

SERVICE MANUAL

17" LCD Monitor

IBM L170



THESE DOCUMENTS ARE FOR REPAIR SERVICE INFORMATION ONLY. EVERY REASONABLE EFFORT HAS BEEN MADE TO ENSURE THE ACCURACY OF THIS MANUAL; WE CANNOT GUARANTEE THE ACCURACY OF THIS INFORMATION AFTER THE DATE OF PUBLICATION AND DISCLAIMERS RE LIABILITY FOR CHANGES, ERRORS OR OMISSIONS.

Table of Contents

Table of Contents	2
1. MONITOR SPECIFICATIONS	4
2. LCD MONITOR DESCRIPTION	5
3. OPERATING INSTRUCTIONS	6
3.1 GENERAL INSTRUCTIONS	6
3.2 CONTROL BUTTONS	6
3.3 ADJUSTING THE PICTURE	6
4. Input/Output Specification	8
4.1 Input Signal Connector	8
4.1.1 Analog D-SUB Connector	8
4.2 Factory Preset Display Modes	8
4.3 Power Supply Requirements	10
4.3.1 Input Requirements	10
4.3.2 Output Requirements	10
4.4 PANEL SPECIFICATION (Samsung)	11
4.4.1 Panel Feature	11
4.4.2 Display Characteristics	11
4.4.3 Optical Characteristics	11
4.4.4 Parameter guide line for CCFL Inverter	12
5. Block Diagram	13
5.1 Monitor Exploded View	13
5.2 Software Flow Chart	14
5.3 Electrical Block Diagram	16
5.3.1 Main Board	16
5.3.2 Inverter/Power Board	17
6. Schematic	19

6.1 Main Board	19
6.2 Inverter/Power Board	22
6.3 KeyPad Board	24
7. PCB Layout	25
7.1 Main Board	25
7.2 Inverter/Power Board	27
7.3 Keypad Board	28
8. Maintainability	28
8.1 Equirements and Tools Requirements	28
8.2 Trouble Shooting	29
8.2.1 Main Board	29
8.2.2 Power/Inverter Board	32
8.2.3 Key Pad Board	34
9. White-Balance, Luminance adjustment	35
10. EDIT Content	36
11. BOM List	37

1. MONITOR SPECIFICATIONS

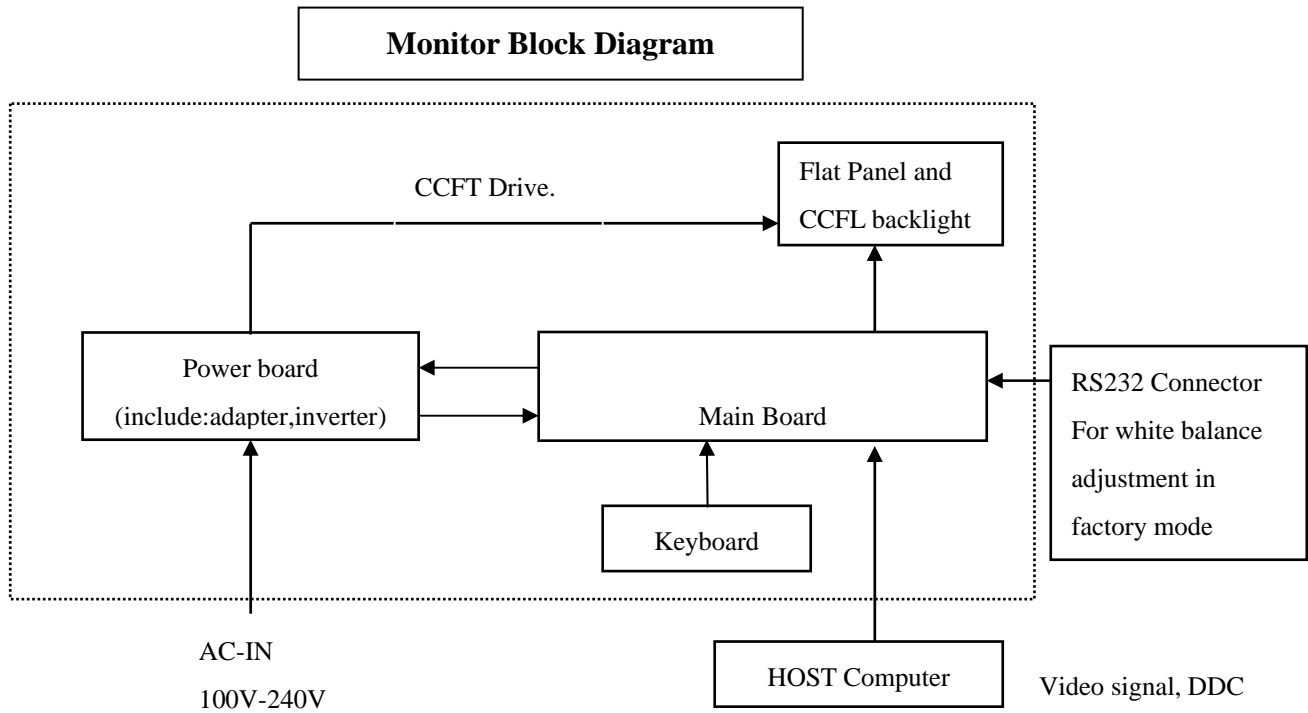
LCD Panel	Driving system	TFT Color LCD
	Size	43.2cm(17.0")
	Pixel pitch	0.264mm(H)x 0.264mm(V)
	Viewable angle	140° (H) 120° (V)
	Response time (typ.)	25 ms
Input	Video	Analog
	Sync. Type	H/V TTL
	H-Frequency	30kHz – 80kHz
	V-Frequency	55-75Hz
Display Colors		Over 16 million Colors
Dot Clock		135MHz
Max. Resolution		1280 x 1024
Plug & Play		VESA DDC2B™
Power Consumption	ON Mode	≤45W
	OFF Mode	≤3W
Maximum Screen Size		Horizontal : 13.3”(337.92mm) Vertical : 10.6”(270.336mm)
Power Source		100~240VAC,47~63Hz
Environmental Considerations		Operating Temp: 0°C to 40°C Storage Temp.: -20°C to 60°C Operating Humidity : 15% to 90%
Weight (N. W.)	Packaged	7.4Kgs Unit
	Unpackaged	6.6Kgs Unit

2. LCD MONITOR DESCRIPTION

The LCD MONITOR will contain an main board, an inverter/power board, keypad board and internal adapter which house the flat panel control logic, brightness control logic and DDC.

The Inverter board will drive the backlight of panel and the DC-DC conversion.

The Adapter will provides the 12V DC-power to inverter/power board.



3. OPERATING INSTRUCTIONS

3.1 GENERAL INSTRUCTIONS

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

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

3.2 CONTROL BUTTONS

- Power Button:

When pressed, the monitor enters the off mode, and the LED turns blank. Press again to restore normal status.

- Left / Right Button:

The Left/Right Button is used to control the monitor functions. Press to switch functions or adjust settings.

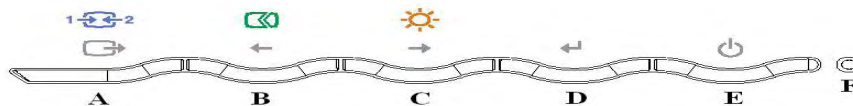
- Auto Adjust Key:

The Auto Adjust Key is used to automatically set the H Position, V Position, Clock and Phase.

- Power Indicator:

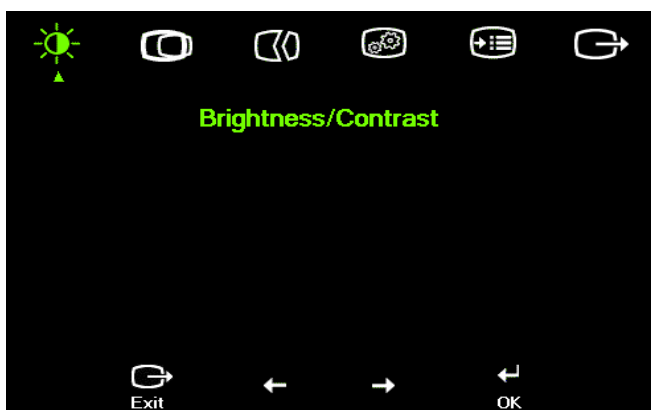
Green — Power On mode.
orange — Power Saving mode.
Blank —Power Off Mode.












CONTROL Buttons



- A. Auto button/Exit**
- B. Left button/Brightness**
- C. Right button/Contrast**
- D. Menu button**
- E. Power button**
- F. Indicator light**

3.3 ADJUSTING THE PICTURE



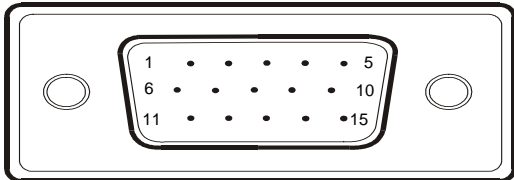
1.		Contrast	Adjusts over all screen brightness.
2.		Brightness	Adjusts difference between light and dark areas.
3.		Horizontal Position	Moves image left or right.
4.		Vertical Position	Moves image up or down.
5.		Automatic	Optimizes image(size,position,phase,and clock).
6.	Clock	Clock	Adjusts picture Clock.
7.	Phase	Phase	Adjusts picture Phase.
8.		Color	Adjusts intensity or red,green and blue.
9.		Information	Shows resolution, refresh rate, and product details.
10.		Menu Language	Changes language of menu.
11.		Menu Position	Adjusts menu location.
12.		Factory Default	Resets monitor to original settings.
13.		Accessibility	Change button repeat rate menu time-out settings.
14.	Exit	Exit	Save user adjustment and OSD disappear.
15.			
16.			

4. Input/Output Specification

4.1 Input Signal Connector

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	Red	9.	+5V
2.	Green	10.	Detect Cable
3.	Blue	11.	NC
4.	Ground	12.	DDC-Serial Data
5.	Ground	13.	H-Sync
6.	R-Ground	14.	V-Sync
7.	G-Ground	15.	DDC-Serial Clock
8.	B-Ground		

VGA connector layout



4.2 Factory Preset Display Modes

VESA MODES							
Mode	Resolution	Total	Horizontal		Vertical		Nominal Pixel Clock (MHz)
			Nominal Frequency +/- 0.5kHz	Sync Polarity	Nominal Freq. +/- 1 Hz	Sync Polarity	
VGA	640x480@60Hz	800 x 525	31.469	N	59.940	N	25.175
	640x480@72Hz	832 x 520	37.861	N	72.809	N	31.500
	640x480@75Hz	840 x 500	37.500	N	75.00	N	31.500
SVGA	800x600@56Hz	1024 x 625	35.156	N/P	56.250	N/P	36.000
	800x600@60Hz	1056 x 628	37.879	P	60.317	P	40.000
	800x600@72Hz	1040 x 666	48.077	P	72.188	P	50.000
	800x600@75Hz	1056x625	46.875	P	75.000	P	49.500
XGA	1024x768@60Hz	1344x806	48.363	N	60.004	N	65.000
	1024x768@60Hz	1312x813	48.78	N	60.00	N	64.000
	1024x768@70Hz	1328x806	56.476	N	70.069	N	75.000
	1024x768@72Hz	1304x798	57.515	P	72.074	P	75.000
	1024x768@75Hz	1328x804	60.200	N	74.90	N	80.000
	1024x768@75Hz	1312x800	60.023	P	75.029	P	78.750

XGA	1152x864@75Hz	1600x900	67.50	P	75.000	P	108.000
SXGA	1280x1024@60Hz	1688x1066	63.981	P	60.020	P	108.000
	1280x1024@75Hz	1688x1066	79.976	P	75.025	P	135.000

IBM MODES							
			Horizontal		Vertical		
Mode	Resolution	Total	Nominal Frequency +/- 0.5kHz	Sync Polarity	Nominal Freq. +/- 1 Hz	Sync Polarity	Nominal Pixel Clock (MHz)
DOS*	720x400@70Hz	900 x 449	31.469	N	70.087	P	28.322
DOS**	640x400@70Hz	800 x 449	31.469	N	70.087	P	25.175
MAC MODES							
VGA	640x480@67Hz	864x525	35.000	N	66.667	N	30.240
SVGA	832x624@75Hz	1152x667	49.725	N	74.551	N	57.2832

4.3 Power Supply Requirements

4.3.1 Input Requirements

PARAMETER	RANGE	CONDITION
Input Voltage	100 to 240VAC RMS	Universal input full range
Input Frequency	60Hz @ 100VAC to 50Hz @ 240VAC	
Input Current	Less than 2.0 Amps RMS	Input voltage 100 VAC RMS ; 60 Hertz. Parameter must be reached within 3 seconds of turn-on.
	Less than 1.0 Amps RMS	Input voltage 220 VAC RMS ; 50 Hertz. Parameter must be reached within 3 seconds of turn-on.
Input Power	Less than 75 Watts	
Power factor > 0.5	Input voltage 120 VAC RMS ; 60 Hertz	
Inrush Current	Less than 30 A peak	Input voltage 100 VAC RMS ; 60 Hertz at all Phase(0, 90, 180, 270 degree)
	Less than 50 A peak	Input voltage 240 VAC RMS ; 50 Hertz at all Phase(0, 90, 180, 270 degree)
Input Fusing	Fuse should be located internal to the adapter, easily accessible when the cover is removed	Fuse must be UL/CSA approved. Fuse value must not have to change for 115 VAC or 230 VAC operation
Leakage Current	Less than 3.5 mA	Input voltage 240 Volts RMS ; 50 Hertz
Hi-Pot	Primary to secondary	1.5KVAC for 1 Minute(leakage current 10mA) 1.8KVAC for 1 Minute(leakage current 10mA) 3.0KVAC for 1 Minute(leakage current 10mA) without Y-cap & Coupling cap.
	Primary to Saft Ground	1.5KVAC for 1 Minute(leakage current 10mA) 1.8KVAC for 1 Minute(leakage current 10mA)

4.3.2 Output Requirements

PARAMETER	RANGE	CONDITION
DC Out	12VDC \pm 5%	Min 0A Max 3.75A
Load Regulation	12.0V(12.12V) \pm 5%	11.4 to 12.6VDC
Dynamic Load Regulation	Any frequency up to 250Hz(duty 50%)	\pm 5% for 10% to 100%, 100% to 10% load change for +12Vdc
Ripple & noise	170mVpp at 12VDC	Input voltage : 100VAC at 60Hz 240VAC at 50Hz * Ripple and noise are measured.
Output current protection	less than 7.0A, more than 12.0A at 12.0VDC	Current exceeds maximum rateing more than 20%
Leakage Current	Less than 0.25 mA	Input voltage 100 Volts RMS ; 50 Hertz
	Less than 0.5 mA	Input voltage 240 Volts RMS ; 50 Hertz

4.4 PANEL SPECIFICATION (Samsung)

4.4.1 Panel Feature

- High contrast ratio, high aperture structure
- TN(Twisted Nematic) mode
- Wide viewing angle
- High speed response
- SXGA(1280 x 1024 pixels) resolution
- Low power consumption
- 2 dual CCFTs(Cold Cathode Fluorescent Tube)
- DE(Data Enable) mode
- COMPACT SIZE DESIGN

4.4.2 Display Characteristics

Items	Specification	Unit
Display Area	337.92(H) x 270.336(V)	mm
Driver element	a-Si TFT active matrix	
Display color	16.2M	Colors
Number of pixels	1280 x 1024	pixel
Pixel Arrangement	RGB vertical stripe	
Pixel pitch	0.264(H) x 0.264(W)	mm
Display Mode	Normally White	

4.4.3 Optical Characteristics

The optical characteristics are measured under stable conditions at 25°C (Room Temperature):

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit	Note	
Contrast Ratio (Center of screen)	C/R	Normal $\phi = 0$ $\theta = 0$	250	350	-			
Response Time	Rising		Tr	-	5	7	msec	
	Falling		Tf	-	20	25		
Luminance of White (Center of screen)	YL	Viewing Angle	200	250	-	Cd/m ²		
Color Chromaticity (CIE 1931) Coordinates (CIE)	Rx		Typ. -0.03	TYP. +0.03	0.633			
	Ry				0.354			
	Gx				0.292			
	Gy				0.598			
	Bx				0.145			
	By				0.107			
	Wx				0.305			
	Wy				0.338			
Brightness Uniformity	[%]	75	80	-				

4.4.4 Parameter guide line for CCFL Inverter

INVERTER MAX BRINGTHNESS (Vadj:5.0v), LOAD=120K Ω X4(Room Temperature 25 $^{\circ}$ C \pm 4 $^{\circ}$ C)

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT	REMARK
Input voltage	Vin	10.8	12	13.2	V	
Input current	Iin		2250	2500	mA	FOR 4 LOAD
Output Current	Iout	6.0	6.5	7.0	mA	FOR 1 LOAD
Frequency	F	50.0	55.0	60.0	KHZ	FOR 1 LOAD
H.V open	Vopen	1450	1600	1750	Vrms	NO LOAD
H.V Load	Vload	710	810	910	Vrms	RL=120K Ω
Start voltage	Vst	1650	1750	1850	Vrms	RL=CCFL
Protect delay time	PDT	0.4	1	4	Sec	

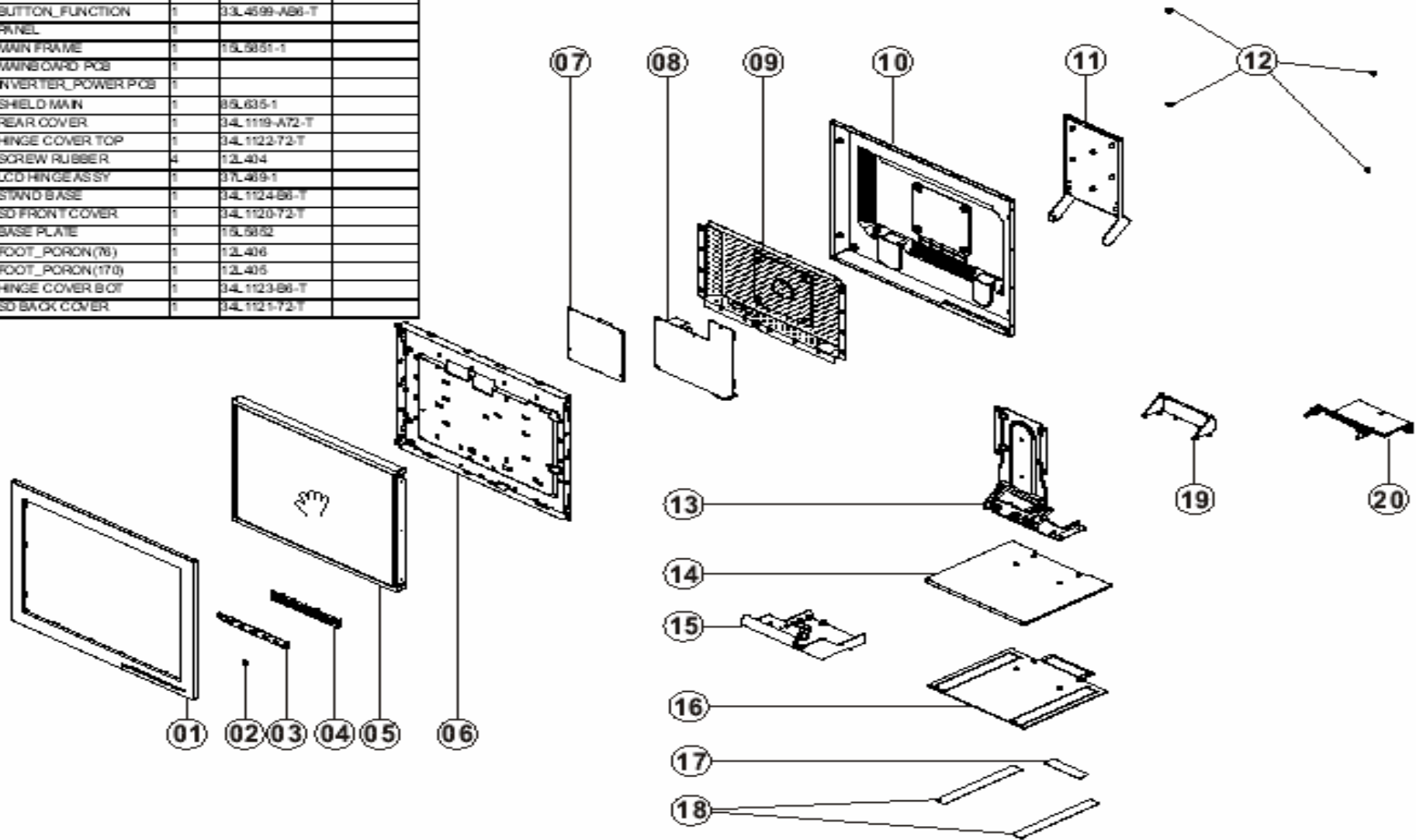
INVERTER MIN BRINGTHNESS (Vadj:0.0v), LOAD=120K Ω X4(Room Temperature 25 $^{\circ}$ C \pm 4 $^{\circ}$ C)

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT	REMARK
input voltage	Vin	10.8	12	13.2	V	
input current	Iin		660	750	mA	FOR 4 LOAD
Output Current	Iout	3.0	3.5	4.0	mA	FOR 1 LOAD
Frequency	F	50.0	55.0	60.0	KHZ	FOR 1 LOAD
H.V open	Vopen	1450	1600	1750	Vrms	NO LOAD
Start voltage	Vst	1650	1750	1850	Vrms	RL=CCFL
H.V Load	Vload	350	450	550	Vrms	RL=120K Ω

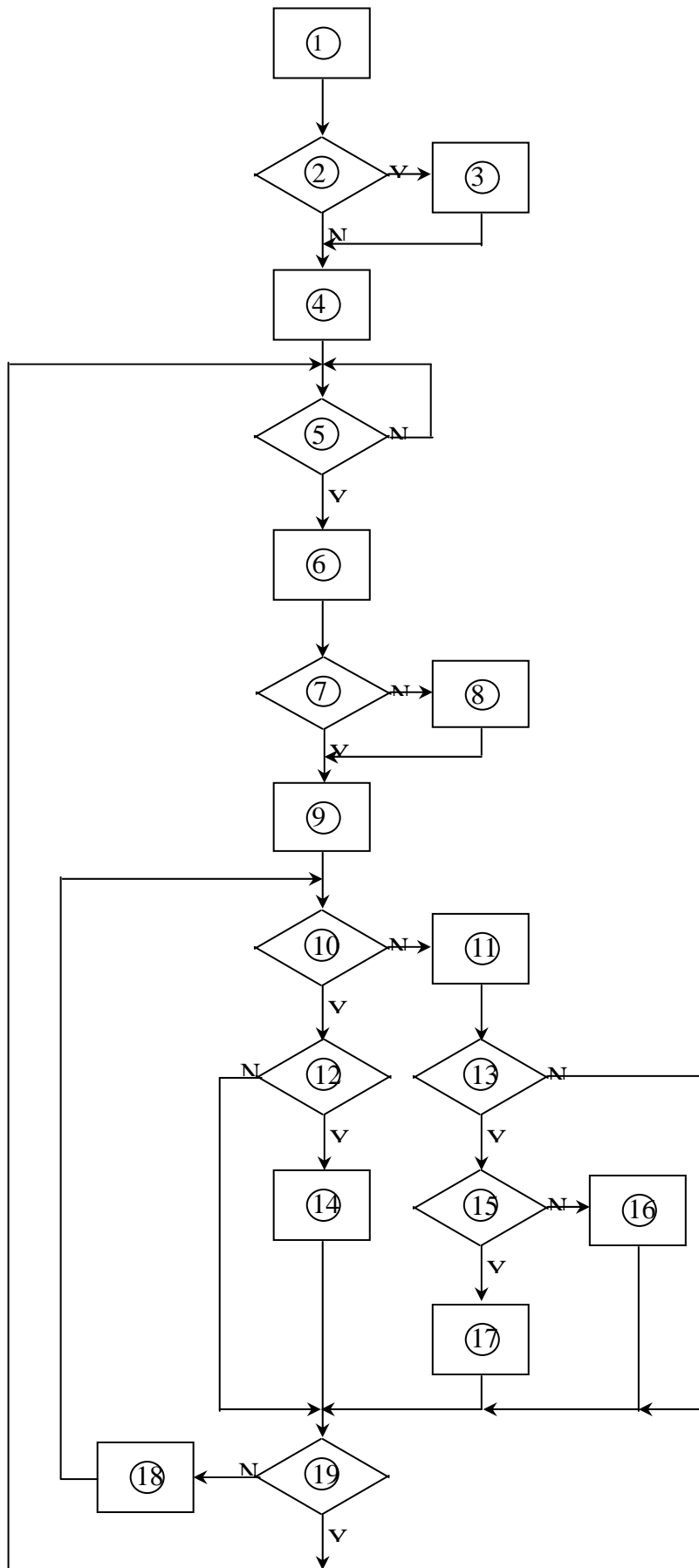
5. Block Diagram

5.1 Monitor Exploded View

Item	Part Name	Qty.	Part No.	Remark
01	Bez el	1	34L1118-A72-T	
02	POWER LENS	1	33L4600-1	
03	KEYPAD PCB	1		
04	BUTTON_FUNCTION	1	33L4599-A66-T	
05	PANEL	1		
06	MAIN FRAME	1	15L5851-1	
07	MAIN CARD PCB	1		
08	INVERTER_POWER PCB	1		
09	SHIELD MAIN	1	85L635-1	
10	REAR COVER	1	34L1119-A72-T	
11	HINGE COVER TOP	1	34L1123-72-T	
12	SCREW RUBBER	4	12L404	
13	LCD HINGE ASSY	1	37L489-1	
14	STAND BASE	1	34L1124-B6-T	
15	SD FRONT COVER	1	34L1120-72-T	
16	BASE PLATE	1	15L5852	
17	FOOT_PORON(76)	1	12L406	
18	FOOT_PORON(170)	1	12L405	
19	HINGE COVER BOT	1	34L1123-B6-T	
20	SD BACK COVER	1	34L1121-72-T	



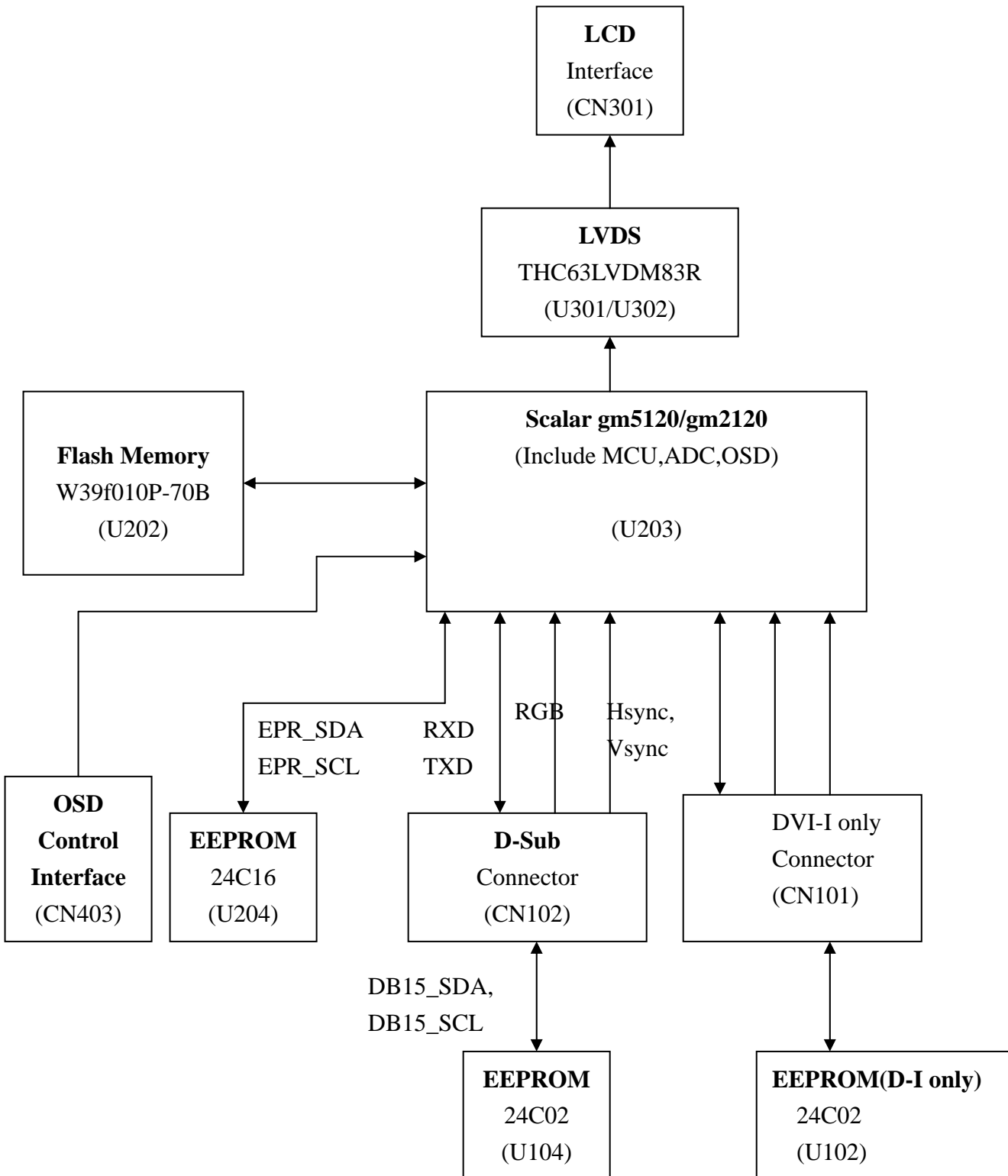
5.2 Software Flow Chart



- 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.
Scaler initialize.
- 10) In standby mode ?
- 11) Update the life time of back light.
- 12) Check the analog port, are there any signals coming ?
- 13) Does the scalar send out a interrupt request ?
- 14) Wake up the scalar.
- 15) Are there any signals coming from analog port ?
- 16) Display "No connection Check Signal Cable" message. And go into standby mode after the message disappear.
- 17) Program the scalar to be able to show the coming mode.
- 18) Process the OSD display.
- 19) Read the keyboard. Is the power key pressed ?

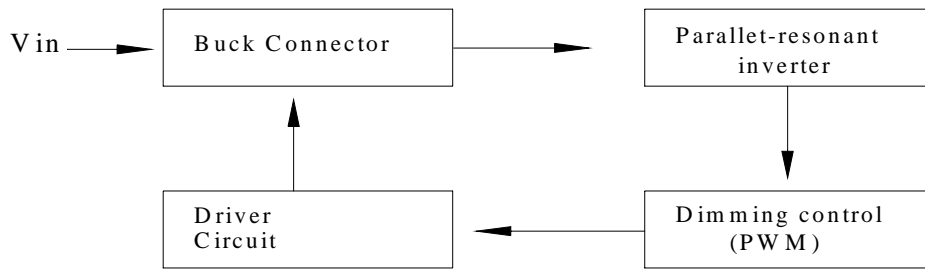
5.3 Electrical Block Diagram

5.3.1 Main Board

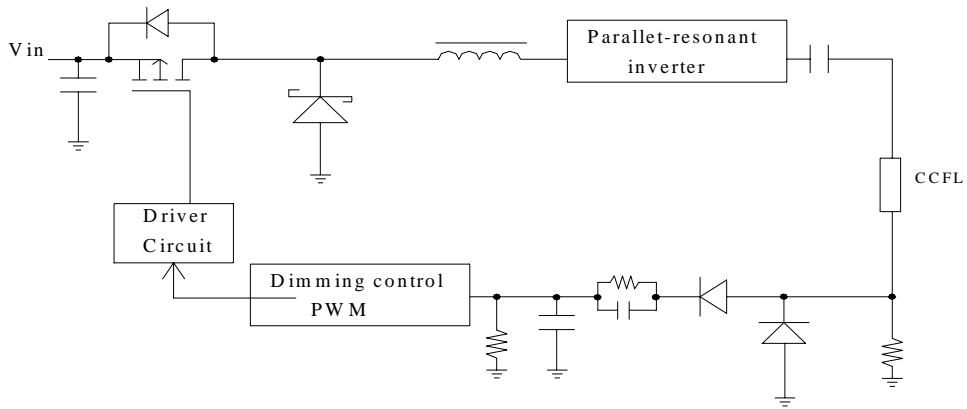


5.3.2 Inverter/Power Board

Inverter Block Diagram

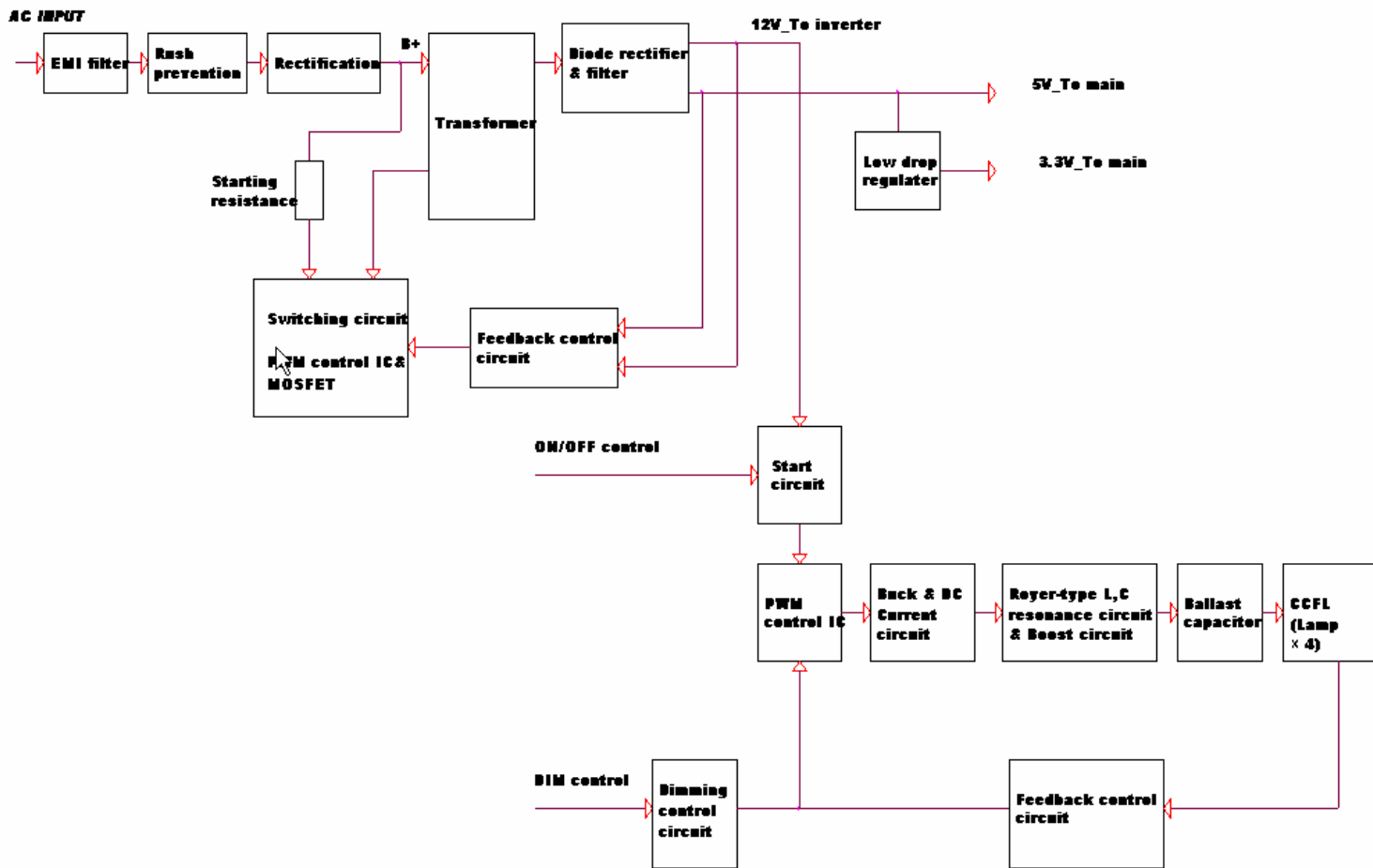


(阀 波 瓜)



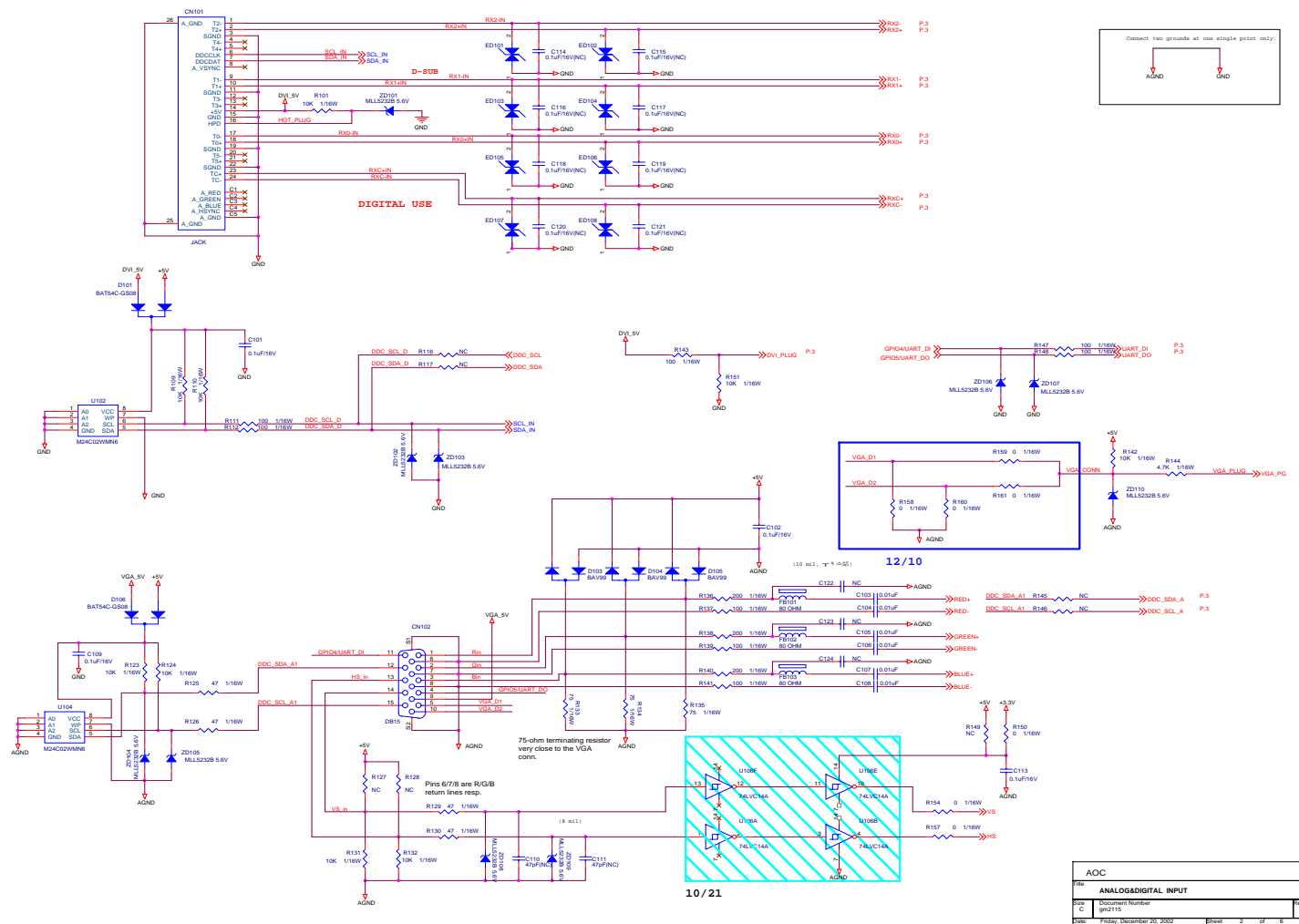
Power Block Diagram

PWPC7425A1 INTERNAL POWER CIRCUIT BLOCK DIAGRAM

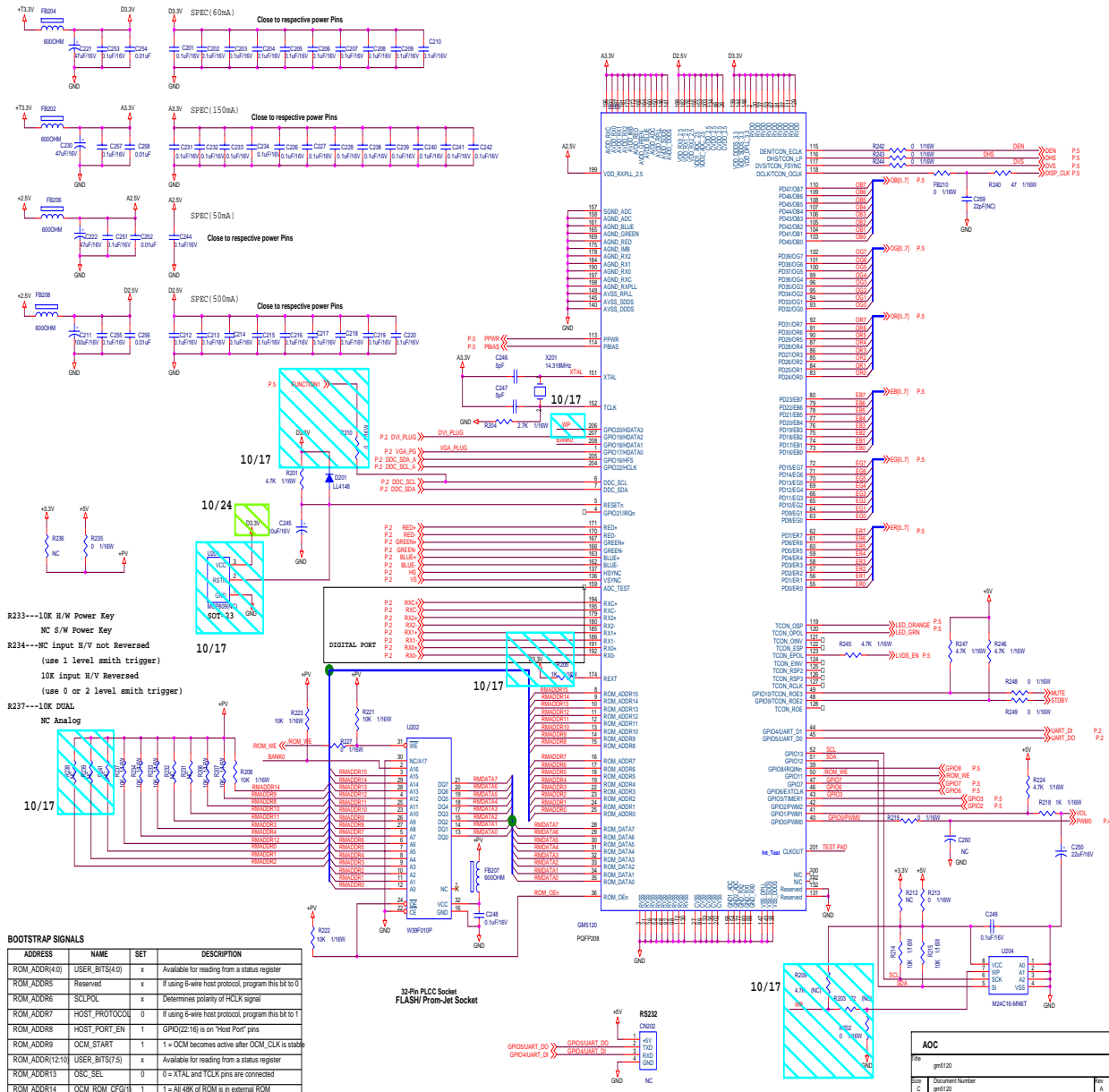


6. Schematic

6.1 Main Board



AOC	
Part	ANALOG/DIGITAL INPUT
Doc. C	Document Number gln2115
Date	Friday, December 2nd, 2005 Printed 2 of 8

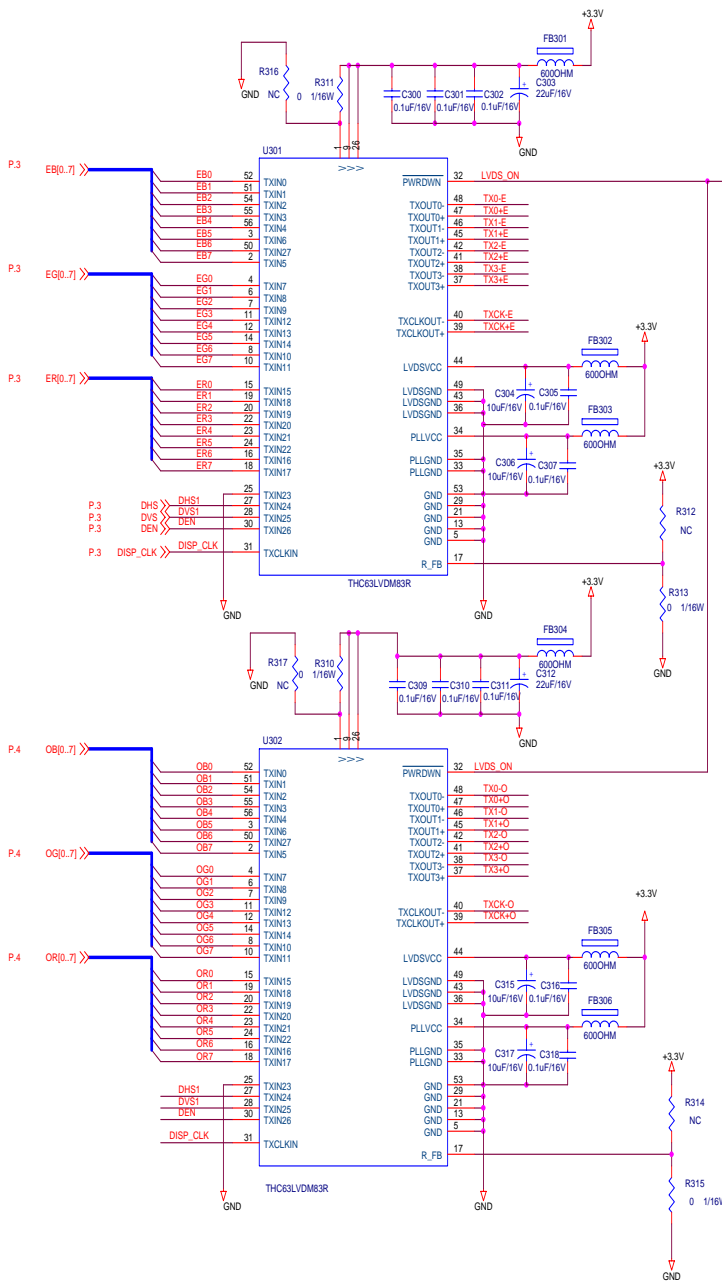


BOOTSTRAP SIGNALS

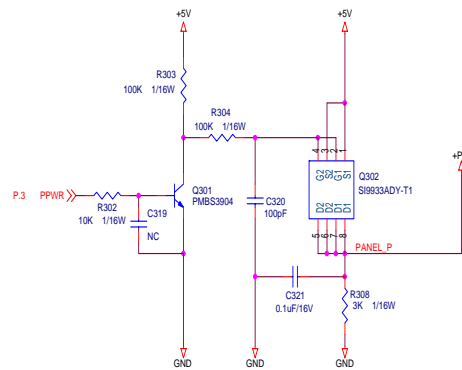
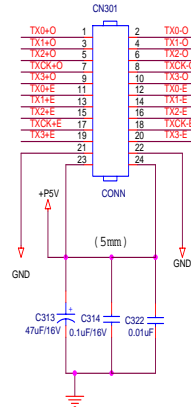
ADDRESS	NAME	SET	DESCRIPTION
ROM_ADDR(4)	USER_BITS(4)	x	Available for reading from a status register
ROM_ADDR5	Reserved	x	If using 6-wire Host protocol, program this bit to 0
ROM_ADDR6	SCL_POL	x	Determines polarity of HCLK signal
ROM_ADDR7	HOST_PROTOCOL	0	If using 6-wire Host protocol, program this bit to 1
ROM_ADDR8	HOST_PORT_EN	1	GPIO(22:16) is on "Host Port" pins
ROM_ADDR9	OCM_START	1	1 = OCM becomes active after OCM_CLK is stable
ROM_ADDR(12:16)	USER_BITS(5)	x	Available for reading from a status register
ROM_ADDR13	OSC_SEL	0	0 = XTAL and TCLK pins are connected
ROM_ADDR14	OCM_ROM_CFG(1)	1	1 = All 48k of ROM is in external ROM

AOC

Pin	Signal	Pin
1	gnd(10)	16
2	Document Number	17
3	gnd(10)	18
4	Pin 1	19
5	Pin 2	20
6	Pin 3	21
7	Pin 4	22
8	Pin 5	23
9	Pin 6	24
10	Pin 7	25
11	Pin 8	26
12	Pin 9	27
13	Pin 10	28
14	Pin 11	29
15	Pin 12	30
16	Pin 13	31
17	Pin 14	32

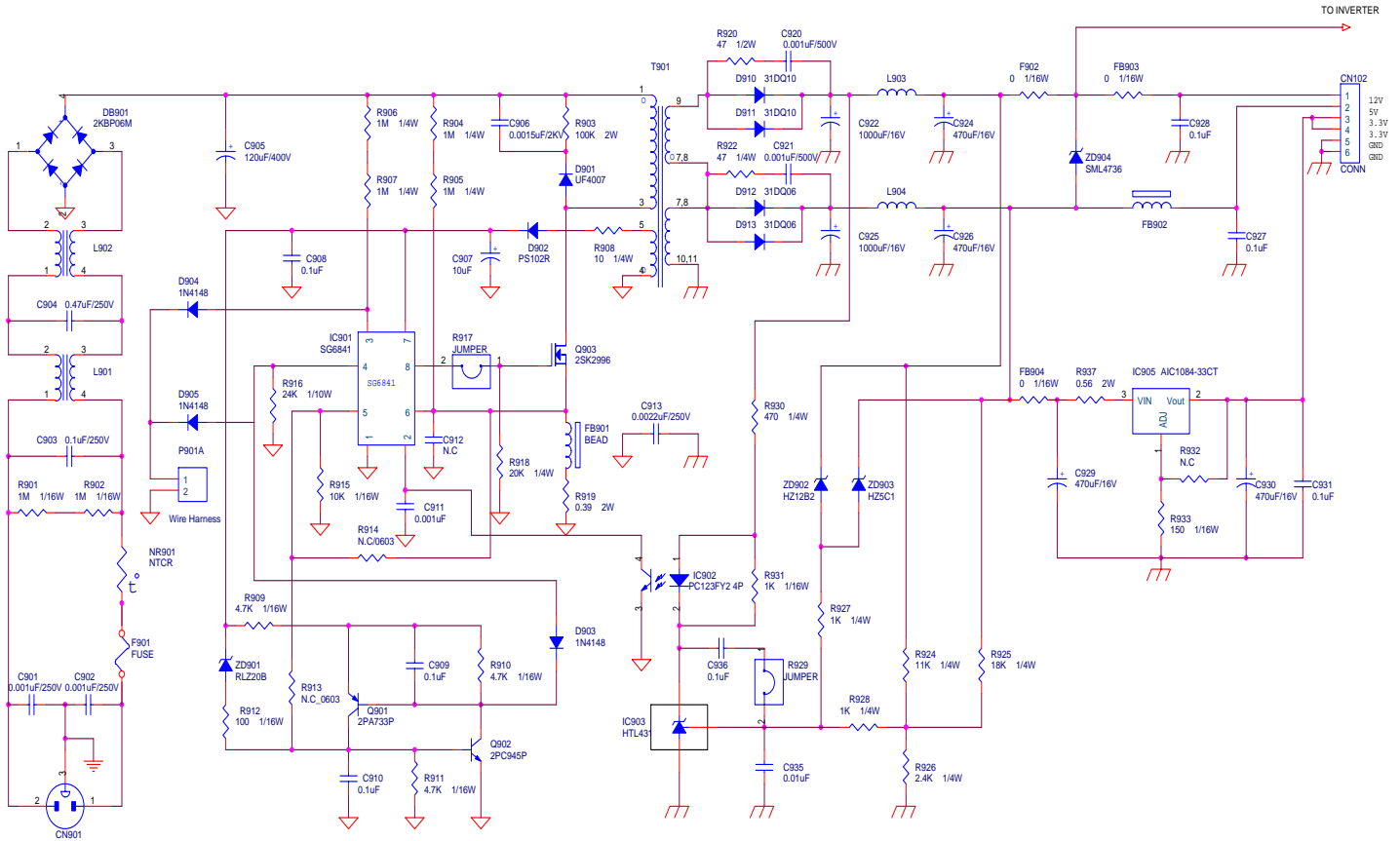


CONNECTOR for PANEL

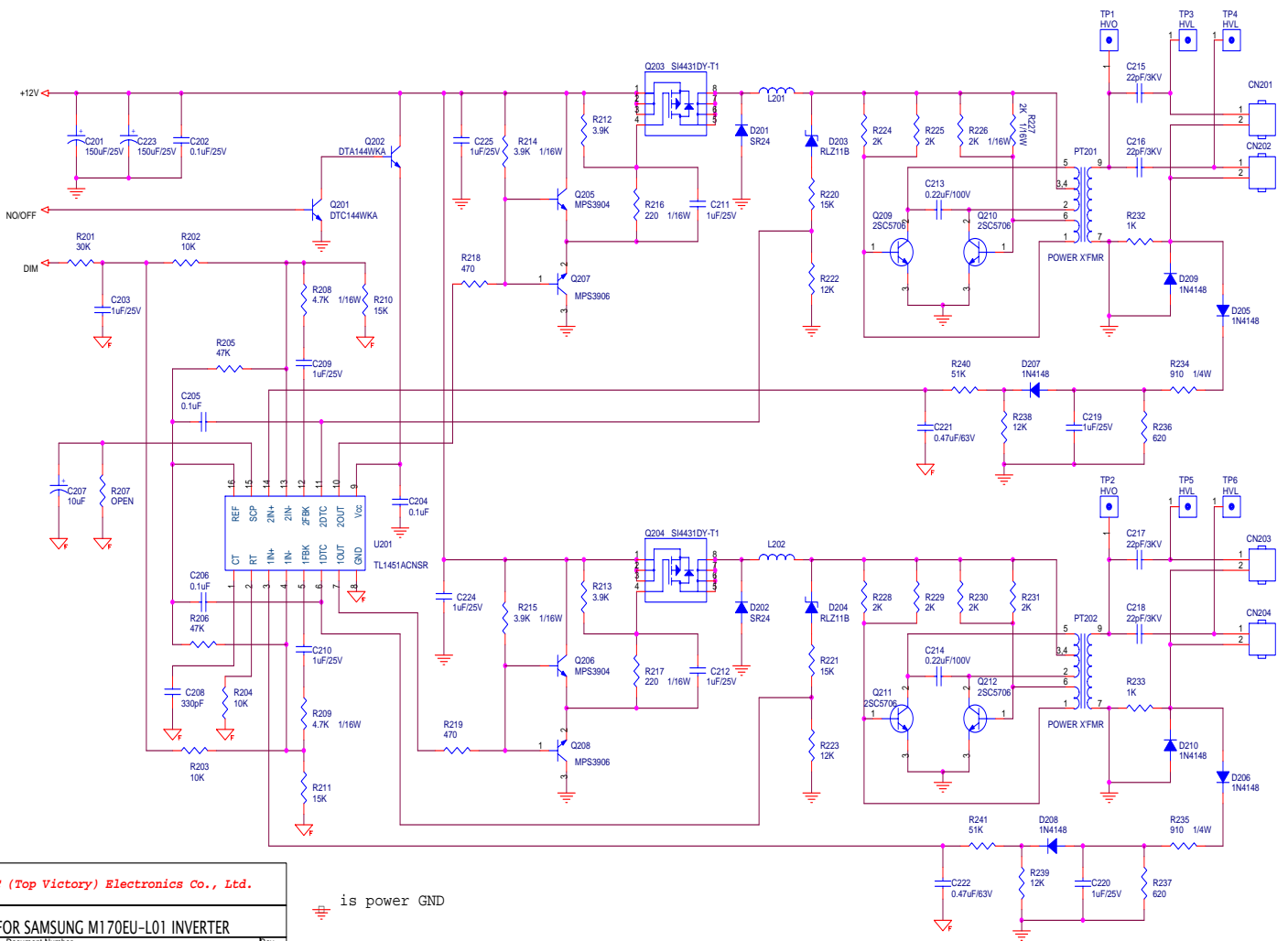


file		
LVDS Interface		
Size	Document Number	Rev
Cust	file:Doc>	
Date:	Friday, October 25, 2002	Sheet 4 of 6



6.2 Inverter/Power Board



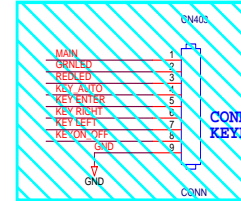
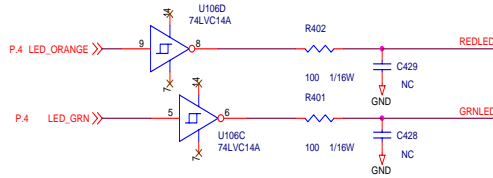
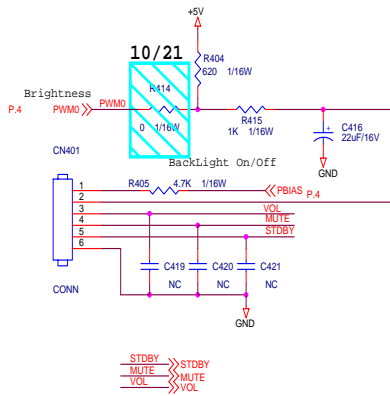
<Title>		
POWER / INVERTER / AUDIO		
Size B	Document Number 71511013-B	Rev 1
Date: Tuesday, October 01, 2002	Sheet 1 of 3	



AOC (Top Victory) Electronics Co., Ltd.	
Title	
2. FOR SAMSUNG M170EU-L01 INVERTER	
Size	Document Number
B	
Date:	Rev
Tuesday, October 01, 2002	A
Sheet	of
2	2

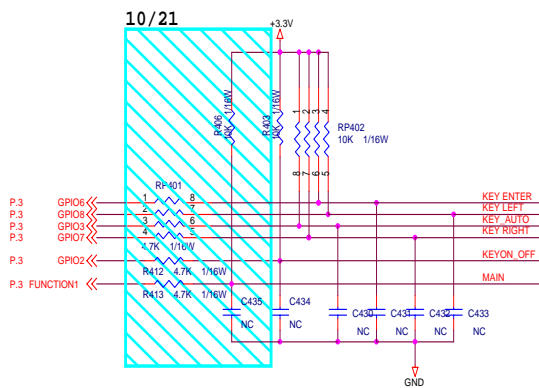
 is power GND
 is signal GND

6.3 KeyPad Board

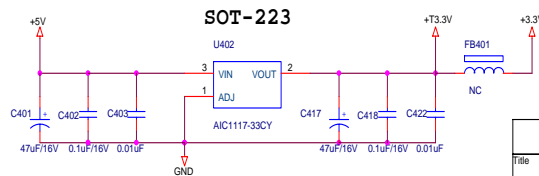
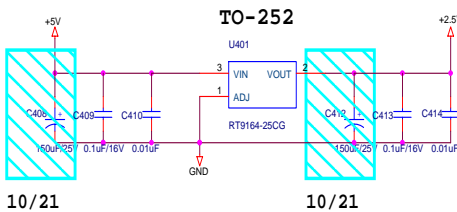
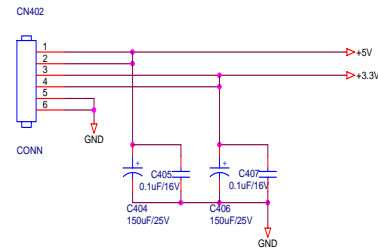


10/21

for



CONNECTOR for POWER/INVERTER Board

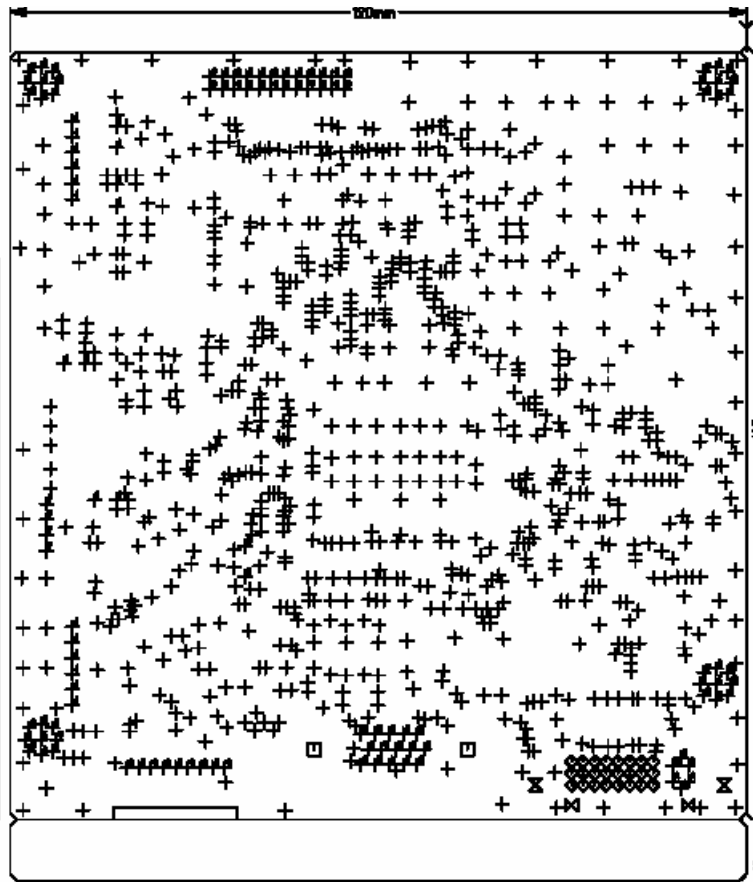


AOC		
Title K.B AND CONNECTOR		
Size B	Document Number gm5120	Rev A
Date: Friday, October 25, 2002	Sheet 5	of 6

7. PCB Layout

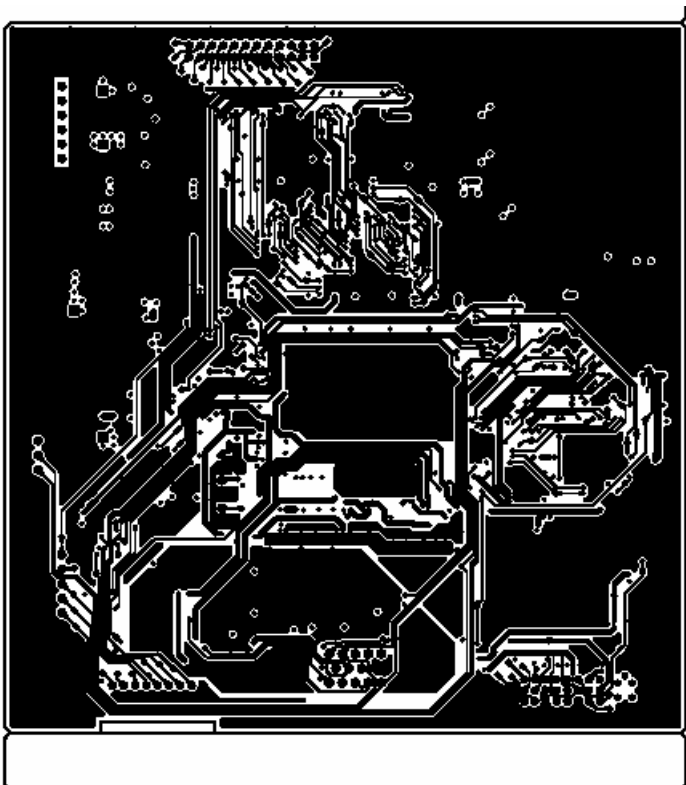
7.1 Main Board

SIZE	QTY	SYM	PLTD
0.3556	661	+	PLTD
3.2004	2	□	PLTD
0.8636	24	◇	PLTD
2.032	2	⊗	PLTD
2.032	2	⊗	NPLTD
0.6604	6	A	PLTD
0.888	2	B	PLTD
0.506	32	D	PLTD
3.302	4	E	NPLTD
0.8806	4	F	PLTD
0.6128	33	G	PLTD
1.05004	15	H	PLTD
0.8144	8	I	PLTD
1.018	12	J	PLTD



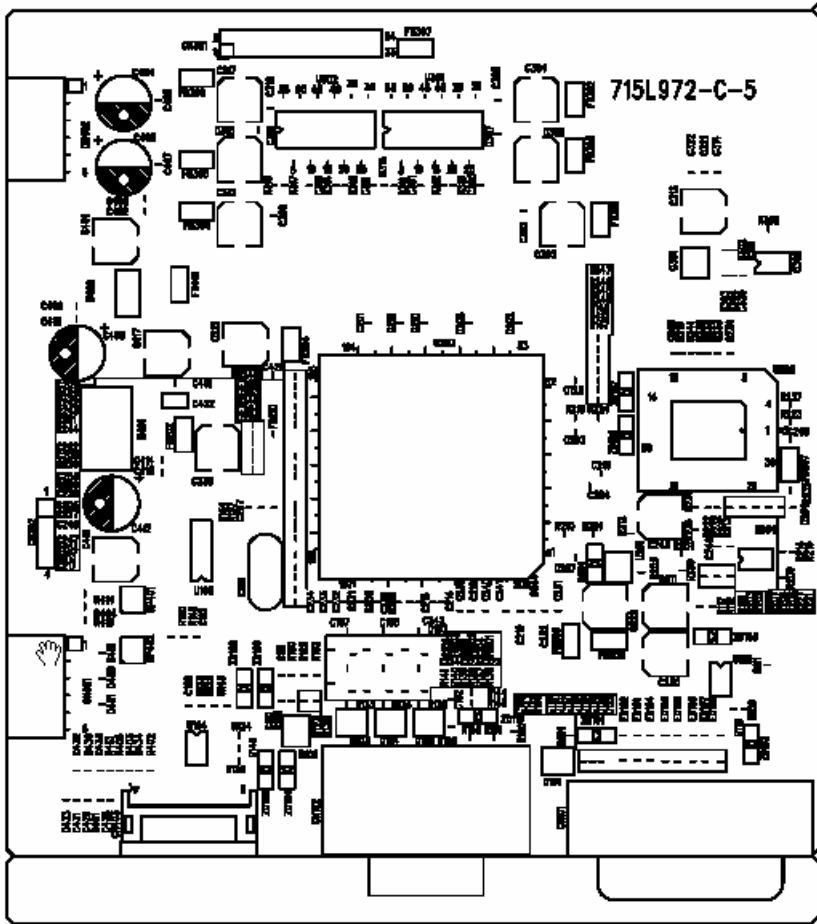
DRILL DRAWING

2003-2-10



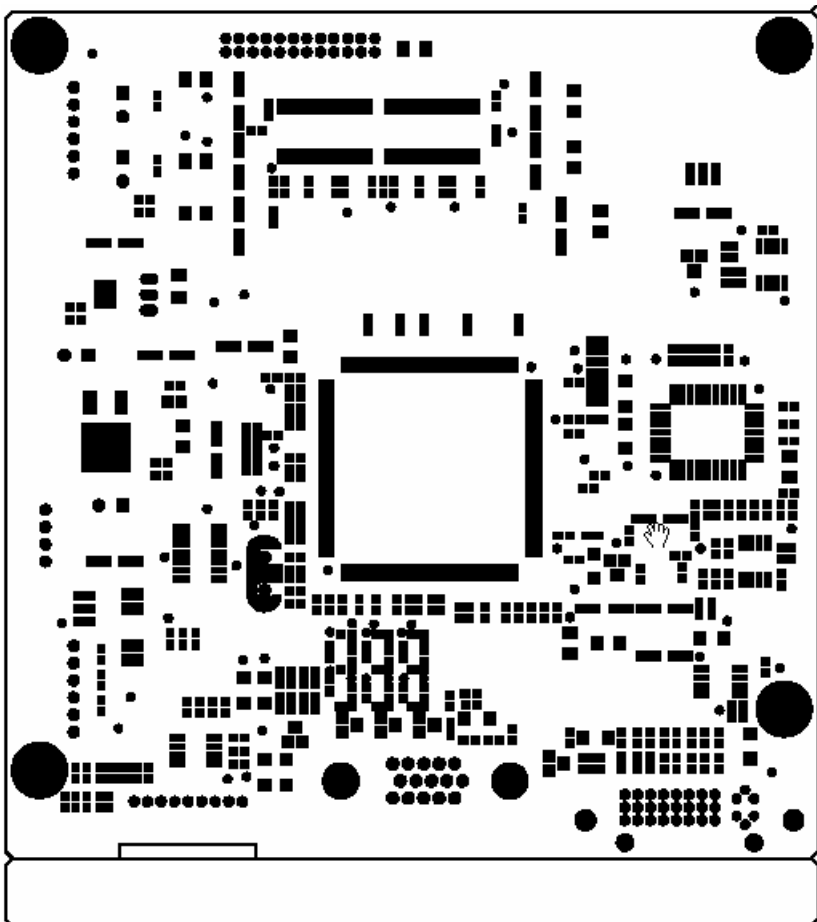
COPPER LAYER

2003-2-10



TOP SILKSCREEN

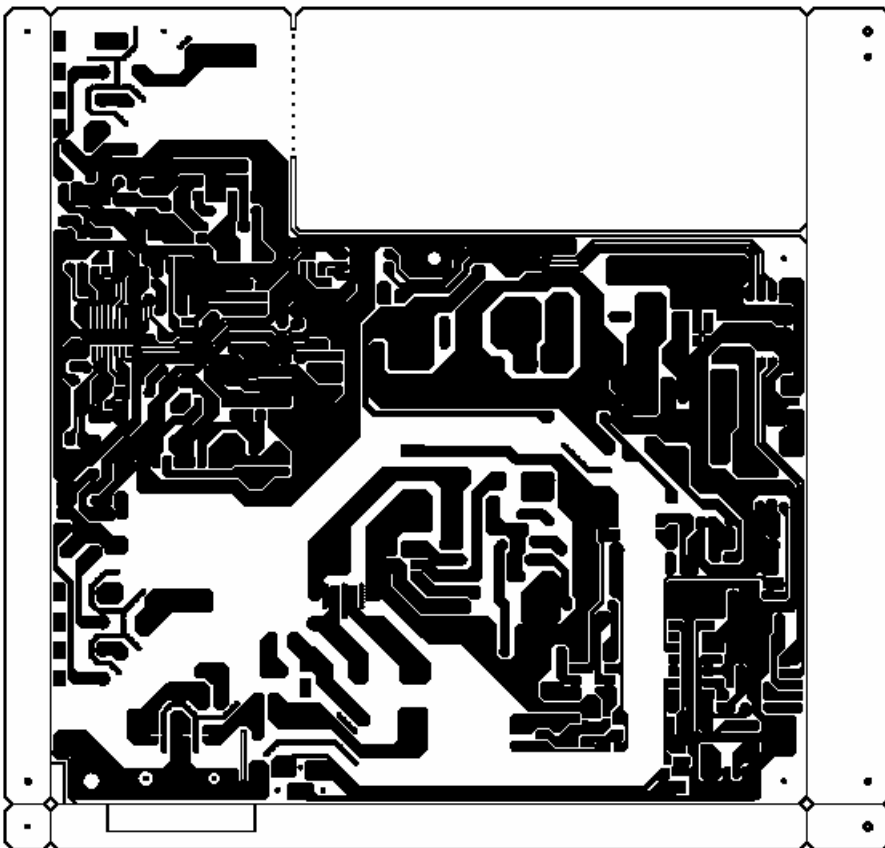
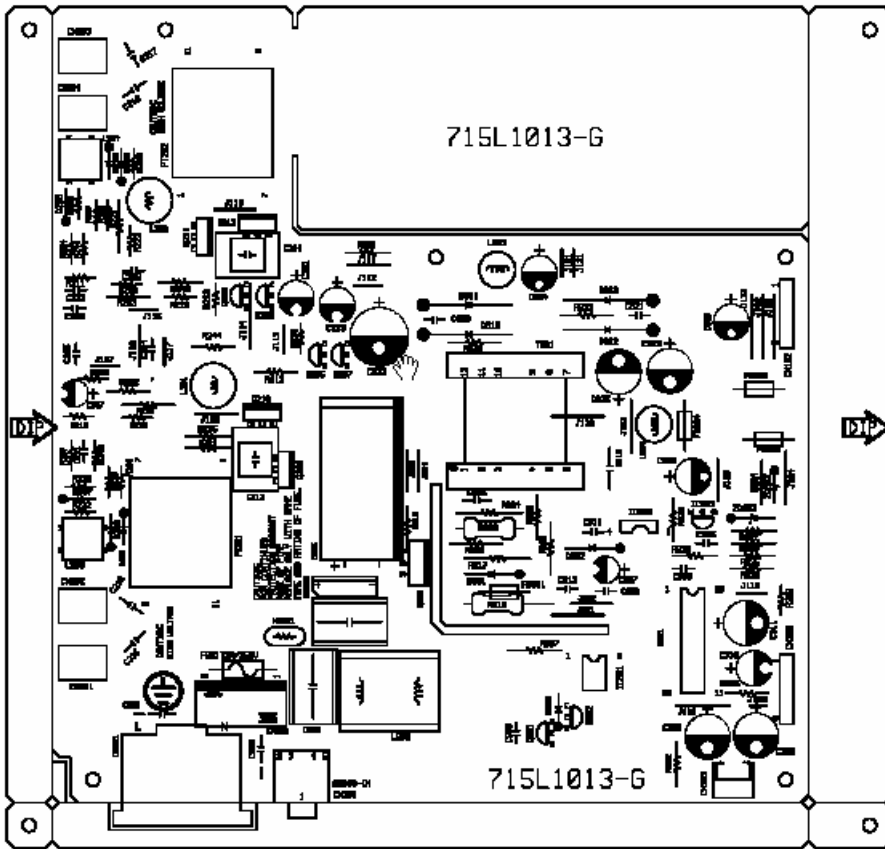
2003-2-10



TOP SMD PASTE MASK

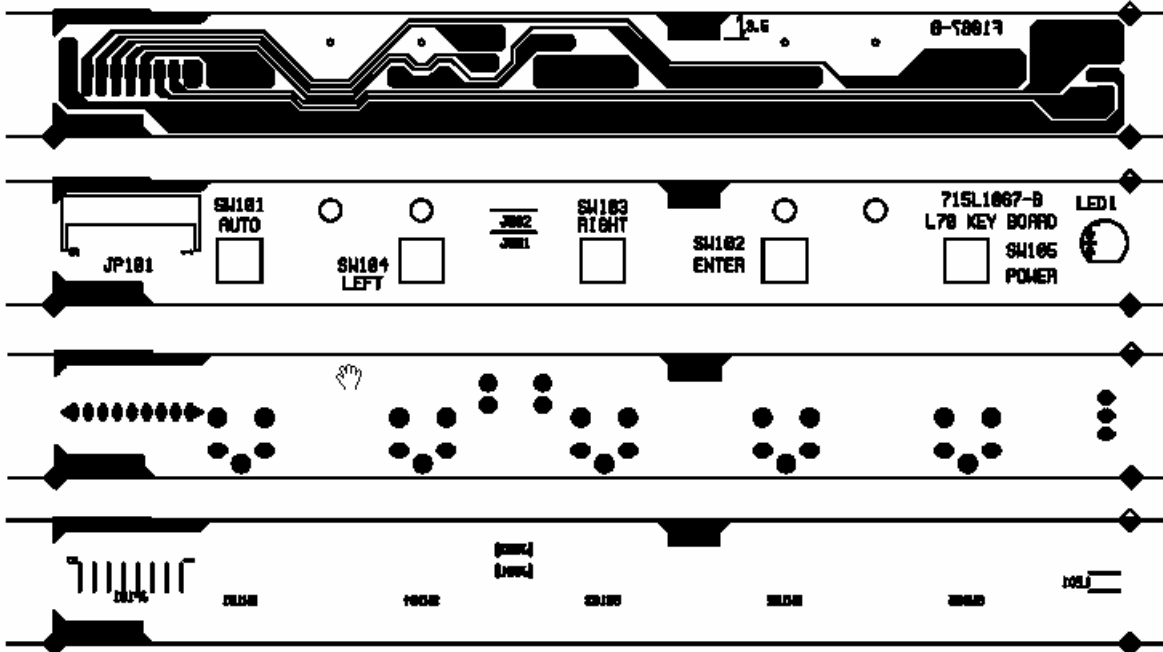
2003-2-10

7.2 Inverter/Power Board



7.3 Keypad Board

715L1067-B



8. Maintainability

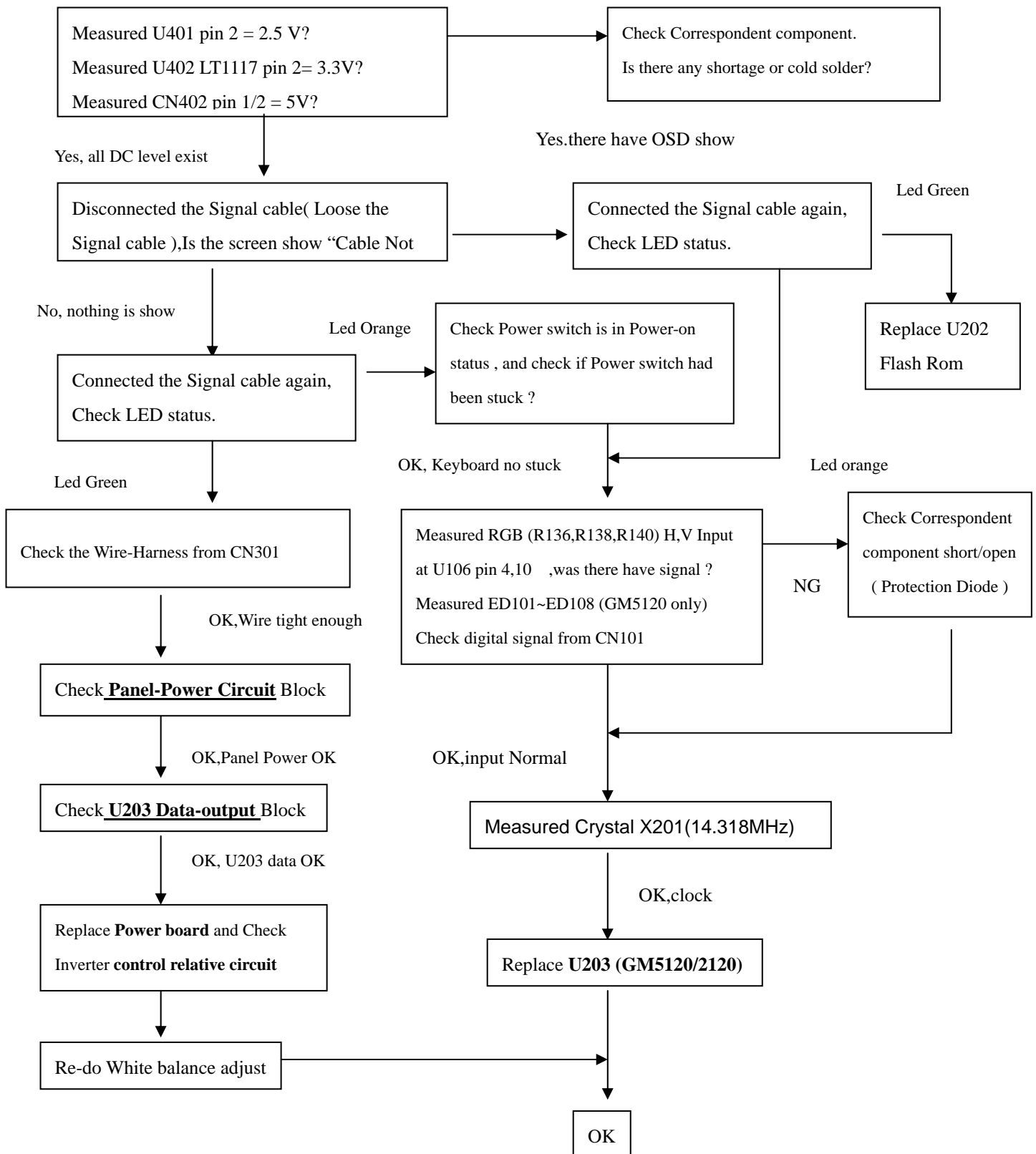
8.1 Equirements and Tools Requirement

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

8.2 Trouble Shooting

8.2.1 Main Board

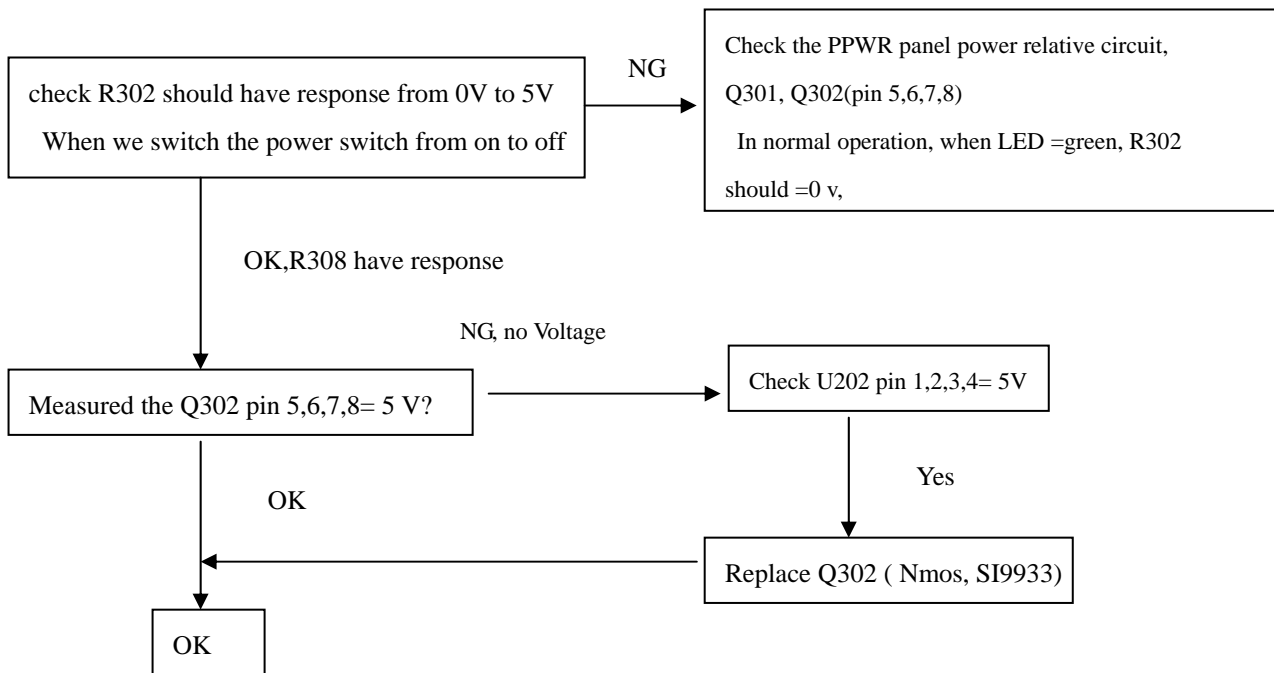
1.NO SCREEN APPEAR



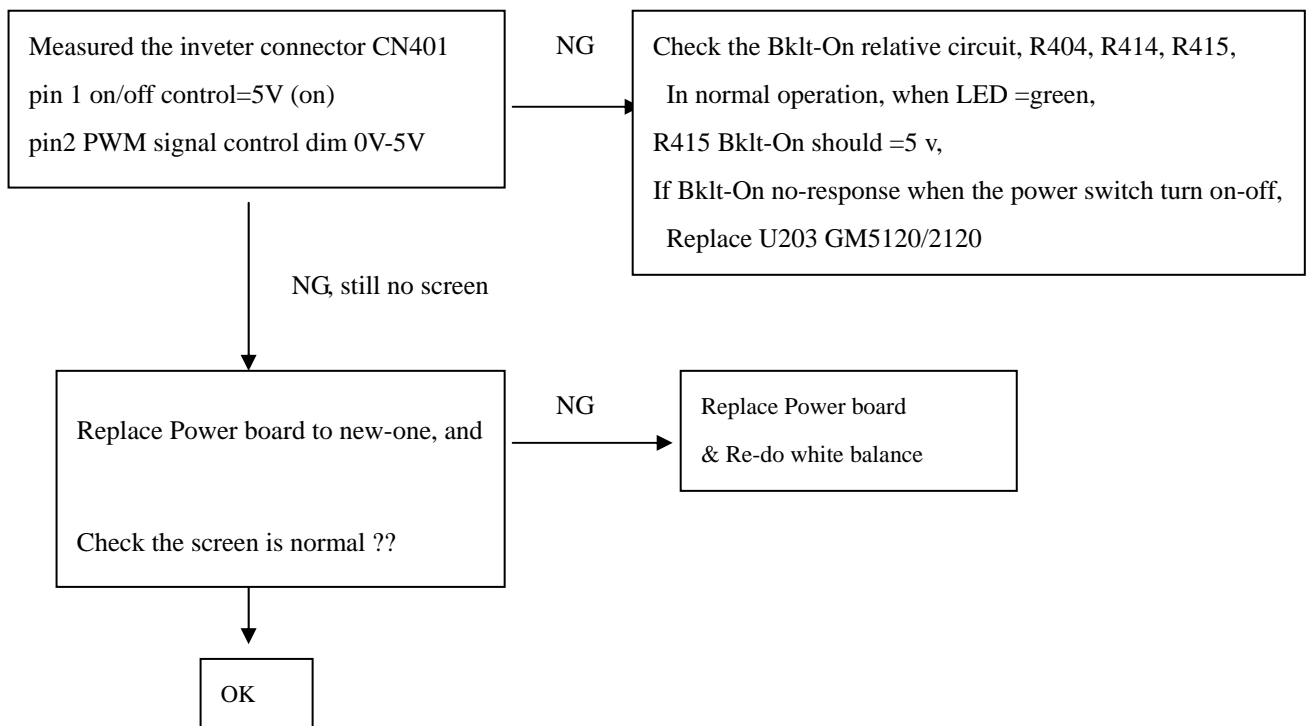
Note: 1. if Replace “**MAIN-BOARD**” , Please re-do “**DDC-content**” programmed & “**WHITE-Balance**”.

2. if Replace “**Power Board**” only, Please re-do “**WHITE-Balance**”

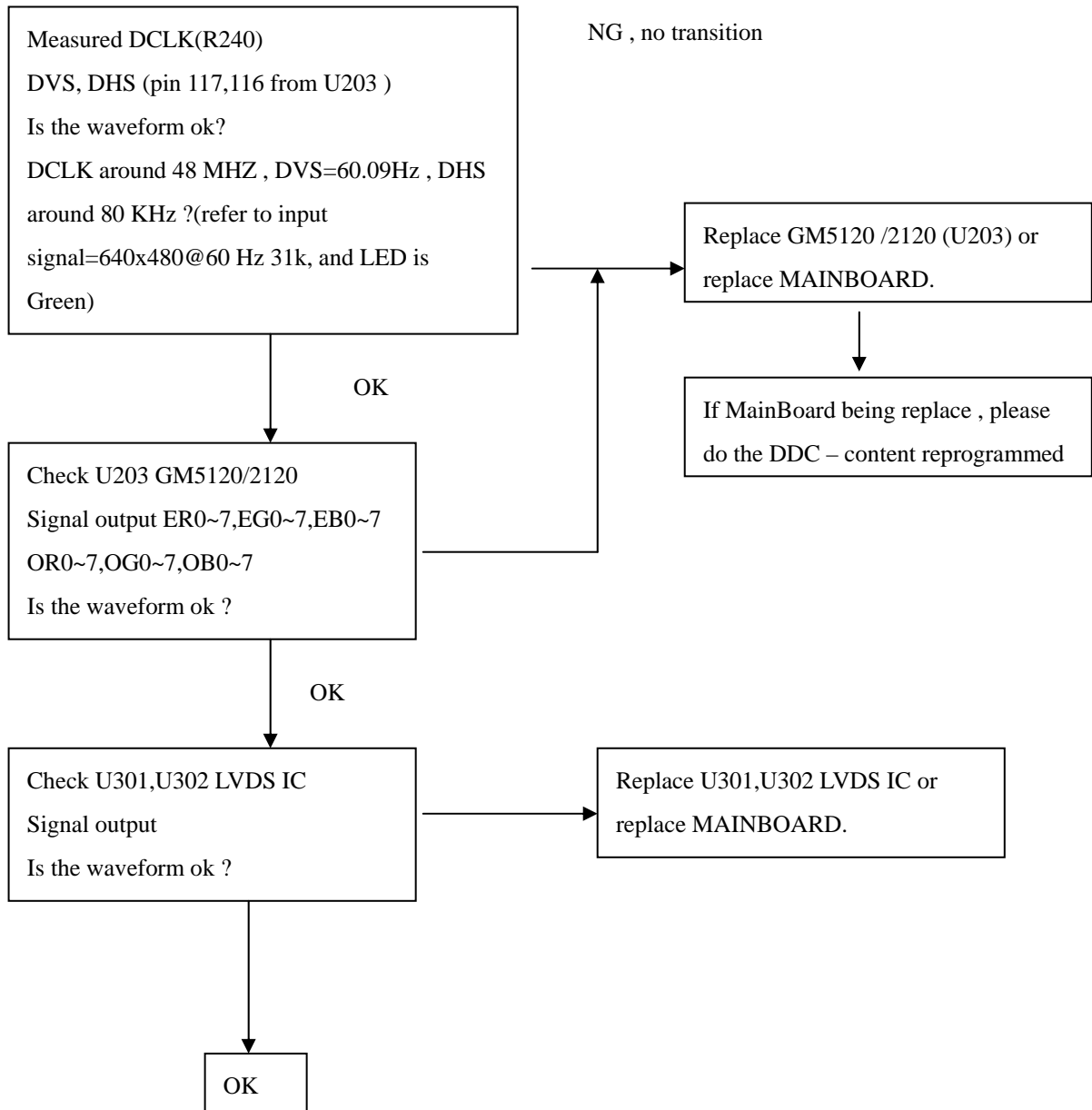
2.PANEL-POWER CIRCUIT



3.INVERTER Control Relative Circuit

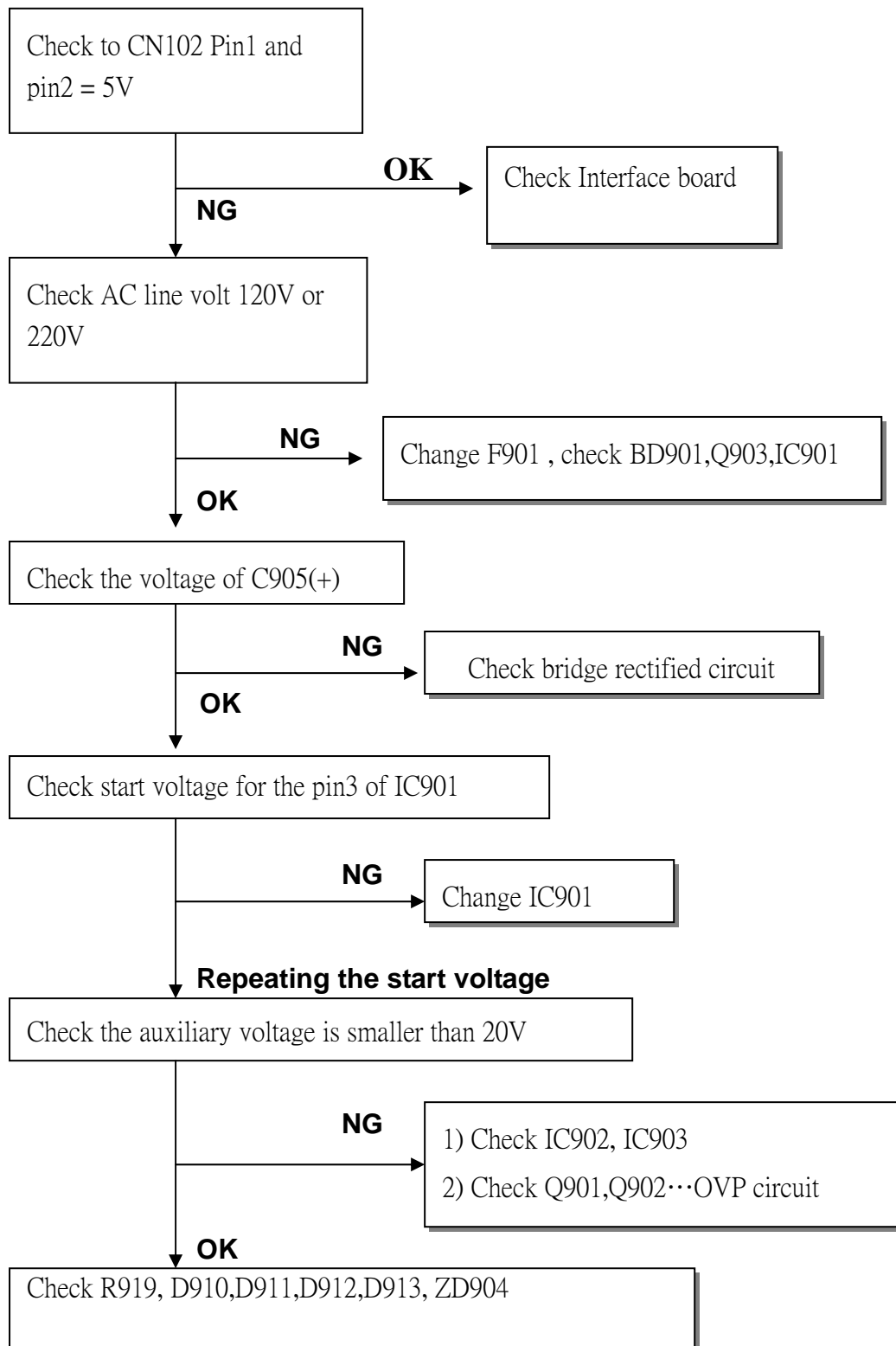


4.U203-DATA OUTPUT

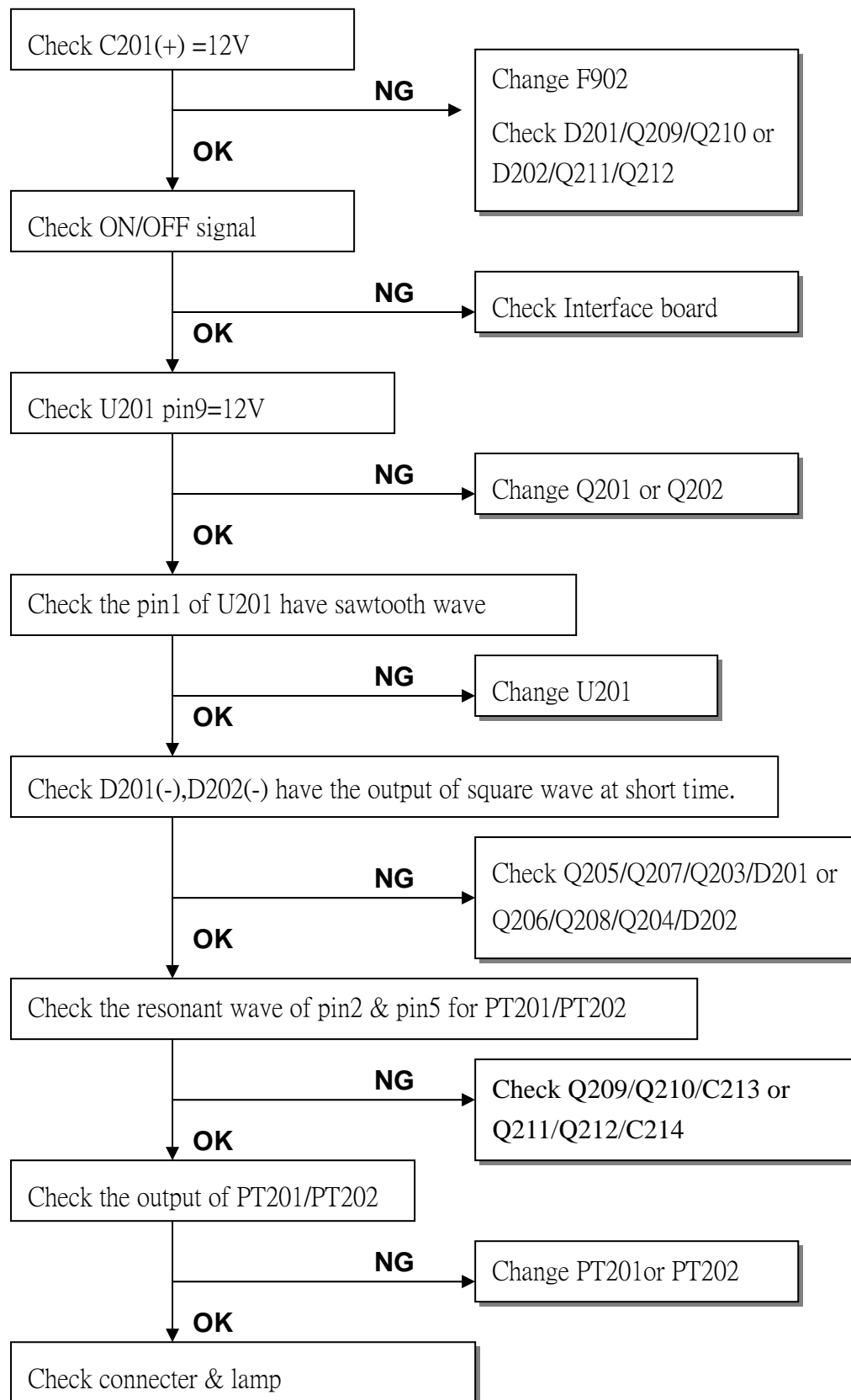


8.2.2 Power/Inverter Board

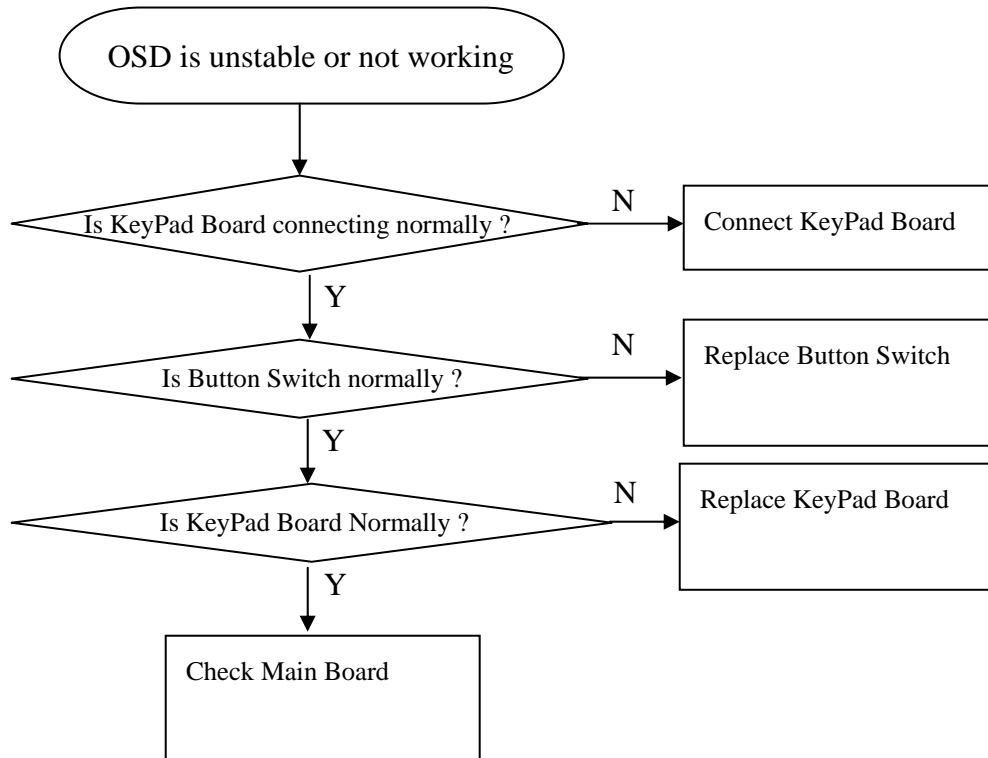
1.) No power



2.) W / LED , No Backlight



8.2.3 Keypad Board



9. White-Balance, Luminance adjustment

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

Before started adjust white balance ,please setting the Chroma-7120 **MEM. channel 1 to 6500** color, **MEM. channel 2 to 7200** color, and **MEM. channel 3 to 9300** color (our 9300 parameter is $x = 296 \pm 10$, $y = 311 \pm 10$, $Y = 190 \pm 10$ cd/m² and 6500 parameter is $x = 313 \pm 10$, $y = 329 \pm 10$, $Y = 200 \pm 10$ cd/m²·7200 parameter is $x = 303 \pm 10$, $y = 319 \pm 10$, $Y = 200 \pm 10$ cd/m²)

How to setting MEM.channel you can reference to chroma 7120 user guide or simple use “**SC**” key and “**NEXT**” key to modify xyY value and use “**ID**” key to modify the TEXT description

Following is the procedure to do white-balance adjust

Press MENU button during 2 seconds along with press Power button will activate the factory mode, then MCU will do AUTO LEVEL automatically. Meanwhile press MENU the OSD screen will located at **left top of panel**.

I. Bias adjustment :

1. set the contrast  to 90.
2. adjust the **Brightness**  to 100.

II. Gain adjustment :

Move cursor to “-Factory-” and press MENU key

a. adjust 6500 color-temperature

- 1 Switch the chroma-7120 to **RGB-mode** (with press “MODE” button)
- 2 switch the MEM.channel to Channel 01 (with up or down arrow on chroma 7120)
- 3 The lcd-indicator on chroma 7120 will show $x = 313 \pm 10$, $y = 329 \pm 10$, $Y = 200 \pm 5$ cd/m²
- 4 Adjust the RED on OSD window until chroma 7120 indicator reached the value R=100
- 5 adjust the GREEN on OSD, until chroma 7120 indicator reached G=100
- 6 adjust the BLUE on OSD, until chroma 7120 indicator reached B=100
- 7 repeat above procedure (item 5,6,7) until chroma 7120 RGB value meet the tolerance =100±2
- 8 Press Exit on OSD window to save the adjustment result

b. adjust 7200 color-temperature

- 9 Switch the chroma-7120 to **RGB-mode** (with press “MODE” button)
- 10 switch the MEM.channel to Channel 02 (with up or down arrow on chroma 7120)
- 11 The lcd-indicator on chroma 7120 will show $x = 303 \pm 10$, $y = 319 \pm 10$, $Y = 200 \pm 5$ cd/m²
- 12 Adjust the RED on OSD window until chroma 7120 indicator reached the value R=100
- 13 adjust the GREEN on OSD, until chroma 7120 indicator reached G=100
- 14 adjust the BLUE on OSD, until chroma 7120 indicator reached B=100
- 15 repeat above procedure (item 5,6,7) until chroma 7120 RGB value meet the tolerance =100±2
- 16 Press Exit on OSD window to save the adjustment result

c. adjust 9300 color-temperature

- 17 Switch the chroma-7120 to **RGB-mode** (with press “MODE” button)
- 18 switch the MEM.channel to Channel 03 (with up or down arrow on chroma 7120)
- 19 The lcd-indicator on chroma 7120 will show $x = 296 \pm 10$, $y = 311 \pm 10$, $Y = 190 \pm 5 \text{ cd/m}^2$
- 20 Adjust the RED on OSD window until chroma 7120 indicator reached the value $R=100$
- 21 adjust the GREEN on OSD, until chroma 7120 indicator reached $G=100$
- 22 adjust the BLUE on OSD, until chroma 7120 indicator reached $B=100$
- 23 repeat above procedure (item 5,6,7) until chroma 7120 RGB value meet the tolerance $=100 \pm 2$
- 24 Press Exit on OSD window to save the adjustment result

Turn the POWER-button off to on to quit from factory mode.

10. EDIT Content

D-SUB Connector(Analog)

	x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	xA	xB	xC	xD	xE	xF
00	00	FF	FF	FF	FF	FF	FF	00	24	4D	70	A1	40	E2	01	00
16:	0B	0D	01	03	68	22	1B	78	2A	24	1F	A1	5A	49	99	25
32:	1A	4C	55	BF	EF	00	81	80	61	4C	71	4F	01	01	01	01
48:	01	01	01	01	01	01	BC	34	00	98	51	00	2A	40	10	90
64:	13	00	54	0E	11	00	00	1E	00	00	00	FD	00	37	4B	1E
80:	53	0E	00	0A	20	20	20	20	20	20	00	00	00	FF	00	35
96:	35	30	30	30	30	31	0A	20	20	20	20	20	00	00	00	FC
112	00	49	42	4D	20	4C	31	37	30	20	54	46	54	0A	00	95

Note: Byte 0C, 0D, 0E, 0F means Serial No. Byte 10, 11 means Manufacture Time. Byte 7F means checksum

11. BOM List

	CBPC780KKDI3	CONVERSION BOARD	1	PCS
	KEPC780KI3	KEY BOARD	1	PCS
	PWPC7425A1I2	LCD POWER ASS'Y	1	PCS
	2L6008 1	SCREW	2	PCS
	12L 404 1	SCREW RUBBER	4	PCS
	15L5689 2 A	GND CLAMP	1	PCS
	15L5851 2	MAIN FRAME	1	PCS
	15L5908 1	BRACKET	1	PCS
	33L4599AB6 T	KEY PAD	1	PCS
	33L4600 1	POWER LENS	1	PCS
	34L1118A72 T	FRONT PANEL	1	PCS
	34L1119A72 T	BACK COVER	1	PCS
	34L1120 72 T	SUPPORT FRONT	1	PCS
	34L1121 72 T	SUPPORT BACK	1	PCS
	34L1122 72 T	HINGE COVER(T)	1	PCS
	34L1123 B6 T	HINGE COVER(B)	1	PCS
	40L 152509	RECYCLE LABEL	0	PCS
	40L 152512	RECYCLE LABEL	0	PCS
	40L 190625 1	ID LABEL	1	PCS
	40L 45760819A	ネ玻ら黻夹帽/诀贺夹帽	1	PCS
	40L 457625 1A	CARTON LABEL	1	PCS
	40L 457625 2A	S/N LABEL	1	PCS
	40L 581 26704	酏纒 FOR CARTON/PALLET	0.02	PCS
	40L 581625 2A	PALLET LABEL	0.02	PCS
	41L 68508 A	恨	0.2	PCS
	44L3231 3	EVA	1	PCS
	44L3231 15	EVA WASHER	1	PCS
	44L3712 1	EPC (L)	1	PCS
	44L3712 2	EPS (R)	1	PCS
	44L3712 4	CARTON	1	PCS
	44L3712624 1A	CARTON	1	PCS
	45L 77 3	ゴ 钱	173	CM
	45L 77500	BARCODE RIBBON	19	CM
	45L 77501	BARCODE RIBBON	0.5	CM
	45L 88607IBM	PE BAG	1	PCS

	52L 1186	SMALL TAPE	8	CM
	52L 1208 A	TAPE	2	PCS
	52L 1211501	絢袈	1	PCS
	52L6020 3AIBM	PROTECT FILM	0.1	PCS
	52L6022 2	SMALL TAPE	15	CM
	52L6025 11531	INSULATE SHEET	1	PCS
	52L6025 11532	INSULATE SHEET	1	PCS
	85L 635 1	SHIELD	1	PCS
	89L1738LAA 1	SIGNAL CABLE	1	PCS
	89L402A18N LS	POWER CORD	1	PCS
	89L402A18N VL	POWER CORD	0	PCS
	95L8018 30504	HARNESS	1	PCS
	M1L 140 10 47	SCREW M4X10	4	PCS
	M1L 330 4128	SCREW M3X4	4	PCS
	M1L1030 4128	SCREW	2	PCS
	M1L1040 8128	SCREW	1	PCS
	M1L1130 6128	SCREW	9	PCS
	Q1L 330 10120	SCREW FOR FP/RC	4	PCS
	Q1L1030 8120	SCREW 3X8 NI	2	PCS
	Q1L1030 8128	SCREW	4	PCS
	750LLK70200	Hydis 17" LCD PANEL(-20	1	PCS
	705L780KB34057	催舱ン	1	PCS
	AIC780KKDI3	MAIN BOARD	1	PCS
CN401	33A8022 6A H	PIN HEADER FEMALE 90 6P	1	PCS
CN402	33A8022 6A H	PIN HEADER FEMALE 90 6P	1	PCS
CN403	33L3802 9H	WAFER 9P RIGHT ANELE PI	1	PCS
CN301	33L801724A H	PIN HEADER 24P 2.0mm	1	PCS
	40L 457624 1A	CPU LABEL	1	PCS
	40L 45762412A	CBPC LABEL	1	PCS
	49L 51 1A	筋猴	0.05	ML
	55L 100600 A	ん盼睐奎	0.5	G
	55L 100603	κ て睐奎	9.1	G
U202	56L1133 41 K6	W39F010P-70B	1	PCS
C404	67L215C151 4H	LOW ESR 150UF 25V 8*7MM	1	PCS
C406	67L215C151 4H	LOW ESR 150UF 25V 8*7MM	1	PCS
C408	67L215C151 4H	LOW ESR 150UF 25V 8*7MM	1	PCS
C412	67L215C151 4H	LOW ESR 150UF 25V 8*7MM	1	PCS
CN102	88L 35315F HA	D-USB 15PIN	1	PCS
X201	93L 22 53	CRYSTAL 14.318MHzHC-49U	1	PCS

	715L 972 1 6	PCB	1	PCS
	55L 23520	IPA	0.06	ML
	55L 100600 A	盼睐奎	0.5	G
	55L 100602	奎筹	0.85	G
U301	56L 561 8	THC63LVDM83R	1	PCS
U302	56L 561 8	THC63LVDM83R	1	PCS
U203	56L 562 26	gm2120 CG	1	PCS
Q302	56L 566 1	SI9933ADY-T1	0	PCS
Q302	56L 566 6	SI9953DY-T1	1	PCS
U402	56L 585 4	AIC1117-33CY	1	PCS
U401	56L 585 7	RT9164-25CL	1	PCS
U204	56L1133 33	M24C16-MN6T	1	PCS
U104	56L1133 34	M24C02-WMN6T SMT	1	PCS
U106	56L4LVC 14 P	74LVC14ADT	1	PCS
Q301	57L 417 4	PMBS3904/PHILIPS-SMT (04	1	PCS
RP402	61L 125103 8	CHIP AR 8P4R 10KOHM +-5	1	PCS
RP401	61L 125472 8	CHIP AR 8P4R 4.7K OHM+-	1	PCS
FB210	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R150	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R154	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R157	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R159	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R160	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R202	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R210	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R213	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R219	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R227	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R235	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R242	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R243	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R244	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R248	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R249	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R250	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R310	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R311	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R313	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R315	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS

R414	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R205	61L0603100 1F	CHIP 1KOHM 1/16W 1%	1	PCS
R137	61L0603101	CHIPR 100 OHM +-5% 1/16	1	PCS
R139	61L0603101	CHIPR 100 OHM +-5% 1/16	1	PCS
R141	61L0603101	CHIPR 100 OHM +-5% 1/16	1	PCS
R147	61L0603101	CHIPR 100 OHM +-5% 1/16	1	PCS
R148	61L0603101	CHIPR 100 OHM +-5% 1/16	1	PCS
R401	61L0603101	CHIPR 100 OHM +-5% 1/16	1	PCS
R402	61L0603101	CHIPR 100 OHM +-5% 1/16	1	PCS
R218	61L0603102	CHIPR 1K OHM +-5% 1/16W	1	PCS
R415	61L0603102	CHIPR 1K OHM +-5% 1/16W	1	PCS
R123	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R124	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R131	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R132	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R142	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R206	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R207	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R208	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R214	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R215	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R221	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R222	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R223	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R231	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R232	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R251	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R302	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R403	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R406	61L0603103	CHIPR 10K OHM +-5% 1/16	1	PCS
R303	61L0603104	CHIPR 100K OHM +-5% 1/1	1	PCS
R304	61L0603104	CHIPR 100K OHM +-5% 1/1	1	PCS
R136	61L0603121	CHIPR 120 OHM 1/16W	1	PCS
R138	61L0603121	CHIPR 120 OHM 1/16W	1	PCS
R140	61L0603121	CHIPR 120 OHM 1/16W	1	PCS
R308	61L0603302	CHIPR 3K OHM +-5% 1/16W	1	PCS
R125	61L0603470	CHIPR 47 OHM +-5% 1/16W	1	PCS
R126	61L0603470	CHIPR 47 OHM +-5% 1/16W	1	PCS
R129	61L0603470	CHIPR 47 OHM +-5% 1/16W	1	PCS

R130	61L0603470	CHIPR 47 OHM +-5% 1/16W	1	PCS
R240	61L0603470	CHIPR 47 OHM +-5% 1/16W	1	PCS
R144	61L0603472	CHIPR 4.7K OHM +-5% 1/1	1	PCS
R201	61L0603472	CHIPR 4.7K OHM +-5% 1/1	1	PCS
R245	61L0603472	CHIPR 4.7K OHM +-5% 1/1	1	PCS
R246	61L0603472	CHIPR 4.7K OHM +-5% 1/1	1	PCS
R247	61L0603472	CHIPR 4.7K OHM +-5% 1/1	1	PCS
R405	61L0603472	CHIPR 4.7K OHM +-5% 1/1	1	PCS
R412	61L0603472	CHIPR 4.7K OHM +-5% 1/1	1	PCS
R413	61L0603472	CHIPR 4.7K OHM +-5% 1/1	1	PCS
R224	61L0603621	CHIPR 620 OHM+-5% 1/16W	1	PCS
R404	61L0603621	CHIPR 620 OHM+-5% 1/16W	1	PCS
R133	61L0603750 9F	750HM 1%	1	PCS
R134	61L0603750 9F	750HM 1%	1	PCS
R135	61L0603750 9F	750HM 1%	1	PCS
FB208	61L1206000	CHIPR 0 OHM +-5% 1/8W	1	PCS
C320	65L0603101 32	100PF +-10% 50V X7R	1	PCS
C125	65L0603102 32	CHIP 1000PF 50V X7R	1	PCS
C261	65L0603102 32	CHIP 1000PF 50V X7R	1	PCS
C262	65L0603102 32	CHIP 1000PF 50V X7R	1	PCS
C263	65L0603102 32	CHIP 1000PF 50V X7R	1	PCS
C264	65L0603102 32	CHIP 1000PF 50V X7R	1	PCS
C425	65L0603102 32	CHIP 1000PF 50V X7R	1	PCS
C428	65L0603102 32	CHIP 1000PF 50V X7R	1	PCS
C429	65L0603102 32	CHIP 1000PF 50V X7R	1	PCS
C430	65L0603102 32	CHIP 1000PF 50V X7R	1	PCS
C431	65L0603102 32	CHIP 1000PF 50V X7R	1	PCS
C432	65L0603102 32	CHIP 1000PF 50V X7R	1	PCS
C433	65L0603102 32	CHIP 1000PF 50V X7R	1	PCS
C434	65L0603102 32	CHIP 1000PF 50V X7R	1	PCS
C435	65L0603102 32	CHIP 1000PF 50V X7R	1	PCS
C103	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C104	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C105	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C106	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C107	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C108	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C252	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C254	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS

C256	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C258	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C322	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C403	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C410	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C414	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C422	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C102	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C109	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C113	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C201	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C202	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C203	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C204	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C205	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C206	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C207	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C208	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C209	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C210	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C212	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C213	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C214	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C215	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C216	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C217	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C218	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C219	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C220	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C226	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C227	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C228	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C231	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C232	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C233	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C234	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C238	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C239	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C240	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS

C241	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C242	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C244	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C248	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C249	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C251	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C253	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C255	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C257	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C300	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C301	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C302	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C305	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C307	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C309	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C310	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C311	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C314	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C316	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C318	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C321	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C402	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C405	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C407	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C409	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C413	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C418	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C246	65L0603330 31	33PF+-5% 50V NPO	1	PCS
C247	65L0603330 31	33PF+-5% 50V NPO	1	PCS
C259	65L0603330 31	33PF+-5% 50V NPO	1	PCS
R204	65L0603509 31	CHIP 5PF+-0.5PF 50V NPO	1	PCS
C245	67L 312100 3	SMD 10uf +-20% 16V	1	PCS
C304	67L 312100 3	SMD 10uf +-20% 16V	1	PCS
C306	67L 312100 3	SMD 10uf +-20% 16V	1	PCS
C315	67L 312100 3	SMD 10uf +-20% 16V	1	PCS
C317	67L 312100 3	SMD 10uf +-20% 16V	1	PCS
C211	67L 312101 3	SMD 100UF +-20% 16V	1	PCS
C250	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C303	67L 312220 3	SMD 22UF +-20% 16V	1	PCS

C312	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C416	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C221	67L 312470 3	SMD 47UF +-20% 16V	1	PCS
C222	67L 312470 3	SMD 47UF +-20% 16V	1	PCS
C230	67L 312470 3	SMD 47UF +-20% 16V	1	PCS
C313	67L 312470 3	SMD 47UF +-20% 16V	1	PCS
C401	67L 312470 3	SMD 47UF +-20% 16V	1	PCS
C417	67L 312470 3	SMD 47UF +-20% 16V	1	PCS
FB202	71L 57G601	TI3216JIG601-T17A	1	PCS
FB204	71L 57G601	TI3216JIG601-T17A	1	PCS
FB206	71L 57G601	TI3216JIG601-T17A	1	PCS
FB207	71L 57G601	TI3216JIG601-T17A	1	PCS
FB301	71L 57G601	TI3216JIG601-T17A	1	PCS
FB302	71L 57G601	TI3216JIG601-T17A	1	PCS
FB303	71L 57G601	TI3216JIG601-T17A	1	PCS
FB304	71L 57G601	TI3216JIG601-T17A	1	PCS
FB305	71L 57G601	TI3216JIG601-T17A	1	PCS
FB306	71L 57G601	TI3216JIG601-T17A	1	PCS
FB307	71L 57G601	TI3216JIG601-T17A	1	PCS
FB101	71L 59C800	80 OHM	1	PCS
FB102	71L 59C800	80 OHM	1	PCS
FB103	71L 59C800	80 OHM	1	PCS
U202	87L 202 32	PLCC CONN 32PIN	1	PCS
ZD104	93L 39146	LL5232B SMT	1	PCS
ZD105	93L 39146	LL5232B SMT	1	PCS
ZD106	93L 39146	LL5232B SMT	1	PCS
ZD107	93L 39146	LL5232B SMT	1	PCS
ZD108	93L 39146	LL5232B SMT	1	PCS
ZD109	93L 39146	LL5232B SMT	1	PCS
ZD110	93L 39146	LL5232B SMT	1	PCS
ZD104	93L 39147	TZMC5V6-GS08	0	PCS
ZD105	93L 39147	TZMC5V6-GS08	0	PCS
ZD106	93L 39147	TZMC5V6-GS08	0	PCS
ZD107	93L 39147	TZMC5V6-GS08	0	PCS
ZD108	93L 39147	TZMC5V6-GS08	0	PCS
ZD109	93L 39147	TZMC5V6-GS08	0	PCS
ZD110	93L 39147	TZMC5V6-GS08	0	PCS
ZD104	93L 39149	MLL5232B BY FULL POWER	0	PCS
ZD105	93L 39149	MLL5232B BY FULL POWER	0	PCS

ZD106	93L 39149	MLL5232B BY FULL POWER	0	PCS
ZD107	93L 39149	MLL5232B BY FULL POWER	0	PCS
ZD108	93L 39149	MLL5232B BY FULL POWER	0	PCS
ZD109	93L 39149	MLL5232B BY FULL POWER	0	PCS
ZD110	93L 39149	MLL5232B BY FULL POWER	0	PCS
D106	93L 60220	BAT54C-GS08	0	PCS
D106	93L 60230	BAT54C(L43)	1	PCS
D201	93L 64 32	LL4148 SMD	0	PCS
D201	93L 6432V	LL4148-GS08	1	PCS
D103	93L 6433P	BAV99-SMT	1	PCS
D104	93L 6433P	BAV99-SMT	1	PCS
D105	93L 6433P	BAV99-SMT	1	PCS
	AIK780KI3	KEY BOARD FOR T780K	1	PCS
SW101	77L 600 1GHJ	KEY SWITCH	1	PCS
SW102	77L 600 1GHJ	KEY SWITCH	1	PCS
SW103	77L 600 1GHJ	KEY SWITCH	1	PCS
SW104	77L 600 1GHJ	KEY SWITCH	1	PCS
SW105	77L 600 1GHJ	KEY SWITCH	1	PCS
LED1	81L 12 1 GP	LED	1	PCS
GND	95L 900538	結	1	PCS
JP101	95L8014 9 41	HARNESS 210mm	1	PCS
PARENT	NO : AIK780KI3	KEY BOARD FOR T780K	M	舱 家
	715L1067 1	KEPC BOARD	1	PCS
J001	95L 90 23	TIN COATED	0	PCS
J002	95L 90 23	TIN COATED	0	PCS
	PWPC7425A1I2AI	LCD POWER ASS'Y FOR AI	1	PCS
	PWPC7425A1I2SMT	LCD POWER ASS'Y FOR SMT	1	PCS
CN102	33L8009 6R H	PIN HEADER DUAL ROW H:6	1	PCS
CN302	33L8009 6R H	PIN HEADER DUAL ROW H:6	1	PCS
CN201	33L8021 2D E	WAFER	0	PCS
CN202	33L8021 2D E	WAFER	0	PCS
CN203	33L8021 2D E	WAFER	0	PCS
CN204	33L8021 2D E	WAFER	0	PCS
CN201	33L8021 2D AC	CONN. 2P R/A 87210-0236	1	PCS
CN202	33L8021 2D AC	CONN. 2P R/A 87210-0236	1	PCS
CN203	33L8021 2D AC	CONN. 2P R/A 87210-0236	1	PCS
CN204	33L8021 2D AC	CONN. 2P R/A 87210-0236	1	PCS
	51L 6 4500	RTV 濺	2	G
IC902	56L 139 3	PC123FY2 BY SHARP	0	PCS

IC902	56L 139 3B	PC123 Y82	1	PCS
IC901	56L 379 32	SG6841D BY SYSTEM	1	PCS
Q207	57L 414 2	MPS3906, 126	1	PCS
Q208	57L 414 2	MPS3906, 126	1	PCS
Q209	57L 761 6	2SC5706 DIP SANYO	1	PCS
Q210	57L 761 6	2SC5706 DIP SANYO	1	PCS
Q211	57L 761 6	2SC5706 DIP SANYO	1	PCS
Q212	57L 761 6	2SC5706 DIP SANYO	1	PCS
R919	61L 2J39864B	0.390HM 5% 2W	1	PCS
NR901	61L 58080 WT	8 OHM NCTR	1	PCS
R903	61L152M104 64	100KOHM 5% 2W	1	PCS
C903	63L 107474 5S	0.47UF +-10% 250VAC	0	PCS
C903	63L 107474 HS	0.47UF +-10% 250VAC	0	PCS
C903	63L 10747410S	0.47UF +-10% 250VAC	1	PCS
C903	63L107K474 FS	0.47UF +-10% 275VAC, X2	0	PCS
C213	63L210J2242A2	PMS 0.22UF 250V	1	PCS
C214	63L210J2242A2	PMS 0.22UF 250V	1	PCS
C213	64L180J224AAT	CAP 0.22UF 160V R79	0	PCS
C214	64L180J224AAT	CAP 0.22UF 160V R79	0	PCS
C906	65L 2K152 5E6052	1500 PF 10% 2KV Y5P	0	PCS
C906	65L 2K152 5E6285	1500 PF 10% 2KV Y5P	0	PCS
C906	65L 2K152 5E6921	1500 PF 10% 2KV Y5P	1	PCS
C215	65L 3J2206EM	22PF 5% 3KV MURATA	0	PCS
C216	65L 3J2206EM	22PF 5% 3KV MURATA	0	PCS
C217	65L 3J2206EM	22PF 5% 3KV MURATA	0	PCS
C218	65L 3J2206EM	22PF 5% 3KV MURATA	0	PCS
C215	65L 3J2206ET	22PF 5% 3KV TDK	1	PCS
C216	65L 3J2206ET	22PF 5% 3KV TDK	1	PCS
C217	65L 3J2206ET	22PF 5% 3KV TDK	1	PCS
C218	65L 3J2206ET	22PF 5% 3KV TDK	1	PCS
C901	65L305M1022B2	1000PF 蹲勾 400VAC/250VAC	0	PCS
C902	65L305M1022B2	1000PF 蹲勾 400VAC/250VAC	0	PCS
C901	65L305M1022EM	1000PF +-20% 250VAC/400	1	PCS
C902	65L305M1022EM	1000PF +-20% 250VAC/400	1	PCS
C913	65L306M472 2B	4700PF 400V 20% Y1-CAP	0	PCS
C913	65L306M4722B2	4700PF +-20% 400VAC Y1	1	PCS
C922	67L 215102 3H	綯紮杆紮臂 1000UF 16V	1	PCS
C925	67L 215102 3H	綯紮杆紮臂 1000UF 16V	1	PCS
C922	67L 215102 3K	綯紮杆紮臂 1000UF/16V	0	PCS

C925	67L 215102 3K	綯紮秆紮臂 1000UF/16V	0	PCS
C905	67L305S10114H	HTR101M2GL33VR	1	PCS
FB902	71L 55 19	BEAD RH 3.5*9*0.8 AB 03	1	PCS
FB901	71L 55 29	FERRITE BEAD	1	PCS
L902	73L 174 26 LS	COMMON CHOKE	0	PCS
L902	73L 174 26 T1	LINE LILTER 0.45mm	1	PCS
L203	73L 174 30 LS	FILTER	0	PCS
L204	73L 174 30 LS	FILTER	0	PCS
L203	73L 174 30 YS	FILTER	1	PCS
L204	73L 174 30 YS	FILTER	1	PCS
L903	73L 253 91 L	CHOKE BY LI TA	1	PCS
L904	73L 253 91 L	CHOKE BY LI TA	1	PCS
L903	73L 253 91 LS	CHOKE BY LI SHIN	0	PCS
L904	73L 253 91 LS	CHOKE BY LI SHIN	0	PCS
L201	73L 253139 L	CHOKE	1	PCS
L202	73L 253139 L	CHOKE	1	PCS
L201	73L 253139 LS	CHOKE	0	PCS
L202	73L 253139 LS	CHOKE	0	PCS
L201	73L 253139 YS	CHOKE	0	PCS
L202	73L 253139 YS	CHOKE	0	PCS
PT201	80LL15T 7 DN	X' FMR	0	PCS
PT202	80LL15T 7 DN	X' FMR	0	PCS
PT201	80LL15T 7 YS	X' FMR	1	PCS
PT202	80LL15T 7 YS	X' FMR	1	PCS
T901	80LL17T 2 L	ADAPTOR BY LITAI	0	PCS
T901	80LL17T 2 T	X' FMR	1	PCS
T901	80LL17T 2 LS	ADAPTOR BY LISHIN	0	PCS
F901	84L 53 1	FUSE 2A 250V LF-230002	1	PCS
BD901	93L 50460 8	BRIDGE 2KBP06M	1	PCS
D902	93L 6038P52T	PS102R	1	PCS
D912	93L3006 1	31DQ06	1	PCS
D913	93L3006 1	31DQ06	1	PCS
D912	93L3006 3	DIODE	0	PCS
D913	93L3006 3	DIODE	0	PCS
D910	93L3010 1	31DQ10	1	PCS
D911	93L3010 1	31DQ10	1	PCS
D910	93L3010 2	DIODE	0	PCS
D911	93L3010 2	DIODE	0	PCS
	705L 780 57 02	CN901 ASS'Y	1	PCS

	705L 780 57 01	Q903 ASS'Y	1	PCS
PT201	6L 31502	1.5MM RIVET	2	PCS
PT202	6L 31502	1.5MM RIVET	2	PCS
	715L1013 1	PCB	1	PCS
FB904	95L 90 23	TIN COATED	0	PCS
J101	95L 90 23	TIN COATED	0	PCS
J102	95L 90 23	TIN COATED	0	PCS
J103	95L 90 23	TIN COATED	0	PCS
J106	95L 90 23	TIN COATED	0	PCS
J107	95L 90 23	TIN COATED	0	PCS
J109	95L 90 23	TIN COATED	0	PCS
J111	95L 90 23	TIN COATED	0	PCS
J112	95L 90 23	TIN COATED	0	PCS
J113	95L 90 23	TIN COATED	0	PCS
J114	95L 90 23	TIN COATED	0	PCS
J115	95L 90 23	TIN COATED	0	PCS
J116	95L 90 23	TIN COATED	0	PCS
J117	95L 90 23	TIN COATED	0	PCS
J118	95L 90 23	TIN COATED	0	PCS
J120	95L 90 23	TIN COATED	0	PCS
J121	95L 90 23	TIN COATED	0	PCS
J122	95L 90 23	TIN COATED	0	PCS
J901	95L 90 23	TIN COATED	0	PCS
J902	95L 90 23	TIN COATED	0	PCS
J903	95L 90 23	TIN COATED	0	PCS
J904	95L 90 23	TIN COATED	0	PCS
J905	95L 90 23	TIN COATED	0	PCS
J906	95L 90 23	TIN COATED	0	PCS
R929	95L 90 23	TIN COATED	0	PCS
R917	61L 17210052T	100HM 5% 1/4W	1	PCS
R930	61L 17210152T	100 OHM 5% 1/4W	1	PCS
R243	61L 17210252T	1K OHM 5% 1/4W	1	PCS
R244	61L 17210252T	1K OHM 5% 1/4W	1	PCS
R927	61L 17210252T	1K OHM 5% 1/4W	1	PCS
R928	61L 17210252T	1K OHM 5% 1/4W	1	PCS
R918	61L 17210352T	CFR 10KOHM +-5% 1/4W	1	PCS
R904	61L 17210552T	1MEGOHM 5% 1/4W	1	PCS
R905	61L 17210552T	1MEGOHM 5% 1/4W	1	PCS
R906	61L 17210552T	1MEGOHM 5% 1/4W	1	PCS

R907	61L 1721052T	1MEGOHM 5% 1/4W	1	PCS
R224	61L 17215252T	CFR 1.5K OHM+-5% 1/4W	1	PCS
R225	61L 17215252T	CFR 1.5K OHM+-5% 1/4W	1	PCS
R920	61L 17247052T	470HM 5% 1/4W	1	PCS
R922	61L 17247052T	470HM 5% 1/4W	1	PCS
R908	61L 17268952T	6.8OHM 5% 1/4W	1	PCS
R926	61L 20024252T	2.4KOHM 1% 1/4W	1	PCS
R924	61L 20033352T	33KOHM 1% 1/4W	1	PCS
R925	61L 20036252T	3.6KOHM 1% 1/4W	1	PCS
R218	61L 60210152T	100OHM +- 5% 1/6W	1	PCS
R219	61L 60210152T	100OHM +- 5% 1/6W	1	PCS
R232	61L 60210252T	CFR 1K OHM+-5% 1/6W	1	PCS
R233	61L 60210252T	CFR 1K OHM+-5% 1/6W	1	PCS
R202	61L 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R203	61L 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R204	61L 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R222	61L 60212352T	12KOHM 5% 1/6W	1	PCS
R223	61L 60212352T	12KOHM 5% 1/6W	1	PCS
R238	61L 60212352T	12KOHM 5% 1/6W	1	PCS
R239	61L 60212352T	12KOHM 5% 1/6W	1	PCS
R210	61L 60215352T	15KOHM 5% 1/6W	1	PCS
R211	61L 60215352T	15KOHM 5% 1/6W	1	PCS
R220	61L 60215352T	15KOHM 5% 1/6W	1	PCS
R221	61L 60215352T	15KOHM 5% 1/6W	1	PCS
R201	61L 60230352T	30KOHM 5% 1/6W	1	PCS
R212	61L 60239252T	3.9KOHM 5% 1/6W	1	PCS
R213	61L 60239252T	3.9KOHM 5% 1/6W	1	PCS
R205	61L 60247352T	47KOHM 5% 1/6W	1	PCS
R206	61L 60247352T	47KOHM 5% 1/6W	1	PCS
R240	61L 60251352T	51KOHM +-5% 1/6W	1	PCS
R241	61L 60251352T	51KOHM +-5% 1/6W	1	PCS
R236	61L 60262152T	620 OHM 5% 1/6W	1	PCS
R237	61L 60262152T	620 OHM 5% 1/6W	1	PCS
R234	61L 60291152T	CFR 910 OHM+-5% 1/6W	1	PCS
R235	61L 60291152T	CFR 910 OHM+-5% 1/6W	1	PCS
ZD902	93L 39 5452T	ZENER HZ12B2	1	PCS
ZD903	93L 39 7752T	ZENER HZ5C1	1	PCS
D901	93L 6026W52T	FR107	1	PCS
D205	93L 64 1152T	1N4148	1	PCS

D206	93L 64 1152T	1N4148	1	PCS
D207	93L 64 1152T	1N4148	1	PCS
D208	93L 64 1152T	1N4148	1	PCS
D209	93L 64 1152T	1N4148	1	PCS
D210	93L 64 1152T	1N4148	1	PCS
D903	93L 64 1152T	1N4148	1	PCS
IC903	56L 158 4 T A	HTL431	1	PCS
Q207	57L 414 2	MPS3906, 126	1	PCS
Q208	57L 414 2	MPS3906, 126	1	PCS
Q205	57L 417 3 T	MPS3904 SILICON PLANER	1	PCS
Q206	57L 417 3 T	MPS3904 SILICON PLANER	1	PCS
Q902	57L 419 PP T	2PC945P	1	PCS
Q901	57L 420 PP T	2PA733P	1	PCS
C911	64L700J1020AT	1000PF 50V PEN	1	PCS
C935	64L700J1030AT	0.01UF 50V PEN	1	PCS
C204	64L700J1040AT	0.1UF 50V PEN	1	PCS
C205	64L700J1040AT	0.1UF 50V PEN	1	PCS
C206	64L700J1040AT	0.1UF 50V PEN	1	PCS
C909	64L700J1040AT	0.1UF 50V PEN	1	PCS
C936	64L700J1040AT	0.1UF 50V PEN	1	PCS
C221	64L701J4740AT	0.47uF 50V	1	PCS
C222	64L701J4740AT	0.47uF 50V	1	PCS
C208	65L 44233113T	330PJNPO 50V	1	PCS
C908	65L 450104 7T	0.1UF +80-20% 50V Y5V	1	PCS
C920	65L517K102 5T6052	1000PF 10% Y5P 500V	0	PCS
C921	65L517K102 5T6052	1000PF 10% Y5P 500V	0	PCS
C920	65L517K102 5T6213	1000PF 10% Y5P 500V	1	PCS
C921	65L517K102 5T6213	1000PF 10% Y5P 500V	1	PCS
C920	65L517K102 5T6285	1000PF 10% Y5P 500V	0	PCS
C921	65L517K102 5T6285	1000PF 10% Y5P 500V	0	PCS
C907	67L 309220 7T	22UF +-20% 50V	1	PCS
C207	67L 309479 7T	4.7UF +-20% 50V 85 尼ん攪	1	PCS
C924	67L215B4713HT	470UF 16V LTR471M1CF11V	1	PCS
C926	67L215B4713HT	470UF 16V LTR471M1CF11V	1	PCS
C929	67L215B4713HT	470UF 16V LTR471M1CF11V	1	PCS
C930	67L215B4713HT	470UF 16V LTR471M1CF11V	1	PCS
C201	67L215C1514HT	LOW ESR 150UF 25V 8*7MM	1	PCS
C223	67L215C1514HT	LOW ESR 150UF 25V 8*7MM	1	PCS
IC905	56L 563 7	AIC1084-33CM	1	PCS

IC905	56L 563 21	AP1084K33	0	PCS
Q203	56L 566 10	SI4431DY-T1-SMT	0	PCS
Q204	56L 566 10	SI4431DY-T1-SMT	0	PCS
U201	56L 608 1	TL1451ACD	0	PCS
U201	56L 622 1	BA9741F-SMT	1	PCS
Q203	56L 763 4	MOSFET	0	PCS
Q204	56L 763 4	MOSFET	0	PCS
Q202	57L 760 4	DTA144WKA BY ROHM SMT(7	1	PCS
Q201	57L 760 5	DTC144WKA BY ROHM SMT(8	1	PCS
Q203	57L 763 3	A04411 SO-8 BY AOS SMT	1	PCS
Q204	57L 763 3	A04411 SO-8 BY AOS SMT	1	PCS
R933	61L0603000	CHIPR 00HM +-5% 1/16W	1	PCS
R931	61L0603102	CHIPR 1K OHM +-5% 1/16W	1	PCS
R216	61L0603221	CHIPR 220 OHM+-5% 1/16W	1	PCS
R217	61L0603221	CHIPR 220 OHM+-5% 1/16W	1	PCS
R214	61L0603222	CHIPR 2.2K OHM+-5% 1/16	1	PCS
R215	61L0603222	CHIPR 2.2K OHM+-5% 1/16	1	PCS
R208	61L0603472	CHIPR 4.7K OHM +-5% 1/1	1	PCS
R209	61L0603472	CHIPR 4.7K OHM +-5% 1/1	1	PCS
R916	61L0805240 2F	CHIP 24KOHM 1% 1/10W	1	PCS
R912	61L1206101	CHIP 100 OHM 5% 1/8W	1	PCS
R915	61L1206103	CHIP 10KOHM 5% 1/8W	1	PCS
R901	61L1206105	CHIP 1MOHM 5% 1/8W	1	PCS
R902	61L1206105	CHIP 1MOHM 5% 1/8W	1	PCS
R226	61L1206152	CHIPR 1.5K OHM+-5%1/8W	1	PCS
R227	61L1206152	CHIPR 1.5K OHM+-5%1/8W	1	PCS
R228	61L1206152	CHIPR 1.5K OHM+-5%1/8W	1	PCS
R229	61L1206152	CHIPR 1.5K OHM+-5%1/8W	1	PCS
R230	61L1206152	CHIPR 1.5K OHM+-5%1/8W	1	PCS
R231	61L1206152	CHIPR 1.5K OHM+-5%1/8W	1	PCS
R909	61L1206472	CHIP 4.7KOHM 5% 1/8W	1	PCS
R910	61L1206472	CHIP 4.7KOHM 5% 1/8W	1	PCS
R911	61L1206472	CHIP 4.7KOHM 5% 1/8W	1	PCS
C910	65L0603104 37	CHIP 0.1UF 50V/Y5V	1	PCS
C927	65L0603104 37	CHIP 0.1UF 50V/Y5V	1	PCS
C931	65L0603104 37	CHIP 0.1UF 50V/Y5V	1	PCS
C202	65L0805104 22	CHIP 0.1uF 25V X7R 0805	1	PCS
C203	65L0805105 27	CHIP 1UF 25V Y5V 0805	1	PCS
C209	65L0805105 27	CHIP 1UF 25V Y5V 0805	1	PCS

C210	65L0805105 27	CHIP 1UF 25V Y5V 0805	1	PCS
C211	65L0805105 27	CHIP 1UF 25V Y5V 0805	1	PCS
C212	65L0805105 27	CHIP 1UF 25V Y5V 0805	1	PCS
C219	65L0805105 27	CHIP 1UF 25V Y5V 0805	1	PCS
C220	65L0805105 27	CHIP 1UF 25V Y5V 0805	1	PCS
C224	65L0805105 27	CHIP 1UF 25V Y5V 0805	1	PCS
C225	65L0805105 27	CHIP 1UF 25V Y5V 0805	1	PCS
F902	84L 52 2	SMD FUSE 4A 32V GET-HAN	1	PCS
D203	93L 39S 3 T	BZT52-C11	0	PCS
D204	93L 39S 3 T	BZT52-C11	0	PCS
D203	93L 39S 8 T	ZD RLZ11B ROHM	1	PCS
D204	93L 39S 8 T	ZD RLZ11B ROHM	1	PCS
ZD901	93L 39S 12 T	RLZ20B BY ROHM	1	PCS
ZD904	93L 39S 16 T	SML4737A/1 1W D0-214AC	0	PCS
ZD904	93L 39S 19 T	ZENER DIODE	1	PCS
D201	93L2004 1	SMAL240LVXRO-SMT	0	PCS
D202	93L2004 1	SMAL240LVXRO-SMT	0	PCS
D201	93L2004 2	SR24/PANJIT-SMT	1	PCS
D202	93L2004 2	SR24/PANJIT-SMT	1	PCS
D201	93L2004 3	DIOED	0	PCS
D202	93L2004 3	DIOED	0	PCS
CN901	87L 501 12 RF	AC SOCKET	1	PCS
	95L205S354022	HARNESS	1	PCS
	96L 29 4	SHRINK TUBE UL/CSA	1	PCS
Q903	57L 723 3B	2SK2761-01MR	0	PCS
Q903	57L 724 4	2SK2996	1	PCS
	90L 407 1	HEAT SINK	1	PCS
	M1L1730 8128	SCREW M3x8	1	PCS
	12L 405 1	FOOT-PORON	2	PCS
	12L 406 1	FOOT-PORON	1	PCS
	15L5852 1	BASE-PLATE	1	PCS
	34L1124 B6 T	BASE	1	PCS
	37L 469 1	HINGE	1	PCS
	M1L 340 8128	SCREW	4	PCS
	Q1L 340 8128	SCREW 4X8mm	2	PCS