

Service  
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# Service Manual

Horizontal Frequency  
30-83 KHz

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### SAFETY NOTICE

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

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



## Important Safety Notice

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

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

Hereafter throughout this manual, AOC Company will be referred to as AOC.

### WARNING

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

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

### FOR PRODUCTS CONTAINING LASER:

DANGER-Invisible laser radiation when open AVOID DIRECT EXPOSURE TO BEAM.

CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION -The use of optical instruments with this product will increase eye hazard.

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

Take care during handling the LCD module with backlight unit

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

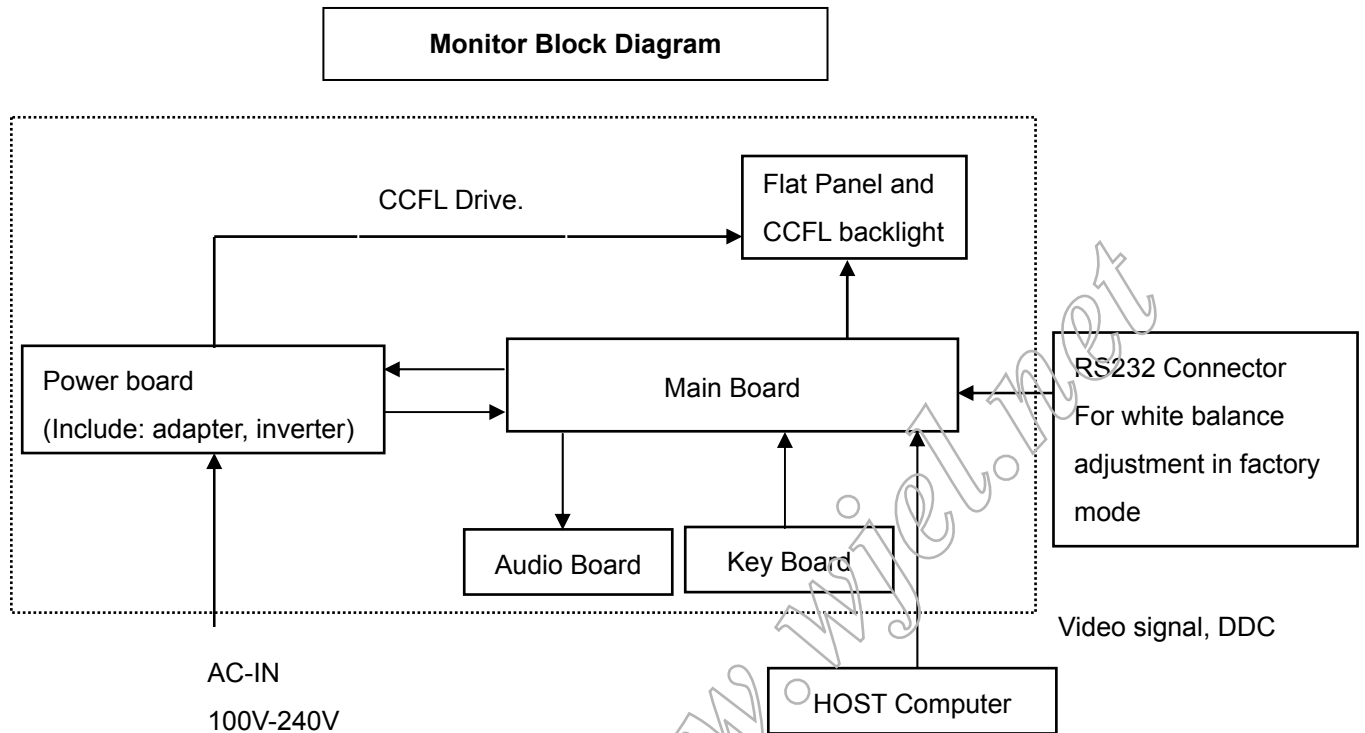
## 1. Monitor Specifications

LCD Panel	Driving system	TFT Color LCD
	Size	55.87cm(22")
	Pixel pitch	0.282mm( H )x 0.282mm( V )
	Response time (type)	5ms for CMO panel
	Viewable angle	170° (H) 160° (V)
	Video	R,G,B Analog Interface
Input	Sync. Type	H/V TTL
	H-Frequency	30kHz – 83kHz
	V-Frequency	56-76Hz
Power Consumption	ON Mode	<65W
	OFF Mode	<2W
Display Color	16.7M	
Dot Clock	165MHz	
Contrast Ratio	700:1	
White Luminance	300cd/m <sup>2</sup>	
Max. Resolution	1680 x 1050	
Plug & Play	VESA DDC2B™	
Power Source	100~240VAC,47~63Hz	
Input Connector	D-Sub 15pin	
Input Video Signal	Analog,0.7Vp-p(standard),75 OHM, Positive	
Safety Certifications	UL/CUL , FCC, CE, Gost-R, BSMI,CCC,VCCI,C-Tick, CB, RoHS required	
Maximum Screen Size	Horizontal : 473.76mm Vertical: 296.1mm	
Environmental Considerations	Operating Temp: 0°C to 35°C Storage Temp: -20°C to 60°C Operating Humidity: 45% to 85%	

## 2. LCD Monitor Description

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

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



## 3. Operating Instructions

### 3.1 General Instructions

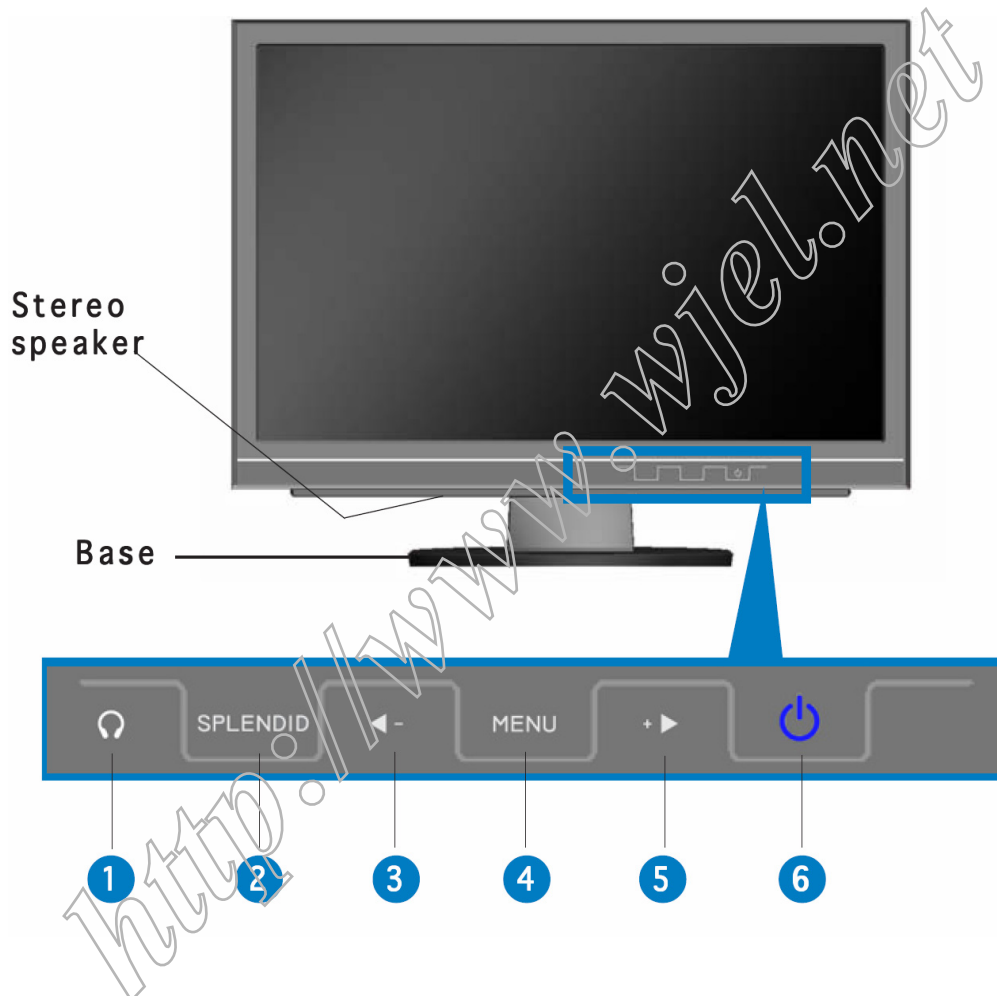
Press the power button to turn the monitor on or off. The other control buttons are located at the front of the panel of the monitor.

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


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

### 3.2 Control Buttons


#### 3.2.1 Key Control



### 3.2.2 Key Function

1. **Headphone port** . This port connects a headphone with a stereo mini-plug (3.5mm).



- The headphone port is under the icon .
- The headphone is purchased separately.

2. **SPLENDID Button:**

- Use this hotkey to switch from five video preset modes (Game Mode, Night View Mode, Scenery Mode, Standard Mode, Theater Mode) with SPLENDID™ Video Enhancement Technology.
- Exit the OSD menu or go back to the previous menu as the OSD menu is active.
- Automatically adjust the image to its optimized position, clock, and phase by pressing this button for 2-4 seconds.

3. **◀- Button:**

- Press this button to decrease the value of the function selected or move left/up to the previous function.
- This is also a hotkey for Volume adjustment.

4. **MENU Button:**

- Press this button to enter/select the icon (function) highlighted while the OSD is activated.

5. **+▶ Button:**

- Press this button to increase the value of the function selected or move right/down to the next function.
- This is also a hotkey for Brightness adjustment.

6. **⏻ Power button/power indicator**

- Press this button to turn the monitor on/off
- The color definition of the power indicator is as the below table.

Status	Description
Blue	ON
Amber	Standby mode
OFF	OFF

### 3.3 OSD Menu

#### 3.3.1 How to Reconfigure



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

#### 3.1.2 OSD Function Introduction



##### 1. Splendid

This function contains five sub-functions you can select for your preference.

- **Scenery Mode:** advance for scenery use with SPLENDID™ Video Enhancement.
- **Standard Mode:** advance for general Window use with SPLENDID™ Video Enhancement.
- **Theater Mode:** advance for movie use with SPLENDID™ Video Enhancement.
- **Game Mode:** advance for game use with SPLENDID™ Video Enhancement.
- **Night View Mode:** advance for dark-display use with SPLENDID™ Video Enhancement.



## 2. Image

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



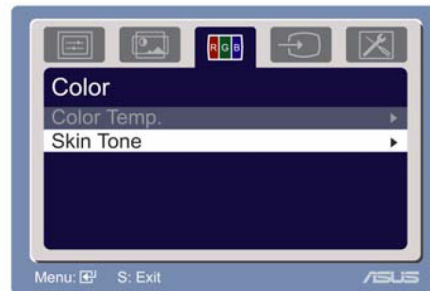
- **Brightness:** the adjusting range is from 0 to 100. + [F4] is a hotkey to activate this function.
- **Contrast:** the adjusting range is from 0 to 100.
- **Sharpness:** the adjusting range is from 0 to 100.
- **Saturation:** the adjusting range is from 0 to 100.
- **Position:** adjusts the horizontal position (H-Position) and the vertical position (V-Position) of the image. The adjusting range is from 0 to 100.
- **Focus:** reduces Horizontal-line noise and Vertical-line noise of the image by adjusting (Phase) and (Clock) separately. The adjusting range is from 0 to 100.



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

## 3. Color

Select the image color you like from this function.



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



In the User mode, colors of R (Red), G (Green), and B (Blue) are user-configurable; the adjusting range is from 0-100.

#### 4. Input Select

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



#### 5. System Setup

Allow you to adjust the system.



- **Volume:** the adjusting range is from 0 to 100. ◀- is a hotkey to activate this function.
- **OSD Setup:** adjusts the horizontal position (H-Position) and the vertical position (V-Position) of the OSD. The adjusting range is from 0 to 100. In the OSD Timeout selection, you can adjust the OSD timeout from 10 to 120.
- **Language:** there are eleven languages for your selection, including English, German, Italian, French, Dutch, Spanish, Russian, Traditional Chinese, Simplified Chinese, Japanese, and Korean.
- **Information:** shows the monitor information.
- **Reset:** "Yes" allows you to revert to the preset mode.

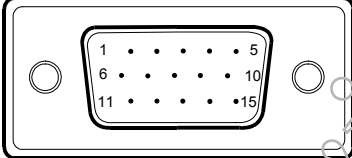
## 4. Input/Output Specification

### 4.1 Input Signal Connector

Analog connectors

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

VGA connector layout



## 4.2 Factory Preset Display Modes

Standard	Resolution	Horizontal Frequency	Vertical Frequency	Pixel Frequency
DOS	720 x 400	31.47KHz	70Hz	28.32MHz
VGA	640 x 480	31.47KHz	60Hz	25.18MHz
	640 x 480	37.90KHz	72Hz	31.50MHz
	640 x 480	37.50KHz	75Hz	31.50MHz
SVGA	800 x 600	35.16KHz	56Hz	36.00MHz
	800 x 600	37.90KHz	60Hz	40.00MHz
	800 x 600	48.10KHz	72Hz	50.00MHz
	800 x 600	46.90KHz	75Hz	49.50MHz
XGA	1024 x 768	48.40KHz	60Hz	65.00MHz
	1024 x 768	56.50KHz	70Hz	75.00MHz
	1024 x 768	60.02KHz	75Hz	78.75MHz
SXGA	1280 x 1024	64.00KHz	60Hz	108.00MHz
	1280 x 1024	80.00KHz	75Hz	135.00MHz
VESA	1152 x 864	67.50KHz	75Hz	108.00MHz
VESA	1440 x 900	55.94KHz	60Hz	106.00MHz
VESA (Primary)	1680 x 1050	65.29KHz	60Hz	146.25MHz

## 4.3 Power Supply Requirements

A/C Line voltage range	100 V ~ 240 V
A/C Line frequency range	50 ± 3Hz, 60 ± 3Hz
Peak surge current	< 60A peak at 240 VAC and cold starting < 30A peak at 120VAC and cold starting
Leakage current	< 3.5mA
Power line surge	No advance effects (no loss of information or defect) with a maximum of 1 half-wave missing per second

## 4.4 Panel Specification

### 4.4.1 General Features

The M220Z1-L01 model is a 22 inch wide TFT-LCD module with a 4-CCFL Backlight Unit and a 30-pin 2ch-LVDS interface. This module supports 1680 x 1050 WSXGA+ (16:10 wide screen) mode and displays up to 16.7 millions colors. The inverter module for the Backlight Unit is not built in.

### 4.4.2 Features

- Super wide viewing angle
- High contrast ratio
- Fast response time
- High color saturation (EBU Like Specifications)
- WSXGA+ (1680 x 1050 pixels) resolution
- DE (Data Enable) only mode
- LVDS (Low Voltage Differential Signaling) interface

### 4.4.3 Display Characteristics

Item	Specification	Unit
Diagonal size	558.68	mm
Active Area	473.76x296.1	mm
Bezel Opening Area	477.7 (H) x 300.1 (V)	mm
Driver Element	a-Si TFT active matrix	-
Pixel Number	1680 x R.G.B. x 1050	pixel
Pixel Pitch	0.282(H) x 0.282(V)	mm
Pixel Arrangement	RGB vertical stripe	-
Display Colors	16.7 millions	color
Transmissive Mode	Normally White	-
Surface Treatment	Hard coating (3H), AG (Haze 25%)	-

## 4.4.4 Optical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	
Color Chromaticity	Red	R <sub>x</sub>	$\theta_x=0^\circ, \theta_y=0^\circ$ CS-1000T	Typ – 0.03	0.639	Typ + 0.03	
		R <sub>y</sub>			0.333		
	Green	G <sub>x</sub>			0.289		
		G <sub>y</sub>			0.597		
	Blue	B <sub>x</sub>			0.153		
		B <sub>y</sub>			0.082		
	White	W <sub>x</sub>			0.313		
		W <sub>y</sub>			0.329		
	Color Gamut	C.G%					
Center Luminance of White	L <sub>C</sub>		255	300	---	cd/m <sup>2</sup>	
Contrast Ratio	CR		450	700	---	-	
Response Time	T <sub>R</sub>	$\theta_x=0^\circ, \theta_y=0^\circ$	---	2	7	ms	
	T <sub>F</sub>			3	8		
White Variation	$\delta W$	$\theta_x=0^\circ, \theta_y=0^\circ$ BM-5A	---	1.3	1.5	-	
Viewing Angle	Horizontal	$\theta_{x+}$	75	85	---	Deg.	
		$\theta_{x-}$	75	85	---		
	Vertical	$\theta_{y+}$	70	80	---		
		$\theta_{y-}$	70	80	---		

## 4.4.5 Electrical Characteristics

## (1) TFT-LCD

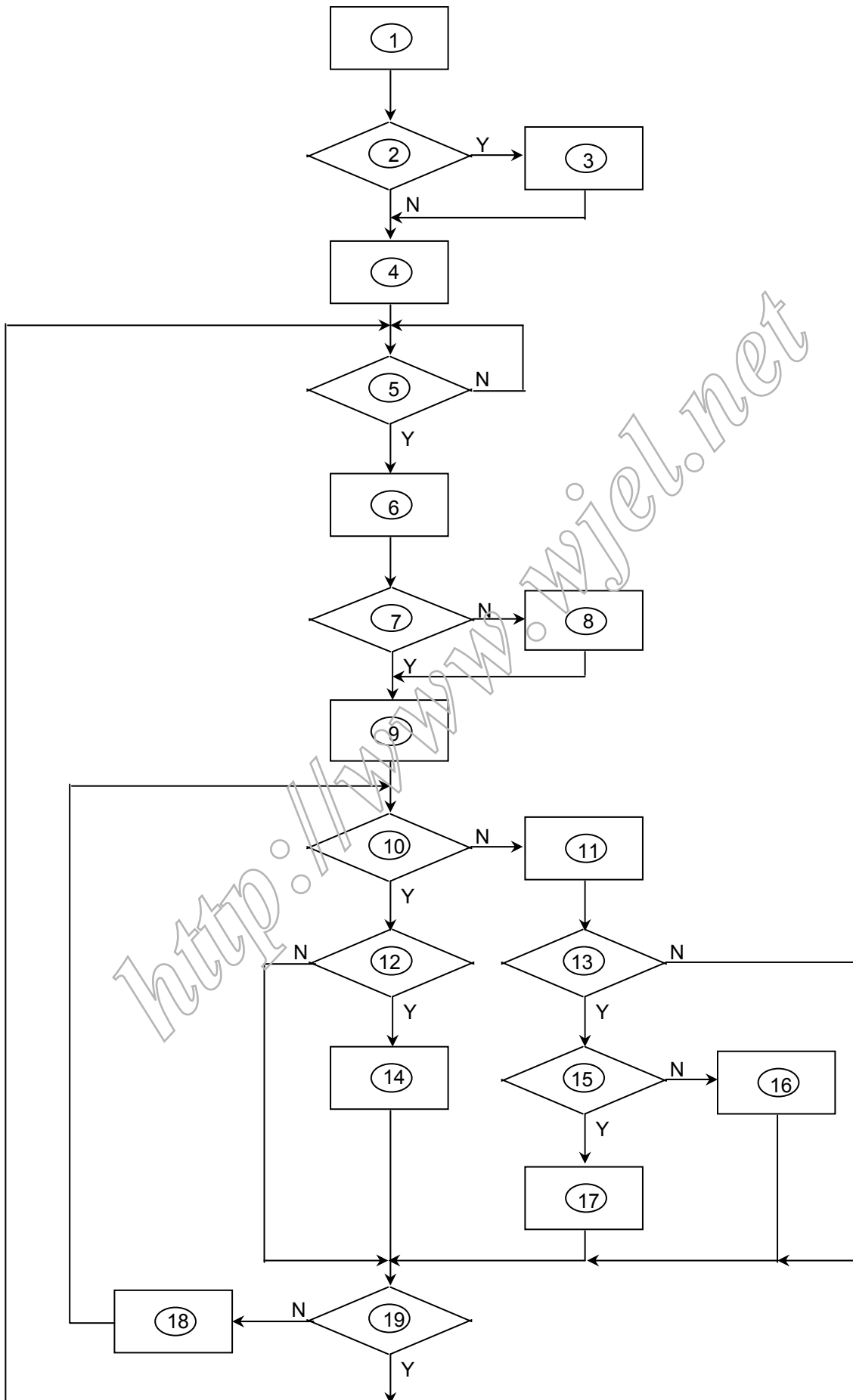
Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
Power Supply Voltage	V <sub>CC</sub>	4.5	5.0	5.5	V
Ripple Voltage	V <sub>RP</sub>	-	--	100	mV
Rush Current	I <sub>RUSH</sub>	-	--	3	A
Power Supply Current	White	-	580		mA
	Black	-	1100		mA
	f <sub>v</sub> = 75Hz, V <sub>CC</sub> =4.5V	-	-	1230	mA
LVDS differential input voltage	V <sub>id</sub>	-100	-	+100	mV
LVDS common input voltage	V <sub>ic</sub>	--	1.2	--	V

## (2) Backlight

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
Lamp Input Voltage	V <sub>L</sub>	738	820	902	V <sub>RMS</sub>
Lamp Current	I <sub>L</sub>	3	7.0	8	mA <sub>RMS</sub>
Lamp Turn On Voltage	V <sub>S</sub>	-	-	1560(25°C)	V <sub>RMS</sub>
		-	-	1800(0°C)	V <sub>RMS</sub>
Operating Frequency	F <sub>L</sub>	50	60	80	KHz
Lamp Life Time	L <sub>BL</sub>	40000		-	Hrs
Power Consumption	P <sub>L</sub>	-	5.74	-	W

### 5. Block Diagram

#### 5.1 Software Flow Chat

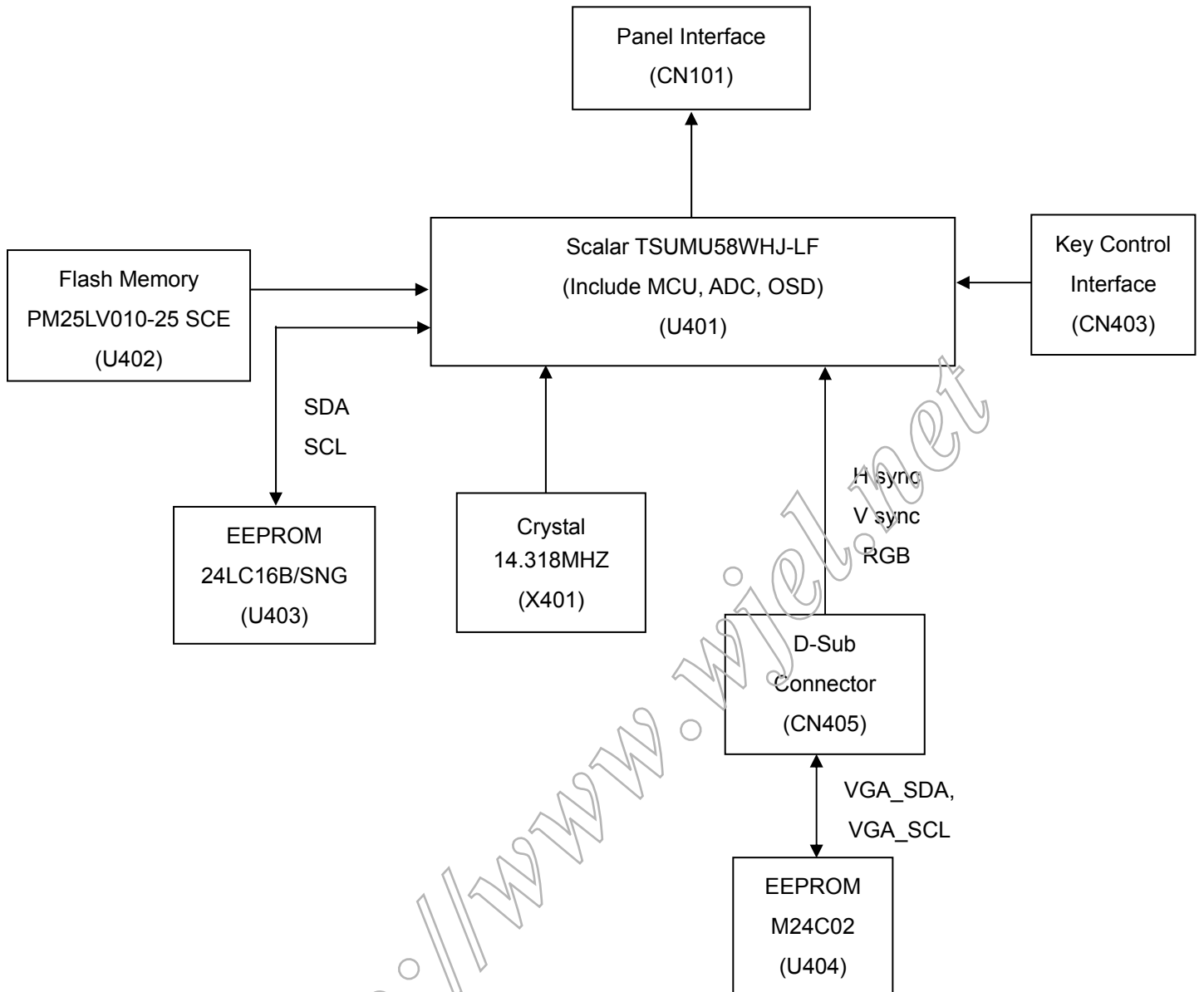


- 1) MCU initialize.
- 2) Is the EPROM blank?
- 3) Program the EPROM by default values.
- 4) Get the PWM value of brightness from EPROM.
- 5) Is the power key pressed?
- 6) Clear all global flags.
- 7) Are the AUTO and SELECT keys pressed?
- 8) Enter factory mode.
- 9) Save the power key status into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

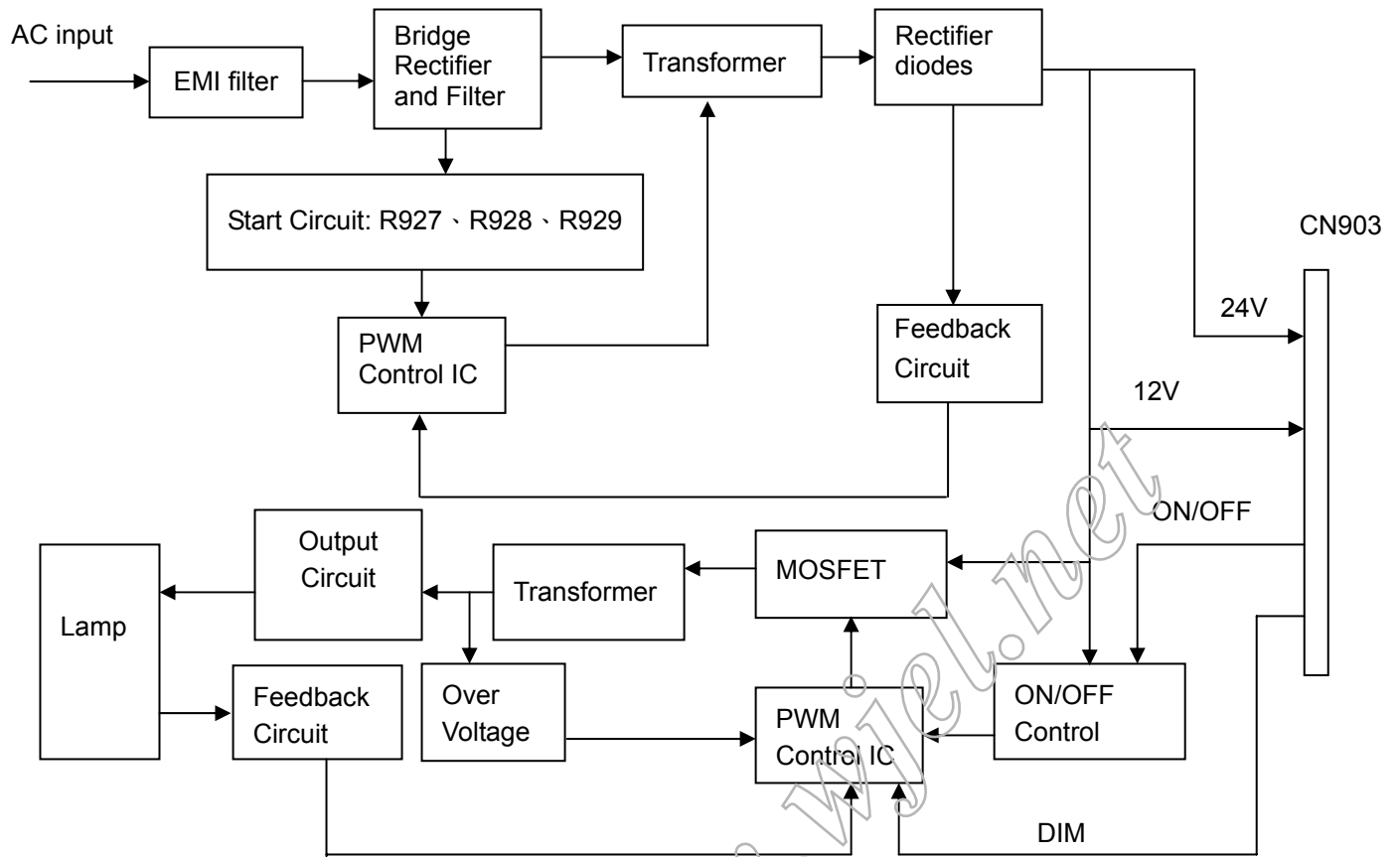


5.2 Electrical Block Diagram

5.2.1 Main Board



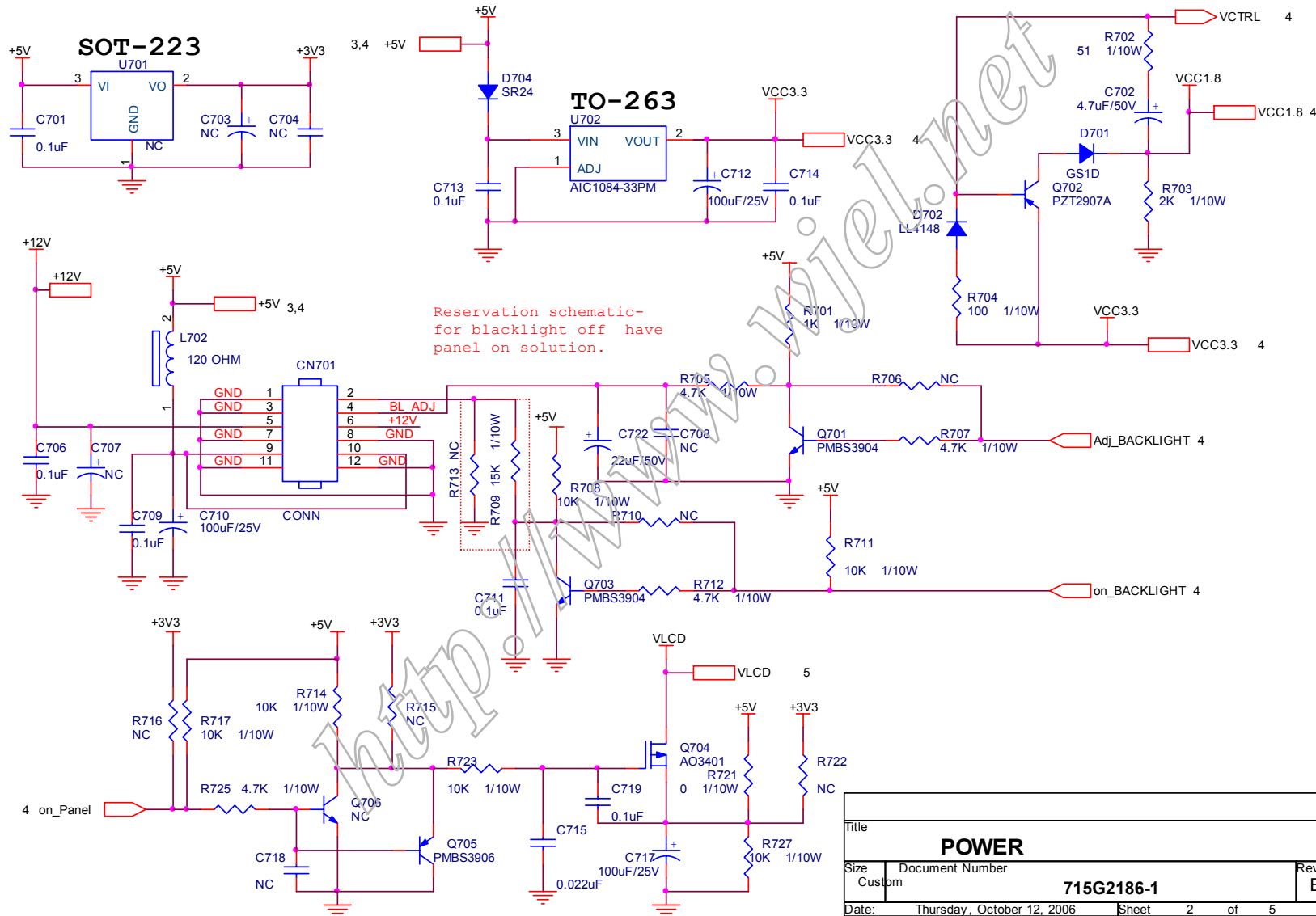
5.2.2 Inverter/Power Board



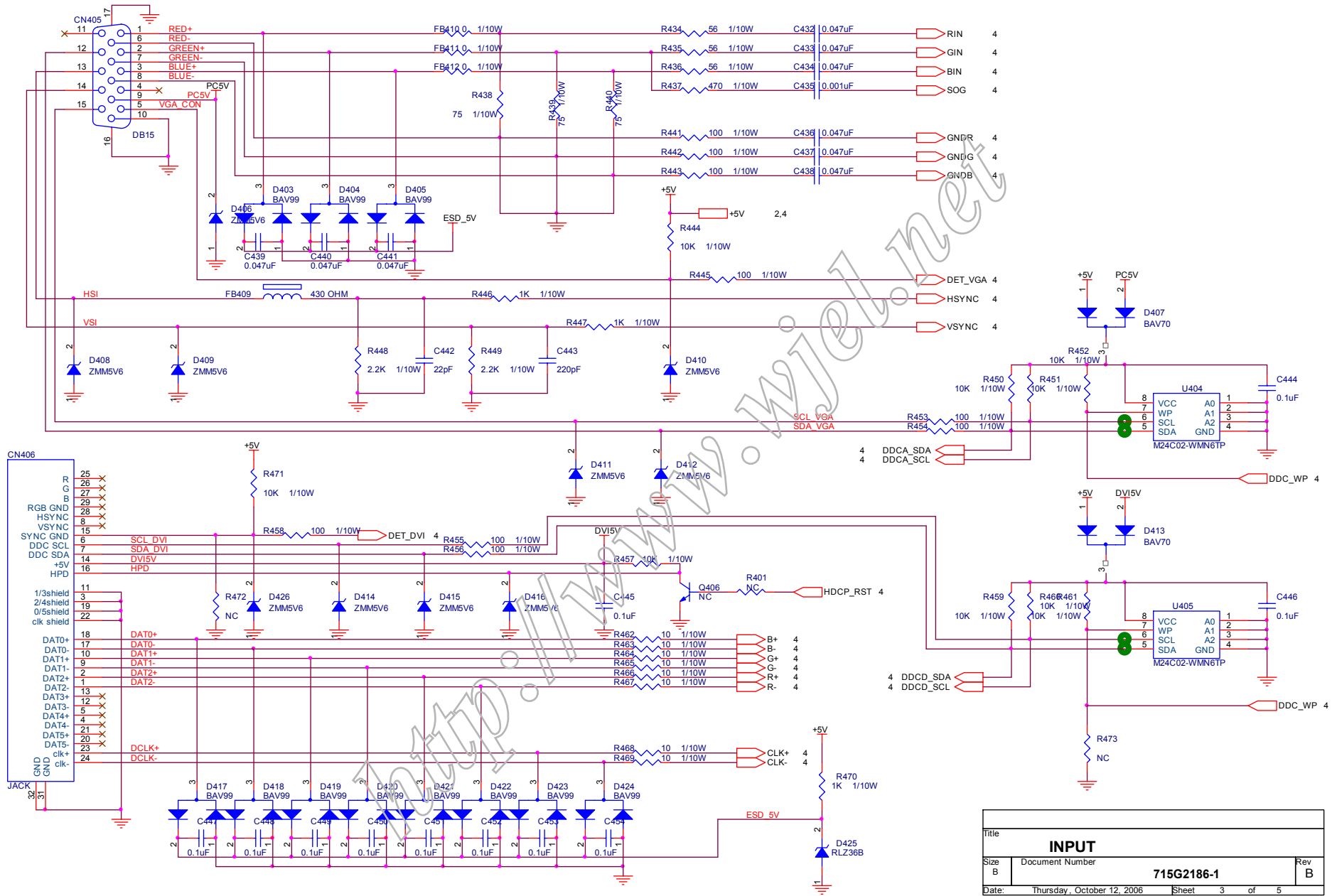
6. Schematic

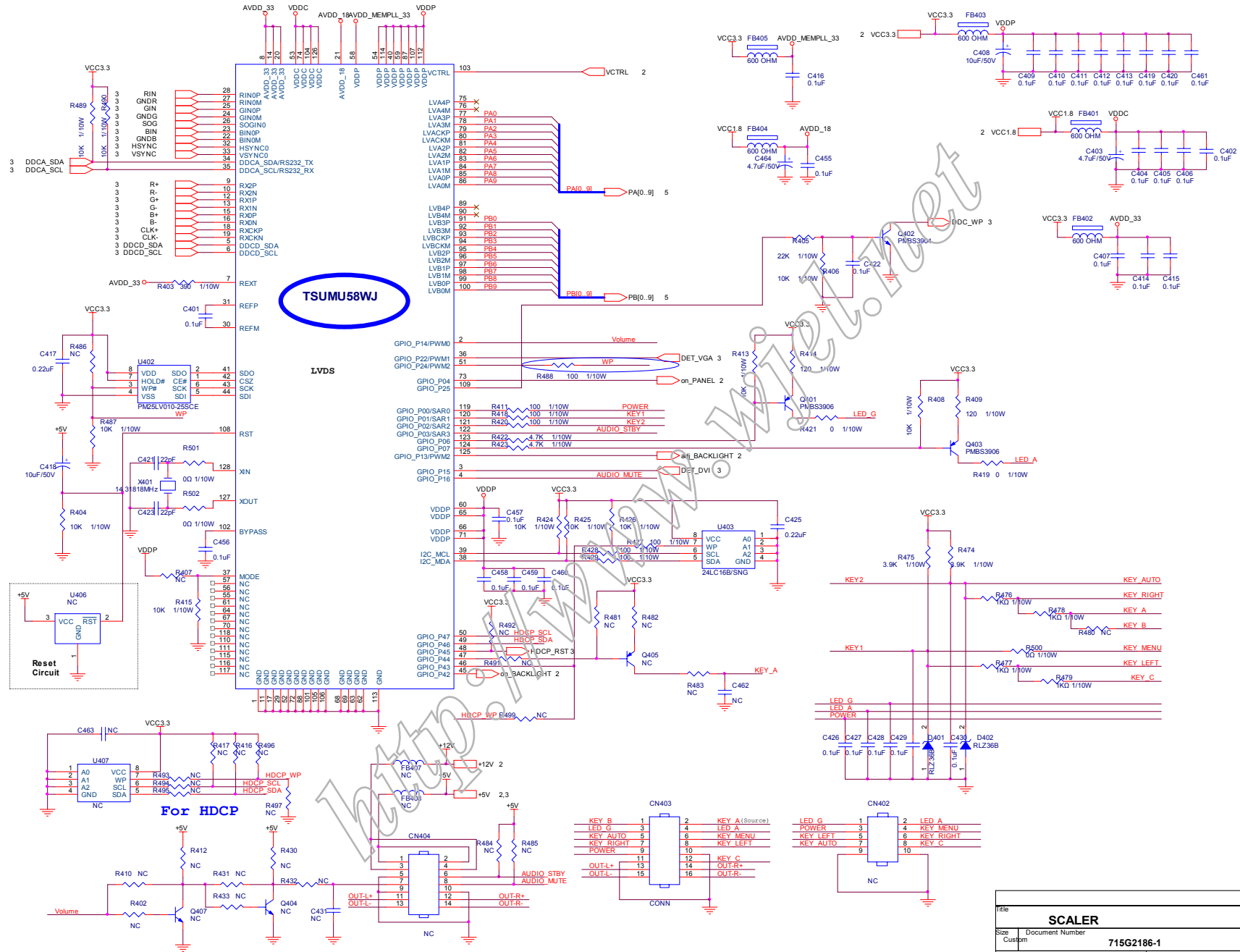
6.1 Main Board

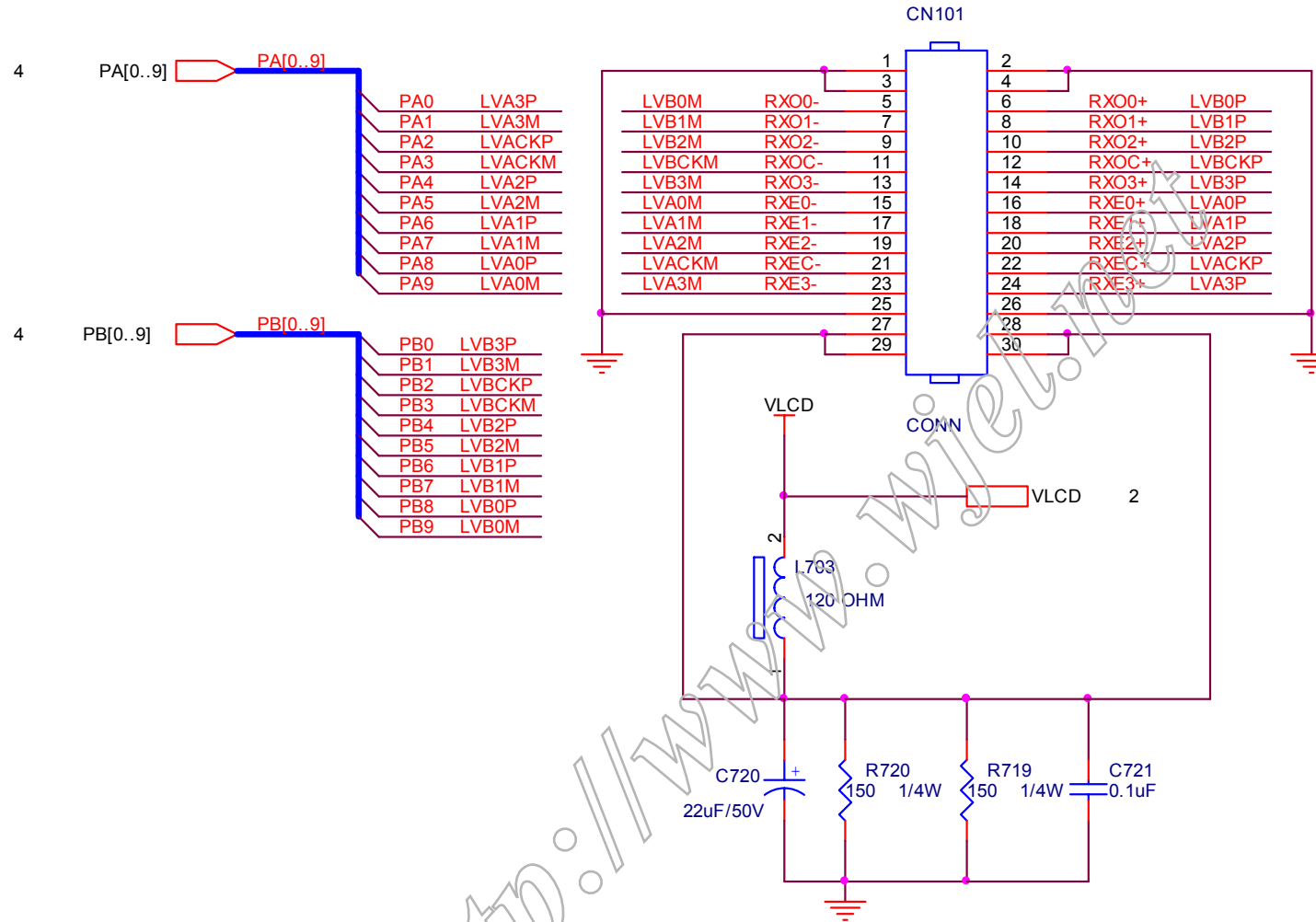
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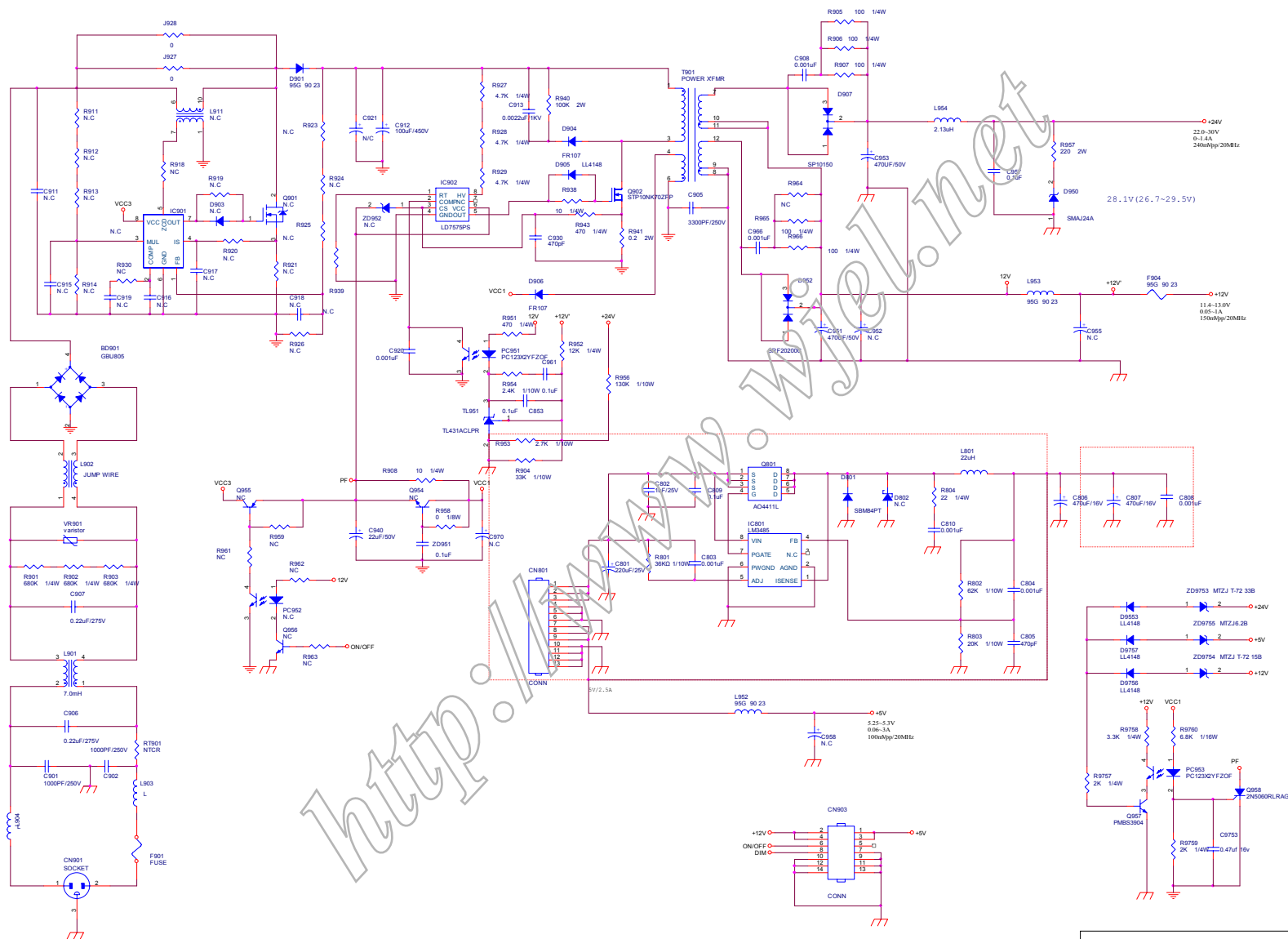




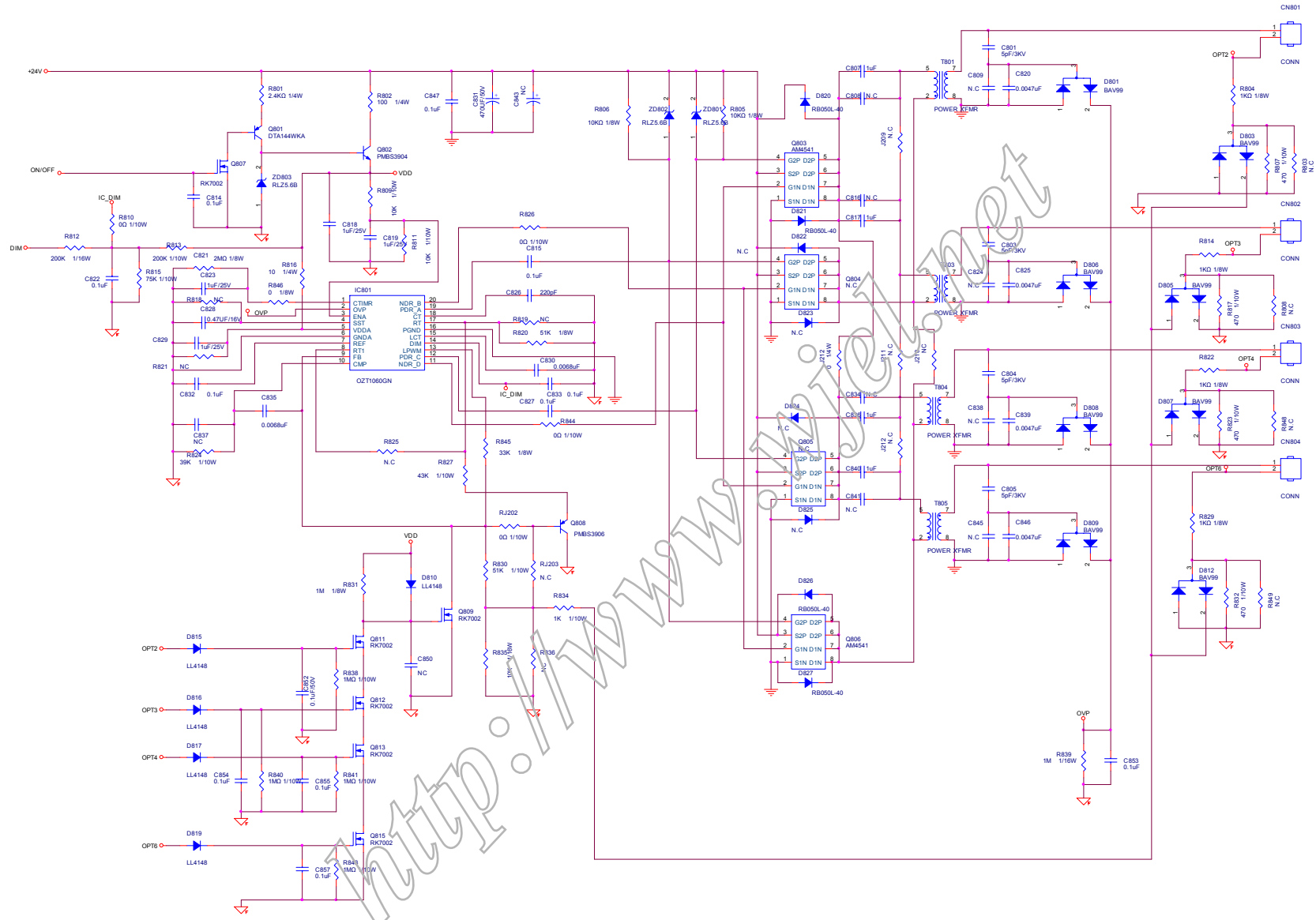
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Date:	Thursday, October 12, 2006	Sheet 5 of 5

6.2 Power Board

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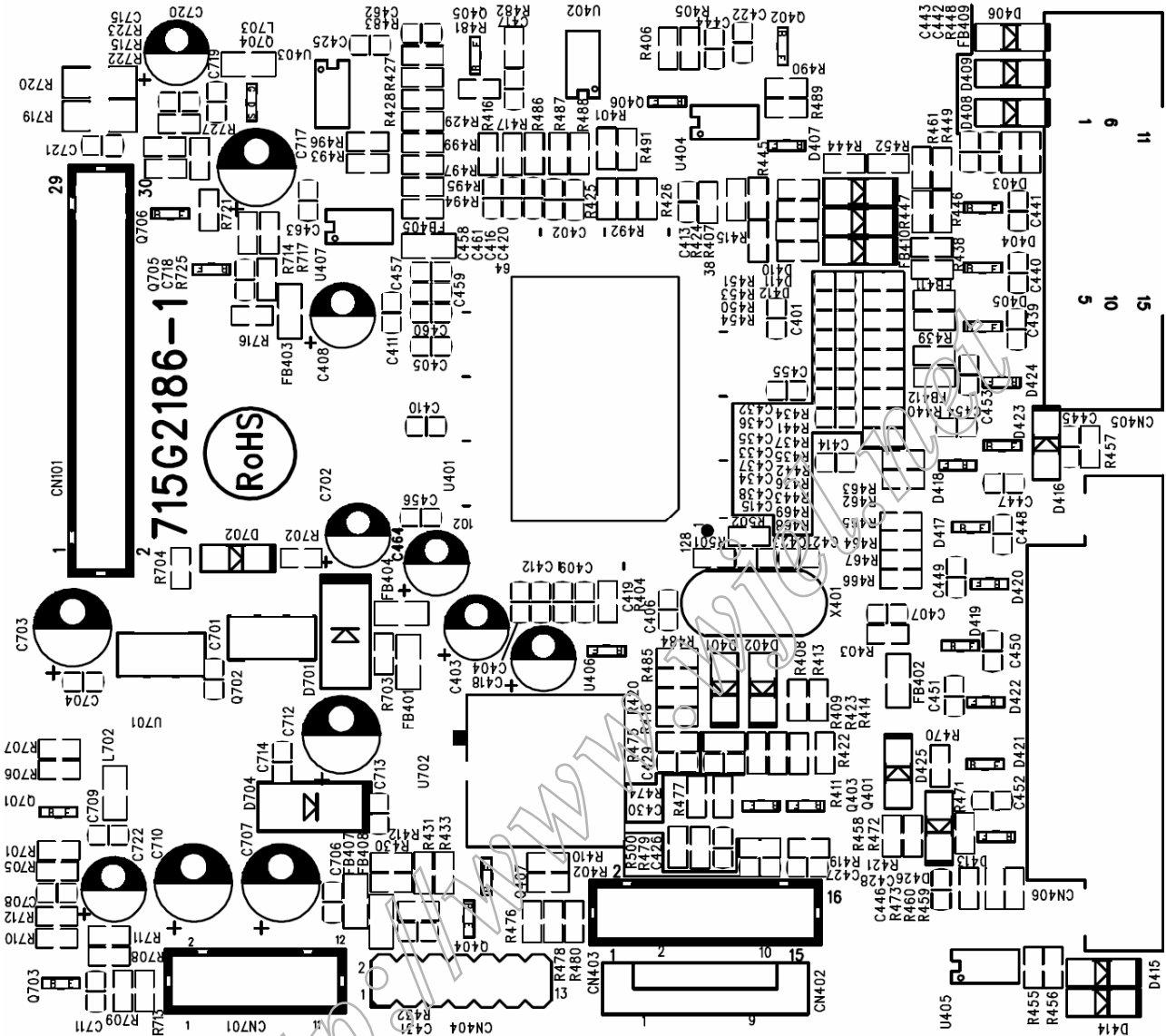
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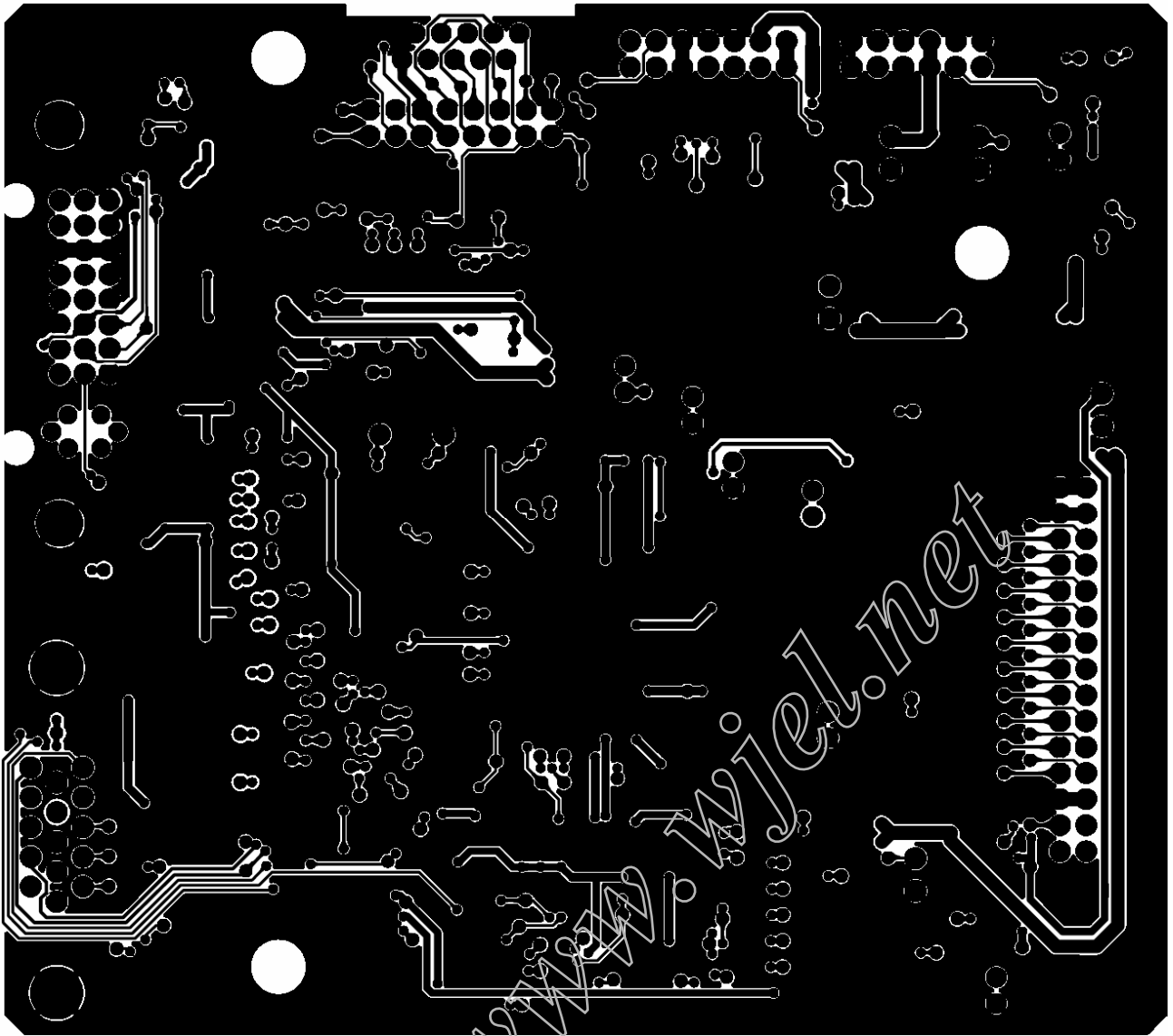


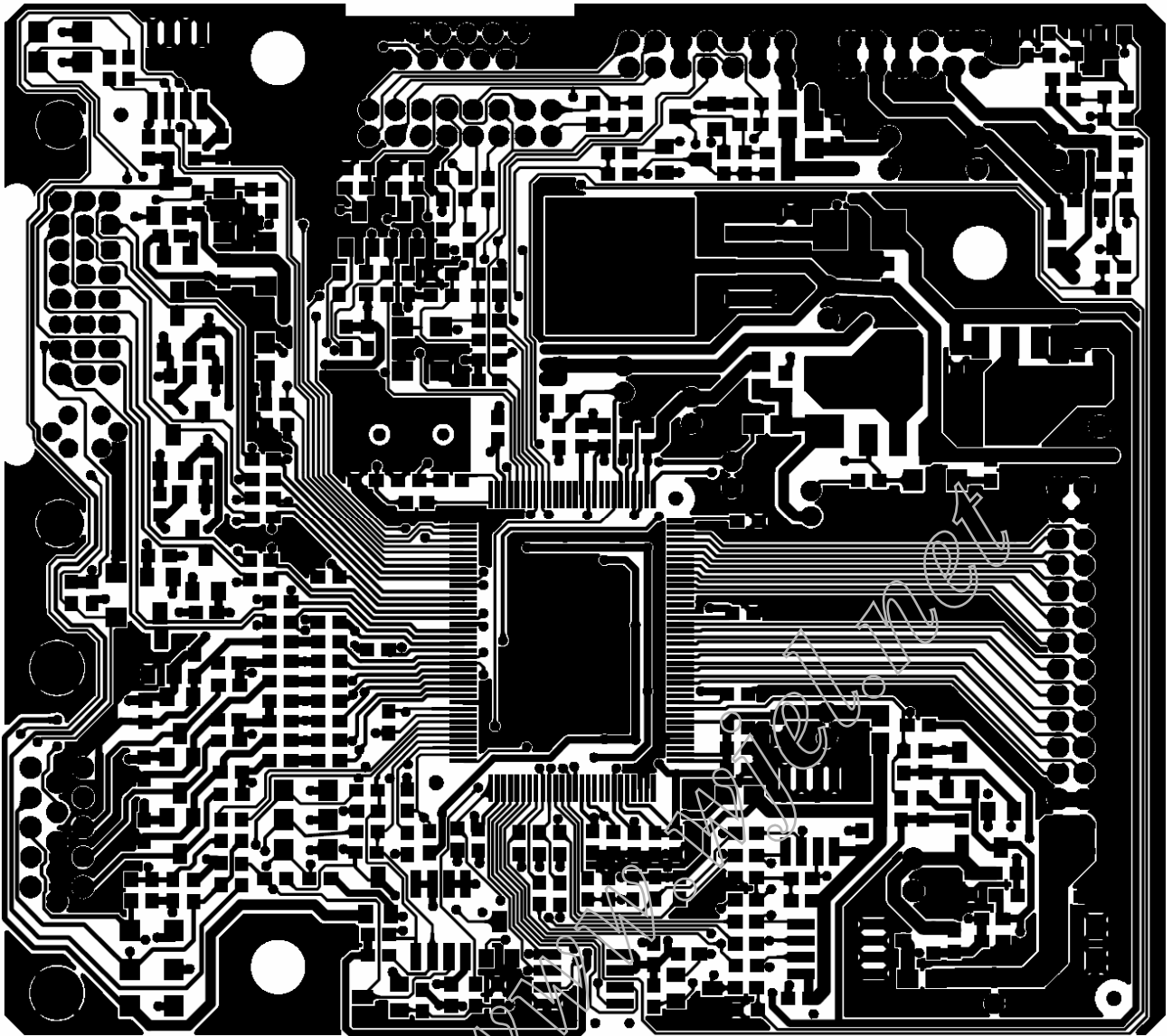
# 7. PCB Layout

## 7.1 Main Board

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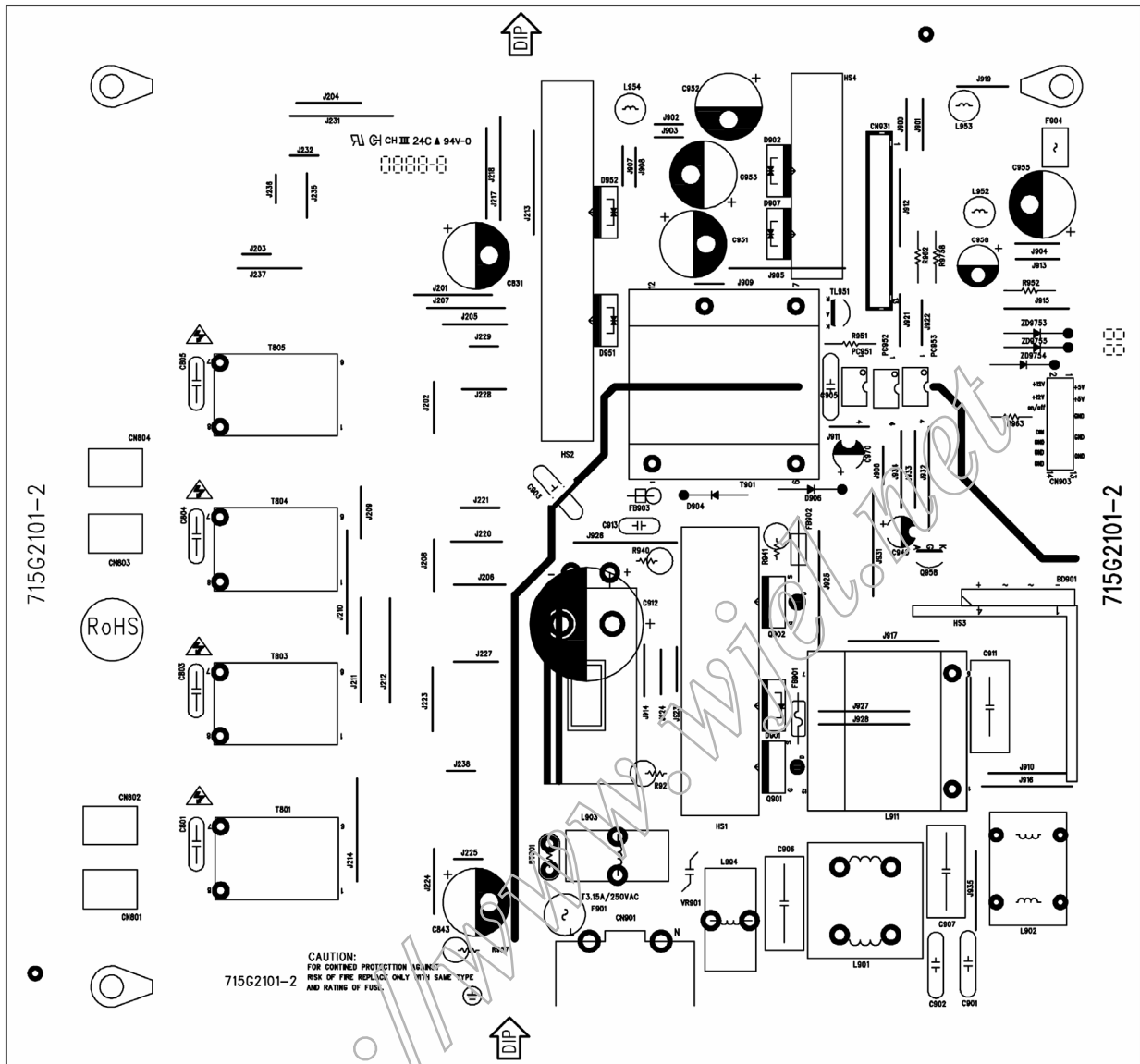




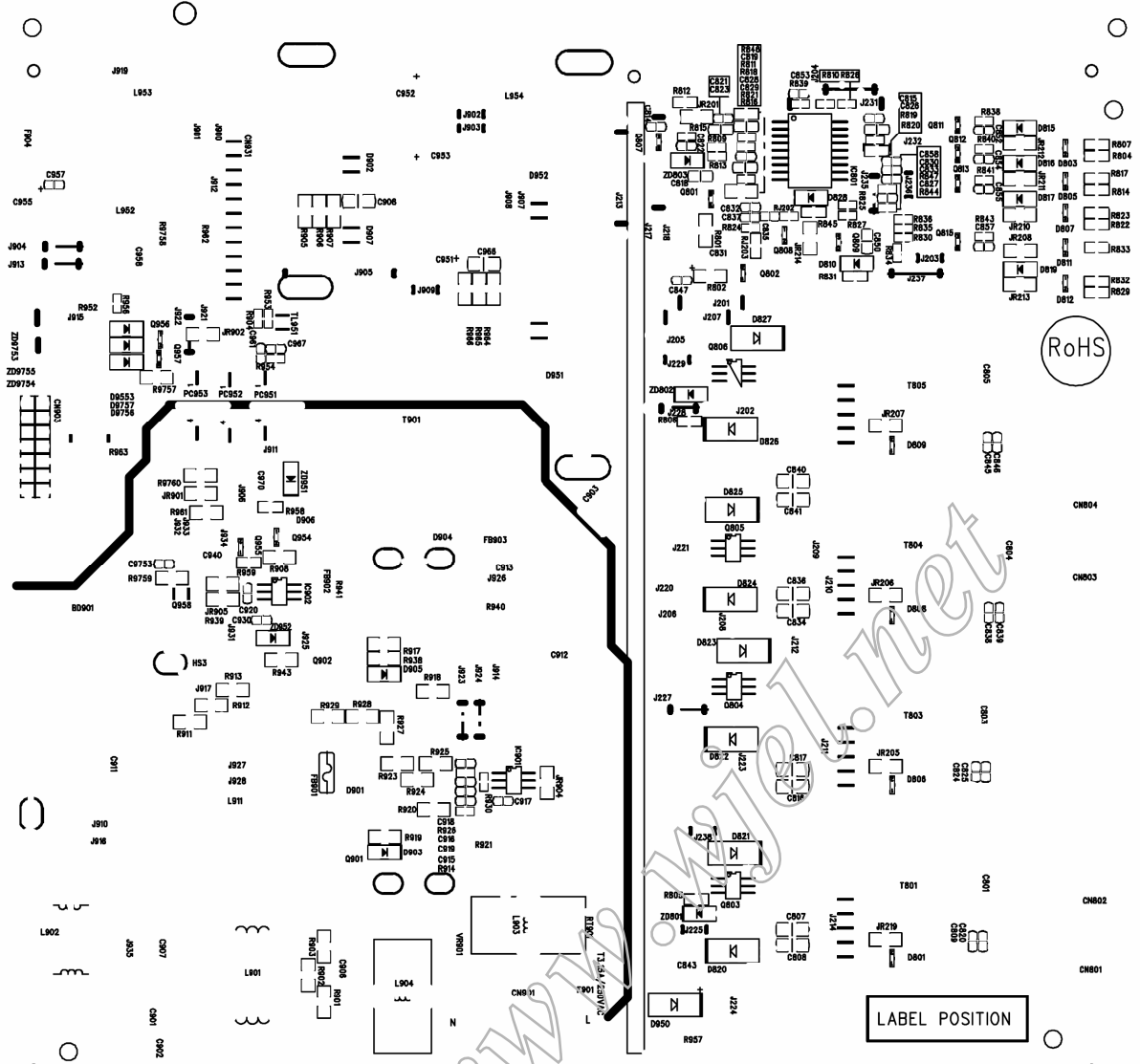


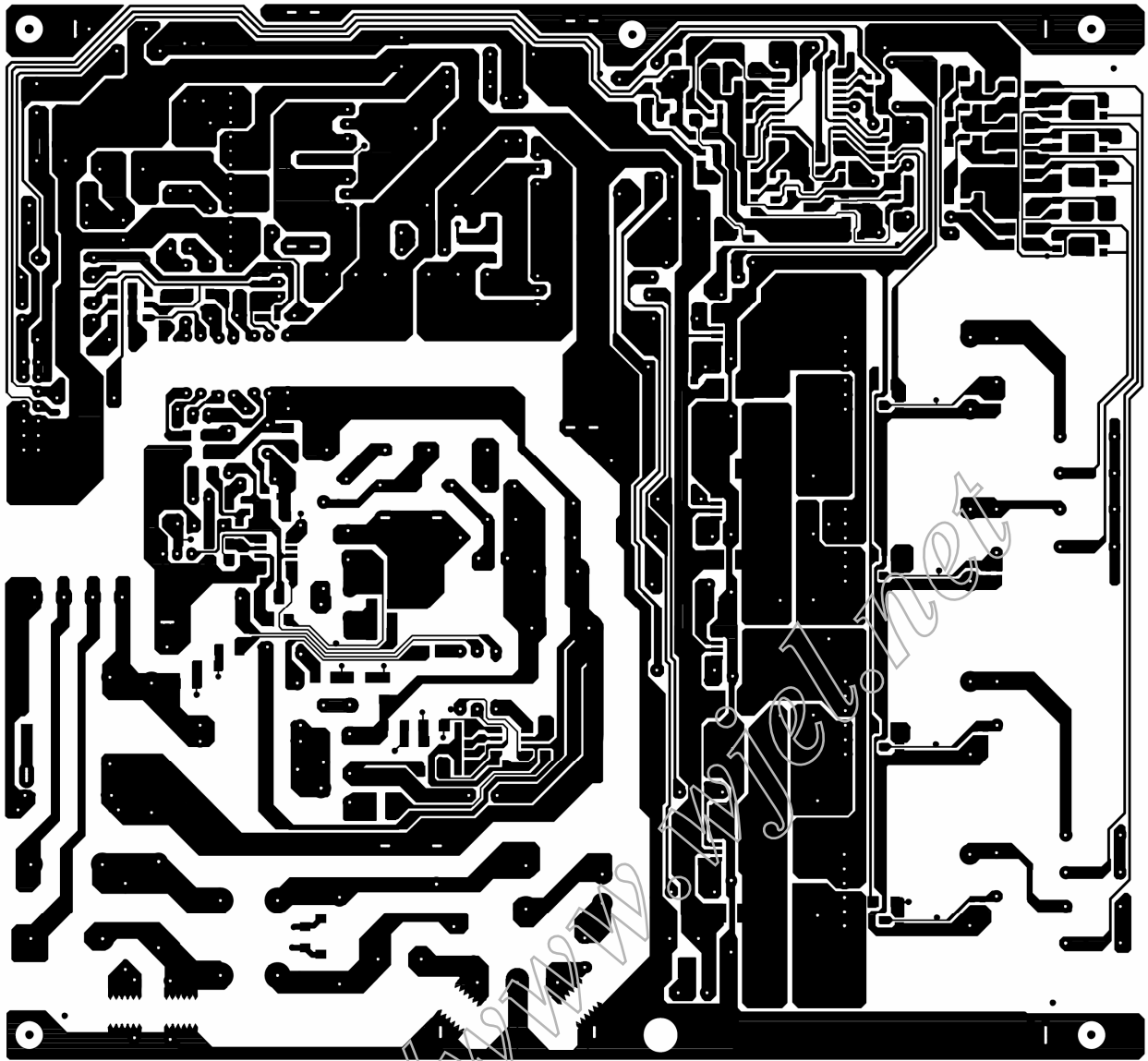
7.2 Power Board

715G2101-2



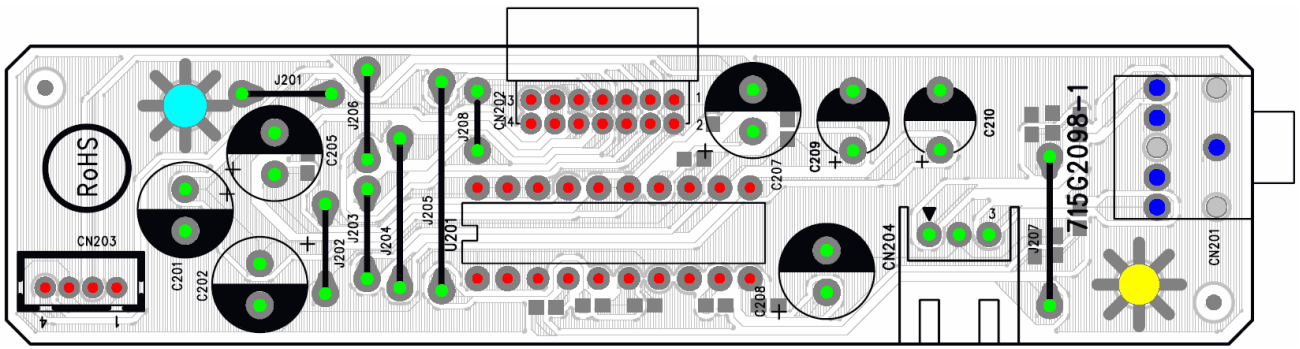
715G2101-2





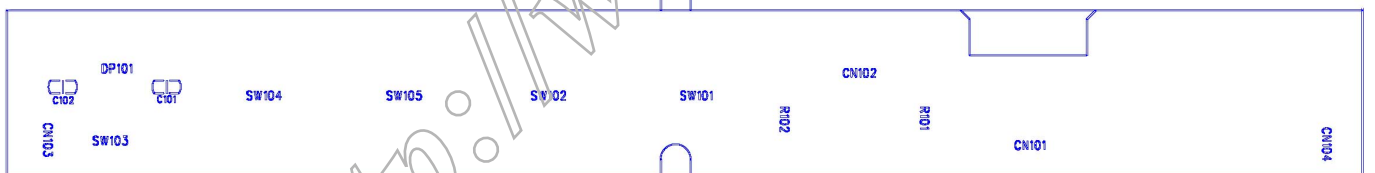
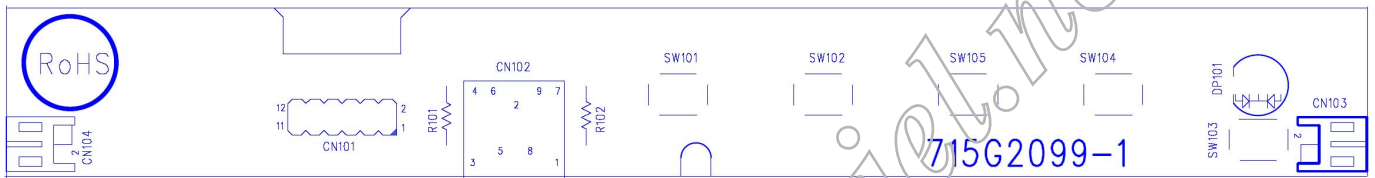
7.3 Audio Board

715G2098-1



7.4 Key Board

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## 8. Maintainability

### 8.1 Equipments And Tools Requirement

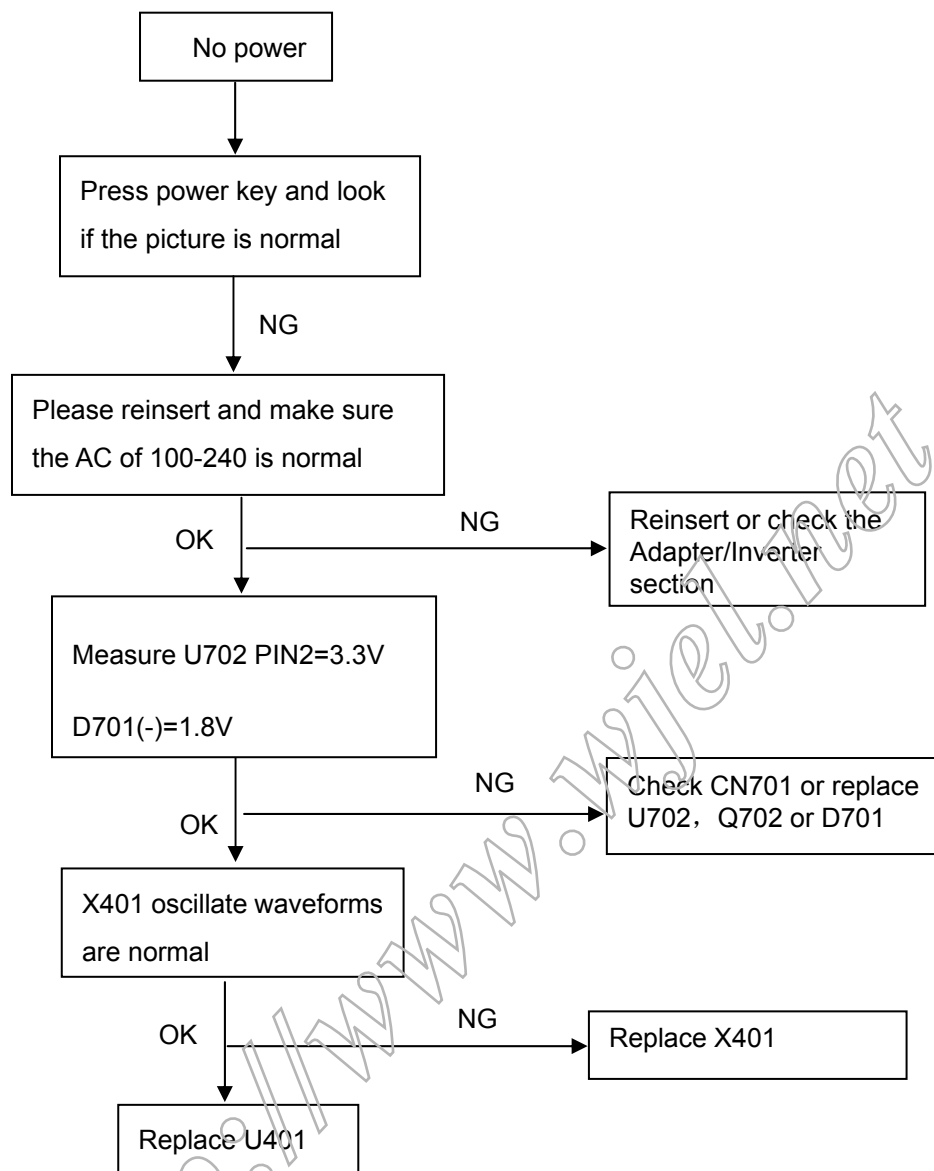
1. Voltmeter.
2. Oscilloscope.
3. Pattern Generator.
4. DDC Tool with an IBM Compatible Computer.
5. Alignment Tool.
6. LCD Color Analyzer.
7. Service Manual.
8. User Manual.

<http://www.wjel.net>

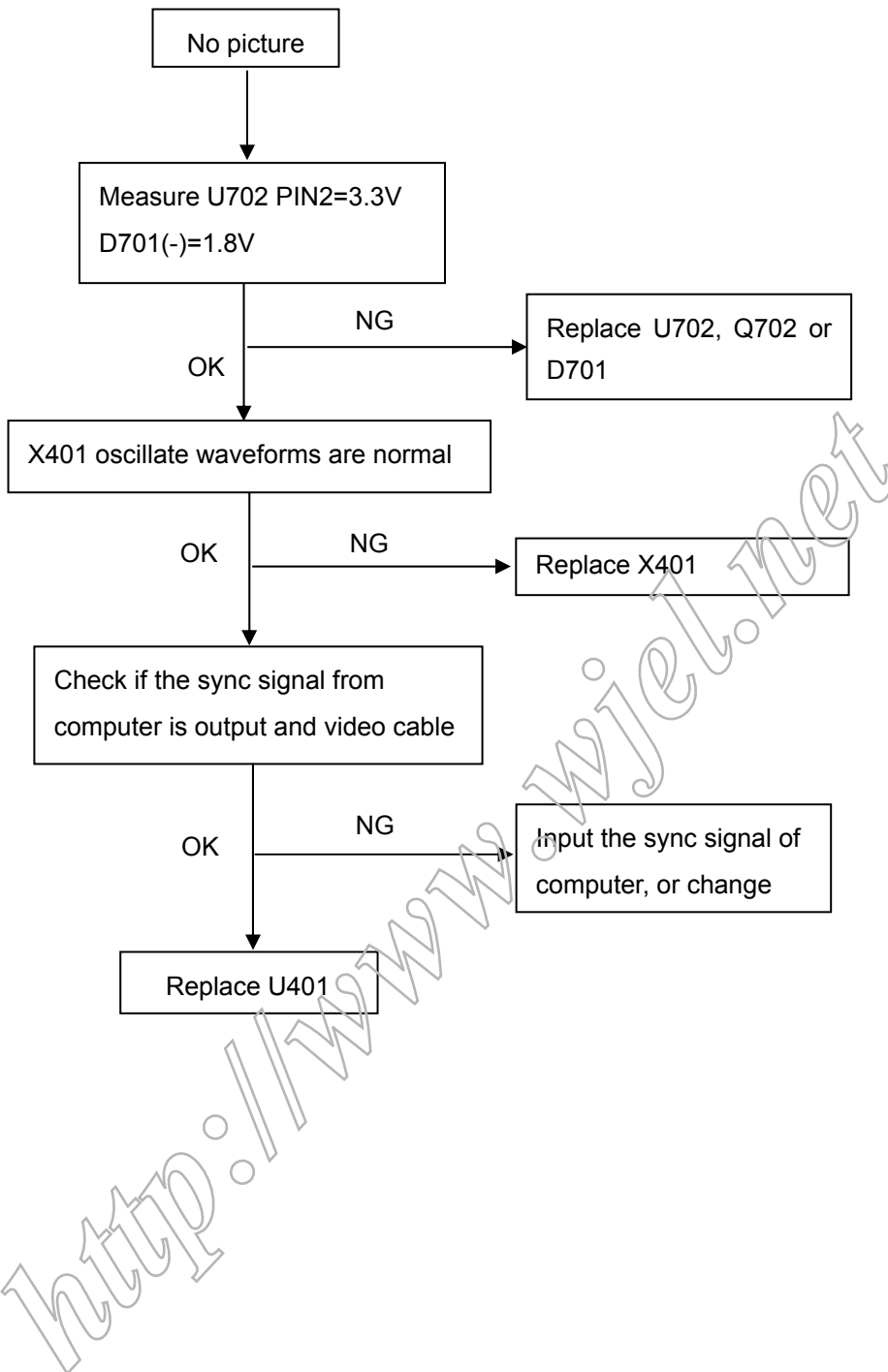


## 8.2 Trouble Shooting

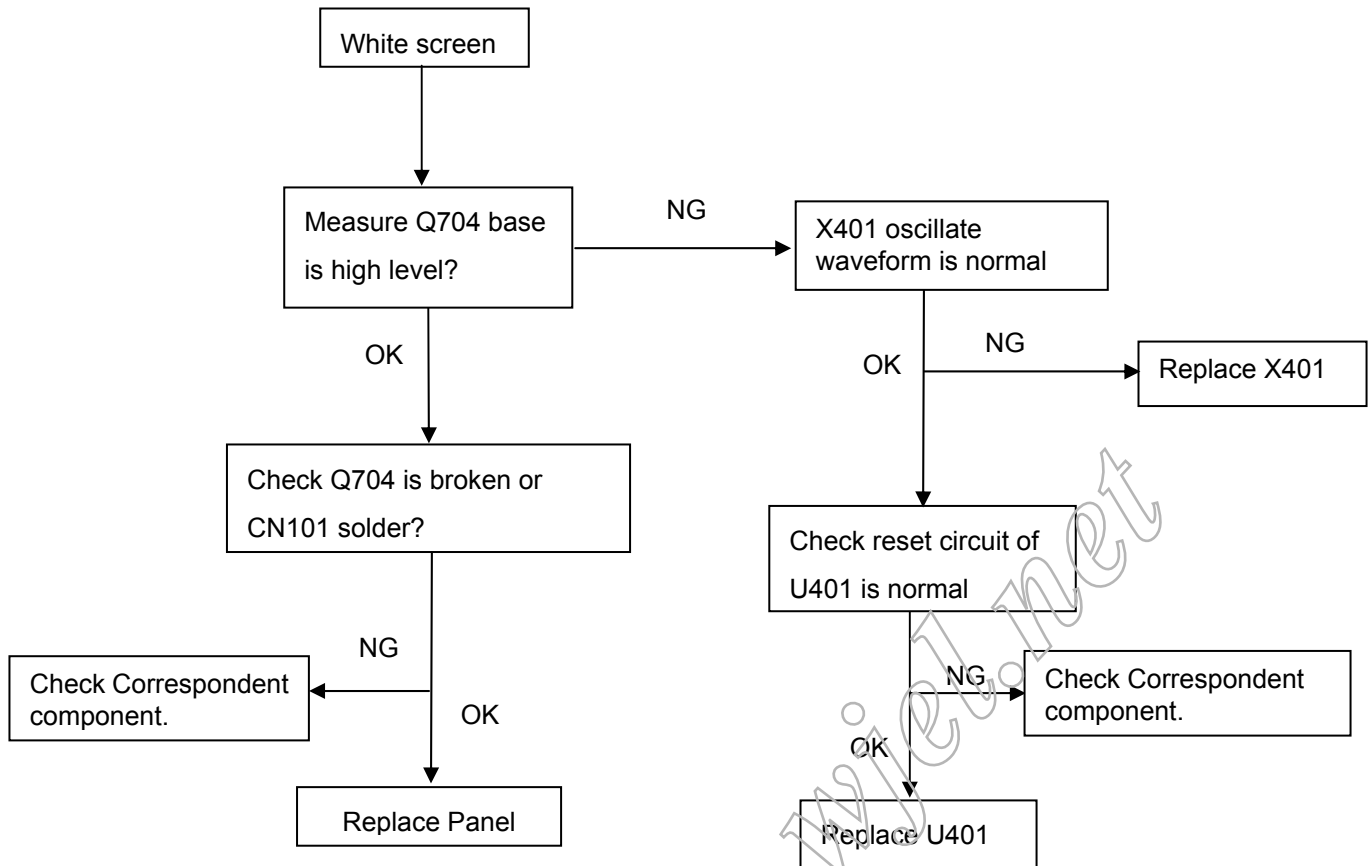
## 8.2.1 Main Board



(2). No Picture

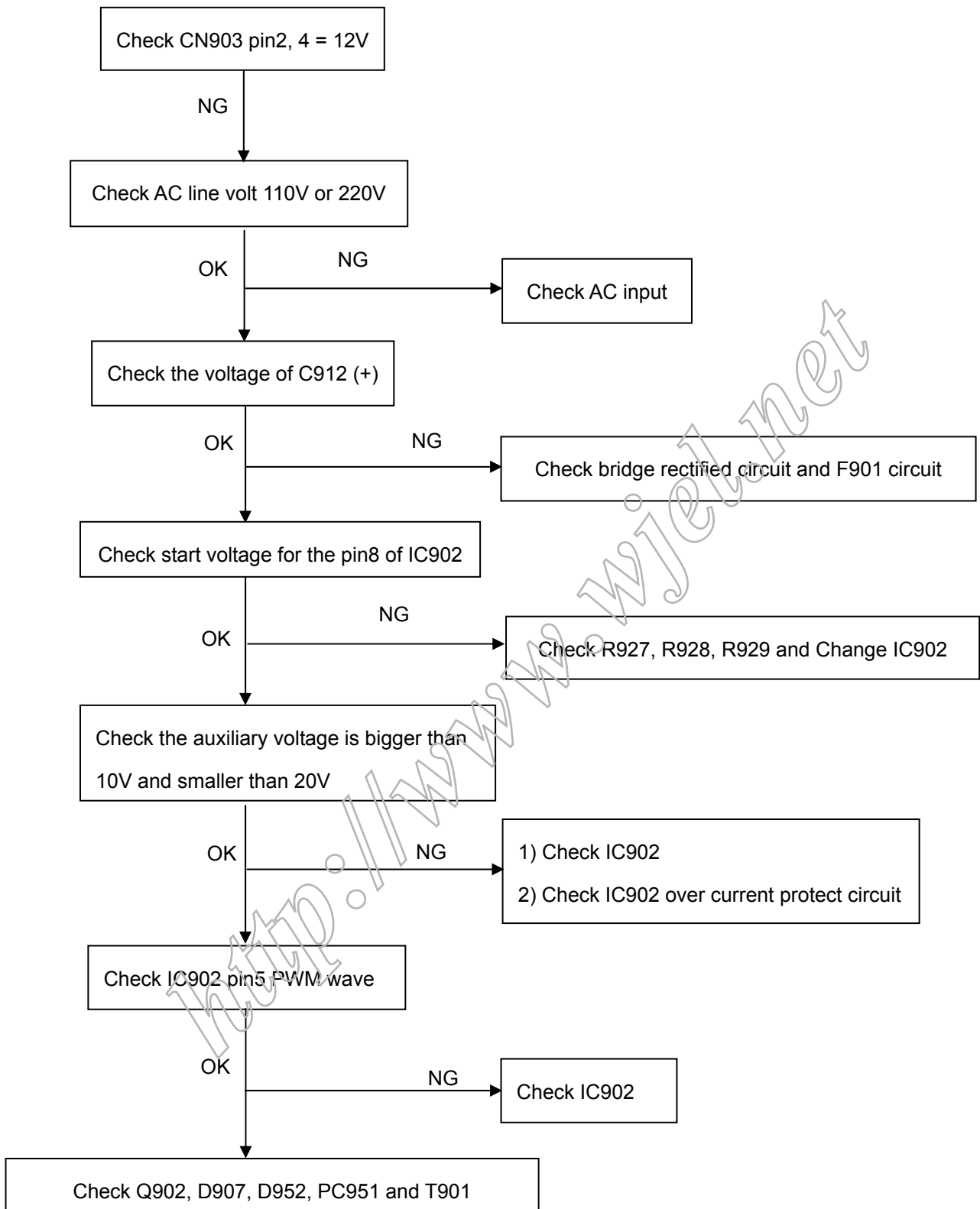


(3). White screen

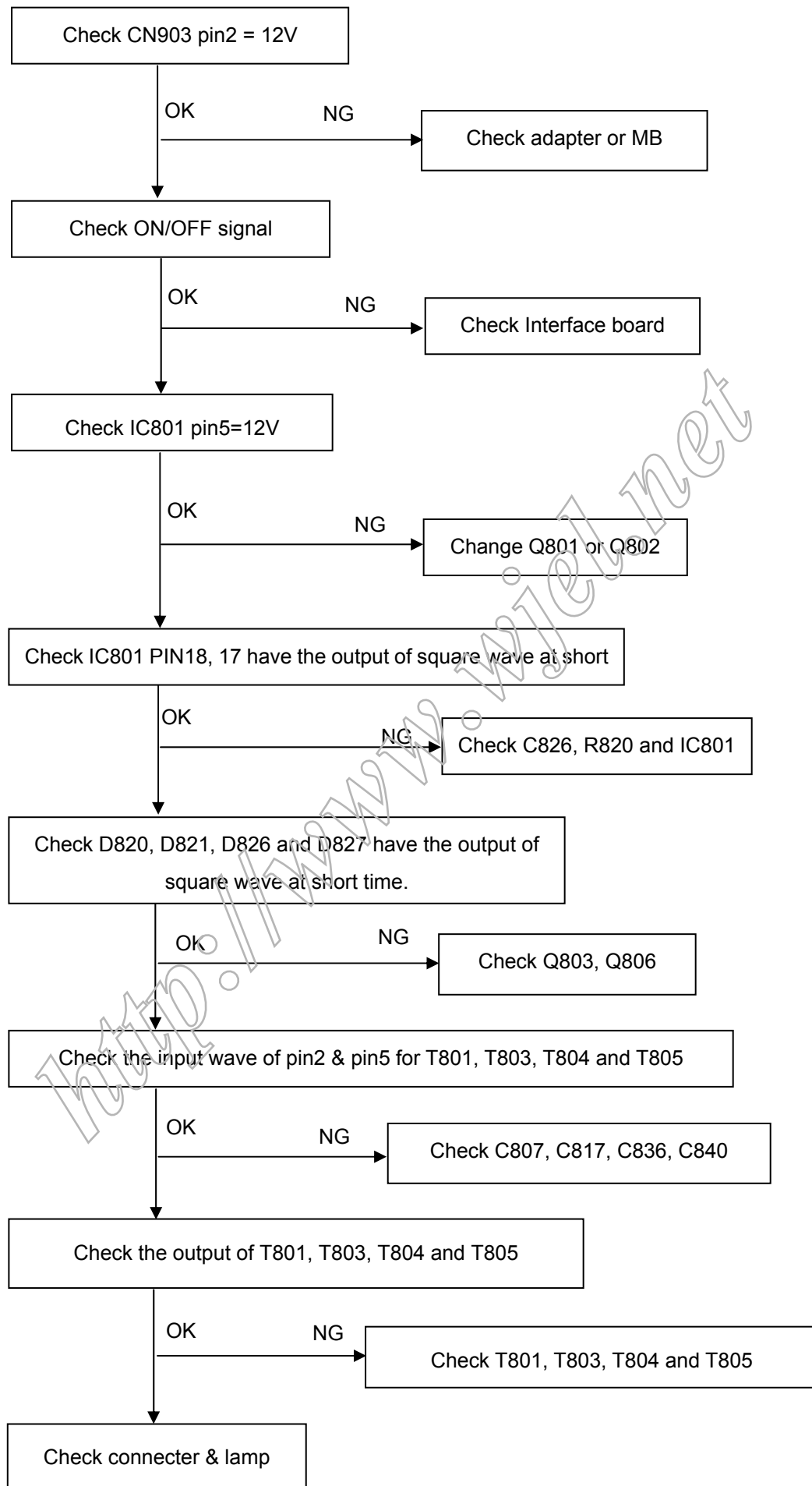


8.2.2 Power/Inverter Board

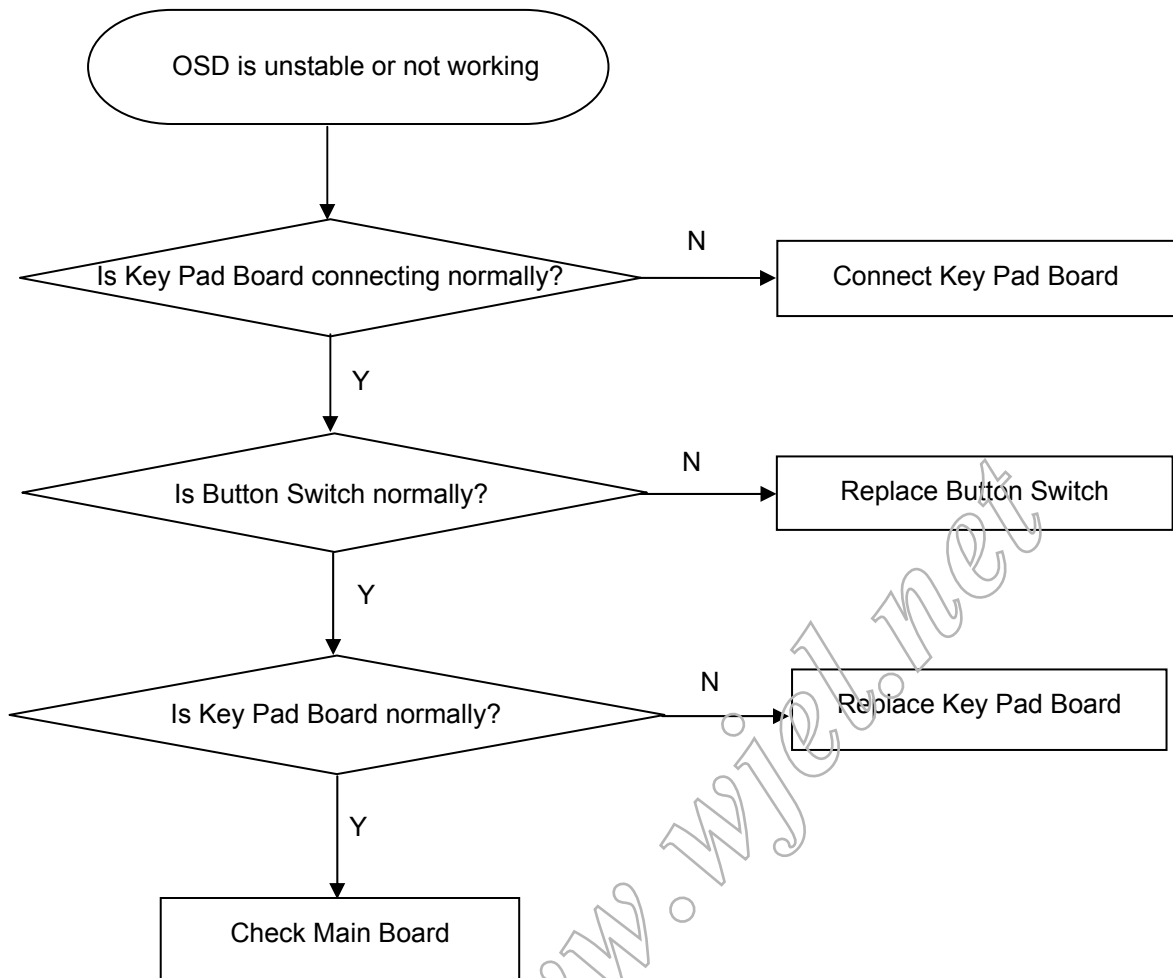
1.) No power



2.) W / LED, No Backlight



8.2.3 Keypad Board



<http://www.wjcl.net>

## 9. White- Balance, Luminance Adjustment

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

Before started adjust white balance , please set the Chroma-7120 MEM Channel 3 to Warm (6500K) color, MEM Channel 4 to Normal (7500K) color, MEM Channel 5 to Cool (9300K) color , and MEM Channel 6 to sRGB color ( our Warm color parameter is  $x = 313 \pm 20$ ,  $y = 329 \pm 20$ ,  $Y > 160\text{cd/m}^2$ ; Normal color parameter is  $x = 299 \pm 20$ ,  $y = 315 \pm 20$ ,  $Y > 160\text{cd/m}^2$ ; Cool color parameter is  $x = 283 \pm 20$ ,  $y = 297 \pm 20$ ,  $Y > 160\text{cd/m}^2$ ; sRGB color parameter is  $x = 313 \pm 20$ ,  $y = 329 \pm 20$ ,  $Y = 150 \pm 20\text{cd/m}^2$ )

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

### 2. Setting the color temp. you want

#### A. MEM.CHANNEL 3 (Warm color):

Warm color temp. parameter is  $x = 313 \pm 20$ ,  $y = 329 \pm 20$ ,  $Y > 160\text{cd/m}^2$

#### B. MEM.CHANNEL 4 (Normal color):

Normal color temp. parameter is  $x = 299 \pm 20$ ,  $y = 315 \pm 20$ ,  $Y > 160\text{cd/m}^2$

#### C. MEM.CHANNEL 5 (Cool color):

Cool color temp. parameter is  $x = 283 \pm 20$ ,  $y = 297 \pm 20$ ,  $Y > 160\text{cd/m}^2$

#### D. MEM.CHANNEL 6 (sRGB color):

sRGB color temp. parameter is  $x = 313 \pm 20$ ,  $y = 329 \pm 20$ ,  $Y = 150 \pm 20\text{cd/m}^2$

### 3. Into Factory mode of ASUS MW221:

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

### 4. Bias adjustment:

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

### 5. Gain adjustment:

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

#### A. Adjust Warm (6500K) color-temperature

1. Switch the chroma-7120 to **RGB-Mode** (with press "MODE" button)
2. Switch the MEM.channel to Channel 3 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show  $x = 313 \pm 20$ ,  $y = 329 \pm 20$ ,  $Y > 160\text{cd/m}^2$
4. Adjust the RED of color3 on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN of color3 on factory window until chroma 7120 indicator reached the value G=100
6. Adjust the BLUE of color3 on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance =  $100 \pm 2$

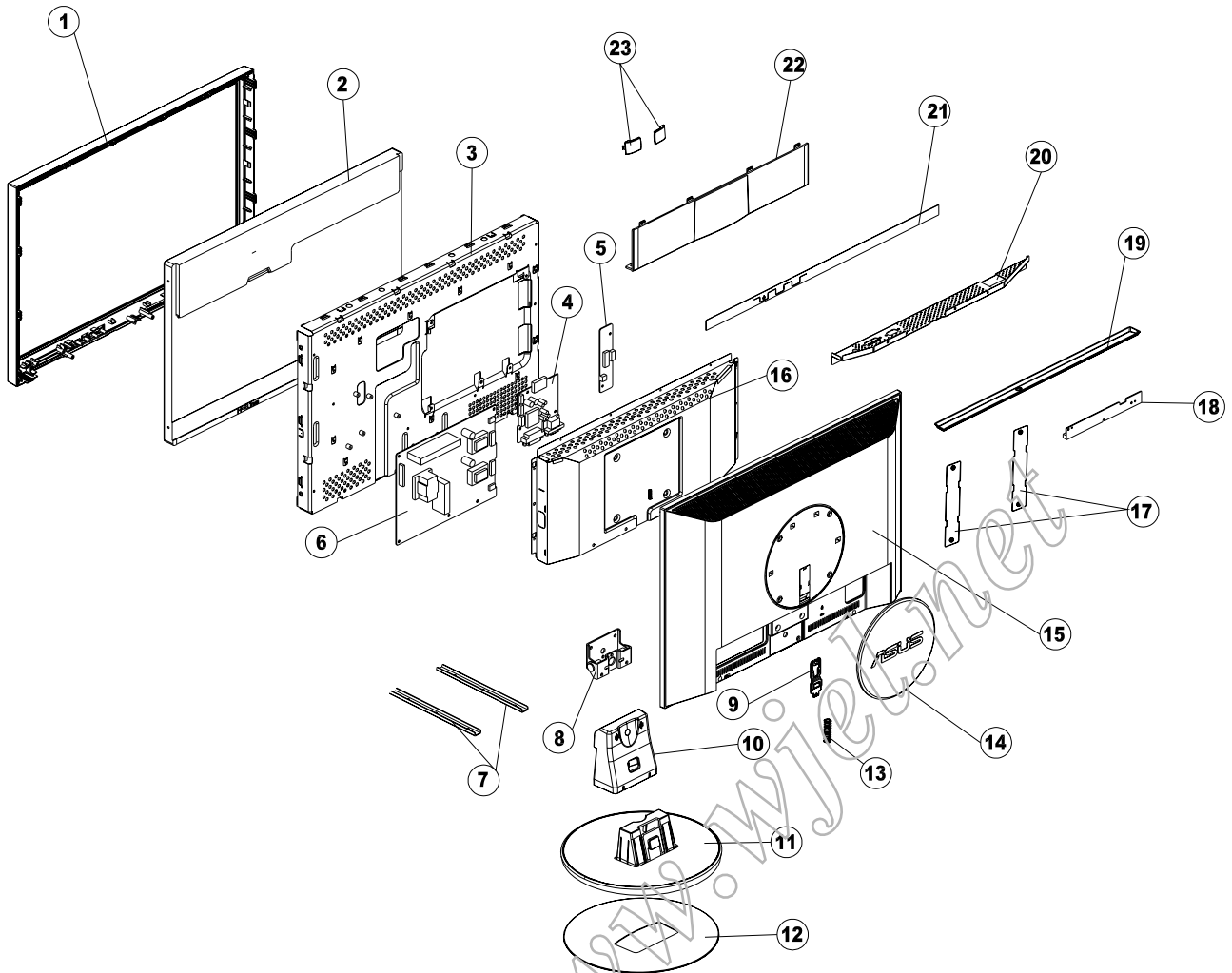
#### B. Adjust Normal (7500K) color-temperature

1. Switch the chroma-7120 to **RGB-Mode** (with press "MODE" button)
2. Switch the MEM.channel to Channel 4 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show  $x = 299 \pm 20$ ,  $y = 315 \pm 20$ ,  $Y > 160\text{cd/m}^2$
4. Adjust the RED of color3 on factory window until chroma 7120 indicator reached the value R=100

5. Adjust the GREEN of color3 on factory window until chroma 7120 indicator reached the value  $G=100$
  6. Adjust the BLUE of color3 on factory window until chroma 7120 indicator reached the value  $B=100$
  7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance  $=100\pm 2$
- C. Adjust Cool (9300K) color-temperature
1. Switch the Chroma-7120 to **RGB-Mode** (with press "MODE" button)
  2. Switch the MEM. Channel to Channel 5 (with up or down arrow on chroma 7120)
  3. The LCD-indicator on chroma 7120 will show  $x = 283 \pm 20$ ,  $y = 297 \pm 20$ ,  $Y > 160 \text{cd/m}^2$
  4. Adjust the RED of color1 on factory window until chroma 7120 indicator reached the value  $R=100$
  5. Adjust the GREEN of color1 on factory window until chroma 7120 indicator reached the value  $G=100$
  6. Adjust the BLUE of color1 on factory window until chroma 7120 indicator reached the value  $B=100$
  7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance  $=100\pm 2$
- D. Adjust sRGB color-temperature
1. Switch the chroma-7120 to **RGB-Mode** (with press "MODE" button)
  2. Switch the MEM.channel to Channel 6 (with up or down arrow on chroma 7120)
  3. The LCD-indicator on chroma 7120 will show  $x = 313 \pm 20$ ,  $y = 329 \pm 20$ ,  $Y = 150 \pm 20 \text{cd/m}^2$
  4. Adjust the RED of color3 on factory window until chroma 7120 indicator reached the value  $R=100$
  5. Adjust the GREEN of color3 on factory window until chroma 7120 indicator reached the value  $G=100$
  6. Adjust the BLUE of color3 on factory window until chroma 7120 indicator reached the value  $B=100$
  7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance  $=100\pm 2$
- E. Turn the Power-button off to quit from factory mode.



10. Monitor Exploded View



Item	Part No. for TPV		Qt'y
1	A34G0103 GM 1B	BEZEL	1
2	750GLMC0Z1111N	PANEL	1
3	A15G0077AS1 2	MAIN FRAME	1
4	CBPC6MM1UAQP	MAIN BOARD	1
5	AUPC6QW8	AUDIO BOARD	1
6	PWPCG44MU2P	POWER BOARD	1
7	Q15G0074 1	BASE BKT	2
8	A37G0015 2	HINGE	1
9	A33G0065 GM 1L	LOGO LOCKER	1
10	A34G0101 GM 1B	STAND	1
11	A34G0102 GM 1B	BASE	1
12	A27G0002 2	BASE PLATE	1
13	Q19G0003 1	SPRING HOLDER	1
14	A33G0064 GM 1L	LOGO COVER	1
15	A34G0104 GM 2B	REAR COVER	1
16	A85G0026-1	SHIELD	1
17	A15G0028 1	VESA BKT	2
18	KEPC6QW8	KEY BOARD	1
19	A85G0024-1	SPEAKER NET	1
20	A15G0078-2-2	IO-BRACKET	1
21	A27G0003 2	KEY PLATE	1
22	A34G0105 GM 1B	REAR LOWER COVER	1
23	A33G0066 GM 1L	CABLE CLAMP	2

## 11. BOM List

## TC6MM1DTW8USDP

Location	Part No. for TPV	Description
	040G 457834 4A GP	S/N LABEL FOR ID
	040G 581680 1A	WARRANTY LABEL
	040G 582680 1A	CARTON LABEL
	040G 582680 4A	CARTON LABEL
	045G 76 28V13	PE BAG FOR MANUAL
	050G 600 2	HANDLE1
	050G 600 3	HANDLE2
	052G 1185 49	ASUS TAPE
	052G 1186	SMALL TAPE
	052G 1208 A	ALUMINIUM TAPE
	052G 1211 A	165MINIUM TAPE
	052G6022 3	SMALL TAPE
	052G6025 11926	MYLAR
	078G 322 5 GL	SPK 8OHM 1.5W NeoSonica
	078G 322 5 GR	SPK 8OHM 1.5W NeoSonica
	078G 322 5 KL	SPK 8OHM 1.5W 43×18×18.5mm 35mm KUAIDA
	078G 322 5 KR	SPK 8OHM 1.5W 43×18×18.5mm 135mm KUAIDA
	078G 322 5 YL	SPK 8OHM 1.5W SU
	078G 322 5 YR	SPK 8OHM 1.5W SU
	089G 728HAA D1	SIGNAL CABLE D-SUB HONGLIN
	089G402A18N IS	POWER CORD
	089G402A18N LS	POWER CORD
	095G801414D673	WIRE HARNESS
	095G801414X673	WIRE HARNESS
	095G801416DH10	WIRE HARNESS
	095G801416XH10	WIRE HARNESS
	095G8018 3D567	LVDS CABLE
	095G8018 3X567	LVDS CABLE
	0M1G 130 6120	SCREW M3X6
	0M1G 130 6120	SCREW M3X6
	0M1G 130 6120	SCREW M3X6
	0M1G 330 6120	SCREW
	0M1G1730 6120	SCREW
	0M1G1730 6120	SCREW
	0M1G1730 6120	SCREW
	0M1G1740 8120	SCREW FOR STD/MF
	0Q1G 330 8 47 CR3	SCREW

	0Q1G 330 8120	SCREW 3X8mm
	0Q1G 330 8120	SCREW 3X8mm
	0Q1G1030 8120	SCREW
	705GQCK0F34005	22" LCD BEZEL-STAND COVER-BASE ASS'Y
	750GLMC0Z1111N	PANEL LCD M220Z1-L01 CMO
	A15G0028 1	VESA BKT
	A15G0077AS1 2	MAIR FRAME(CMO)
	A15G0078 2 2	IO-BRACKET
	A33G0064 GM 1L	LOGO COVER
	A33G0065 GM 1L	LOGO LOCKER
	A33G0066 GM 1L	CABLE CLAMP
	A34G0104 GM 2B	REAR COVER
	A34G0105 GM 1B	REAR LOWER COVER
	A85G0024 1	SPEAKER NET
	A85G0026 1	SHIELD
	AM1G1740 10 47 CR3	SCREW M3X6
	AUPC6QW8	AUDIO BOARD
	CBPC6MM1UAQP	MAIN BOARD
	KEPC6QW8	KEY BOARD
	PWPCC44MU2P	POWER BOARD
	Q12G6300 25 1	RUBBER FOOT
	Q19G0003 1	SPRING HOLDER
	Q40G 22N680 2A	Rating label
	Q40G0002680 2A	Try me label
	Q40G0002680 5A	MW221S Splendid label
	Q40G0002680 8A	Arrow label
	Q41G780068026A	tw warranty card non zbd
	Q44GC002 1	EPS(L)
	Q44GC002 2	EPS(R)
	Q44GC002 3EPE	EPE
	Q44GC002 4EPE	EPE
	Q44GC002680 3A	CARTON
	Q45G 88606 S R	PE BAG FOR BASE
	Q45G 88626 8 R	PE BAG FOR MONITOR
	Q52G6020 29	PROTECT FILM
	Q52G6025 13 63	MYLAR
	040G 58162435A	LABEL
	040G 58162445A	TCO'03
	045G 76 28 RN	PE BAG FO MANUAL/BASE
	089G 17356X554	AUDIO CABLE

	Q41G780068021B	east qsg
	Q70G2201680 1B	cd manual
	0Q1G 130 6120	SCREW (T3X6)
	0Q1G1030 8120	SCREW
	A27G0002 2	BASE PLATE
	A27G0003 2	KEY PLATE
	A33G0063 1 1C	LENS
	A34G0101 GM 1B	STAND
	A34G0102 GM 1B 20	BASE
	A34G0103 GM 1B 30	BEZEL
	A37G0015 2	HINGE
	AQ1G1740 12120	SCREW
	Q15G0074 1	BASE BKT
CN202	033G8027 14	WAFER 14P 2.0MM DIP DUAL ROW
U201	056G 616 1	IC E-TDA7496L ST
C208	067G215B471 3N GP	KY16VB470M-L 8*15MM
C207	067G215B471 3N GP	KY16VB470M-L 8*15MM
C205	067G215B471 3N GP	KY16VB470M-L 8*15MM
C202	067G215B471 3N GP	KY16VB470M-L 8*15MM
C201	067G215B471 3N GP	KY16VB470M-L 8*15MM
CN201	088G 30210K E	PHONE JACK 5PIN
	090G6059 1	HEAT SINK
CN701	033G8027 12	WAFER 2*6P 2.0MM R/A
CN404	033G8027 14	WAFER 14P 2.0MM DIP DUAL ROW
CN403	033G8027 16	WAFER 16PIN 2.0mm DIP
CN101	033G8027 30 H	WAFER 30P 2.0MM RIGHT ANGLE
	040G 457624 1B	LABEL-CPU
	040G 45762412B	CBPC LABEL
C418	067G215Y100 7N	KY50VB10M-L 5*11
C408	067G215Y100 7N	KY50VB10M-L 5*11
C464	067G215Y2207NV	KY50VB22M-CC3 5*11
C720	067G215Y2207NV	KY50VB22M-CC3 5*11
C722	067G215Y2207NV	KY50VB22M-CC3 5*11
C403	067G215Y479 7N	LOW ESR EC 4.7 UF 50V NC
C702	067G215Y479 7N	LOW ESR EC 4.7 UF 50V NC
CN405	088G 35315F H	D-SUB 15PIN
X401	093G 22 53 J	14.31818MHZ/32PF/49US
CN103	033G3802 2H	WAFER 2P RIGHT ANGLE
CN104	033G3802 2H	WAFER 2P RIGHT ANGLE
CN101	033G8027 12 H	PIN HEADER 2*6 R/A

SW101	077G 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW104	077G 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW102	077G 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW105	077G 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW103	077G 605 1 CJ	TSAB-2
DP101	081G 12 2 GP	GP36032ME/50-ZO
CN102	088G 30211K	PHONE JACK 5PIN
CN801	033G8021 2E U	WAFER
CN802	033G8021 2E U	WAFER
CN803	033G8021 2E U	WAFER
CN804	033G8021 2E U	WAFER
CN801	033G8021 2E U	WAFER
CN802	033G8021 2E U	WAFER
CN803	033G8021 2E U	WAFER
CN804	033G8021 2E U	WAFER
	040G 45762420A	LABEL 25x6mm
	051G 6 4502	RTV
PC951	056G 139 3A	PC123Y22FZOF
PC953	056G 139 3A	PC123Y22FZOF
PC951	056G 139 3B	PC123 Y82FZOF
PC953	056G 139 3B	PC123 Y82FZOF
VR901	061G 46 6	TNR10V471K CHEMICON
C906	063G 10722410S	X2 CAP 0.22UF 275VAC
C907	063G 10722410S	X2 CAP 0.22UF 275VAC
C801	065G 3J5096ET	5PF 5% SL 3KV
C803	065G 3J5096ET	5PF 5% SL 3KV
C804	065G 3J5096ET	5PF 5% SL 3KV
C805	065G 3J5096ET	5PF 5% SL 3KV
C901	065G306M1022BM	Y1.CAP.001UF 250VAC MURATA
C902	065G306M1022BM	Y1.CAP.001UF 250VAC MURATA
C902	065G306M1022BP	1000PF Y1.CAP
C901	065G306M1022BP	1000PF Y1.CAP
C905	065G306M3322BM	3300PF +-20% 250VAC
C905	065G306M3322BP	3300PF 20%
C912	067G215S10115K	100UF 450V
C912	067G215S10115N	PAG450VB100-M-L18*35.5MM
C953	067G215S471 6K	105 470UF.M.35V
C951	067G215S471 6K	105 470UF.M.35V
C831	067G215S471 6K	105 470UF.M.35V
FB903	071G 55 29	FERRITE BEAD

L901	073G 174 65 H	LINE FILTER
L901	073G 174 65 LS	LINE FILTER BY LISHIN
L954	073G 253171 LS	CHOKE COIL 3.3UH
L954	073G 253171 YS	IND CHOKE 2.13uH+-20% TOP NATION
L904	073L 253156 LH	CHOKE COIL
L903	073L 253156 LH	CHOKE COIL
T805	080GL20T 9 DN	TRANSFORMER
T804	080GL20T 9 DN	TRANSFORMER
T803	080GL20T 9 DN	TRANSFORMER
T801	080GL20T 9 DN	TRANSFORMER
T901	080GL20T 21 T	X'FMR 400uH SRW3220PQ-T41V016 TDK
CN901	087G 501 32 S	AC SOCKET
BD901	093G 50460 14	GBU 805
CN903	095G801414W682	WIRE HARNESS
	705GQC1 57001	Q902 ASSA'Y
	705GQC1 61001	R941 ASSA'Y
	705GQC1 61002	R940 ASSA'Y
	705GQC1 93001	D907 ASSA'Y
	705GQC1 93002	D952 ASSA'Y
	705GQCK0 61003	RT901 ASS'Y
	705GQCK2 61003	R957 ASSA'Y
CN931	DCPF1205A6P	DC TO DC BOARD
R208	061G0603102	RST CHIP 1K 1/10W 5%
R207	061G0603102	RST CHIP 1K 1/10W 5%
R203	061G0603183	RST CHIPR 18 KOHM +-5% 1/10W
R201	061G0603183	RST CHIPR 18 KOHM +-5% 1/10W
R210	061G0603203	RST CHIPR 20 KOHM +-5% 1/10W
R211	061G0603203	RST CHIPR 20 KOHM +-5% 1/10W
R202	061G0603204	RST CHIPR 200 KOHM +-5% 1/10W
R212	061G0603224	RST CHIPR 220 KOHM +-5% 1/10W
C211	065G0603101 31	CER1 0603 NP0 50V 100P PM5 R
C212	065G0603101 31	CER1 0603 NP0 50V 100P PM5 R
C203	065G0603104 32	CHIP 0.1UF 50V X7R
C213	065G0603104 32	CHIP 0.1UF 50V X7R
C206	065G0603474 27	CHIP 0.47UF 25V Y5V
C204	065G0603474 27	CHIP 0.47UF 25V Y5V
U401	056G 562149	IC TSUMU58WHJ-LF PQFP-128
U702	056G 563 7	IC AIC1084-33PMTR-R AIC
U404	056G1133 34	M24C02-WMN6TP
U402	056G1133 63	IC PM25LV010-25 SCE SOIC-8 PMC

U403	056G113356A	24LC16B/SNG SOIC-8PIN
Q402	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q407	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q701	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q703	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q706	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q401	057G 417 6	PMBS3906/PHILIPS-SMT(06)
Q403	057G 417 6	PMBS3906/PHILIPS-SMT(06)
Q702	057G 417 17 T	PZT2907A
Q704	057G 763 1	A03401 SOT23 BY AOS(A1)
FB410	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
FB411	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
FB412	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
R419	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
R421	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
R432	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
R721	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
R500	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
R411	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
R418	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
R420	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
R427	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
R428	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
R429	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
R441	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
R442	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
R443	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
R445	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
R453	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
R454	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
R488	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
R704	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
R701	061G0603102	RST CHIP 1K 1/10W 5%
R479	061G0603102	RST CHIP 1K 1/10W 5%
R478	061G0603102	RST CHIP 1K 1/10W 5%
R477	061G0603102	RST CHIP 1K 1/10W 5%
R476	061G0603102	RST CHIP 1K 1/10W 5%
R447	061G0603102	RST CHIP 1K 1/10W 5%
R446	061G0603102	RST CHIP 1K 1/10W 5%
R412	061G0603102	RST CHIP 1K 1/10W 5%



R723	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R404	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R406	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R408	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R413	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R708	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R490	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R489	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R487	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R452	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R451	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R450	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R444	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R426	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R425	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R424	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R415	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R717	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R714	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R711	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R727	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R414	061G0603121	RST CHIPR 120 OHM +-5% 1/10W
R409	061G0603121	RST CHIPR 120 OHM +-5% 1/10W
R709	061G0603153	RST CHIPR 15KOHM +-5% 1/10W
R501	061G0603200	RST CHIPR 20 OHM +-5% 1/10W
R502	061G0603200	RST CHIPR 20 OHM +-5% 1/10W
R703	061G0603202	RST CHIPR 2 KOHM +-5% 1/10W
R448	061G0603222	RST CHIPR 2.2 KOHM +-5% 1/10W
R449	061G0603222	RST CHIPR 2.2 KOHM +-5% 1/10W
R405	061G0603223	RST CHIPR 22 KOHM +-5% 1/10W
R403	061G0603390 0F	RST CHIPR 390 OHM +-1% 1/10W
R474	061G0603392	RST CHIPR 3.9 KOHM +-5% 1/10W
R475	061G0603392	RST CHIPR 3.9 KOHM +-5% 1/10W
R437	061G0603471	RST CHIPR 470 OHM +-5% 1/10W
R402	061G0603472	RST CHIPR 4.7KOHM +-5% 1/10W
R422	061G0603472	RST CHIPR 4.7KOHM +-5% 1/10W
R423	061G0603472	RST CHIPR 4.7KOHM +-5% 1/10W
R705	061G0603472	RST CHIPR 4.7KOHM +-5% 1/10W
R707	061G0603472	RST CHIPR 4.7KOHM +-5% 1/10W
R712	061G0603472	RST CHIPR 4.7KOHM +-5% 1/10W



R725	061G0603472	RST CHIPR 4.7KOHM +-5% 1/10W
R431	061G0603472	RST CHIPR 4.7KOHM +-5% 1/10W
R702	061G0603510	RST CHIPR 51 OHM +-5% 1/10W
R434	061G0603560	RST CHIPR 56 OHM +-5% 1/10W
R435	061G0603560	RST CHIPR 56 OHM +-5% 1/10W
R436	061G0603560	RST CHIPR 56 OHM +-5% 1/10W
R438	061G0603750	RST CHIPR 75 OHM +-5% 1/10W
R439	061G0603750	RST CHIPR 75 OHM +-5% 1/10W
R440	061G0603750	RST CHIPR 75 OHM +-5% 1/10W
FB401	061G0805000	0 OHM 1/10W
FB404	061G0805000	0 OHM 1/10W
R719	061G1206151	RST CHIPR 150 OHM +-5% 1/4W
R720	061G1206151	RST CHIPR 150 OHM +-5% 1/4W
C435	065G0603102 32	1000PF +-10% 50V X7R
C422	065G0603104 32	CHIP 0.1UF 50V X7R
C420	065G0603104 32	CHIP 0.1UF 50V X7R
C419	065G0603104 32	CHIP 0.1UF 50V X7R
C416	065G0603104 32	CHIP 0.1UF 50V X7R
C410	065G0603104 32	CHIP 0.1UF 50V X7R
C411	065G0603104 32	CHIP 0.1UF 50V X7R
C412	065G0603104 32	CHIP 0.1UF 50V X7R
C413	065G0603104 32	CHIP 0.1UF 50V X7R
C414	065G0603104 32	CHIP 0.1UF 50V X7R
C415	065G0603104 32	CHIP 0.1UF 50V X7R
C721	065G0603104 32	CHIP 0.1UF 50V X7R
C719	065G0603104 32	CHIP 0.1UF 50V X7R
C718	065G0603104 32	CHIP 0.1UF 50V X7R
C714	065G0603104 32	CHIP 0.1UF 50V X7R
C713	065G0603104 32	CHIP 0.1UF 50V X7R
C711	065G0603104 32	CHIP 0.1UF 50V X7R
C709	065G0603104 32	CHIP 0.1UF 50V X7R
C706	065G0603104 32	CHIP 0.1UF 50V X7R
C701	065G0603104 32	CHIP 0.1UF 50V X7R
C461	065G0603104 32	CHIP 0.1UF 50V X7R
C460	065G0603104 32	CHIP 0.1UF 50V X7R
C459	065G0603104 32	CHIP 0.1UF 50V X7R
C458	065G0603104 32	CHIP 0.1UF 50V X7R
C457	065G0603104 32	CHIP 0.1UF 50V X7R
C456	065G0603104 32	CHIP 0.1UF 50V X7R
C455	065G0603104 32	CHIP 0.1UF 50V X7R

C444	065G0603104 32	CHIP 0.1UF 50V X7R
C430	065G0603104 32	CHIP 0.1UF 50V X7R
C429	065G0603104 32	CHIP 0.1UF 50V X7R
C428	065G0603104 32	CHIP 0.1UF 50V X7R
C427	065G0603104 32	CHIP 0.1UF 50V X7R
C426	065G0603104 32	CHIP 0.1UF 50V X7R
C401	065G0603104 32	CHIP 0.1UF 50V X7R
C402	065G0603104 32	CHIP 0.1UF 50V X7R
C404	065G0603104 32	CHIP 0.1UF 50V X7R
C405	065G0603104 32	CHIP 0.1UF 50V X7R
C407	065G0603104 32	CHIP 0.1UF 50V X7R
C409	065G0603104 32	CHIP 0.1UF 50V X7R
C431	065G0603105 12	CHIP 1UF 16VX7R 0603
C421	065G0603220 31	CER1 0603 NP0 50V 22P PM
C442	065G0603220 31	CER1 0603 NP0 50V 22P PM
C423	065G0603220 31	CER1 0603 NP0 50V 22P PM
C443	065G0603221 32	CHIP 220PF 50V X7R
C715	065G0603223 32	CHIP 0.022UF 50V X7R 0603
C417	065G0603224 22	CHIP 0.22UF 25V X7R
C425	065G0603224 22	CHIP 0.22UF 25V X7R
C441	065G0603473 32	CHIP 0.047UF 50V X7R
C440	065G0603473 32	CHIP 0.047UF 50V X7R
C439	065G0603473 32	CHIP 0.047UF 50V X7R
C438	065G0603473 32	CHIP 0.047UF 50V X7R
C437	065G0603473 32	CHIP 0.047UF 50V X7R
C436	065G0603473 32	CHIP 0.047UF 50V X7R
C434	065G0603473 32	CHIP 0.047UF 50V X7R
C433	065G0603473 32	CHIP 0.047UF 50V X7R
C432	065G0603473 32	CHIP 0.047UF 50V X7R
FB408	071G 56K121 M	CHIP BEAD
FB407	071G 56K121 M	CHIP BEAD
L703	071G 56K121 M	CHIP BEAD
L702	071G 56K121 M	CHIP BEAD
FB402	071G 56Z601	CHIP BEAD 600 OHM 0805
FB403	071G 56Z601	CHIP BEAD 600 OHM 0805
FB405	071G 56Z601	CHIP BEAD 600 OHM 0805
FB409	071G 59B431	BK1608 HW 431
D412	093G 39147SEM	ZMM5V6ST
D411	093G 39147SEM	ZMM5V6ST
D410	093G 39147SEM	ZMM5V6ST

D409	093G 39147SEM	ZMM5V6ST
D408	093G 39147SEM	ZMM5V6ST
D406	093G 39147SEM	ZMM5V6ST
D406	093G 39149	MLL5232B BY FULL POWER SMT
D408	093G 39149	MLL5232B BY FULL POWER SMT
D409	093G 39149	MLL5232B BY FULL POWER SMT
D410	093G 39149	MLL5232B BY FULL POWER SMT
D411	093G 39149	MLL5232B BY FULL POWER SMT
D412	093G 39149	MLL5232B BY FULL POWER SMT
D407	093G 64 42 P	BAV70 SOT-23
D702	093G 6432P	LL4148
D403	093G 6433P	BAV99
D404	093G 6433P	BAV99
D405	093G 6433P	BAV99
D401	093G 39S 45 T	DIODE ZENER RLZ36B ROHM
D402	093G 39S 45 T	DIODE ZENER RLZ36B ROHM
D701	093G1020 1 S	GS1D
D704	093G2004 2	SR24/PANJIT-SMT
	715G2186 1	MAIN BOARD PCB
C101	065G0603103 32	0.01UF +-10% 50V X7R
C102	065G0603103 32	0.01UF +-10% 50V X7R
Q902	057G 667 21	STP10NK70ZFP
Q902	057G 667516	FET 2SK3673 TO-220 FUJI
	0M1G1730 8120	SCREW
HS1	Q90G0010 1	HEAT SINK
R941	061G152M20858F	RST MOFR 0.2OHM +-5% 2W
FOR R941	096G 29 6	H.S. TUBE
R940	061G152M10458F	100K OHM 5% 2W
FOR R940	096G 29 6	H.S. TUBE
D907	093G 60239	FME-210B T0-220
D907	093G 60245	SP10150 10A 150V ITO-220 BY SECOS
D907	093G 60261	DIODE
	0M1G1730 8120	SCREW
HS4	Q90G0012 1	HEAT SINK
D952	093G 60244	SRF20200C
D952	093G 60283	DIODE MBRF20200CT 20A/200V ITO-220AB
	0M1G1730 8120	SCREW
HS2	Q90G0011 1	HEAT SINK
RT901	061G 58030 W	NTCR 3 Ω 5A
	096G 29 10	H.S. TUBE

R957	061G152M22158F	RST MOFR 220OHM +-5% 2W
	096G 29 6	H.S. TUBE
CN801	033T800913Z H	PIN HEADER 1*13 R/A
C806	067T215Y4713NV	LOW ESR 470UF 16V NCC
C807	067T215Y4713NV	LOW ESR 470UF 16V NCC
C806	067T215Y4713RV	EC 105°C 470UF M 16V YXG SERIES 8*16MM
C807	067T215Y4713RV	EC 105°C 470UF M 16V YXG SERIES 8*16MM
C801	067T405V221 4P	105°C 220UF M 25V
IC902	056G 379 61	LD7575PS SOP-8
IC801	056G 608 7	OZT1060GN SOIC-20
Q802	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q957	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q808	057G 417 6	PMBS3906/PHILIPS-SMT(06)
Q815	057G 759 2	RK7002
Q813	057G 759 2	RK7002
Q812	057G 759 2	RK7002
Q811	057G 759 2	RK7002
Q809	057G 759 2	RK7002
Q807	057G 759 2	RK7002
Q801	057G 760 4	DTA144WKA BY ROHM SMT
Q801	057G 760 4A	DTA144WN3/S SOT-23
Q803	057G 763 40	FET AM4541C-T1-PF SOIC-8 ANALOG POWER
Q806	057G 763 40	FET AM4541C-T1-PF SOIC-8 ANALOG POWER
R810	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
R826	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
R844	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
RJ202	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
R834	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R843	061G0603100 4F	RST CHIPR 1 MOHM +-1% 1/10W
R841	061G0603100 4F	RST CHIPR 1 MOHM +-1% 1/10W
R840	061G0603100 4F	RST CHIPR 1 MOHM +-1% 1/10W
R838	061G0603100 4F	RST CHIPR 1 MOHM +-1% 1/10W
R809	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R811	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R839	061G0603120 1F	RST CHIPR 1.2KOHM +-1% 1/10W
R956	061G0603130 3F	RST CHIPR 130KOHM +-1% 1/10W
R813	061G0603200 3F	RST CHIPR 200KOHM +-1% 1/10W
C821	061G0603205	RST CHIPR 2 MOHM +-5% 1/10W
R954	061G0603242	RST CHIPR 2.4 KOHM +-5% 1/10W
R953	061G0603270 1F	RST CHIPR 2.7 KOHM +-1% 1/10W

R904	061G0603330 2F	RST CHIPR 33 KOHM +-1% 1/10W
R827	061G0603330 2F	RST CHIPR 33 KOHM +-1% 1/10W
R824	061G0603393	RST CHIPR 39 KOHM +-5% 1/10W
R830	061G0603510 2F	RST CHIPR 51 KOHM +-1% 1/10W
R835	061G0603620 1F	RST CHIPR 6.2KOHM +-1% 1/10W
R815	061G0603750 2F	RST CHIPR 75KOHM +-1% 1/10W
R846	061G0805000	0 OHM 1/10W
R958	061G0805000	0 OHM 1/10W
R806	061G0805100 2F	RST CHIPR 10KOHM +-1% 1/8W
R805	061G0805100 2F	RST CHIPR 10KOHM +-1% 1/8W
R804	061G0805102	CHIP 1KOHM 1/10W
R814	061G0805102	CHIP 1KOHM 1/10W
R822	061G0805102	CHIP 1KOHM 1/10W
R829	061G0805102	CHIP 1KOHM 1/10W
R831	061G0805105	1MOHM 1/10W
R812	061G0805200 3F	RST CHIPR 200 KOHM +-1% 1/8W
R845	061G0805333	RST CHIPR 33 KOHM +-5% 1/8W
R807	061G0805470 0F	RST CHIPR 470 OHM +-1% 1/8W
R817	061G0805470 0F	RST CHIPR 470 OHM +-1% 1/8W
R823	061G0805470 0F	RST CHIPR 470 OHM +-1% 1/8W
R832	061G0805470 0F	RST CHIPR 470 OHM +-1% 1/8W
R820	061G0805620 2F	RST CHIPR 62 KOHM +-1% 1/8W
JR905	061G1206000	0 OHM 1/8W
JR219	061G1206000	0 OHM 1/8W
JR214	061G1206000	0 OHM 1/8W
JR213	061G1206000	0 OHM 1/8W
JR212	061G1206000	0 OHM 1/8W
JR211	061G1206000	0 OHM 1/8W
JR210	061G1206000	0 OHM 1/8W
JR207	061G1206000	0 OHM 1/8W
JR206	061G1206000	0 OHM 1/8W
JR205	061G1206000	0 OHM 1/8W
JR201	061G1206000	0 OHM 1/8W
R938	061G1206100	RST CHIP 10R 1/4W 5%
R908	061G1206100	RST CHIP 10R 1/4W 5%
R816	061G1206100	RST CHIP 10R 1/4W 5%
R939	061G1206100 3F	RST CHIPR 100 KOHM +-1% 1/4W
R802	061G1206101	100 1206
R905	061G1206101	100 1206
R906	061G1206101	100 1206

R907	061G1206101	100 1206
R917	061G1206103	10 KOHM 1/8W
R9759	061G1206202	RST CHIPR 2 KOHM +-5% 1/4W
R9757	061G1206202	RST CHIPR 2 KOHM +-5% 1/4W
R801	061G1206242	RST CHIPR 2.4 KOHM +-5% 1/4W
R964	061G1206470	47 1206
R965	061G1206470	47 1206
R966	061G1206470	47 1206
R943	061G1206471	470 1206
R927	061G1206472	RST CHIPR 4.7 KOHM +-5% 1/4W
R928	061G1206472	RST CHIPR 4.7 KOHM +-5% 1/4W
R929	061G1206472	RST CHIPR 4.7 KOHM +-5% 1/4W
R9760	061G1206682	RST CHIPR 6.8 KOHM +-5% 1/4W
R901	061G1206684	RST CHIPR 680 KOHM +-5% 1/4W
R902	061G1206684	RST CHIPR 680 KOHM +-5% 1/4W
R903	061G1206684	RST CHIPR 680 KOHM +-5% 1/4W
JR901	061L1206000	CHIPR 0 OHM +-5% 1/8W
C852	065G0603104 32	CHIP 0.1UF 50V X7R
C853	065G0603104 32	CHIP 0.1UF 50V X7R
C967	065G0603104 32	CHIP 0.1UF 50V X7R
C961	065G0603104 32	CHIP 0.1UF 50V X7R
C957	065G0603104 32	CHIP 0.1UF 50V X7R
C857	065G0603104 32	CHIP 0.1UF 50V X7R
C855	065G0603104 32	CHIP 0.1UF 50V X7R
C854	065G0603104 32	CHIP 0.1UF 50V X7R
C847	065G0603104 32	CHIP 0.1UF 50V X7R
C833	065G0603104 32	CHIP 0.1UF 50V X7R
C832	065G0603104 32	CHIP 0.1UF 50V X7R
C827	065G0603104 32	CHIP 0.1UF 50V X7R
C822	065G0603104 32	CHIP 0.1UF 50V X7R
C815	065G0603104 32	CHIP 0.1UF 50V X7R
C814	065G0603104 32	CHIP 0.1UF 50V X7R
C920	065G0603223 32	CHIP 0.022UF 50V X7R 0603
C930	065G0603471 31	CAP:CER 470PF 5%50V SMT 0603
C820	065G0603472 32	CHIP 4700PF 50V X7R
C825	065G0603472 32	CHIP 4700PF 50V X7R
C839	065G0603472 32	CHIP 4700PF 50V X7R
C846	065G0603472 32	CHIP 4700PF 50V X7R
C828	065G0603474 12	MLCC 0603 0.47UF K 16V X7R
C9753	065G0603474 12	MLCC 0603 0.47UF K 16V X7R

C830	065G0603682 32	CHIP 0.0068UF 50V X7R 0603
C835	065G0603682 32	CHIP 0.0068UF 50V X7R 0603
C818	065G0805105 22	CHIP 1UF 25V X7R 0805
C819	065G0805105 22	CHIP 1UF 25V X7R 0805
C823	065G0805105 22	CHIP 1UF 25V X7R 0805
C829	065G0805105 22	CHIP 1UF 25V X7R 0805
C826	065G080522131G	220PF 50V NPO 2%
C908	065G1206102 72	CHIP 1000PF 500V X7R
C966	065G1206102 72	CHIP 1000PF 500V X7R
ZD951	065G1206104 32	CHIP 0.1UF 25V X7R 1206
C840	065G1206105 32	CHIP 1UF 50V X7R 1206
C836	065G1206105 32	CHIP 1UF 50V X7R 1206
C817	065G1206105 32	CHIP 1UF 50V X7R 1206
C807	065G1206105 32	CHIP 1UF 50V X7R 1206
D810	093G 6432S	IN4148W
D9757	093G 6432S	IN4148W
D9553	093G 6432S	IN4148W
D905	093G 6432S	IN4148W
D819	093G 6432S	IN4148W
D817	093G 6432S	IN4148W
D816	093G 6432S	IN4148W
D815	093G 6432S	IN4148W
D815	093G 6432V	LL4148-GSO8
D816	093G 6432V	LL4148-GSO8
D817	093G 6432V	LL4148-GSO8
D819	093G 6432V	LL4148-GSO8
D905	093G 6432V	LL4148-GSO8
D9553	093G 6432V	LL4148-GSO8
D9756	093G 6432V	LL4148-GSO8
D9757	093G 6432V	LL4148-GSO8
D810	093G 6432V	LL4148-GSO8
D801	093G 6433P	BAV99
D808	093G 6433P	BAV99
D809	093G 6433P	BAV99
D812	093G 6433P	BAV99
D807	093G 6433P	BAV99
D806	093G 6433P	BAV99
D805	093G 6433P	BAV99
D803	093G 6433P	BAV99
ZD803	093G 39S 24 T	RLZ 5.6B LLDS



ZD802	093G 39S 24 T	RLZ 5.6B LLDS
ZD801	093G 39S 24 T	RLZ 5.6B LLDS
D950	093G 39S 99 T	TVS SMAJ24A SMA
D827	093G3004 4	RB050L-40
D826	093G3004 4	RB050L-40
D821	093G3004 4	RB050L-40
D820	093G3004 4	RB050L-40
	034FPF20P01	BOBBIN
C209	067G 2151097NT	KMY50VB1M-TP5 5*11.5
C210	067G 2151097NT	KMY50VB1M-TP5 5*11.5
	715G2098 1	AUDIO BOARD PCB
R101	061G 60275052T	75OHM 5% 1/6W
R102	061G 60275052T	75OHM 5% 1/6W
	715G2099 1	KEY BOARD PCB
IC801	056T 133 32 NS	LM3485
Q801	057T 763 3	AO4411L SO-8 BY AOS SMT
Q801	057T 763 4	RSS050P03
R803	061T0603200 2F	RST CHIPR 20 KOHM +-1% 1/10W
R801	061T0603360 2F	RST CHIPR 36 KOHM +-1% 1/10W
R802	061T0603620 2F	RST CHIPR 62 KOHM +-1% 1/10W
R804	061T1206220	RST CHIPR 22 OHM +-5% 1/4W
C803	065T0603102 32	CHIP 1000PF 50V X7R
C804	065T0603103 32	CHIP 0.01UF 50V X7R
C809	065T0603104 32	CHIP 0.1UF 50V X7R
C805	065T0603471 31	CHIP 470PF 50V NPO
C808	065T0805102 32	CHIP 1000PF 50V X7R 0805
C810	065T0805102 32	CHIP 1000PF 50V X7R 0805
C802	065T0805105 22	CHIP 1UF 25V X7R 0805
L801	073T M58220207	22UH +-20%
D801	093T8004 2	SBM84PT
	715T1278 4	PCB
CN901	006G 31500	EYELET
L903	006G 31502	1.5MM RIVET
L904	006G 31502	1.5MM RIVET
RT901	006G 31502	1.5MM RIVET
T805	006G 31502	1.5MM RIVET
T804	006G 31502	1.5MM RIVET
T803	006G 31502	1.5MM RIVET
T801	006G 31502	1.5MM RIVET
L901	006G 31502	1.5MM RIVET



C912	006G 31502	1.5MM RIVET
T901	006G 31502	1.5MM RIVET
Q902	006G 31502	1.5MM RIVET
TL951	056G 158 2 T	TL431ACLPR TO-92 3PIN
TL951	056G 158 4 T	H431BA
Q958	057G 566 1	2N5060RLRAG
Q958	057G 566 4	MCR100-6SCR
R951	061G 17147152T	RST CFR 470 OHM +-2% 1/4W
R9758	061G 17233252T	3.3K 1/4W
R952	061G 20012352T	RST MFR 12KOHM +-1% 1/4W
C913	065G 1K152 1T6052	1.5nF /1K Y5P+-10%
C940	067G215Y2207KT	CAP 105°C 22UF M 50V KINGNICH
FB901	071G 55 29	FERRITE BEAD
FB902	071G 55 29	FERRITE BEAD
F901	084G 55 7W	FUSE 3.15A 250V Wickmann
ZD9754	093G 3916652T	MTZJ15B (13.89-14.62)
ZD9753	093G 3917252T	MTZJ33B
ZD9755	093G 3952552T	ZENER MTZJ T 6.2B
D906	093G 6026T52T	RECTIFIER DIODE FR107
D904	093G 6026T52T	RECTIFIER DIODE FR107
D904	093G 6026W52T	FR107
D906	093G 6026W52T	FR107
	715G2101 2	POWER BOARD PCB

## 12. Different Parts List

Diversity of TC6AMADTW8USAP compared with TC6MM1DTW8USDP		
Location	Part No. for TPV	Description
	089G 17356T553	AUDIO CABLE
	089G 17356X553	AUDIO CABLE
	089G 728CAA D1	SIGNAL CABLE D-SUB COMLINK
	095G801414T673	HARNESS 14P-14P 90MM
	750GLUC0W1011N	PANEL LCD M220EW01 V00 AUO
	CBPC6AM1UAQ1	MAIN BOARD
	PWPCC44AU1P	POWER BOARD
	Q45G 76 28V13 R	PE BAG
	Q45G 76 28 RN R	PE BAG MANUAL
CN903	095G8013 14648	WIRE HARNESS
FB404	071G 56Z601	CHIP BEAD 600 OHM 0805
FB401	071G 56Z601	CHIP BEAD 600 OHM 0805
R807	061G0805560 0F	RST CHIPR 560 OHM +-1% 1/8W
R817	061G0805560 0F	RST CHIPR 560 OHM +-1% 1/8W
R823	061G0805560 0F	RST CHIPR 560 OHM +-1% 1/8W
R832	061G0805560 0F	RST CHIPR 560 OHM +-1% 1/8W