

Panasonic®**ORDER NO. MTV1609090CE**

Service Manual

LED TV

Model No. **TH-49DX400K**
TH-49DX400S
TH-49DX400T

Destination : K: Malaysia S: Singapore T: Thailand



WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by  in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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1 Safety Precautions

1.1 General Guidelines

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.
4. When conducting repairs and servicing, do not attempt to modify the equipment, its parts or its materials.
5. When wiring units (with cables, flexible cables or lead wires) are supplied as repair parts and only one wire or some of the wires have been broken or disconnected, do not attempt to repair or re-wire the units. Replace the entire wiring unit instead.
6. When conducting repairs and servicing, do not twist the Faston connectors but plug them straight in or unplug them straight out.

1.1.1 Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be 8.5Mohm to 13Mohm. When the exposed metal does not have a return path to the chassis, the reading must be ∞ .

1.1.2 Leakage Current Hot Check (See [Figure 1](#) .)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kohm, 10 watts resistor, in parallel with a 0.15 μ F capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in [Figure 1](#) .
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

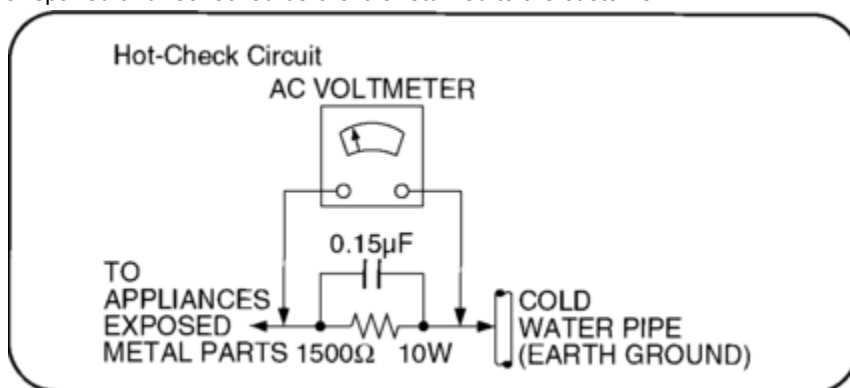


Figure 1

2 Warning

2.1 Prevention of Electrostatic Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor [chip] components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as [anti-static (ESD protected)] can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

2.2 About lead free solder (PbF)

Note: Lead is listed as (Pb) in the periodic table of elements.

In the information below, Pb will refer to Lead solder, and PbF will refer to Lead Free Solder.

The Lead Free Solder used in our manufacturing process and discussed below is (Sn+Ag+Cu).

That is Tin (Sn), Silver (Ag) and Copper (Cu) although other types are available.

This model uses Pb Free solder in it's manufacture due to environmental conservation issues. For service and repair work, we'd suggest the use of Pb free solder as well, although Pb solder may be used.

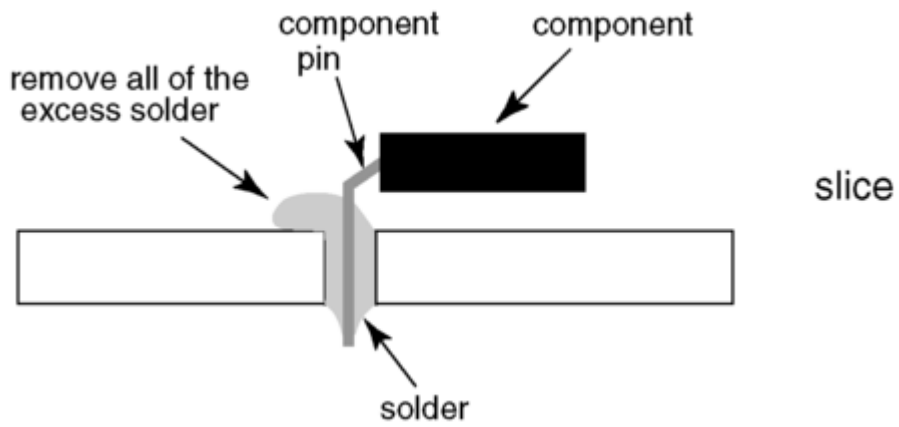
PCBs manufactured using lead free solder will have the PbF within a leaf Symbol **PbF** stamped on the back of PCB.

Caution

- Pb free solder has a higher melting point than standard solder. Typically the melting point is 50 ~ 70 °F (30~40 ° C) higher. Please use a high temperature soldering iron and set it to 700 ± 20 °F (370 ± 10 °C).
- Pb free solder will tend to splash when heated too high (about 1100 °F or 600 °C).
If you must use Pb solder, please completely remove all of the Pb free solder on the pins or solder area before applying Pb solder. If this is not practical, be sure to heat the Pb free solder until it melts, before applying Pb

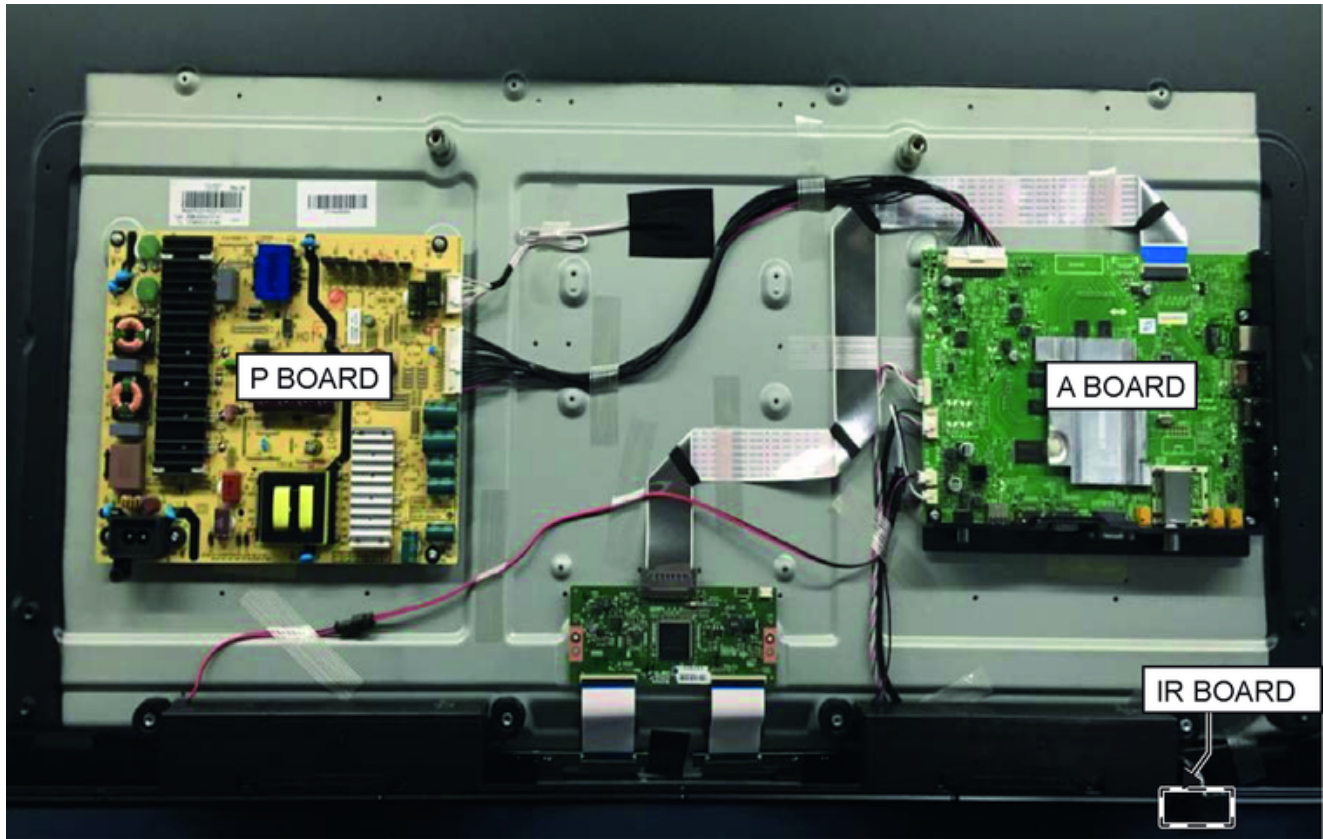
solder.

- After applying PbF solder to double layered boards, please check the component side for excess solder which may flow onto the opposite side. (see figure below)



3 Service Navigation

3.1 Service Hint



Board Name	Main Device	Remarks
A Board	Main Board	All boards are non-repairable and should be exchanged for service
P BOARD	Power Board	
IR BOARD	Remote, Key	

4 Specifications

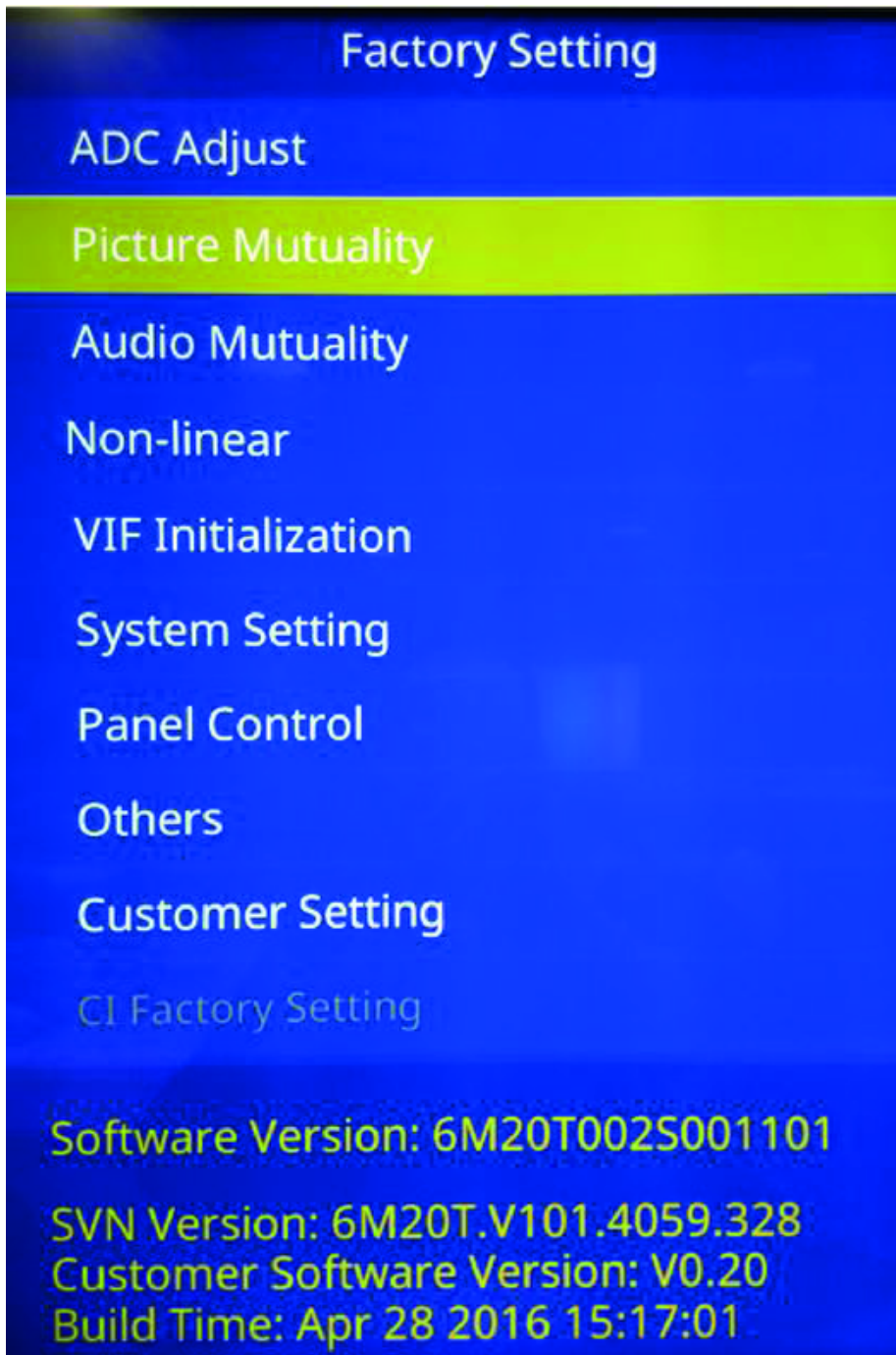
Model No. :	TH-49DX400K / TH-49DX400S / TH-49DX400T	
Screen size - diagonal	124 cm	
Screen resolution	3 840 x 2 160	
Audio output power (L+R)	8 W +8 W	
Working voltage:	100 - 240 V ~ 50/60 Hz	
Rated power consumption	120 W	
Dimensions (W x H x D)	1107.4 mm x 250.2 mm x 690.1 mm	
Net weight	12.2 kg Net	
Environment	Working temperature : 5°C ~ 45°C	
	Working Humidity : 20 % ~ 80 %	
	Storage temperature : -15°C ~ 50°C	
	Storage Humidity : 10 % ~ 90 %	
	Working temperature : 5°C ~ 35°C	
Environment	Working Humidity : 20 % ~ 80 %	
	Storage temperature : -15°C ~ 45°C	
	Storage Humidity : 10 % ~ 90 %	
	Working temperature : 5°C ~ 35°C	
	Working Humidity : 20 % ~ 80 %	
Channel Coverage	48~864 MHz full range of RF Input	
System	TV	PAL / BG / DK, PAL-I, NTSC-M
	AV	PAL, NTSC, SECAM
Preset programme	ATV	100
	DTV	1000
Status displaying method	On screen display	
Function adjustment indicator	Menu display	
Language of OSD	English / Thai / Vietnamese / Indonesia / Chinese / Myanmar	
RF aerial input	75 ohm unbalanced	
AV video input	75 ohm, 1.0 Vp-p, RCA	
Built - in wireless LAN	Standard compliance and Frequency range	
	IEEE802.11. b/g/n	
	2.40 GHz - 2.4835 GHz	
	Security	
	WPA2-PSK (TKIP/AES)	
Note	WPA2-PSK (TKIP/AES)	
	WEP (64bit/128bit)	

- Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.

5 Test and Alignment

5.1 Factory Setting

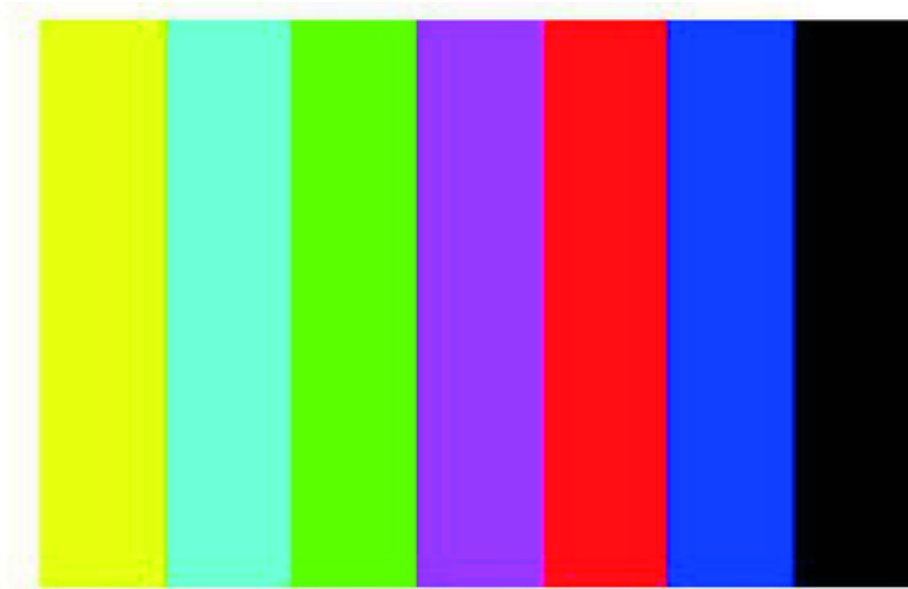
- Press AV button and follow with key 3, 1, 9, 5 one by one.



5.1.1 ADC Adjust

- Press ▲/▼ button, choose ADC Adjust and press OK button to enter.

Before adjusting, enter the channel you want to adjust and input adjust signal (YPBPR channel: ☐ 576P and 720P with 100% color bar; VGA channel: 1366*768 with tessellated white and black). ☐ Select ADC Tune, press ► button to auto adjust the ADC value.



100% color bar

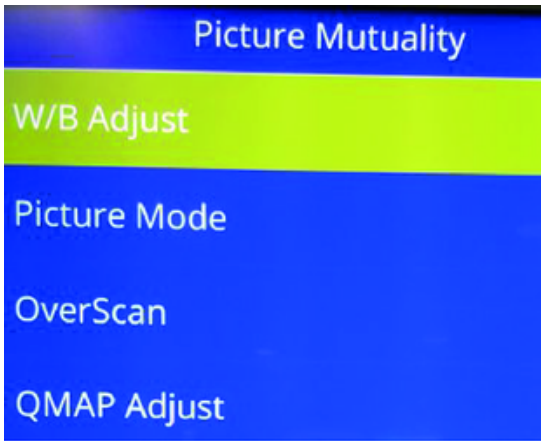


tessellated white and black

Note:

1. The YPBPR and PC's Auto White Balance adjust (AUTO ADC) must be done on the ☐ product line.
2. In YPBPR channel ,must adjust the SD and HD two modes.

5.1.2 Picture Mutuality



MODE	DTV
TEMPERATURE	Medium
R-GAIN	1024
G-GAIN	990
B-GAIN	1015
R-OFFSET	1024
G-OFFSET	1024
B-OFFSET	1024
COPY ALL	

No	Item	Description
1	W/B Adjust	Select W/B Adjust , go to the "MODE" item to select the channel which you want to adjust then ☐ select TEMPERATURE (Medium, Warm, Cool). Then press ▼ button to go to the items you want ☐ to adjust: R-GAIN ☐ G-GAIN ☐ B-GAIN ☐ R-OFFSET ☐ G-OFFSET ☐ B-OFFSET ☐ Press ◀/▶
2	Picture Mode	No adjust.
3	OverScan	Select OverScan , go to the "input source" item to select the channel which you want to adjust. Then press ▼ button to go to the items you want to adjust: Left Crop ☐ Right Crop ☐ Up Crop ☐ Down Crop ☐ Press ◀/▶ buttons can
4	QMAP Adjust	No adjust.

5.1.3 Audio Mutuality

- No adjust.

5.1.4 Non-Linear

- No adjust Press OK button to choose a backlight, volume, brightness, contrast, saturation, sharpness, hue and ☐ so on, press ◀/▶ buttons to nonlinear adjustment.

No	Item	Description
1	Brightness	Adjust the Brightness Curve.
2	Contrast	Adjust the Contrast Curve.
3	Saturation	Adjust the Saturation Curve.
4	Hue	Adjust the Hue Curve.
5	Sharpness	Adjust the Sharpness Curve.
6	Volume	Adjust the Volume Curve.
7	Backlight	Adjust the Backlight Curve.

5.1.5 VIF Initialization

- No adjust.

5.1.6 System Setting

No	Item	Description
1	HOTKEY	Press ◀/▶ button to switch factory hotkey on or off. For shipping condition, this item should be ☐ off.
2	AGING MODE	Press ◀/▶ button to switch aging mode on or off. When aging mode is on, press EXIT button to ☐ exit this mode.
3	Default Country	No adjust.
4	POWER ON MODE	Press ◀/▶ button to switch AC power on status. Memory is power on memorized, Seconda is ☐ power on standby, Direct On is power on always.
5	Country Setup	No adjust.
6	PQ FILE...update	No adjust.
7	HDCP Key Update	No adjust.
8	CI Plus Key Update	No adjust.
9	IP Enable Mapping	No adjust.
10	Mac Addr Update	No adjust.
11	3D	No adjust.
12	Linux TimeSource	No adjust.
13	Channels	No adjust.
14	SKY factory channel preset	No adjust.
15	Burn MAC	Press OK button from U disk write MAC.
16	Burn HDCP KEY	Press OK button from U disk write HDCP KEY.
17	Burn WIDI KEY	Press OK button from U disk write WIDI KEY.
18	Burn CI KEY	Press OK button from U disk write CI KEY.
19	Burn ALL(MAC HDCPKEY WDID CI KEY)	Press OK button from U disk write MAC ,HDCPKEY, WDID and CI KEY.

5.1.7 Panel Control

No	Item	Description
1	WHITE PATTERN	No adjust. For shipping condition, this item should be off.
2	SSC Setting	Press OK to set the appropriate EMC values.
3	6M30 SSC Setting	No adjust.
4	Gplus Mode	No adjust.

5.1.8 Others

No	Item	Description
1	Uart Enable	Press ◀/▶ button to switch Uart Enable on or off.
2	Uart BUS	Press ◀/▶ button to switch Uart BUS on or off.
3	Uart Msg Setting	No adjust.
4	Restore to Default	Press OK to execute factory reset.
5	AVD PAPAMETER	No adjust.
6	WDT	No adjust.
7	Mount Config	No adjust.
8	Customer Info	No adjust.
9	Unique Key Reencrypt	No adjust.
10	PIP/POP	No adjust.
11	PVR-Record All	No adjust.
12	SECURE WRITE	No adjust.
13	RAM Log	No adjust.

14	SW Information	No adjust.
15	Update Logo	No adjust.
16	Backup Date	No adjust.
17	Restore Date	No adjust.

5.1.9 Customer Setting

No	Item	Description
1	Gamma Table	No adjust.

5.1.10 CI Factory Setting

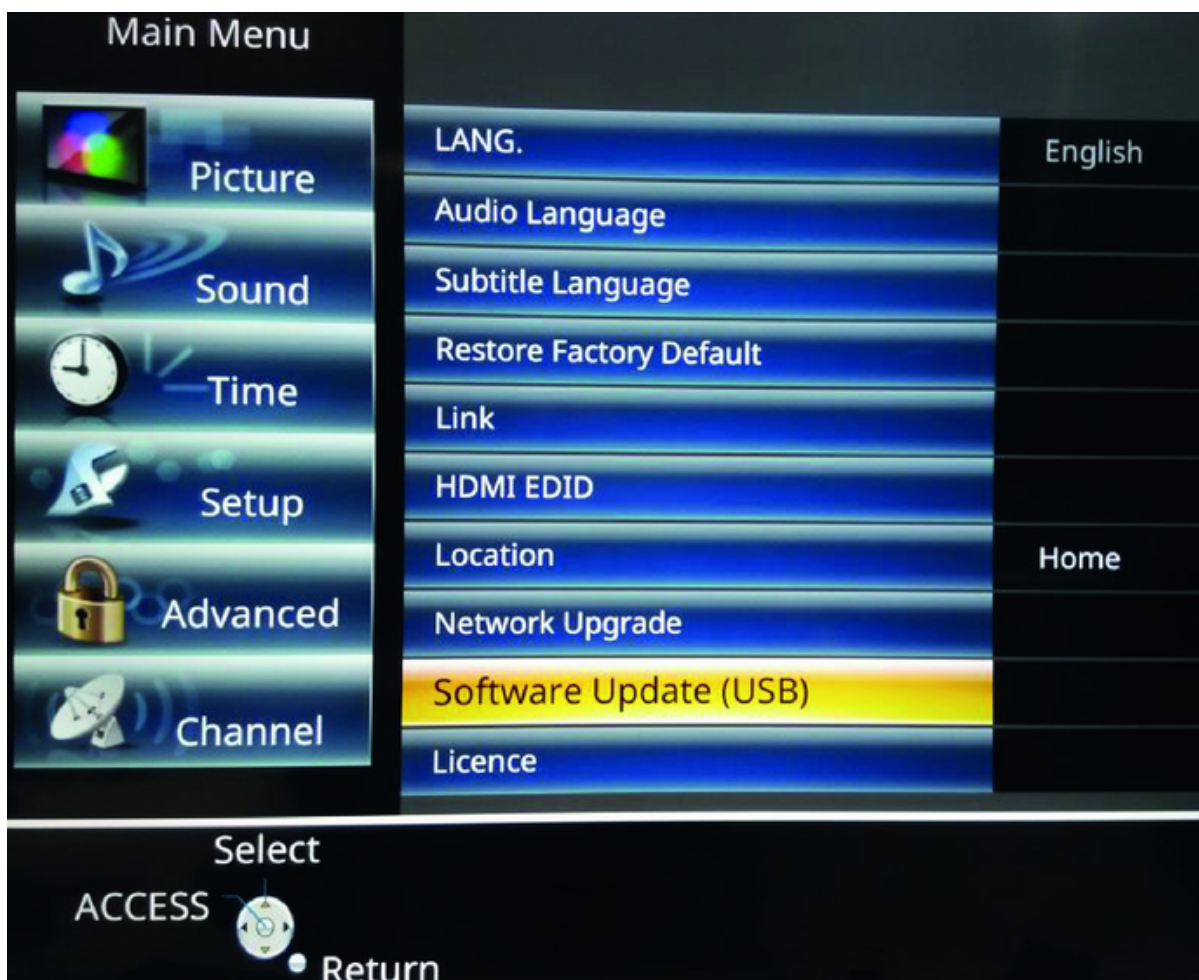
- No adjust.

5.2 MSD6488 Software Upgrade Instruction

5.2.1 Upgrade bin file

The file name of the upgrade bin is "MstarUpgrade.bin" for USB upgrade.

5.2.2 USB upgrade procedures for TV set



1. Copy the software to the root directory of a USB memory stick. Plug the memory stick to ☐ USB port of target TV set.
2. Select 'Software Update(USB)' on OSD and press OK button to start software update. TV ☐ will reboot automatically when upgrade finishes.
3. If the process stop at 19% and TV reboot, it means the software of both TV set and USB ☐ memory stick is the same.

5.3 Hotel Mode

- Enter Hotel Mode: MENU+7906
Enter Hotel Mode State:





No	Item	Description
1	Hotel Mode	Press ◀/▶ button to turn on or turn off hotel mode.
2	Initial INPUT	Press ◀/▶ button to switch power on source.
3	Initial POS	Only available when Initial INPUT switch to ATV. Press ◀/▶ button to set power on TV channel.
4	Initial VOL Level	Press ◀/▶ button to set power on volume.
5	Maximum VOL Level	Press ◀/▶ button to set maximum volume user can adjust.
6	Button Lock	Press ◀/▶ button to lock or unlock panel buttons.
7	Remote Lock	Press ◀/▶ button to lock or unlock remote control. When on, only hotel mode is available (MENU+7906).
8	Auto Power On	Press ◀/▶ button to set power on status. Last is power on memorized, Off is power on standby, On is power on always.
9	RS232	Press ◀/▶ button to switch RS232 on or off. When RS232 switched to on, TV system need to reboot and Uart BUS in factory menu should be switched to On. For command 'Power ON' which is only available when monitor
10	LOGO	Press ◀/▶ button to switch LOGO on or off.
11	BL A OUT	Press ◀/▶ button to switch BLA OUT on or off.
12	Speaker out	Press ◀/▶ button to switch Speaker out on or off.
13	Ear Out Audio	Press ◀/▶ button to select the FIX or VAR model.
14	Ten Key/CH Key	Press ◀/▶ button to Ten Key/CH Key on or off.
15	Input Select Mode	Press OK to enter Input Select Mode. User can turn on or turn off input source in input menu.

6 Troubleshooting Guide

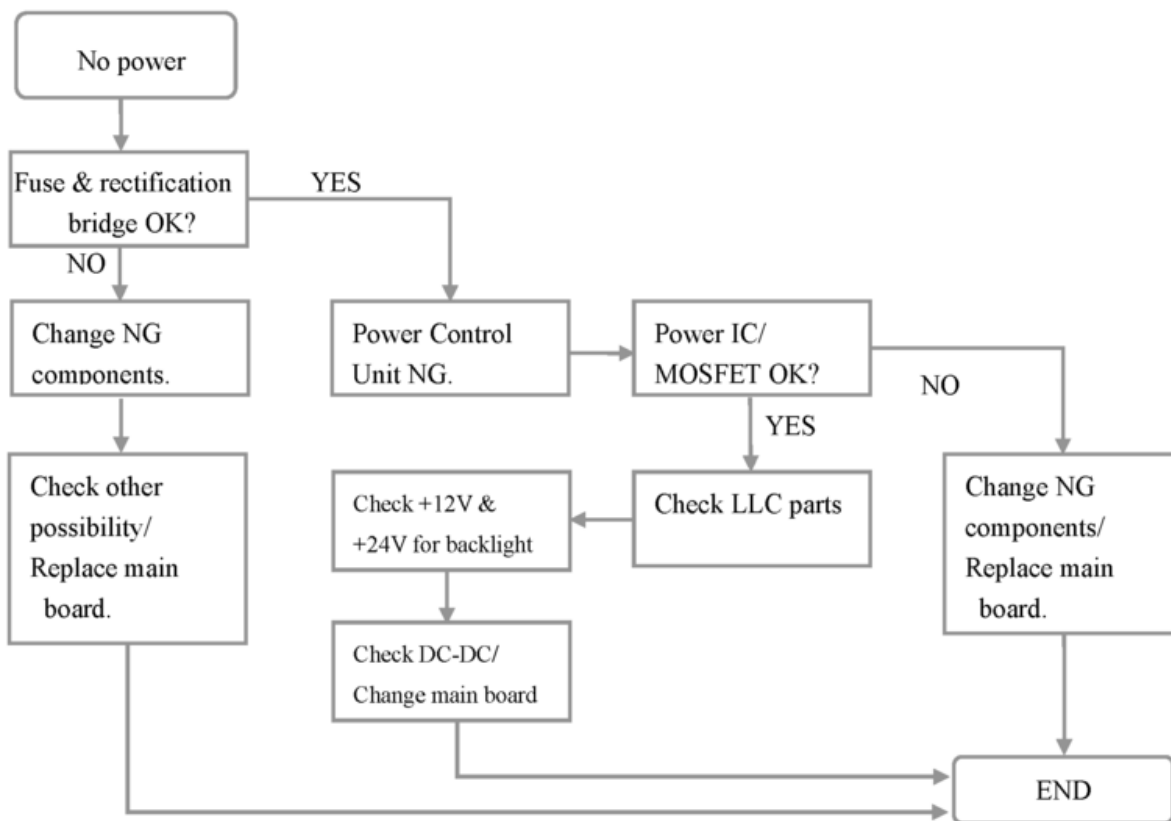
These flow charts may not match every single defeat TV set, but they can give you useful advices when you meet the same defeats described on the titles below.

Terms:

- IR: Infrared Receiver
- RC: Remote Control
- IR logic: IR blink with RC action
- LVDS: Low Voltage Differential Signal, output from processor and input for panel
- O/C: Open Cell, panel with source board
- BL: Back Light, light source for panel module g.g f p
- LB: LED (Light Emitting Diode) Bar, light source for BL module
- VBL: Voltage for Back Light (before Boost)
- VLED: Voltage for LED (after Boost)
- OVP: Over Voltage Protection
- OSD: On Screen Display
- AMP: Amplifier

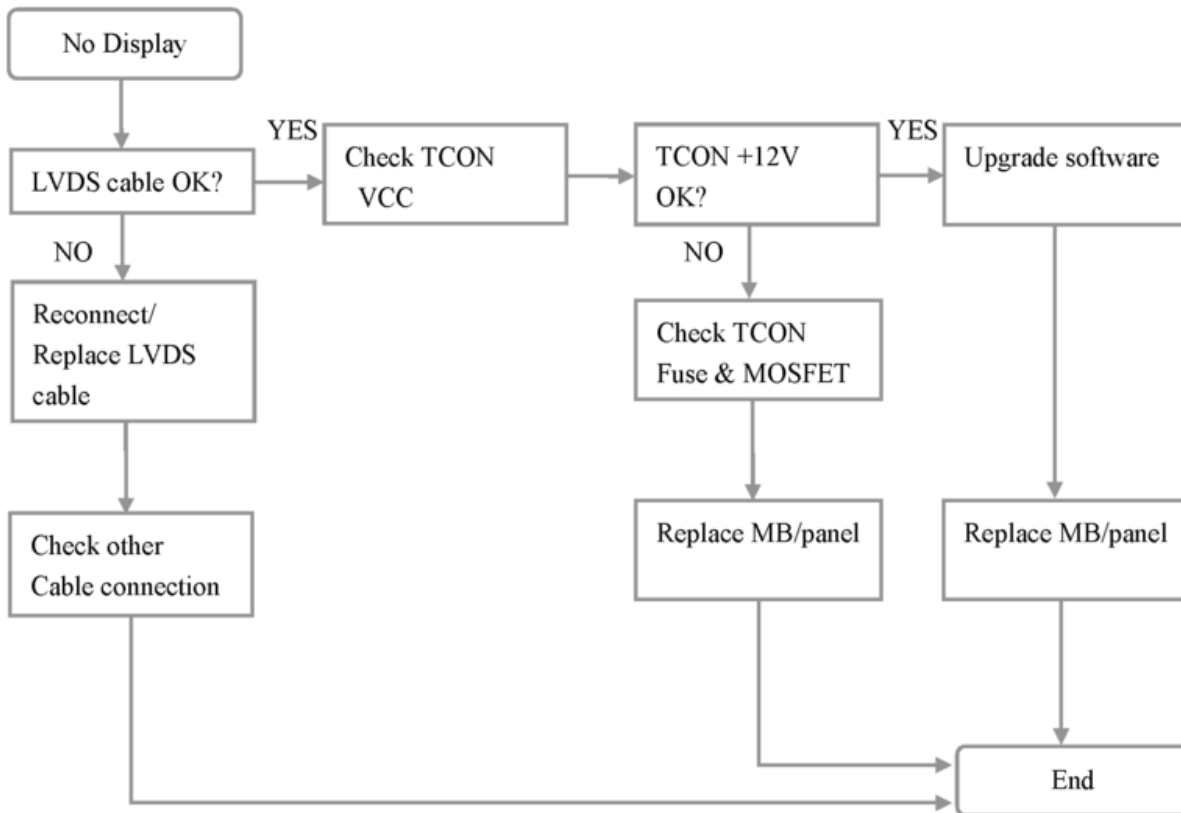
6.1 No Power.

No power LED, RC or Key can not turn on TV. Power LED no light/no change.



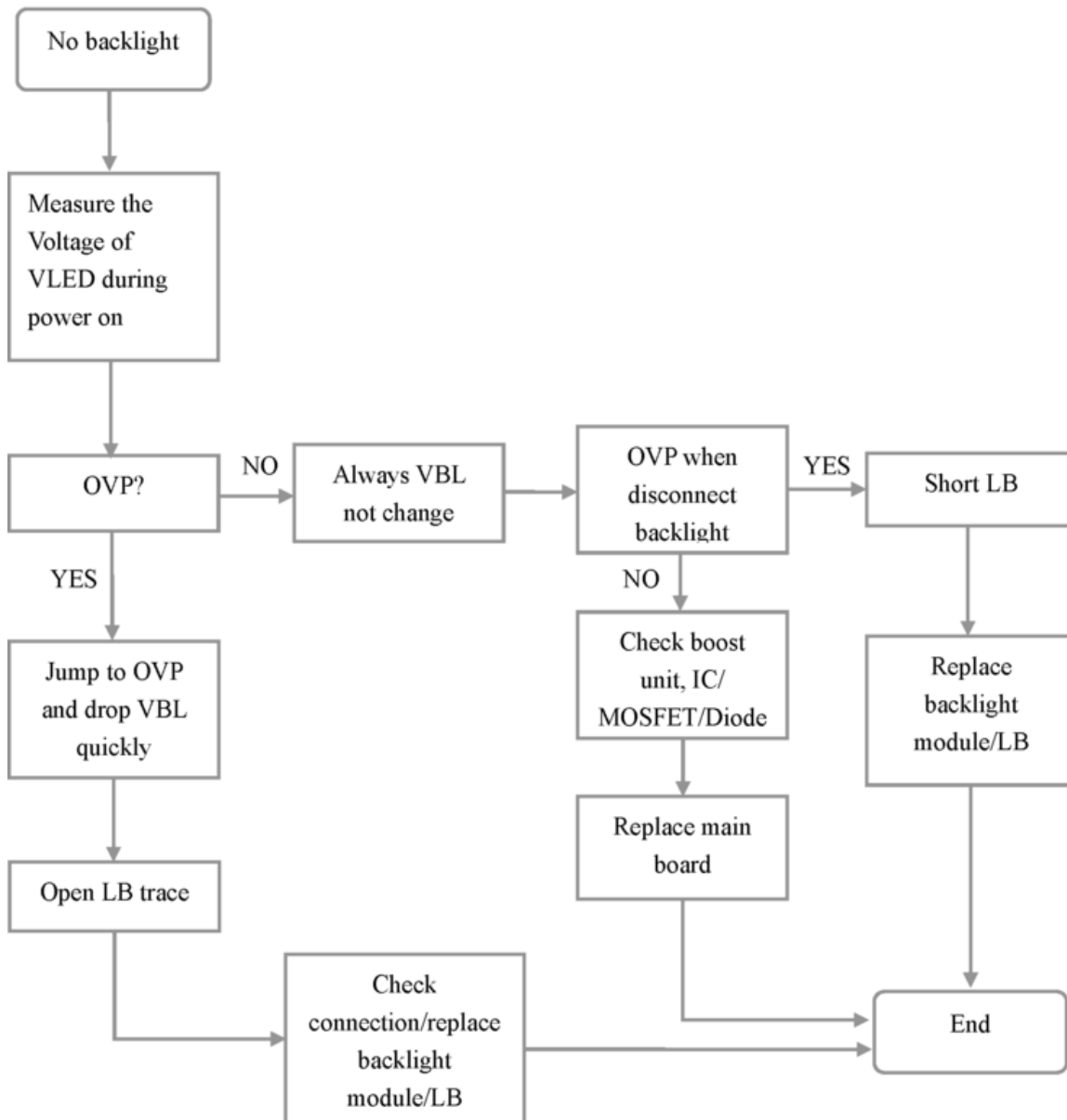
6.2 No Display / Black Panel.

Back light is OK, sound is OK, but no picture.



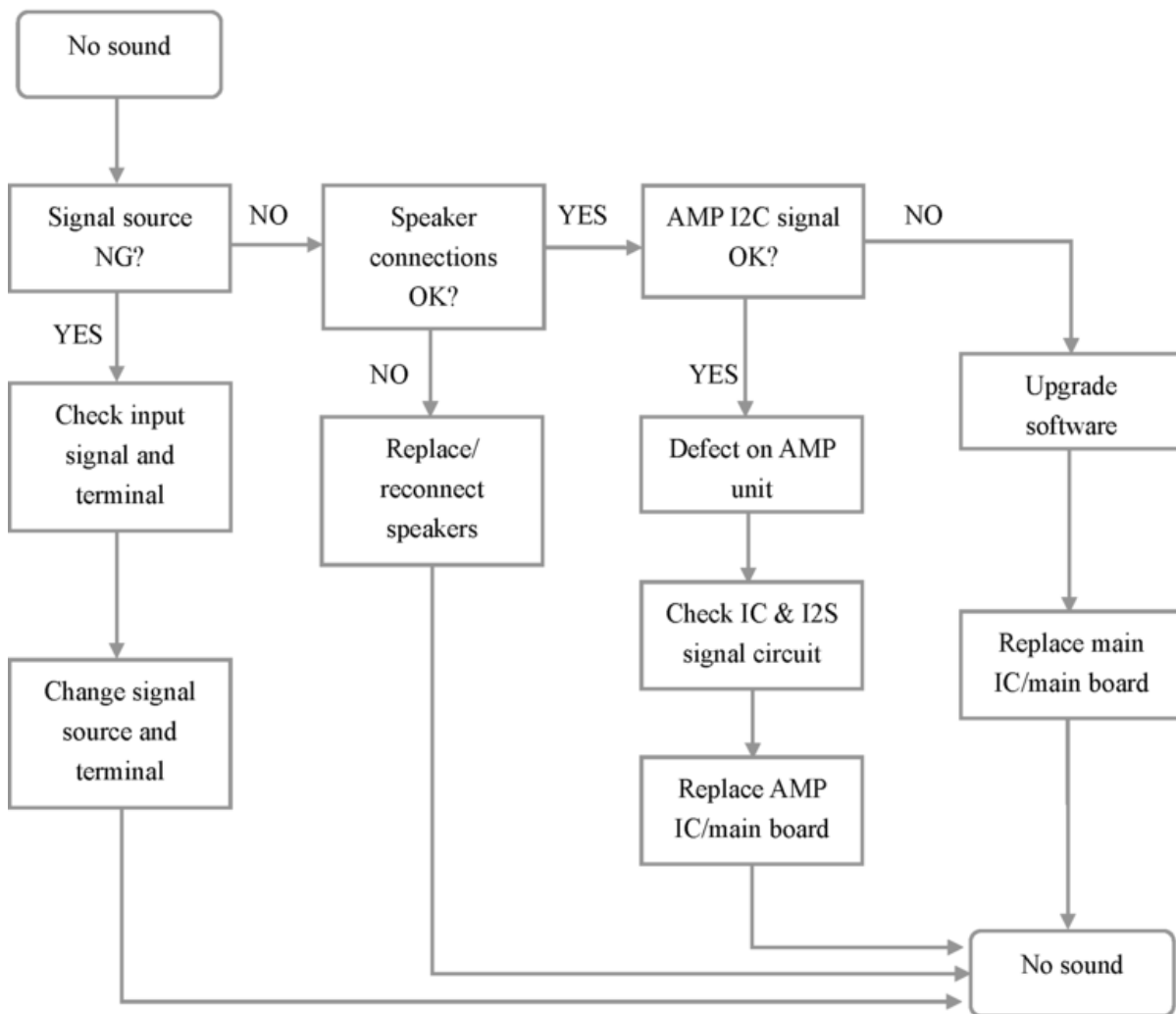
6.3 No Back Light.

Power LED logic OK, sound OK, but no picture(Different from No Display). Power LED logic OK, sound OK, but no picture (Different from No Display).

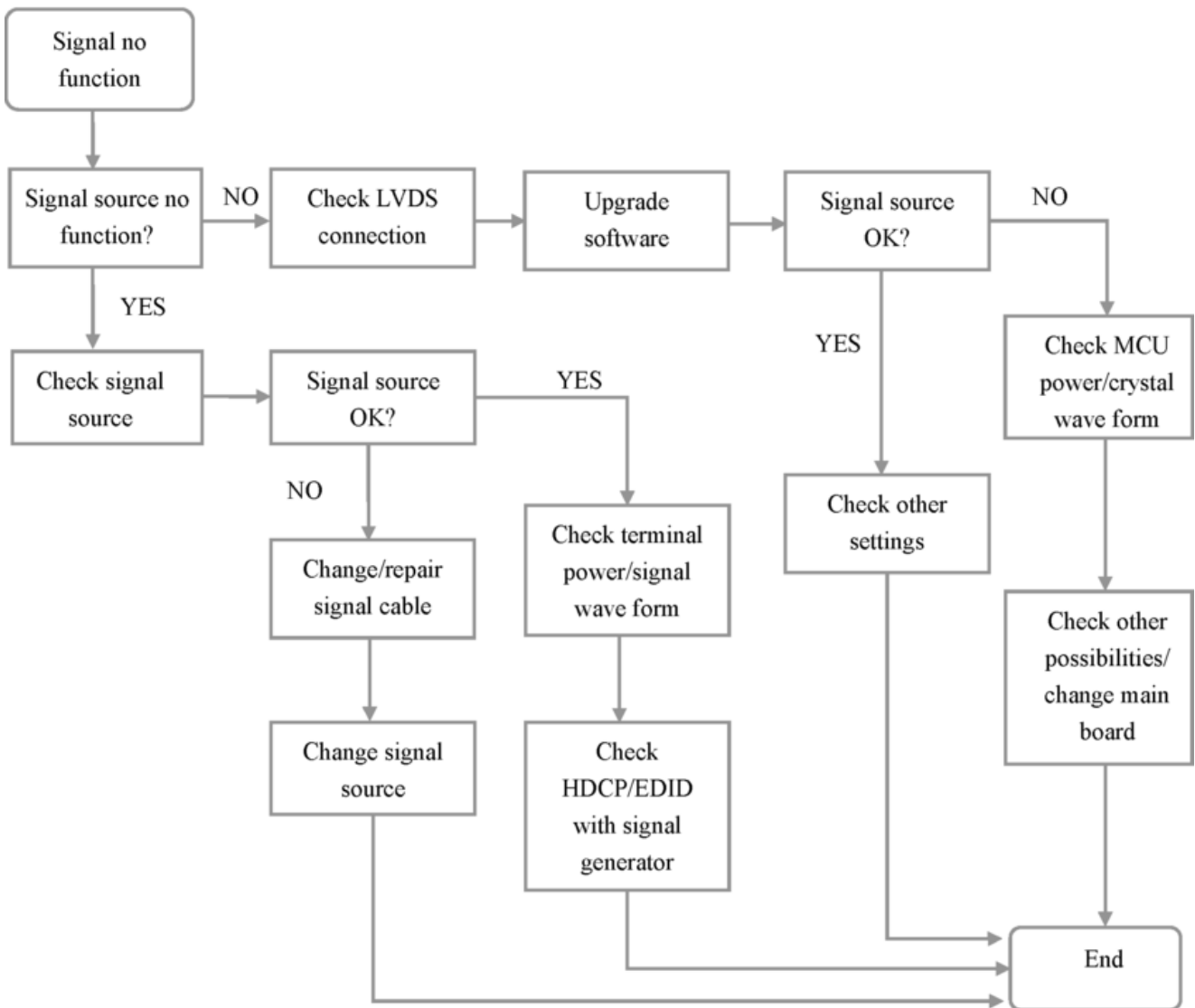


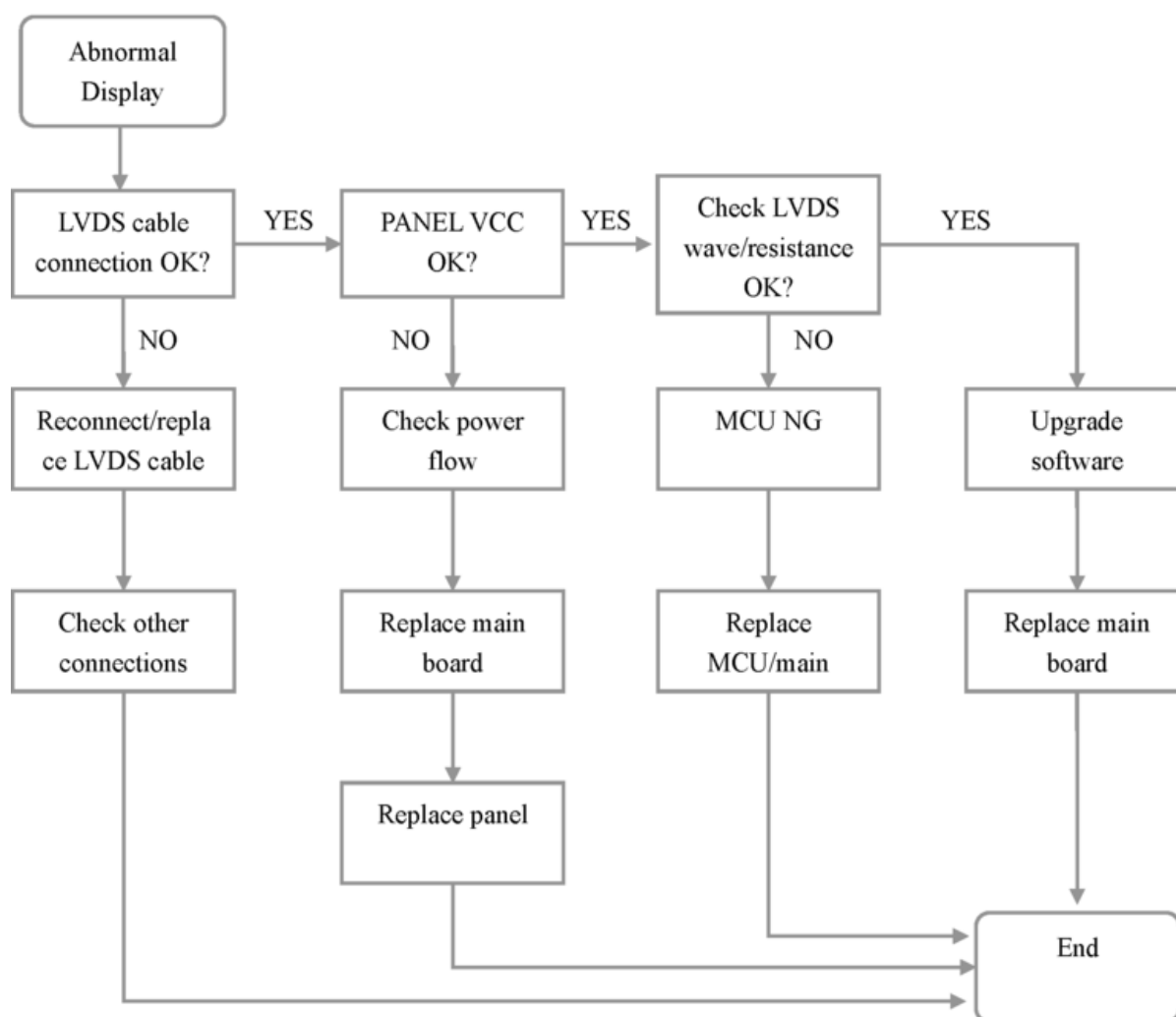
6.4 No Sound.

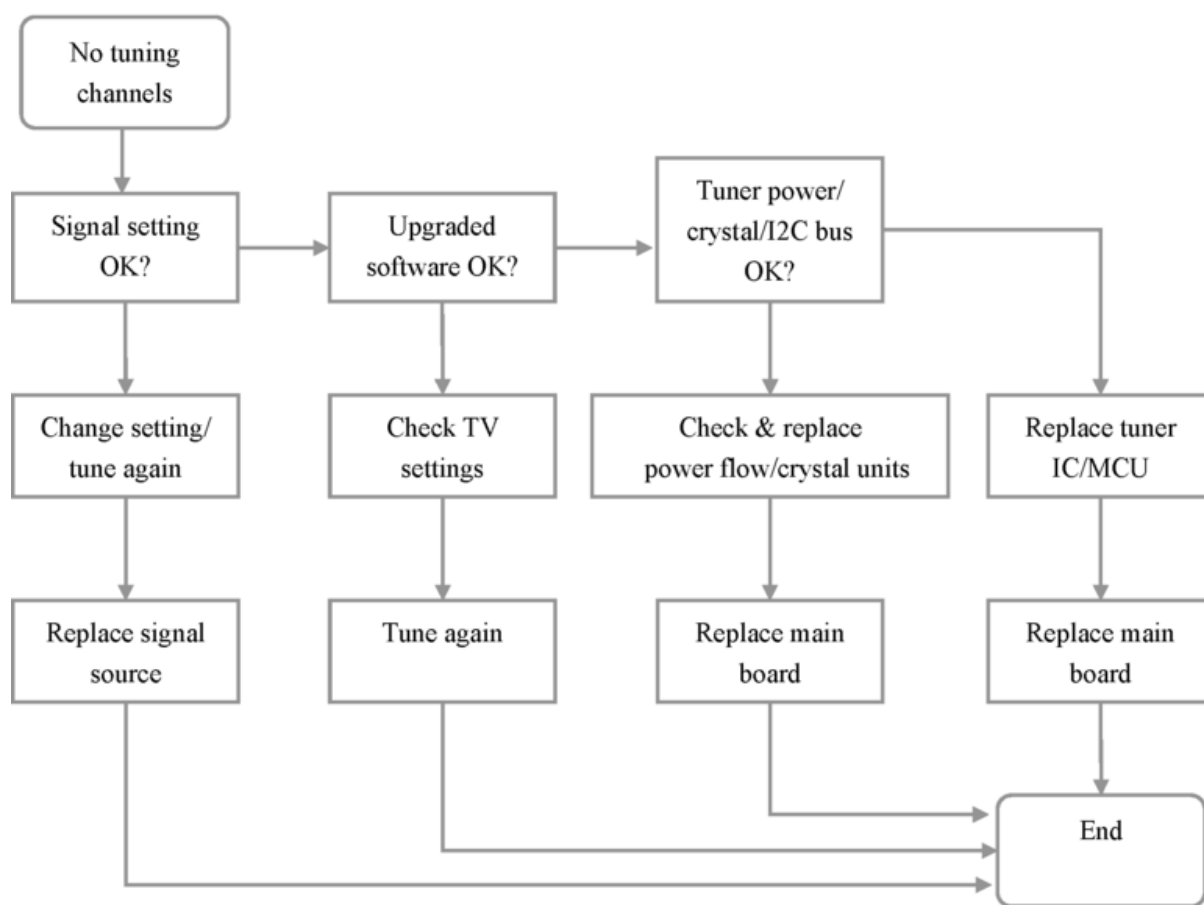
One or all signal source without sound.



6.5 Signal source no function

One or several source no function.**6.6 Abnormal Display**

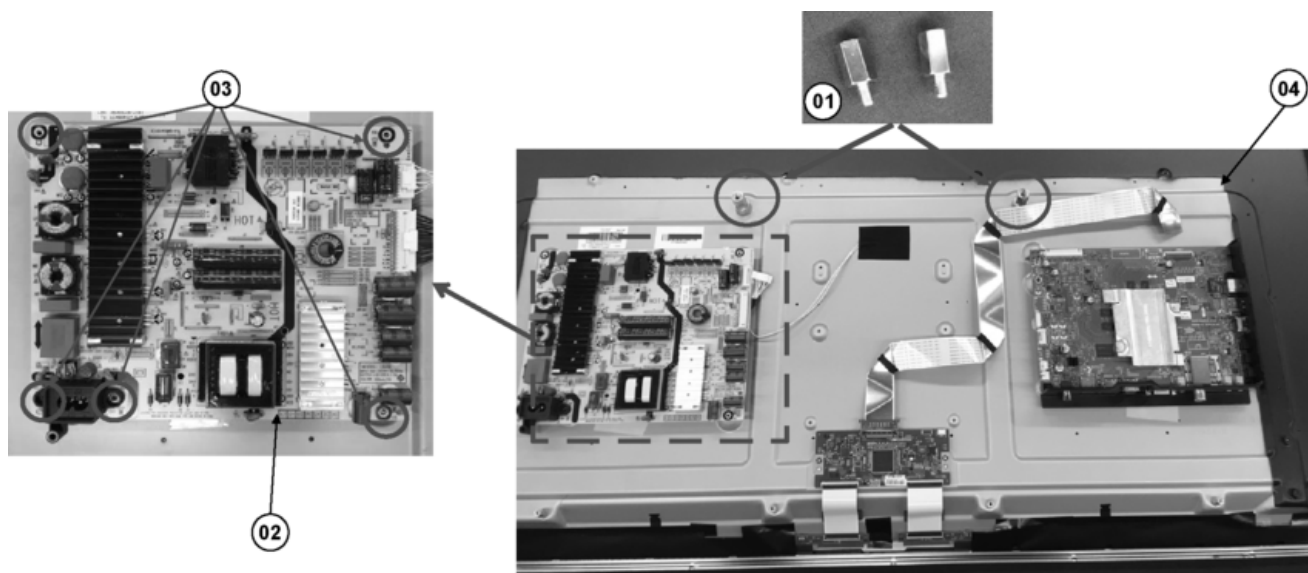
OSD NG or picture NG.**6.7 No Tuning Channels**

DTV or ATV no Channels.

7 Disassembly and Assembly Instructions

7.1 Power Board Assembly

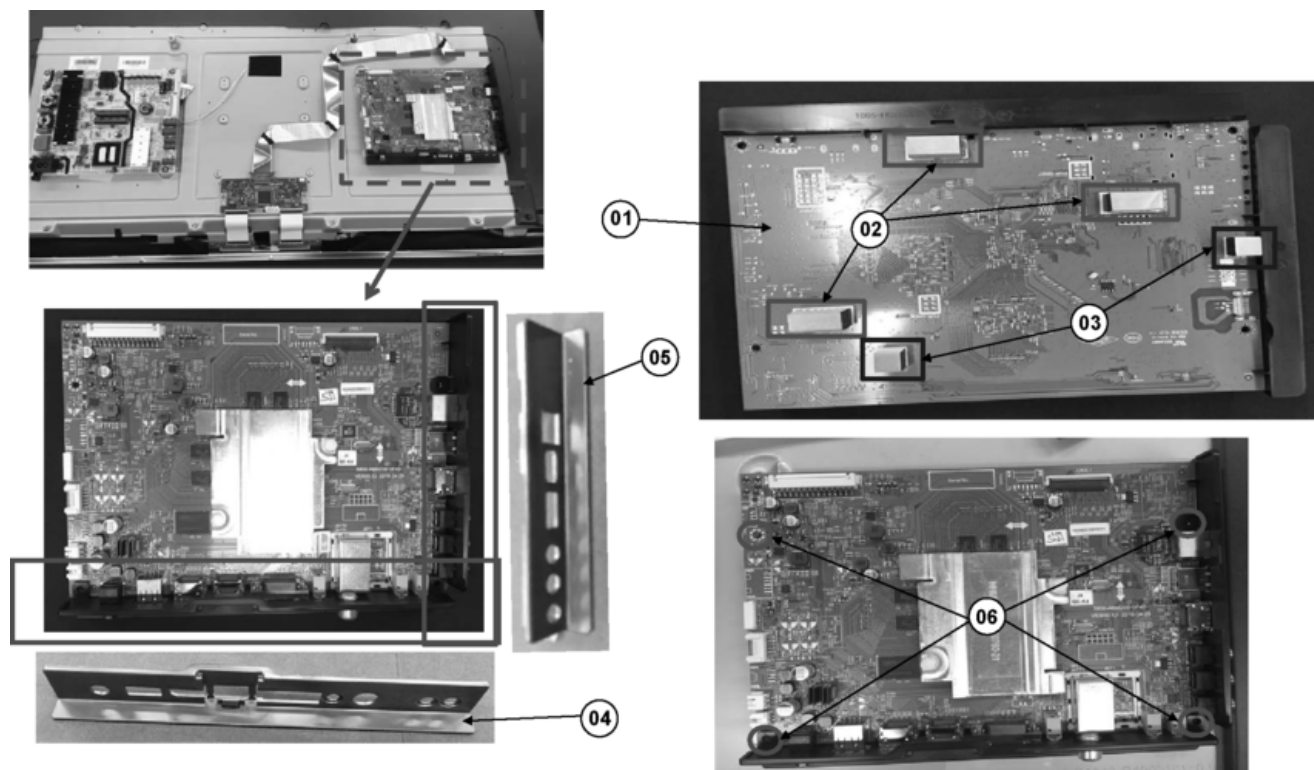
1. Fix Screw to the Panel.
2. Fix Power Board and then screw it.



No	Decription	Qty	Remark
01	SCREW HM6 x19 (M6) HARDEN	2	
02	(HI) POWER ASS'Y 168P-L5L01H-W0	1	
03	WM 3 X 10 WITH PLAIN WASHER AND SPRING W	5	3±2 kgf.cm
04	49" SKY-RGB LCD MNG001 W/Panasonic RDL49	1	

7.2 Main Board Assembly

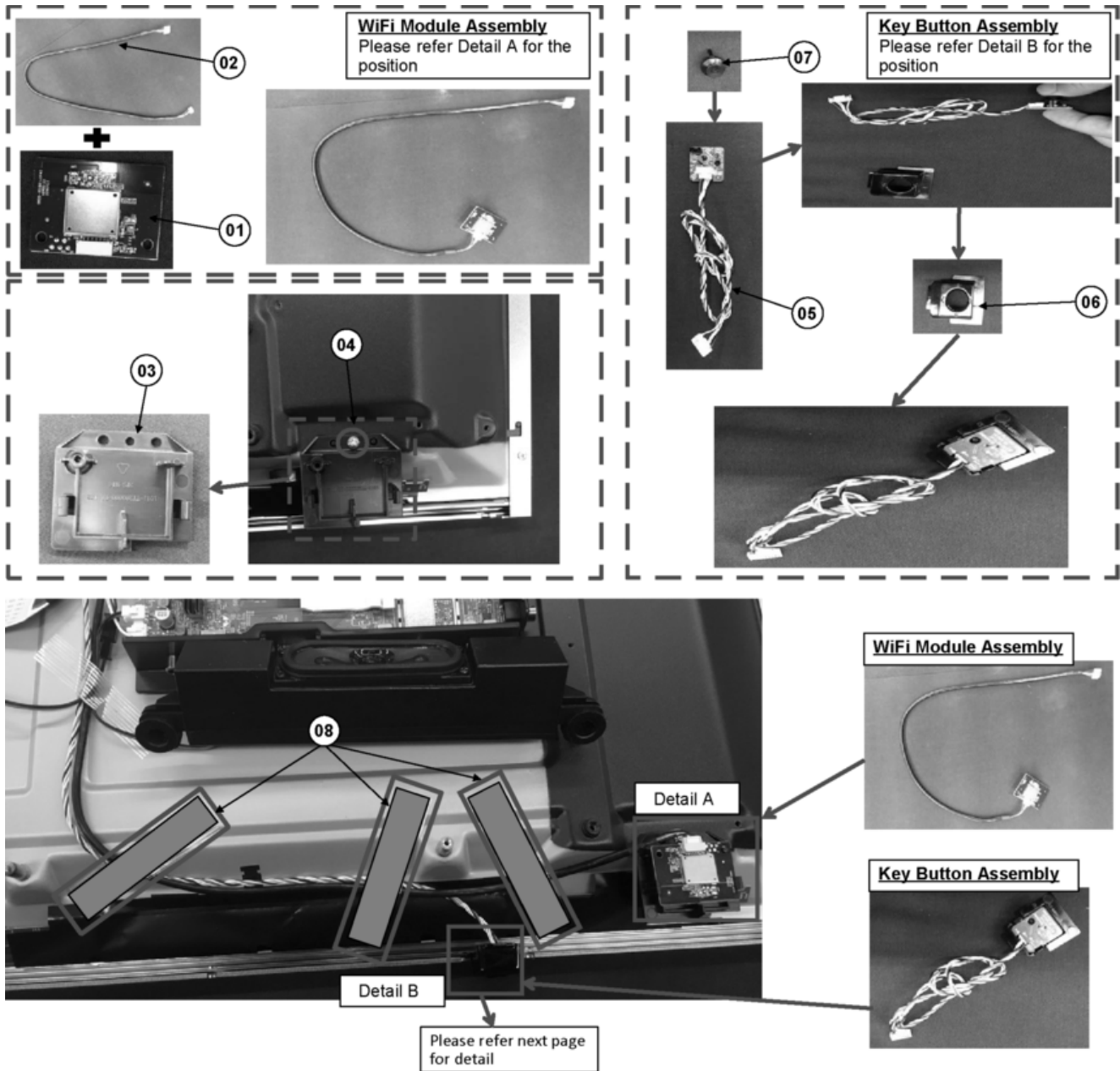
1. Stick Conductive Sponge at the Main Board back side following the spec.
2. Insert BTM & SIDE AV Bracket
3. Fix the board to the panel, and then screw.



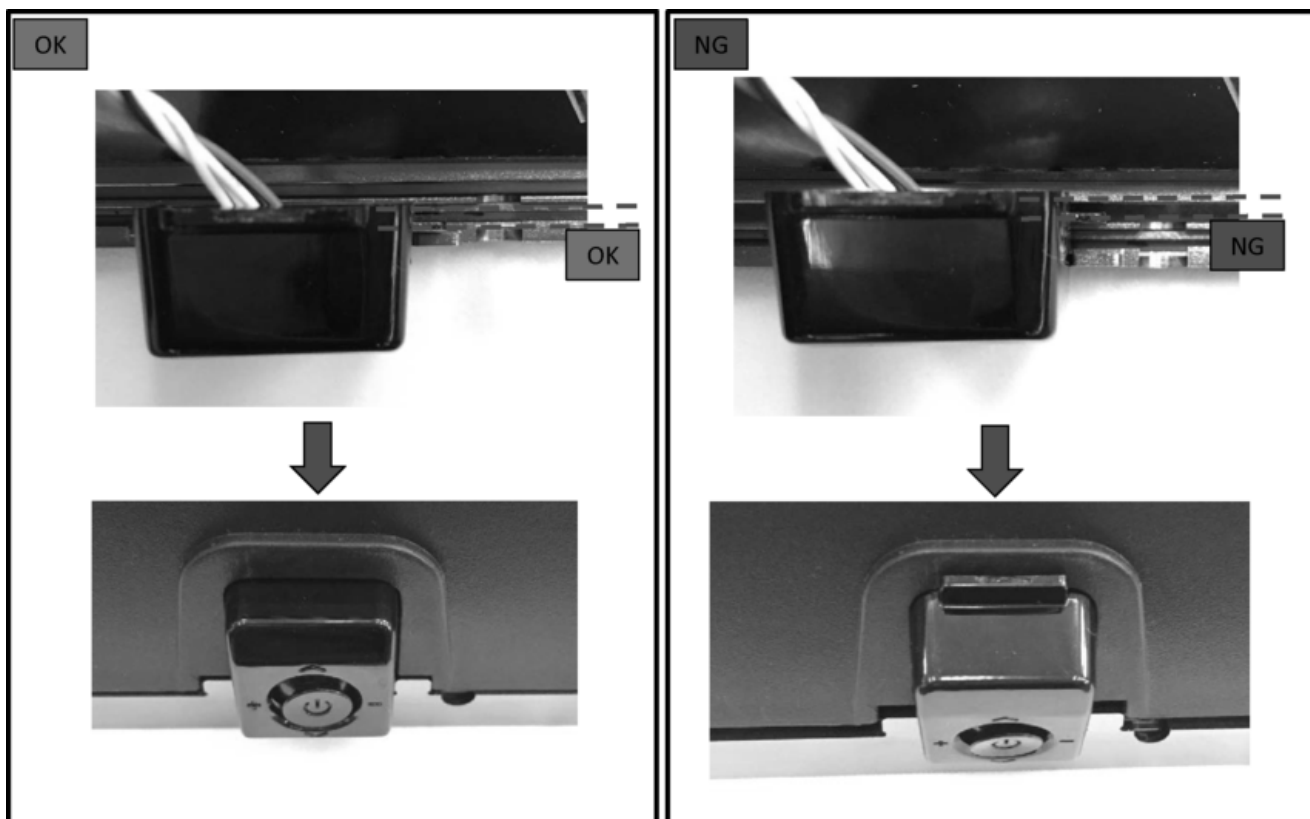
No	Decription	Qty	Remark
01	(HI) MAIN BOARD ASEMBLE	1	(T0.1+W10+L30)
02	CONDUCTIVE SPONGE	3	10x12x20 mm
03	CONDUCTIVE SPONGE	2	10x10x12 mm
04	BTM AV BKT HIPS(94-V0)	1	
05	SIDE AV BKT HIPS(94-V0)	1	
06	WM 3 x 10	4	3±2 kgf.cm

7.3 WIFI and Key Button Assembly

1. Assemble the WiFi Module accordingly.
2. Assemble the Key Button accordingly.
3. Fix the WIFI bracket, then screw.

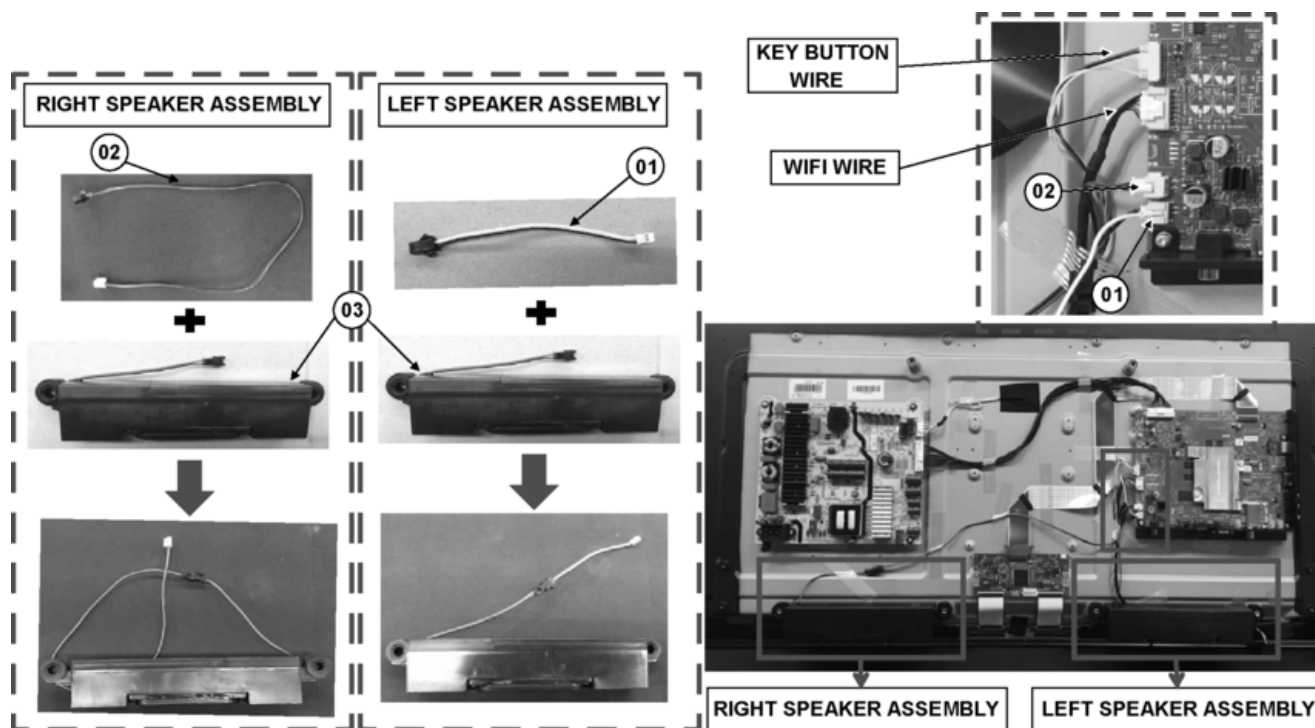


No	Decription	Qty	Remark
01	INSIDE WIFI MODULE NTUD-B3 W/RTL8188ETV	1	
02	HOUSING 06(1.25)+ HOUSING 06(2.0)+ 500MM	1	
03	WIFI BKT.HIPS	1	
04	PM3 x 6	1	3±2 kgf.cm
05	6M20T-49E560(HI)RECEIVER BOARD ASSEMBLY	1	
06	F.LENS PC TRANSPARENT+TEA543 QE20A000-PA	1	
07	CTRL.KEY BKT ABS HNB003 CE300000-PA 32E3	1	
08	3M - FILAMENT TAPE 18mm x 55m	3	0.24 m



7.4 Speaker and Wire Installation

1. Assemble the speaker the fix to position.
2. Fix wire to the board.

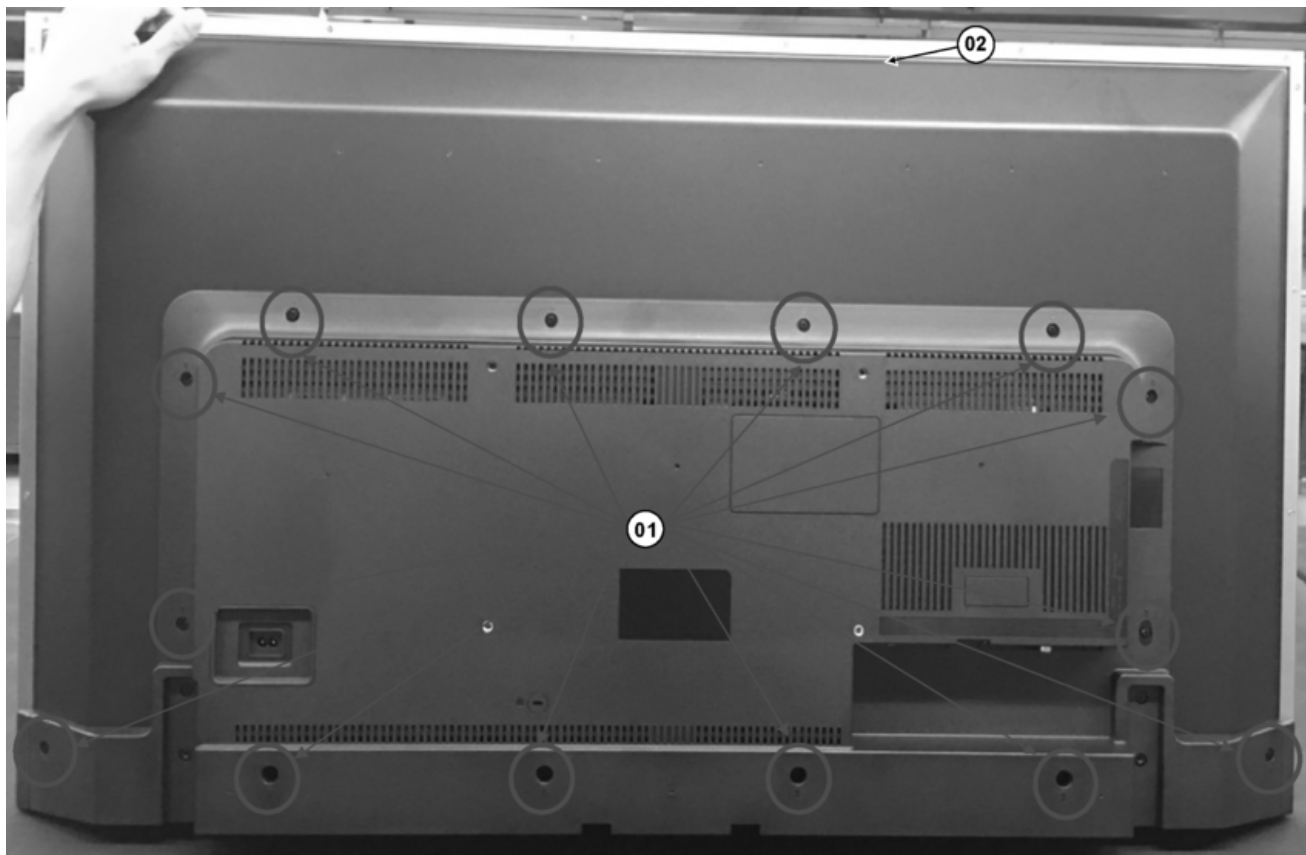


No	Decription	Qty	Remark
01	HOUSING 02(2.0 W/BUCKLE) + HOUSING 02 (2.5)	1	
02	HOUSING 02(2.5 W/BUCKLE)+ HOUSING 02(2.5)	1	

03	SPEAKER BOX 6 OHM 10W MAX 12W 32x190x43	2
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7.5 Back Cover Installation

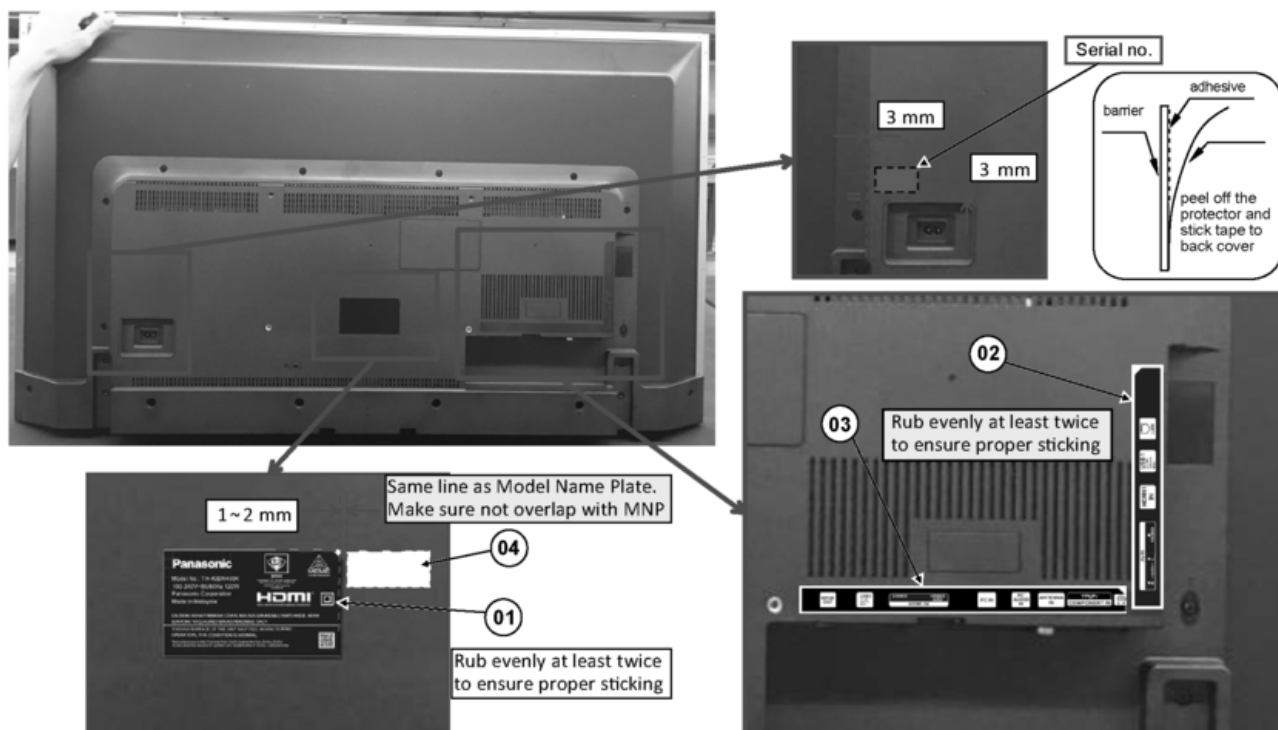
1. Screw the Back Cover following the torque.



No	Decription	Qty	Remark
01	SCREW AM3 x 6 NYLOK BLACK	14	3.5±1 kgf.cm
02	B.CAB HIPS(94-V0) DG001 TB200000-PA2 49E	1	

7.6 Label Sticking

1. Stick Model Name Plate, Side AV and Btm AV Sheet.



No	Decription	Qty	Remark
01	BACK COVER LABEL "Panasonic"	1	
02	INLAY-SIDE AV	1	
03	INLAY-BTM AV	1	
04	DIGITAL LICENCE LABEL	1	TH-49DX400T

7.7 Handling SPEC

Moving the LCD module

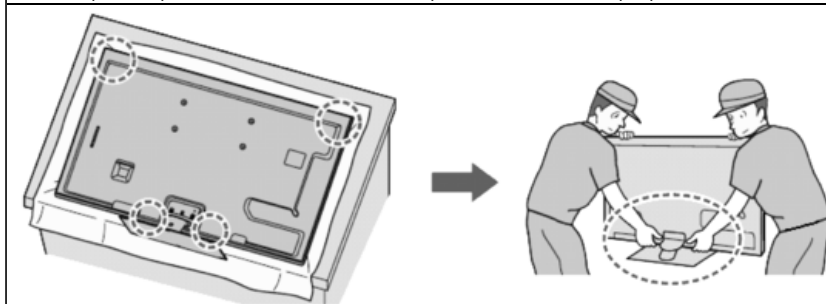
The module should be handle by two people and hold on that top and bottom long side by both hands without module warping. Never handle the module with keeping horizontal position when moving the module

About the work table

When tightening a screw, retention structures are required not to deform the LCD module.

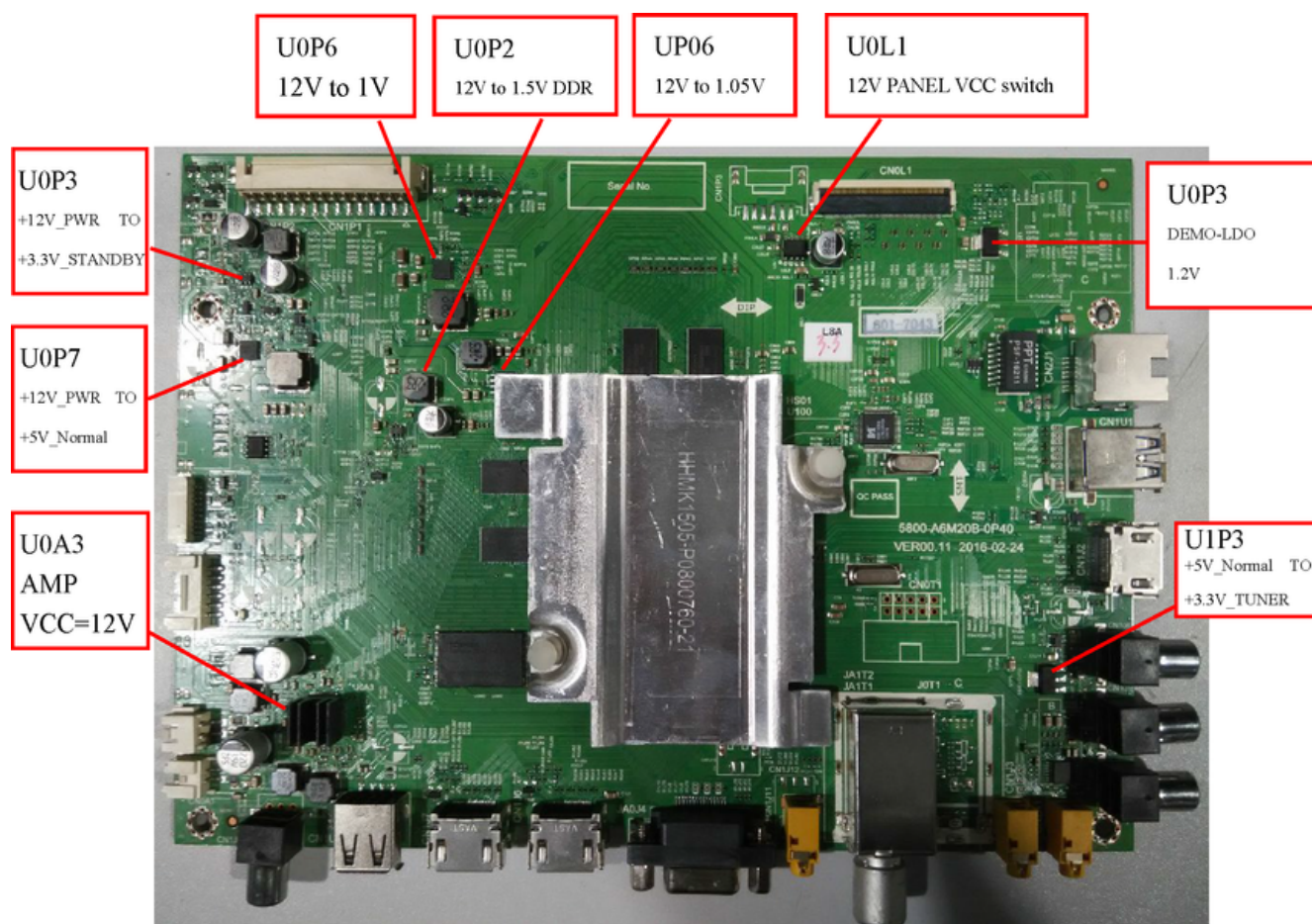
Moving the TV (Case with a stand)

Hold the specified parts as shown to stand the TV up and move it with two people.



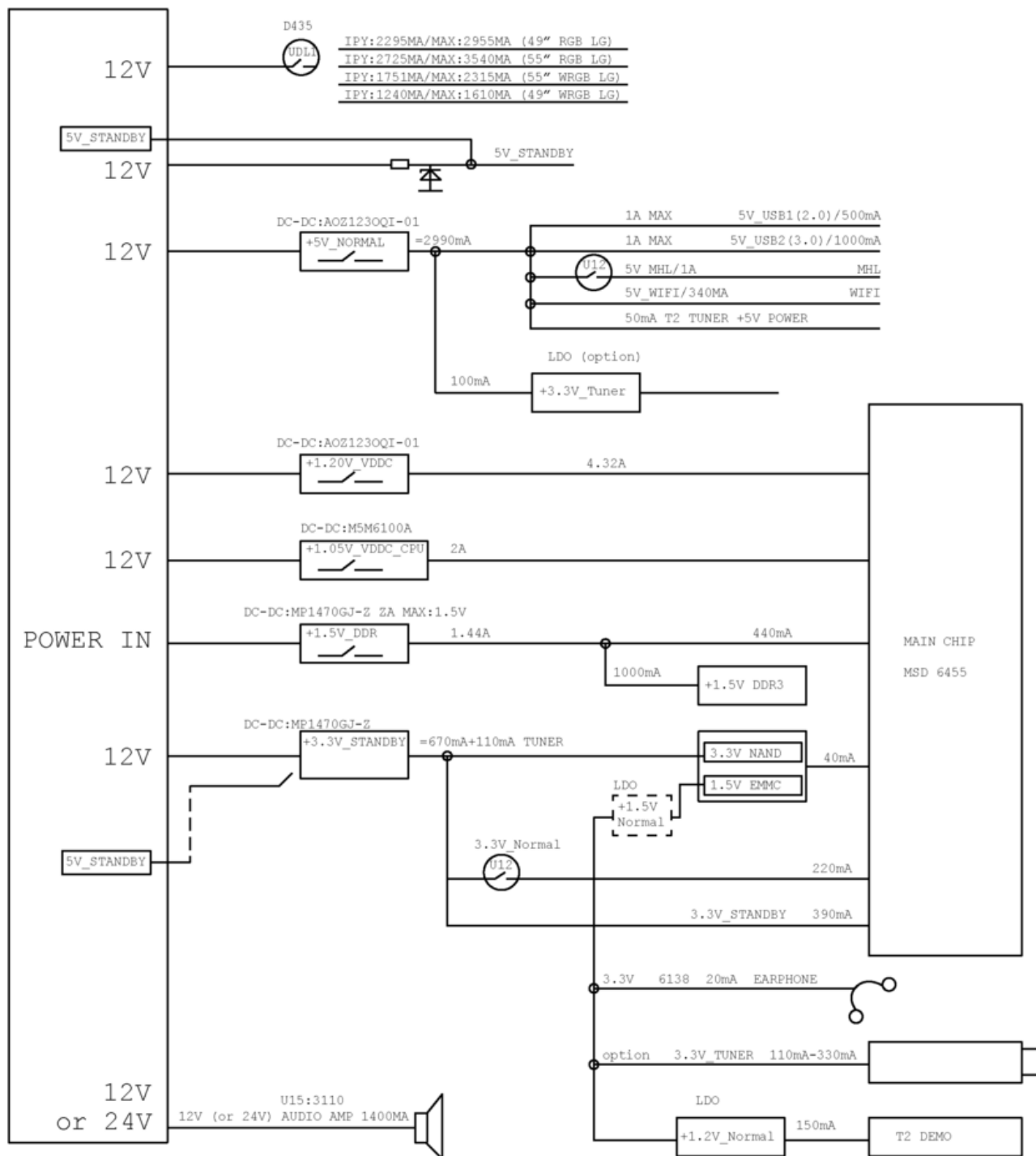
8 Measurements and Adjustments

8.1 Key Check Points



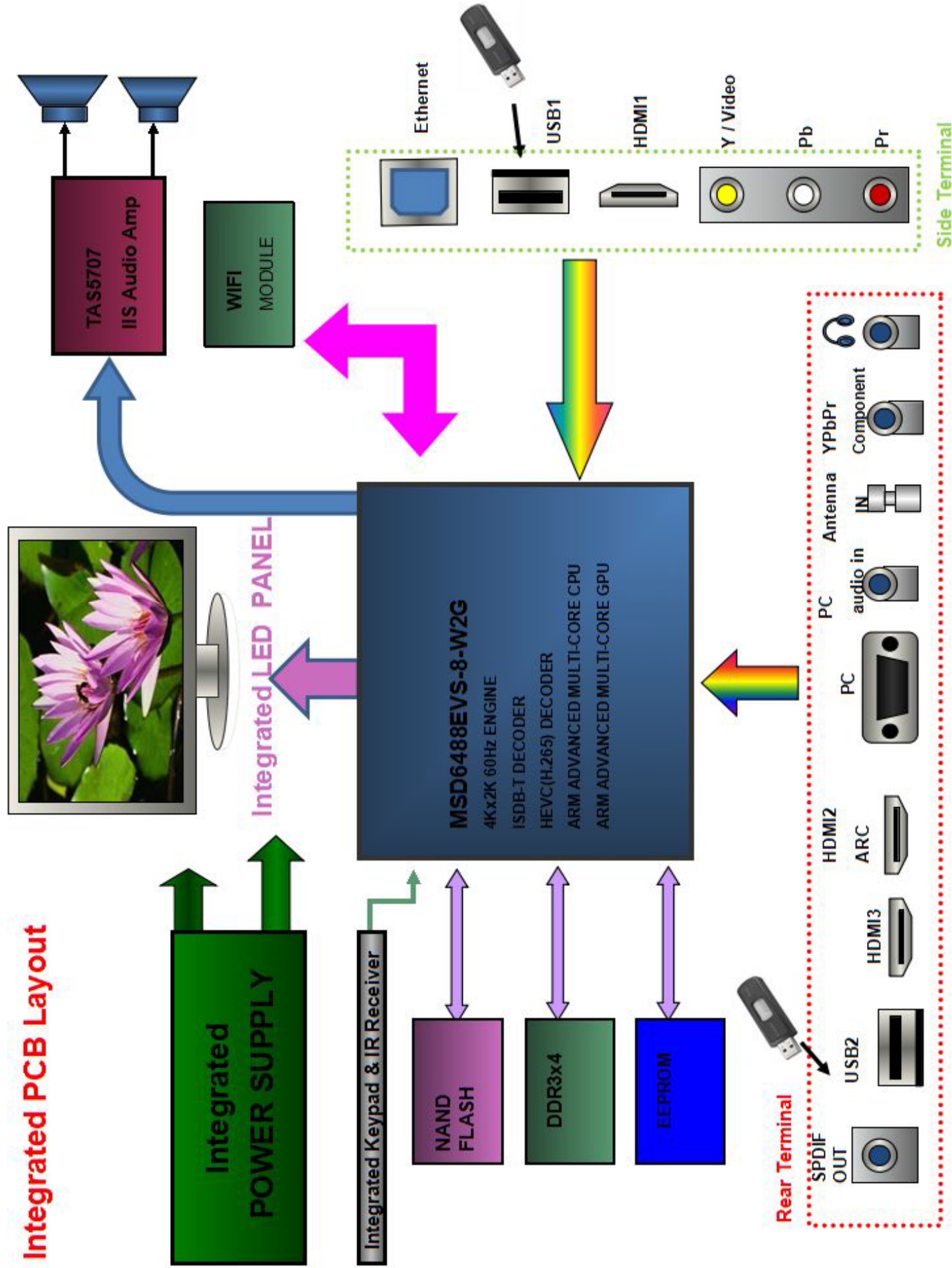
8.2 Power Flow Diagram

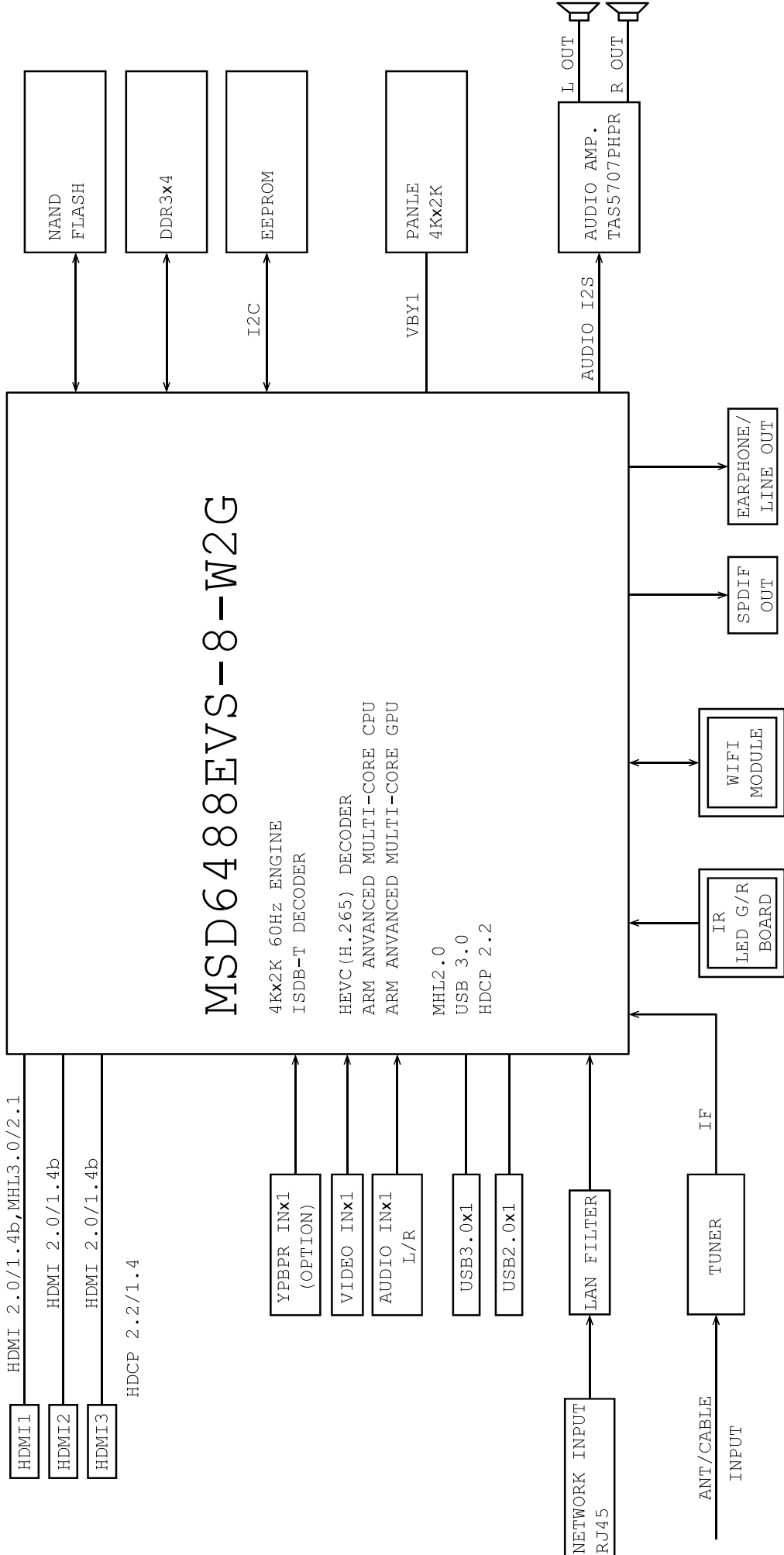
Power Tree



MSD6488 SMART TV POWER TREE

Integrated PCB Layout

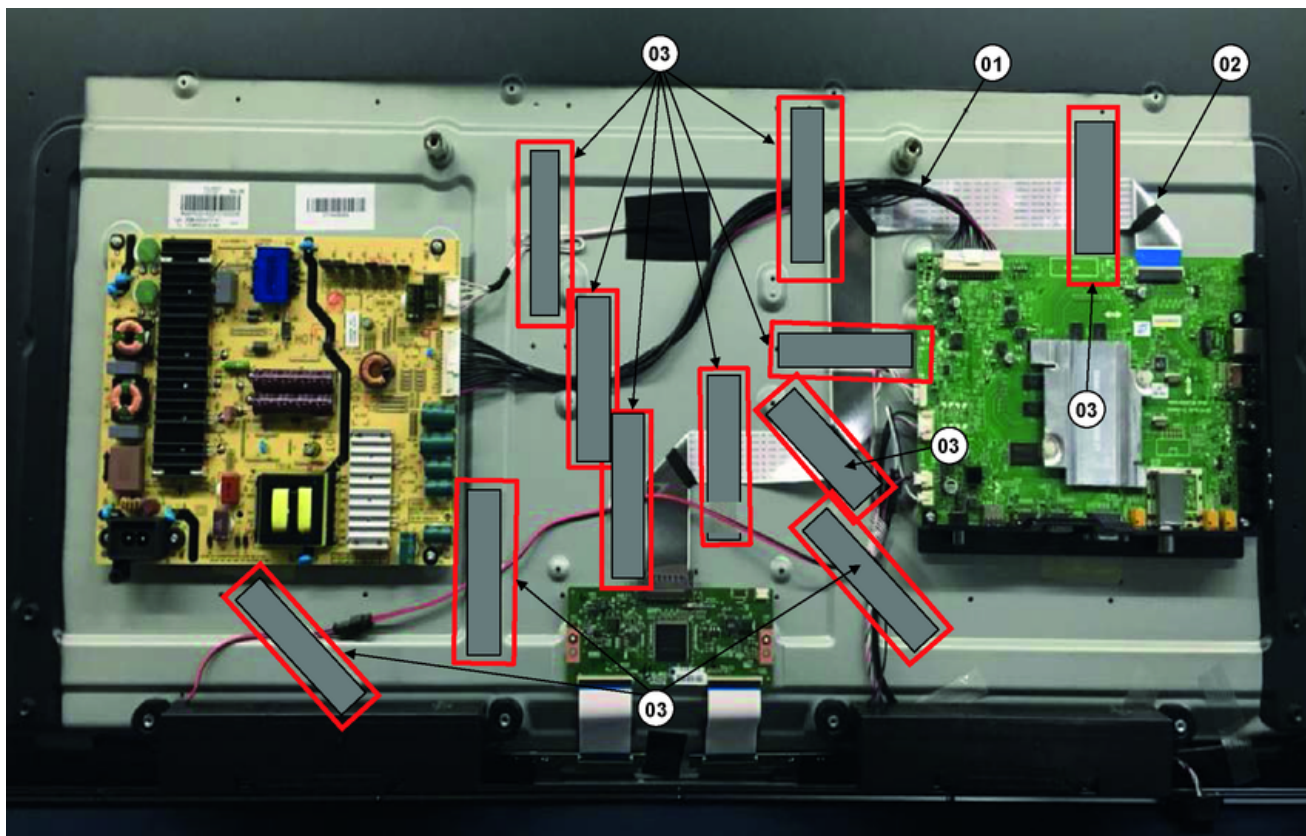




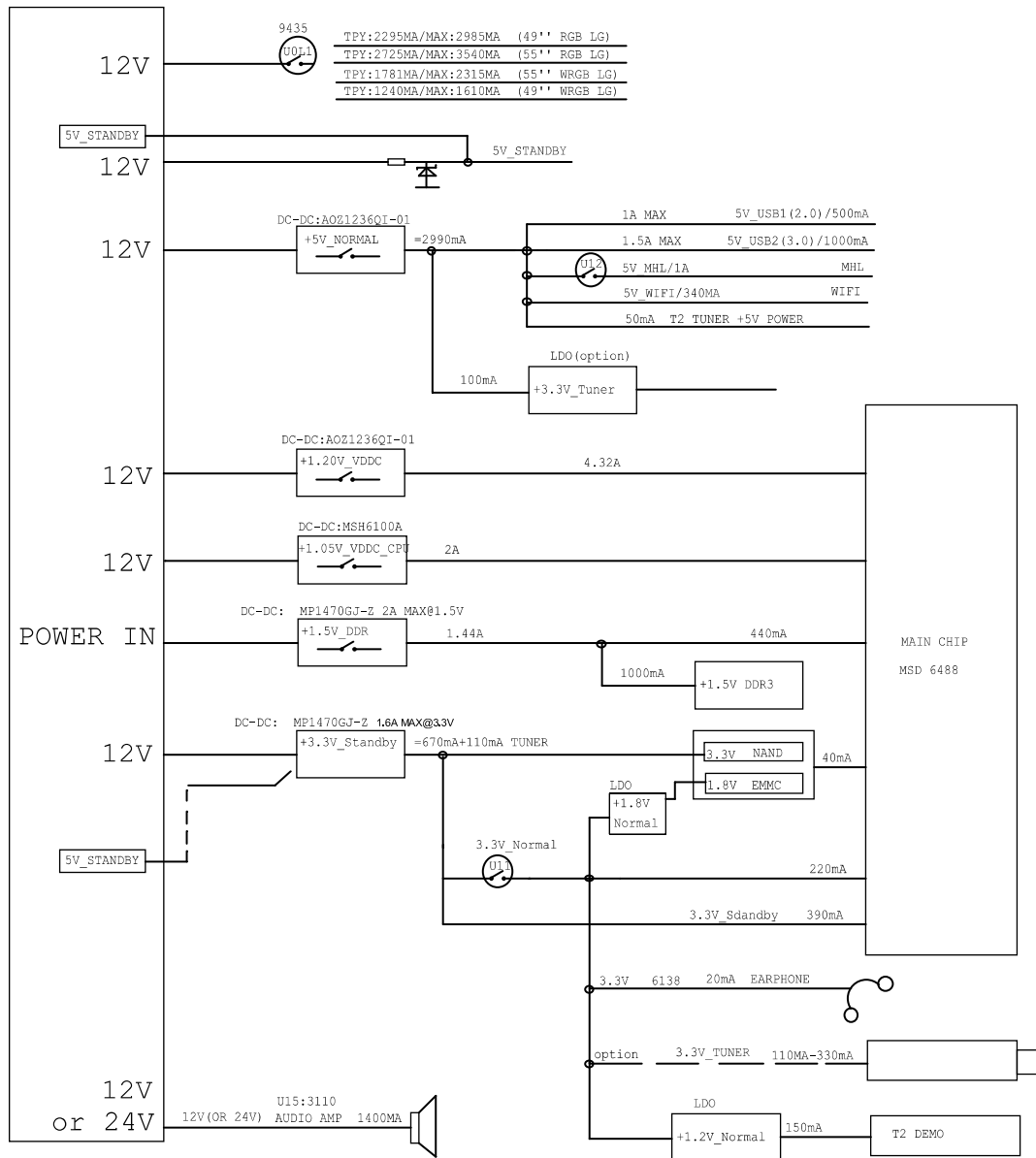
10 Wiring Connection Diagram

10.1 Wire Dressing

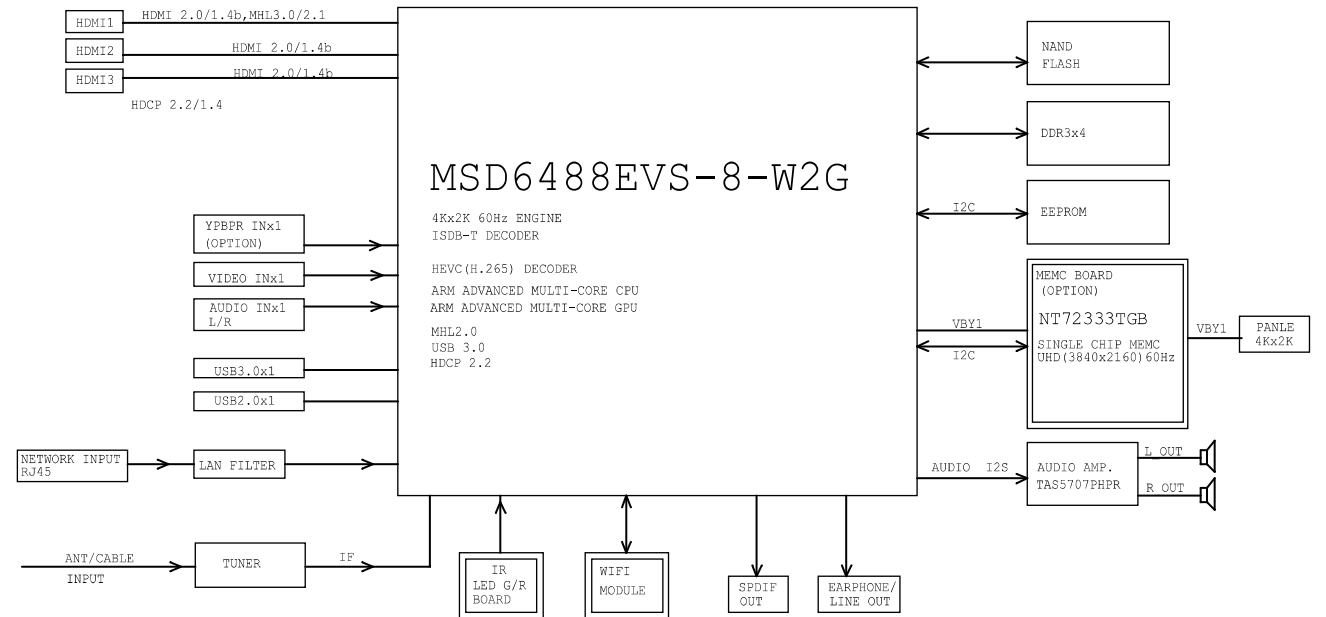
1. Fix all the wire.
2. Stick the Tape following the specification.



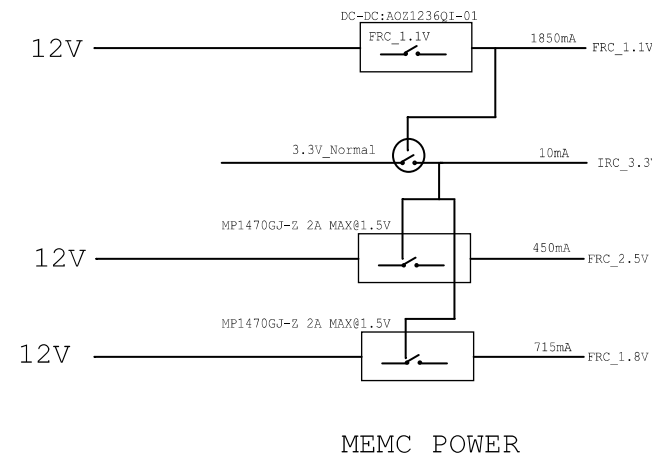
No	Decription	Qty	Remark
01	HOUSING 14(2.5)+ HOUSING 14(2.5)+ 400MM	1	
02	FFC 51 PINS P=0.5mm L=575 mm(90+120+140+1)	1	
03	3M - FILAMENT TAPE	11	18 mm x 55 mm



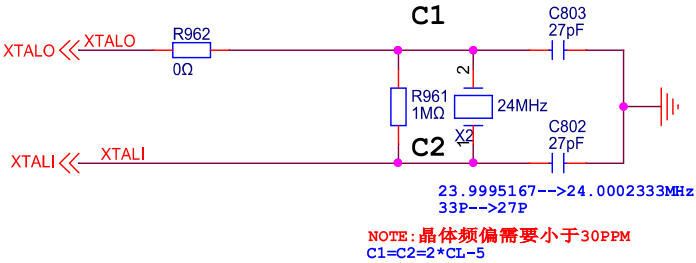
MSD6488 SMART TV POWER TREE



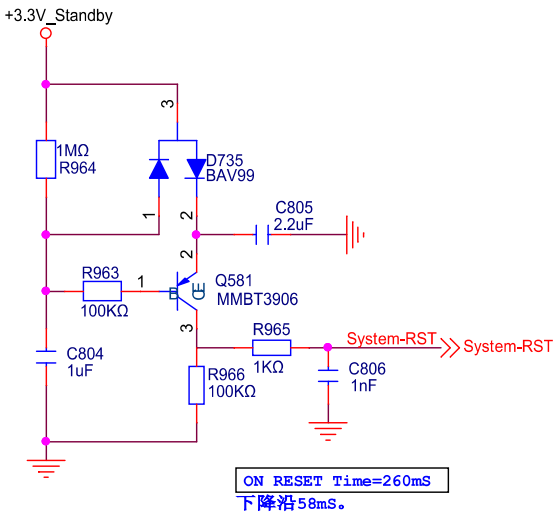
MSD6488 SMART TV MAIN BOARD



CRYSTAL



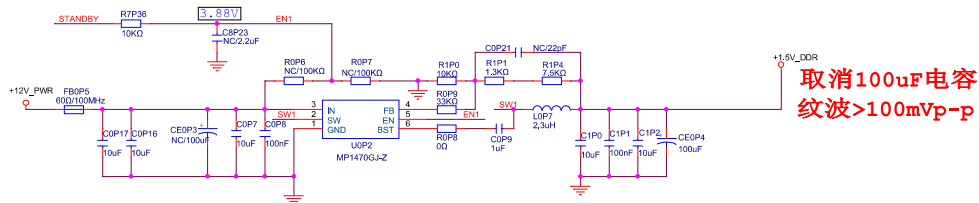
RESET



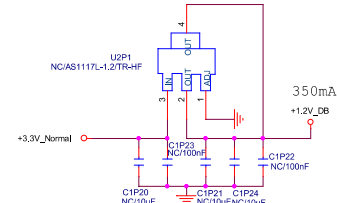
HEAT SINK



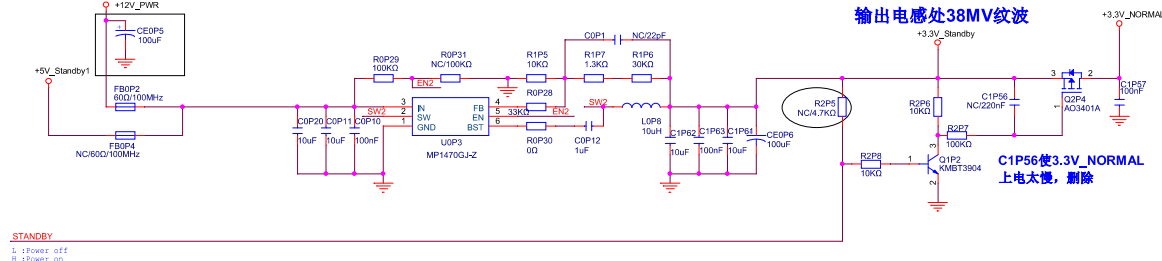
+12V_PWR TO +1.5V_DDR



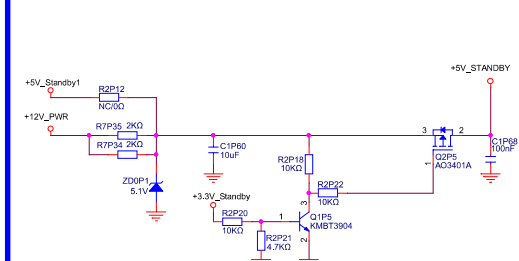
DEMO-LDO



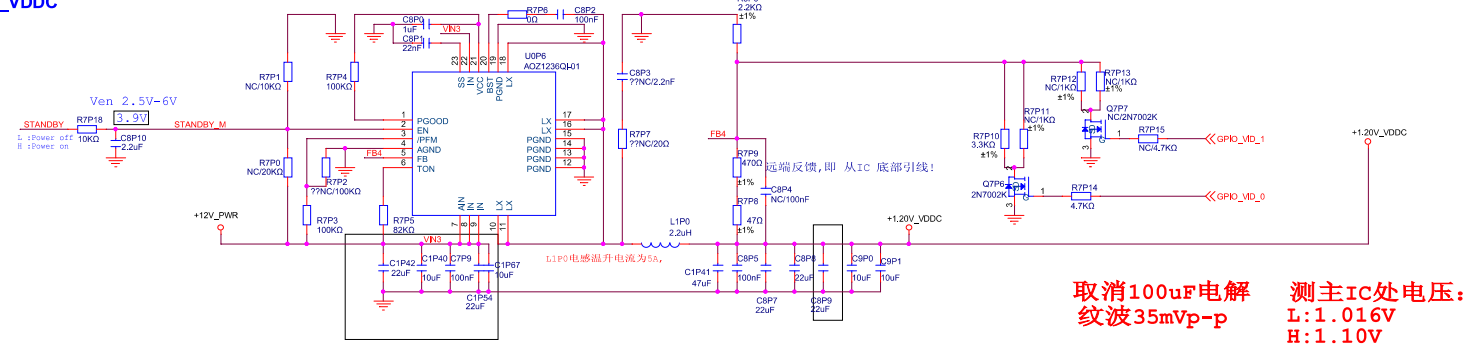
+12V_PWR TO +3.3V_STANDBY



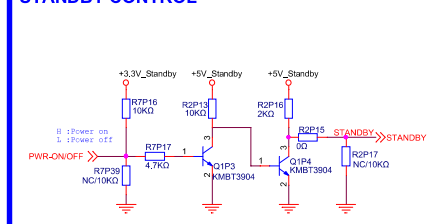
+12V_PWR TO +5V_STANDBY



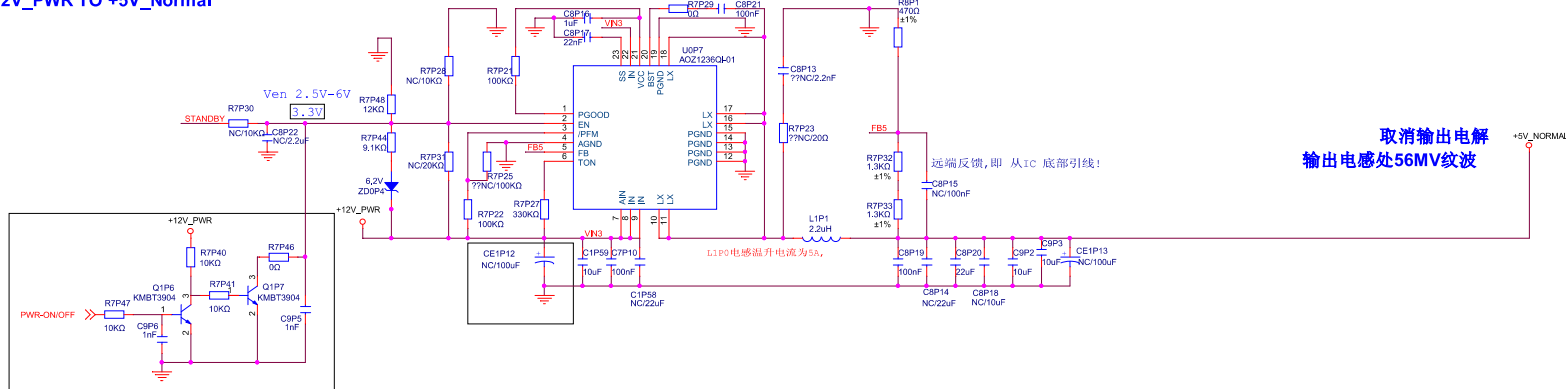
+12V_PWR TO +1.20V_VDDC



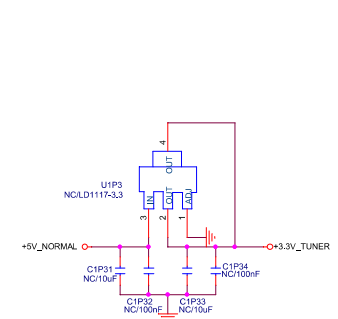
STANDBY CONTROL



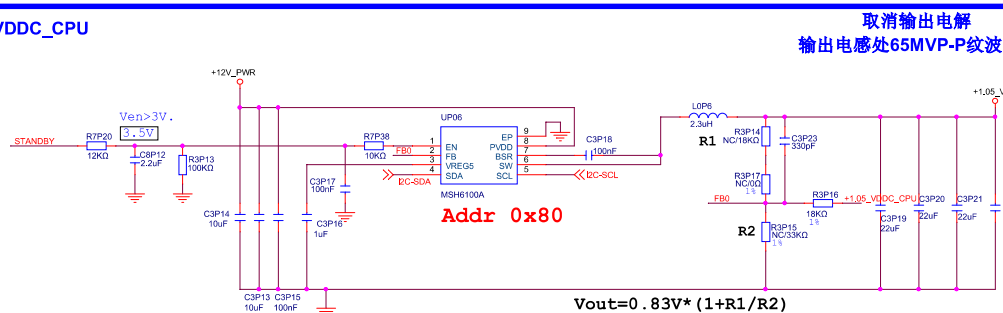
+12V_PWR TO +5V_Normal



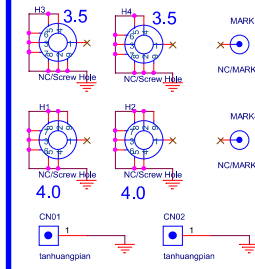
+5V_Normal TO +3.3V_TUNER



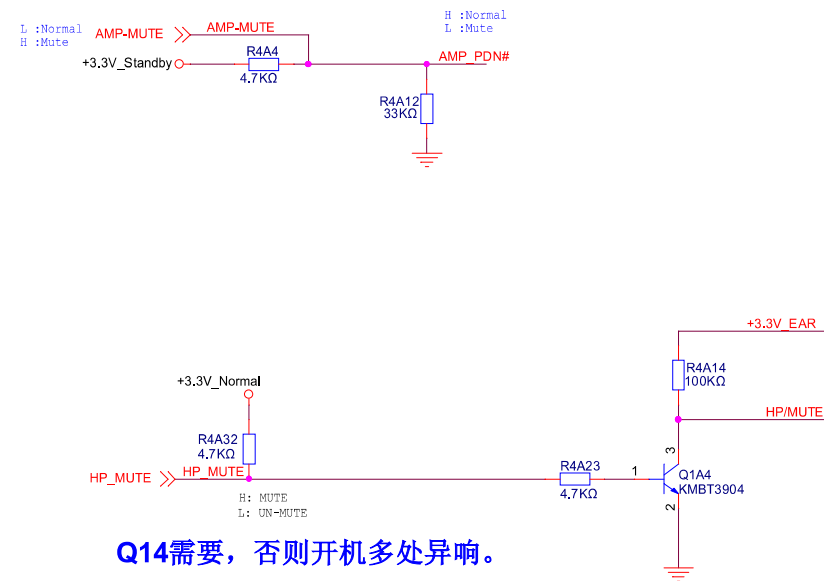
+12V_PWR TO +1.05_VDDC_CPU



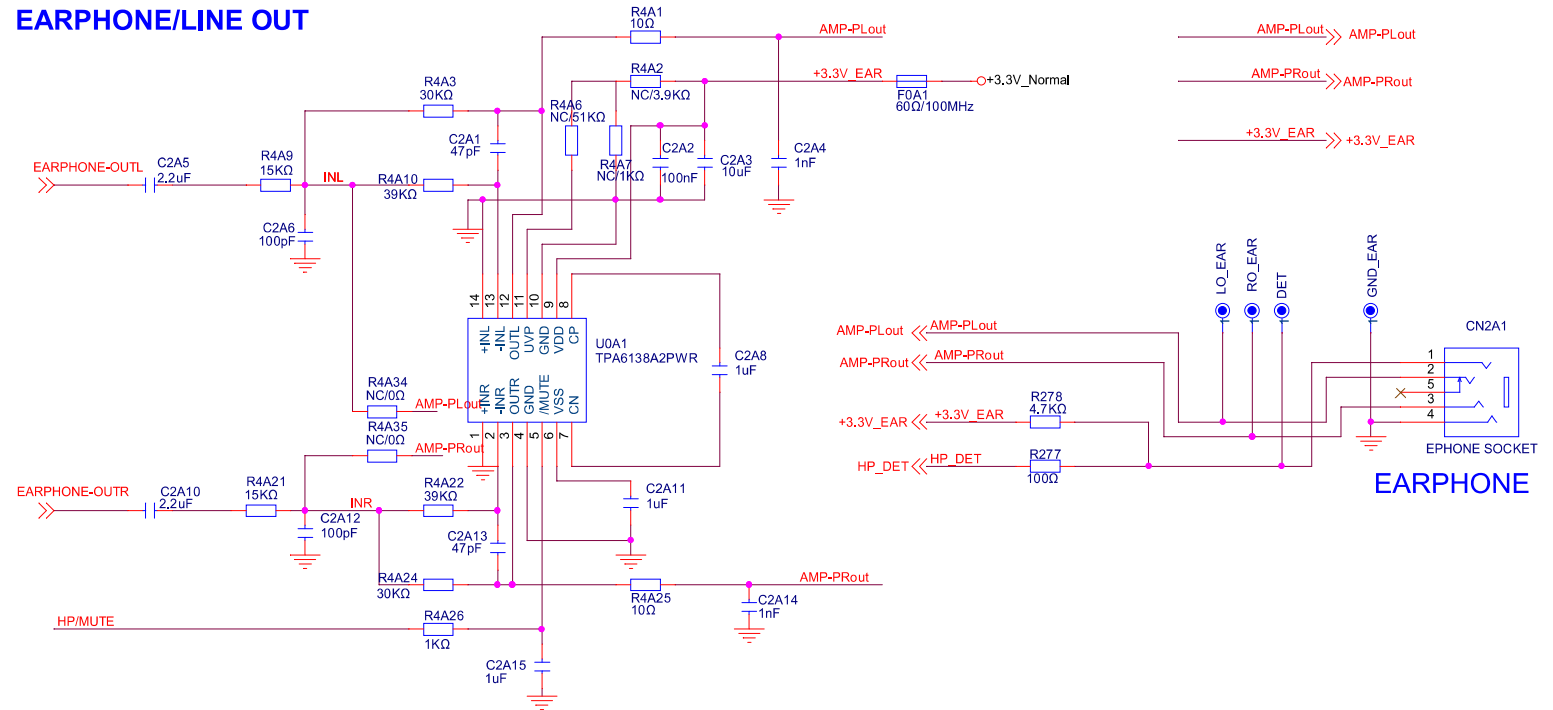
SCREW HOLE & MARK



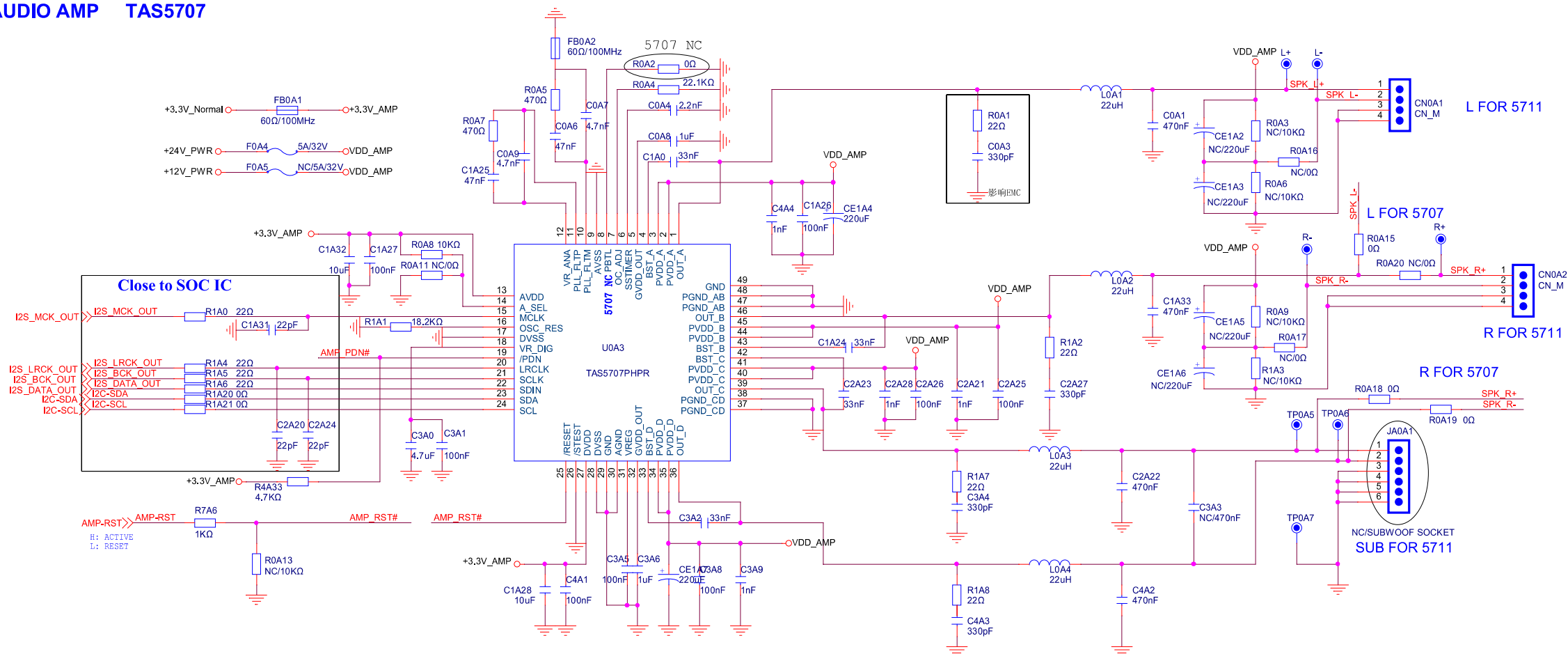
MUTE CONTROL



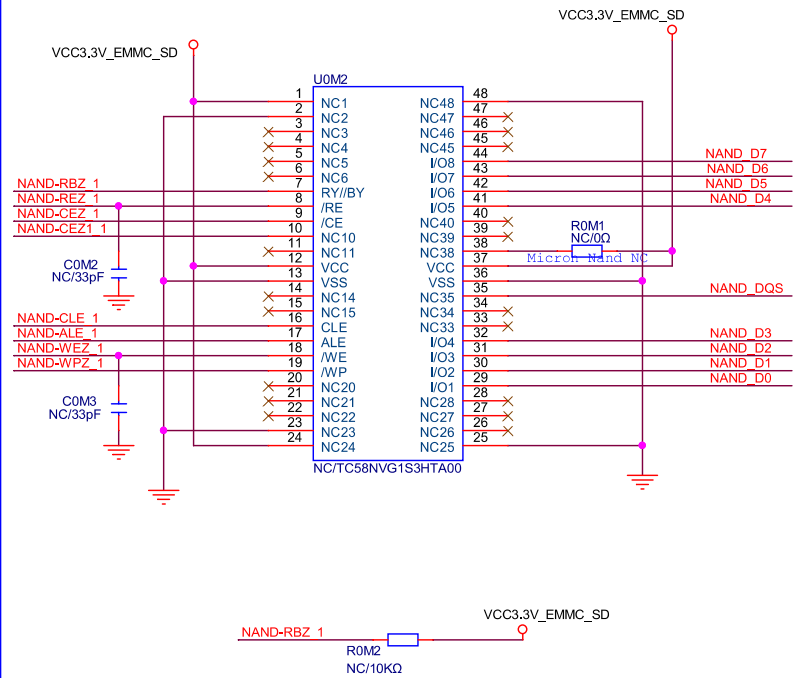
EARPHONE/LINE OUT



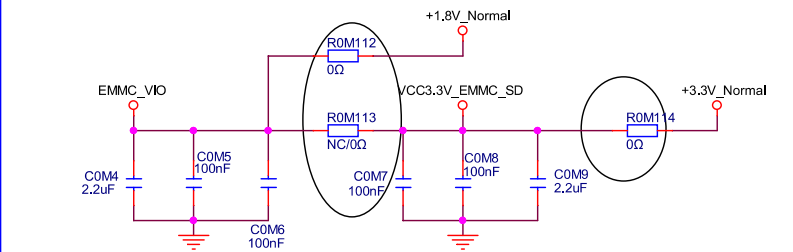
AUDIO AMP TAS5707



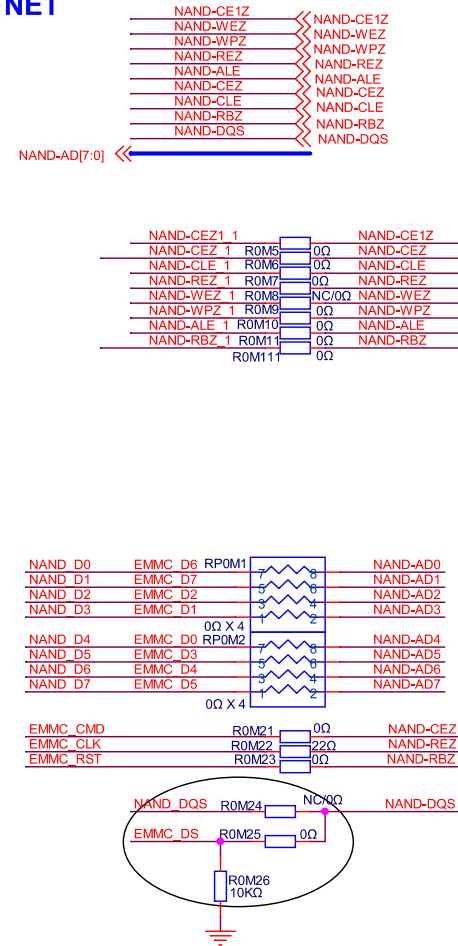
NAND FLASH



EMMC NEED +1.8V

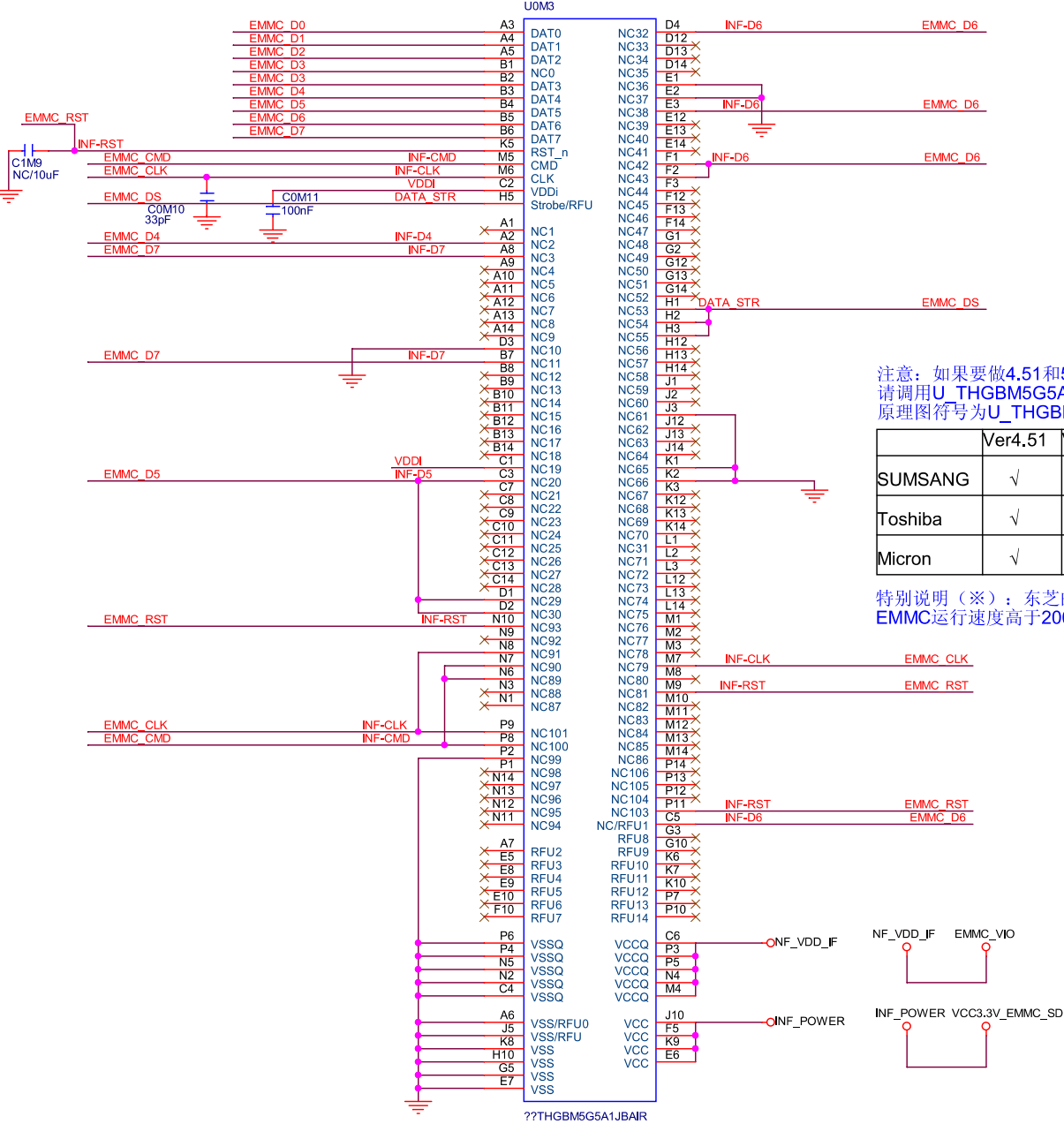


NET



			eMMC	SLC NAND
ROM25	ROM22	ROM112	OR	NC
ROM24	ROM8	ROM113	NC	OR
	ROM26		10K	NC
	R185		4.7K	NC
	R960		NC	4.7K
	R1739		NC	OR
	R1740		OR	NC
	R1741		NC	OR
	C401/C137		NC/NC	10uF/100nF

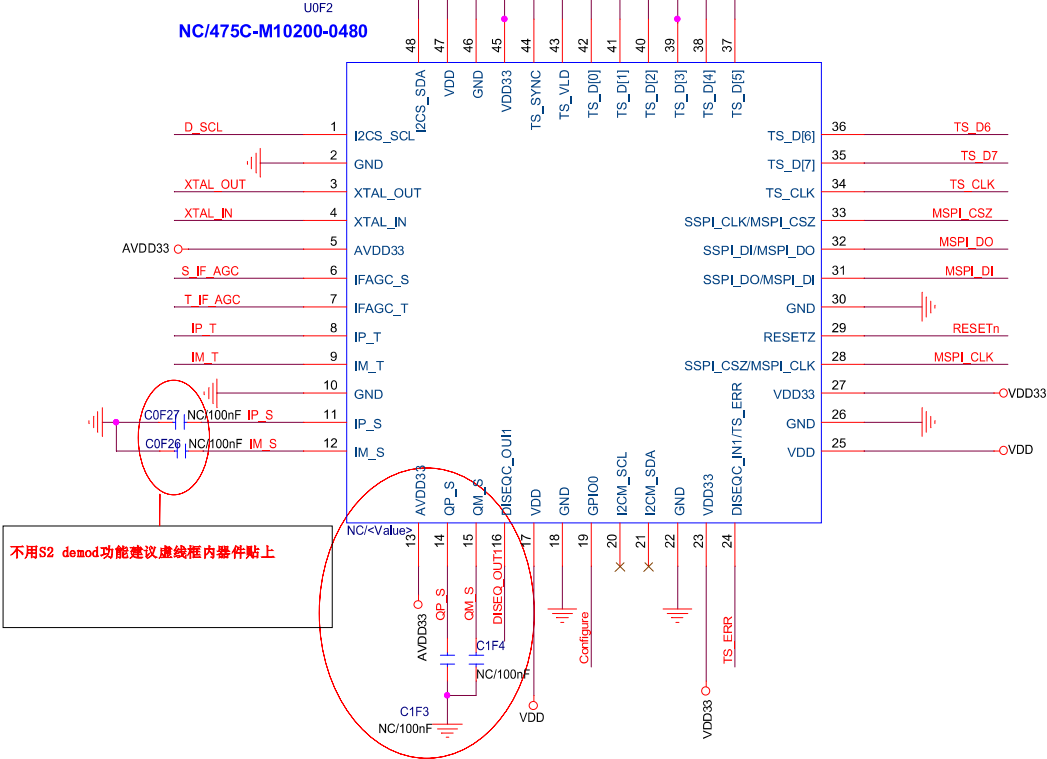
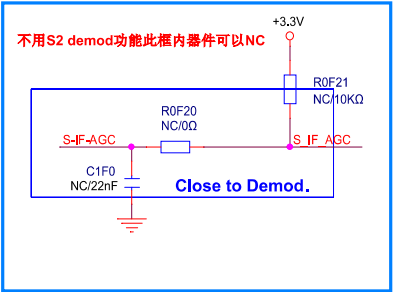
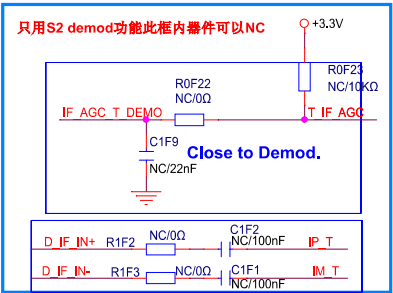
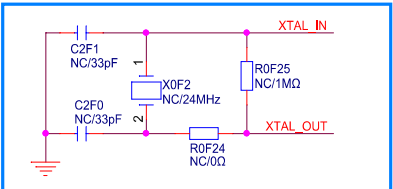
eMMC



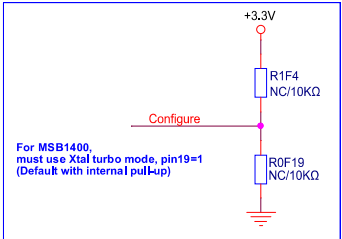
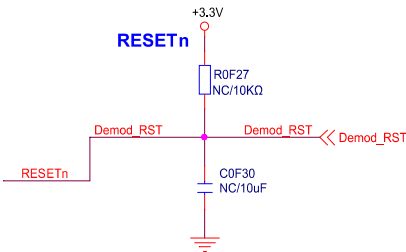
注意：如果要做4.51和5.0的兼容，EMMC的原理图符号
请调用U_THGBM5G5A1JBAIR_01,如果不做兼容，
原理图符号为U_THGBM5G5A1JBAIR

	Ver4.51	Ver 5.0
SUMSANG	√	√
Toshiba	√	※
Micron	√	√

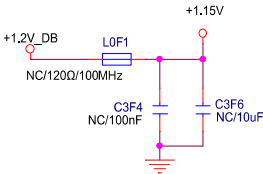
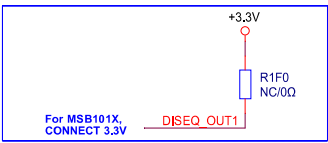
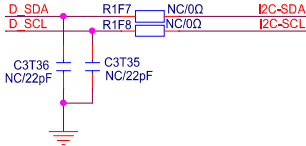
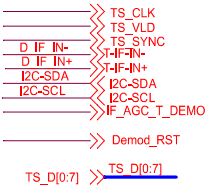
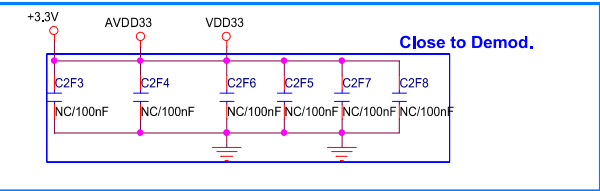
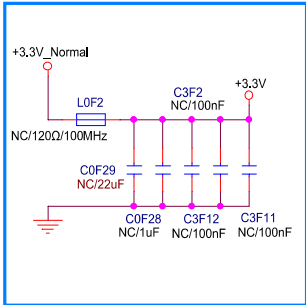
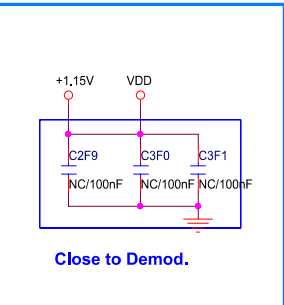
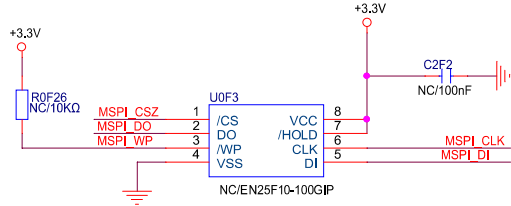
特别说明（※）：东芝的5.0在EMMC运行速度高于200M无法兼容



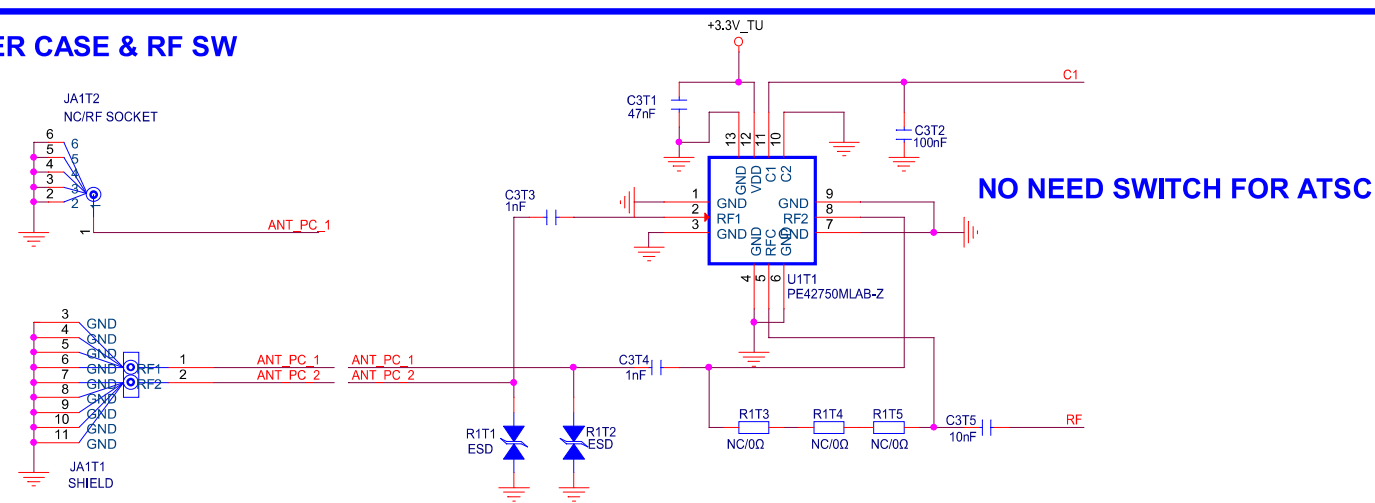
不用S2 demod功能建议虚线框内器件贴上



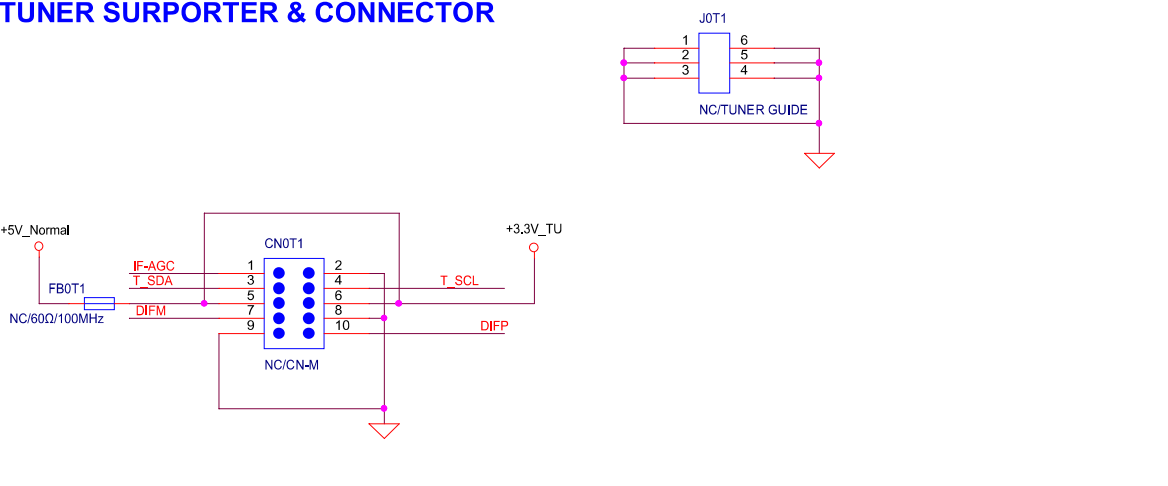
U6 上件说明:
1. 当U4为ISDBT/DTMB/S2 DEMOD chip时,
U5 、R25、C32要 NC。
1. 当U4为DVBT/T2 DEMOD chip时,
U5 、R25、C32要 上件。



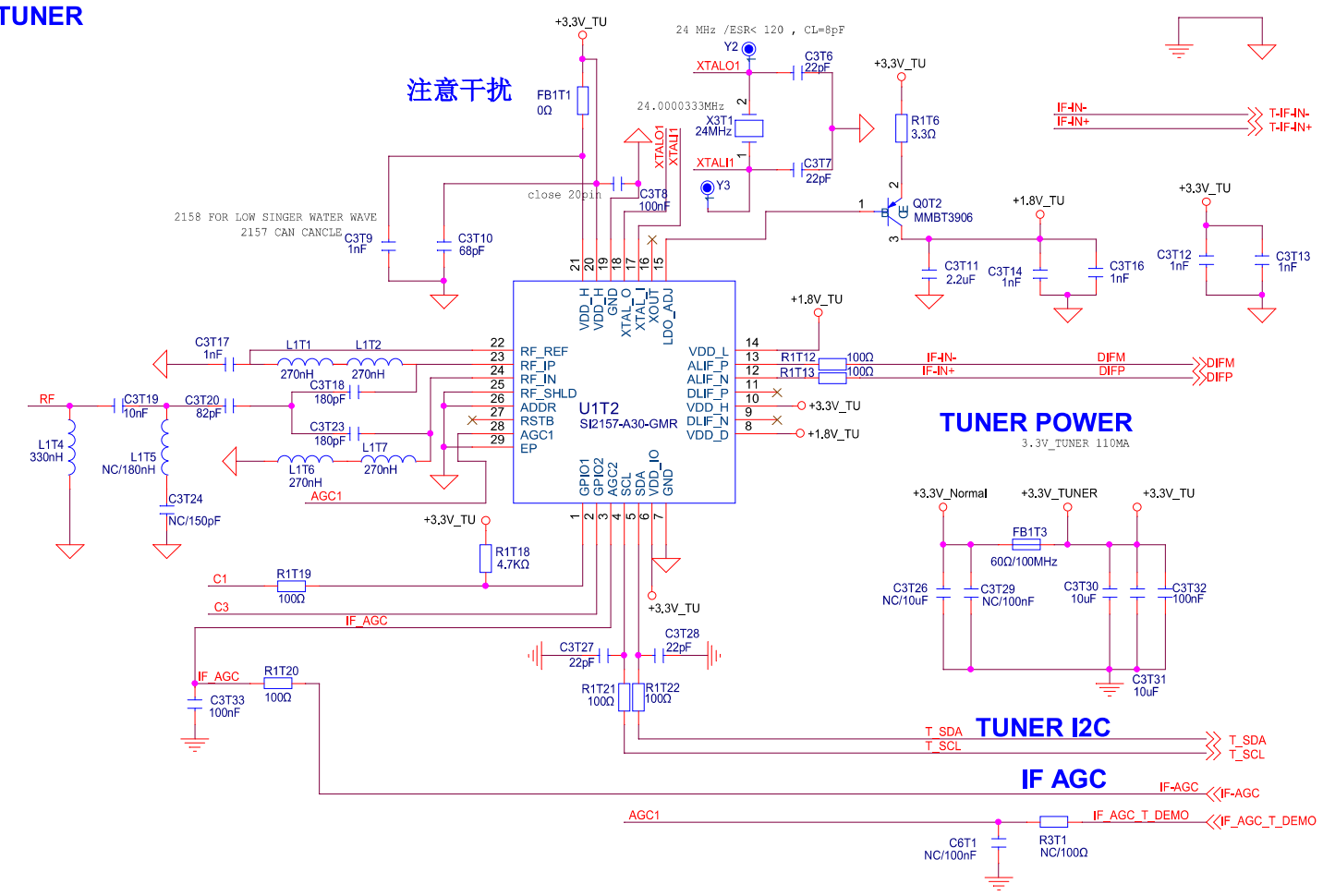
TUNER CASE & RF SW



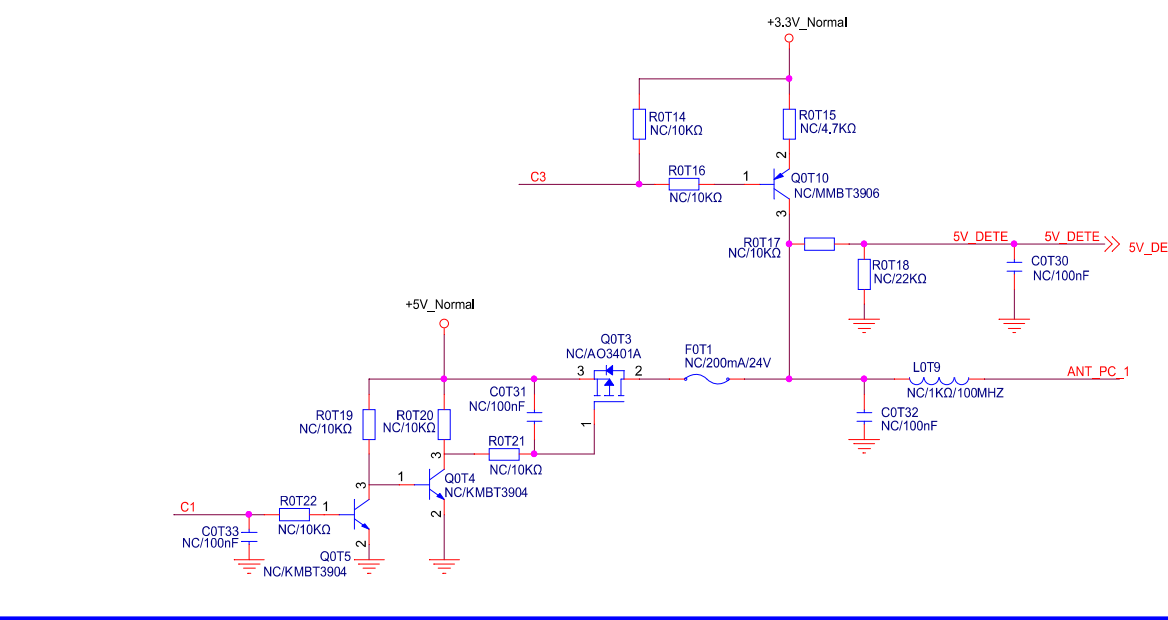
TUNER SURPORTER & CONNECTOR



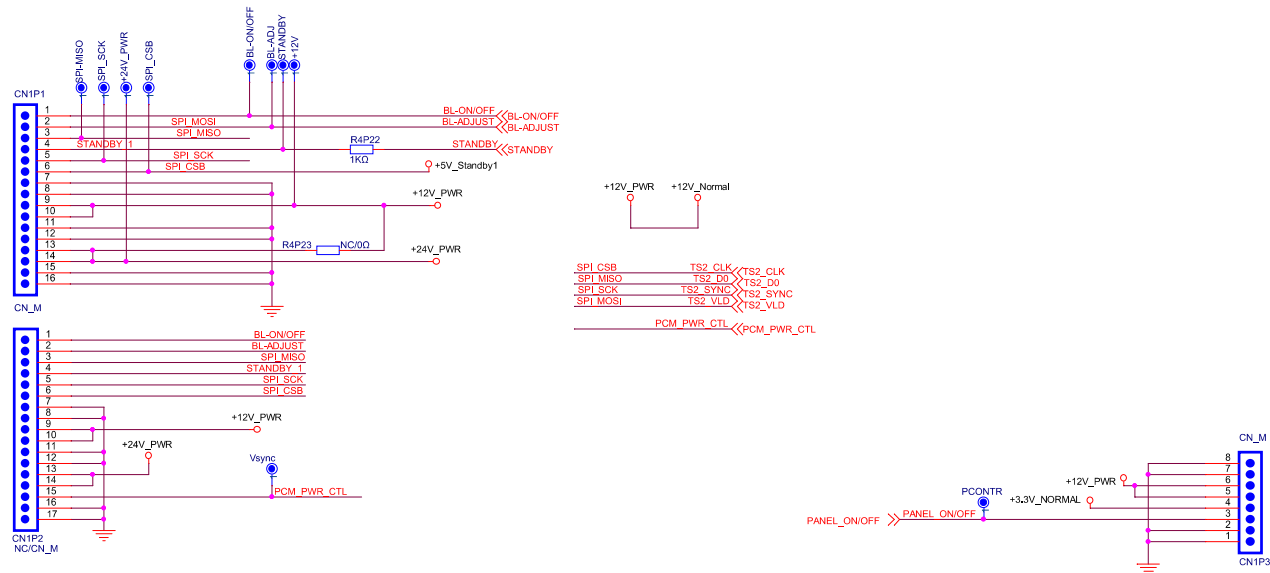
TUNER



DVB_T2 POWER CONTROL

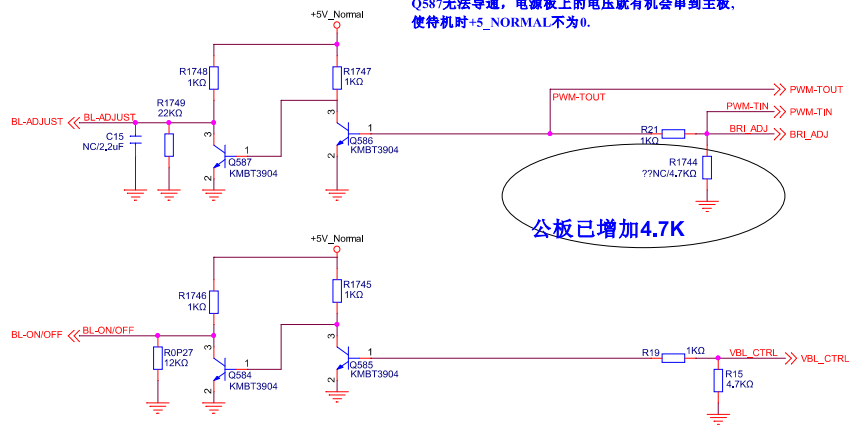


+12V_PWR SUPPLY

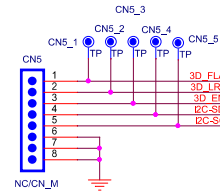


INVERTER CONTROL

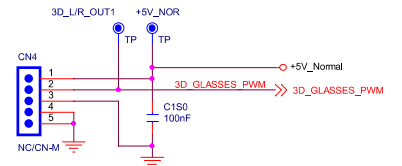
采用+5V_NORMAL供电时，待机状态下无此电压，+5_NORMAL上，Q587无法导通，电源板上的电压就有机会串到主板，使待机时+5_NORMAL不为0。



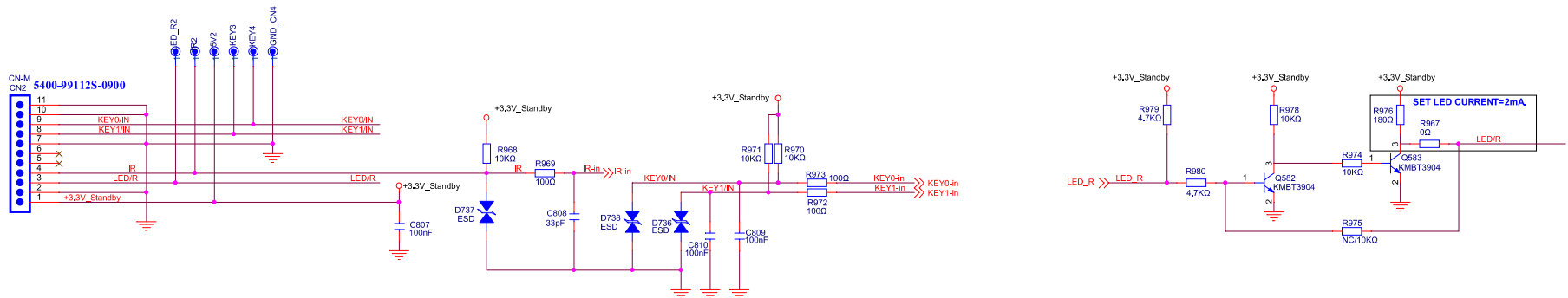
3D INTERFACE



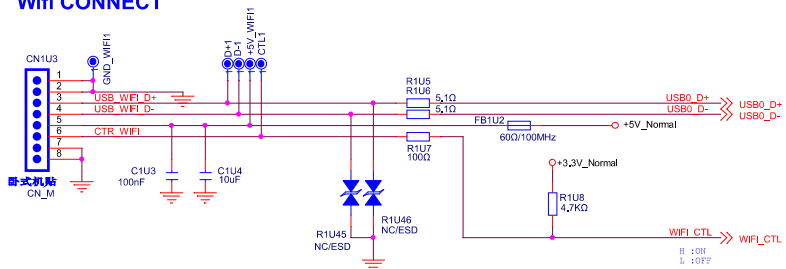
3D GLASS LAUNCH

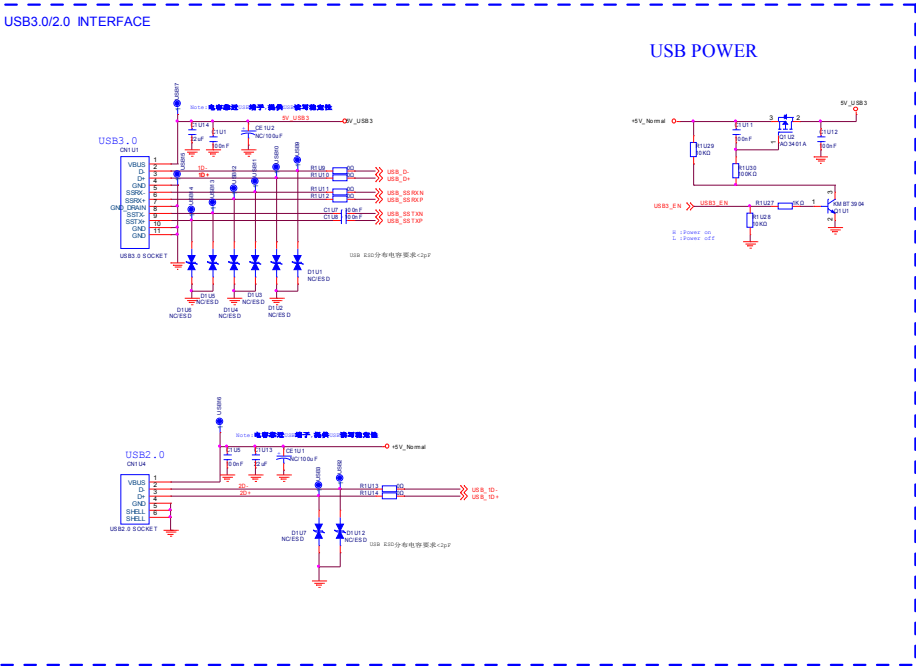
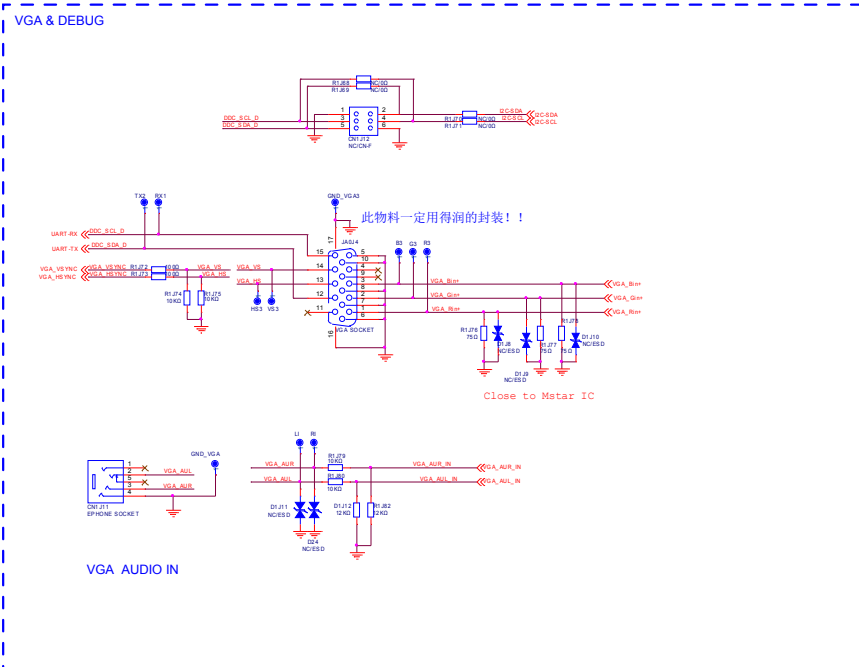
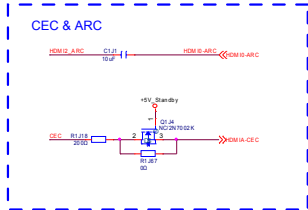
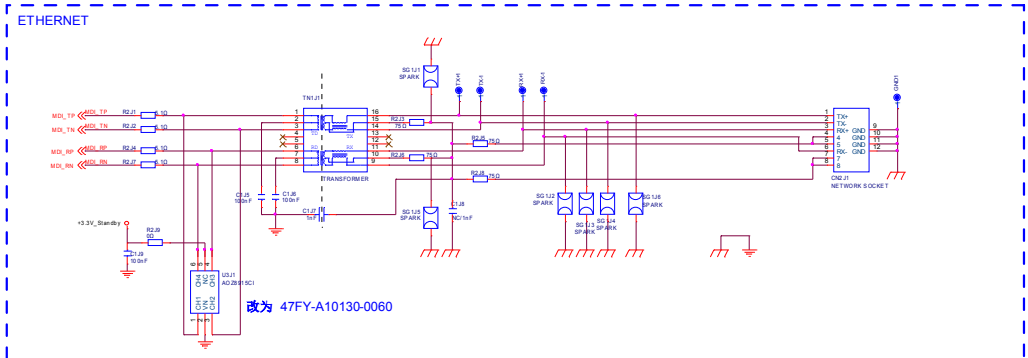
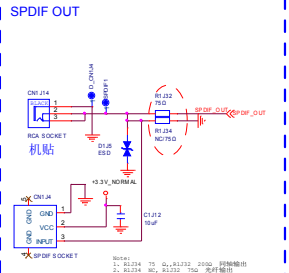
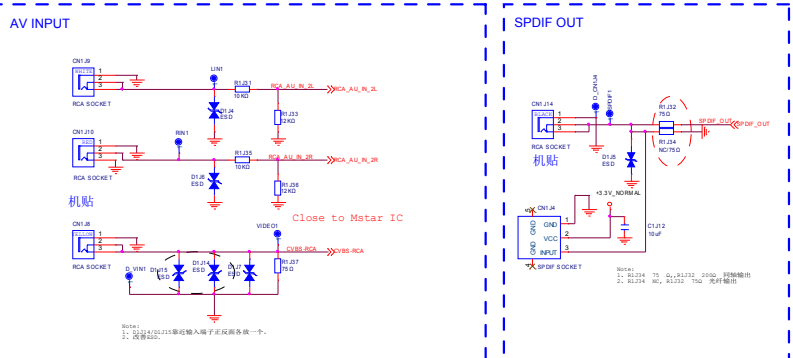
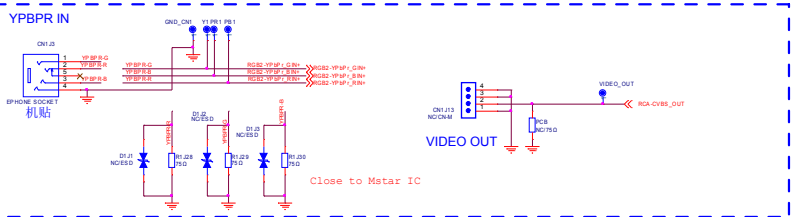
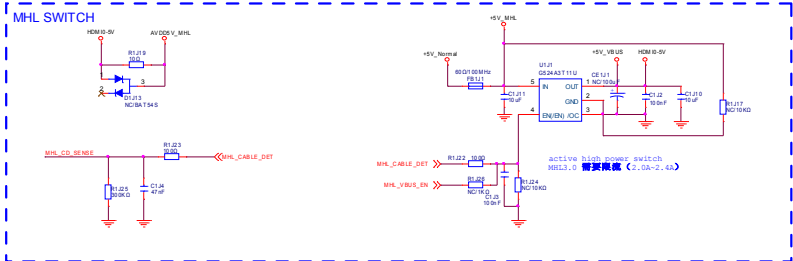
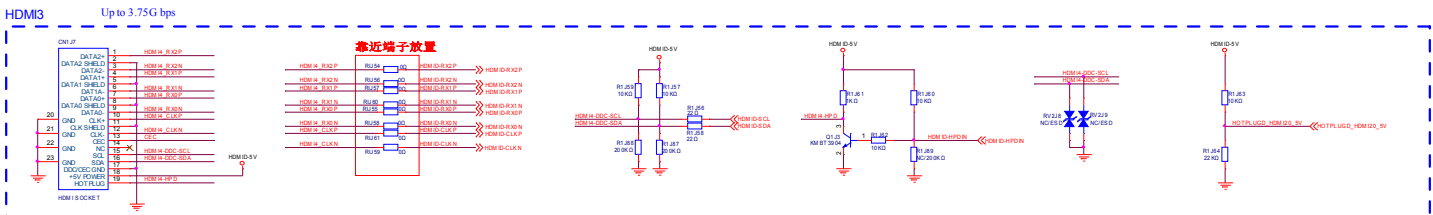
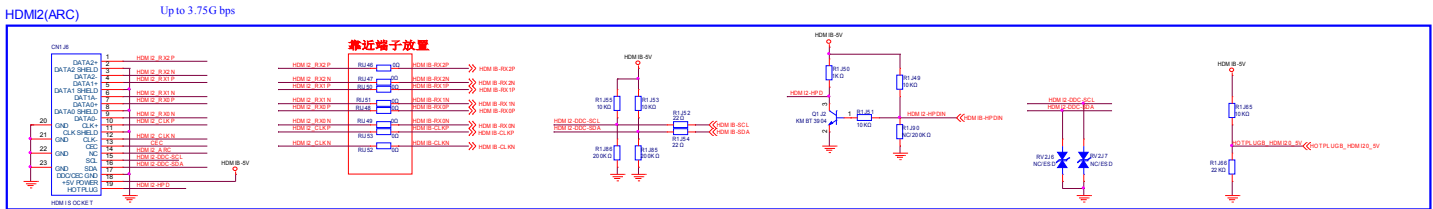
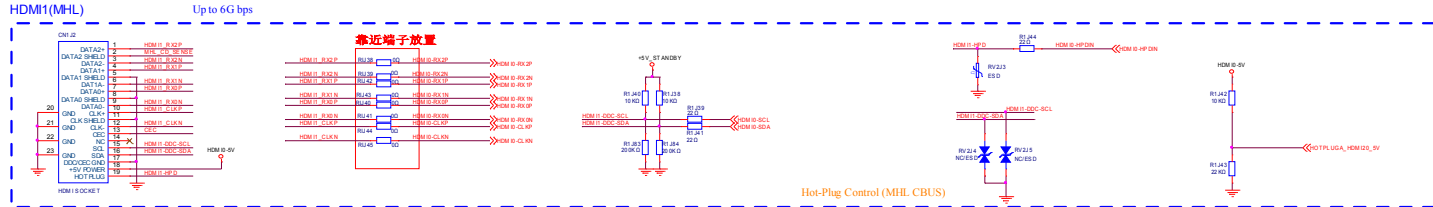


IR&KEY CONNECTOR

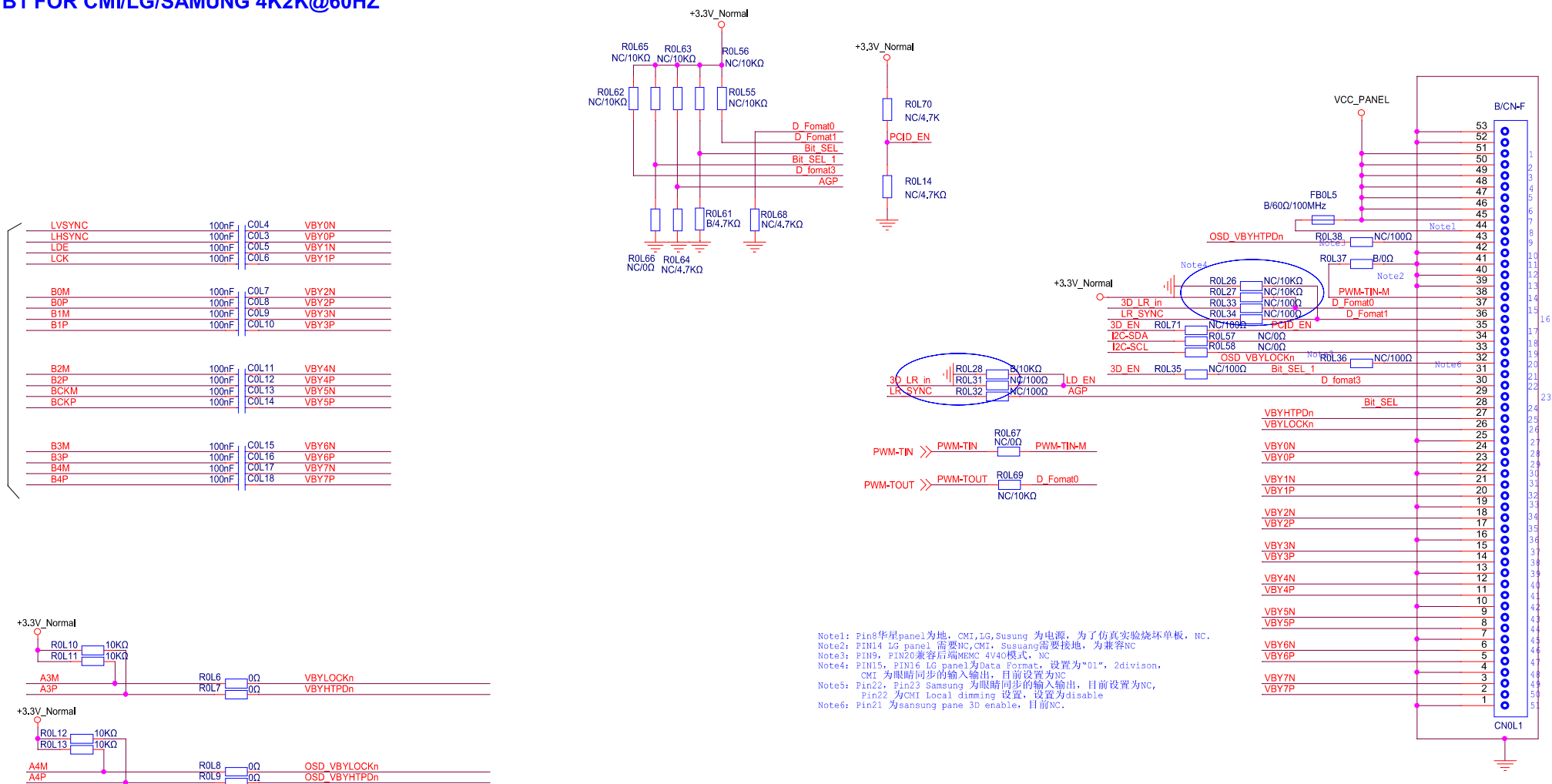


Wifi CONNECT

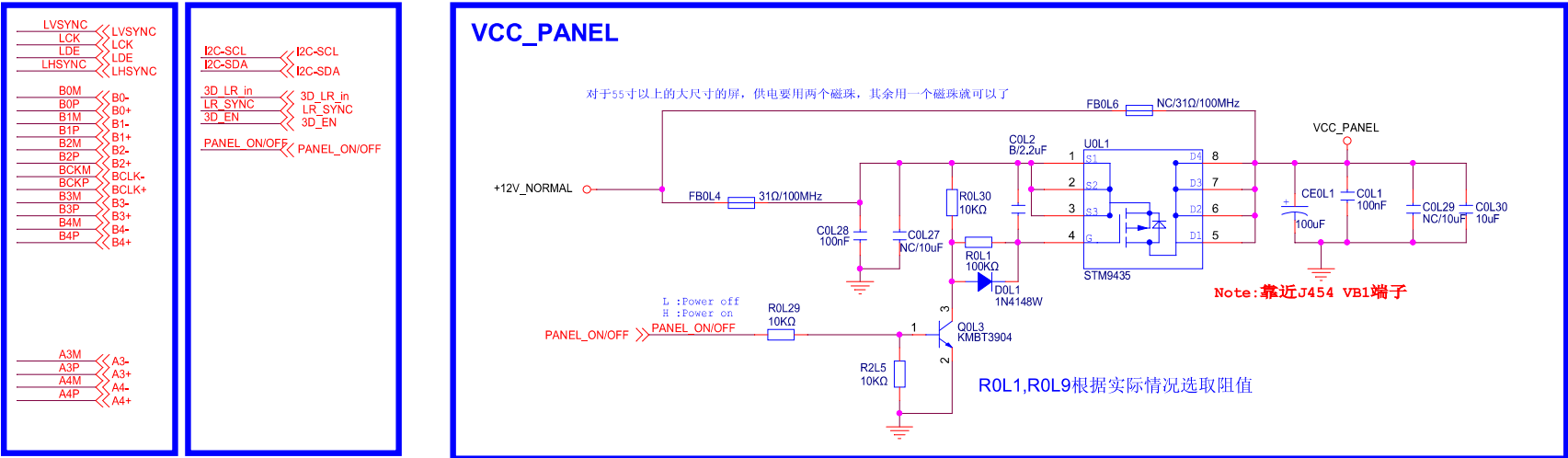




VB1 FOR CMI/LG/SAMUNG 4K2K@60HZ

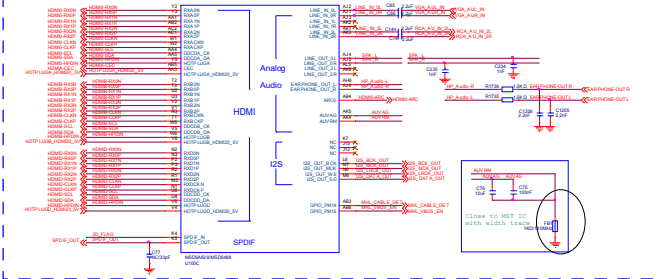


Net

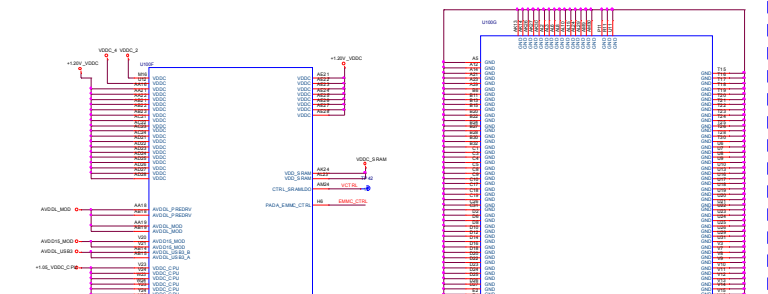
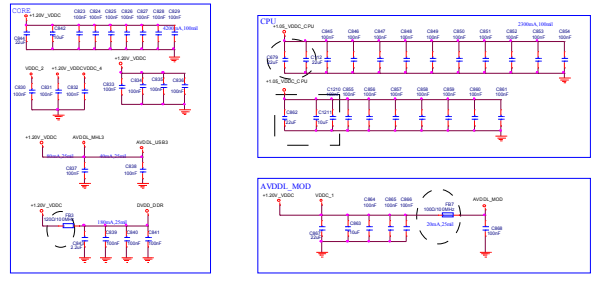
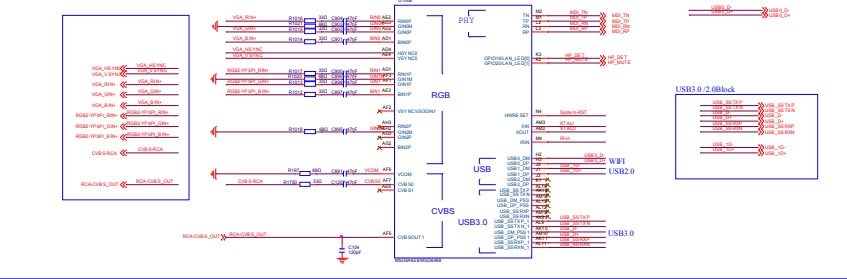


HDMI/Audio Block

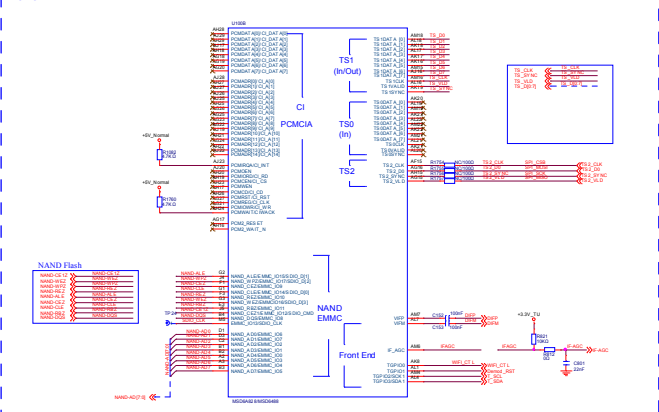
Note : Part A needs shielding ground all signal pair



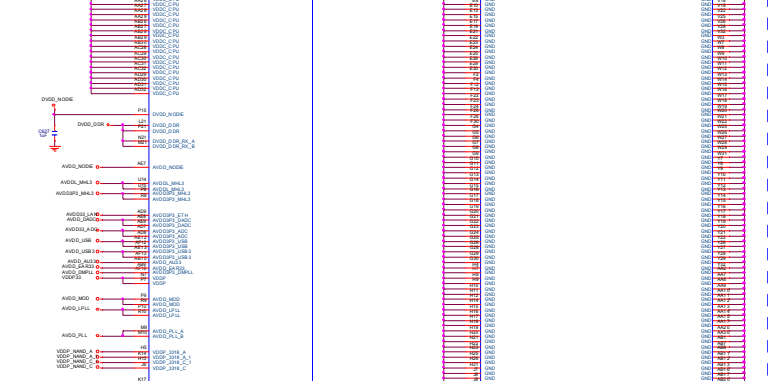
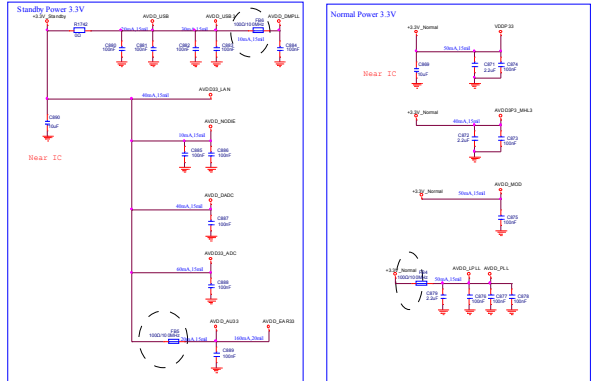
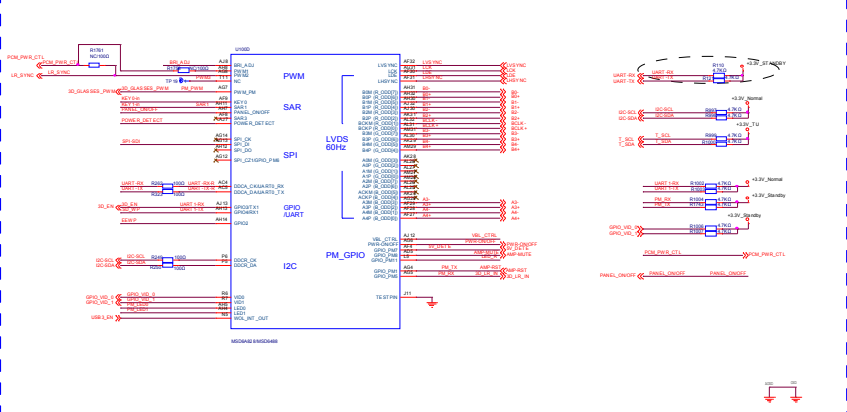
VIDEO BLOCK



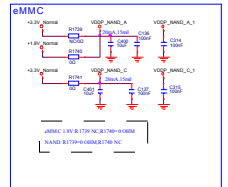
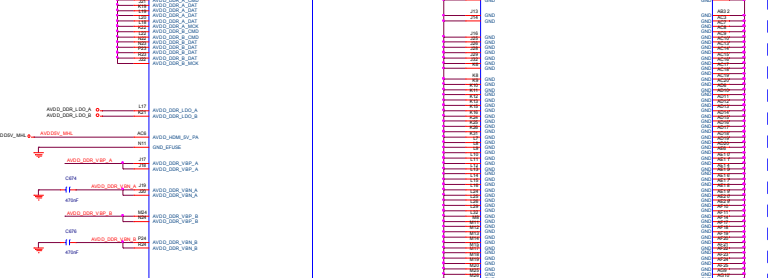
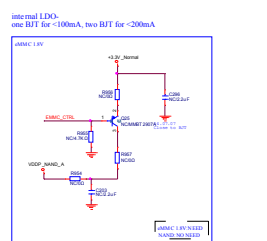
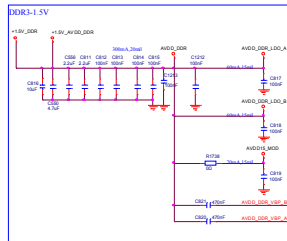
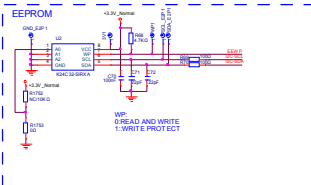
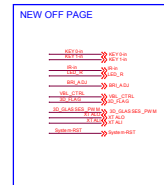
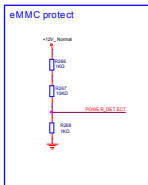
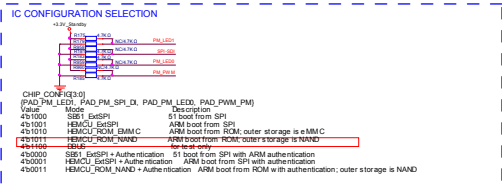
PCMCIA



GPIO/SAR/PWM/LVDS



CHIP_CONFIG[3:0] (PAD_LED1, PAD_PM_SPLI, PAD_PM_LED0, PAD_PWM_PM)



PINS OF MAIN IC

BA2,CSB1,CSB2 need GND shielding

U100A

U100B

U100C

U100D

U100E

U100F

U100G

U100H

U100I

U100J

U100K

U100L

U100M

U100N

U100O

U100P

U100Q

U100R

U100S

U100T

U100U

U100V

U100W

U100X

U100Y

U100Z

U100A1

U100A2

U100A3

U100A4

U100A5

U100A6

U100A7

U100A8

U100A9

U100A10

U100A11

U100A12

U100A13

U100A14

U100A15

U100A16

U100A17

U100A18

U100A19

U100A20

U100A21

U100A22

U100A23

U100A24

U100A25

U100A26

U100A27

U100A28

U100A29

U100A30

U100A31

U100A32

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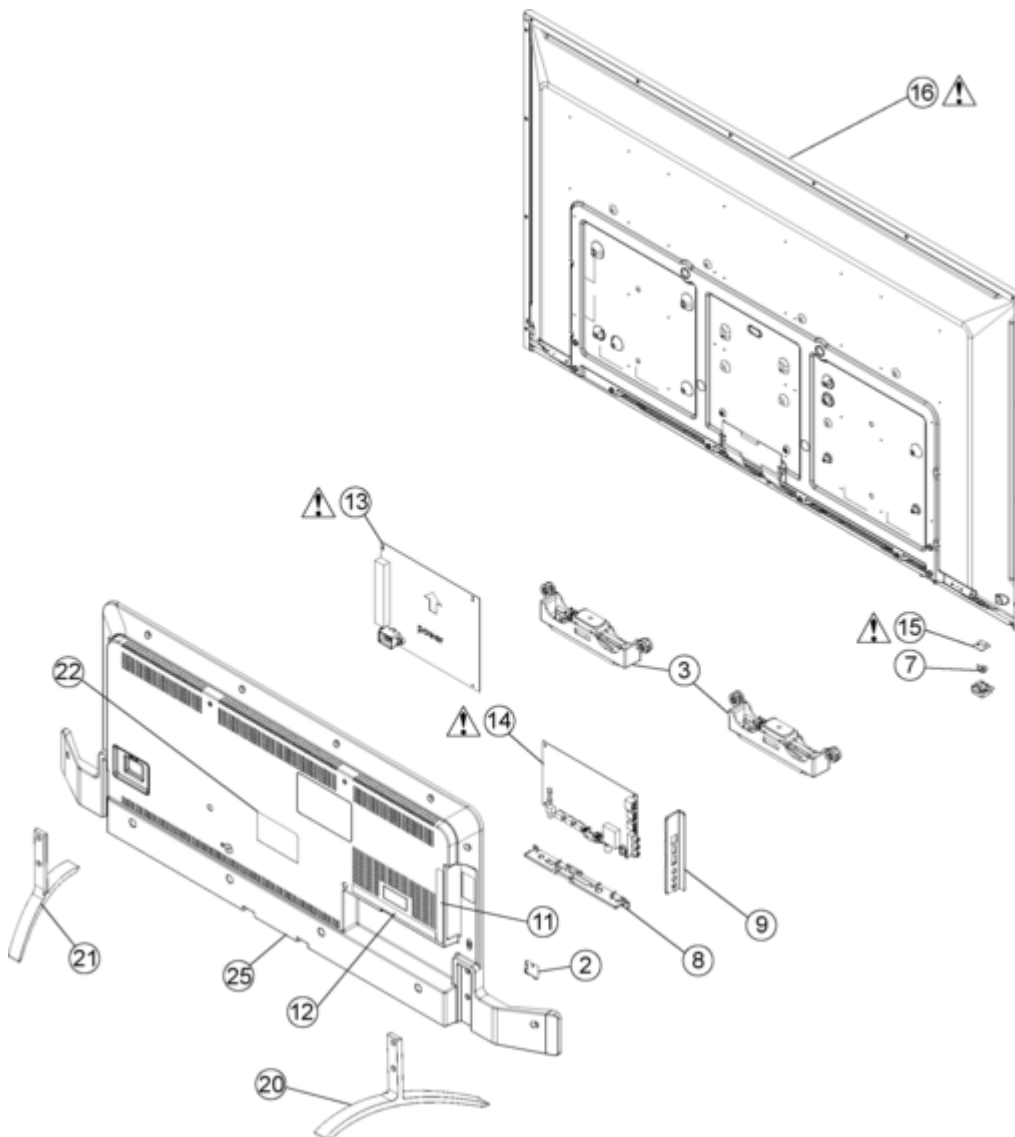
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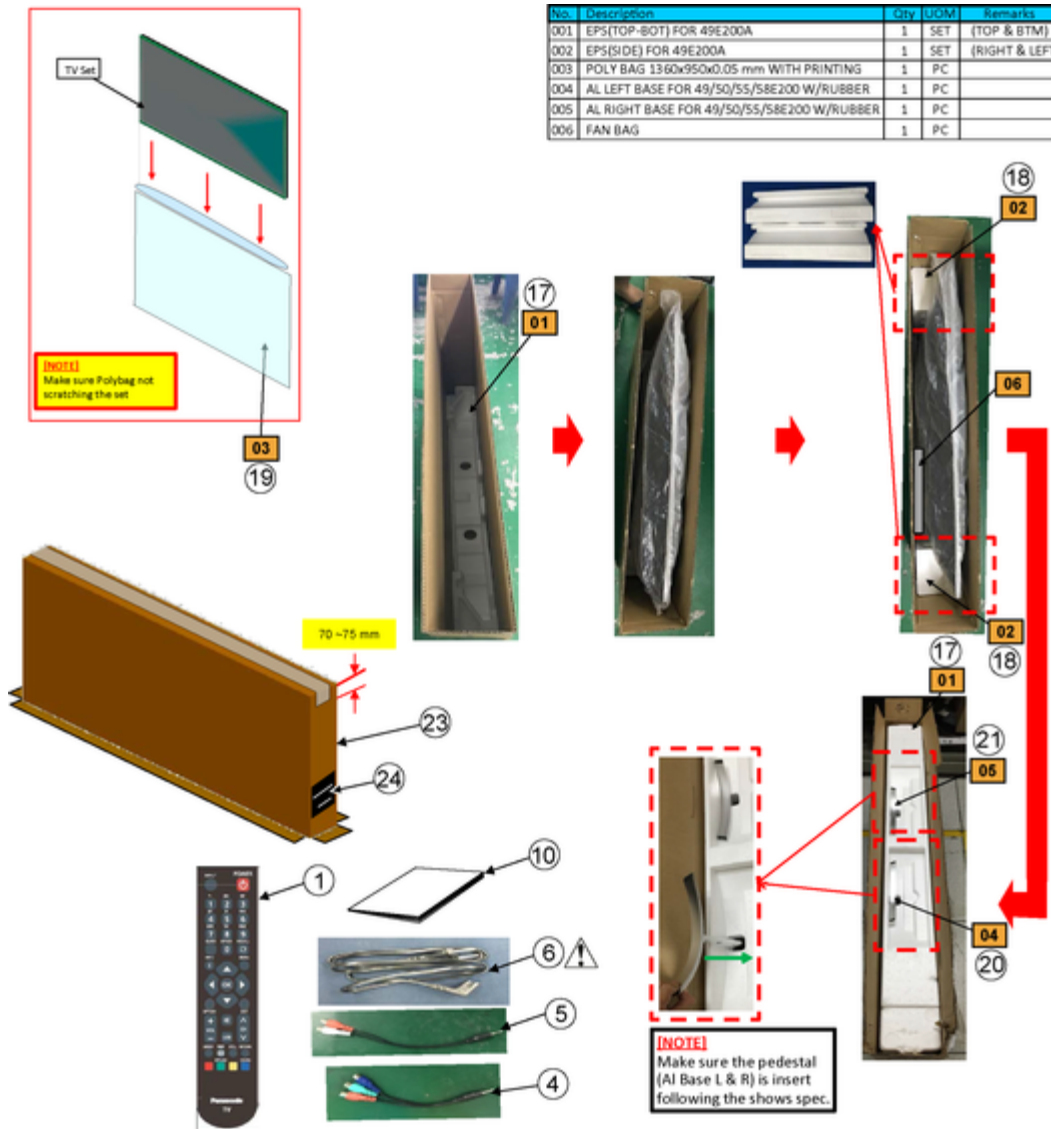
RESISTERS

12 Exploded View and Replacement Parts List

12.1 Parts Location



12.2 Packing Instruction



12.3 Replacement Partlist

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	1	N2QAYB000934	REMOTE TRANSMITTER		
	2	TZZ00002125A	WIFI MODULE (534L-36NTUD-2230)		
	3	TZZ00002126A	SPEAKER BOX (53D3-39E390-0000)		
		TZZ00002128A	LEFT SPEAKER WIRE ASS'Y (5400-321101-0210)		
	4	TZZ00002131A	YUV CABLE (5900-E15100-0060)		
	5	TZZ00002132A	AV CABLE (5900-E20100-0010)		
	6	TZZ00002133A	AC CORD (5942-A15203-1070)		
	7	TZZ00002138A	POWER BUTTON (1023-CE300000-21)		
	8	TZZ00002139A	BOTTOM AV BRACKET (1005-HB200B30-21)		
	9	TZZ00002140A	SIDE AV BRACKET (1005-HB200S30-21)		
	10	TZZ00002144A	OPERATING INSTRUCTION (0773-QE560000-P9)		
	11	TZZ00002146A	SIDE AV LABEL (1213-UE390000-50)		
	12	TZZ00002147A	BOTTOM AV LABEL (1205-UE390000-51)		
	13	TZZ00002150A	POWER BOARD ASS'Y (168P-L5L01H-HCW0S)		

▲	14	TZZ00002151A	MAIN BOARD ASS'Y (6M20T-01H49E560-S3)		
▲	15	TZZ00002152A	IR BOARD ASSEMBLY (6M20T-18H49E560-05)		
		TZZ00002153A	FFC CABLE (5900-F57130-5100)		
▲	16	TZZ00002154A	LCD PANEL (7626-T4900L-YAD0R2)		
		TZZ00002155A	POWER TO A BOARD WIRE ASS'Y (5400-320401-14F0)		
		TZZ00002156A	RIGHT SPEAKER WIRE ASS'Y (5400-321401-0230)		
		TZZ00002157A	WIFI CABLE (5400-393501-0620)		
	17	TZZ00002158A	TOP & BOTTOM CUSHION (0301-TB20A000-21)		
	18	TZZ00002159A	SIDE CUSHION (0301-TB20AS00-21)		
	19	TZZ00002160A	TV SET POLY BAG (0404-13295105-11)		
	20	TZZ00002161A	AL LEFT BASE (1539-HE200BL0-01)		
	21	TZZ00002162A	AL RIGHT BASE (1539-HE200BR0-01)		
	22	TZZ00002163A	BACK COVER LABEL (0601-TB560000-P9)		For TH-49DX400K Only
	22	TZZ00002183A	BACK COVER LABEL (0601-TB560001-P9)		For TH-49DX400S Only
	22	TZZ00002185A	BACK COVER LABEL (0601-TB560003-P9)		For TH-49DX400T Only
	23	TZZ00002164A	PACKING CASE (0100-QE310000-19)		
	24	TZZ00002165A	CARTON BOX LABEL (0612-TB560000-P9)		For TH-49DX400K Only
	24	TZZ00002184A	CARTON BOX LABEL (0612-TB560003-P9)		For TH-49DX400S Only
	24	TZZ00002186A	CARTON BOX LABEL (0612-TB560005-P9)		For TH-49DX400T Only
	25	TZZ00002166A	BACK COVER (1002-TB200002-21)		