

Service Manual

LED TV



Model No. **TH-43DX400K**
TH-43DX400S
TH-43DX400T

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.

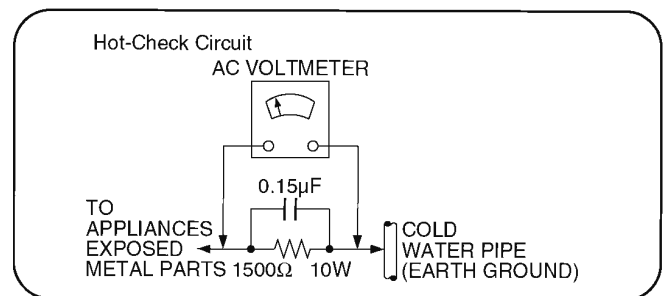


Figure 1

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).

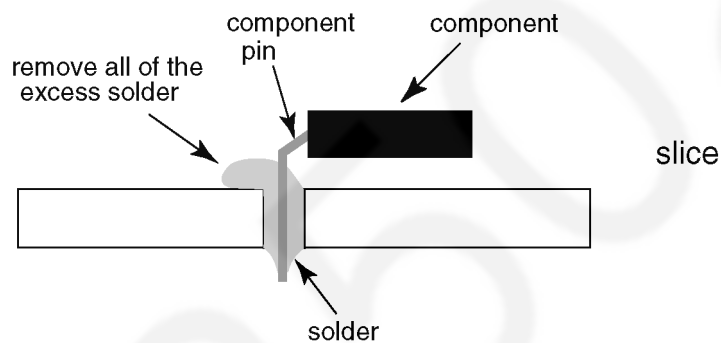
That is Tin (Sn), Silver (Ag) and Copper (Cu) although other types are available.

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.

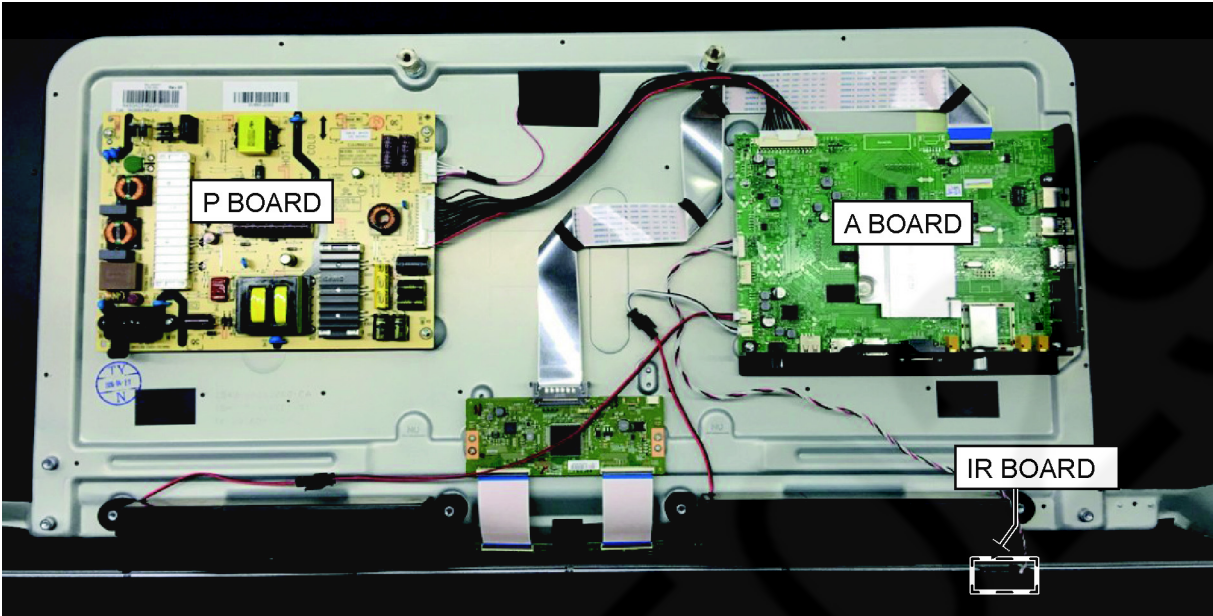
Caution

- 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-43DX400K / TH-43DX400S / TH-43DX400T	
Screen size - diagonal	109 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	100 W	
Dimensions (W x H x D)	973.2 mm x 206.8 mm x 604.5mm	
Net weight	9.5 kg Net	
Environment	Working temperature : 5°C ~ 45°C	
(only for Tropical climates zone)	Working Humidity : 20 % ~ 80 %	
	Storage temperature : -15°C ~ 50°C	
	Storage Humidity : 10 % ~ 90 %	
Environment	Working temperature : 5°C ~ 35°C	
(only for Moderate+ climates zone)	Working Humidity : 20 % ~ 80 %	
	Storage temperature : -15°C ~ 45°C	
	Storage Humidity : 10 % ~ 90 %	
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)	
	WPA2-PSK (TKIP/AES)	
	WEP (64bit/128bit)	

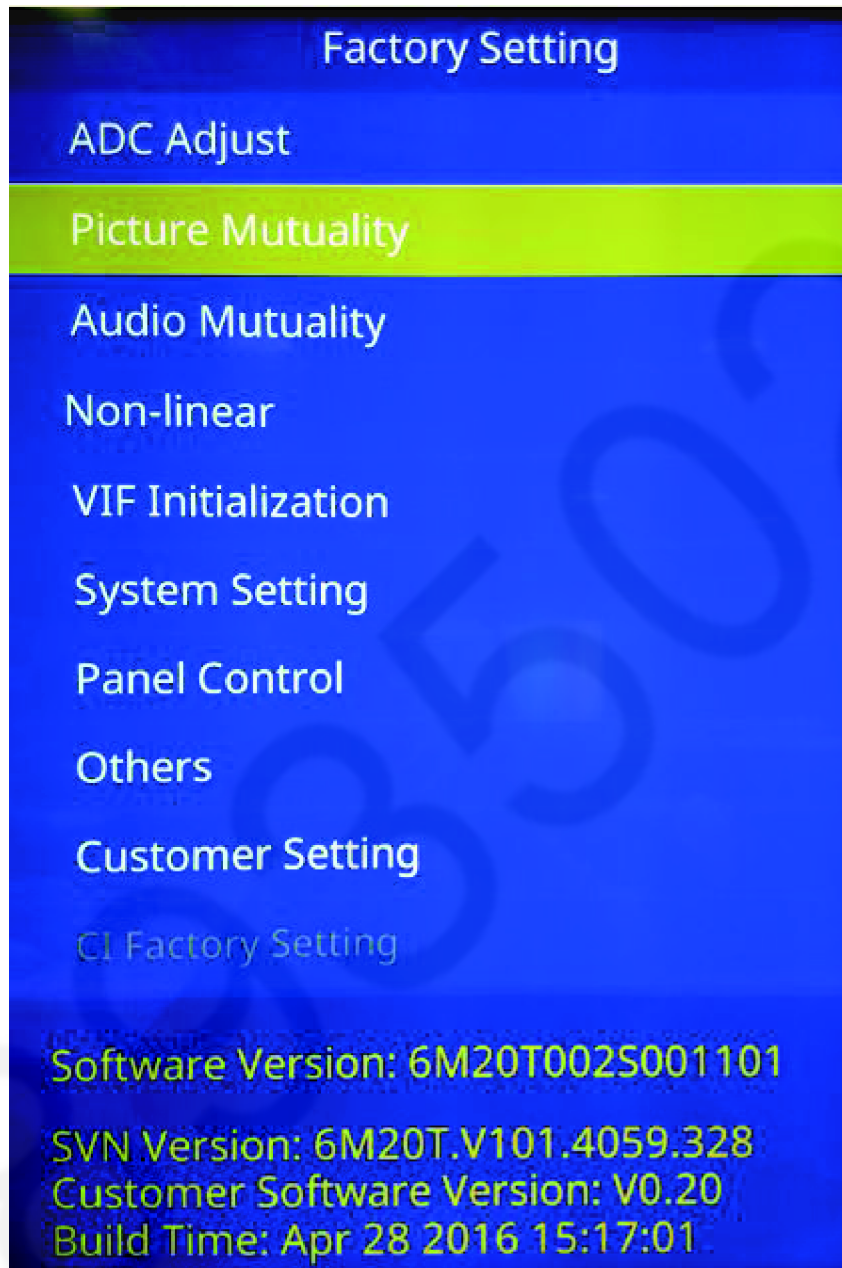
Note

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

5 Test and Alignment

5.1. Factory Setting

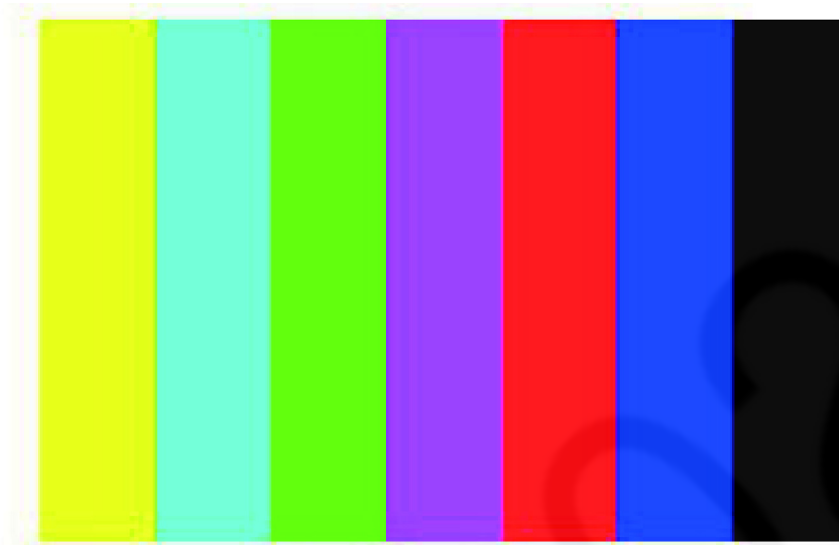
- Press AV button and follow with key 3, 1, 9, 5 one by one.



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

Picture Mutuality	
W/B Adjust	
Picture Mode	
OverScan	
QMAP Adjust	
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 ◀/▶ buttons can adjust the value to the best effect. COPY ALL : Copy the values to all source!
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 adjust the value to the best effect.
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 is turned off, Baud rate is '38400', for other commands, Baud rate should be '115200'.
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

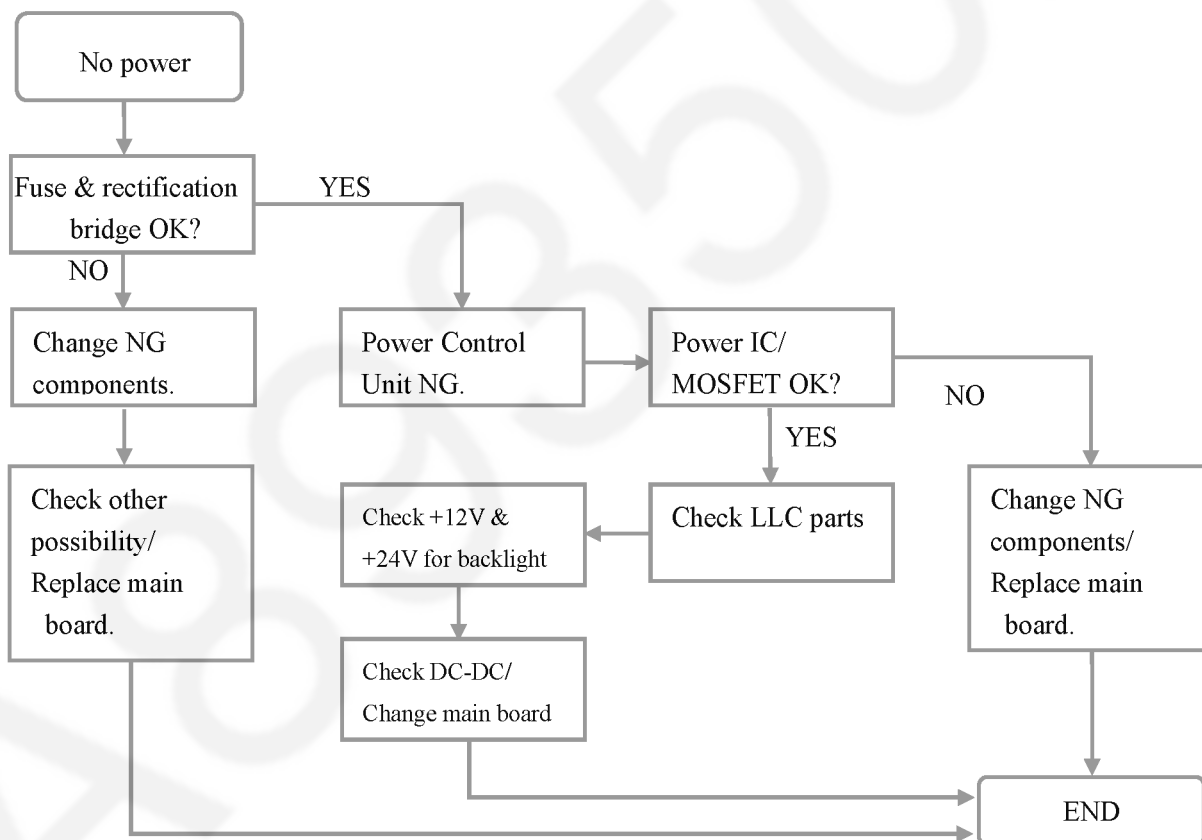
These flow charts may not match every single defeat TV set, but they can give you useful advices when you meet the same defeats described on the titles below.

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

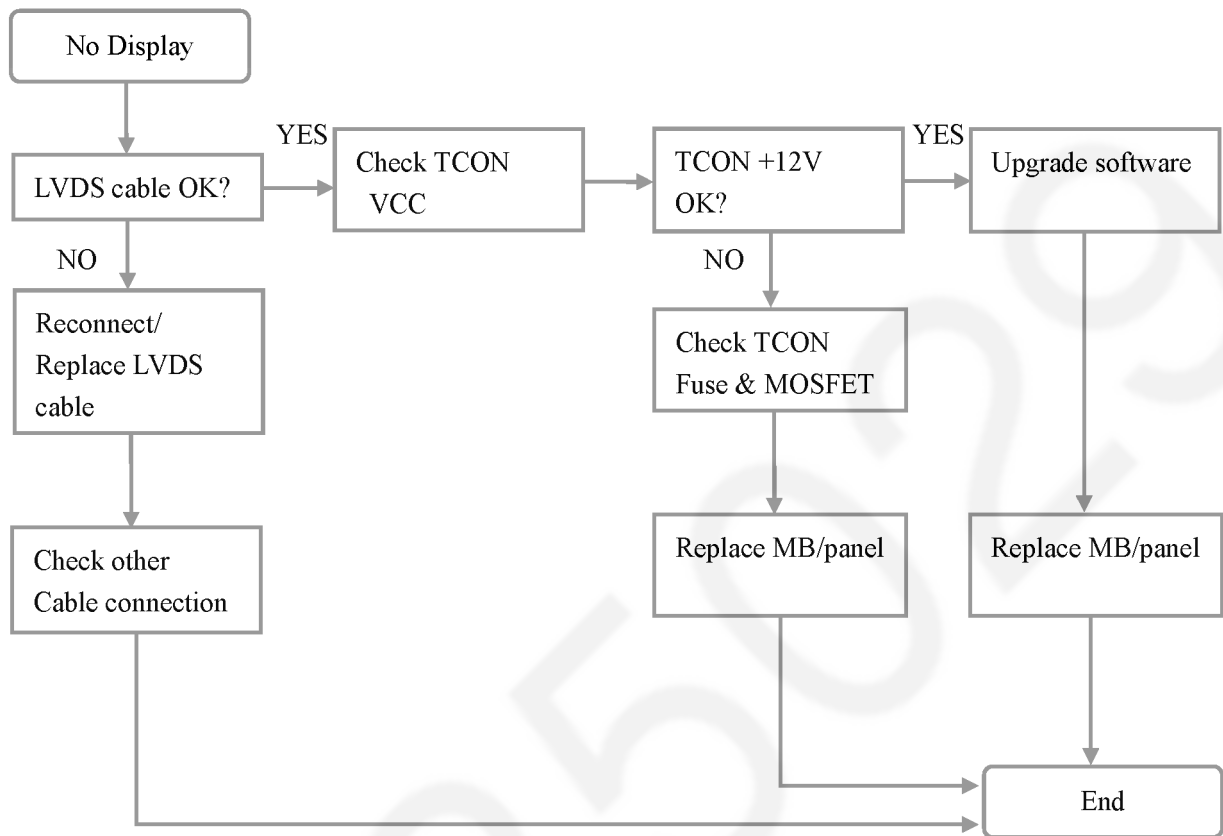
6.1. No Power.

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



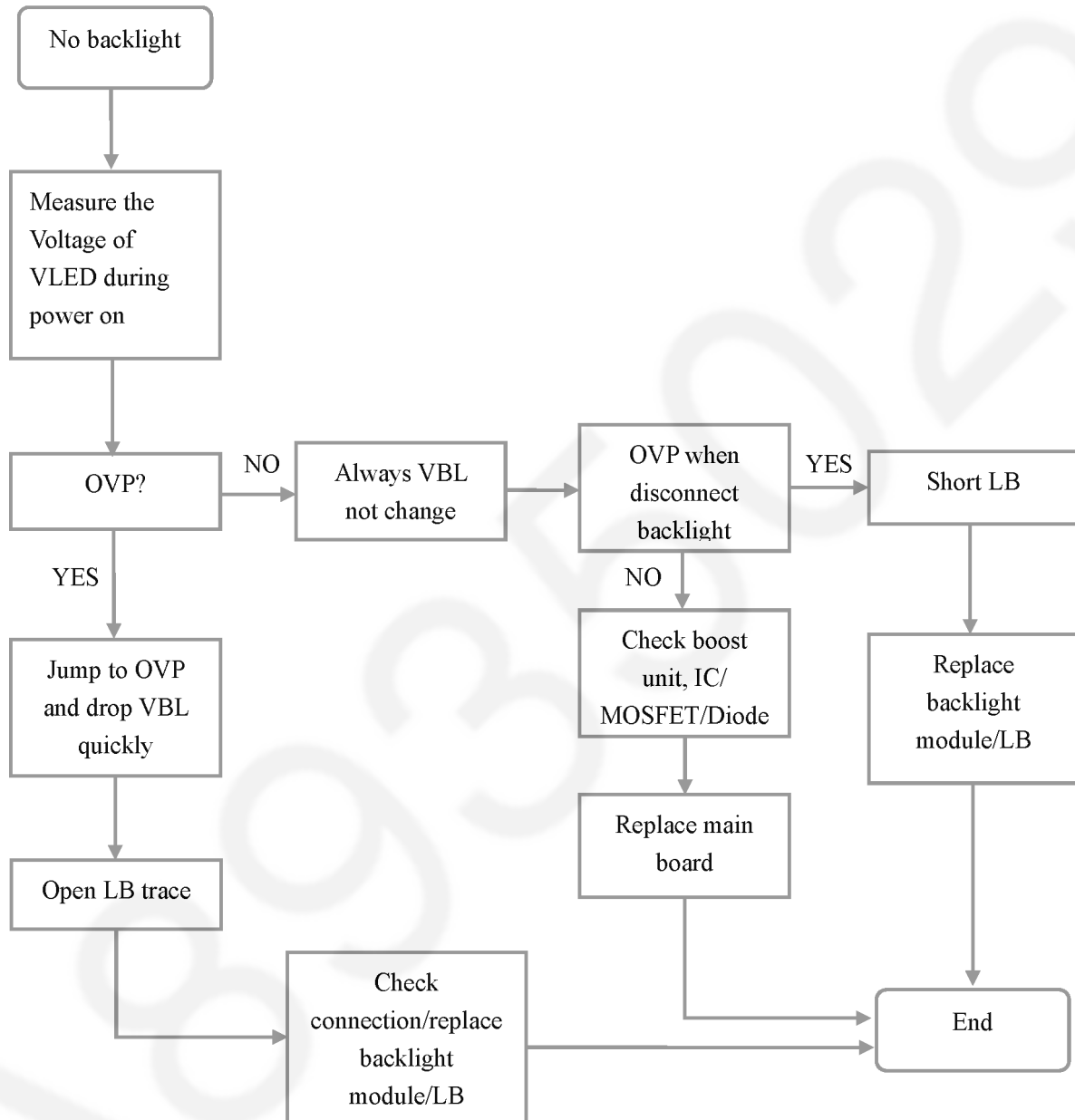
6.2. No Display / Black Panel.

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



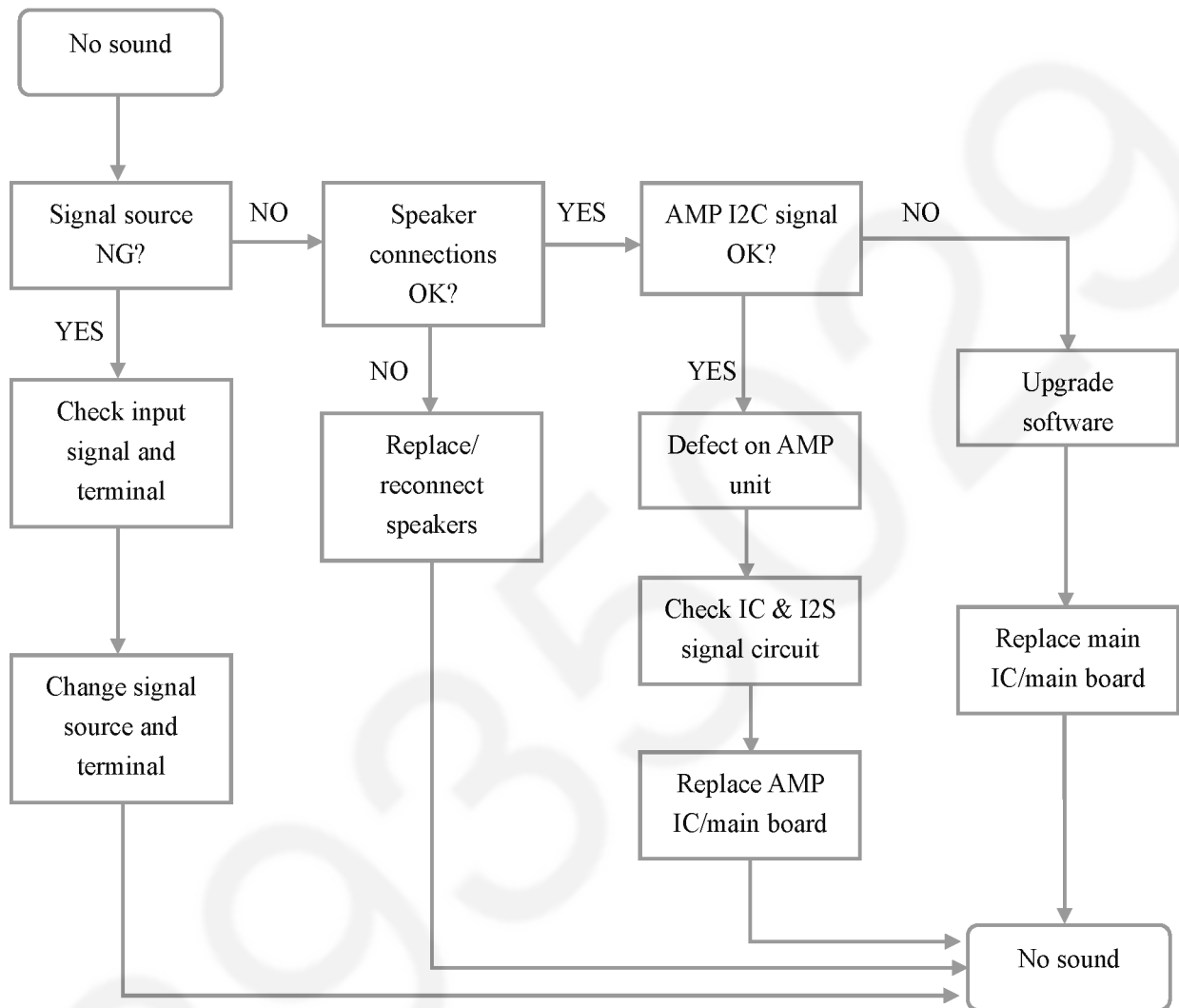
6.3. No Back Light.

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).



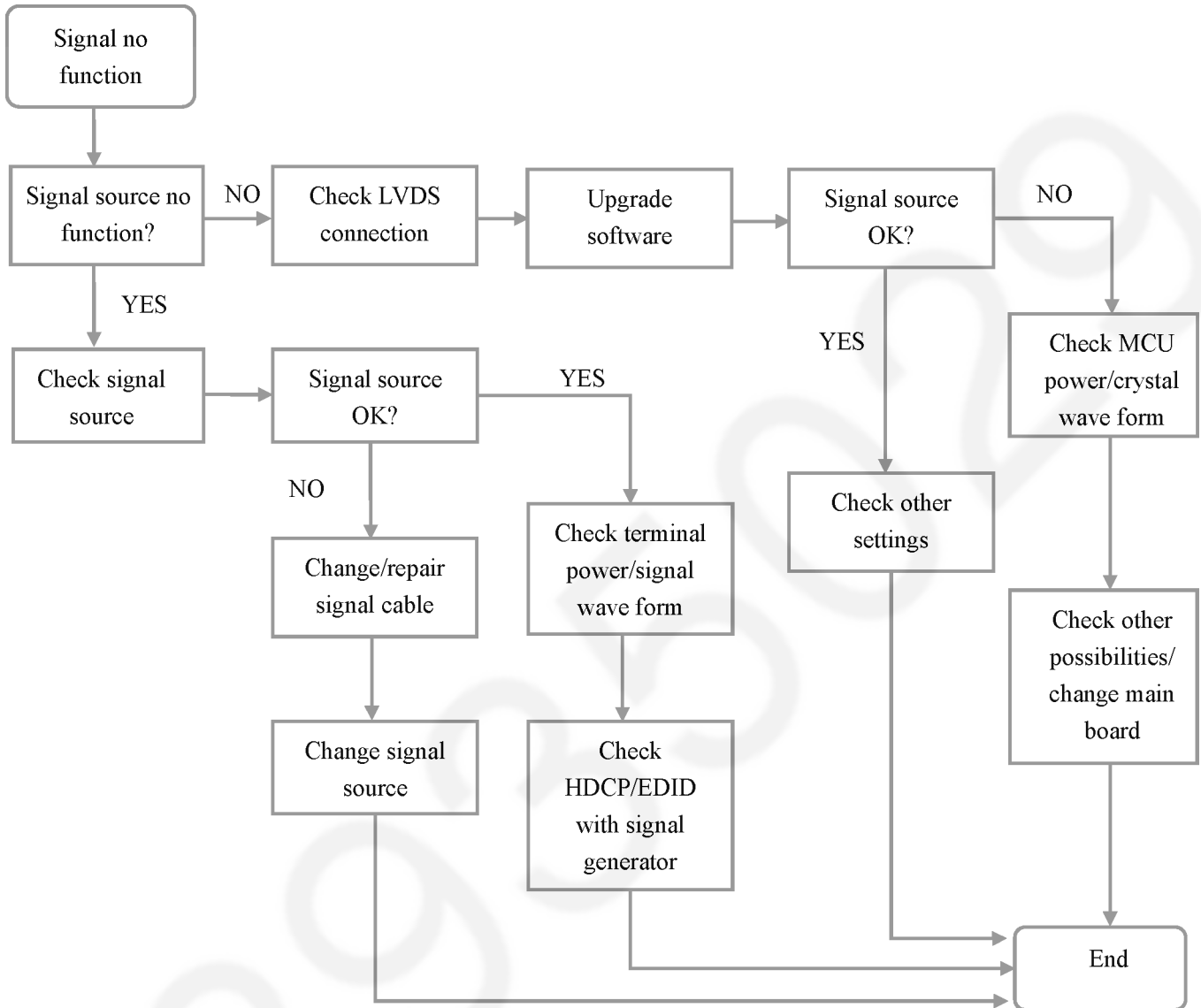
6.4. No Sound.

One or all signal source without sound.



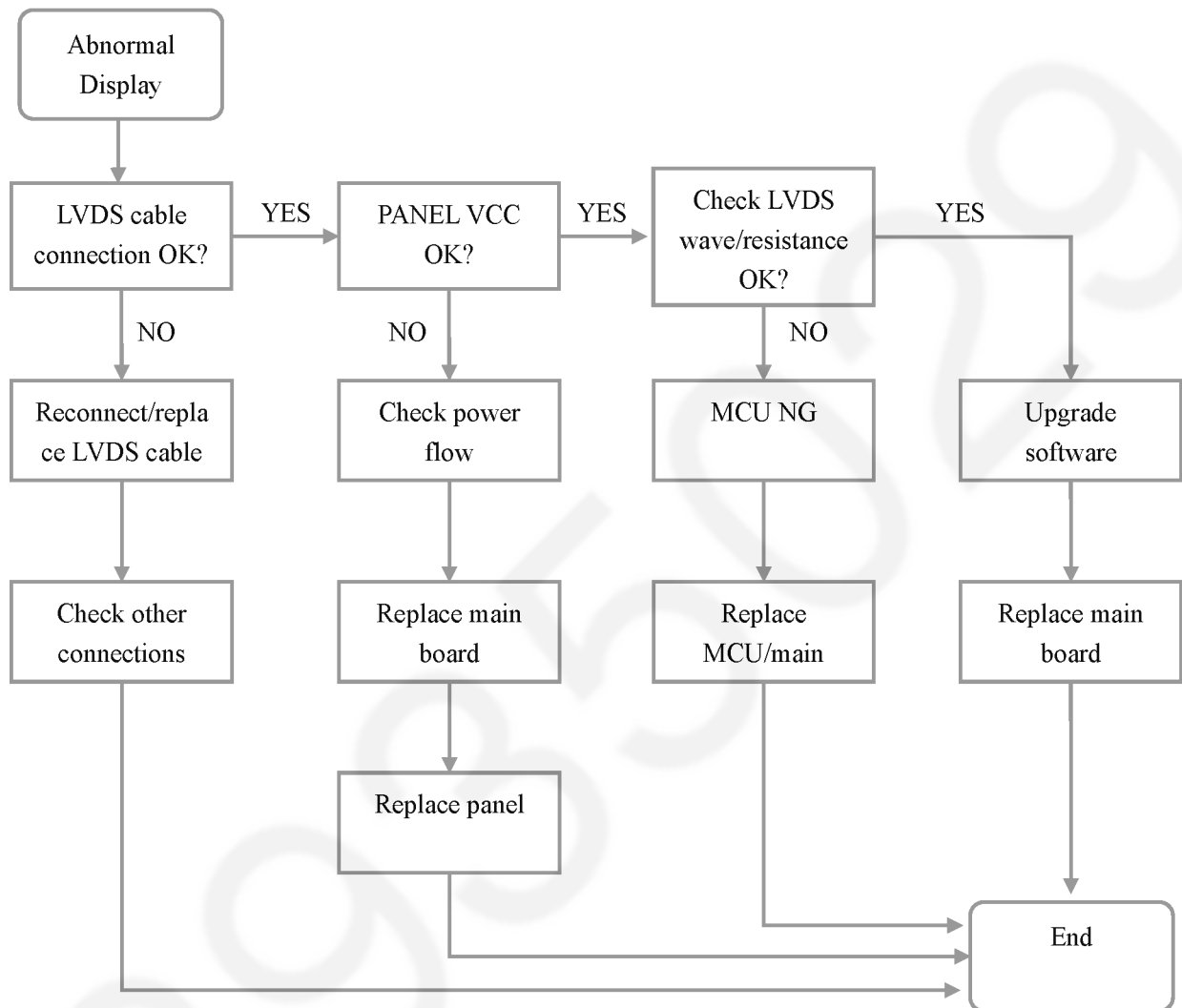
6.5. Signal source no function

One or several source no function.



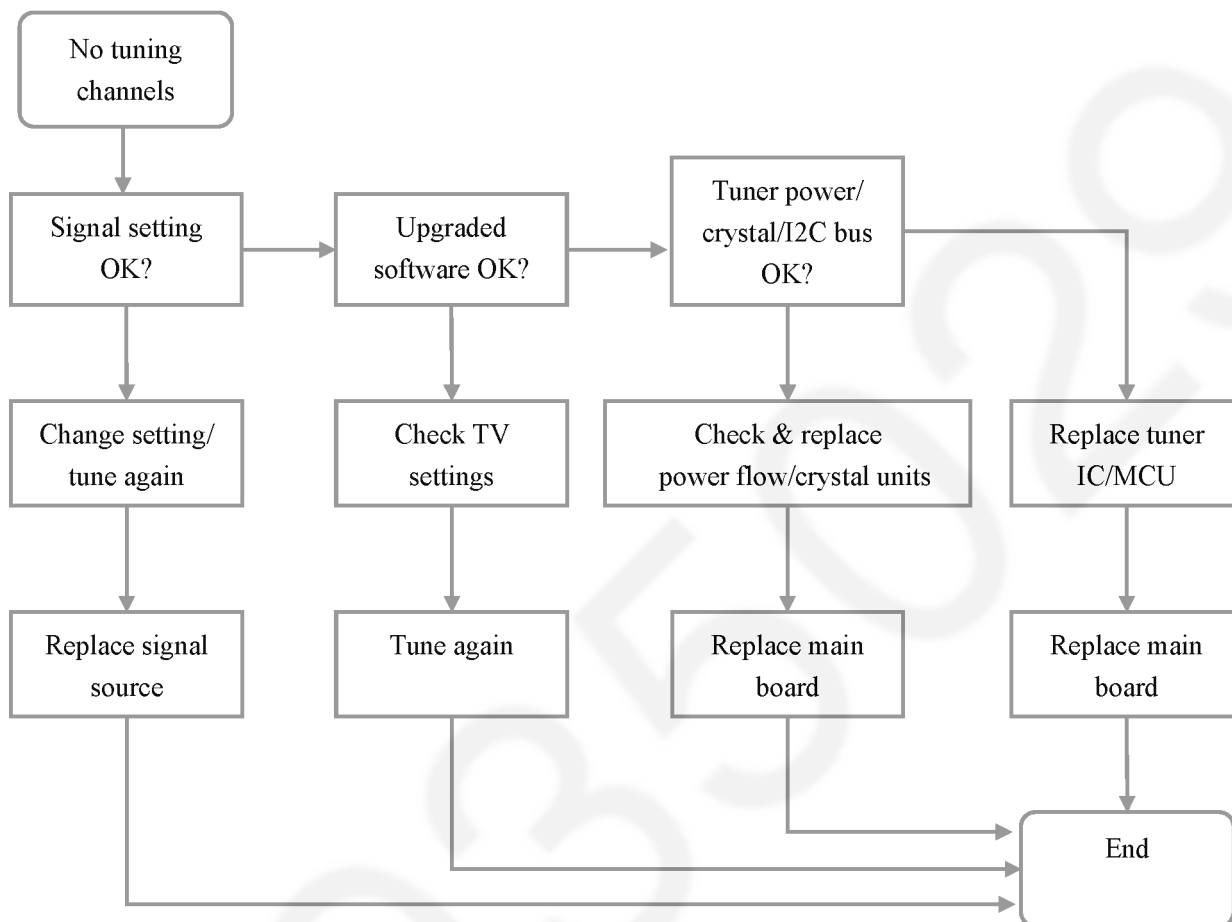
6.6. Abnormal Display

OSD NG or picture NG.



6.7. No Tuning Channels

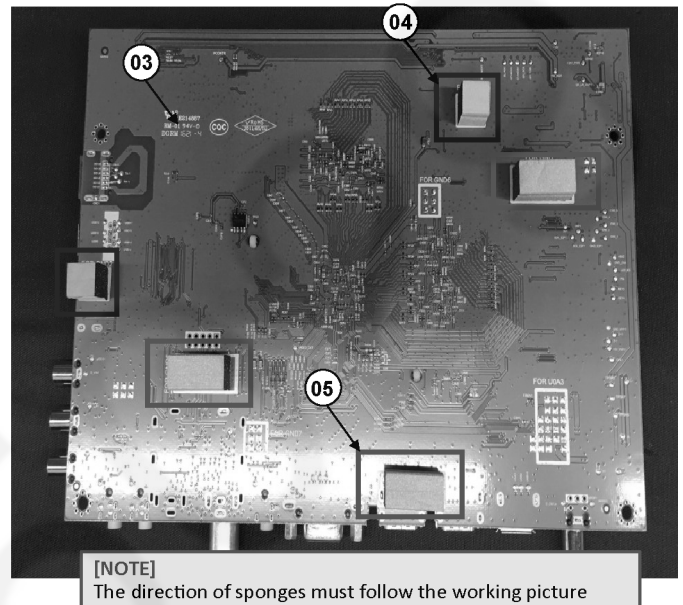
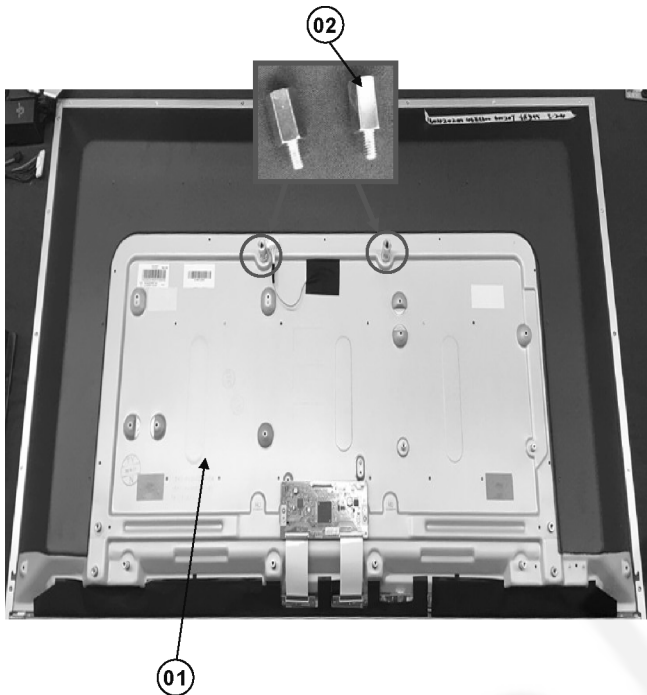
DTV or ATV no Channels.



7 Disassembly and Assembly Instructions

7.1. Panel and Sponges

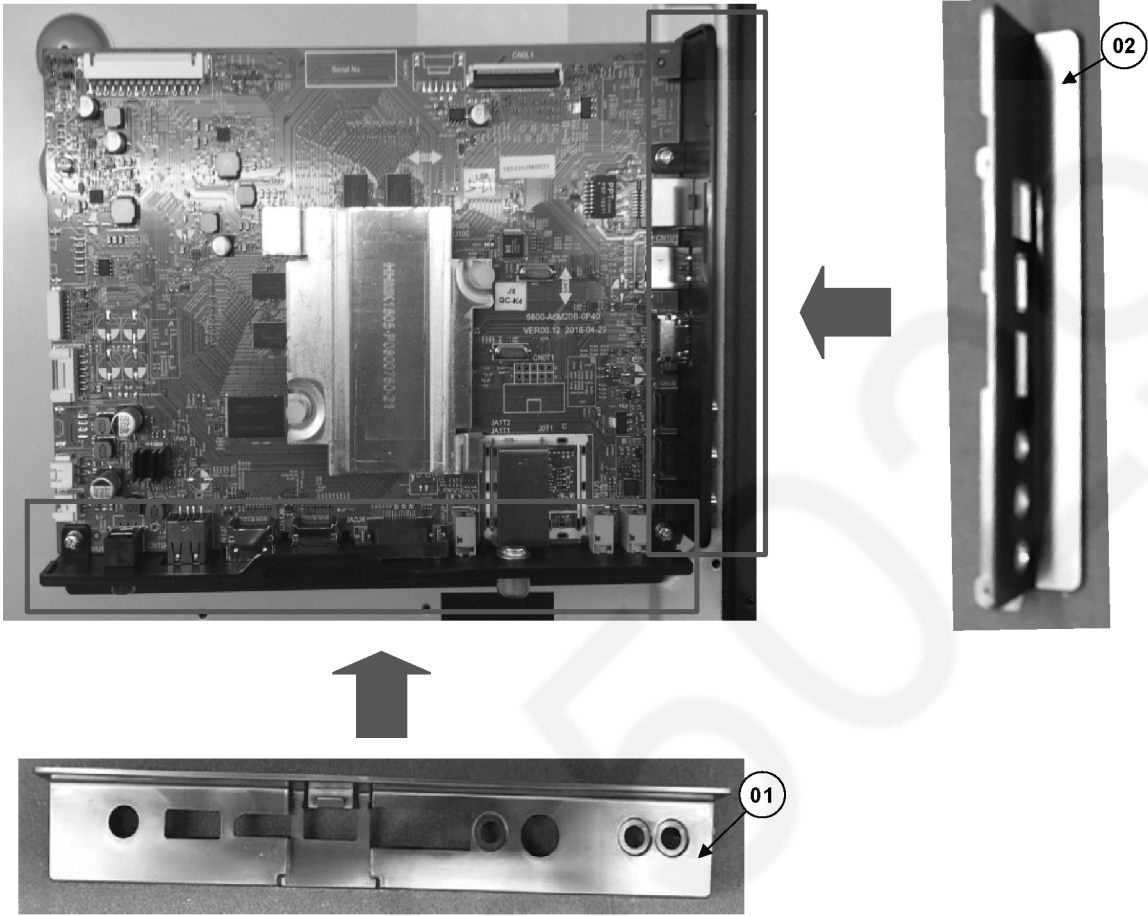
1. Screw components according to spec.
2. Stick conductive sponges according to spec.



No	Decription	Qty	Remark
01	43" SKY-RGB LCD MNG001 W/Panasonic RDL43	1	50 mm
02	SCREW HM6x19 (M6) HARDEN	2	14±3 kgf.cm
03	6M20T-43E560 (HI) MAIN BOARD ASSEMBLE	1	
04	CONDUCTIVE SPONGE	2	10 x 10 x 12 mm
05	CONDUCTIVE SPONGE	3	10 x 12 x 10 mm

7.2. Main Board and AV Brackets

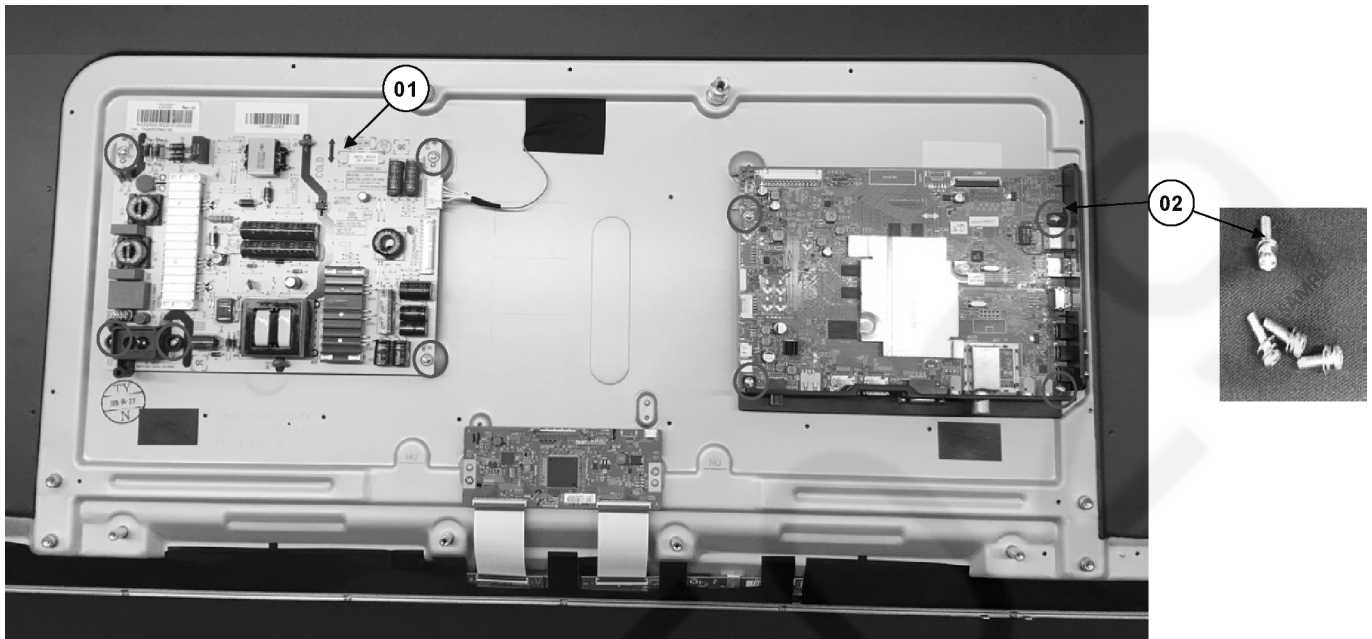
1. Assemble AV brackets to the main board as shown.



No	Decription	Qty	Remark
01	BTM AV BKT HIPS(94-V0) DG001 HB200B30-PA	1	
02	SIDE AV BKT HIPS(94-V0) DG001 HB200S30-PA	1	

7.3. Install PCB

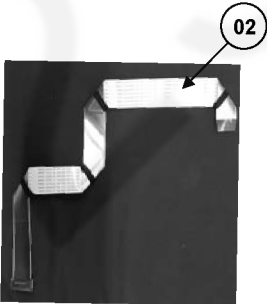
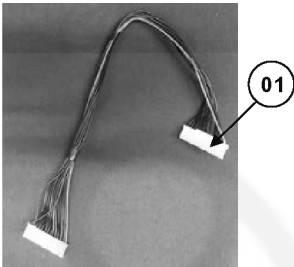
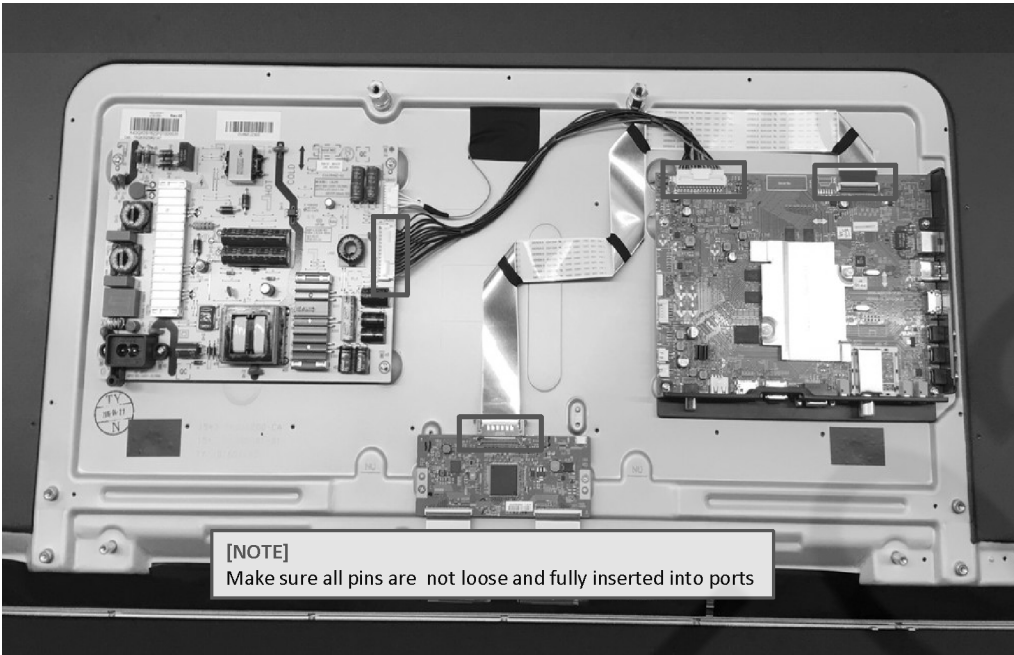
1. Assemble P-Board and A-Board according to spec.
2. Do not overtighten screw.



No	Decription	Qty	Remark
01	(HI) POWER ASS'Y	1	
02	WM 3x10	9	3±2 kgf.cm

7.4. LVDS Cable

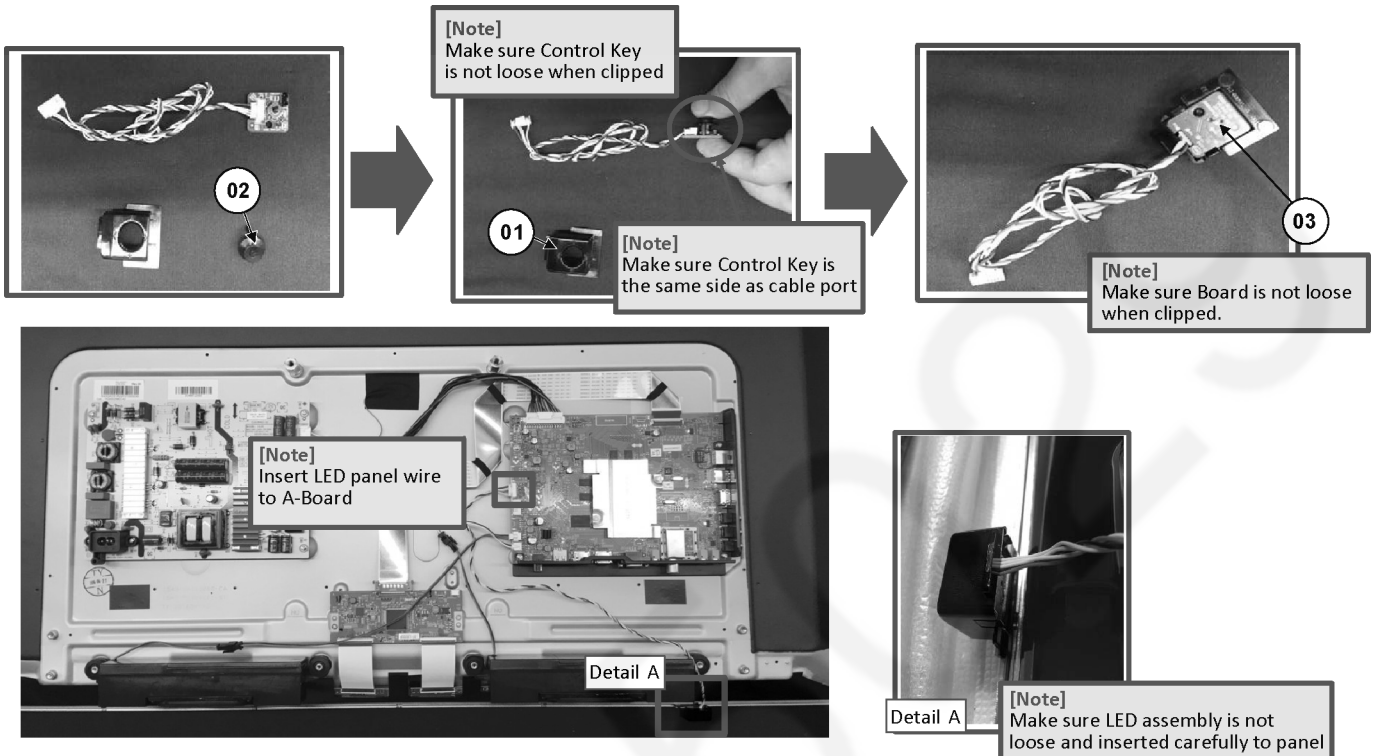
- 1. Assemble Wire and FFC cable according to spec.
- 2. Make sure all pins are inserted fully



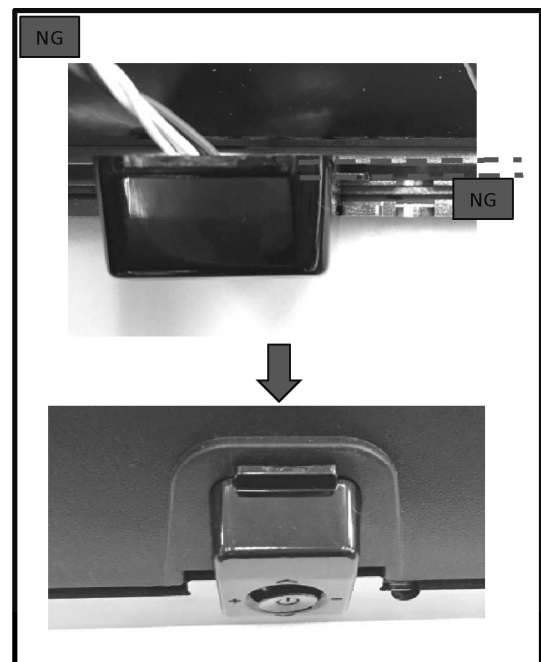
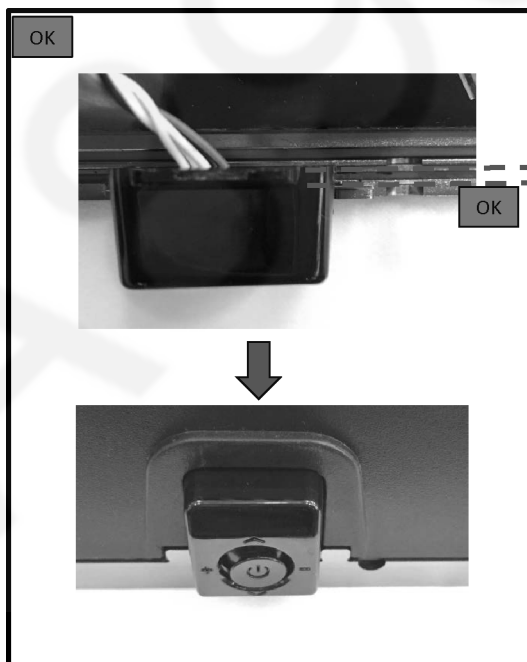
No	Decription	Qty	Remark
01	HOUSING 14(2.5) + HOUSING 14(205) + 300mm	1	
02	FFC 51 PINS P=0.5mm L=530mm	1	

7.5. Key Button Ass'y

1. Assemble LED Panel according to spec.
2. Make sure all parts are clipped fully.

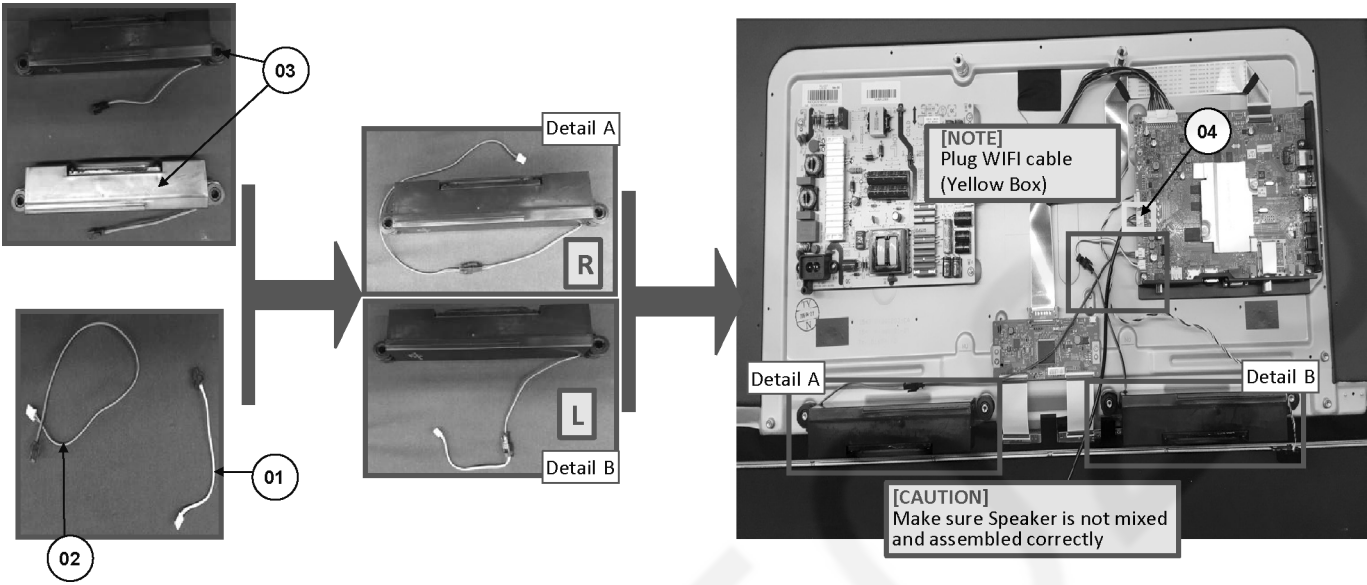


No	Decription	Qty	Remark
01	F. LENS PC TRANSPARENT+TEA543 QE20A000-PA	1	
02	CTRL. KEY BKT ABS HNB003 CE300000-PA 32E3	1	
03	6M20T-43E560(HI) RECEIVER BOARD ASSEMBLY	1	



7.6. Speaker Assy

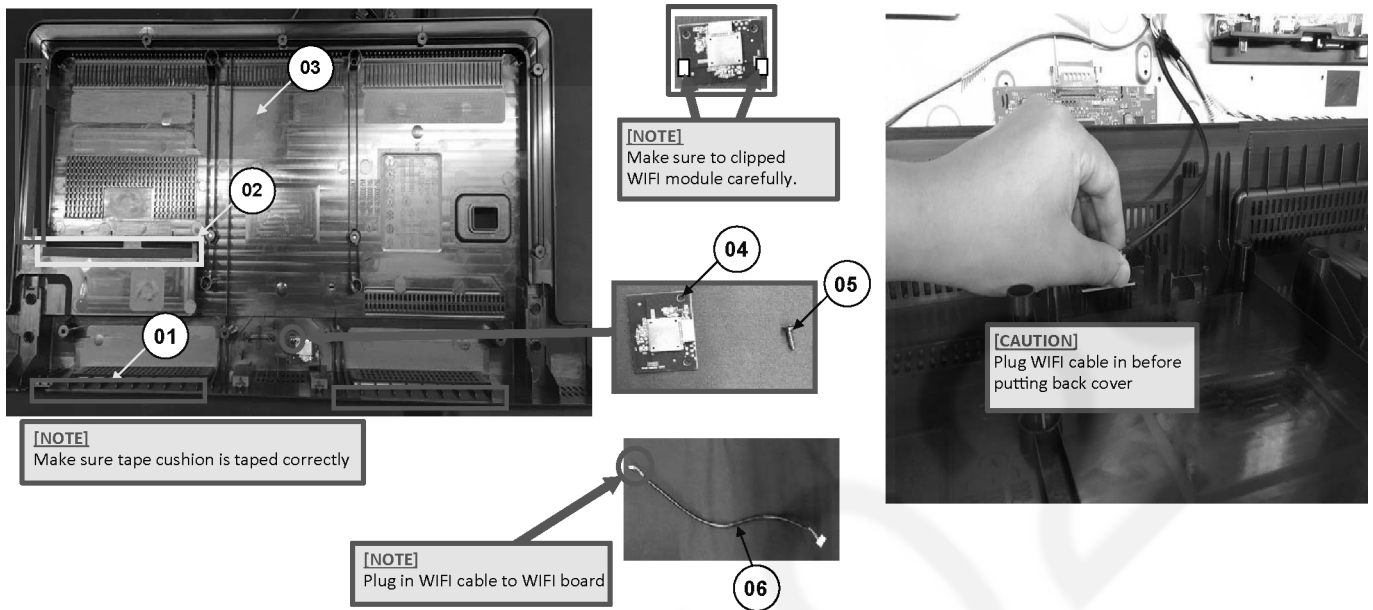
- 1. Assemble Speaker according to spec.
- 2. Make sure all parts are clipped fully.
- 3. Make sure parts are not mix.



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 32*190*43	2	
04	HOUSING 06(1.25)+ HOUSING 06(2.0)+ 300mm	1	

7.7. WIFI and B/C Cushion

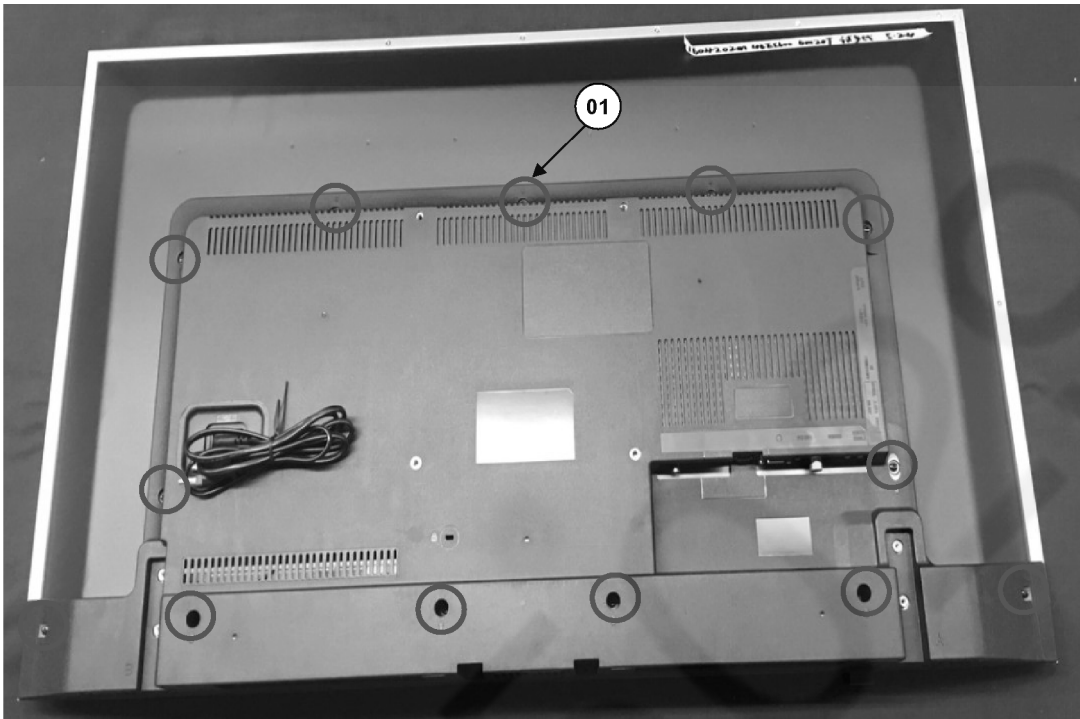
1. Install as follow:



No	Decription	Qty	Remark
01	EVA CUSHION 150x10x0.5mm	3	
02	ADHESIVED TAPE CUSHION 200x10x1mm	1	
03	B.CAB HIPS(94-V0)	1	
04	INSIDE WIFI MODULE NTUD-B3 W/RTL8188ETV	1	
05	SCREW B3 3x10 BLACK	1	3.5±1 kgf.cm
06	HOUSING 06(1.25)+ HOUSING 06(2.0)+ 300mm	1	

7.8. Back Cover Screw

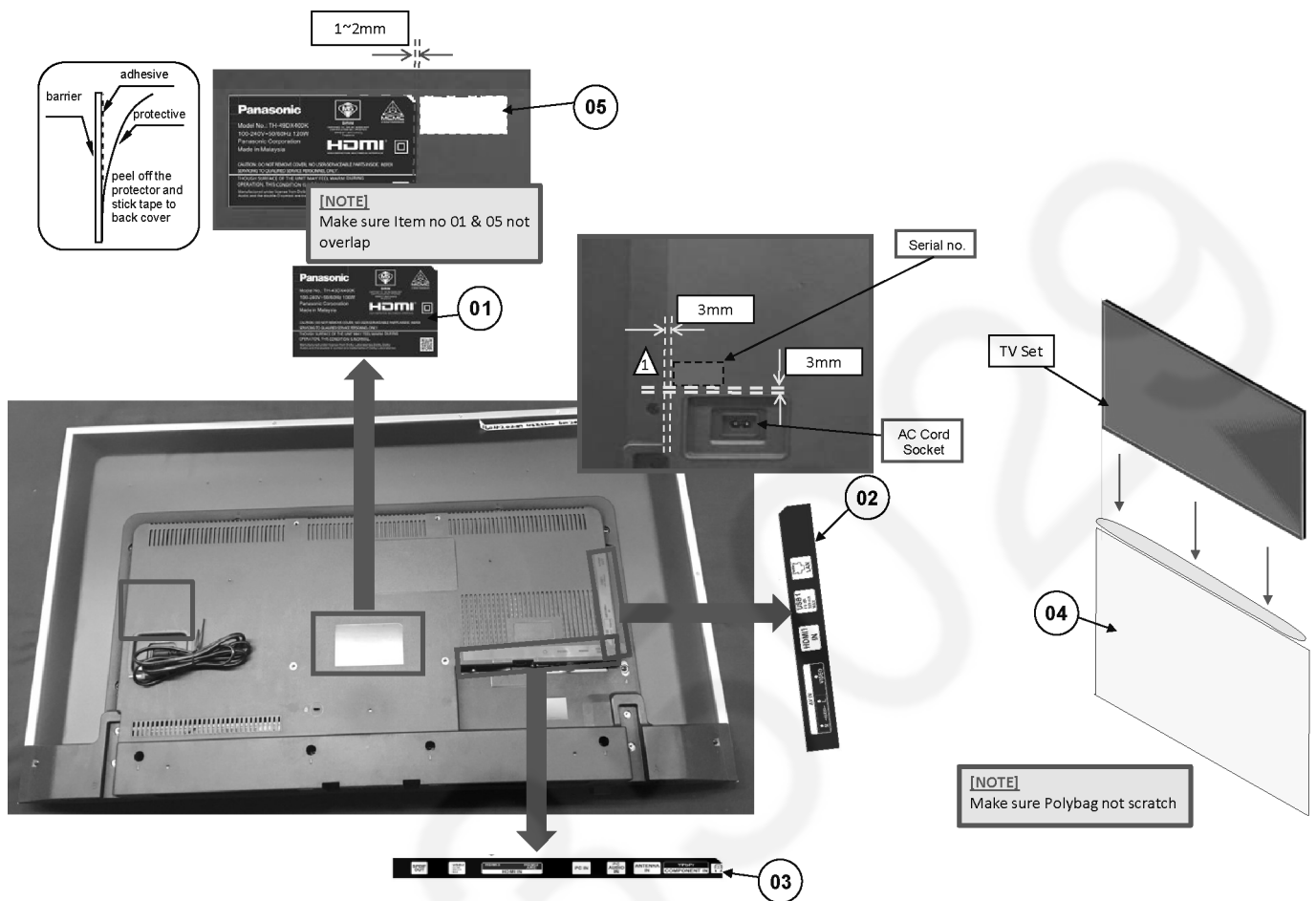
1. Install as follow:



No	Decription	Qty	Remark
01	SCREW AM3*6 BLACK W/O NYLOK	13	3.5±1 kgf.cm

7.9. Label

1. Install as follow:



No	Decription	Qty	Remark
01	BACK COVER LABEL	1	
02	INLAY-SIDE AV	1	
03	INLAY-BTM AV	1	
04	POLY BAG 1160x840x0.05mm WITH PRINTING	1	
05	DIGITAL LICENSE LABEL	1	Thailand only

7.10. Handling SPEC

Moving the LCD module

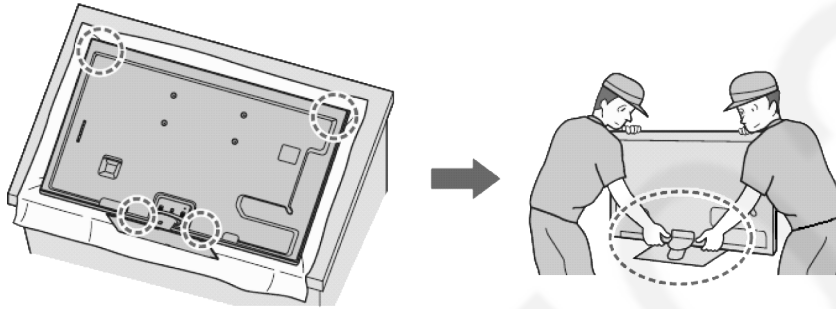
The module should be handle by two people and hold on that top and bottom long side by both hands without module warping. Never handle the module with keeping horizontal position when moving the module in order to avoid internal damage and deformation. Never drop or hit the module.

About the work table

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

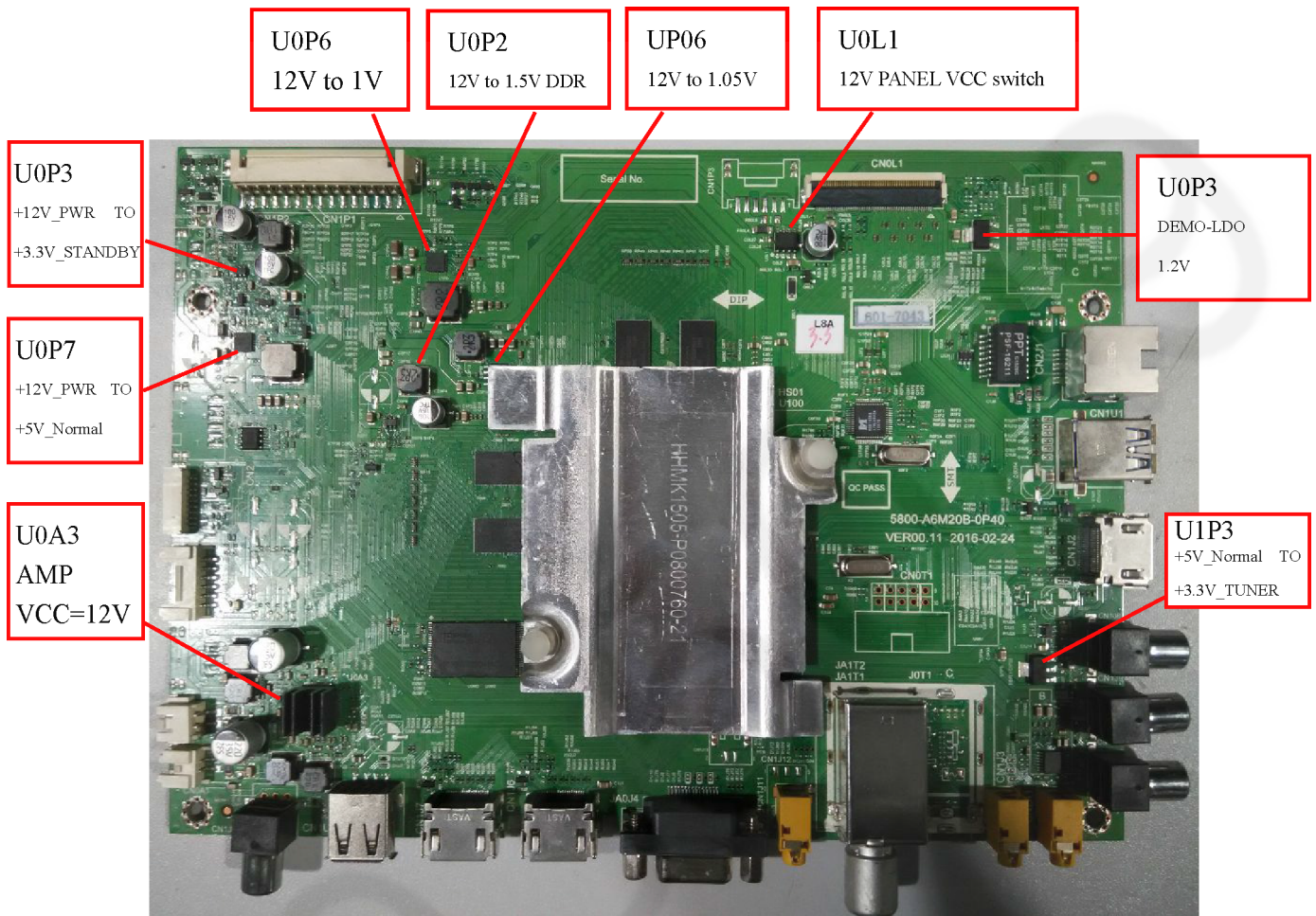
Moving the TV (Case with a stand)

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



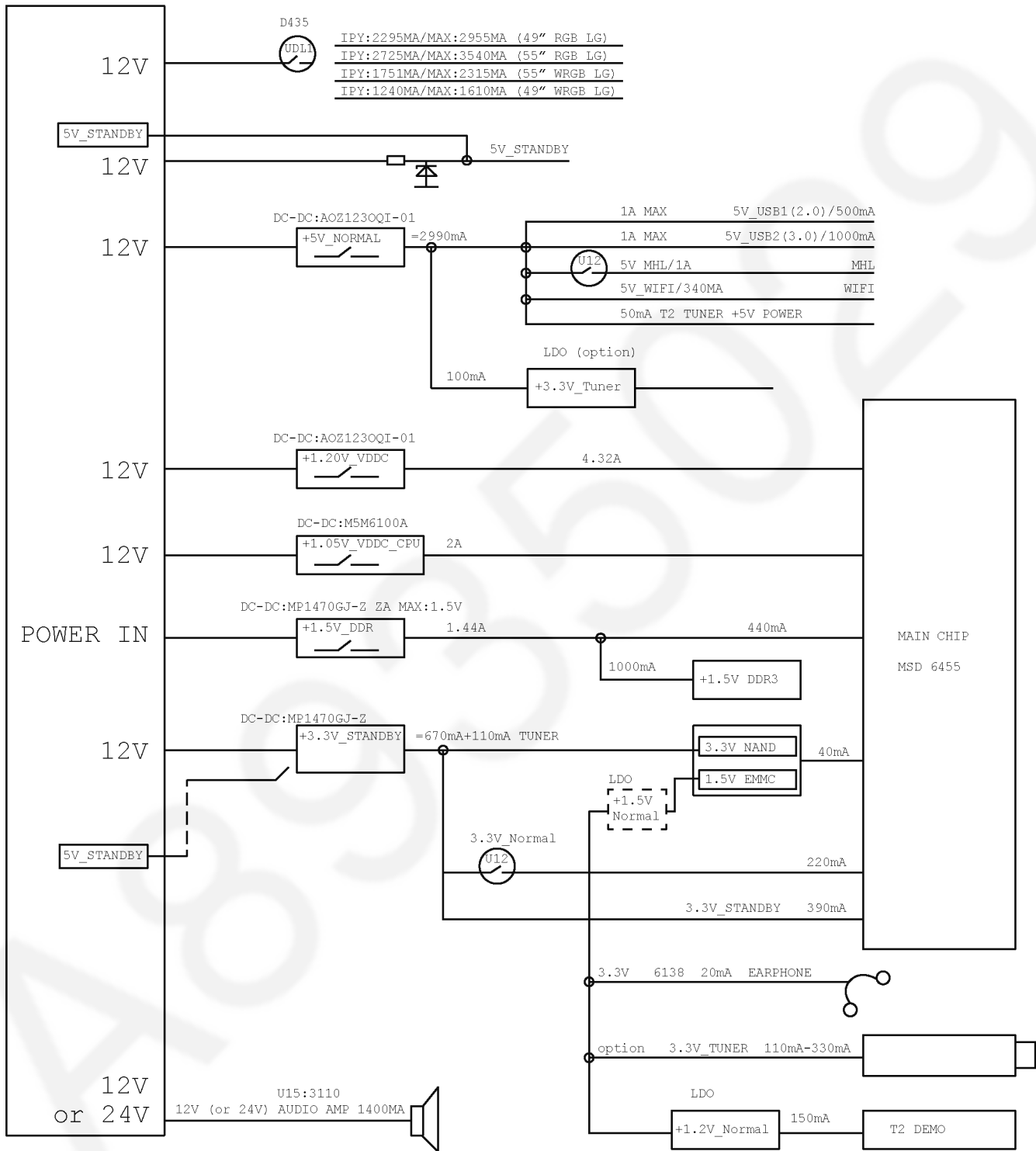
8 Measurements and Adjustments

8.1. Key Check Points



8.2. Power Flow Diagram

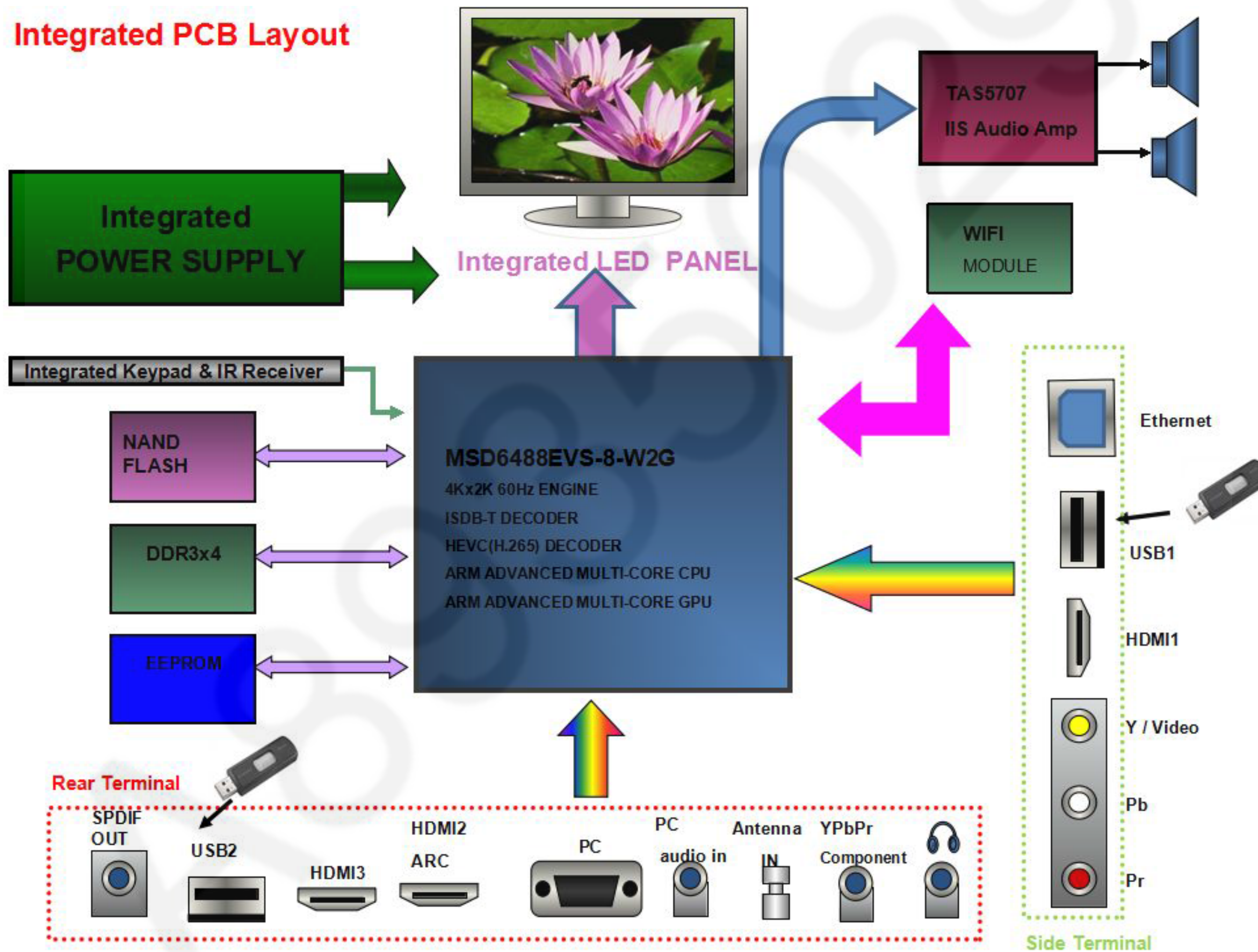
Power Tree



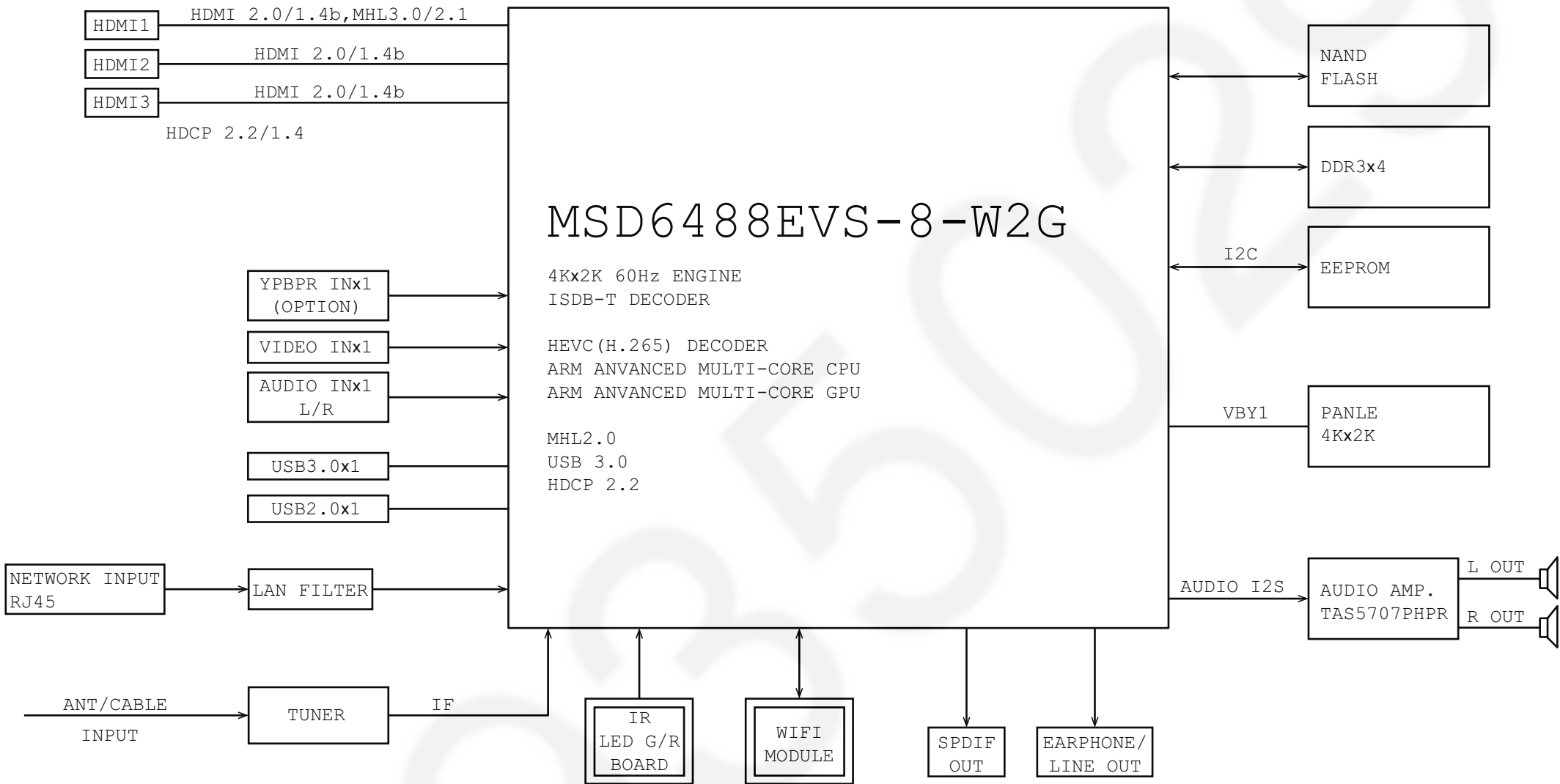
MSD6488 SMART TV POWER TREE

9 Block Diagram

9.1. System Block Diagram



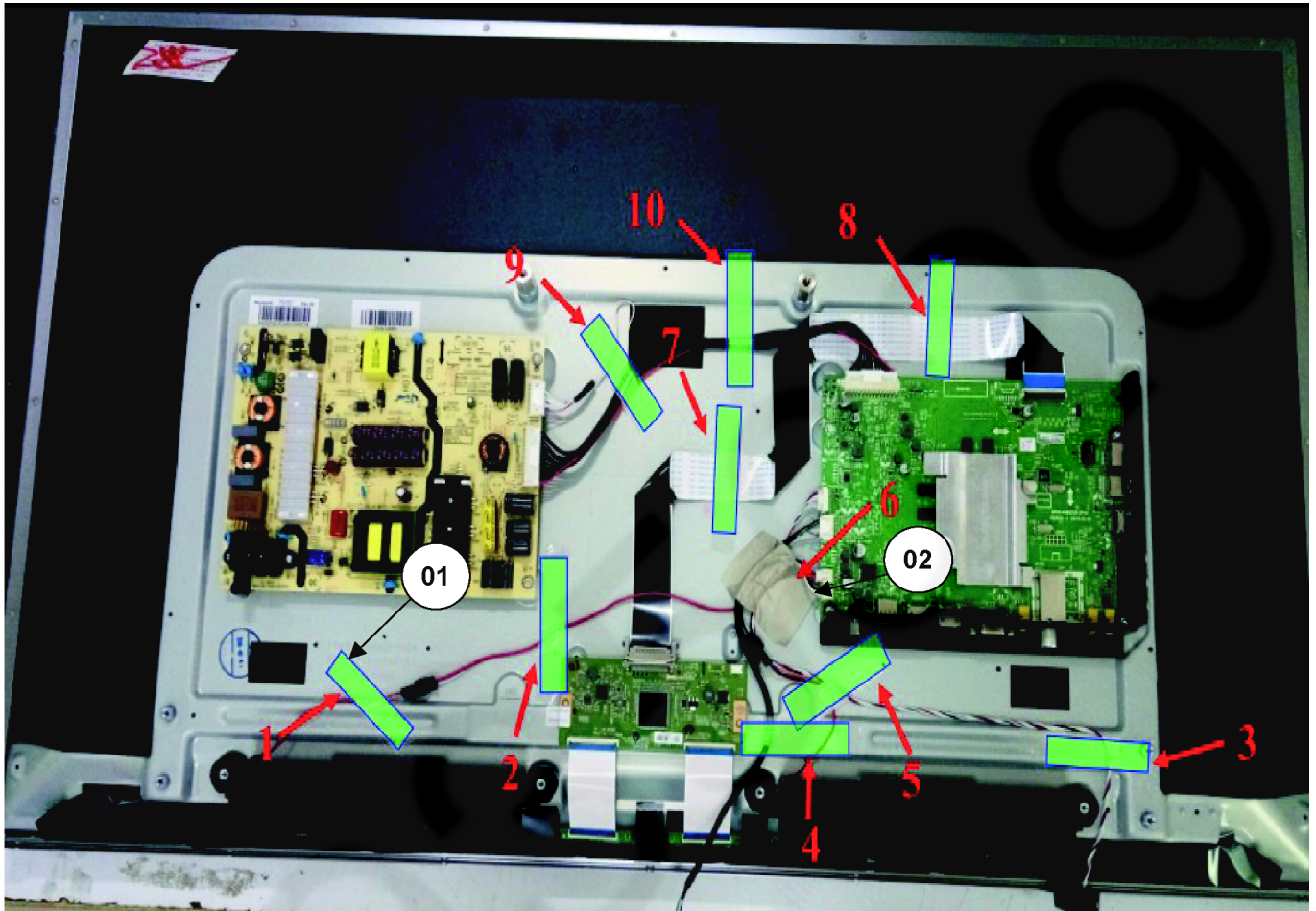
9.2. Circuit Block Diagram



10 Wiring Connection Diagram

10.1. Wire Dressing

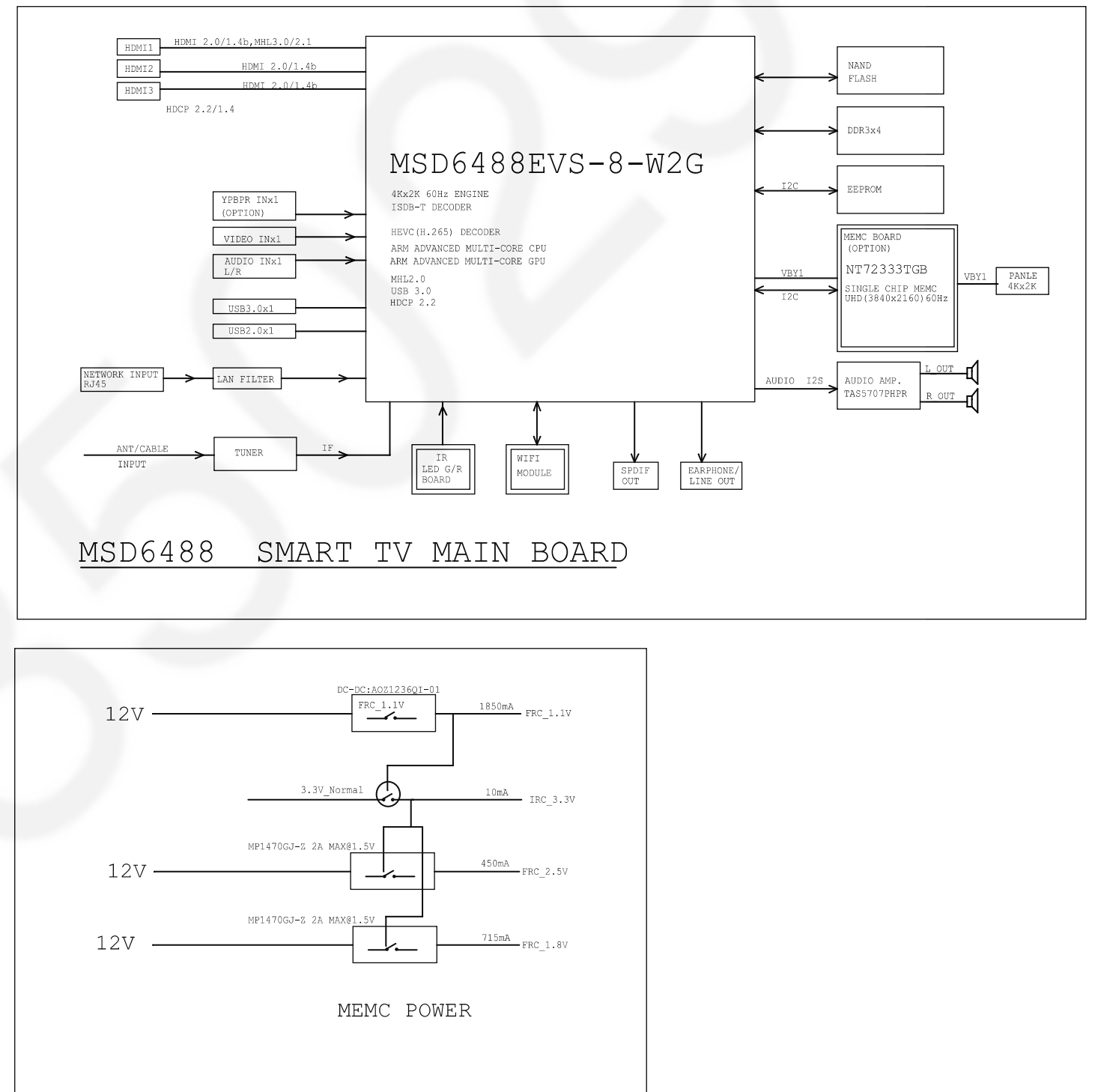
- Stick tape for wire dressing.



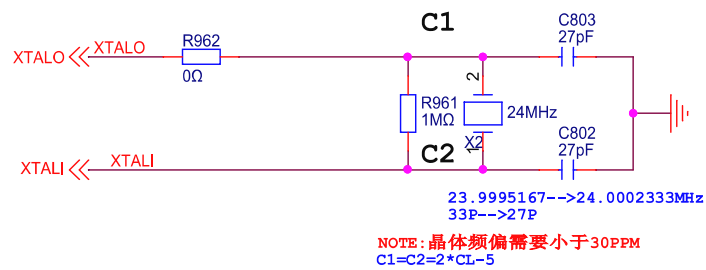
CAUTION POINT:

Please make sure that the Conductive Sponge (FACED ELECTRIC FABRIC) prohibited to touch the PCB board to avoid short circuit.

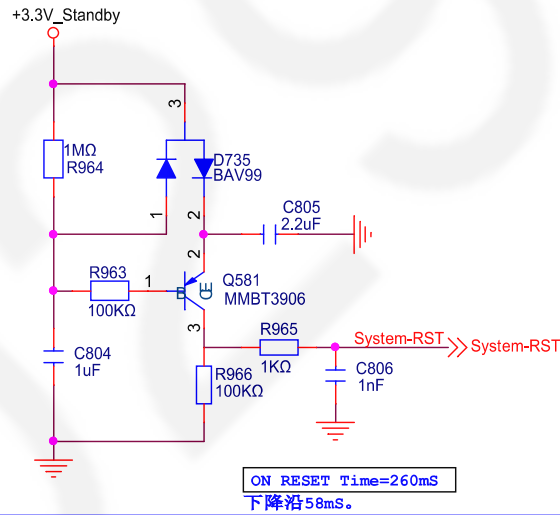
No	Decription	Qty	Remark
01	3M - FILAMENT TAPE	9	18 mm x 55 mm
02	DOUBLE - FACED ELECTRIC FABRIC	1	0.14 mm x 0.06 mm



CRYSTAL

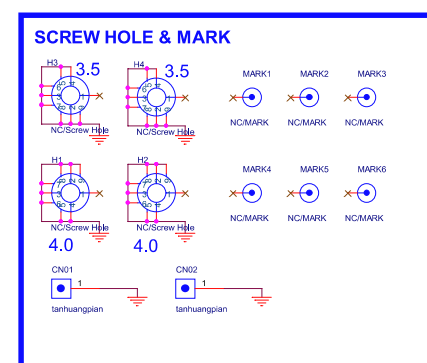
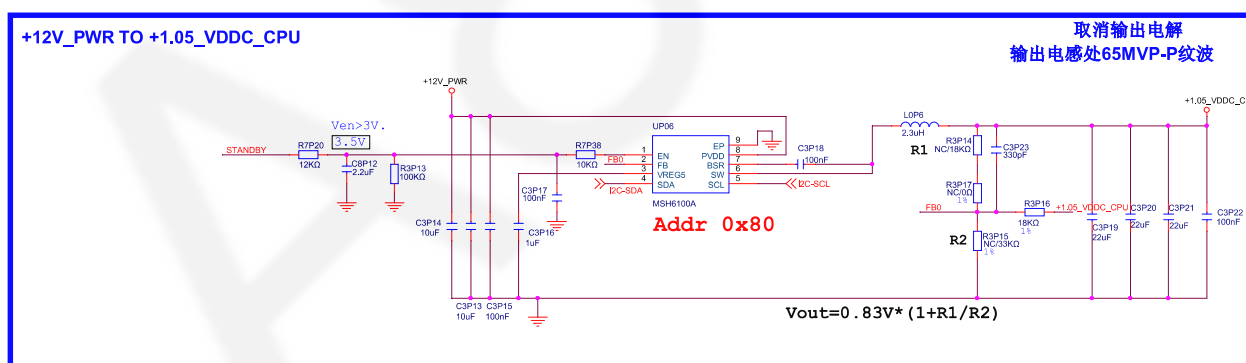
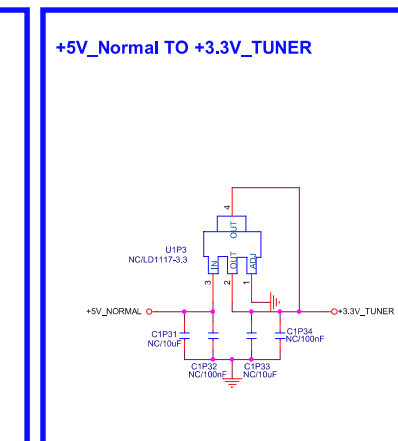
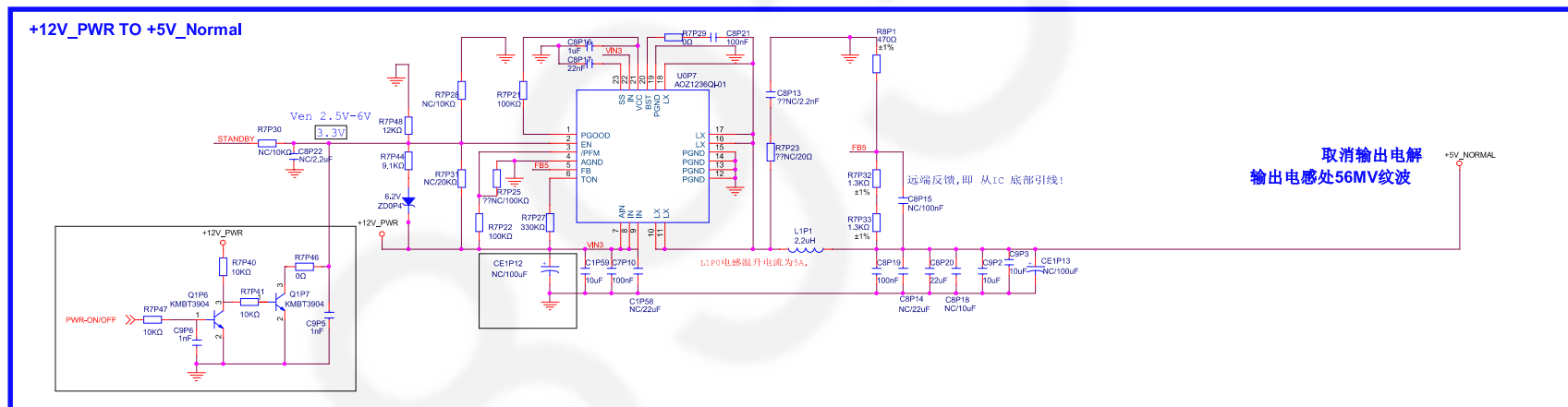
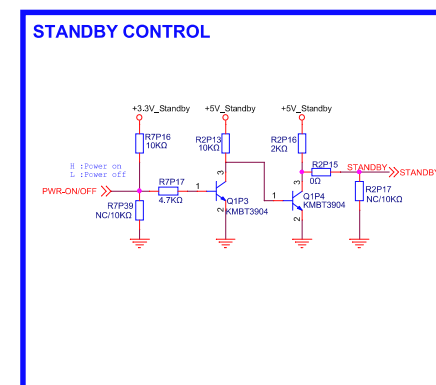
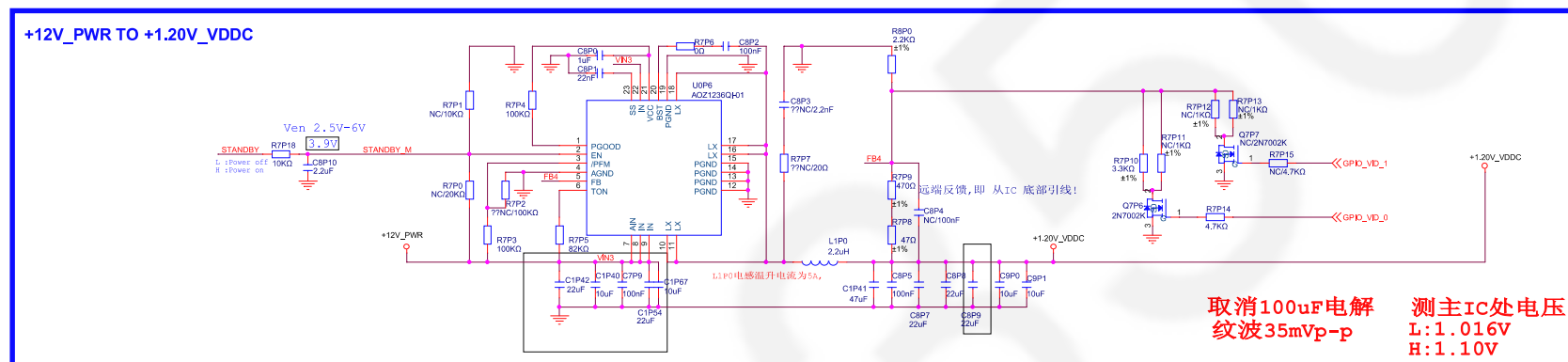
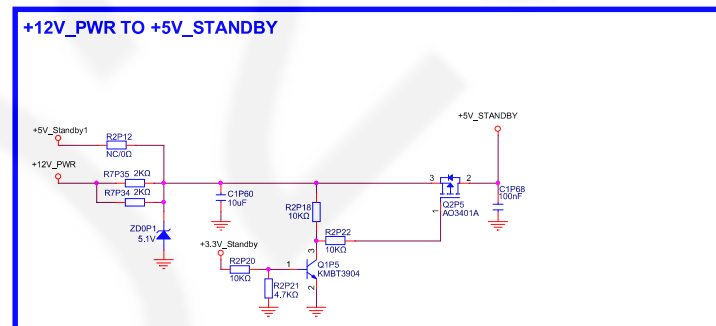
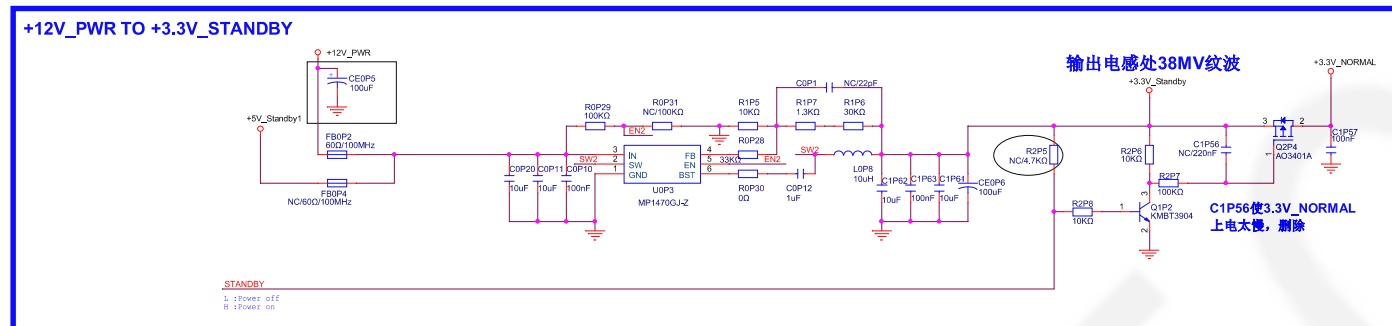
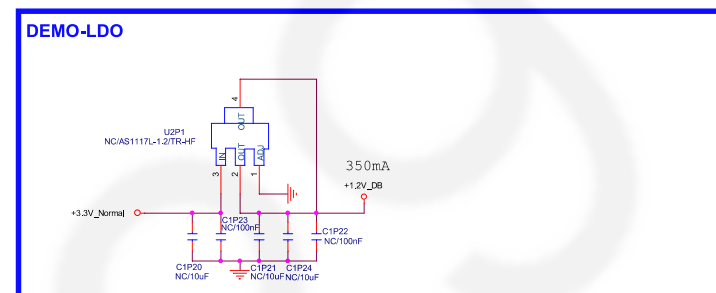
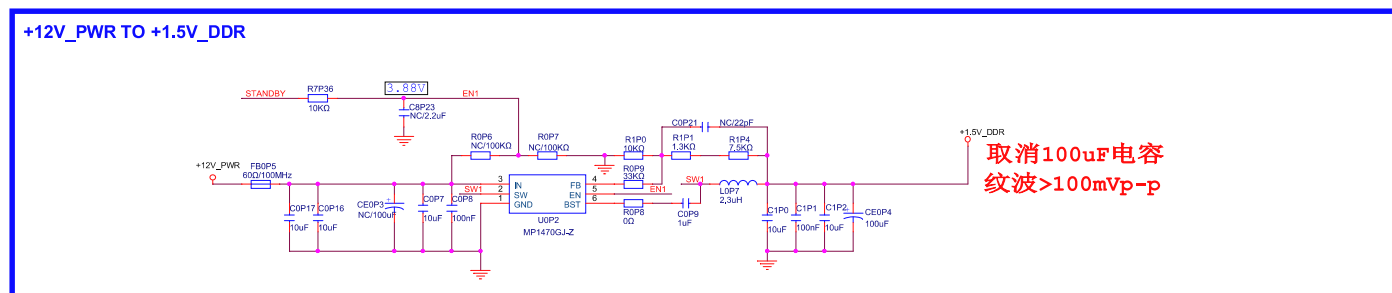


RESET

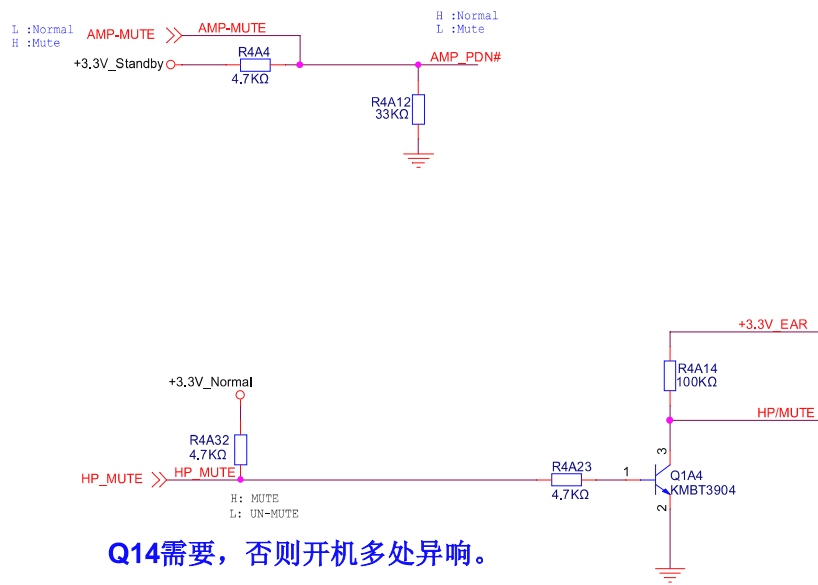


HEAT SINK

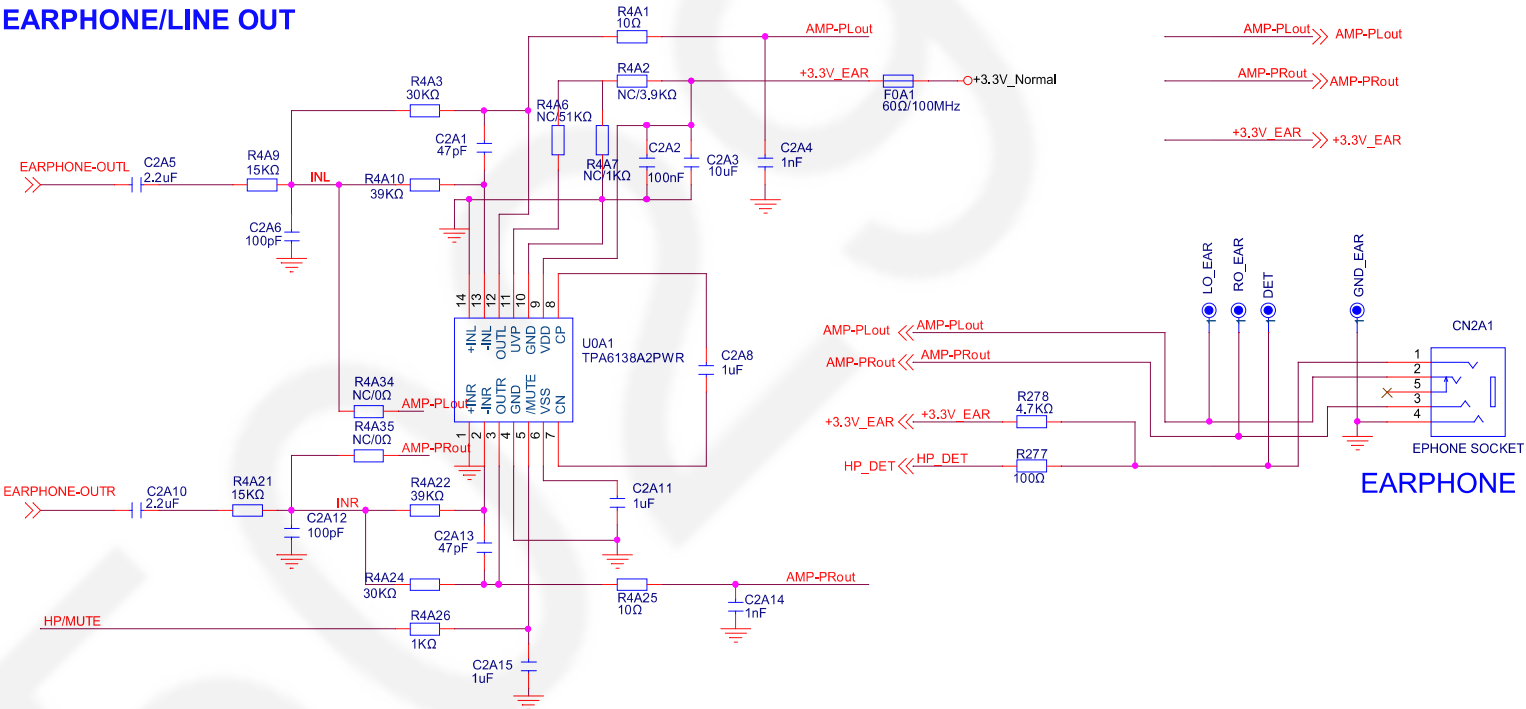




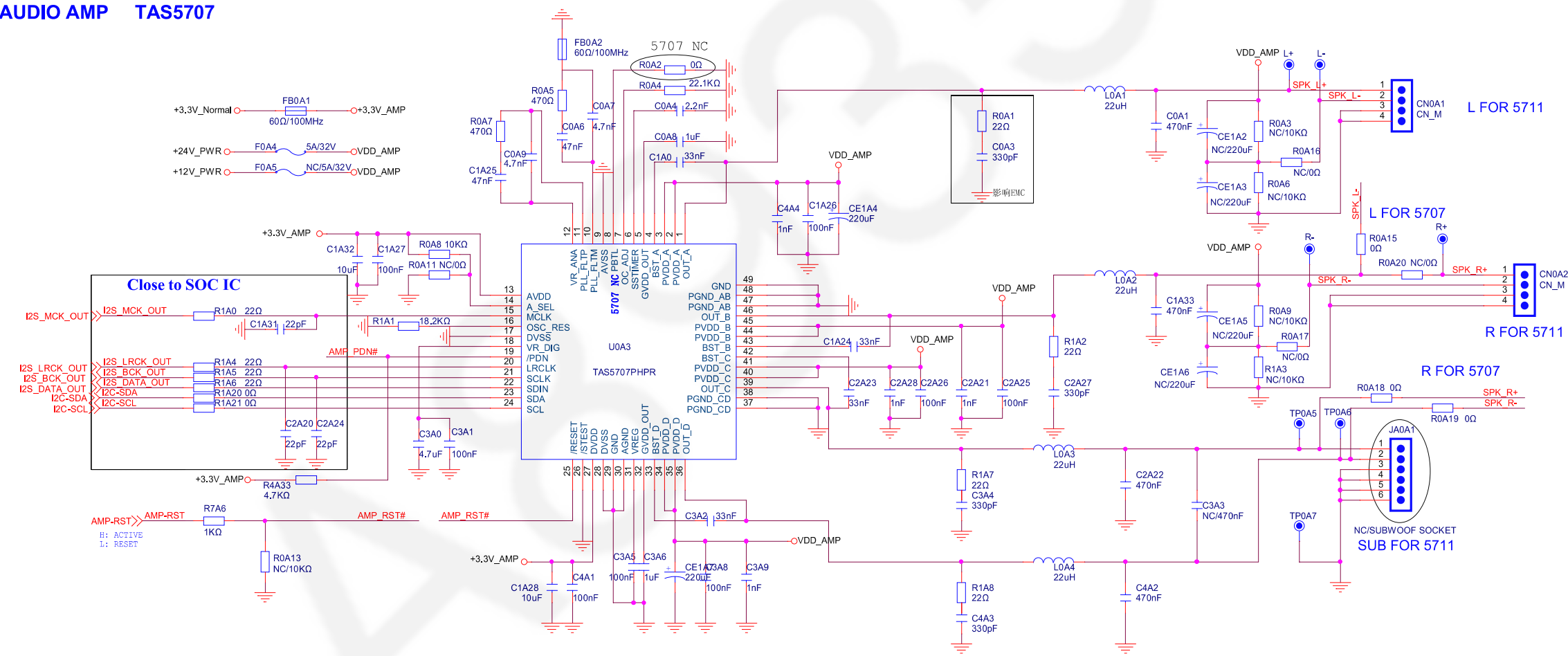
MUTE CONTROL



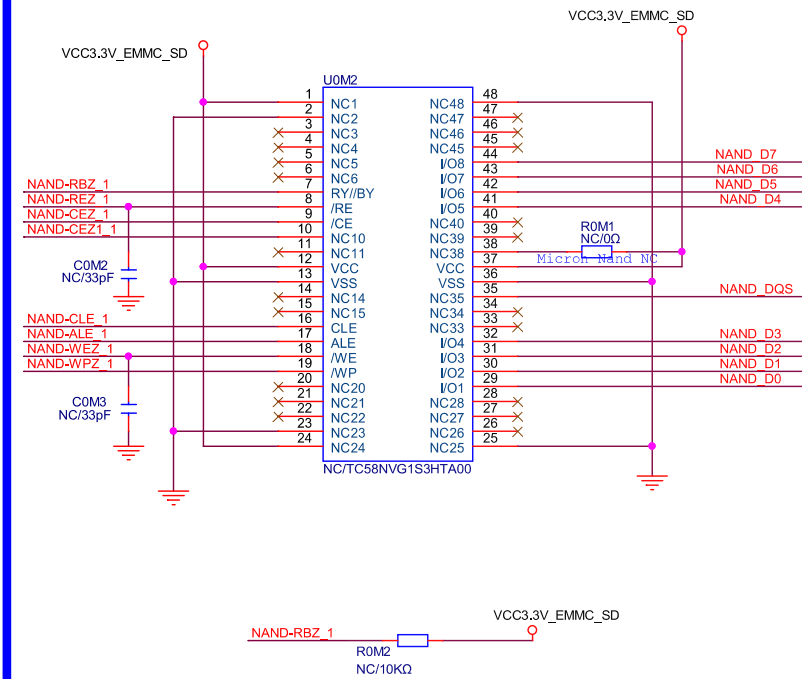
EARPHONE/LINE OUT



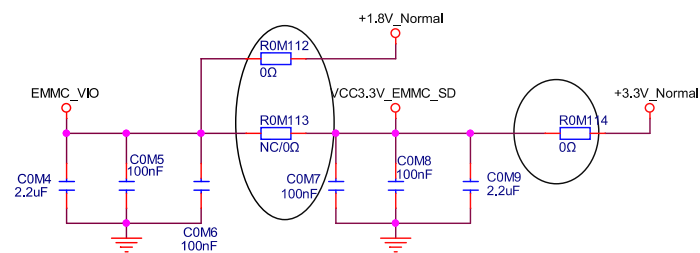
AUDIO AMP TAS5707



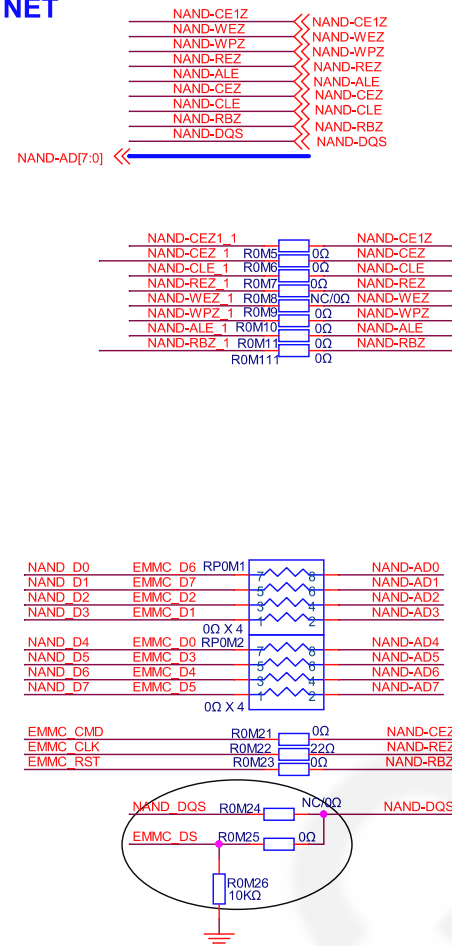
NAND FLASH



EMMC NEED +1.8V

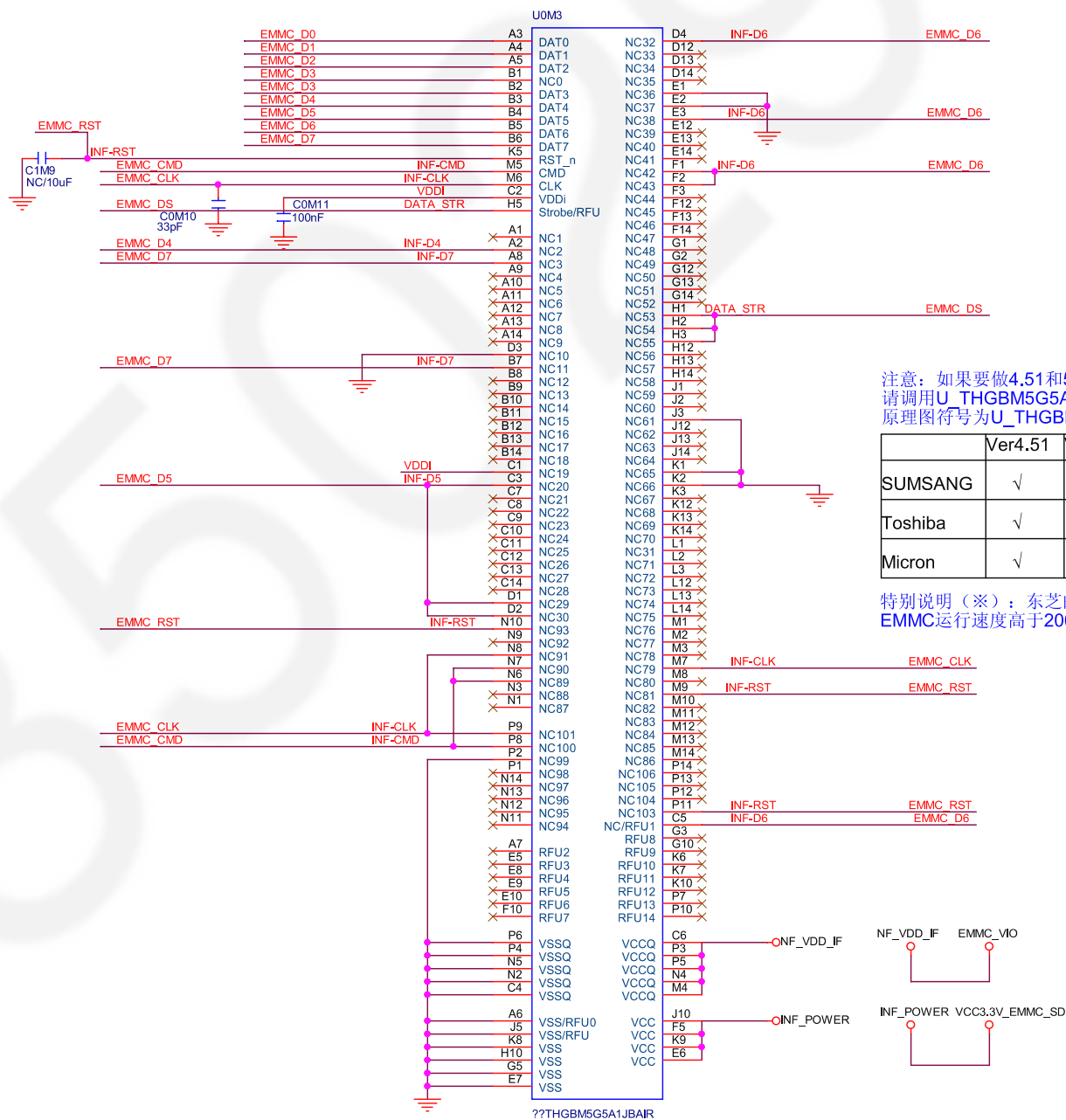


NET



			eMMC	SLC NAND
R0M25	R0M22	R0M112	OR	NC
R0M24	R0M8	R0M113	NC	OR
	R0M26		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

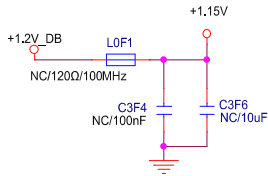
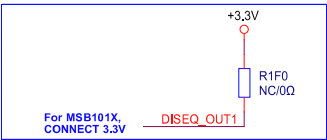
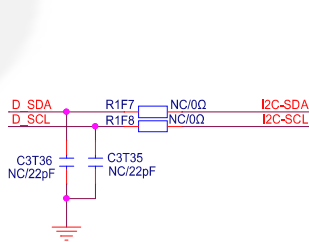
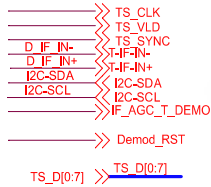
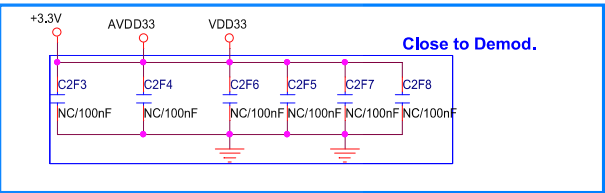
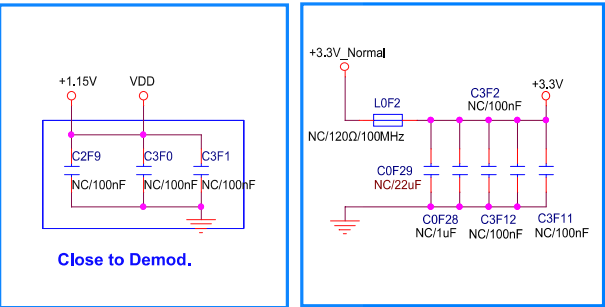
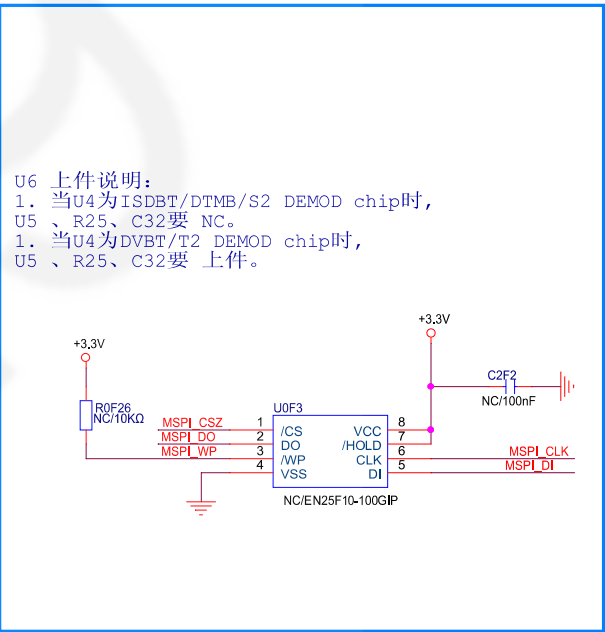
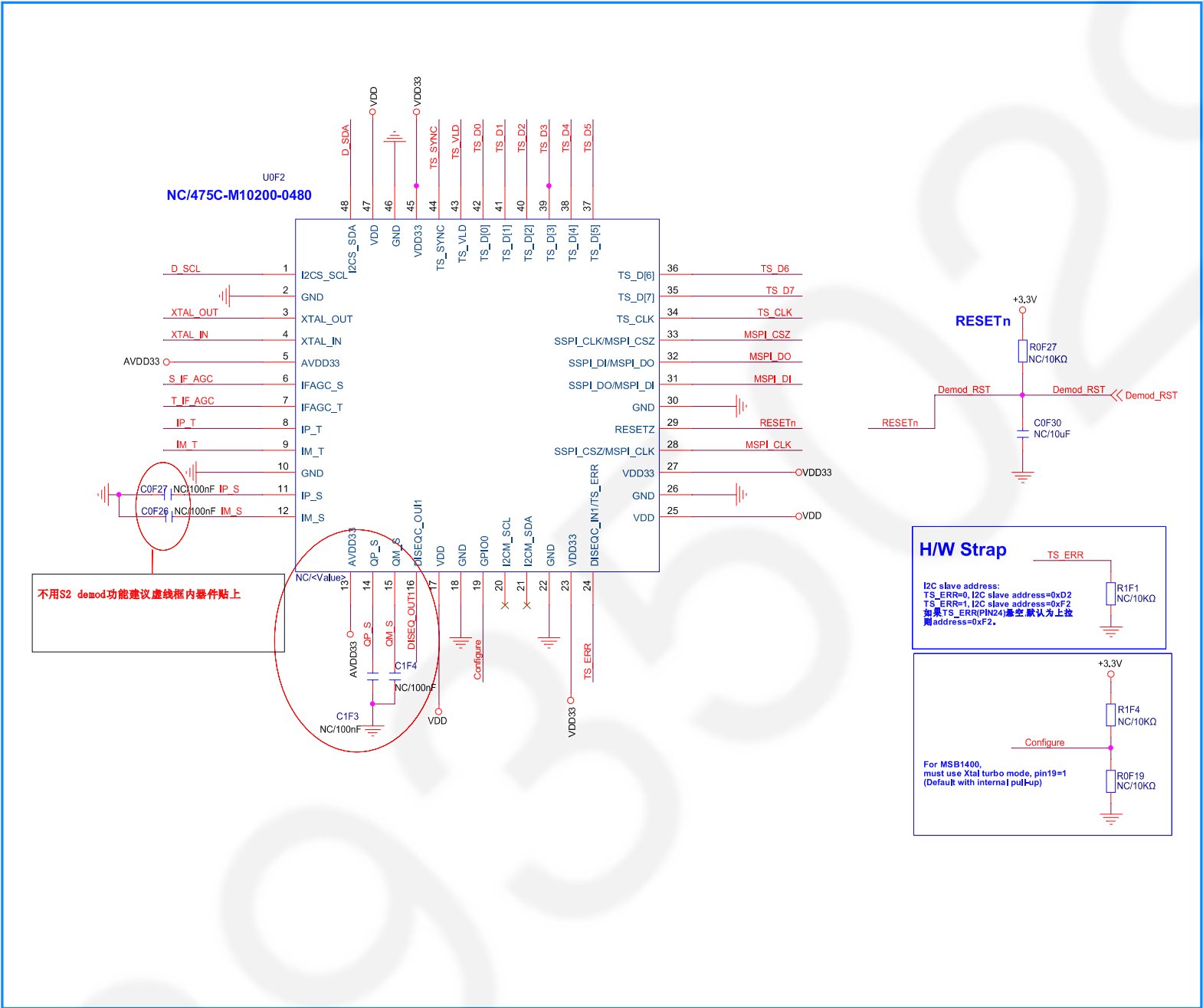
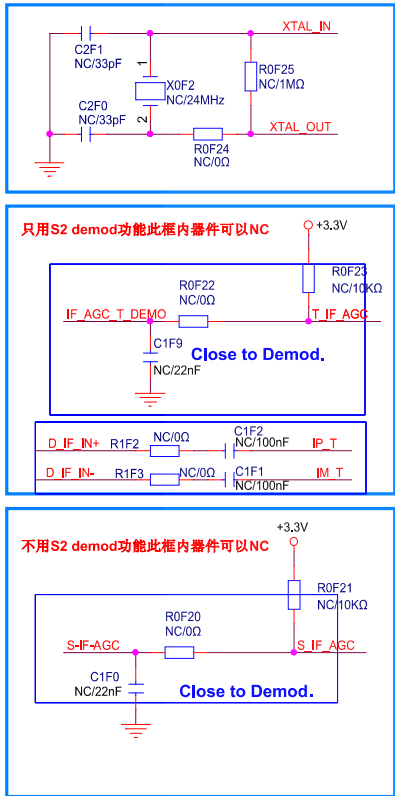
eMMC



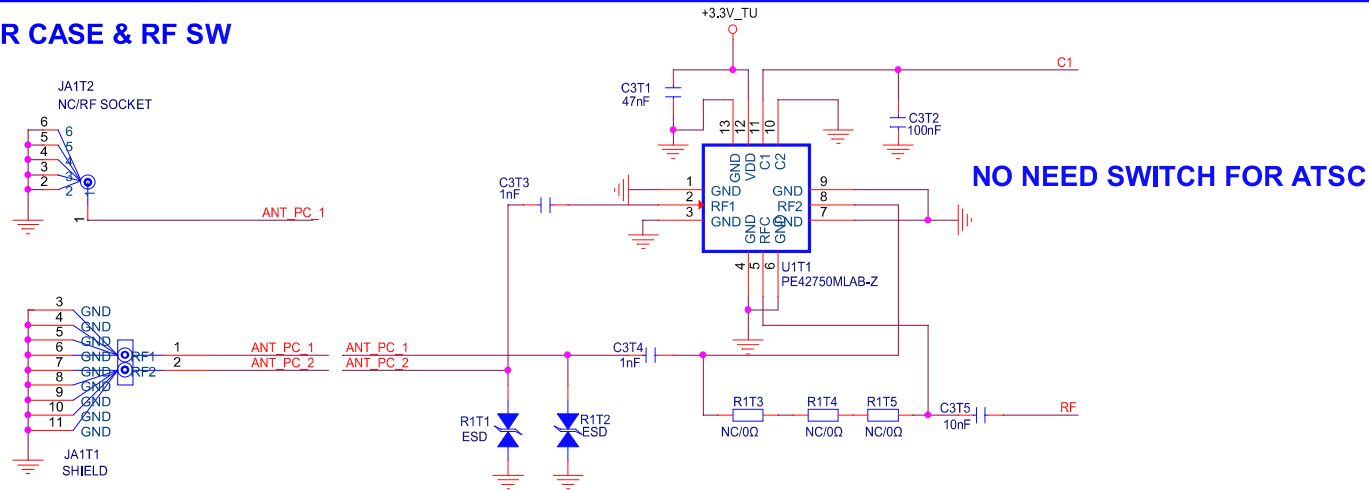
注意：如果要做4.51和5.0的兼容，EMMC的原理图符号
请调用U_THGBM5G5A1JBAIR_01,如果不做兼容，
原理图符号为U_THGBM5G5A1JBAIR

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

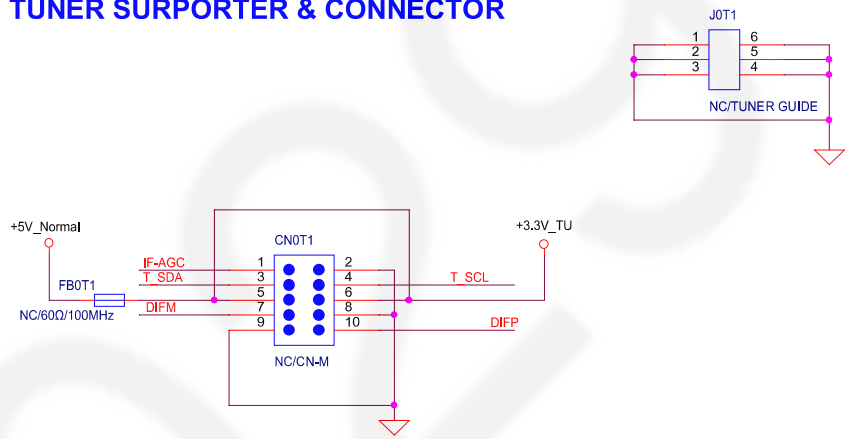
特别说明(※)：东芝的5.0在EMMC运行速度高于200M无法兼容



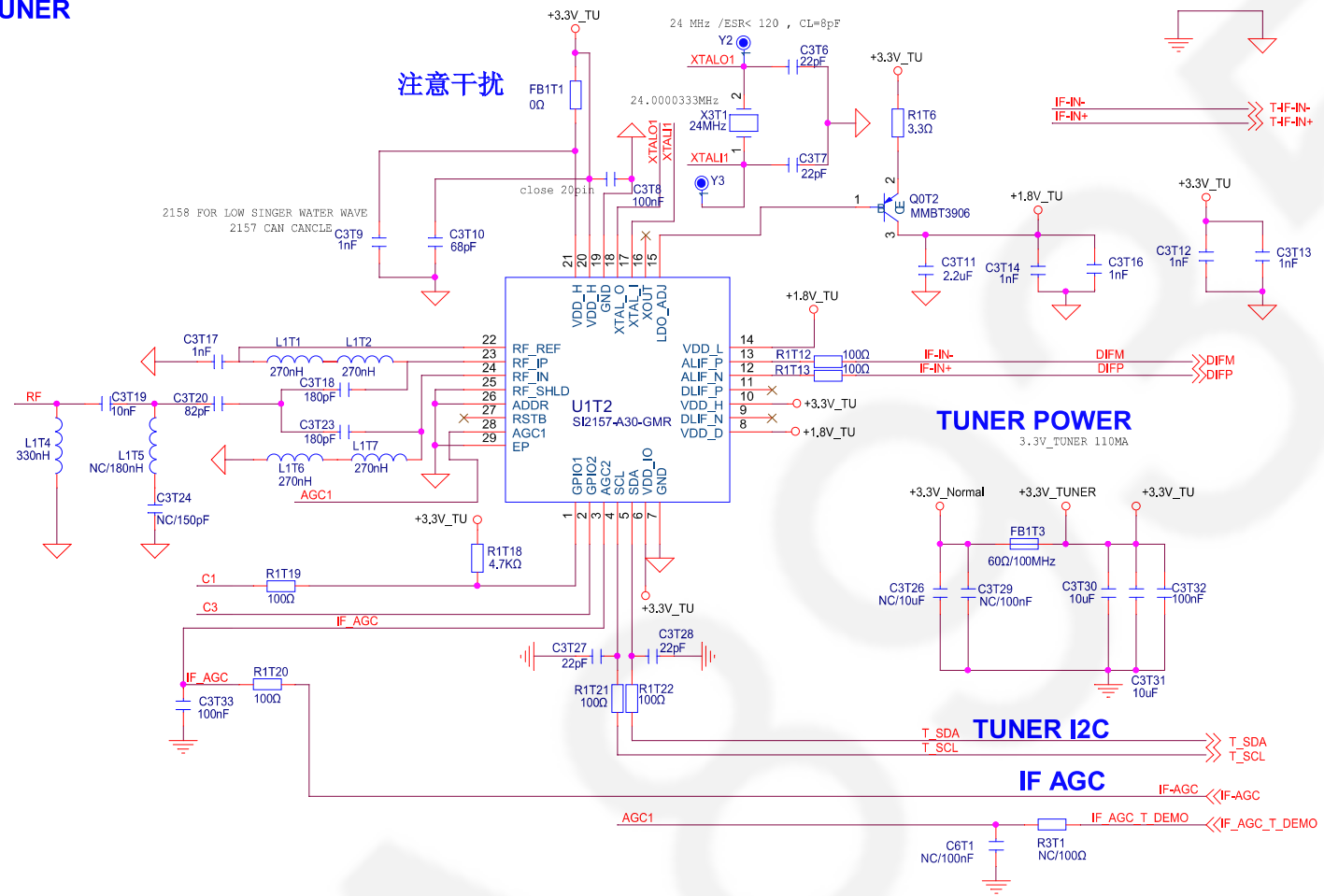
TUNER CASE & RF SW



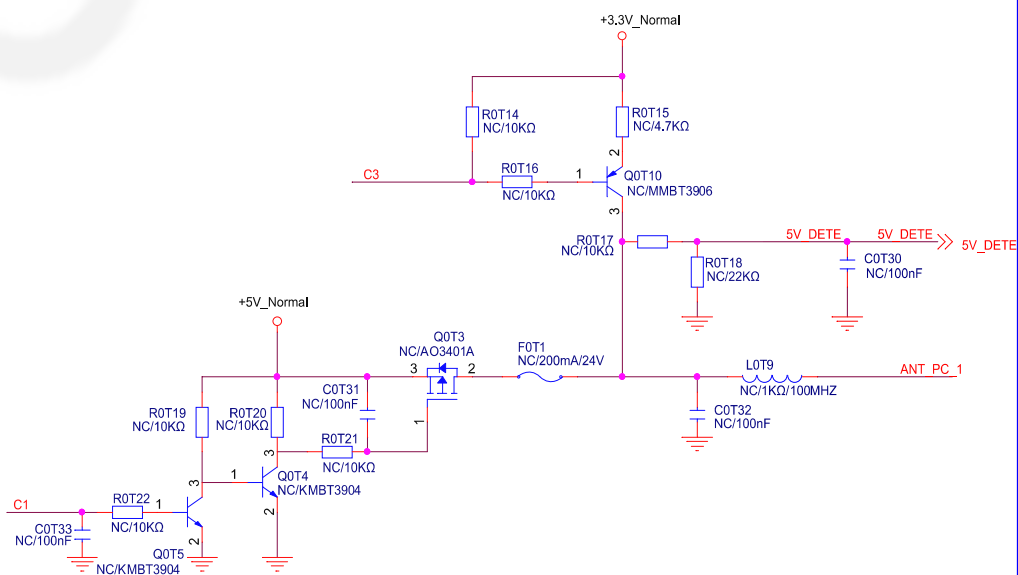
TUNER SURPORTER & CONNECTOR

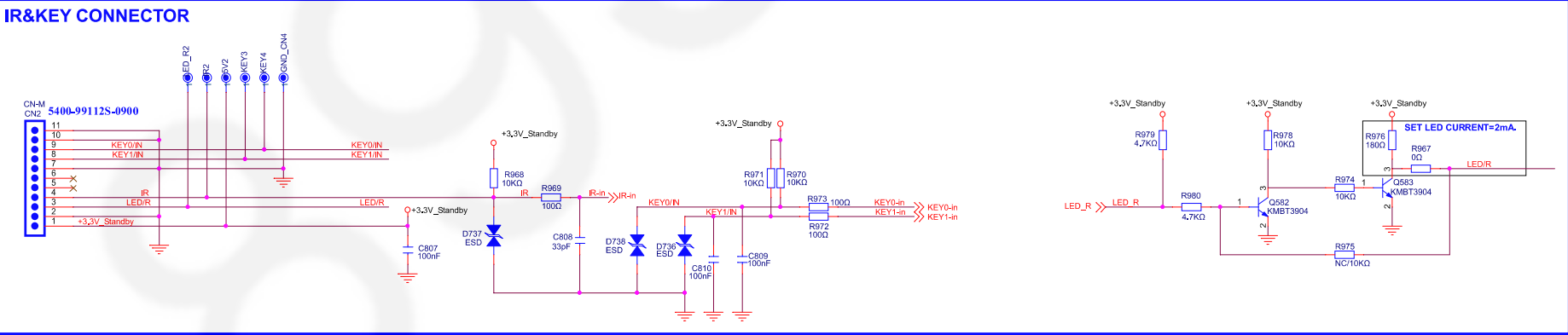
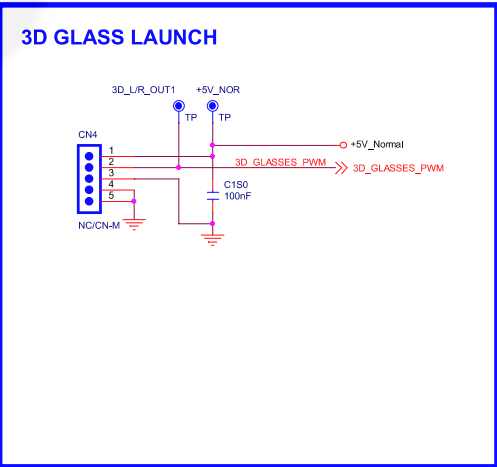
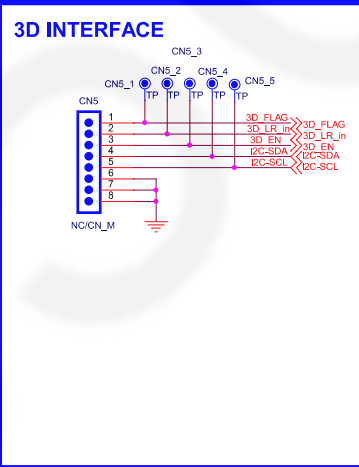
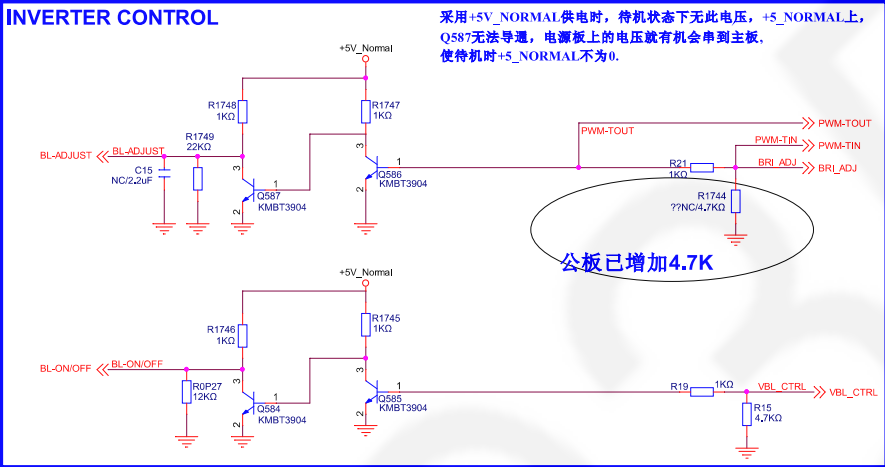
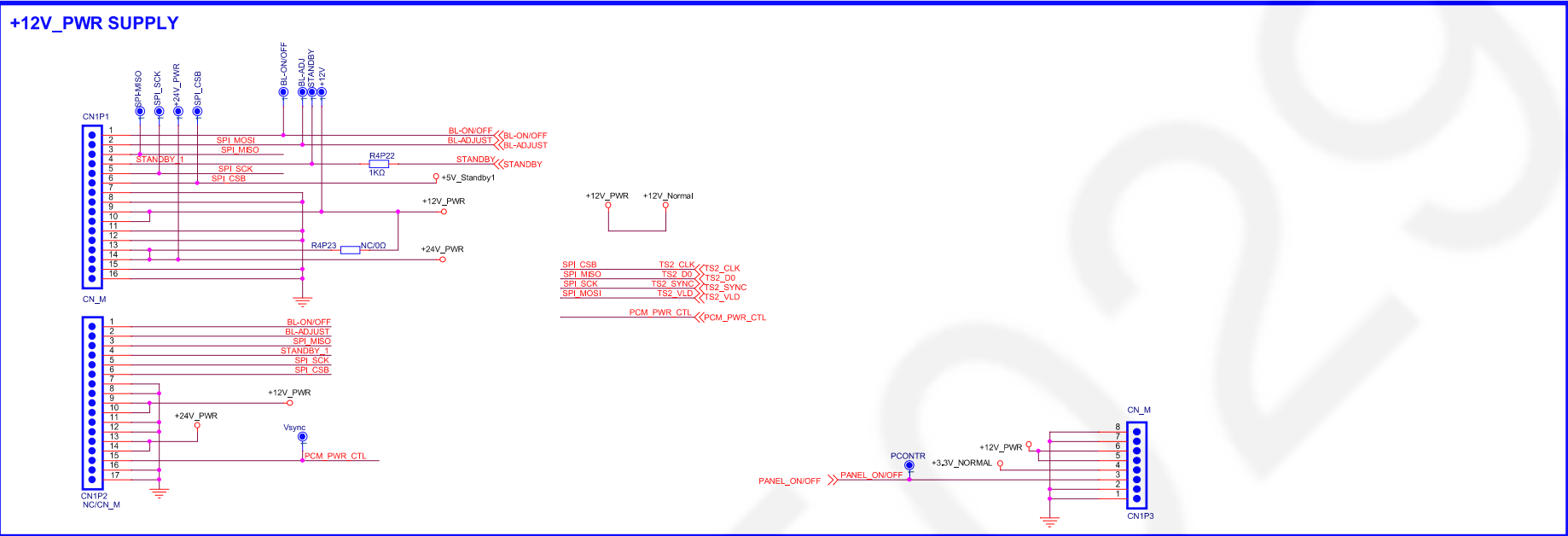


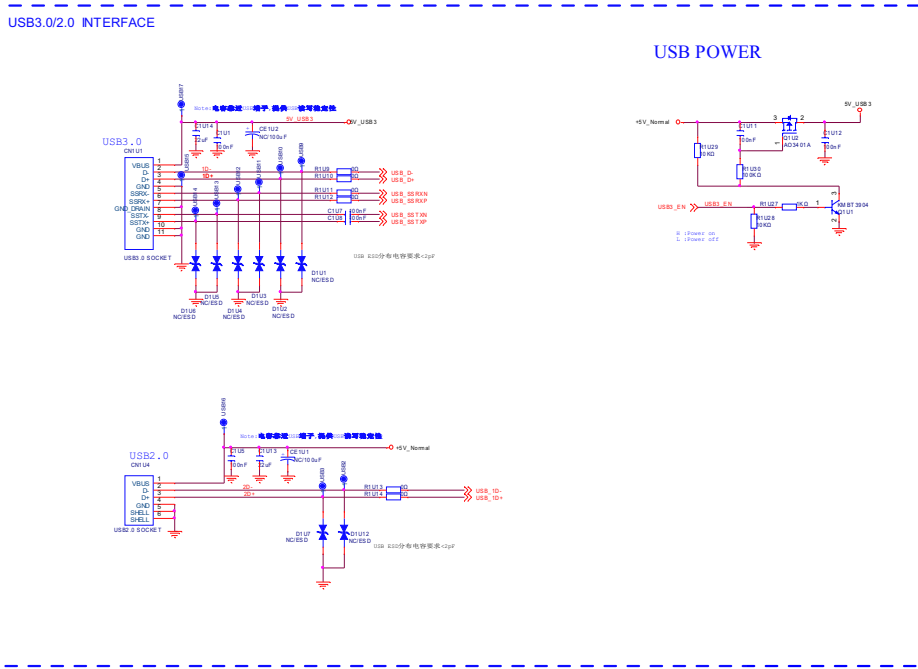
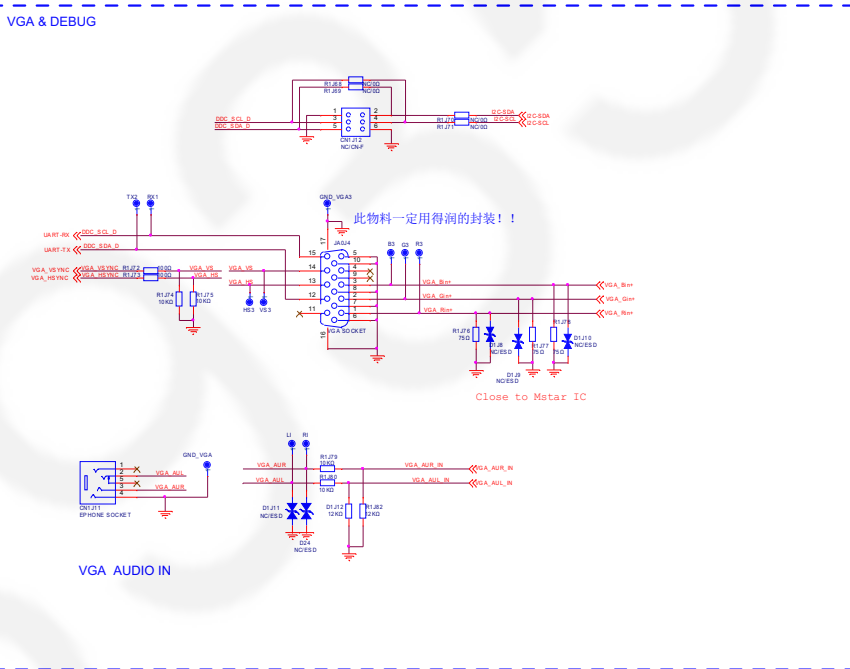
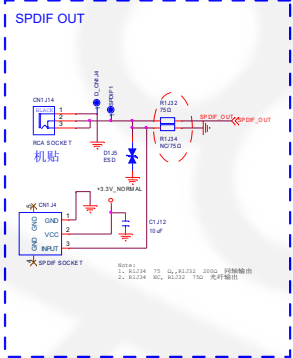
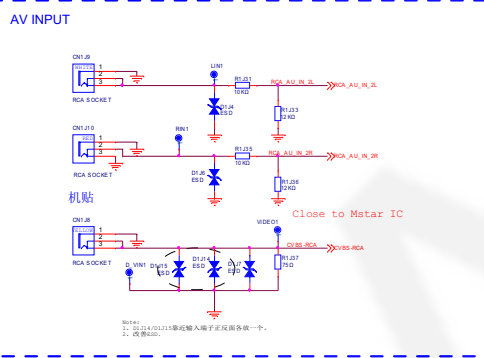
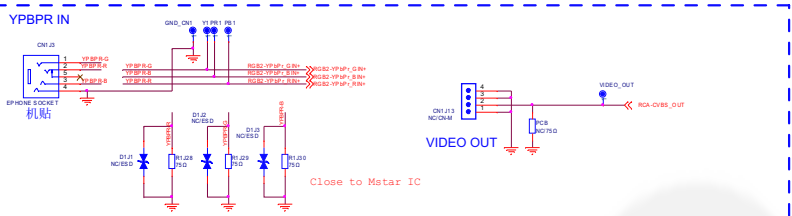
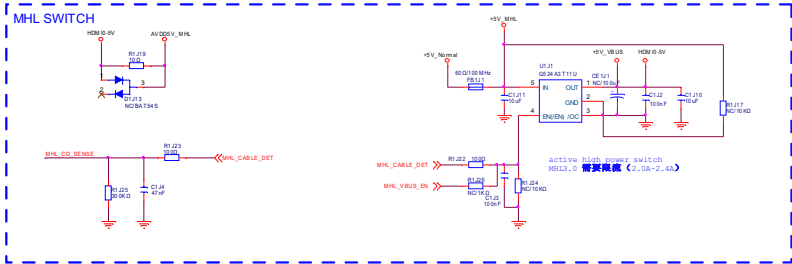
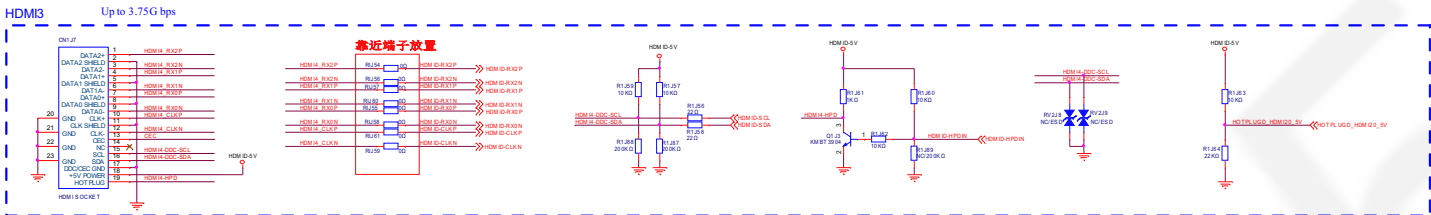
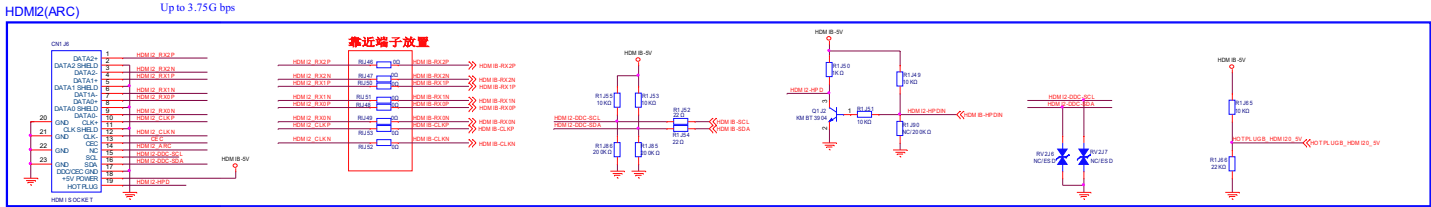
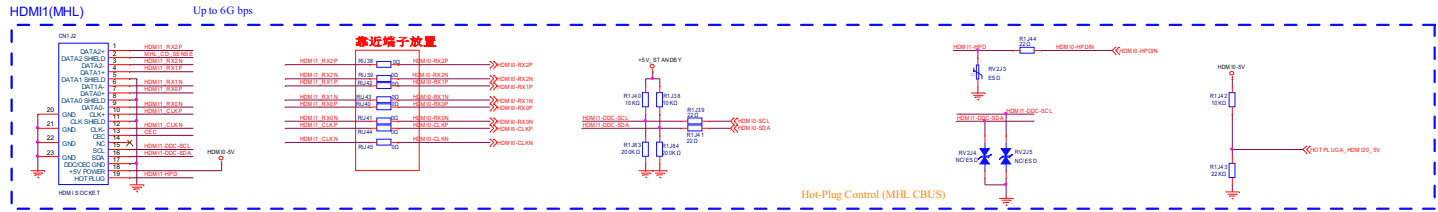
TUNER

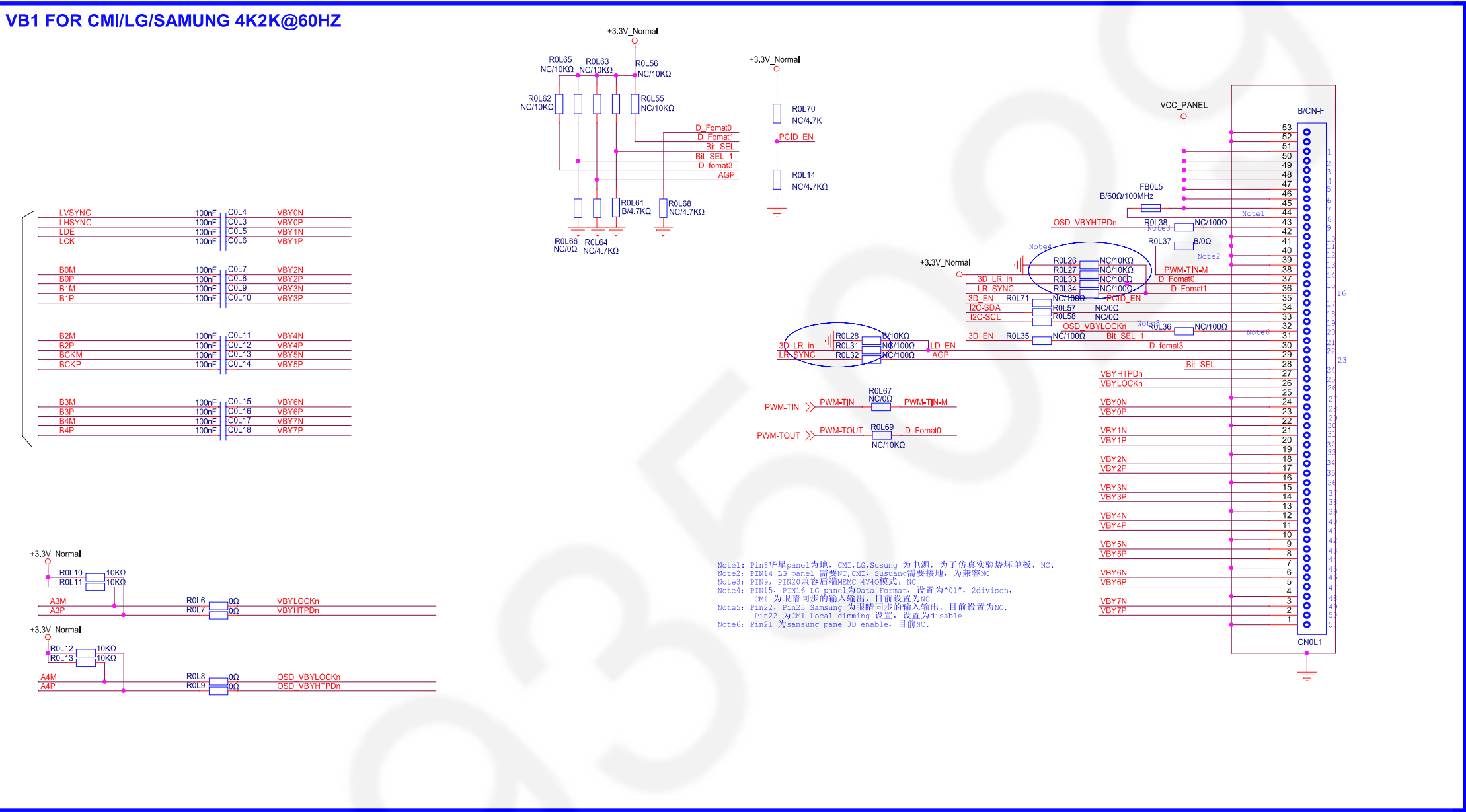


DVB_T2 POWER CONTROL

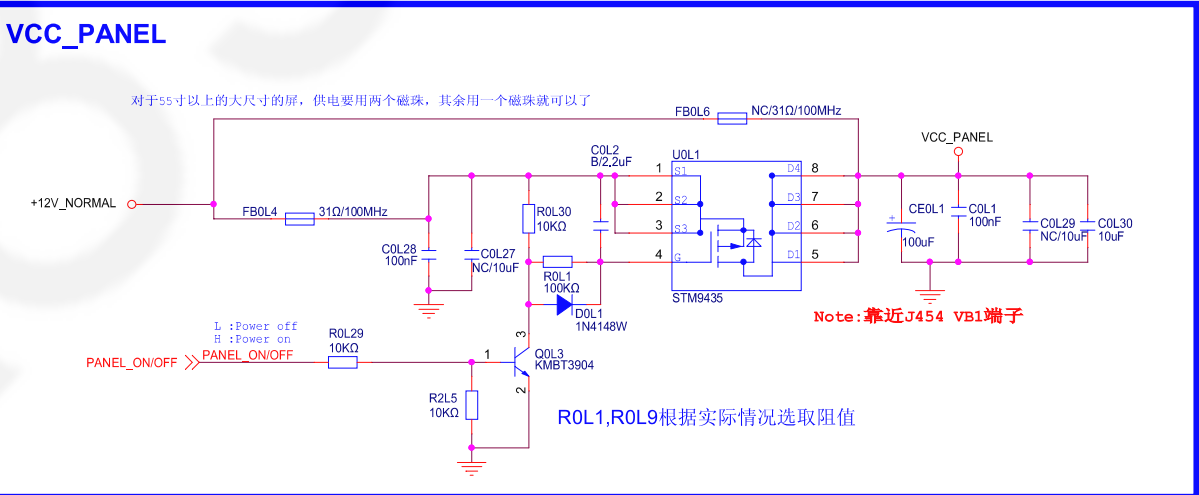
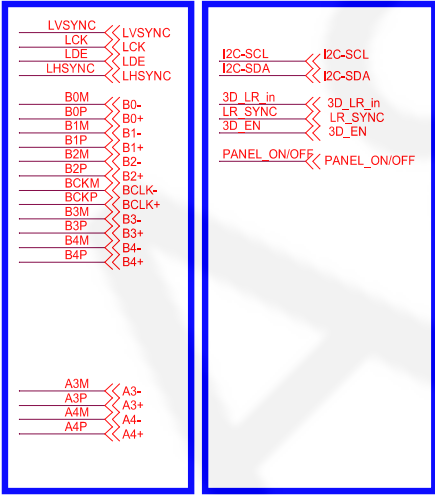




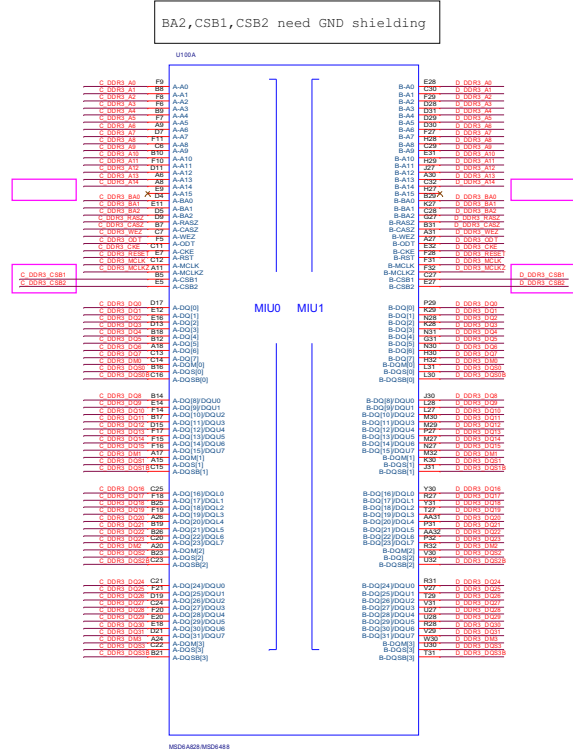




Net



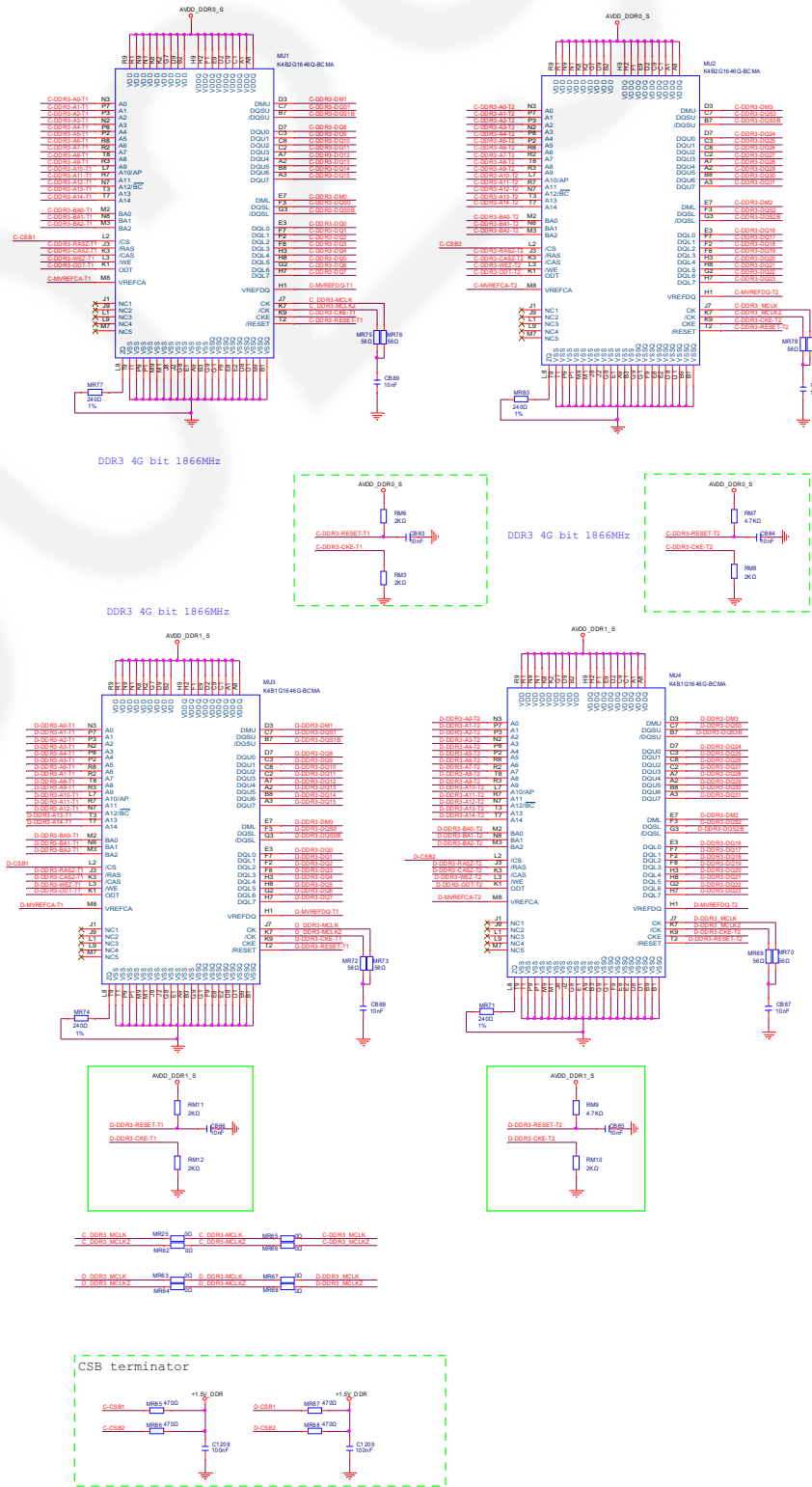
PINS OF MAIN IC



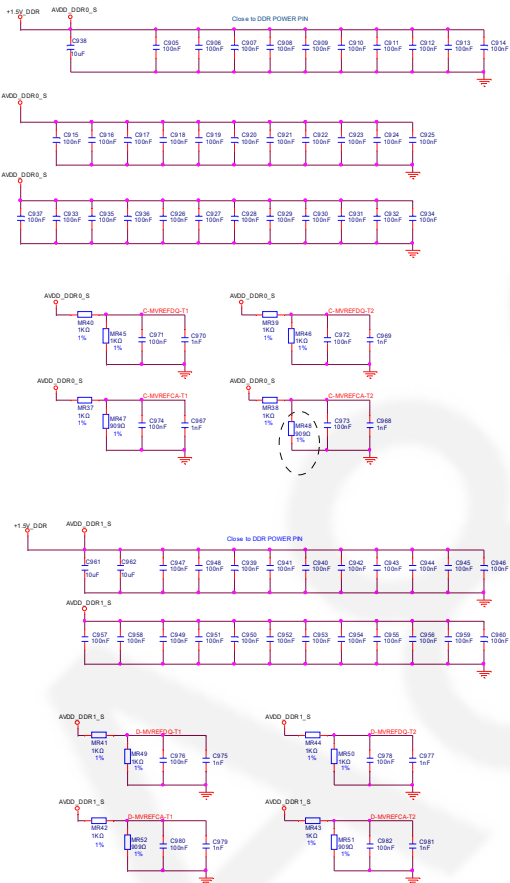
RESISTERS



DDR3 CHIPS

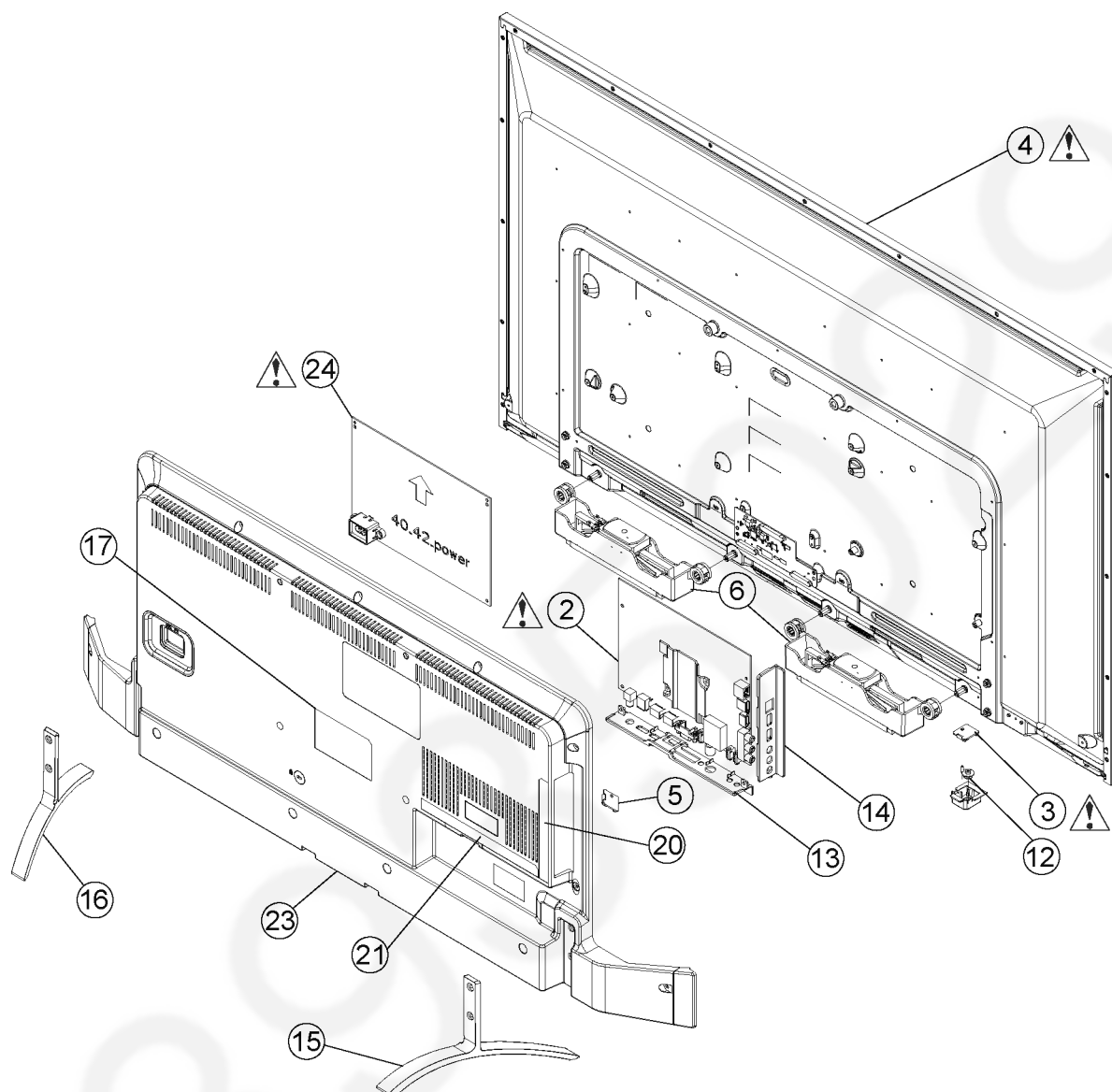


CAPS

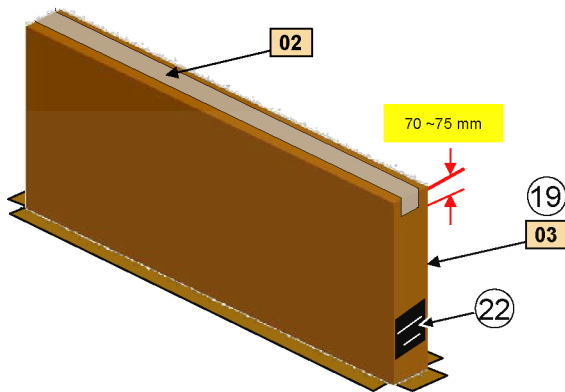


12 Exploded View and Replacement Parts List

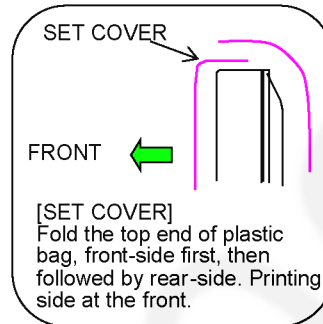
12.1. Parts Location



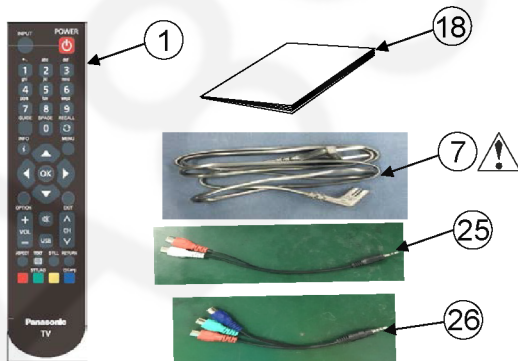
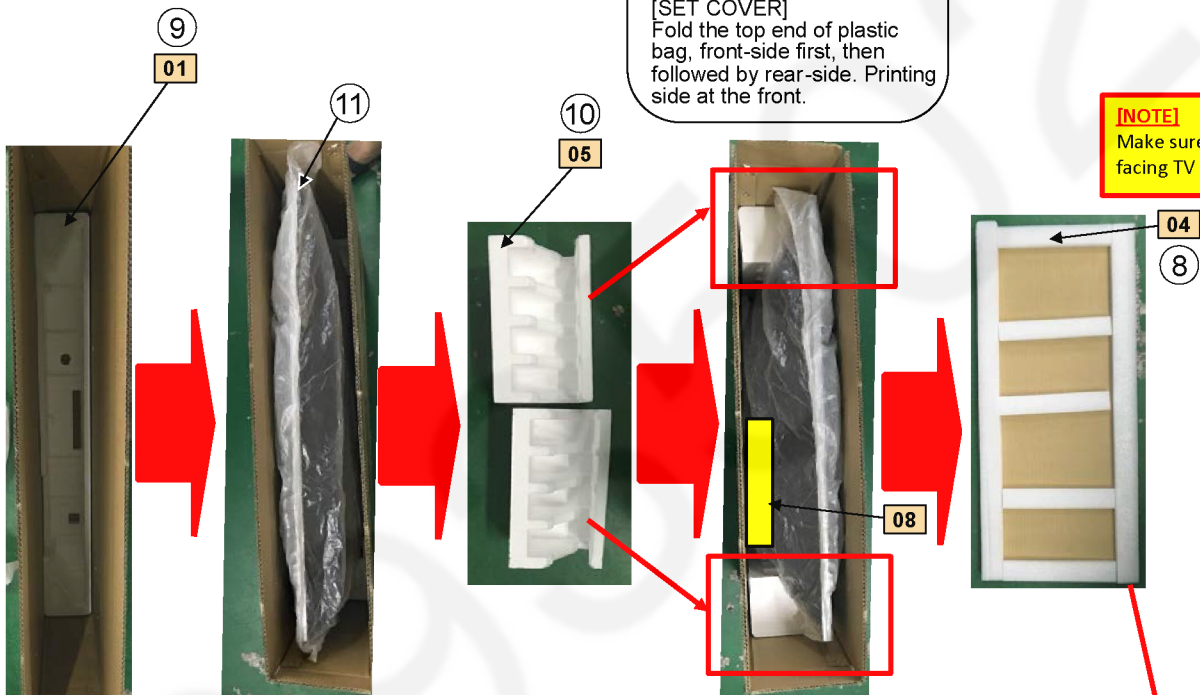
12.2. Packing Instruction



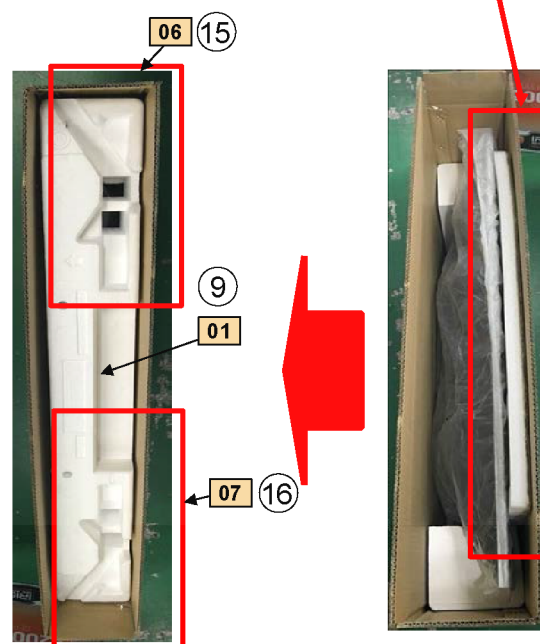
No	Description	Qty	U	Remarks
01	EPS (TOP-BOT) FOR 43E3100-OVERSEA	2	PC	(TOP-BOT)
02	ADHESIVED TAPE (TRANSPARENT) (50M/RL)	1.5	MT	
03	CARTON BOX 43E5600 "Panasonic"	1	PC	
04	EPE FRONT 760*290*25MM FOR 43E5600	1	PC	
05	EPS (SIDE) FOR 43E4600-OVERSEA	2	PC	(LEFT-RIGHT)
06	AL LEFT BASE FOR 40/43E200 W/RUBBER	1	PC	(LEFT)
07	AL RIGHT BASE FOR 40/43E200 W/RUBBER	1	PC	(RIGHT)
08	FAN BAG	1	PC	



[NOTE]
Make sure sponge position
facing TV set



[NOTE]
Make sure Pedestal Stand
inserted into correct hole



12.3. Replacement Partlist

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	1	N2QAYB000934	REMOTE TRANSMITTER		
⚠	2	TZZ00002121A	MAIN BOARD ASSEMBLY (6M20T-01H43E560-S2)		
⚠	3	TZZ00002122A	IR BOARD ASSEMBLY (6M20T-18H43E560-04)		
		TZZ00002123A	FFC CABLE (5900-F53130-5100)		
⚠	4	TZZ00002124A	LCD PANEL (7626-T4300L-Y540R2)		
	5	TZZ00002125A	WIFI MODULE (534L-36NTUD-2230)		
	6	TZZ00002126A	SPEAKER BOX (53D3-39E390-0000)		
		TZZ00002127A	POWER TO A BOARD WIRE ASS'Y (5400-320301-14D0)		
		TZZ00002128A	LEFT SPEAKER WIRE ASS'Y (5400-321101-0210)		
		TZZ00002129A	RIGHT SPEAKER WIRE ASS'Y (5400-321301-0230)		
		TZZ00002130A	WIFI CABLE (5400-393301-0620)		
⚠	7	TZZ00002133A	AC CORD (5942-A15203-1070)		
	8	TZZ00002134A	FRONT FOAM (0201-QE560F00-21)		
	9	TZZ00002135A	TOP AND BOTTOM CUSHION (0301-QE310000-21)		
	10	TZZ00002136A	SIDE CUSHION (0301-QE310S00-21)		
	11	TZZ00002137A	TV SET POLY BAG (0404-11284105-11)		
	12	TZZ00002138A	POWER BUTTON (1023-CE300000-21)		
	13	TZZ00002139A	BOTTOM AV BRACKET (1005-HB200B30-21)		
	14	TZZ00002140A	SIDE AV BRACKET (1005-HB200S30-21)		
	15	TZZ00002141A	AL LEFT BASE (1539-QE200BL0-01)		
	16	TZZ00002142A	AL RIGHT BASE (1539-QE200BR0-01)		
	17	TZZ00002143A	BACK COVER LABEL (0601-QE560000-P9)		For TH-43DX400K Only
	17	TZZ00002179A	BACK COVER LABEL (0601-QE560001-P9)		For TH-43DX400S Only
	17	TZZ00002181A	BACK COVER LABEL (0601-QE560003-P9)		For TH-43DX400T Only
	18	TZZ00002144A	OPERATING INSTRUCTION (0773-QE560000-P9)		
	19	TZZ00002145A	PACKING CASE (0100-QE310000-19)		
	20	TZZ00002146A	SIDE AV LABEL (1213-UE390000-50)		
	21	TZZ00002147A	BOTTOM AV LABEL (1205-UE390000-51)		
	22	TZZ00002148A	PACKING CASE LABEL (0612-QE560000-P9)		For TH-43DX400K Only
	22	TZZ00002180A	PACKING CASE LABEL (TZZ00002180A)		For TH-43DX400S Only
	22	TZZ00002182A	PACKING CASE LABEL (0612-QE560005-P9)		For TH-43DX400T Only
	23	TZZ00002149A	BACK COVER (1002-QE200006-21)		
⚠	24	TZZ00002178A	POWER BOARD ASSEMBLY (168P-L4L019-HSW0)		
	25	TZZ00002132A	AV CABLE (5900-E20100-0010)		
	26	TZZ00002131A	YUV CABLE (5900-E15100-0060)		