

32" LCD COLOR TV

Service Manual

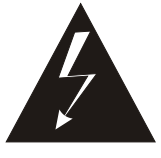
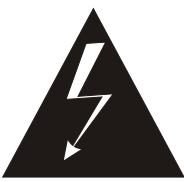
Model No.:

TL32H615B
TL32H601B

Contents

Safety Notice	03
Specifications	04
Supported Operating Modes	05
Control Buttons And Terminals.....	06
Disassembly the Framework	08
Illustration of actual object	12
Drive PCB Principle Diagram	15
Power PCB Circuit Diagram.....	24
Block Diagram.....	33

Safety Notice

 CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN 	TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
 This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.	 This symbol indicates important instructions accompanying the product.

Read this Manual

Read this manual thoroughly before operating the unit.

Keep this manual

Keep this manual for future reference.

Observe all warnings

All warnings on the product and in the manual must be observed closely.

Follow all instructions

All operating instructions in the manual must be followed.

Do not insert liquids or objects

Liquids or objects could result in fire or electrical shock. Use special caution in households where children are present. If liquids or objects should enter the LCD TV, immediately turn off the power switch, disconnect the power plug from the AC outlet and contact the qualified service personnel.

- Do not place the LCD TV near the bathtub, bathroom, kitchen sink, wet basement or swimming pool, and the like.
- Do not expose the LCD TV to rain or moisture.
- Do not place flower vases, pots, cups, cosmetics, liquids as water, etc on or around the LCD TV.
- Do not place metals, combustibles, etc on or around the LCD TV.
- Do not drip or splash liquid of any kind on the LCD TV.

Do not give the LCD TV any shock or impact

If the LCD TV should be shocked and/or broken, it could result in an injury, and continued use could result in fire or electrical shock.

If the glass panel is broken or damaged, immediately turn off the power switch, disconnect the power plug from the AC power outlet and contact the qualified service personnel.

Prevent the unit from falling

- Fasten the LCD TV to a wall using a cord or chain which is sufficient to support the weight of the LCD TV. Before moving the LCD TV, the cord or chain should be removed.
- Avoid children to climb on the LCD TV.
- Do not place the LCD TV on a bed, sofa, rug, similar surface. Do not place the LCD TV on an unstable cart, stand, or table. The LCD TV may fall, causing serious damage to the LCD TV and/or serious personal injury, death.
- When the product is used on a trolley, care should be taken to avoid quick stops, excessive force, and uneven surfaces that may cause the product and trolley to overturn.

Specifications

LCD Panel		
Size/Model	32" Diagonal/TL32H615B	32" Diagonal/TL32H601B
PC Resolution		
Maximum Mode	1360X768 @ 60Hz	1360X768 @ 60Hz
Input Source		
Sync.	H/V separate, TTL, P. or N.	H/V separate, TTL, P. or N.
Video Signal	1Vp-p @ 75 ohm	1Vp-p @ 75 ohm
RGB Signal	0.7 Vp-p @ 75 ohm	0.7 Vp-p @ 75 ohm
TV		
Color System	ATV: PAL, SECAM	ATV: PAL, SECAM
Sound System	BG, DK, I	BG, DK, I
Video		
Color System	PAL/SECAM/NTSC	PAL/SECAM/NTSC
Video Format	CVBS, S-VHS, RGB	CVBS, S-VHS, RGB
Power Supply		
Input	AC 100~240V, 50/60Hz	AC 100~240V, 50/60Hz
Power Consumption		
Working	165W	165W
Standby	≤ 3W	≤ 3W
Environmental Considerations		
Operating Temperature	10℃ ~ 40 ℃(50°F ~ 104°F)	10℃ ~ 40 ℃(50°F ~ 104°F)
Operating Humidity	10% ~ 80%	10% ~ 80%
Audio Characteristics		
Audio Input	RCA Jack (L, R), 0.5Vrms (-9dB)	RCA Jack (L, R), 0.5Vrms (-9dB)
Audio Input (PC)	Φ3.5 Stereo, 0.5Vrms (-9dB)	Φ3.5 Stereo, 0.5Vrms (-9dB)
Frequency	RF: 100Hz~10KHz (at ± 3dB)	RF: 100Hz~10KHz (at ± 3dB)
Response	A/V: 100Hz~12KHz (at ± 3dB)	A/V: 100Hz~12KHz (at ± 3dB)
Dimension (WXDXH) mm		
Without Stand	797X109X533	796X104X527
With Stand	797X233X572	796X270X579
Weight (Kg)		
Net Weight	≈13	≈13.7
Gross Weight	≈15	≈16.5

Note:

- Design and specifications are subject to change without notice.
- Weights and dimensions shown are approximate values only.

Supported Operating Modes

COMPONENT VIDEO (YPbPr) INPUT

Mode	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
576i/50	720X576	15.63	50.00
480i/60	640X480	15.73	60.00
576p/50	720X576	31.25	50.00
480p/60	640X480	31.47	60.00
720p/60	1280X720	45.00	60.00
1080i/50	1920X1080	28.13	50.00
1080i/60	1920X1080	33.75	60.00
1080p/50	1920X1080	56.25	50.00
1080p/60	1920X1080	67.50	60.00

RGB INPUT

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Comment
640x480	31.5	60	DOS
800x600	37.9	60	VESA
1024x768	48.4	60	VESA
1280X768	64.0	60	VESA
1360X768	47.7	60	VESA

HDMI INPUT

Mode	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
480i	640X480	31.47	60.00
576p	720X576	31.25	50.00
720p/60	1280X720	45.00	60.00
1080i/50	1920X1080	28.13	50.00
1080i/60	1920X1080	33.75	60.00
1080p/50	1920X1080	56.25	50.00
1080p/60	1920X1080	67.50	60.00

- Modes, which are not listed in the above table, may not be supported. For an optimal picture is recommended to choose a mode listed in the table.
- The incoming display modes compatible with WINDOWS as shown in the table above.
- Sometimes, the image may be disrupted due to the frequency standard from the VGA card. However, this is not an error. You may improve this situation by activating the automatic adjustment or by manually changing the phase and the clock settings in the menu.
- To extend the service life of the product, we recommend that you use your computer's power management function.

CONTROL BUTTONS AND TERMINALS

FRONT PANEL

Button Name	Description
INPUT	Press to display source menu, then use ▲ / ▼ button to select a input signal.
MENU	Enter or exit from the menu.
VOL ◀▶	Increase or decrease the volume. Adjust the values of the selected menu item in the OSD menu.
CH. ◀▶	When you are watching the TV program, press these buttons to select channel in ascending or descending order. Select the upper or lower menu item in the OSD menu.
STANDBY	Switch on the LCD TV when at standby mode or vice versa.
Power Indicator	Illuminates red in standby mode. Illuminates green when the LCD TV is switched on.
Remote Sensor	Infrared sensor for the remote control.
Main Power Switch	Turn on/off the power.

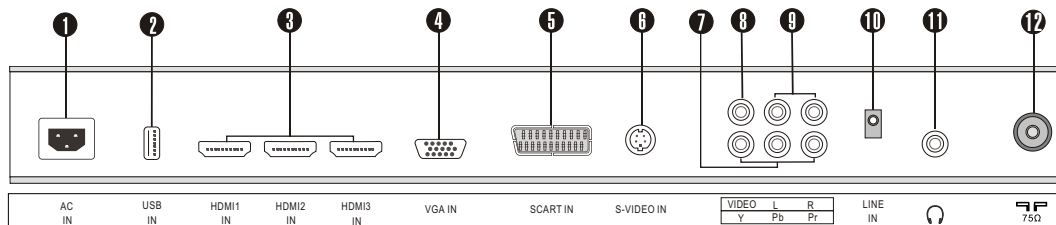
Note:

If there is no signal input for 5 minutes, it will switch to standby mode automatically.

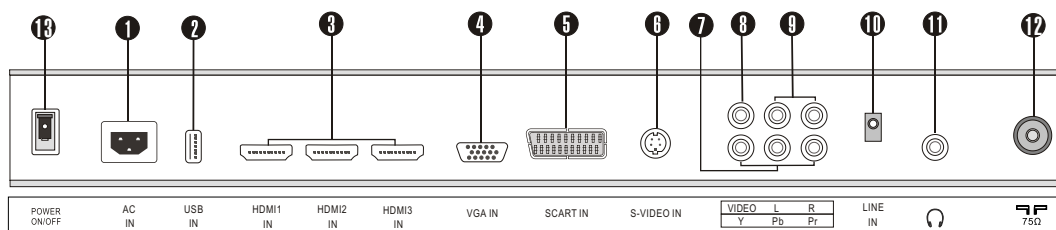
CONTROL BUTTONS AND TERMINALS

REAR PANEL

TL32H615B:



TL32H601B:



- ❶ AC Input Socket: Connect to an earth 100-240V, 50/60Hz AC outlet with the power cable.
- ❷ USB Input Connector: Connect it to the USB.
- ❸ HDMI Input Connectors: Connect it to the HDMI of DVD or other external equipment.
- ❹ VGA Input Terminal: Connect it to the D-Sub 15 pins analog output connector of the PC with the VGA cable.
- ❺ SCART Connector: Connect them to the composite terminal of DVD.
- ❻ S-VIDEO Terminal: Connect it to S-Video output terminal of DVD.
- ❼ YPbPr Component Video Input Terminals: Connect them to the YPbPr component output terminal of DVD or other external equipment.
- ❽ VIDEO Terminal: Connect it to Video output terminal of DVD.
- ❾ Audio In Terminals: Connect them to the audio output terminal of DVD with AV/S-VIDEO/YPBPR mode.
- ❿ LINE IN (VGA Audio) Terminal: Connect it to the audio output terminal of PC.
- ⓫ Headphone Output Terminal: Connect the headphone.
- ⓬ RF Input Socket: Connect antenna or cable 75 ohm coaxial to receive TV signal.
- ⓭ Power On/Off switch: Turn on/off the AC power.

Disassembly the Framework(1)

Please follow the following steps to disassemble the unit :

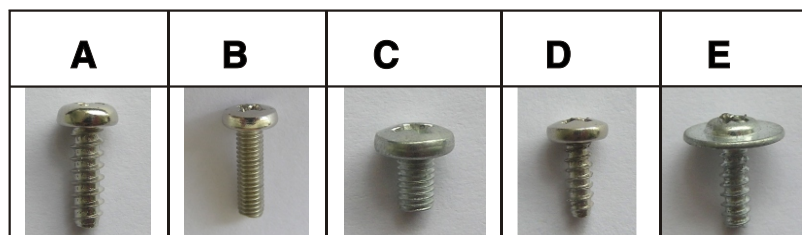
Warning:

All material parts and screws must be installed on its corresponding position correctly ,otherwise it may cause damage.

All the connection cable must be disconnected otherwise it may cause damage.

Warning :

Disassemble the unit only should be handled by qualified service personnel !
Assembly and disassembly must be noted to protect cabinet to avoid scratch and damage.



1、TL32H615B

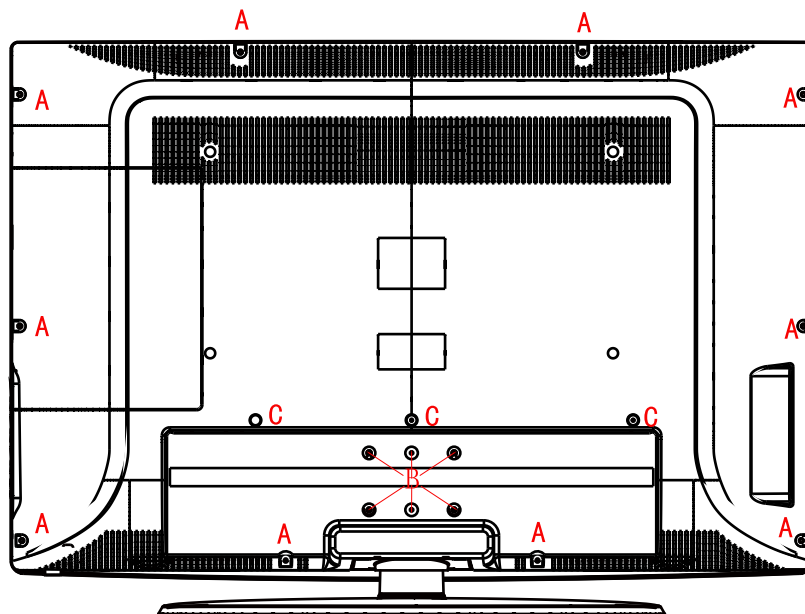
Disassemble the rear cabinet:

1.1、Unfasten the 6 screws B (BM4×12) , take out the stand from the TV.

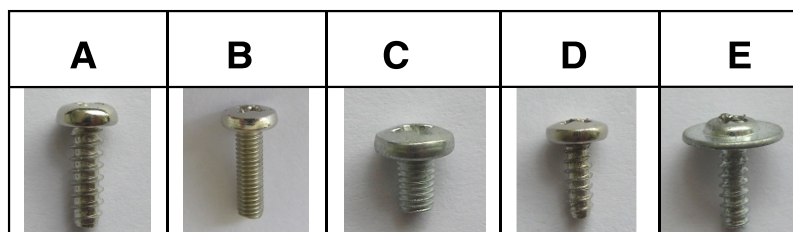
1.2、Unfasten the 10 screws A (BST4×12), and the 3 screws C (BM3X6) , uninstalling the back cover .

Warning :

When remove the stand bracket, please be careful of the LCD panel should not be contacted any edge and firm or corrosive object, they may case scratch and damage.



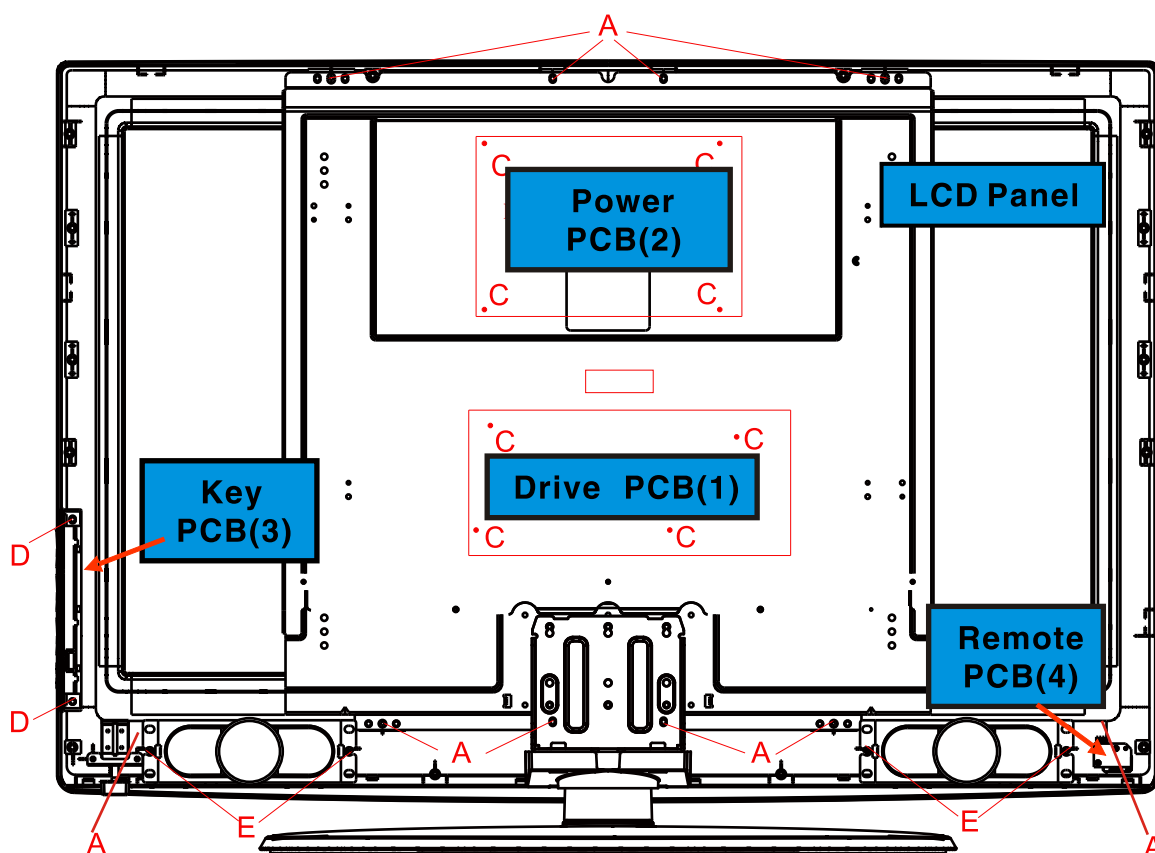
Disassembly the Framework(1-1)



2、TL32H615B

Disassemble PCB assembly and Front cabinet:

- 2.1、Uninstall the Connection cable with Drive PCB1、 Power PCB2、 Key PCB3、 Remote PCB4;
- 2.2、Unfasten 10 Screws of A(BST4×12),and the 2 screws D(BST3×10)take out the Front cabinet and the key PCB3 ;
- 2.3、Unfasten 4 screws of C(M3×6) and take out the Drive PCB1;
- 2.4、Unfasten 4 screws of C(M3×6) and take out the Power PCB2 ;
- 2.5、Unfasten 4 screws of E(PWT3×8),remove the 2 speakers.



Warning : When Disassemble the Drive PCB and Power PCB , please be careful of avoiding the connector pins to be flexed.

Disassembly the Framework(2)

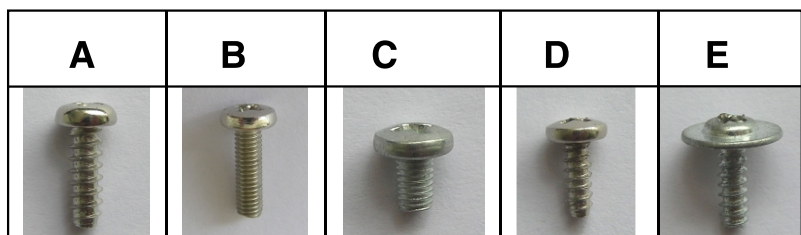
Please follow the following steps to disassemble the unit :

Warning:

All material parts and screws must be installed on its corresponding position correctly ,otherwise it may cause damage.
All the connection cable must be disconnected otherwise it may cause damage.

Warning :

Disassemble the unit only should be handled by qualified service personnel !
Assembly and disassembly must be noted to protect cabinet to avoid scratch and damage.

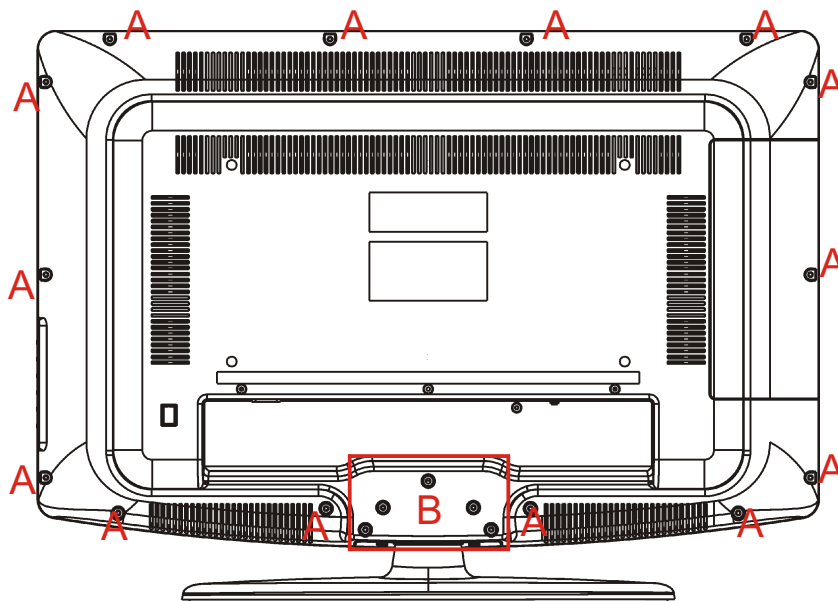


1、TL32H601B

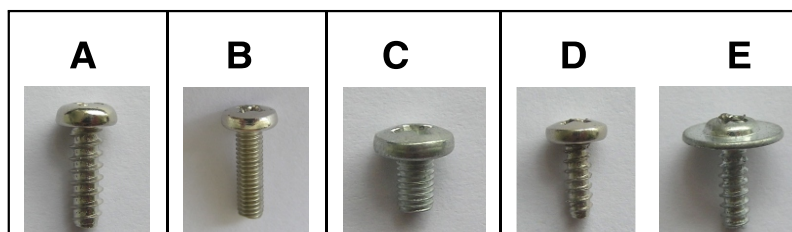
Disassemble the rear cabinet:

- 1.1、 Unfasten the 14 screws A (BST4×12), the 3 screws C (BM3X6) ,
Uninstalling the back cover .
- 1.2、 Unfasten the 5 screws B (BM4×12) , take out the stand from the TV.

When remove the stand bracket, please be careful of the LCD panel should not be contacted any edge and firm or corrosive object, they may case scratch and damage.



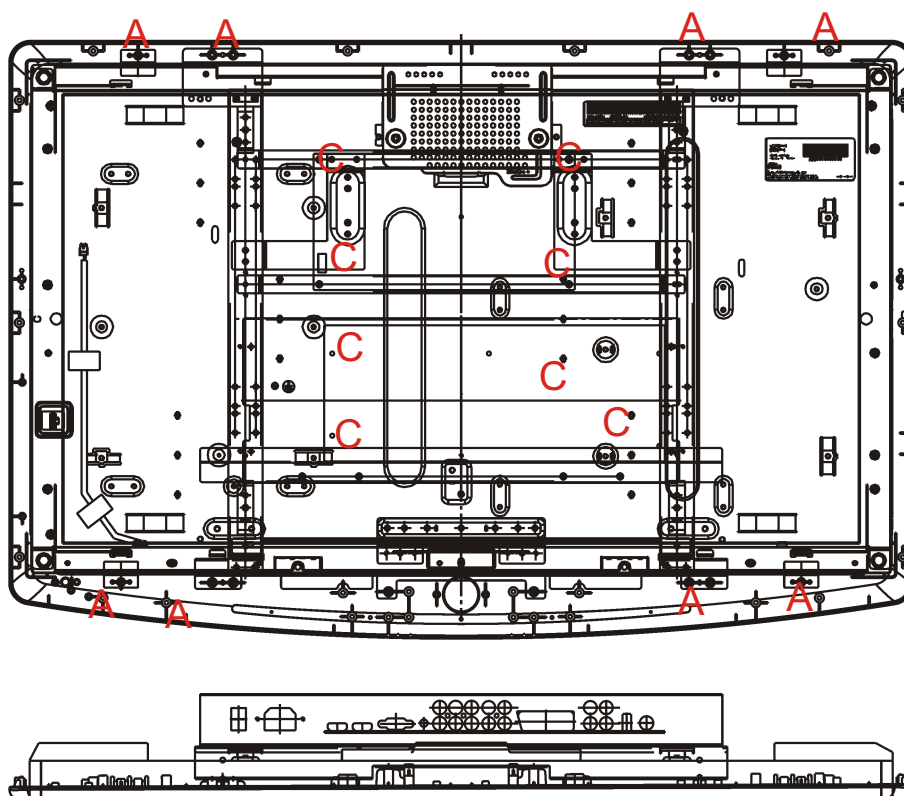
Disassembly the Framework(2-1)



2、TL32H601B

Disassemble PCB assembly and Front cabinet:

- 2.1、Uninstall the Connection cable with Driver PCB1、 Power PCB2、 Key PCB3、 Remote PCB4;
- 2.2、Unfasten 12 screws of A(BST4×12)and take out the Front cabinet;
- 2.3、Unfasten 4 screws of C (M3×6) and take out the Driver PCB1;
- 2.4、Unfasten 4 screws of C (M3×6) and take out the Power PCB2;



Warning : When Disassemble the Drive PCB and Power PCB , please be careful of avoiding the connector pins to be flexed.

Illustration of actual object(1)

Drive Board: Driver Board(obverse)
Drive Board model no. : MT-610

TL32H615B/TL32H601B



Illustration of actual object(2)

Power Board: Power Board(obverse)
Power Board model no. : IPB732

TL32H615B

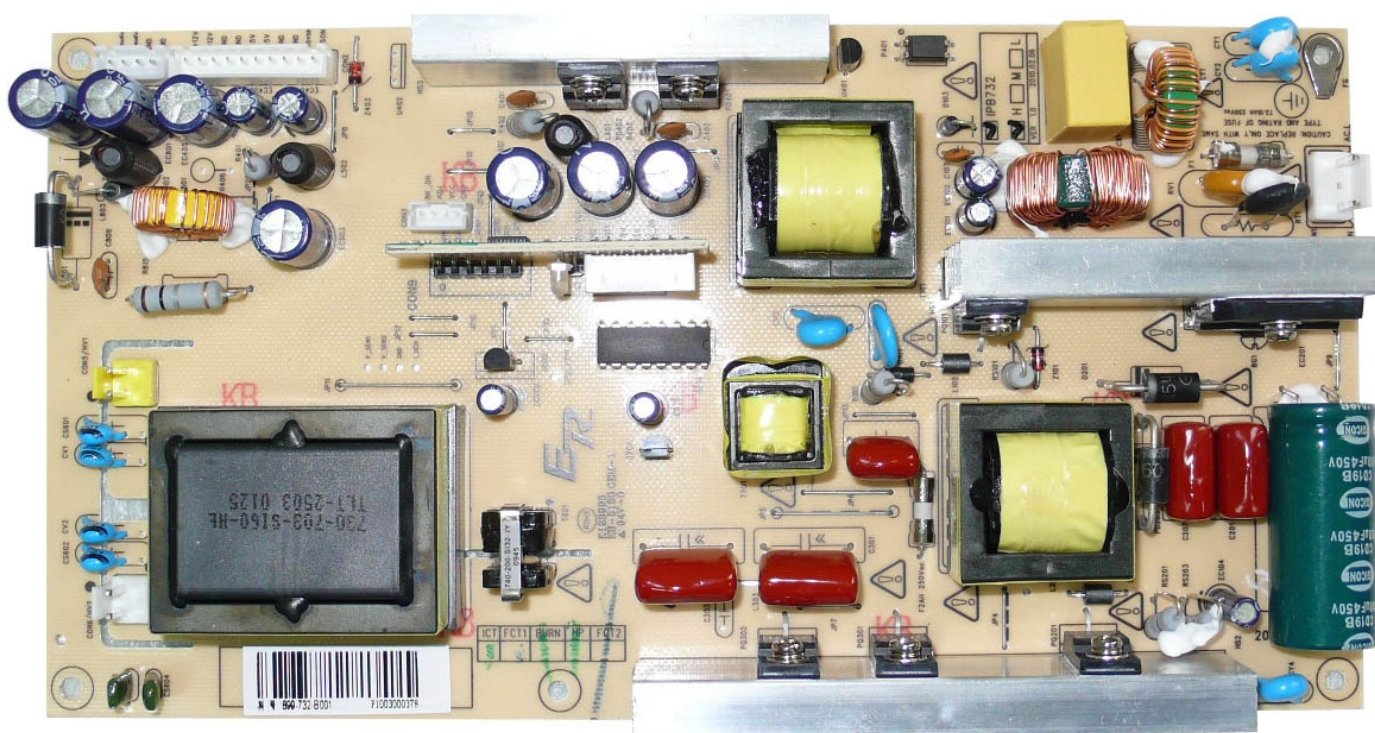


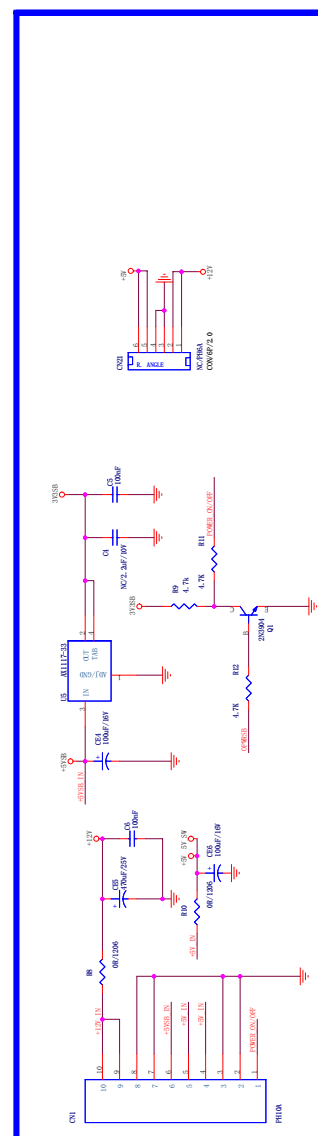
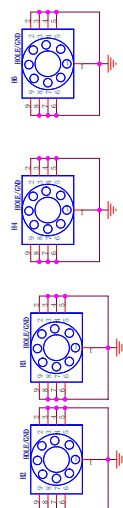
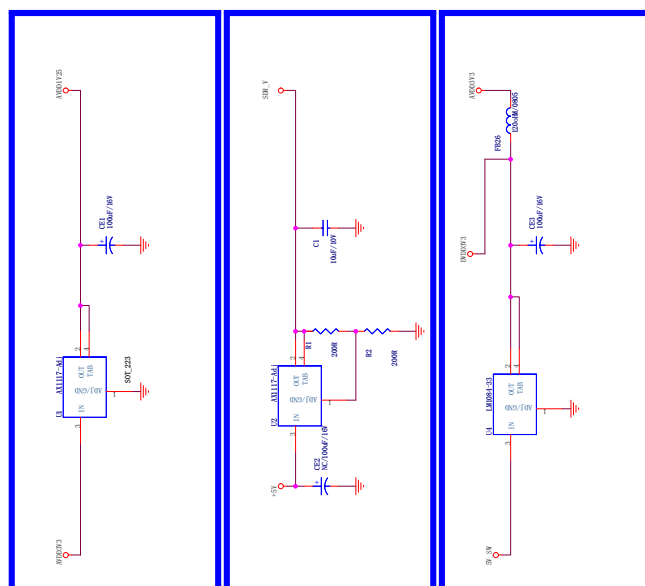
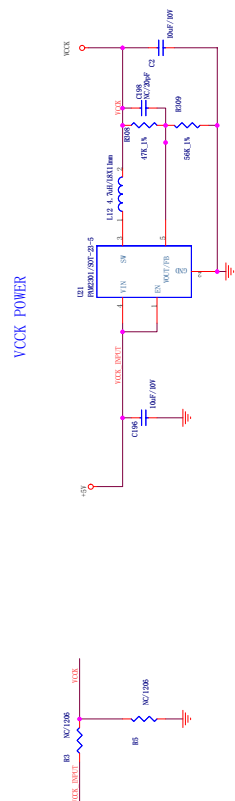
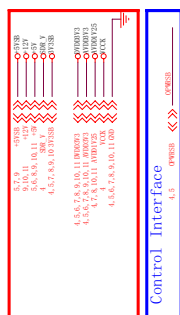
Illustration of actual object(3)

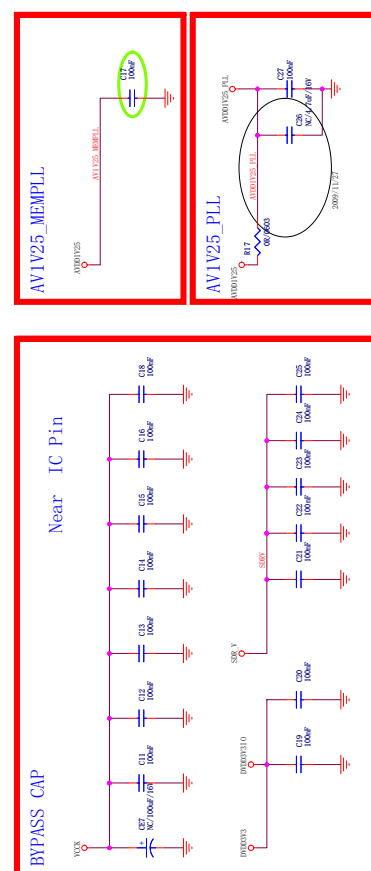
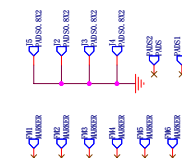
Power Board: Power Board(obverse)
Power Board model no. : MLT666T

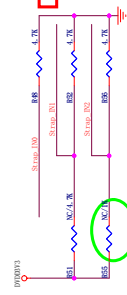
TL32H601B



Drive PCB Principle Diagram











Audio Input

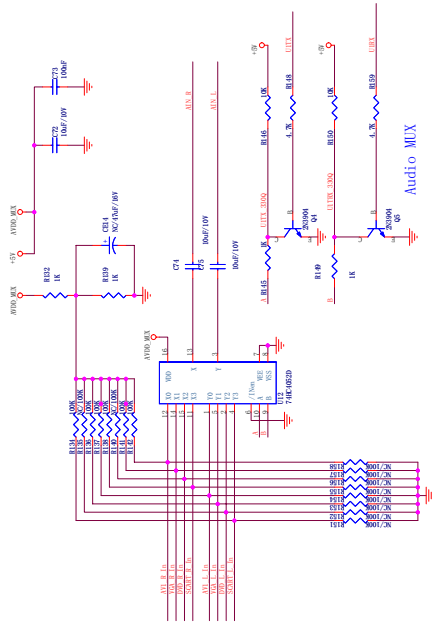
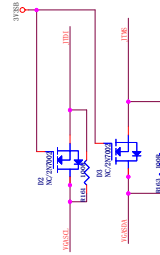
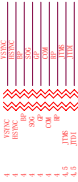


UART VgaPort

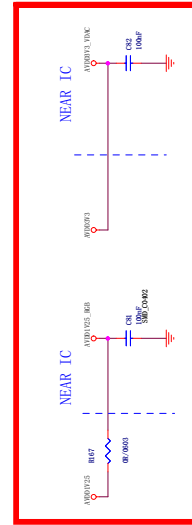
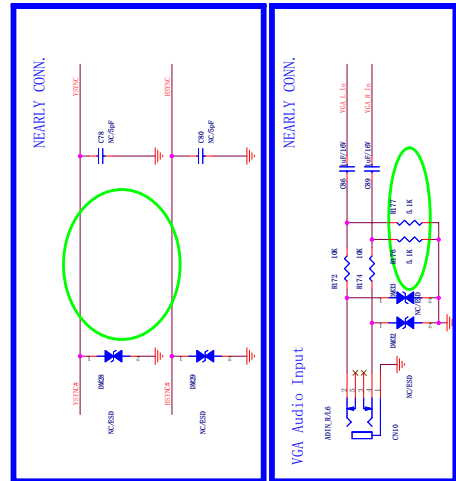
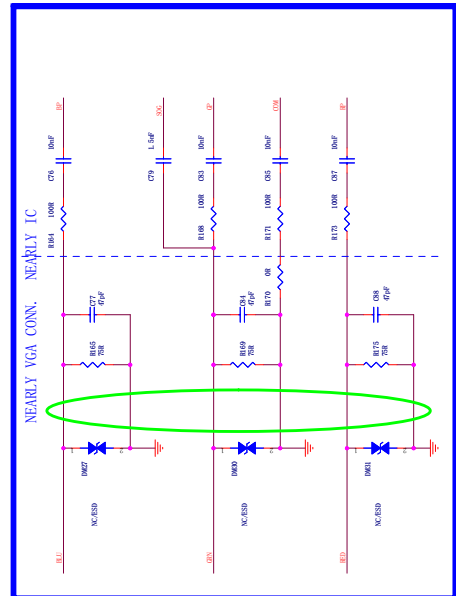
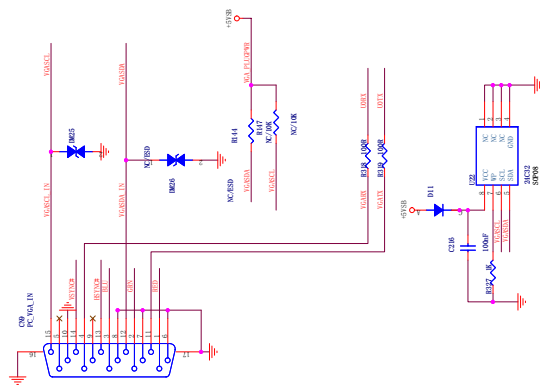
V/A Control

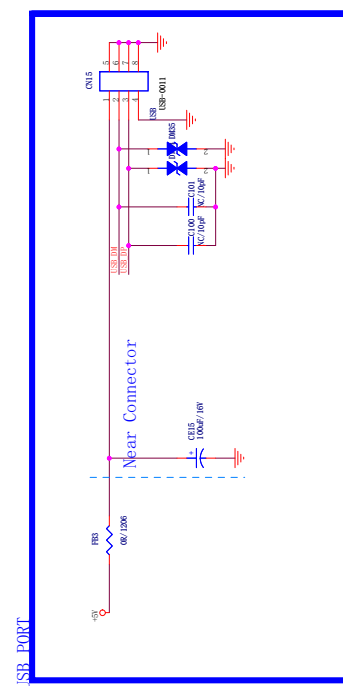


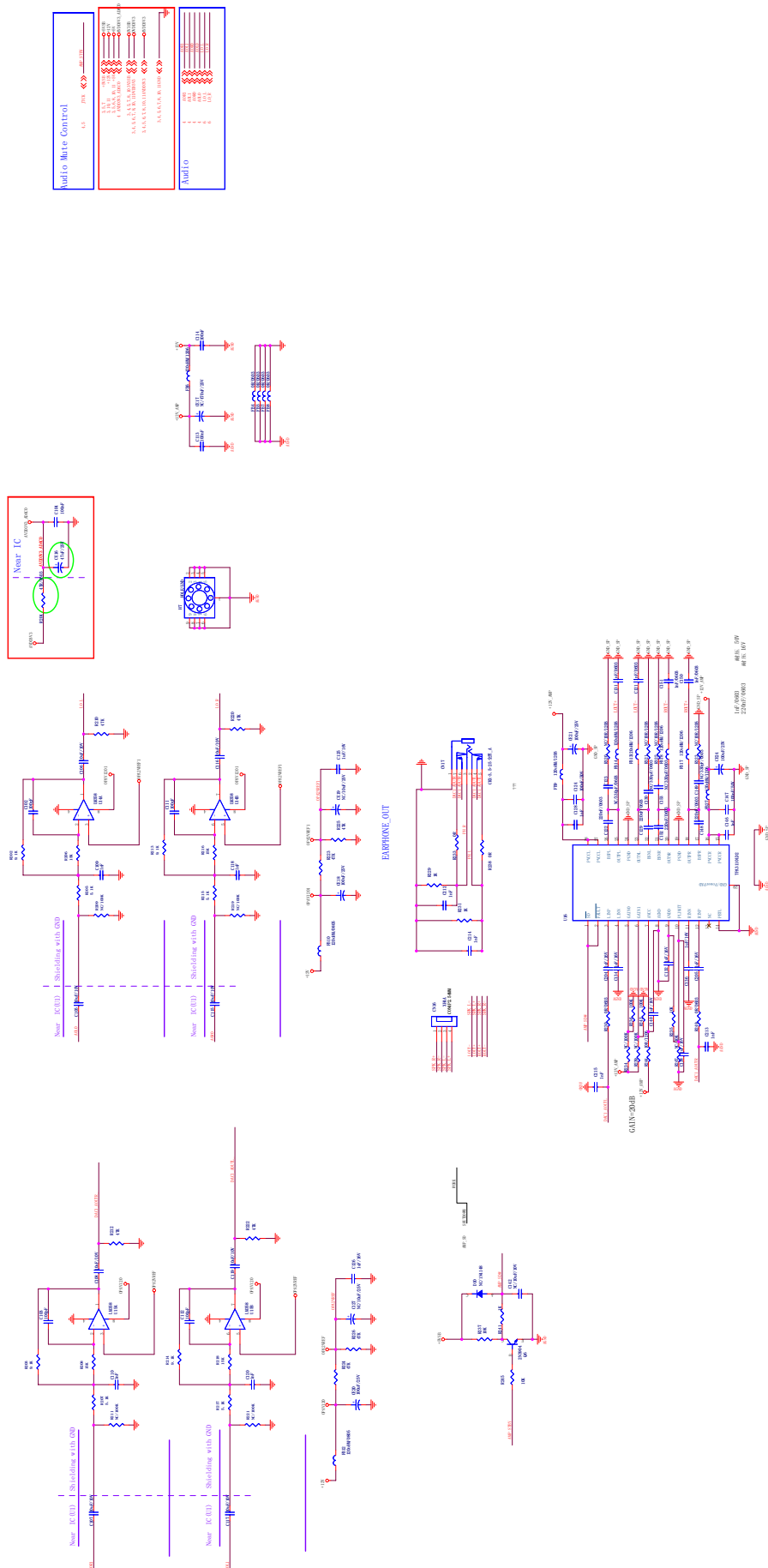
VGA Input

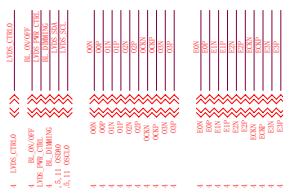


Audio MUX

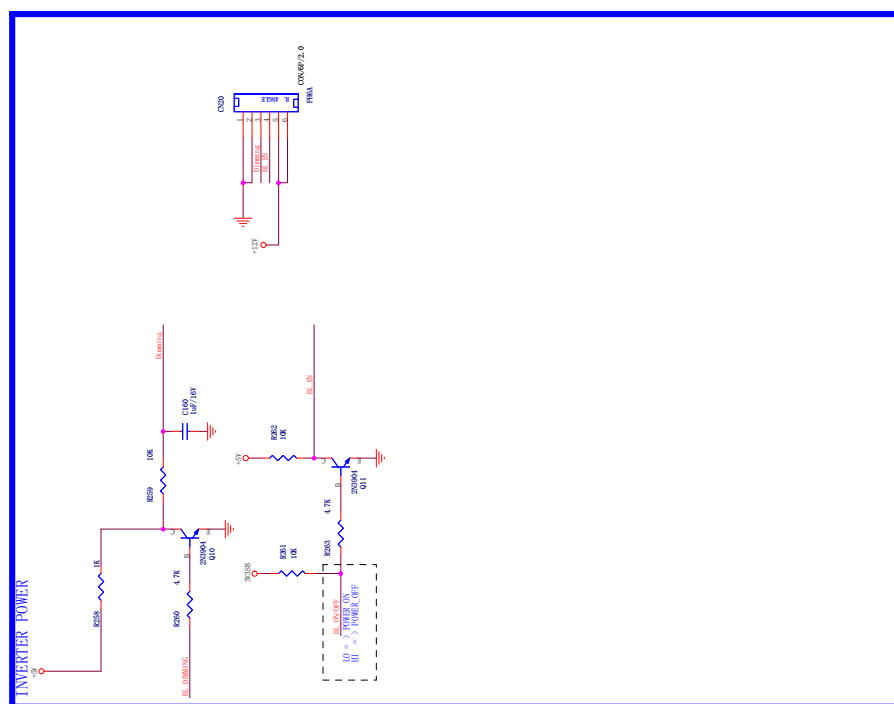
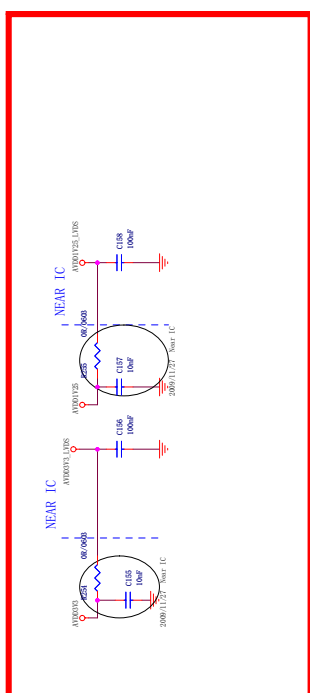
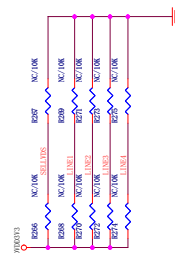
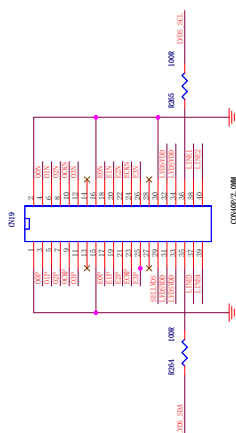
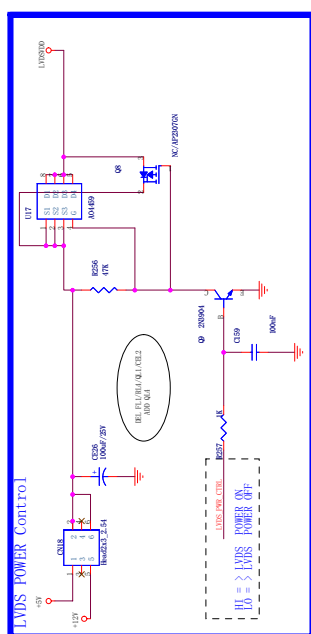


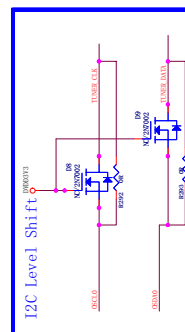
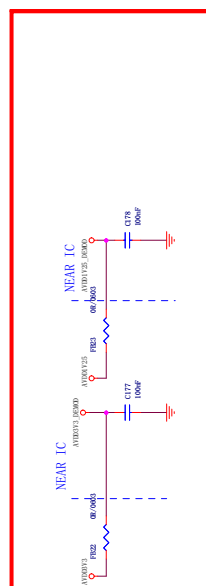
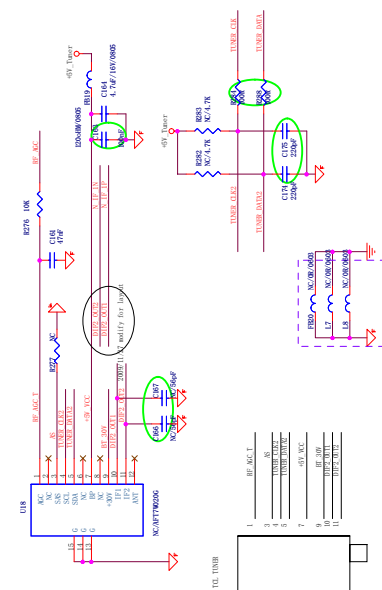
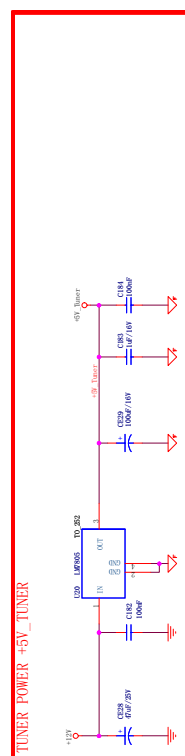
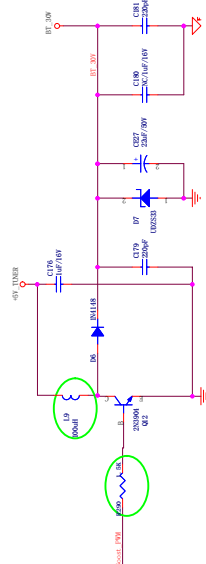
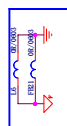
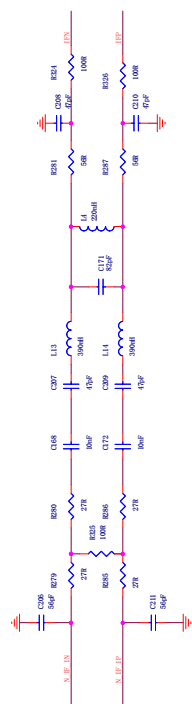
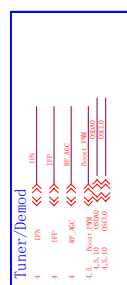
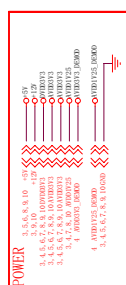






Panel Interface

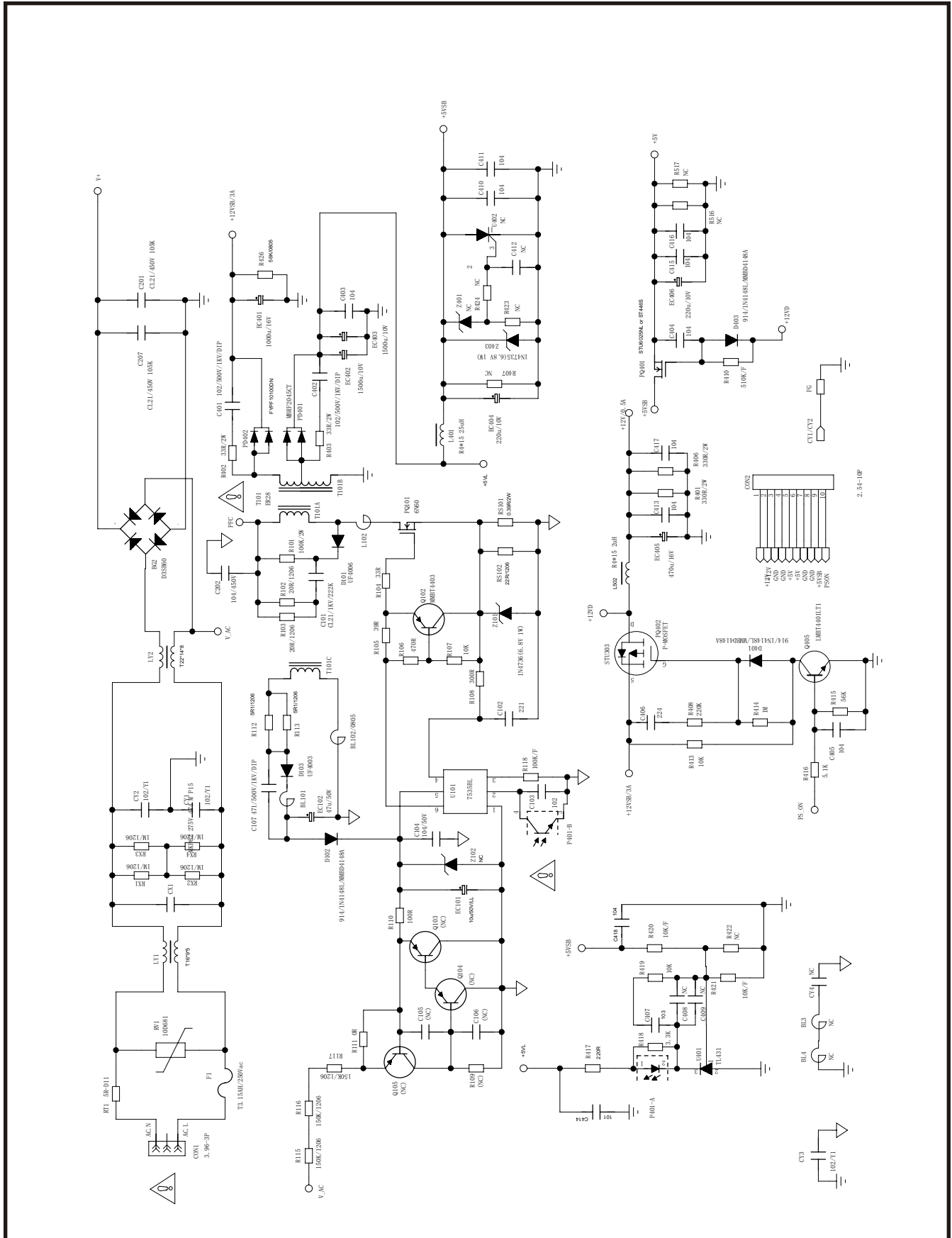


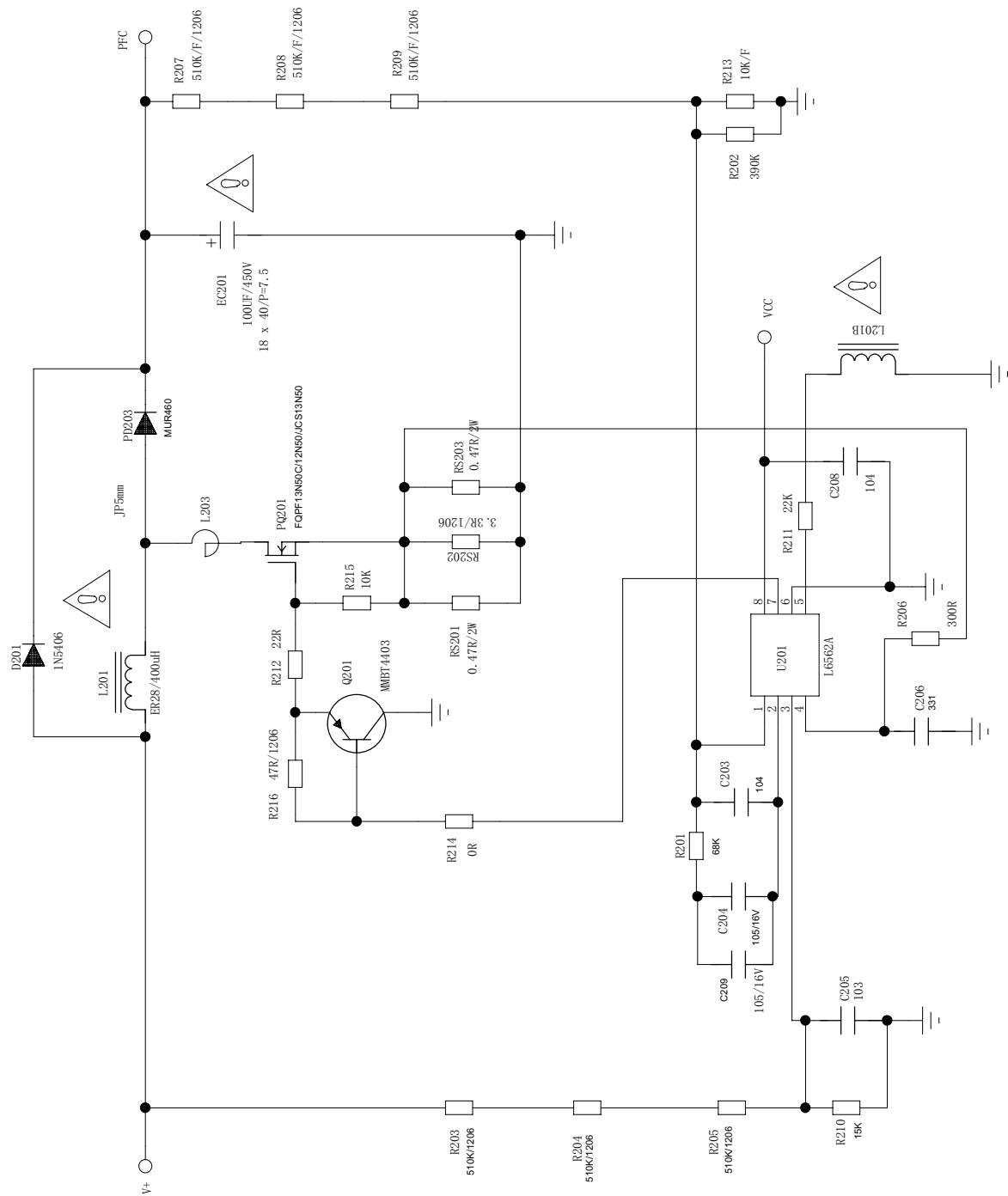


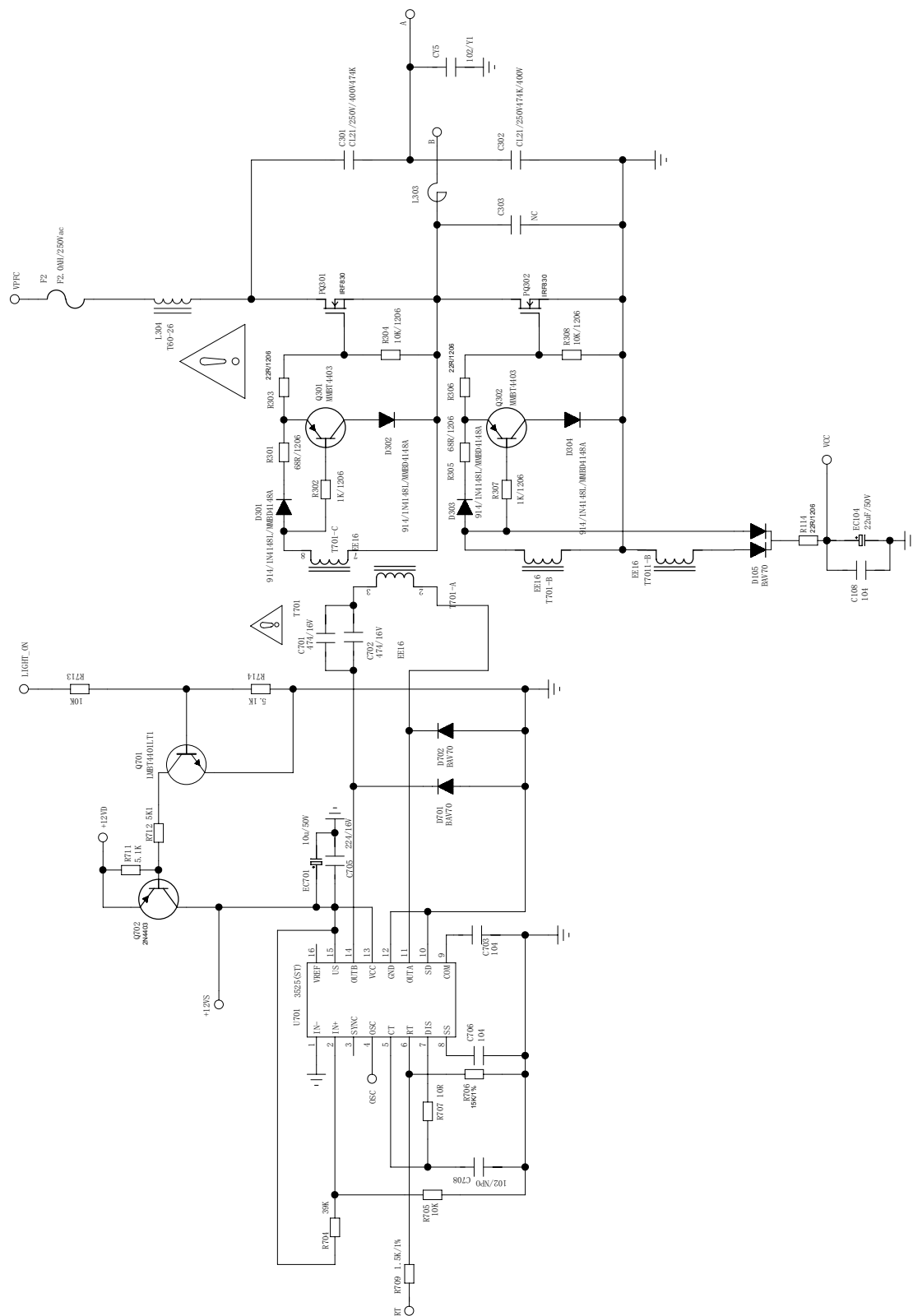
Power PCB Circuit Diagram

Power Board:Power Board

Power Board model no. : IPB732

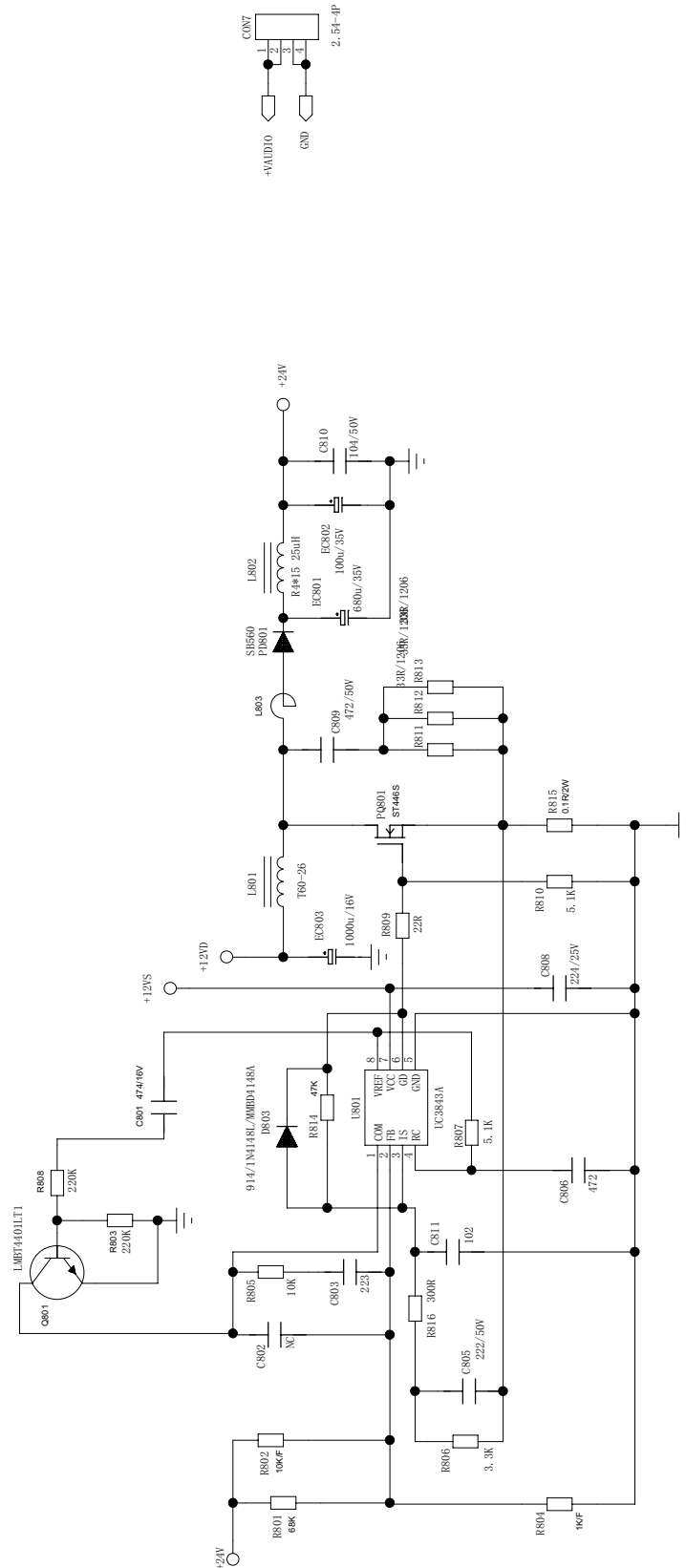






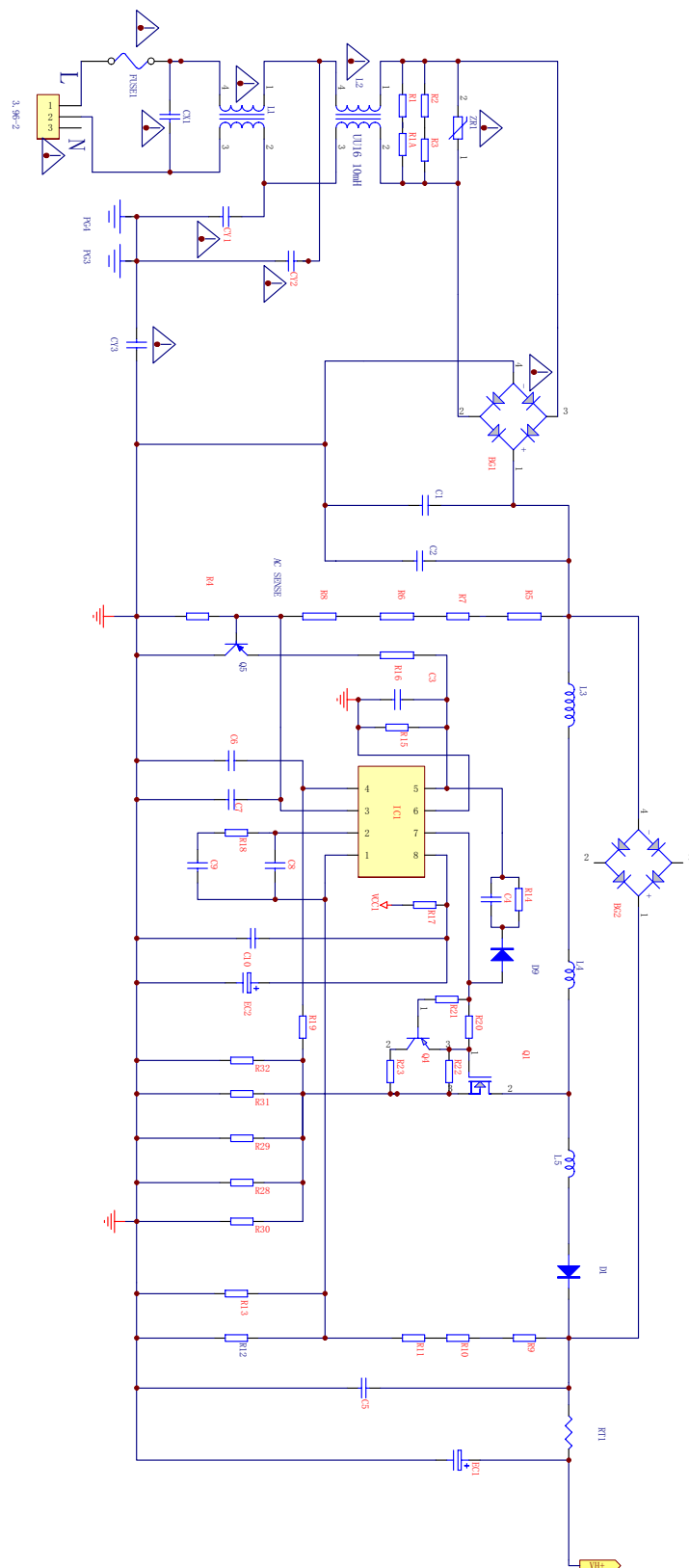


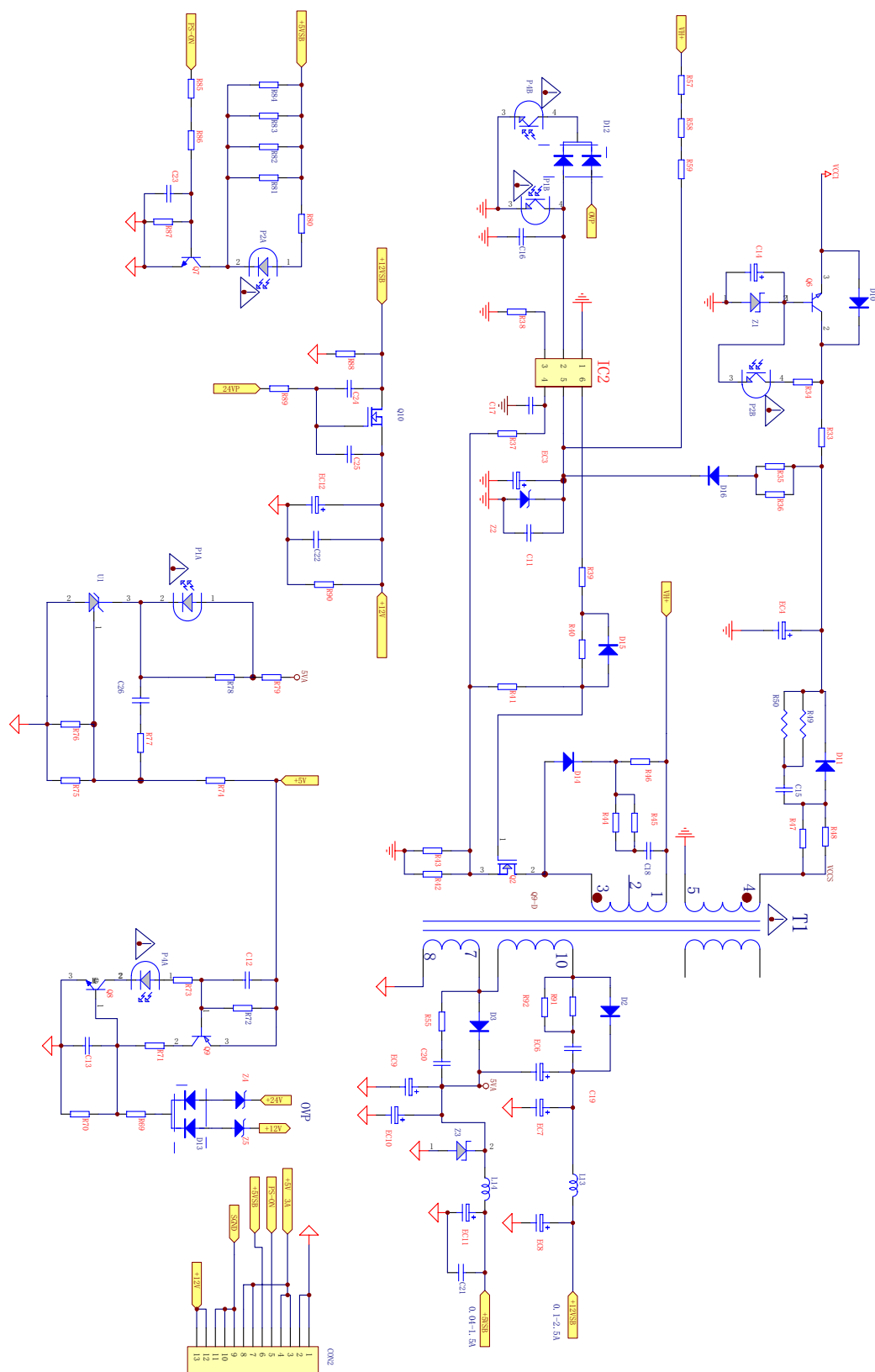




Power Board:Power Board

Power Board model no. : ML666T

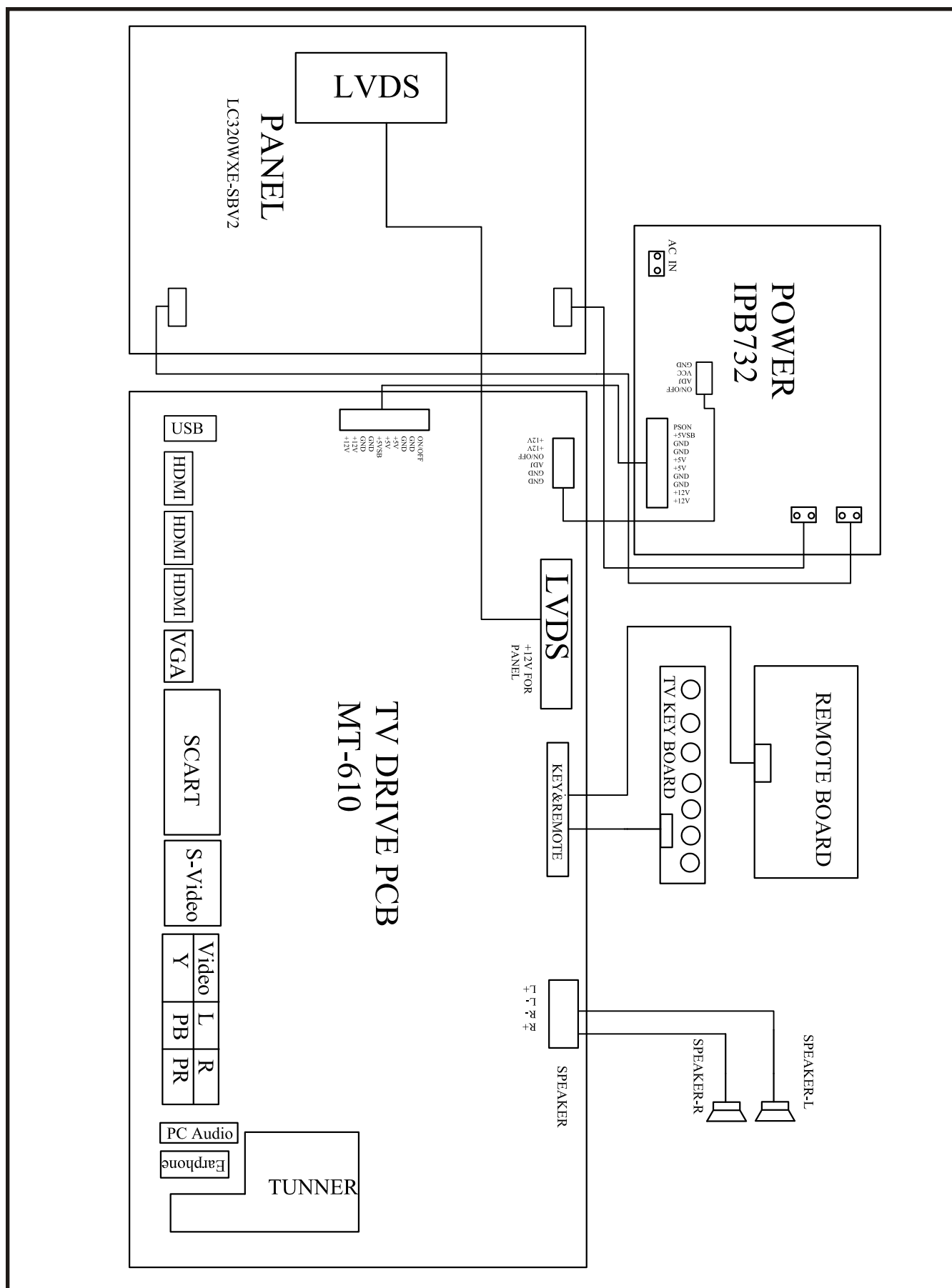






Block Diagram

TL32H615B



TL32H601B

