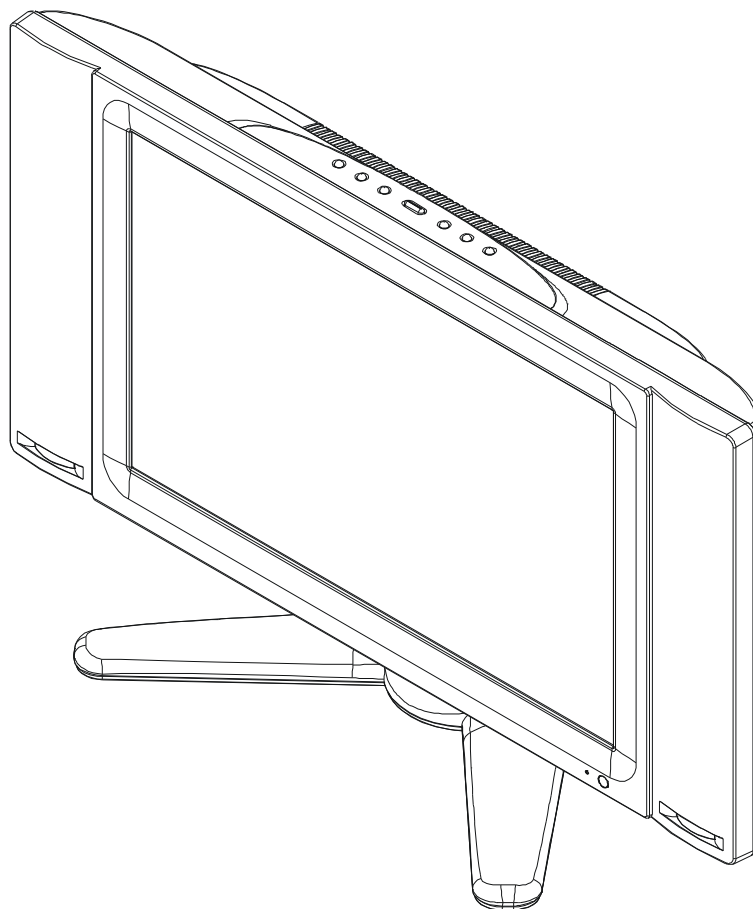


**acer**



**Acer AT2701W**  
**Service Guide**

### Service Guide Version and Revision

<b>No.</b>	<b>Version</b>	<b>Release Date</b>	<b>Revision</b>
1	A00	Aug-02-2005	Original release

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ACER AT2701W Service Manual.

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## 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 TV Monitors

The following symptoms are normal with LCD TV 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 TV 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 TV 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.

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**GENERAL SPECIFICATIONS**

Items		Specification
LCD Panel	Screen Size	27" TFT-LCD
	Aspect Ratio	16: 9
	Resolution	1366 x 768 pixels
TV Function	TV Tuning System	PAL B/G, D/K, I and SECAM L/L' (Multi-Europe) Full Channel with Electronic PLL Tuner
	Sound System	Nicam / A2
	Teletext	Yes (252 Page)
	Color systems	PAL / SECAM / NTSC
PC Input	Signal Input	Analog: D-Sub 15 pin (detachable cable)
	PnP compatibility	DDC 2B
	Recommended Analog	1024 x 768 (60Hz)
	Input Audio	Headphone Mini-jack for stereo (3.5ø)
Audio Output	Audio Output: L / R	Speaker (built-in): Two 5 watt speakers
		Headphone Mini-jack for stereo (3.5ø)
		Line Output (SCART L/R)
Other Function	PIP (only when in PC mode)	
Table Stand	Included	
Wall Mount	VESA 100 x 100 mm	
Power	Power Supply	AC100V~240V, 50/60Hz
	Power Consumption	<140W
Panel Tilt	Forwards/ Backwards/ Rotation	-5° / +20° / ± 30°
Dimension	W x H x D (with stand)	898 x 470 x 287 (mm)
Weight (net)	Kg (w/o Accessories)	13.4 KG
Accessories	Remote Control, Batteries (x2), AC Power Cord, Composite Cable, SCART Cable, S-Video Cable, User's Guide	
AV1 (SCART1)	SCART (CVBS & RGB , Audio L/R)	
AV2/SCART2	SCART (CVBS, Audio L/R)	
AV3	RCA for CVBS, Audio L/R	
AV3-S	S Din For S-Video, Audio L/R share with RCA	

## LCD TV DESCRIPTION

The LCD TV will contain a main board (include audio), a switching power board (include an inverter board), an IR board, a function keyboard, a DPF Board and an Ear phone board. The main board and power board will house the flat panel to control logic I2C bus, DDC, brightness control logic for LCD panel, DC-DC conversion to supply the appropriate power to the whole board and transmitting TTL level signals into LCD Module to drive the LCD display circuit.

The inverter board will drive the sixteen CCFLs (Cold Cathode Fluorescent Tube).

The switching power board will provides the power ON/OFF to control the TV and control LED indicator for DPMS.

The function keyboard and Remote Control will provide the OSD control signal to the Main Board.

## INTERFACE CONNECTOR

A : Power Cord Connector.

B : RF Signal Connector.

C : Video / Audio Signal Connectors.

D : PC D-sub 15 pin Connector.

E : PC Audio Connector.

## PRECAUTIONS AND NOTICES

### 1-1 ASSEMBLY PRECAUTION

(1) Please do not press or scratch LCD panel surface with anything hard. And do not soil LCD panel surface by touching with bare hands (Polarize film, surface of LCD panel is easy to be flawed)

In the LCD panel, the gap between two glass plates is kept perfectly even to maintain display characteristic and reliability. If this panel is subject to hard pressing, the following occurs :

(a) Uniform color      (b) Orientation of liquid crystal becomes disorder

(2) Please wipe out LCD panel surface with absorbent cotton or soft cloth in case of it being soiled.

(3) Please wipe out drops of adhesive like saliva and water in LCD panel surface immediately.

They might damage to cause panel surface variation and color change.

(4) Do not apply any strong mechanical shock to the LCD panel.



## **1-2 OPERATING PRECAUTION**

- (1) Please be sure to unplug the power cord before remove the back-cover. (be sure the power is turn-off)
- (2) Please do not change variable resistance settings in MAIN-BOARD; they are adjusted to the most suitable value. If they are changed, it might happen LUMINANCE does not satisfy the white balance spec.
- (3) Please consider that LCD backlight takes longer time to become stable of radiation characteristic in low temperature than in room temperature.
- (4) Please pay attention to displaying the same pattern for very long-time. Image might stick on LCD.

## **1-3 STORAGE PRECAUTION**

- (1) When you store LCD for a long time, it is recommended to keep the temperature between 0°C -40°C without the exposure of sunlight and to keep the humidity less than 85% RH.
- (2) Please do not leave the LCD in the environment of high humidity and high temperature such as 60°C, 85%RH.
- (3) Please do not leave the LCD in the environment of low temperature; below -25°C.

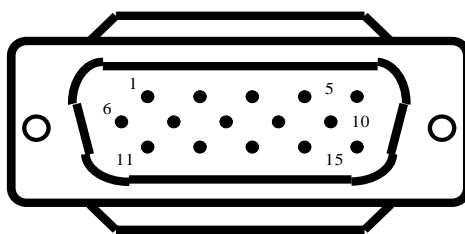
## **1-4 HIGH VOLTAGE WARNING**

The high voltage was only generated by Power support part, if carelessly contacted the transformer on this module, can cause a serious shock.

## D-SUB PIN DISTRIBUTION

This procedure gives you instructions for installing and using the LCD TV display.

- (1) Position the display on the desired operation and plug the power cord into a convenient AC outlet. Three-wire power cord must be shielded and is provided as a safety precaution as it connects the chassis and cabinet to the electrical conduct ground. If the AC outlet in your location does not have provisions for the grounded type plug, the installer should attach the proper adapter to ensure a safe ground potential.
  
- (2) Connect the 15-pin color display shielded signal cable to your signal system device and lock both screws on the connector to ensure firm grounding. The connector information is as follow:



15 - Pin Color Display Signal Cable

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	Red Video	9	No Pin!
2	Green Video	10	Sync Ground
3	Blue Video	11	Not Used
4	Not Used	12	Serial Data for DDC
5	Ground	13	H-Sync.
6	Red Ground	14	V-Sync.
7	Green Ground	15	Serial Clock for DDC
8	Blue Ground		

- (3) S-Video ( Y / C ) : TV rear side : 4 pin Mini-DIN female  
 SCART: TV rear side : RCA female  
 TV: TV rear side : IEC type female  
 AV1 : TV rear side : RCA female ( Yellow )  
 Audio: TV rear side : RCA female ( Red / White )  
 PC Input audio: 3.5mm Stereo female  
 Audio Input for AV1, S-Video, SCART Video : RCA female ( Red / White )  
 Headphone : 3.5mm female  
 Audio line Out ( to another speaker ) : RCA female ( Red / White )

- (4) Apply power to the display by turning the power switch to the "ON" position and allow about ten seconds for Panel warm-up. The Power-On indicator lights "GREEN" when the display is on.

- (5) With proper signals feed to the display, a pattern or data should appear on the screen, adjust the brightness and contrast to the most pleasing display, or press auto-adju to get the best picture-quality.
- (6) This TV (with PC function) has power saving function following the VESA DPMS. Be sure to connect the signal cable to the PC.
- (7) If your TV requires service, it must be returned with the power cord.

## Factory Preset Display Modes:

### Analog RGB Signal Timing

Dots × Lines	Vertical Frequency (Hz)	Horizontal Frequency (kHz)	Sync Polarity		Presence		Screen Mode	
			Horizontal	Vertical	Horizontal	Vertical	Normal (4:3)	FULL (16:9)
720×400	70.1	31.5	NEG	POS	YES	YES	YES	YES
640×480	59.9	31.5	NEG	NEG	YES	YES	YES	YES
	75.0	37.5	NEG	NEG	YES	YES	YES	YES
800x600	75.0	46.9	POS	POS	YES	YES	YES	YES
1024×768	60.0	48.4	POS	POS	YES	YES	YES	YES
1280×768	60.0	47.7	NEG	POS	YES	YES	YES	YES

# LCD TV Panel Specification

## PANEL FEATURES

- Excellent brightness (550 nits)
- Ultra high contrast ratio (1000:1)
- Fast response time (8ms)
- High color saturation NTSC 75%
- WXGA (1366 x 768 pixels) resolution
- DE (Data Enable) only mode
- LVDS (Low Voltage Differential Signaling) interface
- Optimized response time for both 50/60 Hz frame rate
- Ultra wide viewing angle: 176(H)/176(V) (CR>20) Super MVA technology
- 180 degree rotation display option

## GENERAL SPECIFICATIONS

Item	Specification	Unit
Active Area	596.259 (H) x 335.232 (V) (27" diagonal)	mm
Bezel Opening Area	603.22 (H) x 341.98 (V)	mm
Driver Element	a-si TFT active matrix	-
Pixel Number	1366 x R.G.B. x 768	pixel
Pixel Pitch (Sub Pixel)	0.1460 (H) x 0.4365 (V)	mm
Pixel Arrangement	RGB vertical stripe	-
Display Colors	16.7M	color
Display Operation Mode	Transmissive mode / Normally black	-
Surface Treatment	Hardness : 3H, Haze : 40% Anti-reflective coating < 2% reflection	-

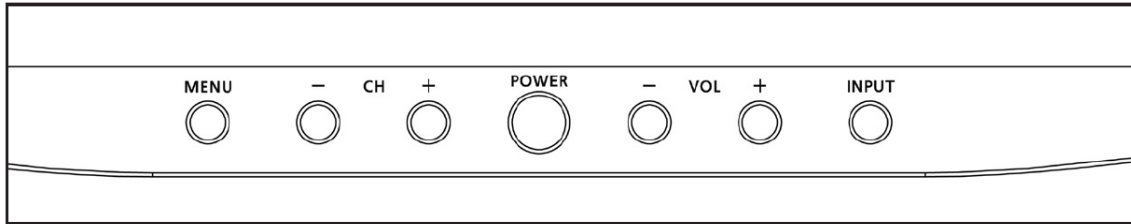
## MECHANICAL SPECIFICATIONS

Item		Min.	Typ.	Max.	Unit
Module Size	Horizontal(H)	637.05	637.55	638.05	mm
	Vertical(V)	379.3	379.8	380.3	mm
	Depth(D)	34.9	35.9	36.9	mm
	Depth(D)	39.5	40.5	41.5	mm
Weight		3600	3900	4300	g

## Optical Specifications

Item		Symbol	Condition	Min.	Typ.	Max.	Unit
Contrast Ratio		CR	$\theta_x=0^\circ, \theta_y=0^\circ$ Viewing Normal Angle		(1000)		-
Response Time		Gray to gray average			(8)		ms
Center Luminance of White		$L_c$			(550)		$cd/m^2$
White Variation		$\delta W$				(1.3)	-
Cross Talk		CT				(4)	%
Color Chromaticity	Red	Rx			(0.652)		-
		Ry			(0.331)		-
	Green	Gx			(0.275)		-
		Gy			(0.597)		-
	Blue	Bx			(0.143)		-
		By		(0.063)		-	
	White	Wx		(0.285)		Target	
		Wy		(0.293)			
Color Gamut		CG		(75)		%	
Viewing Angle	Horizontal	$\theta_{x+}$	CR $\geq$ 20		(88)		Deg.
		$\theta_{x-}$			(88)		
	Vertical	$\theta_{y+}$			(88)		
		$\theta_{y-}$			(88)		

## Front panel controls



**Power Key:** Press to turn the LCD TV on or off.

**MENU Key:** Press to show and exit the OSD menu.

**Down / Up Key:** Press to perform function and channel selection.

**- / + Key:** Press to adjust the volume level, or confirm function selection.

**Input Key:** Press to select your input source.

## Operating Instructions

The following front panel adjustments are available for this product. For details on the locations of these adjustments.

**POWER switch:** This switch shall be visible and accessible on the down right side of front PC frame. Soft Power Switch (TURN ON SYSTEM) and one push of Soft-Power Switch shall turn on the system.

Note: This switch is not considered the “Mains Disconnection Device” for agency purposes. The AC switch in back cover of product can also disconnect power. The power cord is the main disconnection device.

**Power Indicator LED KEY:** This LED will illuminate “Green” light when the product is ON and “Orange” light when the product in stand-by mode.

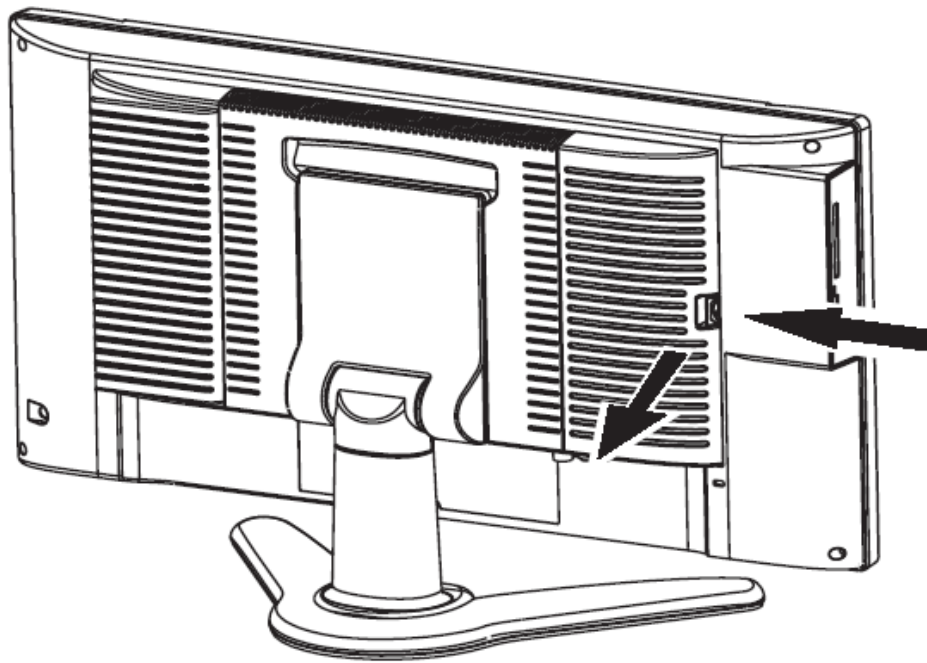
**CH +/- KEY:** These two switches shall be visible and accessible on the bottom of front panel control keys. While TV is selected as input source, activation of these keys will cycle through all available TV channels. While OSD menu is up, activation of these keys will highlight each available adjustment. The activation time for this switch includes Press and Hold should be less than half second.

**VOL +/- KEY:** These two switches shall be visible and accessible on the bottom of front panel control keys. Activation will increase /decrease loudness of the audio output. In addition, while OSD menu is up, activation of these keys will regulate a pre-selected adjustment. The activation time for this switch includes Press and Hold should be less than half second.

**MENU KEY:** This switch shall be visible and accessible on the left side of VOL - switches. Once pressed, this key shall bring up the corresponding OSD menu(s) based on the selected input source.

**INPUT KEY:** This switch shall be visible and accessible on the right side of VOL + switches. Once pressed, this key shall toggle in a closed loop of the input source selection from TV, AV1, AV2, AV3, AV3-S and PC.

**Headphone:** This connector is designed purpose to use headphone. Once the headphone connected, then the speakers will auto mute on audio output.

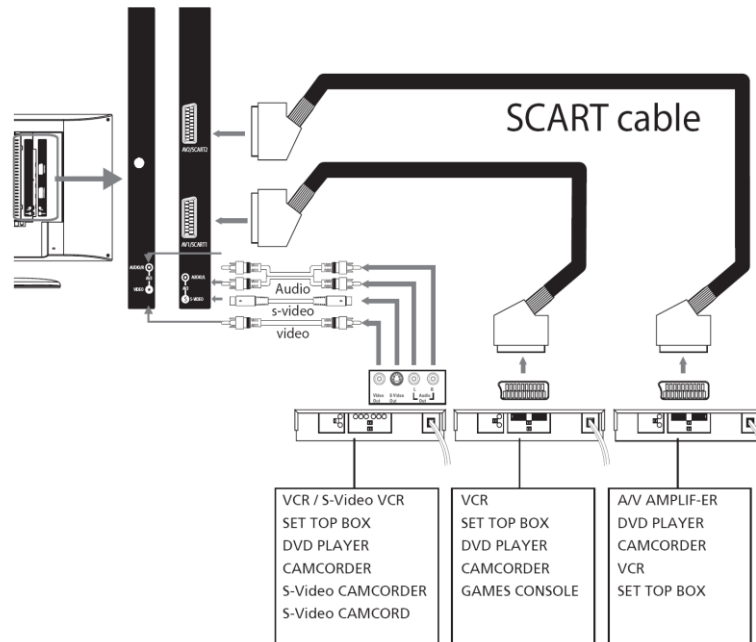


There is a wide range of devices that can be connected to your LCD TV. Please refer to the section below:

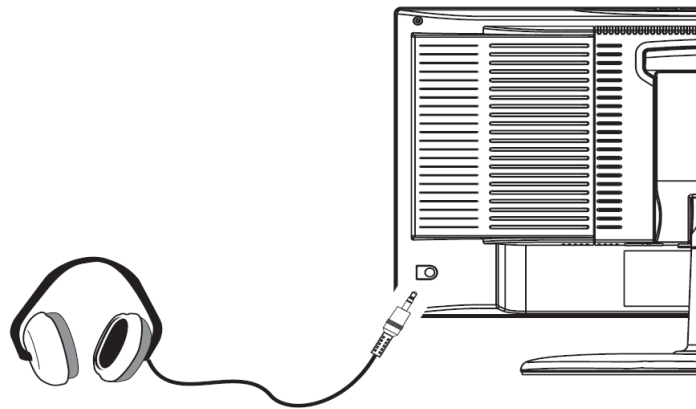
### Preparation


Remove the back plate of the TV as shown above. If you lay your LCD TV flat on a table, with the screen facing down, it will be easier to connect your peripheral equipment. Be careful not to damage the screen.

### How to connect

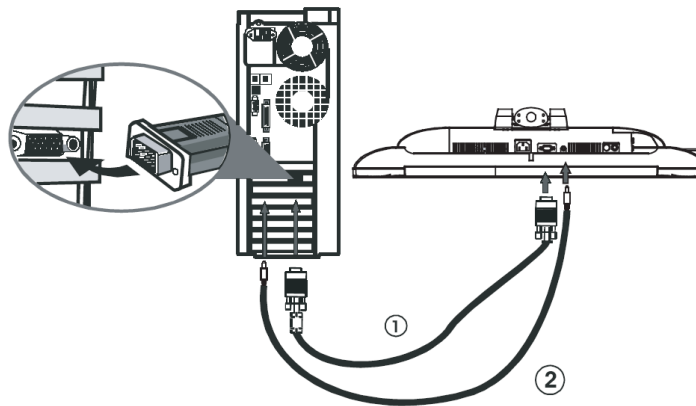


## Headphone



- 1、 When you attach headphones, the speakers built into your TV set will be disabled. You can use the **VOL** controls on the TV set or remote control to adjust the volume level.
- 2、 Press the  key on the remote control to switch off the sound from the headphone.

## PC

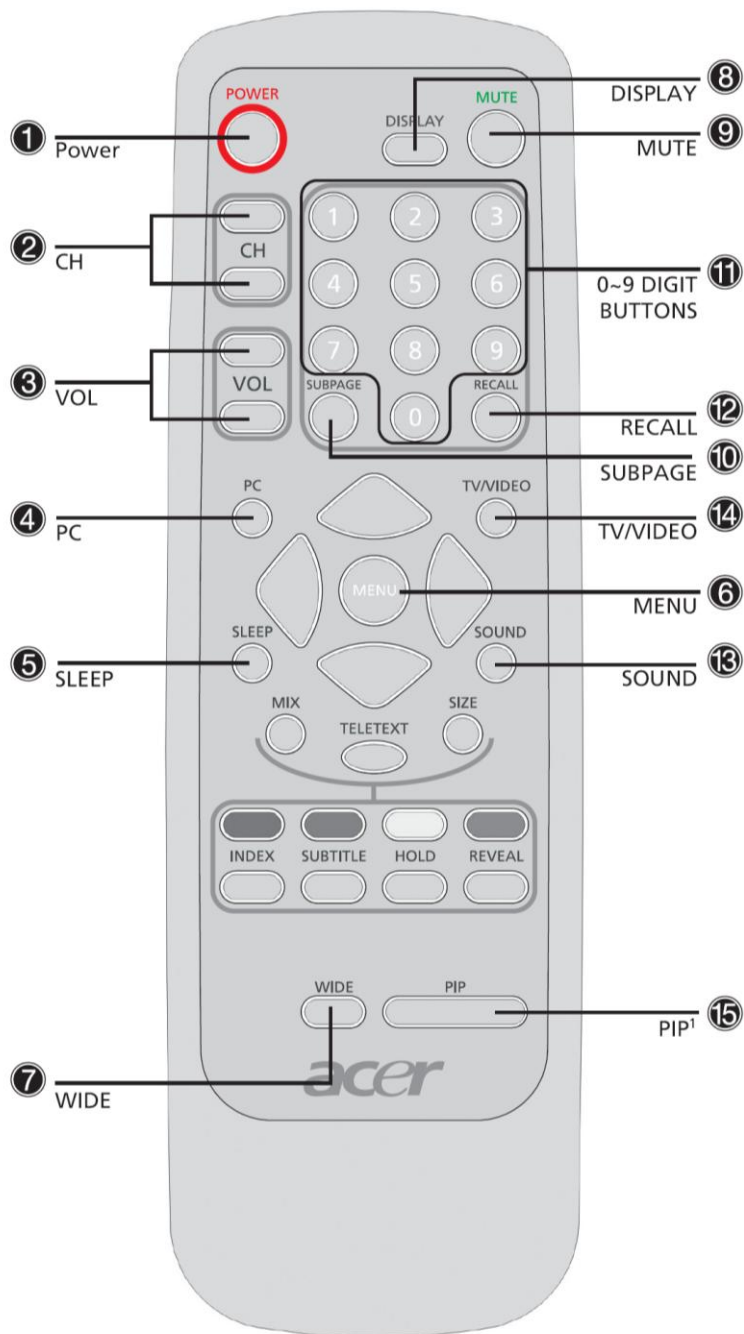


### How to connect PC input

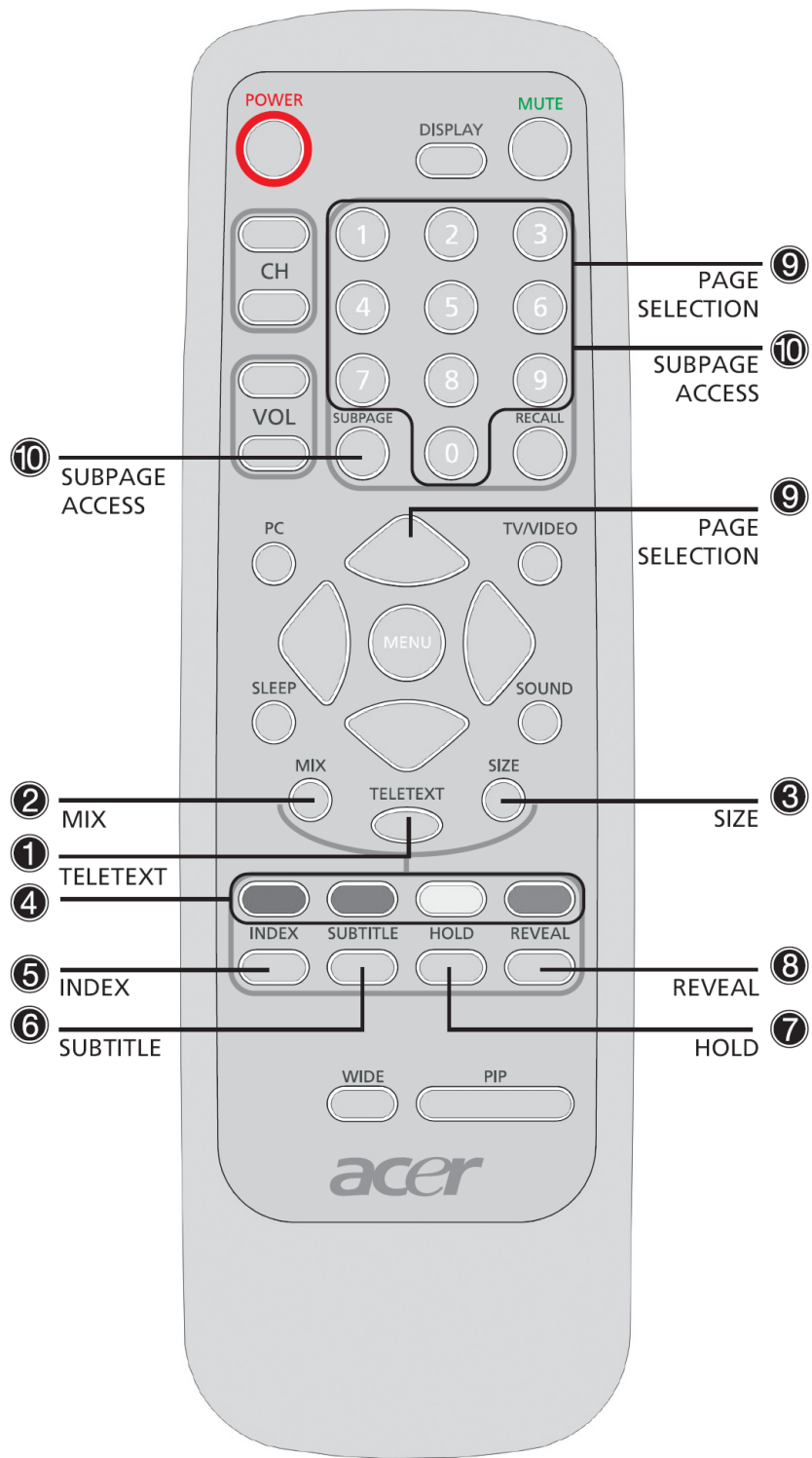
1. Use the D-sub cable in the accessories box, and plug it into the D-sub port located beneath the TV screen.
2. Use the audio cable in the accessories box, and plug it into the PC's audio jacks and the audio jack located beneath the TV screen.



## Using the Remote Control



Item	Description
① POWER	Press to turn on/off your LCD TV. The LCD TV is never completely powered off unless it is physically unplugged.
② CH	Press the ▲ or ▼ (or MENU ▲ or ▼) buttons to browse through the channels.
③ VOL	Press + or – (or MENU ◀ or ▶) buttons to adjust the volume.
④ PC	Set the input source to "PC".
⑤ SLEEP	Select how much time should elapse before your LCD TV switches itself to standby. Press the key repeatedly to select the time, sequentially: 0,30,60,90,120 minutes. The timer begins to count down from the number of minutes selected after the display has disappeared.
⑥ MENU	Press repeatedly to scroll through the OSD menu.
⑦ WIDE	Press to toggle between aspect ratios. Available cohoices are 4:3: to 16:9 (linear), 4:3 to 16:9 (non-linear), and16:9
⑧ DISPLAY	(1) Show the channel being used for RF input. (2) Show the input source when RF is not being used.
⑨ MUTE	Temporarily turn off the sound. Press again to restore the sound.
⑩ SUBPAGE	Activate the Subpage function for Teletext.
⑪ 0~9 DIGIT BUTTONS	Press to select a TV channel.
⑫ RECALL	Return to the previous channel.
⑬ TV/VIDEO	Select the input source from <b>TV</b> , <b>AV1</b> , <b>AV2</b> , <b>AV3</b> or <b>AV3-S</b> mode, according to where you connected your external source.
⑭ SOUND	Select Mono, Stereo or SAP sound from TV RF input.
⑮ PIP <sup>1</sup>	Press to enable the PIP function (only when in PC mode)



## TELETEXT

Teletext is a text-based information service provided by some TV stations, in addition to traditional TV broadcasts.

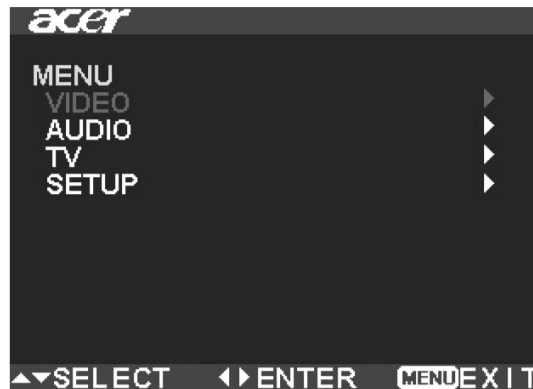
Item	Description
① TELETEXT	Press this button to access the Teletext service. The Teletext screen will appear. To turn off the Teletext service, press TELETEXT again.
② MIX	Press MIX to superimpose the Teletext content over the normal TV broadcast . Press again to return to the standard Teletext mode.
③ SIZE	Press SIZE repeatedly to display the upper teletext part, the lower teletext part and then to return to the normal.
④ RED / GREEN / YELLOW / BLUE	Use the colored buttons to operate the Teletext screens.
⑤ INDEX	Press INDEX to return to the main page.
⑥ SUBTITLE	Press to select the next page marked as a subtitle page and request it as the display page.
⑦ HOLD	Press HOLD to pause the Teletext page when viewing information. Press again to return to automatic page updating.
⑧ REVEAL	Press REVEAL to display reveal hidden words e.g. quiz page answers. Press again to hide.
⑨ PAGE SELECTION	Page can be selected in two ways. a. Press ▲ or ▼ to increase or decrease the page number by one. b. Enter the page number directly using the number keys.
⑩ SUBPAGE ACCESS	When Teletext information exceeds more than one page. Press SUBPAGE followed by the page number (using the number key)....

## USing the OSD Menus

1. Press the **MENU** button repeatedly to access the onscreen display menus.
2. Use the up and down cursor keys to select an item or adjust the settings of a menu item.
3. Use the left and right cursor keys to enter a submenu or activate a function.
4. Press **MENU** again to exit the OSD.

### Main Menu

Press the **MENU** button to access the onscreen display (OSD). The main menu allows you to adjust settings for **VIDEO**, **AUDIO**, **TV** (only when using the TV mode), **PC**, **PIP** (only when in PC mode) and **SETUP**.



### VIDEO Adjust



1. **CONTRAST**, **BRIGHTNESS**, **COLOR TEMP** and **TINT** are adjusted from 0 to 100.
  2. **SHARPNESS** is adjusted from -5 to +5.
- You can adjust picture contrast, brightness, color, tint and sharpness to the levels you prefer.
3. **RESET** to the default value.



When adjusting any item in a submenu, the OSD will display the above.

## AUDIO Adjust

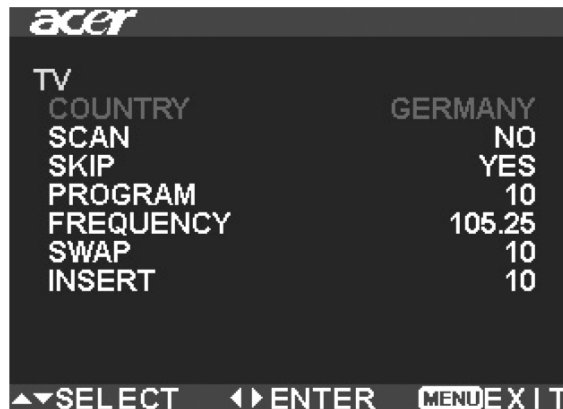


1. **VOLUME** is adjusted from 0 to 100.
2. **BASS** and **TREBLE** are adjusted from 0 to 100. You can adjust Volume, Bass and Treble to the levels you prefer.



When adjusting any item in a submenu, the OSD will display the above.

3. **SRS** turns the SRS feature on or off. SRS audio technology is designed to enhance your audio enjoyment.



### Quick Installation

1. Use **COUNTRY** to select your country first.
2. Move to **SCAN** and scan the available program.
3. Once the scan finished, you can use the **SKIP** function to skip unwanted program.

### PROGRAM Editing

Using **PROGRAM**, **FREQUENCY**, **SWAP**, and **INSERT** functions to edit program.

1. Move to **PROGRAM** and select the program you want to edit.
2. Move to **FREQUENCY**, use left and right buttons to search the program.
3. You can use the **SWAP** function to swap program.

- 
4. Use **INSERT** to insert the current program into selected position.

## SETUP



1. Use the **BLUE SCREEN** option to decide if you want to display a blank screen or a blue screen when there is no video input. Pre-set is ON.
2. Select the **LANGUAGE** you want to use to display the OSD menu. Pre-set is English.
3. You can set the **SLEEP TIMER** to determine the period of time after which the TV should switch itself to standby. The counter runs sequentially 0, 30, 60, 90, 120, 0 minutes.
4. Select the **TELETEXT** language type you want to display.
5. **RESET** to the default values of **BLUE SCREEN** and **SLEEP TIMER**.

## PC Setup



## PC Adjust

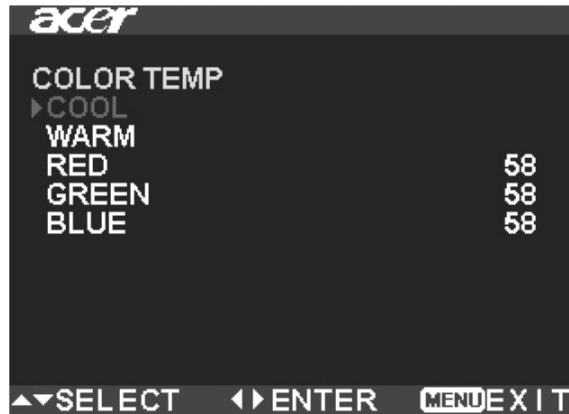


1. **AUTO TUNE** automatically determines the resolution for VGA input.

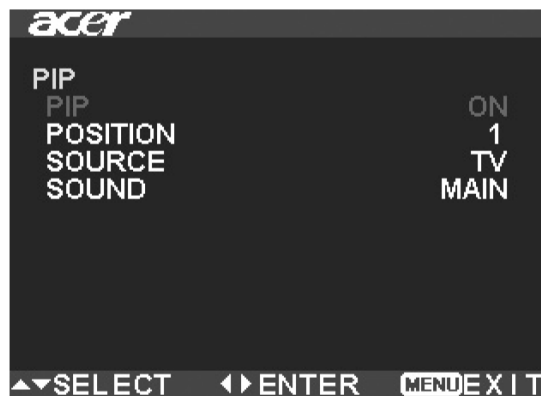
- 
2. **CONTRAST, BRIGHTNESS, FOCUS, CLOCK, H-POSITION, V-POSITION** and **COLOR TEMP** allow you to set the picture for maximum viewing comfort.

## COLOR TEMP

Using the **COLOR TEMP** function, you can select the display warmth and color depth.



## PIP



## PIP

1. Select **PIP** to turn the PIP feature on or off.
2. **POSITION** allows you to change the position of the daughter picture.
3. **SOURCE** lets you select the video source for the daughter picture.
4. Use **SOUND** to select the audio source: MAIN (PC) or SUB (Video).



---

## 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. The display is restored by pressing a key on the keyboard, or clicking the mouse.

#### 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, 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 assemble the monitor for maintenance.

### Disassembly Procedure

#### Disassemble the base

1. put the monitor on a clean soft cloth with panel facing to the table. (Fig 1)



( Fig 1 )

2. Remove six screws to release stand base. (Fig 2)

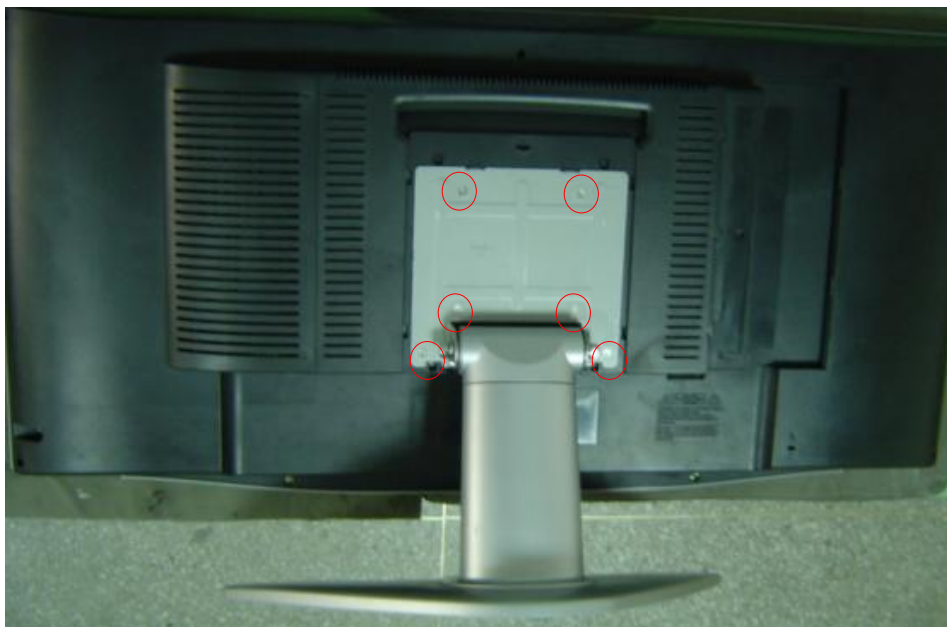


Fig2

---

## Disassemble the back covers

1. Remove ten screws to release back cover. (Fig 3-4)



( Fig 3 )



( Fig 4 )

2. Remove two screws to release key board cover. (Fig 5 - 6)



( Fig 5 )



( Fig 6 )

3. Remove two screws in the keyboard, which is marked with red. (Fig 7)



( Fig 7 )

**Disassemble the shield**

1. Remove six screws to release the shield. The screws is marked with red.(Fig 8)



Fig8



2. Remove the shield as below. (Fig 9)



( Fig 9 )

**Disassemble the speaker**

1. Remove six screws to release speaker. (Fig 10-11)

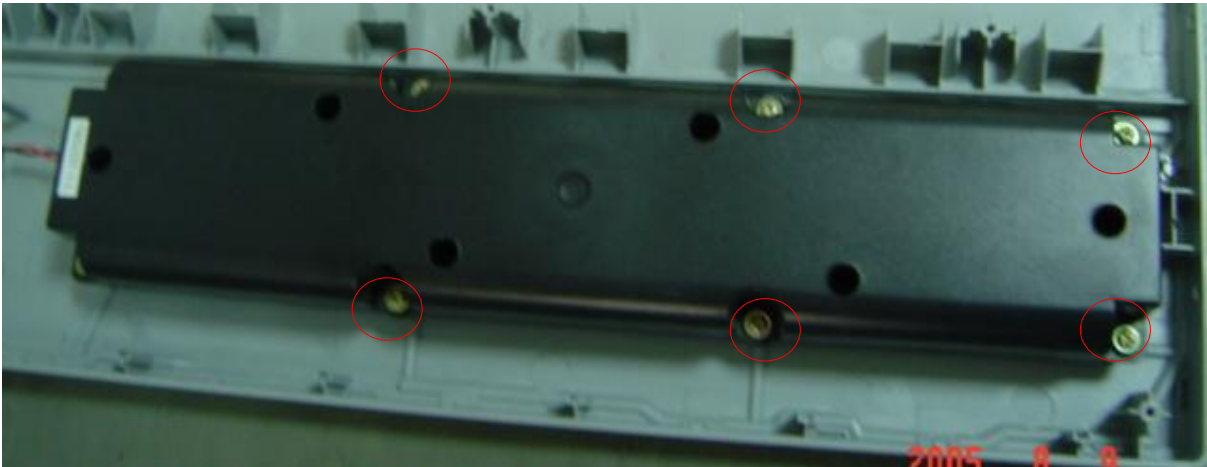
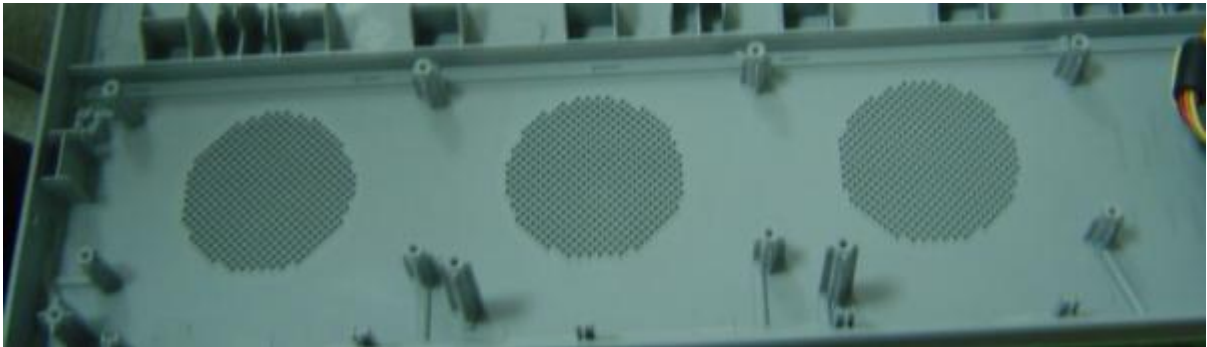


Fig 10



(Fig 11)

**Disassemble the main board**

- 1. Remove eight screws to release main board. (Fig 12)
- 2. Remove connector wire with main board and panel. (Fig 13)



( Fig 12 )



( Fig 13 )

**Disassemble the power board**

- 1. Remove six screws to release power board. (Fig 14)
- 2. Remove connector wire with power board and panel. (Fig 15)
- 3. Remove back cover (Fig 16-17)



Fig 14

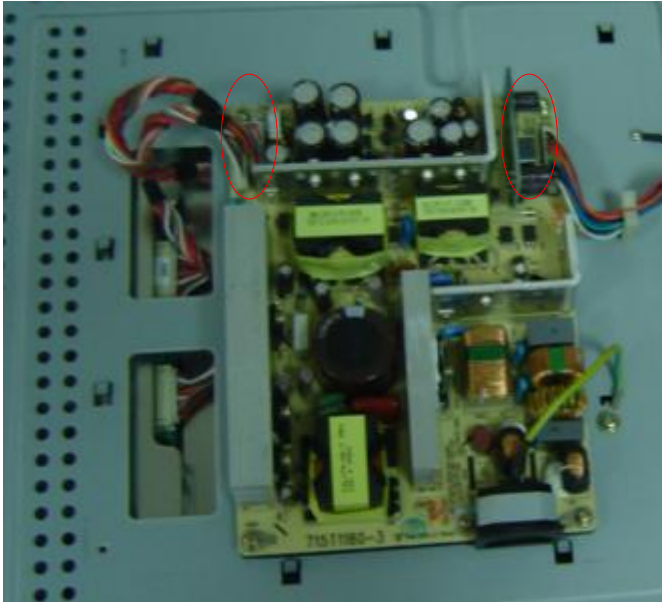


Fig 15



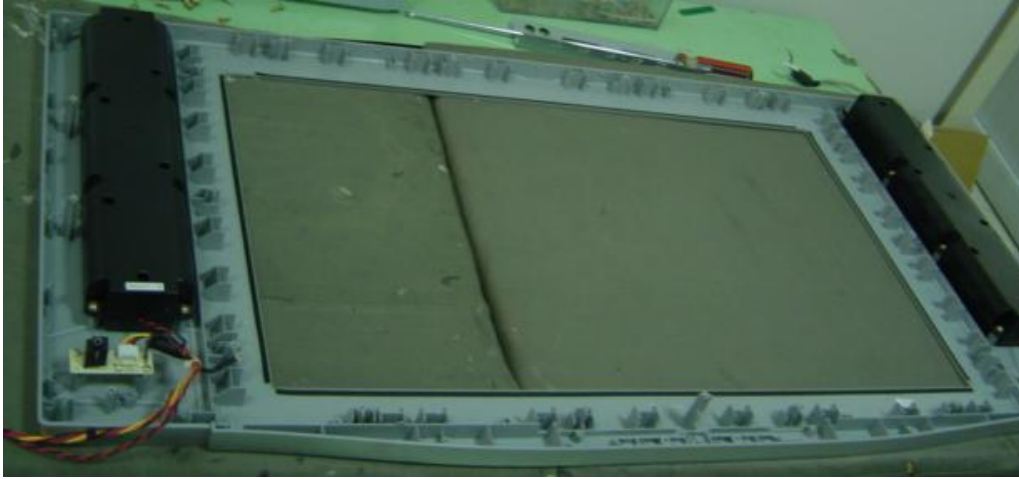


Fig 16

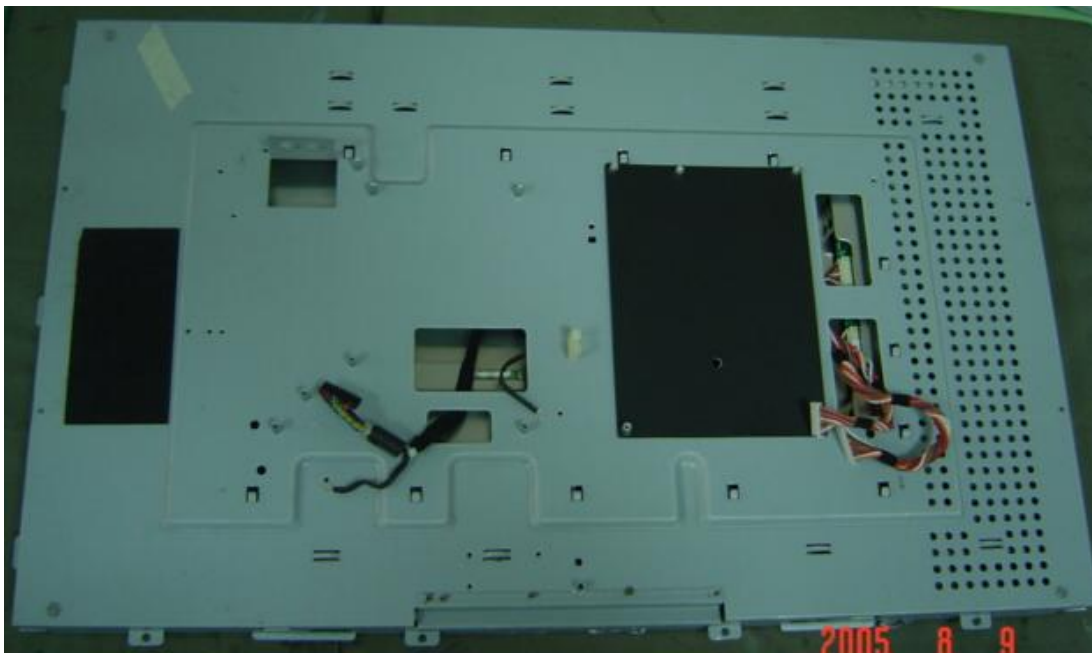


Fig (17)

### Disassemble the panel

1. Remove four screws (right and left) to release metal frame. (Fig 18)

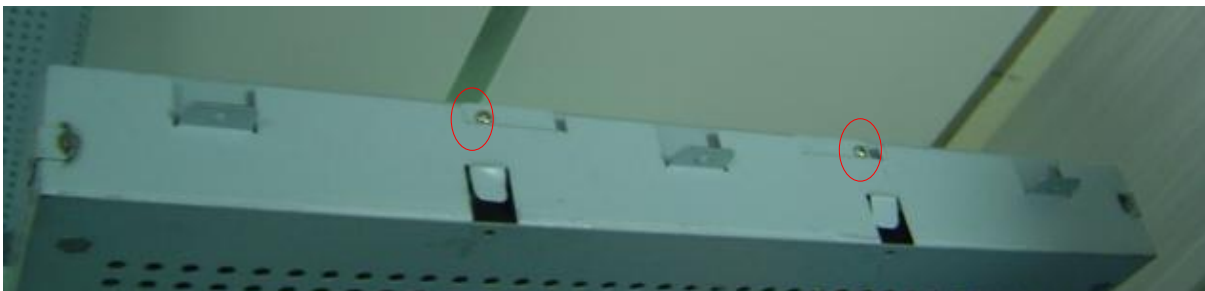
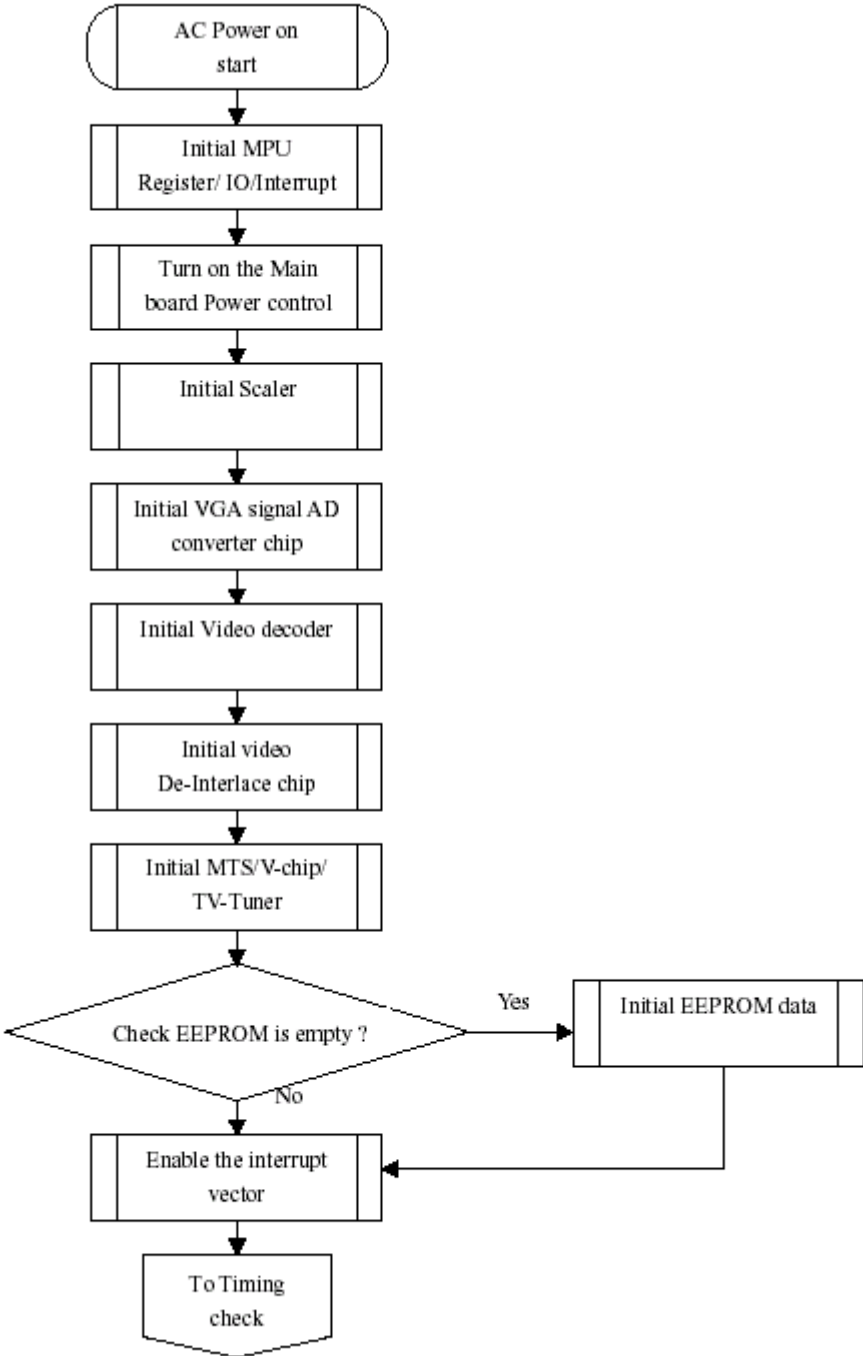
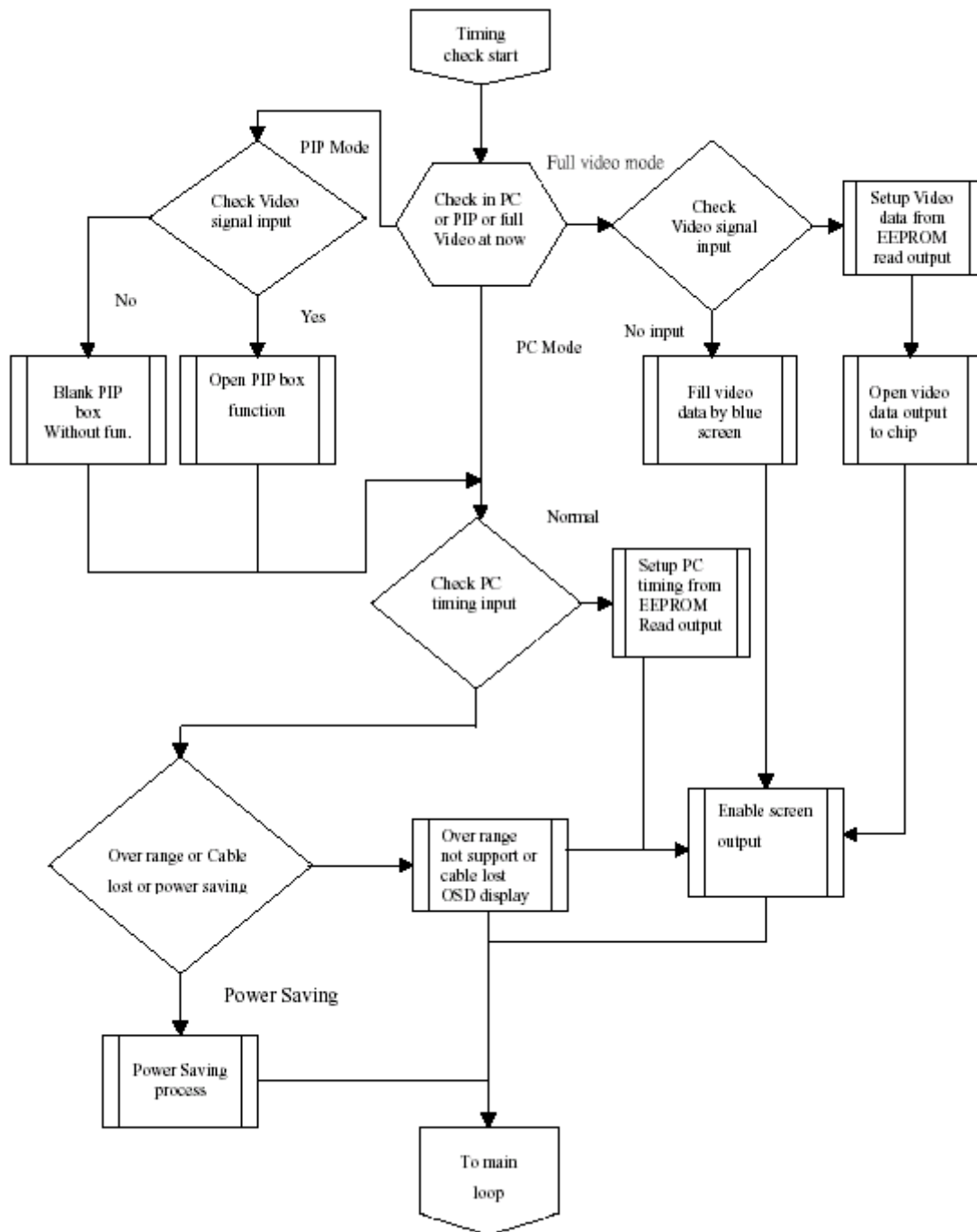


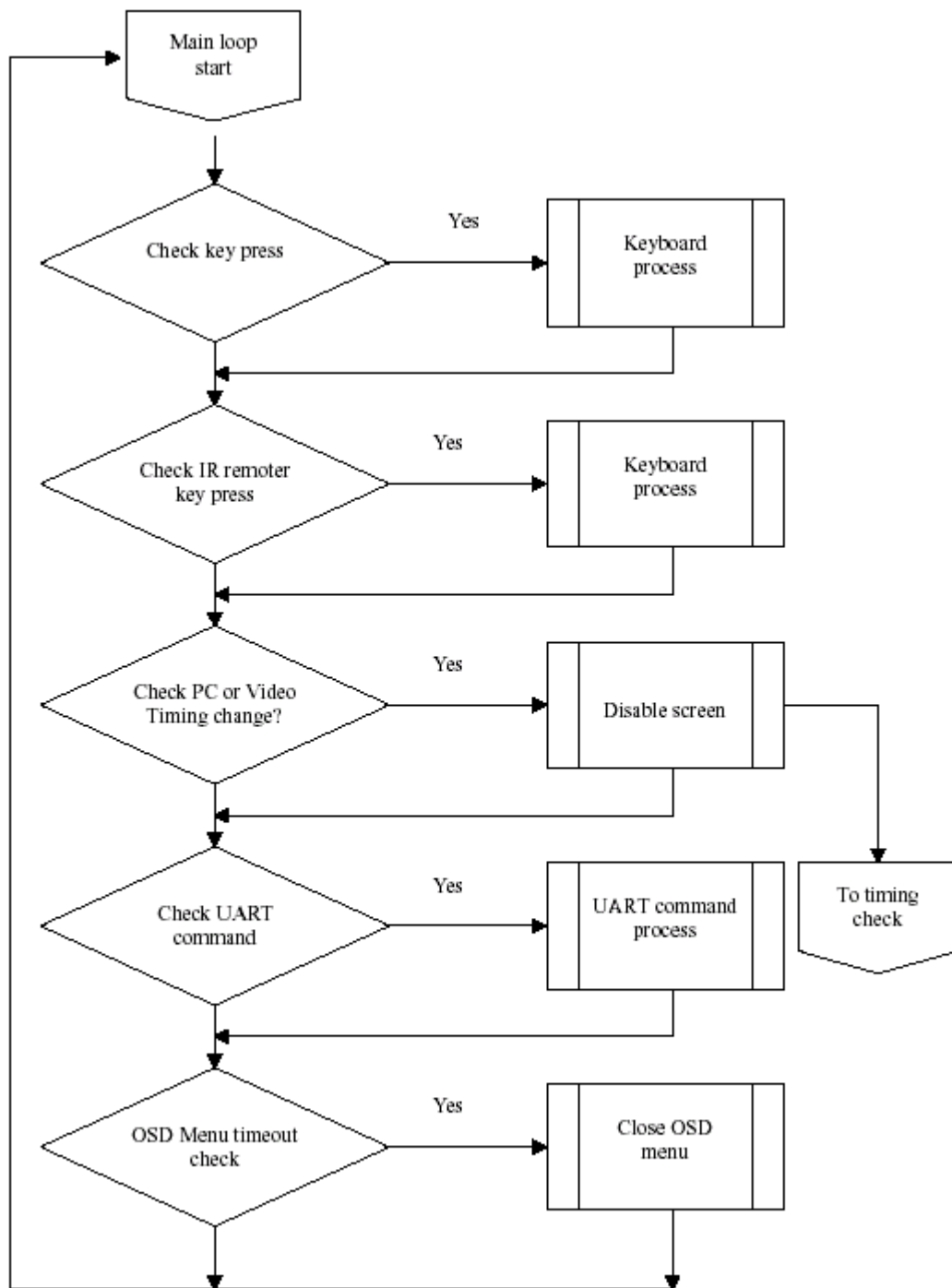
Fig (18)

2, The panel is disassembled absolutely.

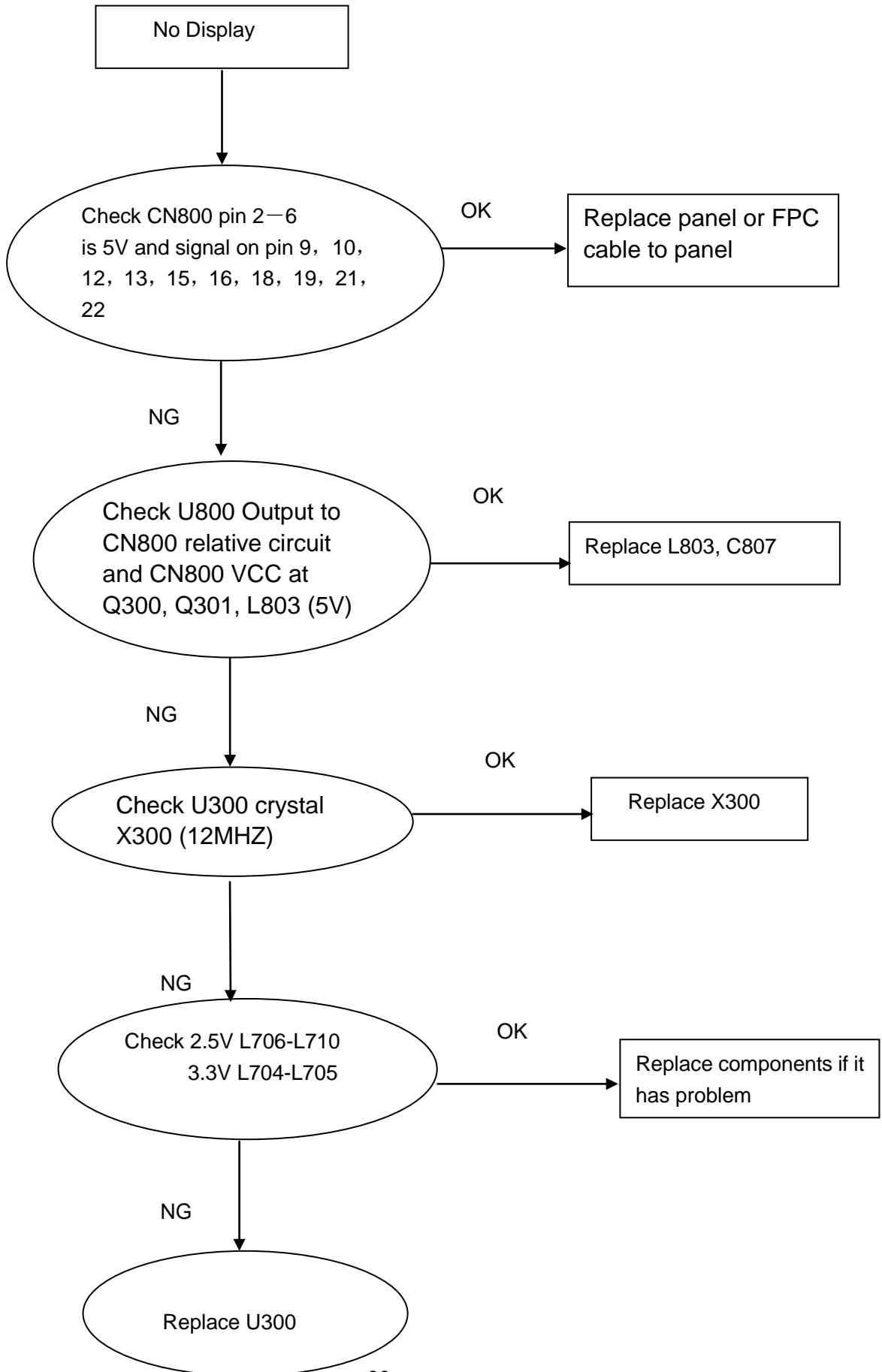




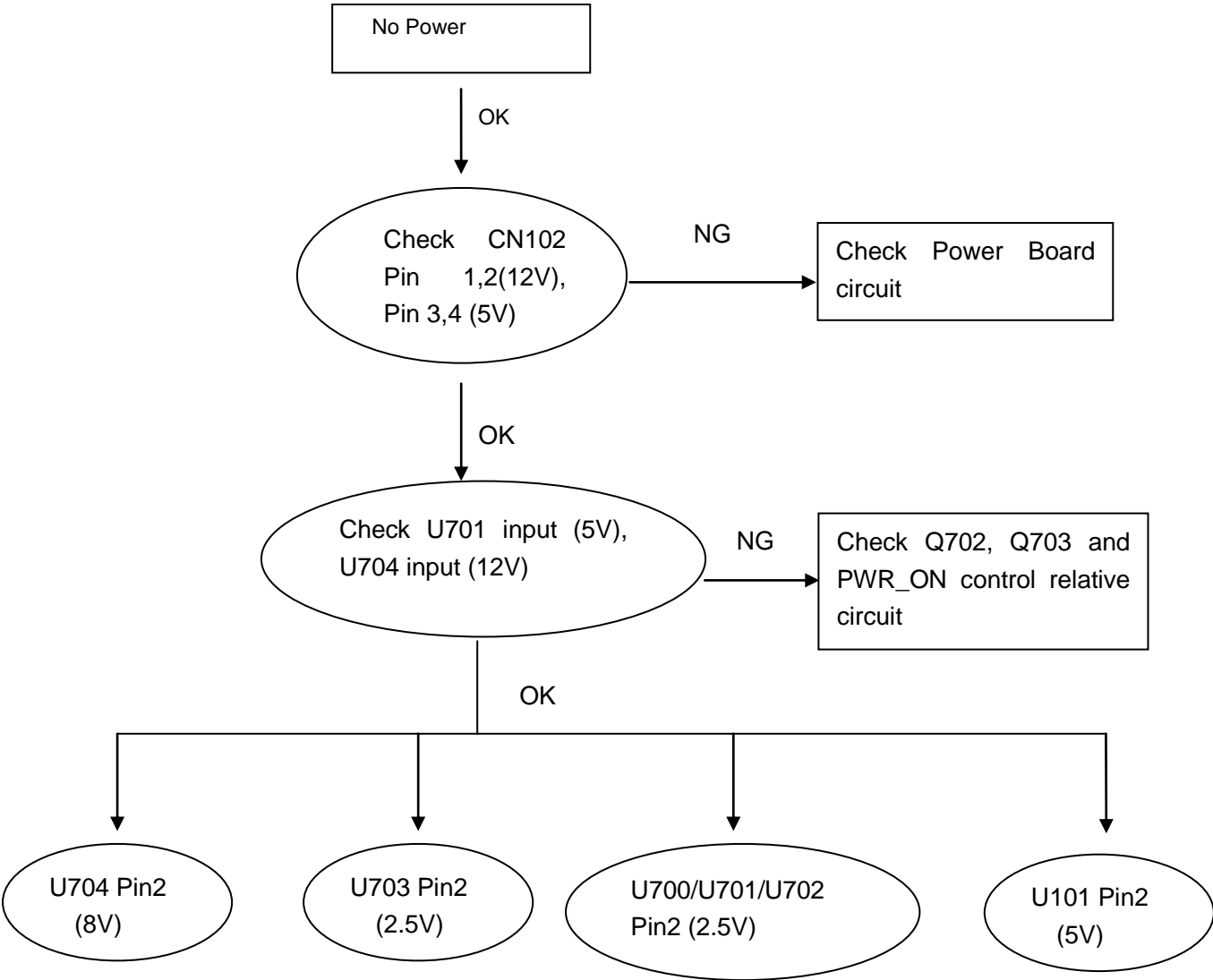




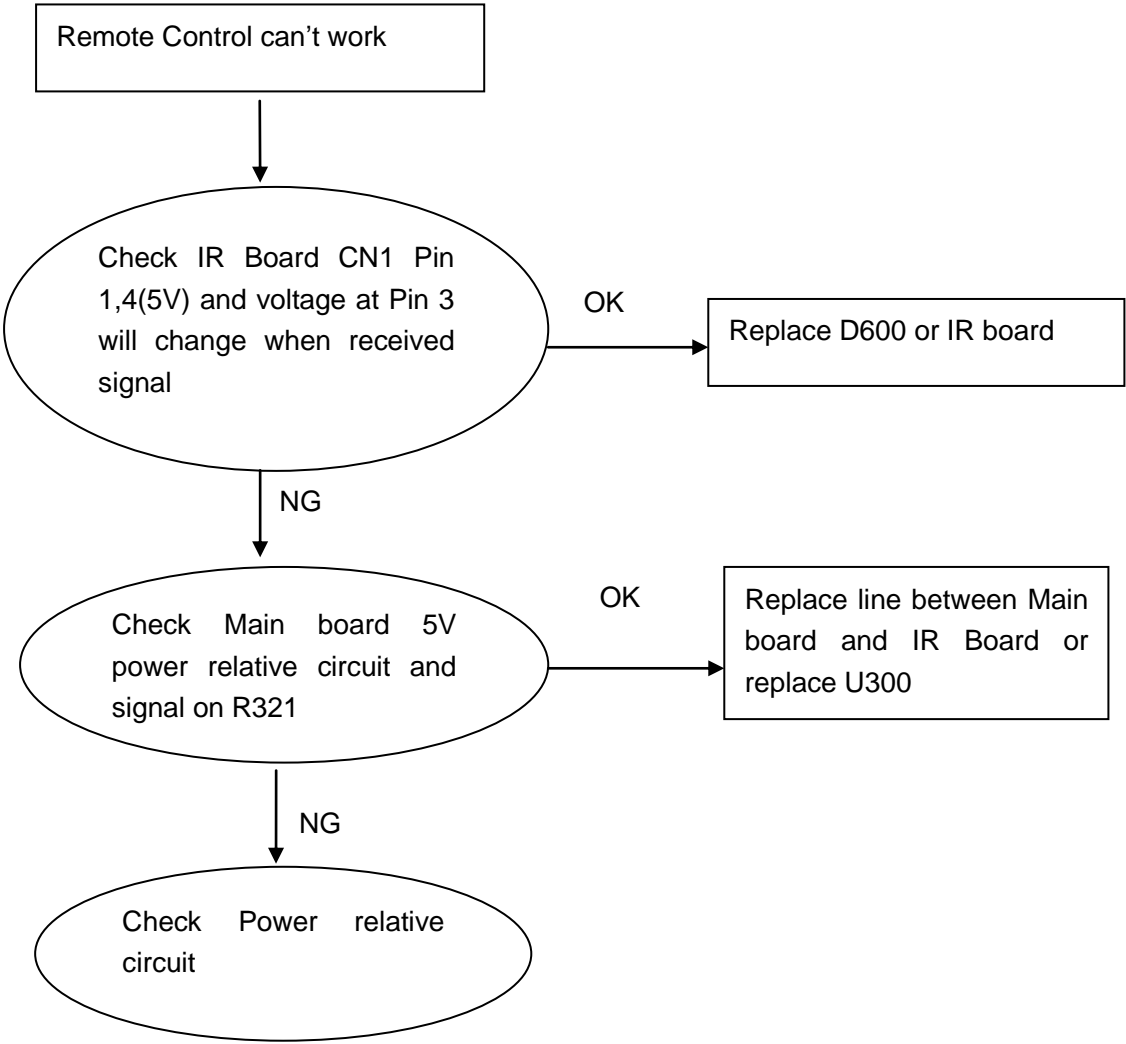
Panel Control Circuit



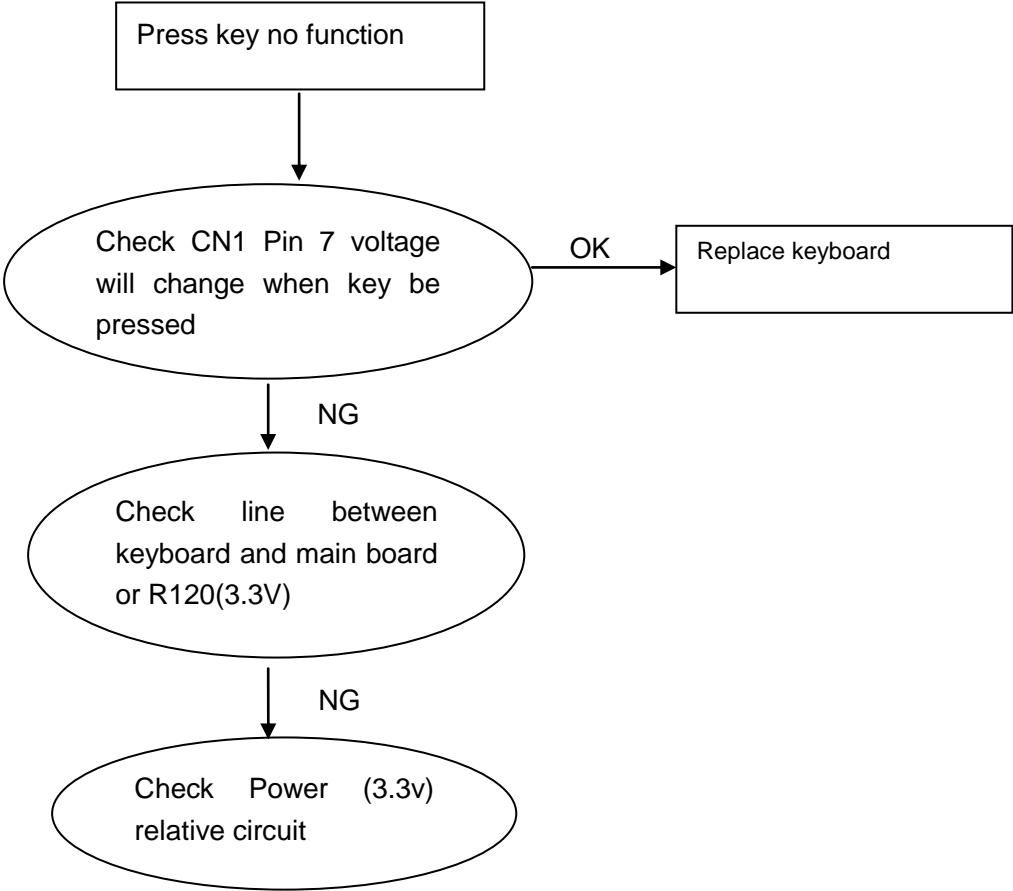
**Main Board Power Circuit**



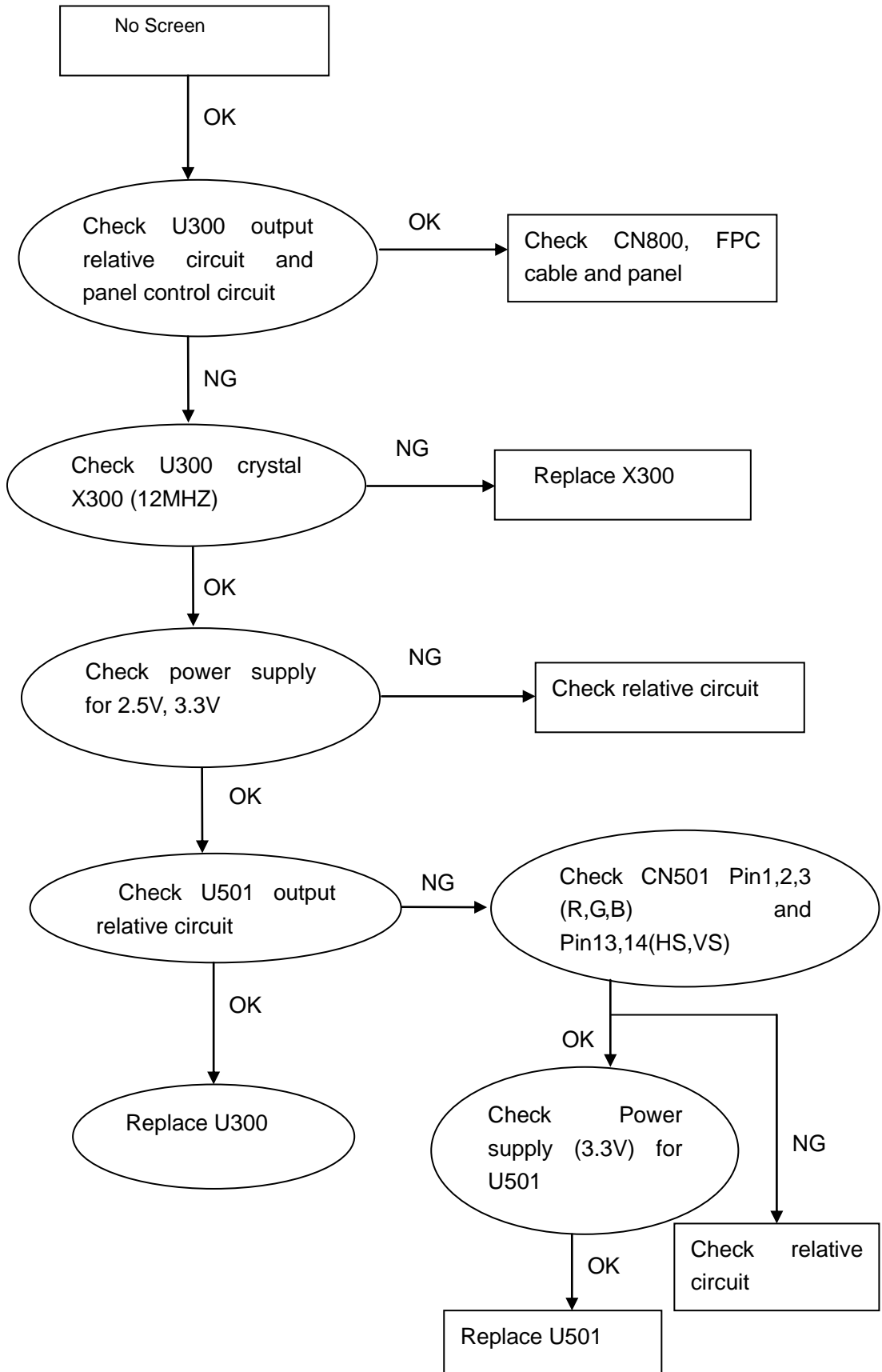
**Remote Control Block**



**Key Board Control Block**

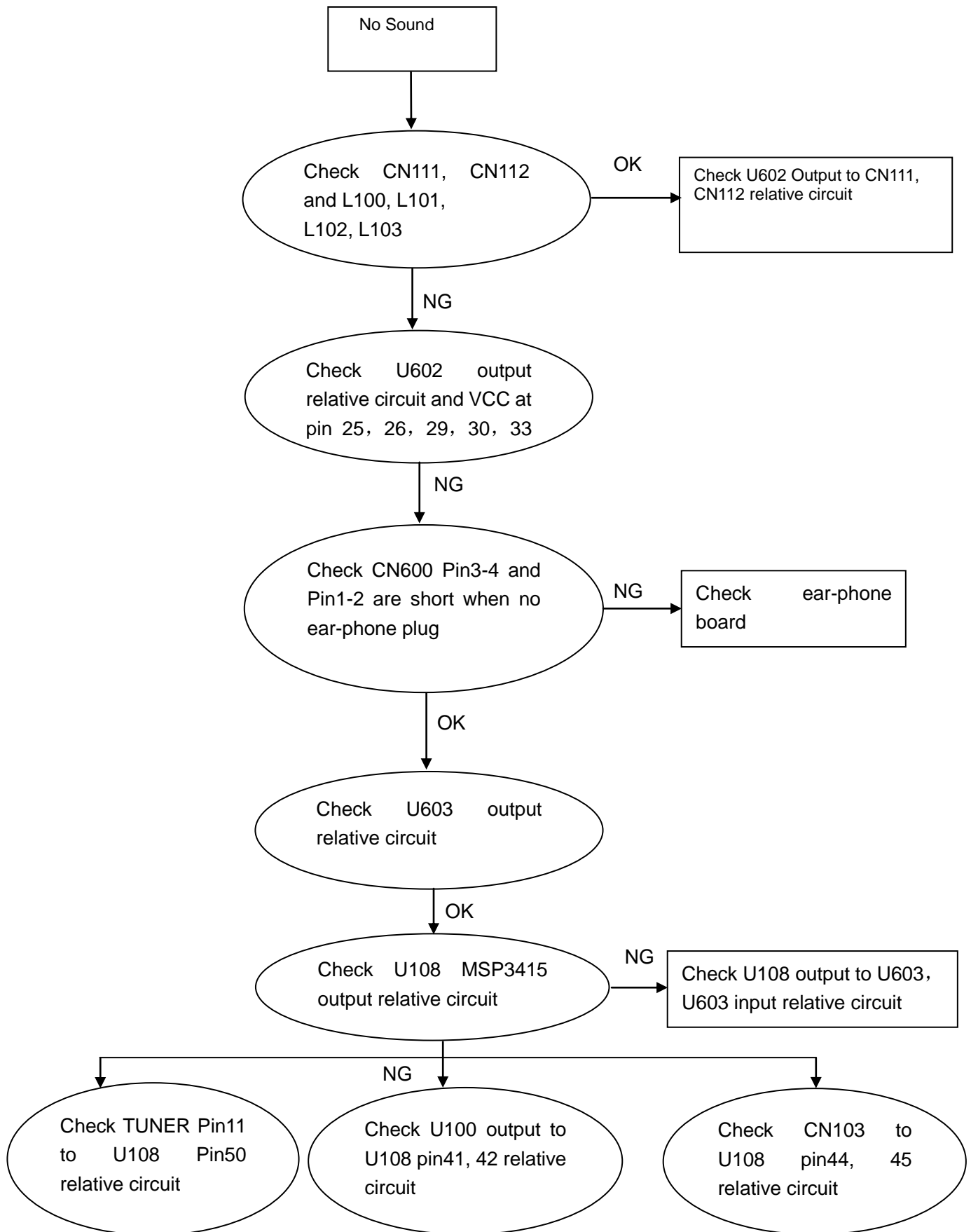


## PC Control Block





## Audio Control Block



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

Before started adjust white balance ,please setting the Chroma-7120 **MEM. Channel 1 to 9300** color, **MEM. channel 2 to 6500** color, and **MEM. channel 3 to 11000** color, ( our 9300 parameter is  $x = 283 \pm 15$ ,  $y = 297 \pm 15$ ,  $Y = 350 \pm 7$  cd/m<sup>2</sup> ; 6500 parameter is  $x = 313 \pm 15$ ,  $y = 329 \pm 15$ ,  $Y = 350 \pm 7$  cd/m<sup>2</sup> ;11000 parameter is  $x = 280 \pm 15$ ,  $y = 275 \pm 15$ ,  $Y = 370 \pm 7$  cd/m<sup>2</sup>)

Color Temp.	9300	6500	11000
X	0.283	0.313	0.280
Y	0.297	0.329	0.275
Y	<b>350±7</b>	<b>350±7</b>	<b>3700±7</b>

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

**I. Press Number key 100 → 9 → 9 → 9 will into the factory mode, and press Menu key the OSD will show menu and a word F at Right top of Menu.**

- \* In the factory mode select MORE function will into Bias and Gain adjustment.
- 1. ADC Adjustment:
  - AL → Auto level adjust.
  - RG, GG, BG → R, G, B Gain adjust.
  - RB, GB, BB → R, G, B Bias adjust.
- 2. SCALER Adjustment:
  - CO, BR → Contrast and Brightness adjust.
  - RG, GG, BG → R, G, B Gain adjust.
  - RB, GB, BB → R, G, B Bias adjust.
  - S9, S6, ST , SH → Save 9300, 6500, 11000 color temperature.
  - R9, R6, RT , RH→ Recall 9300, 6500, 11000 color temperature.
  - BI → Setup Burn-in mode ON / OFF .
  - ISP →Set ISP ON/OFF .
  - PP → Set PIP ON/OFF .
  - WH → Set Wireless Headphone ON/OFF .
  - SR → Set SRS ON/OFF.
  - CC → Set Close Caption ON/OFF.
  - VC → Set V Chip ON/OFF.
  - EX → Exit MORE function to factory mode menu.

---

## **II. Bias (Low luminance) adjustment :**

1. Press "AUTO" button ,
2. Set the contrast on OSD window to the value=80 , color (user )R,G,B set to "50"
3. adjust the brightness on OSD until chroma 7120 measurement reach the value  $Y > 350$  cd/m<sup>2</sup>

## **III. Gain adjustment :**

### **A. adjust 9300 color-temperature :**

1. Set the Contrast of OSD function to 80 and Adjust Brightness to chroma-7120  $Y > 350$  cd/m<sup>2</sup>
2. Switch the chroma-7120 to RGB-mode (with press "MODE" button )
3. Switch the MEM.channel to Channel 01 ( with up or down arrow on chroma-7120 )
4. The lcd-indicator on chroma-7120 will show  $x = 283 \pm 15$ ,  $y = 297 \pm 15$ ,  $Y = 350 \pm 7$  cd/m<sup>2</sup>
5. Adjust the Color(user)Mode: RED on OSD window, until chroma 7120 indicator reached the value  $R=100$
6. Adjust the Color (user) Mode: GREEN on OSD window, until chroma-7120 indicator reached the value  $G=100$
7. Adjust the Color (user) Mode: BLUE on OSD window, until chroma-7120 indicator reached the value  $B=100$
8. Repeat above procedure (Item 5,6,7) until chroma-7120 RGB value meet the tolerance  $=100 \pm 2$
9. switch the chroma-7120 to xyY mode With press "MODE" button
10. Press Color (9300) on OSD window to save the adjustment result

### **B. adjust 6500 color-temperature :**

1. Set the Contrast of OSD function to 80 and Adjust Brightness to chroma-7120  $Y > 350$  cd/m<sup>2</sup>
2. Switch the chroma-7120 to RGB-mode (with press "MODE" button )
3. switch the MEM.channel to Channel 02 ( with up or down arrow on chroma-7120 )
4. The lcd-indicator on chroma-7120 will show  $x = 313 \pm 15$ ,  $y = 329 \pm 15$ ,  $Y = 350 \pm 7$  cd/m<sup>2</sup>
5. Adjust the Color(user)Mode: RED on OSD window, until chroma 7120 indicator reached the value  $R=100$
6. Adjust the Color(user)Mode: GREEN on OSD window, until chroma-7120 indicator reached the value  $G=100$
7. Adjust the Color(user)Mode: BLUE on OSD window, until chroma-7120 indicator reached the value  $B=100$
8. Repeat above procedure ( item 5,6,7) until chroma-7120 RGB value meet the tolerance  $=100 \pm 2$
9. switch the chroma-7120 to xyY mode With press "MODE" button
10. Press Color(6500) on OSD window to save the adjustment result

### **C. adjust 11000 color-temperature :**

1. Set the Contrast of OSD function to 80 and Adjust Brightness to chroma-7120  $Y > 370$  cd/m<sup>2</sup>
2. Switch the chroma-7120 to RGB-mode (with press "MODE" button )

- 
3. Switch the MEM.channel to Channel 03 ( with up or down arrow on chroma-7120 )
  4. The lcd-indicator on chroma-7120 will show  $x = 280 \pm 15$ ,  $y = 275 \pm 15$ ,  $Y = 370 \pm 7$  cd/m<sup>2</sup>
  5. Adjust the Color(user)Mode: RED on OSD window, until chroma 7120 indicator reached the value R=100
  6. Adjust the Color(user)Mode: GREEN on OSD window, until chroma-7120 indicator reached the value G=100
  7. Adjust the Color(user)Mode: BLUE on OSD window, until chroma-7120 indicator reached the value B=100
  8. Repeat above procedure ( item 5,6,7) until chroma-7120 RGB value meet the tolerance  $=100 \pm 2$
  9. Switch the chroma-7120 to XyY mode With press "MODE" button
  10. Press Color (11000) on OSD window to save the adjustment result

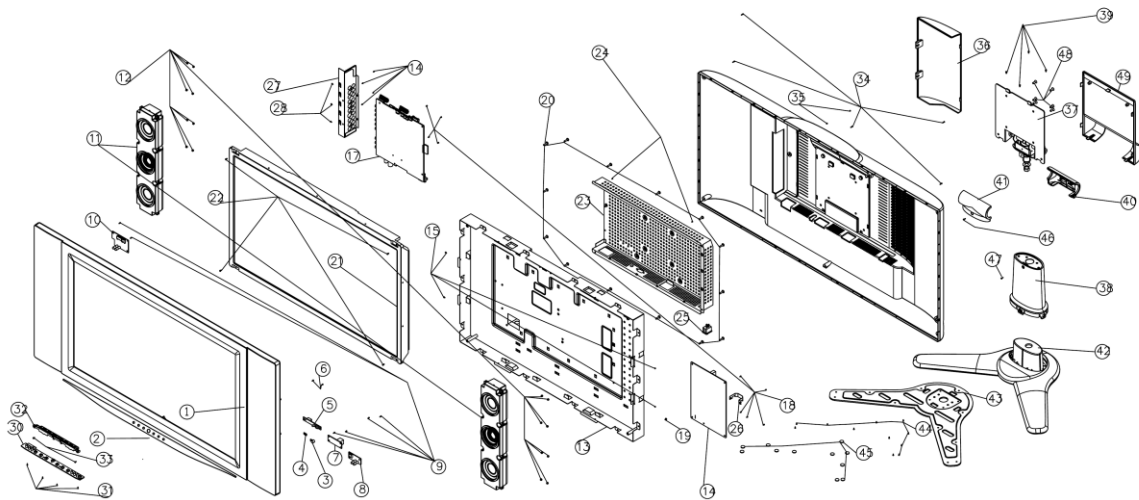
Turn the POWER-button off to on to quit from factory mode ( in USER-mode, the OSD window location was placed at middle of screen)

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of AT2701W. 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: AT2701W)



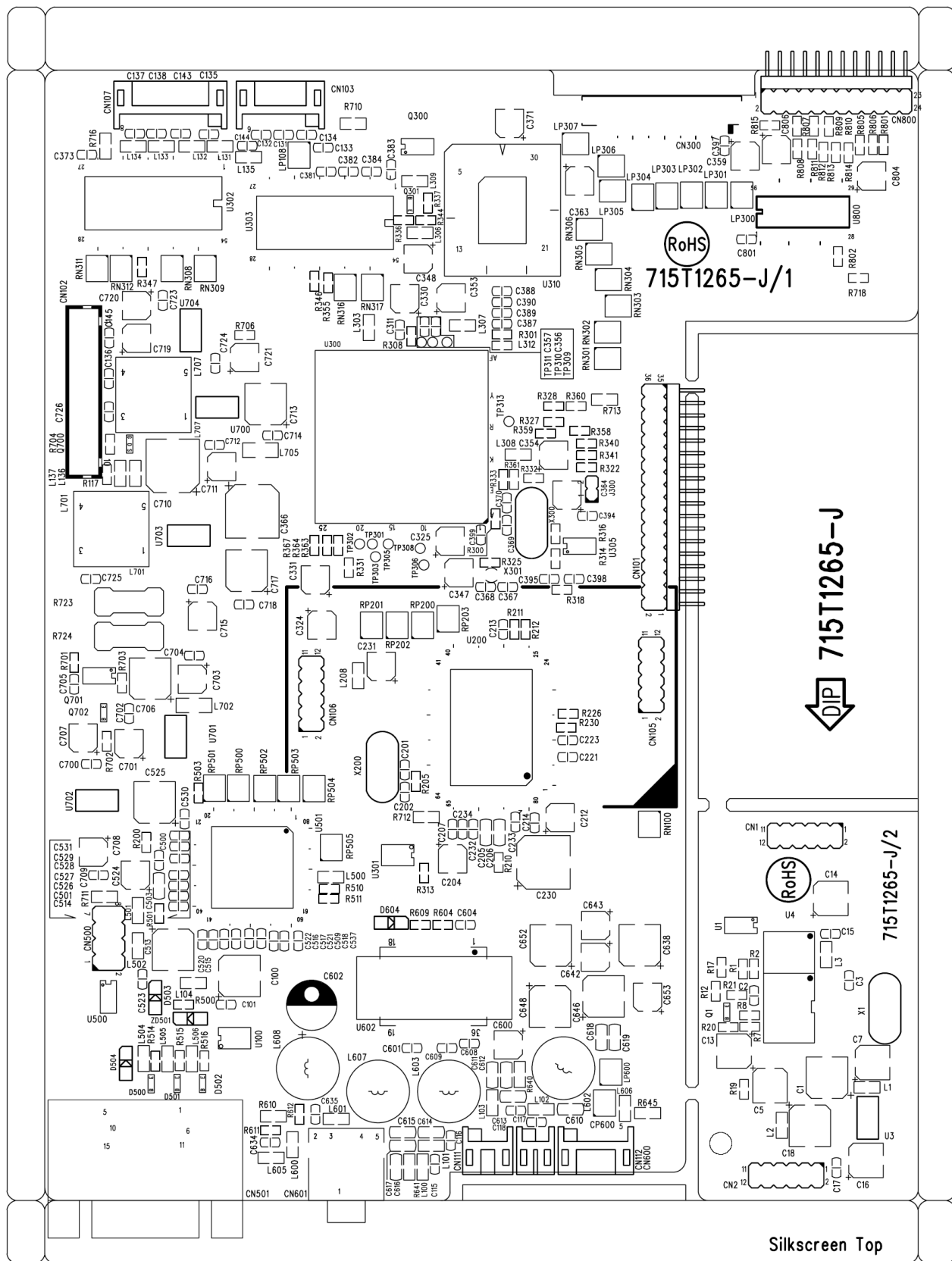
Index	Part Name	Part No.	Qty	Index	Part Name	Part No.	Qty
1	Bezel	34L1301	1	26	Power BKT	15L5908	1
2	PMMA	34T1406	1	27	Connector BKT	15L8019	1
3	Lens Remote	33L4658	1	28	Screw	Q1L930-6128	3
4	Lens Power	33L4659	1	29	Rear Cover	34T1302-5	1
5	Remote Board	IRP760A1	1	30	Keyboard	KEPFA60KA1	1
6	Screw	Q1L330-8120	2	31	Screw	Q1L330-8120	4
7	Audio Board		1	32	Button	33L4660	1
8	Wireless-Head_Phone	Optional	1	33	Screw	Q1L1030-8128	2
9	Screw	Q1L330-8120	4	34	Screw	Q1L330-12120	5
10	Wireless-Head_Phone	Optional	10	35	Screw	M1L330-6128	2
11	Speaker		2	36	Cable Cover	34L1306	1
12	Screw	Q1L1030-8128	16	37	Hinge	37L496	1
13	Main Frame	15L6096	1	38	Stand	34T1432	1
14	Screw	M1L330-4128	4	39	Screw	Q1L140-20120	4
15	Screw	M1L330-4128	1	40	Stand Cover B	34L1308	1
16	PWR Board		1	41	Stand Cover F	34L1307	1
17	Main Board		1	42	Base	34L1379	1
18	Screw	M1L1730-6128	9	43	BKT Base	15L6095	1
19	Screw Ground	M1L1140-6128	1	44	Screw	Q1L130-10120	11
20	Screw	Q1L1030-12128	14	45	Rubber Foot	12L394	11
21	Panel		1	46	Screw	M1L330-6128	1
22	Screw	M1L340-14120	4	47	Screw	M1L330-6128	1
23	Main Shield	85L6085	1	48	Screw	M1L140-10120	6
24	Screw	M1L330-4128	2	49	Hinge Cover	34L1305	1
25	Power SW		1				

---

## EDID Data

```
      00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
0   : 00 FF FF FF FF FF FF 00 04 72 07 AF 0B 95 0D 00
16  : 19 0F 01 03 68 3C 22 78 2A 8E 60 A5 55 44 99 24
32  : 12 49 4B AD C8 00 45 40 45 4C 45 4F 31 40 31 4C
48  : 31 4F 61 40 01 01 0E 1F 00 80 51 00 1E 30 40 80
64  : 37 00 5B 55 21 00 00 1E 00 00 00 FF 00 50 50 50
80  : 50 50 50 50 50 50 50 0A 20 20 00 00 00 FD 00 38
96  : 4B 1F 32 08 00 0A 20 20 20 20 20 20 00 00 00 FC
112: 00 41 63 65 72 20 41 54 32 37 30 31 57 0A 00 45
```

Main Board Layout

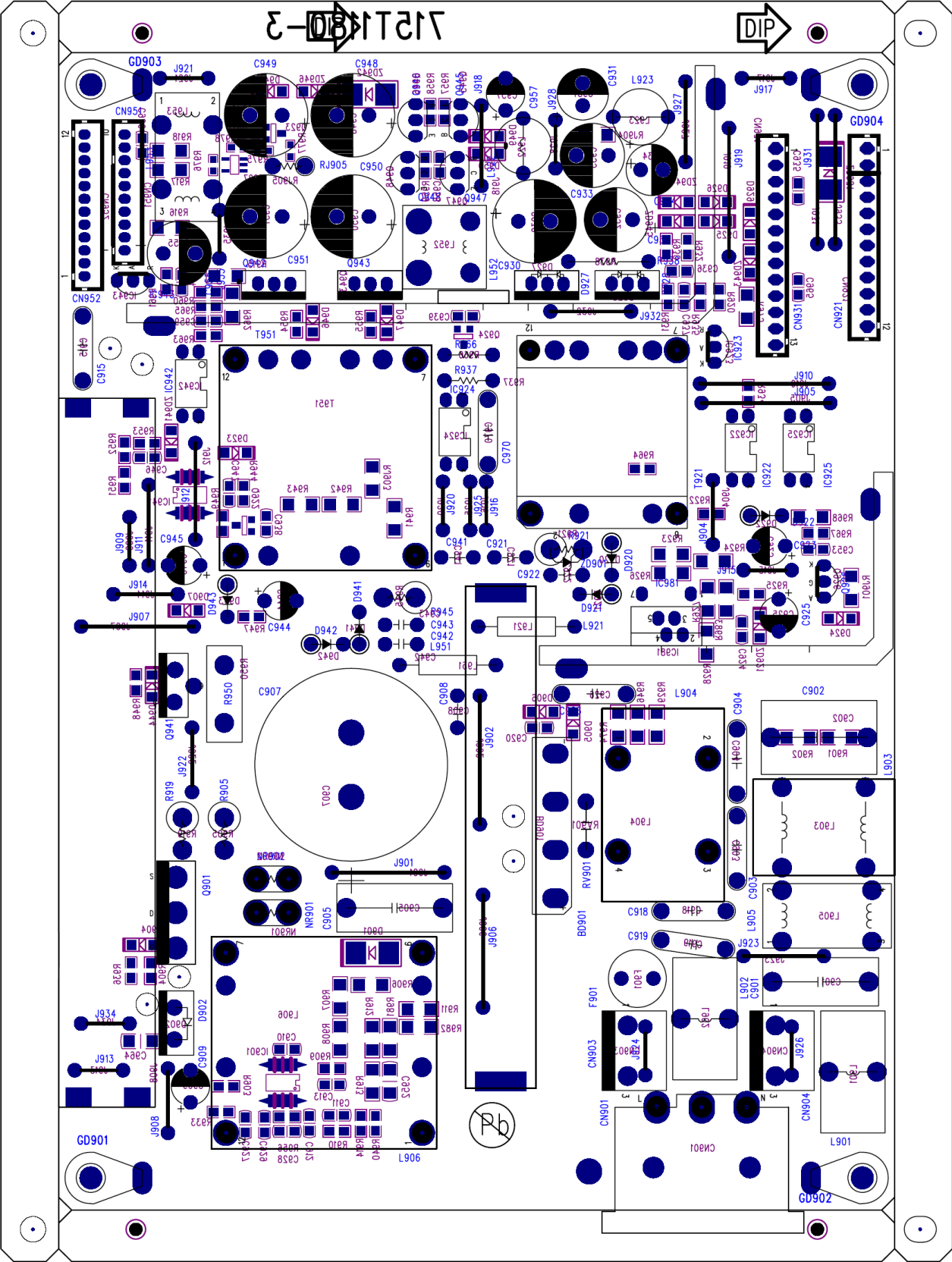


Silkscreen Top



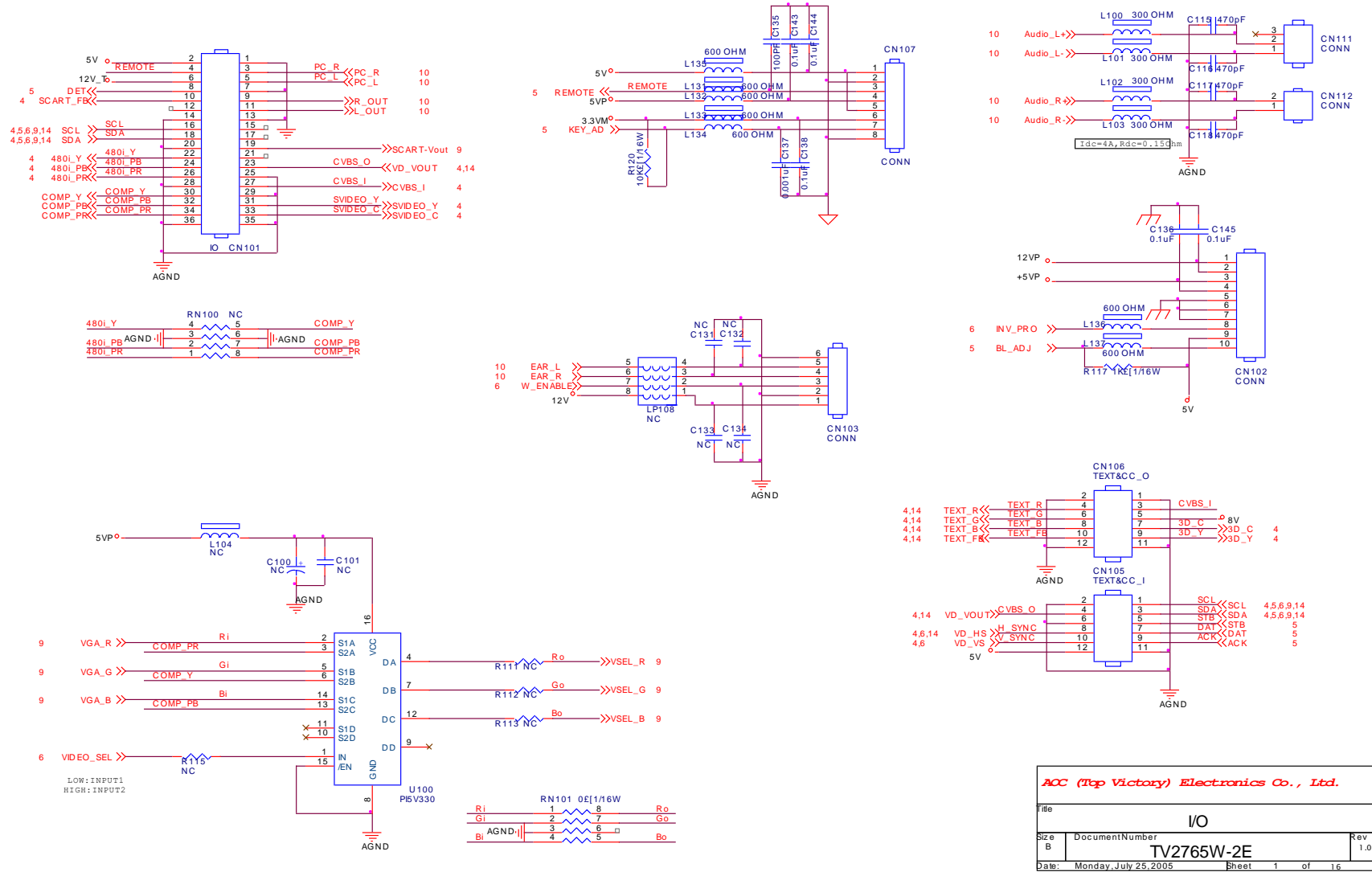
Location	Part NO. for TPV	Description
CN801	33T800913Z H	PIN HEADER 1*13 R/A
CN901	87T 501 19 RF	AC INLET RIGHT ANGLE
CN1	33V801712F	PIN HEADER 2*6P 2.0MM
CN101	33V801736A H	PIN HEADER DUAL ROW 36P
CN102	33T3278 10	10 PLUG B10E-XHA/JST E1
CN105	33T802412D	HEADER FEMALE 12P 2.0MM
CN106	33T802412D	HEADER FEMALE 12P 2.0MM
CN2	33V801712F	PIN HEADER 2*6P 2.0MM
CN501	88T 35315F HA	D-SU13 15PIN
U200	56V 640 1	VPC3230D
U201	56V 634 2	PI5V330Q QSOP-16
U310	56T1133 52AC0	EUR-ACER-CM27-050624N-V
U300	56V 562 87	SPV302A
U301	56V 652 1	PCA9554PW TSSOP-16 PHIL
U302	56V 615 8B	IS42S16400B-7T TSOPII-5
U304	56V1133 56	M24C16-WMN6T/W SO-8
U305	56V 657 3	P2781A-08SR
U310	87T 202 32 NY	IC SOCKET 32PIN PLCC
U500	56V1133 34	M24C02-WMN6T SMT
U501	56T 567 7	MST9883C-140 LQFP-80 BY
U600	56V 593 6	M62438FP SOP-10
U602	56V 535600	TA2024
U603	56V 616 3	PT2308S SO-8
U700	56V 585 4	AIC1117-33CY
U701	56V 585 4	AIC1117-33CY
U702	56V 585 4	AIC1117-33CY
U703	56T 563 44	AME8815BEGT 250Z SOP-22
U704	56V 133 30AAC	AZ1117H-ADJ SOT223
U101	56V 585 11	AZ1117D-5.0 TO-252
U102	56V 652 1	PCA9554PW TSSOP-16 PHIL
U103	56V 620 1	74VHC4D53M SOIC-16P
U104	56V 625 1	NJM-2244M-TE1
U105	56V 634 2	PI5V330Q QSOP-16
U106	56V 625 1	NJM-2244M-TE1
X200	93T 2265B J	20.250 AE13F-BK4
X300	93T 2251B J	NXS12.000AC30F-BT-2
X301	93T 22 61 J	CRYSTAL 32.768 KHZ 3*9
X100	93T 22D60 BH	CRYSTAL

adapter board

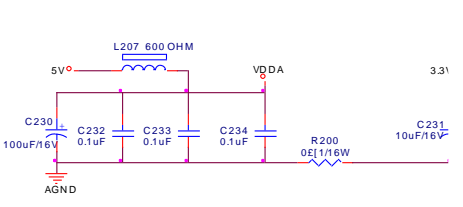
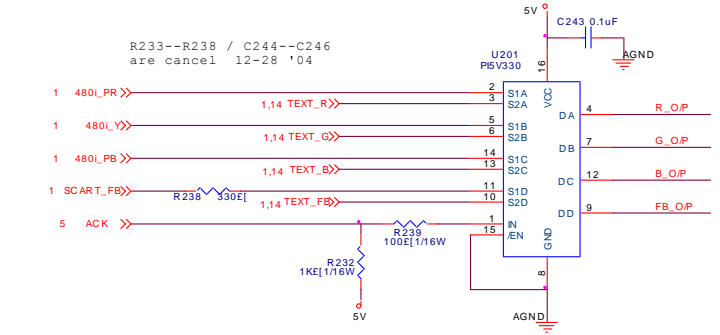
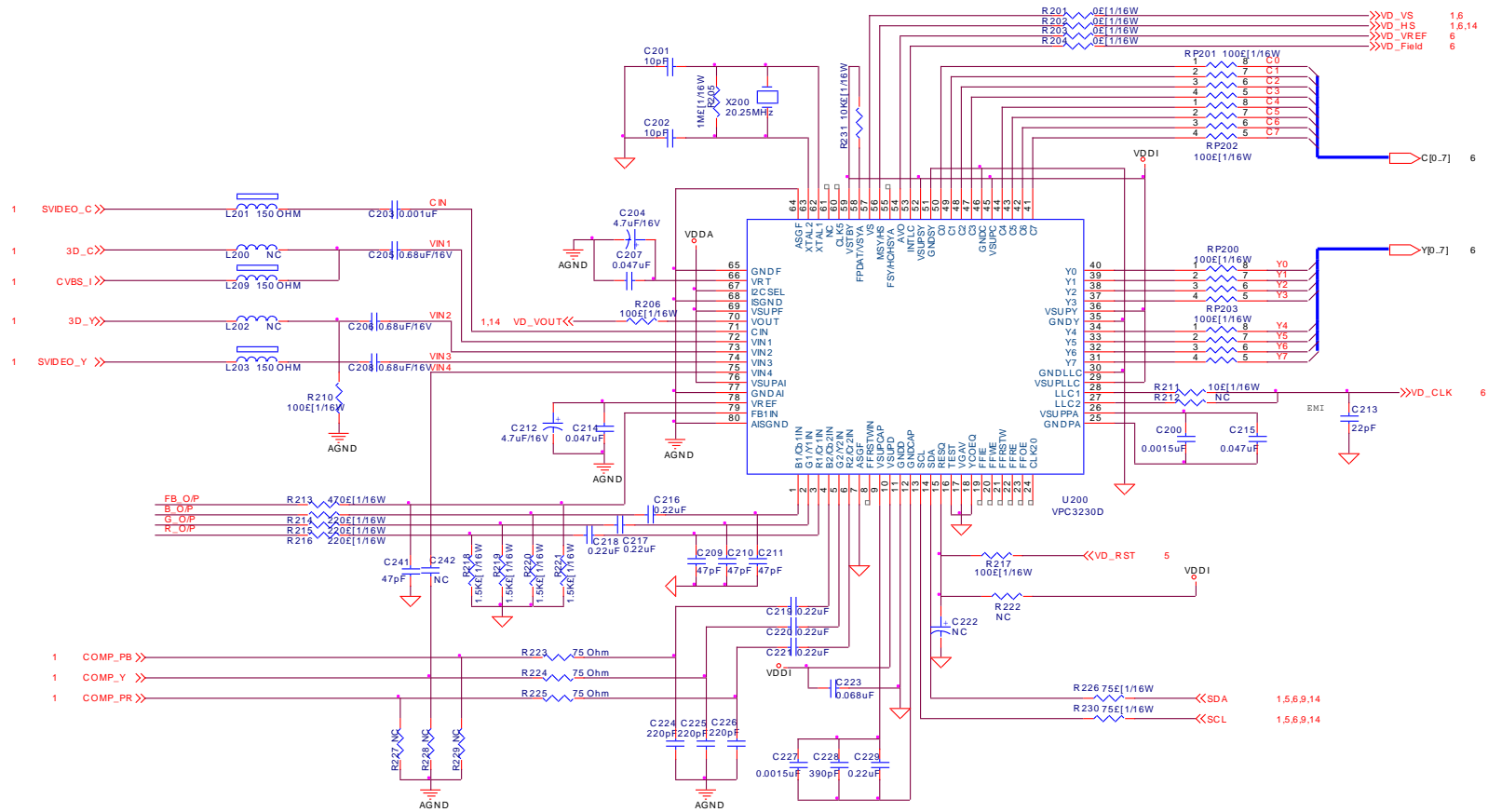


Schematic Diagram

Main board

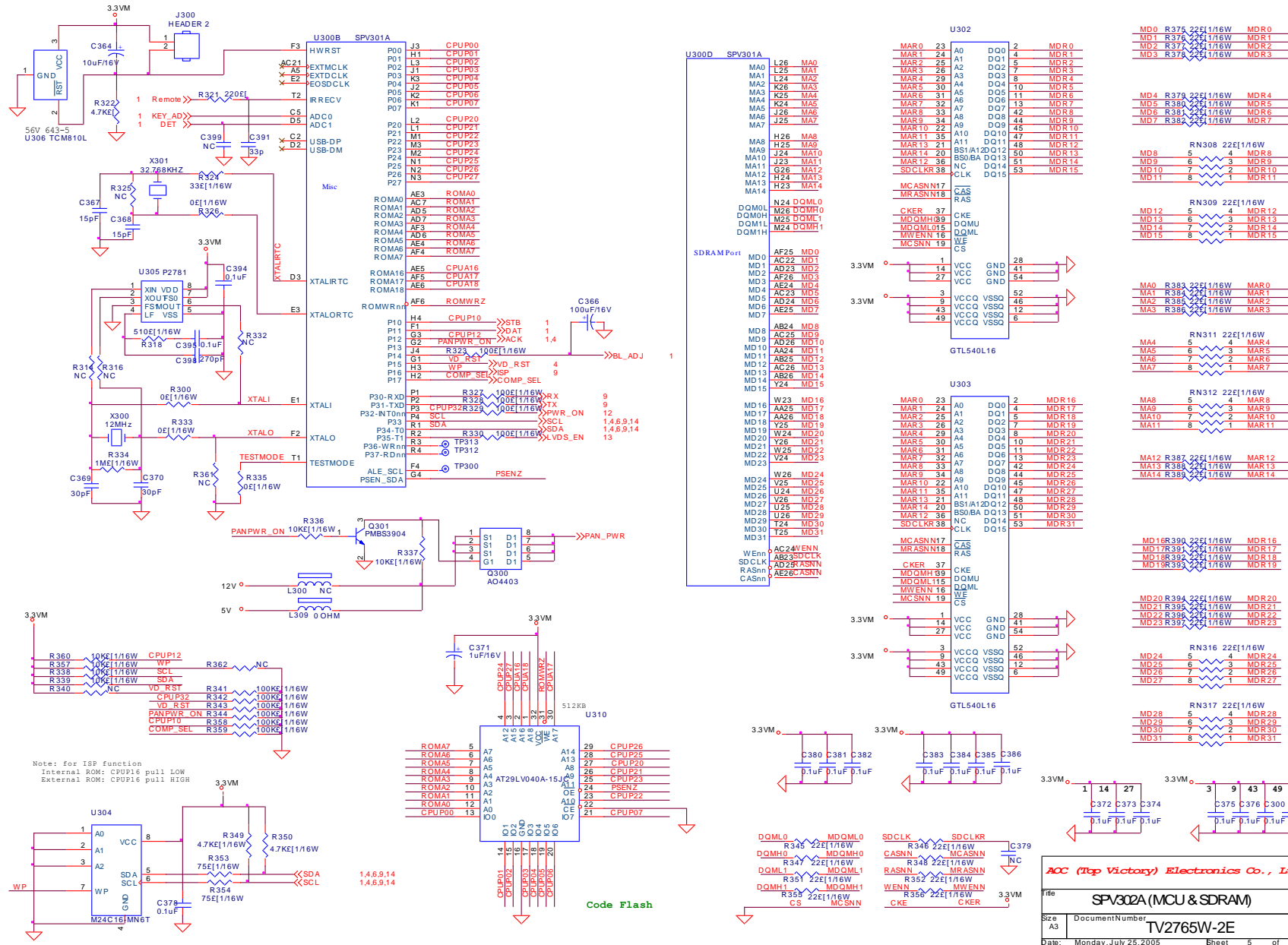


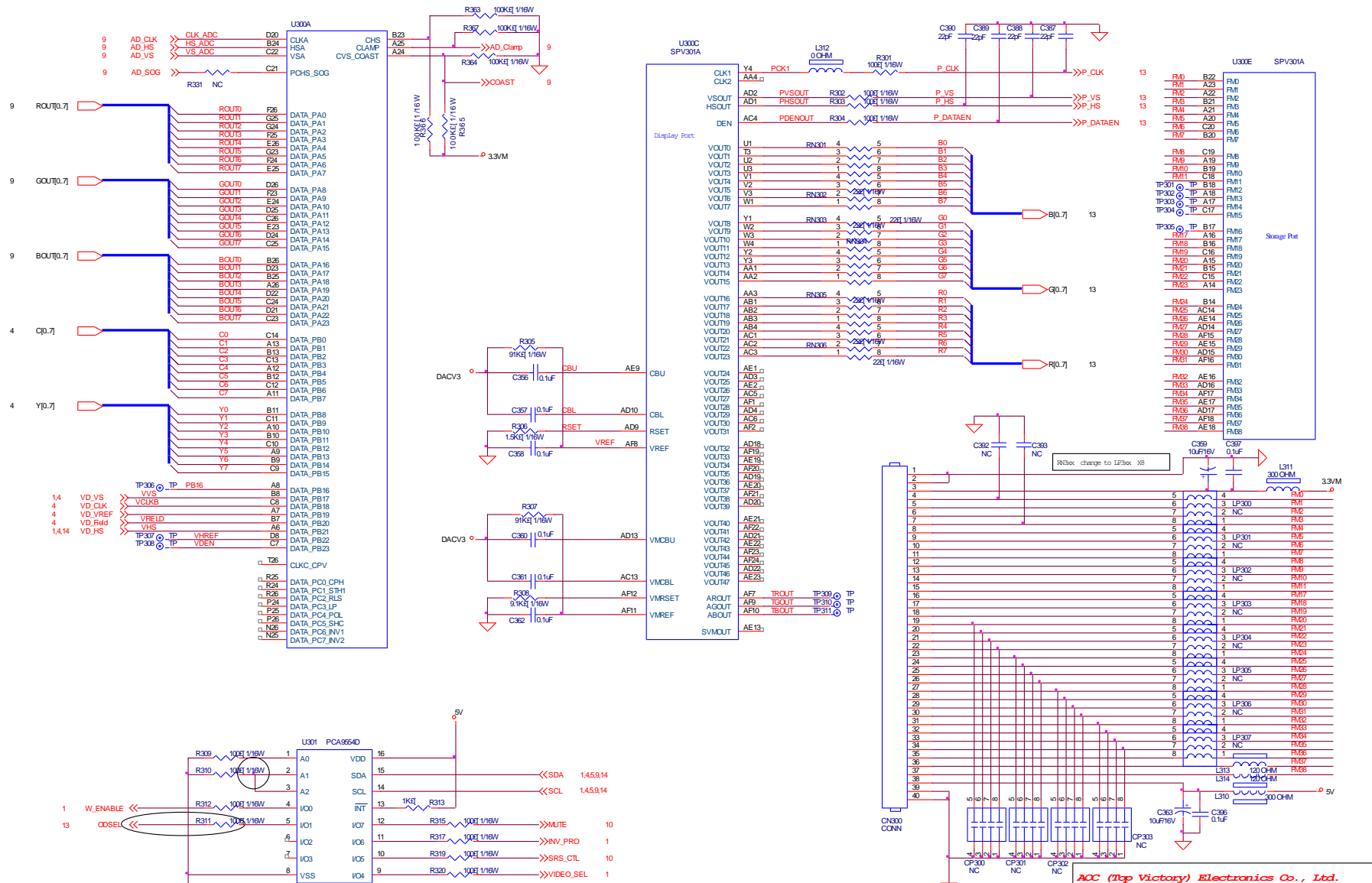
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Title		
I/O		
Size	Document Number	Rev
B	TV2765W-2E	1.0
Date:	Monday, July 25, 2005	Sheet 1 of 16



**ACC (Top Victory) Electronics Co., Ltd.**

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A3			1.0
Daw:	Monday, July 25, 2005	Sheet	4 of 16



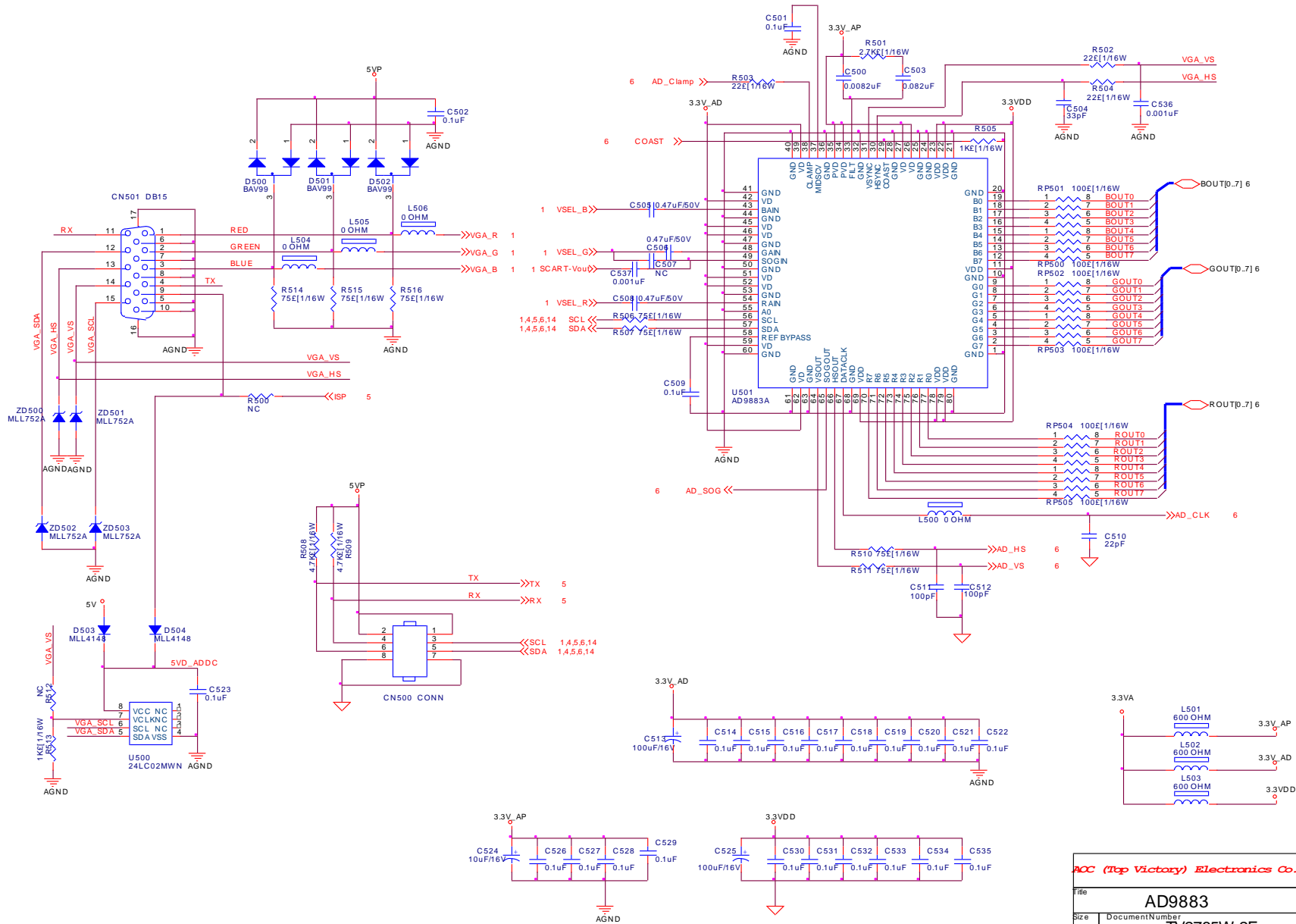


VIDEO\_SEL for ADC input selection (source: HD & VGA)

**ACC (Top Victory) Electronics Co., Ltd.**

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SFV301(Video In/Panel Out)		
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	TV2765W-2E	1.0
Date	Monday, July 25, 2005	Sheet 6 of 1.6

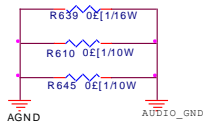
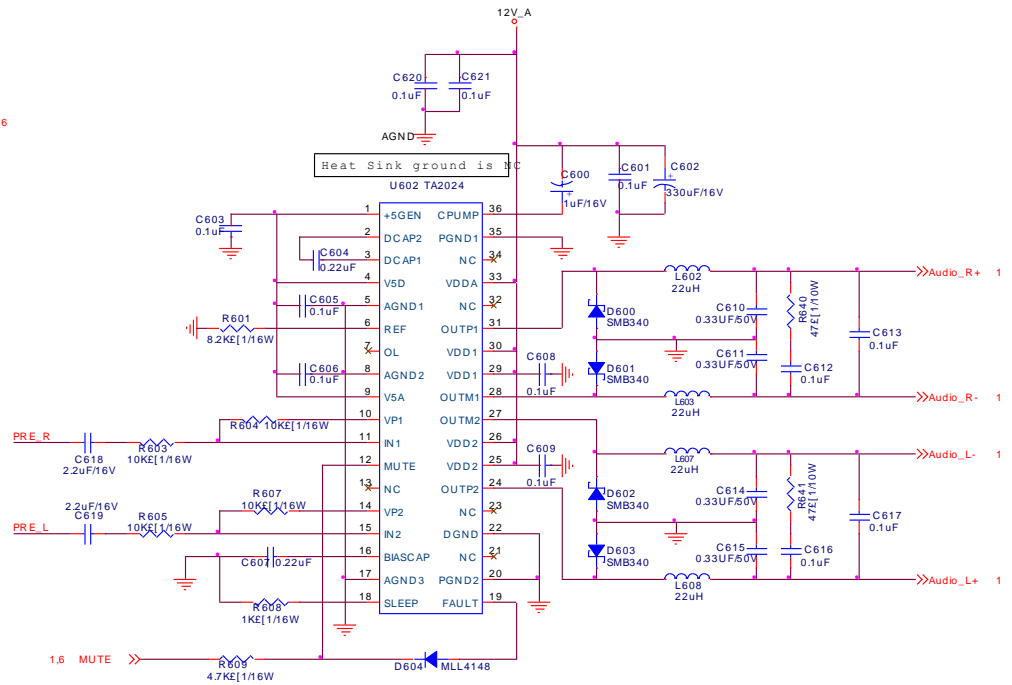
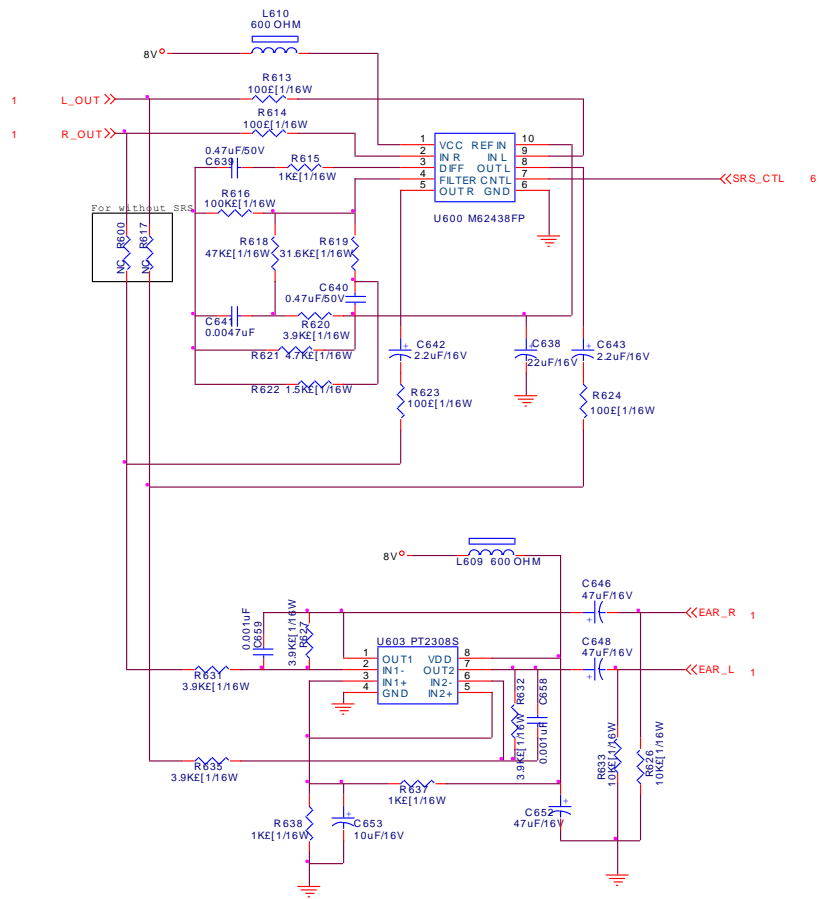
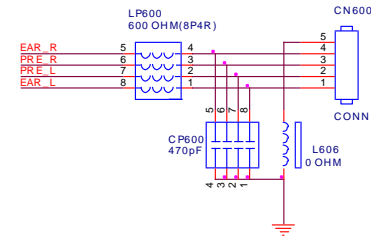
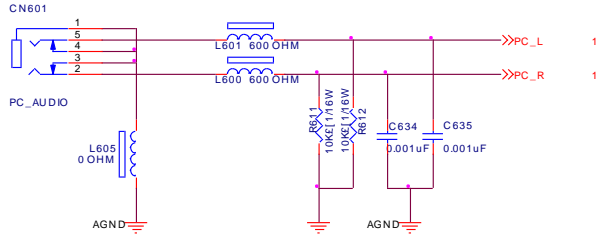




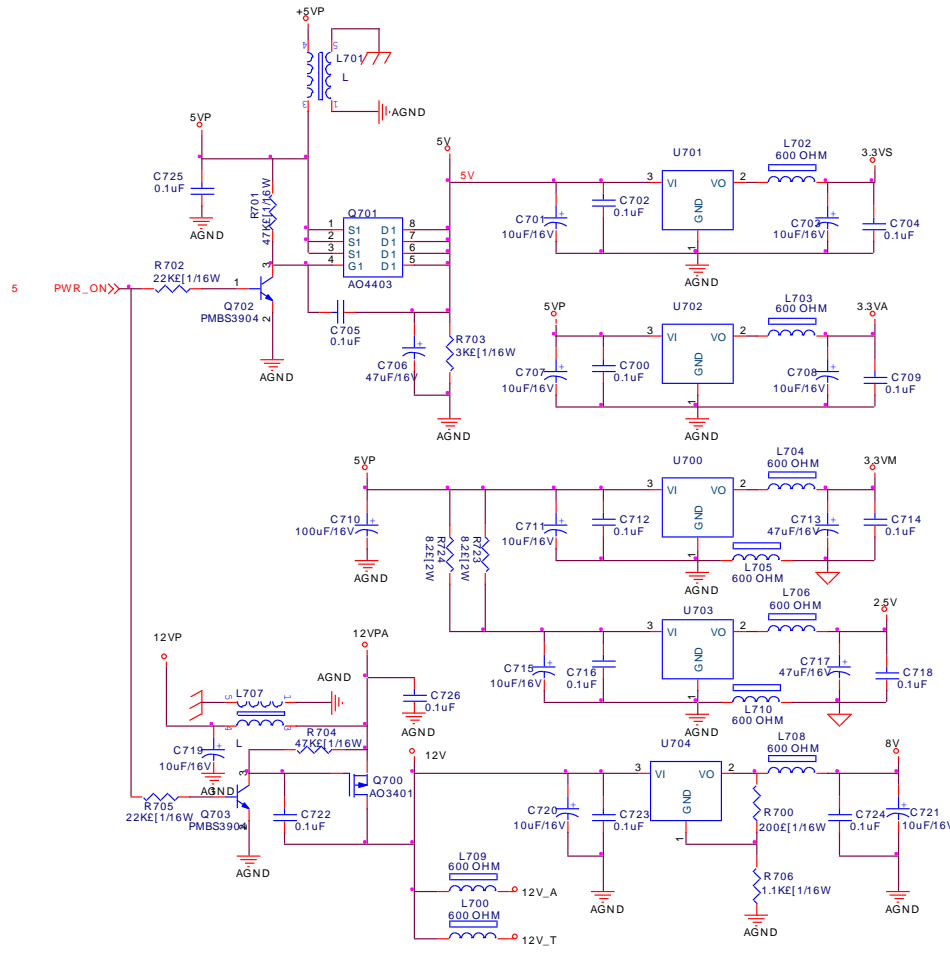
**AOC (Top Victory) Electronics Co., Ltd.**

File		AD9883	
Size	Document Number	TV2765W-2E	
Date	Monday, July 25, 2005	Sheet	9 of 16
		Rev	1.0

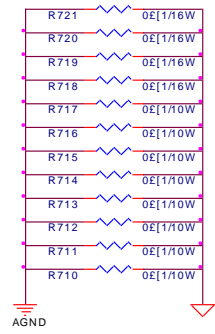




<b>ACC (Top Victory) Electronics Co., Ltd.</b>		
File	AUDIO	
Size	DocumentNumber	Rev
A3	TV2765W-2E	1.0
Date:	Monday, July 25, 2005	Sheet 10 of 16

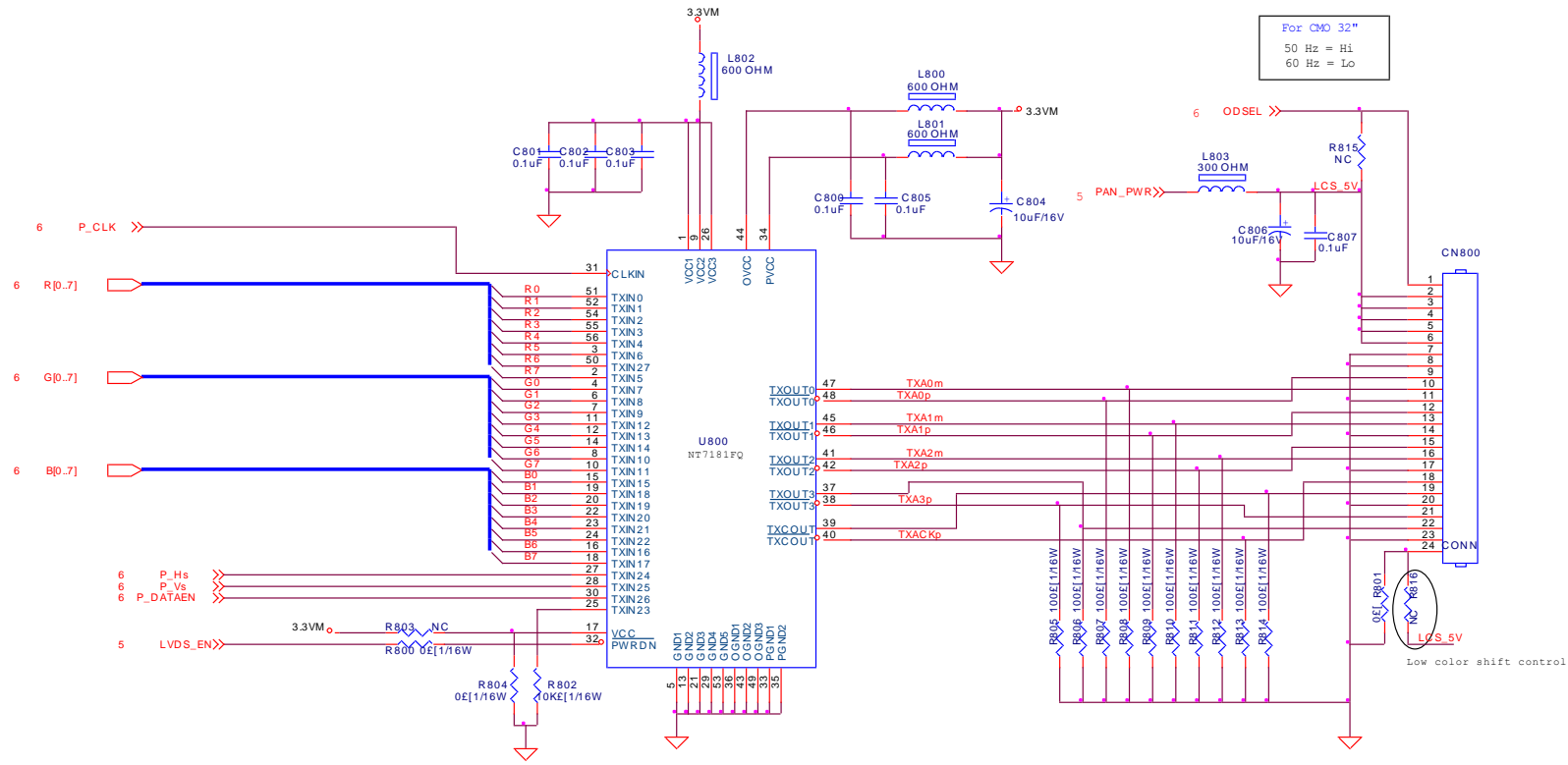


5VP : From Power Supply 5V  
 12VP : From Power Supply 12V  
 8V : FOR MSP3455G/M62438/uPD64038  
 5V : For Tuner/VPC3230D/MSP3455G/  
 TVP5150/PT2308/PT2314/Z86129/uPD64038  
 3.3VS : For Video Decoder VPC3230D  
 / Teltext SAA5264  
 3.3VA : For ADC AD9883  
 3.3VM : For Scaler spv301  
 2.5V : For Scaler spv301  
 12V\_A : For Audio AMP TA2024  
 12V\_T : For CN101 P6



**ACC (Top Victory) Electronics Co., Ltd.**

File		
POWER		
Size A4	Document Number	Rev
	TV2765W-2E	1.0
Date: Monday, July 25, 2005	Sheet	12 of 16

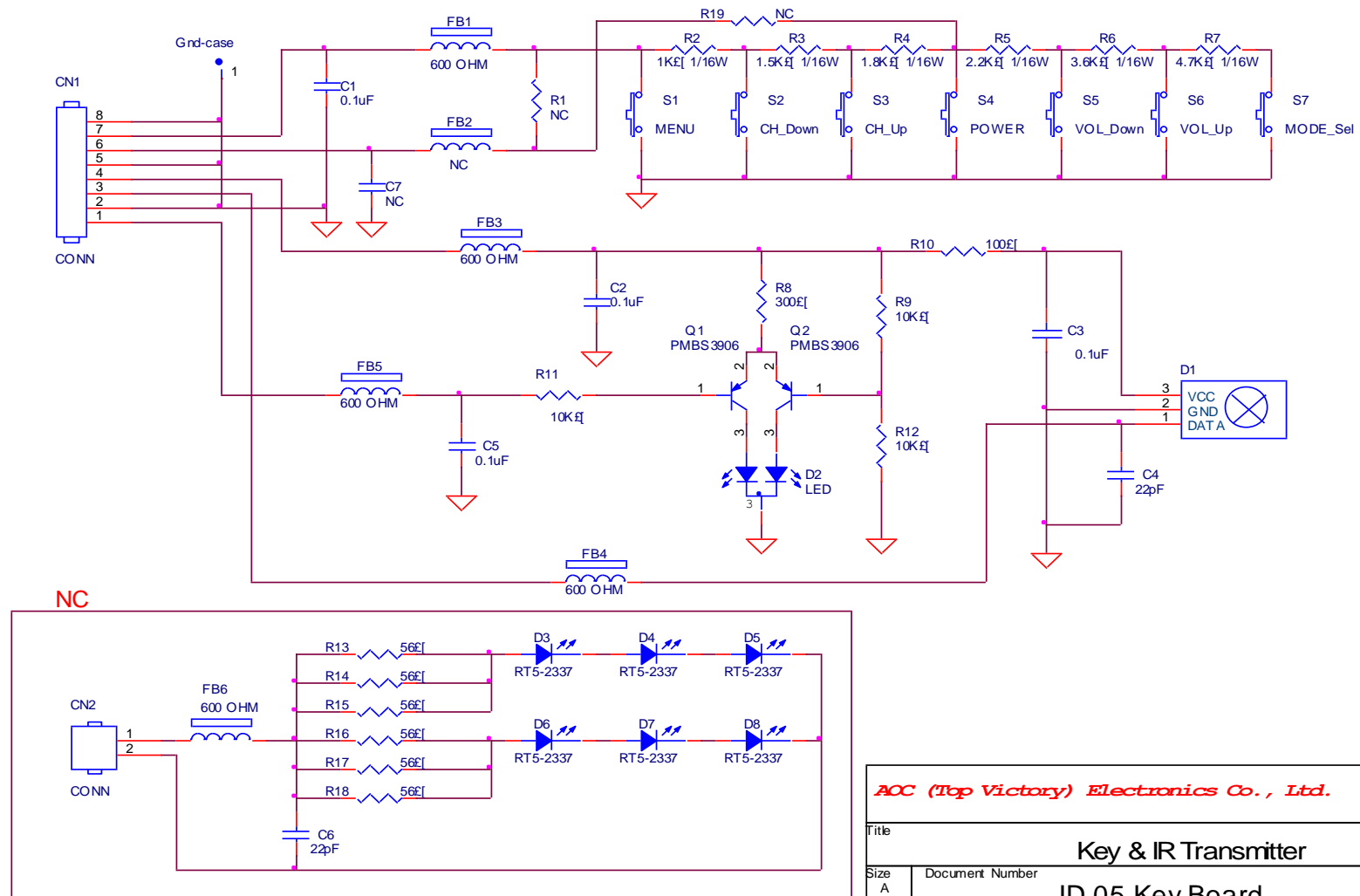


For CMQ 32"  
 50 Hz = Hi  
 60 Hz = Lo

AOC (Top Victory) Electronics Co., Ltd.		
Title: LVDS(Sharp Panel)		
Size: B	Document Number: TV2765W-2E	Rev: 1.0
Date: Monday, July 25, 2005	Sheet: 13	of: 16

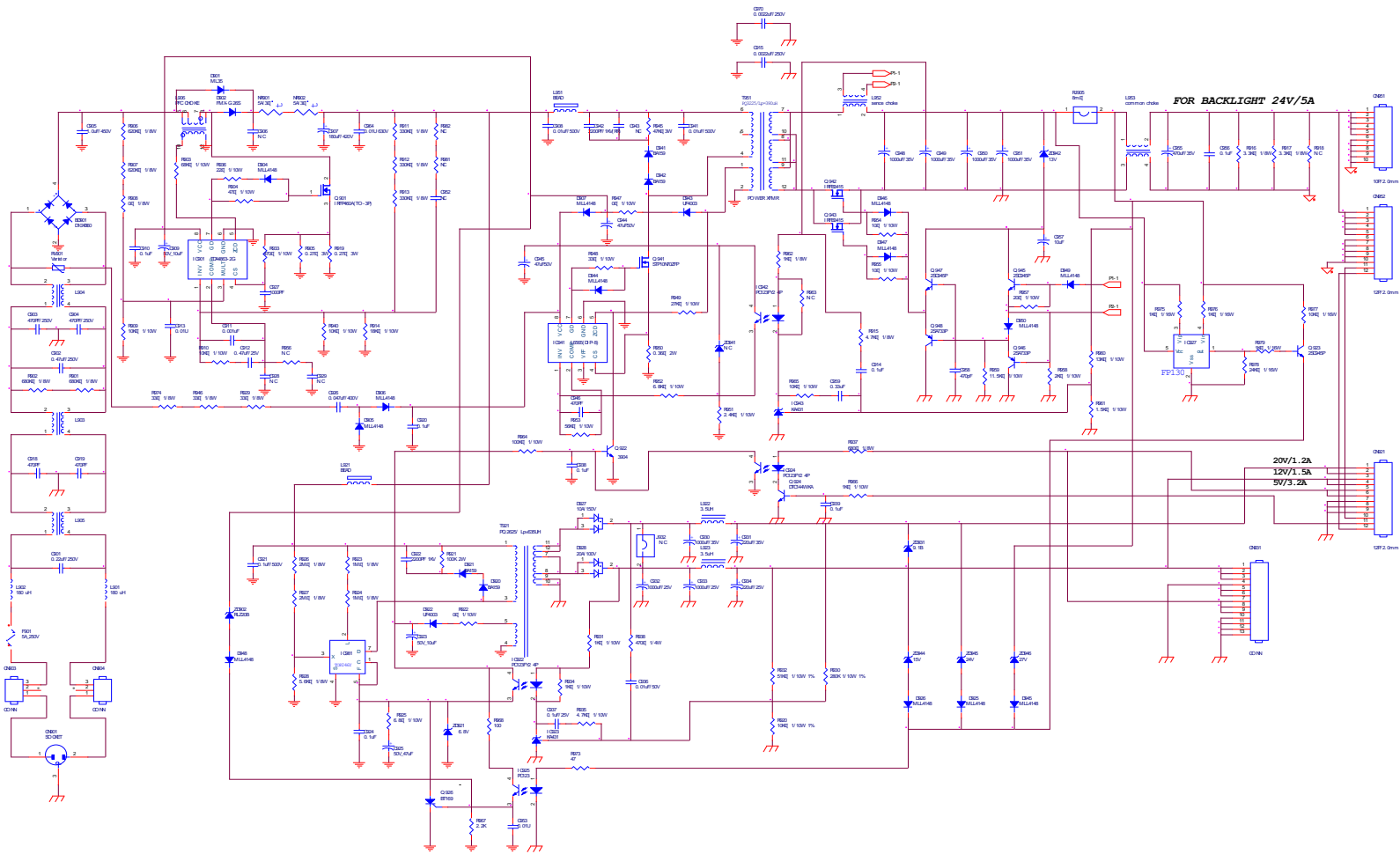


# key board

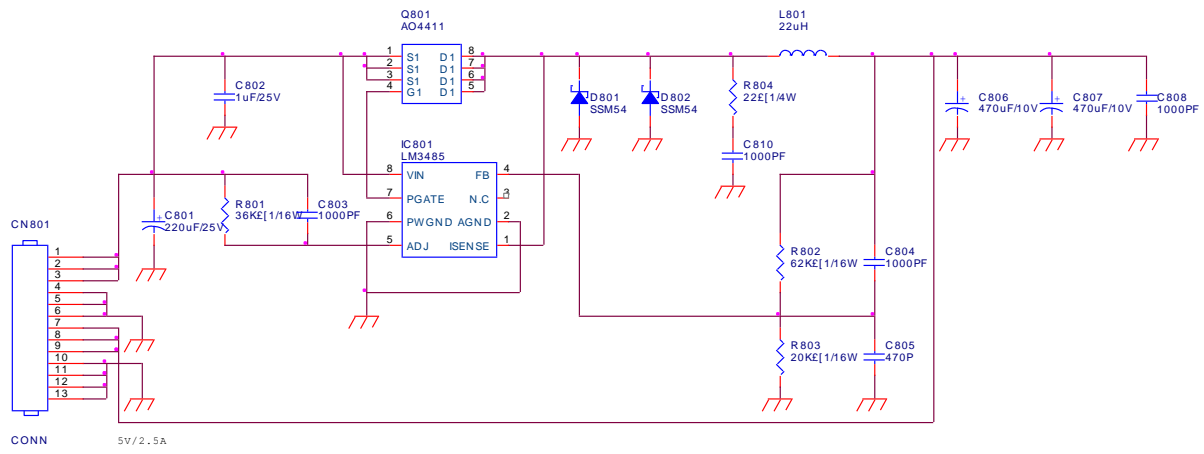


<i>AOC (Top Victory) Electronics Co., Ltd.</i>		
Title		
Key & IR Transmitter		
Size	Document Number	Rev
A	ID 05 Key Board	B
Date:	Thursday, August 11, 2005	Sheet 1 of 1

# Adapter Board



ADPF24180A2	
Doc. No.	ADPF24180A2
Rev.	1.0
Date	10/10/2008



File		
DCPF1205A1		
Size	Document Number	Rev
B	<Doc>	<Rev Code>
Date:	Tuesday, March 29, 2005	Sheet 2 of 2