

Service  
Service  
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# Service Manual

Horizontal Frequency  
30 – 83kHz

## Table of Contents

Description	Page	Description	Page
<a href="#">Table of Contents</a> .....	1	<a href="#">6.1.Main Board</a> .....	19
<a href="#">Revision List</a> .....	2	<a href="#">6.2.Power Board</a> .....	25
<a href="#">Important Safety Notice</a> .....	3	<a href="#">6.3.Key Board</a> .....	29
<a href="#">1.Monitor Specification</a> .....	4	<a href="#">7.PCB Layout</a> .....	30
<a href="#">2.LCD Monitor Description</a> .....	5	<a href="#">7.1.Main Board</a> .....	30
<a href="#">3.Operation Instruction</a> .....	6	<a href="#">7.2.Power Board</a> .....	32
<a href="#">3.1.General Instructions</a> .....	6	<a href="#">7.3.Key Board</a> .....	35
<a href="#">3.2.Control Buttons and Connections</a> .....	6	<a href="#">8.Maintainability</a> .....	36
<a href="#">3.3.OSD Setting</a> .....	8	<a href="#">8.1.Equipments and Tools Requirement</a> .....	36
<a href="#">4.Input/Output Specification</a> .....	12	<a href="#">8.2.Trouble Shooting</a> .....	37
<a href="#">4.1.Input Signal Connector</a> .....	12	<a href="#">9.White-Balance,Luminance Adjustment</a> .....	41
<a href="#">4.2.Preset Display Modes</a> .....	13	<a href="#">10.Monitor Exploded View</a> .....	46
<a href="#">4.3.Panel Specification</a> .....	14	<a href="#">11.BOM List</a> .....	47
<a href="#">5.Block Diagram</a> .....	16		
<a href="#">5.1.Main Board</a> .....	16		
<a href="#">5.2.Power Board</a> .....	17		
<a href="#">6.Schematic</a> .....	19		

### SAFETY NOTICE

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

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

## Revision List

Version	Release Date	Revision History	TPV Model Name
A00	Sep.-21-2015	Initial release	HIF2T72BALACHNE
			HIF2T72BALA2HNE
			HIF2T72BALA3HNE
A01	Jan.-05-2016	Add new model	HIF2T72BALA5HNE
A02	Feb.-29-2016	Add new model	HIF4T72BALACHNE
			HIF4T72BALA2HNE
			HIF4T72BALA3HNE
			HIF4T72BALA5HNE
A03	Jun.-28-2016	Add new model	HIFWT72BALACHNE
			HIFWT72BALA5HNE
A04	Jul.-07-2016	Add new model	HIFWT72BALA2HNE
			HIFWT72BALA3HNE
A05	Jul.-26-2016	Add new model	HIFWT72KALACHNE
A06	Sep.-05-2016	Add new model	HIFWT72CALACHNE
A07	Sep.-19-2016	Add new model	HII1T72BALACDNE
A08	Sep.-26-2016	Add new model	HII1T72BALA2DNE
			HII1T72BALA3DNE
			HII1T72BALA5DNE
A09	Oct.-10-2016	Add new model	HII1T72CALACDNE
A10	Nov.-10-2016	Add new model	HII1T72KALACDNE
A11	Nov.-21-2016	Add new model	HIFWT72GALACHNE
			HII1T72GALACHNE

## Important Safety Notice

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

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

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

### WARNING

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

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

### FOR PRODUCTS CONTAINING LASER:

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

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

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

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

Take care during handling the LCD module with backlight unit

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

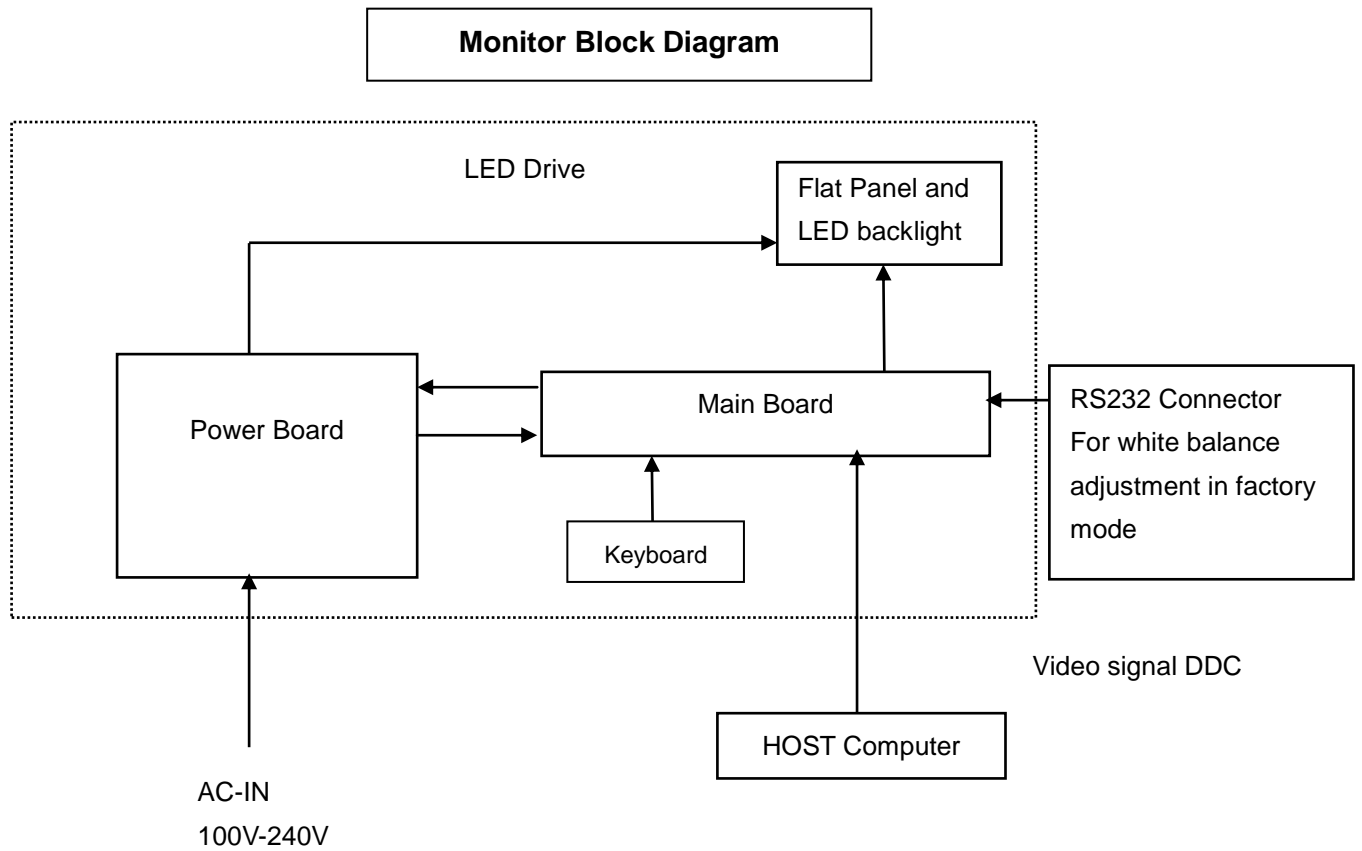
# 1. Monitor Specifications

Panel	Product name	E2270SWHN	
	Driving system	TFT Color LCD	
	Viewable Image Size	54.7cm diagonal	
	Pixel pitch	0.2482mm(H)X0.2482mm(V)	
	Video	R, G, B Analog Interface	
	Separate Sync	H/V TTL	
	Display Color	16.7M Colors	
	Dot Clock	148.5 MHz	
Resolution	Horizontal scan range	30 kHz - 83 kHz	
	Horizontal scan Size(Maximum)	476.64mm	
	Vertical scan range	50 Hz - 76 Hz	
	Vertical scan Size(Maximum)	268.11mm	
	Optimal preset resolution	1920x 1080 (60 Hz)	
	Plug & Play	VESA DDC2B/CI	
	Input Connector	D-Sub ,HDMI	
	Input Video Signal	Analog: 0.7Vp-p(standard), 75 OHM	
	Power Source	100-240V~, 50/60Hz	
	Typical power consumption	17W(Test condition: set Contrast = 50, Brightness = 90)	
	Power Consumption	29W(Test condition: Set Brightness and Contrast to maximum)	
	Power consumption @power-saving	≦0.5W	
Physical Characteristics	Connector Type	D-Sub, HDMI	
	Signal Cable Type	Detachable	
Environmental	Temperature	Operating	0° to 40°
		Non-Operating	-25°to 55°
	Humidity	Operating	10% to 85% (non-condensing)
		Non-Operating	5% to 93% (non-condensing)
	Altitude	Operating	0~ 3658m (0~ 12000 ft )
		Non-Operating	0~ 12192m (0~ 40000 ft )

## 2.LCD Monitor Description

The LCD MONITOR will contain a main board, a power board, and a key board which house the flat panel control logic, brightness control logic and DDC.

The power board will provide AC to DC Inverter voltage to drive the backlight of panel and the main board chips each voltage.



### 3. Operating Instructions

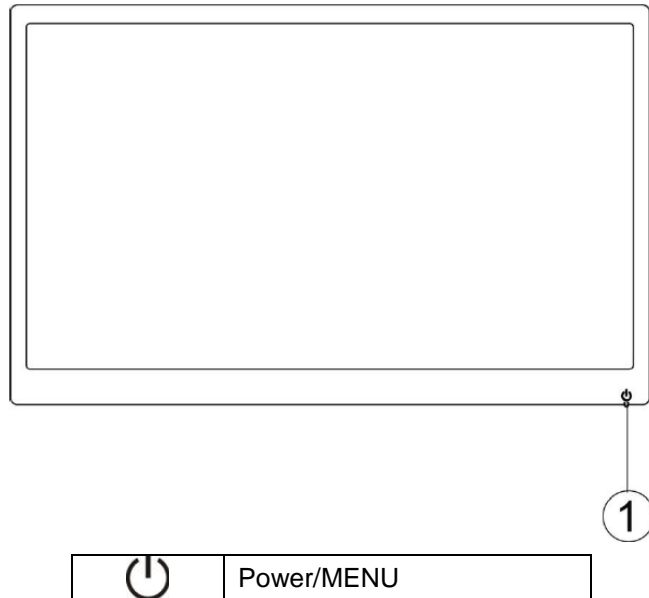
#### 3.1 General Instructions

Press the power button to turn the monitor on or off. The other control knobs are located at front panel of the monitor (See Figure ). By changing these settings, the picture can be adjusted to your personal preferences.

\* The power cord should be connected.


\* Press the power button to turn on the monitor. The power indicator will light up.

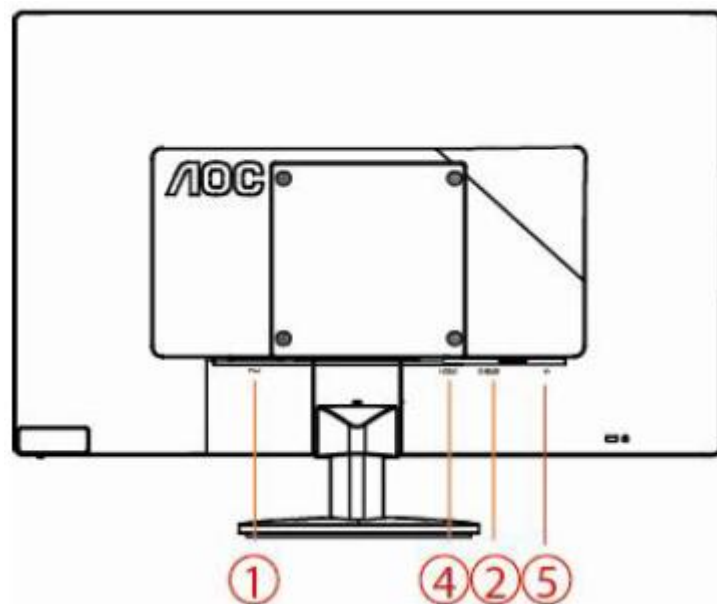
#### 3.2 Control Buttons and Connections



##### Power/ MENU

When Power off, press  button to turn on the monitor.

When Power on, press  button continuously about 3 seconds to turn off the monitor.



1. Power
2. D-Sub
4. HDMI
5. Earphone out

To protect equipment, always turn off the PC and LCD monitor before connecting.

1 Connect the power cable to the AC port on the back of the monitor.

2 Connect one end of the 15-pin D-Sub cable to the back of the monitor and connect the other end to the computer's D-Sub port.

3 (Optional –Requires a video card with DVI port)Connect one end of the DVI cable to the back of the monitor and connect the other end to the computer's DVI port.

4 (Optional – Requires a video card with HDMI port) - Connect one end of the HDMI cable to the back of the monitor and connect the other end to the computer's HDMI port.

5 Turn on your monitor and computer.

If your monitor displays an image, installation is complete. If it does not display an image, please refer Troubleshooting.

### 3.3 OSD Setting

Basic and simple instruction on the control keys.

**VGA+DVI:**




**VGA+HDMI:**



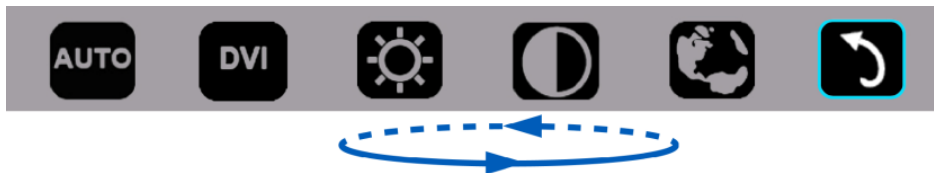
**VGA+HDMI+Earphone out:**



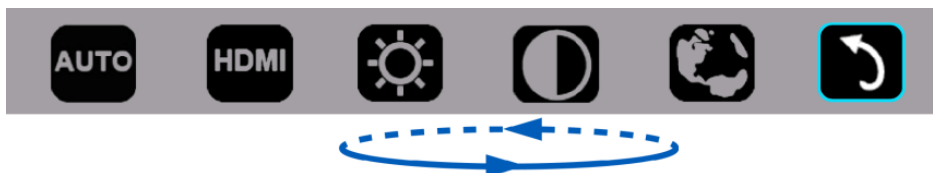
1). Press the bottom key  to activate the OSD window.

2). You can now select any one of the functions by quickly repeat-pressing the bottom key . The blue box will navigate towards the right as you press the key. You can release once the blue box highlights the option you want to choose. Note that the selection is one way loop always moving one direction and then returning at beginning of the menu. The blue box will remain on the selected function for about 3 seconds and the function icon will flash three times to confirm the choice visible on the 1st layer of the OSD and activate it.

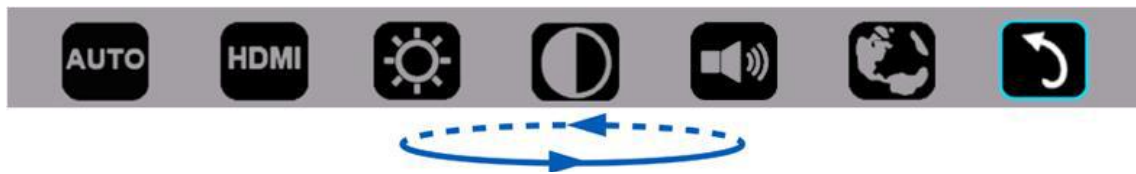
**VGA+DVI:**













**VGA+HDMI:**



**VGA+HDMI+Earphone out:**

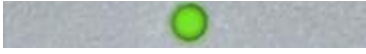





Auto			Auto adjust the H/V position, focus and clock of picture
Input source (E2270SWHN /E2270PWHE)		Show only the disconnected port	Change the input source. When the input source is VGA, VGA won't be shown and only HDMI will be shown in menu. If change from VGA to HDMI source, choose HDMI icon.
			
Input source (E2270SWDN)		Show only the disconnected port	Change the input source. When the input source is VGA, VGA won't be shown and only DVI will be shown in menu. If change from VGA to DVI source, choose DVI icon.
			
Brightness		0-100	Adjust brightness from 0~100
Contrast		0-100	Adjust contrast from 0~100
Volume (E2270SWHN)		0-100	Adjust volume from 0~100
Language		English, France, Spanish, Portuguese, German, Italian, Dutch, Swedish, Finnish, Polish, Czech, Russia, Korea, T-Chinese, S-Chinese, Japanese.	Select the OSD language
Exit			Exit the main OSD

1. Main menu will disappear if no action for about 3 seconds.
2. Sub menu will disappear if no action for about 3 seconds.
3. Before entering OSD menu, monitor will be powered off when continually pressing the bottom key for more than 3 seconds.

### LED Indicators

Status	LED Color	
Full Power Mode	Green	
Active-off Mode	Flickering Green	

## i-Menu



Welcome to “i-Menu” software by AOC. i-Menu makes it easy to adjust your monitor display setting by using on screen menus instead of the OSD button on the monitor. To complete installation, please follow the installation guide.



## e-Saver

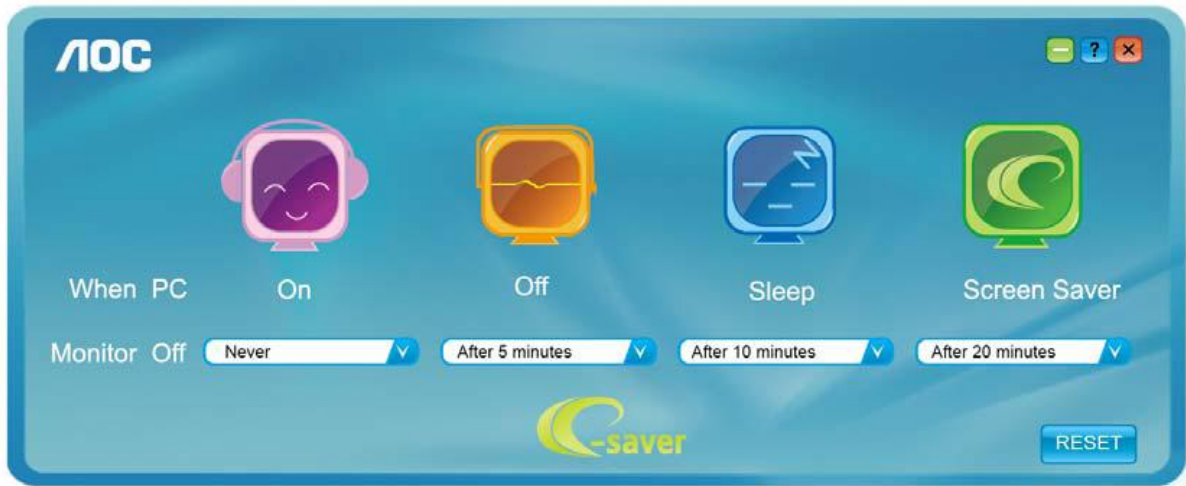


Welcome to use AOC e-Saver monitor power management software! The AOC e-Saver features Smart Shutdown functions for your monitors, allows your monitor to timely shutdown when PC unit is at any status (On, Off, Sleep or Screen Saver); the actual shutdown time depends on your preferences (see example below).

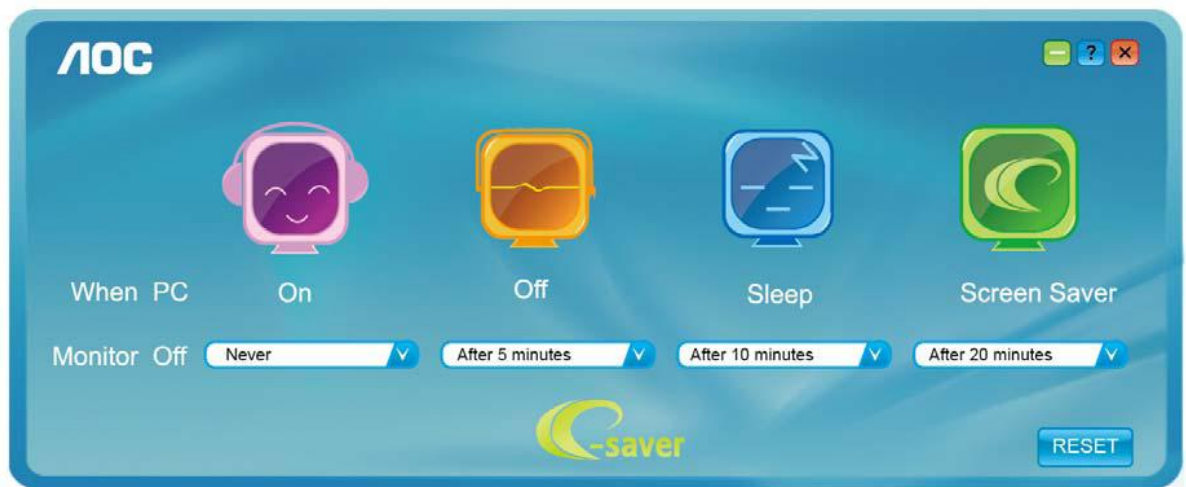
Please click on "driver/e-Saver/setup.exe" to start installing the e-Saver software, follow the install wizard to complete software installation.

Under each of the four PC status, you may choose from the pull-down menu the desired time (in minutes) for your monitor to automatically shutdown. The example above illustrated:

- 1) The monitor will never shutdown when the PC is powered on.
- 2) The monitor will automatically shutdown 5 minutes after the PC is powered off.
- 3) The monitor will automatically shutdown 10 minutes after the PC is in sleep/stand-by mode.
- 4) The monitor will automatically shutdown 20 minutes after the screen saver appears.



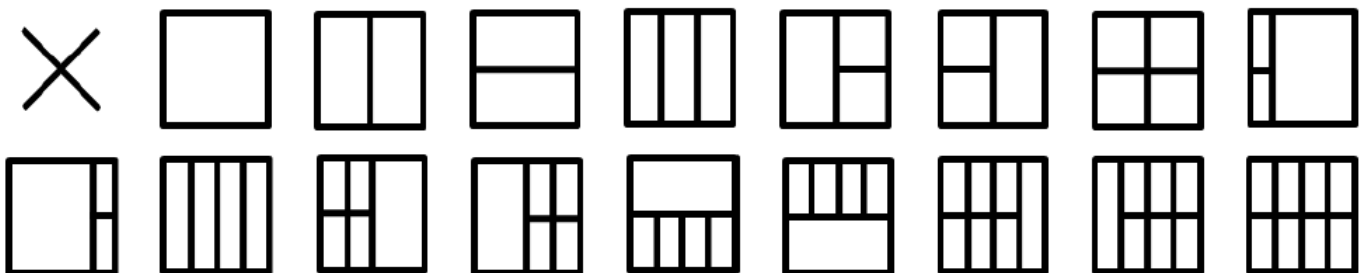
You can click “RESET” to set the e-Saver to its default settings like below.



### Screen+

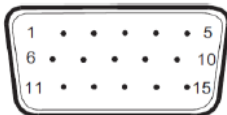


Welcome to "Screen+" software by AOC, Screen+ software is a desktop screen splitting tool, it splits the desktop into different panes, each pane displays a different window. You only need to drag the window to a corresponding pane, when you want to access it. It supports multiple monitor display to make your task easier. Please follow the installation software to install it.



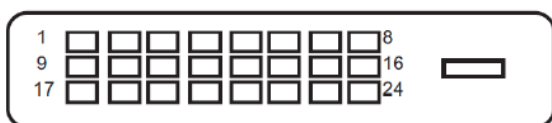
## 4. Input/Output Specification

### 4.1 Input Signal Connector



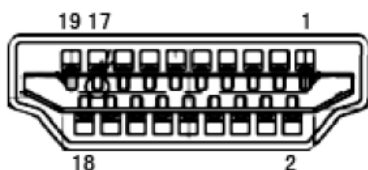
15-Pin Color Display Signal Cable

Pin No.	Signal Name	Pin No.	Signal Name
1	Video-Red	9	+5V
2	Video-Green	10	Ground
3	Video-Blue	11	N.C.
4	N.C.	12	DDC-Serial data
5	Detect Cable	13	H-sync
6	GND-R	14	V-sync
7	GND-G	15	DDC-Serial clock
8	GND-B		



24-Pin Color Display Signal Cable

Pin Number	24-Pin Color Display Signal Cable	Pin Number	24-Pin Color Display Signal Cable
1	TMDS data 2-	13	TMDS data 3+
2	TMDS data 2+	14	+5V Power
3	TMDS data 2/4 Shield	15	Ground (for+5V)
4	TMDS data 4-	16	Hot Plug Detect
5	TMDS data 4+	17	TMDS data 0-
6	DDC Clock	18	TMDS data 0+
7	DDC Data	19	TMDS data 0/5 Shield
8	N.C.	20	TMDS data 5-
9	TMDS data 1-	21	TMDS data 5+
10	TMDS data 1+	22	TMDS Clock Shield
11	TMDS data 1/3 Shield	23	TMDS Clock +
12	TMDS data 3-	24	TMDS Clock -



19-Pin Color Display Signal Cable

Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
1	TMDS Data 2+	9	TMDS Data 0	17	DDC/CEC Ground
2	TMDS Data 2 Shield	10	TMDS Clock +	18	+5V Power
3	TMDS Data 2	11	TMDS Clock Shield	19	Hot Plug Detect
4	TMDS Data 1+	12	TMDS Clock		
5	TMDS Data 1Shield	13	CEC		
6	TMDS Data 1	14	Reserved (N.C. on device)		
7	TMDS Data 0+	15	SCL		
8	TMDS Data 0 Shield	16	SDA		

## 4.2 Preset Display Modes

Standard	Resolution	H. Frequency (kHz)	V. Frequency (Hz)
VGA	640 X 480@60Hz	31.469	59.940
	640 X 480@67Hz	35.000	66.667
	640 X 480@72Hz	37.861	72.809
	640 X 480@75Hz	37.500	75.000
DOS MODE	720 X 400@70Hz	31.469	70.087
SVGA	800 X 600@56Hz	35.156	56.250
	800 X 600@60Hz	37.879	60.317
	800 X 600@72Hz	48.077	72.188
	800 X 600@75Hz	46.875	75.000
MAC MODE	832 X 624@75Hz	49.725	74.551
XGA	1024 X 768@60Hz	48.363	60.004
	1024 X 768@70Hz	56.476	70.069
	1024 X 768@75Hz	60.023	75.029
SXGA	1280 X 1024@60Hz	63.981	60.020
	1280 X 1024@75Hz	79.976	75.025
WXGA+	1440 X 900@60Hz	55.935	59.876
WSXGA+	1680 X 1050@60Hz	65.290	59.950
FHD	1920 X 1080@60Hz	67.500	60.000

### 4.3 Panel Specification

#### 4.3.1 General Features

TPM215HW01-HGEL03 is a 21.5" TFT Liquid Crystal Display module with WLED Backlight unit and 30 pins 2ch-LVDS interface. This module supports 1920 x 1080 Full HD mode and can display up to 16.7M colors. The converter module for Backlight is not built in.

#### 4.3.2 General Specifications

Item	Specification	Unit	Note
Screen Size	21.53" real diagonal		
Driver Element	a-si TFT active matrix -	-	
Pixel Number	1920 x R.G.B. x 1080 pixel	Pixel	
Pixel Pitch	0.2482 (H) x 0.2482 (V) mm	mm	
Pixel Arrangement	RGB vertical stripe -	-	
Display Colors	16.7M color	-	
Transmissive Mode	Normally white	Color	
Surface Treatment	AG type, 3H hard coating, Haze 25%	-	
Luminance, White	200	Cd/m <sup>2</sup>	
Power Consumption	Total (18.73)W(Max.)@cell (7.975)W (Max.), BL (10.75)W (Max.)	-	(1)
Pressure Force Test	3.5	Kgf	(2)

#### 4.3.3 Electrical Characteristics

##### TFT LCD Module

V<sub>cc</sub> = 5.0 V, T<sub>a</sub> = 25 ± 2 °C, Fr = 60Hz

Parameter	Symbol	Value			Unit	Note
		Min.	Typ.	Max.		
Power Supply Voltage	V <sub>cc</sub>	4.5	5	5.5	V	
Ripple Voltage	V <sub>rp</sub>	-	-	300	mV	
Rush Current	I <sub>rush</sub>	-	-	3	A	(2)
Power Supply Current—White		-	0.39	0.45	A	(3)a
Power Supply Current--Black		-	1.17	1.45	A	(3)b
Power Supply Current--Vertical Stripe		-	0.75	1	A	(3)c
Power Consumption	PLCD	-	5.85	7.975	Watt	(4)
AC off Rush Current	I <sub>RUSH</sub>	-	-	4	A	(5)
LVDS differential input voltage	VID	100	-	600	mV	
LVDS common input voltage	VIC	0.05	-	2.85	V	

##### Back Light Unit

T<sub>a</sub> = 25 ± 2 °C

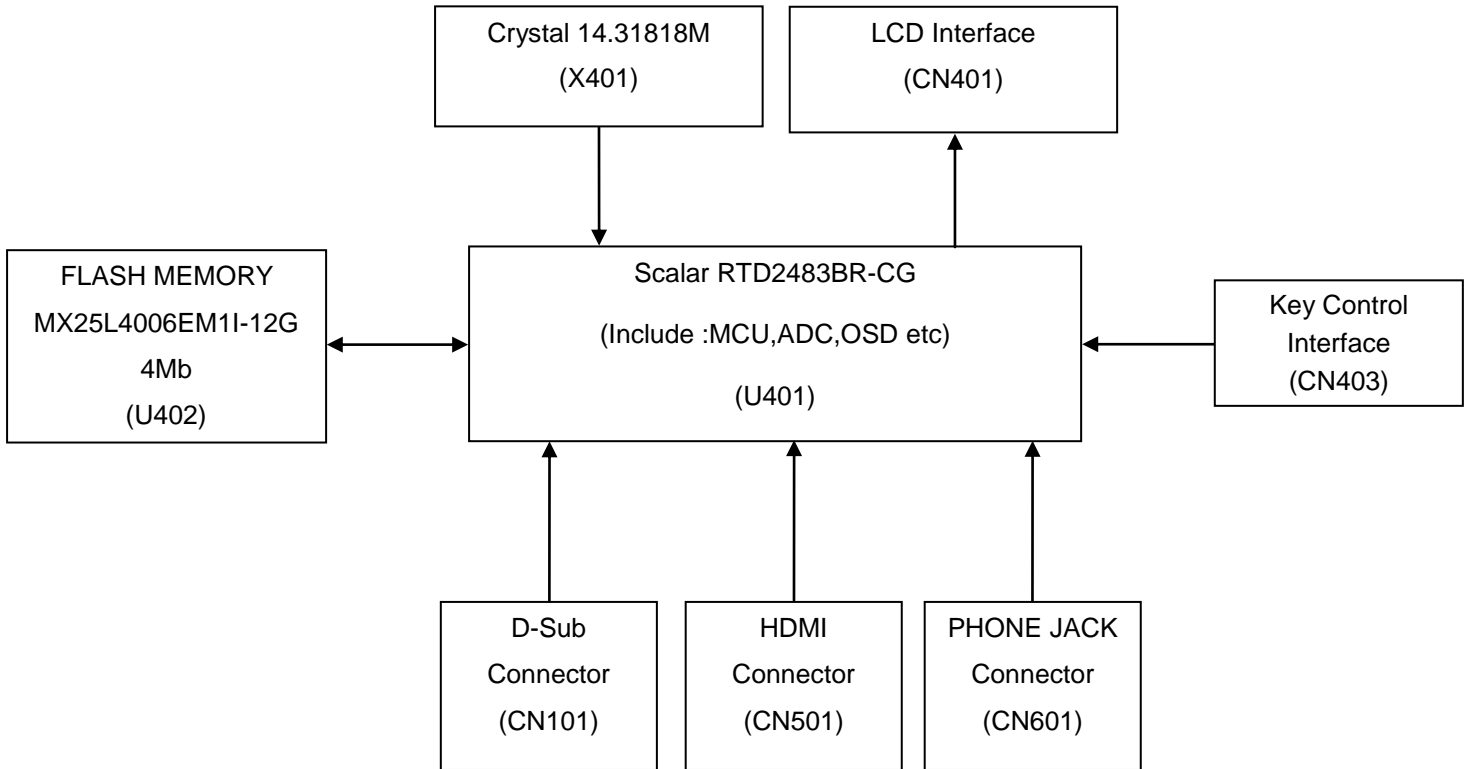
Parameter	Symbol	Value			Unit	Note
		Min	Typ.	Max.		
Light Bar Input Voltage	V <sub>LED</sub>	36.4	41.6	45.5	V <sub>DC</sub>	(Duty 100%)
Light Bar Input Current	I <sub>LED</sub>	---	225	236.25	mA <sub>DC</sub>	(Duty 100%) per string (1)
Power Consumption	P <sub>LED</sub>	---	9.36	10.75	W	(2)
LED Life Time	L <sub>BL</sub>	30000	-	-	Hrs	(3)
IFP LED Peak forward current	I <sub>LED</sub>	-	-	180	mA <sub>DC</sub>	(4)

#### 4.3.4 Optical Characteristics

T<sub>a</sub> = 25 ± 2 °C

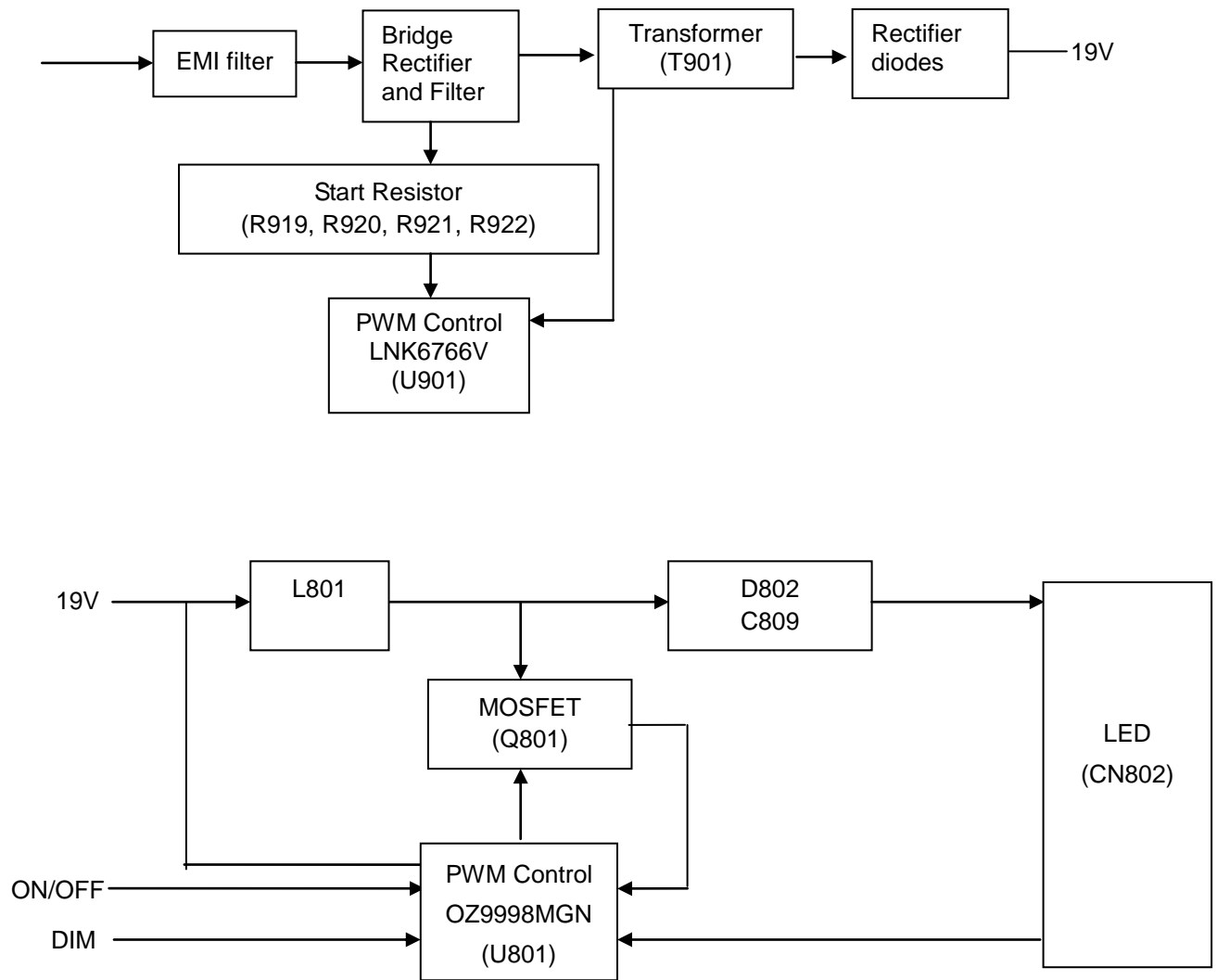
Item	Symbol	Condition	Min.	Typ.	Max.	Unit	Note		
Color Chromaticity (CIE 1931)	Red	$\theta_x=0^\circ, \theta_y=0^\circ$ CS-2000 R=G=B=255 Gray scale	Typ - 0.03	Typ + 0.03			(1), (5)	R <sub>x</sub>	0.633
								R <sub>y</sub>	0.351
	Green							G <sub>x</sub>	0.322
								G <sub>y</sub>	0.630
	Blue							B <sub>x</sub>	0.152
								B <sub>y</sub>	0.050
	White							W <sub>x</sub>	0.313
								W <sub>y</sub>	0.329
	Center Luminance of White (Center of Screen)							L <sub>C</sub>	
Contrast Ratio	CR		500	700	---	-	(2), (5)		
Response Time	T <sub>R</sub>	$\theta_x=0^\circ, \theta_y=0^\circ$	---	1.5	2.2	ms	(3)		
	T <sub>F</sub>			3.5	5.5				
White Variation	δW	$\theta_x=0^\circ, \theta_y=0^\circ$	70	--	--	-	(5), (6)		
Viewing Angle	Horizontal	$\theta_{x-} + \theta_{x+}$	CR ≥ 10 BM-5A	---	90	---	Deg.	(1), (5)	
	Vertical	$\theta_{y-} + \theta_{y+}$			65				

**5. Block Diagram**  
**5.1 Main Board**  
**715G7778M0B000004F**

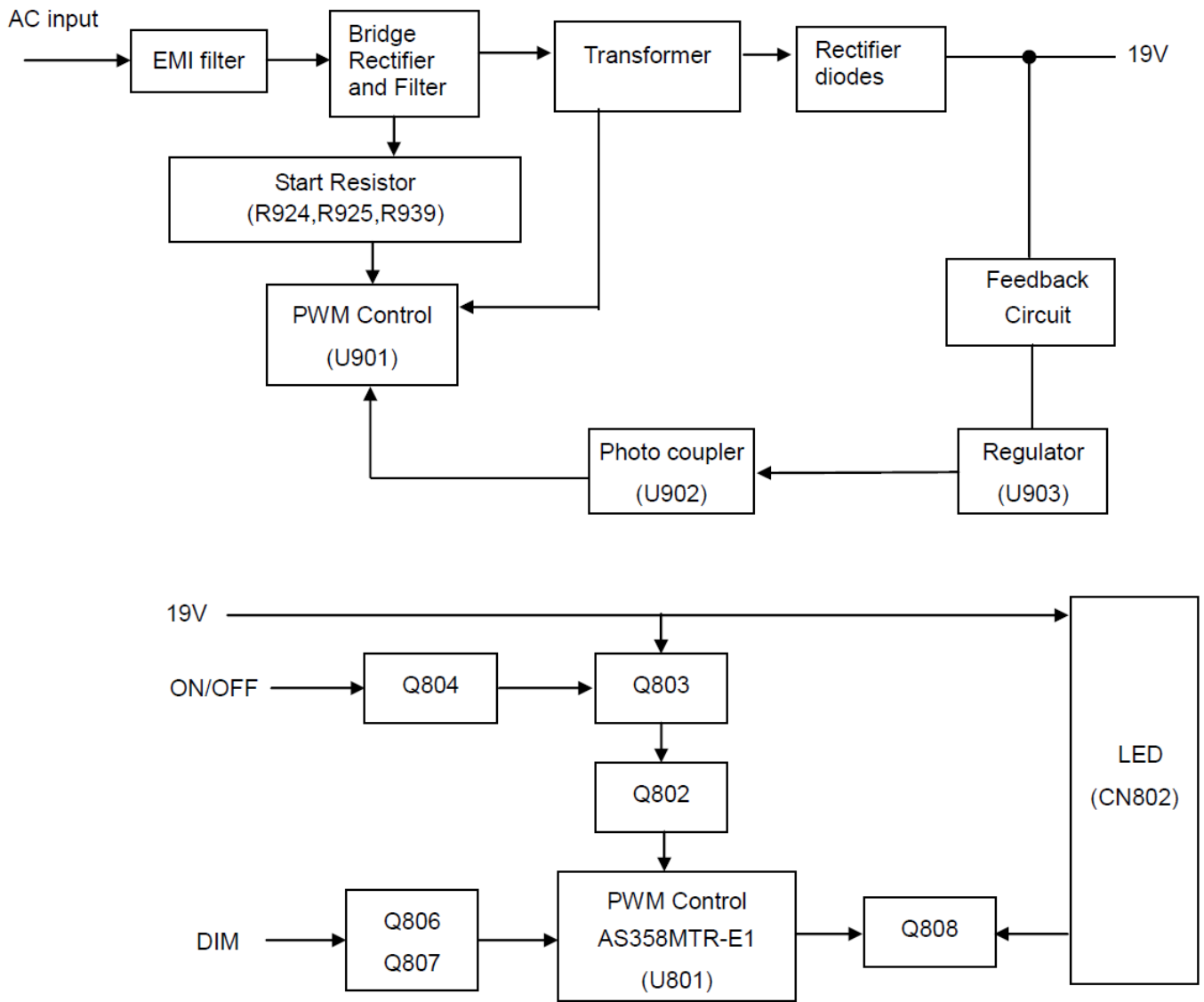




## 5.2 Power Board 715G6503P03011001C



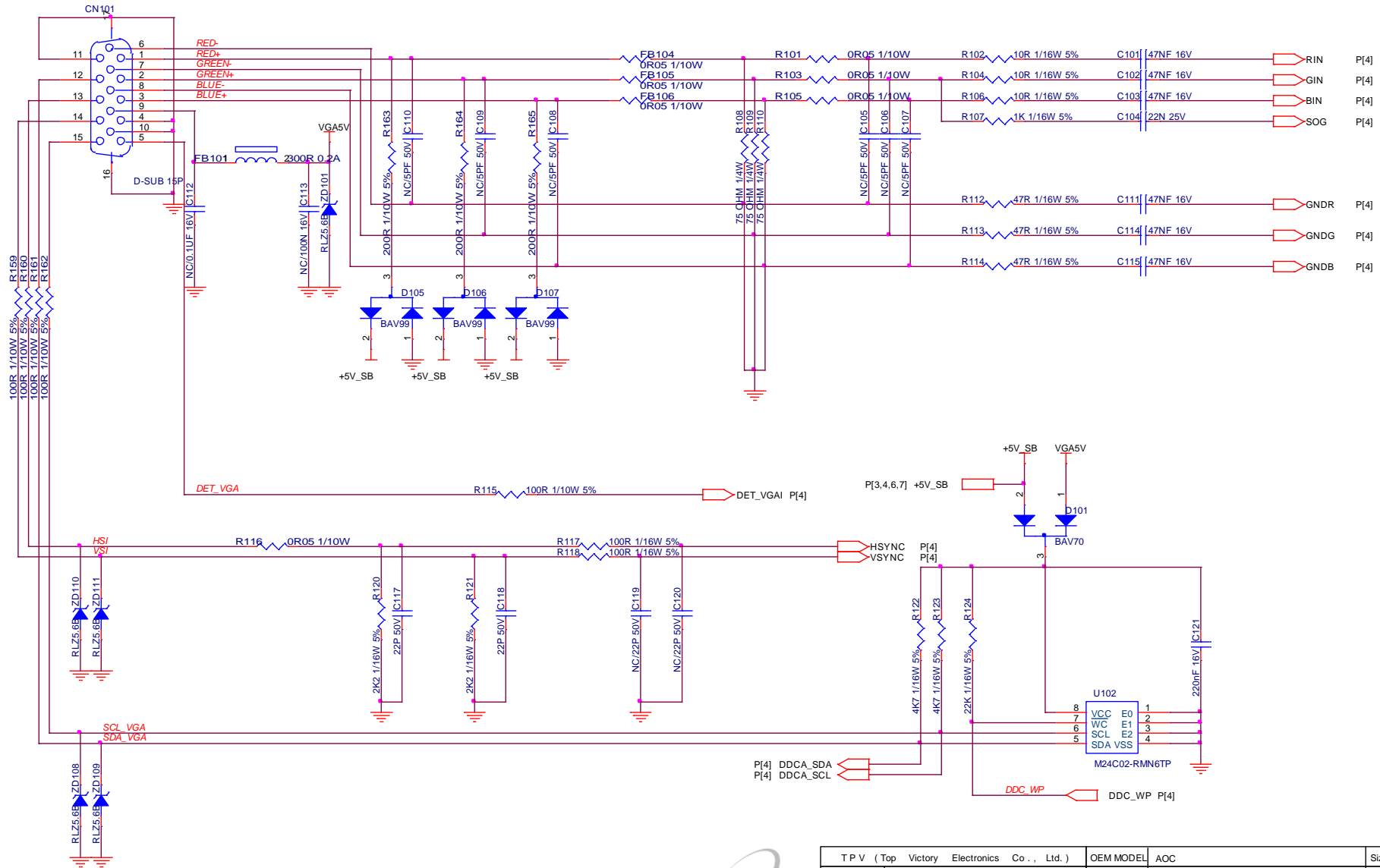
# 715G7300P02



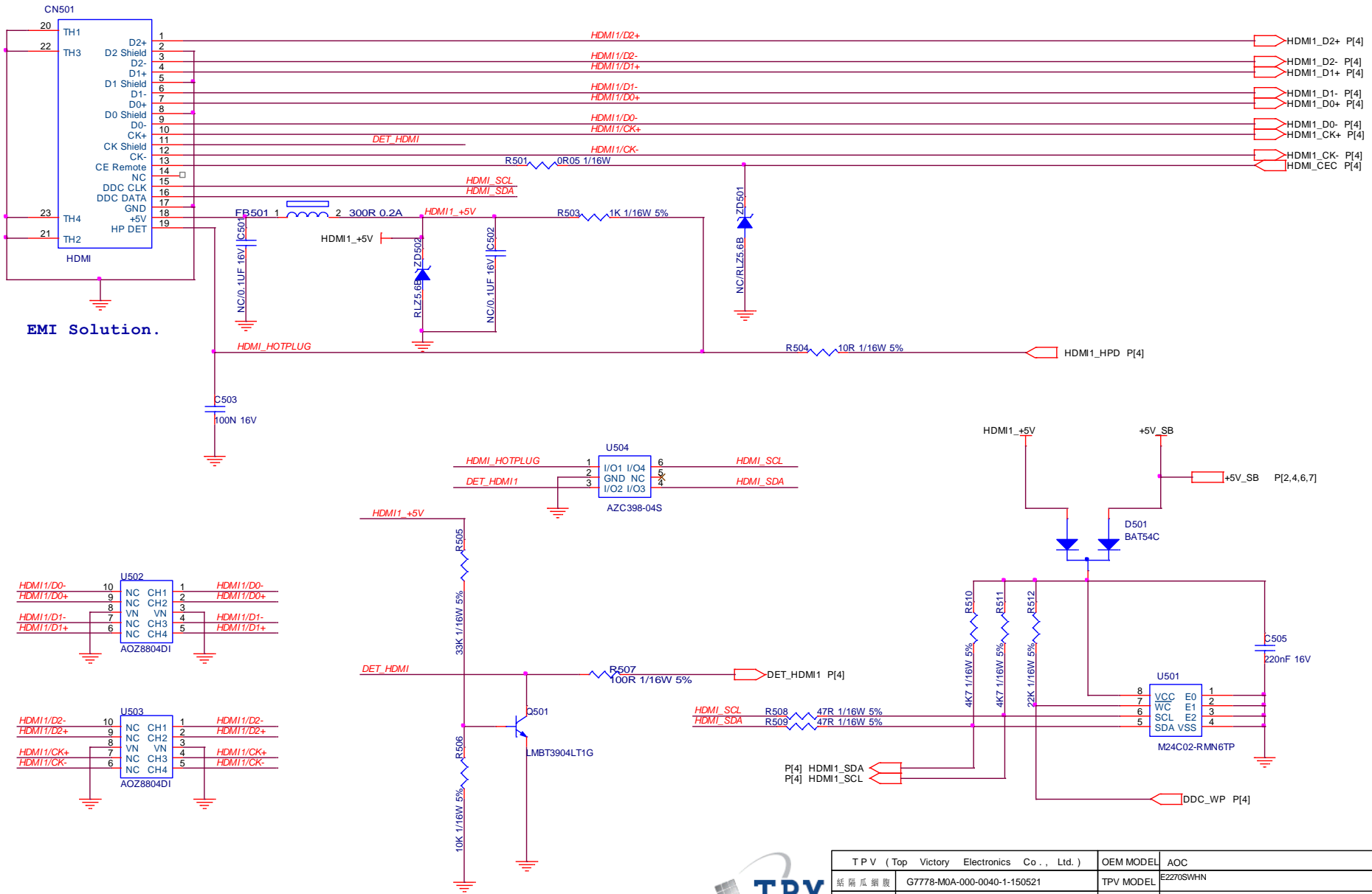
# 6. Schematic

## 6.1 Main Board

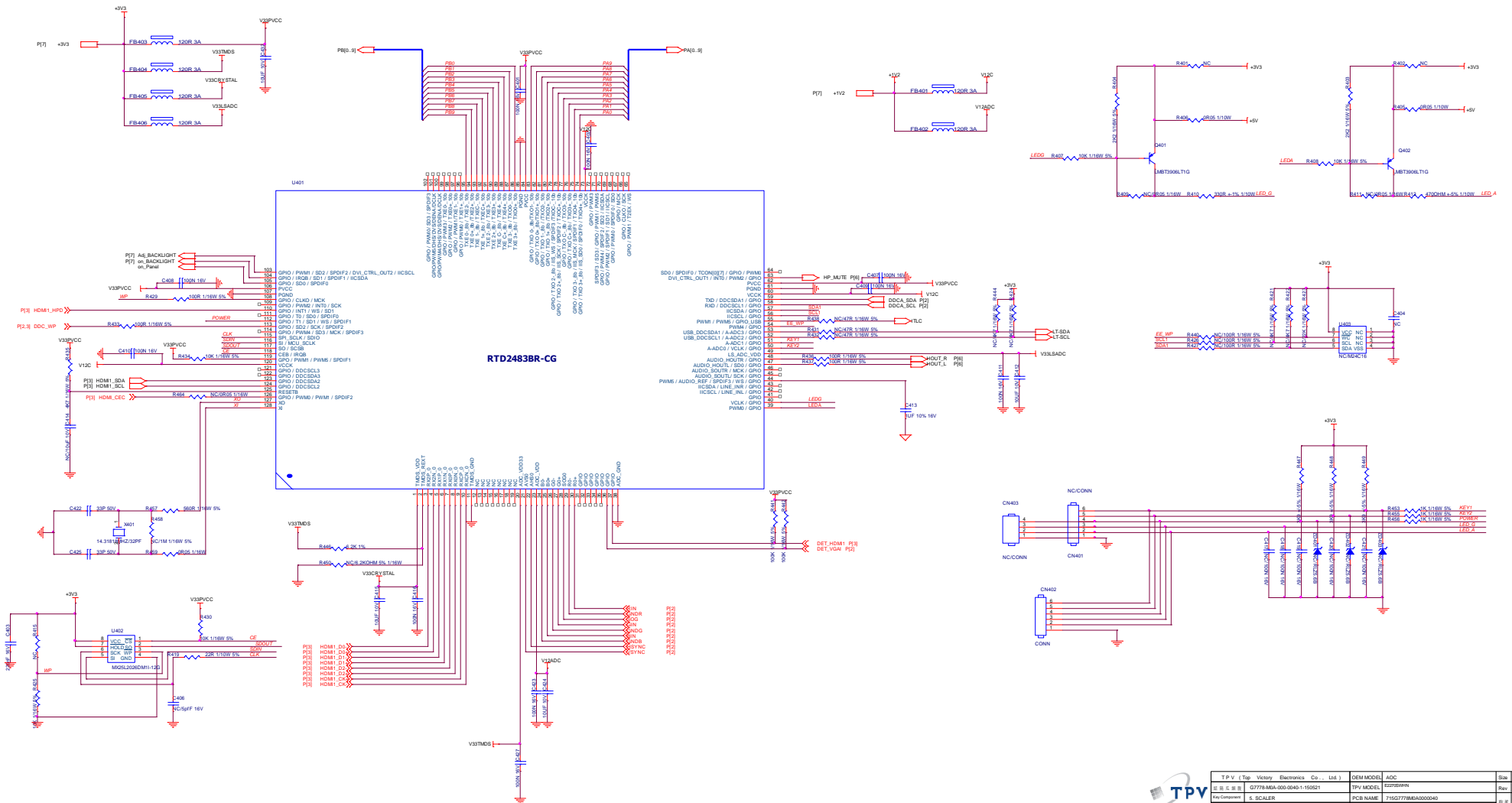
715G7778M0B000004F



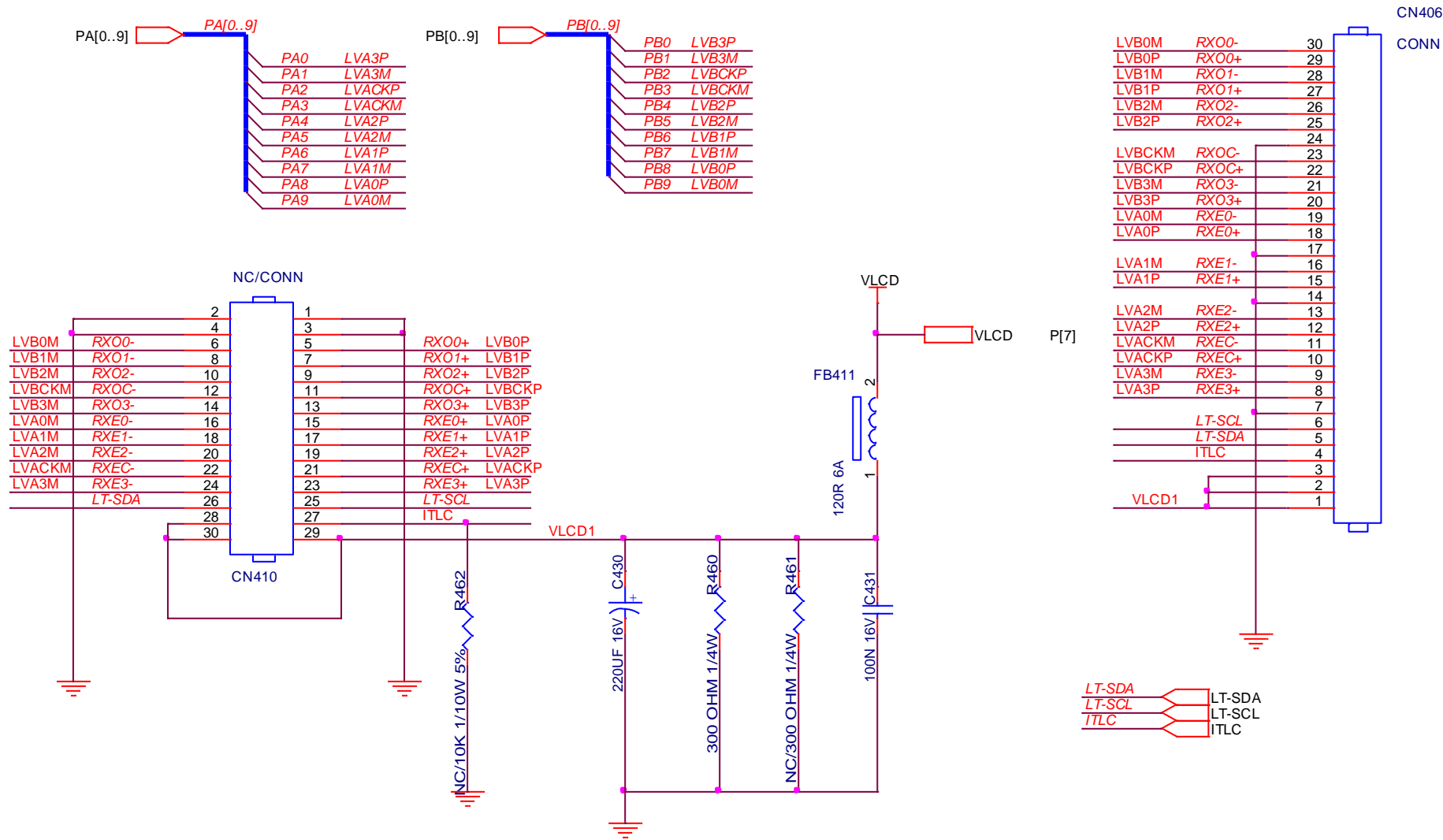
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	AOC	Size	B
丝瓜瓜 網膜	G7778-M0A-000-0040-1-150521	TPV MODEL	E2270SWHN	Rev
Key Component	2. D-SUB Interface	PCB NAME	715G7778M0A0000040	称 密
Date	Wednesday, July 29, 2015	Sheet	2 of 7	< 称 密 >



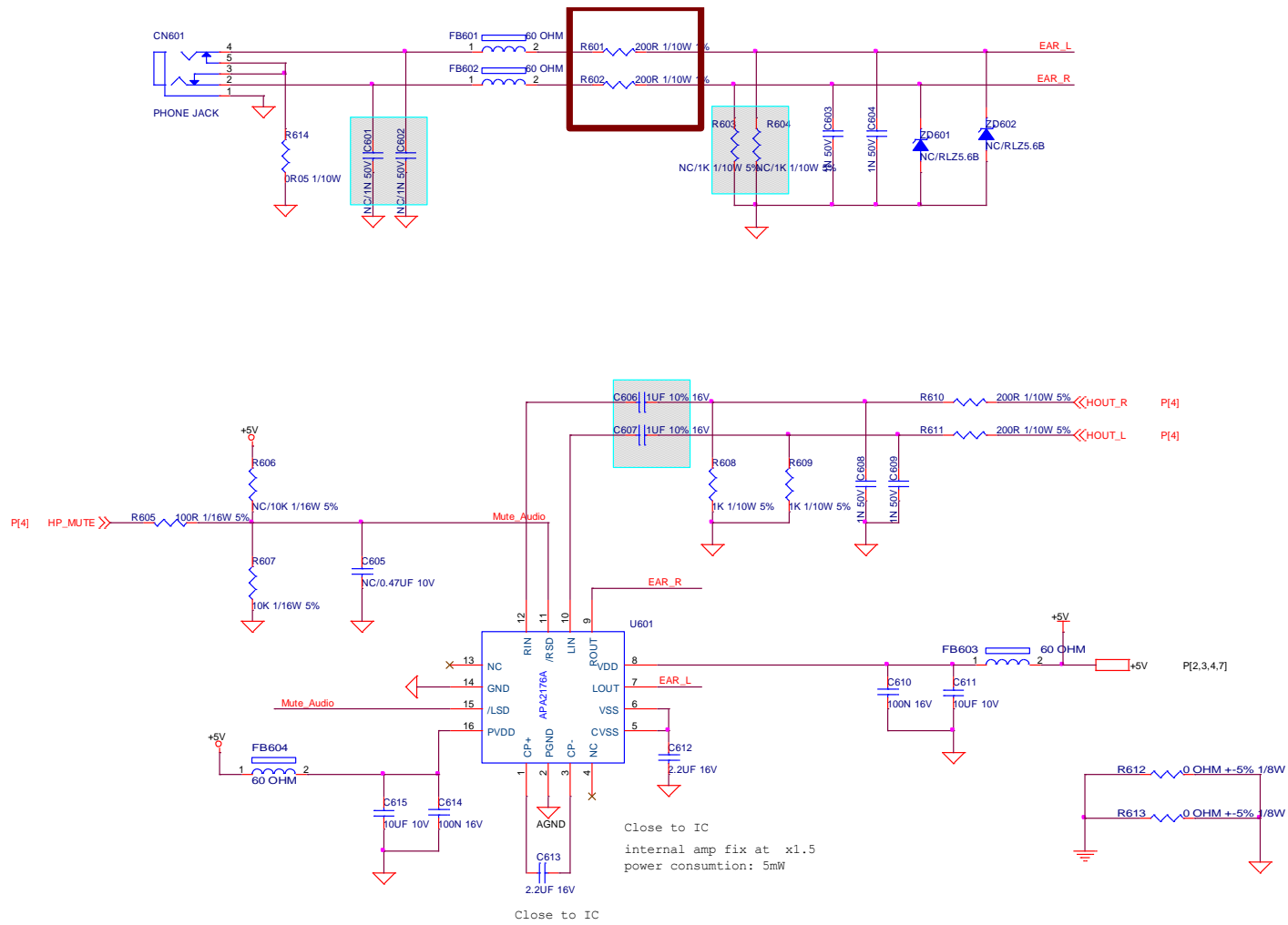
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	AOC	Size	B
経路爪細鹿	G7778-M0A-000-0040-1-150521	TPV MODEL	E2270SWHN	Rev
Key Component	3. HDMI1 Interface	PCB NAME	715G7778M0A0000040	称爹
Date	Wednesday, July 29, 2015	Sheet	3 of 7	<称爹>



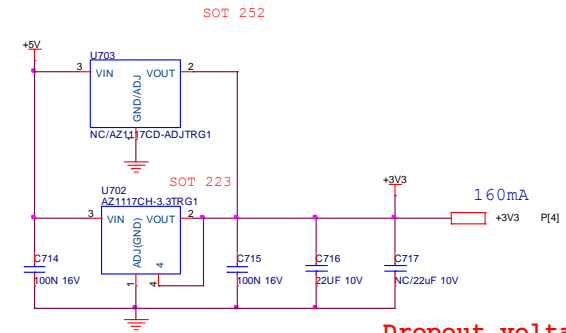
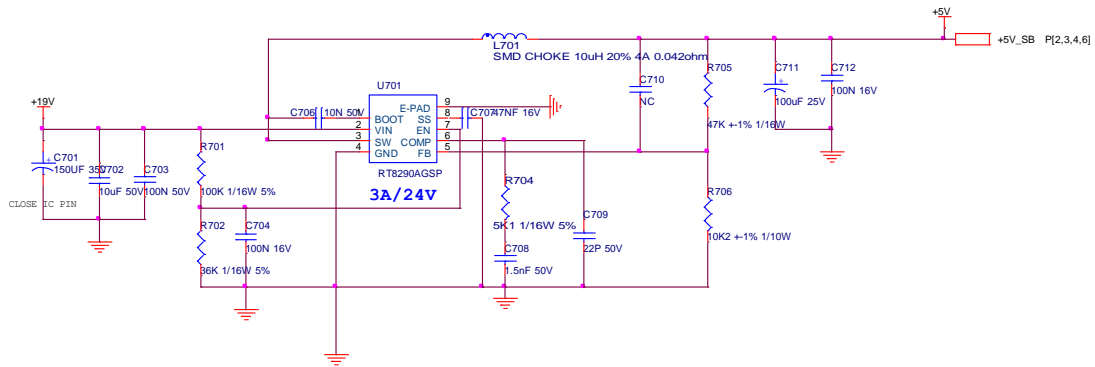
TPV (Top Victory Electronics Co., Ltd.)	DEM MODEL	ACC	Size	Custom
TPV Model	TPV MODEL	TPV MODEL	Rev	MDA
File Comment	S_SCALER	PCB NAME	71507778MMA000040	
Date	Wednesday, July 23, 2015	Sheet	1 of 7	1/1



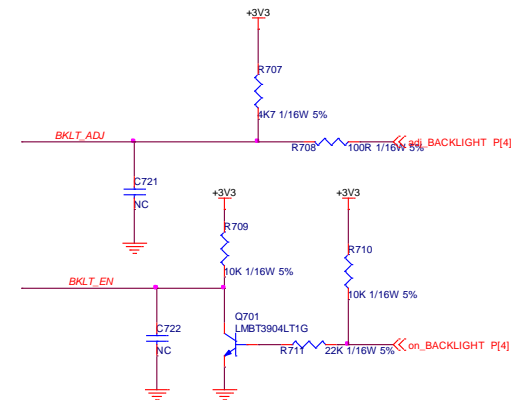
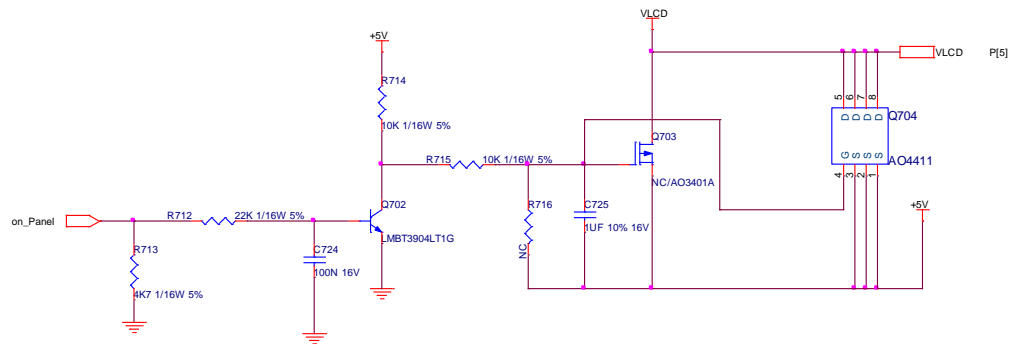
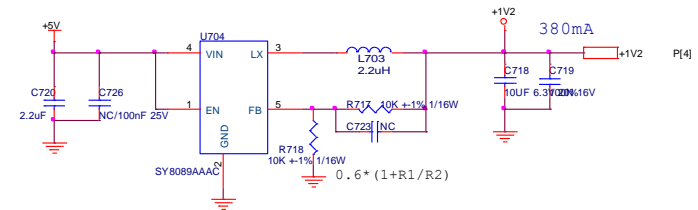
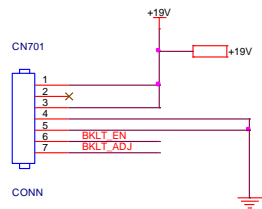
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	AOC	Size	A
結隔瓜網腹	G7778-M0A-000-0040-1-150521	TPV MODEL	E2270SWHN	Rev
Key Component	5. PANEL INTERFACE	PCB NAME	715G7778M0A0000040	称爹
Date	Wednesday, July 29, 2015	Sheet	5 of 7	<称爹>



TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	AOC	Size	Custom
経路広銅膜	G7778-MOA-000-0040-1-150521	TPV MODEL	E2270SWHN	Rev
Key Component	7. Audio	PCB NAME	715G7778MOA0000040	称差
Date	Wednesday, July 29, 2015	Sheet	6 of 7	<称差>



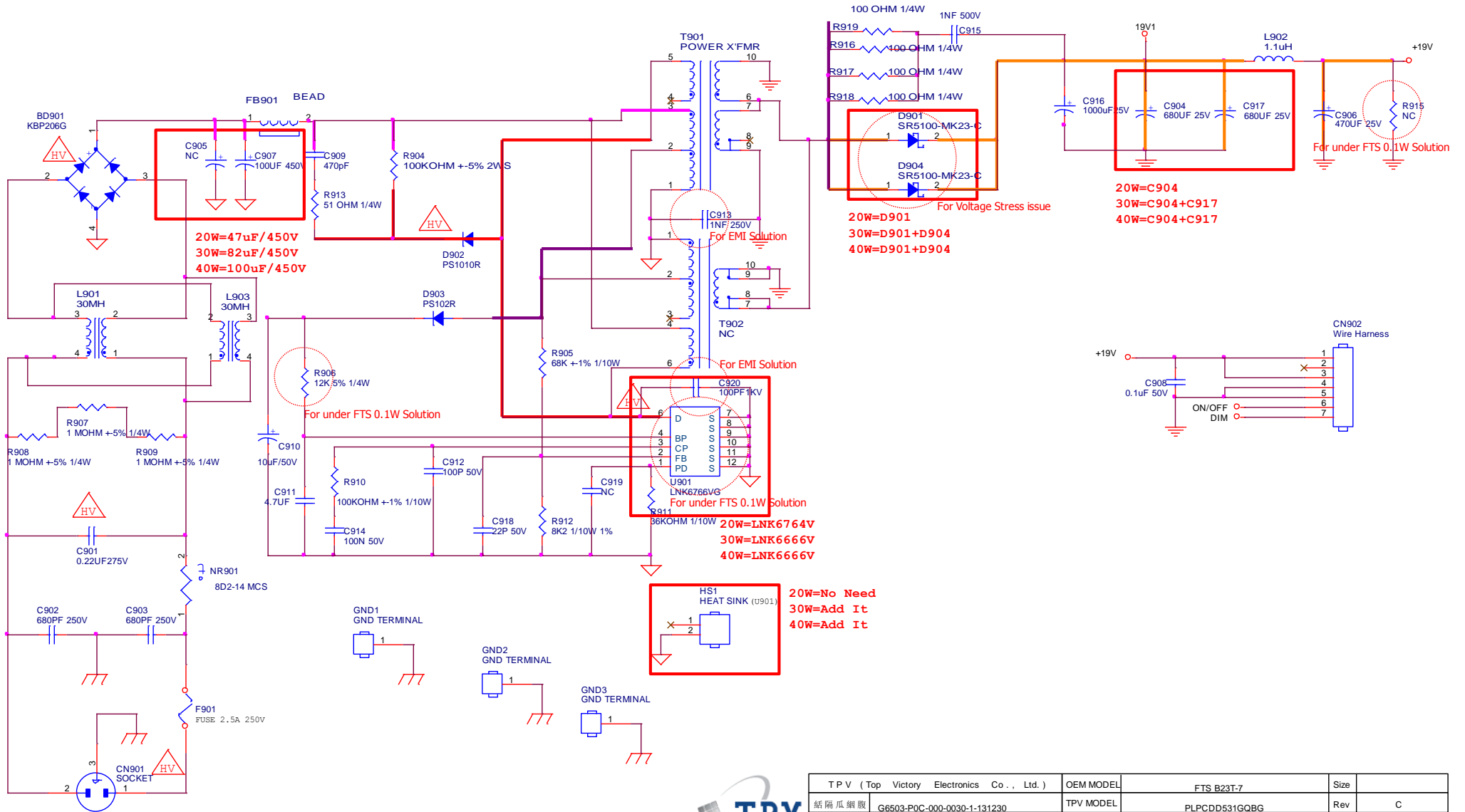
Dropout voltage must < 0.8V @ 400mA



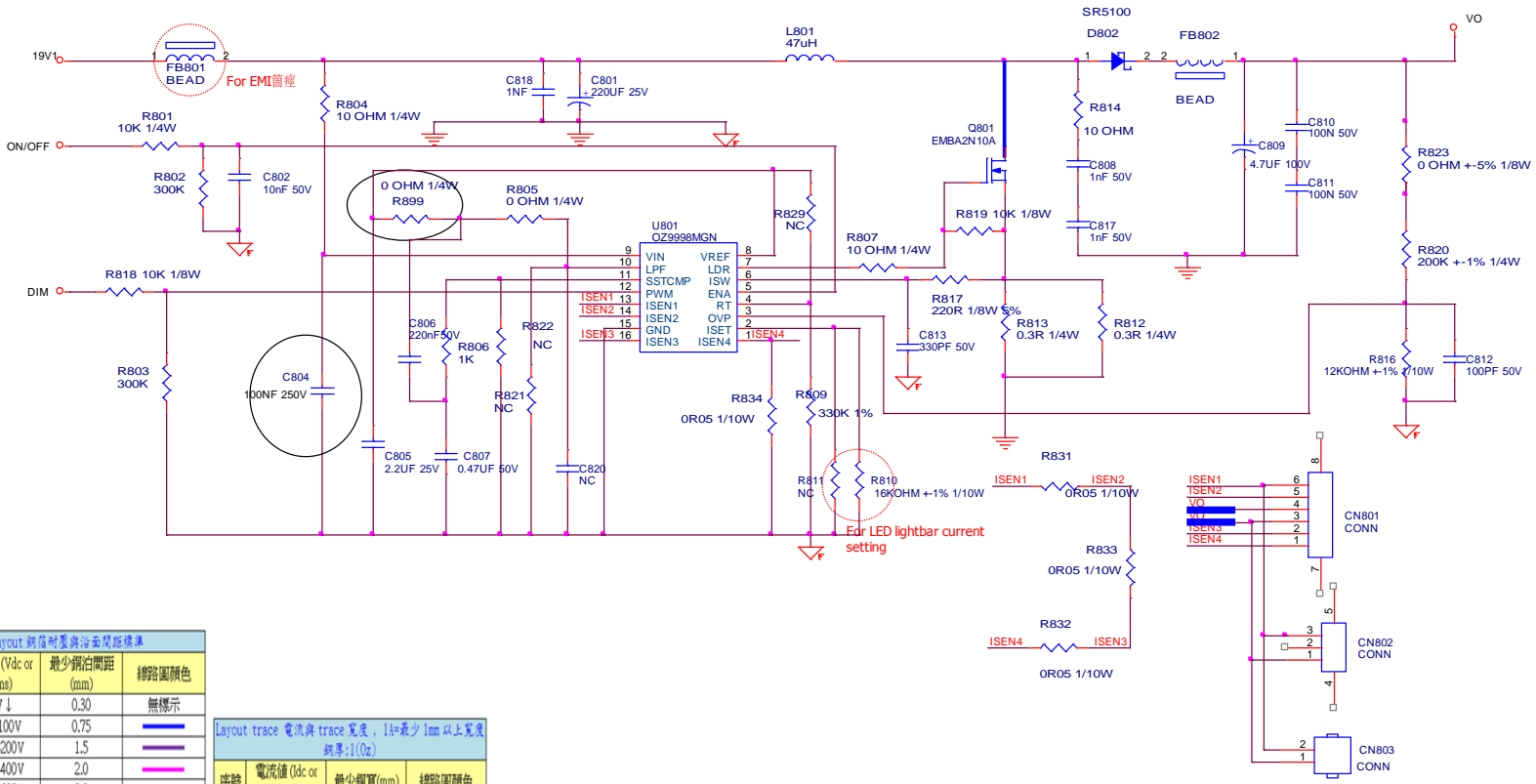
T P V ( Top Victory Electronics Co . , Ltd. )	OEM MODEL	AOC	Size	Custom
通稱及編號	G7778-M0A-000-0040-1-150521	TPV MODEL	E2270SWHN	Rev
Key Component	B. Power	PCB NAME	715G7778M0A0000040	Rev
Date	Wednesday, July 29, 2015	Sheet	7 of 7	稱號 <稱號>



## 6.2 Power Board 715G6503P03011001C



TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	FTS B23T-7		Size	
結構圖網版	G6503-P0C-000-0030-1-131230	TPV MODEL	PLPCDD531QBG		Rev C
Key Component	02.Power	PCB NAME	715G6503-P0C-001-0030		称参 FTS
Date	Tuesday, November 18, 2014	Sheet	2 of 3		



layout 銅箔耐壓與沿面間距標準

序號	電壓值 (Vdc or Vrms)	最少銅箔間距 (mm)	線路圖顏色
1	40V ↓	0.30	無標示
2	40V-100V	0.75	藍色
3	100V-200V	1.5	紫色
4	200V-400V	2.0	粉紅色
5	400V-600V	3.0	紅色
6	600V-1000V	5.0	黑色

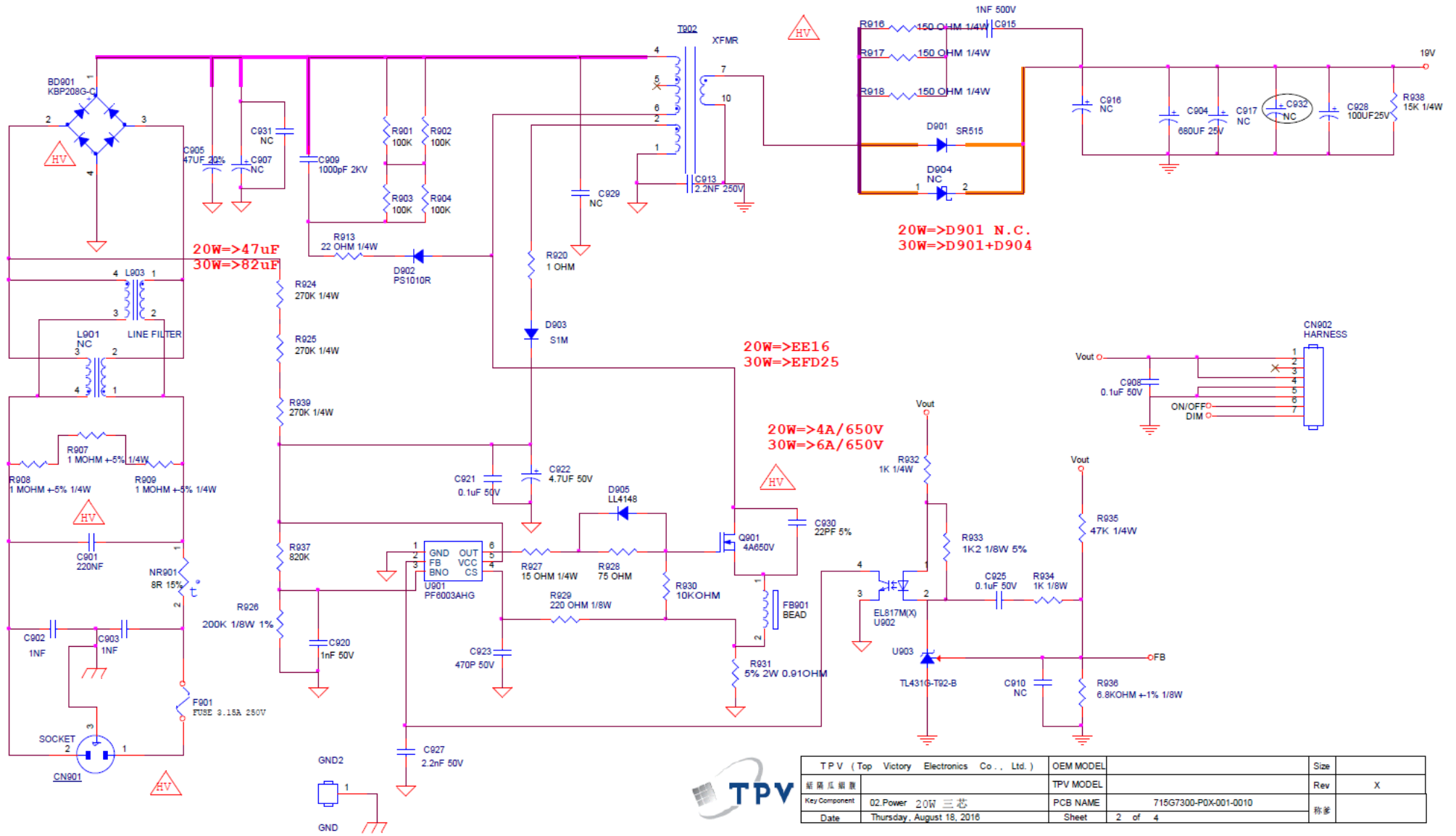
Layout trace 電流與 trace 寬度, 1d=最少 1mm 以上寬度 銅厚:1(Oz)

序號	電流值 (Idc or Ims)	最少銅寬(mm)	線路圖顏色
1		線路圖上標示	棕色

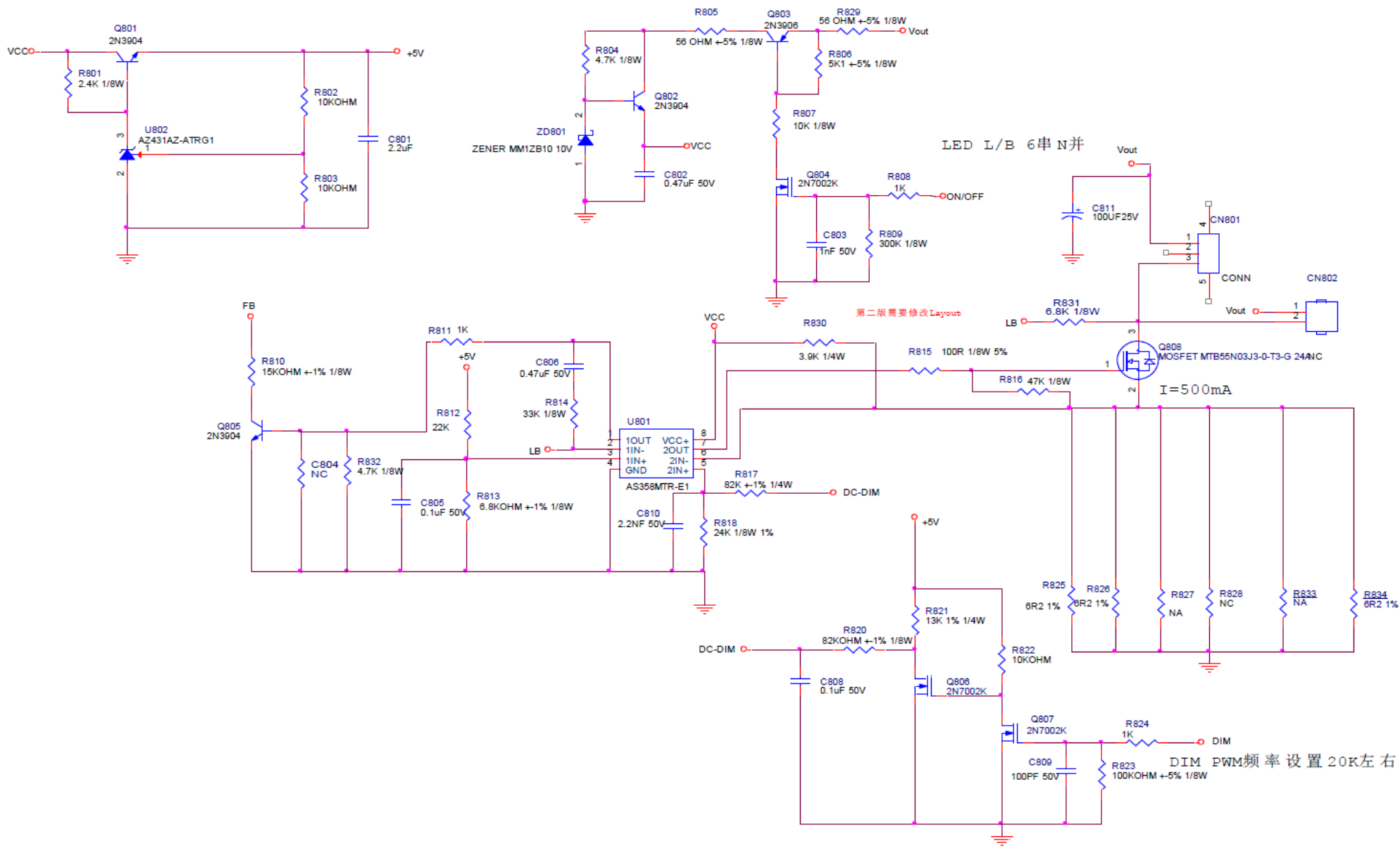


TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	FTS B23T-7		Size	
經銷商網聯	G6503-POB-000-0010-1-131025	TPV MODEL	PLPCDD531GQBG	Rev	C
Key Component	03.LED Converter	PCB NAME	715G6503-P0C-001-0030	稱號	FTS
Date	Tuesday, November 18, 2014	Sheet	3 of 3		

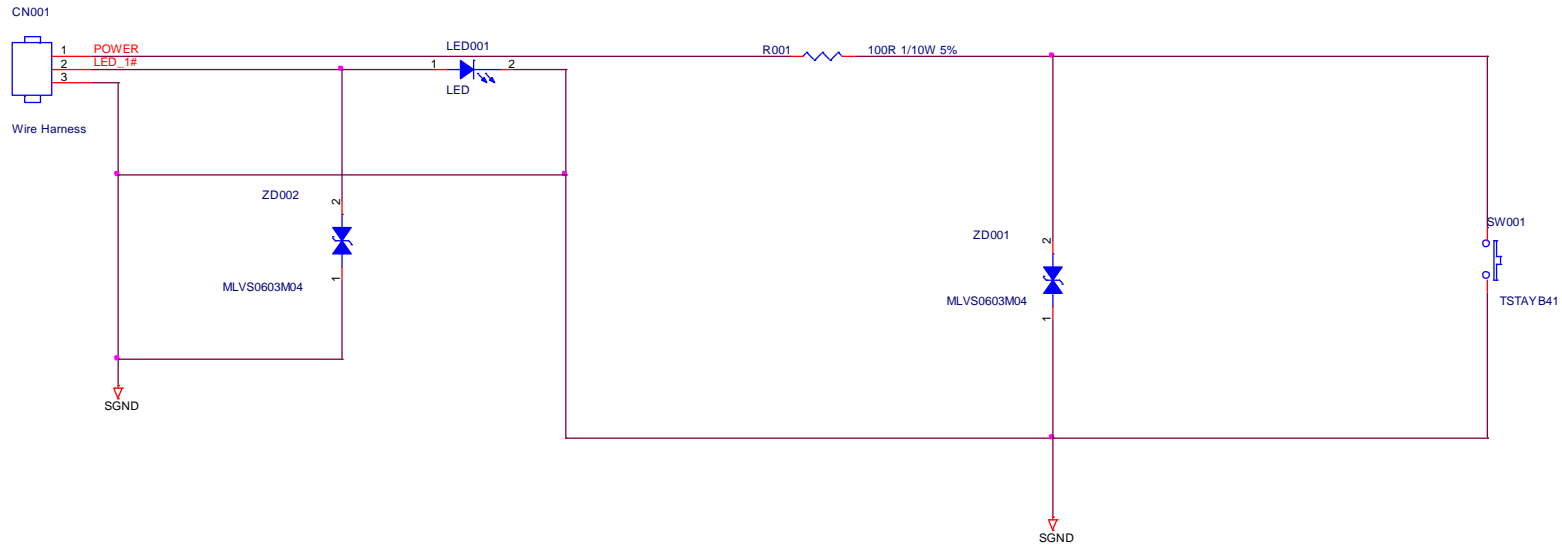
715G7300P02



TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL		Size	
蘇蘭瓜編號		TPV MODEL		Rev	X
Key Component	02.Power 20W 三芯	PCB NAME	715G7300-P0X-001-0010	稱號	
Date	Thursday, August 18, 2016	Sheet	2 of 4		



### 6.3 Key Board 715G5985K01000001M

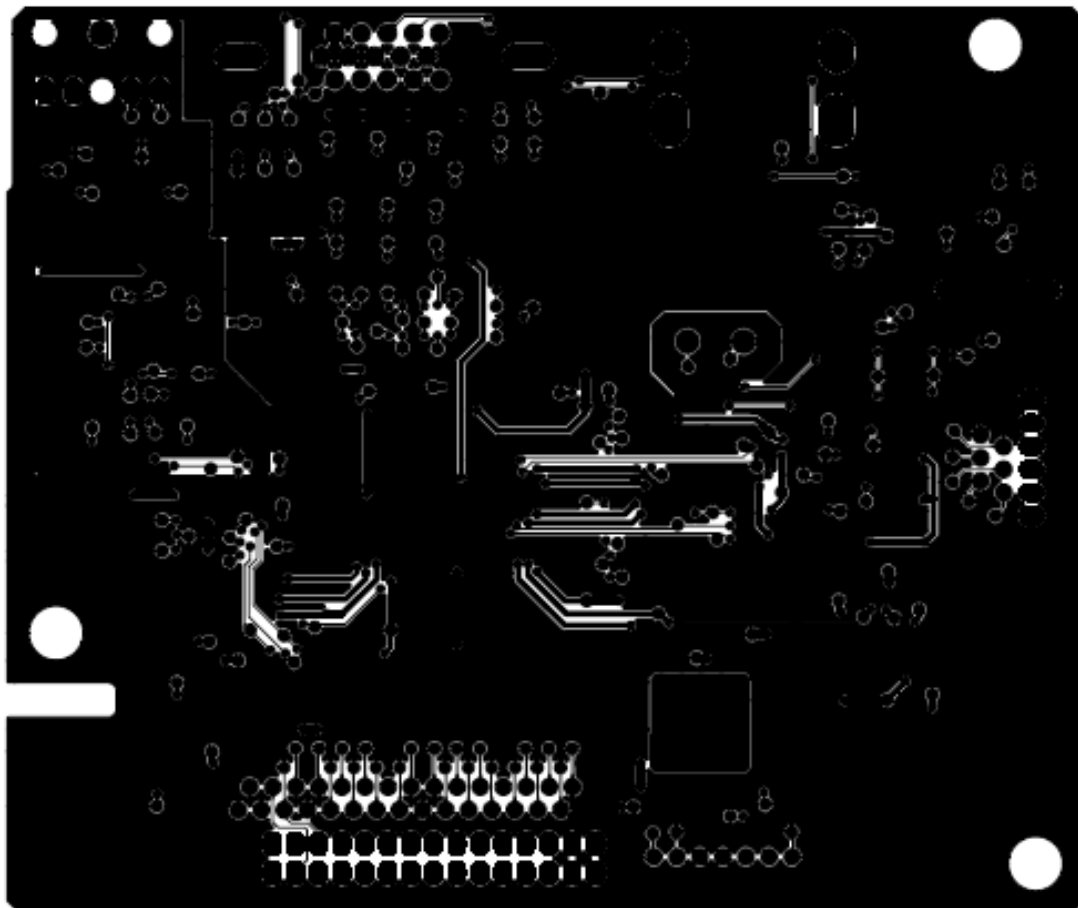
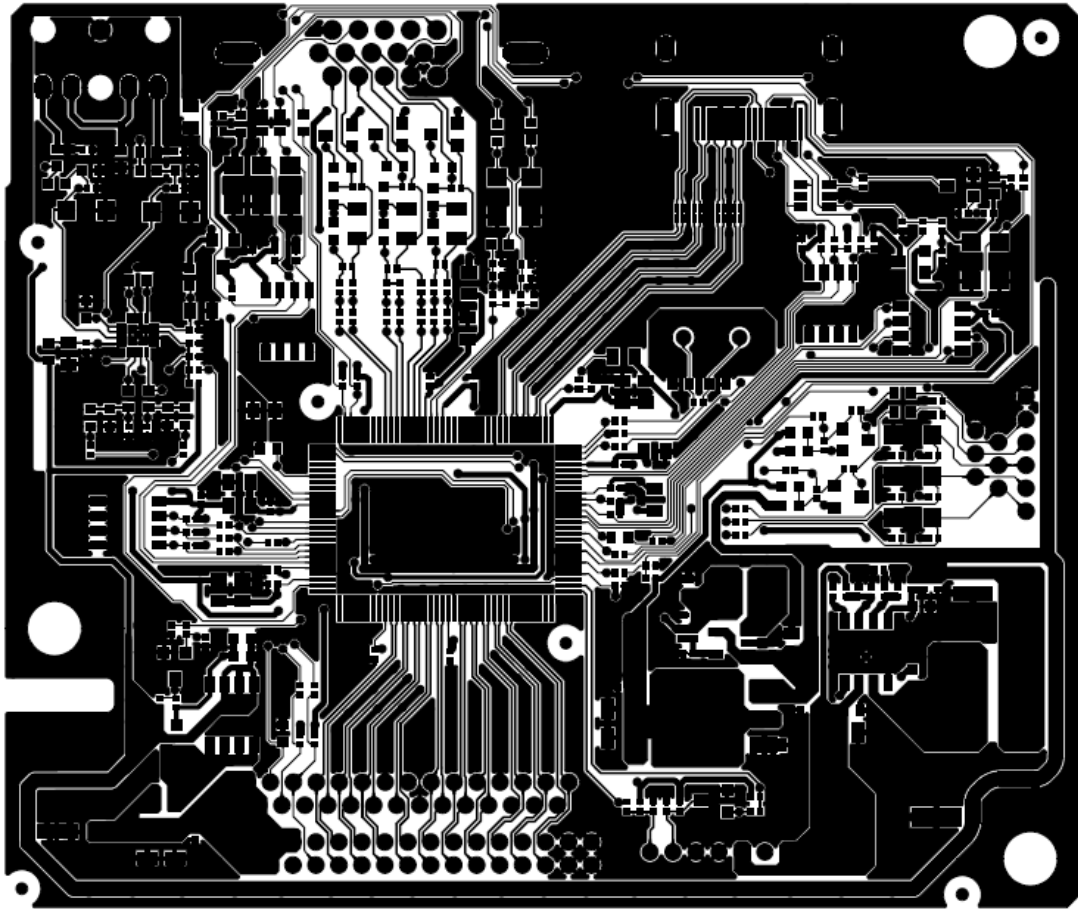


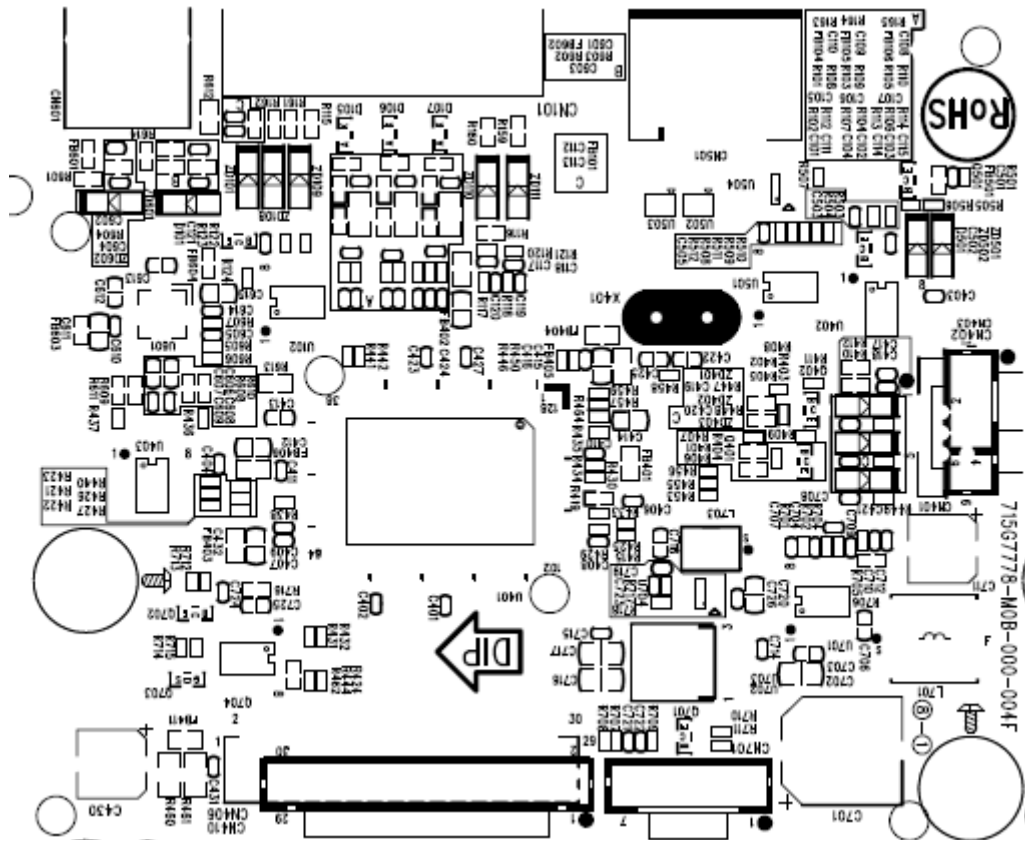
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	PHILIPS V5	Size	B
结 晶 瓦 膜 版	715G5985-K0B-000-0010	TPV MODEL	PHILIPS V5 ONE KEY	Rev
Key Component	2.0.key	PCB NAME	715G5985-K0B-000-0010_PHILIPS V5 ONE KEY	称 差
Date	Thursday, January 03, 2013	Sheet	2 of 2	<称差>

## 7. PCB Layout

### 7.1 Main Board

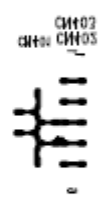
715G7778M0B00004F



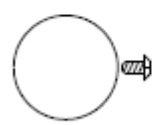


NOTATION LABEL IN

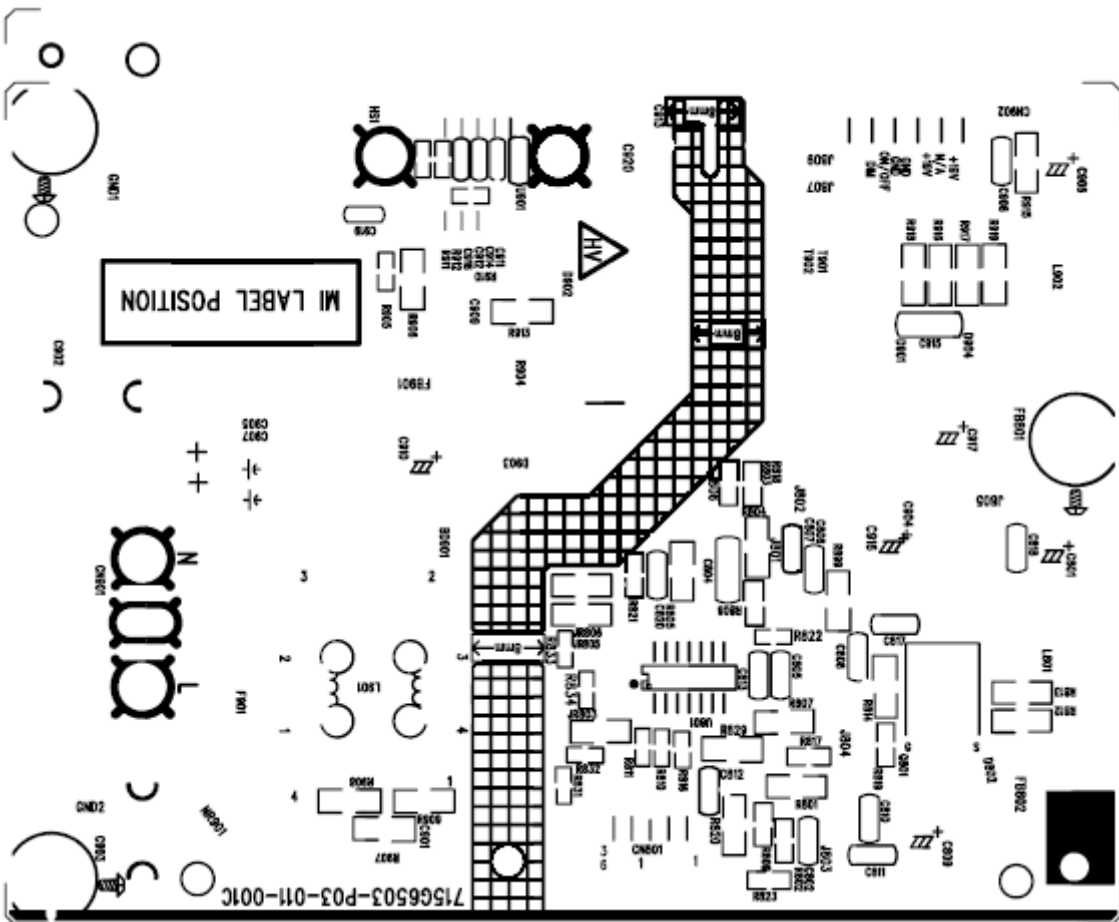
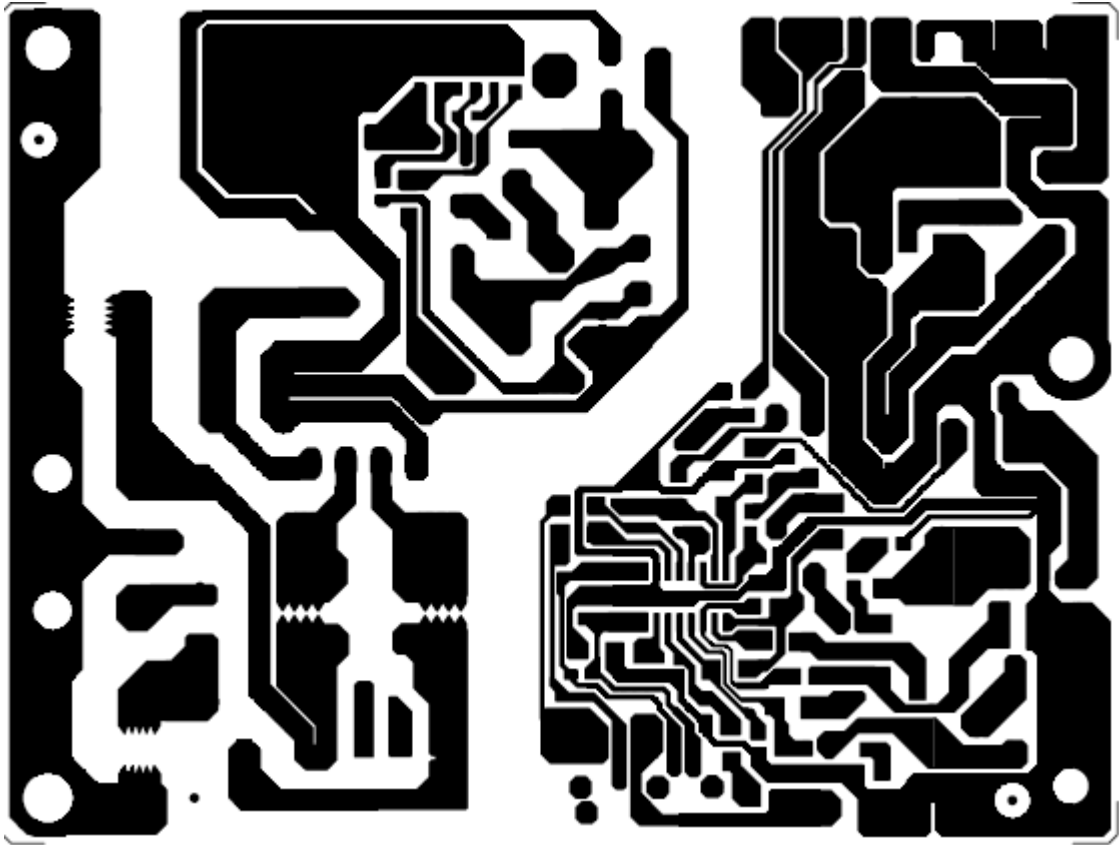
101X



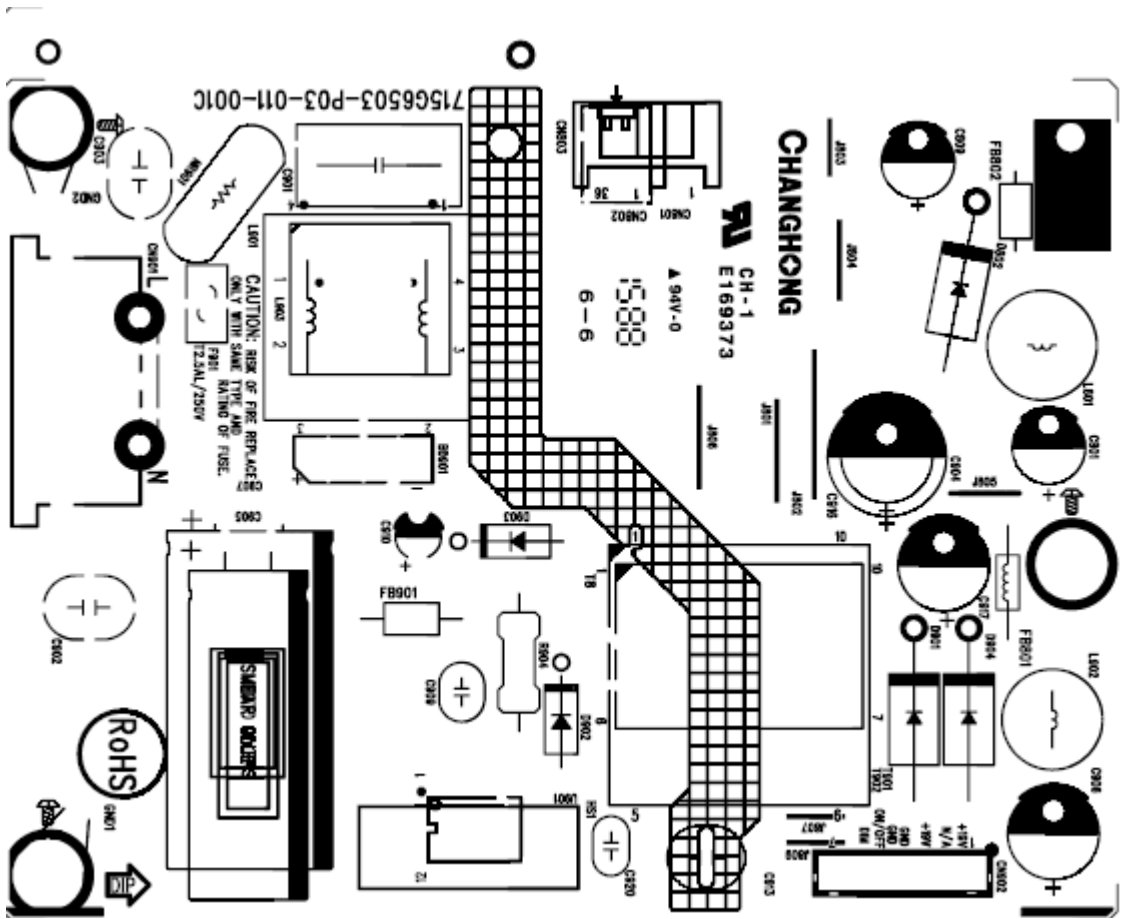
00.00 0-V+LR▲2000® B

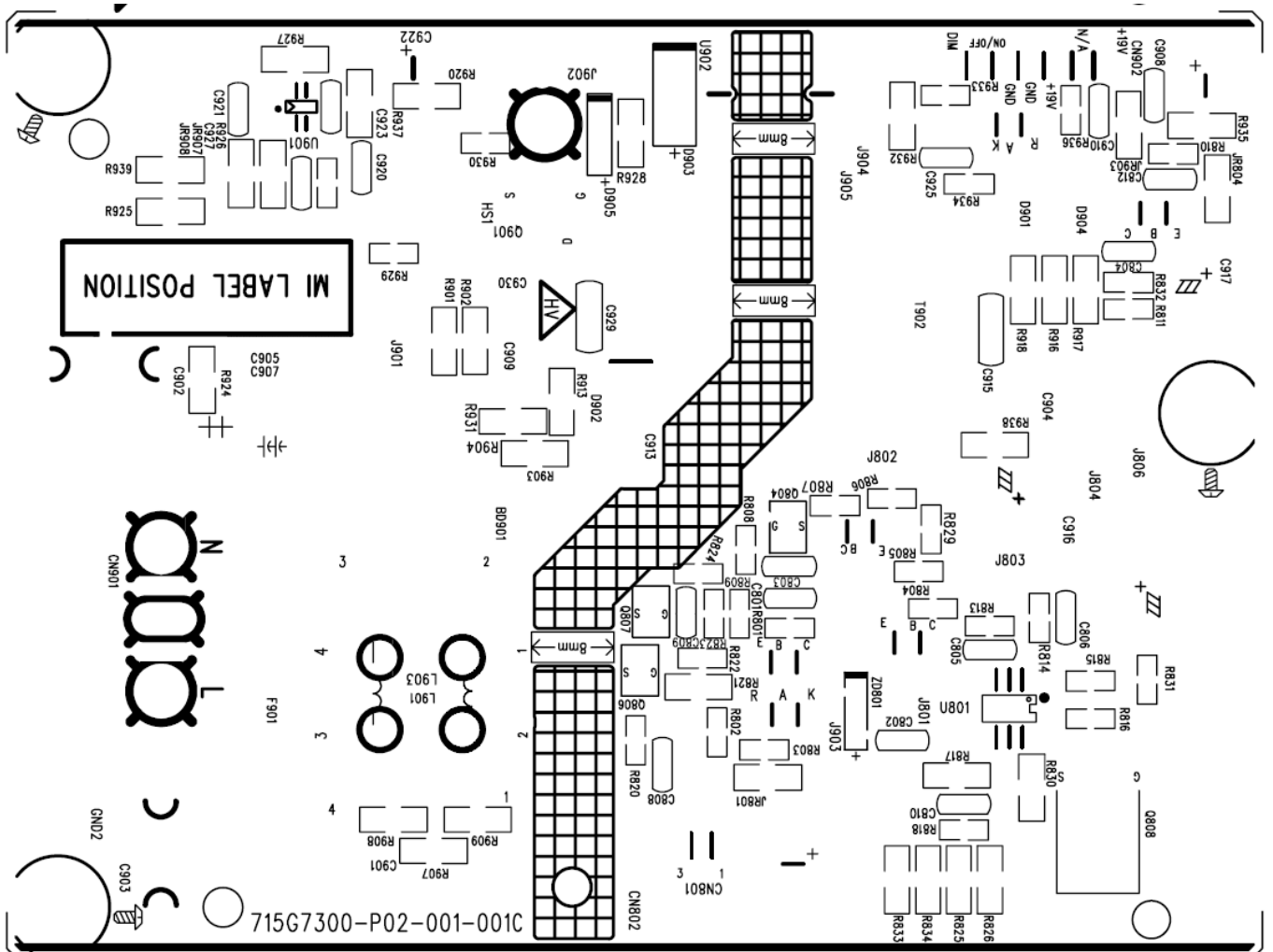
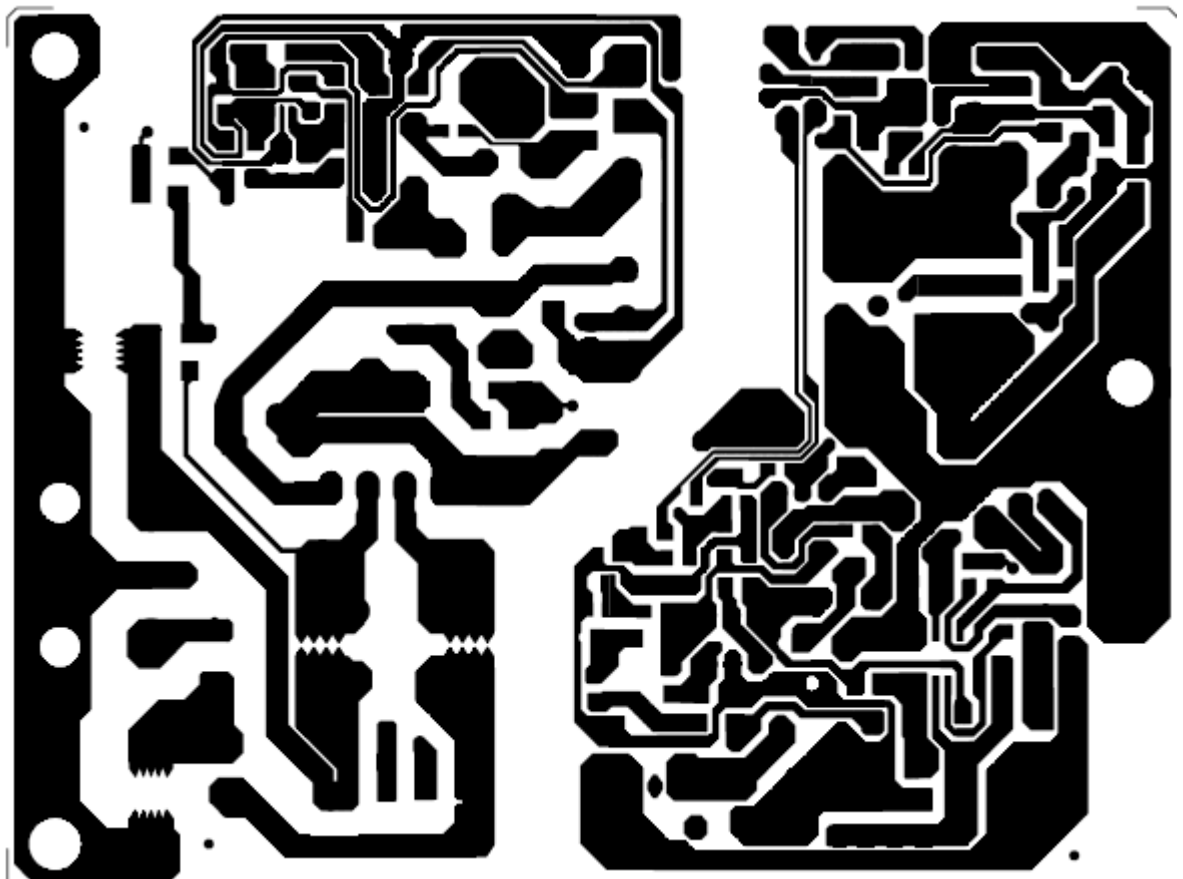


7.2 Power Board  
715G6503P03011001C

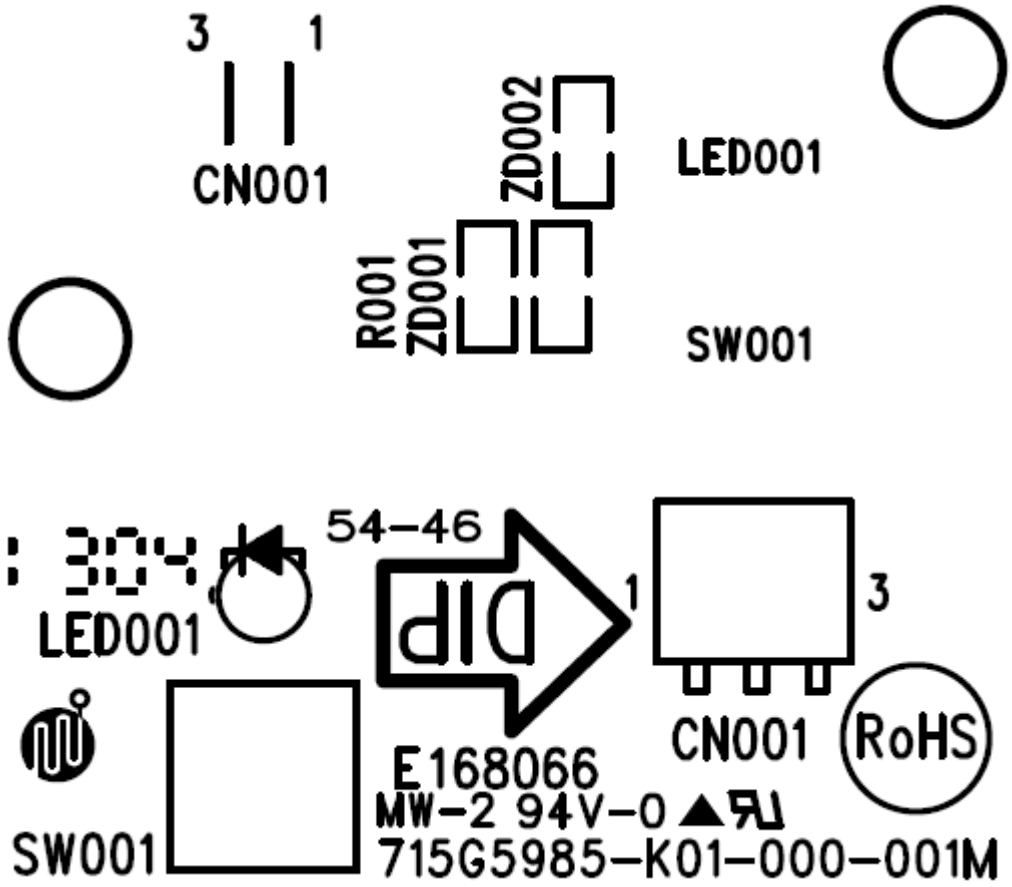








7.3 Key Board  
715G5985K01000001M



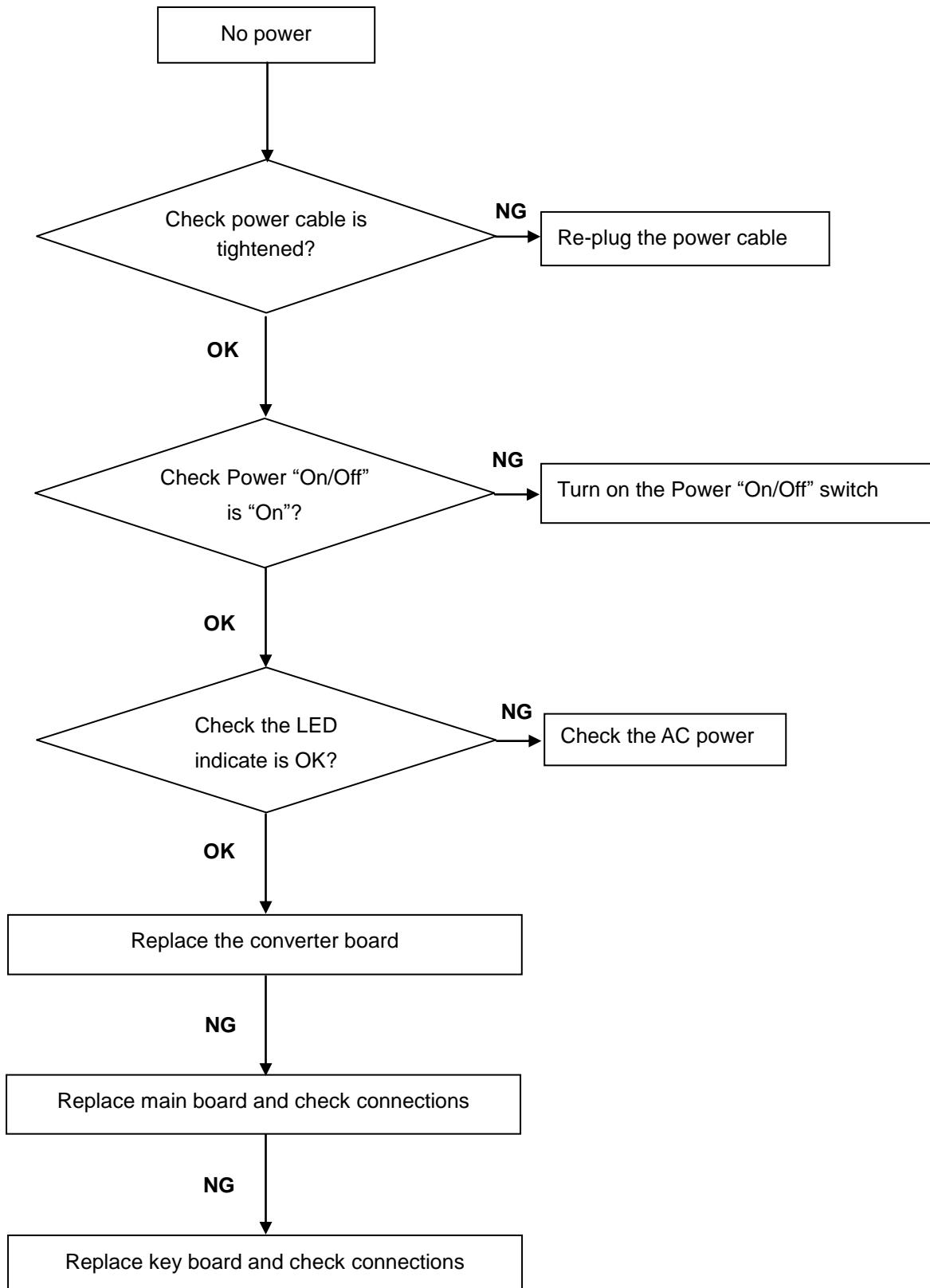
## **8. Maintainability**

### **8.1 Equipments and Tools Requirement**

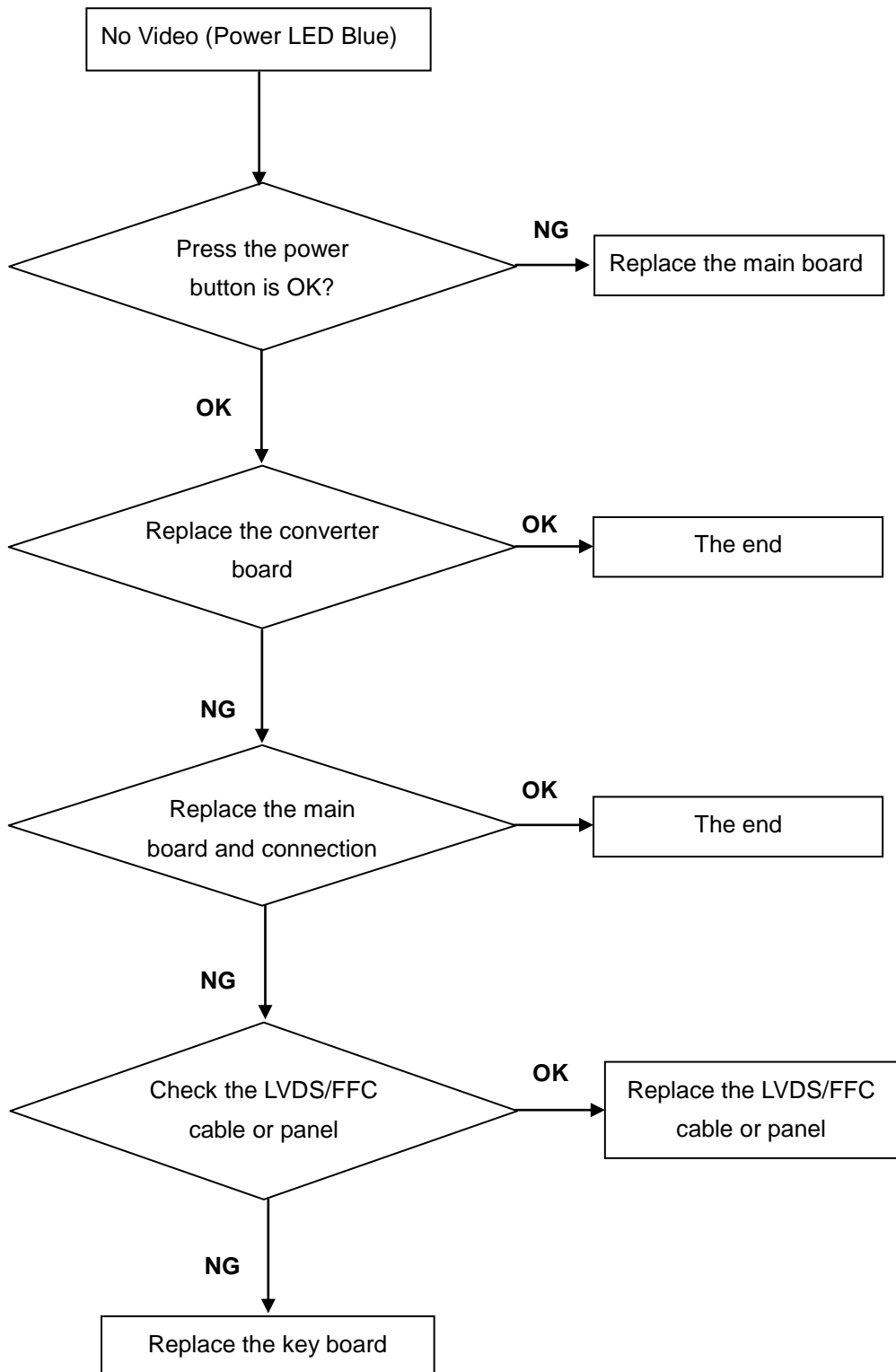
1. Voltmeter.
2. Oscilloscope.
3. Pattern Generator.
4. DDC Tool with an IBM Compatible Computer.
5. Alignment Tool.
6. LCD Color Analyzer.
7. Service Manual.
8. User Manual.

## 8.2 Trouble Shooting

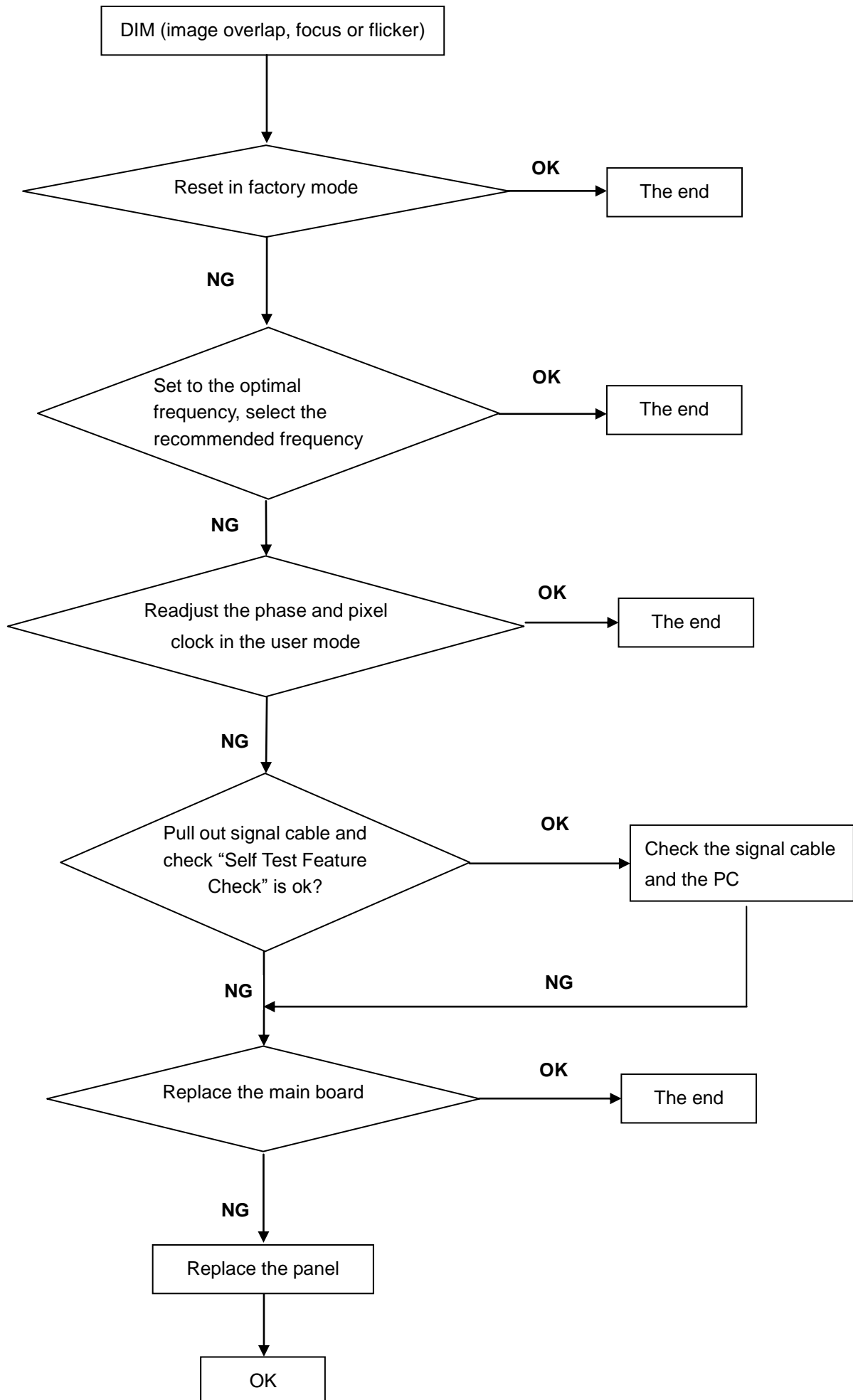
### No Power



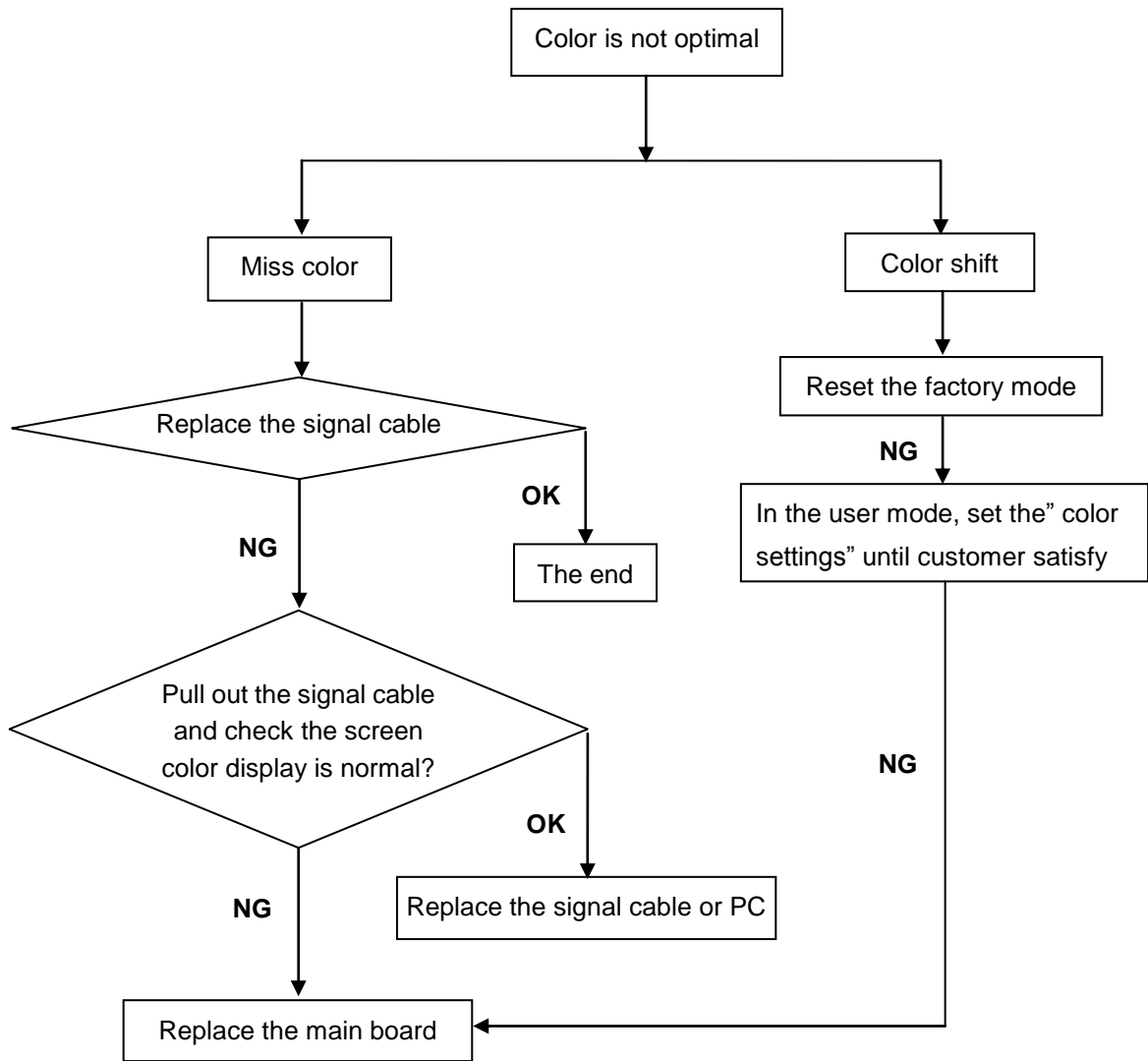
## 2. No Video (Power LED Blue)



### 3. DIM



#### 4. Color is not optimal





## 9.White- Balance, Luminance Adjustment

Approximately 30 minutes should be allowed for warm up before proceeding white balance adjustment.

How to setting MEM channel you can reference to chroma 7120 user guide or simple use “SC” key and “NEXT” Key to modify xyY value and use “ID” key to modify the TEXT description Following is the procedure to do white-balance adjust .

### 1. Setting the color temp.

#### A. 6500K:

Warm color temp. parameter is  $x=313\pm 20$ ,  $y=329\pm 20$

#### B. 7300K

Normal color temp. parameter is  $x=301\pm 20$ ,  $y=317\pm 20$

#### C. 9300K

Cool color temp. parameter is  $x=283\pm 20$ ,  $y=297\pm 20$

#### D. sRGB

sRGB color temp. parameter is  $x=313\pm 20$ ,  $y=329\pm 20$

### 2. Enter into the factory mode:

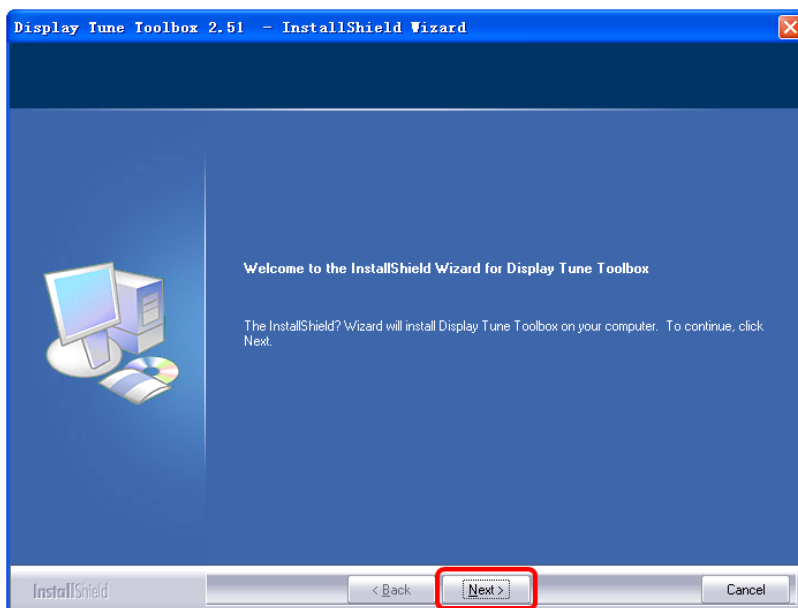
#### 2.1 Software:



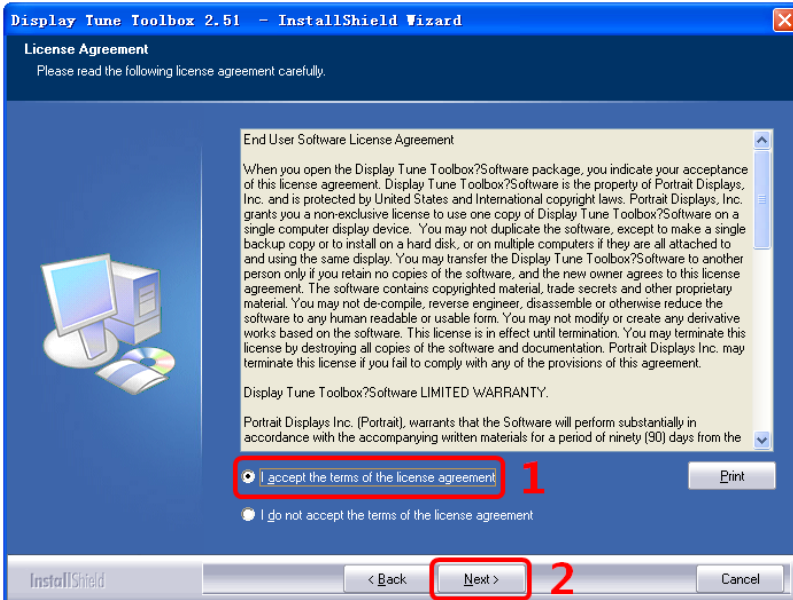
#### 2.2 Install software:



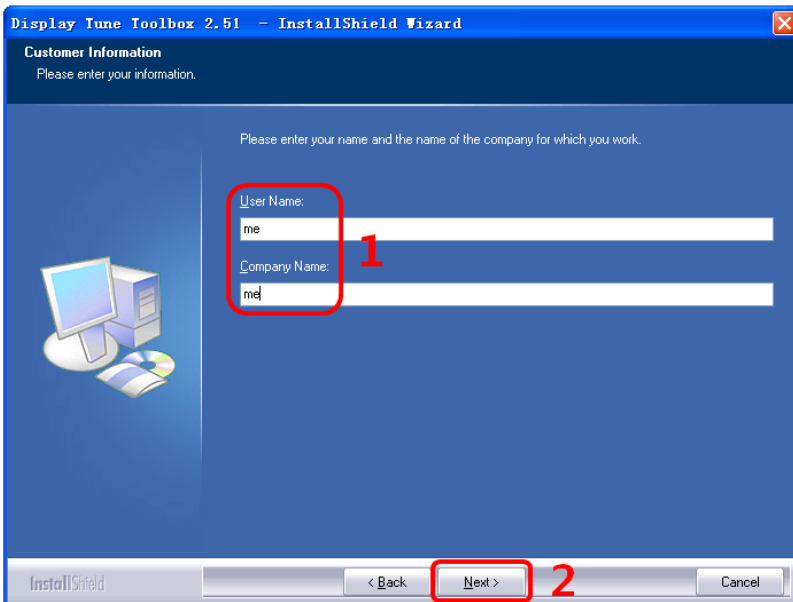
#### 2.2.3 Click .



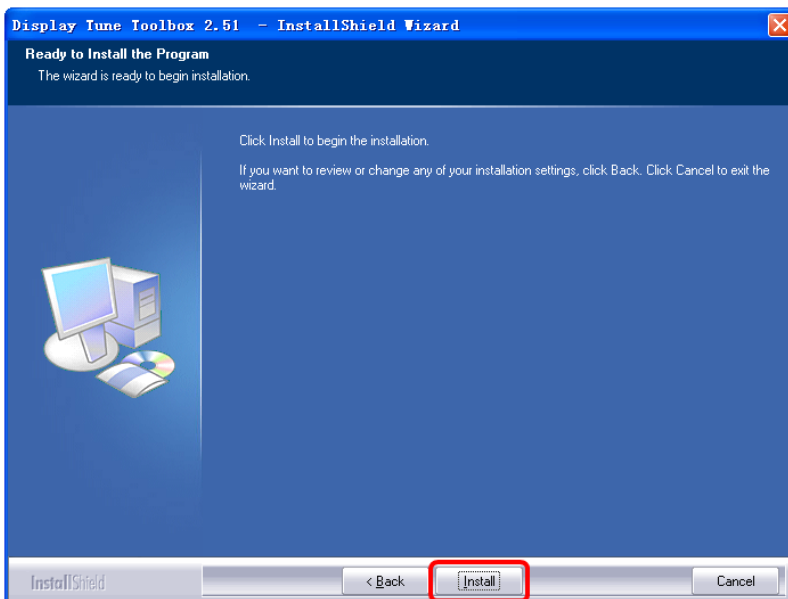
2.2.4 Tick  **I accept the terms of the license agreement** then click .



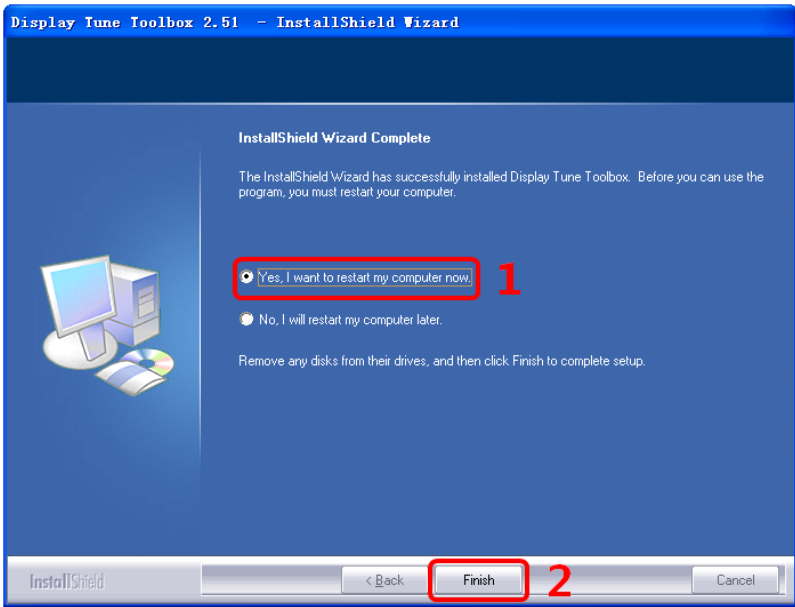
2.2.5 Enter user name and company name then click .



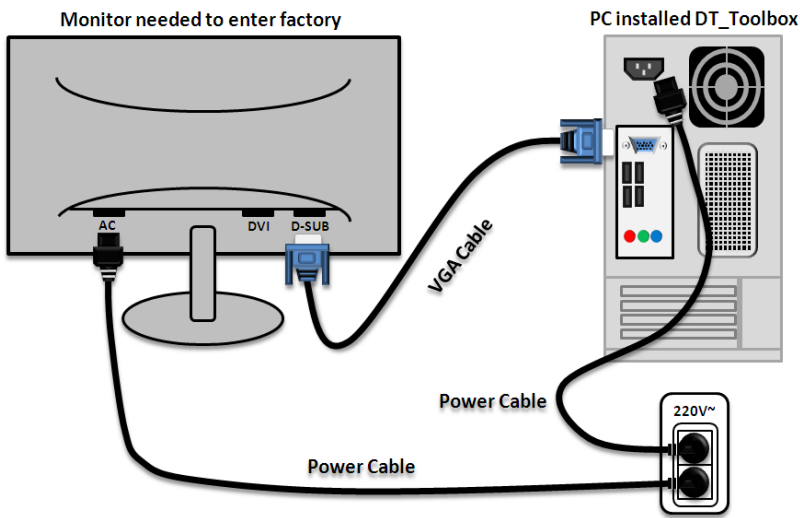
2.2.6 Click .



2.2.7 Tick  **Yes, I want to restart my computer now.** then click  to restart your computer.



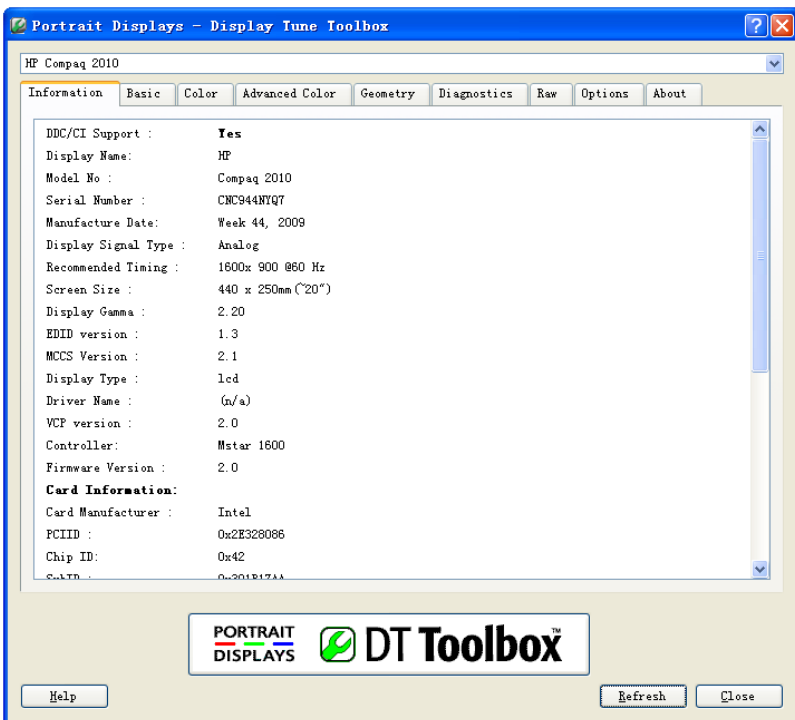
2.3 Connecting the Monitor:



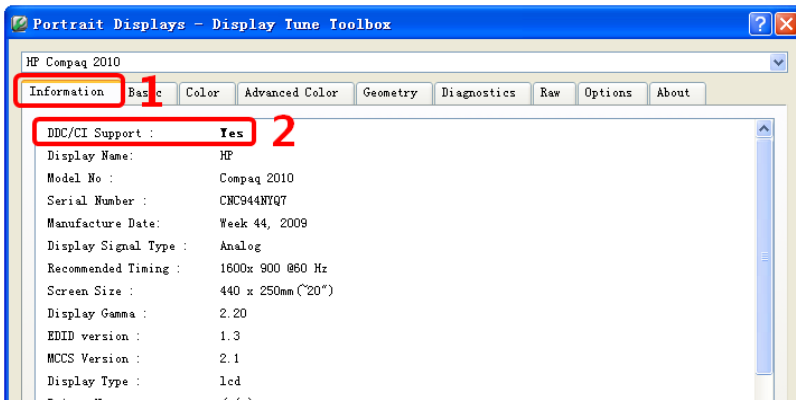
2.4 Enter Factory:



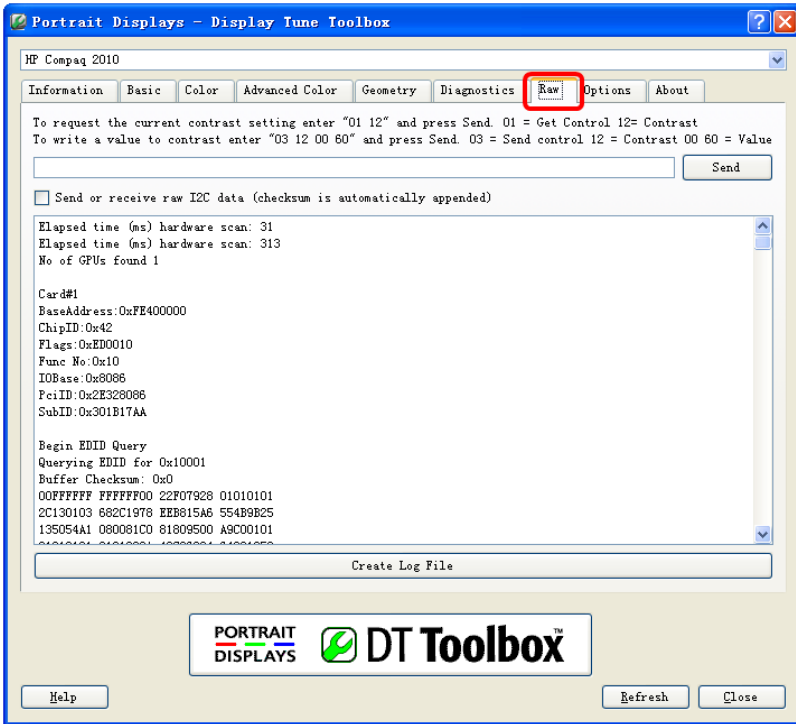
2.4.1 Double-click to run DT\_Toolbox.



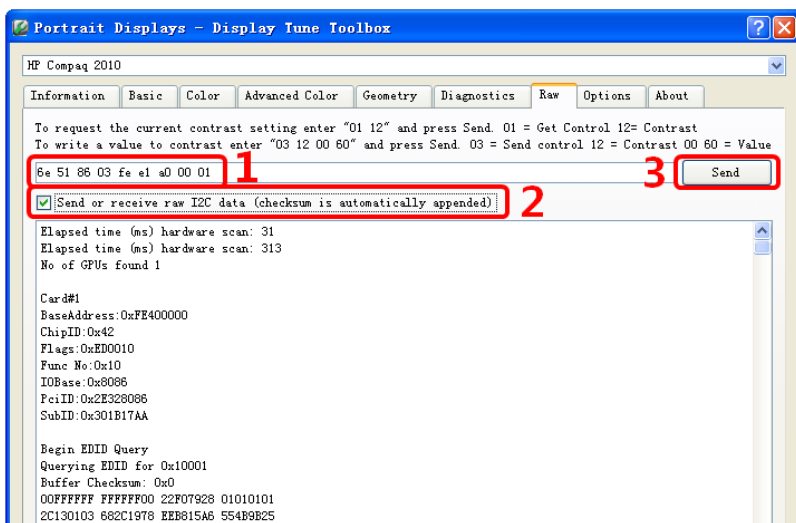
2.4.2 Choose "Information". Confirm "DDC/CI Support" show "Yes". If not, you can't use DT Toolbox.



2.4.3 Choose "Raw".



2.4.4 Input "6e 51 86 03 fe e1 a0 00 01", then tick "Send or receive raw I2C data", click "Send".



2.4.5 Press the menu button of monitor to enter into the factory mode.

### 3. Biase adjustment:

Set the Contrast  to 50; Adjust the Brightness  to 90.

### 4. Gain adjustment:

#### A. Adjust Warm (6500K) color-temperature

1. Switch the chroma-7120 to RGB-Mode (with press "MODE" button)
2. Switch the MEM.channel to Channel 3 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show  $x=313\pm 20$  ,  $y=329\pm 20$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value  $R=100$
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value  $G=100$
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value  $B=100$
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance  $=100\pm 2$

#### B. Adjust Normal (7300K) color-temperature

1. Switch the chroma-7120 to RGB-Mode (with press "MODE" button)
2. Switch the MEM.channel to Channel 4 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show  $x=302\pm 20$  ,  $y=318\pm 20$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value  $R=100$
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value  $G=100$
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value  $B=100$
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance  $=100\pm 2$

#### C. Adjust Cool (9300K) color-temperature

1. Switch the Chroma-7120 to RGB-Mode (with press "MODE" button)
2. Switch the MEM. Channel to Channel 9 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show  $x=283\pm 20$  ,  $y=297\pm 20$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value  $R=100$
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value  $G=100$
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value  $B=100$
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance  $=100\pm 2$

#### D. Adjust sRGB color-temperature

1. Switch the chroma-7120 to RGB-Mode (with press "MODE" button)
2. Switch the MEM.channel to Channel 10 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show  $x=313\pm 20$  ,  $y=329\pm 20$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value  $R=100$
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value  $G=100$
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value  $B=100$
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance  $=100\pm 2$

#### E. Turn the Power-button off to quit from factory mode.

# 10. Monitor Exploded Views

AOC-E2270S-EXPLODE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S

FIRST USED ON  
 PART No.  
 REVISION  
 VERSION A

Item	PART NAME	PART NUMBER	QUANTITY
1	Bezel	Q34G7708-11-01A	1PCS
2	Power lens	A33G1475-11-01A	1PCS
3	key board		1PCS
4	Panel	034B000049500	1PCS
5	Power board		1PCS
6	Main board		1PCS
7	Mainframe	Q15G1429-101-101	1PCS
8	Back cover	Q34G7709-11-01A	1PCS
9	Hinge	H37G00360120FQ	1PCS
10	Stand	A34G3250-11-01A	1PCS
11	Base	Q34G7727-11-01A	1PCS
12	Rubber foot	Q12G3300118	1PCS
13	M3 Screw for PCB board	D1G1030-6-120	4PCS
14	M4 Screw for ground	M1G1140-6-120	1PCS
15	Screw for VESA & MAINFRAME	OM1G2940 10 47 CR3	3PCS

TOP VICTORY ELECTRONICS	DRAWN BY:	FINISH:	COLOR:	UNIT:	SCALE:
TEL:86-591-5285555	CHECKED BY:	MATERIAL:	WALL		DATE:
FAX:86-591-5285447	APPROVED BY:	PART NAME:	THICKNESS:		VERSION:

## 11. BOM List

Note: The parts information listed below are for reference only, and are subject to change without notice. Please go to <http://cs.tpvaoc.com/hello1.asp> for the latest information.

### HIF2T72BALACHNE

Location	Part No.	Description	Remark
	012B20014950207036	Spacer SI-1 ShinEtsu 25u KE951 400*3 t=	
	012B20014966007036	Spacer Y ShinEtsu 25u KE951 235*3*0.3mm	
	052B15014961037036	Al tape AL tape+GA835+SCF100 253*3*1.13	
HDCP-SMT	070GHDCP500HDC	HDCP CODE	
	0D1G1030 6120	SCREW D3 6	
	0M1G1140 8120	SCREW M4 8	
E08902	389G0722CAA0DB	D-SUB CABLE 1200	
E08902	389G0722HAA0DB	D-SUB CABLE 1200	
E08909	389G1845GAAF01	HDMI CABLE 1500	
E08901	389G404A12NHLG	AC POWER CORD 1200 for Europe	
E08901	389G404A12NISG	AC POWER CORD 1200 for Europe	
ECN401	395G179A30B5150000	FFC CABLE 30 160 1.0MM	
ECN401	395G179M30B5150000	FFC CABLE 30 160 1.0MM	
E750	750GBV215GE3P6N000	LCD TPM215HW01-HGEL03 C1P WH TPV	
	756GHFCB0A7006010H	MCU ASSY	
	A33G147500101L0100	LENS	
	A34G3250ABJ01K0200	STAND	
	AM1G1740 12120	SCREW M4 12	
	CBPCFT7A1H3	CONVERSION 715G7778-M0A-000-0040	
M037	H37G00360130B1	HINGE ASS'Y	
M037	H37G00360130BT	HINGE ASS'Y	
M037	H37G00360130FQ	HINGE ASS'Y	
	H40G 001624 1A	CARTON LABEL BARCODE 1	
	H40G0002615A52	LABEL Win8+EPA+EPEAT Sliver	
	H40G000N61515A	RATING LABEL 70 EU	
	H44GB0621010DJ	CUSHION	
	H44GB0622010DJ	CUSHION	
	H44GB06261501B00HX	ARTWORK CARTON E2270SWN WW	
	H70G21C161514A	CD MANUAL E2270PWHE E2270SWHN E2270SWDN	
	KEPCCHB4	KEY BOARD	
	PLPCFB401UHD1	ADAPTER BOARD G6503	
	Q12G630017600A00SI	FOOT PAD	
	Q15G1429E0110100B1	MAINFRAME	
	Q34G7708ABJB6B0130	BEZEL L215W-W70-s1	
	Q34G7709ABJOCK0130	REAR_COVER L215W-W70-s1	
	Q34G7727ABJ01K0130	BASE	
	Q45G990161940800ZW	PROTECT BAG	
E05203	Q52G100204500A00JY	AL FOIL	

E05202	Q52G100204500A00JY	AL FOIL	
E05201	Q52G100204500A00JY	AL FOIL	
	756GHFCB0A7006010H	MCU ASSY	
U402	056G2233 37	MX25L4006EM1I-12G 4Mb SOP-8 150 mil	
SMTCE-U402	100GARVI004W11	AOC E2270SWHN	
	CBPCFT7A1H3	CONVERSION 715G7778-M0A-000-0040	
CN601	088G 30214B YG	PHONE JACK R/A 5P BLACK H=10	
X401	093G 22 53CEC	CRYSTAL S-F-14.31818M-32-3030-2085-30	
CN406	311GF100B30ABL	FFC CONN 1.0mm 30P R/A B1002F30TDHB	
CN406	311GF100B30ABX	FFC CONN 1.0mm 30P R/A FZ21-30RVA-5ET	
CN403	311GW200A04AAX	WAFER 2.0mm 4P V/T W2015-04SVA-A	
CN701	311GW200A07AAX	WAFER 2.0mm 7P V/T W2015-07SVA-A	
CN101	388G353HE01AXH	D-SUB R/A 15P 1*1 BLUE --	
	KEPCCHB4	KEY BOARD	
LED001	081G 2 3 1H	LED GREEN GHG703B-5B	
LED001	081G 2 3 1P	LED GPG2603T/R006-35A GUANGPU	
CN001	395G820H03T510	HARNESS 3P(JC20)-4P(2008) 340mm	
CN001	395G820H03W510	HARNESS 3P(JC20)-4P(2008) 340mm	
	PLPCFB401UHD1	ADAPTER BOARD G6503	
NR901	061G 5810T	NTCR 8R 20% 3.1W SCK13084MMY501	
NR901	061G 5810X	NTCR 8R 20% 4W 8D2-14 MCS	
C901	063G107K224 TM	X2 CAP 0.22UF K 275VAC	
C901	063G107K224 UM	CAP X2 220NF 10% 275V 18*7.5*13.5 MPX-2	
C907	067G 43Z68015H	EC 68uF M 450V HX 18*32mm	
C907	067G 43Z68015K	EC 68UF 20% 450V 18*32 2000 hr	
L901	073G 174192 H	LINE FILTER 30MH MIN LCL-12012 HA	
L901	073G 174192 S	LINE FILTER 30MH MIN LCL-ET-02510	
L902	073G 253191 H	IND CHOKE 1.1uH DADON	
L902	073G 253191 S	IND CHOKE 1.1uH	
CN901	087G 501 32 CJ	AC R/A 7P 24mm	
CN901	087G 501 32 DL	AC SOCKET DIP 3PIN+2PIN GROUND	
CN901	087G 501 32 HC	AC SOCKET 3P DB-14-05 R/A	
BD901	093G 50460518	BRIDGE KBP208G-C 2A 800V KBP	
BD901	093G 50460519	BRIDGE KBP206G X0 2A 800V KBP 80A	
D904	093G 60520	DIODE SR5100-MK23 5A/100V DO-27 SECOS	
D802	093G 60520	DIODE SR5100-MK23 5A/100V DO-27 SECOS	
D802	093G 60988	SCHOTTKY SB5100-E 5A 100V DO-201AD	
D904	093G 60988	SCHOTTKY SB5100-E 5A 100V DO-201AD	
CN802	311GW200A03ABL	WAFER 2.0mm 3P R/A B2009W03HTKO	
CN802	311GW200A03ABX	WAFER 2.0mm 3P	
U901	356G0379012224	AC/DC LNK6766V eDIP-12B	
L801	373G0253214X02	CHOKE COIL 47UH 10% 2A 3LCDR2W0810-470K	
T902	380GL19P535H00	X'FMR 750UH 10% 15UH MAX EE16 BCK-1161	
T902	380GL19P535N00	X'FMR 750UH 10% 15UH MAX EE16 YUVA-216	
CN902	395GH25V07LM001000	HARNESS 7P(SCN)-7P(2008) 100mm	



CN902	395GH25V07XM001000	HARNESS 7P(SCN)-7P(2008) 100mm	
	PLEE401AHD1SMT	ADAPTER BOARD FOR SMT	
T902	S80GL19P535V00	X'FMR 750UH 10% 15UH NA	
	SMTCFT7A1H3	MAIN BOARD FOR SMT	
U601	056G 616516	AUDIO APA2176AQBTRG 0.27W TQFN3X3-16	
U502	056G 662 21	ESD PROTECT AOZ8804DI DFN-10	
U503	056G 662 21	ESD PROTECT AOZ8804DI DFN-10	
U501	056G1133 34 1	EEPROM M24C02-RMN6TP 2Kb SO-8	
U102	056G1133 34 1	EEPROM M24C02-RMN6TP 2Kb SO-8	
U402	056G2233 37	MX25L4006EM1I-12G 4Mb SOP-8 150 mil	
Q702	057G 417511	MMBT3904	
Q501	057G 417511	MMBT3904	
Q701	057G 417511	MMBT3904	
Q401	057G 417512	MMBT3906	
Q401	057G 417517	Tra LMBT3906LT1G -200mA/-40V SOT-23 LRC	
Q702	057G 417518	TRA LMBT3904LT1G 200mA/40V SOT-23 LRC	
Q501	057G 417518	TRA LMBT3904LT1G 200mA/40V SOT-23 LRC	
Q701	057G 417518	TRA LMBT3904LT1G 200mA/40V SOT-23 LRC	
Q704	057G 763 3	AO4411 SO-8 BY AOS	
R459	061G0402000 JT	RST 0402 0.05R MAX 1/16W -	
R501	061G0402000 JT	RST 0402 0.05R MAX 1/16W -	
R104	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R102	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R504	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R106	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R718	061G04021002FT	RST CHIPR 10K +-1% 1/16W TZAI YUAN	
R717	061G04021002FT	RST CHIPR 10K +-1% 1/16W TZAI YUAN	
R605	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R118	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R708	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R436	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R429	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R507	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R433	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R437	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R117	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R107	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R453	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R503	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R456	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R455	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R715	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R710	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R434	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R714	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	

R407	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R607	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R709	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R506	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R425	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R430	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R441	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R442	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R701	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R121	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R404	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R120	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R711	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R512	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R712	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R124	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R505	061G0402333 JT	RST CHIP 33K 1/16W 5% TZAI YUAN	
R702	061G0402363 JT	RST CHIP 36K 1/16W 5% TZAI YUAN	
R448	061G0402392 JT	RST CHIP R 3K9 +/-5% 1/16W TZAI YUAN	
R447	061G0402392 JT	RST CHIP R 3K9 +/-5% 1/16W TZAI YUAN	
R449	061G0402392 JT	RST CHIP R 3K9 +/-5% 1/16W TZAI YUAN	
R114	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R112	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R113	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R509	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R508	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R705	061G04024702FT	RST CHIPR 0402 47K +-1% 1/16W TZAI YUAN	
R122	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R123	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R707	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R713	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R511	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R435	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R510	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R704	061G0402512 JT	RST CHIP 5K1 1/16W 5% TZAI YUAN	
R457	061G0402561 JT	RST 0402 560R 5% 1/16W	
R446	061G04026201FT	RST 0402 6.2K 1% 1/16W SMD04026K2F	
FB106	061G0603000 JF	RST CHIPR MAX 0R05 1/10W FENGHUA	
FB105	061G0603000 JF	RST CHIPR MAX 0R05 1/10W FENGHUA	
FB104	061G0603000 JF	RST CHIPR MAX 0R05 1/10W FENGHUA	
FB104	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R406	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R614	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
FB106	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R103	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	

R105	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R116	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R101	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
FB105	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R161	061G0603101 JT	RST CHIP 100R 1/10W 5% TZAI YUAN	
R115	061G0603101 JT	RST CHIP 100R 1/10W 5% TZAI YUAN	
R162	061G0603101 JT	RST CHIP 100R 1/10W 5% TZAI YUAN	
R160	061G0603101 JT	RST CHIP 100R 1/10W 5% TZAI YUAN	
R159	061G0603101 JT	RST CHIP 100R 1/10W 5% TZAI YUAN	
R609	061G0603102 JT	RST CHIP 1K 1/10W 5% TZAI YUAN	
R608	061G0603102 JT	RST CHIP 1K 1/10W 5% TZAI YUAN	
R706	061G06031022FT	RST CHIPR 10K2 +-1% 1/10W TZAI YUAN	
R601	061G06032000FT	RST CHIP 200R 1/10W 1%	
R602	061G06032000FT	RST CHIP 200R 1/10W 1%	
R163	061G0603201 JT	RST CHIP 200R 1/10W 5% TZAI YUAN	
R165	061G0603201 JT	RST CHIP 200R 1/10W 5% TZAI YUAN	
R164	061G0603201 JT	RST CHIP 200R 1/10W 5% TZAI YUAN	
R610	061G0603201 JT	RST CHIP 200R 1/10W 5% TZAI YUAN	
R611	061G0603201 JT	RST CHIP 200R 1/10W 5% TZAI YUAN	
R419	061G0603220 JT	RST CHIP 22R 1/10W 5% TZAI YUAN	
R410	061G06033300FT	RST CHIPR 330R +-1% 1/10W TZAI YUAN	
R612	061G0805000 JT	RST 0805 0.05R MAX 1/8W	
R613	061G0805000 JT	RST 0805 0.05R MAX 1/8W	
R460	061G1206301 JT	RST CHIPR 300 OHM +-5% 1/4W TZAI YUAN	
R108	061G1206750 JT	RST CHIPR 75 OHM +-5% 1/4W TZAI YUAN	
R109	061G1206750 JT	RST CHIPR 75 OHM +-5% 1/4W TZAI YUAN	
R110	061G1206750 JT	RST CHIPR 75 OHM +-5% 1/4W TZAI YUAN	
C608	065G040210232K Y	CAP 0402 1NF 10% 50V X7R CC0402KRX7R9BB	
C604	065G040210232K Y	CAP 0402 1NF 10% 50V X7R CC0402KRX7R9BB	
C603	065G040210232K Y	CAP 0402 1NF 10% 50V X7R CC0402KRX7R9BB	
C609	065G040210232K Y	CAP 0402 1NF 10% 50V X7R CC0402KRX7R9BB	
C407	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C409	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C610	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C503	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C402	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C712	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C411	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C704	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C724	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C410	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C416	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C423	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C431	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C719	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	

C408	065G040210412K	Y	CAP 0402 100NF 10% 16V X7R	
C714	065G040210412K	Y	CAP 0402 100NF 10% 16V X7R	
C715	065G040210412K	Y	CAP 0402 100NF 10% 16V X7R	
C427	065G040210412K	Y	CAP 0402 100NF 10% 16V X7R	
C614	065G040210412K	Y	CAP 0402 100NF 10% 16V X7R	
C401	065G040210412K	Y	CAP 0402 100NF 10% 16V X7R	
C708	065G040215232K	Y	CAP CHIP 0402 1.5NF 50V X7R	
C709	065G040222031J	Y	CAP CHIP 0402 22P 50V NP0 +/-5%	
C117	065G040222031J	Y	CAP CHIP 0402 22P 50V NP0 +/-5%	
C118	065G040222031J	Y	CAP CHIP 0402 22P 50V NP0 +/-5%	
C104	065G040222322K	Y	CAP 0402 22NF 10% 25V X7R	
C403	065G040222415K	Y	CAP CHIP 0402 220nF 16V X5R	
C121	065G040222415K	Y	CAP CHIP 0402 220nF 16V X5R	
C505	065G040222415K	Y	CAP CHIP 0402 220nF 16V X5R	
C111	065G040247312K	Y	CAP 0402 47NF 10% 16V X7R	
C115	065G040247312K	Y	CAP 0402 47NF 10% 16V X7R	
C102	065G040247312K	Y	CAP 0402 47NF 10% 16V X7R	
C114	065G040247312K	Y	CAP 0402 47NF 10% 16V X7R	
C707	065G040247312K	Y	CAP 0402 47NF 10% 16V X7R	
C103	065G040247312K	Y	CAP 0402 47NF 10% 16V X7R	
C101	065G040247312K	Y	CAP 0402 47NF 10% 16V X7R	
C706	065G060310332K	Y	CAP CHIP 0603 10N 50V X7R +/-10%	
C703	065G060310432K	Y	CAP 0603 100NF 10% 50V X7R	
C607	065G060310512K	A	CAP 0603 1UF 10% 16V X7R	
C413	065G060310512K	A	CAP 0603 1UF 10% 16V X7R	
C725	065G060310512K	A	CAP 0603 1UF 10% 16V X7R	
C606	065G060310512K	A	CAP 0603 1UF 10% 16V X7R	
C718	065G060310605M	A	MLCC 0603 10UF 6.3V X5R +-20%	
C613	065G060322515K	A	0603 2.2UF K 16V X5R	
C612	065G060322515K	A	0603 2.2UF K 16V X5R	
C425	065G060333031J	Y	CAP CHIP 0603 33P 50V NP0 +/-5%	
C422	065G060333031J	Y	CAP CHIP 0603 33P 50V NP0 +/-5%	
C611	065G0805106A5K	A	CAP 0805 10UF 10% 10V X5R	
C415	065G0805106A5K	A	CAP 0805 10UF 10% 10V X5R	
C412	065G0805106A5K	A	CAP 0805 10UF 10% 10V X5R	
C615	065G0805106A5K	A	CAP 0805 10UF 10% 10V X5R	
C424	065G0805106A5K	A	CAP 0805 10UF 10% 10V X5R	
C432	065G0805106A5K	A	CAP 0805 10UF 10% 10V X5R	
C720	065G080522512K	A	CAP 0805 2.2UF 10% 16V X7R	
C716	065G1206226A5K	A	1206 22UF K 10V X5R	
C430	067G311R2213CT		EC SMD 220UF 20% 16V 6.3*7.7 -	
FB403	071G 56121 TA		CHIP BEAD 0805 120R/3A HCB2012KF-121T30	
FB406	071G 56121 TA		CHIP BEAD 0805 120R/3A HCB2012KF-121T30	
FB401	071G 56121 TA		CHIP BEAD 0805 120R/3A HCB2012KF-121T30	
FB402	071G 56121 TA		CHIP BEAD 0805 120R/3A HCB2012KF-121T30	

FB404	071G 56121 TA	CHIP BEAD 0805 120R/3A HCB2012KF-121T30	
FB405	071G 56121 TA	CHIP BEAD 0805 120R/3A HCB2012KF-121T30	
FB411	071G 56K121 TA	HIP BEAD 120R/6000mA HCB2012KF-121T60	
FB604	071G 59C600 TA	CHIP BEAD 0603 60R 25% 600mA	
FB602	071G 59C600 TA	CHIP BEAD 0603 60R 25% 600mA	
FB601	071G 59C600 TA	CHIP BEAD 0603 60R 25% 600mA	
FB603	071G 59C600 TA	CHIP BEAD 0603 60R 25% 600mA	
FB101	071G 59G301 TA	CHIP BEAD 300OHM 200mA FCM1608KF-301T02	
FB501	071G 59G301 TA	CHIP BEAD 300OHM 200mA FCM1608KF-301T02	
D501	093G 60505	SCHOTTKY BAT54C 0.2A 30V SOT-23	
D501	093G 60518SEM	SCHOTTKY BAT54C-HAF 0.2A 30V SOT-23	
D105	093G 6433S	switching diode BAV99	
D106	093G 6433S	switching diode BAV99	
D107	093G 6433S	switching diode BAV99	
ZD110	093G 39GA01 T	RLZ5.6B	
ZD101	093G 39GA01 T	RLZ5.6B	
ZD502	093G 39GA01 T	RLZ5.6B	
ZD111	093G 39GA01 T	RLZ5.6B	
ZD108	093G 39GA01 T	RLZ5.6B	
ZD109	093G 39GA01 T	RLZ5.6B	
ZD109	093G 39S940 T	ZENER GLZ5.6B 5.6 0.5 MINI-MELF LL-34	
ZD110	093G 39S940 T	ZENER GLZ5.6B 5.6 0.5 MINI-MELF LL-34	
ZD108	093G 39S940 T	ZENER GLZ5.6B 5.6 0.5 MINI-MELF LL-34	
ZD111	093G 39S940 T	ZENER GLZ5.6B 5.6 0.5 MINI-MELF LL-34	
ZD101	093G 39S940 T	ZENER GLZ5.6B 5.6 0.5 MINI-MELF LL-34	
ZD502	093G 39S940 T	ZENER GLZ5.6B 5.6 0.5 MINI-MELF LL-34	
U401	356G0562128D43	SCALER RTD2483BR-CG LQFP-128	
U702	356G056351400C00HF	LDO AZ1117CH- 3.3TRG1 1.35A 3.3V SOT-223	
U504	356G066205200C	ESD PROTECT AZC398-04S.R7G(cu) SOT-23-6	
U704	356GD563005208	DC/DC SY8089AAAC 2A 2.7-5.5V SOT23-5	
U701	356GD563008212	DC/DC RT8290AGSP 3A 0.925V~20V SOP-8(Ex	
C702	365G120610635K000M	CAP 1206 10uF 10% 50V X5R GRM31CR61H106K	
C711	367G311R1014CT	EC 100uF 20% 25V 6.3*7.7 2000 hr -- ZV1	
C701	367G311X151GLT	EC SMD 150UF 20% 35V 10*7.7 2000 hr 450	
L703	373G253S256D00	SMD CHOKE 2.2uH 30% 2.95A 0.030R SWPG40	
L701	373G253S357D00	SMD CHOKE 10uH 20% 4A 0.042ohm SWPG8040	
CN501	388G340CJ05AAT	HDMI R/A 19P 1*1 BLACK 6.2mm	
D101	393G006404200P00HF	HF BAV70_R1_00001 0.5A 100V SOT-23	
ZD502	093G 39GA01 T	RLZ5.6B	
ZD111	093G 39GA01 T	RLZ5.6B	
ZD108	093G 39GA01 T	RLZ5.6B	
ZD109	093G 39GA01 T	RLZ5.6B	
ZD109	093G 39S940 T	ZENER GLZ5.6B 5.6 0.5 MINI-MELF LL-34	
ZD110	093G 39S940 T	ZENER GLZ5.6B 5.6 0.5 MINI-MELF LL-34	
ZD108	093G 39S940 T	ZENER GLZ5.6B 5.6 0.5 MINI-MELF LL-34	

ZD111	093G 39S940 T	ZENER GLZ5.6B 5.6 0.5 MINI-MELF LL-34	
ZD101	093G 39S940 T	ZENER GLZ5.6B 5.6 0.5 MINI-MELF LL-34	
ZD502	093G 39S940 T	ZENER GLZ5.6B 5.6 0.5 MINI-MELF LL-34	
U401	356G0562128D43	SCALER RTD2483BR-CG LQFP-128	
U702	356G056351400C00HF	LDO AZ1117CH- 3.3TRG1 1.35A 3.3V SOT-223	
U504	356G066205200C	ESD PROTECT AZC398-04S.R7G(cu) SOT-23-6	
U704	356GD563005208	DC/DC SY8089AAAC 2A 2.7-5.5V SOT23-5	
U701	356GD563008212	DC/DC RT8290AGSP 3A 0.925V~20V SOP-8(Ex	
C702	365G120610635K000M	CAP 1206 10uF 10% 50V X5R GRM31CR61H106K	
C711	367G311R1014CT	EC 100uF 20% 25V 6.3*7.7 2000 hr -- ZV1	
C701	367G311X151GLT	EC SMD 150UF 20% 35V 10*7.7 2000 hr 450	
L703	373G253S256D00	SMD CHOKE 2.2uH 30% 2.95A 0.030R SWPG40	
L701	373G253S357D00	SMD CHOKE 10uH 20% 4A 0.042ohm SWPG8040	
CN501	388G340CJ05AAT	HDMI R/A 19P 1*1 BLACK 6.2mm	
D101	393G006404200P00HF	HF BAV70_R1_00001 0.5A 100V SOT-23	
D106	393G006433P0HF	HF BAV99_R1_00001 0.5A 100V SOT-23	
D105	393G006433P0HF	HF BAV99_R1_00001 0.5A 100V SOT-23	
D107	393G006433P0HF	HF BAV99_R1_00001 0.5A 100V SOT-23	
E715	715G7778M0B000004F	MAIN PCB FR4 DS 95*80*1.2mm	
	PLEE401AHD1SMT	ADAPTER BOARD FOR SMT	
R833	061G0603000 JF	RST CHIPR MAX 0R05 1/10W FENGHUA	
R831	061G0603000 JF	RST CHIPR MAX 0R05 1/10W FENGHUA	
R832	061G0603000 JF	RST CHIPR MAX 0R05 1/10W FENGHUA	
R910	061G06031003FF	RST CHIPR 100KOHM +-1% 1/10W FENGHUA	
R822	061G0603105 JF	RST CHIPR 1M OHM +-5% 1/10W FENGHUA	
R816	061G06031102FY	RST CHIPR 11 KOHM +-1% 1/10W	
R911	061G06031502FF	RST CHIPR 15KOHM +-1% 1/10W FENGHUA	
R810	061G06034302FF	RST CHIPR 43KOHM +-1% 1/10W FENGHUA	
R811	061G06034302FF	RST CHIPR 43KOHM +-1% 1/10W FENGHUA	
R905	061G06035602FY	RST CHIPR 56KOHM +-1% 1/10W YAGEO	
R912	061G06036801FY	RST CHIP 6K8 1/10W 1%	
R806	061G0805102 JY	RST CHIPR 1K OHM 5% 1/8W YAGEO	
R819	061G0805103 JF	RST CHIPR 10K OHM +-5% 1/8W FENGHUA	
R818	061G0805103 JF	RST CHIPR 10K OHM +-5% 1/8W FENGHUA	
R823	061G08051503FF	ST CHIPR 150KOHM +-1% 1/8W FENGHUA	
R817	061G0805221 JT	RST CHIP 220R 1/8W 5% TZAI YUAN	
R803	061G0805304 JY	RST CHIPR 300K +-5% 1/8W YAGEO	
R802	061G0805304 JY	RST CHIPR 300K +-5% 1/8W YAGEO	
R809	061G08053303FT	RST CHIP 330K 1% 1/8W	
R805	061G1206000 JT	RST CHIPR MAX0R05 1/4W TZAI YUAN	
R899	061G1206000 JT	RST CHIPR MAX0R05 1/4W TZAI YUAN	
JR805	061G1206000 JT	RST CHIPR MAX0R05 1/4W TZAI YUAN	
JR806	061G1206000 JT	RST CHIPR MAX0R05 1/4W TZAI YUAN	
JR803	061G1206000 JT	RST CHIPR MAX0R05 1/4W TZAI YUAN	
R814	061G1206100 JF	RST CHIPR 10 OHM +-5% 1/4W FENGHUA	

R807	061G1206100 JF	RST CHIPR 10 OHM +-5% 1/4W FENGHUA	
R804	061G1206101 JF	RST CHIPR 100 OHM +-5% 1/4W FENGHUA	
R915	061G1206103 JF	RST CHIPR 10KOHM +-5% 1/4W FENGHUA	
R801	061G1206103 JF	RST CHIPR 10KOHM +-5% 1/4W FENGHUA	
R908	061G1206105 JF	RST CHIPR 1 MOHM +-5% 1/4W FENGHUA	
R907	061G1206105 JF	RST CHIPR 1 MOHM +-5% 1/4W FENGHUA	
R909	061G1206105 JF	RST CHIPR 1 MOHM +-5% 1/4W FENGHUA	
R916	061G1206121 JF	RST CHIPR 120 OHM+-5% 1/4W FENGHUA	
R917	061G1206121 JF	RST CHIPR 120 OHM+-5% 1/4W FENGHUA	
R918	061G1206121 JF	RST CHIPR 120 OHM+-5% 1/4W FENGHUA	
R919	061G1206121 JF	RST CHIPR 120 OHM+-5% 1/4W FENGHUA	
R906	061G1206123 JF	RST CHIPR 12KOHM +-5% 1/4W FENGHUA	
R820	061G12061503FY	0201CHIPR 150KOHM +-1% 1/4W YAGEO	
R813	061G1206308 JF	RST CHIPR 0.3 OHM +-5% 1/4W FENGHUA	
R812	061G1206308 JF	RST CHIPR 0.3 OHM +-5% 1/4W FENGHUA	
R913	061G1206510 JF	RST CHIPR 51 OHM +-5% 1/4W FENGHUA	
C912	065G060310131J Y	CAP CHIP 0603 100P 50V NP0 +/-5%	
C919	065G060310232K F	CAP CHIP 0603 1NF K 50V X7R	
C914	065G060310432K F	CAP CHIP 0603 0.1UF K 50V X7R	
C918	065G060322031J Y	CAP CHIP 0603 22P 50V NP0 +/-5%	
C812	065G080510131J F	CAP CHIP 0805 100PF J 50V NPO	
C818	065G080510231J F	CAP 0805 1NF 5% 50V NPO	
C808	065G080510232K F	CAP 0805 1000PF 10% 50V X7R	
C817	065G080510232K F	CAP 0805 1000PF 10% 50V X7R	
C802	065G080510332K F	CAP 0805 10NF K 50V X7R	
C908	065G080510432K A	CAP CHIP 0805 0.1UF K 50V X7R	
C811	065G080510432K Y	CAP CHIP 0805 100N 50V X7R +/-10%	
C810	065G080510432K Y	CAP CHIP 0805 100N 50V X7R +/-10%	
C806	065G080522432K F	CAP 0805 220NF 10% 50V X7R	
C805	065G080522522K M	CAP 0805 2.2UF 10% 25V X7R	
C813	065G080533131J F	CAP CHIP 0805 330PF J 50V NPO	
C807	065G080547432K F	0805 0.47UF K 50V X7R	
C911	065G080547525K M	CAP 0805 4.7UF 10% 25V X5R	
C915	065G120610272K Y	CAP 1206 1NF 10% 500V X7R	
C804	065G120610462K M	SONY-Assign CAP 1206 100NF 10% 250V X7R	
U801	356G0700016050	LED DRIVER OZ9998MGN SOP-16	
Q801	357G0600100016	MOSFET MTBA5N10J3 10A 100V TO252	
Q801	357G0600974	MOSFET EMBA2N10A 14A 100V 50W TO-252	
	AIKEPCDHA8	KEY BOARD FOR AI	
SW001	077G603S 4 HJ	TACT SW 2P 5 150g TSTAYB41	
E715	715G5985K01000001M	KEY PCB FR1 SS 35*15*1.6mm	
	PLEC301AHD1AI	ADAPTER BOARD FOR AI	
C903	065G306M1023WR	CAP Y1 1NF 20% 250V Y5U	
C913	065G306M22233R	CAP Y1 2.2NF 20% 250V Y5U	
C906	067G215D4714KT	EC 470UF 20% 25V 10*16 ED	

C910	067G215Y1007KT	KY50VB10M-TP5 5*11.5 EG	
F901	084G 56 2 B	FUSE 2.5A 250V SS-5-2.5A-AP	
D902	093G 60964	RECTIFIER PS1010R-AY-100A3 1A 1000V DO-	
C920	065G 1K470 2T6921	CAP CER 47pF K 1KV	
C902	065G306M1023WR	CAP Y1 1NF 20% 250V Y5U	
FB901	071G 55 29	FERRITE BEAD	
F901	084G 56 2W	FUSE 2.5A 250V	
D902	093G110050152T	DIODE PR1007 1A/1000V 500ns DO-41	
C809	367G515X479JAT	EC 4.7UF 20% 100V -- -- -- ERF1KM4R7G13	
E715	715G6503P03011001C	PWR PCB FR1 SS 92*122*1.6MM	
C904	367G415X6814AT	EC 680uf 20% 25V 10x20 RS 4000 hr ERS1E	
C801	367G315X2214AT	EC 220UF 20% 25V 8*12 RF	
R904	361G152M10452T00TZ	RST MOF 100K 5% 2W MOF2WS100KJT52	
C909	065G 2K471 2T6921	470pF 2KV Y5P	
D903	093G 5212T52T	DIODE 1N4007-AO DO-41	
D903	093G 52917	RECTIFIER 1N4007 1A 1000V DO-41	