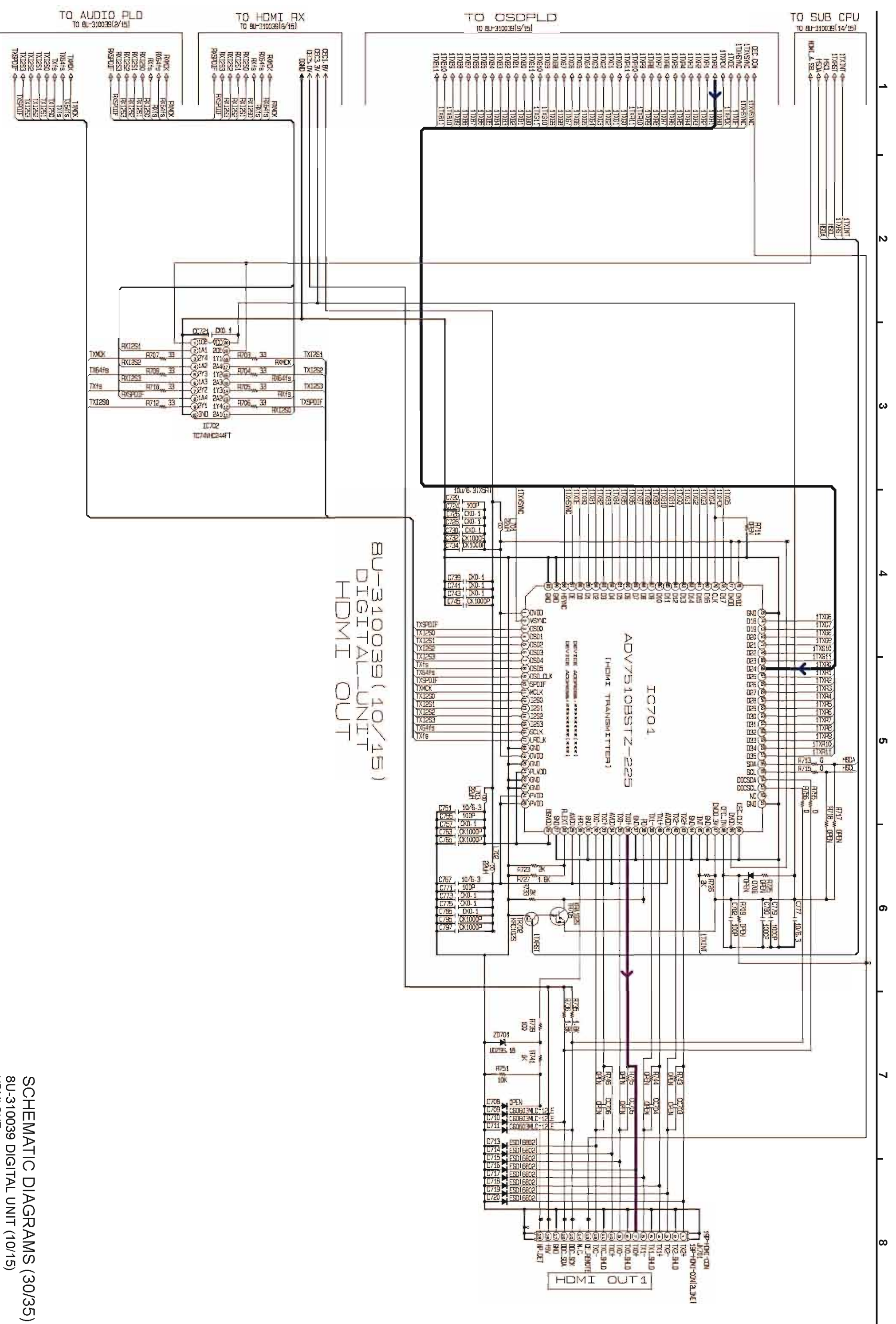
Digital Video Signal Line

SCHEMATIC DIAGRAMS (29/35)

8U-310039 DIGITAL UNIT (9/15)

GUI SECTION

AVR-3310CI/AVR-3310/AVR-990/AVC-3310

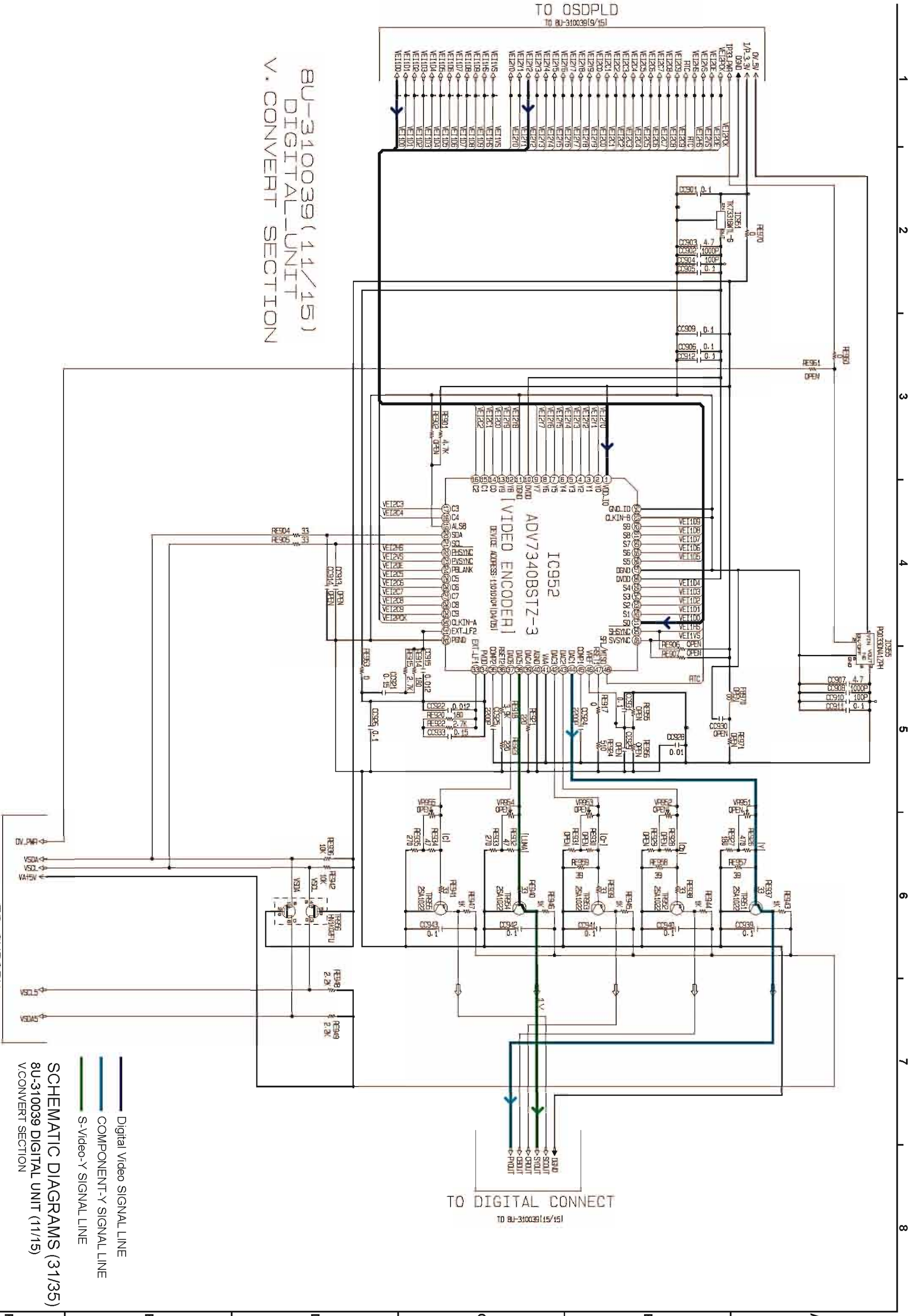


BU-310039 (10/15)
DIGITAL UNIT
HDMI OUT

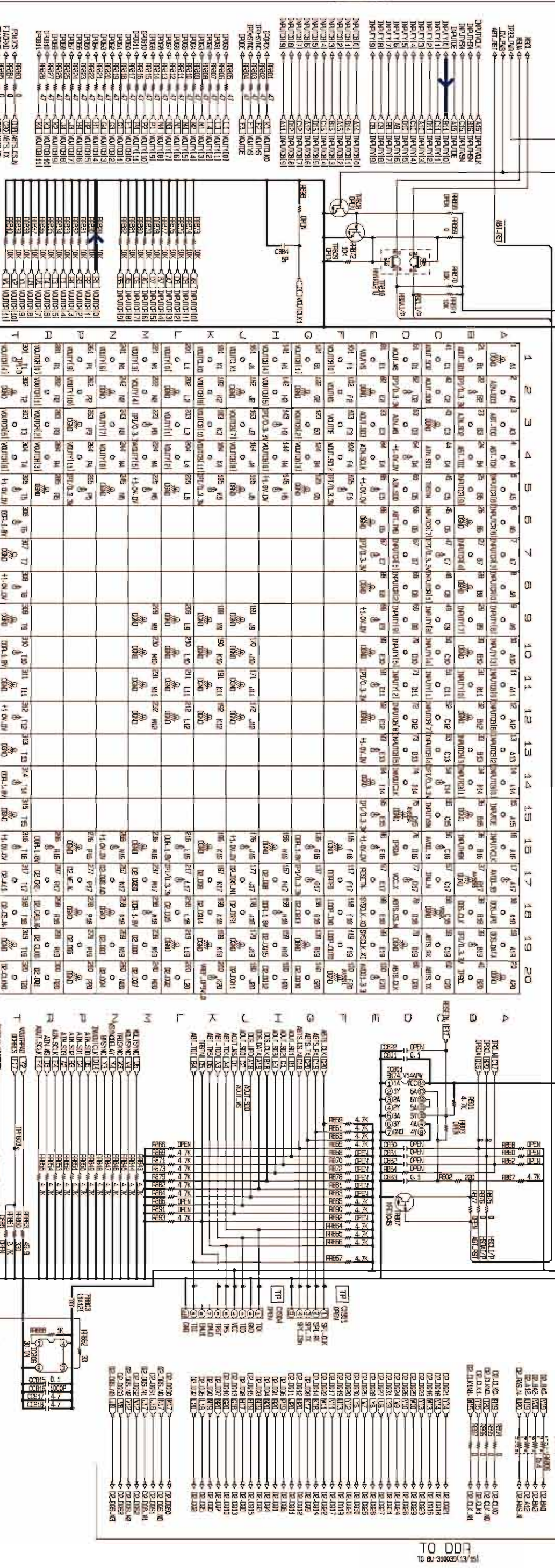
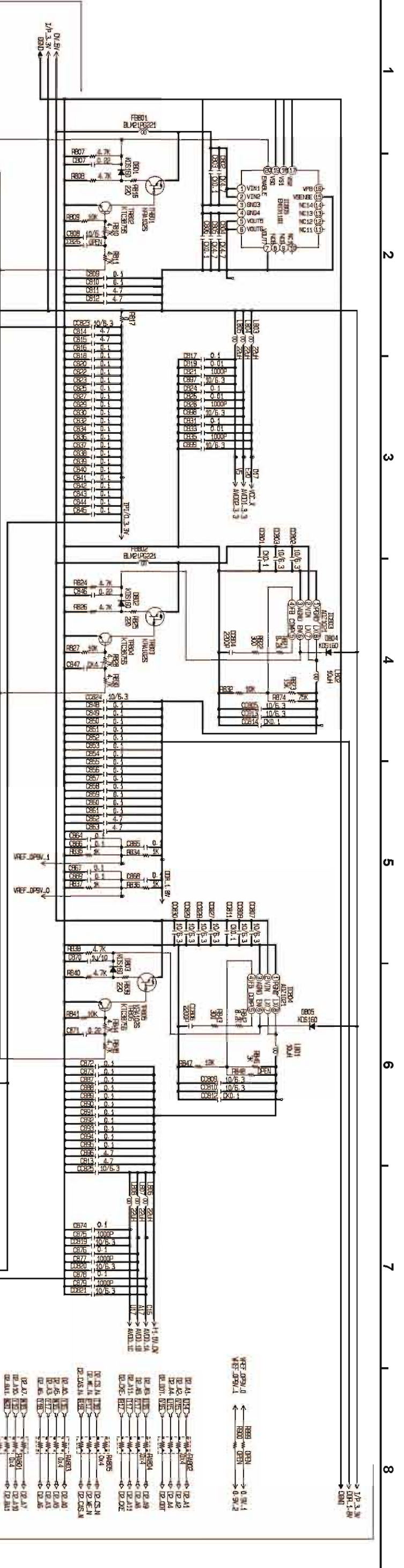
— HDMI/TMDS SIGNAL LINE
— Digital Video SIGNAL LINE

SCHEMATIC DIAGRAMS (30/35)
8U-310039 DIGITAL UNIT (10/15)
HDMI OUT
AVR-3310CI/AVR-3310I/AVR-990/AVC-3310

BU-310039 (11/15)
DIGITAL_UNIT
V. CONVERT SECTION

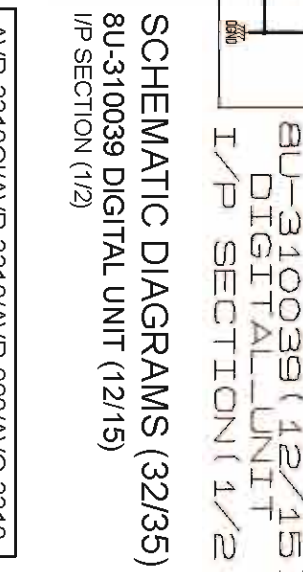
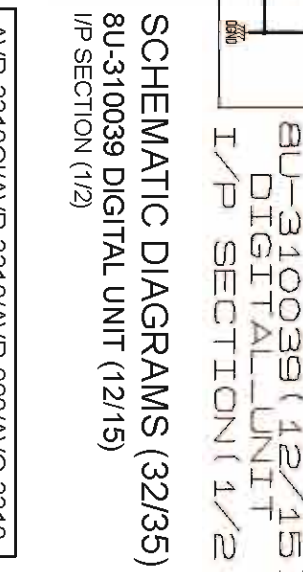
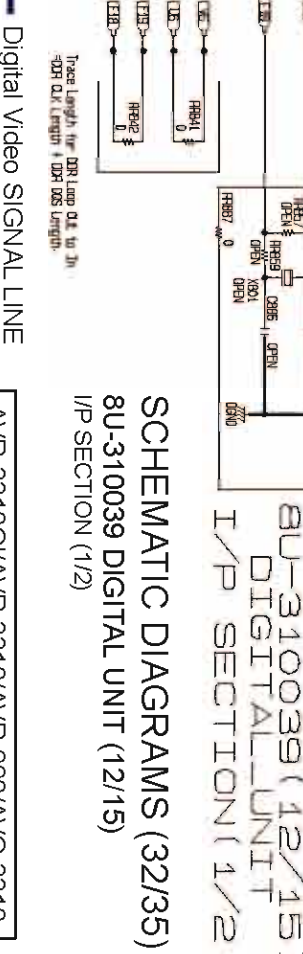


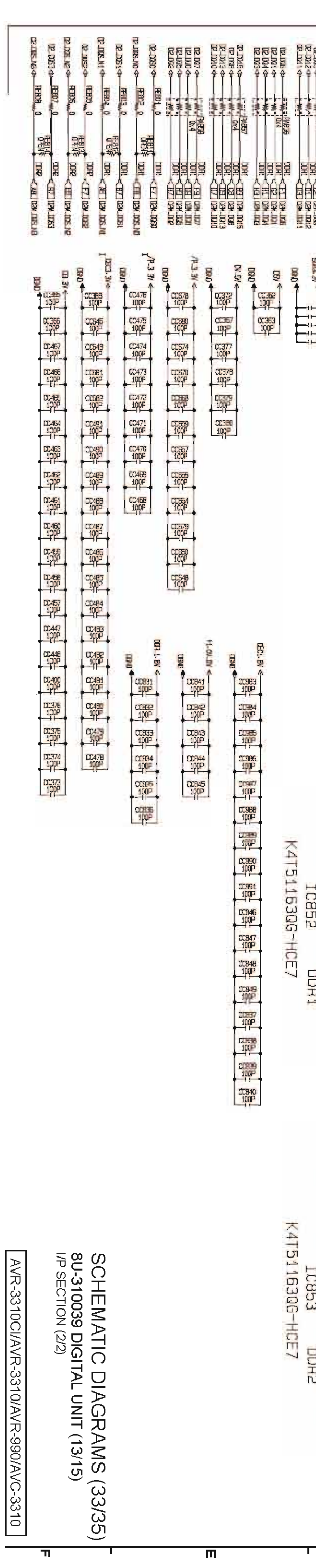
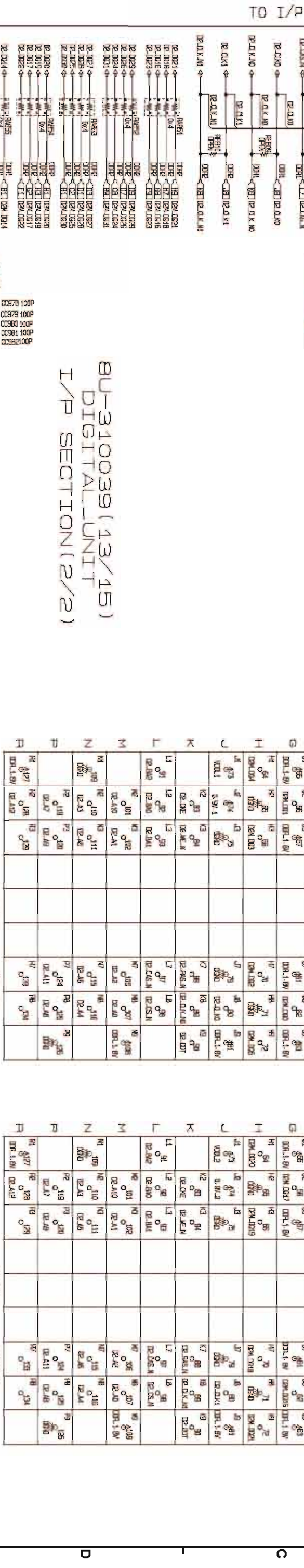
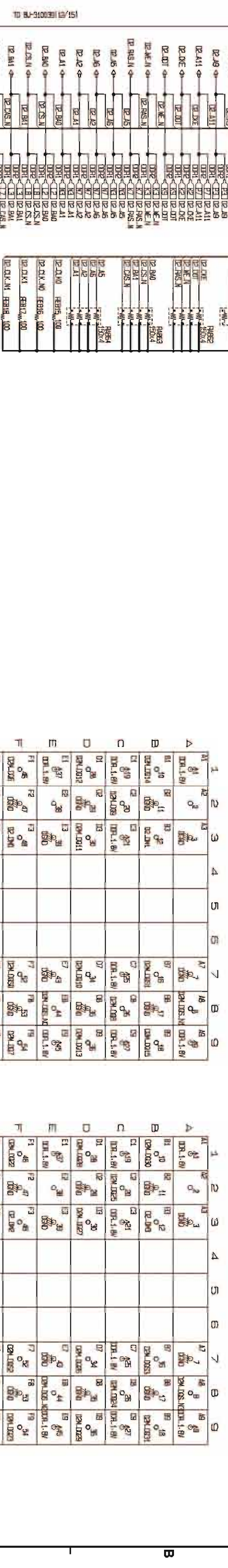
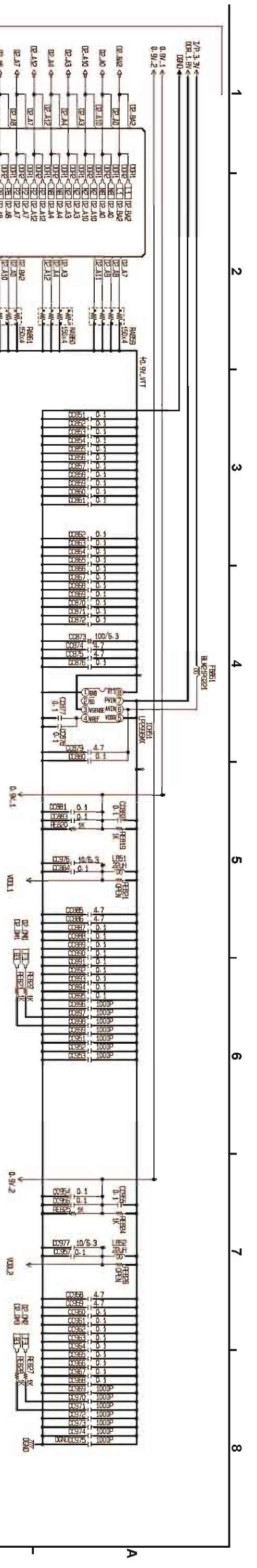
- Digital Video SIGNAL LINE
 - COMPONENT-Y SIGNAL LINE
 - S-Video-Y SIGNAL LINE
- SCHEMATIC DIAGRAMS (31/35)**
8U-310039 DIGITAL UNIT (11/15)
V.CONVERT SECTION

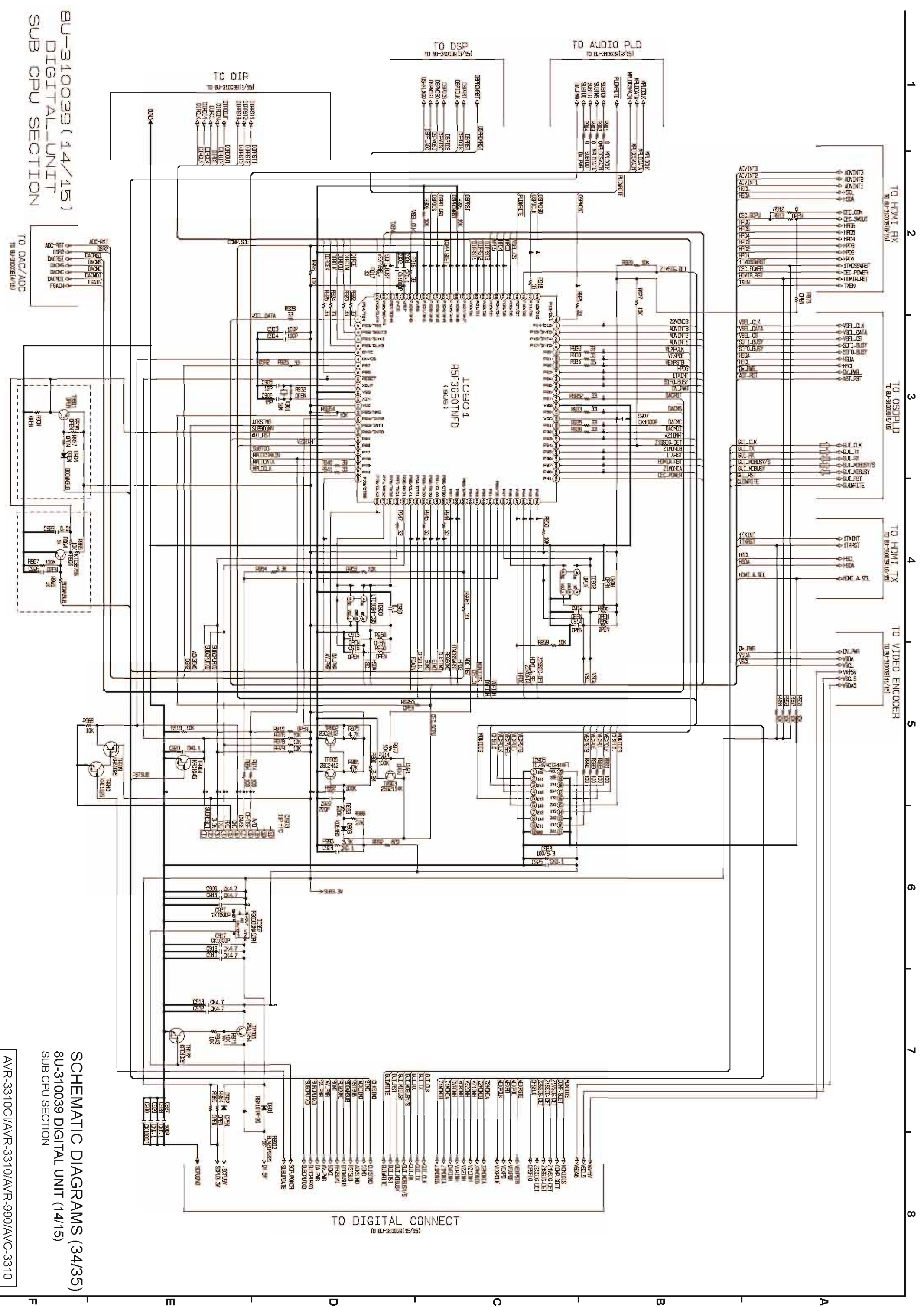


IC802 A8T2010

Y	W	V	U	T	R	N	M	L	K	J	H	G	F	E	D	C	B	A
1	AI	P	AI	3	AI	4	AI	5	AI	6	AI	7	AI	8	AI	9	AI	10
11	AI	12	AI	13	AI	14	AI	15	AI	16	AI	17	AI	18	AI	19	AI	20
21	AI	22	AI	23	AI	24	AI	25	AI	26	AI	27	AI	28	AI	29	AI	30
31	AI	32	AI	33	AI	34	AI	35	AI	36	AI	37	AI	38	AI	39	AI	40
41	AI	42	AI	43	AI	44	AI	45	AI	46	AI	47	AI	48	AI	49	AI	50
51	AI	52	AI	53	AI	54	AI	55	AI	56	AI	57	AI	58	AI	59	AI	60
61	AI	62	AI	63	AI	64	AI	65	AI	66	AI	67	AI	68	AI	69	AI	70
71	AI	72	AI	73	AI	74	AI	75	AI	76	AI	77	AI	78	AI	79	AI	80
81	AI	82	AI	83	AI	84	AI	85	AI	86	AI	87	AI	88	AI	89	AI	90
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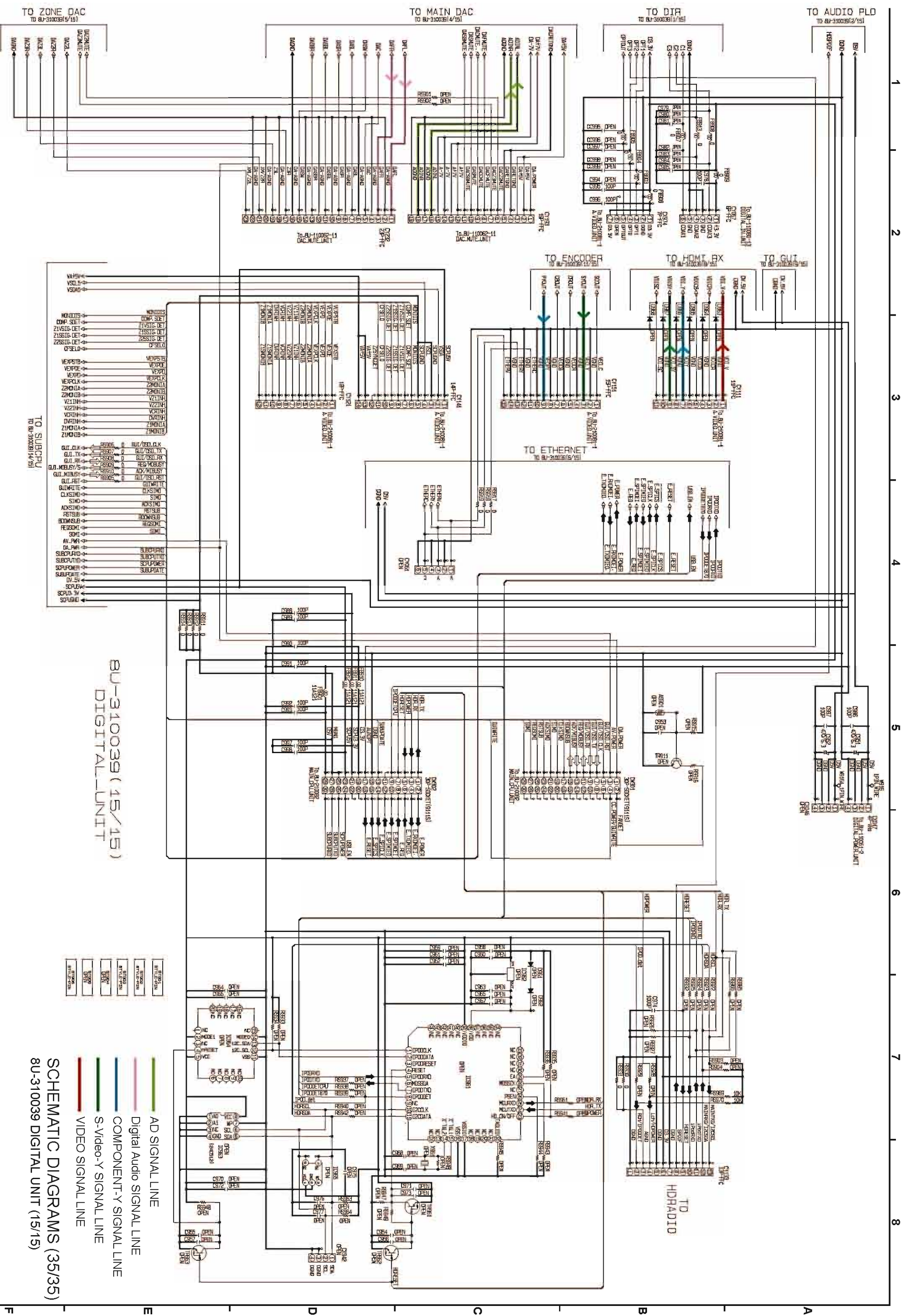
BU-310039 (14/15)
DIGITAL UNIT
SUB CPU SECTION

SCHEMATIC DIAGRAMS (34/35)
8U-310039 DIGITAL UNIT (14/15)
SUB CPU SECTION

AVR-3310CI/AVR-3310/AVR-990/AVC-3310

1
2
3
4
5
6
7
8

F
E
D
C
B
A



BU-310039 (15/15)
DIGITAL UNIT

- AD SIGNAL LINE
- Digital Audio Signal Line
- COMPONENT-Y SIGNAL LINE
- S-Video-Y SIGNAL LINE
- VIDEO SIGNAL LINE

SCHEMATIC DIAGRAMS (35/35)
8U-310039 DIGITAL UNIT (15/15)

AVR-3310CI/AVR-3310/AVR-990/AVC-3310