Service Manual

ViewSonic N4200w-1(M)

Model No. VS10945-1M

42” LCD TV

(N4200w-1M_SM_Rev.1a_Apr.2006)

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Revision History

Revision	SM Editing Date	ECR Number	Description of Changes	Editor
1a	04/11/06		Initial Release	Sophia Kao

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1. Precaution and Safety Notices

1.1 Safety Precautions

This LCD TV is manufactured and tested on a ground principle that a user's safety comes first. However, improper or installation may cause damage to the LCD TV as well as to the user. Carefully go over the following WARNINGS before installing and keep this guide handy.

W ARNINGS:

Read these instructions completely before using the equipment.
Keep these instructions in a safe place.

1. Heed all warnings.
2. Follow all instructions.
3. Do not use this equipment near water.
4. Clean with a soft, dry cloth. If further cleaning is required, see "Cleaning the Display" in this guide for further instructions.
5. Do not block any ventilation openings. Install the equipment in accordance with the manufacturer's instructions.
6. Do not install near any heat sources such as radiators, heat registers, stoves, or other devices (including amplifiers) that produce heat.
7. Do not attempt to circumvent the safety provisions of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade and the third prong are provided for your safety. If the plug does not fit into your outlet, consult an electrician for replacement of the outlet.
8. Protect the power cord from being tread upon or pinched, particularly at the plug, and the point where if emerges from the equipment. Be sure that the power outlet is located near the equipment so that it is easily accessible.
9. Only use attachments/accessories specified by the manufacturer.
10. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the equipment. When a cart is used, use caution when moving the cart/ equipment combination to avoid injury from tipping over.

11. Unplug this equipment when it will be unused for long periods of time.

Refer all servicing to qualified service personnel. Service is required when the unit has been damaged in any way, such as: if the power-supply cord or plug is damaged, if liquid is spilled onto or objects fall into the unit, if the unit is exposed to rain or moisture, or if the unit does not operate normally or has been dropped.

1.2 Product Safety Notice

Electrical and Mechanical parts in this chassis have special safety visual inspections and the protection afforded by them can not necessarily be obtained by using replacement components rated for higher voltages, wattages, etc. Before replacing any of these components read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

1.3 Service Notice

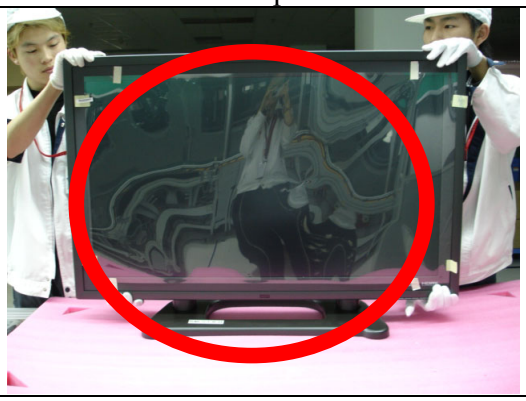
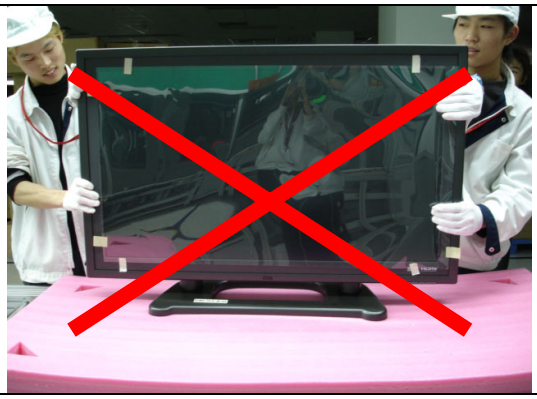
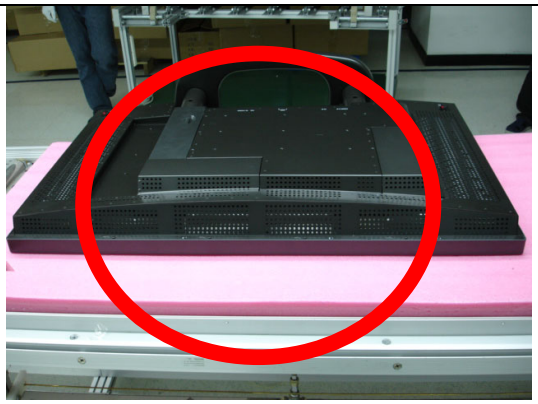
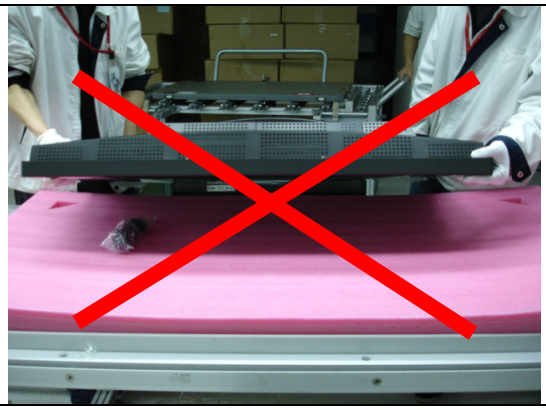
1. When replacing parts or circuit boards, clamp the lead wires around terminals before soldering.
2. When replacing a high wattage resistor (more that 1W of metal oxide film resistor) in circuit board, keep the resistor about 5mm away from circuit board.
3. Keep wires away from high voltage, high temperature components and sharp edges.
4. Keep wires in their original position so as to reduce interference.

1.4 LCD TV Handling Precaution

1. Handling Precautions

(1)Since front polarizer is easily damaged, pay attention not to scratch it.
(2)Be sure to turn off power supply when inserting or disconnecting from input connector.
(3)Wipe off water drop immediately. Long contact with water may cause discoloration or spots.
(4)When the panel surface is soiled, wipe it with absorbent cotton or other soft cloth.
(5)Since the panel is made of glasses, it may break or crack if dropped or bumped on hard surface.
(6)Since CMOS LSI is used in this module, take care of static electricity and ensure human earth when handling.
(7)Do not open nor modify the Module Assembly.
(8)Do not press the reflector sheet at the back of the module to any directions.
(9)In case that if a Module has to be put back into the packing container slot after once it was taken out from the container, do not press the center of the CCFL Reflector edge. Instead, press at the far ends of the CFL Reflector edge softly. Otherwise the TFT Module may be damaged.
(10)At the insertion or removal of the SIGNAL Interface Connector, be sure not to rotate nor tilt the Interface Connector of the TFT Module.
(11)After installation of the TFT Module into an enclosure (LCD TV housing, for example), do not twist nor bend the TFT Module even momentary. At designing the enclosure, it should be taken into consideration that no bending/twisting forces are applied to the TFT Module from outside. Otherwise the TFT Module may be damaged.
(12)Cold cathode fluorescent lamp in LCD contains a small amount of mercury. Please follow local ordinances or regulations for disposal.
(13)Small amount of materials having no flammability grade is used in the LCD module. The LCD module should be supplied by power complied with requirements of Limited Power Source (IEC60950 or UL1950), or be applied exemption.
(14)The LCD module is designed so that the CFL in it is supplied by Limited Current Circuit (IEC60950 or UL1950). Do not connect the CFL in Hazardous voltage Circuit.

2. Handling and Placing Methods

Correct Methods:	Incorrect Methods:
Only touch the metal frame of the LCD panel or the front cover of the LCD TV. Do not touch the surface of the polarizer.	Surface of the LCD panel is pressed by fingers and that may cause “Mura”.
	
Take out the LCD TV with cushions.	Take out the LCD TV by grasping the LCD panel. That may cause ”Mura”.
	
Place the LCD TV on a clean and soft foam pad.	Place the LCD TV on foreign objects. That could scratch the surface of the panel or cause “Mura”.
	

2. Service tool & equipment required

1. si gnal generator
2. m ultimeter
3. o scilloscope
4. s crew driver
5. i ron
6. a bsorber
7. s older
8. DVD player
9. Debug board (connect to PC via null-modem RS-232 serial cable)
10. D8330 PCI Card, VGA cable, DVI to HDMI cable, VGA RS-232 cable, DVI RS-232 cable

3. Specification

3.1 Product Specification

LCD	Type	42.02" view able
	Color Filter	0.681 mm (H) x 0.227 (V) mm pixel pitch
	Glass surface	RGB vertical stripe Anti-Glare
Input signal	RGB	RGB analog (0.7/1.0 Vp-p, 75 ohms) Separate Sync, f_h:30-80 kHz, f_v:50-75 Hz
	Video	D-sub x 1 ,HDMI x 2, YPbPr/YCbCr x 2, S-Video x 2, CVBS x 2
	Audio	Mini-stereo (Φ3.5mm x 1), RCA (L/R) x 4
Compatibility	PC	Up to 1360 x 768 Non-interlaced
Resolution		1360 x 768 @ 60 Hz
Speaker Output		10W x 2
Power	Voltage	90-240 VAC, 50/60 Hz
Display area	Full Scan	930.25mm (H) x 523.01 mm (V) 36.62 inch (H) x 20.59 inch (V)
Operating conditions	Temperature	32° F to + 104° F (0° C to + 40° C)
	Humidity	0% to 95% (no condensation)
	Altitude	To 10,000 feet (3,000m)
Storage conditions	Temperature	-4° F to + 140° F (-20° C to + 60° C)
	Humidity	0% to 95% (no condensation)
	Altitude	To 40,000 feet (12,000m)
Dimensions	Physical	1243 mm (W) x 739 mm (H) x 304mm (D) 48.93 inch (W) x 29.09 inch (H) x 11.96 inch (D)
Weight	Net	33kg (72.68 lb)
Regulations		FCC, UL, cUL, NOM
Power saving modes	On	<240 W LED Green
	Passive Off	< 3 W LED Red

Pre-test Timing Mode (Pre-adjusted to GTF 1360 x 768@60Hz)

Warning: Do not set the graphics card in your computer to exceed these refresh rates; doing so may result in permanent damage to the LCD display.

Note: Product specification is subject to change without notice.

3.2 Factory supporting modes

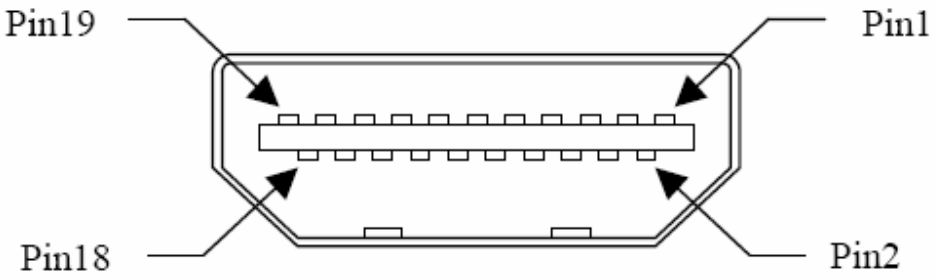
Supporting Modes						
Mode		HDMI R	GB	YPbPr SV	HS	Composite
Standard R	esolution					
	720×400@60Hz	Yes Y	es			
	720×400@70Hz	Yes Y	es			
	720×480@60Hz	Yes Y	es			
	640×480@60Hz	Yes Y	es			
	640×480@72Hz	Yes Y	es			
	640×480@75Hz	Yes Y	es			
	800×600@56Hz	Yes Y	es			
VESA	800×600@60Hz	Yes Y	es			
	800×600@72Hz	Yes Y	es			
VESA	800×600@75Hz	Yes Y	es			
MAC	832×624@75Hz	Yes Y	es	--- --	- ---	
VESA	1024×768@60Hz	Yes Y	es			
	1024×768@70Hz	Yes Y	es			
VESA	1024×768@75Hz	Yes Y	es			
	1280×720@60Hz	Yes Y	es			
	1280×720@75Hz	Yes Y	es			
VESA	1280×768@60Hz	Yes Y	es			
	1280×768@75Hz	Yes Y	es			
VESA	1280×1024@60Hz	Yes Y	es			
	1280×1024@75Hz	Yes Y	es			
	1360×768@60Hz	Yes Y	es			
DVD 480	i(60Hz)	Yes		Yes	Yes	Yes
4	80p(60Hz)	Yes		Yes		
7	20p(50Hz)	Yes		Yes		
7	20p(60Hz)	Yes		Yes		
10	80i(60Hz)	Yes		Yes		

3.3 D-SUB and HDMI Connector

Connector pin assignments for VGA cable
The signal cable connector shall be a molded-over, shield twisted pair cable. The cable shall be 1.8 meters long. The pin assignments shall be listed as below:

Pin No.	Per DDC2B
1	Red Video
2	Green Video
3	Blue Video
4	GROUND
5 GRO	UND
6	Red Video Ground
7	Green Video Ground
8	Blue Video Ground
9	Mandatory +5V Supply for PC Bypass
10	Sync. Ground
11	GROUND
12	Bi-directional Data (SDA) for PC Bypass
13	Horizontal Sync.
14	Vertical Sync.
15	Data Clock (SCL) for PC Bypass

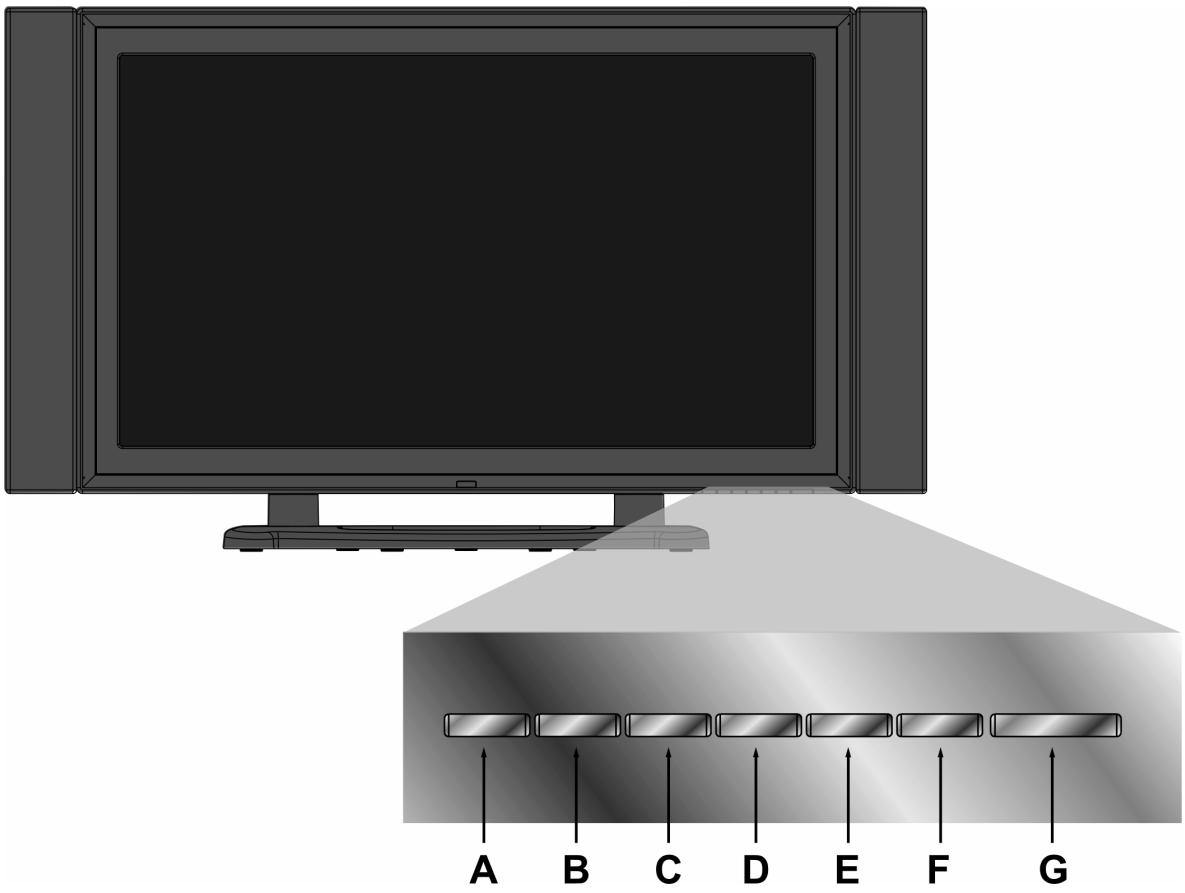
Connector pin assignments for HDMI cable
HDMI: 19 pins HDMI connector is designed to match with HDMI digital signal cable, the pin assignment is as the following:



Pin	Signal Assignment	Pin	Signal Assignment
1	TMDS RX2+	11	TMDS Ground
2	TMDS Ground	12	TMDS Clock-
3	TMDS RX2-	13	CEC
4	TMDS RX1+	14	Floating
5	TMDS Ground	15	DDC Clock
6	TMDS RX1-	16	DDC Data
7	TMDS RX0+	17	Ground
8	TMDS Ground	18	+5V Power
9	TMDS RX0-	19	Hot Plug Detect
10	TMDS Clock+		

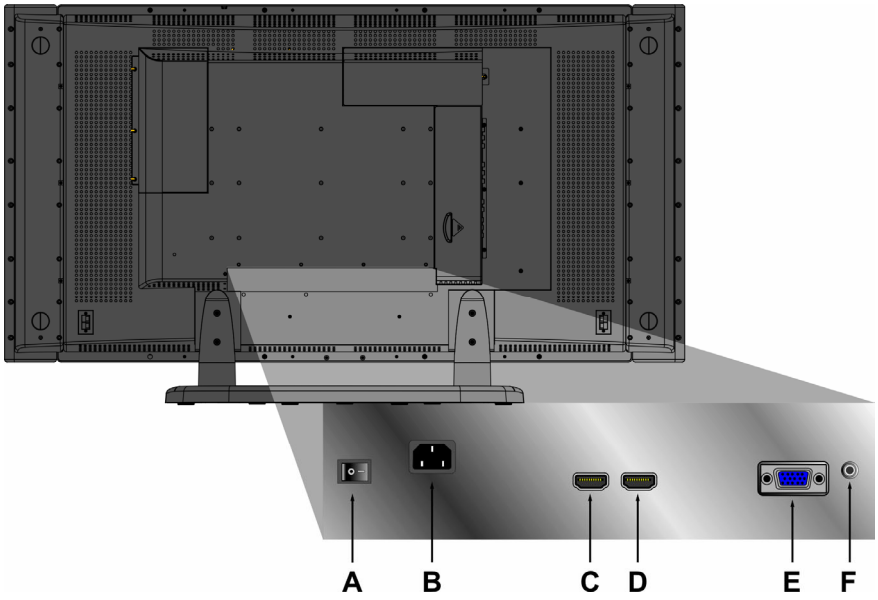
4. Front Panel Function Control Description

4.1 Front View



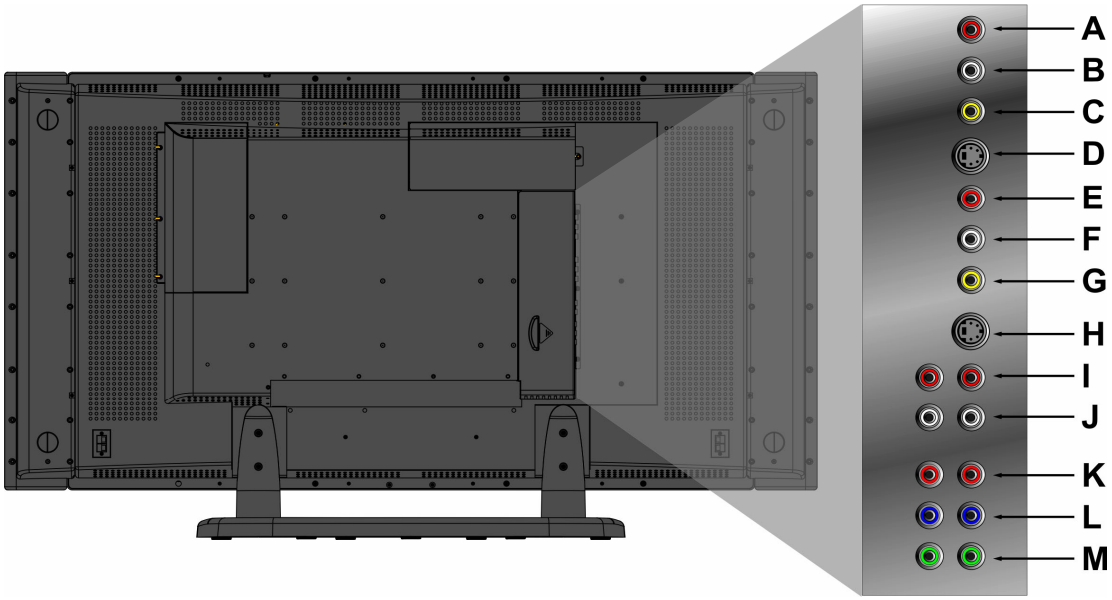
A	**Input**	Select input sources
B	**MENU**	Turn OSD menu ON/OFF
C	**Volume Down**	Decrease volume or adjust a highlighted control decreasingly while in OSD menu
D	**Volume Up**	Increase volume or adjust a highlighted control increasingly while in OSD menu
E	**CH Down**	Channel down/ Scroll down
F	**CH Up**	Channel up/ Scroll up
G	**Power**	Turn the power ON/OFF

4.2 back View



A	**POWER S/W**	Power S/W
B	**AC IN**	Using cable provided, connect a power source.
C	**HDMI(1)**	Have one HDMI cable terminals of your DVD player.
D	**HDMI(2)**	Have one HDMI cable terminals of your DVD player.
E	**VGA**	Connect the VGA cable output of PC to the VGA terminal input.
F	**PC STEREO**	Connect the Audio in cable from audio output of your PC to the audio input terminal.

4.3 Side View



A	**R**	Connect Video/Audio cable from compatible devices into the side jack.
B	**L**	Connect Video/Audio cable from compatible devices into the side jack.
C	**VIDEO**	Connect the external video device such as VCR, DVD, and video game into this jack.
D	**S-V1**	Connect the external video device such as VCR, DVD, and video game into this jack.
E	**R**	Connect Video/Audio cable from compatible devices into the side jack.
F	**L**	Connect Video/Audio cable from compatible devices into the side jack.
G	**VIDEO**	Connect the external video device such as VCR, DVD, and video game into this jack.
H	**S-V2**	Connect the external video device such as VCR, DVD, and video game into this jack.
I	**R**	Connect Audio cable from compatible devices into the side jack.
J	**L**	Connect Audio cable from compatible devices into the side jack.
K	**Pr/Cr**	Connect the external video device into this jack.
L	**Pb/Cb**	Connect the external video device into this jack.
M	**Y**	Connect the external video device into this jack.

5. Adjustment Procedure

5.1 Setup Conditions and Precautions

5.1.1 Adjustments should be undertaken only on those necessary elements since most of them have been carefully preset at the factory.

5.1.2 ESD protection is needed before adjustment.

5.2 Main Adjustments

NO.	F UNCTION	DES IGNATION
1.	EEPROM Initial	F unction Key
2.	Do calibration	F unction Key

5.3 Alignment Procedures

Adjustment Conditions and Precautions:

(A). Power supply voltage:
AC 110/120V±10% 60 Hz±5%, AC 220/240V±10% 50 Hz±5%.
(B). Signals: reference the front detail specifications and timing table.
Video: refer to the specifications given.
(C) Do calibration before test VGA or HDTV.

5.3.1 EEPROM Initial:

A. Switch on the AC-in Power Switch (POWER S/W).
B. Make sure the system is Power on status.
C. Do “Factory Preset” under the OSD Setup menu.
D. Press the “POWER” key to turn off system.
E. Press the “POWER” key to turn on system.

5.3.2. Calibration in VGA or HDTV source Adjustment:

(1) VGA calibration verification:
A. Timing: 1280x720@60Hz.
B. Pattern: 16 gray.
C. Connect VGA port to VG-849 or VG859
D. Press “INPUT” key to open the “Main Source Input” Menu, then select “VGA” item.
E. Press “Power” Key, then the system is soft-power-off status.
F. Press the “VOL-”, “VOL+” and “MENU” key simultaneously, and press the “POWER” key to turn on the system. At this time, the system enters the factory mode.
G: Press “MENU” key to enter the “FACTORY OSD”.
H. Press “CH▼” key to select the “Analog RGB Calibration” item in the factory OSD, and press “VOL+” key then the Calibration will be auto adjusted.

I. After Step H, check Gray Patten on both Main Window and Sub Window with VGA signal. If Color Shift exists or Gray Step Saturation is abnormal, do Step A~H again.

(2) HDTV calibration verification:
A. Timing: 720p@60Hz.
B. Pattern: SMPTE bar.
C. Connect HDTV1 ports to VG-849 or VG859
D. Press “INPUT” key to open the “Main Source Input” Menu, and then select the “HDTV1” item.
E. Press “Power” Key, then the system is soft-power-off status.
F. Press the “VOL-”, “VOL+” and “MENU” key simultaneously, and press the “POWER” key to turn on the system. At this time, the system enters the factory mode.
G. Press “MENU” key to enter the “FACTORY OSD”.
H. Press “CH▼” key to select the “YCbCr Calibration” item in the factory OSD, and press “VOL+” key then the Calibration will be auto adjusted.
I. After Step H, check Gray Patten on both Main Window and Sub Window with HDTV1(YPbPr) signal. If Color Shift exists or Gray Step Saturation is abnormal, do Step A~H again.

5.4 Adjusting Procedures

5.4.1 Function Test

□Video/Audio Receiving Test

I. PC FUNCTION CHECK

- Test Equipment
Color Video Signal & Pattern (or PC with SXGA resolution and a sound card)

- Test Condition
Before function test and alignment, each LCD TV should be warmed up for at least 30 minutes with the following conditions:

(a) In room temperature,
(b) With full-white screen, RGB, and Black
(c) With cycled display modes,
640*480 (H=43.27kHz, V=85Hz)
800*600 (H=53.7kHz, V=85Hz)
1024*768 (H=68.67kHz, V=85Hz)
1280*1024 (H=79.97kHz, V=75Hz)

- Test Display Modes & Pattern

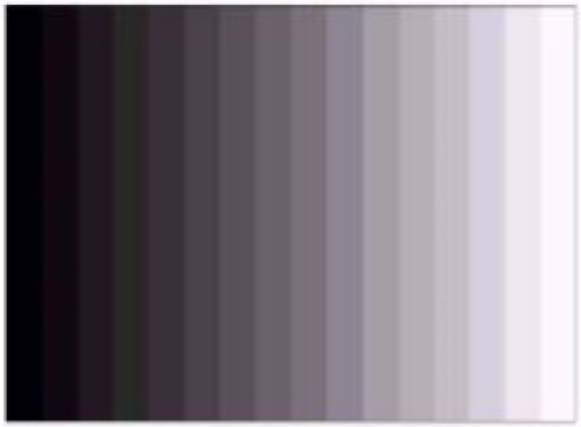
Mode Compatibility Table-N4200w-1M

Analog	Digital
1. 720 x 400 @ 70Hz	1. 720 x 400 @ 70Hz
2. 640 x 480 @ 60Hz	2. 640 x 480 @ 60Hz
3. 640 x 480 @ 75Hz	3. 640 x 480 @ 75Hz
4. 800 x 600 @ 60Hz	4. 800 x 600 @ 60Hz
5. 800 x 600 @ 75Hz	5. 800 x 600 @ 75Hz
6. 832 x 624 @ 75Hz	6. 832 x 624 @ 75Hz
7. 1024 x 768 @ 60Hz	7. 1024 x 768 @ 60Hz
8. 1024 x 768 @ 75Hz	8. 1024 x 768 @ 75Hz
9. 1280 x 720 @ 60Hz	9. 1280 x 720 @ 60Hz
10. 1280 x 768 @ 60Hz	10. 1280 x 768 @ 60Hz
11. 1280 x 1024 @ 60Hz	11. 1280 x 1024 @ 60Hz
12. 1360 x 768 @ 60Hz	12. 1360 x 768 @ 60Hz

Function Test Display Pattern

Item	Test Content	Pattern	Specification	Remark
1	Frequency and Tracking	Fine Line Moire	Eliminate visual wavy noise	Figure 1
2	Contrast/Brightness	16 Gray Scale	16 gray levels should be distinguishable	Figure 2
3	Boundary	Horizontal and Vertical Thickness	Horizontal and Vertical position of video should be adjustable to be within the screen frame	Figure 3
4	RGB Color Performance	RGB Color Intensities	Contrast of each R, G, B, color should be normal.	Figure 4, 5, 6
5	Screen Uniformity and Flicker	Full White	Should be compliant with the spec	Figure 7
6	Dead Pixel/Line	White Screen and Dark Screen	The numbers of dead pixels should be compliant with the spec	Figure 7, 8
7	White Balance	White and Black Pattern	Fi	gure 9

Fine Line Morie Pattern (Figure 1)



Gray Scale Pattern (Figure 2)

Horizontal & Vertical Thickness Pattern (Figure 3)

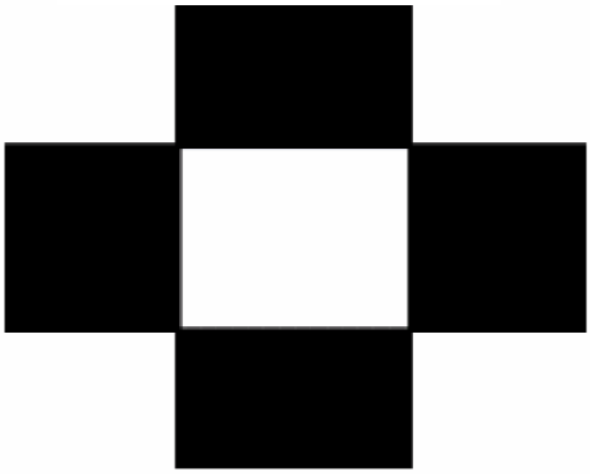
R.Color Pattern (Figure 4)

G. Color Pattern (Figure 5)

B. Color Pattern (Figure 6)

Full White Pattern (Figure 7)

Dark Screen Pattern (Figure 8)



Black-White Pattern (Figure 8)

II.YPBPR FUNCTION CHECK

- Test Equipment
DVD player
S IGNAL DIVIDER

- Test Condition
Before function test and alignment, each LCD TV should be warmed up for at least 30 minutes with the following conditions:

(a) In room temperature,
(b) With full-white screen, RGB, and Black
(c) With cycled display modes,

- Test Display Modes & Pattern

1. Connector HDTV Signal to Interface YPbPr

2. Check Picture

Unclear color steps, snowinterference , unclear gray steps ,water waves and unclear crosstalk can not happen. Picture must be vivid and clear. Audio must have no noise.

III. AV, S-VIDEO INTERFACE FUNCTION TEST

- Test Equipment
DVD player

- Test Condition
Before function test and alignment, each LCD TV should be warmed up for at least 30 minutes with the following conditions:

(a) In room temperature,
(b) With full-white screen, RGB, and Black
(c) With cycled display modes,

- Test Display Modes & Pattern

Connector Figure

Unclear color steps, snow interference , unclear gray steps ,water waves and unclear crosstalk can not happen. Picture must be vivid and clear. Audio must have no noise.

IV. HDMI INTERFACE FUNCTION TEST

- Test Equipment

1. PC
2. VG859A

- Test Condition
Before function test and alignment, each LCD TV should be warmed up for at least 30 minutes with the following conditions:

(a) In room temperature,
(b) With full-white screen, RGB, and Black
(c) With cycled display modes,

- Test Display Modes & Pattern
M ode Compatibility Table

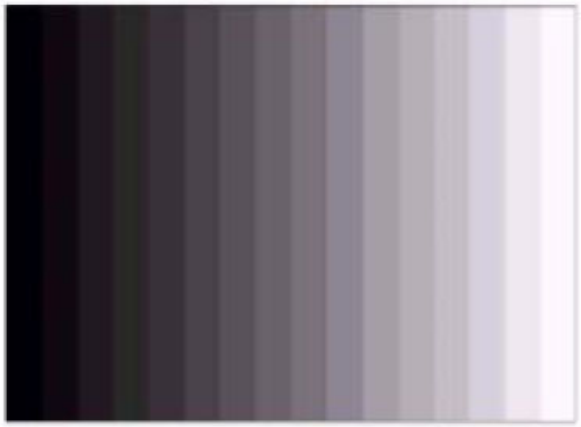
1. 720 x 400 @ 70Hz
2. 640 x 480 @ 60Hz
3. 640 x 480 @ 75Hz
4. 800 x 600 @ 60Hz
5. 800 x 600 @ 75Hz
6. 832 x 624 @ 75Hz
7. 1024 x 768 @ 60Hz
8. 1024 x 768 @ 75Hz
9. 1280 x 720 @ 60Hz
10. 1280 x 768 @ 60Hz
11. 1280 x 1024 @ 60Hz
12. 1360 x 768 @ 60Hz
13. 480I(60Hz)
14. 480p(60Hz)
15. 720p(50Hz)
16. 720p(60Hz)
17. 1080i(60Hz)

Function Test Display Pattern

Item	Test Content	Pattern	Specification	Remark
1	Frequency and Tracking	Fine Line Moire	Eliminate visual wavy noise	Figure 1
2	Contrast/Brightness	16 Gray Scale	16 gray levels should be distinguished by bare eyes	Figure 2
3	Boundary	Horizontal and Vertical Thickness	Horizontal and Vertical position of video should be adjustable within the screen frame	Figure 3
4	RGB Color Performance	RGB Color Intensities	Contrast of each R, G, B, color should be normal	Figure 4, 5, 6

5	Screen Uniformity & Flicker	Full White	Should be compliant with the spec	Figure 7
6	Dead Pixel/Line	White Screen and Dark Screen	The numbers of dead pixels should be compliant with the spec	Figure 7, 8
7	White Balance	White and Black Pattern	Fi	gure 9

Fine Line Morie Pattern (Figure 1)



Gray Scale Pattern (Figure 2)

Horizontal & Vertical Thickness Pattern (Figure 3)

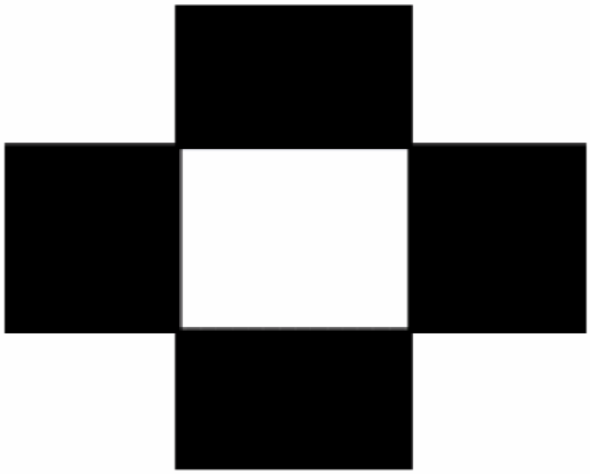
R.Color Pattern (Figure 4)

G. Color Pattern (Figure 5)

B. Color Pattern (Figure 6)

Full White Pattern (Figure 7)

Dark Screen Pattern (Figure 8)



Black-White Pattern (Figure 8)

□COLOR TEMPERATURE ADJUSTING

HD Mode

A. Test Equipment: CA210. Astro 859
B. Timing: 1920*1080@60Hz
C. Pattern: full white
D. LCD TV should be run-in and warmed up for at least 30 minutes.
E. Color temperature adjusting.
F. Color temperature verification.

Warm x= 0.3±0.03 y= 0.31±0.03
STD x= 0.285 y = 0.293
Cold x=0. 274 y =0.286

VGA Mode

A. Test Equipment: CA210. Astro 859
B. Timing: 1024*768@60Hz
C. Pattern: full white
D. LCD TV should be run-in and warmed up for at least 30 minutes.
E. Color temperature adjusting.
F. Color temperature verification.

Warm x=0.3±0.03 y=0.31±0.03
STD x=0.285 y=0.293
Cold x=0. 274 y=0.286

HDMI Mode:

A. Test Equipment: CA210. Astro 859
B. Timing: 1280*720@60Hz
C. Pattern: full white
D. LCD TV should be run-in and warmed up for at least 30 minutes.
E. Color temperature adjusting.
F. Color temperature verification.

Warm x=0.3±0.03 y=0.31±0.03
STD x=0.285 y=0.293
Cold x=0. 274 y=0.286

□POWER SAVING TEST

A. Timing: Video mode: 480i /PC mode: 640*480@75Hz.
B. Pattern: ColorBar.
C. BRIGHTNESS=MAX, CONTRAST=MAX.
D. The power that each MODE consumes is shown in Chart 1.

Mode	Max Power consumed	Power LED Color
P ower On	<240W	GREEN

P ower Saving		ORANGE
Soft Power Off	< 3W	RED

Chart 1

□OSD FUNCTION CHECK

A. Timing: Video mode: 480i / PC mode: 640*480@75Hz.
B. Pattern: ColorBar.
C. Make sure that each FUNCTION have right action.
D. After adjusting and confirming no error, we can deliver the LCD display until it set as default.

□VIDEO RECEIVING TEST

AV receives supply oscillator: AV1/AV2/S-Video1/S-Video2/HDMI1/HDMI2/HDTV1/HDTV2 are from DVD to LCD TV; Examines whether the image and the sound is normal.

(1)AV1/AV2: Video cable (Yellow), Audio cable (Left(White), Right(Red)sound track).
(2)S-Video1/S-Video2: S-Video signal cable (Yellow), Audio cable (Left(White), Right(Red) sound track).
(3)VGA: D-sub cable (Black)
(4)HDMI1/HDMI2: HDMI cable (Black)
(5)HDTV1/HDTV2 (YPbPr/YCbCr): brightness signal cable (Green), Component signal cable(Red, Blue), Audio cable(Left(White), Right(Red)sound track).

□VIDEO/AUDIO OUTPUT TEST

(1) HDTV/AV output: A 42" LCD display in AV pattern, inputs the CVBS signal; the output meets HDTV, HDTV links to another 42" LCD display sending HDTV pattern. Examines two 42" LCD display whether they show same images. But their sound doesn't affect each other and could adjust volume respectively to examine. AV output test are likewise.
(2) With extra amplifiers, audio output should still work under any pattern except PC pattern.

□FACTORY PRESET

After final QC step, we have to erase all saved changes again and restore the factory defaults.
You should do "Factory Preset" again.
Select "Factory Preset" from OSD.
Power off the LCD display.
Turn off the LCD display by pressing "Power" button.

5.4.2 Firmware and DDC Key In Upgrade/Update Methods

A. Firmware Update Method

When you receive the returned LCD TV, please check whether the firmware version is the latest. If not, please do the following procedures to upgrade it to the latest version.

(1) Power on the target system (Information Display).
(2) Connect the supplied cable from the PC's RS-232 port to the target system's update port (as shown in Figure 1).

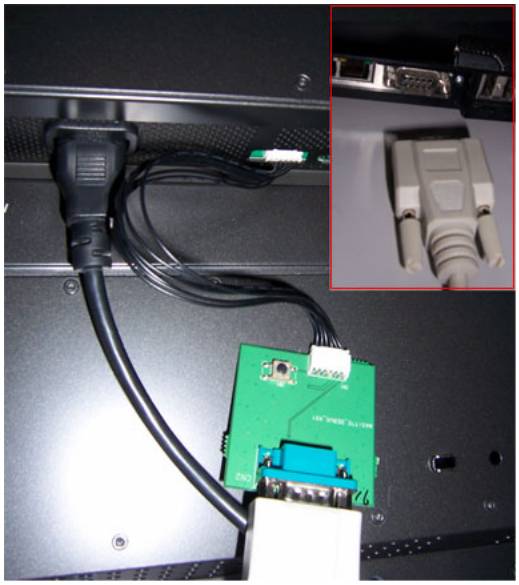


Figure 1

(3) Launch FlashUpgrader utility. Use the figure shown in Figure 2 to set the application.

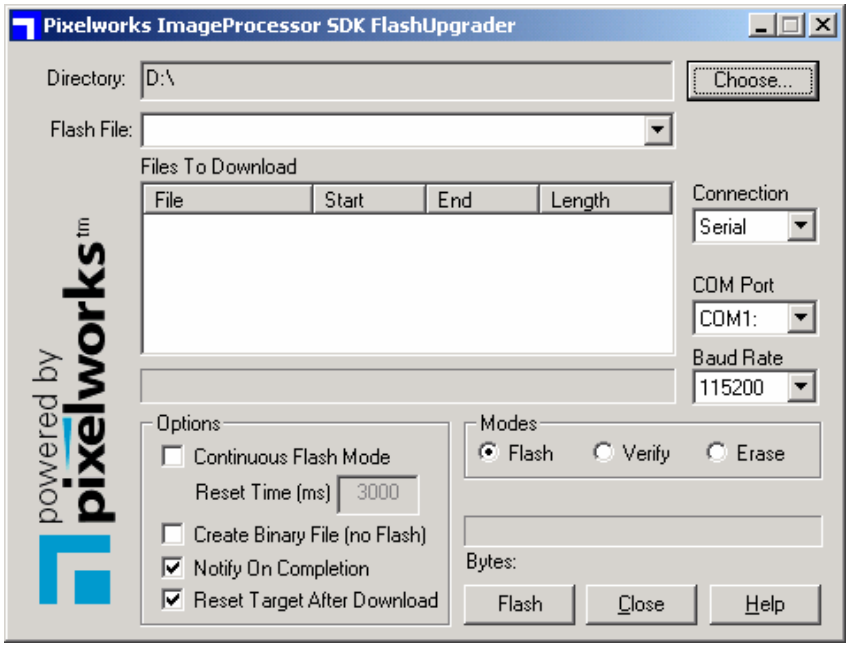


Figure 2

(4) Note: Please verify the cable being used is the cable supplied with the system.
Please verify the COM port selection in the FlashUpgrader utility is correct.
(5) Select “Choose” in the FlashUpgrader dialog box, as shown in Figure 3, to browse for the appropriate appcode.inf file.

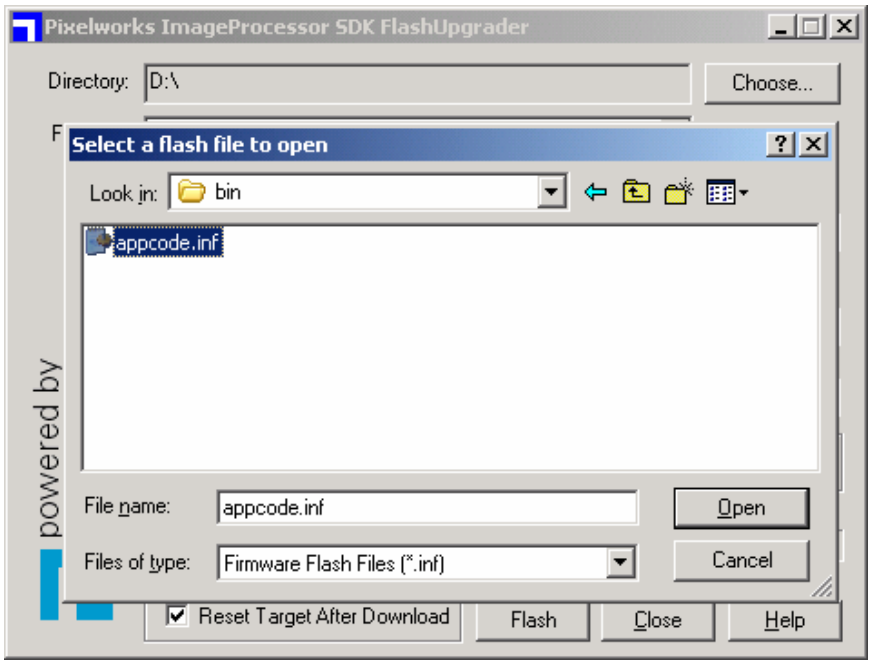


Figure 3

(6) After loading the appcode.inf file, a file list is displayed that will be flashed (as shown in Figure 4).

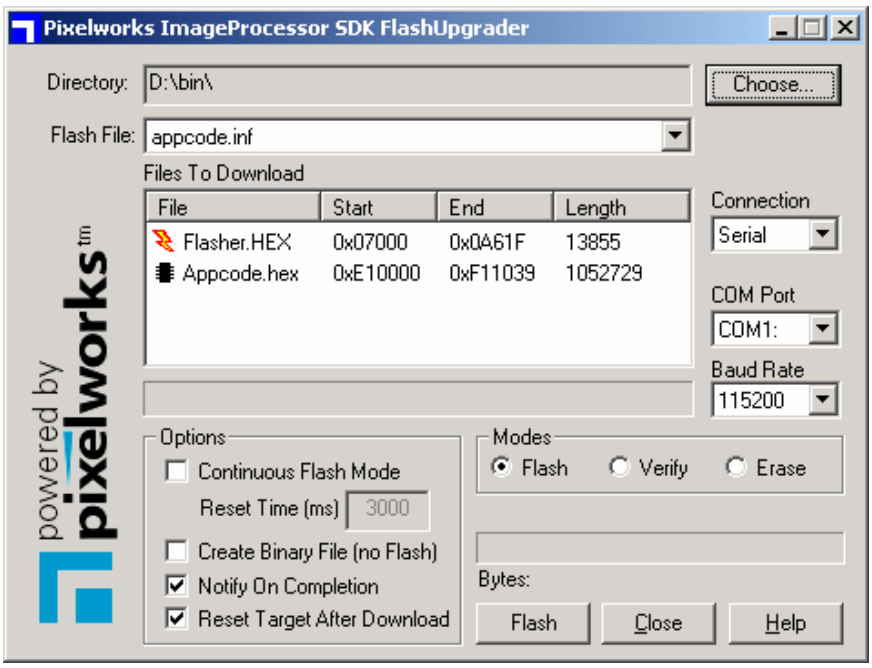


Figure 4

(7) Click "Flash" when you are ready to flash the system.
(8) After FlashUpgrader shows "Waiting for target reset…" message, reset the system by clicking "Reset" key ("SW1") as shown in Figure 5.

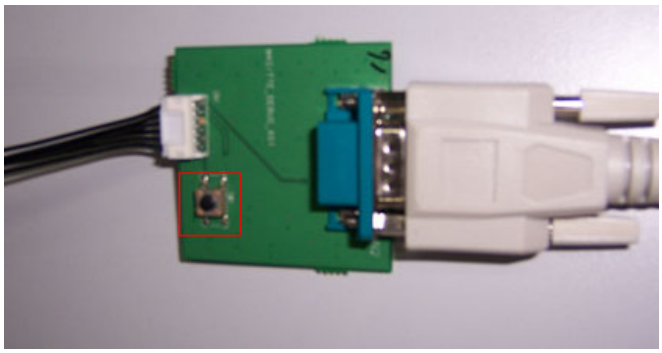


Figure 5

(9) When downloading completes, click "Finish" and power-cycle the system.
(10) Select "Factory Preset" under the "OSD Setup menu".
(11) Power Off and then Power On LCD TV again. Firmware update procedure completes.

B. DDC Key In upgrade/update Methods

- Test Equipment

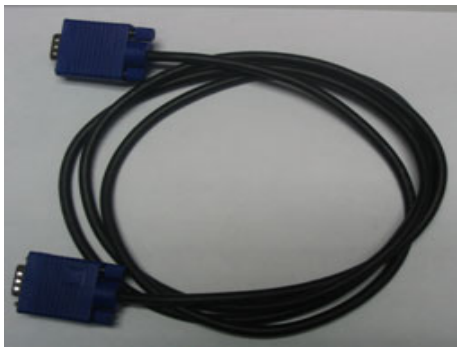
1. D8330 DDC solution
2. D8330 PCI Card

3. Interface Cable

4. DVI RS-232 Cable

5. DVI to HDMI cable

6.VGA RS-232 Cable



7. VGA Cable

8. CD (D8330 software & user's manual)
9. PC

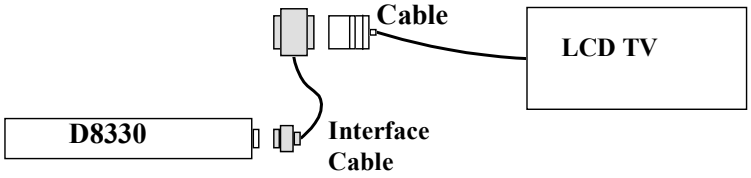
CP U：PentiumIII 8 00 or above
OS ：Microsoft Windows 98/2000/xp
Me mory：128 MB or above
CD-ROM Driver：For software installation.

10. Barcode Reader

(1) Installation Hardware and Software
Please refer to D8330 User Manual.

(2) EDID data
Copy EDID data (n4200w_hdmi1.ddc or n4200w_hdmi2.ddc , n4200w_vga.ddc) to D8330 install path.

(3) Connect D8330 to TV
Use RS-232 cable and connect cable to connect D8330 card to LCD TV port (HDMI, VGA)

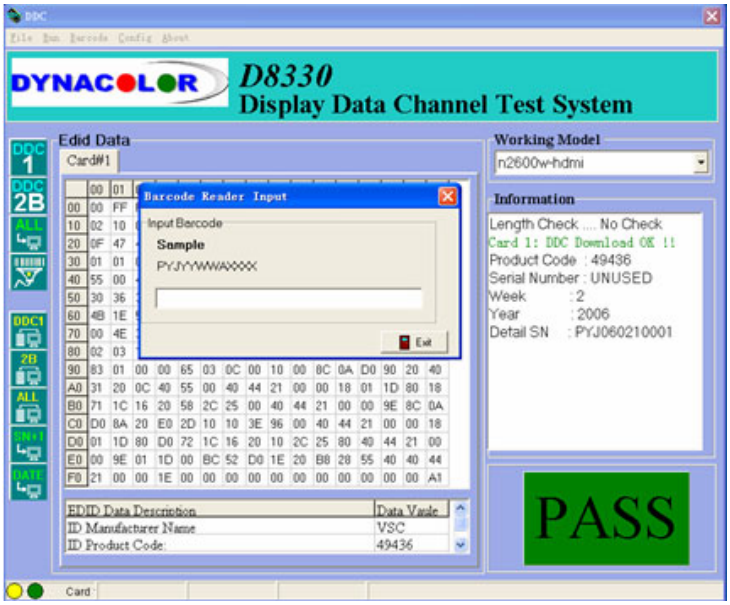


(4) Setup Barcode Read
Barcode Reader connects with keyboard and PC keyboard port.

(5) Update HDMI EDID
Use DVI RS-232 Cable and DVI-HDMI cable connect D8330 card to LCD TV.

(6) Execute DDC.exe
Select N4200w-HDMI1 or N4200w-HDMI2 model.

(7) Press F4 (or  buttom) and use Barcode to input the data (serious number). The system would check the length of input data. The function implement successfully would show the pass screen as below.



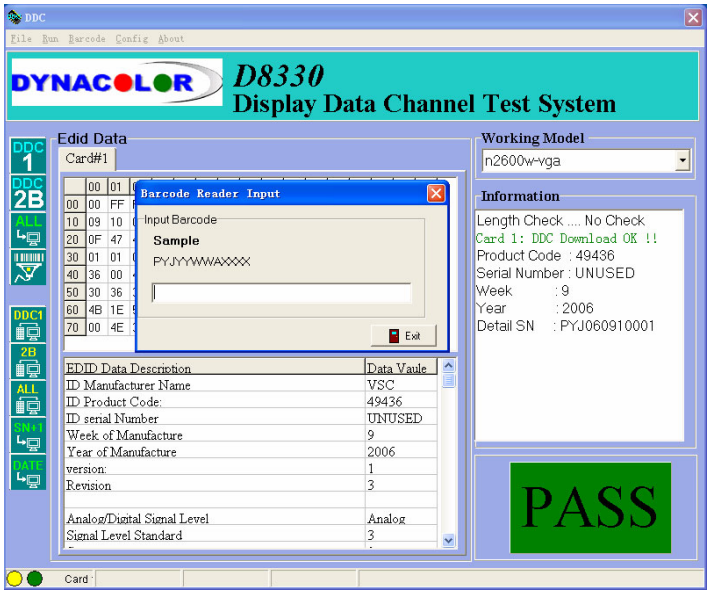
(8) Update VGA EDID

Use VGA RS-232 Cable and VGA cable connect D8330 card to LCD TV

(9) Execute DDC.exe

Select N4200w-VGA model

(10) Press F4 (or ) Use Barcode to input the data (serious number). The system would check the length of input data. The function implement successfully would show the pass screen as below.



5.5 Packing for Shipping and Disassembly Procedure

Packing for Shipping

1 Packing Procedure

1.1 Paste protection film to protect LCD TV. (Figure 1)
1.2 Cover the Stand with PE bag.
1.3 Put LCD TV in PE bag and seal the bag. (Figure 2)

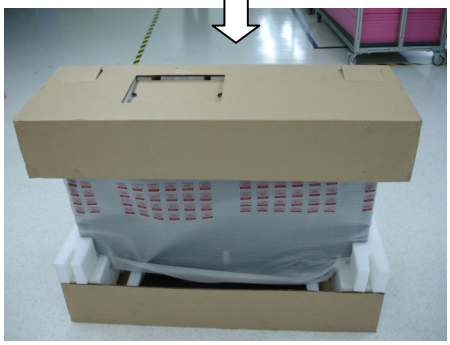
(Figure 1)

(Figure 2)

1.4 Put the LCD TV on the bottom cushion. (Figure 3)
1.5 Put all the accessories into the top cushion. (Figure 4)

1. Power Cable 2 . VGA Cable
3. Manual 4.Remote Control 5.Batteries
6. Speakers 7.Screws

(Figure 3)



(Figure 4)

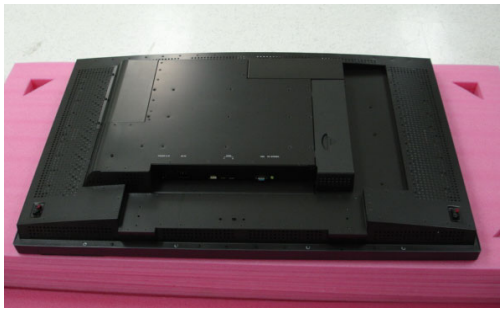
1.6 Cover the Carton on LCD TV and seal it with tape. (Figure 5)

Figure 5

Disassembly Procedure

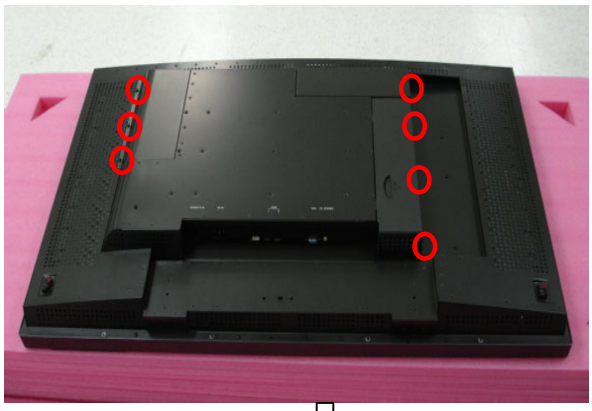
1 Disassembly of Stand and Back-cover from LCD TV.

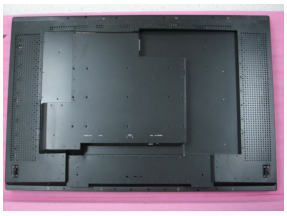
1.1 Unscrew 6 screws to remove Stand.



Stand

1.2 Unscrew 3 screws to remove Cover-wireless.
1.3 Unscrew 1 screw to remove Cove-DTV.
1.4 Unscrew 3 screws to remove IO Box.



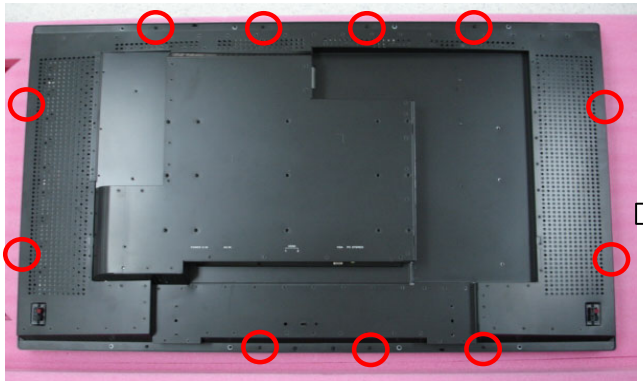


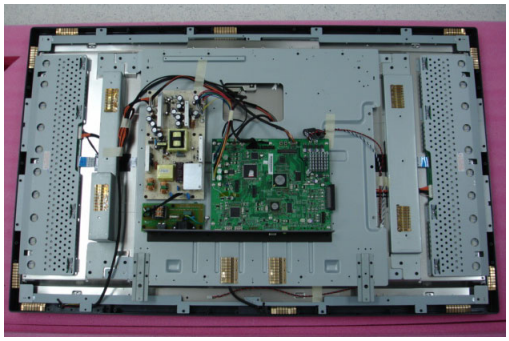
Cover-wireless

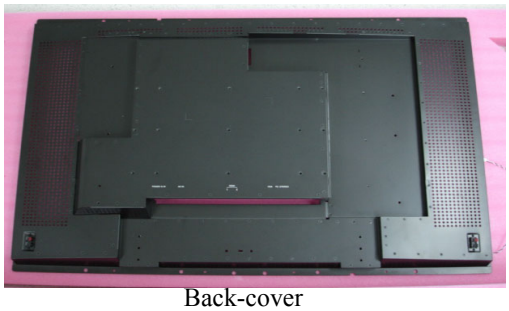
Cover-DTV

IO Box

1.5 Unscrew 11 screws that secure Back-cover.
1.6 Disconnect 2 speak cables to remove Back-cover.



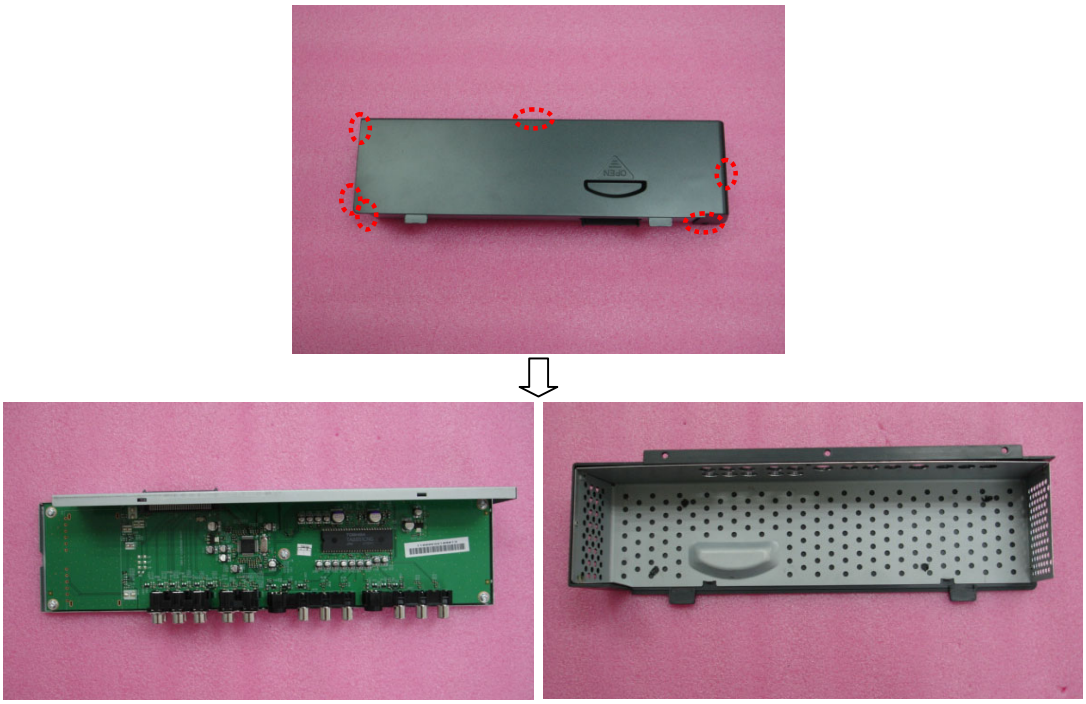




Back-cover

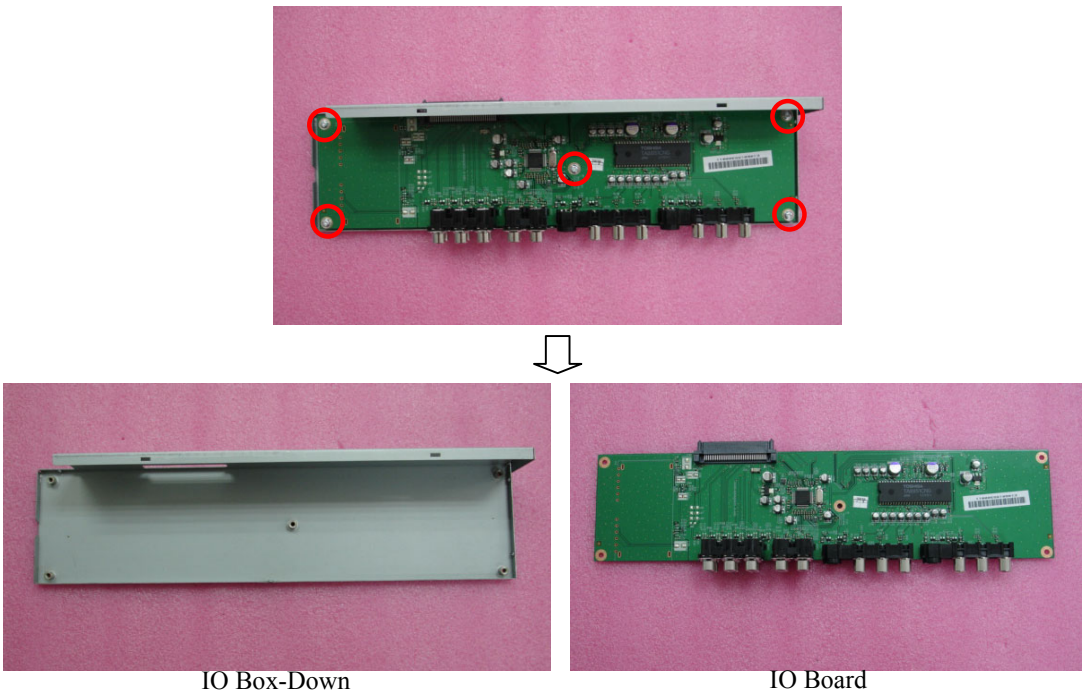
2 Disassembly of IO Board.

2.1 Unscrew 6 screws to remove IO Box-Up.



IO Box-Up

2.2 Unscrew 5 screws to remove IO Board.



IO Box-Down

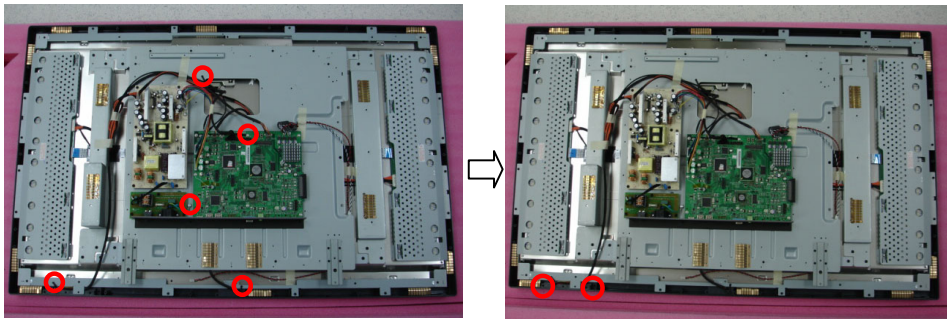
IO Board

3 Disassembly of Main Board, Power Module, AC-IN Board, Keypad Board and IR-LED Board.

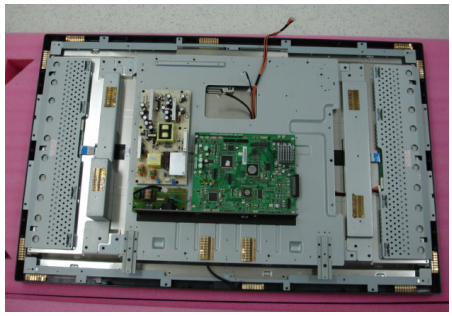
3.1 Unscrew 5 screws that secure ground loop on cables.

3.2 Unscrew 2 screws to remove Keypad-set.

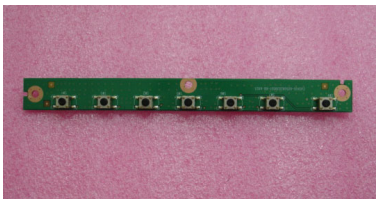
3.3 Disconnect all the cables on Main Board, Power Module, AC-IN Board, Keypad Board, IR Board and Panel.



Keypad Board



3.4 Unscrew 1 screw to separate Keypad Board.

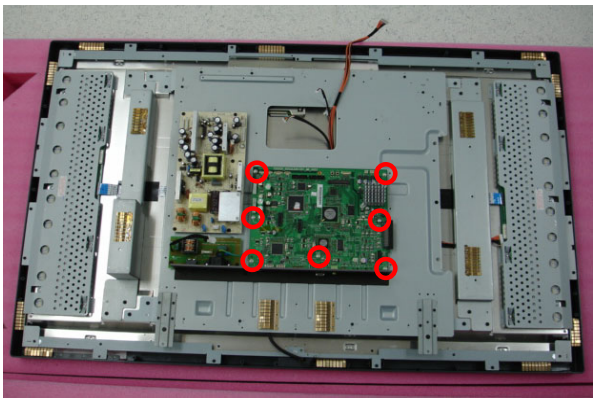


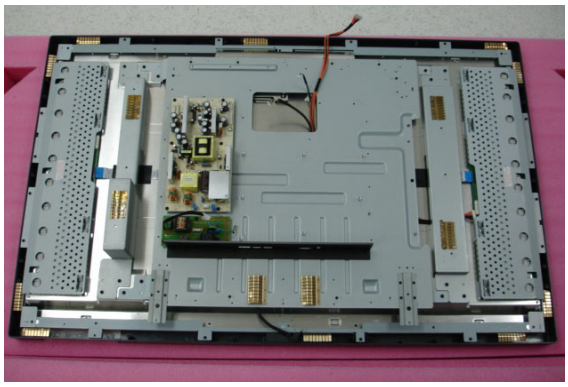
Keypad Board

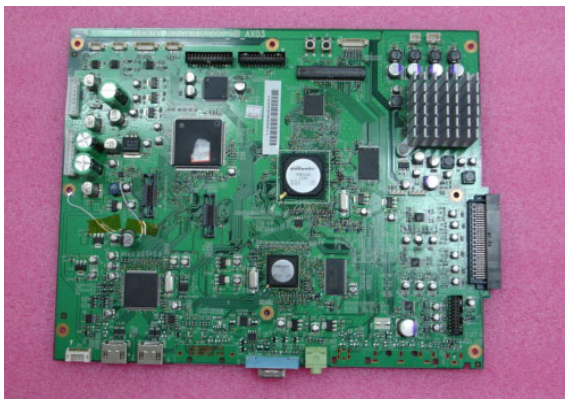
Housing-Key

Switch

3.5 Unscrew 7 screws to remove Main Board.

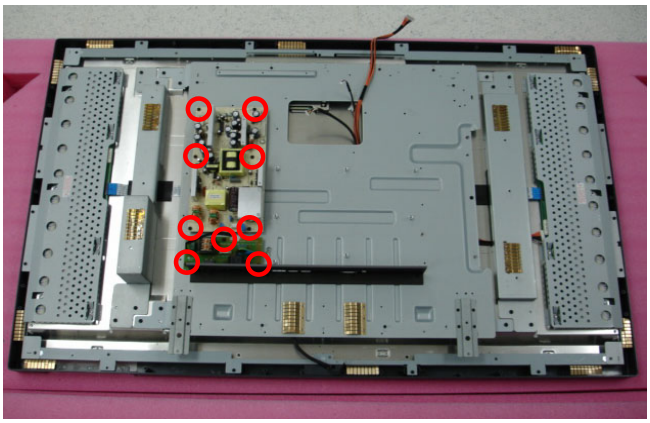


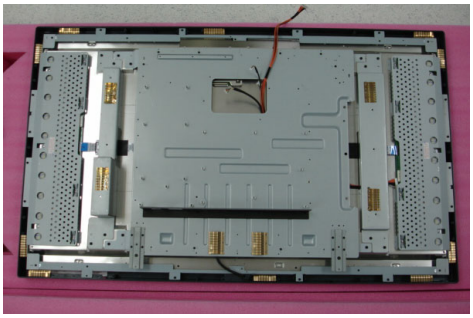


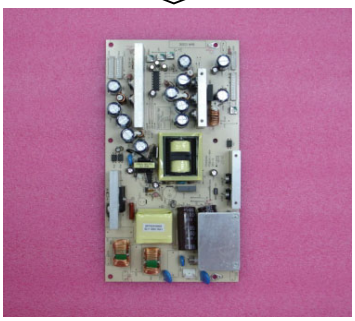


Main Board

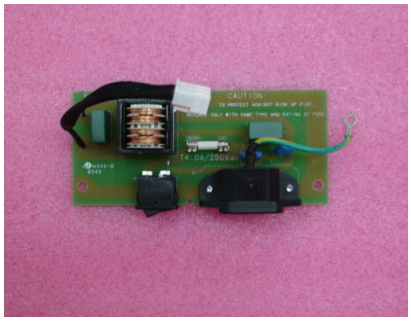
3.6 Unscrew 6 screws to remove Power Module.
3.7 Unscrew 3 screws to remove AC-IN Board.





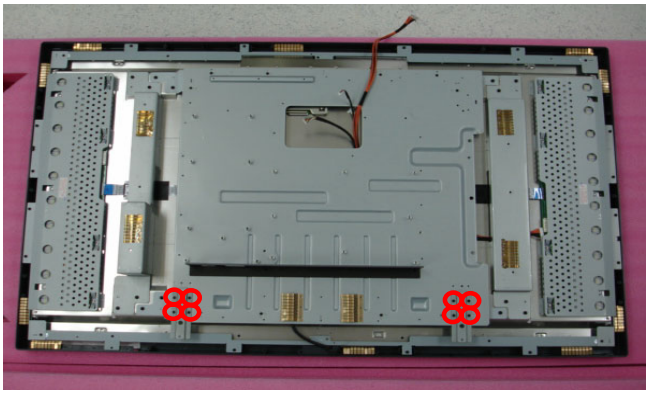


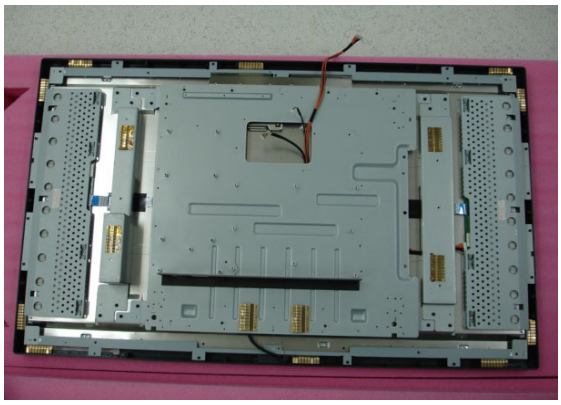
Power Module

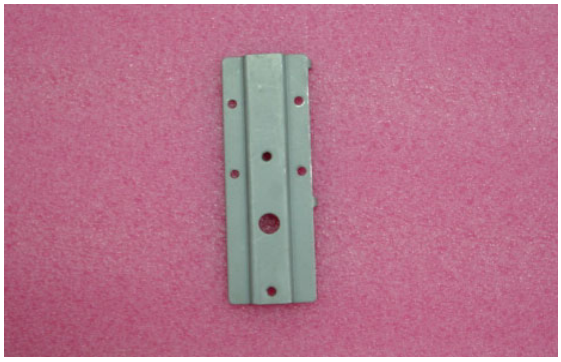


AC-IN Board

3.8 Unscrew 8 screws to remove 2 Gaskets.

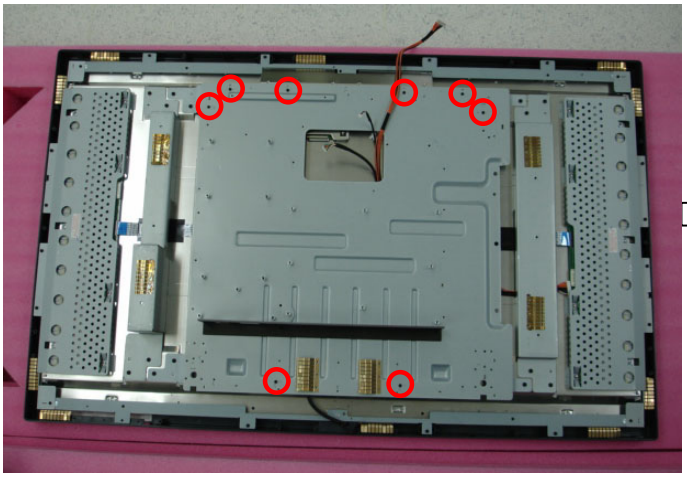


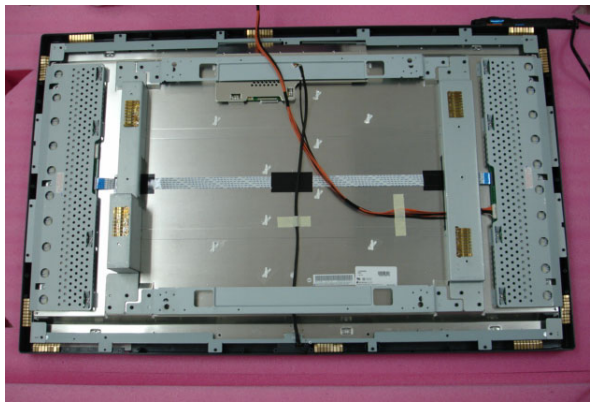


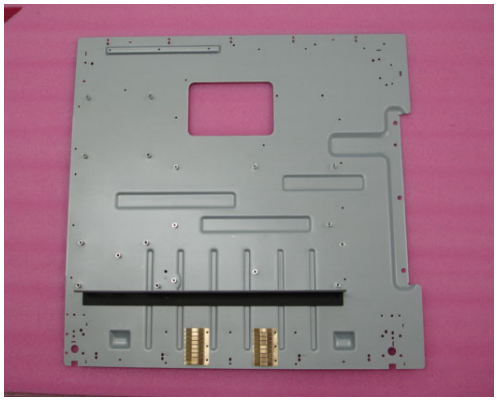


Gasket

3.9 Unscrew 8 screws to remove Chassis.
3.10 Remove 2 Cables.

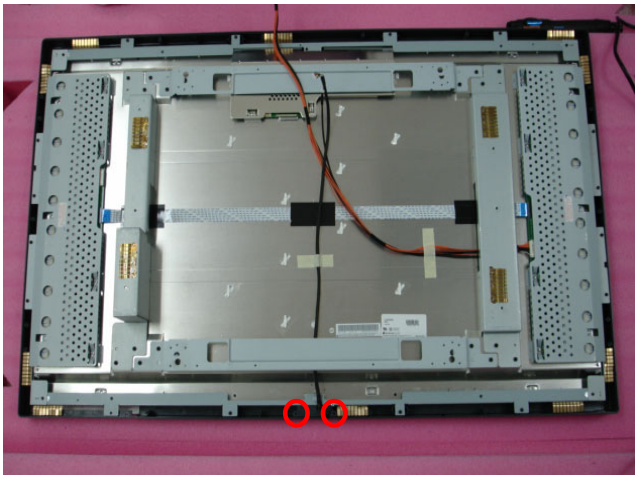


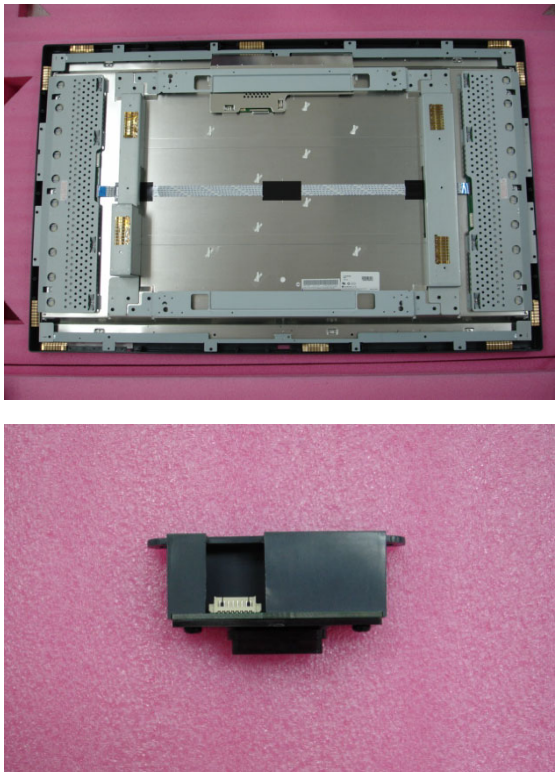




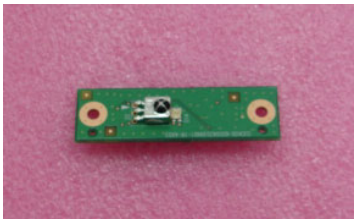
Chassis

3.11 Unscrew 2 screws to remove IR-LED-set.





3.12 Unscrew 2 screws to separate IR-LED Board.



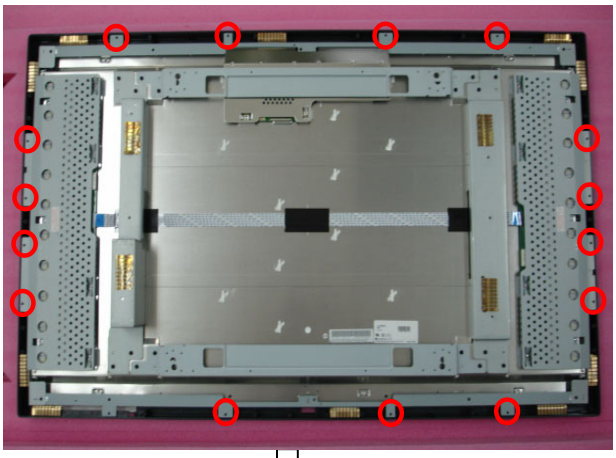
IR-LED Board

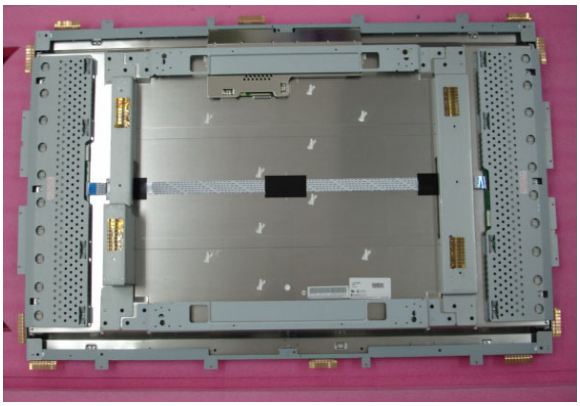
Lense

Housing-LED

4 Disassembly of Panel.

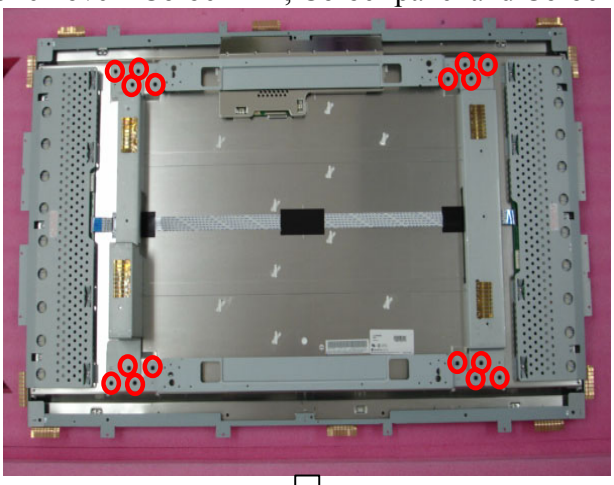
4.1 Unscrew 15 screws to remove Front-cover.

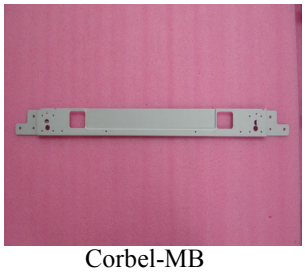




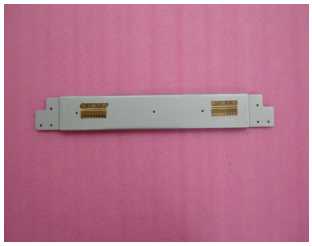
Front-cover

4.2 Unscrew 16 screws to remove 2 Corbel-MB, Corbel-panel and Corbel-panel-R.

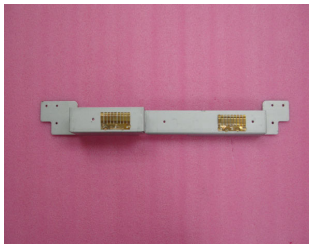




Corbel-MB



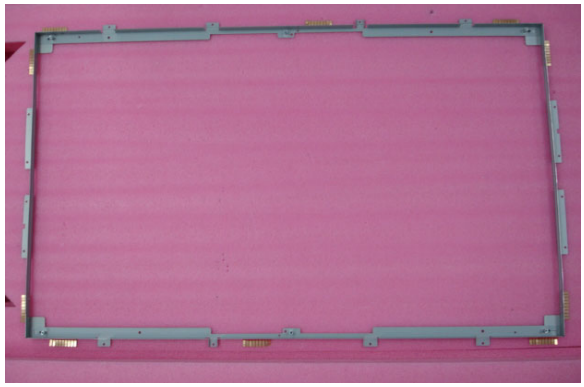
Corbel-Panel



Corbel-Panel-R

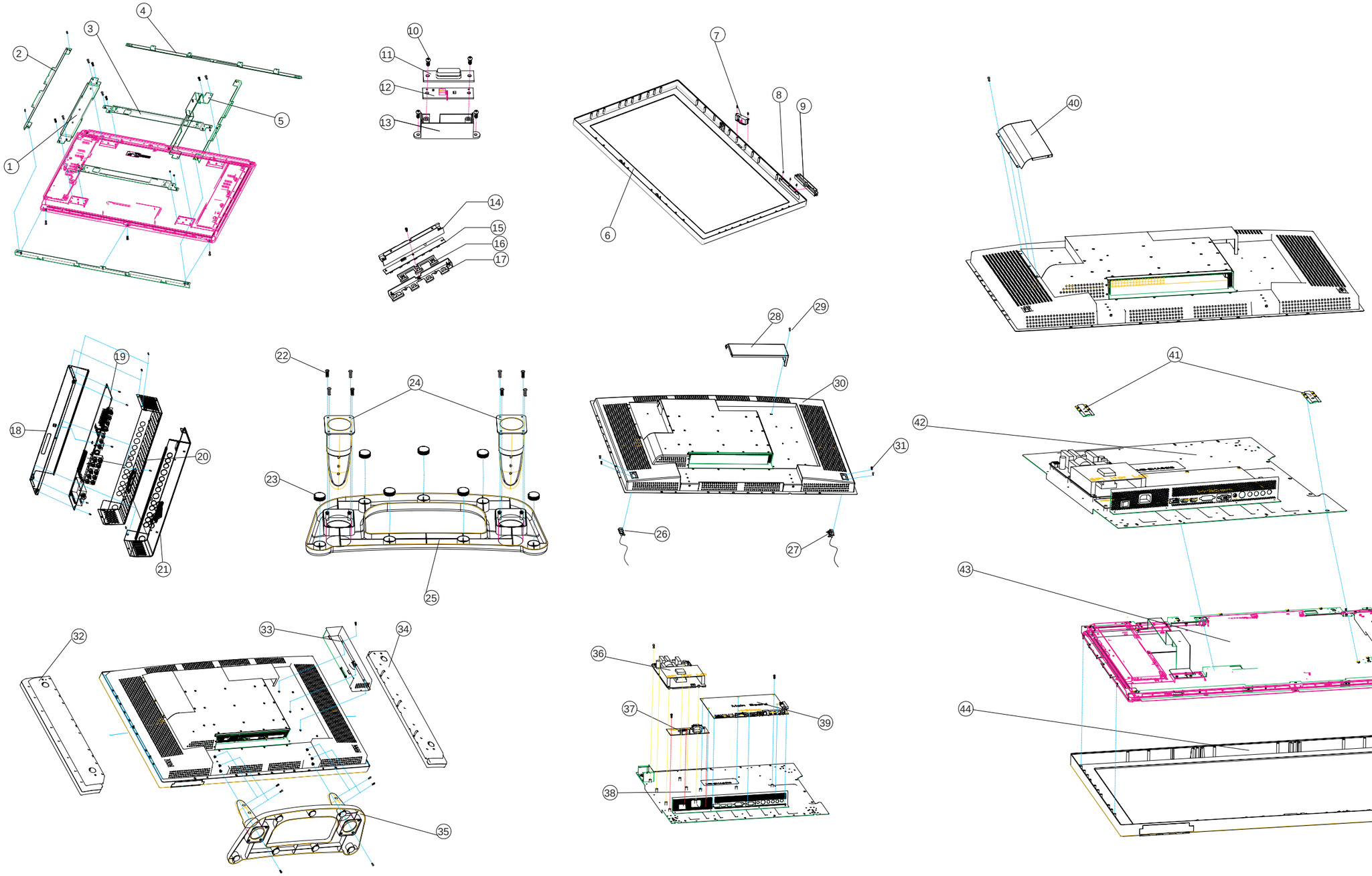
4.3 Unscrew 6 screws to remove Bracket-panel.

Panel



Bracket-panel

6. Exploded Diagram and Exploded Parts List



EXPLODED PARTS LIST (N4200w)

ViewSonic Model Number: VS10945-1M

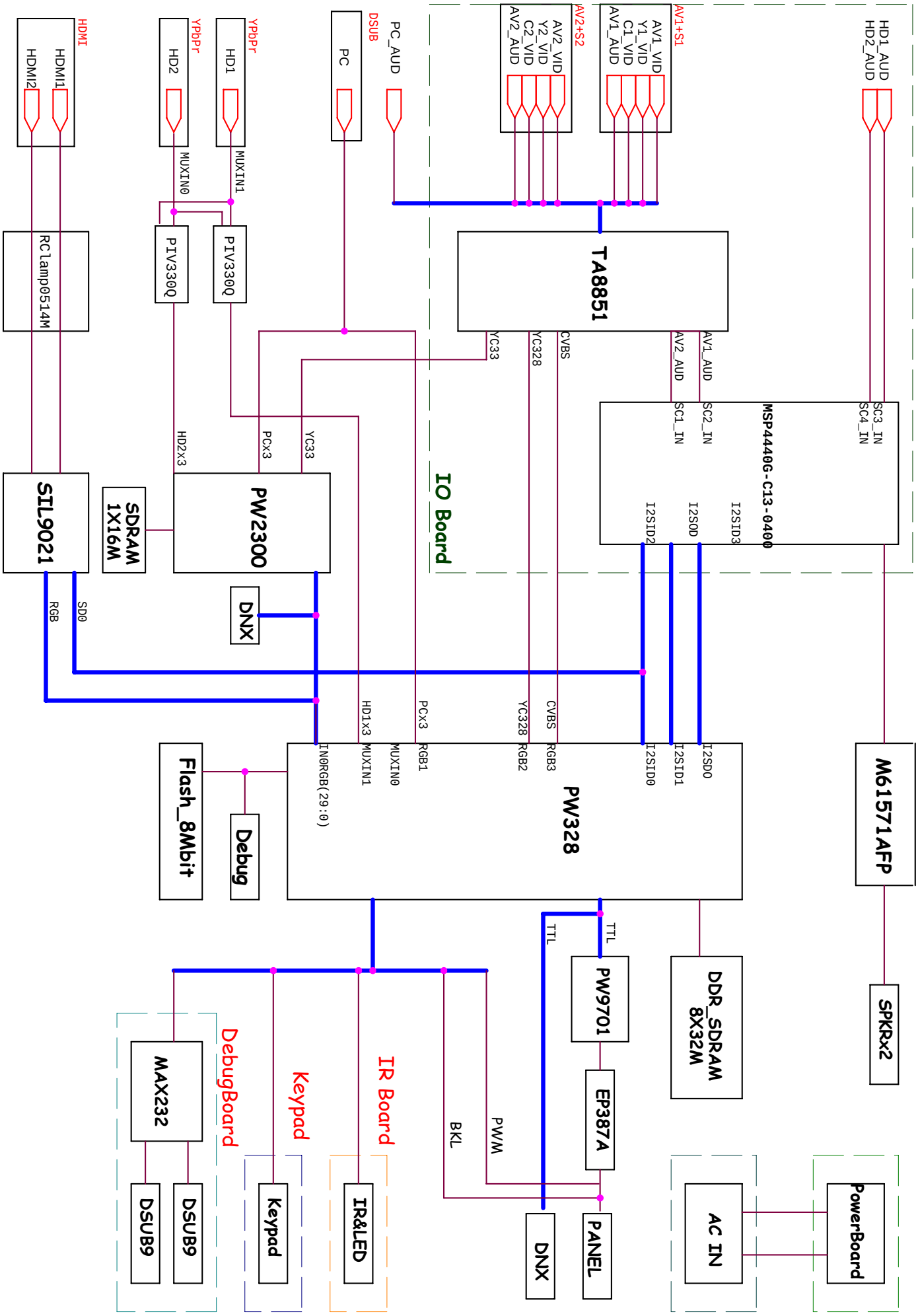
Rev: 1a

Serial No. Prefix: PYD

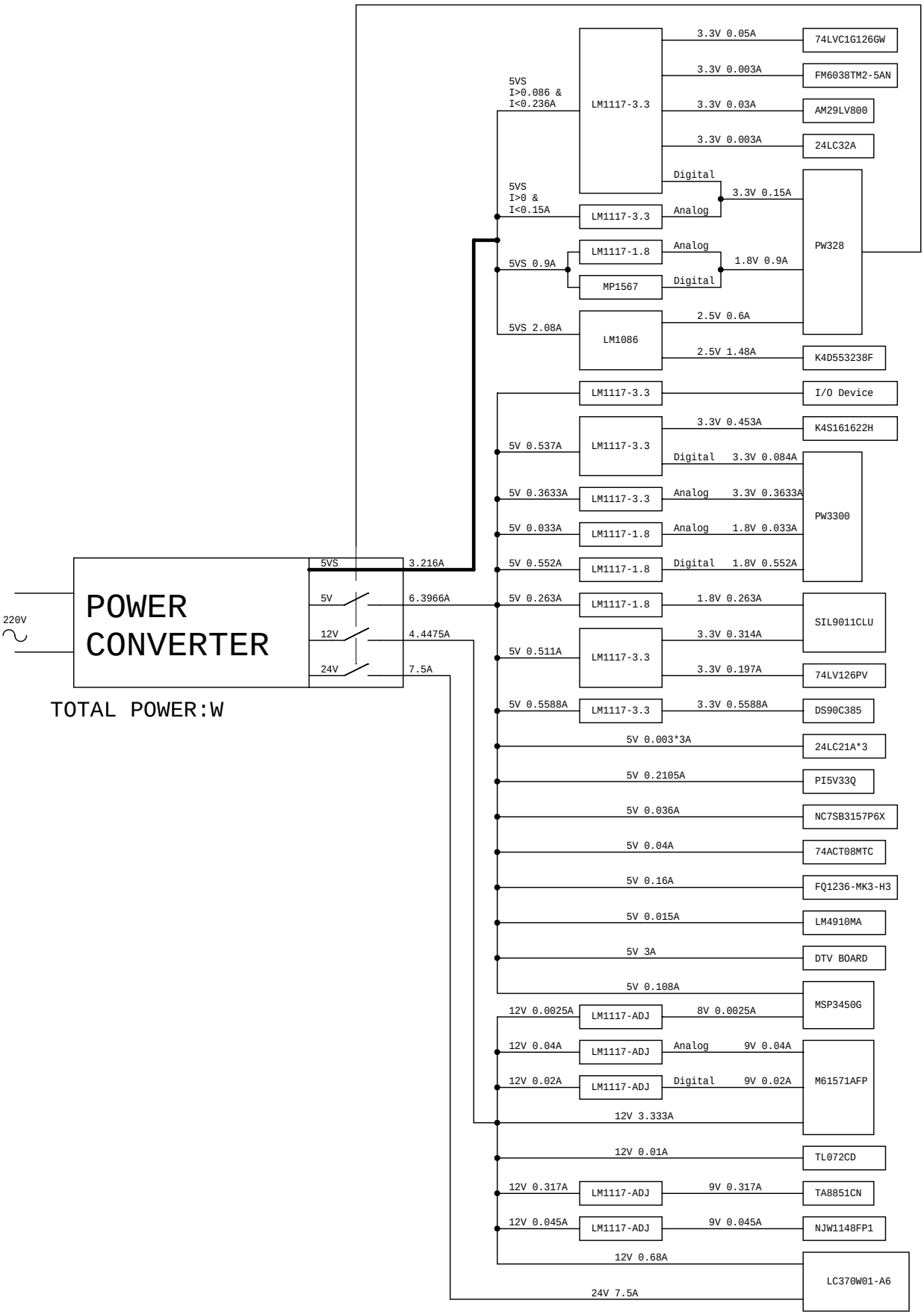
Item	ViewSonic P/N	Ref. P/N	Description	Q'ty
1	N/A	6053B0074701	BRACKET,PANEL,RIGHT,SECC	1
2	N/A	6053B0074901	BRACKET,PANEL,FRONT,SECC	2
3	N/A	6053B0074201	BRACKET,PANEL,UP,SECC	2
4	N/A	6053B0075001	BRACKET,PANEL,BOTTOM,SECC	2
5	N/A	6053B0074801	BRACKET,PANEL,LEFT,SECC	1
6	N/A	6051B0053101	CASE,FRONT,PC+ABS	1
7	N/A	1510B0151801	ASSEMBLY,BOARD,LED	1
8	N/A	6052B0040201	SCREW,PAN,M3.0,8mm,TAP,5.5mm,2.15mm,BK	5
9	N/A	1510B0151901	ASSEMBLY,HOUSING,BOTTOM,KEYPAD	1
10	N/A	6052B0040201	SCREW,PAN,M3.0,8mm,TAP,5.5mm,2.15mm,BK	2
11	N/A	6051B0052801	LENS,LED,FRONT,ACRYLIC	1
12	N/A	1310A2061601	ASSEMBLY,BOARD,LED,SMT	1
13	N/A	6051B0052901	HOUSING,LED,REAR,PC+ABS	1
14	N/A	6051B0053001	HOUSING,FRONT CASE ,PC+ABS	1
15	N/A	1310A2061401	ASSEMBLY,BOARD,KEYPAD	1
16	N/A	6051B0054201	BUTTOM,REAR, PC+ABS	1
17	N/A	6051B0054301	BUTTOM,FRONT, PC+ABS	1
18	N/A	6053B0073601	SHIELD,I/O,BOTTOM,SECC	1
19	N/A	1310A2039702	ASSEMBLY,BOARD,I/O	1
20	N/A	6053B0093001	SHIELD,I/O,TOP,SECC	1
21	N/A	6051B0065001	COVER,I/O,REAR,PC+ABS	1
22	N/A	6052B00040301	SCREW,PAN WASHER,M4,12.0mm,MACH,10mm,3.2	8
23	N/A	6054B0069901	FOOT,RUBBER,10mm,31mm	7
24	N/A	6053B0073901	STAND, MAIN, AL ALLOY	2
25	N/A	6053B0074001	BASE, MAIN STAND,AL ALLOY	1
26	N/A	1510B0166101	ASSEMBLY,LEFT,SWITCH	1
27	N/A	1510B0166201	ASSEMBLY,RIGHT,SWITCH	1
28	N/A	6053B0080601	COVER,DTV,SECC	1
29	N/A	6052B0040401	SCREW,PAN,M4,6.0mm,MACH,7.0mm,2.75mm,BK	1
30	N/A	6053B0074101	CASE,REAR,SECC	1
31	N/A	6052B0040201	SCREW,PAN,M3.0,8mm,TAP,5.5mm,2.15mm,BK	4
32	N/A	6039B0004101	SPEAKER.W/HOUSING,4OHM,10W,79.2mm,655X10	1
33	N/A	1510B0152001	ASSEMBLY,CASE,REAR,I/O	1
34	N/A	6039B0004201	SPEAKER.W/HOUSING,4OHM,10W,79.2mm,655X10	1
35	N/A	1510B0152101	ASSEMBLY,BASE,BOTTOM	1
36	N/A	6020B0000901	POWER MODULE,AC-DC,90-264V,4	1
37	N/A	1310A2061501	ASSEMBLY,BOARD,POWER	1
38	N/A	6053B0096401	FRAME,M/B,SECC	1
39	N/A	1310A2039602	ASSEMBLY,BOARD,MAIN	1
40	N/A	1510B0151701	ASSEMBLY,COVER,REAR	1
41	N/A	6053B0080401	BRACKET,MAIN STAND,SECC	2
42	N/A	1510B0152501	ASSEMBLY,BASE	1
43	N/A	1510B0152201	ASSEMBLY,DISPLAY	1
44	N/A	1510B0152301	ASSEMBLY,BEZEL,FRONT	1

7. Block Diagrams

7.1 N4200w-1M schematic block diagram

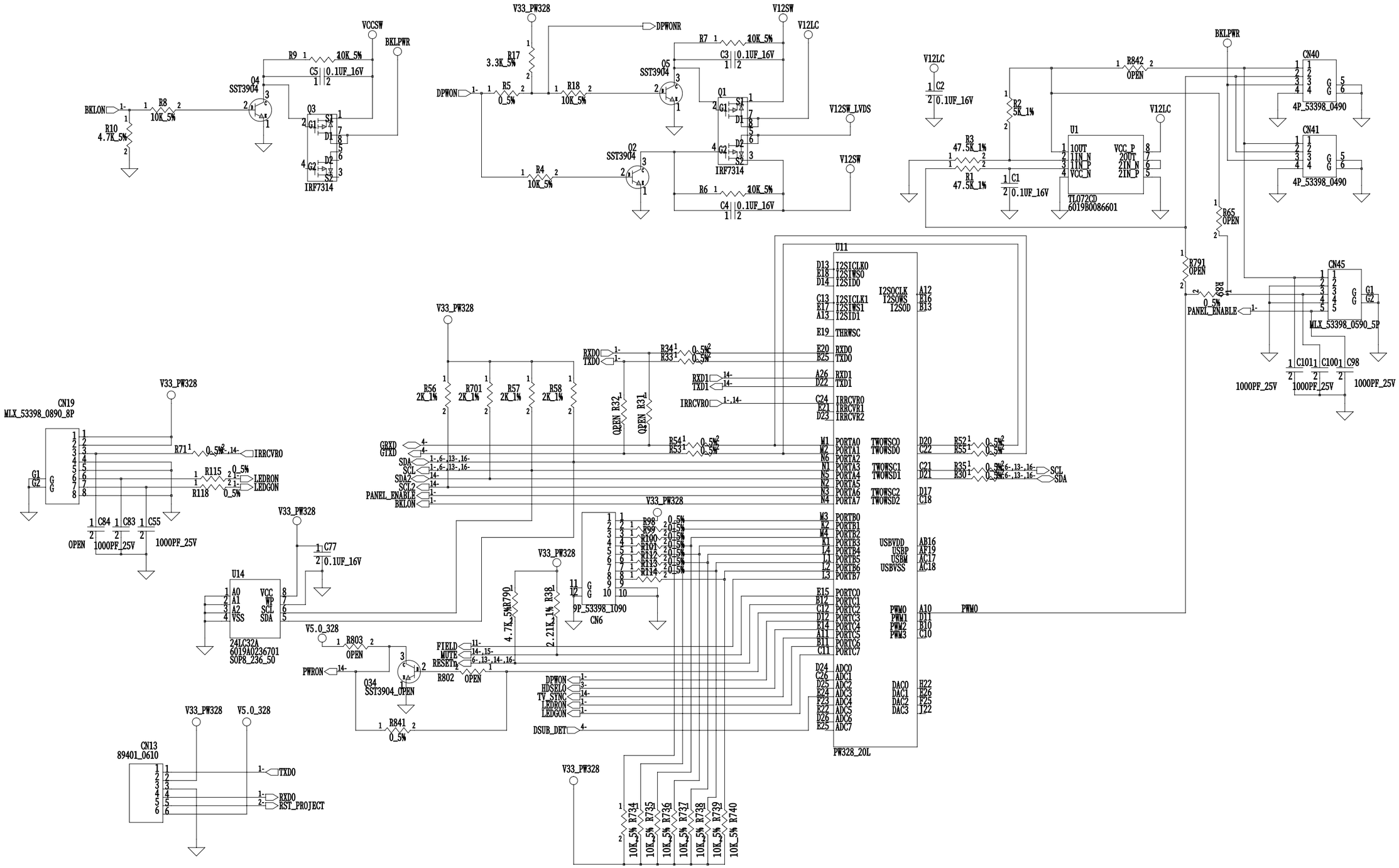


7.2 power block diagram

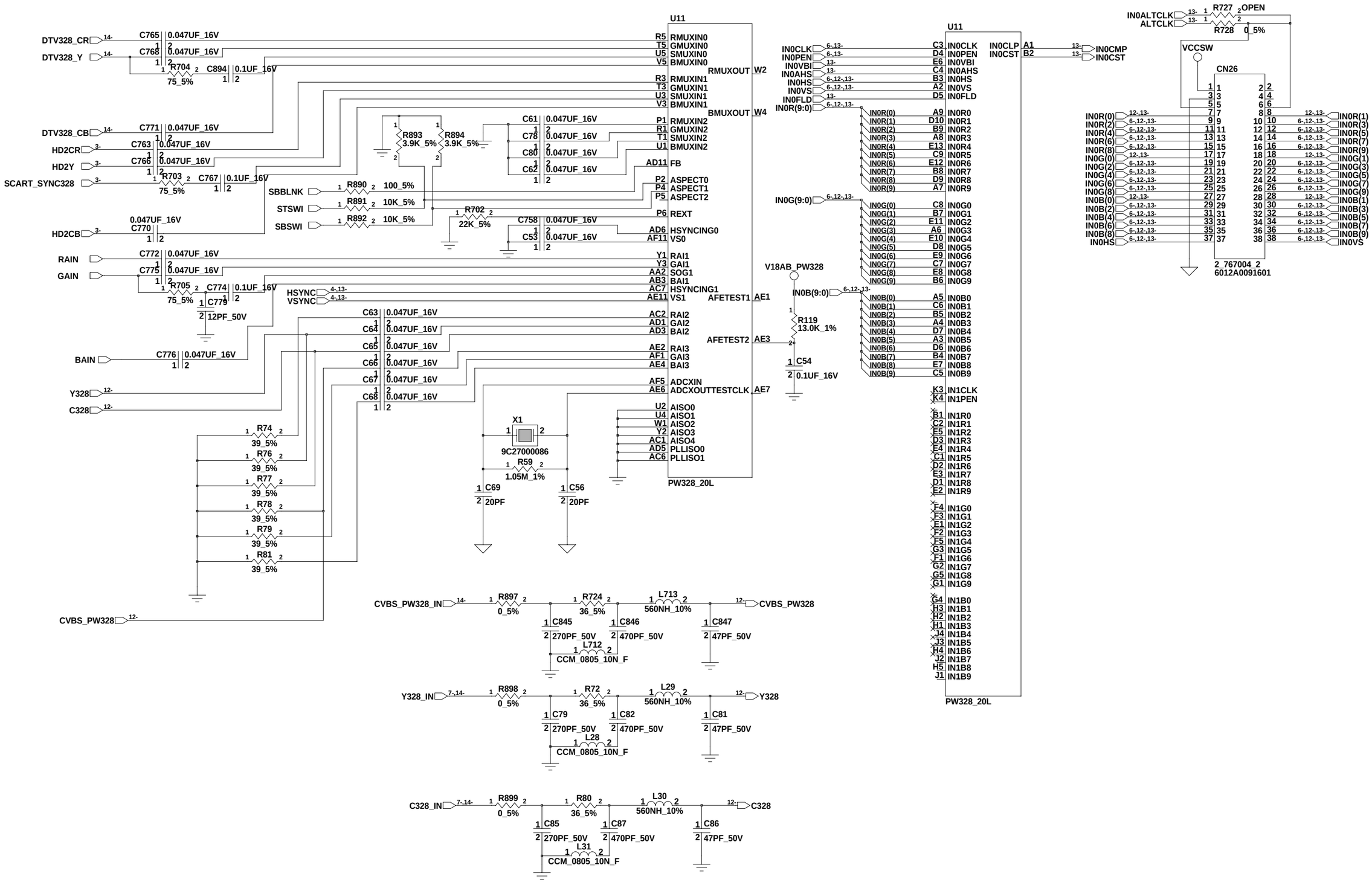


8. Schematic Diagrams

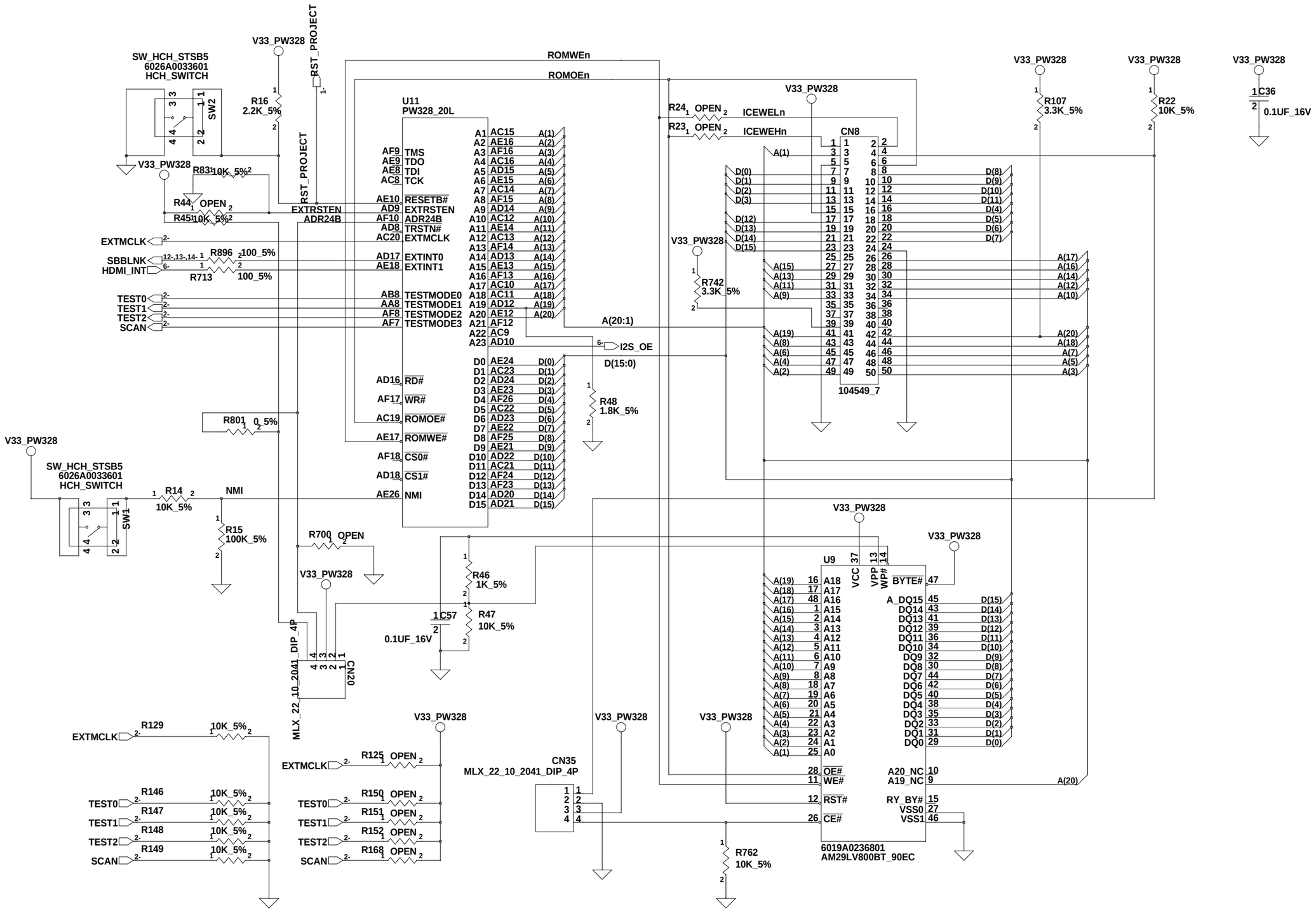
8.1 Scaler



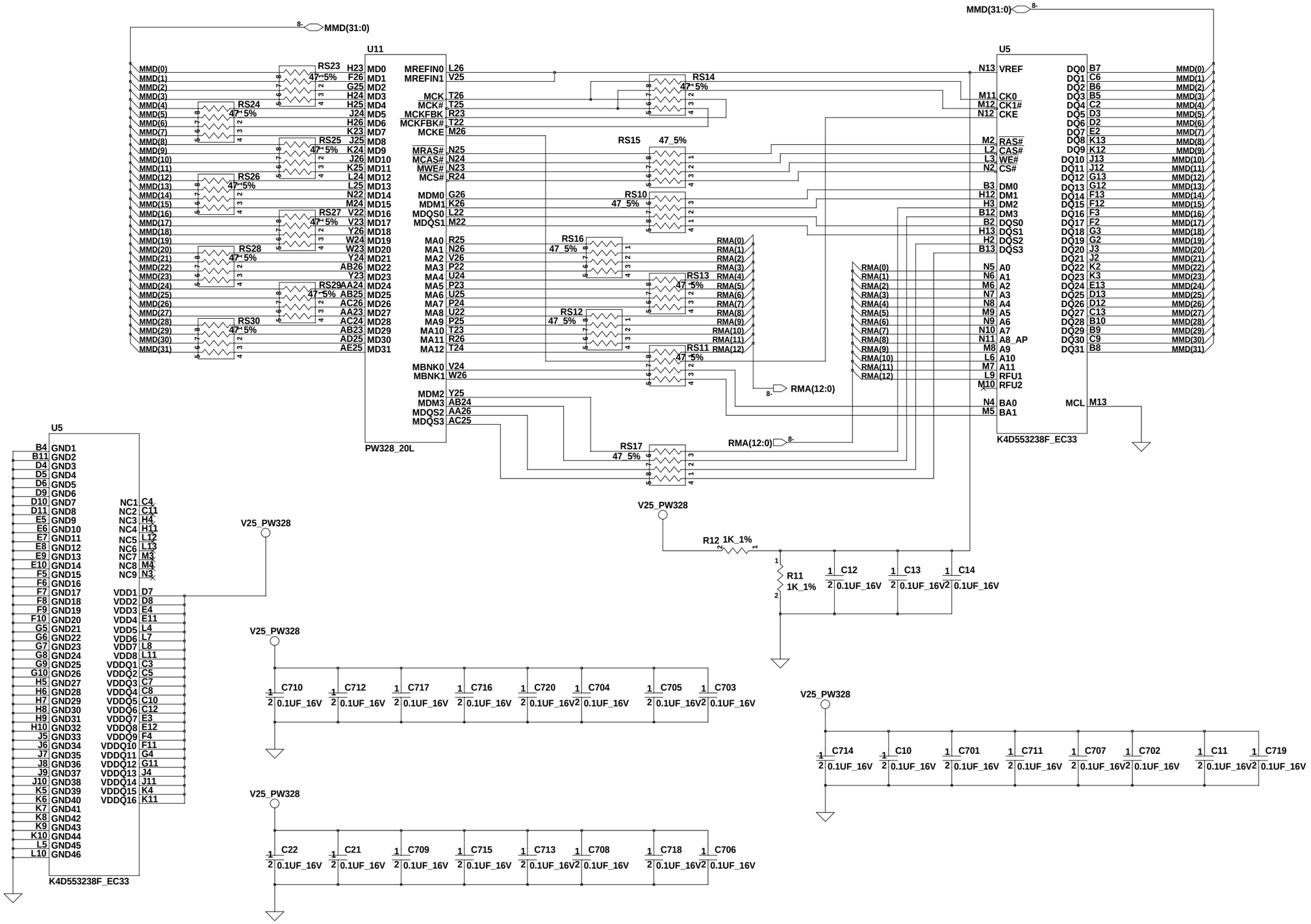
8.2 Scaler Input



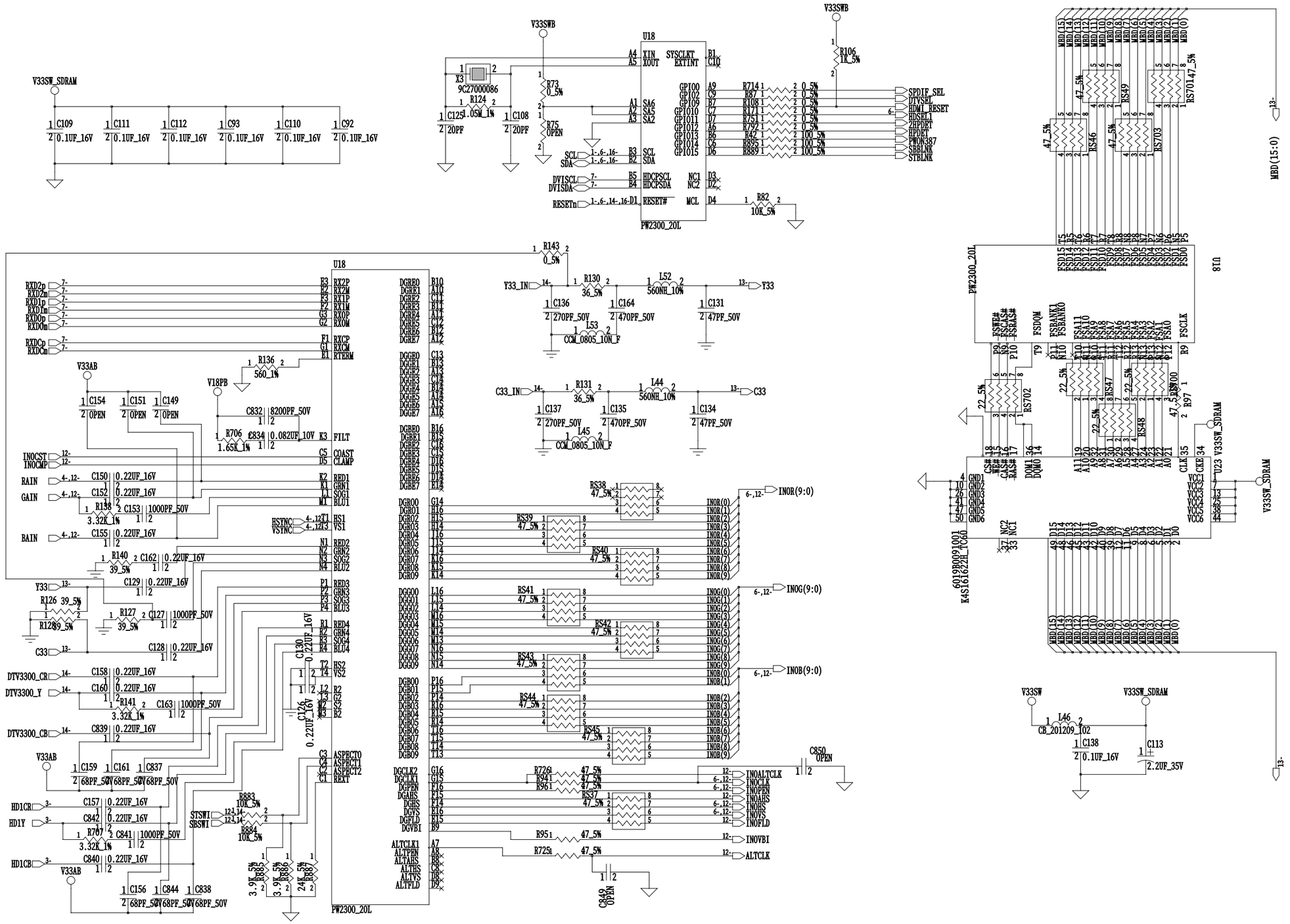
8.3 Flash


V33_PW328
RST_PROJECT
SW_HCH_STSB5
6026A0033601
HCH_SWITCH
SW2
R16
2.2K_5%
R831 10K_5%
R44 OPEN
R45 10K_5%
EXTRSTEN
ADR24B
EXTMCLK
SBBLNK
HDMI_INT
R896 100_5%
R713 100_5%
TEST0
TEST1
TEST2
SCAN
R801 0_5%
SW_HCH_STSB5
6026A0033601
HCH_SWITCH
SW1
R14 10K_5%
NMI
R15
100K_5%
R700 OPEN
R46
1K_5%
R47
10K_5%
1C57
0.1UF_16V
MLX_22_10_2041_DIP_4P
CN20
U11
PW328_20L
ROMWEn
ROMOEn
TMS
TDO
TDI
TCK
RESETB#
EXTRSTEN
ADR24B
TRSTN#
EXTMCLK
EXTINT0
EXTINT1
TESTMODE0
TESTMODE1
TESTMODE2
TESTMODE3
RD#
WR#
ROMOE#
ROMWE#
CS0#
CS1#
NMI
A(20:1)
I2S_OE
D(15:0)
R48
1.8K_5%
R24 OPEN
R23 OPEN
ICEWELn
ICEWEHn
CN8
104549_7
R742
3.3K_5%
R107
3.3K_5%
R22
10K_5%
1C36
0.1UF_16V
R129 10K_5%
R146 10K_5%
R147 10K_5%
R148 10K_5%
R149 10K_5%
R125 OPEN
R150 OPEN
R151 OPEN
R152 OPEN
R168 OPEN
CN35
MLX_22_10_2041_DIP_4P
U9
VCC
VPP
WP#
BYTE#
RST#
CE#
OE#
WE#
RY_BY#
VSS0
VSS1
6019A0236801
AM29LV800BT_90EC
R762
10K_5%

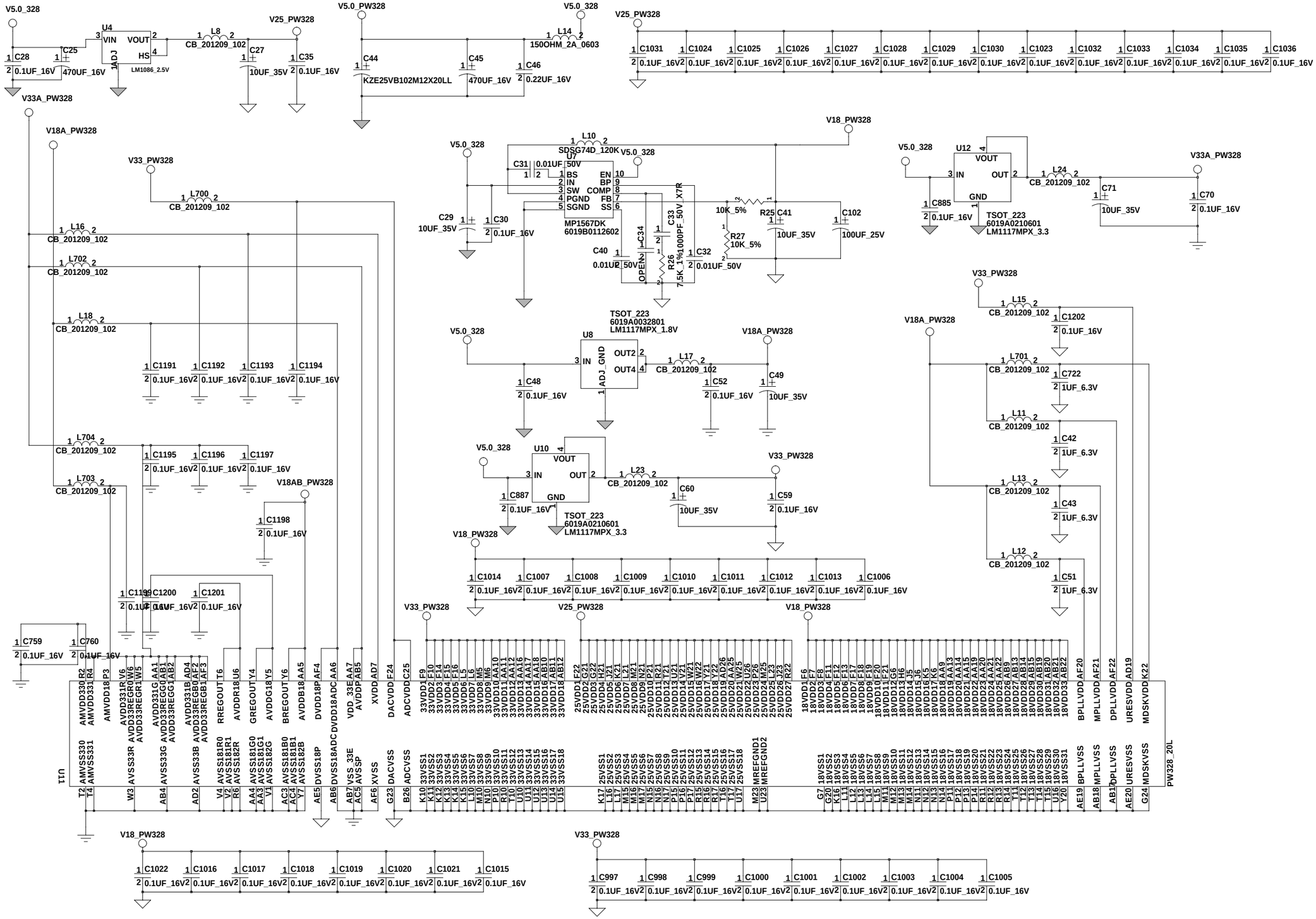
8.4 SDRAM


MMD(31:0)
U11
PW328_20L
RS23 RS24 RS25 RS26 RS27 RS28 RS29 RS30 47_5%
RS10 RS11 RS12 RS13 RS14 RS15 RS16 RS17 47_5%
MREFIN0 MREFIN1 MCK MCK# MCKFBK MCKFBK# MCKE MRAS# MCAS# MWE# MCS# MDM0 MDM1 MDQS0 MDQS1 MA0 MA1 MA2 MA3 MA4 MA5 MA6 MA7 MA8 MA9 MA10 MA11 MA12 MBNK0 MBNK1 MDM2 MDM3 MDQS2 MDQS3
RMA(12:0)
U5
K4D553238F_EC33
VREF CK0 CK1# CKE RAS# CAS# WE# CS# DM0 DM1 DM2 DM3 DQS0 DQS1 DQS2 DQS3 A0 A1 A2 A3 A4 A5 A6 A7 A8_AP A9 A10 A11 RFU1 RFU2 BA0 BA1 MCL
V25_PW328
R12 1K_1%
R11 1K_1%
C12 C13 C14 0.1UF_16V
C710 C712 C717 C716 C720 C704 C705 C703 0.1UF_16V
C714 C10 C701 C711 C707 C702 C11 C719 0.1UF_16V
C22 C21 C709 C715 C713 C708 C718 C706 0.1UF_16V
GND1 GND2 GND3 GND4 GND5 GND6 GND7 GND8 GND9 GND10 GND11 GND12 GND13 GND14 GND15 GND16 GND17 GND18 GND19 GND20 GND21 GND22 GND23 GND24 GND25 GND26 GND27 GND28 GND29 GND30 GND31 GND32 GND33 GND34 GND35 GND36 GND37 GND38 GND39 GND40 GND41 GND42 GND43 GND44 GND45 GND46
NC1 NC2 NC3 NC4 NC5 NC6 NC7 NC8 NC9
VDD1 VDD2 VDD3 VDD4 VDD5 VDD6 VDD7 VDD8
VDDQ1 VDDQ2 VDDQ3 VDDQ4 VDDQ5 VDDQ6 VDDQ7 VDDQ8 VDDQ9 VDDQ10 VDDQ11 VDDQ12 VDDQ13 VDDQ14 VDDQ15 VDDQ16
DQ0 DQ1 DQ2 DQ3 DQ4 DQ5 DQ6 DQ7 DQ8 DQ9 DQ10 DQ11 DQ12 DQ13 DQ14 DQ15 DQ16 DQ17 DQ18 DQ19 DQ20 DQ21 DQ22 DQ23 DQ24 DQ25 DQ26 DQ27 DQ28 DQ29 DQ30 DQ31

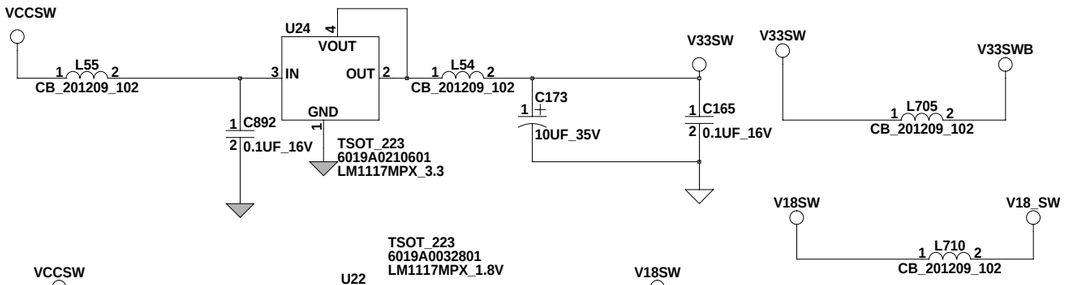
8.5 Video decoder

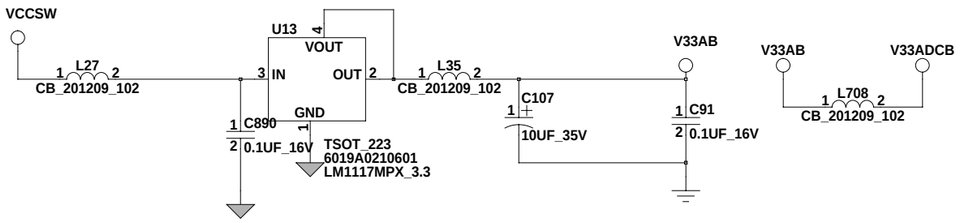


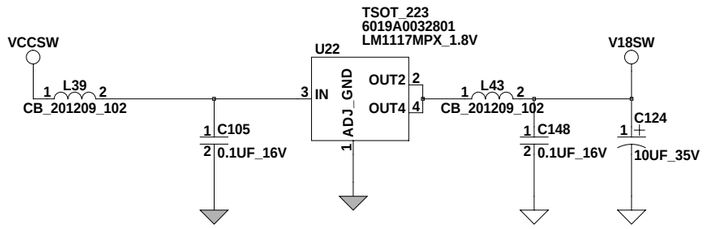
8.6 DC Power
8.6.1 Scaler Power

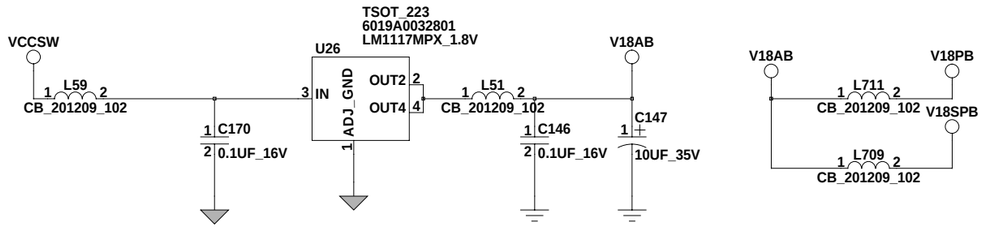


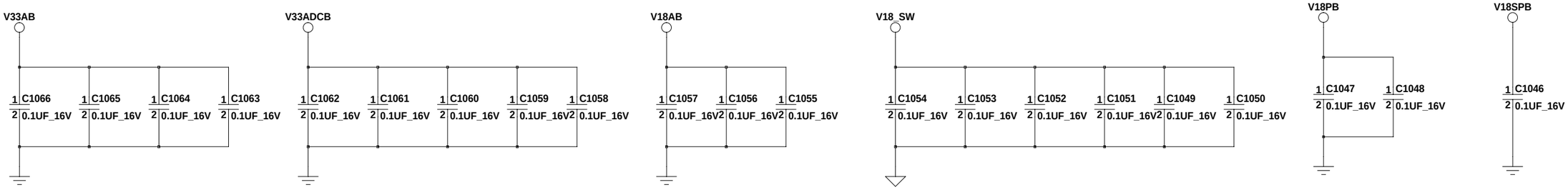
8.6.2 Video Decoder Power

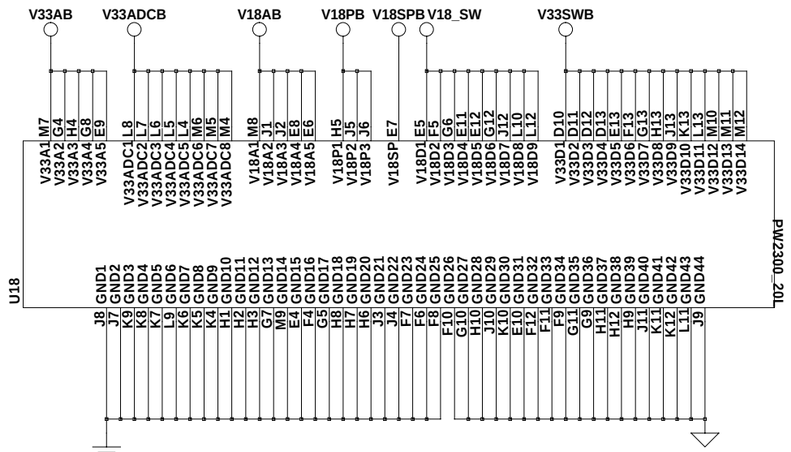


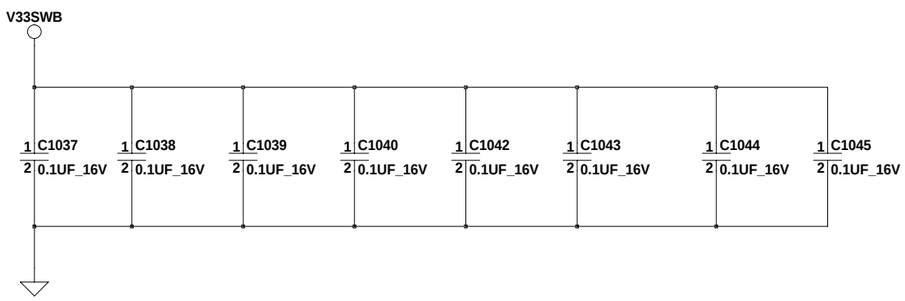




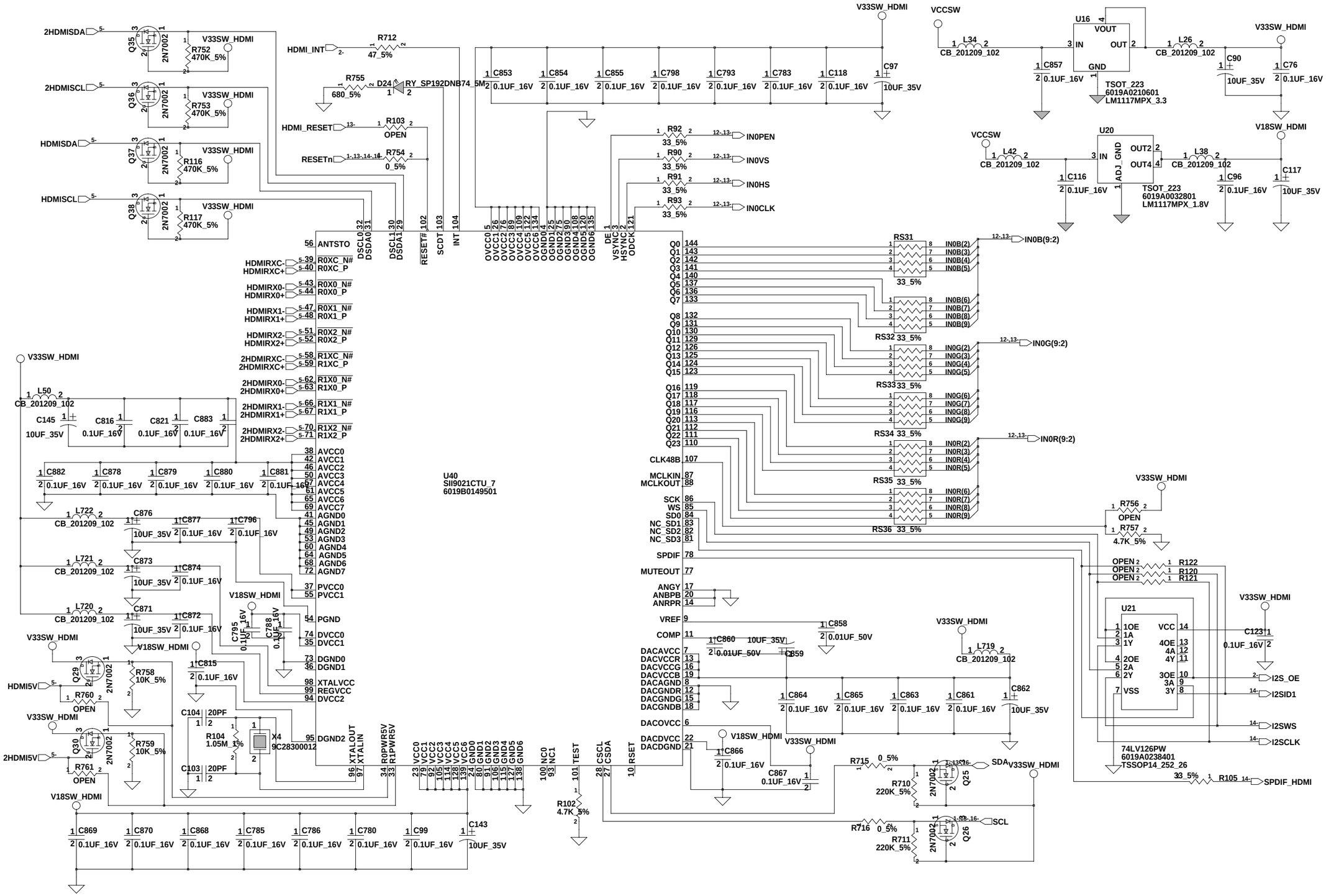




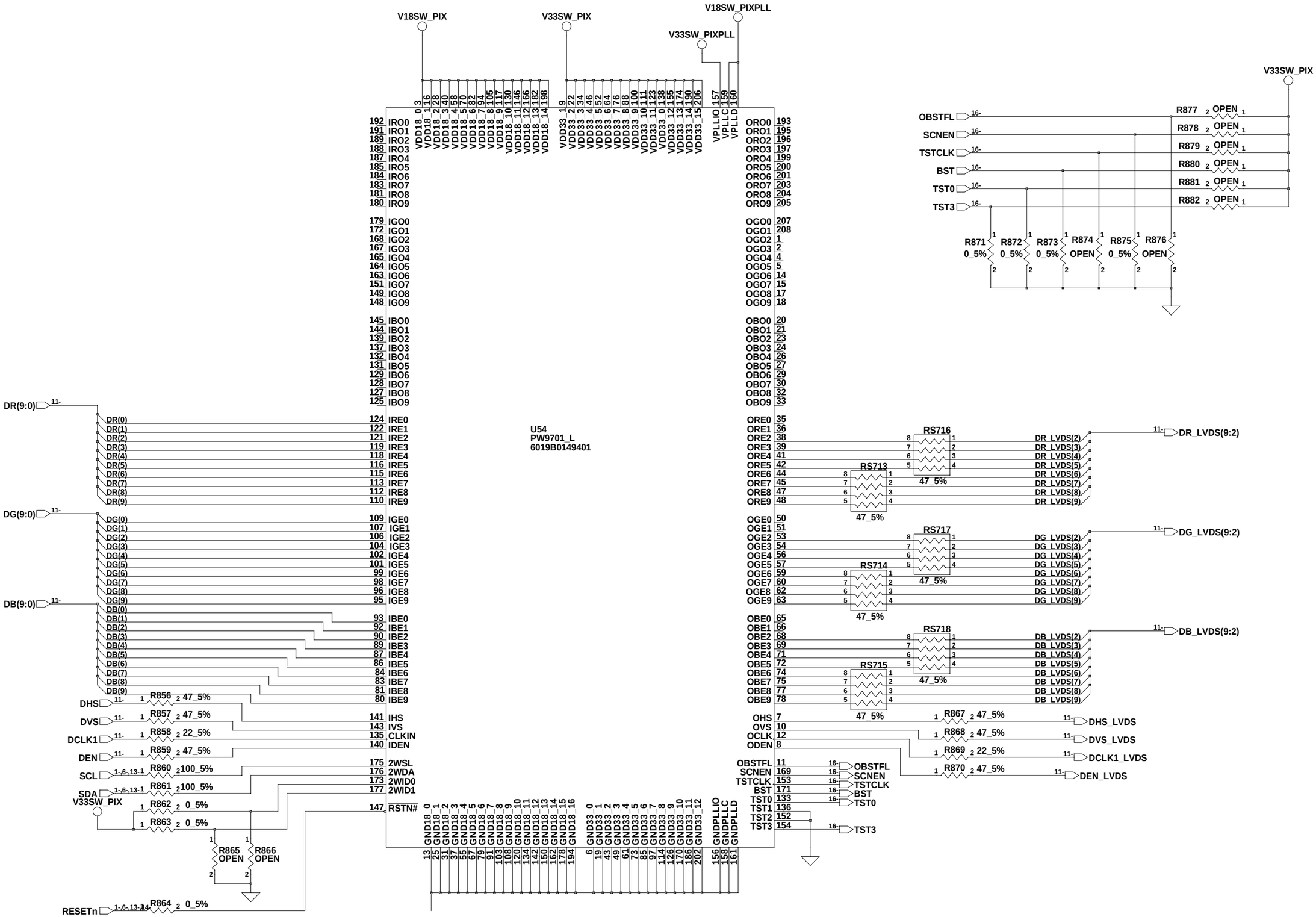




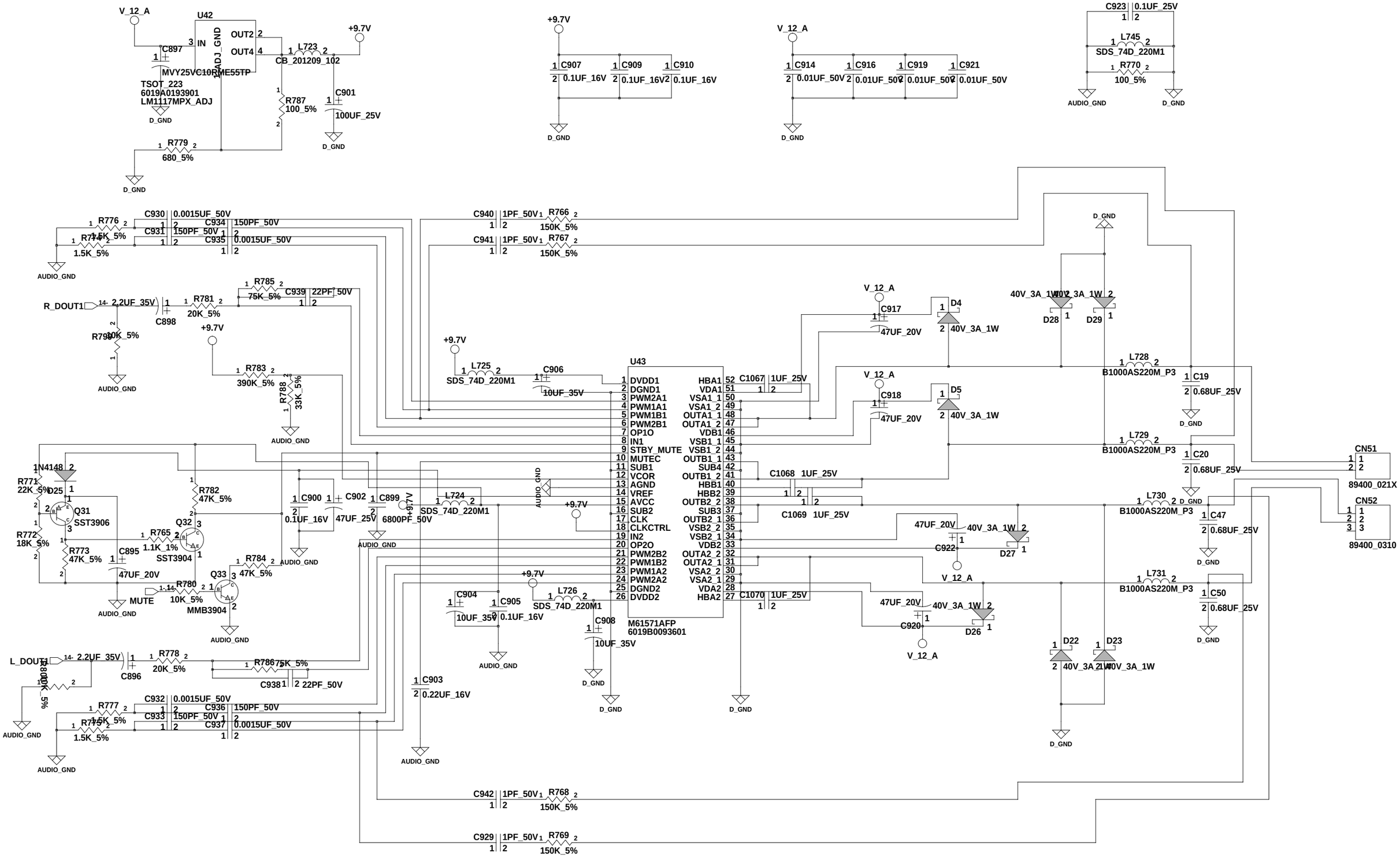
8.7 HDMI Decoder



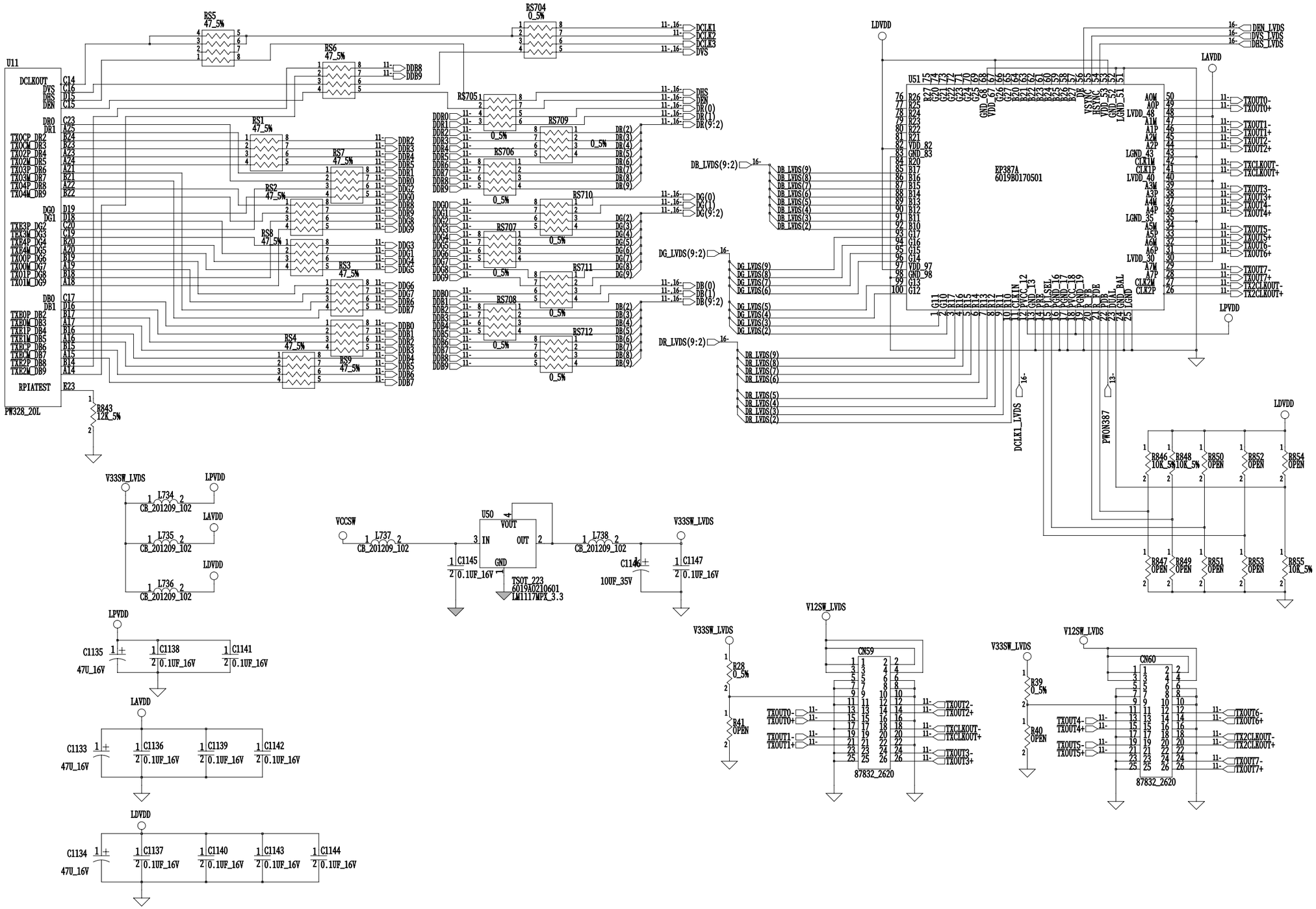
8.8 Video Enhancement



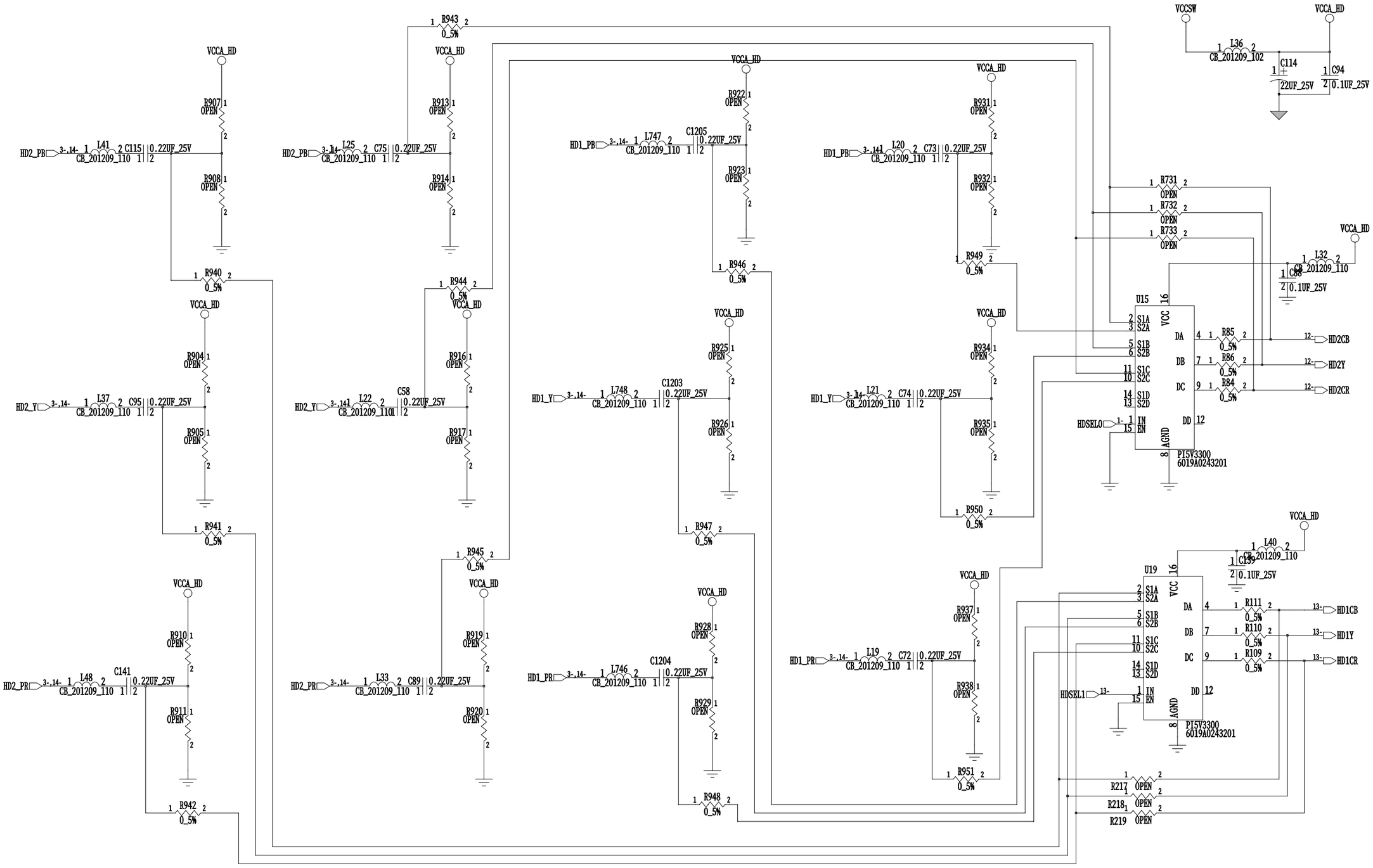
8.9 Audio AMP


V_12_A
U42
C897
MVY25VC10RME55TP
TSOT_223
6019A0193901
LM1117MPX_ADJ
ADJ_GND
OUT2
OUT4
IN
L723
CB_201209_102
+9.7V
R787
100_5%
C901
100UF_25V
R779
680_5%
D_GND
AUDIO_GND
C907
C909
C910
0.1UF_16V
C914
C916
C919
C921
0.01UF_50V
C923
0.1UF_25V
L745
SDS_74D_220M1
R770
100_5%
C930
C931
C934
C935
0.0015UF_50V
150PF_50V
R776
R774
7.5K_5%
1.5K_5%
C940
C941
1PF_50V
R766
R767
150K_5%
R_DOUT1
2.2UF_35V
C898
R781
20K_5%
R785
75K_5%
C939
22PF_50V
R790
100K_5%
R783
390K_5%
R788
33K_5%
L725
SDS_74D_220M1
C906
10UF_35V
U43
M61571AFP
6019B0093601
DVDD1
DGND1
PWM2A1
PWM1A1
PWM1B1
PWM2B1
OP1O
IN1
STBY_MUTE
MUTEC
SUB1
VCOR
AGND
VREF
AVCC
SUB2
CLK
CLKCTRL
IN2
OP2O
PWM2B2
PWM1B2
PWM1A2
PWM2A2
DGND2
DVDD2
HBA1
VDA1
VSA1_1
VSA1_2
OUTA1_1
OUTA1_2
VDB1
VSB1_1
VSB1_2
OUTB1_1
OUTB1_2
SUB3
SUB4
OUTB2_1
OUTB2_2
VSB2_2
VSB2_1
VDB2
OUTA2_2
OUTA2_1
VSA2_2
VSA2_1
VDA2
HBA2
C1067
C1068
C1069
C1070
1UF_25V
C917
C918
C922
47UF_20V
D4
D5
D27
40V_3A_1W
D28
D29
L728
L729
L730
L731
B1000AS220M_P3
C19
C20
C47
C50
0.68UF_25V
CN51
CN52
89400_021X
89400_0310
1N4148
D25
Q31
SST3906
Q32
SST3904
Q33
MMB3904
R771
22K_5%
R772
18K_5%
R773
47K_5%
R782
47K_5%
R784
47K_5%
R765
1.1K_1%
R780
10K_5%
C895
47UF_20V
MUTE
C900
C902
C899
0.1UF_16V
47UF_25V
6800PF_50V
L724
SDS_74D_220M1
C904
C905
0.1UF_16V
C908
L726
SDS_74D_220M1
C903
0.22UF_16V
L_DOUT1
2.2UF_35V
C896
R778
20K_5%
R786
75K_5%
C938
22PF_50V
R777
R775
C932
C933
C936
C937
C942
C929
R768
R769
D22
D23
AUDIO_GND
D_GND

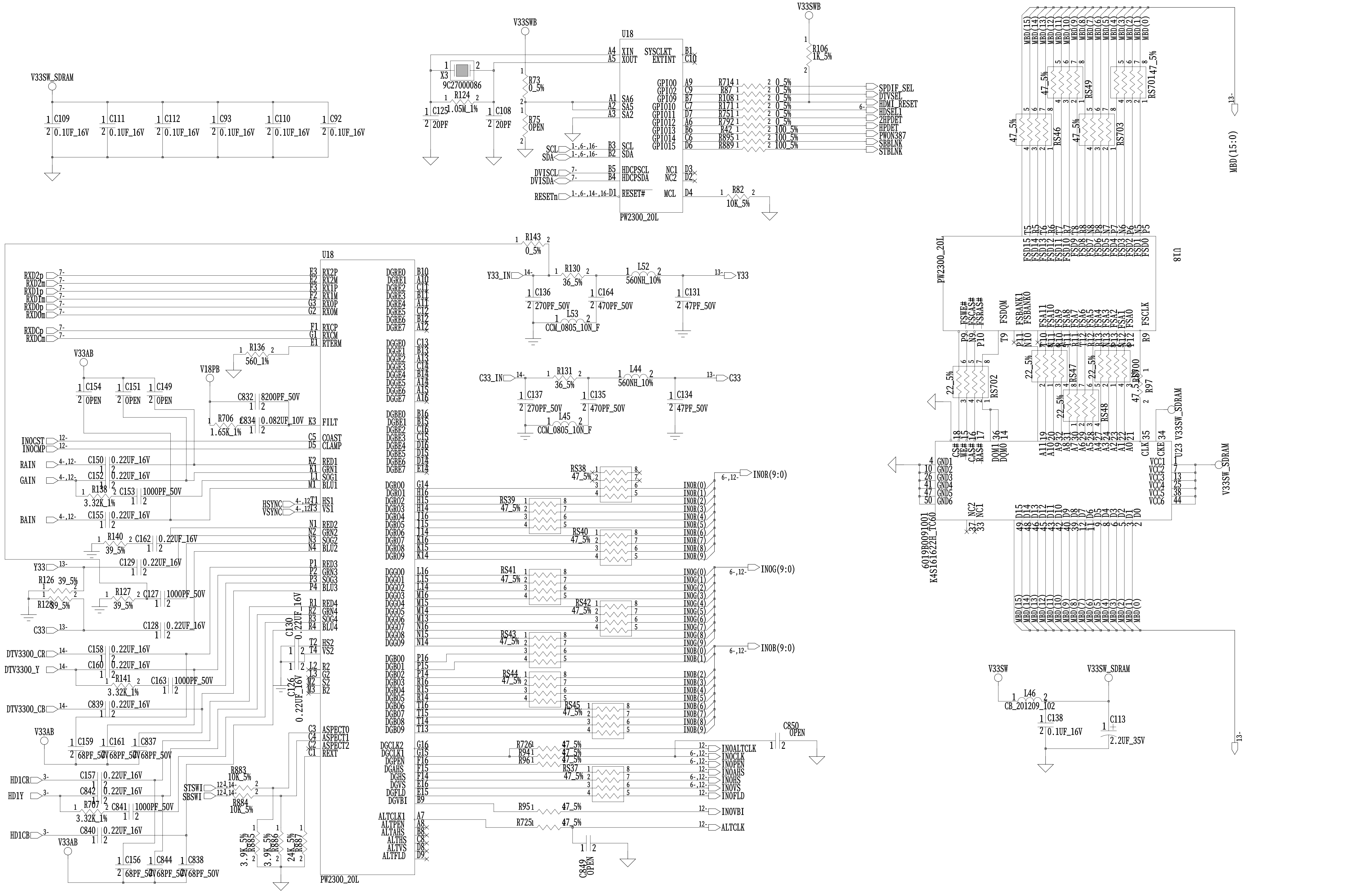
8.10 Panel Output



8.11 HDTV SWITCH

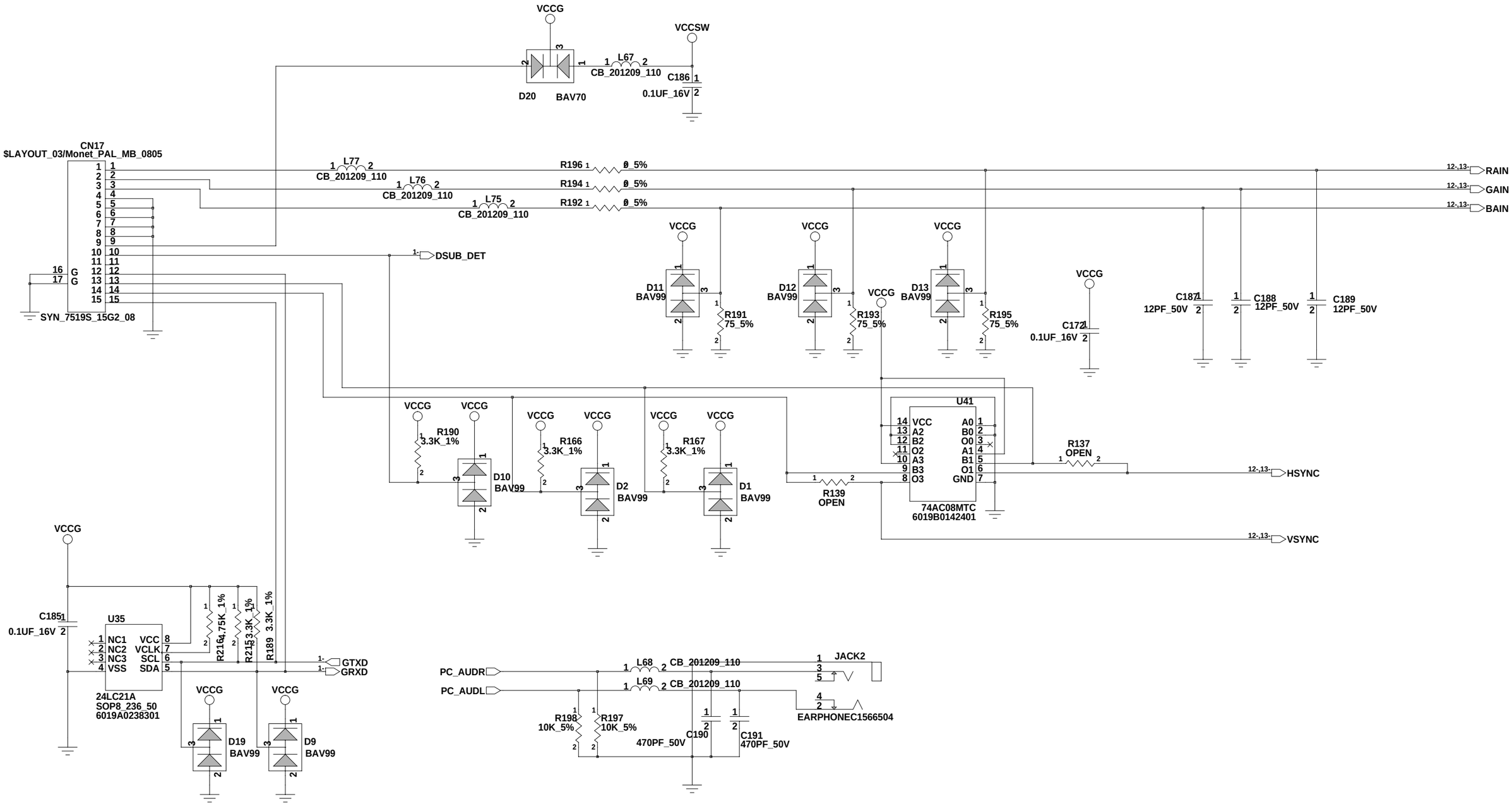


8.12 HDMI IO

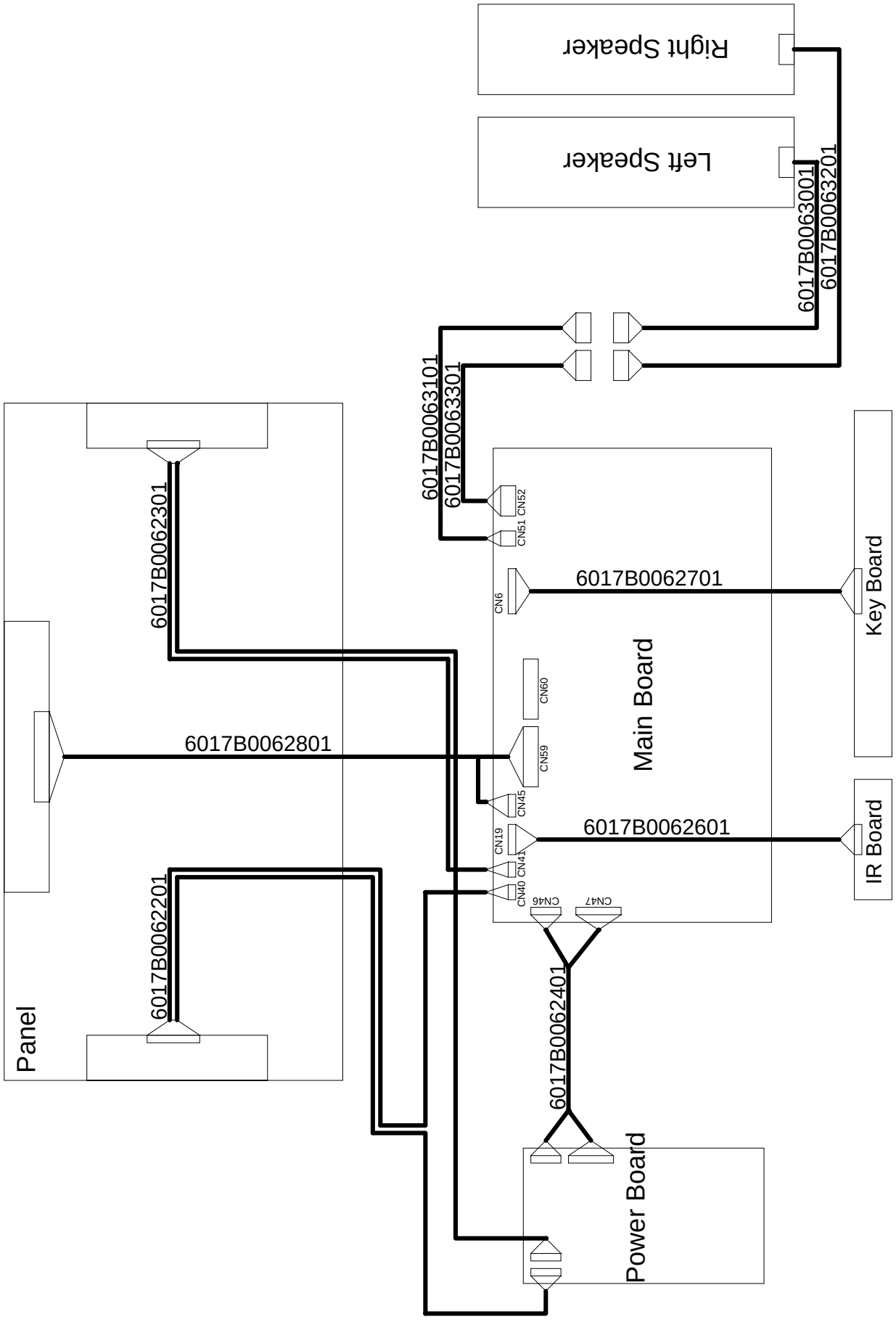


V33SW_SDRAM
C109 0.1UF_16V
C111 0.1UF_16V
C112 0.1UF_16V
C93 0.1UF_16V
C110 0.1UF_16V
C92 0.1UF_16V
V33SWB
U18
PW2300_20L
X3 9C27000086
R124 1.05M_1%
C125 20PF
C108 20PF
R73 0_5%
R75 OPEN
XIN
XOUT
SYSCLKT
EXTINT
SCL
SDA
DVISCL
DVISDA
RESETn
HDCPSCL
HDCPSDA
RESET#
MCL
R82 10K_5%
R106 1K_5%
SPDIF_SEL
DTVSEL
HDMI_RESET
HDSEL1
2HPDET
HPDET
PWON387
SBBLNK
STBLNK
MBD(15:0)
RXD2p
RXD2m
RXD1p
RXD1m
RXD0p
RXD0m
RXDCp
RXDCm
R136 560_1%
V33AB
V18PB
C832 8200PF_50V
C834 0.082UF_10V
R706 1.65K_1%
INOCST
INOCMP
RAIN
GAIN
BAIN
HSYNC
VSYNC
Y33
C33
DTV3300_CR
DTV3300_Y
DTV3300_CB
HD1CR
HD1Y
HD1CB
STSWI
SBSWI
R143 0_5%
Y33_IN
R130 36_5%
L52 560NH_10%
C136 270PF_50V
C164 470PF_50V
C131 47PF_50V
L53 CCM_0805_10N_F
C33_IN
R131 36_5%
L44 560NH_10%
C137 270PF_50V
C135 470PF_50V
C134 47PF_50V
L45 CCM_0805_10N_F
INOR(9:0)
INOG(9:0)
INOB(9:0)
INOALTCLK
INOCLK
INOPEN
INOAHS
INOHS
INOVS
INOFLD
INOVBI
ALTCLK
C850 OPEN
C849 OPEN
U23
6019B0091001
K4S161622H_TC60
V33SW
L46 CB_201209_102
C138 0.1UF_16V
C113 2.2UF_35V

8.13 VGA IO

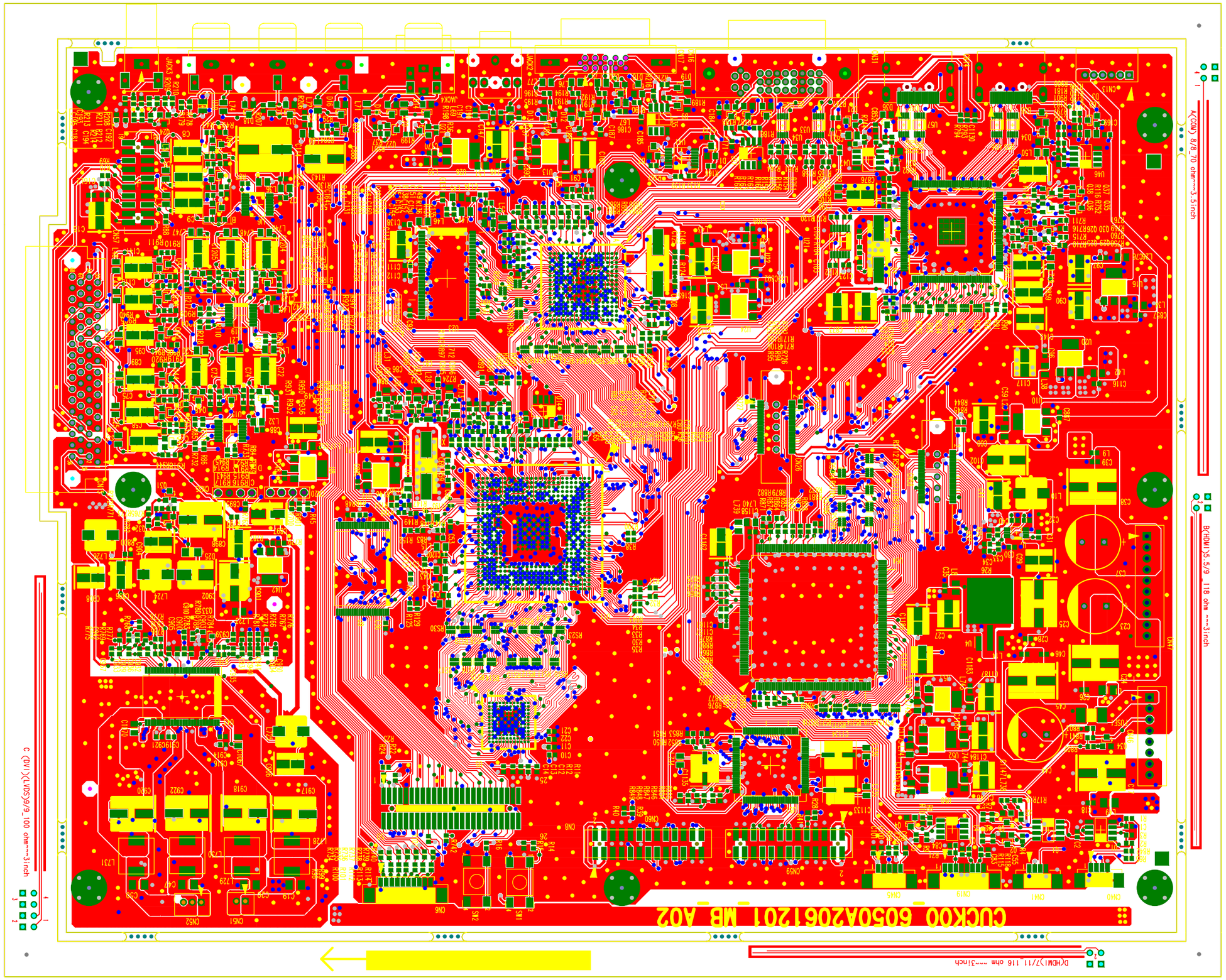

VCCG
VCCSW
D20
BAV70
L67
CB_201209_110
C186
0.1UF_16V
CN17
$LAYOUT_03/Monet_PAL_MB_0805
SYN_7519S_15G2_08
L77
L76
L75
CB_201209_110
R196
R194
R192
0_5%
12-,13-RAIN
12-,13-GAIN
12-,13-BAIN
1-DSUB_DET
D11
D12
D13
BAV99
R191
R193
R195
75_5%
C172
0.1UF_16V
C187
C188
C189
12PF_50V
R190
R166
R167
3.3K_1%
D10
D2
D1
U41
74AC08MTC
6019B0142401
R139
OPEN
R137
OPEN
12-,13-HSYNC
12-,13-VSYNC
C185
0.1UF_16V
U35
24LC21A
SOP8_236_50
6019A0238301
R216
4.75K_1%
R215
R189
3.3K_1%
1-GTXD
1-GRXD
D19
D9
BAV99
PC_AUDR
PC_AUDL
L68
L69
CB_201209_110
JACK2
EARPHONEC1566504
R198
10K_5%
R197
10K_5%
C190
C191
470PF_50V

9. Wiring Diagram

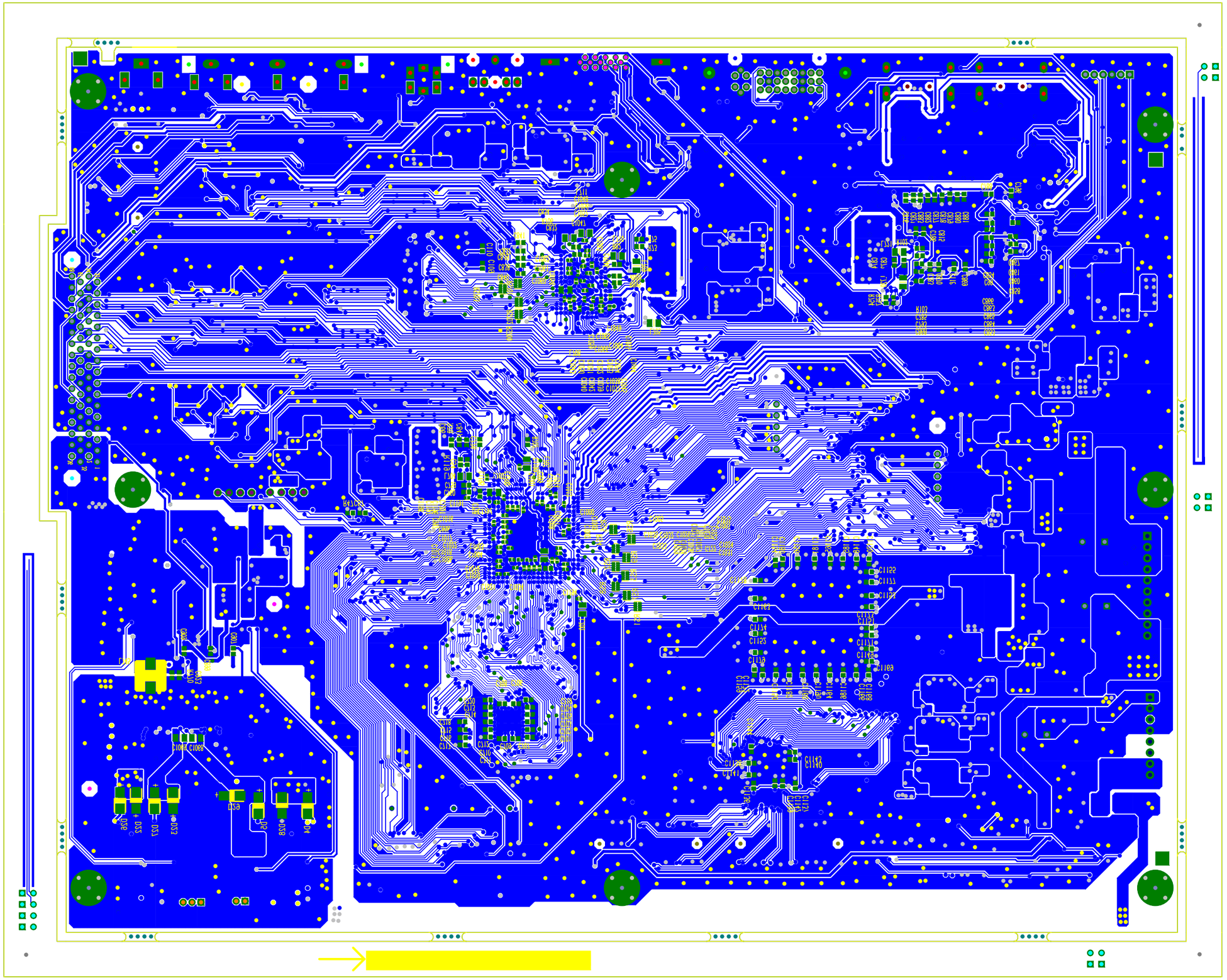


10. PCB Layout Diagrams

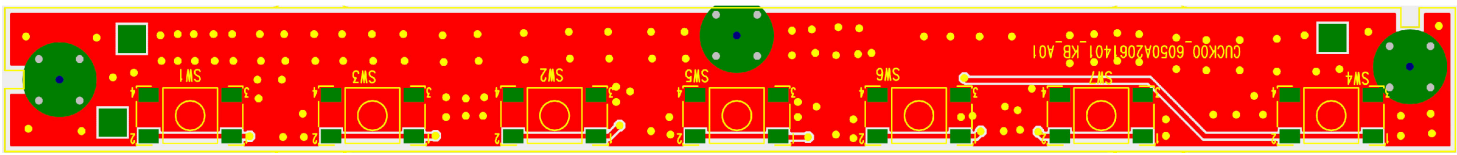
10.1 Main PCB Top View



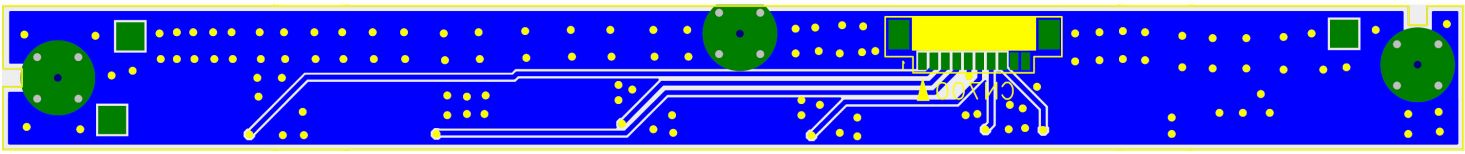
10.2 Main PCB Bottom View



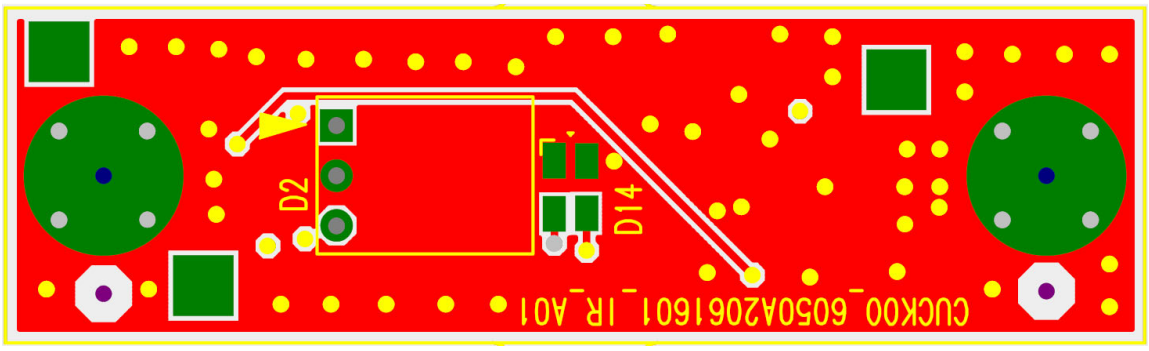
10.3 Keypad Board Top View



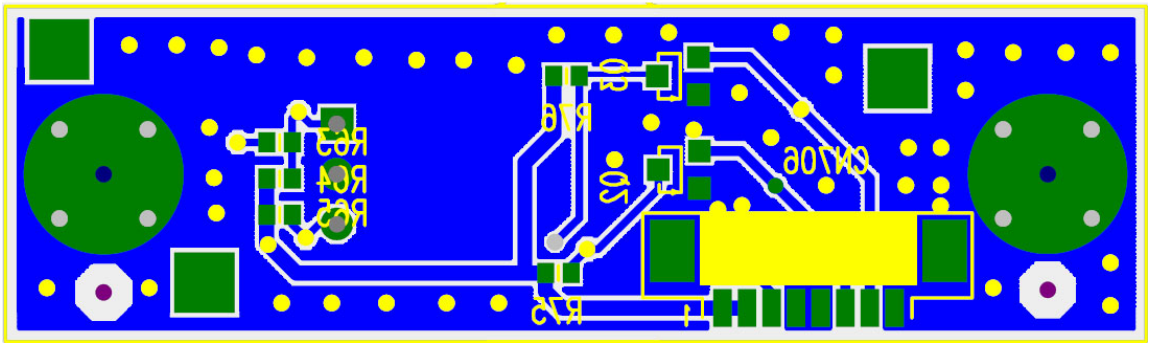
10.4 Keypad Board Bottom View



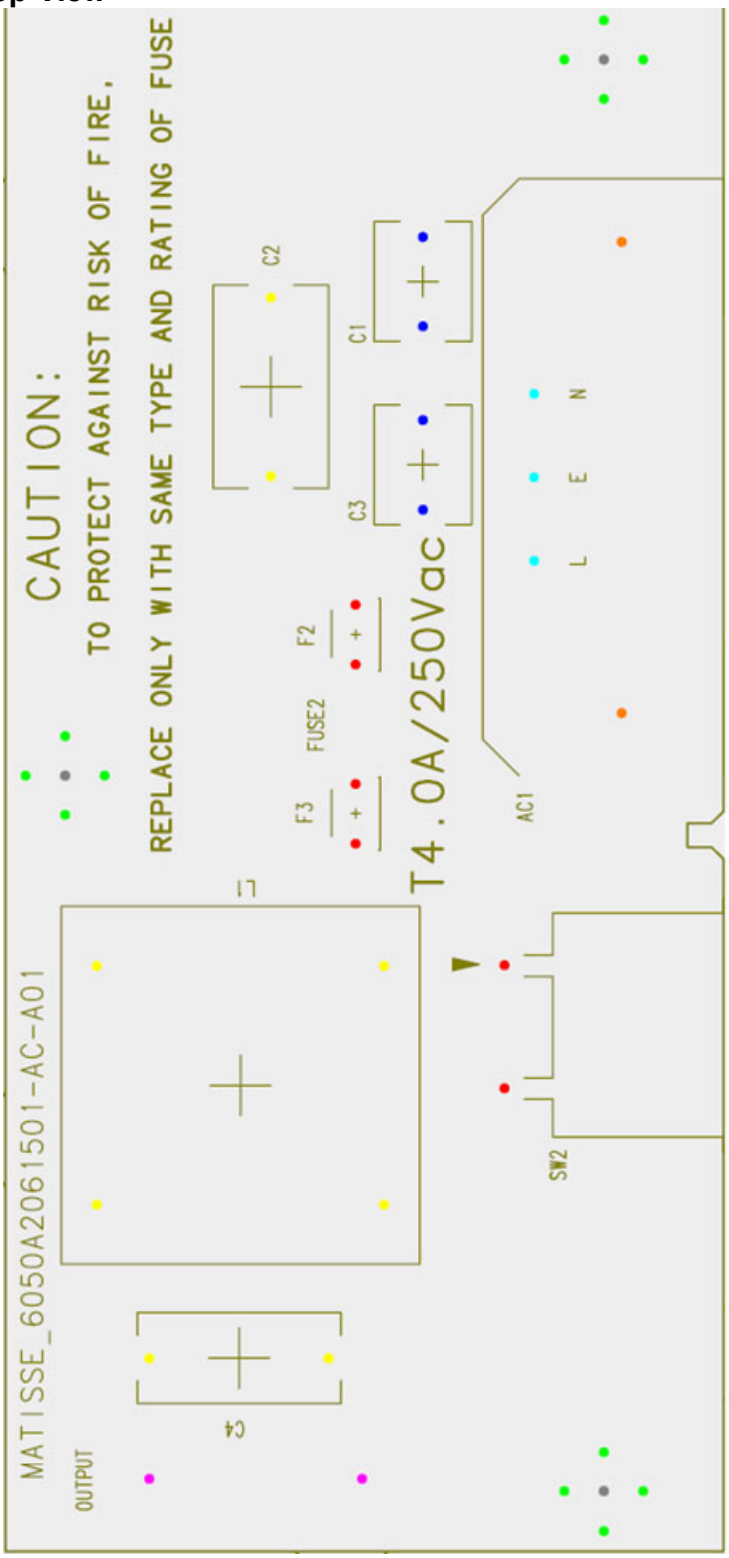
10.5 IR Board Top View



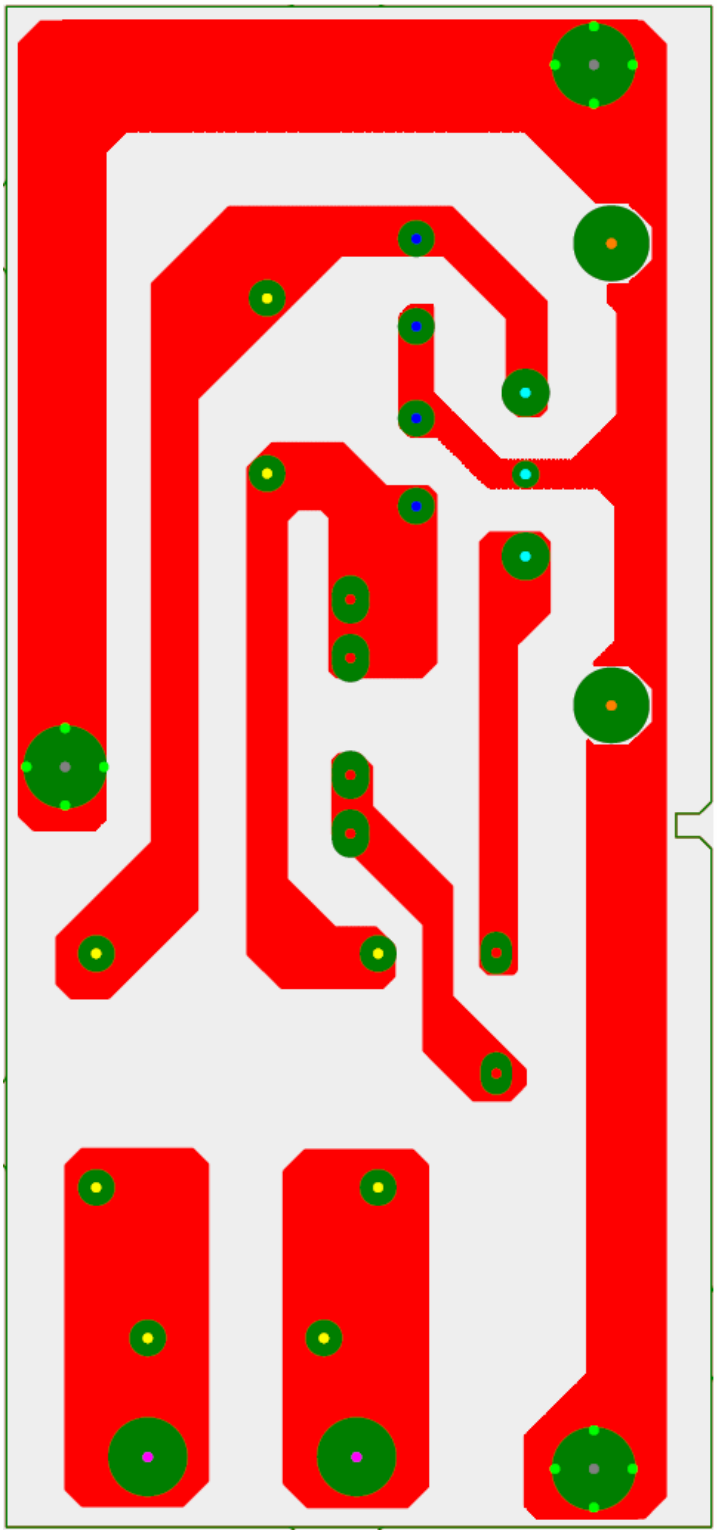
10.6 IR Board Bottom View



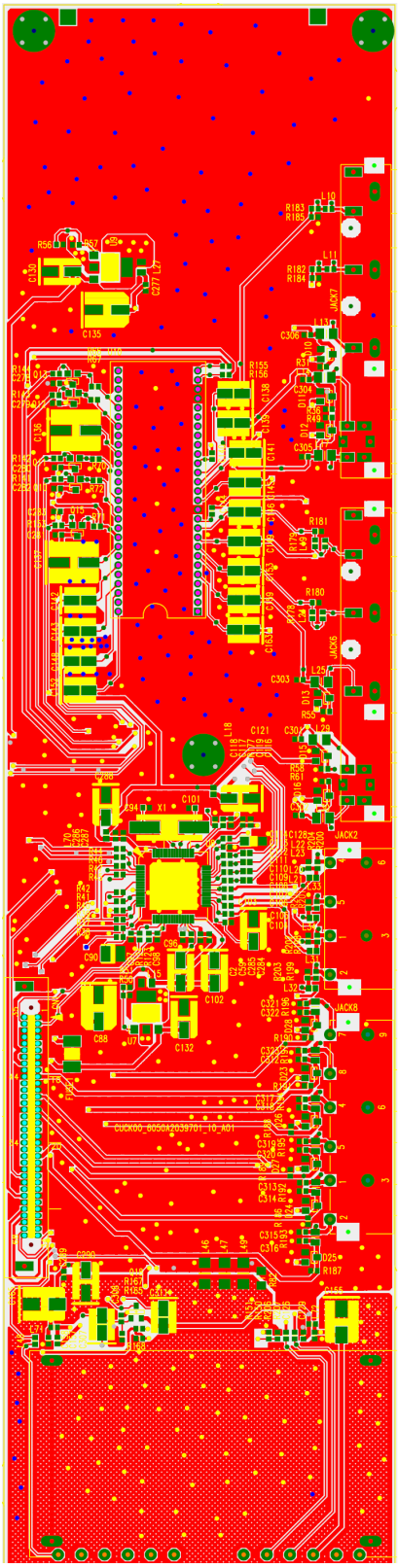
10.7AC-in Board Top View



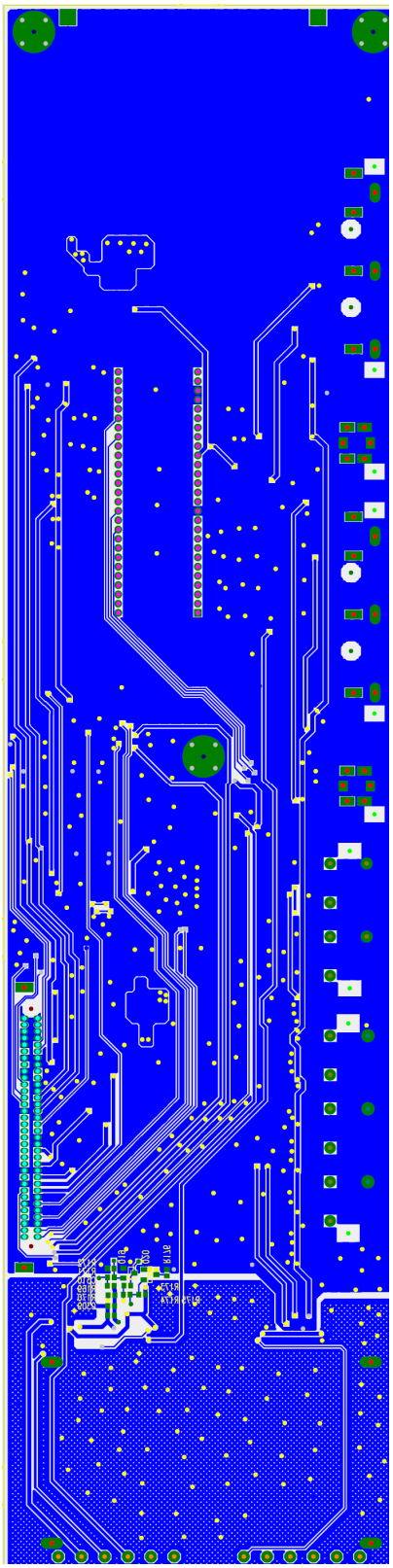
10.8AC-in Board Bottom View



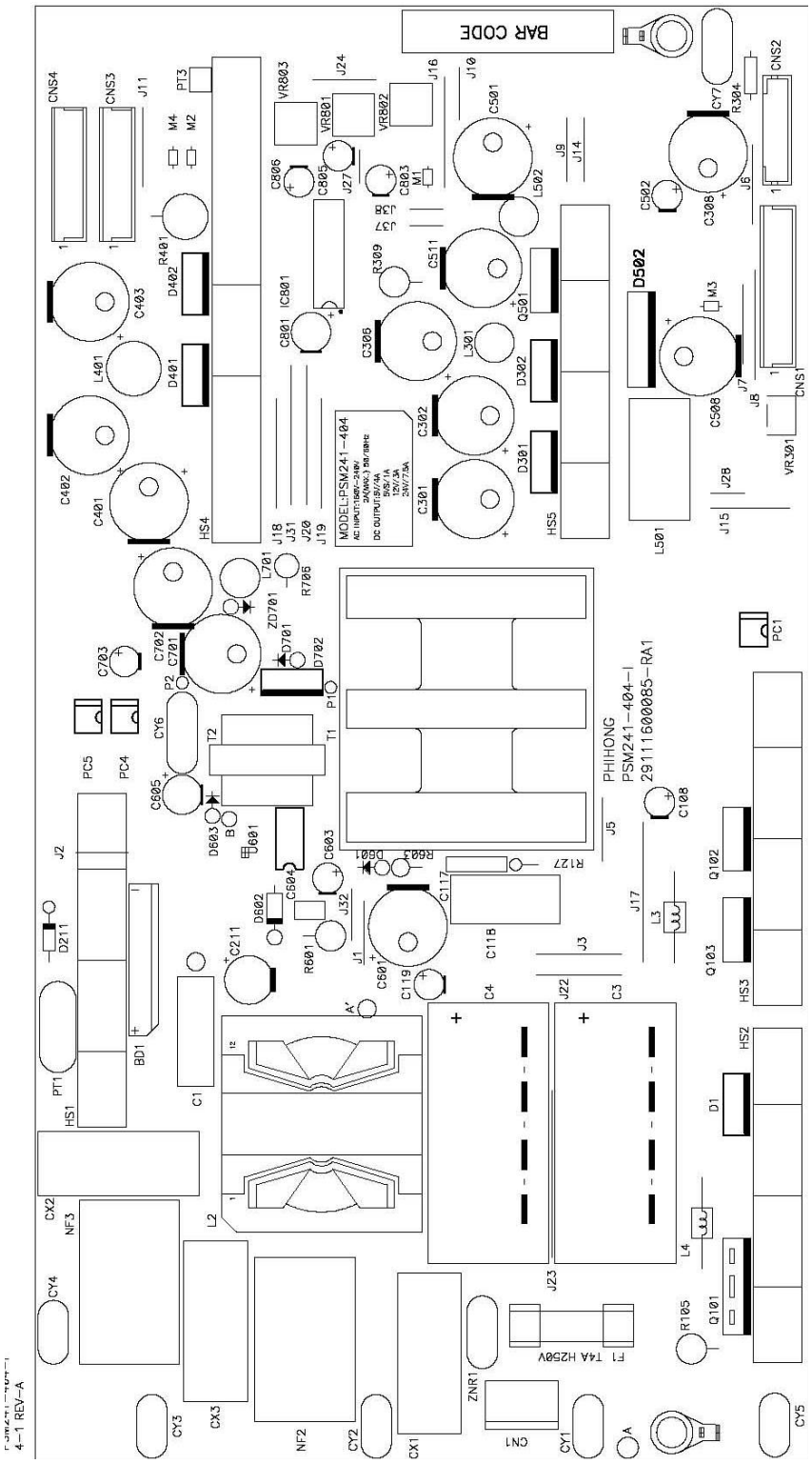
10.9 IO Board Top View



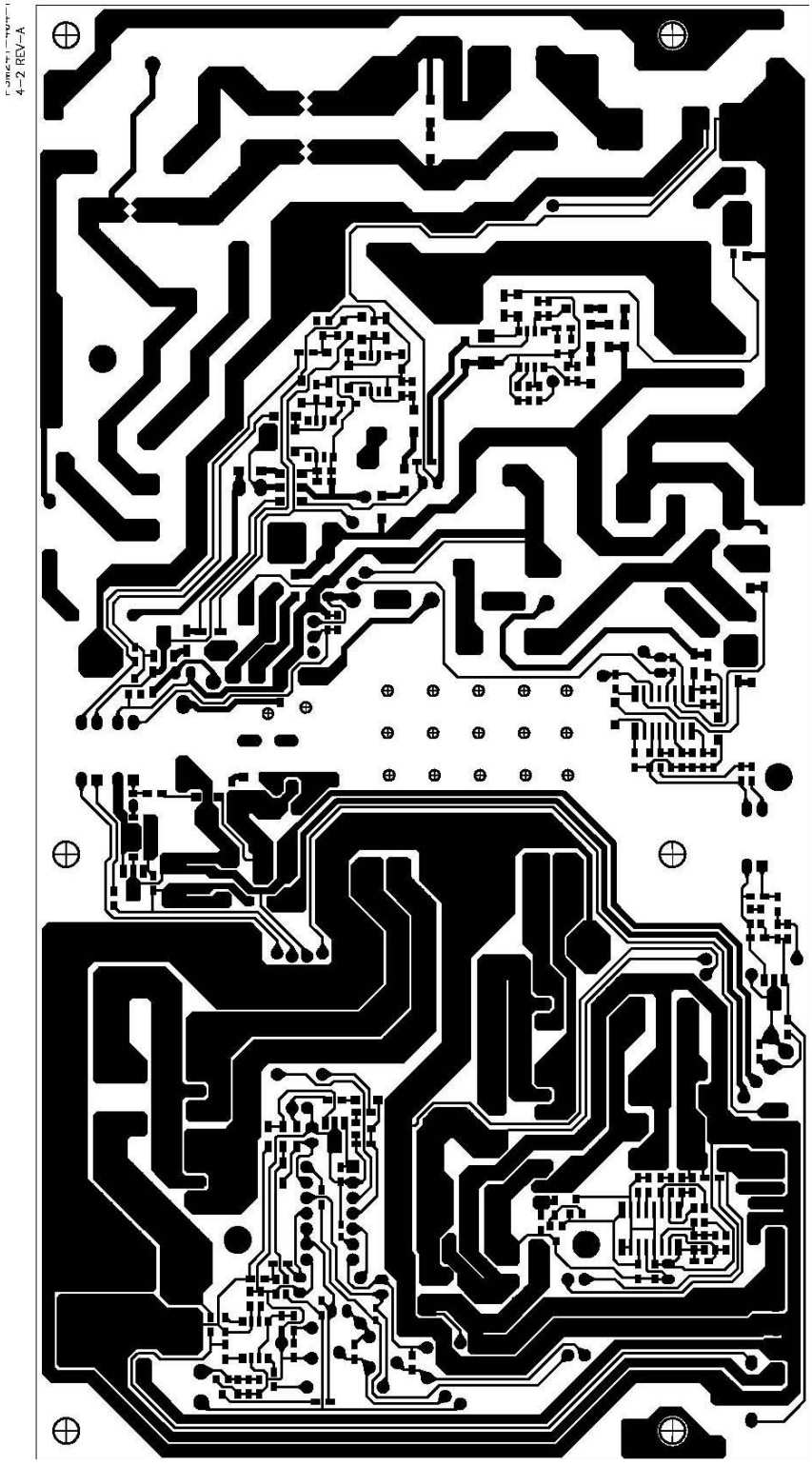
10.10 IO Board Bottom View



10.11 Power Top View

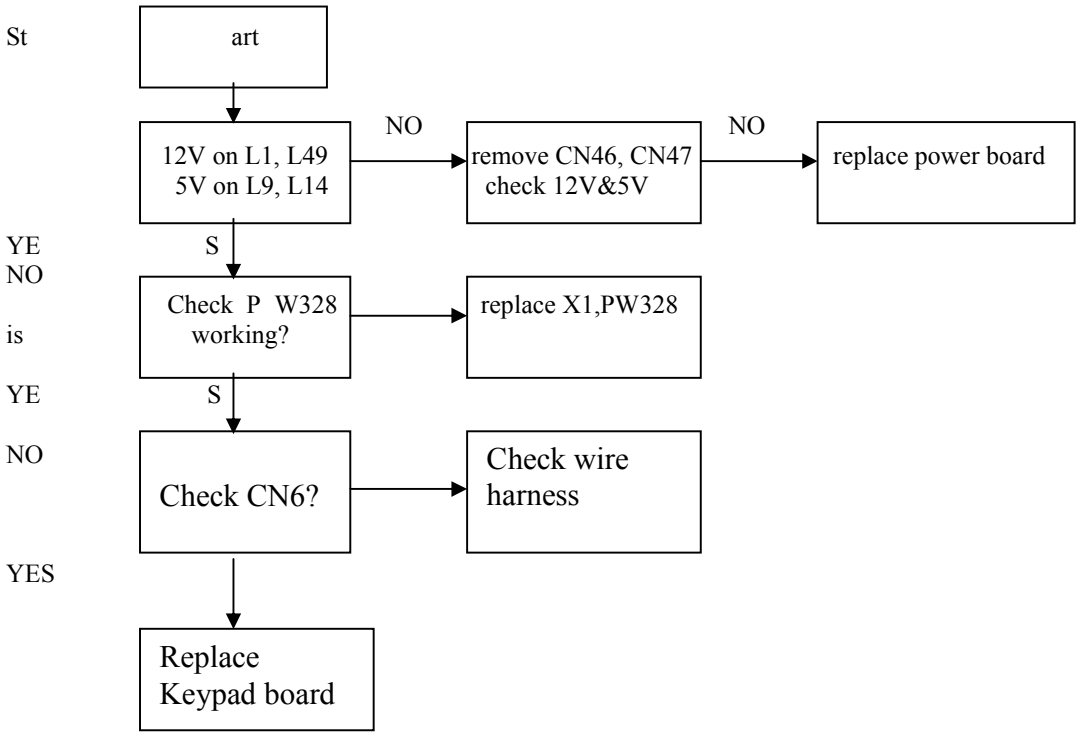


10.12 Power Bottom View



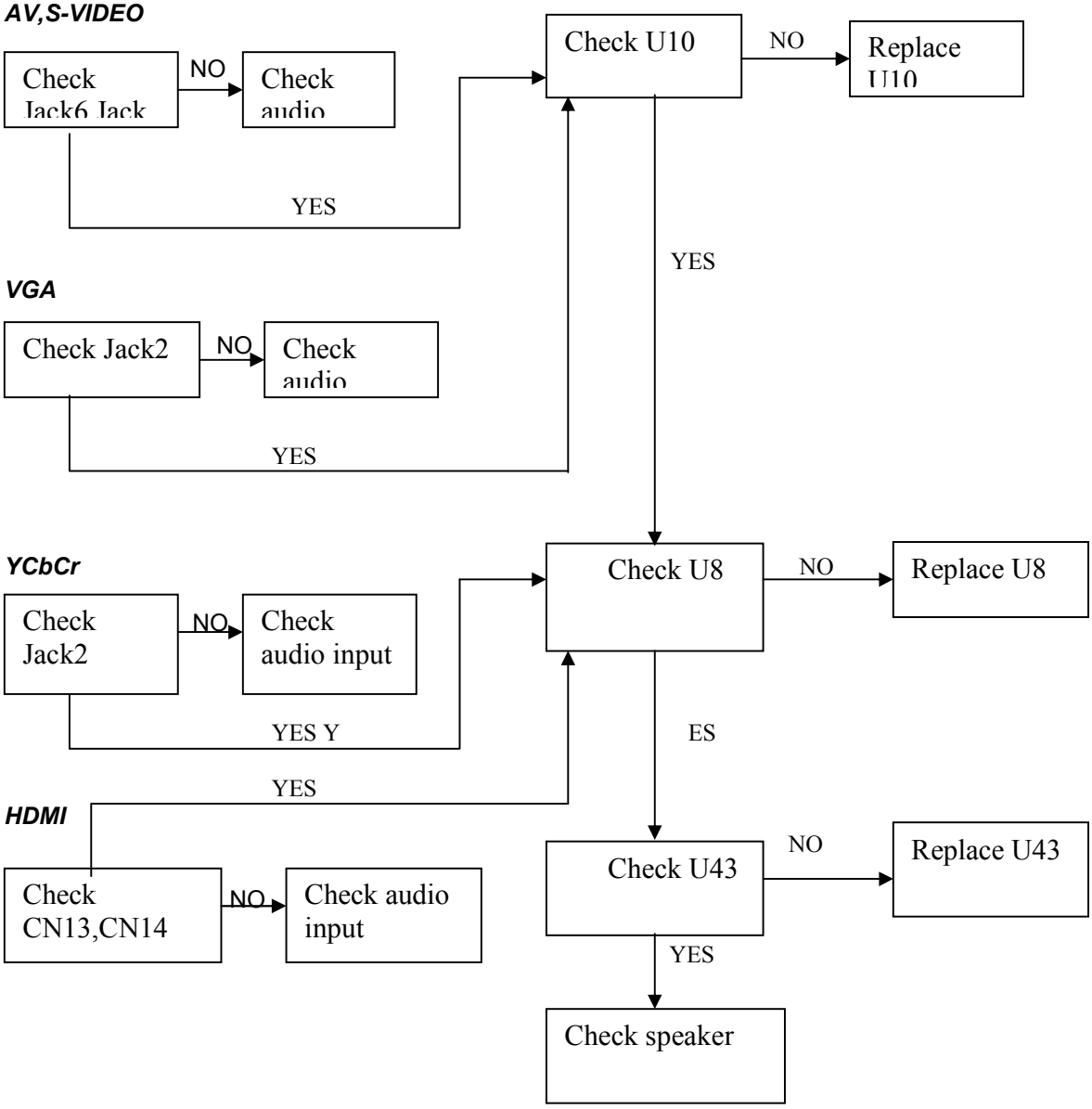
11.Trouble Shooting Flow Chart

11.1. No Power

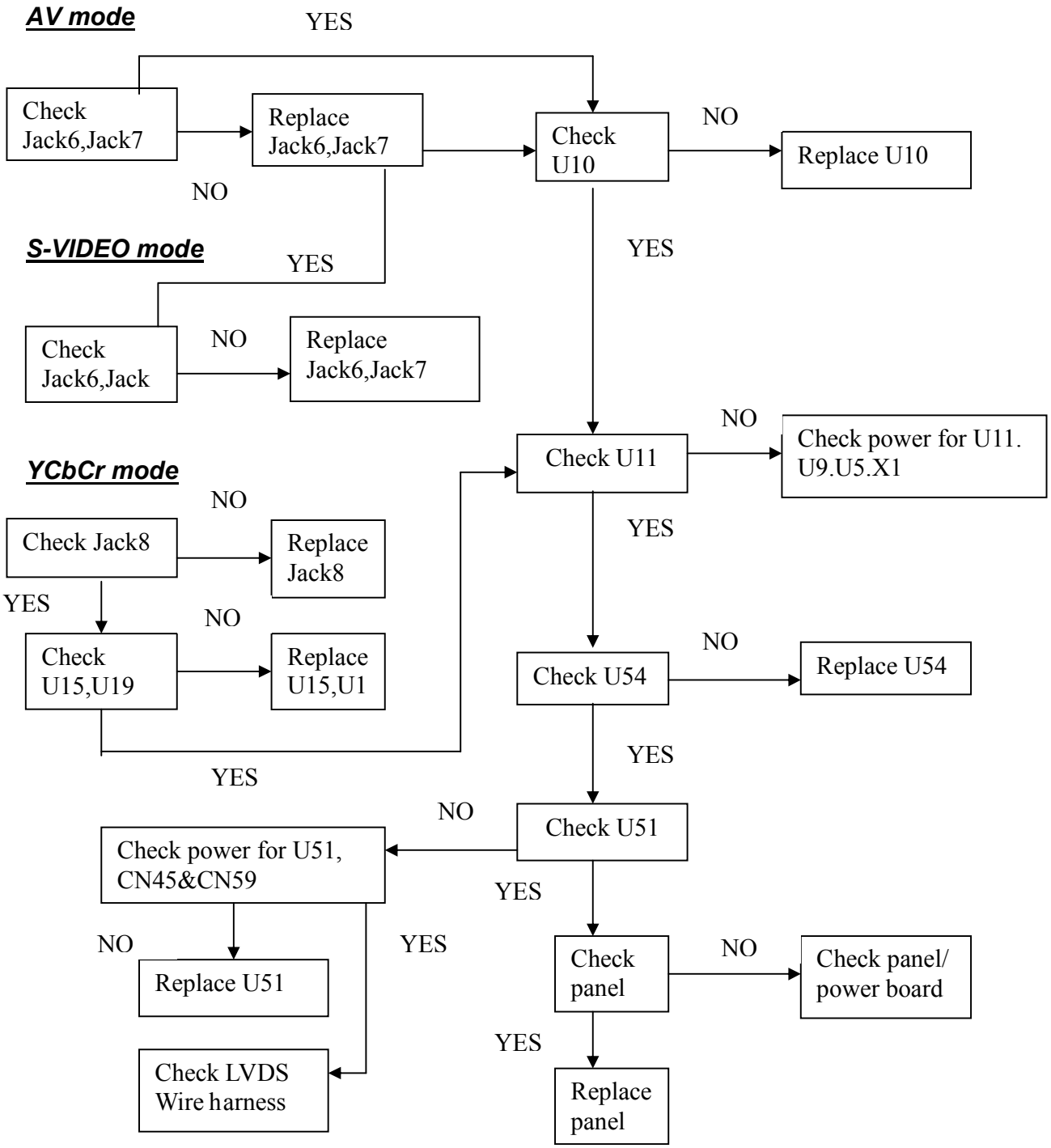


11.2 .No Voice

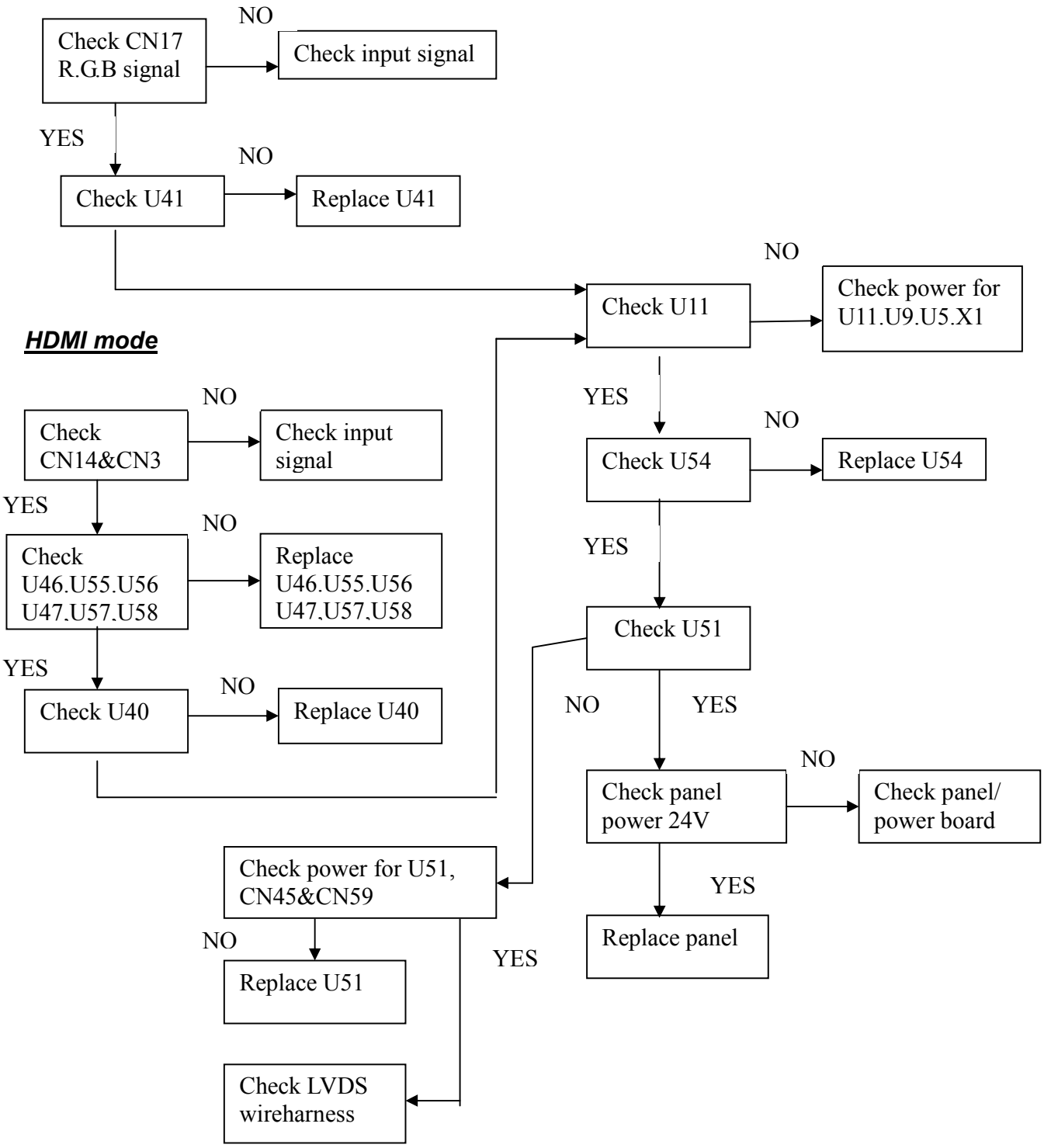
AV,S-VIDEO



11.3 No Display

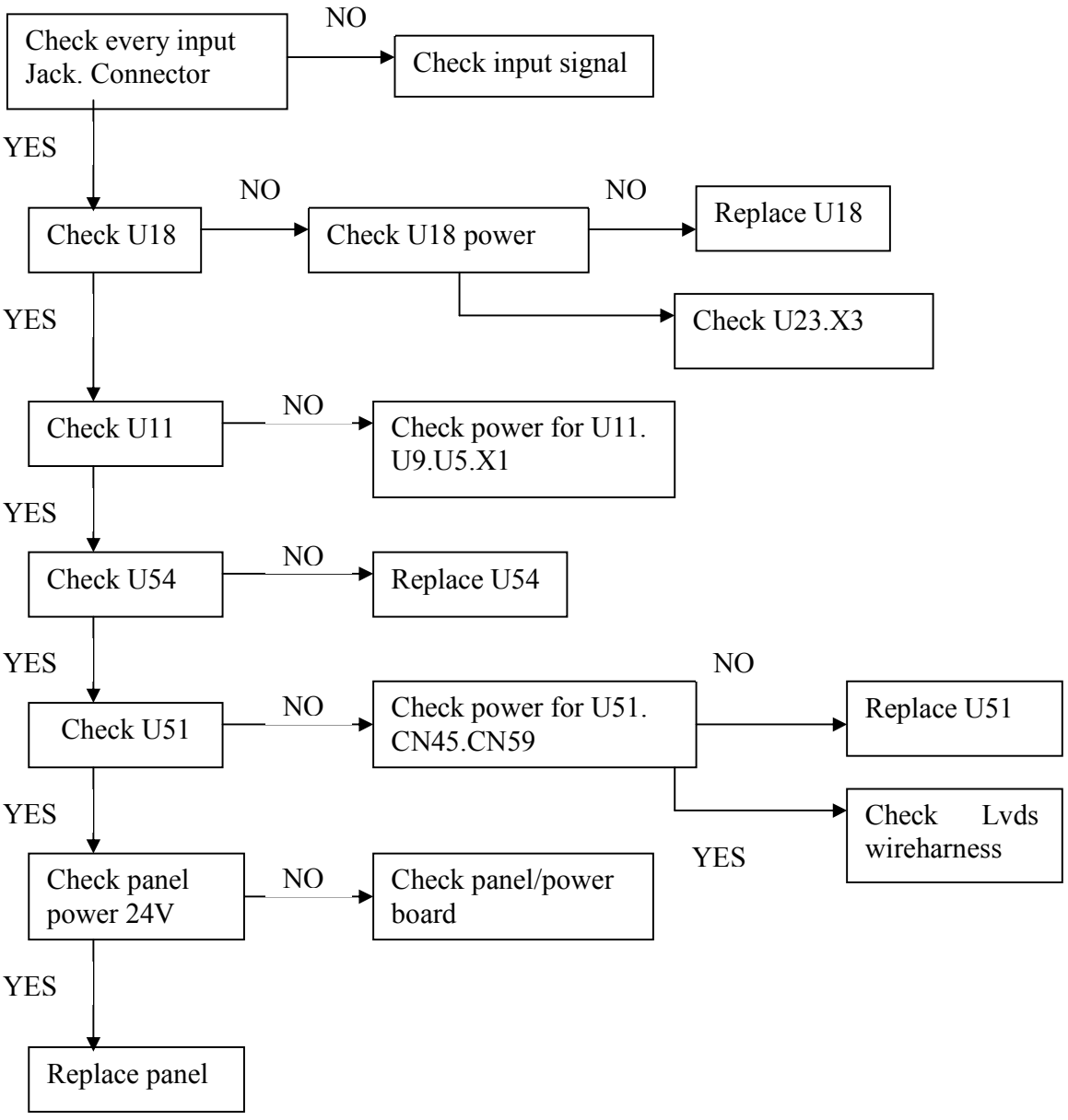


VGA mode



HDMI mode

11.4. No PIP Display



12. Recommended Spare Parts List

RECOMMENDED SPARE PARTS LIST (N4200w-1)

ViewSonic Model Number: VS10945-1M
Rev: 1a
Serial No. Prefix: PYD

Item		Description	ECR/ECN	ViewSonic P/N	Ref. P/N	Location	Universal number#	Q'ty
1	**Accessories:**	CORD,ROUND,3POS,1830mm,E,POWER,USA		A-00005513	6017B0010201			1
2		CORD,ROUND,3POS,1830mm,E,POWER		A-00005513	6017B0010201			1
3		MODULE,REMOTE CONTROLLER		A-00005514	6042B0026301			1
4		ACCESSORY,KIT CUSTOMERIZE,TOP		A-00005515	6063B0001701			1
5		ACCESSORY,KIT CUSTOMERIZE,BOTT		A-00005516	6063B0001801			1
6		BATTERY-ALKALINE-1.5V-AAA		A-00005574	6027A0009401			2
7	**Board Assembly:**	ASSEMBLY,BOARD,I/C		B-00005517	1310A2039702			1
8		MAIN BOARD ASSEMBLY		B-00005518	1310A2039602			1
9		POWER BOARD ASSEMBLY		B-00005519	1310A2061501			1
10		KEYBOARD ASSEMBLY		B-00005520	1310A2061401			1
11		LED BOARD ASSEMBLY		B-00005521	1310A2061601			1
12		POWER MODULE,AC-DC,90-264V,4		B-00005565	6020B0000901			1
13	**Cabinets:**	COVER,WIRELESS,SECC		C-00005523	6053B0080501			1
14		COVER,DTV,SECC		C-00005531	6053B0080601			1
15		CASE,REAR,SECC		C-00005532	6053B0074101			1
16		SET,COVER,FRONT,SWITCH		C-00005534	6070B0105901			1
17		SET,CASE,BOTTOM		C-00005535	6070B0109101			1
18		CASE,FRONT,PC+ABS		C-00005547	6051B0053101			1
19		HOUSING,LED,REAR,PC+ABS		C-00005570	6051B0052901			1
20		HOUSING,FRONT CASE ,PC+ABS		C-00005571	6051B0053001			1
21		COVER,I/O,REAR,PC+ABS		C-00005572	6051B0065001			1
22	**Cables:**	CABLE,ROUND,15POS,1800mm,E,VGA		CB-00005548	6017B0071101			1
23		JACK,SPEAKER,1X2,2P,SN-CU,DIP,-		CB-00005550	6026B0031501			1
24		JACK,SPEAKER,1X2,2P,SN-CU,DIP,		CB-00005551	6026B0056001			1
25		CABLE,ROUND,3POS,900mm,I,SPEAK		CB-00005552	6017B0063101			1
26		CABLE,ROUND,10POS,1000mm,I		CB-00005553	6017B0062701			1
27		CABLE,ROUND,18POS,250mm,I,POWE		CB-00005554	6017B0062401			1
28		CABLE,ROUND,30POS,260mm,I,LVDS		CB-00005555	6017B0062801			1
29		CABLE,ROUND,8POS,600mm,I,ALL		CB-00005556	6017B0062601			1
30		CABLE,ROUND,12POS,270mm,I,INVE		CB-00005557	6017B0062201			1
31		CABLE,ROUND,12POS,800mm,I,INVE		CB-00005558	6017B0062301			1
32		CABLE,ROUND,2POS,400mm,I,SPEAK		CB-00005559	6017B0063001			1
33		CABLE,ROUND,2POS,400mm,I,SPEAK		CB-00005560	6017B0063201			1
34		CABLE,ROUND,1POS,75mm,I		CB-00005561	6017B0065701			1
35		CABLE,ROUND,3POS,120mm,I,AC		CB-00005562	6017B0063401			1
36	**Documentation**	LABEL,AGENCY,183.6mm,51.6mm,USA		DC-00005539	6060B0182201			1
37		LABEL,BLANK,76.2mm,76.2mm,USA		DC-00005540	6060B0189501			1
38		LABEL,BLANK,50.8mm,25.4mm,288519-008		DC-00005541	6060B0146401			1
39		LABEL,SECURITY,7mm,7mm,USA		DC-00005542	6060B0190001			1
40		LABEL.BLANK-028-49*14		DC-00005543	60600509X309			1
41		QUICK START GUIDE,N4200W,USA		DC-00005563	6061B0145301			1
42		USER GUIDE,USA		DC-00005564	6061B0133801			1
43	**Electronics:**	LCD MODULE 42-TFT-WXGA		E-00005566	6024A0013101			1
44		SPEAKER.W/HOUSING,4OHM,10W,79.2mm,655X10		E-00005568	6039B0004101			1
45		SPEAKER.W/HOUSING,4OHM,10W,79.2mm,655X10		E-00005569	6039B0004201			1
46	**Hardware:**	BRACKET,MAIN STAND,SECC		HW-00005522	6053B0080401			2
47		SHIELD,I/O,BOTTOM,SECC		HW-00005524	6053B0073601			1
48		BRACKET,PANEL,BOTTOM,SECC		HW-00005525	6053B0075001			2
49		BRACKET,PANEL,FRONT,SECC		HW-00005526	6053B0074901			2
50		BRACKET,PANEL,LEFT,SECC		HW-00005527	6053B0074801			1
51		BRACKET,PANEL,RIGHT,SECC		HW-00005528	6053B0074701			1
52		BRACKET,PANEL,UP,SECC		HW-00005529	6053B0074201			2
53	**Miscellaneous:**	FRAME,M/B,SECC		M-00005533	6053B0096401			1
54		NAMEPLATE,VIEWSONIC,54.829mm,9		M-00005567	6053B0096301			1
55		PLUG,DEBUG,PC+ABS		M-00005573	6051B0056601			1
56	**Packing Material:**	FOAM,EPS,SHEET,1044mm,736mm,0.		P-00005537	6060B0180101			1
57		CARTON,PT,26KGSCM,AB,CG,1154mm		P-00005538	6062B0014301			1
58		BAG,PE-HD,F,0.05mm,1118mm,915mm		P-00005544	6060B0180001			1
59		BAG-PE-FR-0.05-240x340mm		P-00005545	6060A0158601			1
60	**Plastics:**	GASKET,CHASSIS,REAR CASE,CATER		PL-00005530	6054B0096401			3
61		FOOT,RUBBER,10mm,31mm		PL-00005536	6054B0069901			7
62		LENS,LED,FRONT,ACRYLIC		PL-00005546	6051B0052801			1

Remark 1: Above listed items are examples, supplier can expand the rows to add more necessary items.
Remark 2: All revised RSPLs with newly added items or any change made should be highlighted and correlated with the ECN/ECR approved by ViewSonic Corporation. This is to eliminate repeated cross checks of each item between this version and prior versions.

BOM LIST (N4200w)

ViewSonic Model Number: VS10945-1M

Rev: 1a

Serial No. Prefix: PYD

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
1	CB-00005548	6017B0071101	CABLE,ROUND,15POS,1800mm,E,VGA			1
2	DC-00005563	6061B0145301	MANUAL,QUICK SETUP,N4200W,USA			1
3	DC-00005564	6061B0133801	MANUAL,GUIDE,USA			1
4	A-00005514	6042B0026301	MODULE,REMOTE CONTROLLER			1
5	N/A	6052B0040701	SCREW,PAN,M3.5,18mm,TAP,6.0mm,			6
6	E-00005569	6039B0004201	SPEAKER.W/HOUSING,4OHM,10W,79.			1
7	E-00005568	6039B0004101	SPEAKER.W/HOUSING,4OHM,10W,79.			1
8	A-00005513	6017B0010201	CORD,ROUND,3POS,1830mm,E,POWER			1
9	P-00005545	6060A0158601	BAG-PE-FR-0.05-240x340mm			1
10	A-00005574	6027A0009401	BATTERY-ALKALINE-1.5V-AA			2
11	DC-00005542	6060B0190001	LABEL,SECURITY,7mm,7mm,USA			1
12	DC-00005541	6060B0146401	LABEL,BLANK,50.8mm,25.4mm,2885			1
13	DC-00005543	60600509X309	LABEL.BLANK-028-49*14			1
14	DC-00005540	6060B0189501	LABEL,BLANK,76.2mm,76.2mm,USA			1
15	A-00005515	6063B0001701	ACCESSORY,KIT CUSTOMERIZE,TOP			1
16	N/A	6060B0181001	LABEL,BLANK,40mm,20mm,3M			6
17	A-00005516	6063B0001801	ACCESSORY,KIT CUSTOMERIZE,BOTT			1
18	P-00005537	6060B0180101	FOAM,EPS,SHEET,1044mm,736mm,0.			1
19	P-00005544	6060B0180001	BAG,PE-HD,F,0.05mm,1118mm,915m			1
20	P-00005538	6062B0014301	CARTON,PT,26KGSCM,AB,CG,1154mm			1
21	DC-00005539	6060B0182201	LABEL,AGENCY,183.6mm,51.6mm,US			1
22	N/A	6052B0045901	SCREW,PAN,M3.5,15mm,TAP,6.0mm,			27
23	M-00005567	6053B0096301	NAMEPLATE,VIEWSONIC,54.829mm,9			1
24	N/A	6052B0039901	SCREW,I,M3,6.0mm,MACH,5.5mm,1.			19
25	N/A	6052B0040301	SCREW,PAN WASHER,M4,12.0mm,MAC			6
26	N/A	6052B0040401	SCREW,PAN,M4,6.0mm,MACH,7.0mm,			10
27	HW-00005522	6053B0080401	BRACKET,MAIN STAND,SECC			2
28	C-00005523	6053B0080501	COVER,WIRELESS,SECC			1
29	M-00005573	6051B0056601	PLUG,DEBUG,PC+ABS			1
30	PL-00005530	6054B0096401	GASKET,CHASSIS,REAR CASE,CATER			3
31	N/A	6052B0040201	SCREW,PAN,M3.0,8mm,TAP,5.5mm,2			4
32	N/A	6052B0040401	SCREW,PAN,M4,6.0mm,MACH,7.0mm,			1
33	C-00005531	6053B0080601	COVER,DTV,SECC			1
34	C-00005532	6053B0074101	CASE,REAR,SECC			1
35	N/A	6052B0044701	SCREW,PAN WASHER,M3.0,6mm,MACH			8
36	N/A	6052B0044801	SCREW,PAN WASHER,M4,8mm,MACH,8			1
37	M-00005533	6053B0096401	FRAME,M/B,SECC			1
38	N/A	6017B0063301	CABLE,ROUND,2POS,400mm,I,SPEAK			1
39	CB-00005552	6017B0063101	CABLE,ROUND,3POS,900mm,I,SPEAK			1
40	CB-00005553	6017B0062701	CABLE,ROUND,10POS,1000mm,I			1
41	CB-00005554	6017B0062401	CABLE,ROUND,18POS,250mm,I,POWE			1
42	CB-00005555	6017B0062801	CABLE,ROUND,30POS,260mm,I,LVDS			1
43	CB-00005556	6017B0062601	CABLE,ROUND,8POS,600mm,I,ALL			1
44	CB-00005557	6017B0062201	CABLE,ROUND,12POS,270mm,I,INVE			1
45	CB-00005558	6017B0062301	CABLE,ROUND,12POS,800mm,I,INVE			1
46	B-00005565	6020B0000901	POWER MODULE,AC-DC,90-264V,4			1
47	N/A	6052B0040601	SCREW,PAN,M4,6.0mm,TAP,7.0mm,2			2
48	N/A	6052B0039901	SCREW,I,M3,6.0mm,MACH,5.5mm,1.			3
49	N/A	6052B0040401	SCREW,PAN,M4,6.0mm,MACH,7.0mm,			9
50	N/A	6024B0008901	LCM,42,TFT,WXGA,LVDS,12400g			1
51	N/A	6052B0039901	SCREW,I,M3,6.0mm,MACH,5.5mm,1.			4
52	N/A	6052B0040101	SCREW,PAN,M4,18mm,MACH,7.0mm,2			6
53	N/A	6052B0040401	SCREW,PAN,M4,6.0mm,MACH,7.0mm,			16
54	HW-00005525	6053B0075001	BRACKET,PANEL,BOTTOM,SECC			2
55	HW-00005526	6053B0074901	BRACKET,PANEL,FRONT,SECC			2
56	HW-00005527	6053B0074801	BRACKET,PANEL,LEFT,SECC			1
57	HW-00005528	6053B0074701	BRACKET,PANEL,RIGHT,SECC			1
58	HW-00005529	6053B0074201	BRACKET,PANEL,UP,SECC			2

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
59	N/A	6052B0040201	SCREW,PAN,M3.0,8mm,TAP,5.5mm,2			4
60	C-00005547	6051B0053101	CASE,FRONT,PC+ABS			1
61	N/A	6052B0044701	SCREW,PAN WASHER,M3.0,6mm,MACH			5
62	N/A	6052B0039901	SCREW,I,M3,6.0mm,MACH,5.5mm,1.			6
63	HW-00005524	6053B0073601	SHIELD,I/O,BOTTOM,SECC			1
64	N/A	6052B0040301	SCREW,PAN WASHER,M4,12.0mm,MAC			8
65	PL-00005536	6054B0069901	FOOT,RUBBER,10mm,31mm			7
66	N/A	6053B0074001	BASE,MAIN STAND,AL ALLOY			1
67	N/A	6053B0073901	STAND,MAIN,AL ALLOY			2
68	CB-00005560	6017B0063201	CABLE,ROUND,2POS,400mm,I,SPEAK			1
69	CB-00005550	6026B0031501	JACK,SPEAKER,1X2,2P,SN-CU,DIP,			1
70	CB-00005559	6017B0063001	CABLE,ROUND,2POS,400mm,I,SPEAK			1
71	CB-00005550	6026B0031501	JACK,SPEAKER,1X2,2P,SN-CU,DIP,			1
72	N/A	6012B0071101	CONNECTOR,PWR HEADER,ML,2A,NTU			1
73	N/A	6026A0040001	JACK-AUDIO-5P-TIN-DIP-TAP			1
74	N/A	6012A0148801	CONNECTOR-W TO B-ML-1x2-2.0mm-			1
75	N/A	6012A0137901	CONNECTOR-W TO B-ML-WHT-1x3-2.			1
76	N/A	6012B0071103	CONNECTOR,PWR HEADER,ML,2A,NTU			1
77	N/A	6043B0014201	HEATSINK,CHIP,49.5mm,49.5mm,29			1
78	N/A	6012B0043404	CONNECTOR,W TO B,S+P+G-GS,ML,4			1
79	N/A	6012B0011103	CONNECTOR,P HEADER,ML,1X4,2.54			2
80	N/A	6010B0005601	CAPACITOR-AL,1000uF,25V,M,105C			3
81	N/A	6050A2061501	PCB,AC-IN,2L,2.362X5.118X0.062			1
82	CB-00005561	6017B0065701	CABLE,ROUND,1POS,75mm,I			1
83	CB-00005562	6017B0063401	CABLE,ROUND,3POS,120mm,I,AC			1
84	N/A	6010B0028801	CAPACITOR-SAFETY,2200pF,250VAC			2
85	N/A	6010B0028702	CAPACITOR-SAFETY,0.33uF,300VAC			1
86	N/A	6010B0028701	CAPACITOR-SAFETY,0.22uF,300VAC			1
87	N/A	6036B0003201	FUSE,CERAMIC,4A,250V,20X5.2,-			1
88	N/A	6026B0026301	FUSE HOLDER,2P,V,PRESS,2.8X8.0			2
89	N/A	6014B0017001	FILTER,LINE,1KHz,DIP,30X30mm,4			1
90	N/A	6052B0040201	SCREW,PAN,M3.0,8mm,TAP,5.5mm,2			1
91	C-00005571	6051B0053001	HOUSING,FRONT CASE ,PC+ABS			1
92	N/A	6052B0040201	SCREW,PAN,M3.0,8mm,TAP,5.5mm,2			2
93	PL-00005546	6051B0052801	LENS,LED,FRONT,ACRYLIC			1
94	C-00005570	6051B0052901	HOUSING,LED,REAR,PC+ABS			1
95	N/A	6026B0028402	JACK,RCA,2X2,6P,NICKEL,DIP,TRA			1
96	N/A	6026B0025901	JACK,RCA,2x3,9P,NICKEL,DIP,TRA			1
97	N/A	6026B0025801	JACK,RCA,1X3+1,13P,NICKEL,DIP,			2
98	C-00005572	6051B0065001	COVER,I/O,REAR,PC+ABS			1
99	N/A	6053B0093001	SHIELD,I/O,TOP,SECC			1
100	N/A	6010B0047301	CAPACITOR-CHIP,1000pF,25V,K,X7			3
101	N/A	6014B0001901	BEAD,120OHM,25%,5A,0.02OHM,120			2
102	N/A	6014B0036201	BEAD,30OHM,25%,3A,0.03OHM,0603			1
103	N/A	6012B0094101	CONNECTOR,W TO B,ML,1A,NTU,2X1			2
104	N/A	6014B0019703	INDUCTOR,10nH,5%,250MHz,600mA,			5
105	N/A	6019B0185201	IC,REGULATOR,FIX,2.5V,TO263,3P			1
106	N/A	6012B0090201	CONNECTOR,HDMI,FL,1X19,0.5mm,9			2
107	N/A	6014B0031201	INDUCTOR,22uH,20%,100KHz,1.7A,			4
108	N/A	6050A2061201	PCB,MB,4L,7.874X10.039X.062,5/			1
109	N/A	6011B0031301	DIODE,TVS,5V,5A,125W,SMD,MSOP-			4
110	N/A	6014B0028901	INDUCTOR,22uH,20%,100KHz,1.8A,			4
111	N/A	6019B0161401	IC,VIDEO SWITCH,4CH,QSOP,16P,T			3
112	N/A	6010B0042302	CAPACITOR-AL,47uF,16V,M,105C,6			3
113	N/A	6019B0170501	IC,LVDS TRANSMITTER,LQFP,100P,			1
114	N/A	6018B0002503	CRYSTAL,27MHz,10PPM,20pF,SMD,1			2
115	N/A	6018B0002502	CRYSTAL,28.322MHz,30PPM,20pF,S			1
116	N/A	6019B0149501	IC,HDMI RECEIVER,2 INPUT,TQFP,			1
117	N/A	6019B0142401	IC,AND GATE,QUAD,TSSOP,14P,TR			1
118	N/A	6019B0149401	IC,IMAGE PROCESSOR,PQFP,208P,-			1
119	N/A	6014B0025702	INDUCTOR,12uH,10%,100KHz,2.3A,			1
120	N/A	6014B0020002	BEAD,11OHM,25%,600mA,0.1OHM,08			26
121	N/A	6014B0020001	BEAD,1KOHM,25%,400mA,0.45OHM,0			51

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
122	N/A	6071B0000801	SOLDER,PASTE,SN96.5/AG3/CU.5,8			0.02
123	N/A	6019B0104001	IC,ADC/VIDEO DECODER,HSBGA,548			1
124	N/A	6019B0112602	IC,DC/DC CONVERTER,MSOP,10P,TA			1
125	N/A	6019B0093601	IC,POWER AMPLIFIER,DUAL,SSOP,5			1
126	N/A	6019B0091001	IC,SDRAM,1MX16,10NSCL2,TSOP,50			1
127	N/A	6019B0086601	IC,OP AMPLIFIER,ONE,SOIC,8P,TU			1
128	N/A	6010B0006001	CAPACITOR-CHIP,1uF,6.3V,K,X5R,			2
129	N/A	6019B0083501	IC,VIDEO DECODER,LFBGA,256P,-			1
130	N/A	6019B0047701	IC,DDRSDRAM,8MX32,3.3NSCL4,FBG			1
131	N/A	6019A0193901	IC-REGULATOR-ADJ-1.25_13.8V-SO			1
132	N/A	6014B0006801	INDUCTOR,560nH,5%,50MHz,230mA,			5
133	N/A	6012A0144902	CONNECTOR,HEADER,POWER,ML,BLK,			1
134	N/A	6012A0084609	CONNECTOR,W TO B,ML,WHT,1X5,1.			1
135	N/A	6010B0005501	CAPACITOR-AL,10uF,25V,M,105C,5			1
136	N/A	6019A0238901	IC-EEPROM-2W SERIAL-2K-SOIC-8P			2
137	N/A	6019A0238401	IC-BUFFER-QUAD N_INV-3STATE-TS			1
138	N/A	6019A0236801	IC-FLASH MEMORY-8M-90ns-TSOP-4			1
139	N/A	6019A0236701	IC-EEPROM-2W SERIAL-32K-SOIC-T			1
140	N/A	6019A0201001	IC-EEPROM-2W SERIAL-1K-SOIC-8P			1
141	N/A	6019A0210601	IC-REGULATOR-FIX-3.3V-SOT223-3			7
142	N/A	6015A0064001	TRANSISTOR-FET-PPEMOS-20/20V-5			2
143	N/A	6014A0034801	BEAD-150OHM-25%-2000mA-0.08OHM			2
144	N/A	60150F02900T	TRAN-2N7002-TO-236AB-TAP-FAIR			8
145	N/A	60150F04280T	TRAN-SST3906-SOT-23-TAP-ROHM			1
146	N/A	60150F04270T	TRAN-SST3904-SST3(SOT-23)-TAP-			8
147	N/A	6013A0004701	RES-CHIP-47.5-1%-1/10W-0603-TA			1
148	N/A	6013A0026801	RES-CHIP-36-5%-1/10W-0603-TAP			5
149	N/A	6036A0004001	FUSE-R451005-5A/125V-TAP-LITTE			1
150	N/A	6026A0033601	SWITCH-BLK-PUSH BUTTON-4P-SMD-			2
151	N/A	60120IA15300	CONN-FM-15P(7519S-15G2-08)-SUY			1
152	N/A	60120IA14380	CONN-ML-4P(53398-0490)-MLX			2
153	N/A	60120IA14320	CONN-ML-8P(53398-0890)-MLX			1
154	N/A	6011A0022601	DIODE-SCH-40V-3A-1W-SMD-SMA-TA			8
155	N/A	6011A0020001	DIODE-LED-BLUE-1608-30mcd-130D			1
156	N/A	6010A0049701	CAPACITOR-CHIP-1pF-50V-C-NPO-0			4
157	N/A	6010A0046901	CAPACITOR-CHIP-1uF-25V-K-X5R-0			4
158	N/A	6010A0035601	CAPACITOR-AL-SMD-470uF-M,16V-8			5
159	N/A	6010A0026101	CAPACITOR-CHIP-1uF-K,6.3V-X7R-			4
160	N/A	60110GA0118T	DIODE-RLS4148-TE11-TAP			1
161	N/A	6010A0060301	CAPACITOR-CHIP-0.082uF-10V-K-X			1
162	N/A	6010A0058803	CAPACITOR-AL-47uF-25V-M-105C-6			1
163	N/A	6010A0058801	CAPACITOR-AL-10uF-25V-M-105C-4			45
164	N/A	6010A0057202	CAPACITOR-AL-2.2uF-35V-M-105C-			3
165	N/A	60110GA0436T	DIODE-BAV99-3P-SOT23-TAP-FAIR			8
166	N/A	60110GA0435T	DIODE-SMD-BAV70-FAIR-TAP CPQ			3
167	N/A	6010A0010201	CAPACITOR-CHIP-470pF-K,50V-X7R			7
168	N/A	60100M107180	CAPACITOR-AL-100uF-M,25V-6.3x7			2
169	N/A	60100782200T	CAP-CHIP-822-K,X7R-50V-TAP(060			1
170	N/A	60100768422T	CAPACITOR-CHIP-0.68uF-K,25V-X7			4
171	N/A	60100768020Z	CAPACITOR-CHIP-68pF-J,50V-TAP(			9
172	N/A	60100756120T	CAPACITOR-CHIP-560pF-J,NPO-50V			4
173	N/A	60100756020Z	CAPACITOR-CHIP-56pF-J,NPO-50V-			4
174	N/A	60100747302T	CAP-CHIP-473-K,X7R-16V-TAP(060			21
175	N/A	60100M47654T	CAP-AL-476-M,20V(20SV47M-OS-CO			5
176	N/A	60100M22653T	CAPACITOR-OS-22uF-25V-M-105C-1			1
177	N/A	60100710431Z	CAPACITOR-CHIP-0.1uF-Z,25V(Y5V			6
178	N/A	6010071041BT	CAPACITOR-CHIP-0.1uF-Z,16V-TAP			79
179	N/A	60100710402T	CAPACITOR-CHIP-0.1uF-K,X7R-16V			166
180	N/A	60100710220Z	CAP-CHIP-102-J,50V-NPO-TAP(060			6
181	N/A	60100710200Z	CAP-CHIP-102-K,50V-X7R-TAP(060			1
182	N/A	60100722432Z	CAPACITOR-CHIP-0.22uF-Z,Y5V-16			19
183	N/A	60100722020Z	CAPACITOR-CHIP-22pF-J,50V-NPO-			2
184	N/A	60100712020Z	CAPACITOR-CHIP-12pF-J,50V-TAP(			4

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
185	N/A	601007470 20Z	CAPACITOR-CHIP-47pF-J,50V-NPO-			5
186	N/A	60130CJ0019T	RES-AR-8P4R-0-5%-1/16W-2010-TA			9
187	N/A	60130CJ0115T	RES-AR-8P4R-22-5%-1/16W-2010-T			4
188	N/A	60130CJ0112T	RES-AR-8P4R-33-5%-1/16W-2010-T			6
189	N/A	60130B56009T	RES-CHIP-560-1%-1/10W-0603-TAP			1
190	N/A	60130B50019T	RES-CHIP-5K-1%-1/10W-0603-TAP			1
191	N/A	60130B75300T	RES-CHIP-75K-5%-1/10W-0603-TAP			2
192	N/A	60130B75019T	RES-CHIP-7.5K-1%-1/10W-0603-TA			1
193	N/A	60130B75000Z	RES-CHIP-75-5%-1/10W-0603-TAP			6
194	N/A	60130B68100T	RES-CHIP-680-5%-1/10W-0603-TAP			2
195	N/A	60130B22400Z	RES-CHIP-220K-5%-1/10W-0603-TA			2
196	N/A	60130B22300Z	RES-CHIP-22K-5%-1/10W-0603-TAP			8
197	N/A	60130B22200Z	RES-CHIP-2.2K-5%-1/10W-0603-TA			1
198	N/A	60130B39200T	RES-CHIP-3.9K-5%-1/10W-0603-TA			16
199	N/A	60130B39000T	RES-CHIP-39-5%-1/10W-0603-TAP			10
200	N/A	60130B33300Z	RES-CHIP-33K-5%-1/10W-0603-TAP			1
201	N/A	60130B33219T	RES-CHIP-3.32K-1%-1/10W-0603-T			3
202	N/A	60130B33019T	RES-CHIP-3.3K-1%-1/10W-0603-TA			5
203	N/A	60130B33000Z	RES-CHIP-33-5%-1/10W-0603-TAP			5
204	N/A	60130B47529T	RES-CHIP-47.5K-1%-1/10W-0603-T			2
205	N/A	60130B47519T	RES-CHIP-4.75K-1%-1/10W-0603-T			1
206	N/A	60130B47400T	RES-CHIP-470K-5%-1/10W-0603-TA			4
207	N/A	60130B47300Z	RES-CHIP-47K-5%-1/10W-0603-TAP			3
208	N/A	60130B47200Z	RES-CHIP-4.7K-5%-1/10W-0603-TA			4
209	N/A	60130B47100T	RES-CHIP-470-5%-1/10W-0603-TAP			3
210	N/A	60130B47000Z	RES-CHIP-47-5%-1/10W-0603-TAP			12
211	N/A	60130B13029T	RES-CHIP-13K-1%-1/10W-0603-TAP			1
212	N/A	60130B12300T	RES-CHIP-12K-5%-1/10W-0603-TAP			1
213	N/A	60130B11019T	RES-CHIP-1.1K-1%-1/10W-0603-TA			1
214	N/A	60130B10549T	RES-CHIP-1.05M-1%-1/10W-0603-T			3
215	N/A	60130B10400Z	RES-CHIP-100K-5%-1/10W-0603-TA			1
216	N/A	60130B10300Z	RES-CHIP-10K-5%-1/10W-0603-TAP			41
217	N/A	60130B10200Z	RES-CHIP-1K-5%-1/10W-0603-TAP			16
218	N/A	60130B10100Z	RES-CHIP-100-5%-1/10W-0603-TAP			10
219	N/A	60130B10019T	RES-CHIP-1K-1%-1/10W-0603-TAP			2
220	N/A	60130B20019T	RES-CHIP-2K-1%-1/10W-0603-TAP			4
221	N/A	60130B18400T	RES-CHIP-180K-5%-1/10W-0603-TA			1
222	N/A	60130B18300T	RES-CHIP-18K-5%-1/10W-0603-TAP			1
223	N/A	60130B18200T	RES-CHIP-1.8K-5%-1/10W-0603-TA			1
224	N/A	60130B15403Z	RES-CHIP-150K-5%-1/10W-0603-TA			4
225	N/A	60130B15200Z	RES-CHIP-1.5K-5%-1/10W-0603-TA			4
226	N/A	60130B22119T	RES-CHIP-2.21K-1%-1/10W-0603-T			1
227	N/A	60130B22000T	RES-CHIP-22-5%-1/10W-0603-TAP			2
228	N/A	60130B20300Z	RES-CHIP-20K-5%-1/10W-0603-TAP			4
229	N/A	6012A0146401	CONNECTOR-DOCKING-ML-4x17-1.27			1
230	N/A	60130B00000Z	RES-CHIP-0-5%-1/10W-0603-TAP			75
231	N/A	6012A0084603	CONNECTOR-W TO B-ML-WHT-1x10-1			1
232	N/A	6012A0018803	CONNECTOR-W TO B-ML-2x25-STR-S			1
233	N/A	6010A0019001	CAP-CHIP-20PF-50V-J-NPO-0603-T			6
234	N/A	601007271 20Z	CAP-CHIP-270PF-50V-J-X7R-0603-			5
235	N/A	601007103 20Z	CAP-CHIP-103-J,50V(X7R)-TAP(06			9
236	N/A	6019A0032801	IC-REGULATOR-FIX-1.8V-SOT223-3			5
237	N/A	6013A0086701	RES-CHIP-1.62K-1%-1/10W-0603-T			1
238	N/A	6013A0032001	RES-CHIP-3.3K-5%-1/10W-0603-TA			7
239	N/A	6013A0022001	RES-AR-8P4R-47-5%-1/16W-2010-T			44
240	N/A	60130B24300T	RES-CHIP-24K-5%-1/10W-0603-TAP			1
241	N/A	6010A0040401	CAP-CHIP-6800PF-50V-K-X7R-0603			1
242	N/A	6051B0054301	BUTTON,FRONT,PC+ABS			1
243	N/A	6051B0054201	BUTTON,REAR,PC+ABS			1
244	N/A	6019B0042501	IC,IR RECEIVER,DIP,3P,-			1
245	N/A	6019B0116704	IC,SOUND PROCESSOR,PMQFP,64P,T			1
246	N/A	6014B0020001	BEAD,1KOHM,25%,400mA,0.45OHM,0			2
247	N/A	6071B0000801	SOLDER,PASTE,SN96.5/AG3/CU.5,8			0.015

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
248	N/A	6050A2039701	PCB,IO,2L,12.323X2.953X0.062,1			1
249	N/A	6019B0084301	IC,AUDIO/VIDEO SWITCH,SDIP,54P			1
250	N/A	6019A0193901	IC-REGULATOR-ADJ-1.25_13.8V-SO			2
251	N/A	6014B0001801	BEAD,48OHM,25%,8A,0.006OHM,120			6
252	N/A	6010B0005501	CAPACITOR-AL,10uF,25V,M,105C,5			7
253	N/A	6018A0015009	CRYSTAL-18.432M-30PPM-16pF-SMD			1
254	N/A	6014A0022501	BEAD-30OHM-25%-100M-0603-300mA			4
255	N/A	60150F04270T	TRAN-SST3904-SST3(SOT-23)-TAP-			5
256	N/A	60140EA0314T	BEAD-60OHM-25%-500mA-0603-0.1O			11
257	N/A	6013A0007901	RES-CHIP-137-1%-1/10W-0603-TAP			1
258	N/A	6036A0004001	FUSE-R451005-5A/125V-TAP-LITTE			1
259	N/A	60120IA15940	CONN-FM-68P(87537-68)-MLX			1
260	N/A	6010A0058801	CAPACITOR-AL-10uF-25V-M-105C-4			13
261	N/A	60110GA0436T	DIODE-BAV99-3P-SOT23-TAP-FAIR			12
262	N/A	60100MT4757Z	CAP-TANT-475-M,6.3V(NRA475M06R			1
263	N/A	60100MT4753Z	CAPACITOR-TANT-4.7uF-M,16V-TAP			1
264	N/A	6010A0015401	CAPACITOR-CHIP-3.3pF-C,50V-NPO			2
265	N/A	60100M107180	CAPACITOR-AL-100uF-M,25V-6.3x7			2
266	N/A	60100756020Z	CAPACITOR-CHIP-56pF-J,NPO-50V-			2
267	N/A	60100M47654T	CAP-AL-476-M,20V(20SV47M-OS-CO			2
268	N/A	60100710431Z	CAPACITOR-CHIP-0.1uF-Z,25V(Y5V			3
269	N/A	60100710402T	CAPACITOR-CHIP-0.1uF-K,X7R-16V			9
270	N/A	60100710200Z	CAP-CHIP-102-K,50V-X7R-TAP(060			4
271	N/A	60100718020Z	CAPACITOR-CHIP-18pF-J,50V-NPO-			6
272	N/A	60100747120Z	CAPACITOR-CHIP-470pF-J,NPO-50V			3
273	N/A	6010073340CT	CAPACITOR-CHIP-0.33uF-K,10V-X5			9
274	N/A	60130B51009T	RES-CHIP-510-1%-1/10W-0603-TAP			1
275	N/A	60130B75000Z	RES-CHIP-75-5%-1/10W-0603-TAP			17
276	N/A	60130BA0003T	RES-CHIP-0-5%-1/8W-0805-TAP			6
277	N/A	60130B47100T	RES-CHIP-470-5%-1/10W-0603-TAP			2
278	N/A	60130B12100T	RES-CHIP-120-5%-1/10W-0603-TAP			1
279	N/A	60130B11019T	RES-CHIP-1.1K-1%-1/10W-0603-TA			8
280	N/A	60130B10300Z	RES-CHIP-10K-5%-1/10W-0603-TAP			1
281	N/A	60130B10100Z	RES-CHIP-100-5%-1/10W-0603-TAP			6
282	N/A	60130B22039T	RES-CHIP-220K-1%-1/10W-0603-TA			8
283	N/A	60130B00000Z	RES-CHIP-0-5%-1/10W-0603-TAP			7
284	N/A	60100710320Z	CAP-CHIP-103-J,50V(X7R)-TAP(06			2
285	N/A	60130B75009T	RES-CHIP-750-1%-1/10W-0603-TAP			2
286	N/A	6050A2061401	PCB,KB,2L,0.811X4.921X0.062,10			1
287	N/A	6026A0033601	SWITCH-BLK-PUSH BUTTON-4P-SMD-			7
288	N/A	6012A0084603	CONNECTOR-W TO B-ML-WHT-1x10-1			1
289	N/A	6050A2061601	PCB,IR-LED,2L,3.465X0.61X0.062			1
290	N/A	6011B0021901	DIODE-LED,GRN/RED,3025,20/16mc			1
291	N/A	60150F04270T	TRAN-SST3904-SST3(SOT-23)-TAP-			2
292	N/A	60120IA14320	CONN-ML-8P(53398-0890)-MLX			1
293	N/A	60130B33019T	RES-CHIP-3.3K-1%-1/10W-0603-TA			1
294	N/A	60130B47100T	RES-CHIP-470-5%-1/10W-0603-TAP			1
295	N/A	60130B10200Z	RES-CHIP-1K-5%-1/10W-0603-TAP			2
296	N/A	60130B10100Z	RES-CHIP-100-5%-1/10W-0603-TAP			1

* Reader's Response*

Dear Readers:
Thank you in advance for your feedback on our Service Manual, which allows continuous improvement of our products. We would appreciate your completion of the Assessment Matrix below, for return to ViewSonic Corporation.

Assessment

A. What do you think about the content of **this** Service Manual?

Unit	*Excellent*	*Good*	*Fair*	*Bad*
1. Precautions and Safety Notices				
2. Service tool & equipment required				
3. Specification				
4. Front Panel Function Control Description				
5. Adjustment Procedure				
6. Exploded Diagram and Exploded Parts List				
7. Block Diagrams				
8. Schematic Diagrams				
9. Wiring Diagram				
10. PCB Layout Diagrams				
11. Trouble Shooting Flow Chart				
12. Recommended Spare Parts List				

B. Are you satisfied with **this** Service Manual?

Item	*Excellent*	*Good*	*Fair*	*Bad*
1. Service Manual Content				
2. Service Manual Layout				
3. The form and listing				

C. Do you have any other opinions or suggestions regarding **this** service manual?

Reader's basic dada:

Name:	Title	:	
Company:			
Add:			
Tel:	Fax	:	
E-mail:			

After completing this form, ple ase return it to ViewSonic Quality Assurance in the USA at facsimile 1-909-839-7943. You may also e-mail any suggestions to the Director, Quality Systems & Processes (marc.maupin@viewsonic.com)