Service
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ENERGY STAR

Service Manual

Horizontal Frequency

24- 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 TRANSFOMER FOR THIS UNIT WHEN SERVICING

Revision List

Version	Date	Revision History	TPV Model Name
A00	Aug.-06-2007	Initial release	T97GMMDKHNHPQNE
A01	Aug.-10-2007	Add TPVDW Model in Item 14	T97HMMDKHNHPQNE
A02	Sep.-04-2007	Add TPVDW Model in Item 14	T97HMMDBHNHPQNE
			T97GMMDBHNHPQNE
A03	Sep.-14-2007	Add TPVDW Model in Item 14	T97HMMDTHNHPQNE
			T97HMMDLHNHPQNE
A04	Oct.-16-2007	Add TPVDW Model in Item 14	T97HMMDDHNHPQNE
A05	Oct.-24-2007	Add TPVDW Model in Item 14	T97AMMDBHNHPQNE
A06	Oct.-29-2007	Add TPVDW Model in Item 14	T97SMMDKHNHPQNE
			T97SMMDBHNHPQNE
A07	Nov.-01-2007	Add TPVDW Model in Item 14	T97GMMDLHNHPQNE
A08	Nov.-09-2007	Add TPVDW Model in Item 14	T97HMMDQHNHPQNE
A09	Dec.-12-2007	Add Second Panel list in Item 5	LM190E08-TLL1 LPL LM190E08-TLG2/TLG4
			LTM190EX-L31 QLC
			M190EG02 V40B SZ
			M190EG02 V400 SZ
			HSD190MEN3-A00 WH
			HSD190MEN3-A00 NJ
		Add TPVDW Model in Item 14	T97AMMDKHNHPQNE
			T97AMMDQHNHPQNE
A10	Jan.-19-2008	Add TPVDW Model in Item 14	T97SMMDTHNHPQNE
A11	Jan.-22-2008	Update Power Board in Item 7	715G2655 2 2
A12	Nov.-05-2008	Add TPVDW Model in Item 14	T98HMMDKHNHP2NE
			T97GMMDQHNHPQNE
			T97GMMDTHNHPQNE
			T97GMMDDHNHPQNE
			T97GMMDKHNHPQ1E
			T97GMMDBHNHPQ1E
			T97GMMDKHNHPQCE

1. Monitor Specification

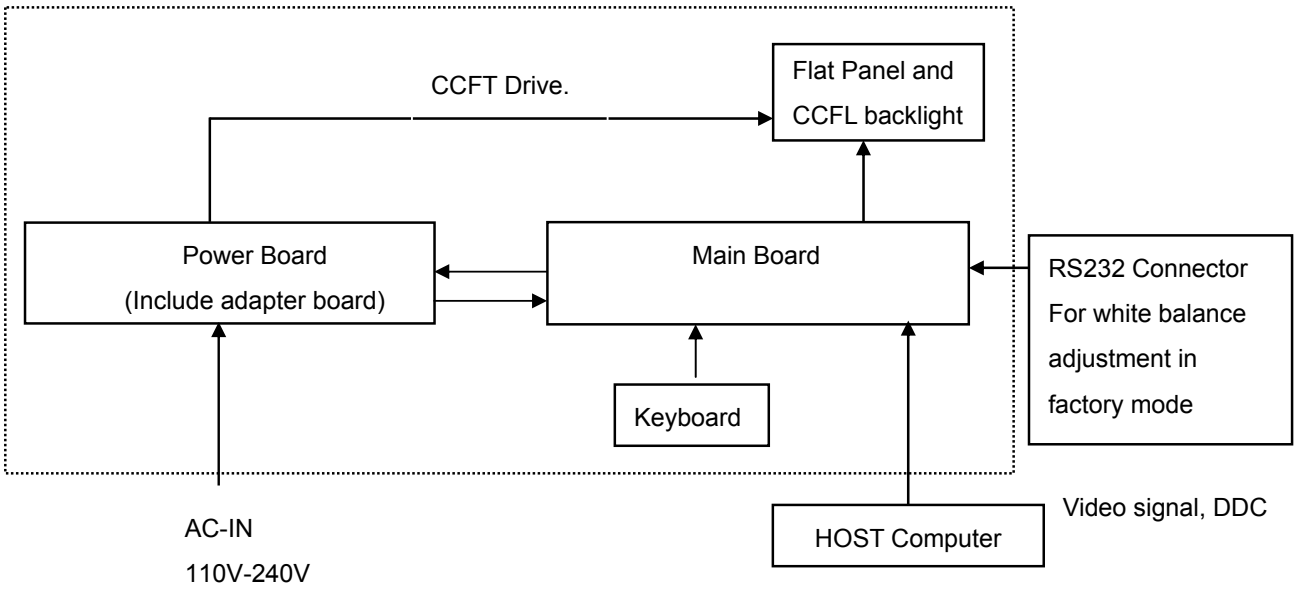
Display	19 inches	48.3 cm
Type	TFT LCD	
Viewable Image Size	19–inch diagonal	48.3 cm
Tilt	-5 to 35°	
Swivel	-45 to 45°	
Maximum Weight (Unpacked)	16.3 lbs.	7.4 kg
Dimensions (include base)		
Height	19.8 inches	50.3 cm
Depth	11.9 inches	30.1 cm
Width	16.3 inches	41.4 cm
Maximum Graphic Resolution	1280 × 1024 (75 Hz) analog input 1280 × 1024 (75 Hz) digital input (select models)	
Optimum Graphic Resolution	1280 x 1024 (60Hz) analog input 1280 x 1024 (60Hz) digital input (select models)	
Text Mode	720 × 400	
Dot Pitch	0.294 (H) × 0.294 (W) mm	
Horizontal Frequency	24 to 83 kHz	
Vertical Refresh Rate	50 to 77 Hz	
Environmental Requirements Temperature		
Operating Temperature	41 to 95° F	5 to 35° C
Storage Temperature	-29 to 140° F	-20 to 60° C
Relative Humidity	20 to 80%	
Power Source	90 — 265 VAC, 45/63 Hz	
Altitude:		
Operating	0 to 12,000 feet	0 to 3657.6 m
Storage	0 to 40,000 feet	0 to 12192 m
Power Consumption (maximum)	<47 watts	
Input Terminal	One VGA connector; one DVI connector (select models) with cables included	

2. LCD Monitor Description

The LCD Monitor will contain main board, power board, 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.

Monitor Block Diagram



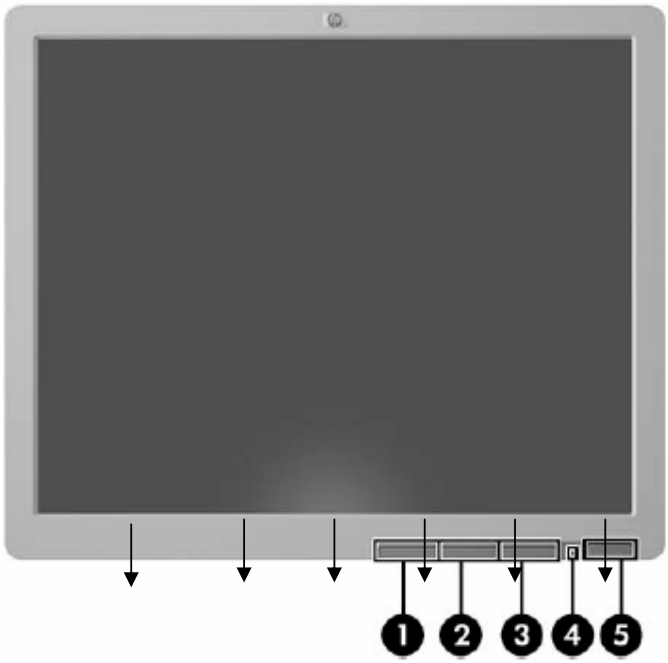
3. Operation Instructions

3.1 General Instructions

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

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

3.2 Control Button



Control		Function
1	Menu	Opens, selects or exits the OSD menu.
2	– (Minus)/Auto	• Navigates backward through the OSD menu and decreases adjustment levels. • When the OSD menu is inactive, activates the auto adjustment feature to optimize the screen image.
3	+ (Plus)/Input	• Navigates forward through the OSD menu and increases adjustment levels. • When the OSD menu is inactive, an Input button chooses the video input signal input, VGA or DVI (select models have input select function).
4	Power LED	Green = Fully powered. Amber = Sleep mode. Flashing Amber = Sleep Timer mode.
5	Power	Turns the monitor on or off.

3.3 Adjust the Picture

Icon	Main Menu	Submenu	Description
	Brightness		Adjusts the brightness level of the screen. The factory default range is 90.

	Contrast	Adjustable scale	Adjusts the contrast level of the screen. The factory default range is 80.
	Volume (select models with internal speakers)		Adjusts the monitor's speaker volume level. The factory default range is 50.
	Image Control		Adjusts the screen image. (VGA input only)
		Auto Adjustment	Automatically adjusts the screen image.
		Horizontal Position	Adjusts the position of the screen image left and right.
		Vertical Position	Adjusts the position of the screen image up and down.
		Clock	Minimizes any vertical bars or strips visible on the screen background. Adjusting the Clock will also change the horizontal screen image.
		Clock Phase	Adjusts the focus of the display. This adjustment allows you to remove any horizontal noise and clear or sharpen the image of characters.
	Color		Selects the screen color. The factory default is 6500K or Custom Color, depending on the model.
		9300 K	Changes to slightly blueish white.
		6500 K	Changes to slightly reddish white.
		Custom Color	Selects and adjusts your own color scales: • R—sets your own red color levels • G—sets your own green color levels • B—sets your own blue color levels
		sRGB	Sets your screen colors to adapt to the color standards used in the image technology industry.
	Language		Selects the language in which the OSD menu is displayed. The factory default is English.
	Management		Selects the OSD and power management features of the monitor.
		OSD Control	Adjusts the position of the OSD menu screen to: • Horizontal OSD Position-Changes the viewing position of the OSD menu to the left or right area of the screen. The factory default range is 50. • Vertical OSD Position-Changes the viewing position of the OSD menu to the top or bottom area of the screen. The factory default range is 50. • OSD Transparency-Adjust to view the background information through the OSD

		• OSD Timeout-Sets the time duration in seconds that the OSD is visible after the last button is pressed. The factory default is 30 seconds. • OSD Rotation (select models)-Rotates the OSD Menu to support pivot function.
	Power Saver	Enables the power saving feature. Select: • On • Off The factory default is On.
	Power On Recall	Restores power to the monitor following an unexpected removal of power. Select: • On • Off The factory default is On.
	Mode Display	Displays the resolution, refresh rate and frequency information on the screen each time the OSD Main Menu is accessed. Select: • On • Off The factory default is On.
	Power-On Status Display	Displays the operating status of the monitor each time the monitor is powered on. Select the location to display the status to: • Top • Middle • Bottom • Off The factory default is Top.
	DDC/CI Support	Allows the computer to control some OSD menu features such as brightness, contrast and color temperature. Set to: • On • Off The factory default is On.
	Bezel Power LED	Turns off the power LED on the front panel of the monitor. The factory default is On.

		Sleep Timer	Provides the timer adjustment menu options: • Set Current Time—sets the current time in hours and minutes • Set Sleep Time—sets the time you want to place the monitor in sleep mode • Set on Time—sets the time you want the monitor to wake up from sleep mode • Timer—sets the Sleep Timer feature On or Off. The default setting is Off. • Sleep Now—immediately sets the monitor to enter sleep mode
	Video Input Control (select models)		Selects the video input signal. DVI is the factory default.
		Switch Video Input	Analog — VGA — Selects VGA input Digital — DVI — Selects DVI input. This input accepts either analog or digital signals.
		Disable/Enable Auto-Switching	Enables or disables the system's automatic video signal input-switching feature. The factory default is enabled.
		Default Video Input	Selects the default or primary video input signal when the monitor is connected to two active and valid video sources. The monitor will automatically determine the video format. The default input selection is DVI. Analog — VGA — Selects VGA input. Digital — DVI — Selects DVI input.
	Information		Selects and displays important information about the monitor.
		Current Settings	Provides the current input video mode.
		Recommended Settings	Provides the recommended resolution mode and refresh rate for the monitor.
		Serial Number	Reports the serial number of the monitor. The serial number is needed if contacting HP technical support.
		Version	Reports the firmware version of the monitor.
		Backlight Hours	Reports the total hours of backlight operation.
		Service Support: http://www.hp.com/support	
	Factory Reset		Returns all OSD menu settings and DDC/CI controls to the factory default settings, except the Language.
	Exit		Exits the OSD menu screen.

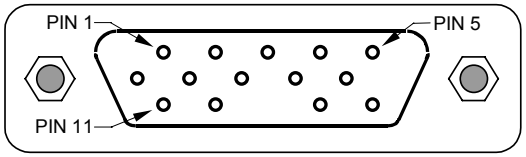
4. Input/Output Specification

4.1 Input Signal Connector

4.1.1 D-SUB connector

Pin	Signal	Pin	Signal
1	Red Video	9	3.3/+5 V (from PC)
2	Green Video	10	Sync Ground
3	Blue Video	11	None
4	None	12	DDC Data
5	Ground (DDC Return)	13	Horizontal Sync
6	Red GND	14	Vertical Sync
7	Green GND	15	DDC Clock
8	Blue GND		

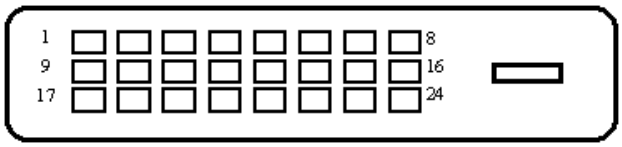
VGA connector layout



4.1.2 DVI-D connector

Pin No.	Signal Name	Pin No.	Signal Name
1	TMDS Data 2-	13	TMDS Data 3+
2	TMDS Data 2+	14	+5V Power
3	TMDS Data 2/4 Shield	15	Ground(for+5V)
4	TMDS Data 4-	16	Hot Plug Detect
5	TMDS Data 4+	17	TMDS Data 0-
6	DDC Clock	18	TMDS Data 0+
7	DDC Data	19	TMDS Data 0/5 Shield
8	N.C.	20	TMDS Data 5-
9	TMDS Data 1-	21	TMDS Data 5+
10	TMDS Data 1+	22	TMDS Clock Shield
11	TMDS Data 1/3 Shield	23	TMDS Clock +
12	TMDS Data 3-	24	TMDS Clock -

24 - Pin Color Display Signal Cable



4.2 Factory Preset Display Modes

Preset	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	640 × 480	31.5	60.0
2	640 × 480	37.9	73.0
3	640 × 480	37.5	75.0
4	720 × 400	31.5	70.0
5	800 × 600	37.9	60.0
6	800 × 600	48.1	72.0
7	800 × 600	46.9	75.0
8	832 × 624	49.7	75.0
9	1024 × 768	48.4	60.0
10	1024 × 768	56.5	70.0
11	1024 × 768	60.0	75.0
12	1152 × 870	68.7	75.0
13	1152 × 900	71.7	76.0
14	1280 × 1024	64.0	60.0
15	1280 × 1024	80.0	75.0

5. Panel Specification

5.1 General Feature

LM190E08-TLL1 LPL/ LM190E08-TLG2/TLG4

Items	Unit	Specifications
Screen Diagonal	[mm]	432 (17.0")
Active Area	[mm]	337.920(H) × 270.336(V)
Pixels H x V		1280 × 3(RGB) × 1024
Pixel Pitch	[mm]	0.264(per one triad) × 0.264
Pixel Arrangement		R.G.B. Vertical Stripe
Display Mode		Normally White
White Luminance	[cd/m^2]	300 (center,Typ)@7.5 mA
Contrast Ratio		500 : 1 (Typ)
Optical ResponseTime	[msec]	8 (Typ)
Nominal Input Voltage VDD	[Volt]	+5.0 (Typ)
Power Consumption	[Watt]	25.8 W (Typ) (PDD=6W, PCFL=19.8W @Lamp=7.5mA)
Weight	[Grams]	1900 (Typ)
Physical Size (H x V x D)	[mm]	358.5(H) x 296.5(V) x 17.0(D) (Typ)
Electrical Interface		Dual Channel LVDS
Surface Treatment		Anti-glare type, Hardness 3H
Support Color		16.2M colors (RGB 6-bits + FRC data)
Temperature Range Operating Storage (Non-Operating)	 [°C] [°C]	 0 to +50 -20 to +60
RoHS Compliance		RoHS Compliance

LTM190EX-L31 QLC

Items	Specification	Unit	Note
Pixel Pitch	0.294(H) x 0.294(W)	mm	
Active Display Area	376.32(H) x 301.056(V)	mm	
Surface Treatment	Haze 25%, Hard Coating(3H)		
Display Colors	16.7M (6bit Hi-FRC)	colors	
Number of Pixels	1280 x 1024	pixel	
Pixel Arrangement	RGB vertical stripe		
Display Mode	Normally White		
Power Consumption	25 Watt (Typ.)		
Luminance of White	300(Typ.)	cd/㎡	

M190EG02 V40B SZ / M190EG02 V400 SZ

Items	Unit	Specifications
Screen Diagonal	[mm]	482.6 (19.0")
Active Area	[mm]	376.32 (H) x 301.06 (V)
Pixels H x V		1280(x3) x 1024
Pixel Pitch	[mm]	0.294 (per one triad) x 0.294
Pixel Arrangement		R.G.B. Vertical Stripe
Display Mode		Normally White
White Luminance	[cd/m^2]	300 (center, Typ) @ 7.5mA
Contrast Ratio		1000 : 1 (Typ)
Optical ResponseTime	[msec]	5 ms(Typ, on/off)
Nominal Input Voltage VDD	[Volt]	+5.0 V
Power Consumption	[Watt]	24.71W (Typ) (PDD=5.11W, PCFL=19.6 W @Lamp=7.5mA)
Weight	[Grams]	2000 (Typ)
Physical Size (H x V x D)	[mm]	396 (H) x 324 (V) x 16.3 (D) (Typ)
Electrical Interface		Dual channel LVDS
Surface Treatment		Hard-coating (3H), Non-Glare treatment
Support Color		16.7M colors (RGB 6-bit data + HiFRC data)
Temperature Range Operating Storage (Non-Operating)	 [°C] [°C]	 0 to +50 -20 to +60
RoHS Compliance		RoHS Compliance

HSD190MEN3-A00 WH / HSD190MEN3-A00 NJ

Item	Specification		Unit
Outline dimension	396 * 324 * 16.5(Typ)		mm
Display area	376.32 (H) x301.056 (V) (19.0" diagonal)		mm
Number of Pixel	1280(H) x 1024(V)		Pixels
Pixel pitch	0.294(H) x 0.294(V)		mm
Pixel arrangement	RGB Vertical Stripe		
Display color	16.7M (6-bits+Hi FRC)		
Color temperature	6500K		
Display mode	Normally white		
Surface treatment	Antiglare, Hard-Coating (3H)		
Weight	1950		g
Back-light	4-CCFLs, Top & bottom edge side		
Input signal	2-ch LVDS		
Power consumption	System	3.5(Typ.)	W
	B/L	19.8(Typ.)	

5.2 Optical Characteristics

LM190E08-TLL1 LPL/ LM190E08-TLG2/TLG4

Item	Unit	Conditions	Min.	Typ.	Max.
Viewing Angle	[degree]	Horizontal (Right) CR = 10 (Left)	60 60	70 70	-
		Vertical (Up) CR = 10 (Down)	60 50	70 60	-
Luminance Uniformity	[%]	9 Points	75	80	-
Optical Response Time	[msec]	Rising	-	6	9
		Falling	-	2	4
		Rising + Falling	-	8	13
Color / Chromaticity Coordinates (CIE 1931)		Red x	0.61	0.64	0.67
		Red y	0.31	0.34	0.37
		Green x	0.26	0.29	0.32
		Green y	0.58	0.61	0.64
		Blue x	0.11	0.14	0.17
		Blue y	0.04	0.07	0.10
		White x	0.28	0.31	0.34
		White y	0.30	0.33	0.36
White Luminance (At CCFL= 7.5mA)	[cd/m^2]		240	300	-
Contrast Ratio			300	500	-
Cross Talk (At 75Hz)	[%]		-	-	1.5
Flicker	[dB]		-	-	-20

LTM190EX-L31 QLC

Item		Symbol	Condition	Min.	Typ.	Max.	Unit
Contrast Ratio (Center of screen)		C/R		600	1,000	-	
Response Time	Rising	Tr		-	1.3	4	msec
	Falling	Tf		-	3.7	6	
Luminance of White (Center of screen)		Y_L		250	300	-	cd/m2
Color Chromaticity (CIE 1931)	Red	Rx	Normal $\Theta_{L,R}=0$ $\Theta_{U,D}=0$ Viewing Angle	0.610	0.640	0.670	
		Ry		0.299	0.329	0.359	
	Green	Gx		0.270	0.300	0.330	
		Gy		0.570	0.600	0.630	
	Blue	Bx		0.120	0.150	0.180	
		By		0.030	0.060	0.090	
	White	Wx		0.283	0.313	0.343	
		Wy		0.299	0.329	0.359	
Color Chromaticity (CIE 1976)	Red	Ru'		-	0.452	-	
		Rv'		-	0.522	-	
	Green	Gu'		-	0.125	-	
		Gv'		-	0.563	-	
	Blue	Bu'		-	0.175	-	
		Bv'		-	0.158	-	
	White	Wu'		-	0.198	-	
		Wv'		-	0.468	-	
C.G.L*	White	$\Delta u'v'$		-	0.018	0.02	
Color Gamut		-		-	72	-	%
Color Temperature		-		-	6,500	-	K
Viewing Angle	Hor.	Θ_L	CR≥10(5)	70(80)	80(89)	-	Degrees
		Θ_R		70(80)	80(89)	-	
	Ver.	Θ_U		70(80)	80(89)	-	
		Θ_D		70(80)	80(89)	-	
Brightness Uniformity (9 Points)		B_{uni}		-	-	25	%

M190EG02 V40B SZ / M190EG02 V400 SZ

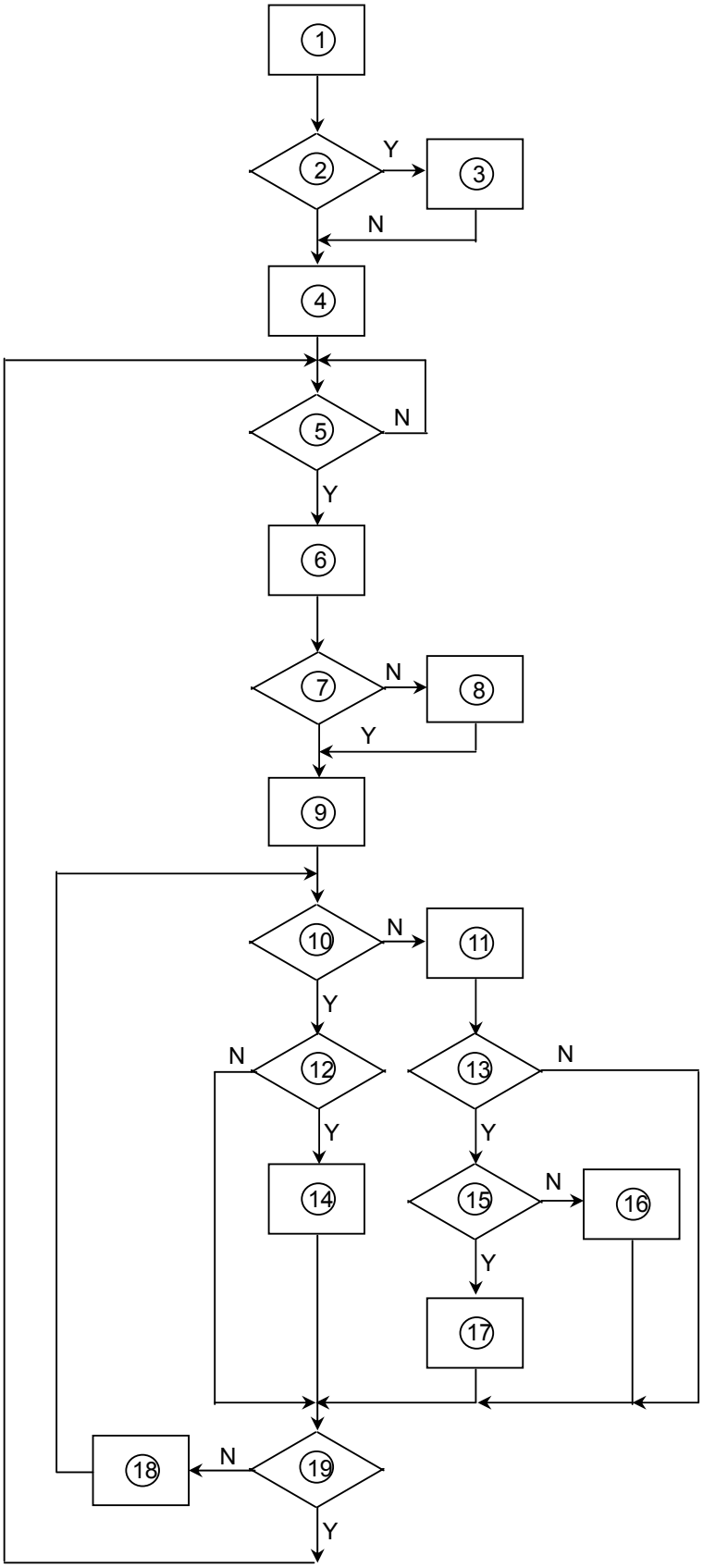
Item	Unit	Conditions	Min.	Typ.	Max.
Viewing Angle	[degree]	Horizontal (Right) CR = 10 (Left)	75 75	85 85	-
		Vertical (Up) CR = 10 (Down)	70 70	80 80	-
		Vertical (Up) CR = 5 (Down)	75 75	85 85	-
Luminance Uniformity	[%]	9 Points	75	80	-
Optical Response Time	[msec]	Rising	-	3.6	5.7
		Falling	-	1.4	2.3
		Rising + Falling	-	5	8
Color / Chromaticity Coordinates (CIE 1931)		Red x	0.617	0.647	0.677
		Red y	0.310	0.340	0.370
		Green x	0.258	0.288	0.318
		Green y	0.575	0.605	0.635
		Blue x	0.115	0.145	0.175
		Blue y	0.041	0.071	0.101
		White x	0.283	0.313	0.343
		White y	0.299	0.329	0.359
White Luminance (At CCFL= 7.5mA)	[cd/m^2]		240	300	-
Contrast Ratio			600	1000	-
Cross Talk (At 75Hz)	[%]		-	-	1.5
Flicker	[dB]		-	-	-20

HSD190MEN3-A00 WH / HSD190MEN3-A00 NJ

Item		Symbol	Condition	Min.	Typ.	Max.	Unit
Contrast		CR	Θ=0° ϕ=0° Normal viewing angle	700	1000	--	
Response time	Rising	TR +TF		--	5.0	10	msec
	Falling			--			
White luminance (center of screen)		Y_L		250	300	--	cd/m^2
Color chromaticity (CIE1931)	Red	Rx		-0.03	0.641	+0.03	
		Ry			0.337		
	Green	Gx			0.304		
		Gy			0.620		
	Blue	Bx			0.141		
		By			0.073		
	White	Wx			0.313		
		Wy			0.329		
Viewing angle	Hor.	$Θ_L$	CR>10	75	85	--	
		$Θ_R$		75	85	--	
	Ver.	$Θ_H$		75	80	--	
		$Θ_L$		75	80	--	
Viewing angle	Hor.	$Θ_L$	CR>5	75	85	--	
		$Θ_R$		75	85	--	
	Ver.	$Θ_H$		75	85	--	
		$Θ_L$		75	85	--	
Brightness uniformity		B_{UNI}	Θ=0° ϕ=0°	75	--	--	%

6. Block diagram

6. 1 Software Flow Chart

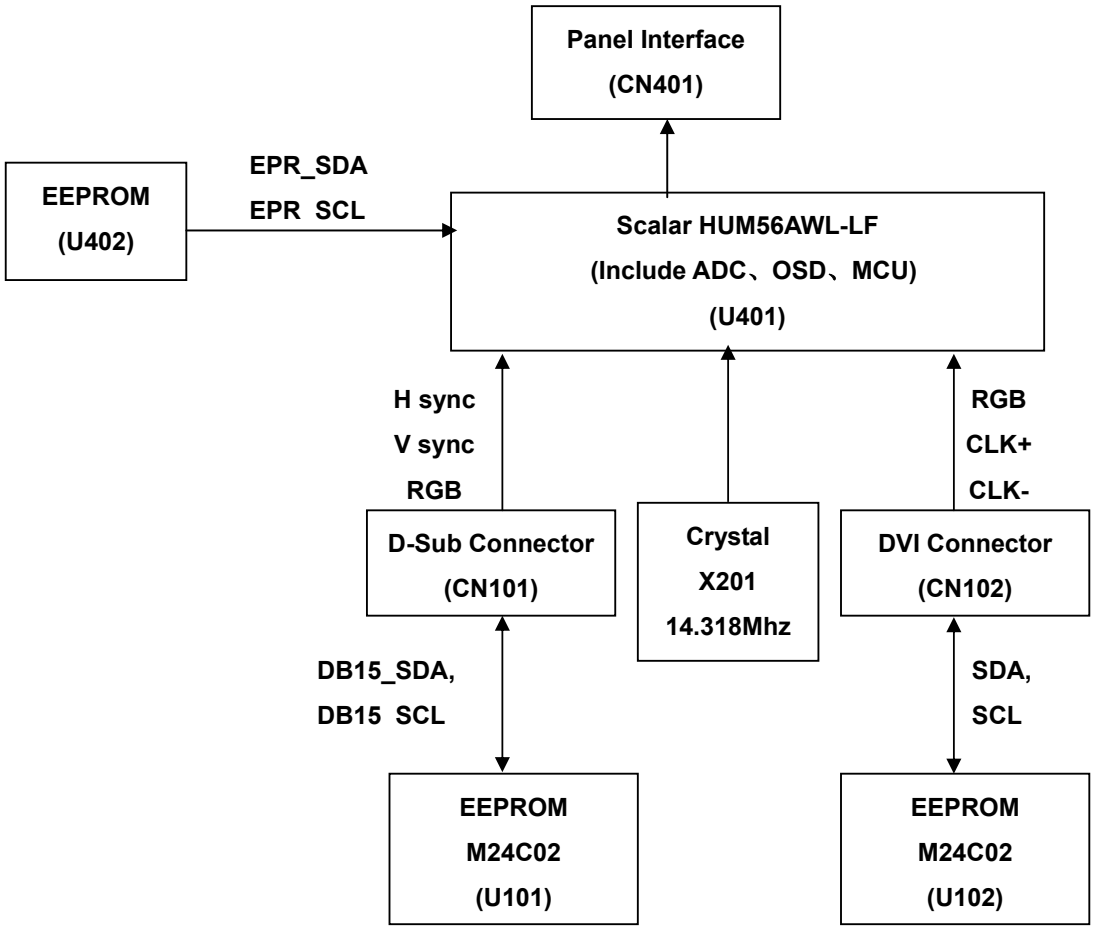


REMARK:

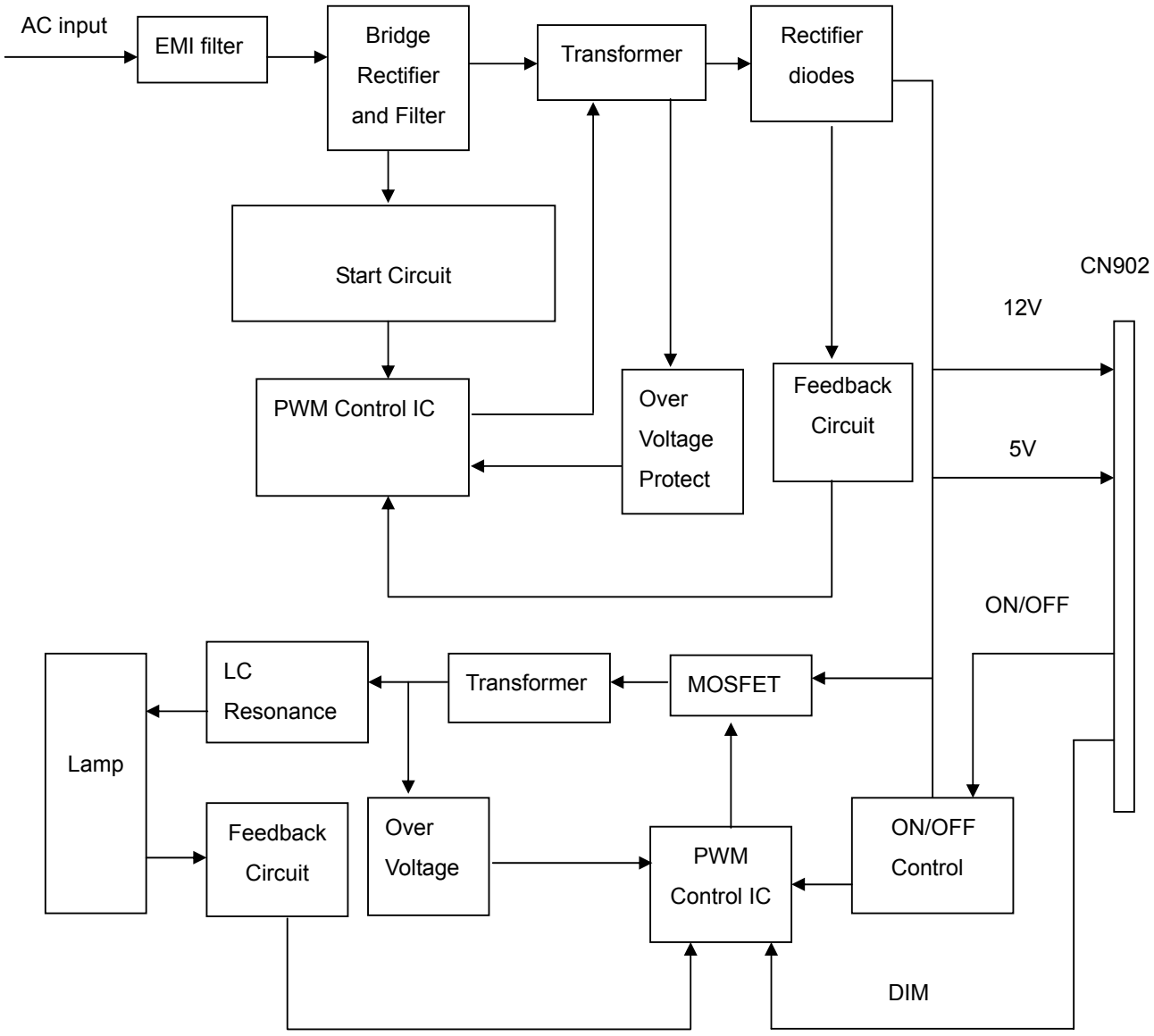
1) MCU initialize.
2) Is the EEprom blank?
3) Program the EEprom by default values.
4) Get the PWM value of brightness from EEprom.
5) Is the power key pressed?
6) Clear all global flags.
7) Are the AUTO and SELECT keys pressed?
8) Enter factory mode.
9) Save the power key status into EEprom. Turn on the LED and set it to green color. Scalar initialize.
10) In standby mode?
11) Update the lifetime of back light.
12) Check the analog port, are they're 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?

6.2 Electrical Block Diagram

6.2.1 Scalar Board

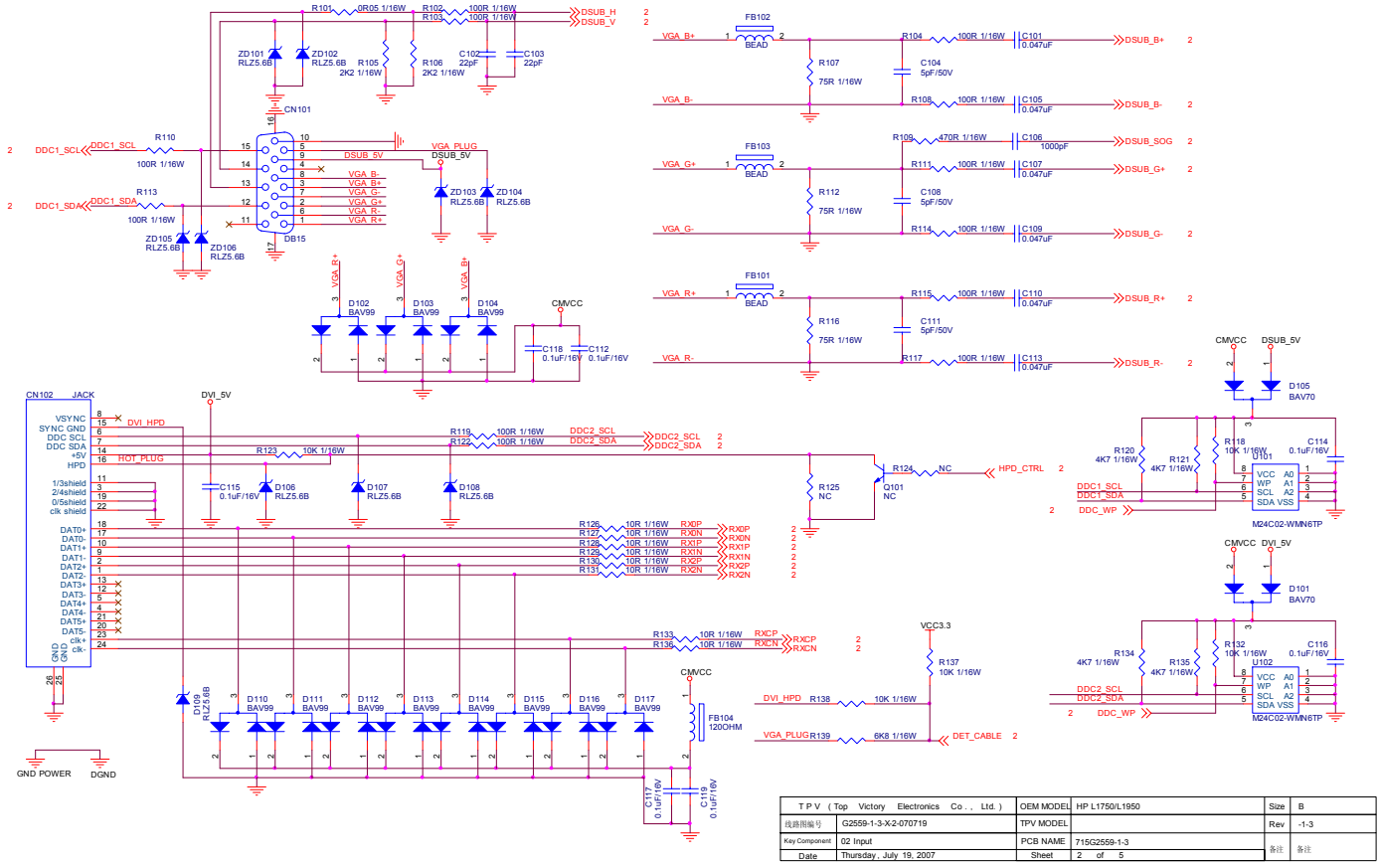


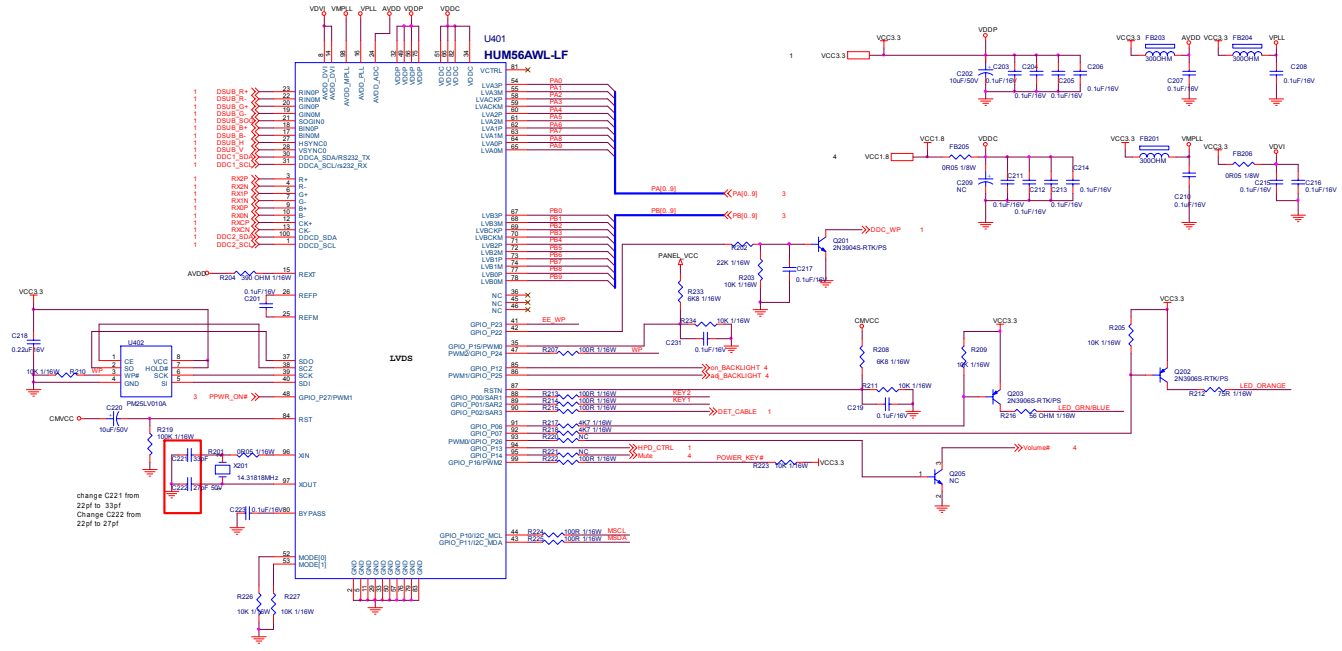
6.2.2 Inverter / Power Board



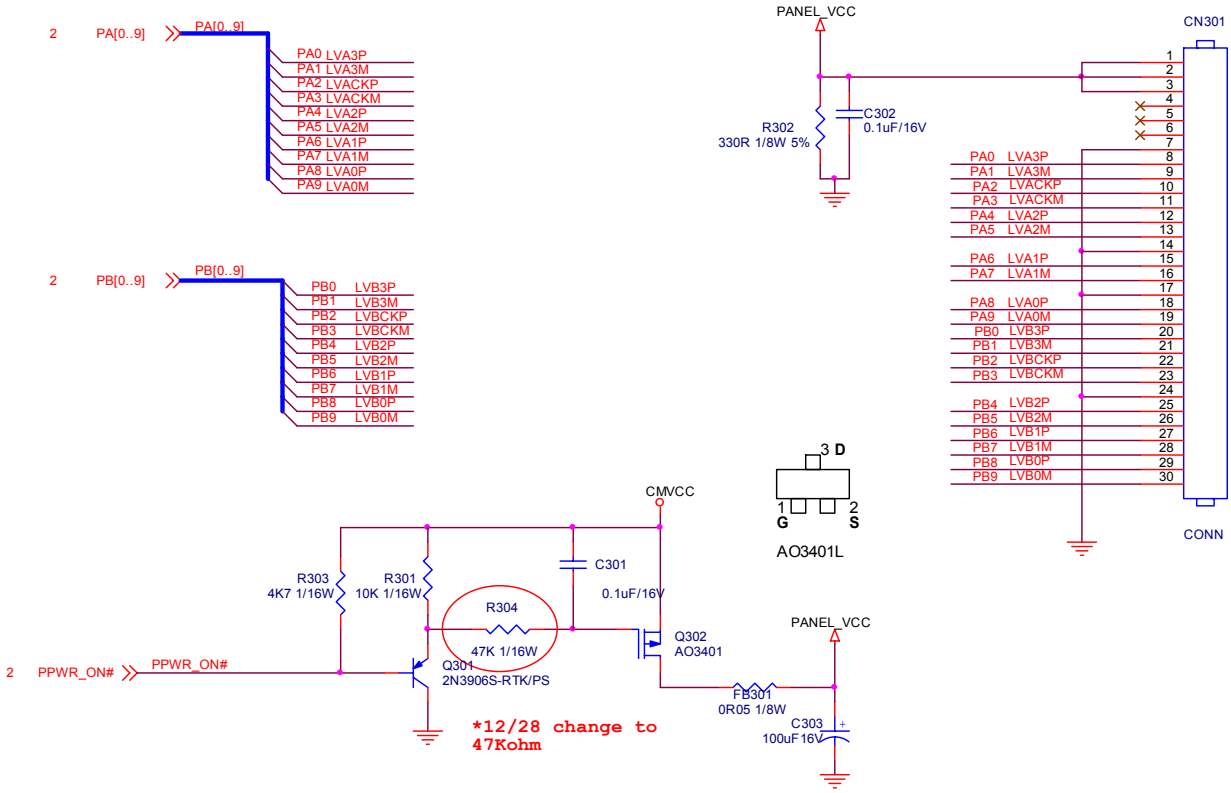
7. Schematic

7.1 Main Board

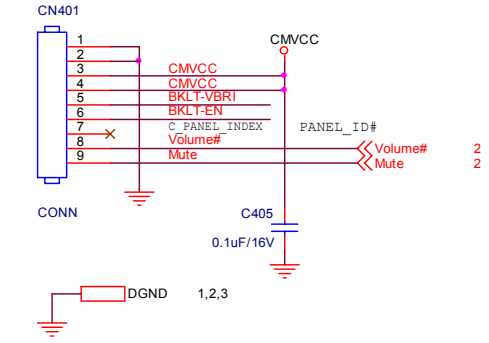


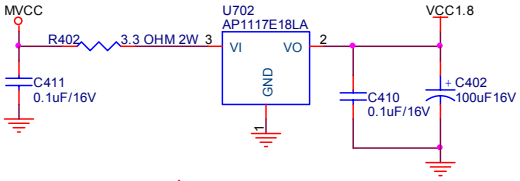


T.P.V. (Top Victory Electronics Co., Ltd.)	OEM MODEL	HP L1750/L1950	Size C
电路图编号	G2559-1-3-X-2-070719	TPV MODEL	Rev -1-3
Key Component	03.Scalar	PCB NAME	715G2559-1-3
Date	Thursday, July 19, 2007	Sheet 3 of 5	

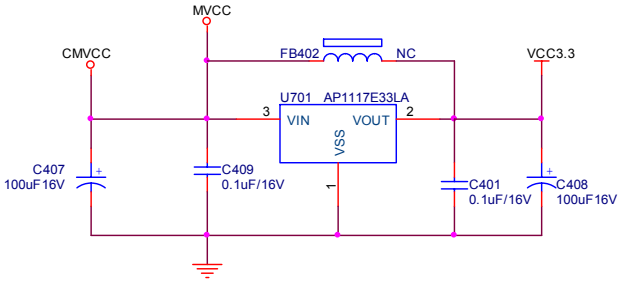


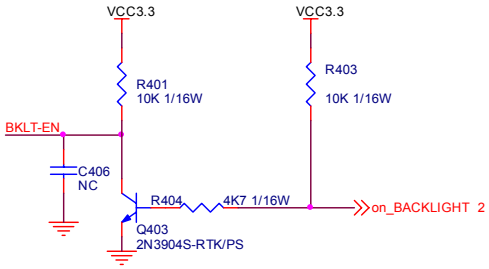
T P V （Top Victory Electronics Co . , Ltd. ）		OEM MODEL	HP L1750/L1950	Size	A
线路图编号	G2559-1-3-X-2-070719	TPV MODEL		Rev	-1-3
Key Component	04 Output	PCB NAME	715G2559-1-3	备注	备注
Date	Thursday , July 19, 2007	Sheet	4 of 5		

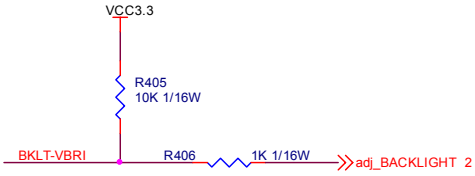




*12/28 change to LDO due to internal ripple too big



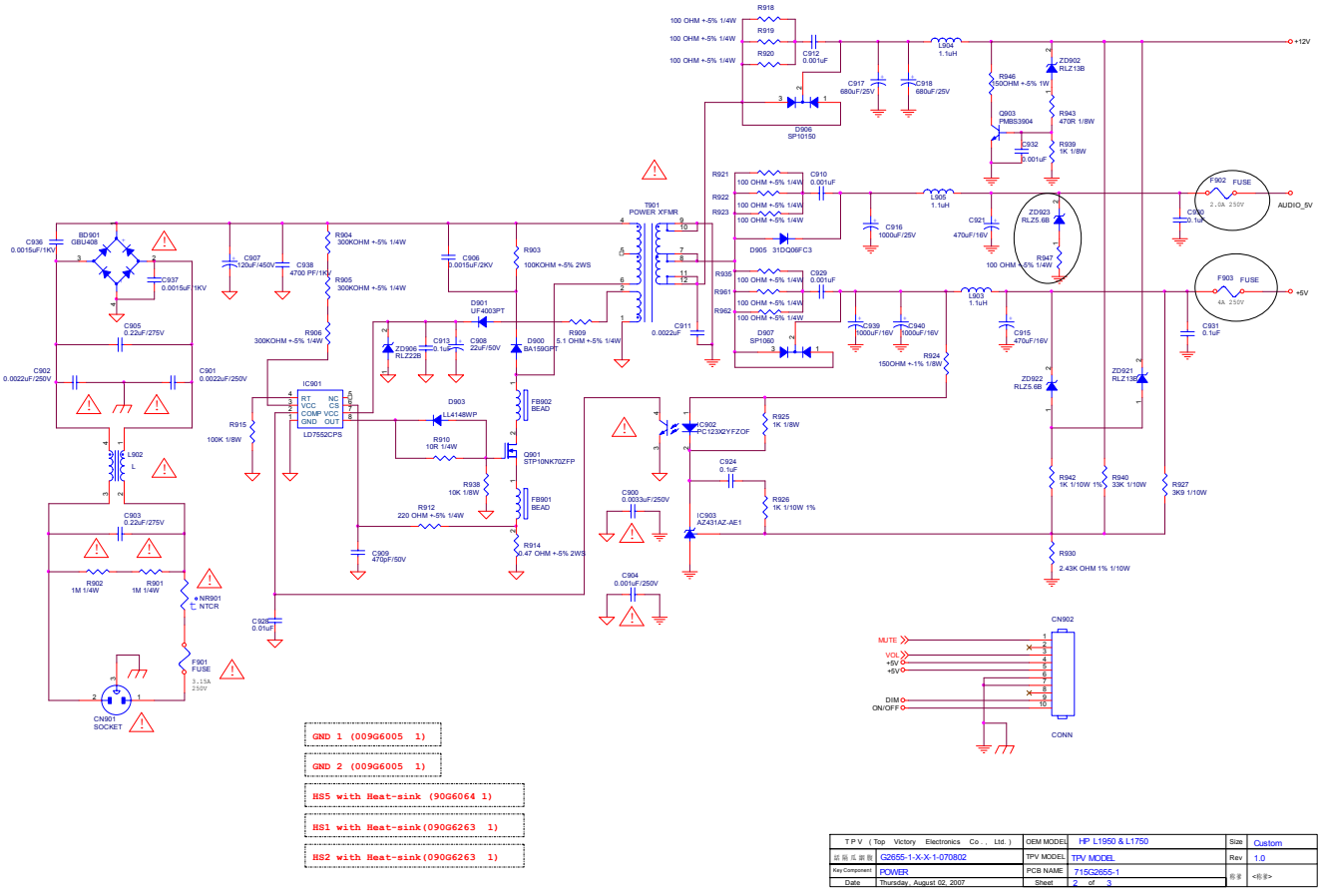


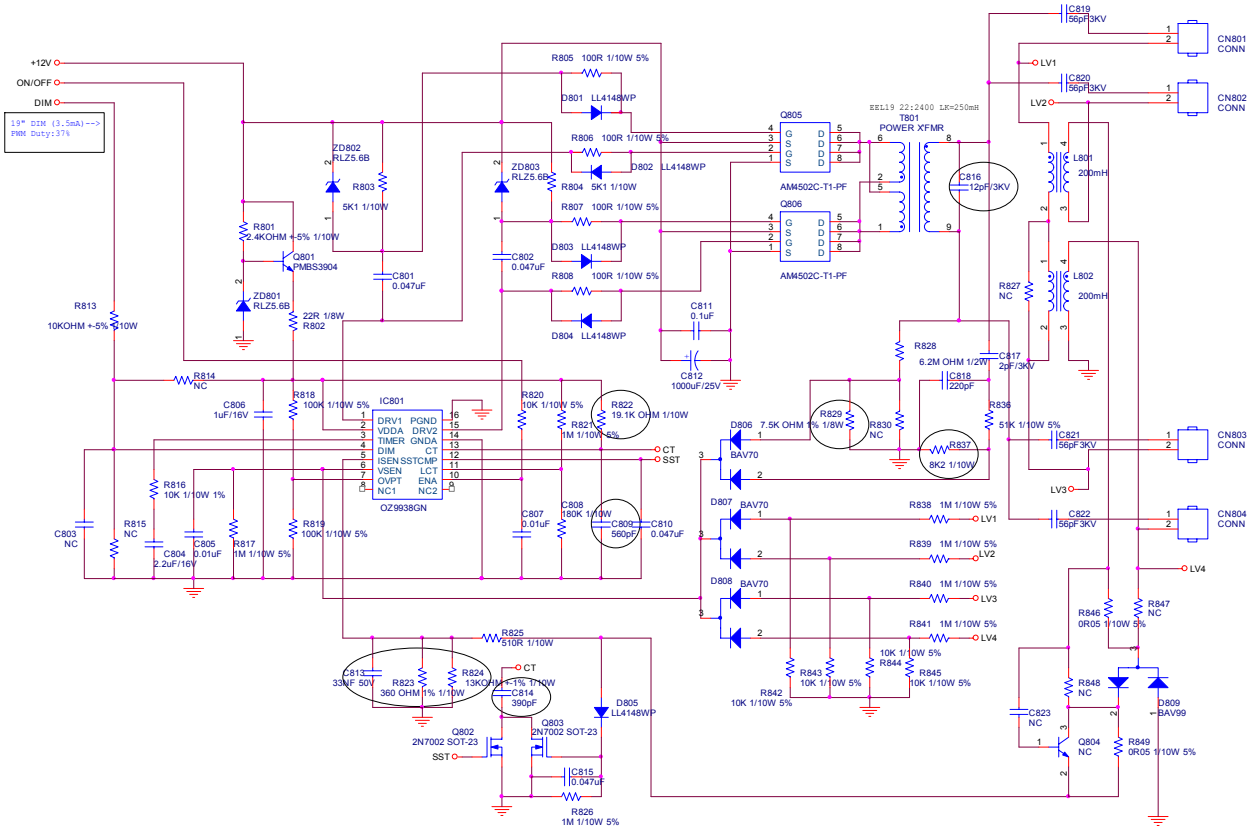


T P V （Top Victory Electronics Co . , Ltd. ）		OEM MODEL	HP L1750/L1950	Size	A
线路图编号	G2559-1-3-X-2-070719	TPV MODEL		Rev	-1-3
Key Component	05 Power	PCB NAME	715G2559-1-3	备注	备注
Date	Thursday , July 19, 2007	Sheet	5 of 5		

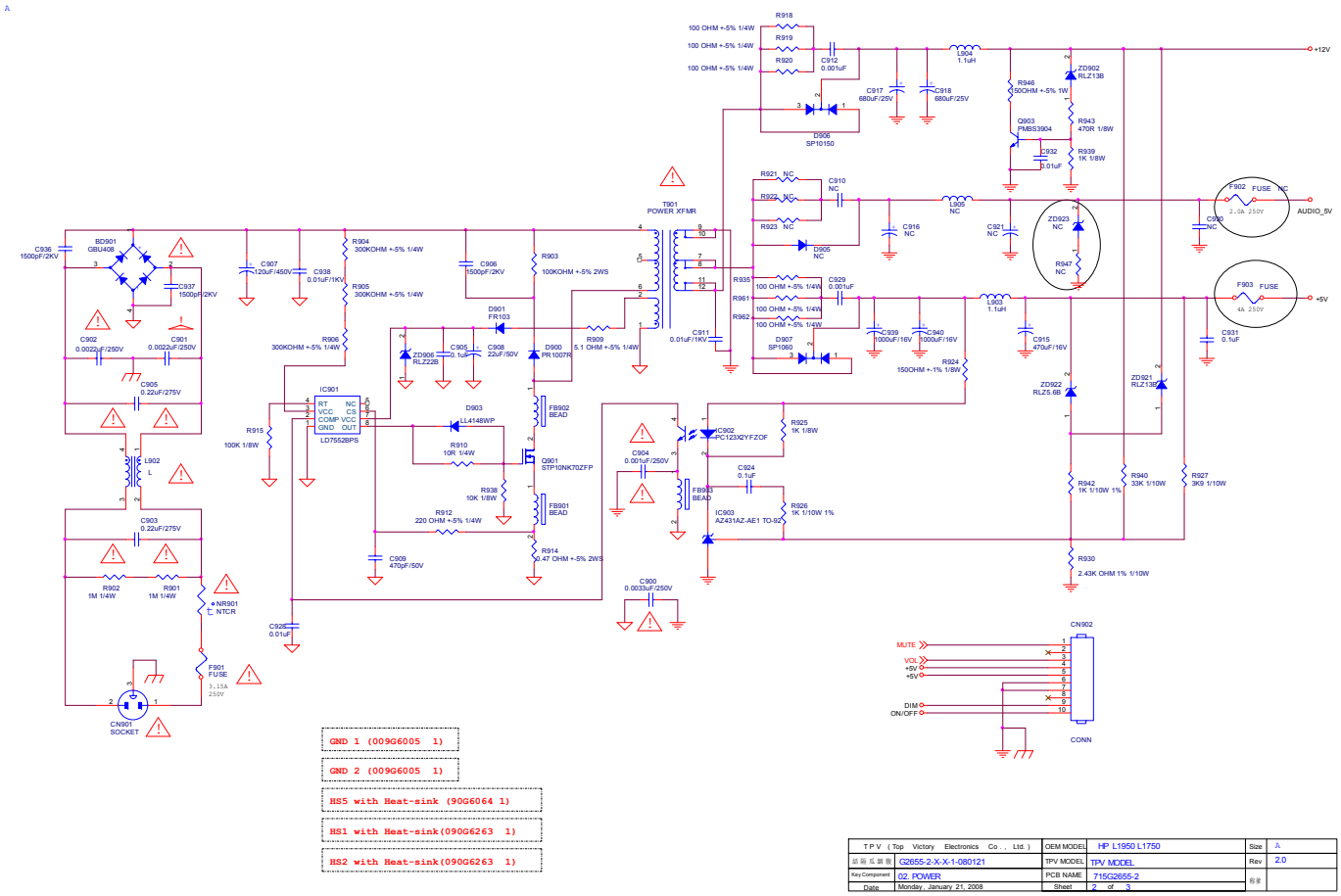
7.2 Power Board

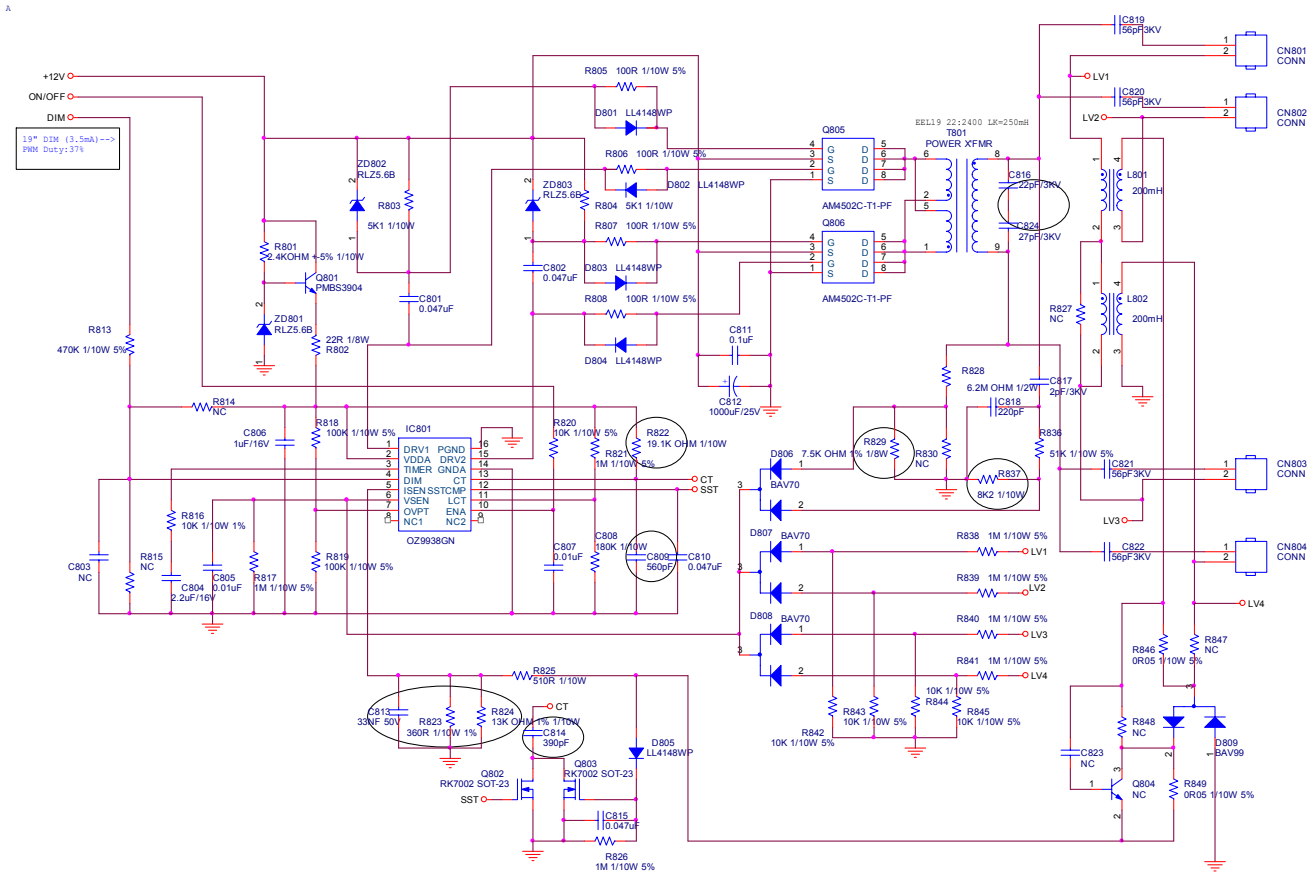
715G2655 1 2





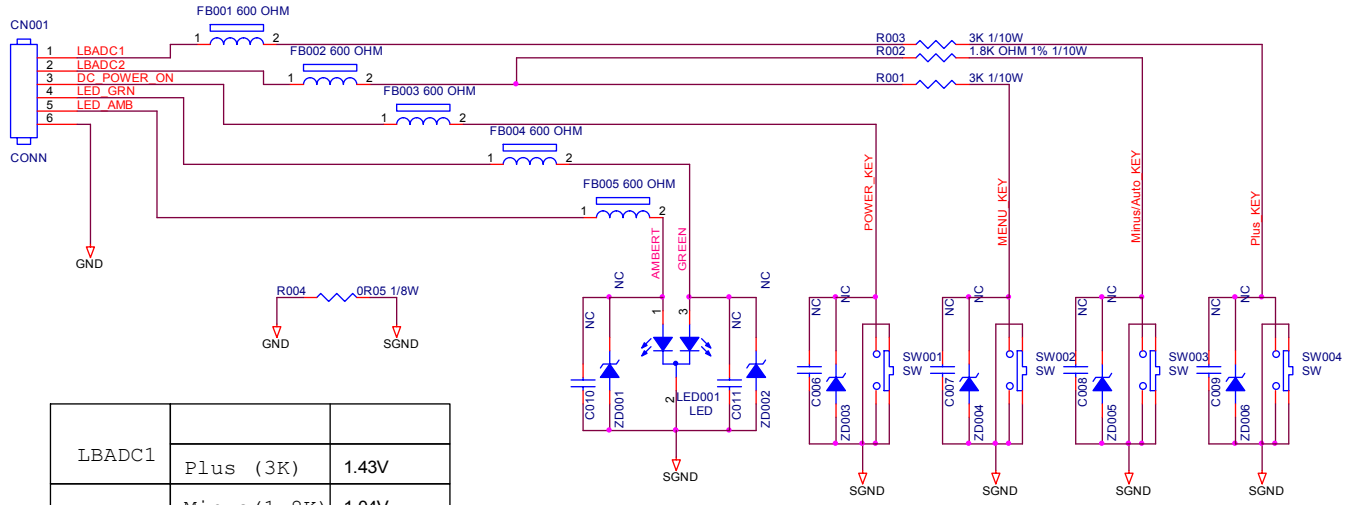
T P V (Top Victory Electronics Co . , Ltd.)		OEM MODEL	HP L1950 & L1750	Size	Custom
結 局 瓜 鋼 腹	G2655-1-X-X-1-070802	TPV MODEL	TPV MODEL	Rev	1.0
Key Component	INVERTER	PCB NAME	715G2655-1	称 峯	<称峯>
Date	Thursday , August 02, 2007	Sheet	3 of 3		





T P V （Top Victory Electronics Co., Ltd.）		OEM MODEL	HP L1950 L1750	Size	A
結 陽 瓜 鎖 服	G2655-2-X-X-1-080121	TPV MODEL	TPV MODEL	Rev	2.0
Key Component	03.INVERTER O29938	PCB NAME	715G2655-2	称 多	
Date	Monday, January 21, 2008	Sheet	3 of 3		

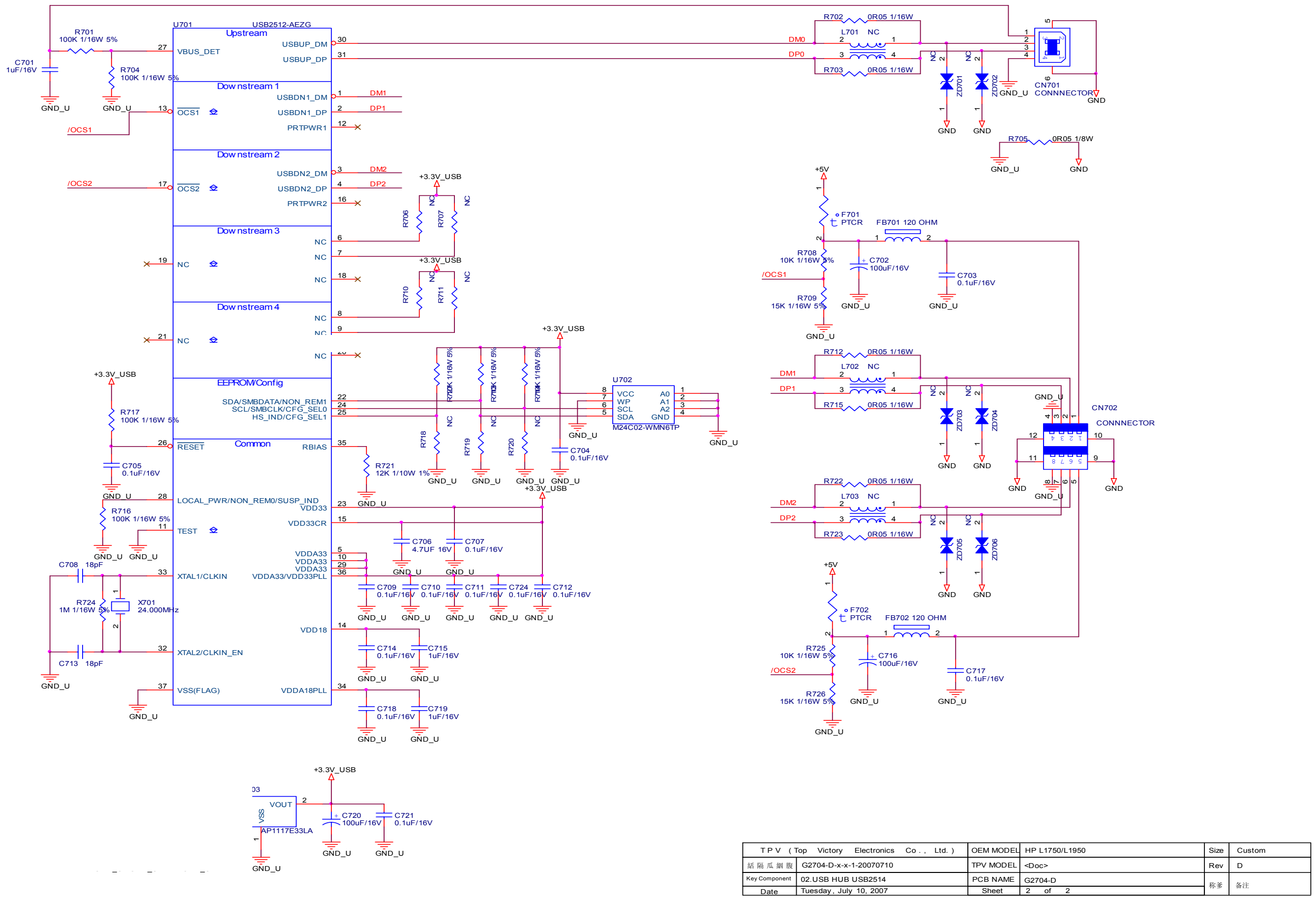
7.3 Key Board



LBADC1	Plus (3K)	1.43V
LBADC2	Minus(1.8K)	1.04V
	MENU (3K)	1.43V

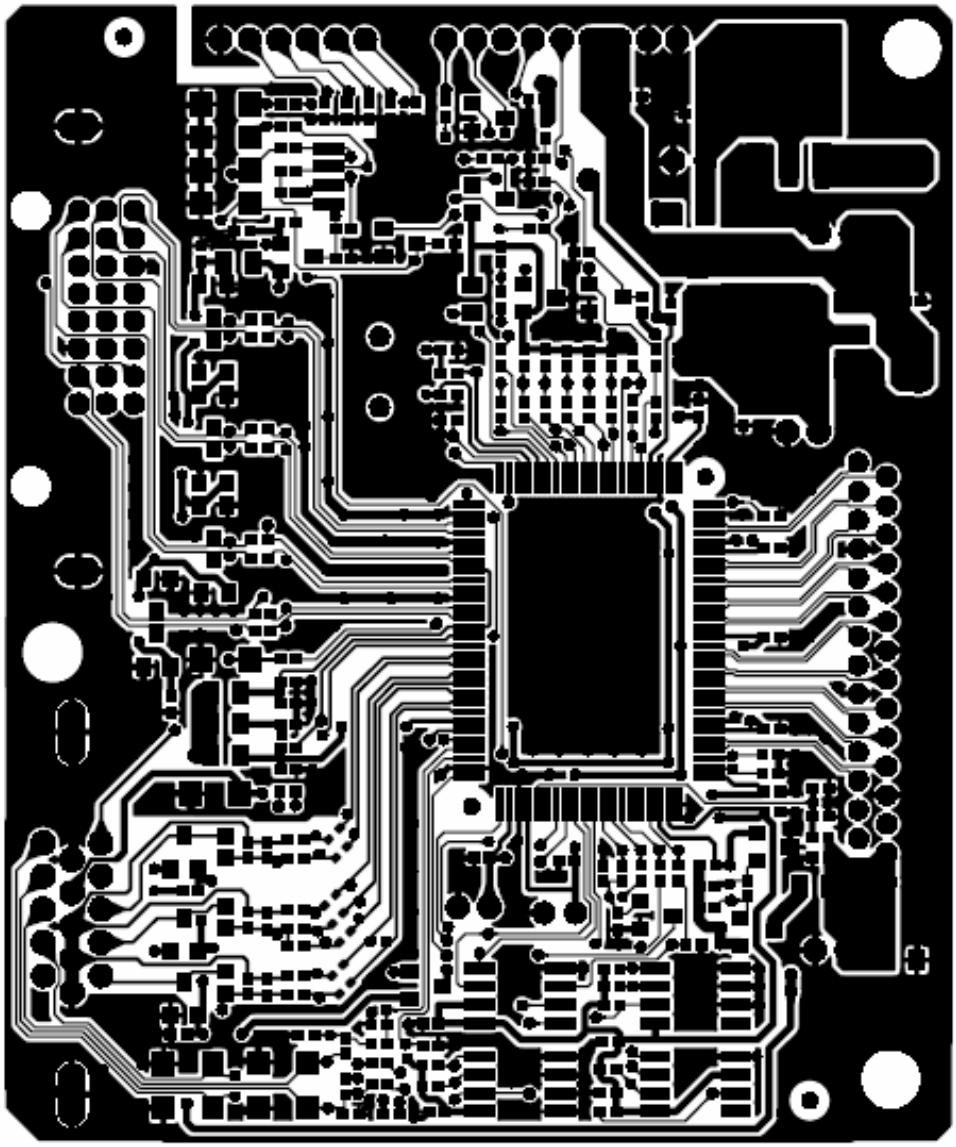
T P V (Top Victory Electronics Co . , Ltd.)		OEM MODEL	HP L1750/L1950	Size	Custom
紙 隔 瓜 絹 腹	G2579-D-K-X-1-20070630	TPV MODEL	<Doc>	Rev	D
Key Component	02.Key Board	PCB NAME	G2579-D	称爹	备注
Date	Saturday , June 30, 2007	Sheet	2 of 2		

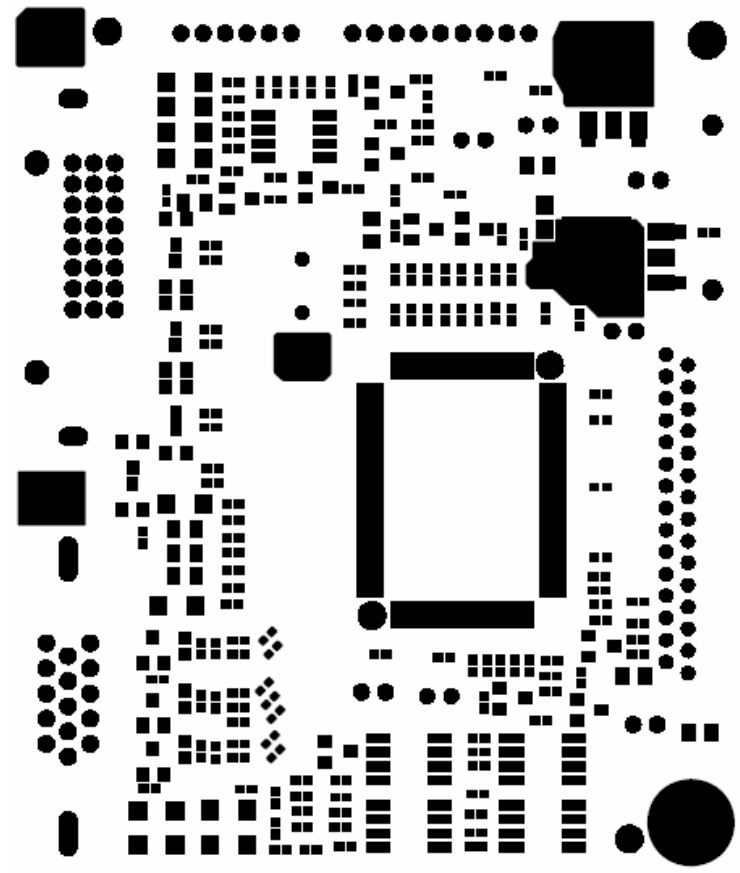
7.4 USB Board

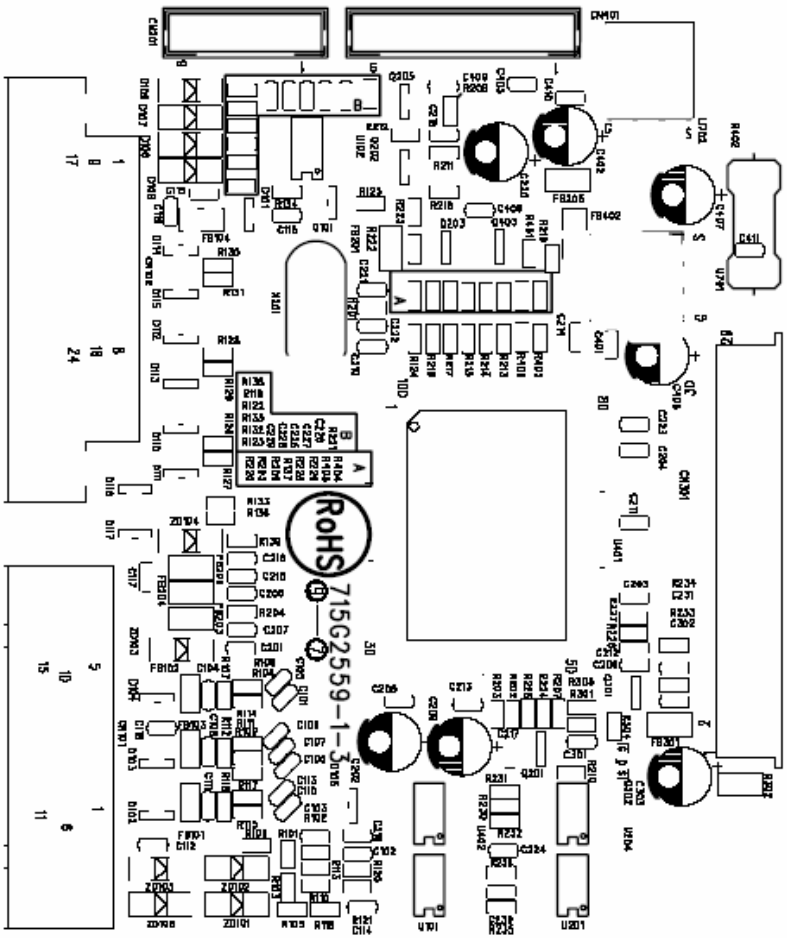


8. PCB Layout

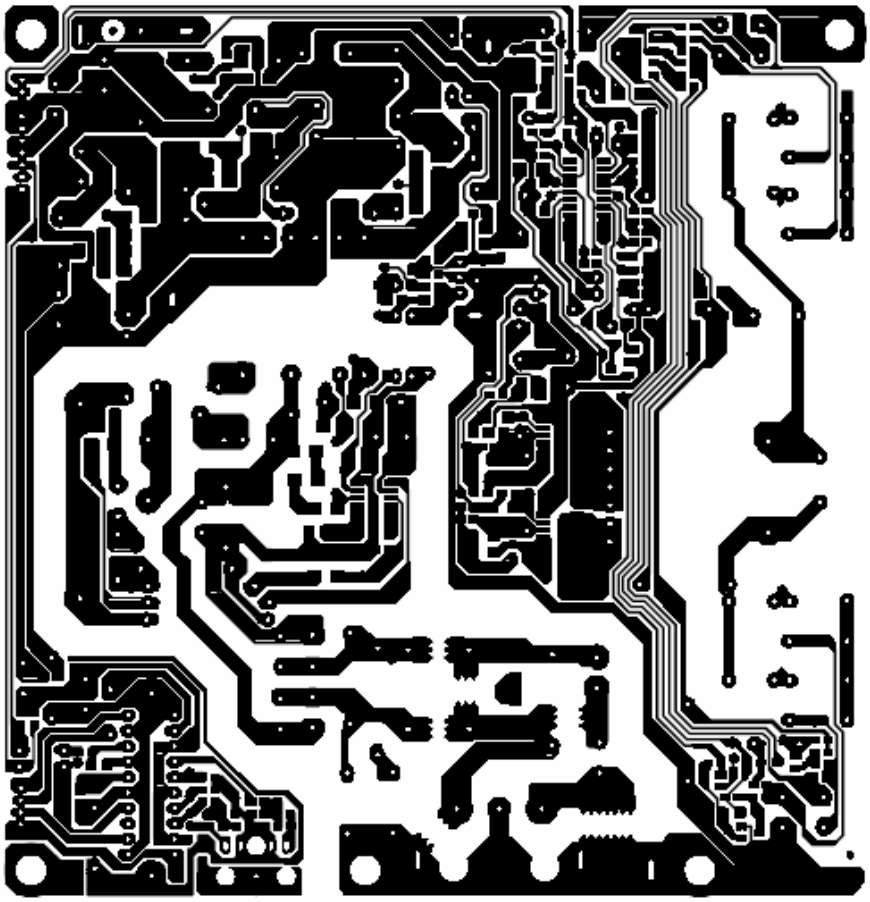
8.1 Main Board

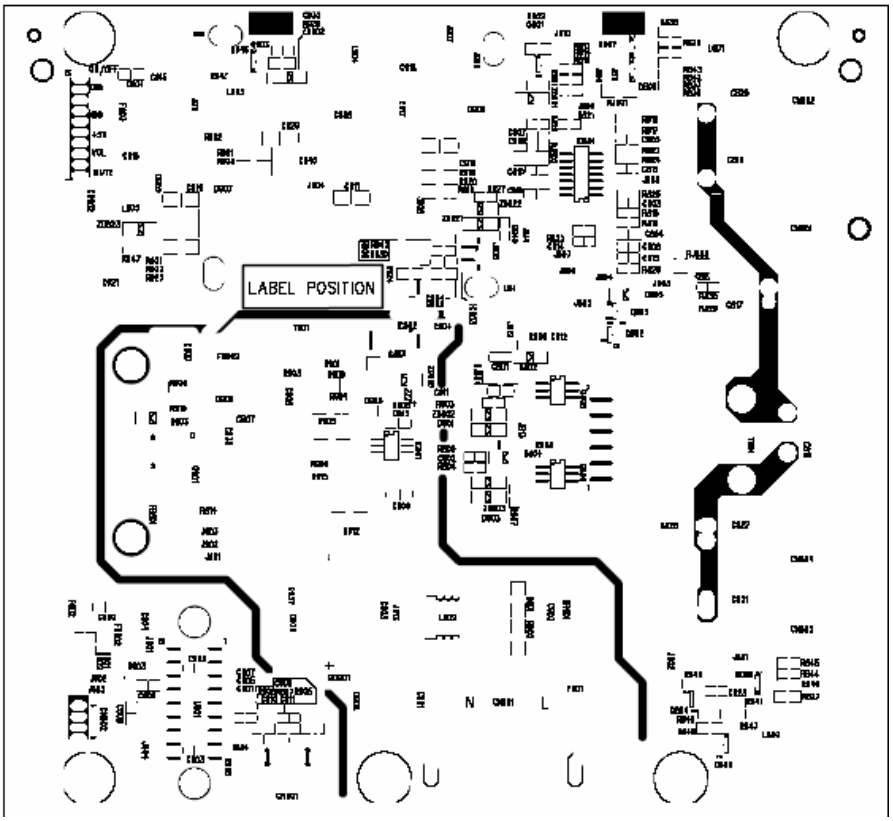


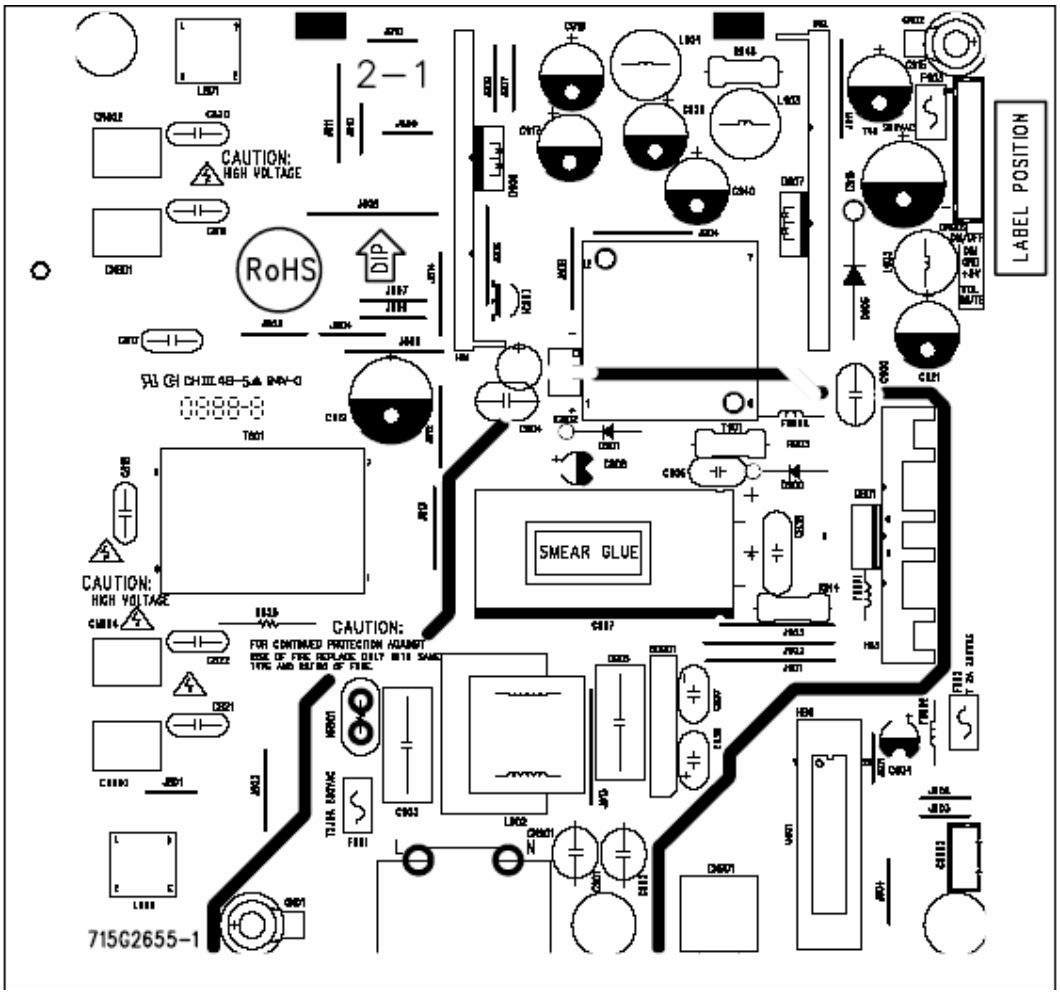




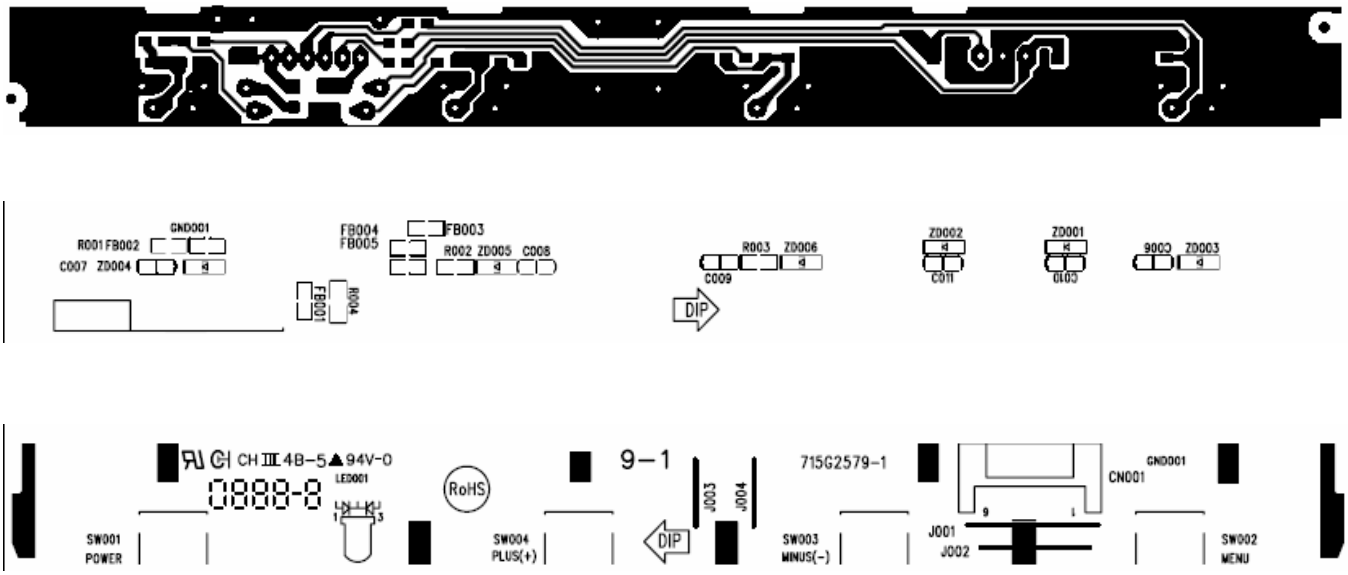
8.2 Power Board



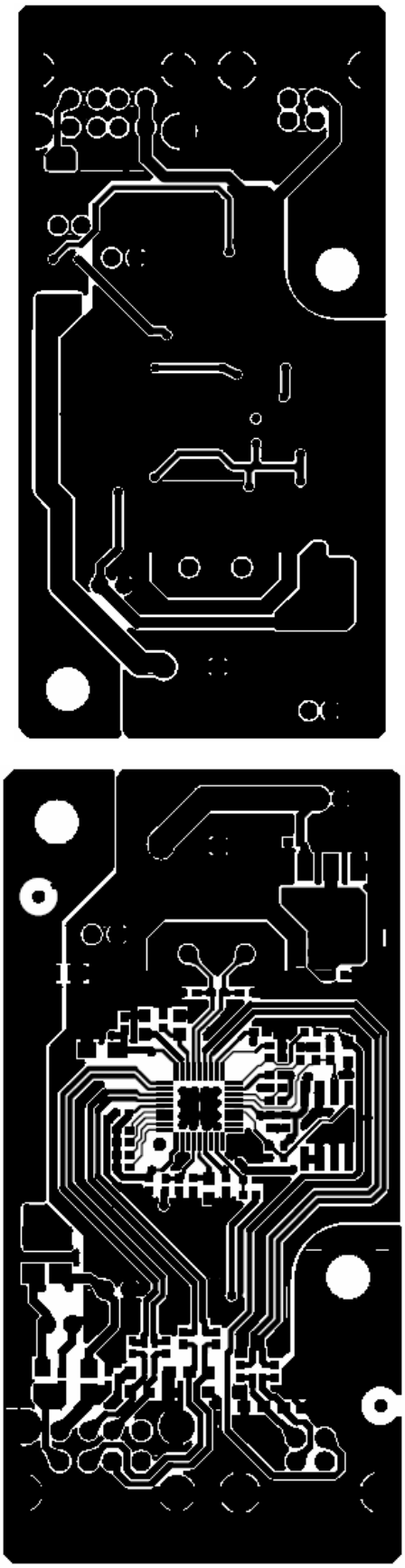


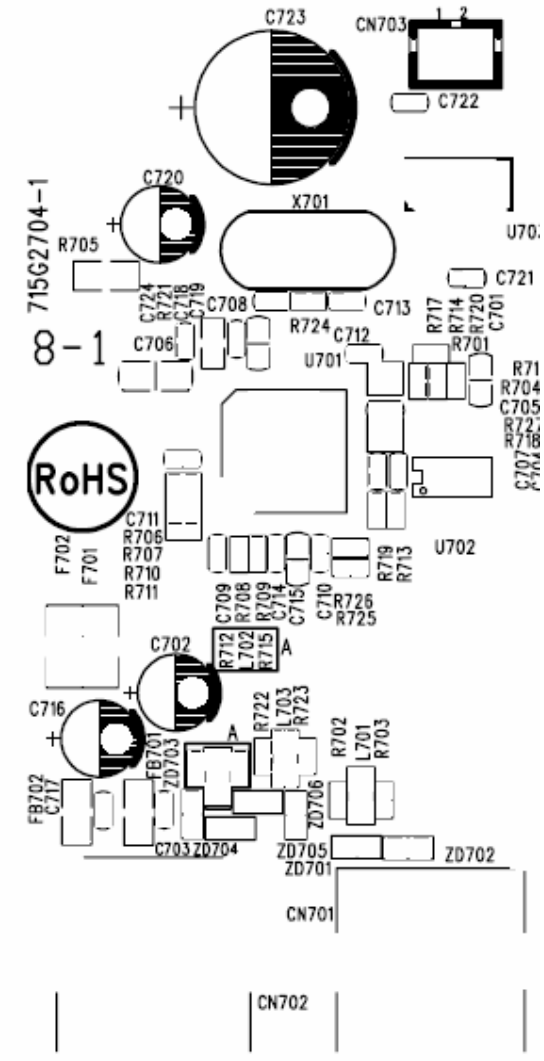


8.3 Key Board



8.4 USB BOARD





9. Maintainability

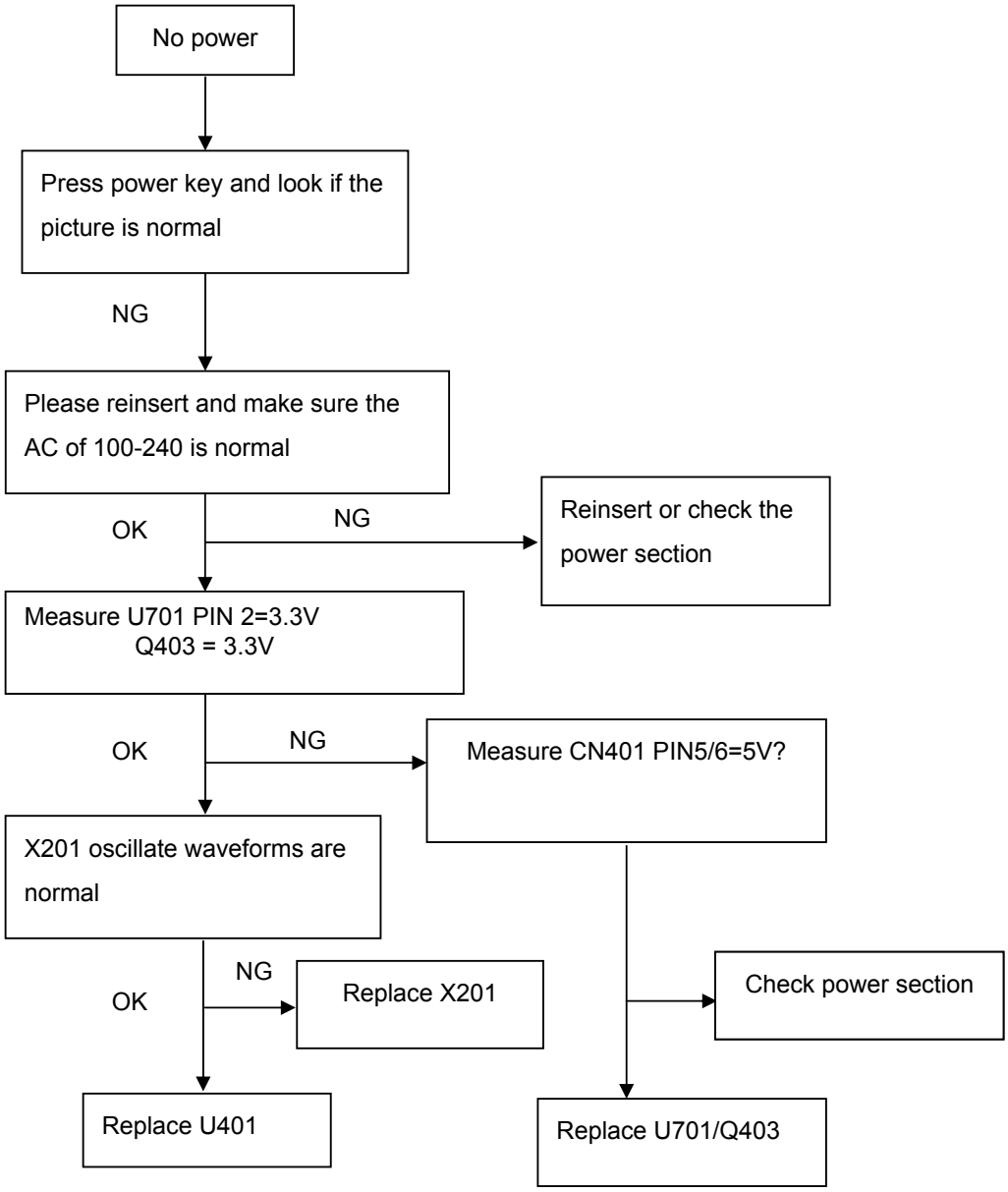
9.1Equipments and Tools Requirement

1. Multi-meter.
2. Oscilloscope.
3. Pattern Generator.
4. DDC Tool with a Compatible Computer.
5. Alignment Tool.
6. LCD Color Analyzer.
7. Service Manual.
8. User Manual.

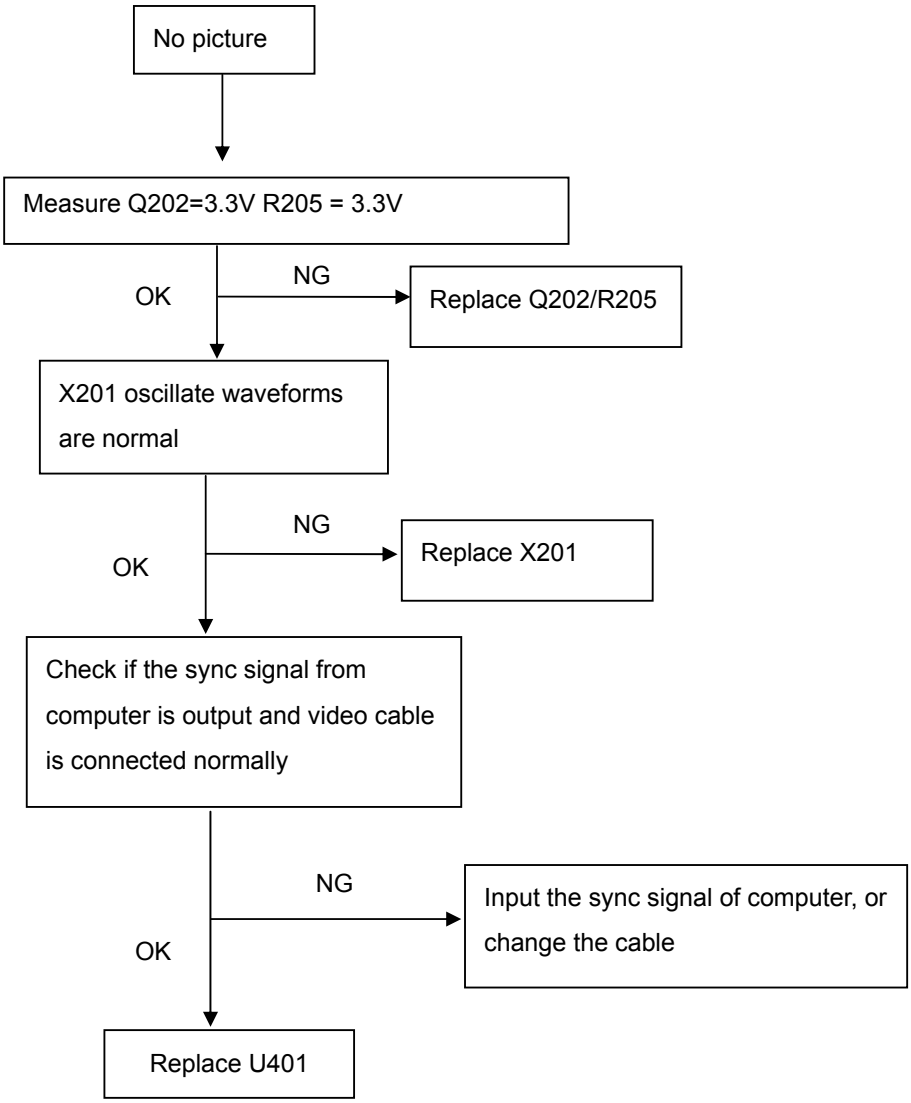
9.2 Trouble Shooting

9.2.1 Main Board

1、No power

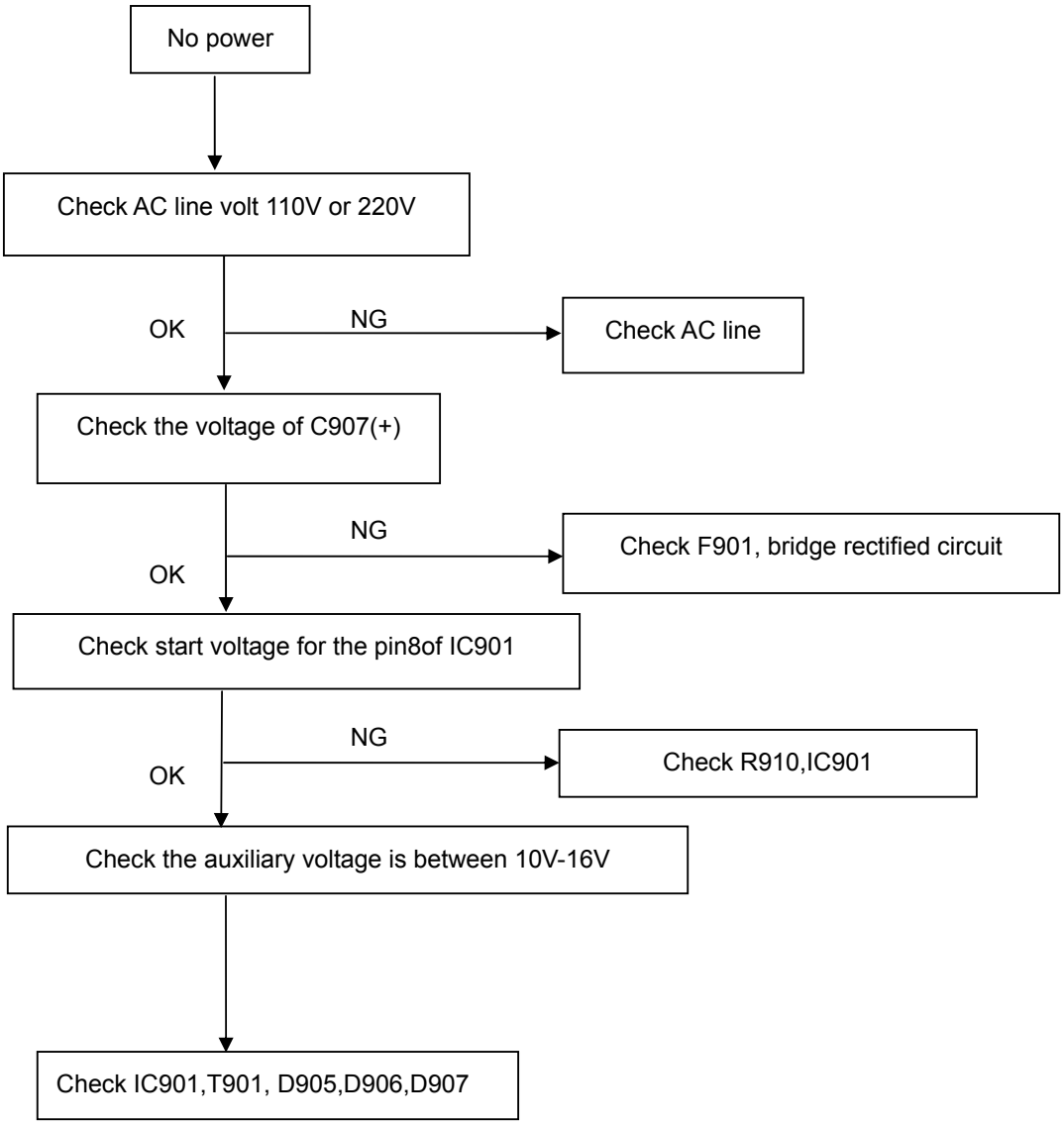


No picture (LED is orange)

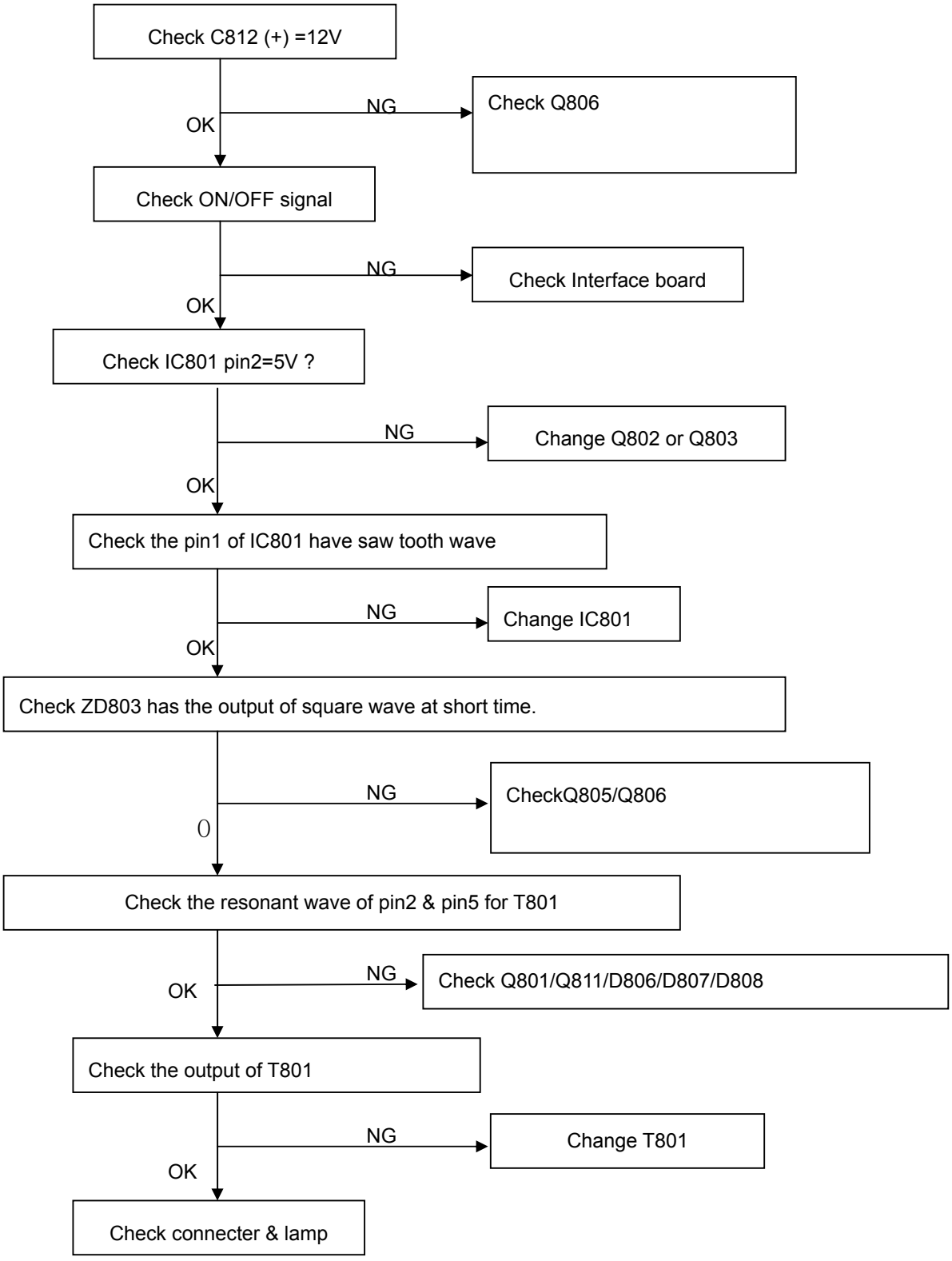


9.2.2 Power Board

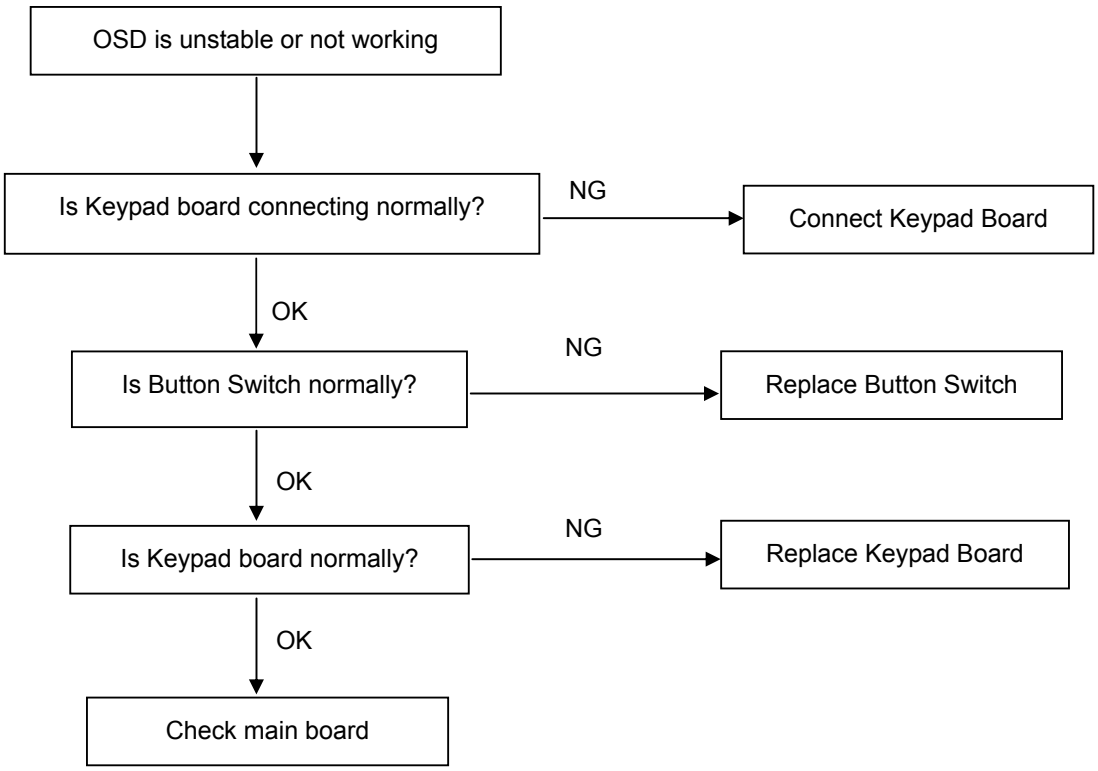
1. No Power



2. W/LED No Backlight



9.2.3 Key Board



10. White- Balance, Luminance Adjustment

Approximately 30 minutes should be allowed for warm up before proceeding White-Balance adjustment.

1. How to do the Chroma-7120 MEM .Channel setting
   A. Reference to chroma 7120 user guide
   B. 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. 9300k color:
      9300 color temp. parameter is x = 283 ±15, y = 297 ±15, Y> 190 cd/m^2 ,
   B. sRGB color:
      sRGB color temp. parameter is x = 313±15, y = 329 ±15, Y>200 cd/m^2)
   C. 6500K color:
      6500K color temp. parameter is x = 313±15, y = 329 ±15, Y>230 cd/m^2)

3. Into factory mode of HP L1950
   Turn on power, 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 80
   Adjust the **Brightness** to 90.
5. Gain adjustment :
   Move cursor to "-F-" and press MENU key
   A. Adjust 9300k color-temperature
      1. Switch the Chroma-7120 to **9300k channel.**
      2. The chroma 7120 will show x = 283±15, y = 297 ±15, Y>190 cd/m^2
      3. Switch the chroma-720 to **RGB MODE** (with press "MODE" button to change)
      4. Adjust the RED of color **9300K** on factory window until chroma 7120 indicator reached the value R=100
      5. Adjust the GREEN of color **9300K** on factory window until chroma 7120 indicator reached the value G=100
      6. Adjust the BLUE of color **9300K** 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±2

B. Adjust sRGB color-temperature

1. Switch the chroma-7120 to sRGB **channel.**
2. The chroma 7120 will show x = 313 ±15, y = 329 ±15, Y >200 cd/m^2
3. Switch the chroma 7120 l to **RGB MODE** (with press “MODE” button to change)
4. Adjust the RED of color sRGB on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN of color sRGB on factory window until chroma 7120 indicator reached the value G=100
6. Adjust the BLUE of color sRGB 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±2

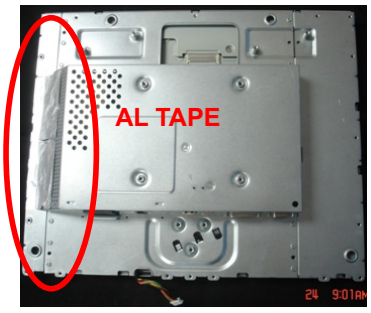
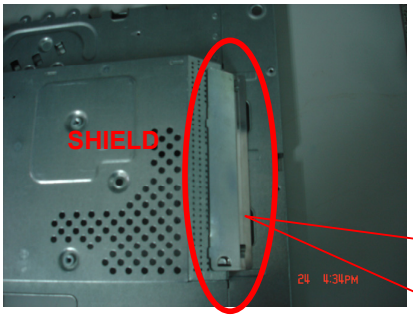
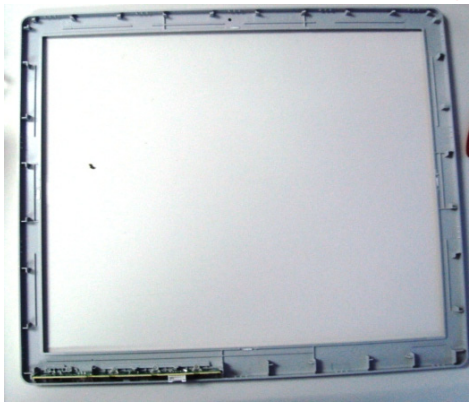
C. Adjust 6500k color-temperature

1. Switch the chroma-7120 to 6500K **channel.**
2. The chroma 7120 will show x = 313 ±15, y = 329 ±15, Y >230 cd/m^2
3. Switch the chroma 7120 l to **RGB MODE** (with press “MODE” button to change)
4. Adjust the RED of color sRGB on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN of color sRGB on factory window until chroma 7120 indicator reached the value G=100
6. Adjust the BLUE of color sRGB 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±2

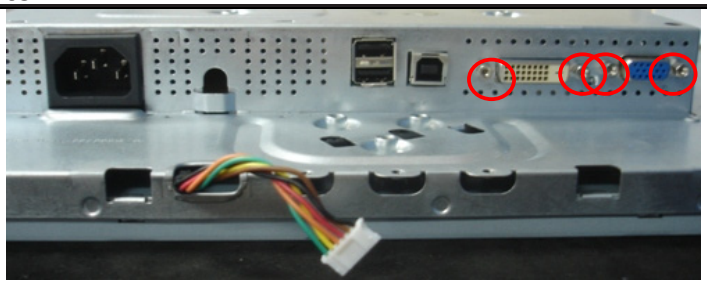
D. Press reset key and Turn the Power-button “off to on” to quit from factory mode.

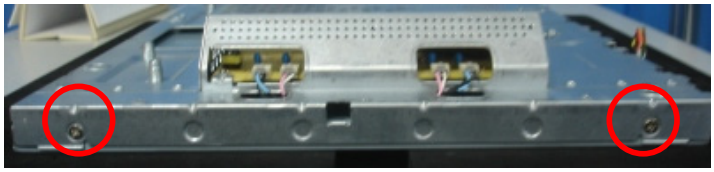
11. Mechanical Instructions

Step	Figure	Description
Preparation		Lay the monitor on a flat, soft and clean surface.
Remove the stand	 	Remove the decorate cover and the screws to remove the stand.

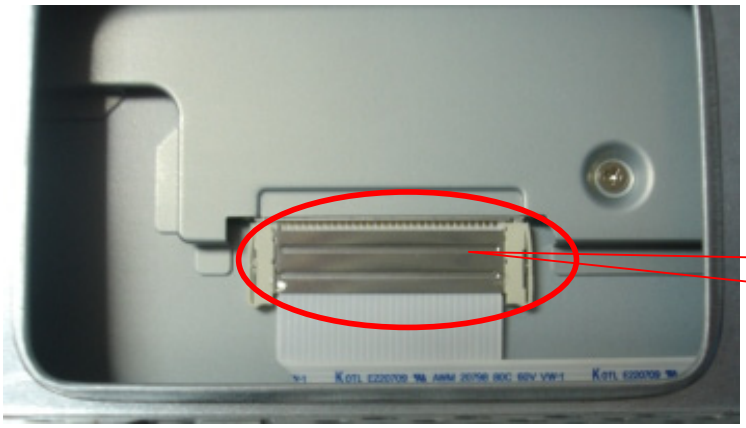
Remove the back cover	 	Remove the back cover
Remove the bezel	  	Remove the screws to remove the bezel Update. Cancel “AL TAPE “, Add “SHIELD”

Remove the main frame

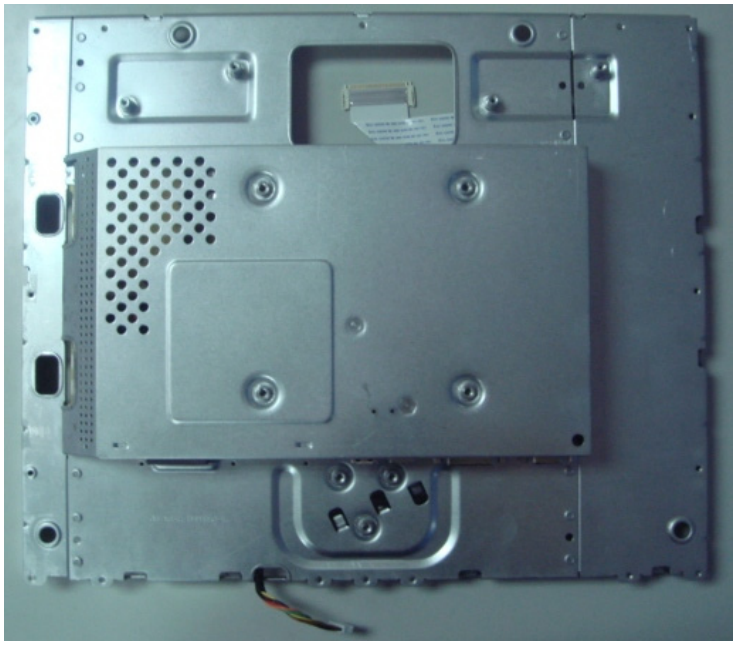


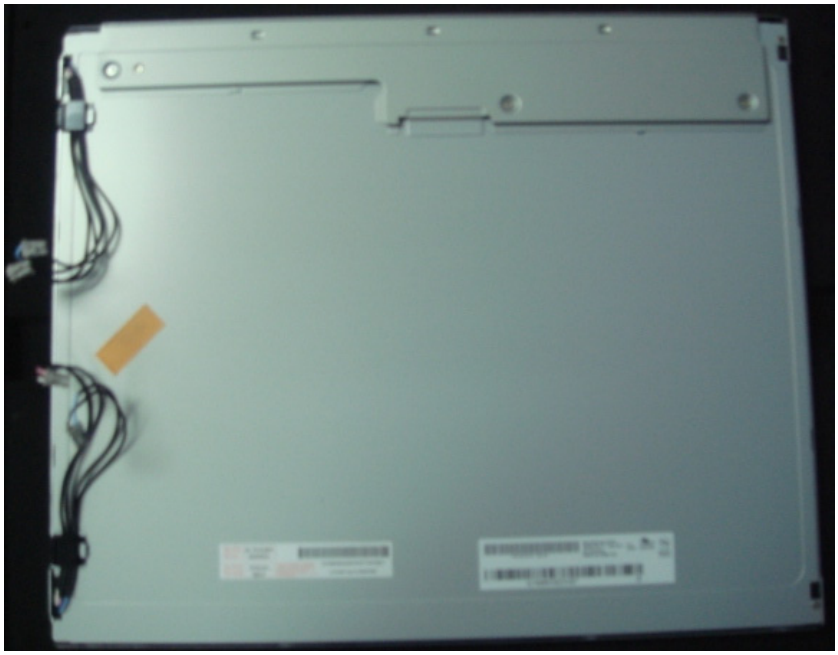


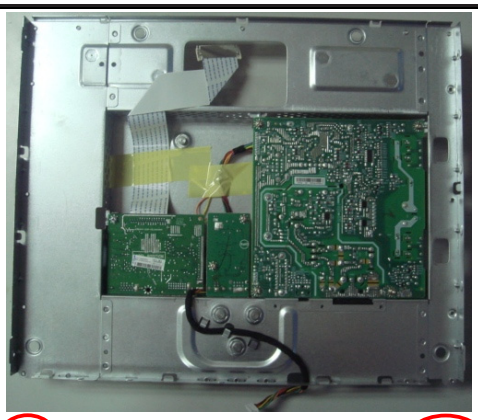
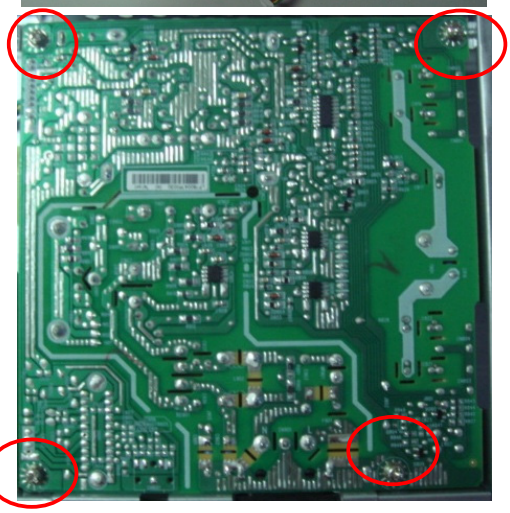
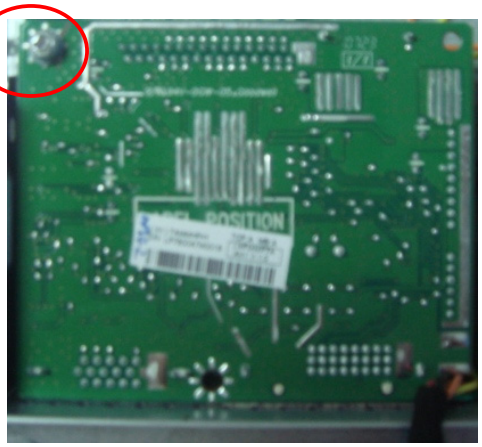
Remove the screws marked in red and to remove the main frame

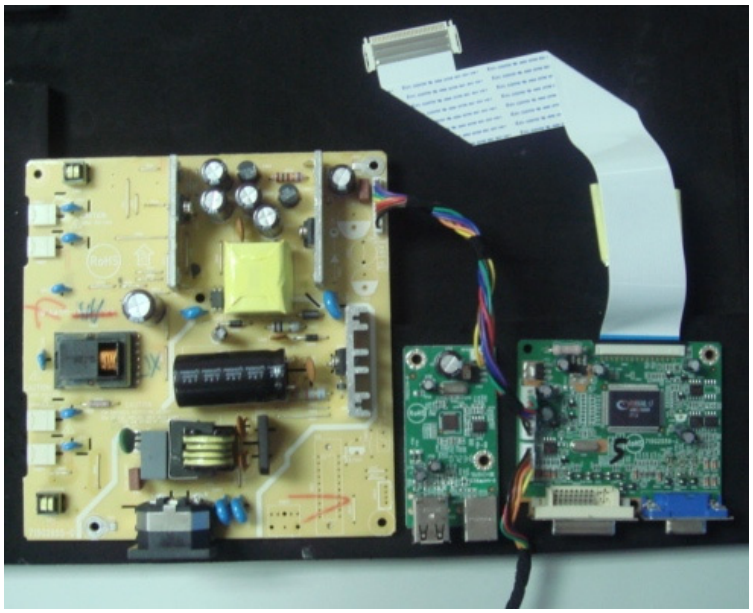
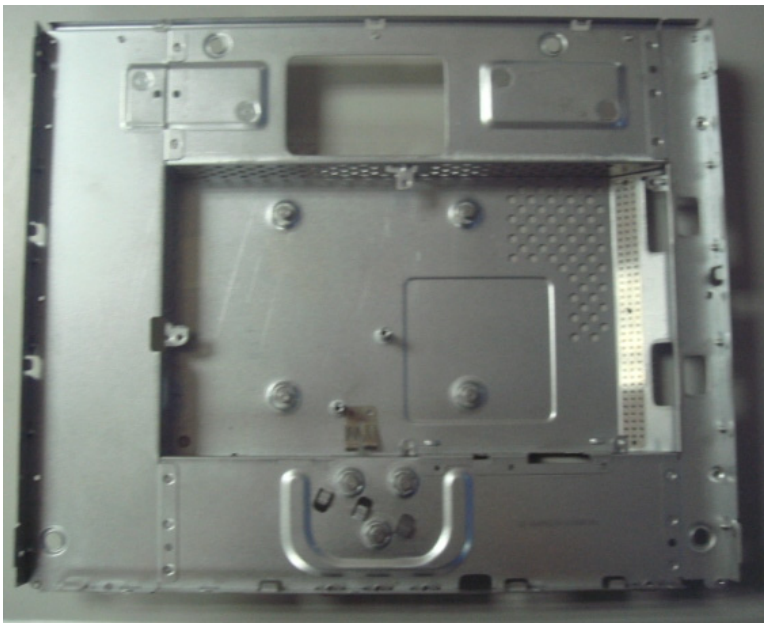


Put this cover up.

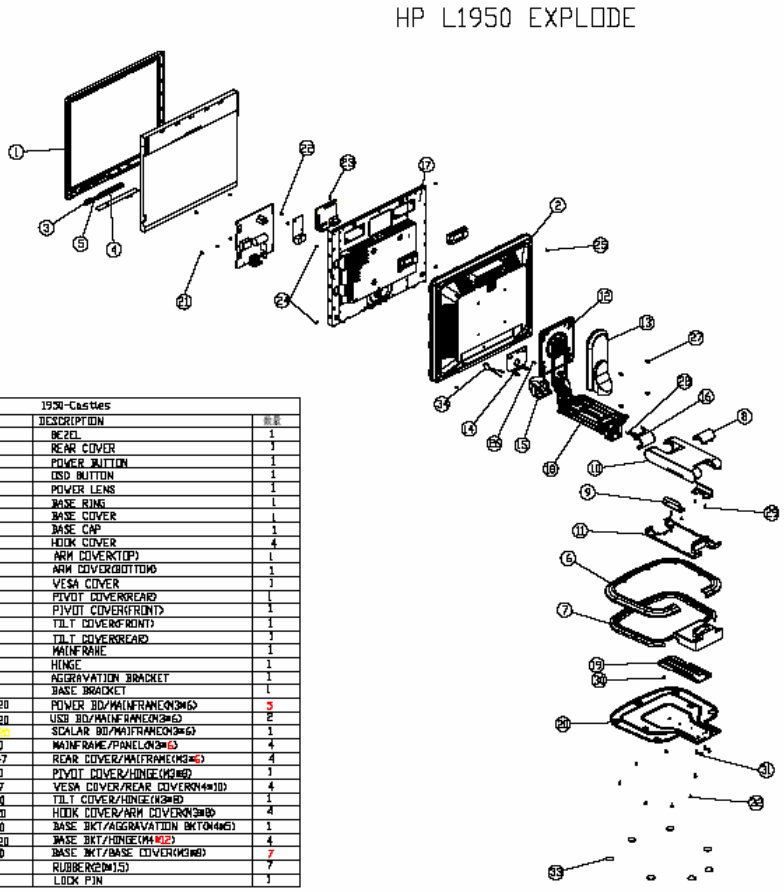


Remove the panel	 	Remove the panel

Remove main board and power board	   	1.Remove the screws marked in red to remove the Power Board、USB Board and Main Board. 2.Disconnect the connector and remove the Power Board、USB Board and Main Board.

The end	 	The machine disconnect freely

12. Monitor Exploded View



1950-Castles			
ITEM	P/N	DESCRIPTION	QTY
1	A34G0430	BEZEL	1
2	A34G0431	REAR COVER	1
3	A33G0237	POWER BUTTON	1
4	A33G0238	OSD BUTTON	1
5	A33G0239	POWER LENS	1
6	A34G0419	BASE RING	1
7	A34G0420	BASE COVER	1
8	A34G0278	BASE CAP	1
9	A34G0279	HOOK COVER	4
10	A33G0423	ARM COVER(UP)	1
11	A33G0424	ARM COVER(BOTTOM)	1
12	A33G0425	VESA COVER	1
13	A34G0460	PIVOT COVER(REAR)	1
14	A34G0280	PIVOT COVER(FRONT)	1
15	A34G0281	TILT COVER(FRONT)	1
16	A33G0282	TILT COVER(REAR)	1
17	A13G0230	MAINFRAME	1
18	A37G0047	HINGE	1
19	A15G0274	AGGRAVATION BRACKET	1
20	A15G0251	BASE BRACKET	1
21	MUG1730-6-120	POWER BD/MA(NFRAME(M3*6)	3
22	MUG1730-6-120	USB BD/MA(NFRAME(M3*6)	2
23	MUG1730-6-120	SCALAR BD/MA)FRAME(M3*6)	1
24	MUG130-6-120	MAINFRAME/PANEL(M3*6)	4
25	PUG3030-6-47	REAR COVER/MA(FRAME(M3*6)	4
26	QUG130-8-120	PIVOT COVER/HINGE(M3*8)	1
27	MUG140-10-47	VESA COVER/REAR COVER(M4*10)	4
28	QUG130-8-120	TILT COVER/HINGE(M3*8)	1
29	QUG930-8-120	HOOK COVER/ARM COVER(M3*8)	4
30	MUG140-5-120	BASE BKT/AGGRAVATION BKT(M4*5)	1
31	MUG140-12-120	BASE BKT/HINGE(M4*12)	4
32	QUG130-8-120	BASE BKT/BASE COVER(M3*8)	7
33	W2G394-3	RUBBER(Ø15)	7
34	H19G0001-1	LOCK PIN	1

13. BOM List

T97GMMDKHNHPQNE / T97GMMDQHNHPQNE

Location	Part No.	Description
	040G 58162435A	P/N LABEL FOR MANUAL PE BAG
	040G 581654 3A	CARTON LABEL
	052G 1185	MIDDLE TAPE
	052G 1205 A	ALUMINIUM TAPE
	052G 1207 A	Conductive Tape 45mm *25mm *0.08mm (单导)
	052G 1211503	ALUMINUM FOIL TAPE
	089G 175517 G	USB CABLE
E08902	089G 728HAAE03	SINGNAL CABLE 1.8M
E08903	089G1748HAA 9	DVI SIGNAL CABLE
E08901	089G402A19N LS	POWER CORD
E09503	095G8014 6T 44	WIRE HARNESS 6P-6P 205mm TONGFU
	0D1G 930 4120	screw
	0D1G 930 6 47 CR3	SCREW
	0D1G1730 8120	SCREW
	0D1G1730 8120	SCREW
	0D1G1730 8120	SCREW
	0M1G 130 6120	SCREW M3X6
	0M1G 140 10 47 CR3	SCREW
	705GH734061	STAND-BASE ASS'Y
	705GH734063	BEZEL ASS'Y
E750	750GLG90E8L12Z000H	PANEL LM190E08-TLL1 NJ LPL
	A15G0249 1104L	19" MAIN FRAME
	A34G0431 EY 1B	REAR COVER
	CBPC7LMMHPH2	CONVERSIONG2559-K-X-X-2-070630
	H40G 17N69016B	ID LABEL
	H40G 19N69016C	ID LABEL
	H40G 581690 8A	TCO'03 LABEL
	H41G160669013D	L1*50g DOCKIT NA
	H41G780669028D	L1*50g QSG 449163-B26
	H41G780669058A	RTF CARD 488950-B21
	H41G780669059A	RTF CARD 407430-005
	H44G9004 1	CUSHION_EPS 19"
	H44G9004 2	CUSHION_EPS 19"
	H44G9004 3	EPE BOARD
	H44G9004690 1C	L1950 CARTON(448181-00A)
	H44G9004BRO 2B	PAPER BOARD
	H45G 77 6	PE PACKING

	H45G 87 18 8H A	EPE COVER
	H45G 87 1810H A	EPE COVER FOR BASE
	H50G 506 1	CIRCLE BELT
	H52G6025 16 33	MYLAR PET 0.25MM 145*50MM
	H85G0006 2	SHIELD
	KEPC7HC5	KEY BOARD
	PWPC941GH1	POWER G2655-2-X-X-2-080528
	Q23G3178690 8A	logo
	Q41G7800690C01	SCREEN FLYER
	Q45G 76 28 H A	PE BAG FOR MANUAL
E08907	S89G179T30N19	LVDS ASSY
	USB7HA2	USB BOARD
	012G 394 6	FOOT PORON
	0M1G 140 12125	SCREW
	0Q1G 130 8120	SCREW 42A9930011
	0Q1G 130 8120	SCREW 42A9930011
	0Q1G 130 8120	SCREW 42A9930011
	0Q1G 330 8120	SCREW 3X8mm 42A9930017/ 42-D002093
	A15G0289 1102A	MAFN FRAME
	A33G0278 EY L	BASE_CAP
	A33G0279 EY L	HOOK COVER
	A33G0280 EY L	COVER_PIVOT_FRONT
	A33G0281 EY L	COVER_TILT_FRONT
	A33G0282 EY L	TILT COVER(REAR)
	A34G0419 PC B	BASE RING
	A34G0420 EY B	BASE COVER
	A34G0423 EY B	COVER_RAM_TOP
	A34G0424 EY B	COVER_RAM_BOTTOM
	A34G0460 EY B	COVER_PIVOT_REAR
	A37G0047 1	Hinge ass'y
	H19G0001 1	LOCK PIN
	H40G 581690 9C	L1*50 caution label
	A33G0237 PC L	BUTTON_POWER
	A33G0238 PC L	OSD BUTTON
	A33G0239 1 1C	LENS_POWER
	A34G0430 PCA1B	BEZEL
CN201	033G3802 6B Y W	WAFER
CN401	033G3802 9B Y W	WAFER
CN301	033G801930F CH JS	CONNECTOR
	040G 45762412B	CBPC LABEL

R402	061G152M33964L6W56	RST MOFR 3.3 0HM +-5% 2WS
C202	067G215V100 7R	LOW E.S.R 10uF M 50V
C220	067G215V100 7R	LOW E.S.R 10uF M 50V
C303	067G405V101 3P	CAP 105℃ 100UF M 16V
C402	067G405V101 3P	CAP 105℃ 100UF M 16V
C407	067G405V101 3P	CAP 105℃ 100UF M 16V
C408	067G405V101 3P	CAP 105℃ 100UF M 16V
CN101	088G 35315F HD	D-SUB CONN F ATTACHED SCREW
CN102	088G 35424F J	DVI 24PIN CONN F ATTACHED SCREW
X201	093G 2253B H	XAT01431AFI1H-3OHX AT-49 14.31818MHZ
	Q85G 583603	GASKET_ALUMINIUM FOIL
	Q85G 583605	GASKET_ALUMINIUM FOIL
U401	056G 562184	IC HUM56AWL-LF PQFP-100
U702	056G 56327A	IC AP1117E18LA SOT223-3L ANACHIP
U701	056G 585 4A	IC AP1117E33L-13
U204	056G1133 32	IC M24C04-WMN6TP SO8
U101	056G1133 34	M24C02-WMN6TP
U102	056G1133 34	M24C02-WMN6TP
U402	056G1133713	IC PM25LV010A-100SCE SOIC-8
Q201	057G 417 12 T	KEC 2N3904S-RTK/PS
Q403	057G 417 12 T	KEC 2N3904S-RTK/PS
Q301	057G 417 13 T	KEC 2N3906S-RTK/PS
Q203	057G 417 13 T	KEC 2N3906S-RTK/PS
Q202	057G 417 13 T	KEC 2N3906S-RTK/PS
Q302	057G 763 1	A03401 SOT23 BY AOS(A1)
R101	061G0402000 6857	RST CHIPR 0 OHM +-5% 1/16W
R201	061G0402000 6857	RST CHIPR 0 OHM +-5% 1/16W
R136	061G0402100 6857	RST CHIP 10R 1/16W 5%
R133	061G0402100 6857	RST CHIP 10R 1/16W 5%
R131	061G0402100 6857	RST CHIP 10R 1/16W 5%
R130	061G0402100 6857	RST CHIP 10R 1/16W 5%
R129	061G0402100 6857	RST CHIP 10R 1/16W 5%
R128	061G0402100 6857	RST CHIP 10R 1/16W 5%
R127	061G0402100 6857	RST CHIP 10R 1/16W 5%
R126	061G0402100 6857	RST CHIP 10R 1/16W 5%
R119	061G0402101 6805	RST CHIPR 100 OHM +-5% 1/16W
R122	061G0402101 6805	RST CHIPR 100 OHM +-5% 1/16W
R207	061G0402101 6805	RST CHIPR 100 OHM +-5% 1/16W
R213	061G0402101 6805	RST CHIPR 100 OHM +-5% 1/16W
R214	061G0402101 6805	RST CHIPR 100 OHM +-5% 1/16W

R215	061G0402101	6805	RST CHIPR 100 OHM +-5% 1/16W
R222	061G0402101	6805	RST CHIPR 100 OHM +-5% 1/16W
R224	061G0402101	6805	RST CHIPR 100 OHM +-5% 1/16W
R225	061G0402101	6805	RST CHIPR 100 OHM +-5% 1/16W
R117	061G0402101	6805	RST CHIPR 100 OHM +-5% 1/16W
R102	061G0402101	6805	RST CHIPR 100 OHM +-5% 1/16W
R103	061G0402101	6805	RST CHIPR 100 OHM +-5% 1/16W
R104	061G0402101	6805	RST CHIPR 100 OHM +-5% 1/16W
R108	061G0402101	6805	RST CHIPR 100 OHM +-5% 1/16W
R110	061G0402101	6805	RST CHIPR 100 OHM +-5% 1/16W
R111	061G0402101	6805	RST CHIPR 100 OHM +-5% 1/16W
R113	061G0402101	6805	RST CHIPR 100 OHM +-5% 1/16W
R114	061G0402101	6805	RST CHIPR 100 OHM +-5% 1/16W
R115	061G0402101	6805	RST CHIPR 100 OHM +-5% 1/16W
R406	061G0402102	6805	RST CHIPR 1k OHM +-5% 1/16W
R405	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R403	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R401	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R301	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R234	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R232	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R231	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R230	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R227	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R226	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R223	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R118	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R123	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R132	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R137	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R138	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R203	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R205	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R209	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R210	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R211	061G0402103	6805	RST CHIPR 10K OHM +-5% 1/16W
R219	061G0402104	6857	RST CHIP 100K 1/16W 5%
R106	061G0402222	6857	RST CHIPR 2.2KOHM +-5% 1/16W F
R105	061G0402222	6857	RST CHIPR 2.2KOHM +-5% 1/16W F
R202	061G0402223	6857	RST CHIP 22K 1/16W 5%

R204	061G0402390 0F6857	RST CHIP 390R 1/16W 1%
R228	061G0402392 6805	RST CHIPR 3.9KOHM +-5%
R229	061G0402392 6805	RST CHIPR 3.9KOHM +-5%
R404	061G0402472 6857	RST CHIPR 4.7KOHM +-5% 1/16W
R303	061G0402472 6857	RST CHIPR 4.7KOHM +-5% 1/16W
R218	061G0402472 6857	RST CHIPR 4.7KOHM +-5% 1/16W
R217	061G0402472 6857	RST CHIPR 4.7KOHM +-5% 1/16W
R135	061G0402472 6857	RST CHIPR 4.7KOHM +-5% 1/16W
R134	061G0402472 6857	RST CHIPR 4.7KOHM +-5% 1/16W
R121	061G0402472 6857	RST CHIPR 4.7KOHM +-5% 1/16W
R120	061G0402472 6857	RST CHIPR 4.7KOHM +-5% 1/16W
R304	061G0402473 6805	RST CHIPR 47K OHM +-5%
R216	061G0402560 6857	RST CHIP 56R 1/16W 5%
R233	061G0402682 6857	RST CHIPR 6.8KOHM +-5% 1/16W
R208	061G0402682 6857	RST CHIPR 6.8KOHM +-5% 1/16W
R139	061G0402682 6857	RST CHIPR 6.8KOHM +-5% 1/16W
R107	061G0402750 6857	RST CHIPR 75 OHM +-5% 1/16W
R112	061G0402750 6857	RST CHIPR 75 OHM +-5% 1/16W
R116	061G0402750 6857	RST CHIPR 75 OHM +-5% 1/16W
R212	061G0402750 6857	RST CHIPR 75 OHM +-5% 1/16W
FB205	061G0805000 6857	RST CHIPR 0 OHM +-5% 1/8W
FB206	061G0805000 6857	RST CHIPR 0 OHM +-5% 1/8W
FB301	061G0805000 6857	RST CHIPR 0 OHM +-5% 1/8W
R302	061G0805331 6857	RST CHIP 330 OHM 1/8W 5%
C215	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C216	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C217	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C219	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C223	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C225	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C226	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C227	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C228	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C229	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C231	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C301	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C302	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C401	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C405	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C409	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1

C410	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C411	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C214	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C112	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C114	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C115	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C116	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C117	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C118	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C119	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C201	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C203	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C213	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C212	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C211	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C210	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C208	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C207	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C206	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C205	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C204	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C102	065G0402220 316785	CAP MLCC 22PF 50V NPO
C103	065G0402220 316785	CAP MLCC 22PF 50V NPO
C224	065G0402224 176785	MLCC 0402 0.22UF Z 16V Y5V
C218	065G0402224 176785	MLCC 0402 0.22UF Z 16V Y5V
C222	065G0402270 316785	CAP 0402 27PF J 50V NPO
C221	065G0402330 316785	CAP 0402 33PF J 50V EYA
C113	065G0402473 126785	CAP MLCC 47NF 16V X7R
C110	065G0402473 126785	CAP MLCC 47NF 16V X7R
C109	065G0402473 126785	CAP MLCC 47NF 16V X7R
C107	065G0402473 126785	CAP MLCC 47NF 16V X7R
C105	065G0402473 126785	CAP MLCC 47NF 16V X7R
C101	065G0402473 126785	CAP MLCC 47NF 16V X7R
C104	065G0402509 316785	CAP MLCC 5PF 50V NPO
C108	065G0402509 316785	CAP MLCC 5PF 50V NPO
C111	065G0402509 316785	CAP MLCC 5PF 50V NPO
FB104	071G 56K121 M	CHIP BEAD
FB204	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 bullwill
FB203	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 bullwill
FB201	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 bullwill

FB101	071G 59K190 B	19 OHM BEAD
FB102	071G 59K190 B	19 OHM BEAD
FB103	071G 59K190 B	19 OHM BEAD
D105	093G 64 42 P	BAV70 SOT23 BY PAN JIT
D101	093G 64 42 P	BAV70 SOT23 BY PAN JIT
D117	093G 6433S	DIODE BAV99 SEMTECH
D116	093G 6433S	DIODE BAV99 SEMTECH
D115	093G 6433S	DIODE BAV99 SEMTECH
D114	093G 6433S	DIODE BAV99 SEMTECH
D113	093G 6433S	DIODE BAV99 SEMTECH
D112	093G 6433S	DIODE BAV99 SEMTECH
D111	093G 6433S	DIODE BAV99 SEMTECH
D110	093G 6433S	DIODE BAV99 SEMTECH
D104	093G 6433S	DIODE BAV99 SEMTECH
D103	093G 6433S	DIODE BAV99 SEMTECH
D102	093G 6433S	DIODE BAV99 SEMTECH
ZD106	093G 39GA01 T	RLZ5.6B
ZD105	093G 39GA01 T	RLZ5.6B
ZD104	093G 39GA01 T	RLZ5.6B
ZD103	093G 39GA01 T	RLZ5.6B
ZD102	093G 39GA01 T	RLZ5.6B
ZD101	093G 39GA01 T	RLZ5.6B
D109	093G 39GA01 T	RLZ5.6B
D108	093G 39GA01 T	RLZ5.6B
D107	093G 39GA01 T	RLZ5.6B
D106	093G 39GA01 T	RLZ5.6B
E715	715G2559 2 36995	MAIN BOARD PCB
CN001	033G3802 6 BH L	WAFER
SW004	077G 602 7 HJ	SWITCH
SW003	077G 602 7 HJ	SWITCH
SW002	077G 602 7 HJ	SWITCH
SW001	077G 602 7 HJ	SWITCH
LED001	081G 121C1 GP	LED GP32032CE/P310-ZY-50-HB
GND001	095G 900633	WIRE HARNESS
	009G6005 1	GROUND TERMINAL
CN801	033G8021 2E U	INVERT CONNECTOR
CN802	033G8021 2E U	INVERT CONNECTOR
CN803	033G8021 2E U	INVERT CONNECTOR
CN804	033G8021 2E U	INVERT CONNECTOR
	040G 45762412B	CBPC LABEL

	055G 23524	WELDING FLUX WITHOUT PB
	055G 100611	TIN STICK W/O PB
IC902	056G 139 3A	IC PC123Y22FZ0F
NR901	061G 58080 WT6872	RST NTCR 8 OHM
C903	063G107K2246S1	X2 CAP 0.22UF K 275VAC
C905	063G107K2246S1	X2 CAP 0.22UF K 275VAC
C817	065G 3J2096ET	2PF 5% SL 3KV
C816	065G 3J2206ET	22PF 5% SL 3KV TDK
C824	065G 3J2706ET	27PFJ 3KV SL
C819	065G 3J5606ET	CAP CER 56PF J 3KV
C820	065G 3J5606ET	CAP CER 56PF J 3KV
C821	065G 3J5606ET	CAP CER 56PF J 3KV
C822	065G 3J5606ET	CAP CER 56PF J 3KV
C904	065G306M1022BP	1000PF Y1.CAP
C901	065G306M2222BP	2200PF +-20% 250VAC
C902	065G306M2222BP	2200PF +-20% 250VAC
C900	065G306M3322BP	3300PF 20%
C907	067G 40Z12115K	EC 120uF V 450V 20*40mm
C918	067G215D6814KV	CAP 105℃ 680uF M 25V
C917	067G215D6814KV	CAP 105℃ 680uF M 25V
C812	067G215S1024KV	EC 105℃ CAP 1000UF M 25V
C915	067G215S4713KV	EC 105℃ CAP 470UF M 16V
C939	067G215V102 3N	EC CAP 105 度 1000UF M 16V NCC
C940	067G215V102 3R	LOW E.S.R 1000UF +/-20% 16V
L802	073G 174 35 HA	IND FILTER 200mH+-25% DADON
L801	073G 174 35 HA	IND FILTER 200mH+-25% DADON
L903	073G 253191 H	IND CHOKE 1.1uH DADON
L904	073G 253191 H	IND CHOKE 1.1uH DADON
T801	080GL19T 28 DN	X'FMR 890mH TK.2017R.101.070302
T901	080GL19T 29 T	X'FMR 610uH SRW24LQ-T20H017
CN901	087G 501 32 DL	AC SOCKET DIP 3PIN+2PIN GROUND
CN902	095G801410TE12	HARNESS 7P-9P-2P 130mm
	705GH957001	Q901 ASS'Y
	705GH993001	D906 ASS'Y
	705GH993002	D907 ASS'Y
L902	S73L17440VG	TRANSFORMER
BD901	093G 50460900	BRIDEGE DIODE GBU408 LITEON
CN703	033G3802 2B Y W	CONNECTOR
	040G 45762412B	CBPC LABEL
C723	067G215S4713KV	EC 105℃ CAP 470UF M 16V

C720	067G305V101 36069	ELCAP 100UF +-20% 16V 105℃
C716	067G305V101 36069	ELCAP 100UF +-20% 16V 105℃
C702	067G305V101 36069	ELCAP 100UF +-20% 16V 105℃
CN702	088G 350 1 CL	USB CONN AX2
CN701	088G 3512B1 CL	USB CONN BLACK
X701	093G 2245B HE	XTL XAT024000FI1H-3OX AT-49 24.000MHZ
R002	061G0603180 1F6857	RST CHIPR 1.8 KOHM +-1% 1/10W
R001	061G0603300 1F6857	RST CHIPR 3KOHM +-1% 1/10W
R003	061G0603300 1F6857	RST CHIPR 3KOHM +-1% 1/10W
R004	061G0805000 6857	RST CHIPR 0 OHM +-5% 1/8W
FB005	071G 59B601 MA	CHIP BEAD
FB004	071G 59B601 MA	CHIP BEAD
FB003	071G 59B601 MA	CHIP BEAD
FB002	071G 59B601 MA	CHIP BEAD
FB001	071G 59B601 MA	CHIP BEAD
E715	715G2579 2 6403	KEPC BOARD PCB
Q901	057G 667 21	STP10NK70ZFP
HS5	090G6064 1	HEAT SINK
	0M1G1730 8120	SCREW
D906	093G 60245	SP10150 10A 150V ITO-220 BY SECOS
	0M1G1730 8120	SCREW
HS1	H90G0009 1	HEAT SINK
D907	093G 60278	DIODE SP1060 ITO-220 SECOS
	0M1G1730 8120	SCREW
HS2	H90G0009 1	HEAT SINK
IC901	056G 379 76	IC LD7552BPS SOP-8
IC801	056G 608 10	IC OZ9938GN-B SOIC-16
Q903	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q801	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q803	057G 759 2	RK7002FD5T116 SOT-23 BY ROHM
Q802	057G 759 2	RK7002FD5T116 SOT-23 BY ROHM
Q805	057G 763905	FET FDS8958A SO-8
Q806	057G 763905	FET FDS8958A SO-8
R846	061G0603000 6857	RST CHIPR 0 OHM +-5% 1/10W
R849	061G0603000 6857	RST CHIPR 0 OHM +-5% 1/10W
R926	061G0603100 1F6805	RST CHIPR 1KOHM +-1% 1/10W
R942	061G0603100 1F6805	RST CHIPR 1KOHM +-1% 1/10W
R816	061G0603100 2F6805	RST CHIPR 10KOHM +-1% 1/10W
R805	061G0603101 6857	RST CHIPR 100 OHM +-5% 1/10W
R806	061G0603101 6857	RST CHIPR 100 OHM +-5% 1/10W

R807	061G0603101 6857	RST CHIPR 100 OHM +-5% 1/10W
R808	061G0603101 6857	RST CHIPR 100 OHM +-5% 1/10W
R845	061G0603103 6857	RST CHIPR 10 KOHM +-5% 1/10W
R844	061G0603103 6857	RST CHIPR 10 KOHM +-5% 1/10W
R843	061G0603103 6857	RST CHIPR 10 KOHM +-5% 1/10W
R842	061G0603103 6857	RST CHIPR 10 KOHM +-5% 1/10W
R820	061G0603103 6857	RST CHIPR 10 KOHM +-5% 1/10W
R813	061G0603103 6857	RST CHIPR 10 KOHM +-5% 1/10W
R819	061G0603104 6857	RST CHIPR 100 KOHM +-5% 1/10W
R818	061G0603104 6857	RST CHIPR 100 KOHM +-5% 1/10W
R841	061G0603105 6857	RST CHIP 1M 1/10W 5%
R840	061G0603105 6857	RST CHIP 1M 1/10W 5%
R839	061G0603105 6857	RST CHIP 1M 1/10W 5%
R838	061G0603105 6857	RST CHIP 1M 1/10W 5%
R826	061G0603105 6857	RST CHIP 1M 1/10W 5%
R821	061G0603105 6857	RST CHIP 1M 1/10W 5%
R817	061G0603105 6857	RST CHIP 1M 1/10W 5%
R824	061G0603130 2F6857	RST CHIPR 13KOHM +-1% 1/10W
C808	061G0603184 6857	RST CHIP 180K 1/10W 5%
R801	061G0603242 6857	RST CHIPR 2.4 KOHM +-5% 1/10W
R930	061G0603243 1F6857	RST CHIPR 2.43KOHM +-1% 1/10W
R940	061G0603330 2F6857	RST CHIPR 33KOHM +-1% 1/10W
R823	061G0603360 0F6857	RST CHIPR 360R 1/10W 1%
R927	061G0603390 1F6857	RST CHIPR 3.9KOHM +-1% 1/10W
R825	061G0603511 6857	RST CHIPR 510 OHM +-5% 1/10W
R803	061G0603512 6857	RST CHIPR 5.1KOHM +-5% 1/10W
R804	061G0603512 6857	RST CHIPR 5.1KOHM +-5% 1/10W
R836	061G0603513 6857	RST CHIP 51K 1/10W 5%
R837	061G0603820 1F6857	RST CHIPR 8.2KOHM +-1% 1/10W
R925	061G0805100 1F6857	RST CHIPR 1KOHM +-1% 1/8W
R939	061G0805102 6857	RST CHIPR 1 KOHM +-5% 1/8W
R938	061G0805103 6857	RST CHIPR 10 KOHM +-5% 1/8W
R915	061G0805104 6857	RST CHIPR 100KOHM +-5% 1/8W
R924	061G0805150 0F6857	RST CHIPR 150OHM +-1% 1/8W
R822	061G0805191 2F	RST CHIPR 19.1 KOHM +-1% 1/8W
R802	061G0805220 6857	RST CHIPR 22 OHM +-5% 1/8W
R943	061G0805471 6857	RST CHIPR 470 OHM +-5% 1/8W
R829	061G0805750 1F6857	RST CHIPR 7.5KOHM +-1% 1/8W
RJ901	061G1206000 6857	RST CHIP 0 OHM 1/4W 5%
RJ803	061G1206000 6857	RST CHIP 0 OHM 1/4W 5%

RJ802	061G1206000 6857	RST CHIP 0 OHM 1/4W 5%
RJ801	061G1206000 6857	RST CHIP 0 OHM 1/4W 5%
R910	061G1206100 6857	RST CHIPR 10 OHM +-5% 1/4W
R962	061G1206101 6857	RST CHIPR 100 OHM +-5% 1/4W
R961	061G1206101 6857	RST CHIPR 100 OHM +-5% 1/4W
R935	061G1206101 6857	RST CHIPR 100 OHM +-5% 1/4W
R920	061G1206101 6857	RST CHIPR 100 OHM +-5% 1/4W
R919	061G1206101 6857	RST CHIPR 100 OHM +-5% 1/4W
R918	061G1206101 6857	RST CHIPR 100 OHM +-5% 1/4W
R902	061G1206105 6857	RST CHIPR 1MOHM +-5% 1/4W
R901	061G1206105 6857	RST CHIPR 1MOHM +-5% 1/4W
R912	061G1206221 6857	RST CHIPR 220 OHM +-5% 1/4W
R904	061G1206304 6857	RST CHIPR 300KOHM +-5% 1/4W
R905	061G1206304 6857	RST CHIPR 300KOHM +-5% 1/4W
R906	061G1206304 6857	RST CHIPR 300KOHM +-5% 1/4W
R909	061G1206519 6857	RST CHIPR 5.1 OHM +-5% 1/4W
C932	065G0603103 326029	CAP 0603 0.01UF +-10% 50V X7R
C805	065G0603103 326029	CAP 0603 0.01UF +-10% 50V X7R
C807	065G0603103 326029	CAP 0603 0.01UF +-10% 50V X7R
C806	065G0603105 126029	CHIP 1UF 16VX7R 0603
C818	065G0603221 326785	CHIP 220PF 50V X7R
C814	065G0603391 316029	CHIP 390pF 50V NPO
C815	065G0603473 326029	CHIP 0.047UF 50V X7R
C810	065G0603473 326029	CHIP 0.047UF 50V X7R
C928	065G0805103 326029	CAP 0805 10NF +-10% 50V X7R
C811	065G0805104 326805	CAP 0805 0.1UF +-10% 50V X7R
C913	065G0805104 326805	CAP 0805 0.1UF +-10% 50V X7R
C924	065G0805104 326805	CAP 0805 0.1UF +-10% 50V X7R
C931	065G0805104 326805	CAP 0805 0.1UF +-10% 50V X7R
C804	065G0805225 126029	MLCC 0805 2.2UF K 16V X7R
C813	065G0805333 326029	CHIP 0.033UF 50V
C909	065G0805471 316857	CHIP 470PF 50V NPO
C801	065G0805473 326029	CAP 0805 0.047UFK 50V X7R
C802	065G0805473 326029	CAP 0805 0.047UFK 50V X7R
C809	065G080556131G6857	MLCC 0805 560PF G 50V NPO
C912	065G1206102 726857	CHIP 1000PF 500V X7R
C929	065G1206102 726857	CHIP 1000PF 500V X7R
C911	065G120622272K F	CAP CHIP 1206 2200PF K 500V X7R
FB903	071G 56G301 EA	BEAD 300 欧
D808	093G 64 42 P	BAV70 SOT23 BY PAN JIT

D807	093G 64 42 P	BAV70 SOT23 BY PAN JIT
D806	093G 64 42 P	BAV70 SOT23 BY PAN JIT
D903	093G 6432S	1N4148W
D805	093G 6432S	1N4148W
D804	093G 6432S	1N4148W
D803	093G 6432S	1N4148W
D802	093G 6432S	1N4148W
D801	093G 6432S	1N4148W
D809	093G 6433S	DIODE BAV99 SEMTECH
ZD906	093G 39S 20 T	RLZ22B LLDS
ZD801	093G 39S 24 T	RLZ 5.6B LLDS
ZD802	093G 39S 24 T	RLZ 5.6B LLDS
ZD803	093G 39S 24 T	RLZ 5.6B LLDS
ZD922	093G 39S 24 T	RLZ 5.6B LLDS
ZD902	093G 39S 40 T	RLZ 13B LLDS
ZD921	093G 39S 40 T	RLZ 13B LLDS
CN901	006G 31500	EYELET
T901	006G 31502	1.5MM RIVET
NR901	006G 31502	1.5MM RIVET
IC903	056G 158 10 T	IC AS431AZTR-E1 TO-92
R903	061G152M10452T6W56	RST MOFR 100KOHM 5% 2WS
R946	061G152M47152T6W56	RST MOFR 470 OHM +-5% 2WS
R914	061G152M47852T6W56	RST MOFR 0.47 OHM +-5% 2WS"
R828	061G212Y62552T6W56	RST MGFR 6.2MOHM +-5% 1/2W
C938	065G 1K472 1T6921	CAP CER 4700PF 10% 1KV Y5P
C906	065G 2K152 1T6921	1.5NF/2KV Y5P +-10%
C936	065G 2K152 1T6921	1.5NF/2KV Y5P +-10%
C937	065G 2K152 1T6921	1.5NF/2KV Y5P +-10%
C908	067G215Y2207KT	CAP 105℃ 22UF M 50V KINGNICHI
FB902	071G 55 9 T	FERRITE BEAD
FB901	071G 55 29 6100	PERRITE BEAD
F901	084G 56 3W	FUSE
F903	084G 56 4W	FUSE 4.0A 250V
D901	093G 6038T52T	FR103
D900	093G1100 1152T	DIODE PR1007R 1A/1000V DO-41
E715	715G2655 2 6403	POWER BOARD PCB
U703	056G 585 4A	IC AP1117E33L-13
U701	056G 659 10	IC USB2512-AEZG QFN-36
U702	056G1133 34	M24C02-WMN6TP
F701	061G 56A075 LT	SMD PTC 0.75A 1206L075.WR 1206

F702	061G 56A075 LT	SMD PTC 0.75A 1206L075.WR 1206
R723	061G0402000 6857	RST CHIPR 0 OHM +-5% 1/16W
R722	061G0402000 6857	RST CHIPR 0 OHM +-5% 1/16W
R715	061G0402000 6857	RST CHIPR 0 OHM +-5% 1/16W
R712	061G0402000 6857	RST CHIPR 0 OHM +-5% 1/16W
R703	061G0402000 6857	RST CHIPR 0 OHM +-5% 1/16W
R702	061G0402000 6857	RST CHIPR 0 OHM +-5% 1/16W
R727	061G0402103 6857	RST CHIPR 10KOHM +-5% 1/16W
R725	061G0402103 6857	RST CHIPR 10KOHM +-5% 1/16W
R714	061G0402103 6857	RST CHIPR 10KOHM +-5% 1/16W
R713	061G0402103 6857	RST CHIPR 10KOHM +-5% 1/16W
R708	061G0402103 6857	RST CHIPR 10KOHM +-5% 1/16W
R701	061G0402104 6857	RST CHIP 100K 1/16W 5%
R704	061G0402104 6857	RST CHIP 100K 1/16W 5%
R716	061G0402104 6857	RST CHIP 100K 1/16W 5%
R717	061G0402104 6857	RST CHIP 100K 1/16W 5%
R724	061G0402105 6857	RST CHIP 1M 1/16W 5%
R709	061G0402153 6857	RST CHIP 15K 1/16W 5%
R726	061G0402153 6857	RST CHIP 15K 1/16W 5%
R721	061G0603120 2F6857	RST CHIP 12K 1/10W 1%
R705	061G0805000 6857	RST CHIPR 0 OHM +-5% 1/8W
C724	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C722	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C721	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C718	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C717	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C714	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C712	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C711	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C710	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C709	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C707	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C705	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C704	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C703	065G0402104 156785	MLCC 0402 CAP 0.1UF K 1
C713	065G0402180 316785	CAP 0402 18PF J 50V NPO
C708	065G0402180 316785	CAP 0402 18PF J 50V NPO
C701	065G0603105 226805	CAP 0603 1UF +-10% 25V X7R
C715	065G0603105 226805	CAP 0603 1UF +-10% 25V X7R
C719	065G0603105 226805	CAP 0603 1UF +-10% 25V X7R

C706	065G080547515T	MLCC 0805 CAP 4.7UF 16V X5R
FB701	071G 56K121 M	CHIP BEAD
FB702	071G 56K121 M	CHIP BEAD
E715	715G2704 2 6F2I	USB BOARD PCB

14. Different Parts List

Diversity of T97HMMDKHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
E08901	089G402A19N IS	AC POWER CABLE
E750	750GLH90N3A12Z000H	PANEL HSD190MEN3-A00 NJ HSD
	A15G0249 1104H	MAIN FRAME_19"
	CBPC7HMMHPH2	CONVERSION BOARD
	PWPC941HH1	POWER BOARD

Diversity of T97HMMDBHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
	050G 600 1 W	WHITE STRAP
E08901	089G404A19N LS	POWER CORD
E750	750GLH90N3A12Z000H	PANEL HSD190MEN3-A00 NJ HSD
	A15G0249 1104H	MAIN FRAME_19"
	CBPC7HMMHPH2	CONVERSION BOARD
	H41G160669017D	L1*50g DOCKIT EMEA
	H41G780669057A	RTF CARD 488557-141
	PWPC941HH1	POWER BOARD

Diversity of T97GMMDBHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
	050G 600 1 W	WHITE STRAP
E08901	089G404A19N LS	POWER CORD
	H41G160669017D	L1*50g DOCKIT EMEA
	H41G780669057A	RTF CARD 488557-141

Diversity of T97HMMDTHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
E750	750GLH90N3A12Z000H	PANEL HSD190MEN3-A00 NJ HSD
	A15G0249 1104H	MAIN FRAME_19"
	CBPC7HMMHPH2	CONVERSION BOARD
	H41G160669016D	L1*50g DOCKIT APD
	PWPC941HH1	POWER BOARD

Diversity of T97HMMDLHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
E08901	089G412A19NIS3	POWER CODE
E750	750GLH90N3A12Z000H	PANEL HSD190MEN3-A00 NJ HSD
	A15G0249 1104H	MAIN FRAME_19"

	CBPC7HMMHPH2	CONVERSION BOARD
	H40G 58169015A	WARRANTY LABEL
	H41G160669016D	L1*50g DOCKIT APD
	PWPC941HH1	POWER BOARD

Diversity of T97HMMDDHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
	041G780069089A	warranty card(390490-AA1)
	041G780069090A	WARRANTY(C8942-90052)
E08901	089G414A19N IS	POWER CORD
E750	750GLH90N3A12Z000H	PANEL HSD190MEN3-A00 NJ HSD
	A15G0249 1104H	MAIN FRAME_19"
	CBPC7HMMHPH2	CONVERSION BOARD
	H41G7806690 9A	CHINA RoHS CARD
	H70G1606690 5D	L1*50g CD 449161-B26
	PWPC941HH1	POWER BOARD

Diversity of T97AMMDBHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
	050G 600 1 W	WHITE STRAP
E08901	089G404A19N IS	POWER CORD
E750	750GLU90G2412Z000H	PANEL M190EG02 V400 SZ AUO
	A15G0249 1104A	19" MAIN FRAME
	CBPC7AMMHPH2	CONVERSIONG2559-K-X-X-2-070630
	H41G160669017D	L1*50g DOCKIT EMEA
	H41G780669057A	RTF CARD 488557-141
	PWPC941HH1	POWER BOARD

Diversity of T97SMMDKHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
E750	750GLS90L3132Z000H	PANEL LTM190EX-L31 QLC(0LU) SZ SEC
	A15G0249 1104S	19" MAIN FRAME
	CBPC7SMMHPH2	CONVERSIONG2559-K-X-X-2-070630
	PWPC941SH1	POWER G2655-2-X-X-4-080528

Diversity of T97SMMDBHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
	050G 600 1 W	WHITE STRAP
E08901	089G404A19N IS	POWER CORD
E750	750GLS90L3132Z000H	PANEL LTM190EX-L31 QLC(0LU) SZ SEC

	A15G0249 1104S	19" MAIN FRAME
	CBPC7SMMHPH2	CONVERSIONG2559-K-X-X-2-070630
	H41G160669017D	L1*50g DOCKIT EMEA
	H41G780669057A	RTF CARD 488557-141
	PWPC941SH1	POWER G2655-2-X-X-4-080528

Diversity of T97GMMDLHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
E08901	089G412A19NIS3	POWER CODE
	H40G 58169015A	WARRANTY LABEL
	H41G160669016D	L1*50g DOCKIT APD

Diversity of T97HMMDQHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
E750	750GLH90N3A12Z000H	PANEL HSD190MEN3-A00 NJ HSD
	A15G0249 1104H	MAIN FRAME_19"
	CBPC7HMMHPH2	CONVERSION BOARD
	PWPC941HH1	POWER BOARD

Diversity of T97AMMDKHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
E750	750GLU90G2412Z000H	PANEL M190EG02 V400 SZ AUO
	A15G0249 1104A	19" MAIN FRAME
	CBPC7AMMHPH2	CONVERSIONG2559-K-X-X-2-070630
	PWPC941HH1	POWER BOARD

Diversity of T97AMMDQHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
E750	750GLU90G2412Z000H	PANEL M190EG02 V400 SZ AUO
	A15G0249 1104A	19" MAIN FRAME
	CBPC7AMMHPH2	CONVERSIONG2559-K-X-X-2-070630
	PWPC941HH1	POWER BOARD

Diversity of T97SMMDTHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
E750	750GLS90L3132Z000H	PANEL LTM190EX-L31 QLC(0LU) SZ SEC
	A15G0249 1104S	19" MAIN FRAME
	CBPC7SMMHPH2	CONVERSIONG2559-K-X-X-2-070630
	H41G160669016D	L1*50g DOCKIT APD
	PWPC941SH1	POWER G2655-2-X-X-4-080528

Diversity of T98HMMDKHNHP2NE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
	040G 45762412B	CBPC LABEL
	040G 581654 3A	CARTON LABEL
	052G 1185	MIDDLE TAPE
	052G 2191 A	PAPER TAPE
	0M1G 140 10225 CR3	SCREW
	705GH8MK002	ASS'Y FOR MKD
E750	750GLH90N3A12Z000H	PANEL HSD190MEN3-A00 NJ HSD
	A15G0249 1104H	MAIN FRAME_19"
	CBPC7HMMHPH2	CONVERSION BOARD
	H40G 17N69021B	L1x50 MEXICO RATING LABEL
	H40G 19N690K1B	ID LABEL
	H44G9004 4	EPE
	H44G9004 5	EPE
	H44G9004 6	EPE
	H44G9004BRO 3A	PAPER SHEET
	H44G9004MKD 1A	CARTON
	PWPC941HH1	POWER BOARD

Diversity of T97GMMDTHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
	H41G160669016D	L1*50g DOCKIT APD

Diversity of T97GMMDDHNHPQNE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
	041G780069089A	warranty card(390490-AA1)
	041G780069090A	WARRANTY(C8942-90052)
E08901	089G414A19N IS	POWER CORD
	H41G7806690 9A	CHINA RoHS CARD
	H70G1606690 5D	L1*50g CD 449161-B26

Diversity of T97GMMDKHNHPQ1E compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
E750	750GLG190E8G23Z0HP	PANEL LM190E08-TLG2 GZ LPL
	A15G0249 1104B	19" MAIN FRAME
E08907	S89G179T30NE06	LVDS ASSY

Diversity of T97GMMDBHNHPQ1E compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**

	050G 600 1 W	WHITE STRAP
E08901	089G404A19N LS	POWER CORD
E750	750GLG190E8G23Z0HP	PANEL LM190E08-TLG2 GZ LPL
	A15G0249 1104B	19" MAIN FRAME
	H41G160669017D	L1*50g DOCKIT EMEA
	H41G780669057A	RTF CARD 488557-141
E08907	S89G179T30NE06	LVDS ASSY

Diversity of T97GMMDKHNHPQCE compared with T97GMMDKHNHPQNE		
Location	**Part No.**	**Description**
E750	750GLG90E8L12D000H	PANEL LM190E08-TLL1 LPL