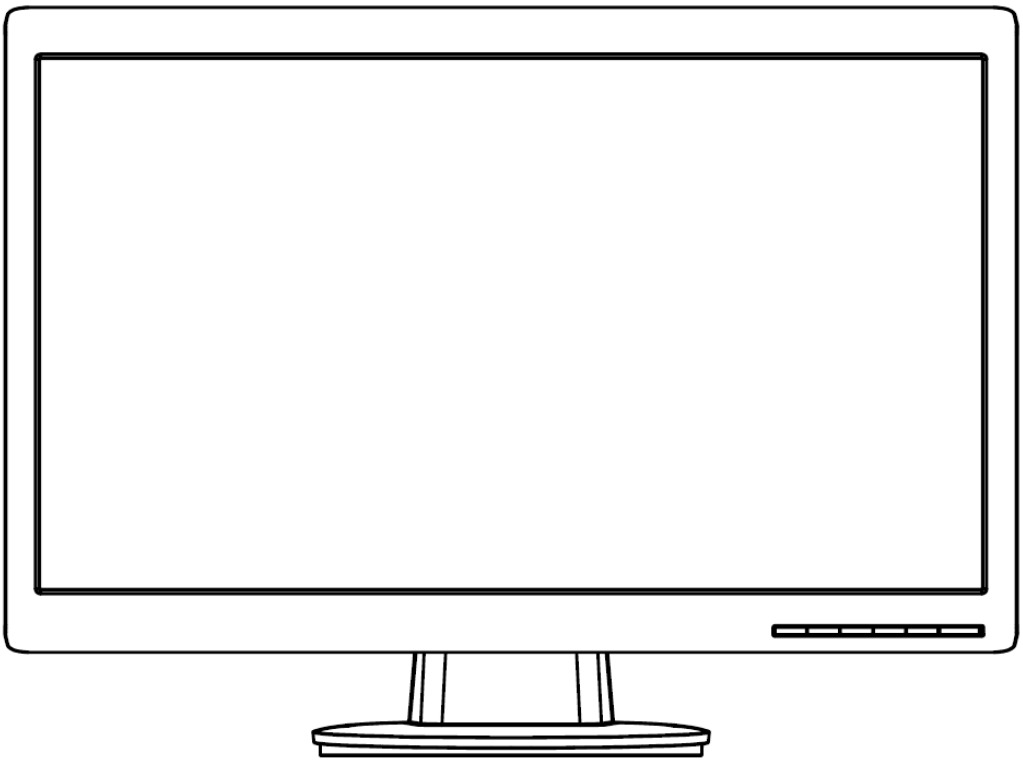
R

LCD Monitor Service Manual



Model: ASUS VH236H&VH232H

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Index

Revision List

Version	Release Date	Revision History	Customer Model	TPV Model Name
A00	Jan,08,2009	Initial release	VH236H	HDRSACNKXCUSRC
			VH232H	HDRSA2NTXCUSRP

Important Safety Notice

Safety information

• Before setting up the monitor, carefully read all the documentation that came with the package.

• To prevent fire or shock hazard, never expose the monitor to rain or moisture.

• Never try to open the monitor cabinet. The dangerous high voltages inside the monitor may result in serious physical injury.

• If the power supply is broken, do not try to fix it by yourself. Contact a qualified service technician or your retailer.

• Before using the product, make sure all cables are correctly connected and the power cables are not damaged. If you detect any damage, contact your dealer immediately.

• Slots and openings on the back or top of the cabinet are provided for ventilation. Do not block these slots. Never place this product near or over a radiator or heat source unless proper ventilation is provided.

• The monitor should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supply to your home, consult your dealer or local power company.

• Use the appropriate power plug which complies with your local power standard.

• Do not overload power strips and extention cords. Overloading can result in fire or electric shock.

• Avoid dust, humidity, and temperature extremes. Do not place the monitor in any area where it may become wet. Place the monitor on a stable surface.

• Unplug the unit during a lightning storm or if it will not be used for a long period of time. This will protect the monitor from damage due to power surges.

• Never push objects or spill liquid of any kind into the slots on the monitor cabinet.

• To ensure satisfactory operation, use the monitor only with UL listed computers which have appropriate configured receptacles marked between 100-240V AC.

• If you encounter technical problems with the monitor, contact a qualified service technician or your retailer.

WARNING

• Before you lift or reposition your monitor, it is better to disconnect the cables and power cord. Follow the correct lifting techniques when positioning the monitor. When lifting or carrying the monitor, grasp the edges of the monitor.Do not lift the display by the stand or the cord.

• Cleaning. Turn your monitor off and unplug the power cord. Clean the monitor surface with a lint-free, non-abrasive cloth. Stubborn stains may be removed with a cloth dampened with mild cleaner.

• Avoid using a cleaner containing alcohol or acetone. Use a cleaner intended for use with the LCD. Never spray cleaner directly on the screen, as it may drip inside the monitor and cause an electric shock.

 WARNING: Information to prevent injury to yourself when trying to complete a task.

 CAUTION: Information to prevent damage to the components when trying to complete a task.

 IMPORTANT: Information that you MUST follow to complete a task.

 NOTE: Tips and additional information to aid in completing a task.

1. Monitor Specifications

Model	VH232H	VH236H
Panel Size	23”W	23”W
True Resolution	1920X1080	1920X1080
Brightness (Max.)	≧300CD/m^2	≧300CD/m^2
Intrisinc Contrast Ratio	≧1000:1	≧1000:1
Viewing Angle (CR=10)	≧160°(V), ≧160°(H)	≧160°(V), ≧160°(H)
Color Saturation (NTSC)	72%	72%
Display Colors	16.7M	16.7M
Response Time	5ms	2ms
Satellite Sperker	2W x 2 stere	2W x 2 stereo
HDMI Input	HMDI	HMDI
DVI Input	Yes	Yes
D-SUB Input	Yes	Yes
Audio Line-in	Yes	Yes
Earphone Output	Yes	Yes
SPIDIF Output	Yes	Yes
Power On	50W	50W
Tilt	+20° ~ -5°	+20° ~ -5°
VESA Wall Mounting	Yes (100mm x 100mm)	Yes (100mm x 100mm)
Phys. Dimension	548.80 x 349.9x 220	548.80 x 349.9x 220
Box Dimesion (WxHxD)	638 x 478 x 171	638 x 478 x 171
Net Weight (Esti.)	5.5	5.5
Gross Weight (Esti.)	7.3	7.3
Voltage Rating	AC: 100 ~ 240V (Built-in)	AC: 100 ~ 240V (Built-in)

2. Operation Instruction

2.1 General Instructions

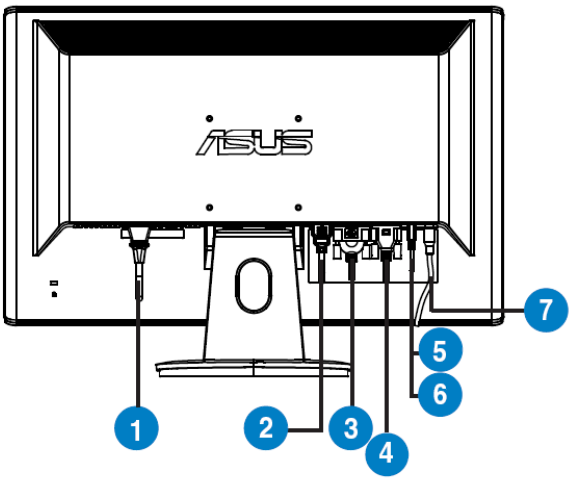
Press the power button to turn the monitor on or off. The other control buttons are located at the front of the panel of the monitor.

By changing these settings, the picture can be adjusted to your personal preferences.

- The power cord should be connected.
- Connect the video cable from the monitor to the video card.
- Press the power button to turn on the monitor, the power indicator will light up.

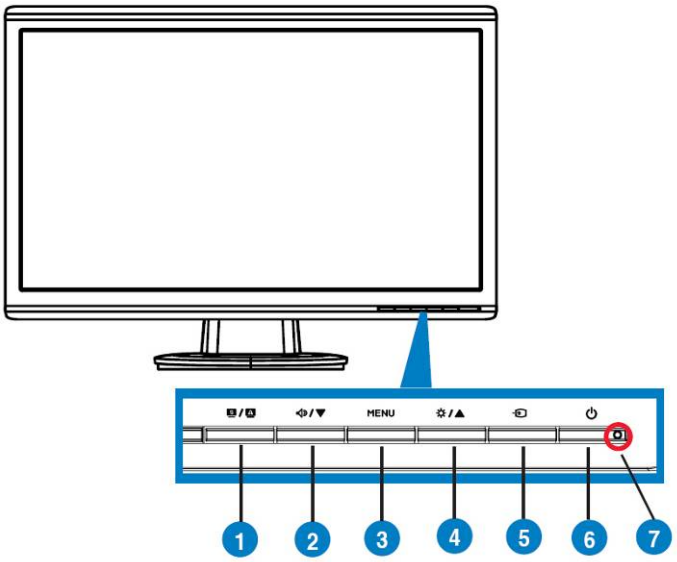
2.2 Control Button

Rear View



1	AC-IN port
2	HDMI-IN port
3	DVI port
4	VGA port
5	Line - in Port
6	Earphone - out Port
7	SPDIF Out

Front View



1. S/A button:
   - Automatically adjust the image to its optimized position, clock, and phase by long pressing this button for 2-4 seconds (for VGA mode only).
   - Use this hotkey to switch from five video preset modes (Game Mode, Night View Mode, Scenery Mode, Standard Mode, Theater Mode) with SPLENDID™ Video Enhancement Technology.
   - Exit the OSD menu or go back to the previous menu as the OSD menu is active.
2. ◀)/▼ Button:
   - Press this button to decrease the value of the function selected or move to the next fuction.
   - This is also a hotkey for Volume adjustment.
3. MENU Button:
   - Press this button to enter/select the icon (function) highlighted while the OSD menu is activated.
4. ☼/▲ Button:
   - Press this button to increase the value of the function selected or move to the previous fuction.
   - This is also a hotkey for Brightness adjustment.
5. Input Select Button
   Use this hotkey to switch from VGA,DVI,HDMI input signal.
   (for some models)

Press (Input Select Button) to display HDMI signals after you connect cable with monitor.(for VH242H and VH222H)

6. Power button
   - Press this button to turn the monitor on/off.
7. Power indicator

2.3 OSD Menu

2.3.1 How to reconfigure

1. Press the MENU button to activate the OSD menu.
2. Press ▼ and ▲ to navigate through the function. Highlight and activate the desired function by pressing the MENU button. If the function selected has a sub-menu, press ▼ and ▲ again to navigate through the sub-menu functions. Highlight and activate the desired sub-menu function by pressing the Menu function.
3. Press ▼ and ▲ to change the settings of the selected function.
4. To exit the OSD menu, press the S button. Repeat step 2 and step 3 to adjust any other function.

2.3.2 OSD Function Introduction

1. Spendid

This function contains five sub-functions you can select for your preference. Each mode has the Reset selection, allowing you to maintain your setting or return to the preset mode.

- **Scenery Mode:** Best choice for scenery photo display with SPLENDID™ Video Enhhancement.
- **Standard Mode:** Best choice for document editing with SPLENDID™ Video Enhancement.
- **Theater Mode:** Best choice for movie with SPLENDIF™ Video Enhancement.
- **Game Mode:** Best choice for game playing with SPLENDID™ Enhancement.
- **Night View Mode:** Best choice for dark-scene game or move with SPLENDID™ Video Enhancemetn.

- In the Standard Mode, the **Satuation** and ASCR functions are not user-configurable.
- In the other modes, the **sRGB** function is not user-configurable.

2. Image

You can adjust brightness, contrast, sharpness, saturation, position (VGA only), and focus (VGA only) from this main function.

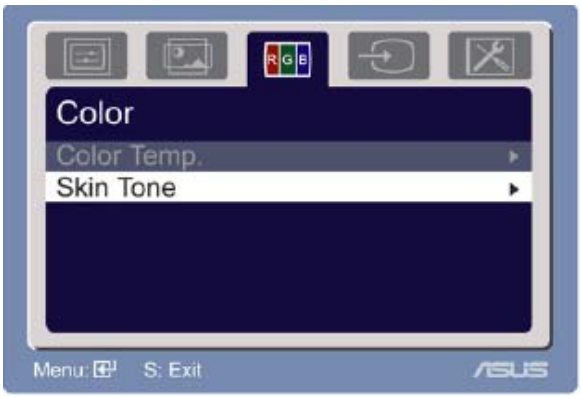
- Brightness: the adjusting range is from 0 to 00. + is a hotkey to activate this function.
- Contrast: the adjusting range is from 0 to 00.
- Sharpness: the adjusting range is from 0 to 00.
- Saturation: the adjusting range is from 0 to 00.
- Position: adjusts the horizontal postition (H-Position) and the vertical position (V-Position) of the image. The adjusting range is from 0 to 00.
- Focus: reduces Horizonal-line noise and Vertical-line noise of the image by adjusting (Phase) and (Clock) separately. The adjusting range is from 0 to 00.

- Phase adjusts the phase of the pixel clock signal. With a wrong phase adjustment, the screen shows horizontal disturbances.
- Clock (pixel frequency) controls the number of pixels scanned by one horizontal sweep. If the frequency is not correct, the screen shows vertical stripes and the image is not proportional.

3. Color

Select the image color you like from this function.

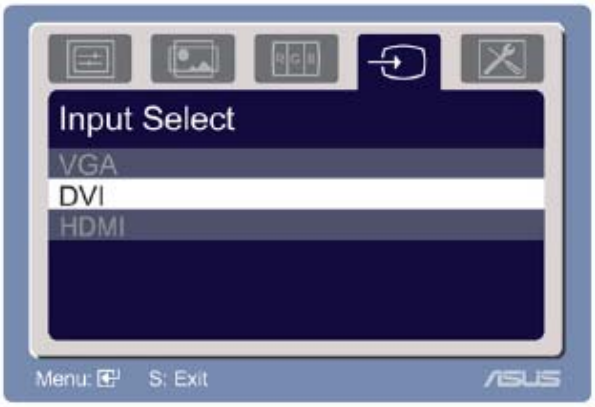
- Color Temp.: contains five color modes including Cool, Normal, Warm, sRGB, and User mode.
- Skin Tone: contains three color modes including Reddish, Natural, and Yellowish.



In the User mode, colors of R (Red), G (Green), and B (Bluee) are userconfigurable; the adjusting range is from 0- 00.

4. Input Select

In this function, you can select VGA, DVI, and HDMI input source (Only for some models).



5. System Setup

Allow you to adjust the system.

• Volume: the adjusting range is from 0 to 00. is a hotkey to activate this function.

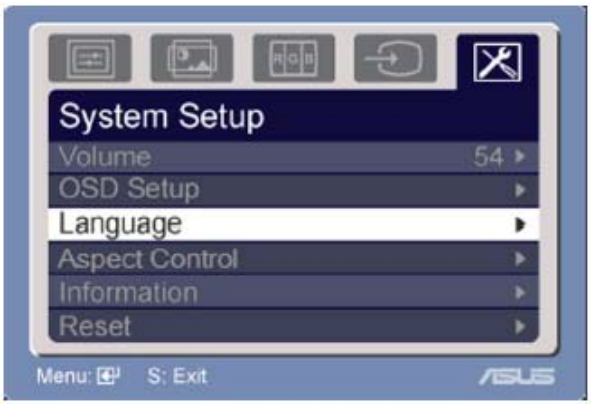
• OSD Setup: adjusts the horizontal postition (H-Position) and the vertical position (V-Position) of the OSD. The adjusting range is from 0 to 00. In the OSD Timeout selection, you can adjust the OSD timeout from 0 to 20.

• Language: there are ten languages for your selection, Including English, German, Italian, French, Dutch, Spanish, Russian, Traditional Chinese, Simplified Chinese, Japanese, and Korean.

• Aspect Controls: adjusts the aspect ratio to “Full” or “4:3”.

• Information: shows the monitor information.

• Reset: “Yes” allows you to revert to the preset mode.



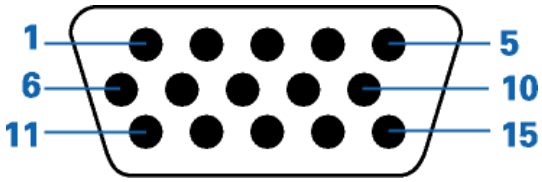
3. Input/Output Specification

3.1 Input Signal Connector

Analog connectors

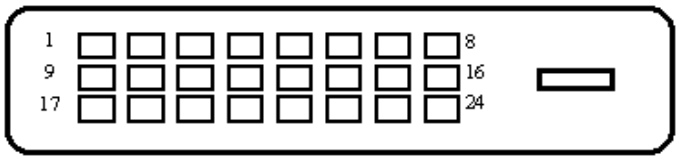
Pin No.	Description	Pin No.	Description
1.	Red Video	9.	+5V Supply
2.	Green Video	10.	Logic Ground
3.	Blue Video	11.	Monitor Ground
4.	Monitor Ground	12.	DDC-Serial Data
5.	DDC-Return	13.	H-Sync
6.	Red Ground	14.	V-Sync
7.	Green Ground	15.	DDC-Serial Clock
8.	Blue Ground		

VGA connector layout



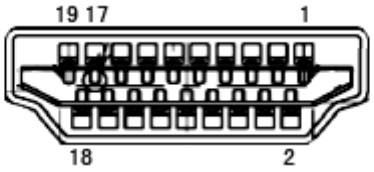
DVI connectors

Pin No.	Description	Pin No.	Description	Pin No.	Description
1.	RX2-	9.	R X1-	17.	RX0-
2.	RX2+	10.	RX1+	18.	RX0+
3.	RX2 Shield	11.	RX1 Shield	19.	RX0 Shield
4.	NC	12.	NC	20.	NC
5.	NC	13.	NC	21.	NC
6.	DDC Clock	14.	+5V Power	22.	RX Clock Shield
7.	DDC Data	15.	Ground	23.	RX Clock+
8.	NC	16.	Hot Plug Detection	24.	RX Clock-



HDMI Connectors

Pin No.	Description	Pin No.	Description
1.	TMDS Data2+	11.	TMDS Clock Shield
2.	TMDS Data2 Shield	12.	TMDS Clock
3.	TMDS Data2-	13.	CEC
4.	TMDS Data1+	14.	Reserved (N.C. on device)
5.	TMDS Data1 Shield	15.	SCL
6.	TMDS Data1-	16.	SDA
7.	TMDS Data0+	17	DDC/CEC Ground
8.	TMDS Data0 Shield	18	+5V
9.	TMDS Data0-	19	Hot Plug Detect
10.	TMDS Clock+		



3.2 Power Supply Requirements

A/C Line voltage range	100 V ~ 240 V
A/C Line frequency range	50 ± 3Hz, 60 ± 3Hz
Input Voltage transients	90-264 voltage AC for 10 sec @40
Current	1.5A max at 100V; 0.8A max at 240 V
Peak surge current	< 60A peak at 240 VAC and cold starting < 30A peak at 120VAC and cold starting
Leakage current	< 3.5mA
Power line surge	No advance effects (no loss of information or defect) with a maximum of 1 half-wave missing per second

3.3 Factory Preset Display Modes

VESA Modes, Factory Preset Timings

Mode	Resolution	H(KHz)	V(Hz)	Pixel(MHz)
VGA	640x480	31.469	60	25.175
	640x480	37.861	72	31.5
	640x480	37.5	75	31.5
SVGA	800x600	35.156	56	36
	800x600	37.879	60	40
	800x600	48.077	72	50
	800x600	46.875	75	49.5
XGA	1024x768	48.363	60	65
	1024x768	56.476	70	75
	1024x768	60.023	75	78.75
SXGA	1152x864	67.5	75	108
	1280x960	60	60	108
	1280x1024	63.981	60	108
	1280x1024	79.976	75	135
WXGA+	1440x900	55.935	59	106.5
WSXGA+	1680x1050	65.29	60	146.25
1080P	1920x1080	67.5	60	148.5

IBM Modes

Mode	Resolution	H(KHz)	V(Hz)	Pixel(MHz)
DOS	640x350	31.469	70	25.175
	720x400	31.469	70	28.322

MAC Modes

Mode	Resolution	H(KHz)	V(Hz)	Pixel(MHz)
VGA	640x480	35	67	30.24
SVGA	832x624	49.725	75	57.2832

VESA Modes, User Available Timings

Mode	Resolution	H(KHz)	V(Hz)	Pixel(MHz)
	848x480	31.02	60	33.75
720P	1280x720	44.444	60	64
	1280x720	44.772	60	74.5
	1280x720	56.456	75	95.75
WXGA	1280x768	47.396	60	68.25
	1280x768	47.776	60	79.5
	1280x768	60.289	75	102.25
	1280x800	49.306	60	71
	1280x800	49.702	60	83.5
	1280x800	62.795	75	106.5
WXGA+	1440x900	55.469	60	88.75
	1440x900	70.635	75	136.75
WSXGA+	1680x1050	64.674	60	119
1080P	1920x1080	66.587	60	138.5

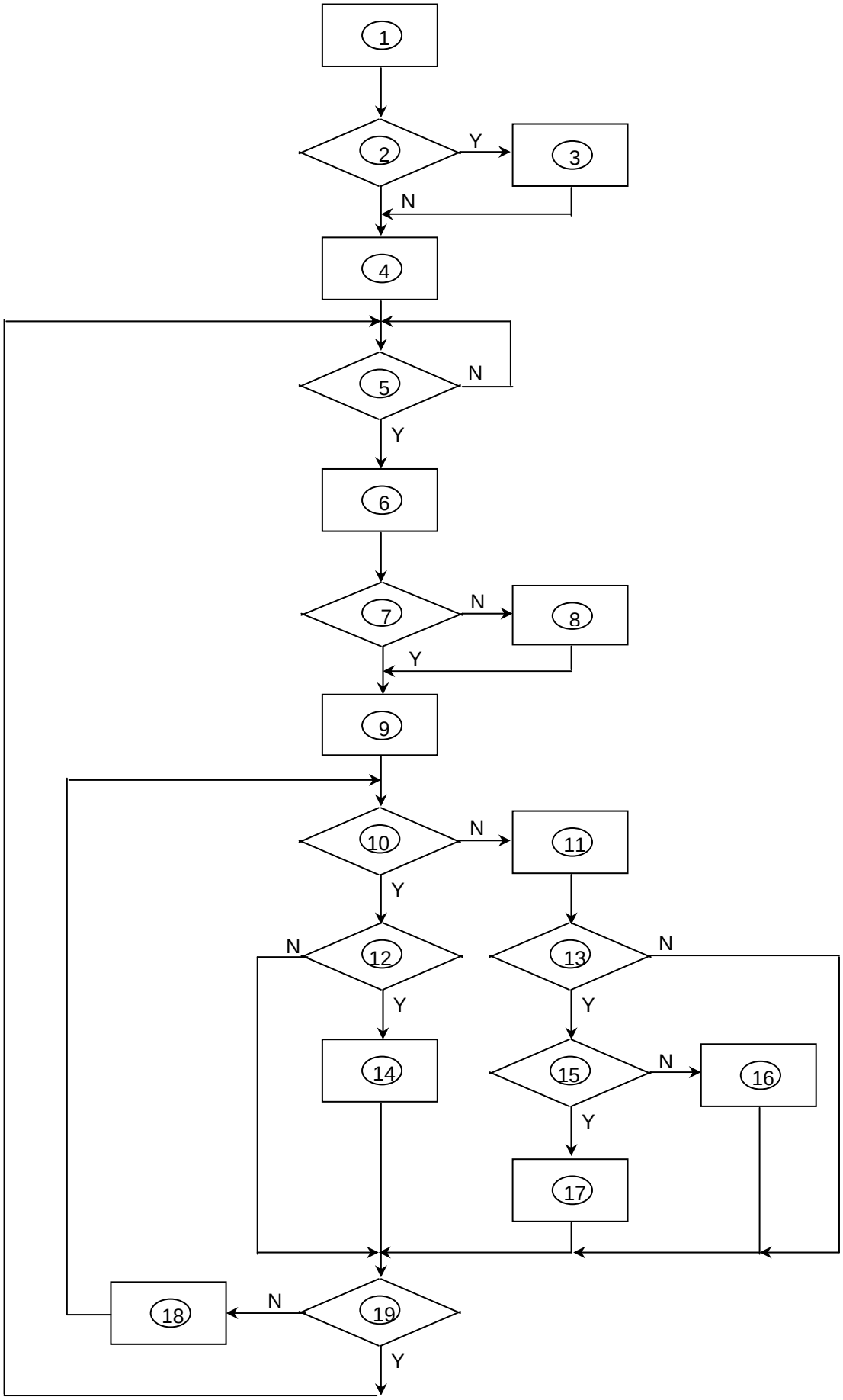
HDMI Supported Primary Timings

Mode	Resolution	H(KHz)	V(Hz)	Pixel(MHz)
480P	640x480P	31.469/31.5	59.94/60	25.175/25.2
	720x480P	31.469 / 31.5	59.94 / 60	27 /27.027
	720x480P	31.469 / 31.5	59.94 / 60	27 /27.027
576P	720x576P	31.25	50	27
	720x576P	31.25	50	27
720P	1280x720P	37.5	50	74.25
	1280x720P	44.955/45	59.94/60	74.176/74.25
1080i	1920x1080i	28.125	50	74.25
	1920x1080i	33.716/33.75	59.94/60	74.176/74.25
1080P	1920x1080P	56.25	50	148.5
	1920x1080P	67.433/67.5	59.94/60	148.352/148.5

Modes not listed in the above tables may not be supported. For optimal resolution, we recommendthatyou choose a mode listed in the above tables

4. Block Diagram

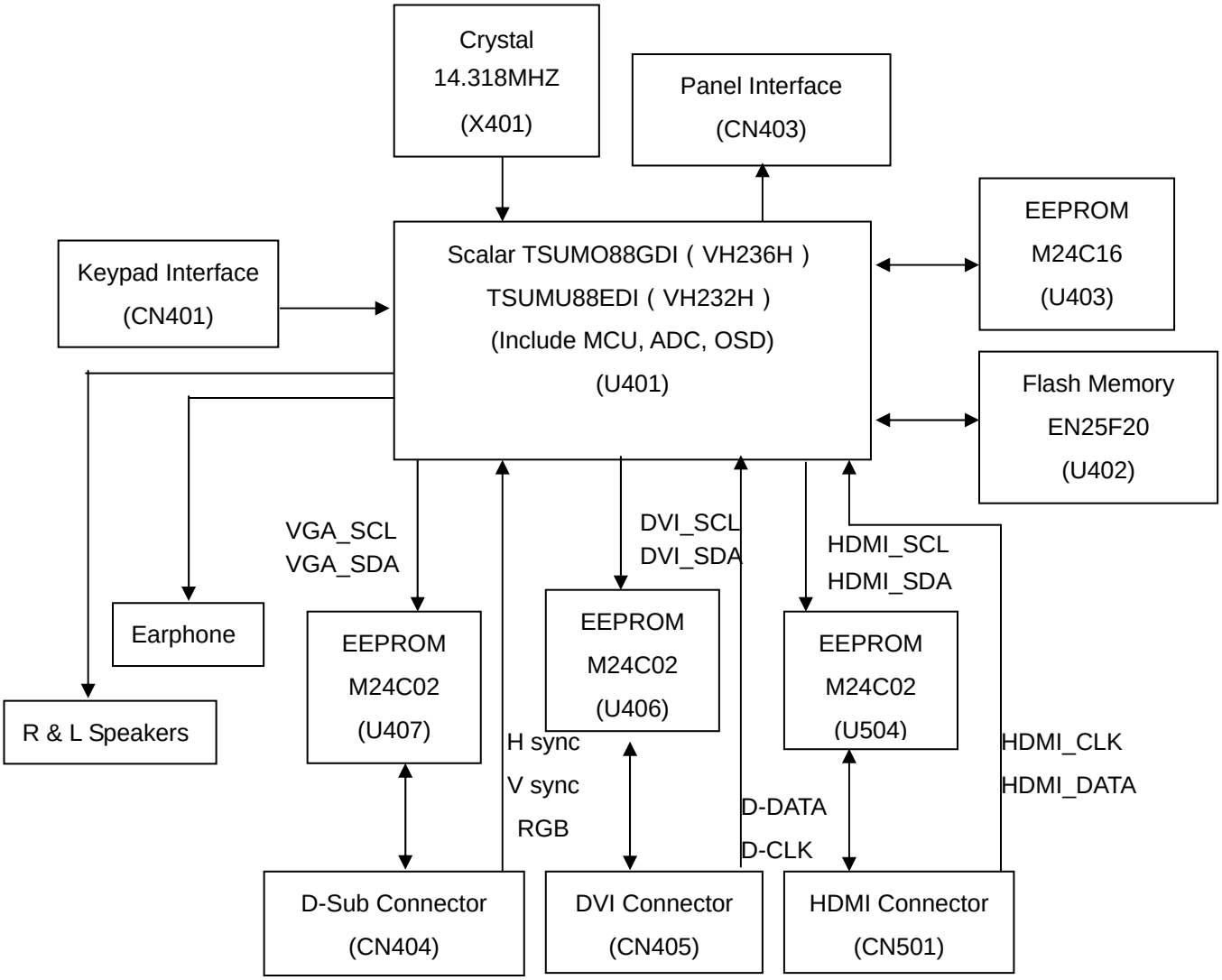
4.1 Software Flow Chat



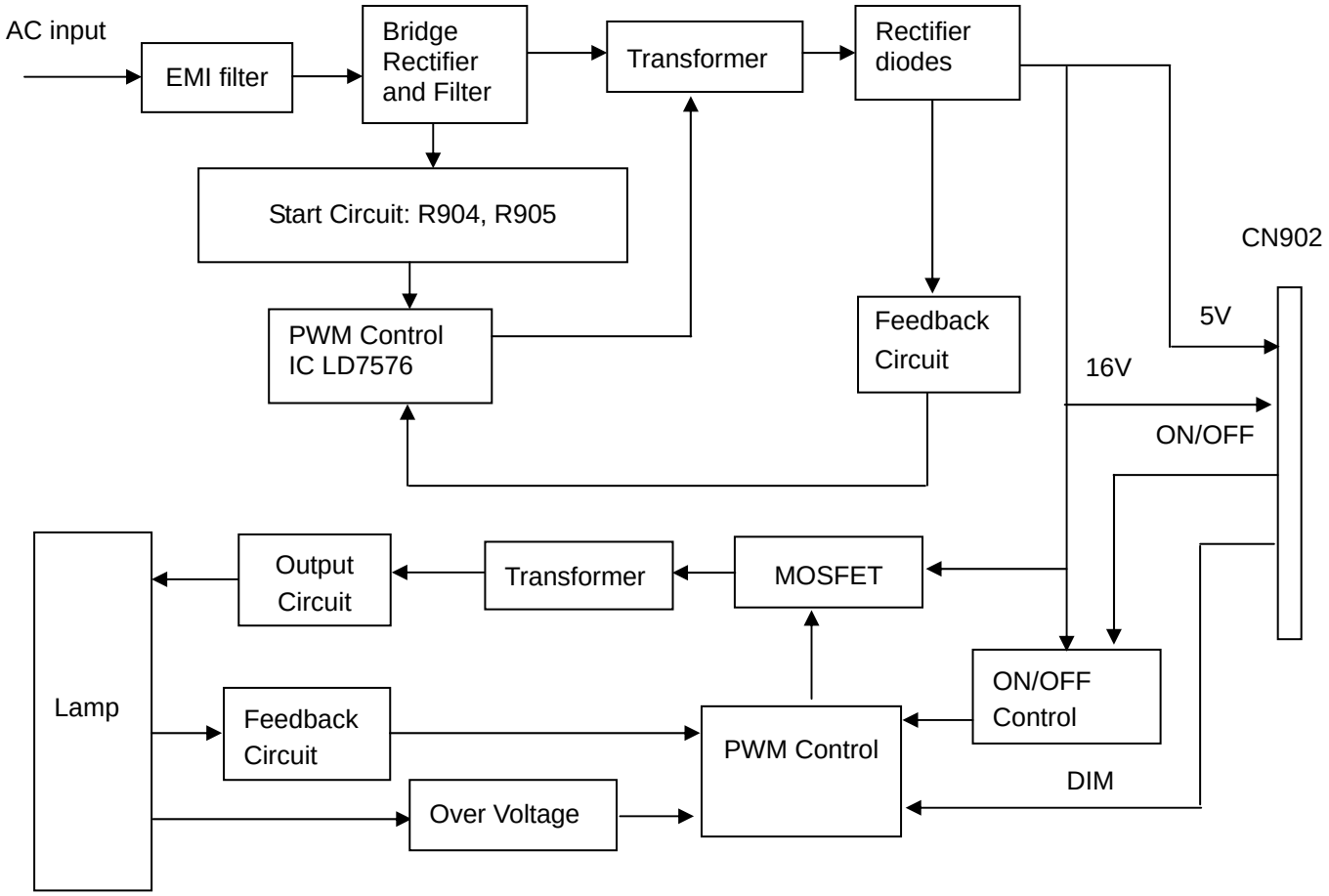
1)	MCU initializes.
2)	Is the EPROM blank?
3)	Program the EPROM by default values.
4)	Get the PWM value of brightness from EPROM.
5)	Is the power key pressed?
6)	Clear all global flags.
7)	Are the AUTO and SELECT keys pressed?
8)	Enter factory mode.
9)	Save the power key status into EPROM. Turn on the LED and set it to green color. Scalar initializes.
10)	In standby mode?
11)	Update the lifetime of back light.
12)	Check the analog port, are there any signals coming?
13)	Does the scalar send out an interrupt request?
14)	Wake up the scalar.
15)	15) Are there any signals coming from analog port?
16)	Display "No connection Check Signal Cable" message. And go into standby mode after the message disappears.
17)	Program the scalar to be able to show the coming mode.
18)	Process the OSD display.
19)	Read the keyboard. Is the power key pressed?

4.2 Electrical Block Diagram

4.2.1 Main Board



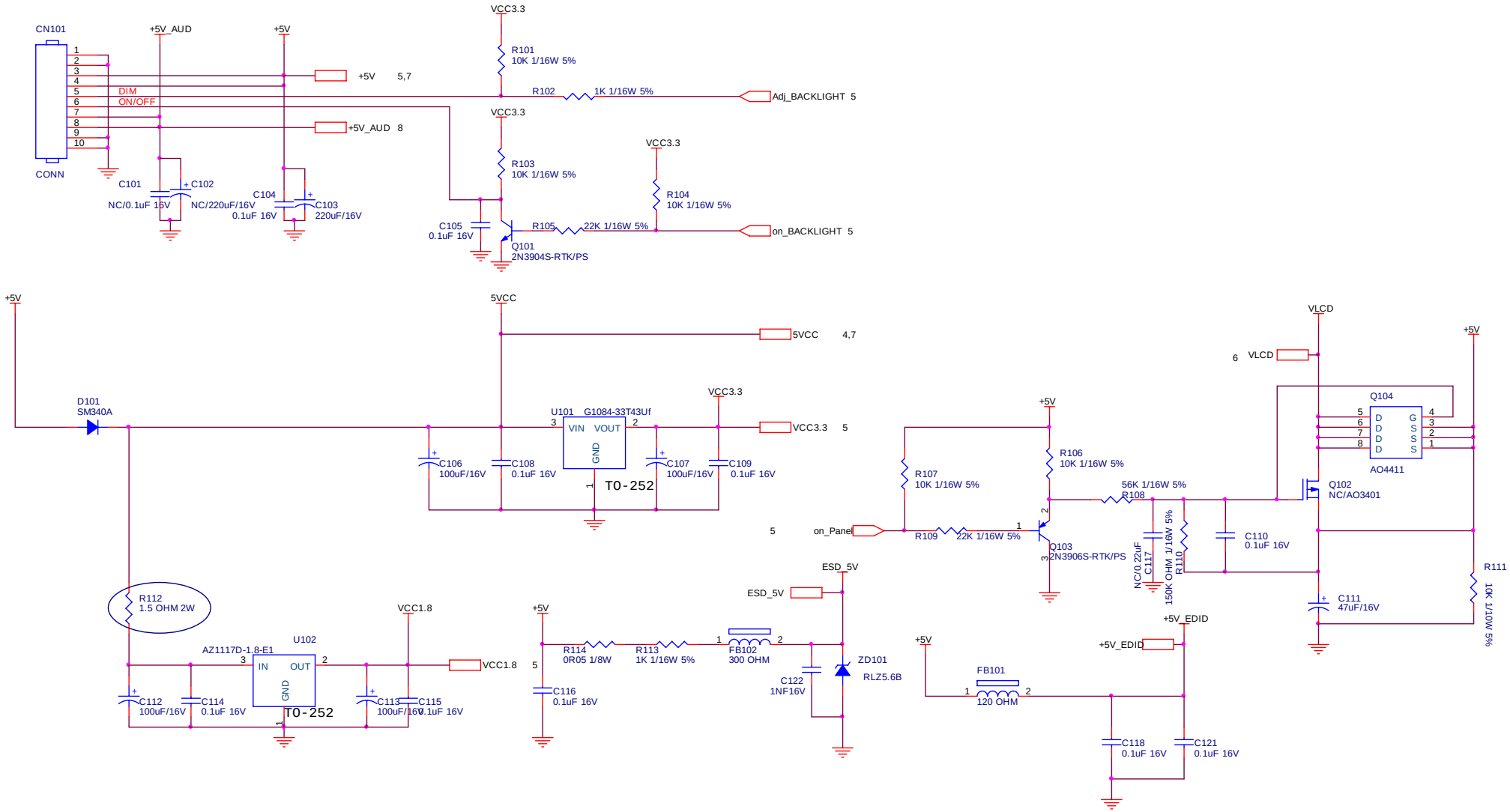
4.2.2 Inverter/Power Board



5. Schematic

5.1 Main Board

715G3221 1



T P V (Top Victory Electronics Co . , Ltd.)		OEM MODEL		Size	B
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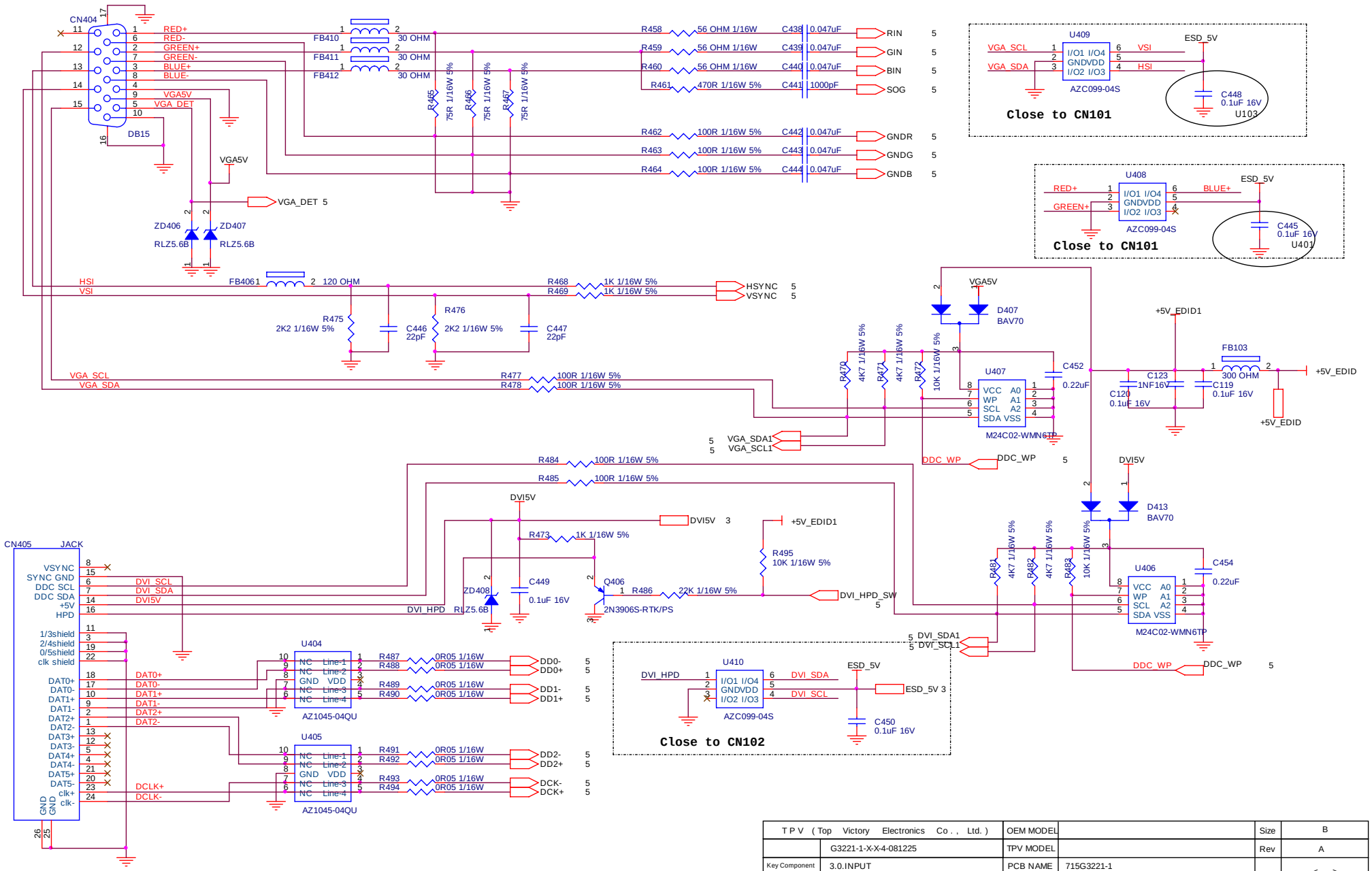

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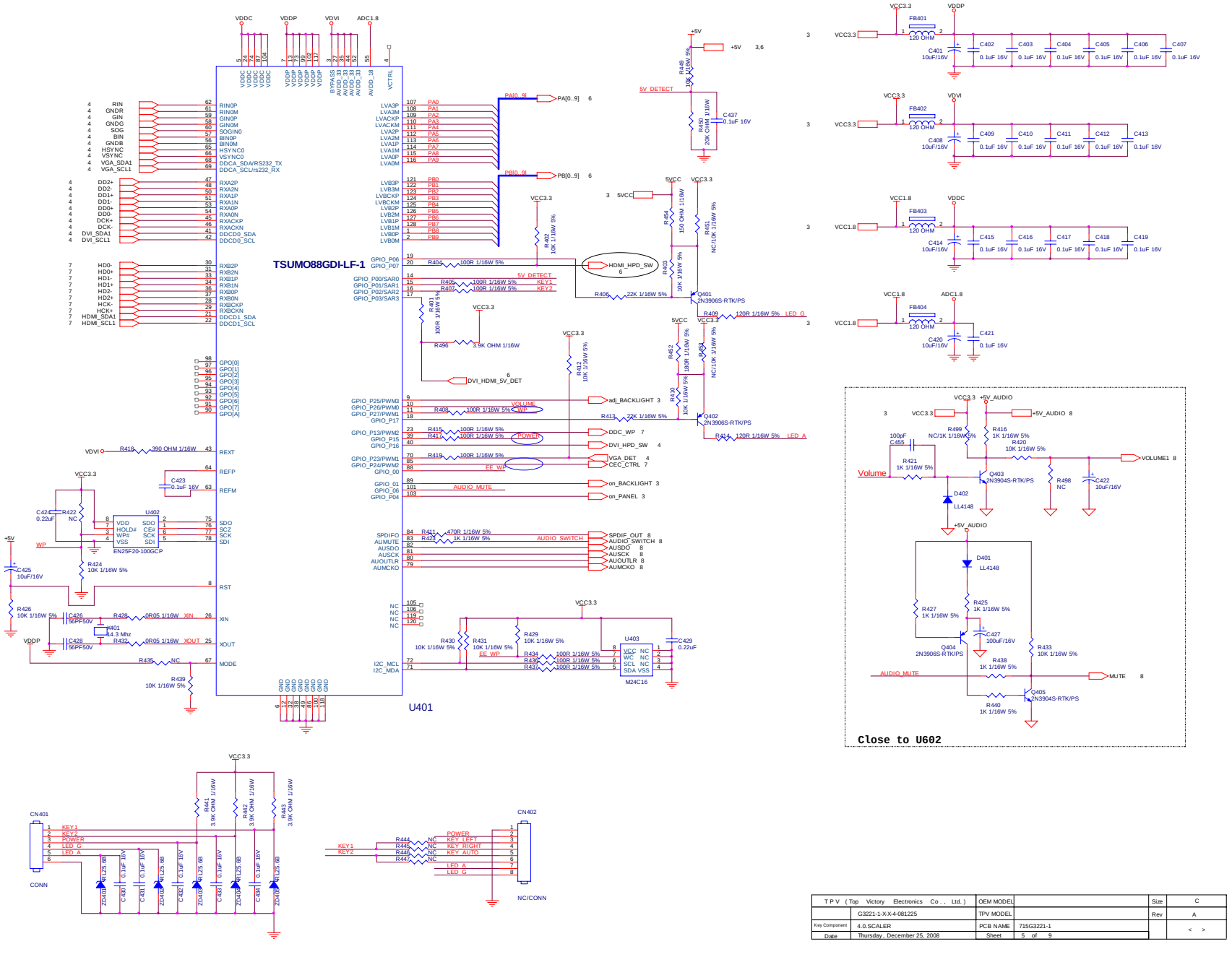

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Key Component	4.0.SCALER	PCB NAME	715G3221-1
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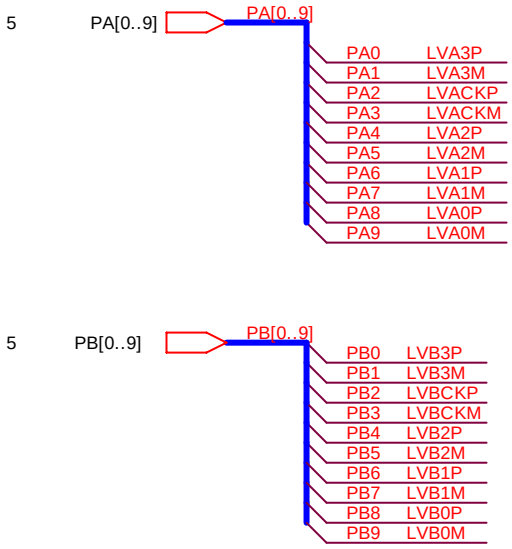

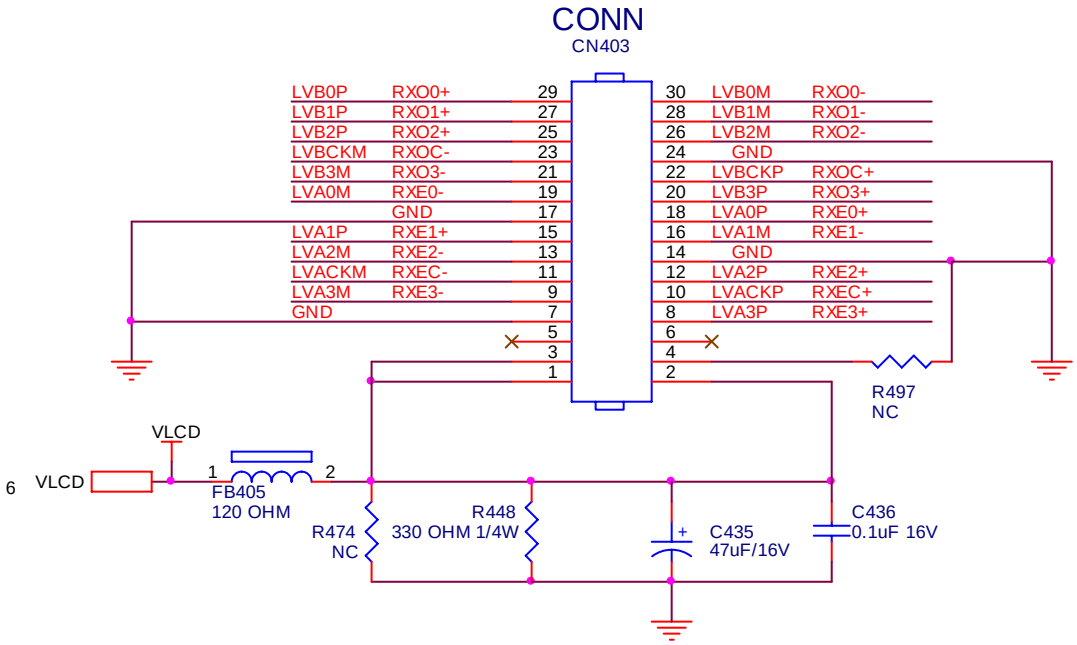

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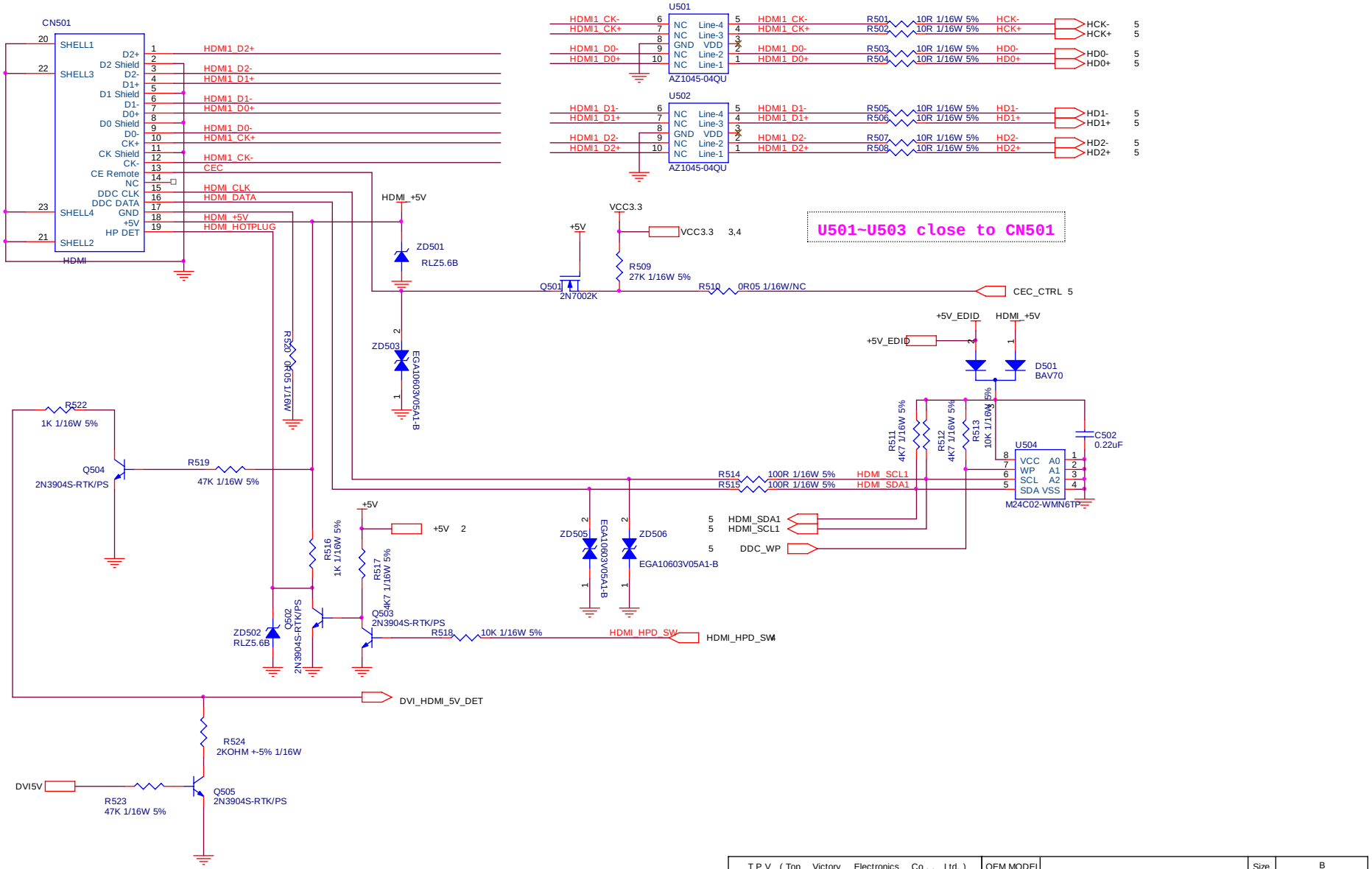
Date	Thursday , December 25, 2008	Sheet	6 of 9		



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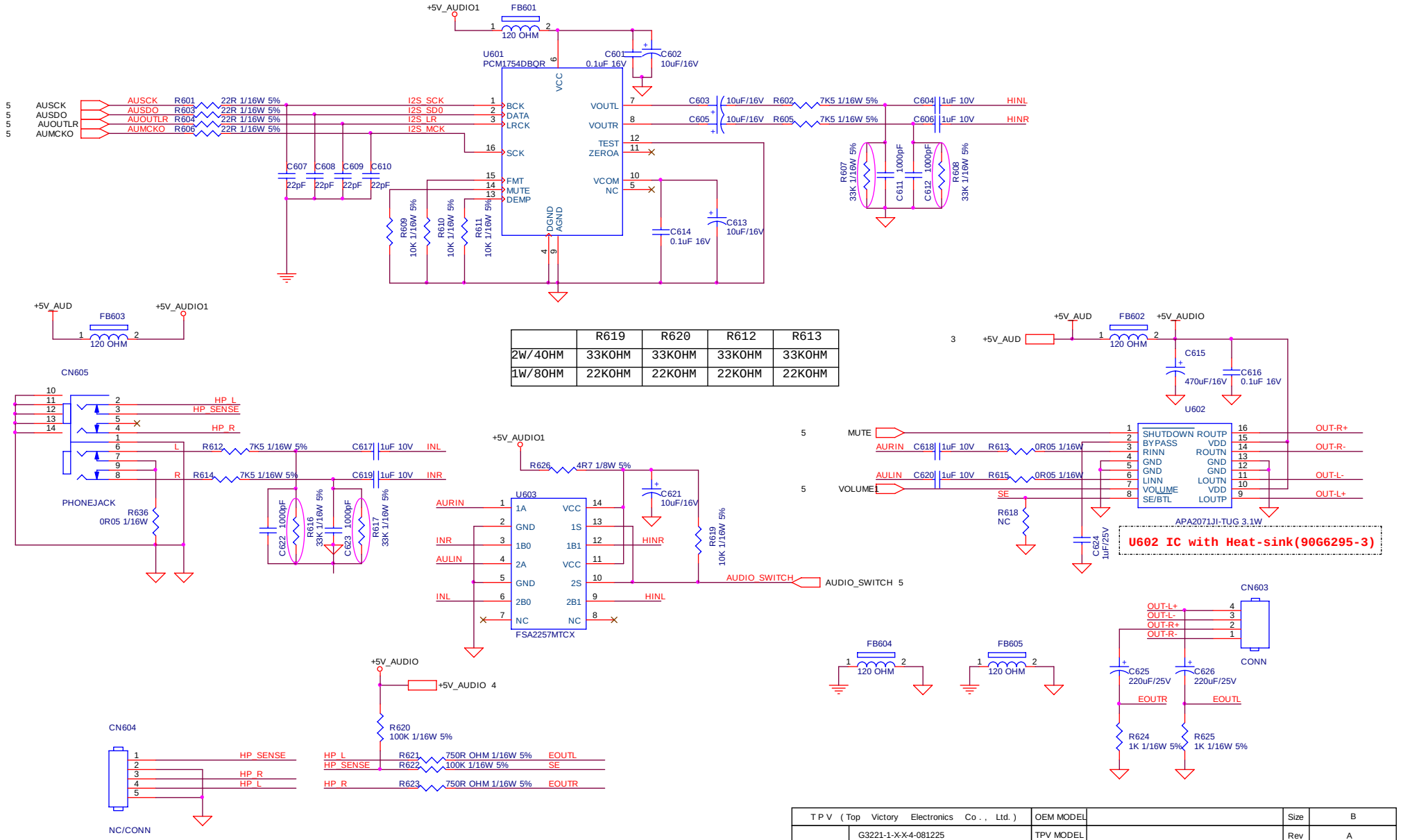
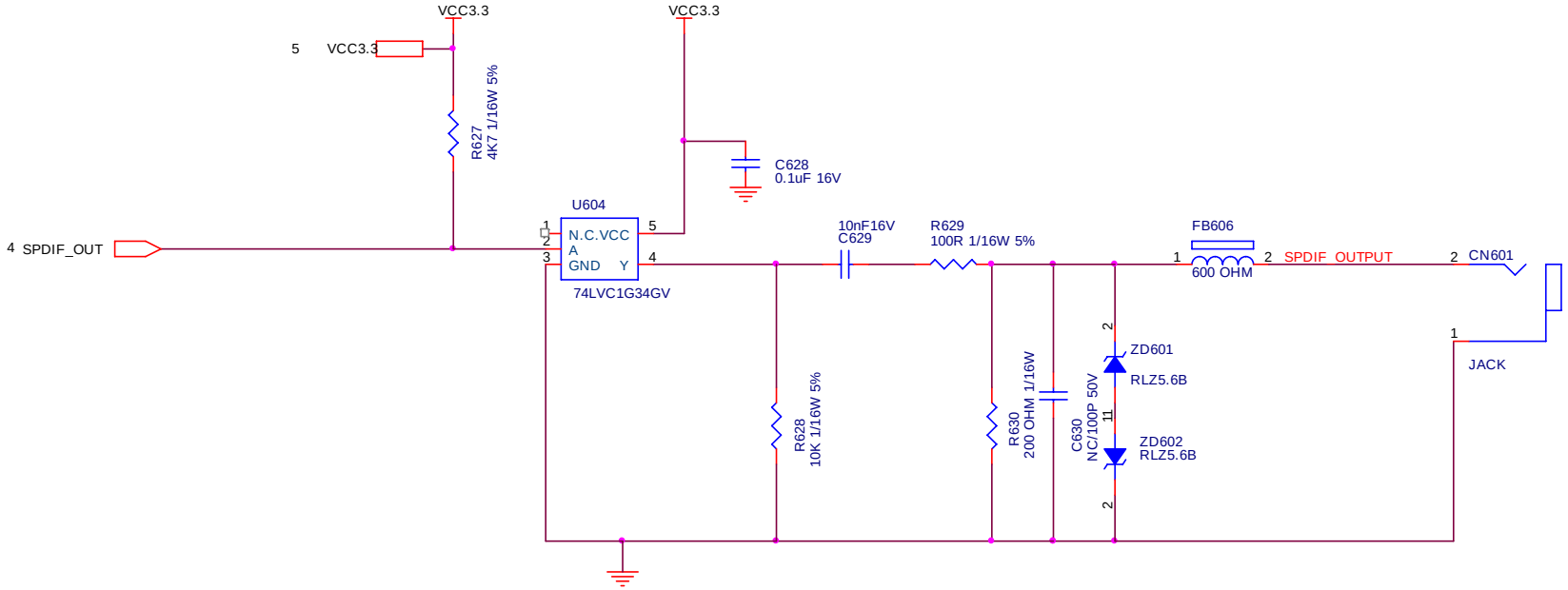


	R619	R620	R612	R613
2W/4OHM	33KOHM	33KOHM	33KOHM	33KOHM
1W/8OHM	22KOHM	22KOHM	22KOHM	22KOHM

TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL		Size	B
	G3221-1-X-X-4-081225	TPV MODEL		Rev	A
Key Component	7.0.AUDIO	PCB NAME	715G3221-1		< >
Date	Thursday, December 25, 2008	Sheet	8 of 9		

SPDIF_OUT and SPDIF_OUTPUT



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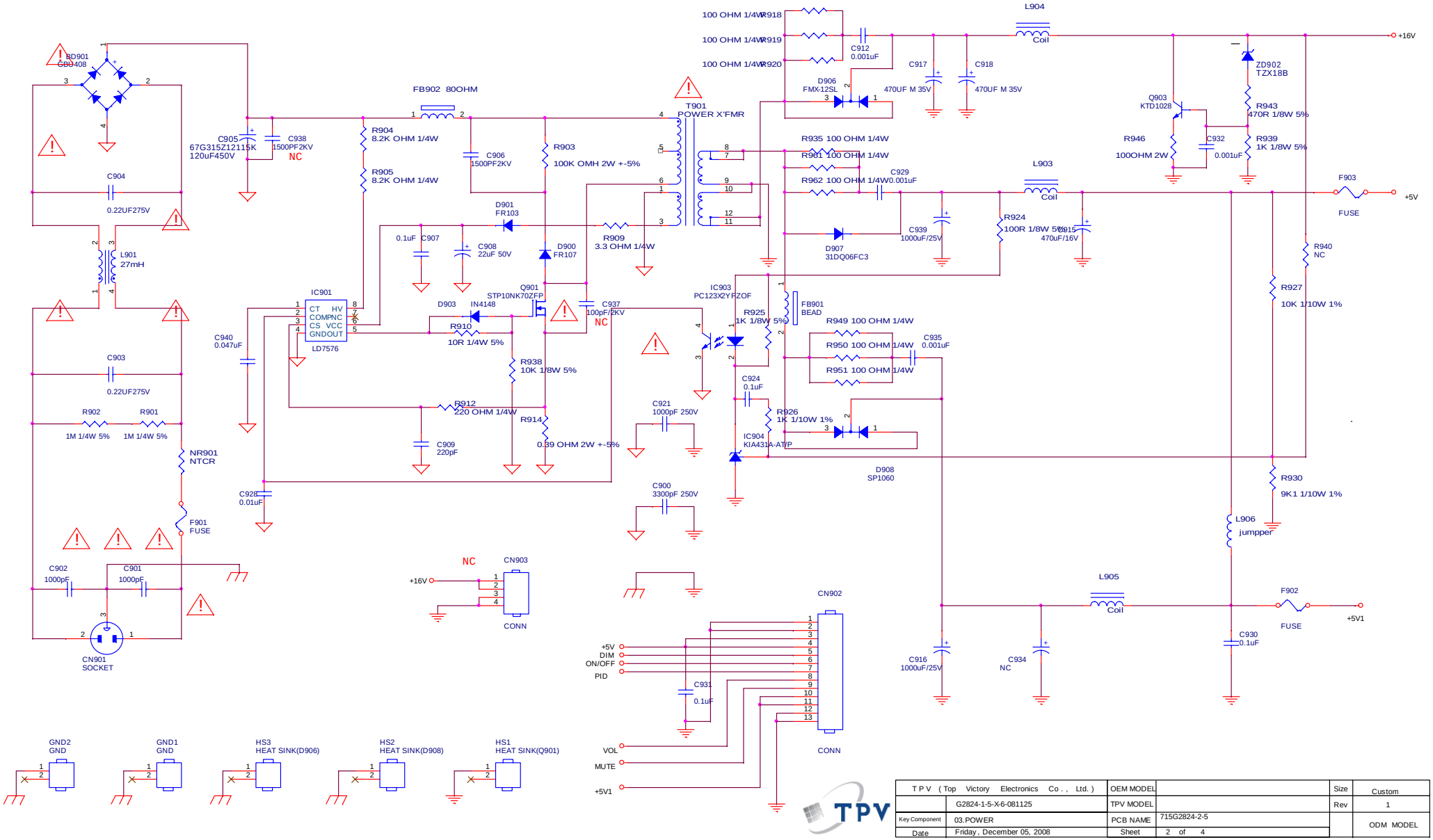
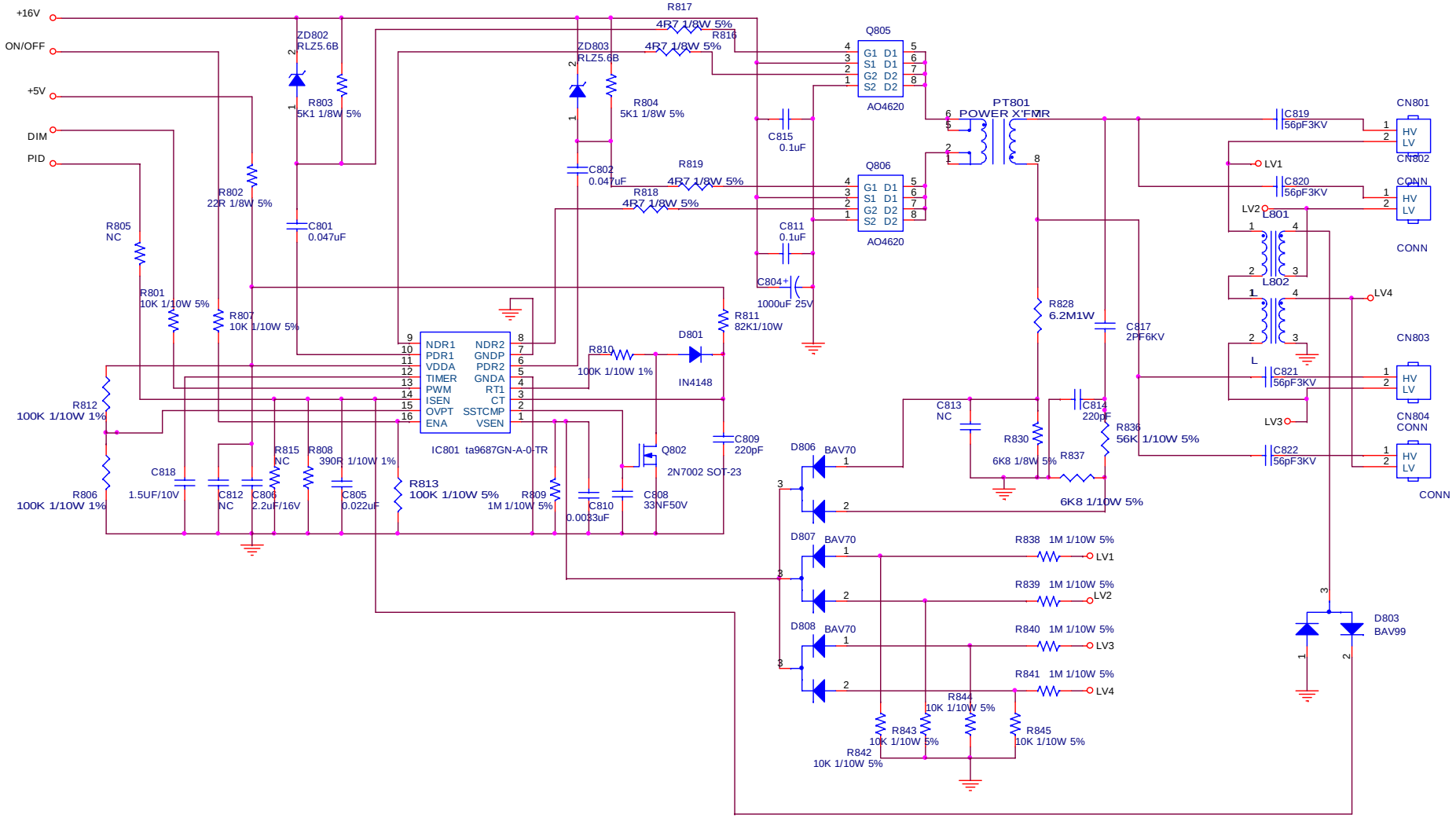
Key Component	8.SPDIF	PCB NAME	715G3221-1		< >
Date	Thursday, December 25, 2008	Sheet	9 of 9		

5.2 Power Board

715G2824-2-5



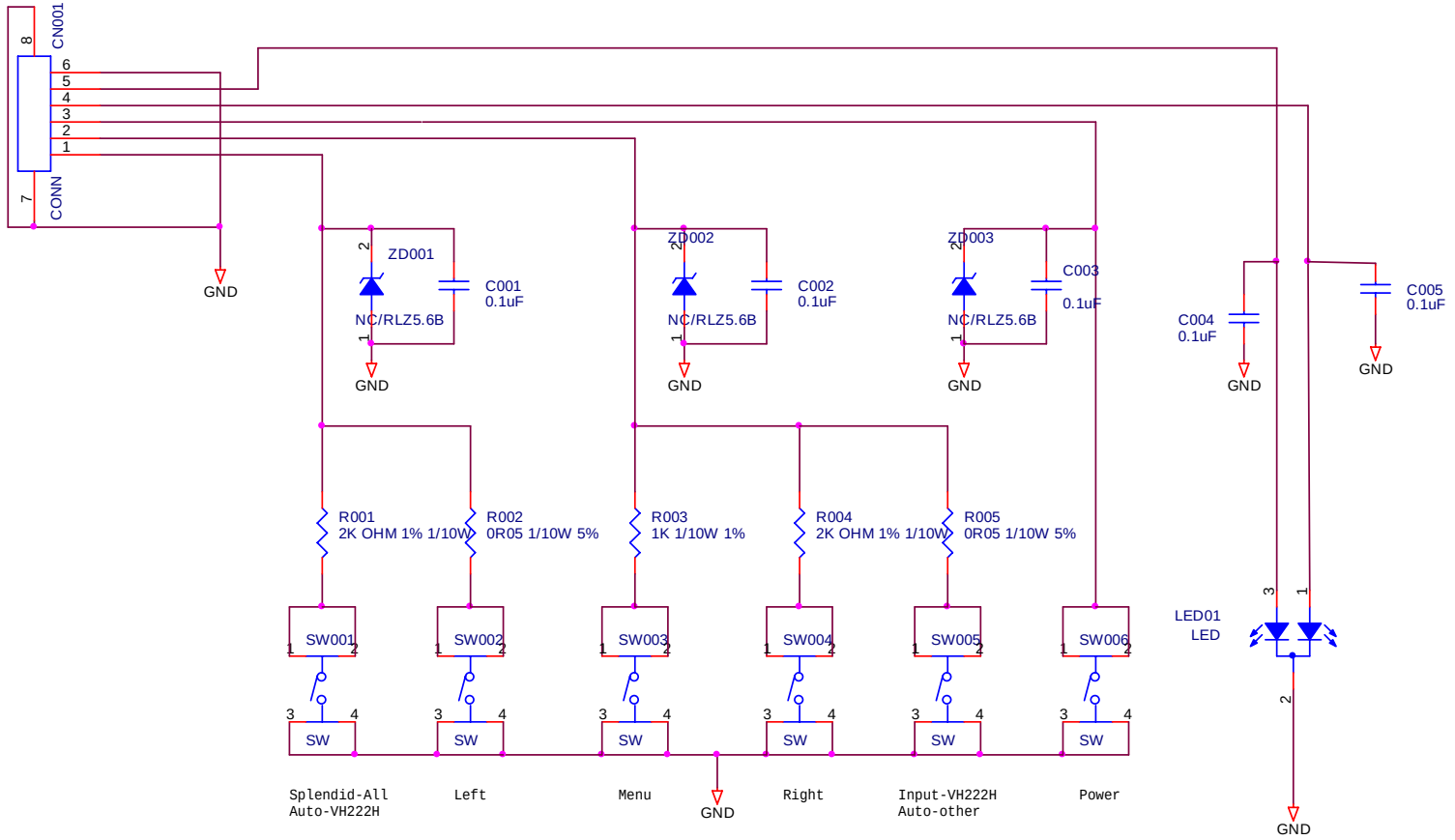
T P V (Top Victory Electronics Co . , Ltd.)		OEM MODEL		Size	Custom
	G2824-1-5-X-6-081125	TPV MODEL		Rev	1
Key Component	03.POWER	PCB NAME	715G2824-2-5		ODM MODEL
Date	Friday , December 05, 2008	Sheet	2 of 4		



TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL		Size	Custom
	G2824-1-5-X-6-081125	TPV MODEL		Rev	1
Key Component	02.INVERTER	PCB NAME	715G2824-2-5		ODM MODEL
Date	Friday, December 05, 2008	Sheet	3 of 4		

5.3 Key Board

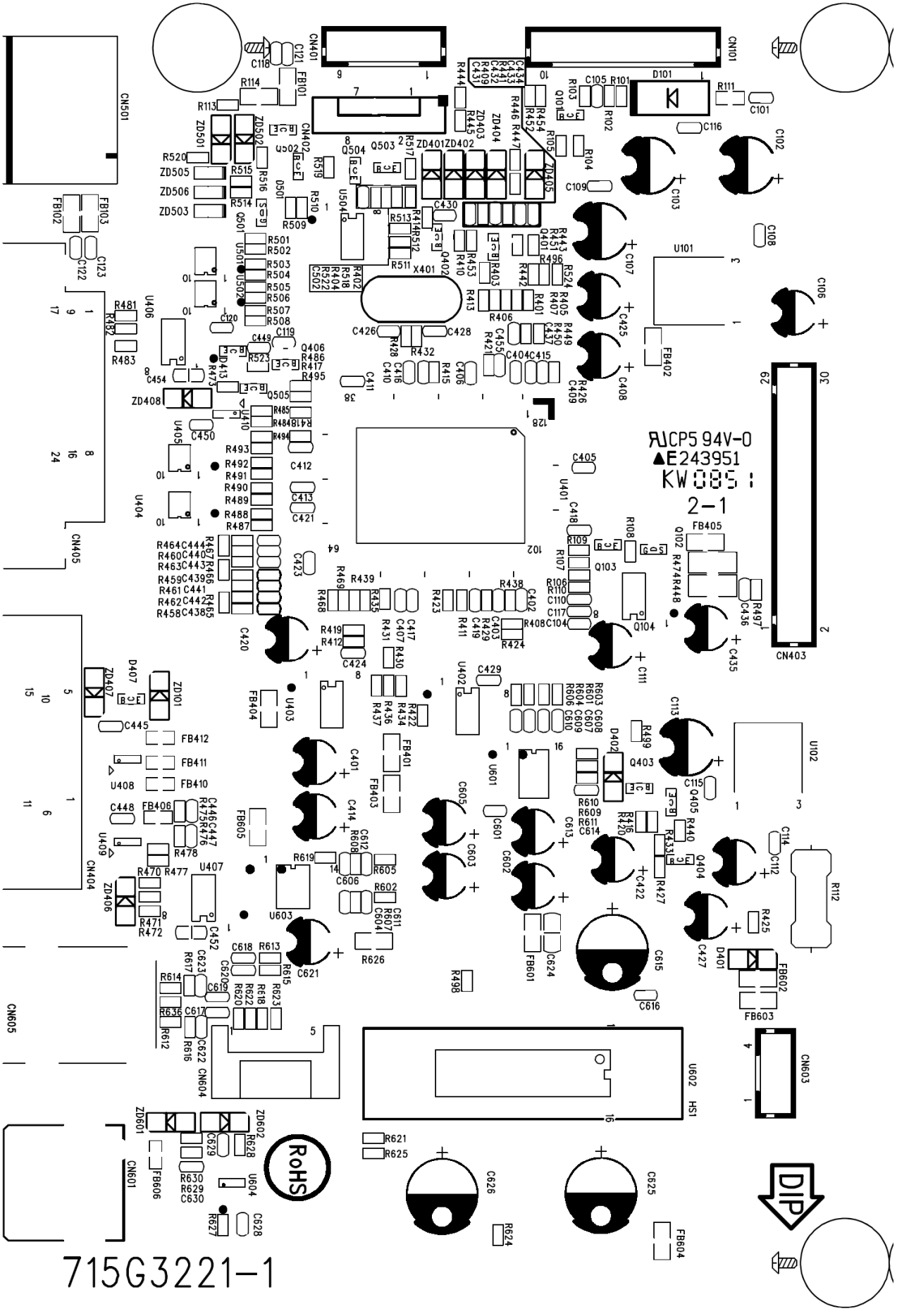
715G2900-1-2

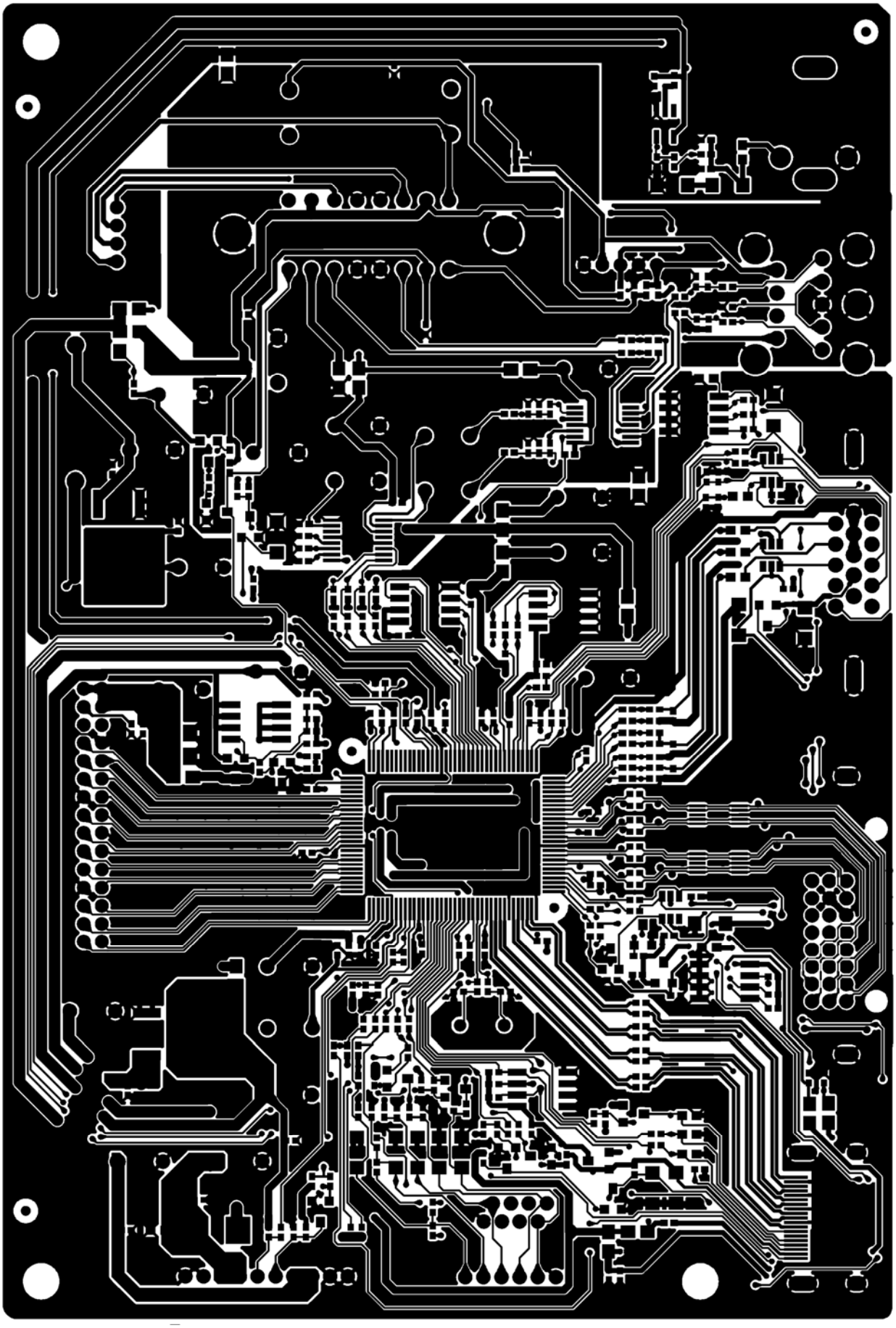


T P V (Top Victory Electronics Co . , Ltd.)		OEM MODEL	ASUS VH222 and VH242H	Size	A
	G2900-1-2-X-1-0801016	TPV MODEL	KEPC8QU3	Rev	E
Key Component	01.KEYBOARD	PCB NAME	G2900-D-2		
Date	Thursday , October 16, 2008	Sheet	2 of 2		

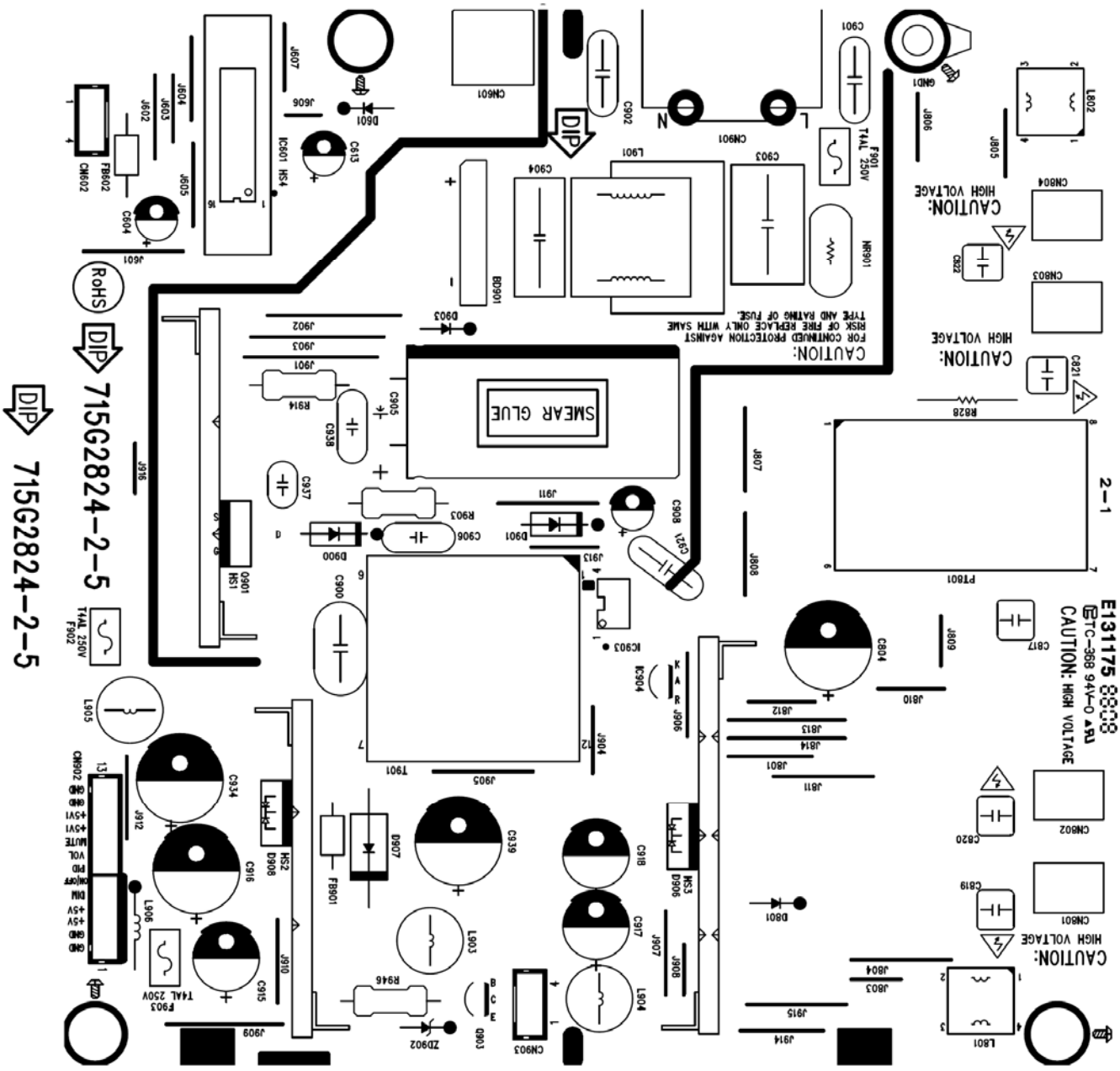
6. PCB Layout

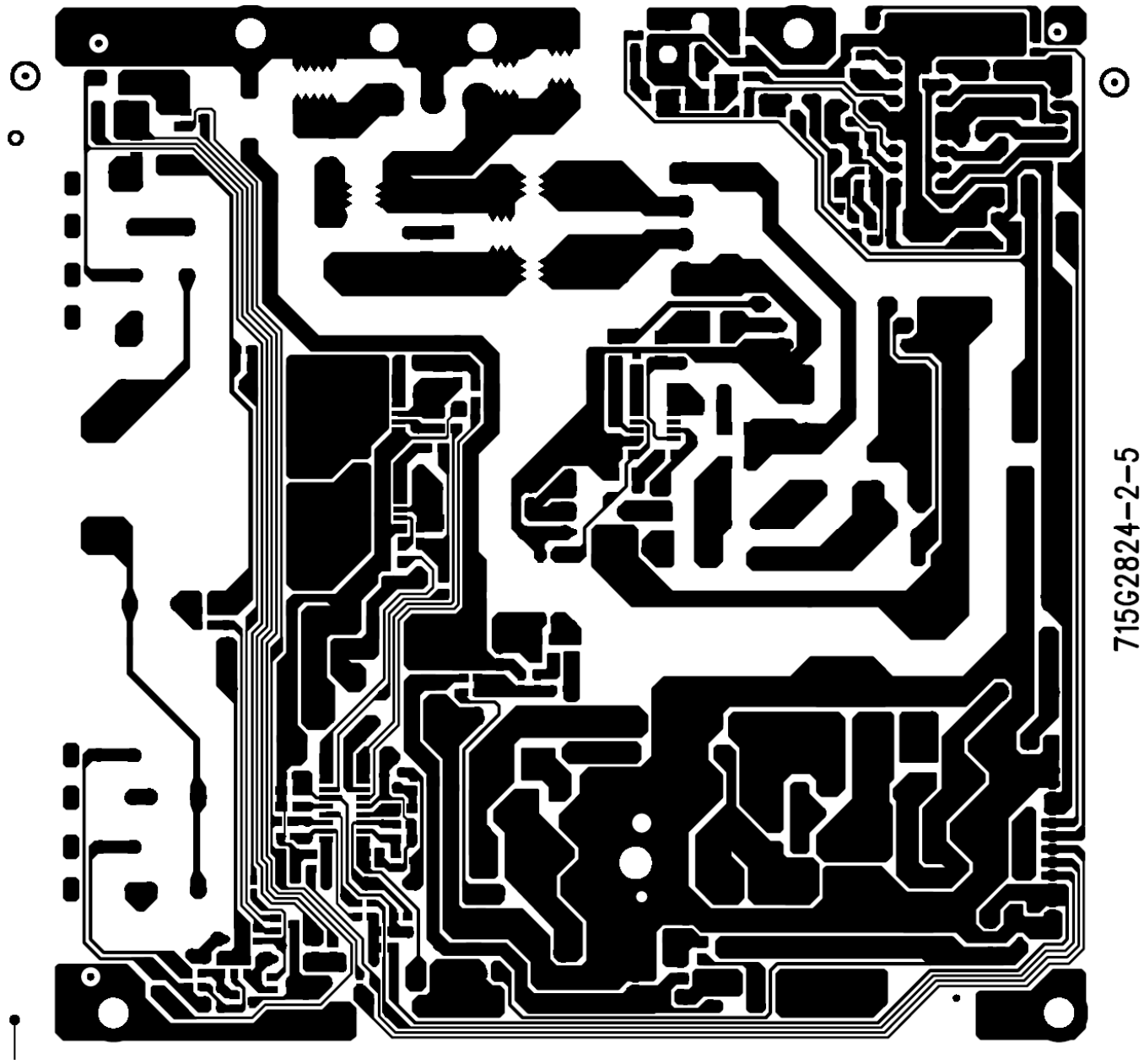
6.1 Main Board





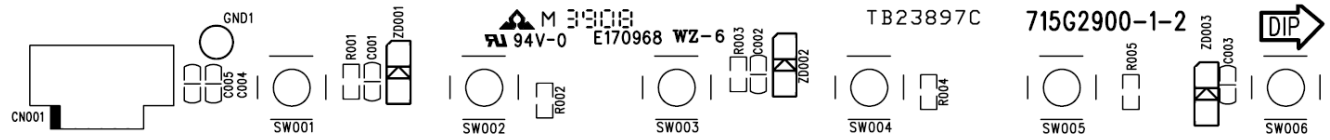
6.2 Power Board

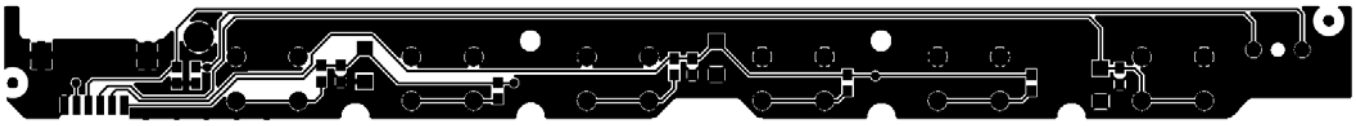



715G2824-2-5

6.3 Key Board

715G2900-1-2





7. Disassemble & Assemble SOP

7.1 Precaution

Please read the precautions as follows to prevent any damages to the LCD Monitor and also select the appropriate tools for disassembly and re-assembly.

- Make sure all power connection is removed. Be sure that the LCD Monitor is in power off status.
- Prepare soft cloth and sponge as working platform to place LCD monitor horizontally.
- Hold LCD by the side carefully and DON'T touch or press panel directly.

- Remove all rings, watches and any other metal objects from your hands which possible to cause scratch.

- Always wear a ground strap or anti-static glove to protect the parts from static discharge. ESD (electro-static discharge) protection is required to guarantee the safety of product and personnel.

7.2 Suggest Tools

Here are some tools that can be used for the LCD monitor's service and repair.

Philips-head Screwdirver

Use a Philips-head screwdriver to fasten/remove the K- or B-typed screws

Gloves

To protect LCD Panel and your hand

C/D Disassembly Tool

Use C/D Disassembly Tool to open cosmetic cover and avoid scratch.

Spacer Screwdriver

Use a spacer screwdriver to fasten/remove spacer screws or hex screws.

7.3 Disassembly Procedure

Information in this section is to perform the disassembly procedure of the LCD monitor. Depending on the failures, replace the defective parts accordingly.

ASUS VH236H&VH232H LCD monitor consists of various subsystems. This section describes the procedures for LCD monitor disassembly. In addition, the detailed disassembly procedures of individual subsystem will be provided for your service needs.

The disassembly procedure consists of the following steps:

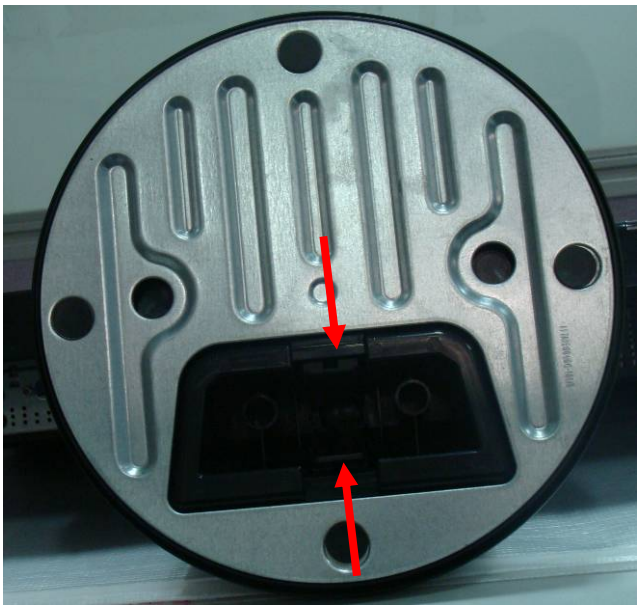
3.1 Stand Subsystem

3.2 Main Subsystem

3.3 Bezel Subsystem

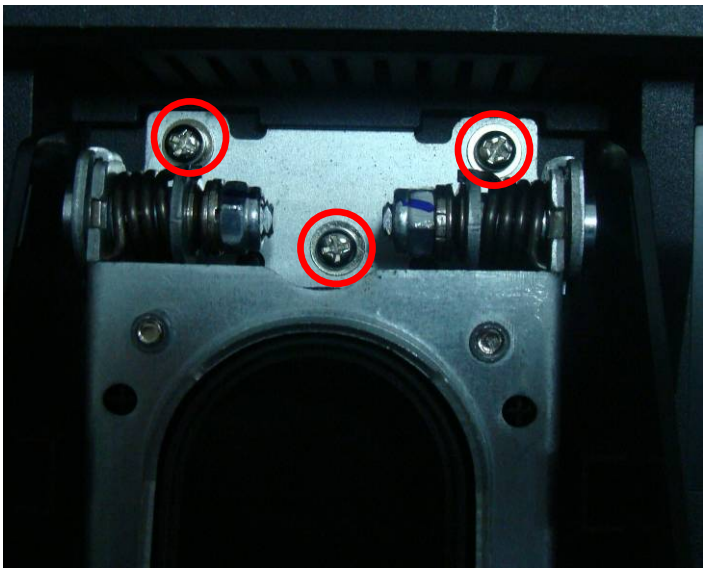
7.3.1 Stand Subsystem

1. Unlock the latches under BASE to dismount.

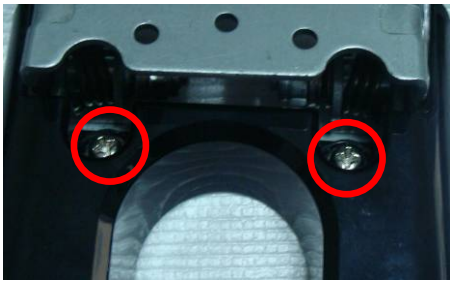


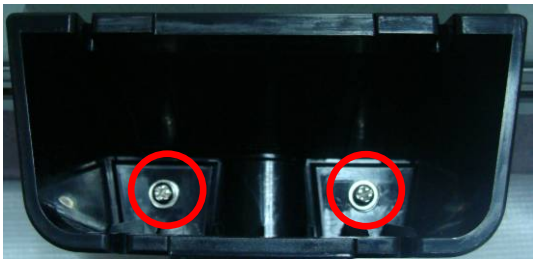
2. Use C/D disassembly tool to unlock STAND COVER.

3. Remove 3 screws on the STAND, and then remove STAND.

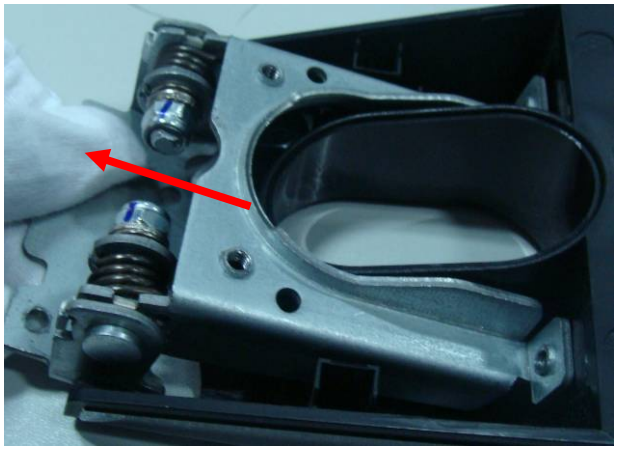


4. Remove 4screws





5. Dismount HINGE



7.3.2 Main Subsystem

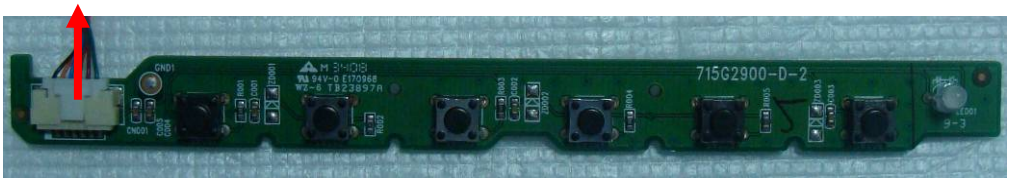
Back Cover

Use disassembly tool to open 6 latches at the bottom of BACK COVER as below, and open the other latches along the edge of the BACK COVER, then lift dimount BACK COVER.

Key Board

1. Unlock lelt and right latches to dismount KEY BOARD.

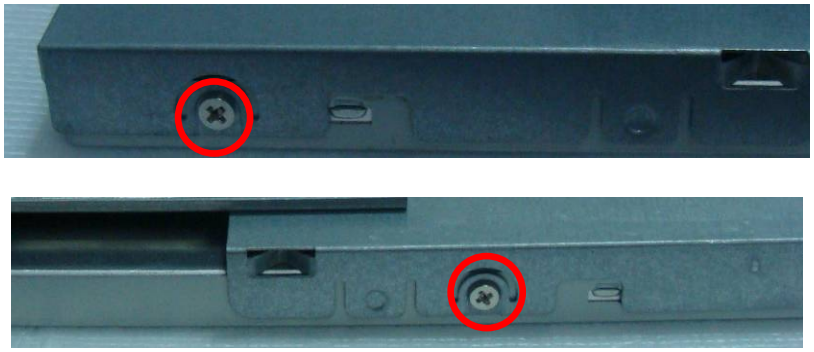
2. Disconnect KEY BOARD CABLE.



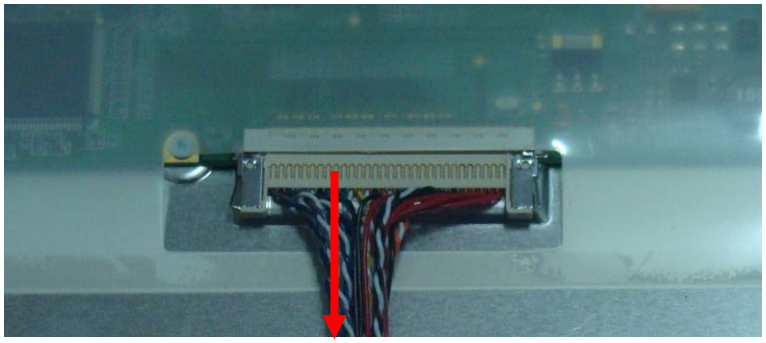
Main Shielding

1. Disconnect LAMP WIRES.

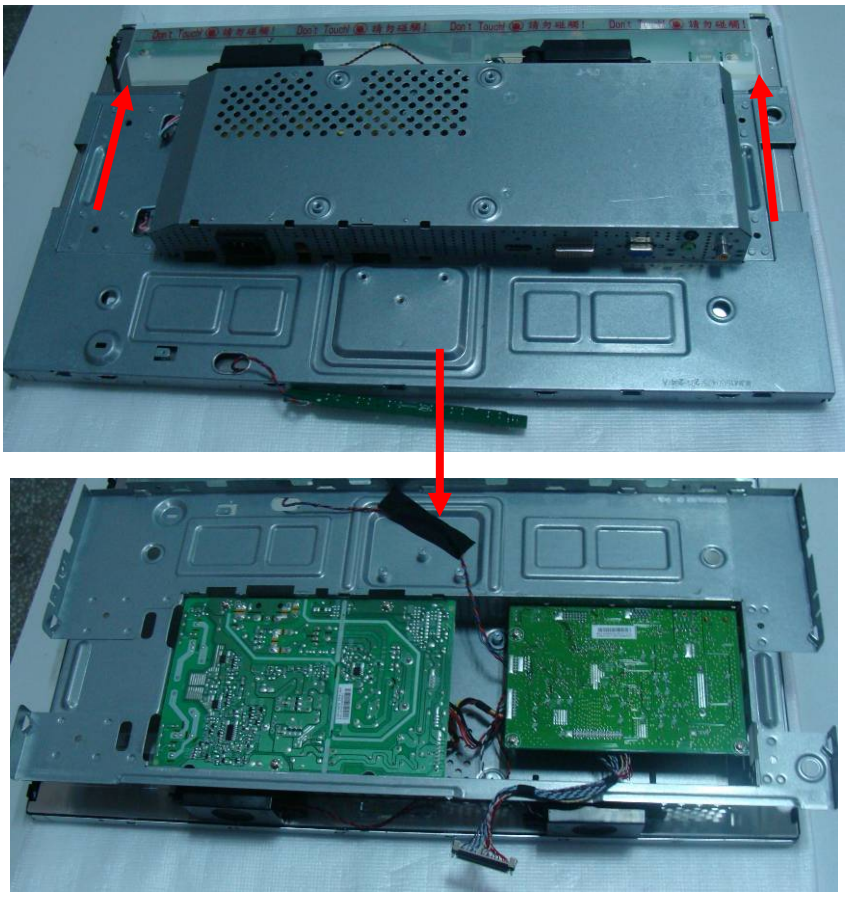
2. Release 2 screws and pull down the MAIN SHIELDIGN.



3. Press to release left and right latches of LVDS CABLE, and then disconnect it.

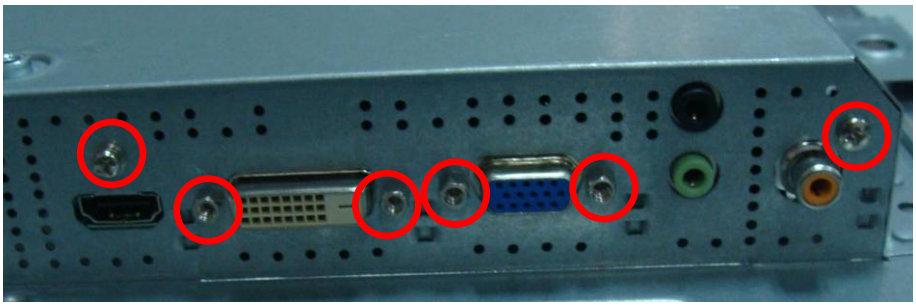


4. Remove the MAIN SHIELDING away from the LCD PANEL.

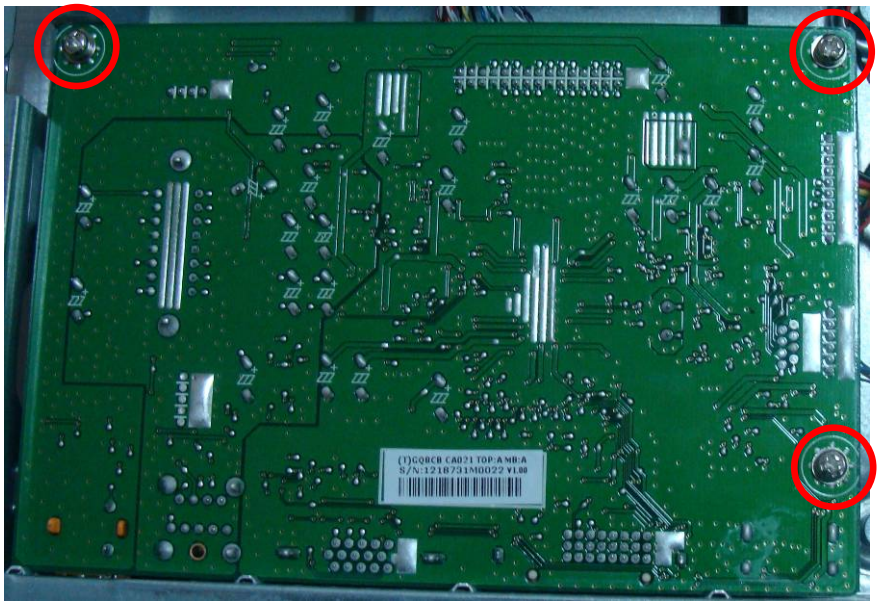


Main Borad

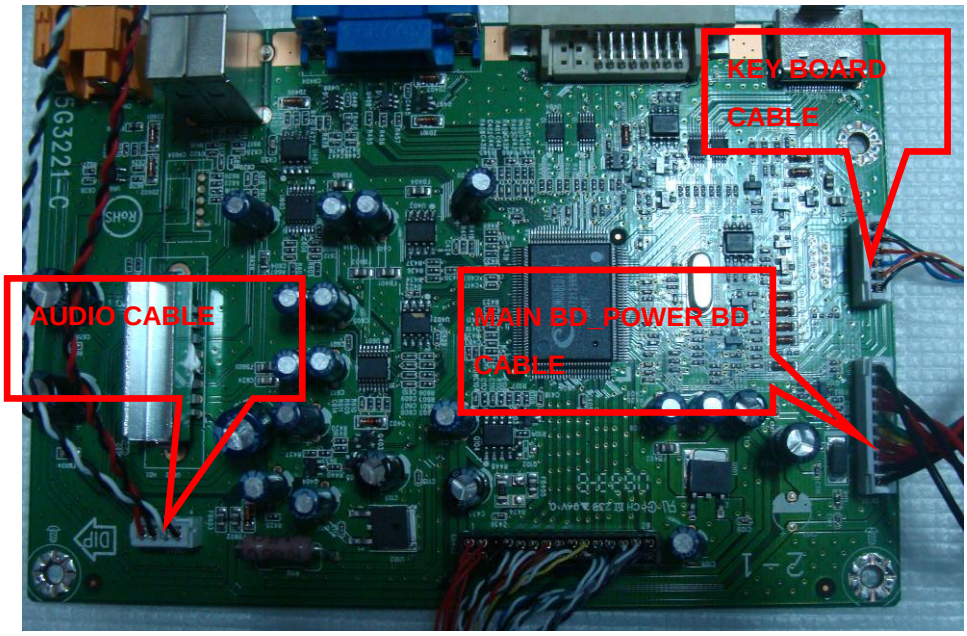
1. Release 6 screws.



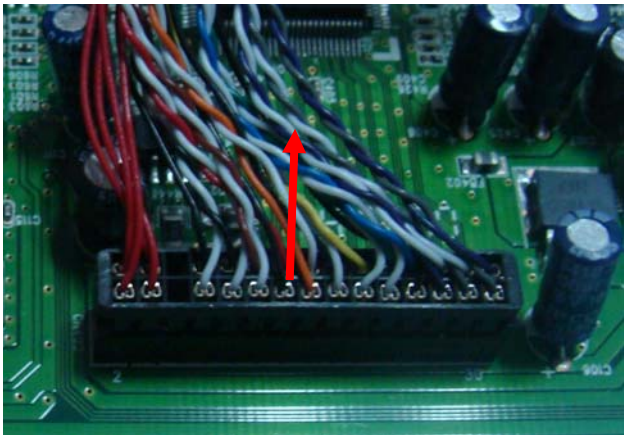
2. Release 3 screws on MAIN BOARD.



3. Turn over the MAIN BOARD and disconnect AUDIO BOARD CABLE, KEY BOARD CABLE, and MAIN BD_POWER BD CABLE.

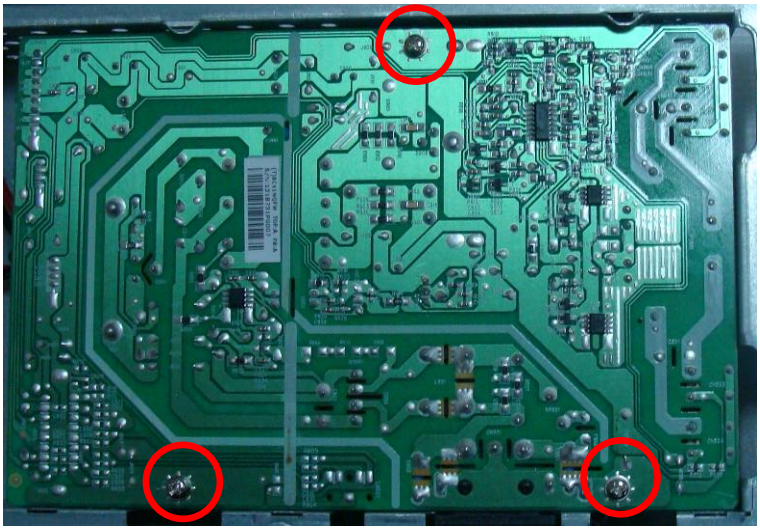


4. Press to disconnect FFC CABLE.



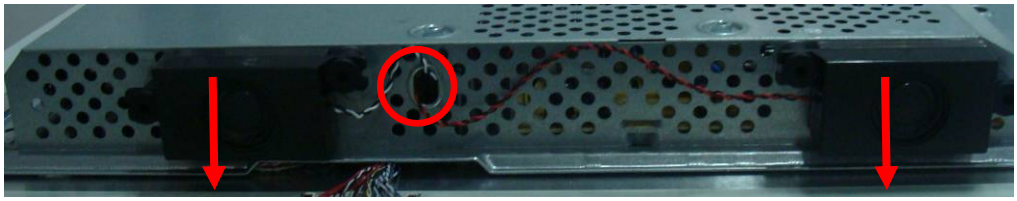
Power Board

Release 3 screws on POWER BOARD and remove POWER BOARD.



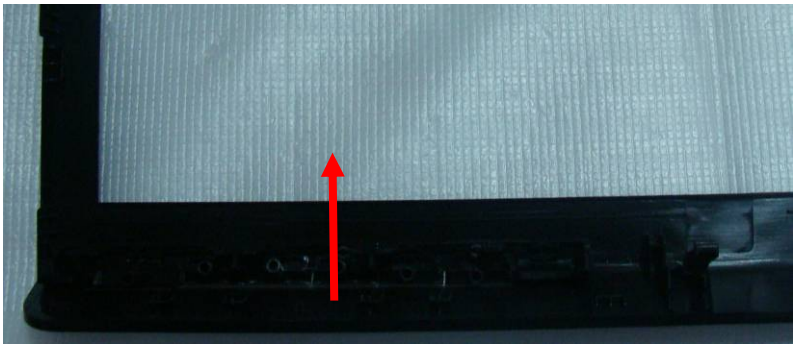
Speaker Module

Pull the SPEAKER CABLE out of the hole and remove SPEAKERS.



7.3.3 Bezel Subsysytem

Dismount KEY PAD.



7.4. Assembly Procedure

Information in this section is to perform the assembly procedure of the LCD monitor.

ASUS VH236H&VH232H LCD monitor consists of various subsystems. This section describes the procedures for LCD monitor assembly. In addition, the detailed assembly procedures of individual modules will be provided for your service needs.

The assembly procedure consists of the following steps:

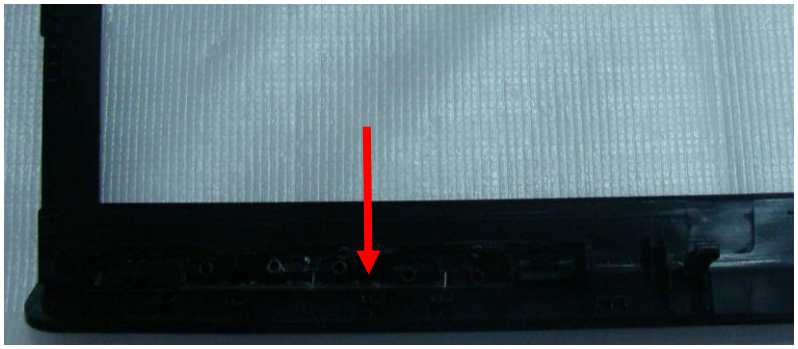
7.4.1 Bezel Subsystem

7.4.2 Main Subsystem

7.4.3 Stand Subsystem

7.4.1 Bezel Subsystem

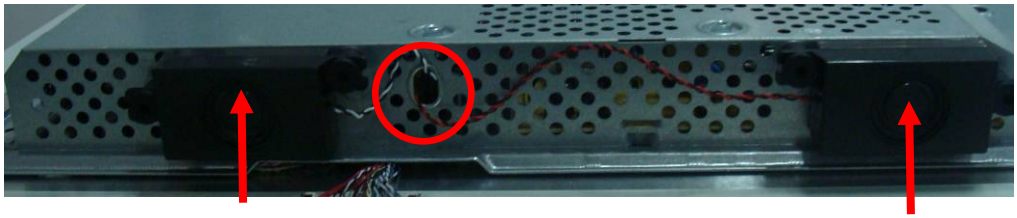
1. Assemble the KEY PAD onto the LCD BEZEL.



7.4.2 Main Subsystem

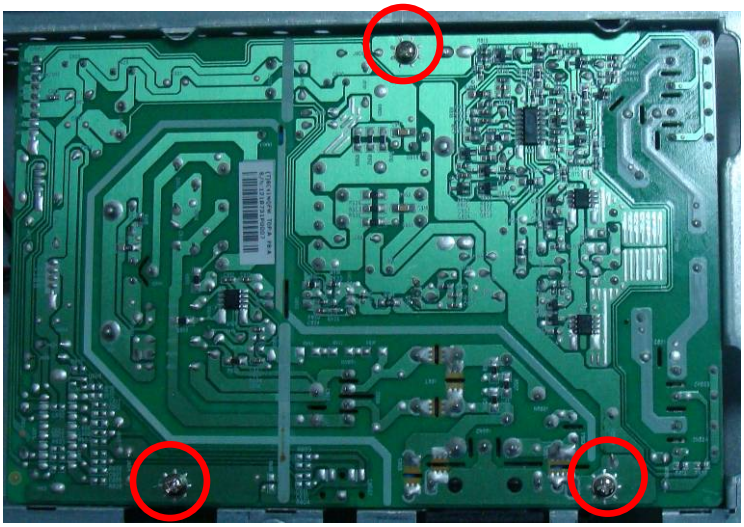
Speaker Module

Install the SPEAKER and spread the SPEAKER CABLE through the hole.



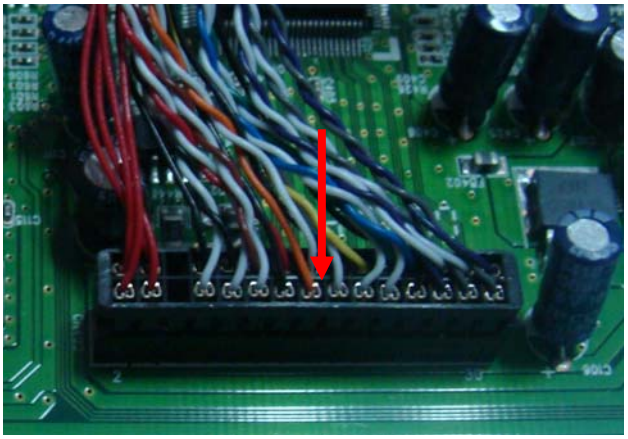
Power Board

Assemble POWER BOARD on PANEL FRAME and tighten 3 screws on POWER BOARD.

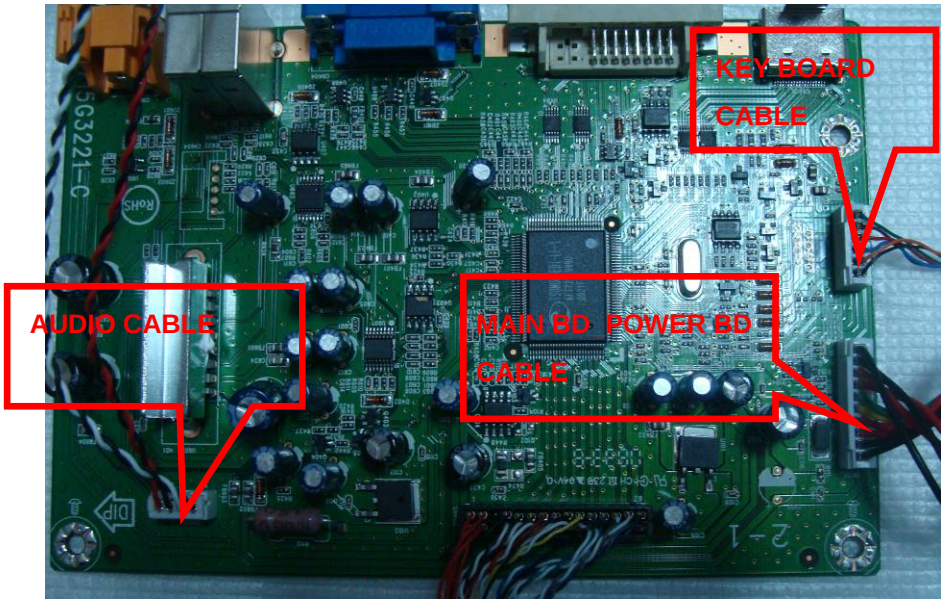


Main Board

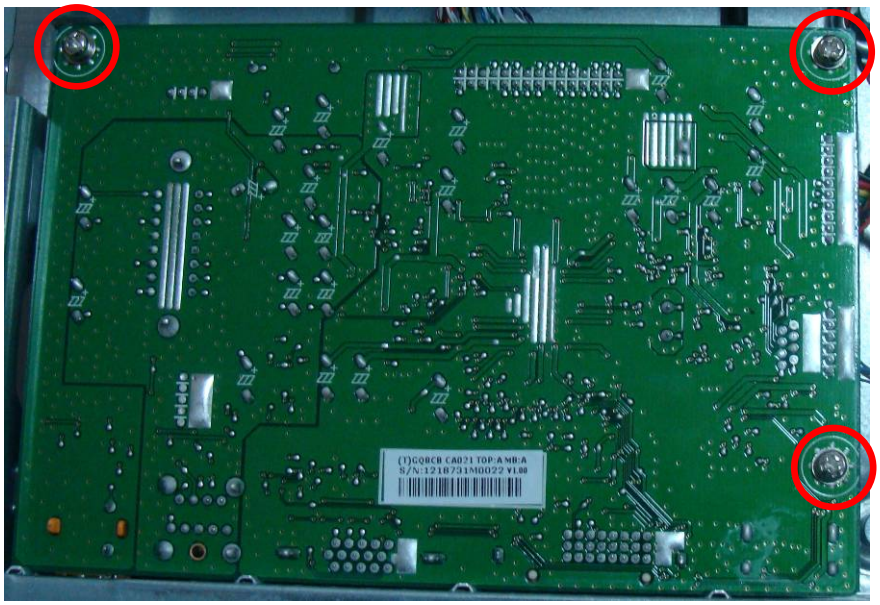
1. Plug FFC CABLE.



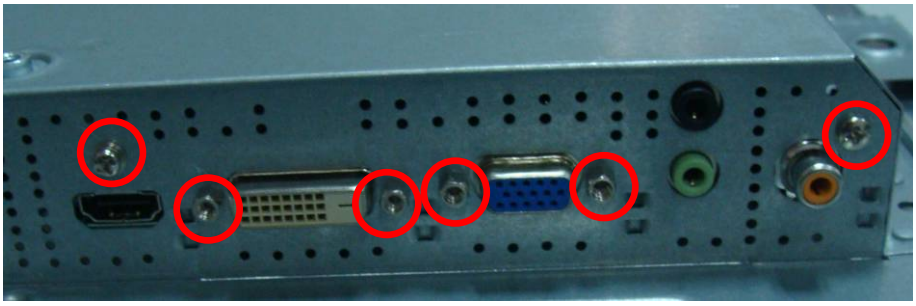
2. Connect AUDIO BOARD CABLE, KEY BOARD CABLE and MAIN BD_POWER BD CABLE with MAIN BOARD.



3. Assemble MAIN BOARD, then tight 3 screws on them.

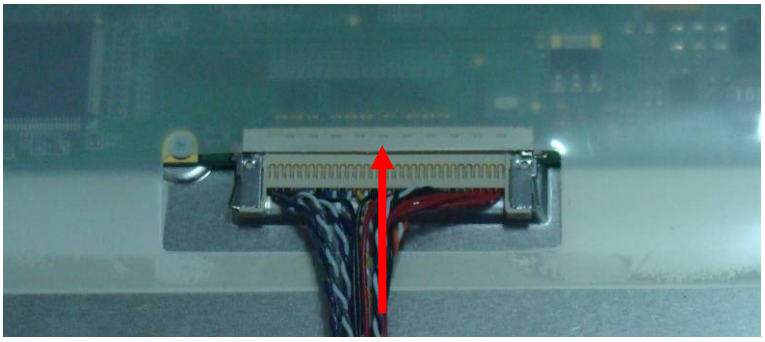


4. Secure 6 srcews.



Main Shielding

1. Connect the LVDS CABLE.



2. Assemble the MAIN SHELDING with LCD PANEL.

3. Secure 2 srcews as follow.

4. Connect LAMP WIRES.

Key Board

1. Place PANEL ASSY on the BEZEL and plug the KEY BOARD CABLE.

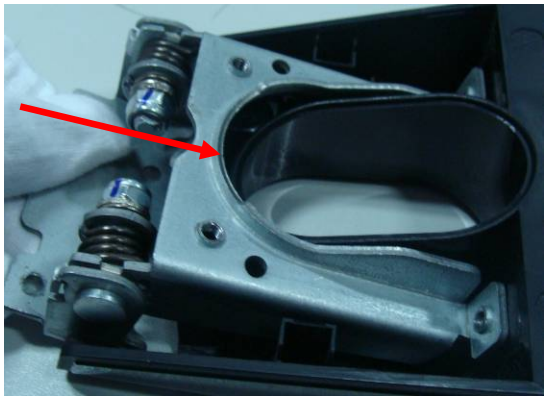
2. Install KEY BOARD.

Back Cover

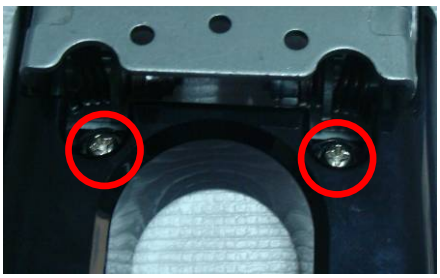
1. Assemble BACK COVER, and press down along sides to lock latches.

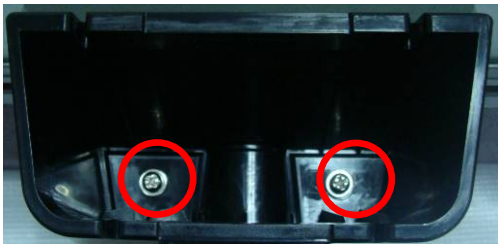
Stand Subsystem

1. Install the HINGE.

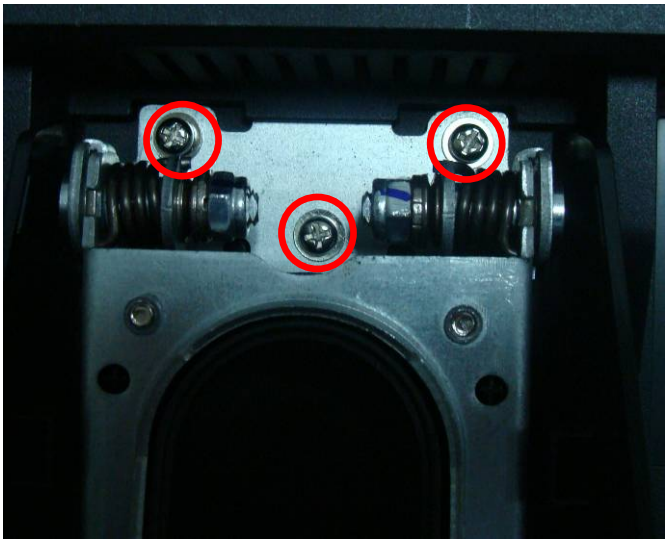


2. Mount 4 screws.





3. Mount STAND, and then secure 3 screws on STAND.



4. Cover STAND COVER, and then mount BASE under STAND.

8. ISP Instruction

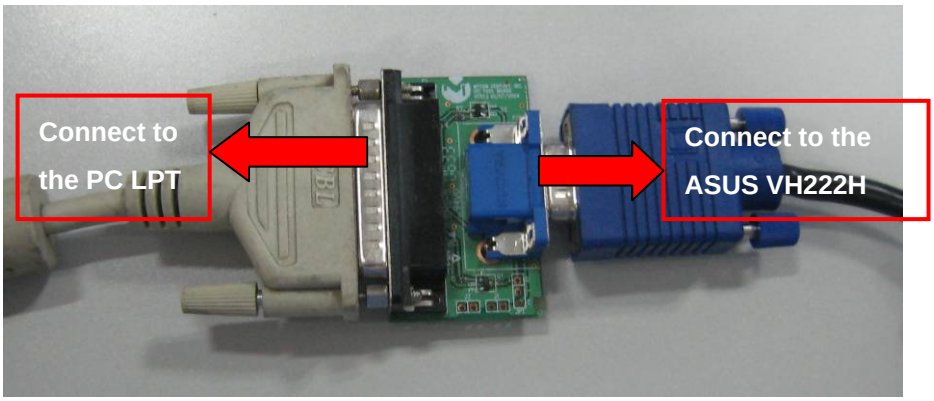
8.1 The tool for ISP

1) An i486 (or above) personal computer or compatible.
2) Microsoft operation system Windows 95/98/2000/XP.
3) “ISP_Tool V4.3.4” program
4) Software ISP SN Alignment kits

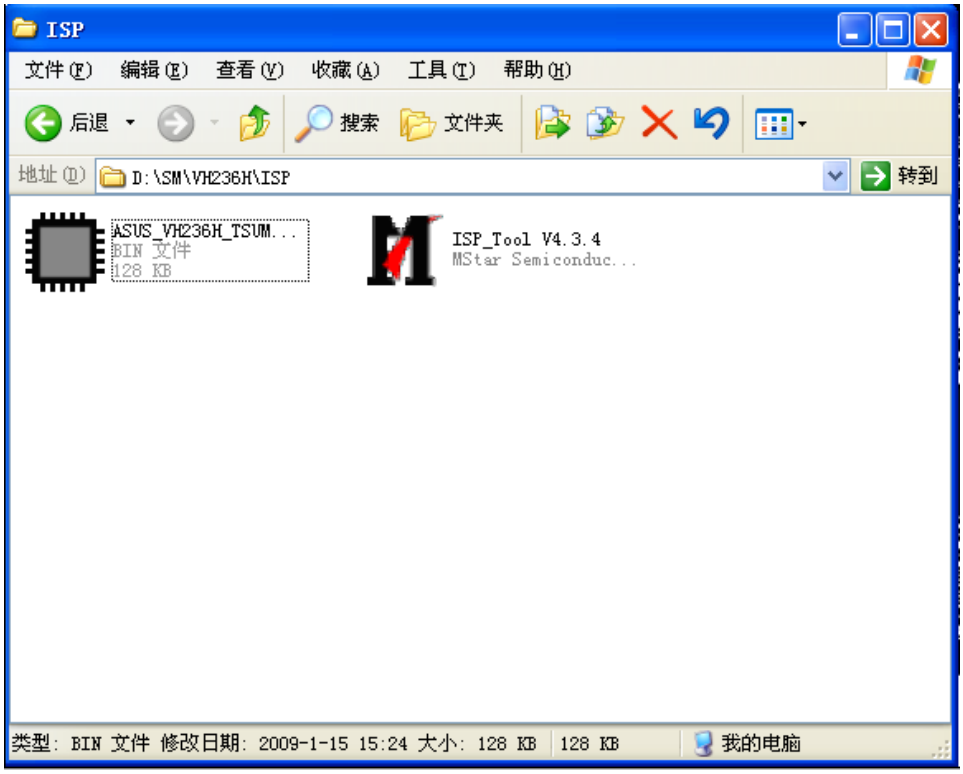
The kit contents:

a) ISP BOARD x1
b) Printer cablex1
c) VGA CABLE X1

8.2 Connect the ISP board as follow:

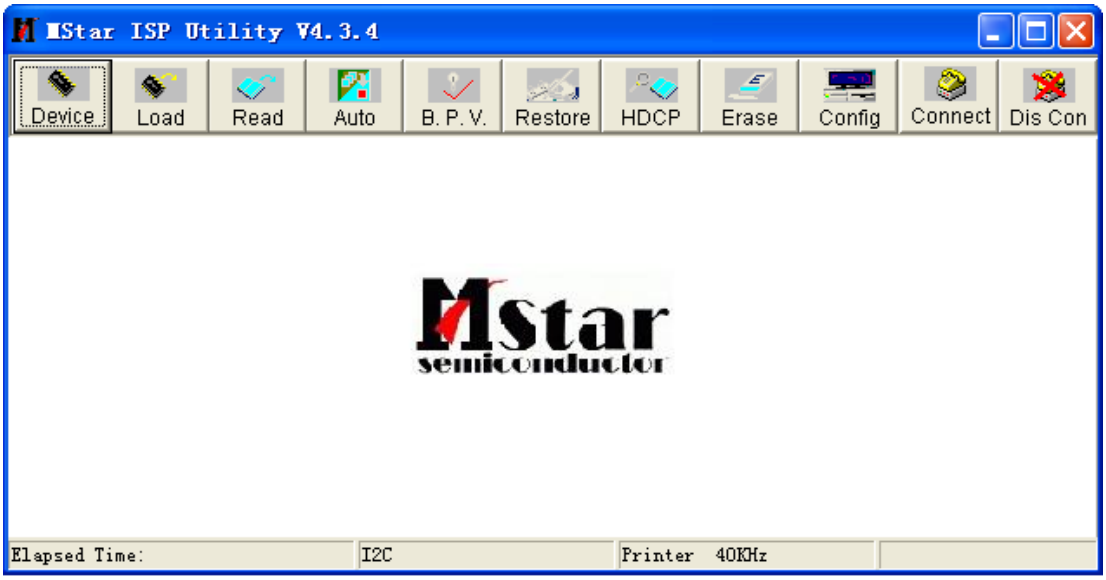


8.3 The process of ISP write is as follows:



a. Double-click 

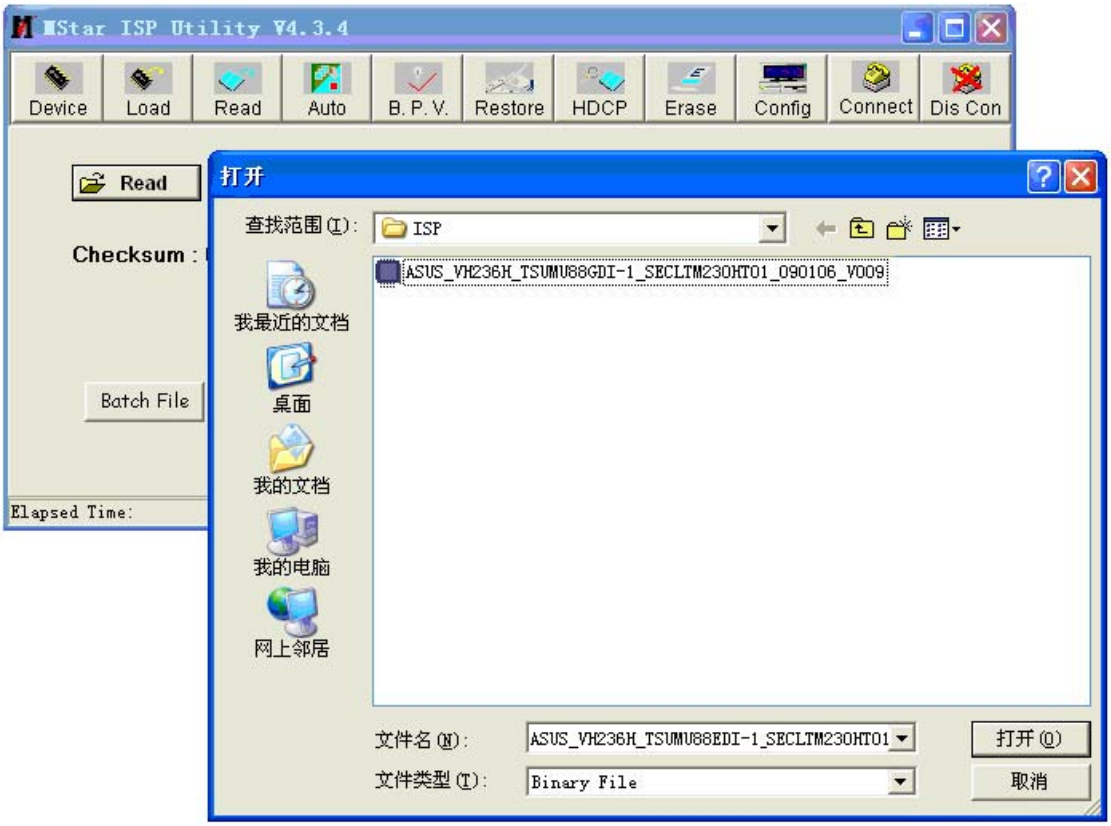
, running the program as follows:



b. Click 

icon, and then click 

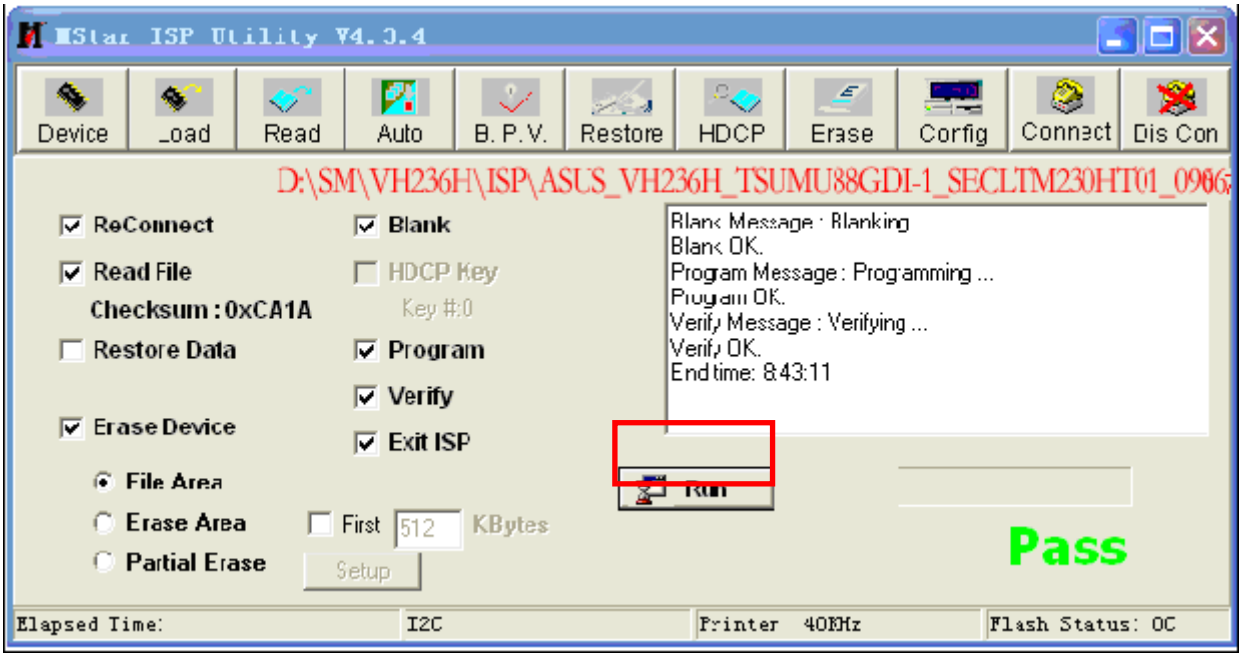
to search the program ” ASUS_VH236H_TSUMU88GDI-1_SECLTM230HT01_090106_V009” and click open:



C. Click 

icon, then click 

. If it burns successfully, it will show as the follow picture:



Note:

The burning way of VH236H is the same as VH232H's.

9. DDC Instruction

9.1 General

DDC Data Re-programming

In case the main EEPROM with Software DDC which store all factory settings were replaced because a defect repaired monitor' the serial numbers have to be re-programmed.

It is advised to re- soldered the main EEPROM with Software DDC from the old board onto the new board if circuit board have been replaced, in this case the DDC data does not need to be re-programmed.

Additional information about DDC (Display Data Channel) may be obtained from Video Electronics Standards Association (VESA). Extended Display Identification Data (EDID) information may be also obtained from VESA.

1. An i486 (or above) personal computer or compatible.
2. Microsoft operation system Windows 95/98/2000/XP.
3. "PORT95NT.exe, WinDDC_ setup" program.
4. Software OSD SN Alignment kits

The kit contents:

a) OSD SN BOARD x1

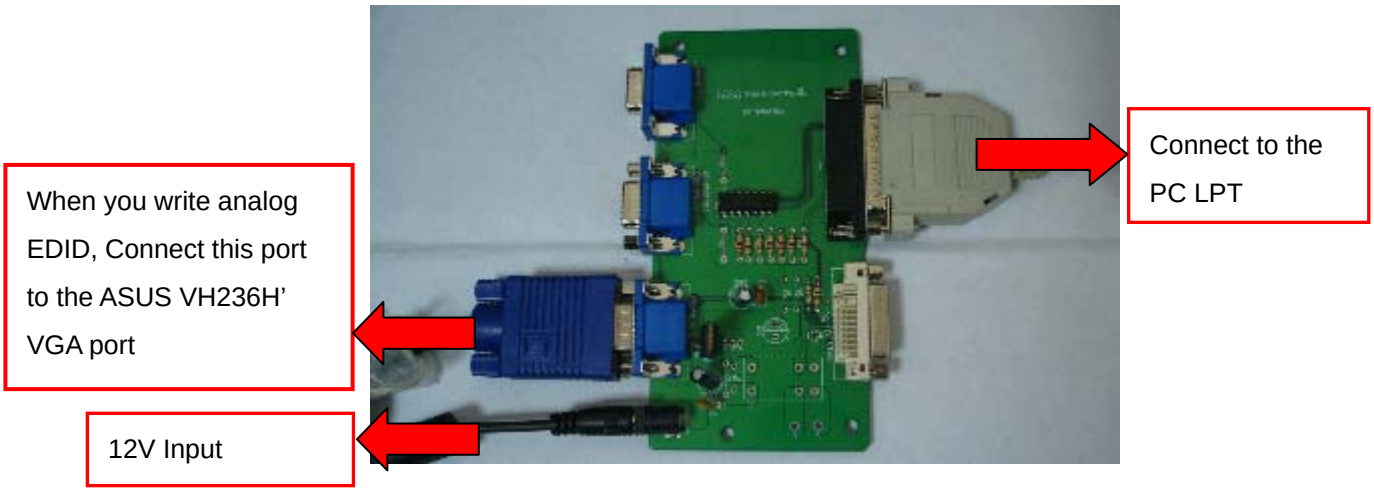
b) Printer cablex1

c) VGA cable x1

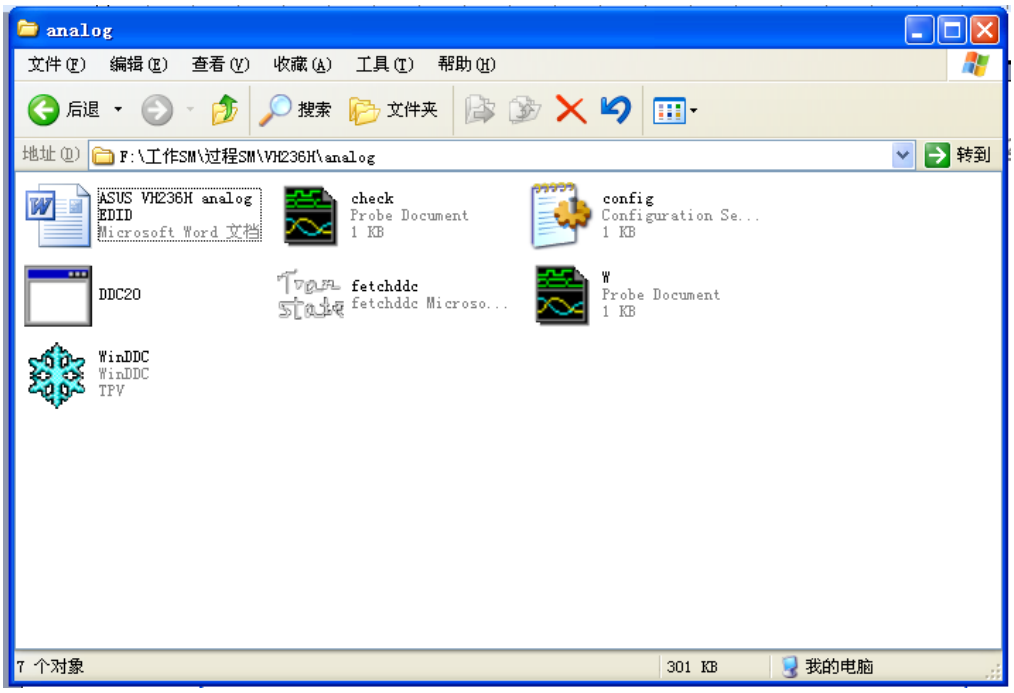
d) Digital cable x1

e) 12V DC power source

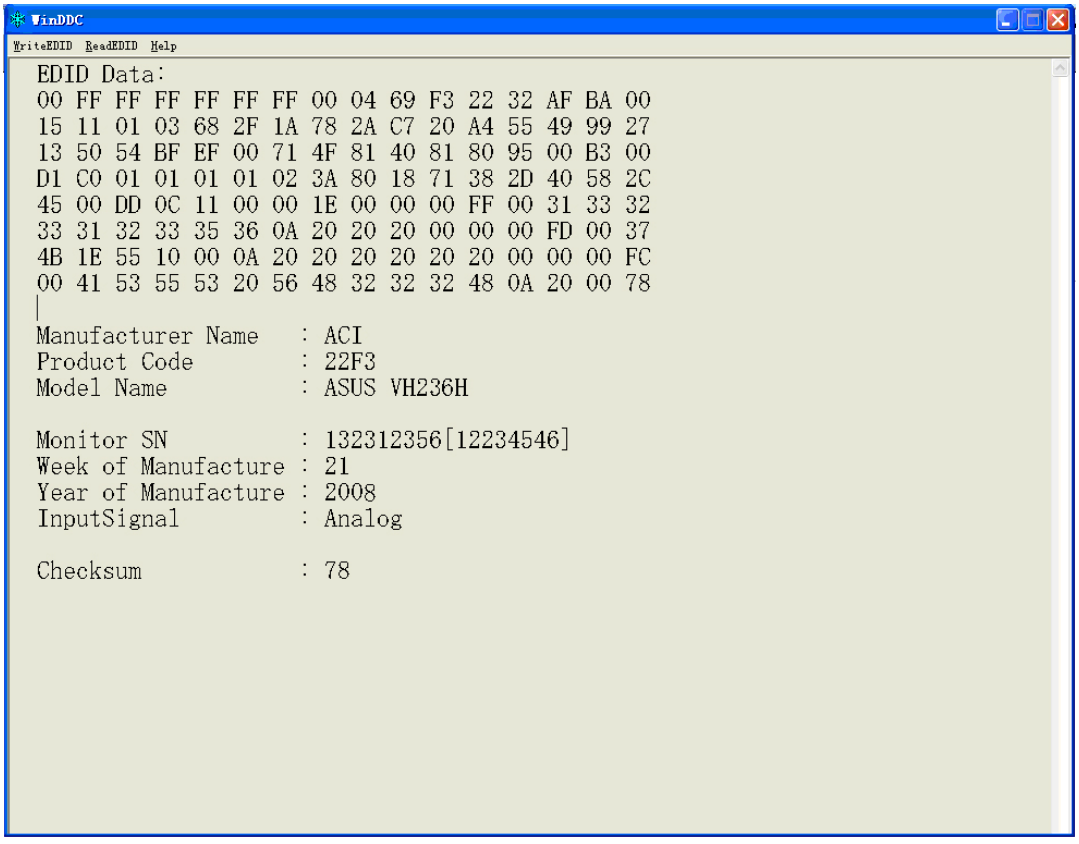
9.2 Connect the DDC board



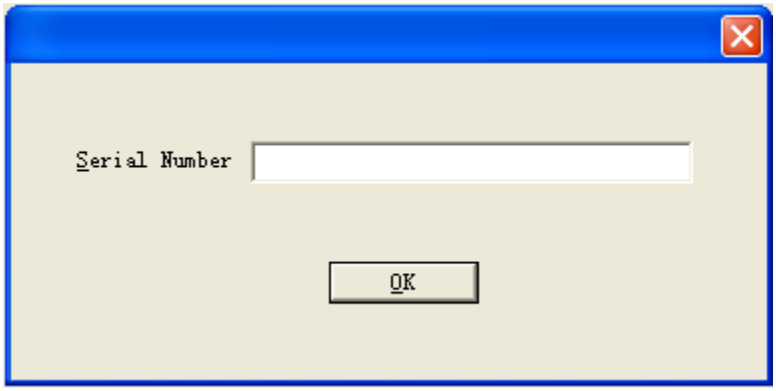
9.3 The process of analog DDC write is as follow:



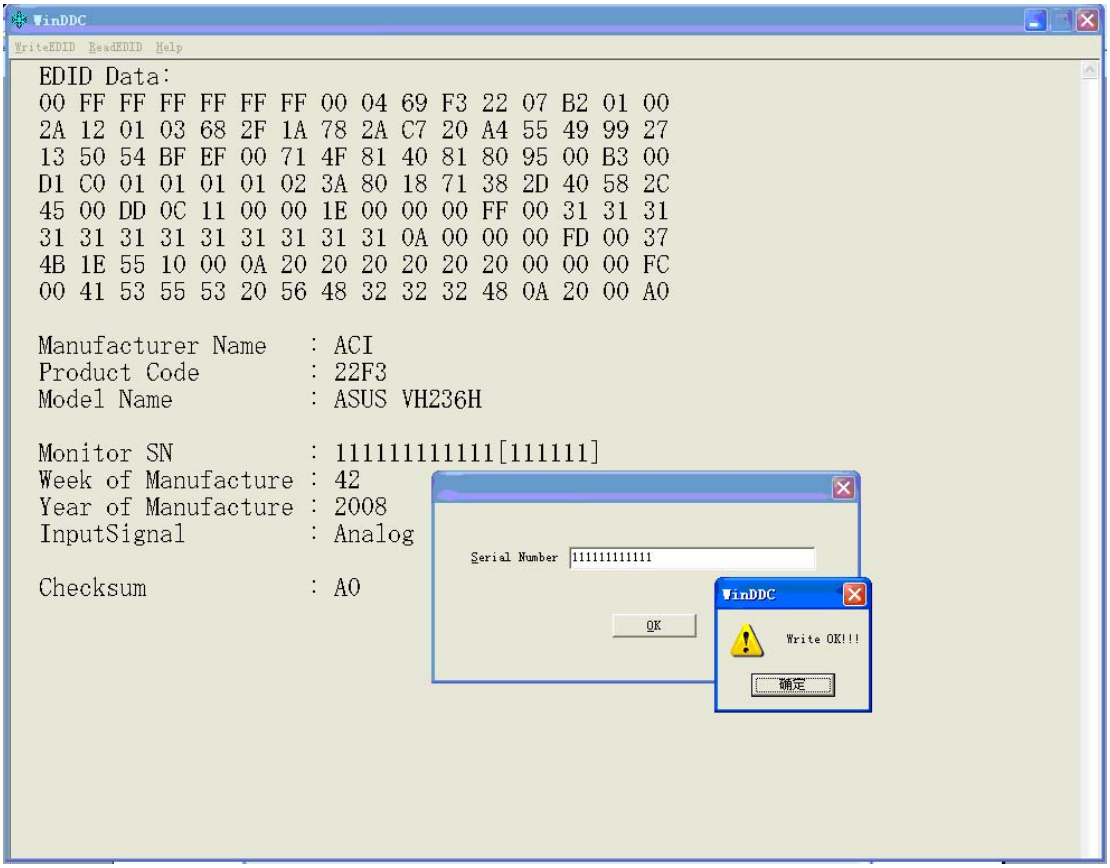
a) Double-click WinDDC.exe , appear as follow Figs:



b) Click WriteEDID, and then appear the dialog box as follow:



c) Key 12 numbers in the Serial Number Blank, then click “OK”. When appear “Write OK!!!” the analog DDC Write completes.



Note:

1) The way of digital DDC write is the same as analog DDC write.
2) The burning way of VH236H is the the same as the VH232H’s.

VH236H EDID

Analog

128 bytes EDID Data (Hex):

00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

0: 00 FF FF FF FF FF FF 00 04 69 F2 23 47 2D 0C 00
16: 33 12 01 03 68 34 1D 78 2A C7 20 A4 55 49 99 27
32: 13 50 54 BF EF 00 71 4F 81 80 95 00 B3 00 D1 C0
48: 01 01 01 01 01 01 02 3A 80 18 71 38 2D 40 58 2C
64: 45 00 09 25 21 00 00 1E 00 00 00 FF 00 31 32 33
80: 35 36 34 37 39 38 30 32 33 0A 00 00 00 FD 00 37
96: 4B 1E 55 10 00 0A 20 20 20 20 20 20 00 00 00 FC
112: 00 41 53 55 53 20 56 48 32 33 36 48 0A 20 00 08

Decoded EDID data

<---Header--->

Header: 00 FF FF FF FF FF FF 00

<-x-Header-x->

<---Vendor/Product Identification--->
ID Manufacturer Name: ACI
ID Product Code: 23F2
ID Serial Number: 000c2d47
Week of Manufacture: 51
Year of Manufacture: 2008
<-x-Vendor/Product Identification-x->

<---EDID Structure Version/Revision--->
EDID Version#: 01
EDID Revision#: 03
<-x-EDID Structure Version/Revision-x->

<---Basic Display Parameters/Features--->
Video i/p definition: Analog
Signal Level Standard: 0.700V/0.000V(0.700Vpp)
Setup: Blank-to-Black not expected

Separate Sync Support: Yes

Composite Sync Support: No

Sync. on green video supported:No

Serration of the Vsync.Pulse is not required.

Max. H. Image Size : 52cm.

Max. V. Image Size : 29cm.

Display Gamma: 2.2

DPMS Features, Active off: Yes.

Display Type: R/G/B color display.

Preferred Timing Mode: Yes.

<---Basic Display Parameters/Features--->

<---Color Characteristics--->

Red x: 0.6435546875

Red y: 0.3320312500

Green x: 0.2861328125

Green y: 0.6005859375

Blue x: 0.1523437500

Blue y: 0.0761718750

White x: 0.3125000000

White y: 0.3310546875

<-x-Color Characteristics-x->

<---Established Timings--->

Established Timings 1: BF

-720x400 @70Hz VGA,IBM

-640x480 @60Hz VGA,IBM

-640x480 @67Hz Apple,Mac II

-640x480 @72Hz VESA

-640x480 @75Hz VESA

-800x600 @56Hz VESA

-800x600 @60Hz VESA

Established Timings 2: EF

-800x600 @72Hz VESA

-800x600 @75Hz VESA

-832x624 @75Hz Apple,Mac II

-1024x768 @60Hz VESA

-1024x768 @70Hz VESA

-1024x768 @75Hz VESA

-1280x1024 @75Hz VESA

Established Timings 3: 00

<-x-Established Timings-x->

<---Standard Timing Identification--->

-1152x864 @75

-1280x1024 @60

-1440x900@60

-1680x1050 @60

-1920x1080 @60

<-x-Standard Timing Identification-x->

<---Detailed Timing Descriptions--->

Detailed Timing: 1920x1080 @ 60Hz.

<-x-Detailed Timing Descriptions-x->

<---Detailed Timing Descriptions--->

Detailed Timing:FF (Monitor SN) '123564798023'

Detailed Timing:FD (Monitor limits)

Min. V. rate: 55Hz

Max. V. rate: 75Hz

Min. H. rate: 30KHz

Max. H. rate: 85KHz

Max. Pixel Clock: 160MHz

Detailed Timing: FC (Monitor Name) 'ASUS VH236H'

<-x-Detailed Timing Descriptions-x->

Extension Flag: 00

Checksum: 08

DVI

128 bytes EDID Data (Hex):

00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

0: 00 FF FF FF FF FF FF 00 04 69 F2 23 A4 69 0D 00

16: 33 12 01 03 80 34 1D 78 2A C7 20 A4 55 49 99 27

32: 13 50 54 BF EF 00 71 4F 81 80 95 00 B3 00 D1 C0

48: 01 01 01 01 01 01 02 3A 80 18 71 38 2D 40 58 2C

64: 45 00 09 25 21 00 00 1E 00 00 00 FF 00 33 31 32

80: 35 34 36 38 37 39 30 31 32 0A 00 00 00 FD 00 37

96: 4B 1E 55 10 00 0A 20 20 20 20 20 20 00 00 00 FC

112: 00 41 53 55 53 20 56 48 32 33 36 48 0A 20 00 58

Decoded EDID data

<---Header--->

Header: 00 FF FF FF FF FF FF 00

<-x-Header-x->

<---Vendor/Product Identification--->

ID Manufacturer Name: ACI
ID Product Code: 23F2
ID Serial Number: 000d69a4
Week of Manufacture: 51
Year of Manufacture: 2008

<-x-Vendor/Product Identification-x->

<---EDID Structure Version/Revision--->

EDID Version#: 01
EDID Revision#: 03

<-x-EDID Structure Version/Revision-x->

<---Basic Display Parameters/Features--->

Video i/p definition: Digital
Max. H. Image Size : 52cm.
Max. V. Image Size : 29cm.
Display Gamma: 2.2
DPMS Features, Active off: Yes.
Display Type: R/G/B color display.
Preferred Timing Mode: Yes.

<---Basic Display Parameters/Features--->

<---Color Characteristics--->

Red x: 0.6435546875
Red y: 0.3320312500
Green x: 0.2861328125
Green y: 0.6005859375
Blue x: 0.1523437500
Blue y: 0.0761718750
White x: 0.3125000000
White y: 0.3310546875

<-x-Color Characteristics-x->

<---Established Timings--->

Established Timings 1: BF

-720x400 @70Hz VGA,IBM

-640x480 @60Hz VGA,IBM

-640x480 @67Hz Apple,Mac II

-640x480 @72Hz VESA

-640x480 @75Hz VESA

-800x600 @56Hz VESA

-800x600 @60Hz VESA

Established Timings 2: EF

-800x600 @72Hz VESA

-800x600 @75Hz VESA

-832x624 @75Hz Apple,Mac II

-1024x768 @60Hz VESA

-1024x768 @70Hz VESA

-1024x768 @75Hz VESA

-1280x1024 @75Hz VESA

Established Timings 3: 00

<-x-Established Timings-x->

<---Standard Timing Identification--->

-1152x864 @75

-1280x1024 @60

-1440x900@60

-1680x1050 @60

-1920x1080 @60

<-x-Standard Timing Identification-x->

<---Detailed Timing Descriptions--->

Detailed Timing: 1920x1080 @ 60Hz.

<-x-Detailed Timing Descriptions-x->

<---Detailed Timing Descriptions--->

Detailed Timing:FF (Monitor SN) '312546879012'

Detailed Timing:FD (Monitor limits)

Min. V. rate: 55Hz

Max. V. rate: 75Hz

Min. H. rate: 30KHz

Max. H. rate: 85KHz

Max. Pixel Clock: 160MHz

Detailed Timing: FC (Monitor Name) 'ASUS VH236H'

<-x-Detailed Timing Descriptions-x->

Extension Flag: 00

Checksum: 58

HDMI

00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F

----------Block 0----------

00| 00 FF FF FF FF FF FF 00 04 69 F2 23 29 E7 04 00

10| 33 12 01 03 80 34 1D 78 2A C7 20 A4 55 49 99 27

20| 13 50 54 BF EF 00 71 4F 81 80 95 00 B3 00 D1 C0

30| 01 01 01 01 01 01 02 3A 80 18 71 38 2D 40 58 2C

40| 45 00 09 25 21 00 00 1E 00 00 00 FF 00 31 32 31

50| 33 32 31 33 32 31 33 32 31 0A 00 00 00 FD 00 37

60| 4B 1E 55 10 00 0A 20 20 20 20 20 20 00 00 00 FC

70| 00 41 53 55 53 20 56 48 32 33 36 48 0A 20 01 77

----------Block 1----------

00| 02 03 22 71 4F 01 02 03 11 12 13 04 14 05 0E 0F

10| 1D 1E 1F 10 23 09 07 01 83 01 00 00 65 03 0C 00

20| 10 00 8C 0A D0 8A 20 E0 2D 10 10 3E 96 00 09 25

30| 21 00 00 18 01 1D 00 72 51 D0 1E 20 6E 28 55 00

40| 09 25 21 00 00 1E 01 1D 00 BC 52 D0 1E 20 B8 28

50| 55 40 09 25 21 00 00 1E 8C 0A D0 90 20 40 31 20

60| 0C 40 55 00 09 25 21 00 00 18 00 00 00 00 00 00

70| 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 73

Block 0:

EDID Structure Version/Revision: 01 03

<-Vendor/Product Identification:->

ID Manufacturer Name: ACI

ID Product Code: 23F2

ID Serial Number: 321321

Week of Manufacture: 51

Year of Manufacture: 2008

<-Basic Display Parameters/Features:->

Video i/p definition: Digital

Max. H. Image Size : 52cm

Max. V. Image Size : 29cm

Display Gamma : 2.2

<-Color Characteristics:->

Rx: 0.644 Gx: 0.285 Bx: 0.152 Wx: 0.312

Ry: 0.332 Gy: 0.601 By: 0.076 Wy: 0.328

<-Established Timings:->

Established Timings 1:BF

720 x 400 @ 70Hz VGA,IBM

640 x 480 @ 60Hz VGA,IBM

640 x 480 @ 67Hz Apple,Mac II

640 x 480 @ 72Hz VESA

640 x 480 @ 75Hz VESA

800 x 600 @ 56Hz VESA

800 x 600 @ 60Hz VESA

Established Timings 2:EF

800 x 600 @ 72Hz VESA

800 x 600 @ 75Hz VESA

832 x 624 @ 75Hz Apple,Mac II

1024 x 768 @ 60Hz VESA

1024 x 768 @ 70Hz VESA

1024 x 768 @ 75Hz VESA

1280 x1024 @ 75Hz VESA

Established Timings 3:00

<-Standard Timing Identification:->

1152 x 864 @ 75Hz

1280 x 1024 @ 60Hz

1440 x 900 @ 60Hz

1680 x 1050 @ 60Hz

1920 x 1080 @ 60Hz

<-Detailed Timing Descriptions:->

Detailed Timing : 1920x1080 @ 60Hz

FF (Monitor SN) : 121321321321

FD (Monitor Limits):

Min. V. rate: 55 Hz

Max. V. rate: 75 Hz

Min. H. rate: 30 KHz

Max. H. rate: 85 KHz

Max. P Clock: 160 MHz

FC (Monitor Name) : ASUS VH236H

Extension Flag : 01

Block0 Checksum : 77

Block 1:

Extended Block Type: CEA 861B

Detailed Timing Blocks start at Byte: 22

DTV Underscan NO

DTV Basic Audio YES

YCbCr (4:4:4) YES

YCbCr (4:2:2) YES

<-Video Short Block Description:->

640 x 480 P 59.94/60Hz 4:3

720 x 480 P 59.94/60Hz 4:3

720 x 480 P 59.94/60Hz 16:9

720 x 576 P 50Hz 4:3

720 x 576 P 50Hz 16:9

1280 x 720 P 50Hz 16:9

1280 x 720 P 59.94/60Hz 16:9

1920 x 1080 I 50Hz 16:9

1920 x 1080 I 59.94/60Hz 16:9

1440 x 480 P 59.94/60Hz 4:3

1440 x 480 P 59.94/60Hz 16:9

1440 x 576 P 50Hz 4:3

1440 x 576 P 50Hz 16:9

1920 x 1080 P 50Hz 16:9

1920 x 1080 P 59.94/60Hz 16:9

<-Audio Short Block Description:->

Numbers of Audio Channels: 2

Audio Format Description: Linear PCM

Audio Supported: 48KHz 44KHz 32KHz

Audio Bit Rate: 16bit

<-Speaker Allocation:->

Speaker Allocation: FL/FR

<-Detailed Timing Descriptions: ->

Detailed Timing Descriptions: 720x480 @ 60Hz
H Image Size: 521 mm V Image Size: 293 mm
Pixel Clock: 27 Hz Refreshed Mode: Non-Interlaced

Detailed Timing Descriptions: 1280x720 @ 60Hz
H Image Size: 521 mm V Image Size: 293 mm
Pixel Clock: 74 Hz Refreshed Mode: Non-Interlaced

Detailed Timing Descriptions: 1280x720 @ 50Hz
H Image Size: 521 mm V Image Size: 293 mm
Pixel Clock: 74 Hz Refreshed Mode: Non-Interlaced

Detailed Timing Descriptions: 720x576 @ 50Hz
H Image Size: 521 mm V Image Size: 293 mm
Pixel Clock: 27 Hz Refreshed Mode: Non-Interlaced

Block1 Checksum : 73

VH232H EDID

Analog

128 bytes EDID Data (Hex):

00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

0: 00 FF FF FF FF FF FF 00 04 69 F1 23 A7 C3 04 00
16: 2F 12 01 03 68 34 1D 78 2A C7 20 A4 55 49 99 27
32: 13 50 54 BF EF 00 71 4F 01 01 81 80 95 00 B3 00
48: D1 C0 01 01 01 01 02 3A 80 18 71 38 2D 40 58 2C
64: 45 00 09 25 21 00 00 1E 00 00 00 FF 00 31 32 33
80: 33 32 31 33 31 32 32 33 31 0A 00 00 00 FD 00 37
96: 4B 1E 55 10 00 0A 20 20 20 20 20 20 00 00 00 FC
112: 00 41 53 55 53 20 56 48 32 33 32 48 0A 20 00 3D

Decoded EDID data

<---Header--->

Header: 00 FF FF FF FF FF FF 00

<-x-Header-x->

<---Vendor/Product Identification--->
ID Manufacturer Name: ACI
ID Product Code: 23F1
ID Serial Number: 0004c3a7
Week of Manufacture: 47
Year of Manufacture: 2008
<-x-Vendor/Product Identification-x->

<---EDID Structure Version/Revision--->
EDID Version#: 01
EDID Revision#: 03
<-x-EDID Structure Version/Revision-x->

<---Basic Display Parameters/Features--->
Video i/p definition: Analog
Signal Level Standard: 0.700V/0.000V(0.700Vpp)
Setup: Blank-to-Black not expected

Separate Sync Support: Yes

Composite Sync Support: No

Sync. on green video supported:No

Serration of the Vsync.Pulse is not required.

Max. H. Image Size : 52cm.

Max. V. Image Size : 29cm.

Display Gamma: 2.2

DPMS Features, Active off: Yes.

Display Type: R/G/B color display.

Preferred Timing Mode: Yes.

<---Basic Display Parameters/Features--->

<---Color Characteristics--->

Red x: 0.6435546875

Red y: 0.3320312500

Green x: 0.2861328125

Green y: 0.6005859375

Blue x: 0.1523437500

Blue y: 0.0761718750

White x: 0.3125000000

White y: 0.3310546875

<-x-Color Characteristics-x->

<---Established Timings--->

Established Timings 1: BF

-720x400 @70Hz VGA,IBM

-640x480 @60Hz VGA,IBM

-640x480 @67Hz Apple,Mac II

-640x480 @72Hz VESA

-640x480 @75Hz VESA

-800x600 @56Hz VESA

-800x600 @60Hz VESA

Established Timings 2: EF

-800x600 @72Hz VESA

-800x600 @75Hz VESA

-832x624 @75Hz Apple,Mac II

-1024x768 @60Hz VESA

-1024x768 @70Hz VESA

-1024x768 @75Hz VESA

-1280x1024 @75Hz VESA

Established Timings 3: 00

<-x-Established Timings-x->

<---Standard Timing Identification--->

-1152x864 @75

-1280x1024 @60

-1440x900@60

-1680x1050 @60

-1920x1080 @60

<-x-Standard Timing Identification-x->

<---Detailed Timing Descriptions--->

Detailed Timing: 1920x1080 @ 60Hz.

<-x-Detailed Timing Descriptions-x->

<---Detailed Timing Descriptions--->

Detailed Timing:FF (Monitor SN) '123321312231'

Detailed Timing:FD (Monitor limits)

Min. V. rate: 55Hz

Max. V. rate: 75Hz

Min. H. rate: 30KHz

Max. H. rate: 85KHz

Max. Pixel Clock: 160MHz

Detailed Timing: FC (Monitor Name) 'ASUS VH232H'

<-x-Detailed Timing Descriptions-x->

Extension Flag: 00

Checksum: 3D

Digital

128 bytes EDID Data (Hex):

00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

0: 00 FF FF FF FF FF FF 00 04 69 F1 23 D3 86 03 00

16: 2F 12 01 03 80 34 1D 78 2A C7 20 A4 55 49 99 27

32: 13 50 54 BF EF 00 71 4F 01 01 81 80 95 00 B3 00

48: D1 C0 01 01 01 01 02 3A 80 18 71 38 2D 40 58 2C

64: 45 00 09 25 21 00 00 1E 00 00 00 FF 00 31 33 32

80: 31 32 33 32 33 31 31 32 33 0A 00 00 00 FD 00 37

96: 4B 1E 55 10 00 0A 20 20 20 20 20 20 00 00 00 FC

112: 00 41 53 55 53 20 56 48 32 33 32 48 0A 20 00 37

Decoded EDID data

<---Header--->

Header: 00 FF FF FF FF FF FF 00

<-x-Header-x->

<---Vendor/Product Identification--->

ID Manufacturer Name: ACI
ID Product Code: 23F1
ID Serial Number: 000386d3
Week of Manufacture: 47
Year of Manufacture: 2008

<-x-Vendor/Product Identification-x->

<---EDID Structure Version/Revision--->

EDID Version#: 01
EDID Revision#: 03

<-x-EDID Structure Version/Revision-x->

<---Basic Display Parameters/Features--->

Video i/p definition: Digital
Max. H. Image Size : 52cm.
Max. V. Image Size : 29cm.
Display Gamma: 2.2
DPMS Features, Active off: Yes.
Display Type: R/G/B color display.
Preferred Timing Mode: Yes.

<---Basic Display Parameters/Features--->

<---Color Characteristics--->

Red x: 0.6435546875
Red y: 0.3320312500
Green x: 0.2861328125
Green y: 0.6005859375
Blue x: 0.1523437500
Blue y: 0.0761718750
White x: 0.3125000000
White y: 0.3310546875

<-x-Color Characteristics-x->

<---Established Timings--->

Established Timings 1: BF

-720x400 @70Hz VGA,IBM

-640x480 @60Hz VGA,IBM

-640x480 @67Hz Apple,Mac II

-640x480 @72Hz VESA

-640x480 @75Hz VESA

-800x600 @56Hz VESA

-800x600 @60Hz VESA

Established Timings 2: EF

-800x600 @72Hz VESA

-800x600 @75Hz VESA

-832x624 @75Hz Apple,Mac II

-1024x768 @60Hz VESA

-1024x768 @70Hz VESA

-1024x768 @75Hz VESA

-1280x1024 @75Hz VESA

Established Timings 3: 00

<-x-Established Timings-x->

<---Standard Timing Identification--->

-1152x864 @75

-1280x1024 @60

-1440x900@60

-1680x1050 @60

-1920x1080 @60

<-x-Standard Timing Identification-x->

<---Detailed Timing Descriptions--->

Detailed Timing: 1920x1080 @ 60Hz.

<-x-Detailed Timing Descriptions-x->

<---Detailed Timing Descriptions--->

Detailed Timing:FF (Monitor SN) '132123231123'

Detailed Timing:FD (Monitor limits)

Min. V. rate: 55Hz

Max. V. rate: 75Hz

Min. H. rate: 30KHz

Max. H. rate: 85KHz

Max. Pixel Clock: 160MHz

Detailed Timing: FC (Monitor Name) 'ASUS VH232H'

<-x-Detailed Timing Descriptions-x->

Extension Flag: 00

Checksum: 37

HDMI

00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F

----------Block 0----------

00| 00 FF FF FF FF FF FF 00 04 69 F1 23 32 AF BA 00

10| 15 11 01 03 80 34 1D 78 2A C7 20 A4 55 49 99 27

20| 13 50 54 BF EF 00 71 4F 01 01 81 80 95 00 B3 00

30| D1 C0 01 01 01 01 02 3A 80 18 71 38 2D 40 58 2C

40| 45 00 09 25 21 00 00 1E 00 00 00 FF 00 31 33 32

50| 33 31 32 33 35 36 0A 20 20 20 00 00 00 FD 00 37

60| 4B 1E 55 10 00 0A 20 20 20 20 20 20 00 00 00 FC

70| 00 41 53 55 53 20 56 48 32 33 32 48 0A 20 01 40

----------Block 1----------

00| 02 03 22 71 4F 01 02 03 11 12 13 04 14 05 0E 0F

10| 1D 1E 1F 10 23 09 07 01 83 01 00 00 65 03 0C 00

20| 10 00 8C 0A D0 8A 20 E0 2D 10 10 3E 96 00 09 25

30| 21 00 00 18 01 1D 00 72 51 D0 1E 20 6E 28 55 00

40| 09 25 21 00 00 1E 01 1D 00 BC 52 D0 1E 20 B8 28

50| 55 40 09 25 21 00 00 1E 8C 0A D0 90 20 40 31 20

60| 0C 40 55 00 09 25 21 00 00 18 00 00 00 00 00 00

70| 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 73

Block 0:

EDID Structure Version/Revision: 01 03

<-Vendor/Product Identification:->

ID Manufacturer Name: ACI

ID Product Code: 23F1

ID Serial Number: 12234546

Week of Manufacture: 21

Year of Manufacture: 2007

<-Basic Display Parameters/Features:->

Video i/p definition: Digital

Max. H. Image Size : 52cm

Max. V. Image Size : 29cm

Display Gamma : 2.2

<-Color Characteristics:->

Rx: 0.644 Gx: 0.285 Bx: 0.152 Wx: 0.312

Ry: 0.332 Gy: 0.601 By: 0.076 Wy: 0.328

<-Established Timings:->

Established Timings 1:BF

720 x 400 @ 70Hz VGA,IBM

640 x 480 @ 60Hz VGA,IBM

640 x 480 @ 67Hz Apple,Mac II

640 x 480 @ 72Hz VESA

640 x 480 @ 75Hz VESA

800 x 600 @ 56Hz VESA

800 x 600 @ 60Hz VESA

Established Timings 2:EF

800 x 600 @ 72Hz VESA

800 x 600 @ 75Hz VESA

832 x 624 @ 75Hz Apple,Mac II

1024 x 768 @ 60Hz VESA

1024 x 768 @ 70Hz VESA

1024 x 768 @ 75Hz VESA

1280 x1024 @ 75Hz VESA

Established Timings 3:00

<-Standard Timing Identification:->

1152 x 864 @ 75Hz

1280 x 1024 @ 60Hz

1440 x 900 @ 60Hz

1680 x 1050 @ 60Hz

1920 x 1080 @ 60Hz

<-Detailed Timing Descriptions:->

Detailed Timing : 1920x1080 @ 60Hz

FF (Monitor SN) : 132312356

FD (Monitor Limits):

Min. V. rate: 55 Hz

Max. V. rate: 75 Hz

Min. H. rate: 30 KHz

Max. H. rate: 85 KHz

Max. P Clock: 160 MHz

FC (Monitor Name) : ASUS VH232H

Extension Flag : 01

Block0 Checksum : 40

Block 1:

Extended Block Type: CEA 861B

Detailed Timing Blocks start at Byte: 22

DTV Underscan NO

DTV Basic Audio YES

YCbCr (4:4:4) YES

YCbCr (4:2:2) YES

<-Video Short Block Description:->

640 x 480 P 59.94/60Hz 4:3

720 x 480 P 59.94/60Hz 4:3

720 x 480 P 59.94/60Hz 16:9

720 x 576 P 50Hz 4:3

720 x 576 P 50Hz 16:9

1280 x 720 P 50Hz 16:9

1280 x 720 P 59.94/60Hz 16:9

1920 x 1080 I 50Hz 16:9

1920 x 1080 I 59.94/60Hz 16:9

1440 x 480 P 59.94/60Hz 4:3

1440 x 480 P 59.94/60Hz 16:9

1440 x 576 P 50Hz 4:3

1440 x 576 P 50Hz 16:9

1920 x 1080 P 50Hz 16:9

1920 x 1080 P 59.94/60Hz 16:9

<-Audio Short Block Description:->

Numbers of Audio Channels: 2

Audio Format Description: Linear PCM

Audio Supported: 48KHz 44KHz 32KHz

Audio Bit Rate: 16bit

<-Speaker Allocation:->

Speaker Allocation: FL/FR

<-Detailed Timing Descriptions: ->

Detailed Timing Descriptions: 720x480 @ 60Hz

H Image Size: 521 mm V Image Size: 293 mm

Pixel Clock: 27 Hz Refreshed Mode: Non-Interlaced

Detailed Timing Descriptions: 1280x720 @ 60Hz

H Image Size: 521 mm V Image Size: 293 mm

Pixel Clock: 74 Hz Refreshed Mode: Non-Interlaced

Detailed Timing Descriptions: 1280x720 @ 50Hz

H Image Size: 521 mm V Image Size: 293 mm

Pixel Clock: 74 Hz Refreshed Mode: Non-Interlaced

Detailed Timing Descriptions: 720x576 @ 50Hz

H Image Size: 521 mm V Image Size: 293 mm

Pixel Clock: 27 Hz Refreshed Mode: Non-Interlaced

Block1 Checksum : 73

10. Color/White balance 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 .

2. Setting the color temp. you want

A. MEM.CHANNEL 3 (Warm color):

Warm color temp.parameter is x = 313 ±20, y = 329 ±20, Y=200cd/ m^2 (typ)

B. MEM.CHANNEL 4 (Normal color):

Normal color temp.parameter is x = 299 ±20, y = 315 ±20, Y=200cd/ m^2 (typ)

C. MEM.CHANNEL 9(Cool color):

Cool color temp. parameter is x = 283 ±20, y = 297 ±20, Y = 170cd/m^2 (typ)

D. MEM.CHANNEL 10 (sRGB color):

sRGB color temp. parameter is x = 313 ±20, y = 329 ±20, Y= 160 ±10cd/m^2

3. Into Factory mode:

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

4. Bias adjustment:

Set the **Contrast** to 50; Adjust the **Brightness** to 80.

5. Gain adjustment:

Move cursor to "-F-" and press MENU key

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 ±20, y = 329 ±20, Y=200cd/m^2 (typ)
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 reachedthe 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±2

B. Adjust Normal (7500K) 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 = 299 ±20, y = 315 ±20, Y=200cd/m2 (typ)
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 reachedthe 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±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 ±20, y = 297 ±20, Y = 170cd/m^2 (typ)
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±2

D. Adjust sRGB color-temperature

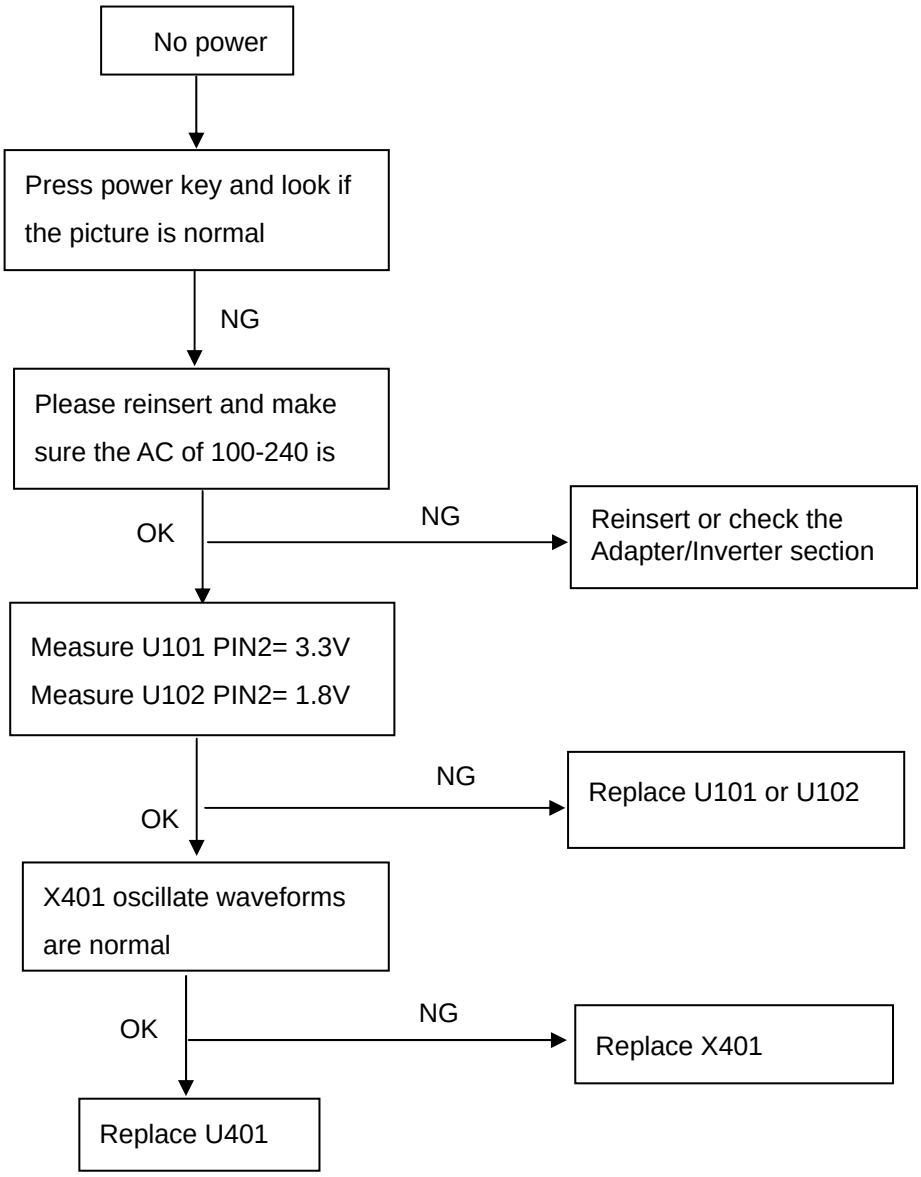
1. Switch the chroma-7120 to **RGB-Mode** (with press “MODE” button)
2. Switch the MEM.channel to Channel 10 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show x = 313 ±20, y = 329 ±20, Y= 160 ±10cd/m^2
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reachedthe 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±2

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

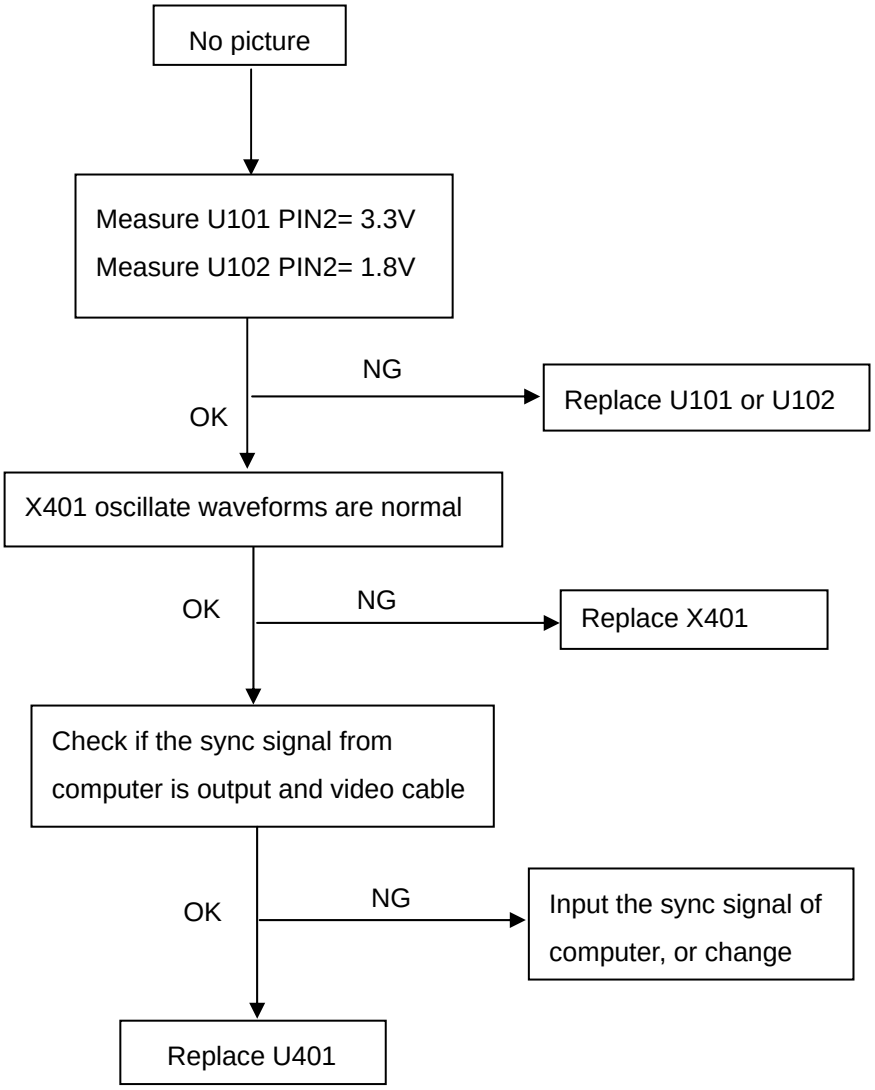
11. Trouble Shooting

11.1 Main Board

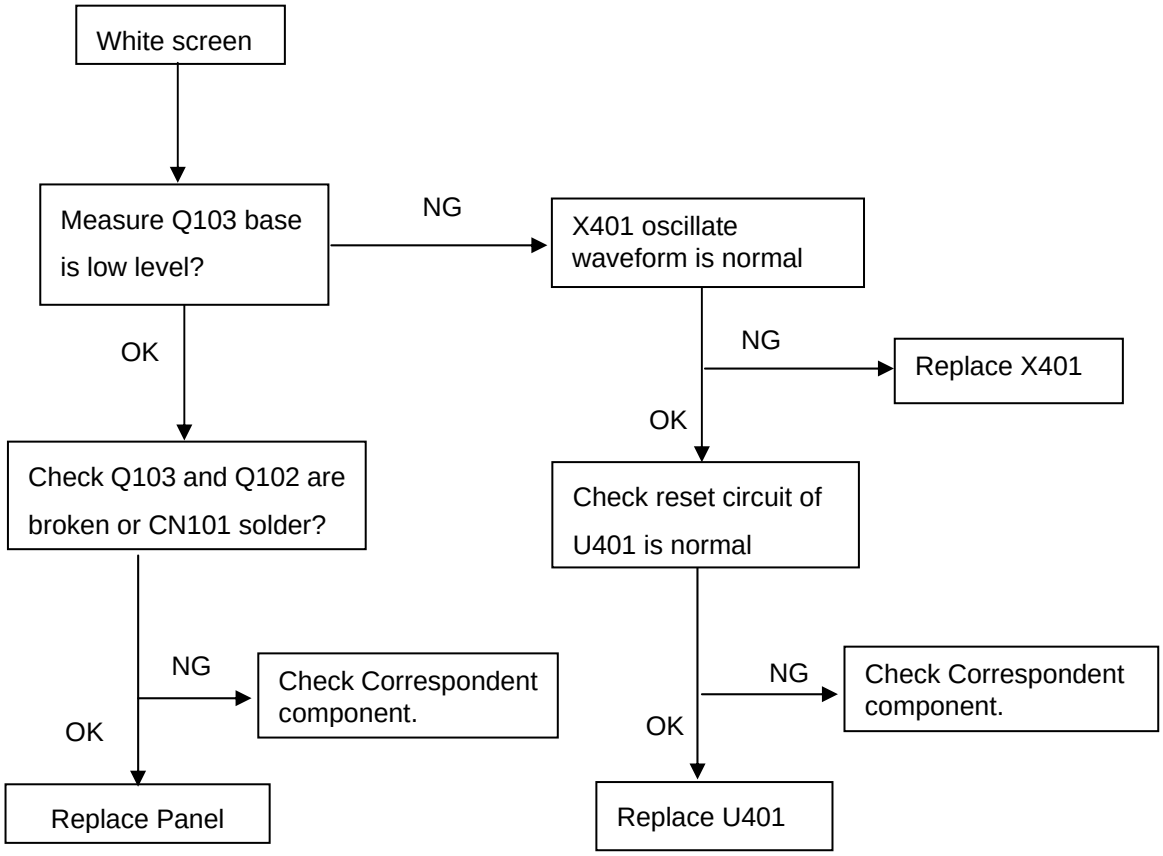
(1). No Power



(2). No Picture

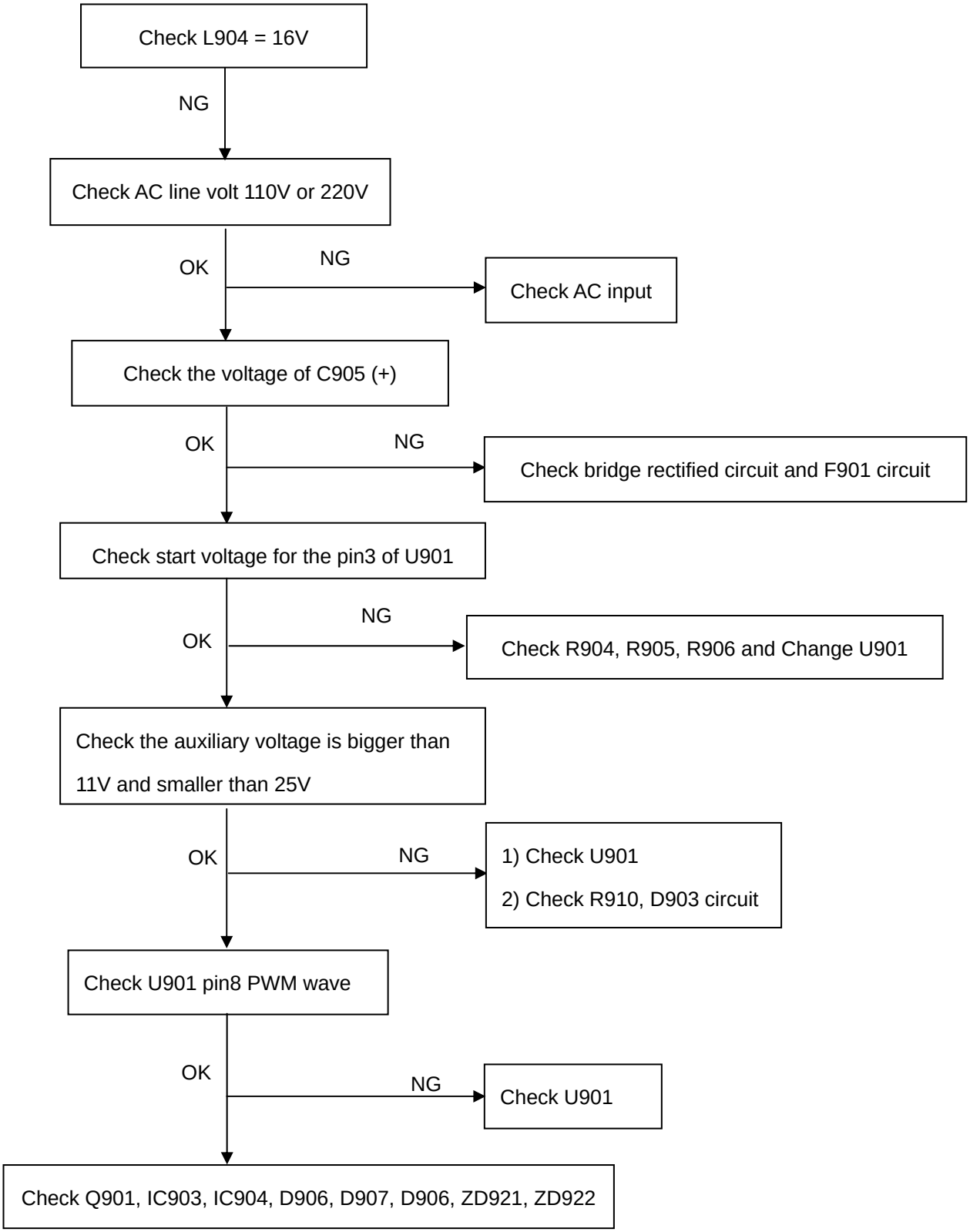

No picture
Measure U101 PIN2= 3.3V
Measure U102 PIN2= 1.8V
NG
Replace U101 or U102
OK
X401 oscillate waveforms are normal
OK
NG
Replace X401
Check if the sync signal from computer is output and video cable
OK
NG
Input the sync signal of computer, or change
Replace U401

(3). White screen

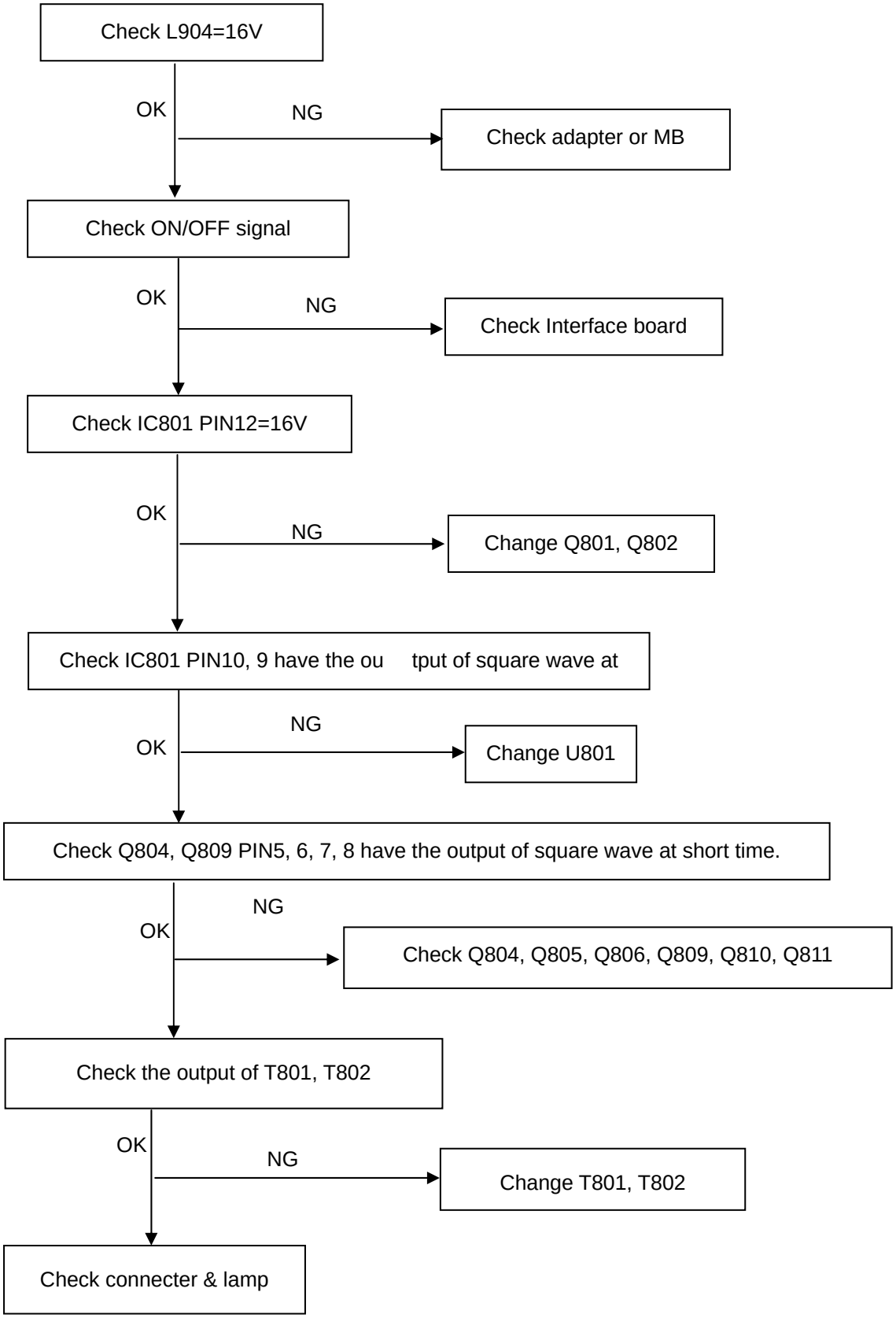


11.2 Power/Inverter Board

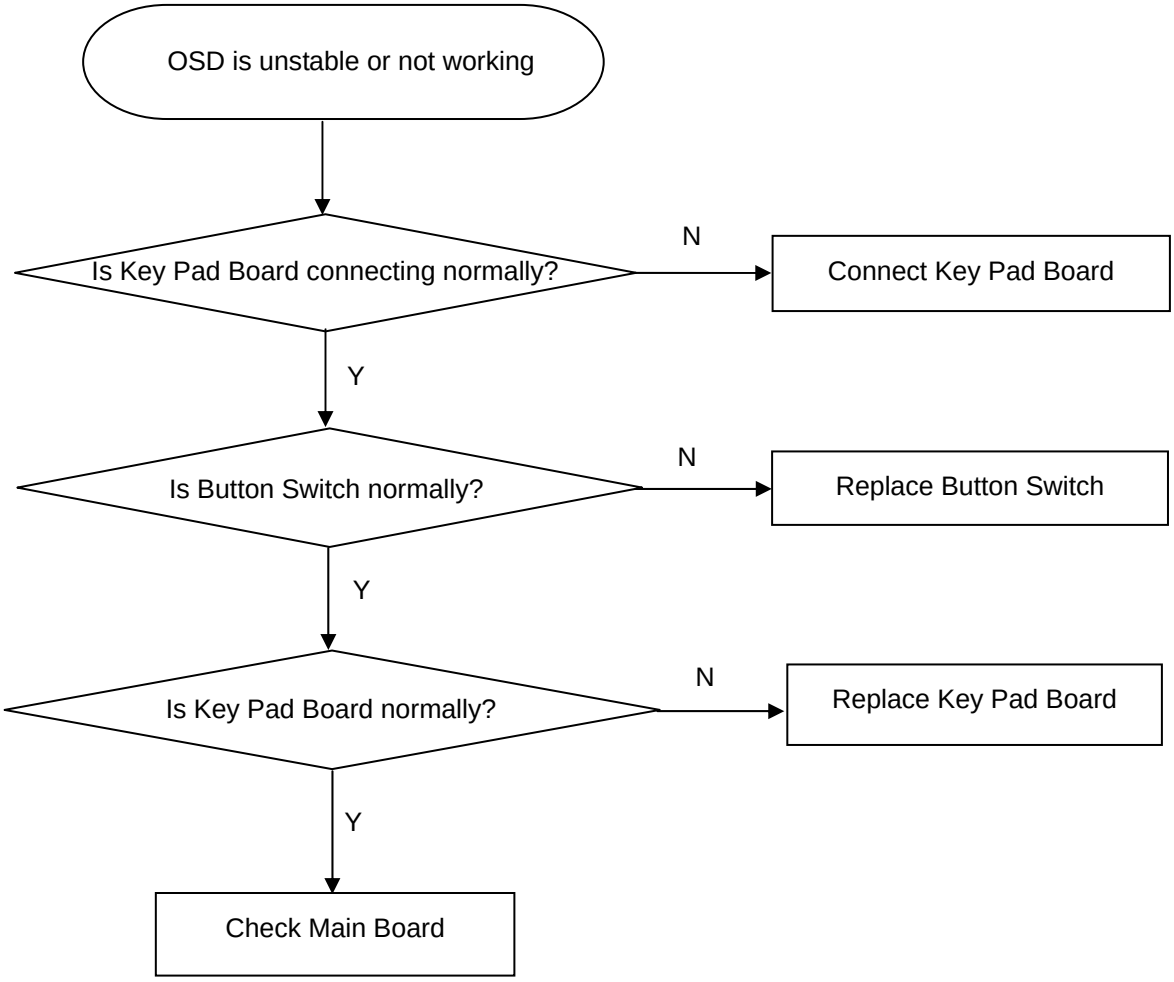
1.) No power



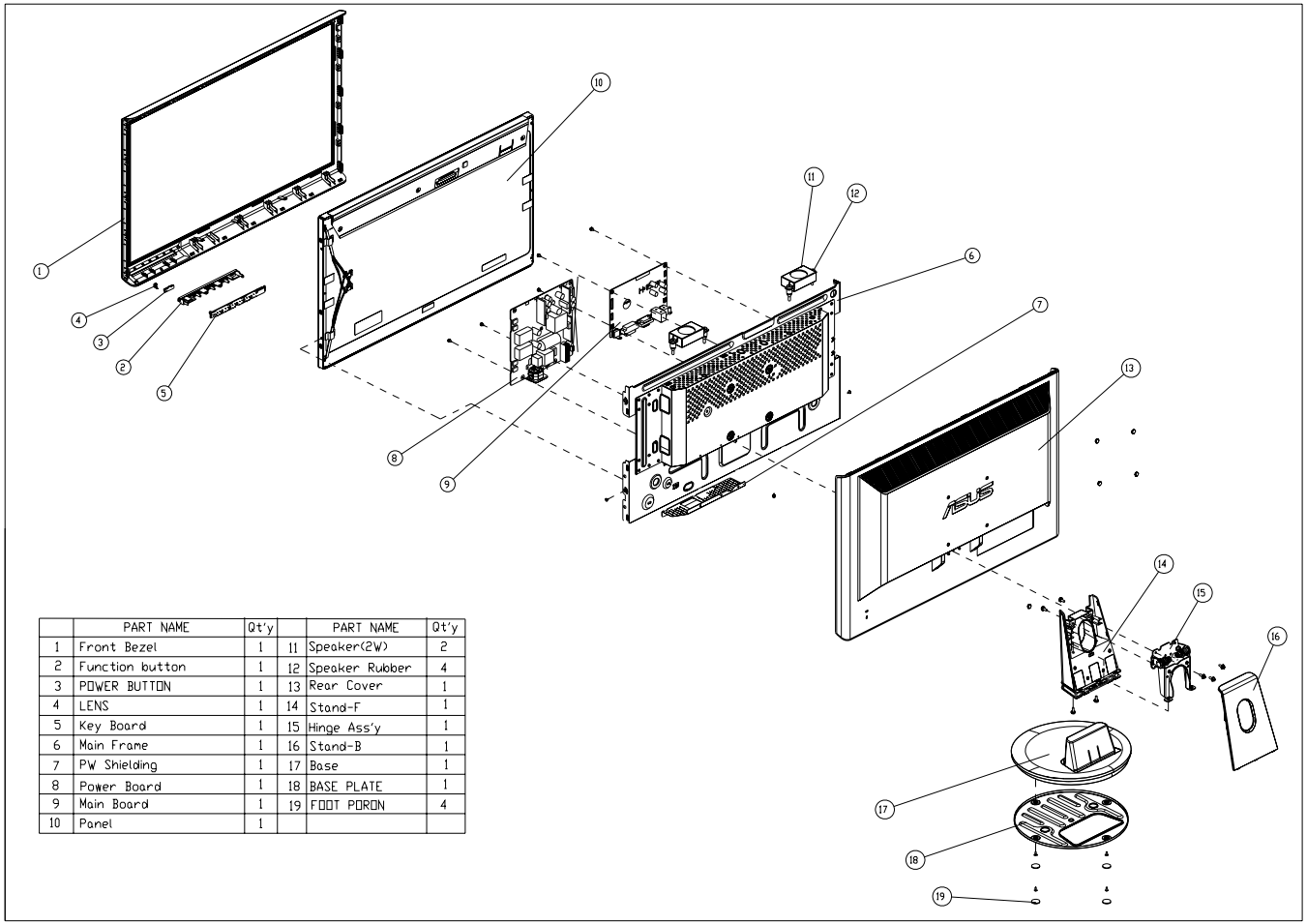
2). W / LED, No Backlight



11.3 Key Board



12. Exploded View



	PART NAME	Qt'y		PART NAME	Qt'y
1	Front Bezel	1	11	Speaker(2W)	2
2	Function button	1	12	Speaker Rubber	4
3	POWER BUTTON	1	13	Rear Cover	1
4	LENS	1	14	Stand-F	1
5	Key Board	1	15	Hinge Ass'y	1
6	Main Frame	1	16	Stand-B	1
7	PW Shielding	1	17	Base	1
8	Power Board	1	18	BASE PLATE	1
9	Main Board	1	19	FOOT PORON	4
10	Panel	1			

13. BOM list

VH236H HDRSACNKXCUSRC

Location	Part No.	Description	Remark
	040G 457834 4A	S/N LABEL FOR ID	
	040G 58160811A	GREEN DOT LABEL	
	040G 581680 1A	WARRANTY LABEL	
	044GH600 1	HANDLE 2	
	050G 600 4	HANDLE 1	
	052G 1185 49	ASUS TAPE 73-D024084	
	052G 1186	SMALL TAPE	
	052G 1211500	ALUMINUM FOIL TAPE	
	052G 1211503	ALUMINUM FOIL TAPE	
	052G 1211527	CONDUCTIVE TAPE	
	052G 1211555	ALUMINUM FOIL TAPE	
	052G 1212 A	ALUMINUM FOIL TAPE	
	070GHDCP500HDC	HDCP CODE	
E07801	078G 500500 V	SPK 4 OHM 2.5W 57.5X34 360 260MM VECO	
E07801	078G 500500 Y	SPK 4 OHM 2.5W 57.5X34 360 260MM SUNLINK	2nd source
E08902	089G 728CAA DB	D-SUB CABLE	
E08902	089G 728HAA DB	D-SUB CABLE	2nd source
E08903	089G1748GAA 2D	DVI CABLE	2nd source
E08903	089G1748HAA 2D	DVI CABLE	
E08901	089G402A18N CX	POWER CORD	
E08901	089G402A18N IS	POWER CORD	2nd source
	095G8014 6D 58	HARNESS 6P-6P 300MM	
E09501	095G801830D178	HARNESS 30P-30P 160MM	
E09501	095G801830X178	HARNESS 30P-30P 160MM	2nd source
	0M1G 130 5120	SCREW	
	0M1G1730 6120	SCREW,42-D020523	
	0M1G1730 6120	SCREW,42-D020523	
	0M1G1740 10 47 CR3	SCREW	
	0Q1G 930 8120	SCREW	
	705GQ834342	23.6" LCD STAND-BASE ASS'Y	
	012G 394 6	FOOT PORON	
	0M1G1740 10 47 CR3	SCREW	
	0Q1G 130 8120	SCREW 42A9930011	
	A15G0486101	BASE PLATE	
	A34G0891ADJ 1B	STAND-F	
	A34G0893ADJ 1B	BASE	

	A37G0090 2	HINGE	
E750	750GLS230HT132M0AS	PANEL LTM230HT01 A03(003) SZ SEC	
E750	750GLS230HT142M0AS	PANEL LTM230HT01 A04(004) SZ SEC	2nd source
	756GQ8CB CA056	MAIN BOARD-CBPCRM9USQ3	
SMTCR-U402	100GCMSD000N11	MCU ASS'Y-056G1133129	
	A15G0563201104	MAINFRAME	
	A33G0487ADJ 1L	FUNCTION BUTTON	
	A33G0488BCV 1C	POWER BUTTON	
	A33G0489 1 1C	LENS	
	A34G0892ADJ 1B	STAND-B	
	A34G1093ADJA1B 30	BEZEL L23WA-8ASUS3-2	
	A34G1094ADJ 1B 30	REAR COVER L23WA-8ASUS3-2	
	A85G0141201	MAIN FRAME SHIELD	
	040G 45762412B	CBPC LABEL	
CN603	033G3802 4	WAFER EH-4	
CN401	033G3802 6	WAFER	
CN101	033G380210B Y W	WAFER	
CN403	033G8027 30	WAFER 30P 2.0MM DIP DUAL ROW	
U602	056G 616 51	IC APA2071JI-TUG 3.1W DIP-16	
R112	061G152M159 64	1.5 OHM 2W 5% MOF	
CN601	088G 78 8A CL	RCA JACK 1P ORANGE	
CN605	088G 30255S	PHONE JACK TWO LAYER 3.5MM 5P BLK	
CN404	088G 35315F XH	D-SUB 15PIN VERTICAL CONN WITH SCREW	
CN405	088G 35424F C	DVI 24PIN CONN F	
X401	093G 2253B J	14.31818MHZ/85C	
C613	067G 305100 3T	10UF 16V	
C605	067G 305100 3T	10UF 16V	
C603	067G 305100 3T	10UF 16V	
C602	067G 305100 3T	10UF 16V	
C425	067G 305100 3T	10UF 16V	
C422	067G 305100 3T	10UF 16V	
C420	067G 305100 3T	10UF 16V	
C414	067G 305100 3T	10UF 16V	
C408	067G 305100 3T	10UF 16V	
C401	067G 305100 3T	10UF 16V	
C621	067G 305100 3T	10UF 16V	
C427	067G 305101 3T	100UF 16V 105C	
C106	067G 305101 3T	100UF 16V 105C	
C112	067G 305101 3T	100UF 16V 105C	

C103	067G 305221 3T	220UF/16V	
C626	067G 305221 4T	6T 810 1 LG220UF 25V	
C625	067G 305221 4T	6T 810 1 LG220UF 25V	
C111	067G 305470 3T	47UF +-20% 16V	
C435	067G 305470 3T	47UF +-20% 16V	
C615	067G 305471 3T	105 攝氏度 470UF +-20% 16V	
C107	067G215B101 3T	CAP 105℃ 100UF M 16V	
C113	067G215B101 3T	CAP 105℃ 100UF M 16V	
U401	056G 562230	IC TSUMO88GDI-LF-1 PQFP-128	
U102	056G 563 31	IC AZ1117D-1.8-E1	
U101	056G 563 75	G1084-33T43UF TO-252	
U102	056G 563930	IC AIC1117A-18PE SOT-252	
U603	056G 628 8	IC FSA2257MTCX TSSOP-14	
U410	056G 662 13	IC AZC099-04S SOT23-6L	
U409	056G 662 13	IC AZC099-04S SOT23-6L	
U408	056G 662 13	IC AZC099-04S SOT23-6L	
U502	056G 662500	IC ESD AZ1045-04QU	
U501	056G 662500	IC ESD AZ1045-04QU	
U405	056G 662500	IC ESD AZ1045-04QU	
U404	056G 662500	IC ESD AZ1045-04QU	
U601	056G1124 3	IC PCM1754DBQR SSOP-16	
U504	056G1133 34	M24C02-WMN6TP	
U407	056G1133 34	M24C02-WMN6TP	
U406	056G1133 34	M24C02-WMN6TP	
U403	056G1133 56	M24C16-WMN6TP	
U604	056G4LVCG34 PH	IC 74LVC1G34GV,125 SC-74A	
U604	056G4LVCG34 TI	IC SN74LVC1G34DBVR SOT23-5	
Q505	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q504	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q503	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q502	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q405	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q403	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q101	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q103	057G 417 13 T	KEC 2N3906S-RTK/PS	
Q401	057G 417 13 T	KEC 2N3906S-RTK/PS	
Q402	057G 417 13 T	KEC 2N3906S-RTK/PS	
Q404	057G 417 13 T	KEC 2N3906S-RTK/PS	
Q406	057G 417 13 T	KEC 2N3906S-RTK/PS	
Q104	057G 763 3	AO4411 SO-8	

Q501	057G 763 62	FET 2N7002K 300MA/60V SOT-23	
R636	061G0402000	RST CHIP MAX 0R05 1/16W	
R615	061G0402000	RST CHIP MAX 0R05 1/16W	
R613	061G0402000	RST CHIP MAX 0R05 1/16W	
R520	061G0402000	RST CHIP MAX 0R05 1/16W	
R494	061G0402000	RST CHIP MAX 0R05 1/16W	
R493	061G0402000	RST CHIP MAX 0R05 1/16W	
R492	061G0402000	RST CHIP MAX 0R05 1/16W	
R491	061G0402000	RST CHIP MAX 0R05 1/16W	
R490	061G0402000	RST CHIP MAX 0R05 1/16W	
R489	061G0402000	RST CHIP MAX 0R05 1/16W	
R488	061G0402000	RST CHIP MAX 0R05 1/16W	
R487	061G0402000	RST CHIP MAX 0R05 1/16W	
R432	061G0402000	RST CHIP MAX 0R05 1/16W	
R428	061G0402000	RST CHIP MAX 0R05 1/16W	
R508	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R507	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R506	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R505	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R504	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R503	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R502	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R501	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R434	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R419	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R417	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R415	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R408	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R407	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R405	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R404	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R401	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R629	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R515	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R514	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R485	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R484	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R478	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R477	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R464	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	

R463	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R462	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R437	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R436	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R468	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R469	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R516	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R522	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R624	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R625	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R473	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R440	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R438	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R427	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R425	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R423	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R421	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R113	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R102	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R410	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R403	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R402	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R107	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R106	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R104	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R103	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R101	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R628	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R619	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R611	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R610	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R609	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R518	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R513	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R495	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R483	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R472	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R412	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R420	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R424	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	

R426	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R429	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R430	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R431	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R433	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R439	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R449	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R620	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W	
R622	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W	
R414	061G0402121	RST CHIP 120R 1/16W 5%	
R409	061G0402121	RST CHIP 120R 1/16W 5%	
R454	061G0402151	RST CHIP 150R 1/16W 5%	
R452	061G0402181 Y	RST CHIP 180R 1/16W 5%	
R630	061G0402201	RST CHIP 200R 1/16W 5%	
R524	061G0402202 Y	RST CHIPR 2KOHM +-5% 1/16W YAGEO	
R450	061G0402203	RST CHIP 20K 1/16W 5%	
R601	061G0402220	RST CHIPR 22 OHM +-5% 1/16W	
R603	061G0402220	RST CHIPR 22 OHM +-5% 1/16W	
R604	061G0402220	RST CHIPR 22 OHM +-5% 1/16W	
R606	061G0402220	RST CHIPR 22 OHM +-5% 1/16W	
R475	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R476	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R486	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	
R413	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	
R406	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	
R109	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	
R105	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	
R509	061G0402273	RST CHIP 27K 1/16W 5%	
R617	061G0402333	RST CHIPR 33 KOHM +-5% 1/16W	
R616	061G0402333	RST CHIPR 33 KOHM +-5% 1/16W	
R608	061G0402333	RST CHIPR 33 KOHM +-5% 1/16W	
R607	061G0402333	RST CHIPR 33 KOHM +-5% 1/16W	
R418	061G0402390 0F	RST CHIP 390R 1/16W 1%	
R496	061G0402392	RST CHIP 3.9K 1/16W 5%	
R443	061G0402392	RST CHIP 3.9K 1/16W 5%	
R442	061G0402392	RST CHIP 3.9K 1/16W 5%	
R441	061G0402392	RST CHIP 3.9K 1/16W 5%	
R461	061G0402471	RST CHIPR 470 OHM +-5% 1/16W	
R411	061G0402471	RST CHIPR 470 OHM +-5% 1/16W	
R627	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	

R517	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R512	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R511	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R482	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R481	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R471	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R470	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R519	061G0402473	RST CHIPR 47 KOHM +-5% 1/16W	
R523	061G0402473	RST CHIPR 47 KOHM +-5% 1/16W	
R458	061G0402560	RST CHIP 56R 1/16W 5%	
R459	061G0402560	RST CHIP 56R 1/16W 5%	
R460	061G0402560	RST CHIP 56R 1/16W 5%	
R108	061G0402563	RST CHIP 56K 1/16W 5%	
R467	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R466	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R465	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R621	061G0402751	RST CHIP 750R 1/16W 5%	
R623	061G0402751	RST CHIP 750R 1/16W 5%	
R602	061G0402752	RST CHIP 7K5 1/16W 5%	
R605	061G0402752	RST CHIP 7K5 1/16W 5%	
R612	061G0402752	RST CHIP 7K5 1/16W 5%	
R614	061G0402752	RST CHIP 7K5 1/16W 5%	
R111	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	
R626	061G0805479	RST CHIP 4R7 1/8W 5%	
R448	061G1206331	RST CHIPR 330 OHM +-5% 1/4W	
C455	065G0402101 32	100PF +-10% 50V X7R	
C623	065G0402102 32	1000PF +-10% 50V X7R	
C622	065G0402102 32	1000PF +-10% 50V X7R	
C612	065G0402102 32	1000PF +-10% 50V X7R	
C611	065G0402102 32	1000PF +-10% 50V X7R	
C441	065G0402102 32	1000PF +-10% 50V X7R	
C629	065G0402103 12	CAP CHIP 0402 10N 16V X7R	
C119	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C118	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C116	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C115	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C114	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C417	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C418	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C419	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	

C404	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C405	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C406	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C407	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C409	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C410	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C628	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C616	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C614	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C601	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C450	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C449	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C448	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C445	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C437	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C436	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C421	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C423	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C430	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C431	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C432	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C433	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C434	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C411	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C412	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C413	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C415	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C416	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C120	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C121	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C402	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C403	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C110	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C109	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C108	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C105	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C104	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C620	065G0402105 A5	CAP 0402 1UF K 10V X5R	
C619	065G0402105 A5	CAP 0402 1UF K 10V X5R	
C618	065G0402105 A5	CAP 0402 1UF K 10V X5R	

C617	065G0402105 A5	CAP 0402 1UF K 10V X5R	
C606	065G0402105 A5	CAP 0402 1UF K 10V X5R	
C604	065G0402105 A5	CAP 0402 1UF K 10V X5R	
C446	065G0402220 31	CHIP 22PF 50V NPO	
C447	065G0402220 31	CHIP 22PF 50V NPO	
C607	065G0402220 31	CHIP 22PF 50V NPO	
C610	065G0402220 31	CHIP 22PF 50V NPO	
C609	065G0402220 31	CHIP 22PF 50V NPO	
C608	065G0402220 31	CHIP 22PF 50V NPO	
C424	065G0402224A5T	MLCC 0402 0.22UF K 10V X	
C429	065G0402224A5T	MLCC 0402 0.22UF K 10V X	
C502	065G0402224A5T	MLCC 0402 0.22UF K 10V X	
C438	065G0402473 12	CHIP 0.047UF 16V X7R	
C439	065G0402473 12	CHIP 0.047UF 16V X7R	
C440	065G0402473 12	CHIP 0.047UF 16V X7R	
C442	065G0402473 12	CHIP 0.047UF 16V X7R	
C443	065G0402473 12	CHIP 0.047UF 16V X7R	
C444	065G0402473 12	CHIP 0.047UF 16V X7R	
C426	065G0402560 31	CHIP 56PF 50V X7R	
C428	065G0402560 31	CHIP 56PF 50V X7R	
C452	065G0603224 22	CHIP 0.22UF 25V X7R	
C454	065G0603224 22	CHIP 0.22UF 25V X7R	
C624	065G0805105 22	CAP CHIP 0805 1UF K 25V X7R	
FB102	071G 56G301 EA	BEAD 300 欧	
FB103	071G 56G301 EA	BEAD 300 欧	
FB401	071G 56K121	CHIP BEAD	
FB402	071G 56K121	CHIP BEAD	
FB403	071G 56K121	CHIP BEAD	
FB404	071G 56K121	CHIP BEAD	
FB405	071G 56K121	CHIP BEAD	
FB601	071G 56K121	CHIP BEAD	
FB602	071G 56K121	CHIP BEAD	
FB603	071G 56K121	CHIP BEAD	
FB604	071G 56K121	CHIP BEAD	
FB605	071G 56K121	CHIP BEAD	
FB406	071G 59B121	TB160808B	
FB606	071G 59B601 MA	CHIP BEAD	
FB412	071G 59K300 B	CHIP BEAD FCB1608KF-300T07 BULLWILL	
FB411	071G 59K300 B	CHIP BEAD FCB1608KF-300T07 BULLWILL	
FB410	071G 59K300 B	CHIP BEAD FCB1608KF-300T07 BULLWILL	

CN501	088G 340 19 AN	HDMI HEADER 19P +SCREW HOLE	
D501	093G 64 42 P	BAV70 SOT23 BY PAN JIT	
D413	093G 64 42 P	BAV70 SOT23 BY PAN JIT	
D407	093G 64 42 P	BAV70 SOT23 BY PAN JIT	
ZD503	093G 64 49 SU	DIODE ESD EGA 10603V05A1-B INPAQ	
ZD505	093G 64 49 SU	DIODE ESD EGA 10603V05A1-B INPAQ	
ZD506	093G 64 49 SU	DIODE ESD EGA 10603V05A1-B INPAQ	
D401	093G 6432P	LL4148	
D402	093G 6432P	LL4148	
ZD404	093G 39S 24 T	RLZ 5.6B LLDS	
ZD101	093G 39S 24 T	RLZ 5.6B LLDS	
ZD401	093G 39S 24 T	RLZ 5.6B LLDS	
ZD402	093G 39S 24 T	RLZ 5.6B LLDS	
ZD403	093G 39S 24 T	RLZ 5.6B LLDS	
ZD602	093G 39S 24 T	RLZ 5.6B LLDS	
ZD601	093G 39S 24 T	RLZ 5.6B LLDS	
ZD502	093G 39S 24 T	RLZ 5.6B LLDS	
ZD501	093G 39S 24 T	RLZ 5.6B LLDS	
ZD408/ ZD407	093G 39S 24 T	RLZ 5.6B LLDS	
ZD406/ ZD405	093G 39S 24 T	RLZ 5.6B LLDS	
D101	093G3004 3	SM340A	
	715G3221 1	MAIN BOARD PCB FR-4 147X100X1.6MM DS	
R114	061G0805000	RST CHIP MAX 0R05 1/8W	
FB101	071G 56K121	CHIP BEAD	
CN501	088G 340 19 AV	HDMI HEADER 19P +SCREW HOLE	
C122	065G0402102 12	CAP CHIP 0402 1NF K 16V X7R	
C123	065G0402102 12	CAP CHIP 0402 1NF K 16V X7R	
R110	061G0402154	RST CHIP 150K 1/16W 5%	
R416	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
	Q90G6258 2	HEAT SINK	
	KEPC8QU9	KEY BOARD G2900-1-2-X-1-081016	
SW003	077G 600 2A CJ	TACT SWITCH 4PIN	
SW002	077G 600 2A CJ	TACT SWITCH 4PIN	
SW001	077G 600 2A CJ	TACT SWITCH 4PIN	
SW005	077G 600 2A CJ	TACT SWITCH 4PIN	
SW006	077G 600 2A CJ	TACT SWITCH 4PIN	
SW004	077G 600 2A CJ	TACT SWITCH 4PIN	
LED01	081G 13 2 GH	LED GHZYB603A2-6A	
LED01	081G 13 2 GP	LED GP3403ME/GP03-ZY-HC-30	
CN001	033G8032 6F HR	CONNECTOR	

R005	061G0603000	RST CHIP MAX 0R05 1/10W	
R002	061G0603000	RST CHIP MAX 0R05 1/10W	
R003	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R001	061G0603200 1F	RST CHIPR 2 KOHM +-1% 1/10W	
R004	061G0603200 1F	RST CHIPR 2 KOHM +-1% 1/10W	
C003	065G0603104 37	CHIP 0.1UF 50V/Y5V	
C005	065G0603104 37	CHIP 0.1UF 50V/Y5V	
C004	065G0603104 37	CHIP 0.1UF 50V/Y5V	
C001	065G0603104 37	CHIP 0.1UF 50V/Y5V	
C002	065G0603104 37	CHIP 0.1UF 50V/Y5V	
	715G2900 1 2	KEY BOARD PCB FR-4 142X14X1.6MM DS	
	PWPC8E41MQIG	POWER BOARD G2824-1-5-X-18-081202	
	040G 45762412B	CBPC LABEL	
GND1	009G6005 1	GROUND TERMINAL	
CN801	033G8021 2E U	INVERT CONNECTOR	
CN802	033G8021 2E U	INVERT CONNECTOR	
CN803	033G8021 2E U	INVERT CONNECTOR	
CN804	033G8021 2E U	INVERT CONNECTOR	
IC903	056G 139 8	IC PS2561L1-1-V-A LJ LEAD BENDING 4PIN	
IC903	056G 139 3A	IC PC123Y22FZ0F	
NR901	061G 5810T	RST NTCR 8 OHM +-20% 4A 13MM THINKING	
C903	063G107K224 UM	X2 CAP 0.22UF K 275VAC	
C904	063G107K224 UM	X2 CAP 0.22UF K 275VAC	
C904	063G107K2246S1	X2 CAP 0.22UF K 275VAC	
C819	065G 3J5606ET	CAP CER 56PF J 3KV	
C820	065G 3J5606ET	CAP CER 56PF J 3KV	
C821	065G 3J5606ET	CAP CER 56PF J 3KV	
C822	065G 3J5606ET	CAP CER 56PF J 3KV	
C817	065G 6J2096ET	2PF 5% SL 6KV	
C901	065G305M1022B2	1000PF 汇侨 400VAC/250VAC	
C902	065G305M1022B2	1000PF 汇侨 400VAC/250VAC	
C901	065G305M1022BP	Y2 1000PF M 250VAC Y5P	
C902	065G305M1022BP	Y2 1000PF M 250VAC Y5P	
C921	065G306M1022BM	Y1.CAP.001UF 250VAC MURATA	
C921	065G306M1022BP	1000PF Y1.CAP	
C900	065G306M3322B3	0.0033UF/250V	
C900	065G306M3322BP	3300PF 20%	
C804	067G215A1024KV	EC 1000UF 25V 12.5*20MM	
C918	067G215B6814RV	CAP 105℃ 680UF M 25V 10*20	

C917	067G215B6814RV	CAP 105℃ 680UF M 25V 10*20	
C804	067G215C1024HV	EC 105℃ CAP 1000UF M 25V	
C918	067G215D6814KV	CAP 105℃ 680UF M 25V	
C917	067G215D6814KV	CAP 105℃ 680UF M 25V	
C908	067G215R2207HB	LOW ESR EC 22UF 50V M 6.3*11MM	
C908	067G215R2207KV	LOW ESR EC 22UF 50V M 6.3*11MM	
C908	067G215R2207LB	LOW ESR EC 22UF 50V M 6.3*11MM	
C939	067G215S1024KV	EC 105℃ CAP 1000UF M 25V	
C916	067G215S1024KV	EC 105℃ CAP 1000UF M 25V	
C915	067G215S4713KV	EC 105℃ CAP 470UF M 16V	
C939	067G215V102 4N	EC CAP 105℃ 1000UF M 25V NCC	
C916	067G215V102 4N	EC CAP 105℃ 1000UF M 25V NCC	
C915	067G215Y4713HV	EC 470UF 16V 10*13MM	
C905	067G315Z12115K	CAP 105℃ 120UF M 450V	
L801	073G 174 63 HA	IND FILTER 150MH DADON	
L802	073G 174 63 HA	IND FILTER 150MH DADON	
L802	073G 174 63DNA	LINE FILTER BY DARFON LK.3711D.101	
L801	073G 174 63DNA	LINE FILTER BY DARFON LK.3711D.101	
L905	073G 253 91 L	CHOKE BY LI TA	
L904	073G 253 91 L	CHOKE BY LI TA	
L903	073G 253 91 L	CHOKE BY LI TA	
L901	073L 174 26T1G	LINE FILTER 27MH	
T901	080GL22T 3 N1	X'FMR 490UH YUVA-1093	
PT801	080GL24T 23 DN	X'FMR 68UH TK.2005Y.101 VOC	
CN901	087G 501 32 S	AC SOCKET	
BD901	093G 50460900	BRIDEGE DIODE GBU408 LITEON	
D907	093G3006 1 1	31DQ06FC3 NIHON INTER	
CN902	095G 82013D505	WIRE HARNESS 13P(SAN)-10P 160MM	2nd source
CN902	095G 82013W505	WIRE HARNESS 13P(SAN)-10P 160MM	
	705GQ857026	Q901 ASS'Y	
Q901	057G 667 21	STP10NK70ZFP	
Q901	057G 667516	FET 2SK3673 TO-220 FUJI	
	0M1G 930 8120	SCREW	
HS1	Q90G6263 6	HEAT SINK	
	705GQ893039	D908 ASS'Y	
D908	093G 60278	DIODE SP1060 ITO-220 SECOS	
D908	093G 60507	SRF1060	
	0M1G 930 8120	SCREW	
HS2	Q90G6263 6	HEAT SINK	
	705GQ893040	D906 ASS'Y	

D906	093G 52 66	DIODE FMX-12SL 10A/200V TO-220	
	0M1G 930 8120	SCREW	
HS3	Q90G6264 5	HEAT SINK	
IC901	056G 379128	IC LD7576 GS SOP-8	
IC801	056G 608 12	IC TA9687GN-A-0-TR SOP-16	
Q805	057G 600 61	AM4502C-TI-PF S0-8	
Q806	057G 600 61	AM4502C-TI-PF S0-8	
Q802	057G 759 2	RK7002FD5T116 SOT-23 BY ROHM	
Q805	057G 763 91	ET AO4620 7.2A/30V -5.3A/-30V SOIC-8	
Q806	057G 763 91	ET AO4620 7.2A/30V -5.3A/-30V SOIC-8	
R926	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R927	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R810	061G0603100 3F	RST CHIPR 100 KOHM +-1% 1/10W	
R806	061G0603100 3F	RST CHIPR 100 KOHM +-1% 1/10W	
R812	061G0603100 3F	RST CHIPR 100 KOHM +-1% 1/10W	
R801	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	
R807	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	
R842	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	
R843	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	
R844	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	
R845	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	
R813	061G0603104	RST CHIPR 100 KOHM +-5% 1/10W	
R809	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R838	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R839	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R840	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R841	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R808	061G0603390 0F	RST CHIPR 390 OHM +-1% 1/10W	
R836	061G0603563	RST CHIPR 56 KOHM +-5% 1/10W	
R837	061G0603682	RST CHIPR 6.8 KOHM +-5% 1/10W	
R811	061G0603820 2F	RST CHIPR 82 KOHM +-1% 1/10W	
R930	061G0603910 1F	RST CHIPR 9.1 KOHM +-1% 1/10W	
JR801	061G0805000	RST CHIP MAX 0R05 1/8W	
JR803	061G0805000	RST CHIP MAX 0R05 1/8W	
JR804	061G0805000	RST CHIP MAX 0R05 1/8W	
R924	061G0805101	1ST CHIPR 100 OHM +-5% 1/8W	
R925	061G0805102	RST CHIPR 1K OHM +-5% 1/8W	
R939	061G0805102	RST CHIPR 1K OHM +-5% 1/8W	
R938	061G0805103	RST CHIPR 10K OHM +-5% 1/8W	
R802	061G0805220	RST CHIPR 22 OHM +-5% 1/8W	

R943	061G0805471	RST CHIPR 470 OHM +-5% 1/8W	
R819	061G0805479	RST CHIP 4R7 1/8W 5%	
R818	061G0805479	RST CHIP 4R7 1/8W 5%	
R817	061G0805479	RST CHIP 4R7 1/8W 5%	
R816	061G0805479	RST CHIP 4R7 1/8W 5%	
R803	061G0805512	RST CHIPR 5.1 KOHM +-5% 1/8W	
R804	061G0805512	RST CHIPR 5.1 KOHM +-5% 1/8W	
R830	061G0805682	RST CHIPR 6.8 KOHM +-5% 1/8W	
JR802	061G1206000	RST CHIP MAX 0R05 1/4W	
JR901	061G1206000	RST CHIP MAX 0R05 1/4W	
JR902	061G1206000	RST CHIP MAX 0R05 1/4W	
R910	061G1206100	RST CHIPR 10 OHM +-5% 1/4W	
R962	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R961	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R951	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R950	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R949	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R935	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R920	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R919	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R918	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R902	061G1206105	1M 1206	
R901	061G1206105	1M 1206	
R912	061G1206221	RST CHIPR 220 OHM +-5% 1/4W	
R909	061G1206339	RST CHIPR 3.3 OHM +-5% 1/4W	
R905	061G1206822	RST CHIPR 8.2 KOHM +-5% 1/4W	
R904	061G1206822	RST CHIPR 8.2 KOHM +-5% 1/4W	
C932	065G0603102 32	1000PF +-10% 50V X7R	
C814	065G0603221 31	CER1 0603 NP0 50V 220P P	
C809	065G0603221 31	CER1 0603 NP0 50V 220P P	
C805	065G0603223 32	CHIP 0.022UF 50V X7R 0603	
C810	065G0603332 32	CHIP 0.0033UF 50V X7R 0603	
C928	065G0805103 32	CAP CHIP 0805 10NF K 50V X7R	
C811	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R	
C815	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R	
C907	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R	
C924	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R	
C930	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R	
C931	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R	
C818	065G0805155 A2	1.5 UF 10V	

C909	065G0805221 31	CAP CHIP 0805 220PF J 50V NPO	
C806	065G0805225 12	CAP CHIP 0805 2.2UF K 16V X7R	
C808	065G0805333 32	CHIP 0.033UF 50V	
C801	065G0805473 32	CHIP 0.047UF 50V X7R	
C802	065G0805473 32	CHIP 0.047UF 50V X7R	
C940	065G0805473 32	CHIP 0.047UF 50V X7R	
C912	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	
C929	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	
C935	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	
FB902	071G 57G800 B	CHIP BEAD HCB3216KF-800T30 BULLWILL	
D803	093G 64 33	DIO SIG SM BAV99 (PHSE)R	
D806	093G 64 42 P	BAV70 SOT23 BY PAN JIT	
D807	093G 64 42 P	BAV70 SOT23 BY PAN JIT	
D808	093G 64 42 P	BAV70 SOT23 BY PAN JIT	
D803	093G 6433S	DIODE BAV99 SEMTECH	
ZD803	093G 39S 24 T	RLZ 5.6B LLDS	
ZD802	093G 39S 24 T	RLZ 5.6B LLDS	
CN901	006G 31500	EYELET	
IC904	056G 158 10 T	IC AS431AZTR-E1 TO-92	
IC904	056G 158 12	KIA431A-AT/P TO-92	
Q903	057G 761 16	TRA KTD1028 KEC	
R946	061G152M10152T	RST MOFR 100OHM +-5% 2WS FUTABA	
R903	061G152M10452T	RST MOFR 100KOHM +-5% 2WS	
R914	061G152M39852T	RST MOFR 0.39 OHM +-5% 2WS	
R828	061T211S62552T SY	MGFR 6.2MOHM +-5% 1WS FUTABA	
C906	065G 2K152 2T6921	CAP CER 1500PF K 2KV Y5P	
J806	071G 55 9 T	FERRITE BEAD	
FB901	071G 55 29	FERRITE BEAD	
F903	084G 56 4 B	FUSE 4A 250V	
F902	084G 56 4 B	FUSE 4A 250V	
F901	084G 56 4 B	FUSE 4A 250V	
F903	084G 56 4W	FUSE 4.0A 250V	
F902	084G 56 4W	FUSE 4.0A 250V	
F901	084G 56 4W	FUSE 4.0A 250V	
ZD902	093G 3952152T	TZX18B	
D901	093G 52 1552T	DIODE 1N4007-E3/73 1A/1000V DO-41	
D900	093G 52 1552T	DIODE 1N4007-E3/73 1A/1000V DO-41	
D900	093G 6026T52T	RECTIFIER DIODE FR107	
D901	093G 6038P52T	PS102R	
D901	093G 6038T52T	FR103	

D903	093G 64 1152T	1N4148	
D801	093G 64 1152T	1N4148	
D903	093G 64 1152T PH	SWITCH DIODE 1N4148 BY PHILIPS	
D801	093G 64 1152T PH	SWITCH DIODE 1N4148 BY PHILIPS	
D900	093G110050152T	DIODE PR1007 1A/1000V 500NS DO-41	
	715G2824 2 5	POWER PCB FR-1 S/S 160X160MM	
	709G2824 QA001	CONSUMPTIVE ASS'Y	
	709G2824 QS001	CONSUMPTIVE ASS'Y	
	052G 2191 A	PAPER TAPE	
L801	S73G17463VA	LINE FILTER ASS'Y	
	709G2824 QM001	CONSUMPTIVE ASS'Y	
	055G 23524	WELDING FLUX WITHOUT PB	
	055G 2	ALCOHOL	
	Q55G 100625	TIN STICK_LOW ARGENTUM	
	705GQ851002	OIL FOR DISAPPEAR ASS'Y	
	Q12G6300 71	VESA PLUG	
	Q23G3178680 1A	ASUS LOGO	
	Q40G 23N680 2A	RATING LABEL	
	Q40G000268088A	TRY ME LABEL	
	Q40G0002680A13	SPLENDID LABEL FOR VH236H	
	Q40G0002680A16	FUNCTION LABEL FOR VH232H/D(VH236H)	
	Q41G780068027B	US WARRANTY CARD NON ZBD	
	Q44GD013101	EPS	
	Q44GD013201	EPS	
	Q44GD013680 2A	23 LCD CARTON	
	Q45G 76 28V13 R	PE BAG	
	Q45G 88607 25	PE BAG FOR BASE	
	Q45G 88609120	EPE BAG	
	Q52G 3 72	TWIN ADHESIVE	
	045G 76 28 RN	PE BAG FOR MANUAL	
E08904	089G 17356C554	AUDIO CABLE	
E08904	089G 17356G554	AUDIO CABLE	2nd source
E08904	089G 17356X554	AUDIO CABLE	2nd source
	Q41G2008680 1A	VH236/VH232/VH202 QSG	
	Q70G2008680 1A	VH236/VH232/VH202 CD MANUAL	
	040G 58162435A	P/N LABEL FOR MANUAL PE BAG	
	040G 582680 4A	CARTON LABEL	

VH232H HDRSA2NTXCUSRP

Location	Part No.	Description	Remark
	040G 457834 4A	S/N LABEL FOR ID	
	040G 58160811A	GREEN DOT LABEL	
	040G 581680 1A	WARRANTY LABEL	
	044GH600 1	HANDLE 2	
	050G 600 4	HANDLE 1	
	052G 1185 49	ASUS TAPE 73-D024084	
	052G 1186	SMALL TAPE	
	052G 1211500	ALUMINUM FOIL TAPE	
	052G 1211503	ALUMINUM FOIL TAPE	
	052G 1211527	CONDUCTIVE TAPE 75MM *45MM *0.08MM	
	052G 1211555	ALUMINUM FOIL TAPE	
	052G 1212 A	ALUMINUM FOIL TAPE	
	070GHDCP500HDC	HDCP CODE	
E07801	078G 500500 V	SPK 4 OHM 2.5W 57.5X34 360 260MM VECO	
E07801	078G 500500 Y	SPK 4 OHM 2.5W 57.5X34 360 260MM SUNLINK	2nd source
E08902	089G 728CAA DB	D-SUB CABLE	
E08902	089G 728HAA DB	D-SUB CABLE	2nd source
E08903	089G1748GAA 2D	DVI CABLE	2nd source
E08903	089G1748HAA 2D	DVI CABLE	
E08901	089G402A18N CX	POWER CORD	
E08901	089G402A18N IS	POWER CORD/(TPV 共用)32-D022438	2nd source
	095G8014 6D 58	HARNESS 6P-6P 300MM	
E09501	095G801830D178	HARNESS 30P-30P 160MM	
E09501	095G801830X178	HARNESS 30P-30P 160MM	2nd source
	0M1G 130 5120	SCREW	
	0M1G1730 6120	SCREW,42-D020523	
	0M1G1730 6120	SCREW,42-D020523	
	0M1G1740 10 47 CR3	SCREW	
	0Q1G 930 8120	SCREW	
	705GQ834342	23.6" LCD STAND-BASE ASS'Y	
	012G 394 6	FOOT PORON	
	0M1G1740 10 47 CR3	SCREW	
	0Q1G 130 8120	SCREW 42A9930011	
	A15G0486101	BASE PLATE	
	A34G0891ADJ 1B	STAND-F	
	A34G0893ADJ 1B	BASE	
	A37G0090 2	HINGE	
E750	750GLS230HT132M0AS	PANEL LTM230HT01 A03(003) SZ SEC	
E750	750GLS230HT142M0AS	PANEL LTM230HT01 A04(004) SZ SEC	2nd source

	756GQ8CB CA053	MAIN BOARD-CBPCRM9USQ2	
SMTCR-U402	100GCMSD005N11	MCU ASS'Y-056G1133129	
	A15G0563201104	MAINFRAME	
	A33G0487ADJ 1L	FUNCTION BUTTON	
	A33G0488BCV 1C	POWER BUTTON	
	A33G0489 1 1C	LENS	
	A34G0892ADJ 1B	STAND-B	
	A34G1093ADJA1B 30	BEZEL L23WA-8ASUS3-2	
	A34G1094ADJ 1B 30	REAR COVER L23WA-8ASUS3-2	
	A85G0141201	MAIN FRAME SHIELD	
	040G 45762412B	CBPC LABEL	
CN603	033G3802 4	WAFER EH-4	
CN401	033G3802 6	WAFER	
CN101	033G380210B Y W	WAFER	
CN403	033G8027 30	WAFER 30P 2.0MM DIP DUAL ROW	
U602	056G 616 51	IC APA2071JI-TUG 3.1W DIP-16	
R112	061G152M159 64	1.5 OHM 2W 5% MOF	
CN601	088G 78 8A CL	RCA JACK 1P ORANGE	
CN605	088G 30255S	PHONE JACK TWO LAYER 3.5MM 5P BLK	
CN404	088G 35315F XH	D-SUB 15PIN VERTICAL CONN WITH SCREW	
CN405	088G 35424F C	DVI 24PIN CONN F 附螺丝	
X401	093G 2253B J	14.31818MHZ/85C	
C613	067G 305100 3T	10UF 16V	
C605	067G 305100 3T	10UF 16V	
C603	067G 305100 3T	10UF 16V	
C602	067G 305100 3T	10UF 16V	
C425	067G 305100 3T	10UF 16V	
C422	067G 305100 3T	10UF 16V	
C420	067G 305100 3T	10UF 16V	
C414	067G 305100 3T	10UF 16V	
C408	067G 305100 3T	10UF 16V	
C401	067G 305100 3T	10UF 16V	
C621	067G 305100 3T	10UF 16V	
C427	067G 305101 3T	100UF 16V 105C	
C106	067G 305101 3T	100UF 16V 105C	
C112	067G 305101 3T	100UF 16V 105C	
C103	067G 305221 3T	220UF/16V	
C626	067G 305221 4T	6T 810 1 LG220UF 25V	
C625	067G 305221 4T	6T 810 1 LG220UF 25V	
C111	067G 305470 3T	47UF +-20% 16V	

C435	067G 305470 3T	47UF +-20% 16V	
C615	067G 305471 3T	105 摄氏度 470UF +-20% 16V	
C107	067G215B101 3T	CAP 105℃ 100UF M 16V	
C113	067G215B101 3T	CAP 105℃ 100UF M 16V	
U401	056G 562212	IC TSUMU88EDI-LF-1 PQFP-128	
U102	056G 563 31	IC AZ1117D-1.8-E1	
U101	056G 563 75	G1084-33T43UF TO-252	
U102	056G 563930	IC AIC1117A-18PE SOT-252	
U603	056G 628 8	IC FSA2257MTCX TSSOP-14	
U410	056G 662 13	IC AZC099-04S SOT23-6L	
U409	056G 662 13	IC AZC099-04S SOT23-6L	
U408	056G 662 13	IC AZC099-04S SOT23-6L	
U502	056G 662500	IC ESD AZ1045-04QU	
U501	056G 662500	IC ESD AZ1045-04QU	
U405	056G 662500	IC ESD AZ1045-04QU	
U404	056G 662500	IC ESD AZ1045-04QU	
U601	056G1124 3	IC PCM1754DBQR SSOP-16	
U504	056G1133 34	M24C02-WMN6TP	
U407	056G1133 34	M24C02-WMN6TP	
U406	056G1133 34	M24C02-WMN6TP	
U403	056G1133 56	M24C16-WMN6TP	
U604	056G4LVCG34 PH	IC 74LVC1G34GV,125 SC-74A	
U604	056G4LVCG34 TI	IC SN74LVC1G34DBVR SOT23-5	
Q505	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q504	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q503	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q502	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q405	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q403	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q101	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q103	057G 417 13 T	KEC 2N3906S-RTK/PS	
Q401	057G 417 13 T	KEC 2N3906S-RTK/PS	
Q402	057G 417 13 T	KEC 2N3906S-RTK/PS	
Q404	057G 417 13 T	KEC 2N3906S-RTK/PS	
Q406	057G 417 13 T	KEC 2N3906S-RTK/PS	
Q104	057G 763 3	AO4411 SO-8	
Q501	057G 763 62	FET 2N7002K 300MA/60V SOT-23	
R636	061G0402000	RST CHIP MAX 0R05 1/16W	
R615	061G0402000	RST CHIP MAX 0R05 1/16W	
R613	061G0402000	RST CHIP MAX 0R05 1/16W	

R520	061G0402000	RST CHIP MAX 0R05 1/16W	
R494	061G0402000	RST CHIP MAX 0R05 1/16W	
R493	061G0402000	RST CHIP MAX 0R05 1/16W	
R492	061G0402000	RST CHIP MAX 0R05 1/16W	
R491	061G0402000	RST CHIP MAX 0R05 1/16W	
R490	061G0402000	RST CHIP MAX 0R05 1/16W	
R489	061G0402000	RST CHIP MAX 0R05 1/16W	
R488	061G0402000	RST CHIP MAX 0R05 1/16W	
R487	061G0402000	RST CHIP MAX 0R05 1/16W	
R432	061G0402000	RST CHIP MAX 0R05 1/16W	
R428	061G0402000	RST CHIP MAX 0R05 1/16W	
R508	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R507	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R506	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R505	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R504	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R503	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R502	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R501	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R434	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R419	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R417	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R415	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R408	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R407	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R405	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R404	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R401	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R629	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R515	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R514	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R485	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R484	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R478	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R477	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R464	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R463	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R462	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R437	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R436	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	

R468	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R469	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R516	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R522	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R624	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R625	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R473	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R440	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R438	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R427	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R425	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R423	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R421	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R113	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R102	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R410	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R403	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R402	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R107	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R106	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R104	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R103	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R101	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R628	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R619	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R611	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R610	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R609	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R518	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R513	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R495	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R483	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R472	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R412	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R420	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R424	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R426	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R429	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R430	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R431	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	

R433	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R439	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R449	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R620	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W	
R622	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W	
R414	061G0402121	RST CHIP 120R 1/16W 5%	
R409	061G0402121	RST CHIP 120R 1/16W 5%	
R454	061G0402151	RST CHIP 150R 1/16W 5%	
R452	061G0402181 Y	RST CHIP 180R 1/16W 5%	
R630	061G0402201	RST CHIP 200R 1/16W 5%	
R524	061G0402202 Y	RST CHIPR 2KOHM +-5% 1/16W YAGEO	
R450	061G0402203	RST CHIP 20K 1/16W 5%	
R601	061G0402220	RST CHIPR 22 OHM +-5% 1/16W	
R603	061G0402220	RST CHIPR 22 OHM +-5% 1/16W	
R604	061G0402220	RST CHIPR 22 OHM +-5% 1/16W	
R606	061G0402220	RST CHIPR 22 OHM +-5% 1/16W	
R475	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R476	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R486	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	
R413	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	
R406	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	
R109	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	
R105	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	
R509	061G0402273	RST CHIP 27K 1/16W 5%	
R617	061G0402333	RST CHIPR 33 KOHM +-5% 1/16W	
R616	061G0402333	RST CHIPR 33 KOHM +-5% 1/16W	
R608	061G0402333	RST CHIPR 33 KOHM +-5% 1/16W	
R607	061G0402333	RST CHIPR 33 KOHM +-5% 1/16W	
R418	061G0402390 0F	RST CHIP 390R 1/16W 1%	
R496	061G0402392	RST CHIP 3.9K 1/16W 5%	
R443	061G0402392	RST CHIP 3.9K 1/16W 5%	
R442	061G0402392	RST CHIP 3.9K 1/16W 5%	
R441	061G0402392	RST CHIP 3.9K 1/16W 5%	
R461	061G0402471	RST CHIPR 470 OHM +-5% 1/16W	
R411	061G0402471	RST CHIPR 470 OHM +-5% 1/16W	
R627	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R517	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R512	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R511	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R482	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	

R481	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R471	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R470	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R519	061G0402473	RST CHIPR 47 KOHM +-5% 1/16W	
R523	061G0402473	RST CHIPR 47 KOHM +-5% 1/16W	
R458	061G0402560	RST CHIP 56R 1/16W 5%	
R459	061G0402560	RST CHIP 56R 1/16W 5%	
R460	061G0402560	RST CHIP 56R 1/16W 5%	
R108	061G0402563	RST CHIP 56K 1/16W 5%	
R467	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R466	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R465	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R621	061G0402751	RST CHIP 750R 1/16W 5%	
R623	061G0402751	RST CHIP 750R 1/16W 5%	
R602	061G0402752	RST CHIP 7K5 1/16W 5%	
R605	061G0402752	RST CHIP 7K5 1/16W 5%	
R612	061G0402752	RST CHIP 7K5 1/16W 5%	
R614	061G0402752	RST CHIP 7K5 1/16W 5%	
R111	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	
R626	061G0805479	RST CHIP 4R7 1/8W 5%	
R448	061G1206331	RST CHIPR 330 OHM +-5% 1/4W	
C455	065G0402101 32	100PF +-10% 50V X7R	
C623	065G0402102 32	1000PF +-10% 50V X7R	
C622	065G0402102 32	1000PF +-10% 50V X7R	
C612	065G0402102 32	1000PF +-10% 50V X7R	
C611	065G0402102 32	1000PF +-10% 50V X7R	
C441	065G0402102 32	1000PF +-10% 50V X7R	
C629	065G0402103 12	CAP CHIP 0402 10N 16V X7R	
C119	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C118	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C116	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C115	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C114	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C417	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C418	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C419	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C404	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C405	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C406	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C407	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	

C409	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C410	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C628	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C616	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C614	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C601	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C450	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C449	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C448	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C445	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C437	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C436	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C421	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C423	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C430	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C431	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C432	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C433	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C434	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C411	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C412	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C413	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C415	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C416	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C120	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C121	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C402	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C403	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C110	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C109	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C108	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C105	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C104	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C620	065G0402105 A5	CAP 0402 1UF K 10V X5R	
C619	065G0402105 A5	CAP 0402 1UF K 10V X5R	
C618	065G0402105 A5	CAP 0402 1UF K 10V X5R	
C617	065G0402105 A5	CAP 0402 1UF K 10V X5R	
C606	065G0402105 A5	CAP 0402 1UF K 10V X5R	
C604	065G0402105 A5	CAP 0402 1UF K 10V X5R	
C446	065G0402220 31	CHIP 22PF 50V NPO	

C447	065G0402220 31	CHIP 22PF 50V NPO	
C607	065G0402220 31	CHIP 22PF 50V NPO	
C610	065G0402220 31	CHIP 22PF 50V NPO	
C609	065G0402220 31	CHIP 22PF 50V NPO	
C608	065G0402220 31	CHIP 22PF 50V NPO	
C424	065G0402224A5T	MLCC 0402 0.22UF K 10V X	
C429	065G0402224A5T	MLCC 0402 0.22UF K 10V X	
C502	065G0402224A5T	MLCC 0402 0.22UF K 10V X	
C438	065G0402473 12	CHIP 0.047UF 16V X7R	
C439	065G0402473 12	CHIP 0.047UF 16V X7R	
C440	065G0402473 12	CHIP 0.047UF 16V X7R	
C442	065G0402473 12	CHIP 0.047UF 16V X7R	
C443	065G0402473 12	CHIP 0.047UF 16V X7R	
C444	065G0402473 12	CHIP 0.047UF 16V X7R	
C426	065G0402560 31	CHIP 56PF 50V X7R	
C428	065G0402560 31	CHIP 56PF 50V X7R	
C452	065G0603224 22	CHIP 0.22UF 25V X7R	
C454	065G0603224 22	CHIP 0.22UF 25V X7R	
C624	065G0805105 22	CAP CHIP 0805 1UF K 25V X7R	
FB102	071G 56G301 EA	BEAD 300 欧	
FB103	071G 56G301 EA	BEAD 300 欧	
FB401	071G 56K121	CHIP BEAD	
FB402	071G 56K121	CHIP BEAD	
FB403	071G 56K121	CHIP BEAD	
FB404	071G 56K121	CHIP BEAD	
FB405	071G 56K121	CHIP BEAD	
FB601	071G 56K121	CHIP BEAD	
FB602	071G 56K121	CHIP BEAD	
FB603	071G 56K121	CHIP BEAD	
FB604	071G 56K121	CHIP BEAD	
FB605	071G 56K121	CHIP BEAD	
FB406	071G 59B121	TB160808B	
FB606	071G 59B601 MA	CHIP BEAD	
FB412	071G 59K300 B	CHIP BEAD FCB1608KF-300T07 BULLWILL	
FB411	071G 59K300 B	CHIP BEAD FCB1608KF-300T07 BULLWILL	
FB410	071G 59K300 B	CHIP BEAD FCB1608KF-300T07 BULLWILL	
CN501	088G 340 19 AN	HDMI HEADER 19P +SCREW HOLE	
D501	093G 64 42 P	BAV70 SOT23 BY PAN JIT	
D413	093G 64 42 P	BAV70 SOT23 BY PAN JIT	
D407	093G 64 42 P	BAV70 SOT23 BY PAN JIT	

ZD503	093G 64 49 SU	DIODE ESD EGA 10603V05A1-B INPAQ	
ZD505	093G 64 49 SU	DIODE ESD EGA 10603V05A1-B INPAQ	
ZD506	093G 64 49 SU	DIODE ESD EGA 10603V05A1-B INPAQ	
D401	093G 6432P	LL4148	
D402	093G 6432P	LL4148	
ZD404	093G 39S 24 T	RLZ 5.6B LLDS	
ZD101	093G 39S 24 T	RLZ 5.6B LLDS	
ZD401	093G 39S 24 T	RLZ 5.6B LLDS	
ZD402	093G 39S 24 T	RLZ 5.6B LLDS	
ZD403	093G 39S 24 T	RLZ 5.6B LLDS	
ZD602	093G 39S 24 T	RLZ 5.6B LLDS	
ZD601	093G 39S 24 T	RLZ 5.6B LLDS	
ZD502	093G 39S 24 T	RLZ 5.6B LLDS	
ZD501	093G 39S 24 T	RLZ 5.6B LLDS	
ZD408	093G 39S 24 T	RLZ 5.6B LLDS	
ZD407	093G 39S 24 T	RLZ 5.6B LLDS	
ZD406	093G 39S 24 T	RLZ 5.6B LLDS	
ZD405	093G 39S 24 T	RLZ 5.6B LLDS	
D101	093G3004 3	SM340A	
	715G3221 1	MAIN BOARD PCB FR-4 147X100X1.6MM DS	
R114	061G0805000	RST CHIP MAX 0R05 1/8W	
FB101	071G 56K121	CHIP BEAD	
CN501	088G 340 19 AV	HDMI HEADER 19P +SCREW HOLE	
C122	065G0402102 12	CAP CHIP 0402 1NF K 16V X7R	
C123	065G0402102 12	CAP CHIP 0402 1NF K 16V X7R	
R110	061G0402154	RST CHIP 150K 1/16W 5%	
R416	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
	Q90G6258 2	HEAT SINK	FOR U602
	KEPC8QU9	KEY BOARD G2900-1-2-X-1-081016	
SW003	077G 600 2A CJ	TACT SWITCH 4PIN	
SW002	077G 600 2A CJ	TACT SWITCH 4PIN	
SW001	077G 600 2A CJ	TACT SWITCH 4PIN	
SW005	077G 600 2A CJ	TACT SWITCH 4PIN	
SW006	077G 600 2A CJ	TACT SWITCH 4PIN	
SW004	077G 600 2A CJ	TACT SWITCH 4PIN	
LED01	081G 13 2 GH	LED GHZYB603A2-6A	
LED01	081G 13 2 GP	LED GP3403ME/GP03-ZY-HC-30	
CN001	033G8032 6F HR	CONNECTOR	
R005	061G0603000	RST CHIP MAX 0R05 1/10W	
R002	061G0603000	RST CHIP MAX 0R05 1/10W	

R003	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R001	061G0603200 1F	RST CHIPR 2 KOHM +-1% 1/10W	
R004	061G0603200 1F	RST CHIPR 2 KOHM +-1% 1/10W	
C003	065G0603104 37	CHIP 0.1UF 50V/Y5V	
C005	065G0603104 37	CHIP 0.1UF 50V/Y5V	
C004	065G0603104 37	CHIP 0.1UF 50V/Y5V	
C001	065G0603104 37	CHIP 0.1UF 50V/Y5V	
C002	065G0603104 37	CHIP 0.1UF 50V/Y5V	
	715G2900 1 2	KEY PCB FR-4 142X14X1.6MM DS	
	PWPC8E41MQIG	POWER BOARD G2824-1-5-X-18-081202	
	040G 45762412B	CBPC LABEL	
GND1	009G6005 1	GROUND TERMINAL	
CN801	033G8021 2E U	INVERT CONNECTOR	
CN802	033G8021 2E U	INVERT CONNECTOR	
CN803	033G8021 2E U	INVERT CONNECTOR	
CN804	033G8021 2E U	INVERT CONNECTOR	
IC903	056G 139 8	IC PS2561L1-1-V-A LJ LEAD BENDING 4PIN	
IC903	056G 139 3A	IC PC123Y22FZ0F	
NR901	061G 5810T	RST NTCR 8 OHM +-20% 4A 13MM THINKING	
C903	063G107K224 UM	X2 CAP 0.22UF K 275VAC	
C904	063G107K224 UM	X2 CAP 0.22UF K 275VAC	
C819	065G 3J5606ET	CAP CER 56PF J 3KV	
C820	065G 3J5606ET	CAP CER 56PF J 3KV	
C821	065G 3J5606ET	CAP CER 56PF J 3KV	
C822	065G 3J5606ET	CAP CER 56PF J 3KV	
C817	065G 6J2096ET	2PF 5% SL 6KV	
C901	065G305M1022BP	Y2 1000PF M 250VAC Y5P	
C902	065G305M1022BP	Y2 1000PF M 250VAC Y5P	
C921	065G306M1022BP	1000PF Y1.CAP	
C900	065G306M3322BP	3300PF 20%	
C804	067G215A1024KV	EC 1000UF 25V 12.5*20MM	
C918	067G215D6814KV	CAP 105℃ 680UF M 25V	
C917	067G215D6814KV	CAP 105℃ 680UF M 25V	
C908	067G215R2207KV	LOW ESR EC 22UF 50V M 6.3*11MM	
C939	067G215S1024KV	EC 105℃ CAP 1000UF M 25V	
C916	067G215S1024KV	EC 105℃ CAP 1000UF M 25V	
C915	067G215S4713KV	EC 105℃ CAP 470UF M 16V	
C905	067G315Z12115K	CAP 105℃ 120UF M 450V	
L802	073G 174 63DNA	LINE FILTER BY DARFON LK.3711D.101	
L801	073G 174 63DNA	LINE FILTER BY DARFON LK.3711D.101	

L905	073G 253 91 L	CHOKE BY LI TA	
L904	073G 253 91 L	CHOKE BY LI TA	
L903	073G 253 91 L	CHOKE BY LI TA	
L901	073L 174 26T1G	LINE FILTER 27MH	
T901	080GL22T 3 N1	X'FMR 490UH YUVA-1093	
PT801	080GL24T 23 DN	X'FMR 68UH TK.2005Y.101 VOC	
CN901	087G 501 32 S	AC SOCKET	
CN901	087G 501 32 DL	AC SOCKET DIP 3PIN+2PIN GROUND	2nd source
BD901	093G 50460 16	U4KB80R	
BD901	093G 50460900	BRIDEGE DIODE GBU408 LITEON	
D907	093G3006 1 1	31DQ06FC3 NIHON INTER	
CN902	095G 82013D505	WIRE HARNESS 13P(SAN)-10P 160MM	2nd source
CN902	095G 82013W505	WIRE HARNESS 13P(SAN)-10P 160MM	
	705GQ857026	Q901 ASS'Y	
Q901	057G 667 21	STP10NK70ZFP	
Q901	057G 667516	FET 2SK3673 TO-220 FUJI	
	0M1G 930 8120	SCREW	
HS1	Q90G6263 6	HEAT SINK	
	705GQ893039	D908 ASS'Y	
D908	093G 60278	DIODE SP1060 ITO-220 SECOS	
D908	093G 60507	SRF1060	
	0M1G 930 8120	SCREW	
HS2	Q90G6263 6	HEAT SINK	
	705GQ893040	D906 ASS'Y	
D906	093G 52 66	DIODE FMX-12SL 10A/200V TO-220	
	0M1G 930 8120	SCREW	
HS3	Q90G6264 5	HEAT SINK	
IC901	056G 379128	IC LD7576 GS SOP-8	
IC801	056G 608 12	IC TA9687GN-A-0-TR SOP-16	
Q802	057G 759 2	RK7002FD5T116 SOT-23 BY ROHM	
Q805	057G 763 91	ET AO4620 7.2A/30V -5.3A/-30V SOIC-8	
Q806	057G 763 91	ET AO4620 7.2A/30V -5.3A/-30V SOIC-8	
R926	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R927	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R810	061G0603100 3F	RST CHIPR 100 KOHM +-1% 1/10W	
R806	061G0603100 3F	RST CHIPR 100 KOHM +-1% 1/10W	
R812	061G0603100 3F	RST CHIPR 100 KOHM +-1% 1/10W	
R801	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	
R807	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	
R842	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	

R843	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	
R844	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	
R845	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	
R813	061G0603104	RST CHIPR 100 KOHM +-5% 1/10W	
R809	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R838	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R839	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R840	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R841	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R808	061G0603390 0F	RST CHIPR 390 OHM +-1% 1/10W	
R836	061G0603563	RST CHIPR 56 KOHM +-5% 1/10W	
R837	061G0603682	RST CHIPR 6.8 KOHM +-5% 1/10W	
R811	061G0603820 2F	RST CHIPR 82 KOHM +-1% 1/10W	
R930	061G0603910 1F	RST CHIPR 9.1 KOHM +-1% 1/10W	
JR801	061G0805000	RST CHIP MAX 0R05 1/8W	
JR803	061G0805000	RST CHIP MAX 0R05 1/8W	
JR804	061G0805000	RST CHIP MAX 0R05 1/8W	
R924	061G0805101	1ST CHIPR 100 OHM +-5% 1/8W	
R925	061G0805102	RST CHIPR 1K OHM +-5% 1/8W	
R939	061G0805102	RST CHIPR 1K OHM +-5% 1/8W	
R938	061G0805103	RST CHIPR 10K OHM +-5% 1/8W	
R802	061G0805220	RST CHIPR 22 OHM +-5% 1/8W	
R943	061G0805471	RST CHIPR 470 OHM +-5% 1/8W	
R819	061G0805479	RST CHIP 4R7 1/8W 5%	
R818	061G0805479	RST CHIP 4R7 1/8W 5%	
R817	061G0805479	RST CHIP 4R7 1/8W 5%	
R816	061G0805479	RST CHIP 4R7 1/8W 5%	
R803	061G0805512	RST CHIPR 5.1 KOHM +-5% 1/8W	
R804	061G0805512	RST CHIPR 5.1 KOHM +-5% 1/8W	
R830	061G0805682	RST CHIPR 6.8 KOHM +-5% 1/8W	
JR802	061G1206000	RST CHIP MAX 0R05 1/4W	
JR901	061G1206000	RST CHIP MAX 0R05 1/4W	
JR902	061G1206000	RST CHIP MAX 0R05 1/4W	
R910	061G1206100	RST CHIPR 10 OHM +-5% 1/4W	
R962	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R961	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R951	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R950	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R949	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R935	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	

R920	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R919	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R918	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R902	061G1206105	1M 1206	
R901	061G1206105	1M 1206	
R912	061G1206221	RST CHIPR 220 OHM +-5% 1/4W	
R909	061G1206339	RST CHIPR 3.3 OHM +-5% 1/4W	
R905	061G1206822	RST CHIPR 8.2 KOHM +-5% 1/4W	
R904	061G1206822	RST CHIPR 8.2 KOHM +-5% 1/4W	
C932	065G0603102 32	1000PF +-10% 50V X7R	
C814	065G0603221 31	CER1 0603 NP0 50V 220P P	
C809	065G0603221 31	CER1 0603 NP0 50V 220P P	
C805	065G0603223 32	CHIP 0.022UF 50V X7R 0603	
C810	065G0603332 32	CHIP 0.0033UF 50V X7R 0603	
C928	065G0805103 32	CAP CHIP 0805 10NF K 50V X7R	
C811	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R	
C815	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R	
C907	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R	
C924	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R	
C930	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R	
C931	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R	
C818	065G0805155 A2	1.5 UF 10V	
C909	065G0805221 31	CAP CHIP 0805 220PF J 50V NPO	
C806	065G0805225 12	CAP CHIP 0805 2.2UF K 16V X7R	
C808	065G0805333 32	CHIP 0.033UF 50V	
C801	065G0805473 32	CHIP 0.047UF 50V X7R	
C802	065G0805473 32	CHIP 0.047UF 50V X7R	
C940	065G0805473 32	CHIP 0.047UF 50V X7R	
C912	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	
C929	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	
C935	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	
FB902	071G 57G800 B	CHIP BEAD HCB3216KF-800T30 BULLWILL	
D803	093G 64 33	DIO SIG SM BAV99 (PHSE)R	
D806	093G 64 42 P	BAV70 SOT23 BY PAN JIT	
D807	093G 64 42 P	BAV70 SOT23 BY PAN JIT	
D808	093G 64 42 P	BAV70 SOT23 BY PAN JIT	
D806	093G 64 42 PP	BAV70 SOT-23	
D807	093G 64 42 PP	BAV70 SOT-23	
D808	093G 64 42 PP	BAV70 SOT-23	
D803	093G 6433S	DIODE BAV99 SEMTECH	

ZD803	093G 39S 24 T	RLZ 5.6B LLDS	
ZD802	093G 39S 24 T	RLZ 5.6B LLDS	
CN901	006G 31500	EYELET	
IC904	056G 158 12	KIA431A-AT/P TO-92	
Q903	057G 761 16	TRA KTD1028 KEC	
R946	061G152M10152T	RST MOFR 100OHM +-5% 2WS FUTABA	
R903	061G152M10452T	RST MOFR 100KOHM +-5% 2WS	
R914	061G152M39852T	RST MOFR 0.39 OHM +-5% 2WS	
R828	061T211S62552T SY	MGFR 6.2MOHM +-5% 1WS FUTABA	
C906	065G 2K152 2T6921	CAP CER 1500PF K 2KV Y5P	
J806	071G 55 9 T	FERRITE BEAD	
FB901	071G 55 29	FERRITE BEAD	
F903	084G 56 4 B	FUSE 4A 250V	
F902	084G 56 4 B	FUSE 4A 250V	
F901	084G 56 4 B	FUSE 4A 250V	
ZD902	093G 3952152T	TZX18B	
D900	093G 6026T52T	RECTIFIER DIODE FR107	
D901	093G 6038T52T	FR103	
D903	093G 64 1152T	1N4148	
D801	093G 64 1152T	1N4148	
	715G2824 2 5	POWER PCB FR-1 S/S 160X160MM	
	709G2824 QA001	CONSUMPTIVE ASS'Y	
	709G2824 QS001	CONSUMPTIVE ASS'Y	
	052G 2191 A	PAPER TAPE	
	709G2824 QM001	CONSUMPTIVE ASS'Y	
	055G 23524	WELDING FLUX WITHOUT PB	
	055G 2	ALCOHOL	
	Q55G 100625	TIN STICK_LOW ARGENTUM	
	705GQ851002	OIL FOR DISAPPEAR ASS'Y	
	Q40G 23N680 1A	RATING LABEL	
	Q40G000268088A	TRY ME LABEL	
	Q40G0002680A09	SPLENDID LABEL FOR VH232H	
	Q40G0002680A16	FUNCTION LABEL FOR VH232H/D(VH236H)	
	Q41G780068029B	TW WARRANTY CARD ZBD	
	Q44GD013101	EPS	
	Q44GD013201	EPS	
	Q44GD013680 1A	23 LCD CARTON	
	Q45G 76 28V13 R	PE BAG	
	Q45G 88607 25	PE BAG FOR BASE	
	Q45G 88609120	EPE BAG	

	045G 76 28 RN	PE BAG FOR MANUAL	
E08904	089G 17356G554	AUDIO CABLE	
E08904	089G 17356X554	AUDIO CABLE	2nd source
	Q41G2008680 1A	VH236/VH232/VH202 QSG	
	Q70G2008680 1A	VH236/VH232/VH202 CD MANUAL	
	040G 58162435A	P/N LABEL FOR MANUAL PE BAG	
	040G 582680 1A	CARTON LABEL	
	040G 582680 4A	CARTON LABEL	