



**Acer AL1702W**  
**Service Guide**

## Service Guide Version and Revision

[illegible]

## Copyright

Copyright © 2003 by Acer Incorporated. All rights reserved. No part of this publication may be reproduced, Transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of Acer Incorporated.

## Disclaimer

The information in this guide is subject to change without notice. Acer Incorporated makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties of merchantability or fitness for any particular purpose. Any Acer Incorporated software described in this manual is sold or licensed "as is". Should the programs prove defective following their purchase, the buyer (and not Acer Incorporated, its distributor, or its dealer) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software.

Intel is a registered trademark of Intel Corporation.

Pentium and Pentium II/III are trademarks of Intel Corporation.

Other brand and product names are trademarks and/or registered trademarks of their respective holders.

## Trademarks

Acer is a registered trademark of Acer Incorporated.

All other trademarks are property of their respective owners.

## Conventions

The following conventions are used in this manual:

Screen messages	Denotes actual messages that appear on screen.
Note	Gives bits and pieces of additional information related to the current topic.
Warning	Alerts you to any damage that might result from doing or not doing specific actions.
Caution	Gives precautionary measures to avoid possible hardware or software problems.
Important	Remind you to do specific actions relevant to the accomplishment of procedures.

## Preface

Before using this information and the product it supports, please read the following general information.

1. This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for Acer's "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office may have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.
2. Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

### Warning: (For FCC Certified Models)

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

### Notice:

1. The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
2. Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.
3. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. It is the responsibility of the user to correct such interference.

As ENERGY STAR® Partner our company has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

### Warning:

To prevent fire or shock hazard, do not expose the monitor to rain or moisture. Dangerous high voltages are present inside the monitor. Do not open the cabinet. Refer servicing to qualified personnel only.

## Precautions

- Do not use the monitor near water, e.g. near a bathtub, washbowl, kitchen sink, laundry tub, swimming pool or in a wet basement.
- Do not place the monitor on an unstable trolley, stand, or table. If the monitor falls, it can injure a person and cause serious damage to the appliance. Use only a trolley or stand recommended by the manufacturer or sold with the monitor. If you mount the monitor on a wall or shelf, use a mounting kit approved by the manufacturer and follow the kit instructions.
- Slots and openings in the back and bottom of the cabinet are provided for ventilation. To ensure reliable operation of the monitor and to protect it from overheating, be sure these openings are not blocked or covered. Do not place the monitor on a bed, sofa, rug, or similar surface. Do not place the monitor near or over a radiator or heat register. Do not place the monitor in a bookcase or cabinet 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 supplied to your home, consult your dealer or local power company.
- The monitor is equipped with a three-pronged grounded plug, a plug with a third (grounding) pin. This plug will fit only into a grounded power outlet as a safety feature. If your outlet does not accommodate the three-wire plug, have an electrician install the correct outlet, or use an adapter to ground the appliance safely. Do not defeat the safety purpose of the grounded plug.
- Unplug the unit during a lightning storm or when it will not be used for long periods of time. This will protect the monitor from damage due to power surges.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- Never push any object into the slot on the monitor cabinet. It could short circuit parts causing a fire or electric shock. Never spill liquids on the monitor.
- Do not attempt to service the monitor yourself; opening or removing covers can expose you to dangerous voltages and other hazards. Please refer all servicing to qualified service personnel
- To ensure satisfactory operation, use the monitor only with UL listed computers which have appropriate configured receptacles marked between 100 - 240V AC, Min. 5A.
- The wall socket shall be installed near the equipment and shall be easily accessible.

## Special Notes On LCD Monitors

The following symptoms are normal with LCD monitor and do not indicate a problem.

## Notes

- Due to the nature of the fluorescent light, the screen may flicker during initial use. Turn off the Power Switch and then turn it on again to make sure the flicker disappears.
- You may find slightly uneven brightness on the screen depending on the desktop pattern you use.
- The LCD screen has effective pixels of 99.99% or more. It may include blemishes of 0.01% or less such as a missing pixel or a pixel lit all of the time.
- Due to the nature of the LCD screen, an afterimage of the previous screen may remain after switching the image, when the same image is displayed for hours. In this case, the screen is recovered slowly by changing the image or turning off the Power Switch for hours.

## Table Of Contents

<b>Chapter 1</b>	<b>Monitor Features</b>	<b>7</b>
	Introduction	7
	Electrical Requirements	8
	LCD Monitor General Specification	9
	LCD Panel Specification	11
	Support Timing	13
	Monitor Block Diagram	14
	Main Board Diagram	15
	Software Flow chart	16
	Main Board Layout	18
	Adjusting the viewing angle	19
	Rear Bezel	20
<b>Chapter 2</b>	<b>Operating Instructions</b>	<b>21</b>
	External Controls	21
	Front Panel Controls	22
	Adjusting the picture	23
	OSD Message	26
	LOGO	27
<b>Chapter 3</b>	<b>Machine Disassembly</b>	<b>28</b>
<b>Chapter 4</b>	<b>Troubleshooting</b>	<b>34</b>
<b>Chapter 5</b>	<b>Connector Information</b>	<b>38</b>
<b>Chapter 6</b>	<b>FRU (Field Replacement Unit) List</b>	<b>39</b>
	Exploded Diagram	40
<b>Chapter 7</b>	<b>Schematic Diagram</b>	<b>43</b>

**Introduction****Scope**

This specification defines the requirements for the 17" MICROPROCESSOR based Multi-mode supported high resolution color LCD monitor. This monitor can be directly connected to general 15-pin D-sub VGA connector, also supports VESA DPMS power management and plug & play function. There is a build-in stereo audio amplifier with OSD control to drive a pair of speakers.

**Description**

The LCD monitor is designed with the latest LCD technology to provide a performance oriented product with no radiation. This will alleviate the growing health concerns. It is also a space saving design, allowing more desktop space, and comparing to the traditional CRT monitor, it consumes less power and gets less weight in addition MTBF target is 50k hours or more.

**Chart of AL1702W**

Panel	HSD170MGW1-A01
Signal Interface	D-Sub 15-pin
Sync Type	Separate / Compatible
Color Temp User Adjust	Support
DDC	DDC2B
Speaker	No
Headphone Jack	No
Microphone Jack	No
USB Hub	Not support
Tilt / Swivel	Yes / No

## Electrical Requirements

### Standard Test Conditions

All tests shall be performed under the following conditions, unless otherwise specified.

Ambient light	:	Dark room
Viewing distance	:	40 cm for LCD performance, 20 cm for LCD failures
Warm up time		
All specifications	:	> 30 minutes
Measuring equipment	:	Chroma 7120 signal generator or equivalent, directly
		Connected to the monitor under test.
		Minolta CA100 photometer, or equivalent
Control settings		
User brightness control	:	Set to Factory preset value (cut off raster)
User contrast control	:	Set to factory preset value, which allows that the brightest two of 32 linear distributed gray-scales (0~ 700mv) can be distinguished.
User red/white balance,		
Green/white balance and		
Blue/white balance control	:	In the center (unless otherwise specified)
Power input	:	230V± 5%
Ambient temperature	:	20±5℃
Display mode	:	1440x900, 60 Hz, all white

### Measurement systems

The units of measure stated in this document are listed below:

1 gamma = 1 nano tesla

1 tesla = 10,000 gauss

cm = in x 2.54

Lb = kg x 2.2

Degrees F = [°C x 1.8] + 32

Degrees C = [°F - 32]/1.8

$u' = 4x/(-2x + 12y + 3)$

$v' = 9y/(-2x + 12y + 3)$

$x = (27u'/4)/[(9u'/2) - 12v' + 9]$

$y = (3v')/[(9u'/2) - 12v' + 9]$

nits = cd/(m<sup>2</sup>) = Ft-L x 3.426

lux = foot-candle x 10.76



## LCD Monitor General Specification

LCD Panel	Driving system	TFT Color LCD
	Size	17"
	Pixel pitch	0.255mm( H ) × 0.255mm( V )
	Brightness	250cd/m <sup>2</sup> (Typical)
	Contrast	500:1 (Typical)
	Viewable angle	140° (H) 130° (V)
	Response time	8 ms
Input	Video	R,G,B Analog Interface
	H-Frequency	55.469kHz – 70.635kHz
	V-Frequency	60-75Hz
Display Colors		262144 Colors
Dot Clock		170MHz
Max. Resolution		1440 × 900 @75Hz
Plug & Play		VESA DDC2B™
EPA ENERGY STAR®	ON Mode	≤ 37W
	OFF Mode	≤ 1W
Input Connector		D-Sub 15pin
Input Video Signal		Analog:0.7Vp-p(standard), 75 OHM, Positive
Maximum Screen Size		Horizontal : 367.2mm Vertical : 229.5mm
Power Source		100-240V~, 50/60Hz
Environmental Considerations		Operating Temp: 0° to 50°C Storage Temp.: -20° to 60°C Operating Humidity: 10% to 80%
Dimensions		400.4(W)×338.37(H)×209.81(D)mm
Weight (N. W.)		3.17kg

External Controls:	Switch	<ul style="list-style-type: none"> <li>• Auto Adjust Key</li> <li>• &lt;</li> <li>• &gt;</li> <li>• Power Button</li> <li>• MENU</li> </ul>
	Functions	<ul style="list-style-type: none"> <li>• Contrast</li> <li>• Brightness</li> <li>• Focus</li> <li>• Clock</li> <li>• H.Position</li> <li>• V.Position</li> <li>• Language</li> <li>• DDC/CI ON/OFF</li> <li>• (Warm) Color</li> <li>• (Cool) Color</li> <li>• RGB Color temperature</li> <li>• Reset</li> <li>• OSD position . timeout</li> <li>• Display information</li> <li>• Exit</li> </ul>
Power Consumption ( Maximum )		45 Watts
Regulatory Compliance		CUL, FCC, VCCI, CCC, MPR II, CE, TÜV/GS , ISO13406-2

## LCD Panel Specification

### General Specifications

Item		Specification	Unit
Outline Dimension		389.2 x 254.5 x 11.5 (Typ)	mm
Display area		367.2 (H) x 229.5 (V)	mm
Number of Pixel		1440(H) x 900(V)	pixels
Pixel pitch		0.255(H) x 0.255(V)	mm
Pixel arrangement		RGB Vertical stripe	
Display color		6 Bits / 262,144	colors
Display mode		Normally white	
Surface treatment		Antiglare (3H)	
Weight		1370	g
Back-light		2-CCFLs, Top & bottom edge side	
Input signal		2-ch LVDS	
Power Consumption	Logic System	2.4	W
	B/L System	9.8	W

### Mechanical Information

Item		Min.	Typ.	Max.	Unit
Module Size	Horizontal (H)	388.7	389.2	389.7	mm
	Vertical (V)	254.0	254.5	255.0	mm
	Depth (D)	11.2	11.5	11.8	mm
Weight (Without inverter)		-	1370	1500	g
Torque of customer screw hole		-	-	3.0	Kgf•Cm

## Optical Specifications

Item		Symbol	Condition	Min.	Typ.	Max.	Unit
Contrast		CR	Θ=0 view angle	350	500	-	msec
Response time	Rising	T <sub>R</sub>		-	3	5	
	Falling	T <sub>F</sub>		-	5	7	
White luminance (Center)		Y <sub>L</sub>		200	250	-	cd/m <sup>2</sup>
		Y <sub>L</sub>		(180)	(230)	-	cd/m <sup>2</sup>
Color chromaticity (CIE1931)	Red	R <sub>x</sub>		0.595	0.625	0.655	
		R <sub>y</sub>		0.315	0.345	0.375	
	Green	G <sub>x</sub>		0.295	0.325	0.355	
		G <sub>y</sub>		0.525	0.555	0.585	
	Blue	B <sub>x</sub>		0.125	0.155	0.185	
		B <sub>y</sub>		0.115	0.145	0.175	
	White	W <sub>x</sub>		0.280	0.310	0.340	
		W <sub>y</sub>		0.300	0.330	0.360	
Viewing angle	Hor.	Θ <sub>L</sub>	CR>10	65	70	-	
		Θ <sub>R</sub>		65	70	-	
	Ver.	Θ <sub>U</sub>		60	65	-	
		Θ <sub>D</sub>		60	65	-	
Viewing angle	Hor.	Θ <sub>L</sub>	CR>5	75	80	-	
		Θ <sub>R</sub>		75	80		
	Ver.	Θ <sub>U</sub>		75	80	-	
		Θ <sub>D</sub>		75	80	-	
Brightness uniformity		B <sub>UNI</sub>	Θ=0	70	75	-	%

## Supported Timing

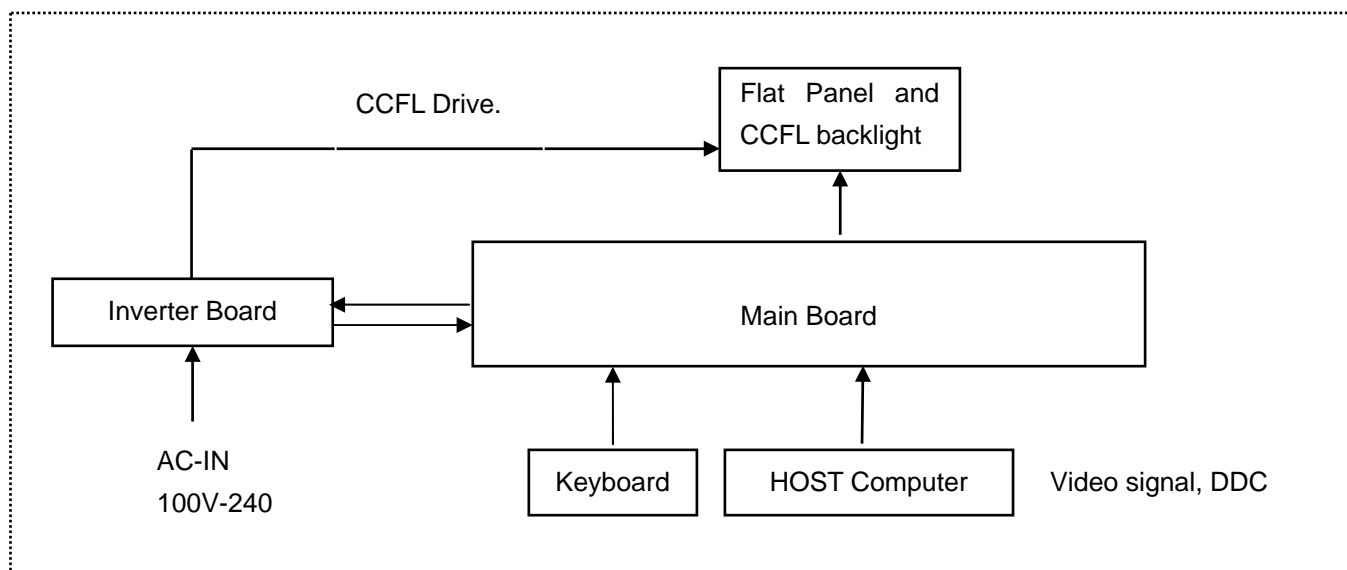
STANDARD		RESOLUTION	HORIZONTAL FREQUENCY(KHz)	VERTICAL FREQUENCY(KHz)
VESA	DOS	720x400	31.469	70.087
	VGA	640x480	31.469	59.940
		640x480	35.000	66.667
		640x480	37.861	72.809
		640x480	37.500	75.000
	SVGA	800x600	35.156	56.250
		800x600	37.879	60.317
		800x600	48.077	72.188
		800x600	46.875	75.000
		832x624	49.726	74.551
	XGA	1024x768	48.363	60.004
		1024x768	56.476	70.069
		1024x768	60.023	75.029
	SXGA	1152x864	67.500	75.000
		1280x1024	64.000	60.000
		1280x1024	80.000	75.000
	WXGA	1440x900	55.930	59.887
		1440x900	70.635	74.984

## Monitor Block Diagram

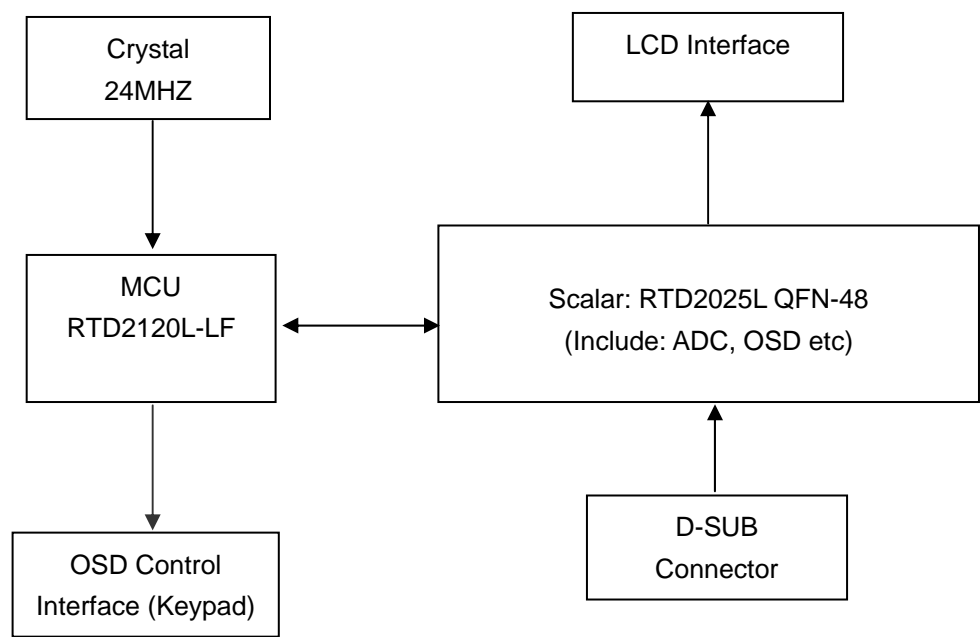
The LCD MONITOR will contain a main board, a power board, and keypad board which house the flat panel control logic, brightness control logic and DDC.

The Inverter board will drive the backlight of panel and the DC-DC conversion,

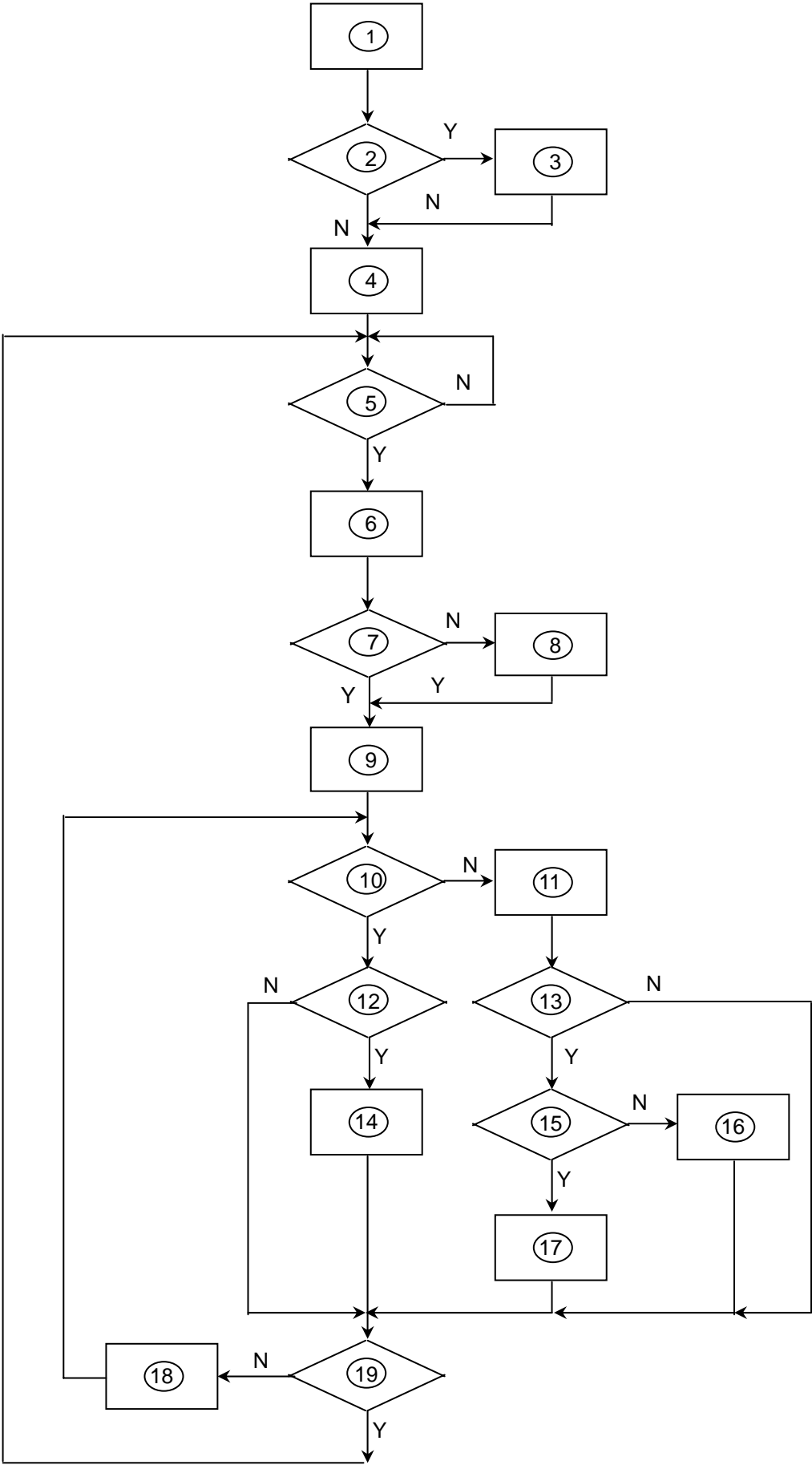
The Adapter will provide the 12V DC-power to inverter/power board.



Main Board Diagram



Software Flow Chart





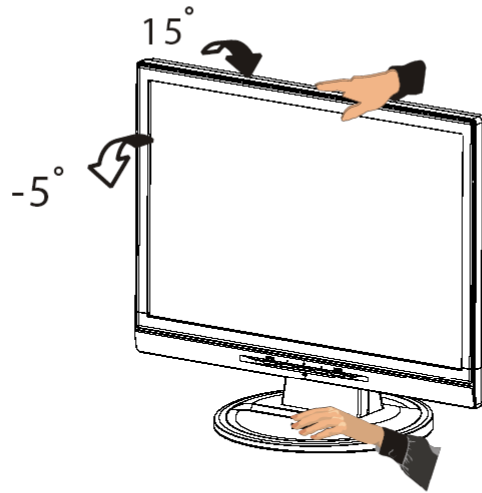
**Remark:**

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?

18

## Adjusting the viewing angle

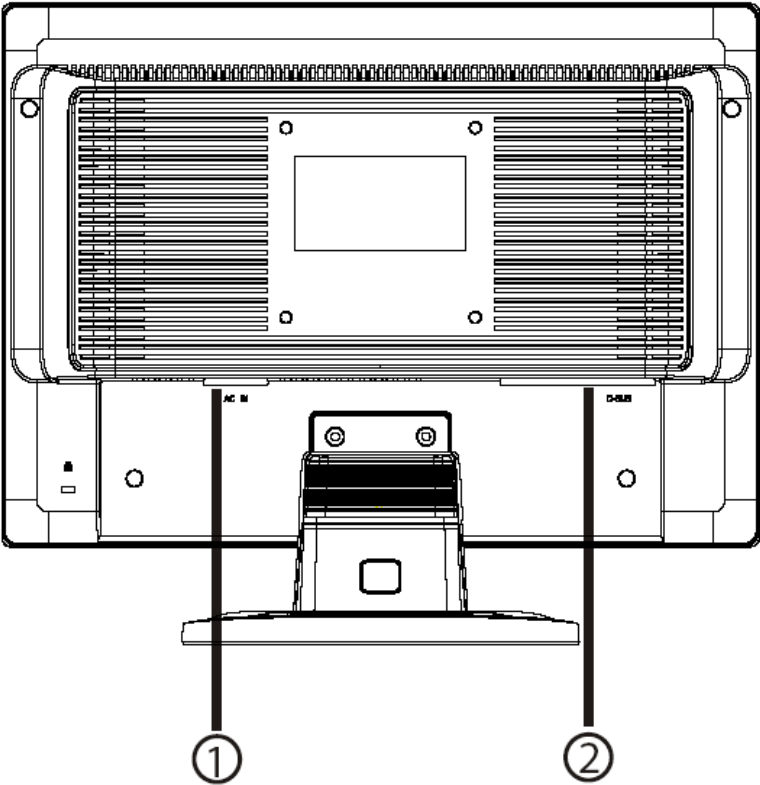
- For optimal viewing it is recommended to look at the full face of the monitor, then adjust the monitor's angle to your own preference.
- Hold the stand so you do not topple the monitor when you change the monitor's angle.
- You are able to adjust the monitor's angle from  $-5^{\circ}$  to  $15^{\circ}$ .



## NOTES

- Do not touch the LCD screen when you change the angle. It may cause damage or break the LCD screen.
- Careful attention is required not to catch your fingers or hands when you change the angle.

Rear Bezel

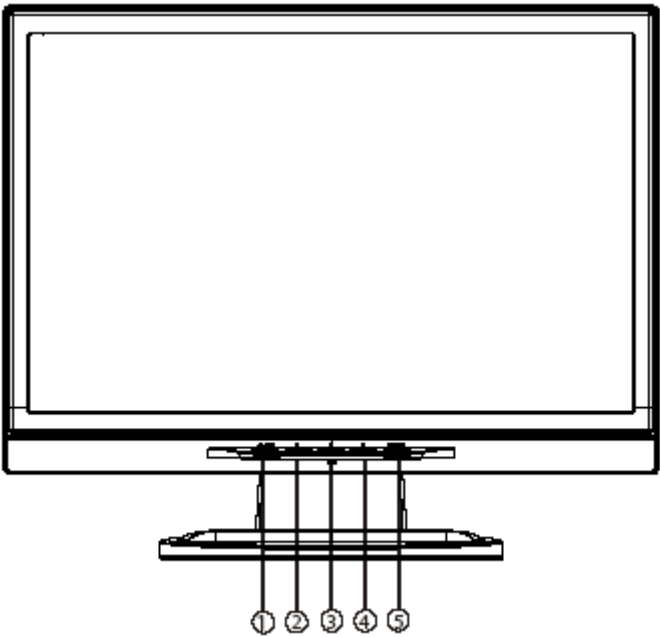


Item	Description	Item	Description
1.	Power Cable	2.	Signal Cable

Press the power button to turn the monitor on or off. The other control buttons are located at front 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 position. The power indicator will light up.

**External Controls**



Item	Description	Item	Description
1.	Auto Config / Exit	4.	>
2.	<	5.	MENU/ENTER
3.	Power Button / Power Indicator		

## Front Panel Control

- **⏻/Power Button:**

Press this button to turn the monitor ON or OFF, And display the monitor's state.

- **Power Indicator:**

Green — Power On mode.

Orange — Stand by mode.

- **MENU / ENTER :**

Activate OSD menu when OSD is OFF or activate/de-activate adjustment function when OSD is ON.

- **<:**

navigate through adjustment icons when OSD is ON or adjust a function when function is activated.

- **>:**

navigate through adjustment icons when OSD is ON or adjust a function when function is activated.

- **Auto Adjust button / Exit:**

1. When OSD menu is in active status, this button will act as EXIT-KEY (EXIT OSD menu).
2. When OSD menu is in off status, press this button for 2 seconds to activate the Auto Adjustment function.  
The Auto Adjustment function is used to set the HPos, VPos, Clock and Focus.

## NOTES

- Do not install the monitor in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, or excessive dust or mechanical vibration or shock.
- Save the original shipping carton and packing materials, as they will come in handy if you ever have to ship your monitor.
- For maximum protection, repackage your monitor as it was originally packed at the factory.
- To keep the monitor looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents such as thinner, benzene, or abrasive cleaners, since these will damage the cabinet. As a safety precaution, always unplug the monitor before cleaning it.

## Adjusting the Picture














### How to Adjust a Setting

1. Press the MENU-button to activate the OSD window.
2. Press < or > to select the desired function.
3. Press the MENU-button to select the function that you want to adjust.
4. Press < or > to change the settings of the current function.
5. To exit and save, select the exit function. If you want to adjust any other function, repeat steps 2-4












**Analog –Only Model**

**b. The Description For Function Control LEDS**

<b>Main Menu Icon</b>	<b>Sub Menu Icon</b>	<b>Sub Menu Item</b>	<b>Description</b>
		Contrast	Adjusts the contrast between the foreground and background of the screen image.
		Brightness	Adjusts the background brightness of the screen image.
		Focus	Adjusts picture Focus.
		Clock	Adjusts picture Clock.
		H. Position	Adjust picture Focus.
		V. Position	Adjust picture Clock.
	N/A	Warm	Set the color temperature to warm white.
	N/A	Cool	Set the color temperature to cool white.
		User /Red	Adjusts Red/Green/Blue intensity.
		User/Green	
		User/Blue	



	N/A	Language	Multi-language selection.
		H. Position	Adjust the horizontal position of the OSD.
		V. Position	Adjust the vertical position of the OSD.
		OSD Timeout	Adjust the OSD timeout.
	N/A	DDC/CI	Turn ON/OFF DDC/CI support.
	N/A	Information	Show the resolution, H/V frequency and input port of current input timing.
	N/A	Reset	Clear each old status of Auto-configuration and set the color temperature to Cool.
	N/A	Exit	Save user adjustment and OSD disappear.

## OSD Message

### a. Outline



### b. The Description For OSD Message

Item	Description
Auto Config Please Wait	When Analog signal input, if User Press Hot-Key “Auto”, will show this message, and the monitor do the auto config function.
Input Not Supported	When the Hsync Frequency, Vsync Frequency or Resolution is out of the monitor support range, will show this message. This message will be flying.
Cable Not Connected	Analog-Only Model: When the video cable is not connected, will show this message. This message will be flying.
No Signal	Analog-Only Model: When the video cable is connected, but there is no active signal input, will show this message, then enter power saving.

## Logo

When the monitor is power on, the LOGO will be showed in the center, and disappear slowly.



## How To Optimize The DOS-Mode

### Plug And Play

#### Plug & Play DDC2B Feature

This monitor is equipped with VESA DDC2B capabilities according to the VESA DDC STANDARD. It allows the monitor to inform the host system of its identity and, depending on the level of DDC used, communicate additional information about its display capabilities.

The DDC2B is a bi-directional data channel based on the I<sup>2</sup>C protocol. The host can request EDID information over the DDC2B channel.

**This monitor will appear to be non-functional if there is no video input signal. In order for this monitor to operate properly, there must be a video input signal.**

This monitor meets the Green monitor standards as set by the Video Electronics Standards Association (VESA) and/or the United States Environmental Protection Agency (EPA) and The Swedish Confederation Employees (NUTEK). This feature is designed to conserve electrical energy by reducing power consumption when there is no video-input signal present. When there is no video input signals this monitor, following a time-out period, will automatically switch to an OFF mode. This reduces the monitor's internal power supply consumption. After the video input signal is restored, full power is restored and the display is automatically redrawn. The appearance is similar to a "Screen Saver" feature except the display is completely off. Pressing a key on the keyboard, or clicking the mouse restores the display.

## Using The Right Power Cord

The accessory power cord for the Northern American region is the wallet plug with NEMA 5-15 style and is UL listed and CSA labeled. The voltage rating for the power cord shall be 125 volts AC.

Supplied with units intended for connection to power outlet of personal computer: Please use a cord set consisting of a minimum No. 18 AWG, type SJT or SVT three conductors flexible cord. One end terminates with a grounding type attachment plug, rated 10A, 250V, and CEE-22 male configuration. The other end terminates with a molded-on type connector body, rated 10A, 250V, having standard CEE-22 female configuration.

Please note that power supply cord needs to use VDE 0602, 0625, 0821 approval power cord in European counties.

This chapter contains step-by-step procedures on how to disassemble the monitor for maintenance.

### Disassembly Procedure

1. Remove the screws to release base stand and gemel. (Fig 1-3)



Fig 1



Fig 2



Fig 3

2. Remove the screws to remove the back cover. (Fig 4)



Fig 4

3. Remove the screws to remove the shield . (Fig 5)

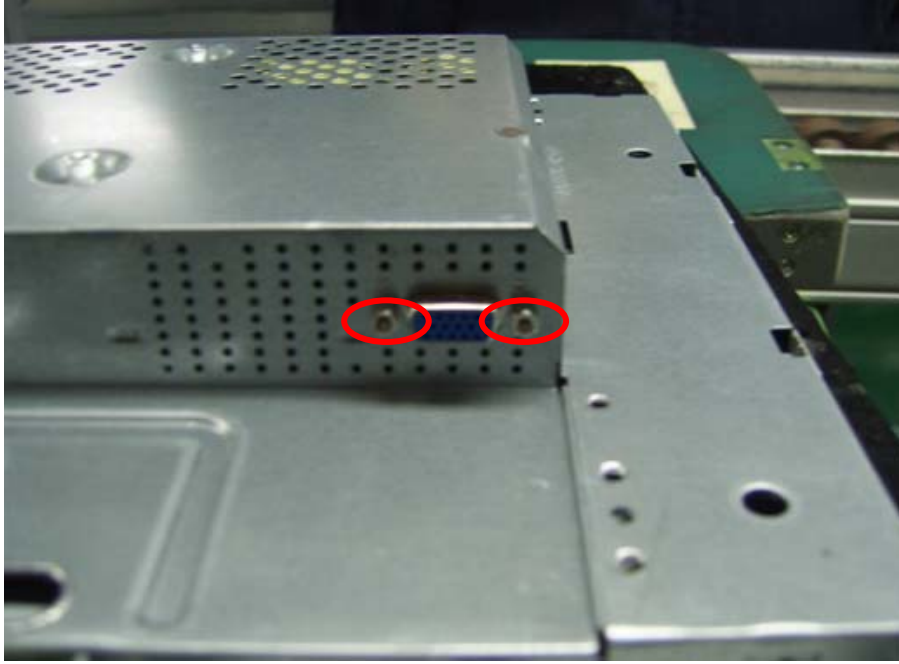


Fig 5

4. Remove the bezel. (Fig 6)



Fig 6





6. Remove the screw to remove the main board. (Fig 10)

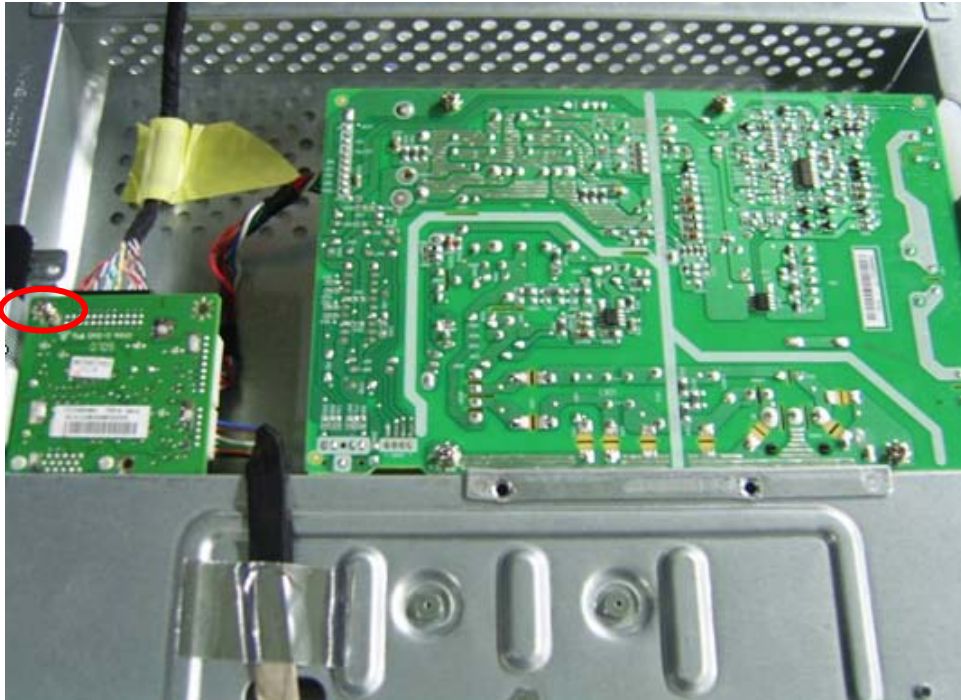


Fig 10

7. Remove the screws to remove the power board. ( Fig 11-12 )

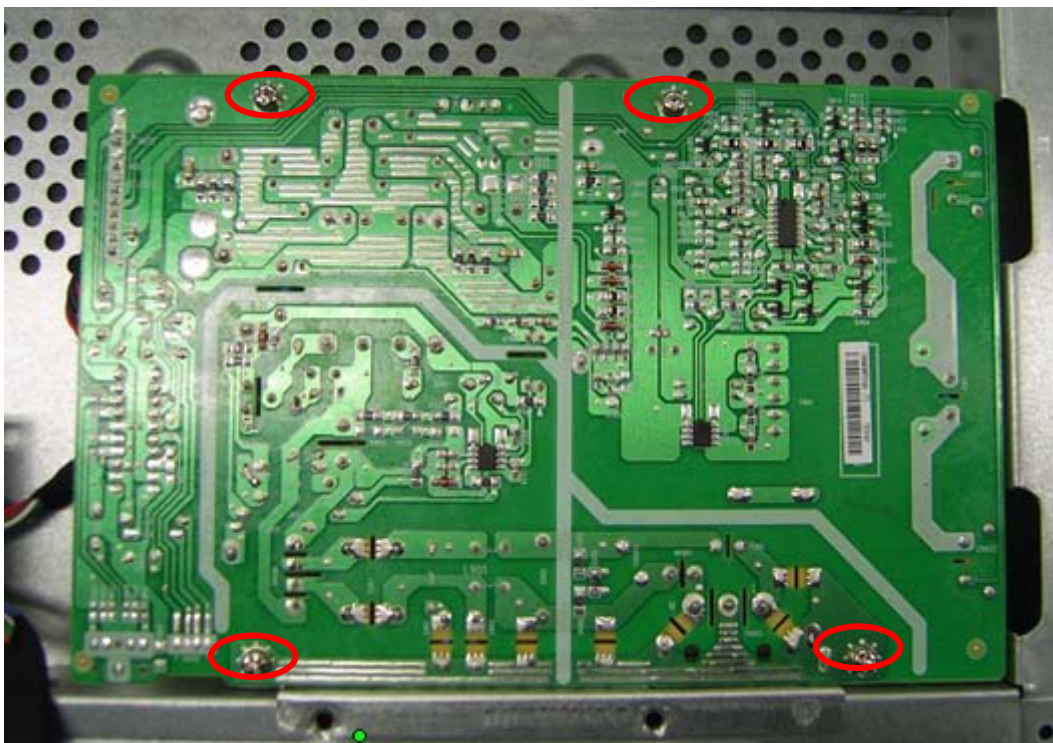


Fig 11



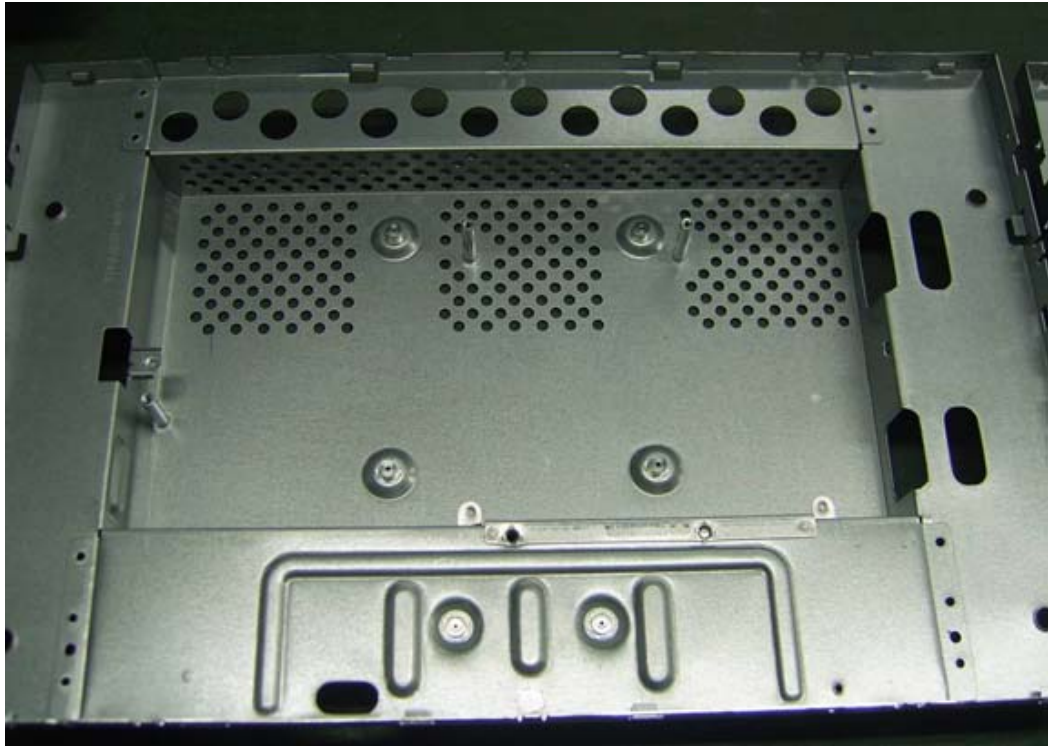
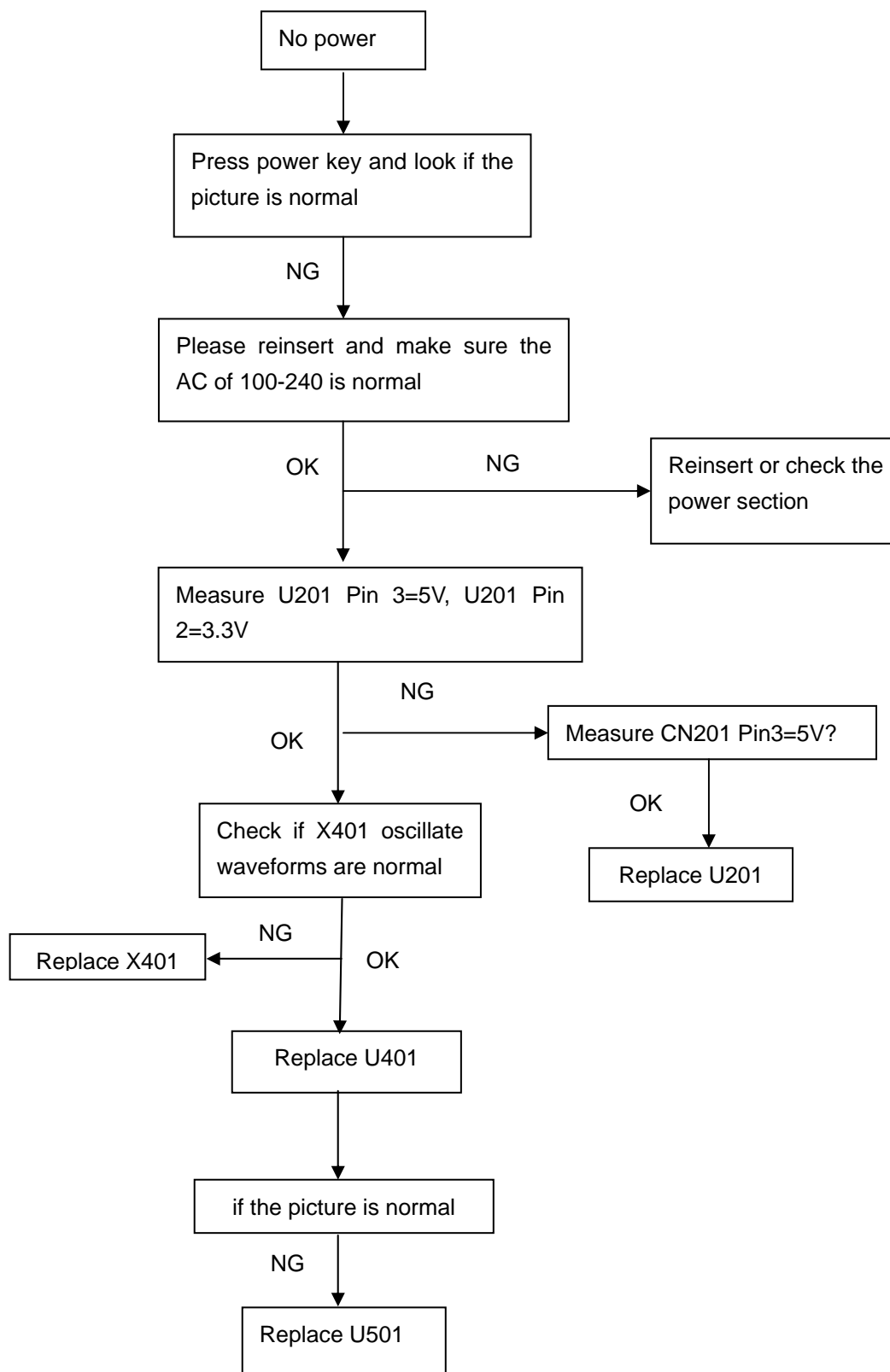


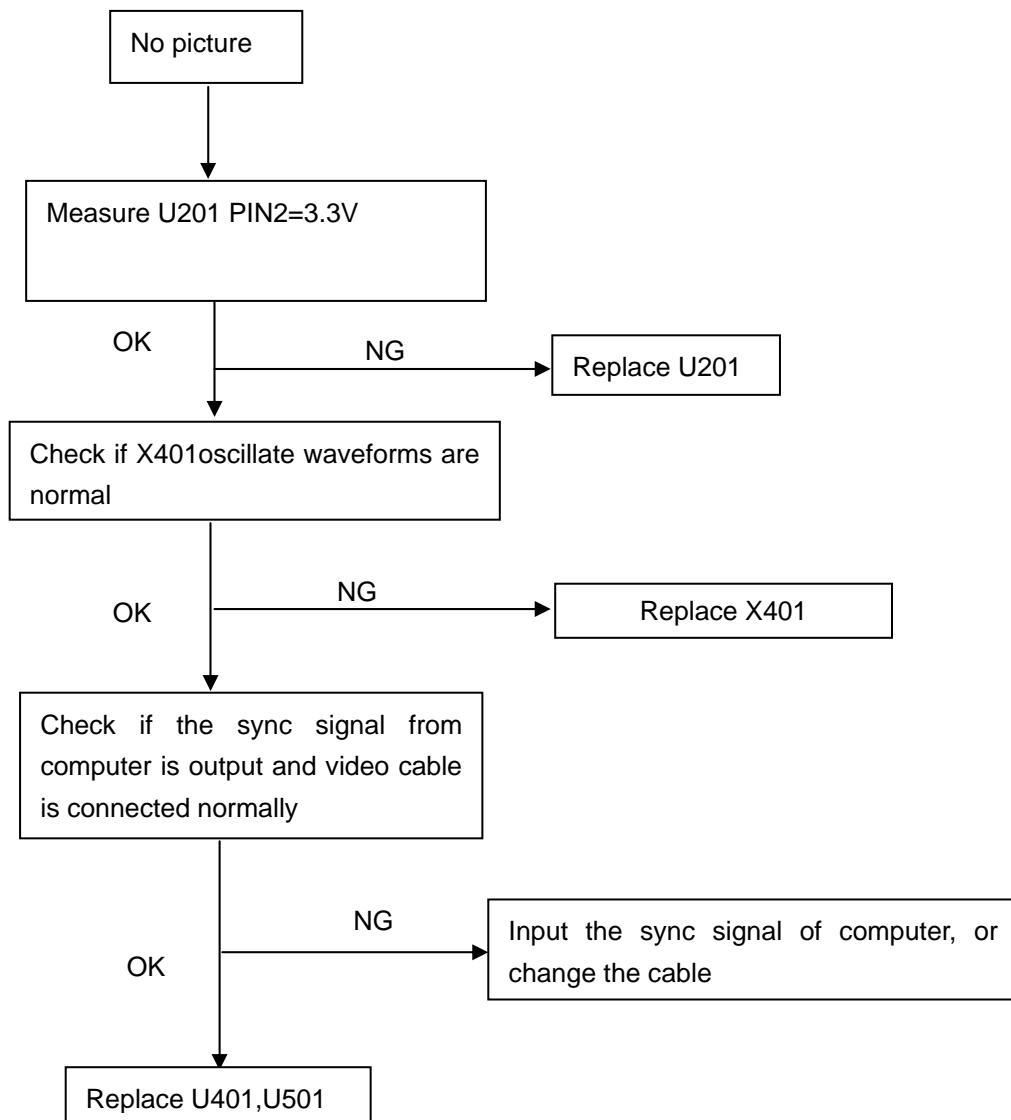
Fig 12

This chapter provides troubleshooting information for the AL1702W:

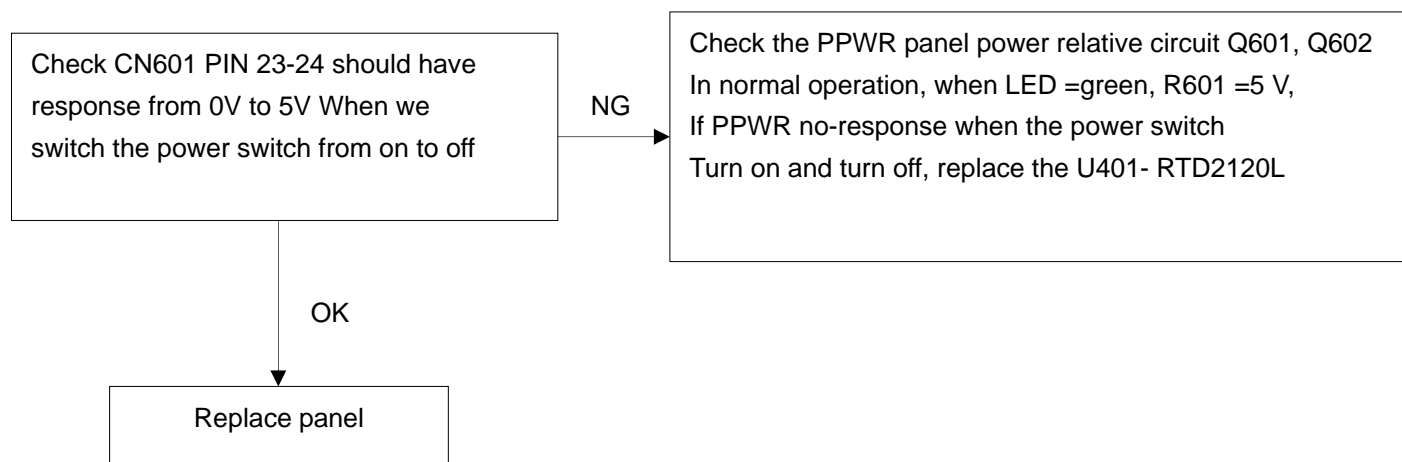
## 1. No Power



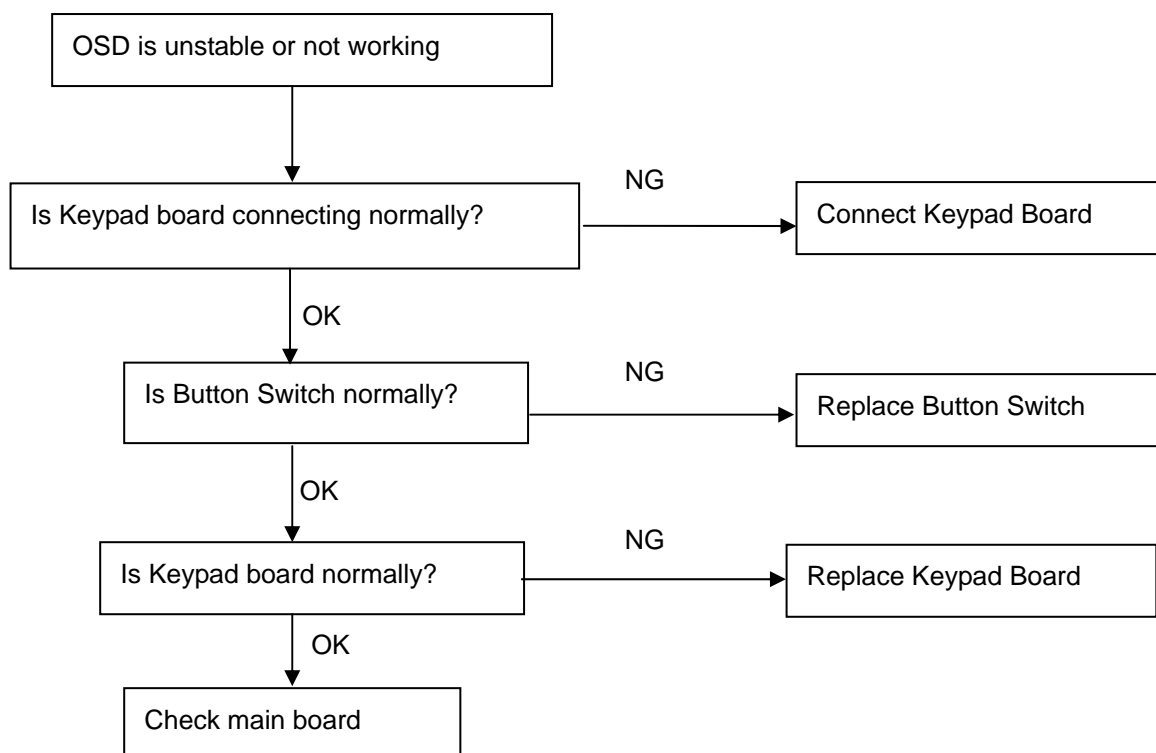
## 2. No Picture



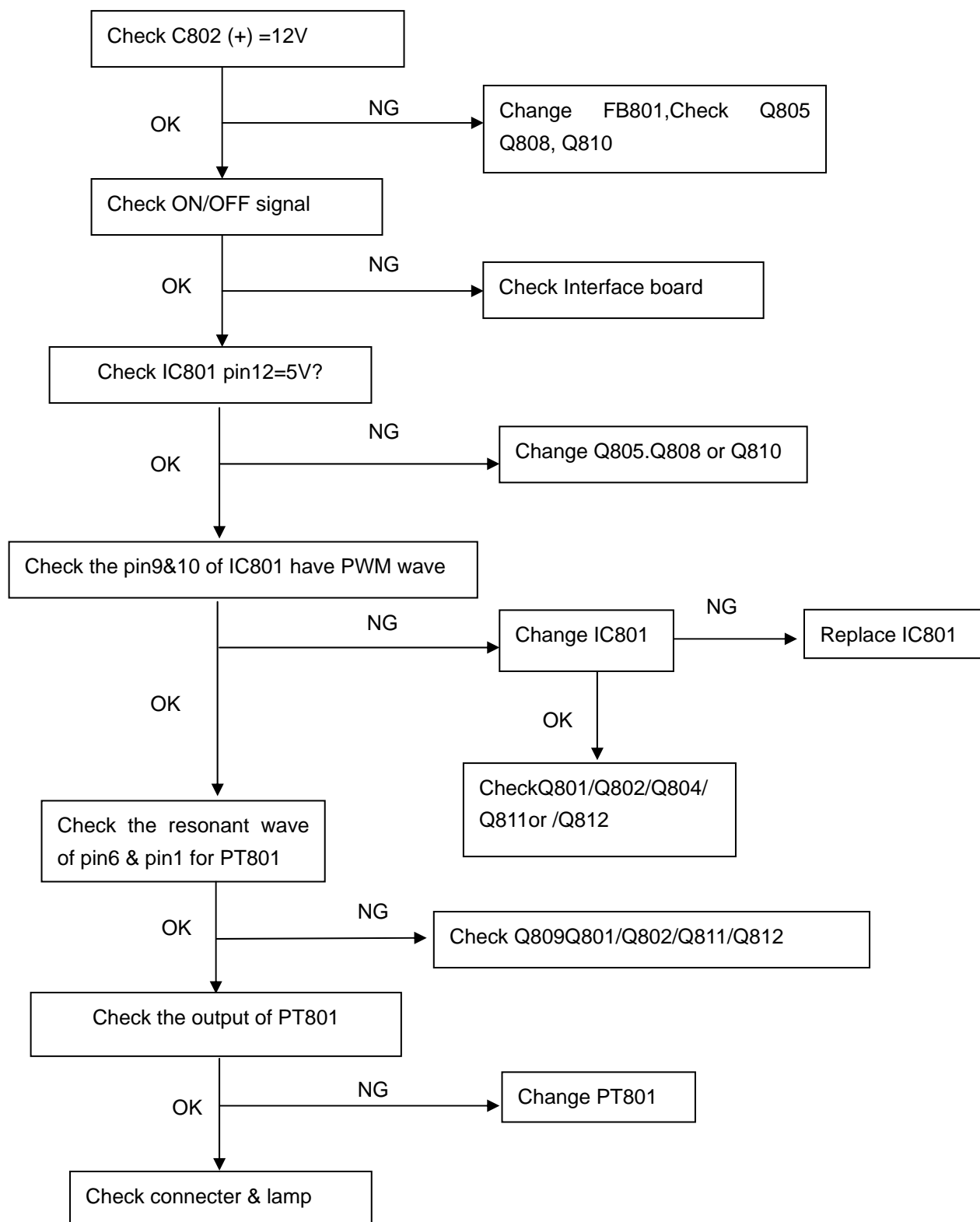
### 3. Panel Power Circuit



### 4. Keypad Board

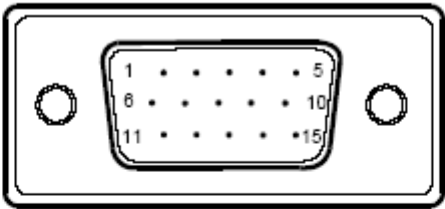


## 5. No Backlight



The following figure shows the connector locations on the monitor:

CONNECTOR PIN ASSIGNMENT



15 - Pin Color Display Signal Cable

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	Red	9.	+5V
2.	Green	10.	Logic Ground
3.	Blue	11.	Monitor Ground
4.	Monitor Ground	12.	DDC-Serial Data
5.	DDC-return	13.	H-Sync
6.	R-Ground	14.	V-Sync
7.	G-Ground	15.	DDC-Serial Clock
8.	B-Ground		

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of AL1702W. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

**NOTE:** Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel (<http://aicsl.acer.com.tw/spl/>). For whatever reasons a part number change is made, it will not be noted in the printed Service Guide. For ACER AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code from those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

**NOTE:** To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by your regional Acer office on how to return it.

Exploded Diagram (Model: AL1702W)

Model: L17W-7K4-7S3  
ACER AL1702W

ITEM	P/N	DESCRIPTION	Q'ty
01	A34G 0432-1	K17W_BEZEL-K4	1
02	A34G 0433-1	K17W_REARCOVER	1
03	A34G 0289-1	K19W_STAND	1
04	A34G 0369-1	K17W_BASE	1
05	A33G 0173-1	K19W_CABLE CLAMP	1
06	A33G 0171-1	K19W_FUNCTION BUTTON	1
07	A33G 0172-2	K19W_POWER LENS	1
08	A15G 0207-AER-1	K17W_MAIN FRAME-HSD	1
09	A37G 0031-3	HINGE	1
10	Q12G 6600-6	RUBBER FOOT	5
11	MIG1730-6-120	SCREW M3X6 PCBPOWER & SCALAR TO MAINFRAME	5
12	MIG130-5-120	SCREW M3X5 MAINFRAME TO PANEL	4
13	AMIG1740-10-47	SCREW M4X10 HINGE TO STAND & MAINFRAME	7
14	Q1G930-14-47	SCREW T3X14 REARCOVER TO BEZEL	1

REVISIONS

REV	DESCRIPTION	DATE
1	INITIAL RELEASE	2004-01-01

ACER AL1702W

ACER SYSTEMS (USA) INC.

3601 KILPATRICK DRIVE

ANN ARBOR, MI 48106-4500

TEL: 734/383-8700

FAX: 734/383-8701


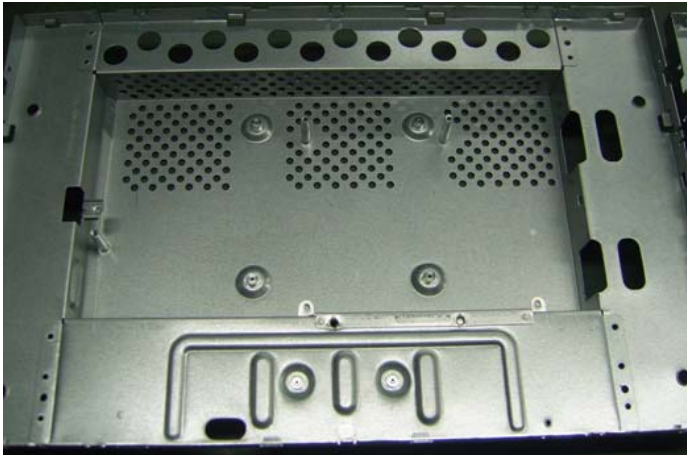


WWW.ACER.COM

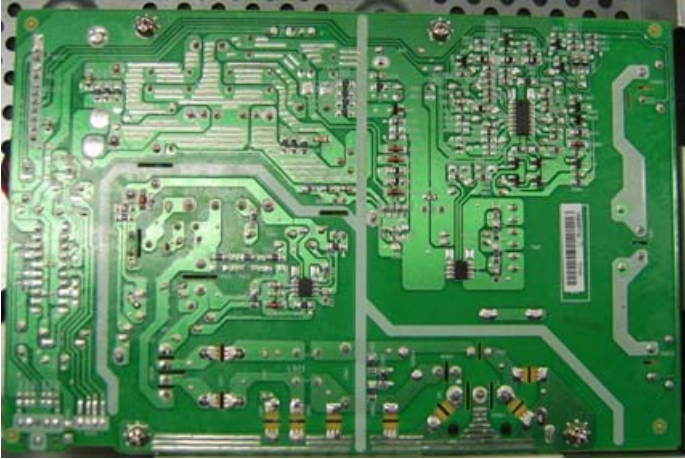

ITEM	QTY	UNIT	PRICE	TOTAL
01	1	EA	10.00	10.00
02	1	EA	10.00	10.00
03	1	EA	10.00	10.00
04	1	EA	10.00	10.00
05	1	EA	10.00	10.00
06	1	EA	10.00	10.00
07	1	EA	10.00	10.00
08	1	EA	10.00	10.00
09	1	EA	10.00	10.00
10	5	EA	10.00	50.00
11	5	EA	10.00	50.00
12	4	EA	10.00	40.00
13	7	EA	10.00	70.00
14	1	EA	10.00	10.00



## Part List

Above picture show the description of the following component.

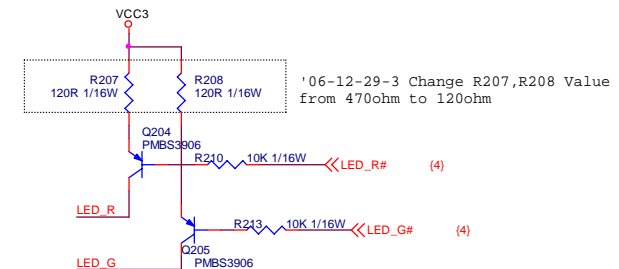
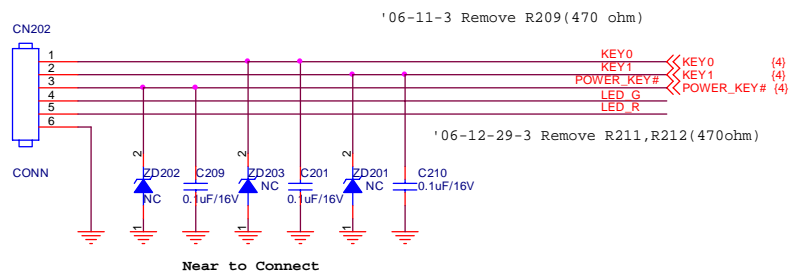
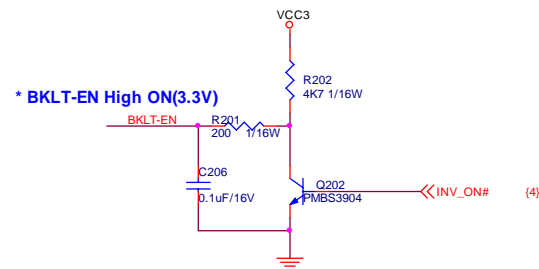
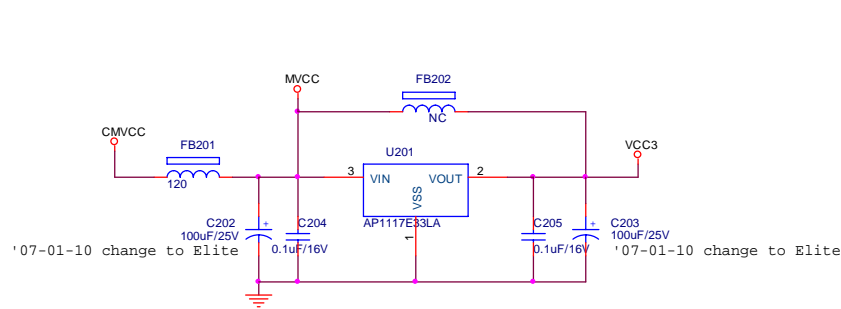
Item	Picture	Description
1		Base
2		shield
3		Key board
4		Panel

5		Power Board
6		Main Board

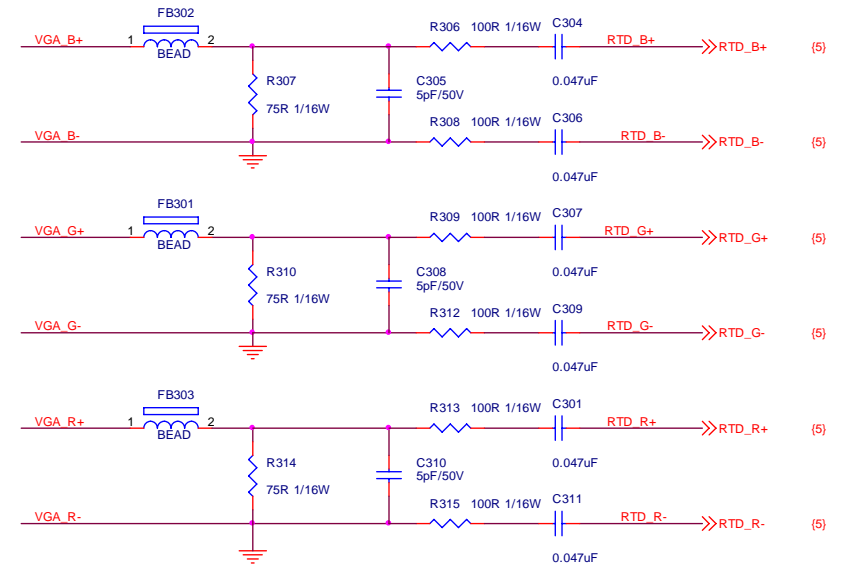
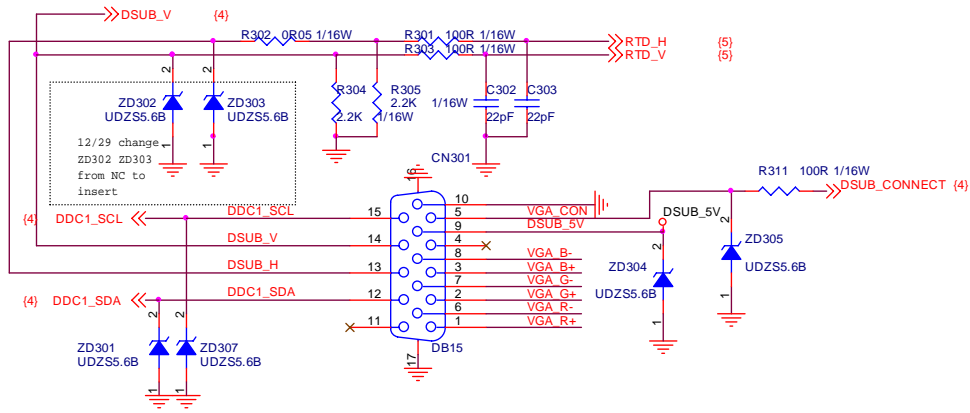
Pin connection diagram for the LED module:

- Pin 1: CMVCC (4)
- Pin 2: CMVCC (4)
- Pin 3: CMVCC (4)
- Pin 4: BKLI-VBRI (4)
- Pin 5: BKLI-EN (4)
- Pin 6: C- PANEL INDEX (4)
- Pin 7: Volume# (4)
- Pin 8: PANEL\_ID# (4)
- Pin 9: Mute (4)

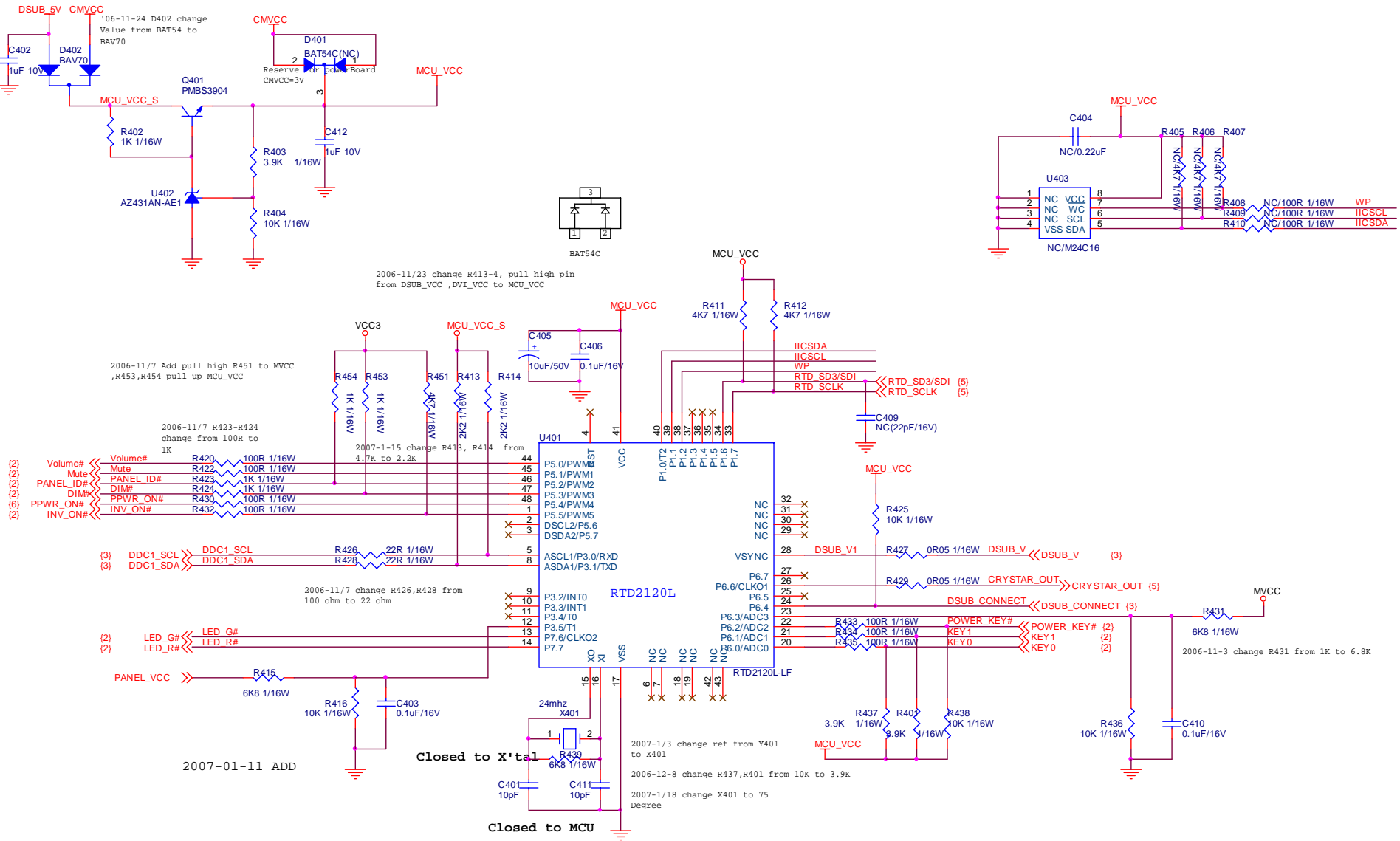
Ground connection is shown at the bottom of the connector.



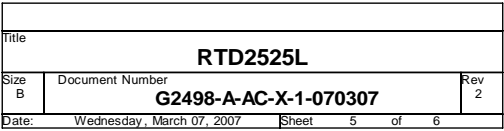
Title				
<b>POWER</b>				
Size B	Document Number <b>G2498-A-AC-X-1-070307</b>			Rev <b>2</b>
Date:	Wednesday, March 07, 2007	Sheet	2	of 6



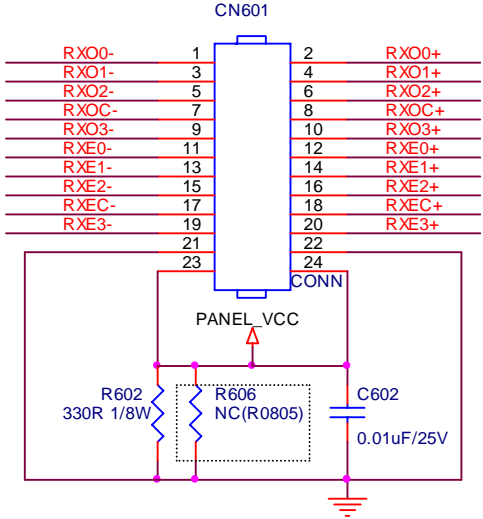
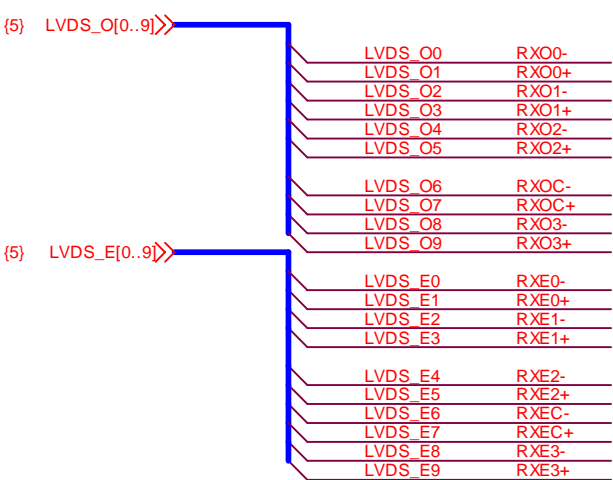
Title			
INPUT			
Size B	Document Number  G2498-A-AC-X-1-070307		Rev 2
Date:	Wednesday, March 07, 2007	Sheet 3 of 6	



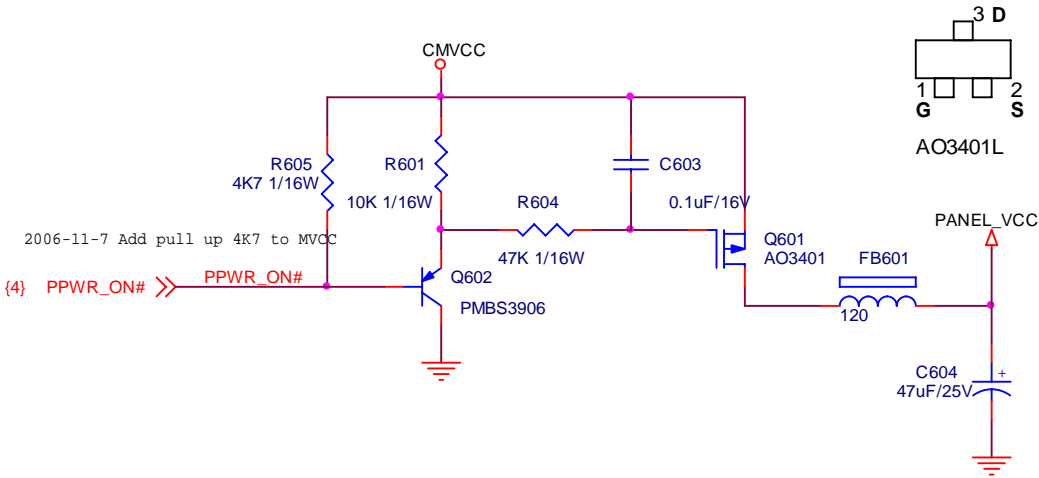
Title		
MCU/RTD2120		
Size	Document Number	Rev
B	G2498-A-AC-X-1-070307	2
Date:	Wednesday, March 07, 2007	Sheet 4 of 6



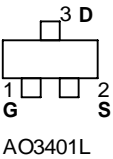
LVDS Panel ( Normal Type )



'07-01-04 Add R606(NC)



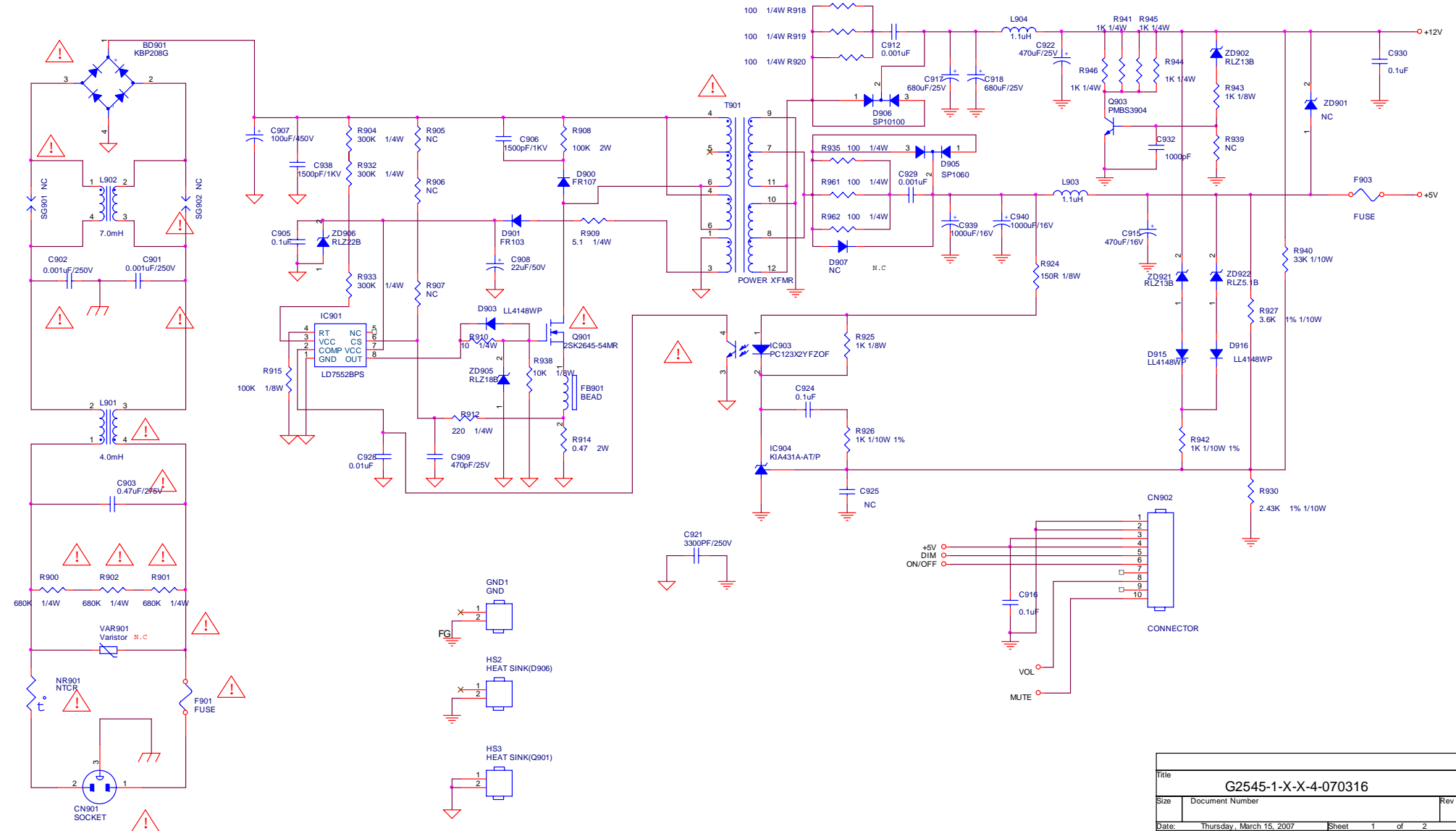
2006-11-7 Add pull up 4K7 to MVCC



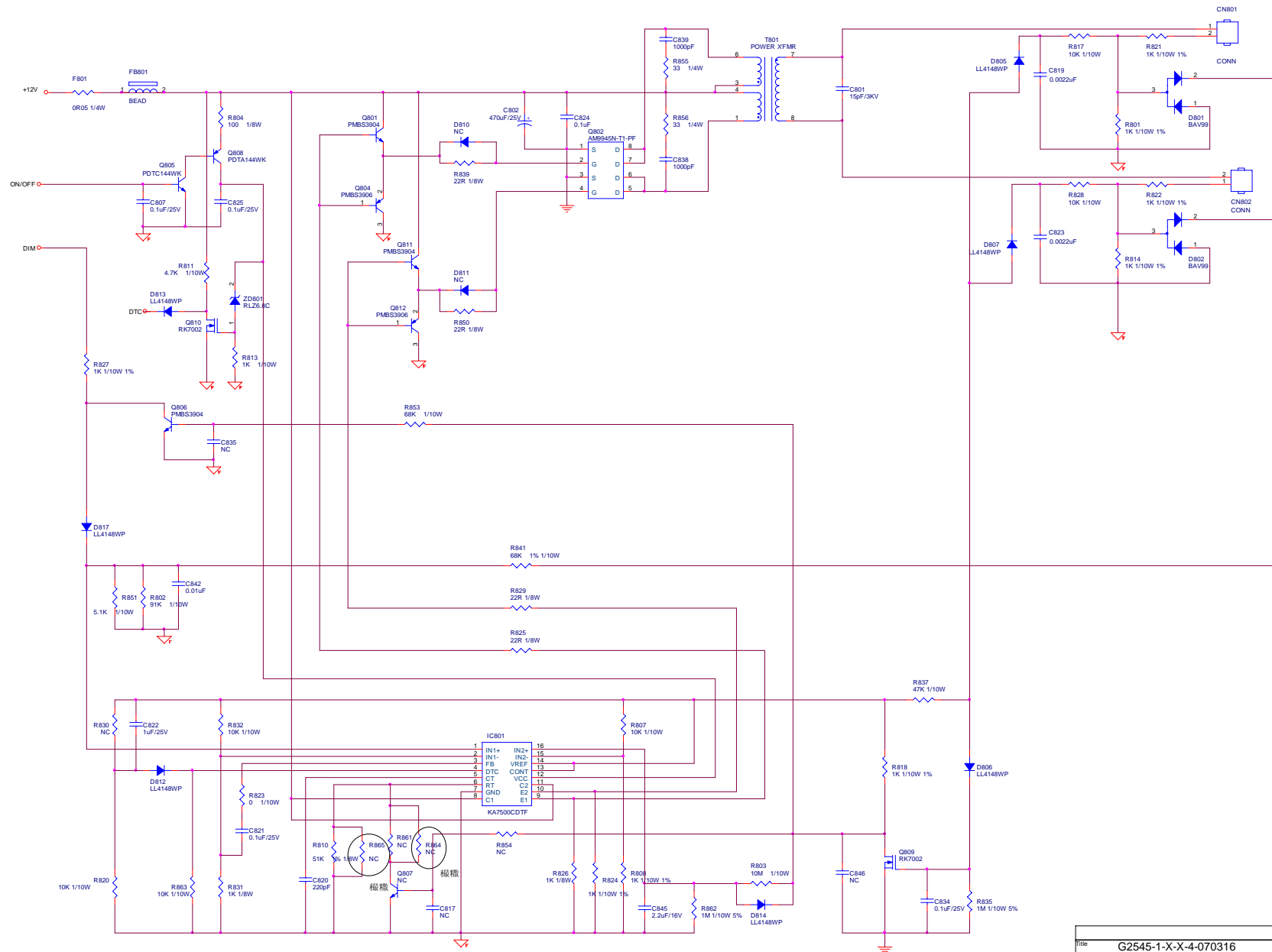
PANEL\_VCC

Title		
OUTPUT		
Size A	Document Number	Rev 2
G2498-A-AC-X-1-070307		
Date:	Wednesday, March 07, 2007	Sheet 6 of 6

## Power board







Title		
G2545-1-X-X-4-070316		
Size	Document Number	Rev
	Custom 1.0	
Date:	Thursday, March 15, 2007	Sheet 2 of 2