Service
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Service Manual

Horizontal Frequency

30 kHz to 83 kHz

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SAFETY NOTICE

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

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

Revision List

Revision	Release Date	Revise history	TPV model
A00	Jun.-16-2008	Initial Release	TC8GMAHKWMDDHN
A01	Jul.-05-2008	Add TPV Model name in item 14	TC8GMAHKWMDDHC TC8MMAHKWMDDHC TC8GMAHMWMDDHN TC8MMAHMWMDDHN TC8GMAHLWMDDHN TC8MMAHLWMDDHN TC8GMAHMWMDLHN TC8MMAHMWMDLHN TC8GMAHJWMDDHN TC8MMAHJWMDDHN TC8GMAHFWMDDHN TC8MMAHFWMDDHN
A02	Aug.-13-2008	Add TPV Model name in item 14	TC8GMAHMWMDLHC
			TC8MMAHMWMDLHC
			TC8GMAHJWMDDHC
			TC8MMAHJWMDDHC
			TC8GMAHFWMDDHC
			TC8MMAHLWMDDHC
			TC8MMAHMWMDDHC
			TC8MMAHFWMDDHC
			TC8MMAHLWMDDHC

ECN History

ECN No.	Change Description	Service Deposition	Cut-in date	MSR

Important Safety Notice

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

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

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

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

Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:
DANGER-Invisible laser radiation when open. AVOID DIRECT EXPOSURE TO BEAM.
CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
CAUTION -The use of optical instruments with this product will increase eye hazard.

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

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

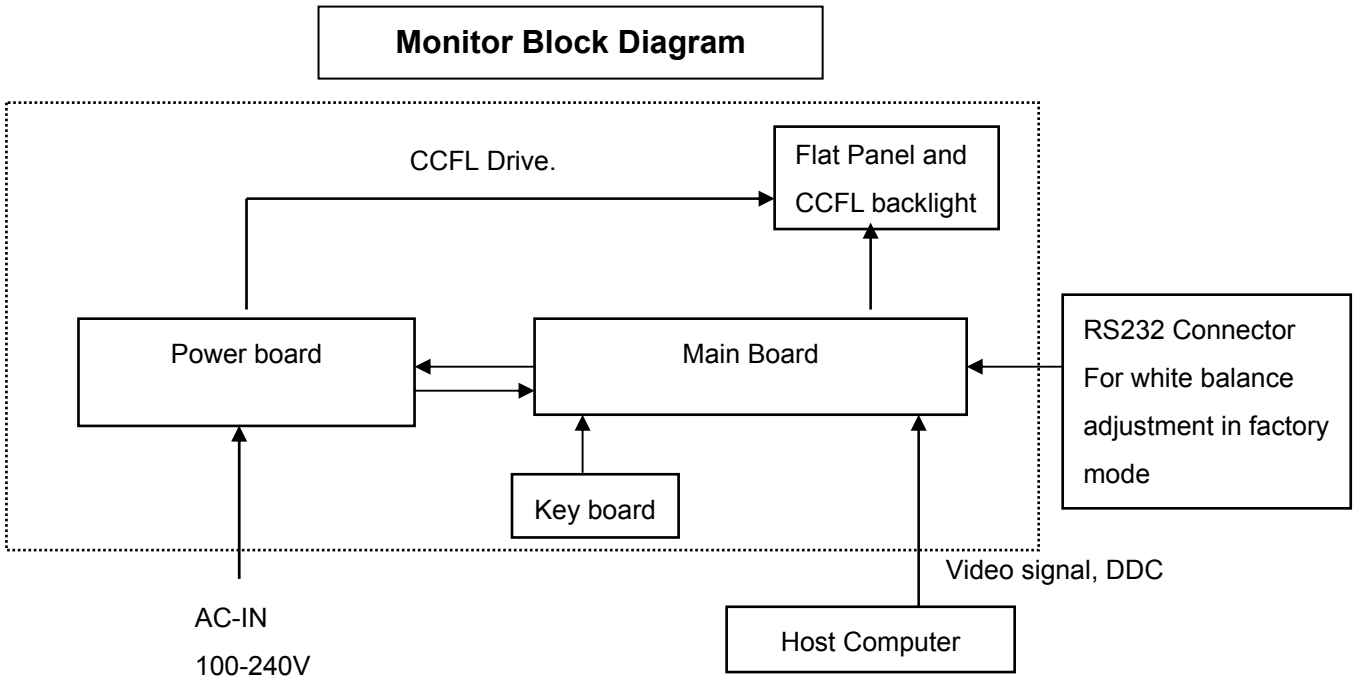
1. Monitor Specifications

LCD Panel	Screen type	Active matrix - TFT LCD
	Panel Type	LM220WE1-TLE1 KR LGD
	Size	22 inches (22-inch viewable image size)
	Pixel pitch	0.282 mm (H) x 0.282mm(V)
	Viewable angle	160° (vertical) typ, 170° (horizontal) typ
	Response time	5ms typical
Input	Video	R, G, B Analog Interface, DVI digital Interface
	Separate Sync	H/V TTL
	H-Frequency	30kHz – 83kHz
	V-Frequency	56 - 75Hz
Dynamic contrast ratio		1000:1 (typical)
Luminance output		300 CD/m ²(typical)
Max. Resolution		1680 x 1050 at 60 Hz
Plug & Play		VESA DDC
EPA ENERGY STAR®	ON Mode	<85W
	OFF Mode	<2W
Input Connector		15-pin D-subminiature, blue connector; DVI-D, white connector
Preset display area:		Height : 406.7 mm (16.01 inches) Width: 511.75 mm (20.14 inches) Depth：163.9 mm（6.4 inches）
Power Source		100 to 240 VAC / 50 or 60 Hz ± 3 Hz / 1.5A
Video display capabilities (DVI playback)		480i/480p/576i/576p/720p/1080i/1080p (Support HDCP)
Environmental Considerations		Operating Temp: 5° to 35°C Operating Humidity: 10% to 80% Storage Temp.: -20° to 60°C
Weight		Weight with packaging: 16.70 lbs (7.59 kg) Weight with stand assembly and cables: 12.91 lbs (5.86 kg) Weight without stand assembly: 9.25 lbs (4.20 kg) Weight of stand assembly: 2.73 lbs (1.24 kg)

2. LCD Monitor Description

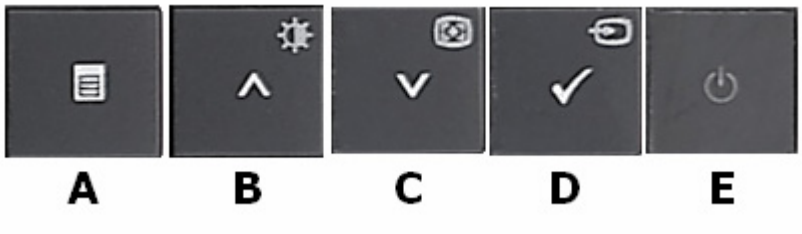
The LCD monitor will contain a main board, power board, and a key board which house the flat panel control logic, brightness control logic and DDC.

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



3. Operation instructions

3.1 Using the Front Panel Controls



Use the buttons on the front of the monitor to adjust the image settings.

Front panel Button		Description
A	 **OSD Menu**	Use the MENU button to launch the on-screen display (OSD) and select the OSD Menu. See
B	 **Brightness/ Contrast Hot Key**	Use this button to directly access the "Brightness/Contrast" menu or to increase the values of the selected menu option.
C	 **Auto Adjust**	Use Auto Adjust to activate automatic setup/adjustment or to decrease the values of the selected menu option. Auto Adjustment allows the monitor to self-adjust to the incoming video signal. After using Auto Adjustment, you can further tune your monitor by using the Pixel Clock and Phase controls under Displays Settings. The following dialog appears on a black screen as the monitor automatically adjusts to the current input: 
D	 **OK / Input Source Select**	Use this button to select the input source or select an OSD menu option. Use the Input source button to select one of the two different video signals that may be connected to your monitor: • VGA input • DVI-D input If both VGA and DVI cables are connected to one Computer, this monitor displays an image

		automatically as long as a video signal is present in either VGA or DVI outputs. On a display connected to two Computers, set equal time for both screen savers. The video input from the movement of the first mouse will activate the display. As you cycle through the inputs, the following messages appear to indicate currently selected input source. It may take 1 or 2 seconds for the image to appear.  **or**   **or**  If either VGA or DVI-D input is selected and both VGA and DVI-D cables are not connected, a floating dialog box as shown below appears.  **or** 
E	 **Power button (with power light indicator)**	Use the Power button to turn the monitor on and off. The blue LED indicates the monitor is on and fully functional. An amber LED indicates DPMS power save mode.

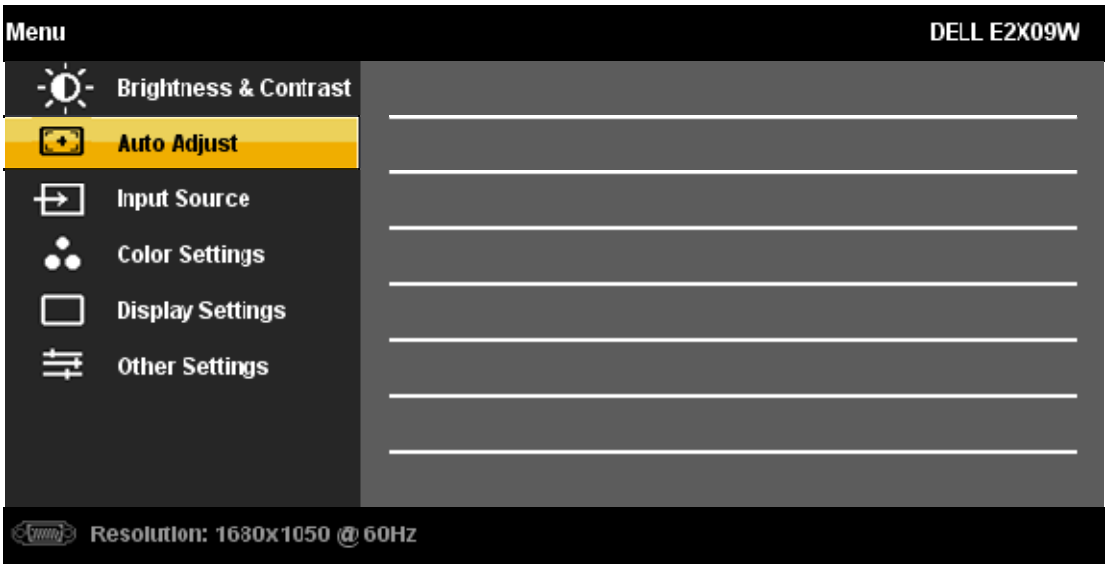
3.2 Control Buttons

1	OSD menu button
2	Up button
3	Down button
4	OK button
5	Power button

3.3 Adjusting the Picture

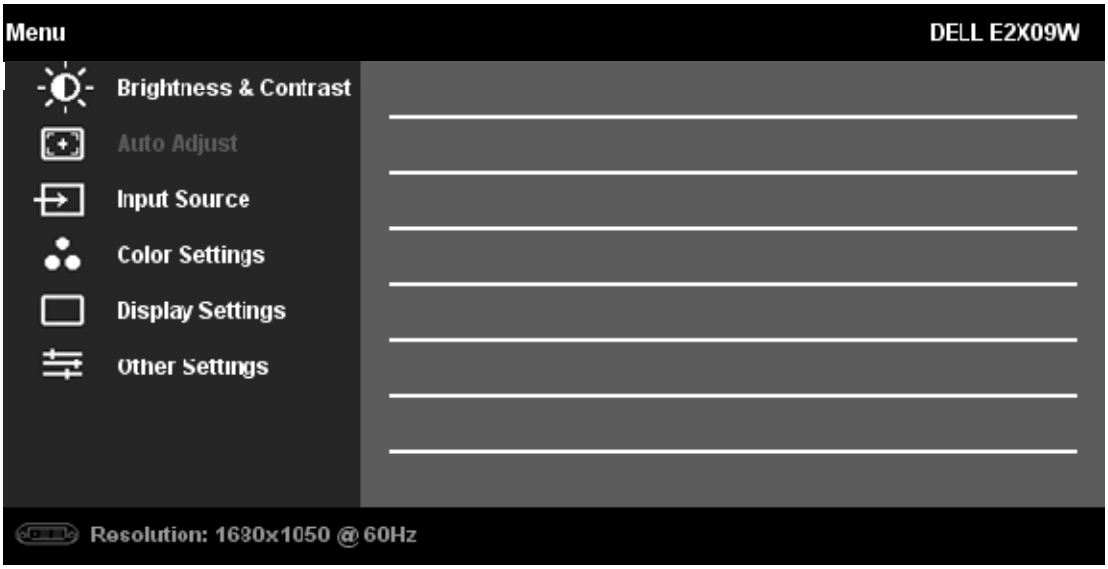
1.Push the MENU button to launch the OSD menu and display the main menu.

Main Menu for Analog (VGA) Input



Or

Main Menu for Digital (DVI-D) Input



2.Push the and buttons to move between the setting options. As you move from one icon to another, the option name is highlighted. See the following table for a complete list of all the options available for the monitor.

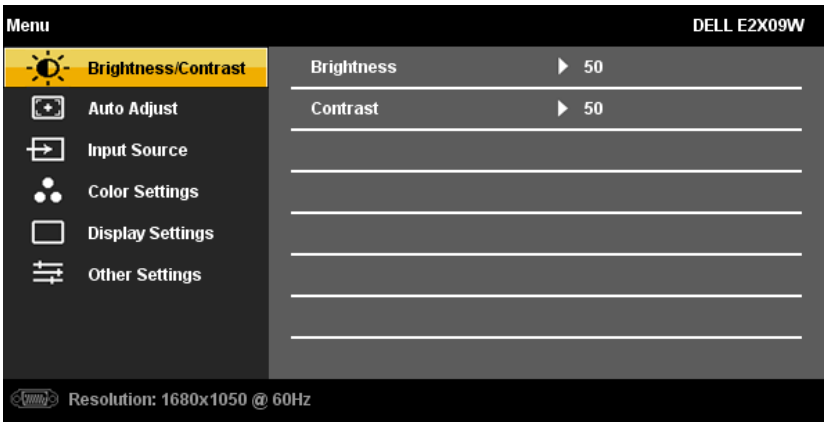
3.Push the button once to activate the highlighted option.

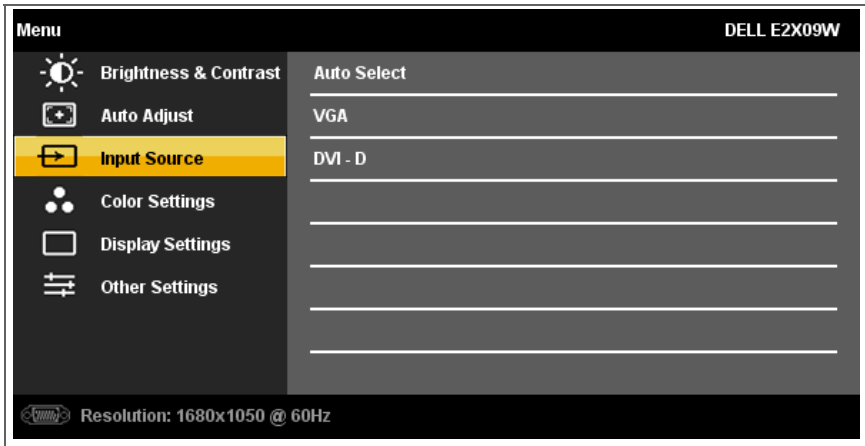
4.Push the and buttons to select the desired parameter.

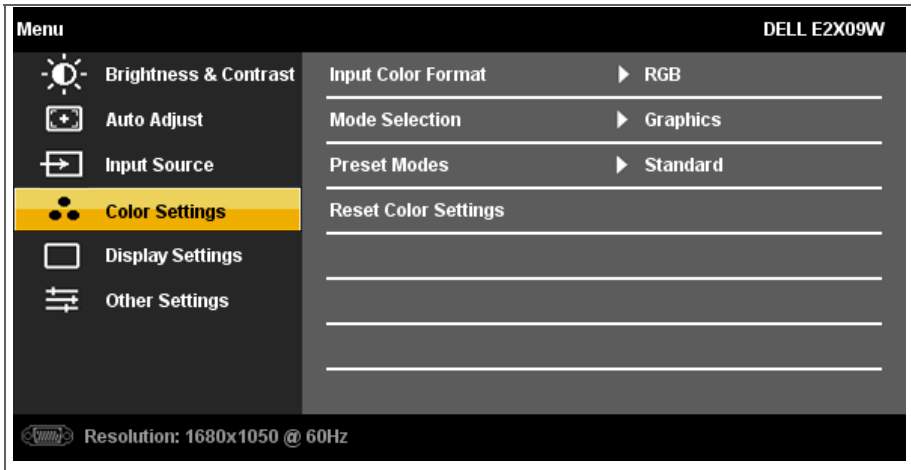
5.Push to enter the slide bar and then use the or button, according to the indicators on the menu, to make your changes

6.Press the **Menu** button once to return to the main menu to select another option or press the **Menu** button two or three times to exit from the OSD menu.

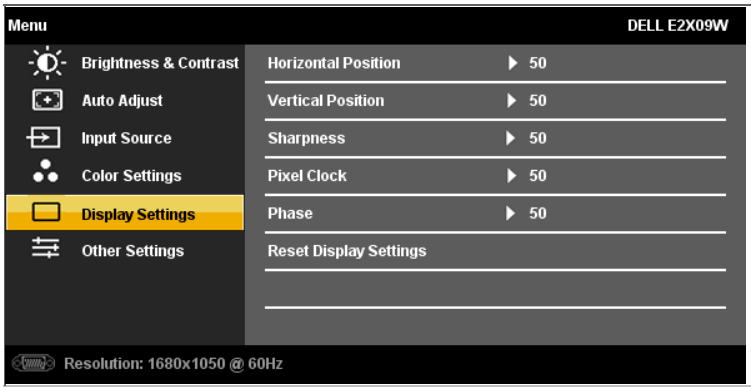
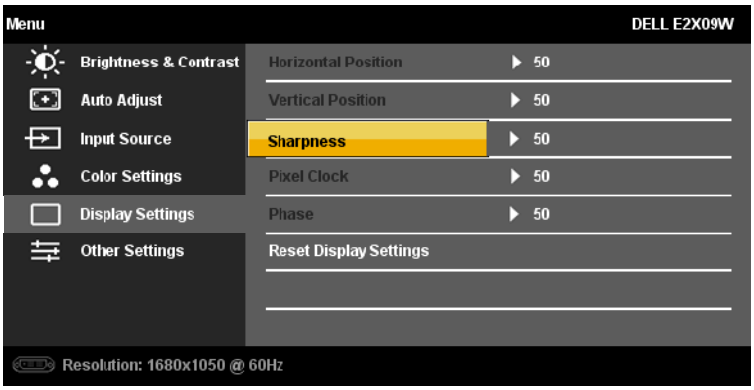
The table below provides a list of all the OSD menu options and their functions.

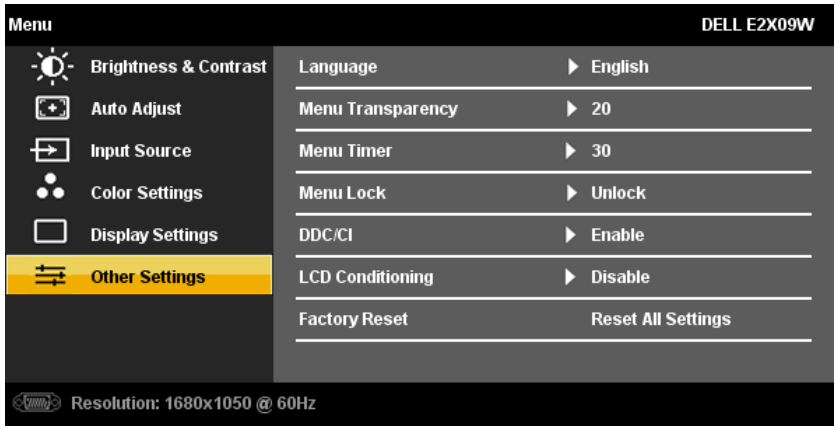
Icon	Menu and Submenus	Description
	Brightness&Contrast	Use this menu to activate Brightness/Contrast adjustment.
		
	Back	Push to go back to the main menu.
	Brightness	Brightness adjusts the luminance of the backlight. Push the button to increase brightness and push the button to decrease brightness (min 0 ~ max 100).
	Contrast	Adjust Brightness first, and then adjust Contrast only if further adjustment is necessary. Push the button to increase contrast and push the button to decrease contrast (min 0 ~ max 100). The Contrast function adjusts the degree of difference between darkness and lightness on the monitor screen.
	Exit Menu	Push to exit the OSD main menu.

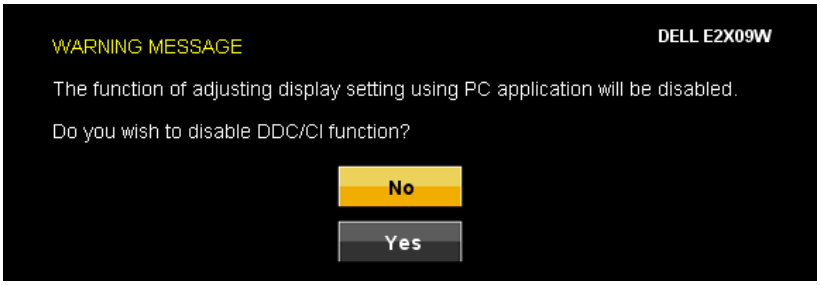
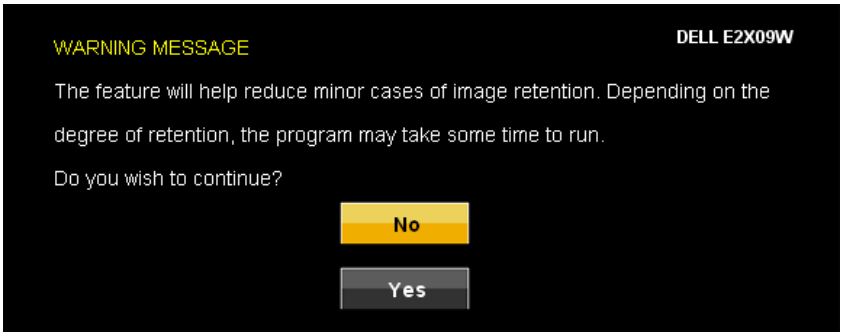
	Auto Adjust	Even though your computer recognizes your monitor on startup, the Auto Adjustment function optimizes the display settings for use with your particular setup.  **NOTE:** In most cases, Auto Adjust produces the best image for your configuration.
	Input Source	Use the INPUT SOURCE menu to select between different video signals that may be connected to your monitor.
		
	Back	Push to go back to the main menu.
	VGA	Select VGA input when you are using the analog (VGA) connector. Push to select the VGA input source.
	DVI-D	Select DVI-D input when you are using the Digital (DVI) connector. Push to select the DVI input source.
	Scan for Sources	Select Auto Select to scan for available input signals.
	Exit Menu	Push to exit the OSD main menu.
	Color Settings	Use the Color Settings to adjust the color setting mode and color temperature. There are different color setting sub-menus for VGA/DVI-D and Video input.

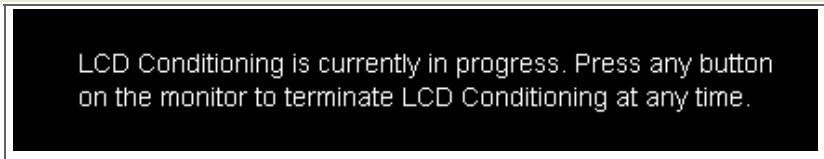
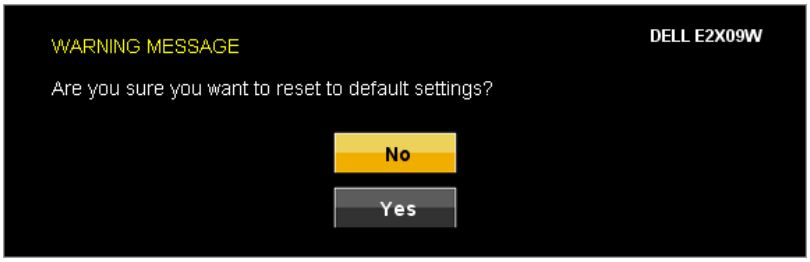
Color setting mode submenu	
Back	Push to go back to the main menu.
Input Color Format	Allows you to set the video input mode to. • **RGB**: Select this option if your monitor is connected to a computer or DVD player using the VGA and DVI cable or the HDMI to DVI adapter. • **YPbPr**: Select this option if the your DVD player supports only YPbPr output.
Mode Selection	Allows you to set the display mode to: • **Graphics**: Select this mode if your monitor is connected to your computer. • **Video**: Select this mode if you monitor is connected to a DVD player. **NOTE:** Depending upon the Display Mode you select the Preset Modes available for your monitor change.

Preset Mode	Allows you to choose from a list of preset color modes. In the **Graphics** mode, you can set the color to the following preset values: • **Standard**: Loads the monitor's default color settings. This is the default preset mode. • **Multimedia**: Loads color settings ideal for multimedia applications. • **Game**: Loads color settings ideal for most gaming applications. • **Warm**: Increase the color temperature. The screen appears warmer with a red/yellow tint. • **Cool**: Decreases the color temperature. The screen appears cooler with a blue tint. • **Custom (R, G, B)**: Allows you to manually adjust the color settings. Press the and buttons to adjust the Red, Green, and Blue values and create your own preset color mode. In the **Video** mode, you can set the color to the following preset values: • **Movie**: Loads color settings ideal for movies. This is the default preset mode. • **Sports**: Loads color settings ideal for sports. • **Game**: Loads color settings ideal for game. • **Nature:** Loads color settings ideal for nature.
Hue	This feature can shift color of video image to green or purple. This is used to adjust the desired flesh tone color. Use or to adjust the hue from '0' to '100' . Push to increase the green shade of the video image Push to increase the purple shade of the video image

	Saturation	This feature can adjust the color saturation of the video image. Use or to adjust the saturation from '0' to '100'. Push to increase the monochrome appearance of the video image Push to increase the colorful appearance of the video image
	Color Reset	Resets your monitor's color settings to the factory defaults.
	Exit Menu	Push to exit the OSD main menu.
	DISPLAY SETTINGS	
	Display Setting subm enu	**Display Setting submenu for VGA input** **Display Setting submenu for DVI-D input** 
	Back	Push to go back to the main menu.
	Horizontal Pos ition	Use the and buttons to adjust image left and right. Minimum is '0' (-). Maximum is '100' (+). **NOTE:** When using a DVI source, the Horizontal Position setting is not

		available.
	Vertical Position	Use the and buttons to adjust image up and down. Minimum is '0' (-). Maximum is '100' (+). **NOTE:** When using a DVI source, the Vertical Position setting is not available.
	Sharpness	This feature can make the image look sharper or softer. Use or to adjust the sharpness from '0' to '100'.
	Pixel Clock	The Phase and Pixel Clock adjustments allow you to adjust your monitor to your preference. Use the and buttons to adjust for best image quality.
	Phase	If satisfactory results are not obtained using the Phase adjustment, use the Pixel Clock (coarse) adjustment and then use Phase (fine), again.
	Display Reset	Reset the image to the original factory setting.
	Exit Menu	Push to exit the OSD main menu.
	OTHER SETTINGS	
		
	Back	Push to go back to the main menu.
	Language	Language option to set the OSD display to one of seven languages (English, Espanol, Francais, Deutsch, Brazilian Portuguese, Japanese, or Simplified Chinese).
	Menu	This function is used to change the OSD background from opaque to

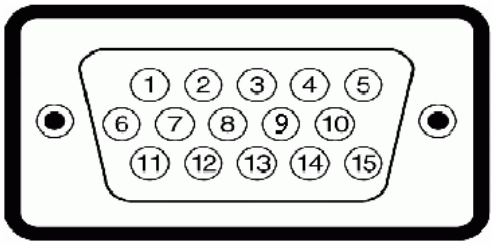
Transparency	transparent.
Menu Timer	OSD Hold Time: Sets the length of time the OSD will remain active after the last time you pressed a button. Use the and buttons to adjust the slider in 1 second increments, from 5 to 60 seconds.
Menu Lock	Controls user access to adjustments. When 'Lock' is selected, no user adjustments are allowed. All buttons are locked except button.
DDC/CI	DDC/CI (Display Data Channel/Command Interface) allows your monitor parameters (brightness, color balance etc) to be adjustable via software on your PC. You can disable this feature by selecting "Disable". You can disable this feature by selecting Disable. The following warning message appears: Select Yes to disable DDC/CI and No to exit with out making changes. 
LCD Conditioning	This feature will help reduce minor cases of image retention. If an image appears to be stuck on the monitor, select **LCD Conditioning** to help eliminate any image retention. Using the LCD Conditioning feature may take some time. Severe cases of image retention are known as burn-in, the LCD Conditioning feature does not remove burn-in. Below warning message appears once user select “Enable" LCD Conditioning. 

		
	Factory Reset	Reset all OSD settings to the factory preset values. 
	Exit Menu	Push  to exit the OSD main menu.

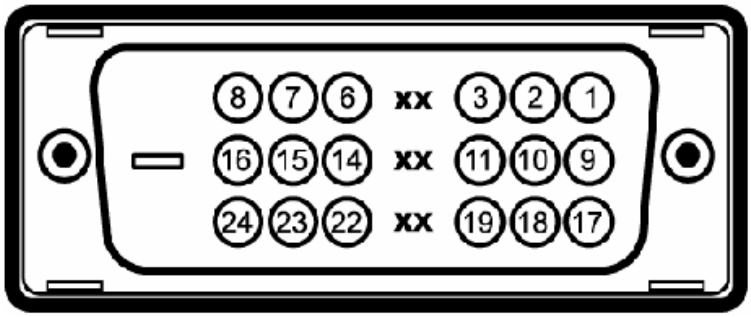
4. Input/Output Specification

4.1 Input Signal Connector

VGA Connector:

Pin No.	Description	Pin No.	Description
1.	Red Video	9.	Computer 5V/3.3V
2.	Green Video	10.	GND-sync
3.	Blue Video	11.	GND
4.	GND	12.	DDC data
5.	Self-test	13.	H-Sync
6.	R-Ground	14.	V-Sync
7.	G-Ground	15.	DDC clock
8.	B-Ground		
VGA Connector layout			
			

DVI Connector:



Note: Pin 1 is at the top right.

Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	T.M.D.S. Data 2-	9	TMDS RX1-	17	TMDS RX0-
2	T.M.D.S. Data 2+	10	TMDS RX1+	18	TMDS RX0+
3	TMDS Ground	**11**	TMDS Ground	19	TMDS Ground
4	Floating	12	Floating	20	Floating
5	Floating	13	Floating	21	Floating
6	DDC Clock	**14**	+5V/+3.3V power	22	TMDS Ground
7	DDC Data	**15**	Self test	23	TMDS Clock+
8	Floating	**16**	Hot Plug Detect	24	TMDS Clock-

4.2 Factory Preset Display Modes

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (Horizontal/Vertical)
VESA, 720 x 400	31.5	70.0	28.3	-/+
VESA, 640 x 480	31.5	60.0	25.2	-/-
VESA, 640 x 480	37.5	75.0	31.5	-/-
VESA, 800 x 600	37.9	60.0	40.0	+/+
VESA, 800 x 600	46.9	75.0	49.5	+/+
VESA, 1024 x 768	48.4	60.0	65.0	-/-
VESA, 1024 x 768	60.0	75.0	78.8	+/+
VESA, 1152 x 864	67.5	75.0	108.0	+/+
VESA, 1280 x 1024	64.0	60.0	135.0	+/+
VESA, 1280 x 1024	80.0	75.0	135.0	+/+
VESA, 1680 x 1050	65.2	60.0	146.3	-/+
VESA, 1680 x 1050	64.6	60.0	119.0	+/-

4.3 Power Supply Requirements

A/C Line voltage range	: 100 V ~ 240 V
A/C Line frequency range	: 50 ± 3Hz, 60 ± 3Hz
Current	: 1.5A max at 100V; 0.8A max at 240 V
Peak surge current	: < 60A peak at 240 VAC 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
DC output Voltage	: 5VDC ± 5%; 12VDC± 5%

4.4 Panel Specification

LM220WE1-TLE1is a Color Active Matrix Liquid Crystal Display with an integral Cold Cathode Fluorescent Lamp(CCFL) backlight system. The matrix employs a-Si Thin Film Transistor as the active element. It is a transmissive type display operating in the normally white mode. It has a 22 inch diagonally measured active display area with WSXGA+ resolution (1050 vertical by 1680 horizontal pixel array) Each pixel is divided into Red, Green and Blue sub-pixels or dots which are arranged in vertical stripes. Gray scale or the brightness of the sub-pixel color is determined with a 8-bit gray scale signal for each dot, thus, presenting a palette of more than 16,7M colors with Advanced-FRC(Frame Rate Control). It has been designed to apply the interface method that enables low power, high speed, low EMI. FPD Link or compatible must be used as a LVDS(Low Voltage Differential Signaling) chip. It is intended to support applications where thin thickness, wide viewing angle, low power are critical factors and graphic displays are important.
office automation products such as monitors.

4.4.1 Display Characteristics

Active screen size	21.995 inches(558.673mm) diagonal (Aspect ratio 16:10)
Outline Dimension	493.7(H) x 320.1 (V) x 16.5(D) mm (Typ.)
Pixel Pitch	0.282mm x 0.282mm
Pixel Format	1680 horizontal By 1050 vertical Pixels. RGB stripe arrangement
Interface	LVDS 2Port
Color depth	16.7M colors
Luminance, white	300 cd/m^2 (Center 1Point, typ)
Viewing Angle (CR>10)	R/L 170(Typ.), U/D 160(Typ.)
Power Consumption	Total 29.4W (Typ.), (4.5W@V_{LCD} , 24.9W@I_{BL}=7.5mA)
Weight	2,350g (Typ.)
Display operating mode	Transmissive mode, normally White
Surface treatments	Hard coating (3H), Anti-glare treatment of the front polarizer

4.4.2 Optical Characteristics

Ta= 25°C, VLCD=5.0V, fV=60Hz fCLK=54MHz, IBL=7.5mA

Parameter		Symbol	Values			Units	Notes
			Min	Typ	Max		
Contrast Ratio		CR	700	1000	-		1
Surface Luminance, white		L_{WH}	250	300	-	cd/m²	2
Luminance Variation		δ_{WHITE} 9P	75			%	3
Response Time	Rise Time	Tr_R	-	1.3	2.6	ms	4
	Decay Time	Tr_D	-	3.7	7.4	ms	4
Color Coordinates [CIE1931]	RED	Rx	Typ -0.03	0.641	Typ +0.03		
		Ry		0.335			
	GREEN	Gx		0.298			
		Gy		0.611			
	BLUE	Bx		0.147			
		By		0.070			
	WHITE	Wx		0.313			
		Wy		0.329			
Viewing Angle (CR>5)							
	x axis, right(ϕ=0°)	θr	75	88		Degree	5
	x axis, left (ϕ=180°)	θl	75	88			
	y axis, up (ϕ=90°)	θu	70	85			
	y axis, down (ϕ=270°)	θd	70	85			
Viewing Angle (CR>10)							
	x axis, right(ϕ=0°)	θr	70	85		Degree	5
	x axis, left (ϕ=180°)	θl	70	85			
	y axis, up (ϕ=90°)	θu	60	75			
	y axis, down (ϕ=270°)	θd	70	85			
Crosstalk					1.5	%	8
Luminance uniformity - Angular dependence (TCO'03)		LR	-	-	1.7		6

4.5 Definition of Pixel Defects

4.5.1 Dot Defect

1.bright dot

Dots(sub-pixels) which appeared brightly in the screen when the LCM displayed with Full Black pattern.

-R,G or B 1 dot ----------0 Max

-Adjacent 2 dots ----------0 Max

-Total amount of Bright dots ----------0 Max

2. Partial Bright Dot

-Partial bright dot (tiny dot) ----------5 Max

* Bright dot and Partial dot definition is referred to the Appendix B

3 Dark dot

Dots(sub-pixels) which appeared darkly in the screen when the LCM displayed with bright pattern.

-1 dot ----------5 Max

-Adjacent 2 dots ----------2 Max

-Adjacent 3 dots ----------1 Max

-Total amount of Dark dot ----------5 Max

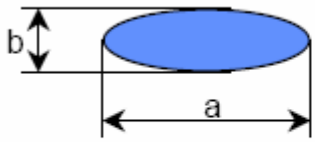
-Minimum distance of Dark dots ----------5mm

4. Total amount of Dot Defects----------5 Max

except Partial bright do

4.5.2 Polarizer Defect

Items	Criteria
Linear	$0.01 < W \leq 0.1,\ 0.3 < L \leq 7.0,\ N \leq 3$
Circular	$0.3 < D \leq 0.7,\ N \leq 5$



D : Average Diameter D=(a+b)/2
W : Width
L : Length
N : Quantity
Linear : a>2b
Circular : a<2b
Unit : mm

Maximum allowable number of defects for 3.2 & 3.3 : N<=83.4.

4.5.3.Line Defect

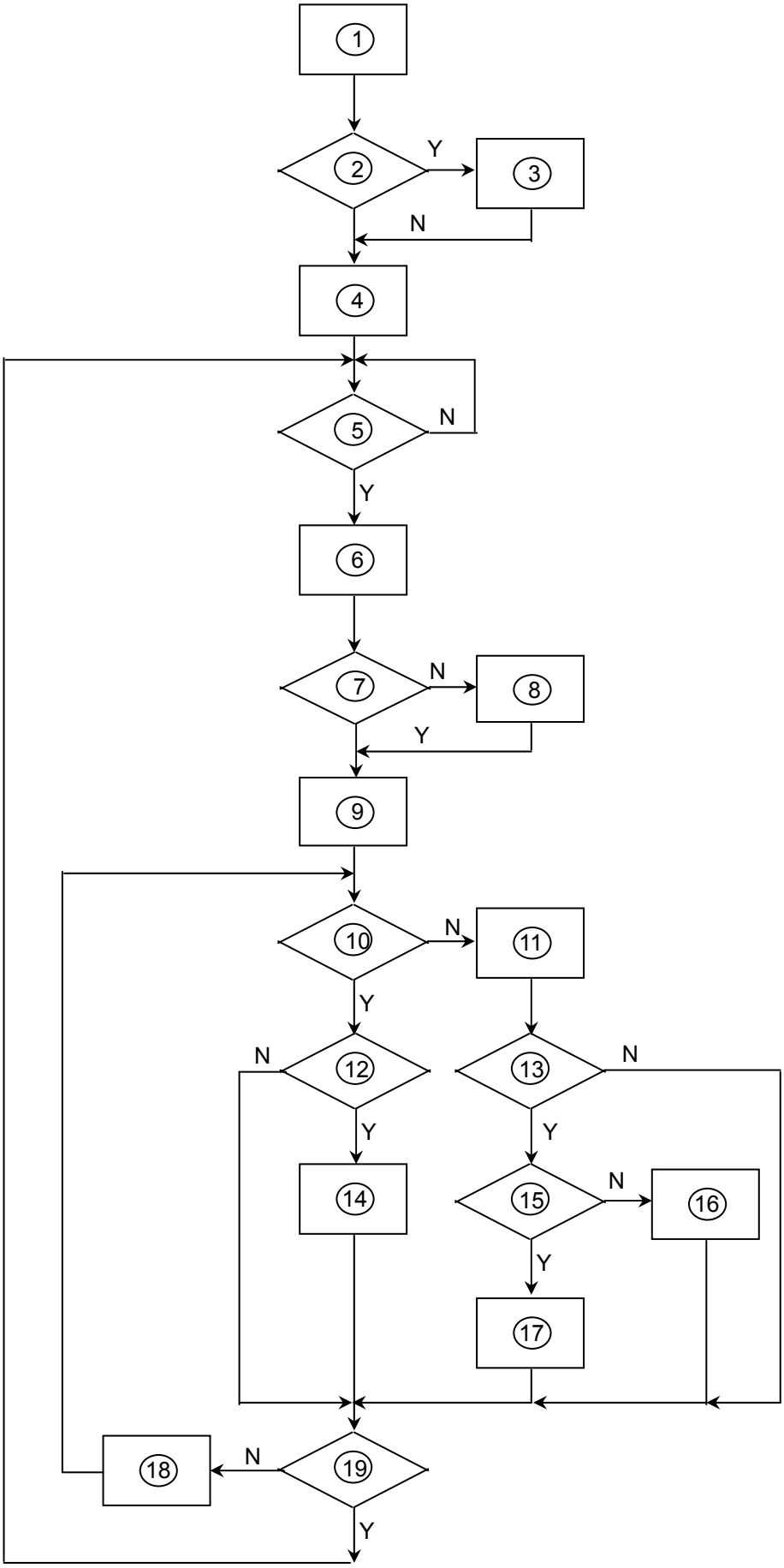
All kinds of line defects such as vertical, horizontal or crossare not allowed.

4.5.4 Bezel Appearance Scratches, minor bents, stains, particles on the Bezel frame are not considered as adefect.**3.6.**

4.5.6 Others Issues which is not defined in this criteria shall be discussedwith both parties, Customerand Supplier, for better solution.

5. Block Diagram

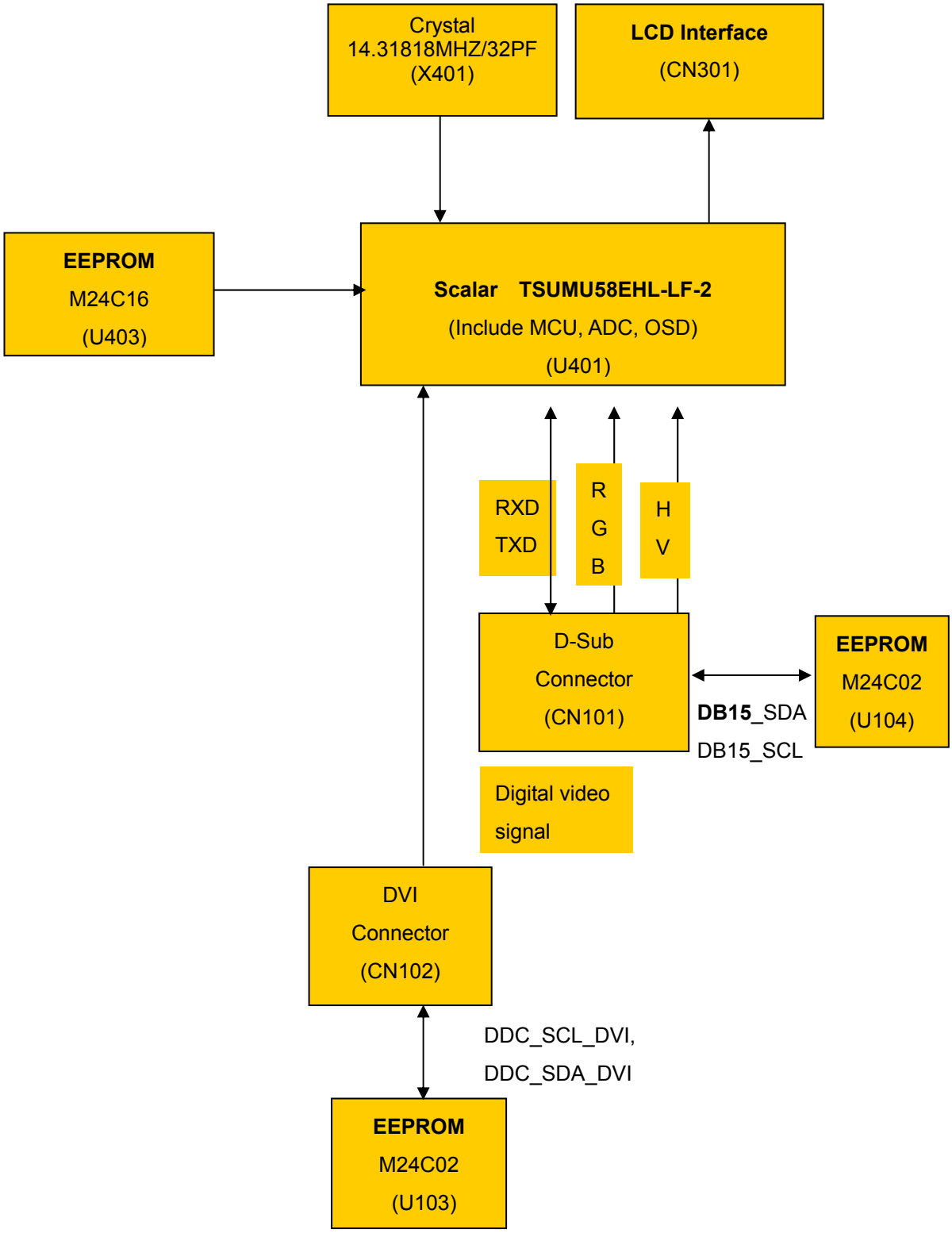
5.1 Software Flow Chart



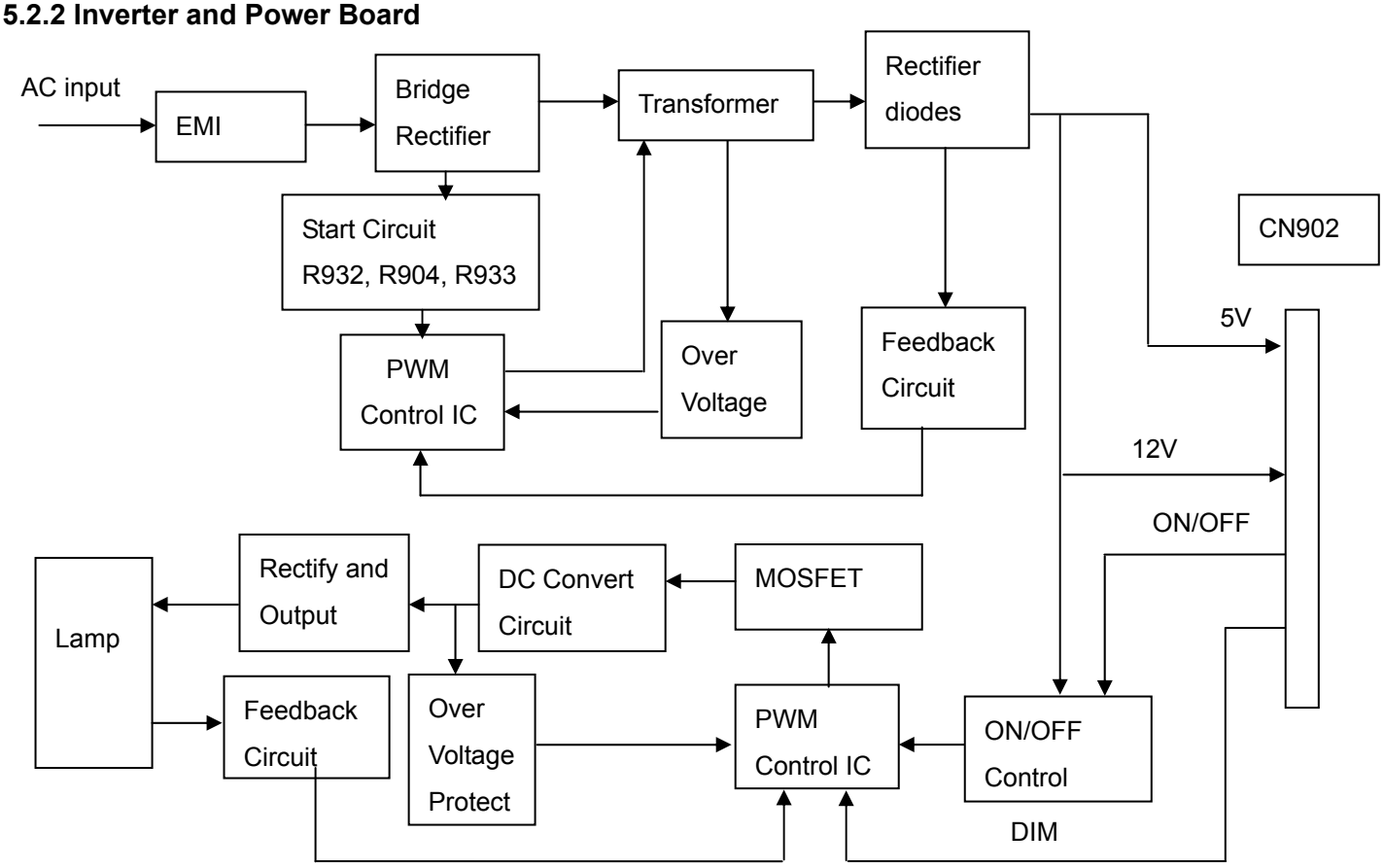
1) MCU Initializes.
2) Is the EEprom blank?
3) Program the EEprom by default values.
4) Get the PWM value of brightness from EEprom.
5) Is the power key pressed?
6) Clear all global flags.
7) Are the AUTO and SELECT keys pressed?
8) Enter factory mode.
9) Save the power key status into EEprom. Turn on 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) 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?

5.2 Electrical Block Diagram

5.2.1 Main Board



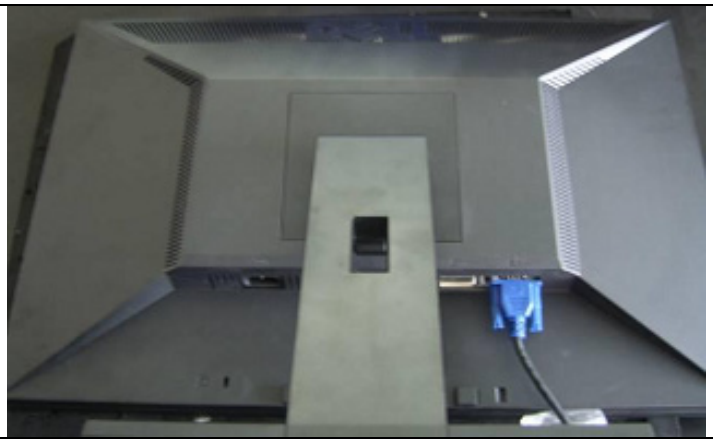
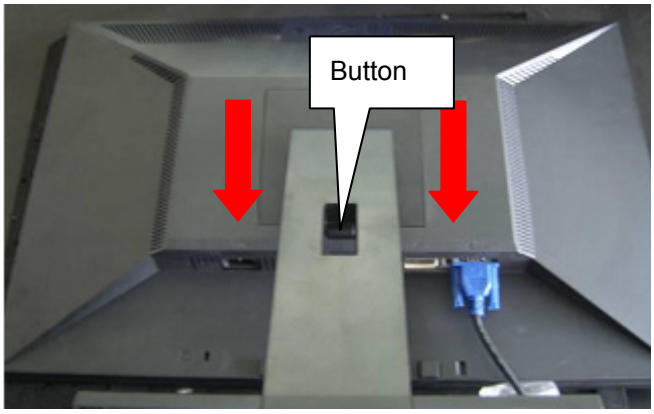
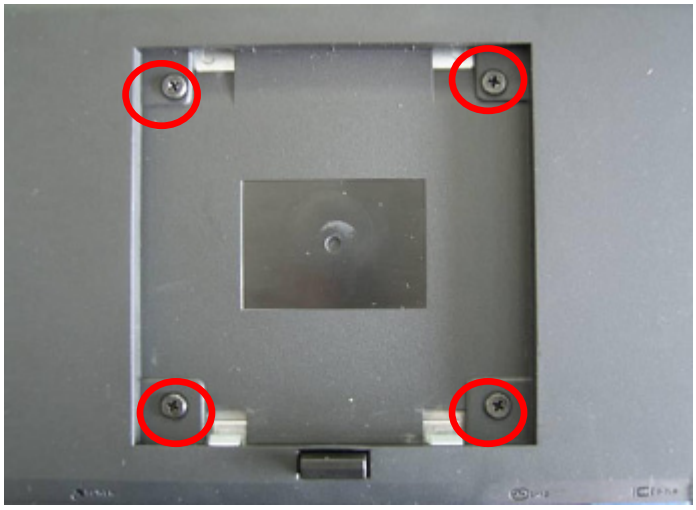
5.2.2 Inverter and Power Board

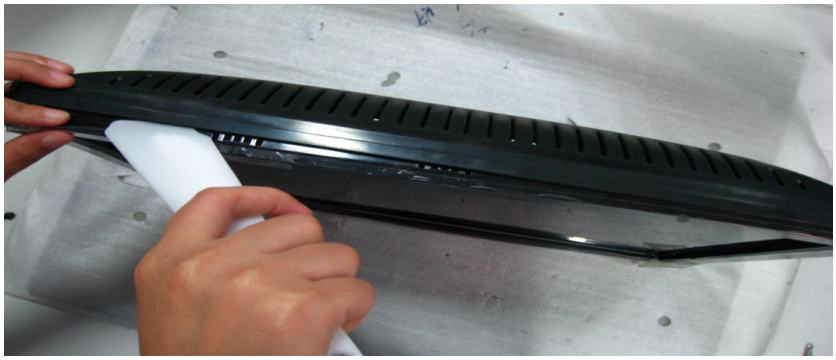


6. Mechanical Instruction

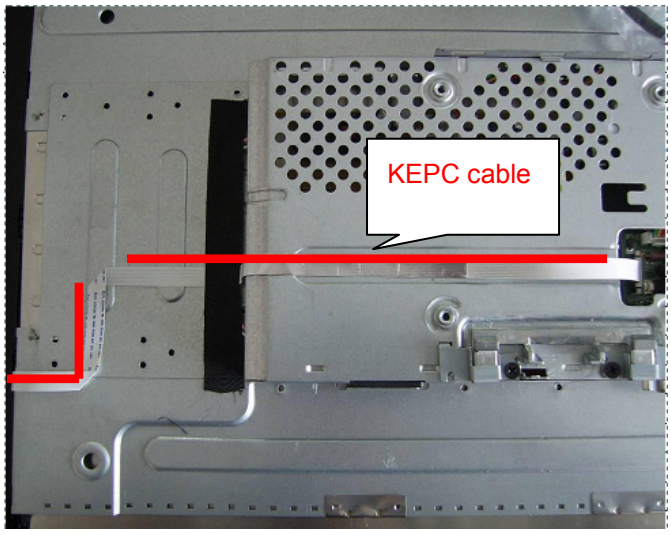
Tools: 2 Power screwdrivers（φ=5mm、L=60mm）; 1 small cross screwdriver; turnbuckle driver;

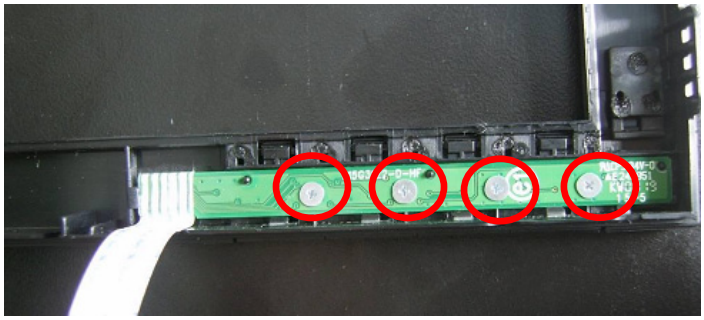
Setting: Power screwdriver torque A=11 kgF. Cm; torque B=6 kgF. Cm

Fig	Remark
	1) Put the monitor on the soft plane table, to avoid scrapping the panel. 2) Remove the cable cover as the arrow show.
	**Remove stand：** Press the button，at the same time pull out the hinge cover follow the arrowhead direction and remove it, then remove the hinge.
	**rear cover**: 1.Remove the two screws and remove the base by Torque A.



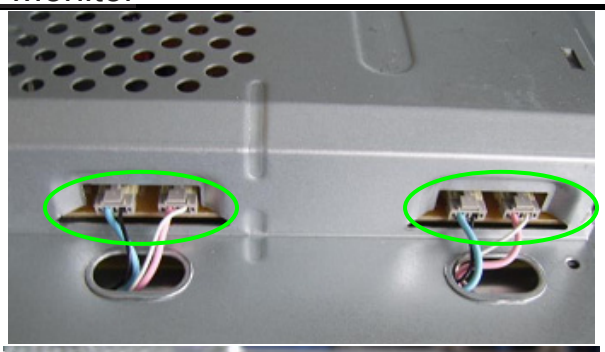
2.Pry the monitor up then find out the hooks' position, use the tool (like the picture or other card) to insert into the gap of bezel and rear cover, then turn over the monitor and take off the rear cover.

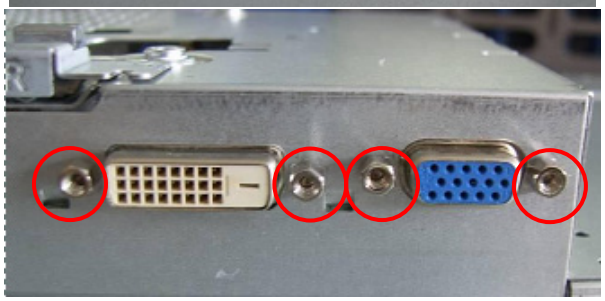




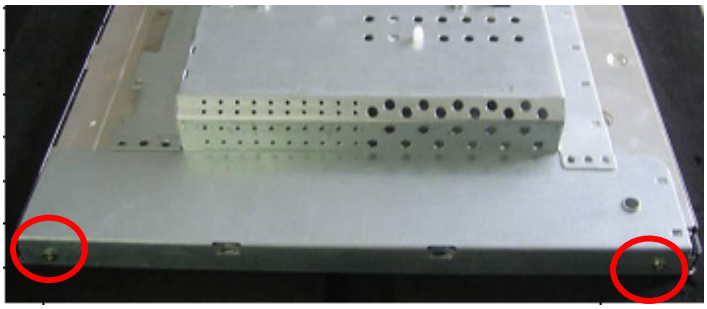
Remove the key board：

Remove the screws remarked in red by Torque B or by manual

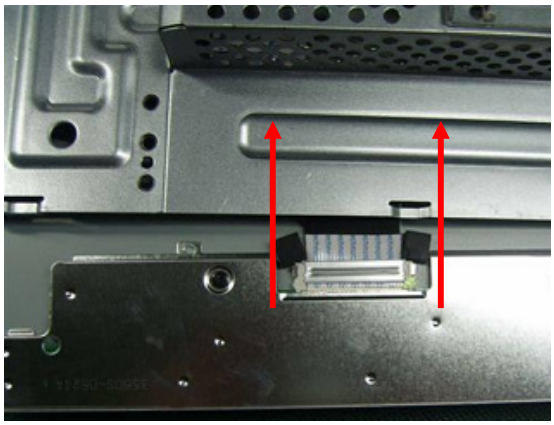




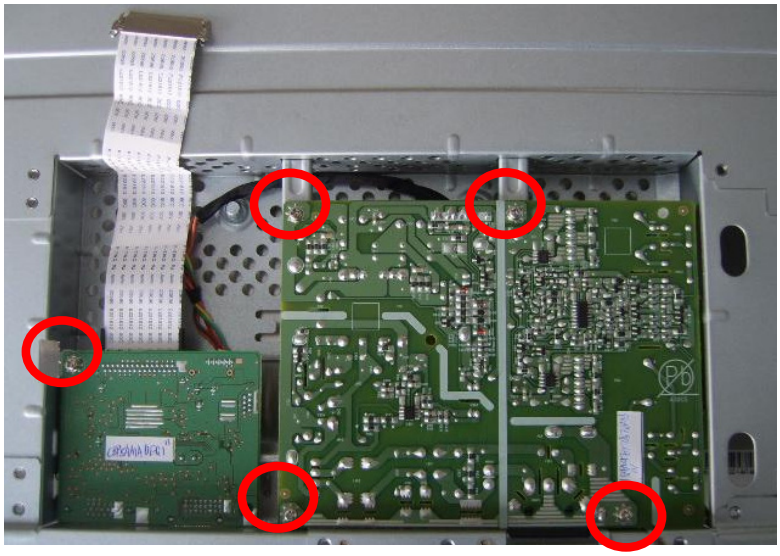
Remove shield:
1.Remove the screws remarked in red by Torque B or by manual and disconnect connector remarked in green.

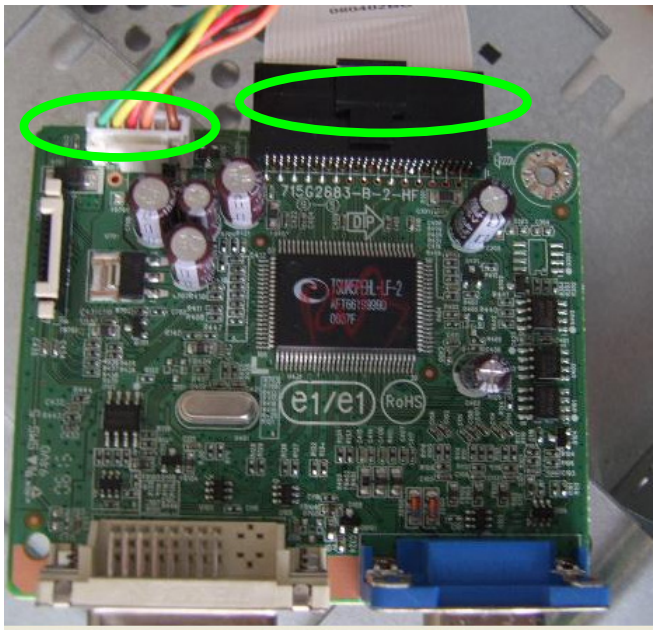


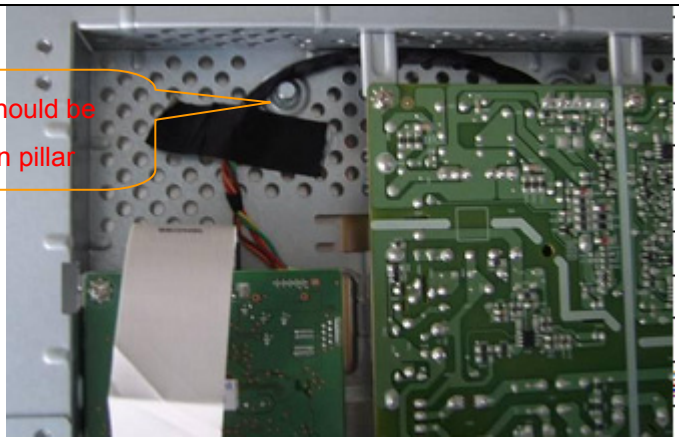
2.Remove the four screws and remove the main frame by manual or torque = 3kgF.Cm



3. Remove the main frame and at the same time disconnect the LVDS connector and remove the EVA washers.
Install:
Note: Make LVDS connector's metal side adown







Harness should be round icon pillar

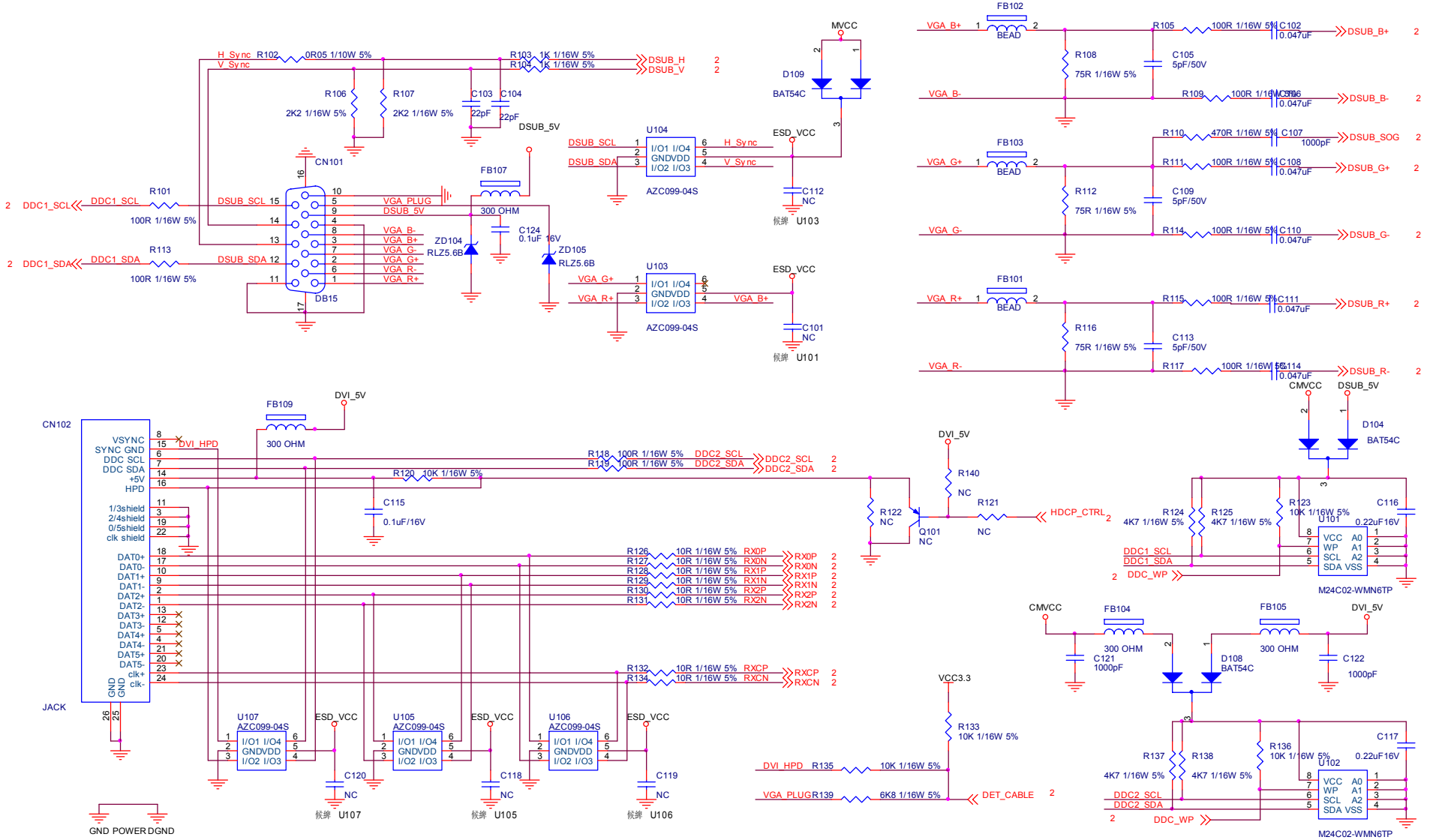
Remove the Power Board, Main Board:

Remove the screws remarked in red by Torque B or by manual and disconnect connector remarked in green.

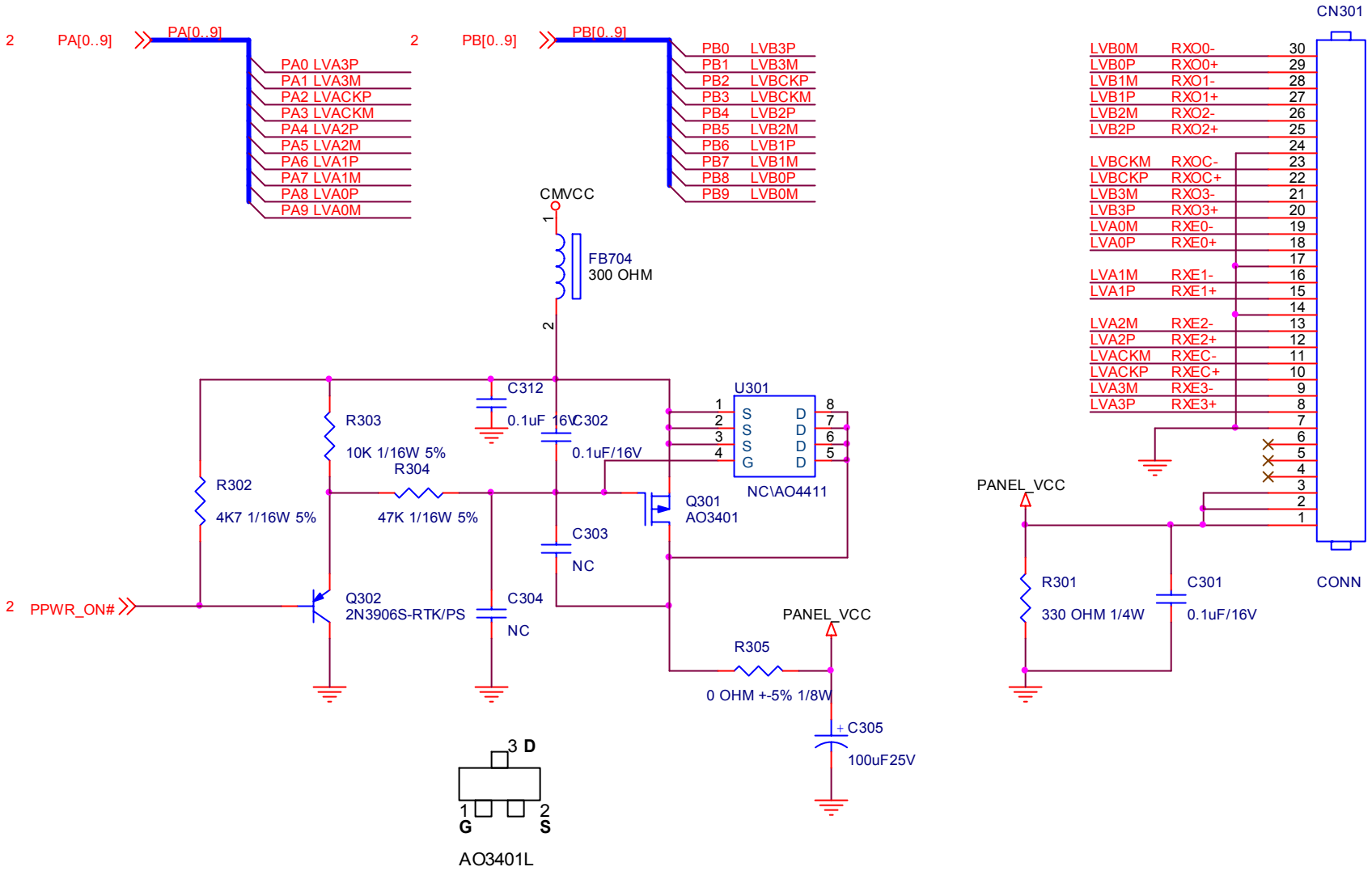
	**The panel**

7. Schematic Diagram

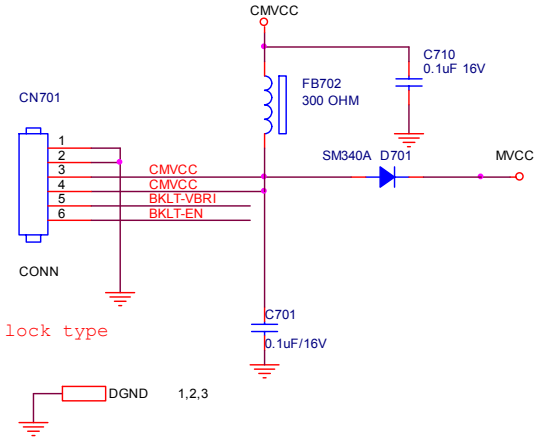
7.1 Main Board

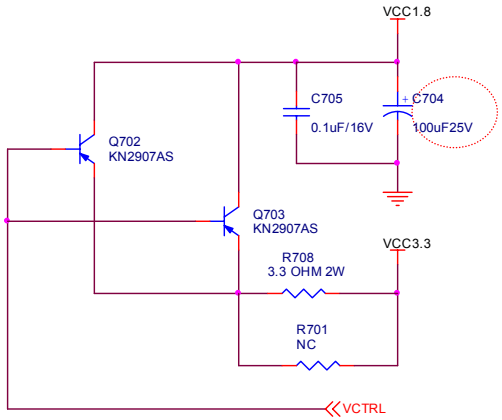


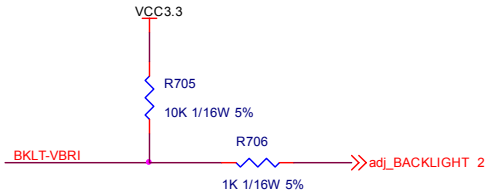
T P V （Top Victory Electronics Co . , Ltd. ）		OEM MODEL	DELL E2209W	Size	B
延 隔 瓜 銅 腹	G2883-C-2-DEL-2-080506	TPV MODEL	17W~22W	Rev	A
Key Component	2.0.INPUT	PCB NAME		称 爹	<称爹>
Date	Monday, June 02, 2008	Sheet	2 of 6		

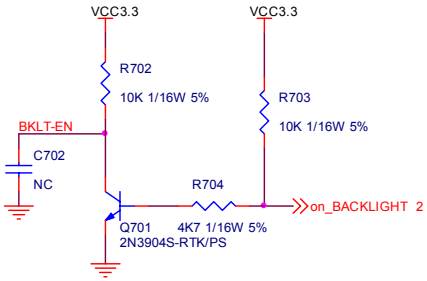


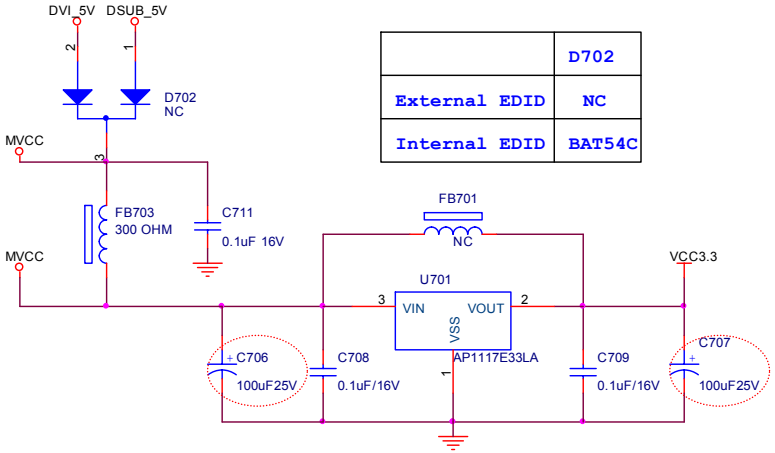
T P V （Top Victory Electronics Co . , Ltd. ）		OEM MODEL	DELL E2209W	Size	A
結 隔 瓜 網 腹	G2883-C-2-DEL-2-080506	TPV MODEL	17W~22W	Rev	A
Key Component	3.0.OUTPUT	PCB NAME		称爹	<称爹>
Date	Monday , June 02, 2008	Sheet	3 of 6		









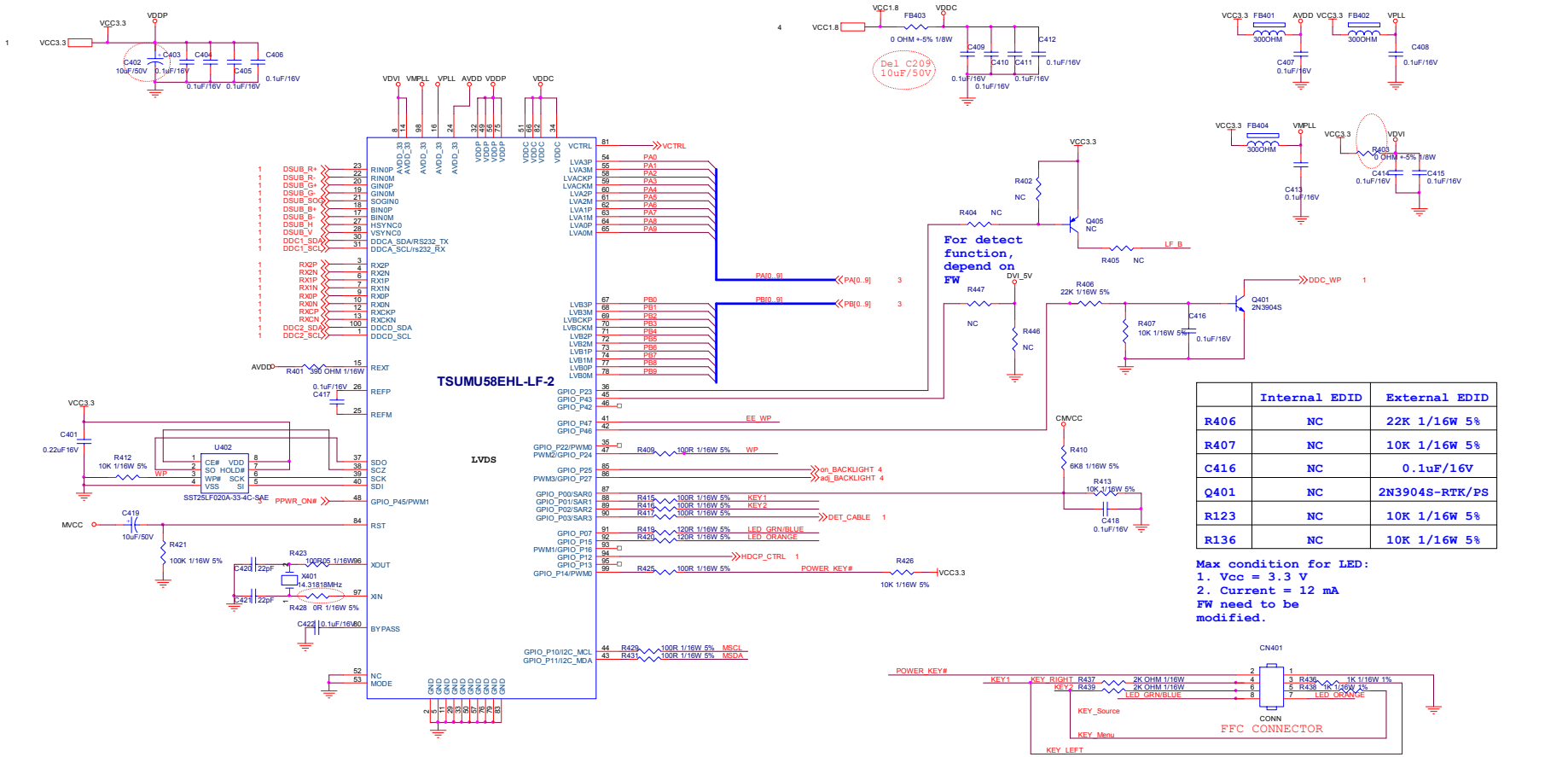


	D702
External EDID	NC
Internal EDID	BAT54C

	R701	R708	U701
TSUM5PFHL	0R05 1/4W	NC	223
TSUMU58EHL	NC	3.3 OHM 2W	223
TSUMO58CWHL	NC	3.3 OHM 2W	252

Both 223 and 252 foot-print

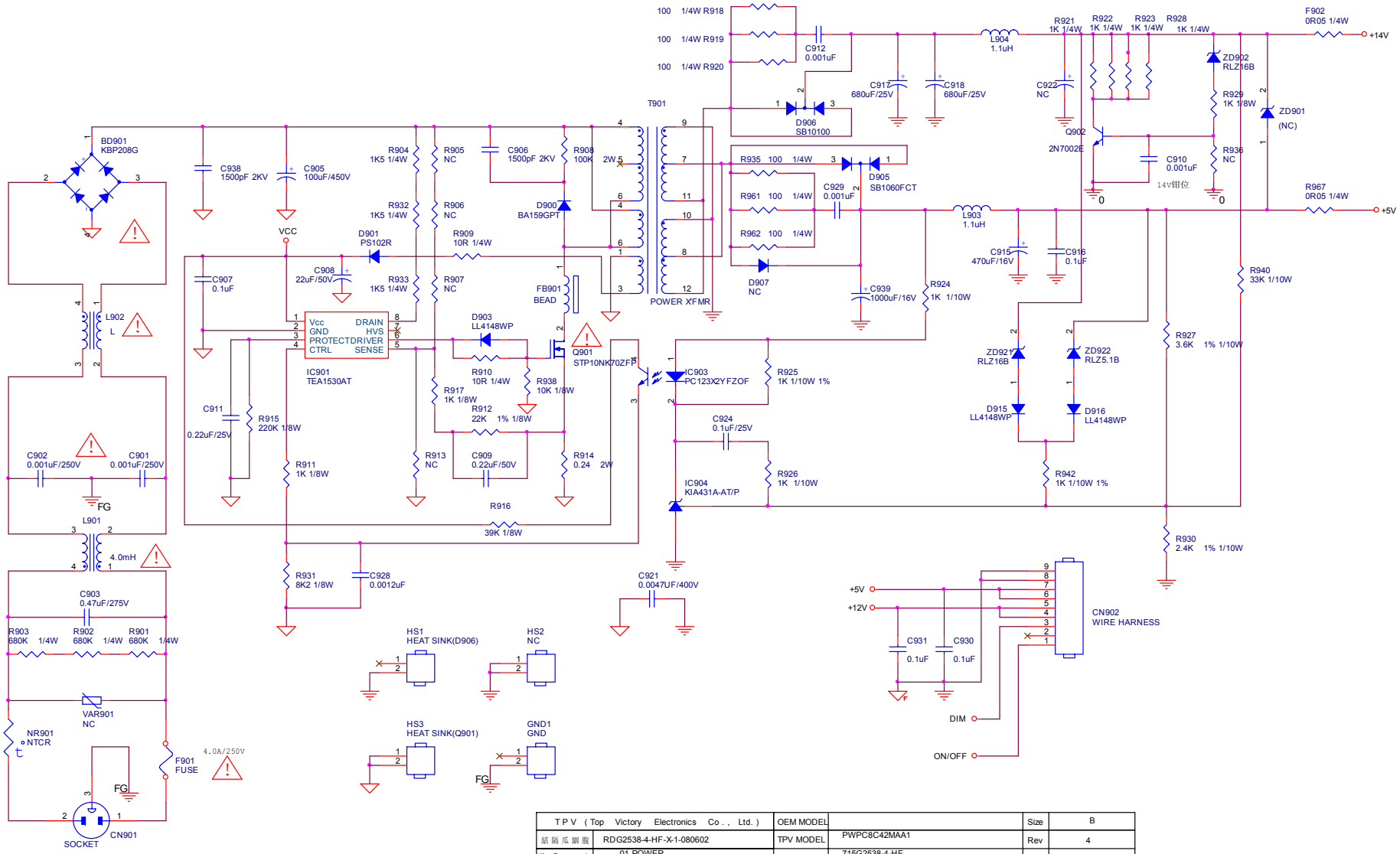
T P V （Top Victory Electronics Co . , Ltd. ）		OEM MODEL	DELL E2209W	Size	B
話 隔 瓜 綢 腹	G2883-C-2-DEL-2-080506	TPV MODEL	17W~22W	Rev	A
Key Component	4.0.POWER	PCB NAME		称爹	<称爹>
Date	Monday , June 02, 2008	Sheet	4 of 6		



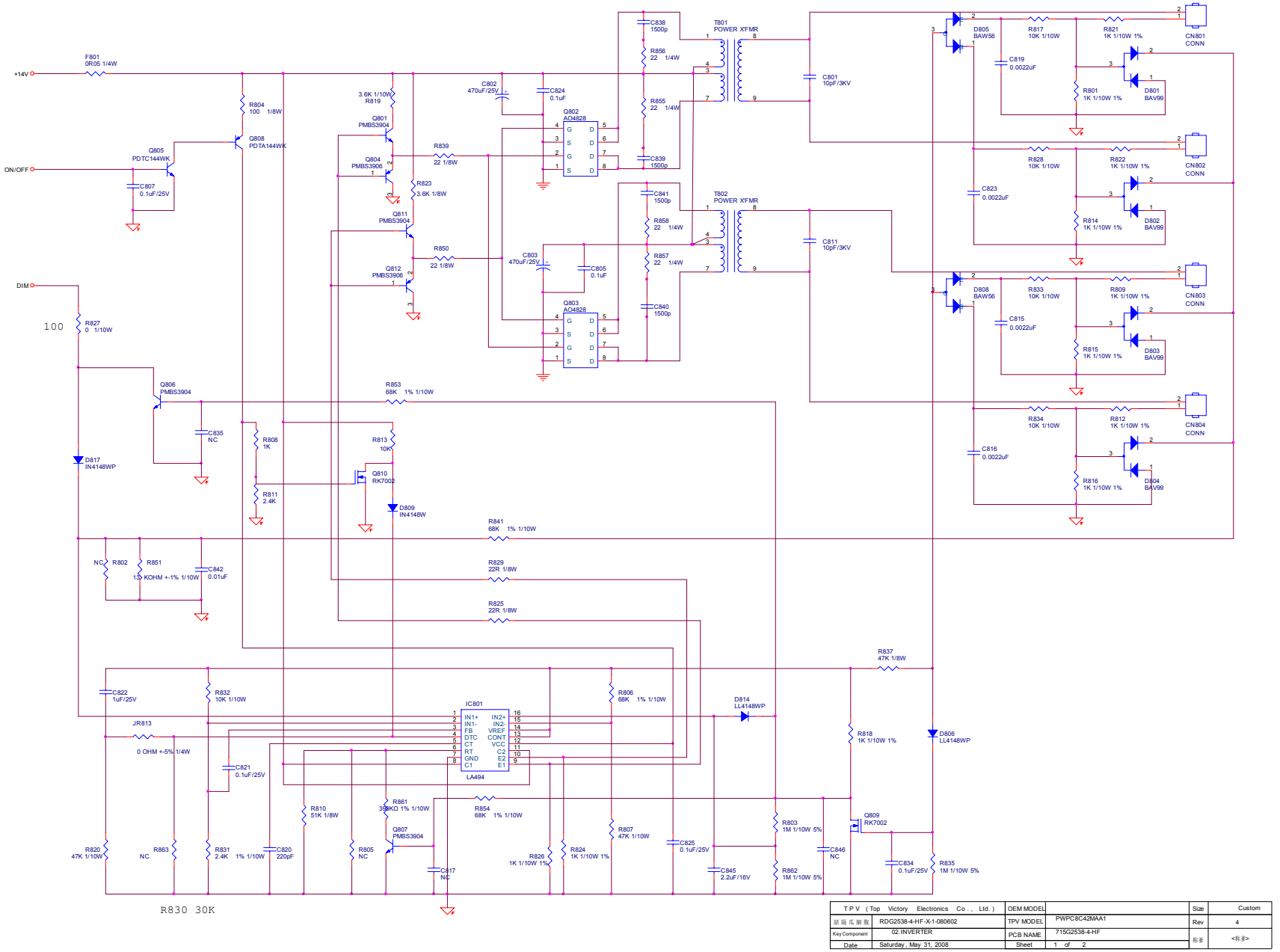
	Internal EDID	External EDID
R406	NC	22K 1/16W 5%
R407	NC	10K 1/16W 5%
C416	NC	0.1uF/16V
Q401	NC	2N3904S-RTK/PS
R123	NC	10K 1/16W 5%
R136	NC	10K 1/16W 5%

T P V (Top Victory Electronics Co., Ltd.)	OEM MODEL	DELL E2209W	Size C
結構瓜圖版	G2883-C-2-DEL-2-080506	TPV MODEL 17W~22W	Rev A
Key Component	5.0.SCALER	PCB NAME	標準 <標準>
Date Monday, June 02, 2008	Sheet 5 of 6		

7.2 Power Board

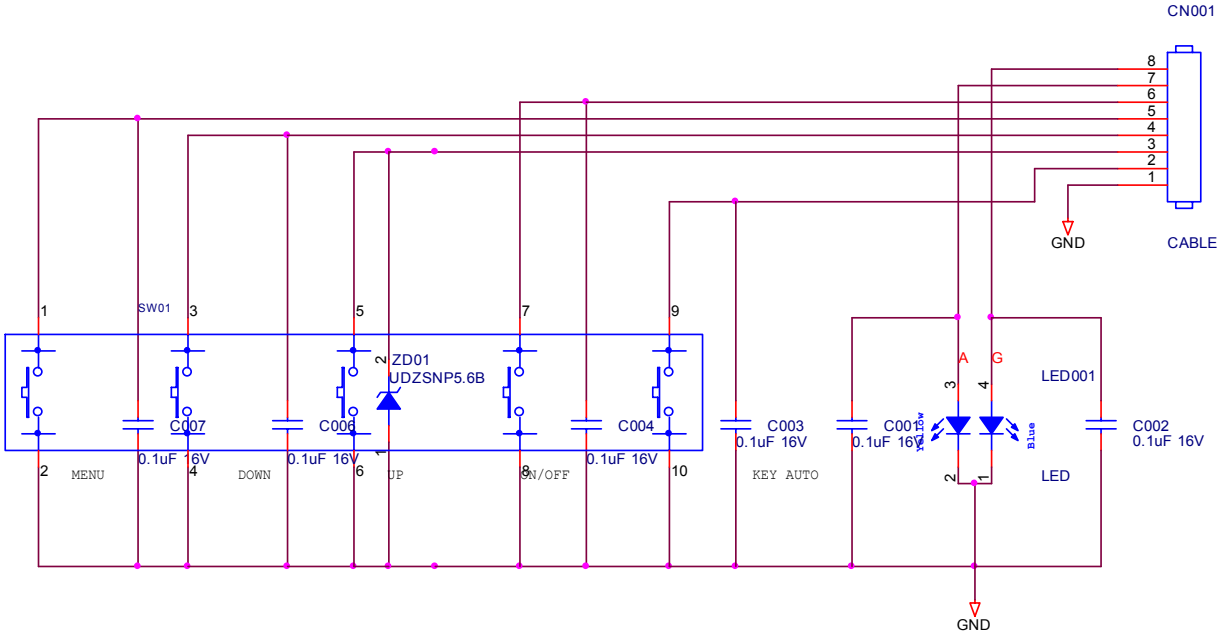


T P V （Top Victory Electronics Co . , Ltd. ）		OEM MODEL		Size	B
結 隔 瓜 鋼 腹	RDG2538-4-HF-X-1-080602	TPV MODEL	PWPC8C42MAA1	Rev	4
Key Component	01.POWER	PCB NAME	715G2538-4-HF	称爹	<称爹>
Date	Monday , June 02, 2008	Sheet	1 of 2		



T P V (Top Victory Electronics Co . , Ltd.)		OEM MODEL		Size	Custom
結 屬 瓜 銅 散	RDG2538-4-HF-X-1-080602	TPV MODEL	PWPC8C42MAA1	Rev	4
Key Component	02.INVERTER	PCB NAME	715G2538-4-HF	称 重	<称重>
Date	Saturday , May 31, 2008	Sheet	1 of 2		

7.3 Key Board



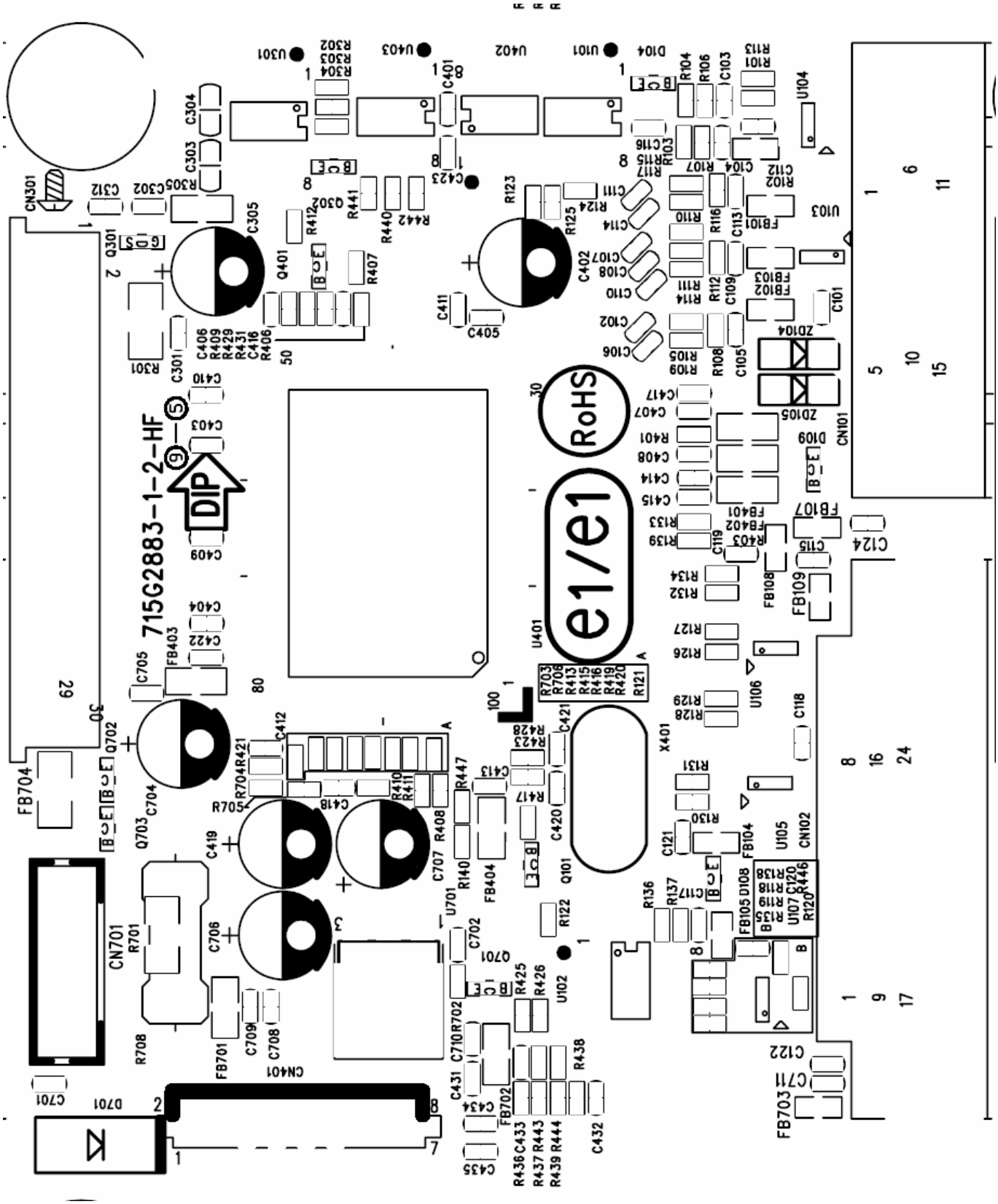
T P V （Top Victory Electronics Co . , Ltd. ）		OEM MODEL	DELL E2209W	Size	A
結 隔 瓜 網 腹	G3122-F-DEL-X-1-080602	TPV MODEL	E2209W	Rev	A
Key Component	2.KEY PAD	PCB NAME	715G3122-F	称爹	<称爹>
Date	Monday , June 02, 2008	Sheet	2 of 2		

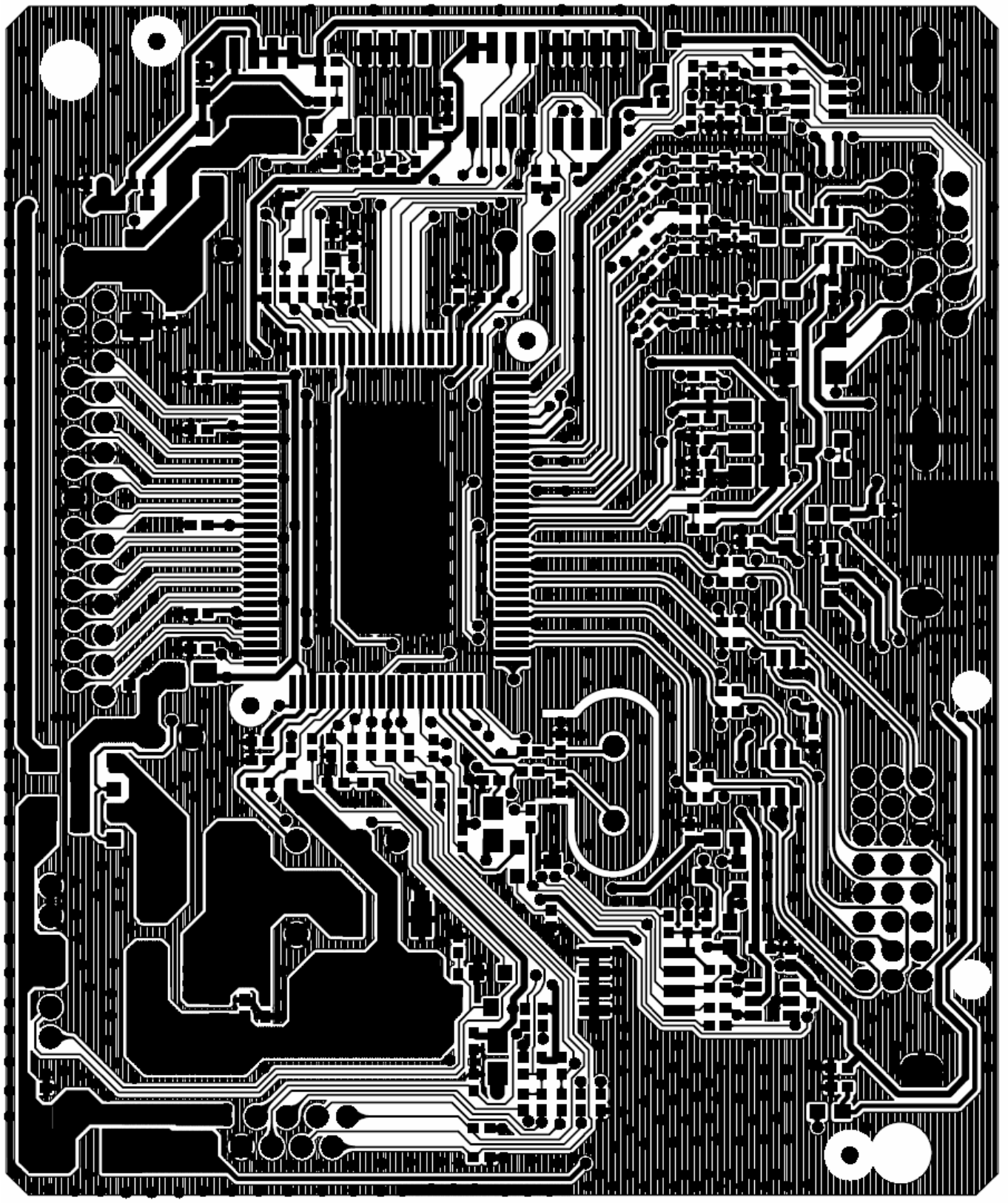
SW

AOC (Top Victory) Electronics Co., Ltd.		
Title	KEY PAD (For IBM L70)	
Size A	Document Number CONTROL KEY PAD (Switch)	Rev B
Date: Monday , June 02, 2008	Sheet 1 of 1	

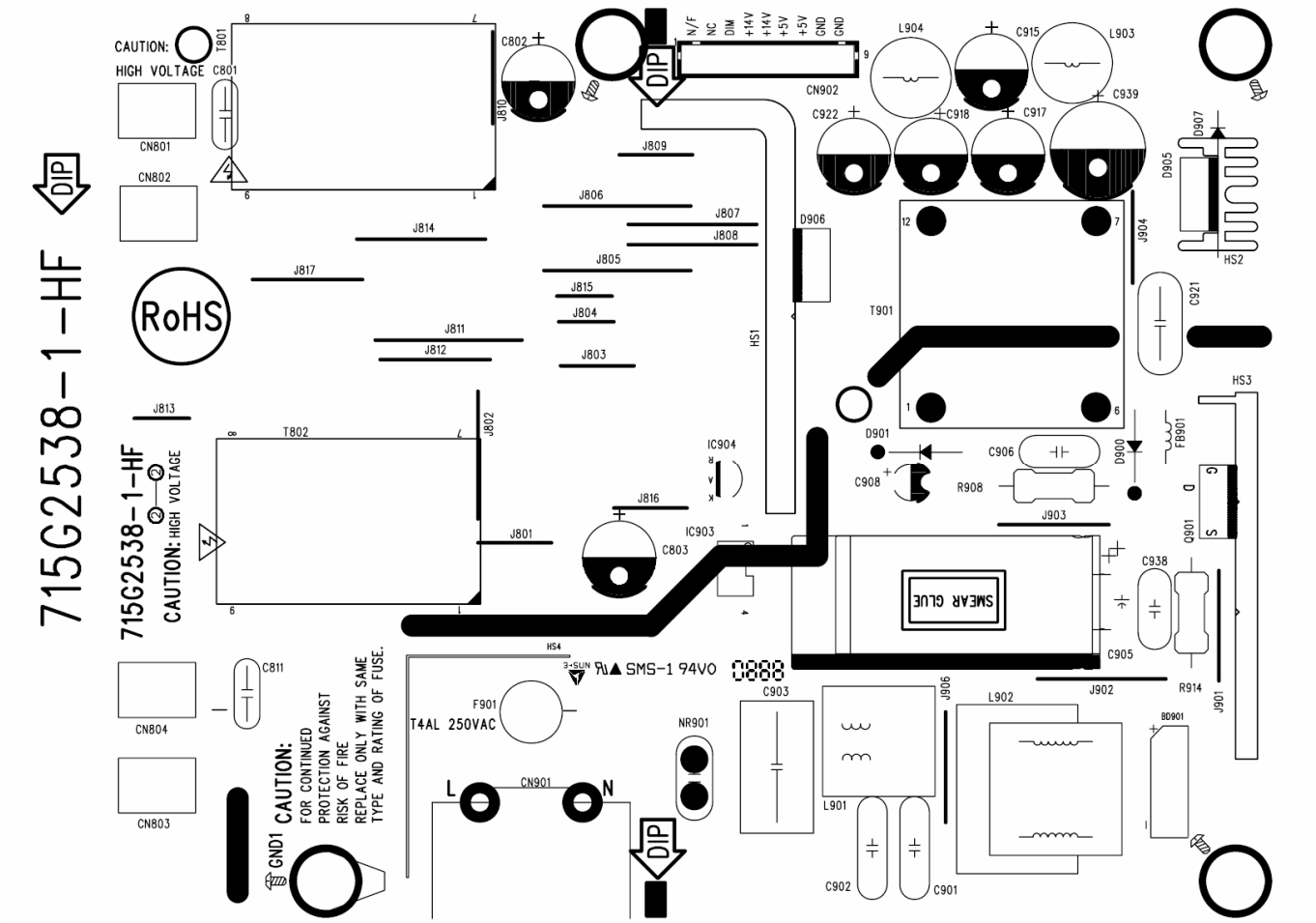
8. PCB Layout

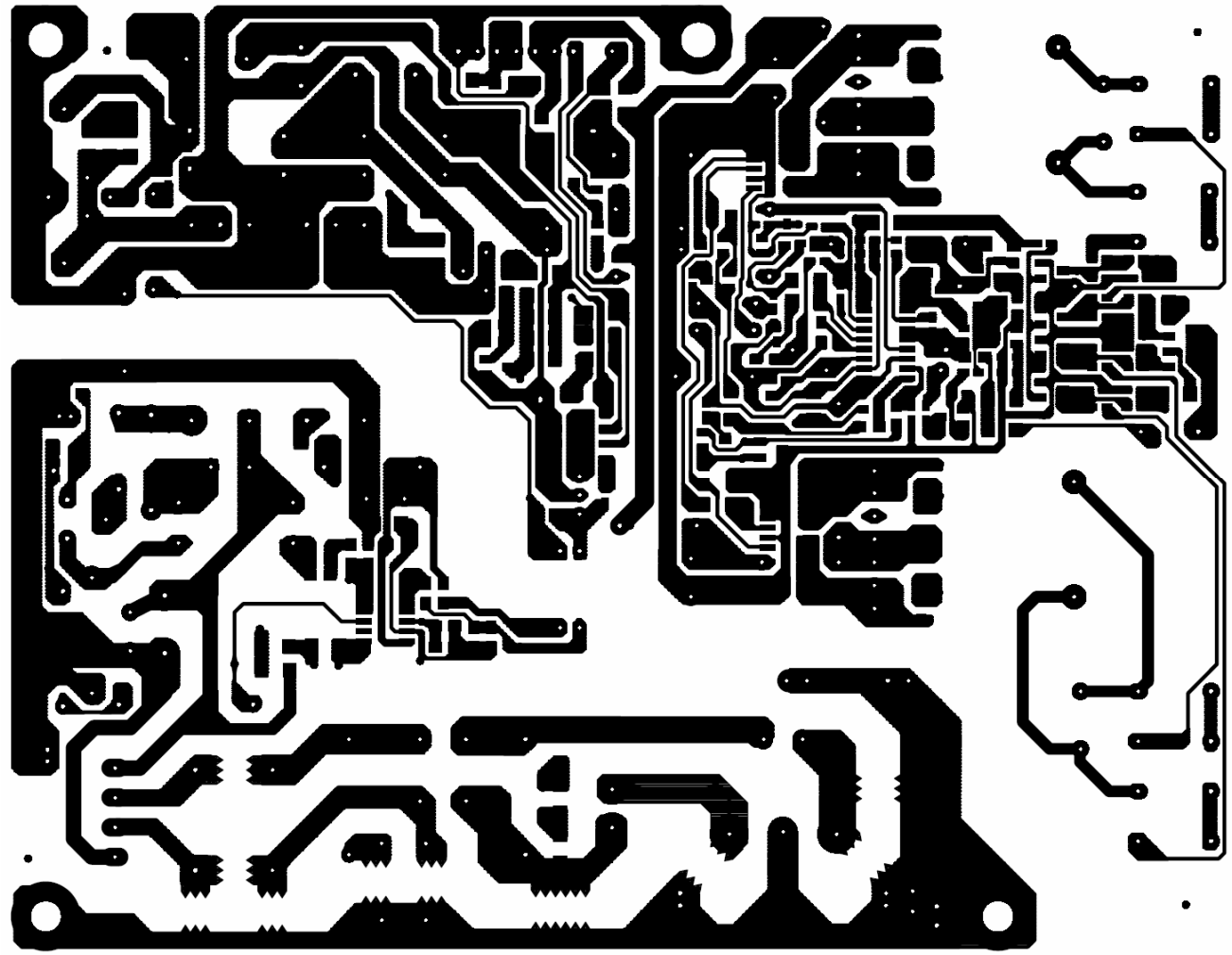
8.1 Main Board



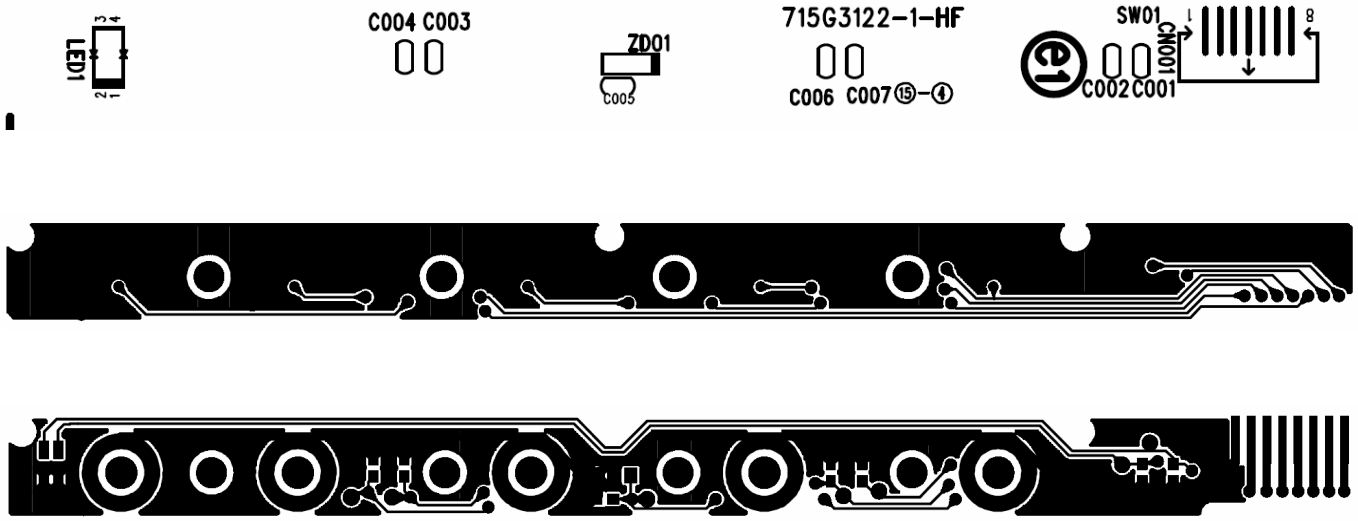


8.2 Power Board





8.3 Key Board


LED1
C004 C003
ZD01
C005
715G3122-1-HF
C006 C007
SW01
CN001
C002 C001

9. Maintainability

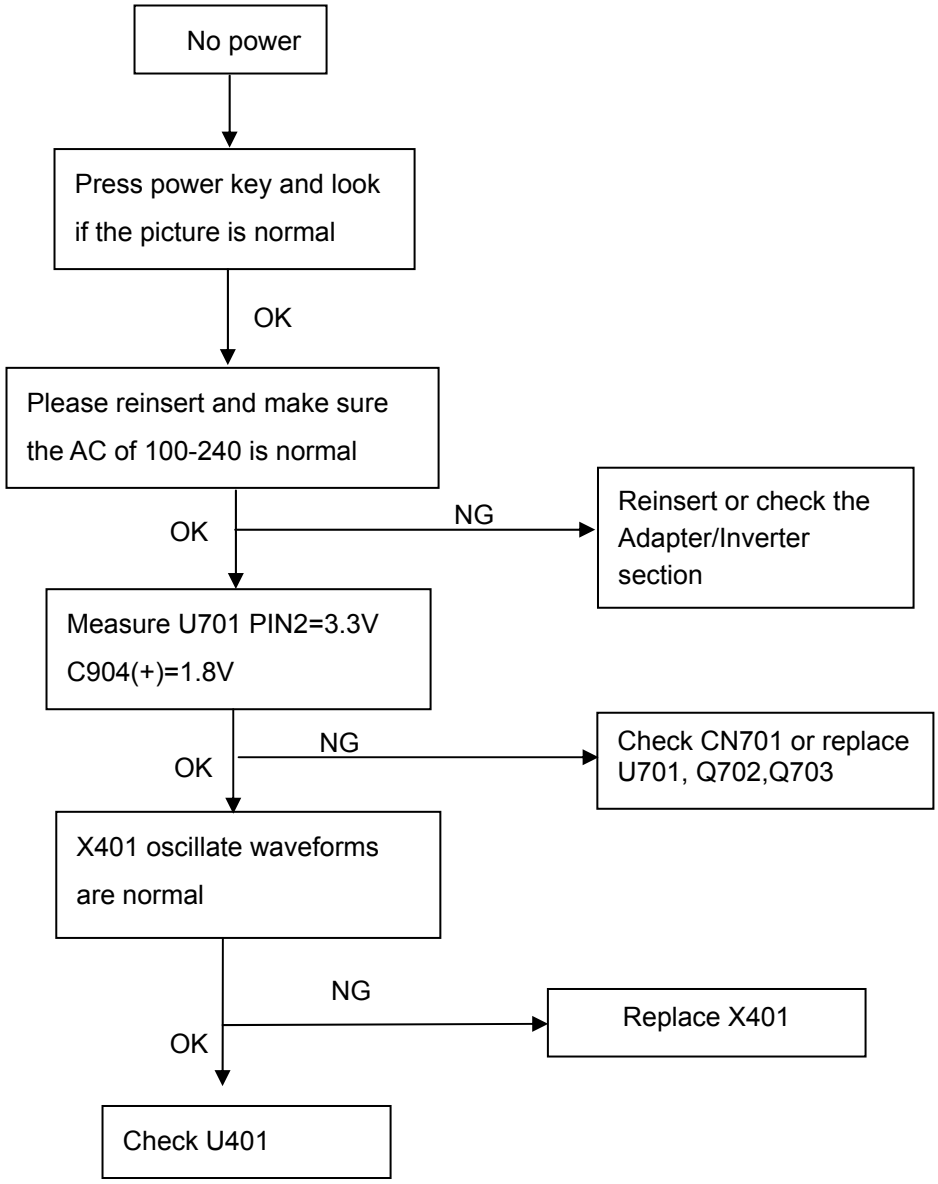
9.1 Equipments and Tools Requirement

1. Voltage meter
2. Oscilloscope
3. Pattern Generator
4. LCD Color Analyzer
5. Service Manual
6. User Manual

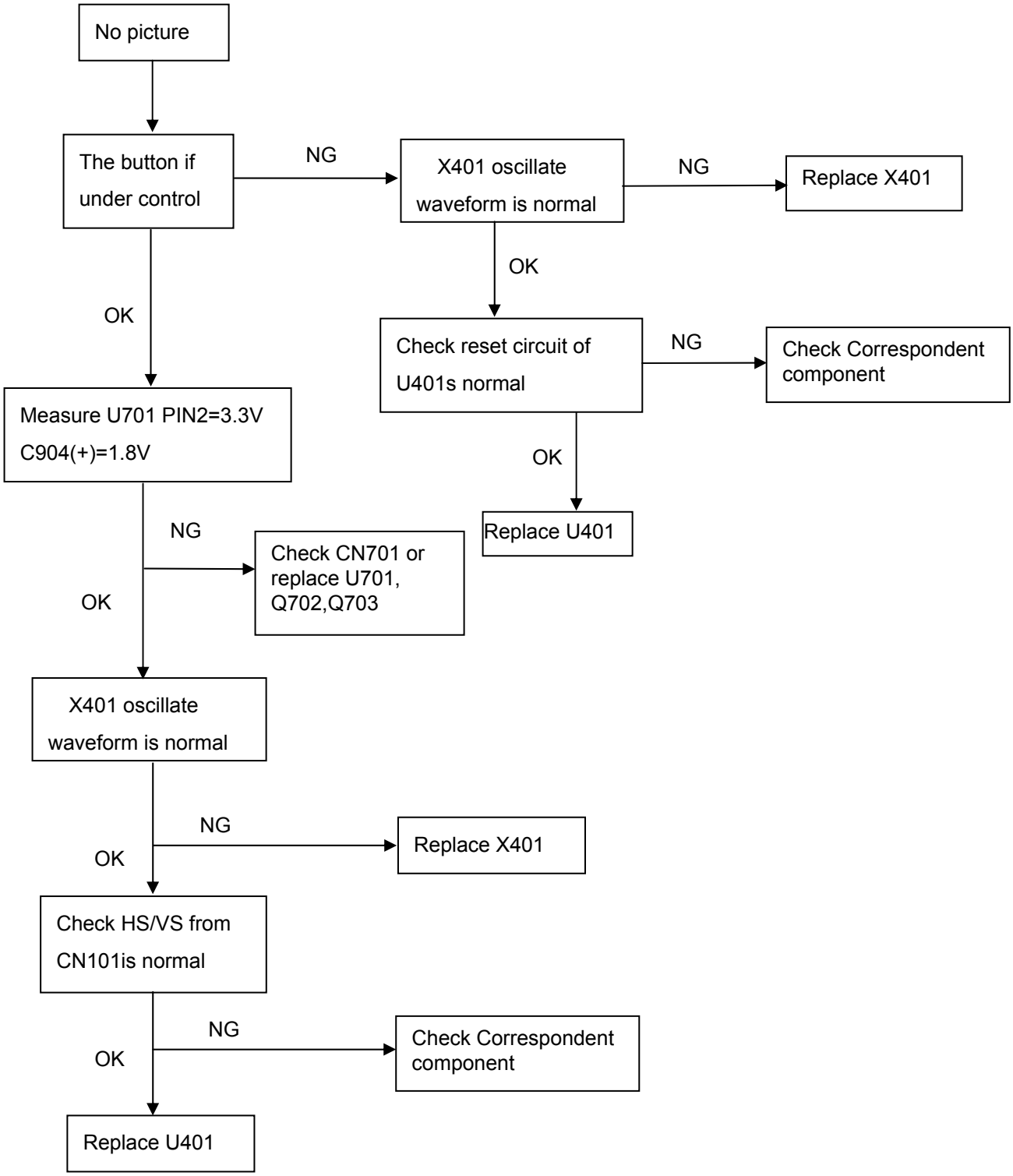
9.2 Trouble shooting

9.2.1 Main Board

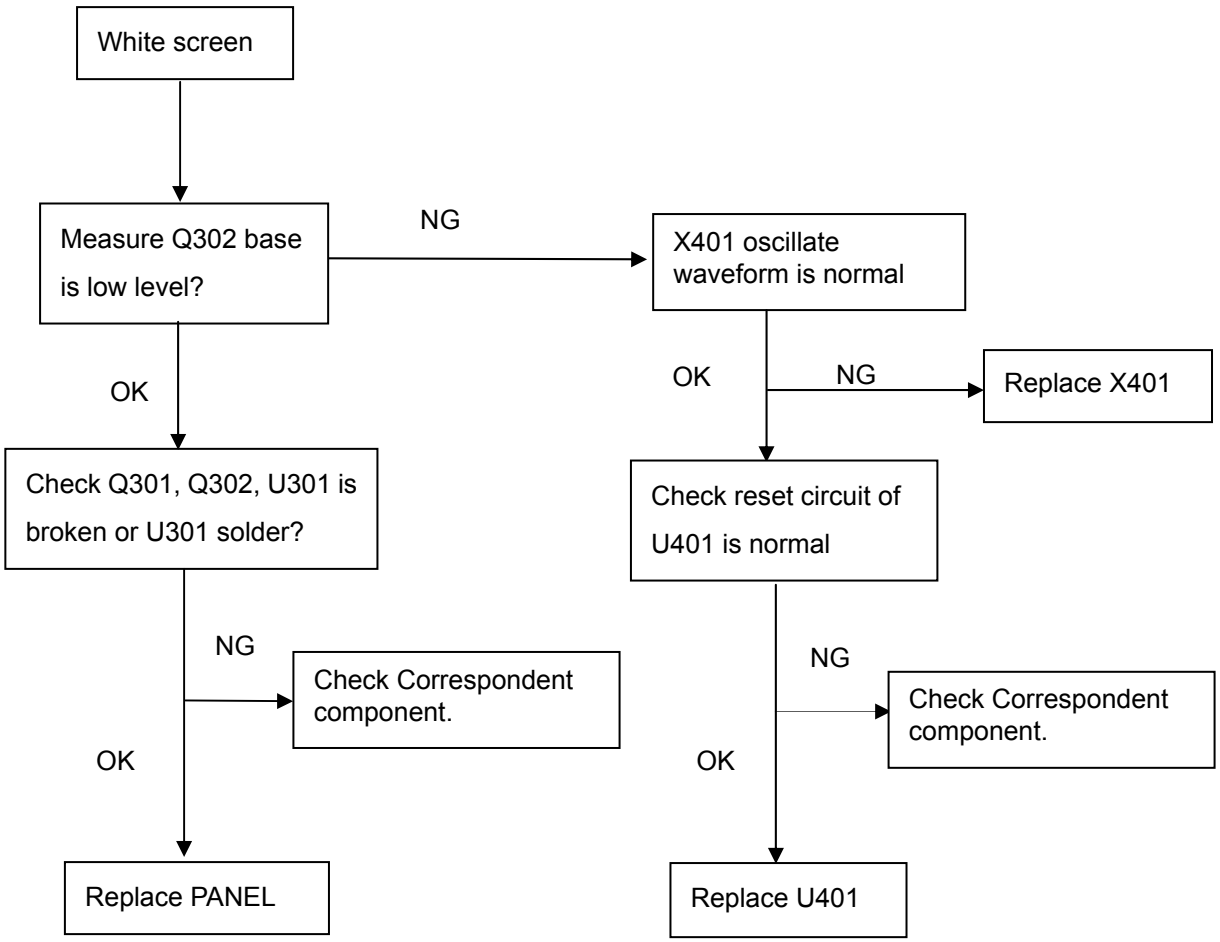
No power



No picture (LED orange)

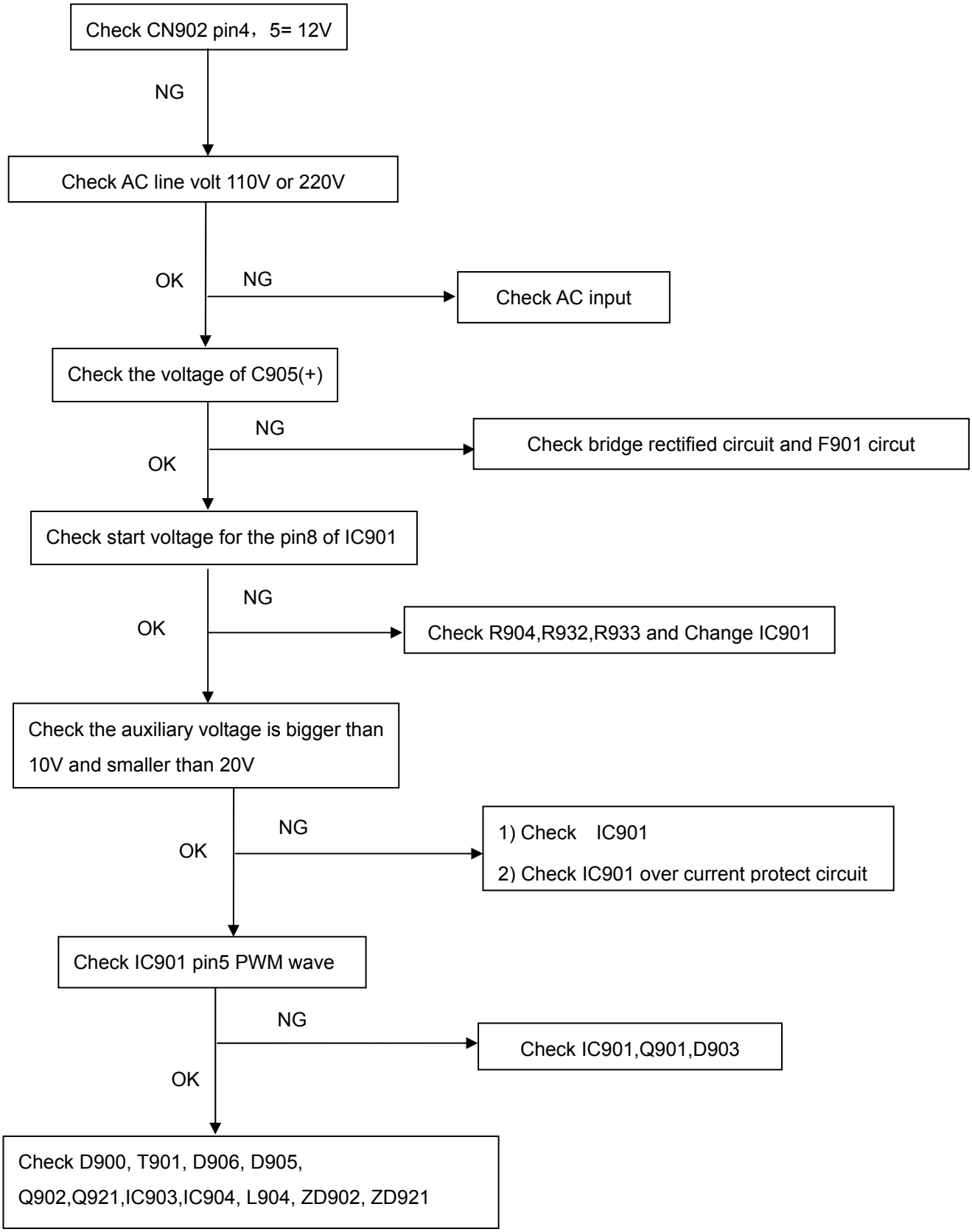


White screen

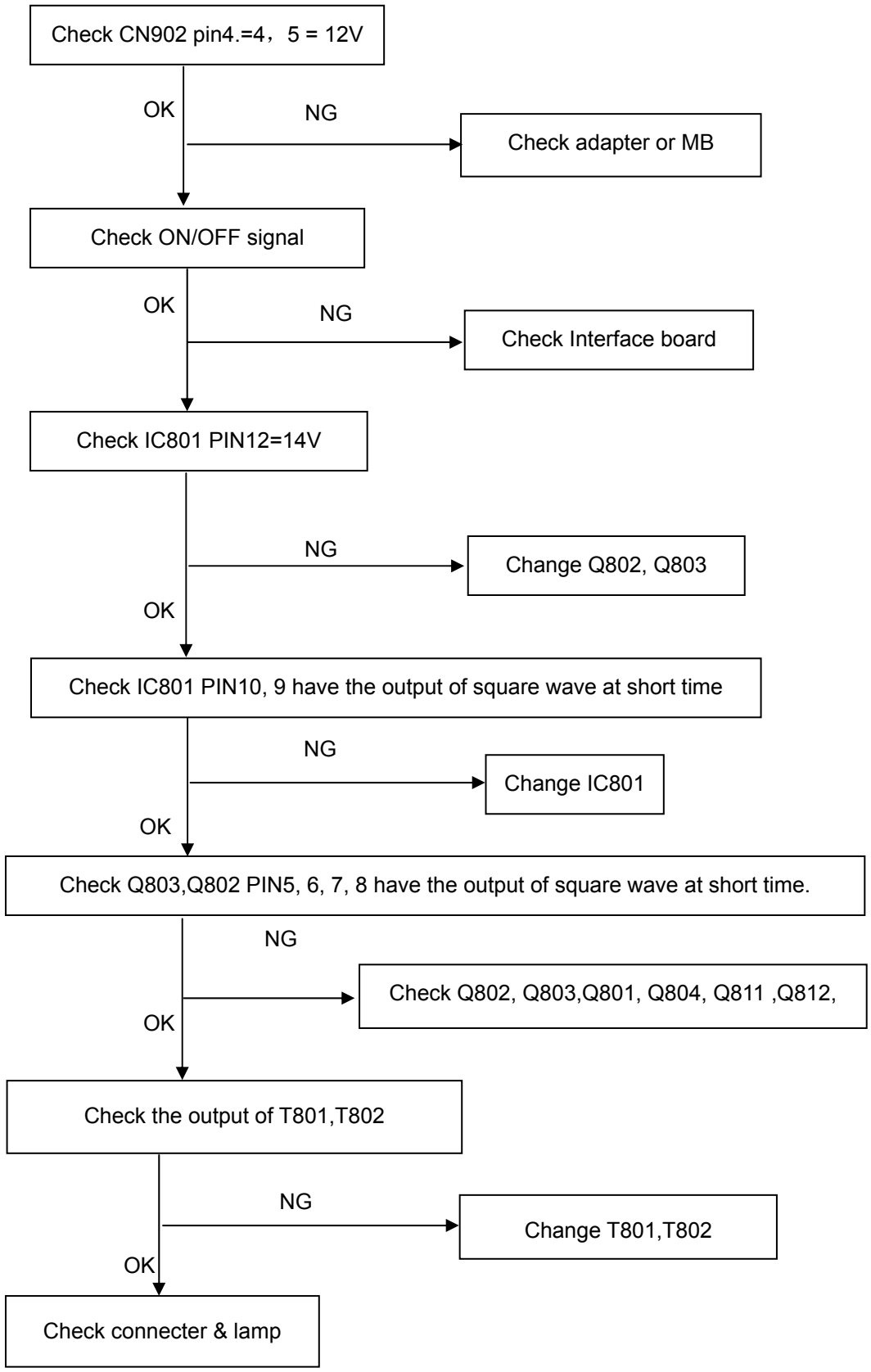


9.2.2 Power/Inverter Board

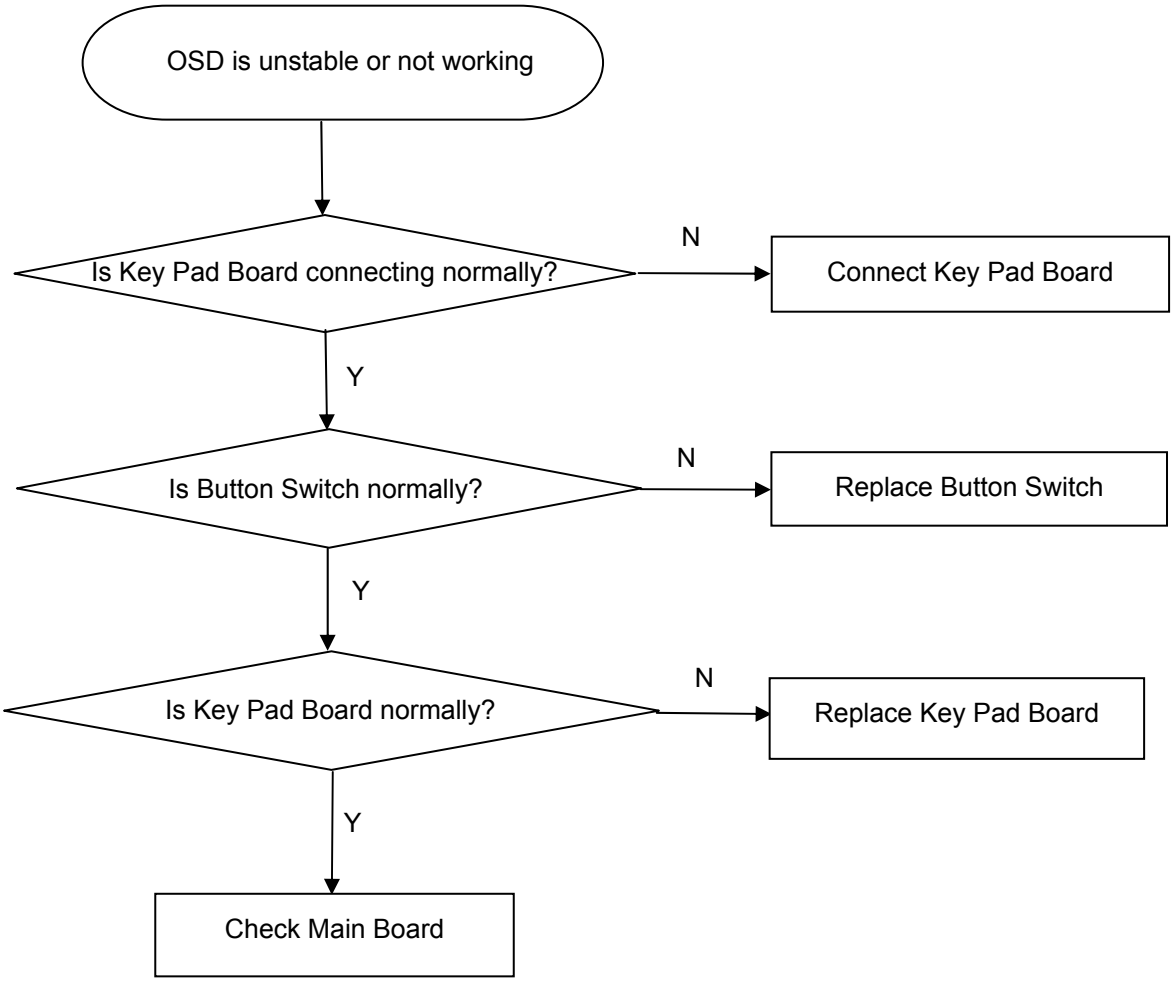
No power



No Backlight



9.2.3 Key Board



10.White balance, Luminance adjustment

Approximately 2 Hours should be allowed for warm up before proceeding White-Balance adjustment.

Before started adjust white balance, please setting the Chroma-7120 **MEM. Channel 3 to 6500^{0}K** colors, **MEM. Channel 4 to 9300^{0}K** colors, **MEM. Channel 9 to 5700^{0}K** (our 9300 parameter is x=283±28, y=297±28, Y = 200 ±20 cd/m^2, 6500 parameter is x =313±28, y=329±28, Y = 200 ±20 cd/m^2, and 5700 parameter is x = 328 ±28, y = 344 ±28, Y = 200 ±20 cd/m^2)

How to setting MEM.channel you can reference to chroma 7120 user guide or simple use " **SC"** key and " **NEXT"** key to modify x, y, Y value and use **"ID"** key to modify the TEXT description Following is the procedure to do white-balance adjust

Enter into the factory mode:

press "menu" and "+" key simultaneously and turn on monitor.

Gain adjustment:

Move cursor to "-Factory Setting-" and press MENU key to enter this sub-menu.

Move cursor to " Factory" and press MENU key.

Move cursor to " Auto Level" and press MENU key to adjust Gain and Offset automatically;

a. Adjust sRGB (6500^{0}K) 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 ±28, y = 329 ±28, Y = 200 ±20 cd/m^2
4. Adjust the RED on OSD window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on OSD, until chroma 7120 indicator reached G=100
6. Adjust the BLUE on OSD, until chroma 7120 indicator reached B=100
7. Repeat above procedure (item 5,6,7) until chroma 7120 RGB value meet the tolerance =100±2

b. Adjust **Color1** (9300^{0}K) color-temperature

8. Switch the chroma-7120 to **RGB-mode** (with press "MODE" button)
9. Switch the MEM.channel to Channel 4 (with up or down arrow on chroma 7120)
10. The LCD-indicator on chroma 7120 will show x = 283 ±28, y = 297 ±28, Y = 200 ±20 cd/m^2
11. Adjust the RED on OSD window until chroma 7120 indicator reached the value R=100
12. Adjust the GREEN on OSD, until chroma 7120 indicator reached G=100
13. Adjust the BLUE on OSD, until chroma 7120 indicator reached B=100
14. Repeat above procedure (item 5,6,7) until chroma 7120 RGB value meet the tolerance =100±2

c. Adjust **Color2** (5700^{0}K) color-temperature

15. Switch the chroma-7120 to **RGB-mode** (with press "MODE" button)
16. Switch the MEM.channel to Channel 9 (with up or down arrow on chroma 7120)
17. The LCD-indicator on chroma 7120 will show x = 328 ±28, y = 344 ±28, Y = 200 ±20 cd/m^2
18. Adjust the RED on OSD window until chroma 7120 indicator reached the value R=100

19. Adjust the GREEN on OSD, until chroma 7120 indicator reached G=100
20. Adjust the BLUE on OSD, until chroma 7120 indicator reached B=100
21. Repeat above procedure (item 5,6,7) until chroma 7120 RGB value meet the tolerance =100±2
22. Move cursor to " Exit/Save" sub-menu and press MENU key to save adjust value and exit.

Turn the POWER-button off to on to quit from factory mode.

Max Brightness measurement: >300 cd/㎡

Test conditions:

a. Switch to the full white pattern, in user mode main menu:

1. Set <Color Settings> Red, Green, and Blue to the max.
2. Set <Brightness> Brightness, Contrast to the max.

b. The Minimum brightness is ：**<** 40% of Max luminance (max luminance = max contrast + max brightness)

Test conditions:

Set <Brightness> Brightness, Contrast to the min.

11. ISP Instruction

Configure and procedure

It is a windows-based program, which cannot be run in MS-DOS.

System and equipment requirements

(1). An i486 (or above) personal computer or computer or compatible.

(2). Microsoft operation system Window 95/98/2000/XP.

(3). ISP Tool: ISP board/printer cable/VGA cable as shown in Fig.1

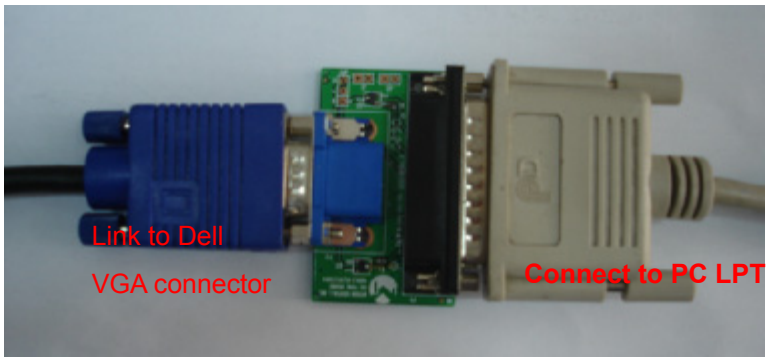
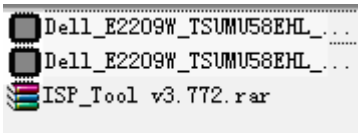


Fig.1

(4). ISP software checklist



(5). Update the firmware

Step 1: Double click the ISP_Tool v3.772.exe  icon and click Connect, bring up Fig.2

Fig.2

Step 2: Click OK and click Read, select program Bin file, bring up Fig.3

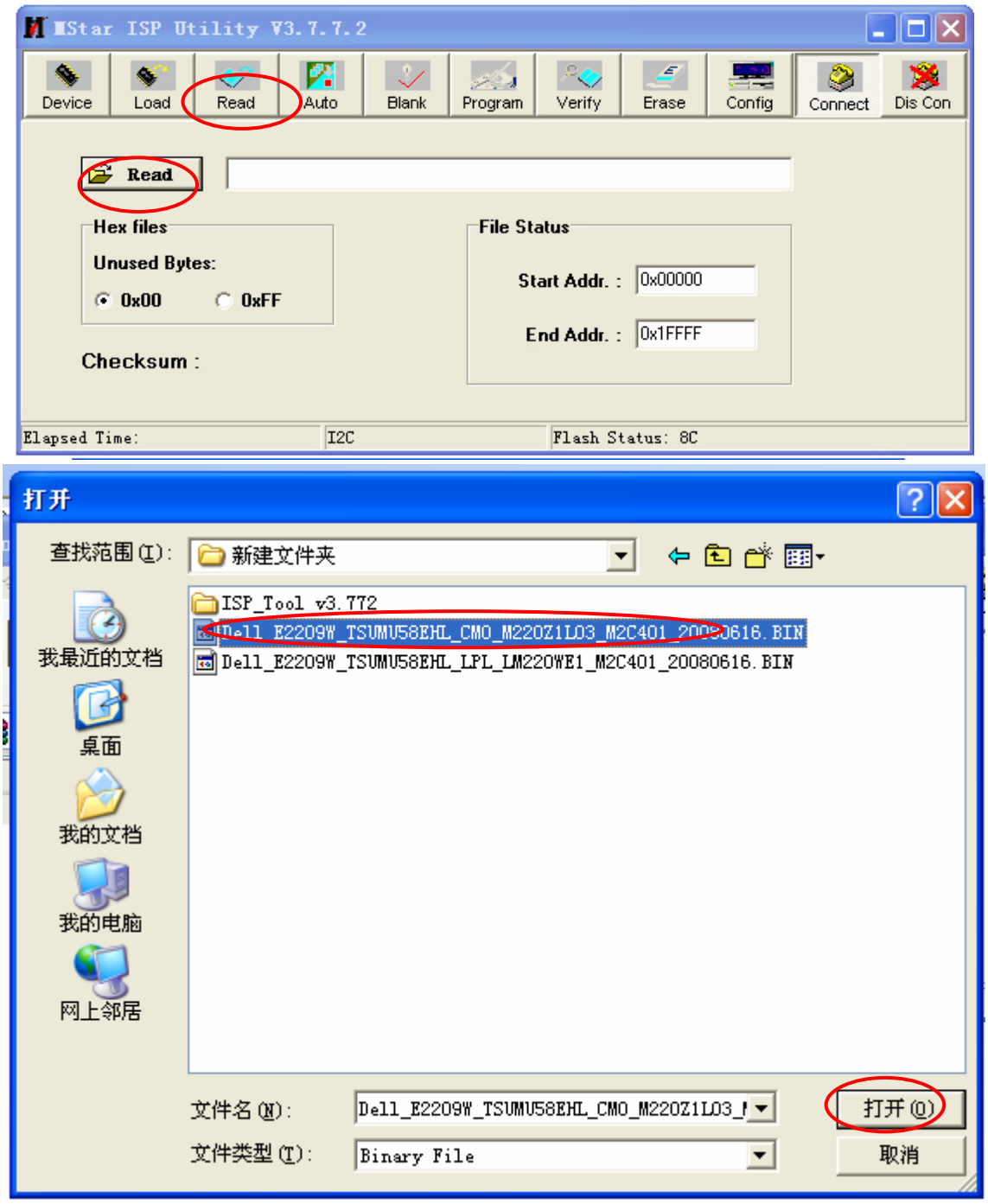


Fig.3

Step3: Click open and OK, bring up Fig.4 and Fig.5

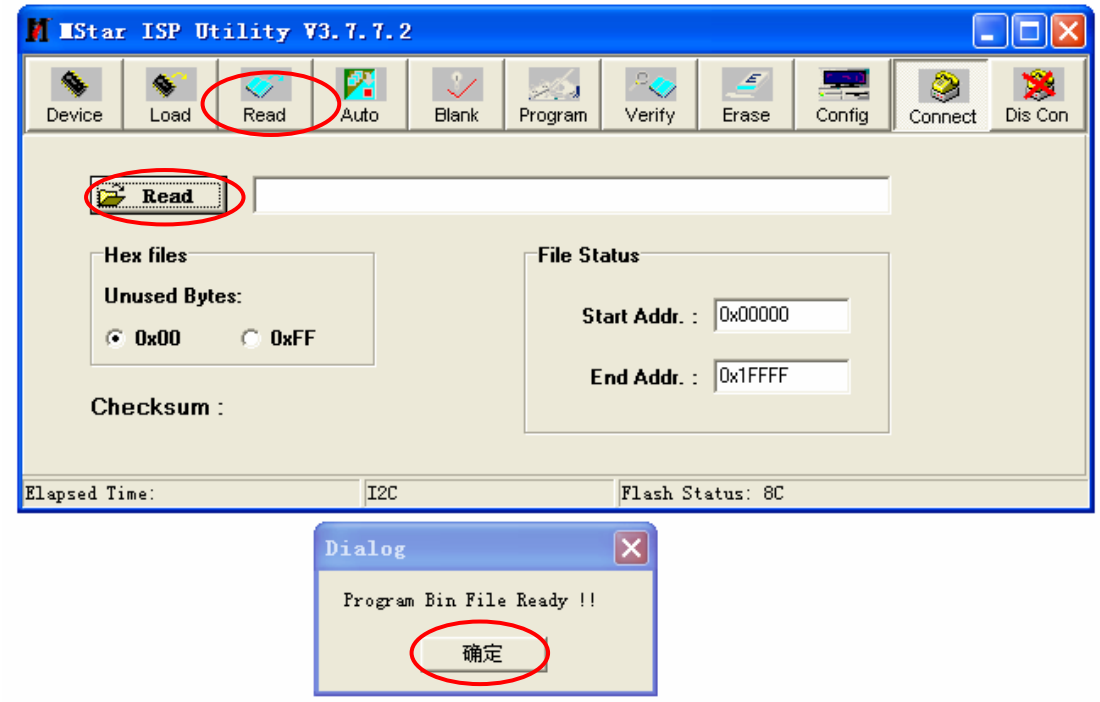


Fig.4

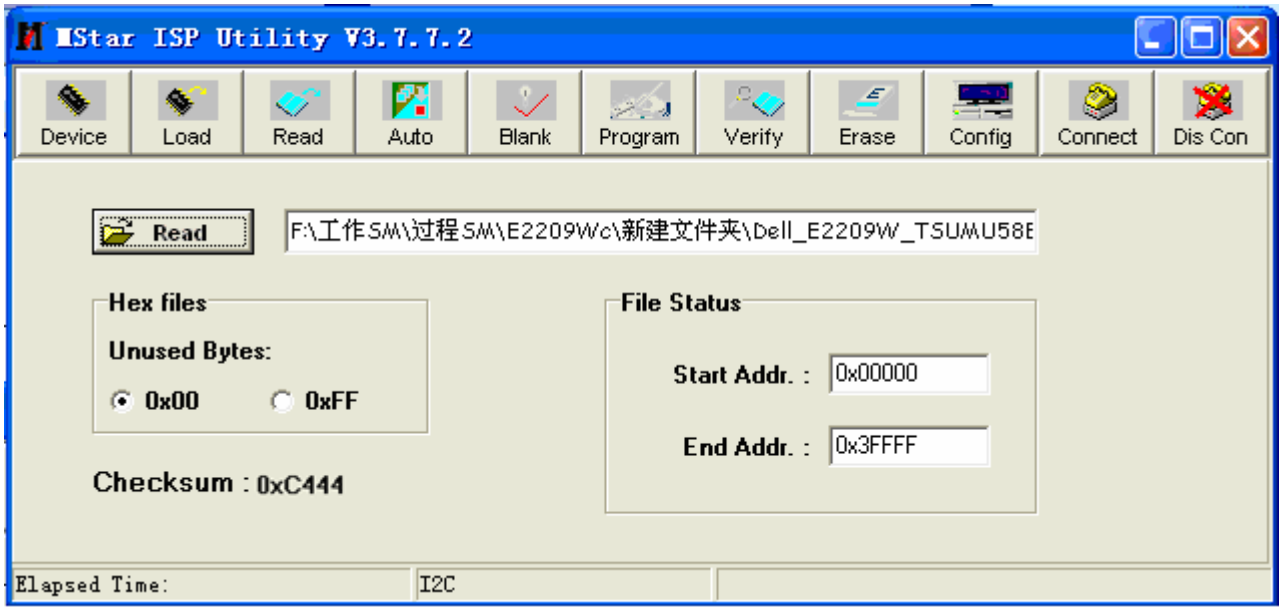


Fig.5

Step 4: Click Auto and Run, bring up Fig.6

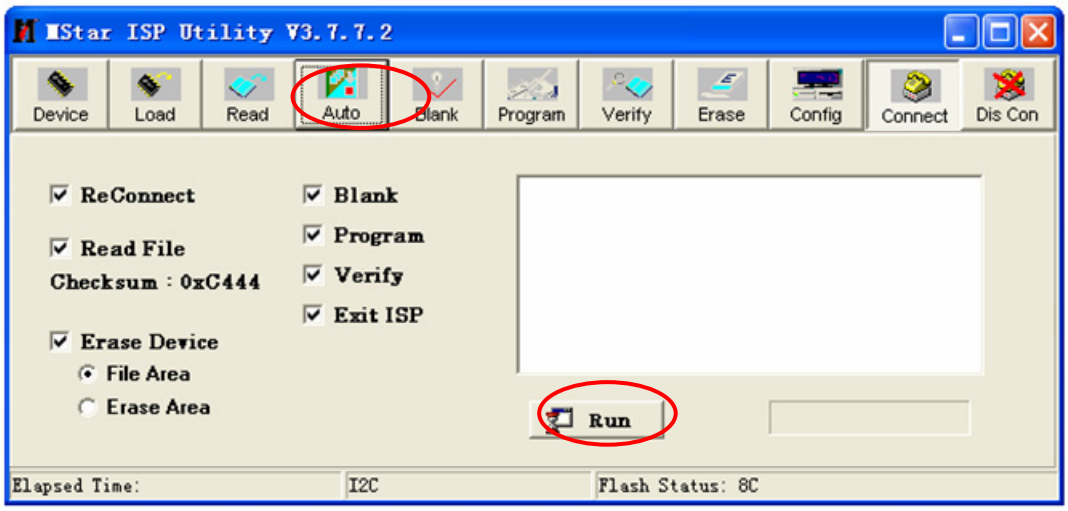


Fig.6

Step 5: When appear Verify OK, writer finished as shown Fig.7

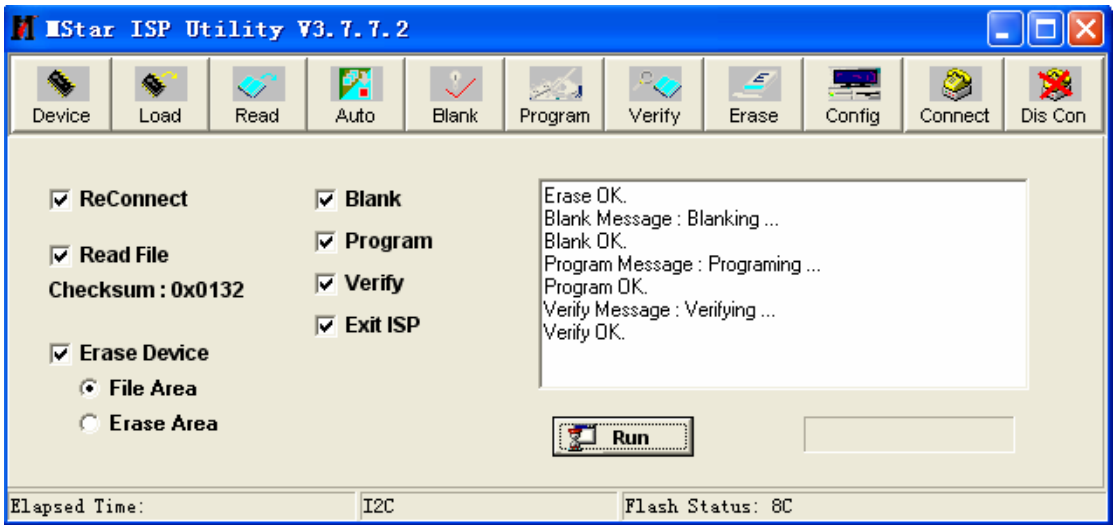
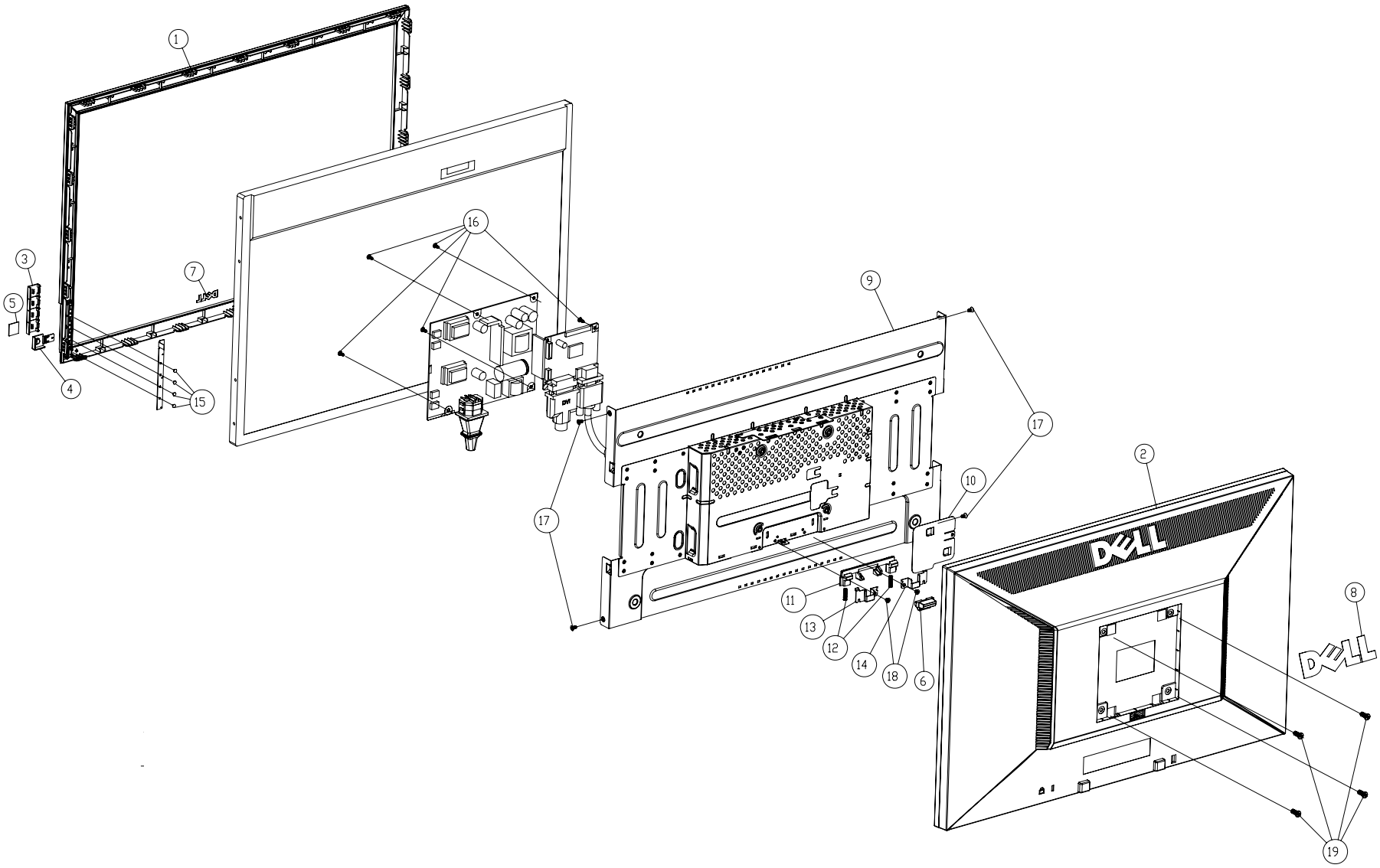


Fig.7

12. Exploded View



ITEM	PART NAME	ITEM	PART NAME
1	BEZEL E2209WC	11	N/A
2	REAR_COVER E2209WC	12	SPRING -HOLDER
3	CONTROL BUTTON	13	HOLDER BRACKET L
4	POWER BUTTON	14	HOLDER BRACKET R
5	POWER LENS	15	SCREW
6	RELEASE BUTTON	16	SCREW
7	LOGO	17	SCREW
8	N/A	18	SCREW
9	MAINFRAME LG	19	SCREW
10	SHIELD-OSD-WIRE		

13. BOM List

TC8GMAHKWMDDHN

Location	Part No.	Description	Remark
	012G6039 4	RUBBER PAD	
	019G 588 3	SPRING -HOLDER	
	050G 600 1 W	WHITE STRAP	
	052G 1150 C	INSULATING TAPE	
	052G 1186	SMALL TAPE	
	052G6019 1	INSULATING TAPE	
	052G6022 1500	SMALL TAPE	
	070GHDCP500HDC	HDCP CODE	
	089G 728GAA 2D	SIGNAL CABLE	
	089G1748GAA 1D	DVI CABLE	
	089G402A18NYHD	POWER CORD	
	0M1G 130 4120	SCREW M3X5	
	0M1G 130 6120	SCREW M3X6	
	0M1G1730 6120	SCREW,42-D020523	
	0M1G2940 10225 CR3	SCREW	
E750	750GLG220E1E11Z0DL	PANEL LM220WE1-TLE1 KR LGD	
E750	750GLG220E1E43Z0DL	PANEL LM220WE1-TLE4 GZ LGD	2nd source
	A15G0437101	Mainframe LG	
	A33G0392 VH 1X0100	RELEASE BUTTON	
	A33G0446 VH 1L0100	POWER BUTTON	
	A33G0447 VHA1L0100	CONTROL BUTTON	
	A34G0826 VH 1S0130	BEZEL E2209Wc	
	A34G0827 VH 1S0130	REAR_COVER E2209Wc	
	A37G0086 1	HINGE ASSEMBLY	
	A85G0116101	SHIELD-OSD-WIRE	
	CBPC8GMADLQ1	MAIN BOARD G2883-C-2-DEL-2-080602	
	040G 45762412B	CBPC LABEL	
CN701	033G3802 6B Y	CONN 6PIN 2.0	
CN401	033G8019 8C B J	CONNECTOR	
CN301	033G801930F CH JS	CONNECTOR	
R708	061G152M33952T	RST MOFR 3.3 OHM +-5% 2WS	
C402	067G 3151007KV	ELCAP 10UF M 50V 105℃ KINGNICHI	
C305	067G 3151014KV	EC 105℃ CAP 100uF M 25V	
C419	067G215V100 7N	KY50VB10-M-CC3 5*11.5MM 10uF M 50V	
C706	067G215V101 4N	KY25VB100M-CC3(6.3*11) 100uF M 25V	
C707	067G215V101 4N	KY25VB100M-CC3(6.3*11) 100uF M 25V	

C704	067G215V101 4N	KY25VB100M-CC3(6.3*11) 100uF M 25V	
CN101	088G 35315F H	D-SUB 15PIN	
CN102	088G 35424F HA	DVI CONN 24P FEMALE + SHIELD	
X401	093G 22 53 J	14.31818MHZ/32PF/49US	
U401	056G 562568	IC TSUMU58EHL-LF-2	
U107	056G 662 13	IC AZC099-04S SOT23-6L	
U106	056G 662 13	IC AZC099-04S SOT23-6L	
U105	056G 662 13	IC AZC099-04S SOT23-6L	
U104	056G 662 13	IC AZC099-04S SOT23-6L	
U103	056G 662 13	IC AZC099-04S SOT23-6L	
U102	056G1133 34	M24C02-WMN6TP	
U101	056G1133 34	M24C02-WMN6TP	
U403	056G1133 56	M24C16-WMN6TP	
U402	056G1133 81(WDLMATCGKQ1)	SST25LF020A-33-4C-SAE	
U701	056T 585 4A	AP1117E33LA	
Q701	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q401	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q302	057G 417 13 T	KEC 2N3906S-RTK/PS	
Q702	057G 417 22 T	TRA KN2907AS -60V/-0.6A SOT-23	
Q703	057G 417 22 T	TRA KN2907AS -60V/-0.6A SOT-23	
Q301	057G 763 1	A03401 SOT23 BY AOS(A1)	
R428	061G0402000	RST CHIPR 0 OHM +-5% 1/16W	
R126	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R127	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R128	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R129	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R130	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R131	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R132	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R134	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	
R436	061G0402100 1F	RST CHIPR 1KOHM +-1% 1/16W	
R438	061G0402100 1F	RST CHIPR 1KOHM +-1% 1/16W	
R117	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R118	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R119	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R111	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R109	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R105	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R101	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	

R113	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R114	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R115	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R423	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R431	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R429	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R425	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R417	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R416	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R415	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R409	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R706	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R104	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R103	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R702	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R442	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R441	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R440	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R426	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R413	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R412	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R411	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R408	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R303	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R135	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R133	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R120	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R703	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R705	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R407	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R123	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R136	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R421	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W	
R420	061G0402121	RST CHIP 120R 1/16W 5%	
R419	061G0402121	RST CHIP 120R 1/16W 5%	
R437	061G0402202	RST CHIP 2K 1/16W 5%	
R439	061G0402202	RST CHIP 2K 1/16W 5%	
R106	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R107	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R406	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	

R401	061G0402390 0F	RST CHIP 390R 1/16W 1%	
R444	061G0402390 1F	RST CHIPR 3.9KOHM +-1% 1/16W	
R443	061G0402390 1F	RST CHIPR 3.9KOHM +-1% 1/16W	
R110	061G0402471	RST CHIPR 470 OHM +-5% 1/16W	
R124	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R125	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R137	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R138	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R302	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R704	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R304	061G0402563	RST CHIP 56K 1/16W 5%	
R139	061G0402682	RST CHIP 6K8 1/16W 5%	
R410	061G0402682	RST CHIP 6K8 1/16W 5%	
R108	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R112	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R116	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R102	061G0603000	RST CHIPR 0 OHM +-5% 1/10W	
R403	061G0805000 F	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R305	061G0805000 F	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
FB403	061G0805000 F	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R301	061G1206331	RST CHIPR 330 OHM +-5% 1/4W	
C107	065G0402102 32	1000PF +-10% 50V X7R	
C121	065G0402102 32	1000PF +-10% 50V X7R	
C122	065G0402102 32	1000PF +-10% 50V X7R	
C124	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C710	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C416	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C711	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C312	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C413	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C412	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C411	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C410	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C409	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C408	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C407	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C406	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	

C405	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C404	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C403	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C302	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C301	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C115	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C705	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C709	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C708	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C701	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C435	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C434	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C433	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C432	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C431	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C422	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C418	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C417	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C415	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C414	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C421	065G0402220 31	CHIP 22PF 50V NPO	
C420	065G0402220 31	CHIP 22PF 50V NPO	
C104	065G0402220 31	CHIP 22PF 50V NPO	
C103	065G0402220 31	CHIP 22PF 50V NPO	
C401	065G0402224 17	CAP CER 0.22UF -20%-80%	
C423	065G0402224 17	CAP CER 0.22UF -20%-80%	
C116	065G0402224A5T	MLCC 0402 0.22UF K 10V X	
C117	065G0402224A5T	MLCC 0402 0.22UF K 10V X	
C114	065G0402473 12	CHIP 0.047uF 16V X7R	
C111	065G0402473 12	CHIP 0.047uF 16V X7R	
C110	065G0402473 12	CHIP 0.047uF 16V X7R	
C108	065G0402473 12	CHIP 0.047uF 16V X7R	
C106	065G0402473 12	CHIP 0.047uF 16V X7R	
C102	065G0402473 12	CHIP 0.047uF 16V X7R	
C105	065G0402509 31	CHIP 5pF 50V NPO	
C109	065G0402509 31	CHIP 5pF 50V NPO	
C113	065G0402509 31	CHIP 5pF 50V NPO	
FB702	071G 56G301 EA	BEAD 300 欧	
FB401	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 bullwill	
FB402	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 bullwill	

FB404	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 bullwill	
FB704	071G 57G301 EA	CHIP BEAD	
FB703	071G 59G301	CHIP BEAD 300OHM	
FB109	071G 59G301	CHIP BEAD 300OHM	
FB107	071G 59G301	CHIP BEAD 300OHM	
FB105	071G 59G301	CHIP BEAD 300OHM	
FB104	071G 59G301	CHIP BEAD 300OHM	
FB101	071G 59K190 B	19 OHM BEAD	
FB102	071G 59K190 B	19 OHM BEAD	
FB103	071G 59K190 B	19 OHM BEAD	
D104	093G 60505	DIO SIG SM BAT54C(PHSE)R	
D108	093G 60505	DIO SIG SM BAT54C(PHSE)R	
D109	093G 60505	DIO SIG SM BAT54C(PHSE)R	
ZD104	093G 39GA01 T	RLZ5.6B	
ZD105	093G 39GA01 T	RLZ5.6B	
D701	093G3004 3	SM340A	
	715G2883 1 2 HF	MAIN BOARD PCB	
	KEPC8QC2	KEY BOARD G3122-F-DEL-X-1-080602	
SW01	077G 500 5B E	DOME SWITCH 5PCS JB41-03540	
CN001	089G 76J 8 2	FFC CABLE 8P 273mm P1.0	
C005	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C004	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C003	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C002	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C001	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C007	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
C006	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R	
LED1	081G 14506 GP	LED GPTD08063YBC1 GUANGPU	
ZD01	093G 39S 34 T	UDZSNP5.6B ROHM	
	715G3122 1A HF	KEY BOARD PCB	
	PWPC8C42MAA1	POWER G2538-4-HF-X-1-080602	
	040G 45762412B	CBPC LABEL	
GND1	009G6005 1	GROUND TERMINAL	
CN801	033G8021 2E F	WAFER	
CN802	033G8021 2E F	WAFER	
CN803	033G8021 2E F	WAFER	
CN804	033G8021 2E F	WAFER	
	051G 6 4503	GLUE_RTV	
IC903	056G 139 3A	IC PC123Y22FZ0F	
NR901	061G 58080 WT	8 OHM NCT	

R908	061G152M104 64	100KOHM 5% 2W	
R914	061G152M24852T	RST MOFR 0.24OHM +-5% 2WS	
C903	063G107K474 6S	CAP X2 0.47UF K 275VAC	
C811	065G 6J1006ET	10PF 5% SL 6KV	
C801	065G 6J1006ET	10PF 5% SL 6KV	
C902	065G305M1022BP	Y2 1000PF M 250VAC Y5P	
C901	065G305M1022BP	Y2 1000PF M 250VAC Y5P	
C921	065G306M4722BP	4700PF +-20% 400VAC	
C905	067G 40Z10115K	CAP 105℃ 100UF M 450V	
C803	067G215D4714KV	E.C 105℃ CAP 470UF M 25V ED SERIES	
C802	067G215D4714KV	E.C 105℃ CAP 470UF M 25V ED SERIES	
C918	067G215D6814KV	CAP 105℃ 680uF M 25V	
C917	067G215D6814KV	CAP 105℃ 680uF M 25V	
C939	067G215S1024KV	EC 105℃ CAP 1000UF M 25V	
C915	067G215S4713KV	EC 105℃ CAP 470UF M 16V	
L902	073G 174 65 H	LINE FILTER	
L901	073G 174 76 H	FILTER	
L903	073G 253191 H	IND CHOKE 1.1uH DADON	
L904	073G 253191 H	IND CHOKE 1.1uH DADON	
T901	080GL19T 23 N	XFMR POWER 510uH YUVA	
CN901	087G 501 32 S	AC SOCKET	
CN901	087G 501 32 DL	AC SOCKET DIP 3PIN+2PIN GROUND	2nd source
BD901	093G 50460 28	BRIDGE DIODE KBP208G LITEON	
BD901	093G 50460510	2KBP08M 2A 800V	2nd source
CN902	095G 825 9D512	WIRE HARNESS 9P(SCN)-6P(PLUG)	2nd source
CN902	095G 825 9E512	WIRE HARNESS 9P(SCN)-6P(PLUG)	
CN902	095G 825 9X512	WIRE HARNESS 9P(SCN)-6P(PLUG)	2nd source
	705G 193 93 01	D906 ASS'Y	
	051G 200 1	OIL FOR DISAPPEAR	
D906	093G 60218	SB10100FCT	
D906	093G 60267	SP10100	2nd source
	0M1G1730 8120	SCREW	
	Q90G6274 2	HEAT SINK	
	705GQ793038	Q901 ASS'Y	
	051G 200 1	OIL FOR DISAPPEAR	
Q901	057G 667 22	FQPF8N80C	
	0M1G1730 8120	SCREW	
	Q90G6263 5	HEAT SINK	

	705GQ9KA 93002	D905 ASS"Y	
	051G 200 1	OIL FOR DISAPPEAR	
	090G6084 1	HEAT SINK	
D905	093G 60257	DIODE SB1060FCT ITO-220AB BY PAN JIT	
	0M1G1730 8120	SCREW	
IC801	056G 379 22	IC TL494IDR SOIC-16	
IC901	056G 379 71	IC TEA1530AT/N2 so-8 nxp	
Q902	057G 417 4	PMBS3904/PHILIPS-SMT(04)	
Q811	057G 417 4	PMBS3904/PHILIPS-SMT(04)	
Q807	057G 417 4	PMBS3904/PHILIPS-SMT(04)	
Q806	057G 417 4	PMBS3904/PHILIPS-SMT(04)	
Q801	057G 417 4	PMBS3904/PHILIPS-SMT(04)	
Q804	057G 417 6	PMBS3906/PHILIPS-SMT(06)	
Q812	057G 417 6	PMBS3906/PHILIPS-SMT(06)	
Q809	057G 759 2	RK7002	
Q810	057G 759 2	RK7002	
Q808	057G 760 4A	DTA144WN3/S SOT-23	
Q805	057G 760 5A	DTC 144WN3/S SOT-23	
Q803	057G 763 6	AO4828L	
Q802	057G 763 6	AO4828L	
R827	061G0603000	RST CHIPR 0 OHM +-5% 1/10W	
R801	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R809	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R812	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R814	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R815	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R816	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R818	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R821	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R822	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R824	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R826	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R925	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R942	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R834	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R833	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R832	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R828	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R817	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	

R813	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R808	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R926	061G0603102	RST CHIPR 1K OHM +-5% 1/10W	
R924	061G0603102	RST CHIPR 1K OHM +-5% 1/10W	
R862	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R835	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R803	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R851	061G0603130 2F	RST CHIPR 13 KOHM +-1% 1/10W	
R811	061G0603240 1F	RST CHIPR 2.4 KOHM +-1% 1/10W	
R831	061G0603240 1F	RST CHIPR 2.4 KOHM +-1% 1/10W	
R930	061G0603240 1F	RST CHIPR 2.4 KOHM +-1% 1/10W	
R940	061G0603330 2F	RST CHIPR 33K OHM +-1% 1/10W	
R927	061G0603360 1F	RST CHIPR 3.6K OHM +-1% 1/10W	
R823	061G0603362	RST CHIPR 3.6 KOHM +-5% 1/10W	
R819	061G0603362	RST CHIPR 3.6 KOHM +-5% 1/10W	
R861	061G0603390 3F	RST CHIPR 390 KOHM +-1% 1/10W	
R807	061G0603470 2F	RST CHIPR 47 KOHM +-1% 1/10W	
R820	061G0603470 2F	RST CHIPR 47 KOHM +-1% 1/10W	
R806	061G0603680 2F	RST CHIPR 68K OHM +-1% 1/10W	
R841	061G0603680 2F	RST CHIPR 68K OHM +-1% 1/10W	
R853	061G0603680 2F	RST CHIPR 68K OHM +-1% 1/10W	
R854	061G0603680 2F	RST CHIPR 68K OHM +-1% 1/10W	
R804	061G0805101	1ST CHIPR 100 OHM +-5% 1/8W	
R911	061G0805102	RST CHIPR 1K OHM +-5% 1/8W	
R917	061G0805102	RST CHIPR 1K OHM +-5% 1/8W	
R929	061G0805102	RST CHIPR 1K OHM +-5% 1/8W	
R938	061G0805103	RST CHIPR 10K OHM +-5% 1/8W	
R850	061G0805220	RST CHIPR 22 OHM +-5% 1/8W	
R839	061G0805220	RST CHIPR 22 OHM +-5% 1/8W	
R829	061G0805220	RST CHIPR 22 OHM +-5% 1/8W	
R825	061G0805220	RST CHIPR 22 OHM +-5% 1/8W	
R912	061G0805220 2F	RST CHIPR 22 KOHM +-1% 1/8W	
R915	061G0805224	RST CHIPR 220 KOHM +-5% 1/8W	
R916	061G0805393	RST CHIPR 39KOHM +-5% 1/8W	
R837	061G0805473	RST CHIPR 47K OHM +-5% 1/8W	
R810	061G0805510 2F	RST CHIPR 51K OHM +-1% 1/8W	
R931	061G0805822	RST CHIPR 8.2 KOHM +-5% 1/8W	
F801	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
F902	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
JR801	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	

R967	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
JR901	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
JR809	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
JR808	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
JR807	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
JR805	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
JR804	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
JR803	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
JR802	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
R910	061G1206100	RST CHIPR 10 OHM +-5% 1/4W	
R909	061G1206100	RST CHIPR 10 OHM +-5% 1/4W	
R918	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R919	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R920	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R935	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R961	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R962	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R921	061G1206102	RST CHIPR 1k OHM +-5% 1/4W	
R922	061G1206102	RST CHIPR 1k OHM +-5% 1/4W	
R923	061G1206102	RST CHIPR 1k OHM +-5% 1/4W	
R928	061G1206102	RST CHIPR 1k OHM +-5% 1/4W	
R904	061G1206152	RST CHIPR 1.5 KOHM +-5% 1/4W	
R932	061G1206152	RST CHIPR 1.5 KOHM +-5% 1/4W	
R933	061G1206152	RST CHIPR 1.5 KOHM +-5% 1/4W	
R855	061G1206220	RST CHIPR 22 OHM +-5% 1/4W	
R857	061G1206220	RST CHIPR 22 OHM +-5% 1/4W	
R856	061G1206220	RST CHIPR 22 OHM +-5% 1/4W	
R858	061G1206220	RST CHIPR 22 OHM +-5% 1/4W	
R901	061G1206684	RST CHIPR 680K OHM +-5% 1/4W	
R902	061G1206684	RST CHIPR 680K OHM +-5% 1/4W	
R903	061G1206684	RST CHIPR 680K OHM +-5% 1/4W	
C842	065G0603103 12	chip 0.01uf 16v x7r	
C924	065G0603104 22	CAP CHIP 0603 0.1UF K 25V X7R	
C834	065G0603104 22	CAP CHIP 0603 0.1UF K 25V X7R	
C825	065G0603104 22	CAP CHIP 0603 0.1UF K 25V X7R	
C821	065G0603104 22	CAP CHIP 0603 0.1UF K 25V X7R	
C807	065G0603104 22	CAP CHIP 0603 0.1UF K 25V X7R	
C823	065G0603222 22	CHIP 2200PF 25V X7R	
C819	065G0603222 22	CHIP 2200PF 25V X7R	
C816	065G0603222 22	CHIP 2200PF 25V X7R	

C815	065G0603222 22	CHIP 2200PF 25V X7R	
C910	065G0805102 32	CHIP 1000P 50VX7R 0805	
C931	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C930	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C916	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C907	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C824	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C805	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C822	065G0805105 22	CAP CHIP 0805 1uF K 25V X7R	
C928	065G0805122 31	CHIP CAP 0805 1200PF J 50V NPO	
C839	065G0805152 31	1.5nF/50V	
C840	065G0805152 31	1.5nF/50V	
C838	065G0805152 31	1.5nF/50V	
C841	065G0805152 31	1.5nF/50V	
C820	065G080522131G	CAP CHIP 0805 220PF G 50V NPO	
C911	065G0805224 22	CAIP CAP 0.22 uF 25V X7R	
C909	065G0805224 32	0.22UF,K,50V,X7R	
C845	065G0805225 12	CAP CHIP 0805 2.2UF K 16V X7R	
C912	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	
C929	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	
D804	093G 64 33	DIO SIG SM BAV99 (PHSE)R	
D803	093G 64 33	DIO SIG SM BAV99 (PHSE)R	
D802	093G 64 33	DIO SIG SM BAV99 (PHSE)R	
D801	093G 64 33	DIO SIG SM BAV99 (PHSE)R	
D805	093G 64 38 P	BAW56	
D808	093G 64 38 P	BAW56	
D903	093G 64 38 P	BAW56	
ZD921	093G 39S 15 T	RLZ15B LLDS	
ZD922	093G 39S 25 T	RLZ5.1B LLDS	
ZD902	093G 39S 61 T	DIODE RLZ16B ROHM	
D809	093G 64S511SEM	IN4148W	
D814	093G 64S511SEM	IN4148W	
D806	093G 64S511SEM	IN4148W	
D817	093G 64S511SEM	IN4148W	
D915	093G 64S511SEM	IN4148W	
D916	093G 64S511SEM	IN4148W	
CN901	006G 31500	EYELET	
NR901	006G 31502	1.5MM RIVET	
T901	006G 31502	1.5MM RIVET	
IC904	056G 158504AME	IC AME431BAJATB25Z AME	

C938	065G 2K152 1T6052	1.5NF/2KV Y5P +-10%	
C906	065G 2K152 1T6921	1.5NF/2KV Y5P +-10%	
C908	067G215Y2207KT	CAP 105℃ 22UF M 50V KINGNICHI	
FB901	071G 55 29	FERRITE BEAD	
F901	084G 55 1W	FUSE 4A 250V Wickmann	
D901	093G 6038P52T	PS102R	
D900	093G1100 1152T	DIODE PR1007R 1A/1000V DO-41	
	715G2538 1 HF	POWER BOARD PCB	
HS4	Q85G0002 1	SHIELD_MAIN	
T802	S80GL22T10V	XFMR POWER 63.5uH TPV-PT	
	Q34FPE19P07	CASE EEL19	
T801	S80GL22T10V	XFMR POWER 63.5uH TPV-PT	
	Q34FPE19P07	CASE EEL19	
	Q01G6019 2	SCREW	
	Q05G6082 1	power lens	
	Q15G0289101	HOLDER BRACKET L	
	Q15G0290101	HOLDER BRACKET R	
	Q20G6044101	Stand Holder	
	Q23G3178700 8A	LOGO	
	Q40G 22N700 5A	RATING LABEL	
	Q40G 22N700 6A	RATING LABEL	
	Q41G7800700A36	E1609W/E2209W PIG FOR DAO	
	Q41G7800700A41	E2009W/E2209W QSG FOR WEST	
	Q44GC059101	EPS	
	Q44GC059201	EPS	
	Q44GC059700 1A	22 LCD CARTON	
	Q45G 77 5	PE PACKING	
	Q45G 88607 77	PE BAG FOR STAND	
	Q45G 88607 78	PE BAG FOR MONITOR	
	Q52G 1185 91	BIG TAPE FOR DELL CARTON	
	Q52G6020130	PROTECT FILM	
	Q52G6025 13193	insulate sheet	
	Q70G2200700 2A	CD MANUAL	
	S89G179T30H26	LVDS ASSY	
	089F80001903AG	1.0*30*2.5-190-4-0.65*0.05	
	033F303FH10BK3	F1010HA-30P-BK	
	033F303FJSHK30	1.0S-19-30A	
	Q40G0001700 4A	DELL carton label	

14. Different Parts List

Diversity of TC8GMAHKWMDDHC compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	044G6002608 9A	PAPER BOARD	
	044G6002709 1A	PAPER BOARD	
E750	750GLG220E1E11D0DL	PANEL LM220WE1-TLE1 KR LGD	
E750	750GLG220E1E43D0DL	PANEL LM220WE1-TLE4 GZ LGD	2nd source

Diversity of TC8MMAHKWMDDHC compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	044G6002608 9A	PAPER BOARD	
	044G6002709 1A	PAPER BOARD	
	750GLMC0Z1322D000D	PANEL M220Z1-L03 C1 NB CMO	
	A15G0437201	mainframe CMO	
	CBPC8MMADLQ1	MAIN BOARD G2883-C-2-DEL-2-080602	

Diversity of TC8GMAHMWMDDHN compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	041G 68623 1A	CERTIFICATED CARD	
	044G6002118 88	PAPER BOARD	
	044G6002709 1A	PAPER BOARD	
	044G9003202	CORNER PAPER	
	Q07G 1 5V76	WOODEN PALLET	
	Q07G 1 5V77	WOODEN PALLET	
	Q41G780070081A	DELL ROHS CARD	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700A40	E2009W/E2209W QSG FOR EAST	
	Q44GC059700 2A	22 LCD CARTON	

Diversity of TC8MMAHMWMDDHN compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	041G 68623 1A	Certificated card	
	044G6002118 88	PAPER BOARD	
	044G6002709 1A	PAPER BOARD	
	044G9003202	CORNER PAPER	
	750GLMC0Z1322Z000D	PANEL M220Z1-L03 C1 NB CMO	
	A15G0437201	mainframe CMO	
	CBPC8MMADLQ1	MAIN BOARD	

		G2883-C-2-DEL-2-080602	
	Q07G 1 5V76	wooden pallet	
	Q07G 1 5V77	wooden pallet	
	Q41G780070081A	dell rohs card	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700A40	E2009W/E2209W QSG FOR EAST	
	Q44GC059700 2A	22 LCD CARTON	

Diversity of TC8GMAHLWMDDHN compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	089G412A18NIS3	POWER CORD/32E1818058	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700A40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8MMAHLWMDDHN compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	089G412A18NIS3	POWER CORD/32E1818058	
	750GLMC0Z1322Z000D	PANEL M220Z1-L03 C1 NB CMO	
	A15G0437201	mainframe CMO	
	CBPC8MMADLQ1	MAIN BOARD G2883-C-2-DEL-2-080602	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700A40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8GMAHMWMDLHN compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700A40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8MMAHMWMDLHN compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	750GLMC0Z1322Z000D	PANEL M220Z1-L03 C1 NB CMO	
	A15G0437201	mainframe CMO	
	CBPC8MMADLQ1	MAIN BOARD G2883-C-2-DEL-2-080602	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700A40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8GMAHJWMDDHN compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	044G6002118 88	PAPER BOARD	
	044G6002709 1A	PAPER BOARD	
	044G9003202	CORNER PAPER	
	089G401A18NHRA	POWER CORD	
	Q07G 1 5V76 X	wooden pallet	
	Q07G 1 5V77 X	wooden pallet	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700A40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8MMAHJWMDDHN compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	044G6002118 88	PAPER BOARD	
	044G6002709 1A	PAPER BOARD	
	044G9003202	CORNER PAPER	
	089G401A18NHRA	POWER CORD	
	750GLMC0Z1322Z000D	PANEL M220Z1-L03 C1 NB CMO	
	A15G0437201	mainframe CMO	
	CBPC8MMADLQ1	MAIN BOARD G2883-C-2-DEL-2-080602	
	Q07G 1 5V76 X	wooden pallet	
	Q07G 1 5V77 X	wooden pallet	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700A40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8GMAHFWMDDHN compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700A40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8MMAHFWMDDHN compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	750GLMC0Z1322Z000D	PANEL M220Z1-L03 C1 NB CMO	
	A15G0437201	mainframe CMO	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700A40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8GMAHMWMDLHC compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
E750	750GLG220E1E11D0DL	PANEL LM220WE1-TLE1 KR LGD	
E750	750GLG220E1E43D0DL	PANEL LM220WE1-TLE4 GZ LGD	2nd source
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700B40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8MMAHMWMDLHC compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
E750	750GLM220Z1332D0DL	PANEL M220Z1-L03 C3 NB CMO	2nd source
E750	750GLMC0Z1322D000D	PANEL M220Z1-L03 C1 NB CMO	
	A15G0437201	mainframe CMO	
	CBPC8MMADLQ1	MAIN BOARD G2883-C-2-DEL-2-080602	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700B40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8GMAHJWMDDHC compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	044G6002118 88	PAPER BOARD	
	044G6002709 1A	PAPER BOARD	
	044G9003202	CORNER PAPER	
	089G401A18NHRA	POWER CORD	
E750	750GLG220E1E11D0DL	PANEL LM220WE1-TLE1 KR LGD	
E750	750GLG220E1E43D0DL	PANEL LM220WE1-TLE4 GZ LGD	2nd source
	Q07G 1 5V76 X	wooden pallet	
	Q07G 1 5V77 X	wooden pallet	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700B40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8MMAHJWMDDHC compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	044G6002118 88	PAPER BOARD	
	044G6002709 1A	PAPER BOARD	
	044G9003202	CORNER PAPER	
	089G401A18NHRA	POWER CORD	
E750	750GLM220Z1332D0DL	PANEL M220Z1-L03 C3 NB CMO	
E750	750GLMC0Z1322D000D	PANEL M220Z1-L03 C1 NB CMO	2nd source
	A15G0437201	mainframe CMO	

	CBPC8MMADLQ1	MAIN BOARD G2883-C-2-DEL-2-080602	
	Q07G 1 5V76 X	wooden pallet	
	Q07G 1 5V77 X	wooden pallet	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700B40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8GMAHFWMDDHC compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
E750	750GLG220E1E11D0DL	PANEL LM220WE1-TLE1 KR LGD	
E750	750GLG220E1E43D0DL	PANEL LM220WE1-TLE4 GZ LGD	2nd source
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700B40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8MMAHLWMDDHC compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	089G412A18NIS3	POWER CORD/32E1818058	
E750	750GLM220Z1332D0DL	PANEL M220Z1-L03 C3 NB CMO	2nd source
E750	750GLMC0Z1322D000D	PANEL M220Z1-L03 C1 NB CMO	
	A15G0437201	mainframe CMO	
	CBPC8MMADLQ1	MAIN BOARD G2883-C-2-DEL-2-080602	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700B40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8MMAHMWMDDHC compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	041G 68623 1A	Certificated card	
	044G6002118 88	PAPER BOARD	
	044G6002709 1A	PAPER BOARD	
	044G9003202	CORNER PAPER	
E750	750GLM220Z1332D0DL	PANEL M220Z1-L03 C3 NB CMO	2nd source
E750	750GLMC0Z1322D000D	PANEL M220Z1-L03 C1 NB CMO	
	A15G0437201	mainframe CMO	
	CBPC8MMADLQ1	MAIN BOARD G2883-C-2-DEL-2-080602	
	Q07G 1 5V76	wooden pallet	
	Q07G 1 5V77	wooden pallet	
	Q41G780070081A	dell rohs card	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700B40	E2009W/E2209W QSG FOR EAST	
	Q44GC059700 2A	22 LCD CARTON	

Diversity of TC8MMAHFWMDDHC compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
E750	750GLM220Z1332D0DL	PANEL M220Z1-L03 C3 NB CMO	2nd source
E750	750GLMC0Z1322D000D	PANEL M220Z1-L03 C1 NB CMO	
	A15G0437201	mainframe CMO	
	CBPC8MMADLQ1	MAIN BOARD G2883-C-2-DEL-2-080602	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700B40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8MMAHLWMDDHC compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	089G412A18NIS3	POWER CORD/32E1818058	
E750	750GLM220Z1332D0DL	PANEL M220Z1-L03 C3 NB CMO	
E750	750GLMC0Z1322D000D	PANEL M220Z1-L03 C1 NB CMO	2nd source
	A15G0437201	mainframe CMO	
	CBPC8MMADLQ1	MAIN BOARD G2883-C-2-DEL-2-080602	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700B40	E2009W/E2209W QSG FOR EAST	

Diversity of TC8MMAHMWMDDHC compared with TC8GMAHKWMDDHN			
Location	**Part No.**	**Description**	**Remark**
	041G 68623 1A	Certificated card	
	044G6002118 88	PAPER BOARD	
	044G6002709 1A	PAPER BOARD	
	044G9003202	CORNER PAPER	
E750	750GLM220Z1332D0DL	PANEL M220Z1-L03 C3 NB CMO	2nd source
E750	750GLMC0Z1322D000D	PANEL M220Z1-L03 C1 NB CMO	
	A15G0437201	mainframe CMO	
	CBPC8MMADLQ1	MAIN BOARD G2883-C-2-DEL-2-080602	
	Q07G 1 5V76	wooden pallet	
	Q07G 1 5V77	wooden pallet	
	Q41G780070081A	dell rohs card	
	Q41G7800700A37	E1609W/E2209W PIG FOR APCC	
	Q41G7800700B40	E2009W/E2209W QSG FOR EAST	
	Q44GC059700 2A	22 LCD CARTON	