

SERVICE MANUAL

MODEL	JP	E3	E2	EK	KA	E1	E1K	E1C
AVR-3311CI		✓						
AVR-3311 			✓					✓

AV SURROUND RECEIVER

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

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

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

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.

Be sure to test for leakage current with the AC plug in both polarities, in addition, in each power ON, OFF and STANDBY mode, if applicable.

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. 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!

Through 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  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 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 inplug and the externally exposed metal parts (antenna terminal, headphones terminal, input terminal, etc.) is 1MΩ or greater. If it is less, the set must be inspected and repaired.

CAUTION Concerning important safety parts

Many of the electric and 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  mark.

(2) Parts lists Indicated by the  mark.

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

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.

NOTE FOR PARTS LIST

- Parts for which "nsp" is indicated on this table cannot be supplied.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including General-purpose Carbon Film Resistor in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)
- 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: $\pm 1\%$	P: Pulse-resistant type		
RC: Composition	2E: 1/4 W	G: $\pm 2\%$	NL: Low noise type		
RS: Metal oxide film	2H: 1/2 W	J: $\pm 5\%$	NB: Non-burning type		
RW: winding	3A: 1 W	K: $\pm 10\%$	FR: Fuse-resistor		
RN: Metal film	3D: 2 W	M: $\pm 20\%$	F: Lead wire forming		
RK: Metal mixture	3F: 3 W				
	3H: 5 W				

* Resistance

$\frac{1}{\uparrow} \frac{8}{\uparrow} \frac{2}{\uparrow} \Rightarrow 1800\text{ohm}=1.8\text{kohm}$
 Indicates number of zeros after effective number.
 2-digit effective number.

$\frac{1}{\uparrow} \frac{R}{\uparrow} \frac{2}{\uparrow} \Rightarrow 1.2\text{ohm}$
 1-digit effective number.
 2-digit effective number, decimal point indicated by R.
 : Units: ohm

● 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 : $\pm 1\%$	HS: High stability type	
CA: Aluminium solid electrolytic		1A : 10 V	G : $\pm 2\%$	BP: Non-polar type	
CS: Tantalum electrolytic		1C : 16 V	J : $\pm 5\%$	HR: Ripple-resistant type	
CQ: Film		1E : 25 V	K : $\pm 10\%$	DL: For charge and discharge	
CK: Ceramic		1V : 35 V	M : $\pm 20\%$	HF: For assuring high frequency	
CC: Ceramic		1H : 50 V	Z : $\pm 80\%$	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 : $\pm 0.25\text{pF}$	F : Lead wire forming	
CH: Metallized		2D : 200 V	D : $\pm 0.5\text{pF}$		
		2E : 250 V	= : Others		
		2H : 500 V			
		2J : 630 V			

* Capacity (electrolyte only)

$\frac{2}{\uparrow} \frac{2}{\uparrow} \frac{2}{\uparrow} \Rightarrow 2200 \mu\text{F}$
 Indicates number of zeros after effective number.
 • Units: μF .

$\frac{2}{\uparrow} \frac{R}{\uparrow} \frac{2}{\uparrow} \Rightarrow 2.2 \mu\text{F}$
 1-digit effective number.
 2-digit effective number, decimal point indicated by R
 • Units: μF .

* Capacity (except electrolyte)

$\frac{2}{\uparrow} \frac{2}{\uparrow} \frac{2}{\uparrow} \Rightarrow 2200\text{pF}=0.0022 \mu\text{F}$
 Indicates number of zeros after effective number. (More than 2)
 2-digit effective number.
 • Units:pF

$\frac{2}{\uparrow} \frac{2}{\uparrow} \frac{1}{\uparrow} \Rightarrow 220\text{pF}$
 Indicates number of zeros after effective number. (0 or 1)
 2-digit effective number.
 • Units:pF

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

TECHNICAL SPECIFICATIONS

□ Audio Section

• Power amplifier

Rated output :

Front : 125 W + 125 W (8 Ω, 20 Hz – 20 kHz with 0.05 % T.H.D.)
165 W + 165 W (6 Ω, 1 kHz with 0.7 % T.H.D.)
Center : 125 W (8 Ω, 20 Hz – 20 kHz with 0.05 % T.H.D.)
165 W (6 Ω, 1 kHz with 0.7 % T.H.D.)
Surround : 125 W + 125 W (8 Ω, 20 Hz – 20 kHz with 0.05 % T.H.D.)
165 W + 165 W (6 Ω, 1 kHz with 0.7 % T.H.D.)
Surround back / Front height / Front wide :
125 W + 125 W (8 Ω, 20 Hz – 20 kHz with 0.05 % T.H.D.)
165 W + 165 W (6 Ω, 1 kHz with 0.7 % T.H.D.)

Dynamic power : 130 W x 2ch (8 Ω)
190 W x 2ch (4 Ω)

Output connectors : 6 – 16 Ω

• Analog

Input sensitivity/Input impedance : 200 mV/47 kΩ

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

S/N: 102 dB (IHF–A weighted, DIRECT mode)

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

Rated output: 1.2 V

• Digital

D/A output: Rated output — 2 V (at 0 dB playback)

Total harmonic distortion — 0.008 % (1 kHz, at 0 dB)

S/N ratio — 102 dB

Dynamic range — 100 dB

Digital input: Format — Digital audio interface

• Phono equalizer (PHONO input — REC OUT)

Input sensitivity: 2.5 mV

RIAA deviation: ±1 dB (20 Hz to 20 kHz)

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

Rated output: 150 mV

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

□ Video Section

• Standard video connectors

Input/output level and impedance : 1 Vp-p, 75 Ω

Frequency response : 5 Hz – 10 MHz — +1, –3 dB

• Color component video connector

Input/output level and impedance :

Y (brightness) signal — 1 Vp-p, 75 Ω

P_B / C_B signal — 0.7 Vp-p, 75 Ω

P_R / C_R signal — 0.7 Vp-p, 75 Ω

Frequency response : 5 Hz – 60 MHz — +0, –3 dB (when “Video Convert” set to “OFF”)

□ HD Radio section (for E3)

[FM](Note: μV at 75 Ω, 0 dBf = 1 x 10⁻¹⁵ W)

Receiving Range :

[FM] 87.5 MHz – 107.9 MHz [AM] 530 kHz – 1710 kHz

Usable Sensitivity :

[FM] 1.5 μV (14.8 dBf) [AM] 20 μV

S/N (IHF-A) :

[FM] MONO 78 dB [AM]
STEREO 68 dB
HD 85 dB 85 dB

Total harmonic Distortion (at 1 kHz) :

[FM] MONO 0.1 % [AM]
STEREO 0.2 %
HD 0.02 % 0.02 %

□ Tuner section (for E2, E1C)

[FM](Note: μV at 75 Ω, 0 dBf = 1 x 10⁻¹⁵ W)

Receiving Range :

[FM] 87.5 MHz – 108.0 MHz [AM] 522 kHz – 1611 kHz

Usable Sensitivity :

[FM] 1.2 μV (12.8 dBf) [AM] 18 μV

50 dB Quieting Sensitivity :

[FM] MONO 2.0 μV (17.3 dBf)
STEREO 42 μV (34.5 dBf)

S/N (IHF-A) :

[FM] MONO 72 dB
STEREO 67 dB

Total harmonic Distortion (at 1 kHz) :

[FM] MONO 0.3 %
STEREO 0.7 %

□ General

Power supply : AC 120 V, 60 Hz (for E3)
AC 230 V, 50 Hz (for E2)
AC 220 V, 50 Hz (for E1C)

Power consumption :

670 W
0.1 W (Standby)
2.2 W (CEC standby)

Maximum external dimensions :

434 (W) x 171 (H) x 381 (D) mm (17-3/32" x 6-47/64" x 15")

Weight : 12.2 kg (26 lbs 14.3 oz)

□ Remote Control Unit (RC-1146)

Batteries : R6/AA Type (two batteries)

Maximum external dimensions :

53 (W) x 224 (H) x 28 (D) mm (2-3/32" x 8-13/16" x 1-7/64")

Weight : 160 g (5.6 oz, including batteries)

□ Remote Control Unit (RC-1148)

Batteries : R03/AAA Type (two batteries)

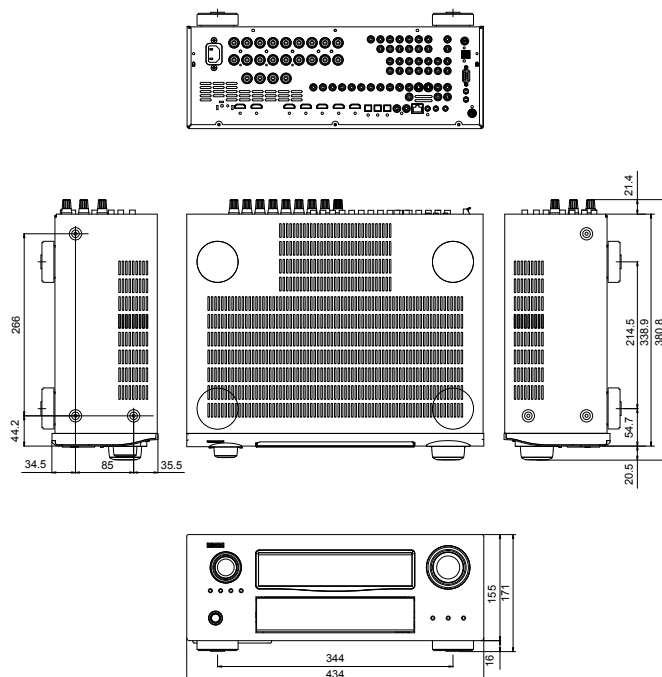
Maximum external dimensions :

49 (W) x 220 (H) x 24.5 (D) mm (1-59/64" x 8-21/32" x 31/32")

Maximum external dimensions :

114 g (Approx 4 oz, including batteries)

DIMENSION



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.

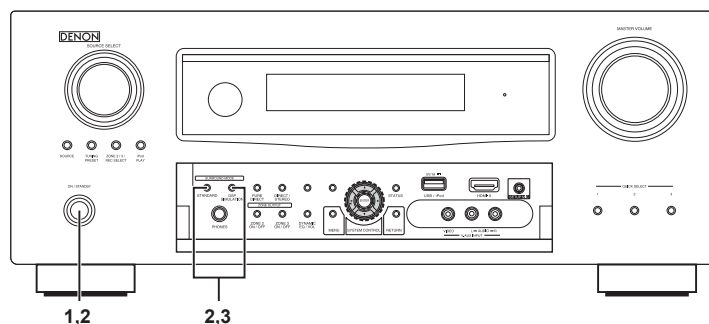
Initializing AV SURROUND RECEIVER

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

1. Turn off the power using ON/STANDBY button.
2. Press ON/STANDBY button while simultaneously pressing STANDARD and DSP SIMULATION buttons.
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.



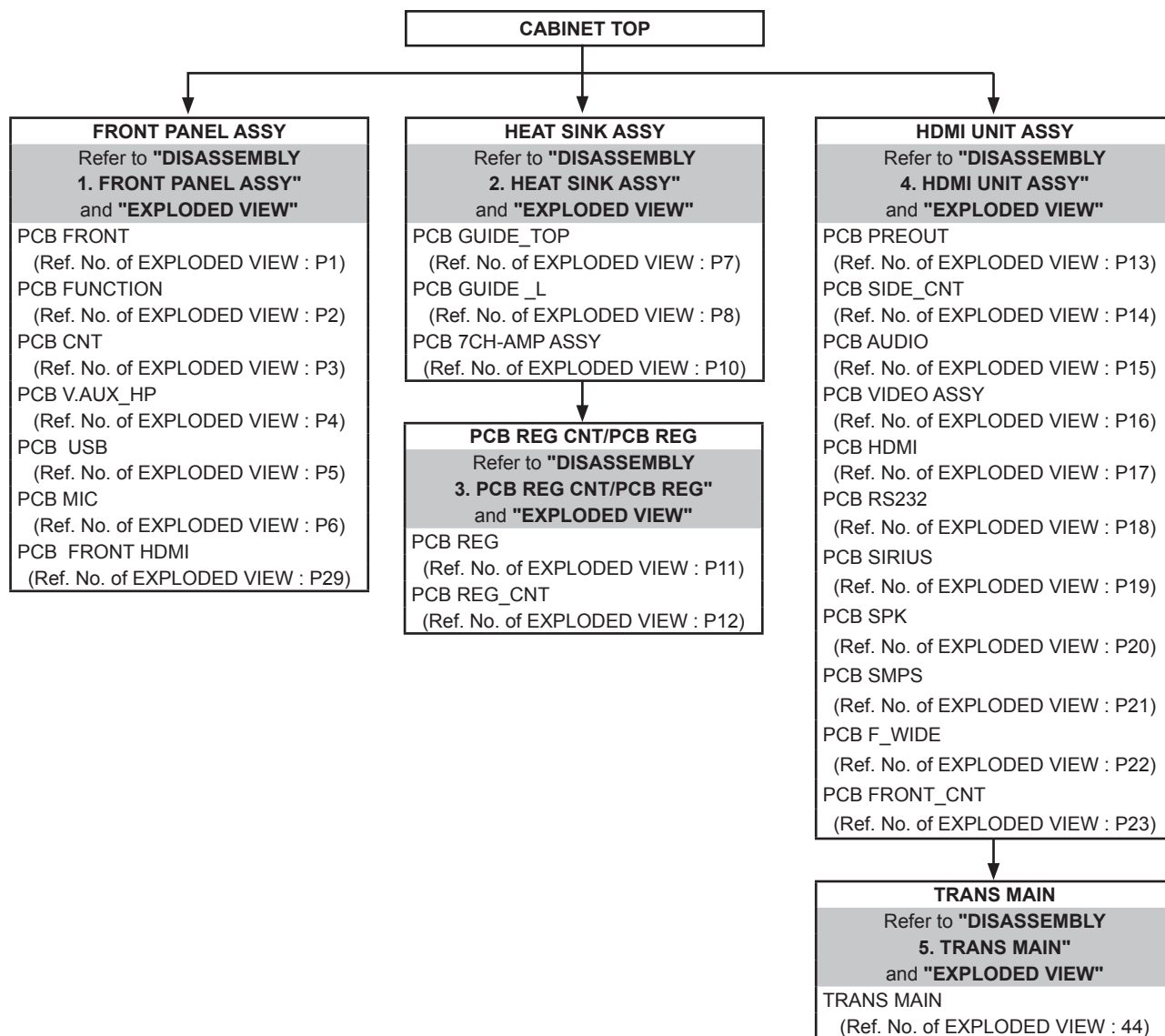
Service Jigs

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

8U-110084S : EXTENSION UNIT KIT : 1 Set
(Refer to 21 page)

DISASSEMBLY

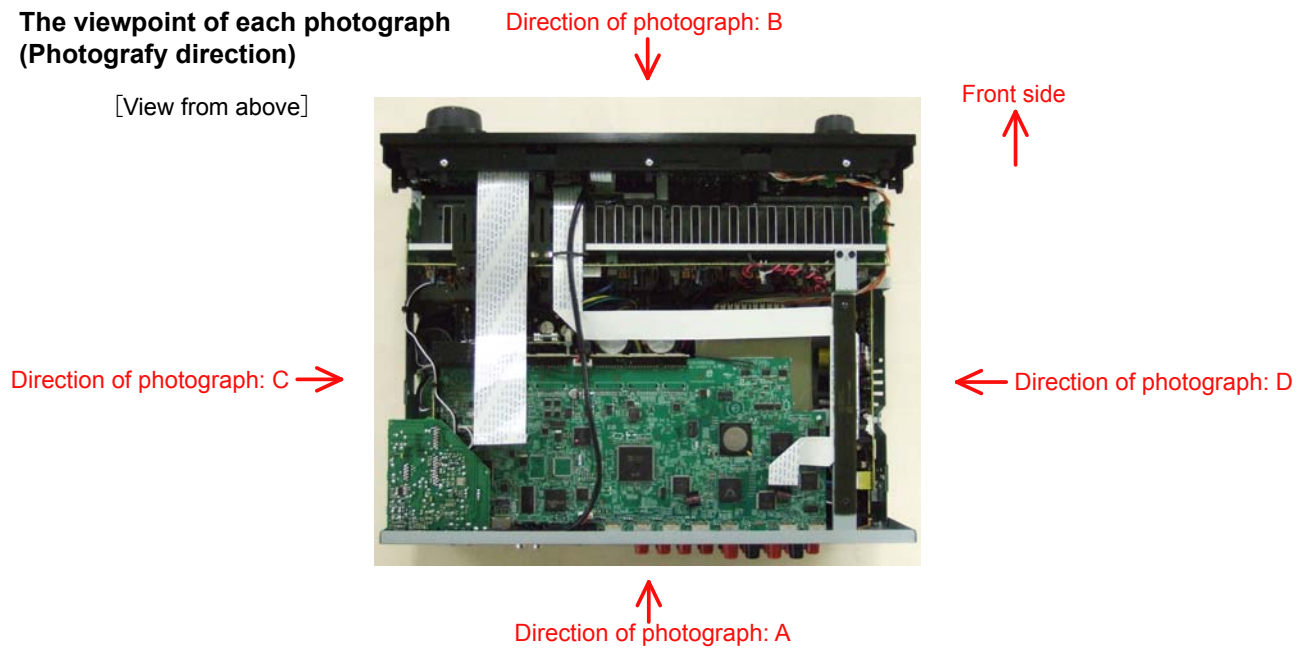
- Disassemble in order of the arrow of the figure of following flow.
- In the case of the re-assembling, assemble it in order of the reverse of the following flow.
- In the case of the re-assembling, observe "attention of assembling" it.
- If wire bundles are untied or moved to perform adjustment or 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.



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.

The viewpoint of each photograph (Photografy direction)



1. FRONT PANEL ASSY

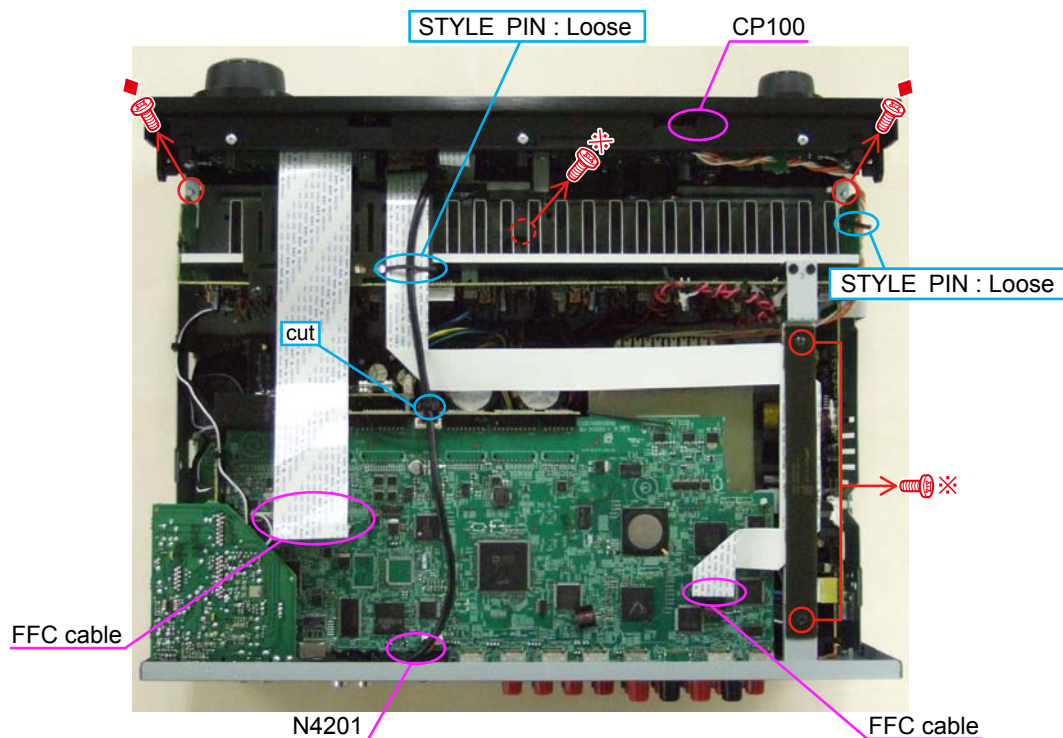
Proceeding : **CABINET TOP** → **FRONT PANEL ASSY**

(1) Remove the screws.

View from bottom



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



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

2. HEAT SINK ASSY

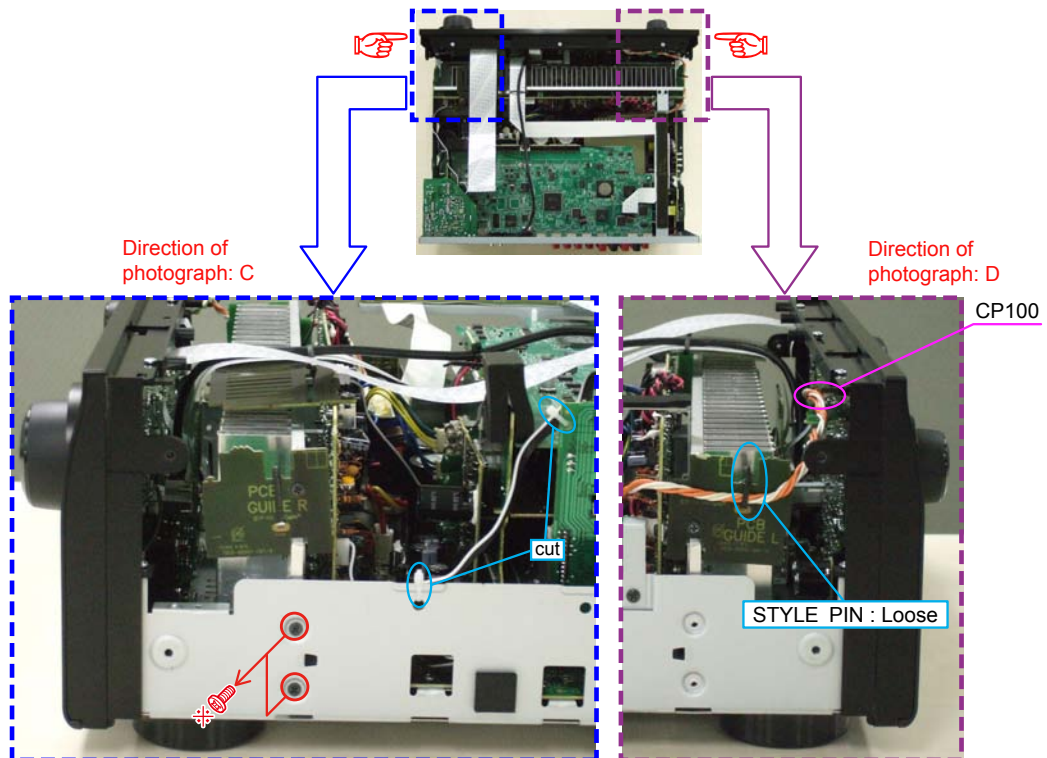
Proceeding : **CABINET TOP** → **HEAT SINK ASSY**

- (1) Remove the screws.

View from bottom



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

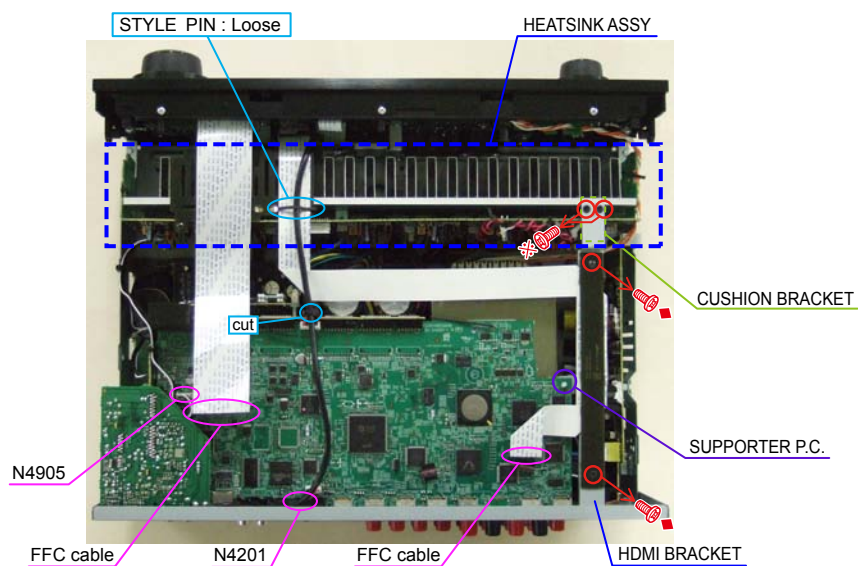


(3) Remove the screws.

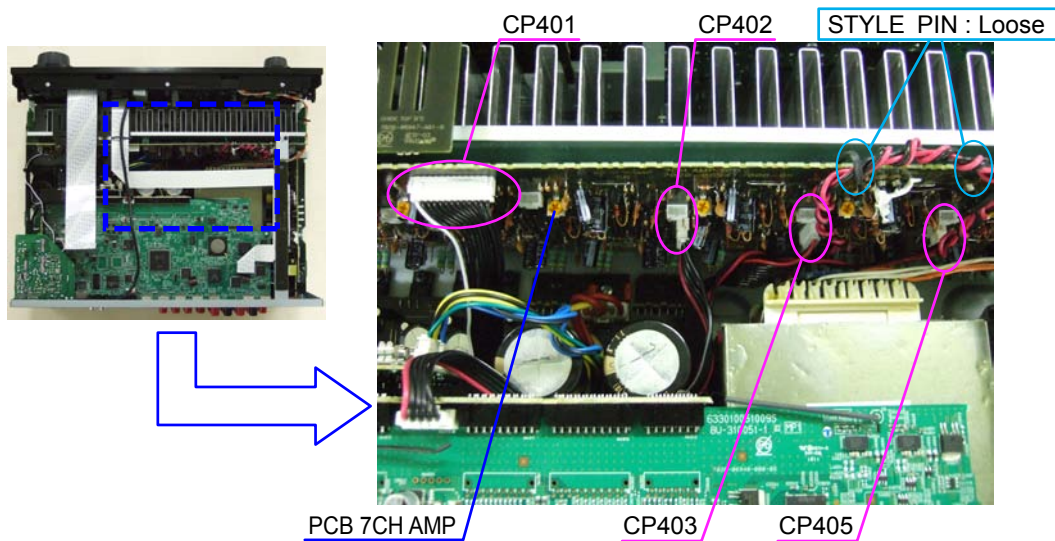
Direction of photograph: A



(4) Cut the wire clamp bands, then disconnect the connector wires and FFC cable. Remove the screws, SUPPORTER P.C. and the HDMI BRACKET.



(5) Disconnect the connector wires.

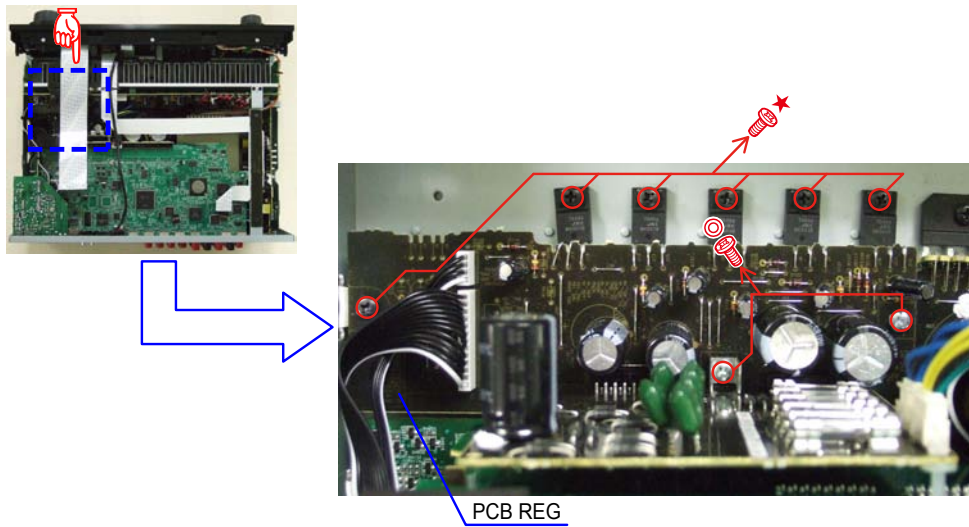


Please refer to "EXPLODED VIEW" for the disassembly method of each P.W.B included in HEAT SINK ASSY.

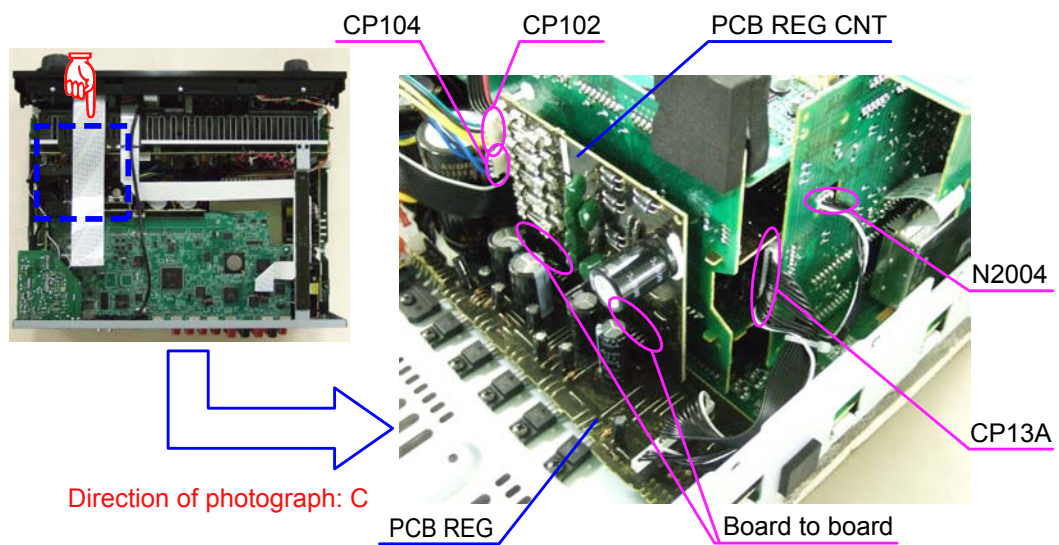
3. PCB REG CNT/PCB REG

Proceeding : **CABINET TOP** → **HEAT SINK ASSY** → **PCB REG CNT/PCB REG**

(1) Remove the screws.



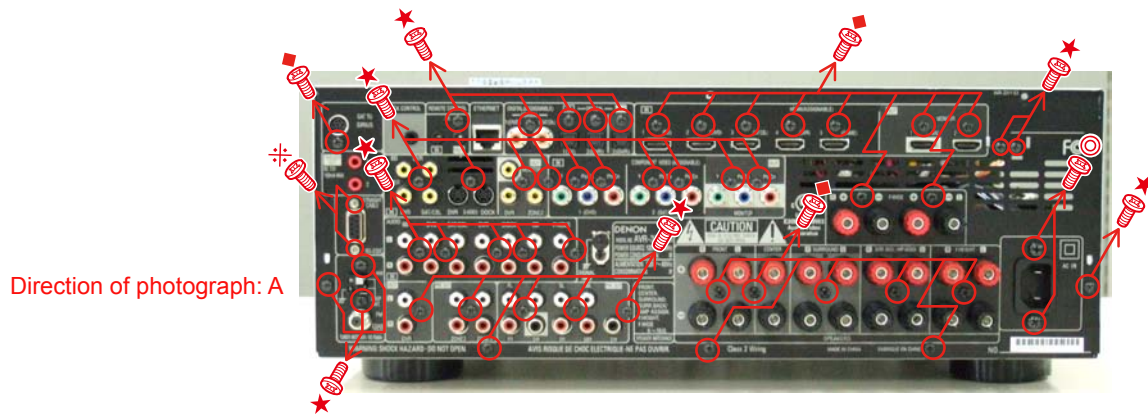
(2) Disconnect the connector wires and connector board.



4. HDMI UNIT ASSY

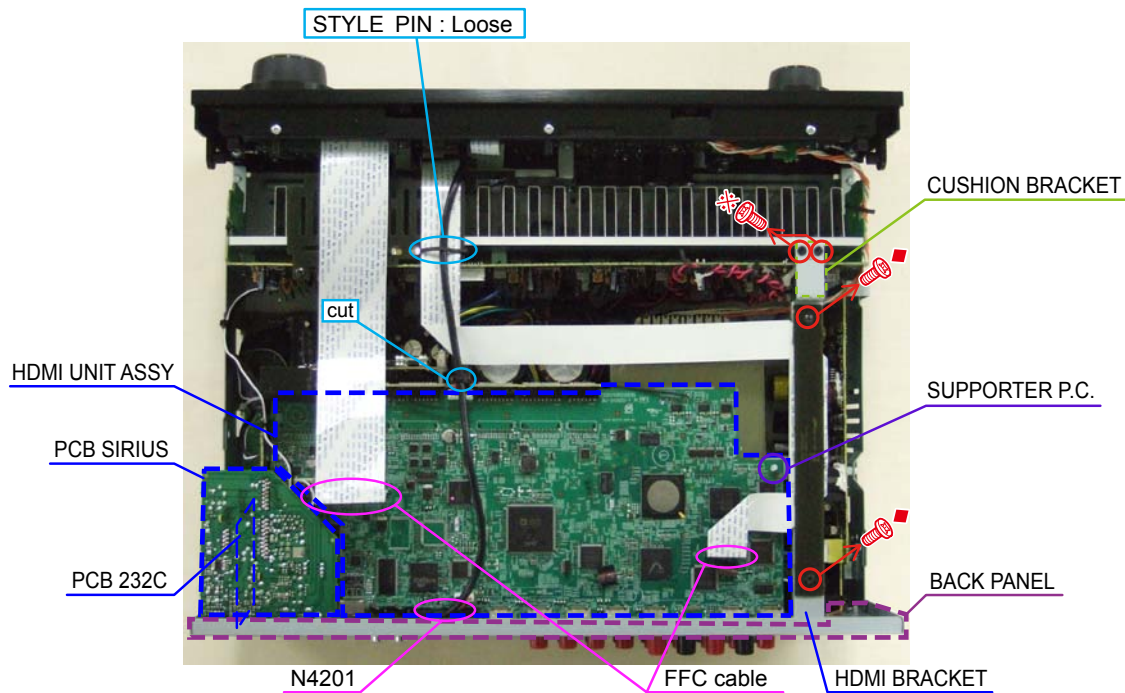
Proceeding : CABINET TOP → HDMI UNIT ASSY

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

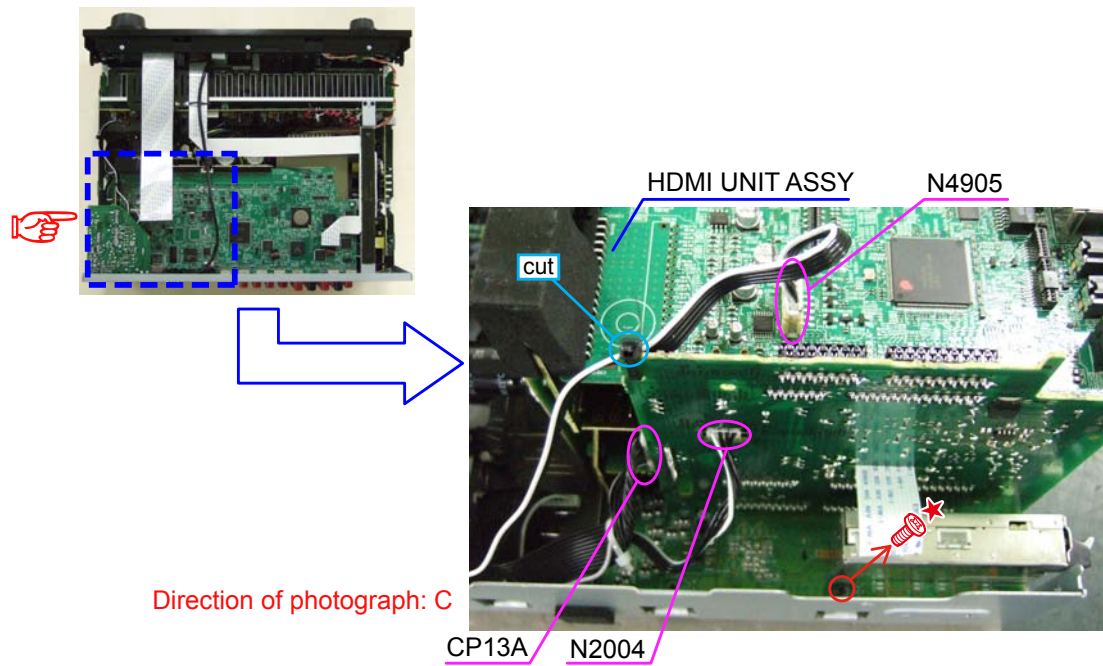


- (2) Cut wire clamp band, then disconnect the connector wires and the FFC cables. Remove the screws and the SUPPORTER P.C..

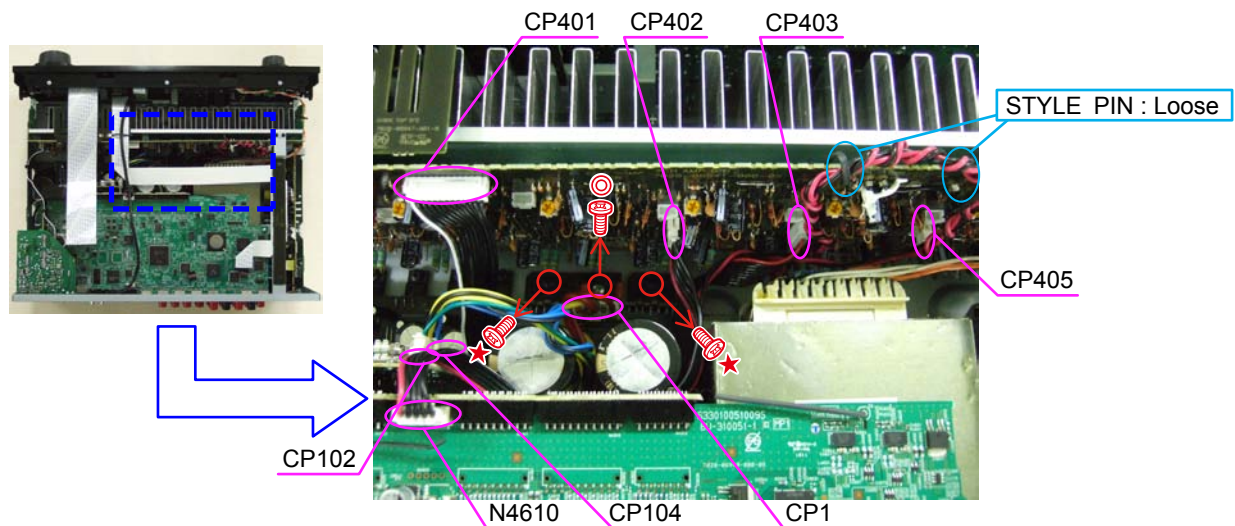
Remove the PCB SIRIUS and the PCB RS232 from the PCB SIDE CNT(Board to board).



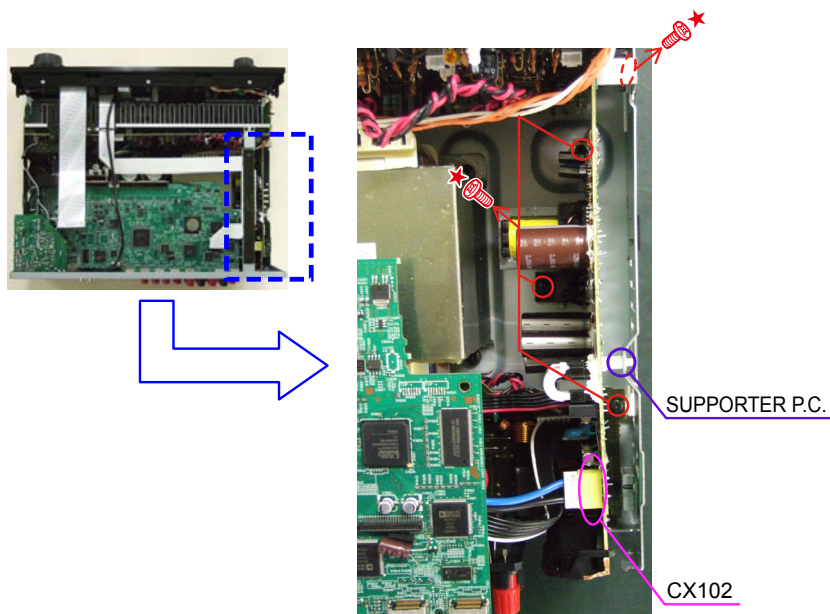
(3) Cut the wire clamp band, then disconnect the connector wires. Remove the screw.



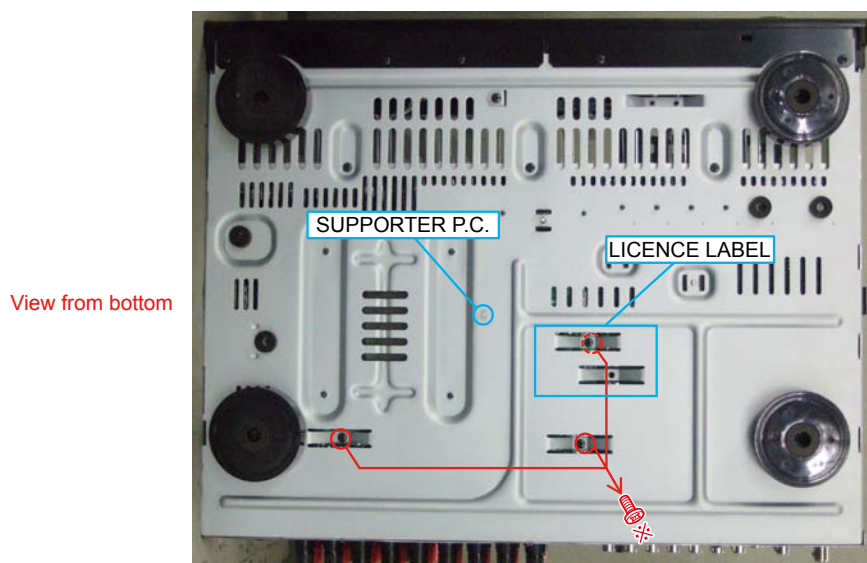
(4) Remove the screws and disconnect the connector.



(5) Disconnect the connector wire, then remove the screws and the SUPPORTER P.C..



(6) Remove the LICENCE LABEL, then remove the screws and SUPPORTER P.C..
Remove the HDMI UNIT ASSY from the main unit.



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

5. TRANS MAIN

Proceeding : **CABINET TOP** → **HDMI UNIT ASSY** → **TRANS MAIN**

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

SPECIAL MODE

Special mode setting button

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

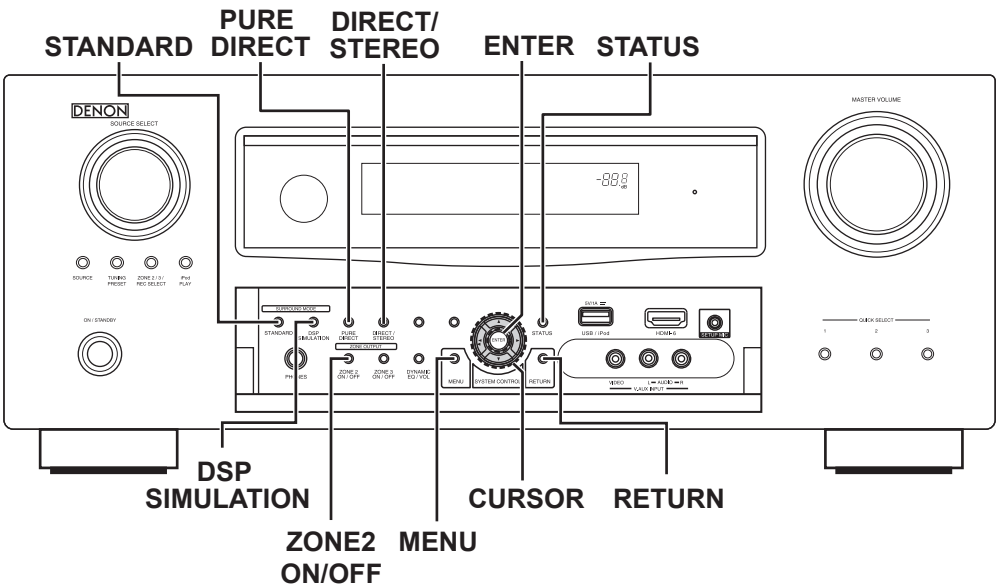
Mode	Button A	Button B	Contents
Version display (μcom/DSP Error Display)	STATUS	RETURN	Serial No. and firmware versions such as Main, Sub, DSP are displayed in the FL manager. Errors are displayed when they occur. (Refer to 16 page)
Displaying the protection history mode	STATUS	MENU	Displaying the protection history (Refer to 19 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
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	DIRECT/ STEREO	Operations using main unit panel buttons or master volume are rejected.
Panel lock mode (Remove Master volume)	DIRECT/ STEREO	PURE DIRECT	Operations using main unit panel buttons are rejected.
Cancellation of panel lock mode	DIRECT/ STEREO	ENTER	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.
Diagnostic mode	CURSOR LEFT	ENTER	This mode is used for confirming the Video and Audio (signal) paths. (Troubleshooting) Confirming the operation of unit can be easily done after repair.

3

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. μ com/DSP Version display mode

1.1. Operation specifications

μ com/DSP version display mode:

When started up, the version information is displayed.

Starting up:

With the "RETURN" and "STATUS" buttons pressed, press the "ON/STANDBY" button to turn the power on.
Now, press the "STATUS" button to display the 2nd item information on the FL Display.

1.2. Display Order

Error information(Refer to 1.3. Error display) → ①Model destination information → ②Firmware Package Version → ③Main μ -com/ROM version → ④Main 1st Boot Loader → ⑤Sub μ -com/Sub FBL → ⑥DSP version → ⑦Audio PLD → ⑧OSD FPGA Config → ⑨OSD Program → ⑩OSD font data → ⑪Ethernet(DM860) 1st Boot Loader, Hardware ID → ⑫Ethernet(DM860) 2nd Boot Loader, Rhapsody Flag → ⑬Ethernet(DM860) IMAGE → ⑭Ethernet(DM860)MAC ADDRESS information → ⑮HD RADIO SDK/HD RADIO BBP → ⑯iPod Version → ⑰MultEQ Pro APP(Displayed when Audyssey Pro is complete) → ⑱MultEQ Pro ICL(Displayed when Audyssey Pro is complete)

①Model destination information :

Upper	A	U	R	3	3	1	1		E	3						
Lower	S	/	N	.			*	*	*	*	*	*	*	*	*	*

②Firmware Package Version :

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

③Main μ -com & ROM version :

Upper		M	a	i	n					:	*	*	.	*	*
Lower		M	a	i	n		R	O	M	:	*	*	.	*	*

④Main 1st Boot Loader :

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

⑤Sub μ -com & Sub FBL :

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

⑥DSP ROM :

Upper		D	S	P						:	*	*	.	*	*
Lower															

⑦Audio PLD :

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

⑧OSD FPGA Config :

Upper	O	S	D		C	o	n	f	i	g	:					
Lower	*	*	*	*	*	*	*	*	*	*	*	*				

⑨OSD Program :

Upper	O	S	D		P	R	G	:								
Lower	*	*	*	*	*	*	*	*	*	*	*	*				

⑩OSD font data :

Upper	O	S	D		D	A	T	:								
Lower	*	*	*	*	*	*	*	*	*	*	*	*				

⑪Ethernet(DM860) 1st Boot Loader, Hardware ID :

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

⑫Ethernet(DM860) 2nd Boot Loader, Rhapsody Flag :

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

⑬Ethernet(DM860) IMAGE :

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

⑭Ethernet(DM860) MAC ADDRESS information :

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

⑮HD RADIO SDK/HD RADIO BBP (AVR-3311CIE3 only) :

Upper	*	H	D	S	D	K	:					*	*	.	*	*
Lower	*	H	D	B	B	P	:	C	0	0	0	2	.	0	0	0

⑯iPod Version :

Upper		i	P	o	d		D	o	c	k	:	*	*	.	*	*
Lower																

⑰MultEQ Pro APP(Displayed when Audyssey Pro is complete) :

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

⑱MultEQ Pro ICL(Displayed when Audyssey Pro is complete) :

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

1.3. Error display

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

Display order is ①,②,③,④,⑤.

Condition	State	State
① Sub-μcom NG	No response from Sub-μcom	SUB ERROR 01
② DIR NG	No response from DIR	DIR ERROR 01
③ DSP 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.)	E2PROM ERR***
⑤ Both SUB/DSP /EEPROM OK		(No error display, version display only)

2. Errors checking mode (Displaying the protection history)

2.1. Operation specifications

Error mode (Displaying the protection history):

When started up, the error information is displayed.

Starting up:

●All model commonness

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

Now, 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)

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

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

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

Cause: The line between speaker terminals is shorted, or use speakers having impedance less than that specified.

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

Turning on the power without correcting the abnormality will cause the protection function to work about 5 seconds later and the power supply will be shut off.

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

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

Cause: DC output of the power amplifier is abnormal.

Turning on the power without correcting the abnormality will cause the protection function to work about 5 seconds later and the power supply will be shut off.

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

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

Cause: The temperature of the heat sink is excessive.

Turning on the power without correcting the abnormality will cause the protection function to work about 5 seconds later and the power supply will be shut off.

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

When the "STATUS" button is pressed again after the above protection history 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 display) mode, display the error, then press and hold in the "ENTER" button for 3 seconds.

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



Press and hold in the "ENTER" button for 3 seconds.

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



The above is displayed and the protection history is cleared.

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

- (2) Initialize. (Refer to "Initializing AV SURROUND RECEIVER" 5 page.)

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

Warning indication by the POWER LED

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

- (1) ASO/DC PROTECTION : Flashes 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. DIAGNOSTIC MODE (Video/Audio (signal) path confirmation mode) ⚠

This mode is used for confirming the Video and Audio (signal) paths. (Troubleshooting)
Confirming the operation of unit can be easily done after repair.
Backup data will not be lost.

3.1.Starting diagnostic mode

Press the "CURSOR LEFT" and "ENTER" botton while simulltaneously pressing those two bottons of this unit.
Q1, Q2 and Q3 are lit in FL display.

3.2. Canceling diagnostic mode

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

3.3. Operation

When you perform remote operation in accordance with the instructions in "Details of how to operate remote controller" *a) in the table below using the remote control unit (RC-1146).
You will find using another remote control unit with the macro functions very useful. To use the macro functions, program a macro function to output a remote control code in accordance with the steps in *b) in the table below.

3.4. Video system confirmation items

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

Confirmation item		Setting and display	Details of how to operate remote controller *a)	Output sequence of remote control codes ※ It is useful to form a macro program. *b)	Contents of confirmation	Remarks
1	Analog Video (signal) Path	Video Convert (IP Scaler) : OFF , All Sources All ZONE : ON Display: V01 DVD	1.Press [AMP]	①ZONE2 POWER OFF	·Input : CVBS / Output : CVBS ·Input : CVBS / Output : CVBS RECOUT (DVR) ·Input : CVBS / Output : CVBS ZONE2 ·Input : Component / Output : Component ·Input : Component / Output Component ZONE (※ As the input source, you can switch from DVD to other ones.)	
			2.Press [ZONE SELECT] , Select "ZONE2"			
			3.Press [ZONE OFF]			
			4.Press [ZONE SELECT], Select "ZONE3"	②ZONE3 POWER OFF		
			5.Press [ZONE OFF]			
			6.Press [ZONE SELECT], Select "MAIN"	③KEY 1/CODE1 (Main Zone) Initialization & Video Convert All OFF		
			7.Press [1/.]			
			8.Press [ZONE SELECT], Select "ZONE2"	④ZONE2 POWER ON		
			9.Press [ZONE ON]			
			10.Press [ZONE SELECT], Select "ZONE3"	⑤ZONE3 POWER ON		
			11.Press [ZONE ON]			
			12.Press [ZONE SELECT], Select "MAIN"	⑥DVD (Main Zone)		
			13.Press [DVD]			
2	Analog Video Convert (signal) Path	Video Convert(IP Scaler) : ON , All Sources Display: V02 DVD	1.Press [AMP]	①ZONE2 POWER OFF	·Input : CVBS / Through : V.Decoder and V.Encoder / Output : CVBS ·Input : CVBS / Through : V.Decoder and V.Encoder / Output : Component ·Input : Component / Through V.Decoder and V.Encoder / Output : CVBS ·Input : Component / Through V.Decoder and V.Encoder / Output : Component (※ As the input source, you can switch from DVD to other ones.)	Confirm the input pass one by one. Because it becomes only the input of the highest input becomes Convert/IP Scaler (signal) Path if it inputs it at the same time. (HDMI input > Component input > S-VIDEO input > CVBS input) Do not connect anything with HDMI Monito OUT. Because the Convert pass is used with Analog to HDMI when connecting it.
			2.Press [ZONE SELECT] , Select "ZONE2"			
			3.Press [ZONE OFF]			
			4.Press [ZONE SELECT], Select "ZONE3"	②ZONE3 POWER OFF		
			5.Press [ZONE OFF]			
			6.Press [ZONE SELECT], Select "MAIN"	③KEY 2/ABC (Main Zone) Initialization & Video Convert All ON & IP Scaler "Analog & HDMI"		
			7.Press [2/ABC]			
			8.Press [DVD]	④DVD (Main Zone)		
3	HDMI (signal) Path	Video Convert(IP Scaler) : OFF, All Sources All ZONE:ON Display: V01 DVD	1.Press [AMP]	①ZONE2 POWER OFF	·Input : HDMI / Output : HDMI (※ As the input source, you can switch from DVD to other ones.)	
			2.Press [ZONE SELECT] , Select "ZONE2"			
			3.Press [ZONE OFF]			
			4.Press [ZONE SELECT], Select "ZONE3"	②ZONE3 POWER OFF		
			5.Press [ZONE OFF]			
			6.Press [ZONE SELECT], Select "MAIN"	③KEY1/CODE1 (Main Zone) Initialization & Video Convert All OFF		
			7.Press [1/.]			
			8.Press [ZONE SELECT], Select "ZONE2"	④ZONE2 POWER ON		
			9.Press [ZONE ON]			
			10.Press [ZONE SELECT], Select "ZONE3"	⑤ZONE3 POWER ON		
			11.Press [ZONE ON]			
			12.Press [ZONE SELECT], Select "MAIN"	⑥DVD (Main Zone)		
			13.Press [DVD]			

Confirmation item		Setting and display	Details of how to operate remote controller *a)	Output sequence of remote control codes ※ It is useful to form a macro program. *b)	Contents of confirmation	Remarks
4	Analog or HDMI to HDMI (signal) Path fig.4	Video Convert(IP Scaler) : ON, All Sources IP Scaler : Analog & HDMI , All Sources Resolution : "AUTO", All Sources Display: U02 DVD	1.Press [AMP] 2.Press [ZONE SELECT] , Select "ZONE2" 3.Press [ZONE OFF] 4.Press [ZONE SELECT], Select "ZONE3" 5.Press [ZONE OFF] 6.Press [ZONE SELECT], Select "MAIN" 7.Press [2/ABC] 8.Press [DVD]	①ZONE2 POWER OFF ②ZONE3 POWER OFF ③KEY 2/ABC (Main Zone) Initialization & Video Convert All ON & IP Scaler "Analog & HDMI" ④DVD (Main Zone)	·Input CVBS / Through : IP Scaler / Output : HDMI ·Input S-VIDEO / Through : IP Scaler / Output : HDMI ·Input Component / Through : IP Scaler / Outpu : HDMI ·Input HDMI / Through : IP Scaler / Outpu : HDMI (※ As the input source, you can switch from DVD to other ones.)	Confirm the input pass one by one. Because it becomes only the input of the highest input becomes Convert/IP Scaler (signal) Path if it inputs it at the same time. (HDMI input > Component input > S-VIDEO input > CVBS input)
5	OSD FUNCTION fig.5	Video Convert(IP Scaler) : ON, All Sources IP Scaler : Analog & HDMI , All Sources Resolution : "AUTO", All Sources Menu : ON All ZONE :ON Display: U02 DVD	1.Press [AMP] 2.Press [ZONE SELECT] , Select "ZONE2" 3.Press [ZONE OFF] 4.Press [ZONE SELECT], Select "ZONE3" 5.Press [ZONE OFF] 6.Press [ZONE SELECT], Select "MAIN" 7.Press [2/ABC] 8.Press [ZONE SELECT], Select "ZONE2" 9.Press [ZONE ON] 10.Press [ZONE SELECT], Select "ZONE3" 11.Press [ZONE ON] 12.Press [ZONE SELECT], Select "MAIN" 13.Press [DVD] 14.Press [AMP] 15.Press [MENU] 16.Press [ZONE SELECT], Select "ZONE2" 17.Press [MENU]	①ZONE2 POWER OFF ②ZONE3 POWER OFF ③KEY 2/ABC (Main Zone) Initialization &VideoConvert All ON & IP Scaler"Analog&HDMI" ④ZONE2 POWER ON ⑤ZONE3 POWER ON ⑥DVD (Main Zone) ⑦GUI MENU (Main Zone) ⑧ZONE2 MENU	·OSD Display / Output : CVBS ·OSD Display / Output : CVBS ZONE2 ·OSD Display / Output : Component ·OSD Display / Output : HDMI (※ As the input source, you can switch from DVD to other ones.)	Connect HDMI Monitor OUT / Output : OSD from HDMI No connect HDMI Monitor OUT / Output : OSD from Component No output other terminal. ※ AVR2311/3311 are nothing ZONE2 OSD
6	CEC FUNCTION (Control Monitor : HDMI Monitor1) fig.6	HDMI Control : ON Control Monitor Monitor1 (When checking the HDMI Monitor Out1) Display: U03 DVD	1.Press [AMP] 2.Press [ZONE SELECT] , Select "ZONE2" 3.Press [ZONE OFF] 4.Press [ZONE SELECT], Select "ZONE3" 5.Press [ZONE OFF] 6.Press [ZONE SELECT], Select "MAIN" 7.Press [3/DEF] 8.Press [DVD]	①ZONE2 POWER OFF ②ZONE3 POWER OFF ③KEY 3/DEF (Main Zone) Initialization & CEC Control ON & Select Control Monitor 1 ④DVD (Main Zone)	·When the power supply of a TV is put in the standby mode, make sure that the power supply of this unit is also put in the standby mode. (※ As the input source, you can switch from DVD to other ones.)	
8	HDMI Audio (signal) Path (Audio : AMP) fig.8	Audio : AMP(When checking the audio output from AMP) Display: U05 DVD	1.Press [AMP] 2.Press [ZONE SELECT] , Select "ZONE2" 3.Press [ZONE OFF] 4.Press [ZONE SELECT], Select "ZONE3" 5.Press [ZONE OFF] 6.Press [ZONE SELECT], Select "MAIN" 7.Press [5/JKL] 8.Press [DVD]	①ZONE2 POWER OFF ②ZONE3 POWER OFF ③KEY 5/JKL (Main Zone) Initialization & Select Audio AMP ④DVD (Main Zone)	·Input : HDMI (Signal of PCM, DolbyDigital or DTS) / Output : Speakers ·Input : HDMI (Signal of HD Audio) / Output : Speakers (※ As the input source, you can switch from DVD to other ones.)	
9	HDMI Audio (signal) Path (Audio : TV) fig.9	Audio : TV(When checking the audio output from TV) Display: U06 DVD	1.Press [AMP] 2.Press [ZONE SELECT] , Select "ZONE2" 3.Press [ZONE OFF] 4.Press [ZONE SELECT], Select "ZONE3" 5.Press [ZONE OFF] 6.Press [ZONE SELECT], Select "MAIN" 7.Press [6/MNO] 8.Press [DVD]	①ZONE2 POWER OFF ②ZONE3 POWER OFF ③KEY 6/MNO (Main Zone) Initialization & Audio Select TV ④DVD (Main Zone)	·Input : HDMI (Signal of PCM or DolbyDigital or DTS) / Output : HDMI (Audio output from connected TV) (※ As the input source, you can switch from DVD to other ones.)	

3.5. Audio system confirmation items

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

Confirmation item		Setting and display	Details of how to operate remote controller	Output sequence of remote control codes ※ It is useful to form a macro program.	Contents of confirmation	Remarks
1	Analog (signal) Path	Input Mode : Fixed ANALOG SURROUND mode : DIRECT Amp assign : NORMAL Display: A 0 1 D V D	1.Press [AMP]	①ZONE2 POWER OFF	·Input : Analog / Output : Speakers (Front L/R) ·Input : Analog / Output : Pre OUT(Front L/R) (※ As the input source, you can switch from DVD to other ones.)	
			2.Press [ZONE SELECT] , Select "ZONE2"			
			3.Press [ZONE OFF]			
			4.Press [ZONE SELECT], Select "ZONE3"	②ZONE3 POWER OFF		
2	DIGITAL (signal) Path (MAIN)	Input Mode : Fixed DIGITAL Amp assign : NORMAL Display: A 0 2 D V D	5.Press [ZONE OFF]		·Input : Digital / Output : Speakers (Front L/R) ·Input : Digital / Output : Pre OUT(Front L/R) (※ As the input source, you can switch from DVD to other ones.)	
			6.Press [ZONE SELECT], Select "MAIN"	③KEY 7/PQRS (Main Zone) Initialization & Amp assign NORMAL& Input Mode Fixed ANALOG & SURROUND mode DIRECT		
			7.Press [7/PQRS]			
			8.Press [DVD]	④DVD (Main Zone)		
3	DIGITAL (signal) Path (ZONE2)	Input Mode : Fixed DIGITAL Amp assign : ZONE2 ZONE2 Function : Source Display: A 0 3 D V D	1.Press [AMP]	①ZONE2 POWER OFF	·Input : Digital / Output : Speakers (SURR BACK L/R) ·Input : Digital / Output : Pre OUT(ZONE2 L/R) (※ As the input source, you can switch from DVD to other ones.)	only AV3311/991
			2.Press [ZONE SELECT] , Select "ZONE2"			
			3.Press [ZONE OFF]			
			4.Press [ZONE SELECT], Select "ZONE3"	②ZONE3 POWER OFF		
4	DIGITAL (signal) Path (ZONE3)	Input Mode : Fixed DIGITAL Amp assign : ZONE3 ZONE3 Function : Source Display: A 0 4 D V D	5.Press [ZONE OFF]		·Input : Digital / Output : Speakers (SURR BACK L/R) ·Input : Digital / Output : Pre OUT(ZONE3 L/R) (※ As the input source, you can switch from DVD to other ones.)	only AVR3311
			6.Press [ZONE SELECT], Select "MAIN"	③KEY9/WXYZ (Main Zone) Initialization & Amp assign ZONE2 & Input Mode Fixed DIGITAL		
			7.Press [9/WXYZ]			
			8.Press [ZONE SELECT], Select "ZONE2"	④ZONE2 POWER ON		
5	HDMI (signal) Path	Input Mode : Fixed HDMI Amp assign : NORMAL Display: A 0 5 D V D	9.Press [ZONE ON]		·Input : HDMI / Output : Speakers (Front L/R) ·Input : HDMI / Output : Pre OUT(Front L/R) (※ As the input source, you can switch from DVD to other ones.)	
			10.Press [ZONE SELECT], Select "MAIN"	⑤DVD (Main Zone)		
			11.Press [DVD]			
			1.Press [AMP]	①ZONE2 POWER OFF		
5	HDMI (signal) Path	Input Mode : Fixed HDMI Amp assign : NORMAL Display: A 0 5 D V D	2.Press [ZONE SELECT] , Select "ZONE2"		·Input : HDMI / Output : Speakers (Front L/R) ·Input : HDMI / Output : Pre OUT(Front L/R) (※ As the input source, you can switch from DVD to other ones.)	
			3.Press [ZONE OFF]			
			4.Press [ZONE SELECT], Select "ZONE3"	②ZONE3 POWER OFF		
			5.Press [ZONE OFF]			
5	HDMI (signal) Path	Input Mode : Fixed HDMI Amp assign : NORMAL Display: A 0 5 D V D	6.Press [ZONE SELECT], Select "MAIN"	③MULTEQ Select Initialization &Amp assign NORMAL & Input Mode Fixed HDMI	·Input : HDMI / Output : Speakers (Front L/R) ·Input : HDMI / Output : Pre OUT(Front L/R) (※ As the input source, you can switch from DVD to other ones.)	
			7.Press [MULTEQ]			
			8.Press [DVD]	④DVD (Main Zone)		

	Confirmation item	Setting and display	Details of how to operate remote controller	Output sequence of remote control codes ※ It is useful to form a macro program.	Contents of confirmation	Remarks
6	A/D (signal) Path (Main Zone) fig.15	Amp assign : NORMAL SURROUND mode : Multi ch STEREO Vol -20dB Speaker Config : SSSSY (Front/Center/Surround/SourroundBack : Small, SW : Yes) Display: A 0 6 [] [] [] D V D [] [] [] [] 	1.Press [AMP] 2.Press [ZONE SELECT] , Select "ZONE2" 3.Press [ZONE OFF] 4.Press [ZONE SELECT], Select "ZONE3" 5.Press [ZONE OFF] 6.Press [ZONE SELECT], Select "MAIN" 7.Press [DYN EQ/VOL]	①ZONE2 POWER OFF ②ZONE3 POWER OFF ③DYNAMIC EQ/VOLUME Initialization &Amp assign NORMAL & SURROUND mode : Multi ch STEREO & Volume -20dB ④DVD (Main Zone)	·Input : Analog / Output : Speakers (Front L/R) ·Input : Analog / Output : Pre OUT(Front L/R), SW(20Hz) (※ As the input source, you can switch from DVD to other ones.)	
7	Amp Assign (signal) Path (Amp Assign : ZONE2) fig.16	Amp assign : ZONE2 ZONE2 Function : Source Zone2 Vol -20dB Display: A 0 7 [] [] [] D V D [] [] [] [] 	1.Press [AMP] 2.Press [ZONE SELECT] , Select "ZONE2" 3.Press [ZONE OFF] 4.Press [ZONE SELECT], Select "ZONE3" 5.Press [ZONE OFF] 6.Press [ZONE SELECT], Select "MAIN" 7.Press [A-DSX]	①ZONE2 POWER OFF ②ZONE3 POWER OFF ③Audyssey DSX ON/OFF Initialization & Amp assign ZONE2 & SURROUND mode : Multi ch STEREO & ZONE2 Volume -20dB ④ZONE2 POWER ON ⑤DVD (Main Zone)	·Input : Analog / Output : Speakers (SURREAR BACK L/R) ·Input : Analog / Output : Pre OUT (ZONE2 L/R) (※ As the input source, you can switch from DVD to other ones.)	
8	Amp Assign (signal) Path (Amp Assign : ZONE3) fig.17	Amp assign : ZONE3 SURROUND mode : Multi ch STEREO Zone3 Vol -20dB Display: A 0 8 [] [] [] D V D [] [] [] [] 	1.Press [AMP] 2.Press [ZONE SELECT] , Select "ZONE2" 3.Press [ZONE OFF] 4.Press [ZONE SELECT], Select "ZONE3" 5.Press [ZONE OFF] 6.Press [ZONE SELECT], Select "MAIN" 7.Press [RESTORER]	①ZONE2 POWER OFF ②ZONE3 POWER OFF ③AUDIO RESTORER Initialization & Amp assign ZONE3 & SURROUND mode : Multi ch STEREO & ZONE3 Volume -20dB ④ZONE3 POWER ON ⑤DVD (Main Zone)	·Input : Analog / Output : Speakers (SURREAR BACK L/R) ·Input : Analog / Output : Pre OUT (ZONE3 L/R) (※ As the input source, you can switch from DVD to other ones.)	only AVR3311
9	Amp Assign (signal) Path (Amp Assign : ZONE2/ZONE3-MONO) fig.18	Amp assign : ZONE2/ZONE3-MONO SURROUND mode : Multi ch STEREO ZONE2 Vol -20dB ZONE3 Vol -20dB Display: A 0 9 [] [] [] D V D [] [] [] [] 	1.Press [AMP] 2.Press [ZONE SELECT] , Select "ZONE2" 3.Press [ZONE OFF] 4.Press [ZONE SELECT], Select "ZONE3" 5.Press [ZONE OFF] 6.Press [ZONE SELECT], Select "MAIN" 7.Press [STANDARD]	①ZONE2 POWER OFF ②ZONE3 POWER OFF ③STANDARD Initialization & Amp assign ZONE2/ZONE3- MONO & SURROUND mode : Multi ch STEREO & ZONE2 Volume -20dB & ZONE3 Volume -20dB ④ZONE2 POWER ON ⑤ZONE3 POWER ON ⑥DVD (Main Zone)	·Input : Analog / Output : Speakers (SURREAR BACK L/R) ·Input : Analog / Output : Pre OUT (ZONE2 L/R) ·Input : Analog / Output : Pre OUT (ZONE3 L/R) (※ As the input source, you can switch from DVD to other ones.)	only AVR3311

fig.16

fig.17

fig.18

BLOCK DIAGRAM

fig.1

VIDEO BLOCK DIAGRAM

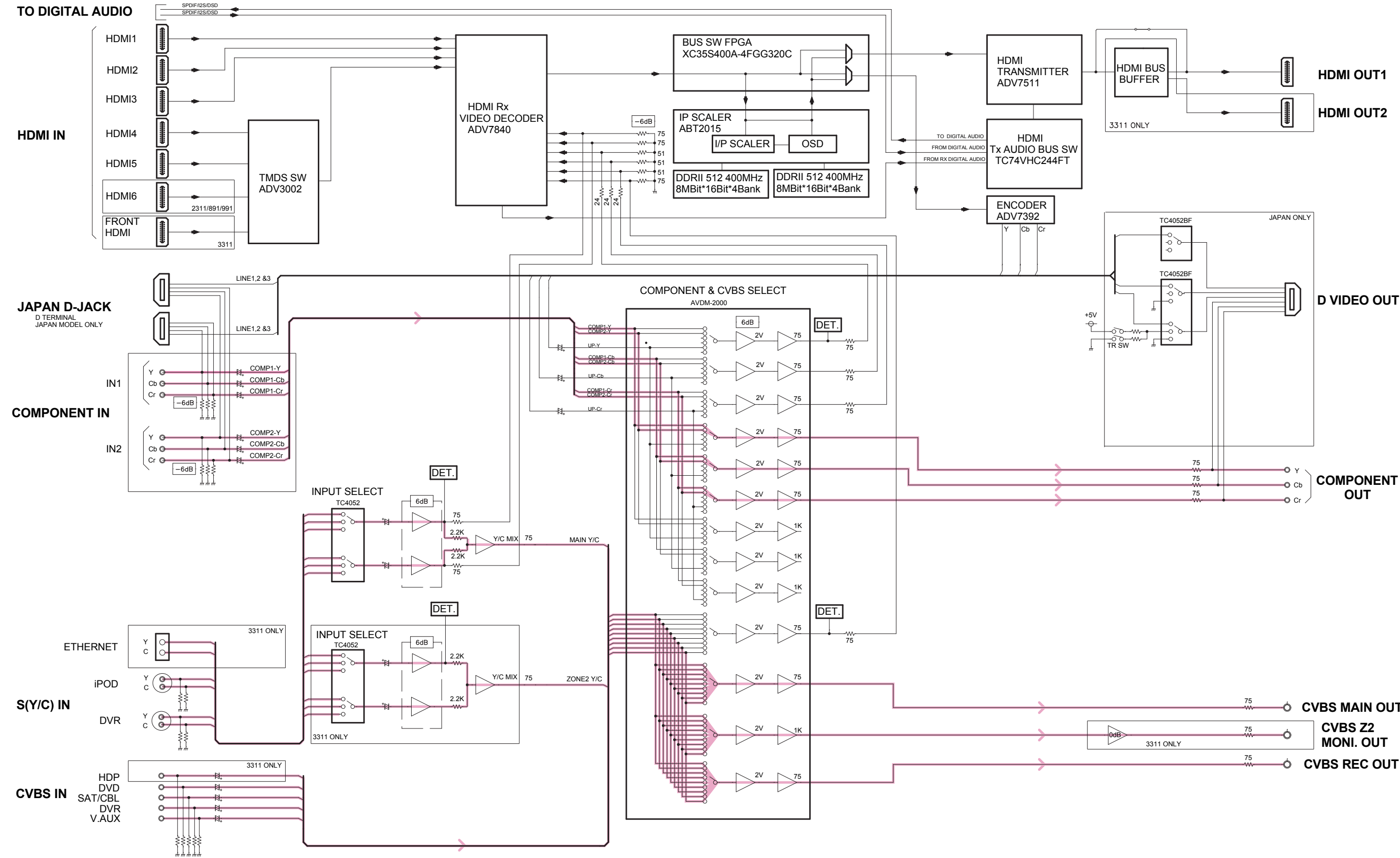


fig.2

VIDEO BLOCK DIAGRAM

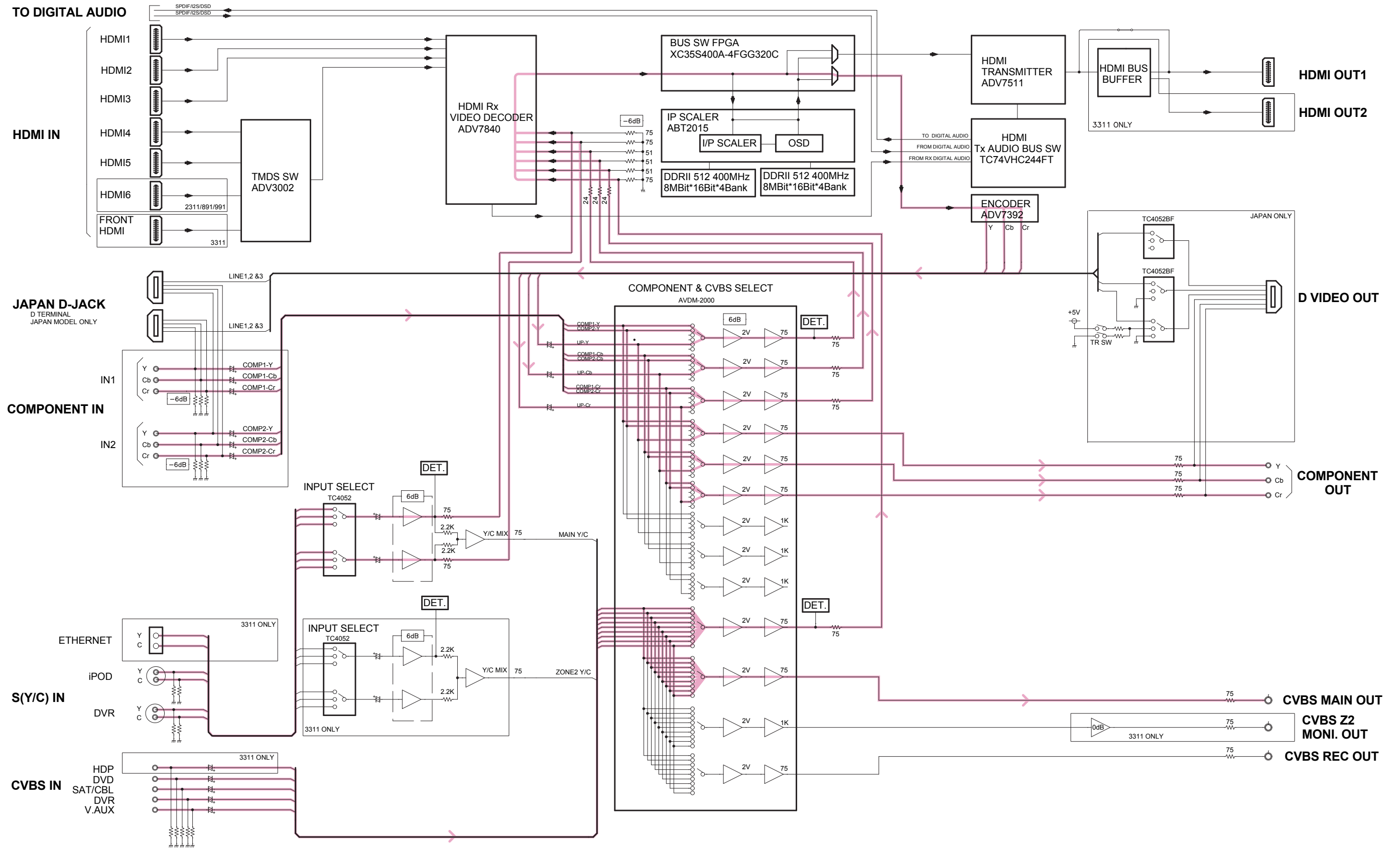


fig.3

VIDEO BLOCK DIAGRAM

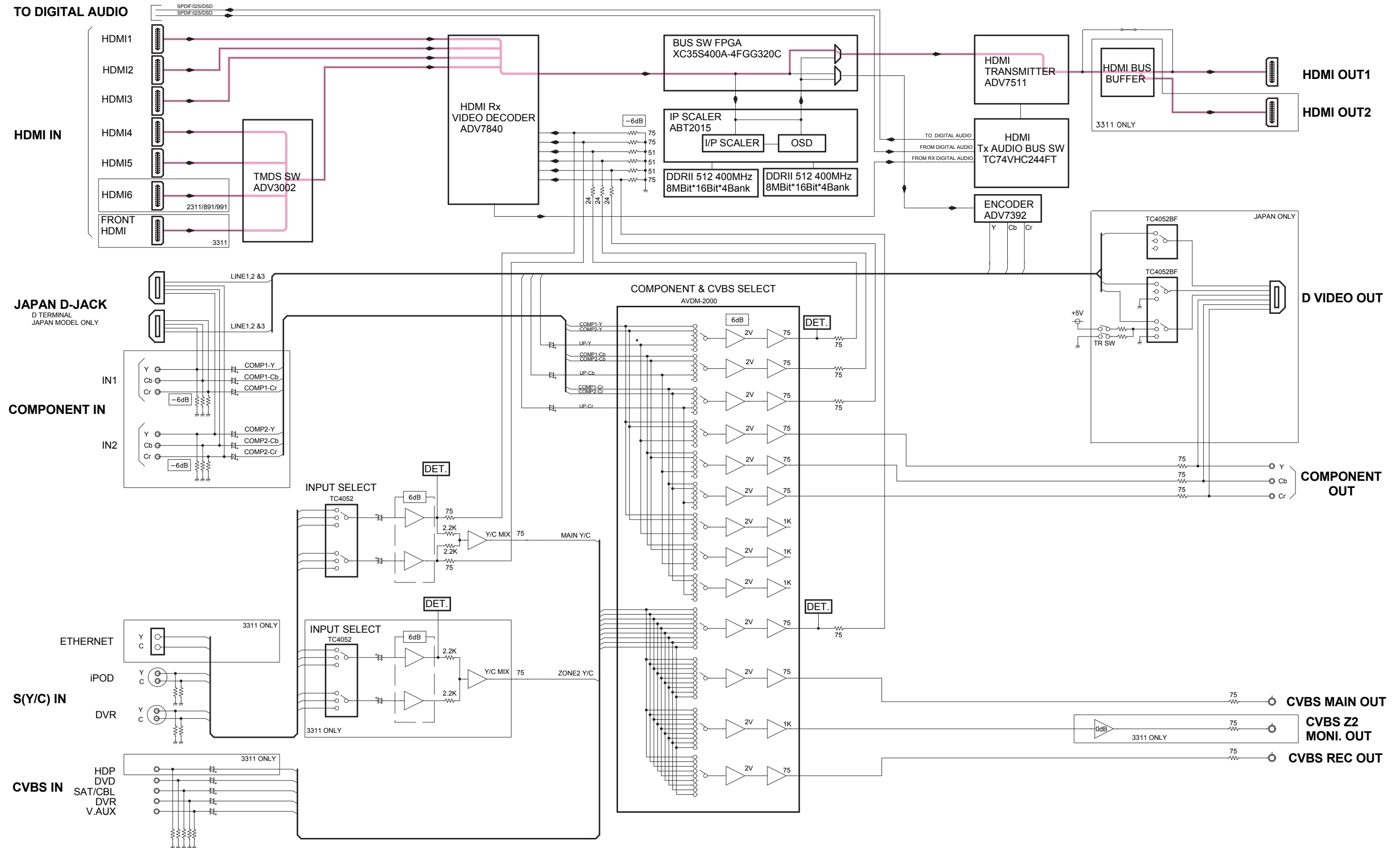


fig.4

VIDEO BLOCK DIAGRAM

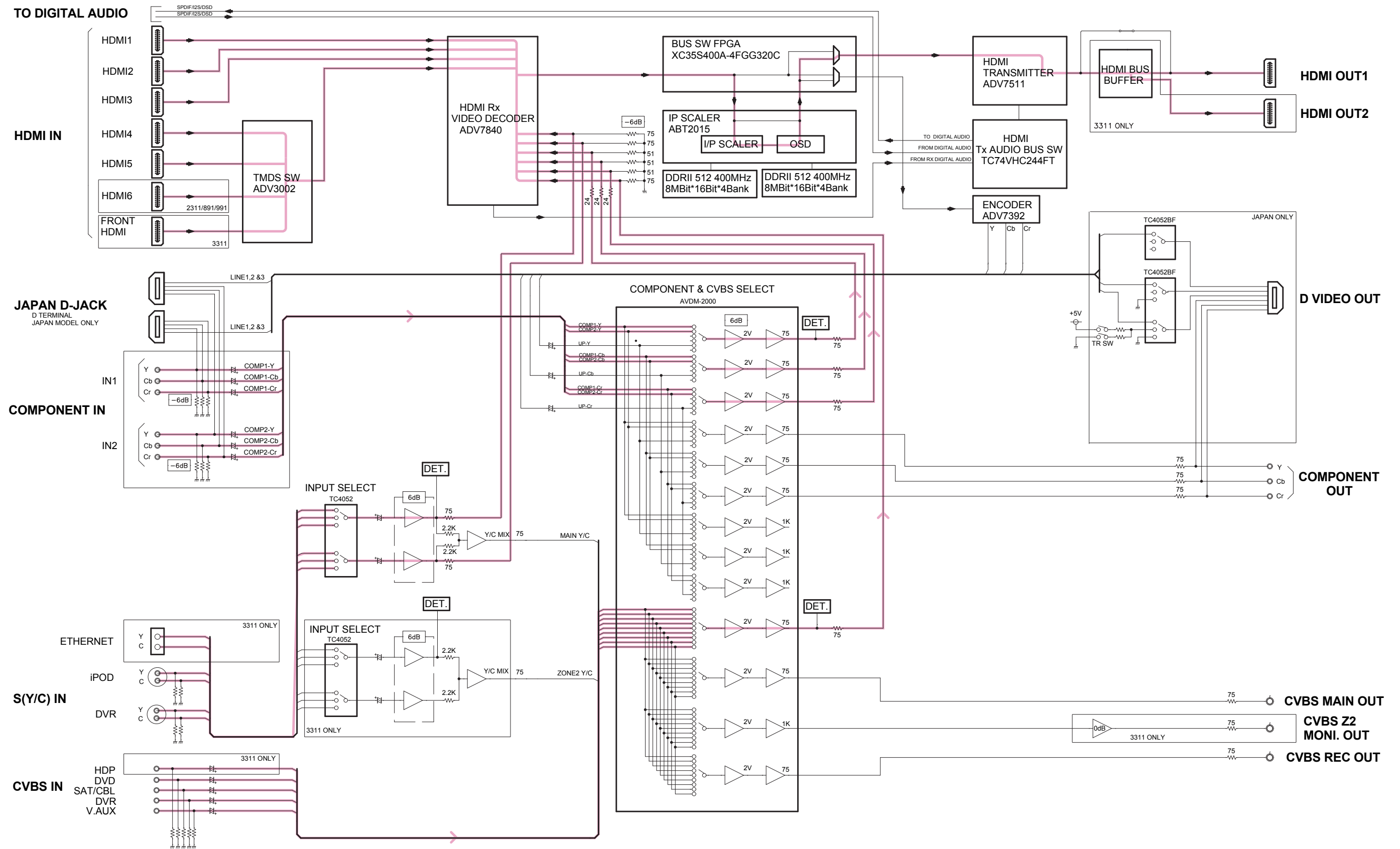


fig.5

VIDEO BLOCK DIAGRAM

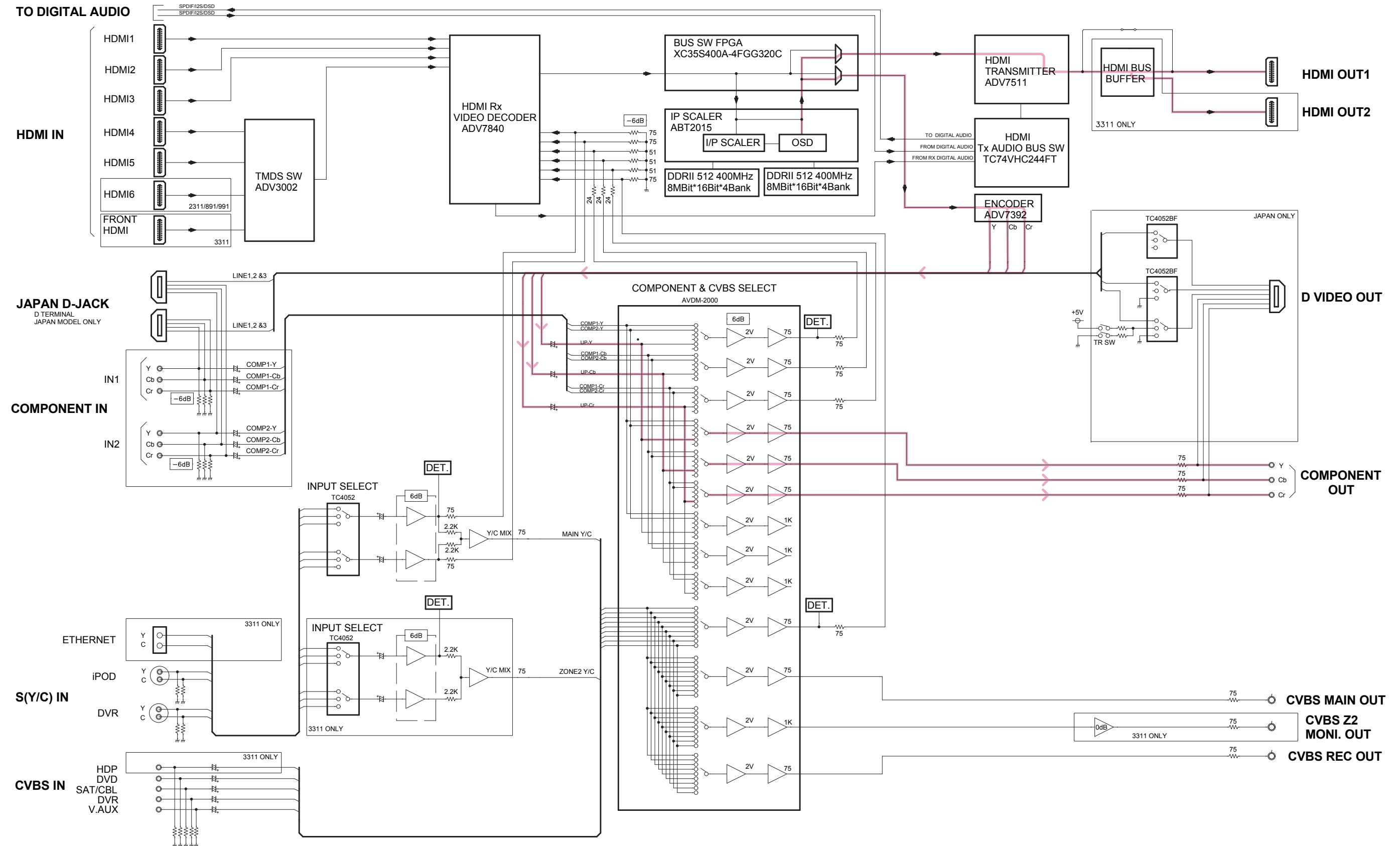


fig.6

VIDEO BLOCK DIAGRAM

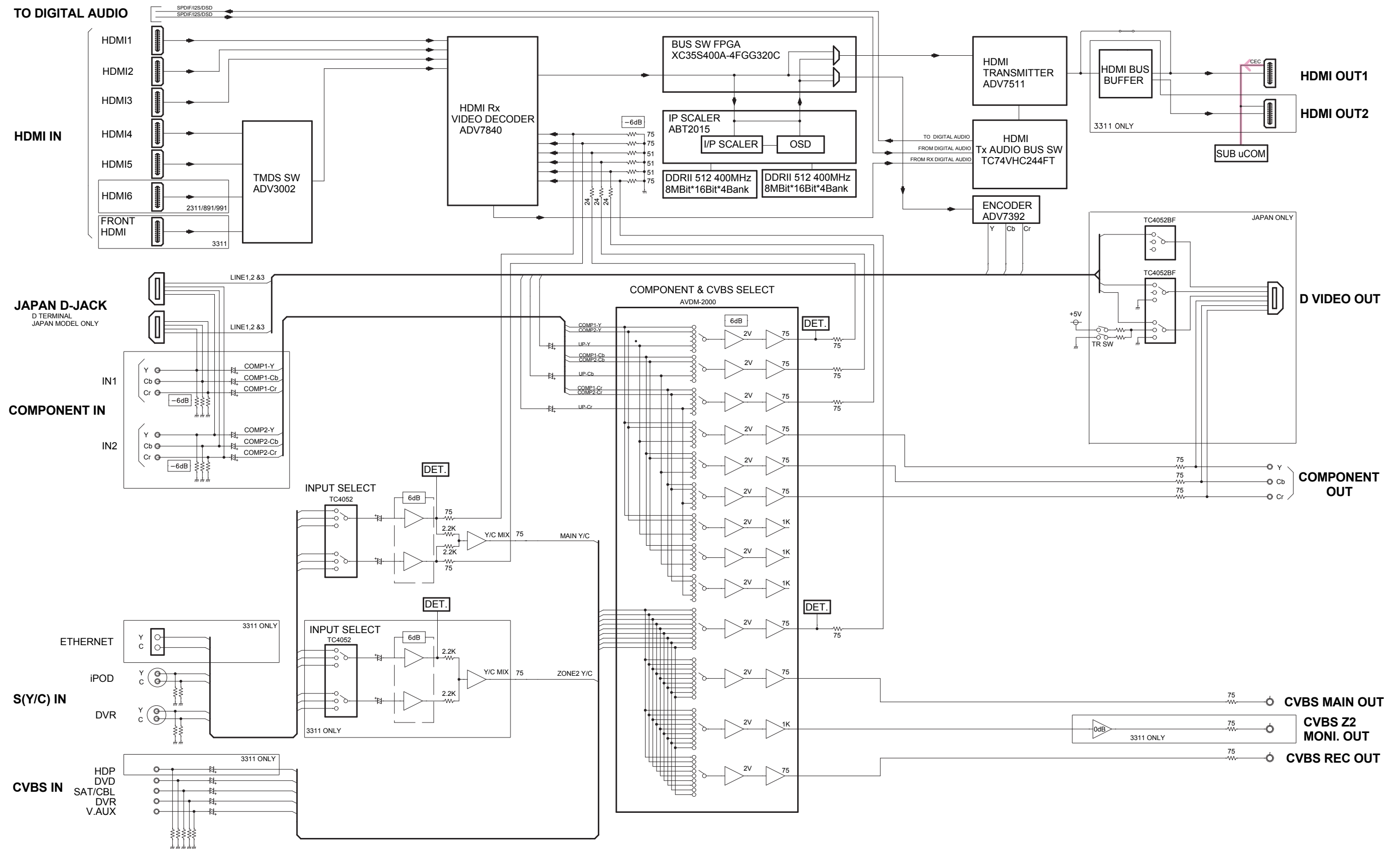


fig.8

AUDIO BLOCK DIAGRAM

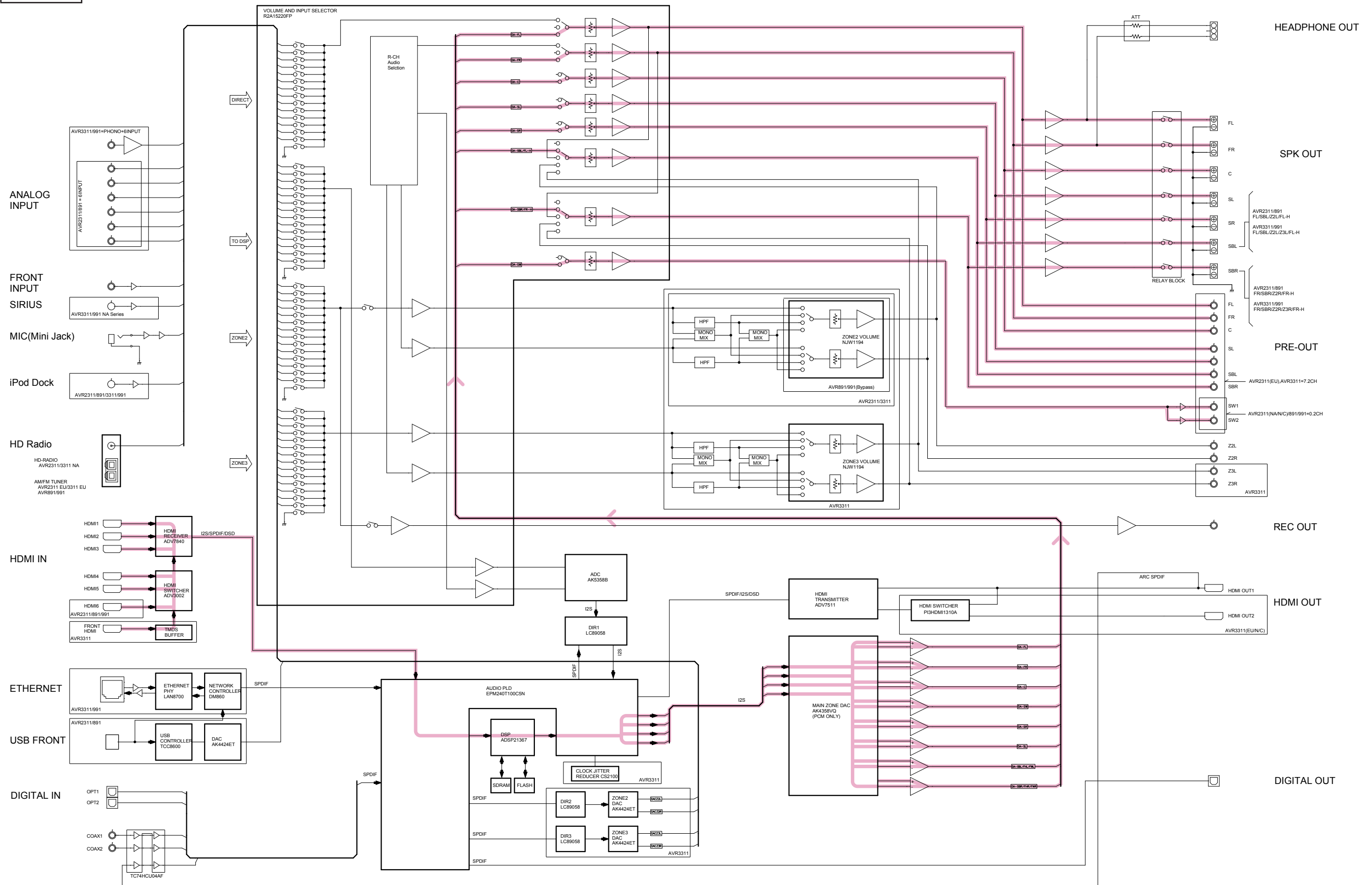


fig.9

AUDIO BLOCK DIAGRAM

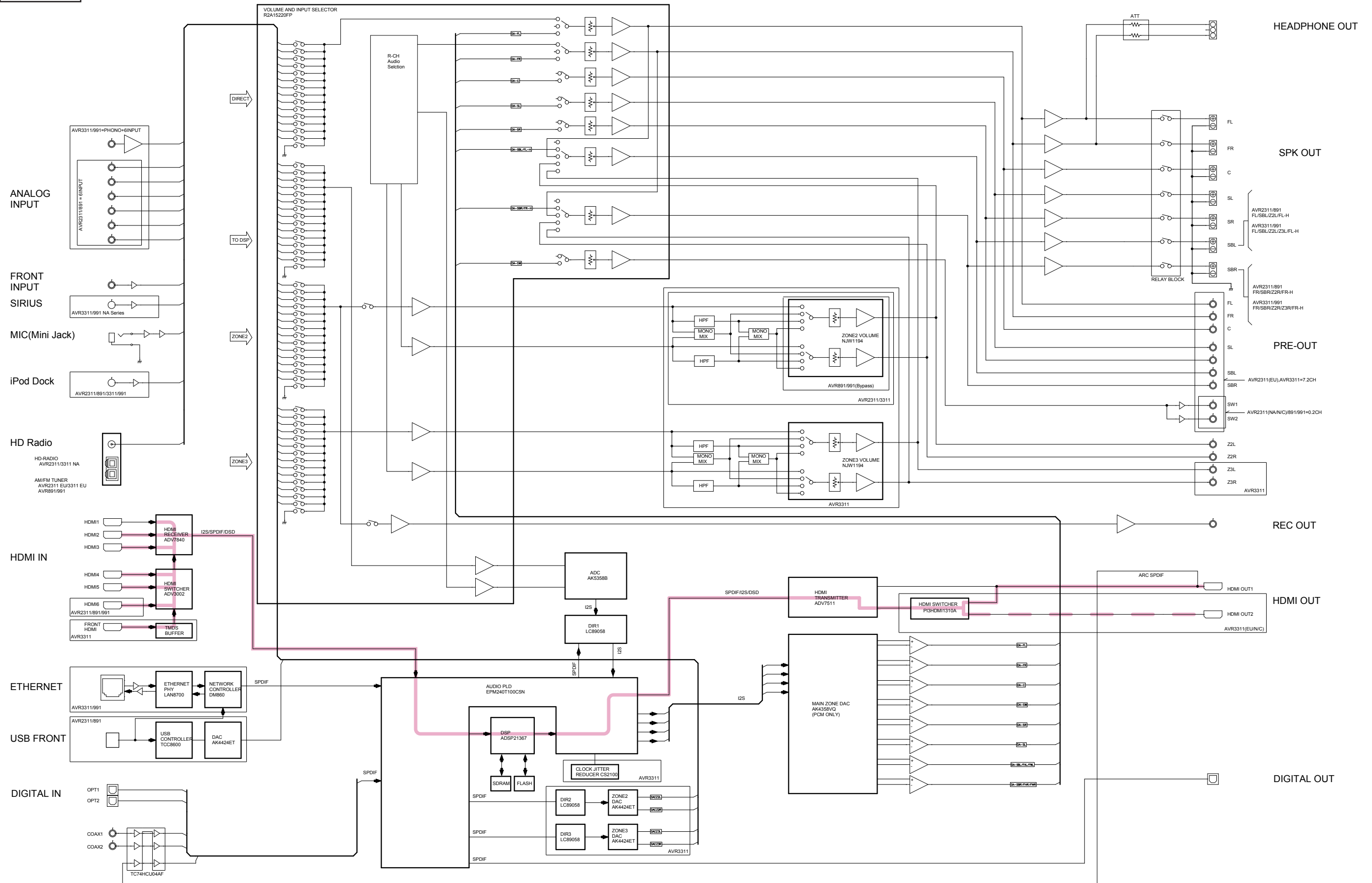


fig.10

AUDIO BLOCK DIAGRAM

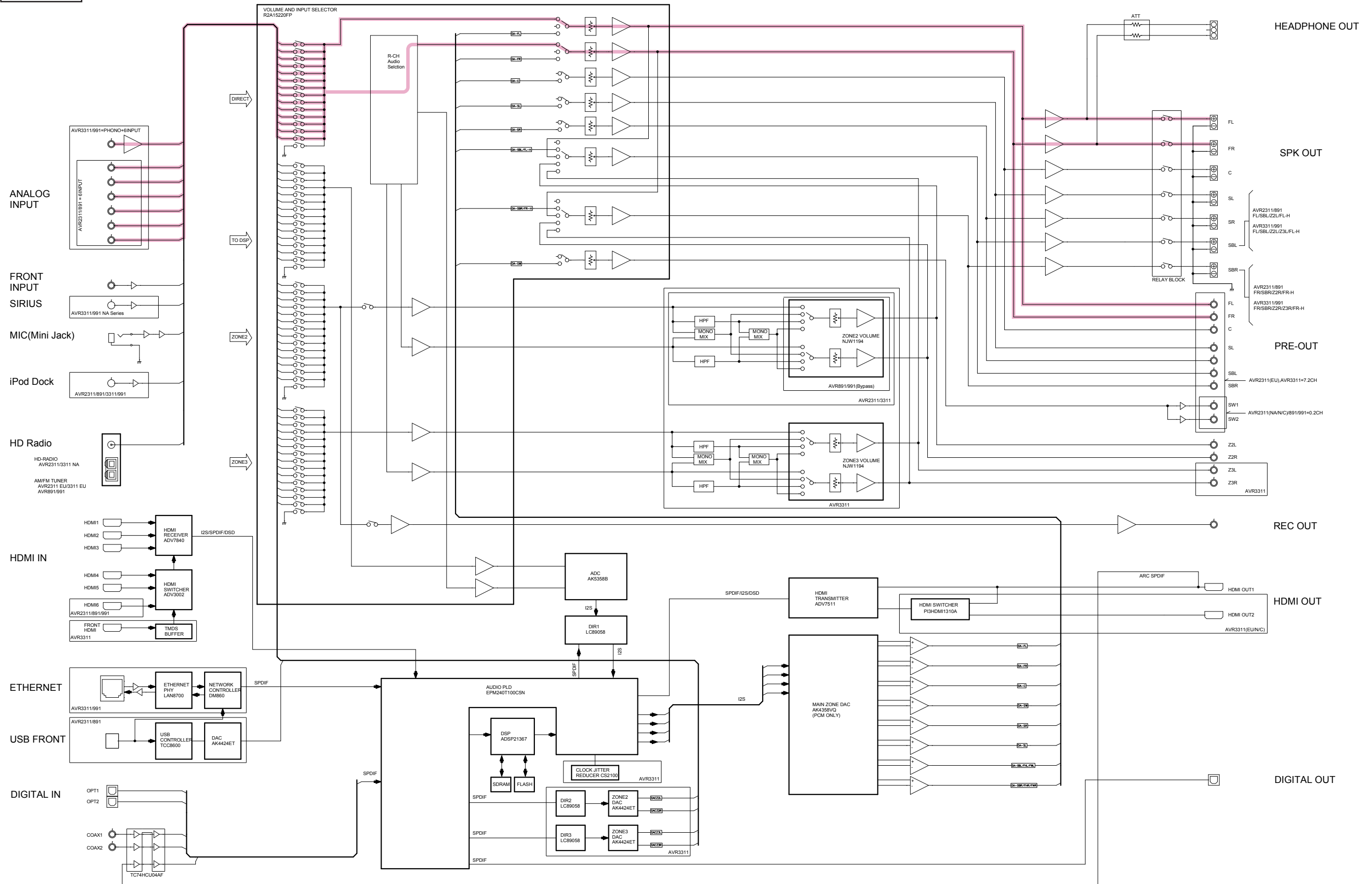


fig.11

AUDIO BLOCK DIAGRAM

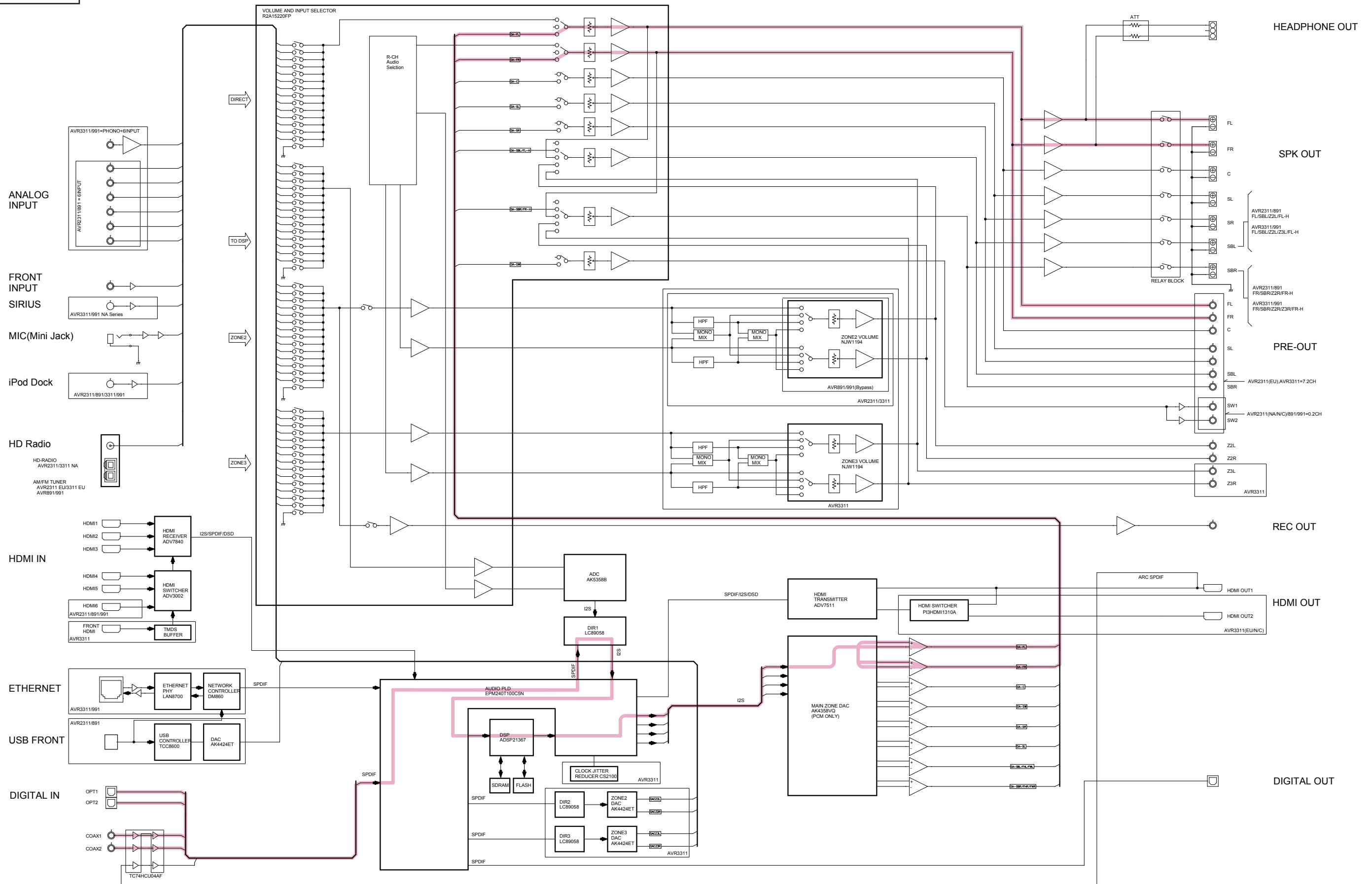


fig.12

AUDIO BLOCK DIAGRAM

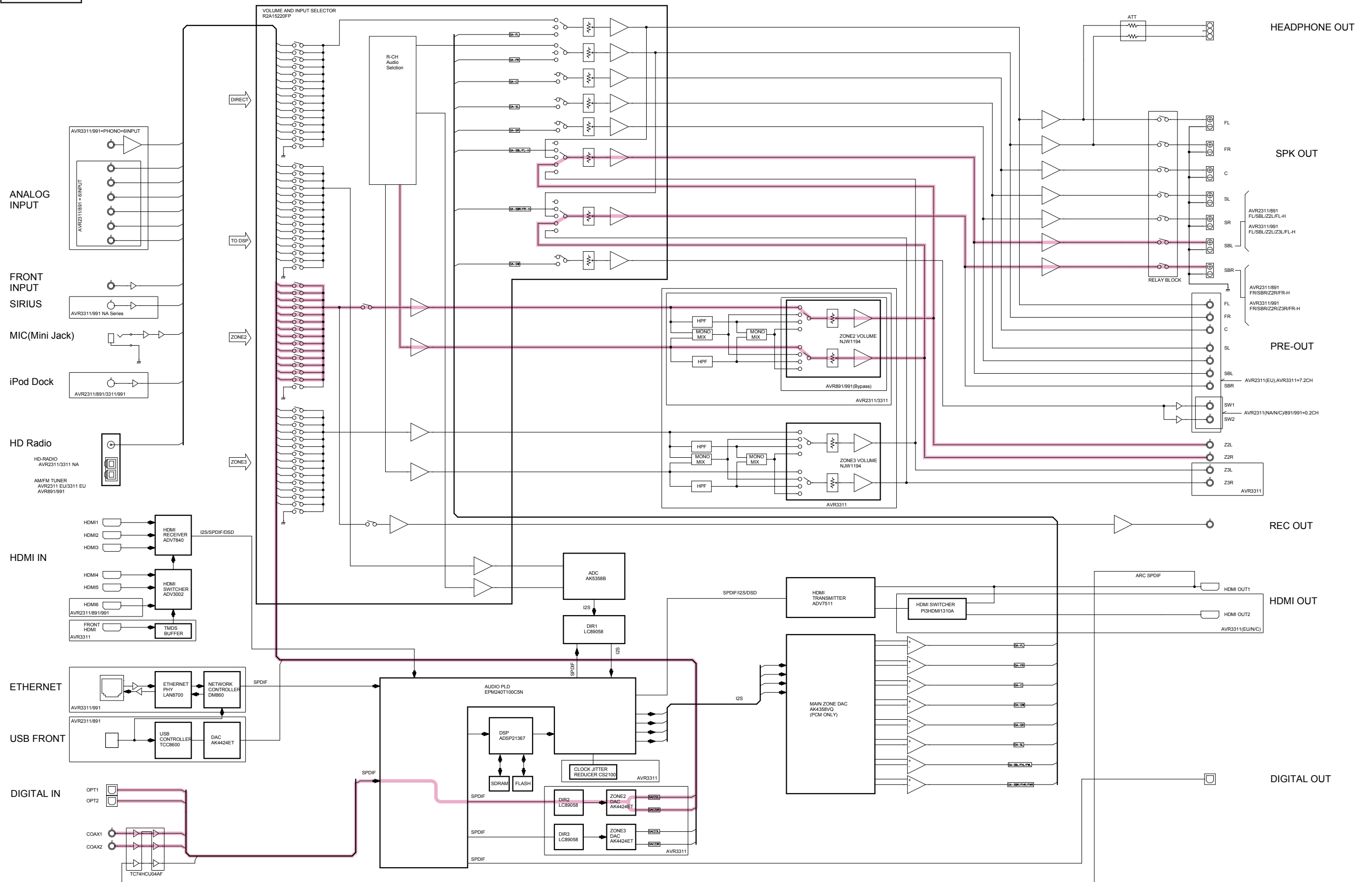


fig.13

AUDIO BLOCK DIAGRAM

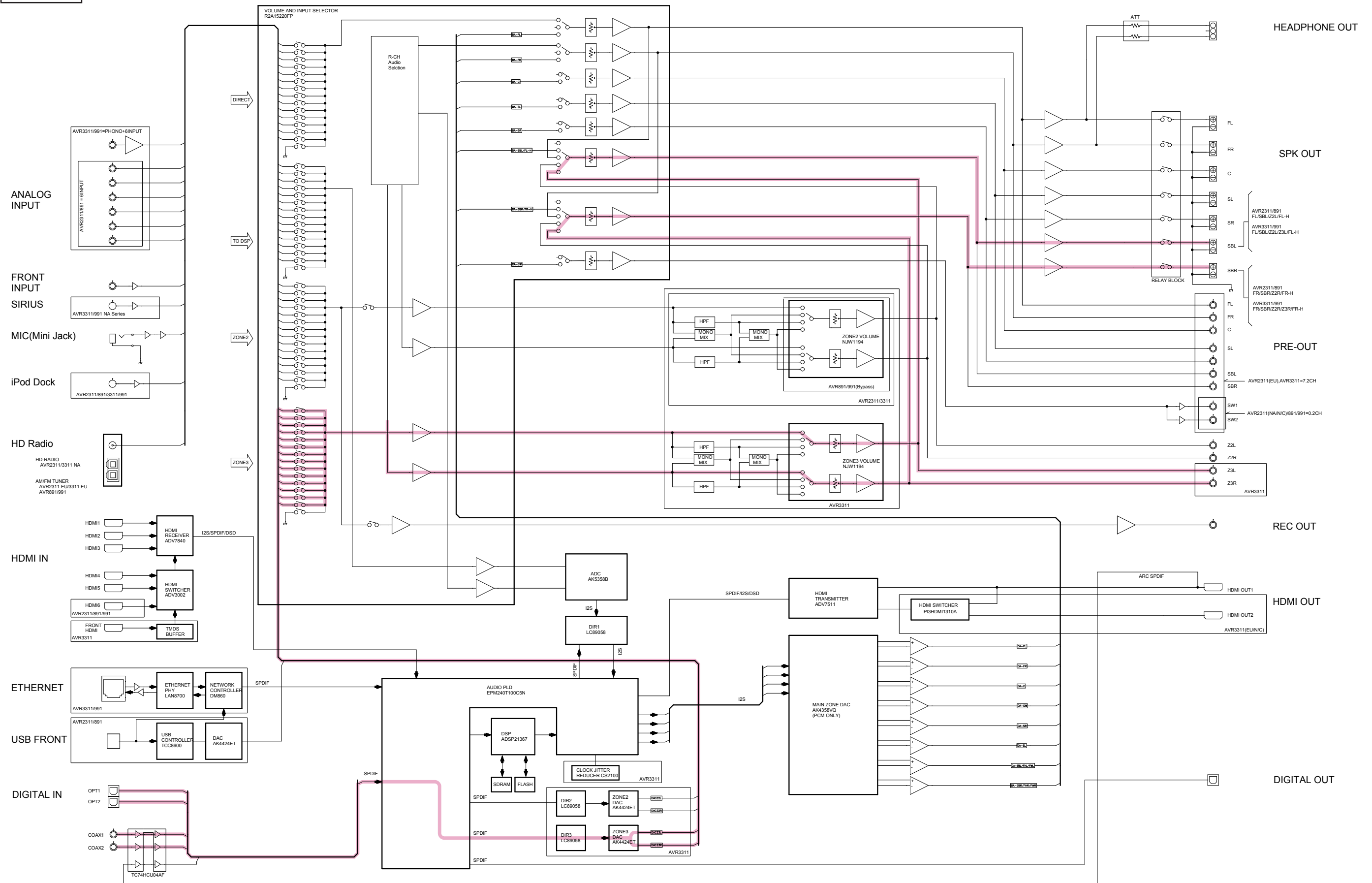


fig.14

AUDIO BLOCK DIAGRAM

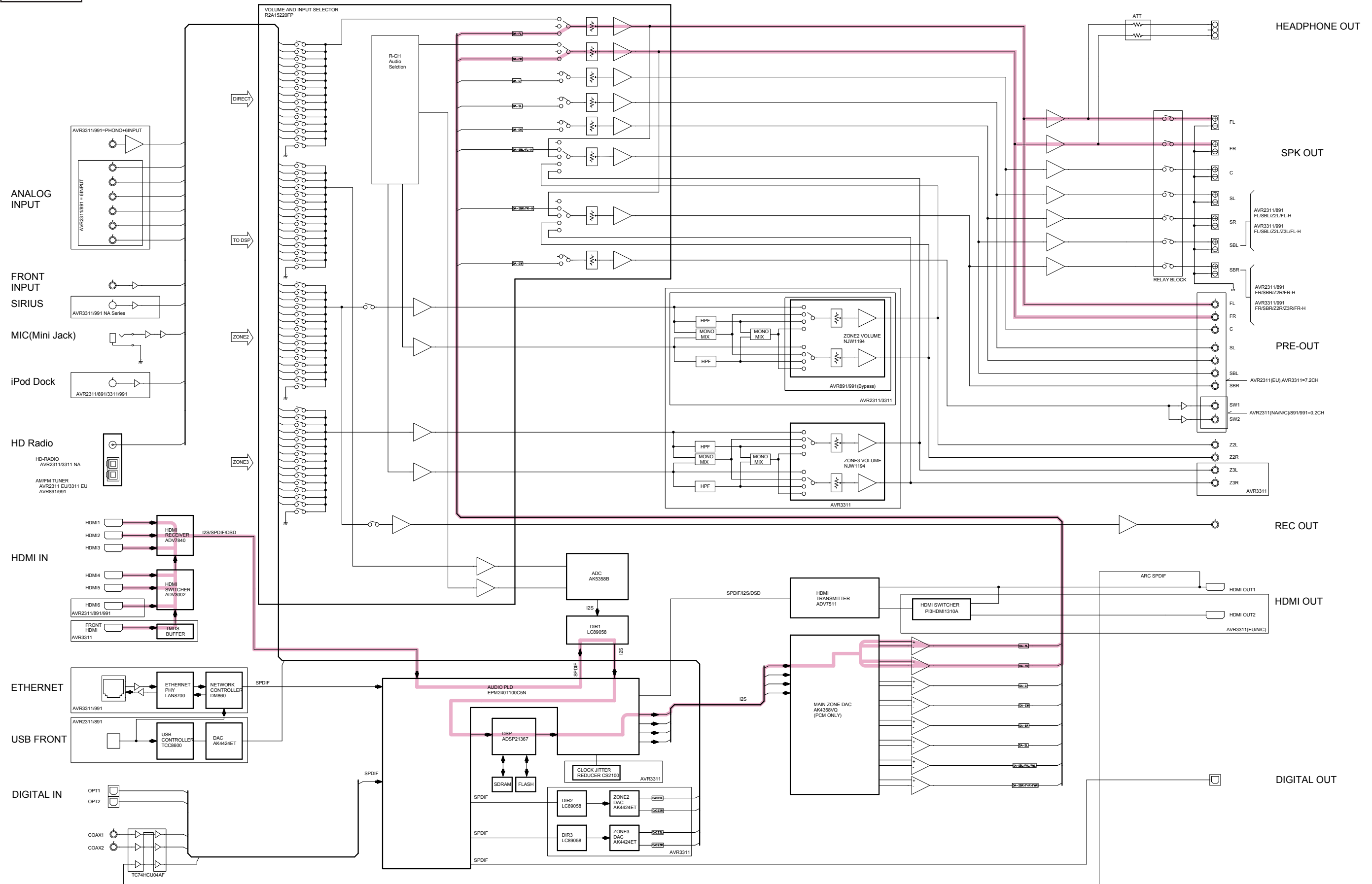


fig.15

AUDIO BLOCK DIAGRAM

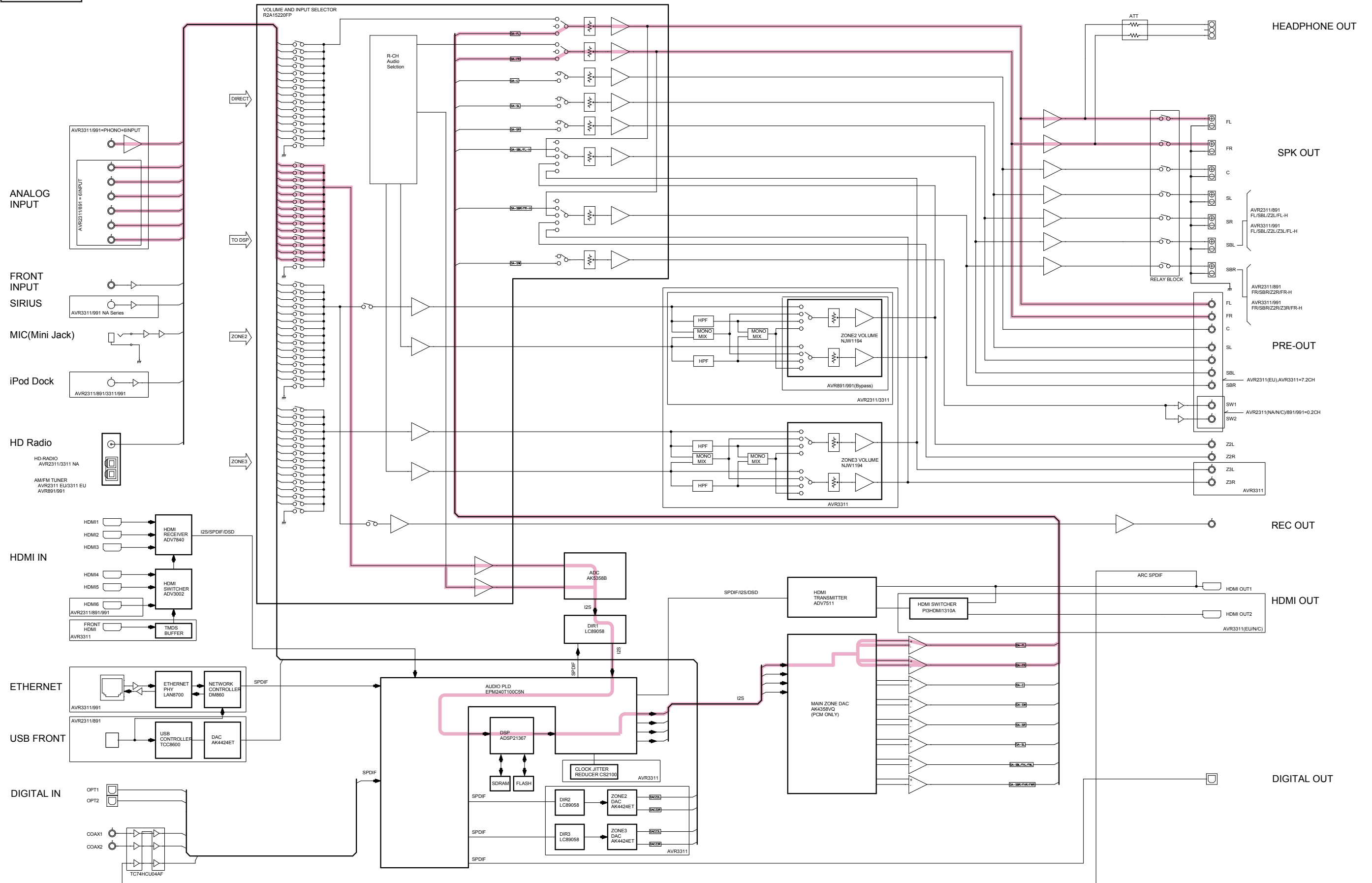


fig.16

AUDIO BLOCK DIAGRAM

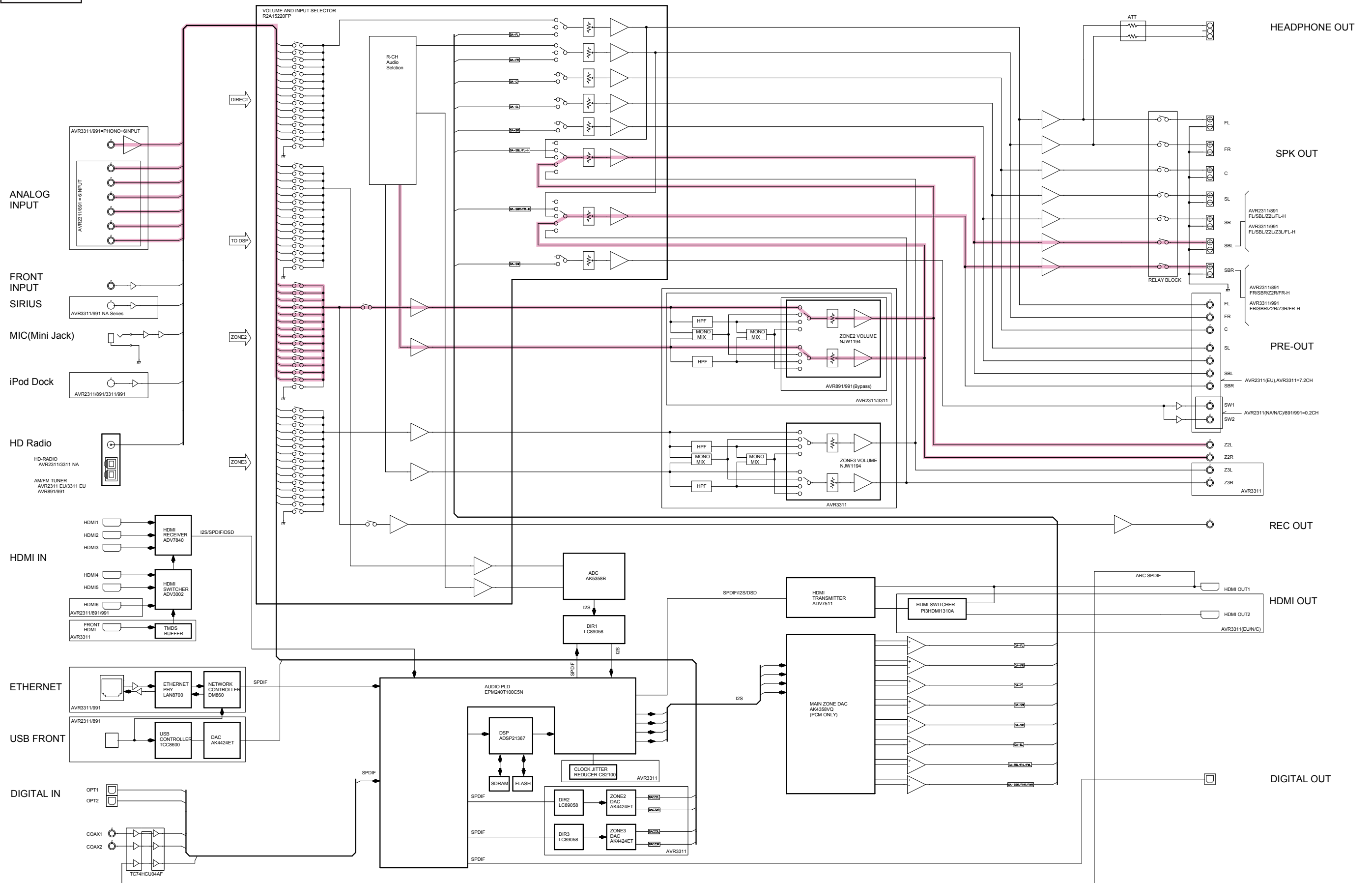


fig.17

AUDIO BLOCK DIAGRAM

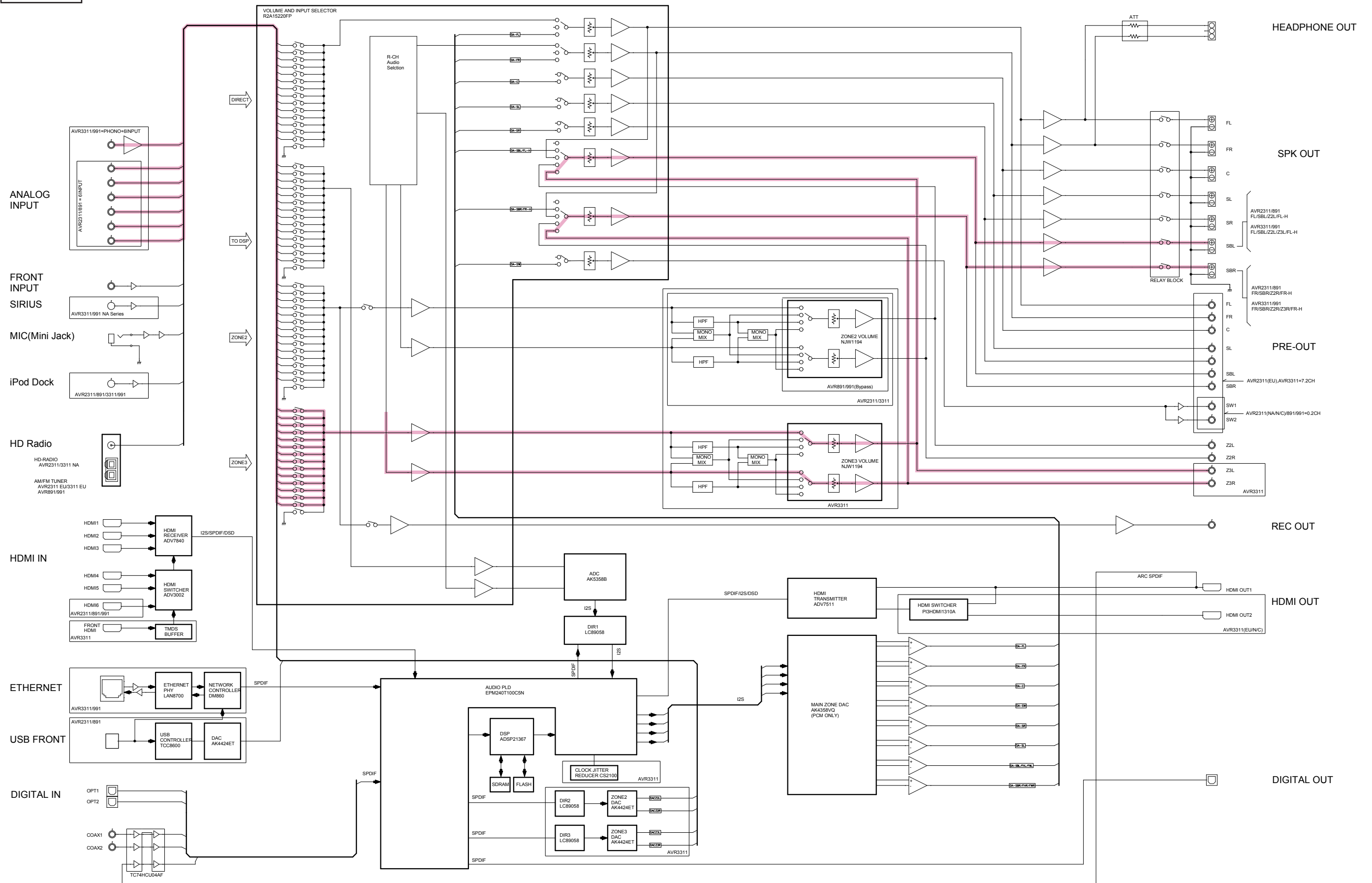


fig.18

AUDIO BLOCK DIAGRAM

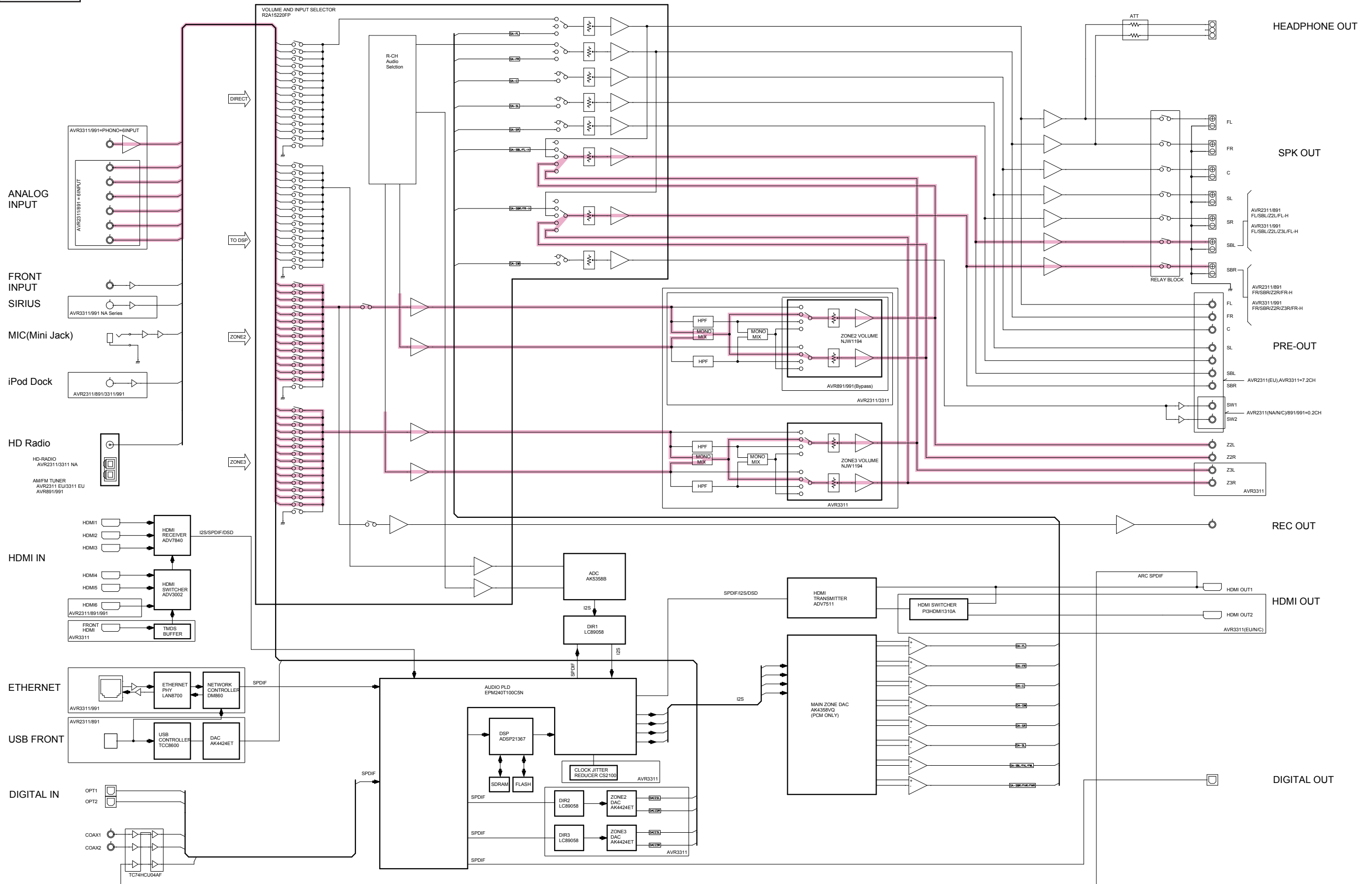


fig.19,20,21

AUDIO BLOCK DIAGRAM

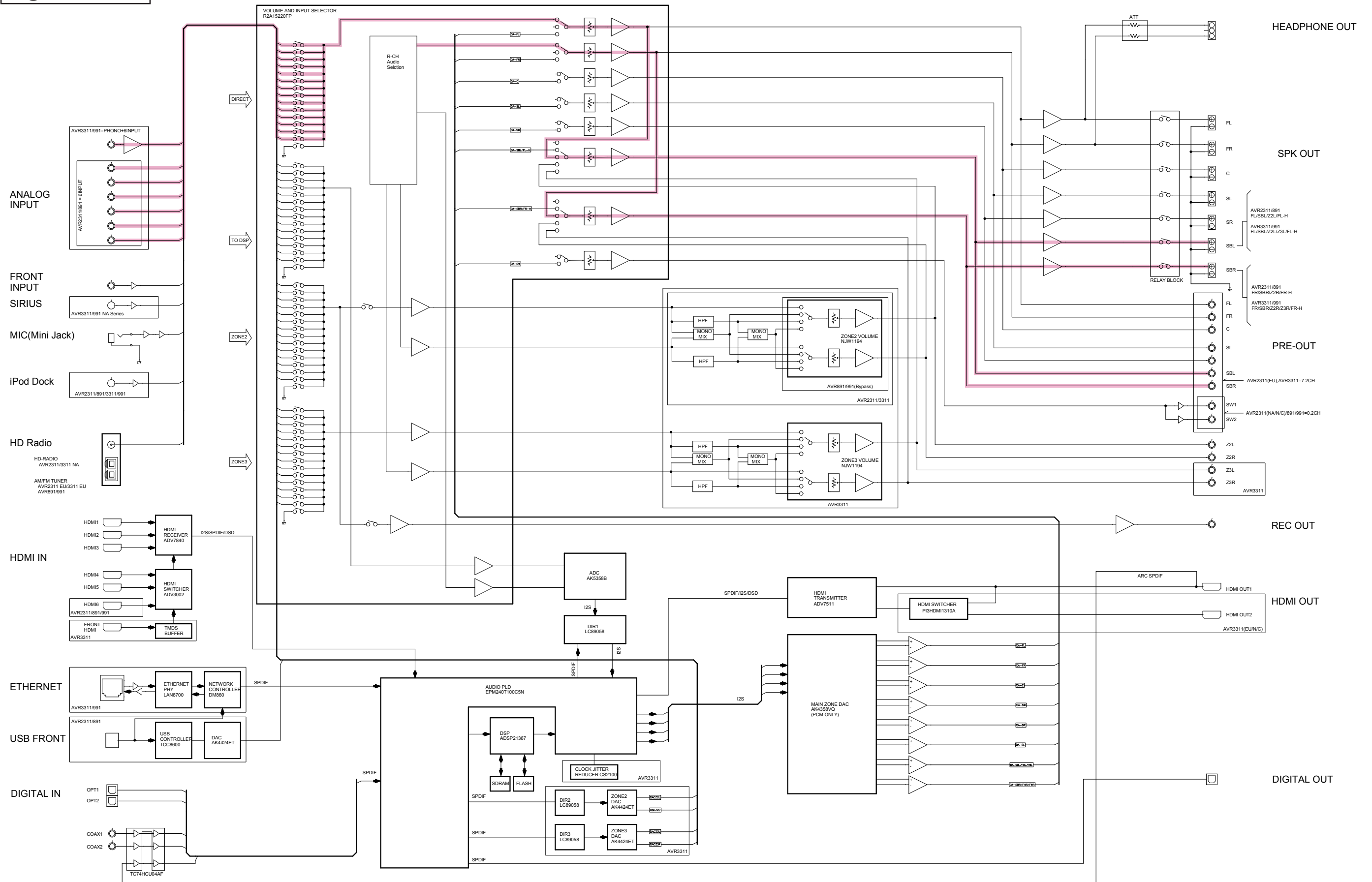
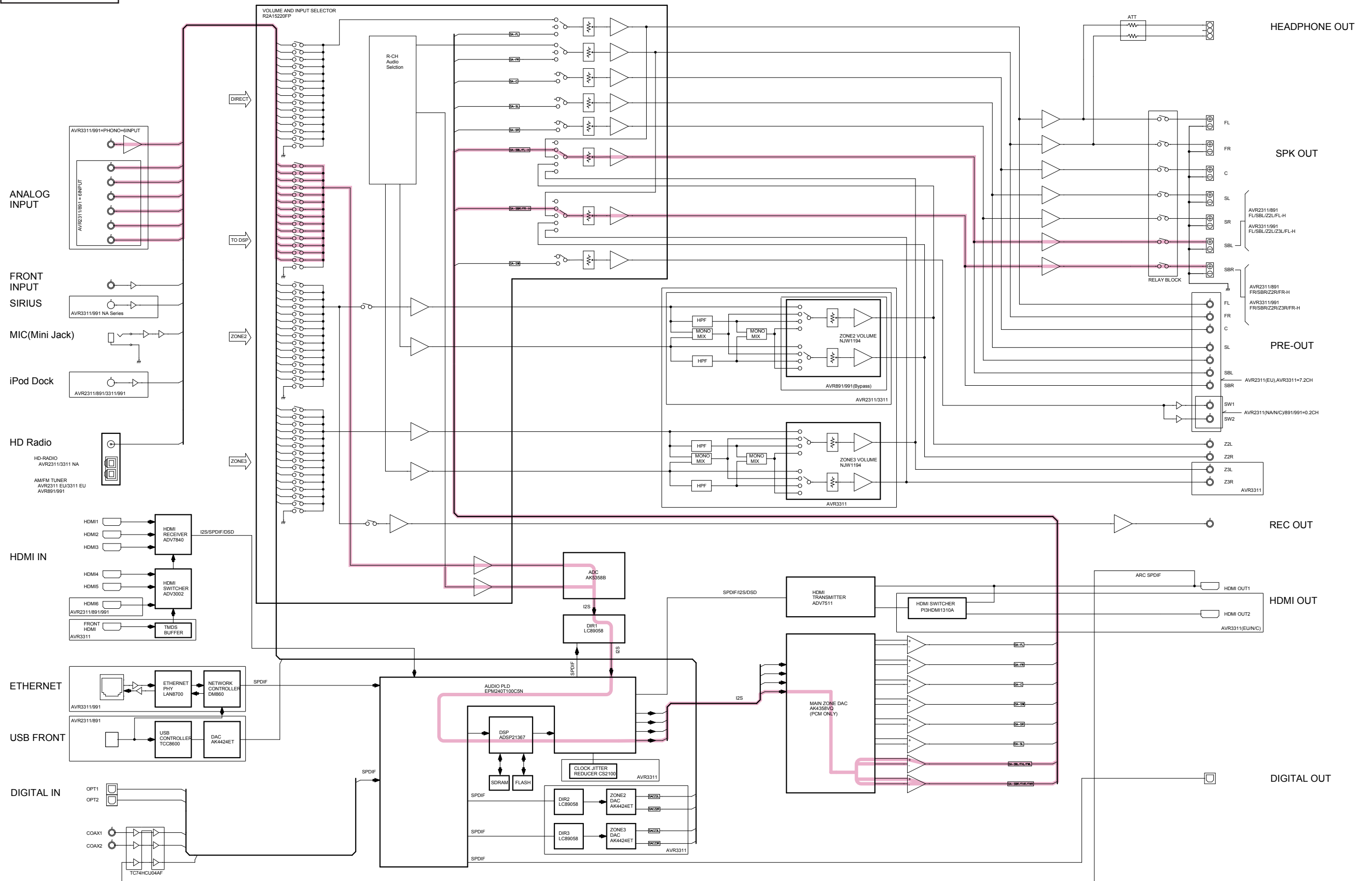
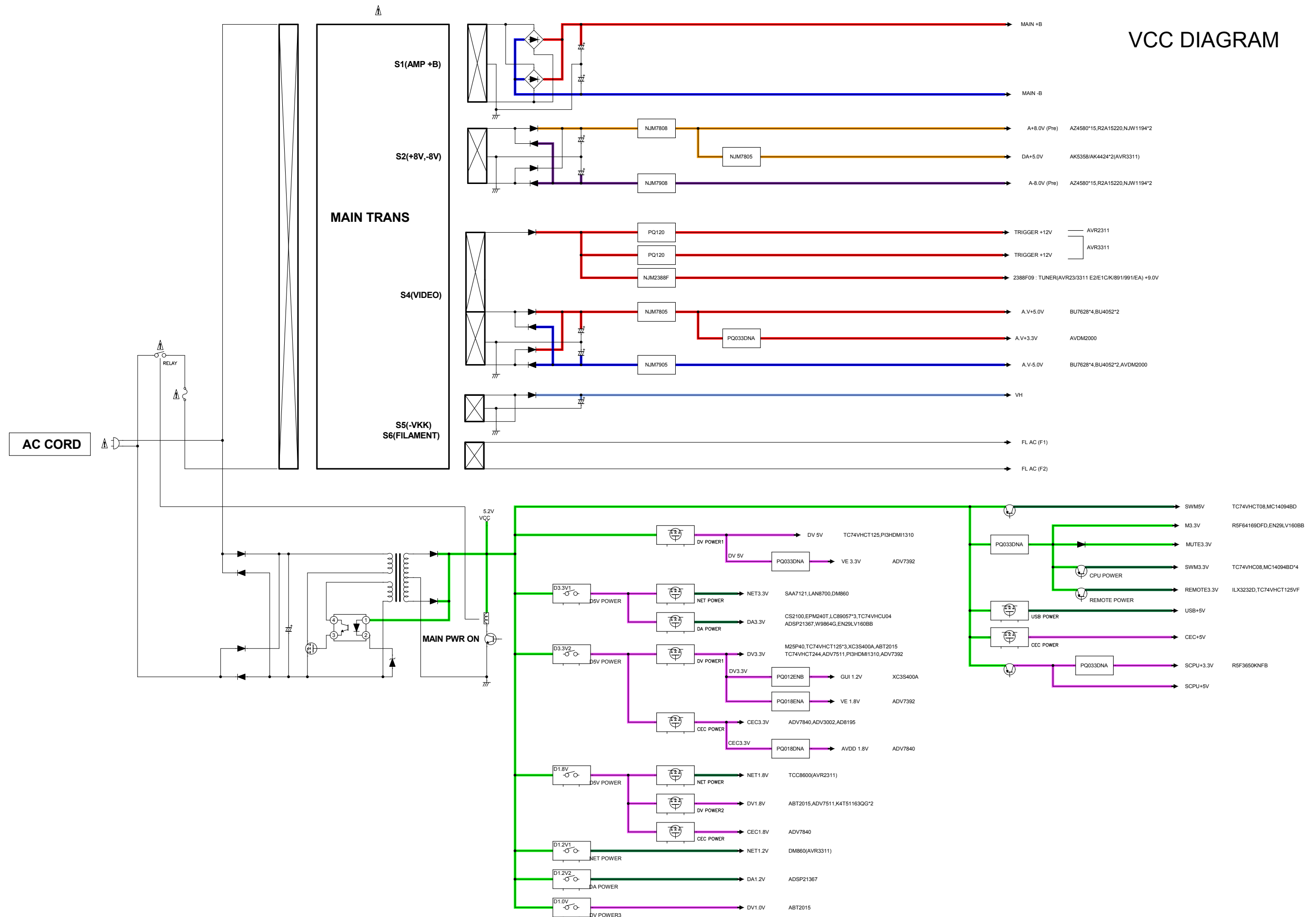


fig.23,24

AUDIO BLOCK DIAGRAM





This image shows a full page of blank, lined paper. It features approximately 30 evenly spaced horizontal grey lines across the entire width of the page, providing a guide for handwriting or typing. The background is a solid off-white color.

[illegible]

JIG FOR SERVICING

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

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

8U-110084S : EXTENSION UNIT KIT

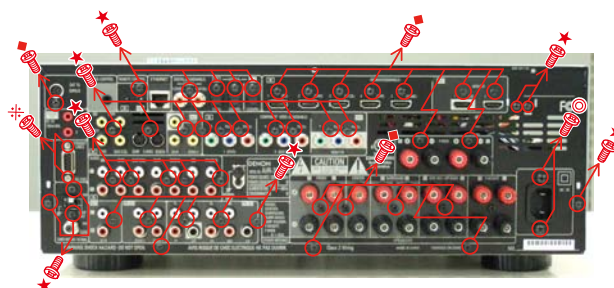
• Connection of PCB HDMI JIG

-Preparation-

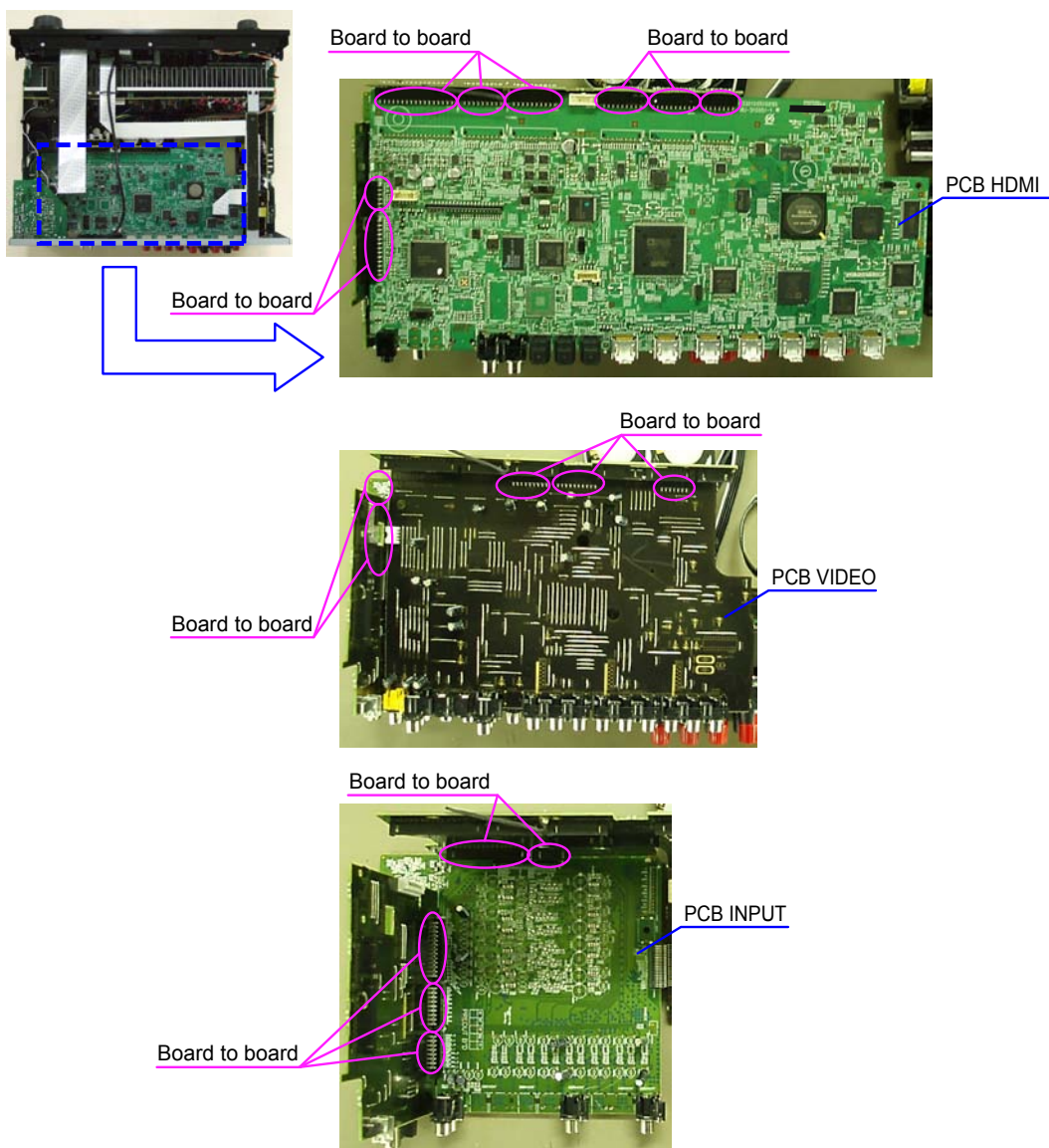
8U-110084S : EXTENSION UNIT KIT : 1 Set
Insulation sheet (Do not supply it) : 3 sheet
Ground lead (Do not supply it) : 3 pcs

-Procedures-

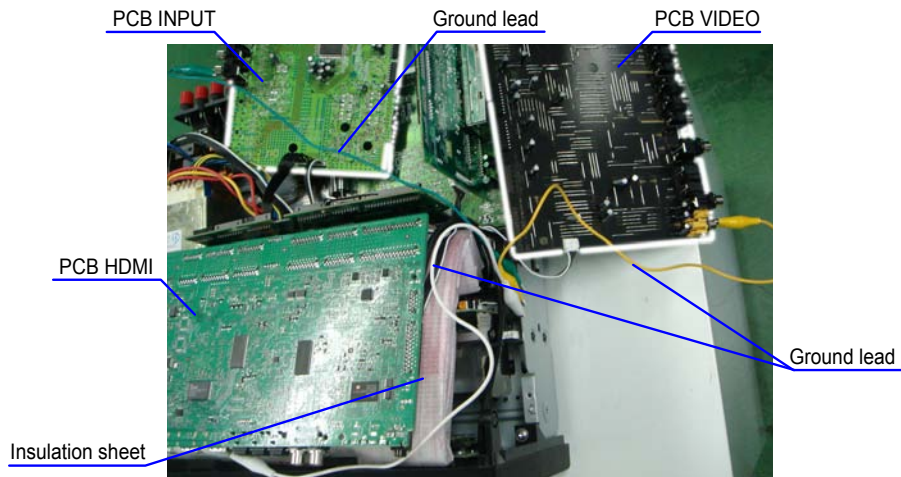
(1) Remove the screws.



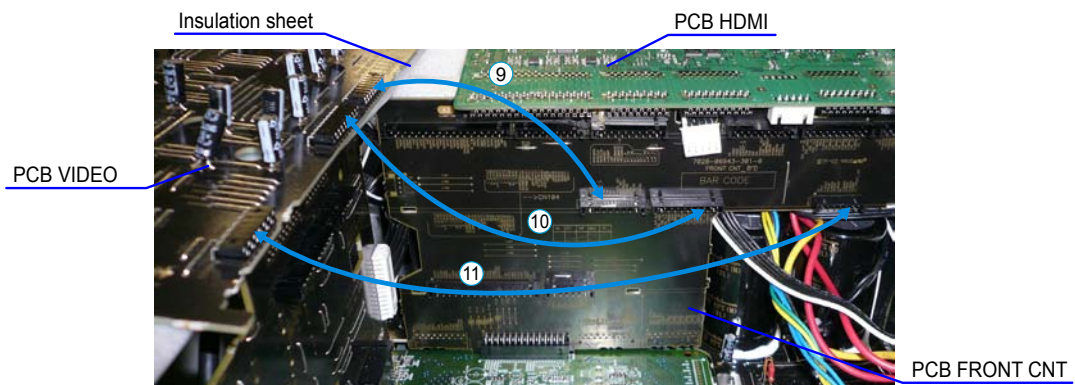
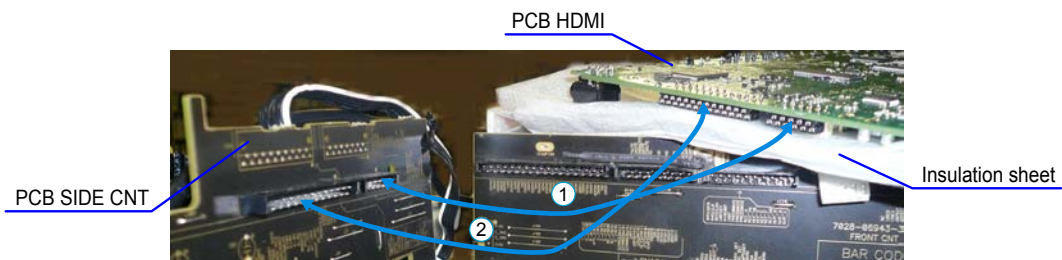
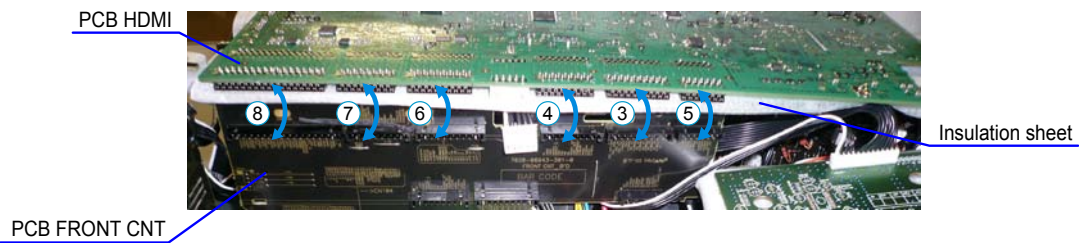
(2) Disconnect the connector board.

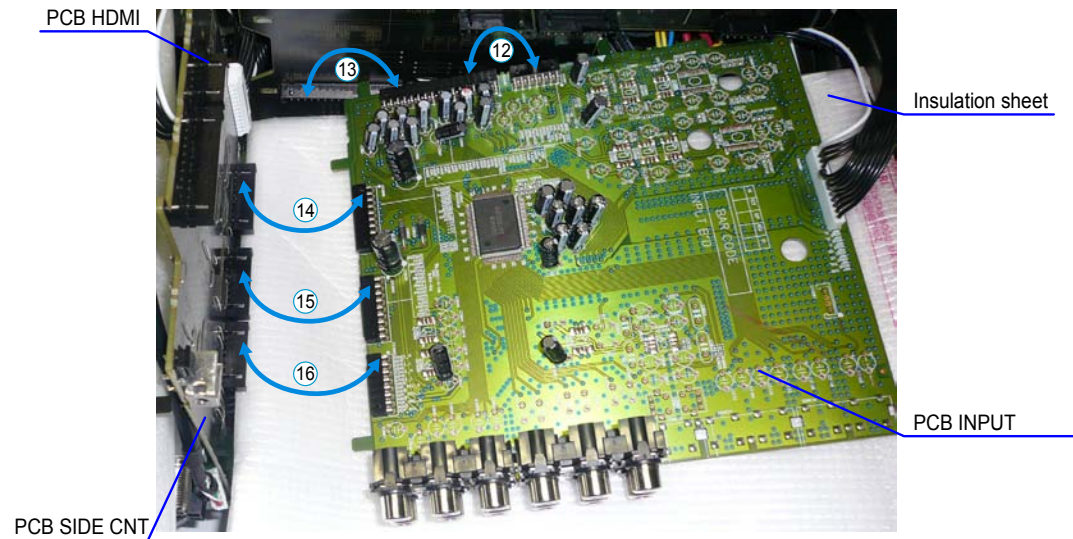


- (3) PCB HDMI is detached from the chassis, and it puts it into the state turned inside out.
Please pave an insulation sheet that is larger than PCB HDMI under PCB.
※ Connect the ground point of PCB to the chassis with a ground lead or the like.



- (4) Connect the four extension jig cables.





Connection table of Board to Board

No.	Pin	Ref. No.	PCB		Ref. No.	PCB
①	11 pin	CP3	SIDE CNT	↔	N4908	HDMI
②	25 pin	CP4	SIDE CNT	↔	N4907	HDMI
③	19 pin	CP105	FRONT CNT	↔	N4910	HDMI
④	17 pin	CP106	FRONT CNT	↔	N4911	HDMI
⑤	13 pin	CP107	FRONT CNT	↔	N4912	HDMI
⑥	19 pin	CP108	FRONT CNT	↔	N4913	HDMI
⑦	17 pin	CP109	FRONT CNT	↔	N4914	HDMI
⑧	33 pin	CP110	FRONT CNT	↔	N4916	HDMI
⑨	19 pin	CP111	FRONT CNT	↔	N2001	VIDEO
⑩	17 pin	CP112	FRONT CNT	↔	N2002	VIDEO
⑪	13 pin	CP113	FRONT CNT	↔	N2003	VIDEO
⑫	13 pin	CP114	FRONT CNT	↔	CX3001	INPUT
⑬	33 pin	CP115	FRONT CNT	↔	CN3000	INPUT
⑭	19 pin	CP6	SIDE CNT	↔	CX3000	INPUT
⑮	17 pin	CP7	SIDE CNT	↔	CX3002	INPUT
⑯	15 pin	CP8	SIDE CNT	↔	CX3003	INPUT

ABOUT REPLACE THE MICROPROCESSOR WITH A NEW ONE

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

PWB Name	Ref. No.	Description	After replaced	Remark
HDMI	U5301	R5F64169DFD	B	SOFTWARE: Main
HDMI	U5101	W19B160BBT7H	B	SOFTWARE: Main ROM
HDMI	U5500	R5F3650KNFB	B	SOFTWARE: Sub
HDMI	U3202	EN29LV160BB-70TIP	B	SOFTWARE: DSP ROM
HDMI	U3000	EPM240T100C5N	B	SOFTWARE: Audio PLD
HDMI	U1603	M25P40-VMN6PB	B	SOFTWARE: Video Config ROM

After replaced

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

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

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

VERSION UPGRADE PROCEDURE OF FIRMWARE

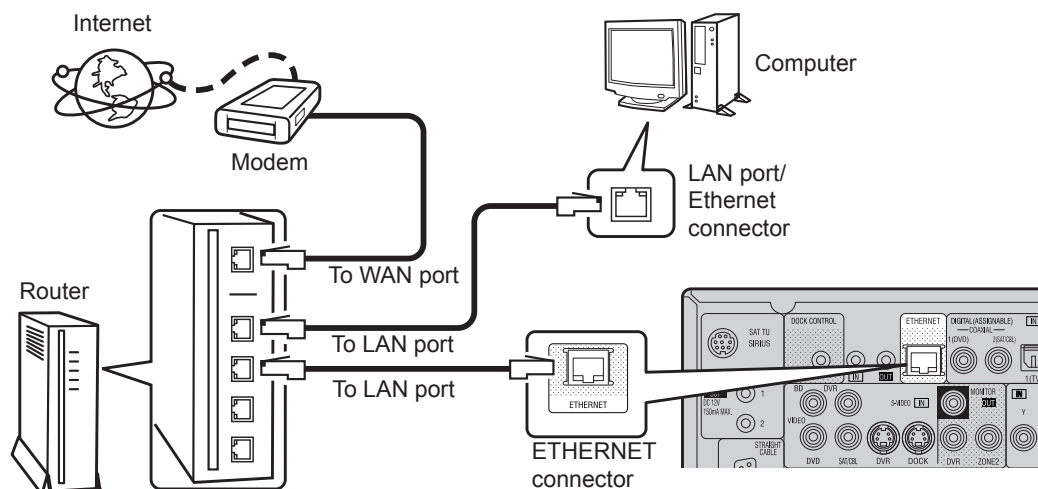
You can update by downloading the latest firmware from the Internet.

1. Connecting to the Network

(1) System Requirement

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

(2) Setting



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-3311 cannot be performed until updating is completed. Also, setting items of the GUI menu of AVR-3311 or setting items of the image adjustment may be initialized.
Make a note of the settings before updating, and set them again after updating.

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.	Login failed 01	Reset and update again. Carry out the update in an environment that has little network load.
02	Line, etc., is busy when logging into DPMS.	Server is busy 02	Carry out the update in an environment that has little network load.
03	Connection to DPMS failed.	Connection fail 03	Check the network connection. Carry out the update in an environment that has little network load.
04	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	Check the network connection. 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	Check the network connection. 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	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
0D	Data acquisition failed (timed out) when downloading Main CPU firmware. Received Package Version is wrong.	Connection fail 0D	Check the network connection. Carry out the update in an environment that has little network load.
10	Main CPU failed to receive firmware for rewriting sent from DM860 (when timed out).	Main ***min Updating fail 10	Turn the power off then back on. Updating starts automatically.
11	Main CPU failed to receive firmware for rewriting sent from DM860 (when an error)	Main ***min Updating fail 11	Turn the power off then back on. Updating starts automatically.
12	There was invalid data in the firmware for rewriting sent from DM860 to Main CPU (when a Check Sum error).	Main ***min Updating fail 12	Turn the power off then back on. Updating starts automatically.
13	The deletion of block data failed before rewriting Main CPU.	Main ***min Erase fail 13	Turn the power off then back on. Updating starts automatically.
14	The rewriting of block data failed when rewriting Main CPU.	Main ***min Updating fail 14	Turn the power off then back on. Updating starts automatically.
15	The data verification was invalid after rewriting Main CPU.	Main ***min UpdateCheckNG 15	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.
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.

Error Code	Details of Error code	Display	Coping strategies
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.
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.
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.
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 Update Check NG 61	Turn the power off then back on. Updating starts automatically.
62	Start failure of Sub μ -com.	Sub ***min Updating fail 62	Turn the power off then back on. Updating starts automatically. (AVR-4810 deal with this matter from the first and AVR-4310 deal with this matter by the update.)
80	Failure to acquire serial flash data and before deleting serial flash.	OSD ***min Updating fail 80	Turn the power off then back on. Updating starts automatically.

Error Code	Details of Error code	Display	Coping strategies
81	Failure to delete data before rewriting serial flash.	OSD 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).	OSD 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).	OSD 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).	OSD 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).	OSD Updating fail 85	Turn the power off then back on. Updating starts automatically.
86	Failure to rewrite when writing data in serial flash.	OSD 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).	Ether IMG ***min ConnectionFailedA0	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).	Ether IMG ***min ConnectionFailedA1	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).	Ether IMG ***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).	Ether IMG ***min Server is busyA3	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).	Ether IMG ***min ConnectionFailedA4	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).	Ether IMG ***min Updating fail A6	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.	Ether IMG ***min Updating fail A7	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).	Ether IMG ***min ConnectionFailedA8	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).	Ether IMG ***min ConnectionFailedA9	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).	Ether IMG ***min Login failed AA	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
AB	Notification of line congestion via DPMS access when rewriting DM860 related firmware (Boot Loader Mode).	Ether IMG ***n in Server is busyAB	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).	Ether IMG ***n in Connection FailAC	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).	Ether IMG ***n in Download failAE	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).	Ether IMG ***n in Server is busyAF	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).	Ether IMG ***n in Connection FailB0	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.	Ether IMG ***n in Updating failB2	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	Main Updeting ***min	10~15 36~3C
Sub	Sub Updeting ***min	50~52 54~58 5A~62
Audio PLD	APLD Updeting ***min	50~52 54~58 5A~62
DSP	DSP Updeting ***min	50~52 54~58 5A~62
OSD (FPGA/Program/Font Data)	OSD Updeting ***min	50~52 54~58 5A 62 80~86
DM860 Boot Loader	Ether SBL Updeting ***min	A0~A4 A6~AC AE~B0 B2
DM860 Image	Ether IMG Updeting ***min	A0~A4 A6~AC AE~B0 B2

SURROUND MODES AND PARAMETERS

Symbols in the table

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

Surround mode	Channel output					Surround Parameter									
	Front L/R	Center	Surround L/R	Surround back L/R	Front height L/R	Front wide L/R	Subwoofer	Mode	Cinema EQ. *5	DRC *9	D. Comp *10	LFE *11	Delay Time	Effect Lev.	Room Size
PURE DIRECT	○						◎ *3			○	○	○			
DIRECT (2channel)	○						◎ *3			○	○				
DIRECT (Multi-channel)	○	◎	◎	◎ *1	◎ *1	◎ *1	◎			○	○	○			
STEREO	○						◎			○	○	○			
MULTI CH IN	○	◎	◎	◎	◎ *2		◎	◎ *4	○		○	○			
DOLBY PRO LOGIC IIz	○	◎	◎		◎		◎	◎	◎	○	○				
DOLBY PRO LOGIC IIx	○	◎	◎	◎			◎	◎	◎ *6	○	○				
DOLBY PRO LOGIC II	○	◎	◎				◎	◎	◎ *7	○	○				
DOLBY PRO LOGIC	○	◎	◎				◎	◎	◎ *7	○	○				
DOLBY PRO LOGIC II A-DSX	○	◎	◎		◎ *12	◎ *13	◎	◎	◎ *7	○	○				
DOLBY PRO LOGIC A-DSX	○	◎	◎		◎ *12	◎ *13	◎	◎	◎ *7	○	○				
DTS NEO:6	○	◎	◎				◎	◎	◎ *6	○	○				
DTS NEO:6 A-DSX	○	◎	◎		◎ *12	◎ *13	◎	◎	◎ *6	○	○				
Audyssey DSX	○	◎	◎		◎ *12	◎ *13	◎			○	○	○			
DOLBY DIGITAL	○	◎	◎	◎	◎ *2		◎	◎	◎ *8		○	○			
DOLBY DIGITAL Plus	○	◎	◎	◎	◎ *2		◎	◎	◎ *8		○	○			
DOLBY TrueHD	○	◎	◎	◎	◎ *2		◎	◎	◎ *8	○		○			
DTS SURROUND	○	◎	◎	◎	◎ *2		◎	◎	◎ *8		○	○			
DTS 96/24	○	◎	◎	◎	◎ *2		◎	◎	◎ *8		○	○			
DTS-HD	○	◎	◎	◎	◎ *2		◎	◎	◎ *8		○	○			
DTS Express	○	◎	◎	◎	◎ *2		◎	◎	◎ *8		○	○			
MULTI CH STEREO	○	◎	◎	◎ *14	◎ *15	◎ *16	◎				○	○			
ROCK ARENA	○	◎	◎	◎ *14	◎ *15	◎ *16	◎				○	○		○	○
JAZZ CLUB	○	◎	◎	◎ *14	◎ *15	◎ *16	◎				○	○		○	○
MONO MOVIE	○	◎	◎	◎ *14	◎ *15	◎ *16	◎				○	○		○	○
VIDEO GAME	○	◎	◎	◎ *14	◎ *15	◎ *16	◎				○	○		○	○
MATRIX	○	◎	◎	◎ *14	◎ *15	◎ *16	◎				○	○	○		
VIRTUAL	○						◎ *3				○	○			

- *1 A signal for each channel contained in an input signal is output as audio.
- *2 If "Surround Parameter" – "F.Height" is set to "ON", sound is output from the front height speakers.
- *3 Only when "Subwoofer Mode" is set to "LFE+Main", sound is output from the subwoofer.
- *4 If this surround mode is selected, only the "Height" mode setting is available for "Surround Parameter" – "Mode".
- *5 For HD Audio whose sampling frequency of an input signal is more than 96 kHz, this sound parameter cannot be set.
- *6 This item can be selected when "Surround Parameter" – "Mode" is set to "Cinema".
- *7 This item can be selected when "Surround Parameter" – "Mode" is set to "Cinema" or "Pro Logic".
- *8 This item cannot be set when "Surround Parameter" – "S.Back" is set to "PLIIx Music".
- *9 This item can be selected when a Dolby TrueHD signal is played.
- *10 This item can be selected when a Dolby Digital or DTS signal is played.
- *11 This item can be selected when a Dolby Digital or DTS signal or DVD-Audio is played.
- *12 If "Audyssey DSX" is set to "ON-Height", sound is output from the front height speakers.
- *13 If "Audyssey DSX" is set to "ON-Wide", sound is output from the front wide speakers.
- *14 If "Surround Parameter" – "Speaker" – "S.Back" is set to "ON", sound is output from the surround back speakers.
- *15 If "Surround Parameter" – "Speaker" – "F.Height" is set to "ON", sound is output from the front height speakers.
- *16 If "Surround Parameter" – "Speaker" – "F.Wide" is set to "ON", sound is output from the front wide speakers.

Surround mode	Surround Parameter										Tone * 19	Audyssey Settings * 24			Audyssey DSX™ * 24 * 25	RESTORE * 23
	AFDM * 11	S.Back	F.Height * 17	Height Gain * 18	Speaker	Subwoofer	PRO LOGIC II/Ix Music mode only			NEO6 Music mode only		MultEQ® XT	Dynamic EQ® * 21	Dynamic Volume™ * 22		
PURE DIRECT						○ * 3										
DIRECT (2 channel)						○ * 3										
DIRECT (Multi-channel)																
STEREO																
MULTI CH IN	○	○	○	○							○	○	○	○	○	○
DOLBY PRO LOGIC IIz			○	○							○	○	○	○	○	○
DOLBY PRO LOGIC IIx		○	○				○	○	○		○	○	○	○	○	○
DOLBY PRO LOGIC II		○	○				○	○	○		○	○	○	○	○	○
DOLBY PRO LOGIC		○	○				○	○	○		○	○	○	○	○	○
DOLBY PRO LOGIC II A-DSX							○	○	○		○	○	○	○	○	○
DOLBY PRO LOGIC A-DSX							○	○	○		○	○	○	○	○	○
DTS NEO6		○								○	○	○	○	○	○	○
DTS NEO6 A-DSX										○	○	○	○	○	○	○
Audyssey DSX											○	○	○	○	○	○
DOLBY DIGITAL	○	○	○	○							○	○	○	○	○	○
DOLBY DIGITAL Plus	○	○	○	○							○	○	○	○	○	○
DOLBY TrueHD	○	○	○	○							○	○	○	○	○	○
DTS SURROUND	○	○	○	○							○	○	○	○	○	○
DTS 96/24	○	○	○	○							○	○	○	○	○	○
DTS-HD	○	○	○	○							○	○	○	○	○	○
DTS Express	○		○	○							○	○	○	○	○	○
MULTI CH STEREO		○			○						○	○	○	○	○	○
ROCK ARENA		○			○						○	○	○	○	○	○
JAZZ CLUB		○			○						○	○	○	○	○	○
MONO MOVIE		○			○						○	○	○	○	○	○
VIDEO GAME		○			○						○	○	○	○	○	○
MATRIX		○			○						○	○	○	○	○	○
VIRTUAL											○	○	○	○	○	○

* 3 Only when "Subwoofer Mode" is set to "LFE+Main", sound is output from the subwoofer.

* 17 If "Speaker Config." – "F.Height" is set to "None", this item cannot be selected.

* 18 This item can be selected when "Surround Parameter" – "F.Height" is set to "ON".

* 19 This item cannot be set when "Dynamic EQ" is set to "ON".

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

* 21 This item cannot be set when "MultEQ XT" is set to "OFF" or "Manual".

* 22 This item cannot be set when "Dynamic EQ" is set to "OFF".

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

* 24 For HD Audio whose sampling frequency of an input signal is more than 96 kHz, this sound parameter cannot be set.

* 25 This item can not be selected when "Surround Parameter" – "F.Height" is set to "ON".

Symbols in the table

- This indicates the default surround mode.
- ⊙ This indicates the surround mode that is fixed when "AFDM" is set to "ON".
- This indicates the selectable surround mode.

Surround mode	NOTE	Input signal types and formats									
		ANALOG	PCM		DTS-HD		DTS			DOLBY	
			LINEAR PCM (multi ch)	LINEAR PCM (2ch)	DTS-HD Master Audio	DTS-HD High Resolution Audio	DTS EXPRESS	DTS ES DSCRT (With Flag)	DTS ES MTRX (With Flag)	DTS (5.1ch)	DTS 96/24
DTS SURROUND											
DTS-HD MSTR	*5				●						
DTS-HD HI RES	*5				●						
DTS ES DSCRT6.1	*1 *3						⊙	●			
DTS ES MTRX6.1	*1 *3						○	○	⊙		
DTS SURROUND	*5										
DTS 96/24	*5										●
DTS (-HD) + PLIIX CINEMA	*2 *3				○			○	○		○
DTS (-HD) + PLIIX MUSIC	*1 *3				○			○	○		○
DTS (-HD) + PLIIZ	*4				○			○	○		○
DTS EXPRESS	*5										
DTS (-HD) + NEO6	*1 *3				○			○	○		○
DTS NEO6 CINEMA	*5	○		○							○
DTS NEO6 MUSIC	*5	○		○							○
DTS NEO6 CINEMA A-DSX		○		○							○
DTS NEO6 MUSIC A-DSX		○		○							○
Audyssey DSX											
DOLBY SURROUND											
DOLBY TrueHD	*5									●	
DOLBY DIGITAL+	*5										
DOLBY DIGITAL EX	*1 *3									○	
DOLBY (D+) (HD) +EX	*1 *3									○	
DOLBY DIGITAL	*5										
DOLBY (D) (D+) (HD) +PLIIX CINEMA	*2 *3									○	
DOLBY (D) (D+) (HD) +PLIIX MUSIC	*1 *3									○	
DOLBY (D) (D+) (HD) +PLIIZ	*4									○	
DOLBY PRO LOGIC IIX CINEMA	*1 *3	○		○						○	
DOLBY PRO LOGIC IIX MUSIC	*1 *3	○		○						○	
DOLBY PRO LOGIC IIX GAME	*1 *3	○		○						○	
DOLBY PRO LOGIC IIZ	*4	○		○						○	
DOLBY PRO LOGIC IIX CINEMA	*1 *3	○		○						○	
DOLBY PRO LOGIC IIX MUSIC	*1 *3	○		○						○	
DOLBY PRO LOGIC IIX GAME	*1 *3	○		○						○	
DOLBY PRO LOGIC IIZ	*4	○		○						○	
DOLBY PRO LOGIC IIX CINEMA	*1 *3	○		○						○	
DOLBY PRO LOGIC IIX MUSIC	*1 *3	○		○						○	
DOLBY PRO LOGIC IIX GAME	*1 *3	○		○						○	
DOLBY PRO LOGIC IIZ	*4	○		○						○	
DOLBY PRO LOGIC IIX CINEMA	*1 *3	○		○						○	
DOLBY PRO LOGIC IIX MUSIC	*1 *3	○		○						○	
DOLBY PRO LOGIC IIX GAME	*1 *3	○		○						○	
DOLBY PRO LOGIC IIZ	*4	○		○						○	

- *1 If "Speaker Config." - "S.Back" is set to "None", this surround mode cannot be selected.
- *2 If "Speaker Config." - "S.Back" is set to "1spkr" or "None", this surround mode cannot be selected.
- *3 This surround mode can be selected when "Amp Assign" is set to "Normal".

- *4 If "Speaker Config." - "F.Height" is set to "None", this surround mode cannot be selected.
- *5 The same was when "Audyssey DSX™" setting is set to "ON".

Surround mode	NOTE	Input signal types and formats																
		ANALOG	PCM		DTS-HD		DTS				DOLBY		DOLBY DIGITAL					
			LINEAR PCM (multi ch)	LINEAR PCM (2ch)	DTS-HD Master Audio	DTS-HD High Resolution Audio	DTS EXPRESS	DTS ES DSCRT (With Flag)	DTS ES MTRX (With Flag)	DTS (5.1ch)	DTS 96/24	DOLBY TrueHD	DOLBY DIGITAL Plus	DOLBY DIGITAL EX (With Flag)	DOLBY DIGITAL EX (With no Flag)	DOLBY DIGITAL (5.1/5.4ch)	DOLBY DIGITAL (4/3ch)	DOLBY DIGITAL (2ch)
DOLBY SURROUND		☐	☐														☐	☐
DOLBY PRO LOGIC II CINEMA A-DSX		☐	☐														☐	☐
DOLBY PRO LOGIC II MUSIC A-DSX		☐	☐														☐	☐
DOLBY PRO LOGIC II GAME A-DSX		☐	☐														☐	☐
DOLBY PRO LOGIC A-DSX		☐	☐								☐	☐	☐	☐	☐	☐	☐	☐
Audyssey A-DSX																		
MULTI CH IN																		
MULTI CH IN + PLIIx CINEMA		* 5	●															
MULTI CH IN + PLIIx MUSIC		* 2 * 3	☐															
MULTI CH IN + PLIIx MUSIC		* 1 * 3	☐															
MULTI CH IN + PLIIz		* 4	☐															
MULTI CH IN + Dolby EX		* 3	☐															
MULTI CH IN 7.1		* 3	● ◎ (7.1)															
Audyssey A-DSX		☐	☐															
DIRECT																		
DIRECT		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
PURE DIRECT		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
PURE DIRECT		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
DSP SIMULATION																		
MULTI CH STEREO		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
ROCK ARENA		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
JAZZ CLUB		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MONO MOVIE		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
VIDEO GAME		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MATRIX		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
VIRTUAL		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
STEREO		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
STEREO		●	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

- *1 If "Speaker Config." – "S.Back" is set to "None", this surround mode cannot be selected.
 *2 If "Speaker Config." – "S.Back" is set to "1spkr" or "None", this surround mode cannot be selected.
 *3 This surround mode can be selected when "Amp Assign" is set to "Normal".
 *4 If "Speaker Config." – "F.Height" is set to "None", this surround mode cannot be selected.
 *5 The same was when "Audyssey DSX™" setting is set to "ON".

ADJUSTMENT

Audio Section

Idling Current

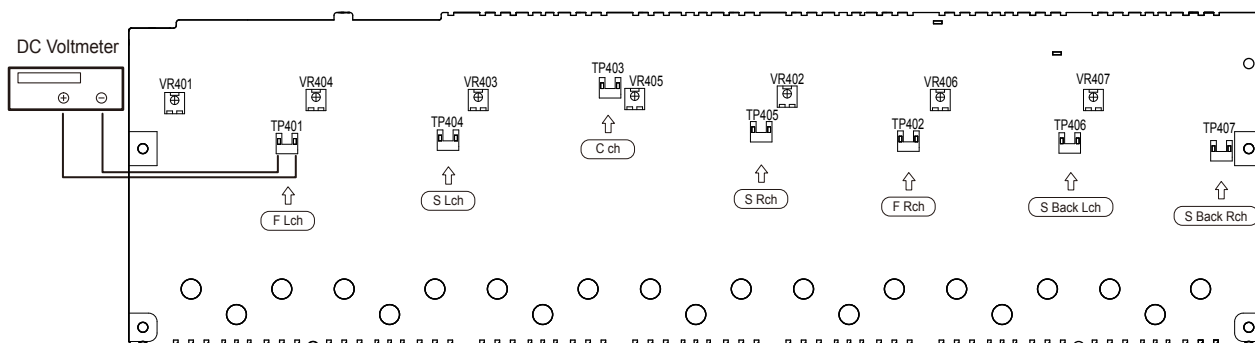
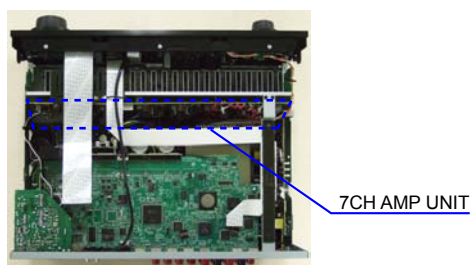
Required measurement equipment: DC Voltmeter

1. Preparation

- (1) Avoid direct blow from an air conditioner or an electric fan, and adjust the unit at normal room temperature 15 °C ~ 30 °C (59 °F ~ 86 °F).
- (2) Presetting
 - POWER (Power source switch) STANDBY
 - SPEAKER (Speaker terminal) No load
(Do not connect speaker, dummy resistor, etc.)

2. Adjustment

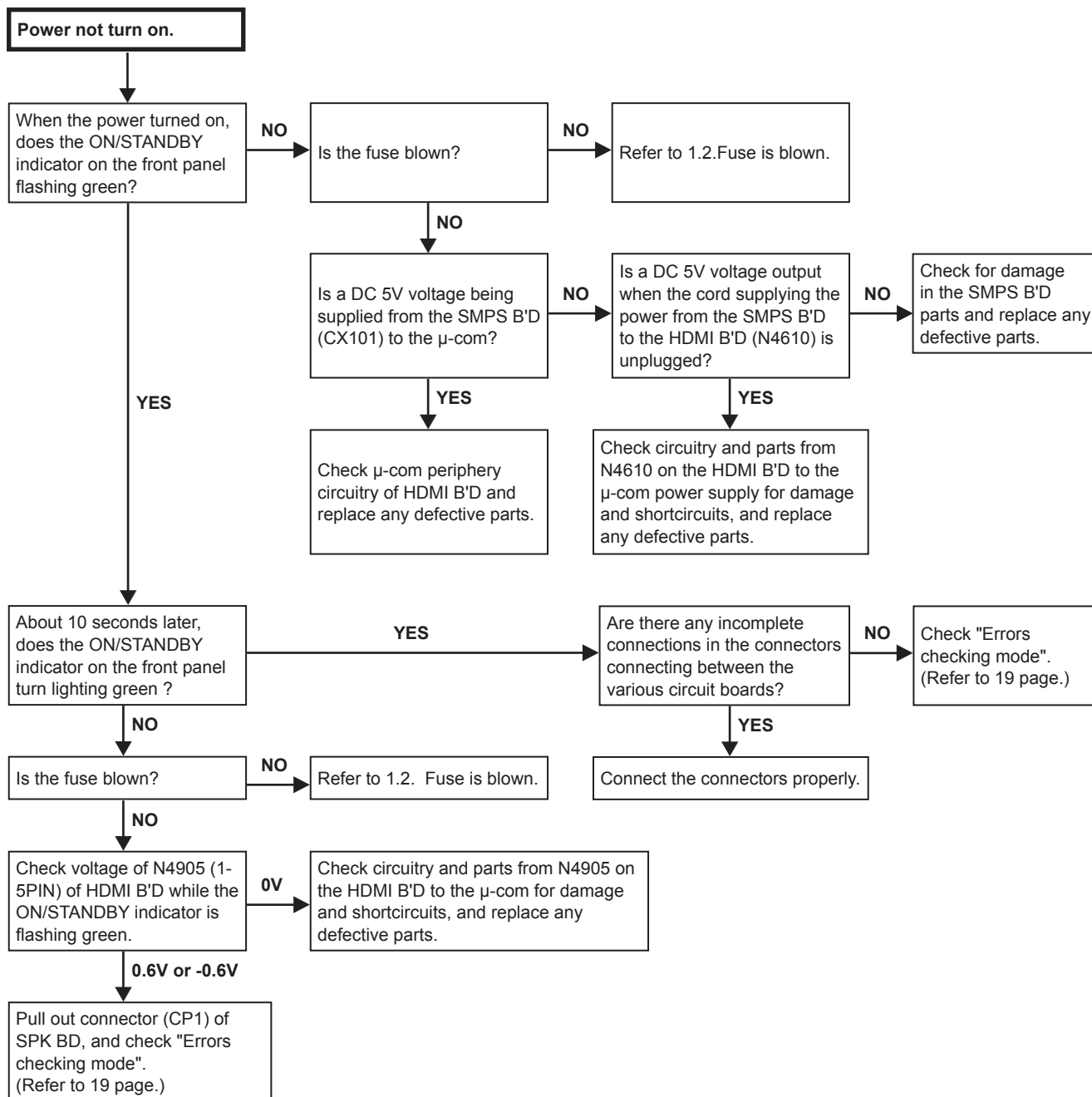
- (1) Remove top cover and set VR401, VR402, VR403, VR404, VR405, VR406, VR407 on 7CH AMP UNIT at fully counterclockwise (↺) position.
- (2) Connect DC Voltmeter to test points (FRONT-Lch: TP401, FRONT-Rch: TP402, CENTER ch: TP403, SURROUND-Lch: TP404, SURROUND-Rch: TP405, SURROUND-BACK Lch: TP406, SURROUND-BACK Rch: TP407).
- (3) Connect power cord to AC Line, and turn power switch "ON".
- (4) Presetting.
 - MASTER VOLUME : "----" counterclockwise (↺ min.)
 - SPEAKER (Speaker terminal) : No load
(Do not connect speaker, dummy resistor, etc.)
 - MODE : MCH STEREO
 - FUNCTION : DVD
- (5) Within 2 minutes after the power on, turn VR401 clockwise (↻) to adjust the TEST POINT voltage to 8 mV ± 0.5 mV DC.
- (6) After 10 minutes from the preset above, turn VR401 to set the voltage to 8 mV ± 0.5 mV DC.
- (7) Adjust the Variable Resistors of other channels in the same way.



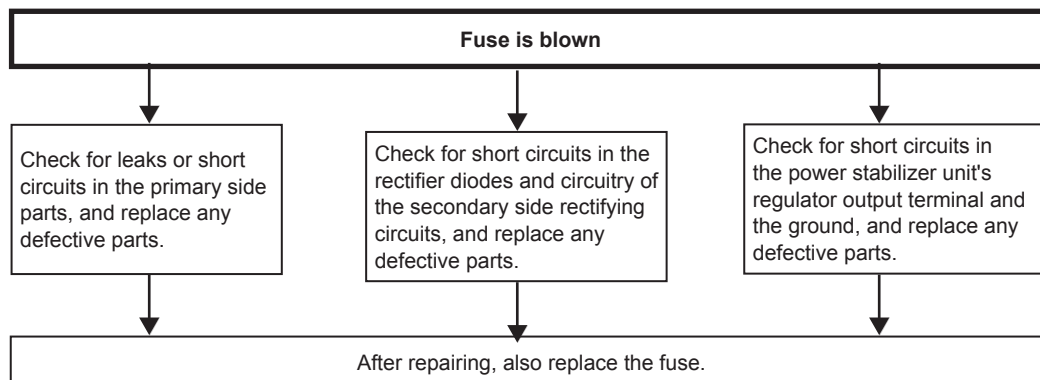
TROUBLE SHOOTING

1. POWER

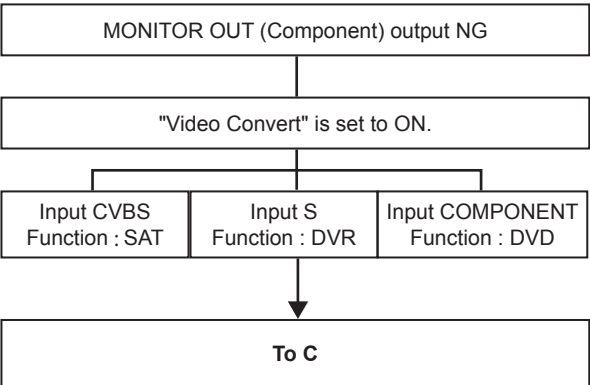
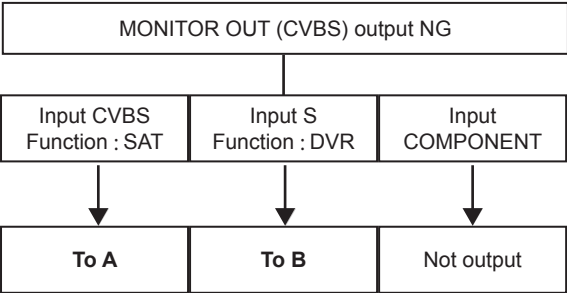
1.1. Power not turn on

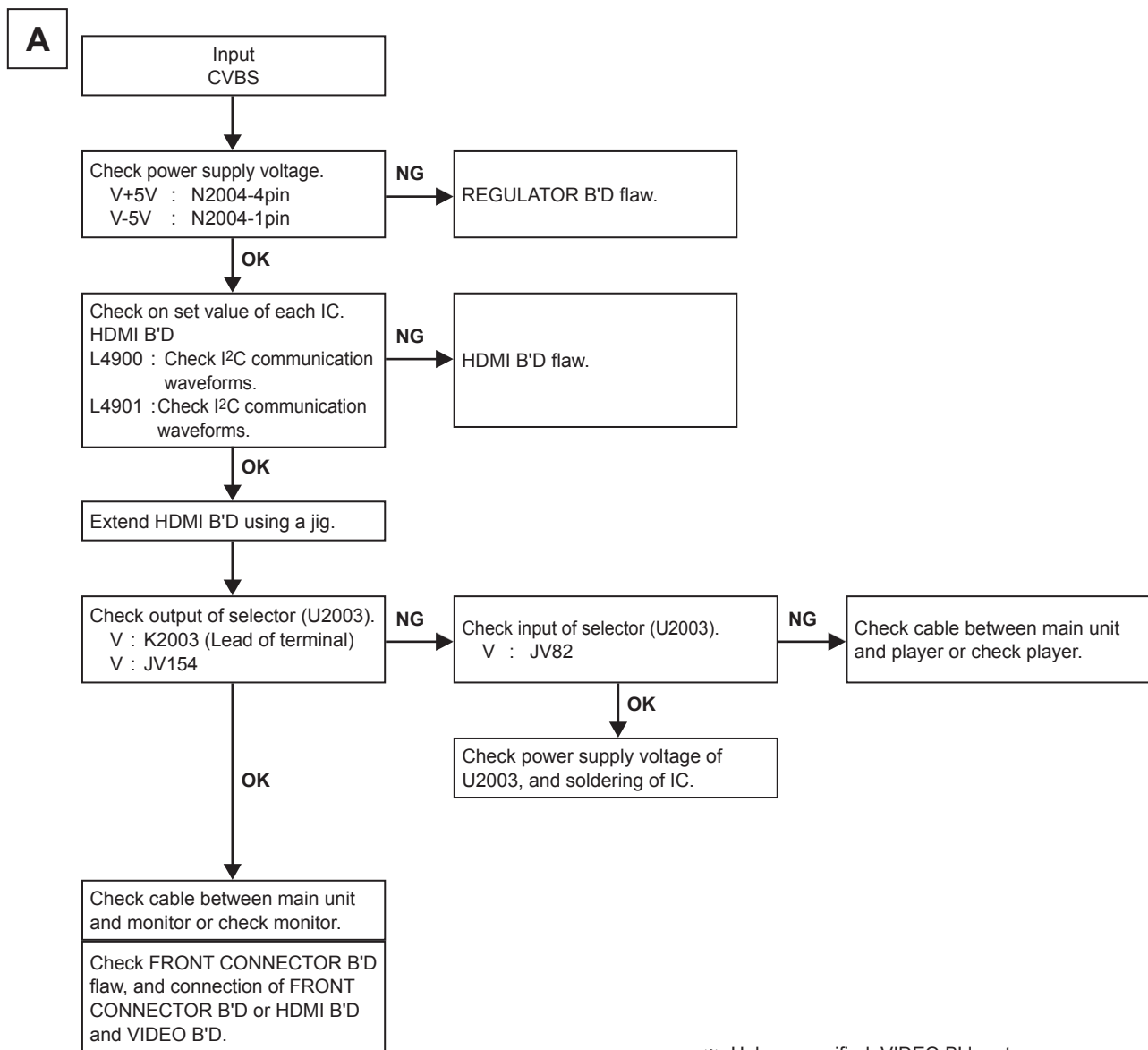


1.2. Fuse is blown

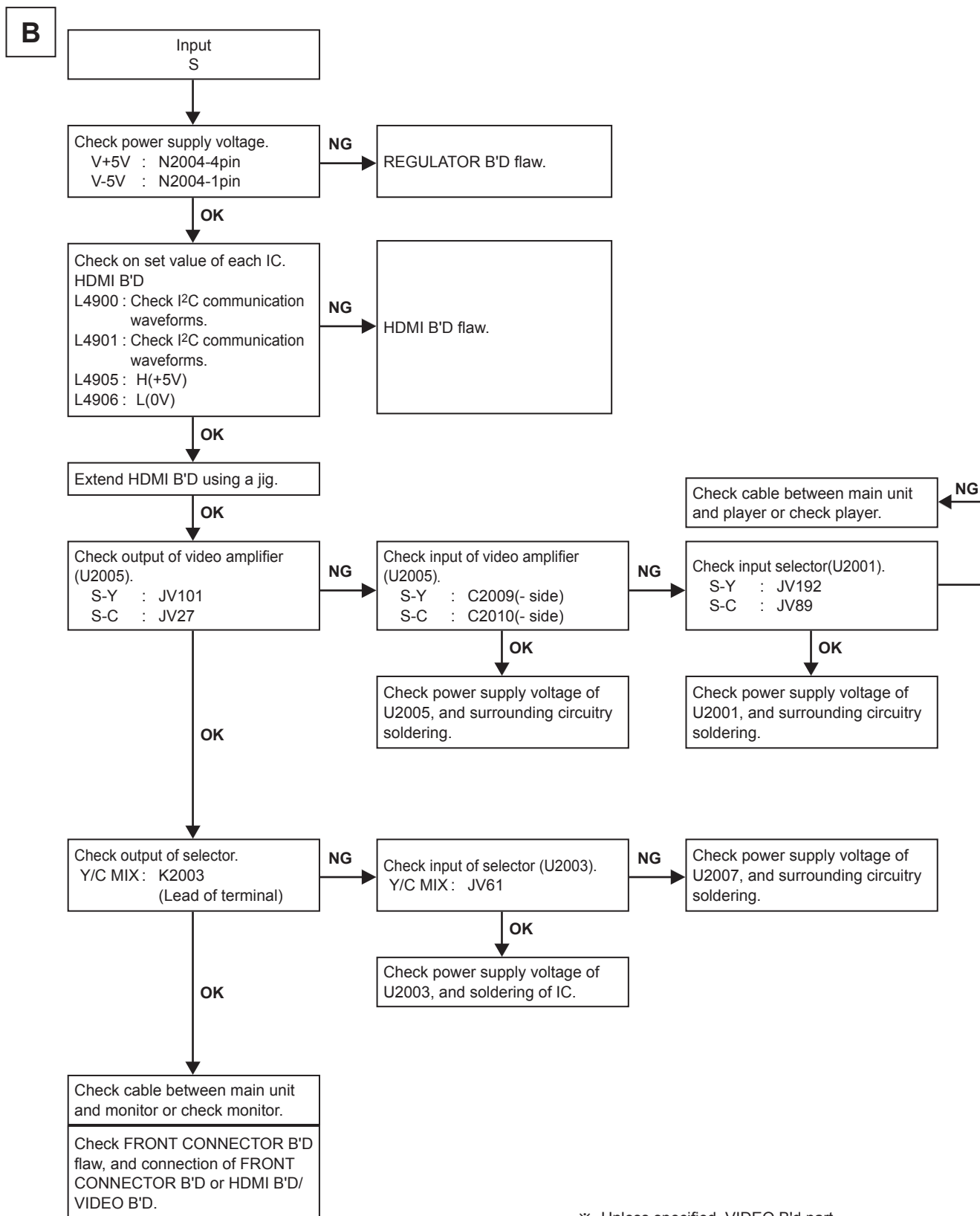


2. Analog video

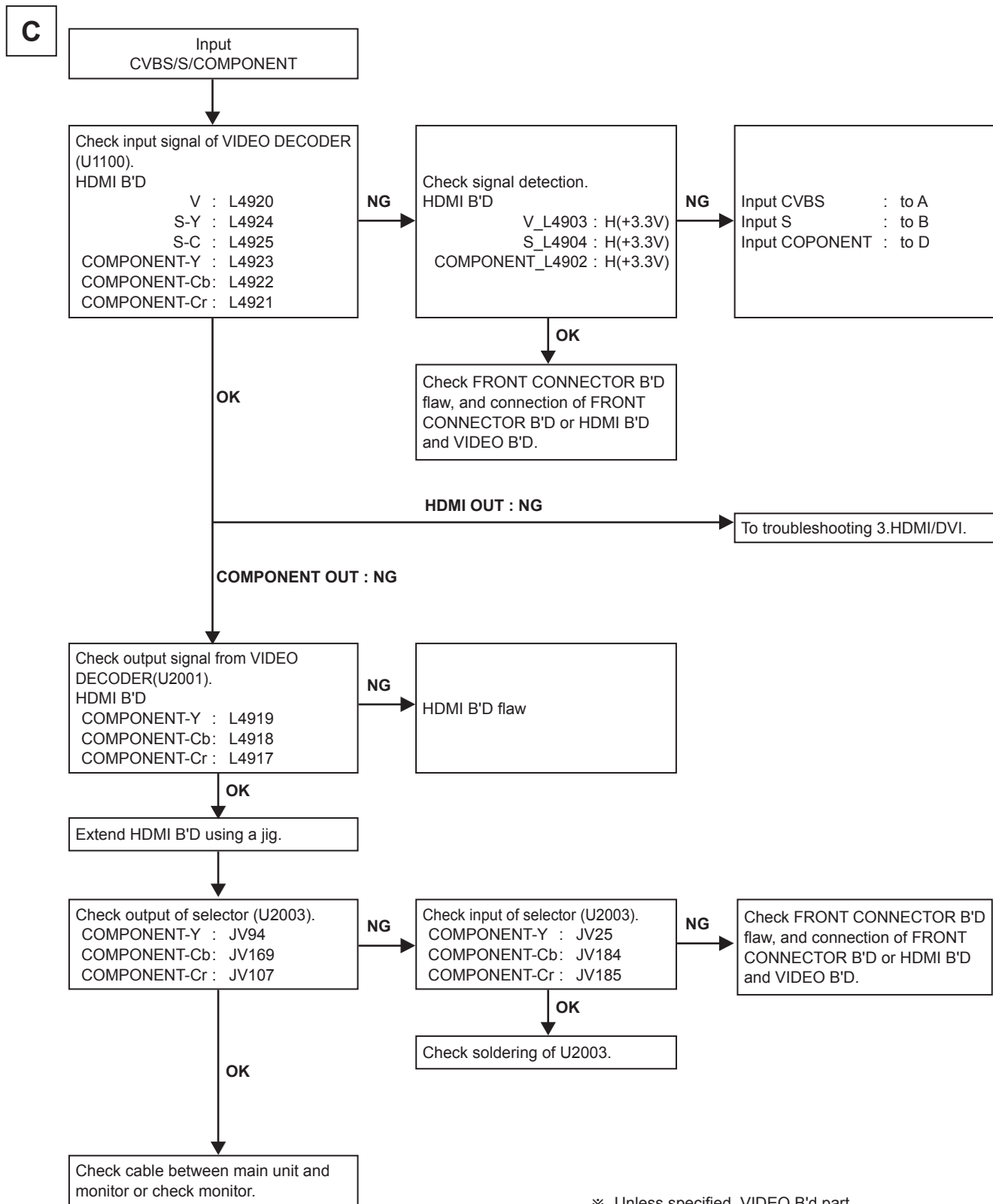


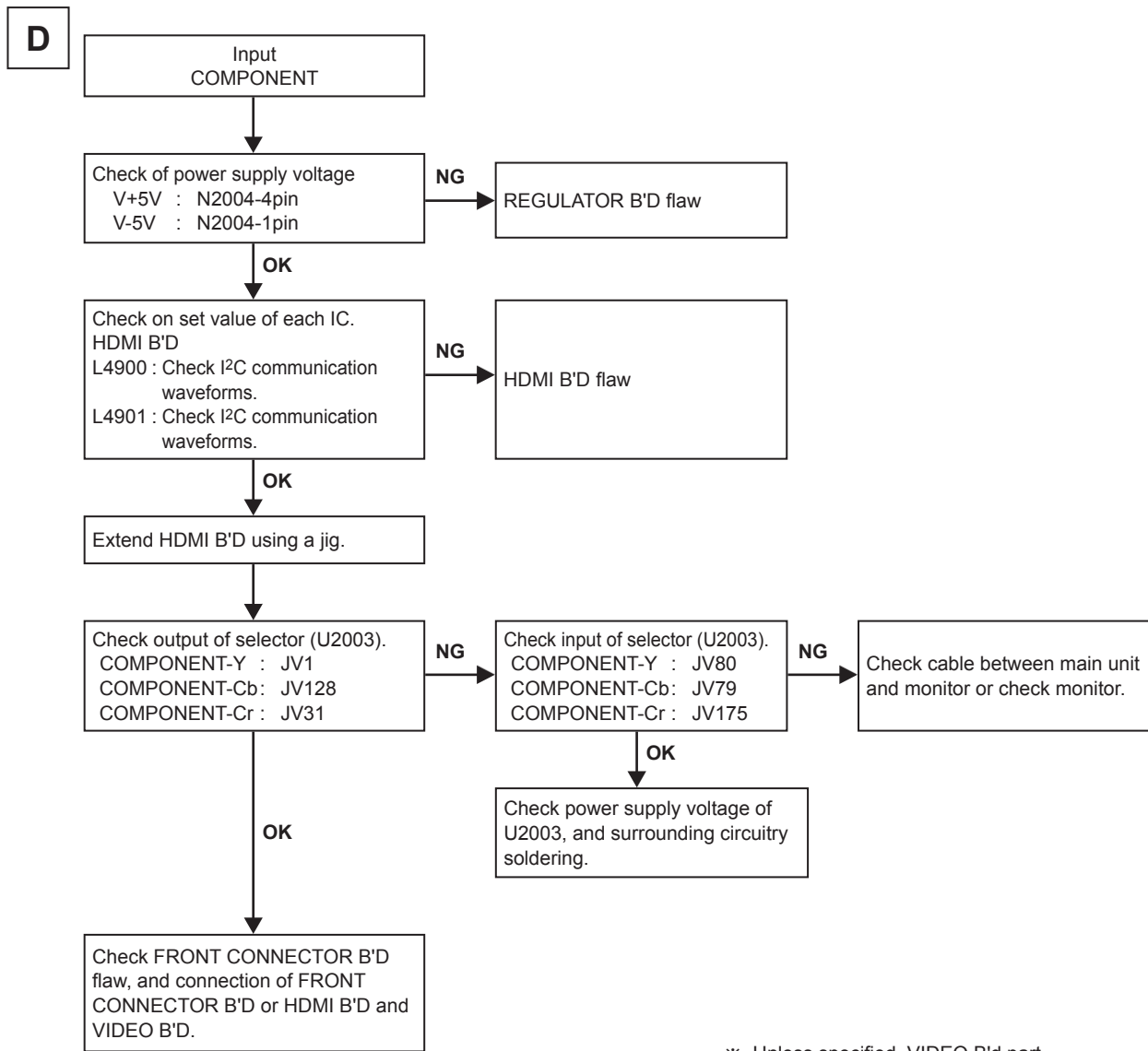


※ Unless specified, VIDEO B'd part.



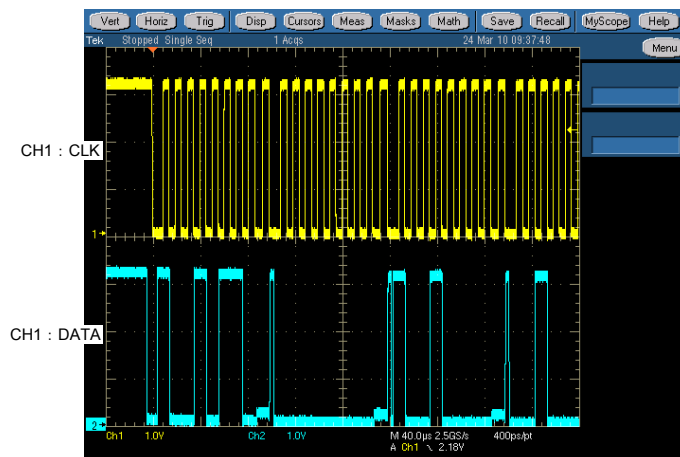
※ Unless specified, VIDEO B'd part.





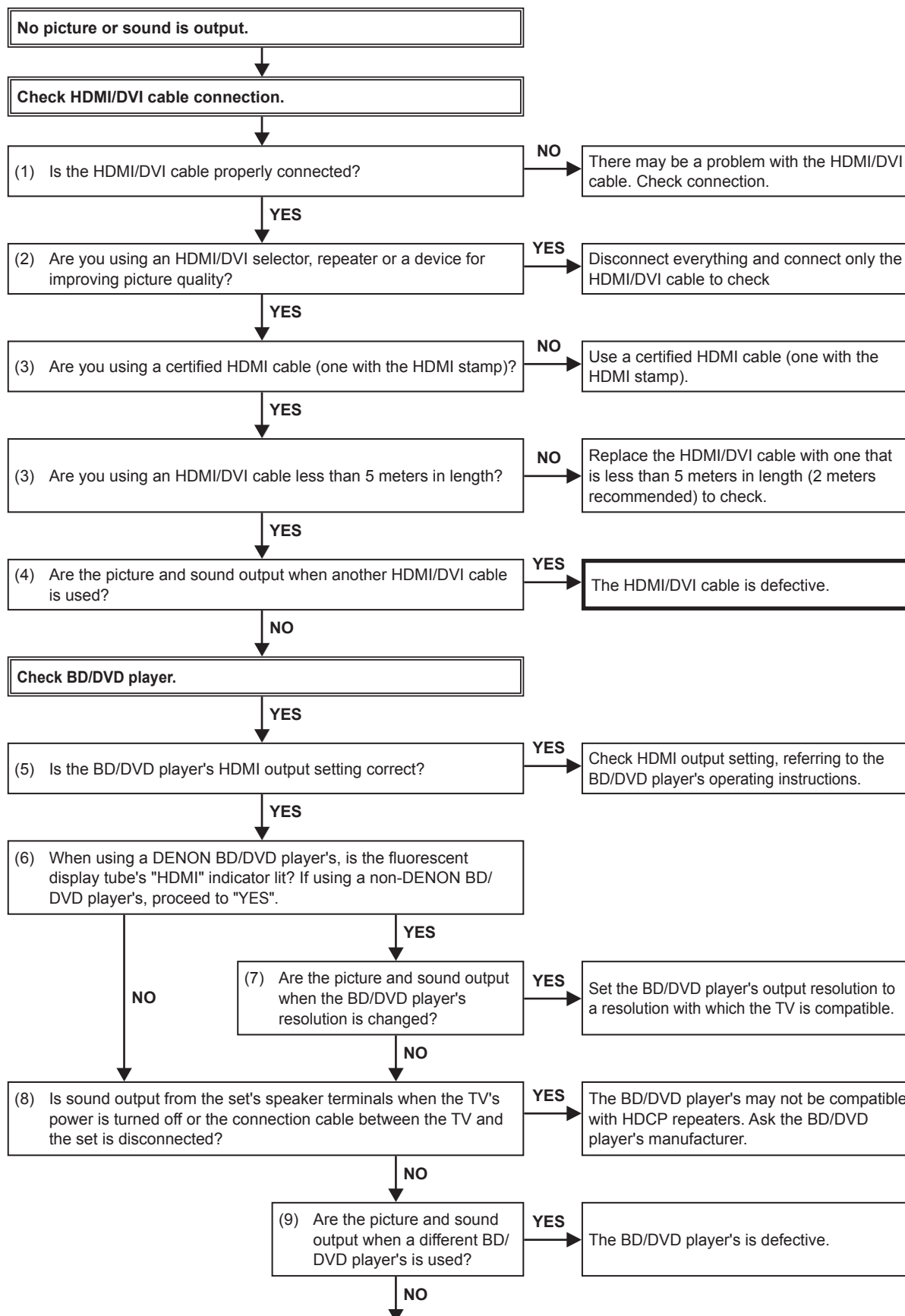
※ Unless specified, VIDEO B'd part.

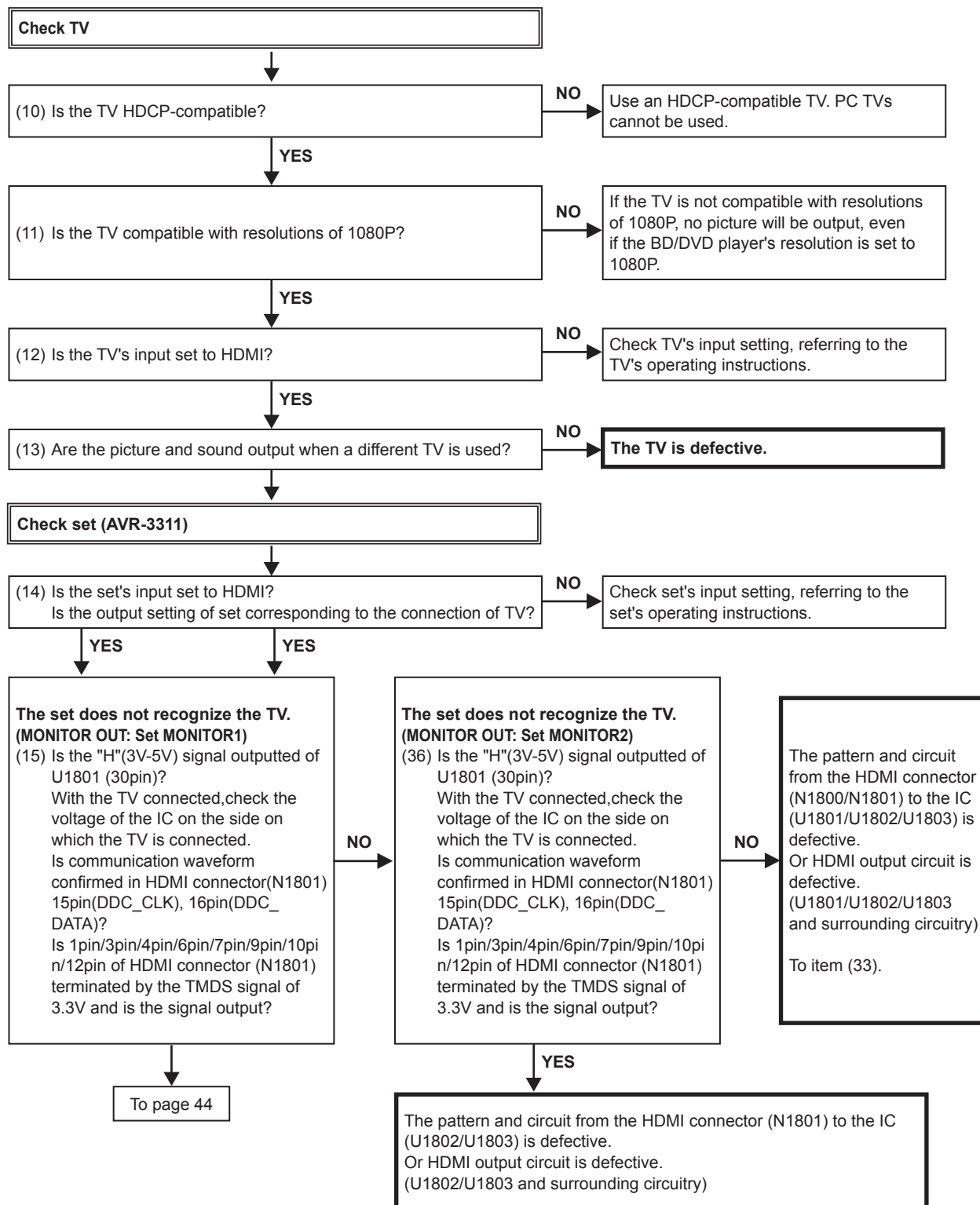
I2C communication waveforms

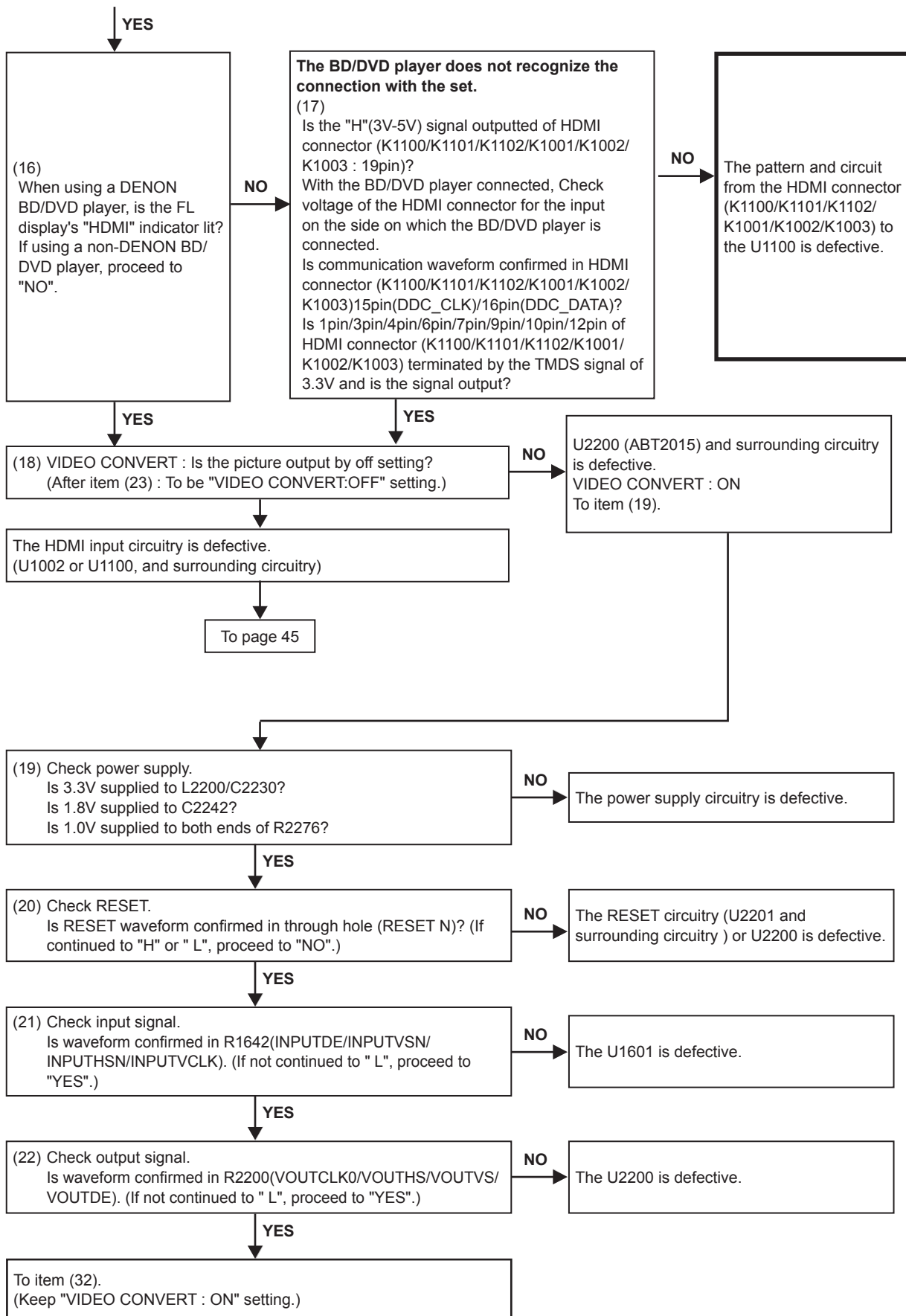


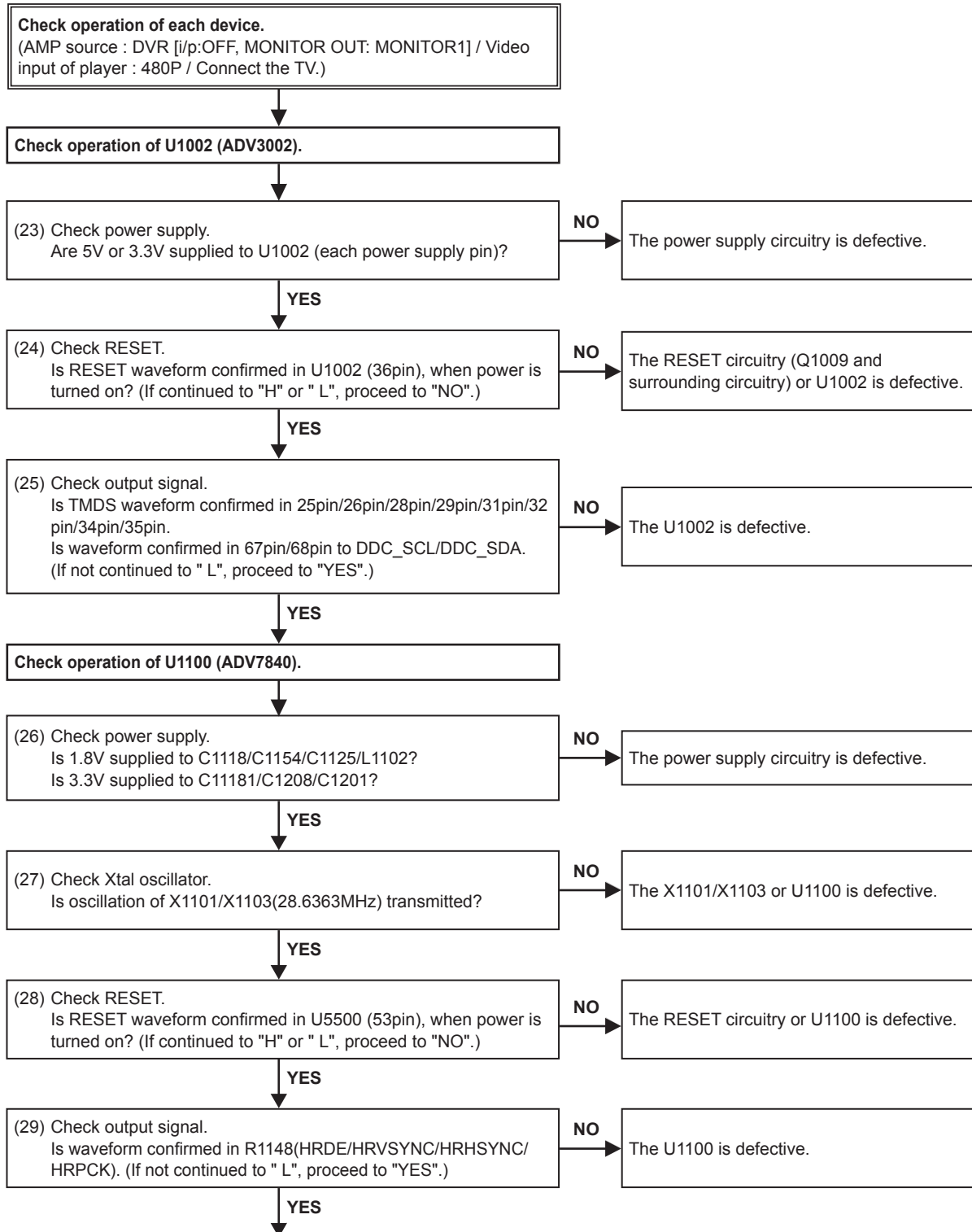
3. HDMI/DVI.

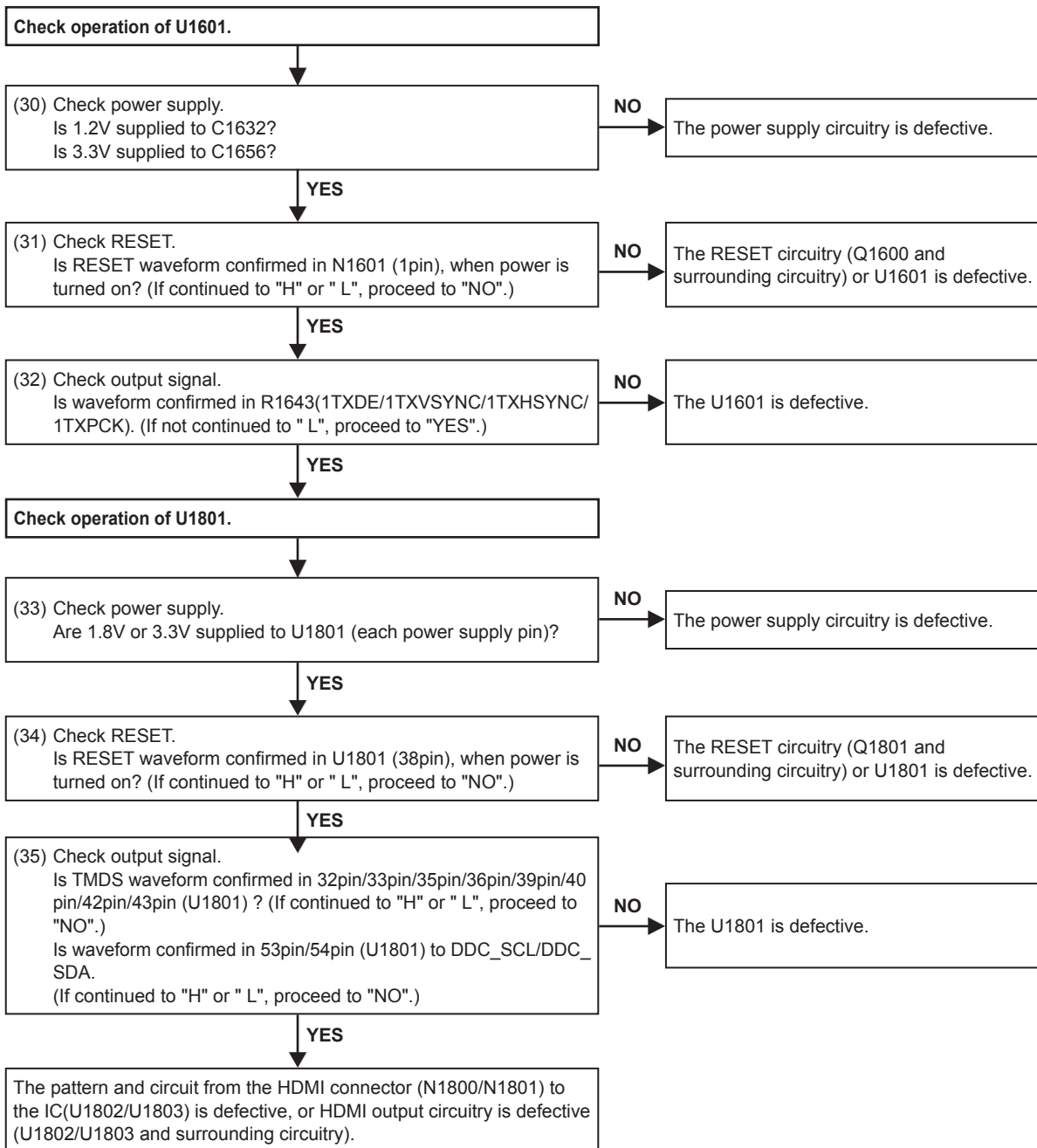
3.1. No picture or sound is output



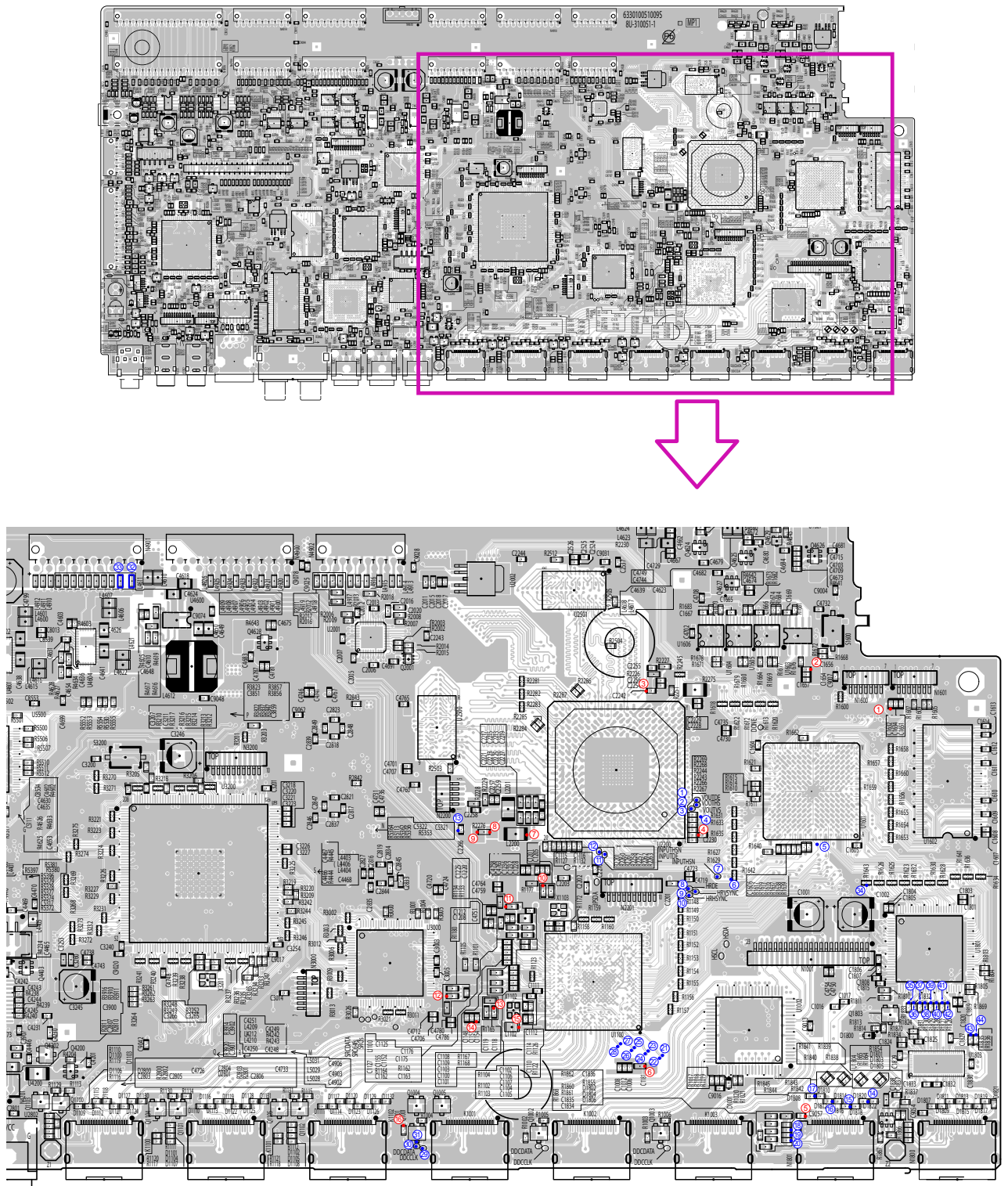








2.2. HDMI test point and waveforms



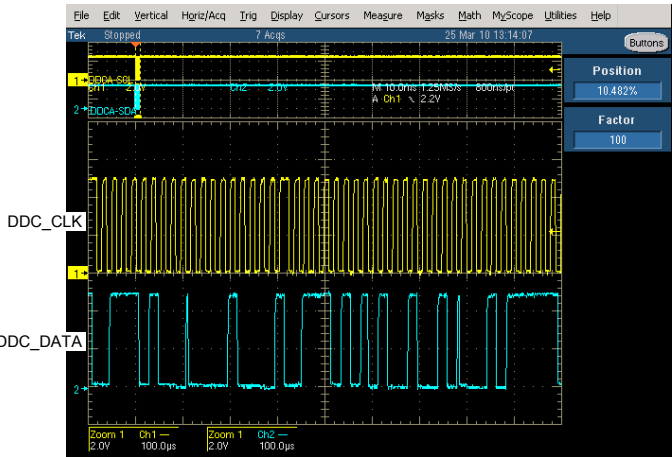
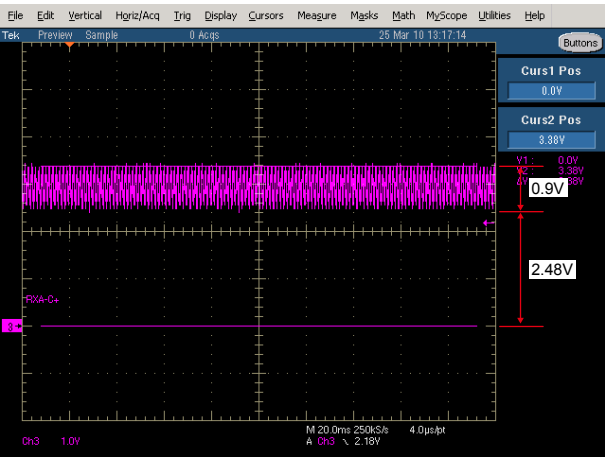
Check the voltage (Red)

No.	
1	1.2V
2	3.3V
3	1.8V
4	3.3V
5	+5V
6	3.3V
7	3.3V
8	1.0V
9	1.0V
10	3.3V
11	1.8V
12	3.3V
13	1.8V
14	1.8V
15	1.8V
16	+5V

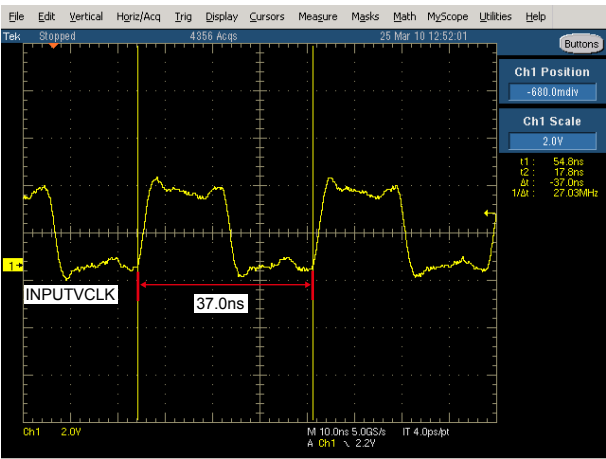
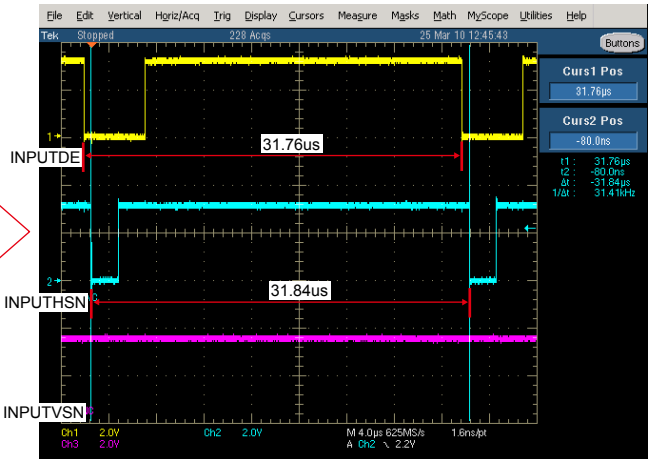
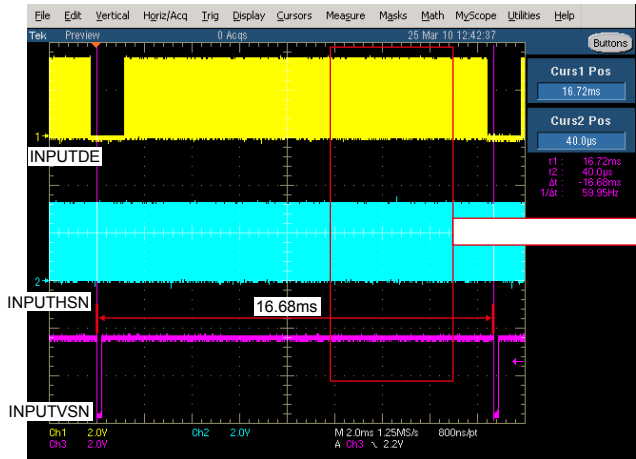
Check the wave form (Blue)

No.		No.	
1	VOUTDE	23	RXD_1+
2	VOUTHs	24	RXD_1-
3	VOUTVS	25	RXD_0+
4	VOUTCLK0	26	RXD_0-
5	HRPCK	27	RXD_C+
6	INPUTVCLK	28	RXD_C-
7	INPUTHSN	29	DDC CLK
8	HRDE	30	DDC DATA
9	HRVSYNC	31	HPD
10	HRHSYNC	32	I2C CLK
11	INPUTDE	33	I2C DATA
12	INPUTVSN	34	1TXPCK/1TXDE/ 1TXHSYNC/1TXVSYNC
13	RESETN.	35	TXC-
14	D2+/D2-	36	TXC+
15	D1+/D1-	37	TX0-
16	D0+/D0-	38	TX0+
17	CK+/CK-	39	TX1-
18	HPD	40	TX1+
19	DDC_SDA	41	TX2-
20	DDC_SCL	42	TX2+
21	RXD_2+	43	DDCSCL
22	RXD_2-	44	DDCSDA

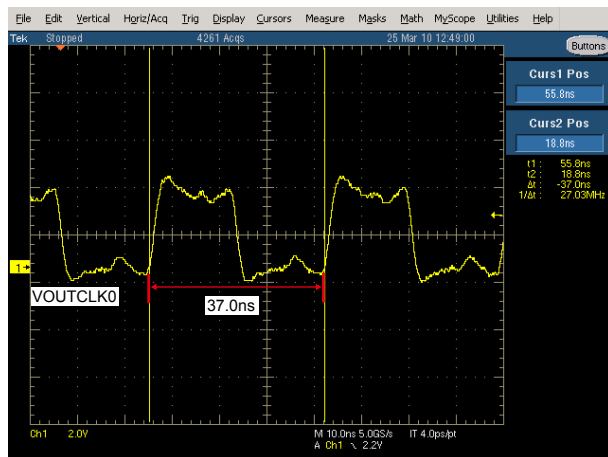
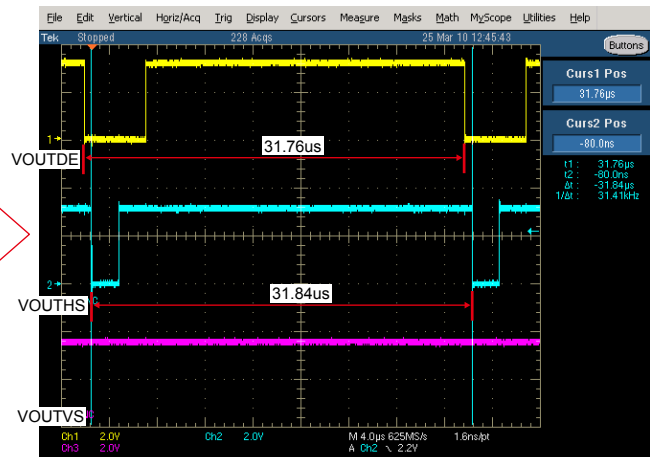
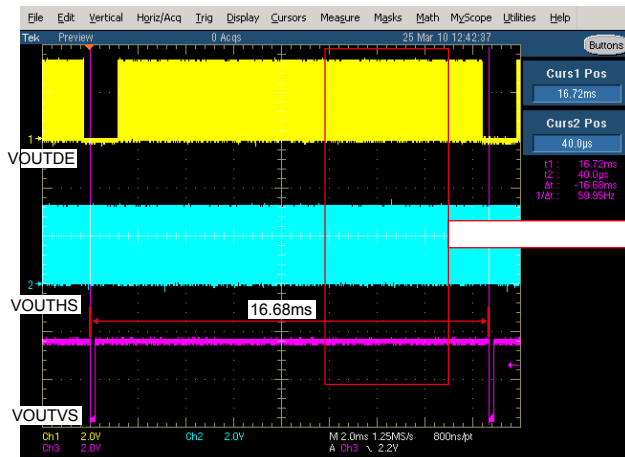
DDC_CLK/DDC_DATA/TMDS : Check item (15),(17),(25),(35),(36)



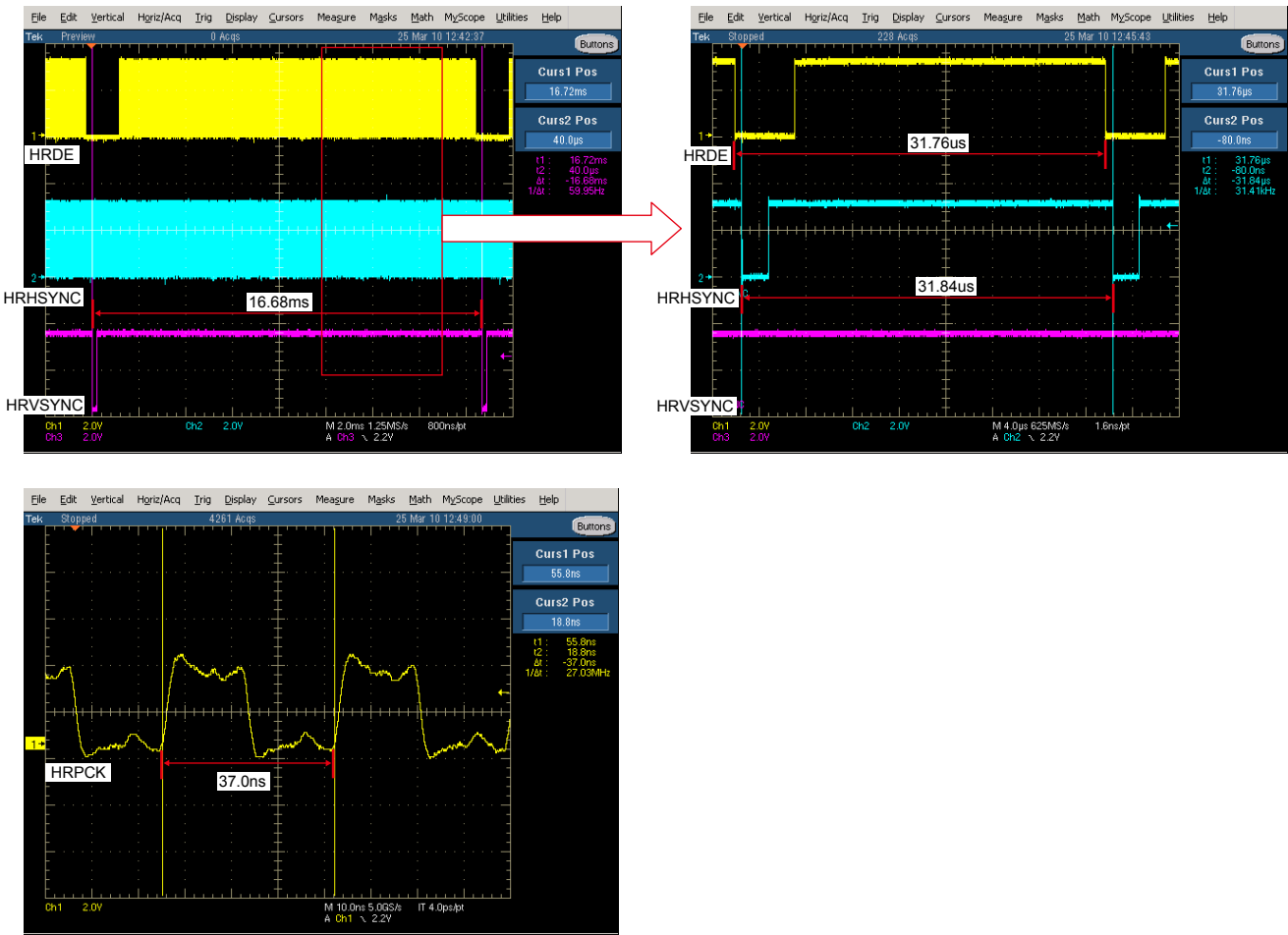
INPUTDE/INPUTVSN/INPUTHSN/INPUTVCLK : Check item (21)



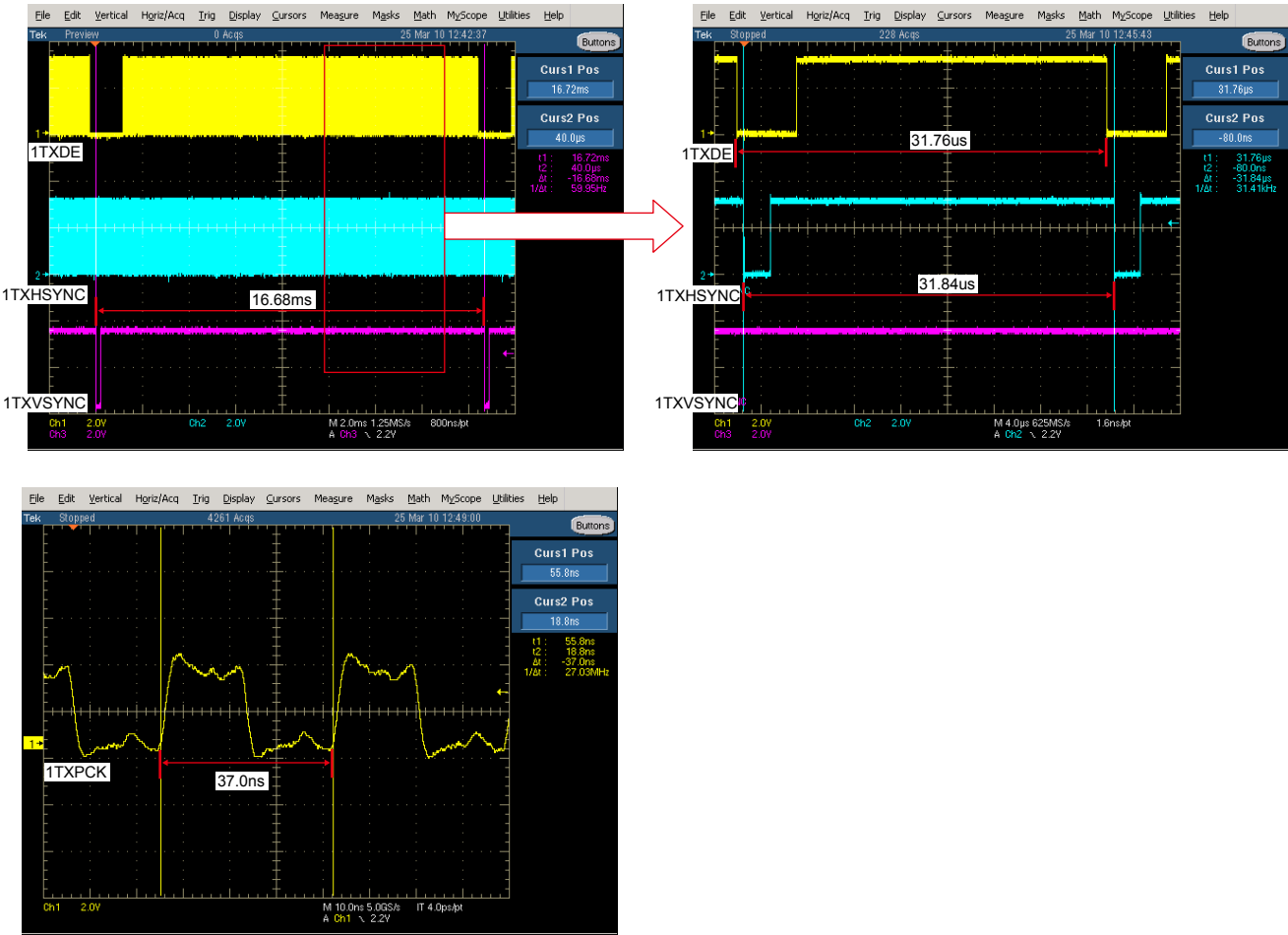
VOUTDE/VOUTVS/VOUTH0 : Check item (22)



HRDE/HRVSYNC/HRHSYNC/HRPCK : Check item (29)

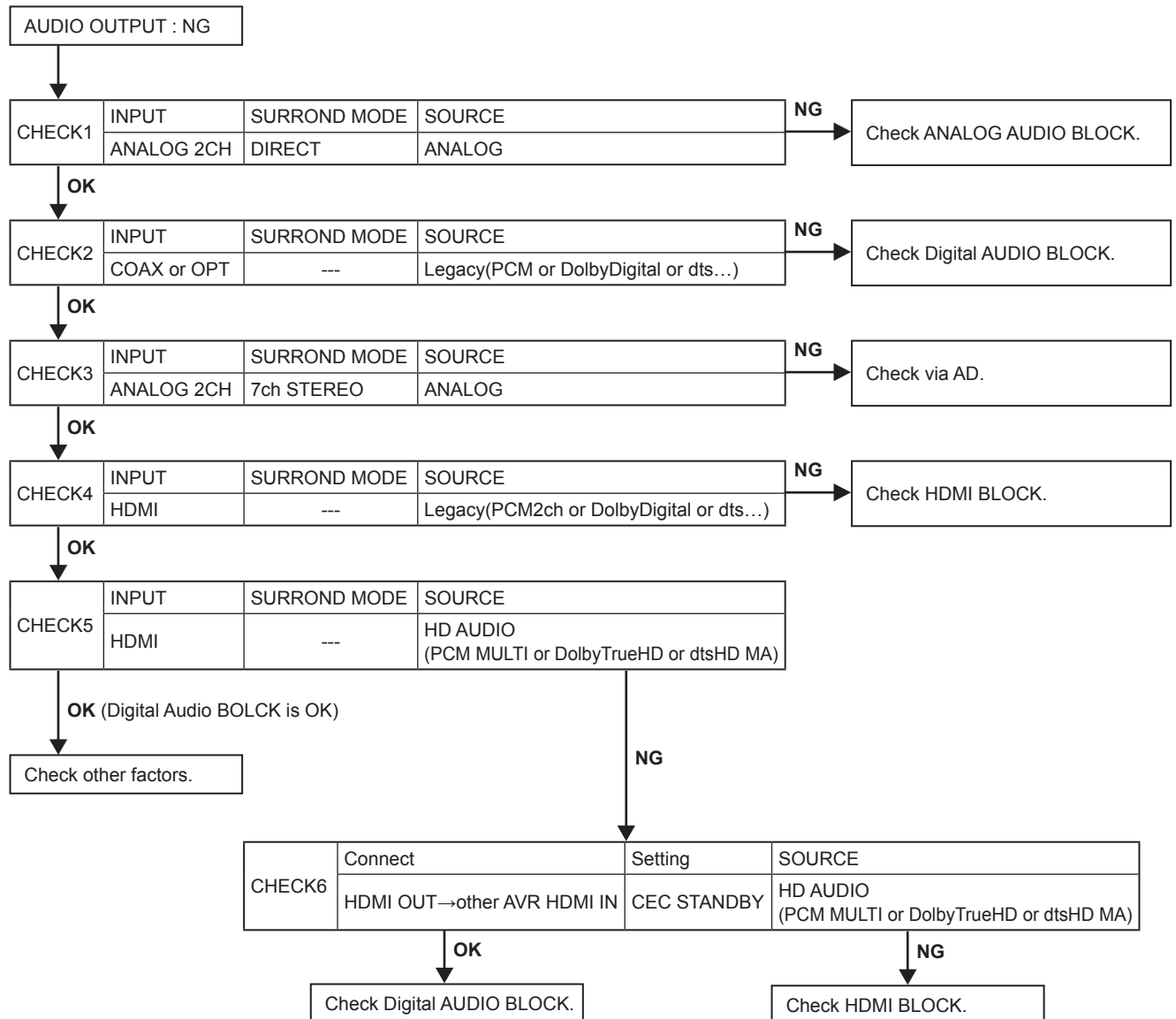


1TXDE/1TXVSYNC/1TXHSYNC/1TXPCK : Check item (32)

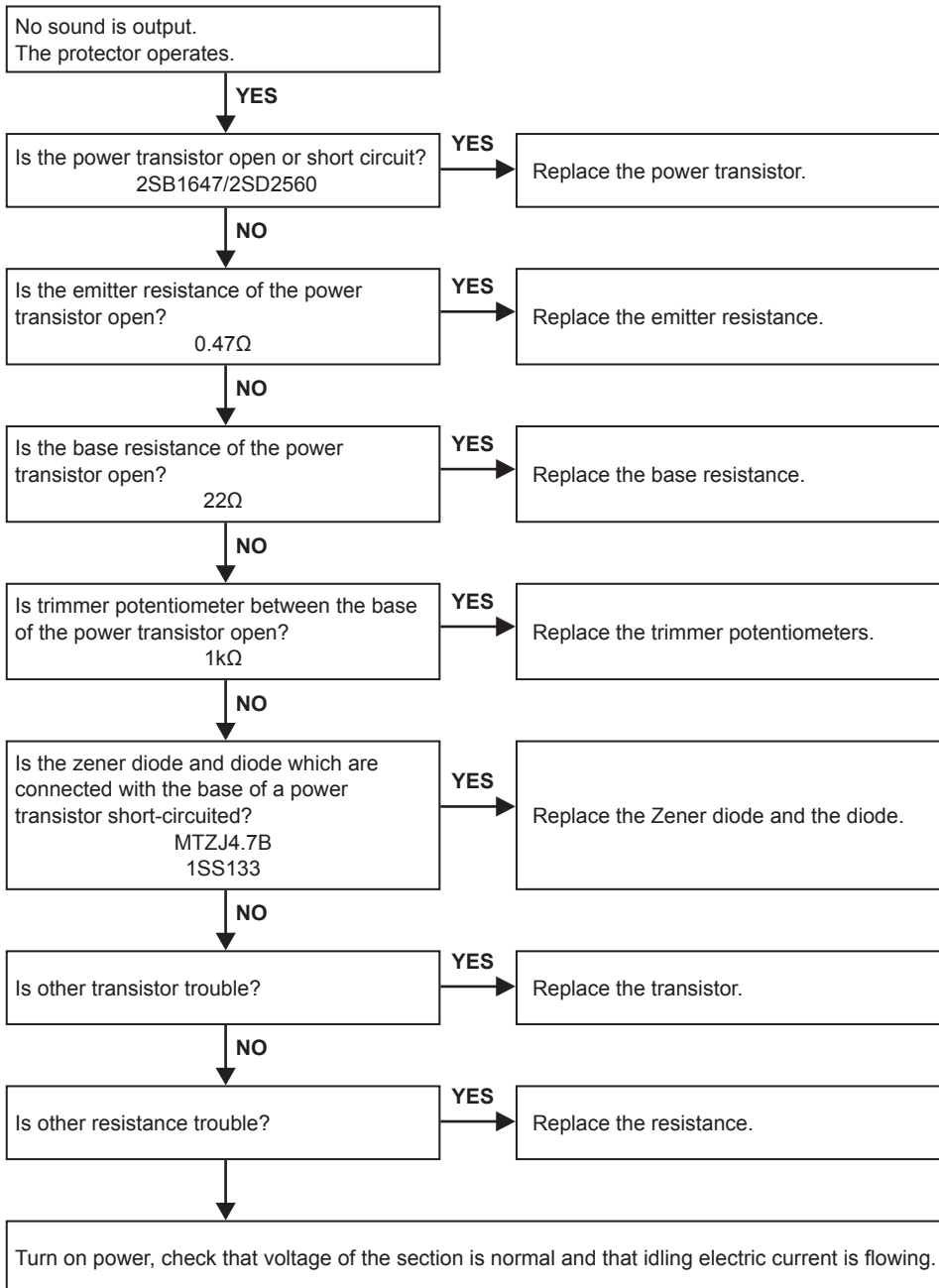


4. AUDIO

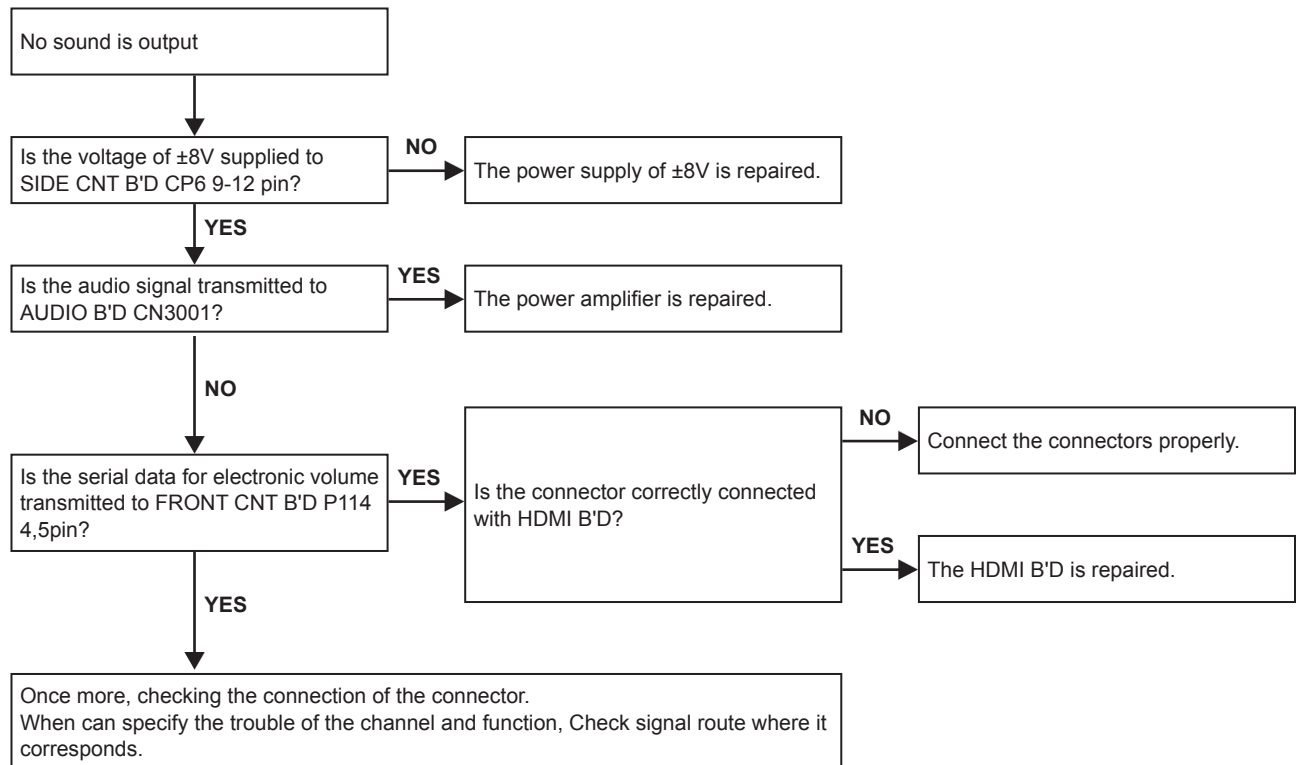
4.1. AUDIO CHECK



4.2. Power AMP (7CH AMP B'D)

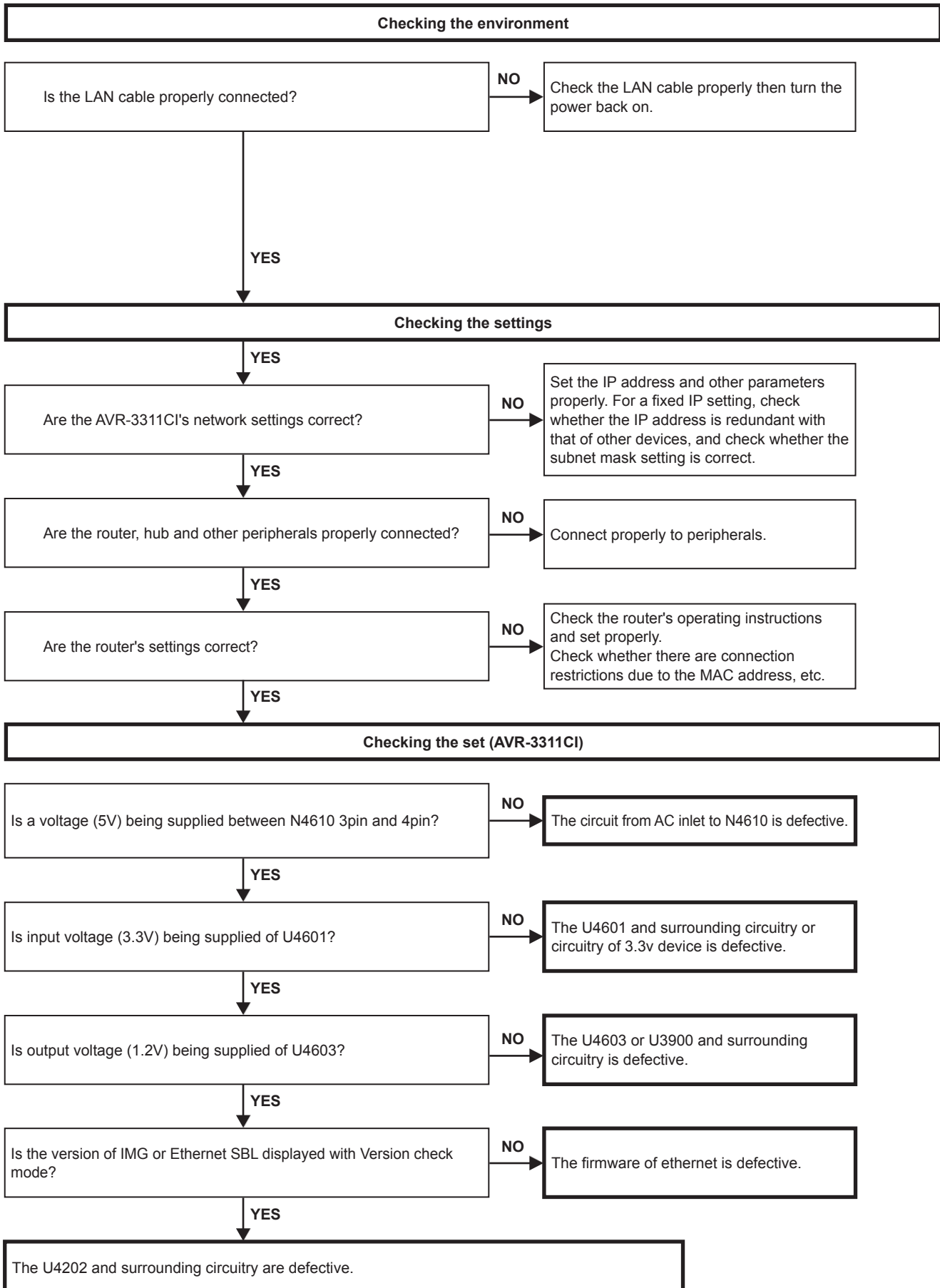


4.3. Analog audio

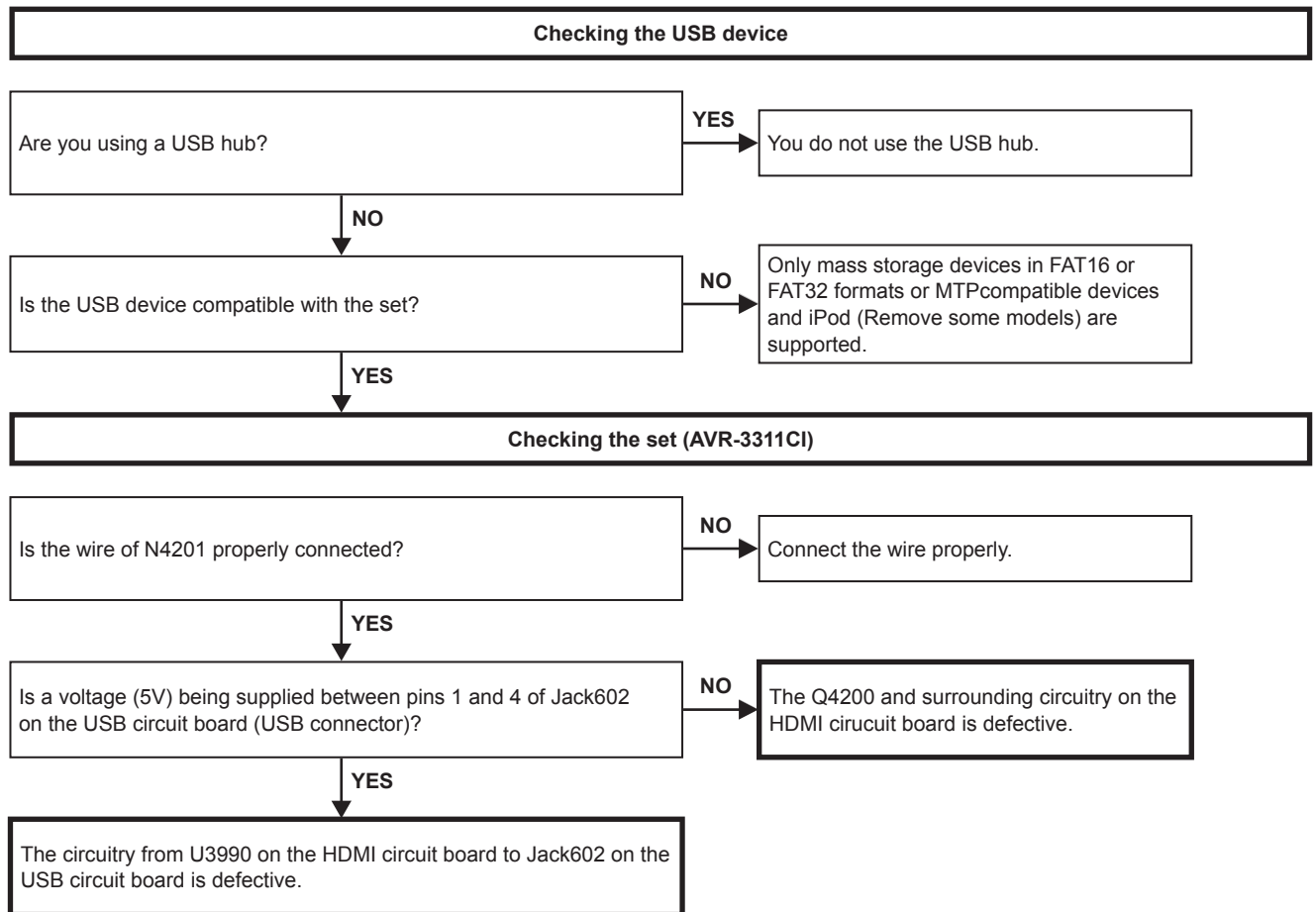


5. Network/USB

5.1. Cannot connect to network



5.2. USB device is not recognized



5.3. No picture or sound is output

Checking the set (AVR-3311CI):(If no picture is output)

Are video signals output from U4203 pin 27 (Y) and pin 24 (C)?

NO

You do not use the USB hub.

YES

Check the analog video circuit.

Checking the set (AVR-3311CI):(If no sound is output)

Are S/PDIF signals output to U3000 pin 21?

NO

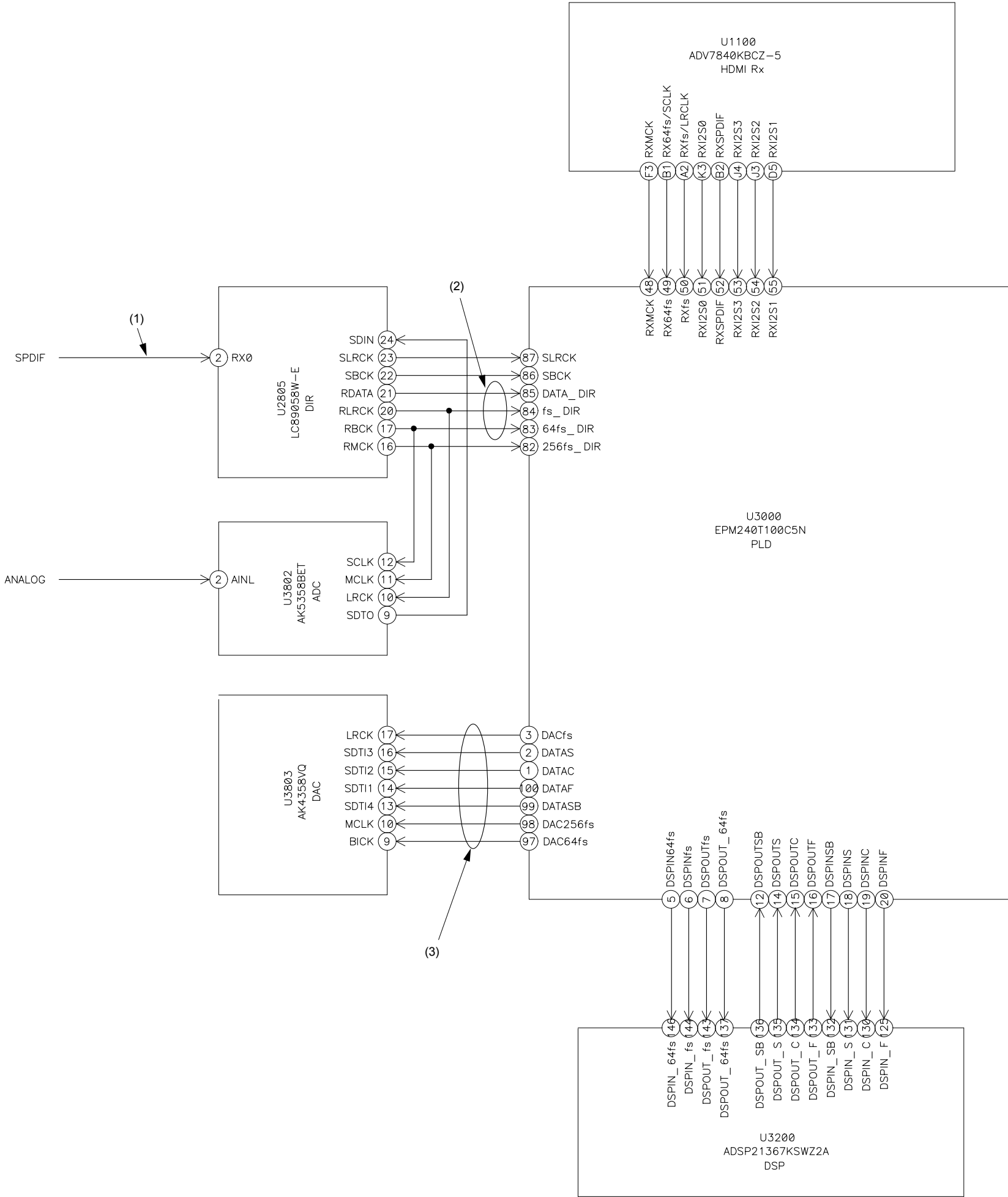
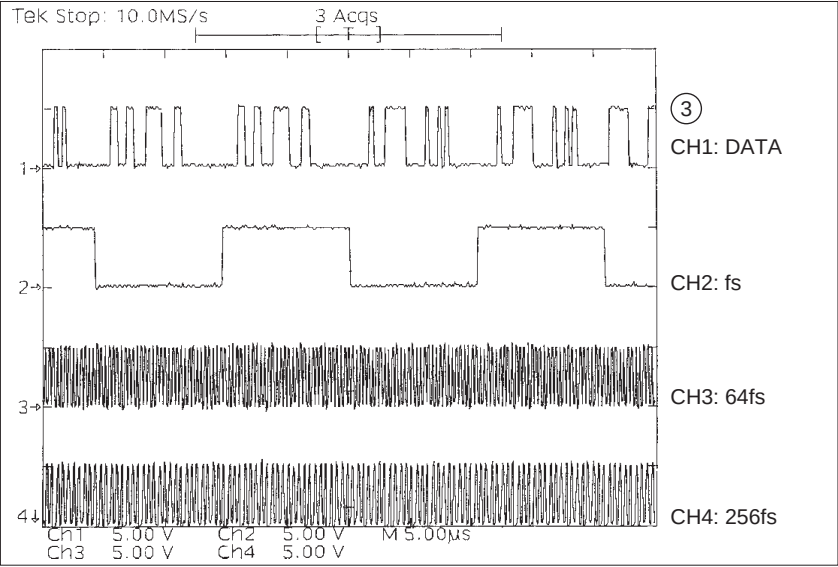
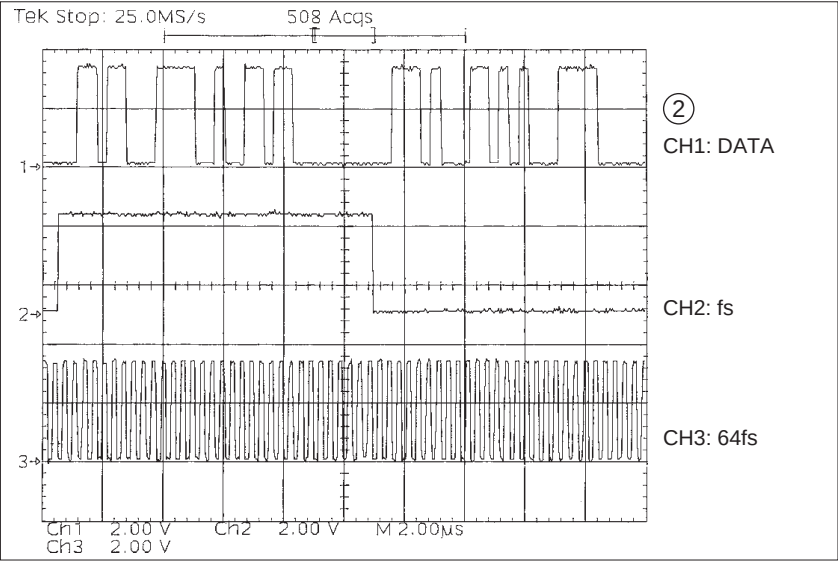
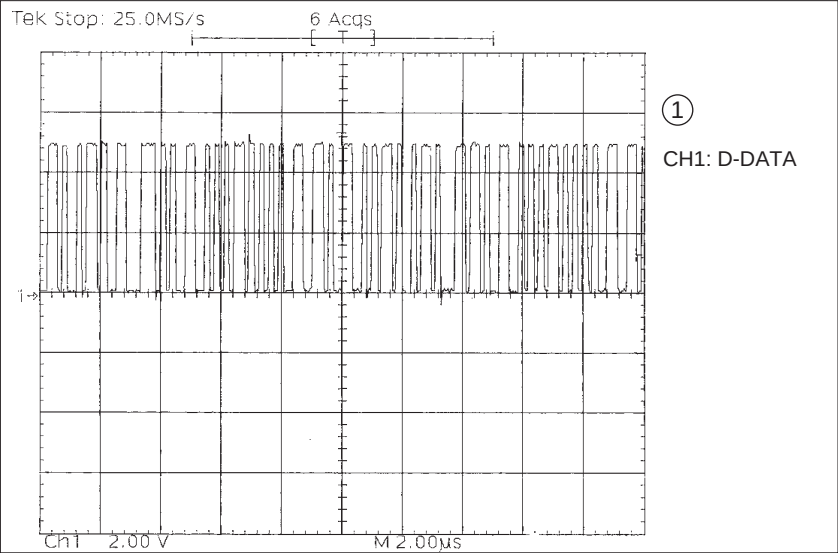
U3900 and surrounding circuitry is defective.

YES

Check the Digital audio circuit.

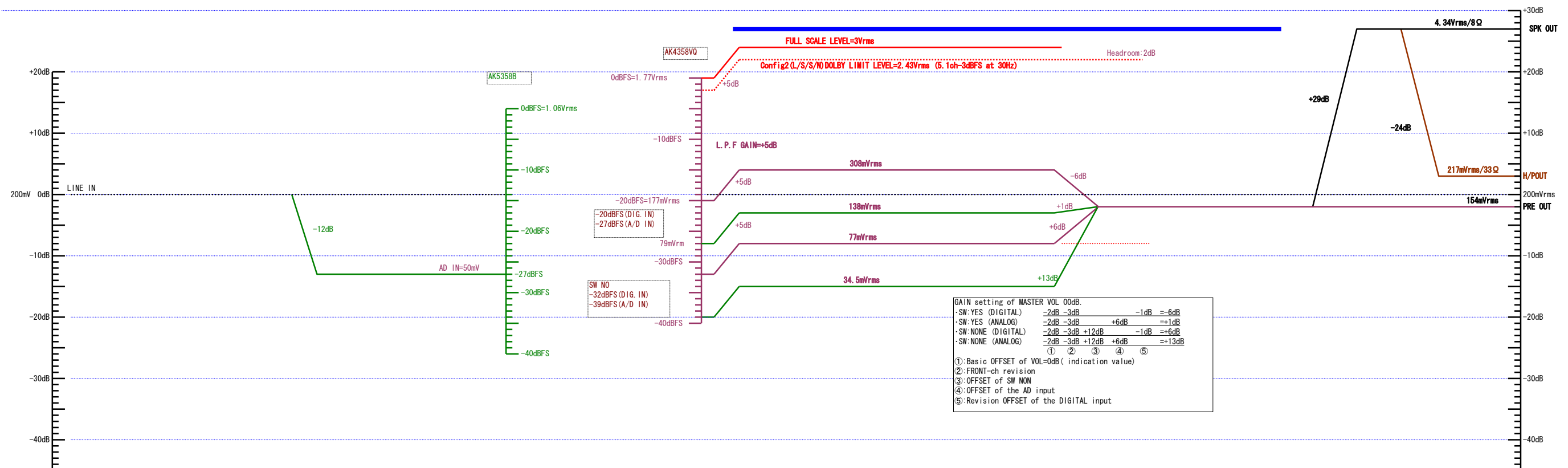
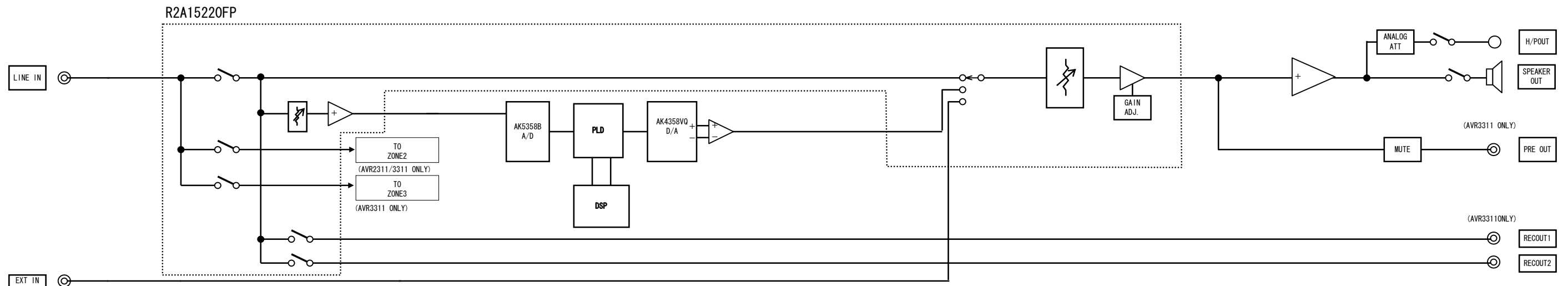
CLOCK FLOW & WAVE FORM IN DIGITAL BLOCK

Wave form

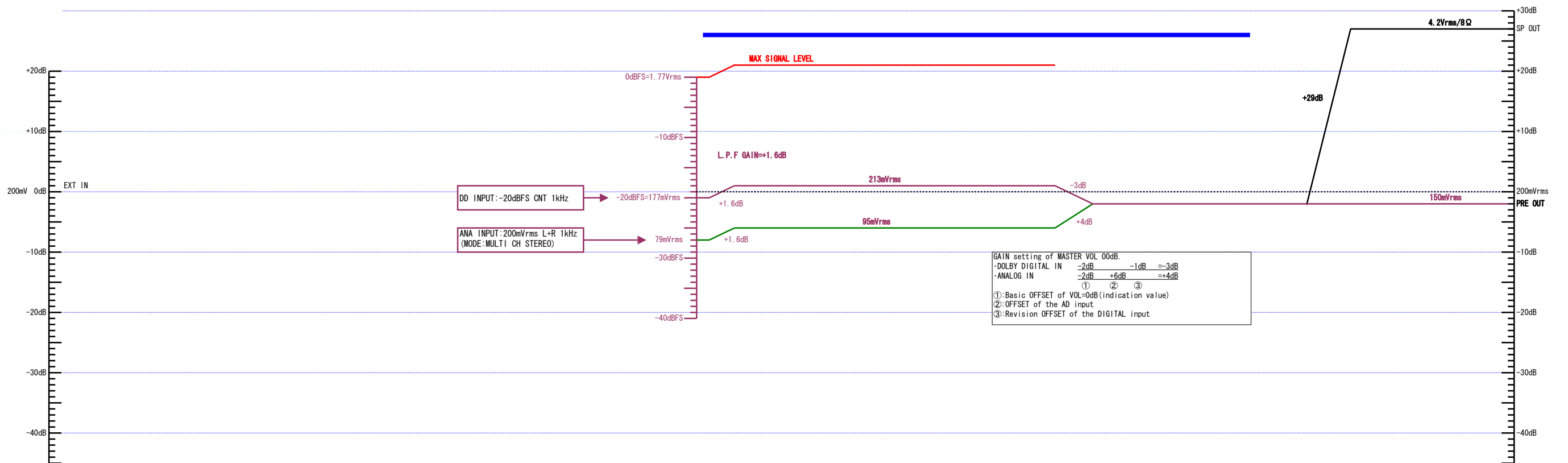
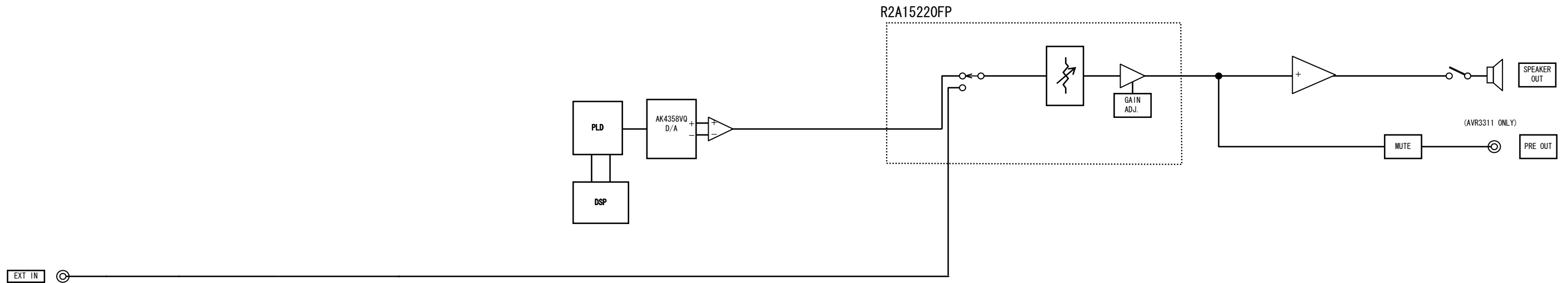


LAEVEL DIAGRAM

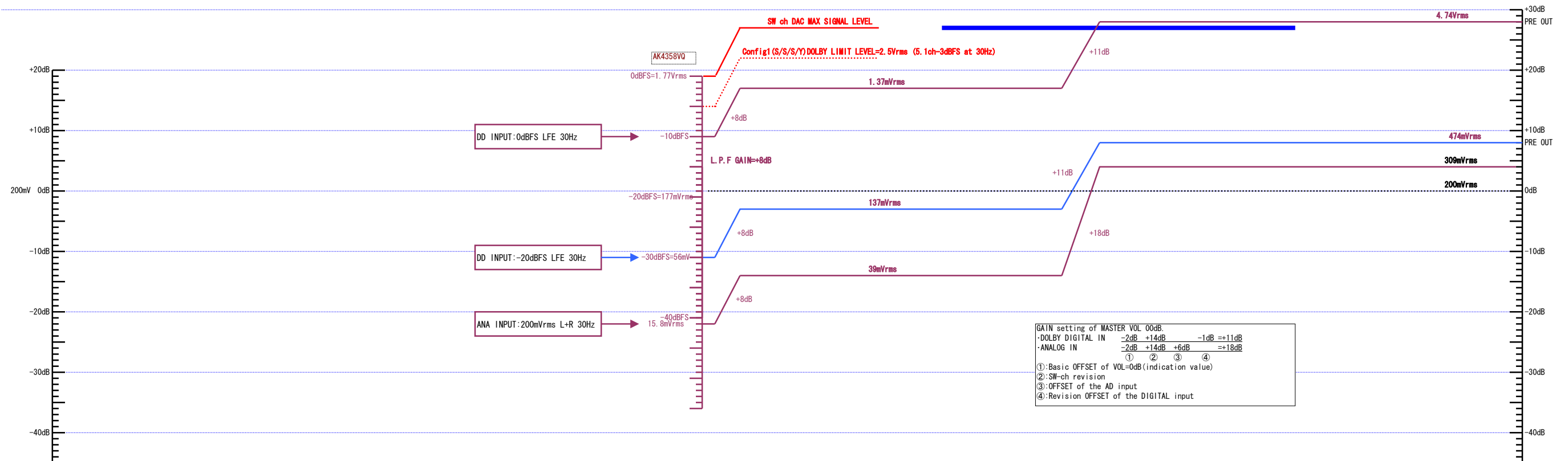
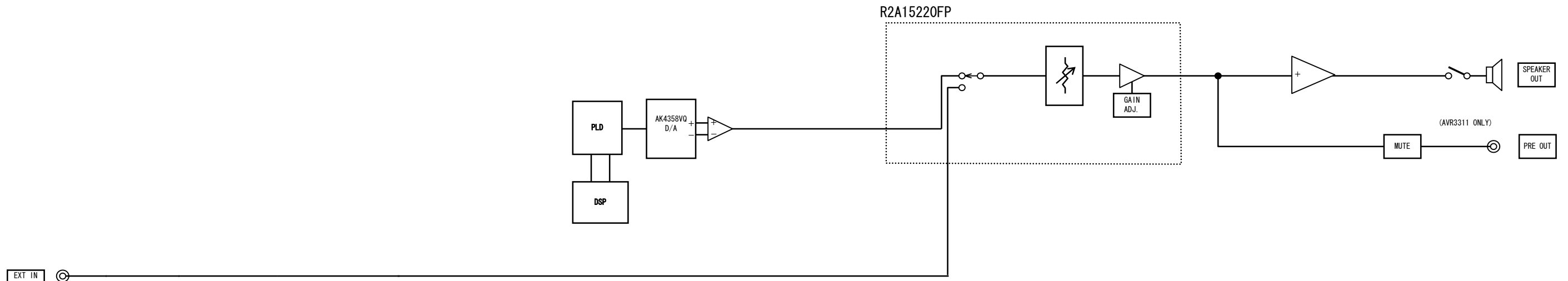
LEVEL DIAGRAM
FRONT ch



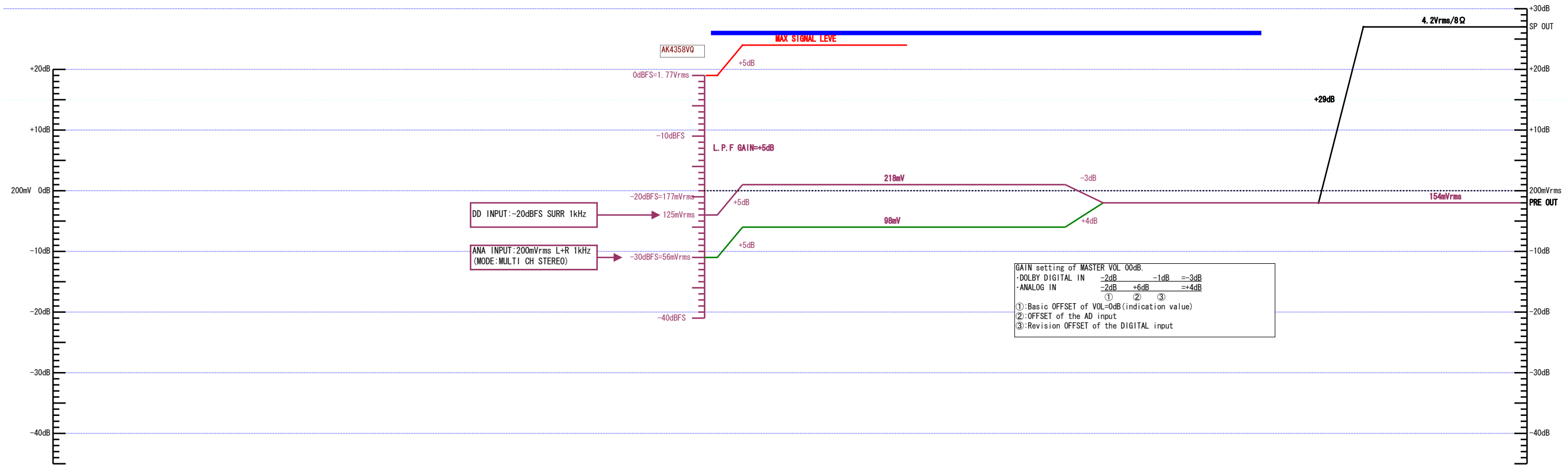
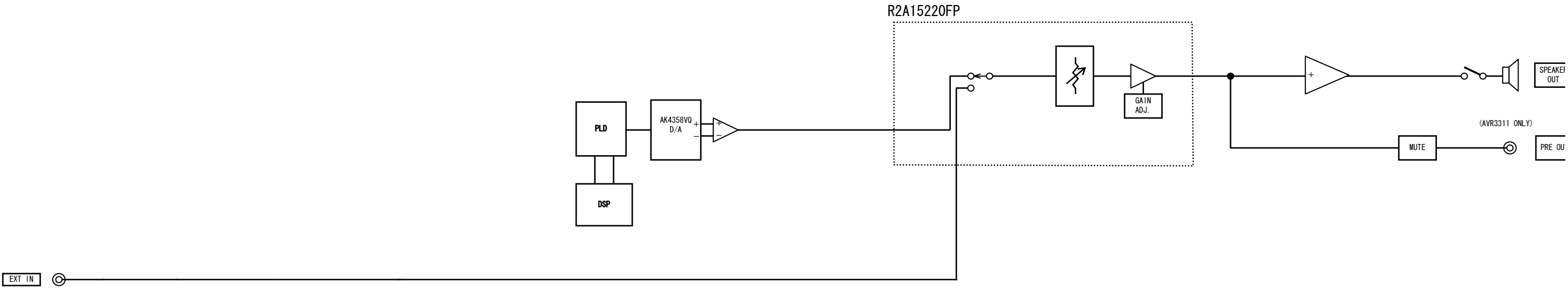
LEVEL DIAGRAM
CENTER ch



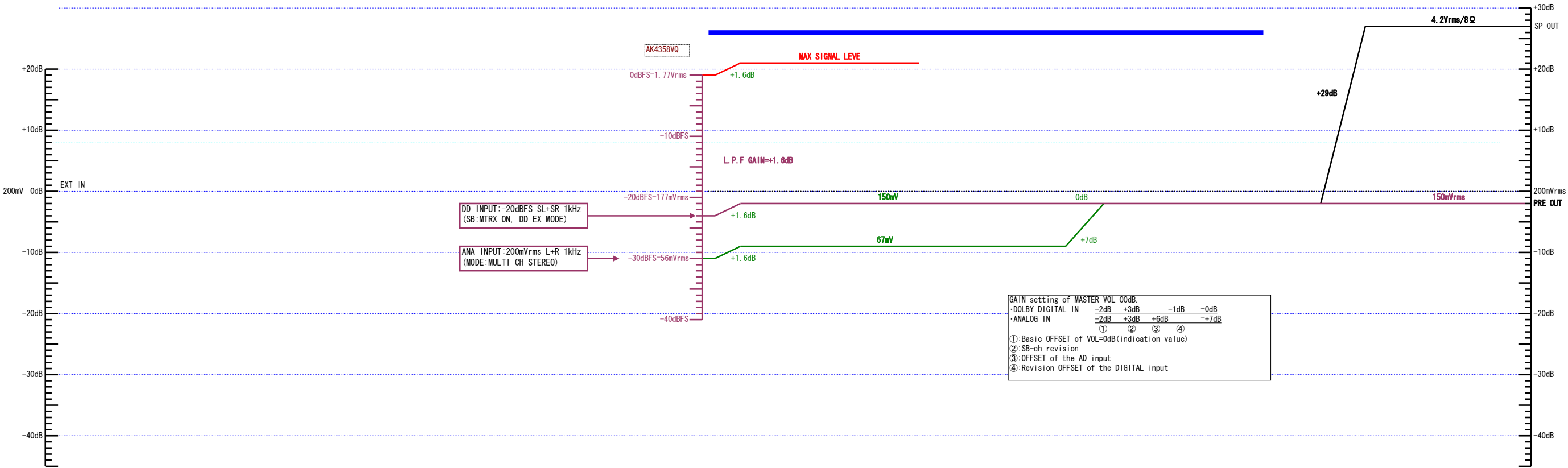
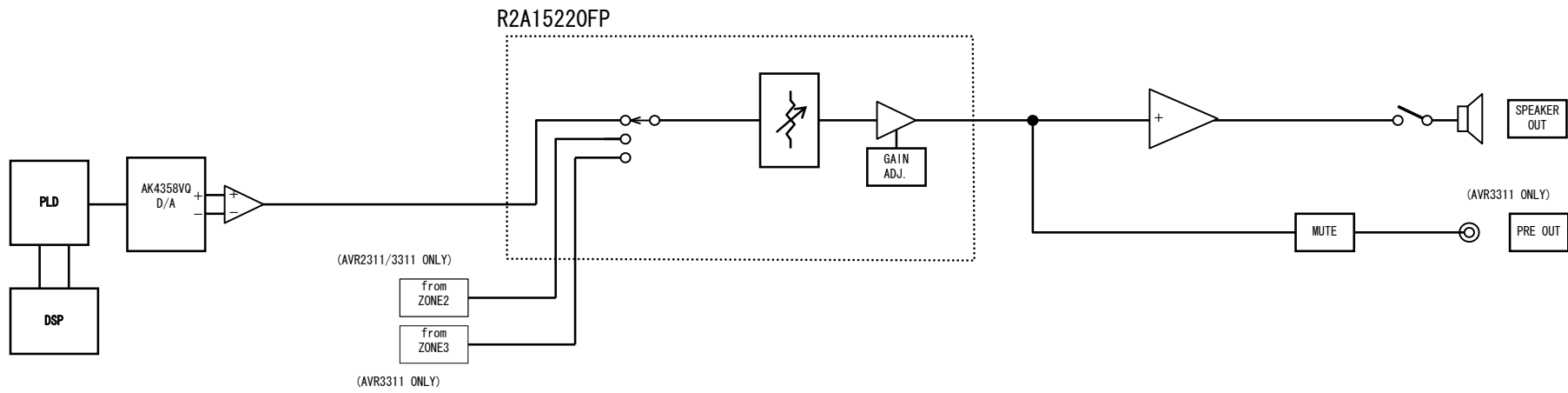
LEVEL DIAGRAM
SUBWOOFER ch

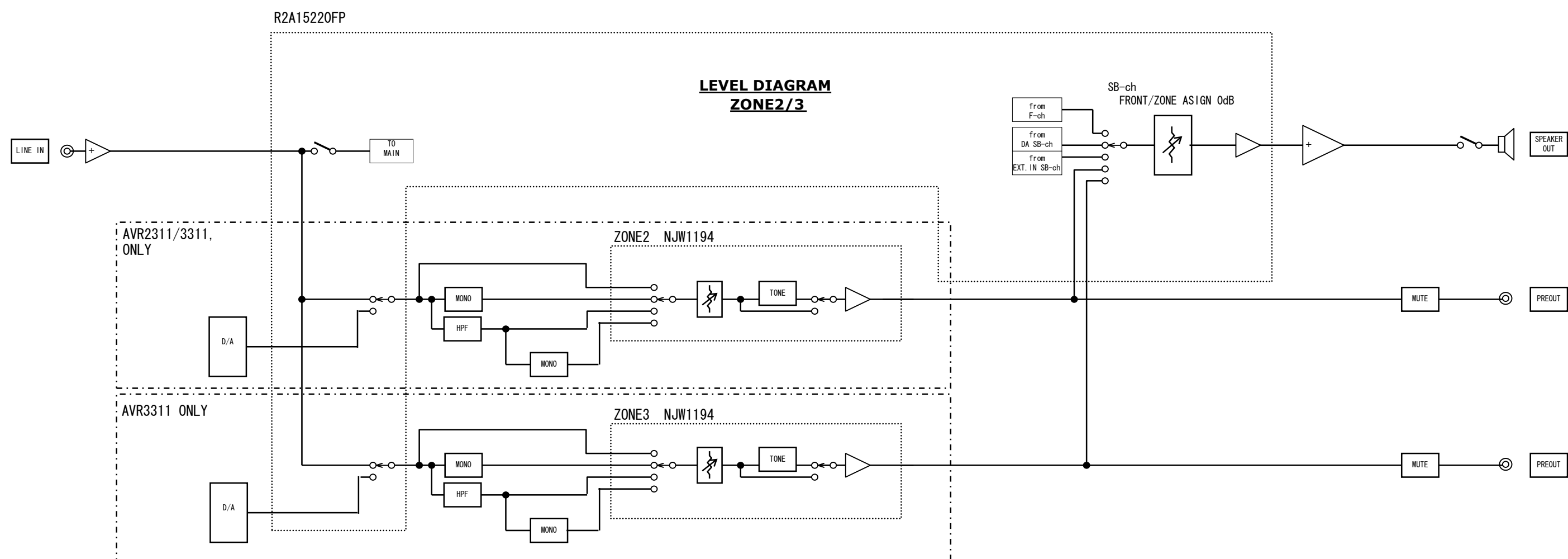


LEVEL DIAGRAM
SURROUND ch



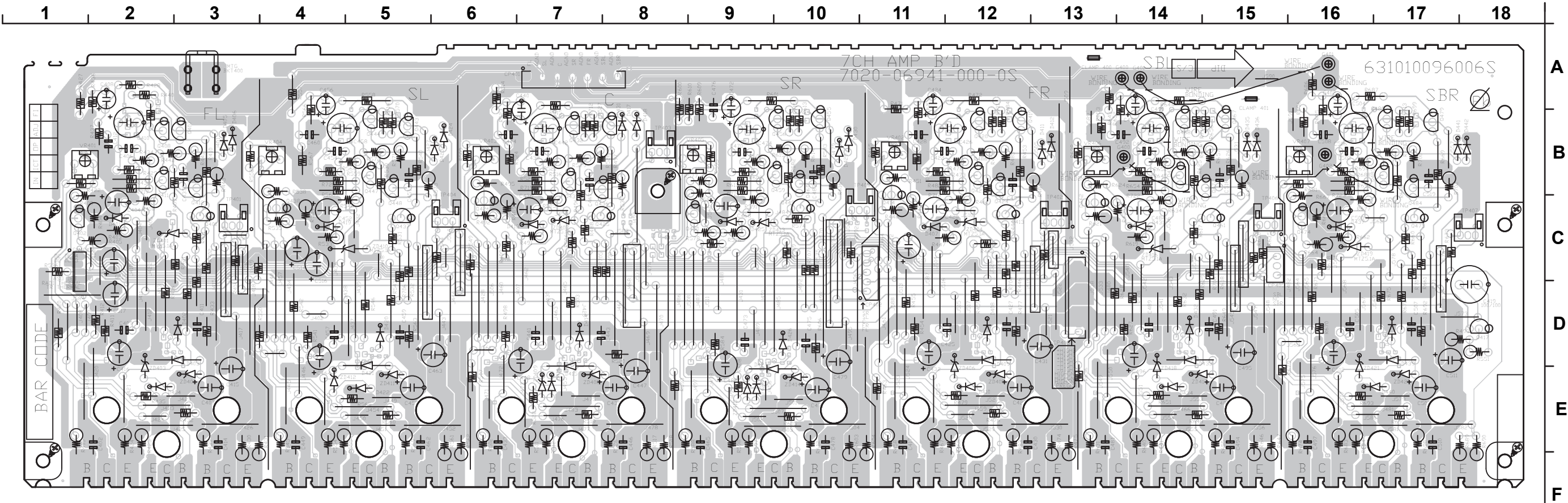
LEVEL DIAGRAM
SURR.BACK ch



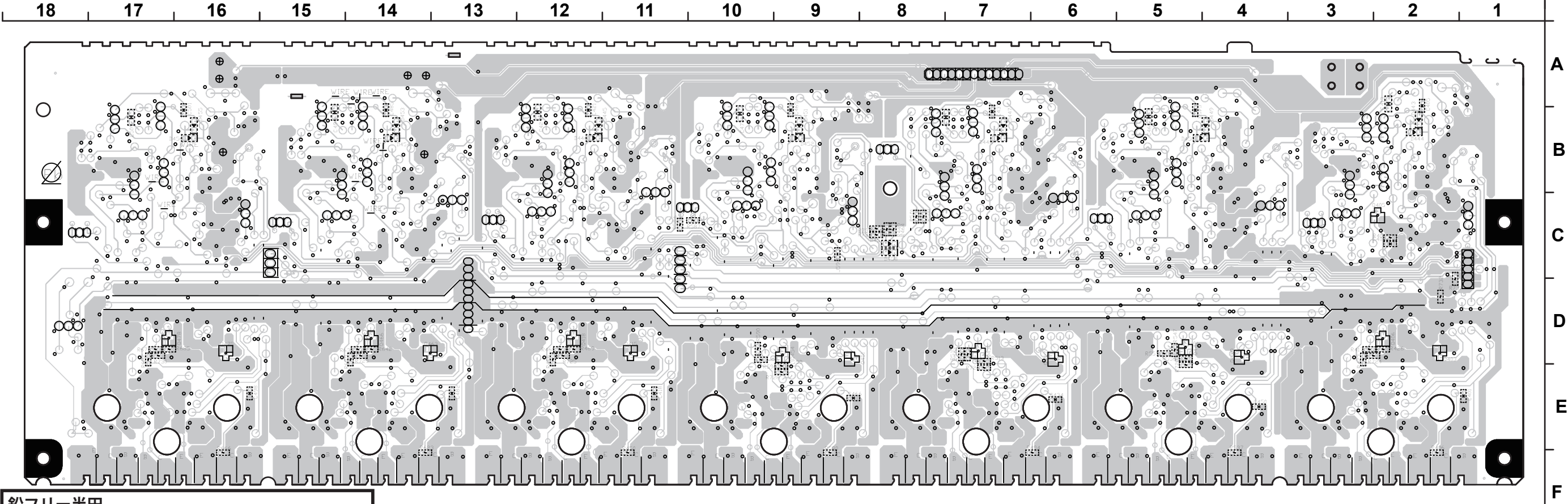


PRINTED WIRING BOARDS

7CH-AMP (COMPONENT SIDE)



7CH-AMP (FOIL SIDE)

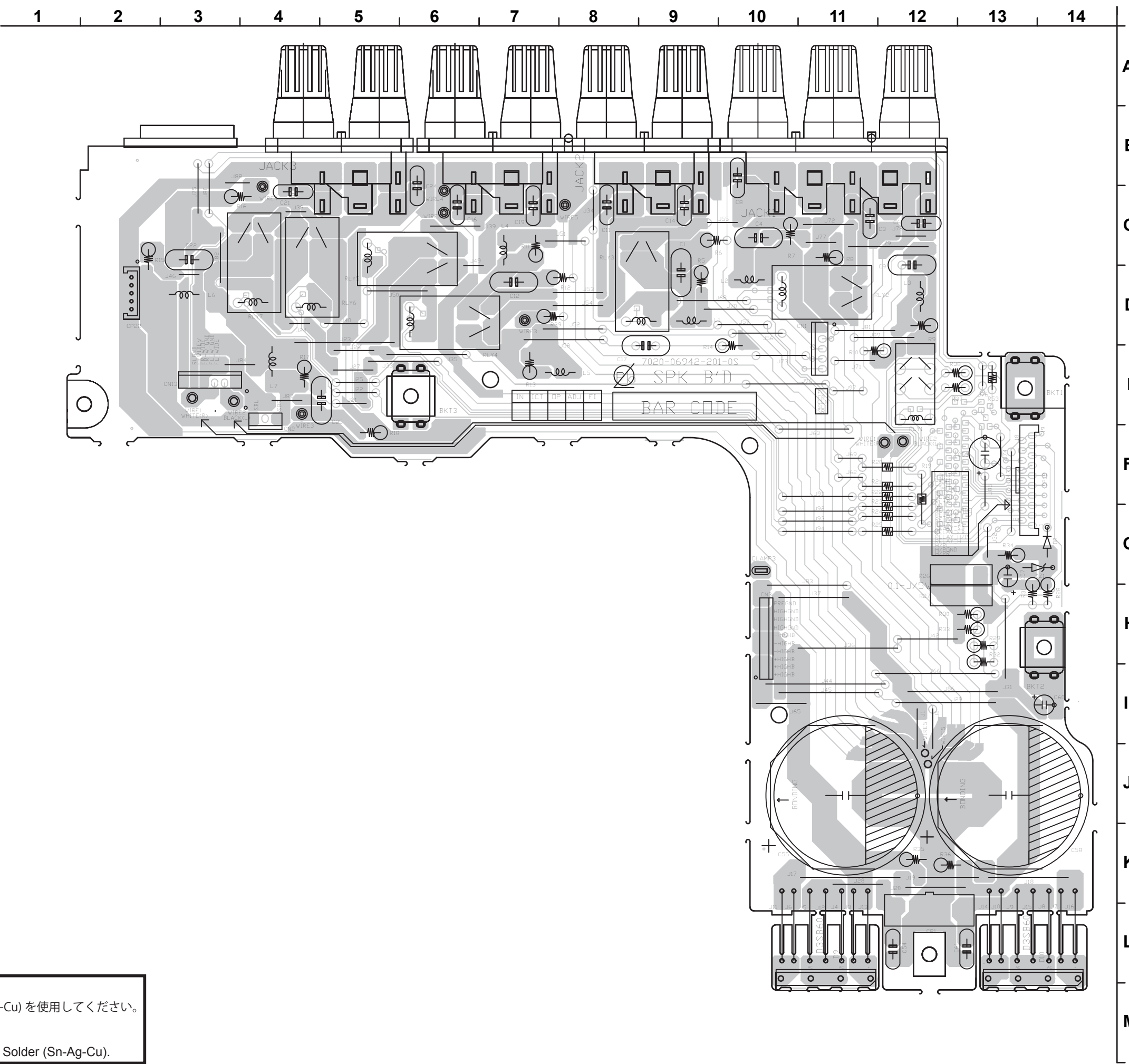


鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

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

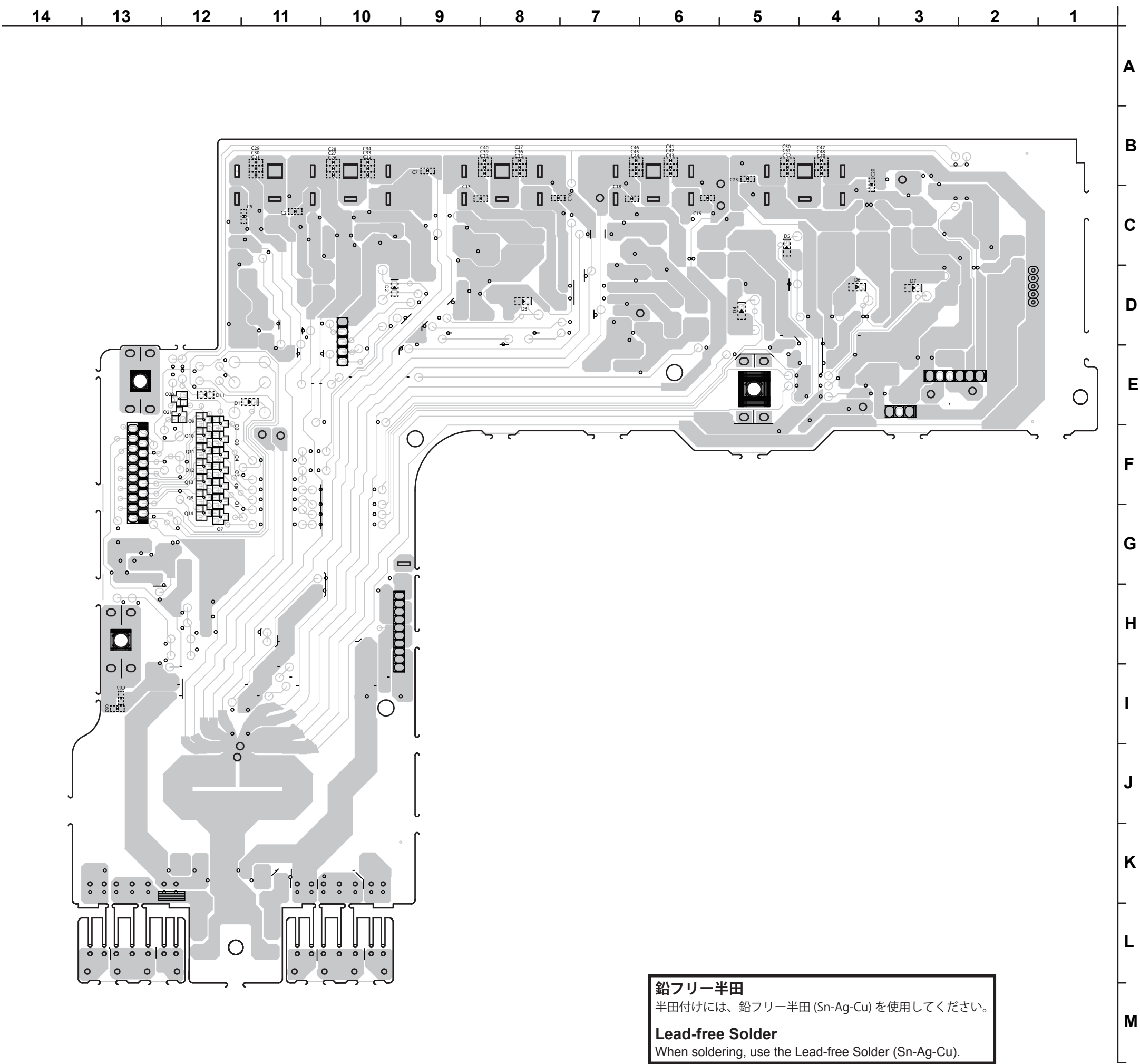
The image shows a detailed PCB layout for a power supply unit. The layout is organized into sections labeled A through F and 1 through 12. Key components include a transformer, a bridge rectifier, and a voltage regulator. The layout includes a 'BAR CODE' area and a 'SMP5 B/D20-06942-101-0S' label. The components are arranged in a way that minimizes interference and maximizes efficiency. The layout includes a 'BAR CODE' area and a 'SMP5 B/D20-06942-101-0S' label. The components are arranged in a way that minimizes interference and maximizes efficiency.

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



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

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

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

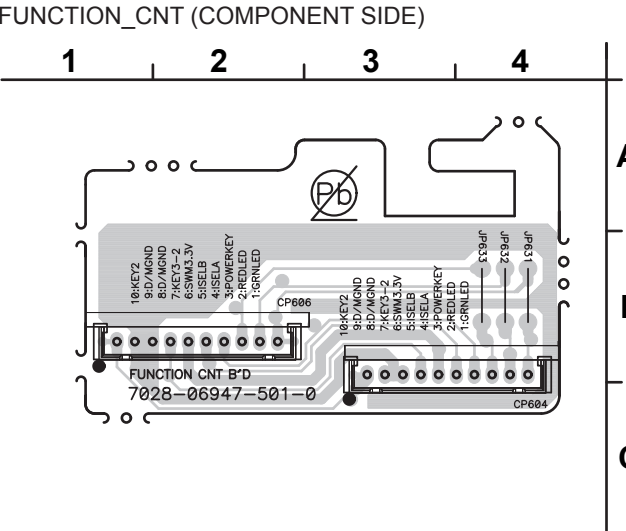
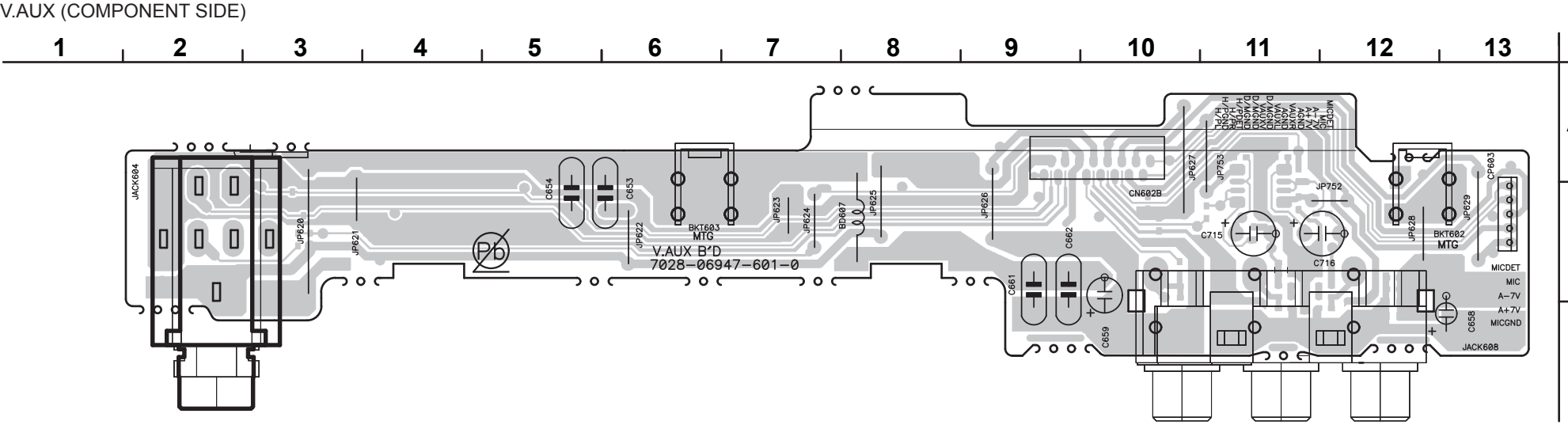
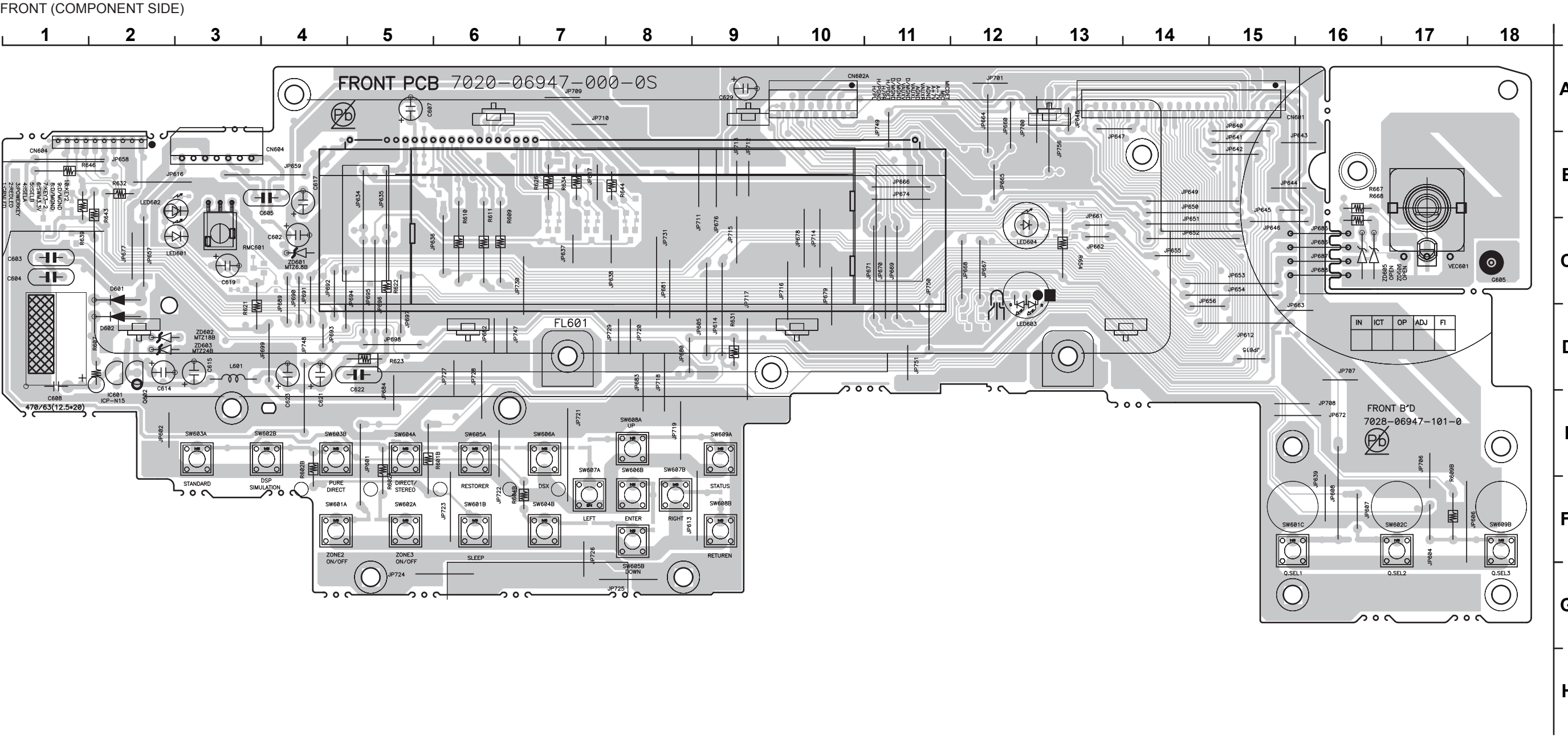
96

The top view of the PCB layout for the Raspberry Pi 4 Model B shows the intricate circuitry and component placement. The 40-pin GPIO header is located at the bottom center. The layout includes various components such as the SoC, memory, and peripheral controllers, all interconnected by a dense network of traces. The board is labeled with '7' through '1' along the top edge and 'A' through 'F' along the right edge.

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

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

Diagram of the back of the device showing the USB B connector, JP619, and various labels. The labels include: JACK682, USB B'D (with a crossed-out 'D'), 702B-86947-481-8, C639, JP619, Q1699, and USB +DATA. The diagram also shows the physical components and their connections.



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

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

16

3

2

1

A

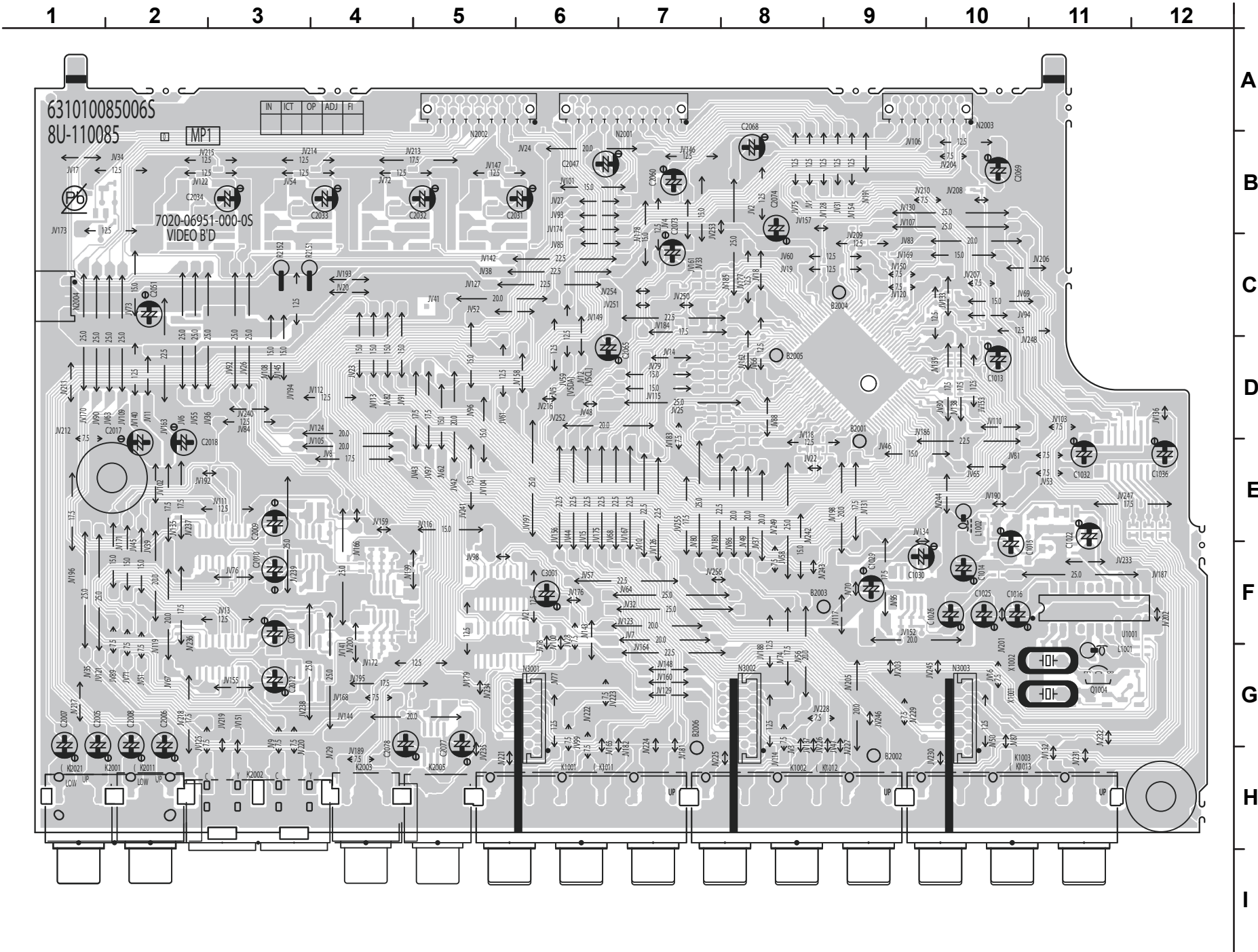
B

C

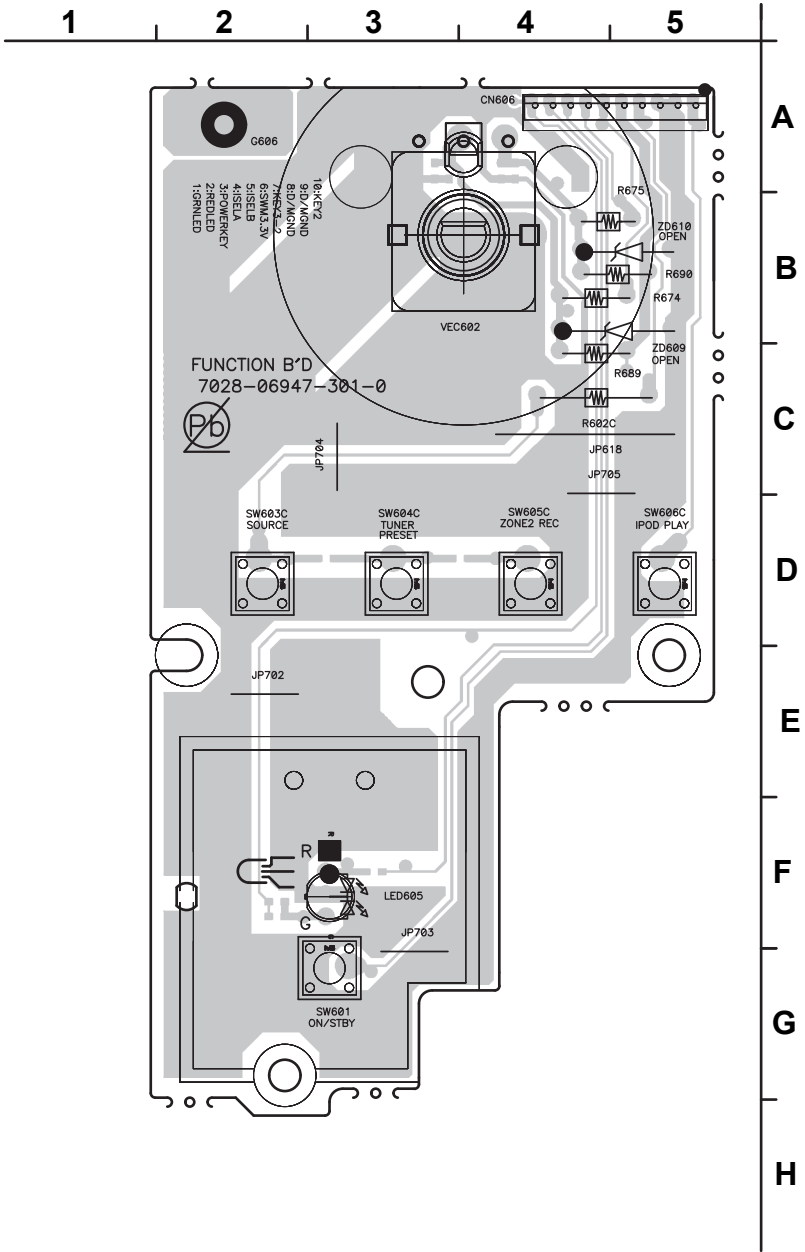
16K72
8.0V/AGND
7/K7C3-2
65NM33V
250K
45SEL4
3/POWERKEY
2/RELED
1/CRULED

16K72
8.0V/AGND
7/K7C3-2
65NM33V
250K
45SEL4
3/POWERKEY
2/RELED
1/CRULED

100

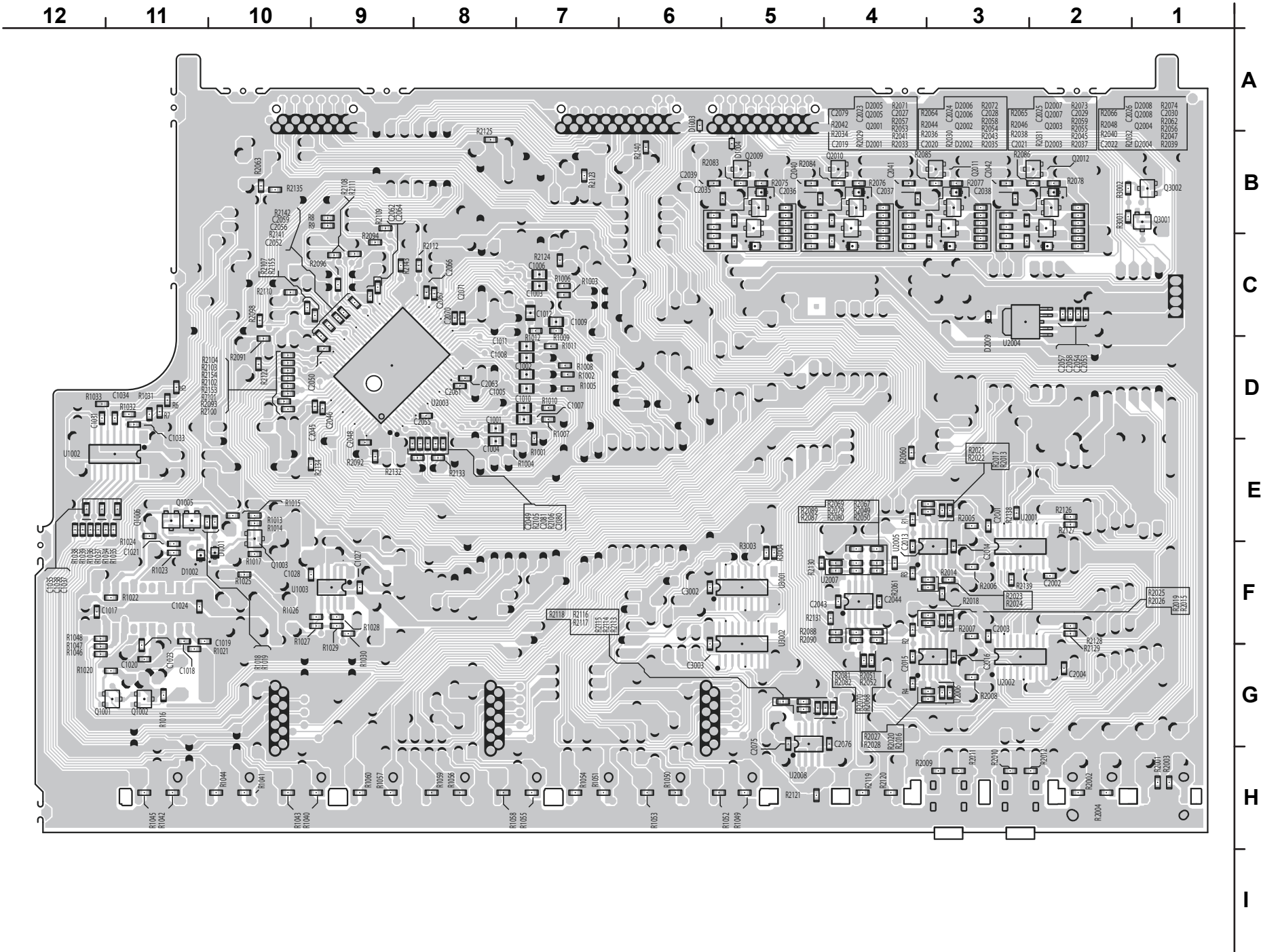


FUNCTION (COMPONENT SIDE)

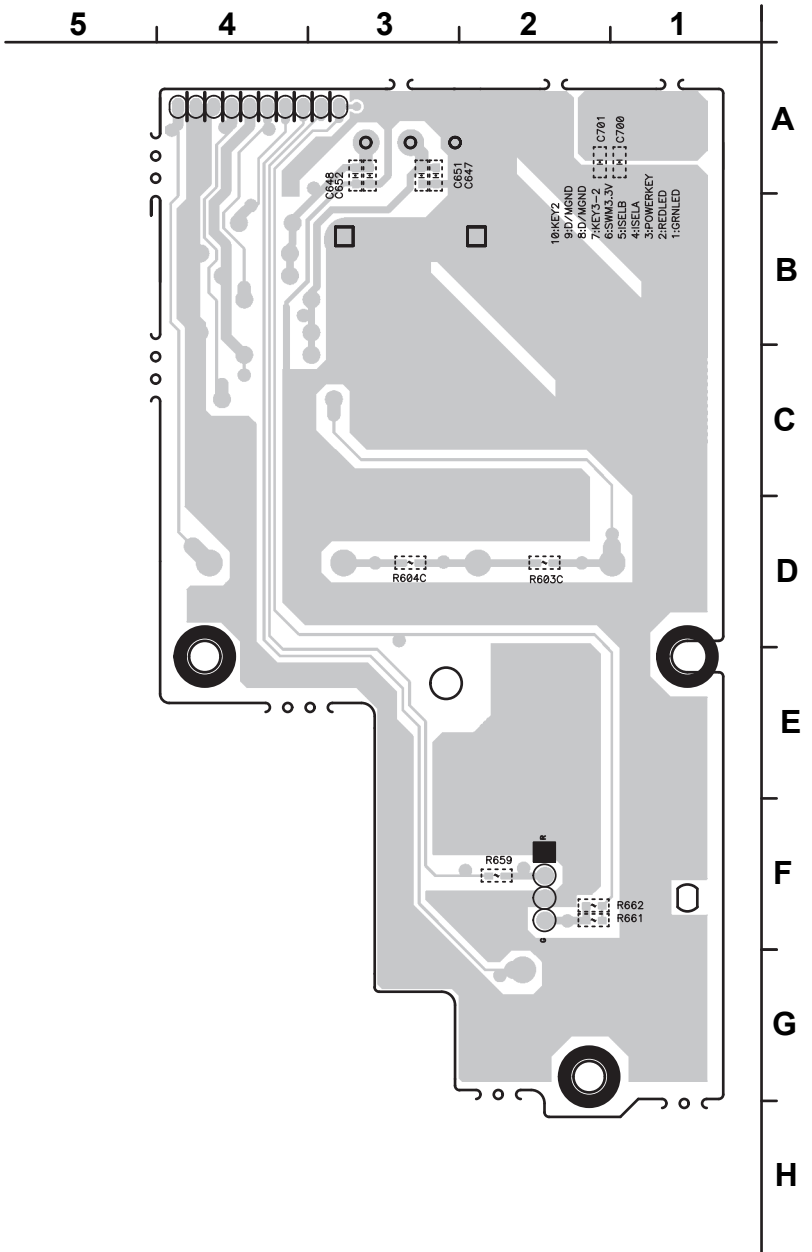


鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

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

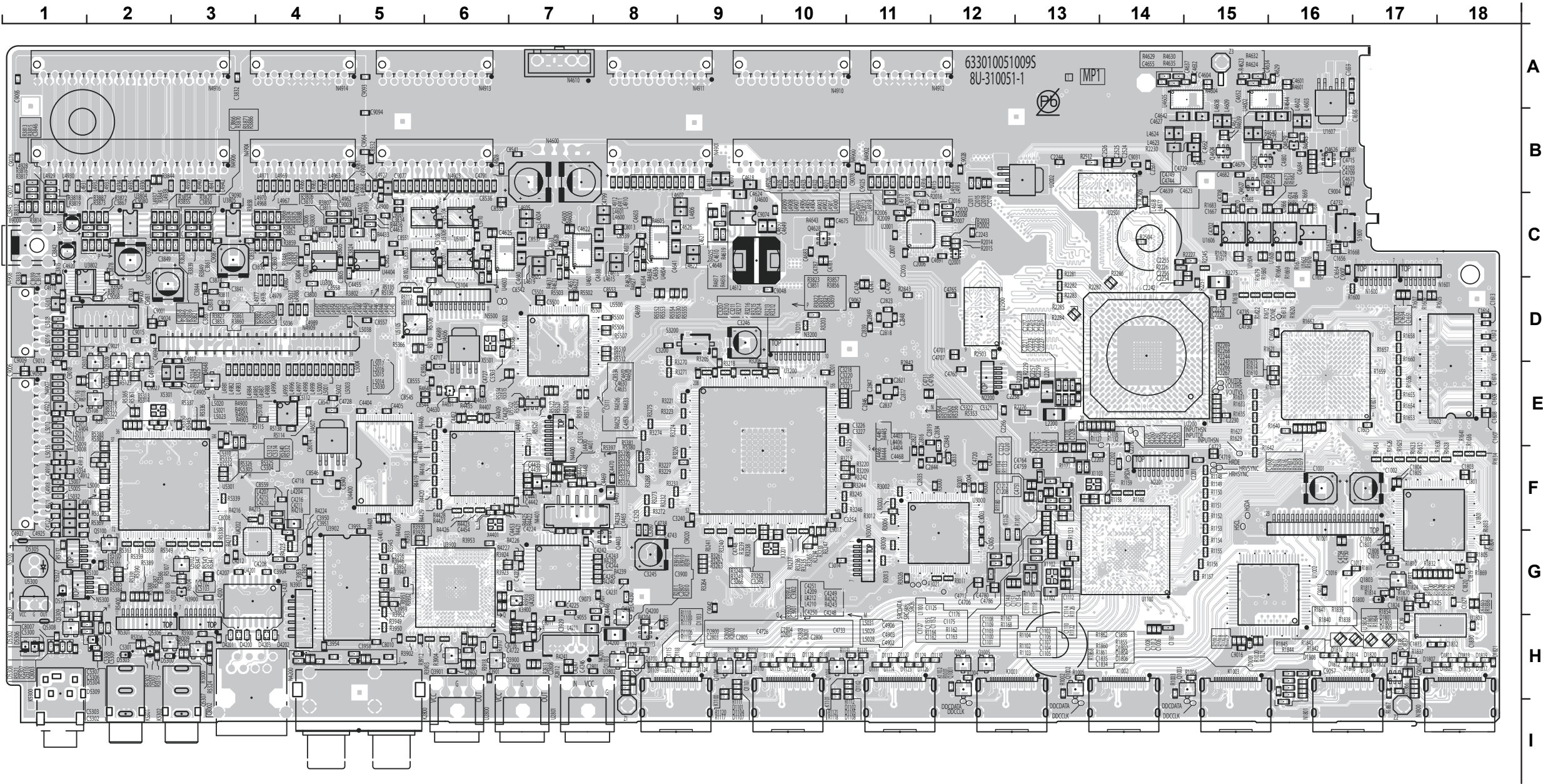


FUNCTION (FOIL SIDE)

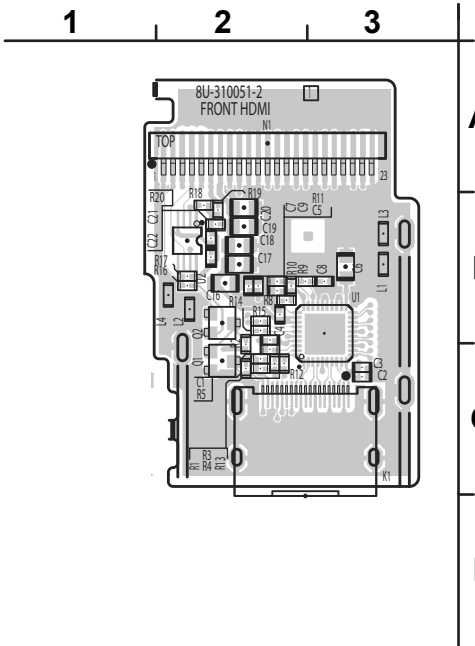


鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

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



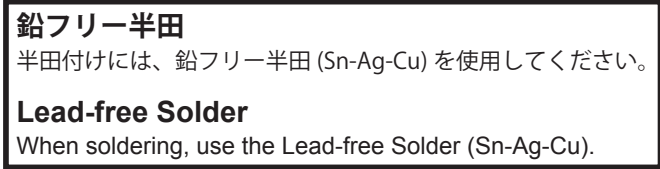
FRONT HDMI (COMPONENT SIDE)

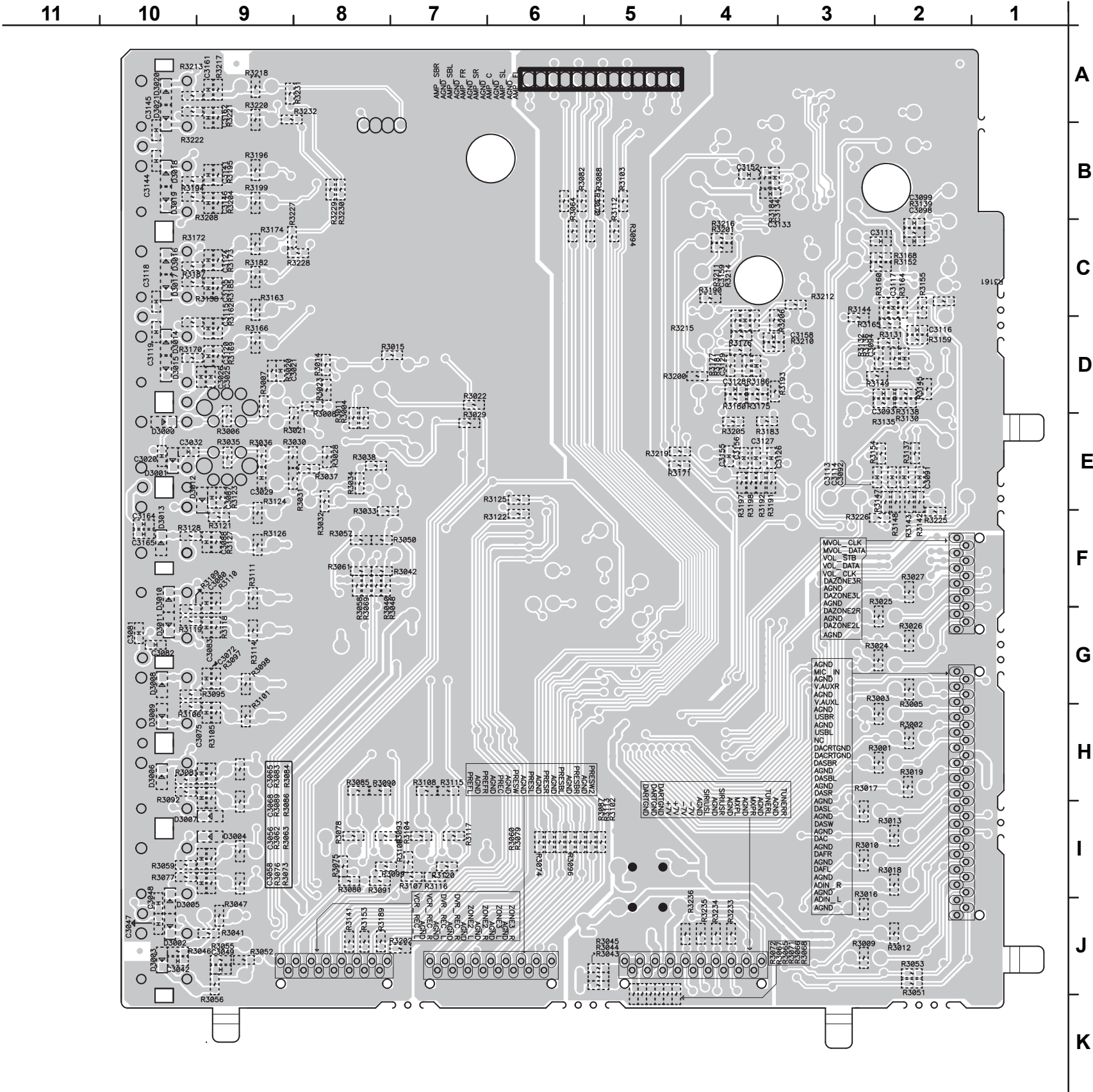


鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。
Lead-free Solder
When soldering, use the Lead-free Solder (Sn-Ag-Cu).



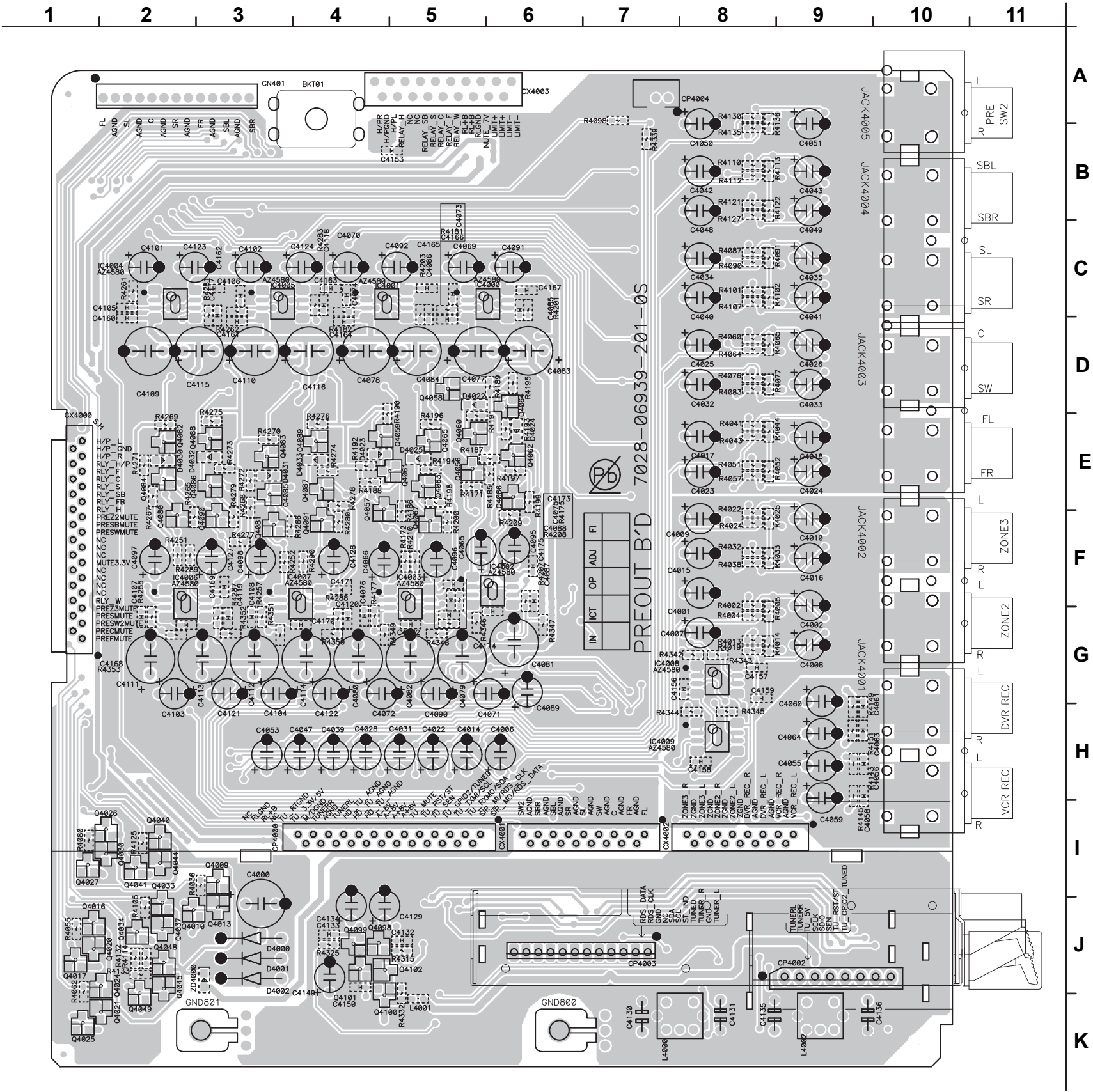
鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。
Lead-free Solder
When soldering, use the Lead-free Solder (Sn-Ag-Cu).





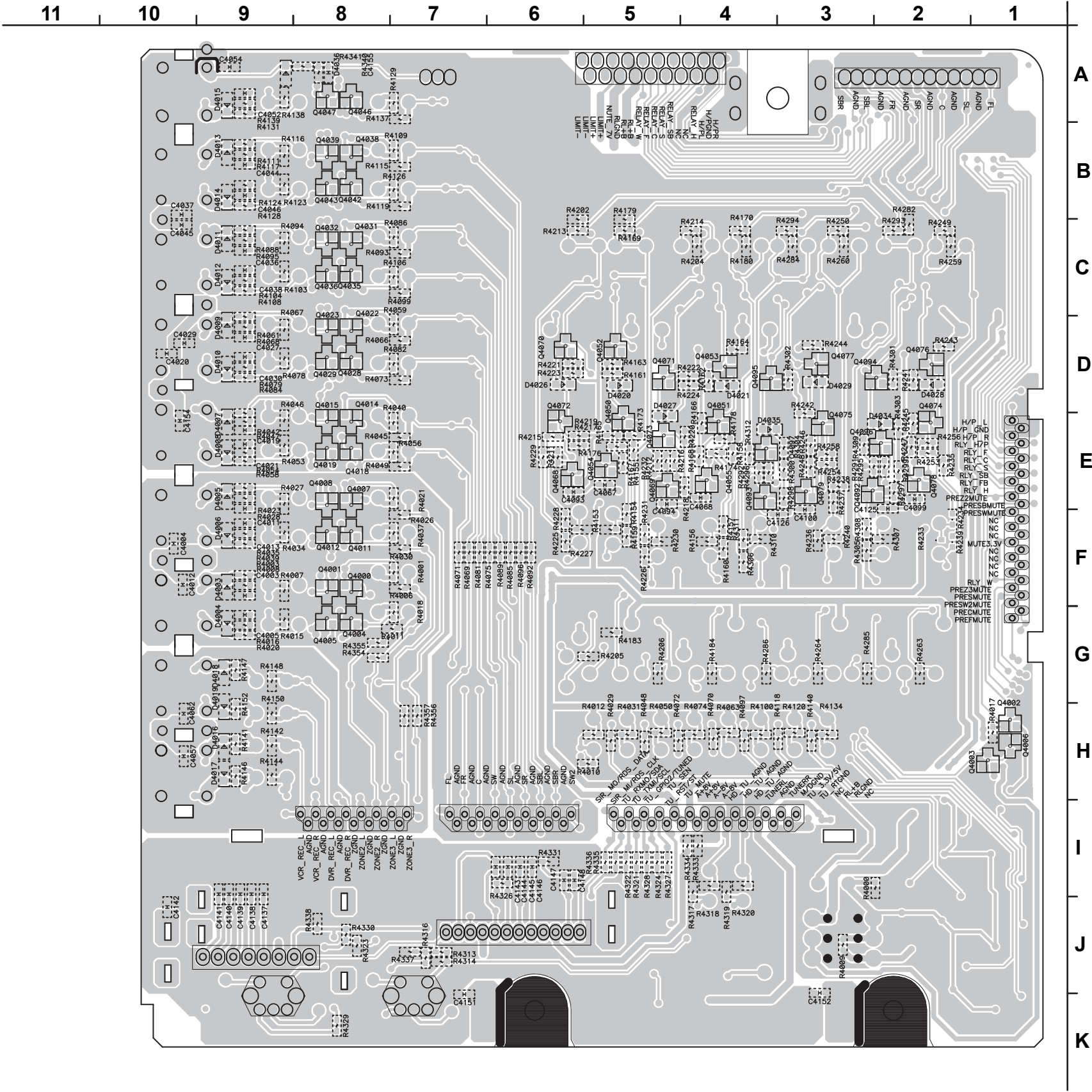
鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

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



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

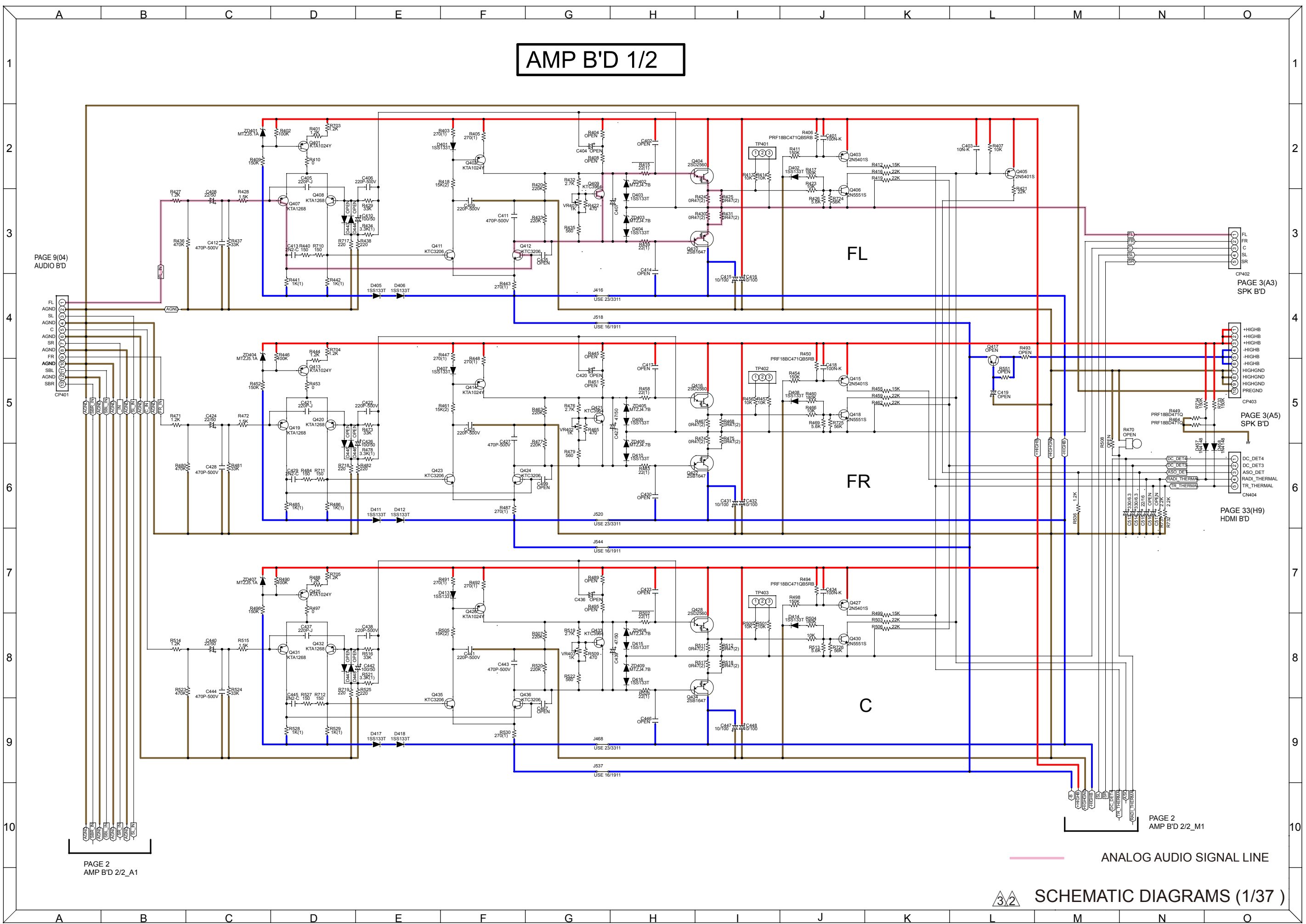
Lead-free Solder
When soldering, use the Lead-free Solder (Sn-Ag-Cu).

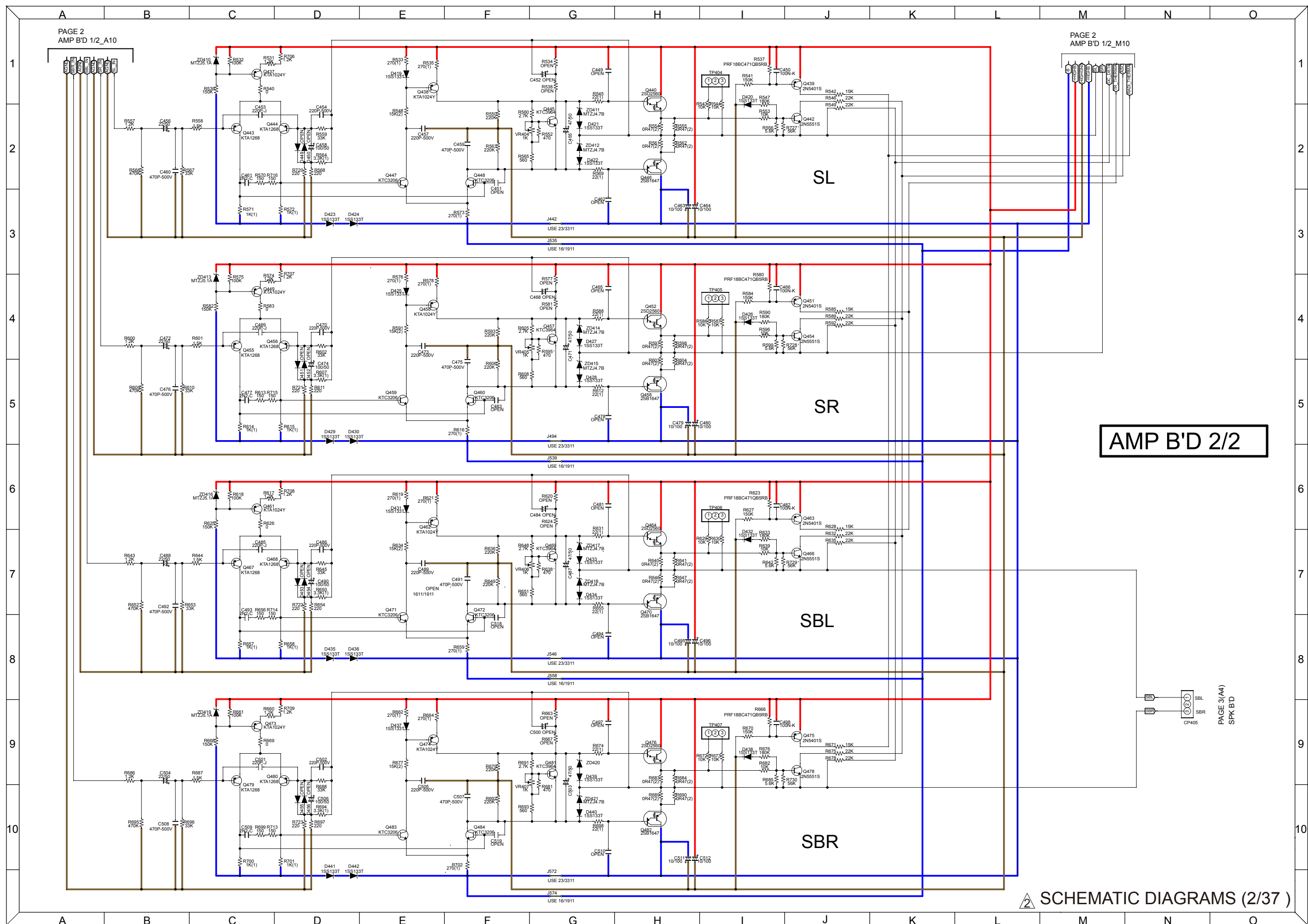


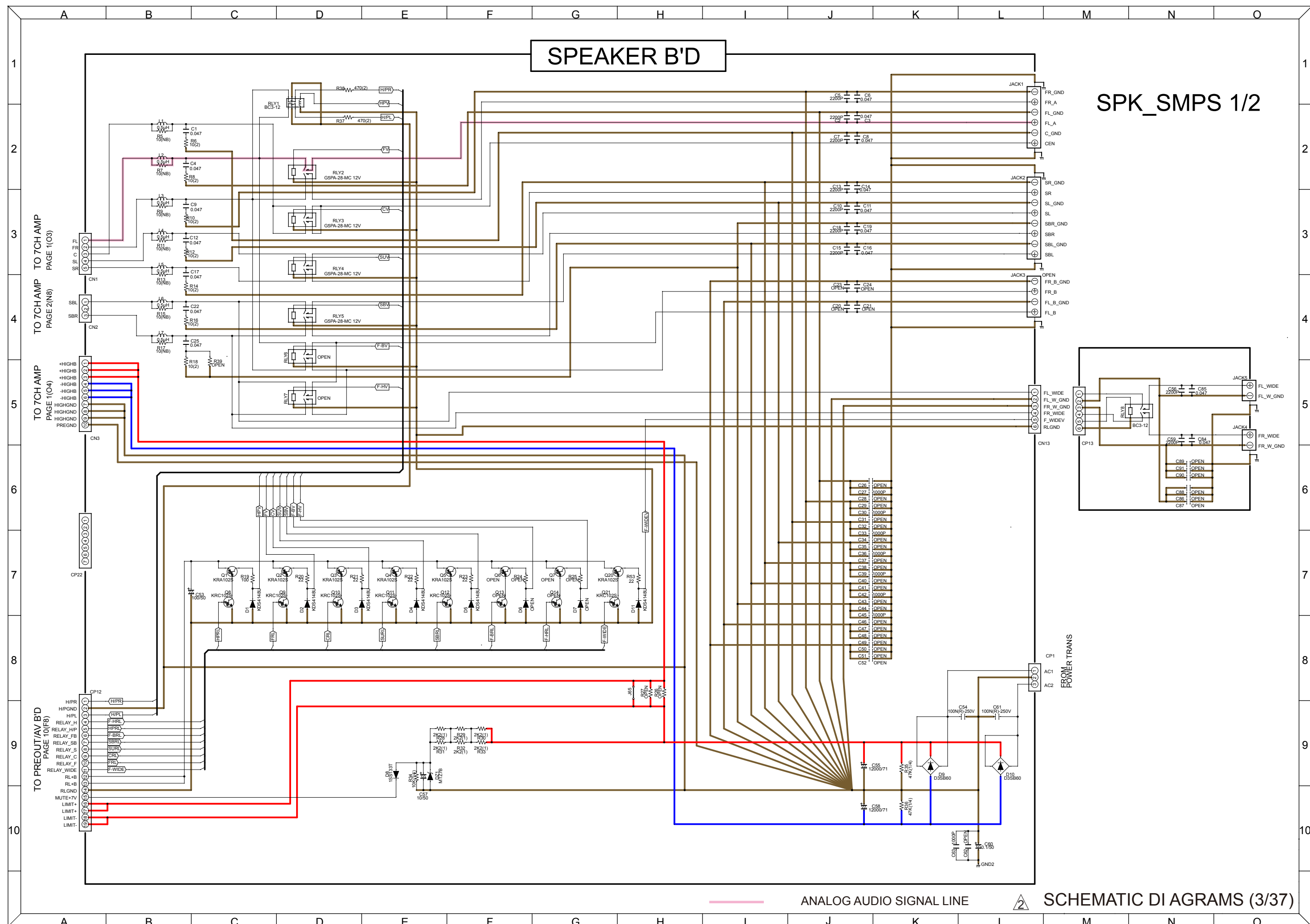
鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

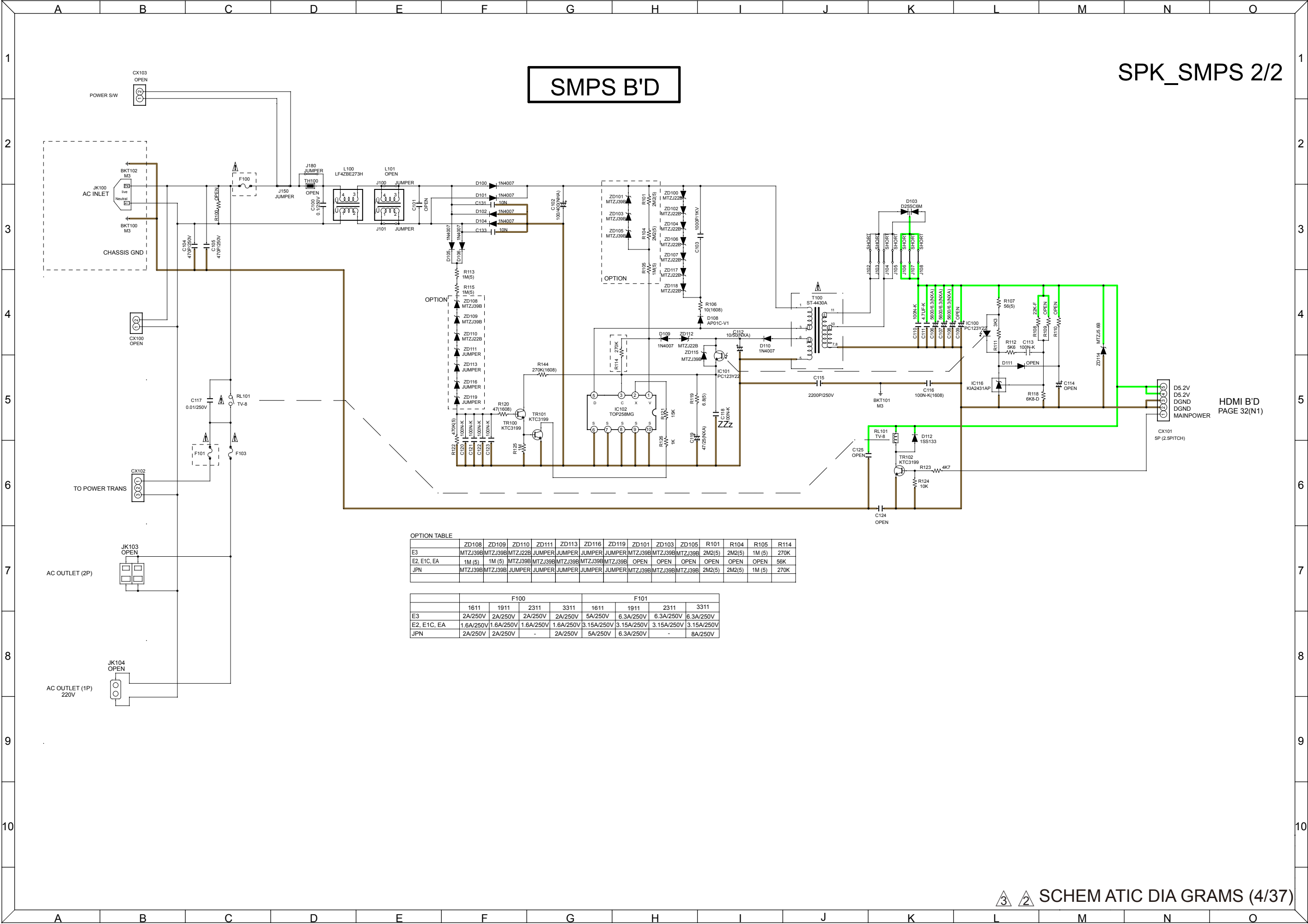
Lead-free Solder
When soldering, use the Lead-free Solder (Sn-Ag-Cu).

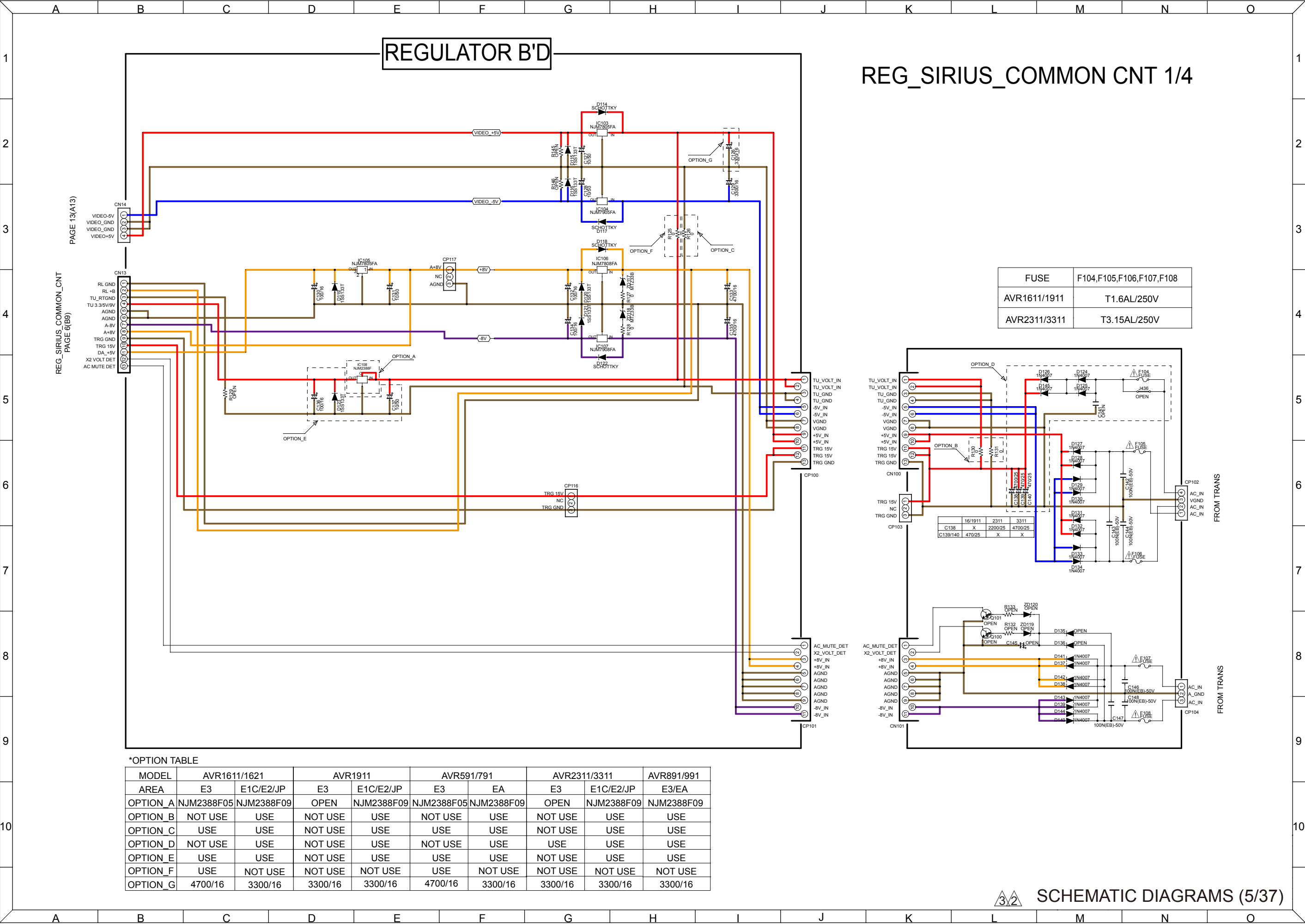
AMP B'D 1/2







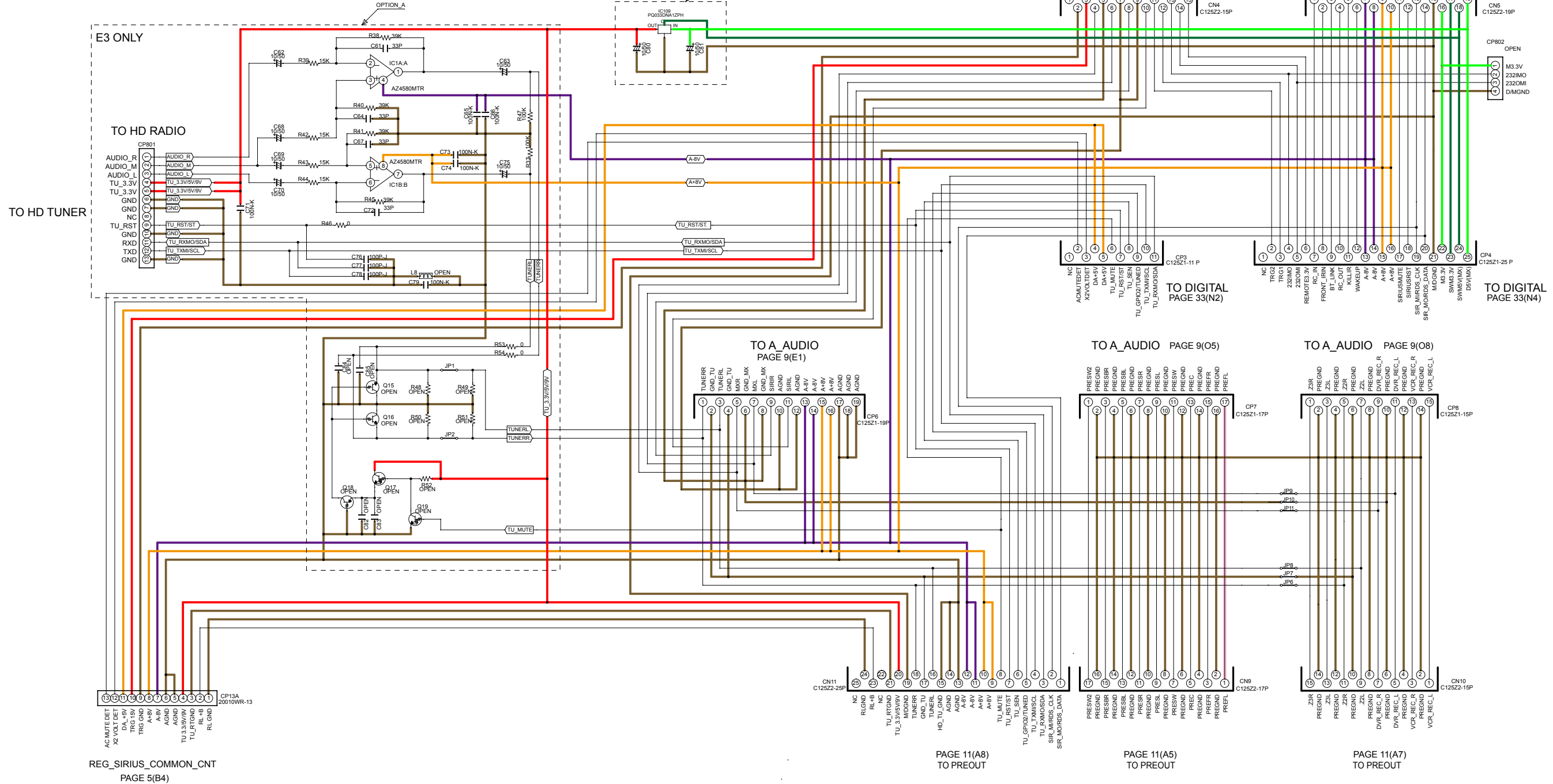




SIDE CONNECTOR

REG_SIRIUS_COMMON CNT 2/4

OPTION A				OPTION B			
MODEL	E3	E2	JP	MODEL	E3	E2	JP
AVR1611	X	X	X	AVR1611	X	X	X
AVR1911	O	X	X	AVR1911	O	X	X
AVR2311	O	X	X	AVR2311	O	X	X
AVR3311	O	X	X	AVR3311	O	X	X



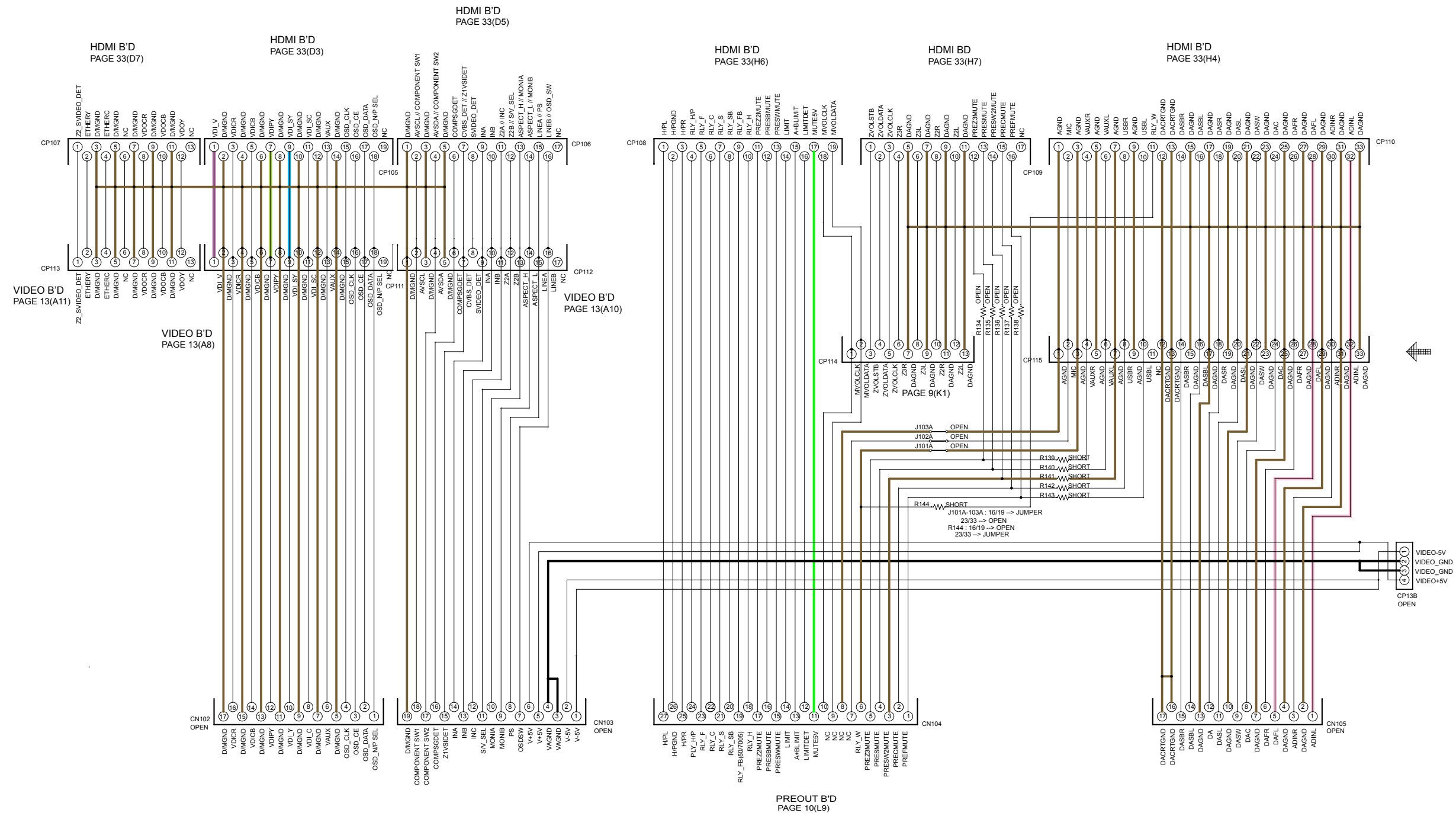
ANALOG AUDIO SIGNAL LINE



SCHEMATIC DIAGRAMS (6/37)

FRONT CONNECTOR

REG_SIRIUS_COMMON CNT 3/4



TO A_AUDIO
PAGE 9(H1)

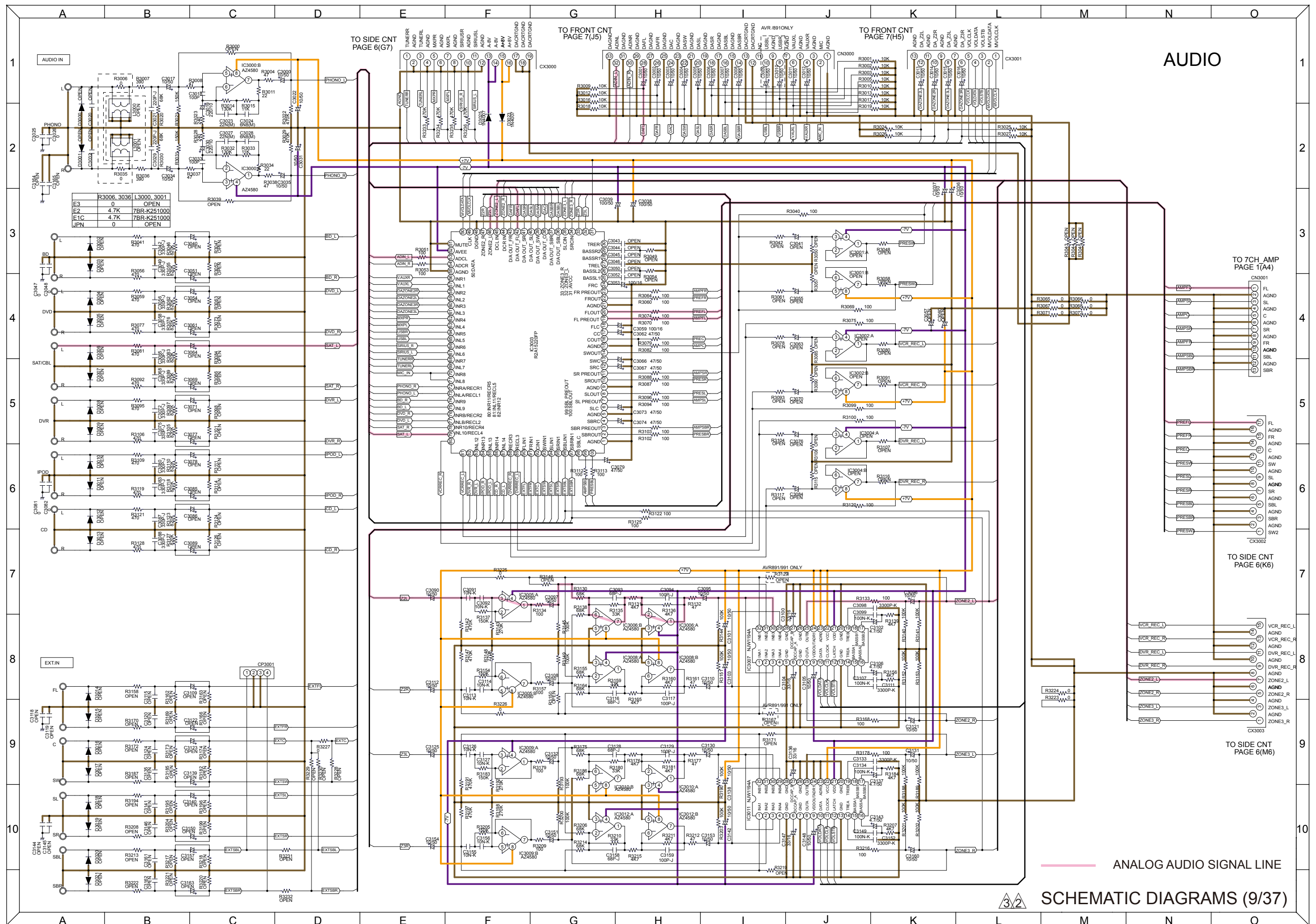
CP13B
OPEN

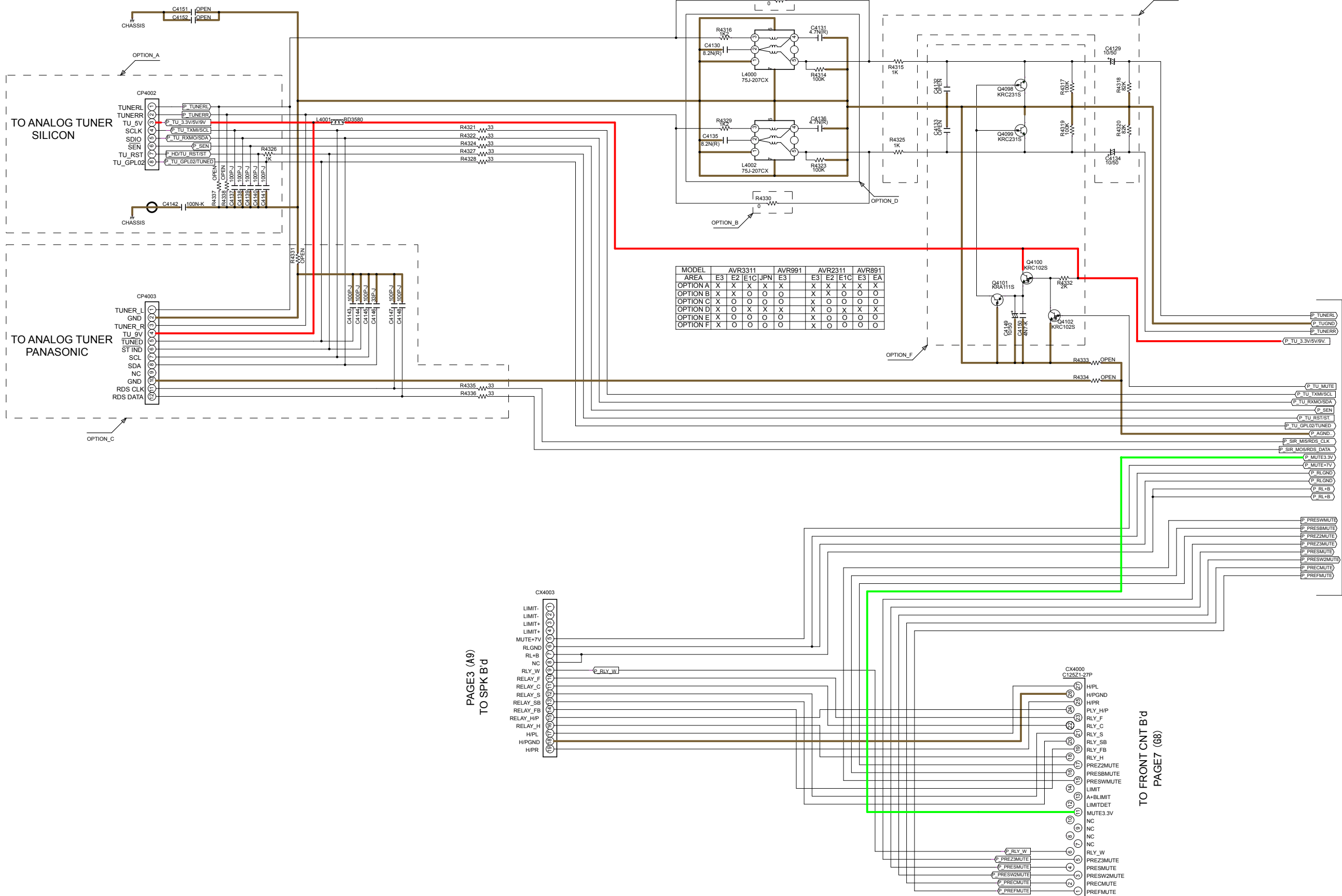
COMPONENT (Y) SIGNAL LINE

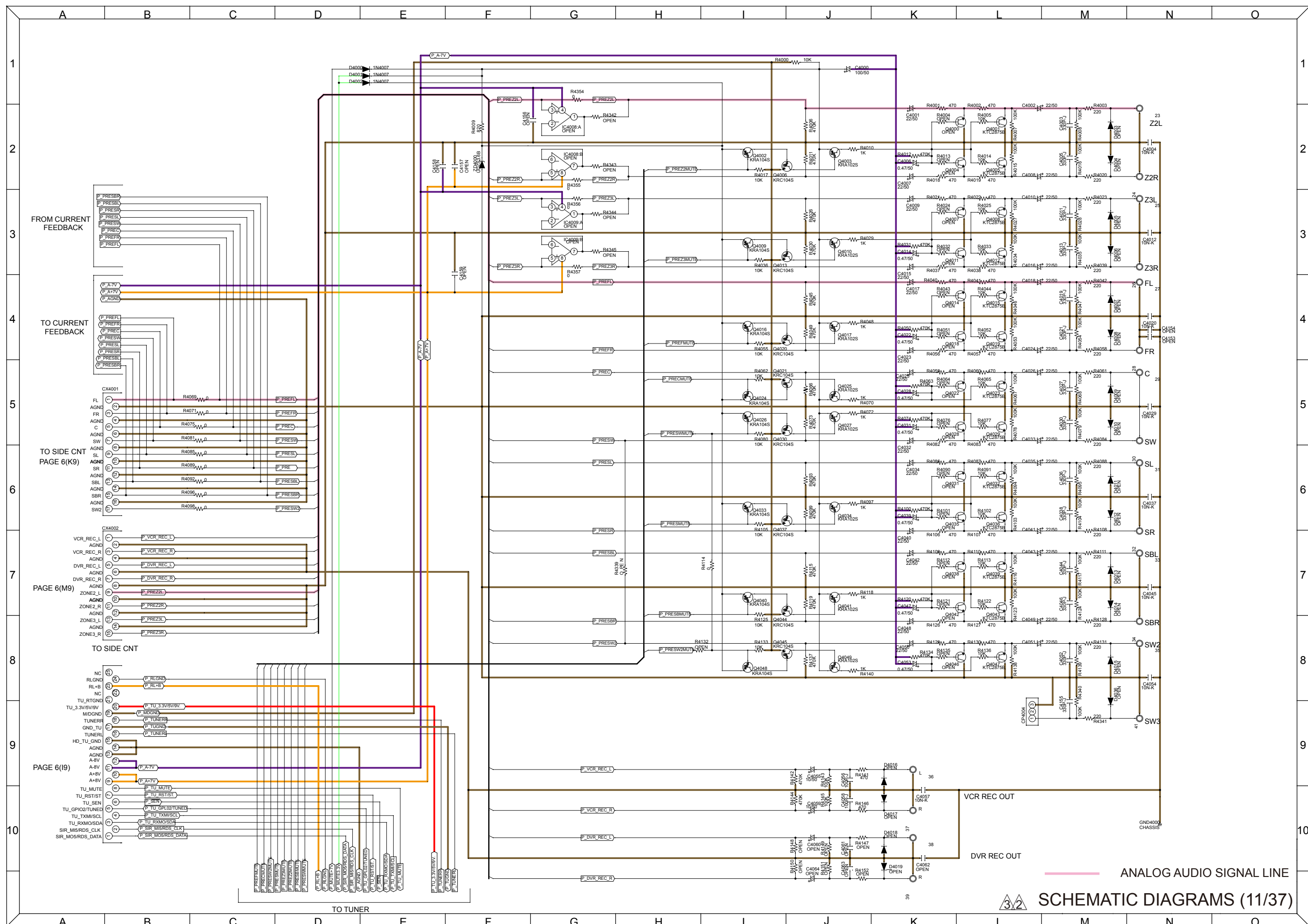
VIDEO SIGNAL LINE

S (Y) VIDEO SIGNAL LINE

2 SCHEMATIC DIAGRAMS (7/37)

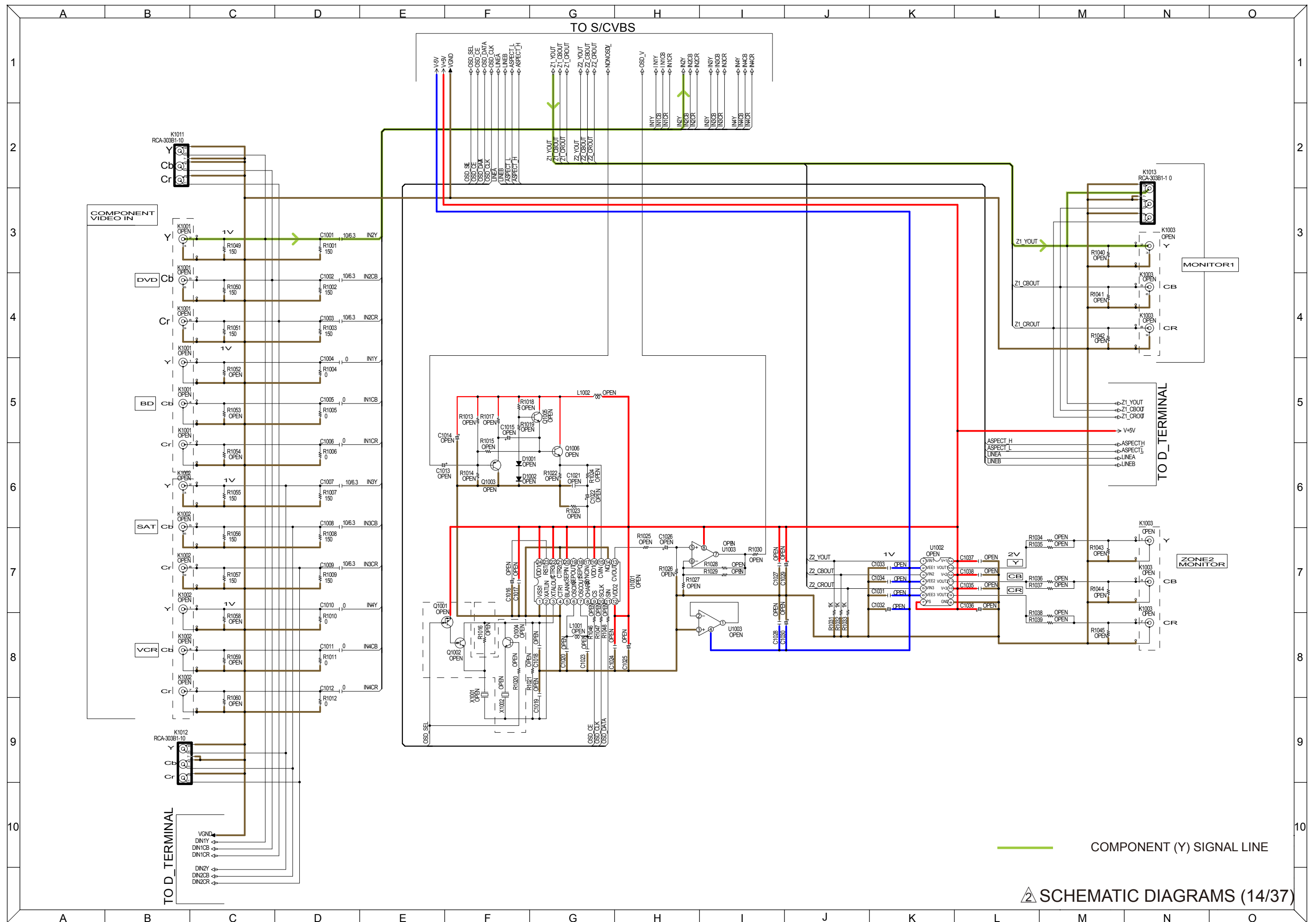


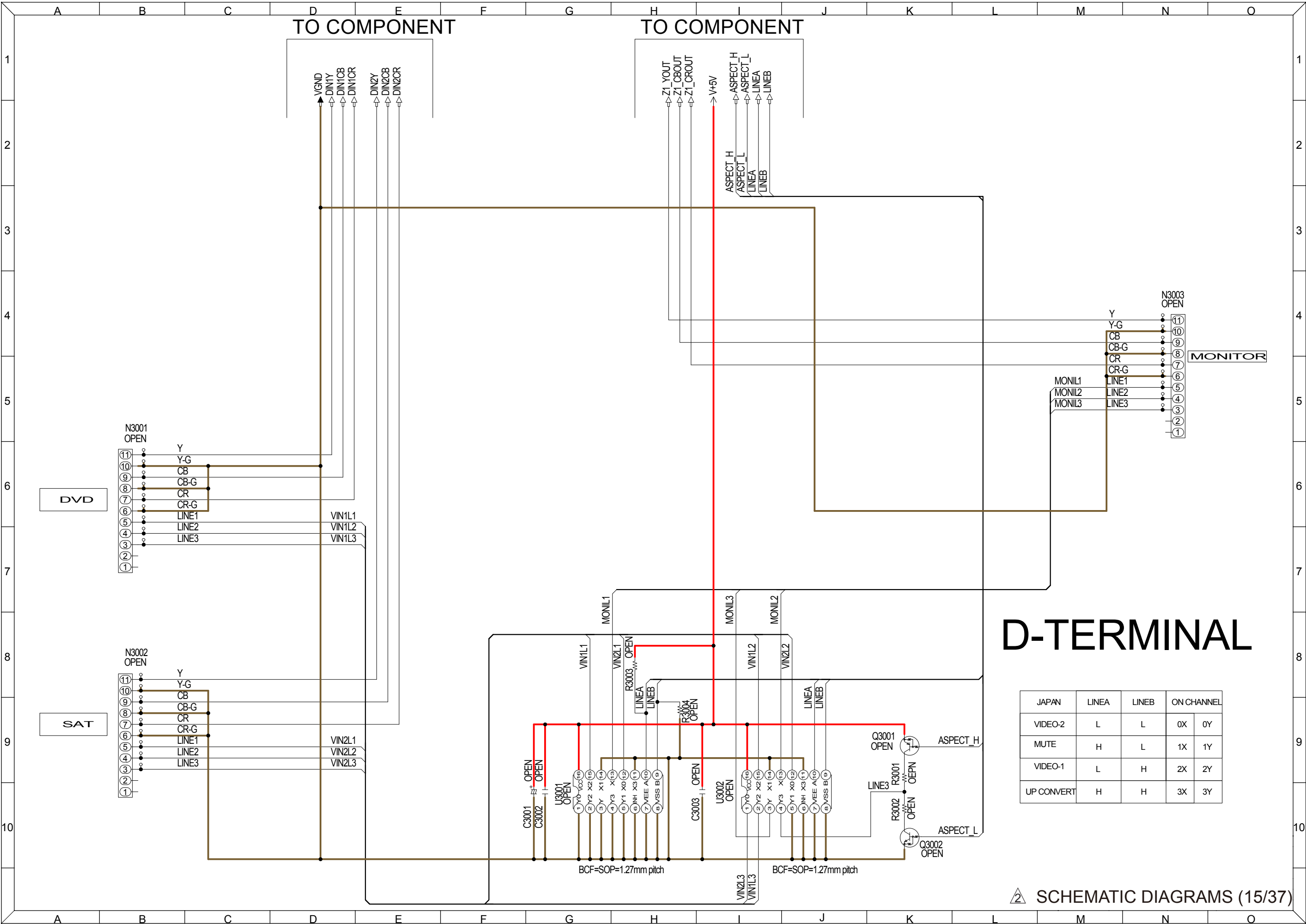






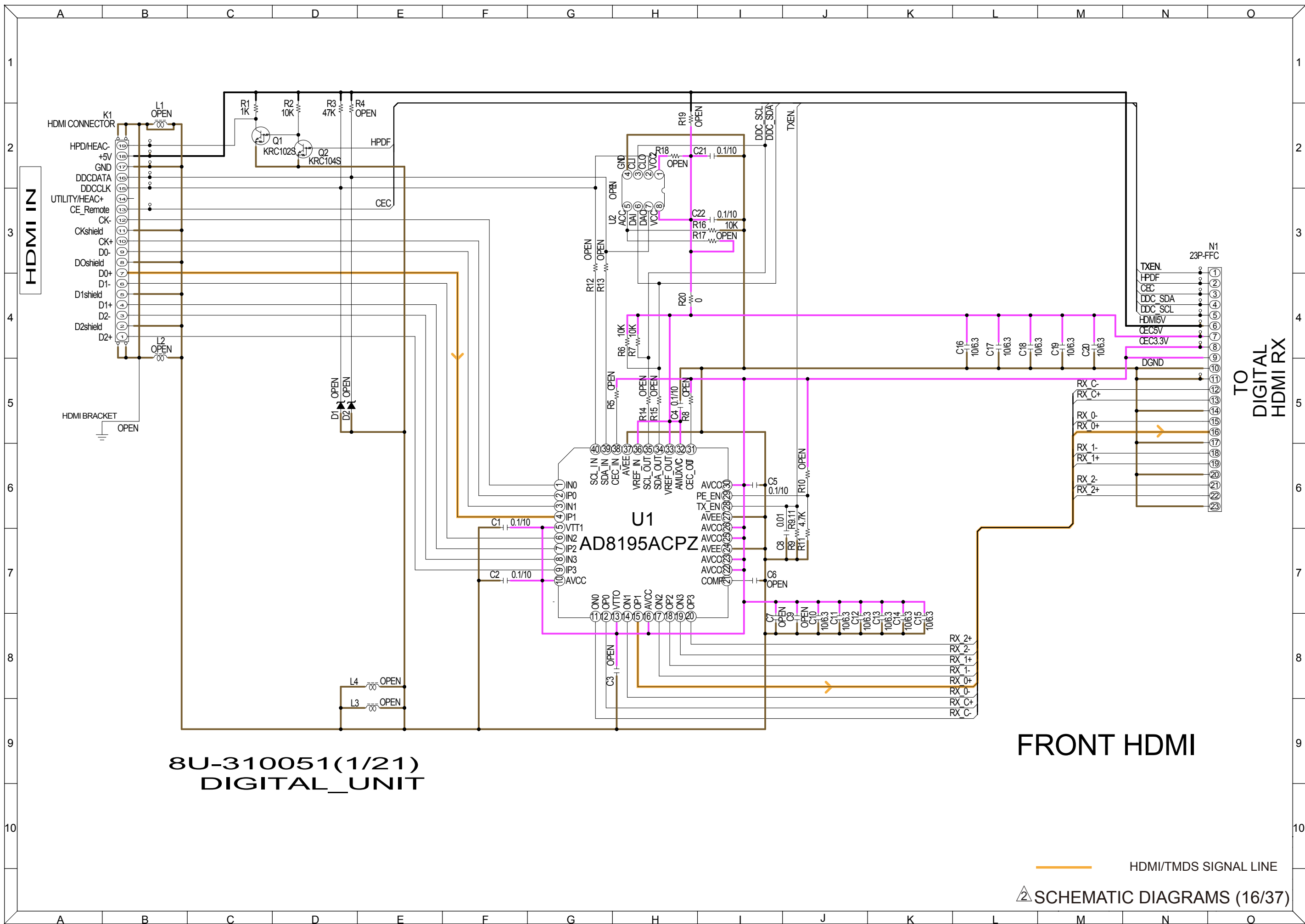


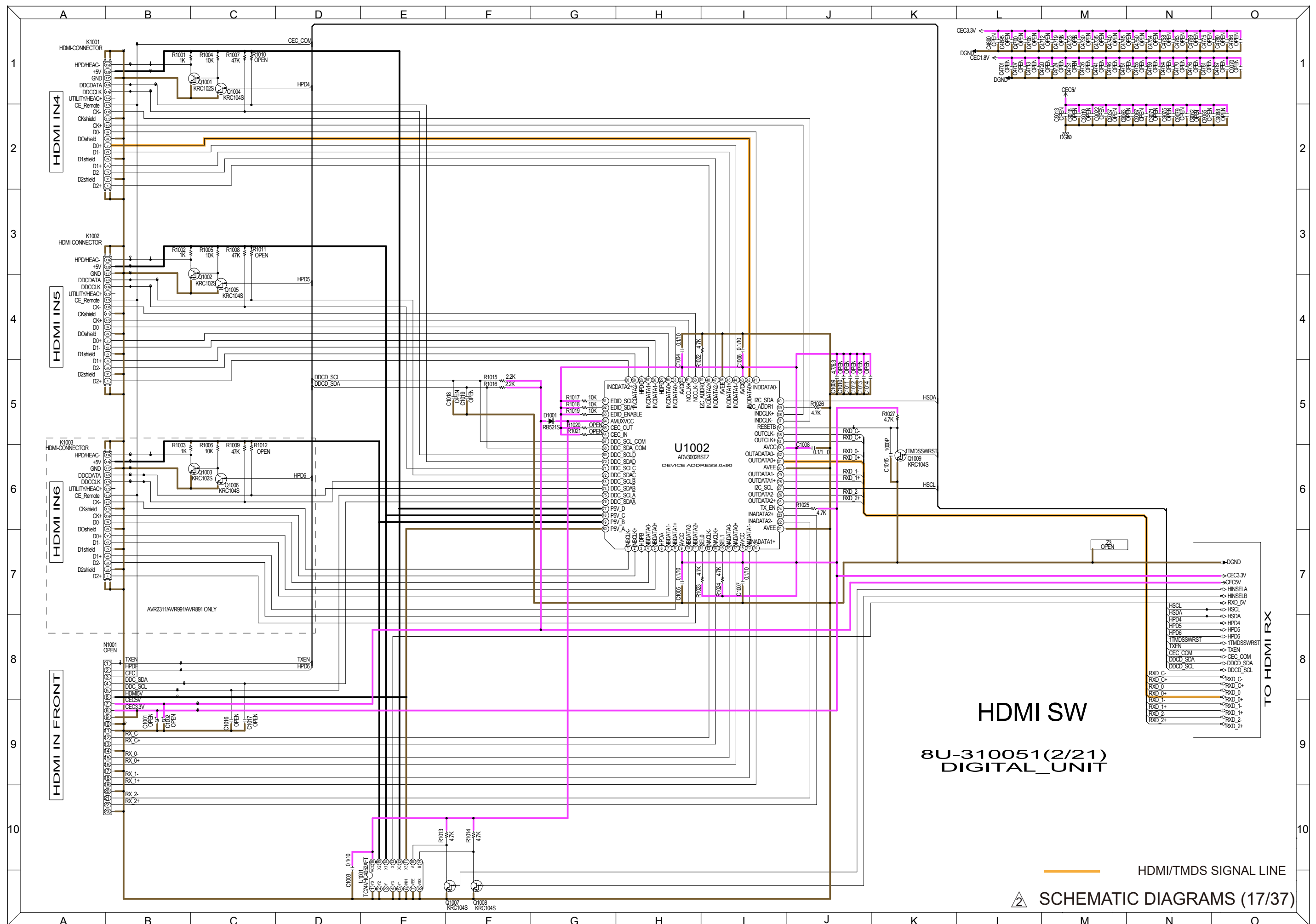


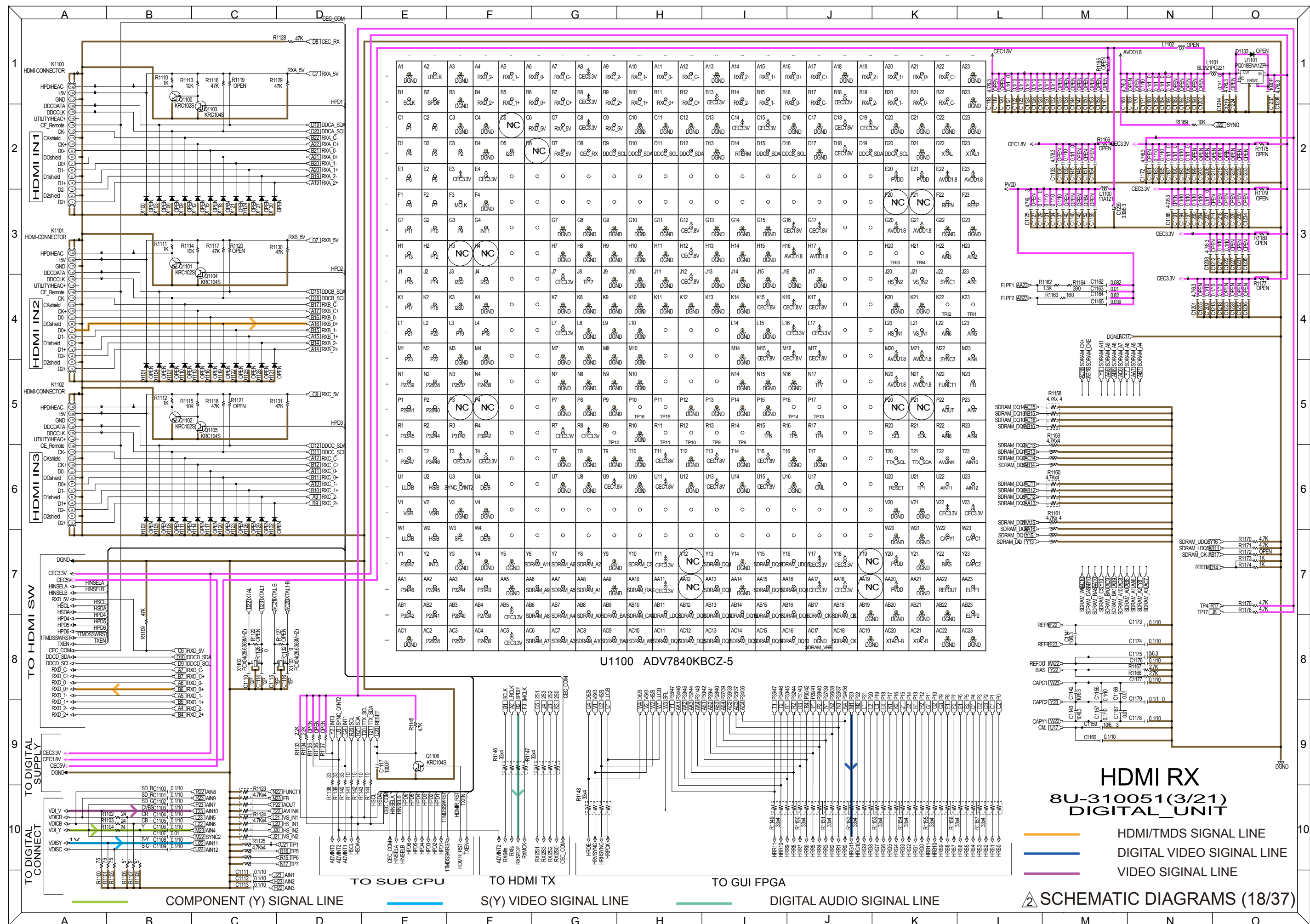


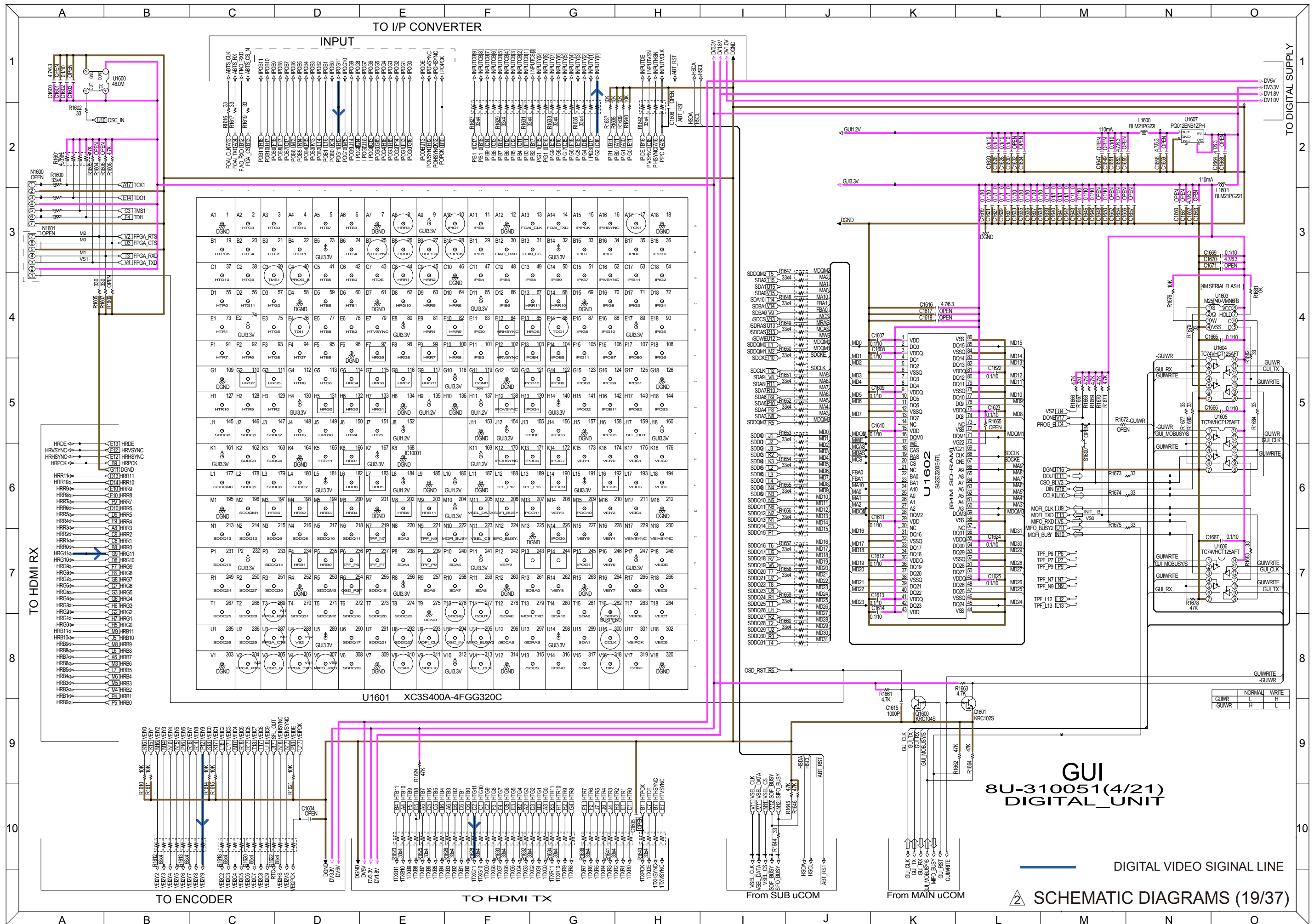
D-TERMINAL

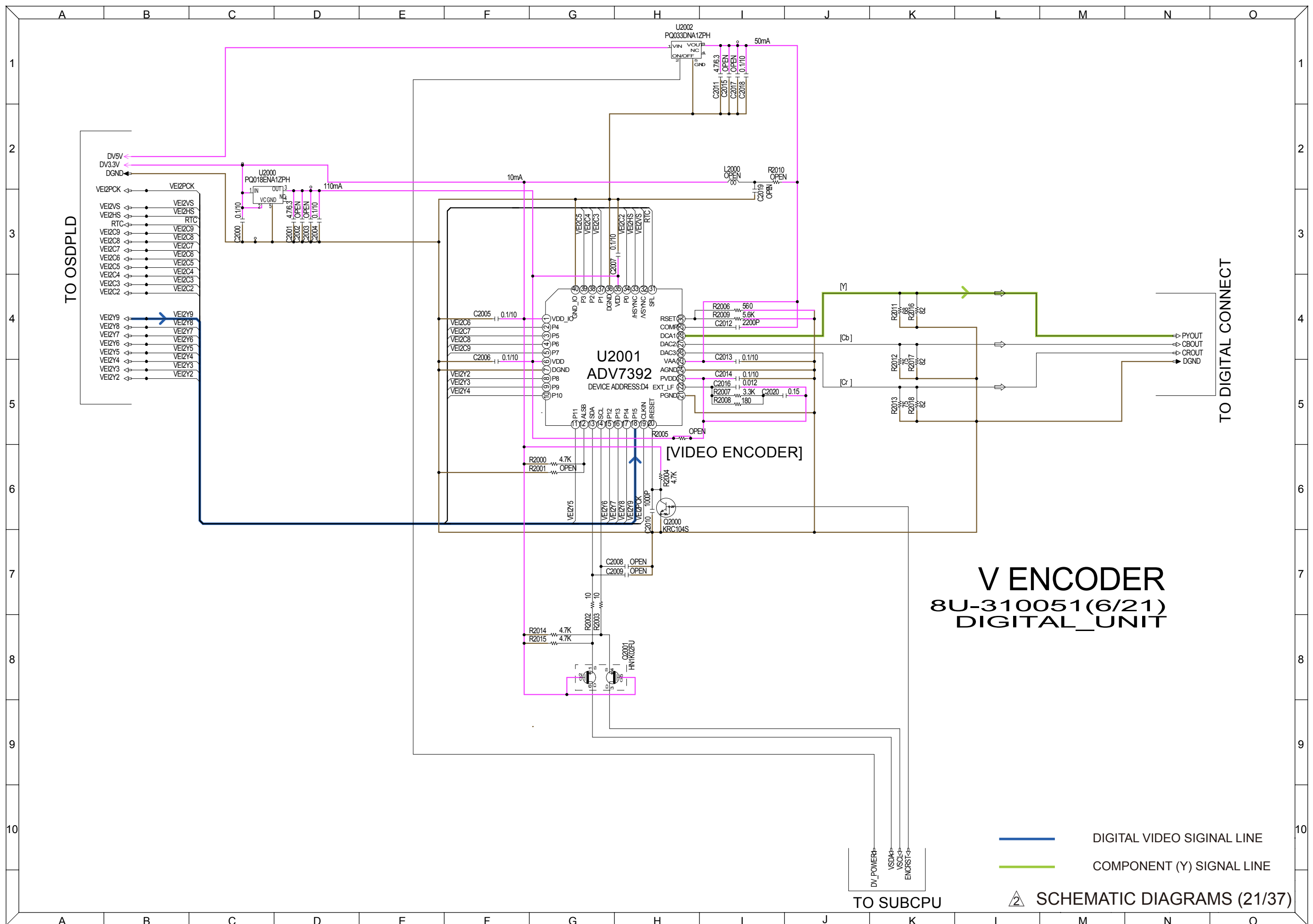
JAPAN	LINEA	LINEB	ON CHANNEL	
VIDEO-2	L	L	0X	0Y
MUTE	H	L	1X	1Y
VIDEO-1	L	H	2X	2Y
UP CONVERT	H	H	3X	3Y

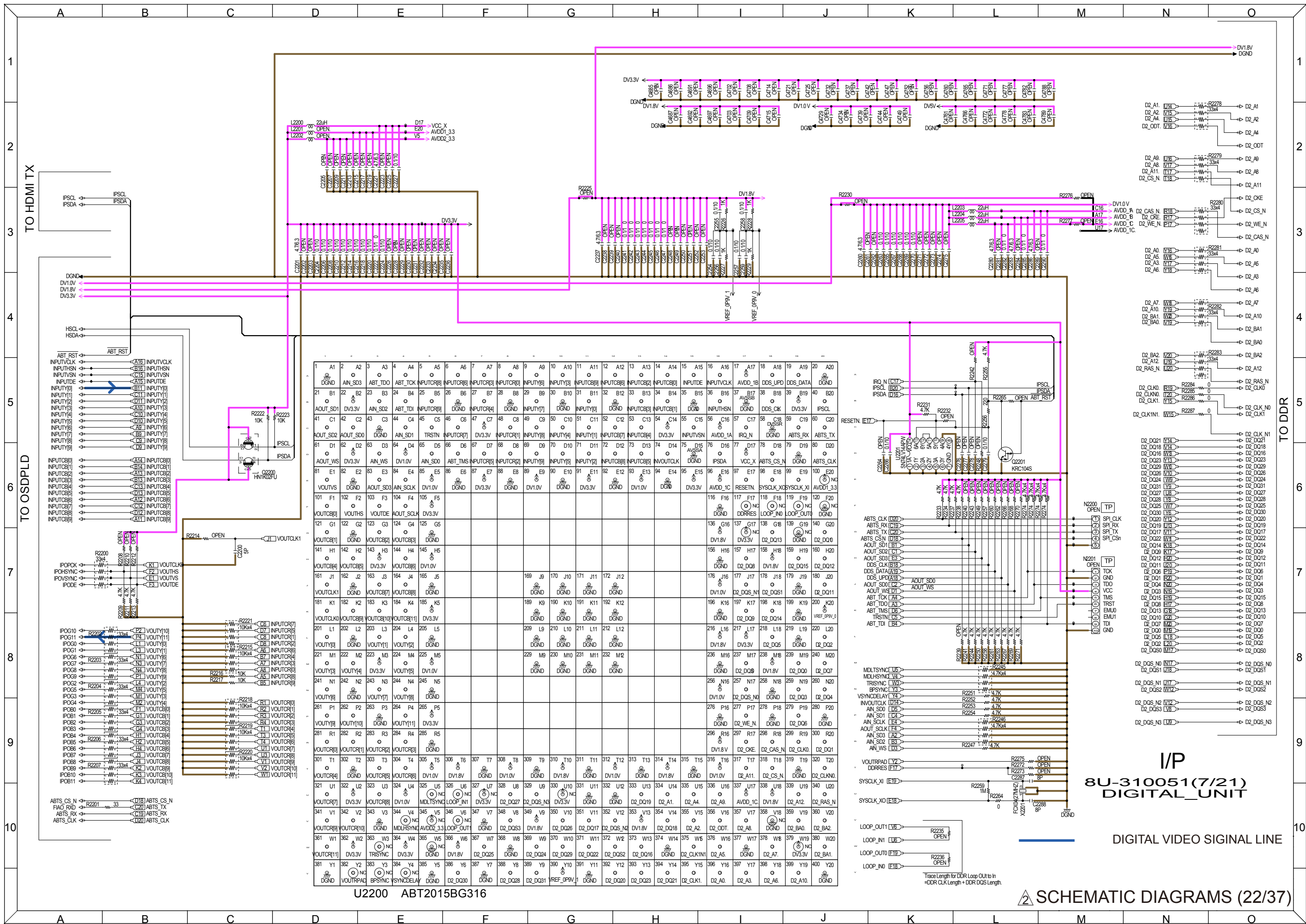


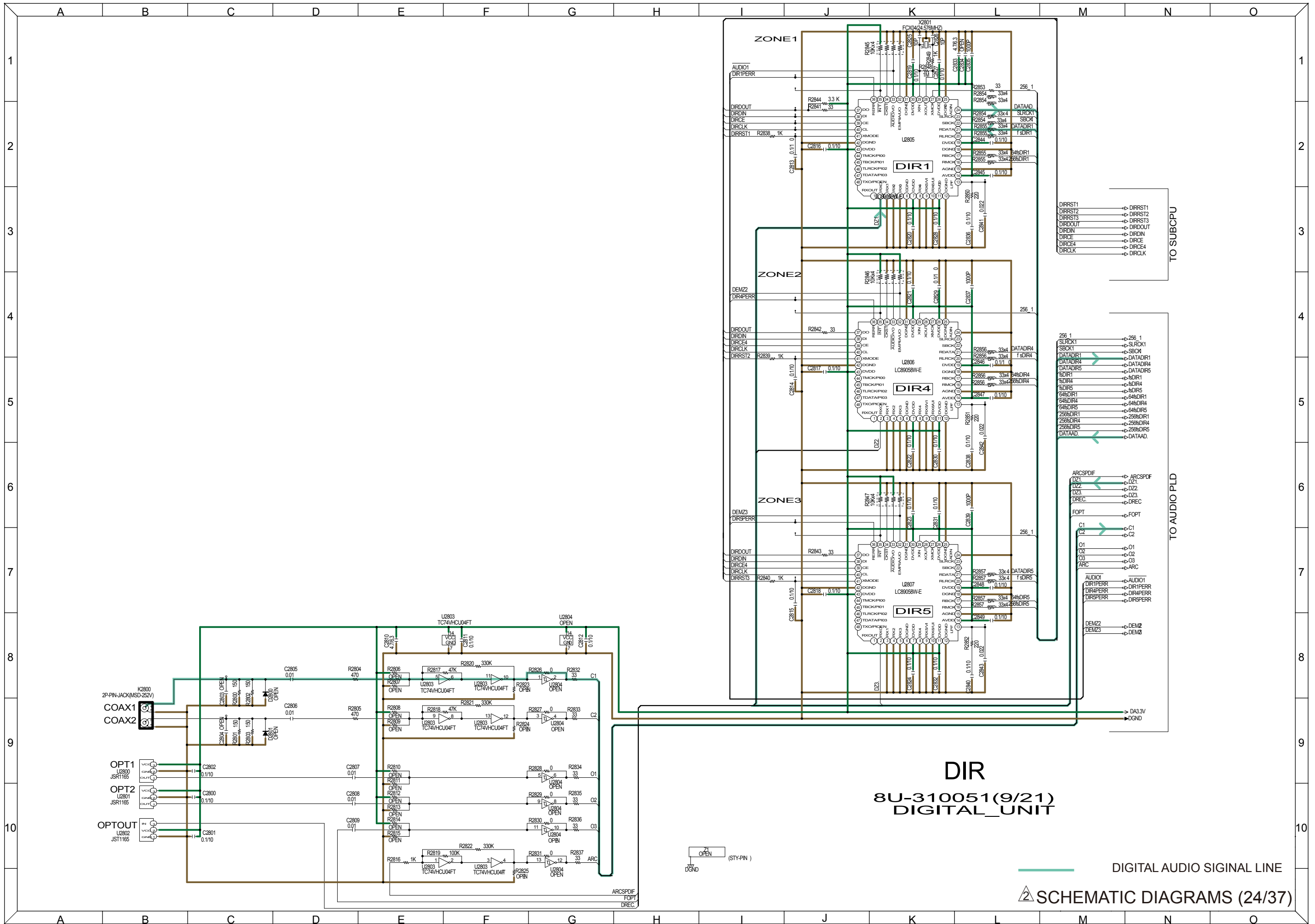


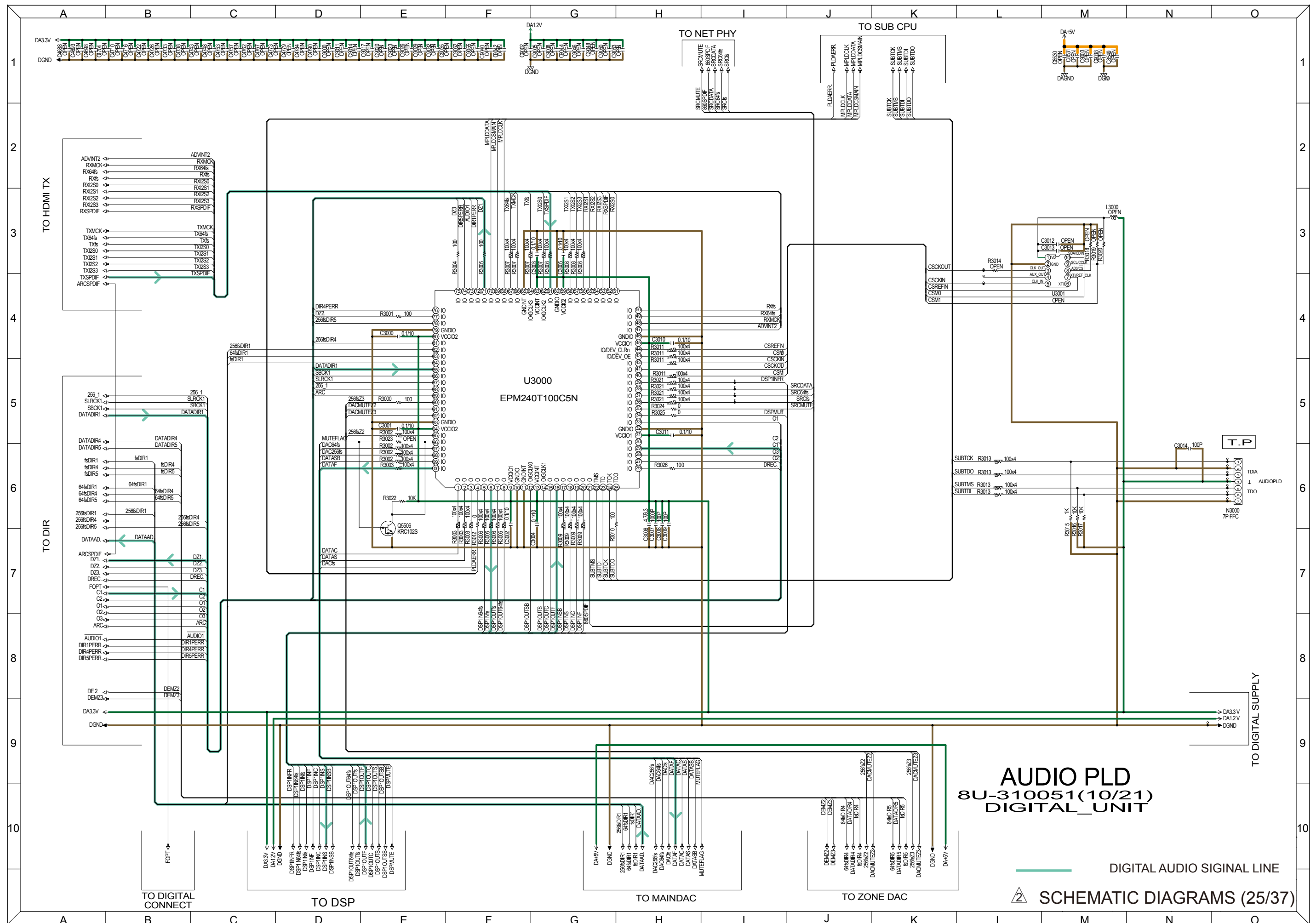




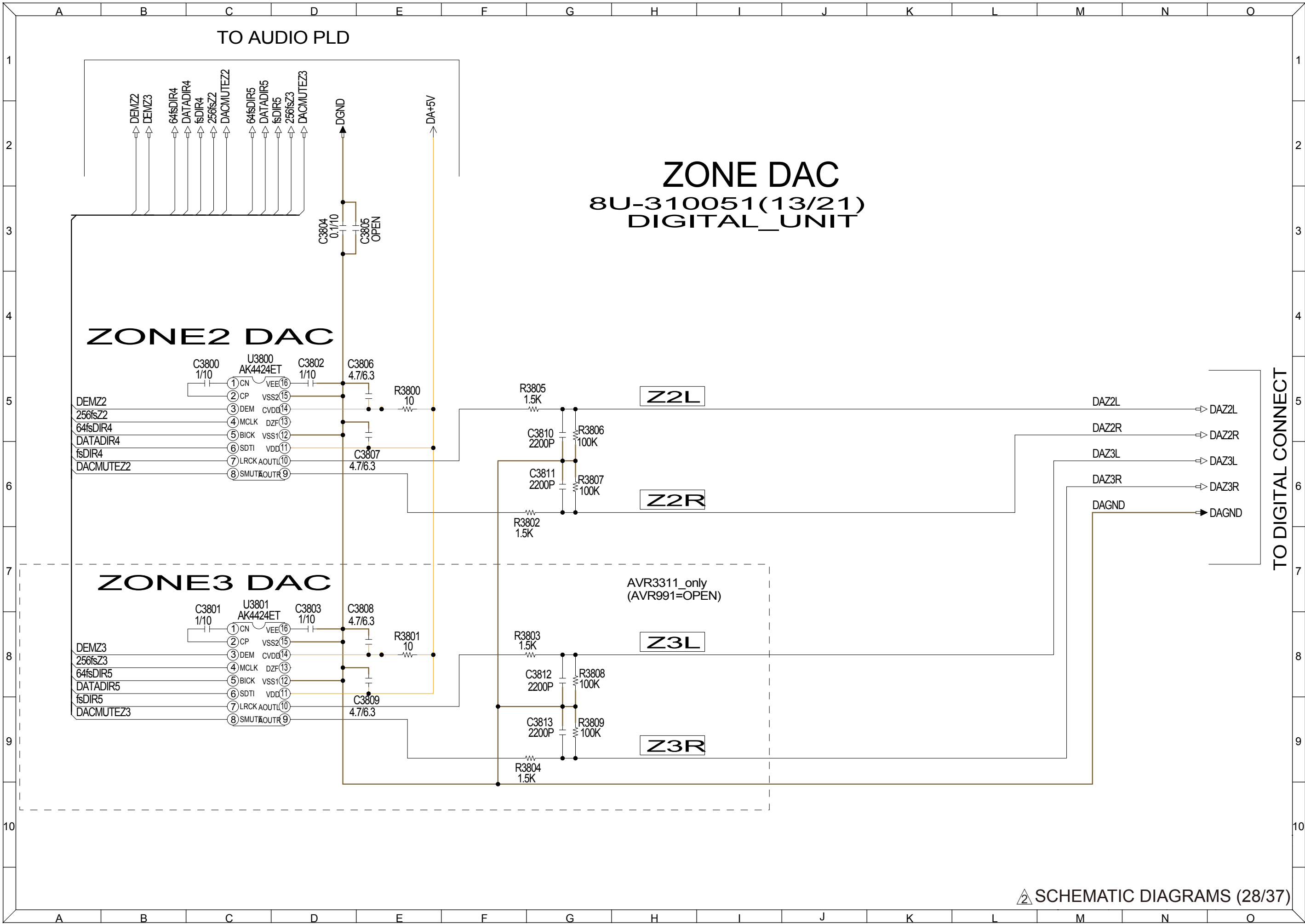


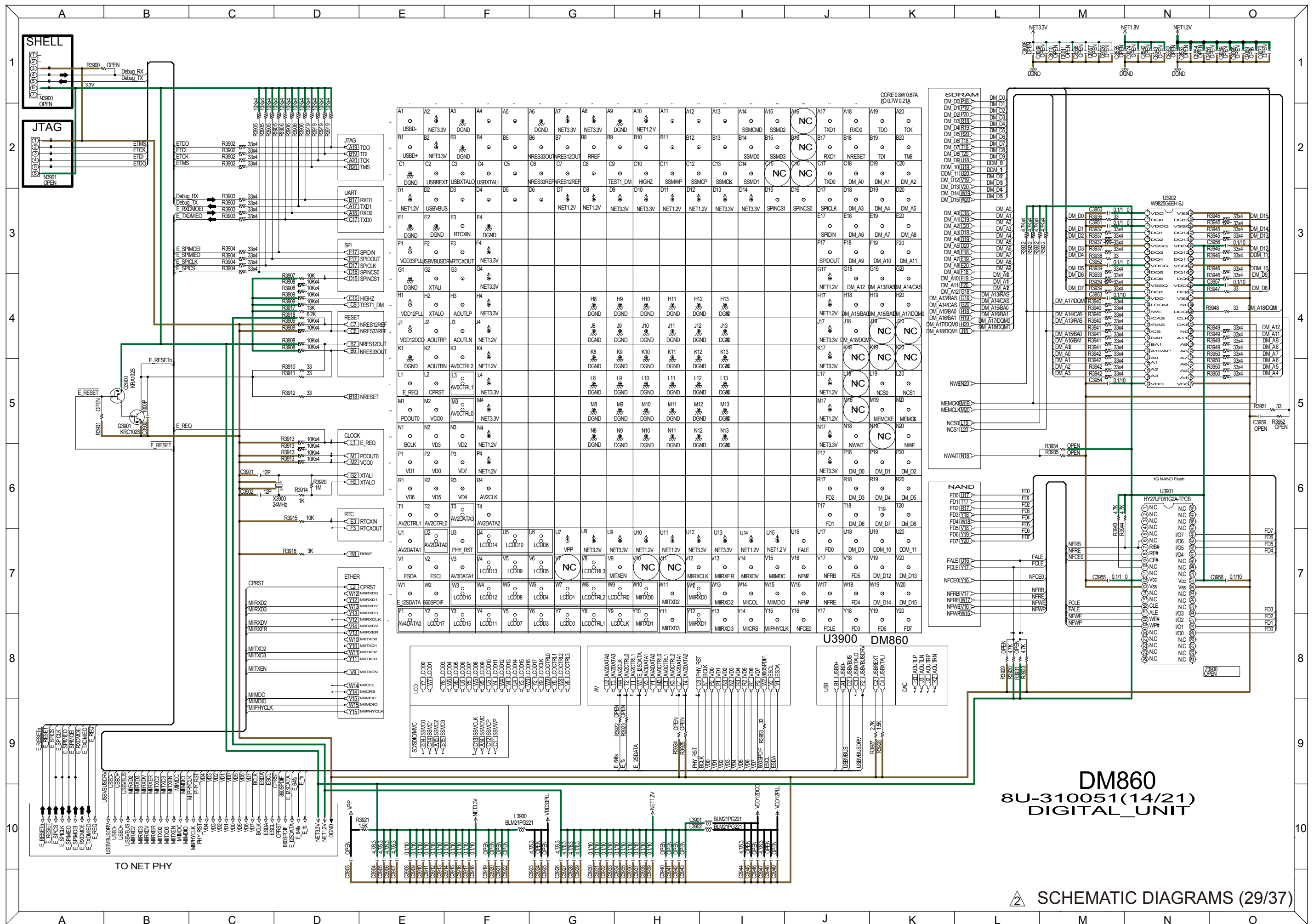


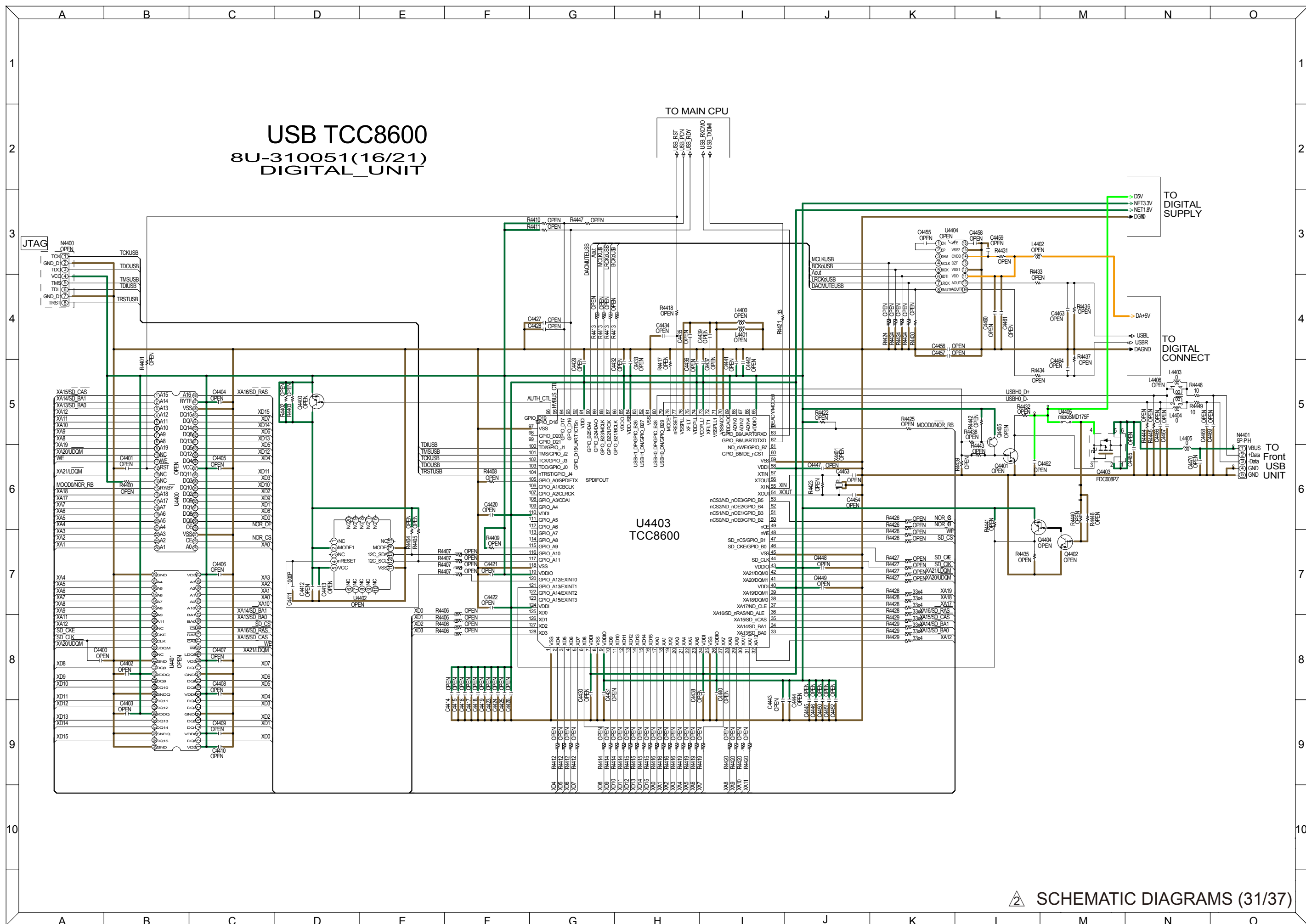


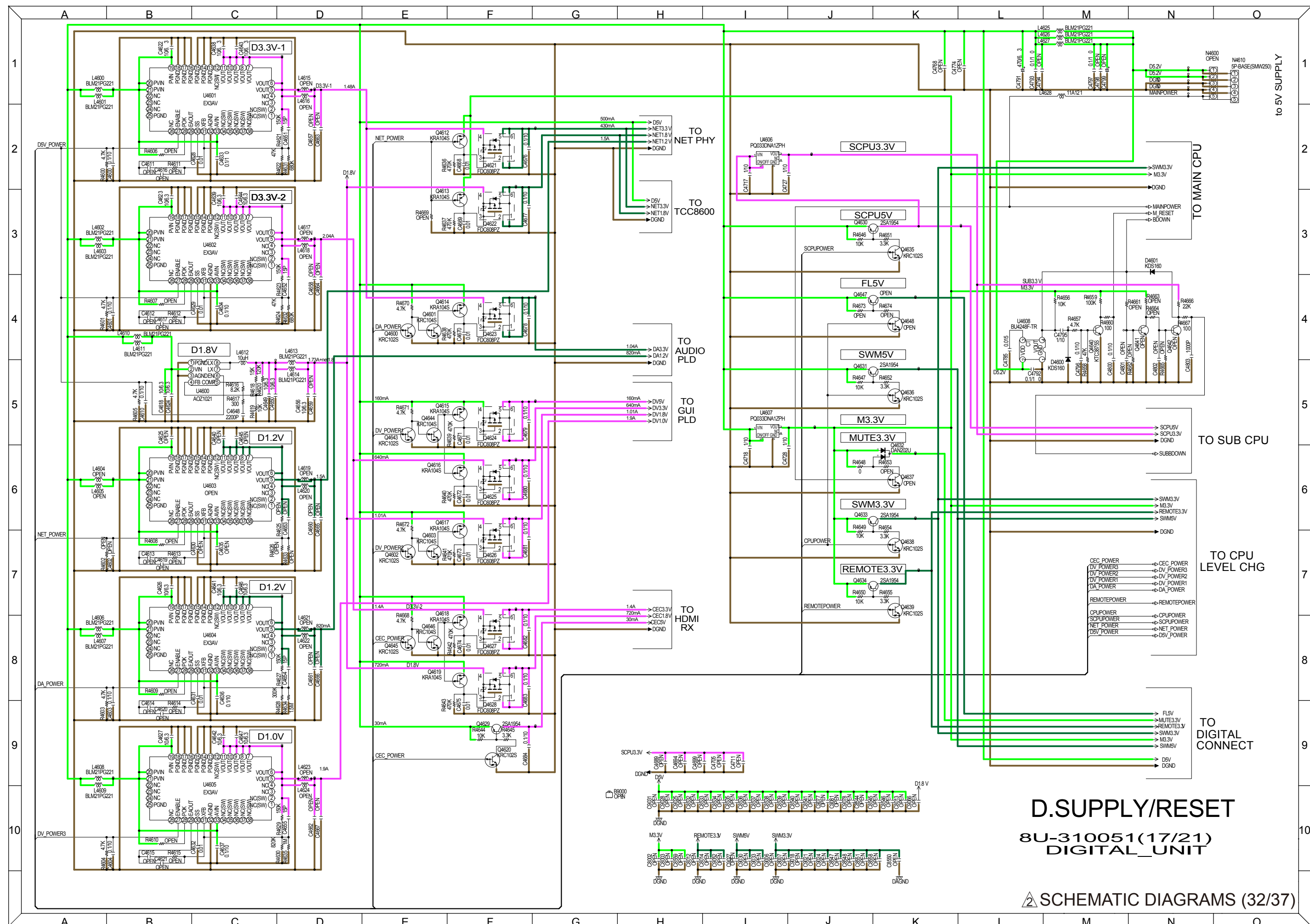


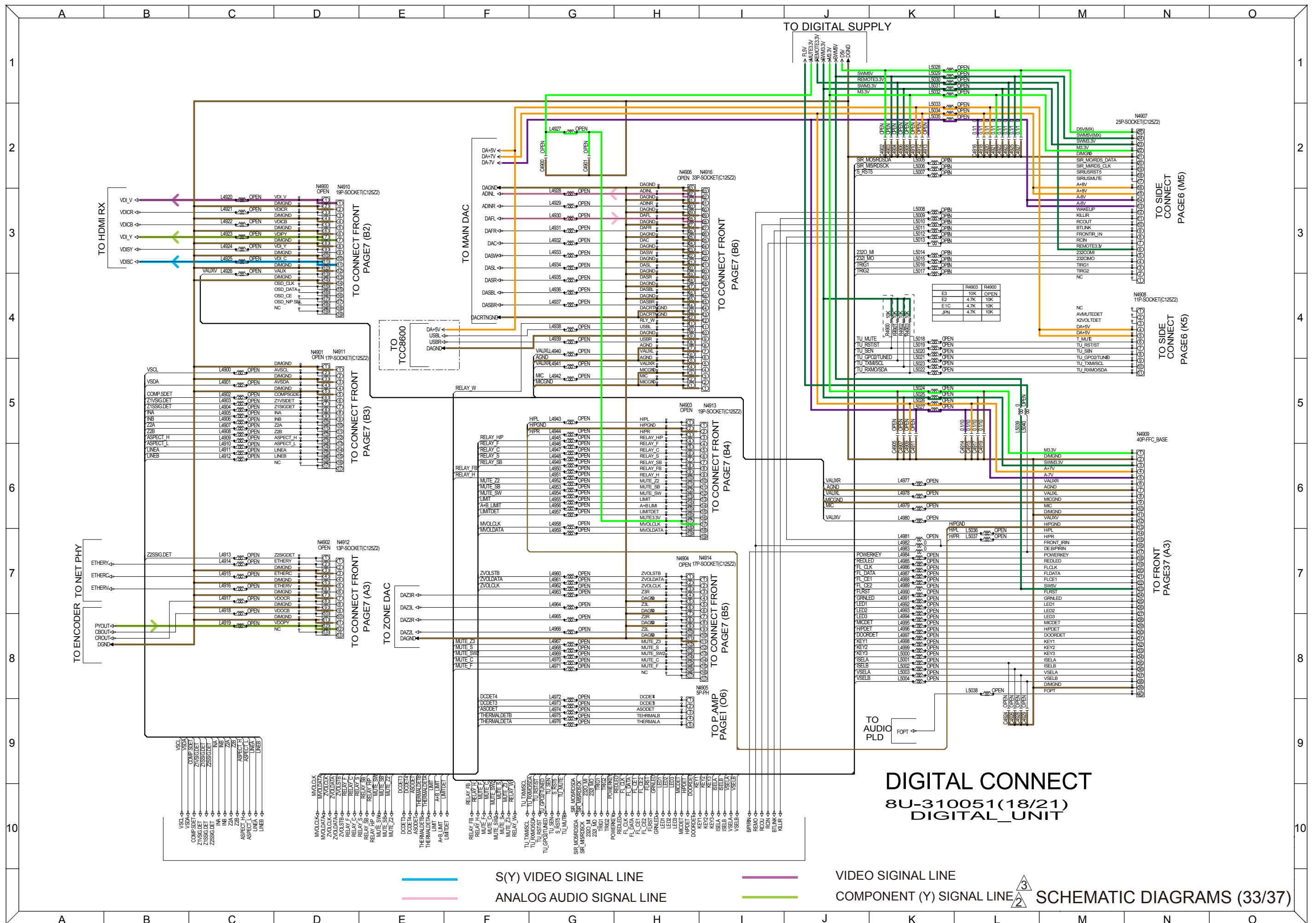


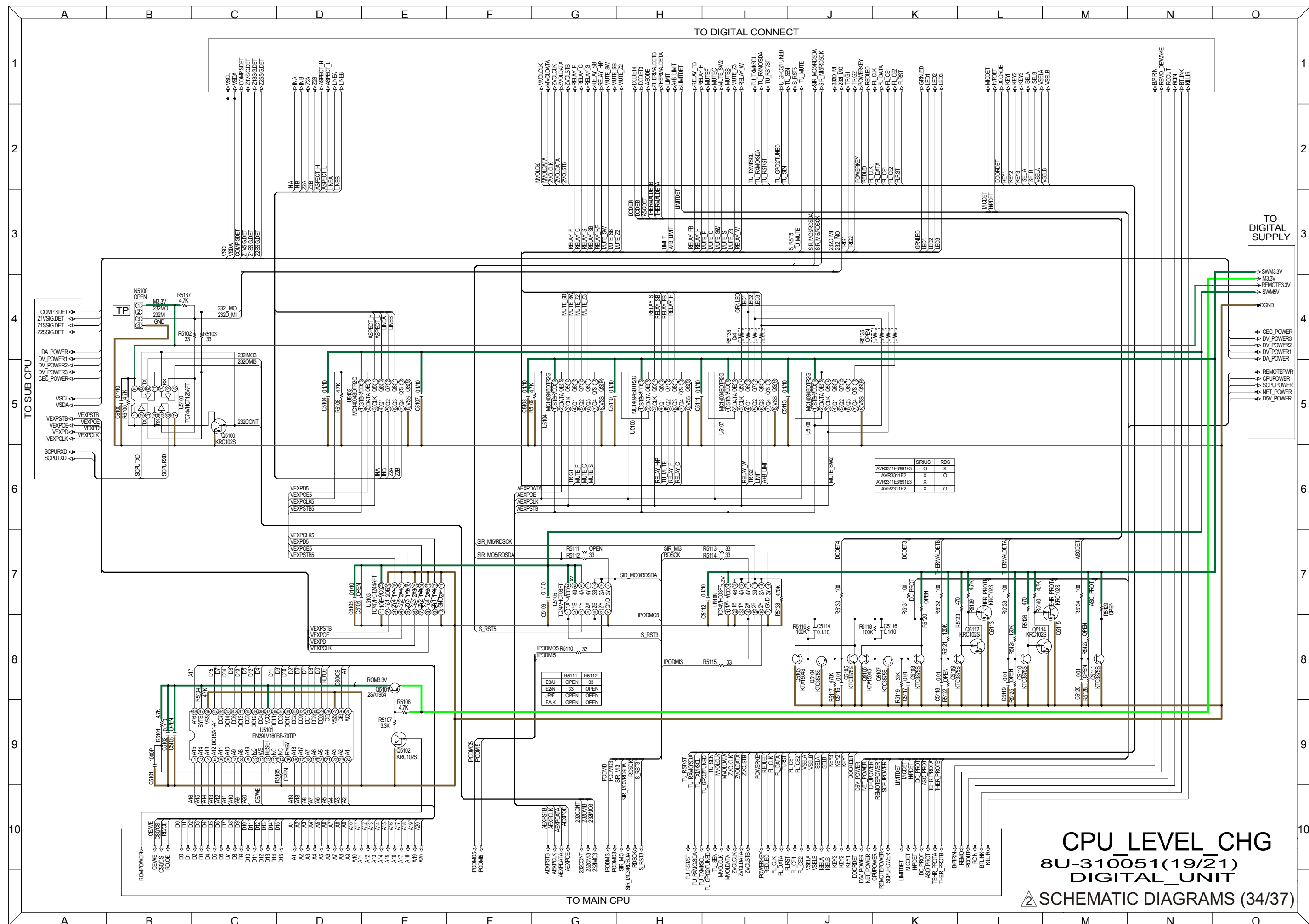


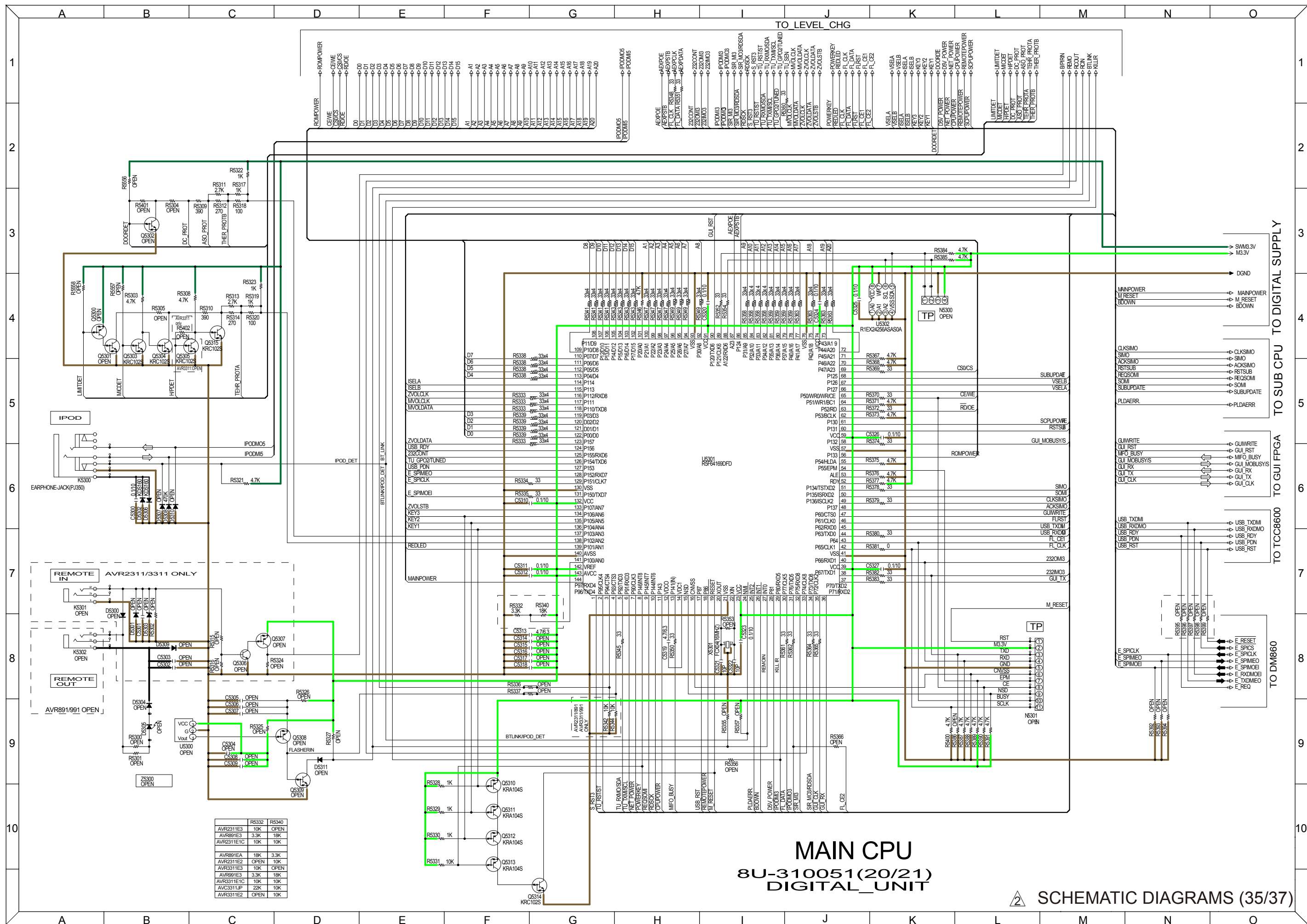






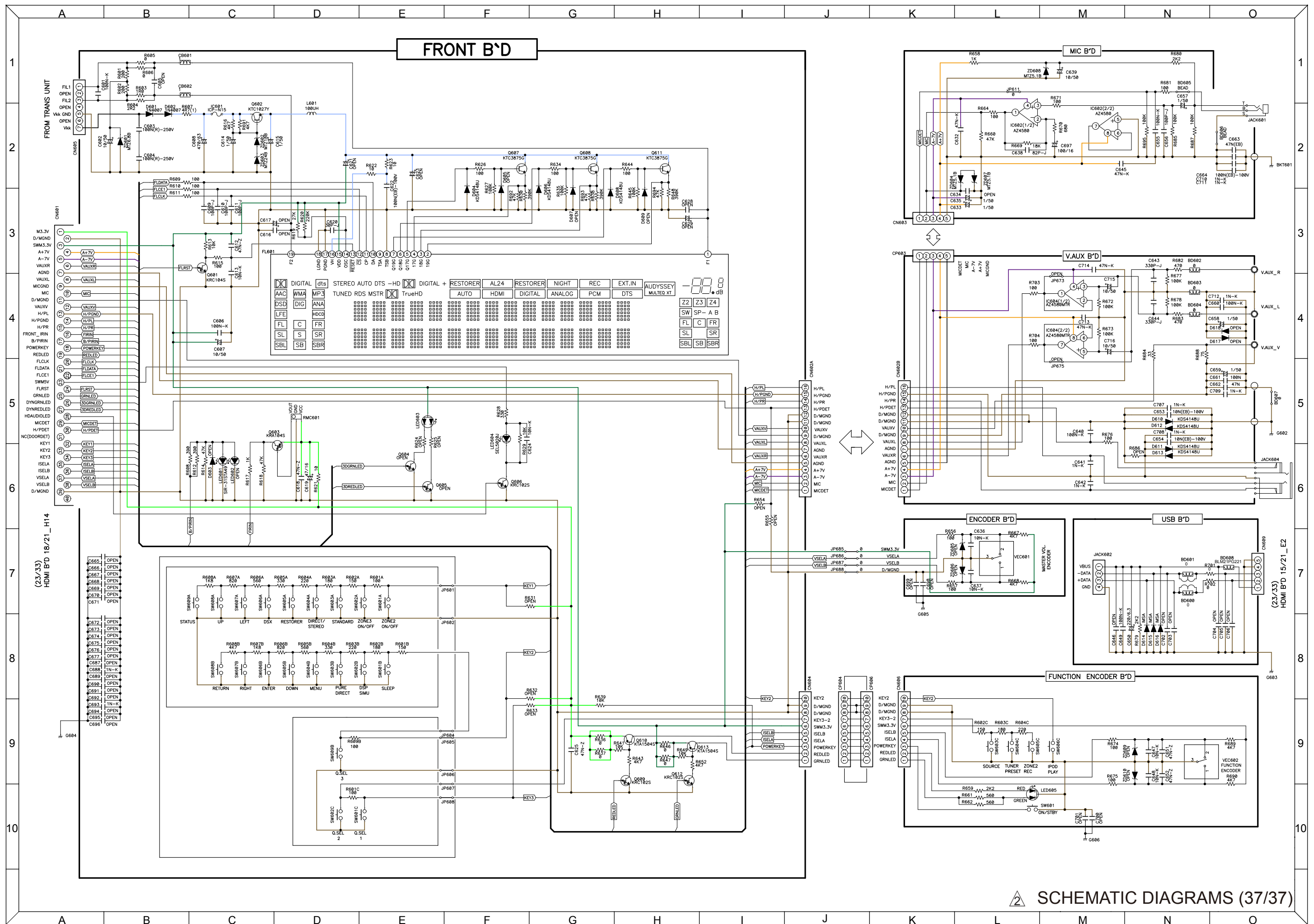




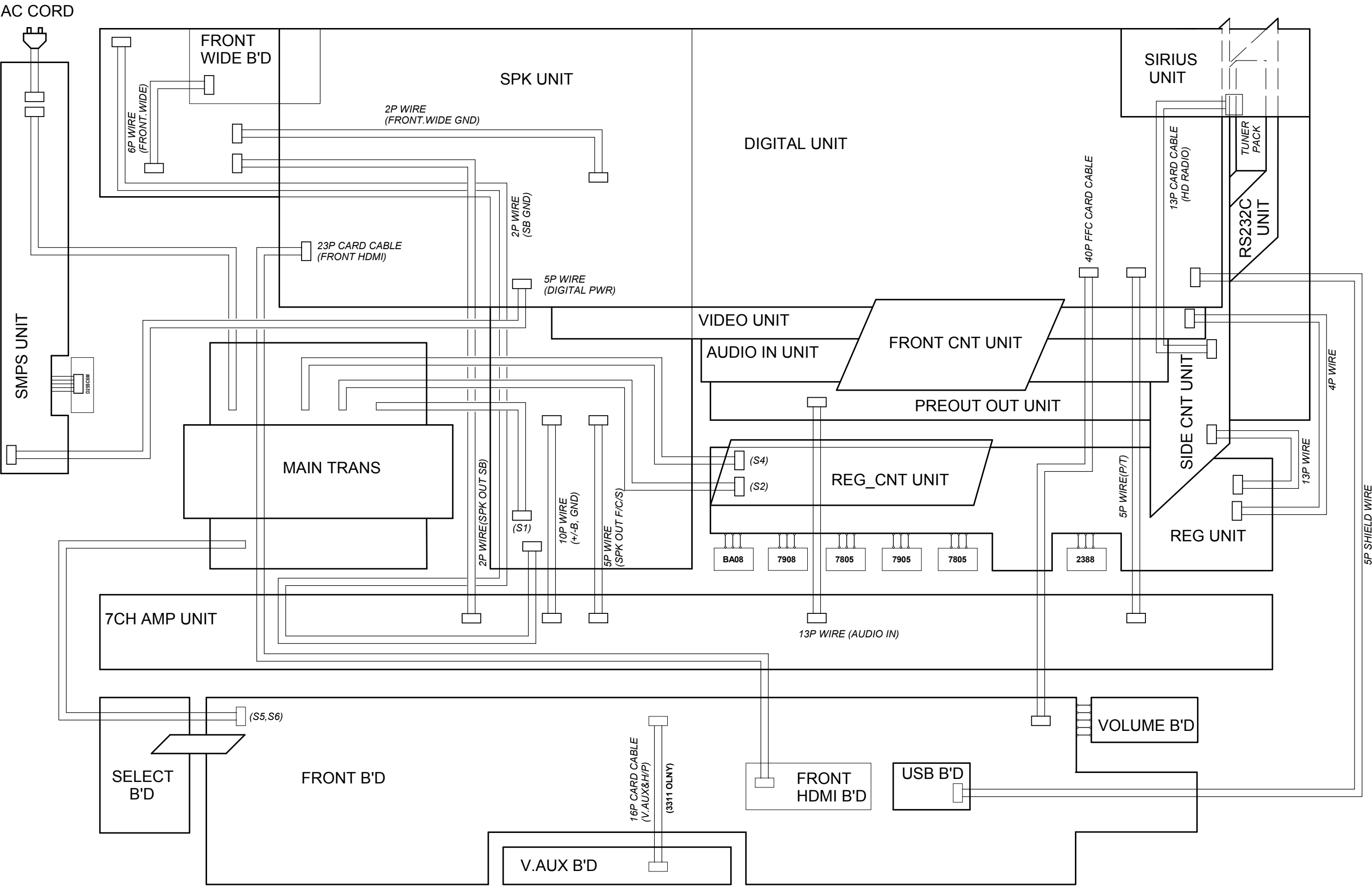


MAIN CPU 8U-310051(20/21) DIGITAL_UNIT





WIRING DIAGRAM 3



2

WARNING:

Parts marked with this symbol have critical characteristics.

Use ONLY replacement parts recommended by the manufacturer.



E2, E1C only

57

147

2

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

SP : Premium Silver model

[illegible]

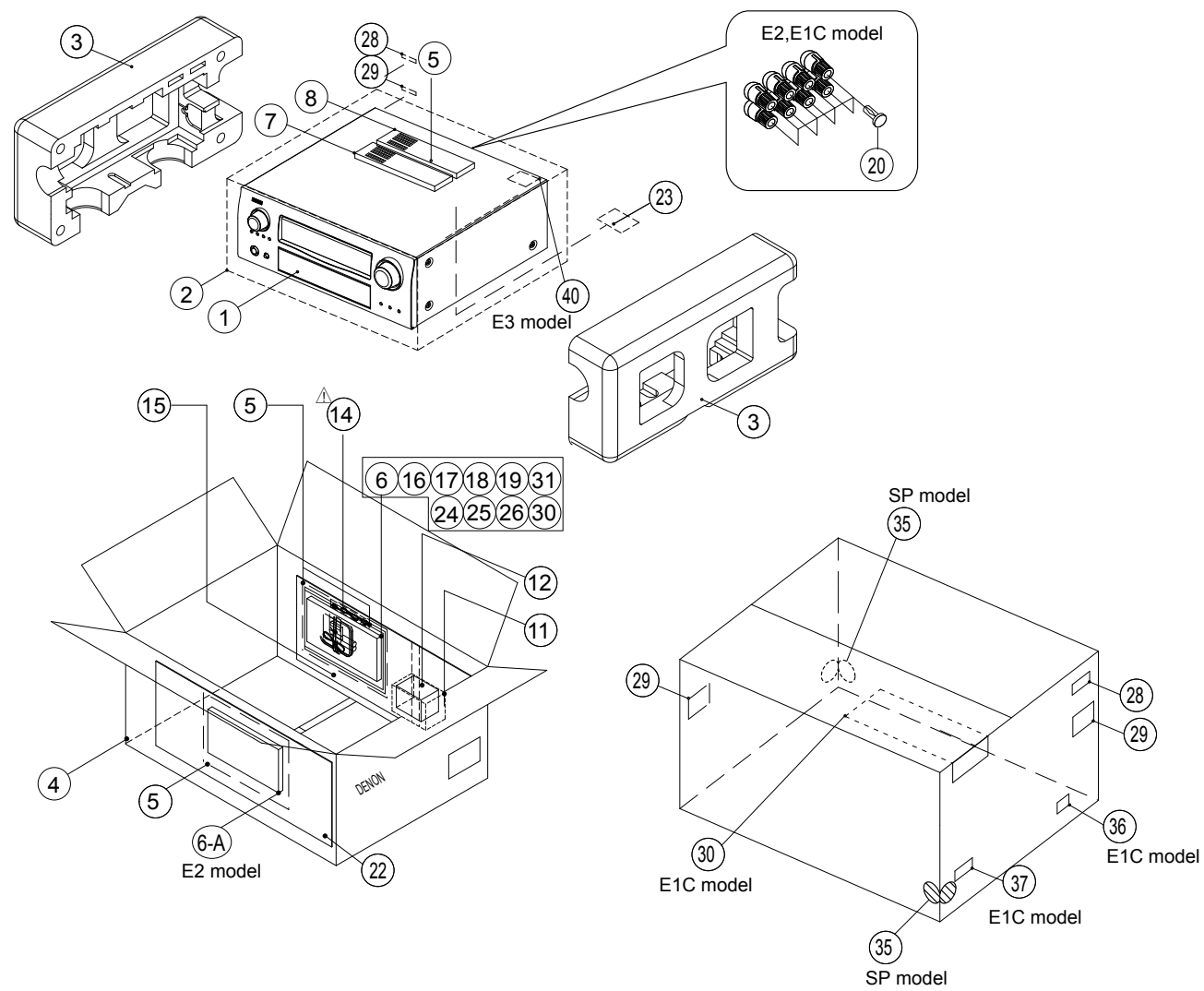
NOTE :
Please change the destination-resistors when changing 3311CIBKE3 (8U6331006100S) to other destination.
Please refer to destination-resistors 000, 000 page.
(SCHEMATIC DIAGRAMS : 34/38, 35/38)

	R5111(34/37)	R5112(34/37)	R5332(35/37)	R5340(35/37)
E2	33	OPEN	OPEN	10K
E1C	OPEN	OPEN	10K	10K

Personal notes:

Personal notes:

PACKING VIEW 2



PARTS LIST OF PACKING & ACCESSORIES

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

* Part indicated with the mark "★" is not illustrated in the exploded view.

* 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.

E3 : U.S.A. & Canada model

E2 : Europe model

E1C : China model

BK : Black model

SP : Premium Silver model

Ref.No.	Part No.	Part Name	Remarks		Q'ty	New
1	-	SET	-		1	
2	nsp	PE,SHEET		6327040059000S	1	
3	963533010090D	CUSHION SNOW		6230212814000S	1	
4	963531011120D	BOX GIFT	E3	6007211730050S	1	*
4	963531011910D	BOX GIFT	E2	6007211730060S	1	*
4	963531011920D	BOX GIFT	E1C	6007211730070S	1	*
5	nsp	POLY BAG	E3, E1C	6330000240000S	2	
5	nsp	POLY BAG	E2	6330000240000S	3	
6	541110428006D	INSTRUCTION MANUAL	E3	5707000003900S	1	*
6	541110533007D	INSTRUCTION MANUAL	E2	5707000004400S	1	*
6	541110431002D	INSTRUCTION MANUAL	E1C	5707000003930S	1	*
6-A	541110430009D	INSTRUCTION MANUAL-2	E2	5707000003910S	1	*
7	307010069004D	REMOCON RC-1146		8300114600010S	1	
8	307010071007D	REMOCON RC-1148		8300114800010S	1	*
11	nsp	POLY BAG ACCESSORY		6330210222000S	1	
12	324010001003D	AUTO SETUP MIC		M040000310040S	1	
	14	90M-ZC000470R	CORD ASSY	E3	L068125130010S	1
	14	90M-ZC000600R	CORD ASSY	E2	L068250160020S	1
	14	963611004880S	CORD ASSY	E1C	L068250100050S	1
	15	nsp	PAD BOX BACK		6240210730000S	1
	16	nsp	BATTERY DRY AA		G670001R50190S	2
	17	nsp	BATTERY DRY AAA		G670001R50210S	2
	18	00D9630158006	ANTENNA WIRE (FM)		E605010070001S	1
	19	00D2310089007	ANTENNA AM LOOP	E3	E601016400010S	1
	19	90M-ZA000260R	ANTENNA LOOP WIRE 9.5UH	E2, E1C	E601016000010S	1
	20	nsp	BUSHING TERMINAL	E2, E1C	2410040353010S	
	22	nsp	PAD MANUAL	E2	6240210780000S	1
	23	nsp	LABEL LICENSE	E3	5507000002950S	1
	23	nsp	LABEL LICENSE	E2, E1C	5507000004580S	1
	24	nsp	SHEET Sirius	E3	5227000000810S	1
	25	nsp	SHEET RHAPSODY	E3	5227000000990S	1
	26	nsp	SHEET NAPSTER	E3, E2	5227000001380S	1
	28	nsp	LABEL MAC ADDRESS		5507000002920S	1
	29	nsp	LABEL CONTROL		5507000007000S	1
	30	nsp	WARRANTY CARD	3311CIE3	5727000003010S	1
	30	nsp	WARRANTY CARD	E1C	5777001670010S	1
	31	nsp	CARD S.S LIST		577700162001GS	1
	35	nsp	LABEL COLOR	SP	5507020170680S	2
	36	nsp	LABEL CRoHS DATE	E1C	5507000000850S	1
	37	nsp	LABEL BOX	E1C	5507100500970S	1
	40	nsp	LABEL HOT-SURFACE	E3	5507000003730S	1
★	41	nsp	LABEL STICKER		5507000005300S	1

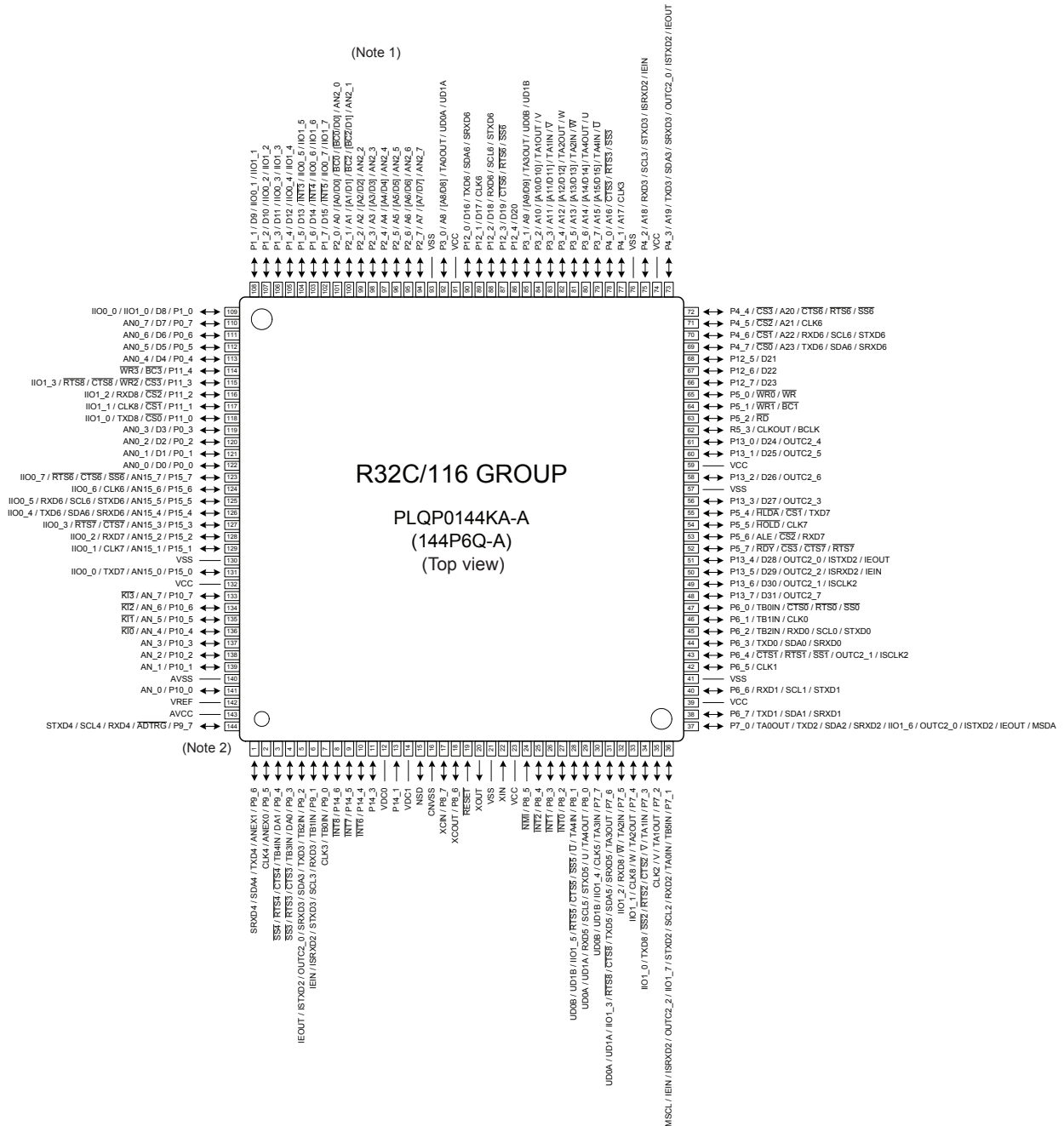


SEMICONDUCTORS

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

R5F64169DFD (HDMI : U5301)



- Notes:
- Pin names in brackets [] represent a functional signal as a whole and should not be considered as two separate pins.
 - The position of pin number 1 varies by product. Refer to the index mark in attached "Package Dimensions".

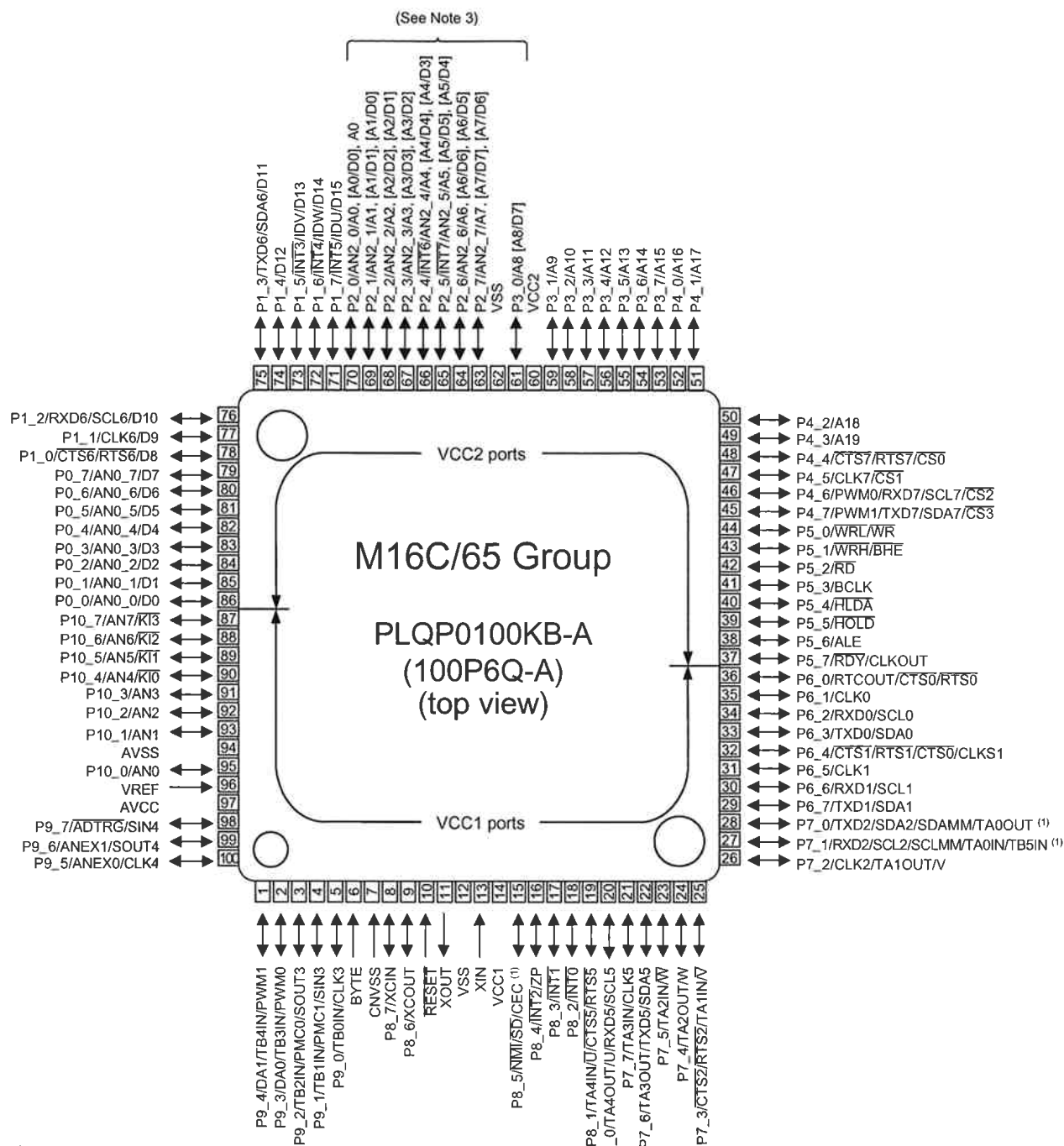
R5F64169DFD Terminal Functions

Pin	Pin Name	Synbol	I/O	Type	Pullup	Lv Cnv	STBY	stop	Function
1	P96/(TXD4)	SIRIUS RST	O	C	-	3/5	O/L	O/L	NC
2	P95/(CLK4)	HD RADIO RST/ST IND	O/O/I	C/C/-	-	-	O/L	O/L	HD RADIO control pin /ANALOG TUNER control
3	P94/(CTS4)/TB4IN	NC	O/I	C/-	-	-	O/L	O/L	NC
4	P93/(CTS3)/TB3IN	NC	O/I	C/-	-	-	O/L	O/L	NC
5	P92/TXD3/SDA3	HDRADIO MOHI/TU SDA	O/I_O	C	-	-	O/L	O/L	HD RADIO control/ANALOG TUNER control
6	P91/RXD3/SCL3	HDRADIO MIHO/TU SCL	I/O	-C	-	-	O/L	O/L	HD RADIO control/ANALOG TUNER control
7	P90/(CLK3)	E POWER	O	C	-	-	O/L	O/L	ETHERNET POWER control pin
8	P146/INT8	POWER KEY	I	-	3VPu	-	I	I	POWER KEY (WAIT MODE cancel, interrupt port)
9	P145/INT7	REQ SOMI	I	-	-	-	I	O/L	MAIN-SUB u-com communication control output pin
10	P144/INT6	RDS CLK(3311E2 model)	I	-	-	3/5	I	I	RDS control(3311E2 model)(Interrupt detection)
11	P143	CPU POWER	O	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 IN ONLY	DOSD MIFO_BUSY	I	-	-	-	I	O/L	D.OSD CPU control 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 start : H input set)
17	P87/(XCIN)	E RESET	O	C	-	-	O/L	O/L	ETHERNET RESET control pin
18	P86/(XCOUT)	232C POWER(REMOTE PWR)	O	C	-	-	O/L	O/L	232C POWER control pin(ON: H)/
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) IN ONLY	iPod DET	I	-	SW3	-	O/L	O/L	MINI JACK connection detection pin for DOCK connection(Connection:H)
25	P84/INT2	PLDAERR	I	-	-	-	O/L	O/L	PLD ERROR detection
26	P83/INT1	B.DOWN	I	-	-	-	I	I	Power failure detect(Power failure:L)
27	P82/INT0	REMOCON	I	-	3Vin/Pd	-	I	I	Remote control signal input
28	P81	D5V POWER	O	C	-	-	O/L	O/L	Digital 5V power control pin
29	P80/RXD5	iPod RXD	I	-	(3Vin)/	5/3	O/L	O/L	iPod communication control pin
30	P77/(CLK5)	EXP & FL DATA	O	C	-	-	O/L	O/L	EXP control pin & FL control pin
31	P76/TXD5	iPod TXD	O	C	-	3/5	O/L	O/L	iPod communication control pin
32	P75/RXD8	NC	I	-	(3Vin)	5/3	O/L	O/L	NC
33	P74/(CLK8)/TA2OUT	NC	O	C	-	-	O/L	O/L	NC
34	P73/TXD8	SIRIUS MO(3311E3 model)	O/I	C/N	-	3/5	O/L	O/L	SIRIUS control pin (3311E3 model)
35	P72/CLK2	DOSD CPU CLK	O	C	-	-	O/L	O/L	D.OSD CPU control pin
36	P71/RXD2	DOSD CPU RX	I	-	-	-	O/L	O/L	D.OSD CPU control pin
37	P70/TXD2	DOSD CPU TX	O	C	-	-	O/L	O/L	D.OSD CPU control pin
38	P67/TXD1	TXD MO232I	O	C	-	-	O/L	O/L	Data transfer to external pin(AMX)/MITSUBISHI writer rewrite
39	VCC	VCC1	-	-	-	-	-	-	+3V
40	P66/RXD1	RXD MI232O	I	-	-	-	I	O/L	Data received from the external pin(AMX) /MITSUBISHI writer rewrite
41	VSS	VSS	-	-	-	-	-	-	GND
42	P65/(CLK1)/SCLK(L)	EXP & FL CLK	O	C	Pd	-	O/L	O/L	EXP control pin & FL control pin
43	P64/(BUSY)	FL CE1	O	C	-	-	O/L	O/L	FL control order pin
44	P63/TXD0	E_TXDMOEI	O	C	-	-	O/L	O/L	ETHERNET communication control pin
45	P62/RXD0	E_RXDMIEO	I	-	-	-	I	O/L	ETHERNET communication control pin
46	P61/(CLK0)	FL RST	O	C	-	-	O/L	O/L	FL control pin
47	P60/(CTS0)	DOSD WRITE	O	C	-	-	O/L	O/L	D. OSD rewrite control pin
48	P137	ACK SIMO	O	C	-	-	O/L	O/L	MAIN-SUB u-com communication control output pin
49	P136/ISCLK2	CLK MO	O	C	-	-	O/L	O/L	MAIN-SUB u-com communication control output pin
50	P135/ISRXD2	SOMI	I	-	-	-	I	O/L	MAIN-SUB u-com communication control output pin
51	P134/ISTXD2	MOSI	O	C	-	-	O/L	O/L	MAIN-SUB u-com communication control output pin
52	P57/RDY	RDY	I	C	M3VPu	-	I	I	External memory access pin(NC,Pup)
53	P56/ALE	ALE	O	C	-	-	O/L	O/L	External memory access pin(NC)
54	P55/HOLD/EPM	HOLD/FRASH EPM	I	C	M3VPu	-	I	I	External memory access pin(NC,Pup) /Rewrite boot program start : L input set
55	P54/HLDÄ	HLDÄ	O	C	-	-	O/L	O/L	External memory access pin(NC)
56	P133	ROM POWER	O	C	-	-	O/L	O/L	3.3V control pin for enhancing ROM
57	VSS	VSS	-	-	-	-	-	-	GND
58	P132	D.OSD MOFI_BUSY	O	C	-	-	O/L	O/L	D.OSD CPU control pin

Pin	Pin Name	Symbol	I/O	Type	Pullup	Lv Cnv	STBY	stop	Function
59	VCC	VCC2	-	-	-	-	-	-	+3V
60	P131	RST SUB	O	C	-	-	O/L	O/L	Output for reset of sub-μcom
61	P130	SCPU POWER	O	C	-	-	O/L	O/L	SUB CPU POWER ON/OFF switch(H:ON)
62	P53/BCLK	BCLK	O	C	-	-	O/L	O/L	External memory access pin(NC)
63	P52/RD	RD	O	C	-	-	O/L	O/L	External memory access pin(Connection:OE#)
64	P51/(WR1)/BC1	BC1	O	C	-	-	O/L	O/L	External memory access pin(NC)
65	P50/(WR0)/WR/CE	WR/FRASH CE	O	C	Pd	-	O/L	O/L	External memory access pin(Connection:WE#) /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	SUB UPDATE	O	C	-	-	O/L	O/L	SUB UPDATE mode control (DPMS/DENON WRITTER). Normal:L. SUB rewriting mode:H(SUB reset)
69	P47/CS0/(A23)	CS0	O	C	-	-	O/L	O/L	External memory access pin(Connection:CS#)
70	P46/(CS1)/A22	A22	O	C	-	-	O/L	O/L	External memory access pin(NC)
71	P45/(CS2)/A21	A21	O	C	-	-	O/L	O/L	External memory access pin(NC)
72	P44/(CS3)/A20	A20	O	C	-	-	O/L	O/L	External memory access pin(Connection:A19)
73	P43/A19	A19	O	C	-	-	O/L	O/L	External memory access pin(Connection:A18)
74	VCC	VCC	-	-	-	-	-	-	+3V
75	P42/A18	A18	O	C	-	-	O/L	O/L	External memory access pin(Connection:A17)
76	VSS	VSS	-	-	-	-	-	-	GND
77	P41/A17	A17	O	C	-	-	O/L	O/L	External memory access pin(Connection:A16)
78	P40/A16	A16	O	C	-	-	O/L	O/L	External memory access pin(Connection:A15)
79	P37/A15	A15	O	C	-	-	O/L	O/L	External memory access pin(Connection:A14)
80	P36/A14	A14	O	C	-	-	O/L	O/L	External memory access pin(Connection:A13)
81	P35/A13	A13	O	C	-	-	O/L	O/L	External memory access pin(Connection:A12)
82	P34/A12	A12	O	C	-	-	O/L	O/L	External memory access pin(Connection:A11)
83	P33/A11	A11	O	C	-	-	O/L	O/L	External memory access pin(Connection:A10)
84	P32/A10	A10	O	C	-	-	O/L	O/L	External memory access pin(Connection:A9)
85	P31/A9	A9	O	C	-	-	O/L	O/L	External memory access pin(Connection:A8)
86	P124	EXP STB	O	C	-	-	O/L	O/L	Expansion EXP control pin
87	P123	EXP OE	O	C	Pd	-	O/L	O/L	Expansion EXP control pin
88	P122/(RXD6)	EEPROM SCL/(I_O EXP)	I/O	C	-	-	O/L	I	EEPROM control pin/(Spare I / O EXP Control)
89	P121/(CLK6)	EEPROM SDA/(I_O EXP)	I/O	C	-	-	O/L	I	EEPROM control pin/(Spare I / O EXP Control)
90	P120/(TXD6)	D.OSD CPU RST	O	C	-	-	O/L	O/L	D.OSD CPU control pin
91	VCC	VCC	-	-	-	-	-	-	+3V
92	P30/A8	A8	O	C	-	-	O/L	O/L	External memory access pin(Connection:A7)
93	VSS	VSS	-	-	-	-	-	-	GND
94	P27/A7	A7	O	C	-	-	O/L	O/L	External memory access pin(Connection:A6)
95	P26/A6	A6	O	C	-	-	O/L	O/L	External memory access pin(Connection:A5)
96	P25/A5	A5	O	C	-	-	O/L	O/L	External memory access pin(Connection:A4)
97	P24/A4	A4	O	C	-	-	O/L	O/L	External memory access pin(Connection:A3)
98	P23/A3	A3	O	C	-	-	O/L	O/L	External memory access pin(Connection:A2)
99	P22/A2	A2	O	C	-	-	O/L	O/L	External memory access pin(Connection:A1)
100	P21/A1	A1	O	C	-	-	O/L	O/L	External memory access pin(Connection:A0)
101	P20/A0	A0	O	C	-	-	O/L	O/L	External memory access pin(NC)
102	P17/D15	D15	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D15)
103	P16/D14	D14	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D14)
104	P15/D13	D13	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D13)
105	P14/D12	D12	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D12)
106	P13/D11	D11	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D11)
107	P12/D10	D10	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D10)
108	P11/D9	D9	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D9)
109	P10/D8	D8	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D8)
110	P07/D7	D7	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D7)
111	P06/D6	D6	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D6)
112	P05/D5	D5	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D5)
113	P04/D4	D4	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D4)
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)	ZVOL CLK	O	C	-	-	O/L	O/L	ZONE VOL(NJW1194) control
117	P111	VOL CLK	O	C	-	-	O/L	O/L	FUNCTION/VOLUME control(R2A15220)
118	P110/(TXD8)	VOL DATA	O	C	-	-	O/L	O/L	FUNCTION/VOLUME control(R2A15220)
119	P03/D3	D3	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D3)
120	P02/D2	D2	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D2)
121	P01/D1	D1	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D1)
122	P00/D0	D0	I/O	C	-	-	O/L	O/L	External memory access pin(Connection:D0)

Pin	Pin Name	Symbol	I/O	Type	Pullup	Lv Cnv	STBY	stop	Function
123	P157	ZVOL DATA	O	C	-	-	O/L	O/L	ZONE VOL(NJW1194) control
124	P156	E SPI REQ	I	-	Pd	-	O/L	O/L	ETHERNET communication control pin
125	P155/(RXD6)	232C CONTROL (SUB LOG MODE)	O	C	-	-	O/L	O/L	SUB LOG MODE : For 232C course switch control
126	P154/(TXD6)	TUNED	I	-	SW3VPu	-	O/L	O/L	ANALOG TUNER control (Except 3311E3 model)
127	P153	E SPI CS	O	C	-	-	O/L	O/L	ETHERNET communication control pin
128	P152/(RXD7)	E SPI MIEO	I	-	Pd	-	O/L	O/L	ETHERNET communication control pin
129	P151/(CLK7)	E SPI CLK	O	C	Pd	-	O/L	O/L	ETHERNET communication control pin
130	VSS	VSS	-	-	-	-	-	-	GND
131	P150/(TXD7)	E SPI MOEI	O	C	Pd	-	O/L	O/L	ETHERNET communication control pin
132	VCC	VCC	-	-	-	-	-	-	+3V
133	P107/(AN7)/(KI3)	ZVOL STB	O	C	-	-	O/L	O/L	ZONE VOL(NJW1194) control
134	P106/AN6/KI2	KEY3	I	-	M3VPu	-	I	I	Button input 3
135	P105/AN5/KI1	KEY2	I	-	M3VPu	-	I	I	Button input 2
136	P104/AN4/KI0	KEY1	I	-	M3VPu	-	I	I	Button input 1
137	P103/AN3	ASO/DC/TH_B	I	-	SW3VPu	-	O/L	O/L	ASO PROTECT/DC PROTECT/Temperature detection B input
138	P102/AN2	MIC/H_P/LIMIT/TH_A	I	-	SW3VPu	-	O/L	O/L	MIC detection/Headphone detection/LIMIT decision detection/ Temperature detection B input (A/D detection)
139	P101/AN1	REDLED	O	C	-	-	O/L	O/L	POWER/STANDBY LED control pin(ON : H)
140	AVSS	AVSS	-	-	-	-	-	-	Analog GND
141	P100/AN0	MODE	I	-	M3VPu	-	I	I	Destination switch input
142	VREF	VREF	-	-	-	-	-	-	Standard power input +3V
143	AVCC	AVCC	-	-	-	-	-	-	Analog power +3V
144	P97/(RXD4)	MAIN POWER	O	C	-	-	O/L	O/L	MAIN POWER control pin

R5F3650KNFB (HDMI : U5500)

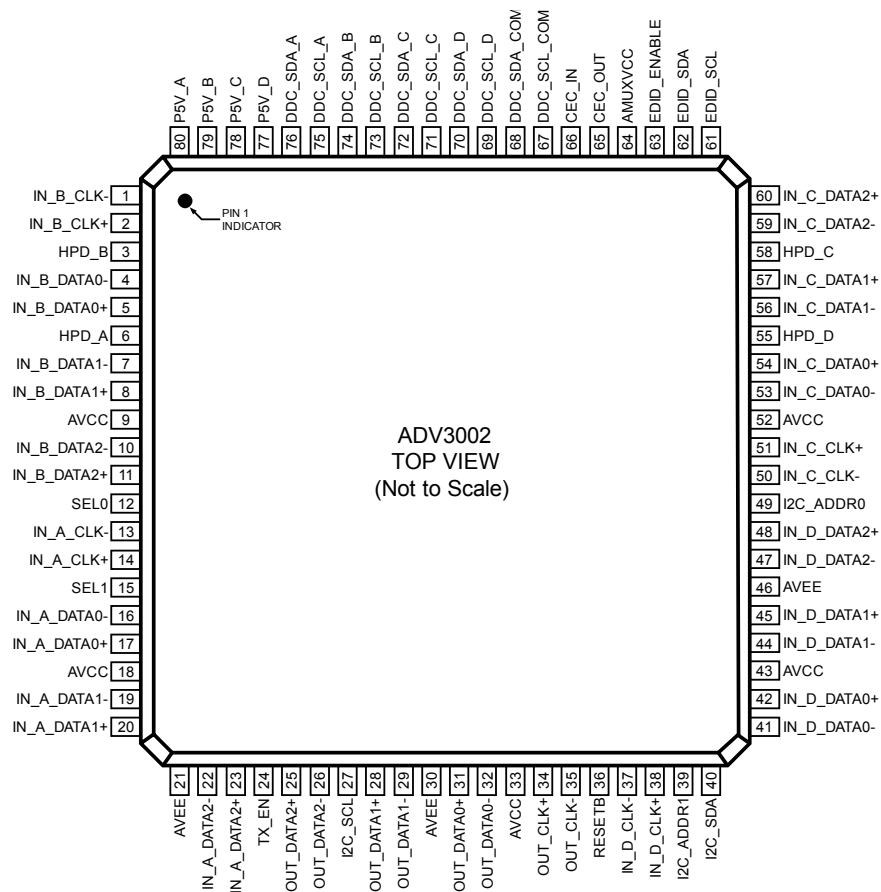


R5F3650KNFB Terminal Functions

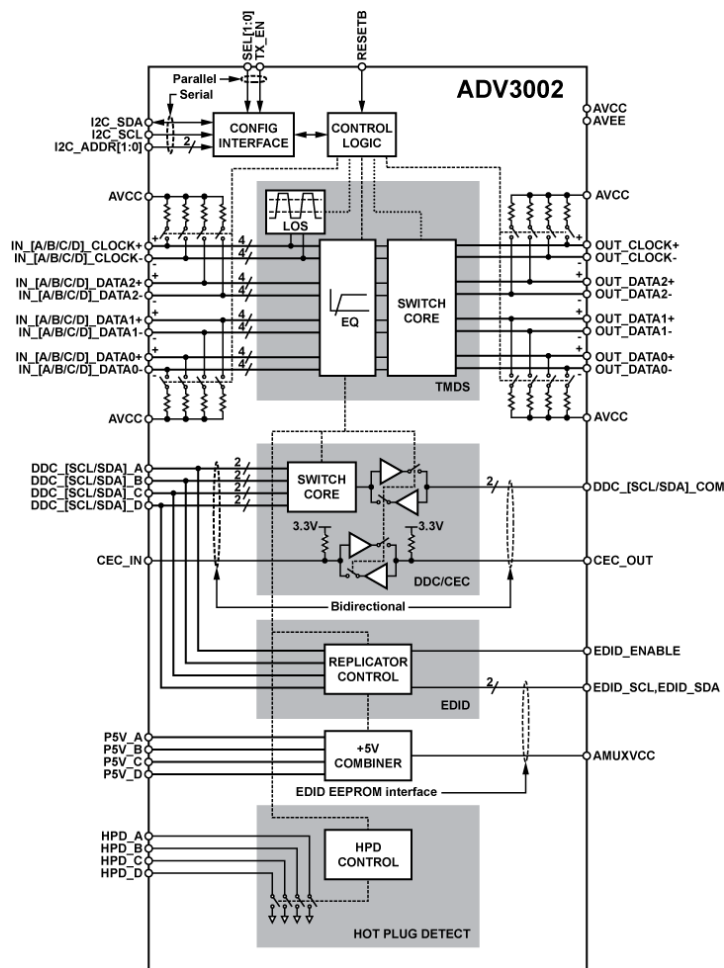
Pin	Pin Name	Symbol	I/O	Type	Det	Op (Int.)	Pu/Pd (Ext.)	Res	PURE D	CEC STBY	P.OFF	Function
1	P94	VSEL DATA	O	C	-	-	-	Z	-	O/L	Z	VIDEO PLD control pin
2	P93	DIR CE	O	C	-	-	-	Z	-	O/L	Z	DIR control pin (LC89058W-VF4A)
3	P92/SOUT3	DIR DIN	O	C	-	-	-	Z	-	O/L	Z	DIR control pin (LC89058W-VF4A)
4	P91/SIN3	DIR DOUT	I	-	Lv	-	DA3.3Pu	Z	-	-	Z	DIR control pin (LC89058W-VF4A)
5	P90/CLK3	DIR CLK	O	C	-	-	-	Z	-	O/L	Z	DIR control pin (LC89058W-VF4A)
6	BYTE	BYTE	-	-	-	-	-	-	-	-	-	GND(Ext. data bus bit width switching, 16bit : L)
7	CNVCS	CNVSS	-	-	-	-	Pd	-	-	-	-	Single-chip/Micro-processor mode switching (Normal single-chip : L, Rewrite boot program start : H input set)
8	P87	ADC RST	O	C	-	-	-	Z	-	O/L	Z	AD(*****) control pin
9	P86	DIR CE4	O	C	-	-	-	Z	-	O/L	Z	DIR control pin (LC89058W-VF4A)
10	RESET	SUBRESET	I	-	Lv	-	SCPU3VPu	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(N)/(NMI)/(CEC)	(CEC_IN)	I	-	-	-	Pd	-	-	-	-	NC ("H" fixed / Reserve (16pin CEC-D signal input for TEST))
16	P84/INT2	CEC_IN	I	-	E↓&L	-	SCPU3VPu	Z	-	-	Z	CEC-D signal input pin
17	P83/INT1	ACK SIMO	I	-	E↓&L	-	-	Z	-	-	Z	MAIN-SUB ucom communication control input pin (MAIN ucom Hack from the main "L" Return)
18	P82/INT0	SUB BDOWN	I	-	E↓&L	-	-	Z	-	-	Z	Power failure detect(Power failure:L)
19	P81	ABT RST	O	C	-	-	-	Z	-	O/H	Z	IP CONV(ABT2015) Reset
20	P80/(RXD5)	NC	I	-	-	-	Pd	Z	-	-	Z	NC
21	P77/(CLK5)	SUB TDO	I	-	-	-	-	Z	-	O/L	Z	PLD rewriting control (JTAG)
22	P76/(TXD5)	A PLD CS "D/M"	O	C	-	-	-	Z	-	-	O/L	A PLD control pin/ DENON WRITTER / MITSUBISHI rewritten for determining (DW :L)
23	P75	A PLD DATA	O	C	-	-	-	Z	-	O/L	Z	A PLD control pin
24	P74	A PLD CLK	O	C	-	-	-	Z	-	O/L	Z	A PLD control pin
25	P73/CTS2	NC	I	-	-	-	Pd	Z	-	-	Z	NC
26	P72/CLK2	DA POWER	O	C	-	-	-	Z	O/H	-	Z	DIGITAL power (DA3.3V,DA1.2V) ON/OFF control (H: ON)
27	P71(N)/RXD2/ SCLMM	HSCL(400k)	I/O	N	-	-	CEC3VPu	Z	-	O/L	O/L	VIDEO I2C- IP CONV(ABT2015)/HDMI_R(ADV7840)/ HDMI T(ADV7511)/SWITCHER(ADV3002)
28	P70(N)/TXD2/ SDAMM	HSDA(400k)	I/O	N	-	-	CEC3VPu	Z	-	O/L	O/L	VIDEO I2C- IP CONV(ABT1030)/HDMI_R(ADV7840)/ HDMI T(ADV7511)/SWITCHER(ADV3002)
29	P67/TXD1	TXD	O	C	-	-	SCPU3VPu	Z	-	-	Z	Data transmission output to external
30	P66/RXD1	RXD	I	-	Lv	-	SCPU3VPu	Z	-	-	Z	Data reception input from the external
31	P65/CLK1/SCLK	SCLK	I	-	-	-	Pd	Z	-	-	Z	Emulator communication pin
32	P64/CTS1	HIN SELA	O	C	-	-	-	Z	-	O/L	Z	For HDMI 4/5/6/F selection(TC4052)
33	P63/TXD0	SOMI	O	C	-	-	-	Z	-	-	Z	MAIN-SUB ucom communication control pin
34	P62/RXD0	SIMO	I	-	-	-	-	Z	-	-	Z	MAIN-SUB ucom communication control pin
35	P61/CLK0	CLK SIMO	I	-	-	-	-	Z	-	-	Z	MAIN-SUB ucom communication control pin
36	P60/CTS0	REQ SOMI	O	C	-	-	-	Z	-	-	Z	MAIN-SUB ucom communication control pin
37	P57	1TMS SW RST	O	C	-	-	SCPU3VPu	Z	-	-	Z	HDMI SWITCHER ADV3002 Reset pin
38	P56	DV POWER2	O	C	-	-	-	Z	O/H	-	Z	DIGITAL VIDEO power control pin (DV1.8V)
39	P55/EPM	EPM	I	-	-	-	Pd	Z	-	-	Z	Rewrite boot program start : L input set
40	P54	CEC_OUT	O	C	-	-	-	Z	-	-	Z	CEC-D signal input pin
41	P53	DV POWER3	O	C	-	-	-	Z	O/H	O/L	Z	DIGITAL VIDEO power control pin (DV1.0V)
42	P52	Z2SSIG.DET	I	-	Lv	-	SCPU3VPu	Z	-	I	Z	ZONE2 S signal presence detection input (Connected: H)
43	P51	HIN SELB	O	C	-	-	-	Z	-	O/L	Z	For HDMI 4/5/6/F selection(TC4052)
44	P50/CE	MONI SEL/CE/ DSP BOOT	O/I	C	-	-	SCPU3VPu	Z	-	-	Z	MONI SEL(for Dual Moni)(MAX4886) /Rewrite boot program start : H input set
45	P47/(TXD7)/SDA7	VSDA	I/O	C	-	-	DV3VPu	Z	-	-	O/L	ENCODER ADV7392 I2C/VIDEO SELECT IC(NJW1327)
46	P46/(RXD7)/SCL7	VSCL	I/O	C	-	-	DV3VPu	Z	-	-	O/L	ENCODER ADV7392 I2C/VIDEO SELECT IC(NJW1327)
47	P45/(CLK7)	NC	I	-	-	-	Pd	Z	-	I	Z	NC
48	P44	HPD1	O	C	-	-	-	Z	-	O/L	Z	HP DET control pin
49	P43	HDMI A.SEL	O	C	-	-	-	Z	-	O/L	Z	HDMI AUDIO switch (H : DSP course, L : HDMI Rx→Tx through)(TC74VHC244)
50	P42	NC	I	-	-	-	Pd	Z	-	I	Z	NC
51	P41	CEC POWER	O	C	-	-	-	Z	O/H	O/H	Z	Power ON (CEC5V,CEC3.3V,CEC1.8V) for CEC STANDBY
52	P40	HPD2	O	C	-	-	-	Z	-	O/L	Z	HP DET control pin
53	P37	HDMIR_RST	O	C	-	-	SCPU3VPu	Z	-	-	Z	Reset for HDMI RECEIVER(ADV7840)
54	P36	1TX RST	O	C	-	-	SCPU3VPu	Z	-	-	Z	Reset for HDMI TRANSMITTER (ADV7511)
55	P35	ENC RST	O	C	-	-	SCPU3VPu	Z	-	O/L	Z	Reset for VIDEO ENCODER (ADV7392)
56	P34	Z1 SSIGDET	I	-	Lv	-	SCPU3VPu	Z	-	-	Z	S signal presence detection input (Connected: H)
57	P33	HPD3	O	C	-	-	-	Z	-	O/L	Z	HP DET control pin

Pin	Pin Name	Symbol	I/O	Type	Det	Op (Int.)	Pu/Pd (Ext.)	Res	PURE D	CEC STBY	P.OFF	Function
58	P32	DAC MDI	O	C	-	-	-	Z	-	O/L	Z	DAC control pin (ASK4358)
59	P31	DAC MC	O	C	-	-	-	Z	-	O/L	Z	DAC control pin (ASK4358)
60	VCC	VCC	-	-	-	-	-	-	-	-	-	+3.3V
61	P30	DAC MS	O	C	-	-	-	Z	-	O/L	Z	DAC control pin (ASK4358)
62	VSS	VSS	-	-	-	-	-	-	-	-	-	GND
63	P27	DAC RST	O	C	-	-	-	Z	-	O/L	Z	DAC control pin (ASK4358)
64	P26	DV POWER	O	C	-	-	-	Z	O/H	MODE1=O/H MODE2=O/L	Z	DIGITAL VIDEO power control pin (DV5V,DV3.3V)
65	P25/INT7	OSD CPU BUSY SIFO	I	-	Lv	-	Pd	Z	-	-	Z	OSD CPU control pin
66	P24/INT6	1TX INT	I	-	Lv	-	-	Z	-	-	Z	HDMI OUT1 signal presence detection input (HDMI TRANS1 ADV7511)
67	P23	SUB TMS	O	C	-	-	DA3.3Pu	Z	-	-	Z	PLD rewriting control (JTAG)
68	P22	VEXP STB	O	C	-	-	-	Z	-	O/L	Z	Terminal output for VIDEO expander pin (BU4094BCFV)
69	P21	VEXP OE	O	C	-	-	-	Z	-	O/L	Z	Terminal output for VIDEO expander pin (BU4094BCFV)
70	P20	VEXP CLK	O	C	-	-	-	Z	-	O/L	Z	CLK output for VIDEO expander control(BU4094BCFV)
71	P17/INT5	ADVINT1	I	-	E _L &L	-	-	Z	-	-	Z	HDMI RECEIVER(ADV7840)INT1 output
72	P16/INT4	ADVINT2	I	-	E _L &L	-	-	Z	-	-	Z	HDMI RECEIVER(ADV7840)INT2 output
73	P15/INT3	ADVINT3	I	-	E _L &L	-	-	Z	-	-	Z	HDMI RECEIVER(ADV7840)INT3 output
74	P14	HPD4	O	C	-	-	-	Z	-	O/L	Z	HP DET control pin
75	P13/TXD6	DSP MOSI	O	C	-	-	DA3VPu	Z	-	O/L	Z	DSP control pin(ADSP-21367-333)
76	P12/RXD6	DSP MISO	I	-	Lv	-	DA3VPu	Z	-	-	Z	DSP control pin(ADSP-21367-333)
77	P11/CLK6	DSPICLK	O	C	-	-	DA3VPu	Z	-	O/L	Z	DSP control pin(ADSP-21367-333)
78	P10	Z1VSIG.DET	I	-	Lv	-	SCPU3VPu	Z	-	-	Z	VIDEO IN signal presence detection input(Signal input:H)
79	P07	SUB TDI	O	C	-	-	DA3.3Pu	Z	-	O/L	Z	PLD rewriting control (JTAG)
80	P06	VSEL CS	O	C	-	-	-	Z	-	MODE1=O/H MODE2=O/L	Z	VIDEO PLD control pin
81	P05	NC	I	-	-	-	Pd	Z	-	-	Z	NC
82	P04	NC	I	-	-	-	Pd	Z	-	-	Z	NC
83	P03	SUB TCK	O	C	-	-	Pd	Z	-	-	Z	PLD rewriting control (JTAG)
84	P02	DIR RST3	O	C	-	-	-	Z	-	O/L	O/L	DIR control pin (LC89058W-VF4A)
85	P01	DIR RST2	O	C	-	-	-	Z	-	O/L	O/L	DIR control pin (LC89058W-VF4A)
86	P00	DIR RST1	O	C	-	-	-	Z	-	O/L	O/L	DIR control pin (LC89058W-VF4A)
87	P107/(AN7)	DSP RST	O	C	-	-	-	Z	-	O/L	Z	DSP(ADSP-21367-333) reset output pin(Reset : L)
88	P106/(AN6)	HPD5	O	C	-	-	-	Z	-	O/L	Z	HP DET control pin
89	P105/(AN5)	DSP ROMRST	O	C	-	-	-	Z	-	O/L	Z	Memory reset for DSP (Reset : L)
90	P104/(AN4)	COMPS DET	I	-	Lv	-	SCPU3VPu	Z	-	-	Z	COMPONENT IN signal presence detection input
91	P103/(AN3)	DSP FLAG0	I	-	Lv	-	Pd	Z	-	-	Z	DSP control pin(ADSP-21367-333)
92	P102/(AN2)	DSPICS	O	C	-	-	DA3VPu	Z	-	O/L	Z	DSP control pin(ADSP-21367-333)
93	P101/(AN1)	HPD6	O	C	-	-	-	Z	-	O/L	Z	HP DET control pin
94	AVSS	AVSS	-	-	-	-	-	-	-	-	-	AD GND
95	P100/(AN0)	VSEL CLK	O	C	-	-	-	Z	-	O/L	Z	VIDEO PLD control pin
96	VREF	VREF	-	-	-	-	-	-	-	-	-	AD standard +3.3V
97	AVCC	AVCC	-	-	-	-	-	-	-	-	-	AD +3.3V
98	P97/(SIN4)	Tx EN	O	C	-	-	-	Z	-	-	Z	AD8195 ENABLE pin for Front HDMI control
99	P96/(SOUT4)	OSD CPU BUSY SOFI	O	C	-	-	Pd	Z	-	-	Z	OSD CPU control pin
100	P95/(CLK4)	VEXP DIN	O	C	-	-	-	Z	-	O/L	Z	DATA output for VIDEO expander control (BU4094BCFV)

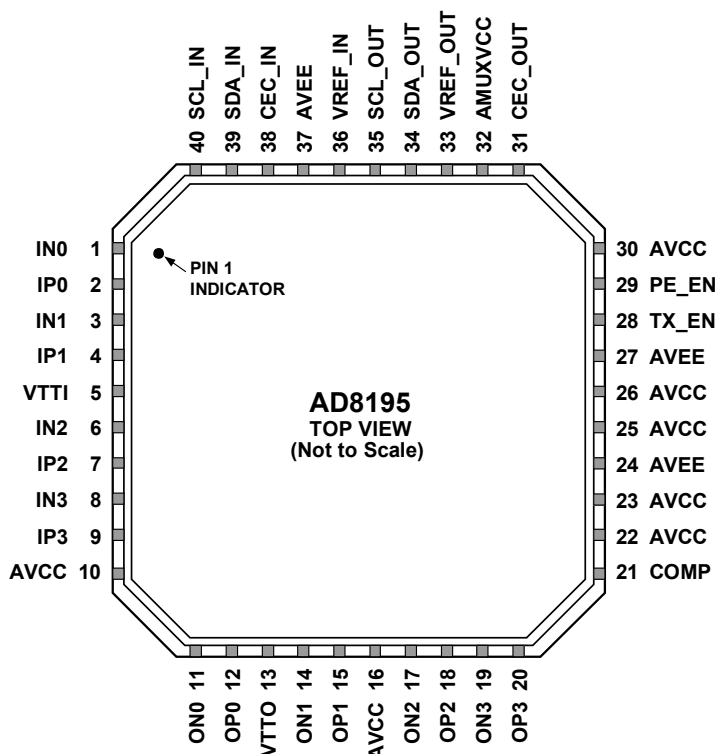
ADV3002BSTZ (HDMI : U1002)



ADV3002BSTZ Block diagram



AD8195ACPZ (HDMI : U1)



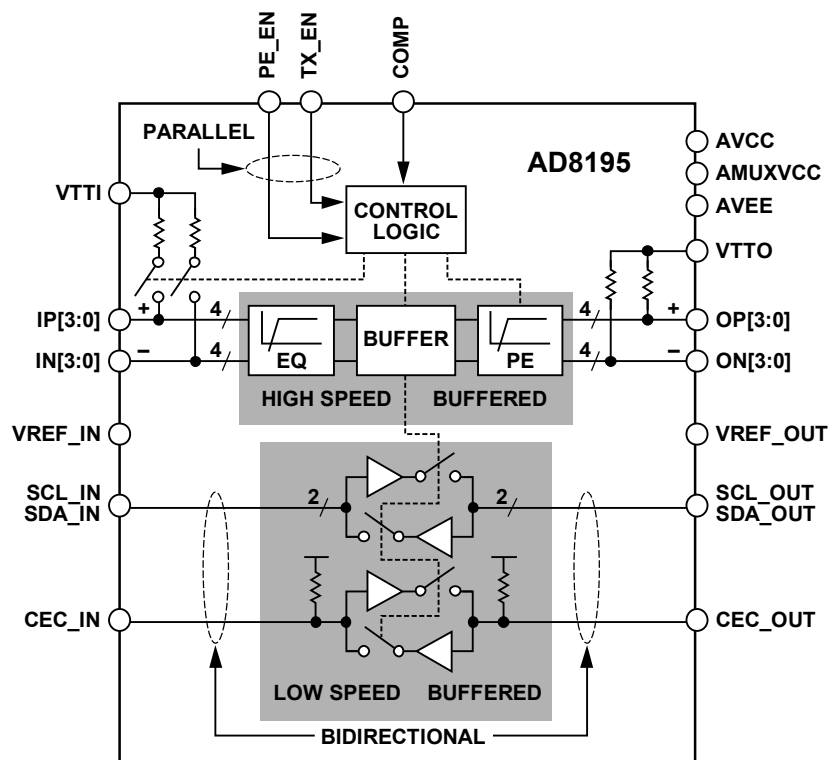
NOTES
1. THE AD8195 LFCSP HAS AN EXPOSED PAD ON THE UNDERSIDE OF THE PACKAGE THAT AIDS IN HEAT DISSIPATION. THE PAD MUST BE ELECTRICALLY CONNECTED TO THE AVEE SUPPLY PLANE IN ORDER TO MEET THERMAL SPECIFICATIONS.

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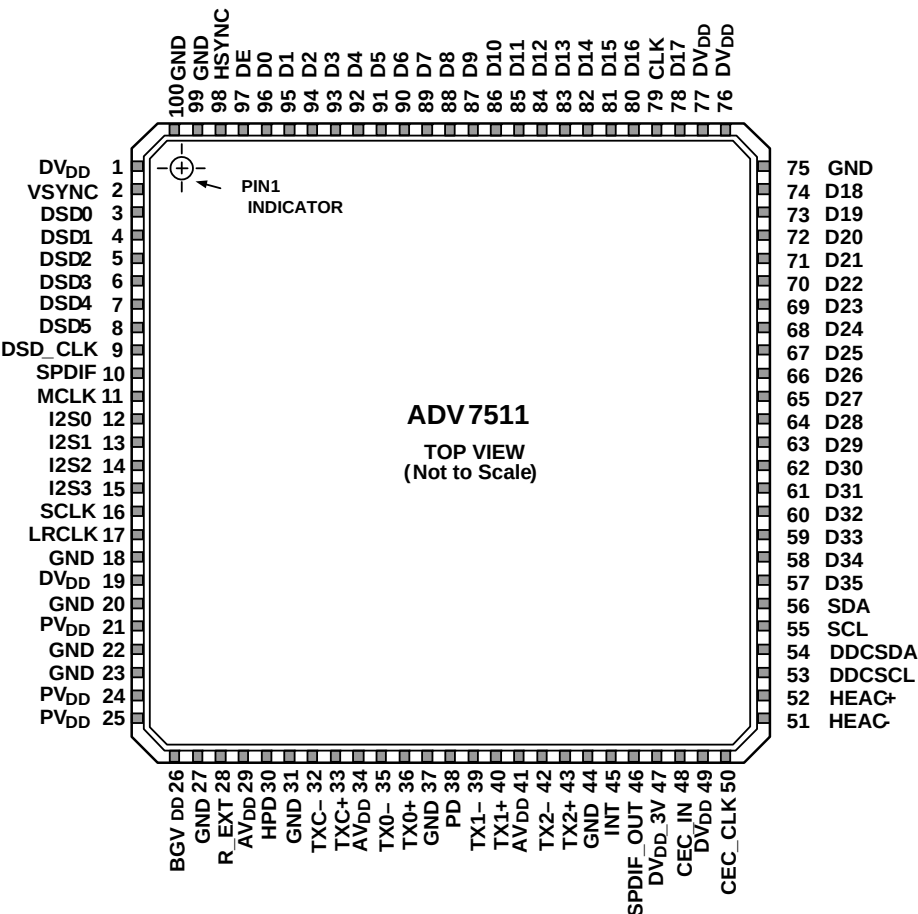
AD8195ACPZ Termini Function

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

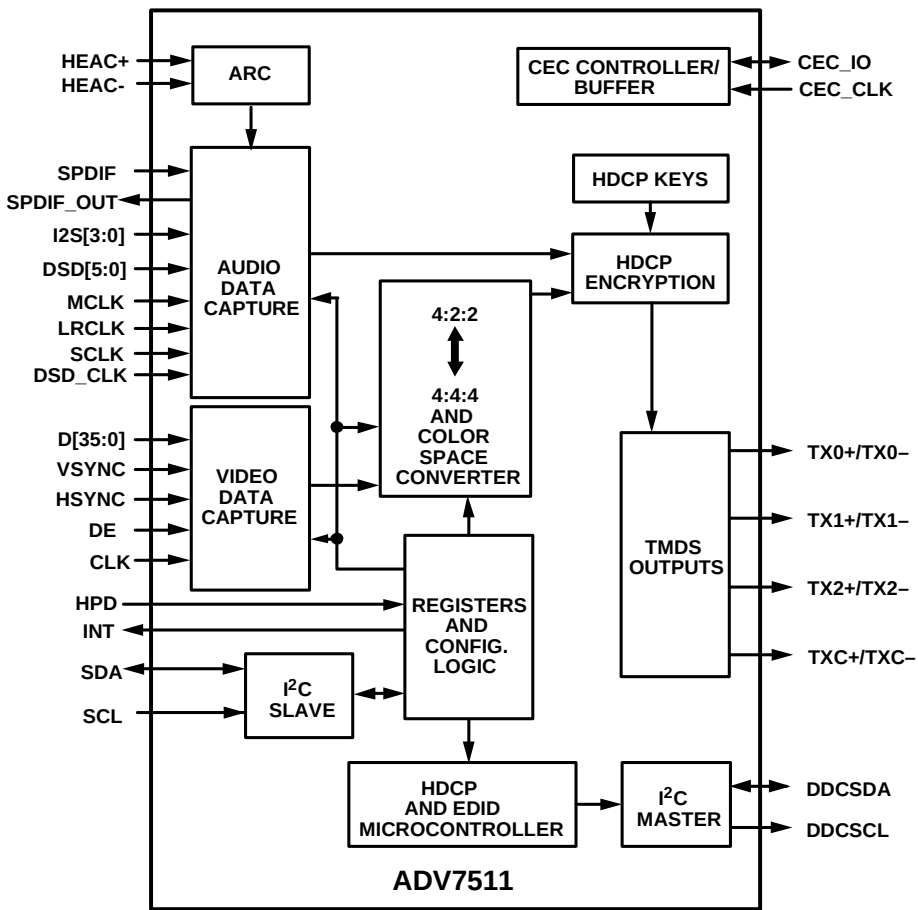
AD8195ACPZ Block diagram



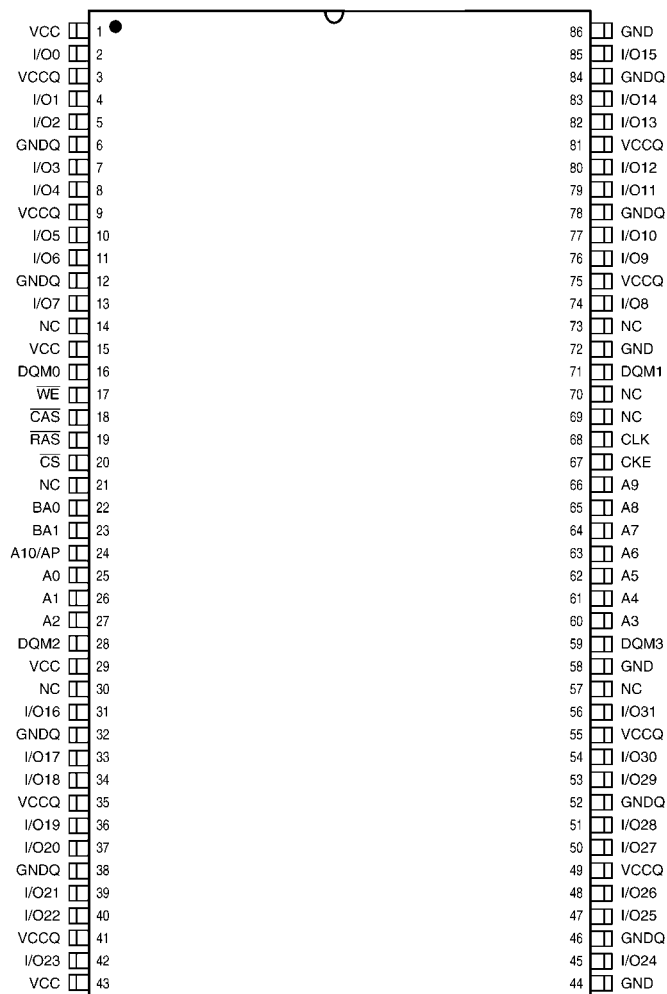
ADV7511BSTZ (HDMI : U1801)



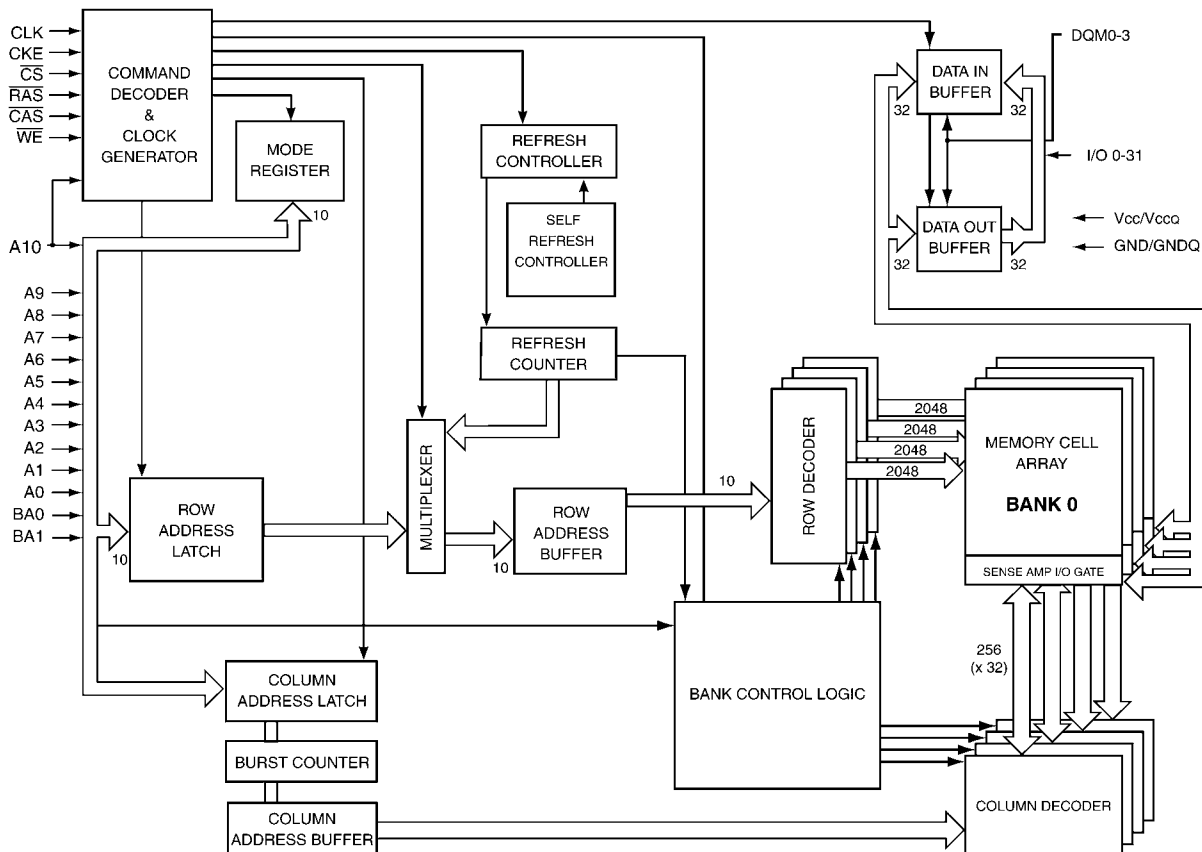
ADV7511BSTZ Block diagram



IS42S32200E6TL (HDMI : U1602)



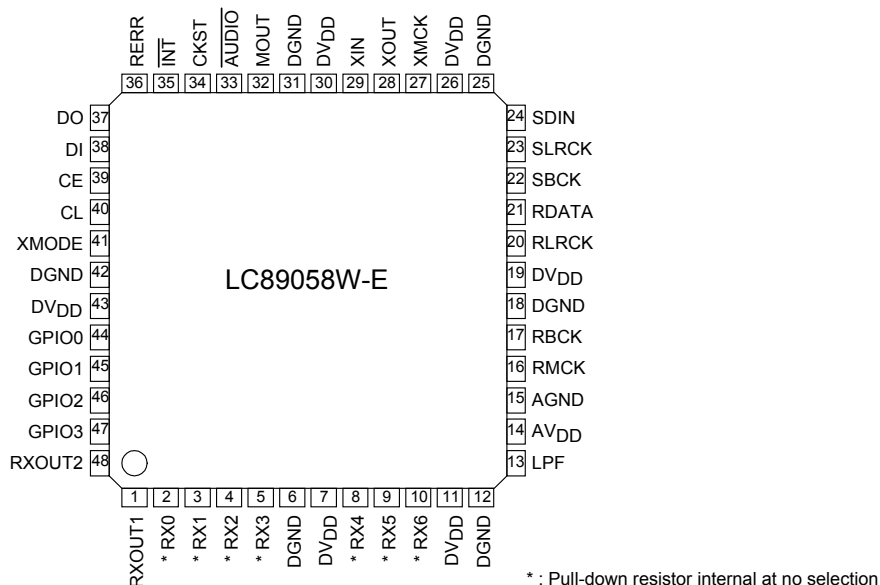
IS42S32200E6TL Block diagram



IS42S32200E6TL Termini 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	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 (HDMI : U2805,U2806,U2807)



Pin Functions

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

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

* Input voltage: I₋ = -0.3 to 3.6V, I_s = -0.3 to 5.5V

* Output voltage: O = -0.3 to 3.6V

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

Their level is fixed when they are unselected.

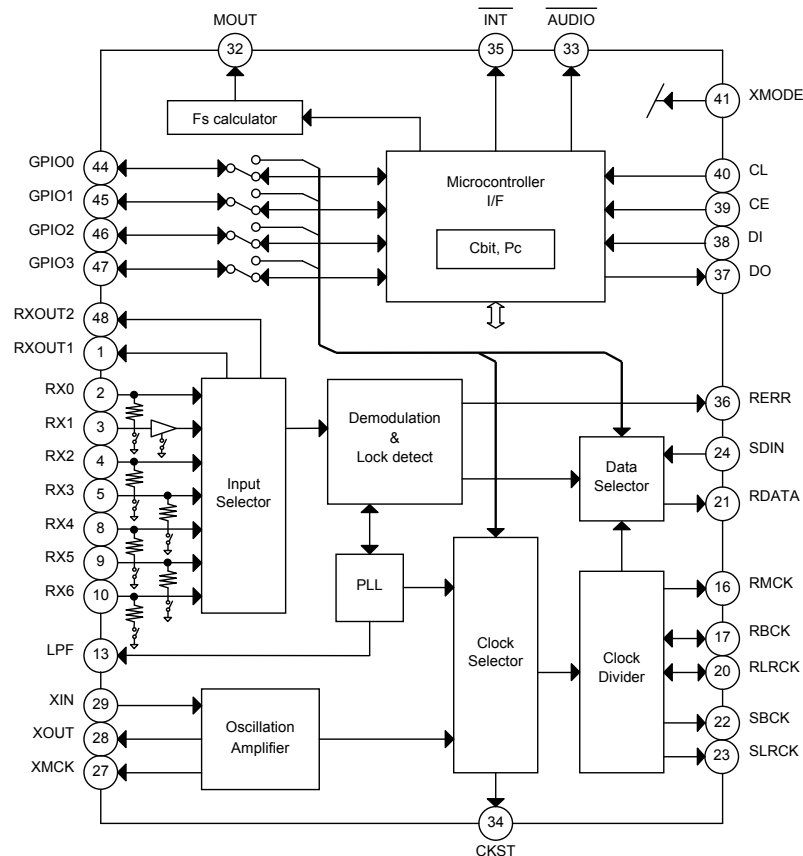
* Pins 32 and 33 are input pins for chip address setting when pin 41 is held at the low level.

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

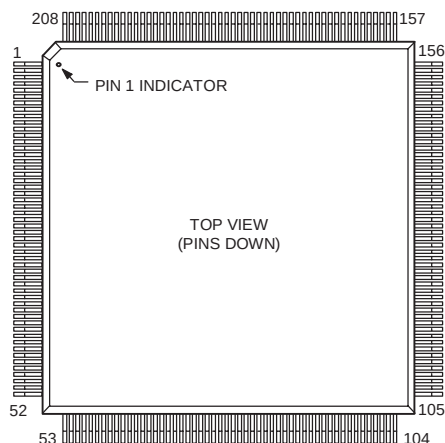
* Pin 35 serves as the input pin for configuring the I/O of pins 44 to 47 when pin 41 is held at the low level.

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

LC89058W-E Block diagram



ADSP21367KSWZ2A (HDMI : U3200)



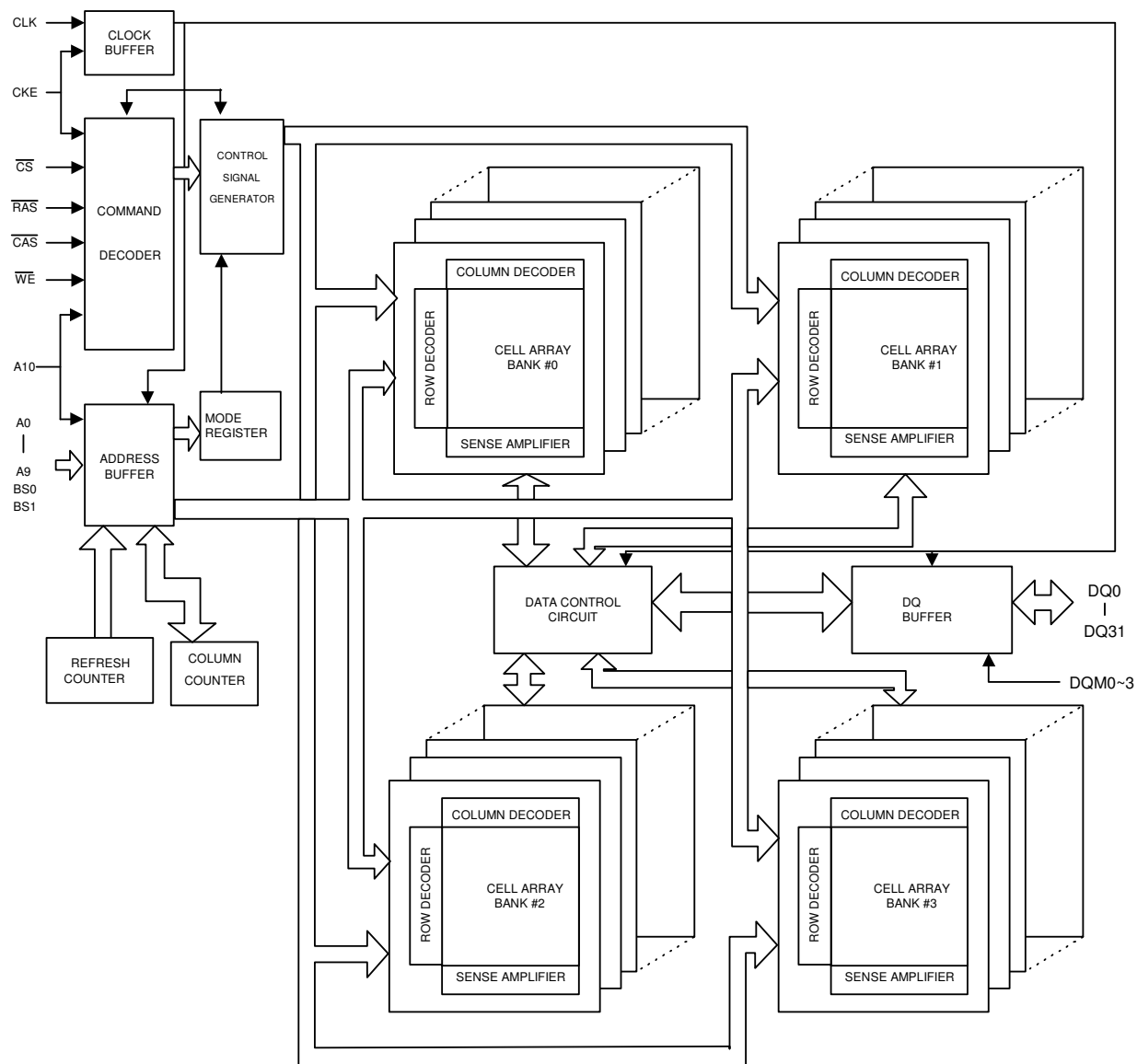
ADSP21367KSWZ2A Terminal Function

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	SDCA5	160	VDD
5	IOVDD	57	ADDR2	109	SDRA5	161	VDD
6	DATA26	58	ADDR1	110	SDCKE	162	VDD
7	DATA25	59	ADDR4	111	SDWE	163	TDI
8	DATA24	60	ADDR3	112	WR	164	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	RD	171	CLK_CFG1
16	GND	68	ADDR8	120	ACK	172	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	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	MS1	154	VDD	206	DATA31
51	GND	103	MS0	155	GND	207	DATA29
52	VDD	104	VDD	156	VDD	208	VDD

W9864G2IH-6 (HDMI : U3201)

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

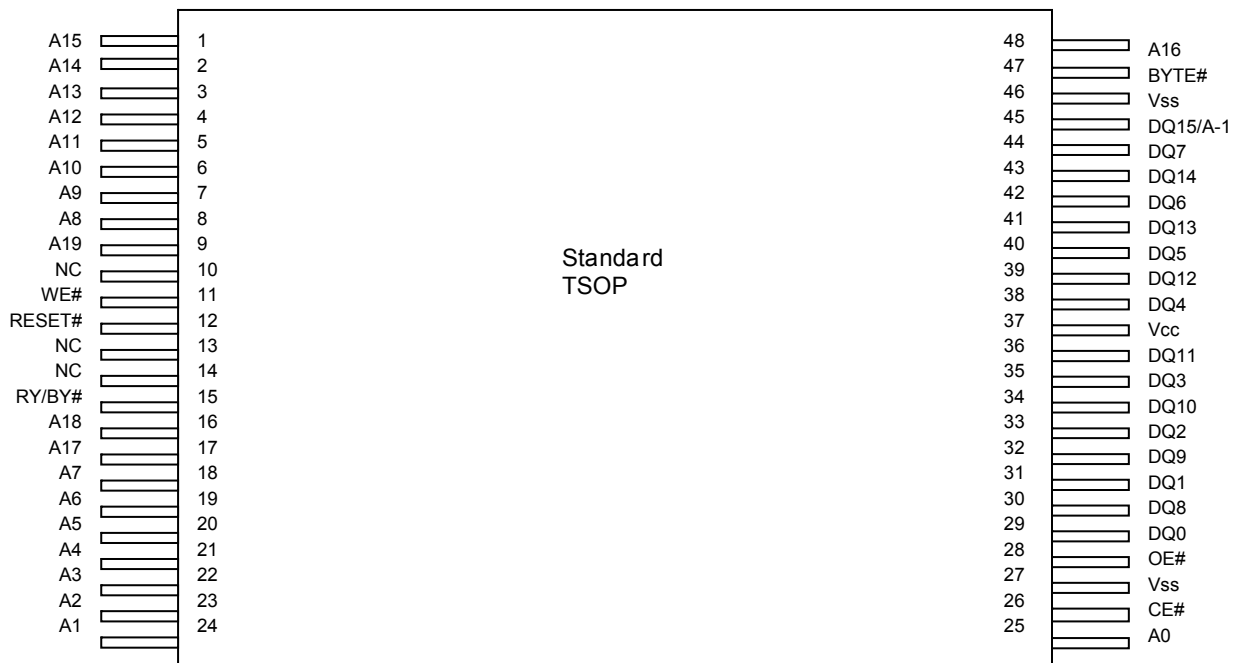
W9864G2IH-6 Block diagram



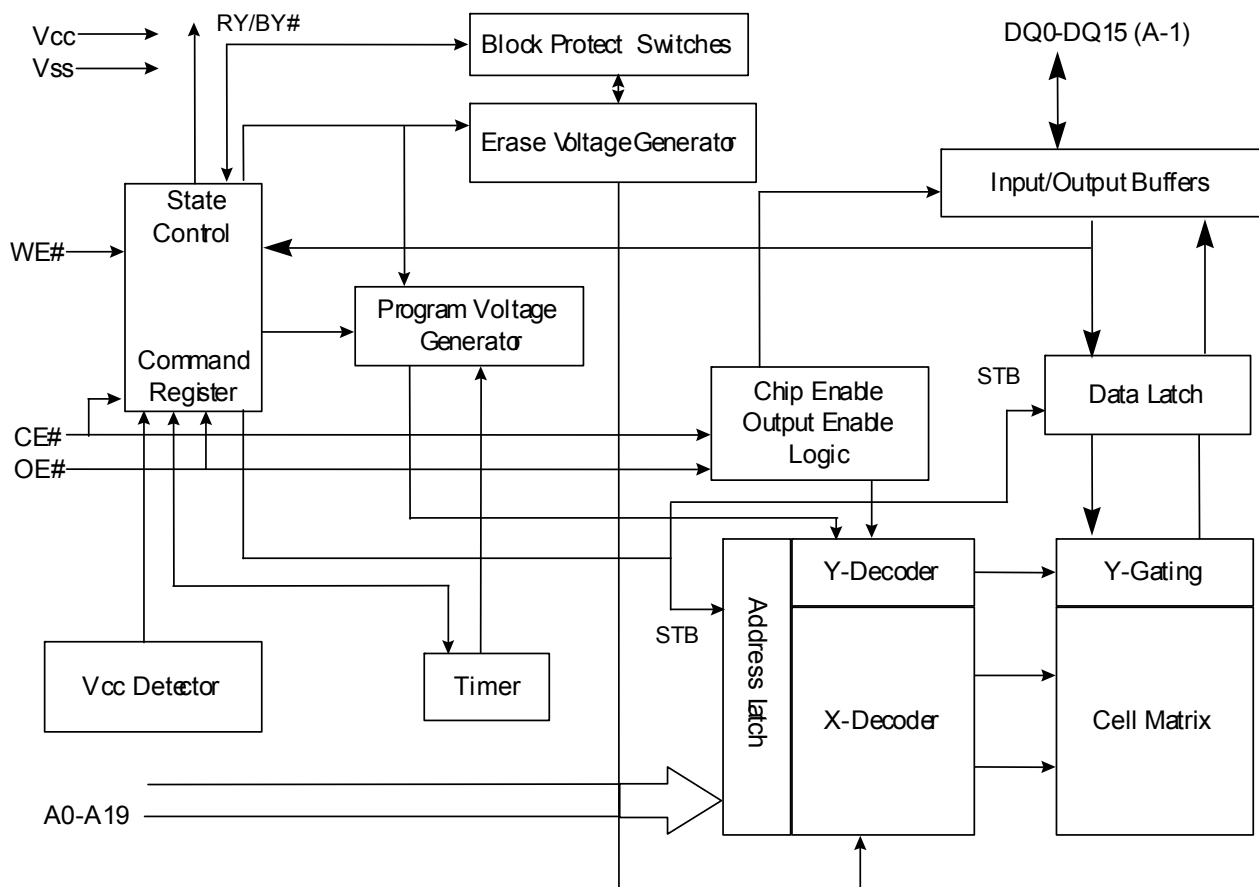
W9864G2IH-6 Pin description

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

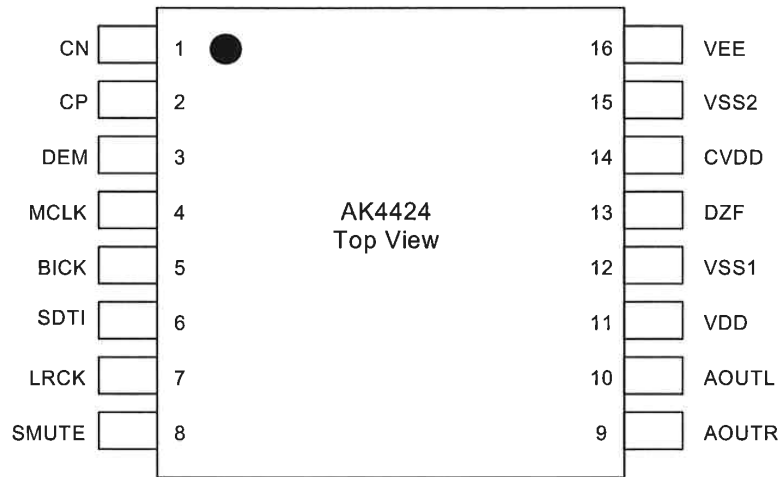
EN29LV160BB (HDMI : U3202,U5101)



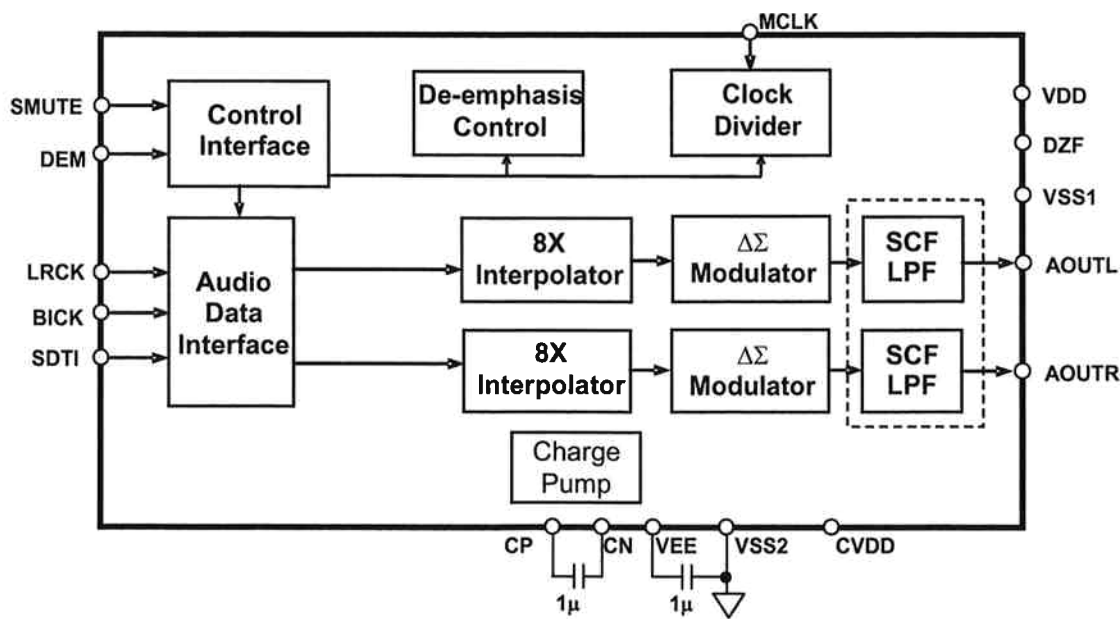
EN29LV160BB Block Diagram



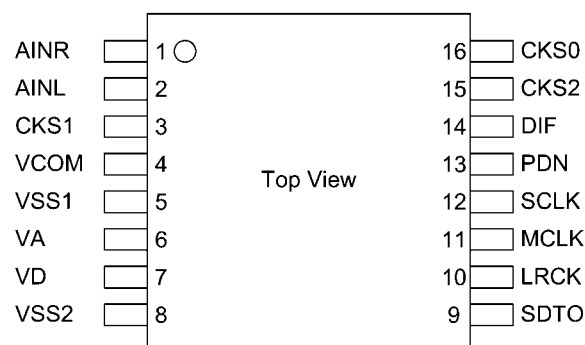
AK4424ET (HDMI : U3800,U3801)



AK4424ET Block Diagram



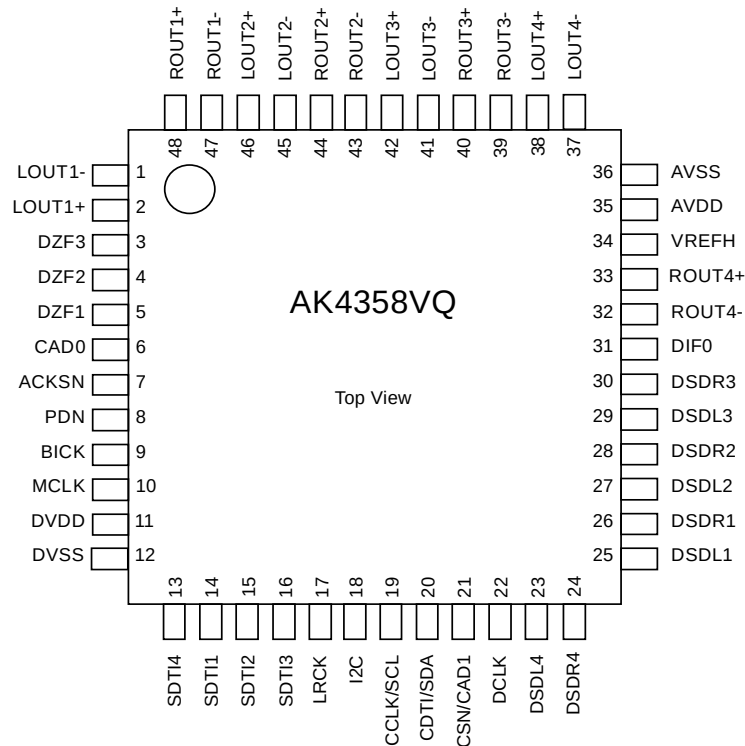
AK5358BET (HDMI : U3802)



AK5358BET Pin Function

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

AK4358VQ (HDMI : U3803)



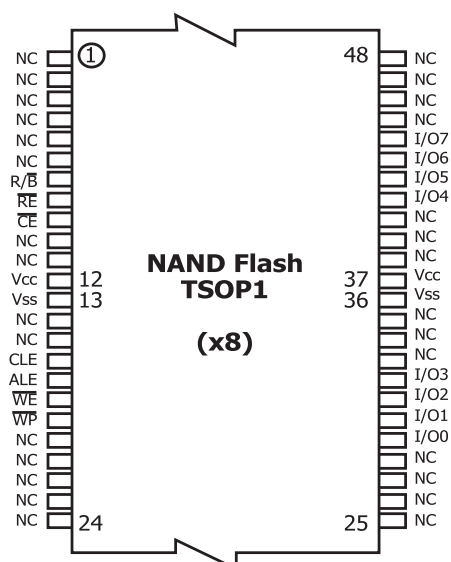
AK4358VQ Pin Function

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

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

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

HY27UF081G2A-TPCB (HDMI : 3901)



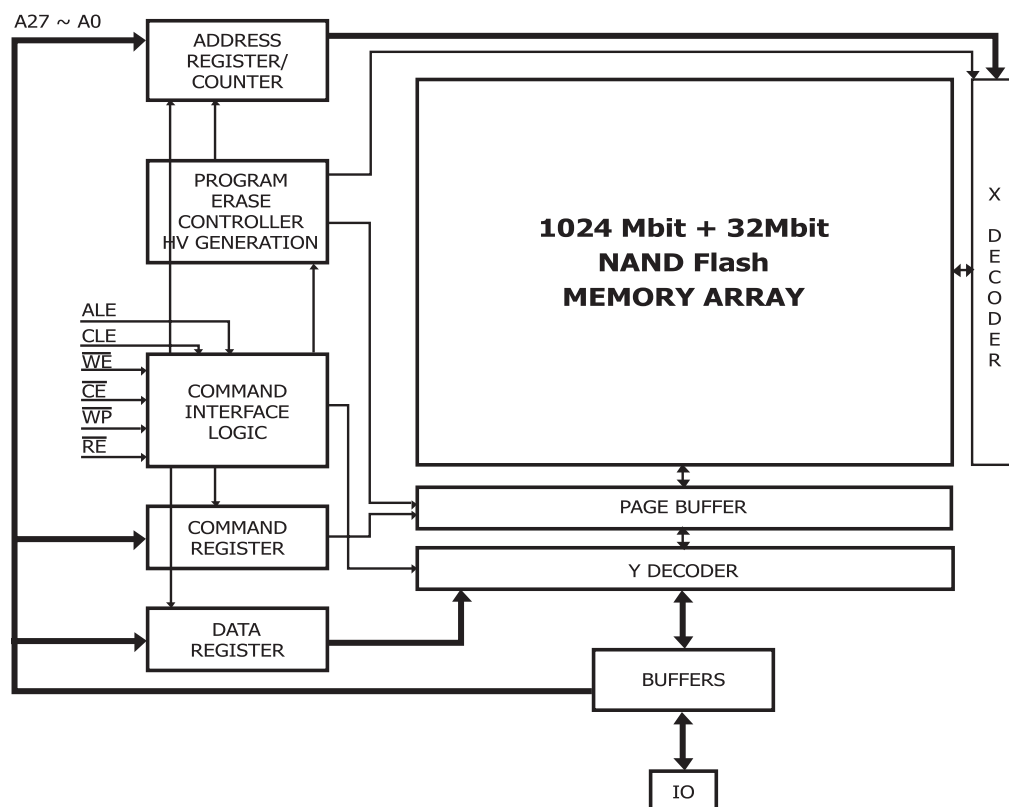
HY27UF081G2A-TPCB Pin Function

Pin Name	Description
I00-I07 I08-I015(1)	DATA INPUTS/OUTPUTS The IO pins allow to input command, address and data and to output data during read / program operations. The inputs are latched on the rising edge of Write Enable (WE). The I/O buffer float to High-Z when the device is deselected or the outputs are disabled.
CLE	COMMAND LATCH ENABLE This input activates the latching of the IO inputs inside the Command Register on the Rising edge of Write Enable (WE).
ALE	ADDRESS LATCH ENABLE This input activates the latching of the IO inputs inside the Address Register on the Rising edge of Write Enable (WE).
$\overline{CE}$	CHIP ENABLE This input controls the selection of the device. When the device is busy $\overline{CE}$ low does not deselect the memory.
$\overline{WE}$	WRITE ENABLE This input acts as clock to latch Command, Address and Data. The IO inputs are latched on the rise edge of WE.
$\overline{RE}$	READ ENABLE The RE input is the serial data-out control, and when active drives the data onto the I/O bus. Data is valid tREA after the falling edge of RE which also increments the internal column address counter by one.
$\overline{WP}$	WRITE PROTECT The WP pin, when Low, provides an Hardware protection against undesired modify (program / erase) operations.
R/B	READY BUSY The Ready/Busy output is an Open Drain pin that signals the state of the memory.
VCC	SUPPLY VOLTAGE The VCC supplies the power for all the operations (Read, Write, Erase).
VSS	GROUND
NC	NO CONNECTION

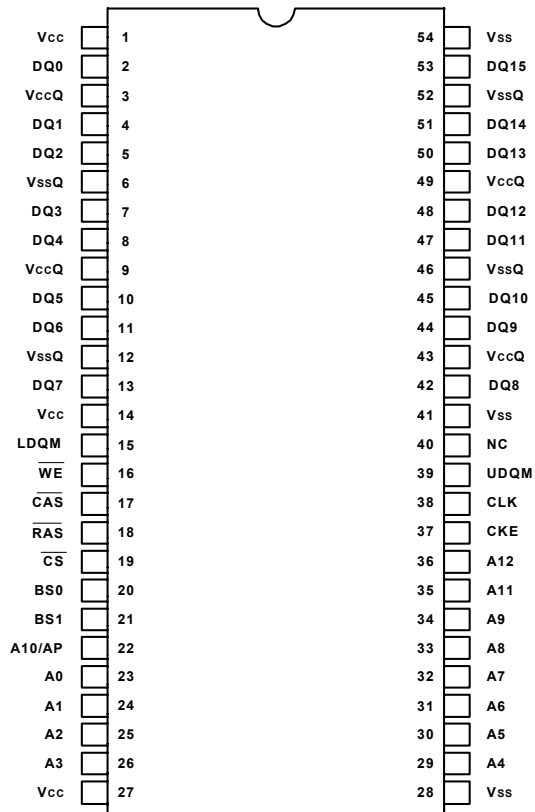
NOTE:

1. A 0.1uF capacitor should be connected between the Vcc Supply Voltage pin and the Vss Ground pin to decouple the current surges from the power supply. The PCB track widths must be sufficient to carry the currents required during program and erase operations.

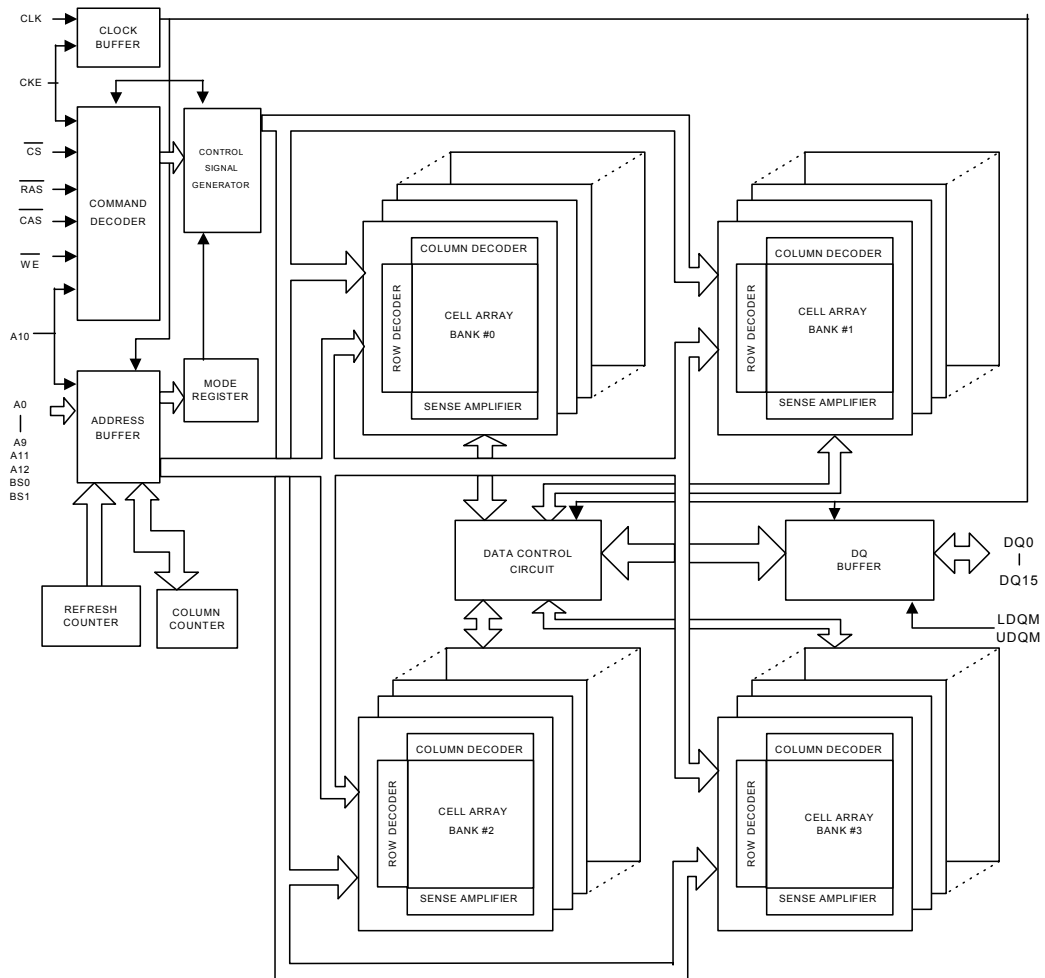
HY27UF081G2A-TPCB Block Diagram



W9825G6EH-6J (HDMI : U3902)



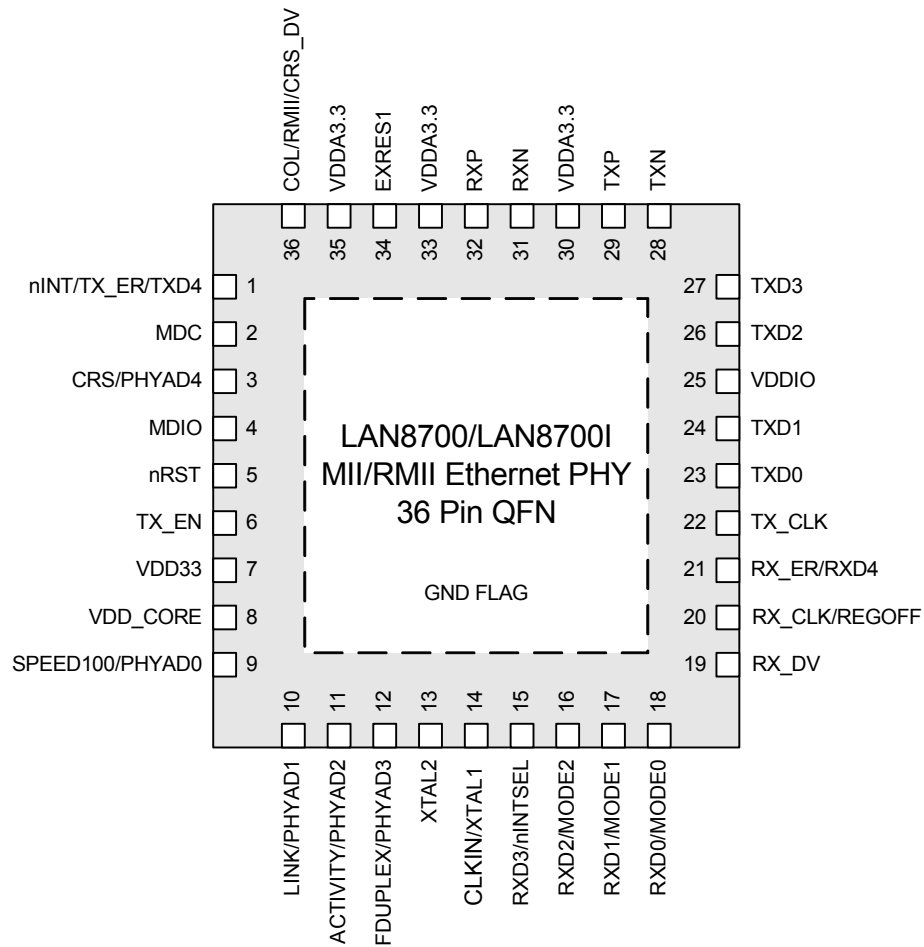
W9825G6EH-6J Block Diagram



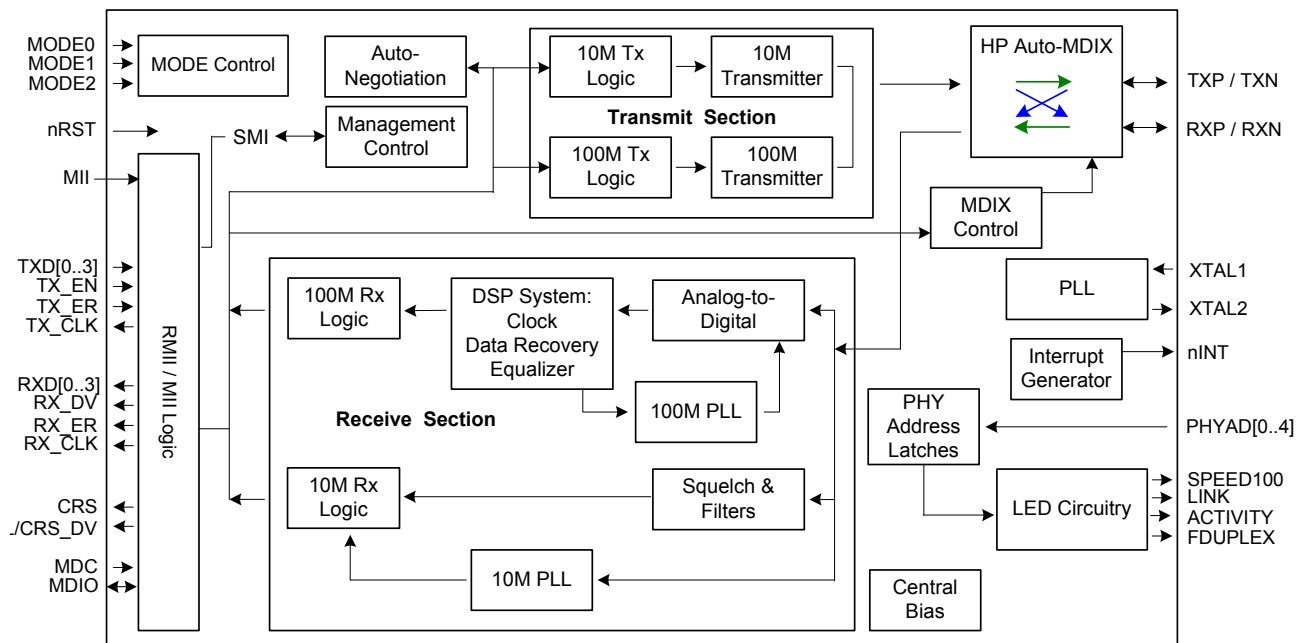
W9825G6EH-6J Pin Description

PIN NUMBER	PIN NAME	FUNCTION	DESCRIPTION
23–26, 22, 29–36	A0–A12	Address	Multiplexed pins for row and column address. Row address: A0–A12. Column address: A0–A8.
20, 21	BS0, BS1	Bank Select	Select bank to activate during row address latch time, or bank to read/write during address latch time.
2, 4, 5, 7, 8, 10, 11, 13, 42, 44, 45, 47, 48, 50, 51, 53	DQ0–DQ15	Data Input/Output	Multiplexed pins for data output and input.
19	$\overline{\text{CS}}$	Chip Select	Disable or enable the command decoder. When command decoder is disabled, new command is ignored and previous operation continues.
18	$\overline{\text{RAS}}$	Row Address Strobe	Command input. When sampled at the rising edge of the clock, $\overline{\text{RAS}}$, $\overline{\text{CAS}}$ and $\overline{\text{WE}}$ define the operation to be executed.
17	$\overline{\text{CAS}}$	Column Address Strobe	Referred to $\overline{\text{RAS}}$
16	$\overline{\text{WE}}$	Write Enable	Referred to $\overline{\text{RAS}}$
15, 39	LDQM, UDQM	Input/Output Mask	The output buffer is placed at Hi-Z(with latency of 2) when DQM is sampled high in read cycle. In write cycle, sampling DQM high will block the write operation with zero latency.
38	CLK	Clock Inputs	System clock used to sample inputs on the rising edge of clock.
37	CKE	Clock Enable	CKE controls the clock activation and deactivation. When CKE is low, Power Down mode, Suspend mode, or Self Refresh mode is entered.
1, 14, 27	VCC	Power (+3.3V)	Power for input buffers and logic circuit inside DRAM.
28, 41, 54	VSS	Ground	Ground for input buffers and logic circuit inside DRAM.
3, 9, 43, 49	VCCQ	Power (+3.3V) for I/O Buffer	Separated power from VCC, to improve DQ noise immunity.
6, 12, 46, 52	VSSQ	Ground for I/O Buffer	Separated ground from VSS, to improve DQ noise immunity.
40	NC	No Connection	No connection. (NC pin should be connected to GND or floating)

LAN8700 (HDMI : U4202)



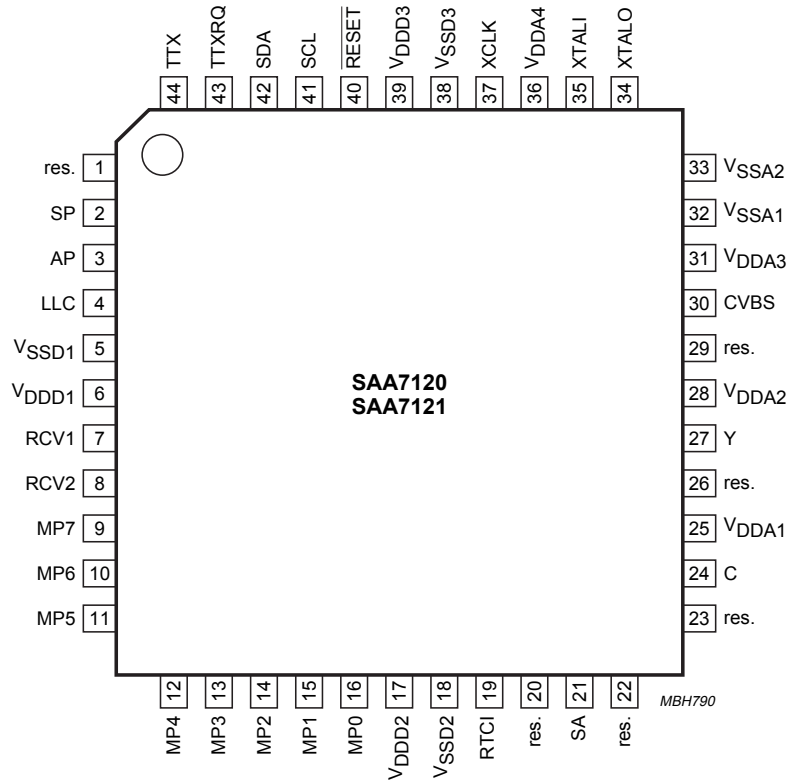
LAN8700 Block Diagram



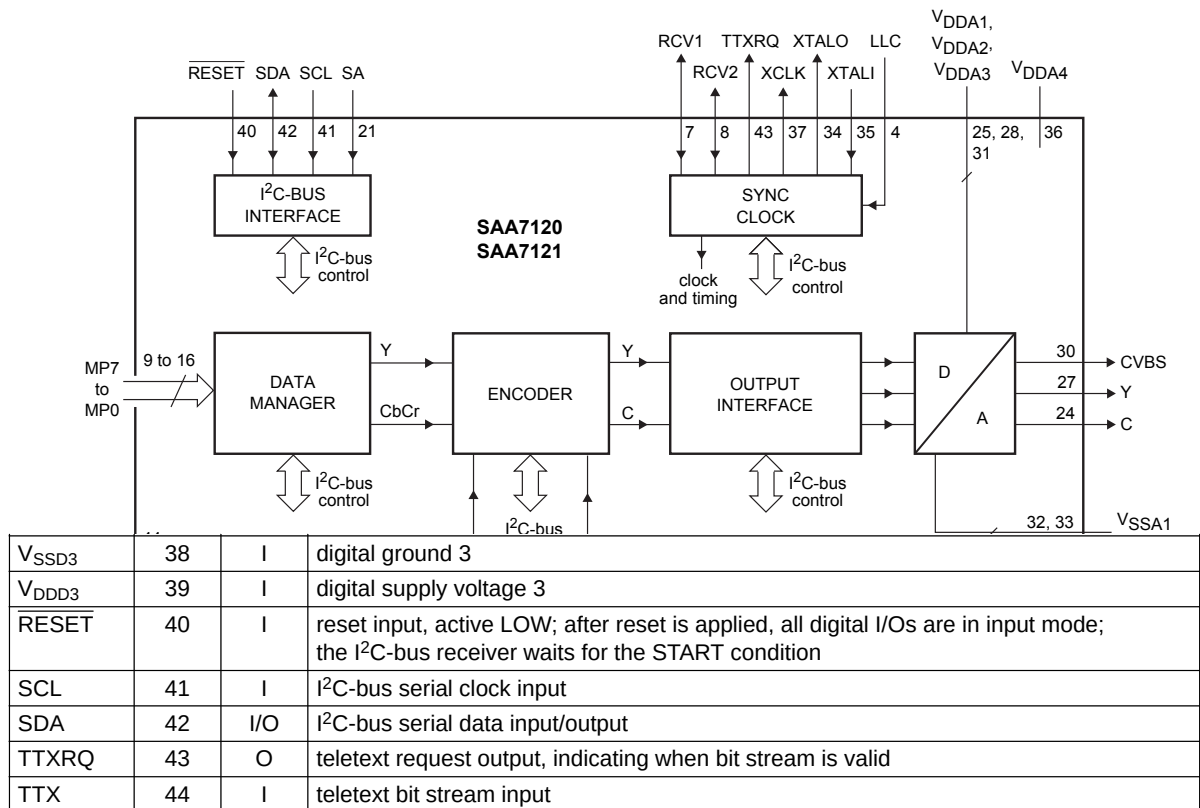
LAN8700 Pin Description

PIN NO.	PIN NAME	PIN NO.	PIN NAME
1	nINT/TX_ER/TXD4	19	RX_DV
2	MDC	20	RX_CLK/REGOFF
3	CRS/PHYAD4	21	RX_ER/RXD4
4	MDIO	22	TXCLK
5	nRST	23	TXD0
6	TX_EN	24	TXD1
7	VDD33	25	VDDIO
8	VDD_CORE	26	TXD2
9	SPEED100/PHYAD0	27	TXD3
10	LINK/PHYAD1	28	TXN
11	ACTIVITY/PHYAD2	29	TXP
12	FDUPLEX/PHYAD3	30	VDDA3.3
13	XTAL2	31	RXN
14	CLKIN/XTAL1	32	RXP
15	RXD3/nINTSEL	33	VDDA3.3
16	RXD2/MODE2	34	EXRES1
17	RXD1/MODE1	35	VDDA3.3
18	RXD0/MODE0	36	COL/RMII/CRS_DV

SA7121 (HDMI : U4203)



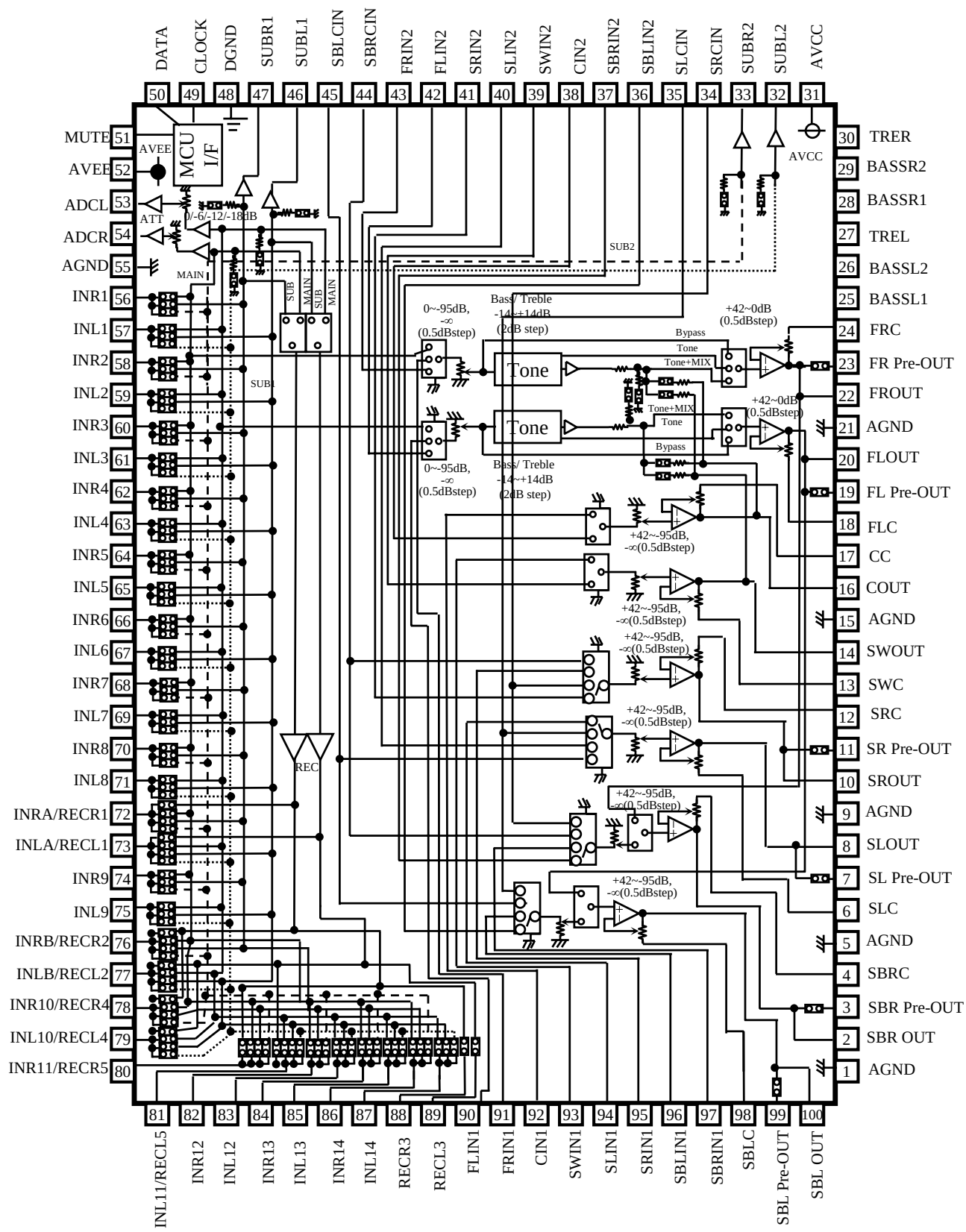
SA7121 Block Diagram



SA7121 Pin Description

SYMBOL	PIN	I/O	DESCRIPTION
res.	1	–	reserved
SP	2	I	test pin; connected to digital ground for normal operation
AP	3	I	test pin; connected to digital ground for normal operation
LLC	4	I	line-locked clock; this is the 27 MHz master clock for the encoder
V _{SSD1}	5	I	digital ground 1
V _{DD1}	6	I	digital supply voltage 1
RCV1	7	I/O	raster control 1 for video port; this pin receives/provides a VS/FS/FSEQ signal
RCV2	8	I/O	raster control 2 for video port; this pin provides an HS pulse of programmable length or receives an HS pulse
MP7	9	I	MPEG port; it is an input for “CCIR 656” style multiplexed Cb Y, Cr data
MP6	10	I	
MP5	11	I	
MP4	12	I	
MP3	13	I	
MP2	14	I	
MP1	15	I	
MP0	16	I	
V _{DD2}	17	I	digital supply voltage 2
V _{SS2}	18	I	digital ground 2
RTCI	19	I	Real Time Control input; if the LLC clock is provided by an SAA7111 or SAA7151B, RTCI should be connected to pin RTCO of the decoder to improve the signal quality
res.	20	–	reserved
SA	21	I	the I ² C-bus slave address select input pin; LOW: slave address = 88H, HIGH = 8CH
res.	22	–	reserved
res.	23	–	reserved
C	24	O	analog output of the chrominance signal
V _{DDA1}	25	I	analog supply voltage 1 for the C DAC
res.	26	–	reserved
Y	27	O	analog output of VBS signal
V _{DDA2}	28	I	analog supply voltage 2 for the Y DAC
res.	29	–	reserved
CVBS	30	O	analog output of the CVBS signal
V _{DDA3}	31	I	analog supply voltage 3 for the CVBS DAC
V _{SSA1}	32	I	analog ground 1 for the DACs
V _{SSA2}	33	I	analog ground 2 for the oscillator and reference voltage
XTALO	34	O	crystal oscillator output (to crystal)
XTALI	35	I	crystal oscillator input (from crystal); if the oscillator is not used, this pin should be connected to ground
V _{DDA4}	36	I	analog supply voltage 4 for the oscillator and reference voltage
XCLK	37	O	clock output of the crystal oscillator

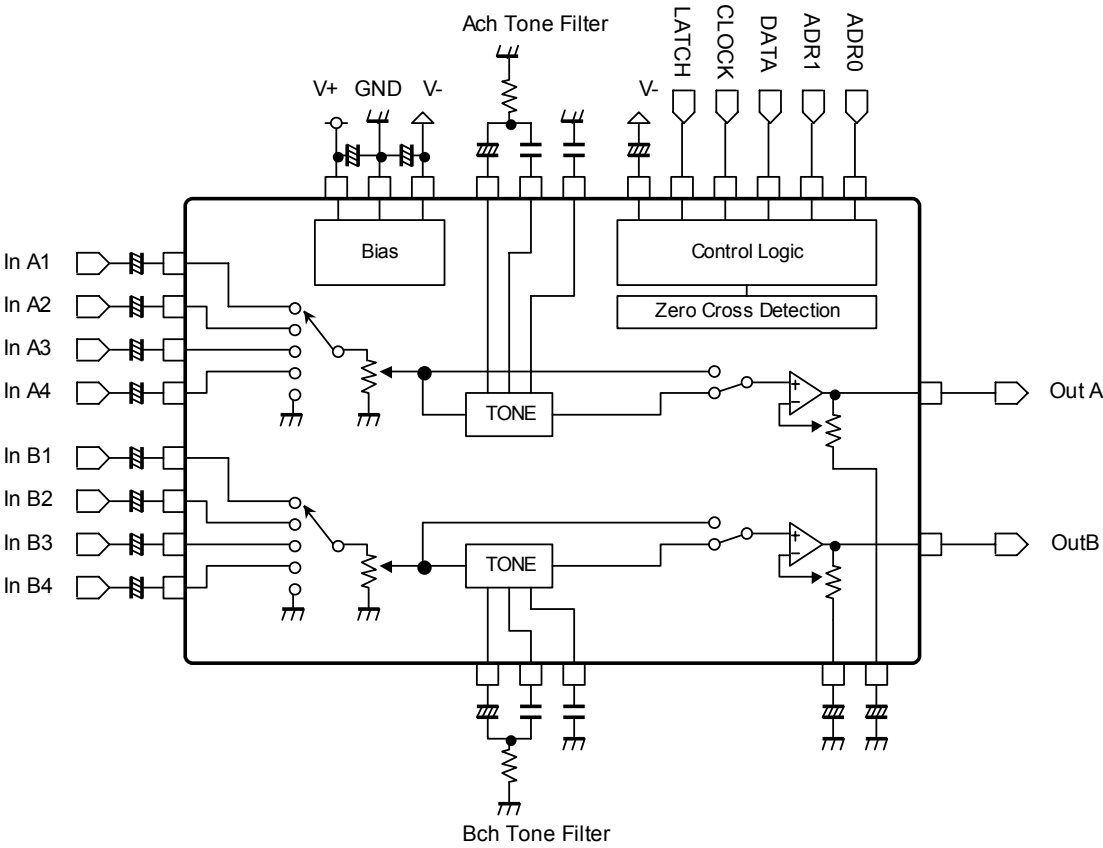
R2A15220FP (AUDIO : IC3003)



R2A15220FP Pin Function

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

NJW1194A (AUDIO : IC3007,IC3011)



FLD (19-ST-03GINK) (FRONT : FL601)



PIN NO.	662	661	659	658	657	656	655	654	653	652
CONNECTION	F	N	N	N	P	P	P	P	R	R

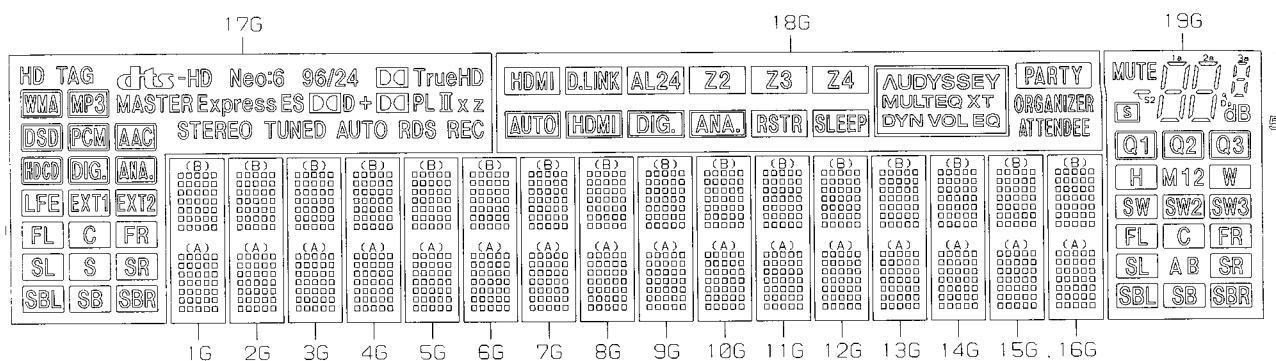
[illegible]

- ```

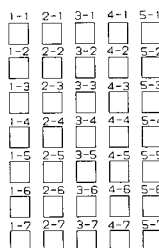
NOTE 1) F1,F2 --- Filament
 2) NP ----- No pin
 3) DL ----- Datum Line
 4) NX ----- No extend pin
 5) 17G-19G --- Grid
 6) Q17G-Q19G --- Driver Output Port
 7) LGND ----- Logic GND pin
 8) PGND ----- Power GND pin
 9) VH ----- High Voltage Supply pin
 10) VDD ----- Logic Voltage Supply pin
 11) OSC ----- 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.

```

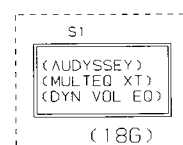
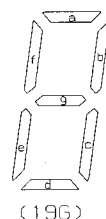
## GRID ASSIGNMENT



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



(1G~16G)



# ANODE CONNECTION

|      | 1G~16G | 17G | 18G | 19G |
|------|--------|-----|-----|-----|
| D0A  | 1-1A   | -   | -   | -   |
| D1A  | 2-1A   | -   | -   | -   |
| D2A  | 3-1A   | -   | -   | -   |
| D3A  | 4-1A   | -   | -   | -   |
| D4A  | 5-1A   | -   | -   | -   |
| D5A  | 1-2A   | -   | -   | -   |
| D6A  | 2-2A   | -   | -   | -   |
| D7A  | 3-2A   | -   | -   | -   |
| D8A  | 4-2A   | -   | -   | -   |
| D9A  | 5-2A   | -   | -   | -   |
| D10A | 1-3A   | -   | -   | -   |
| D11A | 2-3A   | -   | -   | dB  |
| D12A | 3-3A   | -   | -   | Dp  |
| D13A | 4-3A   | -   | -   | 3d  |
| D14A | 5-3A   | -   | -   | 3e  |
| D15A | 1-4A   | -   | -   | 3c  |
| D16A | 2-4A   | -   | -   | 3g  |
| D17A | 3-4A   | -   | -   | 3f  |
| D18A | 4-4A   | -   | -   | 3b  |
| D19A | 5-4A   | -   | -   | 3a  |
| D20A | 1-5A   | -   | -   | 2d  |
| D21A | 2-5A   | -   | -   | 2e  |
| D22A | 3-5A   | -   | -   | 2c  |
| D23A | 4-5A   | -   | -   | 2g  |
| D24A | 5-5A   | -   | -   | 2f  |
| D25A | 1-6A   | -   | -   | 2b  |
| D26A | 2-6A   | -   | -   | 2a  |
| D27A | 3-6A   | -   | -   | 1d  |
| D28A | 4-6A   | Z   | -   | 1e  |
| D29A | 5-6A   | X   | -   | 1c  |
| D30A | 1-7A   | II  | -   | 1g  |
| D31A | 2-7A   | PL  | -   | 1f  |
| D32A | 3-7A   | +   | -   | 1b  |
| D33A | 4-7A   | ES  | -   | 1a  |
| D34A | 5-7A   | HD  | -   | S2  |

|      | 1G~16G | 17G        | 18G       | 19G  |
|------|--------|------------|-----------|------|
| D0B  | 1-1B   | REC        | -         | -    |
| D1B  | 2-1B   | RDS        | -         | -    |
| D2B  | 3-1B   | AUTO       | -         | -    |
| D3B  | 4-1B   | TUNED      | -         | -    |
| D4B  | 5-1B   | DCI        | -         | -    |
| D5B  | 1-2B   | DCID       | -         | -    |
| D6B  | 2-2B   | DCI TrueHD | -         | -    |
| D7B  | 3-2B   | 96/24      | -         | -    |
| D8B  | 4-2B   | Express    | -         | -    |
| D9B  | 5-2B   | Nec:6      | -         | -    |
| D10B | 1-3B   | STEREO     | -         | -    |
| D11B | 2-3B   | MASTER     | -         | -    |
| D12B | 3-3B   | -HD        | -         | MUTE |
| D13B | 4-3B   | dts        | ATTENDEE  | [S]  |
| D14B | 5-3B   | TAG        | ORGANIZER | [Q3] |
| D15B | 1-4B   | MP3        | PARTY     | [Q2] |
| D16B | 2-4B   | TWA        | EQ        | [Q1] |
| D17B | 3-4B   | AAC        | VOL       | [W]  |
| D18B | 4-4B   | PCM        | DYN       | 2    |
| D19B | 5-4B   | DSD        | XT        | 1    |
| D20B | 1-5B   | ANA        | MULTIEQ   | M    |
| D21B | 2-5B   | DIG        | AUDYSSEY  | H    |
| D22B | 3-5B   | RCO        | S1        | SW3  |
| D23B | 4-5B   | EXT2       | SLEEP     | SW2  |
| D24B | 5-5B   | EXT1       | ASTR      | SW   |
| D25B | 1-6B   | LFE        | ANA       | FR   |
| D26B | 2-6B   | FR         | DIG       | C    |
| D27B | 3-6B   | C          | HDWI      | FL   |
| D28B | 4-6B   | FL         | AUTO      | SR   |
| D29B | 5-6B   | SR         | Z4        | B    |
| D30B | 1-7B   | S          | Z3        | A    |
| D31B | 2-7B   | SL         | Z2        | SL   |
| D32B | 3-7B   | SBR        | AL24      | SBR  |
| D33B | 4-7B   | SB         | D.LINK    | SB   |
| D34B | 5-7B   | SBL        | HDWI      | SBL  |

## PARTS LIST OF P.C.B. UNIT

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

\* Part indicated with the mark "★" is not illustrated in the exploded view.

\* 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.

E3 : U.S.A. & Canada model

E2 : Europe model

E1C : China model

### PCB 7CH\_AMP ASS'Y

|                             | Ref. No.  | Part No.      | Part Name            | Remarks |                | Q'ty | New |
|-----------------------------|-----------|---------------|----------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |           |               |                      |         |                |      |     |
|                             | Q401,402  | 00D2710314903 | TR 2SA KTA1024Y      |         | J5001024Y0050S |      |     |
|                             | Q403      | 00D2710318909 | TR 2SA 2N5401S       |         | J520254010010S |      |     |
|                             | Q405      | 00D2710318909 | TR 2SA 2N5401S       |         | J520254010010S |      |     |
|                             | Q406      | 00D2730479909 | TR 2SC 2N5551S       |         | J522255510010S |      |     |
|                             | Q407,408  | 00D9600196302 | TR KTA1268BL         |         | J5001268B0050S |      |     |
|                             | Q411,412  | 00D2730471907 | TR 2SC KTC3206Y      |         | J5023206Y0050S |      |     |
|                             | Q413,414  | 00D2710314903 | TR 2SA KTA1024Y      |         | J5001024Y0050S |      |     |
|                             | Q415      | 00D2710318909 | TR 2SA 2N5401S       |         | J520254010010S |      |     |
|                             | Q418      | 00D2730479909 | TR 2SC 2N5551S       |         | J522255510010S |      |     |
|                             | Q419,420  | 00D9600196302 | TR KTA1268BL         |         | J5001268B0050S |      |     |
|                             | Q423,424  | 00D2730471907 | TR 2SC KTC3206Y      |         | J5023206Y0050S |      |     |
|                             | Q425,426  | 00D2710314903 | TR 2SA KTA1024Y      |         | J5001024Y0050S |      |     |
|                             | Q427      | 00D2710318909 | TR 2SA 2N5401S       |         | J520254010010S |      |     |
|                             | Q430      | 00D2730479909 | TR 2SC 2N5551S       |         | J522255510010S |      |     |
|                             | Q431,432  | 00D9600196302 | TR KTA1268BL         |         | J5001268B0050S |      |     |
|                             | Q435,436  | 00D2730471907 | TR 2SC KTC3206Y      |         | J5023206Y0050S |      |     |
|                             | Q437,438  | 00D2710314903 | TR 2SA KTA1024Y      |         | J5001024Y0050S |      |     |
|                             | Q439      | 00D2710318909 | TR 2SA 2N5401S       |         | J520254010010S |      |     |
|                             | Q442      | 00D2730479909 | TR 2SC 2N5551S       |         | J522255510010S |      |     |
|                             | Q443,444  | 00D9600196302 | TR KTA1268BL         |         | J5001268B0050S |      |     |
|                             | Q447,448  | 00D2730471907 | TR 2SC KTC3206Y      |         | J5023206Y0050S |      |     |
|                             | Q449,450  | 00D2710314903 | TR 2SA KTA1024Y      |         | J5001024Y0050S |      |     |
|                             | Q451      | 00D2710318909 | TR 2SA 2N5401S       |         | J520254010010S |      |     |
|                             | Q454      | 00D2730479909 | TR 2SC 2N5551S       |         | J522255510010S |      |     |
|                             | Q455,456  | 00D9600196302 | TR KTA1268BL         |         | J5001268B0050S |      |     |
|                             | Q459,460  | 00D2730471907 | TR 2SC KTC3206Y      |         | J5023206Y0050S |      |     |
|                             | Q461,462  | 00D2710314903 | TR 2SA KTA1024Y      |         | J5001024Y0050S |      |     |
|                             | Q463      | 00D2710318909 | TR 2SA 2N5401S       |         | J520254010010S |      |     |
|                             | Q466      | 00D2730479909 | TR 2SC 2N5551S       |         | J522255510010S |      |     |
|                             | Q467,468  | 00D9600196302 | TR KTA1268BL         |         | J5001268B0050S |      |     |
|                             | Q471,472  | 00D2730471907 | TR 2SC KTC3206Y      |         | J5023206Y0050S |      |     |
|                             | Q473,474  | 00D2710314903 | TR 2SA KTA1024Y      |         | J5001024Y0050S |      |     |
|                             | Q475      | 00D2710318909 | TR 2SA 2N5401S       |         | J520254010010S |      |     |
|                             | Q478      | 00D2730479909 | TR 2SC 2N5551S       |         | J522255510010S |      |     |
|                             | Q479,480  | 00D9600196302 | TR KTA1268BL         |         | J5001268B0050S |      |     |
|                             | Q483,484  | 00D2730471907 | TR 2SC KTC3206Y      |         | J5023206Y0050S |      |     |
|                             |           |               |                      |         |                |      |     |
|                             | D401-442  | 00D2760401905 | D,SWITCHING 1SS133T  |         | K000013300520S |      |     |
|                             | D457,458  | 00D9630355401 | D,SWITCHING KDS4148U |         | K005041480030S |      |     |
|                             |           |               |                      |         |                |      |     |
|                             | ZD401     | 00D2760643983 | D,ZENER MTZJ5.1A     |         | K06005R134520S |      |     |
|                             | ZD402,403 | 00D2760760934 | D,ZENER MTZJ4.7B     |         | K06004R744520S |      |     |
|                             | ZD404     | 00D2760643983 | D,ZENER MTZJ5.1A     |         | K06005R134520S |      |     |
|                             | ZD405,406 | 00D2760760934 | D,ZENER MTZJ4.7B     |         | K06004R744520S |      |     |
|                             | ZD407     | 00D2760643983 | D,ZENER MTZJ5.1A     |         | K06005R134520S |      |     |
|                             | ZD408,409 | 00D2760760934 | D,ZENER MTZJ4.7B     |         | K06004R744520S |      |     |
|                             | ZD410     | 00D2760643983 | D,ZENER MTZJ5.1A     |         | K06005R134520S |      |     |
|                             | ZD411,412 | 00D2760760934 | D,ZENER MTZJ4.7B     |         | K06004R744520S |      |     |
|                             | ZD413     | 00D2760643983 | D,ZENER MTZJ5.1A     |         | K06005R134520S |      |     |
|                             | ZD414,415 | 00D2760760934 | D,ZENER MTZJ4.7B     |         | K06004R744520S |      |     |
|                             | ZD416     | 00D2760643983 | D,ZENER MTZJ5.1A     |         | K06005R134520S |      |     |
|                             | ZD417,418 | 00D2760760934 | D,ZENER MTZJ4.7B     |         | K06004R744520S |      |     |
|                             | ZD419     | 00D2760643983 | D,ZENER MTZJ5.1A     |         | K06005R134520S |      |     |
|                             | ZD420,421 | 00D2760760934 | D,ZENER MTZJ4.7B     |         | K06004R744520S |      |     |

| Ref. No.               | Part No.      | Part Name                | Remarks | Q'ty           | New |
|------------------------|---------------|--------------------------|---------|----------------|-----|
| <b>RESISTORS GROUP</b> |               |                          |         |                |     |
| R403                   | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R405                   | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R406                   | 252310006506S | POSISTOR PRF18BB471QB5RB |         | F320184710051S |     |
| R415                   | nsp           | R,METAL FILM 22-J,1W     |         | C060022065050S |     |
| R418                   | 963125010690S | R,METAL FILM 15K-J,2W    |         | C060015366050S |     |
| R424,425               | nsp           | R,FIXED 2WJ-0.47         |         | N113136647820S |     |
| R430,431               | nsp           | R,FIXED 2WJ-0.47         |         | N113136647820S |     |
| R434                   | nsp           | R,METAL FILM 3.3K-J,1W   |         | C060033265050S |     |
| R439                   | 90M-GA000220R | R,METAL FILM 22-J,1W     |         | C060022065050S |     |
| R441,442               | nsp           | R,METAL FILM 1K-J,1W     |         | C060010265050S |     |
| R443                   | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R447,448               | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R449                   | 252310006520S | POSISTOR PRF18BD471QB5RB |         | F320184710150S |     |
| R450                   | 252310006506S | POSISTOR PRF18BB471QB5RB |         | F320184710051S |     |
| R458                   | nsp           | R,METAL FILM 22-J,1W     |         | C060022065050S |     |
| R461                   | 963125010690S | R,METAL FILM 15K-J,2W    |         | C060015366050S |     |
| R464                   | 252310006520S | POSISTOR PRF18BD471QB5RB |         | F320184710150S |     |
| R467,468               | nsp           | R,FIXED 2WJ-0.47         |         | N113136647820S |     |
| R474,475               | nsp           | R,FIXED 2WJ-0.47         |         | N113136647820S |     |
| R478                   | nsp           | R,METAL FILM 3.3K-J,1W   |         | C060033265050S |     |
| R483                   | nsp           | R,METAL FILM 22-J,1W     |         | C060022065050S |     |
| R485,486               | nsp           | R,METAL FILM 1K-J,1W     |         | C060010265050S |     |
| R487                   | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R491,492               | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R494                   | 252310006506S | POSISTOR PRF18BB471QB5RB |         | F320184710051S |     |
| R502                   | nsp           | R,METAL FILM 22-J,1W     |         | C060022065050S |     |
| R505                   | 963125010690S | R,METAL FILM 15K-J,2W    |         | C060015366050S |     |
| R511,512               | nsp           | R,FIXED 2WJ-0.47         |         | N113136647820S |     |
| R517,518               | nsp           | R,FIXED 2WJ-0.47         |         | N113136647820S |     |
| R521                   | nsp           | R,METAL FILM 3.3K-J,1W   |         | C060033265050S |     |
| R526                   | nsp           | R,METAL FILM 22-J,1W     |         | C060022065050S |     |
| R528,529               | nsp           | R,METAL FILM 1K-J,1W     |         | C060010265050S |     |
| R530                   | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R533                   | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R535                   | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R537                   | 252310006506S | POSISTOR PRF18BB471QB5RB |         | F320184710051S |     |
| R545                   | nsp           | R,METAL FILM 22-J,1W     |         | C060022065050S |     |
| R548                   | 963125010690S | R,METAL FILM 15K-J,2W    |         | C060015366050S |     |
| R554,555               | nsp           | R,FIXED 2WJ-0.47         |         | N113136647820S |     |
| R561,562               | nsp           | R,FIXED 2WJ-0.47         |         | N113136647820S |     |
| R564                   | nsp           | R,METAL FILM 3.3K-J,1W   |         | C060033265050S |     |
| R569                   | nsp           | R,METAL FILM 22-J,1W     |         | C060022065050S |     |
| R571,572               | nsp           | R,METAL FILM 1K-J,1W     |         | C060010265050S |     |
| R573                   | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R576                   | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R578                   | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R580                   | 252310006506S | POSISTOR PRF18BB471QB5RB |         | F320184710051S |     |
| R588                   | nsp           | R,METAL FILM 22-J,1W     |         | C060022065050S |     |
| R591                   | 963125010690S | R,METAL FILM 15K-J,2W    |         | C060015366050S |     |
| R597,598               | nsp           | R,FIXED 2WJ-0.47         |         | N113136647820S |     |
| R603,604               | nsp           | R,FIXED 2WJ-0.47         |         | N113136647820S |     |
| R607                   | nsp           | R,METAL FILM 3.3K-J,1W   |         | C060033265050S |     |
| R612                   | nsp           | R,METAL FILM 22-J,1W     |         | C060022065050S |     |
| R614,615               | nsp           | R,METAL FILM 1K-J,1W     |         | C060010265050S |     |
| R616                   | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R619                   | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R621                   | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |
| R623                   | 252310006506S | POSISTOR PRF18BB471QB5RB |         | F320184710051S |     |
| R631                   | nsp           | R,METAL FILM 22-J,1W     |         | C060022065050S |     |
| R634                   | 963125010690S | R,METAL FILM 15K-J,2W    |         | C060015366050S |     |
| R640,641               | nsp           | R,FIXED 2WJ-0.47         |         | N113136647820S |     |
| R646,647               | nsp           | R,FIXED 2WJ-0.47         |         | N113136647820S |     |
| R650                   | nsp           | R,METAL FILM 3.3K-J,1W   |         | C060033265050S |     |
| R655                   | nsp           | R,METAL FILM 22-J,1W     |         | C060022065050S |     |
| R657,658               | nsp           | R,METAL FILM 1K-J,1W     |         | C060010265050S |     |
| R659                   | nsp           | R,METAL FILM 270-J,1W    |         | C060027165060S |     |

| Ref. No.                | Part No.      | Part Name                      | Remarks |                | Q'ty | New |
|-------------------------|---------------|--------------------------------|---------|----------------|------|-----|
| R662                    | nsp           | R,METAL FILM 270-J,1W          |         | C060027165060S |      |     |
| R664                    | nsp           | R,METAL FILM 270-J,1W          |         | C060027165060S |      |     |
| R666                    | 252310006506S | POSISTOR PRF18BB471QB5RB       |         | F320184710051S |      |     |
| R674                    | nsp           | R,METAL FILM 22-J,1W           |         | C060022065050S |      |     |
| R677                    | 963125010690S | R,METAL FILM 15K-J,2W          |         | C060015366050S |      |     |
| R683,684                | nsp           | R,FIXED 2WJ-0.47               |         | N113136647820S |      |     |
| R689,690                | nsp           | R,FIXED 2WJ-0.47               |         | N113136647820S |      |     |
| R694                    | nsp           | R,METAL FILM 3.3K-J,1W         |         | C060033265050S |      |     |
| R698                    | nsp           | R,METAL FILM 22-J,1W           |         | C060022065050S |      |     |
| R700,701                | nsp           | R,METAL FILM 1K-J,1W           |         | C060010265050S |      |     |
| R702                    | nsp           | R,METAL FILM 270-J,1W          |         | C060027165060S |      |     |
|                         |               |                                |         |                |      |     |
| VR401-407               | nsp           | VR,SEMI CARBON EVN-DCAA03B 1KB |         | C541102315000S |      |     |
|                         |               |                                |         |                |      |     |
|                         |               |                                |         |                |      |     |
| <b>CAPACITORS GROUP</b> |               |                                |         |                |      |     |
| C401                    | nsp           | C,CERAMIC 0.1UF-K/50V          |         | D011104577160S |      |     |
| C403                    | nsp           | C,CERAMIC 0.01UF-K/50V         |         | D010103777160S |      |     |
| C405                    | nsp           | C,CERAMIC 220PF-J/50V          |         | D010221167160S |      |     |
| C406                    | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
| C407                    | 00D9630234506 | C,ELECT 47UF-M/50V (Pb Free)   |         | D040470087070S |      |     |
| C408                    | 00D9630224503 | C,ELECT 22UF-M/50V             |         | D040220087060S |      |     |
| C409                    | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
| C410                    | 00D9609009937 | C,ELECT 100UF-M/50V            |         | D040101087060S |      |     |
| C411,412                | nsp           | C,CERAMIC 470PF-K/500V         |         | D00447127D050S |      |     |
| C413                    | nsp           | C,CERAMIC X7R2200PF-K/50V      |         | D011222777200S |      |     |
| C415,416                | 00D9630234302 | C,ELECT 10UF-M/100V            |         | D04010008C050S |      |     |
| C418                    | nsp           | C,CERAMIC 0.1UF-K/50V          |         | D011104577160S |      |     |
| C421                    | nsp           | C,CERAMIC 220PF-J/50V          |         | D010221167160S |      |     |
| C422                    | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
| C423                    | 00D9630234506 | C,ELECT 47UF-M/50V (Pb Free)   |         | D040470087070S |      |     |
| C424                    | 00D9630224503 | C,ELECT 22UF-M/50V             |         | D040220087060S |      |     |
| C425                    | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
| C426                    | 00D9609009937 | C,ELECT 100UF-M/50V            |         | D040101087060S |      |     |
| C427,428                | nsp           | C,CERAMIC 470PF-K/500V         |         | D00447127D050S |      |     |
| C429                    | nsp           | C,CERAMIC X7R2200PF-K/50V      |         | D011222777200S |      |     |
| C431,432                | 00D9630234302 | C,ELECT 10UF-M/100V            | E3, E1C | D04010008C050S |      |     |
| C434                    | nsp           | C,CERAMIC 0.1UF-K/50V          |         | D011104577160S |      |     |
| C437                    | nsp           | C,CERAMIC 220PF-J/50V          |         | D010221167160S |      |     |
| C438                    | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
| C439                    | 00D9630234506 | C,ELECT 47UF-M/50V (Pb Free)   |         | D040470087070S |      |     |
| C440                    | 00D9630224503 | C,ELECT 22UF-M/50V             |         | D040220087060S |      |     |
| C441                    | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
| C442                    | 00D9609009937 | C,ELECT 100UF-M/50V            |         | D040101087060S |      |     |
| C443,444                | nsp           | C,CERAMIC 470PF-K/500V         |         | D00447127D050S |      |     |
| C445                    | nsp           | C,CERAMIC X7R2200PF-K/50V      |         | D011222777200S |      |     |
| C447,448                | 00D9630234302 | C,ELECT 10UF-M/100V            | E3, E1C | D04010008C050S |      |     |
| C450                    | nsp           | C,CERAMIC 0.1UF-K/50V          |         | D011104577160S |      |     |
| C453                    | nsp           | C,CERAMIC 220PF-J/50V          |         | D010221167160S |      |     |
| C454                    | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
| C455                    | 00D9630234506 | C,ELECT 47UF-M/50V (Pb Free)   |         | D040470087070S |      |     |
| C456                    | 00D9630224503 | C,ELECT 22UF-M/50V             |         | D040220087060S |      |     |
| C457                    | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
| C458                    | 00D9609009937 | C,ELECT 100UF-M/50V            |         | D040101087060S |      |     |
| C459,460                | nsp           | C,CERAMIC 470PF-K/500V         |         | D00447127D050S |      |     |
| C461                    | nsp           | C,CERAMIC X7R2200PF-K/50V      |         | D011222777200S |      |     |
| C463,464                | 00D9630234302 | C,ELECT 10UF-M/100V            | E3, E1C | D04010008C050S |      |     |
| C466                    | nsp           | C,CERAMIC 0.1UF-K/50V          |         | D011104577160S |      |     |
| C469                    | nsp           | C,CERAMIC 220PF-J/50V          |         | D010221167160S |      |     |
| C470                    | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
| C471                    | 00D9630234506 | C,ELECT 47UF-M/50V (Pb Free)   |         | D040470087070S |      |     |
| C472                    | 00D9630224503 | C,ELECT 22UF-M/50V             |         | D040220087060S |      |     |
| C473                    | nsp           | C,CERAMIC SL220PF-J/500V       |         | D00022106D051S |      |     |
| C474                    | 00D9609009937 | C,ELECT 100UF-M/50V            |         | D040101087060S |      |     |
| C475,476                | nsp           | C,CERAMIC 470PF-K/500V         |         | D00447127D050S |      |     |
| C477                    | nsp           | C,CERAMIC X7R2200PF-K/50V      |         | D011222777200S |      |     |
| C479,480                | 00D9630234302 | C,ELECT 10UF-M/100V            |         | D04010008C050S |      |     |

| Ref. No.                  | Part No.      | Part Name                    | Remarks |                | Q'ty | New |
|---------------------------|---------------|------------------------------|---------|----------------|------|-----|
| C482                      | nsp           | C,CERAMIC 0.1UF-K/50V        |         | D011104577160S |      |     |
| C485                      | nsp           | C,CERAMIC 220PF-J/50V        |         | D010221167160S |      |     |
| C486                      | nsp           | C,CERAMIC SL220PF-J/500V     |         | D00022106D051S |      |     |
| C487                      | 00D9630234506 | C,ELECT 47UF-M/50V (Pb Free) |         | D040470087070S |      |     |
| C488                      | 00D9630224503 | C,ELECT 22UF-M/50V           |         | D040220087060S |      |     |
| C489                      | nsp           | C,CERAMIC SL220PF-J/500V     |         | D00022106D051S |      |     |
| C490                      | 00D9609009937 | C,ELECT 100UF-M/50V          |         | D040101087060S |      |     |
| C491,492                  | nsp           | C,CERAMIC 470PF-K/500V       |         | D00447127D050S |      |     |
| C493                      | nsp           | C,CERAMIC X7R2200PF-K/50V    |         | D011222777200S |      |     |
| C495,496                  | 00D9630234302 | C,ELECT 10UF-M/100V          | E3, E1C | D04010008C050S |      |     |
| C498                      | nsp           | C,CERAMIC 0.01UF-K/50V       |         | D011104577160S |      |     |
| C501                      | nsp           | C,CERAMIC 220PF-J/50V        |         | D010221167160S |      |     |
| C502                      | nsp           | C,CERAMIC SL220PF-J/500V     |         | D00022106D051S |      |     |
| C503                      | 00D9630234506 | C,ELECT 47UF-M/50V (Pb Free) |         | D040470087070S |      |     |
| C504                      | 00D9630224503 | C,ELECT 22UF-M/50V           |         | D040220087060S |      |     |
| C505                      | nsp           | C,CERAMIC SL220PF-J/500V     |         | D00022106D051S |      |     |
| C506                      | 00D9609009937 | C,ELECT 100UF-M/50V          |         | D040101087060S |      |     |
| C507,508                  | nsp           | C,CERAMIC 470PF-K/500V       |         | D00447127D050S |      |     |
| C509                      | nsp           | C,CERAMIC X7R2200PF-K/50V    |         | D011222777200S |      |     |
| C511,512                  | 00D9630234302 | C,ELECT 10UF-M/100V          |         | D04010008C050S |      |     |
| C513,514                  | 00D9630338402 | C,ELECT 330UF-M/6.3V         |         | D040331081050S |      |     |
| C515                      | 00D9630324607 | C,ELECT 47UF-M/10V           |         | D040470082060S |      |     |
|                           |               |                              |         |                |      |     |
|                           |               |                              |         |                |      |     |
| <b>OTHERS PARTS GROUP</b> |               |                              |         |                |      |     |
| BKT400                    | nsp           | BRACKET 0.8t/SCREW           |         | 4010210196100S |      |     |
|                           |               |                              |         |                |      |     |
| CLAMP400,401              | nsp           | CLAMP WIRE(SOLDER)           |         | 4330000120000S |      |     |
|                           |               |                              |         |                |      |     |
| CN404                     | nsp           | CN.WIRE 5P                   |         | L002251052620S |      | *   |
|                           |               |                              |         |                |      |     |
| CP401                     | nsp           | CN.WAFER 13P 20010WS         |         | L101200101310S |      |     |
| CP402                     | nsp           | CN.WAFER 5P 5267             |         | L102526700500S |      |     |
| CP403                     | nsp           | CN.WAFER 10P 20010WS         |         | L101200101010S |      |     |
| CP405                     | nsp           | CN.WAFER 3P 5267             |         | L102526700300S |      |     |
|                           |               |                              |         |                |      |     |
| G400-402                  | nsp           | CN,WIRE 1P                   |         | L000600010050S |      | *   |
|                           |               |                              |         |                |      |     |
| TP401-407                 | nsp           | CN.WAFER 3P 20010WR          |         | L101200100320S |      |     |
|                           |               |                              |         |                |      |     |

# PCB SPK ASS'Y

|                                                                                   | Ref. No.  | Part No.      | Part Name                        | Remarks |                | Q'ty | New |
|-----------------------------------------------------------------------------------|-----------|---------------|----------------------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b>                                                       |           |               |                                  |         |                |      |     |
|  | IC100     | 963239010480S | IC PC123X2YFZ (DIP4P SHARP)      |         | K614123000010S |      |     |
|  | IC102     | 231010091708S | IC TOP258MG                      |         | G200258000010S |      | *   |
|                                                                                   | IC116     | 212050010508S | IC KIA2431AP                     |         | J126243118010S |      |     |
|                                                                                   |           |               |                                  |         |                |      |     |
|                                                                                   | Q1-5      | 00D9630120704 | TR KRA102S(PB)                   |         | J520010200210S |      |     |
|                                                                                   | Q7        | 00D9630120704 | TR KRA102S(PB)                   |         | J520010200210S |      |     |
|                                                                                   | Q8-12     | 00D9630120801 | TR 2SC KRC102S (NB)              |         | J522010200210S |      |     |
|                                                                                   | Q14       | 00D9630120801 | TR 2SC KRC102S (NB)              |         | J522010200210S |      |     |
|                                                                                   | Q20       | 00D9630120704 | TR KRA102S(PB)                   |         | J520010200210S |      |     |
|                                                                                   | Q21       | 00D9630120801 | TR 2SC KRC102S (NB)              |         | J522010200210S |      |     |
|                                                                                   |           |               |                                  |         |                |      |     |
|                                                                                   | D1-5      | 00D9630355401 | D,SWITCHING KDS4148U             |         | K005041480030S |      |     |
|                                                                                   | D7        | 00D9630355401 | D,SWITCHING KDS4148U             |         | K005041480030S |      |     |
|                                                                                   | D8        | 00D2760401905 | D,SWITCHING 1SS133T              |         | K000013300520S |      |     |
|                                                                                   | D9,10     | 963209011740S | D,RECTIFIER BRIDGE D3SB60-5000   |         | K047036040030S |      |     |
|                                                                                   | D11       | 00D9630355401 | D,SWITCHING KDS4148U             |         | K005041480030S |      |     |
|                                                                                   | D100-102  | 00D9630328409 | D,SWITCHING 1N4007               |         | K000400700010S |      |     |
|                                                                                   | D103      | 203050018706S | D,SCHOTTKY D25SC6M 60V 25A       |         | K120256000010S |      |     |
|                                                                                   | D104-106  | 00D9630328409 | D,SWITCHING 1N4007               |         | K000400700010S |      |     |
|                                                                                   | D108      | 963209010430S | D,FAST RECOVERY AP01C-V1 52RE-AX |         | K050000015000S |      |     |
|                                                                                   | D109,110  | 00D9630328409 | D,SWITCHING 1N4007               |         | K000400700010S |      |     |
|                                                                                   | D112      | 00D2760401905 | D,SWITCHING 1SS133T              |         | K000013300520S |      |     |
|                                                                                   |           |               |                                  |         |                |      |     |
|                                                                                   | ZD100     | 963202010440S | D,ZENER MTZJ22B                  |         | K06022R044520S |      |     |
|                                                                                   | ZD101     | 00D2760762958 | D,ZENER MTZJ39B                  | E3      | K06039R044520S |      |     |
|                                                                                   | ZD102     | 963202010440S | D,ZENER MTZJ22B                  |         | K06022R044520S |      |     |
|                                                                                   | ZD103     | 00D2760762958 | D,ZENER MTZJ39B                  | E3      | K06039R044520S |      |     |
|                                                                                   | ZD104     | 963202010440S | D,ZENER MTZJ22B                  |         | K06022R044520S |      |     |
|                                                                                   | ZD105     | 00D2760762958 | D,ZENER MTZJ39B                  | E3      | K06039R044520S |      |     |
|                                                                                   | ZD106,107 | 963202010440S | D,ZENER MTZJ22B                  |         | K06022R044520S |      |     |
|                                                                                   | ZD108,109 | 00D2760762958 | D,ZENER MTZJ39B                  | E3      | K06039R044520S |      |     |
|                                                                                   | ZD110     | 963202010440S | D,ZENER MTZJ22B                  | E3      | K06022R044520S |      |     |
|                                                                                   | ZD110     | 00D2760762958 | D,ZENER MTZJ39B                  | E2, E1C | K06039R044520S |      |     |
|                                                                                   | ZD111     | 00D2760762958 | D,ZENER MTZJ39B                  | E2, E1C | K06039R044520S |      |     |
|                                                                                   | ZD112     | 963202010440S | D,ZENER MTZJ22B                  |         | K06022R044520S |      |     |
|                                                                                   | ZD113     | 00D2760762958 | D,ZENER MTZJ39B                  | E2, E1C | K06039R044520S |      |     |
|                                                                                   | ZD114     | 00D9600095607 | D,ZENER MTZJ5.6B                 |         | K06005R644520S |      |     |
|                                                                                   | ZD115     | 00D2760762958 | D,ZENER MTZJ39B                  |         | K06039R044520S |      |     |
|                                                                                   | ZD116     | 00D2760762958 | D,ZENER MTZJ39B                  | E2, E1C | K06039R044520S |      |     |
|                                                                                   | ZD117,118 | 963202010440S | D,ZENER MTZJ22B                  |         | K06022R044520S |      |     |
|                                                                                   | ZD119     | 00D2760762958 | D,ZENER MTZJ39B                  | E2, E1C | K06039R044520S |      |     |
|                                                                                   |           |               |                                  |         |                |      |     |
| <b>RESISTORS GROUP</b>                                                            |           |               |                                  |         |                |      |     |
|                                                                                   | R5-18     | 963125010100S | R,METAL FILM 10-J 2W             |         | C060010066050S |      |     |
|                                                                                   | R28-33    | 00D9630310404 | R,METAL FILM 2.2K-J,1W           |         | C060022265050S |      |     |
|                                                                                   | R34       | nsp           | R,METAL FILM 10K-J,1/4W          |         | C060103063050S |      |     |
|                                                                                   | R35,36    | nsp           | R,METAL FILM 47K-J,1/4W          | E3, E1C | C060047363050S |      |     |
|                                                                                   | R35,36    | nsp           | R,METAL FILM 470K-J,1/4W         | E2      | C060047463050S |      |     |
|                                                                                   | R37,38    | 963125010110S | R,METAL FILM 470-J,2W            |         | C060047166060S |      |     |
|                                                                                   |           |               |                                  |         |                |      |     |
| <b>CAPACITORS GROUP</b>                                                           |           |               |                                  |         |                |      |     |
|                                                                                   | C1        | nsp           | C,FILM MI-0.047UF-J/50V          |         | D020473167050S |      |     |
|                                                                                   | C2        | nsp           | C,CERAMIC 2200PF-K/50V           |         | D011222777160S |      |     |
|                                                                                   | C3,4      | nsp           | C,FILM MI-0.047UF-J/50V          |         | D020473167050S |      |     |
|                                                                                   | C5        | nsp           | C,CERAMIC 2200PF-K/50V           |         | D011222777160S |      |     |
|                                                                                   | C6        | nsp           | C,FILM MI-0.047UF-J/50V          |         | D020473167050S |      |     |
|                                                                                   | C7        | nsp           | C,CERAMIC 2200PF-K/50V           |         | D011222777160S |      |     |
|                                                                                   | C8,9      | nsp           | C,FILM MI-0.047UF-J/50V          |         | D020473167050S |      |     |
|                                                                                   | C10       | nsp           | C,CERAMIC 2200PF-K/50V           |         | D011222777160S |      |     |
|                                                                                   | C11,12    | nsp           | C,FILM MI-0.047UF-J/50V          |         | D020473167050S |      |     |
|                                                                                   | C13       | nsp           | C,CERAMIC 2200PF-K/50V           |         | D011222777160S |      |     |
|                                                                                   | C14       | nsp           | C,FILM MI-0.047UF-J/50V          |         | D020473167050S |      |     |

| Ref. No.                  | Part No.      | Part Name                        | Remarks |                | Q'ty | New |
|---------------------------|---------------|----------------------------------|---------|----------------|------|-----|
| C15                       | nsp           | C,CERAMIC 2200PF-K/50V           |         | D011222777160S |      |     |
| C16,17                    | nsp           | C,FILM MI-0.047UF-J/50V          |         | D020473167050S |      |     |
| C18                       | nsp           | C,CERAMIC 2200PF-K/50V           |         | D011222777160S |      |     |
| C19                       | nsp           | C,FILM MI-0.047UF-J/50V          |         | D020473167050S |      |     |
| C20                       | nsp           | C,CERAMIC 2200PF-K/50V           |         | D011222777160S |      |     |
| C21,22                    | nsp           | C,FILM MI-0.047UF-J/50V          |         | D020473167050S |      |     |
| C23                       | nsp           | C,CERAMIC 2200PF-K/50V           |         | D011222777160S |      |     |
| C24,25                    | nsp           | C,FILM MI-0.047UF-J/50V          |         | D020473167050S |      |     |
| C27                       | nsp           | C,CERAMIC 1000PF-K/50V           |         | D011102777160S |      |     |
| C30                       | nsp           | C,CERAMIC 1000PF-K/50V           |         | D011102777160S |      |     |
| C33                       | nsp           | C,CERAMIC 1000PF-K/50V           |         | D011102777160S |      |     |
| C36                       | nsp           | C,CERAMIC 1000PF-K/50V           |         | D011102777160S |      |     |
| C39                       | nsp           | C,CERAMIC 1000PF-K/50V           |         | D011102777160S |      |     |
| C42                       | nsp           | C,CERAMIC 1000PF-K/50V           |         | D011102777160S |      |     |
| C45                       | nsp           | C,CERAMIC 1000PF-K/50V           |         | D011102777160S |      |     |
| C48                       | nsp           | C,CERAMIC 1000PF-K/50V           |         | D011102777160S |      |     |
| C51                       | nsp           | C,CERAMIC 1000PF-K/50V           |         | D011102777160S |      |     |
| C53                       | 00D9609009937 | C,ELECT 100UF-M/50V              |         | D040101087060S |      |     |
| C54                       | nsp           | C,FILM 0.1UF-K/250V              |         | D02010407H080S |      |     |
| C55                       | 963134010180S | C,ELECT 12000UF-M/71V            |         | D040123089550S |      |     |
| C56                       | nsp           | C,CERAMIC 2200PF-K/50V           |         | D011222777160S |      |     |
| C57                       | 00D9630234205 | C,ELECT 10UF-M/50V               |         | D040100087070S |      |     |
| C58                       | 963134010180S | C,ELECT 12000UF-M/71V            |         | D040123089550S |      |     |
| C59                       | nsp           | C,CERAMIC 2200PF-K/50V           |         | D011222777160S |      |     |
| C60                       | 00D9630244606 | C,ELECT 0.1UF-M/50V (Pb Free)    |         | D040R10087080S |      |     |
| C61                       | nsp           | C,FILM 0.1UF-K/250V              |         | D02010407H080S |      |     |
| C63                       | nsp           | C,CERAMIC 1000PF-K/50V           |         | D011102777160S |      |     |
| C84,85                    | nsp           | C,FILM MI-0.047UF-J/50V          |         | D020473167050S |      |     |
| C87                       | nsp           | C,CERAMIC 1000PF-K/50V           |         | D011102777160S |      |     |
| C90                       | nsp           | C,CERAMIC 1000PF-K/50V           |         | D011102777160S |      |     |
| ⚠ C100                    | 963132010140S | C,CERAMIC ECQU2A104ML 0.1UF      |         | D00810408H000S |      |     |
| C102                      | 963134010200S | C,ELECT 100UF-M/400V             |         | D04110108K000S |      |     |
| C103                      | 963132010120S | C,CERAMIC DEHR33A102KB2B         |         | D00810207Q010S |      |     |
| ⚠ C104,105                | 963134011730S | C,CERAMIC DE1B3KX471KB4BL01      |         | D00847127H010S |      |     |
| C106-108                  | 963134010220S | C,ELECT5600UF-M/6.3V             |         | D041562081001S |      |     |
| C110                      | nsp           | C,CERAMIC 0.1UF-K/25V            |         | D011104774161S |      |     |
| C111                      | nsp           | C,CERAMIC 4.7UF-K/6.3V           |         | D011475571160S |      |     |
| C112                      | 963134010190S | C,ELECT 10UF-M/50V               |         | D041100087050S |      |     |
| C113                      | nsp           | C,CERAMIC 0.1UF-K/25V            |         | D011104774161S |      |     |
| C115                      | 963132011930S | C,CERAMIC DE1E3KX222MB4BL01      |         | D00822248H010S |      |     |
| C116                      | nsp           | C,CERAMIC 0.1UF-K/25V            |         | D011104774161S |      |     |
| C117                      | 963132011940S | C,CERAMIC DE2F3KY103MB3BM02      |         | D008103589010S |      |     |
| C118                      | nsp           | C,CERAMIC 0.1UF-K/25V            |         | D011104774161S |      |     |
| C119                      | 963134010210S | C,ELECT 47UF-M/25V               |         | D041470084050S |      |     |
| C120-123                  | nsp           | C,CERAMIC 0.1UF-K/25V            |         | D011104774161S |      |     |
| C131,133                  | 963132011940S | C,CERAMIC DE2F3KY103MB3BM02      |         | D008103589010S |      |     |
|                           |               |                                  |         |                |      |     |
|                           |               |                                  |         |                |      |     |
| <b>OTHERS PARTS GROUP</b> |               |                                  |         |                |      |     |
| BKT1-3                    | nsp           | BRACKET t1.0+Sn plating /PCB MTG |         | 4010214876000S |      |     |
| BKT101                    | nsp           | BRACKET SCREW                    |         | 4010210196000S |      |     |
|                           |               |                                  |         |                |      |     |
| CLAMP3                    | nsp           | CLAMP WIRE(SOLDER)               |         | 4330000120000S |      |     |
|                           |               |                                  |         |                |      |     |
| CN1                       | nsp           | CN,WIRE 230MM/5P                 |         | L000231050050S |      |     |
| CN2                       | nsp           | CN,WIRE 670MM/2P                 |         | L000671020050S |      |     |
| CN3                       | nsp           | CN,WIRE 2MM 170MM/10P            |         | L002171100050S |      |     |
| CN13                      | nsp           | CN,WIRE 130MM/6P                 |         | L000131062050S |      |     |
|                           |               |                                  |         |                |      |     |
| CP1                       | nsp           | CN.WAFER 3CKT                    |         | L108353280360S |      |     |
| CP12                      | nsp           | CN.FPC 1.25MM 19P                |         | L131019100010S |      |     |
| CP13                      | nsp           | CN.WAFER 6P 5267                 |         | L102526700600S |      |     |
| CP22                      | nsp           | CN.WAFER 5P TUC-P P              |         | L101100040510S |      |     |
|                           |               |                                  |         |                |      |     |
| CX102                     | nsp           | CN.WAFER 7.92MM                  |         | L108353280290S |      |     |
| CX104                     | nsp           | CN.WAFER 5P TUC-P X              |         | L101100030510S |      |     |
| CX105                     | nsp           | CN,WIRE 370MM/5P                 |         | L000371050050S |      |     |

|   | Ref. No. | Part No.      | Part Name                          | Remarks         |                | Q'ty | New |
|---|----------|---------------|------------------------------------|-----------------|----------------|------|-----|
|   | DZ1      | 00D9600095801 | D,ZENER MTZJ6.8B                   |                 | K06006R844520S |      |     |
|   | RLY1     | 00D9630218409 | RELAY BC3-12 24V 2A                |                 | G680240202030S |      |     |
|   | RLY2-5   | 963682002440S | RELAY 12V 5A SPK                   |                 | G680120502050S |      |     |
|   | RLY7,8   | 963682002440S | RELAY 12V 5A SPK                   |                 | G680120502050S |      |     |
|   |          |               |                                    |                 |                |      |     |
| ⚠ | F100     | 963652010510S | FUSE T2A/250V                      | E3              | N751502001160S |      |     |
| ⚠ | F100     | 963652010500S | FUSE T1.6A/250V                    | E2, E1C         | N751501601160S |      |     |
| ⚠ | F101     | 963652010520S | FUSE T6.3A/250V                    | E3              | N751506301160S |      |     |
| ⚠ | F101     | 963652010910S | FUSE T3.15A/250V                   | E2, E1C         | N751503151160S |      |     |
|   |          |               |                                    |                 |                |      |     |
|   | JACK1    | 963643010360S | TER,BOARD SCREW 6P JB-602A-02      |                 | G613602A0200YS |      |     |
|   | JACK2    | 963646001690S | TER,BOARD SCREW 8P MST-108V1-01    |                 | G614108V1010MS |      |     |
|   | JACK3    | 00D9630257208 | TER,BOARD SCREW 8P JB-405E(V0)-02  |                 | G612405E0200YS |      |     |
|   | JACK4,5  | 963643011140S | TER,BOARD SCREW 2P MST-103V1-03    |                 | G611103V1030MS |      |     |
|   |          |               |                                    |                 |                |      |     |
| ⚠ | JK100    | 00D2033958004 | SOCKET,POWER AC INLET              |                 | G4300152P0001S |      |     |
|   |          |               |                                    |                 |                |      |     |
|   | L1-7     | nsp           | COIL INDUCTOR 0.5UH                |                 | D330R50000000S |      |     |
| ⚠ | L100     | 963111010230S | COIL LINE FILTER LF-4ZB-E273H 27mH |                 | D320402730020S |      |     |
|   |          |               |                                    |                 |                |      |     |
| ⚠ | RL101    | 963682010370S | RELAY HL31-1AT-5H 5V 1A            |                 | G680050102020S |      |     |
|   |          |               |                                    |                 |                |      |     |
| ⚠ | T100     | 963102010240S | TRANS,SWITCHING ST-4430A           |                 | E060044300010S |      | *   |
|   |          |               |                                    |                 |                |      |     |
|   | TR100    | 00D9630255802 | TR 2SC KTC3199Y                    |                 | J5023199Y0010S |      |     |
|   | TR101    | 00D9630255802 | TR 2SC KTC3199Y                    |                 | J5023199Y0010S |      |     |
|   | TR102    | 00D9630255802 | TR 2SC KTC3199Y                    |                 | J5023199Y0010S |      |     |
|   |          |               |                                    |                 |                |      |     |
|   | WIRE1    | nsp           | CN,WIRE 200MM/2P                   |                 | L000201020150S |      | *   |
|   | WIRE5    | nsp           | CN,WIRE 900MM/2P                   |                 | L000901020050S |      | *   |
|   |          |               |                                    |                 |                |      |     |
|   |          | nsp           | HOLDER,FUSE CLIP                   | F100_1          | G645000050010S |      |     |
|   |          | nsp           | HOLDER,FUSE CLIP                   | F100_2          | G645000050010S |      |     |
|   |          | nsp           | HOLDER,FUSE CLIP                   | F101_1          | G645000050010S |      |     |
|   |          | nsp           | HOLDER,FUSE CLIP                   | E2, E1C, F101_2 | G645000050010S |      |     |
|   |          | nsp           | LABEL FUSE                         |                 | 5507000006790S |      |     |
|   |          | nsp           | LABEL FUSE                         | E2, E1C, F101   | 5507000006800S |      |     |

## PCB REG\_CNT ASS'Y

| Ref. No.                    | Part No.      | Part Name                 | Remarks | Q'ty           | New |
|-----------------------------|---------------|---------------------------|---------|----------------|-----|
| <b>SEMICONDUCTORS GROUP</b> |               |                           |         |                |     |
| IC1                         | 00D2631289900 | IC AZ4580M-TRE1-SOIC8P    | E3      | J121458000020S |     |
| IC103                       | 00D2630809006 | IC NJM7805FA              |         | J126780500130S |     |
| IC104                       | 00D2630554005 | IC NJM7905FA              |         | J126790500020S |     |
| IC105                       | 00D2630809006 | IC NJM7805FA              |         | J126780500130S |     |
| IC106                       | 00D2630810008 | IC NJM7808FA              |         | J126780800030S |     |
| IC107                       | 00D2630503001 | IC NJM7908FA              |         | J126790800020S |     |
| IC108                       | 963239010770S | IC NJM2388F09             | E2, E1C | J126238800090S |     |
| IC109                       | nsp           | IC PQ033DNA1ZPH           | E3      | J126033010010S |     |
| IC402                       | 00D2631289900 | IC AZ4580M-TRE1-SOIC8P    | E3      | J121458000020S |     |
| IC404                       | 963239008800S | IC ILX3232D               |         | J046323200020S |     |
| IC405,406                   | nsp           | IC PQ120DNA1ZPH           |         | J126120010010S |     |
| D114                        | 00D9630236504 | D, SHOTTKY RB721Q         |         | K120072140010S |     |
| D115,116                    | 00D2760401905 | D,SWITCHING 1SS133T       |         | K000013300520S |     |
| D117,118                    | 00D9630236504 | D, SHOTTKY RB721Q         |         | K120072140010S |     |
| D119-121                    | 00D2760401905 | D,SWITCHING 1SS133T       |         | K000013300520S |     |
| D122                        | 00D9630236504 | D, SHOTTKY RB721Q         |         | K120072140010S |     |
| D123                        | 00D2760401905 | D,SWITCHING 1SS133T       | E2, E1C | K000013300520S |     |
| D124-134                    | 00D9630328409 | D,SWITCHING 1N4007        |         | K000400700010S |     |
| D137-145                    | 00D9630328409 | D,SWITCHING 1N4007        |         | K000400700010S |     |
| ZD117,118                   | 00D9600096004 | D,ZENER MTZJ33B           |         | K06033R044520S |     |
| ZD401,402                   | 00D2760665903 | D,ZENER MTZJ16B           |         | K06016R044520S |     |
| <b>CAPACITORS GROUP</b>     |               |                           |         |                |     |
| C61                         | nsp           | C, CERAMIC 33PF-J/50V     | E3      | D010330167160S |     |
| C62,63                      | 00D9630234205 | C,ELECT 10UF-M/50V        | E3      | D040100087070S |     |
| C64                         | nsp           | C, CERAMIC 33PF-J/50V     | E3      | D010330167160S |     |
| C65                         | nsp           | C, CERAMIC 0.1UF-K/50V    | E3      | D011104577160S |     |
| C66                         | nsp           | C, CERAMIC 1UF-K/16V      | E3      | D011105173161S |     |
| C67                         | nsp           | C, CERAMIC 33PF-J/50V     | E3      | D010330167160S |     |
| C68-70                      | 00D9630234205 | C,ELECT 10UF-M/50V        | E3      | D040100087070S |     |
| C71                         | nsp           | C, CERAMIC 0.1UF-K/50V    | E3      | D011104777200S |     |
| C72                         | nsp           | C, CERAMIC 33PF-J/50V     | E3      | D010330167160S |     |
| C73                         | nsp           | C, CERAMIC 1UF-K/16V      | E3      | D011105173161S |     |
| C74                         | nsp           | C, CERAMIC 0.1UF-K/50V    | E3      | D011104577160S |     |
| C75                         | 00D9630234205 | C,ELECT 10UF-M/50V        | E3      | D040100087070S |     |
| C76-78                      | nsp           | C, CERAMIC 100PF-J/50V    | E3      | D010101167160S |     |
| C79                         | nsp           | C, CERAMIC 0.1UF-K/50V    | E3      | D011104577160S |     |
| C80,81                      | 00D9630234205 | C,ELECT 10UF-M/50V        | E3      | D040100087070S |     |
| C126                        | 00D9630217002 | C,ELECT 3300UF-M/16V      |         | D040332083010S |     |
| C127,128                    | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |     |
| C129                        | 00D9630217002 | C,ELECT 3300UF-M/16V      |         | D040332083010S |     |
| C130                        | 00D9630333203 | C,ELECT 100UF-M/16V       |         | D040101083090S |     |
| C131                        | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |     |
| C132                        | 00D9630333203 | C,ELECT 100UF-M/16V       |         | D040101083090S |     |
| C133                        | 90M-OA000500R | C,ELECT 4700UF-M/25V(MHA) |         | D040472084240S |     |
| C134                        | 00D9630333203 | C,ELECT 100UF-M/16V       |         | D040101083090S |     |
| C135                        | 90M-OA000500R | C,ELECT 4700UF-M/25V(MHA) |         | D040472084240S |     |
| C136                        | 00D9630333203 | C,ELECT 100UF-M/16V       | E2, E1C | D040101083090S |     |
| C137                        | 00D9630234205 | C,ELECT 10UF-M/50V        | E2, E1C | D040100087070S |     |
| C138                        | 90M-OA000500R | C,ELECT 4700UF-M/25V(MHA) |         | D040472084240S |     |
| C142-144                    | nsp           | C,FILM 0.1UF-J/50V        |         | D020104167050S |     |
| C146-148                    | nsp           | C,FILM 0.1UF-J/50V        |         | D020104167050S |     |
| C403, 404                   | nsp           | C, CERAMIC 0.1UF-K/50V    | E3      | D011104577160S |     |
| C407,408                    | 963134010940S | C,ELECT 10UF-M/16V        | E3      | D040100083090S |     |
| C427                        | nsp           | C, CERAMIC 0.1UF-K/50V    | E3      | D011104577160S |     |
| C432-435                    | 00D9630234205 | C,ELECT 10UF-M/50V        | E3      | D040100087070S |     |
| C439, 440                   | nsp           | C, CERAMIC 470PF-K/50V    | E3      | D011471767160S |     |
| C443                        | nsp           | C, CERAMIC 470PF-K/50V    | E3      | D011471767160S |     |
| C444                        | nsp           | C, CERAMIC 0.1UF-K/50V    | E3      | D011104577160S |     |
| C448-451                    | nsp           | C, CERAMIC 0.1UF-K/50V    |         | D011104577160S |     |
| C452                        | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |     |

| Ref. No.                  | Part No.      | Part Name                           | Remarks    |                | Q'ty | New |
|---------------------------|---------------|-------------------------------------|------------|----------------|------|-----|
| C453                      | nsp           | C, CERAMIC 0.1UF-K/50V              |            | D011104577160S |      |     |
| C454,455                  | 00D9630234205 | C,ELECT 10UF-M/50V                  |            | D040100087070S |      |     |
| C456                      | nsp           | C, CERAMIC 33PF-J/50V               |            | D010330167160S |      |     |
| C457,458                  | 00D9630234205 | C,ELECT 10UF-M/50V                  |            | D040100087070S |      |     |
| C459                      | nsp           | C, CERAMIC 33PF-J/50V               |            | D010330167160S |      |     |
| C460, 461                 | nsp           | C, CERAMIC 0.1UF-K/50V              |            | D011104577160S |      |     |
| C467-469                  | nsp           | C, CERAMIC 0.1UF-K/50V              |            | D011104577160S |      |     |
|                           |               |                                     |            |                |      |     |
|                           |               |                                     |            |                |      |     |
| <b>OTHERS PARTS GROUP</b> |               |                                     |            |                |      |     |
| BKT100                    | nsp           | BRACKET SCREW                       |            | 4010210196000S |      |     |
| BKT401                    | nsp           | BRACKET 0.8t/SCREW                  |            | 4010210196100S |      |     |
|                           |               |                                     |            |                |      |     |
| CLAMP100                  | nsp           | CLAMP WIRE(SOLDER)                  |            | 4330000120000S |      |     |
| CLAMP102                  | nsp           | CLAMP WIRE(SOLDER)                  |            | 4330000120000S |      |     |
|                           |               |                                     |            |                |      |     |
| CN4                       | nsp           | CN,WAFFER 15P C125Z2                |            | L109012521510S |      | *   |
| CN5                       | nsp           | CN,WAFFER 19P C125Z2                |            | L109012521910S |      | *   |
| CN9                       | nsp           | CN,WAFFER 17P C125Z2                |            | L109012521710S |      | *   |
| CN10                      | nsp           | CN,WAFFER 15P C125Z2                |            | L109012521510S |      | *   |
| CN11                      | nsp           | CN,WAFFER 25P C125Z2                |            | L109012522510S |      | *   |
| CN13                      | nsp           | CN,WIRE 2MM 120MM/13P               |            | L002121130010S |      | *   |
| CN15                      | nsp           | CN.WAFFER 4P 20010HS                |            | L002161040091S |      |     |
| CN100                     | nsp           | CN,WAFFER 13P C125Z2                |            | L109012521310S |      | *   |
| CN101                     | nsp           | CN,WAFFER 11P C125Z2                |            | L109012521110S |      | *   |
| CN104                     | nsp           | CN,WAFFER 27P C125Z2                |            | L109012522710S |      | *   |
| CN401                     | nsp           | CN,WAFFER 11P C125Z2                |            | L109012521110S |      | *   |
| CN402                     | nsp           | CN,WAFFER 15P C125Z1                |            | L109012511510S |      | *   |
| CN403                     | nsp           | CN,WAFFER 19P C125Z1                |            | L109012511910S |      | *   |
|                           |               |                                     |            |                |      |     |
| CP3                       | nsp           | CN,WAFFER 11P C125Z1                |            | L109012511110S |      | *   |
| CP4                       | nsp           | CN,WAFFER 25P C125Z1                |            | L109012512510S |      | *   |
| CP6                       | nsp           | CN,WAFFER 19P C125Z1                |            | L109012511910S |      | *   |
| CP7                       | nsp           | CN,WAFFER 17P C125Z1                |            | L109012511710S |      | *   |
| CP8                       | nsp           | CN,WAFFER 15P C125Z1                |            | L109012511510S |      | *   |
| CP13A                     | nsp           | CN.WAFFER 13P 20010WR               |            | L101200101320S |      |     |
| CP100                     | nsp           | CN,WAFFER 13P C125Z1                |            | L109012511310S |      | *   |
| CP101                     | nsp           | CN,WAFFER 11P C125Z1                |            | L109012511110S |      | *   |
| CP102                     | nsp           | CN.WAFFER 4P 5267                   |            | L102526700400S |      |     |
| CP104                     | nsp           | CN.WAFFER 3P 5267                   |            | L102526700300S |      |     |
| CP105                     | nsp           | CN,WAFFER 19P C125Z1                |            | L109012511910S |      | *   |
| CP106                     | nsp           | CN,WAFFER 17P C125Z1                |            | L109012511710S |      | *   |
| CP107                     | nsp           | CN,WAFFER 13P C125Z1                |            | L109012511310S |      | *   |
| CP108                     | nsp           | CN,WAFFER 19P C125Z1                |            | L109012511910S |      | *   |
| CP109                     | nsp           | CN,WAFFER 17P C125Z1                |            | L109012511710S |      | *   |
| CP110                     | nsp           | CN.WAFFER 33P C125Z1                |            | L109012513310S |      | *   |
| CP111                     | nsp           | CN,WAFFER 19P C125Z1                |            | L109012511910S |      | *   |
| CP112                     | nsp           | CN,WAFFER 17P C125Z1                |            | L109012511710S |      | *   |
| CP113,114                 | nsp           | CN,WAFFER 13P C125Z1                |            | L109012511310S |      | *   |
| CP115                     | nsp           | CN.WAFFER 33P C125Z1                |            | L109012513310S |      | *   |
| CP401                     | nsp           | CN,WAFFER 11P C125Z1                |            | L109012511110S |      | *   |
| CP801                     | nsp           | CN.FPC 1.25MM 1.25-2-13P 13P ST DIP | E3         | L131125021310S |      |     |
|                           |               |                                     |            |                |      |     |
| ⚠ F104-108                | 963652010910S | FUSE T3.15A/250V                    |            | N751503151160S |      | *   |
|                           |               |                                     |            |                |      |     |
| JACK402                   | 00D9630333601 | JACK,DIN 8P YKF51-5397N             | E3         | G403515397000S |      |     |
| JACK404                   | 963643011150S | CN.WAFFER 9P FEMALE D-SUB DS03      |            | L103090090030S |      |     |
| JACK405,406               | 00D9630325606 | JACK,D3.5 PJ-308-02                 |            | G40130802001YS |      |     |
|                           |               |                                     |            |                |      |     |
|                           | nsp           | HOLDER,FUSE CLIP PI5.2-REEL         | F104A-108A | G645000050010S |      |     |
|                           | nsp           | HOLDER,FUSE CLIP PI5.2-REEL         | F104B-108B | G645000050010S |      |     |
|                           | nsp           | LABEL FUSE                          |            | 5507000005090S |      |     |

## PCB FRONT ASS'Y

|                             | Ref. No.  | Part No.      | Part Name                      | Remarks |                | Q'ty | New |
|-----------------------------|-----------|---------------|--------------------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |           |               |                                |         |                |      |     |
| ⚠                           | IC601     | 00D9600195808 | IC ICP-N15                     |         | J120001500030S |      |     |
|                             | IC602,604 | 00D2631289900 | IC AZ4580M                     |         | J121458000020S |      |     |
|                             |           |               |                                |         |                |      |     |
|                             | Q601      | 00D9600285006 | TR KRC104S (ND)                |         | J522104S00210S |      |     |
|                             | Q602      | 00D9630226705 | TR 2SC KTC1027Y                |         | J5021027Y0020S |      |     |
|                             | Q603      | 00D9630121402 | TR KRA104S                     |         | J520010400210S |      |     |
|                             | Q606      | 00D9630120801 | TR 2SC KRC102S (NB)            |         | J522010200210S |      |     |
|                             | Q607,608  | 00D9630328302 | TR 2SC KTC3875G(ALG)           |         | J5223875G0210S |      |     |
|                             | Q609      | 00D9630120801 | TR 2SC KRC102S (NB)            |         | J522010200210S |      |     |
|                             | Q610      | 00D2710305909 | SEMI KTA1504S                  |         | J520015040150S |      |     |
|                             | Q611      | 00D9630328302 | TR 2SC KTC3875G(ALG)           |         | J5223875G0210S |      |     |
|                             | Q612      | 00D9630120801 | TR 2SC KRC102S (NB)            |         | J522010200210S |      |     |
|                             | Q613      | 00D2710305909 | SEMI KTA1504S                  |         | J520015040150S |      |     |
|                             |           |               |                                |         |                |      |     |
|                             | D601,602  | 00D9630328409 | D,SWITCHING 1N4007             |         | K000400700010S |      |     |
|                             | D604      | 00D9630355401 | D,SWITCHING KDS4148U           |         | K005041480030S |      |     |
|                             | D606      | 00D9630355401 | D,SWITCHING KDS4148U           |         | K005041480030S |      |     |
|                             | D608      | 00D9630355401 | D,SWITCHING KDS4148U           |         | K005041480030S |      |     |
|                             | D610-613  | 00D9630355401 | D,SWITCHING KDS4148U           |         | K005041480030S |      |     |
|                             | D614-616  | 963209003510S | D,ESD CDS3C05HDMI1             |         | K067030500010S |      |     |
|                             |           |               |                                |         |                |      |     |
|                             | ZD601     | 00D9600095801 | D,ZENER MTZJ6.8B               |         | K06006R844520S |      |     |
|                             | ZD602     | 00D9630046202 | D,ZENER MTZJ18B                |         | K06018R044520S |      |     |
|                             | ZD603     | 00D2760762903 | D,ZENER MTZJ24B                |         | K06024R044520S |      |     |
|                             | ZD604     | 00D2760683930 | D,ZENER 0.2W 5.1V              |         | K06605R14P400S |      |     |
|                             | ZD607,608 | 00D2760683930 | D,ZENER 0.2W 5.1V              |         | K06605R14P400S |      |     |
|                             |           |               |                                |         |                |      |     |
|                             | LED602    | 963262010460S | LED SIR-341ST3F 3PI            |         | K505341300010S |      |     |
|                             | LED604    | 963263011010S | LED BZ-BB43V4V-2-TBS22A 5PI    |         | K500056000100S |      |     |
|                             | LED605    | 00D9630366108 | LED BL-BEG204-L 5PI            |         | K500052004010S |      |     |
|                             |           |               |                                |         |                |      |     |
|                             | FL601     | 172010006108D | DISPLAY,FLT 19-ST-02GINK GREEN |         | K530190020010S |      |     |
|                             |           |               |                                |         |                |      |     |
|                             |           |               |                                |         |                |      |     |
| <b>RESISTORS GROUP</b>      |           |               |                                |         |                |      |     |
|                             | R607      | 00D9630215907 | 4.7-J,1W-R.REEL                |         | C0604R7065050S |      |     |
|                             |           |               |                                |         |                |      |     |
|                             |           |               |                                |         |                |      |     |
| <b>CAPACITORS GROUP</b>     |           |               |                                |         |                |      |     |
|                             | C601      | nsp           | C,CERAMIC 0.1UF-K/50V          |         | D011104577160S |      |     |
|                             | C602      | 00D9630311209 | C,ELECT 10UF-M/50V             |         | D040100087060S |      |     |
|                             | C603,604  | nsp           | C,FILM 0.1UF-K/250V            |         | D02010407H080S |      |     |
|                             | C606      | nsp           | C,CERAMIC 0.1UF-K/50V          |         | D011104577160S |      |     |
|                             | C607      | 00D9630311209 | C,ELECT 10UF-M/50V             |         | D040100087060S |      |     |
|                             | C608      | 00D9630157900 | C,ELECT 470UF-M/63V            |         | D040471088010S |      |     |
|                             | C609-611  | nsp           | C,CERAMIC 100PF-J/50V          |         | D010101167160S |      |     |
|                             | C612      | nsp           | C,CERAMIC 0.047UF-Z/50V        |         | D011473597160S |      |     |
|                             | C613      | nsp           | C,CERAMIC 0.01UF-K/50V         |         | D011103777160S |      |     |
|                             | C614,615  | 00D9630293602 | C,ELECT 1UF-M/50V (Pb Free)    |         | D040010087150S |      |     |
|                             | C618      | nsp           | C,CERAMIC 0.047UF-Z/50V        |         | D011473597160S |      |     |
|                             | C619      | 963134010980S | C,ELECT 47UF-M/16V             |         | D040470083060S |      |     |
|                             | C620      | nsp           | C,CERAMIC 30PF-J/50V           |         | D010300167160S |      |     |
|                             | C622      | nsp           | C,FILM 0.1UF-J/100V            |         | D02010406C060S |      |     |
|                             | C624      | nsp           | C,CERAMIC 0.01UF-K/50V         |         | D011103777160S |      |     |
|                             | C625      | nsp           | C,CERAMIC 0.047UF-Z/50V        |         | D011473597160S |      |     |
|                             | C632      | nsp           | C,CERAMIC 0.047UF-Z/50V        |         | D011473597160S |      |     |
|                             | C633      | 00D9630310909 | C,ELECT 1UF-M/50V              |         | D040010087070S |      |     |
|                             | C635      | 00D9630310909 | C,ELECT 1UF-M/50V              |         | D040010087070S |      |     |
|                             | C636,637  | nsp           | C,CERAMIC 0.01UF-K/50V         |         | D011103777160S |      |     |
|                             | C638      | nsp           | C,CERAMIC COG82PF-J/50V        |         | D010820167160S |      |     |
|                             | C639      | 00D9630311209 | C,ELECT 10UF-M/50V             |         | D040100087060S |      |     |
|                             | C640      | nsp           | C,CERAMIC 0.1UF-K/50V          |         | D011104577160S |      |     |
|                             | C641,642  | nsp           | C,CERAMIC 1000PF-K/50V         |         | D011102777160S |      |     |
|                             | C643,644  | nsp           | C,CERAMIC 330PF-J/50V          |         | D010331167160S |      |     |

| Ref. No.                  | Part No.      | Part Name                                | Remarks |                | Q'ty | New |
|---------------------------|---------------|------------------------------------------|---------|----------------|------|-----|
| C645                      | nsp           | C,CERAMIC 0.047UF-Z/50V                  |         | D011473597160S |      |     |
| C647,648                  | nsp           | C,CERAMIC 0.01UF-K/50V                   |         | D011103777160S |      |     |
| C649                      | nsp           | C,CERAMIC 0.1UF-K/50V                    |         | D011104577160S |      |     |
| C650                      | 963134010950S | C,ELECT 220UF-M                          |         | D040221081060S |      |     |
| C651,652                  | nsp           | C,CERAMIC 0.047UF-Z/50V                  |         | D011473597160S |      |     |
| C653,654                  | nsp           | C,FILM ST-0.01UF-J/100V                  |         | D02010306C060S |      |     |
| C655                      | nsp           | C,CERAMIC 0.1UF-K/50V                    |         | D011104577160S |      |     |
| C656                      | nsp           | C,CERAMIC 100PF-J/50V                    |         | D010101167160S |      |     |
| C657,658                  | 00D9630311209 | C,ELECT 1UF-M/50V                        |         | D040010087070S |      |     |
| C659                      | 00D9630293602 | C,ELECT 1UF-M/50V (Pb Free)              |         | D040010087150S |      |     |
| C660                      | nsp           | C,CERAMIC 0.1UF-K/50V                    |         | D011104577160S |      |     |
| C661                      | nsp           | C,FILM 0.1UF-J/100V                      |         | D02010406C060S |      |     |
| C662,663                  | nsp           | C,FILM 0.047UF-J/100V                    |         | D02047306C060S |      |     |
| C664                      | nsp           | C,FILM 0.1UF-K/250V                      |         | D02010407H080S |      |     |
| C688                      | nsp           | C,CERAMIC 1000PF-K/50V                   |         | D011102777160S |      |     |
| C690                      | nsp           | C, CERAMIC 0.1UF-K/50V                   |         | D011104577160S |      |     |
| C691                      | nsp           | C,CERAMIC 1000PF-K/50V                   |         | D011102777160S |      |     |
| C692, 693                 | nsp           | C, CERAMIC 100PF-J/50V                   |         | D010101167160S |      |     |
| C695                      | nsp           | C, CERAMIC 0.1UF-K/50V                   |         | D011104577160S |      |     |
| C696                      | nsp           | C,CERAMIC 1000PF-K/50V                   |         | D011102777160S |      |     |
| C697                      | 00D9630333203 | C,ELECT 100UF-M/16V                      |         | D040101083090S |      |     |
| C698                      | nsp           | C,CERAMIC 1000PF-K/50V                   |         | D011102777160S |      |     |
| C699                      | nsp           | C, CERAMIC 100PF-J/50V                   |         | D010101167160S |      |     |
| C700                      | nsp           | C,CERAMIC 1000PF-K/50V                   |         | D011102777160S |      |     |
| C701                      | nsp           | C, CERAMIC 100PF-J/50V                   |         | D010101167160S |      |     |
| C707-712                  | nsp           | C,CERAMIC 1000PF-K/50V                   |         | D011102777160S |      |     |
| C713,714                  | nsp           | C,CERAMIC 0.047UF-Z/50V                  | E2, E1C | D011473597160S |      |     |
| C715,716                  | 00D9630311209 | C,ELECT 10UF-M/50V                       | E2, E1C | D040100087060S |      |     |
|                           |               |                                          |         |                |      |     |
|                           |               |                                          |         |                |      |     |
| <b>OTHERS PARTS GROUP</b> |               |                                          |         |                |      |     |
| BD600-604                 | nsp           | R,THICK 0-J,1/16W                        |         | C20000006M160S |      |     |
| BD605,606                 | nsp           | COIL,BEAD CBW160808U121T                 |         | D340160811210S |      |     |
| BD608                     | nsp           | COIL,BEAD BLM21PG221SN1                  |         | D340201212210S |      |     |
|                           |               |                                          |         |                |      |     |
| BKT601-603                | nsp           | BRACKET                                  |         | 4010210196100S |      |     |
|                           |               |                                          |         |                |      |     |
| CLP402                    | nsp           | CLAMP WIRE(SOLDER)                       |         | 4330000120000S |      |     |
| CLP405                    | nsp           | CLAMP WIRE(SOLDER)                       |         | 4330000120000S |      |     |
| CLP406                    | nsp           | CLAMP WIRE(SOLDER)                       |         | 4330000120000S |      |     |
| CLP409                    | nsp           | CLAMP WIRE(SOLDER)                       |         | 4330000120000S |      |     |
| CLP410                    | nsp           | CLAMP WIRE(SOLDER)                       |         | 4330000120000S |      |     |
|                           |               |                                          |         |                |      |     |
| CN601                     | nsp           | CN.FPC 40P                               |         | L130100114050S |      | *   |
| CN602A                    | nsp           | CN.FPC 16P                               |         | L130100111650S |      |     |
| CN602B                    | nsp           | CN.FPC 16P                               |         | L130100111650S |      |     |
| CN603                     | nsp           | CN.WAFER 5P TUC-P P                      |         | L101100040510S |      |     |
| CN604                     | 00D9630257703 | CN.WAFER 10P TUC-P X                     |         | L101100031010S |      |     |
| CN605                     | nsp           | CN.WAFER 7P 5268                         |         | L102526800700S |      |     |
| CN606                     | 00D9630257703 | CN.WAFER 10P TUC-P X                     |         | L101100031010S |      |     |
| CN609                     | nsp           | CN,WIRE 2MM 520MM/5P                     | E3      | L002521050010S |      | *   |
| CN609                     | nsp           | CN,WIRE 2MM 360MM/5P                     | E2, E1C | L002361050030S |      |     |
|                           |               |                                          |         |                |      |     |
| CP603                     | nsp           | CN.WAFER 5P TUC-P X                      |         | L101100030510S |      |     |
| CP604                     | 00D9609009908 | CN.WAFER 10P TUC-P P                     |         | L101100041010S |      |     |
| CP606                     | 00D9609009908 | CN.WAFER 10P TUC-P P                     |         | L101100041010S |      |     |
|                           |               |                                          |         |                |      |     |
| G605, 606                 | nsp           | TER WIRE 90MM/1P 6054-BS                 |         | 8410900010040S |      |     |
|                           |               |                                          |         |                |      |     |
| JACK601                   | 00D2048260004 | JACK,D3.5 YKB215289V BLACK               |         | G401215289000S |      |     |
| JACK602                   | 963643011130S | CN,PLUG CONTACT USB A TYPE FEMALE 4P     |         | G480040400030S |      | *   |
| JACK604                   | 00D2048217031 | JACK,D6.5 YKB21-5153G HP                 |         | G402PJ9000000S |      |     |
| JACK608                   | 963643005070S | TER,RCA 3PIN RCA-303G-05(BK,BK,BK) YUQIU |         | G606303G0500YS |      |     |
|                           |               |                                          |         |                |      |     |
| L601                      | nsp           | COIL INDUCTOR 100UH                      |         | D330101001020S |      |     |
|                           |               |                                          |         |                |      |     |
| RMC601                    | 963262011220S | MODULE,REMOCON R34FS8A                   |         | E940348003810S |      |     |

| Ref. No.    | Part No.      | Part Name            | Remarks |                | Q'ty | New |
|-------------|---------------|----------------------|---------|----------------|------|-----|
|             |               |                      |         |                |      |     |
| SW601       | 00D9630095305 | SW,TACT SKHV10910D01 |         | G180040500010S |      |     |
| SW601A-609A | 00D9630095305 | SW,TACT SKHV10910D01 |         | G180040500010S |      |     |
| SW601B-609B | 00D9630095305 | SW,TACT SKHV10910D01 |         | G180040500010S |      |     |
| SW601C-606C | 00D9630095305 | SW,TACT SKHV10910D01 |         | G180040500010S |      |     |
|             |               |                      |         |                |      |     |
| VEC601,602  | 00D9630387408 | SW,ENCODER EC16B24SO |         | G121162400070S |      |     |
|             |               |                      |         |                |      |     |
| JP611       | nsp           | R,THICK 0-J,1/16W    |         | C20000006M160S |      |     |
| JP754,755   | nsp           | R,THICK 0-J,1/16W    | E2, E1C | C20000006M160S |      |     |
|             |               |                      |         |                |      |     |
|             | nsp           | HOLDER FLT           |         | 4320211026000S |      |     |
|             | nsp           | BRACKET              |         | 4010214796000S |      |     |

## PCB VIDEO ASS'Y

|                             | Ref. No.   | Part No.      | Part Name                   | Remarks |                | Q'ty | New |
|-----------------------------|------------|---------------|-----------------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |            |               |                             |         |                |      |     |
|                             | U2001      | 00D2622012908 | IC,BU4052BCF-E2             |         | J040405200060S |      |     |
|                             | U2002      | 00D2622012908 | IC,BU4052BCF-E2             |         | J040405200060S |      |     |
|                             | U2003      | 235810046603S | IC,AVDM2000(NJW1327)        |         | J171132700010S |      | *   |
|                             | U2004      | nsp           | IC,PQ033DNA1ZPH             |         | J126033010010S |      |     |
|                             | U2005      | 232810005504S | IC BD7628F-E2               |         | J127762800010S |      |     |
|                             | U2006      | 232810005504S | IC BD7628F-E2               |         | J127762800010S |      |     |
|                             | U2007      | 232810005504S | IC BD7628F-E2               |         | J127762800010S |      |     |
|                             | U2008      | 232810005504S | IC BD7628F-E2               |         | J127762800010S |      |     |
|                             |            |               |                             |         |                |      |     |
|                             | Q2001-2004 | 963219010750S | TR 2SA KTA1504G             |         | J5201504G0210S |      |     |
|                             | Q2005      | 00D9630121606 | TR KRC107S (NH)             |         | J522107S00210S |      |     |
|                             | Q2006-2012 | 00D9630120801 | TR 2SC KRC102S (NB)         |         | J522010200210S |      |     |
|                             |            |               |                             |         |                |      |     |
|                             | D1003,1004 | 963209003510S | D,ESD CDS3C05HDMI1          |         | K067030500010S |      |     |
|                             | D2001-2008 | 00D9630355401 | D,SWITCHING KDS4148U        |         | K005041480030S |      |     |
|                             | D2009      | 00D9630328603 | D,SCHOTTKY RB521S-30        |         | K125521300010S |      |     |
|                             |            |               |                             |         |                |      |     |
|                             |            |               |                             |         |                |      |     |
| <b>CAPACITORS GROUP</b>     |            |               |                             |         |                |      |     |
|                             | C1001-1003 | 963132006970M | C,CERAMIC 10UF-K/16V        |         | D011106573200S |      |     |
|                             | C1007-1009 | 963132006970M | C,CERAMIC 10UF-K/16V        |         | D011106573200S |      |     |
|                             | C2001-2004 | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D010103777160S |      |     |
|                             | C2005-2008 | 00D9639006531 | C,ELECT 22UF-M/16V          |         | D040220083070S |      |     |
|                             | C2009-2012 | 00D9630333203 | C,ELECT 100UF-M/16V         |         | D040101083090S |      |     |
|                             | C2013-2016 | nsp           | C,CERAMIC0.01UF-K/50V       |         | D010103777160S |      |     |
|                             | C2017,2018 | 00D9639005862 | C,ELECT 47UF-M/16V          |         | D040470083080S |      |     |
|                             | C2019-2022 | nsp           | C,CERAMIC 0.047UF-K/16V     |         | D011473773160S |      |     |
|                             | C2023      | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D010103777160S |      |     |
|                             | C2024-2026 | nsp           | C,CERAMIC 0.1UF-K/50V       |         | D011104577160S |      |     |
|                             | C2027-2030 | nsp           | C,CERAMIC 0.047UF-K/16V     |         | D011473773160S |      |     |
|                             | C2031-2034 | 00D9630293602 | C,ELECT 1UF-M/50V (Pb Free) |         | D040010087150S |      |     |
|                             | C2039-2042 | nsp           | C,CERAMIC 0.047UF-K/16V     |         | D011473773160S |      |     |
|                             | C2043,2044 | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D010103777160S |      |     |
|                             | C2045,2046 | nsp           | C,CERAMIC 0.1UF-K/50V       |         | D011104577160S |      |     |
|                             | C2047      | 00D9639006531 | C,ELECT 22UF-M/16V          |         | D040220083070S |      |     |
|                             | C2048-2050 | nsp           | C,CERAMIC 0.1UF-K/50V       |         | D011104577160S |      |     |
|                             | C2051      | 00D9639005862 | C,ELECT 47UF-M/16V          |         | D040470083080S |      |     |
|                             | C2052      | nsp           | C,CERAMIC 0.1UF-K/50V       |         | D011104577160S |      |     |
|                             | C2053      | nsp           | C,CERAMIC1UF-K/16V          |         | D011105173161S |      |     |
|                             | C2055,2056 | nsp           | C,CERAMIC 0.1UF-K/50V       |         | D011104577160S |      |     |
|                             | C2058      | nsp           | C,CERAMIC1UF-K/16V          |         | D011105173161S |      |     |
|                             | C2059      | nsp           | C,CERAMIC 0.1UF-K/50V       |         | D011104577160S |      |     |
|                             | C2060      | 00D9639006531 | C,ELECT 22UF-M/16V          |         | D040220083070S |      |     |
|                             | C2061-2064 | nsp           | C,CERAMIC 0.1UF-K/50V       |         | D011104577160S |      |     |
|                             | C2065      | 00D9639005862 | C,ELECT 47UF-M/16V          |         | D040470083080S |      |     |
|                             | C2066,2067 | nsp           | C,CERAMIC 0.1UF-K/50V       |         | D011104577160S |      |     |
|                             | C2068      | 00D9639006531 | C,ELECT 22UF-M/16V          |         | D040220083070S |      |     |
|                             | C2070,2071 | nsp           | C,CERAMIC 0.1UF-K/50V       |         | D011104577160S |      |     |
|                             | C2073      | 00D9639006531 | C,ELECT 22UF-M/16V          |         | D040220083070S |      |     |
|                             | C2074      | 00D9639005862 | C,ELECT 47UF-M/16V          |         | D040470083080S |      |     |
|                             | C2075,2076 | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D010103777160S |      |     |
|                             | C2077,2078 | 00D9639005862 | C,ELECT 47UF-M/16V          |         | D040470083080S |      |     |
|                             | C2079      | nsp           | C,CERAMIC 220PF-J/50V       |         | D010221167160S |      |     |
|                             |            |               |                             |         |                |      |     |
|                             |            |               |                             |         |                |      |     |
| <b>OTHERS PARTS GROUP</b>   |            |               |                             |         |                |      |     |
|                             | B2001      | nsp           | CN,WIRE 1P                  |         | L000800010110S |      | *   |
|                             | B2003      | nsp           | CN,WIRE 1P                  |         | L000800010110S |      | *   |
|                             | B2005      | nsp           | CN,WIRE 1P                  |         | L000900010110S |      | *   |
|                             |            |               |                             |         |                |      |     |
|                             | K1011      | 963643010900S | TER,RCA 3PIN RCA-303A(2)    |         | G606303A0800YS |      |     |
|                             | K1012      | 963643010900S | TER,RCA 3PIN RCA-303A(2)    |         | G606303A0800YS |      |     |
|                             | K1013      | 963643010900S | TER,RCA 3PIN RCA-303A(2)    |         | G606303A0800YS |      |     |
|                             | K2001      | 963643003460S | TER,RCA 4PIN RCA-405BE      |         | G602405BE310YS |      |     |

| Ref. No. | Part No.      | Part Name              | Remarks |                | Q'ty | New |
|----------|---------------|------------------------|---------|----------------|------|-----|
| K2002    | 963643010870S | JACK, 2P DIN-409BX2    |         | G403040020010S |      |     |
| K2003    | 963643010880S | TER,RCA 2PIN RCA-207B1 |         | G601207B1050YS |      |     |
| K2005    | 00D9630146005 | TER,RCA 1PIN RCA-107AY |         | G600107AY000YS |      |     |
|          |               |                        |         |                |      |     |
| N2001    | nsp           | CN,WAFER 19P C125Z2    |         | L109012521910S |      | *   |
| N2002    | nsp           | CN,WAFER 17P C125Z2    |         | L109012521710S |      | *   |
| N2003    | nsp           | CN,WAFER 13P C125Z2    |         | L109012521310S |      | *   |
| N2004    | nsp           | CN.WAFER 4P 20010WR    |         | L101200100420S |      |     |

## PCB AUDIO ASS'Y

| Ref. No.                    | Part No.      | Part Name                | Remarks | Q'ty           | New |
|-----------------------------|---------------|--------------------------|---------|----------------|-----|
| <b>SEMICONDUCTORS GROUP</b> |               |                          |         |                |     |
| IC3000                      | 00D2631289900 | IC AZ4580M               |         | J121458000020S |     |
| IC3003                      | 235810045600S | IC R2A15220FP            |         | J084152200010S | *   |
| IC3005,3006                 | 00D2631289900 | IC AZ4580M               |         | J121458000020S |     |
| IC3007                      | 00D2623727904 | IC NJW1194A              |         | J084119400010S |     |
| IC3008-3010                 | 00D2631289900 | IC AZ4580M               |         | J121458000020S |     |
| IC3011                      | 00D2623727904 | IC NJW1194A              |         | J084119400010S |     |
| IC3012                      | 00D2631289900 | IC AZ4580M               |         | J121458000020S |     |
| Q4001                       | 00D9630044301 | TR KTC2875B(MB)          |         | J5222875B0010S |     |
| Q4002,4003                  | 00D9630120704 | TR KRA102S(PB)           |         | J520010200210S |     |
| Q4005                       | 00D9630044301 | TR KTC2875B(MB)          |         | J5222875B0010S |     |
| Q4006                       | 00D9630120801 | TR 2SC KRC102S (NB)      |         | J522010200210S |     |
| Q4008                       | 00D9630044301 | TR KTC2875B(MB)          |         | J5222875B0010S |     |
| Q4009,4010                  | 00D9630120704 | TR KRA102S(PB)           |         | J520010200210S |     |
| Q4012                       | 00D9630044301 | TR KTC2875B(MB)          |         | J5222875B0010S |     |
| Q4013                       | 00D9630120801 | TR 2SC KRC102S (NB)      |         | J522010200210S |     |
| Q4015                       | 00D9630044301 | TR KTC2875B(MB)          |         | J5222875B0010S |     |
| Q4016,4017                  | 00D9630120704 | TR KRA102S(PB)           |         | J520010200210S |     |
| Q4019                       | 00D9630044301 | TR KTC2875B(MB)          |         | J5222875B0010S |     |
| Q4020,4021                  | 00D9630120801 | TR 2SC KRC102S (NB)      |         | J522010200210S |     |
| Q4023                       | 00D9630044301 | TR KTC2875B(MB)          |         | J5222875B0010S |     |
| Q4024-4027                  | 00D9630120704 | TR KRA102S(PB)           |         | J520010200210S |     |
| Q4029                       | 00D9630044301 | TR KTC2875B(MB)          |         | J5222875B0010S |     |
| Q4030                       | 00D9630120801 | TR 2SC KRC102S (NB)      |         | J522010200210S |     |
| Q4032                       | 00D9630044301 | TR KTC2875B(MB)          |         | J5222875B0010S |     |
| Q4033,4034                  | 00D9630120704 | TR KRA102S(PB)           |         | J520010200210S |     |
| Q4036                       | 00D9630044301 | TR KTC2875B(MB)          |         | J5222875B0010S |     |
| Q4037                       | 00D9630120801 | TR 2SC KRC102S (NB)      |         | J522010200210S |     |
| Q4039                       | 00D9630044301 | TR KTC2875B(MB)          |         | J5222875B0010S |     |
| Q4040,4041                  | 00D9630120704 | TR KRA102S(PB)           |         | J520010200210S |     |
| Q4043                       | 00D9630044301 | TR KTC2875B(MB)          |         | J5222875B0010S |     |
| Q4044,4045                  | 00D9630120801 | TR 2SC KRC102S (NB)      |         | J522010200210S |     |
| Q4047                       | 00D9630044301 | TR KTC2875B(MB)          |         | J5222875B0010S |     |
| Q4048,4049                  | 00D9630120704 | TR KRA102S(PB)           |         | J520010200210S |     |
| Q4098,4099                  | 963219010760S | TR KRC231(NW)            | E2, E1C | J5220231M0010S |     |
| Q4100                       | 00D9630120801 | TR 2SC KRC102S (NB)      | E2, E1C | J522010200210S |     |
| Q4101                       | 963219010740S | TR KRA111S               | E2, E1C | J520011100210S |     |
| Q4102                       | 00D9630120801 | TR 2SC KRC102S (NB)      | E2, E1C | J522010200210S |     |
| D3023                       | 00D9630328409 | D,SWITCHING 1N4007       |         | K000400700010S |     |
| D3025                       | 00D9630328409 | D,SWITCHING 1N4007       |         | K000400700010S |     |
| D4000-4002                  | 00D9630328409 | D,SWITCHING 1N4007       |         | K000400700010S |     |
| ZD4000                      | 00D2760693962 | D,ZENER 0.2W 3.6V UDZ    |         | K06603R64P400S |     |
| <b>CAPACITORS GROUP</b>     |               |                          |         |                |     |
| C3000                       | 00D9630234205 | C,ELECT 10UF-M/50V       |         | D040100087070S |     |
| C3001,3002                  | 00D9630234205 | C,ELECT 10UF-M/50V       | E3,E1C  | D040100087070S |     |
| C3001,3002                  | 00D2544583900 | C,ELECT 10UF-M/50V (ROB) | E2      | D040100087140S |     |
| C3003-3008                  | 00D9630234205 | C,ELECT 10UF-M/50V       |         | D040100087070S |     |
| C3011-3017                  | 00D9630234205 | C,ELECT 10UF-M/50V       |         | D040100087070S |     |
| C3018                       | nsp           | C,CERAMIC 100PF-J/50V    |         | D010101167160S |     |
| C3019                       | 963134010960S | C,ELECT 220UF-M/10V      |         | D040221082080S |     |
| C3021                       | nsp           | C,CERAMIC 220PF-J/50V    |         | D010221167160S |     |
| C3022                       | 00D9630234205 | C,ELECT 10UF-M/50V       |         | D040100087070S |     |
| C3023                       | nsp           | C,FILM 0.022UF-J/100V    |         | D02022306C060S |     |
| C3024                       | nsp           | C,FILM 0.0068UF-J/100V   |         | D02068206C060S |     |
| C3027                       | nsp           | C,FILM 0.022UF-J/100V    |         | D02022306C060S |     |
| C3028                       | nsp           | C,FILM 0.0068UF-J/100V   |         | D02068206C060S |     |
| C3029                       | nsp           | C,CERAMIC 220PF-J/50V    |         | D010221167160S |     |
| C3030                       | 963134010960S | C,ELECT 220UF-M/10V      |         | D040221082080S |     |
| C3031                       | 00D9630234205 | C,ELECT 10UF-M/50V       |         | D040100087070S |     |
| C3033                       | nsp           | C,CERAMIC 100PF-J/50V    |         | D010101167160S |     |

| Ref. No.   | Part No.      | Part Name                 | Remarks |                | Q'ty | New |
|------------|---------------|---------------------------|---------|----------------|------|-----|
| C3034,3035 | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3036,3037 | 00D9630234205 | C,ELECT 10UF-M/50V        | E3, E1C | D040100087070S |      |     |
| C3036,3037 | 00D2544583900 | C,ELECT 10UF-M/50V (ROB)  | E2      | D040100087140S |      |     |
| C3038,3039 | 00D9609009937 | C,ELECT 100UF-M/50V       | E3, E1C | D040101087060S |      |     |
| C3038,3039 | 00D2544765906 | C,ELECT 100UF-M/25V (ROB) | E2      | D040101084140S |      |     |
| C3042      | nsp           | C,CERAMIC 330PF-J/50V     |         | D010331167160S |      |     |
| C3049      | nsp           | C,CERAMIC 330PF-J/50V     |         | D010331167160S |      |     |
| C3053      | 00D9630333203 | C,ELECT 100UF-M/16V       |         | D040101083090S |      |     |
| C3056      | nsp           | C,CERAMIC 330PF-J/50V     |         | D010331167160S |      |     |
| C3058      | nsp           | C,CERAMIC 330PF-J/50V     |         | D010331167160S |      |     |
| C3059      | 00D9630333203 | C,ELECT 100UF-M/16V       |         | D040101083090S |      |     |
| C3062      | 963134010710S | C,ELECT 47UF-M/35V        |         | D040470085060S |      |     |
| C3065      | nsp           | C,CERAMIC 330PF-J/50V     |         | D010331167160S |      |     |
| C3066,3067 | 963134010710S | C,ELECT 47UF-M/35V        |         | D040470085060S |      |     |
| C3068      | nsp           | C,CERAMIC 330PF-J/50V     |         | D010331167160S |      |     |
| C3072      | nsp           | C,CERAMIC 330PF-J/50V     |         | D010331167160S |      |     |
| C3073,3074 | 963134010710S | C,ELECT 47UF-M/35V        |         | D040470085060S |      |     |
| C3075      | nsp           | C,CERAMIC 330PF-J/50V     |         | D010331167160S |      |     |
| C3079      | 963134010710S | C,ELECT 47UF-M/35V        |         | D040470085060S |      |     |
| C3080      | nsp           | C,CERAMIC 330PF-J/50V     |         | D010331167160S |      |     |
| C3083      | nsp           | C,CERAMIC 330PF-J/50V     |         | D010331167160S |      |     |
| C3087,3088 | nsp           | C,CERAMIC 330PF-J/50V     |         | D010331167160S |      |     |
| C3090      | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3091,3092 | nsp           | C,CERAMIC 0.01UF-K/50V    |         | D010103777160S |      |     |
| C3093      | nsp           | C,CERAMIC 68PF-J/50V      |         | D010680167160S |      |     |
| C3094      | nsp           | C,CERAMIC 100PF-J/50V     |         | D010101167160S |      |     |
| C3095-3097 | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3098      | nsp           | C,CERAMIC 3300PF-K/50V    |         | D011332777160S |      |     |
| C3099      | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104577160S |      |     |
| C3100      | 963134010970S | C,ELECT 33UF-M/16V        |         | D040330083050S |      |     |
| C3101      | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3102      | 00D9639006476 | C,ELECT 4.7UF-M/50V       |         | D0404R7087250S |      |     |
| C3103      | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3104      | 963134010970S | C,ELECT 33UF-M/16V        |         | D040330083050S |      |     |
| C3105      | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3106      | 00D9639006476 | C,ELECT 4.7UF-M/50V       |         | D0404R7087250S |      |     |
| C3107      | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104577160S |      |     |
| C3108      | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3110      | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3111      | nsp           | C,CERAMIC 3300PF-K/50V    |         | D011332777160S |      |     |
| C3112      | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3113,3114 | nsp           | C,CERAMIC 0.01UF-K/50V    |         | D010103777160S |      |     |
| C3116      | nsp           | C,CERAMIC 68PF-J/50V      |         | D010680167160S |      |     |
| C3117      | nsp           | C,CERAMIC 100PF-J/50V     |         | D010101167160S |      |     |
| C3121      | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3125      | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3126,3127 | nsp           | C,CERAMIC 0.01UF-K/50V    |         | D010103777160S |      |     |
| C3128      | nsp           | C,CERAMIC 68PF-J/50V      |         | D010680167160S |      |     |
| C3129      | nsp           | C,CERAMIC 100PF-J/50V     |         | D010101167160S |      |     |
| C3130-3132 | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3133      | nsp           | C,CERAMIC 3300PF-K/50V    |         | D011332777160S |      |     |
| C3134      | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104577160S |      |     |
| C3136      | 963134010970S | C,ELECT 33UF-M/16V        |         | D040330083050S |      |     |
| C3137      | 00D9639006476 | C,ELECT 4.7UF-M/50V       |         | D0404R7087250S |      |     |
| C3138      | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3142      | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3143      | 00D9639006476 | C,ELECT 4.7UF-M/50V       |         | D0404R7087250S |      |     |
| C3147      | 963134010970S | C,ELECT 33UF-M/16V        |         | D040330083050S |      |     |
| C3148      | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3149      | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104577160S |      |     |
| C3151      | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3152      | nsp           | C,CERAMIC 3300PF-K/50V    |         | D011332777160S |      |     |
| C3153,3154 | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |
| C3155,3156 | nsp           | C,CERAMIC 0.01UF-K/50V    |         | D010103777160S |      |     |
| C3158      | nsp           | C,CERAMIC 68PF-J/50V      |         | D010680167160S |      |     |
| C3159      | nsp           | C,CERAMIC 100PF-J/50V     |         | D010101167160S |      |     |
| C3160      | 00D9630234205 | C,ELECT 10UF-M/50V        |         | D040100087070S |      |     |

|                           | Ref. No.   | Part No.      | Part Name                  | Remarks |                | Q'ty | New |
|---------------------------|------------|---------------|----------------------------|---------|----------------|------|-----|
|                           | C4000      | 00D9630234205 | C,ELECT 10UF-M/50V         |         | D040100087070S |      |     |
|                           | C4001,4002 | 00D9630224503 | C,ELECT 22UF-M/50V         |         | D040220087060S |      |     |
|                           | C4003      | nsp           | C,CERAMIC 330PF-J/50V      |         | D010331167160S |      |     |
|                           | C4004      | nsp           | C,CERAMIC 0.01UF-K/50V     |         | D010103777160S |      |     |
|                           | C4005      | nsp           | C,CERAMIC 330PF-J/50V      |         | D010331167160S |      |     |
|                           | C4006      | 00D9609010023 | C,ELECT 0.47UF-M/50V       |         | D040R47087050S |      |     |
|                           | C4007-4010 | 00D9630224503 | C,ELECT 22UF-M/50V         |         | D040220087060S |      |     |
|                           | C4011      | nsp           | C,CERAMIC 330PF-J/50V      |         | D010331167160S |      |     |
|                           | C4012      | nsp           | C,CERAMIC 0.01UF-K/50V     |         | D010103777160S |      |     |
|                           | C4013      | nsp           | C,CERAMIC 330PF-J/50V      |         | D010331167160S |      |     |
|                           | C4014      | 00D9609010023 | C,ELECT 0.47UF-M/50V       |         | D040R47087050S |      |     |
|                           | C4015-4018 | 00D9630224503 | C,ELECT 22UF-M/50V         |         | D040220087060S |      |     |
|                           | C4019      | nsp           | C,CERAMIC 330PF-J/50V      |         | D010331167160S |      |     |
|                           | C4020      | nsp           | C,CERAMIC 0.01UF-K/50V     |         | D010103777160S |      |     |
|                           | C4021      | nsp           | C,CERAMIC 330PF-J/50V      |         | D010331167160S |      |     |
|                           | C4022      | 00D9609010023 | C,ELECT 0.47UF-M/50V       |         | D040R47087050S |      |     |
|                           | C4023-4026 | 00D9630224503 | C,ELECT 22UF-M/50V         |         | D040220087060S |      |     |
|                           | C4027      | nsp           | C,CERAMIC 330PF-J/50V      |         | D010331167160S |      |     |
|                           | C4028      | 00D9609010023 | C,ELECT 0.47UF-M/50V       |         | D040R47087050S |      |     |
|                           | C4029      | nsp           | C,CERAMIC 0.01UF-K/50V     |         | D010103777160S |      |     |
|                           | C4030      | nsp           | C,CERAMIC 330PF-J/50V      |         | D010331167160S |      |     |
|                           | C4031      | 00D9609010023 | C,ELECT 0.47UF-M/50V       |         | D040R47087050S |      |     |
|                           | C4032-4035 | 00D9630224503 | C,ELECT 22UF-M/50V         |         | D040220087060S |      |     |
|                           | C4036      | nsp           | C,CERAMIC 330PF-J/50V      |         | D010331167160S |      |     |
|                           | C4037      | nsp           | C,CERAMIC 0.01UF-K/50V     |         | D010103777160S |      |     |
|                           | C4038      | nsp           | C,CERAMIC 330PF-J/50V      |         | D010331167160S |      |     |
|                           | C4039      | 00D9609010023 | C,ELECT 0.47UF-M/50V       |         | D040R47087050S |      |     |
|                           | C4040-4043 | 00D9630224503 | C,ELECT 22UF-M/50V         |         | D040220087060S |      |     |
|                           | C4044      | nsp           | C,CERAMIC 330PF-J/50V      |         | D010331167160S |      |     |
|                           | C4045      | nsp           | C,CERAMIC 0.01UF-K/50V     |         | D010103777160S |      |     |
|                           | C4046      | nsp           | C,CERAMIC 330PF-J/50V      |         | D010331167160S |      |     |
|                           | C4047      | 00D9609010023 | C,ELECT 0.47UF-M/50V       |         | D040R47087050S |      |     |
|                           | C4048-4051 | 00D9630224503 | C,ELECT 22UF-M/50V         |         | D040220087060S |      |     |
|                           | C4052      | nsp           | C,CERAMIC 330PF-J/50V      |         | D010331167160S |      |     |
|                           | C4053      | 00D9609010023 | C,ELECT 0.47UF-M/50V       |         | D040R47087050S |      |     |
|                           | C4054      | nsp           | C,CERAMIC 0.01UF-K/50V     |         | D010103777160S |      |     |
|                           | C4055      | 00D9630234205 | C,ELECT 10UF-M/50V         |         | D040100087070S |      |     |
|                           | C4056      | nsp           | C,CERAMIC 100PF-J/50V      |         | D010101167160S |      |     |
|                           | C4057      | nsp           | C,CERAMIC 0.01UF-K/50V     |         | D010103777160S |      |     |
|                           | C4058      | nsp           | C,CERAMIC 100PF-J/50V      |         | D010101167160S |      |     |
|                           | C4059      | 00D9630234205 | C,ELECT 10UF-M/50V         |         | D040100087070S |      |     |
|                           | C4129      | 00D9630234205 | C,ELECT 10UF-M/50V         | E2, E1C | D040100087070S |      |     |
|                           | C4130      | nsp           | C,FILM 0.0082UF            | E2      | D02082206C060S |      |     |
|                           | C4131      | nsp           | C,FILM 0.0047UF            | E2      | D02047206C060S |      |     |
|                           | C4134      | 00D9630234205 | C,ELECT 10UF-M/50V         | E2, E1C | D040100087070S |      |     |
|                           | C4135      | nsp           | C,FILM 0.0082UF            | E2      | D02082206C060S |      |     |
|                           | C4136      | nsp           | C,FILM 0.0047UF            | E2      | D02047206C060S |      |     |
|                           | C4143-4145 | nsp           | C, CERAMIC 100PF-J/50V     | E2, E1C | D010101167160S |      |     |
|                           | C4146      | nsp           | C, CERAMIC 33PF-J/50V      | E2, E1C | D010330167160S |      |     |
|                           | C4147,4148 | nsp           | C, CERAMIC 100PF-J/50V     | E2, E1C | D010101167160S |      |     |
|                           | C4149      | 00D9630234205 | C,ELECT 10UF-M/50V         | E2, E1C | D040100087070S |      |     |
|                           | C4150      | nsp           | C,CERAMIC 4700PF-K/50V     | E2, E1C | D011472777160S |      |     |
|                           |            |               |                            |         |                |      |     |
|                           |            |               |                            |         |                |      |     |
| <b>OTHERS PARTS GROUP</b> |            |               |                            |         |                |      |     |
|                           | CN3000     | nsp           | CN.WAFER 33P               |         | L109012523310S |      |     |
|                           | CN3001     | nsp           | CN,WIRE 13P                |         | L002221132620S |      |     |
|                           |            |               |                            |         |                |      |     |
|                           | CP4000     | nsp           | CN,WAFER 25P               |         | L109012512510S |      |     |
|                           | CP4003     | 963183011320S | TUNER,FM/AM KST-MT104MV1-2 | E2      | E903104100110S |      |     |
|                           | CP4003     | 963183011300S | TUNER,FM/AM KST-MT004MV1-2 | E1C     | E903004100110S |      |     |
|                           |            |               |                            |         |                |      |     |
|                           | JACK4001   | 90M-YT004640R | TER,RCA 2PIN               |         | G601207AE020YS |      |     |
|                           | JACK4002   | 00D9630132103 | TER,RCA 4PIN               |         | G602405B0400YS |      |     |
|                           | JACK4003   | 00D9630387505 | TER,RCA 4PIN               |         | G602405B5500YS |      |     |
|                           | JACK4004   | 00D9630132103 | TER,RCA 4PIN               |         | G602405B0400YS |      |     |
|                           | JACK4005   | 00D9630146005 | TER,RCA 1PIN               |         | G600107A0000YS |      |     |

| Ref. No.    | Part No.      | Part Name                          | Remarks |                | Q'ty | New |
|-------------|---------------|------------------------------------|---------|----------------|------|-----|
|             |               |                                    |         |                |      |     |
| JK3001,3002 | 963643010890S | TER,RCA 6PIN                       |         | G603603B05000S |      |     |
| JK3003      | 90M-YT004640R | TER,RCA 2PIN                       |         | G601207AE020YS |      |     |
|             |               |                                    |         |                |      |     |
| L3000,3001  | nsp           | COIL,CHOKE 7BR-K251000BSP-KR (FTZ) | E2, E1C | D300700000040S |      |     |
| L4000       | nsp           | FILTER,LC MPX                      | E2      | E401010020020S |      |     |
| L4001       | 90M-FN000270R | COIL,BEAD CBW160808U121T           |         | D340160811210S |      |     |
| L4002       | nsp           | FILTER,LC MPX                      | E2      | E401010020020S |      |     |
|             |               |                                    |         |                |      |     |
| CX3000      | nsp           | CN,WAFER 19P C125Z2                |         | L109012521910S |      | *   |
| CX3001      | nsp           | CN,WAFER 13P C125Z2                |         | L109012521310S |      | *   |
| CX3002      | nsp           | CN,WAFER 17P C125Z2                |         | L109012521710S |      | *   |
| CX3003      | nsp           | CN,WAFER 15P C125Z2                |         | L109012521510S |      | *   |
| CX4000      | nsp           | CN,WAFER 27P C125Z1                |         | L109012512710S |      | *   |
| CX4001      | nsp           | CN,WAFER 17P C125Z1                |         | L109012511710S |      | *   |
| CX4002      | nsp           | CN,WAFER 15P C125Z1                |         | L109012511510S |      | *   |
| CX4003      | nsp           | CN.FPC 19P TWG-P                   |         | L131019000010S |      |     |

## PCB HDMI ASS'Y

| Ref. No.                    | Part No.      | Part Name                              | Remarks | Q'ty           | New |
|-----------------------------|---------------|----------------------------------------|---------|----------------|-----|
| <b>SEMICONDUCTORS GROUP</b> |               |                                        |         |                |     |
| U1                          | nsp           | IC,LOGIC AD8195                        |         | J040819505510S |     |
| U2                          | 00D262342590S | IC,LOGIC LTC4300/MSOP8P                |         | J040430005500S |     |
| U1001                       | 234810018506S | IC,LOGIC TC74VHC4052AFT                |         | J040744052080S | *   |
| U1002                       | 236810057606S | IC,LOGIC ADV3002BSTZ                   |         | J040300205510S |     |
| U1100                       | nsp           | IC ADV7840                             |         | J040784005510S |     |
| U1101                       | nsp           | IC PQ018ENA1ZPH                        |         | J126018010030S |     |
| U1600                       | 963142010720S | CERAMIC CHIP 48MHz SMD2520             |         | E85548R000020S | *   |
| U1601                       | nsp           | IC,LOGIC XC3S400A-4FGG320C             |         | J040340043230S |     |
| U1602                       | 246810010604D | IC IS42S32200E-6TL                     |         | J001423220040S |     |
| U1603                       | 963243011510S | IC MEMORY FLASH<br>(M25P40-VMN6TPB)    |         | 8952331100070  | *   |
| U1604                       | 00MHC007805KZ | IC TC74VHCT125AFT                      |         | J040741255580S |     |
| U1605                       | 00MHC007805KZ | IC TC74VHCT125AFT                      |         | J040741255580S |     |
| U1606                       | 00MHC007805KZ | IC TC74VHCT125AFT                      |         | J040741255580S |     |
| U1607                       | nsp           | IC PQ012ENB1ZPH                        |         | J126012010040S |     |
| U1800                       | 00D2623436907 | IC,LOGIC TC74VHC244FT                  |         | J040742445530S |     |
| U1801                       | 963239010410S | IC ADV7511BSTZ-225                     |         | J040751100010S | *   |
| U1802                       | 00MHC007805KZ | IC TC74VHCT125AFT                      |         | J040741255580S |     |
| U1803                       | nsp           | IC,LOGIC PI3HDMI1310_A                 |         | J046131000020S | *   |
| U2000                       | nsp           | IC PQ018ENA1ZPH                        |         | J126018010030S |     |
| U2001                       | nsp           | IC,LOGIC ADV7392                       |         | J045739200010S | *   |
| U2002                       | nsp           | IC PQ033DNA1ZPH                        |         | J126033010010S |     |
| U2200                       | nsp           | IC ABT2015                             |         | J080201500020S | *   |
| U2201                       | 00D9630244907 | IC SN74LV14APWR                        |         | J040741400180S |     |
| U2500                       | nsp           | IC K4T51163QI-HCE7                     |         | J001451163270S |     |
| U2501                       | nsp           | IC K4T51163QI-HCE7                     |         | J001451163270S |     |
| U2800                       | 00D9630237503 | MODULE JSR1165-C                       |         | E100116500040S |     |
| U2801                       | 00D9630237503 | MODULE JSR1165-C                       |         | E100116500040S |     |
| U2802                       | 00D9630113009 | MODULE JST1165                         |         | E100116500030S |     |
| U2803                       | 00D2623077900 | IC TC74VHCU04FT                        |         | J040740405580S |     |
| U2805                       | 236810062608S | IC LC89058W-E                          |         | J046890580020S |     |
| U2806                       | 236810062608S | IC LC89058W-E                          |         | J046890580020S |     |
| U2807                       | 236810062608S | IC LC89058W-E                          |         | J046890580020S |     |
| U3000                       | 963243011520S | IC PAL/PLD<br>(EPM240T100C5N)          |         | 8952331100060  | *   |
| U3001                       | 236810083506S | IC CS2100-10-CZZR                      |         | J120210005510S | *   |
| U3200                       | nsp           | IC ADSP21367KSWZ2A1182                 |         | J080213675530S |     |
| U3201                       | 963239010680S | IC W9864G2IH-6                         |         | J001986460060S | *   |
| U3202                       | 963243011530S | IC MEMORY FLASH<br>(EN29LV160BB-70TIP) |         | 8952331100050  | *   |
| U3800                       | 236810070500S | IC AK4424ET-E2 TSSOP16                 |         | J042442405520S |     |
| U3801                       | 236810070500S | IC AK4424ET-E2 TSSOP16                 |         | J042442405520S |     |
| U3802                       | 236810086505S | IC AK5358BET-E2                        |         | J043535805520S | *   |
| U3803                       | 236810073509S | IC AK4358VQ-L                          |         | J042435800010S |     |
| U3804                       | 00D2631289900 | IC AZ4580M                             |         | J121458000020S |     |
| U3805                       | 00D2631289900 | IC AZ4580M                             |         | J121458000020S |     |
| U3806                       | 00D2631289900 | IC AZ4580M                             |         | J121458000020S |     |
| U3807                       | 00D2631289900 | IC AZ4580M                             |         | J121458000020S |     |
| U3900                       | nsp           | IC,ANALOG DM860                        |         | J080860000010S | *   |
| U3901                       | nsp           | IC MEMORY FLASH<br>(HY27UF081G2A-TPCB) |         | 8952331100040  | *   |
| U3902                       | 246810031601S | IC W9825G6EH-6J                        |         | J001982560010S | *   |
| U4200                       | 00D2790055907 | SW,POLY MICROSMD175F                   |         | G300017500010S |     |
| U4201                       | 103810002508S | PULSE TRANS                            |         | D900100015510S | *   |
| U4202                       | nsp           | IC LAN8700-AEZG-TR                     |         | J127870010010S | *   |
| U4203                       | 00D2623711004 | IC,LOGIC SAA7121H                      |         | J045712100010S |     |
| U4204                       | nsp           | IC MFI341S2164                         |         | J044341216410S |     |
| U4600                       | 231810069505S | IC AOZ1021AI                           |         | J048102100010S |     |
| U4601                       | nsp           | IC EX3AV                               |         | J048030030010S | *   |
| U4602                       | nsp           | IC EX3AV                               |         | J048030030010S | *   |
| U4603                       | nsp           | IC EX3AV                               |         | J048030030010S | *   |
| U4604                       | nsp           | IC EX3AV                               |         | J048030030010S | *   |
| U4605                       | nsp           | IC EX3AV                               |         | J048030030010S | *   |

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| Ref. No.   | Part No.      | Part Name                              | Remarks | Q'ty           | New |
|------------|---------------|----------------------------------------|---------|----------------|-----|
| U4606      | nsp           | IC PQ033DNA1ZPH                        |         | J126033010010S |     |
| U4607      | nsp           | IC PQ033DNA1ZPH                        |         | J126033010010S |     |
| U4608      | 234810015507S | IC BU4248F                             |         | J126424800010S |     |
| U5100      | 00MHC007805KZ | IC TC74VHCT125AFT                      |         | J040741255580S |     |
| U5101      | 963243011550S | IC MEMORY FLASH<br>(EN29LV160BB-70TIP) |         | 8952331100030  | *   |
| U5102      | 234810014504S | IC MC14094BDTR2G                       |         | J040140940020S |     |
| U5103      | 00D2623437906 | IC TC74VHCT244AFT                      |         | J040742445540S |     |
| U5104      | 234810014504S | IC MC14094BDTR2G                       |         | J040140940020S |     |
| U5105      | 00D2623410907 | IC TC74VHCT08AFT                       |         | J040740800090S |     |
| U5106      | 234810014504S | IC MC14094BDTR2G                       |         | J040140940020S |     |
| U5107      | 234810014504S | IC MC14094BDTR2G                       |         | J040140940020S |     |
| U5108      | 00D2623444902 | IC TC74VHC08FT                         |         | J040740800280S |     |
| U5109      | 234810014504S | IC MC14094BDTR2G                       |         | J040140940020S |     |
| U5301      | 963243011560S | IC CPU MICRO PROCESS<br>(R5F64169DFD)  |         | 8952331100010  | *   |
| U5302      | 246810026500S | IC R1EX24256ASAS0A                     |         | J000242565550S |     |
| U5500      | 963243011570S | IC CPU MICRO PROCESS<br>(R5F3650KNFB)  |         | 8952331100020  | *   |
| Q1         | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q2         | 00D9600285006 | TR KRC104S (ND)                        |         | J522104S00210S |     |
| Q1001,1002 | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q1004,1005 | 00D9600285006 | TR KRC104S (ND)                        |         | J522104S00210S |     |
| Q1007-1009 | 00D9600285006 | TR KRC104S (ND)                        |         | J522104S00210S |     |
| Q1100-1102 | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q1103-1106 | 00D9600285006 | TR KRC104S (ND)                        |         | J522104S00210S |     |
| Q1600      | 00D9600285006 | TR KRC104S (ND)                        |         | J522104S00210S |     |
| Q1601      | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q1800      | 00D9630120704 | TR KRA102S(PB)                         |         | J520010200210S |     |
| Q1801      | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q1802,1803 | 00D9600285006 | TR KRC104S (ND)                        |         | J522104S00210S |     |
| Q2000      | 00D9600285006 | TR KRC104S (ND)                        |         | J522104S00210S |     |
| Q2001      | 00D2750110905 | SEMI HN1K02FU                          |         | J543102000020S |     |
| Q2200      | 00D2750110905 | SEMI HN1K02FU                          |         | J543102000020S |     |
| Q2201      | 00D9600285006 | TR KRC104S (ND)                        |         | J522104S00210S |     |
| Q3200      | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q3201      | 00D9630120704 | TR KRA102S(PB)                         |         | J520010200210S |     |
| Q3900      | 00D9630120704 | TR KRA102S(PB)                         |         | J520010200210S |     |
| Q3901      | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q4200      | 963219004200S | CHIP FDC608PZ P-CH                     |         | J543608000010S |     |
| Q4201      | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q4600      | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q4601      | 00D9600285006 | TR KRC104S (ND)                        |         | J522104S00210S |     |
| Q4602      | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q4603      | 00D9600285006 | TR KRC104S (ND)                        |         | J522104S00210S |     |
| Q4612      | 00D9630121402 | TR KRA104S                             |         | J520010400210S |     |
| Q4614-4619 | 00D9630121402 | TR KRA104S                             |         | J520010400210S |     |
| Q4620      | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q4621      | 963219004200S | CHIP FDC608PZ P-CH                     |         | J543608000010S |     |
| Q4623-4628 | 963219004200S | CHIP FDC608PZ P-CH                     |         | J543608000010S |     |
| Q4629-4631 | 00D2710326904 | TR 2SA 2SA1954                         |         | J520195405510S |     |
| Q4632      | 00MHZ2000921Y | CHIP DAN202U 1.2V                      |         | K005020200200S |     |
| Q4633,4634 | 00D2710326904 | TR 2SA 2SA1954                         |         | J520195405510S |     |
| Q4635,4636 | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q4638,4639 | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q4640      | 00D9630328302 | TR 2SC KTC3875G(ALG)                   |         | J5223875G0210S |     |
| Q4643      | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q4644      | 00D9600285006 | TR KRC104S (ND)                        |         | J522104S00210S |     |
| Q4645      | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q4646      | 00D9600285006 | TR KRC104S (ND)                        |         | J522104S00210S |     |
| Q5100      | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q5101      | 00D2710326904 | TR 2SA 2SA1954                         |         | J520195405510S |     |
| Q5102      | 00D9630120801 | TR 2SC KRC102S (NB)                    |         | J522010200210S |     |
| Q5103      | 00D2710312905 | SEMI KTA1504G                          |         | J5201504G0210S |     |
| Q5104,5105 | 00D9630328302 | TR 2SC KTC3875G(ALG)                   |         | J5223875G0210S |     |

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| Ref. No.                | Part No.      | Part Name              | Remarks |                | Q'ty | New |
|-------------------------|---------------|------------------------|---------|----------------|------|-----|
| Q5106                   | 00D2710312905 | SEMI KTA1504G          |         | J5201504G0210S |      |     |
| Q5107-5111              | 00D9630328302 | TR 2SC KTC3875G(ALG)   |         | J5223875G0210S |      |     |
| Q5112-5115              | 00D9630120801 | TR 2SC KRC102S (NB)    |         | J522010200210S |      |     |
| Q5303,5304              | 00D9630120801 | TR 2SC KRC102S (NB)    |         | J522010200210S |      |     |
| Q5306                   | 00D9630328302 | TR 2SC KTC3875G(ALG)   |         | J5223875G0210S |      |     |
| Q5307                   | 00D9630120704 | TR KRA102S(PB)         |         | J520010200210S |      |     |
| Q5310-5313              | 00D9630121402 | TR KRA104S             |         | J520010400210S |      |     |
| Q5314,5315              | 00D9630120801 | TR 2SC KRC102S (NB)    |         | J522010200210S |      |     |
| Q5500                   | 00D9630328302 | TR 2SC KTC3875G(ALG)   |         | J5223875G0210S |      |     |
| Q5501                   | 00D9630120704 | TR KRA102S(PB)         |         | J520010200210S |      |     |
| Q5502                   | 963219002180S | TR 2SD2114KT146W       |         | J5232114K0010S |      |     |
| Q5503                   | 00D9630120801 | TR 2SC KRC102S (NB)    |         | J522010200210S |      |     |
| Q5504                   | 00D9630328302 | TR 2SC KTC3875G(ALG)   |         | J5223875G0210S |      |     |
| Q5505,5506              | 00D9630120801 | TR 2SC KRC102S (NB)    |         | J522010200210S |      |     |
|                         |               |                        |         |                |      |     |
| D1001                   | 00D9630328603 | D,SCHOTTKY RB521S-30   |         | K125521300010S |      |     |
| D1801                   | 963209010450S | D,ESD VCH4AG100R8MAT   |         | K067040100080S |      | *   |
| D1802                   | 963209010450S | D,ESD VCH4AG100R8MAT   | E2, E1C | K067040100080S |      |     |
| D4600,4601              | 00D9630355401 | D,SWITCHING KDS4148U   |         | K005041480030S |      |     |
| D5300                   | 00D9630328603 | D,SCHOTTKY RB521S-30   |         | K125521300010S |      |     |
| D5301,5302              | 00D9630355401 | D,SWITCHING KDS4148U   |         | K005041480030S |      |     |
| D5306                   | 00D9630355401 | D,SWITCHING KDS4148U   |         | K005041480030S |      |     |
| D5309                   | 00D9630328603 | D,SCHOTTKY RB521S-30   |         | K125521300010S |      |     |
| D5500                   | 00D9630355401 | D,SWITCHING KDS4148U   |         | K005041480030S |      |     |
|                         |               |                        |         |                |      |     |
|                         |               |                        |         |                |      |     |
|                         |               |                        |         |                |      |     |
| <b>RESISTORS GROUP</b>  |               |                        |         |                |      |     |
| R4903                   | nsp           | R,CHIP 10K-J,1/16W     | E3      | C20001036M111S |      |     |
| R4903                   | nsp           | R,CHIP 4.7K-J,1/16W    | E2, E1C | C20004726M111S |      |     |
| R5111                   | nsp           | R,CHIP 33-J, 1/16W     | E2      | C20003306M101S |      |     |
| R5112                   | nsp           | R,CHIP 33-J, 1/16W     | E3      | C20003306M101S |      |     |
| R5332                   | nsp           | R,CHIP 10K-J,1/16W     | E3, E1C | C20001036M160S |      |     |
| R5340                   | nsp           | R,CHIP 10K-J,1/16W     | E2, E1C | C20001036M160S |      |     |
|                         |               |                        |         |                |      |     |
|                         |               |                        |         |                |      |     |
|                         |               |                        |         |                |      |     |
| <b>CAPACITORS GROUP</b> |               |                        |         |                |      |     |
| C1-5                    | nsp           | C,CERAMIC 0.1UF-K/50V  |         | D011104177101S |      |     |
| C6                      | nsp           | C,CERAMIC 10UF-K/16V   |         | D011106573200S |      |     |
| C7                      | nsp           | C,CERAMIC 1000PF-K/50V |         | D011102177101S |      |     |
| C8                      | nsp           | C,CERAMIC 0.01UF-K/16V |         | D011103177101S |      |     |
| C9                      | nsp           | C,CERAMIC 1000PF-K/50V |         | D011102177101S |      |     |
| C10-20                  | nsp           | C,CERAMIC 10UF-K/16V   |         | D011106573200S |      |     |
| C21,22                  | nsp           | C,CERAMIC 0.1UF-K/50V  |         | D011104177101S |      |     |
| C1001,1002              | 00D9630325004 | C,ELECT 100UF-MVG/6.3V |         | D050101081650S |      |     |
| C1003-1008              | nsp           | C,CERAMIC 0.1UF-K/50V  |         | D011104177101S |      |     |
| C1009                   | nsp           | C,CERAMIC 4.7UF-K/6.3V |         | D011475571160S |      |     |
| C1015                   | nsp           | C,CERAMIC 1000PF-K/50V |         | D011102177101S |      |     |
| C1016,1017              | nsp           | C,CERAMIC 22PF-J/50V   |         | D011220167101S |      |     |
| C1100-1106              | nsp           | C,CERAMIC 0.1UF-K/50V  |         | D011104177101S |      |     |
| C1107                   | nsp           | C,CERAMIC 0.01UF-K/16V |         | D011103177101S |      |     |
| C1108,1109              | nsp           | C,CERAMIC 0.1UF-K/50V  |         | D011104177101S |      |     |
| C1110                   | nsp           | C,CERAMIC 12PF-J/50V   |         | D011120167101S |      |     |
| C1111-1113              | nsp           | C,CERAMIC 0.1UF-K/50V  |         | D011104177101S |      |     |
| C1114                   | nsp           | C,CERAMIC 12PF-J/50V   |         | D011120167101S |      |     |
| C1115,1116              | nsp           | C,CERAMIC 15PF-J/50V   |         | D011150167101S |      |     |
| C1117                   | nsp           | C,CERAMIC 1000PF-K/50V |         | D011102177101S |      |     |
| C1118                   | nsp           | C,CERAMIC 4.7UF-K/6.3V |         | D011475571160S |      |     |
| C1121-1124              | nsp           | C,CERAMIC 0.1UF-K/50V  |         | D011104177101S |      |     |
| C1125                   | nsp           | C,CERAMIC 4.7UF-K/6.3V |         | D011475571160S |      |     |
| C1126                   | nsp           | C,CERAMIC 0.1UF-K/50V  |         | D011104177101S |      |     |
| C1128-1132              | nsp           | C,CERAMIC 0.1UF-K/50V  |         | D011104177101S |      |     |
| C1133                   | nsp           | C,CERAMIC 4.7UF-K/6.3V |         | D011475571160S |      |     |
| C1134                   | nsp           | C,CERAMIC 0.1UF-K/50V  |         | D011104177101S |      |     |
| C1137                   | nsp           | C,CERAMIC 0.1UF-K/50V  |         | D011104177101S |      |     |
| C1139                   | nsp           | C,CERAMIC 0.1UF-K/50V  |         | D011104177101S |      |     |
| C1141-1143              | nsp           | C,CERAMIC 10UF-K/16V   |         | D011106573200S |      |     |
| C1145                   | nsp           | C,CERAMIC 0.1UF-K/50V  |         | D011104177101S |      |     |

| Ref. No.   | Part No.      | Part Name                  | Remarks |                | Q'ty | New |
|------------|---------------|----------------------------|---------|----------------|------|-----|
| C1156,1157 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1159      | nsp           | C,CERAMIC 10UF-K/16V       |         | D011106573200S |      |     |
| C1160      | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1162      | nsp           | C,CERAMIC0.082UF-Z/50V     |         | D011823597160S |      |     |
| C1163      | nsp           | C,CERAMIC 0.01UF-K/50V     |         | D011103777160S |      |     |
| C1164      | nsp           | C,CERAMIC 0.82UF-K/10V     |         | D011824772162S |      |     |
| C1165      | nsp           | C,CERAMIC X7R0.039UF-K/50V |         | D011393707160S |      |     |
| C1166,1167 | nsp           | C,CERAMIC 0.01UF-K/16V     |         | D011103177101S |      |     |
| C1168      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1171      | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1172      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1173,1174 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1175      | nsp           | C,CERAMIC 10UF-K/16V       |         | D011106573200S |      |     |
| C1176-1180 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1182-1187 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1188      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1190      | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1193,1194 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1196,1197 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1200      | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1201      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1204      | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1207      | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1208      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1209      | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1213,1214 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1217,1218 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1219      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1222      | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1237      | nsp           | C,CERAMIC 1000PF-K/50V     |         | D011102177101S |      |     |
| C1238      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1239      | 963134011230S | C, ELECT 330UF-M/6.3V      |         | D041331081020S |      |     |
| C1600      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1602      | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1607-1614 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1615      | nsp           | C,CERAMIC 1000PF-K/50V     |         | D011102177101S |      |     |
| C1616      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1619-1631 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1633      | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1635-1646 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1650,1651 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1653      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1658      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1662      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1664      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1665-1667 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1669      | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1670      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1800,1801 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1802      | nsp           | C,CERAMIC 10UF-K/16V       |         | D011106573200S |      |     |
| C1805-1808 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1809      | nsp           | C,CERAMIC 10UF-K/16V       |         | D011106573200S |      |     |
| C1812-1815 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1816      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C1819,1820 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1821      | nsp           | C,CERAMIC 10UF-K/16V       |         | D011106573200S |      |     |
| C1824-1833 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C1834-1836 | nsp           | C,CERAMIC 1UF-K/10V        |         | D011105772161S |      |     |
| C1839      | 963134011230S | C, ELECT 330UF-M/6.3V      |         | D041331081020S |      |     |
| C2000      | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C2001      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C2004-2007 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C2010      | nsp           | C,CERAMIC 1000PF-K/50V     |         | D011102177101S |      |     |
| C2011      | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C2012      | nsp           | C,CERAMIC 2200PF-K/50V     |         | D011222177101S |      |     |
| C2013,2014 | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C2016      | nsp           | C,CERAMIC 0.012UF-K/50V    |         | D011123177161S |      |     |

| Ref. No.   | Part No. | Part Name               | Remarks |                | Q'ty | New |
|------------|----------|-------------------------|---------|----------------|------|-----|
| C2018      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2020      | nsp      | C,CERAMIC 0.15uF-K/10V  |         | D011154172160S |      |     |
| C2200      | nsp      | C,CERAMIC 5PF-C/50V     |         | D011050107101S |      |     |
| C2201      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C2204      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2206      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2208      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2210      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2212      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2214      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2216      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2218      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2220      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2221      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C2222      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2224      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2227      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2237      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C2241-2247 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2254-2259 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2260      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C2263      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2265-2270 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2279      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2280      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C2282      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2283      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C2285      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2286      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C2287,2288 | nsp      | C,CERAMIC 8PF-D/50V     |         | D011080117101S |      |     |
| C2290      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2500-2502 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2503      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C2505      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2506      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C2508-2516 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2524-2526 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2527      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C2529      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2530      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C2532-2540 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2800-2802 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2805-2809 | nsp      | C,CERAMIC 0.01UF-K/16V  |         | D011103177101S |      |     |
| C2810      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C2811-2824 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2825,2826 | nsp      | C,CERAMIC 10PF-D/50V    |         | D011100117101S |      |     |
| C2827-2832 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2833      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C2835      | nsp      | C,CERAMIC 1000PF-K/50V  |         | D011102177101S |      |     |
| C2836      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2837      | nsp      | C,CERAMIC 1000PF-K/50V  |         | D011102177101S |      |     |
| C2838      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2839      | nsp      | C,CERAMIC 1000PF-K/50V  |         | D011102177101S |      |     |
| C2840      | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C2841-2843 | nsp      | C,CERAMIC 0.022UF-Z/50V |         | D011223597160S |      |     |
| C2844-2849 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C3000-3005 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C3006      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C3007      | nsp      | C,CERAMIC 1000PF-K/50V  |         | D011102177101S |      |     |
| C3008,3009 | nsp      | C,CERAMIC 100PF-J/50V   |         | D011101167101S |      |     |
| C3010,3011 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C3012      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |
| C3013      | nsp      | C,CERAMIC 1000PF-K/50V  |         | D011102177101S |      |     |
| C3014      | nsp      | C,CERAMIC 100PF-J/50V   |         | D011101167101S |      |     |
| C3200-3209 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C3218-3240 | nsp      | C,CERAMIC 0.1UF-K/50V   |         | D011104177101S |      |     |
| C3241      | nsp      | C,CERAMIC 4.7UF-K/6.3V  |         | D011475571160S |      |     |

| Ref. No.   | Part No.      | Part Name                 | Remarks |                | Q'ty | New |
|------------|---------------|---------------------------|---------|----------------|------|-----|
| C3242      | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C3243      | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C3244      | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C3247-3252 | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C3253      | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C3254-3259 | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C3260-3262 | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C3264      | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C3265,3266 | nsp           | C,CERAMIC 7PF-C/50V       |         | D011070117101S |      |     |
| C3267-3280 | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C3800-3803 | nsp           | C,CERAMIC 1UF-K/10V       |         | D011105772161S |      |     |
| C3804      | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C3806-3809 | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C3810-3813 | nsp           | C,CERAMIC 2200PF-K/50V    |         | D011222777160S |      |     |
| C3814      | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C3816      | nsp           | C,CERAMIC 1UF-K/10V       |         | D011105772161S |      |     |
| C3818      | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C3819      | nsp           | C,CERAMIC 1UF-K/10V       |         | D011105772161S |      |     |
| C3820,3821 | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C3822-3841 | nsp           | C,CERAMIC 1000PF-K/50V    |         | D011102177101S |      |     |
| C3842,3843 | 00D9630338606 | C,ELECT 10UF-MVG/16V      |         | D050100083470S |      |     |
| C3844      | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C3845,3846 | nsp           | C,CERAMIC 4700PF-K/50V    |         | D011472777160S |      |     |
| C3848      | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C3849      | 963134000450S | C,ELECT 100UF-MVG/16V     |         | D050101083660S |      |     |
| C3850,3851 | nsp           | C,CERAMIC X7R3900PF-K/50V |         | D011392777160S |      |     |
| C3852      | nsp           | C,CERAMIC X7R2700PF-K/50V |         | D011272777160S |      |     |
| C3853-3855 | nsp           | C,CERAMIC X7R3900PF-K/50V |         | D011392777160S |      |     |
| C3856,3857 | nsp           | C,CERAMIC X7R2700PF-K/50V |         | D011272777160S |      |     |
| C3858-3873 | nsp           | C,CERAMIC 470PF-J/50V     |         | D010471167160S |      |     |
| C3874,3875 | 963134000450S | C,ELECT 100UF-MVG/16V     |         | D050101083660S |      |     |
| C3878      | nsp           | C,CERAMIC 1000PF-K/50V    |         | D011102177101S |      |     |
| C3900      | nsp           | C,CERAMIC 1000PF-K/50V    |         | D011102177101S |      |     |
| C3901,3902 | nsp           | C,CERAMIC 12PF-J/50V      |         | D011120167101S |      |     |
| C3904-3907 | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C3908-3918 | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C3923      | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C3926-3929 | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C3930-3939 | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C3944      | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C3947      | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C3950-3958 | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C4200      | nsp           | C,CERAMIC 1000PF-K/50V    |         | D011102177101S |      |     |
| C4201      | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C4202      | nsp           | C,CERAMIC 0.022UF-Z/50V   |         | D011223597160S |      |     |
| C4203      | nsp           | C,CERAMIC 1000PF-K/50V    |         | D011102177101S |      |     |
| C4204      | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C4205      | nsp           | C,CERAMIC 1000PF-K/50V    |         | D011102177101S |      |     |
| C4206      | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C4207,4208 | nsp           | C,CERAMIC 15PF-J/50V      |         | D011150167101S |      |     |
| C4209      | nsp           | C,CERAMIC 1000PF-K/50V    |         | D011102177101S |      |     |
| C4210,4211 | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C4213      | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C4215,4216 | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C4218      | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C4219-4222 | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C4223      | nsp           | C,CERAMIC 1000PF-K/50V    |         | D011102177101S |      |     |
| C4224,4225 | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C4226      | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C4228,4229 | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C4234      | nsp           | C,CERAMIC 4.7UF-K/6.3V    |         | D011475571160S |      |     |
| C4243-4247 | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C4248,4249 | nsp           | C,CERAMIC 1PF-C/50V       |         | D011010107100S |      |     |
| C4600-4604 | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C4610      | nsp           | C,CERAMIC 0.1UF-K/50V     |         | D011104177101S |      |     |
| C4618      | nsp           | C,CERAMIC 10UF-K/16V      |         | D011106573200S |      |     |
| C4622-4627 | nsp           | C,CERAMIC 10UF-K/16V      |         | D011106573200S |      |     |

| Ref. No.                  | Part No.      | Part Name                  | Remarks |                | Q'ty | New |
|---------------------------|---------------|----------------------------|---------|----------------|------|-----|
| C4628-4632                | nsp           | C,CERAMIC 0.01UF-K/16V     |         | D011103177101S |      |     |
| C4633-4637                | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C4638-4647                | nsp           | C,CERAMIC 10UF-K/16V       |         | D011106573200S |      |     |
| C4648                     | nsp           | C,CERAMIC 2200PF-K/50V     |         | D011222777160S |      |     |
| C4649,4650                | nsp           | C,CERAMIC 10UF-K/16V       |         | D011106573200S |      |     |
| C4651-4655                | nsp           | C,CERAMIC 15PF-J/50V       |         | D011150167101S |      |     |
| C4656                     | nsp           | C,CERAMIC 10UF-K/16V       |         | D011106573200S |      |     |
| C4668                     | nsp           | C,CERAMIC 0.01UF-K/16V     |         | D011103177101S |      |     |
| C4670-4675                | nsp           | C,CERAMIC 0.01UF-K/16V     |         | D011103177101S |      |     |
| C4676                     | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C4678-4684                | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C4717,4718                | nsp           | C,CERAMIC 1UF-K/10V        |         | D011105772161S |      |     |
| C4727,4728                | nsp           | C,CERAMIC 1UF-K/10V        |         | D011105772161S |      |     |
| C4785                     | nsp           | C,CERAMIC X7R0.015UF-K/50V |         | D011153777160S |      |     |
| C4791                     | 00D9630325402 | C,ELECT 470UF-MVG/6.3V     |         | D050471081200S |      |     |
| C4792,4793                | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C4795                     | nsp           | C,CERAMIC 1UF-K/10V        |         | D011105772161S |      |     |
| C4796,4797                | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C4800                     | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C4803                     | nsp           | C,CERAMIC 1000PF-K/50V     |         | D011102177101S |      |     |
| C4914-4923                | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C4925                     | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C4927                     | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5100                     | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5101                     | nsp           | C,CERAMIC 1000PF-K/50V     |         | D011102177101S |      |     |
| C5102                     | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5104,5105                | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5107-5114                | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5115                     | nsp           | C,CERAMIC 0.01UF-K/16V     |         | D011103177101S |      |     |
| C5116                     | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5117-5120                | nsp           | C,CERAMIC 0.01UF-K/16V     |         | D011103177101S |      |     |
| C5300                     | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5301                     | nsp           | C,CERAMIC 1000PF-K/50V     |         | D011102177101S |      |     |
| C5302                     | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5303                     | nsp           | C,CERAMIC 1000PF-K/50V     |         | D011102177101S |      |     |
| C5310-5312                | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5313                     | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C5319                     | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C5320                     | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5321,5322                | nsp           | C,CERAMIC 10PF-D/50V       |         | D011100117101S |      |     |
| C5323-5327                | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5500                     | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5502,5503                | nsp           | C,CERAMIC 10PF-J/50V       |         | D010100167161S |      |     |
| C5504,5505                | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5506                     | nsp           | C,CERAMIC 4.7UF-K/6.3V     |         | D011475571160S |      |     |
| C5513                     | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5515                     | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C5516                     | nsp           | C,CERAMIC 220PF-K/50V      |         | D011221177101S |      |     |
| C5517                     | nsp           | C,CERAMIC 0.1UF-K/50V      |         | D011104177101S |      |     |
| C9064                     | nsp           | C,CERAMIC 5PF-C/50V        |         | D011050107101S |      |     |
| C9068                     | nsp           | C,CERAMIC 5PF-C/50V        |         | D011050107101S |      |     |
|                           |               |                            |         |                |      |     |
|                           |               |                            |         |                |      |     |
| <b>OTHERS PARTS GROUP</b> |               |                            |         |                |      |     |
| L1100                     | nsp           | COIL,BEAD CBW160808U121T   |         | D340160811210S |      |     |
| L1101                     | nsp           | COIL,BEAD BLM21PG221SN1    |         | D340201212210S |      |     |
| L1600,1601                | nsp           | COIL,BEAD BLM21PG221SN1    |         | D340201212210S |      |     |
| L1800-1802                | nsp           | COIL,CHIP FLC32C220K       |         | D307322205520S |      |     |
| L1804                     | nsp           | R THICK 0-J,1/8W           |         | C200000061300S |      |     |
| L2200                     | nsp           | COIL,CHIP FLC32C220K       |         | D307322205520S |      |     |
| L2203-2205                | nsp           | COIL,CHIP FLC32C220K       |         | D307322205520S |      |     |
| L2500,2501                | nsp           | COIL,CHIP FLC32C220K       |         | D307322205520S |      |     |
| L3000                     | nsp           | COIL,BEAD CBW160808U121T   |         | D340160811210S |      |     |
| L3900-3902                | nsp           | COIL,BEAD BLM21PG221SN1    |         | D340201212210S |      |     |
| L4200,4201                | nsp           | COIL,CHIP DLW21SN900HQ2L   |         | D311201219000S |      |     |
| L4202-4206                | nsp           | COIL,BEAD BLM21PG221SN1    |         | D340201212210S |      |     |
| L4208                     | nsp           | COIL,BEAD CBW160808U121T   |         | D340160811210S |      |     |

| Ref. No.   | Part No.      | Part Name                        | Remarks |                | Q'ty | New |
|------------|---------------|----------------------------------|---------|----------------|------|-----|
| L4211      | nsp           | R THICK 0-J,1/10W                |         | C200000060200S |      |     |
| L4212      | nsp           | COIL,CHIP DLW21SN181SQ2L         |         | D311201211810S |      |     |
| L4600-4611 | nsp           | COIL,BEAD BLM21PG221SN1          |         | D340201212210S |      |     |
| L4612      | nsp           | COIL,INDUCTOR B82464Z4103M       |         | D310824641030S |      |     |
| L4613,4614 | nsp           | COIL,BEAD BLM21PG221SN1          |         | D340201212210S |      |     |
| L4619,4620 | nsp           | R,CHIP THICK 0-J,1/10W           |         | C200000060200S |      |     |
| L4625-4627 | nsp           | COIL,BEAD BLM21PG221SN1          |         | D340201212210S |      |     |
| L4628      | nsp           | COIL,BEAD CBW160808U121T         |         | D340160811210S |      |     |
| L4982,4983 | nsp           | R,THICK 0-J,1/16W                |         | C20000006M160S |      |     |
| L5039      | nsp           | R,CHIP THICK 0-J,1/10W           |         | C200000060200S |      |     |
|            |               |                                  |         |                |      |     |
| X1102,1103 | 141810044504S | CRYSTAL CHIP FCX-04(28.63636MHz) |         | E80528R636380S |      | *   |
| X2201      | 141810045507S | CRYSTAL CHIP FCX-04(27MHz)       |         | E80527R000080S |      | *   |
| X2801      | 141810046500S | CRYSTAL CHIP FCX-04(24.576MHz)   |         | E80524R576080S |      | *   |
| X3201      | 141810047503S | CRYSTAL CHIP FCX-04(20.815MHz)   |         | E80520R815080S |      | *   |
| X3900      | 963141010990S | CRYSTAL CHIP FCX-04(24MHz)       |         | E80524R000080S |      | *   |
| X5301      | 141810048506S | CRYSTAL CHIP FCX-04(16MHz)       |         | E80516R000080S |      | *   |
| X5501      | 141810048506S | CRYSTAL CHIP FCX-04(16MHz)       |         | E80516R000080S |      | *   |
|            |               |                                  |         |                |      |     |
| K1         | nsp           | CN.WAFER 19P YKF45-7074N HDMI    |         | L109100190450S |      | *   |
| K1001      | nsp           | CN.WAFER 19P YKF45-7074N HDMI    |         | L109100190450S |      | *   |
| K1002      | nsp           | CN.WAFER 19P YKF45-7074N HDMI    |         | L109100190450S |      | *   |
| K1100      | nsp           | CN.WAFER 19P YKF45-7074N HDMI    |         | L109100190450S |      | *   |
| K1101      | nsp           | CN.WAFER 19P YKF45-7074N HDMI    |         | L109100190450S |      | *   |
| K1102      | nsp           | CN.WAFER 19P YKF45-7074N HDMI    |         | L109100190450S |      | *   |
| K2800      | 00D963021790S | TER,RCA 2PIN                     |         | G601206A0200YS |      |     |
| K5300      | 00D9630294601 | JACK,D3.5 EARPHONE               |         | G40100350000YS |      |     |
| K5301      | 643010086002S | JACK,D3.5 EARPHONE               |         | G40130802000YS |      |     |
| K5302      | 643010086002S | JACK,D3.5 EARPHONE               |         | G40130802000YS |      |     |
|            |               |                                  |         |                |      |     |
| N1         | nsp           | CN.FPC 23P                       |         | L130100162330S |      |     |
| N1001      | nsp           | CN.FPC 23P                       |         | L130100162330S |      |     |
| N1800      | nsp           | CN.WAFER 19P YKF45-7074N HDMI    |         | L109100190450S |      |     |
| N1801      | nsp           | CN.WAFER 19P YKF45-7074N HDMI    |         | L109100190450S |      |     |
| N3000      | nsp           | CN.FPC 7P                        |         | L130100160730S |      |     |
| N3900      | nsp           | CN.FPC 7P                        | E3      | L130100160730S |      |     |
| N4200      | nsp           | JACK YKS11-0088N                 |         | G4060RJ450110S |      |     |
| N4201      | nsp           | CN.WAFER 5P 20010WS              |         | L101200100510S |      |     |
| N4610      | nsp           | CN.WAFER 5P SMW250               |         | L102050010040S |      |     |
| N4905      | nsp           | CN.WAFER 5P 20022WS              |         | L101200220510S |      |     |
| N4907      | nsp           | CN,WAFER 25P C125Z2              |         | L109012522510S |      |     |
| N4908      | nsp           | CN,WAFER 11P C125Z2              |         | L109012521110S |      |     |
| N4909      | nsp           | CN.FPC 40P 1022HS                |         | L130100220400S |      |     |
| N4910      | nsp           | CN,WAFER 19P C125Z2              |         | L109012521910S |      |     |
| N4911      | nsp           | CN,WAFER 17P C125Z2              |         | L109012521710S |      |     |
| N4912      | nsp           | CN,WAFER 13P C125Z2              |         | L109012521310S |      |     |
| N4913      | nsp           | CN,WAFER 19P C125Z2              |         | L109012521910S |      |     |
| N4914      | nsp           | CN,WAFER 17P C125Z2              |         | L109012521710S |      |     |
| N4916      | nsp           | CN.WAFER 33P C125Z2              |         | L109012523310S |      |     |
| N5301      | nsp           | CN.FPC 11P                       | E3      | L130100161130S |      |     |
| N5500      | nsp           | CN.FPC 11P                       | E3      | L130100161130S |      |     |
|            |               |                                  |         |                |      |     |
| Z3         | nsp           | CLAMP STYLE PIN 1P               | E3      | 4330210162000S |      |     |
|            |               |                                  |         |                |      |     |
|            | nsp           | BRACKET                          |         | 4010214786000S |      |     |

Personal notes: