

TCL

SERVICE MANUAL

L32E5300/MT27S-AP/CSTM E3 V

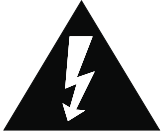
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1. Caution.....
 2. specification.....
 3. Alignment Procedure.....
 4. Block diagram.....
 5. Scheme Diagram
 5. Troubleshooting.....
 6. PCB Layout

This manual is the latest at the time of printing, and does not include the modification which may be made after the printing, by the constant improvement of product

1. CAUTION

CAUTION:

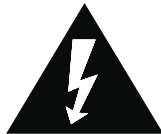
Use of controls, adjustments or procedures other than those specified herein may result in hazardous radiation exposure.



CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN.



CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, with an equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to the person.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT SAFETY INSTRUCTIONS

CAUTION:

Read all of these instructions. Save these instructions for later use. Follow all Warnings and Instructions marked on the audio equipment.

1. Read Instructions- All the safety and operating instructions should be read before the product is operated.
2. Retain Instructions- The safety and operating instructions should be retained for future reference.
3. Heed Warnings- All warnings on the product and in the operating instructions should be adhered to.
4. Follow Instructions- All operating and use instructions should be followed.

FOR YOUR PERSONAL SAFETY

1. When the power cord or plug is damaged or frayed, unplug this television set from the wall outlet and refer servicing to qualified service personnel.
2. Do not overload wall outlets and extension cords as this can result in fire or electric shock.
3. Do not allow anything to rest on or roll over the power cord, and do not place the TV where power cord is subject to traffic or abuse. This may result in a shock or fire hazard.
4. Do not attempt to service this television set yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
5. Never push objects of any kind into this television set through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the television set.
6. If the television set has been dropped or the cabinet has been damaged, unplug this television set from the wall outlet and refer servicing to qualified service personnel.
7. If liquid has been spilled into the television set, unplug this television set from the wall outlet and refer servicing to qualified service personnel.
8. Do not subject your television set to impact of any kind. Be particularly careful not to damage the picture tube surface.
9. Unplug this television set from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 10.1. Do not place this television set on an unstable cart, stand, or table. The television set may fall, causing serious injury to a child or an adult, and serious damage to the appliance. Use only with a cart or stand recommended by the manufacturer, or sold with the television set. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.
- 10.2. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



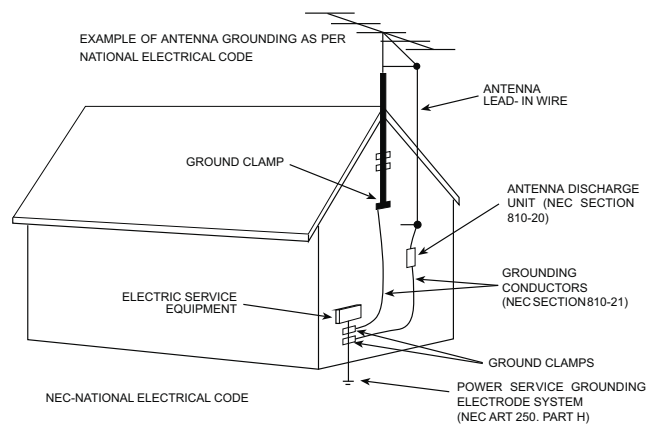
PROTECTION AND LOCATION OF YOUR SET

11.
 - Do not use this television set near water ... for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.
 - Never expose the set to rain or water. If the set has been exposed to rain or water, unplug the set from the wall outlet and refer servicing to qualified service personnel.
12. Choose a place where light (artificial or sunlight) does not shine directly on the screen.
13. Avoid dusty places, since piling up of dust inside TV chassis may cause failure of the set when high humidity persists.
14. The set has slots, or openings in the cabinet for ventilation purposes, to provide reliable operation of the receiver, to protect it from overheating. These openings must not be blocked or covered.
 - Never cover the slots or openings with cloth or other material.
 - Never block the bottom ventilation slots of the set by placing it on a bed, sofa, rug, etc.
 - Never place the set near or over a radiator or heat register.
 - Never place the set in a "built-in" enclosure, unless proper ventilation is provided.

PROTECTION AND LOCATION OF YOUR SET

- 15.1. If an outside antenna is connected to the television set, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges, Section 810 of the National Electrical Code, NFPA No. 70-1975, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrode, and requirements for the grounding electrode.

EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE INSTRUCTIONS



15.2. Note to CATV system installer : (Only for the television set with CATV reception)

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

16. An outside antenna system should not be located in the vicinity of overhead power lines or other electric lights or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
17. For added protection for this television set during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage due to lightning and power-line surges.

OPERATION OF YOUR SET

18. This television set should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply at your home, consult your television dealer or local power company. For television sets designed to operate from battery power, refer to the operating instructions.
19. If the television set does not operate normally by following the operating instructions, unplug this television set from the wall outlet and refer servicing to qualified service personnel. Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the television set to normal operation.
20. When going on a holiday : If your television set is to remain unused for a period of time, for instance, when you go on a holiday, turn the television set " off " and unplug the television set from the wall outlet.

IF THE SET DOES NOT OPERATE PROPERLY

21. If you are unable to restore normal operation by following the detailed procedure in your operating instructions, do not attempt any further adjustment. Unplug the set and call your dealer or service technician.
22. Whenever the television set is damaged or fails, or a distinct change in performance indicates a need for service, unplug the set and have it checked by a professional service technician.
23. It is normal for some TV sets to make occasional snapping or popping sounds, particularly when being turned on or off. If the snapping or popping is continuous or frequent, unplug the set and consult your dealer or service technician.

FOR SERVICE AND MODIFICATION

24. Do not use attachments not recommended by the television set manufacturer as they may cause hazards.
25. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
26. Upon completion of any service or repairs to the television set, ask the service technician to perform routine safety checks to determine that the television is in safe operating condition.

SPECIFICATION RELEASE

Version: V1.0

Issued Date: 2012.8.8

Model: L32E5300/MT27S-AP/CSTM E3

PICTURE	
Category	LCDTV
Dynamic Contrast	Yes
Color Temperature	Warm / Standard/ Cool
Backlight Adjustable	Yes

Scale Mode	Standard,Full, Subtitle, Wide Screen, Zoom,Expand,Original,Natural
Picture Effect	Standard, Bright, Soft, User
Film Mode (3:2 pull down)	AUTO
VGA Dot to Dot Display	Yes (Natural)
Light Sensor	ON/OFF. When set to ON,TV can automatically adjust the backlight according to the intensity of ambient light,and it is in power saving mode.

Picture Enhancement

Comb Filter	3D
Adaptive Deinterlacing	3D
Blue Stretch	Yes
Black Stretch	Yes
DLTI	Yes
DCTI	Yes
Dynamic Skin Correction	Yes

PANEL SPECIFICATION

Back light Unit	LED
Panel supplier	TCL
Aspect Ratio	16:9
Panel Size (inch)	32"
Display Resolution	1366*768
Brightness (cd/m2)	300
Contrast Ratio	4000:1
Response Time Tr/Tf	6.5ms
Viewing Angle (H/V)	178°/178°
Life Time	30,000hrs
Color	16.7M

SOUND

Speakers	Integrated speakers (Bottom)
Audio Power Output	2×8W
Woofer Power Output	--
Smart Volume	Yes
Sound Effect	Stereo, Movie, News, User
Sound Control	Balance, Bass, Treble
Sound Features	MTS (NICAM)
	Scene Selecting (Desk Top mode and Hang Up mode)

FUNCTION

OSD Language	English/French/Thai/Vietnamese/Russian Portuguese/Arabic/Farsi/Hebrew/Mongolian
OSD Features	Motion Bmp Style
Teletext	Yes
Clock/Sleep Timers	Yes
Wake up/Turn off time	Yes
Wake up Source/Channel	Yes
Watch Time Limit	Yes
Smart Switch	Yes(Signal Auto Detecting and Changing Source)
Picture Freeze	Yes
DNR (Dynamic Noise Reduction)	Off、Low、standard、strong
Hotel Menu	In factory mode
USB Connection	Movie: Support H.264、RM/RMVB、MPEG2、MPEG4,etc. Photo: Support JPEG、BMP Music: support MP3

Note: For coding files, there are many kinds of no-standard coding method. So this system can not be guaranteed to support the file formats using any coding method.

Design and specifications are subject to change without notice!



SIGNAL FORMAT CAPABILITY

Component Video Format	Y,Pb/Cb,Pr/CR:up to 1080P
DVI Video Format	Up to XGA for HDMI-PC
HDMI Video Format	up to 1080P
PC Compatibility	Up to SXGA

TERMINALS

AV1 Input (Composite)	Audio/CVBS---R/L+ Video in side
AV2 Input (Composite)	Video Share with Y and Audio share with YPbPr Audio
YPbPr Input	1---Downward
Audio Input for YPbPr	1---Downward
YCbCr Input	Share with "YPbPr"
Audio Input for YCbCr	Share with Audio for "YPbPr"
VGA(PC) Input	1 (D-Sub,15 Pins)---Downward
Audio Input for VGA(PC)	Share with Audio for "YPbPr"
HDMI	1 ---downward
CVBS Video Output (Composite)	1 RCA video socket,Downward
CVBS Audio Output	1 Φ3.5mm socket--Side
Headphone Output	No
RF Input(Antenna)	1 (IEC Type)---Downward
USB	1 (Standard) ---side

BASIC INFO.

TV System	PAL/SECAM B/G,D/K,I ;NTSC-M
AV System	PAL,NTSC,SECAM
Channels	199(1~199)
Chassis	MT27S-AP
Certification	CB
Power Supply	AC 100V-240V 50/60Hz
Power Consumption-TV on	70W
Power Consumption-Standby	≤1W
Default Color of Front Cabinet	Black
Keyboard Position	Side
Base Stand Detachable	Yes

PACKAGE INFO.

Unpackaged Dimension for Main Body (L*H*D) (mm)

With Base Stand (mm)	730.5*183*494
Without Base Stand (mm)	730.5*60.5*439.1

Packaged Dimension (L*H*D)

Main Body (mm)	878*184*566
Speaker Box	--
Base Stand	--
Net Weight (Kg)	8.3(With Base Stand)
Gross Weight (Kg)	10
Container Loading	
20 feet	328
40 feet	676
40 feet high	785

ACCESSORIES

Operation Manual	English(Default)
Remote Control	For TV control (with two batteries)
Base Stand	Integrated Packaging
Speaker Box	No
Wall Mount	WME300 (Optional)
Others	AC Power cord

Drafted by: 贾国强

Checked by:

Approved by:

Alignment Procedure

MT27S-AP/LA Chassis



Version: 1.0

Release Date: 2012-4-16

PREPARED BY: SHU XIANG CHENG DATE: 2012-4-16

APPROVED BY: _____ DATE: _____

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History	Description of major changes	Release Date
V1.0		2012-4-16

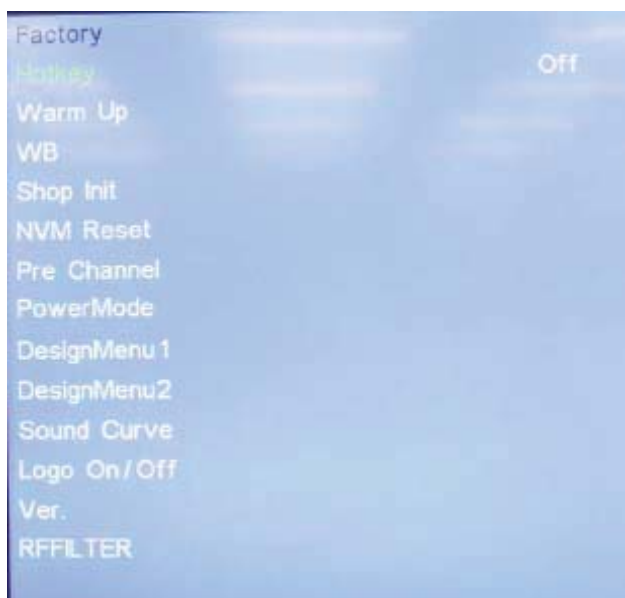
	Chassis	Model
FHD		
HD	MT27S-APLA	L32D3260, etc

1. General Description

MT27S-AP/LA is our latest design especially for LCDTV products selling in Asia Pacific (AP) and Latin America (LA) market. It features by its high integration, easy debugging as well as convenience in terms of maintenance. Fast software upgrade through USB disk facilitates both manufacture and after-sale service. Meantime, a variety of functions involved in Factory Main Menu can not only bring benefits for production, but also satisfy various demands of customer.

Note: Factory Menu covers all indispensable functions during manufacture such as White Balance Adjustment, Shop Init, NVM Reset, DesignMenu1, DesignMenu2 e.g., while the items under DesignMenu1 and DesignMenu2 is exclusively used by R&D engineer, anyone else shouldn't change the settings in the menu. When you wish to learn the product information like project ID, model name, you can access to DesignMenu1. In addition, in Hotel Menu, we also provide a great deal of useful functions for specific applications in hotel.

2. Factory Menu



2.1 Accessing way:

- In the first place, press **Menu** button of remote control, then select **Contrast** item of **Picture** submenu. Finally, press **9, 7, 3, 5** consecutively.
- When the **FAC HOTKEY** item of **Factory Menu** is enabled (ON), press **Return** button of remote control.

2.2 Factory Menu

Factory Menu			
Name	Default	Description	Status
HOTKEY	OFF	Factory Menu shortcut button switch <i>The item must be disabled (OFF) after production</i>	OK
WARM-UP	OFF	OFF: Normal mode. Display blue screen when no signal. Turn to automatically standby mode if keep the signal unavailable over 15 minutes. ON: Aging mode. Display Red , Blue, Green, White Scene when no signal. The set will not turn to standby even if the unavailability of signal, Press MENU of KEY TO exit	OK
WB	>>	White Balance Adjustment (see details below)	OK
SHOP Init	DO	<i>It is crucial that the function is executed after production aim to clear information of production process, ensure user cannot access to Factory Menu after executing the item.</i>	OK
NVM RESET	DO	Restore default value except WB	OK
Pre Channel	DO	Preset the channel table of factory. Option: HZ, WX, NMG, ORION e.g. To preset the channel table of certain factory, firstly, choose the corresponding factory name, then press OK button of remote control and wait until the disappearance of Factory Menu,	OK
PowerMode	LAST/STB	ON: the set will power on after switching on power. STB: the set will remain standby status after switching on power. Last: the set will turn to the status in which it lies when last switching off. If without requirement from certain customer, by default, the Setting should be Last for MT27S-AP and STB for MT27S-LA	OK
DesignMenu1	DO	exclusively used by R&D engineer	OK
DesignMenu2	DO	exclusively used by R&D engineer	OK
Sound Curve	DO	<i>Exclusively used by R&D.</i>	OK
Logo ON/OFF	DO	Display TCL Logo or not. On : display, Off: not display	OK
VER.	DO	software version, release date e.g.,	OK
RFFILTER		<i>Exclusively used by R&D.</i>	ok

2.3 White Balance Adjustment menu

Factory		
Hotkey	BlanceSource	HDMI
Warm Up	ColorTemp	Standard
WB	R_GAIN	128
Shop Init	G_GAIN	128
NVM Reset	B_GAIN	128
Pre Channel	R_OFFSET	128
PowerMode	G_OFFSET	128
DesignMenu1	B_OFFSET	128
DesignMenu2	WB Init	DO
Sound Curve		
Logo On/Off		
Ver.		

White Balance menu

Press the ▲ ▼ button in remote control to select certain item and ◀ ▶ to adjust White Balance

White Balance Adjustment menu

Name	Default	Description	Status
BlanceSource	AV1	Select the source you intend to apply WB adjustment. Only HDMI1, AV1, YPBPR, PC and should be adjusted.	OK
ColorTemp	Standard	Select color temperature you intend to adjust Three groups of color temperature: Normal, Warm, Cool are available for each source.	OK
R GAIN	+2	Gain of R channel (cannot be changed after auto calibration)	OK
G GAIN	0	Gain of G channel (cannot be changed after auto calibration)	OK
B GAIN	-7	Gain of B channel (cannot be changed after auto calibration)	OK
R OFFSET	0	Sw Default ,NOT need calibration	OK
G OFFSET	0	Sw Default ,NOT need calibration	OK
B OFFSET	0	Sw Default ,NOT need calibration	OK
WB INIT		White Balance Initialization. Before WB adjustment, this item should be executed.	OK

3. DesignMenu1

Factory		
Hotkey	InitVol	25
Warm Up	TunerAGC	0
WB	ProjectID	1/L32D3260_CSTT_E1
Shop Init	PrintMessage	Off
NVM Reset	Descramble box	Off
Pre Channel	Descramble box	Off
PowerMode	Sound_Count	0
DesignMenu1	DBC	0
DesignMenu2	DB_CP	100
Sound Curve	DBC_BP	60
Logo On/Off	Spread Step	30
Ver.		
RFFILTER		

Press the ▲ ▼ button in remote control to select certain item and ◀ ▶ to toggle among or execute the available options.

DesignMenu1			
Name	Default	Description	Status
<i>Initvol</i>	25	<i>Exclusively used by R&D.</i>	OK
<i>TunerAGC</i>	0	<i>Exclusively used by R&D.</i>	OK
<i>ProjectID</i>		the product information like project ID, model name	OK
<i>PrintMessage</i>	OFF	<i>Exclusively used by R&D.</i>	OK
<i>Descramble box</i>	OFF	<i>Exclusively used by R&D.</i>	OK
<i>Descramble box</i>	OFF	<i>Exclusively used by R&D.</i>	OK
<i>Sound_Count</i>	0	<i>Exclusively used by R&D.</i>	OK
<i>DBC</i>	0	<i>Parameter of DBC</i> <i>Exclusively used by R&D.</i>	OK
<i>DB_CP</i>	100	<i>Exclusively used by R&D.</i>	OK

DBC_BP	60	Exclusively used by R&D	OK
Spread Step	30	LVDS Spread expand Exclusively used by R&D	OK

4 DesignMenu2

Factory		
Hotkey	Panel_Control	On
Warm Up	Panel_Freq	30
WB	Panel_Percent	5
Shop Init	BlueMute	On
NVM Reset	OtherCTI	On
Pre Channel	FleshTone	On
PowerMode	LumaControl	On
DesignMenu1	Hotel Menu	Off
DesignMenu2	USB UPG	
Sound Curve	BackIT	Off
Logo On/Off		
Ver.		
RFFILTER		

Press the ▲ ▼ button in remote control to select certain item and ◀ ▶ to toggle among the available options..

DesignMenu2

Name	Default	Description	Status
Panel_control	on	Exclusively used by R&D	OK
Panel_freq	30	Exclusively used by R&D	OK
Panel_percent	5	Exclusively used by R&D	OK
bluemute	on	Exclusively used by R&D	OK
Otherct1	on	Exclusively used by R&D	OK
FleshTone	on	Exclusively used by R&D	OK
LumaControl	on	Exclusively used by R&D	OK
Hotel Menu (enable)	off	Hotel Menu is accessible only when HOTEL Menu (enable) item is enabled (ON).	OK
USB UPG		Upgrade software. Please see details below.	OK

PRELIMINARY INFORMATION ----- SUBJECT TO CHANGE

BackIT	off	Exclusively used by R&D	ok

4.1 HOTEL MENU

Hotel Menu	
Power Logo	On
CH Lock	Off
MAX VOL	100
AUTO SET	Off
PIC MODE	User
Sound Mode	User
POWER VOL	25
Power Signal	TV
Power Channel	1
KEY LOCK	Off
Save Data to USB	DO
Write Data From USB	DO

4.1.1 Accessing way:

- Hotel Menu(enable)item is enabled(on)
- press **Menu** button of remote control, then select

Contrast item of **Picture** submenu.

Finally, press **9, 7, 1, 5** consecutively.

HOTEL MENU			
Name	Default	Description	Status
POWER LOGO	ON	LOGO select	OK
CH LOCK	OFF	Channel scan lock.	OK
MAX VOL	100	Max volume	OK
AUTO SET	OFF	The switch of PIC, SOUND etc. When it is ON, these items are selectable.	OK
PIC MODE	user	Picture mode.	OK
SOUND MODE	user	Sound mode	OK
POWER VOL.	25	Default volume when power on	OK
POWER SIGNAL	TV	Default signal source when power on	OK
POWER CHANNEL	1	Default channel no. when power on	OK
KEY LOCK	OFF	Lock the keys.	OK
SAVE DATA TO USB	DO	Save the settings of TV to USB	OK
Write Data from USB	DO	Copy the settings of USB TO TV	OK

5. The steps of debugging

5.1 Device

Color Analyzer CA-210. Video Pattern Generator Chroma2329. Color TV Pattern Generator PM5418, VGA cable, AV cable(RCA), YPBPR(RCA) cable.



Chroma2329



Fluke5418



CA-210

5.2 steps of debugging:

According to the requirement of order, we suggest take the below steps to finish the appropriate settings.

A enter the **Factory Menu**, enable **HOTKEY**

B Check the version of software, release date displayed at the bottom of **Factory Menu**. If the information is correct, you can ignore step C and D.

C Enter **Factory Menu**, choose **DESIGNMENU1->PROJECT ID**, choose corresponding Project ID number of the product (Please refer to the description in BOM about Project ID number).

D return to **DesignMenu1**, check the Product model.

E choose **Factory Menu-> NVM RESET** and press ► and wait until prompt OK appears.

F restart the set

G according to the requirement of order, set the items of Hotel Menu etc.

H After aging under normal temperature, adjust white balance.

I choose **Factory Menu-> SHOP INIT** and press ► button of remote control to initialize the set.

Note: after **step I** (execute **SHOP INIT**), **Hotel Menu** will be disabled by default. Therefore, if order requires hotel function, it is necessary to enable hotel function by set **Factory Menu-> DesignMenu2->HOTEL MENU ENABLE** to **ON**.

5.3 White Balance adjustment (Manual)

Before adjustment, you must ensure Color Analyzer has been calibrated. Only AV1, YPBPR, VGA, HDMI 1 need to be adjusted. It is necessary to adjustment HDMI 1 firstly.

a. signal and generator

The pattern of the signal should be used are White (Chroma2329 pattern113) and Grey (pattern 114).The format of signal are respectively 720p for HDMI1 (Chroma2329 Timing 69), NTSC for AV1 (Chroma2329 Timing 37), 1024×768@60Hz

(Chroma2329 Timing 14) for VGA and 720p (Chroma2329 Timing 79)for YPBPR

b. steps of adjustment

- 1) enter the **factory menu->WB**, select source **HDMI 1** and **COLORTEMP normal**.
- 2) input white signal in 720p format
- 3) change **R Gain** and **B Gain** to make sure the value of color coordination equal to

(x, y).

In addition to select **COLORTEMP COOL/WARM**, the adjustment method of **COOL** and **WARM** color temperature is same with that of **NORMAL**. The color coordination we recommend is as follows:

Device: CA-210; Accuracy: ± 0.015				
Color Temperature		WARM	NORMAL	COOL
LCD	x	0.300	0.280	0.270
	y	0.305	0.290	0.270
LED	x	0.302	0.282	0.272
	y	0.317	0.302	0.282

Factory		
Hotkey	BlanceSource	HDMI
Warm Up	ColorTemp	Standard
WB	R_GAIN	128
Shop Init	G_GAIN	128
NVM Reset	B_GAIN	128
Pre Channel	R_OFFSET	128
PowerMode	G_OFFSET	128
DesignMenu1	B_OFFSET	128
DesignMenu2	WB Init	DO
Sound Curve		
Logo On/Off		
Ver.		
RFFILTER		

HDMI White Balance adjustment

6. Chip list of software programming before SMT

Following chip must be programmed before SMT by ALL-11 or other tools.

	Position	Chip type	Chip name	Part number	Software description	Decal
1	U401	Flash	W25Q32	13-W25Q32-BVB	Main software;HDMI KEY;EDID	SO-8

Note:

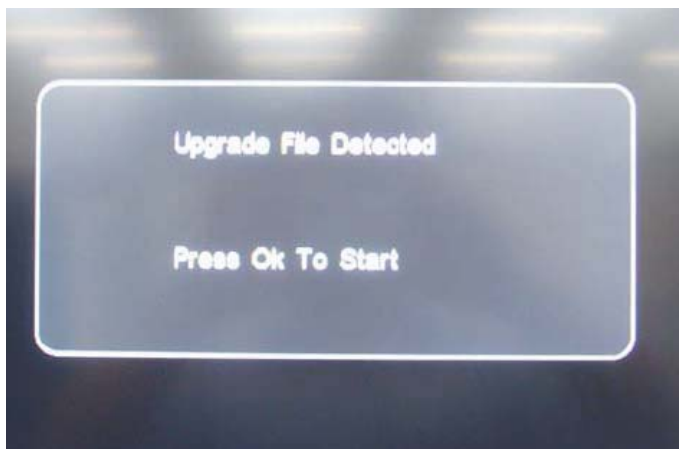
- 1) The software for U401 can be program using ISP tool.
- 2) Every set has its unique HDCP key which is purchased from suppliers or HDCP certification authority. Please check HDCP function in the process of production.
- 3) Once in a while, the software of main board may be upgraded. Please pay attention to use the latest software before production.

Appendix:

1. Software upgrade through USB disk

- 1) Please ensure the software you are using has a correct file name **TCL_MT27_UPDATE.bin**, then copy it to the root directory of a USB disk.
- 2) Insert the USB disk to the USB socket of the set for which you are going to upgrade program.
- 3) Enter the **Factory Menu** (you can choose either a or b way below)
 - a. In the first place, press **Menu** button of remote control, then select **Contrast** item of **Picture** submenu. Finally, press **9, 7, 3, 5** consecutively.
 - b. When the **Factory hotkey** item of **Factory Menu** is enabled (ON), press **Return** button of remote control.
- 4) select **USB UPG** item of **DesignMenu2** submenu, press **▶** button of remote control, a pop menu will appear prompting whether start upgrade or not. Press **Yes** to start upgrade,

press **No** to cancel. **Please wait patiently until the set restart automatically after upgrade. Do not cut off the power supply during the process.**



2. Check software version, release date and Project ID

After upgrading, sometimes you may not be certain whether the new software has been successfully updated or not. In this case, you can check the software version and release date in **Factory Menu** to make sure the success of upgrading.

In addition, for the convenience of software management, many models of same chassis may share a same software, but are allocated with different Project ID.

In another words, every model has its unique Project ID. Obviously, Both software version and Project ID are highly critical to ensure the set work properly. Therefore, after upgrading software, we suggest you check these information by following method.

1) Enter the **Factory Menu** (you can choose either a or b way below)

a. In the first place, press **Menu** button of remote control, then select **Contrast** item of **Picture** submenu. Finally, press **9, 7 3, 5** consecutively.

b. When the **HOTKEY** item of **Factory Menu** is enabled (ON), press **Return** button of remote control.

2) Check the version of software, release date displayed at the bottom of **Factory Menu**. If the information is correct, you can ignore step 3.

3) choose **DesignMenu1->PROJECTID**, choose corresponding Project ID number of the product (Please refer to the description in BOM about Project ID number).

4) choose **Factory Menu** and press **OK** button of the remote. Next, select **NVM RESET** and press **▶** and wait until prompt OK appears.

5) choose **SHOP INIT** and press **▶** button of remote control to initialize the set.

Note: after **step 1** (execute **SHOP INIT**), **Hotel Menu** will be disabled by default.

Therefore, if order requires hotel function, it is necessary to enable hotel function by set **Factory Menu-> DesignMenu2->HOTEL Menu** enable to **ON**.

6) restart the set.

Factory		
Hotkey	Prj.	1/L32D3260_CSTT_E1
Warm Up	Ver.	V8-0MT2705-LF1R002
WB	Panel Model	LVW320CSTT_E1
Shop Init	PSU	PE081C0
NVM Reset	SIACP_VER	0.01
Pre Channel	Date	Apr 24 2012
PowerMode	SN	
DesignMenu1		
DesignMenu2		
Sound Curve		
Logo On/Off		
Ver.		

Product
Information

Factory		
Hotkey	InitVol	25
Warm Up	TunerAGC	0
WB	ProjectID	1/L32D3260_CSTT_E1
Shop Init	PrintMessage	Off
NVM Reset	Descramble box	Off
Pre Channel	Descramble box	Off
PowerMode	Sound_Count	0
DesignMenu1	DBC	0
DesignMenu2	DB_CP	100
Sound Curve	DBC_BP	60
Logo On/Off	Spread Step	30
Ver.		

Project ID

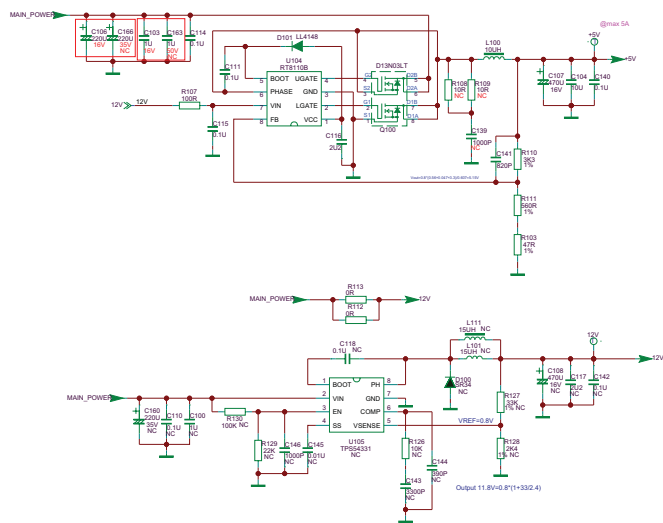
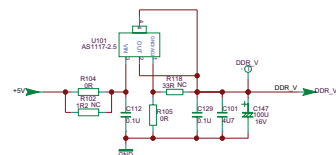
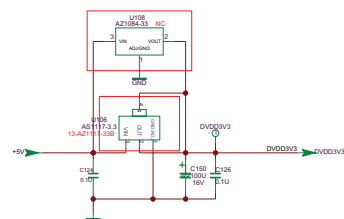
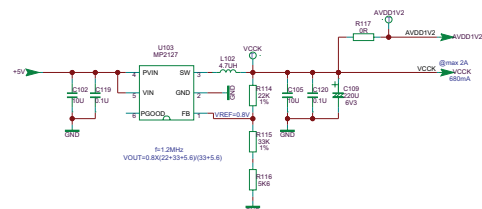
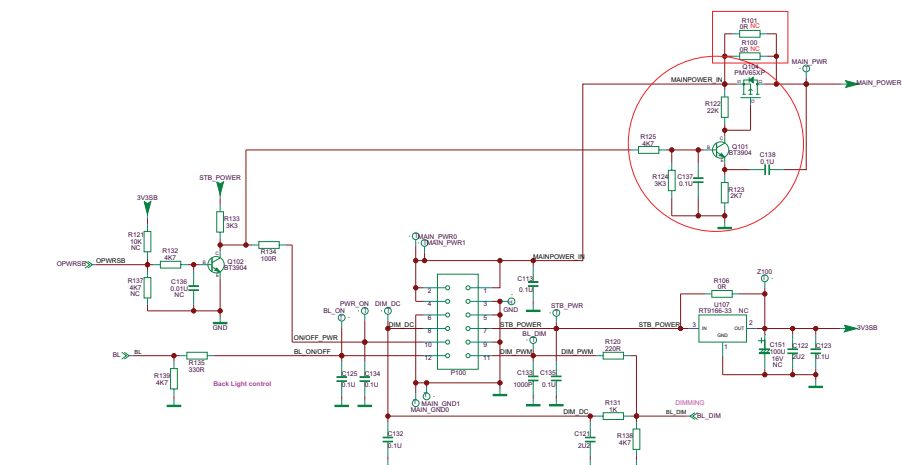
Change project ID

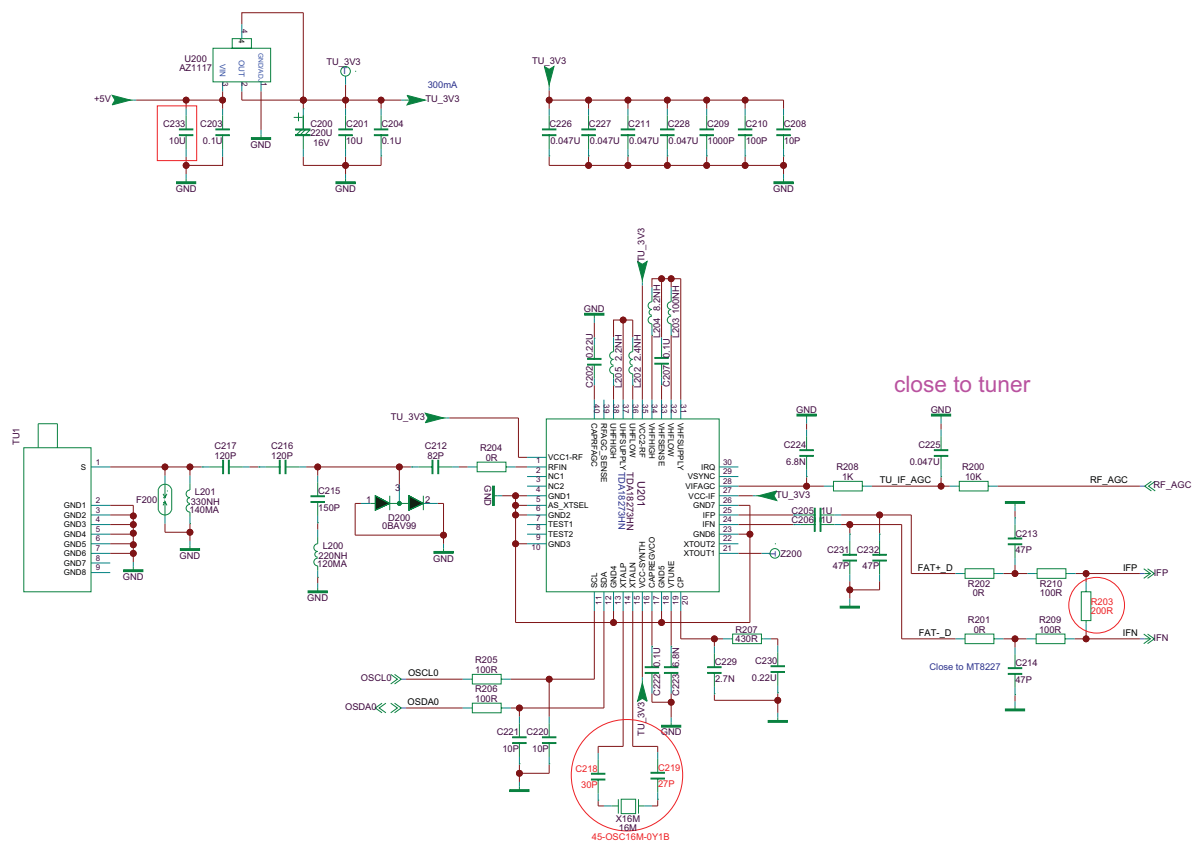
3. FAQ

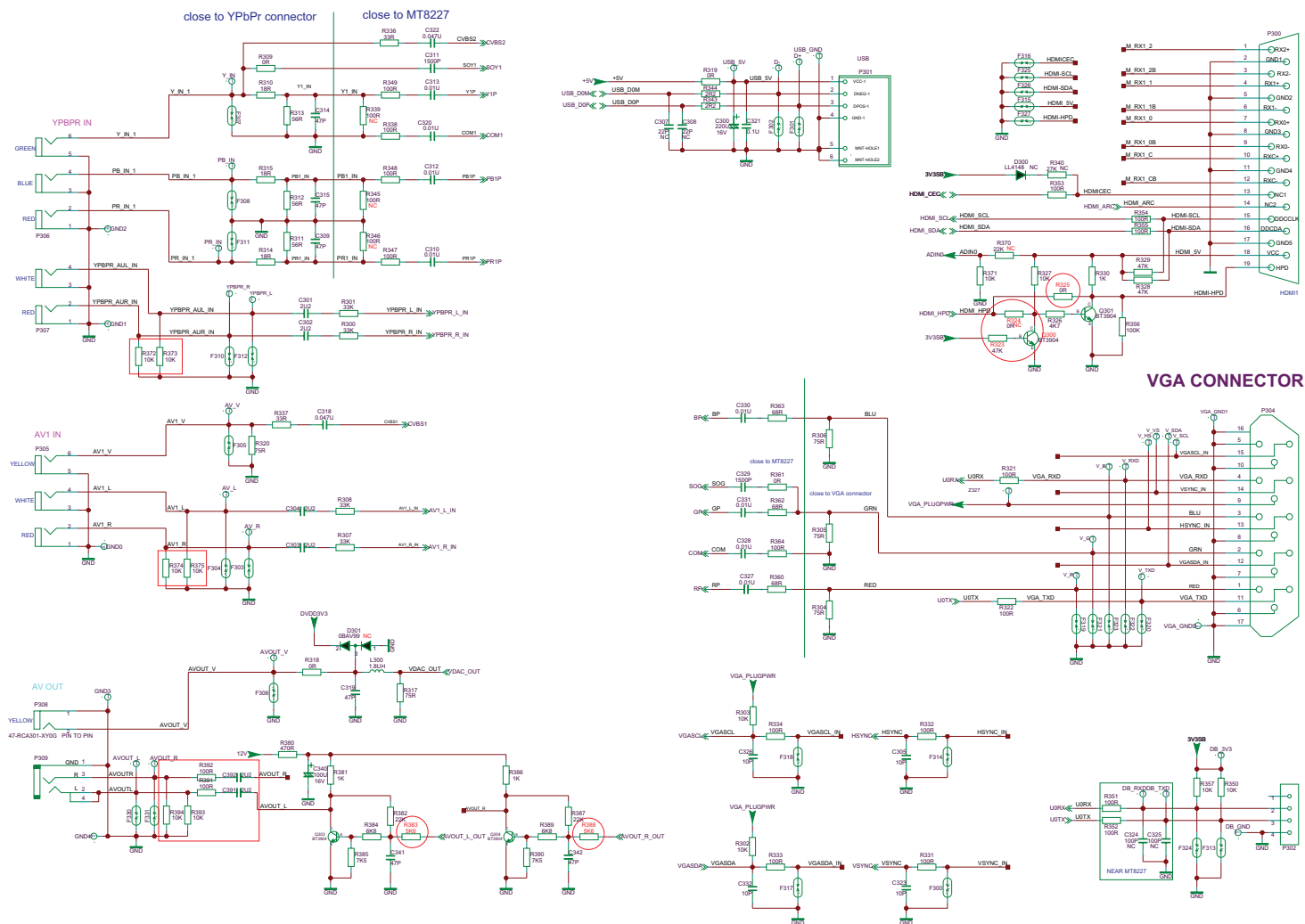
1) Why there is no picture after upgrading software or changing project ID?

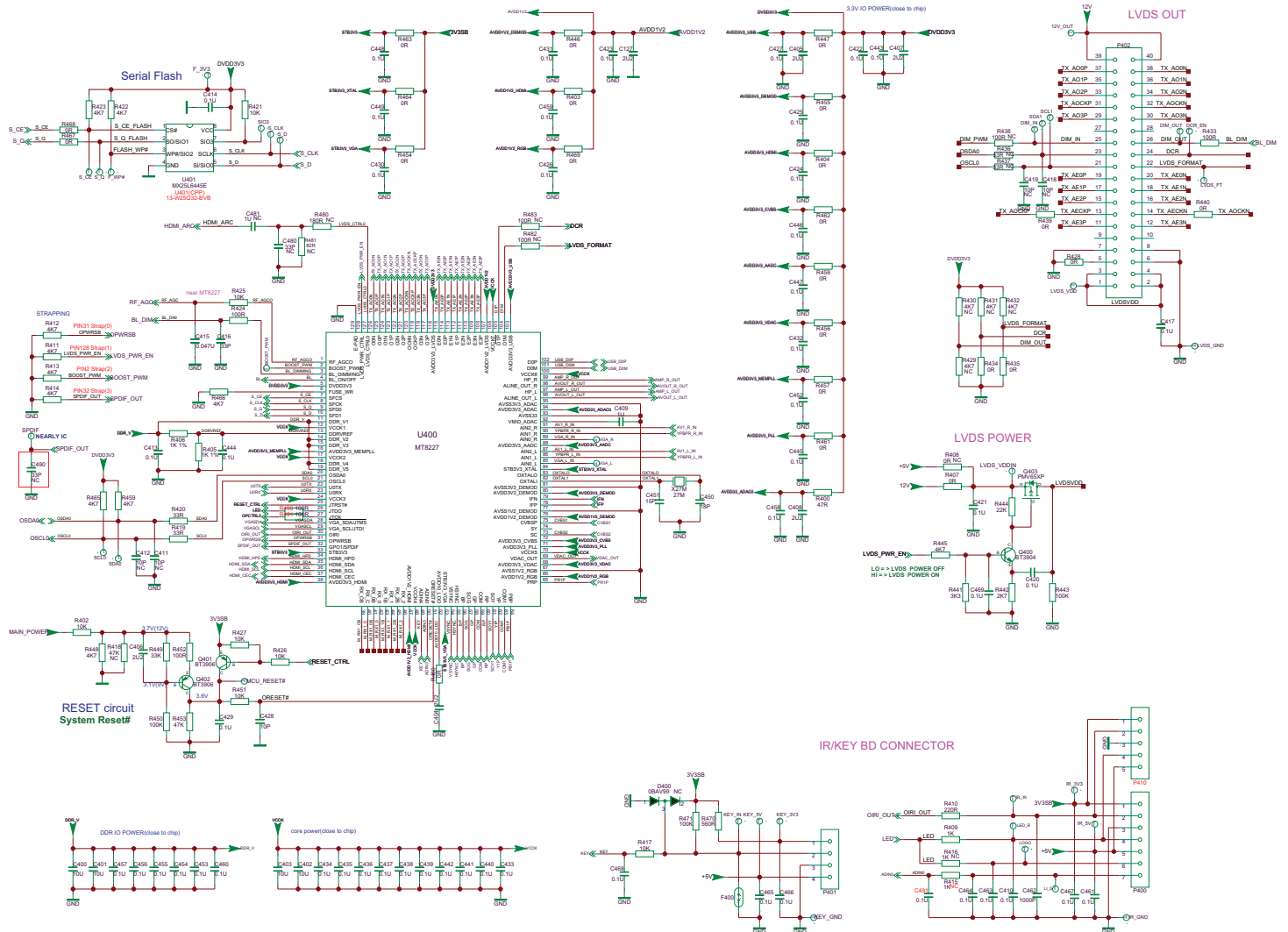
It may be caused by fault of project ID. You can try below method to fix the problem.

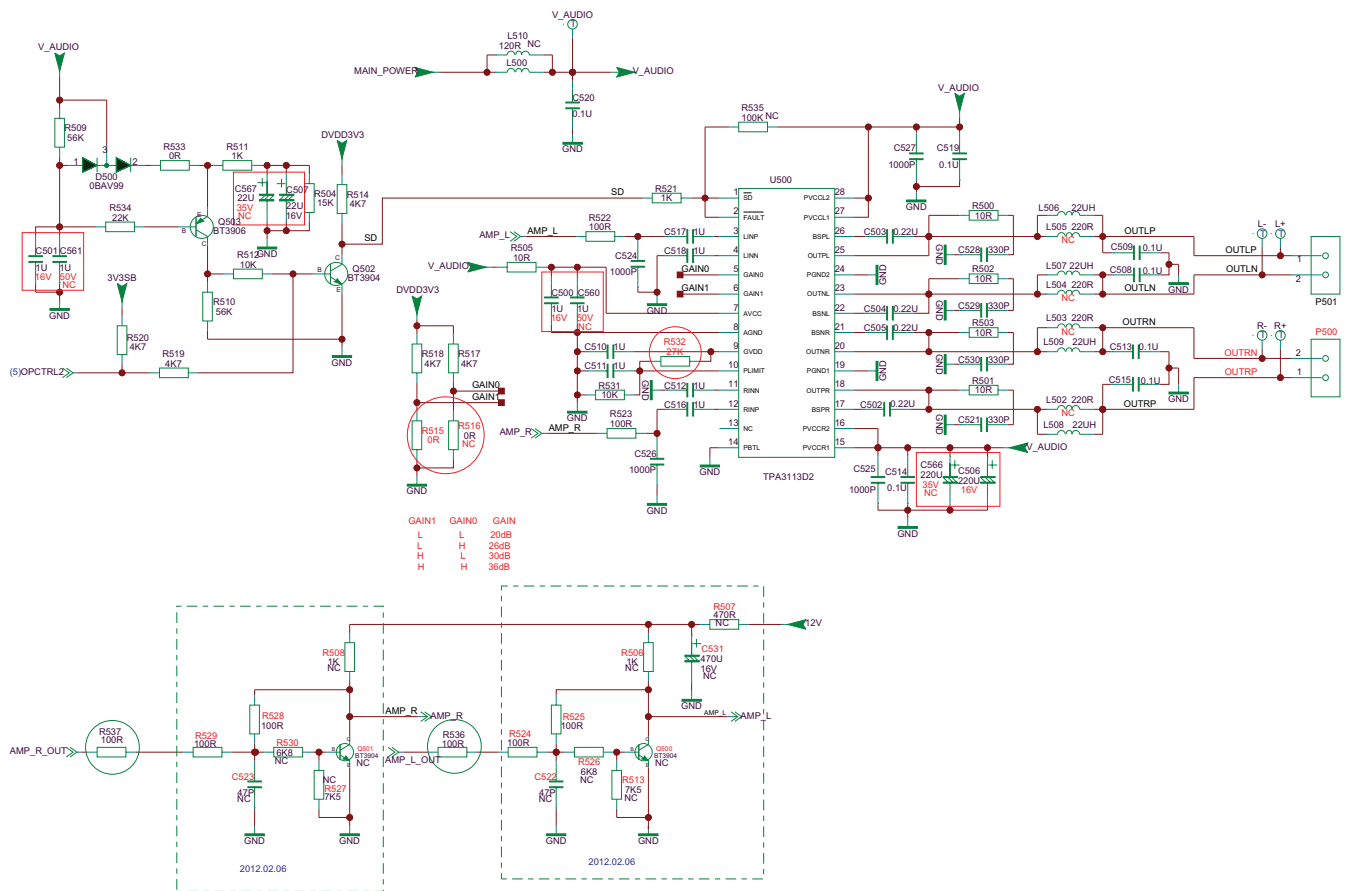
- a. If the resolution of the panel of your set is 1366×768(HD panel), you can press 062598,Menu, and Number(HD panel projectID) of remote control in series after turning on.
- b. If the resolution of the panel of your set is 1920×1080(FHD panel), you can press 062598,Menu, and Number(FHD panel projectID) in series after turning on.
- c. If you can see the picture at this time, please recheck the project ID again. If the project ID is still wrong, correct it reference to above description.

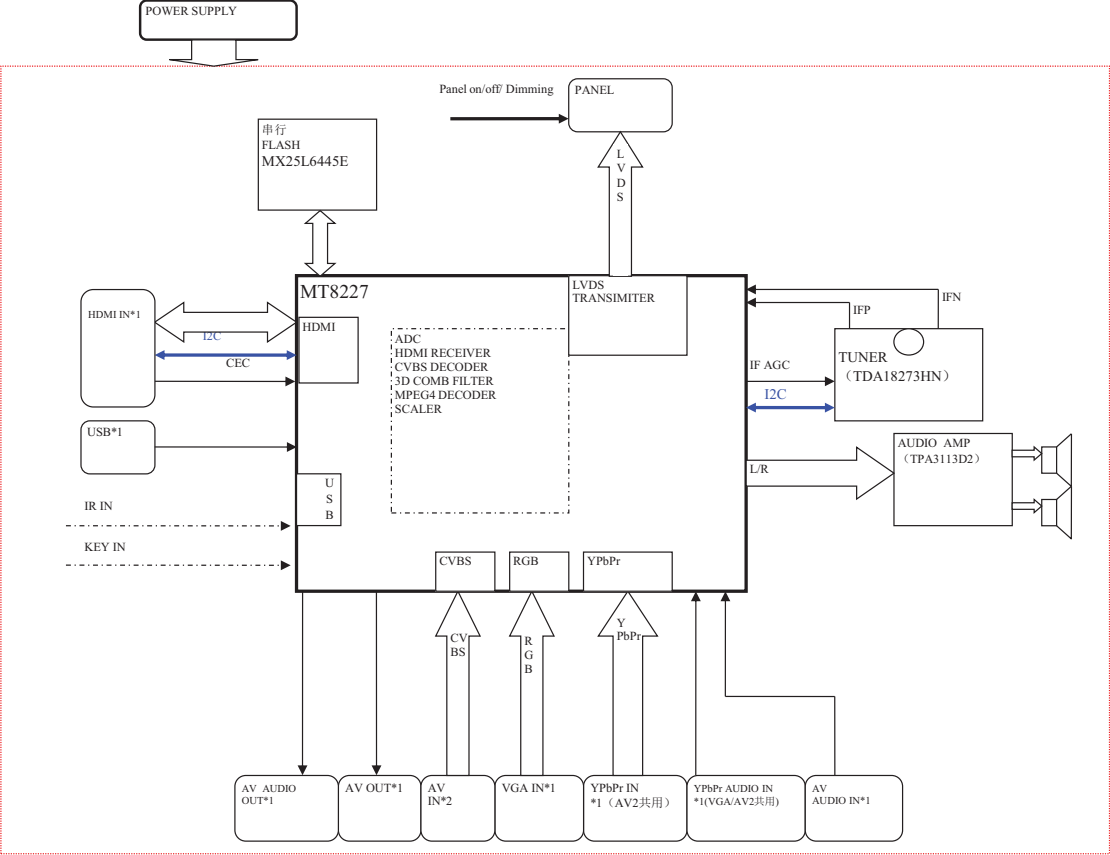




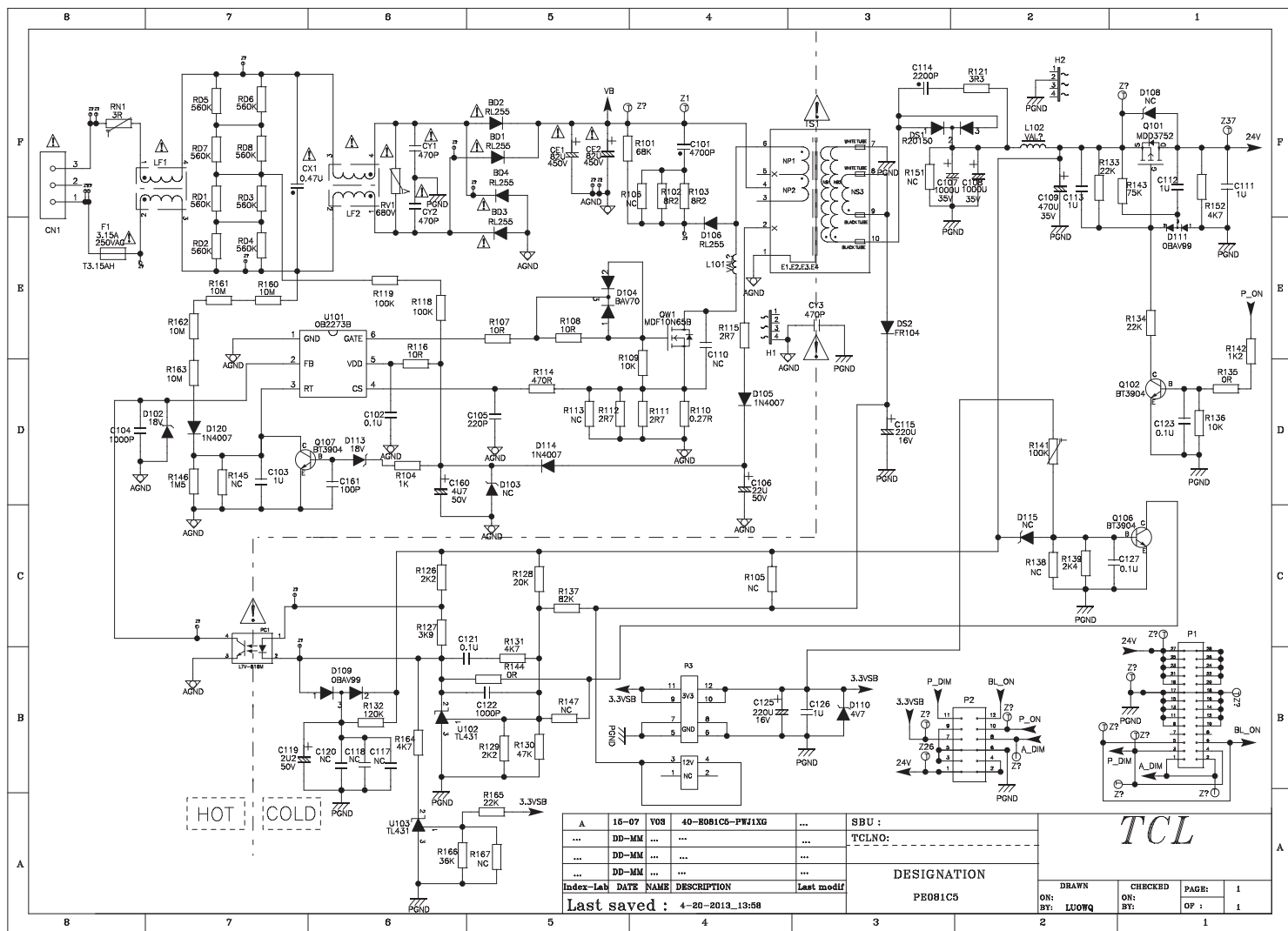






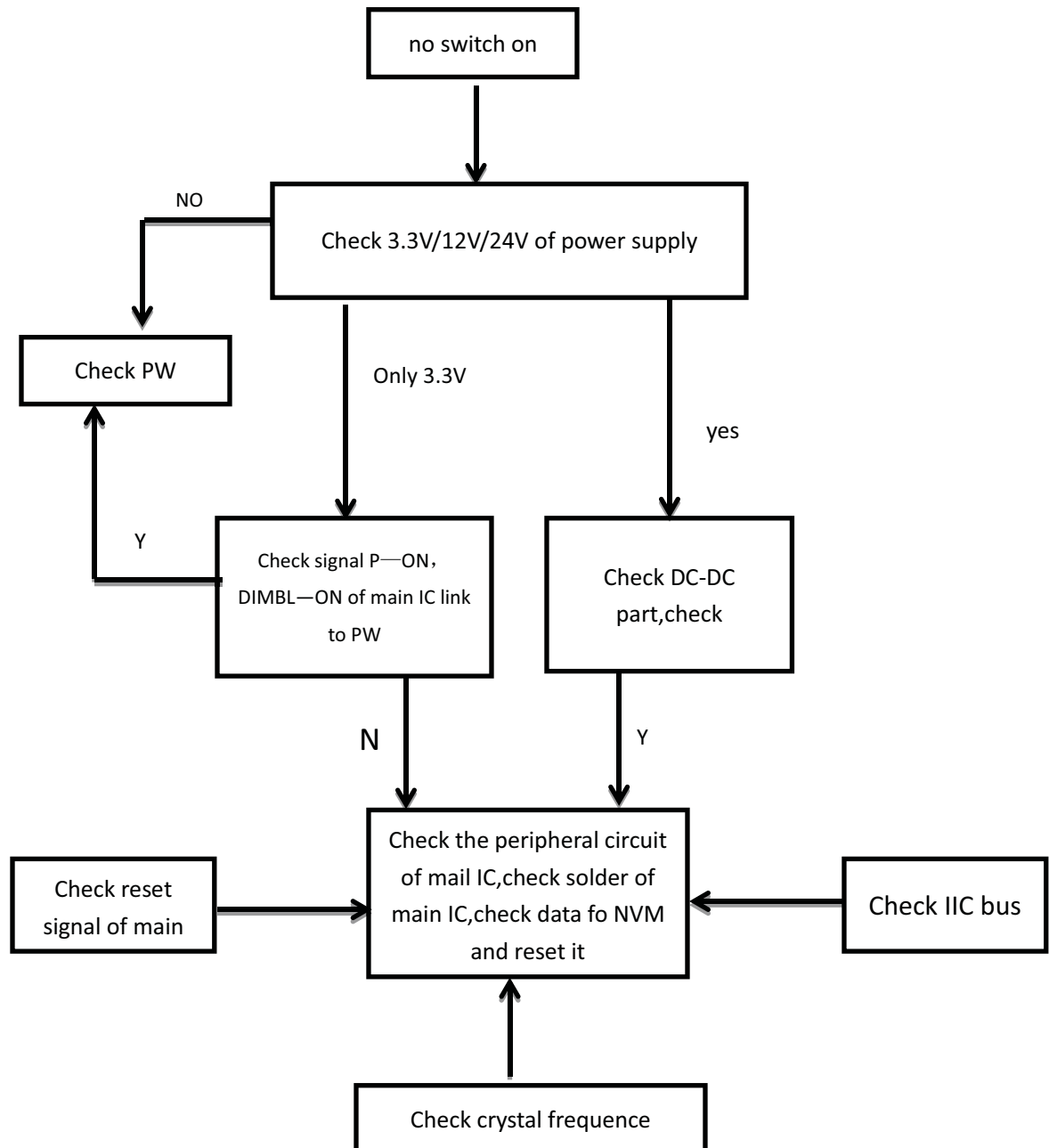


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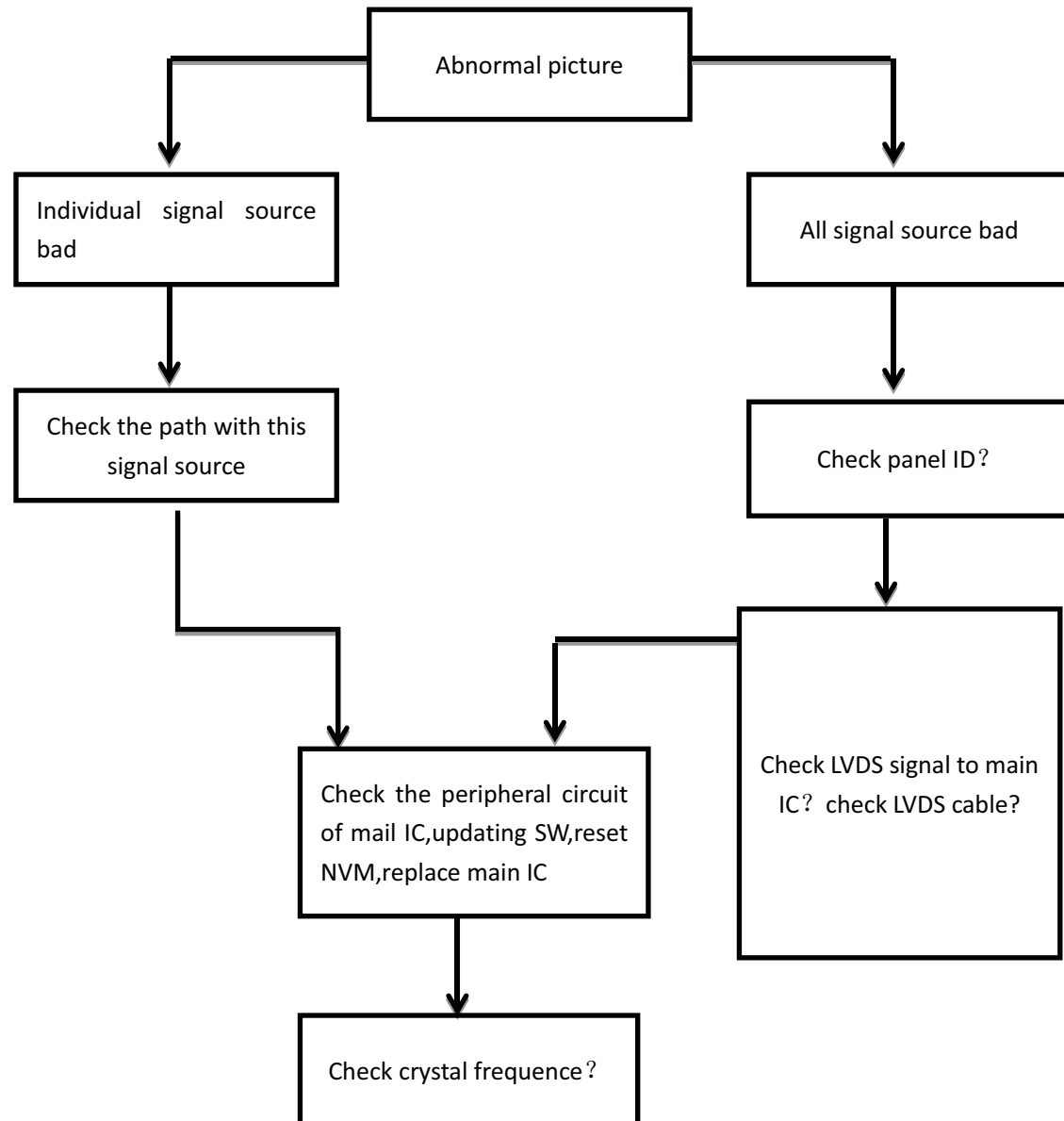


Trouble shooting

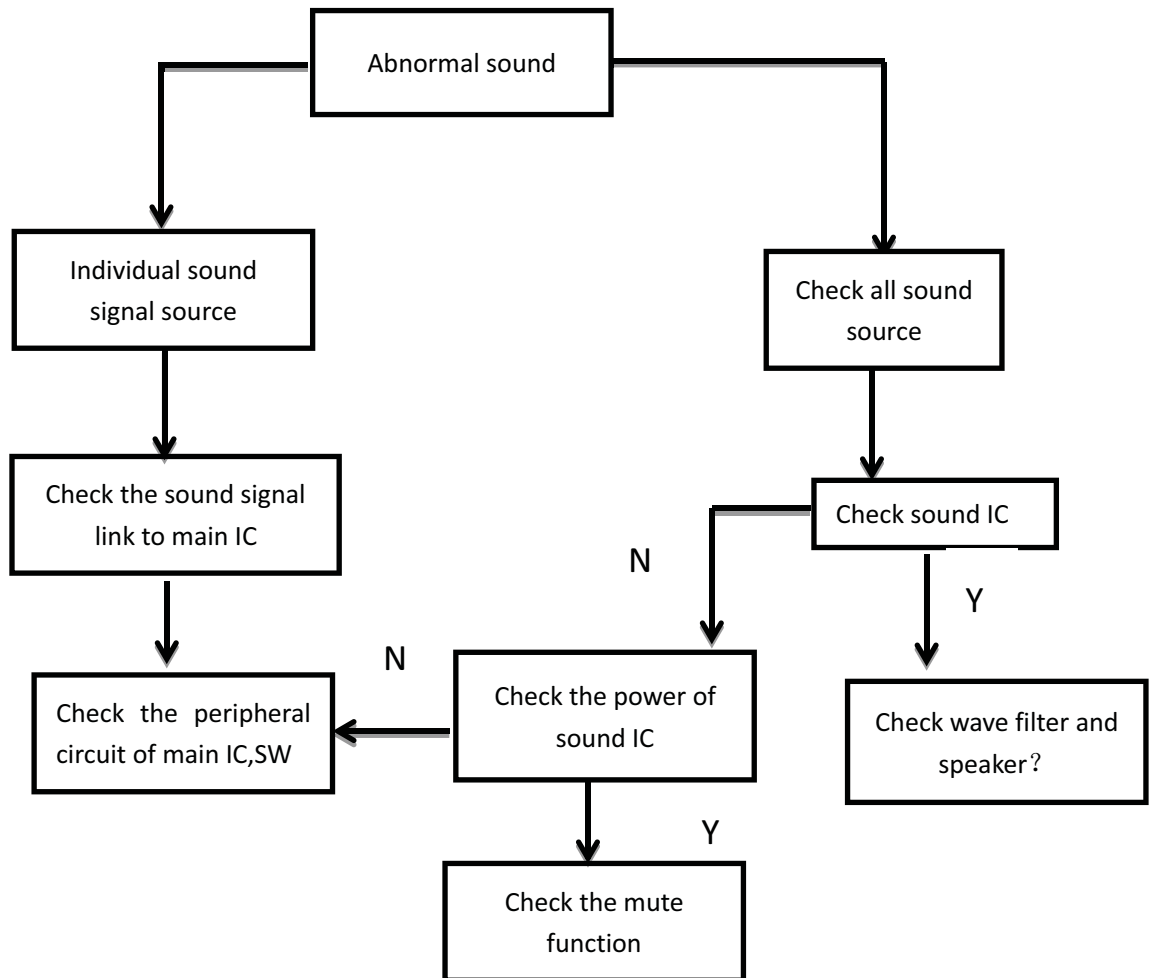
1、 Can not switch on:



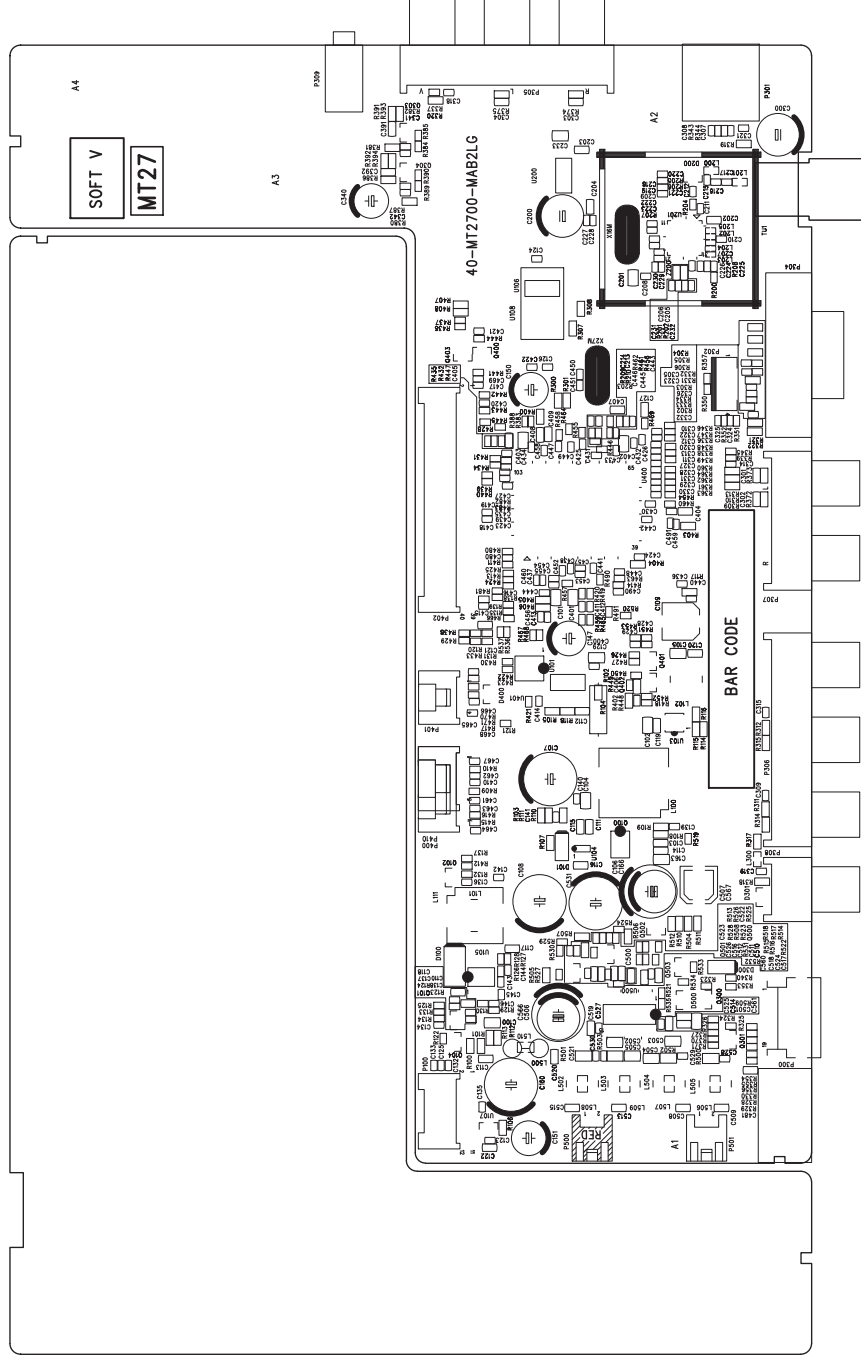
2、abnormal picture :



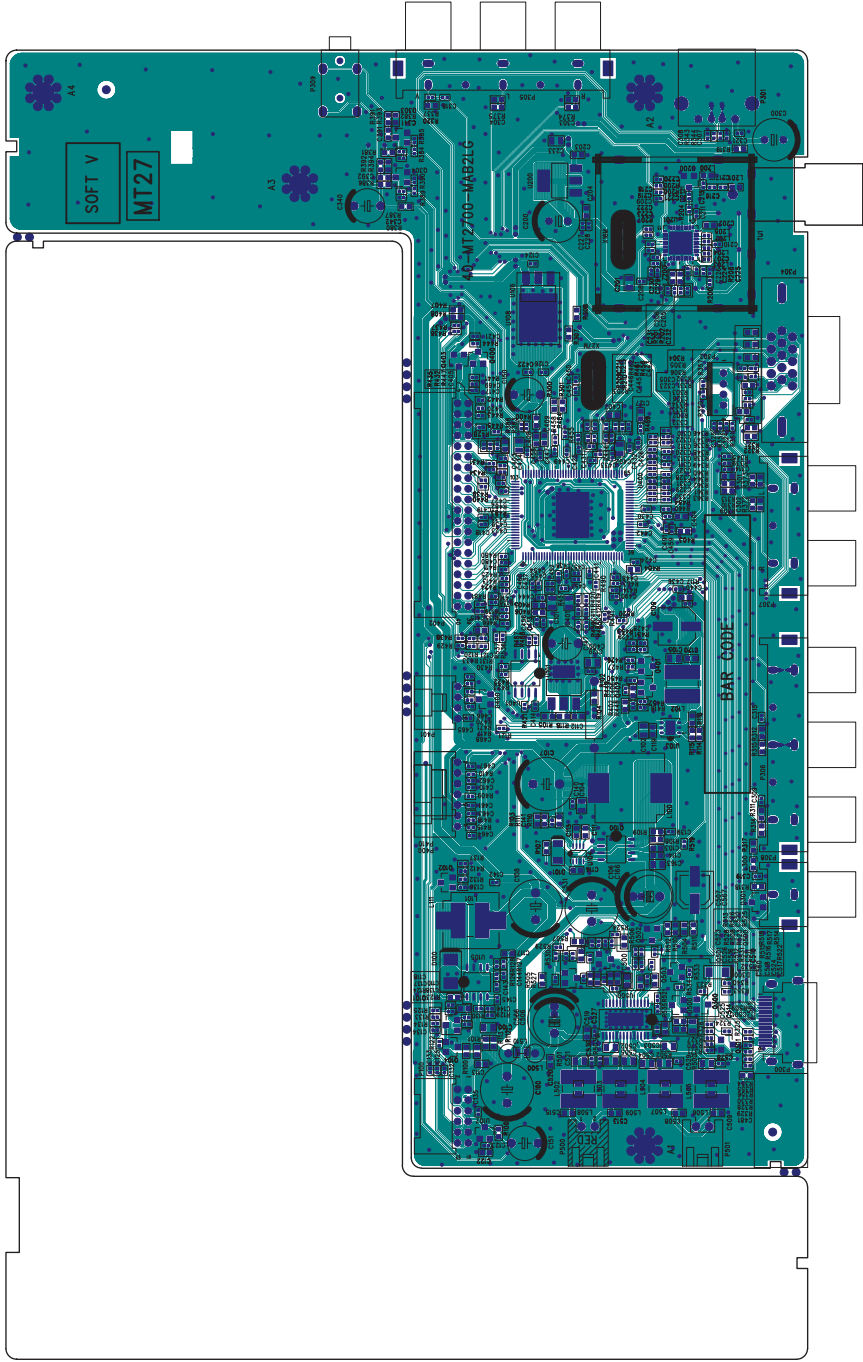
3、 Abnormal sound:



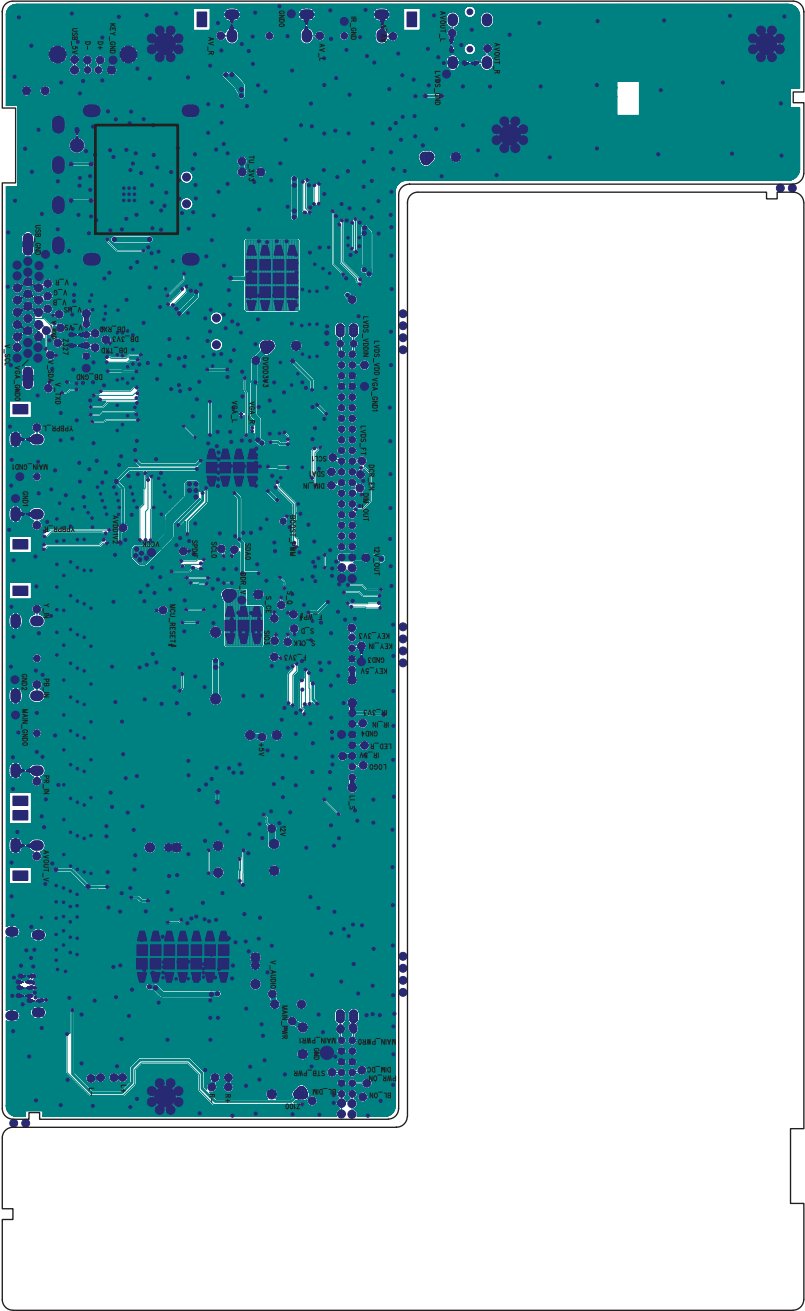
PCB Material
FR-4
Thickness(MM)
1.6MM
Layer
DOUBLESIDE
Copper Thickness
10Z
Surface treatment
OSP
Solder slot(C-PAD)
Other



PCB	laid
4-ET	
Thickness (MM)	
MMaT	
layer	
DOUBLE SIDE	
Copper thickness	
50T	
thematy acufu2	
q20	
(DA9-C)jole rabio2	
tenf0	



PCB Material	FR-4
Thickness(MM)	1.6MM
Layer	DOUBLESIDE
Copper Thickness	10Z
Surface treatment	OSP
Solder slot(C-PAD)	
Other	



Offset
Solder alloy(C-PAD) 02b
Surface treatment
IOI
Copper Thickness
DOINGE2IDE
Layer
Thickness(MM)
FR-4
BCB Material