

# Service Service Service



# Service Manual

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Remark: 1) BDP3200 not need alignment between Blu-ray Loader and Main Board, you can replace the defective loader or Main Board by new one directly.

2) The Service Manual only for S/N starting from GSxxxxxxxxxx . If the set with S/N starting from KXxxxxxxxxxx or SMxxxxxxxxxx, please refer to another Service Manual with code number 31417853580x in winzip file.

CLASS 1  
LASER PRODUCT

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314178535912

Version 1.2



# PHILIPS

## 1.1 Specifications

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Specifications are subject to change without notice

### Video

Signal system: PAL / NTSC

Composite video output: 1 Vp-p (75 ohm)

Component video output: 480/576i, 480/576p, 720p, 1080i

Y: 1 Vp-p (75 ohm)

Pb: 0.7 V-p (75 ohm)

Pr: 0.7 V-p (75 ohm)

HDMI output 480p, 576p, 720p, 1080i, 1080p, 1080p24

### Audio

2 Channel analog output

Audio Front L&R : 2 Vrms (> 1 kohm)

Digital output: 0.5 Vp-p (75 ohm)

Coaxial

HDMI output

Sampling frequency:

MP3: 32 kHz 44.1 kHz 48 kHz

WMA: 44.1 kHz 48 kHz

Constant bit rate:

MP3: 112 kbps - 320 kbps

WMA: 48 kbps - 192 kbps

### USB

Compatibility: Hi-Speed USB (2.0)

Class support: UMS (USB Mass Storage Class)

### Main unit

Power supply rating: AC 220-240V, 50 Hz

Power consumption: 25 W

Power consumption in standby mode: < 0.5 W

Dimensions (w x h x d): 435 x 60 x 227 (mm)

Net Weight: 2.35 kg

### Accessories supplied

Remote control and batteries

Audio/Video cables

Power cable

Quick start guide

User manual

CD-ROM built in multi-lingual user manual

### Laser Specification

Laser Type:

BD Laser Diode: AlGaInN

DVD Laser Diode: AlGaInP

CD Laser Diode: AlGaInP

Wave length

BD: 405 +5nm/-5nm

DVD: 655 +10nm/-10nm

CD: 790 +10nm/-20nm

### Output power:

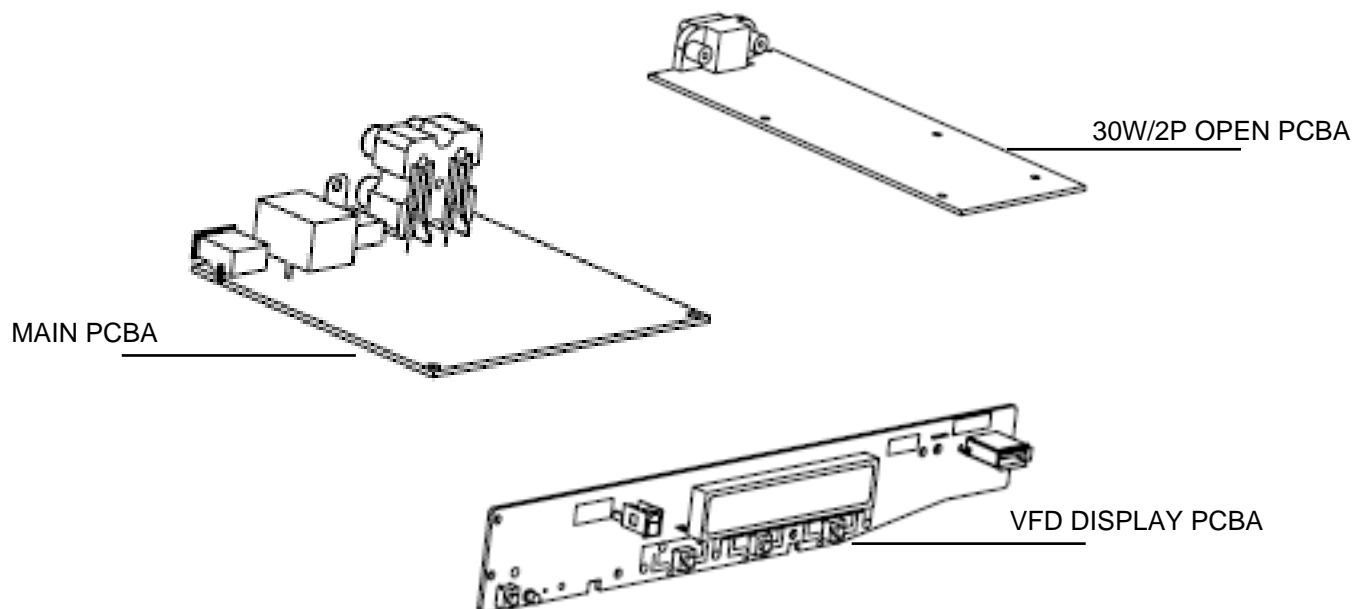
BD: Max. ratings: 20mW

DVD: Max. ratings: 6mW

CD: Max. ratings: 7mW

## 1.1 PCBs Location

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### VERSION VARIATIONS

<div> <div>Type/Versions:</div> <div>Service policy</div> </div>	BDP3200						
	51	55	77	78			
Board in used:							
MAIN BOARD	C	C	C	C			
VFD DISPLAY PCBA	C	C	C	C			
30W/2P OPEN PCBA	M	M	M	M			

**\*TIPS:** C -- Component Lever Repair.  
 M -- Module Lever Repair  
 X -- OCX

## Software check and upgrade

### Preparation to upgrade software

- 1) Start the CD burning software & create a folder named "UPGAL".
- 2) Then copy the Bin file (BDP3XXXXX-XXX-XXXXXX.bin) into it,
- 3) Burn the data onto the blank CD.

#### A. Procedure for software upgrade

##### A) Upgrade software via Disc

- 1) Power on the set and insert the prepared Upgrade CDR.
- 2) The set will start reading disc & response with the following display TV screen:  
Now searching for upgrade software!  
Please wait...!
- 3) Then screen will display :  
software upgrades for this player has been found! Do you want to upgrade?  

Cancel
Start
- 4) Press Right cursor button to choose "Start", then press <OK>;
- 5) The software will upgrade and screen will display as below:  
Upgrade is ongoing, Please wait...  
Please do not unplug or switch off the device.
- 6) Restart the set.

##### B) Update software via USB Flash Drive:

- 1) Go to [www.philips.com/support](http://www.philips.com/support) to check if the latest software version is available for this player.
- 2) Download the software onto a USB flash drive's root DIR named "UPGAL".
- 3) Insert the USB flash drive to the USB jack of the rear panel.
- 4) In the Home menu, select <Setup>-<Advanced>-<Software update>-<USB>.
- 5) Then press OK
- 6) You'll see now searching for new software, please wait.....
- 7) Waiting, you'll see "software for this player has been found ....."
- 8) Then select "Start" and press "OK"
- 9) Then you'll see "upgrade is ongoing .....", wait until it ends.
- 10) Player will restart automatically or press "Restart now" to restart, after restarting the upgrade ends.

#### B. Read out the software versions to confirm upgrading

- 4) In homemenu, enter "setup"->"advanced"->"version info", press "OK"

and other information will display on the TV screen as below:

Model:XXX.XXX  
 Versions  
 subinfo:xxxx  
 system SW:xxxx  
 ethernet MAC:xxxxxxxx  
<http://www.philips.com/support>

Caution: The set must not be power off during upgrading, otherwise the Main board will be damaged entirely.

## 2.0 Safety instruction

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### 1. General safety

Safety regulations require that during a repair:

. Connect the unit to the mains via an isolation transformer.

. Replace safety components indicated by the symbol

Only by components identical to the original ones.

Any

Other component substitution (other than original type)

May increase risk of fire or electrical shock hazard.

Safety regulations require that after a repair, you must

Return the unit in its original condition. Pay, in particular,

Attention to the following points:

. Route the wires/cables correctly, and fix them with the

mounted cable clamps

. Check the insulation of the mains lead for external Damage

. Check the electrical DC resistance between the mains

Plug and the secondary side:

- 1) Unplug the mains cord, and connect a wire between

The two pins of the mains plug.

- 2) Set the mains switch the "on" position (keep the

Mains cord unplug).

- 3) Measure the resistance value between the mains

plug and the front panel, controls, and chassis bottom.

- 4) Repair or correct unit when the resistance measurement is less than 1M  $\Omega$

- 5) Verify this, before you return the unit to the customer/user (ref. UL-standard no. 1492).

- 6) Switch the unit "off", and remove the wire between

the two pins of the mains plug.

### 2. Laser safety

This unit employs a laser. Only qualified service personnel

May remove the cover, or attempt to service this device

(due to possible eye injury).

Laser device unit

Type :Semiconductor laser GaAlAs

Wavelength :650nm (DVD)

:780nm (VCD/CD)

Output power :7mW(DVD)

:10mW(DVD/CD)

Beam divergence:60 degree

Note: Use of controls or adjustments or performance of procedure other than those specified herein, may result in hazardous radiation exposure. Avoid direct exposure to beam.

### 3.0 Instruction for Use

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You can download this information from the following websites:

<http://www.philips.com/support>

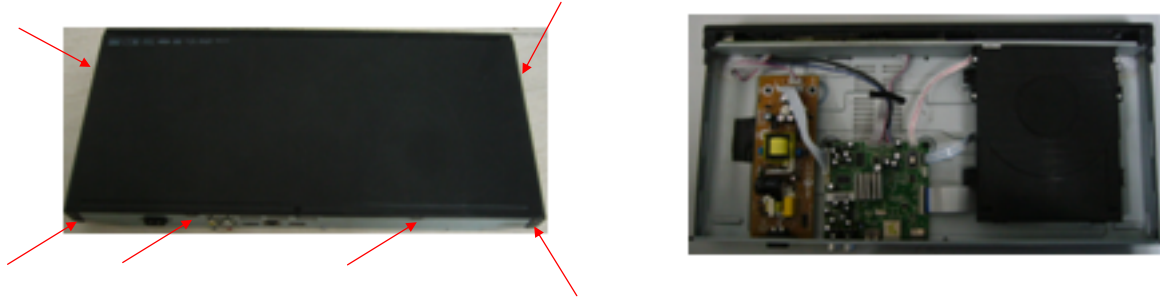
<http://www.p4c.philips.com>

## 4.0 MECHANICAL AND DISMANTLING INSTRUCTIONS

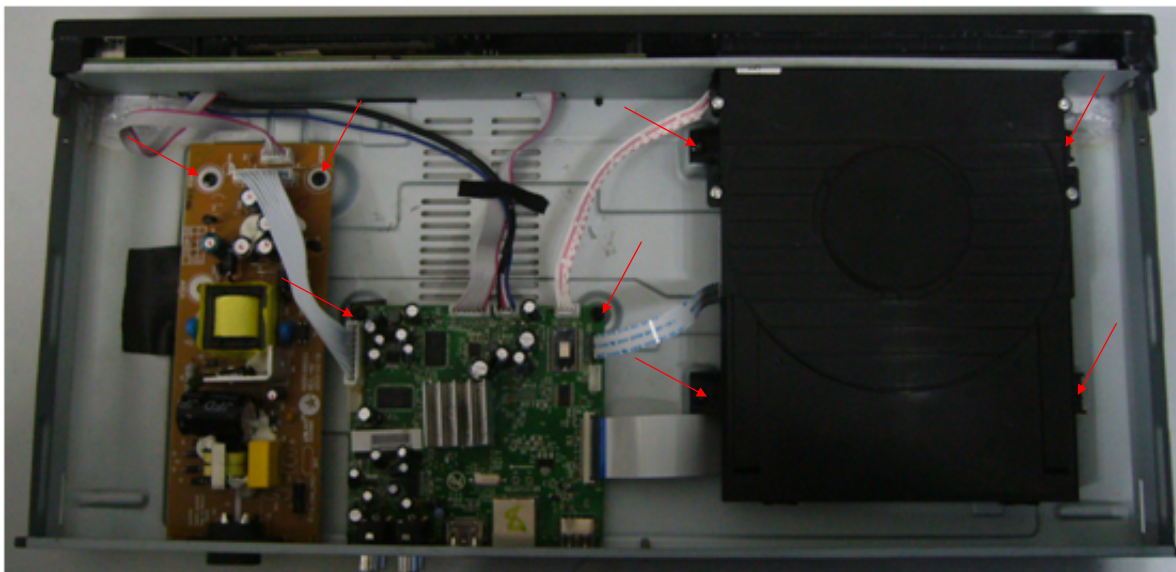
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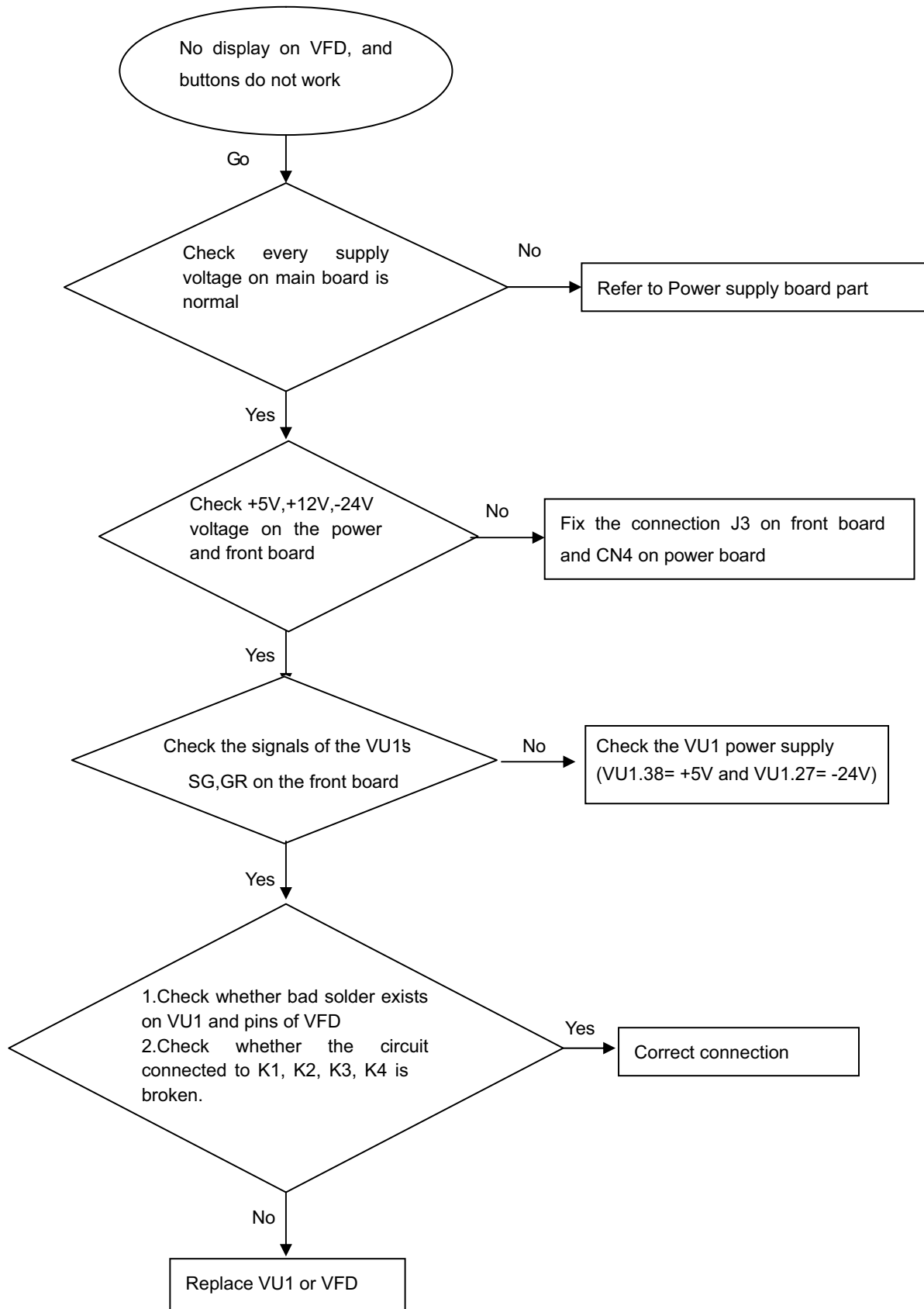
The following guidelines show how to dismantle the player.

Step1: Remove 6 screws around the Top Cover, and then remove the Top Cover(Figure1)

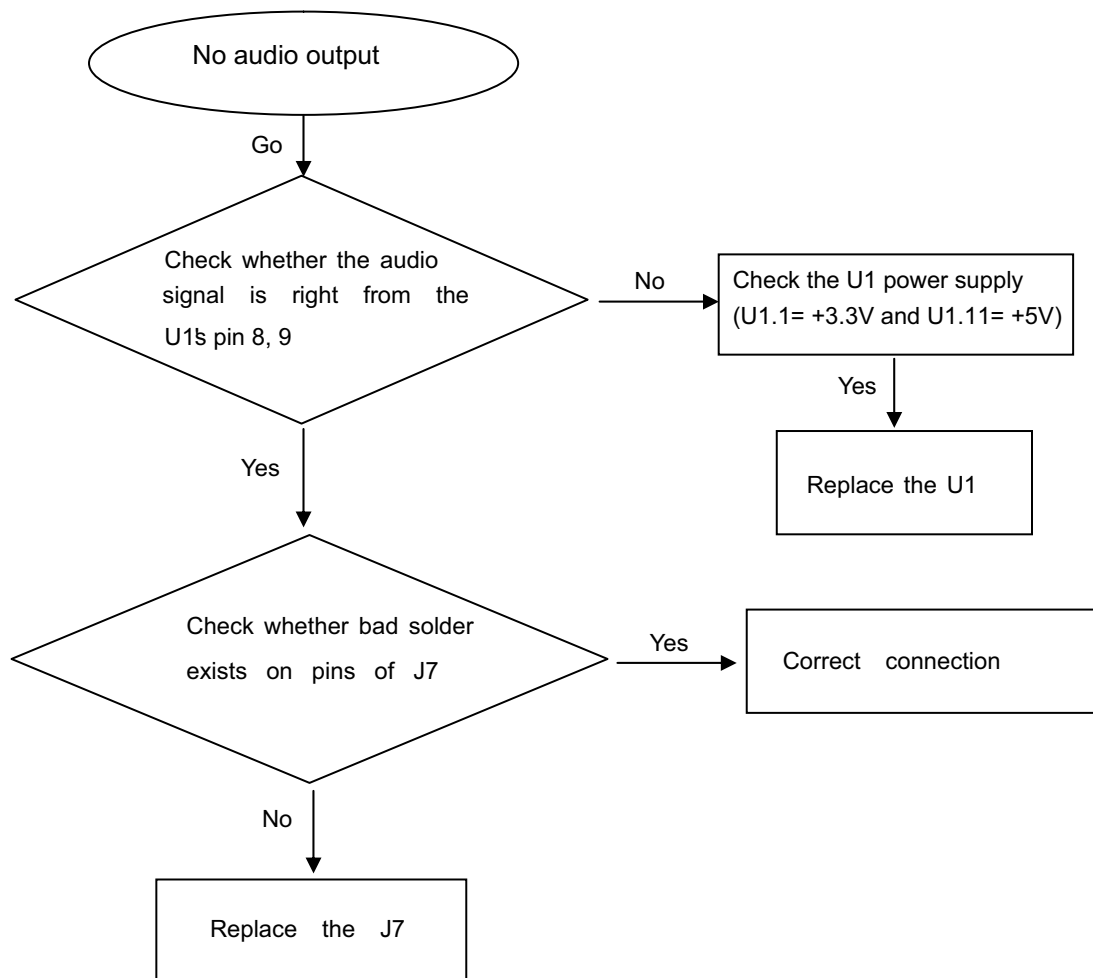


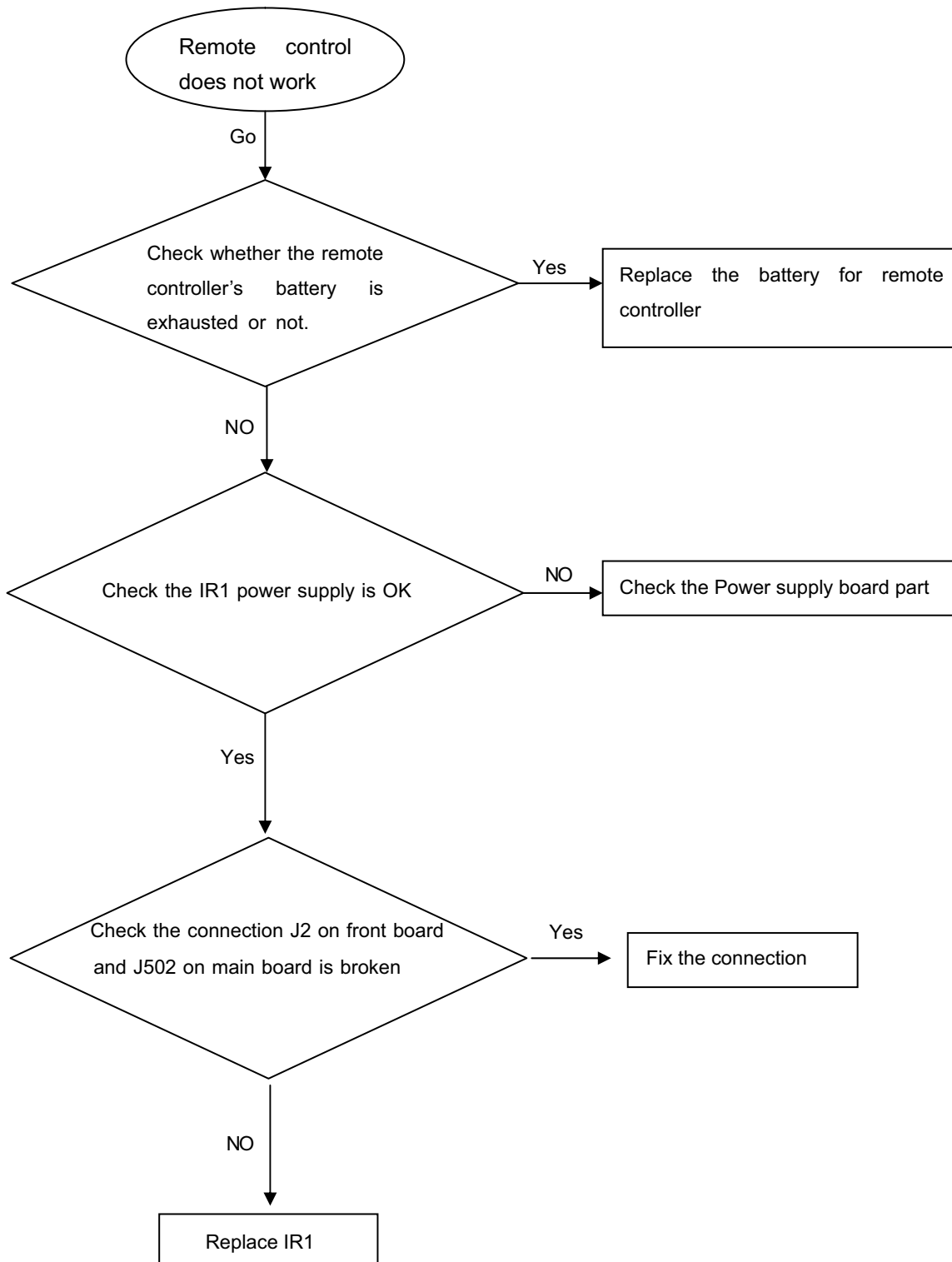
Step2: Remove the 8 screws on board to dismantle the DVD BOARD & POWER BOARD & LED BOARD & DECK

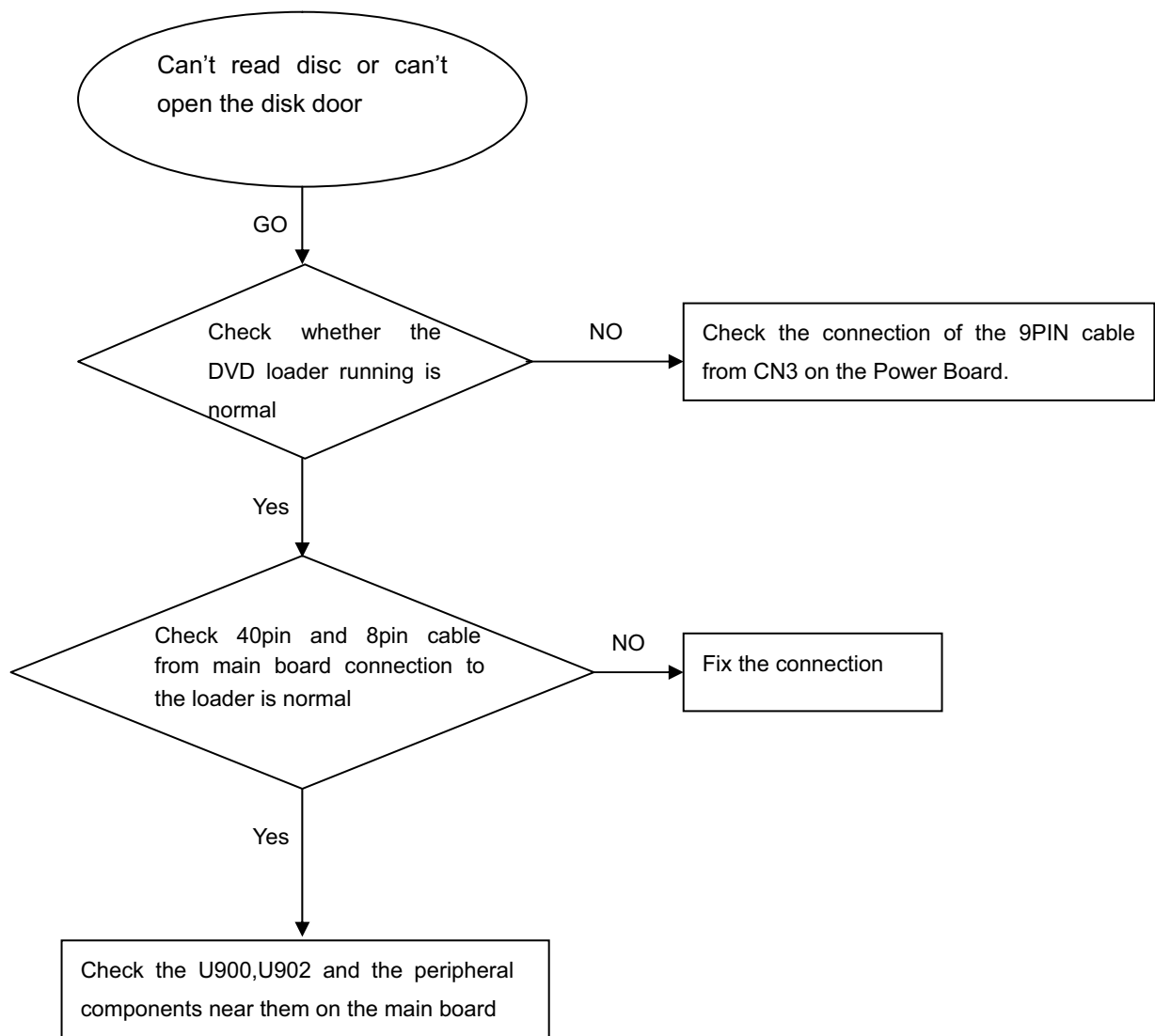


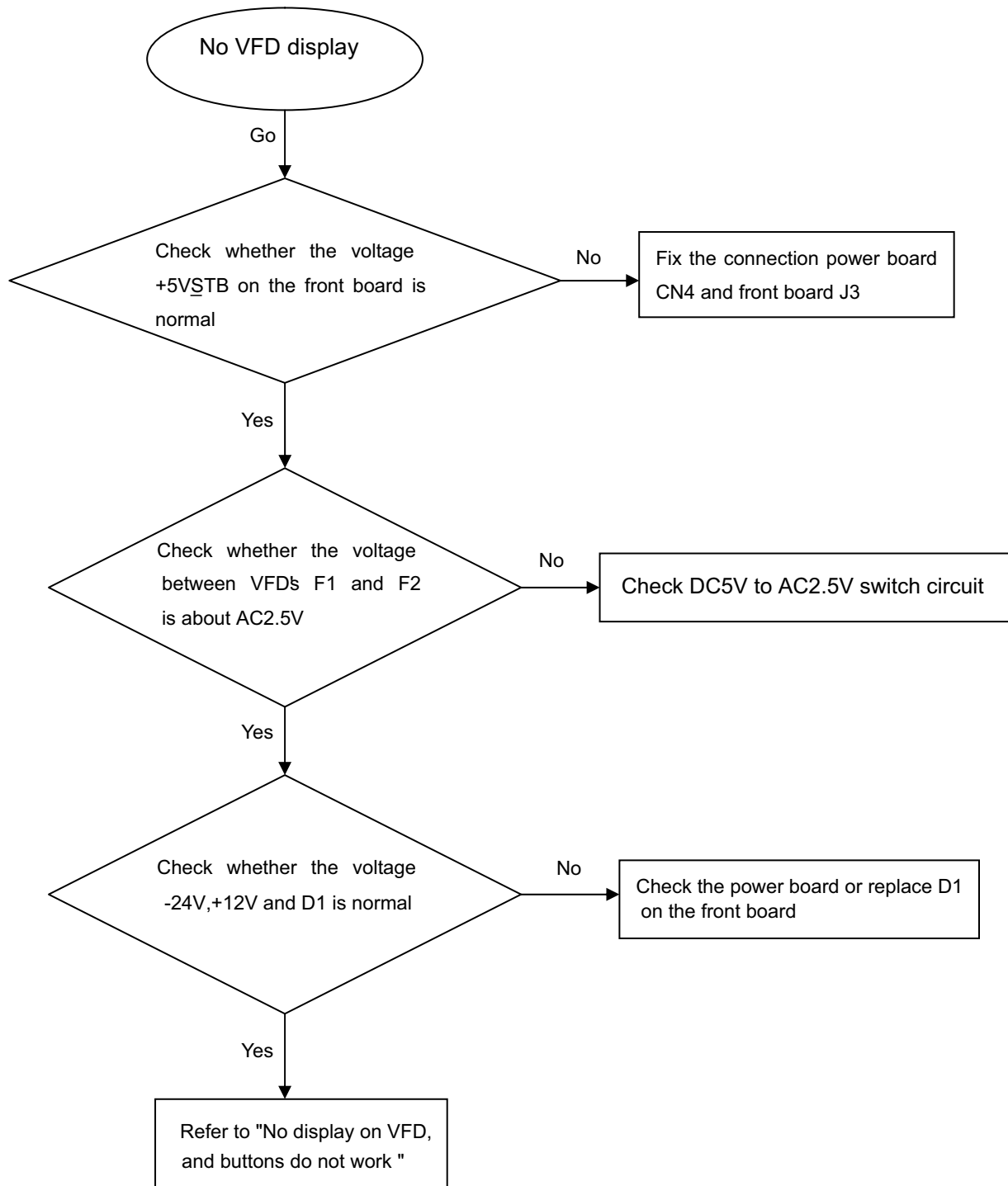
**No display on VFD, and buttons do not work**



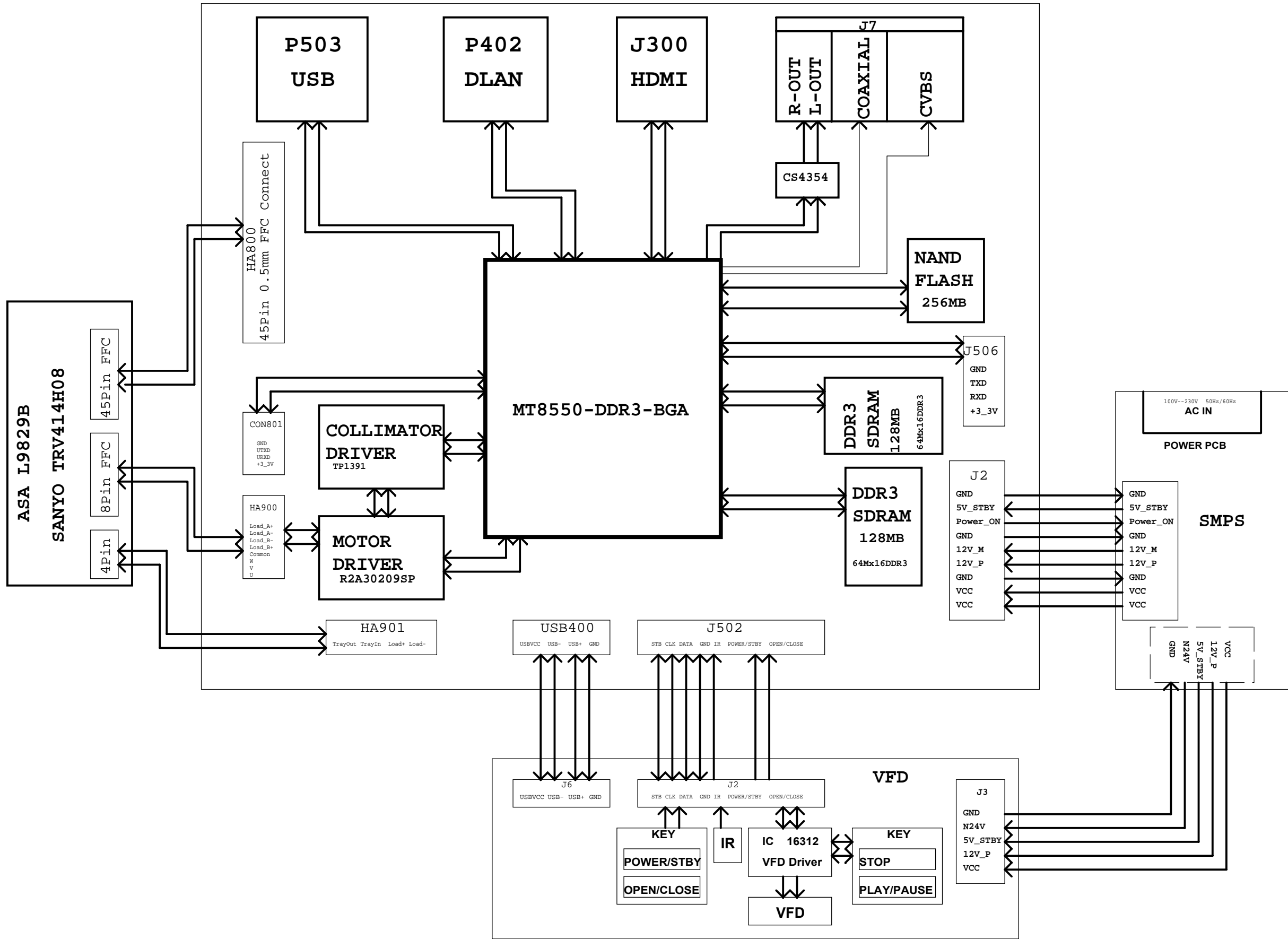
**No audio output**

**Remote control does not work**

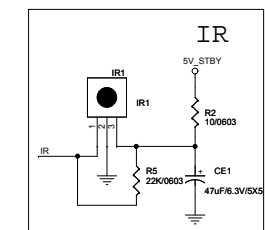
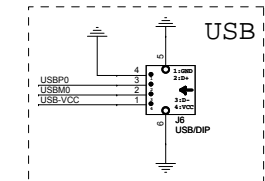
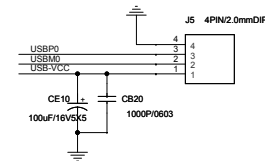
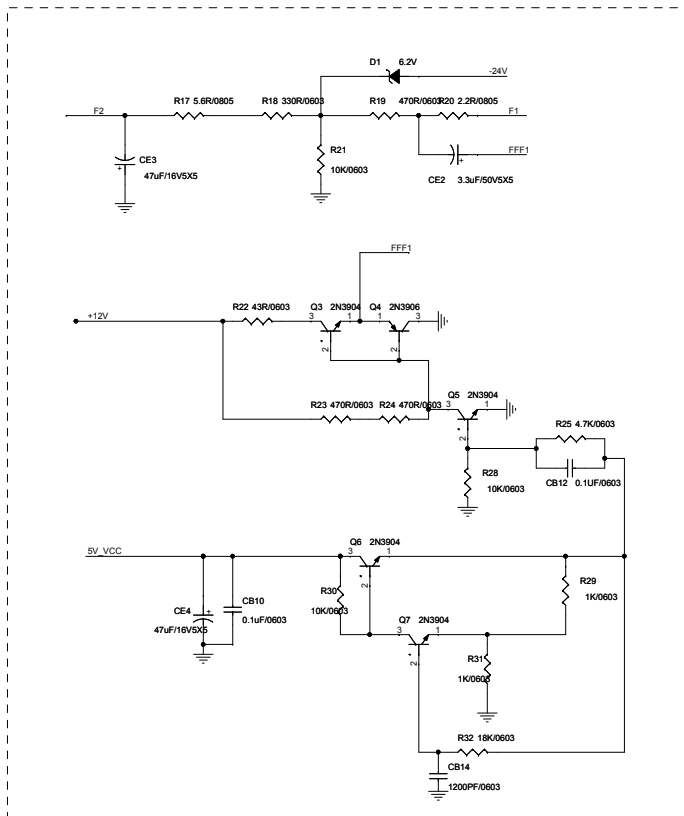
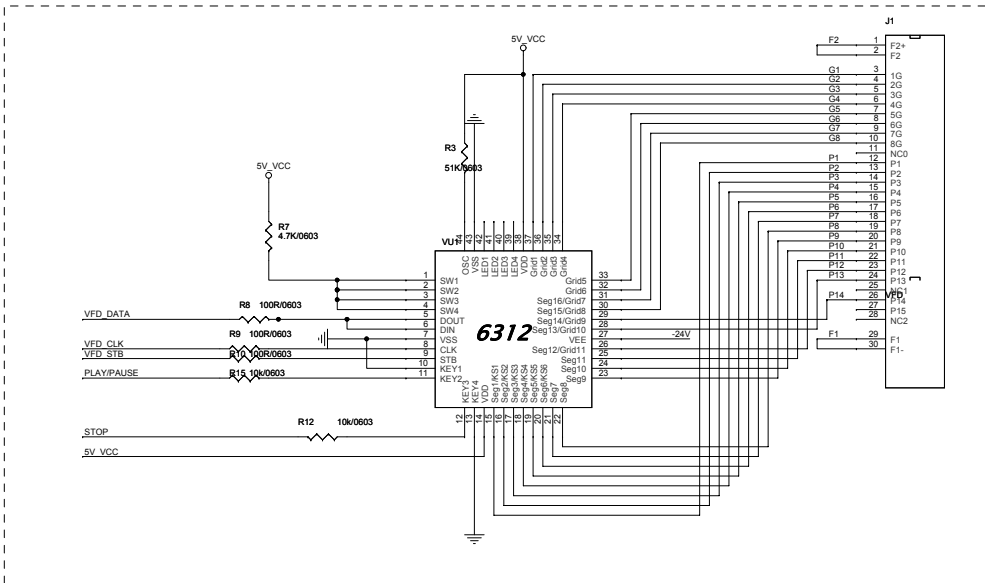
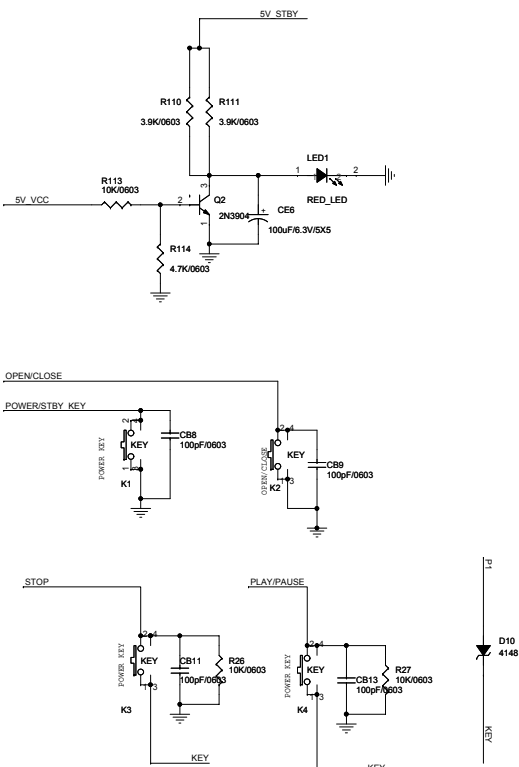
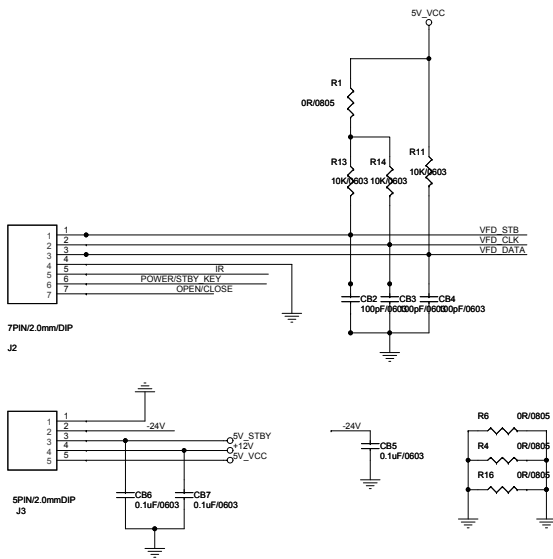
**Can't read disc or can't open the disk door**

**No VFD display**

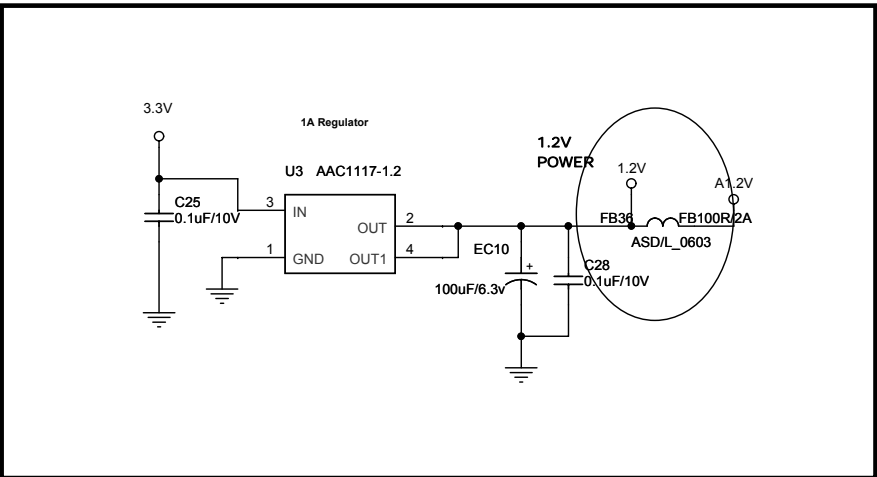
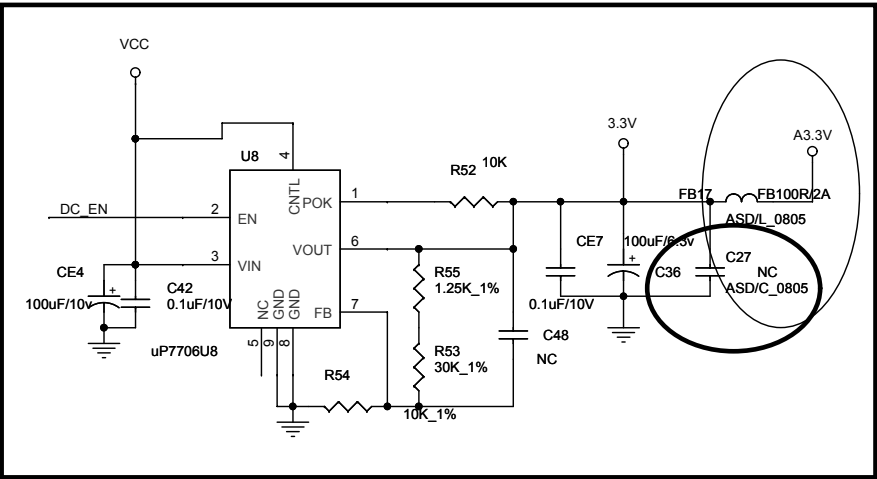
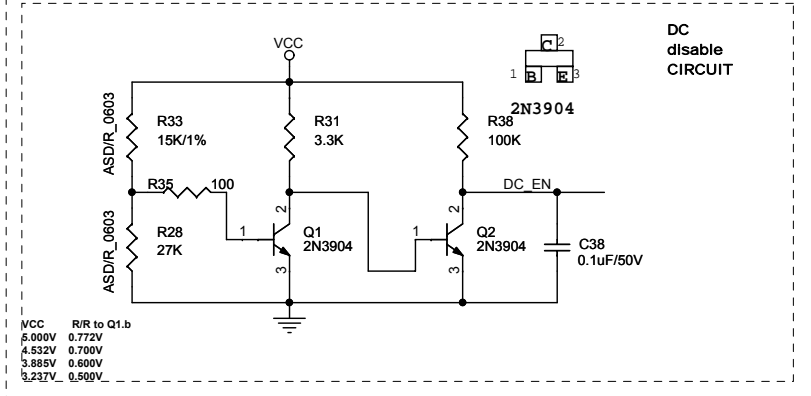
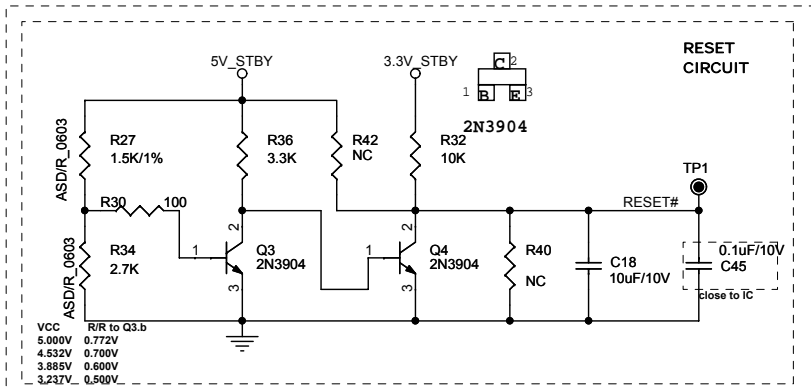
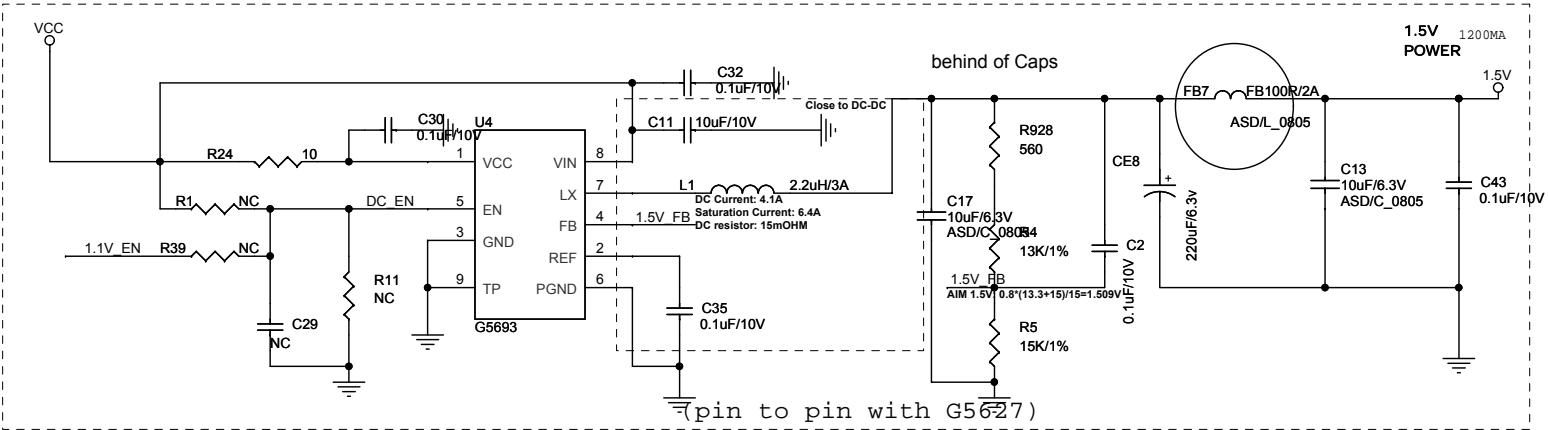
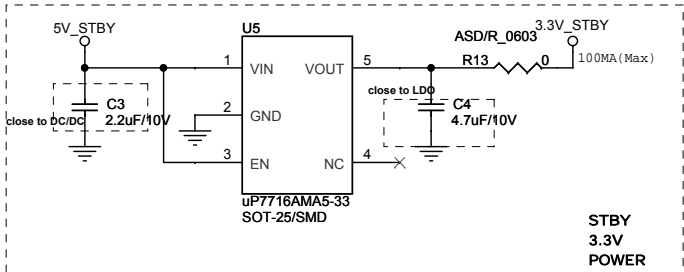
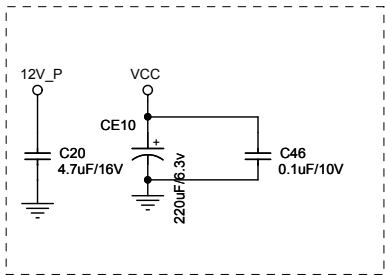
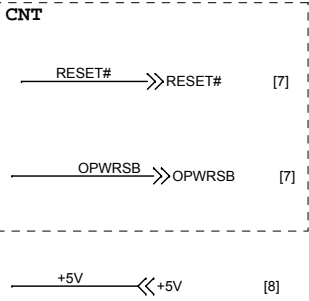
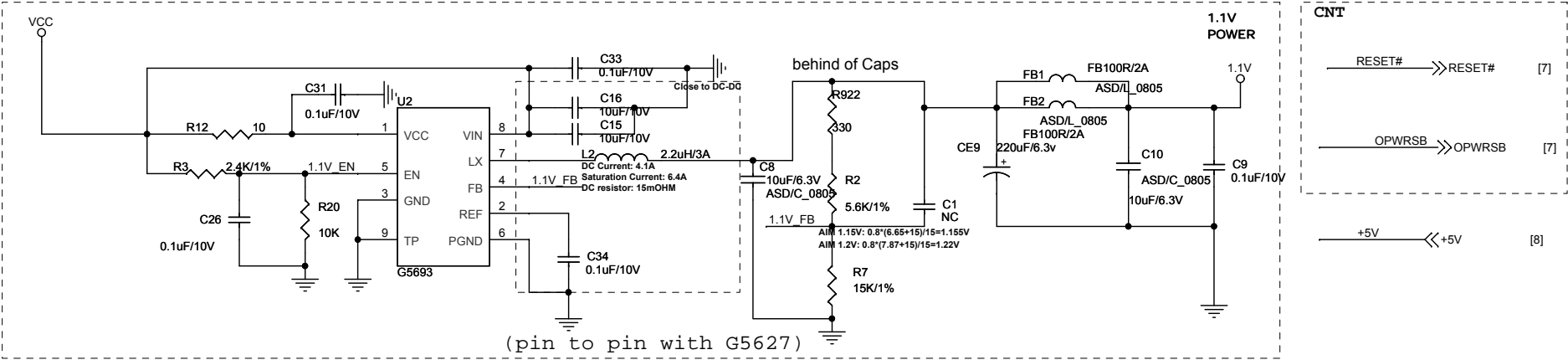
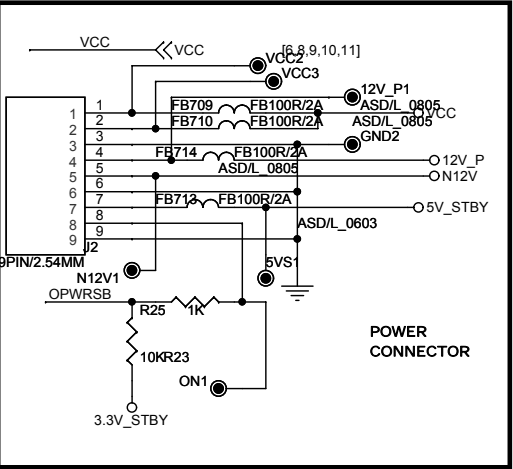
OVERALL BLOCK DIAGRAM



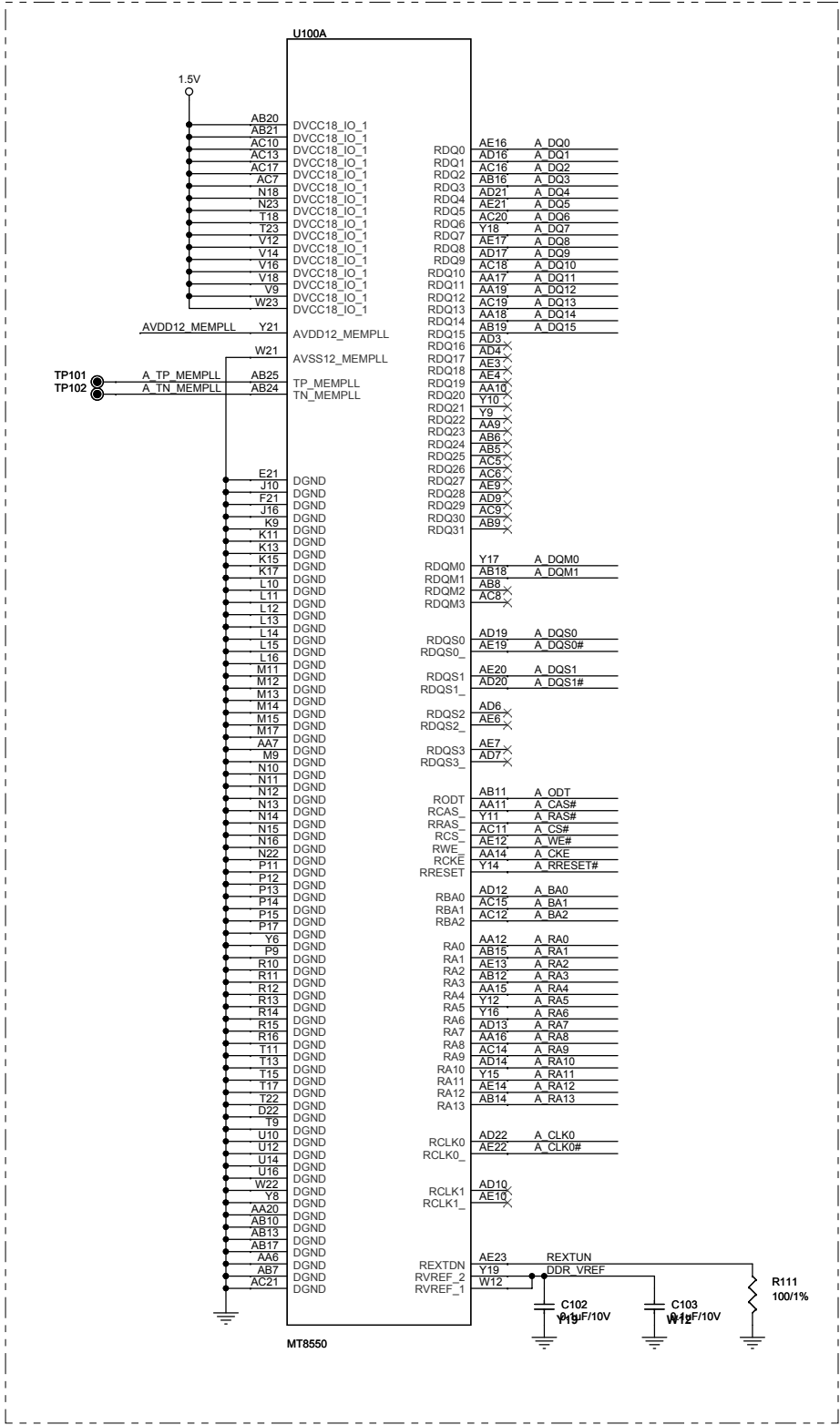
## CIRCUIT DIAGRAM-Front Board



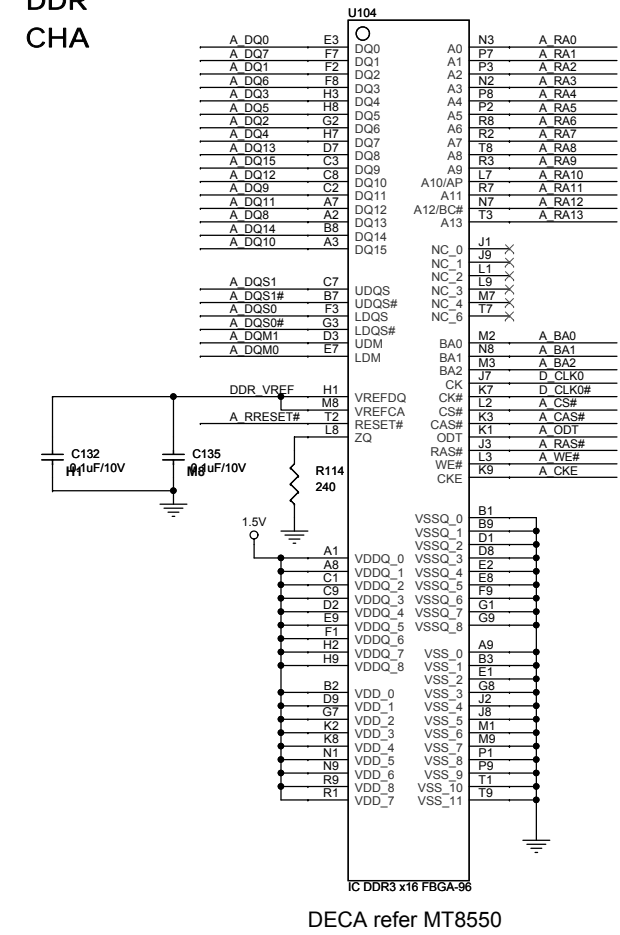
CIRCUIT DIAGRAM-DVD Main Board



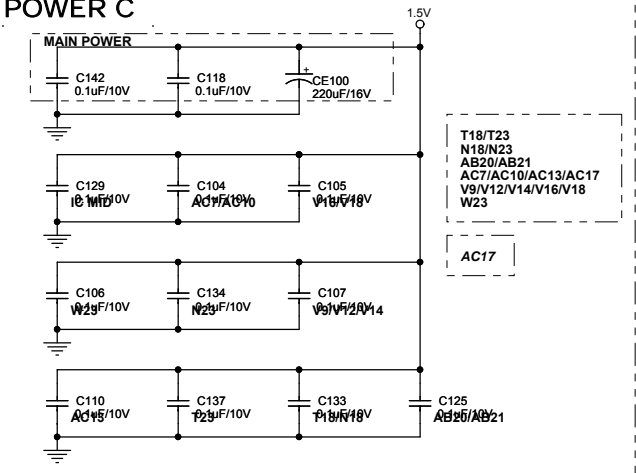
CIRCUIT DIAGRAM-DVD Main Board



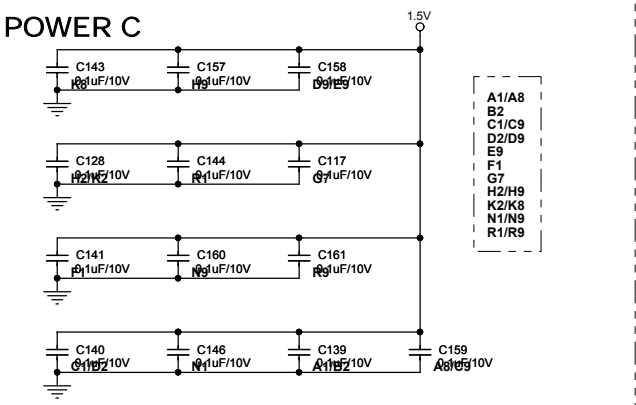
DDR  
CHA



IC 1.5V  
POWER C



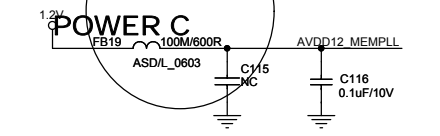
DDRA 1.5V  
POWER C



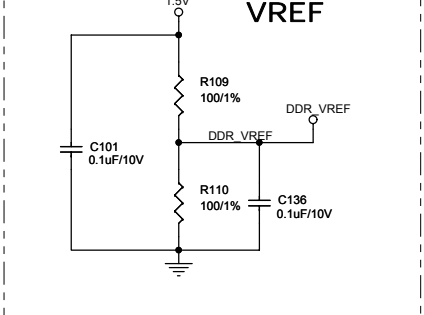
DDRA CLK



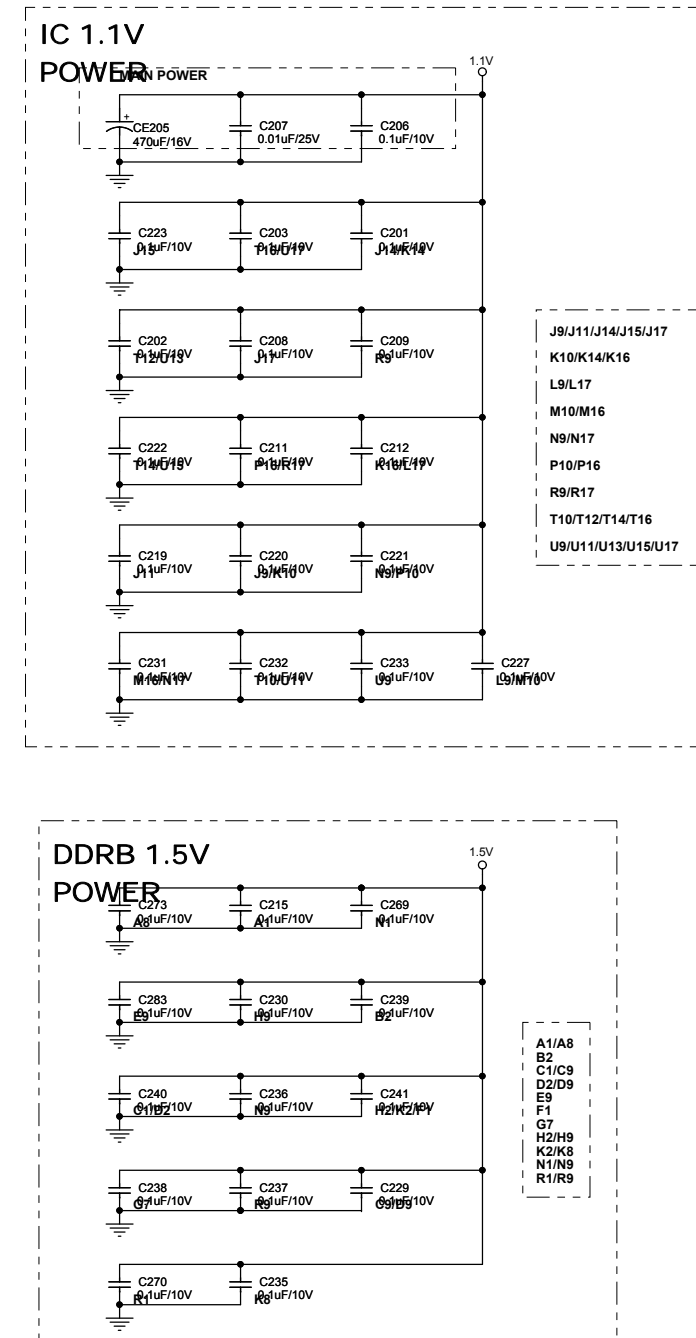
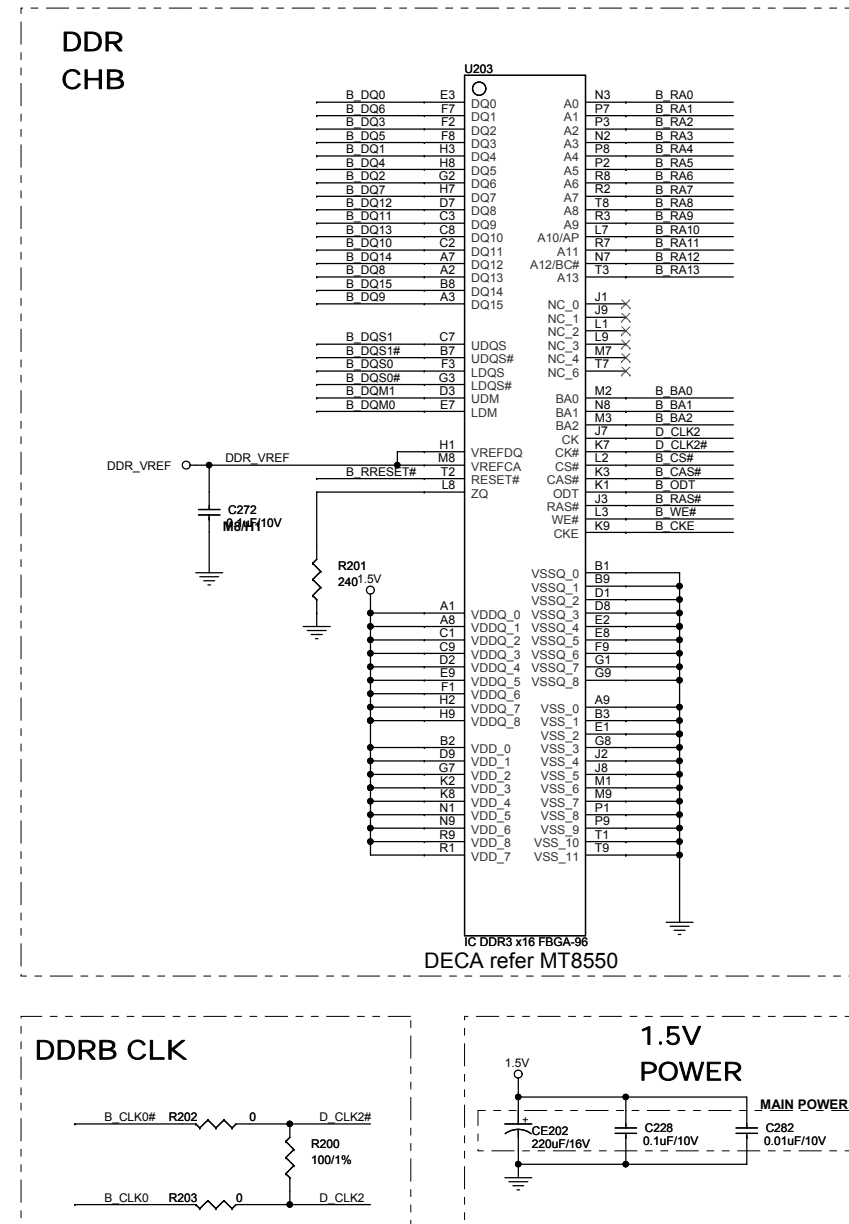
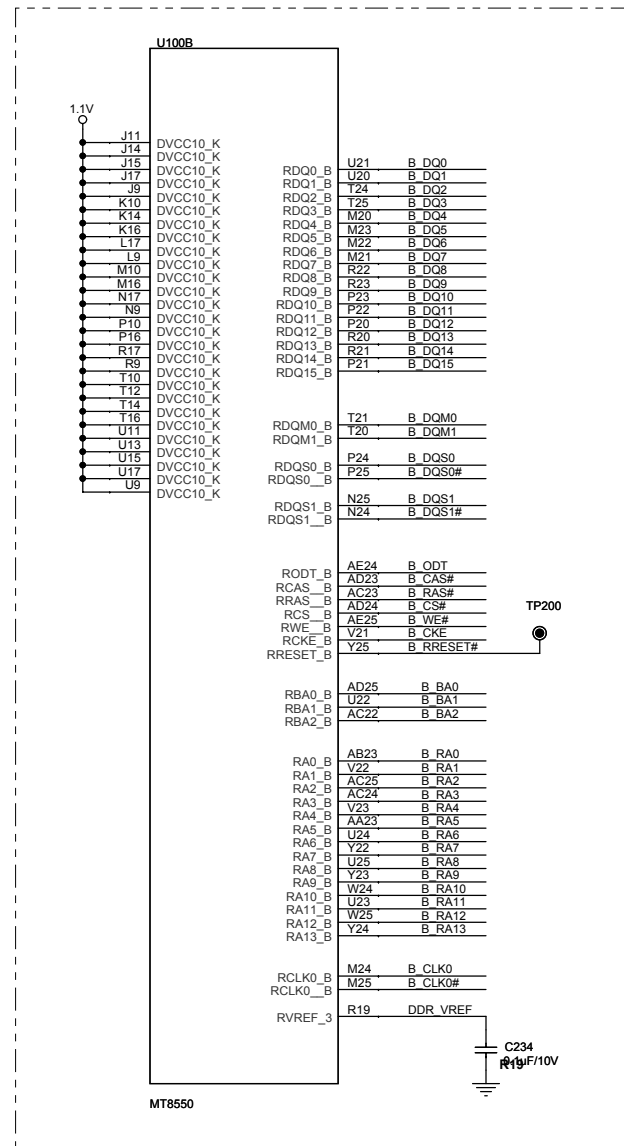
DDR PLL  
POWER C



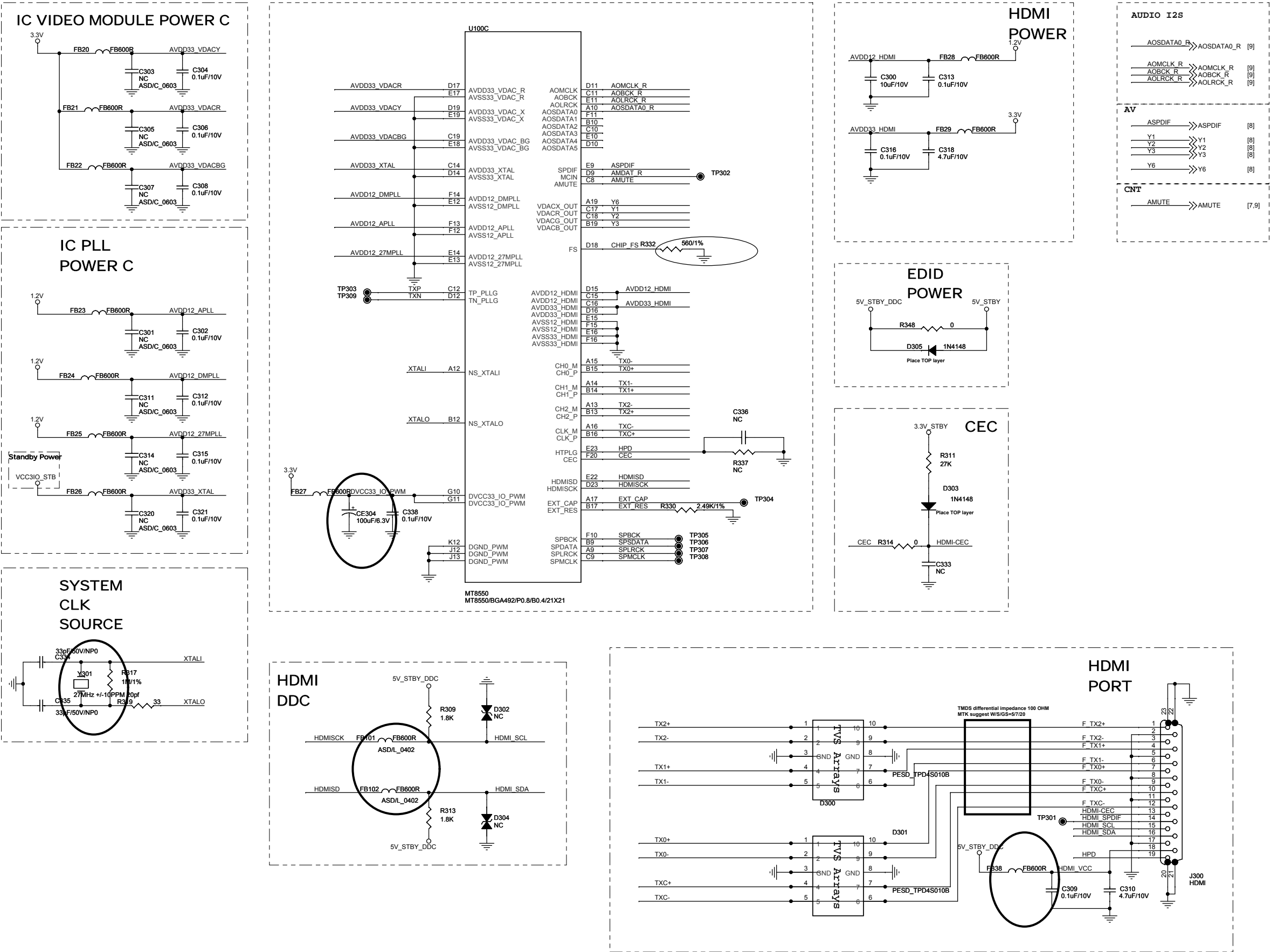
DDR  
VREF



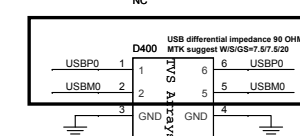
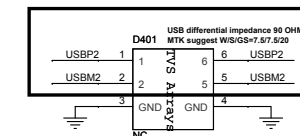
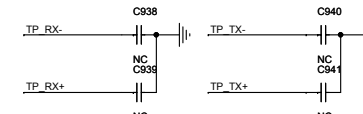
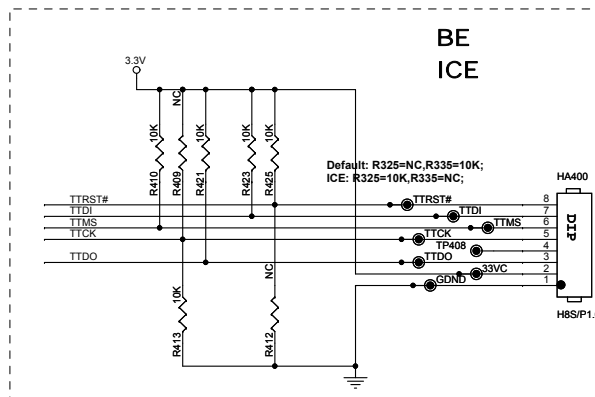
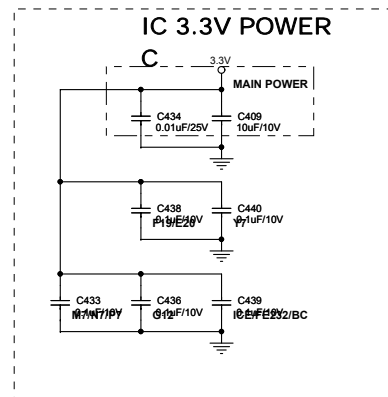
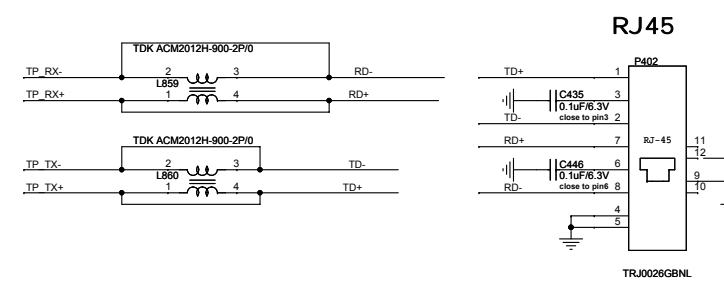
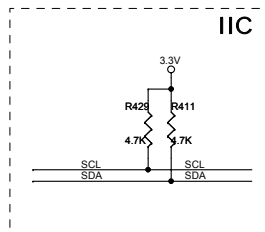
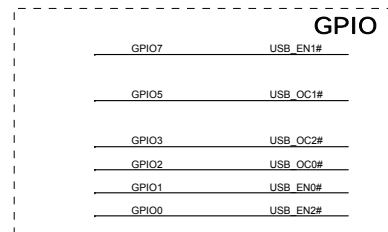
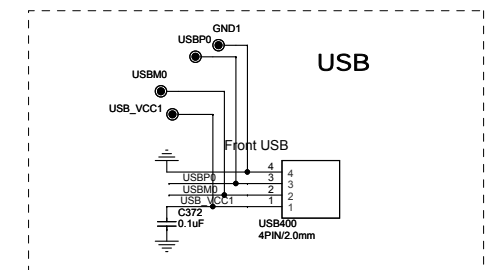
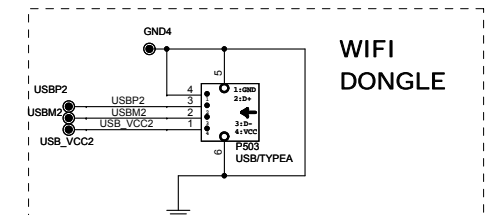
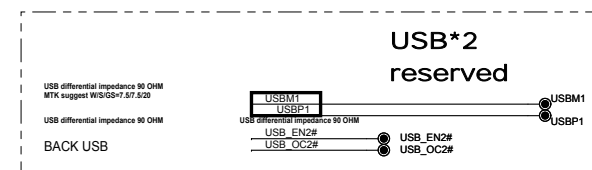
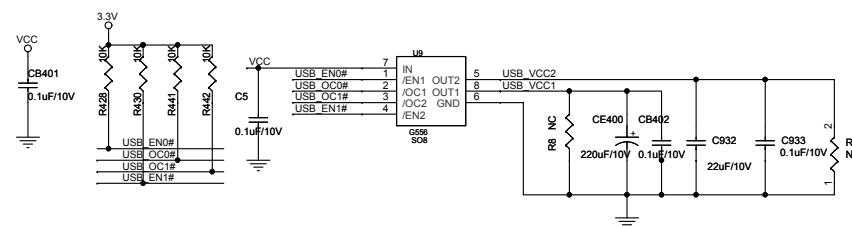
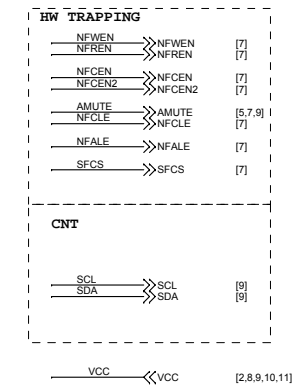
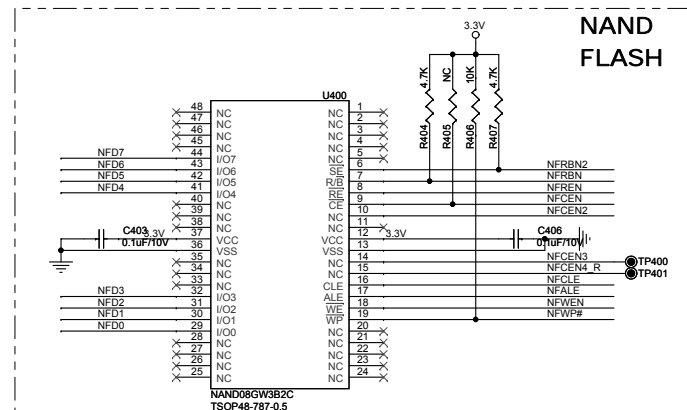
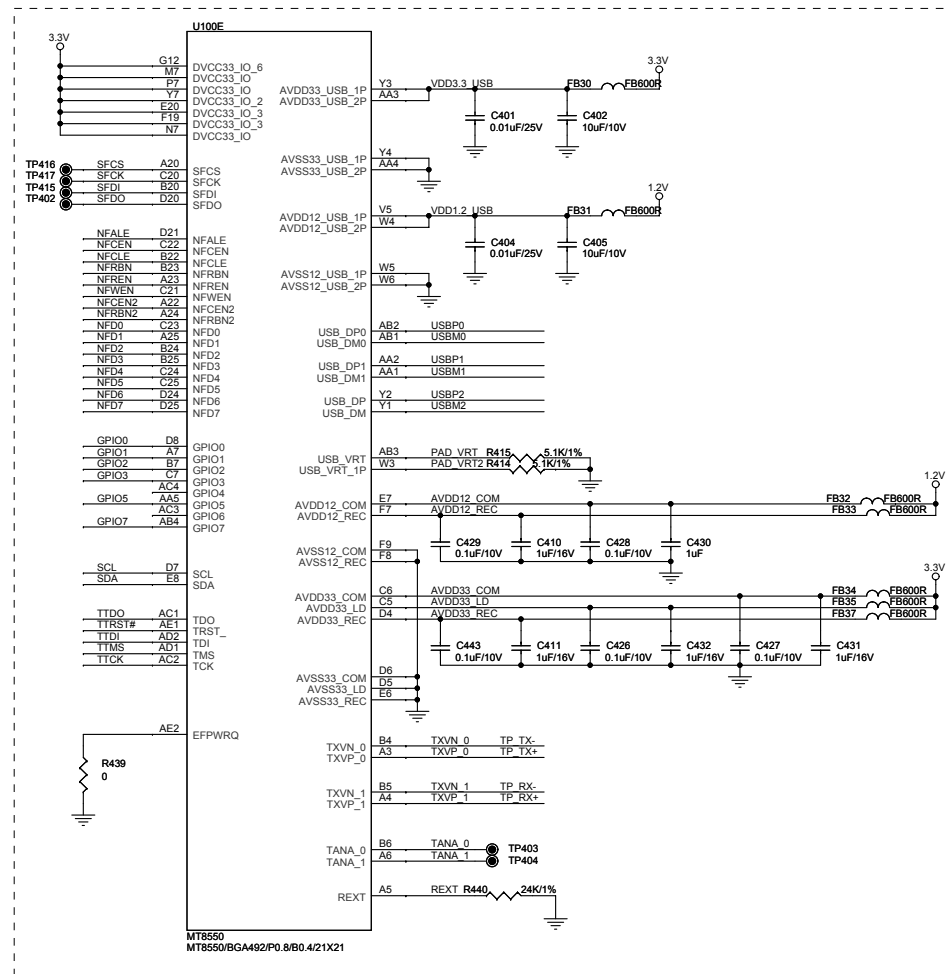




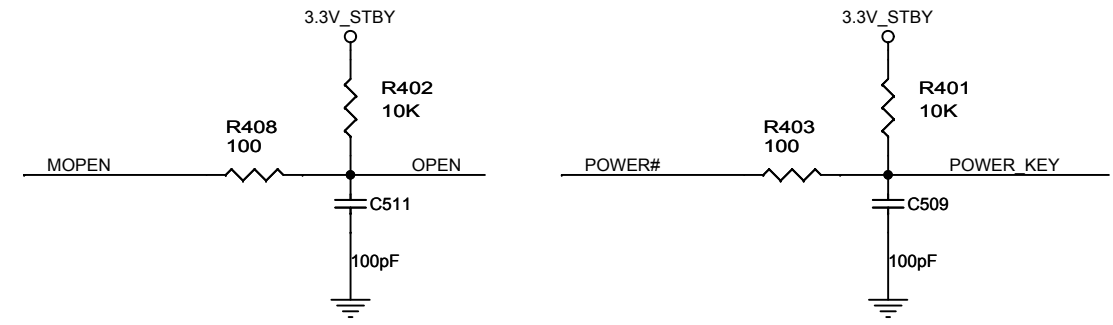
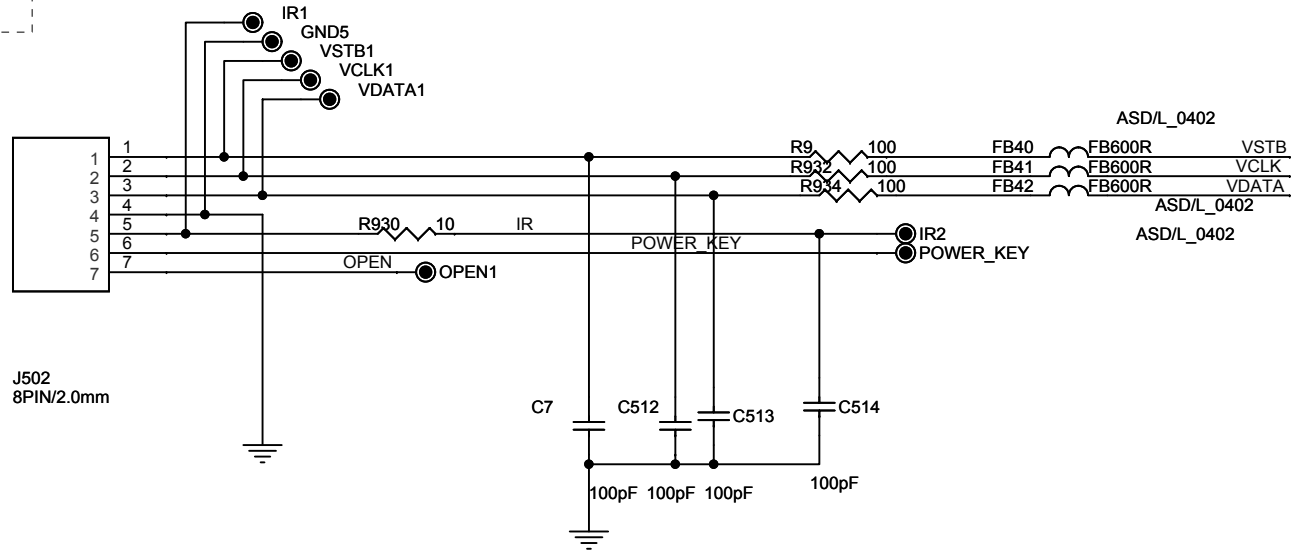
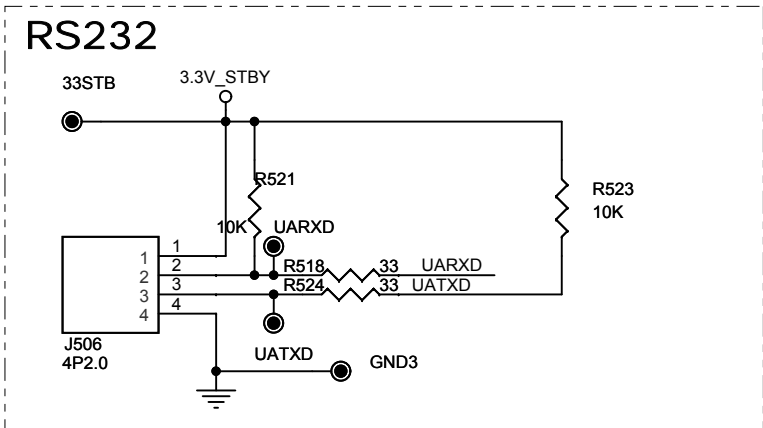
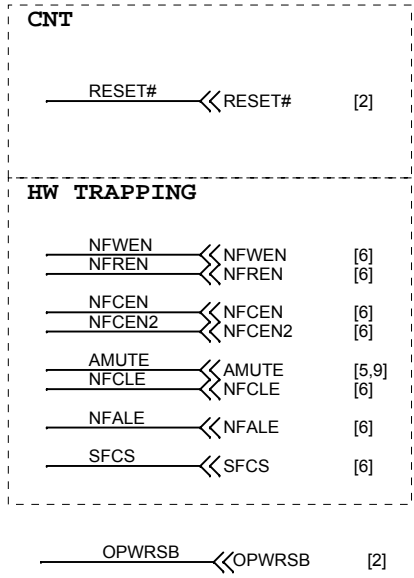
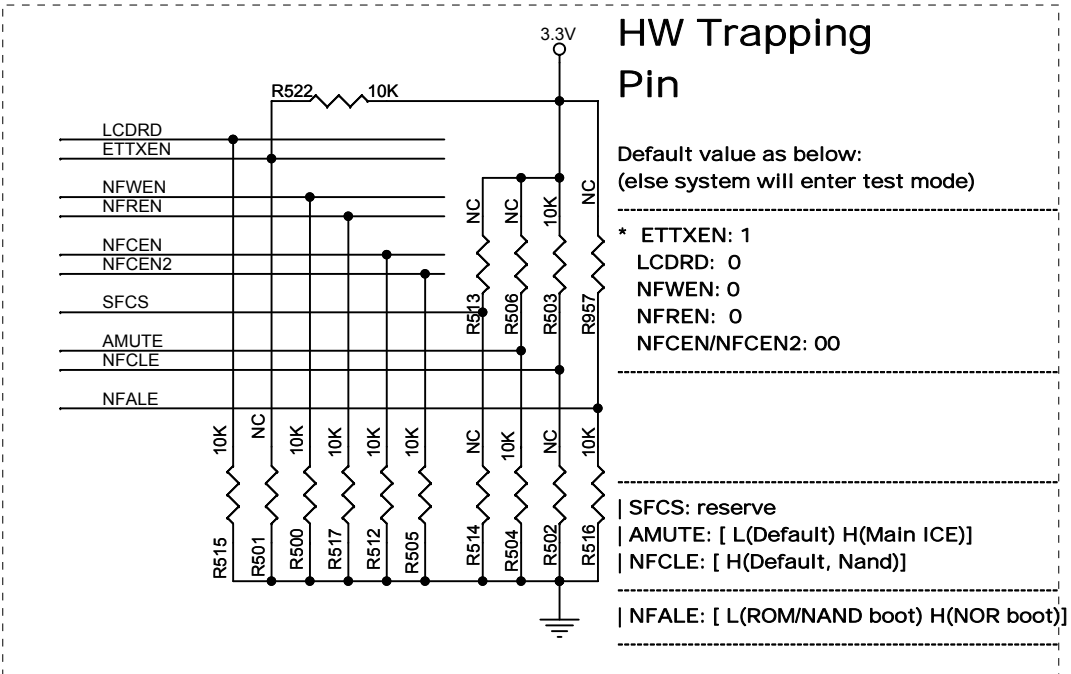
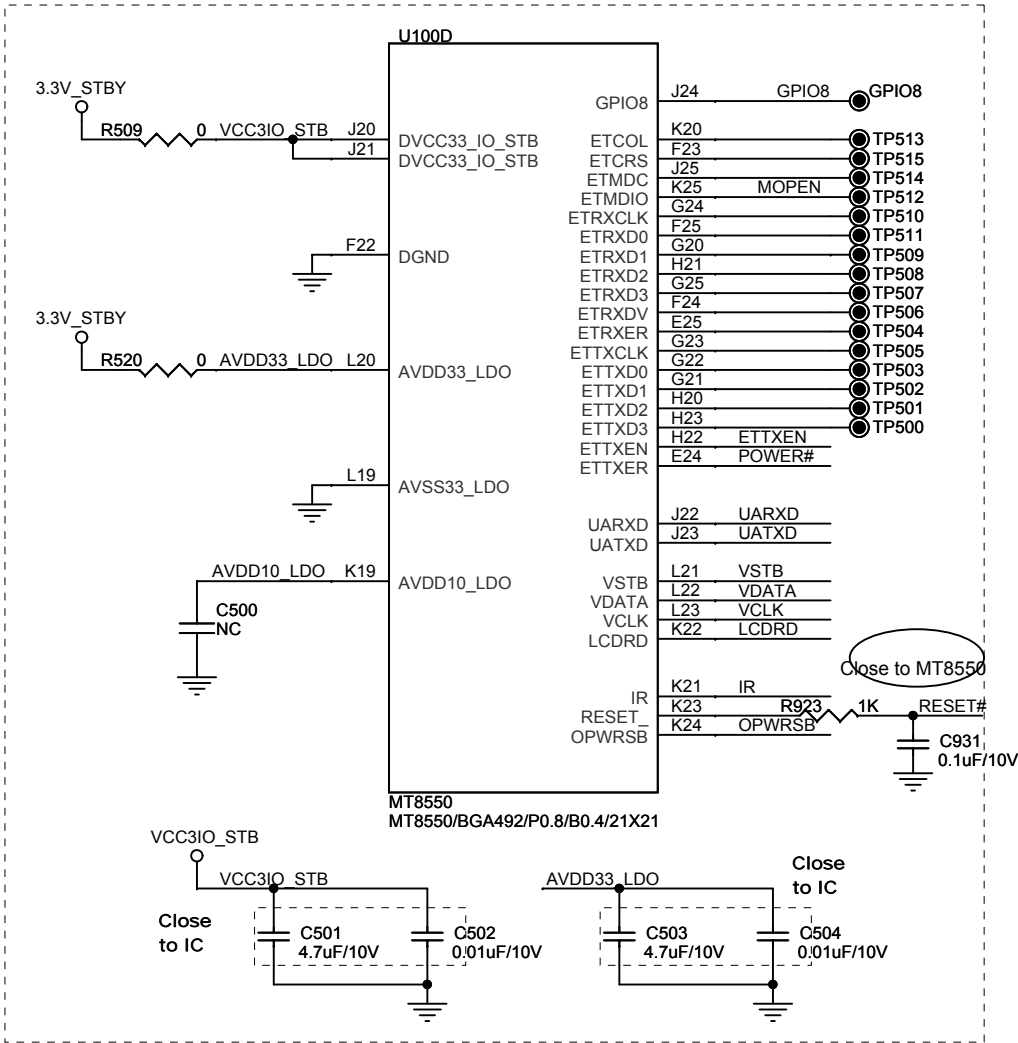
CIRCUIT DIAGRAM-DVD Main Board

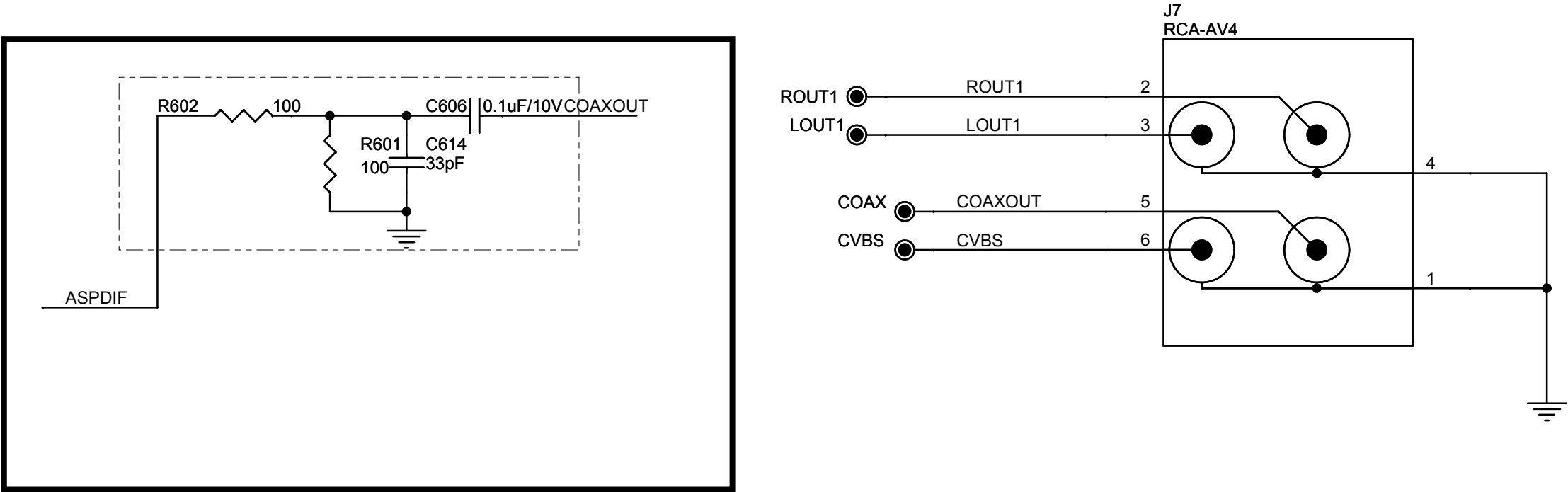
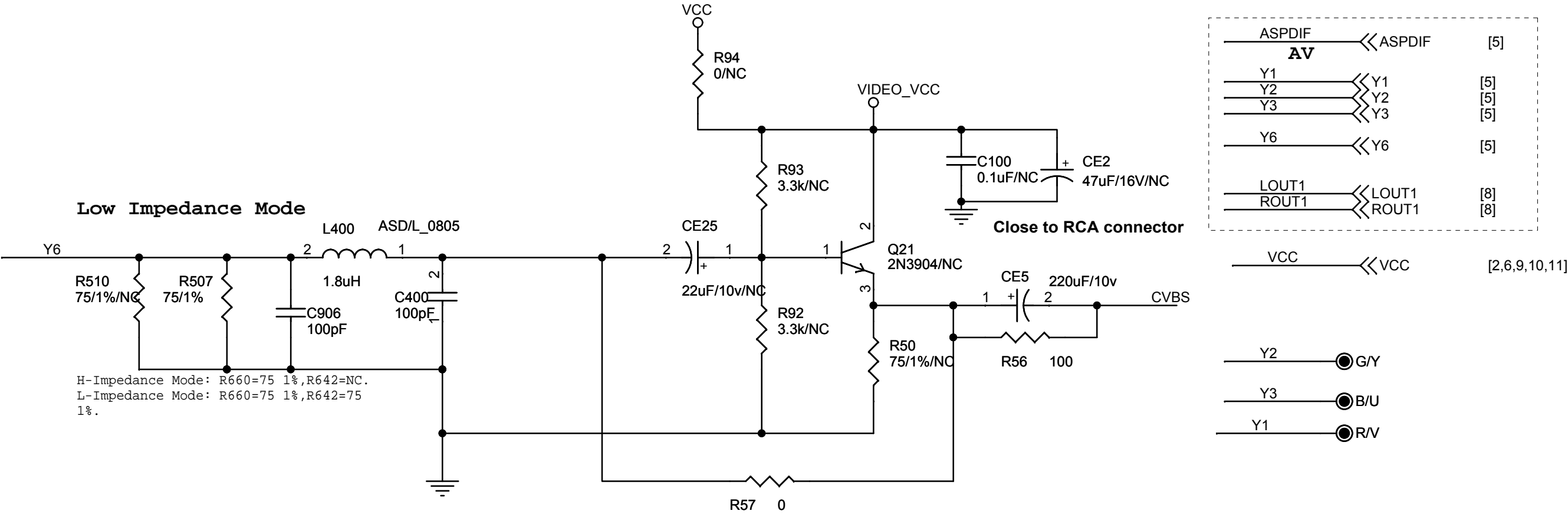


## CIRCUIT DIAGRAM-DVD Main Board

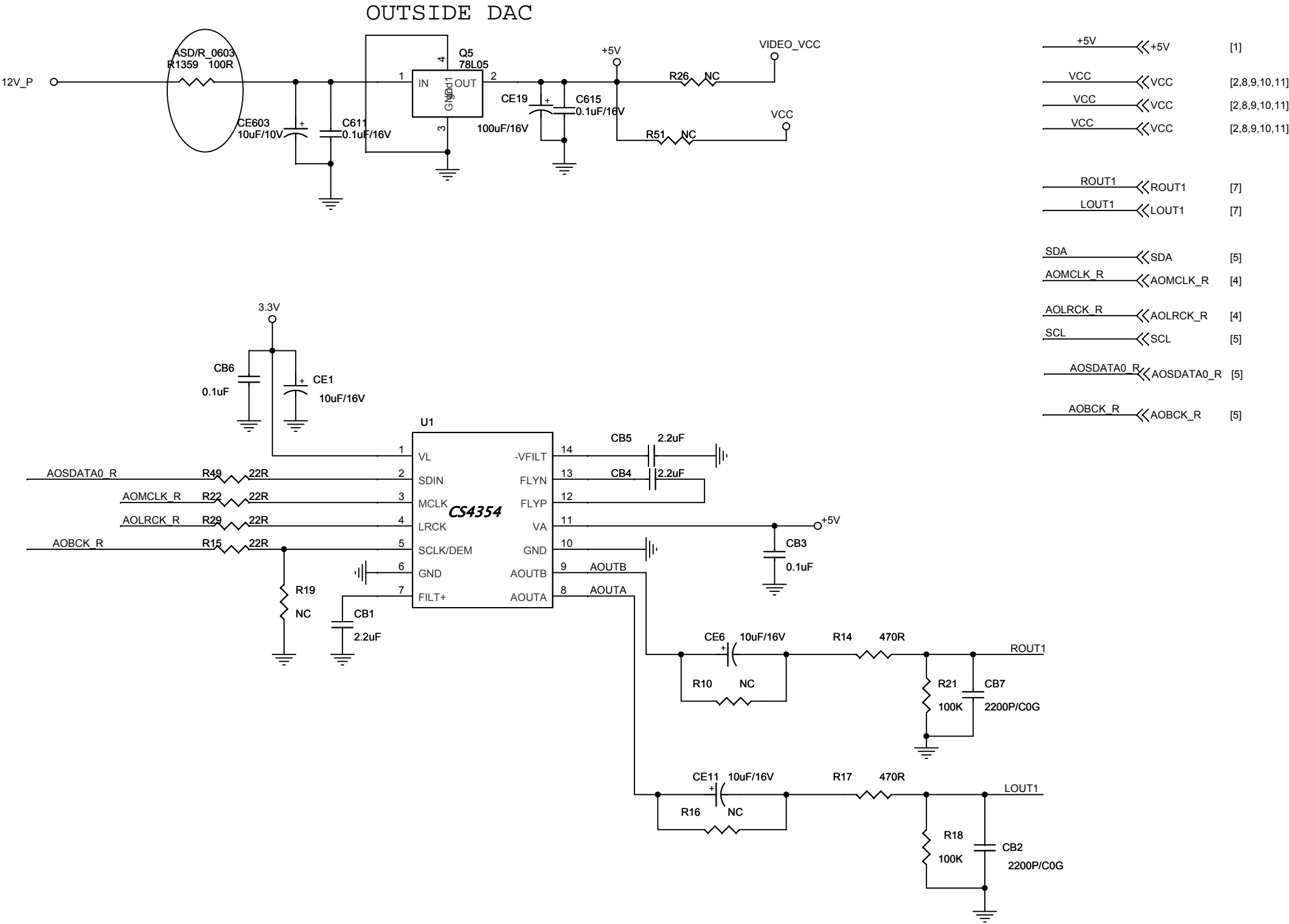


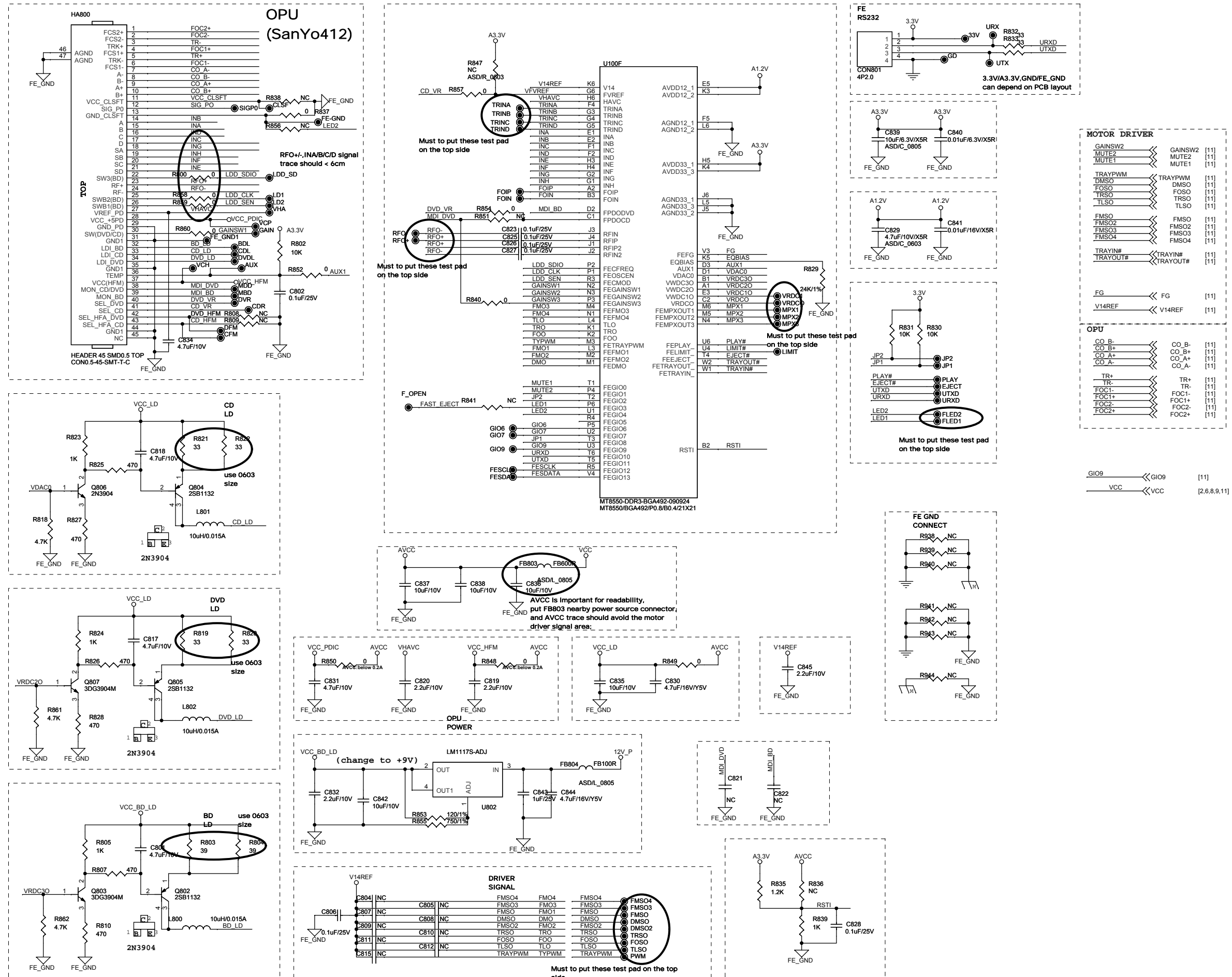
CIRCUIT DIAGRAM-DVD Main Board





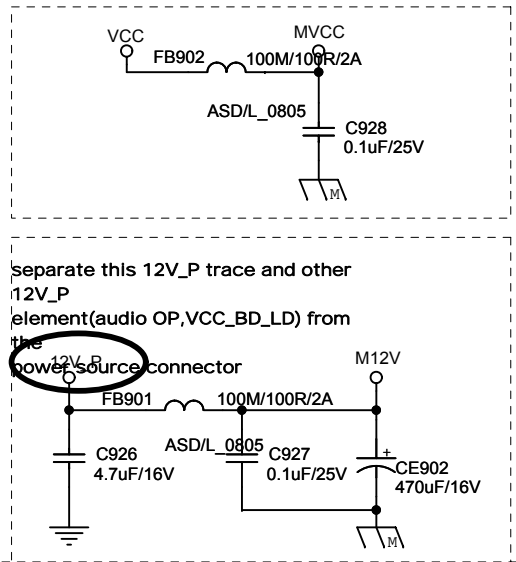
CIRCUIT DIAGRAM-DVD Main Board





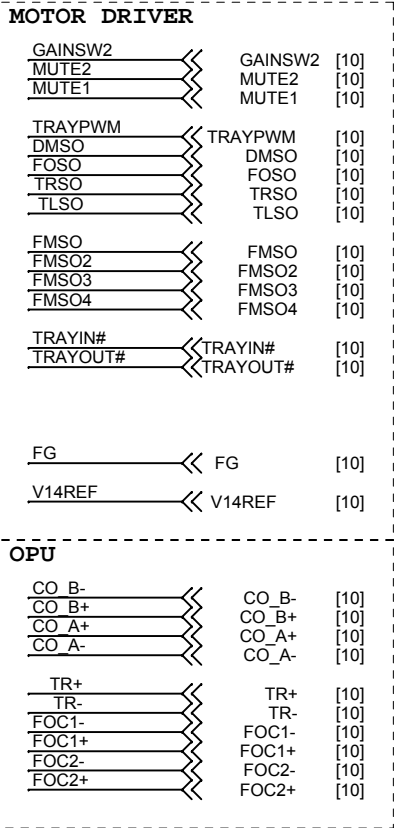
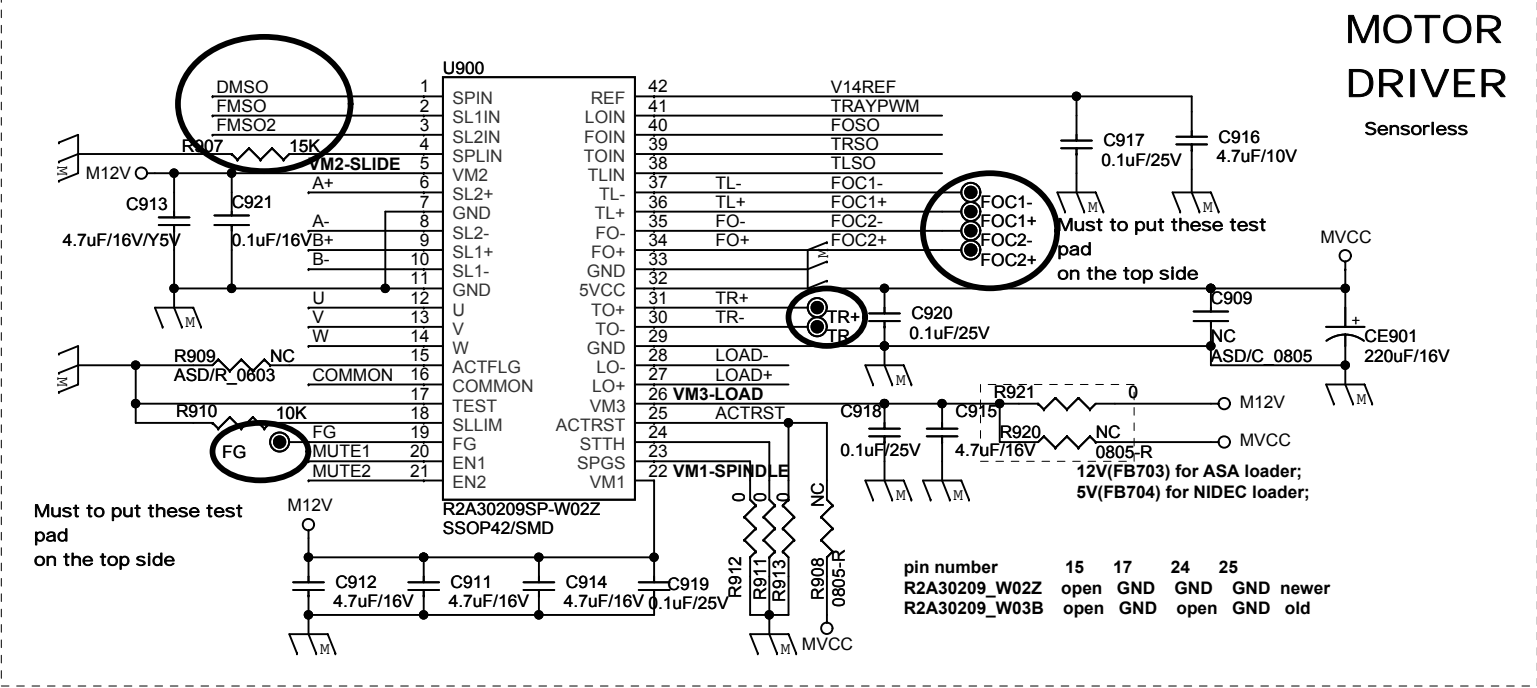
CIRCUIT DIAGRAM-DVD Main Board

MOTOR POWER

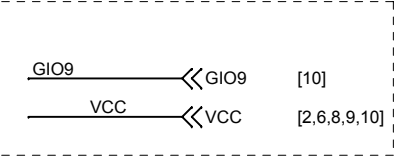
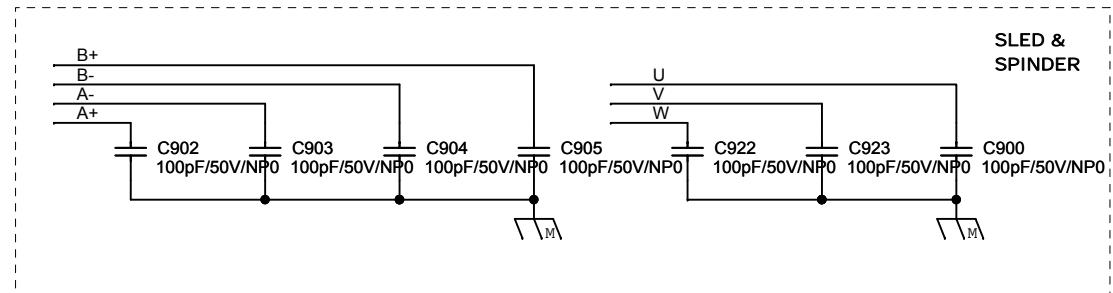
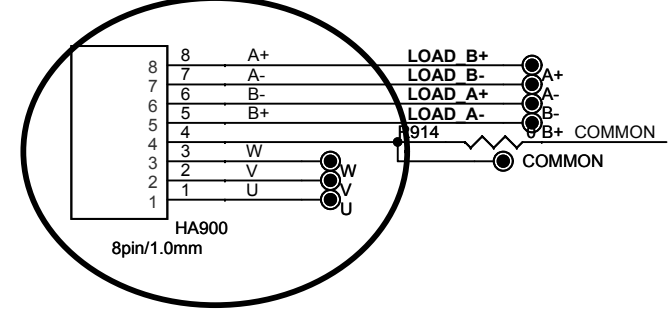
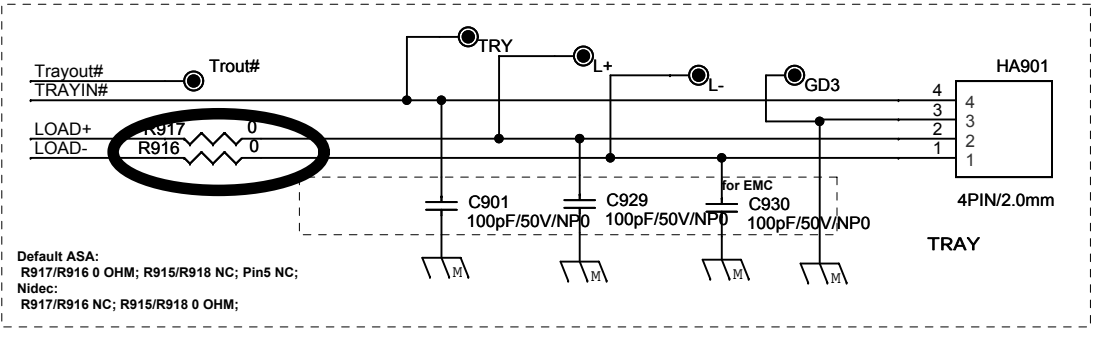
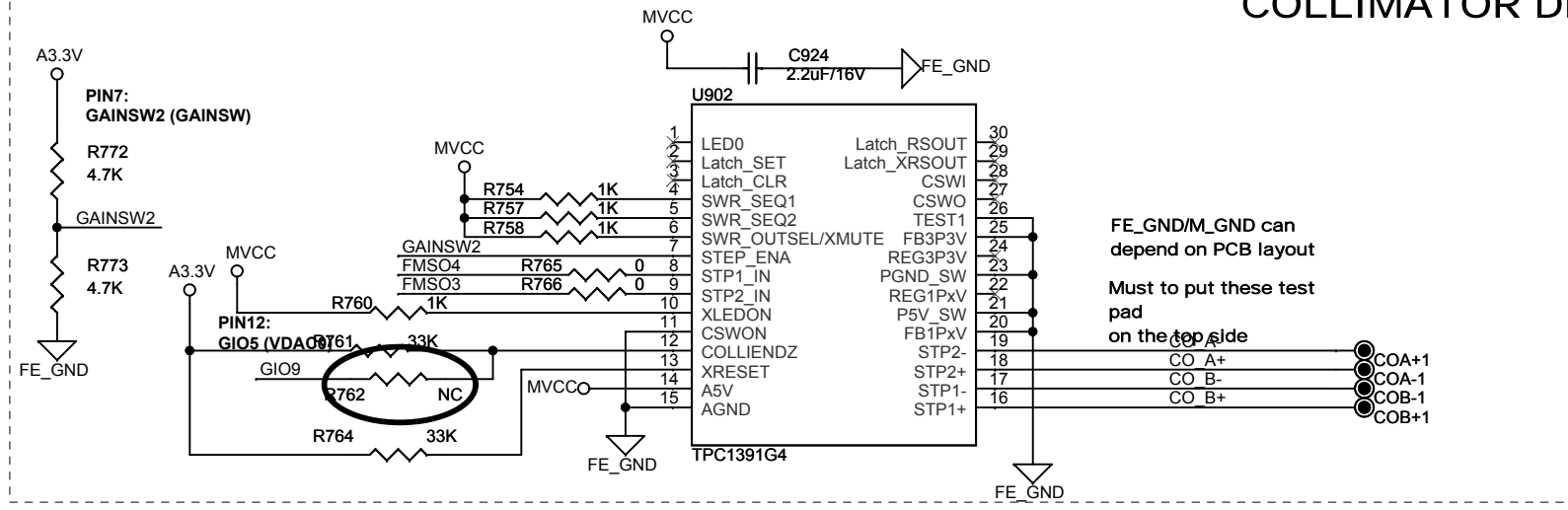


MOTOR DRIVER

Sensorless



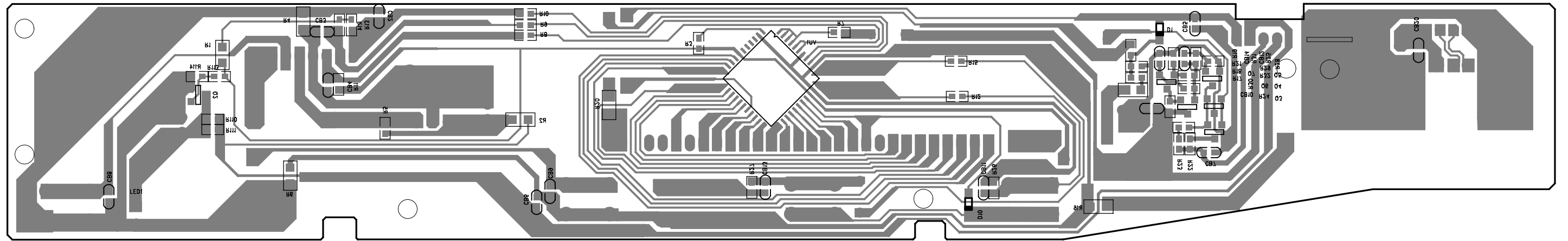
COLLIMATOR DRIVER



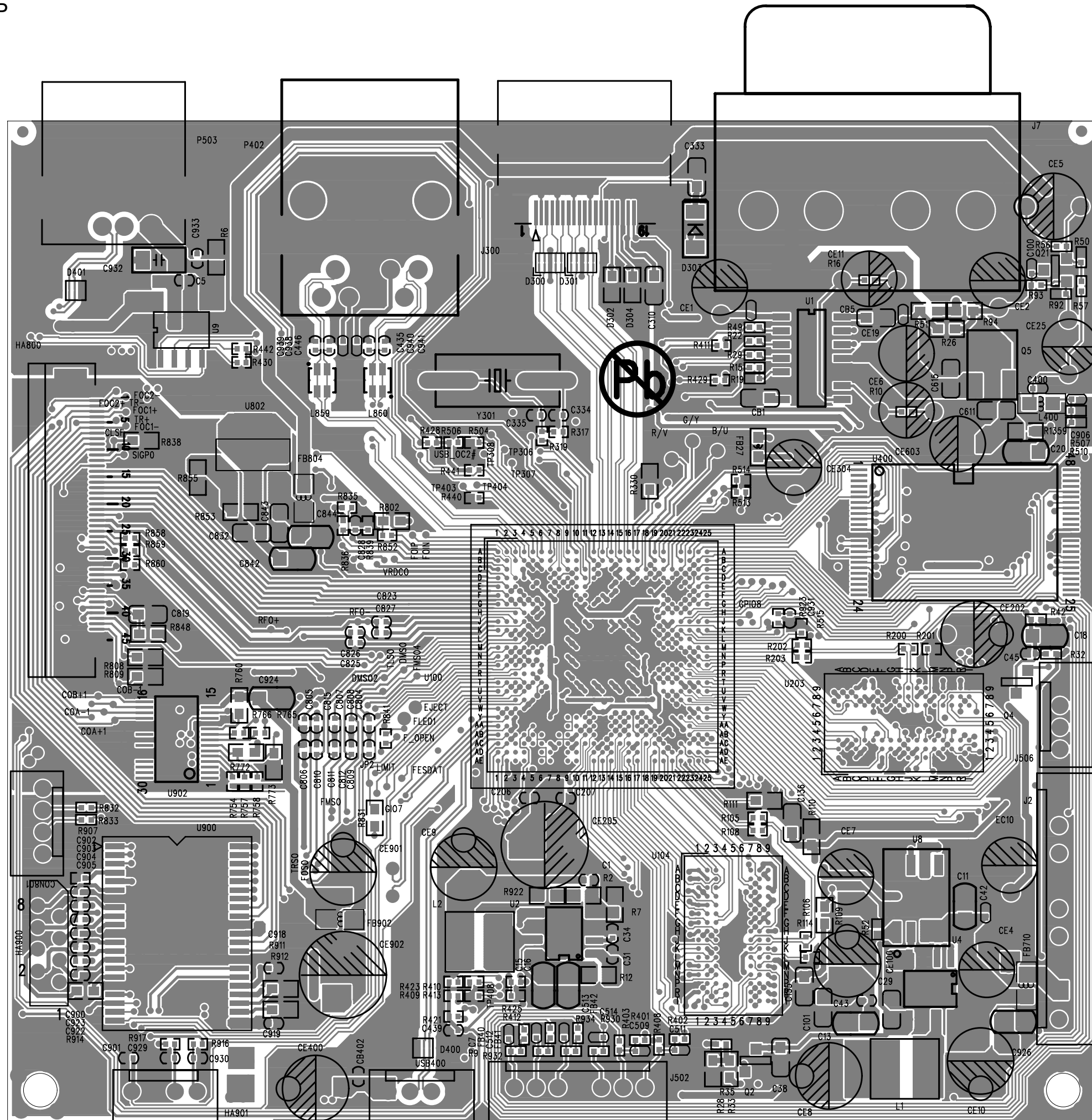




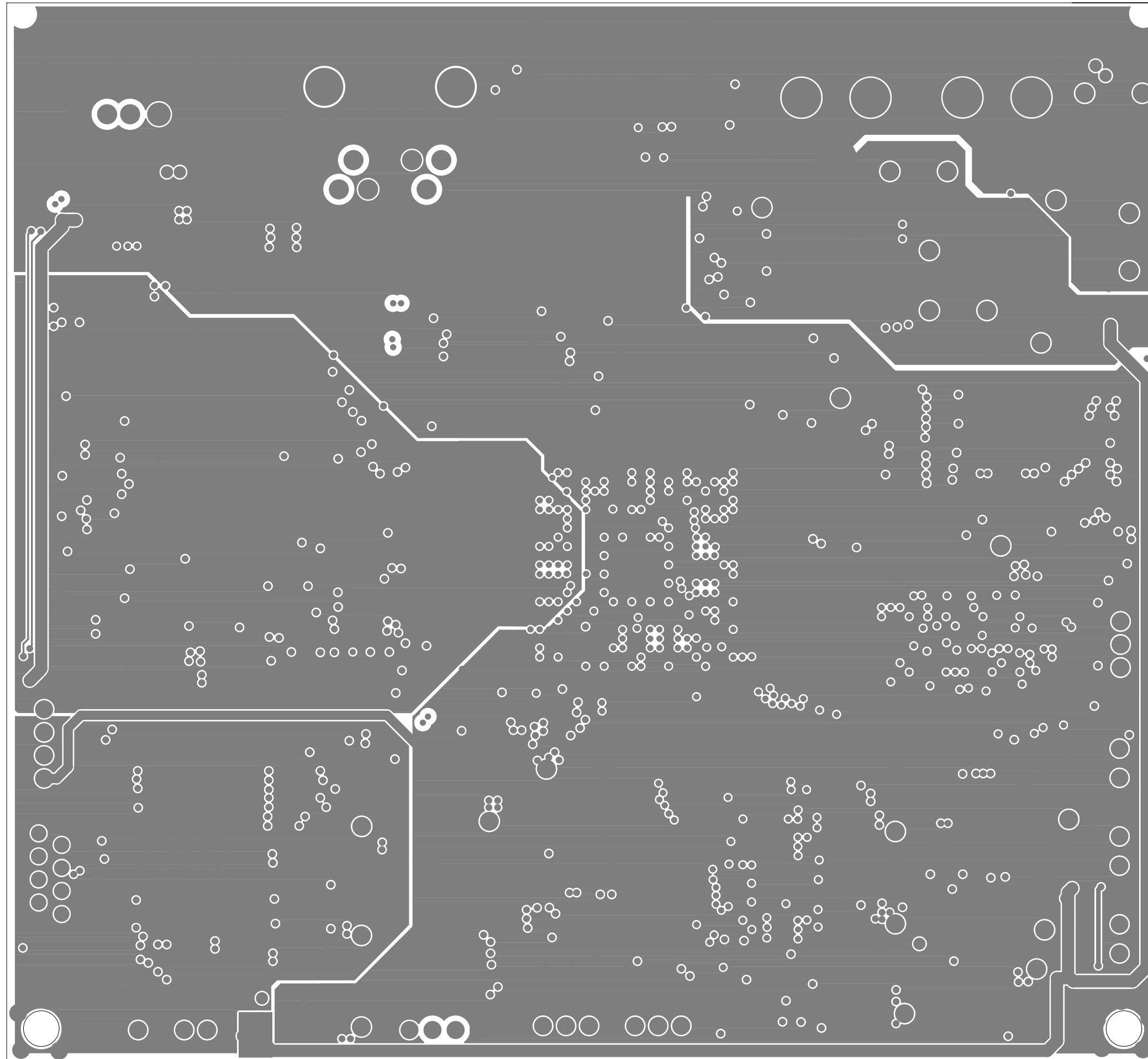
## Front PCB - BOTTOM

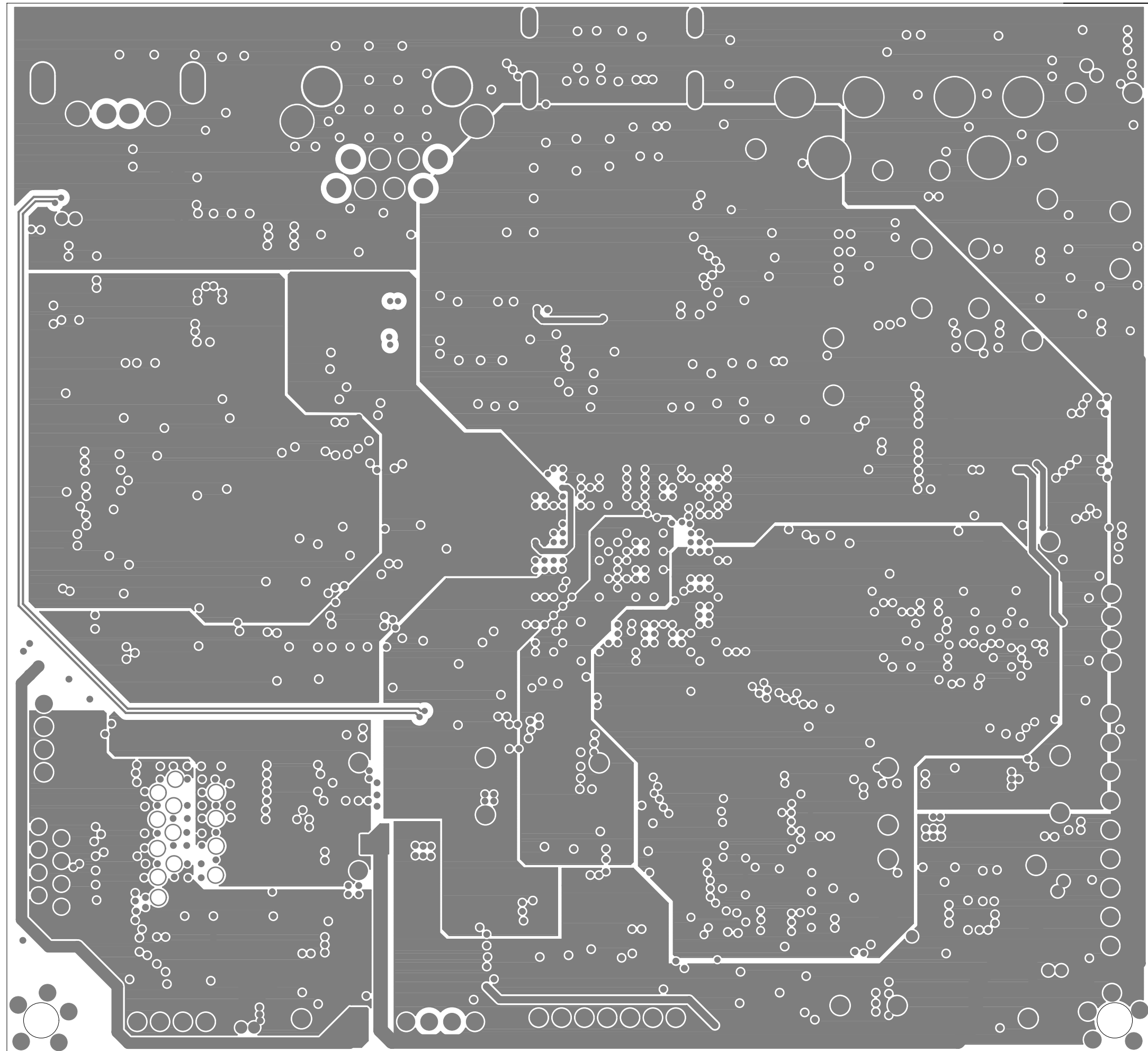


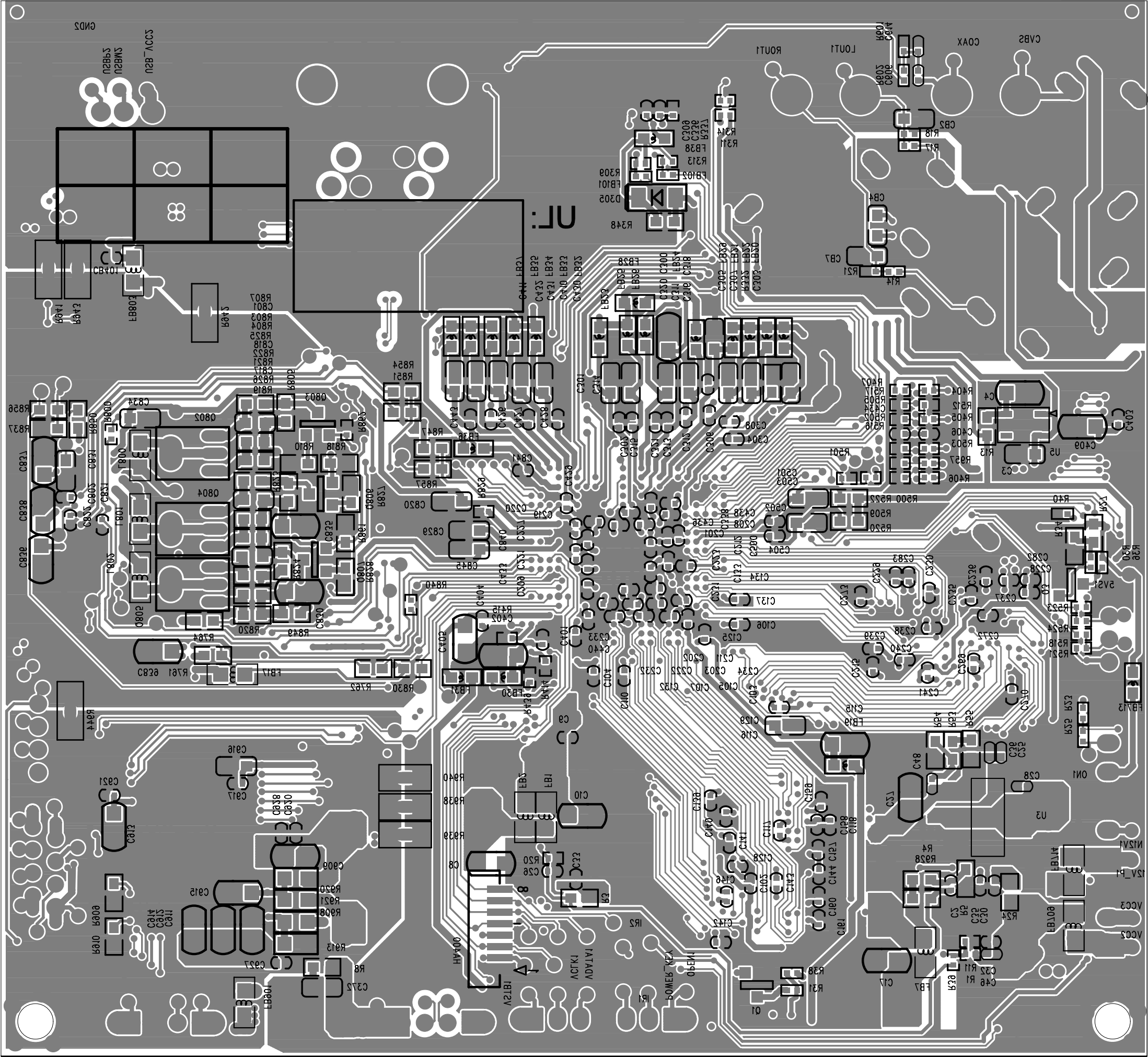
## Main PCB - TOP

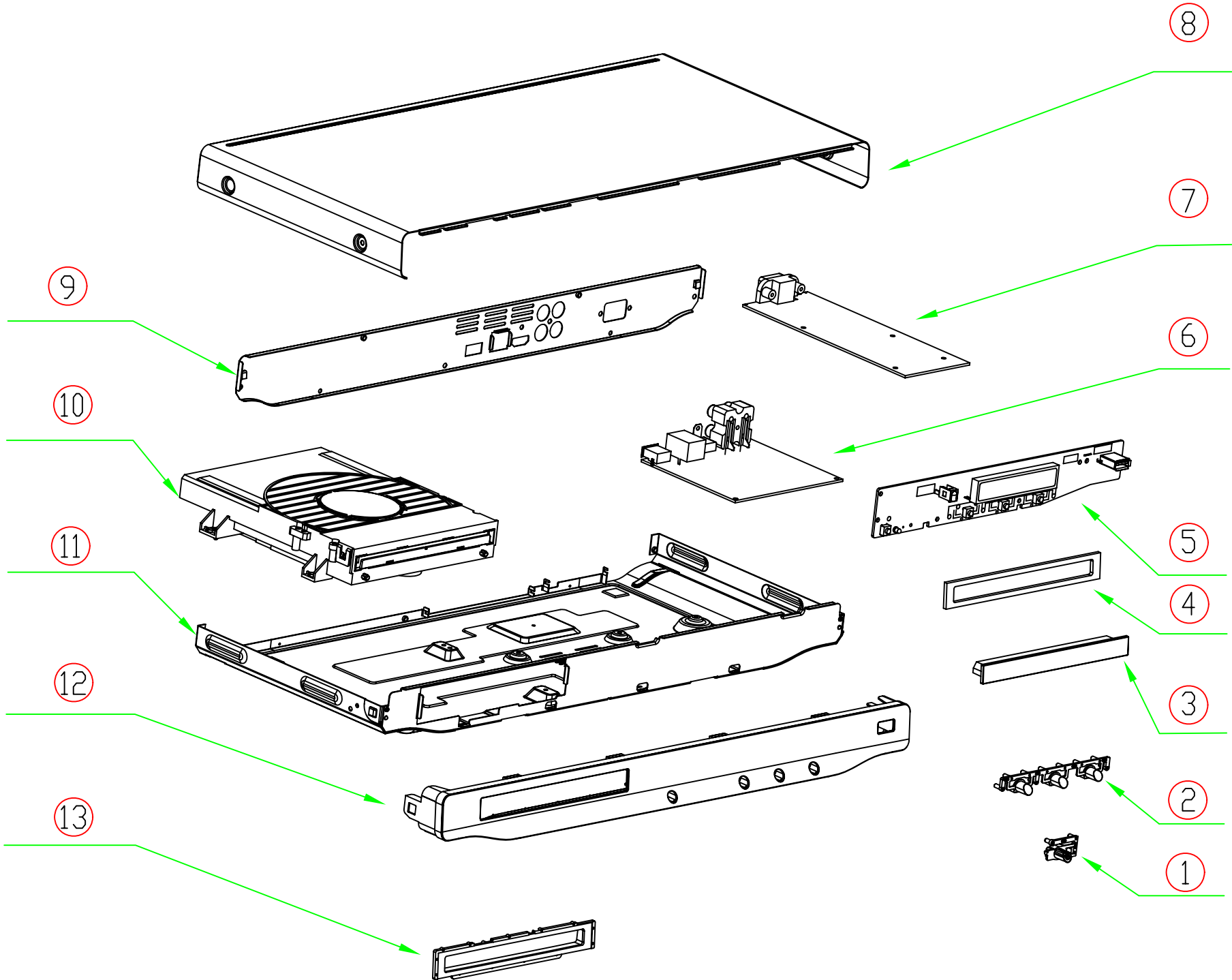


## Main PCB - Gnd layout









## 9.0 REVISION LIST

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### Version 1.0

- Initial release BDP3200X/77 & /78.

### Version 1.1

- The version /51 & /55 added.

### Version 1.2

- The version /05 & /12 added.