

Service
Service
Service



Service Manual

Horizontal Frequency
30 - 60kHz

Table of Contents

Description	Page	Description	Page
Table of Contents.....	1	6.Schematic.....	29
Revision List.....	2	6.1.Main Board.....	29
Important Safety Notice.....	3	6.2.Power Board.....	34
1.Monitor Specification.....	4	7.PCB Layout.....	37
2.LCD Monitor Description.....	5	7.1.Main Board.....	37
3.Operation Instruction.....	6	7.2.Power Board.....	38
3.1.General Instructions.....	6	7.3.Key Board.....	41
3.2.Control Buttons and Connections.....	6	7.4.USB Board.....	41
3.3.OSD Setting.....	8	8.Maintainability.....	42
4.Input/Output Specification.....	23	8.1.Equipments and Tools Requirement.....	42
4.1.Input Signal Connector.....	23	8.2.Trouble Shooting.....	43
4.2.Preset Display Modes.....	23	9.White-Balance,Luminance Adjustment.....	65
4.3.Panel Specification.....	24	10.Monitor Exploded View.....	67
5.Block Diagram.....	27	11.BOM List.....	68
5.1.Main Board.....	27		
5.2.Power Board.....	28		

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

[illegible]

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.)

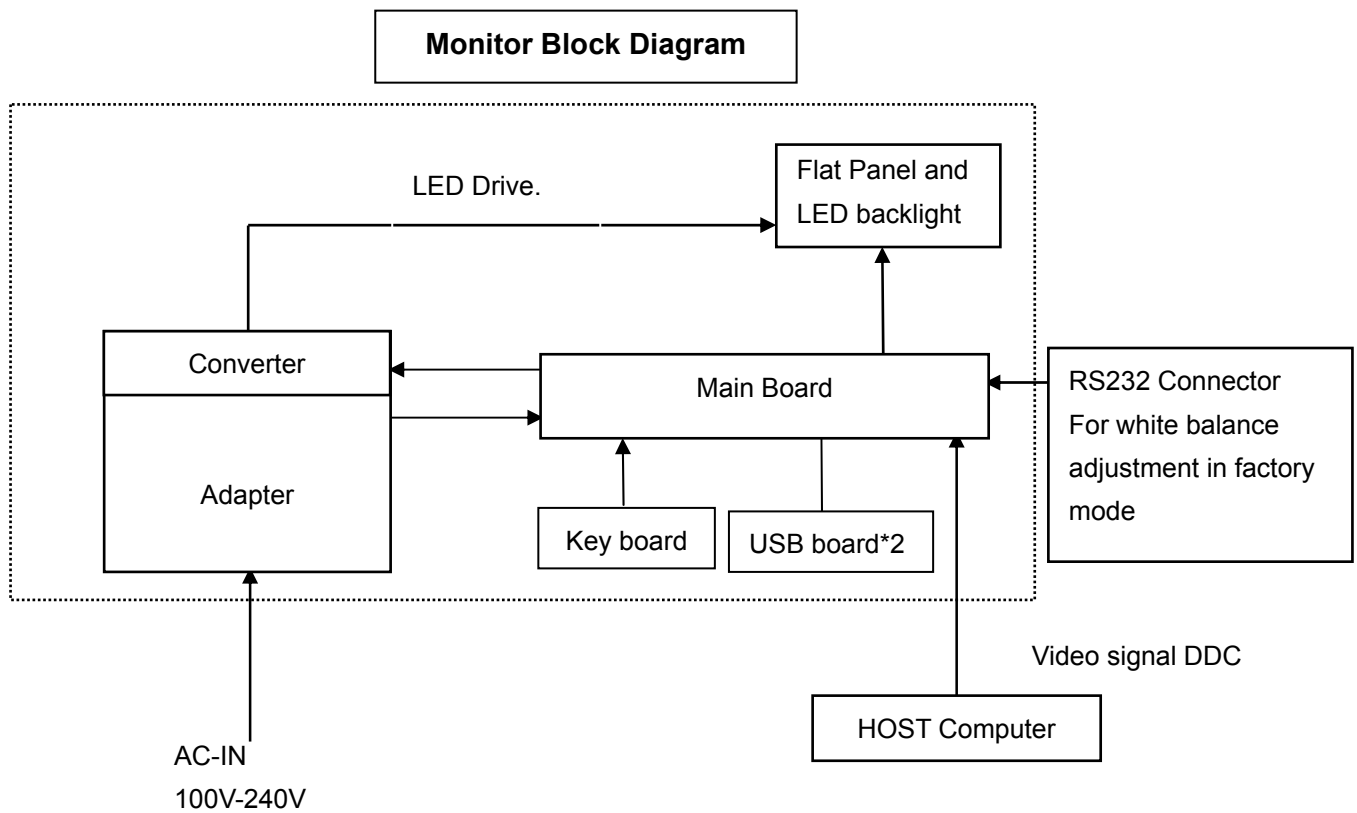
1. Monitor Specifications

Panel	Model name	e941Pwa	
	Driving system	TFT Color LED	
	Viewable Image Size	47.0 cm diagonal	
	Pixel pitch	0.3mm(H) x 0.3mm(V)	
	Video	R, G, B Analog Interface & Digital interface	
	Separate Sync.	H/V TTL	
	Display Color	16.7M Colors	
	Dot Clock	85.5 MHz	
Resolution	Horizontal scan range	30 kHz - 60 kHz	
	Horizontal scan Size(Maximum)	409.8mm	
	Vertical scan range	55 Hz - 75 Hz	
	Vertical scan Size(Maximum)	230.4mm	
	Optimal preset resolution	1366 x 768 (60 Hz)	
	Plug & Play	VESA DDC2B/CI	
	Input Connector	D-Sub 15pin & DVI 24pin	
	Input Video Signal	Analog: 0.7Vp-p(standard), 75 OHM, Positive (TMDS)	
	Power Source	100-240V~, 50/60Hz	
	Power Consumption	Active < 20 W	
		Standby < 0.1 W	
	USB Downstream port (A type)	To USB device, loading < 100mA	
	off timer	0~24hours	Select timing to turn off the monitor.
Physical Characteristics	Connector Type	15-pin Mini D-Sub & 24-pin DVI	
	Signal Cable Type	Detachable	
	Dimensions & Weight:		
	Height (with base)	430 mm	
	Width	457.9 mm	
	Depth	280 mm	
	Weight (monitor only)	3.93 kg	
Environmental	Temperature:		
	Operating	0°C to 40° C	
	Non-Operating	-25°C to 55°C	
	Humidity:		
	Operating	10% to 85% (non-condensing)	
	Non-Operating	5% to 93% (non-condensing)	
	Altitude:		
	Operating	0~ 3,658m (0~ 12,000 ft)	
	Non-Operating	0~ 12,192m (0~ 40,000 ft)	

2.LCD Monitor Description

The LCD monitor will contain a main board, an adapter board, a converter board, two USB boards and a key board which house the flat panel control logic, brightness control logic and DDC.

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



3. Operating Instructions

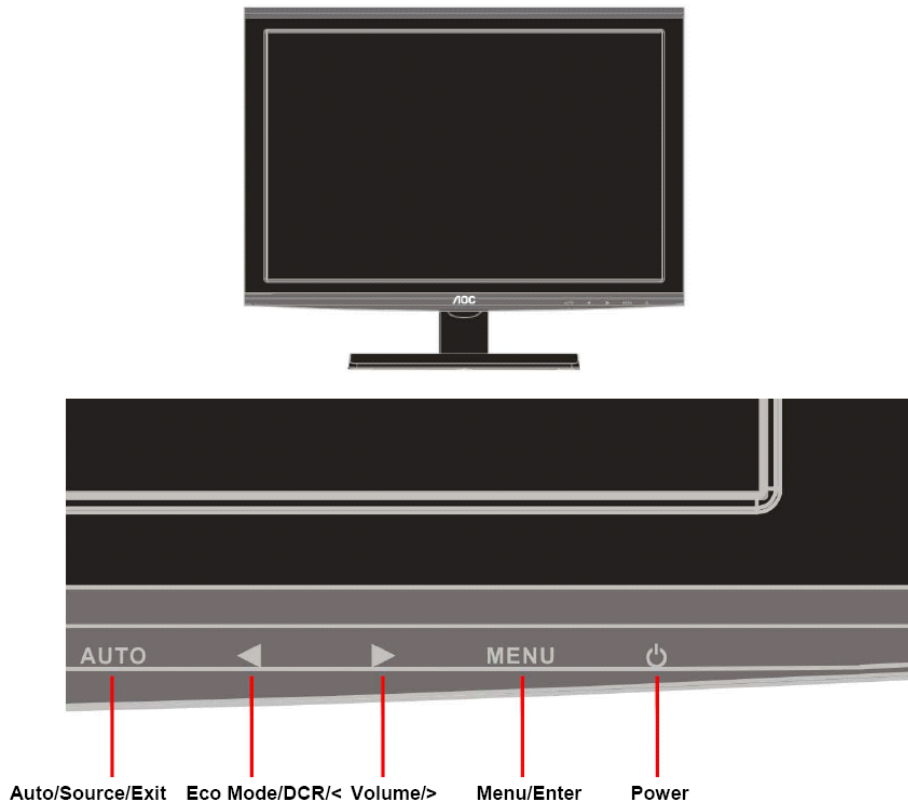
3.1 General Instructions

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

Press the Power button to turn on/off the monitor.

Eco Mode /DCR/ <-

Press the Eco key continuously to select the Eco mode/DCR of brightness when there is no OSD (Eco mode hot key may not be available in all models).

Volume / >

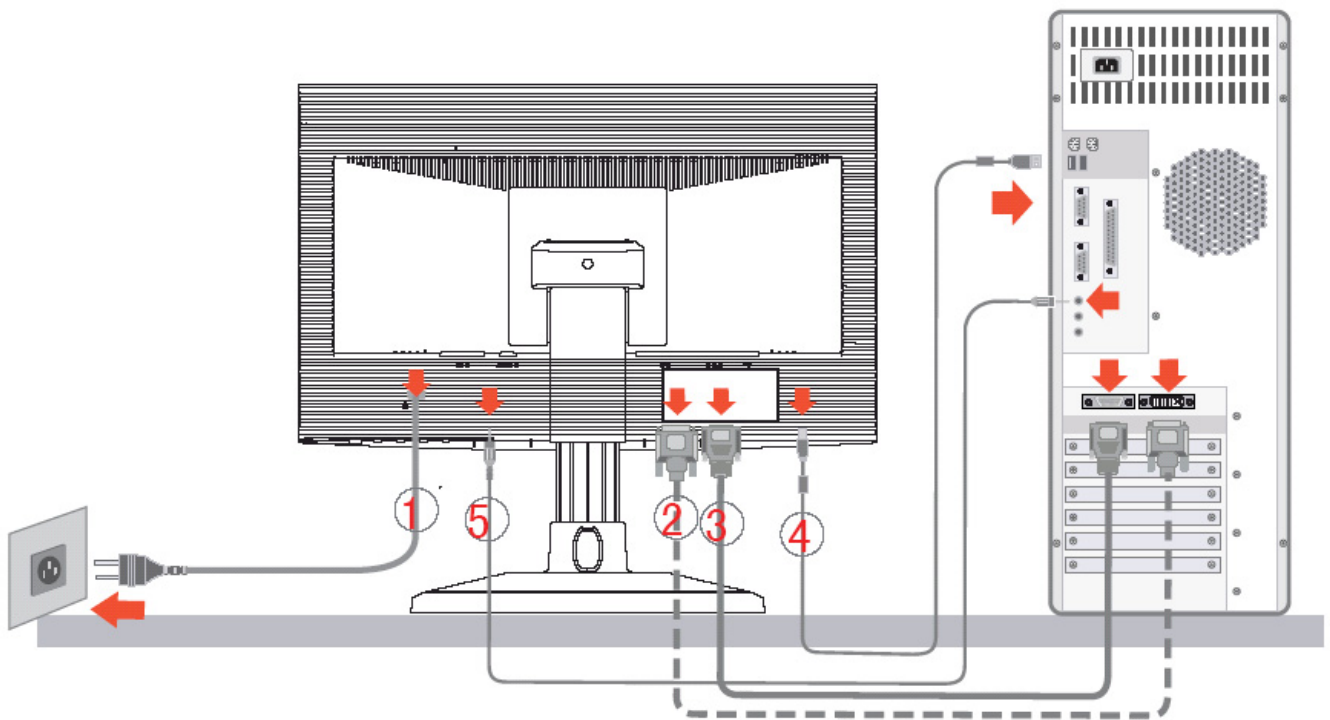
When there is no OSD, press Volume > to active volume adjustment bar, press < or > to adjust volume.

Auto / Exit

When the OSD is closed, press Auto button 2S will be auto configure hot key function .

Source hot key

When the OSD is closed, press Source button will be Source hot key function. Press Source button continuously to select the input source showed in the message bar , press Menu/Enter button to change to the source selected.



1. Power
2. DVI
3. D-SUB
4. USB
5. Audio

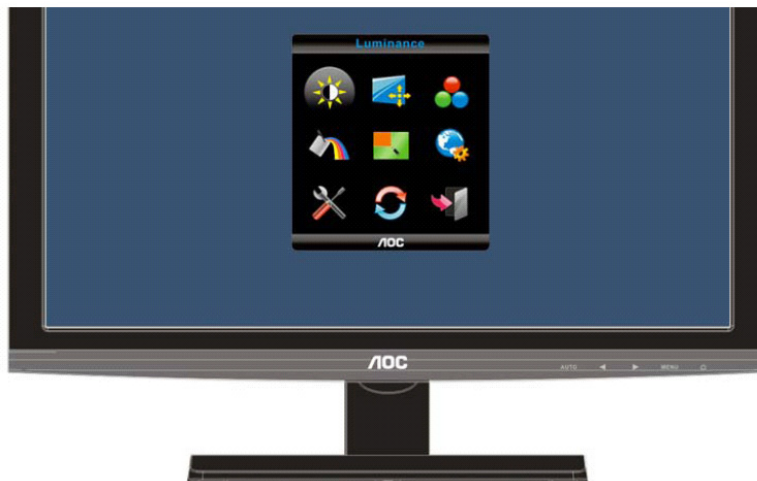
To protect equipment, always turn off the PC and LCD monitor before connecting.

- 1 Connect the power cable to the AC port on the back of the monitor.
- 2 Connect one end of the DVI cable to the back of the monitor and connect the other end to the computer's DVI port.
- 3 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.
- 4 Connect one end of the USB cable to the back of the monitor and connect the other end to the computer's USB port.
- 6 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.



- 1) Press the **MENU-button** to activate the OSD window.
- 2) Press **< or >** to navigate through the functions. Once the desired function is highlighted, press the **MENU-button** to activate it. Press **< or >** to navigate through the sub-menu functions. Once the desired function is highlighted, press **MENU-button** to activate it.
- 3) Press **< or >** to change the settings of the selected function. Press **AUTO** to exit. If you want to adjust any other function, repeat steps 2-3.
- 4) OSD Lock Function: To lock the OSD, press and hold the **MENU button** while the monitor is off and then press **power button** to turn the monitor on. To un-lock the OSD - press and hold the **MENU button** while the monitor is off and then press **power button** to turn the monitor on.

Notes:

- 1) If the product has only one signal input, the item of "Input Select" is disable to adjust.
- 2) If the product screen size is 4:3 or input signal resolution is wide format, the item of "Image Ratio" is disable to adjust.
- 3) One of DCR, Color Boost, and Picture Boost functions is active, the other two function is turned off accordingly.

Luminance

1



Press **MENU** (Menu) to display menu.

2



Press **<** or **>** to select  (Luminance), and press **MENU** to enter.

3



Press **<** or **>** to select submenu, press **MENU** to enter, and press **<** or **>** to adjust.

4

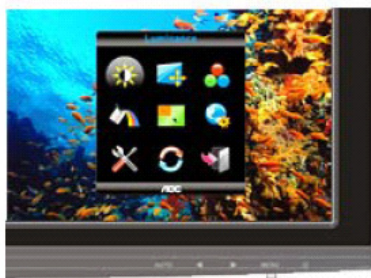


Press **AUTO** to exit.

	Brightness	0-100		Backlight Adjustment
	Contrast	0-100		Contrast from Digital-register.
	Eco mode	Standard		Standard Mode
		Text		Text Mode
		Internet		Internet Mode
		Game		Game Mode
		Movie		Movie Mode
		Sports		Sports Mode
	Gamma	Gamma1		Adjust to Gamma1
		Gamma2		Adjust to Gamma 2
		Gamma3		Adjust to Gamma 3
	DCR	Off		Disable dynamic contrast ratio
		On		Enable dynamic contrast ratio

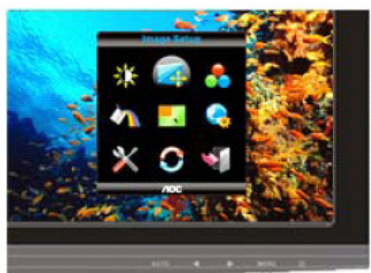
Image Setup

1



Press **MENU** (Menu) to display menu.

2



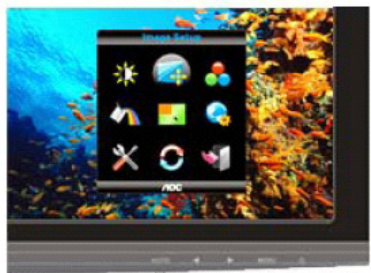
Press **<** or **>** to select  (Image Setup), and press **MENU** to enter.

3



Press **<** or **>** to select submenu, press **MENU** to enter, and press **<** or **>** to adjust.

4

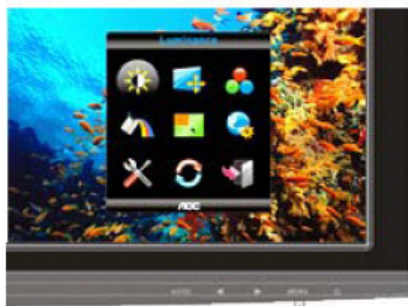


Press **AUTO** to exit.

	Clock	0-100	Adjust picture Clock to reduce Vertical-Line noise.
	Phase	0-100	Adjust Picture Phase to reduce Horizontal-Line noise
	H.Position	0-100	Adjust the horizontal position of the picture.
	V.Position	0-100	Adjust the vertical position of the picture.

Color Temperature

1



Press **MENU** (Menu) to display menu.

2



Press **<** or **>** to select  (Color Temperature), and press **MENU** to enter.

3



Press **<** or **>** to select submenu, press **MENU** to enter, and press **<** or **>** to adjust.

4



Press **AUTO** to exit.

	Warm		Recall Warm Color Temperature from EEPROM.
	Normal		Recall Normal Color Temperature from EEPROM.
	Cool		Recall Cool Color Temperature from EEPROM.
	sRGB		Recall SRGB Color Temperature from EEPROM.
	User	Red	Red Gain from Digital-register
		Green	Green Gain Digital-register.
		Blue	Blue Gain from Digital-register

Color Boost

1



Press **MENU** (Menu) to display menu.

2



Press **<** or **>** to select  (Color Boost), and press **MENU** to enter.

3



Press **<** or **>** to select submenu, press **MENU** to enter, and press **<** or **>** to adjust.

4

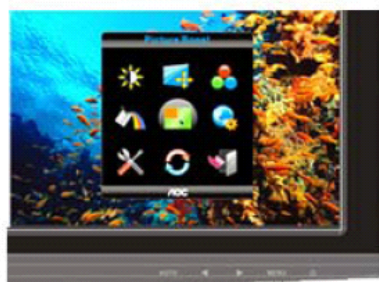


Press **AUTO** to exit.

	Full Enhance	on or off	Disable or Enable Full Enhance Mode
	Nature Skin	on or off	Disable or Enable Nature Skin Mode
	Green Field	on or off	Disable or Enable Green Field Mode
	Sky-blue	on or off	Disable or Enable Sky-blue Mode
	AutoDetect	on or off	Disable or Enable AutoDetect Mode
	Demo	on or off	Disable or Enable Demo

Picture Boost

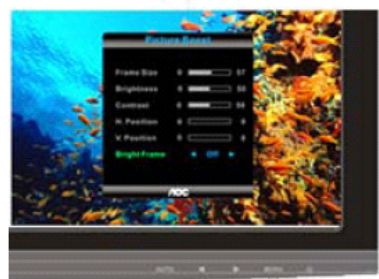
1



Press **MENU** (Menu) to display MENU.

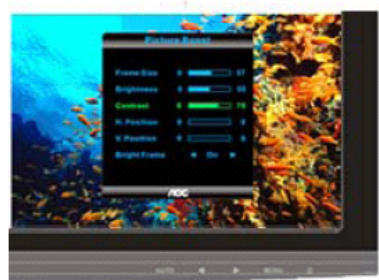
Press **<** or **>** to select  (Picture Boost); and press **MENU** to enter.

2



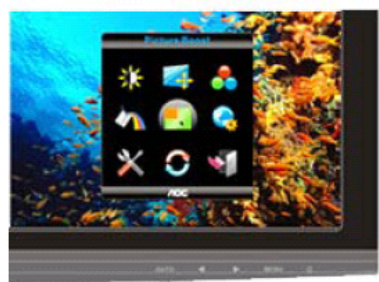
Press **<** or **>** to select Bright Frame.
Select "on" to activate Picture Boost.

3



Press **<** or **>** to select submenu, press **MENU** to enter, and press **<** or **>** to adjust.

4

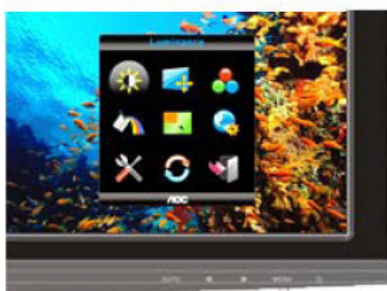


Press **AUTO** to exit.

	Frame Size	14-100	Adjust Frame Size
	Brightness	0-100	Adjust Frame Brightness
	Contrast	0-100	Adjust Frame Contrast
	H. position	0-100	Adjust Frame horizontal Position
	V.position	0-100	Adjust Frame vertical Position
	Bright Frame	on or off	Disable or Enable Bright Frame

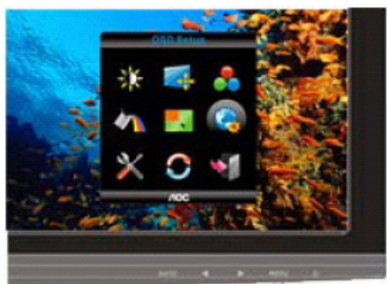
OSD Setup

1



Press **MENU** (Menu) to display menu.

2



Press **<** or **>** to select  (OSD Setup), and press **MENU** to enter.

3



Press **<** or **>** to select submenu, press **MENU** to enter, and press **<** or **>** to adjust.

4

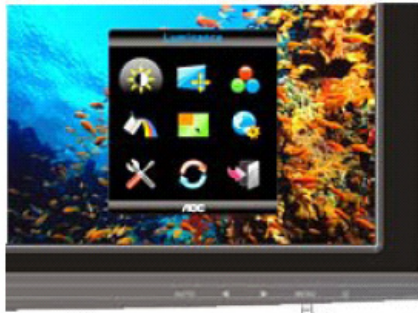


Press **AUTO** to exit.

	OSD Setup		
	H.Position	0-100	Adjust the horizontal position of OSD
	V.Position	0-100	Adjust the vertical position of OSD
	Timeout	5-120	Adjust the OSD Timeout
	Transparency	0-100	Adjust the transparency of OSD
	Language		Select the OSD language

Extra

1



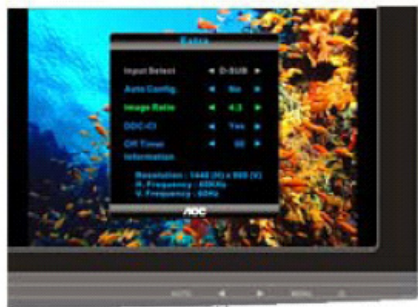
Press **MENU** (Menu) to display menu.

2



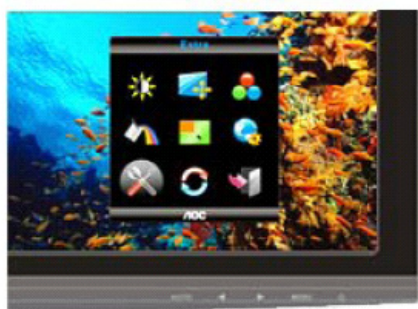
Press **<** or **>** to select  (OSD Setup), and press **MENU** to enter.

3



Press **<** or **>** to select submenu, press **MENU** to enter, and press **<** or **>** to adjust.

4



Press **AUTO** to exit.

	Input Select	Auto	Select to Auto Detect input signal
		Analog	Select Analog Signal Source as Input
		DVI	Select Analog Signal Source as Input
	Auto Config	yes or no	Auto adjust the picture to default
	Image Ratio	wide or 4:3	Select wide or 4:3 format for display
	DDC-CI	yes or no	Turn ON/OFF DDC-CI Support
	Off Timer	0~24hours	Select timing to turn off the monitor.
	Information		Show the information of the main image and sub-image source

Reset

1



Press **MENU** (Menu) to display menu.

2



Press **<** or **>** to select  (Reset), and press **MENU** to enter.

3



Press **<** or **>** to select YES or NO.

4



Press **AUTO** to exit.

	Reset	yes or no	Reset the menu to default
---	-------	-----------	---------------------------

Exit

1



Press **MENU** (Menu) to display menu.

2



Press **<** or **>** to select  (Exit);
and press **MENU** to exit.

	Exit		Exit the main OSD
--	------	--	-------------------

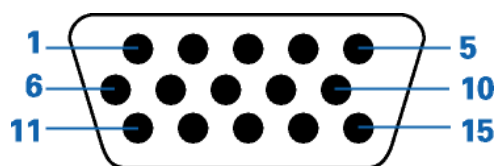
LED Indicators

Status	LED Color	
Full Power Mode	Green or Blue	
Active-off Mode	Orange or red	

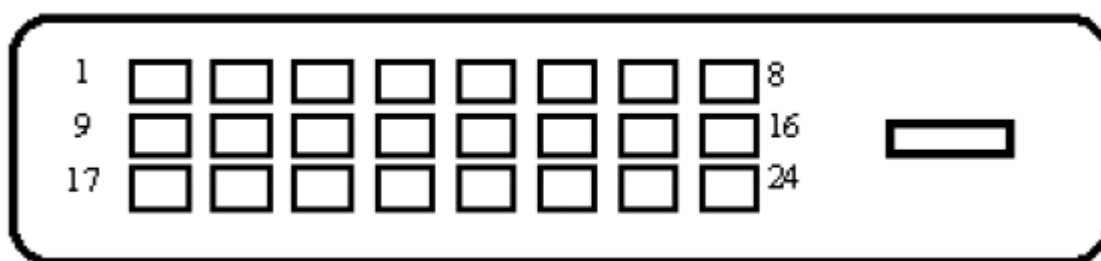
4. Input/Output Specification

4.1 Input Signal Connector

Analog connector



Pin Number	15-Pin Side of the Signal Cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	N.C.
5	Detect Cable
6	GND-R
7	GND-G
8	GND-B
9	+5V
10	Ground
11	N.C.
12	DDC-Serial data
13	H-sync
14	V-sync
15	DDC-Serial clock



Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
1	TMDS Data 2-	9	TMDS Data 1-	17	TMDS Data 0-
2	TMDS Data 2+	10	TMDS Data 1+	18	TMDS Data 0+
3	TMDS Data 2/4 Shield	11	TMDS Data 1/3 Shield	19	TMDS Data 0/5 Shield
4	TMDS Data 4-	12	TMDS Data 3-	20	TMDS Data 5-
5	TMDS Data 4+	13	TMDS Data 3+	21	TMDS Data 5+
6	DDC Clock	14	+5V Power	22	TMDS Clock Shield
7	DDC Data	15	Ground(for+5V)	23	TMDS Clock +
8	N.C.	16	Hot Plug Detect	24	TMDS Clock -

4.2 Preset Display Modes

STANDARD	RESOLUTION	HORIZONTAL FREQUENCY(kHz)	VERTICAL FREQUENCY(Hz)
VGA	640×480@60Hz	31.469	59.940
VGA	640×480@67Hz	35.000	66.667
VGA	640×480@72Hz	37.861	72.809
VGA	640×480@75Hz	37.500	75.000
Dos-mode	720×400@70Hz	31.469	70.087
SVGA	800×600@56Hz	35.156	56.250
SVGA	800×600@60Hz	37.879	60.317
SVGA	800×600@72Hz	48.077	72.188
SVGA	800×600@75Hz	46.875	75.000
Mac-mode	832×624@75Hz	49.725	74.551
XGA	1024×768@60Hz	48.363	60.004
XGA	1024×768@70Hz	56.476	70.069
XGA	1024×768@72Hz	57.500	72.074
XGA	1024×768@75Hz	60.023	75.029
WXGA	1280×720@60Hz	45.000	60.000
WXGA	1366×768@60Hz	47.712	59.790

4.3 Panel Specification

4.3.1 General Features

This specification applies to the 18.5 inch-wide Color a-Si TFT-LCD Module M185XW01. The display supports the WXGA - 1366(H) x 768(V) screen format and 16.7M colors (RGB 6-bits + Hi-FRC data). All input signals are 1-channel LVDS interface and this module doesn't contain an inverter board for backlight.

4.3.2 General Specifications

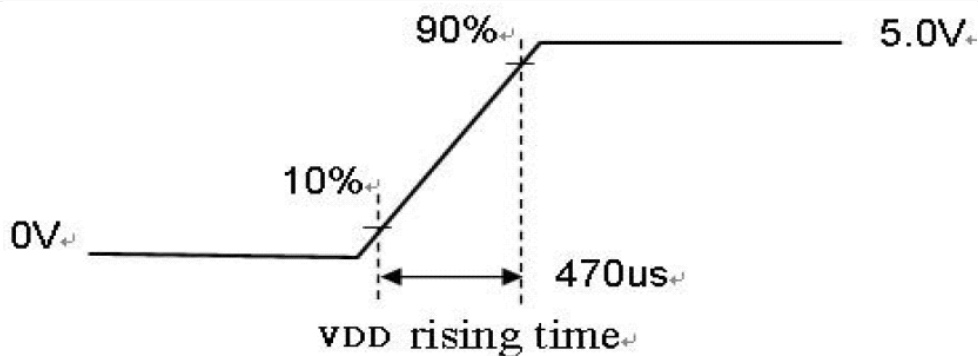
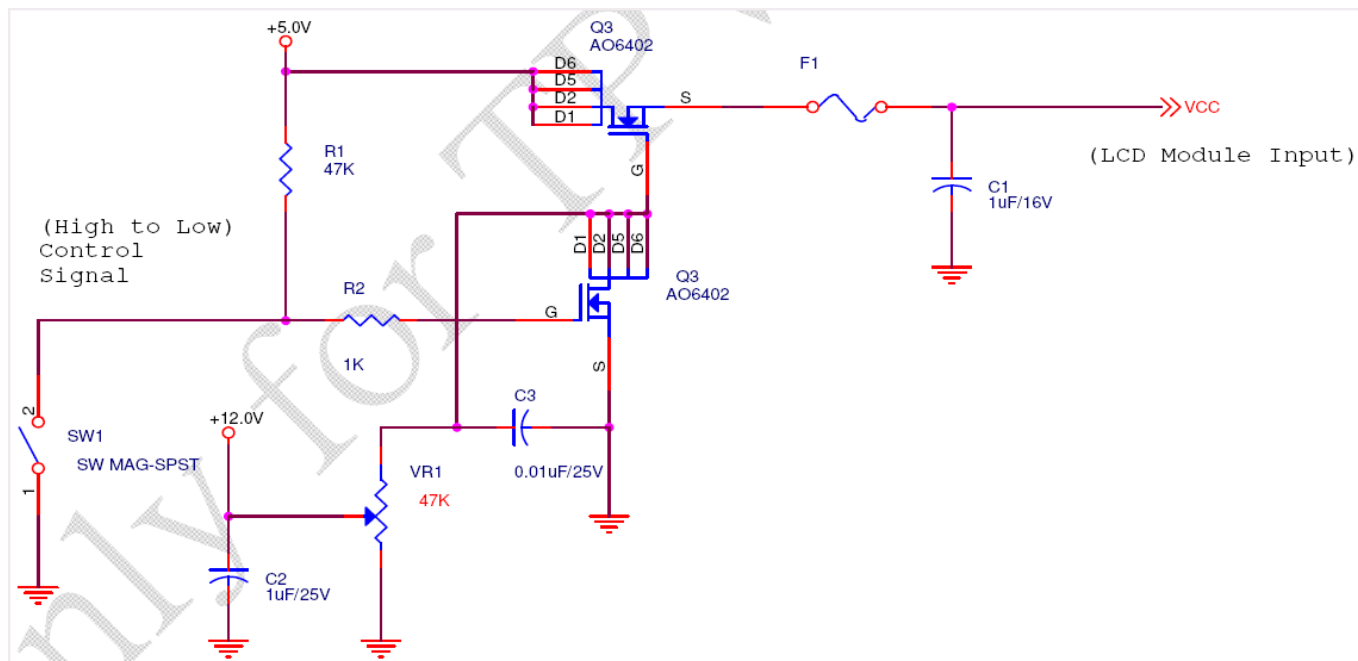
Ta = 25°C

ITEMS	Unit	SPECIFICATIONS
Screen Diagonal	[mm]	470.1(18.51")
Active Area	[mm]	409.8 (H) x 230.4 (V)
Pixels H x V		1366(x3) x 768
Pixel Pitch	[um]	300 (per one triad) x 300
Pixel Arrangement		R.G.B. Vertical Stripe
Display Mode		TN Mode, Normally White
White Luminance (Center)	[cd/m ²]	250 cd/m ² (Typ.)
Contrast Ratio		1000 (Typ.)
Optical Response Time	[msec]	5ms (Typ., on/off)
Nominal Input Voltage VDD	[Volt]	+5.0 V (Typ)
Power Consumption (VDD line + LED line)	[Watt]	10.5 (Typ.) (without inverter, all black pattern)
Weight	[Grams]	1290 (Typ)
Physical Size	[mm]	430.4 (W) x 254.6 (H) Typ. x 9.9 (D) Typ
Interface		One channel LVDS
Support Color		16.7M colors (RGB 6-bit + Hi_FRC)
Surface Treatment		Anti-Glare, 3H
Temperature Range		
Operating	[°C]	0 to +50
Storage (Shipping)	[°C]	-20 to +60
TCO5.1 Compliance		TCO5.1 Compliance
RoHS Compliance		RoHS Compliance

4.3.3 Electrical Characteristics

TFT LCD Module

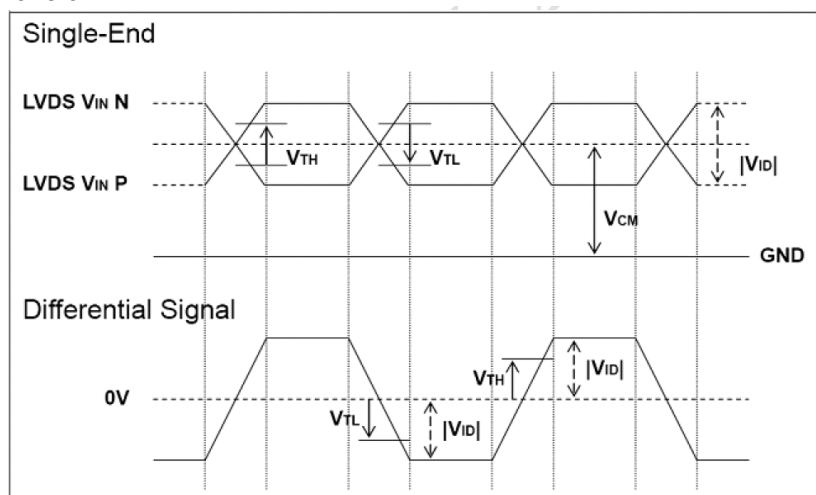
Symbol	Parameter	Min	Typ	Max	Unit	Conditions
VDD	Logic/LCD Drive Voltage	4.5	5.0	5.5	[Volt]	+/-10%
IDD	Input Current	-	0.45	0.5	[A]	VDD= 5.0V, All Black Pattern At 60Hz,
PDD	VDD Power	-	2.25	2.5	[Watt]	VDD= 5.0V, All Black Pattern At 60Hz
IRush	Inrush Current	-	-	3	[A]	Note 1
VDDrp	Allowable Logic/LCD Drive Ripple Voltage	-	-	350	[mV] p-p	VDD= 5.0V, All Black Pattern At 60Hz



Signal Electrical Characteristics

Symbol	Parameter	Min	Typ	Max	Units	Condition
VTH	Differential Input High Threshold	-	-	+100	[mV]	VICM = 1.2V Note 1
VTL	Differential Input Low Threshold	-100	-	-	[mV]	VICM = 1.2V Note 1
VID	Input Differential Voltage	100	-	600	[mV]	Note 1
VICM	Differential Input Common Mode Voltage	+1.0	+1.2	+1.5	[V]	VTH-VTL = 200MV (max) Note 1

Note 1: LVDS Signal Waveform



Backlight Unit

Ta = 25°C

Symbol	Parameter	Min.	Typ.	Max.	Unit	Note
IR _{LED}	LED Operation Current	57	60	63	[mA] Note 1	Operating with fixed driving current
V _{LB}	Light Bar Operation Voltage (for reference)	30	34	36	[Volt] Note 2	
P _{BLU}	BLU Power consumption (for reference)	6.8	8.2	9.1	[Watt]	
LT _{LED}	LED life Time	30000	-	-	[Hour] Note 3	

Note 1 : The specified current is input LED chip 100% duty current.

Note 2 : The value showed in the table is one light bar's operation voltage.

Note 3 : Definition of life time : brightness becomes 50% of its original value. The minimum life time of LED unit is on the condition of IR_{LED} = 60mA and 25±2°C

(Room temperature).

Note 4: Each LED light bar consists of 40 pcs LED package (4 strings x 10 pcs / string).

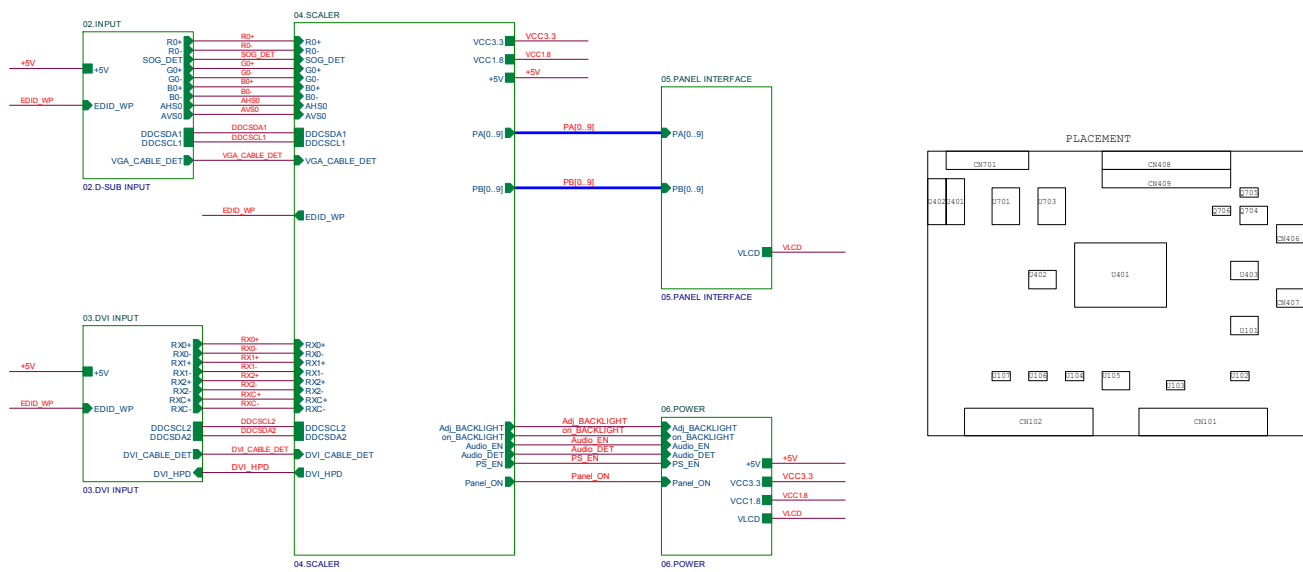
4.3.4 Optical Characteristics

[VDD = 5.0V, Frame rate = 60Hz, Clock = 78MHz, IBL = 7.5mA, Ta = 25±2 °C]

Item	Unit	Conditions	Min.	Typ.	Max.
Viewing Angle	[degree]	Horizontal (Right) CR = 10 (Left)	75 75	85 85	- -
		Vertical (Up) CR = 10 (Down)	70 70	80 80	- -
Contrast ratio		Normal Direction	600	1000	-
Response Time	[msec]	Raising Time (T _{rR})	-	3.6	5.7
		Falling Time (T _{rF})	-	1.4	2.3
		Raising + Falling	-	5	8
Color / Chromaticity Coordinates (CIE)		Red x	0.604	0.634	0.664
		Red y	0.321	0.351	0.381
		Green x	0.304	0.334	0.364
		Green y	0.582	0.612	0.642
		Blue x	0.116	0.146	0.176
		Blue y	0.029	0.059	0.089
		White x	0.283	0.313	0.343
		White y	0.299	0.329	0.359
Color Coordinates (CIE) White					
Central Luminance	[cd/m ²]		200	250	-
Luminance Uniformity	[%]		75	80	-
Crosstalk (in 60Hz)	[%]				1.5
Flicker	dB				-20

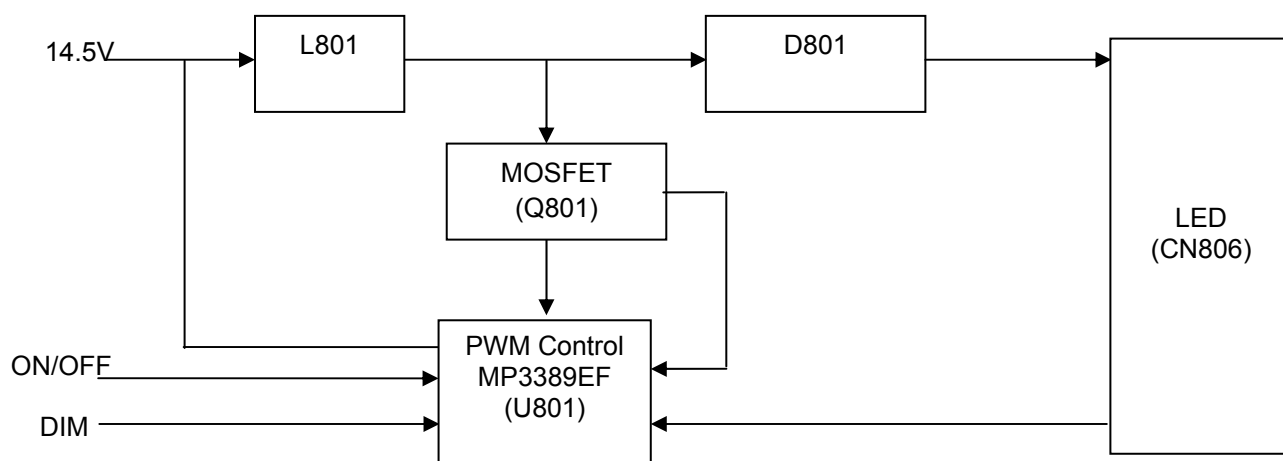
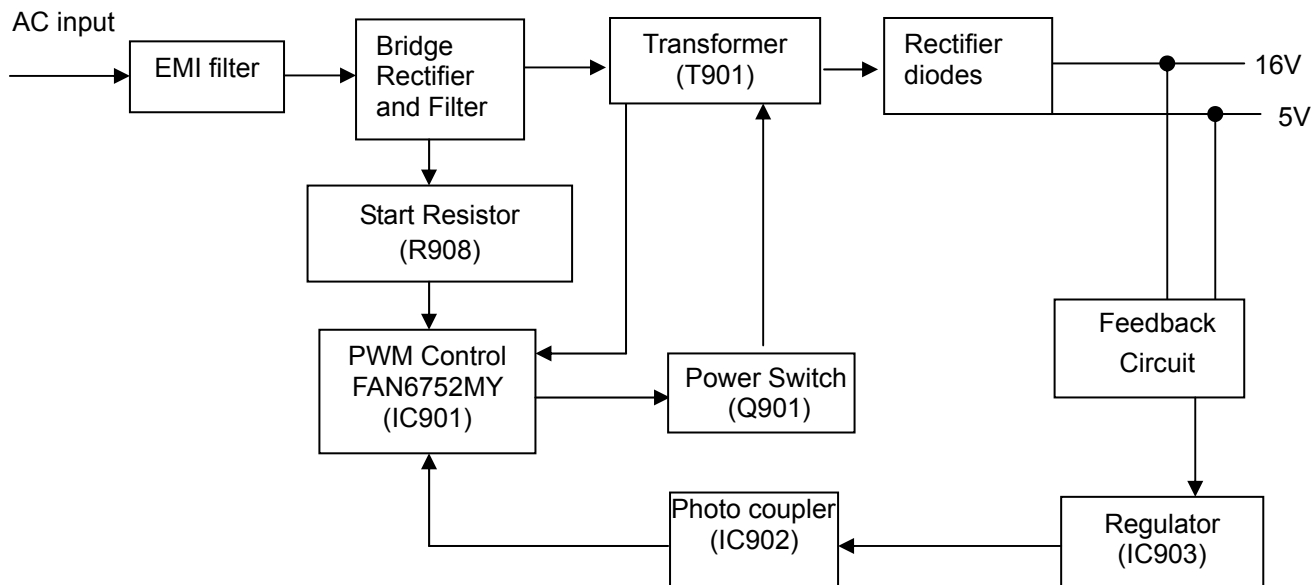
5. Block Diagram

5.1 Main Board

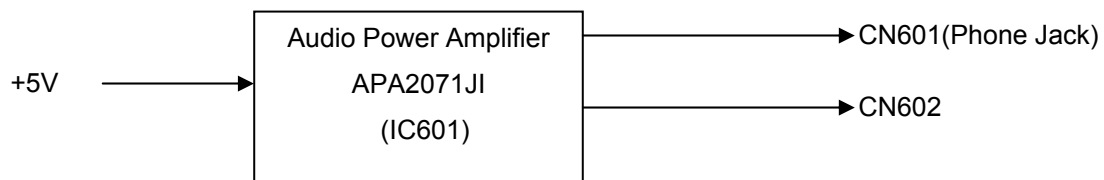


TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	OTS	Size	B
TPV MODEL	DUAL	Rev	B	
COVER & REVISE HISTORY	PCB NAME	715G3737-C-HF	Rev	B
Date	Friday, April 05, 2010	Sheet	2 of 7	<Rev>

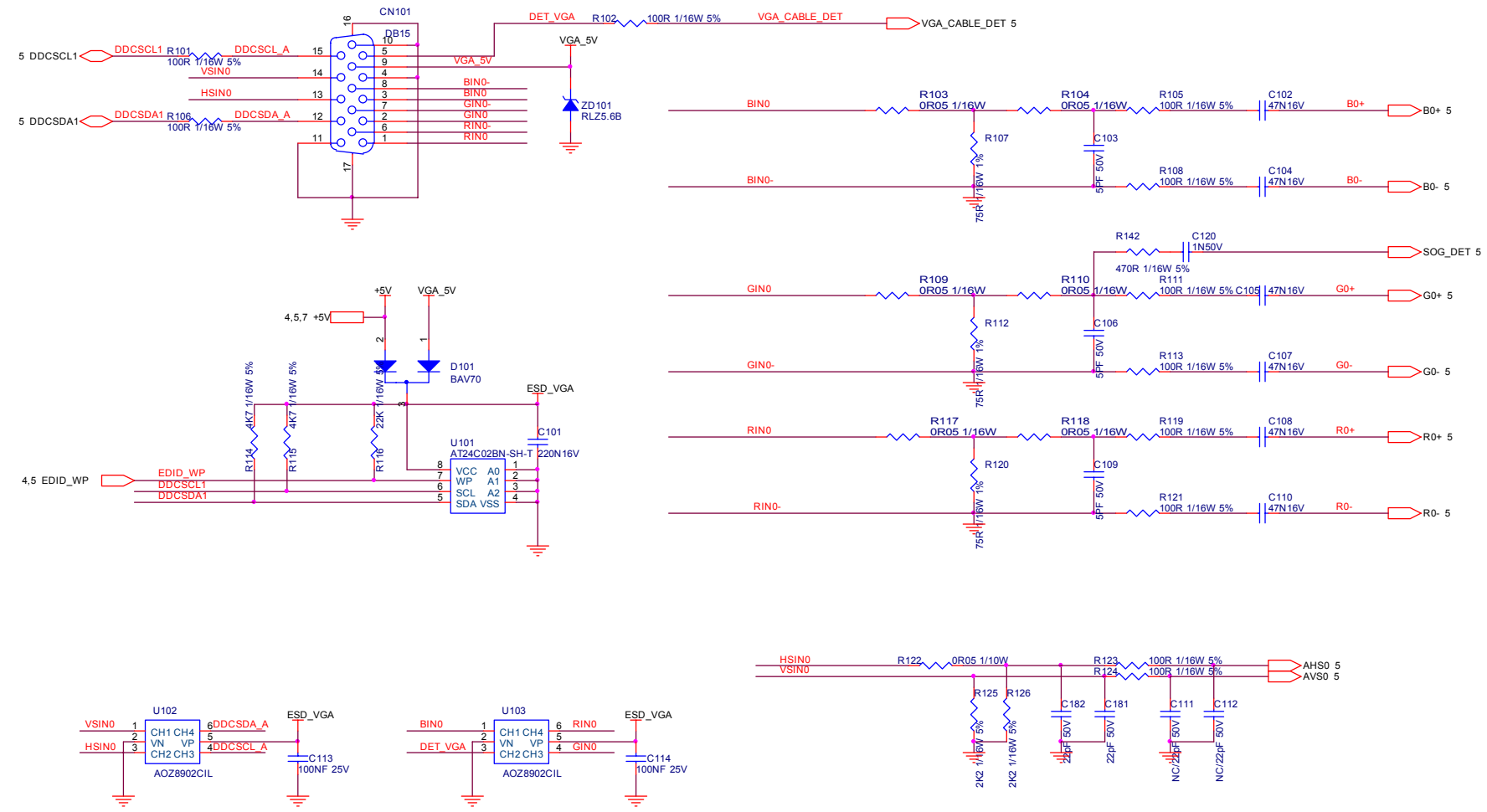
5.2 Power Board



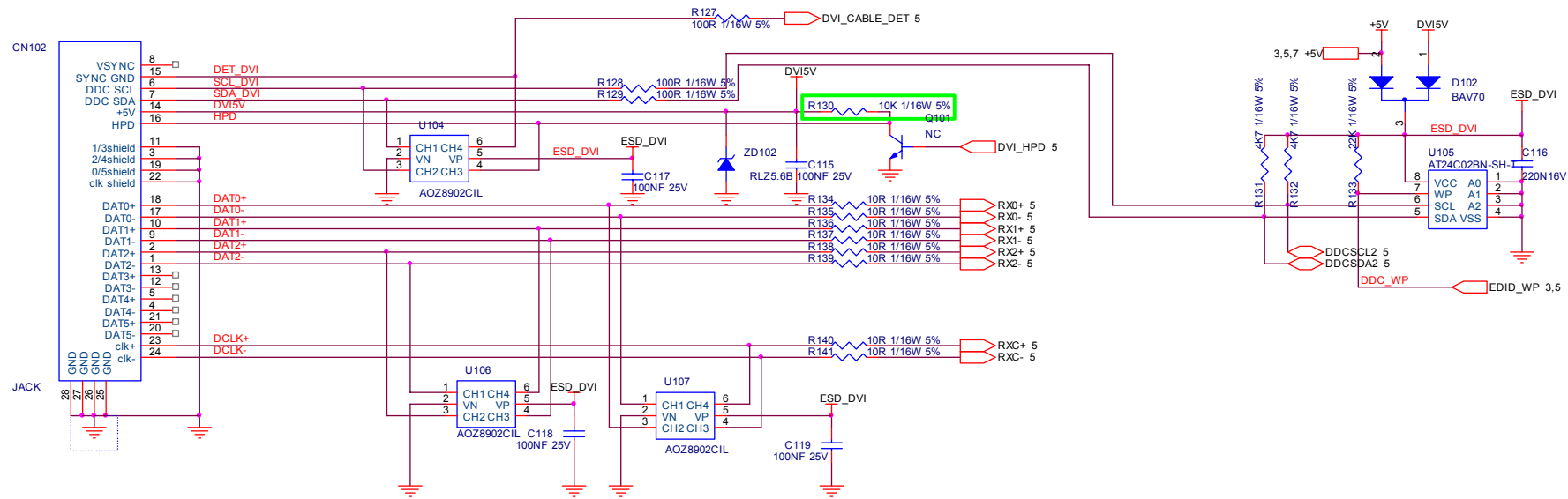
Audio



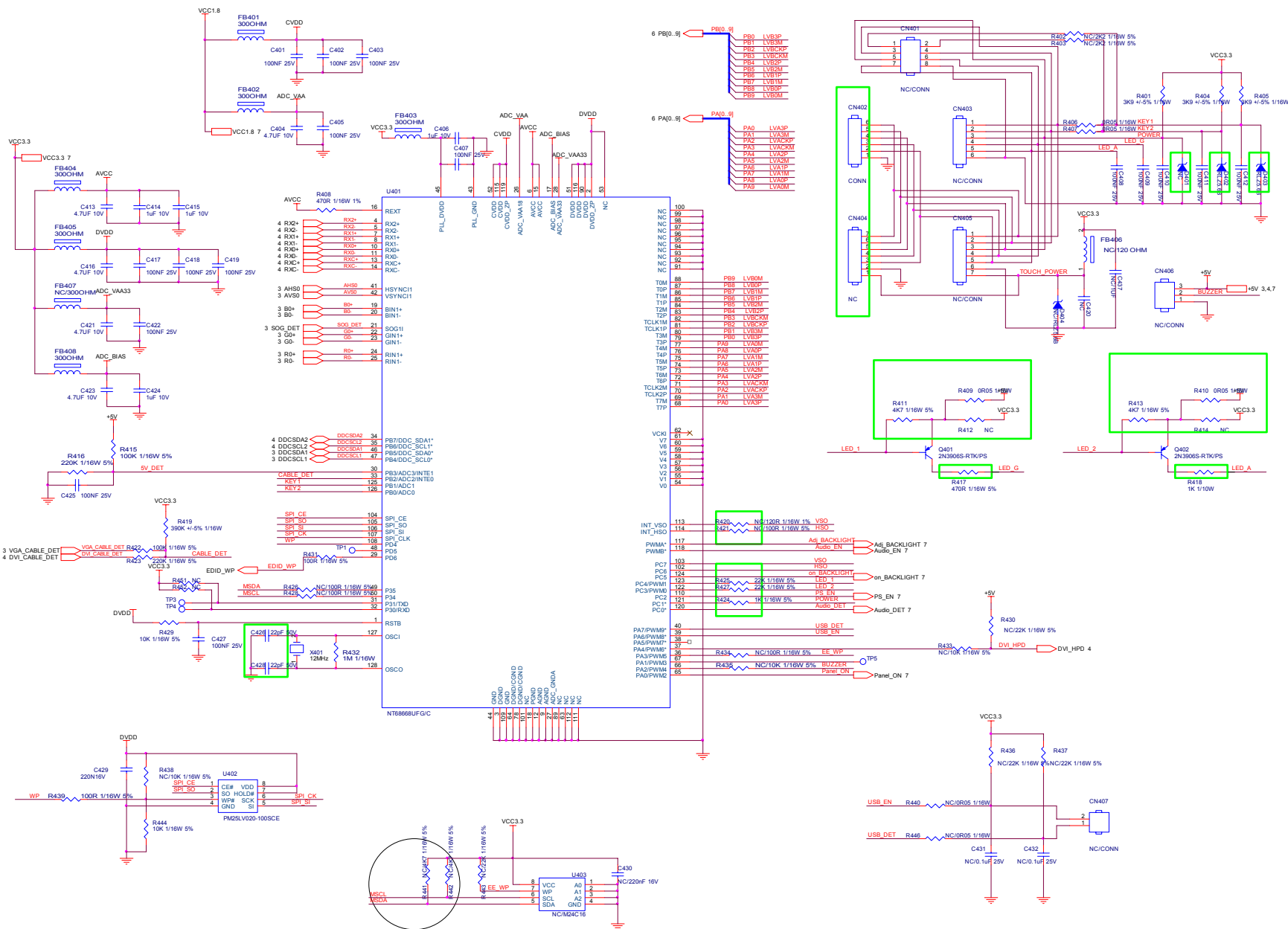
6. Schematic
6.1 Main Board
715G3737M02000004S



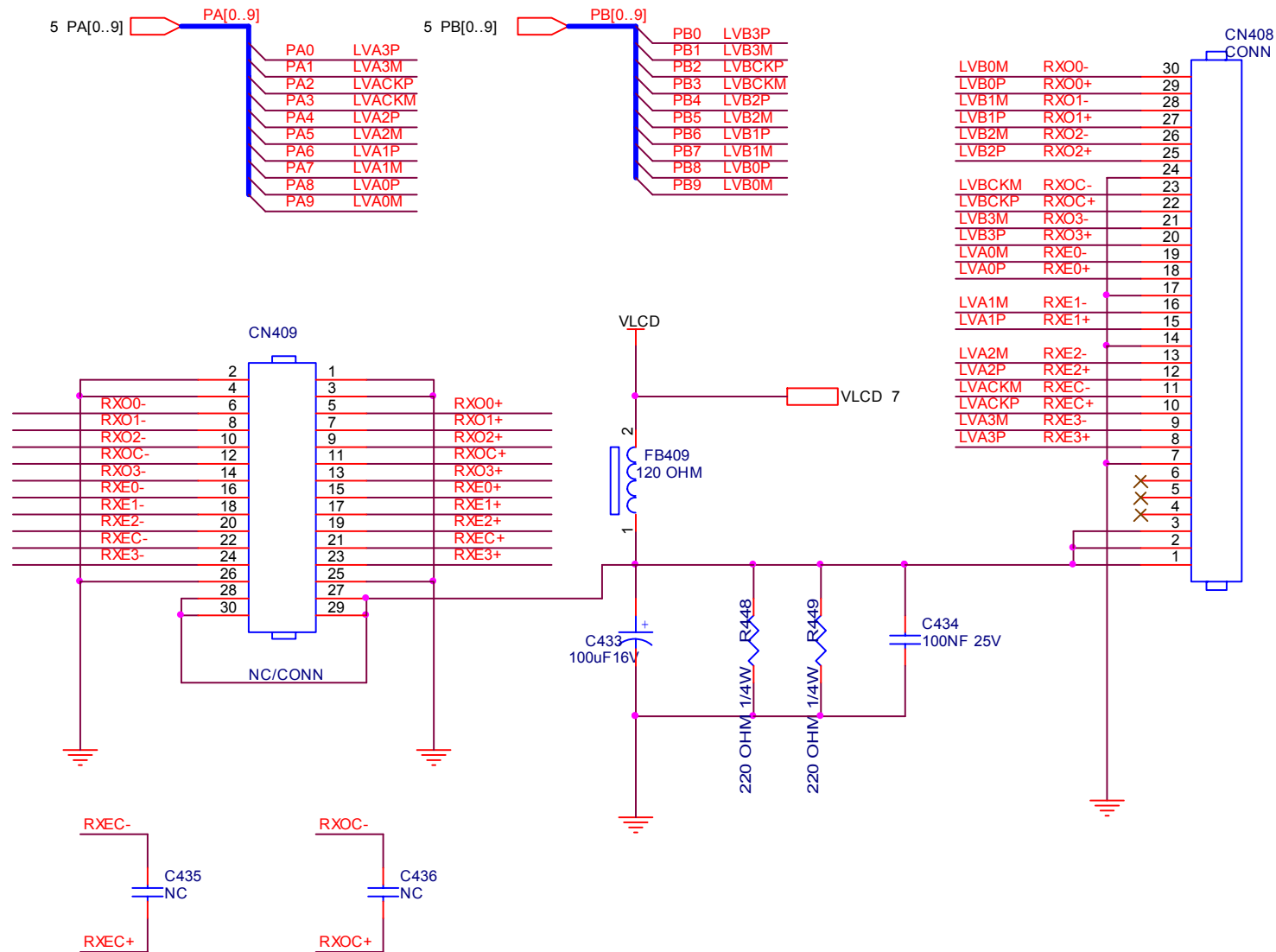
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	OTS	Size	B
結構圖	G3737-M01-000-0H4K-10-100330	TPV MODEL	DUAL	Rev
Key Component	D-SUB I/O	PCB NAME	715G3737-C-HF	<稱重>
Date	Friday, April 09, 2010	Sheet	3 of 7	



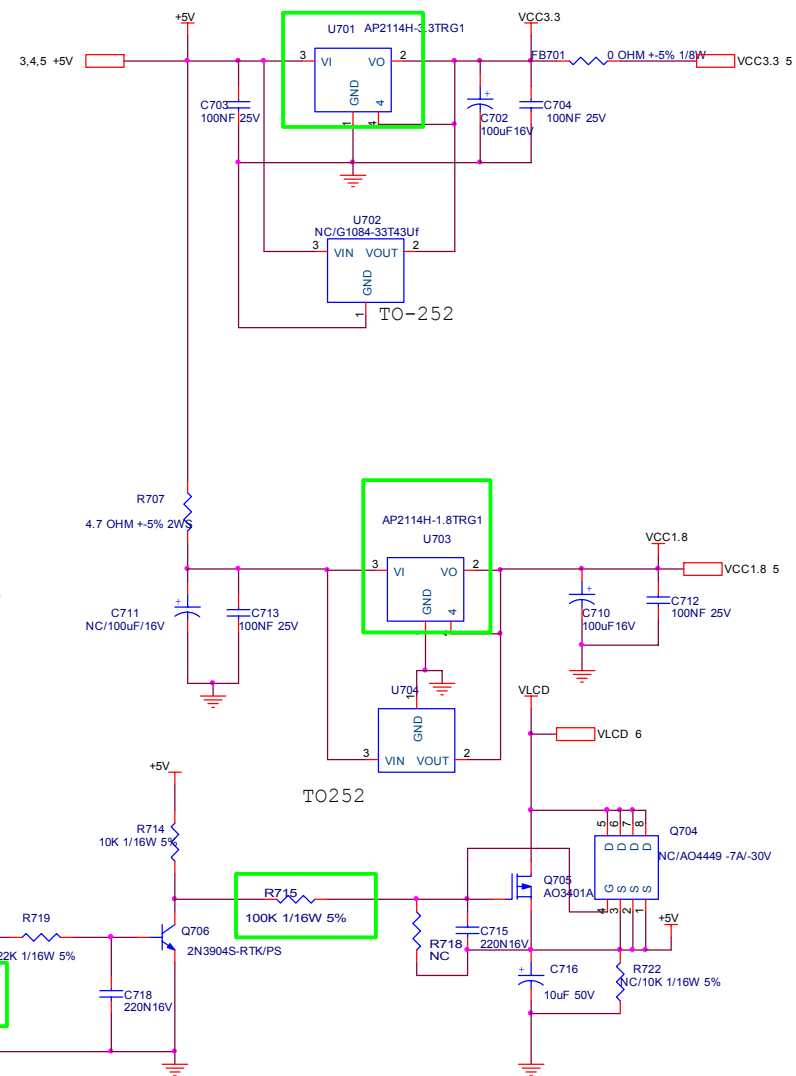
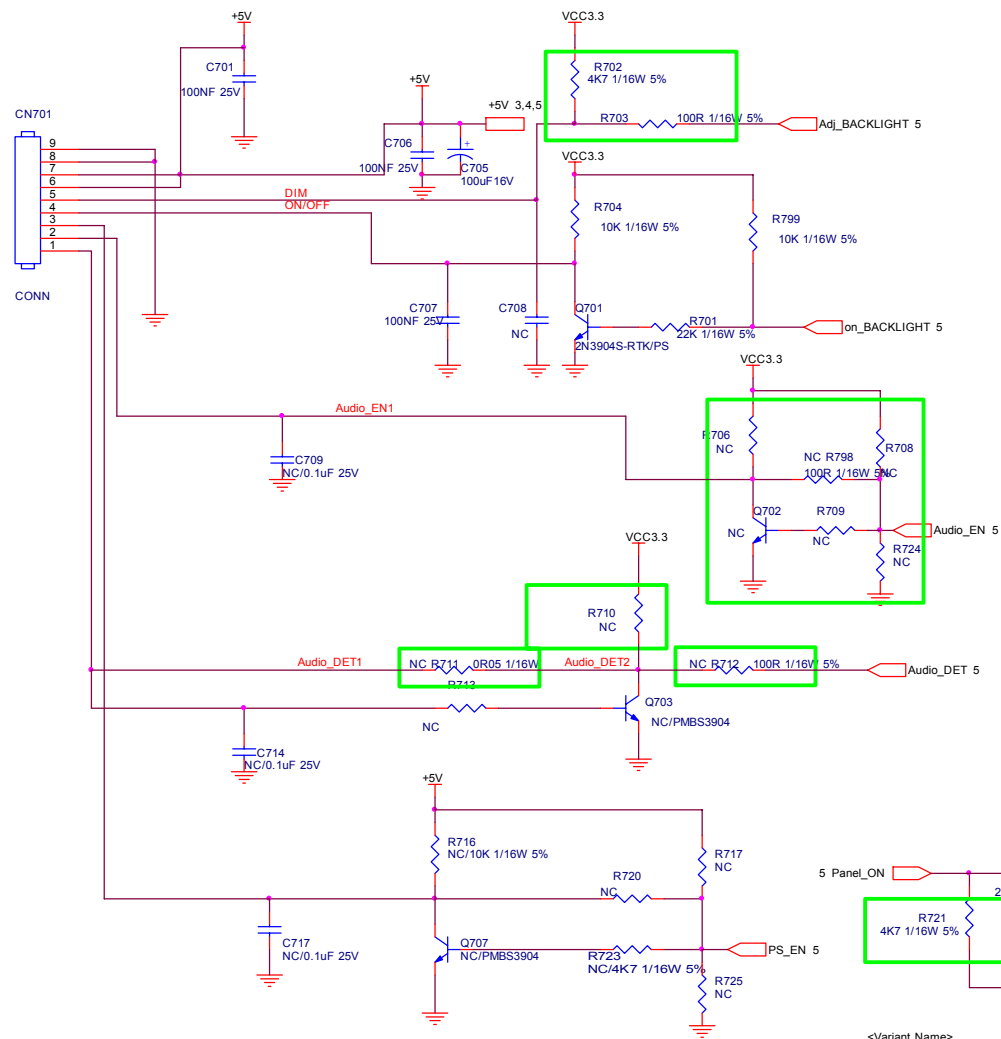
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	OTS	Size	B
結隔瓜網膜	G3737-M01-000-0H4K-10-100330	TPV MODEL	DUAL	Rev
Key Component	DVI	PCB NAME	715G3737-C-HF	称爹
Date	Friday, April 09, 2010	Sheet	4 of 7	<称爹>



TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	OTS	Size	C
冠捷电子	G3737-M01-000-QH4K-10-100330	TPV MODEL	DUAL	Rev
Key Component	SCALER	PCB NAME	715G3737-C-HF	Rev
Date	Friday, April 09, 2010	Sheet	5 of 7	Rev



TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	OTS	Size	A
結隔瓜網腹	G3737-M01-000-0H4K-10-100330	TPV MODEL	Rev	B
Key Component	LVDS PANEL I/O	PCB NAME	715G3737-C-HF	称爹
Date	Friday, April 09, 2010	Sheet	6 of 7	<称爹>

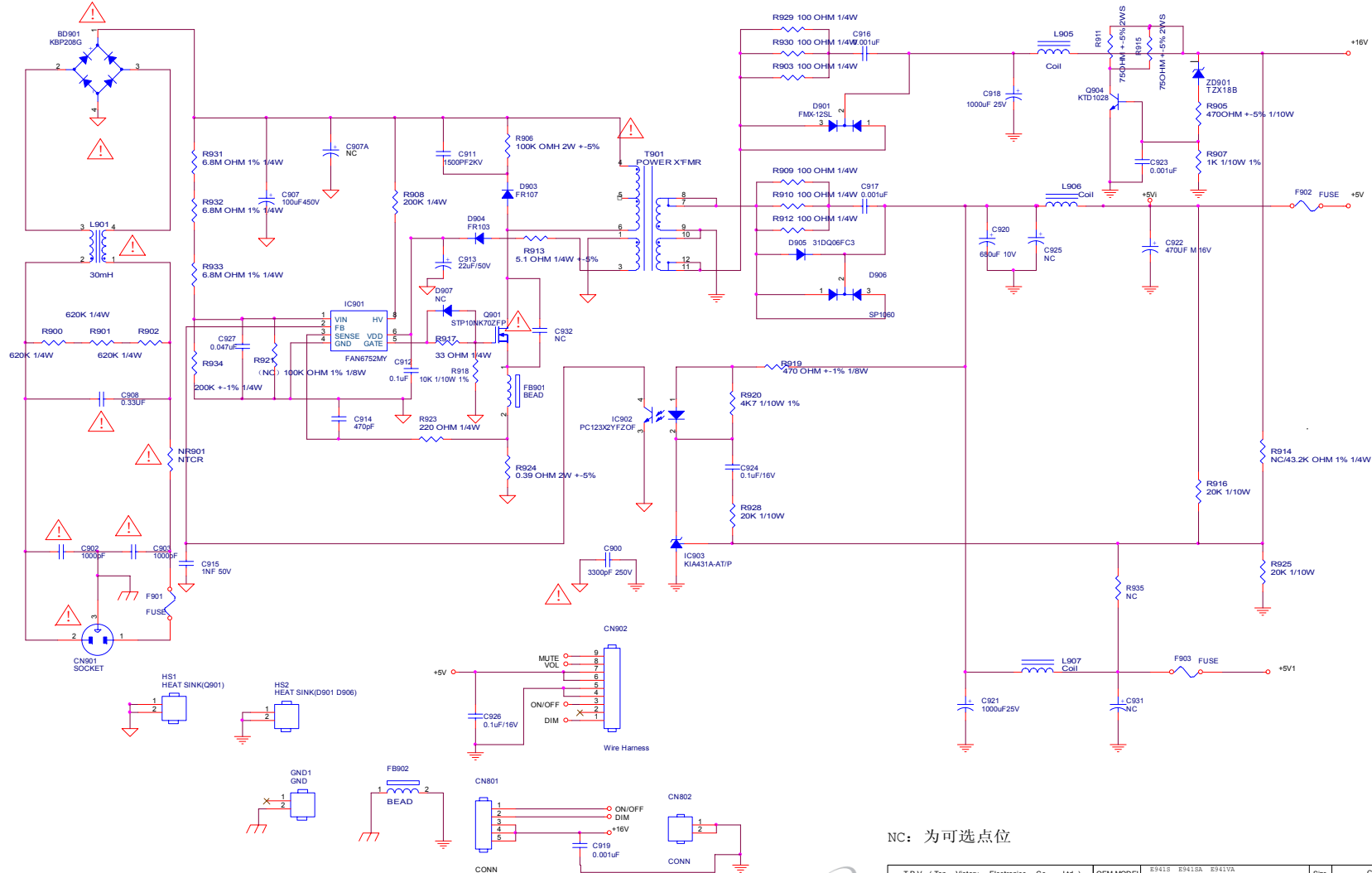


<Variant Name>



TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	OTS	Size	B
紙隔瓜銅版	G3737-M01-000-0H4K-10-100330	TPV MODEL	DUAL	Rev
Key Component	POWER	PCB NAME	715G3737-C-HF	Rev
Date	Friday, April 09, 2010	Sheet	7 of 7	Rev

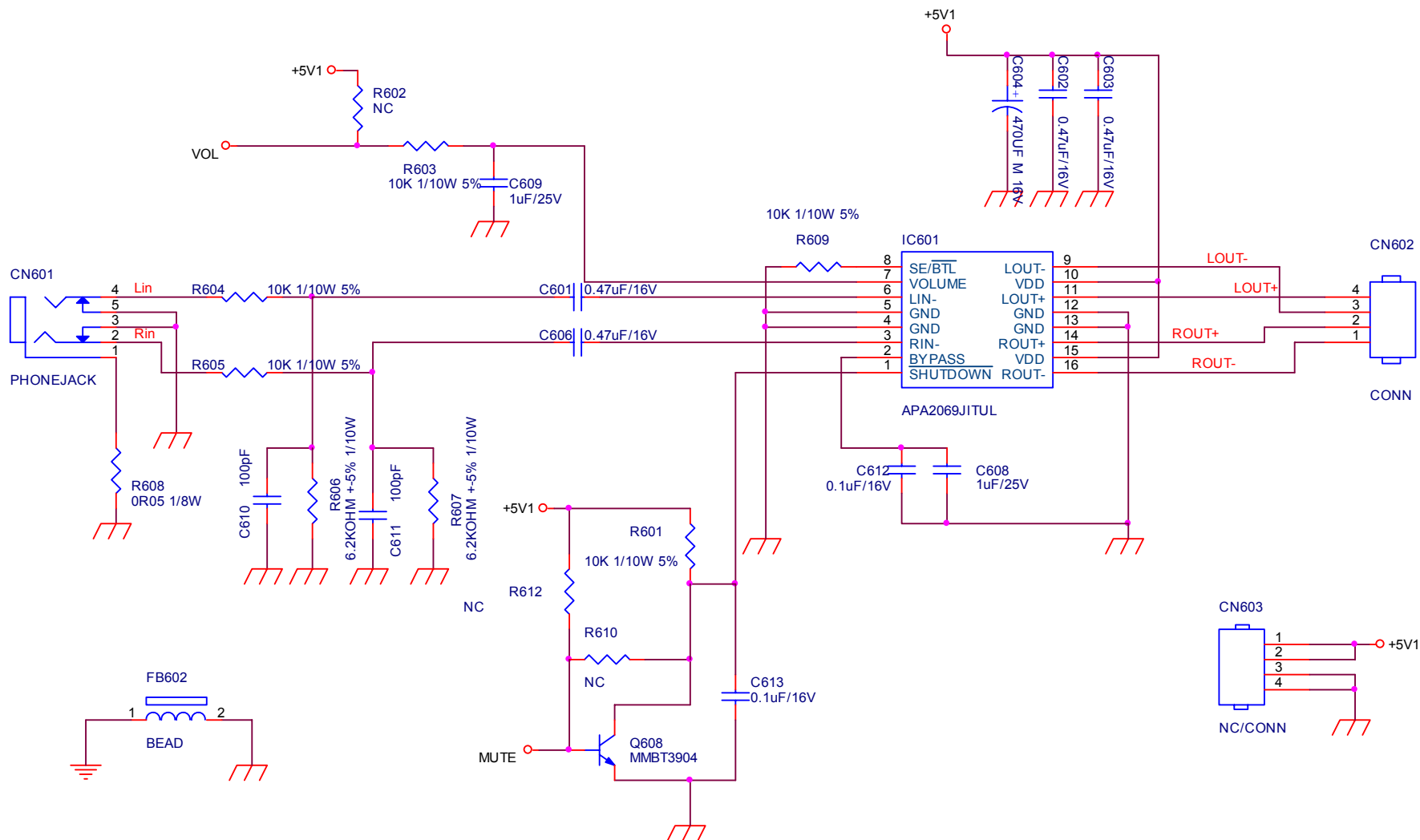
6.2 Power Board
Adapter
715G2892P01020001C



NC: 为可选点位

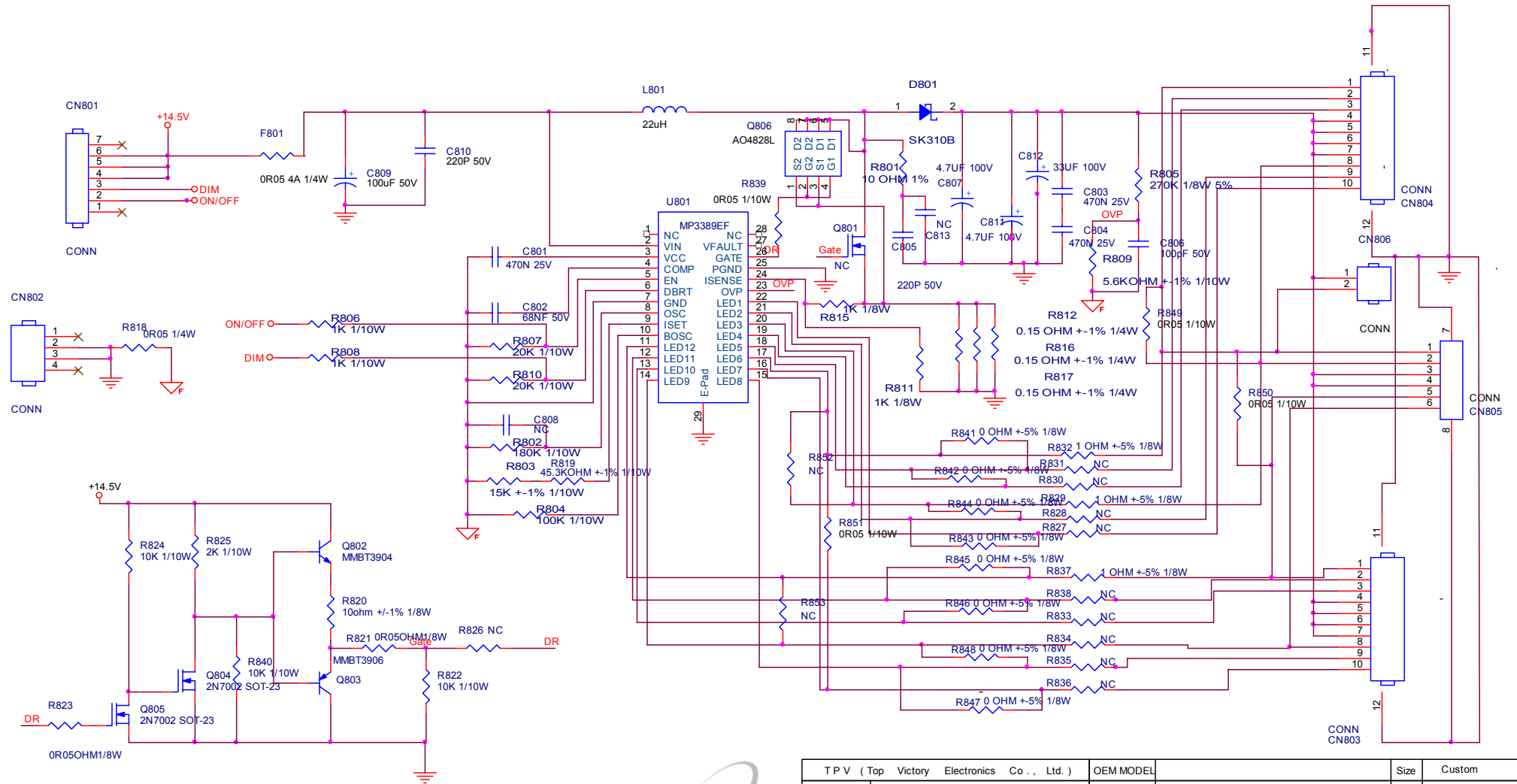


TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL		E941B E941SA E941VA	Size	Custom
规格书编号	G2892-P01-020-001C-X1-100414	TPV MODEL	ADPC9841MYD3J	Rev	F
Key Component	01.COVER	PCB NAME	715G2892P01020001C	料号	ODM MODEL
Date	Tuesday, November 30, 2010	Sheet	of		



TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL	E941S E941SA E941VA	Size	A
結構瓜網腹	G2892-P01-020-001C-X-1-100414	TPV MODEL	ADPC9B41MYD3J	Rev	F
Key Component	01.COVER	PCB NAME	715G2892P01020001C	称爹	ODM MODEL
Date	Thursday, April 22, 2010	Sheet	of		

Converter 715G4013P02001004S

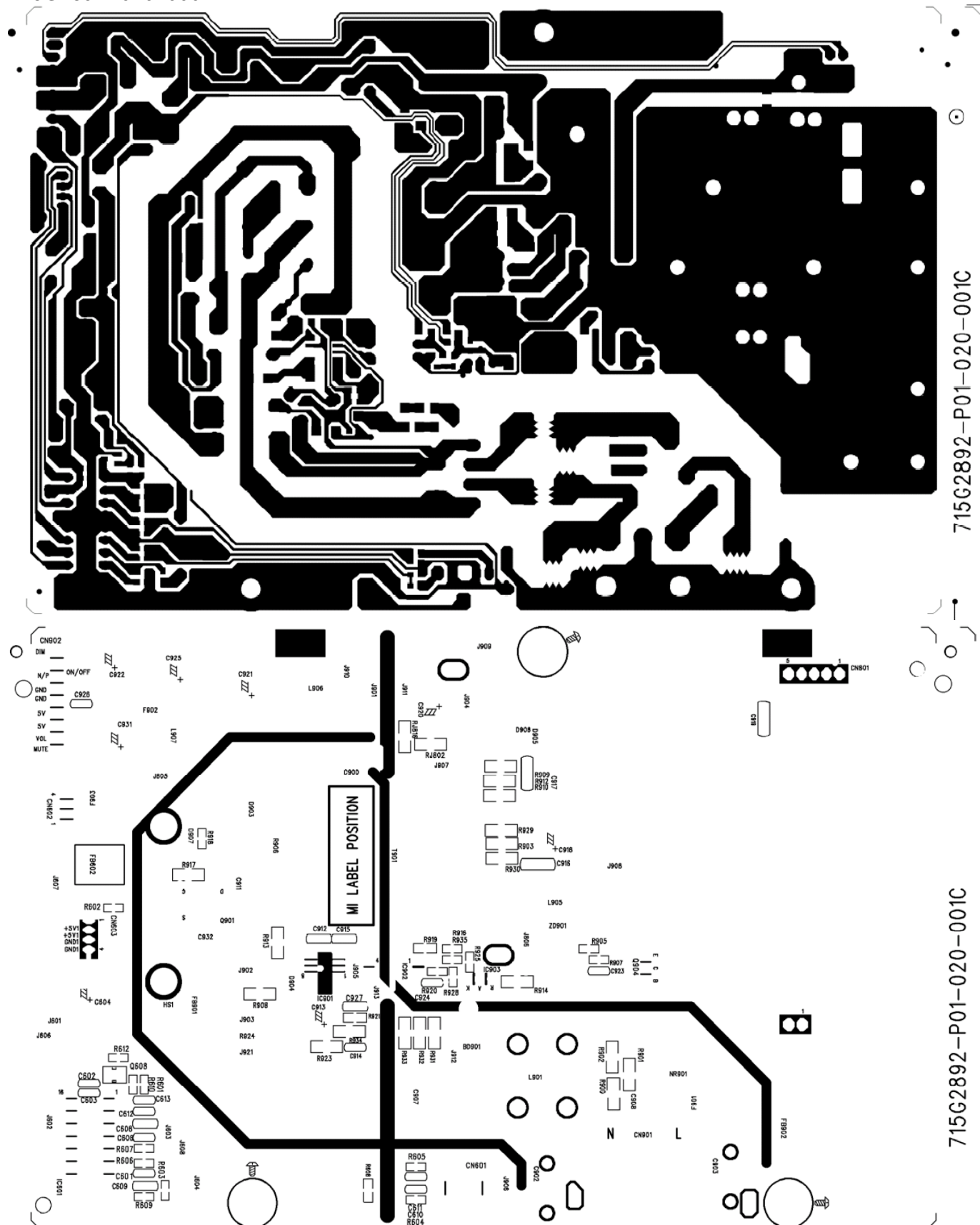


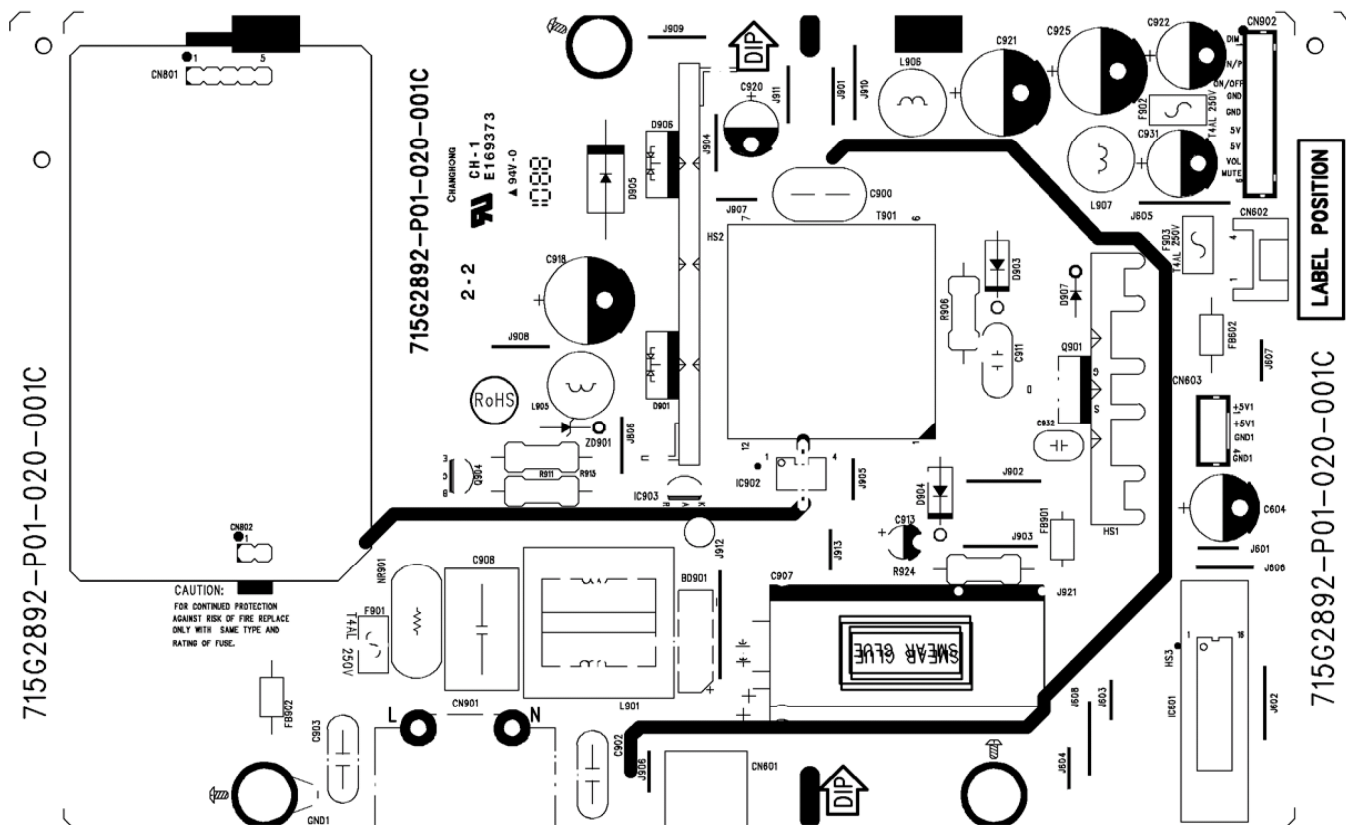
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	Size	Custom
結構瓜網版	715GXXXX	Rev	A
Key Component	01.CONVERTER	PCB NAME	715G4013-P01-002-0040
Date	Monday, November 15, 2010	Sheet	1 of 2
		称爹	ODM MODEL

715G3737M02000004S

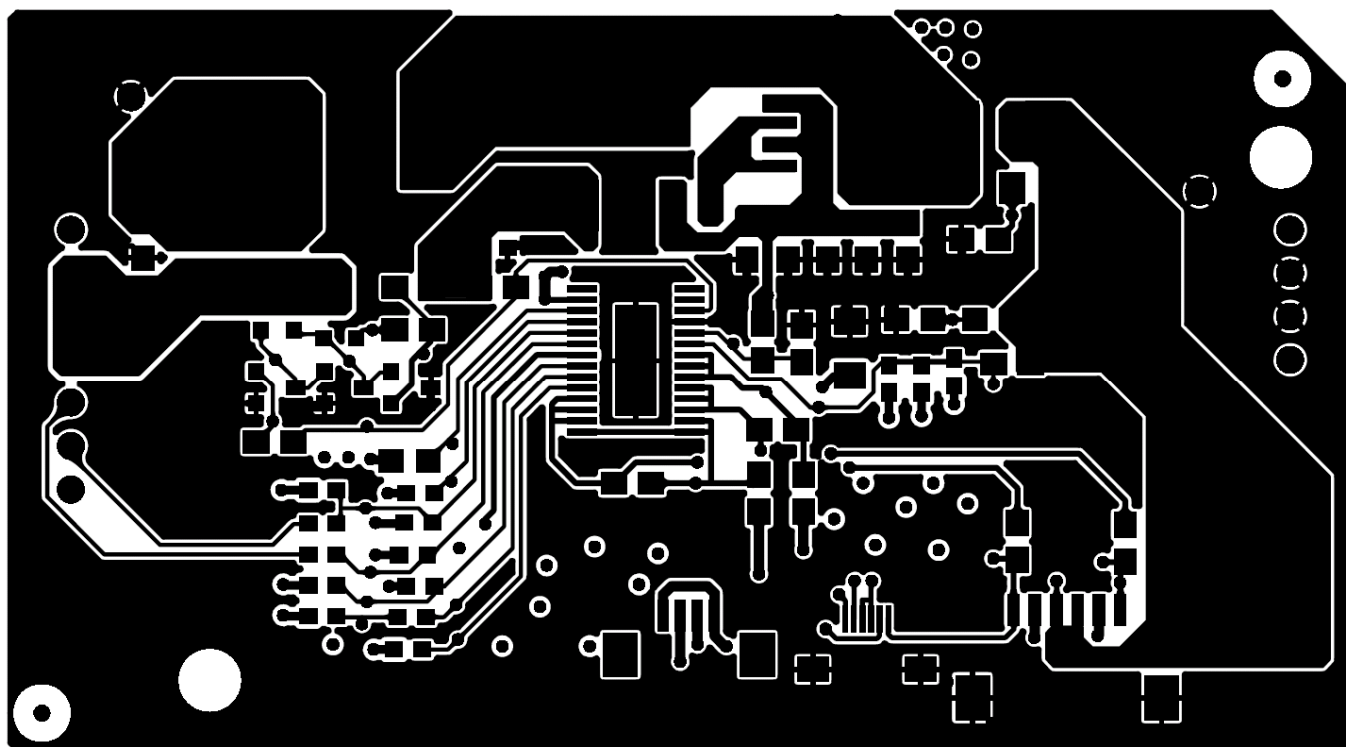


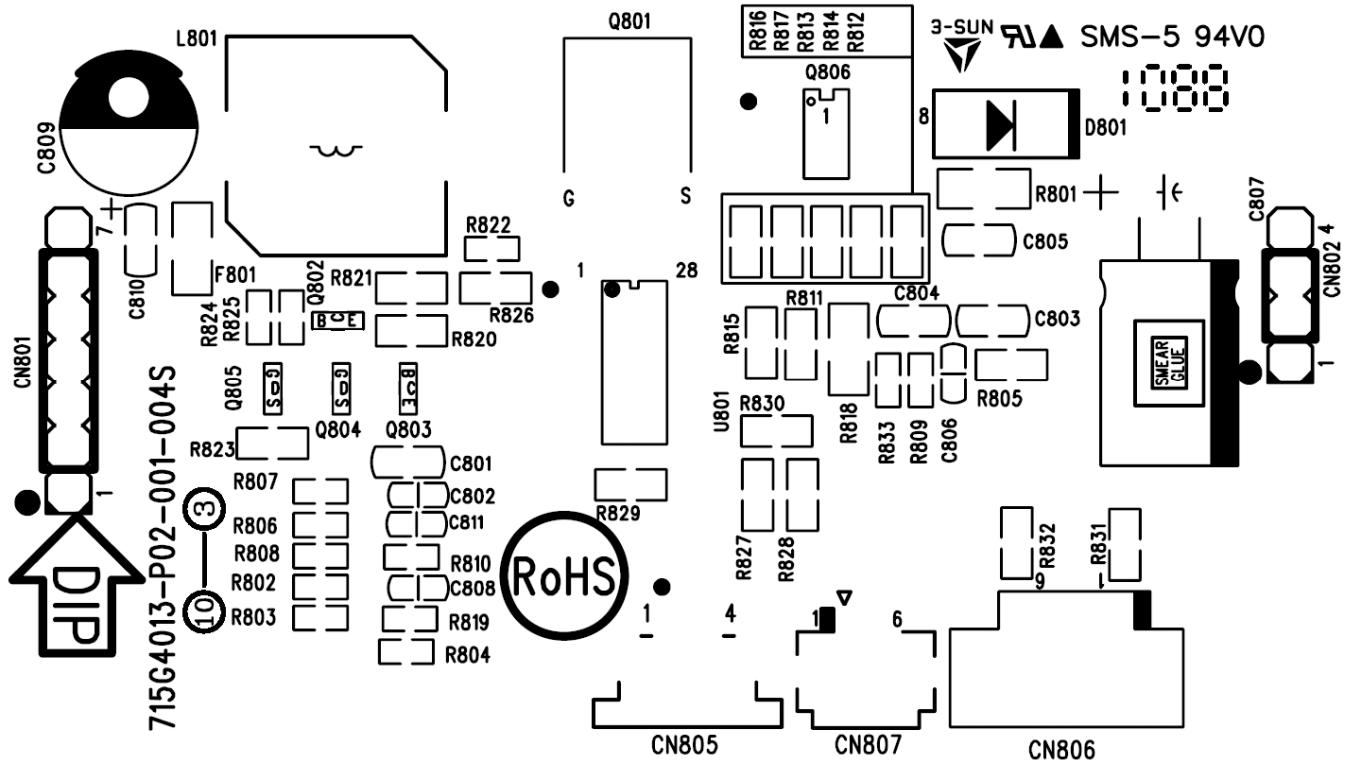
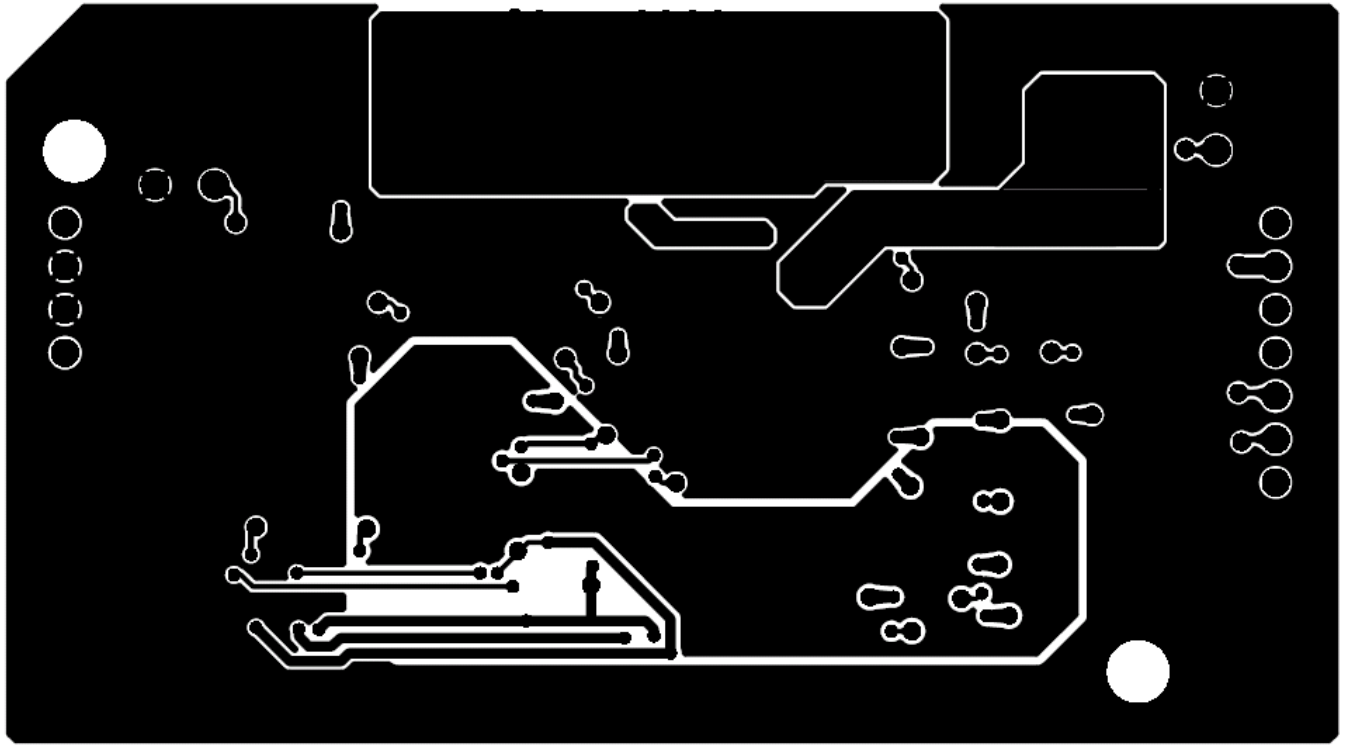
7.2 Power Board
Adapter
715G2892P01020001C



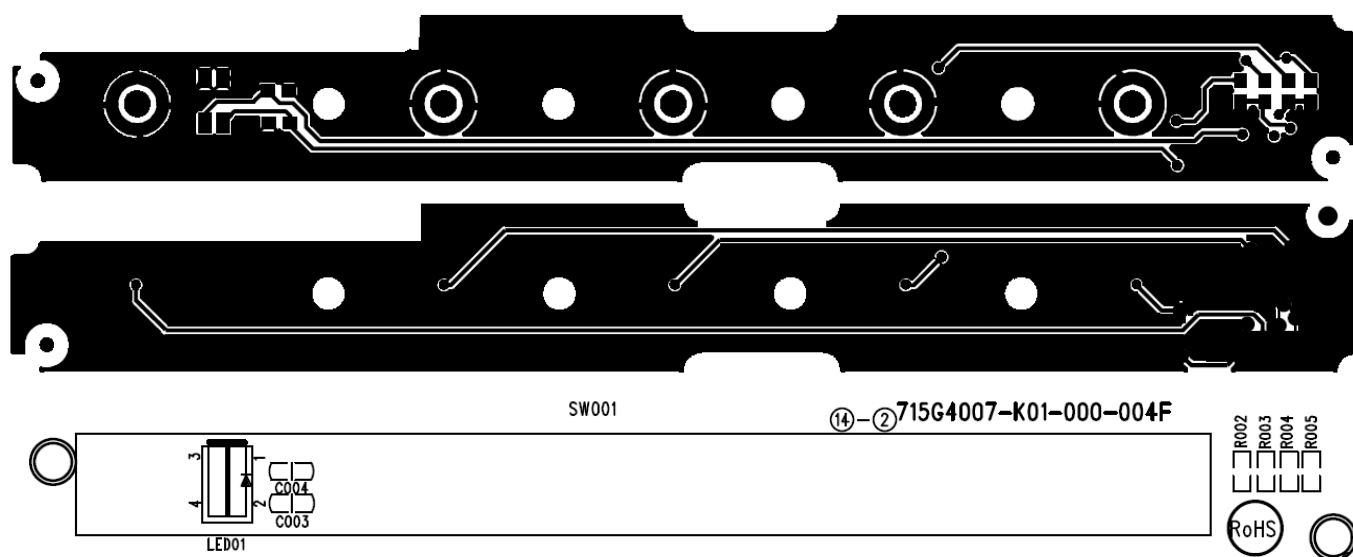


Converter 715G4013P02001004S

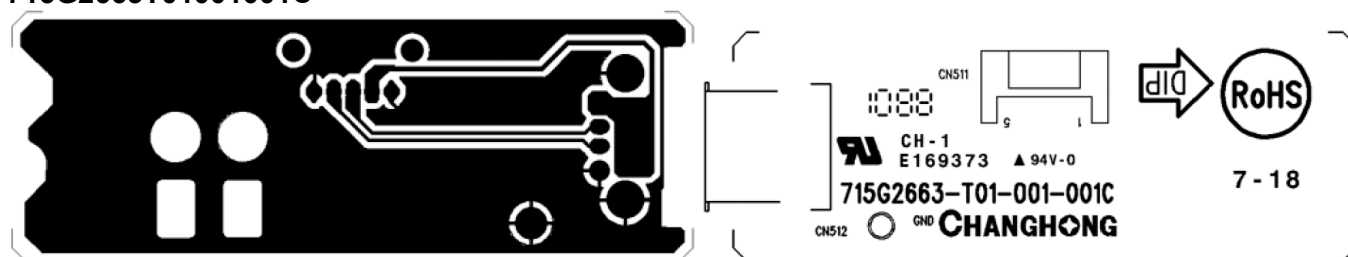




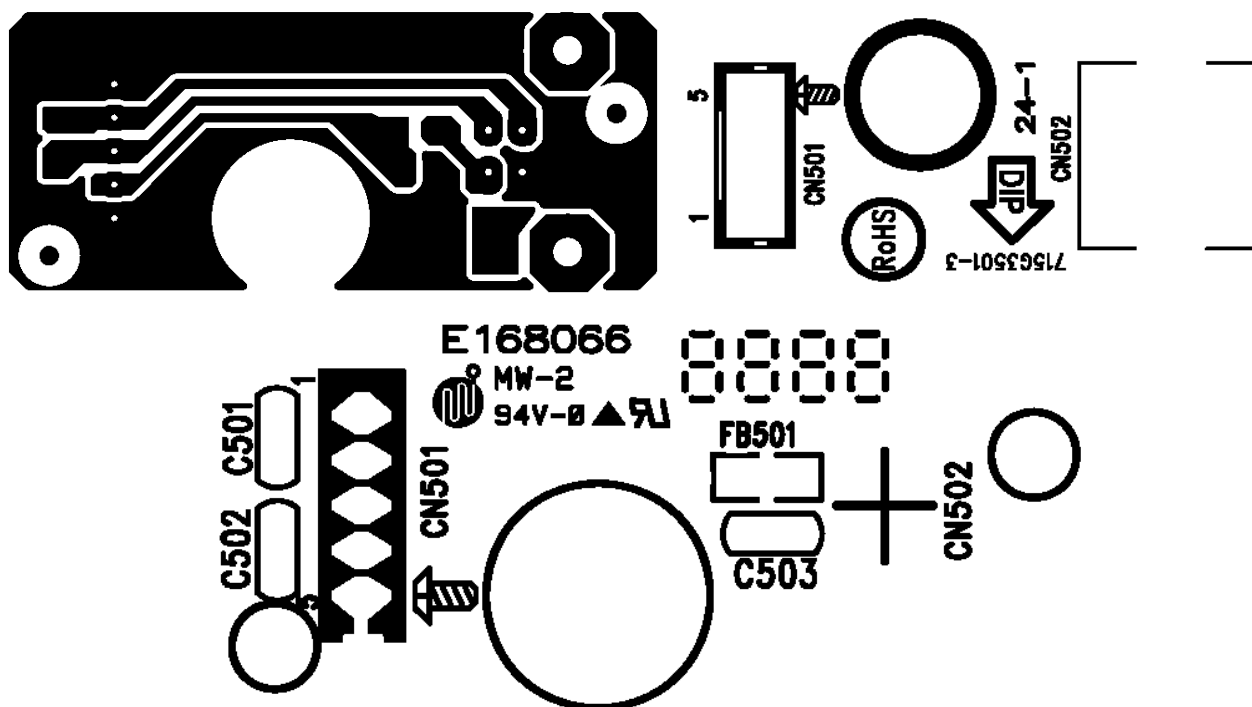
7.3 Key Board 715G4007K01000004F



7.4 USB Board 715G2663T01001001C



715G3501 3



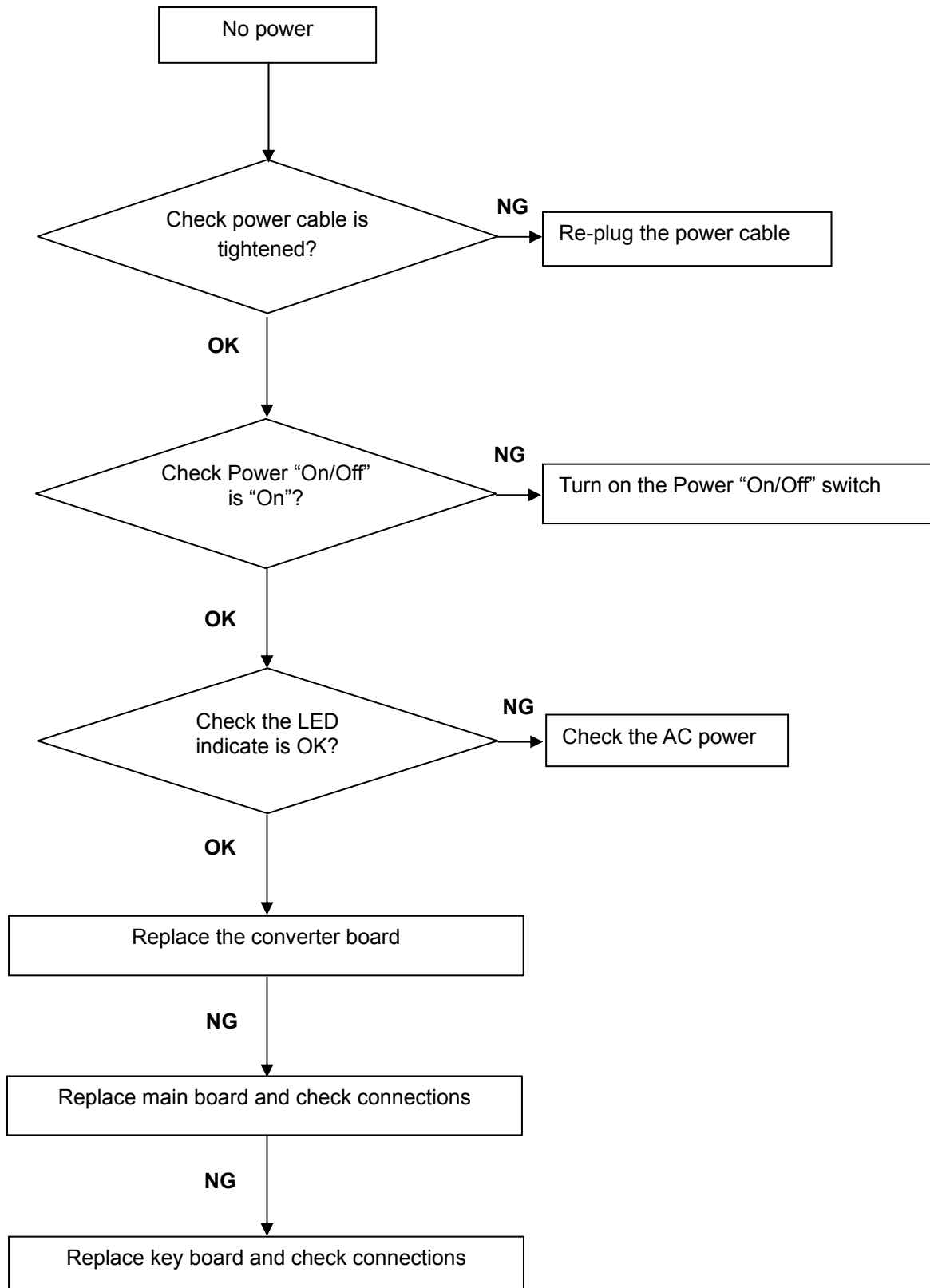
8. Maintainability

8.1 Equipments and Tools Requirement

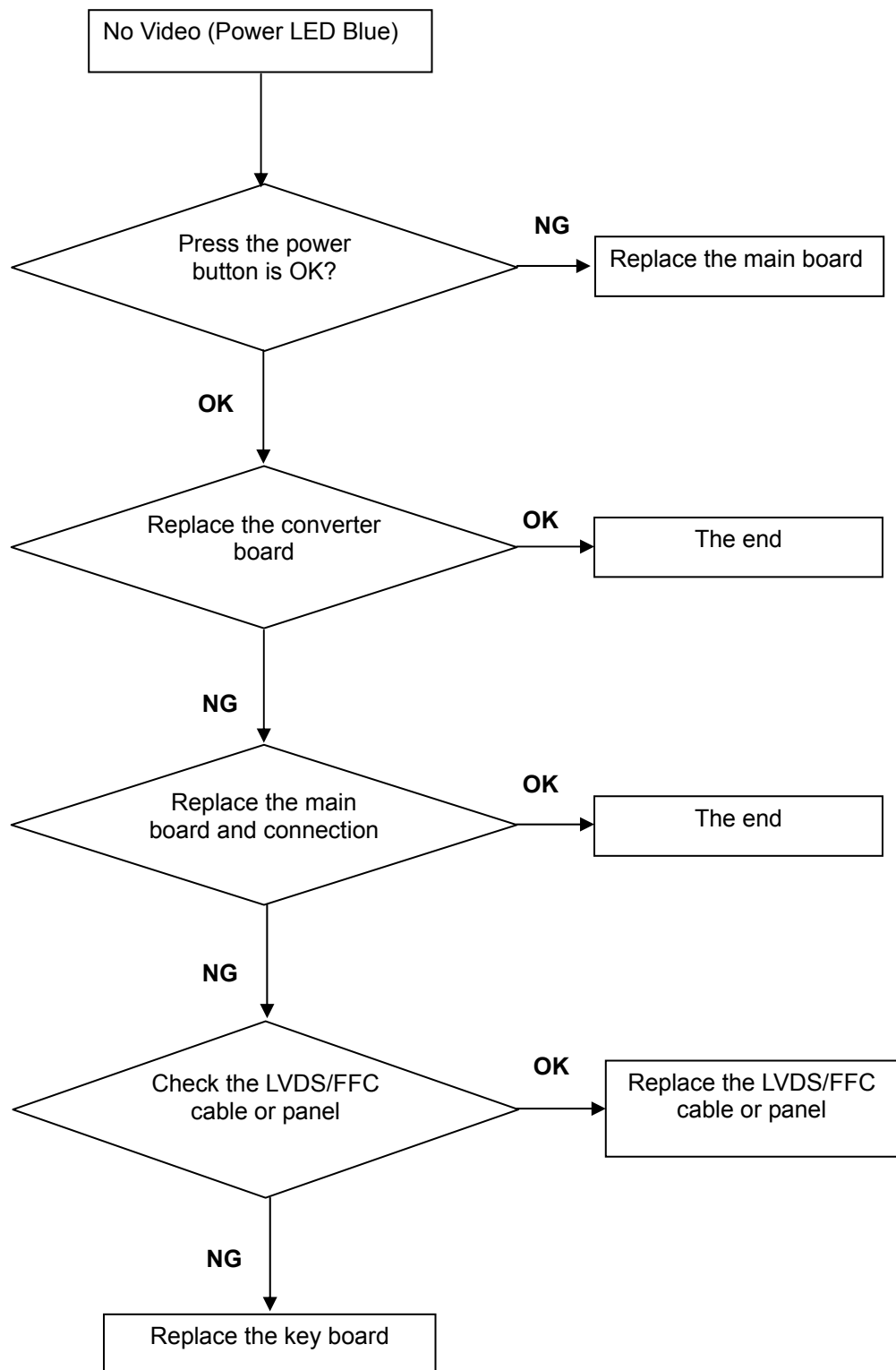
1. Voltmeter.
2. Oscilloscope.
3. Pattern Generator.
4. DDC Tool with an IBM Compatible Computer.
5. Alignment Tool.
6. LCD Color Analyzer.
7. Service Manual.
8. User Manual.

8.2 Trouble Shooting

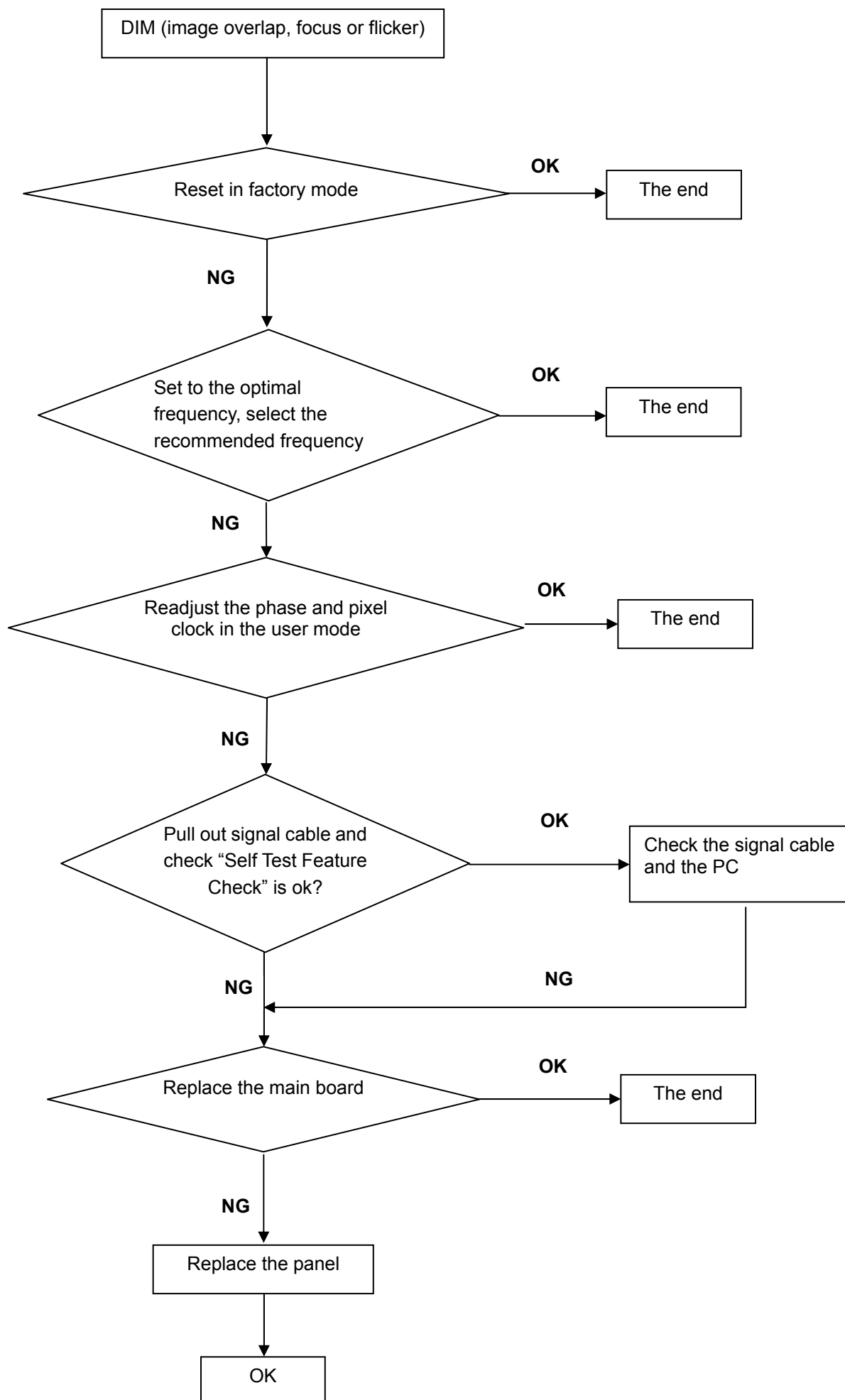
1. No Power



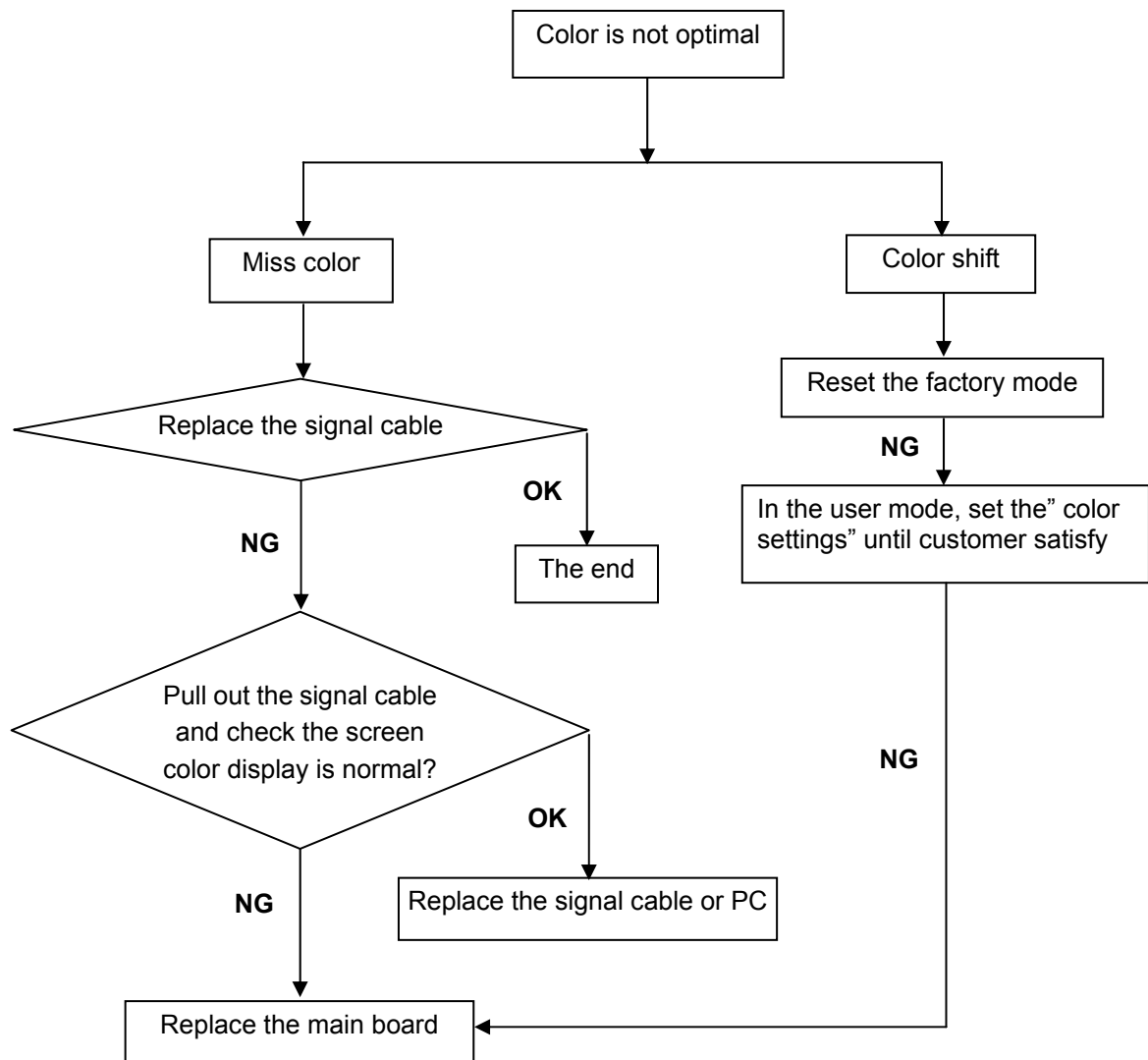
2. No Video (Power LED Blue)



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 $x=313\pm30$, $y=329\pm30$

B. 7300K

Normal color temp. parameter is $x=302\pm30$, $y=318\pm30$

C. 9300K

Cool color temp. parameter is $x=283\pm30$, $y=297\pm30$

D. sRGB

sRGB color temp. parameter is $x=313\pm30$, $y=329\pm30$

2. Enter into the factory mode:

Press the MENU button, Pull out the power cord, then plug the power cord. Then the factory OSD will be at the left top of the panel.

3. Bias 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 $x=313\pm30$, $y=329\pm30$
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 $=100\pm2$

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 $x=302\pm30$, $y=318\pm30$
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 $=100\pm2$

C. Adjust Cool (9300K) color-temperature

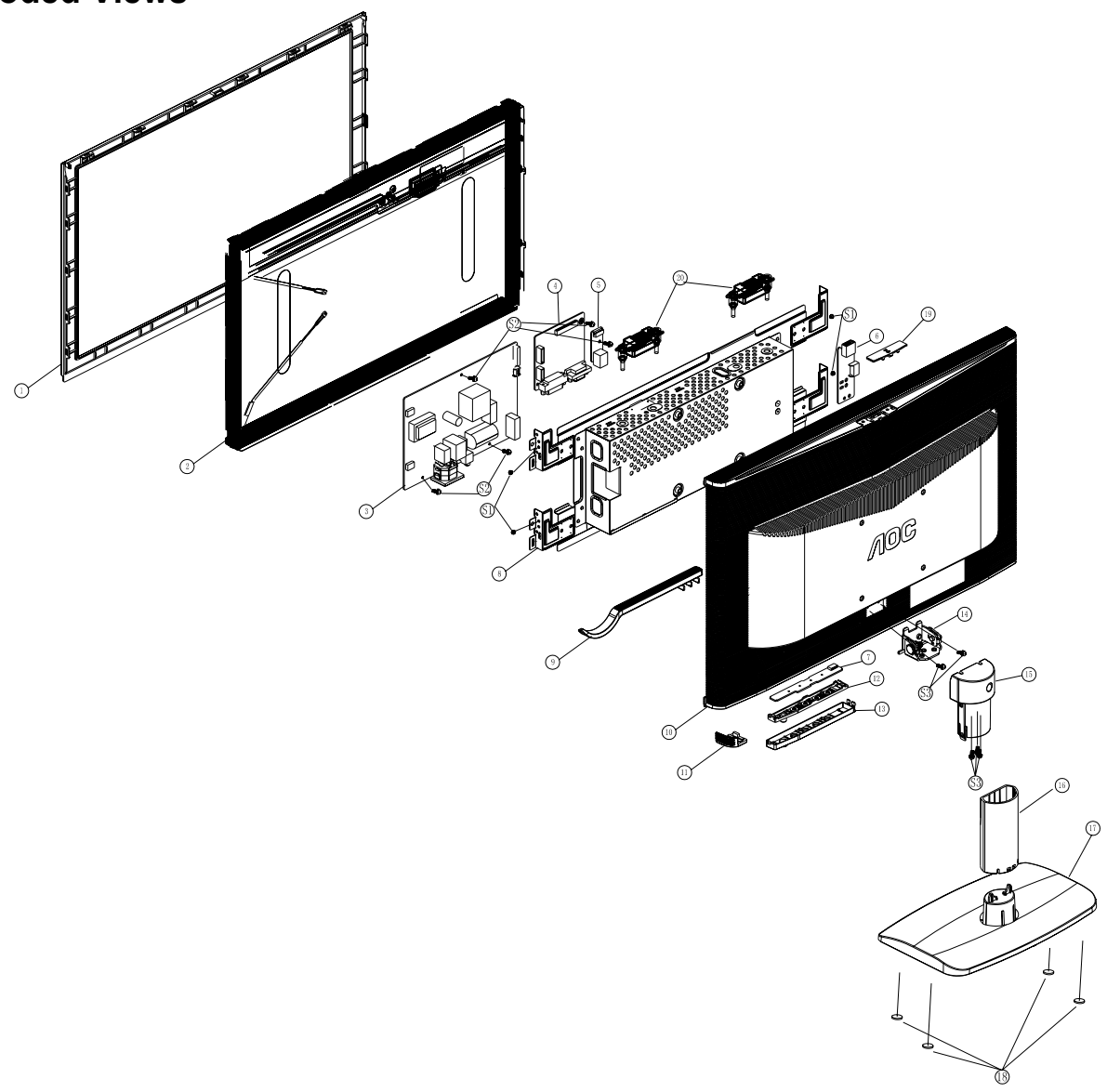
1. Switch the Chroma-7120 to RGB-Mode (with press "MODE" button)
2. Switch the MEM. Channel to Channel 9 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x=283\pm30$, $y=297\pm30$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value $R=100$
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 $=100\pm2$

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 $x=313\pm30$, $y=329\pm30$
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 $=100\pm2$

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

10. Monitor Exploded Views



item	part name
No.	Description
1	BEZEL
2	PANEL
3	POWER BOARD
4	MAIN BOARD
5	USB BOARD
6	USB BOARD
7	KEY BOARD
8	E941SW MAINFRAME
9	EAR PHONE STAND
10	REAR COVER
11	N/A
12	KEY PAD
13	KEY PAD HOLDER
14	HINGE
15	STAND
16	STAND COVER
17	BASE-941
18	FOOT
19	WEB CAM COVER
20	N/A
S1	0M1G 130 5120
S2	0D1G1030 8120
S3	AM1G1740 10120

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.tpv.com.cn/hello1.asp> for the latest information.

T8BANT6BWVA1DNE

Location	Part No.	Description	Remark
	050G 600 1 W	WHITE STRAP (1G004991)	
	052G 1211 B	Conductive Tape 85mm *40mm *0.09mm	
	052G 2191 A	PAPER TAPE	
HDCP-SMT	070GHDCP500HDC	HDCP CODE	
E07801	078G 518500 V	SPK 8OHM 2W 40X20 200 120MM VECO	2nd source
E07801	078G 518500 Y	SPK 8OHM 2W 40X20 200 120MM SU	
	089G 173 56 4B	AUDIO CABLE	
E08905	089G 175 8A C	USB CABLE 1800MM without PE bag	2nd source
E08905	089G 175 8A G	USB CABLE 1800MM without PE bag	
E08902	089G 715CAAE01	SIGNAL CABLE	2nd source
E08902	089G 715GAAE01	SIGNAL CABLE	2nd source
E08902	089G 715HAAE01	SIGNAL CABLE	
E08901	089G404A15N HL	AC POWER CORD 1500mm	
E08901	089G404A15N IS	AC POWER CORD 1500	2nd source
	095G8014 6WH52	HARNESS 6P(PLUG)-6P(A1253HA HR) 260	
E09501	095G8018 3DH92	LVDS CABLE 30P-30P 140MM	2nd source
E09503	095G8022 6DE07	HARNESS 6P(CI1406)-6P(1253) 150	2nd source
E09503	095G8022 6TE07	HARNESS 6P(CI1406)-6P(1253) 150	
E09503	095G8022 6WE07	HARNESS 6P(CI1406)-6P(1253) 150MM	2nd source
	0D1G1030 8120	screw	
	0M1G 130 5120	SCREW	
	0M1G2940 10225 CR3	SCREW	
	0Q1G1030 8120	SCREW	
	705GHB34035	STAND ASS'Y	
E750	750GBU185X1D04N000	LCD M185XW01 VD00 SH AUO	2nd source
E750	750GBU185X1DA4N000	LCD M185XW01 VD0A SH AUO	
	A15G1179301103	MAIN_FRAME	
	A34G0501ABJ 1B	VESA COVER	
	ADPCA1603HE4	ADAPTER BOARD	
	H40G 001624 1A	CARTON LABEL BARCODE 1	
	H40G 18N61574C	E941PWA EU ID LABEL	
	H40G 45762413B	P/N LABEL FOR BASE	
	H40G 58361548A	941 USB LABEL	
	H40G 58361561A	LED LABEL	
	H40G000261535A	WIN7 EPA TCO05 LABEL--Erect	
	H41G780961513A	TCO5.0 CARD	
	H41G780961546A	e941Pwa QSG	
	H41G78D1615 1A	EU address card	
	H44G8024101	EPS	
	H44G8024201	EPS	
	H44G8024615 1B	e941Pwa CARTON	
	H45G 87 18 6 A	EPE COVER	
	H70G18C1615 1C	e941Pwa CD MANUAL	
	J33G8B42 1 1C0100	KEY PAD	
	J33G8B43ABJ 1L0100	key pad holder	
	J33G8B44ABJ 1L0100	EAR PHONE STAND	
	J33G8B46ABJ 1L0100	web cam cover	
	KEPCAHA3	KEY BOARD	
	Q34G7137ABJA8B0100	REAR COVER	

	Q34G7138AEDZ1B0100	BEZEL e941Pwa	
	Q40G 58162435A	LABEL	
	Q40G000170018A	LABEL	
	Q45G 76 28 H A	P.E. BAGx320x210x0.04	
	Q52G 1185 99	BIG CARTON TAPE FOR AOC	
	Q52G6019 14	TAPE	
E09501	S95G80183H92	HARNESS 30P-30P 140MM	
	USBAHA1	USB BOARD	
	USBAHA6	USB BOARD	
	0Q1G 330 8120	SCREW	
	0Q1G1840 10120	SCREW 4x10	
	A34G0495ABJ 1B	BASE	
	A34G0496ABJ 1B	Base column cover	
	A34G0497ABJ 1T	Directional pillar	
	A34G0498ABJ 2B	SCREW PILLAR	
	A34G0499ABJ 1T	Sleeve	
	A34G0500ABJ 1B	up column-cover	
	A34G0502 1 1X	SWIVEL	
	A37G0054 3	HINGE	
	AM1G1740 12 47 CR3	SCREW	
	AQ1G1740 14120	SCREW	
	Q12G6600 8	PORON FOOT	
	Q33G5006ABJ 1L 32	CABLE COVER	
	756GHACB A3034	MAIN BOARD-CBPCANTA4H1	
SMTCA-U402	100GANA8019W11	MCU ASS'Y-056G2233 11	
GND1	009G6005 1	GND TERMINAL	
CN602	033G3802 4 BH F	CONNECTOR	
IC902	056G 139 3A	PC123Y22FZOF SHARP	
NR901	061G 58100 X	NTCR 10R 20% 5W(10D2-14 MCS)	
C908	063G107K334 6S	CAP X2 330NF 10% 275V BULK (B)	
C903	065G305M1022BP	CAP Y2 1000PF M 250VAC	
C902	065G305M1022BP	CAP Y2 1000PF M 250VAC	
C900	065G306M3322BP	CAP Y1 3.3NF 20% 250V Y5U	
C918	067G215A1024KV	EC 1000UF 20% 25V 12.5*20	
C925	067G215D4714KV	EC 470UF 20% 25V 10*16	
C921	067G215S1023KV	EC 1000UF 20% 16V 10*20	
C604	067G215S4713LV	LOW ESR EC 470uF 16V M 10*12.5mm	
C922	067G215S4713LV	LOW ESR EC 470uF 16V M 10*12.5mm	
C907	067G315Z10115L	EC 100uF 450V M 18*40mm	
L901	073G 174 65 X2	LINE FILTER 30mH MIN	
L905	073G 253 91 L	CHOKE COIL 3.5UH 10% CC-015367HF,VOC,HF	
L906	073G 253 91 L	CHOKE COIL 3.5UH 10% CC-015367HF,VOC,HF	
L907	073G 253191 H	IND CHOKE 1.1uH DADON	
CN901	087G 501 32 S	AC SOCKET ST-01CP-BCE-R	
CN601	088G 30214K DC	PHONE JACK 5P GREEN -	
D905	093G 60334	DIODE SR506 5A/60V DO-201AD	
CN902	095G 825 9D518	HARNESS 9P-9P 120	
CN902	095G 825 9T518	HARNESS 9P-9P 120MM	2nd source
	705GH793081	D901/D906 ASS'Y	
	705GHA57024	Q901 ASS'Y	
	709G2892 HM001	CONSUMPTIVE ASS'Y	
	H40G 45762429A	LABEL	
	LNPCA8361AHD1	CONVERTER BOARD	
HS3	Q90G6295 3	HEAT SINK	
T901	S80GL22T3V1	FMR POWER 490uH TPV-PT	

IC601	056G 616 51	IC APA2071JI-TUG 3.1W DIP-16	
BD901	093G 50460 28	BRIDGE DIODE KBP208G LITEON	
CN402	033G3802 6B Y L	WAFER	
CN701	033G3802 9B Y L	CONN 2.0 9P	
CN101	088G 35315F CH	D-SUB CONN WITH SCREW 15P	
CN102	088G 35424F CH	DVI 24PIN CONN F ATTACHED SCREW	
X401	093G 2251B J	CRYSTAL 12MHZ NXS12.000AC30F-KAB10	
CN409	311GW200C30ABL	WAFER 2.0mm 2*15P	
	709G3737 HM001	COMSUPTIVE ASS'Y	
	H40G 45762429A	LABEL	
SW001	077G 5005A1 CJ	DOME SW 5 SJ-22-217B	
CN512	088G 352 21CL	USB CONN TYPE A	
CN511	311GW200A05ABX	WAFER 2.0mm 5P	
	709G2663 HM001	CONSUMPTIVE ASS'Y	
E715	715G2663T01001001C	USB BOARD PCB	
CN501	033G3802 5B Y L	CONNECTOR 5P 2.0	
CN502	088G 3513B1 CL	USB CONN BLACK	
E09505	095G8014 5DH15	HARNESS 5P(2008)-5P(2008) 300mm	
E09505	095G8014 5WH15	HARNESS 5P(2008)-5P(2008) 300	2nd source
	709G3501 HM001	CONSUMPTIVE ASS'Y	
D901	093G 52 69	DIODE YG902C2RSC 10A/200V TO-220F15	
D906	093G 60526	SCHOTTKY MBRF1060CT ITO-220AB	
	0M1G 930 8120	SCREW 3x8	
HS2	Q90G6264 5	HEAT SINK	
Q901	057G 667924	MOSFET SMK0965F	
HS1	090G6064 1	HEAT SINK	
	0M1G 930 8120	SCREW 3x8	
E55	055G 23524	WELDING FLUX WITHOUT PB	
	Q51G 6 4509	GLUE_RTV	
	Q55G 100625	TIN STICK_LOW ARGENTUM	
IC901	056G 379160	IC FAN6752MY SOP-7	
R610	061G0603000 JF	RST CHIPR MAX 0R05 1/10W FENGHUA	
R907	061G06031001FT	RST CHIP 1K 1/10W 1%	
R918	061G06031002FT	RST CHIP 10K 1/10W 1%	
R602	061G0603103 JT	RST CHIP 10K 1/10W 5% TZAI YUAN	
R603	061G0603103 JT	RST CHIP 10K 1/10W 5% TZAI YUAN	
R604	061G0603103 JT	RST CHIP 10K 1/10W 5% TZAI YUAN	
R605	061G0603103 JT	RST CHIP 10K 1/10W 5% TZAI YUAN	
R609	061G0603103 JT	RST CHIP 10K 1/10W 5% TZAI YUAN	
R916	061G06032002FT	RST CHIP 20K 1/10W 1%	
R925	061G06032002FT	RST CHIP 20K 1/10W 1%	
R928	061G06032002FT	RST CHIP 20K 1/10W 1%	
R606	061G0603273 JT	RST CHIP 27K 1/10W 5% TZAI YUAN	
R607	061G0603273 JT	RST CHIP 27K 1/10W 5% TZAI YUAN	
R920	061G06034701FT	RST CHIP 4K7 1/10W 1%	
R905	061G0603471 JT	RST CHIPR 470OHM +-5% 1/10W TZAI YUAN	
R608	061G0805000 JT	RST 0805 0.05R MAX 1/8W	
R919	061G08054700FT	RST CHIP 470R 1/8W 1%	
RJ816	061G12060007JT	RST CHIPR MAX 0R05 1/4W 1206	
RJ802	061G12060007JT	RST CHIPR MAX 0R05 1/4W 1206	
R902	061G12061004FT	RST CHIP R 1 MOHM +-1% 1/4W	
R901	061G12061004FT	RST CHIP R 1 MOHM +-1% 1/4W	
R900	061G12061004FT	RST CHIP R 1 MOHM +-1% 1/4W	
R923	061G1206101 JF	RST CHIPR 100 OHM +-5% 1/4W FENGHUA	
R912	061G1206101 JF	RST CHIPR 100 OHM +-5% 1/4W FENGHUA	

R910	061G1206101 JF	RST CHIPR 100 OHM +-5% 1/4W FENGHUA	
R909	061G1206101 JF	RST CHIPR 100 OHM +-5% 1/4W FENGHUA	
R903	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R929	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R930	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R934	061G12062003FF	RST CHIPR 200KOHM +-1% 1/4W FENGHUA	
R908	061G1206204 JF	RST CHIPR 200KOHM +-5% 1/4W FENGHUA	
R917	061G1206330 JT	RST CHIP R 33ohm 1/4W +/-5%	
R913	061G1206339 JF	RST CHIPR 3.3 OHM +-5% 1/4W FENGHUA	
R932	061G12066804FF	RST CHIPR 6.8MOHM 1% 1/4W FENGHUA	
R931	061G12066804FF	RST CHIPR 6.8MOHM 1% 1/4W FENGHUA	
R933	061G12066804FF	RST CHIPR 6.8MOHM 1% 1/4W FENGHUA	
C610	065G060310131J Y	CAP CHIP 0603 100P 50V NP0 +/-5%	
C611	065G060310131J Y	CAP CHIP 0603 100P 50V NP0 +/-5%	
C923	065G060310232K Y	CAP CHIP 0603 1N 50V X7R +/-10%	
C924	065G060310412K Y	CAP CHIP 0603 100N 16V X7R +/-10%	
C926	065G060310412K Y	CAP CHIP 0603 100N 16V X7R +/-10%	
C612	065G060310432K Y	CAP 0603 100NF 10% 50V X7R	
C613	065G060310432K Y	CAP 0603 100NF 10% 50V X7R	
C914	065G060347132K Y	CAP CHIP 0603 470PF K 50V X7R	
C603	065G060347412K Y	CAP CHIP 0.47uF 16V +/-10% X7R	
C606	065G060347412K Y	CAP CHIP 0.47uF 16V +/-10% X7R	
C601	065G060347412K Y	CAP CHIP 0.47uF 16V +/-10% X7R	
C602	065G060347412K Y	CAP CHIP 0.47uF 16V +/-10% X7R	
C915	065G080510232K F	CAP 0805 1000PF 10% 50V X7R	
C912	065G080510432K Y	CAP CHIP 0805 100N 50V X7R +/-10%	
C608	065G080510522K 3	CAP CHIP 0805 1U 25V X7R +/-10%	
C609	065G080510522K 3	CAP CHIP 0805 1U 25V X7R +/-10%	
C927	065G080510522K T	CAP 0805 1UF 10% 25V X7R	
C916	065G120610272K Y	CAP 1206 1NF 10% 500V X7R	
C917	065G120610272K Y	CAP 1206 1NF 10% 500V X7R	
C919	065G120610272K Y	CAP 1206 1NF 10% 500V X7R	
C809	067G 4151017LV	EC 100uF 20% 50V RZY 8*11.5	
C807	067G 415479 9L	EC 4.7UF 20% 100V 8*12	
CN802	311GB254B04AAL	PIN HEADER 2.54mm 4P V/T 9.16mm 2.54mm	
CN801	311GB254B07AAL	PIN HEADER 2.54MM 7P 5P7.2MM/2P4.0MM	
	709G3823 HM001	COMSUPTIVE ASS'Y	
	H40G 45762429A	LABEL	
	Q55G 100625	TIN STICK_LOW ARGENTUM	
C716	067G 3051007PB	EC 10UF 20% 50V 5*11 CD263	
C433	067G 3051013PB	EC 105C 100uF M 16V 5*11mm JH CD263	
C705	067G 3051013PB	EC 105C 100uF M 16V 5*11mm JH CD263	
C702	067G 3051013PB	EC 105C 100uF M 16V 5*11mm JH CD263	
U401	056G 562327	IC Scaler NT68668AFG QFP-128	
U701	056G 563224	LDO AP2114H-3.3TRG1 1A 3.3V SOT-223	
U102	056G 662504	IC ESD AOZ8902CIL 24KV 5A SOT23-6 AOS	
U103	056G 662504	IC ESD AOZ8902CIL 24KV 5A SOT23-6 AOS	
U104	056G 662504	IC ESD AOZ8902CIL 24KV 5A SOT23-6 AOS	
U106	056G 662504	IC ESD AOZ8902CIL 24KV 5A SOT23-6 AOS	
U107	056G 662504	IC ESD AOZ8902CIL 24KV 5A SOT23-6 AOS	
U101	056G1133 34	EEPROM M24C02-WMN6TP 2Kb SO-8	
U105	056G1133 34	EEPROM M24C02-WMN6TP 2Kb SO-8	
U402	056G2233 11	IC Pm25LD020C-SCE SIOC-8(150mil) 2M	
Q701	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q706	057G 417 12 T	KEC 2N3904S-RTK/PS	

Q401	057G 417 13 T	SMALLTRAN 2N3906S-RTK/PS 0.2A 40V SOT-23	
Q402	057G 417 13 T	SMALLTRAN 2N3906S-RTK/PS 0.2A 40V SOT-23	
Q705	057G 763940	MOSFET AO3401A SOT-23	
R711	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R410	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R409	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R407	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R406	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R118	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R117	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R110	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R109	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R104	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R103	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R141	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R140	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R139	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R138	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R137	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R136	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R135	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R134	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R703	061G0402101 JF	RST CHIPR 100 OHM +-5% 1/16W FENGHUA	
R124	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R127	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R128	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R129	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R431	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R439	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R712	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R798	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R123	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R121	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R119	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R113	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R111	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R108	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R106	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R105	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R102	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R101	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R424	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R130	061G0402103 JF	RST CHIPR 10KOHM +-5% 1/16W FENGHUA	
R799	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R714	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R704	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R444	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R429	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R415	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R422	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R715	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R432	061G0402105 JF	RST CHIPR 1MOHM 5% 1/16W FENGHUA	
R125	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R126	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R413	061G0402223 JF	RST CHIPR 22KOHM 5% 1/16W FENGHUA	

R411	061G0402223 JF	RST CHIPR 22KOHM 5% 1/16W FENGHUA	
R719	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R701	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R427	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R425	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R133	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R116	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R416	061G0402224 JT	RST CHIP 220K 1/16W 5% TZAI YUAN	
R423	061G0402224 JT	RST CHIP 220K 1/16W 5% TZAI YUAN	
R405	061G0402392 JT	RST CHIP R 3K9 +/-5% 1/16W TZAI YUAN	
R404	061G0402392 JT	RST CHIP R 3K9 +/-5% 1/16W TZAI YUAN	
R401	061G0402392 JT	RST CHIP R 3K9 +/-5% 1/16W TZAI YUAN	
R419	061G0402394 JY	RST CHIP R 390K +/-5% 1/16W YAGEO	
R408	061G04024700FT	RST CHIP 470R 1/16W 1%	
R142	061G0402471 JT	RST CHIP 470R 1/16W 5% TZAI YUAN	
R114	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R115	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R131	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R132	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R702	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R721	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R107	061G04027509FT	RST CHIP 75R 1/16W 1%	
R112	061G04027509FT	RST CHIP 75R 1/16W 1%	
R120	061G04027509FT	RST CHIP 75R 1/16W 1%	
R122	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R418	061G0603102 JT	RST CHIP 1K 1/10W 5% TZAI YUAN	
R417	061G0603471 JT	RST CHIPR 470OHM +/-5% 1/10W TZAI YUAN	
FB701	061G0805000 JT	RST 0805 0.05R MAX 1/8W	
R448	061G1206221 JT	RST CHIPR 220 OHM +/-5% 1/4W TZAI YUAN	
R449	061G1206221 JT	RST CHIPR 220 OHM +/-5% 1/4W TZAI YUAN	
C120	065G040210232K A	CAP 0402 1NF 10% 50V X7R	
C412	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C417	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C418	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C419	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C422	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C425	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C427	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C434	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C701	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C703	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C704	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C706	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C707	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C113	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C114	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C115	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C117	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C118	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C119	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C401	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C402	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C403	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C405	065G040210425K T	CAP 0402 100NF 10% 25V X5R	
C407	065G040210425K T	CAP 0402 100NF 10% 25V X5R	

C408	065G040210425K	T	CAP 0402 100NF 10% 25V X5R	
C409	065G040210425K	T	CAP 0402 100NF 10% 25V X5R	
C410	065G040210425K	T	CAP 0402 100NF 10% 25V X5R	
C411	065G040210425K	T	CAP 0402 100NF 10% 25V X5R	
C406	065G0402105A5K	T	CAP 0402 1UF 10% 10V X5R	
C414	065G0402105A5K	T	CAP 0402 1UF 10% 10V X5R	
C415	065G0402105A5K	T	CAP 0402 1UF 10% 10V X5R	
C424	065G0402105A5K	T	CAP 0402 1UF 10% 10V X5R	
C426	065G040218031J	A	CAP 0402 18PF J 50V NPO	
C428	065G040218031J	A	CAP 0402 18PF J 50V NPO	
C181	065G040222031J	A	CAP 0402 22PF J 50V NPO	
C182	065G040222031J	A	CAP 0402 22PF J 50V NPO	
C101	065G040222415K	A	CAP 0402 220NF 10% 16V X5R	
C718	065G040222415K	A	CAP 0402 220NF 10% 16V X5R	
C715	065G040222415K	A	CAP 0402 220NF 10% 16V X5R	
C429	065G040222415K	A	CAP 0402 220NF 10% 16V X5R	
C116	065G040222415K	A	CAP 0402 220NF 10% 16V X5R	
C107	065G040247312K	T	CAP 0402 47NF 10% 16V X7R	
C108	065G040247312K	T	CAP 0402 47NF 10% 16V X7R	
C110	065G040247312K	T	CAP 0402 47NF 10% 16V X7R	
C105	065G040247312K	T	CAP 0402 47NF 10% 16V X7R	
C104	065G040247312K	T	CAP 0402 47NF 10% 16V X7R	
C102	065G040247312K	T	CAP 0402 47NF 10% 16V X7R	
C103	065G040250931J	A	CAP 0402 5PF J 50 NPO	
C106	065G040250931J	A	CAP 0402 5PF J 50 NPO	
C109	065G040250931J	A	CAP 0402 5PF J 50 NPO	
C404	065G0805475A2K	Y	NO-SUGGEST CAP 0805 4.7UF 10% 10V X7R	
C413	065G0805475A2K	Y	NO-SUGGEST CAP 0805 4.7UF 10% 10V X7R	
C416	065G0805475A2K	Y	NO-SUGGEST CAP 0805 4.7UF 10% 10V X7R	
C421	065G0805475A2K	Y	NO-SUGGEST CAP 0805 4.7UF 10% 10V X7R	
C423	065G0805475A2K	Y	NO-SUGGEST CAP 0805 4.7UF 10% 10V X7R	
FB409	071G 56K121	M	CHIP BEAD 120OHM 6A MGLB2012-120T-LF	
FB403	071G 56V301	M	CHIP BEAD 0805 300R 25% 700mA	
FB404	071G 56V301	M	CHIP BEAD 0805 300R 25% 700mA	
FB405	071G 56V301	M	CHIP BEAD 0805 300R 25% 700mA	
FB408	071G 56V301	M	CHIP BEAD 0805 300R 25% 700mA	
FB407	071G 56V301	M	CHIP BEAD 0805 300R 25% 700mA	
D101	093G 64 42	L	DIODE LBAV70LT1G SOT-23 LRC	
D102	093G 64 42	L	DIODE LBAV70LT1G SOT-23 LRC	
ZD101	093G 39GA01	T	RLZ5.6B	
ZD102	093G 39GA01	T	RLZ5.6B	
D402	093G 39GA01	T	RLZ5.6B	
D403	093G 39GA01	T	RLZ5.6B	
	709G3737 HS001		COMSUPTIVE ASS'Y	
E715	715G3737M02000004L		MAIN BOARD PCB	2nd source
E715	715G3737M02000004S		MAIN BOARD PCB	
	H52G1701 1		MESH PRINTTING_PAPER	
CN001	033G8032 6F	X	WAFER 6P 1.25MM	
R003	061G0603000 JF		RST CHIPR MAX 0R05 1/10W FENGHUA	
R005	061G06031001FT		RST CHIP 1K 1/10W 1%	
R004	061G06032001FF		RST CHIP 2KOHM 1% 1/10W FENGHUA	2nd source
R004	061G06032001FT		RST CHIP R 2Kohm 1/10W +/-1%	
R002	061G06032001FT		RST CHIP R 2Kohm 1/10W +/-1%	
LED01	081G 14501 GP		LED GPTD1210YGC3-HB	
E715	715G4007K01000004F		KEY BOARD PCB	2nd source

E715	715G4007K01000004I	KEY BOARD PCB	
E715	715G4007K01000004L	KEY BOARD PCB	2nd source
C503	065G060310432K A	CAP 0603 100NF 10% 50V X7R	
C501	065G060350931C Y	CAP CHIP 0603 5P 50V NPO +/- 0.25PF	
C502	065G060350931C Y	CAP CHIP 0603 5P 50V NPO +/- 0.25PF	
FB501	071G 56K121 M	CHIP BEAD 120OHM 6A MGLB2012-120T-LF	
	715G3501 3	USB BOARD PCB	
D903	093G 6026T52T	CTIFIER DIODE FR107	
CN901	006G 31500	EYELET	
IC903	056G 158 10 T	LDO IC AZ431AZ-AE1 TO-92 150MA 40V TO-92	
Q904	057G 530503 T	2SD1207T	
R906	061G152M10452T SY	RST MOFR 100KOHM +/-5% 2WS FUTABA	
R924	061G152M33852T SY	RST MOF 0R33 5% 2W	
R915	061G152M68152T SY	RST MOF 680R 5% 2WS	
R911	061G152M68152T SY	RST MOF 680R 5% 2WS	
C911	065G 2K152 2T6921	CAP CER 1500pF K 2KV Y5P	
C920	067G 2046812KT	CS CAP 680uF 10V 8*11 mm	
C913	067G215Y2207KT	CAP 105°C 22UF M 50V KINGNICHIEG	
FB602	071G 55 9 T	BEAD 3.5*0.8*6.0mm 110R HF	
FB902	071G 55 9 T	BEAD 3.5*0.8*6.0mm 110R HF	
FB901	071G 55 29	FERRITE BEAD	
F901	084G 56 4W	FUSE 4A 250V	
F902	084G 56 4W	FUSE 4A 250V	
F903	084G 56 4W	FUSE 4A 250V	
ZD901	093G 3957952T	GDZJ18C	
D904	093G 6038T52T	FR103 AO	
J906	095G 90 23	JUMPER WIRE	
J907	095G 90 23	JUMPER WIRE	
J908	095G 90 23	JUMPER WIRE	
J909	095G 90 23	JUMPER WIRE	
J910	095G 90 23	JUMPER WIRE	
J911	095G 90 23	JUMPER WIRE	
J912	095G 90 23	JUMPER WIRE	
J913	095G 90 23	JUMPER WIRE	
J921	095G 90 23	JUMPER WIRE	
J905	095G 90 23	JUMPER WIRE	
J904	095G 90 23	JUMPER WIRE	
J601	095G 90 23	JUMPER WIRE	
J903	095G 90 23	JUMPER WIRE	
J902	095G 90 23	JUMPER WIRE	
J901	095G 90 23	JUMPER WIRE	
J806	095G 90 23	JUMPER WIRE	
J608	095G 90 23	JUMPER WIRE	
J607	095G 90 23	JUMPER WIRE	
J606	095G 90 23	JUMPER WIRE	
J605	095G 90 23	JUMPER WIRE	
J604	095G 90 23	JUMPER WIRE	
J603	095G 90 23	JUMPER WIRE	
J602	095G 90 23	JUMPER WIRE	
	709G2892 HA001	CONSUMPTIVE ASS'Y	
E715	715G2892P01020001C	ADAPTER BOARD PCB	
E715	715G2892P01020001M	ADAPTER BOARD PCB	2nd source
E715	715G2892P01020001S	ADAPTER BOARD PCB	2nd source
CN806	033G8032 6F HR	CONNECTOR 6P 1.25	
U801	056G 700 5	IC LED driver MP3389EF TSSOP28	

Q806	057G 763947	MOSFET APM8005KCTRG 6A 80V SOP-8	
R809	061G06031002FT	RST CHIP 10K 1/10W 1%	
R806	061G0603102 JF	RST CHIPR 1K OHM +-5% 1/10W FENGHUA	
R808	061G0603102 JF	RST CHIPR 1K OHM +-5% 1/10W FENGHUA	
R804	061G0603104 JF	RST CHIPR 100KOHM 5% 1/10W FENGHUA	
R802	061G06032003FF	RST CHIPR 200KOHM 1/10W FENGHUA	
R810	061G0603203 JF	RST CHIPR 20K OHM +-5% 1/10W FENGHUA	
R807	061G0603203 JF	RST CHIPR 20K OHM +-5% 1/10W FENGHUA	
R803	061G06033302FT	RST CHIP 33K 1/10W 1%	
R819	061G06033302FT	RST CHIP 33K 1/10W 1%	
R823	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R815	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R826	061G08051009FT	RST CHIP R 10ohm +/-1% 1/8W	
R827	061G0805109 JF	RST CHIPR 1 OHM +- 5% 1/8W FENGHUA	
R828	061G0805109 JF	RST CHIPR 1 OHM +- 5% 1/8W FENGHUA	
R831	061G0805109 JF	RST CHIPR 1 OHM +- 5% 1/8W FENGHUA	
R832	061G0805109 JF	RST CHIPR 1 OHM +- 5% 1/8W FENGHUA	
R805	061G0805304 JT	RST CHIP 300K 1/8W 5% TZAI YUAN	
R811	061G0805308 JF	RST CHIP R3 1/8W 5%	
R812	061G0805308 JF	RST CHIP R3 1/8W 5%	
R818	061G1206000 JF	RST CHIPR MAX0R05 1/4W FENGHUA	
F801	061G12060004JT	RST CHIPR 1206 MAX0R05 4A 1/4W TZAI YUAN	
R801	061G12061009FT	RST CHIP R 10ohm 1/4W +/-1%	
C806	065G060310131J F	CAP CHIP 0603 100PF J 50V NPO	
C811	065G060310131J F	CAP CHIP 0603 100PF J 50V NPO	
C802	065G060368332K Y	CHIP 0603 68NF 50V X7R	
C805	065G080510131J F	CAP CHIP 0805 100PF J 50V NPO	
C801	065G080522432K A	CAP 0805 220NF 10% 50V X7R	
C803	065G080522432K A	CAP 0805 220NF 10% 50V X7R	
C804	065G080522432K A	CAP 0805 220NF 10% 50V X7R	
C810	065G080547432K A	CAP CHIP 0805 0.47UF K 50V X7R	
L801	073G253S 19 H	SMD CHOKE 33uH+-20% 3A	
D801	093G 60S907 T	SCHOTTKY B3100B 3A 100V SMB	
E715	715G4013P02001004S	CONVERTER BOARD PCB	