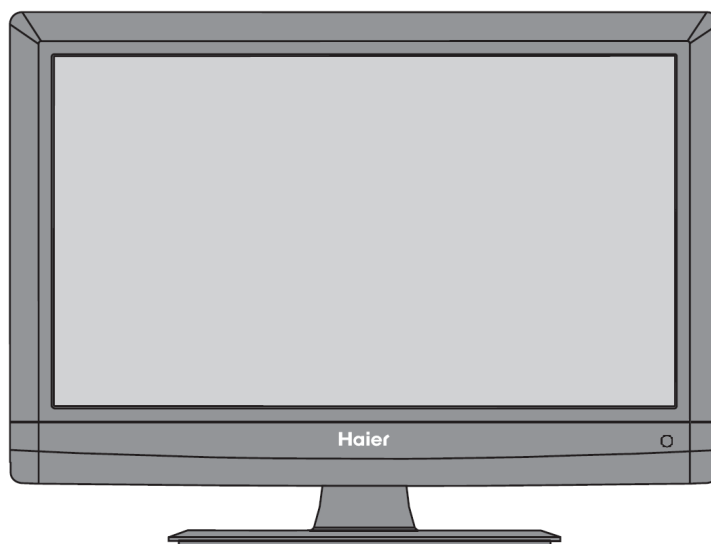


Service  
Service  
Service



# Service Manual

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## SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFORMER FOR THIS UNIT WHEN SERVICING

## Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all Haier Company Equipment. The service procedures recommended by Haier and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. Haier could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, Haier has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by Haier must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.

Hereafter throughout this manual, Haier Company will be referred to as Haier.

### WARNING

Use of substitute replacement parts, which do not have the same, specified safety characteristics might create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from Haier. Haier assumes no liability, express or implied, arising out of any unauthorized modification of design. Servicer assumes all liability.

### FOR PRODUCTS CONTAINING LASER:

DANGER-Invisible laser radiations when open AVOID DIRECT EXPOSURE TO BEAM.

CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.

Take care during handling the LCD module with backlight unit

- Must mount the module using mounting holes arranged in four corners.
- Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
- Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
- Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
- Make certain that treatment person's body is grounded through wristband.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

## Revision List

[illegible]

## 1. General Specification

|                                      |  |                      |
|--------------------------------------|--|----------------------|
| Model No.                            | LY19Z6   | LYF24Z6              |
| DISPLAY                              |  |                      |
| Aspect Ratio                         | 16:9   | 16:9                 |
| Resolution                           | 1366 x 768   | 1920 x 1080          |
| ENHANCEMENT                          |  |                      |
| Sound Output (RMS Watts)             | 2 x 3 W  | 2 x 3 W              |
| Sound Mode                           | Speech, Personal, Music  |                      |
| Picture Formats                      | Auto, Normal, Wide, Zoom 1, Zoom 2, Native (only in HDMI mode)   |                      |
| Picture Mode                         | Standard, Vivid, Movie, Eco, Personal  |                      |
| CONNECTIONS                          |  |                      |
| Rear Connectors                      | Tuner Input (75Ω)<br>SCART<br>PC IN: VGA and Audio Cable<br>Component Video and L/R Audio Input<br>SPDIF Output (Coaxial audio Out)<br>HDMI 1<br>AV OUT<br>SERVICE |                      |
| Side Connectors                      | Earphone Output<br>AV In(Composite Audio/Video)<br>HDMI 2<br>USB<br>CI Slot (Common Interface)   |                      |
| WEIGHT & DIMENSION                   |  |                      |
| Dimension with stand (WxHxD) (mm)    | 469.4 x 353.5 x 150  | 581.24 x 416.7 x 160 |
| Dimension without stand (WxHxD) (mm) | 469.4 x 313.7 x 55.7   | 581.24 x 416.7 x 53  |
| Weight with stand                    | 4.0 Kg   | 4.8 Kg               |
| Weight without stand                 | 3.7 Kg   | 4.5 Kg               |
| POWER                                |  |                      |
| Operation (Max.)                     | < 40 W   | < 50 W               |
| Standby                              | < 0.5 W  |                      |
| Mains Power                          | AC220-240V, 50-60Hz  |                      |
| Accessories                          | User Manual<br>Quick Setup Guide<br>Remote Control with Batteries<br>Mains Cord<br>Warranty Card   |                      |

## **2. Operating Instructions**

For this chapter, pls refer to the user manual attached with this service manual.

### 3. Input/Output Specification

#### 3.1 Input Signal Connector

##### VGA

| Pin No. | Signal                    |
|---------|---------------------------|
| 1       | Red                       |
| 2       | Green                     |
| 3       | Blue                      |
| 4       | UART-TX                   |
| 5       | GND                       |
| 6       | Red GND                   |
| 7       | Green GND                 |
| 8       | Blue GND                  |
| 9       | +5V (supply from PC)      |
| 10      | Sync GND                  |
| 11      | UART-RX                   |
| 12      | Bi-directional data (SDA) |
| 13      | H-sync                    |
| 14      | V-sync (vclk)             |
| 15      | Data clock (SCL)          |

##### HDMI

| Pin No. | Signal                    |
|---------|---------------------------|
| 1       | TMDS Data2+               |
| 2       | TMDS Data2 shield         |
| 3       | TMDS Data2-               |
| 4       | TMDS Data1+               |
| 5       | TMDS Data1 shield         |
| 6       | TMDS Data1-               |
| 7       | TMDS Data0+               |
| 8       | TMDS Data0 shield         |
| 9       | TMDS Data0-               |
| 10      | TMDS Clock+               |
| 11      | TMDS Clock Shield         |
| 12      | TMDS Clock-               |
| 13      | CEC                       |
| 14      | Reserved (N.C. on device) |
| 15      | SCL                       |
| 16      | SDA                       |
| 17      | DDC/CEC Ground            |
| 18      | +5V Power                 |
| 19      | Hot Plug Detect           |

## Full SCART

| Pin No. | Signal                               |
|---------|--------------------------------------|
| 1       | Audio output B (right)               |
| 2       | Audio input B (right)                |
| 3       | Audio output A (left)                |
| 4       | Ground (audio)                       |
| 5       | Ground (blue)                        |
| 6       | Audio input A (left)                 |
| 7       | Blue input                           |
| 8       | Function select                      |
| 9       | Ground (green)                       |
| 10      | Comms data 2                         |
| 11      | Green input                          |
| 12      | Comms data 1                         |
| 13      | Ground (red)                         |
| 14      | Ground (blanking)                    |
| 15      | Red input or Chroma                  |
| 16      | RGB switching control                |
| 17      | Ground (video input & output)        |
| 18      | Ground (RGB switching control)       |
| 19      | Video output (composite)             |
| 20      | Sync or Video input (composite or Y) |
| 21      | Shield (ground)                      |

## 3.2 Input Signal Mode

### Video input format

| Physical Inputs                | Format           |
|--------------------------------|------------------|
| PAL from RF                    | 720 x 576 @50i   |
| SECAM from RF                  | 720 x 576 @50i   |
| Side, SCART (CVBS,RGB and Y/C) | 720 x 576 @50i   |
|                                | 720 x 480 @60i   |
| Component                      | 720 x 480 @60i   |
|                                | 720 x 480 @60p   |
|                                | 720 x 576 @50i   |
|                                | 720 x 576 @50p   |
|                                | 1280 x 720 @60p  |
|                                | 1280 x 720 @50p  |
|                                | 1920 x 1080 @60i |
|                                | 1920 x 1080 @50i |
|                                |                  |
| HDMI                           | 720 x 480 @60i   |
|                                | 720 x 480 @60p   |
|                                | 720 x 576 @50i   |
|                                | 720 x 576 @50p   |
|                                | 1280 x 720 @50p  |
|                                | 1280 x 720 @60p  |
|                                | 1920 x 1080 @50i |
|                                | 1920 x 1080 @60i |
|                                | 1920 x 1080 @25p |
|                                | 1920 x 1080 @30p |
|                                | 640 x 480 @60Hz  |
|                                | 800 x 600 @60Hz  |
|                                | 1024 x 768 @60Hz |
|                                | 1360 x 768 @60Hz |

### PC Input signal mode

| Dot rate (MHz) |         | H.freq (KHz) | Mode                    | Resolution  | V.freq (Hz) |
|----------------|---------|--------------|-------------------------|-------------|-------------|
| 1              | 25.175  | 31.469       | IBM VGA                 | 640 * 480   | 59.940      |
| 2              | 36.000  | 35.156       | VESA                    | 800 * 600   | 56.250      |
| 3              | 40.000  | 37.879       | VESA                    | 800 * 600   | 60.317      |
| 4              | 65.000  | 48.363       | VESA                    | 1024 * 768  | 60.004      |
| 5              | 74.500  | 44.772       | CTV 0.92MW              | 1280 * 720  | 59.855      |
| 6              | 79.500  | 47.776       | CVT 2.3MA               | 1280 * 768  | 59.870      |
| 7              | 85.500  | 47.712       | VESA                    | 1360 * 768  | 60.015      |
| 8              | 108.000 | 63.981       | VESA                    | 1280 * 1024 | 60.020      |
| 9              | 138.500 | 66.587       | VESA (reduced blanking) | 1920 * 1080 | 59.934      |



#### 4. Mechanical Instructions

Note: Below is the main process for disassemble only. And maybe some of the pictures are a little difference with the original TV, for reference only.

LY19Z6

Step1. Unscrew the 4 screws to remove the STAND ASS'Y.

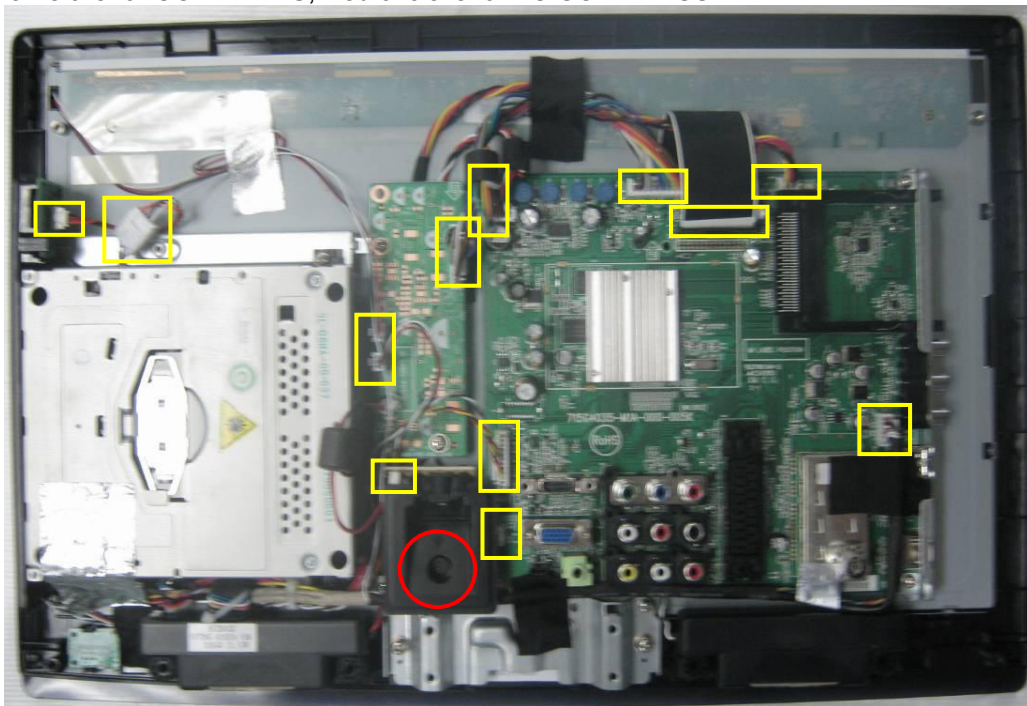


Step2. Unscrew the 6 screws to remove the REAR COVER.

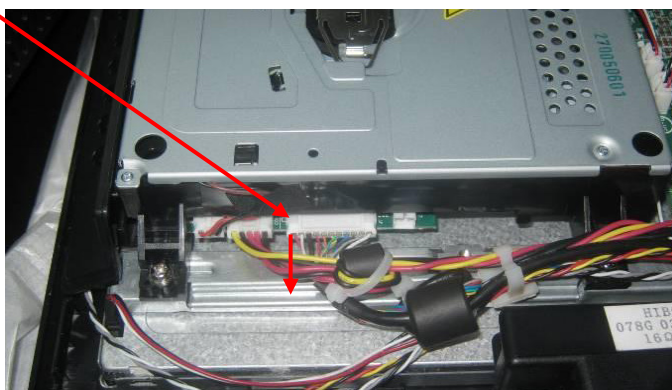
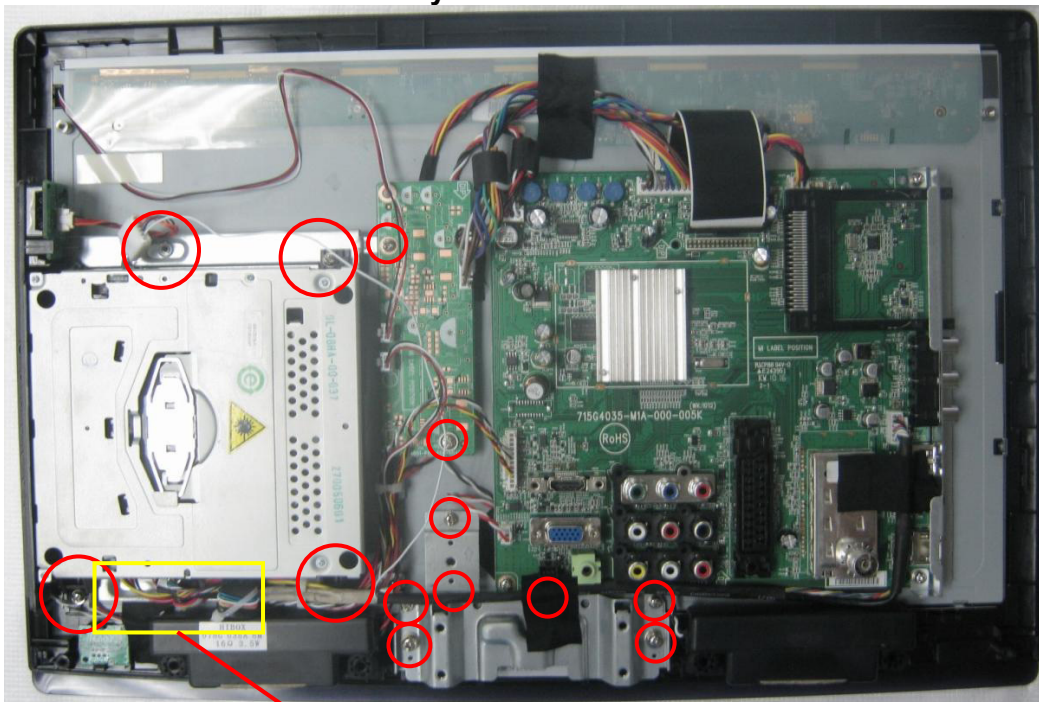


**Step3. Remove the all the detachable CON/WIRES and AC COVER ASS'Y.**

Note: Yellow frame are for CON/WIRES; Red circle is for AC COVER ASS'Y.

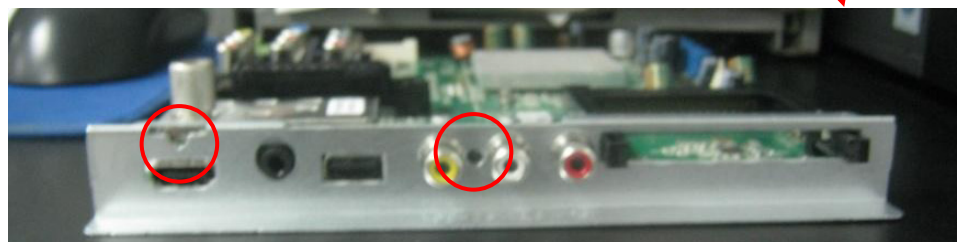
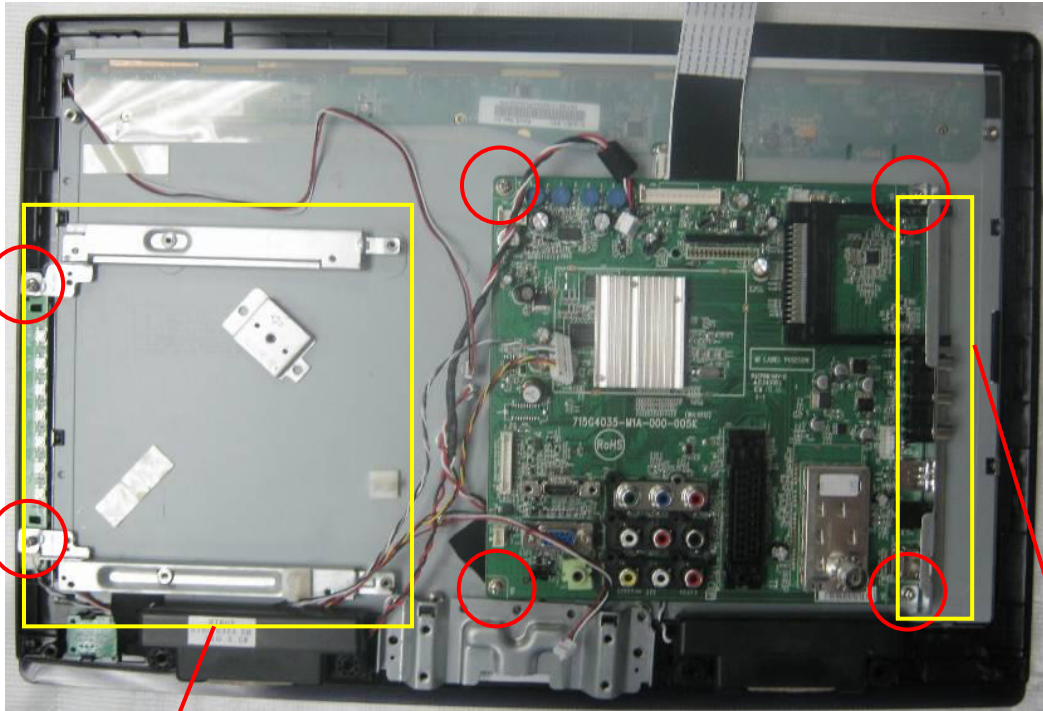


**Step4. Unscrew the 13 screws as red circle to remove HINGE BKT, AC BKT, POWER BD and DVD; Disconnect the DVD HARNESS as yellow frame.**

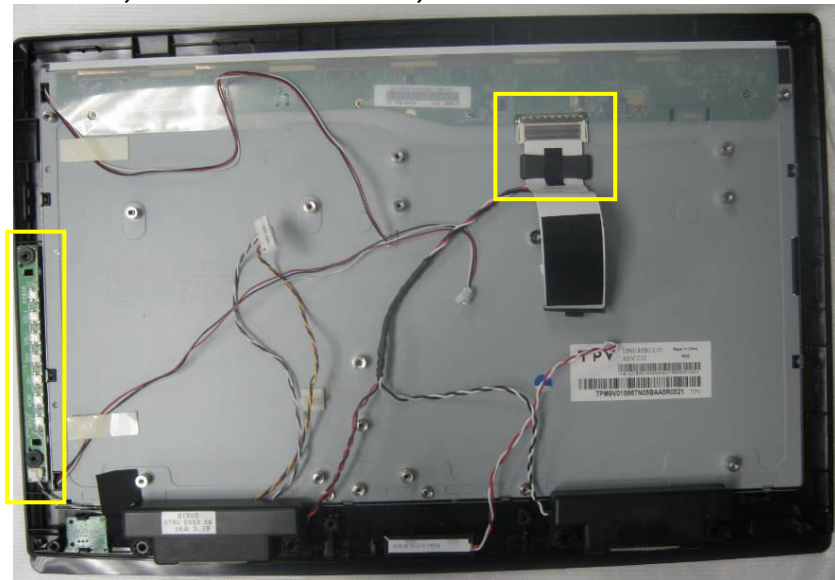




**Step5. Unscrew the 11 screws as red circle to remove MAIN BD, KEY COVER, BKT and Side\_I/O BKT.**



**Step6. Separate the BEZEL, PANEL and KEY BD; Disconnect the FFC CABLE.**



**The PANEL.**



**LYF24Z6**

**Step1. Unscrew the 4 screws to remove the STAND ASS'Y.**



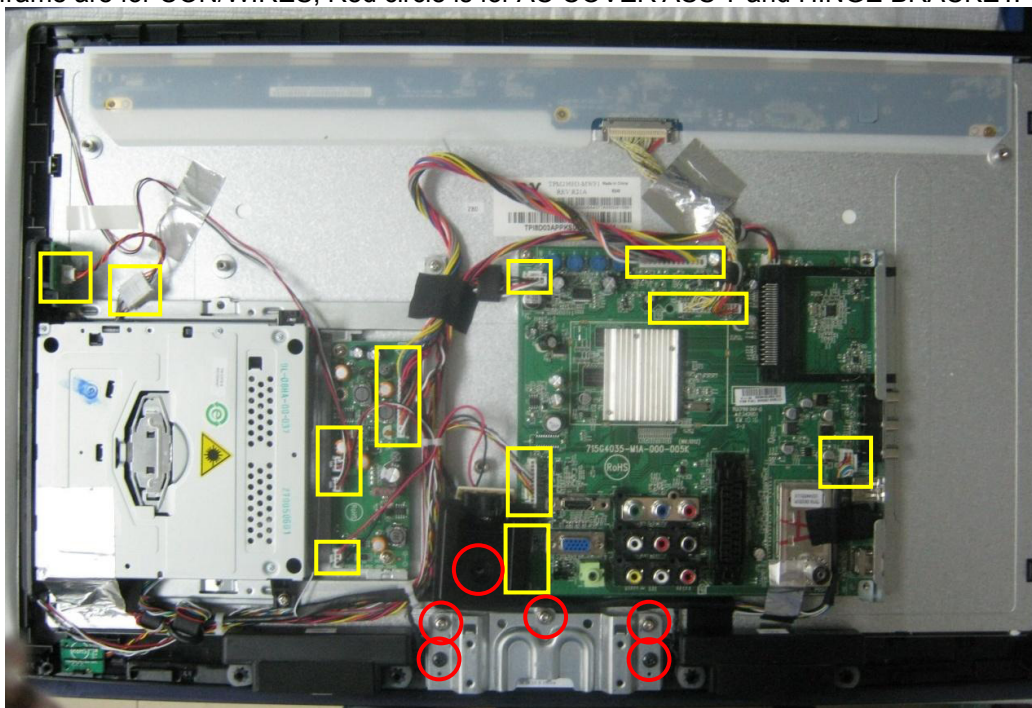
**Step2. Unscrew the 6 screws to remove the REAR COVER.**



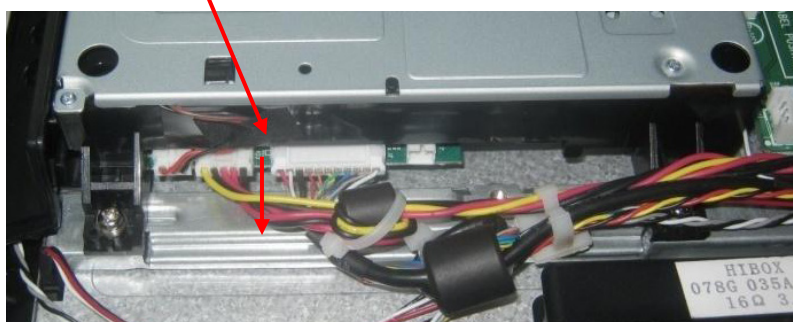
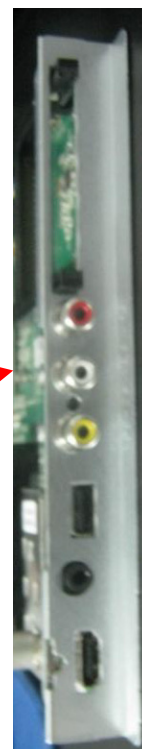
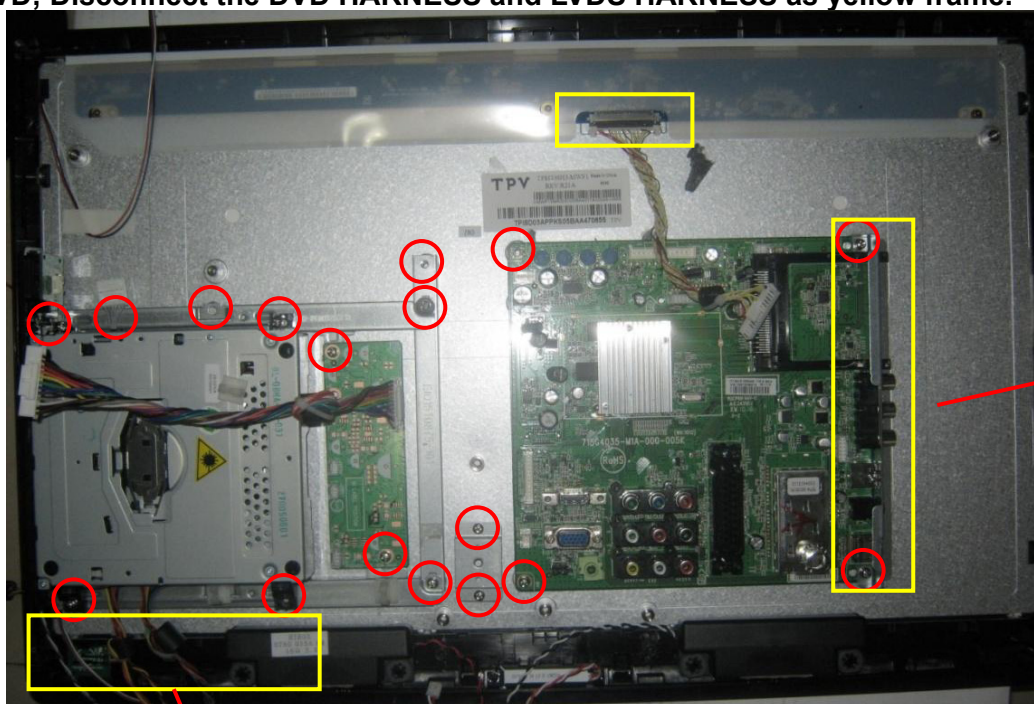


**Step3. Remove the all the detachable CON/WIRES, AC COVER ASS'Y and HINGE BRACKET.**

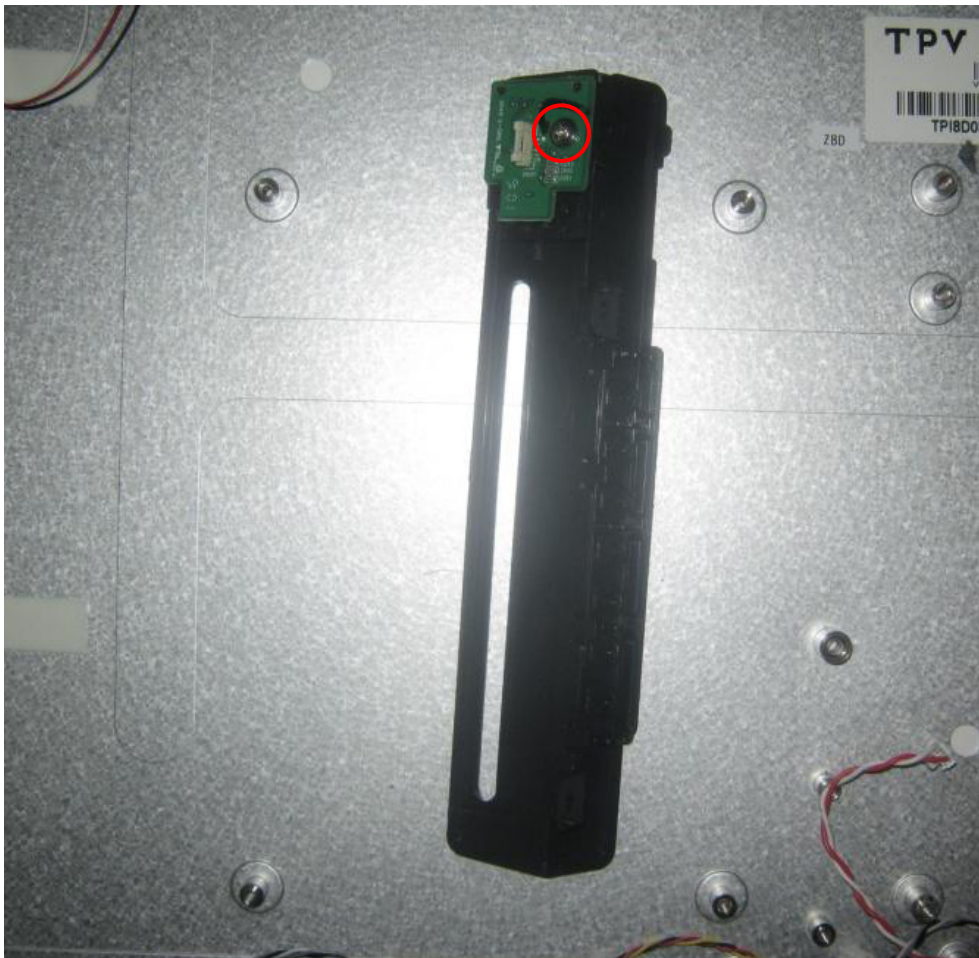
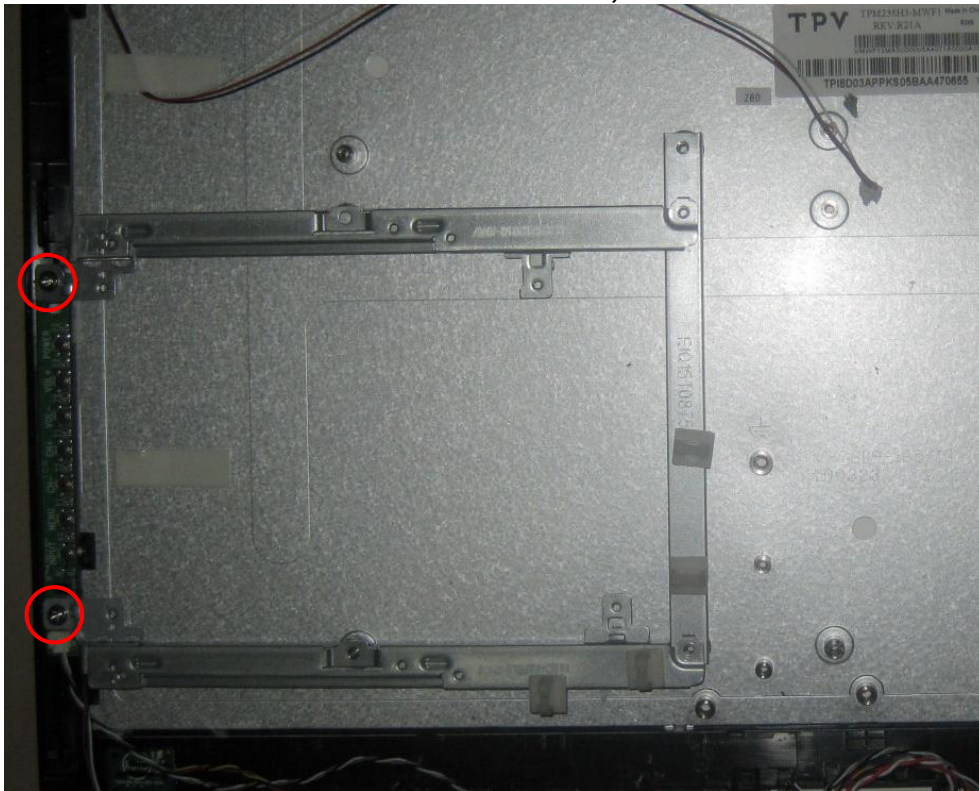
Note: Yellow frame are for CON/WIRES; Red circle is for AC COVER ASS'Y and HINGE BRACKET.



**Step4. Unscrew the 17 screws as red circle to remove AC BKT, BKT, POWER BD, MAIN BD and DVD; Disconnect the DVD HARNESS and LVDS HARNESS as yellow frame.**

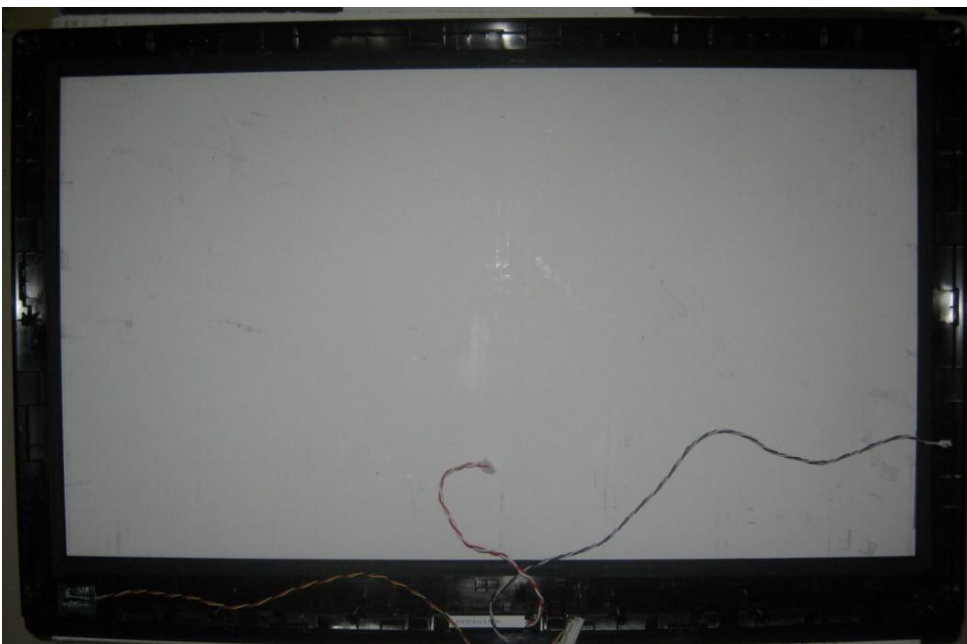
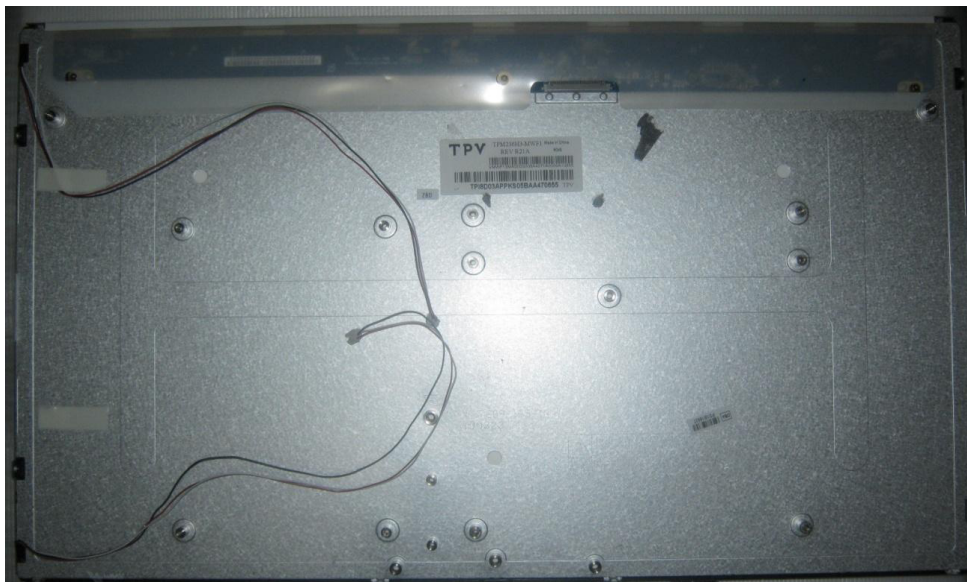
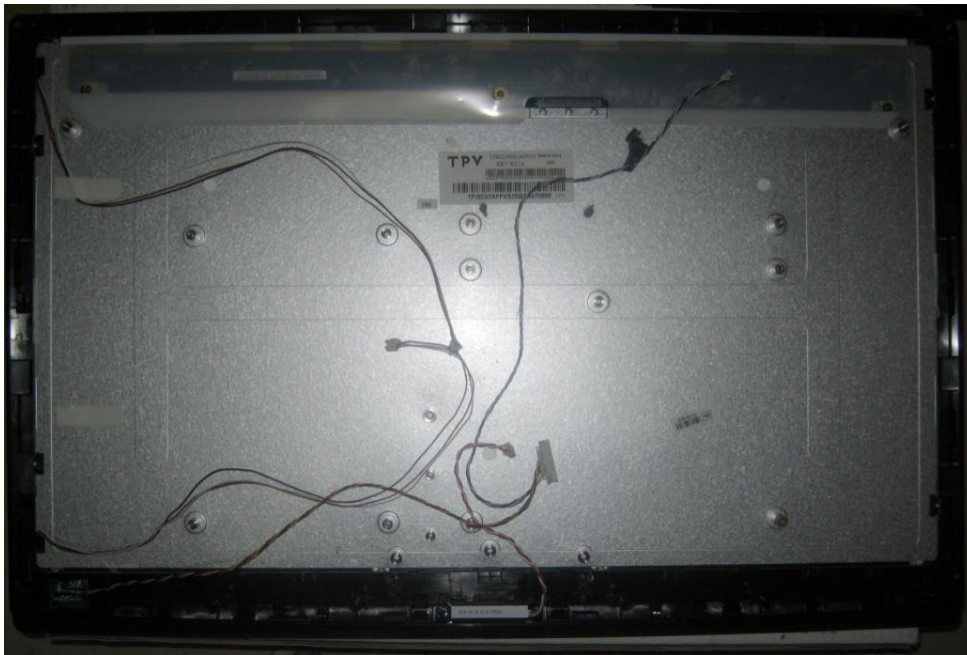


**Step5. Unscrew the 3 screws as red circle to remove BKT, KEY BD and KEY COVER.**





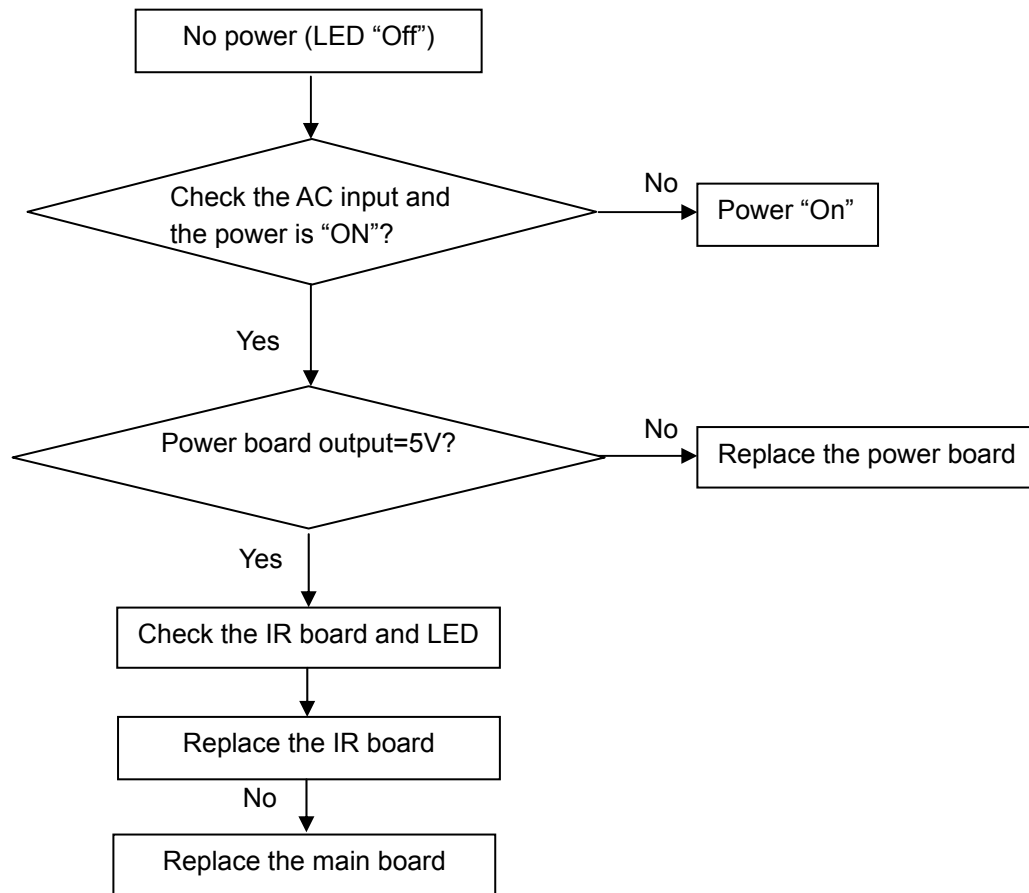
**Step6. Separate the BEZEL and PANEL.**



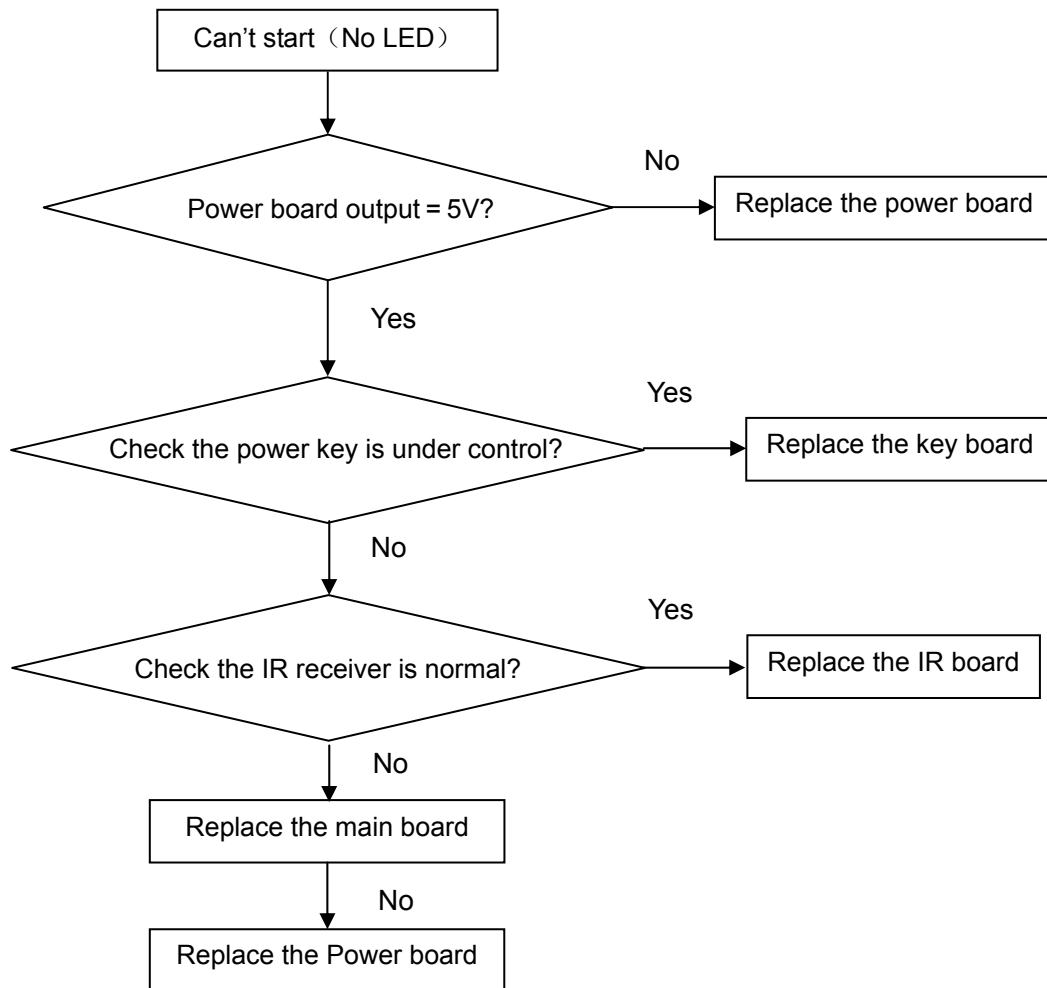


## 5. Repair Flow Chart

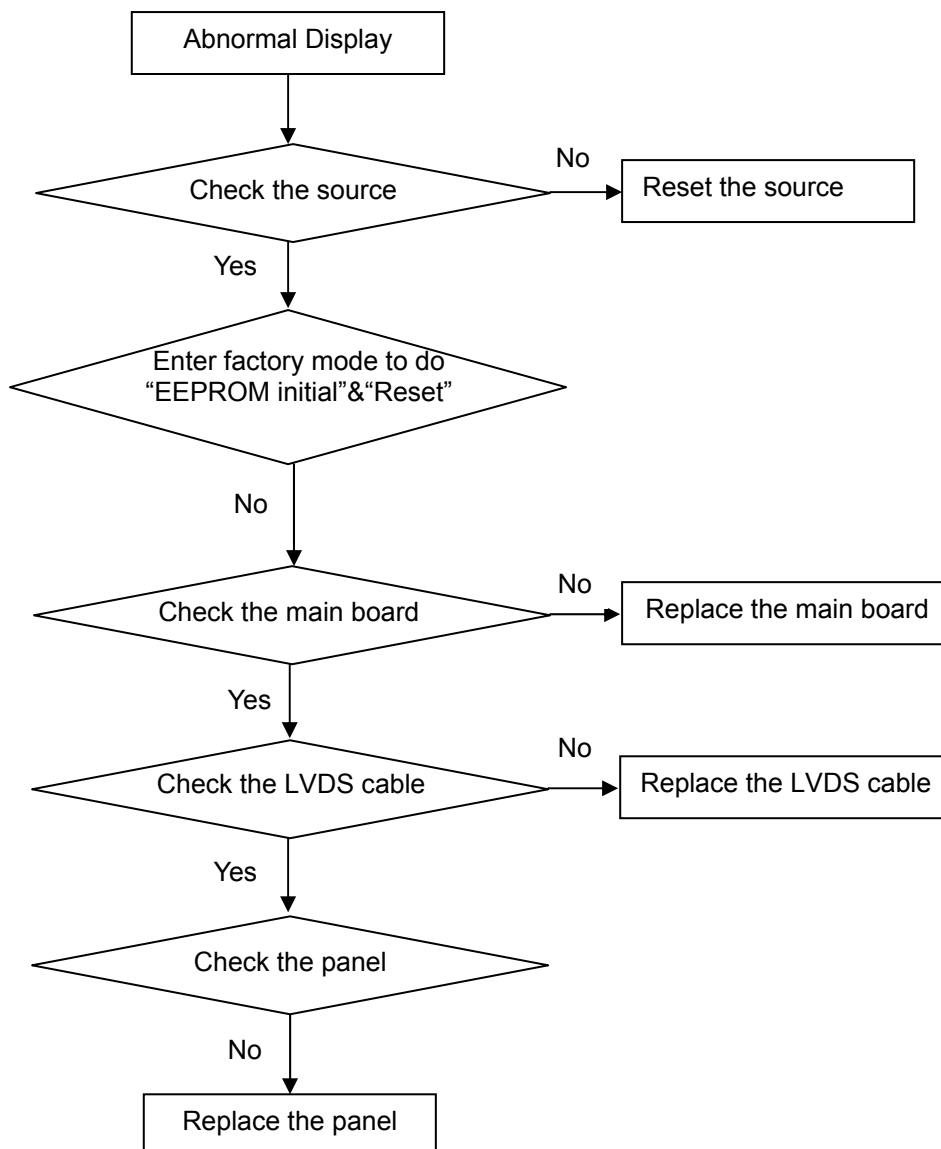
### 1. No power



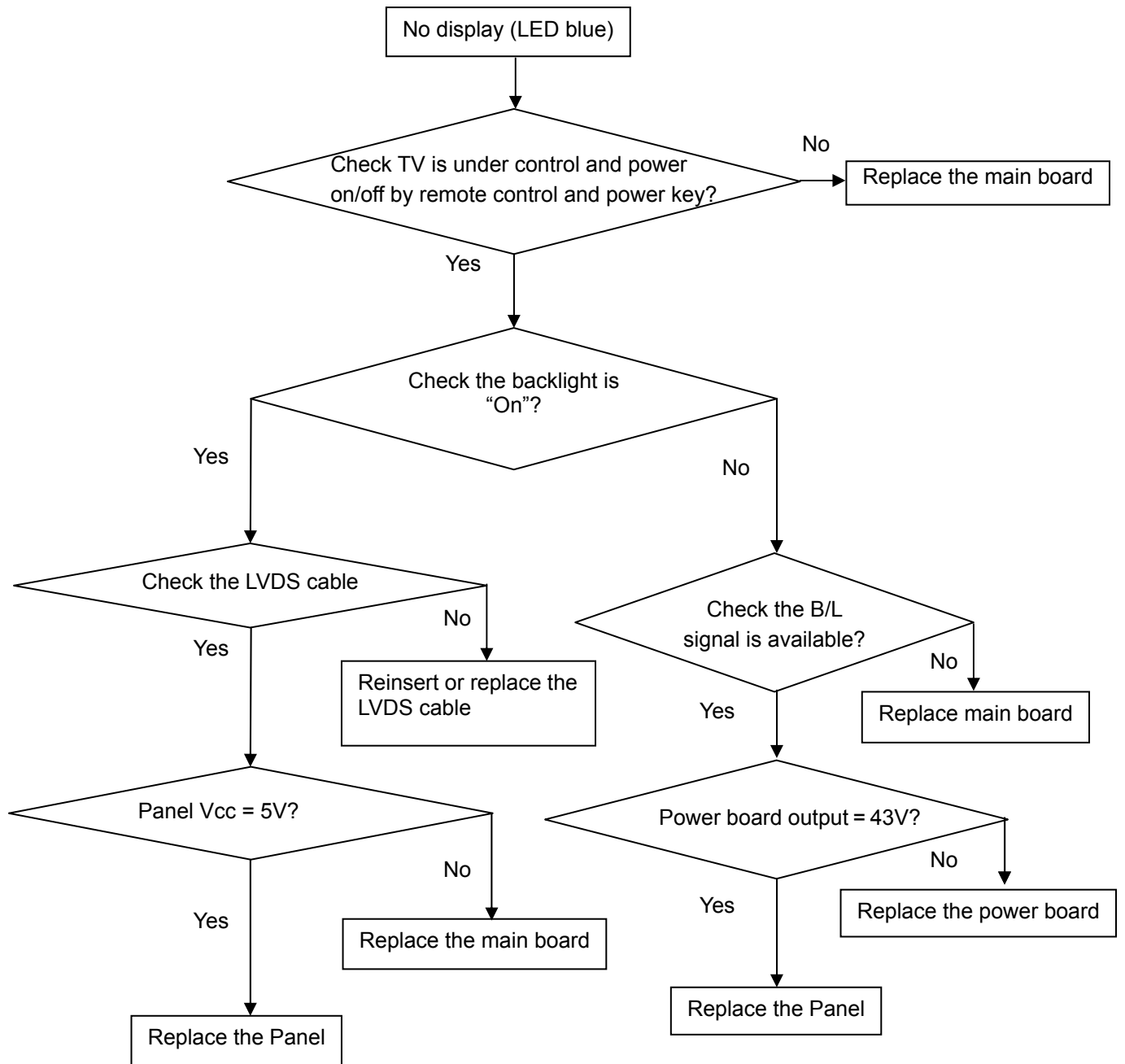
## 2. Can't start



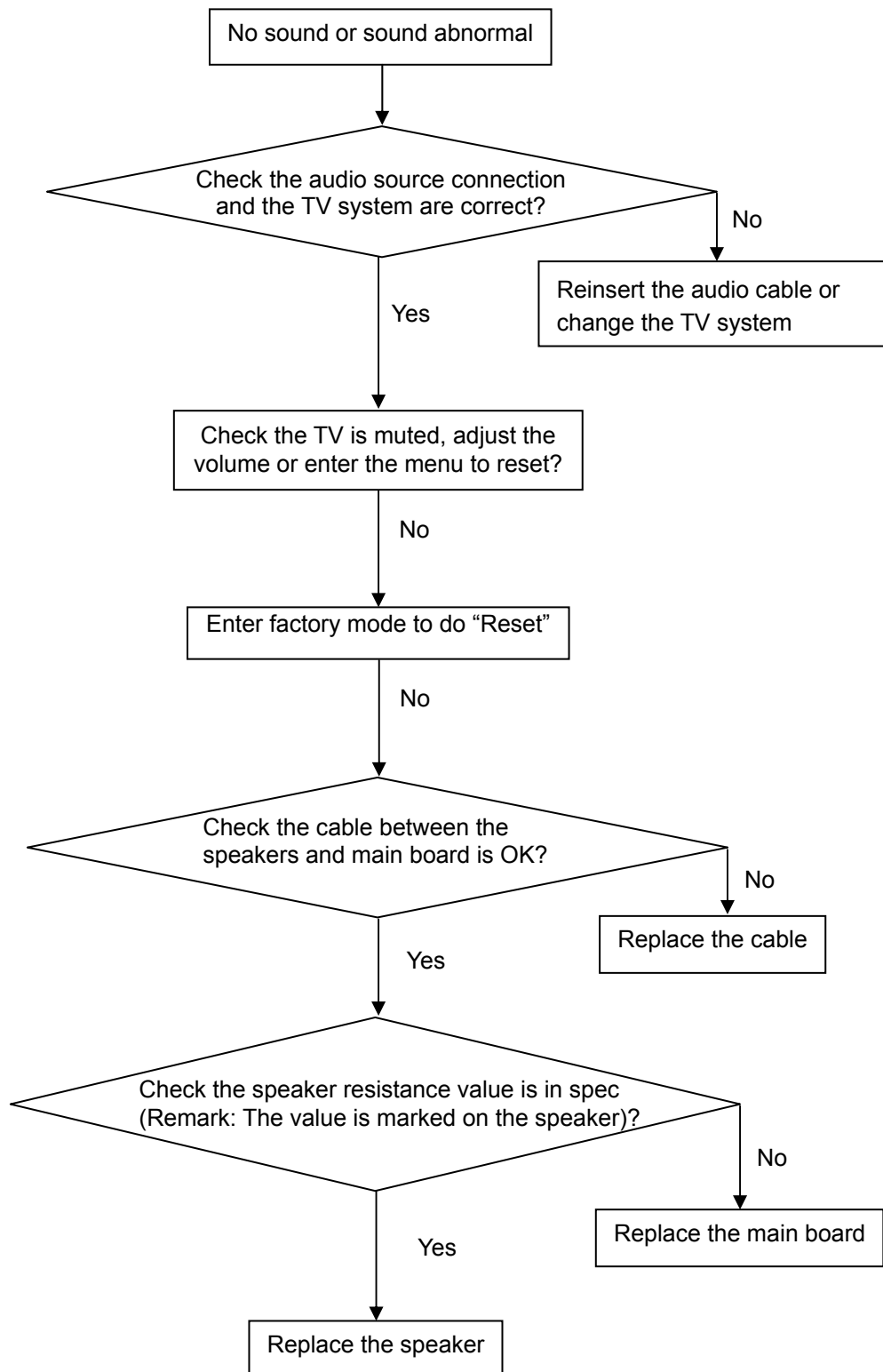
### 3. Abnormal Display



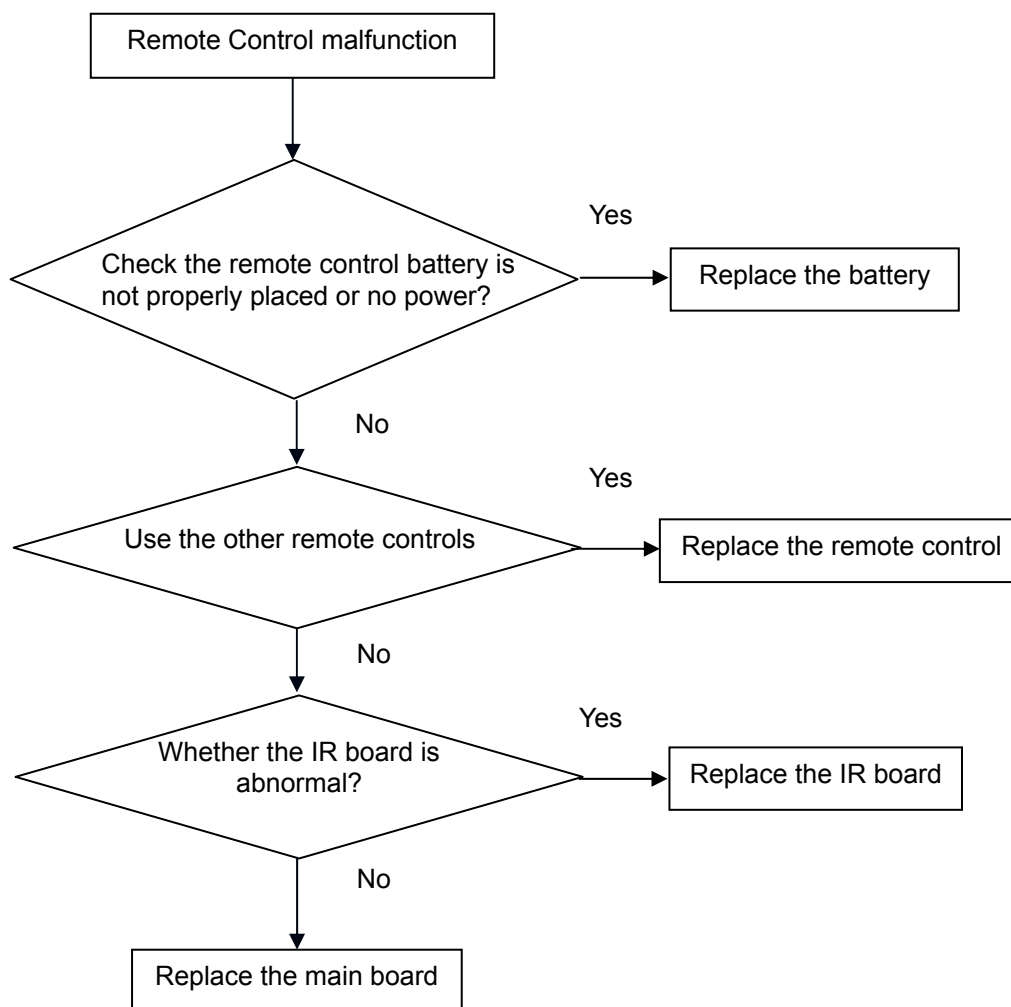
#### 4. No display



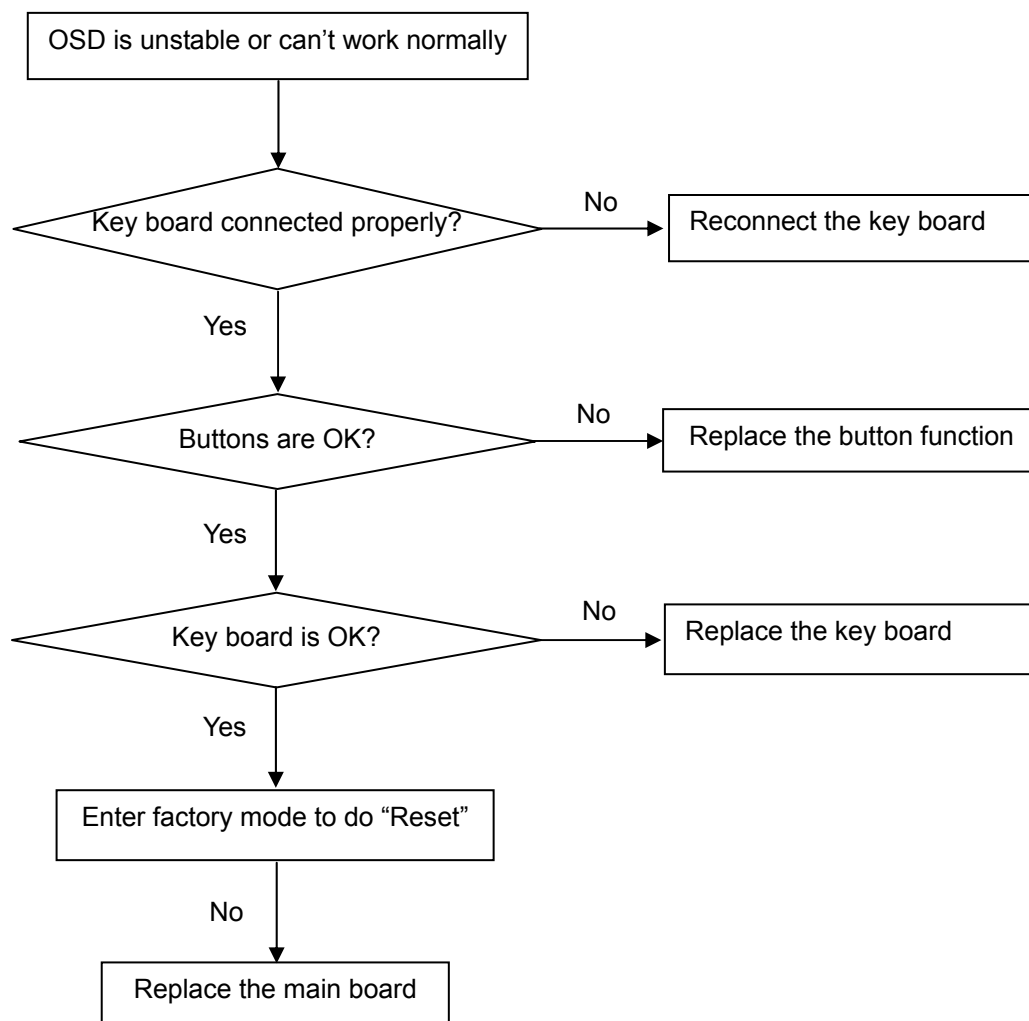
## 5. Sound problem



## 6. Remote control malfunction

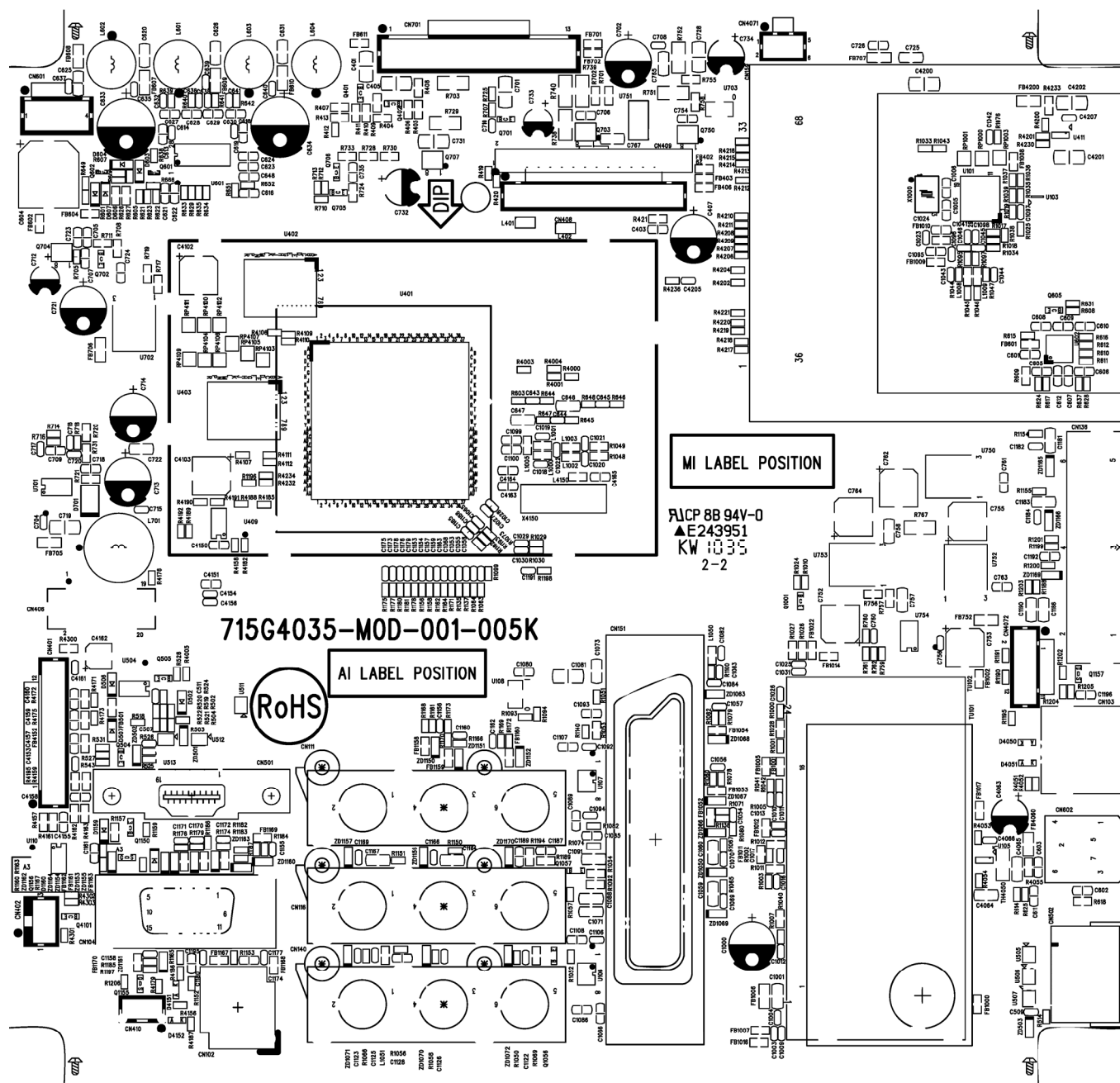


## 7. OSD is unstable or can't work normally

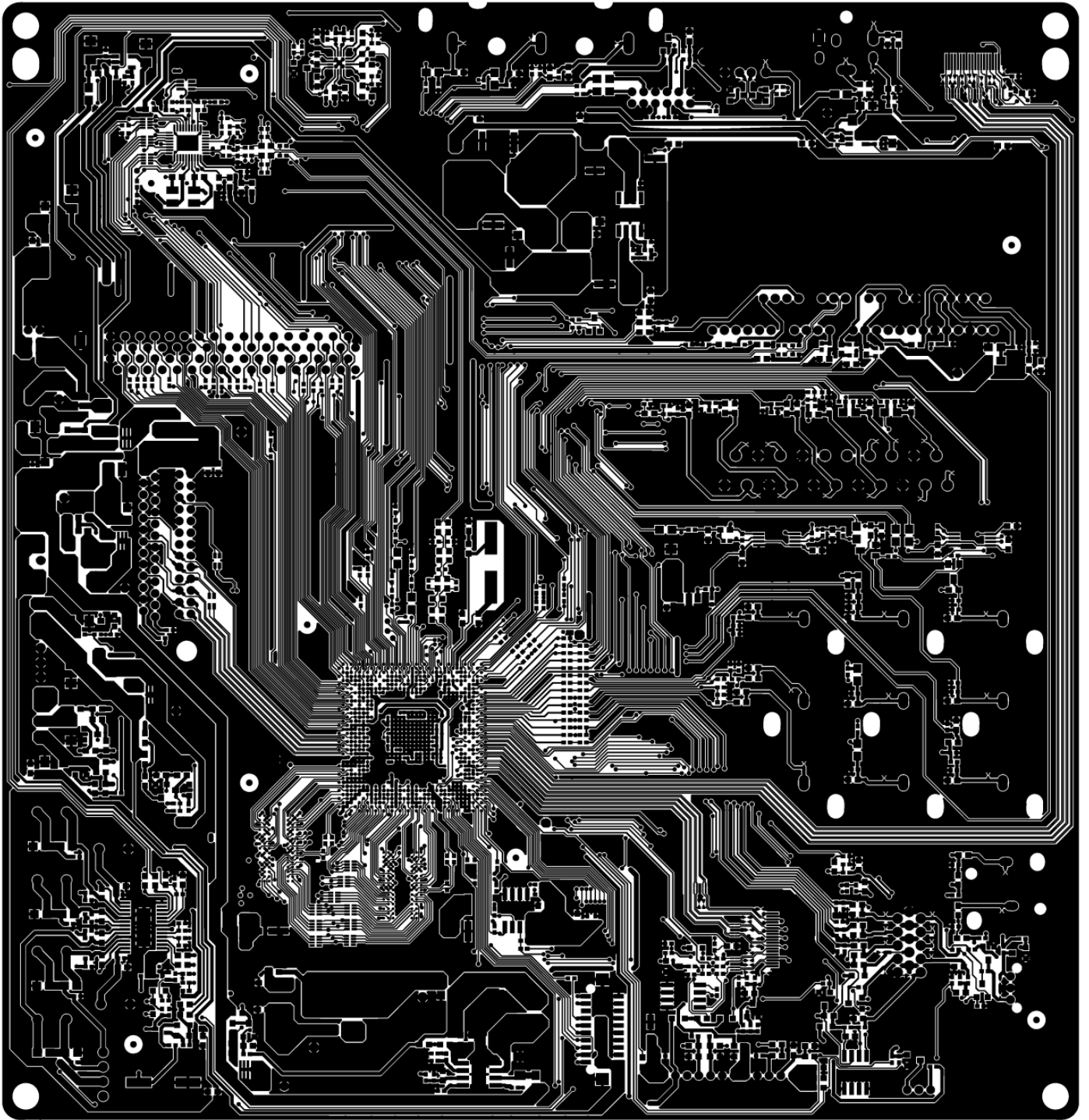


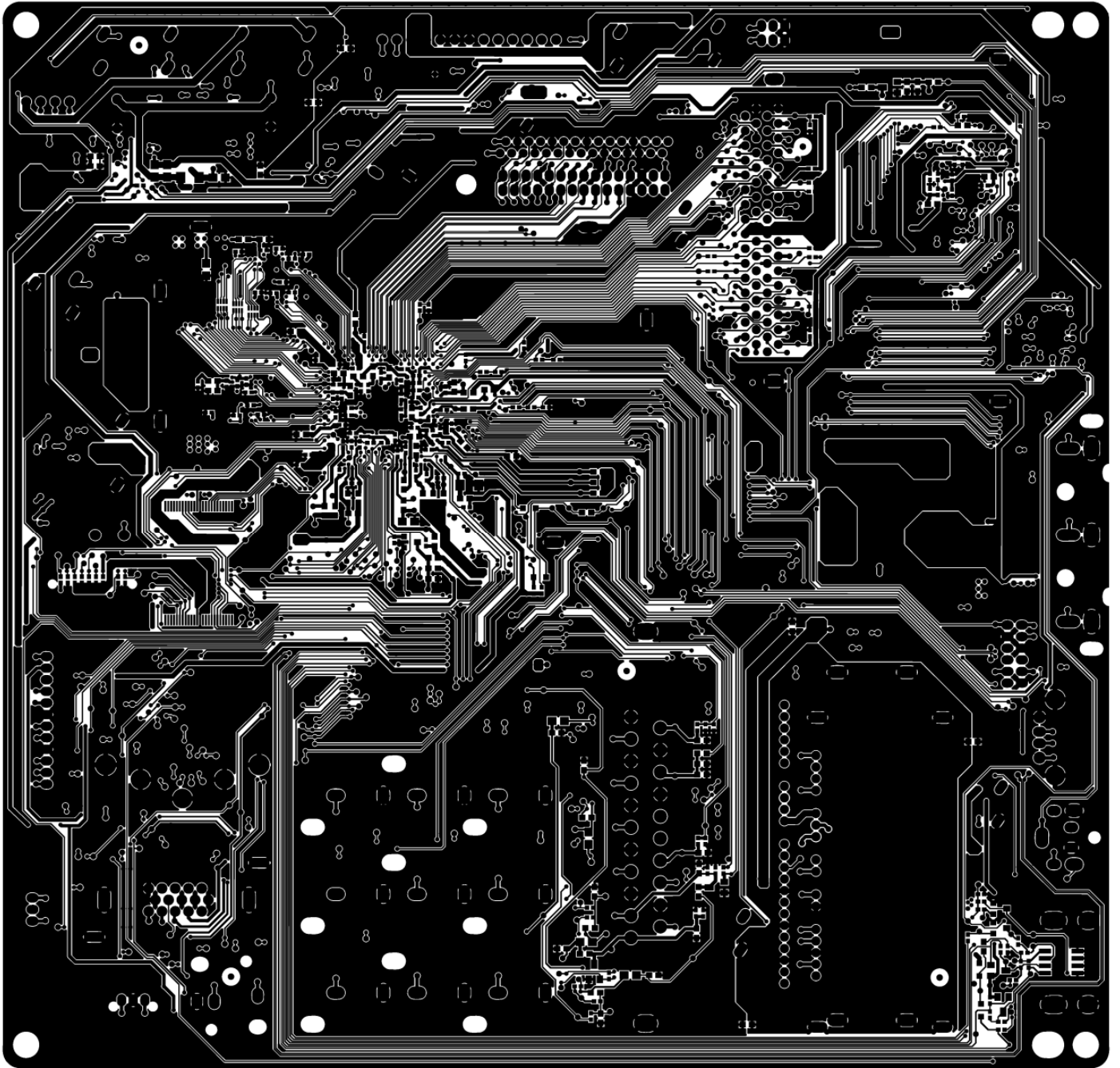
## 6.1 Main Board

**715G4035M0A001005F**



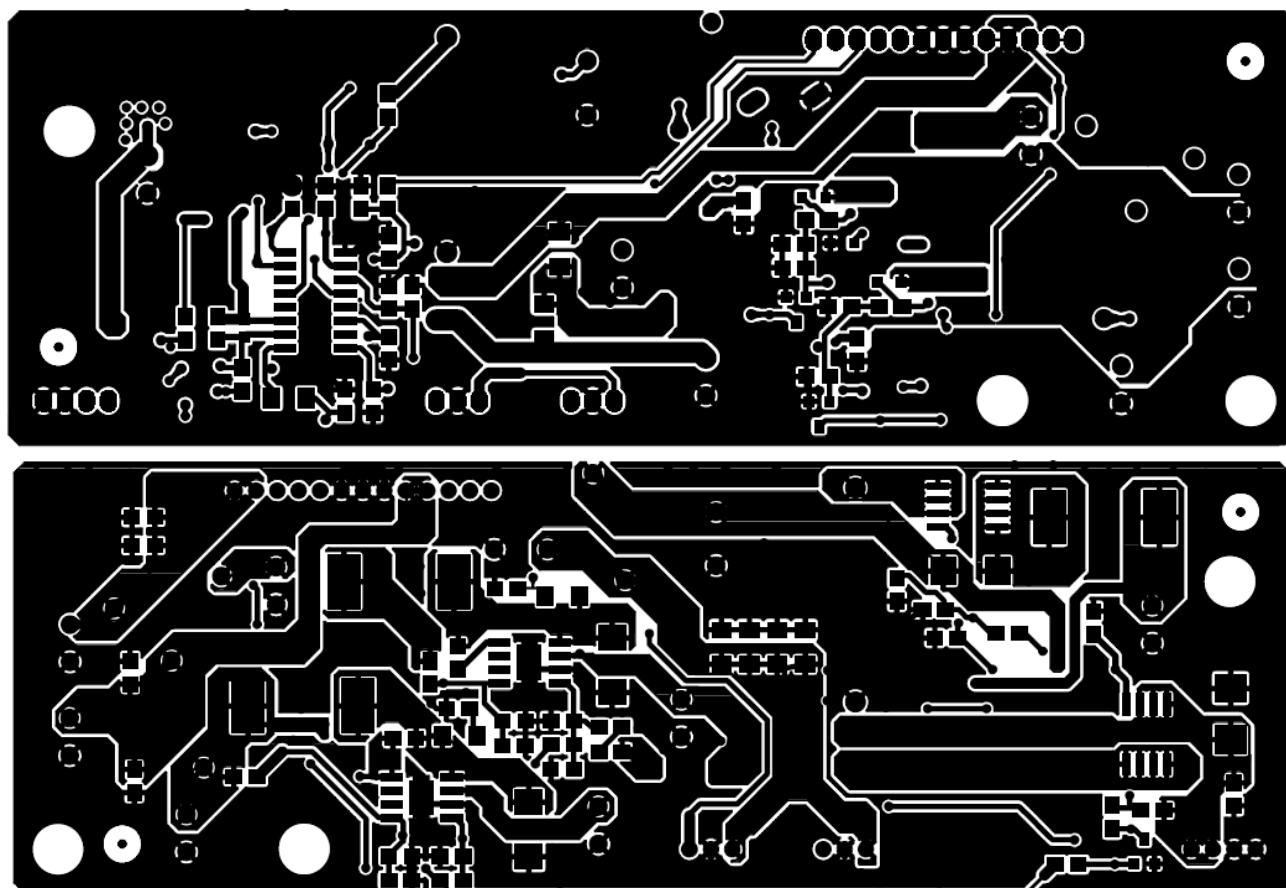


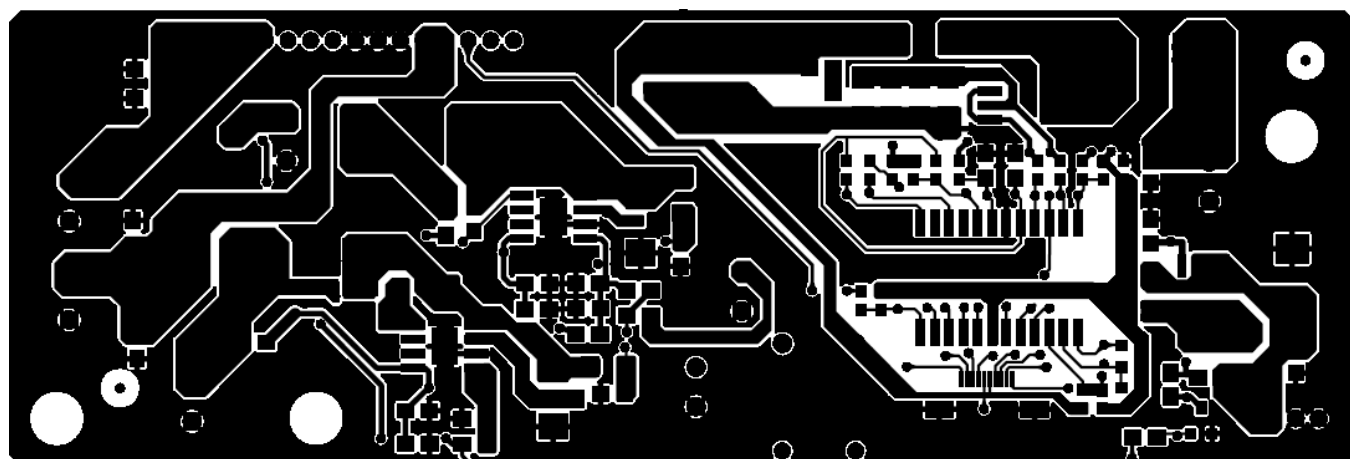
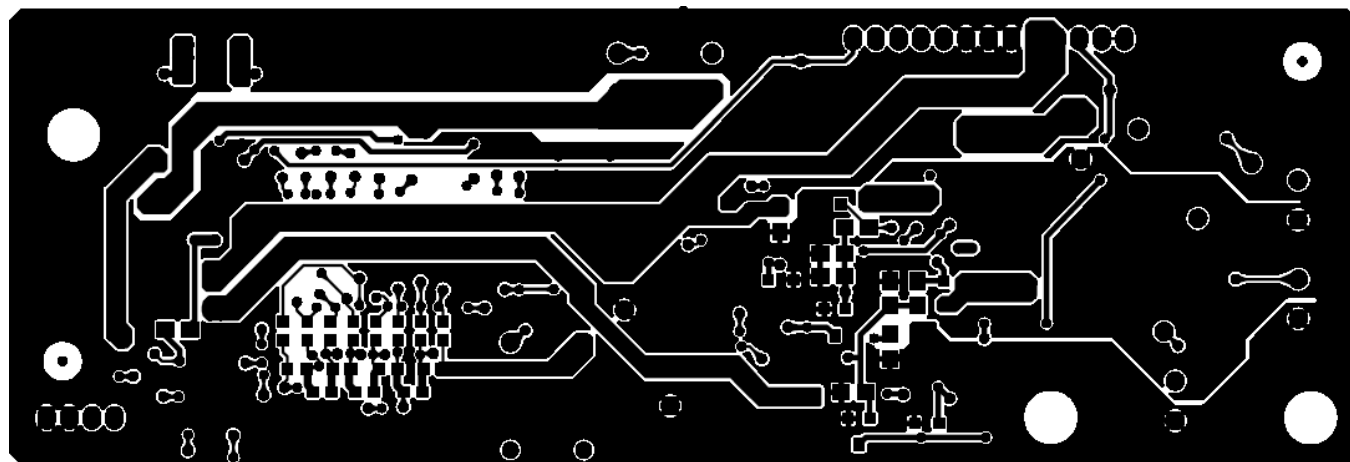
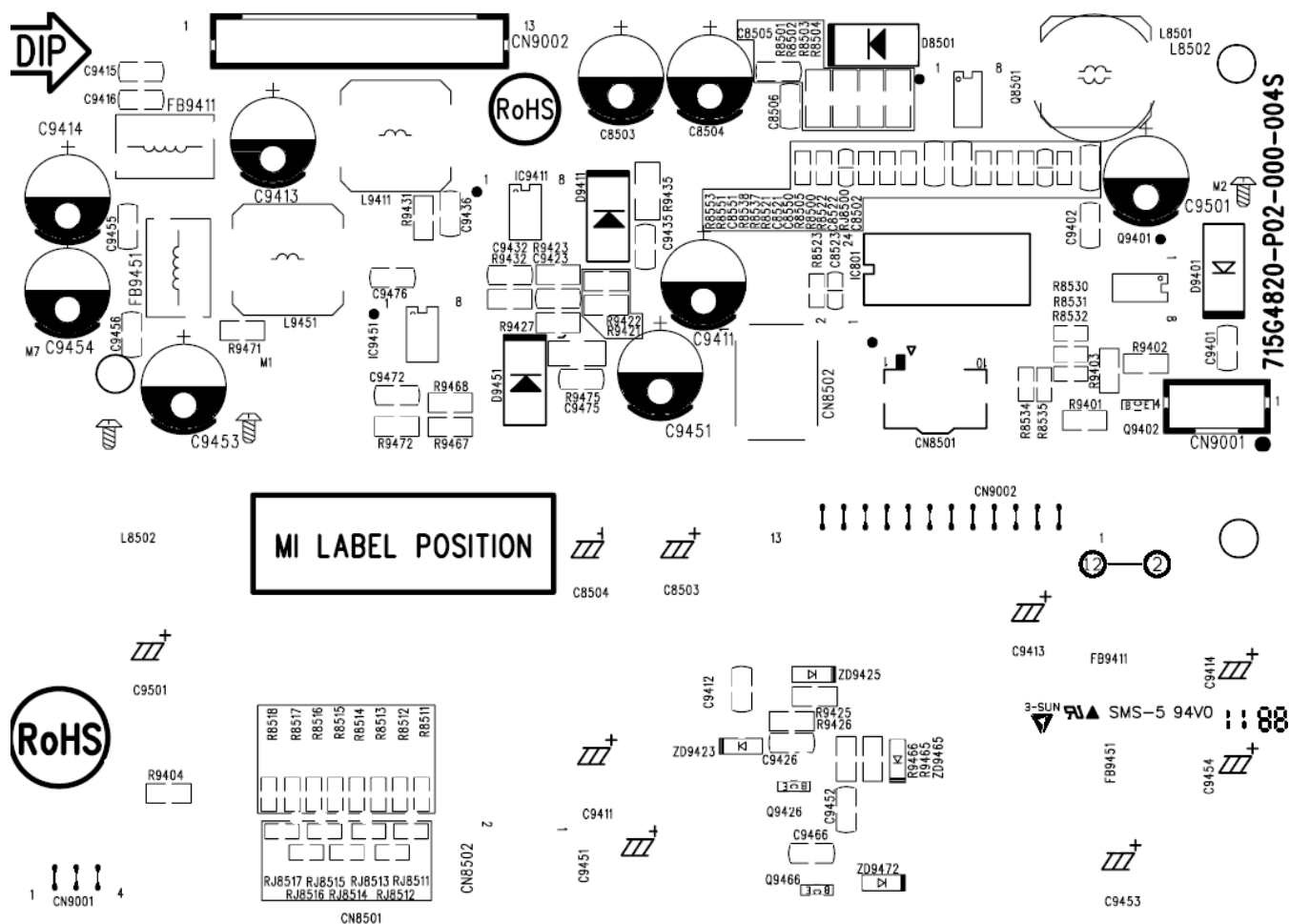






**715G4051P01000004S**



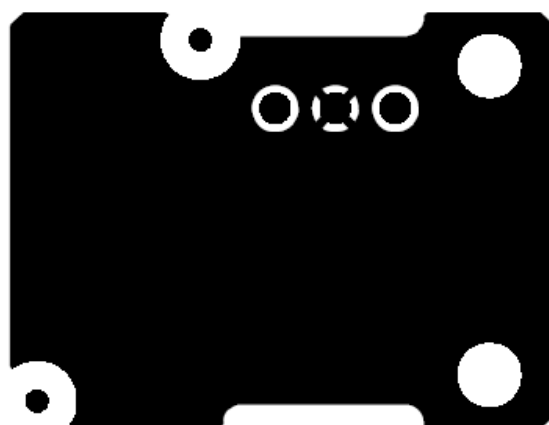
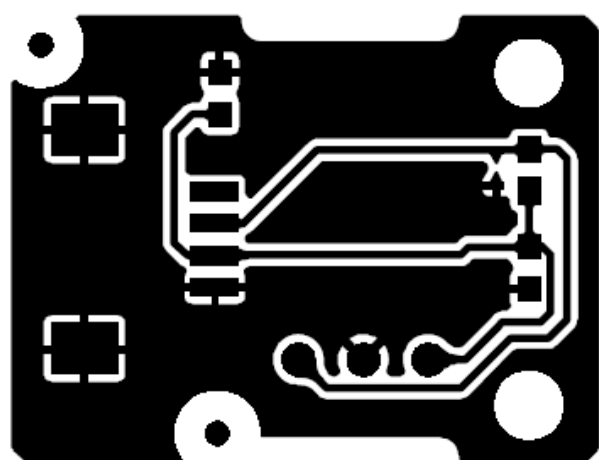
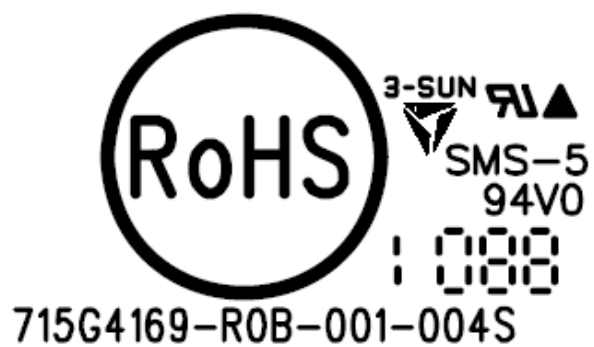
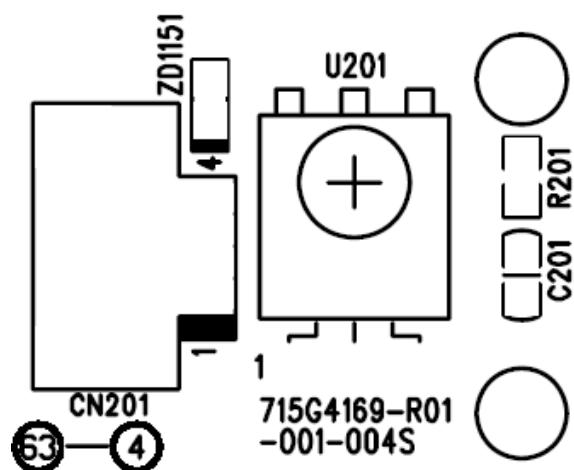


**715G4251K01000004S**

**715G4168K02000004S**



# 6.4 IR Board 715G4169R01001004S



## 7. Adjustment/FW Upgrade/EDID

### 7.1 Adjustment

It's no need to adjust the white balance for this model.

#### 1. Enter into the factory mode:

Turn on the TV, press MENU key with remote control, then press number key 1 → 9 → 9 → 9. It will achieve the factory mode.

#### 2. Click on "Auto Color" in the PC and Component modes:

**PC mode:** TIM = 137; PAT = 42

**Component mode:** TIM = 316; PAT = 185

#### 3. Click on "Color temp" in the COMPONENT modes:

**Component mode:** TIM = 316; PAT = 105

Warm Temperature Spec

Warm\_Spec\_x = 314

Warm\_Spec\_y = 319

Normal Temperature Spec

Normal\_Spec\_x = 289

Normal\_Spec\_y = 291

Cool Temperature Spec

Cool\_Spec\_x = 278

Cool\_Spec\_y = 278




## 7.2 FW Upgrade

### Haier MTK5363 FW upgrade with USB SOP

#### Step 1: Ready for F/W Upgrade

1.1 Change the software file name to "upgrade.pkg", eg:

Before change:  HAIER\_EUR\_MTK5363\_Panel\_DS\_DVD\_upgrade\_V2.03\_20100806\_C79F.pkg

After change:  upgrade.pkg

1.2 Prepare a USB memory (The file system of USB memory must be FAT16 or FAT 32).

1.3 Copy the file (upgrade.pkg) from your computer to the USB memory, and remove it from computer's USB port!

Note: 1). Note the version of this F/W is **V2.03** before you change the software file name.

2). The software file name must be changed, or TV can't detect the F/W.

#### Step 2: F/W Upgrade

2.1 AC on (Power plug Figure 2.1.1/2.1.2)



Figure 2.1.1



Figure 2.1.2

2.2 Plug the USB memory on the USB port on the side I/O port of TV.



Figure 2.2

2.3 Press the power key on the Remote Control or the right side of TV to turn on TV.

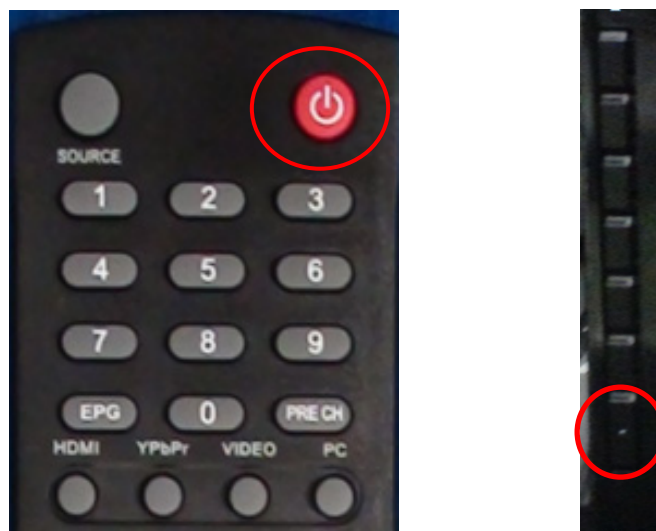


Figure 2.3

2.4 When TV detects the USB memory, the LED light flickers as figure 2.4.1. For a moment there is a prompt frame appearing on the screen as figure 2.4.2, press “OK” key(on the Navigation Keys on the Remote control, as follows Figure 2.4.3 ) to select “Yes” option to download F/W (Figure 2.5).

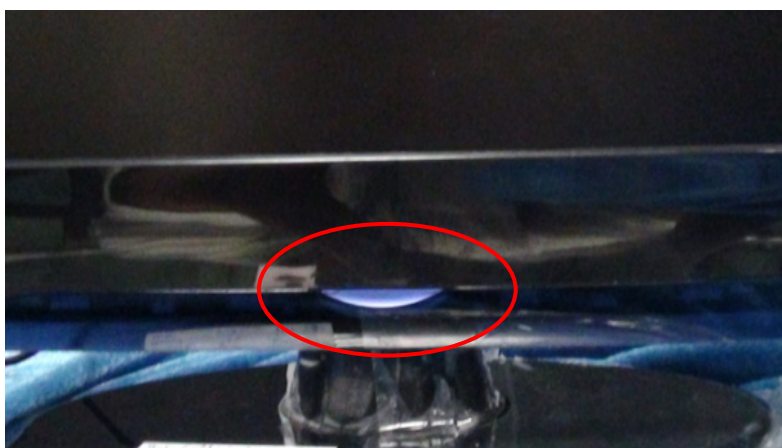


Figure 2.4.1

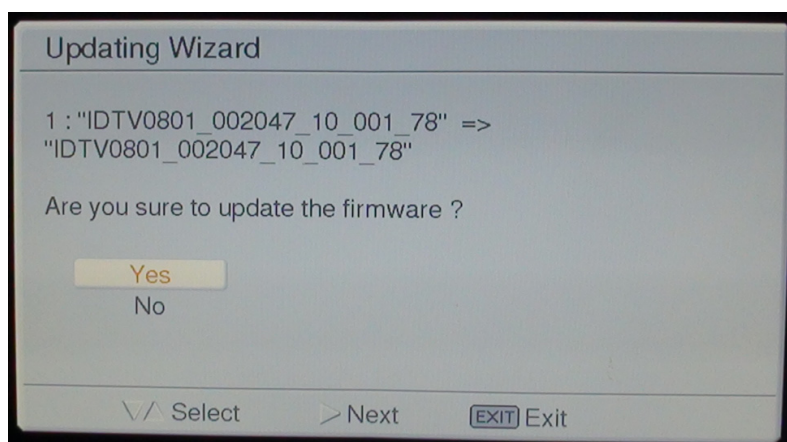


Figure 2.4.2



Figure 2.4.3

2.5 TV will upgrade automatically.

Note: When Upgrade on the process, please don't Power-Off!

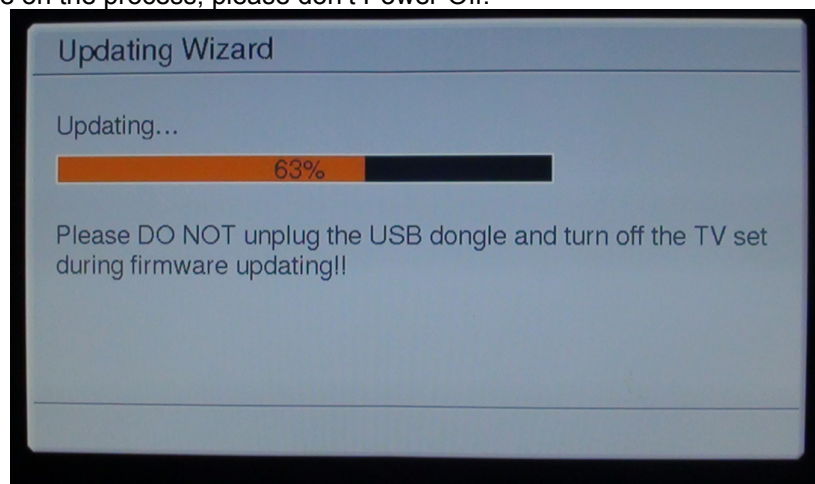


Figure 2.5

2.6 When upgrade 100% and prompt for Upgrade Success info, remove the USB Drive and press "power" key to reset TV.



Figure 2.6

### Step 3: Check the F/W version and reset to default.

3.1 Press "MENU"+"1"+"9" + "9" + "9" key rapidly on the Remote control to enter the factory mode.

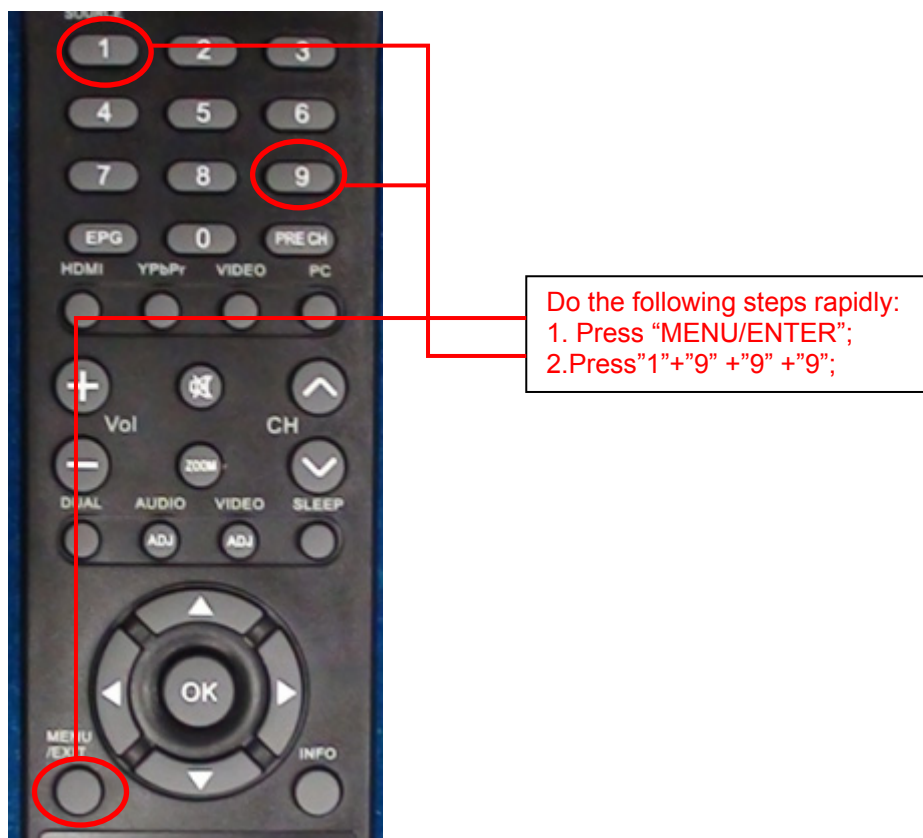


Figure 3.1

3.2 Check the F/W version on the second row of the factory mode info (eg: the "Ver" info is **V2.03**). If F/W version is incorrect, please check the version of F/W in your USB memory, else let's go to Step 3.3.

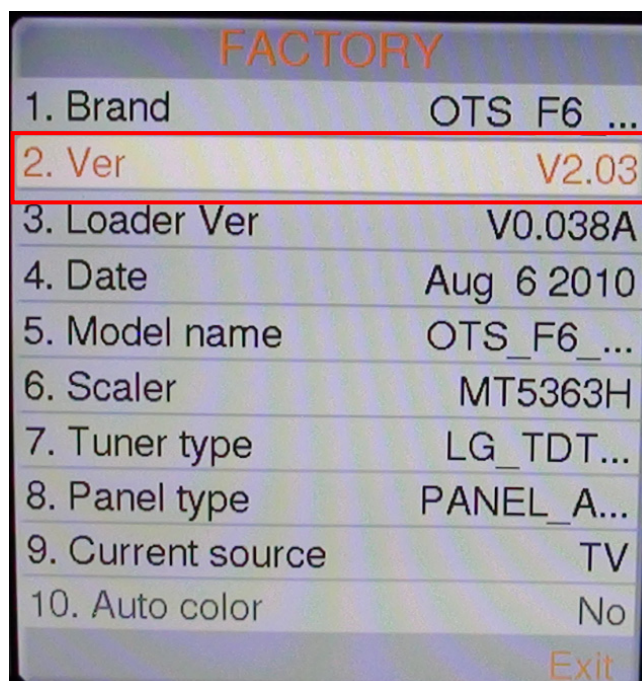


Figure 3.2



3.3 If the FW version is correct, please do factory reset.

Choose item 30 “Reset” and press “ok” key to do factory reset as figure 3.3.1



Figure 3.3.1

Note: You can also check the FW version in user mode by pressing “MENU/EXIT” on remote control, as 3.3.2

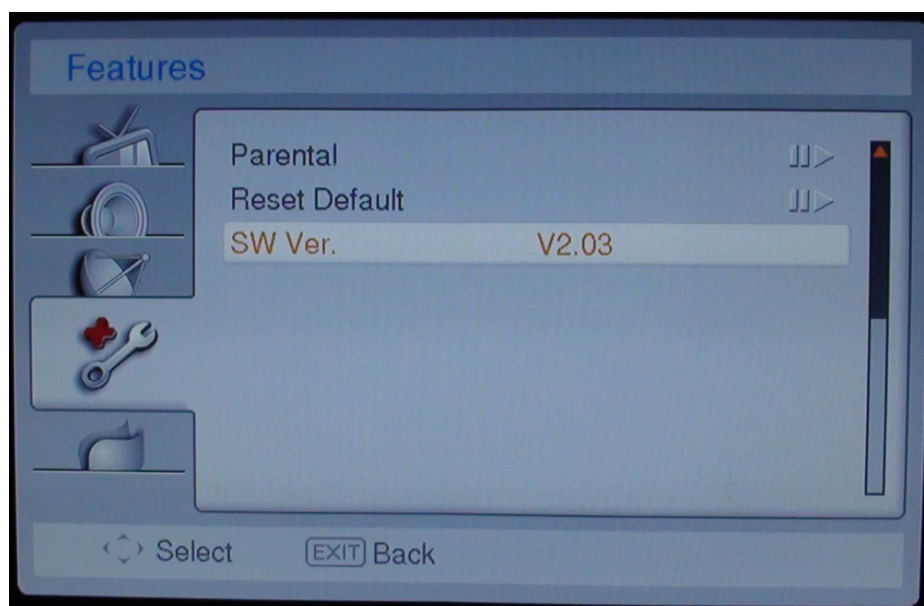


Figure 3.3.2

3.4 After all the steps, FW upgrade is finished finally.

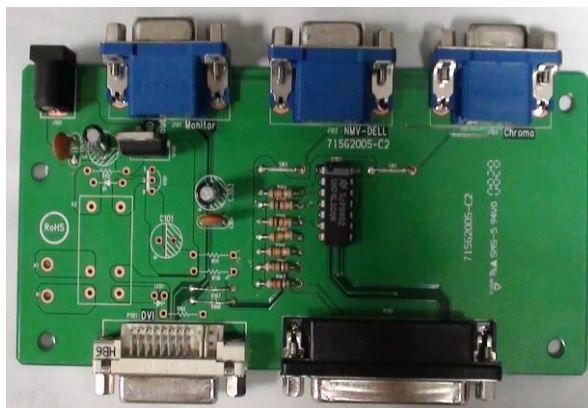
### 7.3 The Writing VGA & HDMI EDID

Take LY19Z6 only for example as below.

#### Step1. Ready for writing EDID

Tool: 715G2005-C2

Cable: a LPT cable, a VGA cable, a DVI to HDMI cable and a 12V DC adapter.



715G2005-C2



male to male LPT cable



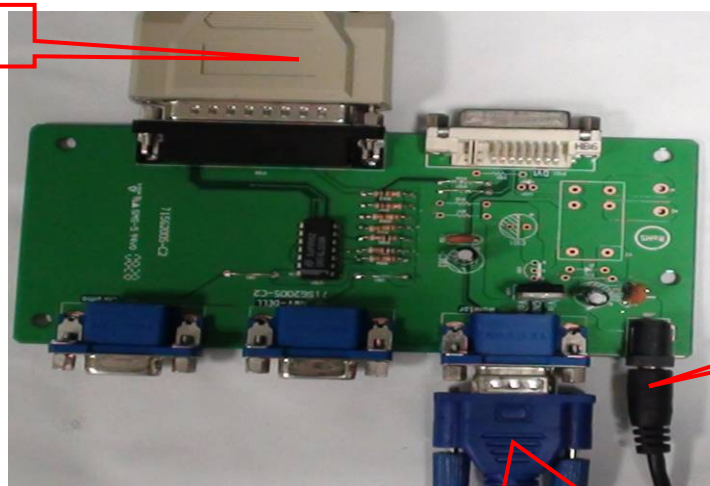
VGA cable



DVI to HDMI cable

#### Step2. Connection for writing VGA EDID.

Connect to PC LPT



12V DC input

Connect to TV VGA

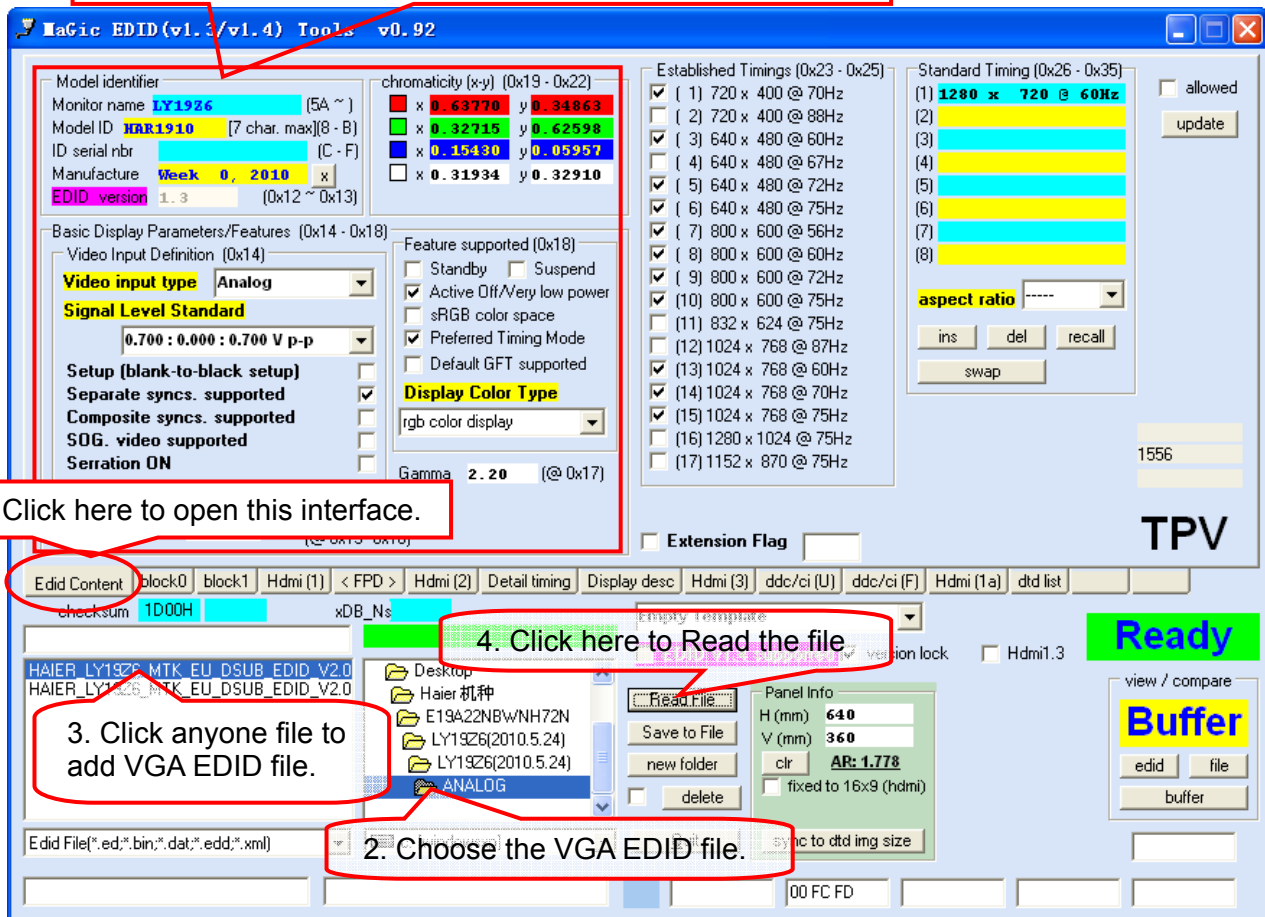
### Step3. Install TPV EDID tool.



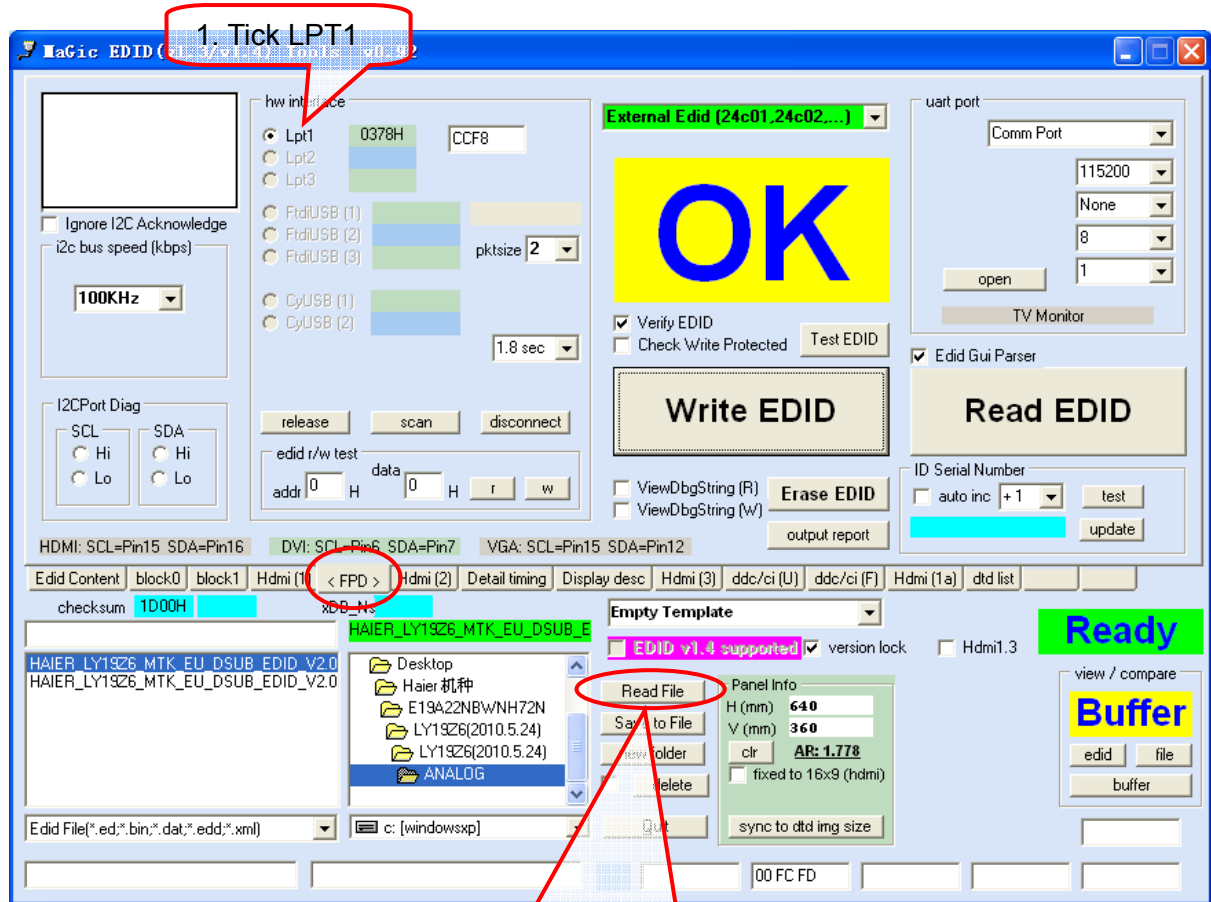
1. Double click this icon to install.

2. Double click this icon to run.

This red frame contents detail information in VGA EDID file.



Step4. Click “FPD” to open another interface as follows.



2. Click here to read file as figure 4.2

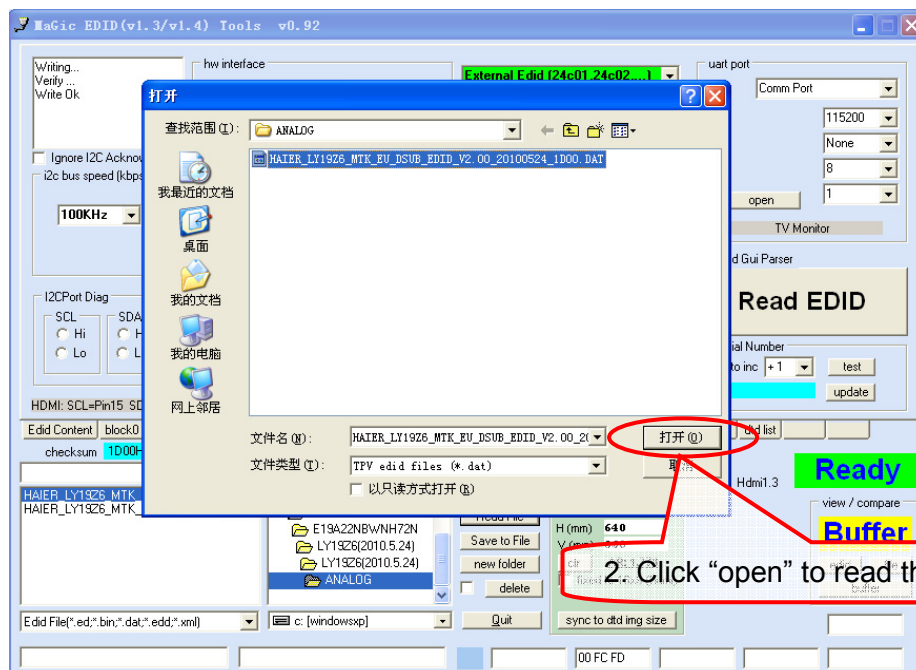
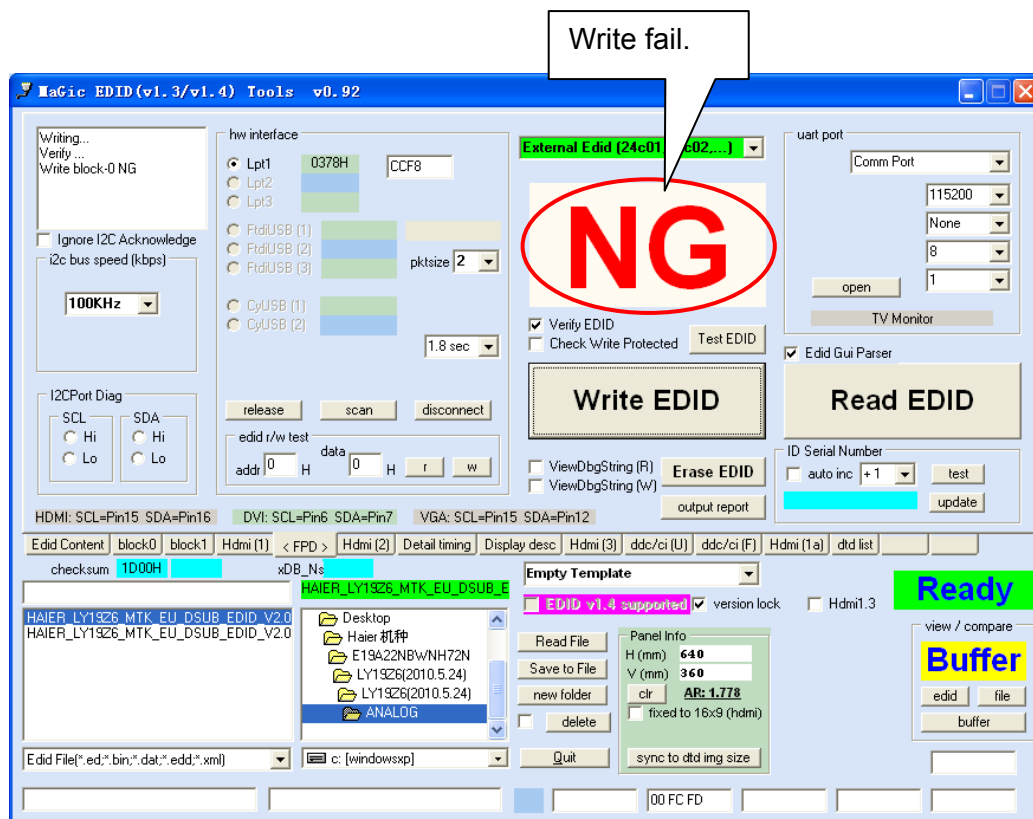
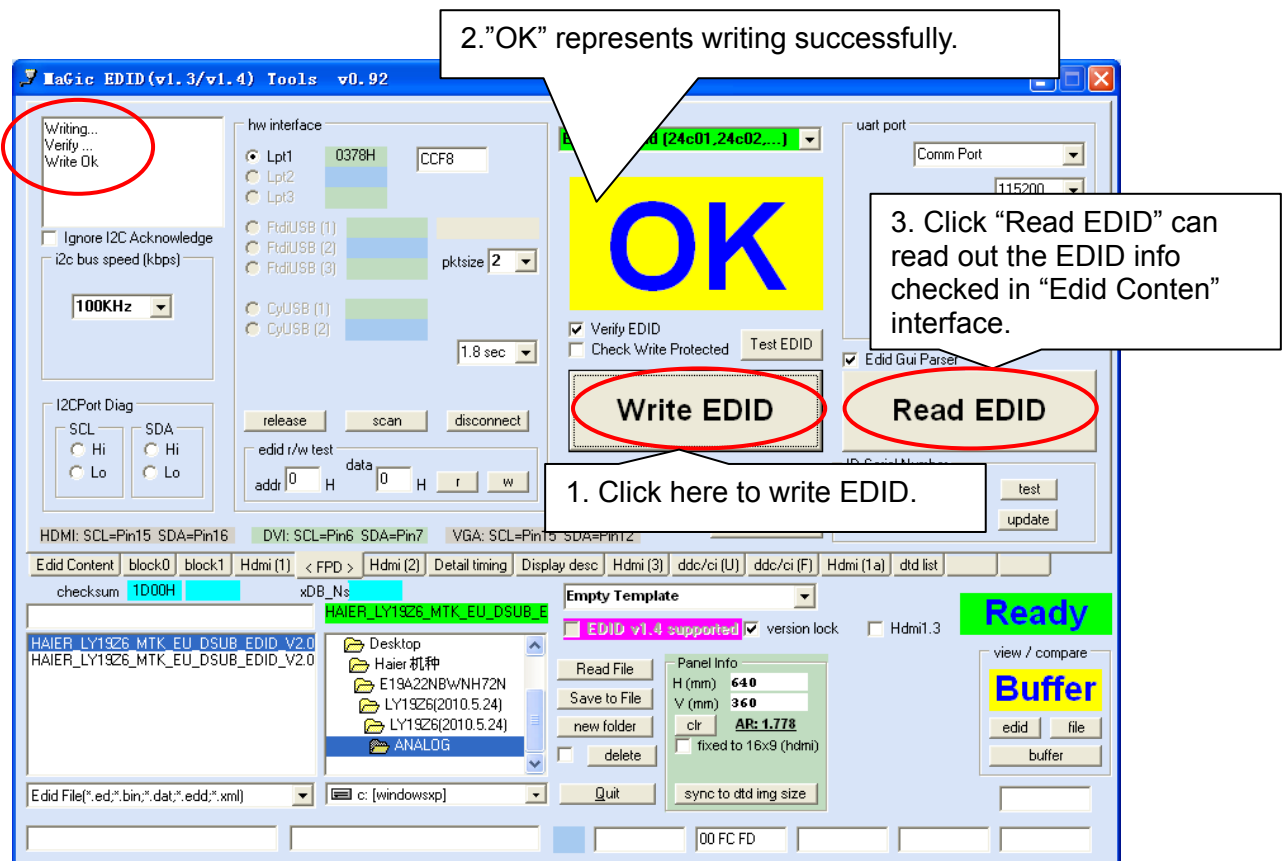


Figure 4.2



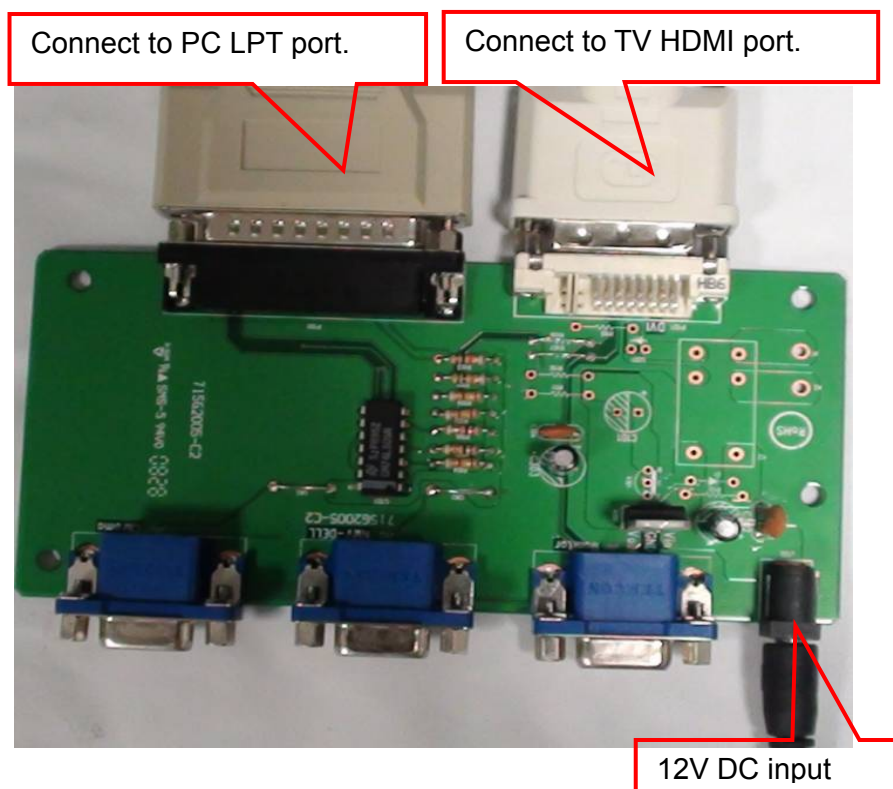
### Step5. Click “write EDID” to write EDID.

If display “NG” in the yellow blank, which represent writing failly. Please check the whether the connection of tool and cables is normal and retry. Another way is to change a new ISP board and retry.



### Step6. Write HDMI EDID.

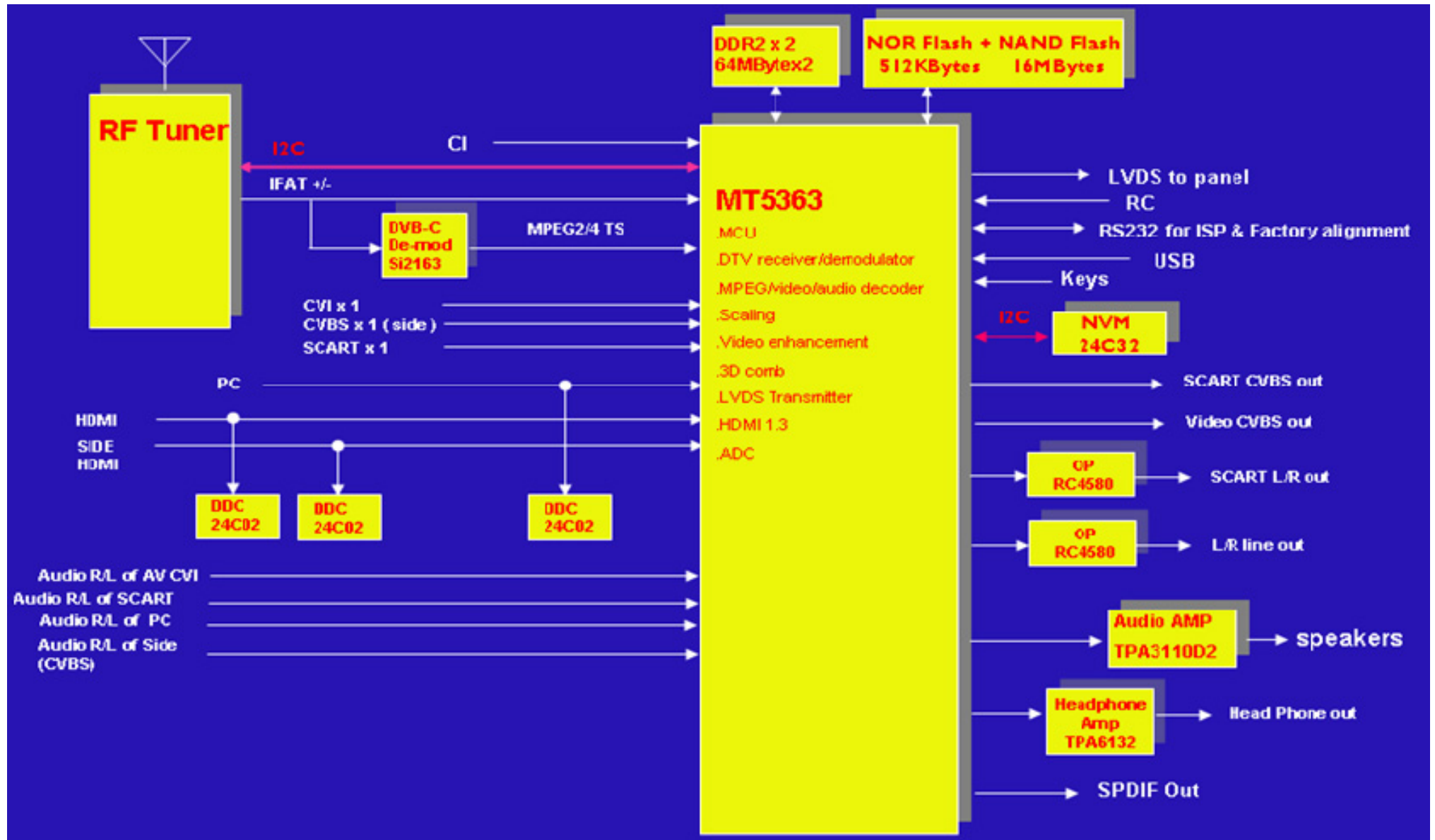
Connection for writing HDMI EDID.



**Note:** When writing HDMI EDID, the TV must be AC on, or the process can't continue, and will prompt "NG" info.

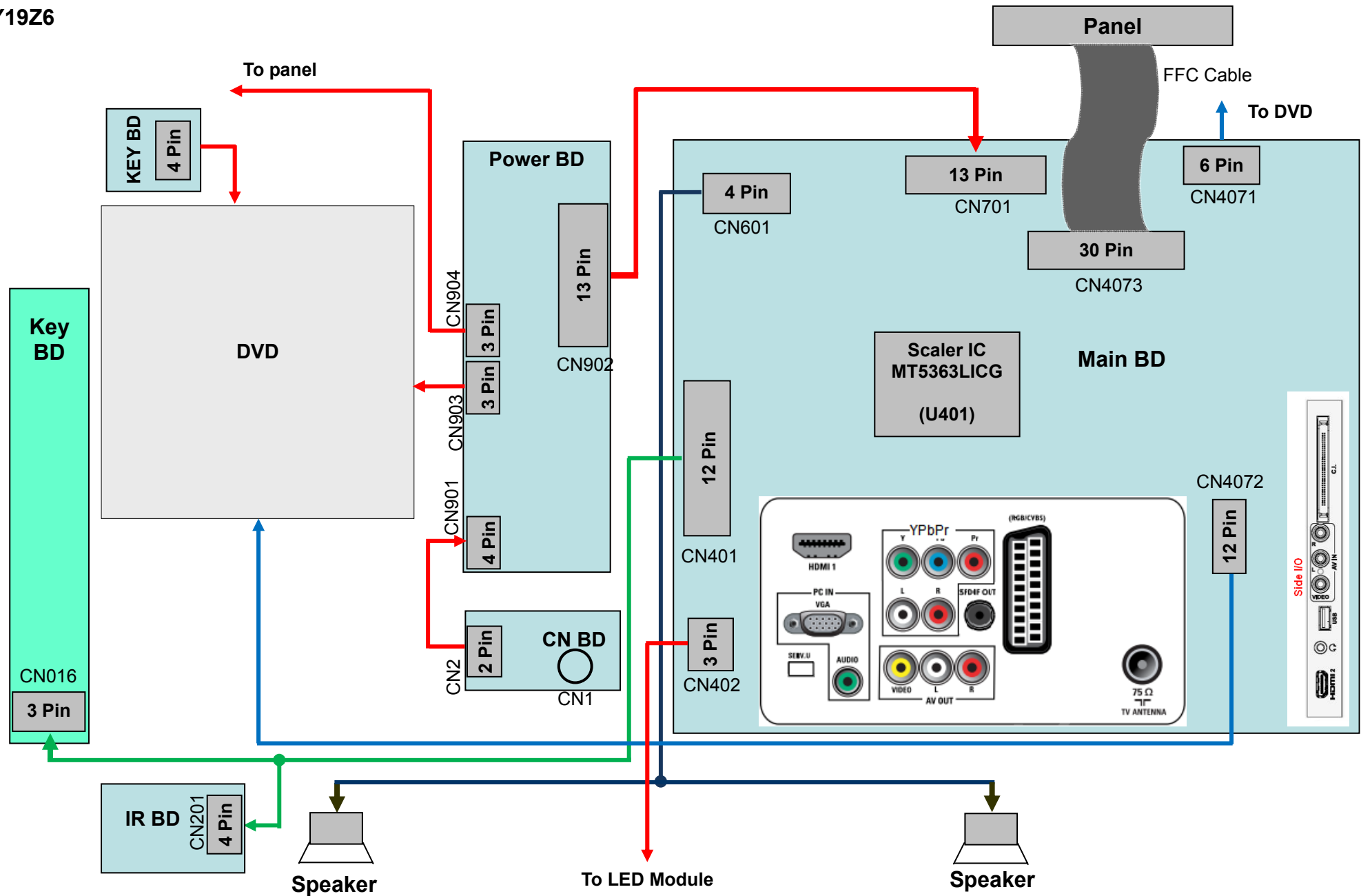
For the other steps, pls refer to the writing VGA EDID sop.

## 8. Block Diagram



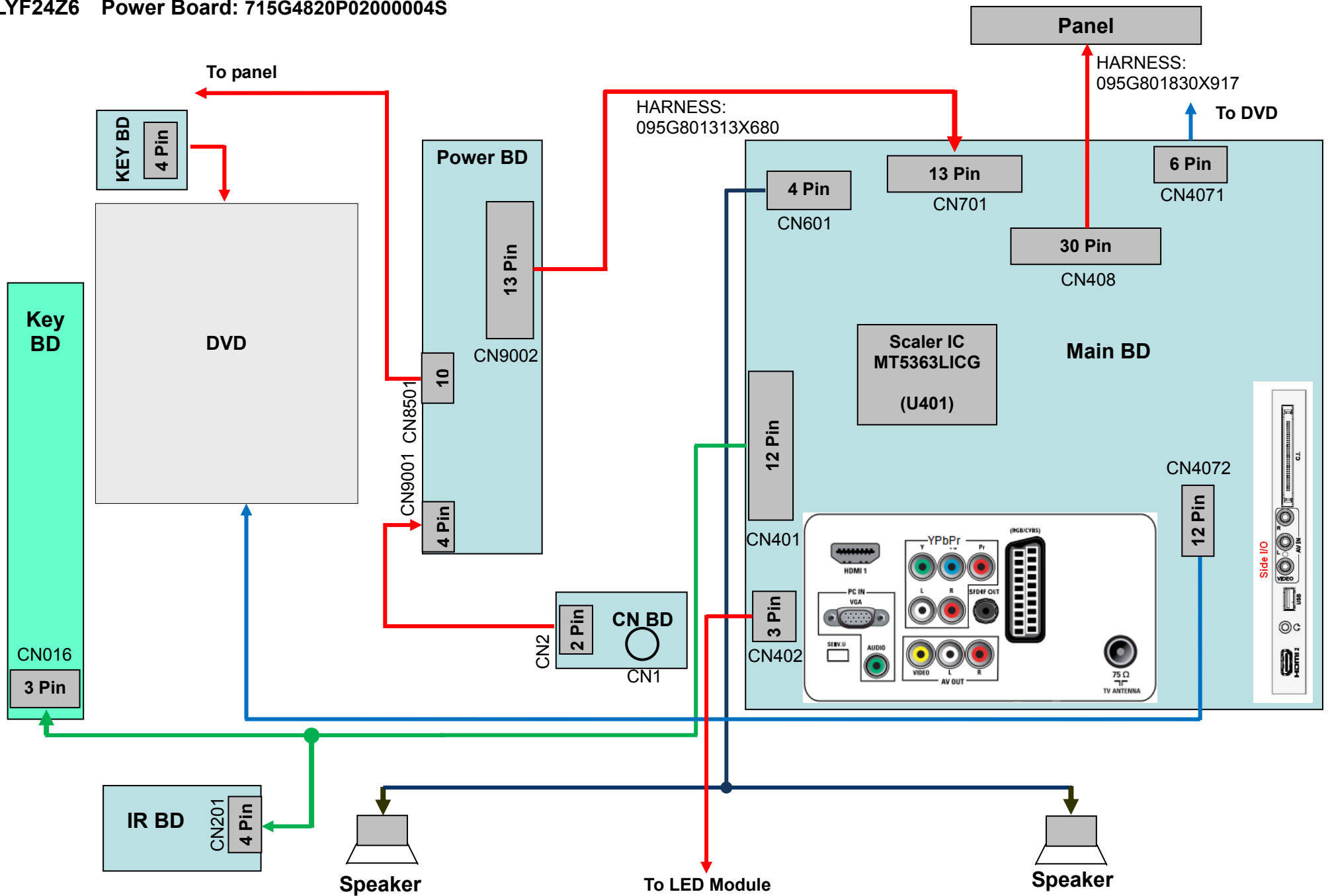
## 9. Wiring Diagram

LY19Z6



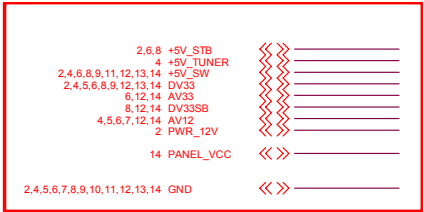
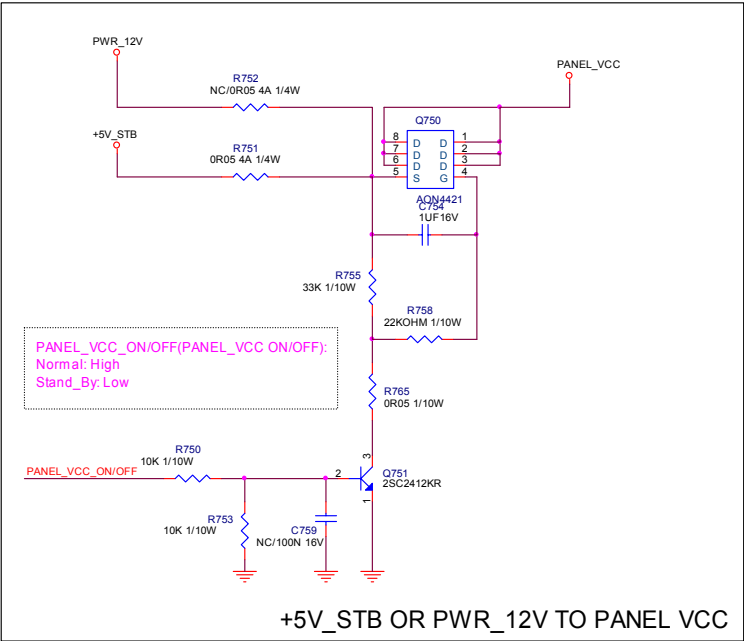
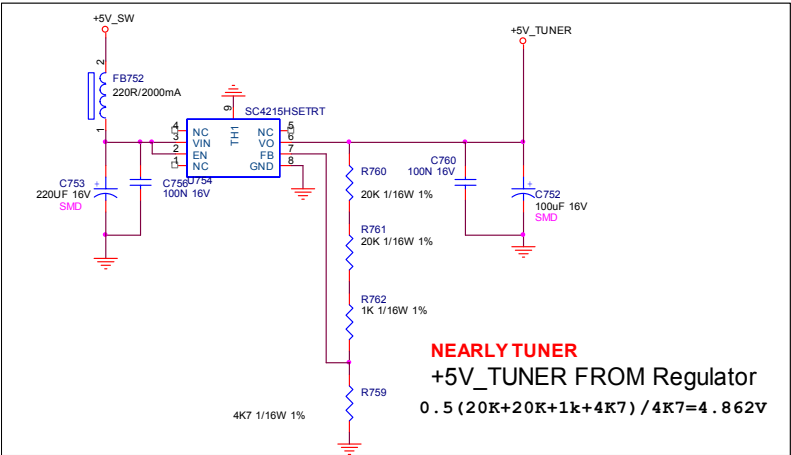
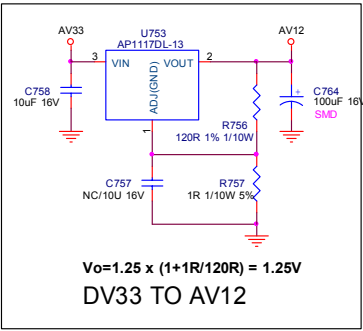
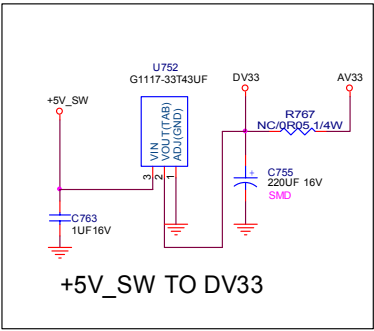
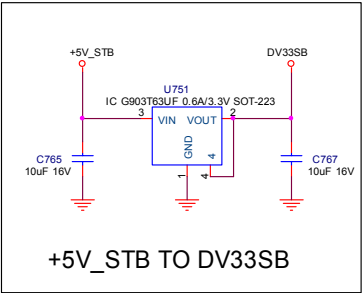
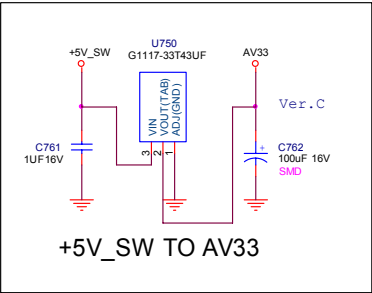


LYF24Z6 Power Board: 715G4820P02000004S



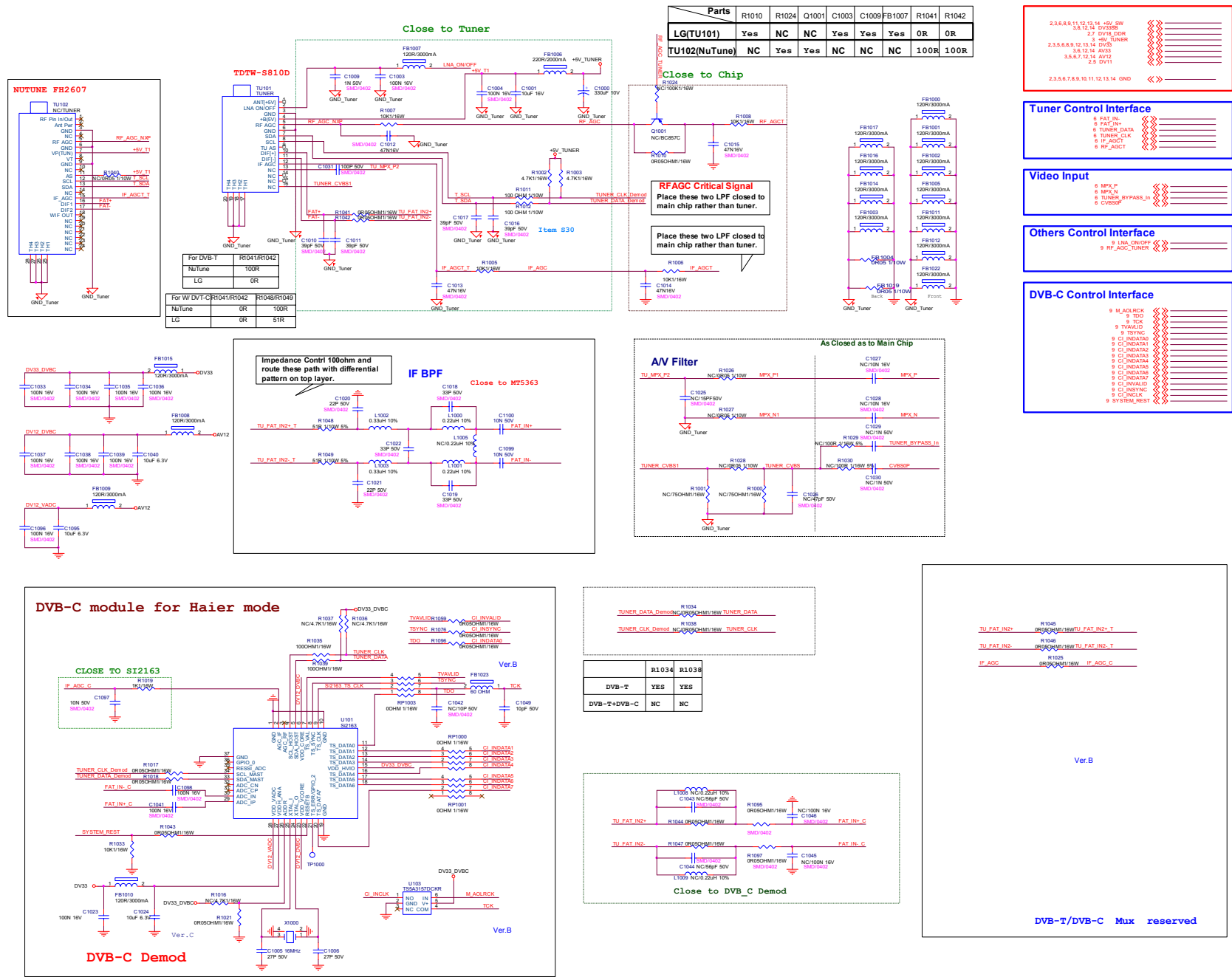


03. POWER-2

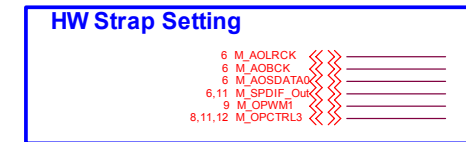
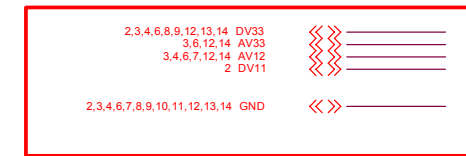
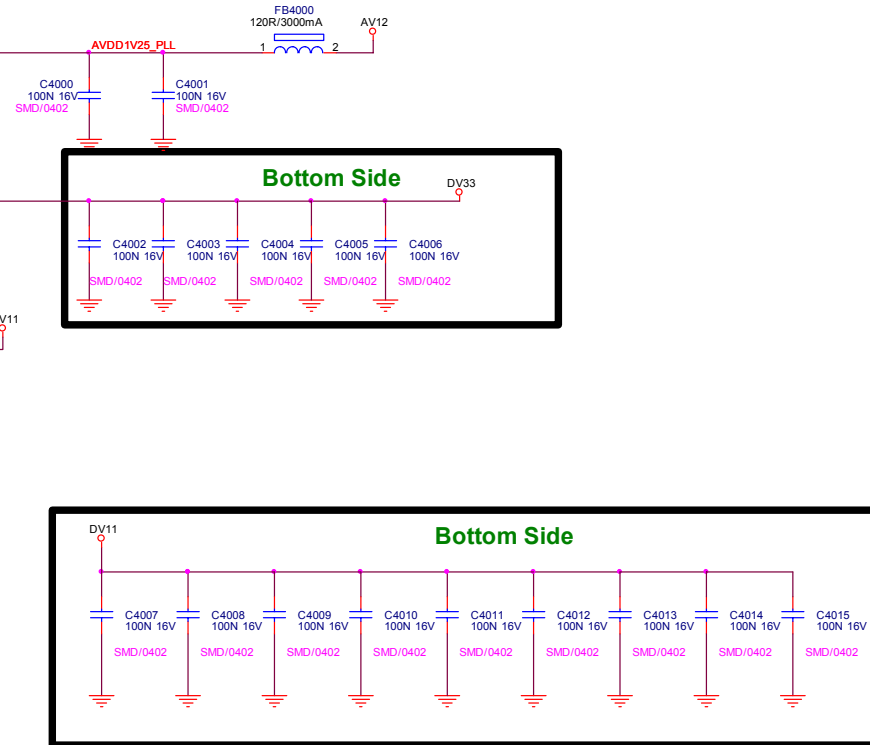
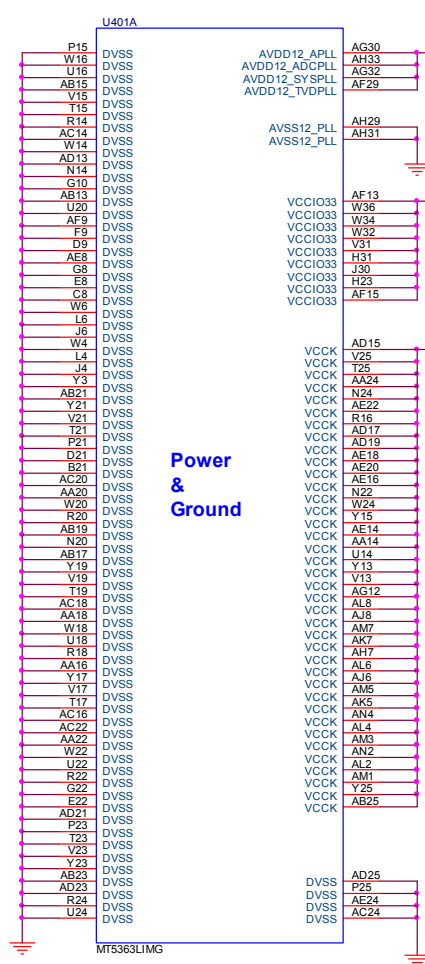




04. TUNER



## 05. MT5362 BYPASS/TRAP.

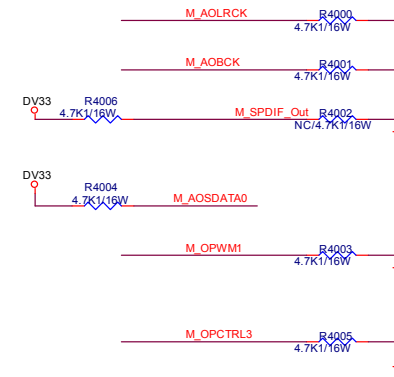


| Strapping Mode         | AOLRCK | AOBCK | ASPDIF |
|------------------------|--------|-------|--------|
| ICE Mode + Serial Boot | 0      | 0     | 0      |
| ICE mode + ROM Boot    | 0      | 0     | 1      |

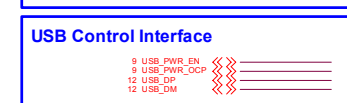
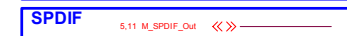
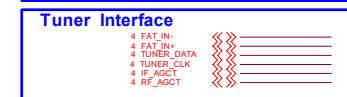
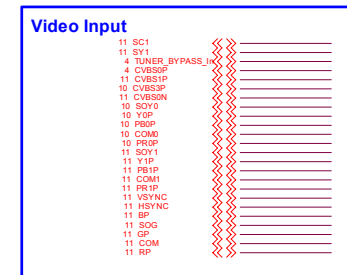
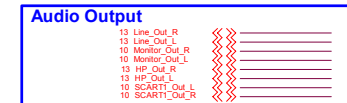
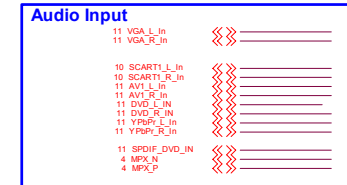
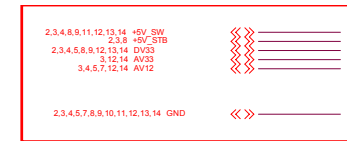
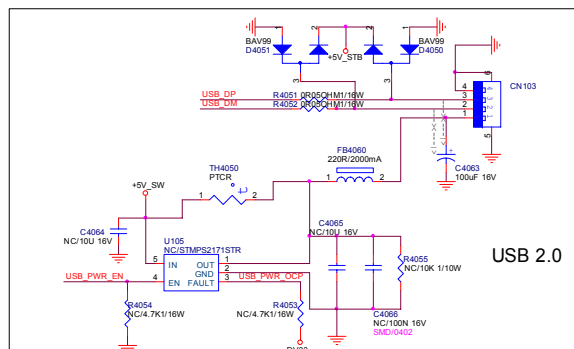
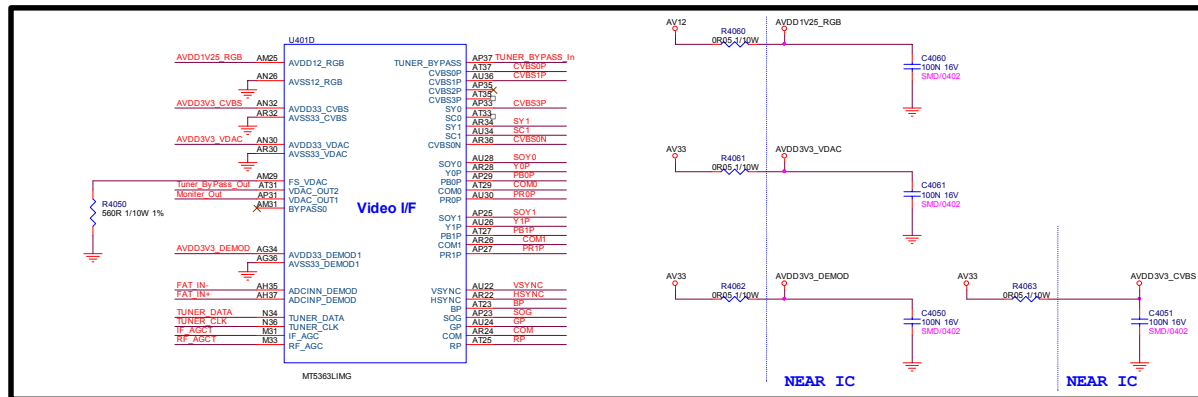
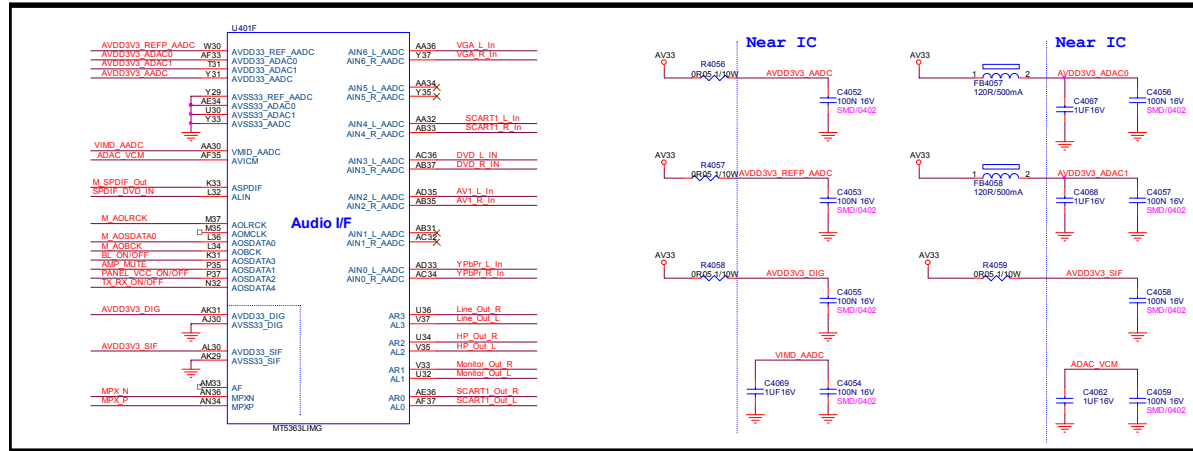
| Strapping Mode | AOSDATA0 | OPWM1 |
|----------------|----------|-------|
| XTAL 54MHz     | 1        | 0     |

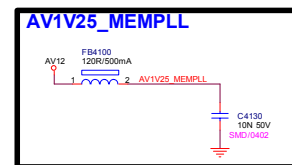
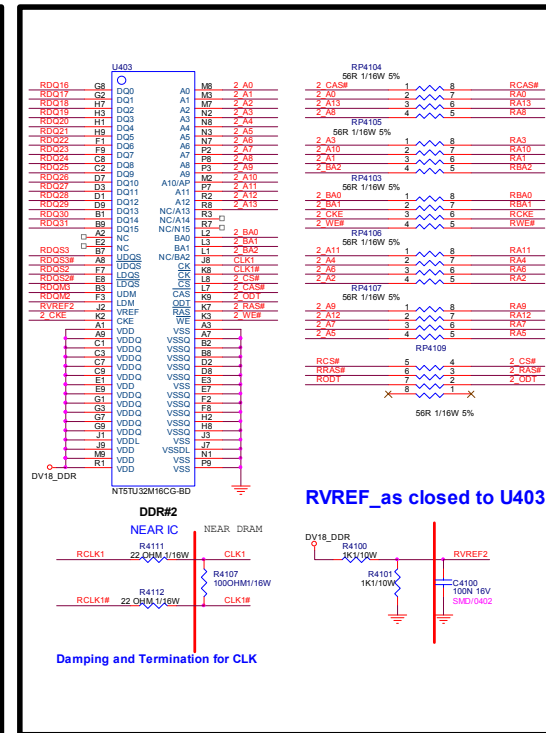
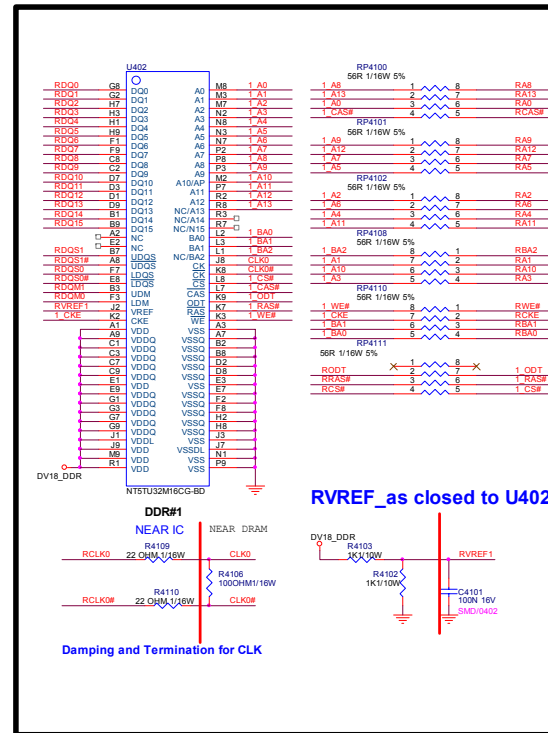
|                |             |
|----------------|-------------|
| Strapping Mode | OPCTRL3 (0) |
| PDWNC Normal   | 0           |

## MT5363 STRAPPING MODE

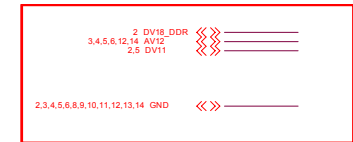
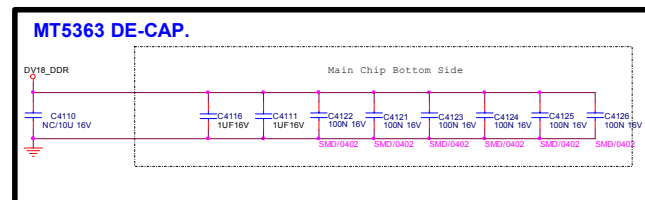
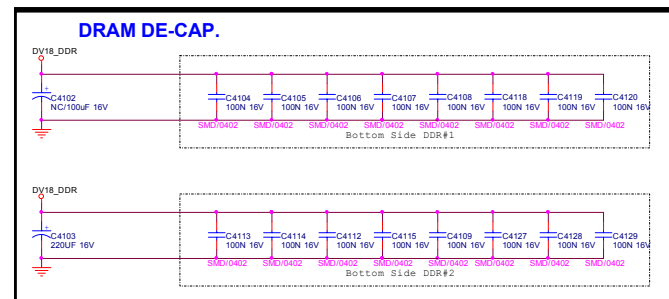


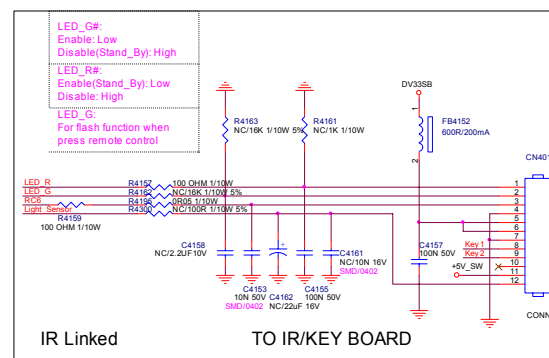
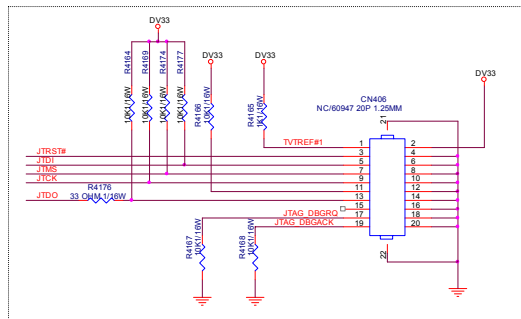
## 06. MT5362 PERIPHERAL/USB2.0



[illegible]

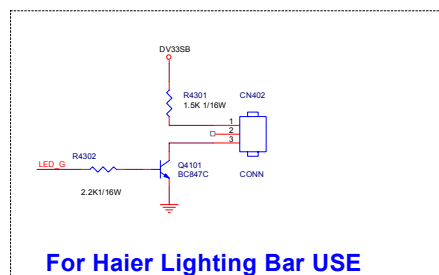
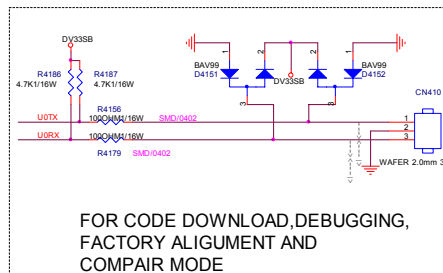
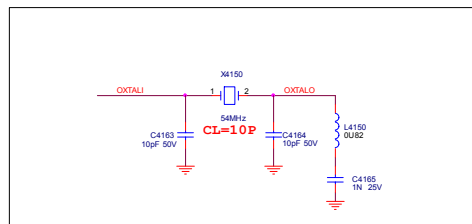
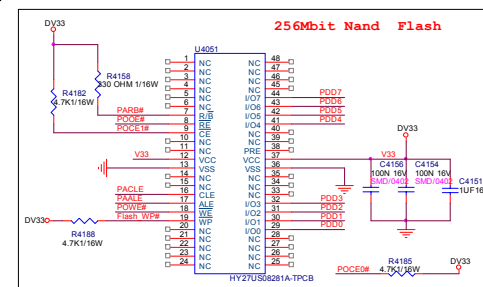
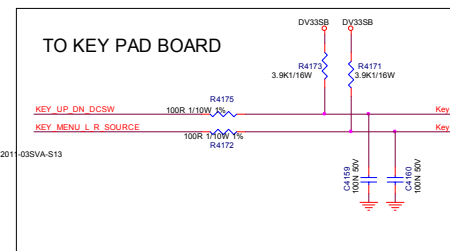
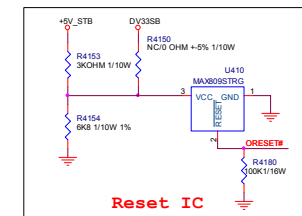
| Parts \ Brand | 1st             | 2nd           |
|---------------|-----------------|---------------|
| U402,U403     | NT5TU32M16CG-BD | H5PS5162FFR-G |





512KB Nor Flash for Boot Code

Ver.B

[illegible]

2,3,4,6,9,11,12,13,14 +5V\_SW  
2,3,6 +5V\_STB  
3,12,14 DV33SB  
2,3,4,5,6,9,12,13,14 DV33  
3,4,5,6,7,12,14 AV12

2,3,4,5,6,7,9,10,11,12,13,14 GND

```

13 AUDIO_MUTE<<>>=====
13 SP_AMP_MUTE<<>>=====

```

2 OPWSB &lt;&lt;&gt;&gt; \_\_\_\_\_

10 SCART\_FS0 &lt;&lt;&gt;&gt; \_\_\_\_\_

|    |              |       |
|----|--------------|-------|
| 11 | U0RX         | ===== |
| 11 | U0TX         | ===== |
| 9  | LED_G        | ===== |
| 9  | DVD_STATUS   | ===== |
| 2  | Light_Sensor | ===== |
| 11 | RC6          | ===== |
| 11 | DVD_STATUS   | ===== |

### USB Control Interface

6,9 USB\_PWR\_OCP <<>> \_\_\_\_\_  
 6,9 USB\_PWR\_EN <<>> \_\_\_\_\_

**U0401H**

| Pin | Signal      | Pin | Signal | Pin | Signal | Pin | Signal           |
|-----|-------------|-----|--------|-----|--------|-----|------------------|
| 1   | SYSTEM REST | J34 | OPWMO  | 61  | GPI00  | K35 | CI PWR EN        |
| 2   | M OPWMT     | J36 | OPWMI  | 62  | GPI01  | K37 | CI GCP           |
| 3   | BC CHIMING  | J33 | OPWMT  | 63  | GPI02  | K38 | CI AGC TUNER     |
| 4   |             |     |        | 64  | GPI03  | K39 | M CI INDATA1     |
| 5   |             |     |        | 65  | GPI04  | K40 | CI AT4           |
| 6   |             |     |        | 66  | GPI05  | K41 | M CI INDATA2     |
| 7   |             |     |        | 67  | GPI06  | K42 | CI WE8           |
| 8   |             |     |        | 68  | GPI07  | K43 | M CI INDATA3     |
| 9   |             |     |        | 69  | GPI08  | K44 | CI IREQ          |
| 10  |             |     |        | 70  | GPI09  | K45 | M CI INDATA4     |
| 11  |             |     |        | 71  | GPI10  | K46 | M CI INVALD      |
| 12  |             |     |        | 72  | GPI11  | K47 | CI INCK          |
| 13  |             |     |        | 73  | GPI12  | K48 | M CI INDATA5     |
| 14  |             |     |        | 74  | GPI13  | K49 | CI AT2           |
| 15  |             |     |        | 75  | GPI14  | K50 | M CI INDATA7     |
| 16  |             |     |        | 76  | GPI15  | K51 | CI AT1           |
| 17  |             |     |        | 77  | GPI16  | K52 | M CI OUTLK       |
| 18  |             |     |        | 78  | GPI17  | K53 | CI AT5           |
| 19  |             |     |        | 79  | GPI18  | K54 | CI RESET         |
| 20  |             |     |        | 80  | GPI19  | K55 | CI AT6           |
| 21  |             |     |        | 81  | GPI20  | K56 | CI WAH           |
| 22  |             |     |        | 82  | GPI21  | K57 | CI AT4           |
| 23  |             |     |        | 83  | GPI22  | K58 | CI AT3           |
| 24  |             |     |        | 84  | GPI23  | K59 | CI REG8          |
| 25  |             |     |        | 85  | GPI24  | K60 | CI AT2           |
| 26  |             |     |        | 86  | GPI25  | K61 | M CI OUTVALID    |
| 27  |             |     |        | 87  | GPI26  | K62 | CI AT1           |
| 28  |             |     |        | 88  | GPI27  | K63 | M CI OUTSYNC     |
| 29  |             |     |        | 89  | GPI28  | K64 | CI AT5           |
| 30  |             |     |        | 90  | GPI29  | K65 | M CI OUTAT4      |
| 31  |             |     |        | 91  | GPI30  | K66 | CI D5            |
| 32  |             |     |        | 92  | GPI31  | K67 | M CI OUTDATA1    |
| 33  |             |     |        | 93  | GPI32  | K68 | CI D1            |
| 34  |             |     |        | 94  | GPI33  | K69 | M CI OUTDATA2    |
| 35  |             |     |        | 95  | GPI34  | K70 | CI D2            |
| 36  |             |     |        | 96  | GPI35  | K71 | CI D3            |
| 37  |             |     |        | 97  | GPI36  | K72 | CI D4            |
| 38  |             |     |        | 98  | GPI37  | K73 | LNA ON/OFF       |
| 39  |             |     |        | 99  | GPI38  | K74 | RC BLANK         |
| 40  |             |     |        | 100 | GPI39  | K75 | TRIP DETE        |
| 41  |             |     |        | 101 | GPI40  | K76 | LED G            |
| 42  |             |     |        | 102 | GPI41  | K77 | AG4 USB PWR OP   |
| 43  |             |     |        | 103 | GPI42  | K78 | AG6 USB PWR EN   |
| 44  |             |     |        | 104 | GPI43  | K79 | AG3 HTP AMP MUTE |
| 45  |             |     |        | 105 | GPI44  | K80 | AH1 STAND BY     |

**CI D5** E38  
**M CI OUTDATA3** E37  
**CI AT6** A32  
**CI DWR#** C35  
**CI AT9** C32  
**M CI INSYNC** B31  
**CI AT4** D31  
**CI IRD#** D31  
**CI D7** B37  
**M CI OUTDATA7** A36  
**CI CE19** B35  
**CI AT10** A35  
**CI VS1F** C34  
**CI CSF** B33  
**M CI INDATA6** C32  
**M CI OUTDATA6** C36  
**CI D6** E39  
**CI AT3** F31  
**M CI OUTDATA4** E34

**CI D4** G34  
**CI D1F** H33  
**M CI OUTDATA3** H35  
**CI D3** F35

**TDO** G36  
**FLCK** F33  
**TVALLD** F33  
**TSYNC** H37

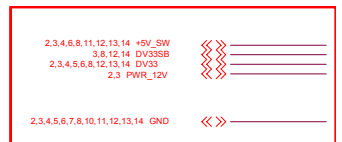
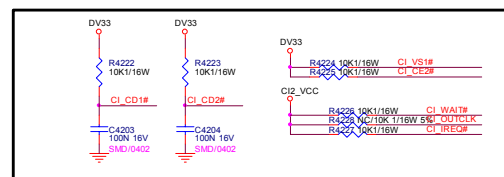
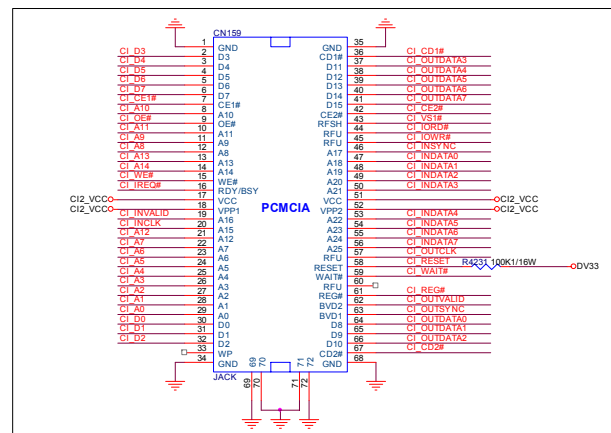
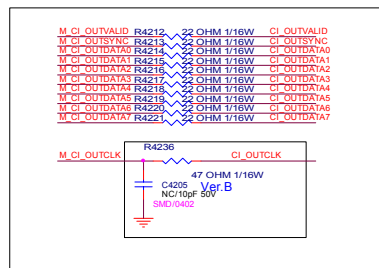
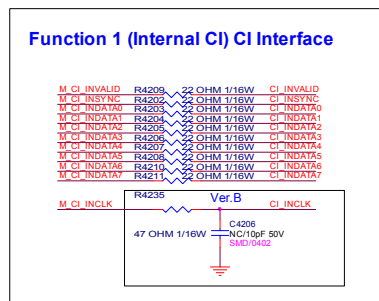
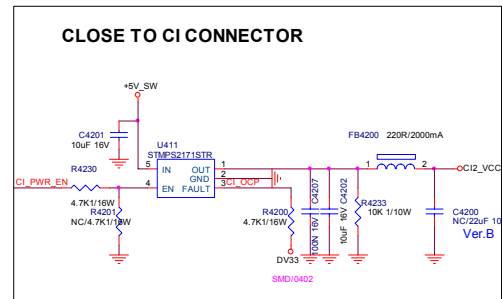
**CI MVAL** CI MVAL  
**CI MISTR** CI MISTR  
**CI MCLK1** CI MD10  
**CI MD10** CI MD10  
**CI MVAL** CI MVAL  
**CI MCKSTR** CI MCKSTR  
**CI MCLK0** CI MCLK0  
**CI MD00** CI MD00

**GPI0/**  
**Int. CI/**  
**MII**

**M35363LMG**

**R4234**  
**U0401H**  
**ODV33**  
**ODV33**

**4.7K1/1W**



14 BL\_DIMMING &lt;&gt; \_\_\_\_\_

2 STAND\_BY &lt;&lt;&gt;&gt; \_\_\_\_\_

5 M\_OPWM1 <<>> \_\_\_\_\_  
 5,6 M\_AOLRCK <<>> \_\_\_\_\_  
 5,6 M\_AOBCK <<>> \_\_\_\_\_  
 5,6 M\_AOSDATA0 <<>> \_\_\_\_\_  
 5,6,11 M\_SPDIF\_Out <<>> \_\_\_\_\_

```
6 USB_PWR_EN <<>> _____
6 USB_PWR_OCP <<>> _____
```

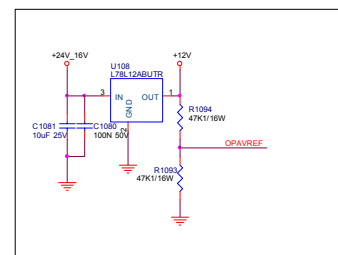
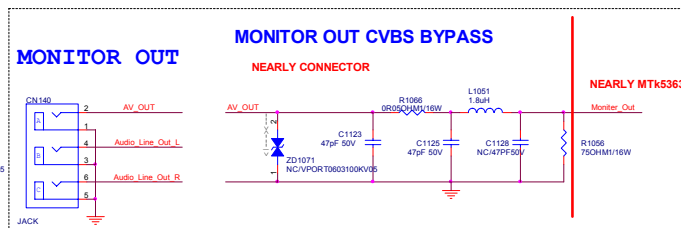
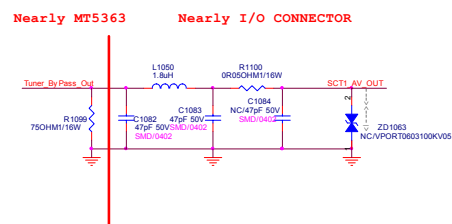
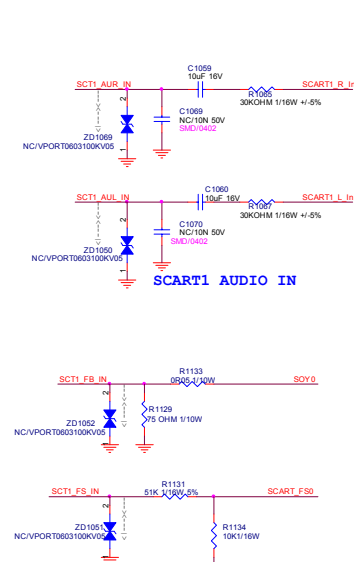
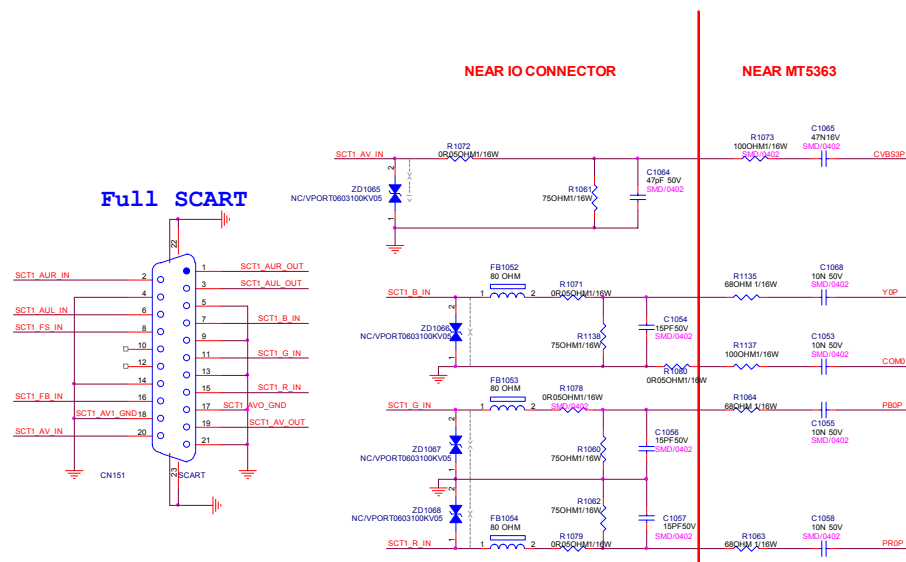
13 HP\_DET#        \_\_\_\_\_  
8 LED\_G        \_\_\_\_\_  
4 RF\_AGC\_TUNER        \_\_\_\_\_  
4 LNA\_ON/OFF        \_\_\_\_\_  
4 RC\_BLANK        \_\_\_\_\_  
13 HP\_AMP\_MUTE        \_\_\_\_\_

```

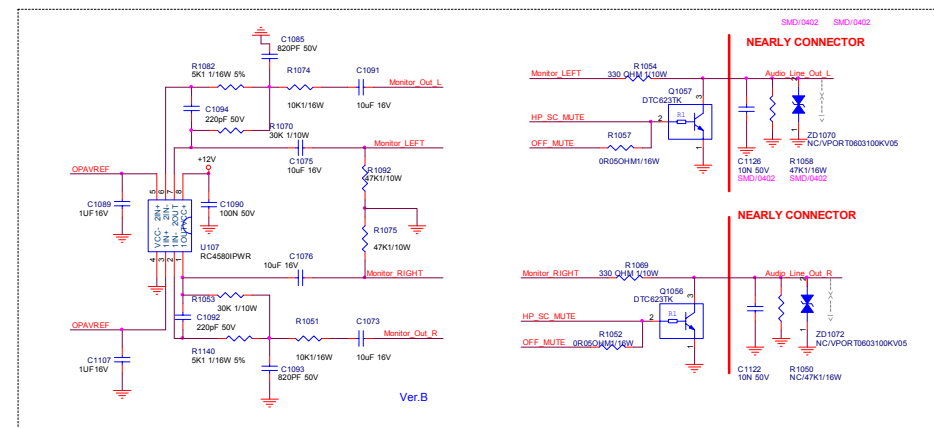
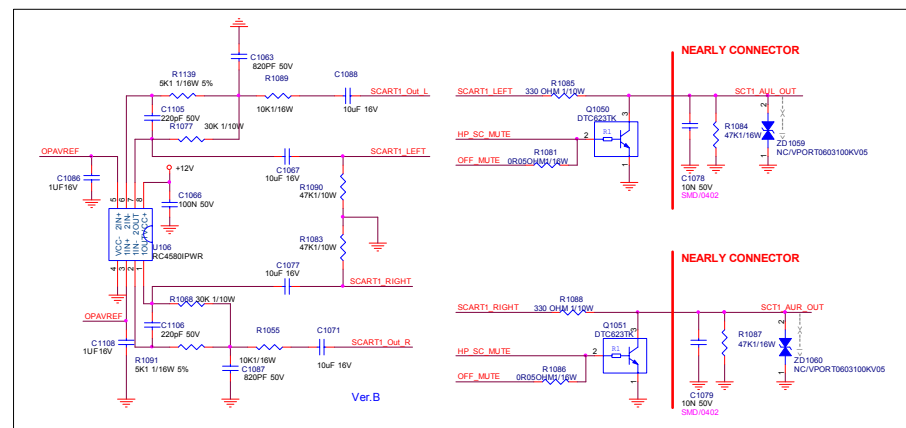
4 TDO
4 TCK
4 TVALLID
4 TSYNC
4 CI_INDATA0
4 CI_INDATA1
4 CI_INDATA2
4 CI_INDATA3
4 CI_INDATA4
4 CI_INDATA5
4 CI_INDATA6
4 CI_INDATA7
4 CI_INVALID
4 CI_NSYNCR
4 CI_INCLK
4 SYSTEM_RESET

```

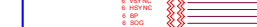
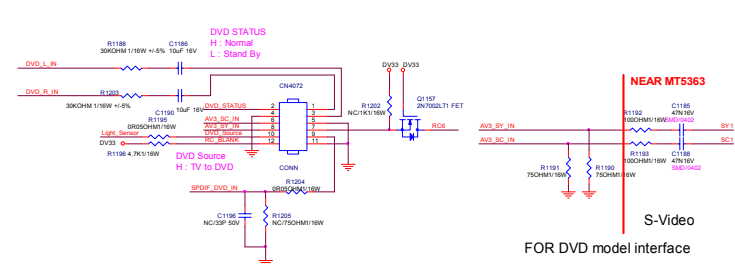
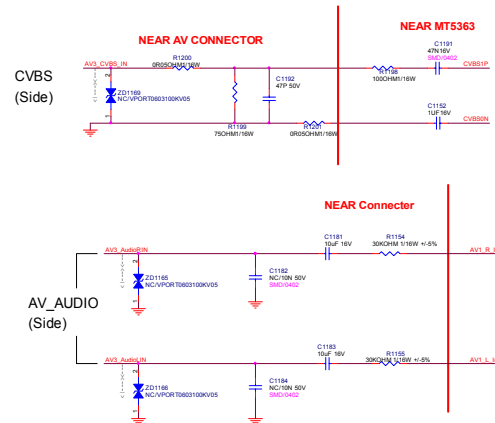
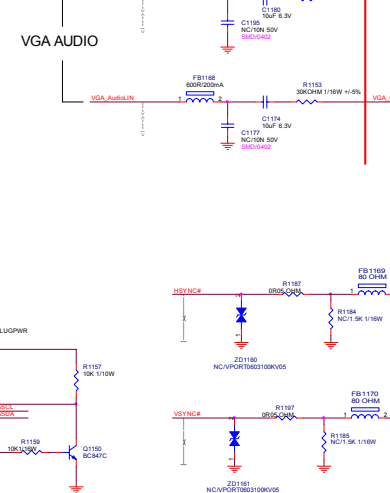
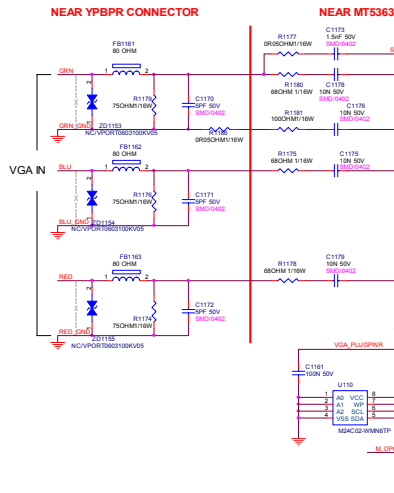
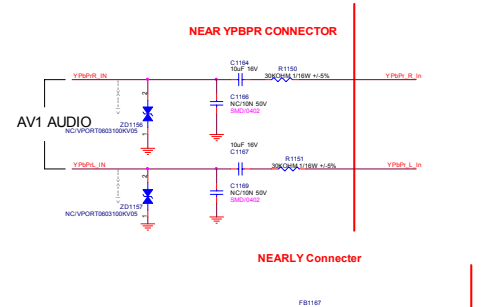
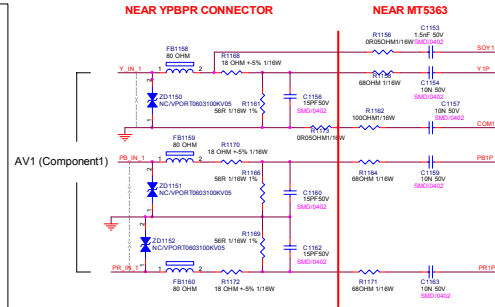
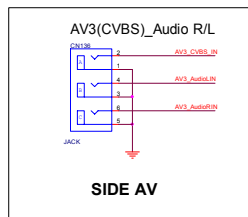
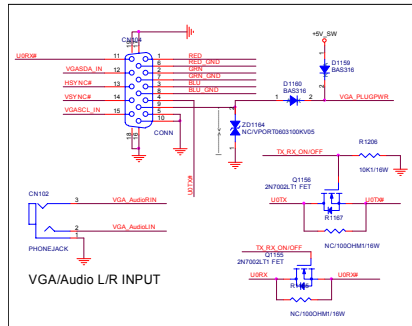
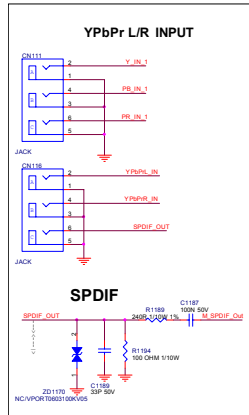
## 10. SCART1



| <b>Fuction</b> \ <b>Brand</b>           | <b>Philips</b> | <b>OTS</b> |
|---|----------------|------------|
| Monitor out (AV OUT) {U107,Q1056,Q1057} | <b>No</b>      | <b>Yes</b> |

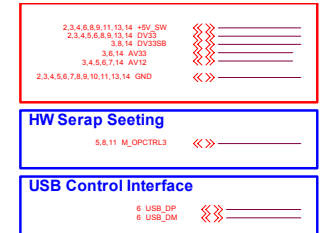
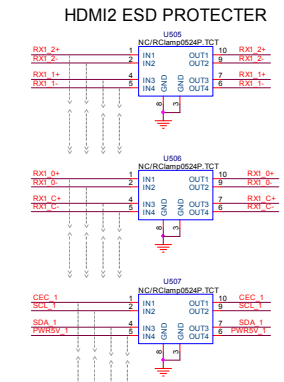
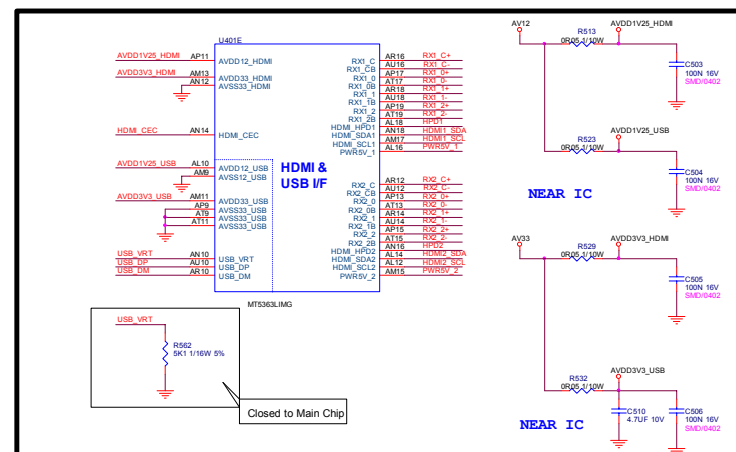
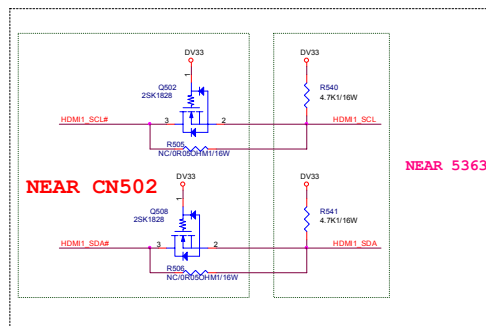
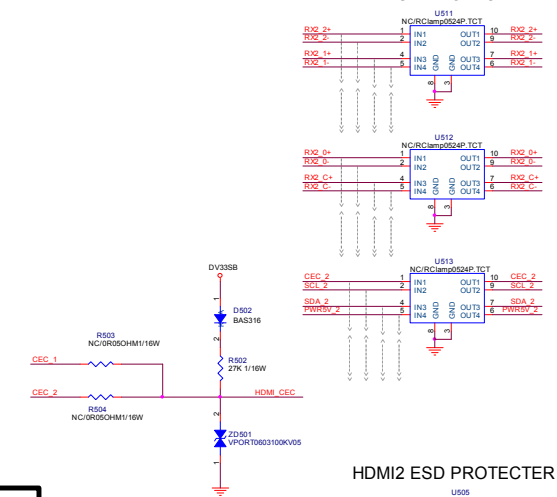
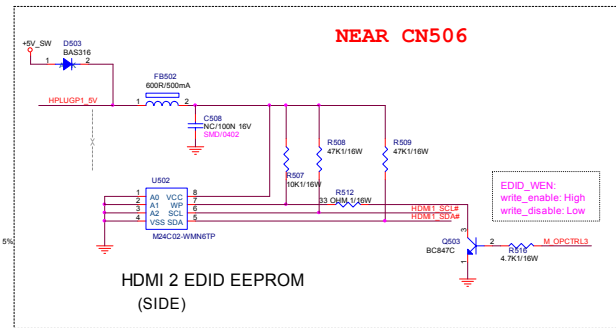
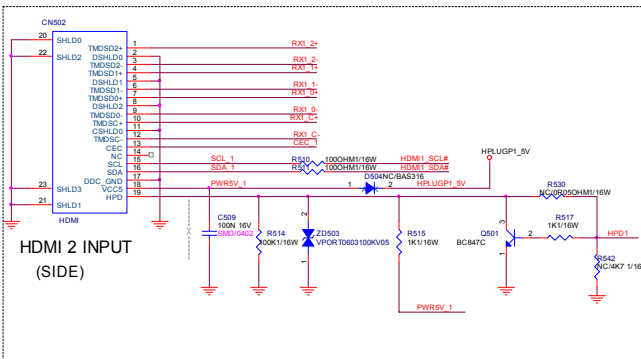
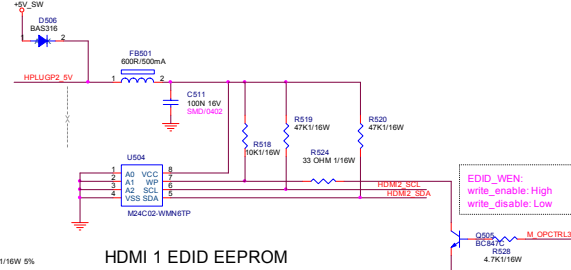
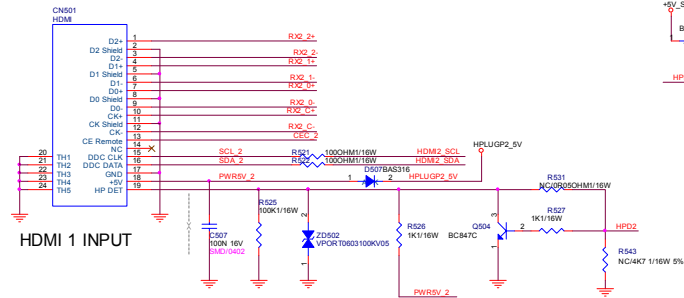


## 11. YPBPR/ VGA/ SIDE AV INPUT

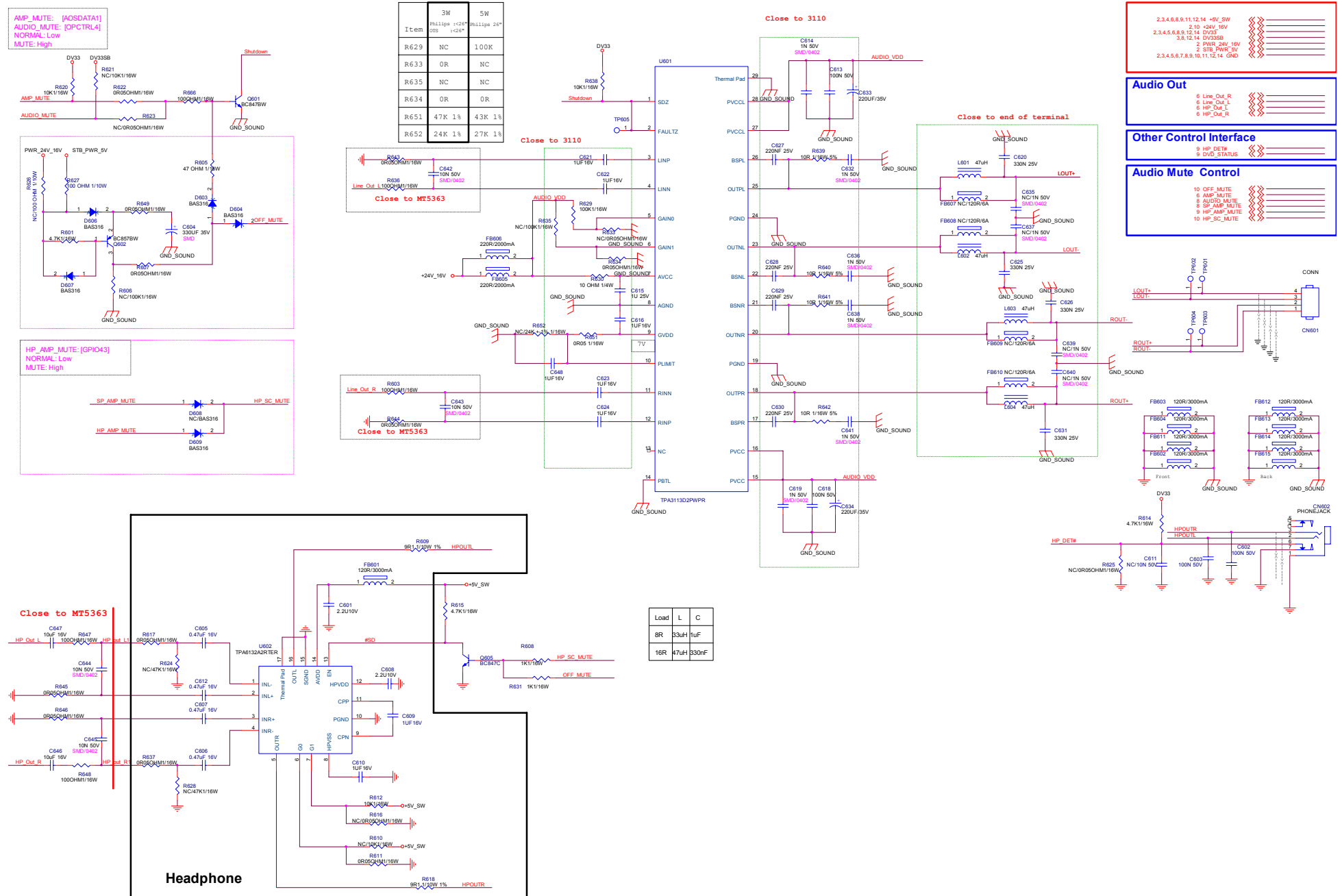




## 12. HDMI1/HDMI2 INPUT

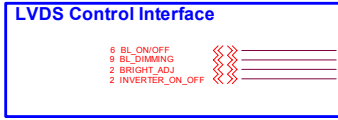
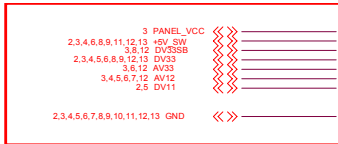
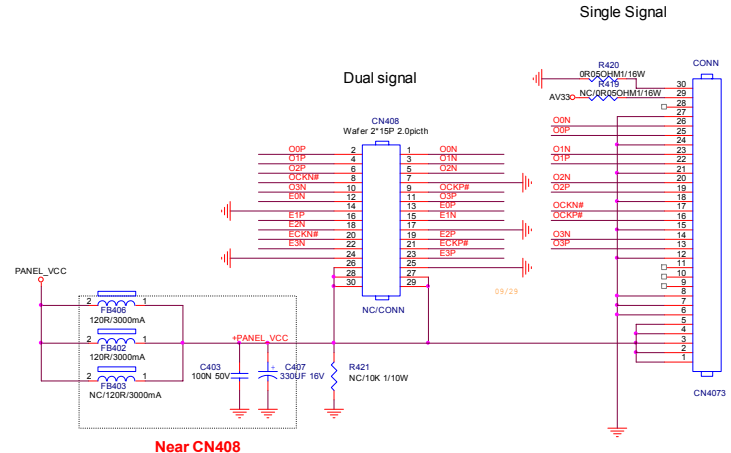
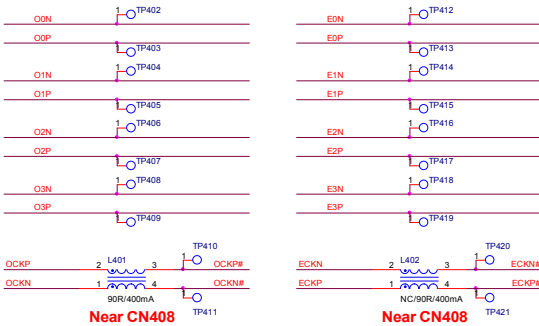


### 13. AUDIO AMP/HEADPHONE OUT

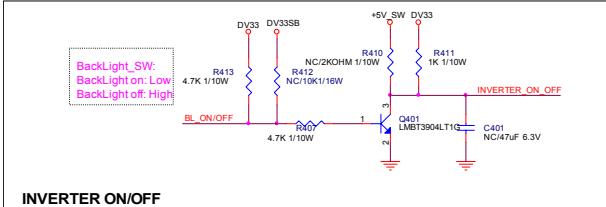
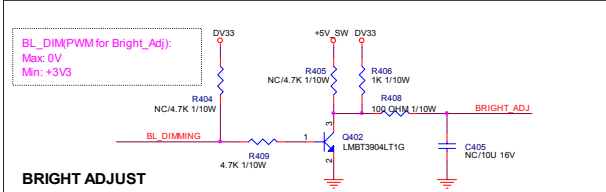


14. LVDS OUTPUT

LY19Z6

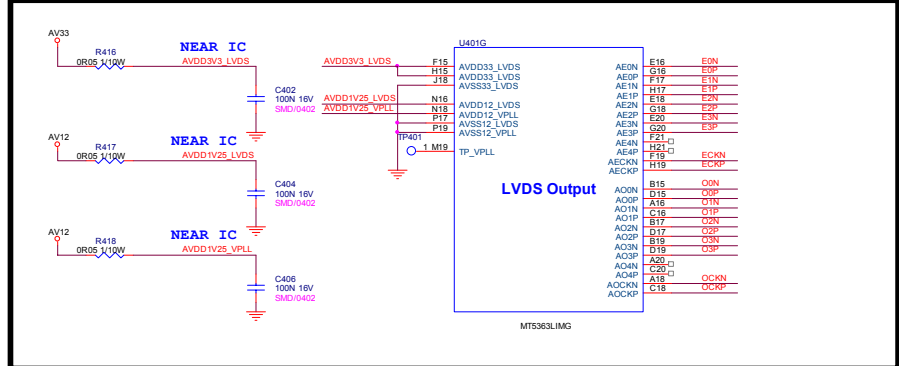


| Part  | Panel | <=22" [LCD] | >=26" [LCD] | <=22" [LED] | >=26" [LED] |
|-------|-------|-------------|-------------|-------------|-------------|
| CN408 |       | NC          | Yes         | NC          | Yes         |
| CN409 |       | Yes         | NC          | Yes         | NC          |
| R419  |       | NC          | NC          | NC          | NC          |
| R420  |       | NC          | NC          | Yes         | Yes         |

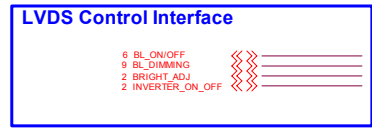
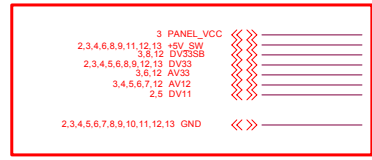
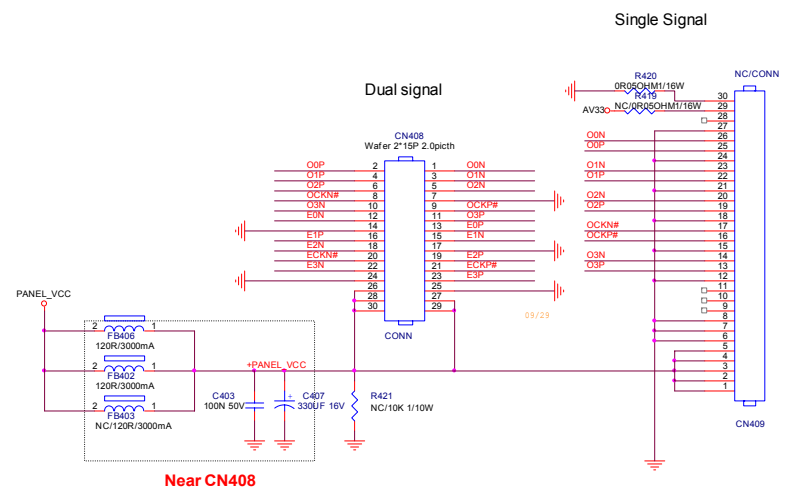
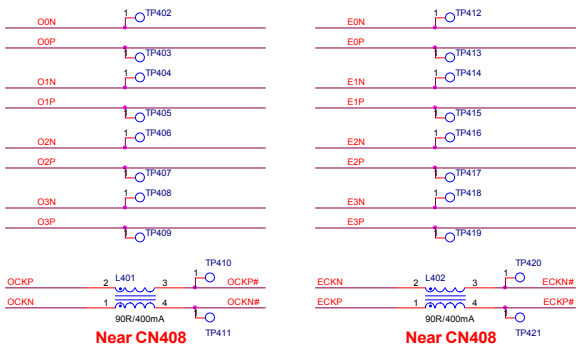


|             |      |      |      |
|-------------|------|------|------|
| BL CONTROL  | R408 | R406 | C405 |
| PWM CONTROL | 100R | 1K   | N/C  |
| DC CONTROL  | 5K6  | 1K   | 10U  |

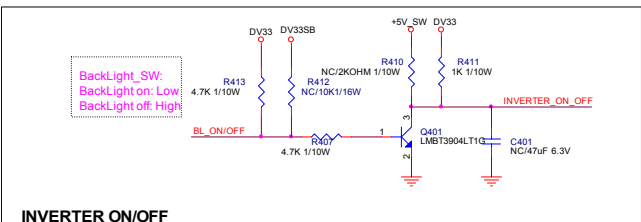
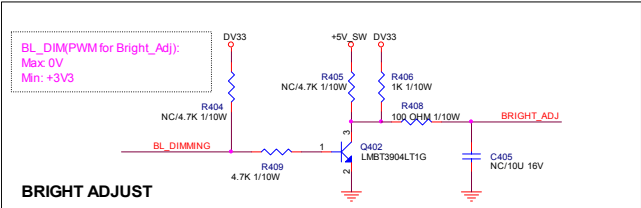
|                 |      |      |
|-----------------|------|------|
| INVERTER ON/OFF | R410 | R411 |
| 3V3             | N/C  | 1K   |
| 5V              | 2K   | N/C  |



LYF24Z6

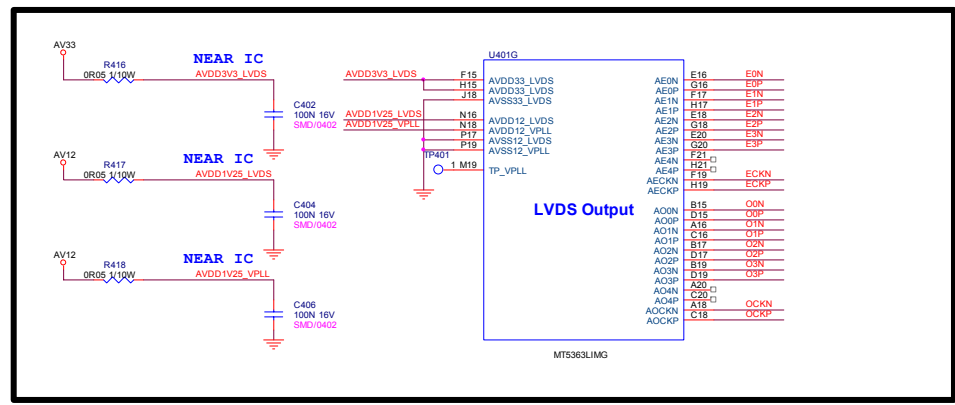


| Part \ Panel | <=22" [LCD] | >=26" [LCD] | <=22" [LED] | >=26" [LED] |
|--------------|-------------|-------------|-------------|-------------|
| CN408        | NC          | Yes         | NC          | Yes         |
| CN409        | Yes         | NC          | Yes         | NC          |
| R419         | NC          | NC          | NC          | NC          |
| R420         | NC          | NC          | Yes         | Yes         |



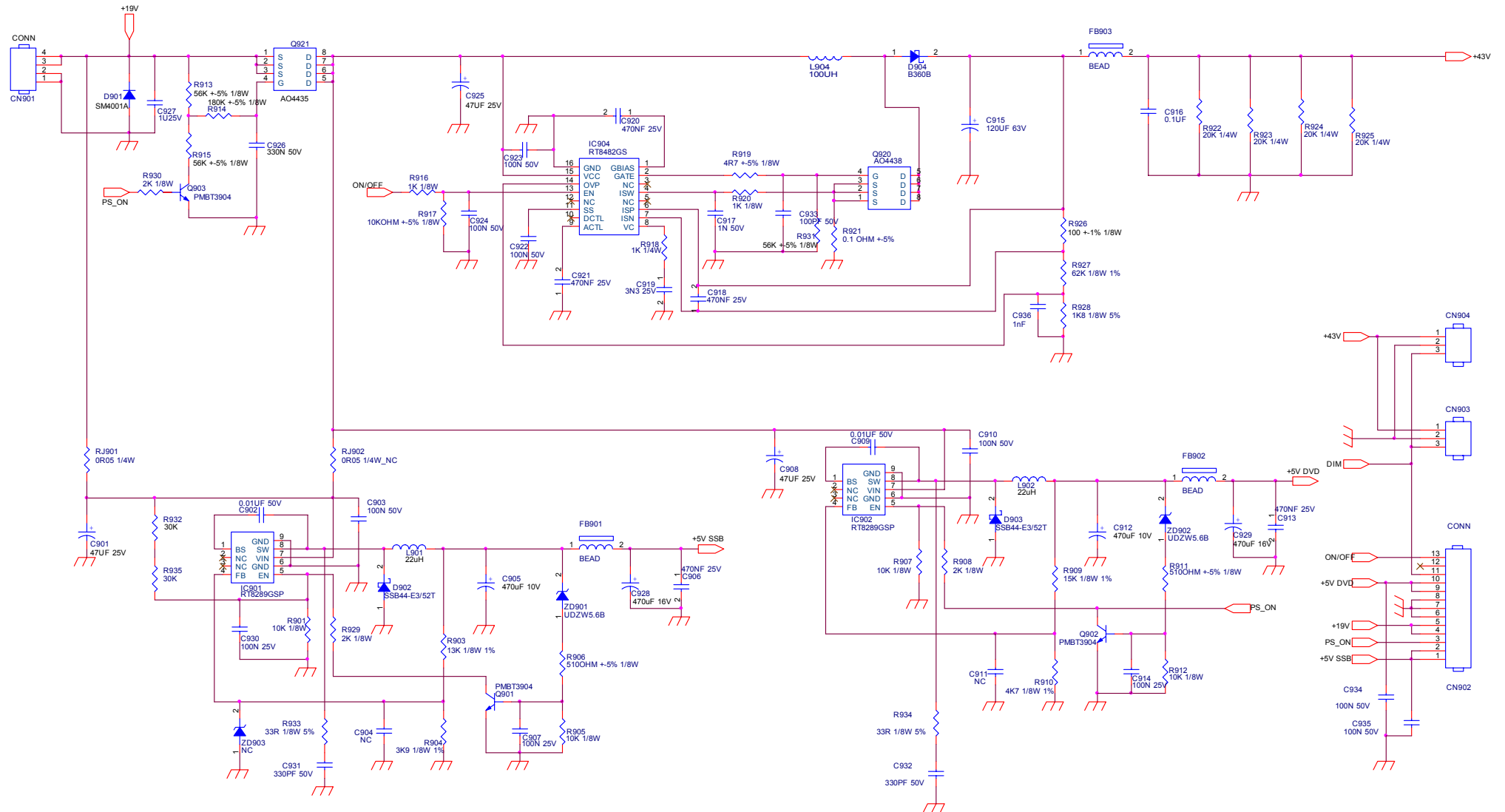
|             |      |      |      |
|-------------|------|------|------|
| BL CONTROL  | R408 | R406 | C405 |
| PWM CONTROL | 100R | 1K   | N/C  |
| DC CONTROL  | 5K6  | 1K   | 10U  |

|                 |      |      |
|-----------------|------|------|
| INVERTER ON/OFF | R410 | R411 |
| 3V3             | N/C  | 1K   |
| 5V              | 2K   | N/C  |

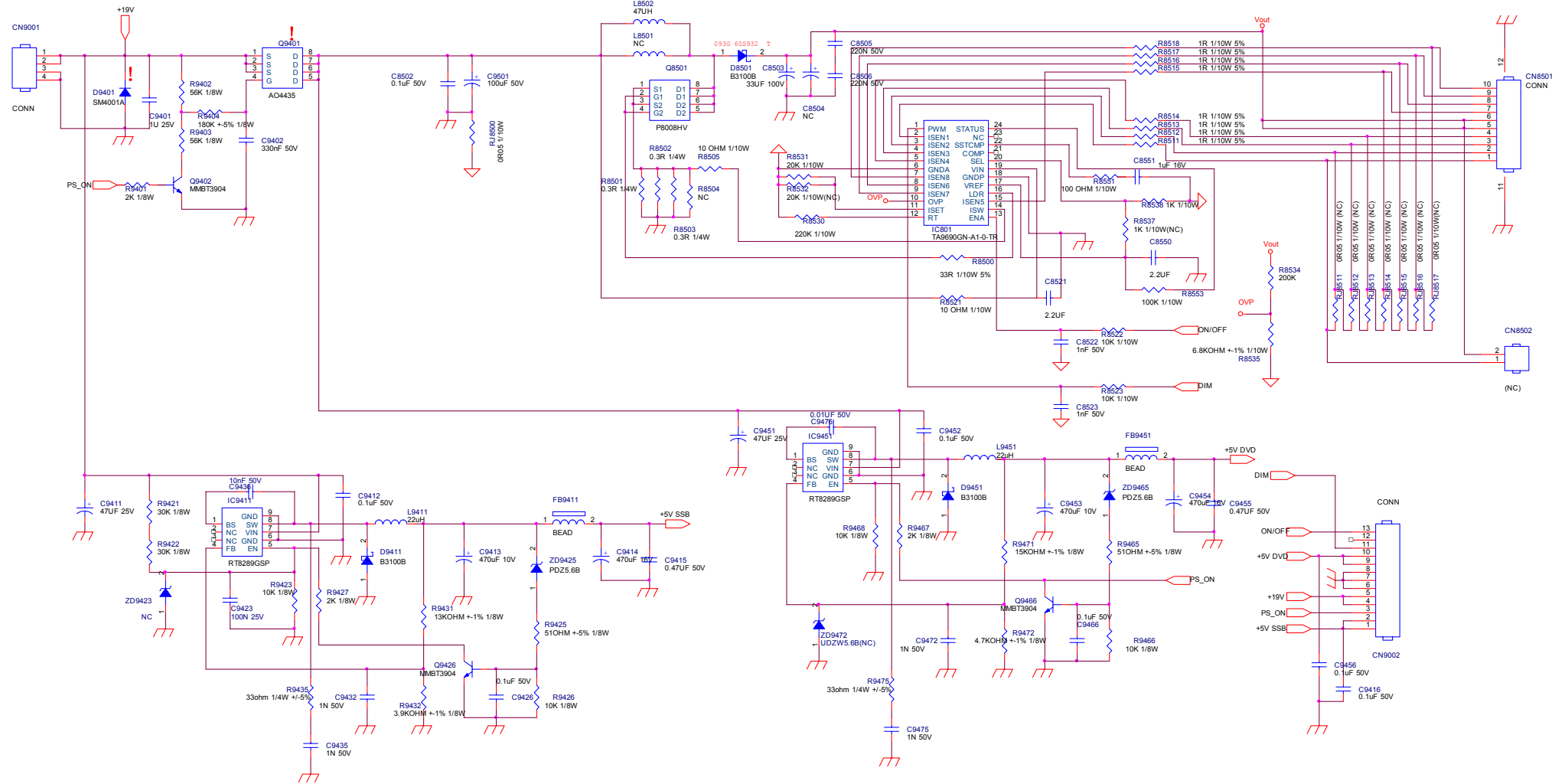


## 10.2 Power Board

715G4051P01000004S

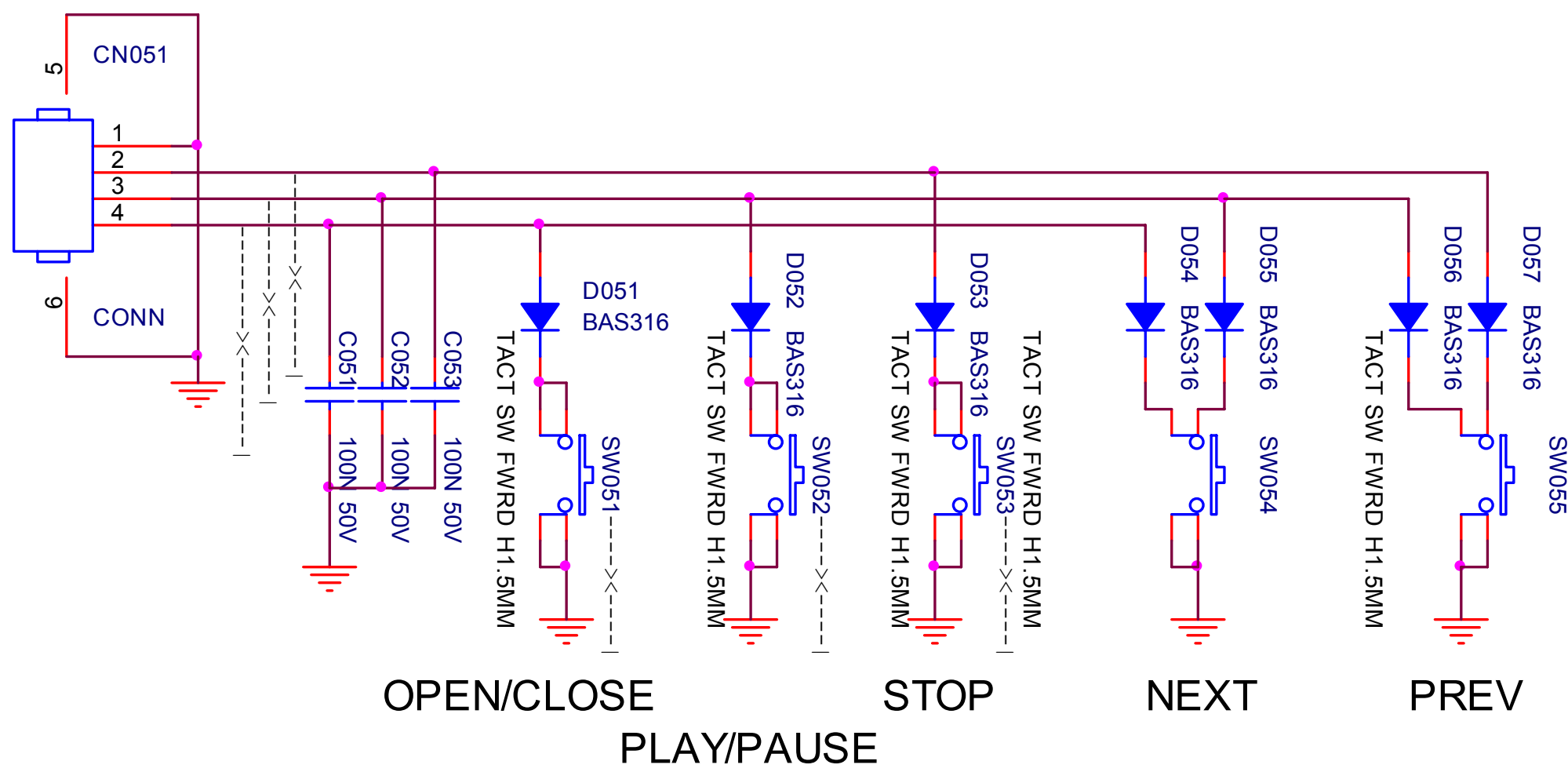


# LYF24Z6 715G4820P02000004S



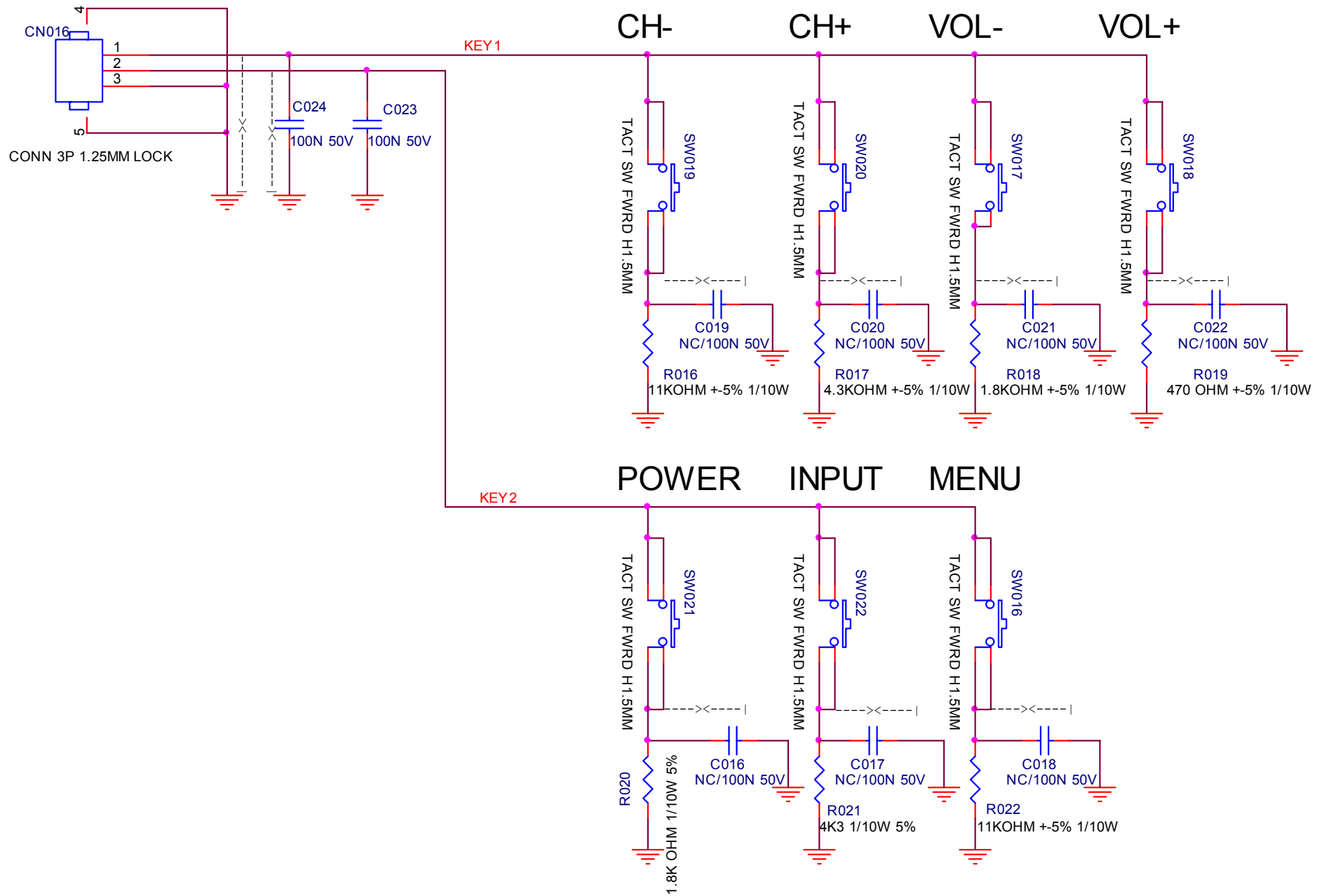
10.3 Key Board

715G4251K0D000004S





715G4168K02000004S



## 10.4 IR Board

715G4169R0A001004S

