

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

## Revision List

<b>Version</b>	<b>Release Date</b>	<b>Revision History</b>	<b>L&amp;T Model Name</b>
A00	Aug.-18-2010	Initial release	TAAJNY2BZ3K2NNF.LF
			TAAJNY2CZ3ACNNF.LF
A01	Sep.-09-2010	Add new models	TAAJNY2BZ3K3NNF.LF
			TAAJNY2QZ3E6NNF.LF
A02	Nov.-09-2010	Add new models	TAAJNY2CZ3AONNF.LF
			TAAJNY2CZ36ANNF.LF
A03	Jan-21-2011	Add new models	TAAJNY2MZ38ANNF.LF
			TAAJNY2MZ38ANNF.LF
			TAAJNY2QZ3E8NNF.LF
A04	Feb-14-2011	Add new models	TAAJNY2CZ38ANNF.LF
			TAAJNY2BZ3KKNNF.LF
A05	Mar-04-2011	Add new models	TAAJNY2CZ3RMNNF.LF
A06	Mar-15-2011	Add new model	TAAJNY2CZ3RA3NF.LF
A07	Apr-29-2011	Add new model	TAAJNY2BZ3ACNNF.LF
A08	May-26-2011	Add new model	TAAJNY2CZ3RANNF.LF
A09	Sep-11-2011	Add new model	TAAJNY2CZ3RANNF.LF
			TAAJNY2BZ3A7NNF.LF
A10	Nov-11-2011	Add new model	TAAJNY2CZ3RANNF.LF
			TAAJNY2CZ3SUNNF.LF
		Add CKD model	TAAJNY2CZ3SCNNF.LF
			TAAJNY2CZ3A63NF.LF
A11	Jan-30-2012	Add new model	TAAJNY2MZ3RLNNF.LF
A12	Mar-21-2012	Add new model	TAAJNY2BZ33ANNF.LF
A13	JUN-24-2012	Add new model	TACJNY2CZ3AONNF.LF
A14	JUL-01-2012	Add new models	TACJNY2BZ3KKNNF.LF
			TACJNY2CZ3SCNNF.LF
			TACJNY2BZ33ANNF.LF
			TACJNY2CZ3SUNNF.LF
A15	JUL-22-2012	Add new model	TACJNY2QZ3E8NNF.LF
A16	AUG-03-2012	Add new model	TACJNY2MZ3RLNNF.LF
A17	SEP-09-2012	Add new models	TADJNY2BZ3KKNNF.LF
			TADJNY2BZ33ANNF.LF
			TADJNY2CZ3SCNNF.LF
			TADJNY2CZ3SUNNF.LF
A18	DEC-06-2012	Add new model	TADJNY2QZ3E8NNF.LF
A19	DEC-11-2012	Add new model	TADJNY2BZ3A7NNF.LF

## **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.)

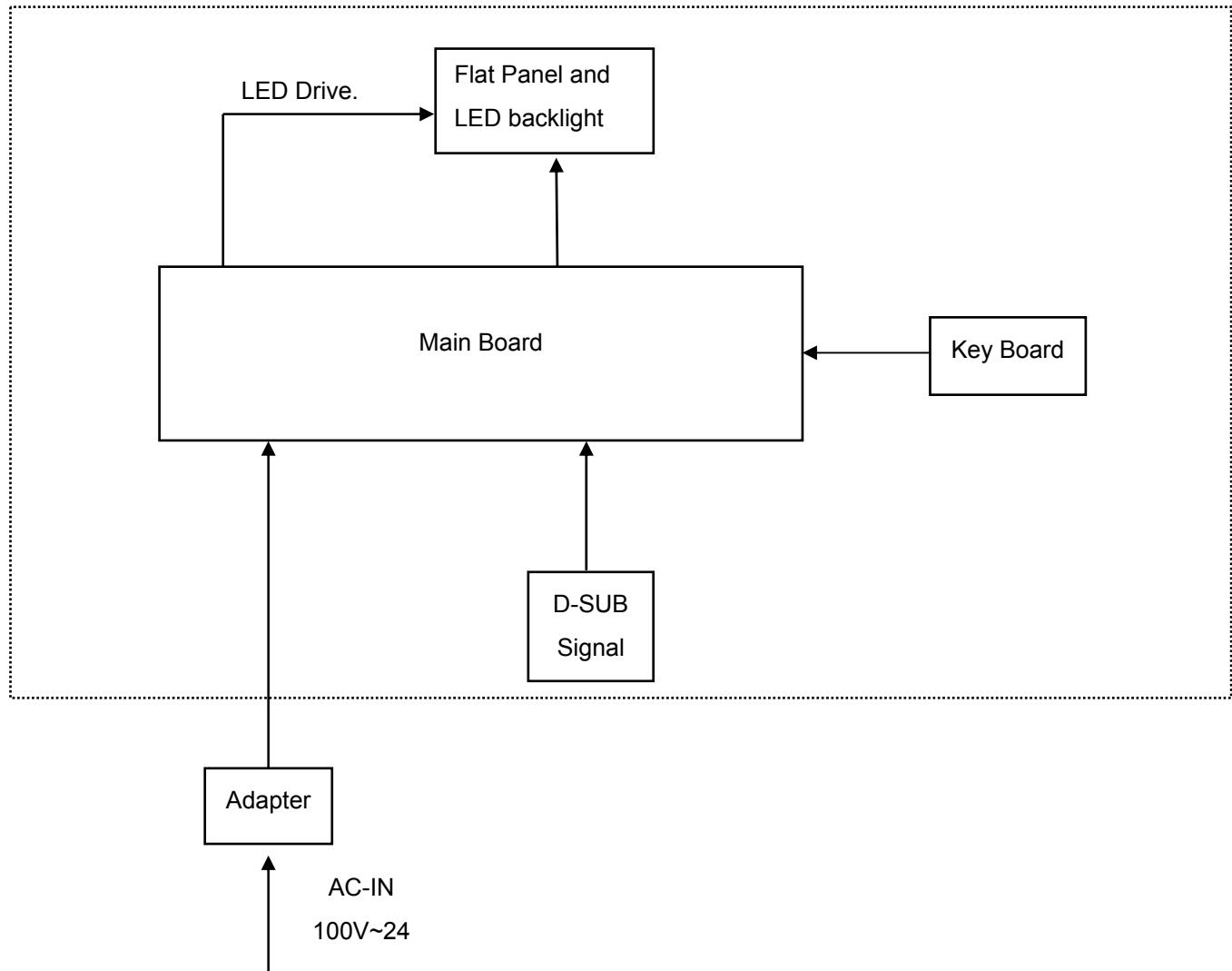
# 1. Monitor Specifications

Panel	Model number	e2043Fs /e2043Fsk /e2043Fsb
	Driving system	TFT Color LED
	Viewable Image Size	50.8cm diagonal
	Pixel pitch	0.2766mm(H) x 0.2766mm(V)
	Video	R, G, B Analog Interface
	Separate Sync.	H/V TTL
	Display Color	16.7M Colors
	Dot Clock	108 MHz
Resolution	Horizontal scan range	30 kHz - 83 kHz
	Horizontal scan Size(Maximum)	442.8mm
	Vertical scan range	55 Hz - 75 Hz
	Vertical scan Size(Maximum)	249.075mm
	Optimal preset resolution	1600 x 900 (60 Hz)
	Highest preset resolution	1600 x 900 (60 Hz)
	Plug & Play	VESA DDC2B/CI
	Input Connector	D-Sub 15pin
	Input Video Signal	Analog: 0.7Vp-p(standard), 75 OHM,
	Power Source	100~240VAC, 50/60Hz
	Power Consumption	Active < 20 W (Typical) Standby < 0.5 W
Physical Characteristics	Connector Type	15-pin Mini D-Sub
	Signal Cable Type	Detachable
	Dimensions & Weight:	
	Height (with base)	367.4 mm
	Width	480.8 mm
	Depth	182 mm
	Weight (monitor only)	2.3 kg
Environmental	Temperature:	
	Operating	0°C to 40° C
	Non-Operating	-25°C to 55°C
	Humidity:	
	Operating	10% to 85% (non-condensing)
	Non-Operating	5% to 93% (non-condensing)
	Altitude:	
	Operating	0~ 3,658m (0~ 12,000 ft )
	Non-Operating	0~ 12,192m (0~ 40,000 ft )

## 2. LCD Monitor Description

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

Monitor Block Diagram



### 3. Operating Instructions

#### 3.1 General Instructions

Press the power button to turn the monitor on or off. The other control knobs are located at base of the monitor. By changing these settings, the picture can be adjusted to your personal preferences.

#### 3.2 Control Buttons



##### **Power**

Press the Power button to turn On/off the monitor.

##### **Eco Mode / <**

Press the Eco key continuously to select the Eco mode of brightness when there is no OSD ( Eco mode hot key may not be available in all models).

##### **4:3 or wide image ratio / >**

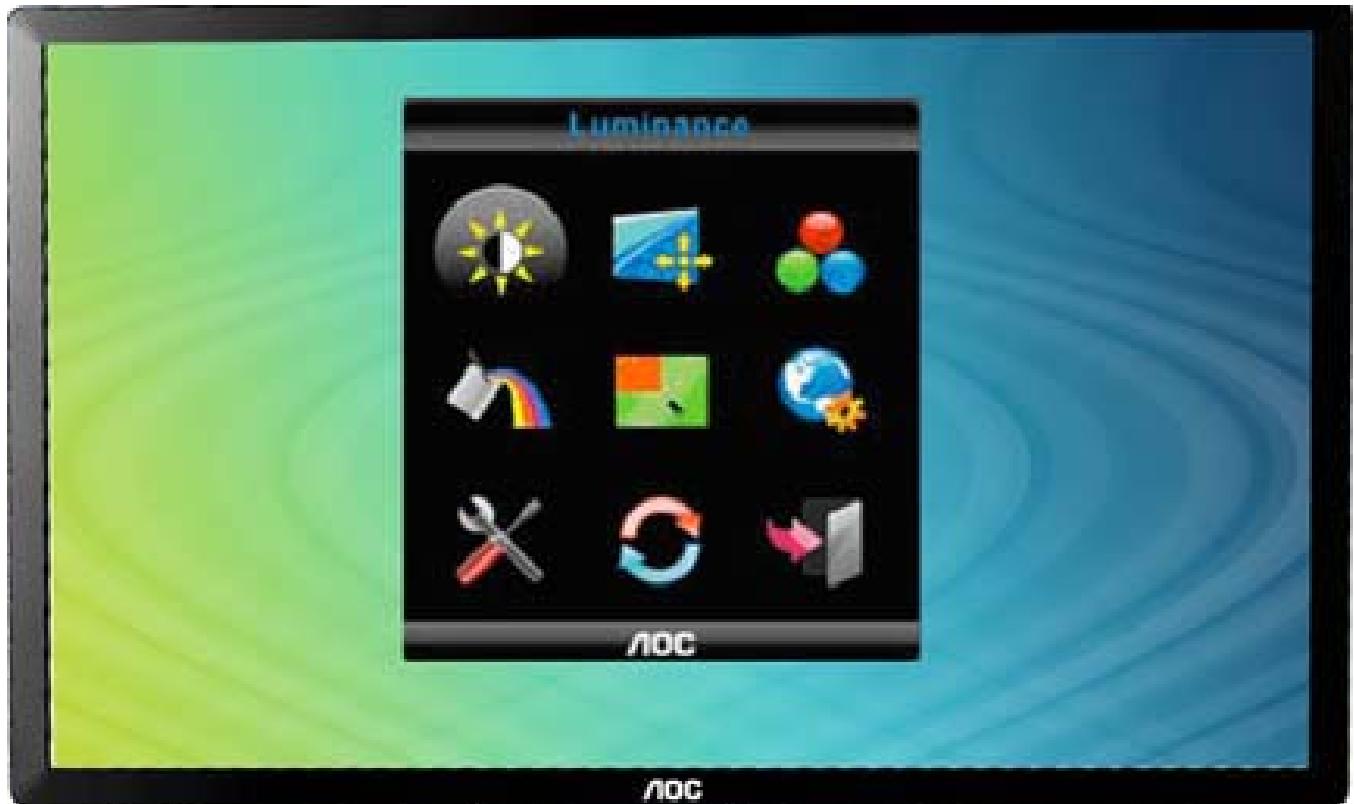
When there is no OSD, press > hotkey continuously to change 4:3 or wide image ratio. (If the product screen size is 4:3 or input signal resolution is wide format, the hot key is disable to adjust. )

##### **Auto/Exit**

When the OSD is closed, press Auto/Source/Exit button continuously about 2 second to do auto configure (only for the models with dual or more inputs).

When the OSD is closed, press Auto/Source/Exit button will be Source hot key function(Only for the models with dual or more inputs).Press Auto/Source/Exit button continuously to select the input source showed in the message bar, press Menu/Enter button to change to the source selected.

### 3.3 OSD Menu



- 1) Press the **MENU-button** to activate the OSD window.
- 2) Press **< or >** to navigate through the functions. Once the desired function is highlighted, press the **MENU-button** to activate sub-menu . Once the desired function is highlighted, press **MENU-button** to activate it.
- 3) Press **< or >** to change the settings of the selected function. Press **< or >** to select another function in sub-menu . Press **AUTO** to exit . If you want to adjust any other function, repeat steps 2-3.
- 4) OSD Lock Function: To lock the OSD, press and hold the **MENU button** while the monitor is off and then press **power button** to turn the monitor on. To un-lock the OSD - press and hold the **MENU button** while the monitor is off and then press **power button** to turn the monitor on.

#### Notes:

- 1) If the product has only one signal input, the item of "Input Select" is disable to adjust.
- 2) If the product screen size is 4:3 or input signal resolution is wide format, the item of "Image Ratio" is disable to adjust.
- 3) One of DCR, Color Boost, and Picture Boost functions is active, the other two function is turned off accordingly.

## Luminance

1



Press  (Menu) to display menu.

2



Press  or  to select  (Luminance), and press  to enter.

3



Press  or  to select submenu, press  to enter, and press  or  to adjust.

4



Press  to exit.



	Brightness	0-100	Backlight Adjustment
	Contrast	0-100	Contrast from Digital-register.
Eco mode	Standard		Standard Mode
	Text		Text Mode
	Internet		Internet Mode
	Game		Game Mode
	Movie		Movie Mode
	Sports		Sports Mode
Gamma	Gamma1		Adjust to Gamma1
	Gamma2		Adjust to Gamma 2
	Gamma3		Adjust to Gamma 3
DCR	Off		Disable dynamic contrast ratio
	On		Enable dynamic contrast ratio

## Image Setup

1



Press (Menu) to display menu.

2



Press or to select (Image Setup), and press to enter.

3



Press or to select submenu, press to enter, and press or to adjust.

4



Press to exit.

	Clock	0-100	Adjust picture Clock to reduce Vertical-Line noise.
	Phase	0-100	Adjust Picture Phase to reduce Horizontal-Line noise
	H.Position	0-100	Adjust the horizontal position of the picture.
	V.Position	0-100	Adjust the vertical position of the picture.

## Color Temperature



Press (Menu) to display menu.



Press or to select (Color Temperature), and press to enter.



Press or to select submenu, press to enter, and press or to adjust.



Press to exit.

	Warm	6500K	Recall Warm Color Temperature from EEPROM.
	Normal	7300K	Recall Normal Color Temperature from EEPROM.
	Cool	9300K	Recall Cool Color Temperature from EEPROM.
	sRGB		Recall SRGB Color Temperature from EEPROM.
	User	Red	Red Gain from Digital-register
		Green	Green Gain Digital-register.
		Blue	Blue Gain from Digital-register

## Color Boost



Press  (Menu) to display menu.

Press  or  to select  (Color Boost), and press  to enter.

Press  or  to select submenu, press  to enter, and press  or  to adjust.

Press  to exit.

	Full Enhance	on or off	Disable or Enable Full Enhance Mode
	Nature Skin	on or off	Disable or Enable Nature Skin Mode
	Green Field	on or off	Disable or Enable Green Field Mode
	Sky-blue	on or off	Disable or Enable Sky-blue Mode
	AutoDetect	on or off	Disable or Enable AutoDetect Mode
	Demo	on or off	Disable or Enable Demo

## Picture Boost

1



Press (Menu) to display MENU.

2



Press or to select (Picture Boost); and press to enter.

3



Press or to select submenu, press to enter, and press or to adjust.

4



Press to exit.

	Frame Size	14-100	Adjust Frame Size
	Brightness	0-100	Adjust Frame Brightness
	Contrast	0-100	Adjust Frame Contrast
	H. position	0-100	Adjust Frame horizontal Position
	V.position	0-100	Adjust Frame vertical Position
	Bright Frame	on or off	Disable or Enable Bright Frame

## OSD Setup

1



Press  (Menu) to display menu.

2



Press < or > to select  (OSD Setup), and press  to enter.

3



Press < or > to select submenu, press  to enter, and press < or > to adjust.

4



Press  to exit.

	OSD Setup		
	H.Position	0-100	Adjust the horizontal position of OSD
	V.Position	0-100	Adjust the vertical position of OSD
	Timeout	5-120	Adjust the OSD Timeout
	Transparency	0-100	Adjust the transparency of OSD
	Language		Select the OSD language

## Extra

1



Press (Menu) to display menu.

2



Press or to select (OSD Setup), and press to enter.

3



Press or to select submenu, press to enter, and press or to adjust.

4



Press to exit.

	Input Select	D-SUB	Select Analog Signal Source as Input
	Auto Config	yes or no	Auto adjust the picture to default
	Image Ratio	wide or 4:3	Select wide or 4:3 format for display
	DDC/CI	yes or no	Turn ON/OFF DDC/CI Support
	Off timer	0 to 24hrs	Select DC off time
	Information		Show the information of the main image and sub-image source

## Reset

1



Press (Menu) to display menu.

2



Press < or > to select (Reset), and press to enter.

3



Press < or > to select YES or NO.

4



Press to exit.

	Reset	yes or no	Reset the menu to default
--	-------	-----------	---------------------------

## Exit



Press  (Menu) to display menu.



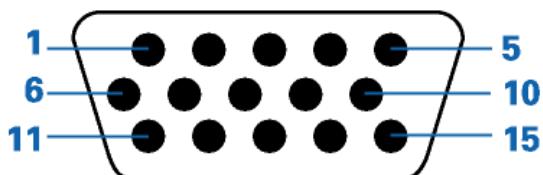
Press  or  to select  (Exit);  
and press  to exit.

	Exit	Exit the main OSD
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## 4. Input/Output Specification

### 4.1 Input Signal Connector

Analog connector



Pin Number	15-Pin Side of the Signal Cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	N.C.
5	Detect Cable
6	GND-R
7	GND-G
8	GND-B
9	+5V
10	Ground
11	N.C.
12	DDC-Serial data
13	H-sync
14	V-sync
15	DDC-Serial clock

### 4.2 Factory Preset Display Modes

STAND	RESOLUTION	HORIZONTAL FREQUENCY(kHz)	VERTICAL FREQUENCY(Hz)
VGA	640×480 @60Hz	31.469	59.940
VGA	640×480 @67Hz	35.000	66.667
VGA	640×480 @72Hz	37.861	72.809
VGA	640×480 @75Hz	37.500	75.000
Dos-mode	720×400 @70Hz	31.469	70.087
SVGA	800×600 @56Hz	35.156	56.250
SVGA	800×600 @60Hz	37.879	60.317
SVGA	800×600 @72Hz	48.077	72.188
SVGA	800×600 @75Hz	46.875	75.000
Mac-mode	832×624 @75Hz	49.725	74.551
XGA	1024×768 @60Hz	48.363	60.004
XGA	1024×768 @70Hz	56.476	70.069
XGA	1024×768 @75Hz	60.023	75.029
720P	1280×720 @60Hz	45	60.023
WSXGA	1600x900 @60Hz	60	60

## 4.3 Panel Specification

### 4.3.1 General Features

LM200WD3-TRA(C)2 is a Color Active Matrix Liquid Crystal Display with an integral Light Emitting Diode (LED) backlight system. The matrix employs a-Si Thin Film Transistor as the active element. It is a transmissive type display operating in the normally white mode. It has a 20.0 inch diagonally measured active display area with HD+ resolution (900 vertical by 1600 horizontal pixel array). Each pixel is divided into Red, Green and Blue sub-pixels or dots which are arranged in vertical stripes. Gray scale or the brightness of the sub-pixel color is determined with a 8-bit gray scale signal for each dot, thus, presenting a palette of more than 16,7M colors with Advanced-FRC(Frame Rate Control). It has been designed to apply the interface method that enables low power, high speed, low EMI. FPD Link or compatible must be used as a LVDS(Low Voltage Differential Signaling) chip. It is intended to support applications where thin thickness, wide viewing angle, low power are critical factors and graphic displays are important. In combination with the vertical arrangement of the sub-pixels, the LM200WD3-TRA2 characteristics provide an excellent flat panel display for office automation products such as monitors.

### 4.3.2 Display Characteristics

Active screen size	20.0 inches (508.05mm) diagonal
Outline Dimension	462.8(H) x 272.0(V) x 8.2(D) mm(Typ.)
Pixel Pitch	0.0922*RGB(H)mm x 0.2766(V)mm
Pixel Format	1600 horizontal By 900 vertical Pixels. RGB stripe arrangement
Interface	LVDS 2Port
Color depth	16.7M colors
Luminance, white	250 cd/m <sup>2</sup> ( Center 1Point, typ)
Viewing Angle (CR>10)	R/L 170(Typ.), U/D 160(Typ.)
Power Consumption	Total 14.55W(Typ.), (4.75 W@V <sub>LCD</sub> , 9.8 W@W/O Driver)
Weight	1050 g (Typ.)
Display operating mode	Transmissive mode, Normally White
Surface treatments	Hard coating (3H), Anti-glare treatment of the front polarizer

### 4.3.3 Optical Characteristics

#### Electrical characteristics

T<sub>a</sub> = 25°C

Parameter	Symbol	Values			Unit
		Min	Typ	Max	
<b>MODULE :</b>					
Power Supply Input Voltage	V <sub>LCD</sub>	4.5	5.0	5.5	Vdc
Permissive Power Input Ripple	V <sub>LCD</sub>	-	-	0.3	V
Power Supply Input Current	I <sub>LCD-MOSAIC(60Hz)</sub>	-	950	1235	mA
	I <sub>LCD-BLACK(60Hz)</sub>	-	1155	1500	mA
	I <sub>LCD-BLACK(75Hz)</sub>		-	1800	mA
Power Consumption	P <sub>LCD</sub>	-	4.75	6.18	Watt
Inrush current	I <sub>RUSH</sub>	-	-	3.0	A

#### LED bar Electrical characteristics

T<sub>a</sub> = 25°C

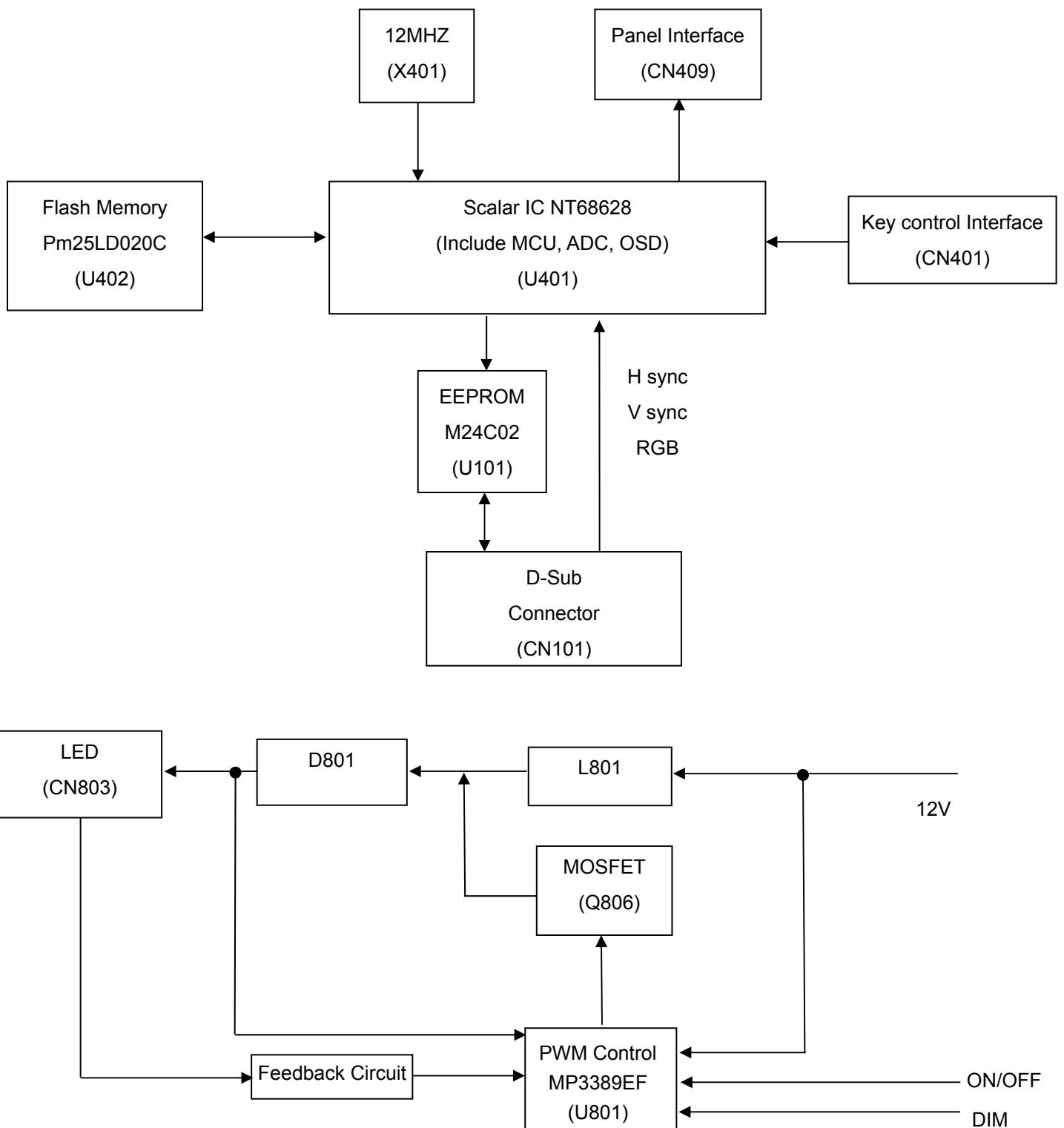
Parameter	Symbol	Condition	Values			Unit
			Min.	Typ.	Max.	
<b>LED :</b>						
LED String Current	I <sub>s</sub>		-	60	65	mA
LED String Voltage	V <sub>s</sub>		-	54.4	59.5	V
Power Consumption	P <sub>Bar</sub>		-	9.8	10.7	Watt
LED Life Time	LED_LT		30,000	-	-	Hrs

#### 4.3.4 Optical Characteristics

(Ta= 25°C, V<sub>LCD</sub>=5.0V, fv=60Hz, D<sub>CLK</sub>= 77.0MHz, Is=60mA)

Parameter		Symbol	Values			Units
			Min	Typ	Max	
Contrast Ratio		CR	700	1000	-	
Surface Luminance, white		L <sub>WH</sub>	200	250	-	cd/m <sup>2</sup>
Luminance Variation		δ <sub>WHITE</sub>	9P	75	-	%
Response Time	Rise Time	Tr <sub>R</sub>		-	1.1	2.6 ms
	Decay Time	Tr <sub>D</sub>		-	3.9	7.4 ms
Color Coordinates [CIE1931]		RED	Rx	Typ -0.03	0.626	
			Ry		0.346	
		GREEN	Gx		0.335	
			Gy		0.624	Typ +0.03
		BLUE	Bx		0.154	
			By		0.053	
		WHITE	Wx		0.313	
			Wy		0.329	
Viewing Angle (CR>5)						
	x axis, right(ϕ=0°)	θr	75	88		Degree
	x axis, left (ϕ=180°)	θl	75	88		
	y axis, up (ϕ=90°)	θu	70	85		
	y axis, down (ϕ=270°)	θd	70	85		
Viewing Angle (CR>10)						
	x axis, right(ϕ=0°)	θr	70	85		Degree
	x axis, left (ϕ=180°)	θl	70	85		
	y axis, up (ϕ=90°)	θu	65	75		
	y axis, down (ϕ=270°)	θd	75	85		
Crosstalk					1.5	%
Luminance uniformity - Angular dependence (TCO'03)		LR	-	-	1.7	
Color grayscale linearity		Δu'v'		0.018		

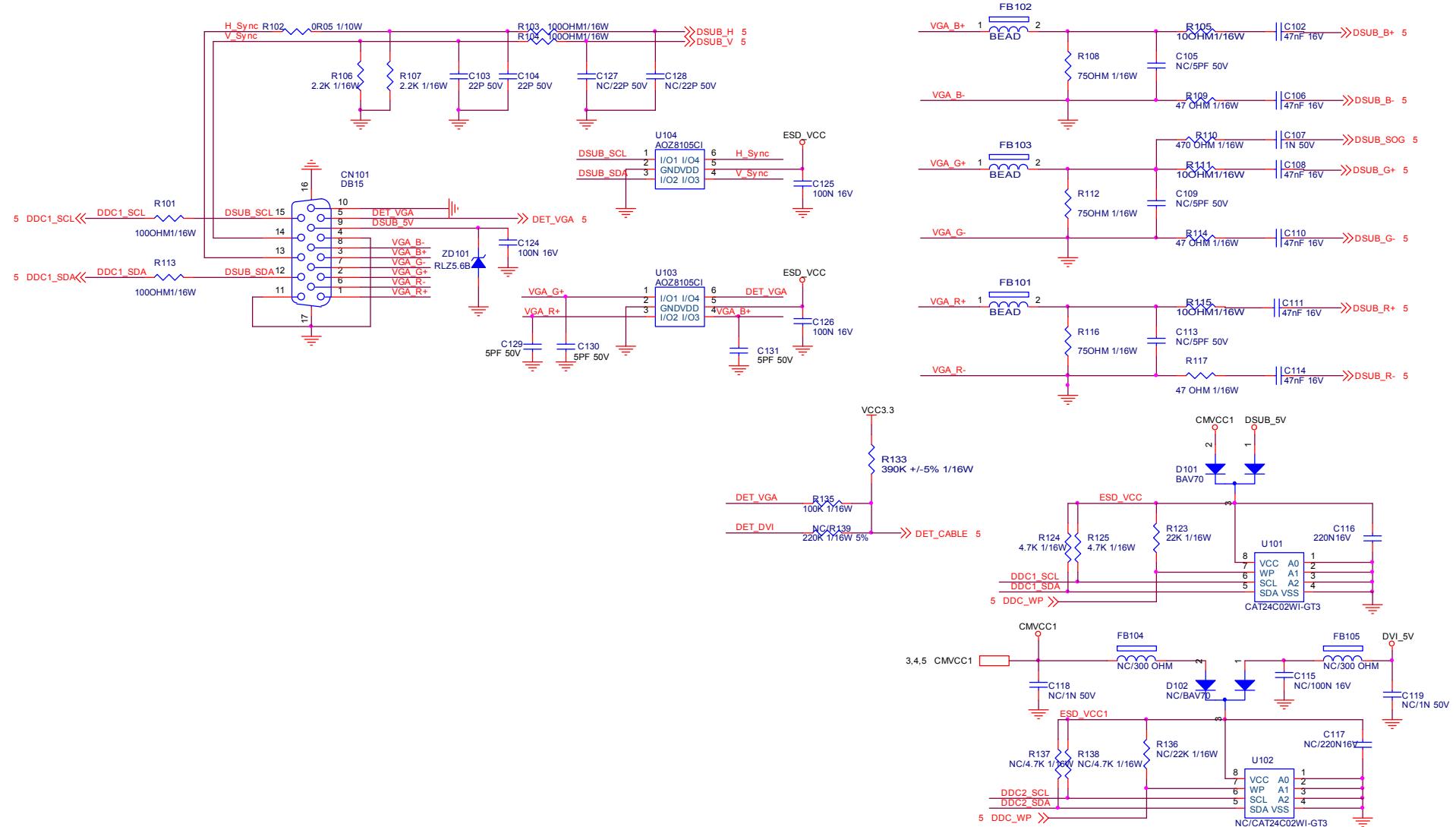
## 5. Block Diagram Main Board



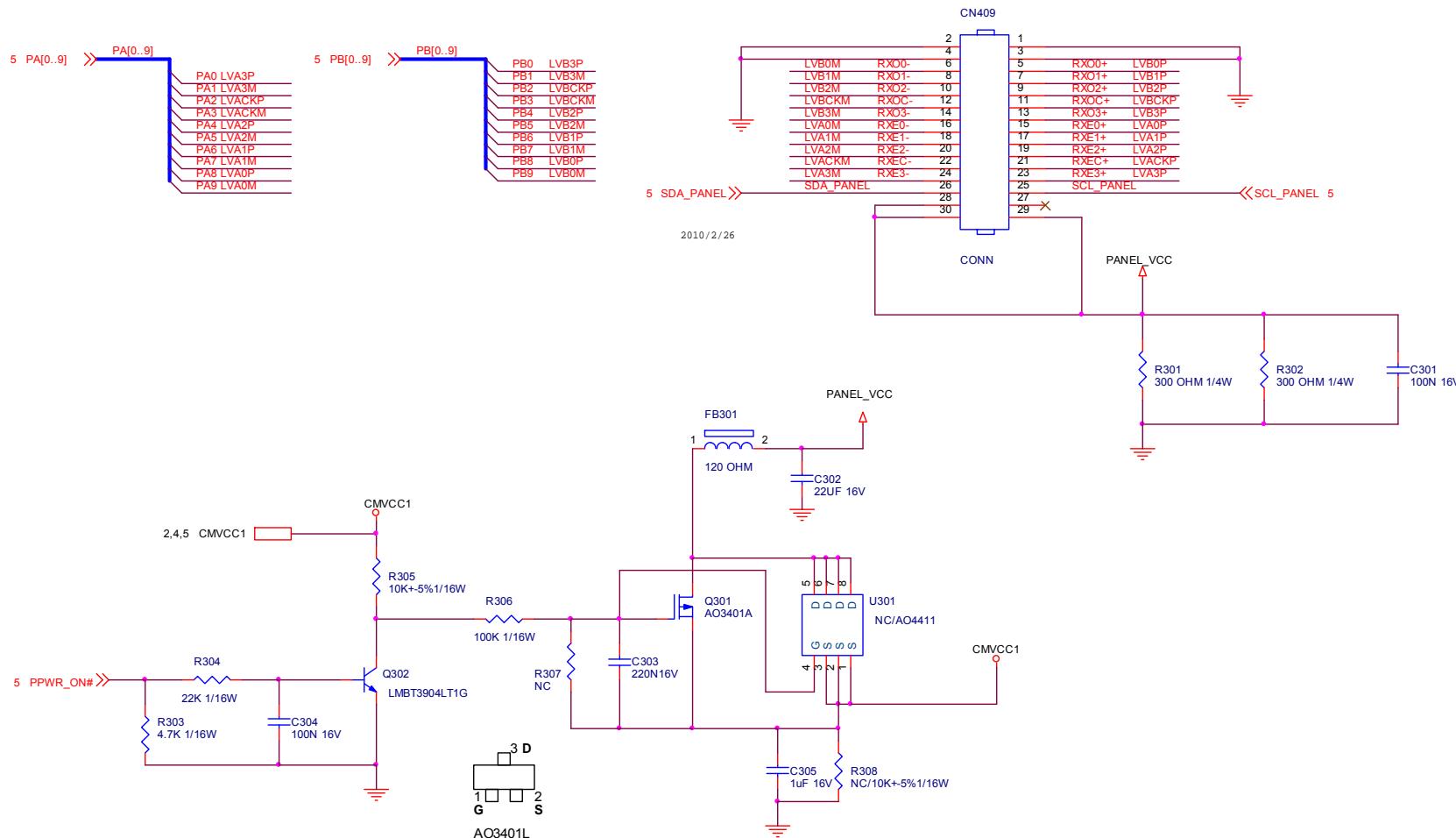
## 6. Schematic

### 6.1 Main Board

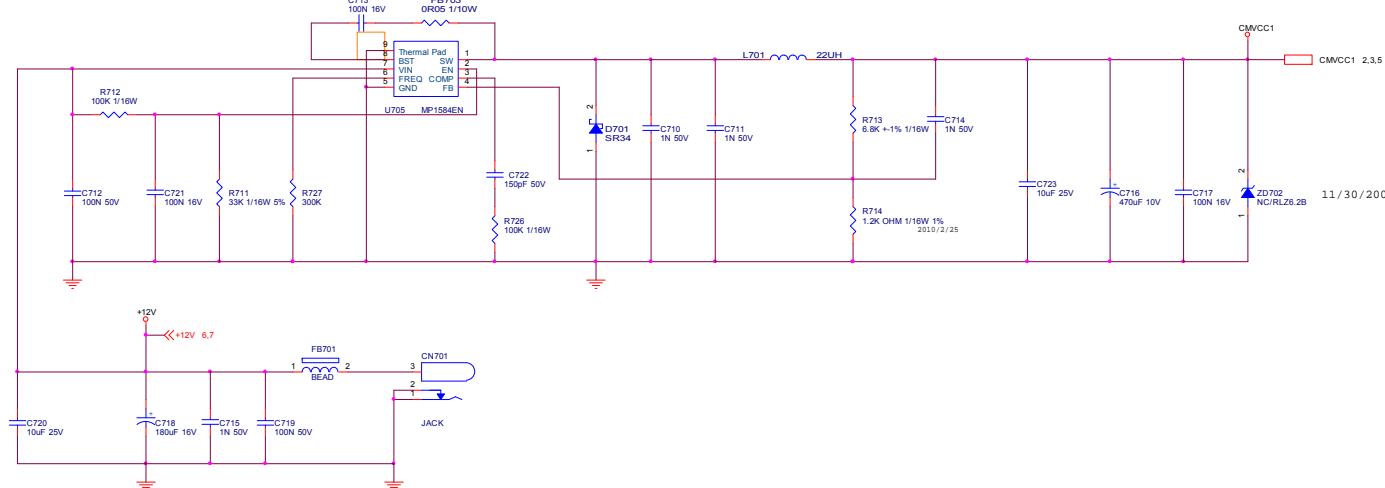
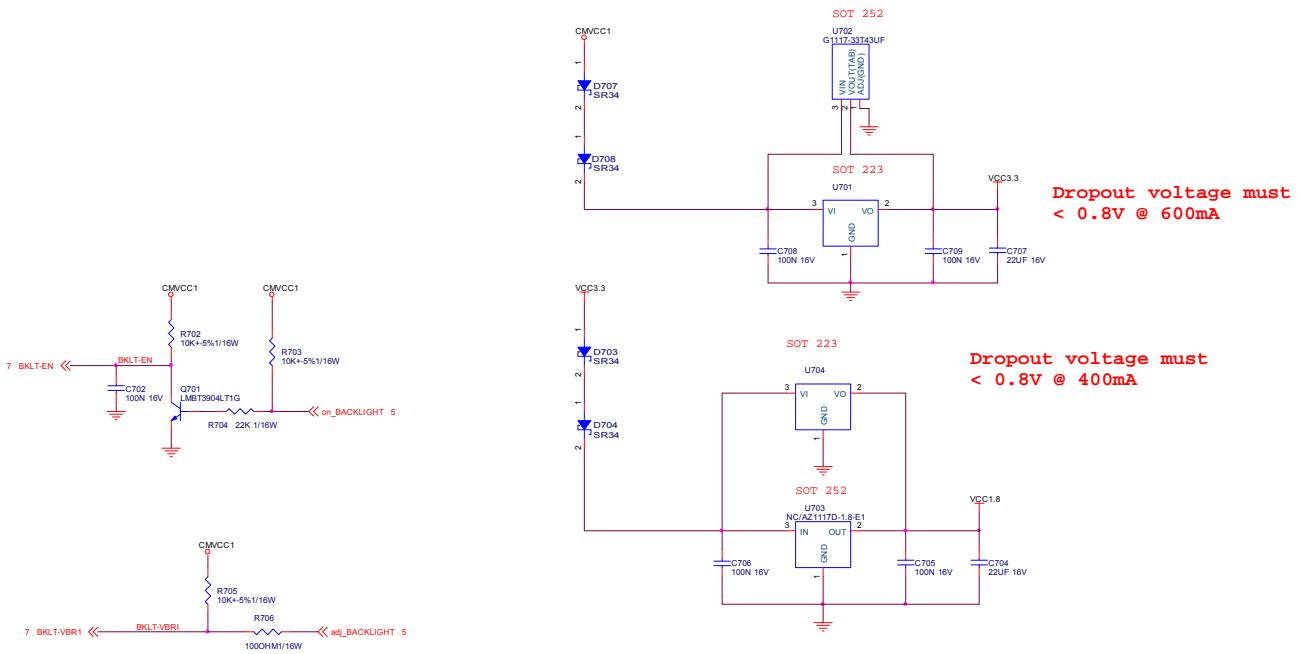
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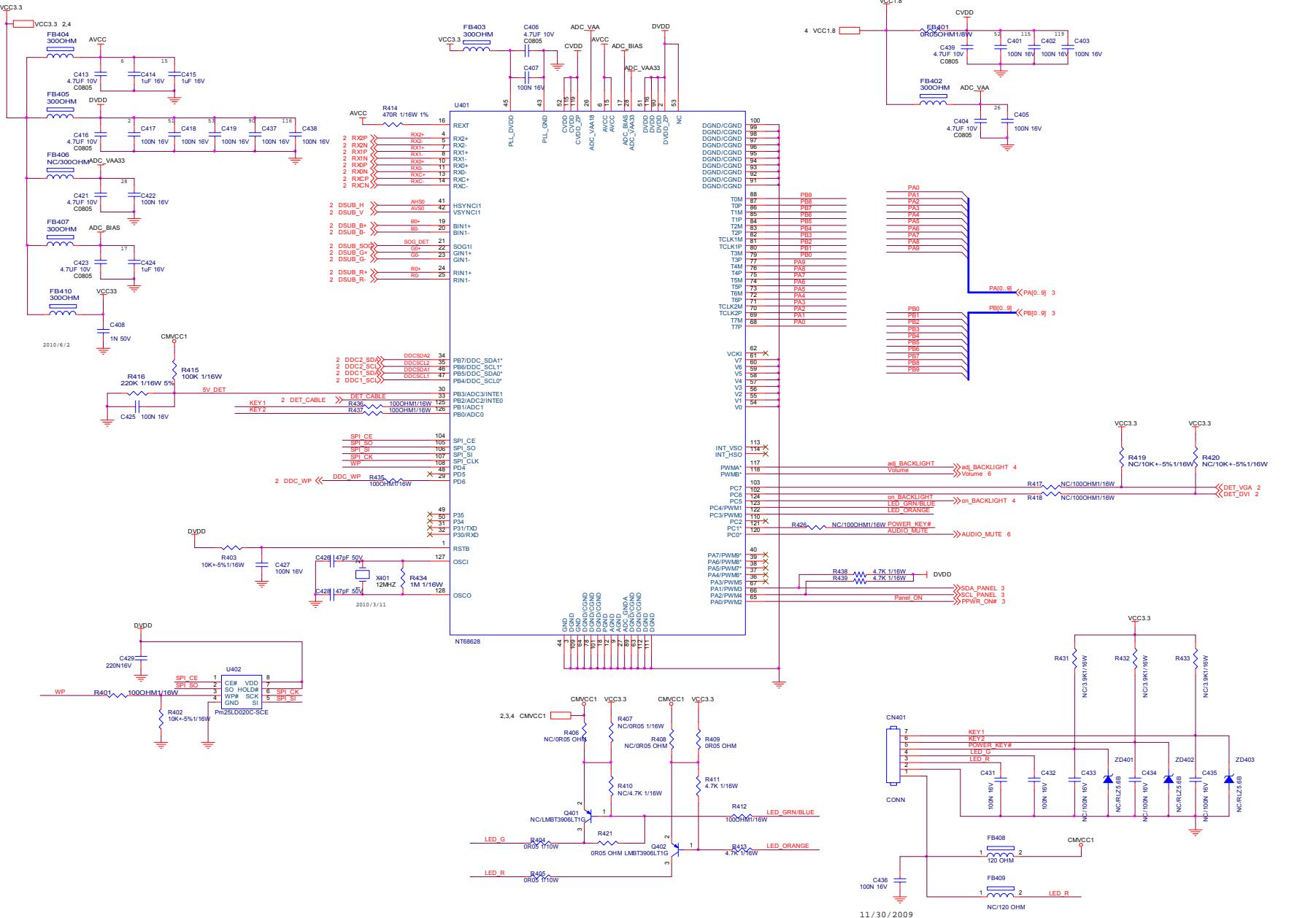
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	AOC	Size	B
G4134-M0D-000-0040-6-100613	TPV MODEL		Rev	B
Key Component	PCB NAME		称爹	
Date Sunday, June 13, 2010	Sheet	2 of 7		



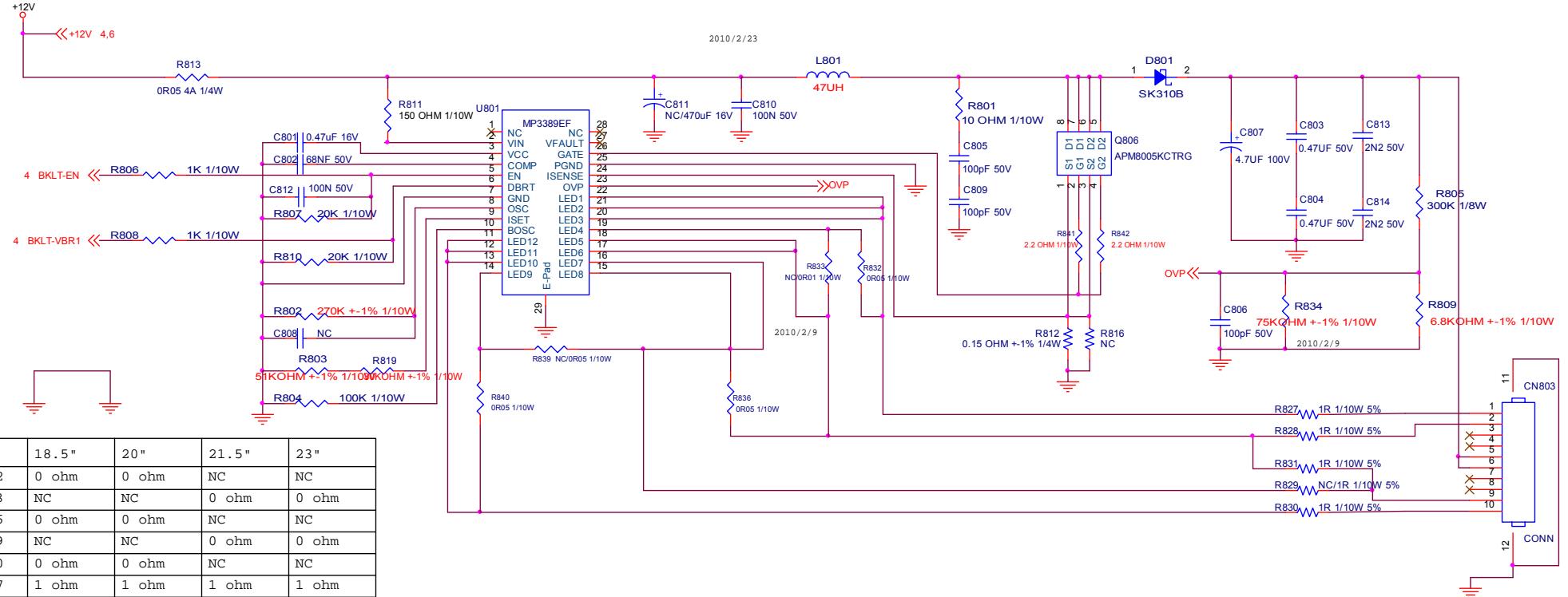
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	AOC	Size	B
结隔瓜纲膜 G4134-MOD-000-040-6-100613	TPV MODEL		Rev	B
Key Component 3.0 OUTPUT	PCB NAME			称爹
Date Sunday, June 13, 2010	Sheet	3 of 7		



TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	AOC	Size	C
拓维 电源	G4134-MDD-000-0040-6-100813	TPV MODEL	Rev	B
Key Component	4.0 POWER	PCB NAME		
Date	Sunday, June 13, 2010	Sheet	4 of 7	称重



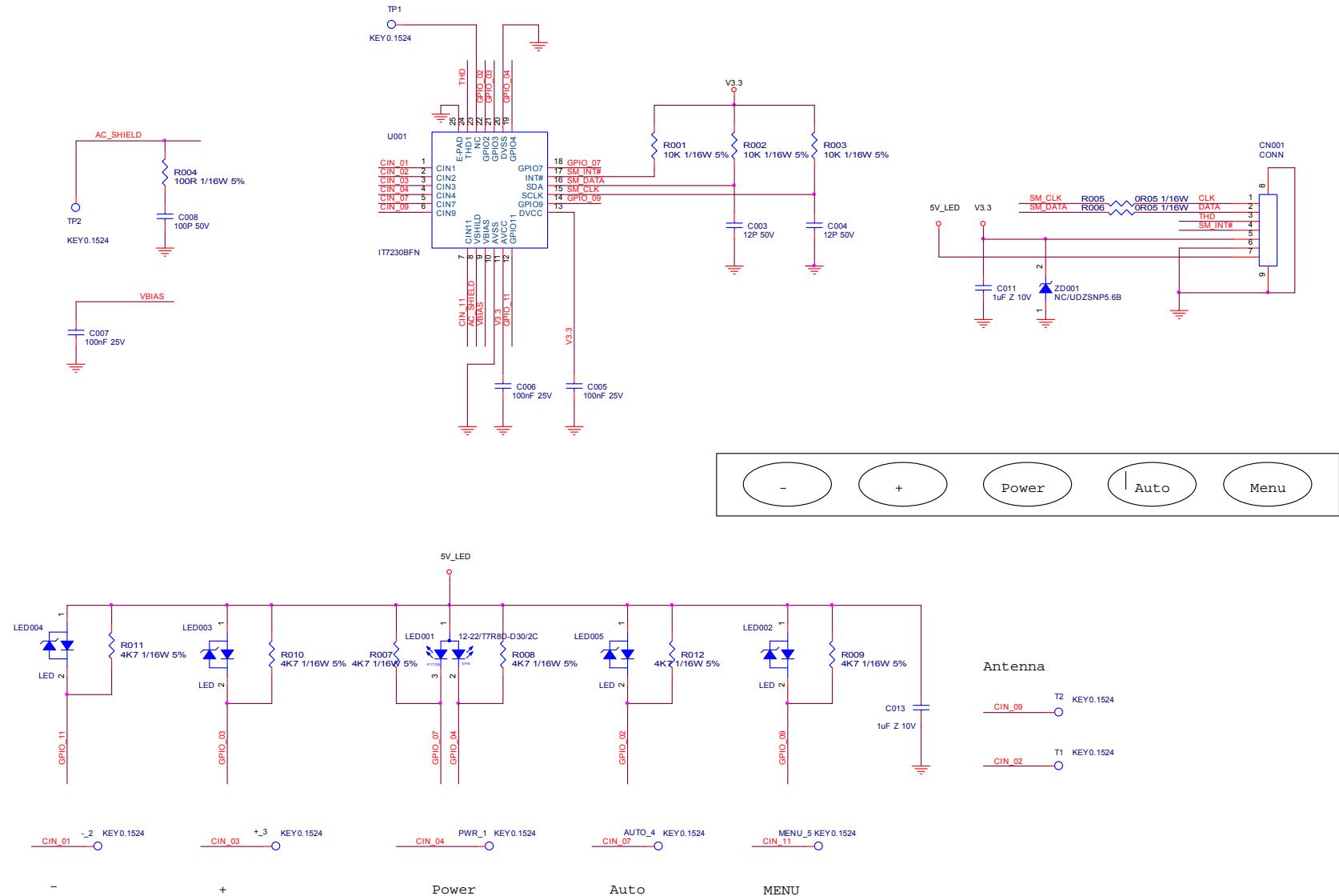
TPV (Top Victory Electronics Co., Ltd.)	ITEM MODEL	AOC	Size	C
晶圆直供	G1434-MOD-000-0040-6-100613	TPV MODEL		
Key Component	5.0 SCALER	PCB NAME		
Date	Sunday, June 13, 2010	Sheet	5 of 7	称重



TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL	AOC	Size	Custom
话筒	G4134-M0D-000-0040-6-100613	TPV MODEL		Rev	B
Key Component	7.0.CONVERT	PCB NAME			
Date	Sunday, June 13, 2010	Sheet	7 of 7	称重	

## 6.2 Key Board

715G4164K01000004F

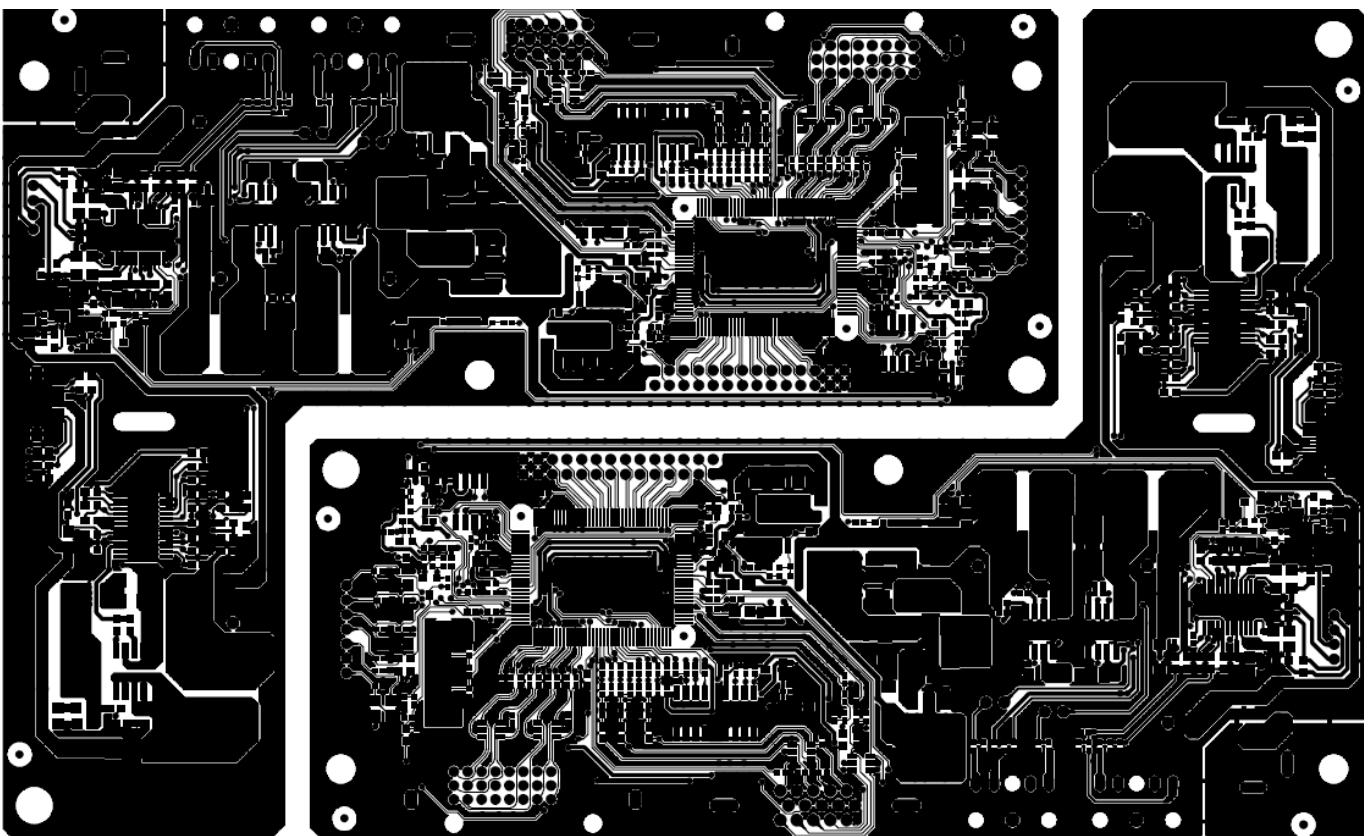
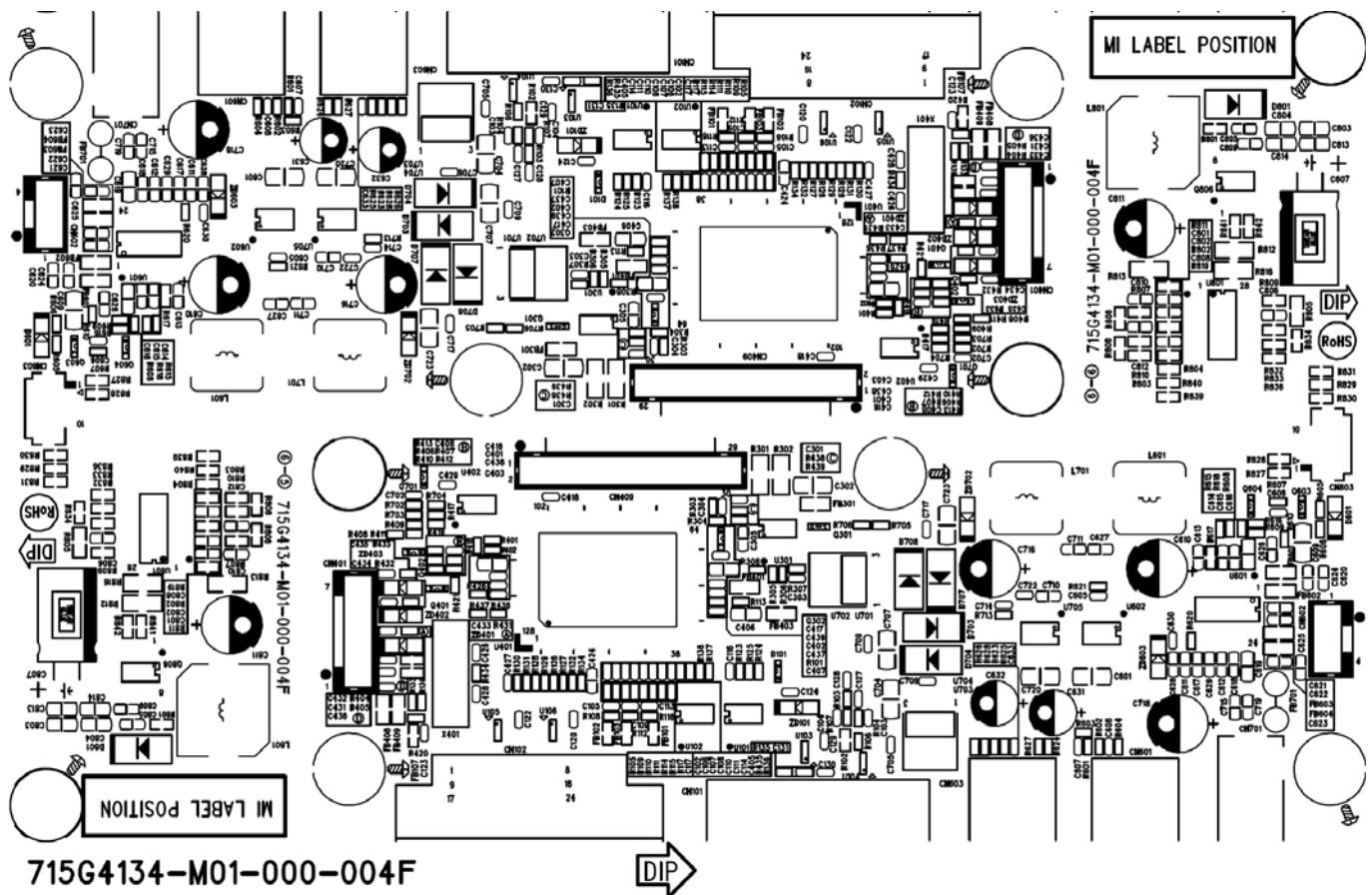


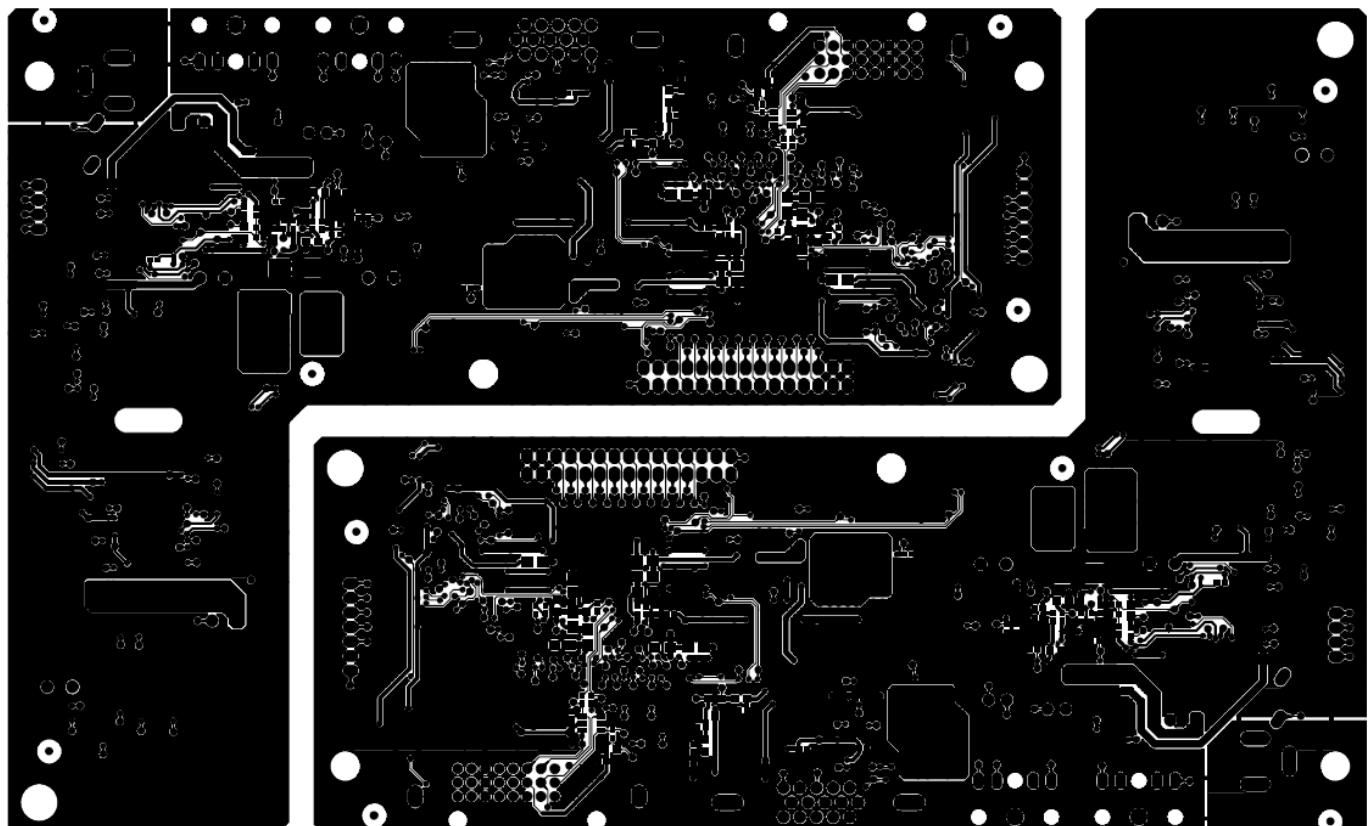
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	Size	A3
715G4164-K0C-000-0040_20100420.DSN	TPV MODEL	Rev	C
2.0 Touch key	PCB NAME	715G4164-K0C	
Tuesday, April 20, 2010	Sheet	2 of 2	称多

## 7. PCB Layout

### 7.1 Main Board

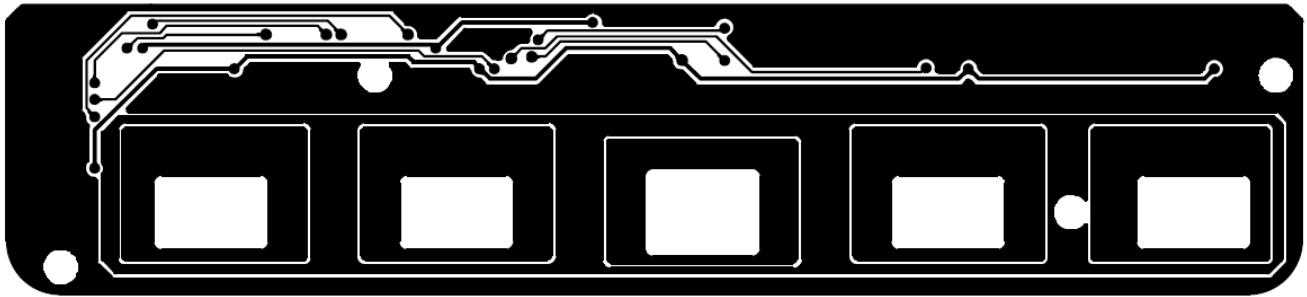
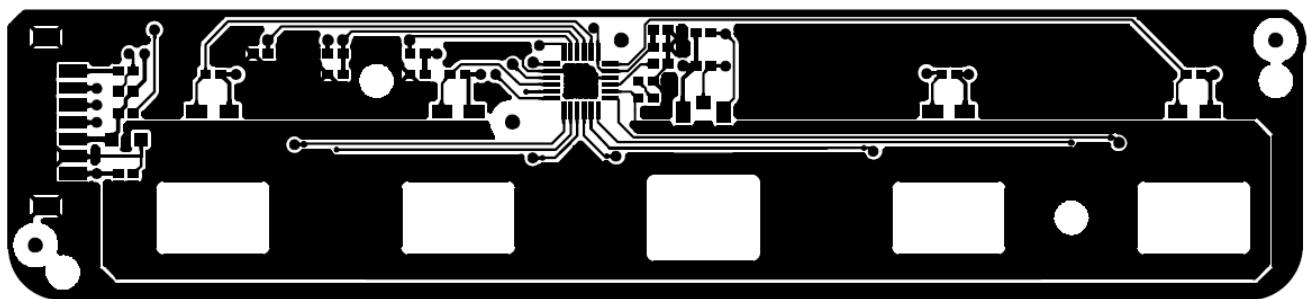
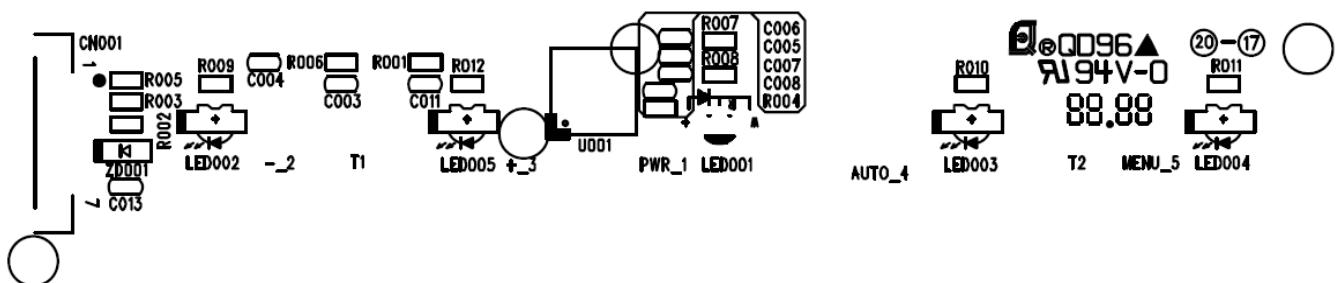
715G4134M01000004F





## 7.2 Key Board

715G4164K01000004F



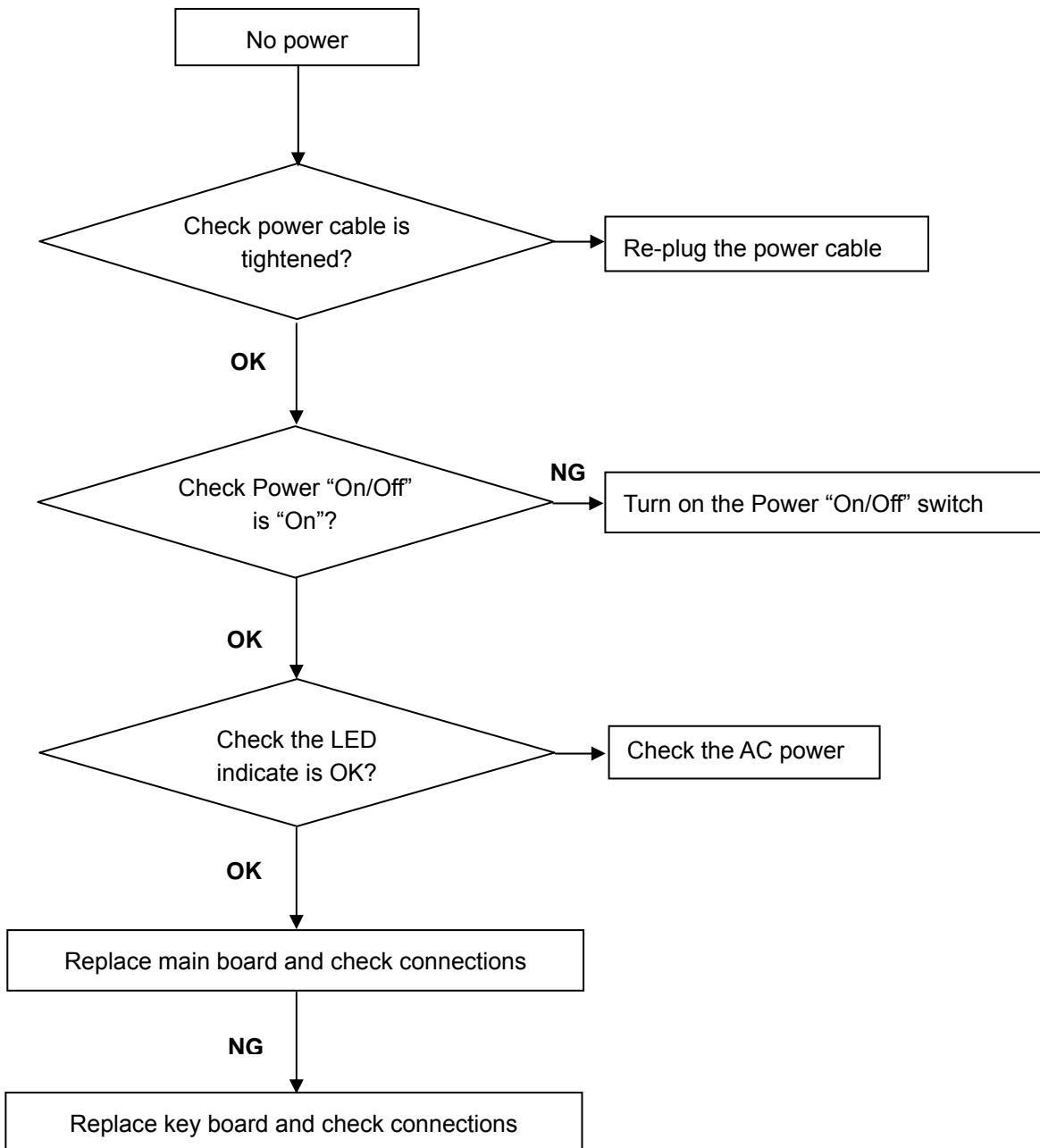
## **8. Maintainability**

### **8.1 Equipments and Tools Requirement**

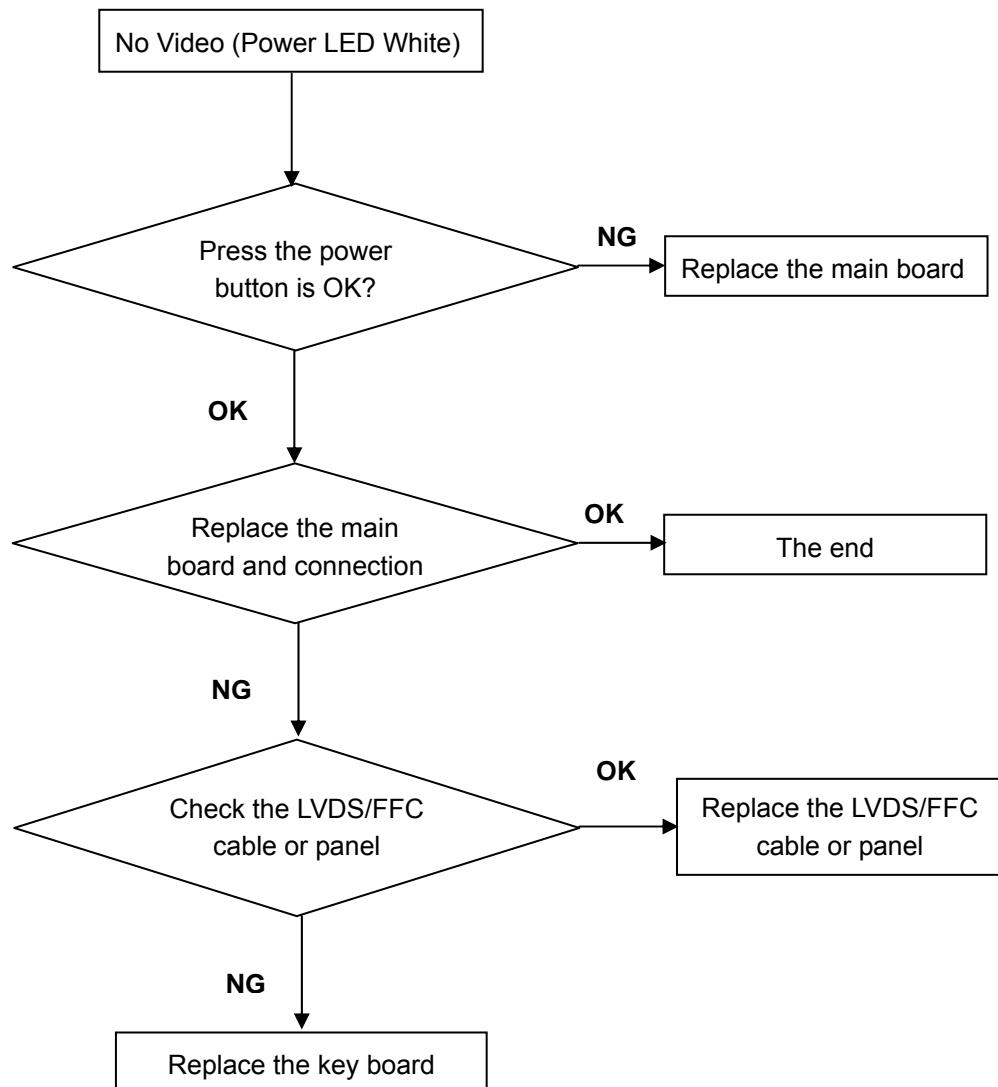
1. Voltmeter.
2. Oscilloscope.
3. Pattern Generator.
4. DDC Tool with an IBM Compatible Computer.
5. Alignment Tool.
6. LCD Color Analyzer.
7. Service Manual.
8. User Manual.

## 8.2 Trouble Shooting

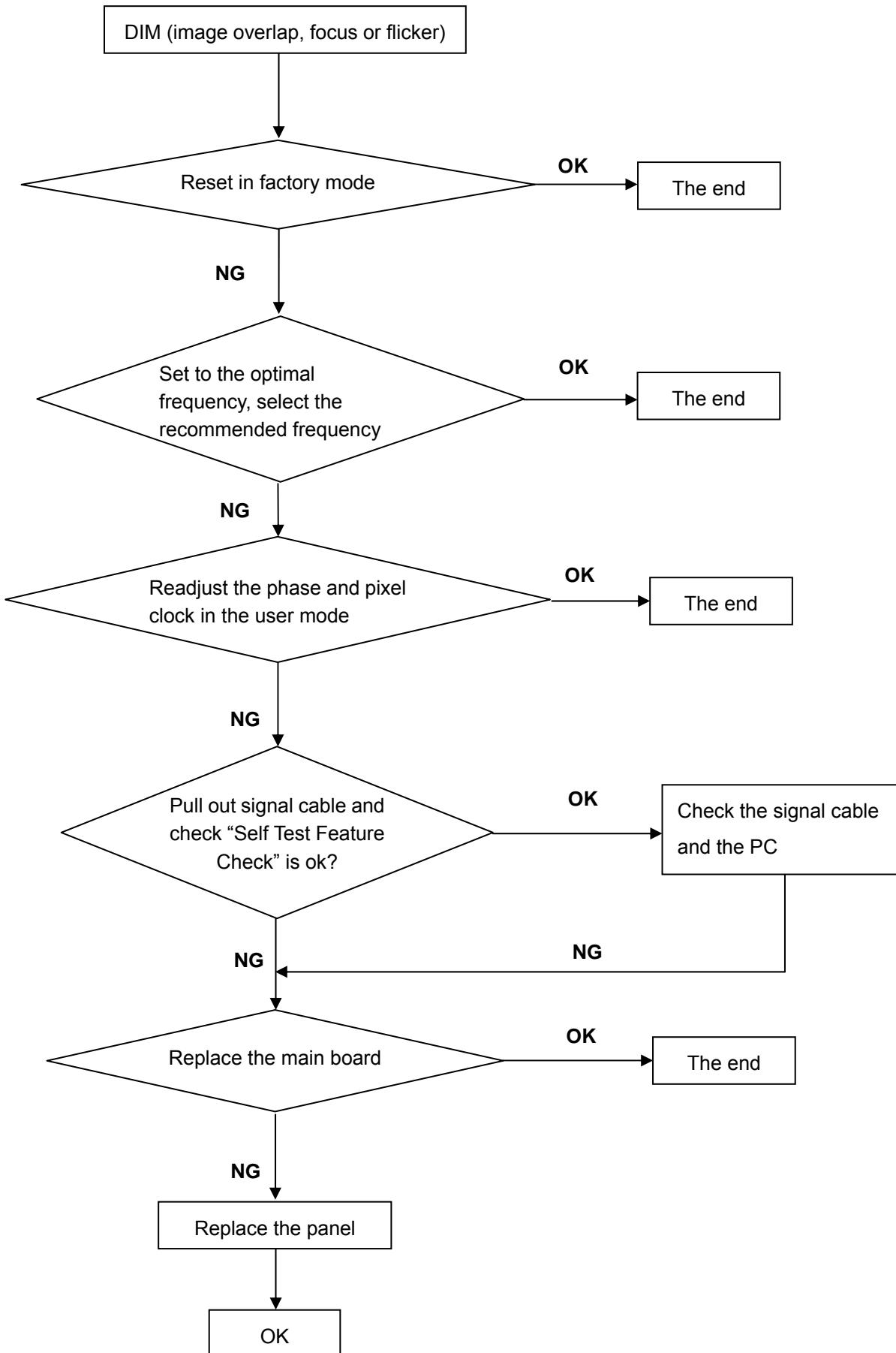
### 1. No Power



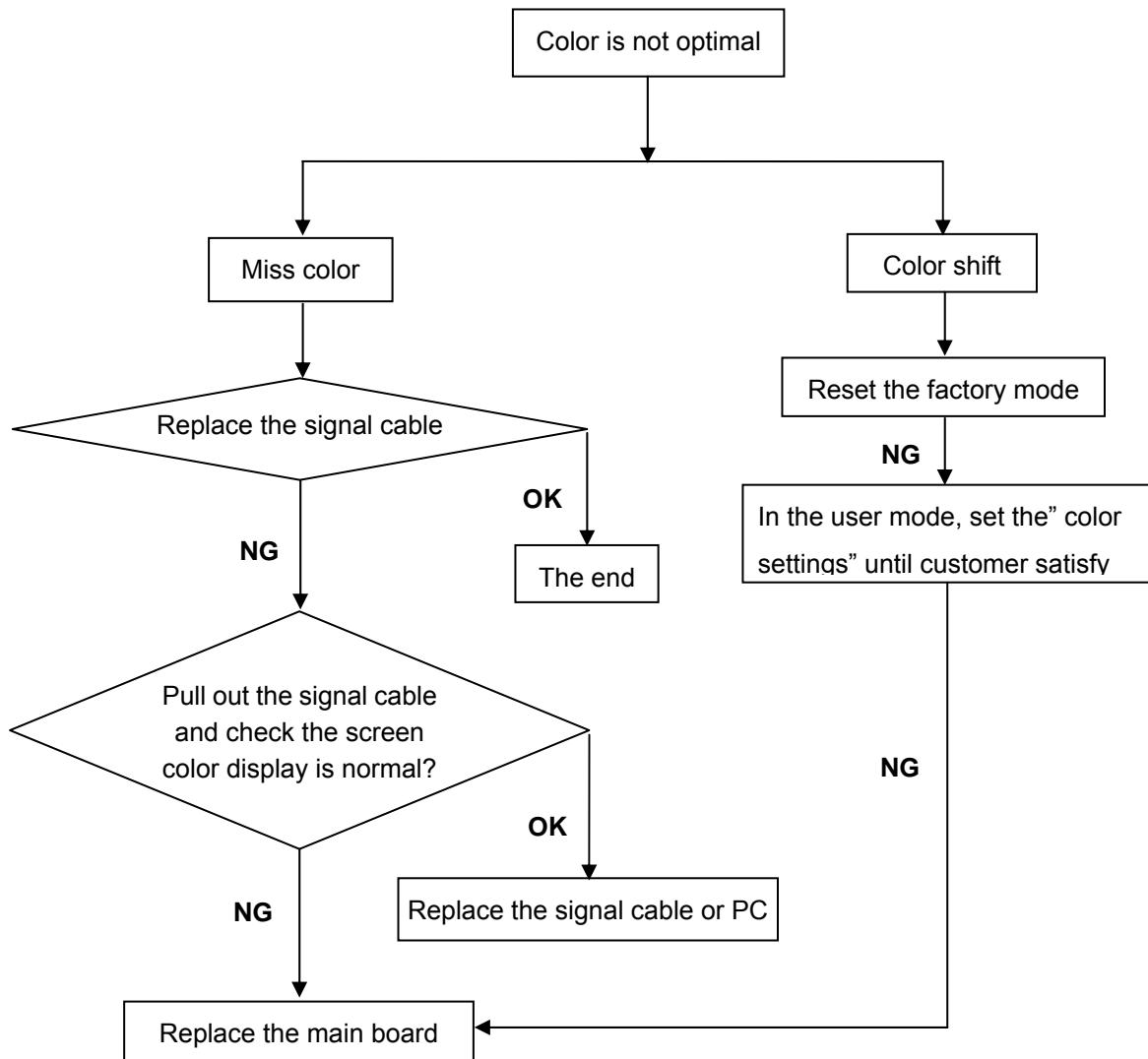
## 2. No Video (Power LED White)



### 3. DIM



#### 4. Color is not optimal



## 9. White- Balance, Luminance Adjustment

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

How to setting MEM channel you can reference to chroma 7120 user guide or simpl 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 (6500K):

Warm color temp. parameter is  $x = 313 \pm 30$ ,  $y = 329 \pm 30$

#### B. MEM.CHANNEL 4 Normal (7300K):

Normal color temp. parameter is  $x = 302 \pm 30$ ,  $y = 318 \pm 30$

#### C. MEM.CHANNEL 9 Cool (9300K):

Cool color temp. parameter is  $x = 283 \pm 30$ ,  $y = 297 \pm 30$

#### D. MEM.CHANNEL 10 (sRGB color):

sRGB color temp. parameter is  $x = 313 \pm 30$ ,  $y = 329 \pm 30$

### 3. Enter into the factory mode

Turn off the power, press two direction keys and turn the power on. Then press the “MENU” button. The factory OSD will appear.

### 4. 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  $x = 313 \pm 30$ ,  $y = 329 \pm 30$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reachedthe value G=100
6. Adjust the BLUE 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 (7300K) 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  $x = 302 \pm 30$ ,  $y = 318 \pm 30$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reachedthe value G=100
6. Adjust the BLUE 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

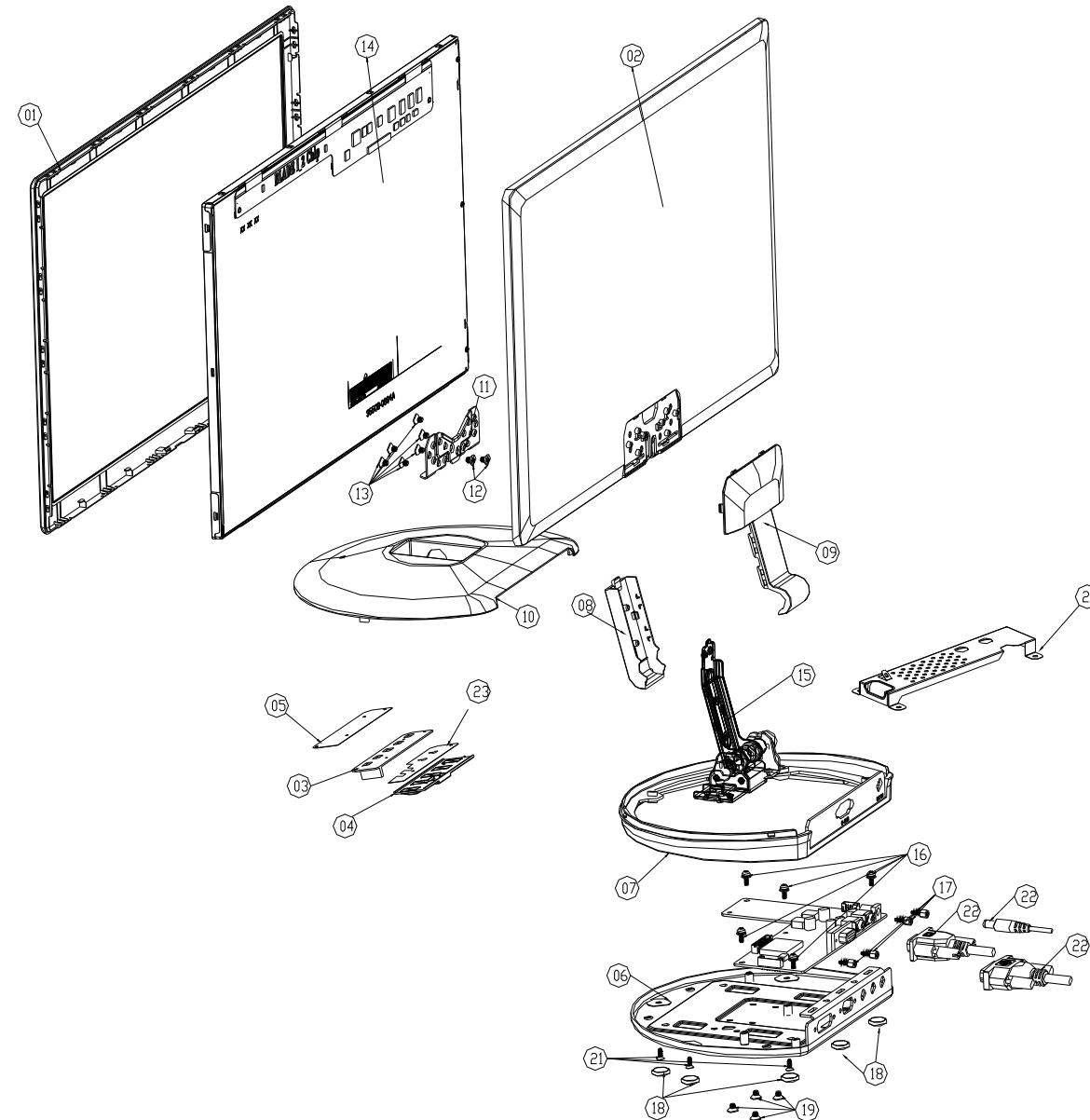
1. Switch the Chroma-7120 to **RGB-Mode** (with press “MODE” button)
2. Switch the MEM. Channel to Channel 9 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show  $x = 283 \pm 30$ ,  $y = 297 \pm 30$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value G=100
6. Adjust the BLUE 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 10 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show  $x = 313 \pm 30$ ,  $y = 329 \pm 30$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reachedthe value G=100
6. Adjust the BLUE 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



No.	Description	No.	Part No.	Description
1	BEZELL20W-TB1-TBP1	12	0M1G-940--5125	SCREW(HINGE /TILT SUPPORT BRACKET)
2	REAR COVER	13	0M1G-140--6125	SCREW(TILT SUPPORT BRACKET/ REAR COVER)
3	KEY BOARD	14		PANEL
4	LENS	15		HINGE_ASS'Y
5	WASHER	16	0M1G1730--6120	SCREW(MAIN BOARD/ SHIELD_MAIN_BASE)
6	SHIELD_MAIN_BASE	17		SCREW(FOR SIGNAL CONNECTOR)
7	BASE TRIM	18		FOOT PAD
8	HINGE FRONT COVER	19	0M1G-140--8125	SCREW(SHIELD_MAIN_BASE / HINGE)
9	HINGE BACK COVER	20	N/A	N/A
10	BASE COVER-TOP	21	0Q1G-140-10120	SCREW(BASE/ SHIELD_MAIN_BASE)
11	TILT SUPPORT BRACKET	22	N/A	N/A
		23		3M TAPE
		24		SHIELD COVER

## 11. BOM List

Note: The parts information listed below are for reference only, and are subject to change without notice. Please go to [http://cs\(tpv.com.cn/hello1.asp](http://cs(tpv.com.cn/hello1.asp) for the latest information.

TAAJNY2BZ3K2NNF.LF

Location	Part No.	Description	Remark
	040G-58162435A	P/N LABEL FOR MANUAL PE BAG	
	040G-581689-4A	BARCODE LABEL FOR 1	
	052G---1207--A	CONDUCTIVE TAPE 45MM *25MM *0.08MM	
	052G---1211--B	CONDUCTIVE TAPE 85MM *40MM *0.09MM	
	052G---2191--A	PAPER TAPE	
	052G6019--1	INSULATING TAPE	
	085G-583576	GASKET_ELECTRIC	
	089G-725HAA-DB	D-SUB CABLE	
	089G404A15N-IS	AC POWER CORD 1500MM EUROPE REG.	
E09502	095G176W-10572	FFC CABLE 10PIN 543MM 0.5MM	
	S95G176T10572	LVDS ASS'Y	2 <sup>nd</sup> source
	095G176J-10572	FFC CABLE 10PIN 543MM 0.5MM	2 <sup>nd</sup> source
E09503	095G8014-7D605	HARNESS 7P-7P(A1253HA HR) 120MM	
	095G8014-7L605	WIRE HARNESS 7P-7P(A1253HA HR) 120MM	2 <sup>nd</sup> source
E09501	095G8018-3DJ48	LVDS CABLE 30P-30P(2004) 430MM	
	095G8018-3LJ48	LVDS CABLE 30P-30P(2004) 430MM	2 <sup>nd</sup> source
	0M1G-140--6125	SCREW	
	0M1G-140--8125	SCREW	
	0M1G-940--5125	.CREW	
	0M1G1730--6120	SCREW,42-D020523	
	0Q1G-140-10120	SCREW	
	708GA09801S	AOC PAPER SLIPSHEET40(1680)	
	708GA098-CP	AOC 40(1596)	
	Q50G---4-10	TIE (Y1900221)	
	Q52G---1185-99	BIG CARTON TAPE FOR AOC	
	750GMT200W3A21N000	PANEL LM200WD3-TRA2 FQ LTD	
	2436L-1634A	LM200WD3-TRA2-TF1-A0	
	3110T-0705A	GALVALUME, T=0.3, LM200WD3-TRA1-TF1-A0	
	3850L-0088A	ID, YUPO, 78X37	
	4296L-0284A	PMP-P2 100-520U-13, 5U-C60 BLACK A600, 180X7X0.45	
	6060L-1840A	LM200WD3-TRA2-TF1-A0	
	6061L-1514A	LM200WD3-TRA1-T11	
	6871L-2343A	SOURCE, SINGLE, LM200WD3-TRA2-TF1-A0	
C89	0CH2102K562	1NF 50V K X 1608 R/TP	

C65,C66,C91	0CH2103K562	10NF, K, 50V, X7R, 0.9MM, 1608, R/TP	
C61,C77	0CH2104K562	0.1UF 50V K X7R 1608 R/TP	
C70,C71,C86	0CH2223H562	22NF 25V K X 1608 R/TP	
C10,C3,C5,C7,C8	0CH2A-0007A	1U F, 10 VOLT, K PER, X5R(JB), 1608 R/TP, T=0.9(MAX)	
C11,C12,C13, C73,C74	0CH2A-0011A	10U F, 16 VOLT, K PER, X5R(JB), 3216 R/TP, T=0.95(MAX)	
C1,C141,C142,C143, C144,C145,C146,C151, C156,C41,C42,C43, C44,C45,C46,C47,C48, C51,C52,C53,C54,C76, C87,C98	0CH2A-0015A	1UF, K, 25V, X5R, 0.9MM, 1608, R/TP	
C63,C64	0CH2A-0019A	68N F, 50 VOLT, K PER, X7R(JB), 1608 R/TP, T=0.9(MAX)	
C161,C164,C166,C170, C62,C68,C69,C78,C79, C80,C83,C84	0CH2A-0026A	10U F, 25 VOLT, K PER, X5R(JB), 3225 R/TP, T=1.0(MAX)	
C4,C6,C9	0CH2A-0068A	10 VOLT, X7R(JB), K %, 1005 R/TP, 0.1U F, T=0.55 MAX	
C30	0CH5681K412	680PF 50V J NP0 1608 R/TP	
D1,D2,D3	0DHZL-0008B	BAV99-7-05-F, DIODES, SOT-23, R/TP	
ZD1	0DHZL-0061A	SDZ6V2D, AUK, SOD-323, R/TP	
D4	0DHZL-0095A	RB050M-30, ROHM, PMDU, R/TP	
F1	0FFST-0002A	F0603FA2500V032T, AEM, 2.5, 32 VOLT, 1.6X0.8X0.8, SMT, CERAMIC, UL/CSA	
U3	0IDIL-0002A	AP7167-FNG-7, DIODES, ADJUST_3.3V, 1.2A, DFN3030-10, R/TP, 10	
U2	0ISKL-0001A	S-24CL04A0I-T8T1GE, SEIKO INSTRUMENTS, 4K, 4MS (TYP), TSSOP, R/TP, 8	
US1	0ISML-0007A	SM4025, SILICON MITUS, MONITOR, BOOST+L/S(GPM)+OP-AMP+PVCOM+DISCHA RGING,	
UC1	0ITLL-0043B	TL2334ML_B, TLI, LVDS, 6/8, 2, MINI-LVDS, 6, 1, DRD, GIP, AFRC, DGA, VNC, ODIN3_B,	
L1	0LCAA-0069A	TNI8016-100M, DACOWELL, 10UH, M20, 2.1A, 0.093, 8.0X11.0X1.8 (1.2MM,IN-BOARD), R/TP	

R10,R107,R118,R132, R133,R136,R142,R17, R177,R180,R181,R182, R183,R19,R31,R5,R6, R72,R75,R77,R81,R97	0RH0000C622	0 OHM 1/16W 1608 5% D R/TP	
R30	0RH0102C422	10 OHM 1/16W 1608 1% D R/TP	
R191,R193	0RH0221C622	2.2 OHM 1/16W 1608 5% D R/TP	
R106	0RH0302C422	30 OHM 1/16W 1608 1% D R/TP	
R194,R195	0RH1000C422	100 OHM 1/16W 1608 1% D R/TP	
R4,R83	0RH1001C422	1K OHM 1/16W 1608 1% D R/TP	
R16,R22	0RH1002C422	10K OHM 1/16W 1608 1% D R/TP	
R41,R44	0RH1200C422	120 OHM 1/16W 1608 1% D R/TP	
R94	0RH1201C422	1.2K OHM 1/16W 1608 1% D R/TP	
R13	0RH1302C422	13K OHM 1/16W 1608 1% D R/TP	
R115,R116	0RH1502C422	15K OHM 1/16W 1608 1% D R/TP	
R777	0RH1602C422	16K OHM 1/16W 1608 1% D R/TP	
R55,R61,R95	0RH2001C422	2K OHM 1/16W 1608 1% D R/TP	
R64	0RH2201C422	2.2K OHM 1/16W 1608 1% D R/TP	
R103	0RH2202C422	22K OHM 1/16W 1608 1% D R/TP	
R137	0RH2400C422	240 OHM 1/16W 1608 1% D R/TP	
R20,R21,R65,R68	0RH2401C422	2.4K OHM 1/16W 1608 1% D R/TP	
R62,R63	0RH2701C422	2.7K OHM 1/16W 1608 1% D R/TP	
R105	0RH2702C422	27K OHM 1/16W 1608 1% D R/TP	
R66	0RH3000C422	300 OHM 1/16W 1608 1% D R/TP	
R51	0RH3001C422	3K OHM 1/16W 1608 1% D R/TP	
R104	0RH3002C422	30K OHM 1/16W 1608 1% D R/TP	
R78	0RH3601C422	3.6K OHM, 1/16W(1608), 1 PER, D-TYPE, R/TP	
R45,R48	0RH3900C422	390 OHM 1/16W 1608 1% D R/TP	
R50	0RH4301C422	4.3K OHM 1/16W 1608 1% D R/PT	
R3	0RH4701C422	4.7K OHM 1/16W 1608 1% D R/TP	
R117	0RH5100C422	510 OHM 1/16W 1608 1% D R/TP	
R778,R79	0RH5101C422	5.1K OHM 1/16W 1608 1% D R/TP	
R42,R74	0RH5601C422	5.6K OHM 1/16W 1608 1% D R/TP	
R82	0RH5602C422	56K OHM 1/16W 1608 1% D R/TP	
R46,R54,R99	0RH6201C422	6.2K OHM 1/16W 1608 1% D R/TP	
R70,R73,R84	0RH6800C422	680 OHM 1/16W 1608 1% D R/TP	
R85	0RH6801C422	6.8K OHM 1/16W 1608 1% D R/TP	
R49,R52,R69	0RH7500C422	750 OHM 1/16W 1608 1% D R/TP	
R15	0RH8201C422	8.2K OHM 1/16W 1608 1% D R/TP	

R53,R56	0RH9100C422	910 OHM 1/16W 1608 1% D R/TP	
AR3,AR4,AR5,AR6	0RHZL10005A	100OHM 5 1/16W 3216 R/TP	
FL1,FL2,FL3	6200L-J015A	BLM18PG300SN1D	
CN1	6630L-0157B	FI-XB30SL-HF10, JAE, 30 PIN, 1 MM, ANGLE, SN, USER LOCK	
	6870S-1125A	LM200WD3-TRA2-TF1-A0, 2L, 0.6T, 415.8 X 39.0, 4, N, 72, SOURCE	
	6091L-1300B	LM200WD3-TRA2-TF1-A0	
	3022L-1151A	KOLON, XC210, T=0.123, LM200WD3-TRA1-TF1-A0	
	3022L-1313A	TORAY, TPL123, T=0.135, LM200WD3-TRA1-TF1-A0	
	3032L-0846A	EFUN, HGL-8B, T=0.210, ANGLE = 0?, LM200WD3-TRA1-TF1-A0	
	3550B-0695A	AL, T=0.5, LM200WD3-TRA1-TF1-A0	
	3850L-0151A	BL, YUPO, 77X21	
	4000L-0036B	SWCH18A, TAP-TITE B, PAN HEAD, M2.0, L2.5, ELECTROLESS NI	
	4975L-0333A	LM200WD3-TRA1-TF1-A0	
	4296L-0242A	SJ CHEMICAL, SJC #101, SILICONE, GRAY, TERAOKA 767, 449*1.2*0.25	
	4296L-0245A	SJ CHEMICAL, SJC #101, SILICONE, GRAY, TERAOKA 767, 254.5*1.3*0.25	
	4974L-0638A	ENTIRE, ETR-1010, LM200WD3-TRA1-TF1-A0	
	5151L-0439A	LM200WD3-TRA1-TF1-A0	
	3953L-0089A	TORAY, 188E60L, T=0.188, TERAOKA 7051, 449.6*1.8*0.2, LM200WD3-TRA1-TF1-A0	
	3953L-0094A	TORAY, 188E60L, T=0.188, TERAOKA 7051, 264.4*1.8*0.2, LM200WD3-TRA1-TF1-A0	
	5150L-0439A	PMMA, FLAT, 2.0, PRINTING, LM200WD3-TRA1-TF1-A0	
	6916L-0248A	LG INNOTEK, 51(NUMBER OF LED), WHITE LED, LM200WD3-TRA1-TF1-A0	
	5153L-0068A	10FH-SM1-GAN-TB(LF)(SN) , JST	
	6915L-0172A	WOOREE, WM32NW1F, TOP VIEW, 1EA(LED CHIP Q'TY PER PKG), 3.0*2.0*0.8	
	6920L-0040A	264.5*4.2*1.0, 3EA(NUMBER OF CHAIN), 1L(NUMBER OF LAYER), 51EA(NUMBER OF LED), AL	
	7250L-0879A	T-GLOBAL, LI-98,263.5*3.6*0.25	
	7250L-0864A	NITTO, NITTO 5000NS, CLEAR, 30*3*0.16	

	7250L-0865A	3M, ZH350, SILVER,15*8*0.08	
	7250L-1408A	ZH350 25X16X0.1	
	756GQACB-AA041--00	MAIN BOARD-CBPCANYA1QF	
SMTCA-U402	100GANGA002YT1	MCU ASS'Y-056G2233-11	
	A15G1327101	TILT SUPPORT BRACKET	
	A34G2040AGS-1B0100	LENS	
	A34G2041AKMA1M0100	BASE COVER-TOP	
	A34G2042AED-2B0100	BASE TRIM	
	A34G2043AGS-1B0100	HINGE FRONT COVER	
	A34G2044AGS-1B0100	HINGE BACK COVER	
	A34G2122AEDB1B0100	BEZELL20W-TB1-TBP1	
	A34G2123AGSA1B0100	REAR COVER	
	A37G0188011	HINGE_ASS??Y	
	A85G0260101	SHIELD_MAIN_BASE	
	A85G0272101	SHIELD COVER	
	ADPC91236YJ1	ADAPTER BOARD	
CN401	033G3802-7B--Y---L	CONN 2.0 7P	
CN409	033G804330C-HR	WAFER 2*15P 2.0PICTH	
	311GW200C30AAL	WAFER 2.0MM 2*15P	2 <sup>nd</sup> source
	040G-45762412B	CBPC LABEL	
C718	067G204V181-3K	CS CAP 180UF 16V 8*8 MM	
C716	067G204V471-2K	CS CAP 470UF 10V 8*8 MM	
C807	067G415R479-9K	EC 4.7UF 20% 100V ED 8*12	
FB701	071G--5526A--H	CORE 6.0X3.5X3.5 127 25% 3.5X6.0	
	071G--5526A--S	CORE 6.0X3.5X3.5 127 25%	
CN701	088G-3041CF	DC JACK	
CN101	088G-35315F-XH	D-SUB 15PIN VERTICAL CONN WITH SCREW	
	088G-35315F-HD	D-SUB CONN F ATTACHED SCREW	2 <sup>nd</sup> source
	709G4134-QM001	COMSUPTIVE ASS'Y	
	055G--23524--A	WELDING FULX WITHOUT PB	
	Q55G-100625	TIN STICK_LOW ARGENTUM	
CN803	033G801910Y--H	FPC CONN. 0.5MM SMT 10P	
	311GF050B10ADH	FFC CONN 0.5MM 10P	2 <sup>nd</sup> source
U401	056G-562F23	SCALER NT68628 QFP-128PIN	
U704	056G-563113	IC G1117-18T63UF 1A/1.8V SOT-223	
U705	056G-563215	IC DC/DC MP1584EN SOIC8E	
U702	056G-563512	IC G1117-33T43UF TO-252	
U103,U104	056G-662505	IC ESD AOZ8105CI SOT-23-6 AOS	
U801	056G-700--5	IC LED DRIVER MP3389EF TSSOP28	
U101	056G1133956	IC CAT24C02WI-GT3 SO-8	

U402	056G2233-11	IC PM25LD020C-SCE SIOC-8(150MIL) 2M	
	056G1133-90--1	IC PM25LV020-100SCE 2MB SOIC-8 PMC	
Q402	057G-417517	TRA LMBT3906LT1G -200MA/-40V SOT-23 LRC	
	057G-417512	MMBT3906	
Q302,Q701	057G-417518	TRA LMBT3904LT1G 200MA/40V SOT-23 LRC	
	057G-417511	MMBT3904	
Q301	057G-763940	MOSFET AO3401A SOT-23	
Q806	057G-763947	MOSFET APM8005KCTRG SOP-8	
R409,R421	061G0402000-JF	RST CHIPR MAX0R05 1/16W FENGHUA	
	061G0402000-JY	RST CHIPR 0 OHM -5% 1/16W YAGEO	
R105,R111,R115	061G0402100-JF	RST CHIPR 10 OHM +-5% 1/16W FENGHUA	
	061G0402100-JY	RST CHIPR 10 OHM -5% 1/16W YAGEO	
R101,R103,R104,R113, R401,R412,R435,R436, R437,R706	061G0402101-JF	RST CHIPR 100 OHM +-5% 1/16W FENGHUA	
	061G0402101-JY	RST CHIPR 100 OHM -5% 1/16W YAGEO	
R305,R402,R403, R702,R703,R705	061G0402103-JF	RST CHIPR 10KOHM +-5% 1/16W FENGHUA	
	061G0402103-JY	RST CHIPR 10KOHM -5% 1/16W YAGEO	
R135,R306,R415,R712, R726	061G0402104-JF	RST CHIPR 100KOHM +-5% 1/16W FENGHUA	
	061G0402104-JY	RST CHIPR 100KOHM -5% 1/16W YAGEO	
R434	061G0402105-JF	RST CHIPR 1MOHM 5% 1/16W FENGHUA	
	061G0402105-JY	RST CHIPR 1000KOHM 1/16W YAGEO	
R714	061G04021201FF	RST CHIP 1.2K 1/16W 1% FENGHUA	
	061G04021201FY	RST CHIP 1.2K 1/16W 1%	
R106,R107	061G0402222-JF	RST CHIPR 2.2KOHM +-5% 1/16W FENGHUA	
	061G0402222-JY	RST CHIPR 2.2KOHM -5% 1/16W YAGEO	
R123,R304,R704	061G0402223-JF	RST CHIPR 22KOHM 5% 1/16W FENGHUA	
	061G0402223-JY	RST CHIPR 22KOHM -5% 1/16W YAGEO	
R416	061G0402224-JT	RST CHIP 220K 1/16W 5% TZAI YUAN	
	061G0402224-JY	RST CHIPR 220KOHM -5% 1/16W YAGEO	
R727	061G0402304-JF	RST 0402 300K 5% 1/16W FENGHUA	
	061G0402304-JT	RST 0402 300K 5% 1/16W TZAI YUAN	
R711	061G0402333-JF	RST CHIP 33K 1/16W 5% FENGHUA	
	061G0402333-JY	RST CHIPR 33KOHM ??-?? 1/16W YAGEO	
R133	061G0402394-JY	RST CHIP R 390K +/-5% 1/16W YAGEO	
	061G0402394-JF	RST CHIP R 390K /-5% 1/16W FENGHUA	
R109,R114,R117	061G0402470-JF	RST CHIPR 47 OHM 5% 1/16W FENGHUA	

	061G0402470-JY	RST CHIPR 47 OHM 5% 1/16W YAGEO	
R414	061G04024700FF	RST CHIP 470R 1/16W 1% FENGHUA	
	061G04024700FY	RST CHIP 470R 1/16W 1%	
R110	061G0402471-JF	RST CHIPR 470 OHM 5% 1/16W FENGHUA	
	061G0402471-JY	RST CHIPR 470OHM -5% 1/16W YAGEO	
R124,R125,R303,R411, R413,R438,R439	061G0402472-JF	RST CHIPR 4.7KOHM +-5% 1/16W FENGHUA	
	061G0402472-JY	RST CHIPR 4.7KOHM -5% 1/16W YAGEO	
R713	061G04026801FF	RST CHIPR 6.8K +-1% 1/16W FENGHUA	
	061G04026801FY	RST CHIP 6K8 1/16W 1%	
R108,R112,R116	061G0402750-JF	RST CHIPR 75 OHM +-5% 1/16W FENGHUA	
	061G0402750-JY	RST CHIPR 75OHM -5% 1/16W YAGEO	
FB703,R102,R404, R405,R832,R836,R840	061G0603000-JF	RST CHIPR MAX 0R05 1/10W FENGHUA	
	061G0603000-JI	TEST ONLY RST 0603 0.05R MAX 1/16W TA-I	
R801	061G0603100-JF	RST CHIPR 10 OHM 5% 1/10W FENGHUA	
	061G0603100-JY	RST CHIPR 10OHM 1/10W YAGEO	
R806,R808	061G0603102-JF	RST CHIPR 1K OHM +-5% 1/10W FENGHUA	
	061G0603102-JI	TEST ONLY RST 0603 1K 5% 1/16W TA-I	
R804	061G0603104-JF	RST CHIPR 100KOHM 5% 1/10W FENGHUA	
	061G0603104-JI	TEST ONLY RST 0603 100K 5% 1/16W TA-I	
R827,R828,R830,R831	061G0603109-JF	RST CHIP 1R 1/10W 5% FENGHUA	
	061G0603109-JY	RST CHIPR 1 OHM -5% 1/10W YAGEO	
R811	061G0603151-JF	RST CHIPR 150 OHM +-5% 1/10W FENGHUA	
	061G0603151-JT	RST CHIP 150R 1/10W 5% TZAI YUAN	
R807,R810	061G0603203-JF	RST CHIPR 20K OHM +-5% 1/10W FENGHUA	
	061G0603203-JY	RST CHIP 20K 1/10W 5% YAGEO	
R841,R842	061G0603229-JF	RST CHIPR 2.2 OHM 5% 1/10W FENGHUA	
	061G0603229-JI	RST 0603 2.2R 5% 1/10W TA-I	
R802	061G06032703FF	RST CHIPR 270KOHM +-1% 1/10W FENGHUA	
	061G06032703FY	RST CHIPR 270KOHM -1% 1/10W YAGEO	
R819	061G06033002FF	RST CHIPR 30KOHM +-1% 1/10W FENGHUA	
	061G06033002FY	RST CHIPR 30KOHM -1% 1/10W YAGEO	
R803	061G06035102FF	RST CHIPR 51KOHM +-1% 1/10W FENGHUA	
	061G06035102FY	RST CHIPR 51KOHM -1% 1/10W YAGEO	
R809	061G06036041FF	RST CHIPR 6.04KOHM +-1% 1/10W FENGHUA	
	061G06036041FY	RST CHIPR 6.04KOHM -1% 1/10W YAGEO	
R834	061G06037502FF	RST CHIPR 75KOHM +-1% 1/10W FENGHUA	
	061G06037502FY	RST CHIPR 75KOHM -1% 1/10W YAGEO	
FB401	061G0805000-JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	

R805	061G0805304-JF	RST CHIPR 300KOHM +-5% 1/8W FENGHUA	
	061G0805304-JY	RST CHIPR 300K -5% 1/8W YAGEO	
R813	061G12060004JF	RST CHIPR MAX0R05 4A 1/4W FENGHUA	
	061G12060004JY	RST CHIPR MAX0R05 4A 1/4W YAGEO	
R812	061G12061507FF	RST CHIPR 0.15 OHM +-1% 1/4W FENGHUA	
	061G12061507FT	RST CHIPR 0.15 OHM -1% 1/4W	
R301,R302	061G1206301-JF	RST CHIPR 300 OHM +-5% 1/4W FENGHUA	
	061G1206301-JT	RST CHIPR 300 OHM 1/4W TZAI YUAN	
C107,C408,C714	065G040210232K---Y	CAP CHIP 0402 1N 50V X7R +/-10%	
	065G040210232K---A	CAP 0402 1NF K 50V X7R	
C124,C125,C126,C301, C304,C401,C402,C403, C405,C407,C417,C418, C419,C422,C425,C427, C431,C432,C436,C437, C438,C702,C705,C706, C708,C709,C713,C717, C721	065G040210412K---Y	CAP CHIP 0402 100N 16V X7R +/-10%	
	065G040210412K---A	CAP CHIP 0402 100NF K 16V X7R	
C123,C722	065G040215131J---Y	CHIP 150PF 50V NPO YAGEO	
C103,C104	065G040222031J---Y	CAP CHIP 0402 22P 50V NPO +/-5%	
	065G040222031J---A	CAP 0402 22PF J 50V NPO	
C116,C303,C429	065G040222415K---A	CAP CHIP 0402 0.22UF K 16V X5R	
	065G040222415K---T	CAP CHIP 0402 220NF K 16V X5R	
	065G040222415K---Y	CAP CHIP 0402 220NF 16V X5R	
C426,C428	065G040247031J---Y	CAP CHIP 0402 47PF 50V NPO +/-5%	
	065G040247031J---A	CAP CHIP 0402 47PF J 50V NPO	
C102,C106,C108, C110,C111,C114	065G040247312K---A	8.31HIP 0402 47NF K 16V X7R	
	065G040247312K---T	CAP CHIP 0402 0.047UF 16V X7R	
C129,C130,C131	065G040250931C---Y	CAP CHIP 0402 5PF 50V NPO +/-0.25PF	
C805,C806,C809	065G060310131J---Y	CAP CHIP 0603 100P 50V NPO +/-5%	
	065G060310131J---F	CAP CHIP 0603 100PF J 50V NPO	
C710,C711,C715	065G060310232K---Y	CAP CHIP 0603 1N 50V X7R +/-10%	
	065G060310232K---F	CAP CHIP 0603 1NF K 50V X7R	
C712,C719,C810,C812	065G060310432K---Y	CAP CHIP 0603 0.1UF K 50V X7R	
	065G060310432K---F	CAP CHIP 0603 0.1UF K 50V X7R	

C305,C414,C415,C424	065G060310512K---T	CAP CHIP 0603 1UF K 16V X7R	
	065G060310512K---3	MLCC 0603 CAP 1UF K 16V X7R	
C813,C814	065G060322232K---Y	CAP CHIP 0603 2N2 50V X7R +/-10%	
	065G060322232K---A	CAP 0603 2.2NF K 50V X7R	
C801	065G060347412K---A	CAP CHIP 0603 470NF K 16V X7R	
	065G060347412K---Y	CAP CHIP 0603 0.47UF K 16V X7R	
C802	065G060368332K---Y	CAP CHIP 0603 68NF K 50V X7R	
	065G060368332K---F	CAP CHIP 0603 68NF K 50V X7R	
C803,C804	065G080547432K---A	CAP CHIP 0805 0.47UF K 50V X7R	
	065G080547432K---Y	CAP CHIP 0805 470N 50V X7R /-10%	
C404,C406,C413,C416, C421,C423,C439	065G0805475A2K---T	CAP CHIP 4U7 10V X7R 10%	
	065G0805475A2K---3	CAP CHIP 4.7UF 10V X7R /- 10%	
C720,C723	065G120610625K---T	CAP CHIP 1206 10UF K 25V X5R	
C302,C704,C707	065G1206226A5K---T	CAP CHIP 1206 22UF K 16V X5R	
	065G120622615K---M	CAP CHIP 1206 22UF K 16V X5R	
	065G120622615K---A	CAP CHIP 1206 22UF K 16V X5R	
FB301,FB408	071G-56K121	CHIP BEAD	
	071G-56K121--M	CHIP BEAD	
FB402,FB403,FB404, FB405,FB407,FB410	071G-56V301--B	CHIP BEAD FCM2012VF-301T07 BULLWILL	
FB107	071G-59G301	CHIP BEAD 300OHM	
FB101,FB102,FB103	071G-59K190--B	19 OHM BEAD	
L801	073G253S-98-DN	SMD CHOKE 47UH 20% 3A 64R	
L701	073G253S521--H	SMD CHOKE 22UH 20% 3.3A HF	
D101	093G--64-42-PP	BAV70 SOT-23	
X401	093G-22S-51--A	CRYSTAL 12MHZ 32P SMD-49	
ZD101	093G-39GA01--T	RLZ5.6B	
D801	093G-60S932--T	DIODE SK310B DO-214AA	
D701,D703,D704, D707,D708	093G3004--2	SR34 PAN JIT	
	709G4134-QS001	COMSUPTIVE ASS'Y	
	052G--2191--A	PAPER TAPE	
	Q52G6026--6	MESH PRINTTING PAPER	
E715	715G4134M01000004K	MAIN PCB 146*115MM*1.6MM FR-4 D/S 1OZ	
	715G4134M01000004L	MAIN BOARD FRO SMT	2 <sup>nd</sup> source
	715G4134M01000004F	MAIN PCB FR4 DS 146X115X1.6MM	2 <sup>nd</sup> source
	KEPCAQQQR	KEY BOARD	
CN001	033G8032-7F--S--HR	CONNECTOR 7P 1.25	

U001	056G-669-15	TEST ONLY IT7230BFN	
R005,R006	061G0402000-JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
	061G0402000-JY	RST CHIPR 0 OHM -5% 1/16W YAGEO	
R004	061G0402101-JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
	061G0402101-JY	RST CHIPR 100 OHM -5% 1/16W YAGEO	
R001,R002,R003	061G0402103-JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
	061G0402103-JY	RST CHIPR 10KOHM -5% 1/16W YAGEO	
R007,R008,R009, R010,R011,R012	061G0402472-JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
	061G0402472-JY	RST CHIPR 4.7KOHM -5% 1/16W YAGEO	
C008	065G040210131J---Y	CAP CHIP 0402 100P 50V NPO +/-5%	
	065G040210131J---T	CAP CHIP 0402 100PF 50V NPO	
C005,C006,C007	065G040210427Z---T	CAP CHIP 0402 0.1UF 25V Y5V	
C011,C013	065G0402105A7Z---Y	CAP CHIP 0402 1UF Z 10V Y5V	
	065G0402105A7Z---3	CAP CHIP 0402 1UF Z 10V Y5V	
C003,C004	065G040212031J---Y	CAP CHIP 0402 12P 50V NPO +/-5%	
	065G040212031J---T	CAP CHIP 0402 12PF 50V J NPO	
LED001	081G--15--2-EL	LED WHITE/RED 12-22/T7R8D-D30/2C SMD	
LED002,LED003, LED004,LED005	081G-15W--1-EL	CHIP LED WHITE	
	709G4164-QS001	COMSUPTIVE ASS'Y	
	715G4164K01000004M	KEY PCB FR4 DS97X23X1.0MM	
	715G4164K01000004F	KEY PCB FR4 DS97X23X1.0MM	
	Q05G6131--1	WASHER	
	Q36G-600517	DUSTER CLOTH	
	Q40G-18E61515A	RATING LABEL	
	Q40G000161515A	CARTON LABEL	
	Q40G0003615C68	LABEL POP FOR E943FW/E94FWS	
	Q40G0003615A71	LABEL POP(SILVER EPEAT+EPA)	
	Q41G78D1615-4A	CARD	
	Q41G78S161545A	E943FWS/E2043FS/E2243FWS/E2343FS QSG	
	Q44GA098101	CHSHION PULP MOLD	
	Q44GA098201	CUSHION PULP MOLD-	
	Q44GA098615-2A	CARTON 20 LCD E2043FS	
	Q45G--88609199	EPE BAG	
	Q45G2010M0201A	PE BAG	
	Q52G1201--4	3M TAPE	
	Q70G200161516A	E2043FS CD MANUAL	