



E-mail: <http://www.LGService.com/techsup.html>

COLOR MONITOR

SERVICE MANUAL

MODEL: FLATRON W1742S (W1742S-PFT. ATAPH for HSD
B00&B01) **Sales Market**

CAUTION

BEFORE SERVICING THE UNIT,
READ THE **SAFETY PRECAUTIONS** IN THIS MANUAL.



*To apply the **MSTAR Chip**.

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SPECIFICATIONS

1. LCD CHARACTERISTICS

Type : TFT Color LCD Module
 Active Display Area : 17.0 inch
 Pixel Pitch : 0.285 (H) x 0.285 (V)
 Color Depth : 6bits, 16.2M colors
 Size : 389.2 (H) x 254.5 (V) x 11.5(D)
 Electrical Interface : FFC
 Surface Treatment : Hard-coating(3H), Anti-Glare
 Operating Mode : Normally White, Transmissive mode
 Backlight Unit : 2-CCFL

2. OPTICAL CHARACTERISTICS

2-1. Viewing Angle by Contrast Ratio > 10
 Left : 80°min., 85°(Typ) Right : 80°min,85°(Typ)
 Top :85° min., 85°(Typ) Bottom : 65°min,85°(Typ)

2-2.Luminance :220(min), 300(Typ) (Full White pattern, 0.7V) -**6500K**
 :170(min) (Full White pattern, 0.7V) -**9300K**

2-3. Contrast Ratio : 500(min), 600(Tye)

3. SIGNAL (Refer to the Timing Chart)

3-1. Sync Signal
 • Type : Separate Sync, SOG

3-2. Video Input Signal
 1) Type : R, G, B Analog
 2) Voltage Level : 0~0.71 V
 a) Color 0, 0 :0 Vp-p
 b) Color 7 .0 :0.467Vp-p
 c) Color 15, 0 : 0.714Vp-p
 3) Input Impedance: 75 Ω

3-3. Operating Frequency
 Horizontal : 30 ~ 83kHz
 Vertical : 56 ~ 75Hz

4. Max. Resolution

D-sub Analog : 1440X900@75Hz

5. POWER SUPPLY

5-1. Power : AC 90~264V, 47.5/63Hz , 3.5Ma

5-2. Power Consumption

MODE	H/V SYNC	VIDEO	POWER CONSUMPTION	LED COLOR
POWER ON (NORMAL) STAND-BY	ON/ON	ACTIVE	21W(typical)	BLUE
	OFF/ON	OFF	less than 1 W	AMBER
SUSPEND	ON/OFF	OFF	less than 1 W	AMBER
DPMS OFF	OFF/OFF	OFF	less than 1 W	AMBER
POWER S/W OFF	-	-	less than 1 W	OFF

6. ENVIRONMENT

6-1. Operating Temperature : 0°C~40°C(Ambient)
 6-2. Relative Humidity : 20%~80% (Non-condensing)
 6-3. MTBF : 70,000 HRS with 90% Confidence
 Lamp Life : 50,000 Hours(Min)

7. DIMENSIONS (with Stand)

Width : 40.49 cm (15.94 inches)
 Depth : 19.84 cm (7.81 inches)
 Height : 34.98 cm (13.77 inches)

8. WEIGHT (excl. packing)

Net. Weight : 3kg (6.61 lbs)

PRECAUTION

WARNING FOR THE SAFETY-RELATED COMPONENT.

- There are some special components used in LCD monitor that are important for safety. **These parts are marked on the schematic diagram and the replacement parts list.** It is essential that these critical parts should be replaced with the manufacturer's specified parts to prevent electric shock, fire or other hazard.
- Do not modify original design without obtaining written permission from manufacturer or you will void the original parts and labor guarantee.

⚠ WARNING

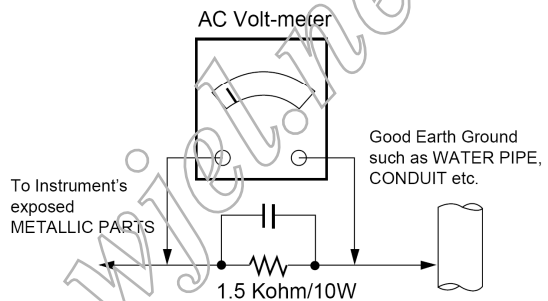
BE CAREFUL ELECTRIC SHOCK !

- If you want to replace with the new backlight (CCFL) or inverter circuit, must disconnect the AC adapter because high voltage appears at inverter circuit about 650Vrms.
- Handle with care wires or connectors of the inverter circuit. If the wires are pressed cause short and may burn or take fire.

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 are grounded through wrist band.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- The module not be exposed to the direct sunlight.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel become dirty, please wipe it off with a softmaterial. (Cleaning with a dirty or rough cloth may damage the panel.)

Leakage Current Hot Check Circuit



⚠ CAUTION

Please use only a plastic screwdriver to protect yourself from shock hazard during service operation.

SERVICING PRECAUTIONS

CAUTION: Before servicing receivers covered by this service manual and its supplements and addenda, read and follow the **SAFETY PRECAUTIONS** on page 3 of this publication.

NOTE: If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions on page 3 of this publication, always follow the safety precautions. Remember: Safety First.

General Servicing Precautions

1. Always unplug the receiver AC power cord from the AC power source before;
 - a. Removing or reinstalling any component, circuit board module or any other receiver assembly.
 - b. Disconnecting or reconnecting any receiver electrical plug or other electrical connection.
 - c. Connecting a test substitute in parallel with an electrolytic capacitor in the receiver.
CAUTION: A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.
 - d. Discharging the picture tube anode.
2. Test high voltage only by measuring it with an appropriate high voltage meter or other voltage measuring device (DVM, FETVOM, etc) equipped with a suitable high voltage probe.
Do not test high voltage by "drawing an arc".
3. Discharge the picture tube anode only by (a) first connecting one end of an insulated clip lead to the degaussing or kine aquadag grounding system shield at the point where the picture tube socket ground lead is connected, and then (b) touch the other end of the insulated clip lead to the picture tube anode button, using an insulating handle to avoid personal contact with high voltage.
4. Do not spray chemicals on or near this receiver or any of its assemblies.
5. Unless specified otherwise in this service manual, clean electrical contacts only by applying the following mixture to the contacts with a pipe cleaner, cotton-tipped stick or comparable non-abrasive applicator; 10% (by volume) Acetone and 90% (by volume) isopropyl alcohol (90%-99% strength)
CAUTION: This is a flammable mixture.
Unless specified otherwise in this service manual, lubrication of contacts is not required.
6. Do not defeat any plug/socket E+ voltage interlocks with which receivers covered by this service manual might be equipped.
7. Do not apply AC power to this instrument and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
8. Always connect the test receiver ground lead to the receiver chassis ground before connecting the test receiver positive lead.
Always remove the test receiver ground lead last.

9. Use with this receiver only the test fixtures specified in this service manual.

CAUTION: Do not connect the test fixture ground strap to any heat sink in this receiver.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid-state) devices can be damaged easily by static electricity. Such components commonly are called *Electrostatically Sensitive (ES) Devices*. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed to prevent potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static type solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

General Soldering Guidelines

1. Use a grounded-tip, low-wattage soldering iron and appropriate tip size and shape that will maintain tip temperature within the range of 500° F to 600° F.
2. Use an appropriate gauge of RMA resin-core solder composed of 60 parts tin/40 parts lead.
3. Keep the soldering iron tip clean and well tinned.
4. Thoroughly clean the surfaces to be soldered. Use a small wire-bristle (0.5 inch, or 1.25cm) brush with a metal handle.

Do not use freon-propelled spray-on cleaners.

5. Use the following unsoldering technique
 - a. Allow the soldering iron tip to reach normal temperature.
(500° F to 600° F)
 - b. Heat the component lead until the solder melts.
 - c. Quickly draw the melted solder with an anti-static, suction-type solder removal device or with solder braid.

CAUTION: Work quickly to avoid overheating the circuitboard printed foil.

6. Use the following soldering technique.
 - a. Allow the soldering iron tip to reach a normal temperature (500° F to 600° F)
 - b. First, hold the soldering iron tip and solder the strand against the component lead until the solder melts.
 - c. Quickly move the soldering iron tip to the junction of the component lead and the printed circuit foil, and hold it there only until the solder flows onto and around both the component lead and the foil.

CAUTION: Work quickly to avoid overheating the circuit board printed foil.

- d. Closely inspect the solder area and remove any excess or splashed solder with a small wire-bristle brush.

IC Remove/Replacement

Some chassis circuit boards have slotted holes (oblong) through which the IC leads are inserted and then bent flat against the circuit foil. When holes are the slotted type, the following technique should be used to remove and replace the IC. When working with boards using the familiar round hole, use the standard technique as outlined in paragraphs 5 and 6 above.

Removal

1. Desolder and straighten each IC lead in one operation by gently prying up on the lead with the soldering iron tip as the solder melts.
2. Draw away the melted solder with an anti-static suction-type solder removal device (or with solder braid) before removing the IC.

Replacement

1. Carefully insert the replacement IC in the circuit board.
2. Carefully bend each IC lead against the circuit foil pad and solder it.
3. Clean the soldered areas with a small wire-bristle brush. (It is not necessary to reapply acrylic coating to the areas).

"Small-Signal" Discrete Transistor

Removal/Replacement

1. Remove the defective transistor by clipping its leads as close as possible to the component body.
2. Bend into a "U" shape the end of each of three leads remaining on the circuit board.
3. Bend into a "U" shape the replacement transistor leads.
4. Connect the replacement transistor leads to the corresponding leads extending from the circuit board and crimp the "U" with long nose pliers to insure metal to metal contact then solder each connection.

Power Output, Transistor Device

Removal/Replacement

1. Heat and remove all solder from around the transistor leads.
2. Remove the heat sink mounting screw (if so equipped).
3. Carefully remove the transistor from the heat sink of the circuit board.
4. Insert new transistor in the circuit board.
5. Solder each transistor lead, and clip off excess lead.
6. Replace heat sink.

Diode Removal/Replacement

1. Remove defective diode by clipping its leads as close as possible to diode body.
2. Bend the two remaining leads perpendicular y to the circuit board.
3. Observing diode polarity, wrap each lead of the new diode around the corresponding lead on the circuit board.
4. Securely crimp each connection and solder it.
5. Inspect (on the circuit board copper side) the solder joints of the two "original" leads. If they are not shiny, reheat them and if necessary, apply additional solder.

Fuse and Conventional Resistor

Removal/Replacement

1. Clip each fuse or resistor lead at top of the circuit board hollow stake.
2. Securely crimp the leads of replacement component around notch at stake top.
3. Solder the connections.

CAUTION: Maintain original spacing between the replaced component and adjacent components and the circuit board to prevent excessive component temperatures.

Circuit Board Foil Repair

Excessive heat applied to the copper foil of any printed circuit board will weaken the adhesive that bonds the foil to the circuit board causing the foil to separate from or "lift-off" the board. The following guidelines and procedures should be followed whenever this condition is encountered.

At IC Connections

To repair a defective copper pattern at IC connections use the following procedure to install a jumper wire on the copper pattern side of the circuit board. (Use this technique only on IC connections).

1. Carefully remove the damaged copper pattern with a sharp knife. (Remove only as much copper as absolutely necessary).
2. Carefully scratch away the solder resist and acrylic coating (if used) from the end of the remaining copper pattern.
3. Bend a small "U" in one end of a small gauge jumper wire and carefully crimp it around the IC pin. Solder the IC connection.
4. Route the jumper wire along the path of the out-away copper pattern and let it overlap the previously scraped end of the good copper pattern. Solder the overlapped area and clip off any excess jumper wire.

At Other Connections

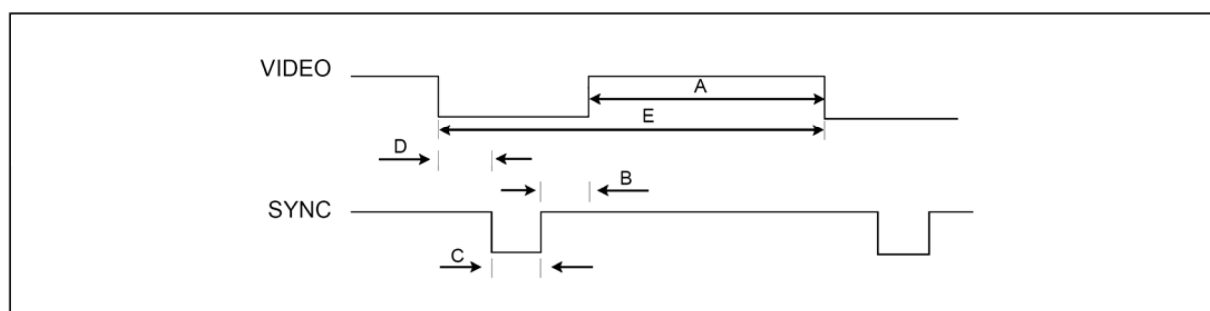
Use the following technique to repair the defective copper pattern at connections other than IC Pins. This technique involves the installation of a jumper wire on the component side of the circuit board.

1. Remove the defective copper pattern with a sharp knife.
Remove at least 1/4 inch of copper, to ensure that a hazardous condition will not exist if the jumper wire opens.
2. Trace along the copper pattern from both sides of the pattern break and locate the nearest component that is directly connected to the affected copper pattern.
3. Connect insulated 20-gauge jumper wire from the lead of the nearest component on one side of the pattern break to the lead of the nearest component on the other side.

Carefully crimp and solder the connections.

CAUTION: Be sure the insulated jumper wire is dressed so the it does not touch components or sharp edges.

TIMING CHART



MODE	H / V	Sync Polarity	Dot Clock	Frequency	Total Period (E)	Video Active Time (A)	Sync Duration (D)	Front Porch (C)	Blanking Time (B)	Resolution
1	H(Pixels)	+	25.175	31.469	800	640	16	96	48	640 X 350
	V(Lines)	-		70.08	449	350	37	2	60	
2	H(Pixels)	-	28.321	31.469	900	720	18	108	54	720 X 400
	V(Lines)	+		70.08	449	400	12	2	35	
3	H(Pixels)	-	25.175	31.469	800	640	16	96	48	640 x 480
	V(Lines)	-		59.94	525	480	10	2	33	
4	H(Pixels)	-	31.5	37.5	840	640	16	64	120	640 x 480
	V(Lines)	-		75	500	480	1	3	16	
5	H(Pixels)	+	40.0	37.879	1056	800	40	128	88	800 x 600
	V(Lines)	+		60.317	628	600	1	4	23	
6	H(Pixels)	+	49.5	46.875	1056	800	16	80	160	800 x 600
	V(Lines)	+		75.0	625	600	1	3	21	
7	H(Pixels)	-	57.2832	49.725	1152	832	32	64	224	832 x 624
	V(Lines)	-		74.553	667	624	3	3	37	
8	H(Pixels)	-	65.0	48.353	1344	1024	24	136	160	1024 x 768
	V(Lines)	-		60.0	806	768	3	6	29	
9	H(Pixels)	-	78.5	60.023	1312	1024	16	96	176	1024 x 768
	V(Lines)	-		75.029	800	768	1	3	28	
10	H(Pixels)	+/-	100.0	63.681	1456	1152	32	128	144	1152 x 870
	V(Lines)	+/-		75.062	915	870	3	3	39	
11	H(Pixels)	+/-	122.954	61.805	1504	1152	30	128	194	1152 x 900
	V(Lines)	+/-		65	937	900	2	4	31	
12	H(Pixels)	+	108.0	63.981	1688	1280	48	112	248	1280x1024
	V(Lines)	+		60.02	1066	1024	1	3	38	
13	H(Pixels)	+	135.0	79.976	1688	1280	16	144	248	1280 x 1024
	V(Lines)	+		75.035	1066	1024	1	3	38	

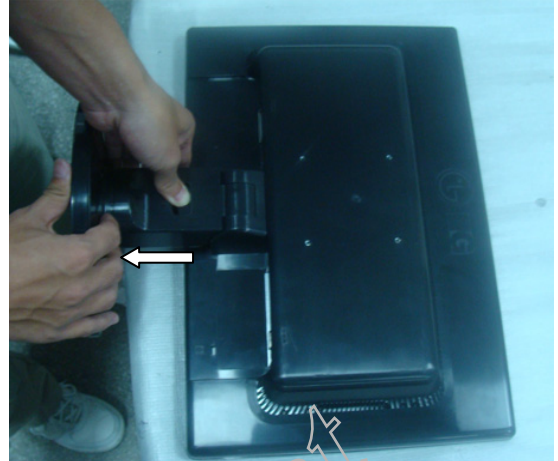
DISASSEMBLY-Set

#1



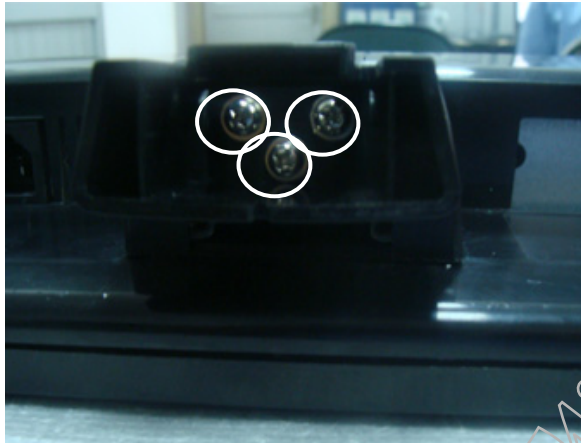
Put the monitor on a soft flat.

#2



Pull out the hinge cover as arrow direction.

#3



Remove the three screws.

#4



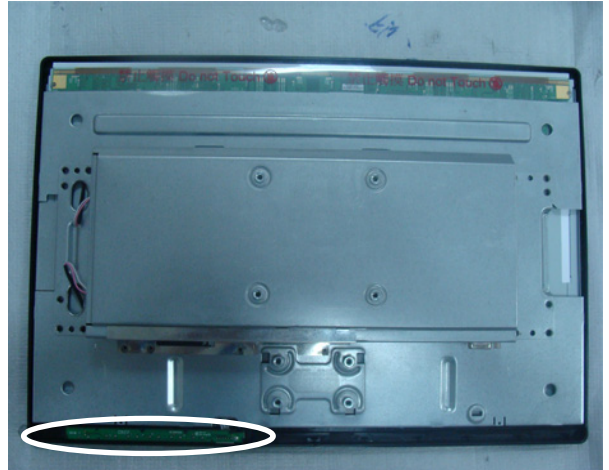
Put the front cover upward. Then let the all latches are separated.

#5



Put the front face down, disassembly back cover.

#6



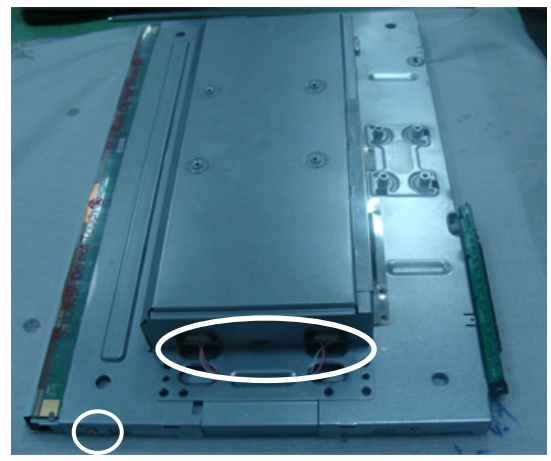
Pull the key board out of bezel.

#7



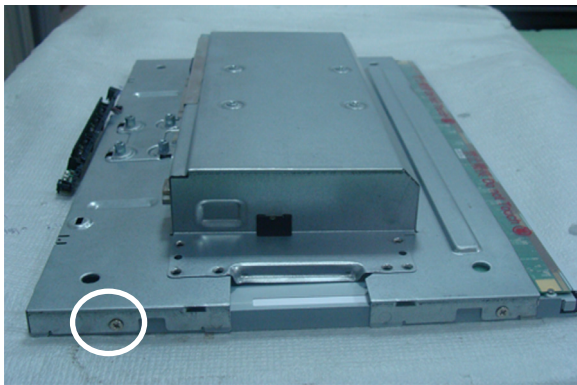
Disassembly the bezel.

#8



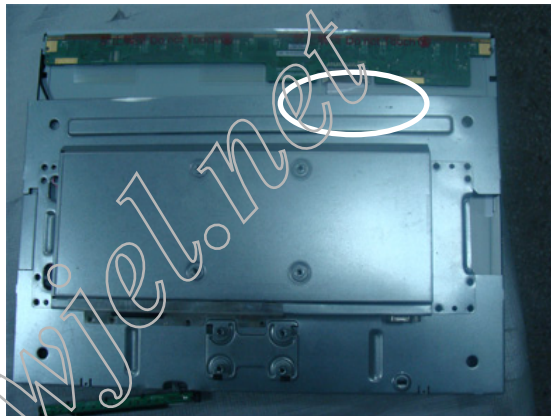
Disassembly the connector and screw.

#9



Remove the screw.

#10



Disassemble the LVDS cable

#11



Main board and power board

#12



The panel

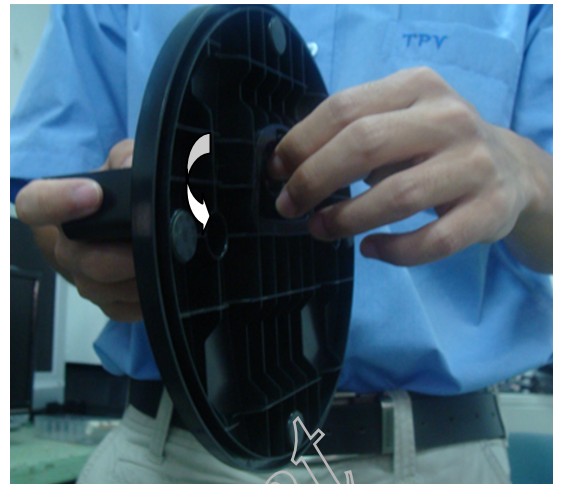
DISASSEMBLY-Stand

#1



Pull the Base Latches to inside until losing elasticity.

#2



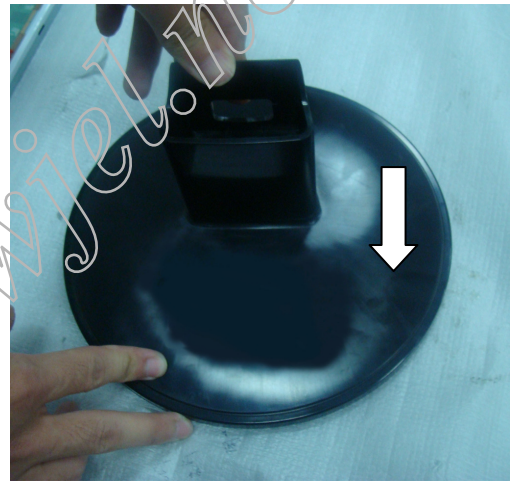
Consequently, pull the stand body directly.

#3



Separate Stand Body & Stand Base.

#4



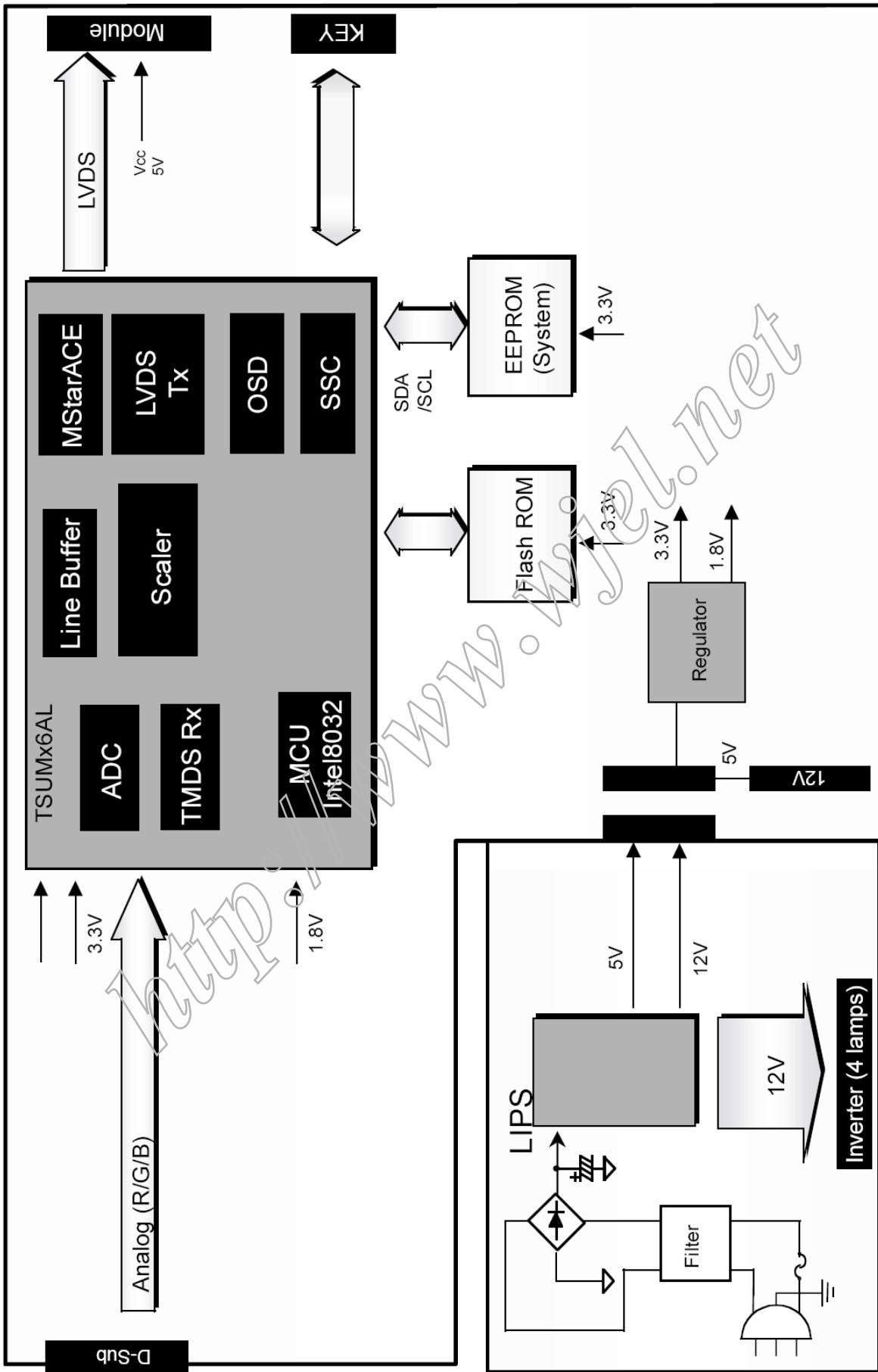
Fix Stand Base & Stand Body.

#5



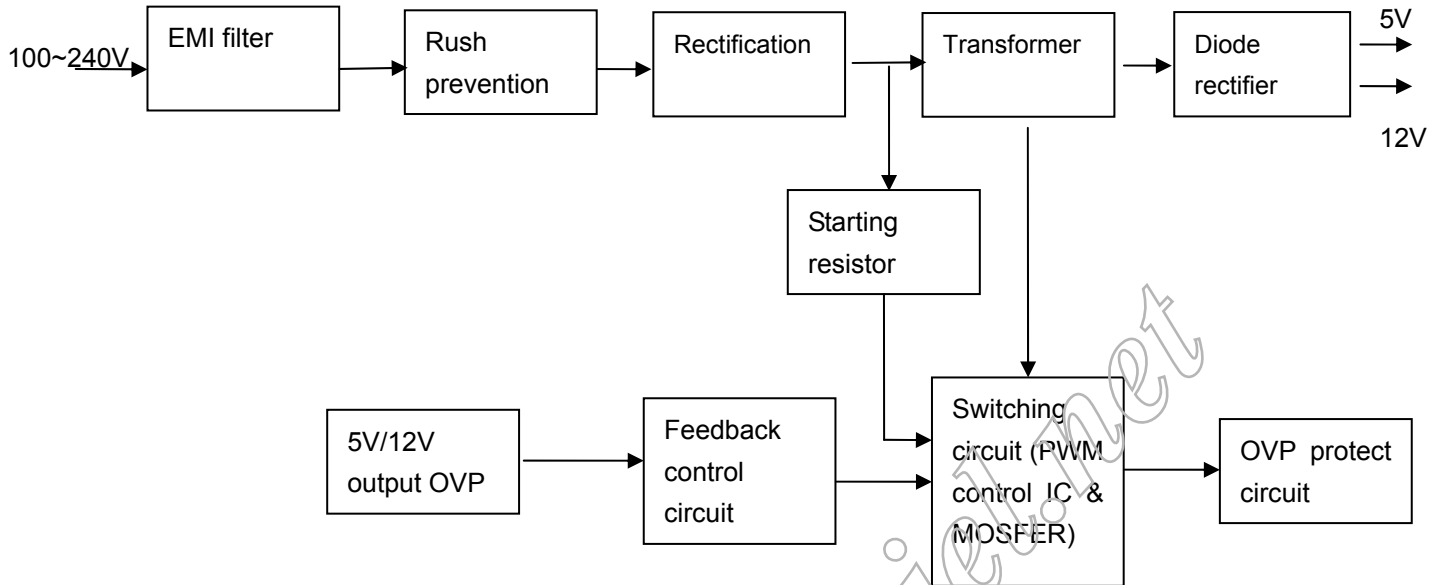
Separate the hinge and stand.

BLOCK DIAGRAM

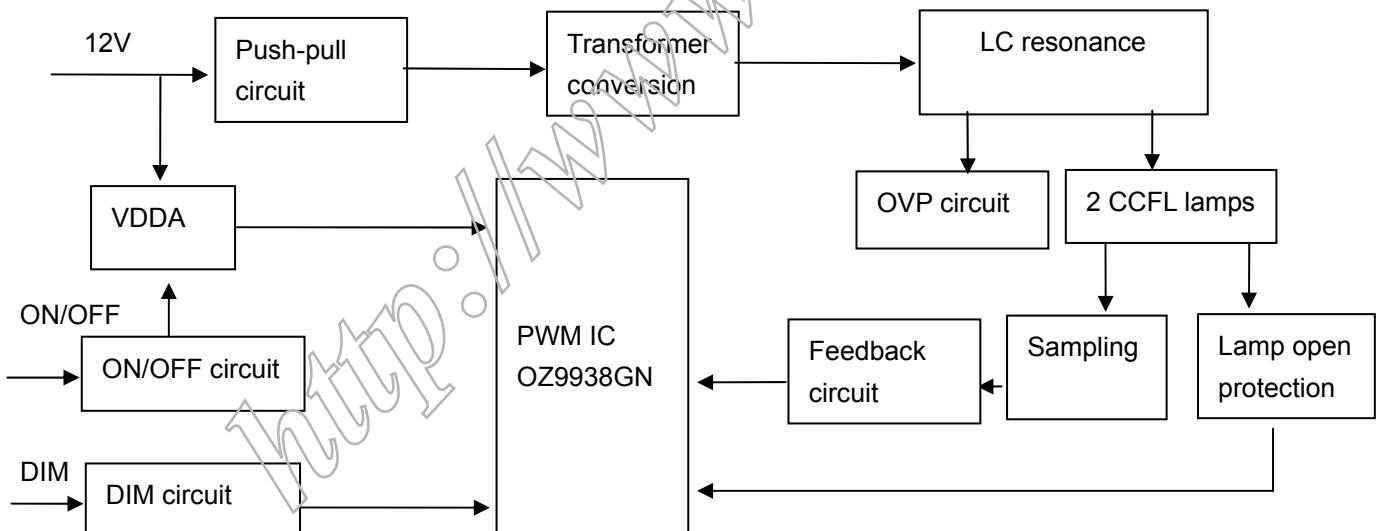


BLOCK DIAGRAM-POWER

Power



Inverter



DESCRIPTION OF BLOCK DIAGRAM

1. Video Controller Part.

This part amplifies the level of video signal for the digital conversion and converts from the analog video signal to the digital video signal using a pixel clock.

The pixel clock for each mode is generated by the PLL.

The range of the pixel clock is from 25MHz to 135MHz.

This part consists of the Scaler, ADC converter, TMDS receiver and LVDS transmitter.

The Scaler gets the video signal converted analog to digital, interpolates input to 1440 X 900 resolution signal and outputs 8-bit R, G, B signal to transmitter.

2. Power Part.

This part consists of the one 3.3V, and one 1.8V regulators to convert power which is provided 5V in Power board.

12V is provided for inverter, 5V is provided for LCD panel.

Also, 5V is converted 3.3V and 1.8V by regulator. Converted power is provided for IC in the main board.

The inverter converts from DC 12V to AC 700Vrms and operates back-light lamps of module.

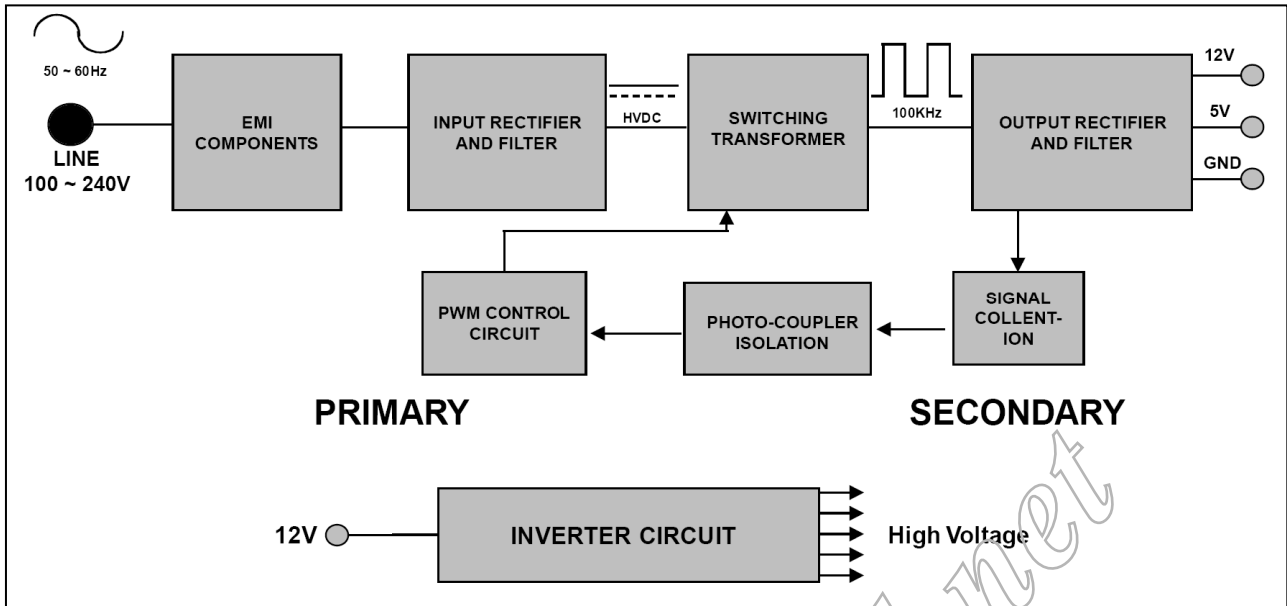
3. MICOM Part.

This part is including video controller part. And this part consists of EEPROM IC which stores control data, Reset IC and the Micom.

The Micom distinguishes polarity and frequencies of the H/V sync are supplied from signal cable.

The controlled data of each mode is stored in EEPROM.

LIPS Board Block Diagram



Operation description_LIPS

1. EMI components.

This part contains of EMI components to comply with global marketing EMI standards like FCC,VCCI CISPR, the circuit included a line-filter, across line capacitor and of course the primary protection fuse.

2. Input rectifier and filter.

This part function is for transfer the input AC voltage to a DC voltage through a bridge rectifier and a bulk capacitor.

3. Energy Transfer.

This part function is for transfer the primary energy to secondary through a power transformer.

4. Output rectifier and filter.

This part function is to make a pulse width modulation control and to provide the driver signal to power switch, to adjust the duty cycle during different AC input and output loading condition to achieve the dc output stabilized, and also the over power protection is also monitor by this part.

5. Photo-Coupler isolation.

This part function is to feed back the DC output changing status through a photo transistor to primary controller to achieve the stabilized DC output voltage.

6. Signal collection.

This part function is to collect the any change from the DC output and feed back to the primary through photo transistor.

ADJUSTMENT

Windows EDID V1.0 User Manual

Operating System: DOS, windows98, 2000, XP

1. Parallel port setting

Enter your bios, and do as followings.

- a) Integrated peripheral
- b) Super IO Device
- c) Parallel port mode

you should set the "parallel port mode" to SPP for using the DOS EDID tool surely.

2. EDID Write

- 1、 Connect the signal line of monitor with DDC recorder
- 2、 Choose the DDC RECORD program, and it shows on the screen, the choose the correct source base on the monitor.
- 3、 Click "LoadFile" ,then key in the **manufacturer name**, **model name**, **product code**, then choose the correct model name base on the monitor.(as Fig. 2)
- 4、 Scan serial No. to DDC recorder by Bar Reader, then read again in the Verify SN
- 5、 According to the message of DDC program, when the picture as fig 1 appears, it show DDC record has finished

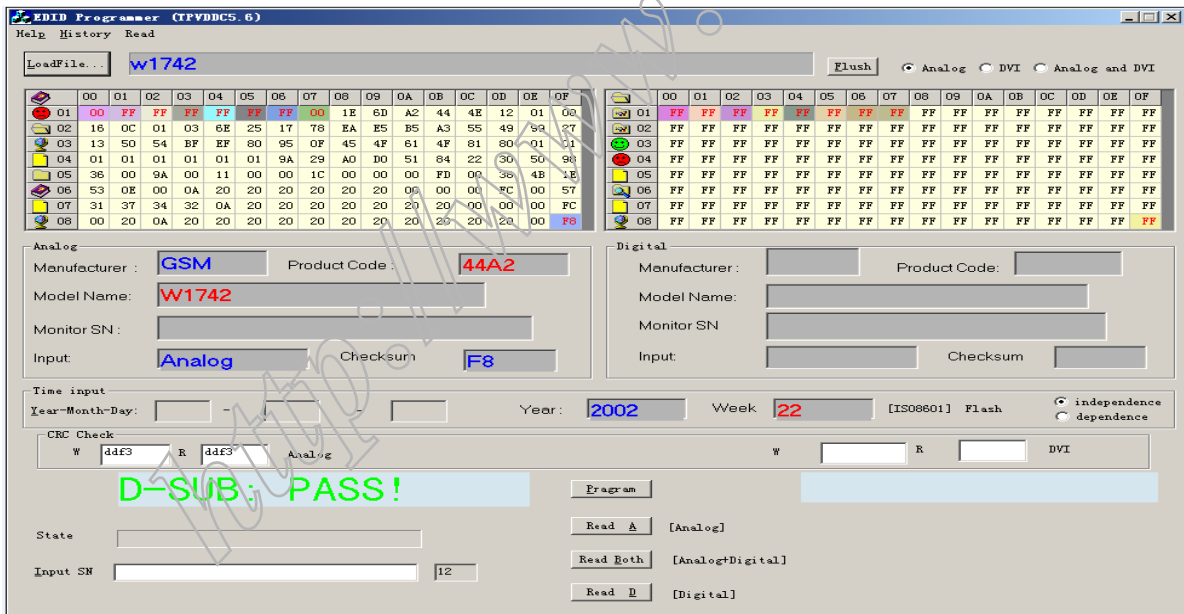


Fig.1

Please check **Manufacturer Name**、**Vendor Assigned Code**、**Monitor Name**、**Serial Number**: *****[????????? *****] (it must be the same as Bar Code)、**Week of Manufacture**: **, **Year of Manufacture**: ****、**Checksum**: ** (It must be the same as the last byte of data table, as follows picture shows)Above of all must be right, then if it shows the green "PASS", it means record succeeds ,the red "Fail" means record fails; then check the power supply and signal line, and ensure they are connected well ,then do DDC record again from the third step.

Select

Analog Digital

Analog

Manufacturer : Product Code :

Model Name:

Digital

Manufacturer : Product Code:

Model Name:

Next

Cancel

Fig.2

<http://www.wjel.net>

SERVICE MODE

- 1) Turn off the power switch at the front side of the display.
- 2) Wait for about 5 seconds and press MENU, POWER switch with 1 second interval.
- 3) The SVC OSD menu contains additional menus that the User OSD menu as described below.

- a) CLEAR ETI: To initialize using time.
- b) Auto Color: W/B balance and automatically sets the gain and offset value.
- c) AGING: Select Aging mode (on/off).
- d) PANEL: used panel type
- e) NVRAM INIT: EEPROM initialize. (24C04)
- f) R/G/B-9300K: Allows you to set the R/G/B-9300K value manually.
- g) R/G/B-6500K: Allows you to set the R/G/B-6500K value manually.
- h) R/G/B-Offset: Allows you to set the R/G/B-Offset value manually. (Analog Only)
- i) R/G/B-Gain: Allows you to set the R/G/B-Gain value manually. (Analog Only)

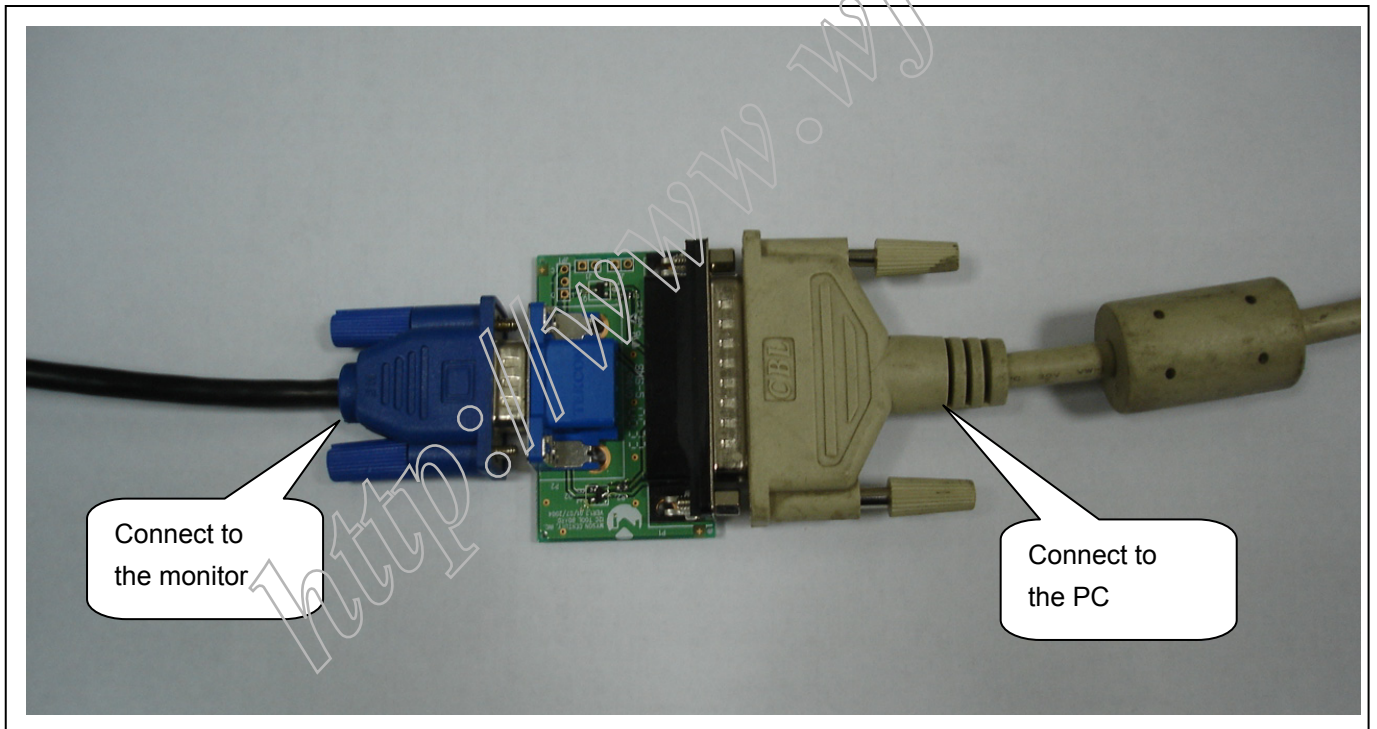
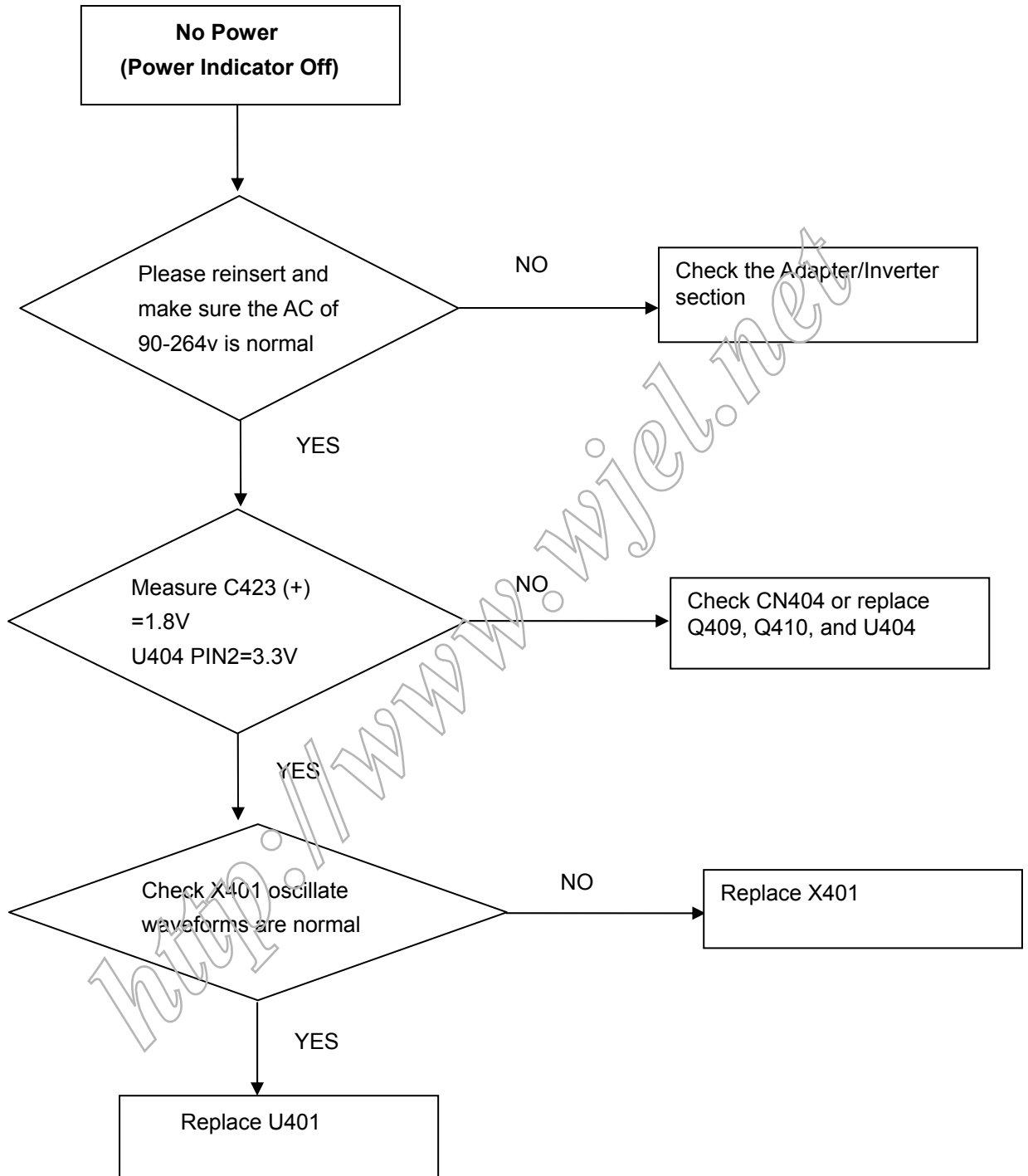


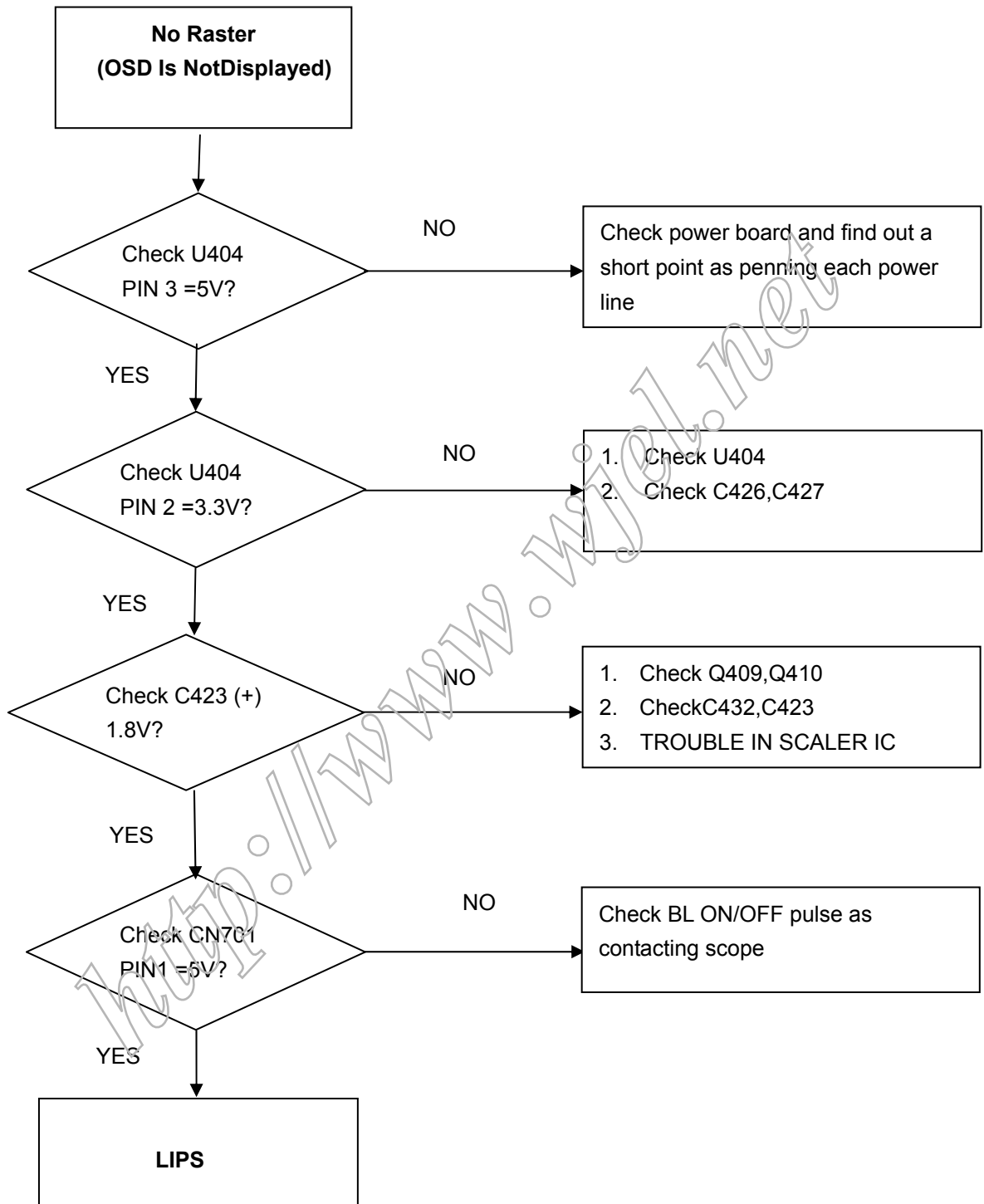
Figure 1. Cable Connection for Micom uploading

TROUBLESHOOTING GUIDE

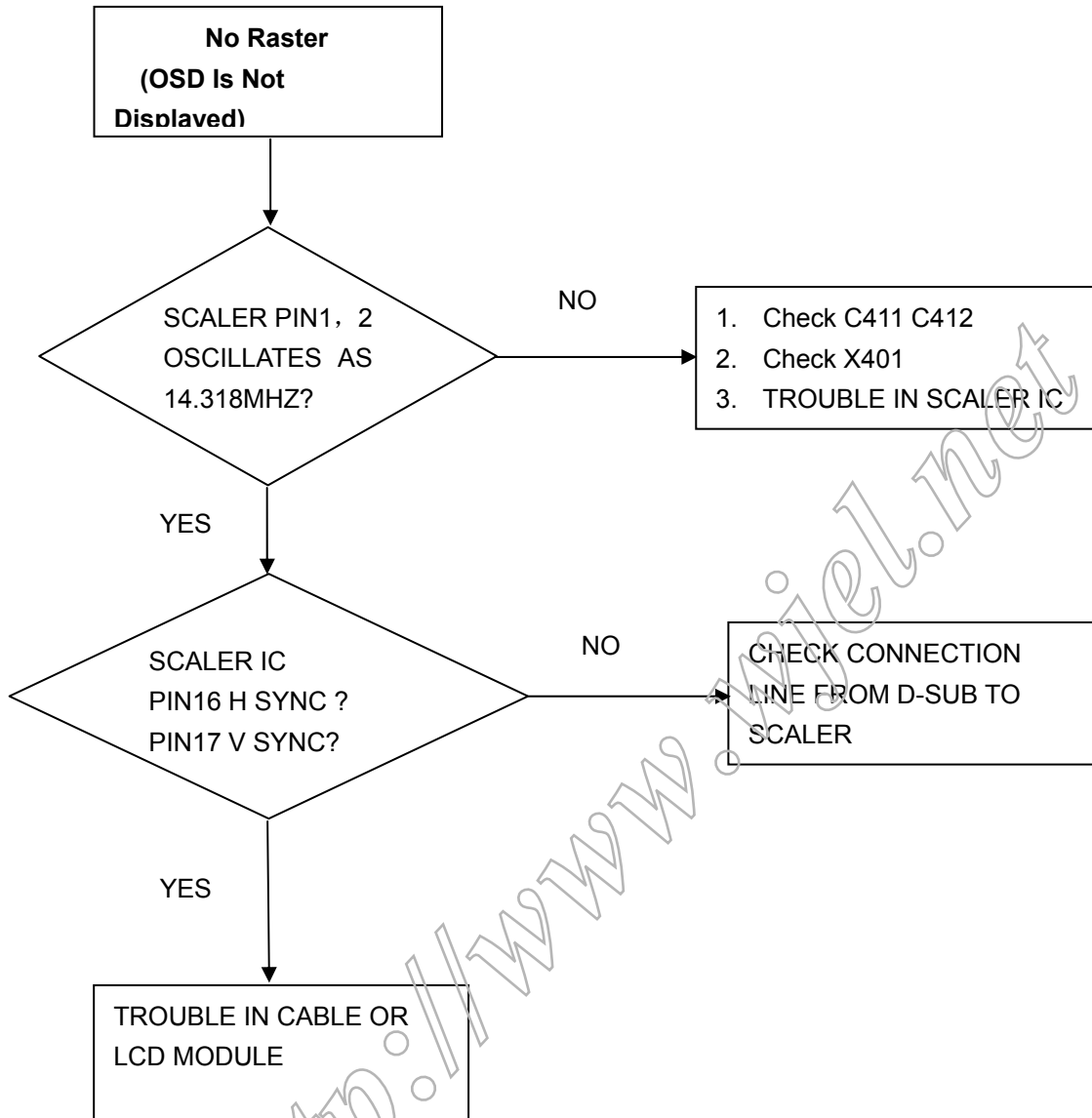
1. NO POWER



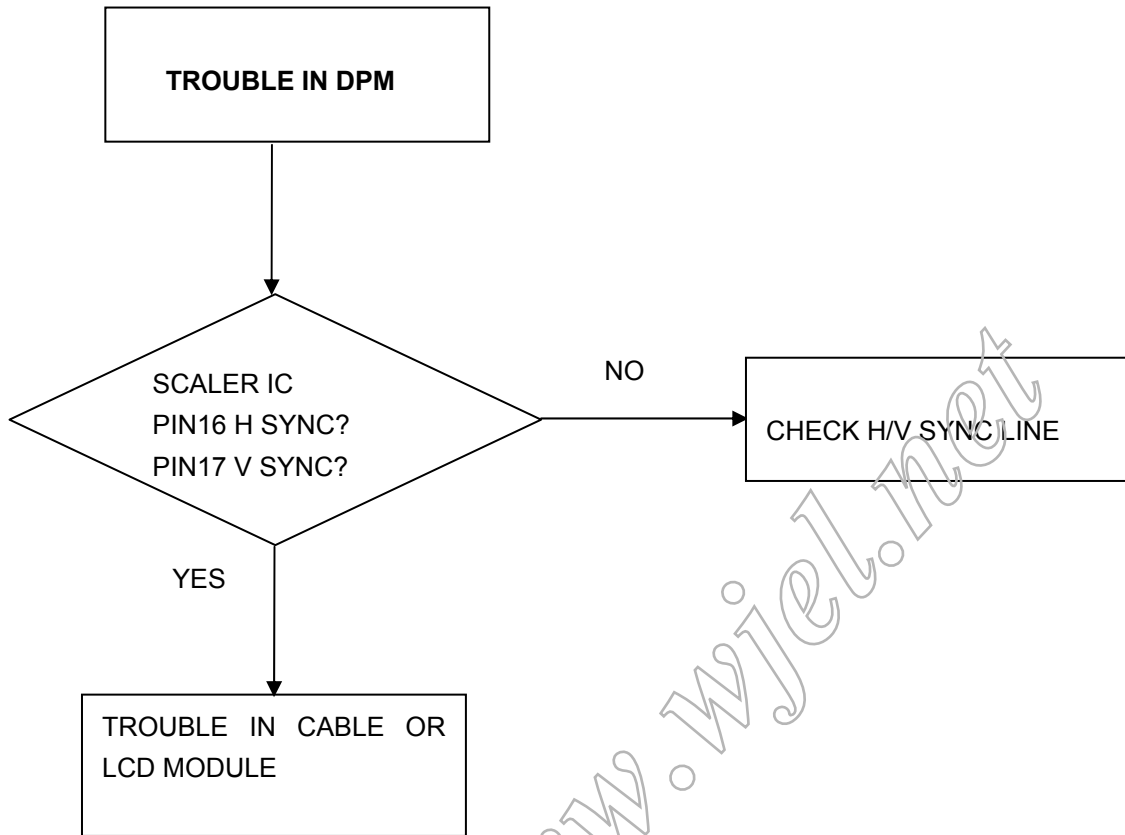
2. NO RASTER (OSD IS NOT DISPLAY)-LIPS



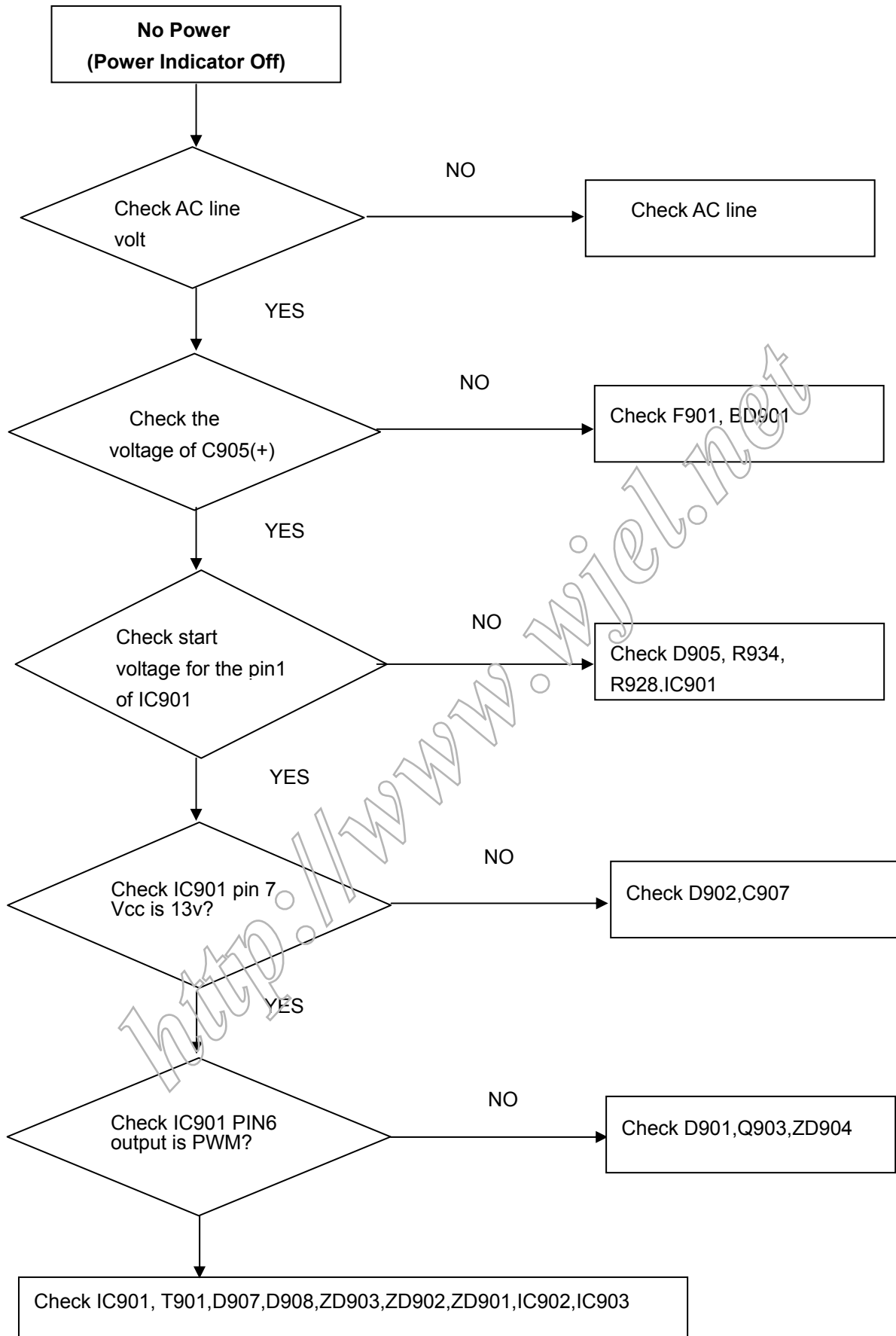
2. NO RASTER (OSD IS NOT DISPLAYED)-MSTAR



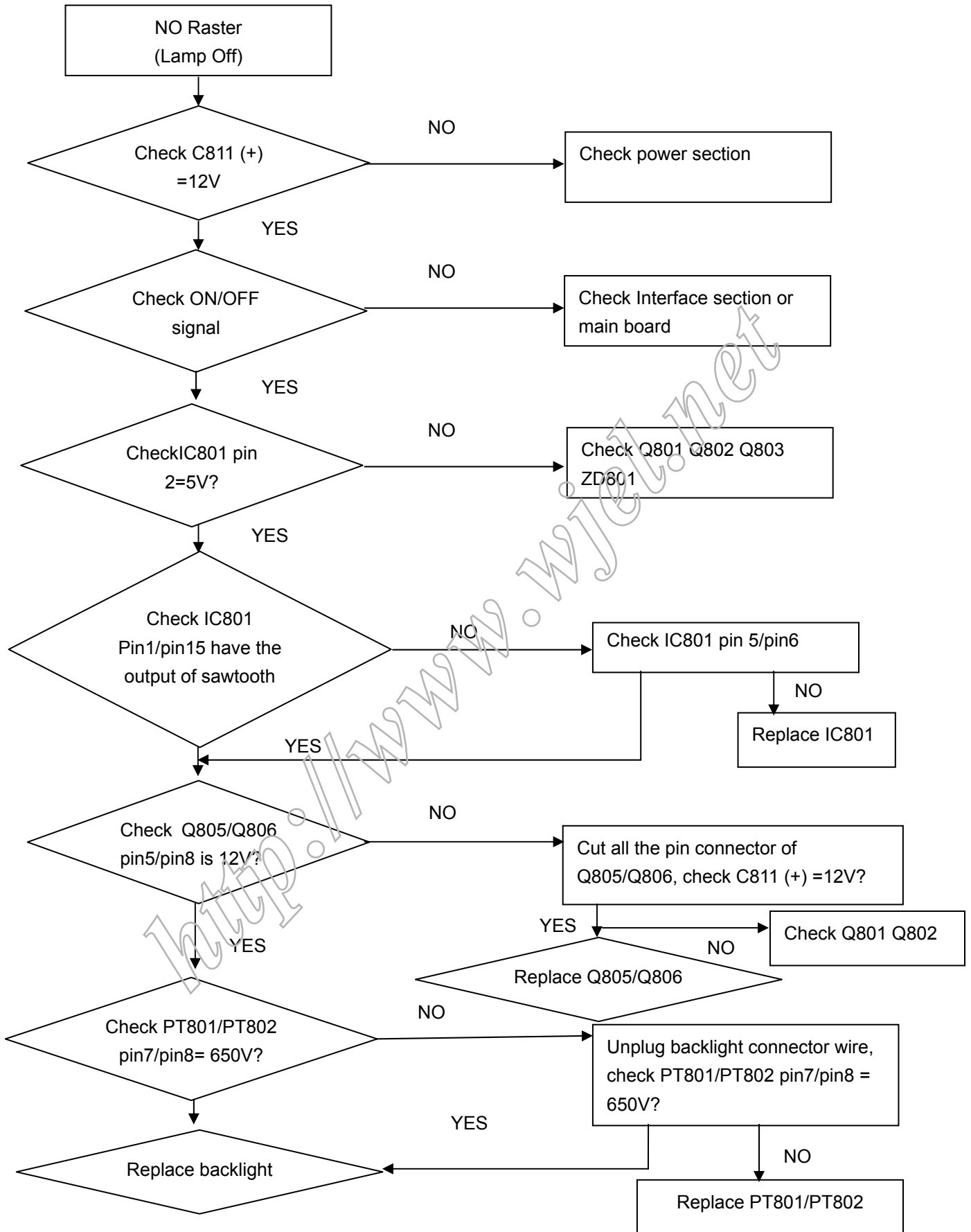
4. TROUBLE IN DPM



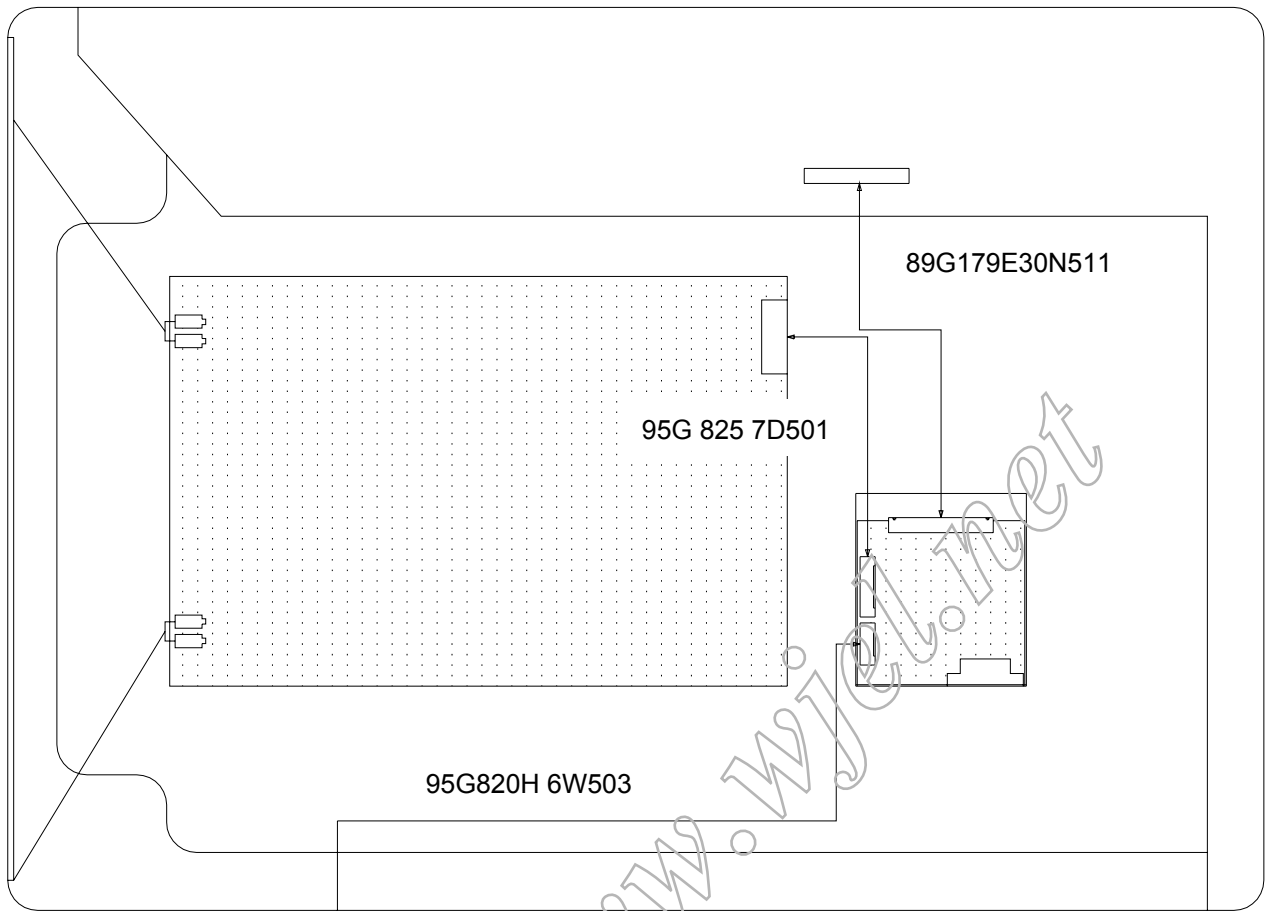
5. POWER



6. RASTER

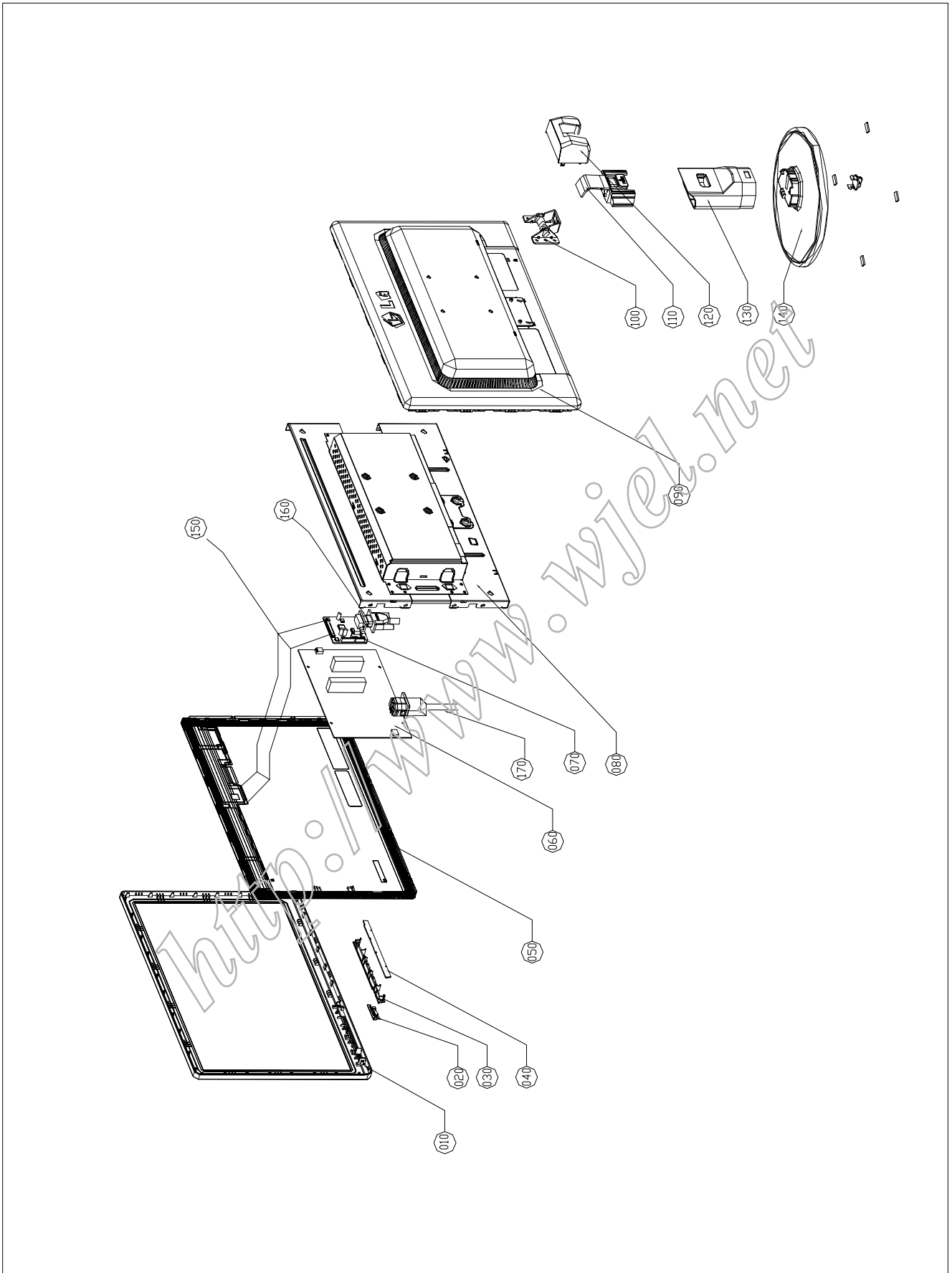


WIRING DIAGRAM



<http://www.wjcl.net>

EXPLODED VIEW



EXPLODED VIEW PARTS LIST

Ref. No.	TPV part no.	LGE part no.	Description
010	Q34G0446 B6A1B0100	MCK60961501	BEZEL L17W-8LG2
020	Q33G0238 1 1C0100	MBG60961601	LENS
030	Q33G0239 B6 1L0100	MBG60961701	KEY BUTTON
040	KEPC8QG8	EBU60009101	KEY BOARD
050	750GLH70GWB12N	COV30080601	PANEL HSD170MGW1 B00 NJ HSD
060	PWPC8721HYA2	EBU60009001	POWER BOARD
070	CBPCRM5LGQ2	EBU60008901	MAIN BOARD
080	Q15G0366101	MGJ60966501	MAIN FRAME
090	Q34G0447 B6 1B0100	MCK60961801	REAR COVER17W
100	Q37G0104011	AGU71998801	HINGE
110	Q34G0462 B6 1B0100	MCK60965801	STAND TOP
120	Q34G0463 B6 1B0100	MCK60961901	HINGE COVER
130	Q34G0464 B6 1B0132	MCK60966001	STAND
140	Q34G0465 B6 1B0133	MCK60966201	BASE
150	089G179E30N511	COV30081101	FFC CABLE
160	089G 728HAA 2G	COV30013801	SIGNAL CABLE
170	089G421A18N IS	6410TEW003A	POWER CORD

REPLACEMENT PARTS LIST

CAUTION: BEFORE REPLACING ANY OF THESE COMPONENTS,
READ CAREFULLY THE **SAFETY PRECAUTIONS** IN THIS MANUAL.
MAIN BOARD AND POWER BOARD PARTS ARE DIFFERENT.

*NOTE : **S** SAFETY Mark **AL** ALTERNATIVE PARTS

		LOC. NO.	PART NO.	DESCRIPTION
DATE: 2008. 08. 7				
*S				
*AL				
MAIN BOARD				
CAPACITOR				
		C101	065G0402473 12	CHIP 0.047UF 16V X7R
		C102	065G0402220 31	CHIP 22PF 50V NPO
		C103	065G0402220 31	CHIP 22PF 50V NPO
		C104	065G0402509 31	CHIP 5PF 50V NPO
		C105	065G0402473 12	CHIP 0.047UF 16V X7R
		C106	065G0402473 12	CHIP 0.047UF 16V X7R
		C107	065G0402473 12	CHIP 0.047UF 16V X7R
		C108	065G0402509 31	CHIP 5PF 50V NPO
		C109	065G0402473 12	CHIP 0.047UF 16V X7R
		C110	065G0402473 12	CHIP 0.047UF 16V X7R
		C111	065G0402509 31	CHIP 5PF 50V NPO
		C113	065G0402473 12	CHIP 0.047UF 16V X7R
		C401	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
		C403	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
		C404	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
		C406	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
		C407	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
		C408	065G0402224 17	CAP CER 0.22UF -20%-80%
		C409	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
		C410	067G215V100 7R	LOW E.S.R 10UF M 50V
		C411	065G0402220 31	CHIP 22PF 50V NPO
		C412	065G0402220 31	CHIP 22PF 50V NPO
		C414	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
		C415	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
		C416	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
		C417	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
		C419	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
		C420	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
		C421	067G 3151014KV	EC 105°C CAP 100UF M 25V
		C422	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
		C423	067G 3151014KV	EC 105°C CAP 100UF M 25V
		C426	067G 3151014KV	EC 105°C CAP 100UF M 25V
		C427	067G 3151014KV	EC 105°C CAP 100UF M 25V
		C428	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
		C429	065G0402224 17	CAP CER 0.22UF -20%-80%

		C432	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
DIODE				
		D402	093G3004 3	SM340A
		D403	093G 60230	BAT54C(L43)
		ZD103	093G 39S 34 T	UDZSNP5.6B ROHM
		ZD104	093G 39S 34 T	UDZSNP5.6B ROHM
IC				
		U102	056G 662 13	IC AZC099-04S SOT23-6L
		U103	056G 662 13	IC AZC099-04S SOT23-6L
		U401	056G 562557	IC TSUM1PFR-LF
		SMTC-U402	100GKMH7001NT1	MCU ASS'Y-56G1133 81
		U403	056G1133 32	IC M24C04-WMN6TP SO8
		U404	056G 563 52	IC AP1117D33L-13 TO252-3L DIODES
TRANSISTOR				
		Q404	057G 417 6	PMBS3906/PHILIPS-SMT(06)
		Q405	057G 763 1	A03401 SOT23 BY AOS(A1)
		Q406	057G 417 12 T	KEC 2N3904S-RTK/PS
		Q409	057G 417 22 T	TRA KN2907AS -60V/-0.6A SOT-23
		Q410	057G 417 22 T	TRA KN2907AS -60V/-0.6A SOT-23
RESISTOR				
		R101	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
		R102	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R103	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R104	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R105	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W
		R106	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W
		R107	061G0402750	RST CHIPR 75 OHM +-5% 1/16W
		R108	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R109	061G0402390 0F	RST CHIP 390R 1/16W 1%
		R110	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R111	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R112	061G0402750	RST CHIPR 75 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
		R116	061G0402750	RST CHIPR 75 OHM +-5% 1/16W
		R117	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R118	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
		R120	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
		R121	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
		R401	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
		R402	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
		R403	061G0402390 0F	RST CHIP 390R 1/16W 1%
		R404	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
		R405	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R406	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
		R407	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W

		R408	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
		R409	061G0402203	RST CHIP 20K 1/16W 5%
		R410	061G0402121	RST CHIP 120R 1/16W 5%
		R411	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R412	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R413	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R414	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
		R417	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
		R424	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R427	061G0402392	RST CHIP 3.9K 1/16W 5%
		R428	061G0402392	RST CHIP 3.9K 1/16W 5%
		R433	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
		R434	061G1206331	RST CHIPR 330 OHM +-5% 1/4W
		R435	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
		R436	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W
		R437	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
		R439	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
		R440	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
		R441	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
		R442	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R451	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R452	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R453	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
		R454	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
		R455	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
		R456	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
		R457	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
COIL & FILTER				
		FB101	071G 59K190 B	19 OHM BEAD
		FB102	071G 59K190 B	19 OHM BEAD
		FB103	071G 59K190 B	19 OHM BEAD
		FB401	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
		FB402	071G 56K121 M	CHIP BEAD
OTHER				
		X401	093G 22 53 J	14.31818MHZ/32PF/49US
		CN101	088G 35315F H	D-SUB 15PIN
		CN401	033G3802 6	WAFER
		CN403	033G801930F CH JS	CONNECTOR
		CN404	033G3802 9	WAFER 9P RIGHT ANELE PITCH
POWER BOARD				
CAPACITOR				
		C801	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
		C802	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
		C804	065G0805105 22	CAP CHIP 0805 1UF K 25V X7R
		C805	065G0805222 31	0805 2200PF
		C806	065G0805105 22	CAP CHIP 0805 1UF K 25V X7R

		C807	065G0805103 32	CAP CHIP 0805 10NF K 50V X7R
		C809	065G0805473 32	CHIP 0.047UF 50V X7R
		C810	065G080556131G	MLCC 0805 560PF G 50V NPO
		C811	067G215P4714AV	CAP 105°C 470UF M 25V
		C813	065G0805102 31	CAP CHIP 0805 1000PF J 50V NPO
		C814	065G0805105 22	CAP CHIP 0805 1UF K 25V X7R
		C819	065G0805473 32	CHIP 0.047UF 50V X7R
		C820	065G0805472 32	CAP CHIP 0805 4700PF K 50V X7R
		C822	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
		C825	065G 6J1206ET	12PF 5% SL 6KV TDK
		C826	065G 3J3096ET	3PF,J,3KV,Z5P
		C828	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
		C830	065G0805105 22	CAP CHIP 0805 1UF K 25V X7R
		C832	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
		C833	065G060347141J W	CAP CHIP 0603 470PF J 100V NPO
		C834	065G060347141J W	CAP CHIP 0603 470PF J 100V NPO
		C837	065G0805391 31	CHIP 390PF 50V
		C838	065G0805473 32	CHIP 0.047UF 50V X7R
		C839	065G 3J3096ET	3PF,J,3KV,Z5P
		C841	065G0805472 32	CAP CHIP 0805 4700PF K 50V X7R
		C900	065G306M3322BP	3300PF 20%
		C901	065G306M2222BP	2200PF +-20% 400VAC
		C902	065G306M2222BP	2200PF +-20% 400VAC
		C903	063G107K474 6S	CAP X2 0.47UF K 275VAC
		C903	006G 31502	1.5MM RIVET
		C904	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
		C905	067G315Y10115H	CAP 105°C 100UF M 450V
		C905	006G 31502	1.5MM RIVET
		C907	067G 5152207HT	CAP 105°C 22UF M 50V
		C908	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
		C909	065G0805221 31	CAP CHIP 0805 220PF J 50V NPO
		C910	065G0805103 32	CAP CHIP 0805 10NF K 50V X7R
		C912	065G0805152 32	CHIP 1500PF 50V X7R 0805
		C913	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
		C914	065G0805152 32	CHIP 1500PF 50V X7R 0805
		C915	067G215P4714AV	CAP 105°C 470UF M 25V
		C918	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
		C919	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
		C920	067G215P4714AV	CAP 105°C 470UF M 25V
		C921	067G215P4714AV	CAP 105°C 470UF M 25V
		C922	067G215D4713KT	105°C EC 470UF M 16V KINGNICH
		C923	067G 2046812KT	CS CAP 680UF 10V 8*11 MM
		C925	067G215S10915T3964	EC CAP 1.0UF 450V 8*11MM
		C930	065G 2K222 2T6921	CAP CER 2200PF K 2KV Y5P
		C931	065G 2K152 1T GP	CERAMIC CAP
		C932	065G0603102 32	1000PF +-10% 50V X7R
		C934	065G 2K152 1T GP	CERAMIC CAP

DIODE				
		BD901	093G 50460 38	BRIDGE KBJ408G 4A/800V KBJ
		BD901	006G 31500	EYELET
		D801	093G 64 33	DIO SIG SM BAV99 (PHSE)R
		D802	093G 64 33	DIO SIG SM BAV99 (PHSE)R
		D806	093G 64 33	DIO SIG SM BAV99 (PHSE)R
		D809	093G 6432S	IN4148W
		D810	093G 6432S	IN4148W
		D811	093G 6432S	IN4148W
		D812	093G 6432S	IN4148W
		D901	093G 6026W52T	FR107
		D902	093G 6038T52T	FR103
		D905	093G 5212T52T	DIODE 1N4007 DO-41
		D907	093G 60267	SP10100
		D908	093G3006 1 1	31DQ06FC3 NIHON INTER
		ZD801	093G 39S 24 T	RLZ 5.6B LLDS
		ZD901	093G 39S 40 T	RLZ 13B LLDS
		ZD902	093G 39S 24 T	RLZ 5.6B LLDS
		ZD903	093G 39S 40 T	RLZ 13B LLDS
		ZD904	093G 39GA31 T	ZENER DIODE RLZ18B SEMTECH
		ZD906	093G 39S 42 T	RLZ27B LLDS
TRANSISTOR & IC				
		IC801	056G 608 10	IC OZ9938GN-B SOIC-16
		IC901	056G 379 79	IC LD7522PS SOP-8
		IC902	056G 139 7 1	IC EL817MA M-TYPE
		IC903	056G 158 12	KIA431A-AT/P TO-92
		Q801	057G 417 4	PMBS3904/PHILIPS-SMT(04)
		Q802	057G 417 4	PMBS3904/PHILIPS-SMT(04)
		Q803	057G 417 4	PMBS3904/PHILIPS-SMT(04)
		Q804	057G 759 2	RK7002
		Q806	057G 763 6	AO4828L
		Q807	057G 759 2	RK7002
		Q808	057G 759 2	RK7002
		Q811	057G 759 2	RK7002
		Q812	057G 759 2	RK7002
		Q903	057G 667 47	FET FQPF8N60C FAIRCHILD
		Q903	006G 31502	1.5MM RIVET
		Q904	057G 417511	MMBT3904
RESISTOR				
		JR801	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
		JR820	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
		JR902	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
		NR901	061G 58005 W	RST NTCR 5 OHM 3A THINKING
		NR901	006G 31502	1.5MM RIVET
		R802	061G0805304	RST CHIPR 300K OHM +-5% 1/8W
		R803	061G0805103	RST CHIPR 10K OHM +-5% 1/8W
		R804	061G0805103	RST CHIPR 10K OHM +-5% 1/8W

		R805	061G1206471	RST CHIPR 470 OHM +-5% 1/4W
		R806	061G0805103	RST CHIPR 10K OHM +-5% 1/8W
		R807	061G1206220	RST CHIPR 22 OHM +-5% 1/4W
		R808	061G0805473	RST CHIPR 47K OHM +-5% 1/8W
		R810	061G0805105	RST CHIPR 1M OHM +-5% 1/8W
		R812	061G0805103	RST CHIPR 10K OHM +-5% 1/8W
		R813	061G0805105	RST CHIPR 1M OHM +-5% 1/8W
		R814	061G0805754	RST CHIPR 750K OHM +-5% 1/8W
		R815	061G0805104	RST CHIPR 100K OHM +-5% 1/8W
		R816	061G0805105	RST CHIPR 1M OHM +-5% 1/8W
		R817	061G0805200 2F	RST CHIPR 20 KOHM +-1% 1/8W
		R818	061G1206820	RST CHIPR 82 OHM +-5% 1/4W
		R820	061G0805105	RST CHIPR 1M OHM +-5% 1/8W
		R825	061G0805513	RST CHIPR 51K OHM +-5% 1/8W
		R826	061G0805220 1F	RST CHIPR 2.2KOHM +-1% 1/8W
		R828	061G1206472	RST CHIPR 4.7K OHM +-5% 1/4W
		R829	061G1206820	RST CHIPR 82 OHM +-5% 1/4W
		R833	061G1206472	RST CHIPR 4.7K OHM +-5% 1/4W
		R836	061G0805102	RST CHIPR 1K OHM +-5% 1/8W
		R837	061G1206519	RST CHIPR 5.1 OHM +-5% 1/4W
		R840	061G0805105	RST CHIPR 1M OHM +-5% 1/8W
		R841	061G0805430 0F	RST CHIPR 430 OHM +-1% 1/8W
		R842	061G1206519	RST CHIPR 5.1 OHM +-5% 1/4W
		R844	061G0805105	RST CHIPR 1M OHM +-5% 1/8W
		R846	061G0805511	RST CHIPR 510 OHM +-5% 1/8W
		R847	061G0805105	RST CHIPR 1M OHM +-5% 1/8W
		R858	061G0805751	RST CHIPR 750 OHM +-5% 1/8W
		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
		R904	061G1206154	RST CHIPR 150K OHM +-5% 1/4W
		R905	061G152M51352T	RST MOFR 51 KOHM +-5% 2WS
		R906	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
		R907	061G1206154	RST CHIPR 150K OHM +-5% 1/4W
		R908	061G0805202	RST CHIPR 2K OHM +-5% 1/8W
		R909	061G1206249	RST CHIPR 2.4 OHM +-5% 1/4W
		R910	061G1206220	RST CHIPR 22 OHM +-5% 1/4W
		R911	061G1206221	RST CHIPR 220 OHM +-5% 1/4W
		R912	061G1206103	RST CHIPR 10K OHM +-5% 1/4W
		R913	061G0805124	RST CHIPR 120K OHM +-5% 1/8W
		R914	061G152M51852T	RST MOFR 0.51 OHM +-5% 2WS
		R915	061G1206154	RST CHIPR 150K OHM +-5% 1/4W
		R916	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
		R917	061G0805683	RST CHIPR 68K OHM +-5% 1/8W
		R919	061G1206151	RST CHIPR 150 OHM +-5% 1/4W
		R920	061G0805302	RST CHIPR 3K OHM +-5% 1/8W
		R921	061G0805102	RST CHIPR 1K OHM +-5% 1/8W

		R922	061G0805102	RST CHIPR 1K OHM +-5% 1/8W
		R923	061G0805330 2F	RST CHIPR 33K OHM +-1% 1/8W
		R924	061G0805240 1F	RST CHIPR 2.4K OHM +-1% 1/8W
		R925	061G0805360 1F	RST CHIPR 3.6K OHM +-1% 1/8W
		R926	061G0805102	RST CHIPR 1K OHM +-5% 1/8W
		R927	061G0805103	RST CHIPR 10K OHM +-5% 1/8W
		R928	061G1206335	RST CHIPR 3.3M OHM +-5% 1/4W
		R929	061G1206335	RST CHIPR 3.3M OHM +-5% 1/4W
		R930	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
		R931	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
		R932	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
		R933	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
		R934	061G1206335	RST CHIPR 3.3M OHM +-5% 1/4W
		R935	061G152M15152T	RST MOFR 150 OHM +-5% 2WS
		R936	061G0805471	RST CHIPR 470 OHM +-5% 1/8W
		R937	061G0805102	RST CHIPR 1K OHM +-5% 1/8W
TRANSFORMER				
		PT801	080GL17T 40 H	XFMR INVERTER DADON
		PT801	006G 31502	1.5MM RIVET
		T901	080GL22T 2 S	X'FMR POWER 510UH
		T901	006G 31502	1.5MM RIVET
OTHER				
		CN801	033G8020 2E F	CONNECTOR
		CN802	033G8020 2E F	CONNECTOR
		CN901	087G 501 32 DL	AC SOCKET DIP 3PIN+2PIN GROUND
		CN901	006G 31500	EYELET
		CN902	095G 825 7D501	WIRE HARNESS 9P-7P(SCN) 100MM
		L901	006G 31502	1.5MM RIVET
		L901	S73L17453VGGP	TRANSFORMER ASS'Y
		L902	006G 31502	1.5MM RIVET
		L902	S73L17440VG	TRANSFORMER ASS'Y
		L903	S73G25391V	CHOKE COIL ASS'Y
		L904	S73G25391V	CHOKE COIL ASS'Y
		L906	071G 55 29	FERRITE BEAD
		HS1	090G6084 1	HEAT SINK
		HS4	Q85G0062 1	EMI-BKT
		F901	084G 33 10	FUSE CLIP
		F901	084G 41 3	3.15AH/250V
		FB901	071G 55 29	FERRITE BEAD

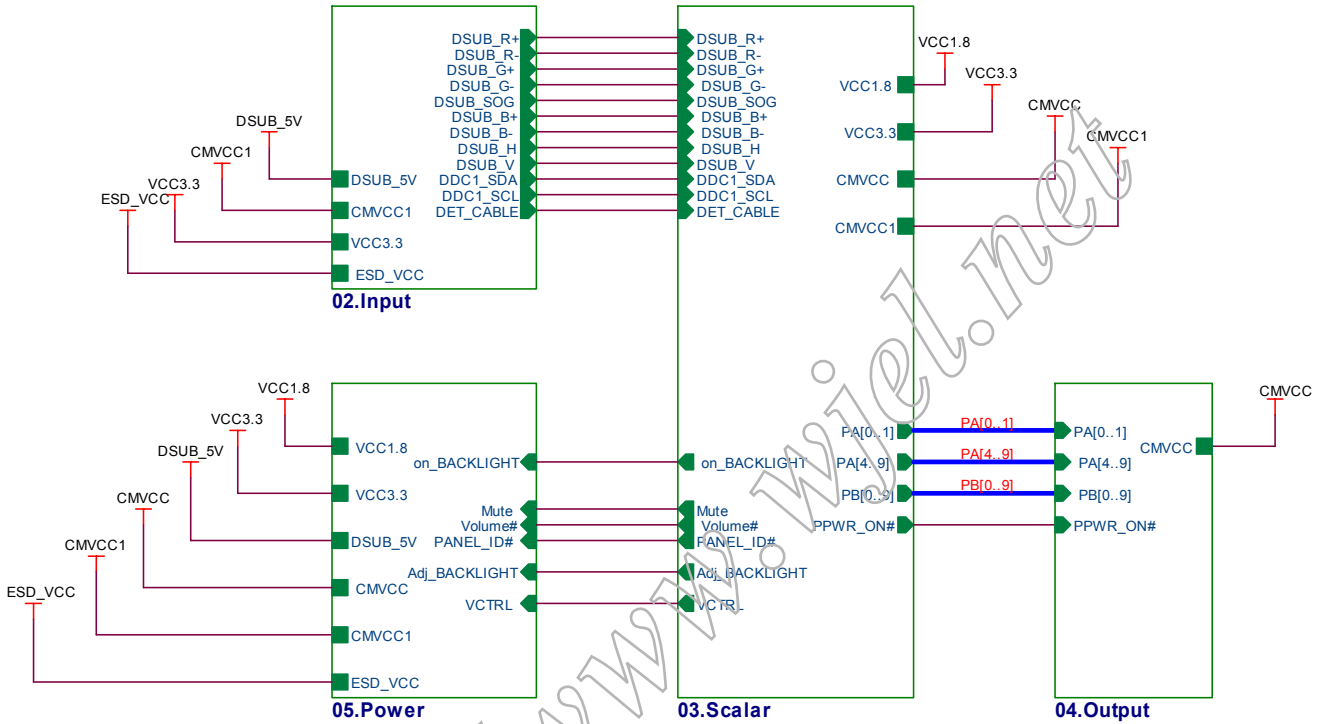
SCHEMATIC DIAGRAM

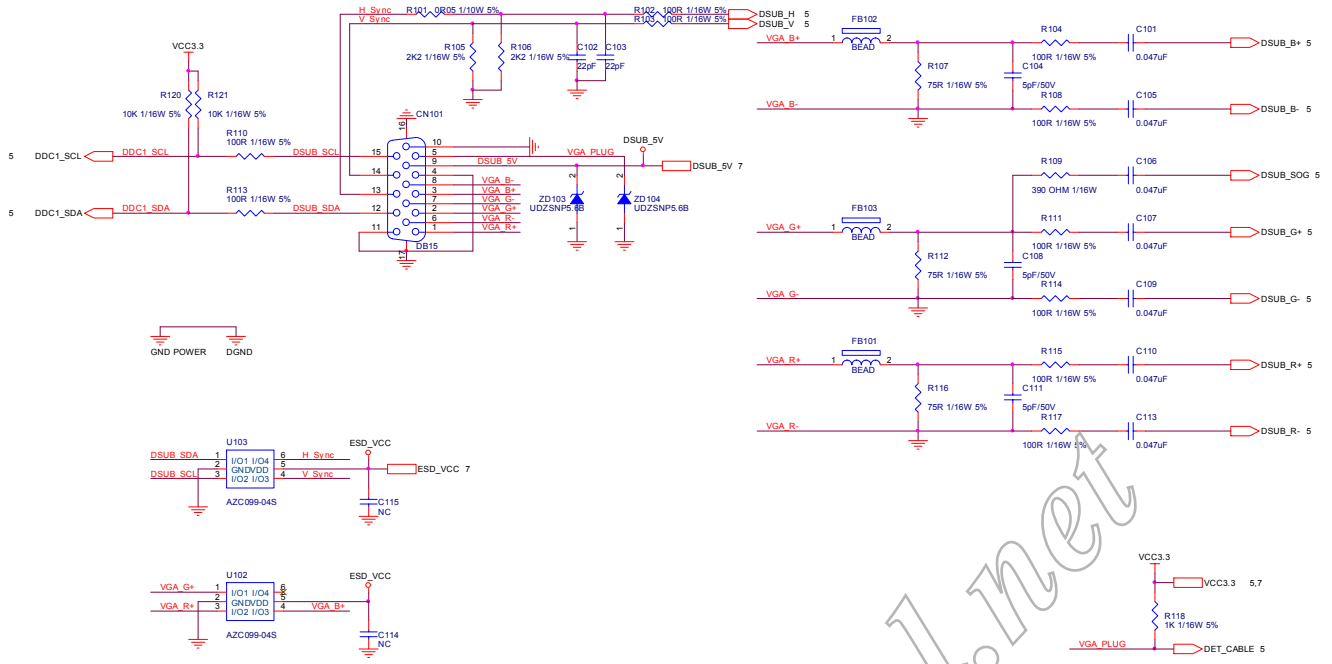
1. SCALER

TSUM1PFR-LF SCHEMATIC

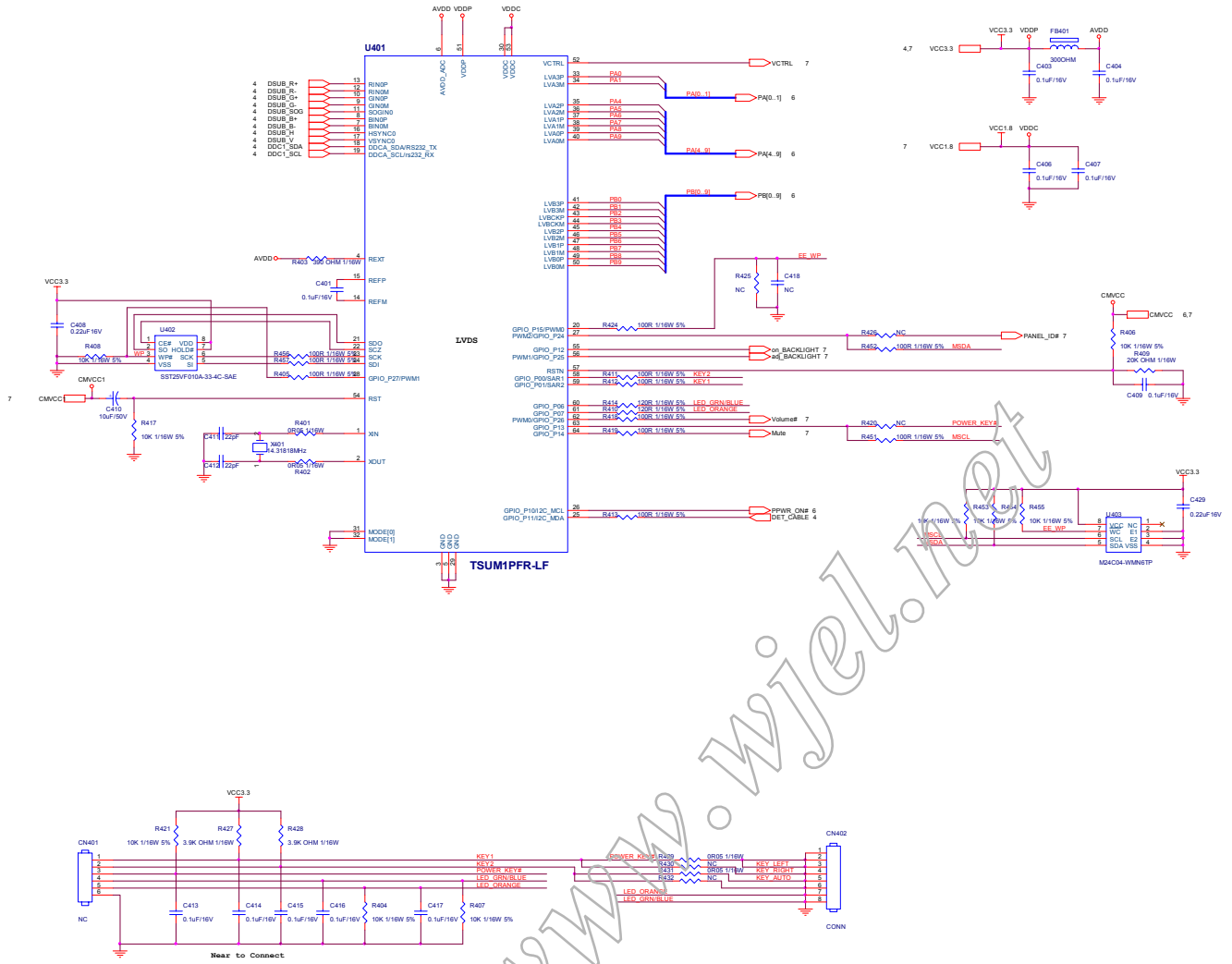
XGA/SXGA

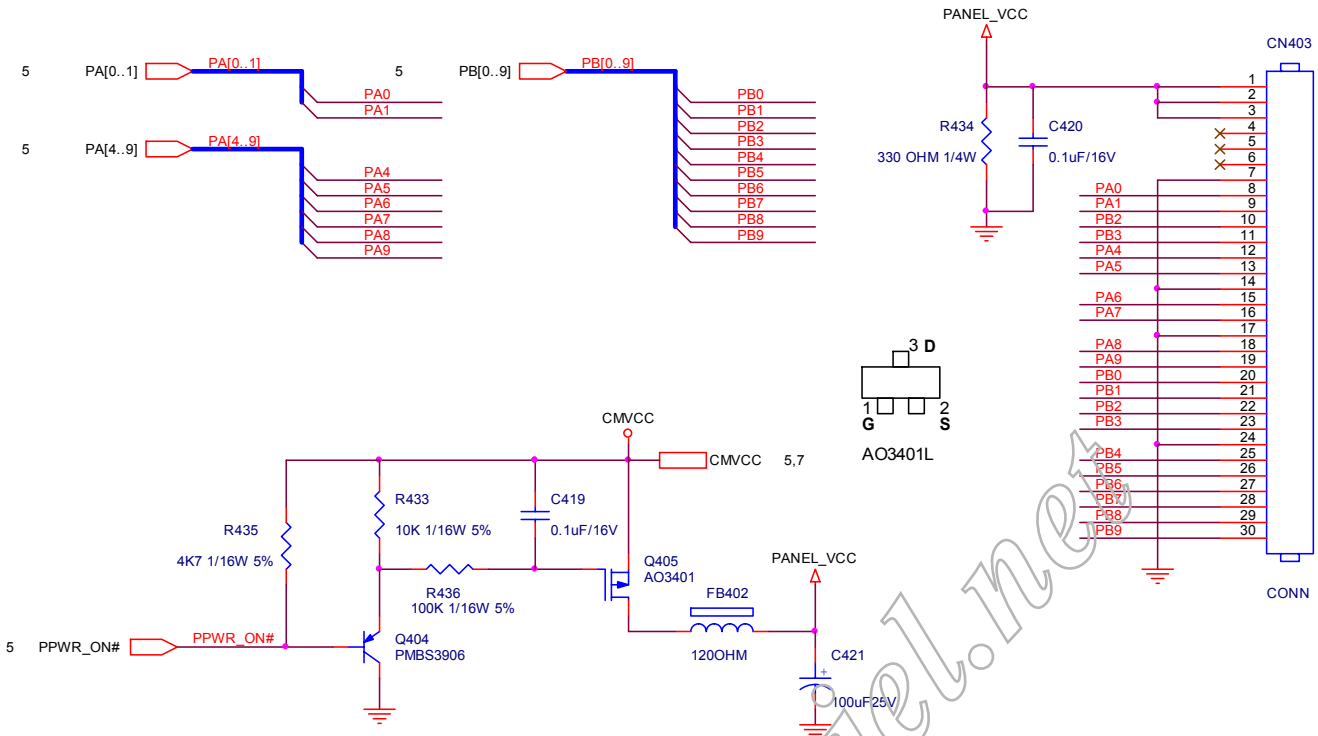
LVDS OUTPUT



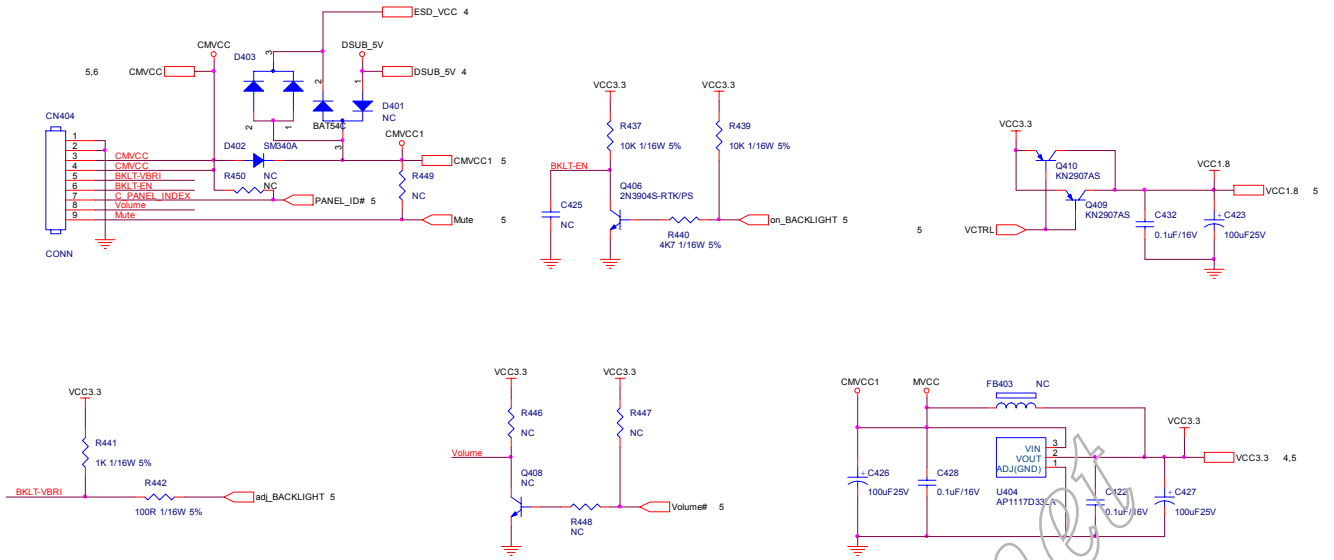


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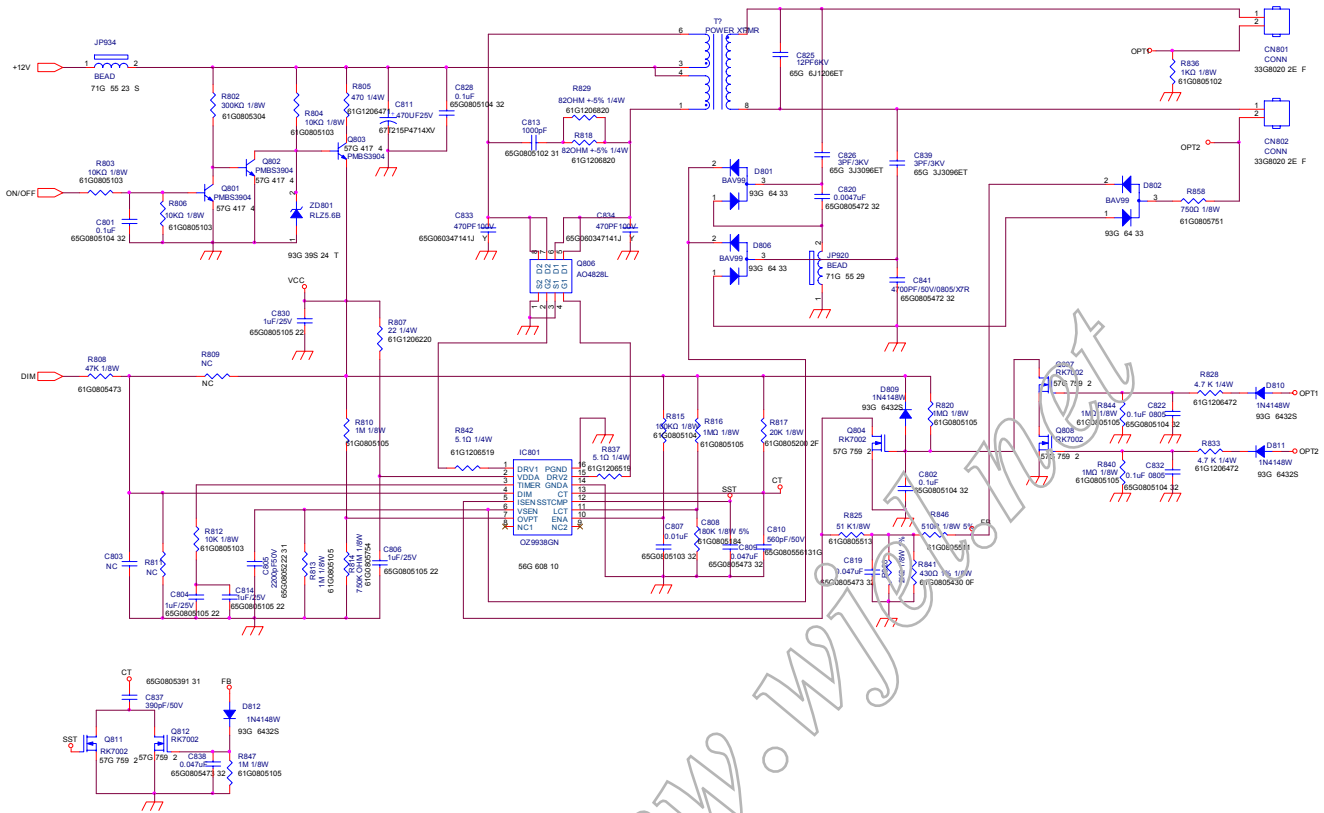


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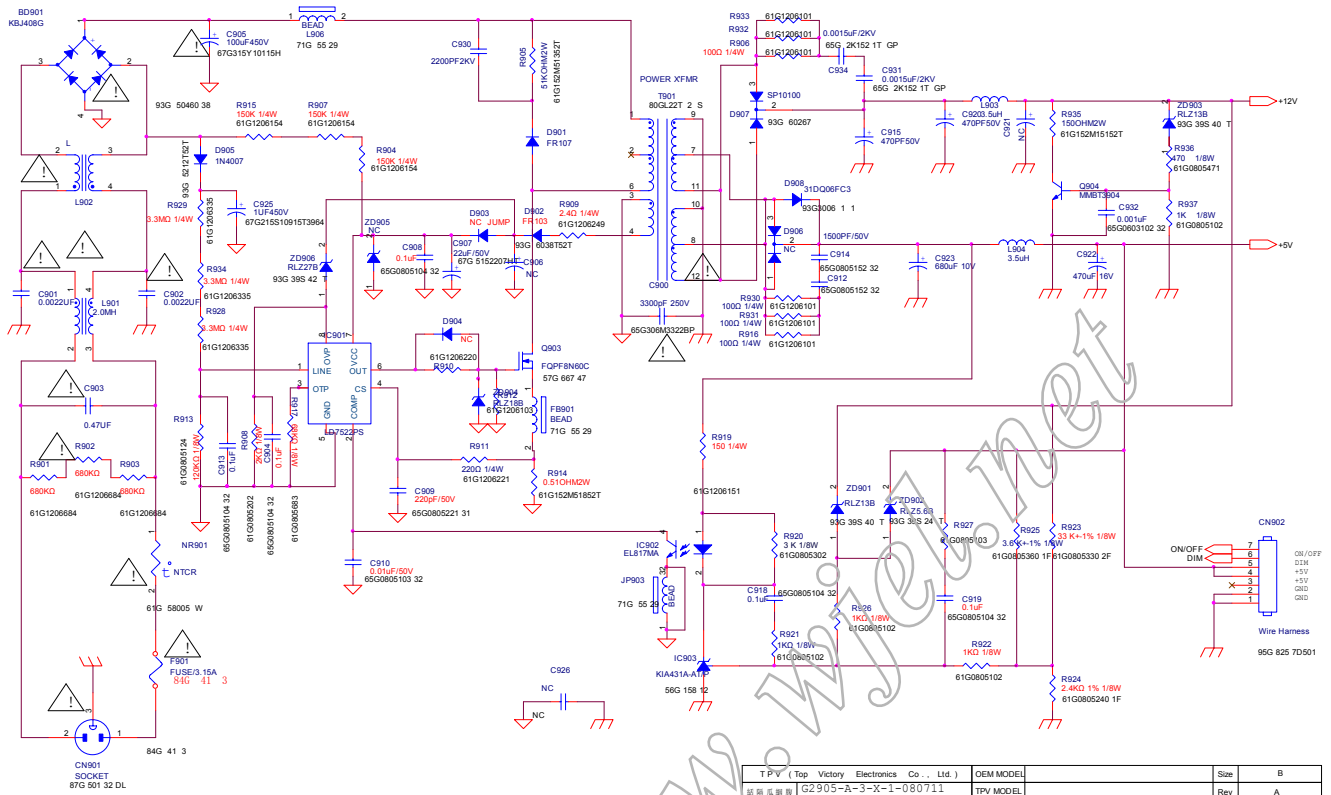


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2. INVERTER



3. POWER



TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	Size	B
规格代号: G2905-A-3-X-1-080711	TPV MODEL	Rev	A
Key Component: 01.LD7522; 02.OZ9938	PCB NAME: 715G2905-A	图号	<5>
Date: Friday, July 11, 2008	Sheet: 1 of 3		



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