

SERVICE MANUAL

EN9110



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1. SPECIFICATIONS FOR LCD MONITOR

1-1 GENARAL SPECIFICATION

1. LCD-Panel:
 - Active display area 19 inch diagonal
 - Pixel pitch 0.294 mm x 0.294 mm
 - Pixel format 1280 x 1024 RGB vertical stripe arrangement
2. Display Color:
 - 8-bit, 16.7 million colors
3. External Controls:
 - Auto Config/Exit, Brightness (up key), contrast (down key), Menu/Enter, Power indicator, Power button
4. Input Video Signal:
 - Analog-signal 0.7Vpp
 - Video signal termination impedance 75 OHM
 - Digital-input TMDS
5. Scanning Frequencies:
 - Horizontal: 30 KHz - 92 KHz
 - Vertical: 55 Hz – 85 Hz
 - Pixel clock: 158 MHz
6. Factory Preset Timing: 26
 - Input signal tolerance: H tolerance ± 1 KHz, V tolerance ± 3 lines from center frequency
7. Input Power Source:
 - Switching Mode Power Supply
 - AC 100 – 240 V, 50/60 Hz Universal Type
8. Operating Temperature: 0°C - 40°C Ambient
 - Non-operating Temperature: -20°C - 60°C
9. Humidity:
 - Operating: 15% to 90% RH
 - Non Operating: 15% to 90%RH
10. Weight: 5.9 kg for monitor only, 8,7kg with packing.
11. External Connection: 15Pin D-type Connector & 24 pin DVI-D, AC power-Cord
12. View Angle: Min. 70° H and V
13. Outside dimension: Width x Height x Thickness = 432x 440 x 198 mm
14. Plug and Play: VESA DDC1/DDC2B
15. Power saving: Compatible VESA DPMS
16. Audio performance (optional): Each speaker shall accept up to 3.0 watt of audio power without damage or exceeding the frequency response and total harmonic distortion specification and audio amplifier shall provide two channels of audio up to 2.0 watts per channel from 100Hz to 20kHz.
17. USB hub (optional): 1 up-stream and 4 down-streams

1-2 LCD MONITOR DESCRIPTION

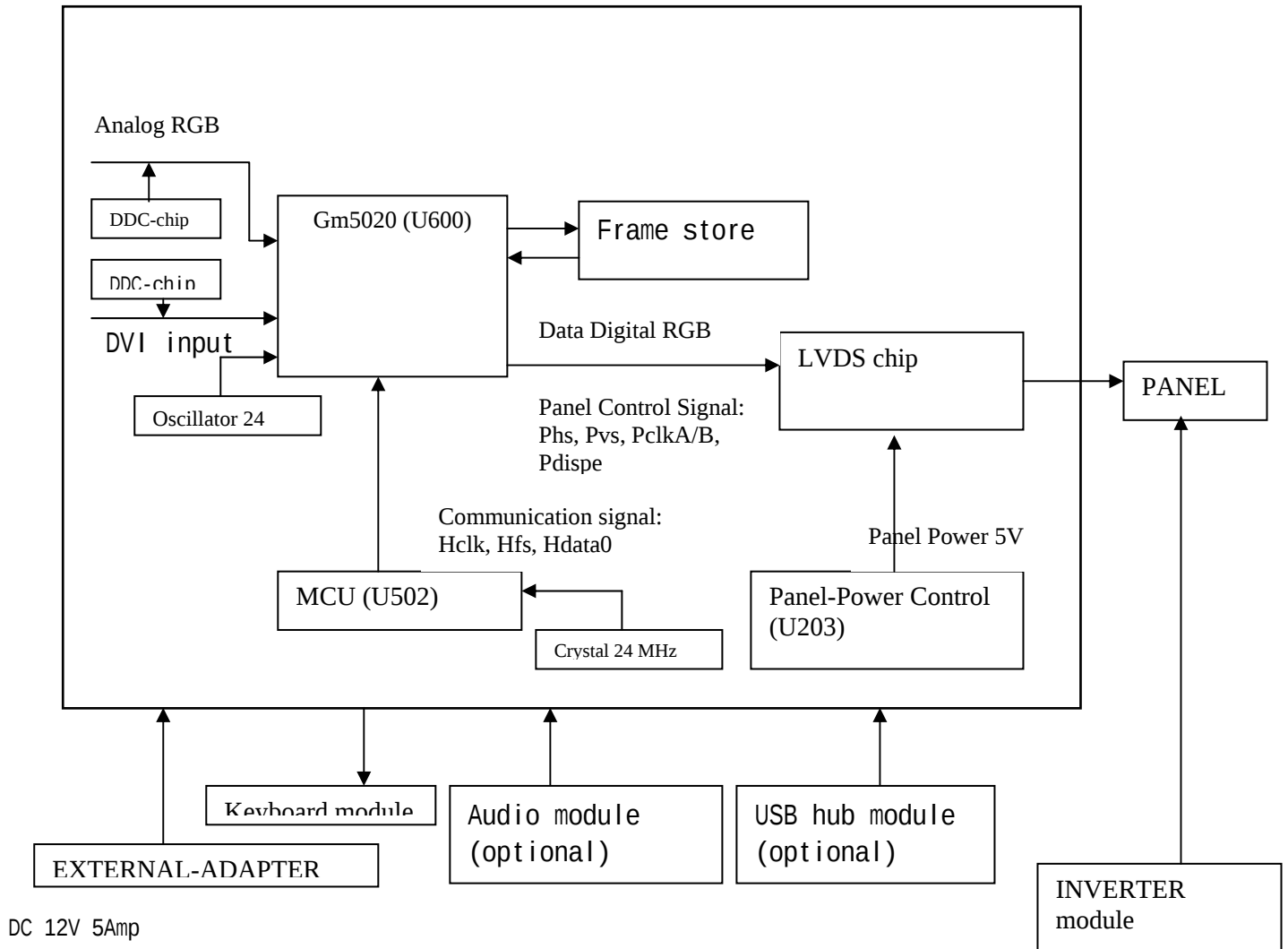
The LCD monitor contains main-board, Inverter module, keyboard, audio module, USB-hub module and External Adapter.

The main-board controls all logic signals such as panel control logic, backlight control logic, ...etc.

The Inverter module will drive the backlight of panel.

The Adapter supplies power to the LCD monitor.

Main-board Block diagram



1-3 PANEL SPECIFICATION (AU EN02)

1-3-1 Panel Feature

- 19 inch Color TFT-LCD
- ALL input signals are 2 Channel LVDS interface compatible
- Supported the SXGA(H1280Pixel × V1024Lines) resolution
- By applying 16.7M colors (RGB 8 bit data)

1-3-2 Display Characteristics

ITEM	UNIT	SPECIFICATIONS
Screen Diagonal	[mm]	480(19")
Active Area	[mm]	376.32(H) x 301.056(V)
Pixel Pitch		1280(x3) x 1024
Pixel Arrangement	[mm]	0.294(per one triad) x 0.294
Display Mode		R.G.B Vertical Stripe
White Luminance (Center)	[cd/m ²]	250 cd/m ² @7mA (Typ)
Contrast Ratio		600:1(Typ)
Optical Response Time	[msec]	25(Typ)
Nominal input Voltage VDD	[Volt]	+5.0V
Power consumption (VDD line + CCFL line)	[Watt]	28W (Typ.) (w/o Inverter, All white pattern)
Weight	[Grams]	2700(Typ)
Physical Size	[mm]	404.2(W) x330 (H) x20 (D)(Typ)
Electrical Interface		Even/Odd R/G/B data, 3 sync signal Clock
Support Color		16.7M colors (RGB 8-bit data)
Temperature Range		0 to +50
Operating	[]	-20 to +60
Storage (Shopping)	[]	

1-3-3 Optical Characteristics

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

ITEM	UNIT	CONDITIONS	MIN	TYP.	MAX.
Viewing Angle	[degree]	Horizontal (Right) CR=10(Left)	75	85	—
	[degree]			85	—
	[degree]	Vertical (Up) CR=10(Down)	75	85	—
	[degree]			85	—
Contrast ratio		Normal Direction	400	600	
Response Time (Note 1)	[m sec]	Raising Time	—	15	25
	[m sec]	Falling Time	—	10	15
	[m sec]	Raising +Falling	—	25	40
		Red x	0.604	0.634	0.664
		Red y	0.324	0.354	0.384
		Green x	0.278	0.308	0.338
		Green y	0.576	0.606	0.636
		Blue x	0.108	0.138	0.168
		Blue y	0.057	0.087	0.117
Color Coordinates (CIE) White White Luminance at CCFL 7.0mA (central point)	[cd/m ²]	White x	0.28	0.31	0.34
		White y	0.3	0.33	0.36
			200	250	—
Luminance Uniformity (Note 2)	[%]		75	80	—
Crosstalk (in 75Hz)(Note 3)	[%]				1.5

1-3-4 Parameter guide line for CCFL Inverter

INVERTER MAX BRINGTHNESS (Vadj: 3.0v), LOAD=100KΩX4(ROOM TEMPERATURE 25 ±4)

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT	REMARK
Input voltage	Vin	10.8	12	13.2	V	
Input current	Iin	---	1950	2200	mA	FOR 4 LOAD
Output Current	Iout	6.0	7.0	8.0	mA	FOR 1 LOAD
Frequency	F	45.0	50.0	55.0	KHZ	FOR 1 LOAD
H.V open	Vopen	1550	1700	1850	Vrms	NO LOAD
H.V Load	Vload	620	670	720	Vrms	RL=100KΩ
Start voltage	Vst	1870	1970	2070	Vrms	RL=CCFL
Protect delay time	PDT	1	1.5	3	Sec	

INVERTER MIN BRINGTHNESS (Vadj:0.0v), LOAD=100KΩX4(ROOM TEMPERATURE 25 ±4)

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT	REMARK
input voltage	Vin	10.8	12	13.2	V	
input current	Iin		470	520	mA	FOR 4 LOAD
Output Current	Iout	2.5	3.0	3.5	mA	FOR 1 LOAD
Frequency	F	45.0	50.0	55.0	KHZ	FOR 1 LOAD
H.V open	Vopen	1550	1700	1850	Vrms	NO LOAD
Start voltage	Vst	1650	1970	2050	Vrms	RL=CCFL
H.V Load	Vload	270	320	370	Vrms	RL=100KΩ

1-4 FACTORY PRESET TIMING LIST

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/P	59.940	N/P	25.175
	640x480@72Hz	832 x 520	37.861	N/P	72.809	N/P	31.500
	640x480@75Hz	840 x 500	37.500	N/P	75.00	N/P	31.500
	640x480@85Hz	832 x 509	43.269	N/P	85.008	N/P	36.000
SVGA	800x600@56Hz	1024 x 625	35.156	N/P	56.250	N/P	36.000
	800x600@60Hz	1056 x 628	37.879	N/P	60.317	N/P	40.000
	800x600@72Hz	1040 x 666	48.077	N/P	72.188	N/P	50.000
	800x600@75Hz	1056x 625	46.875	N/P	75.000	N/P	49.500
	800x600@85Hz	1048x631	53.674	N/P	85.061	N/P	56.250
XGA	1024x768@60Hz	1344x806	48.363	N/P	60.004	N/P	65.000
	1024x768@70Hz	1328x806	56.476	N/P	70.069	N/P	75.000
	1024x768@75Hz	1312x800	60.023	N/P	75.029	N/P	78.750
	1024x768@85Hz	1376x808	68.677	N/P	84.997	N/P	94.500
SXGA	1280x1024@60Hz	1688x1066	63.981	N/P	60.020	N/P	108.000
	1280x1024@75Hz	1688x1066	79.976	N/P	75.025	N/P	135.000
	1280x1024@85Hz	1728x1072	91.146	N/P	85.024	N/P	157.500
	1152x 864@75Hz	1600x900	67.500	N/P	75.000	N/P	108.000
	1280x960@60Hz	1800x1000	60.000	N/P	60.000	N/P	108.000
	1280x960@85Hz	1728x1011	85.938	N/P	85.002	N/P	148.500

Notice: For digital input, the resolution 1280x1024@ 85hz, 1280x960@ 85Hz are not supported.

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
	720x400@85Hz	936 x 446	37.927	N	85.039	P	35.550
DOS	640x400@70Hz	800 x 449	31.469	N	70.087	P	25.175
DOS	640x350@70Hz	800 x 449	31.469	P	70.087	N	25.175
MAC MODES							
VGA	640x480@67Hz	864x525	35.000	N/P	66.667	N/P	30.240
SVGA	832x624@75Hz	1152x667	49.725	N/P	74.551	N/P	57.283

All modes will automatically optimize the screen size with “ AUTO-config “ function, except 3 dos- modes: 640x480@60hz, 720 x 400@70hz, 640x350@70hz.

1-5INTERFACE CONNECTION

- (A) AC-Power Cable
- (B) Video Signal Connectors and Cable
- (C) DVI-D and DVI cable
- (D) Audio cable (optional)
- (E) USB cable (optional)
- (F) External Adapter

2. PRECAUTIONS AND NOTICES

2-1 ASSEMBLY PRECAUTION

- (1) Please do not press or scratch LCD panel surface with anything hard. And do not soil LCD panel surface by touching with bare hands (Polarizer film, surface of LCD panel is easy to be flawed)

In the LCD panel, the gap between two glass plates is kept perfectly even to maintain display characteristic and reliability. If this panel is subject to hard pressing, the following occurs:

- (a) Uniform color
 - (b) Orientation of liquid crystal becomes disorder
- (2) Please wipe out LCD panel surface with absorbent cotton or soft cloth in case of it being soiled.
 - (3) Please wipe out drops of adhesive like saliva and water in LCD panel surface immediately.
They might damage to cause panel surface variation and color change.
 - (4) Do not apply any strong mechanical shock to the LCD panel.

2-2 OPERATING PRECAUTIONS

- (1) Please be sure to unplug the power cord before remove the back-cover. (Be sure the power is turn-off)
- (2) Please consider that LCD backlight takes longer time to become stable of radiation characteristic in low temperature than in room temperature.
- (3) Please pay attention not to displaying the same pattern for very long-time. For image might stick on LCD.

2-3 STORAGE PRECAUTIONS

- (1) When you store LCD for a long time, it is recommended to keep the temperature between 5 ~ -40 without the exposure of sunlight and to keep the humidity less than 85% RH.
- (2) Please do not leave the LCD in the environment of high humidity and high temperature such as 60 ~ 90%RH.
- (3) Please do not leave the LCD in the environment of low temperature; below -15 .

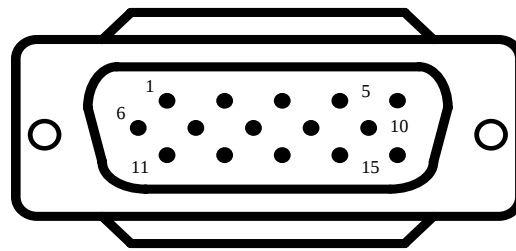
2-4 HIGH VOLTAGE WARNING

The high voltage is only generated by INVERTER module; carelessly contacting the transformer on this module can cause a serious shock. (The lamp voltage after stable around 600V, with lamp current around 6.5mA, and the lamp starting voltage was around 1650V, at Ta=25)

3. OPERATING INSTRUCTIONS

This procedure gives you instructions for installing and using the LCD monitor display.

1. Position the display on the desired operation and plug-in the power cord into External Adapter AC outlet. Three-wire power cord must be shielded and is provided as a safety precaution as it connects the chassis and cabinet to the electrical conduct ground. If the AC outlet in your location does not have provisions for the grounded type plug, the installer should attach the proper adapter to ensure a safe ground potential.
2. Connect the 15-pin color display shielded signal cable to your signal system device and lock both screws on the connector to ensure firm grounding. The connector information is as follow:

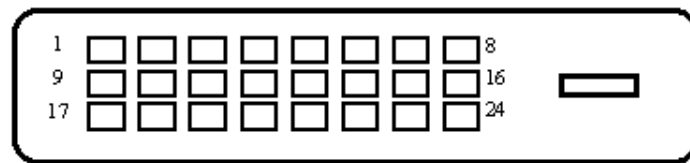


15 - Pin Color Display

Signal Cable

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	RED	9.	5V power from VGA-card
2.	GREEN	10.	Detect Cable
3.	BLUE	11.	SYNC. GND
4.	GND	12.	DDC-Serial Data
5.	GND	13.	HORIZ. SYNC
6.	GND-R	14.	VERT. SYNC
7.	GND-G	15.	DDC Serial Data
8.	GND-B		

3. Connect the 24-pin color display shielded DVI-DVI signal cable to your signal system device and lock both screws on the connector to ensure firm grounding. The connector information is as follow:



15 - Pin Color Display Signal Cable

PIN NO.	DESCRIPTION	PI N NO.	DESCRIPTION
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 -

4. Apply power to the display by pressing the power key for about 2 second consecutively and allow about several seconds for Panel warm-up. The Power-On indicator lights up when the display is on.
5. With proper signals feed to the display, a pattern or data should appear on the screen, adjust the brightness and contrast to the most pleasing display, or press auto-key to get the factory preset best picture-quality.
6. This monitor has power saving function following the VESA DPMS. Be sure to connect the signal cable to the PC.
7. If your LCD monitor requires service, it must be returned with the power cord & Adapter.

4. ADJUSTMENT

4-1 ADJUSTMENT CONDITIONS AND PRECAUTIONS

Adjustments should be undertaken only on following function: Contrasts, Brightness, Black level, Phase, Clock, H/V-position, Languages, Color- (C2, C1, User), Auto level, , Languages, Reset, RGB level, input selected, scaling mode

- **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.

4-2 ADJUSTMENT METHOD AND DESCRIPTION

4-2-1 White-Balance, Luminance adjustment

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

Before start adjusting white balance, please set Chroma-7120 MEM. Channel 1 to C2 color and MEM. channel 2 to C1 color, (our C2 parameter is $x = 296 \pm 20$, $y = 311 \pm 20$, $Y = 220$ and C1 parameter is $x = 313 \pm 20$, $y = 329 \pm 20$, $Y = 220$)

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

Following is the procedure to do white-balance adjustment:

Press MENU button during 1 seconds along with plug in the DC-power cord will activate the factory mode, and the OSD screen will located at left top of the panel.

Alignment Procedure

- 1.)Pattern generator Output: Timing 1280x1024@60hz, Pattern 32 Gray Scale, Analog.
- 2.)Connect Alignment Tool JP2 with Chroma 7120, JP3 with Monitor Analog Connector, JP4 with Pattern Generator.
- 3.)Press Menu and Select Button, then Power on Monitor to enter Factor Mode.
- 4.)Press [SW1] at Alignment Tool.
- 5.)Change Pattern Generator Pattern to Full White Pattern.
- 6.)Press [SW2] at Alignment Tool.
- 7.)Wait LED from OK -> BUSY -> OK.
- 8.)Press [SW3] once to verify 7800 color temperature.
- 9.)Press [SW3] once to verify 6500 color temperature.
- 10.) If there is error at step 7 to 8, repeat step 4 to 9.

4-2-2 OSD adjustments

Turn the POWER-button off to on to quit from factory mode (in USER-mode, the OSD window location was placed at the middle of the screen) Press MENU button to activate OSD Menu or make a confirmation on desired function, Press Left/Right button to select the function or done the adjustment.

1. Clock adjustment

Set the Chroma at pattern 63 (cross-talk pattern) or WIN98/95 shutdown mode (dot-pattern).

Adjust until the vertical-Stripe-shadow as wide as possible or no visible.

This function is adjust the PLL divider of ADC to generate an accurate pixel clock

Example: Hsyn = 31.5KHz Pixel freq. = 25.175MHz (from VESA spec)

The Divider number is (N) = (Pixel freq. x 1000)/Hsyn

From this formula, we get the Divider number, if we fill this number in ADC register (divider register), the PLL of ADC will generate a clock which have same period with above Pixel freq. (25.175MHz) the accuracy of this clock will effect the size of screen. (This clock was called PIXEL-CLOCK)

2. Focus adjustment

Set the Chroma at pattern 63 (cross talk pattern) or WIN98/95 shut down mode (dot-pattern).

Adjust the horizontal interference as less as possible

This function is adjusting the phase shift of PIXEL-CLOCK to acquire the right pixel data.

If the relationship of pixel data and pixel clock not so match, we will see the horizontal interference on screen, we only find this phenomena in crosstalk pattern or dot pattern, other pattern the affect is very light

3. H/V-Position adjustment

Set the Chroma to pattern 1 (crosshatch pattern) or WIN98/95 full-white pattern confirm above item 2 & 3 functions (clock & focus) was done well, if that 2 functions failed, the H/V position will be failed too. Adjust the four edges until all four-edges are visible at the edge of screen.

4. Language function

There have 5 languages for selection, presses "MENU" to select and confirm, press "UP" or "DOWN" to change the kind of language (English, Deutch, Francais, Espanol, Italian)

5. Reset function

Clear each old status of auto-configuration and re-do auto-configuration (for all mode)

This function also recalls C2 color-temperature.

The descriptions for function control LEDS is as following list

1.		Contrast	Adjust the picture contrast.
2.		Brightness	Adjust the picture brightness.
3.		Input Selected	Input Signal source selected (select Analog or Digital input source)
4.		Focus	Adjust picture Focus.
5.		Clock	Adjust picture Clock.
6.		H- Position	Adjust the horizontal position of the picture.
7.		V- Position	Adjust the vertical position of the picture.
8.		Language	Multi-Language selection
9.		Scaling Mode	Stretch the picture to fit full screen, screen size ratio or native size.
10.	R ⊕	Red	Adjusts Red intensity.
11.	G ⊕	Green	Adjusts Green intensity.
12.	B ⊕	Blue	Adjusts Blue intensity.
13.	C1	(6500K) Color	The color temperature for 6500°K is x=0.313, y=0.329.
15.	C2	(7800K) Color	The color temperature for 7800°K is x=0.296, y=0.311.
16.	R →	Reset	Clear each old status of Auto-configuration and re-do auto-configuration and set the color temperature to 7800°K.
17.	EXIT	Exit	Save user adjustment and OSD disappear.

5 BLOCK DIAGRAM

5-1 SPECIAL FUNCTION WITH PRESS-KEY

Press menu button during 2 seconds along with plug-in the DC Power cord:

That operation will set the monitor into "Factory- mode", in Factory mode we can do the White balance adjustment with RS232 .In Factory mode, OSD-screen will locate in left top of screen. Press POWER-button off to on once will quit from factory mode and back to user-mode. The OSD-index explanation is as following:

1. No signal: No signal input (Signal-cable not connected).
2. Input not supported:
 - a. Input frequency out of range: $H > 92\text{kHz}$, $v > 85\text{Hz}$ or $H < 31\text{kHz}$, $v < 55\text{Hz}$
 - b. Input frequency out of VESA-spec. (Out of tolerance too far)

5-2 CIRCUIT FUNCTION DESCRIPTION

5-2-1 main board

1. U600, scaler IC gm5020 (all-in-one chip solution for ADC, OSD, scalar and interpolation):

USE for computer graphics images to convert analog RGB data to digital data with interpolation process, zooming, generated the OSD font, perform overlay function and generate drive timing for LCD-PANEL.

2. U502, W78E65 (WINBOND- MCU, type 8052 series with 64k Rom-size and 512 byte ram):

Use for calculate frequency, pixel-dot, detect change mode, rs232-communication, power-consumption control, OSD-index warning, ...etc.

3. U301, ATME12524C02N

EEPROM type, 1K ROM-SIZE, for saving Digital DDC-CONTENT.

4. U302, MIRCCHIP24LC21A

EEPROM type, 1K ROM-SIZE, for saving Analog DDC-CONTENT.

4. U501, 24C16 (ATMEL IC):

EEPROM type, 16K ROM-SIZE, for saving AUTO-config data, White-balance data, and Power-key status and Backlight-counter data.

5. U901, SI8050 (switching regulator 12V to 5V with 3A load current) .

6. U904, AIC 1084-33CM (AIC brand linear regulator 5V to 3.3V)

7. U902, RT9164 (Linear regulator 5V to 2.5V)

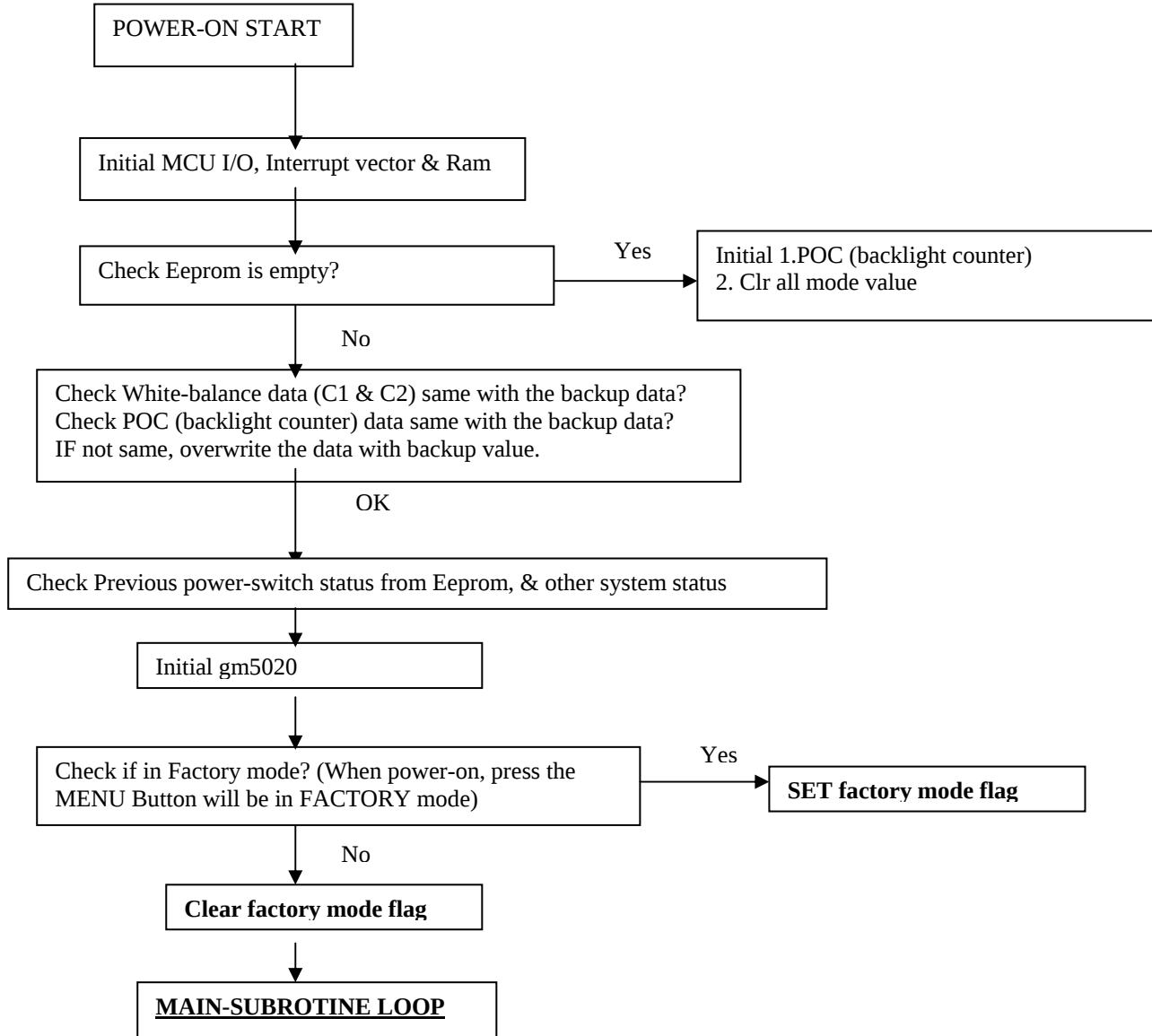
8. U201, U202, LVDS (use NOVATEK NT7181F)

Convert the TTL signal to LVDS signal , the advantage of LVDS signal is : the wire can be lengthen and eliminate wire number , low EMI .LVDS signal is high frequency but low voltage, only 0.35 VPP ,the frequency is seven times higher than TTL

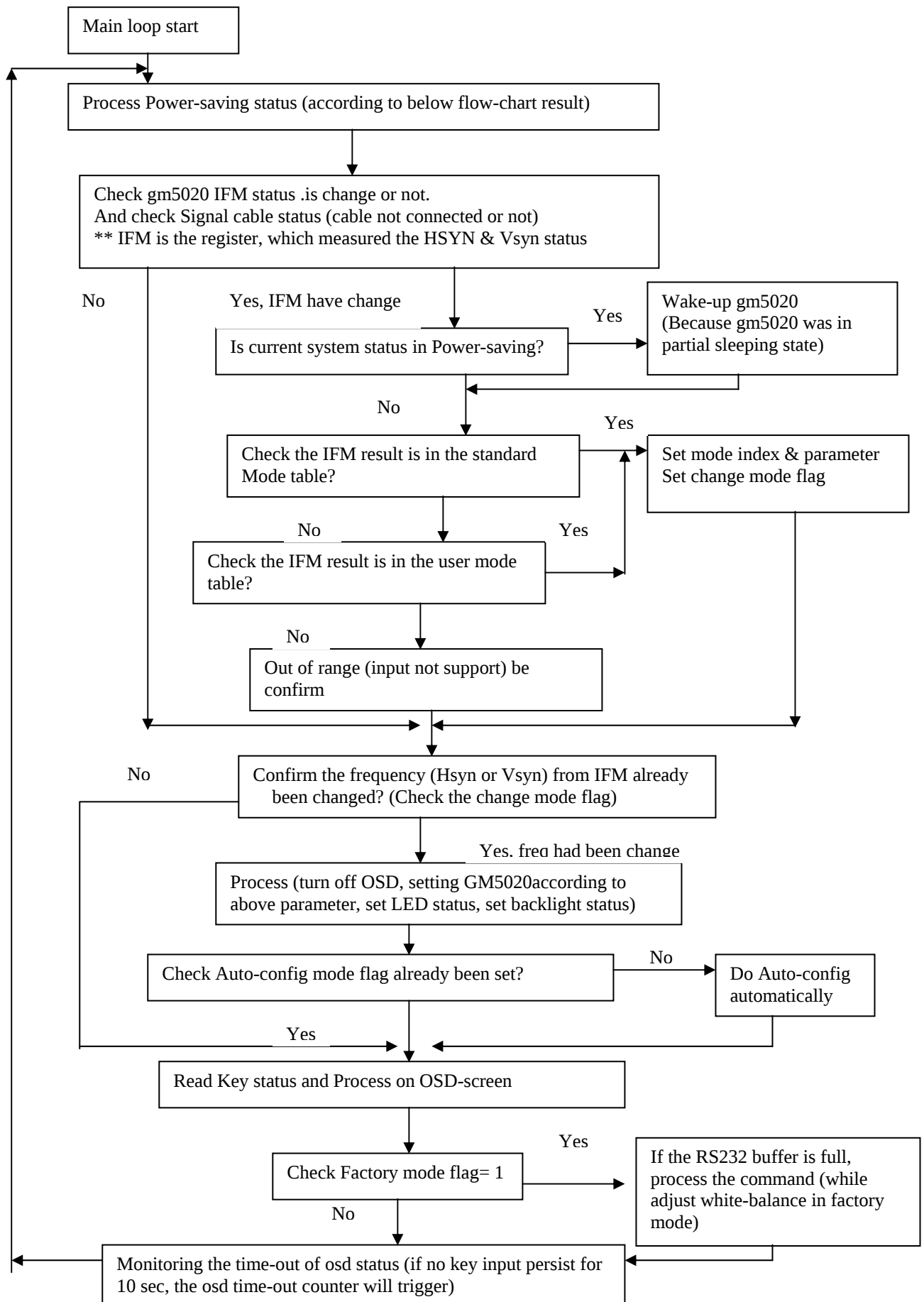
5-2-2 adapter/inverter

1. ADAPTER: CONVERSION-module to convert AC 110V-240V to 12VDC, with 5 AMP
2. INVERTER: CONVERSION-module to convert DC 12V to High-Voltage around 1650V, with frequency 30K-80Khz, 5mA-13mA

5-3 SOFTWARE FLOW CHART



Main subroutine loop



6.MAINTAINABILITY

6-1. EQUIPMENTS AND TOOLS REQUIRED

- 1.) Voltmeter.
- 2.) Oscilloscope.
- 3) Pattern Generator.
- 4) DDC Tool with a personal computer
- 5) Alignment Tool.
- 6) LCD Color Analyzer.
- 7) Service Manual.
- 8)User Manual.

6-2 TROUBLE SHOOTING

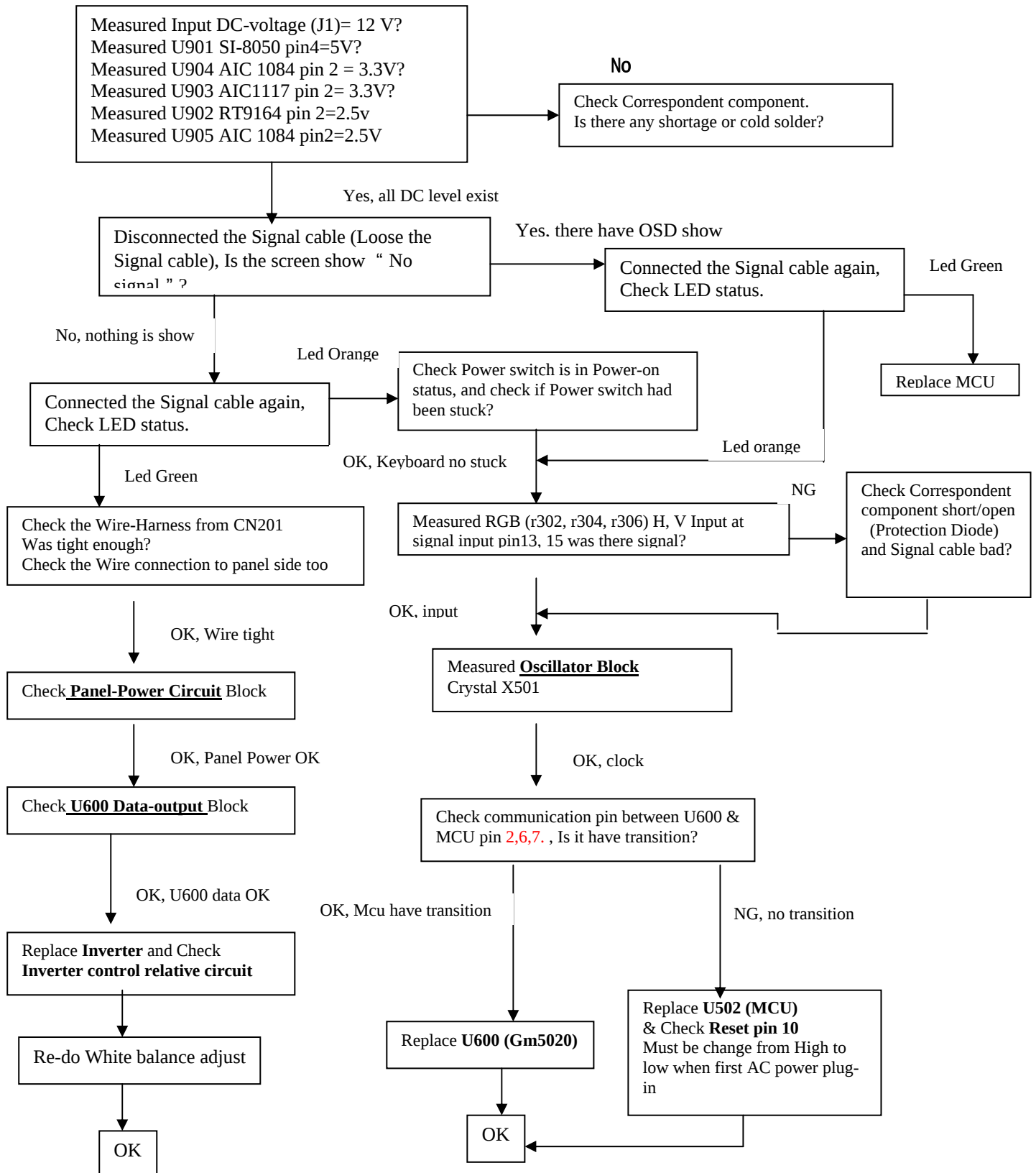
6-2-1 interface board trouble shooting chart

*Use the PC Win 98 white pattern, with some icon on it, and Change the Resolution to 640x480 60 Hz / 31 KHz

**NOTICE: The free-running freq. of our system is 48 KHz / 60 Hz, so we recommend to use another resolution to do trouble shooting, this trouble shooting is proceed with 640x480 @60Hz 31Khz

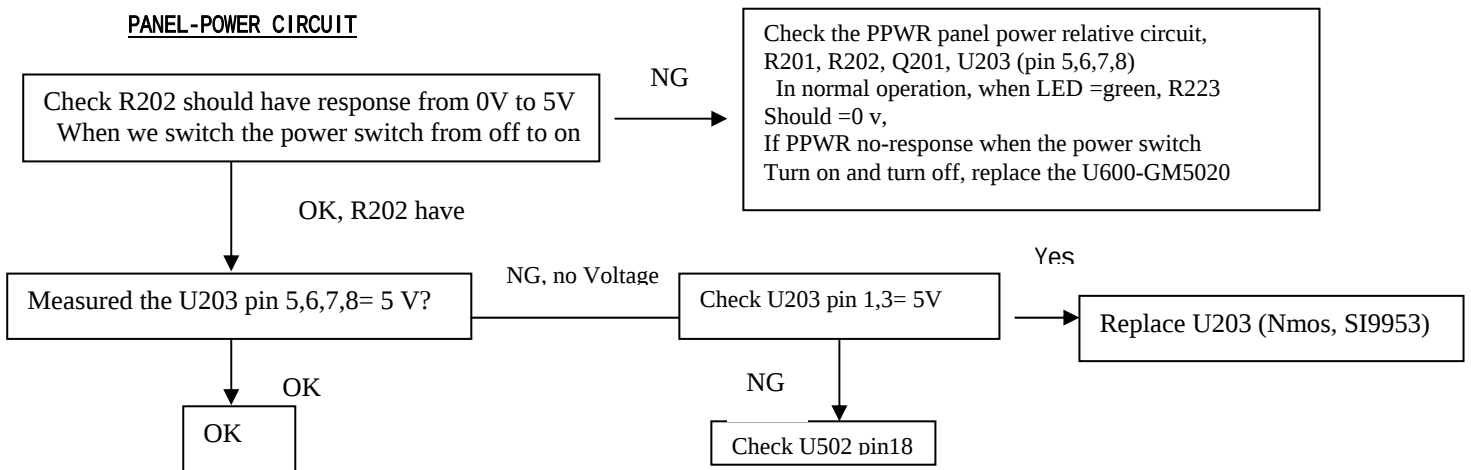
I. No screen appear

DC-Power Part

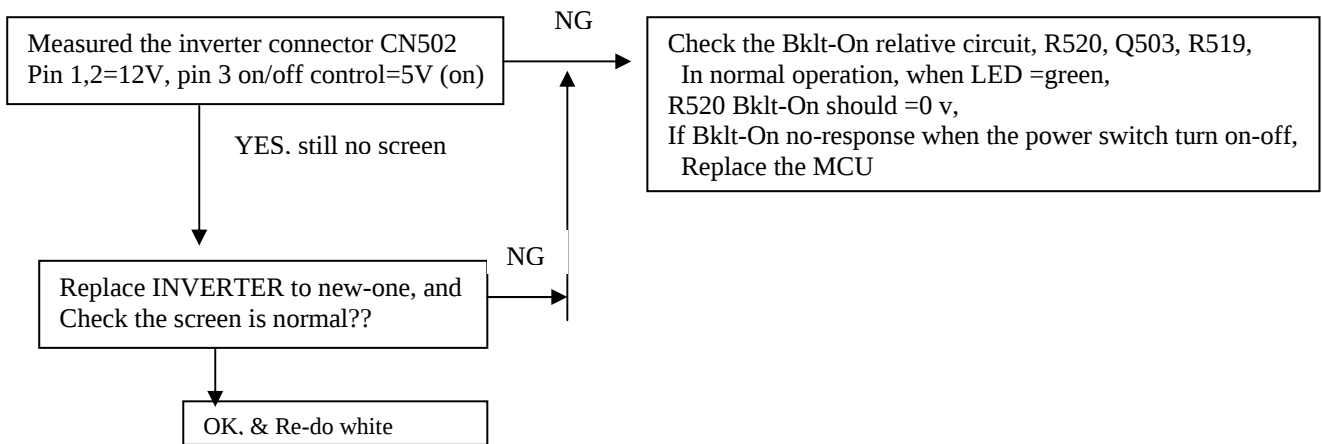


Note: 1. If Replace "Main board", Please re-do "DDC-content" programmed & "White-balance".
2. If Replace " Inverter" only, Please re-do " White-Balance"

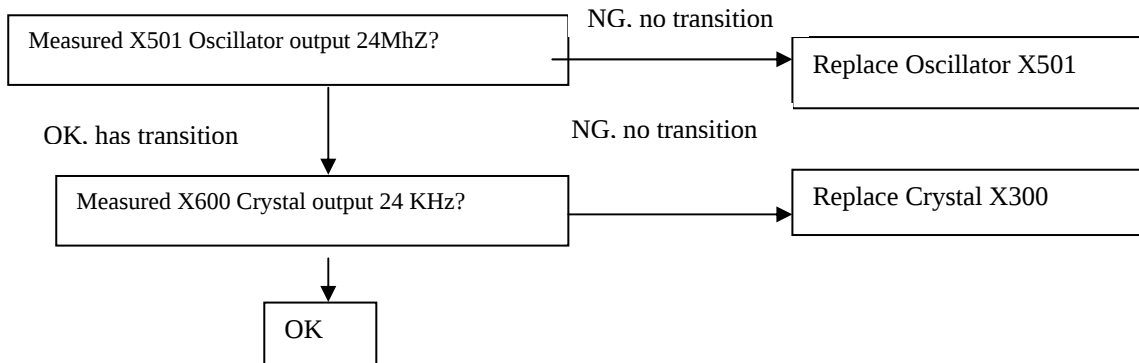
PANEL-POWER CIRCUIT



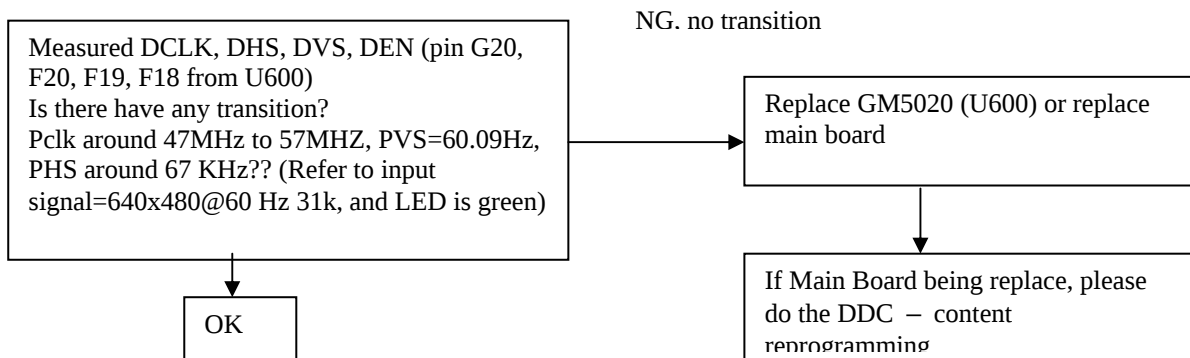
INVERTER Control Relative Circuit



OSCILLATOR BLOCK

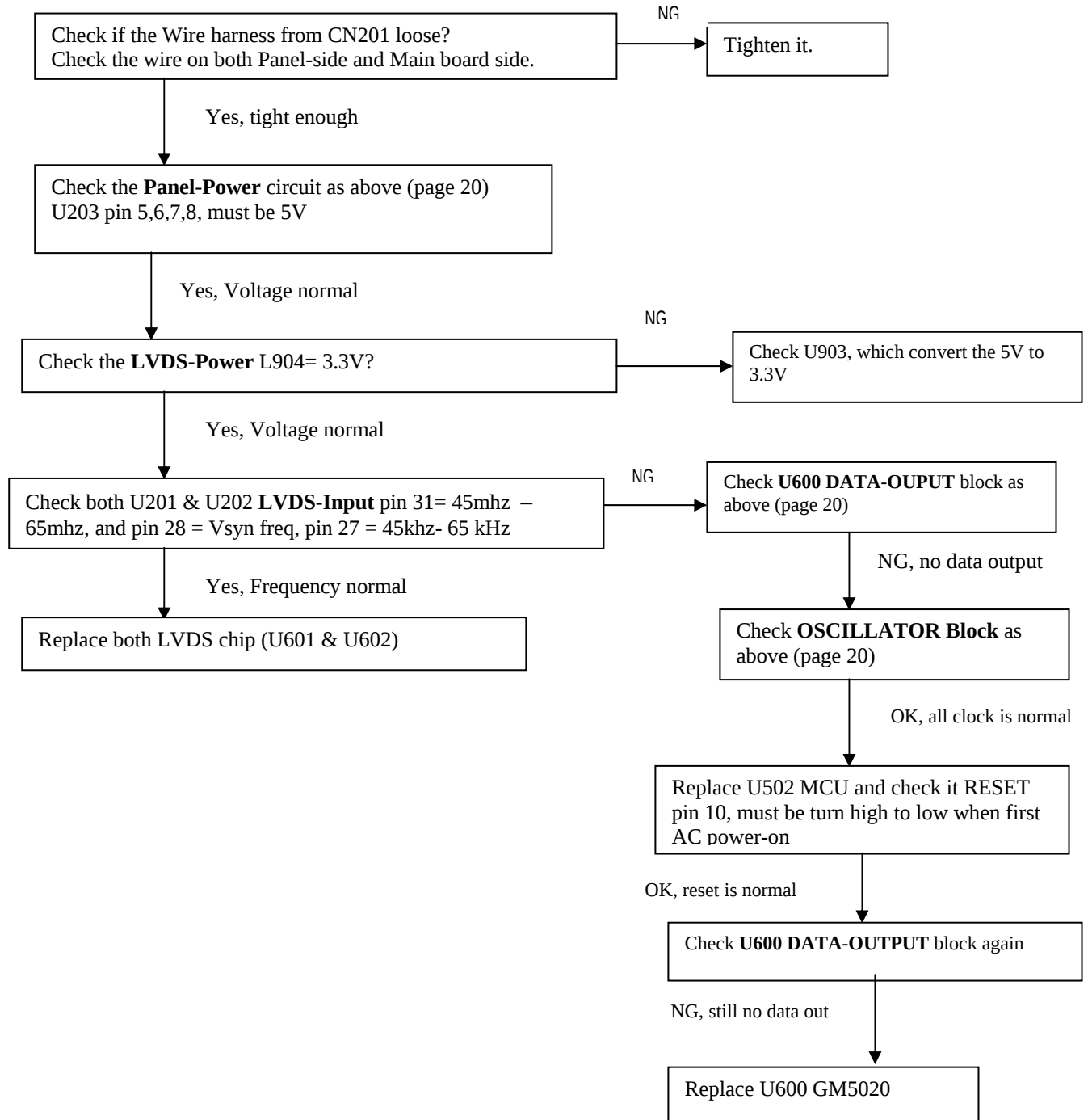


U600-DATA OUTPUT



II (a) the screen is abnormal, stuck at white screen, OSD window can't appear, but keyboard & LED is normal operation.

At general, this symptom is cause by missing panel data or panel power, so we must check our wire-harness, which connected to panel or the panel power controller (U203)

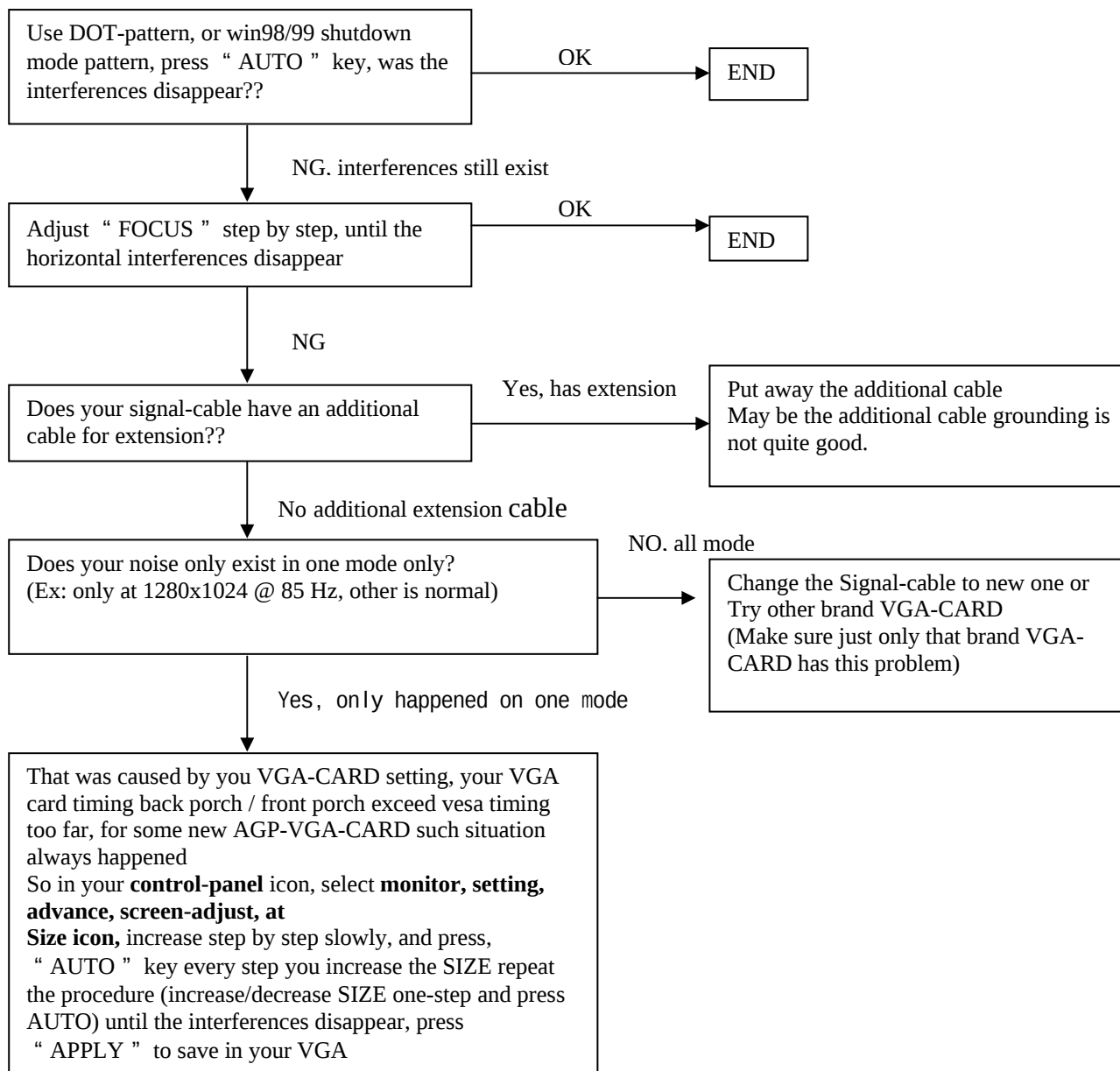


II. (B) The screen had the Vertical Straight Line, may be stuck in Red, Green or Blue
 That symptom is caused by bad Panel issue (might be the Source IC from Panel is cold soldered or open looped) so replace the panel and try it.

III. ALL SCREEN HAS INTERFERENCES OR NOISE, CAN'T BE FIXED BY AUTO KEY

**** NOTE:** There are so many kinds of interferences,

- 1). One is caused by some VGA-CARD that not meet VESA spec or power grounding too bad that influence the circuit.
- 2). Other is caused by external interferences, move the monitor far from electronic equipment. (Rarely happened)

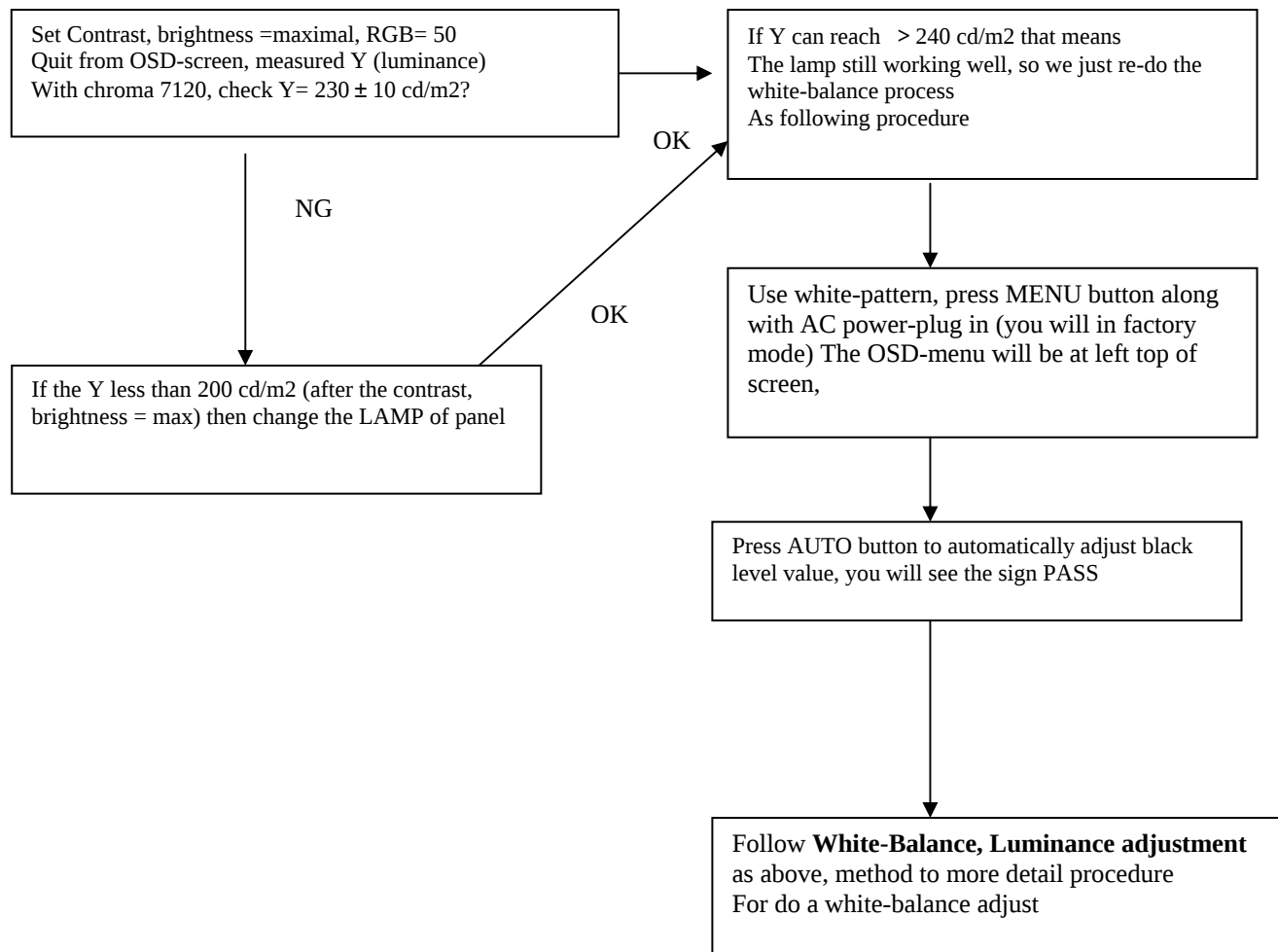


III There is interferences in DOS mode

NOTE: the criteria of doing AUTO-CONFIGURATION: must be a full-size screen, if the screen not full, the auto-configuration will fail. So in DOS mode, just set your "CLOCK" in OSD-MENU to zero or use some EDITOR software which can full fill the whole screen (ex: PE2, HE) and then press "AUTO" Or you can use "DOS1.EXE" which attached in your Driver disk to optimize DOS mode performance.

IV The panel luminance is down

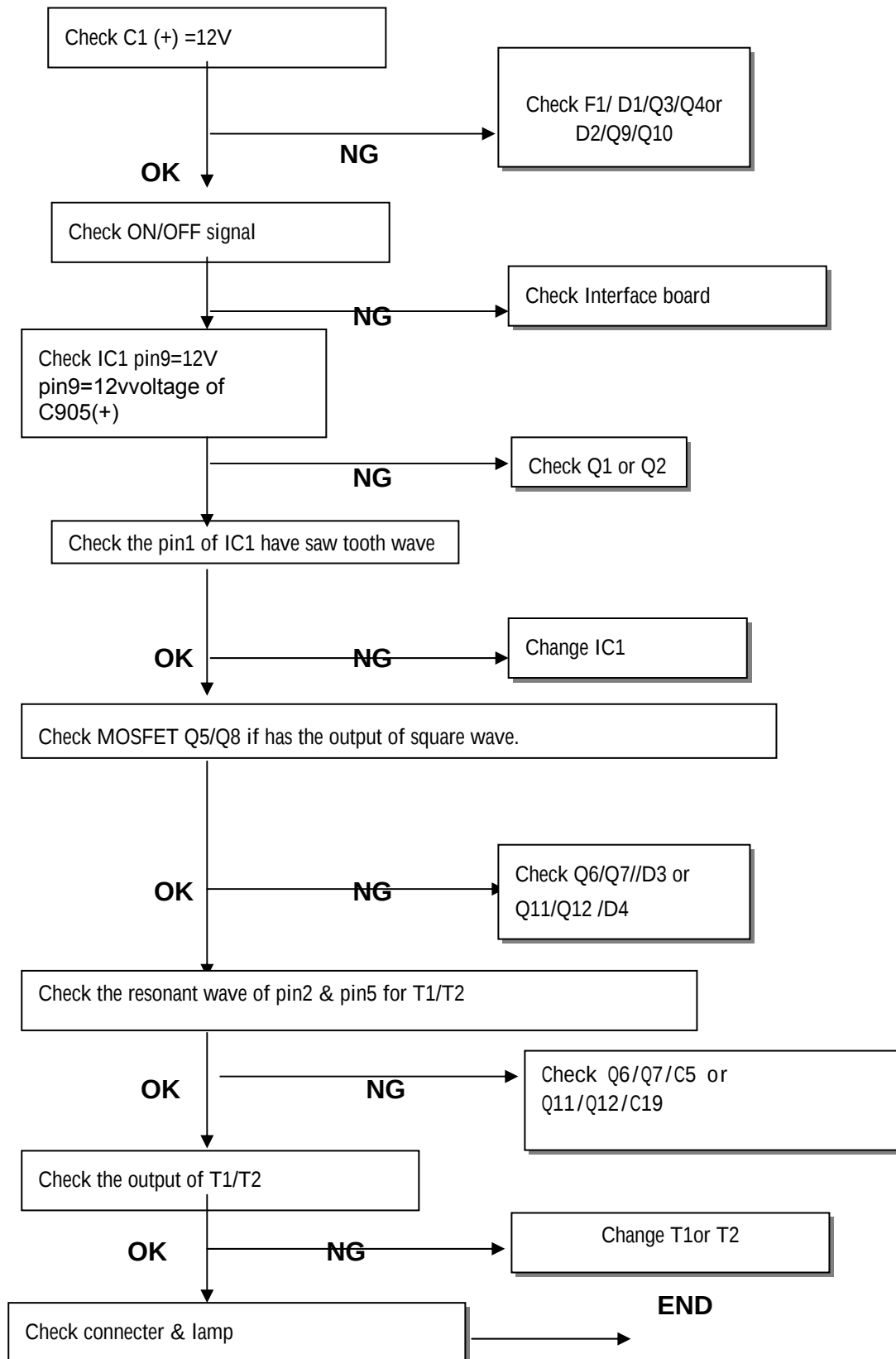
Use white pattern and resolution 1280x1024 @ 60Hz, CHROMA 7120 measured the center of panel



6-2-2 INVERTER –MODULE TROUBLE SHOOTING CHART

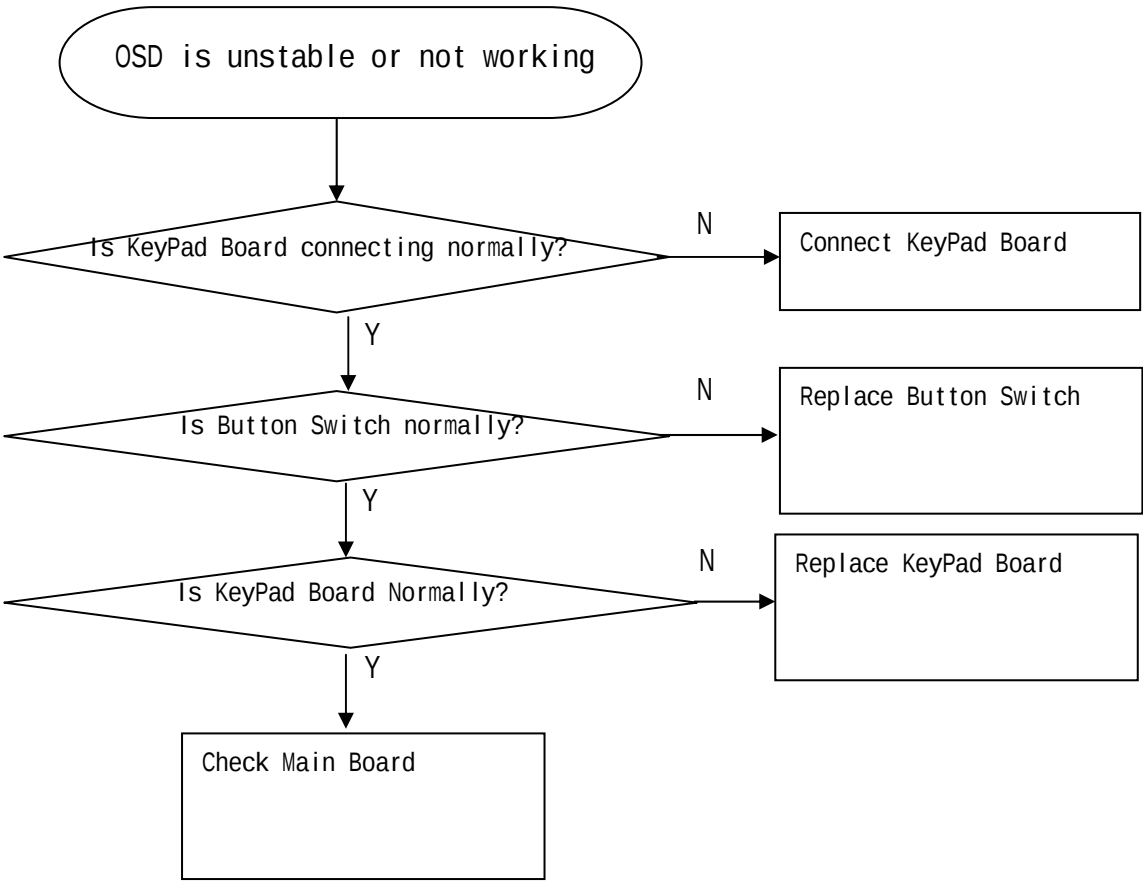
****Note:** the Waveform of U901 pin 2 can determined the power situation

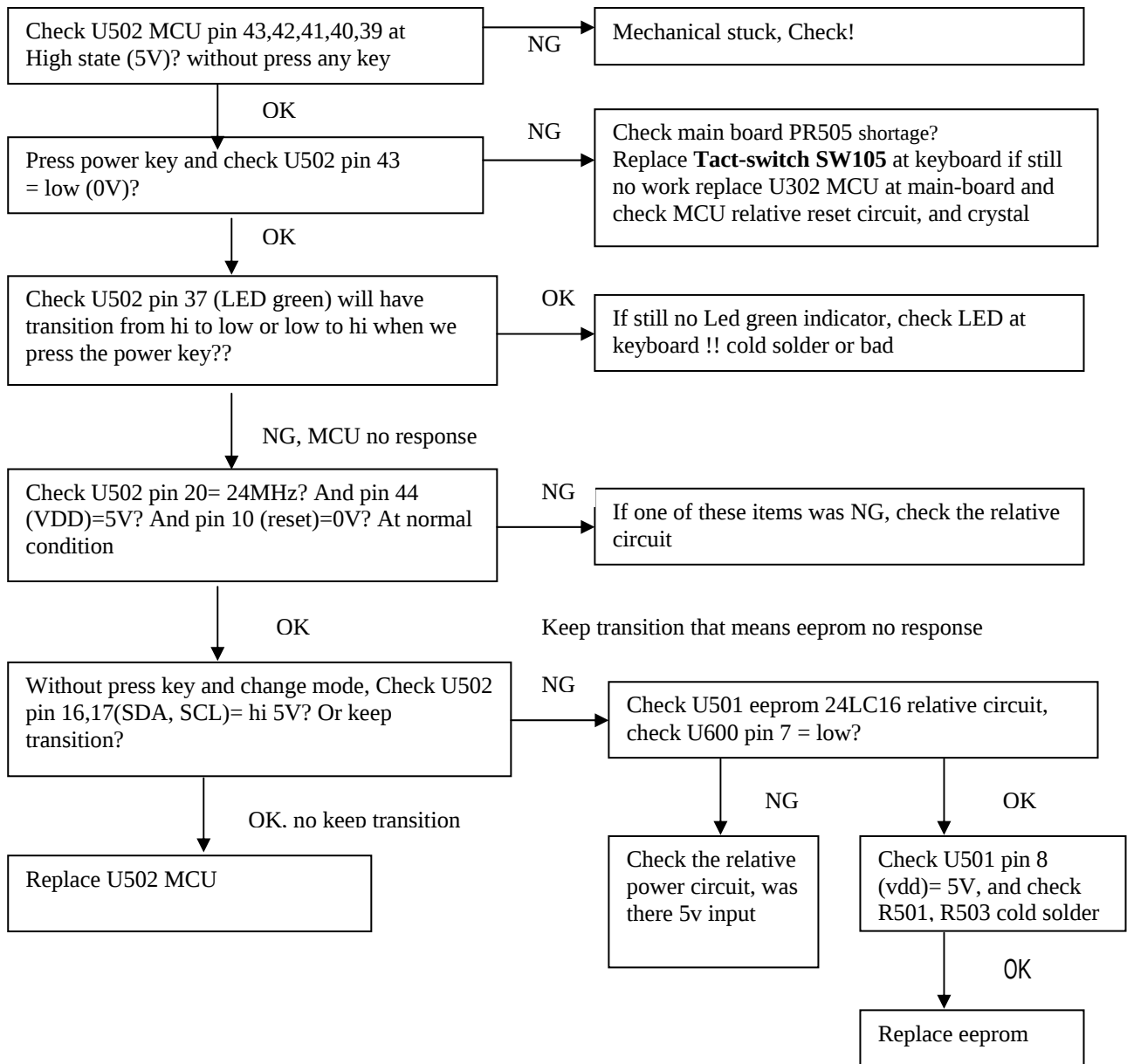
1. Stable rectangle waveform with equal duty, freq around 150K-158KHz that means all power of this interface board is in normal operation , And all status of 5V & 3.3V is working well
2. Unstable or uneven rectangle waveform without same duty, that means ABNORMAL operation was happened, check 3.3V or 5V, if short-circuit or bad component
3. Rectangle waveform with large spike & harmonic pulse on front side means all 3.3v is no load, U600 **Gm5020** was shut-down, and only U502 **MCU** still working, that means the monitor is in power saving status, all power system is working well.



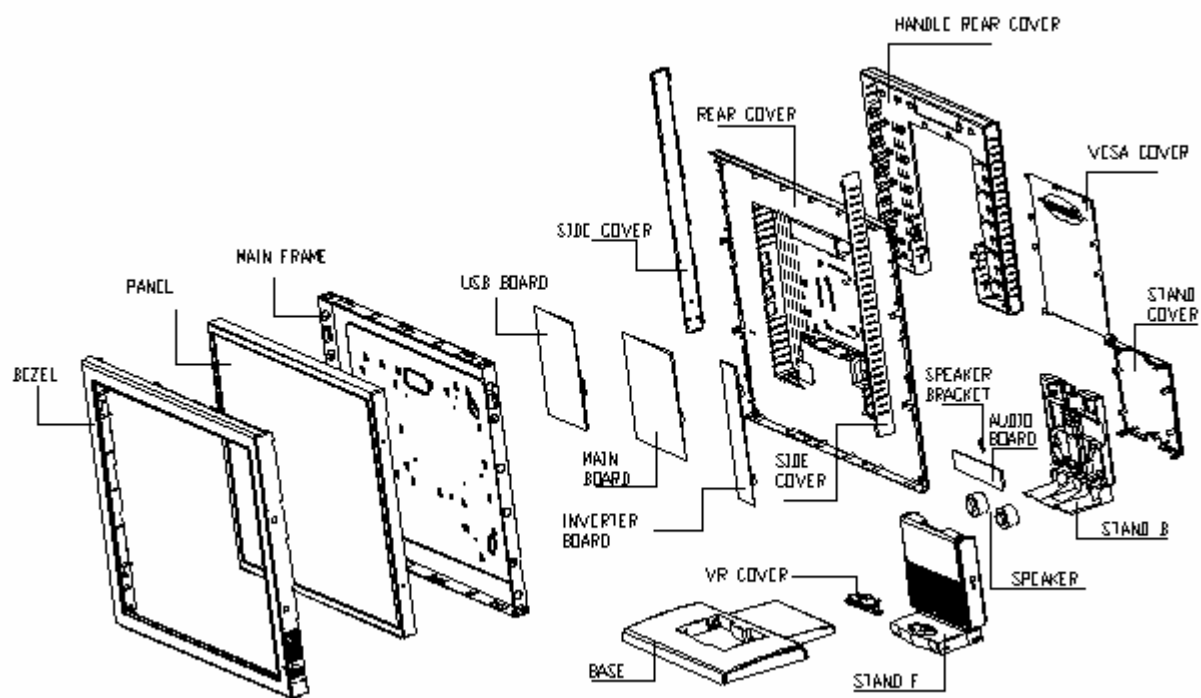
6-2-3 KeyPad Board module trouble-shooting chart

I

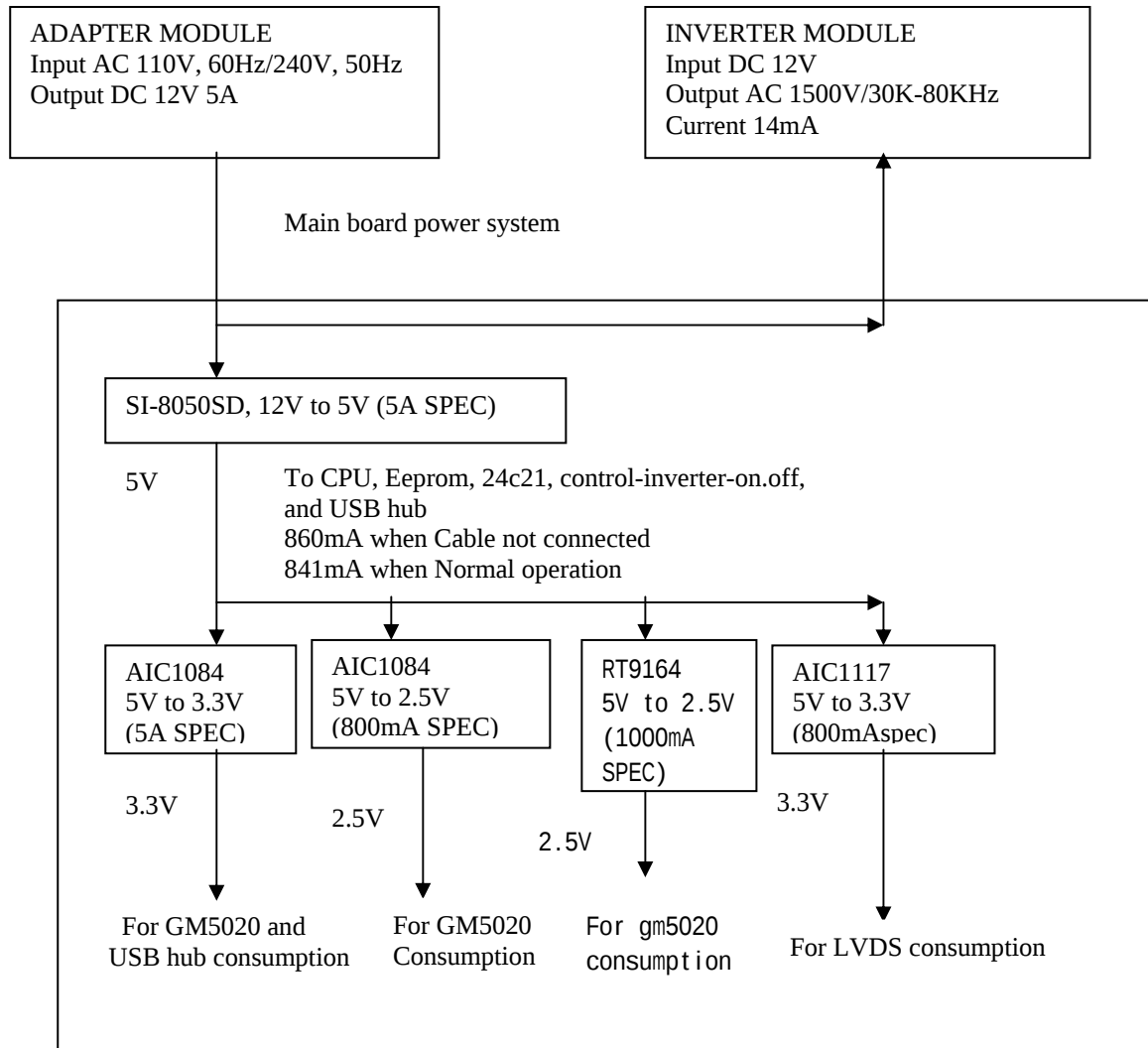




7.MECHANICAL OF CABINET FRONT DIS-ASSEMBLY



8. POWER SYSTEM AND CONSUMPTION CURRENT



9. MAIN BOARD SCHEMATIC

Jasper Reference Design 5020RD1 Preliminary Schematic

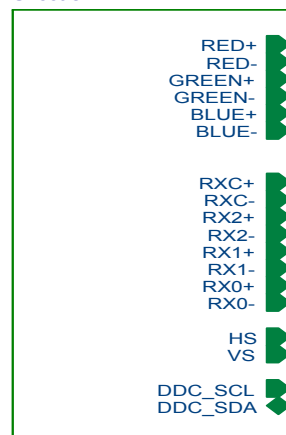
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7.Frame Store	7
8.Power	8

Approval	Organization	Signature	Date

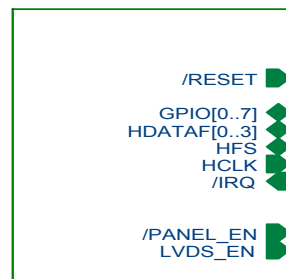
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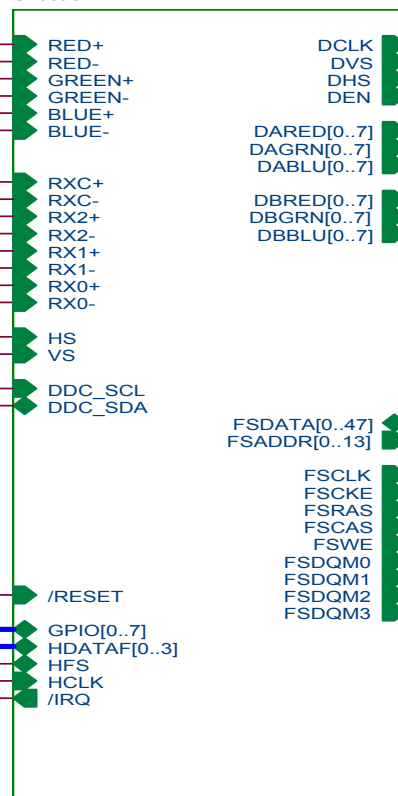
3.Input Connectors

Sheet 4



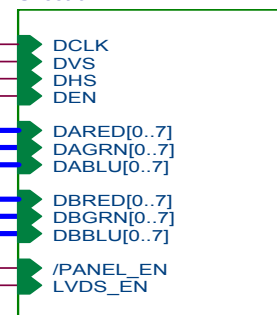
4.MCU

Sheet 5



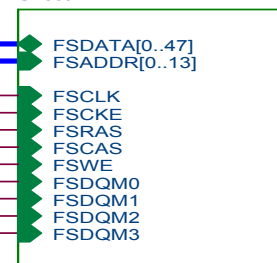
5.Gm5020

Sheet 6



6.Display Interface

Sheet 7



7.Frame Store

Sheet 8



8.Power

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Title

Top Level

Size
A

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A

Date:

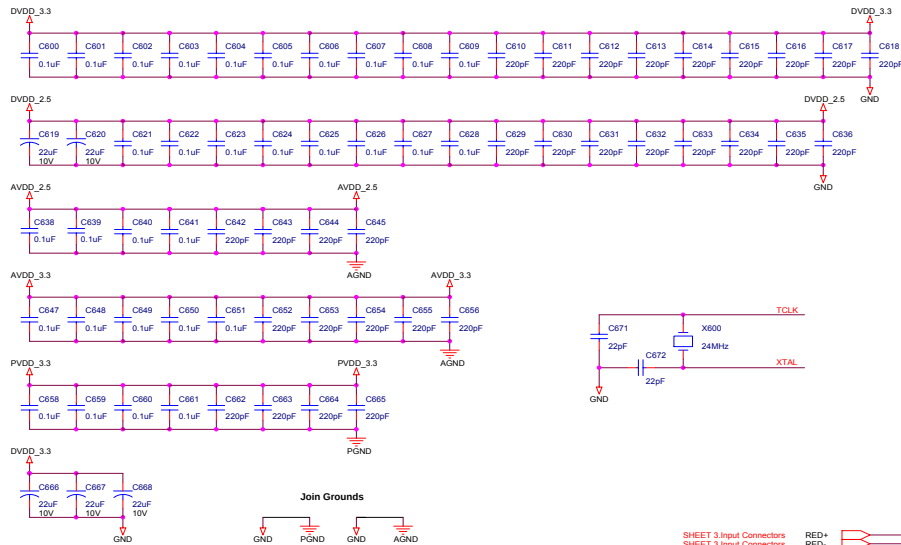
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3. Input Connectors

RED- (C301---U601.E1)
 RED- (C302---U601.E2)
 GREEN+ (C303---U601.D1)
 GREEN- (C304---U601.D1)
 BLUE+ (C305---U601.C1)
 BLUE- (C306---U601.C2)
 VS (U303.8---U601.K1)
 HS (U303.4---U601.L2)
 RX2- (CN302.1---U601.D10)
 RX2+ (CN302.2---U601.C10)
 RX1- (CN302.9---U601.D9)
 RX1+ (CN302.10---U601.C9)
 RX0- (CN302.17---U601.D8)
 RX0+ (CN302.18---U601.C8)
 RXC- (CN302.24---U601.D6)
 RXC+ (CN302.23---U601.C6)

4. MCU

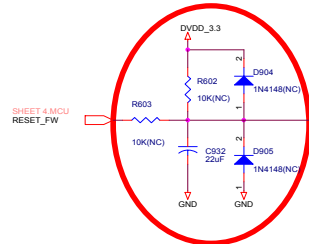
HDATAF[0..3] (U502.26,27,28,29---U601.R2,R1,P4,P3)
 HCLK (U502.30---U601.P1)
 HFS (U502.31---U601.P2)
 /IRQ (U502.14---U601.R3)
 RESET_FW (U502.25---R906)
 PWM0 (U601.N1---R527)
 PWM1 (U601.M4---R528)

6. Display Interface

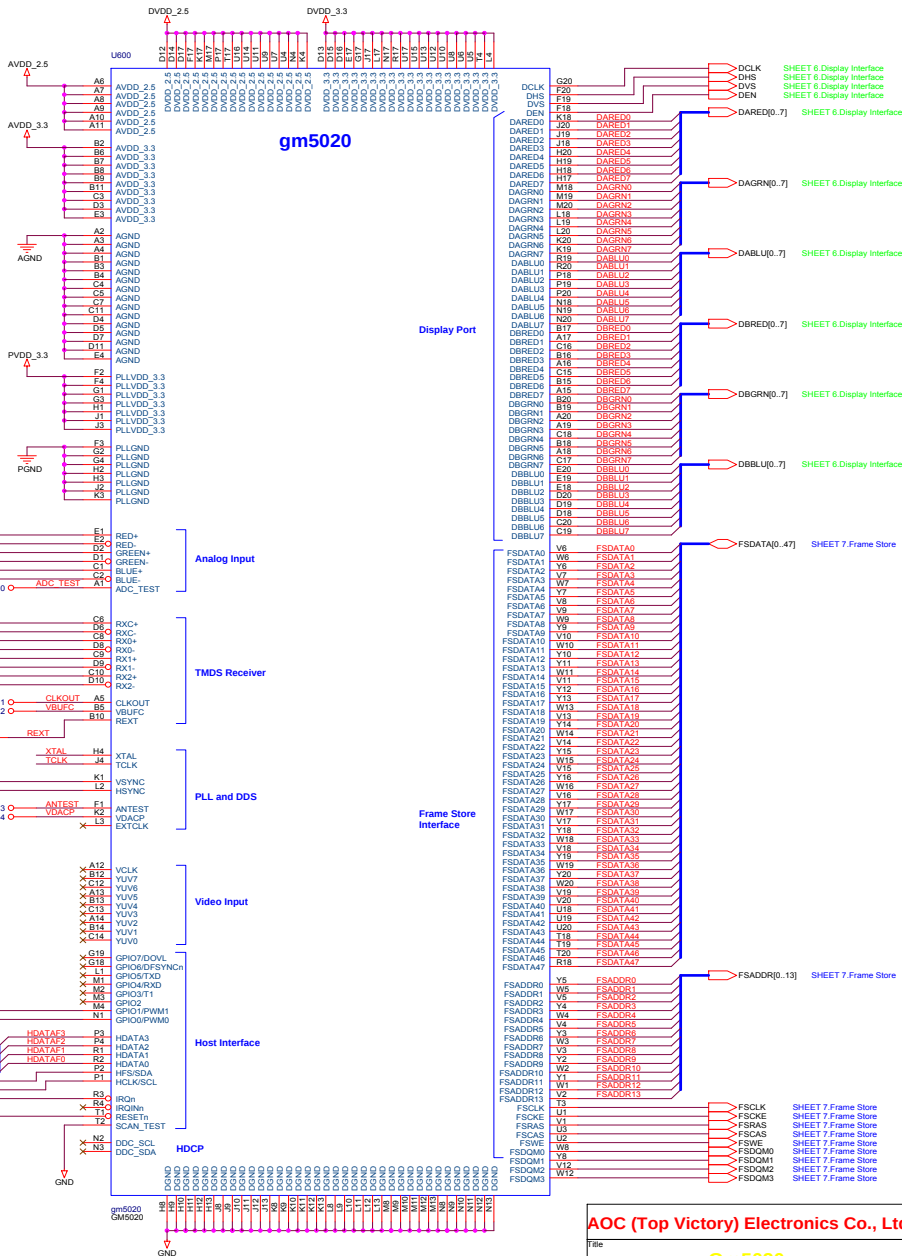
DARED[0..7] (U601---U201)
 DAGRN[0..7] (U601---U201)
 DABLU[0..7] (U601---U201)
 DBRED[0..7] (U601---U201)
 DBGRN[0..7] (U601---U201)
 DBBLU[0..7] (U601---U201)
 DCLK (U601.G20---U201.31,U202.31)
 DHS (U601.F20---U201.27,U202.27)
 DVS (U601.F19---U201.28,U202.28)
 DEN (U601.F18---U201.30,U202.30)

7. Frame Store

FSADDR[0..13] (U601---U801,U802,U803)
 FSDATA[0..47] (U601---U801,U802,U803)
 FSCCLK (U601.T3---U801.35,U802.35,U803.35)
 FSCKE (U601.U1---U801.34,U802.34,U803.34)
 FSRAS (U601.V1---U801.17,U802.17,U803.17)
 FSCAS (U601.U3---U801.16,U802.16,U803.16)
 FSWE (U601.U2---U801.15,U802.15,U803.15)
 FSDQM0 (U601.W8---U801.14)
 FSDQM1 (U601.Y8---U801.16)
 FSDQM2 (U601.V12---U802.14,U803.14)
 FSDQM3 (U601.W12---U802.36,U803.36)



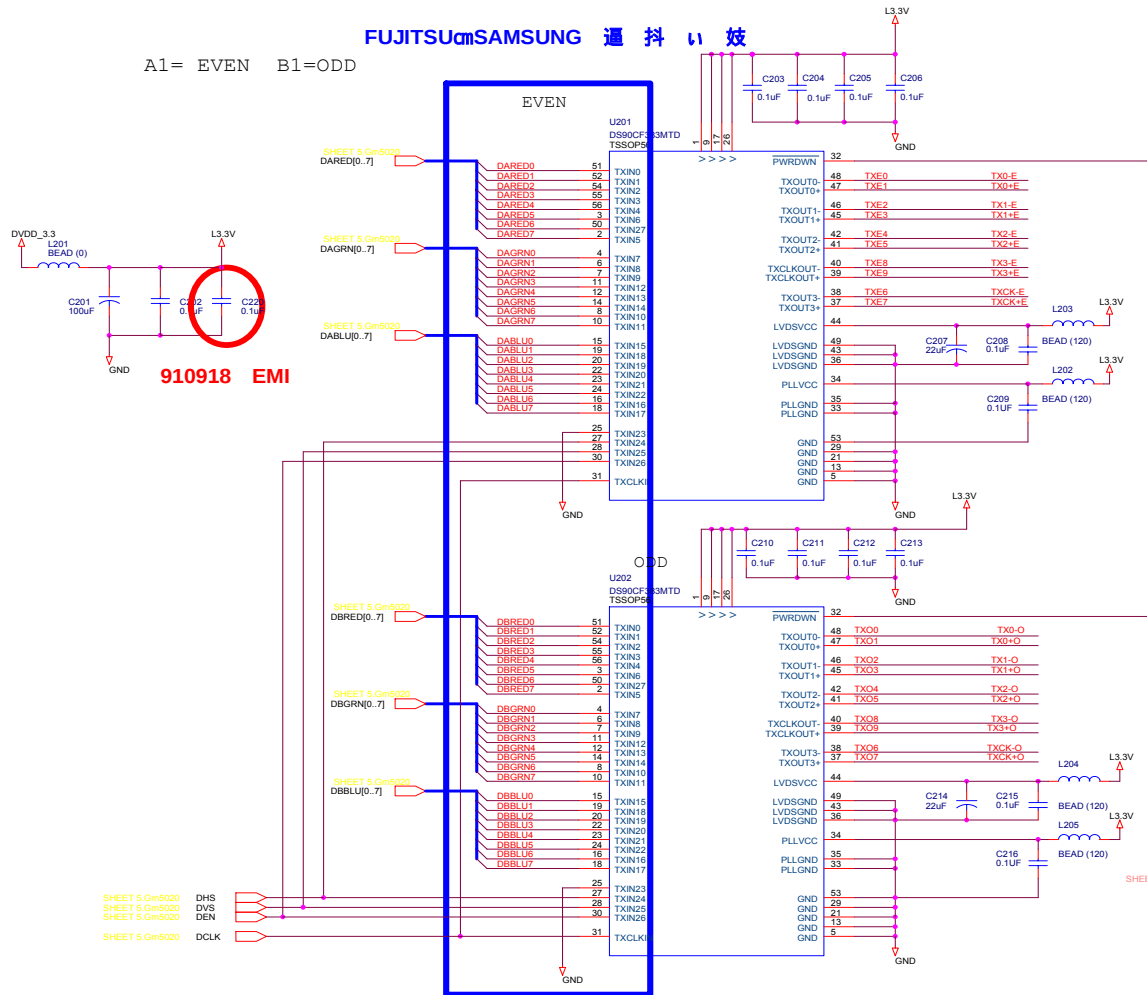
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A1= EVEN B1=ODD

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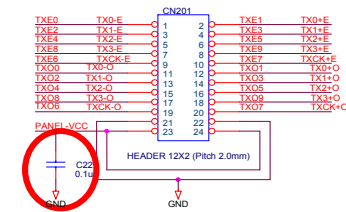
910918 EMI

5.Gm5020

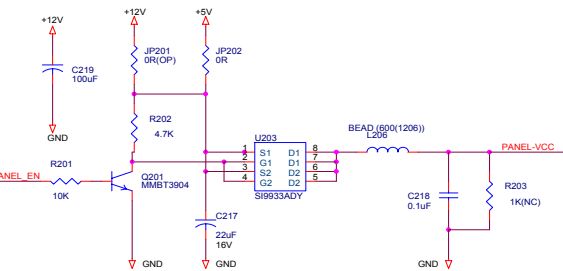
DARED[0..7] (U601---U201)
DAGRN[0..7] (U601---U201)
DABLU[0..7] (U601---U201)
DBRED[0..7] (U601---U201)
DBGRN[0..7] (U601---U201)
DBBLU[0..7] (U601---U201)
DCLK (U601.G20---U201.31,U202.31)
DHS (U601.F20---U201.27,U202.27)
DVS (U601.F19---U201.28,U202.28)
DEN (U601.F18---U201.30,U202.30)

4.MCU

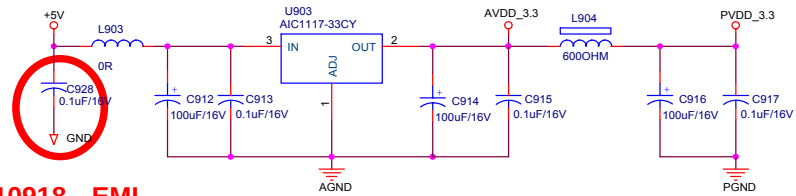
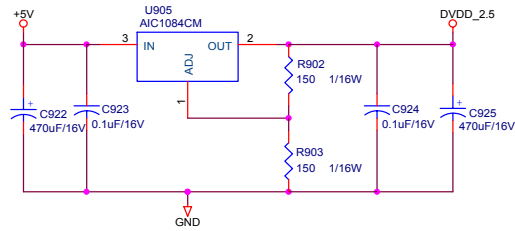
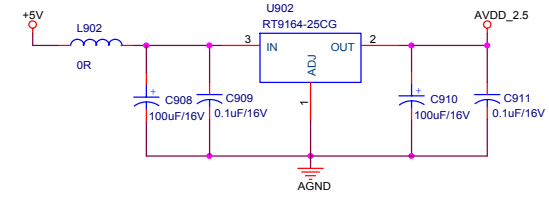
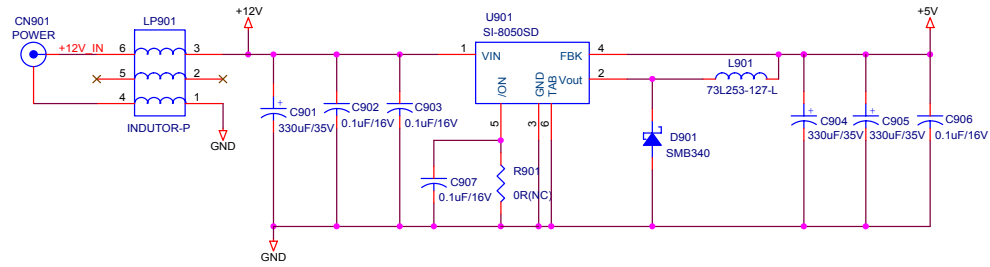
PANEL_EN (U502.18---R201)
LVDS_EN (U502.36---U201.32,U202.32)



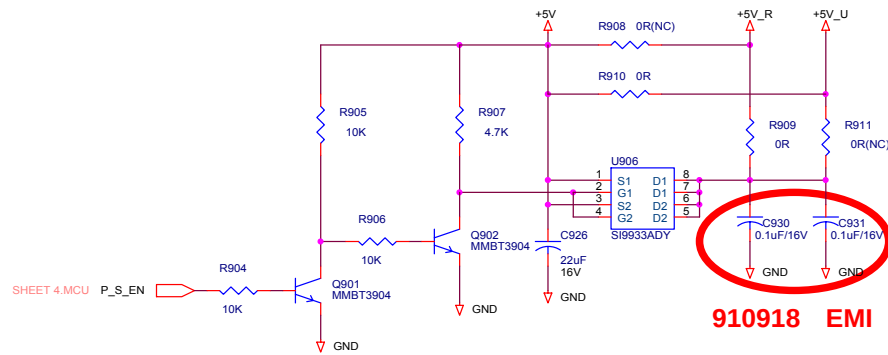
910918 EMI



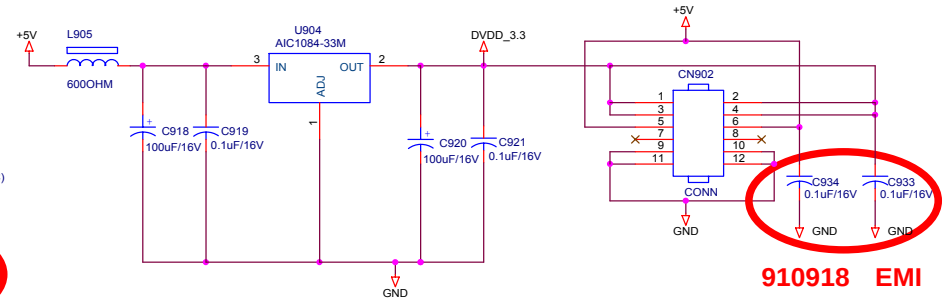
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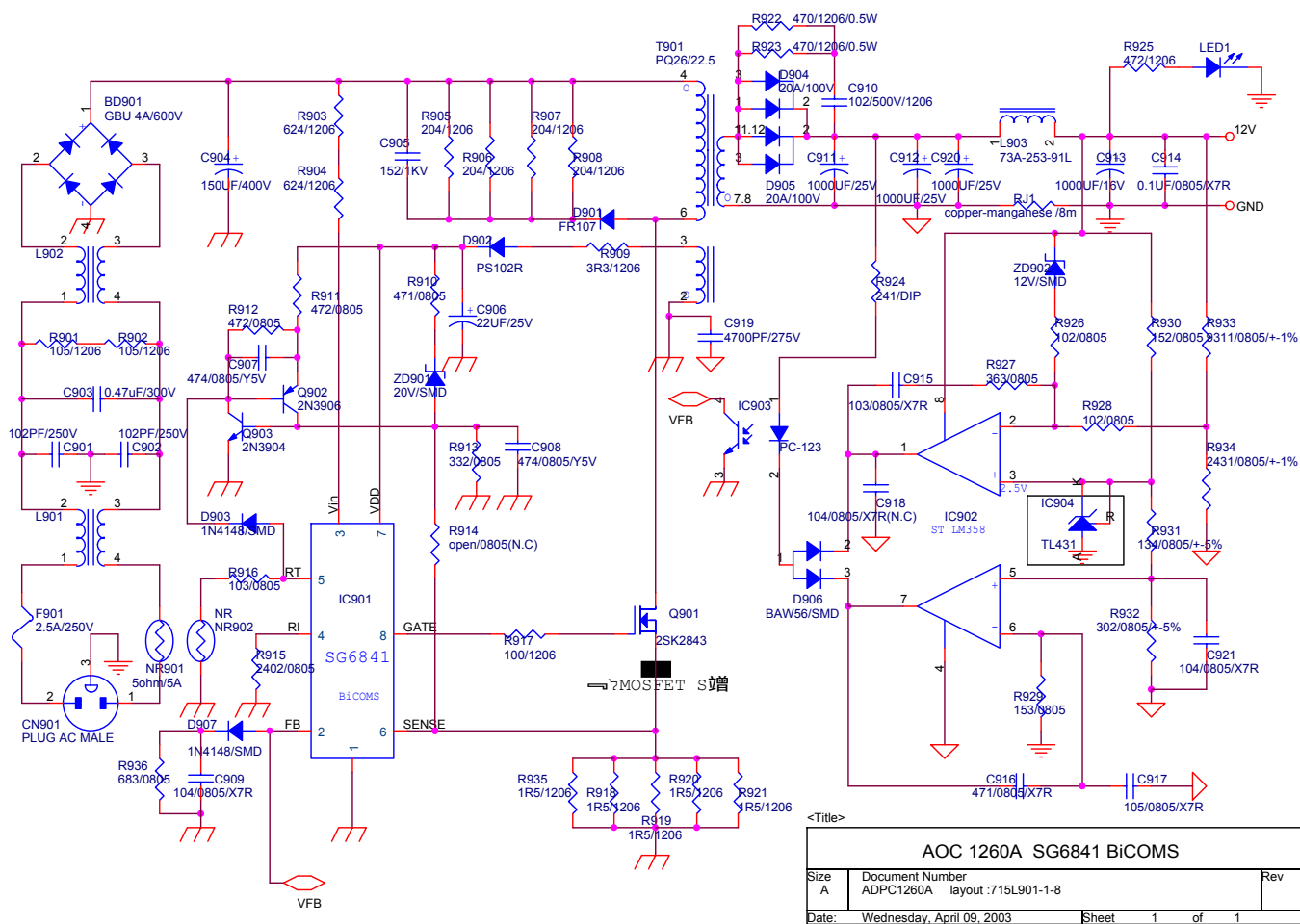
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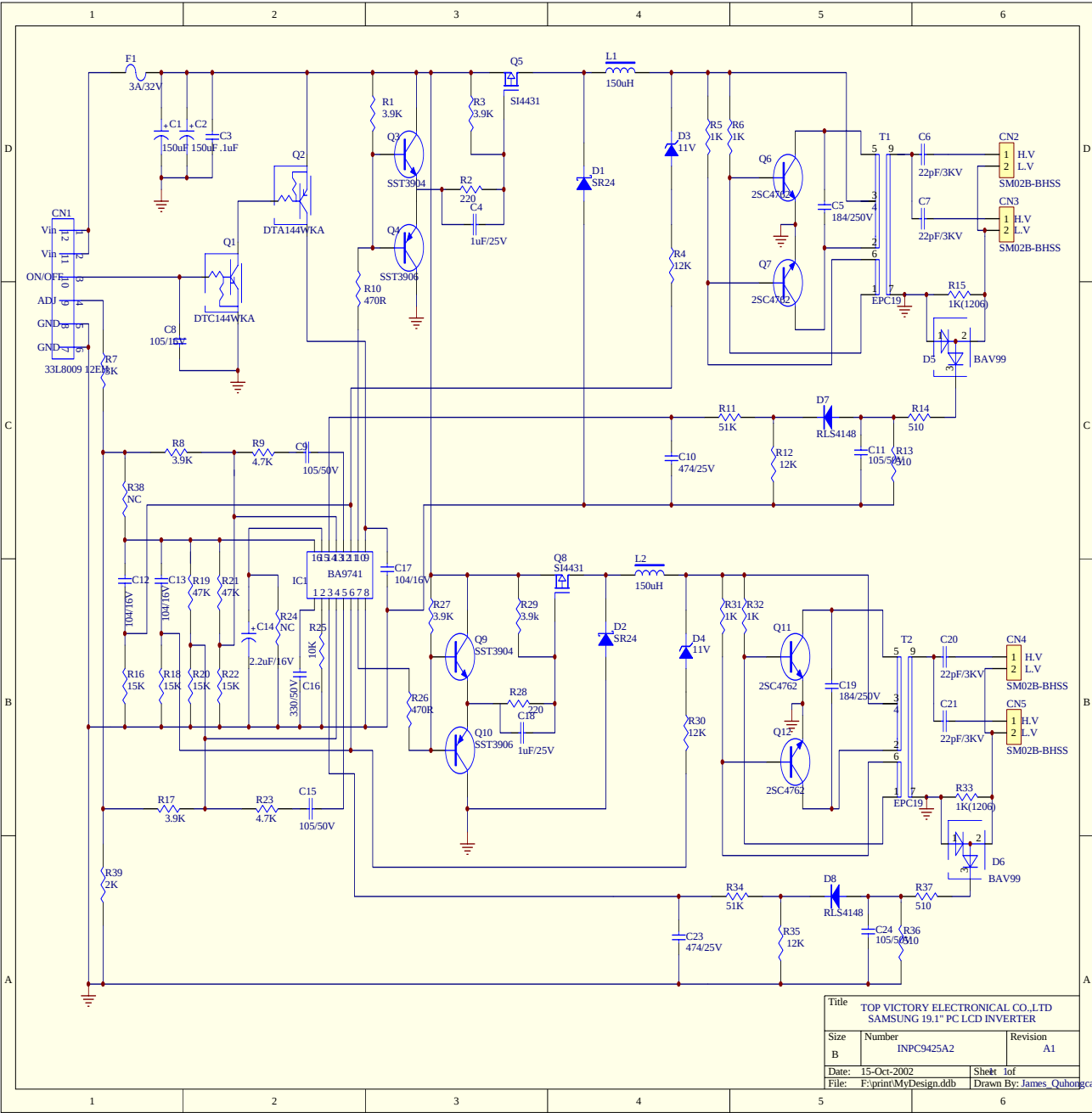
910918 EMI

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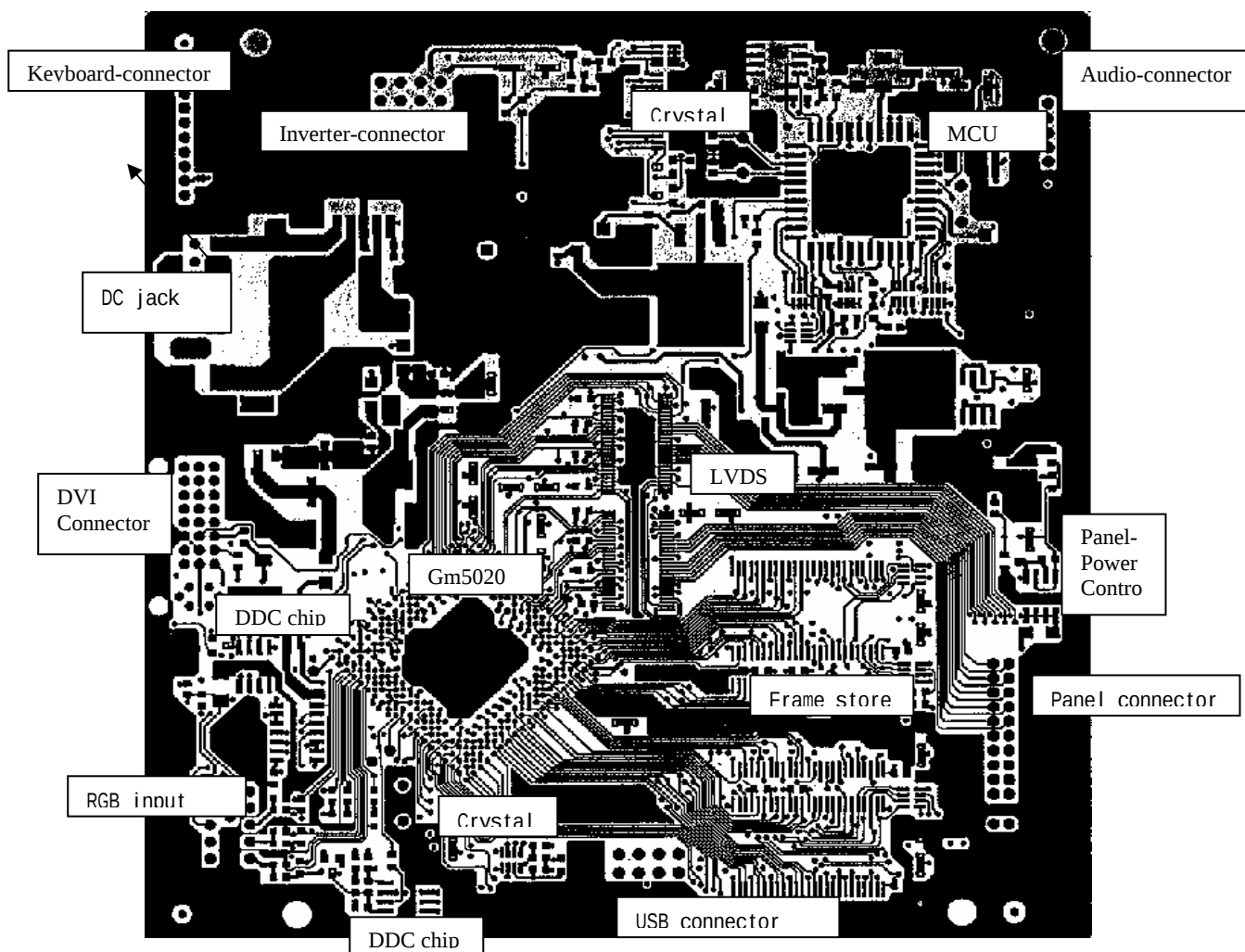
9.2 Adapter Board SCHEMATICS



9.3 Inverter Board SCHEMATICS



10. PCB LAYOUT (MAIN PCB LAYOUT)



11. EDID CONTENT

DIGITAL

	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	16	09	81	E9	70	68	03	00
16:	09	0C	01	03	E8	26	1E	78	2A	45	62	A1	58	4B	99	24
32:	13	4E	53	BF	EF	00	31	59	45	59	61	59	71	4F	81	40
48:	81	80	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	FF	00	54	35	4C
80:	50	39	39	41	32	32	33	33	34	34	00	00	00	FD	00	37
96:	55	1F	57	0E	00	0A	20	20	20	20	20	20	00	00	00	FC
112	00	45	4E	39	31	31	30	0A	20	20	20	20	20	20	00	BF

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	16	09	80	E9	01	00	00	00
16:	04	0D	01	03	68	26	1E	78	2A	45	62	A1	58	4B	99	24
32:	13	4E	53	BF	EF	00	31	59	45	59	61	59	71	4F	81	40
48:	81	59	81	80	81	99	86	3D	00	C0	51	00	30	40	40	A0
64:	13	00	7C	31	11	00	00	1E	00	00	00	FF	00	30	30	30
80:	30	30	30	30	30	30	30	30	30	31	00	00	00	FD	00	37
96:	55	1F	5F	10	00	0A	20	20	20	20	20	20	00	00	00	FC
112	00	45	4E	39	31	31	30	0A	20	20	20	20	20	20	00	30

12.BOM LIST
T990KAANKAE5N

插件位置	元件料号	品名规格	用量	单位
	ADPC1260AE	LCD ADAPTER BOARD ASS'Y	1	PCS
	CBPC990KAAE5	CONVERSION BOARD FOR T9	1	PCS
	INPC9425A4	DC TOAC INV OF SAMSUNG	1	PCS
	KEPC991KA1	KEY BOARD	1	PCS
	7L 1 L 12	WOODEN PALLET	0.009	PCS
	7L 1 L 13	WOODEN PALLET	0.009	PCS
	12L 381 1	RUBBER FOOT	0	PCS
	15L5790 1	MAIN FRAME 9SAMSUNG	1	PCS
	15L5791 1	VESA BRACKET	1	PCS
	26L 800673 1A	ENVISION BARCODE LABEL	1	PCS
	34L1020 U0 1L	REAR COVER	1	PCS
	34L1021 U0 1L	HANDLE REAR COVER	1	PCS
	34L1050AU0 5L	VESA COVER	1	PCS
	34L1051 U2 L	STAND COVER	1	PCS
	40L 191673 2C	ID LABEL	1	PCS
	40L 581 26704	唛头纸 FOR CARTON/PALLET	0.05	PCS
	41L 68508 A	管制卡	0.1	PCS
	41L780061513B	INPUT NOT SUPPORT CARD	1	PCS
	41L7800673 3D	WARRANTY BOOKLET	1	PCS
	41L7800673 4D	QSG	1	PCS
	41L780067324A	Envision Envelop	1	PCS
	41L780067329B	WARRANTY CARD	1	PCS
	41L780067330B	Envision -kensington Ca	1	PCS
	44L3231501500	导电泡棉	2	PCS
	44L3278 1	EPS CUSHION (L)	1	PCS
	44L3278 2	EPS CUSHION(R)	1	PCS
	44L3278673 1F	CARTON	1	PCS
	44L9003210	护角板	0.07	PCS
	45L 76 28 C	PE Bag For Manual	1	PCS
	45L 77 3	打包膜	173	CM
	45L 77500	BARCODE RIBBON	19	CM
	45L 77501	BARCODE RIBBON	0.5	CM
	45L 88606 C	PE BAG FOR BASE	1	PCS
	45L 88626 1	PE BAG FOR MONITOR	1	PCS
	50L 600 2	HANDLE1	1	PCS
	50L 600 3	HANDLE2	1	PCS
	51L 2 14	热熔胶	0.4	G
	52L 1185	MIDDLE TAPE FOR CARTON	81	CM
	52L 1186	SMALL TAPE	8	CM
	52L6020 5	PROTECT FILM	1	PCS
	52L6025 11554	INSULATE SHEET	1	PCS
	70L L19501EPI	DRIVER DISK	1	PCS
	85L 605 1	MAIN SHIELD	1	PCS

	89L 174L19 2A	SIGNAL CABLE	1	PCS
	89L1748LAA 1	SIGNAL CABLE	1	PCS
	89L402A18N IS	POWER CORD	1	PCS
	95L8018 30 21	HARNESS	1	PCS
	M1L 330 4128	SCREW M3X4	1	PCS
	M1L 330 6128	SCREW	4	PCS
	M1L1130 6128	SCREW	7	PCS
	M1L1740 12128	SCREW	4	PCS
	Q1L 330 10120	SCREW FOR FP/RC	10	PCS
	Q1L 930 16120	SCREW (3X16)	4	PCS
	705L990KB34005	LCD 后壳 ASS'Y	1	PCS
	750LLU90N02	AU 19"LCD PANEL (EN02)	1	PCS
-----	-----	-----	-----	-----
PARENT	NO: ADPC1260AE	LCD ADAPTER BOARD ASS'		
-----	-----	-----	-----	-----
	ADPC1260AAI	LCD ADAPTER ASS'Y FOR A	1	PCS
	ADPC1260ASMT	LCD ADAPTER ASS'Y FOR S	1	PCS
	2L6003 1	SCREW NUT	0	PCS
	19L6005 1	弹簧铗	2	PCS
	33L6007 1	LENS	1.01	PCS
	40L 154501 1	HI-POT GND LABEL FOR MO	1	PCS
	40L 581700 6A	LABEL	1.04	PCS
	40L500B615 1A	ID LABEL	1.02	PCS
	45L 88525 E	PE BAG	1.02	PCS
	51L 6 4500	RTV 胶	0	G
	51L 6 4502	RTV 胶	2	G
	51L 6 4503	RTV 胶	0	G
	51L 200 1	散热油	0.2	G
	52L 1211 A	ALUMINIUM TAPE	2.04	PCS
	52L6025 11520	导热胶片	1	PCS
	52L6025 11631	绝缘片	1	PCS
IC903	56L 139 3A	PC123Y22	1	PCS
IC903	56L 139 3B	PC123 Y82	0	PCS
NR901	61L 58050 WT	NTC 5 OHM 5A	1	PCS
C903	63L 107474 HS	0.47UF +-10% 250VAC	1	PCS
C903	63L 10747410S	0.47UF +-10% 250VAC	0	PCS
C901	65L305M1022E2	1000P 400VAC/250VAC	0	PCS
C902	65L305M1022E2	1000P 400VAC/250VAC	0	PCS
C901	65L305M1022E3	1000PF +-20% 400VAC BY	1	PCS
C902	65L305M1022E3	1000PF +-20% 400VAC BY	1	PCS
C919	65L306M4722B2	4700PF +-20% 400VAC Y1	1	PCS
C904	67L 30515114H	150UF 400V HERMEI	1	PCS
C911	67L215C102 4H	1000UF 25V LZ HER MEI	1	PCS
C912	67L215C102 4H	1000UF 25V LZ HER MEI	1	PCS
C920	67L215C102 4H	1000UF 25V LZ HER MEI	1	PCS
	71L 55500 S	FERRITE BEAD 3.5*3*1.3	1	PCS

L901	73L 174 29 L	LINE FILITER LITAI	0	PCS
L901	73L 174 29 T	LINEFILTER	0	PCS
L901	73L 174 29 LS	LINE FILITER LISHIN	1	PCS
L902	73L 174 31 L	LINE FILTER	0	PCS
L902	73L 174 31 T	CHOKE COIL	0	PCS
L902	73L 174 31 LS	LINE FILTER	1	PCS
L903	73L 253 91 H	CHOKE COIL	1	PCS
L903	73L 253 91 L	CHOKE BY LI TA	0	PCS
L903	73L 253 91 S	CHOKE COIL	0	PCS
T901	80LL17T 5 L	TRANS FORMER BY LI TAI	0	PCS
T901	80LL17T 5 T	X'FMR	0	PCS
T901	80LL17T 5 LS	ADAPTOR BY LISHIN	1	PCS
LED1	81L 2 3 2P	GPG2603TE/R006	1	PCS
F901	84L 53 2	250V/2A	1	PCS
CN901	87L 501 11 RF	AC SOCKET	1	PCS
	89L 171513	1.2M 16AWG 1185 STYLE	1	PCS
	90L6063500 T	HEAT SINK	1	PCS
	90L6083 1	HEAT SINK	1	PCS
BD901	93L 50460 10	BRIDGE GBU405 4A 600V B	0	PCS
BD901	93L 50460 16	U4KB80R	1	PCS
D904	93L 60228	MBR20100CT 20A 100V	0	PCS
D905	93L 60228	MBR20100CT 20A 100V	0	PCS
D904	93L 60237	SRF20100C	1	PCS
D905	93L 60237	SRF20100C	1	PCS
D901	93L 6026T52T	RECTIFIER DIODE FR107	1	PCS
D902	93L 6038P52T	PS102R	1	PCS
D902	93L 6038T52T	FR103	0	PCS
RJ1	95L 90 26	COPPER MANGANESE WIRE	1	PCS
A	95L 205430322	FL YWIRE 43MM 18 AWG RE	1	PCS
	96L 29 8	TUBE	1	PCS
	M1L 130 8120	SCREW	0	PCS
	M1L 330 8128	SCREW	2	PCS
	W33L6045 B T	TOP COVER	1.01	PCS
	W33L6046 B T	COVER	1.01	PCS
	705L 990 57 01	Q901 ASS'Y	1	PCS
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PARENT	NO: ADPC1260AAI	LCD ADAPTER ASS'Y FOR I		
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	715L 901 1 8	PCB BOARD	1	PCS
J901	95L 90 23	TIN COATED	0	PCS
J902	95L 90 23	TIN COATED	0	PCS
R924	61L 17224152T	240OHM 5% 1/4W	1	PCS
C906	67L 305220 7T	22UF +-20% 50V	1	PCS
IC904	56L 158 4 T A	H431BA	1	PCS
C924	65L 1K101 5T6921	100PF/1KV	1	PCS
C905	65L 1K152 1T6052	1.5NF/1KV Z5F+-10%	1	PCS

C905	65L 1K152 1T6285	1.5NF/1KV Z5F+-10%	0	PCS
C905	65L 1K152 1T6921	1.5NF/1KV Z5F+-10%	0	PCS
C913	67L 305471 3T	470UF 16V	1	PCS
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PARENT	NO: ADPC1260ASMT	LCD ADAPTER ASS'Y FOR MT		
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IC902	56L 192 10	LM358D	1	PCS
IC901	56L 379 33	SG6841S	1	PCS
Q903	57L 417 4	PMBS3904/PHILIPS-SMT (04	1	PCS
Q902	57L 417 6	PMBS3906/PHILIPS-SMT (06	1	PCS
R926	61L0805102	CHIPR 1K OHM +-5% 1/8W	1	PCS
R928	61L0805102	CHIPR 1K OHM +-5% 1/8W	1	PCS
R930	61L0805152	CHIPR 1.5K OHM +-5% 1/8	1	PCS
R929	61L0805153	CHIPR 15K OHM+-5% 1/8W	1	PCS
R931	61L0805154	CHIP 150KOHM 5% 1/8W	1	PCS
R915	61L0805240 2F	CHIP 24KOHM 1% 1/8W	1	PCS
R934	61L0805243 1F	CHIP 2.43K OHM 1/8W 1%	1	PCS
R913	61L0805332	CHIP 3.3K OHM +-5% 1/8W	1	PCS
R932	61L0805332	CHIP 3.3K OHM +-5% 1/8W	1	PCS
R927	61L0805363	CHIP 36KOHM 1/8W	1	PCS
R910	61L0805471	CHIPR 470 OHM+-5% 1/8W	1	PCS
R911	61L0805472	CHIPR 4.7K OHM +-5% 1/8	1	PCS
R912	61L0805472	CHIPR 4.7K OHM +-5% 1/8	1	PCS
R936	61L0805683	CHIPR 68K OHM+-5% 1/8W	1	PCS
R933	61L0805931 1F	CHIP 9.31K OHM 1/8W 1%	1	PCS
R917	61L1206100	CHIPR 10 OHM+-5% 1/4W	1	PCS
R901	61L1206105	CHIP 1MOHM 5% 1/4W	1	PCS
R902	61L1206105	CHIP 1MOHM 5% 1/4W	1	PCS
R918	61L1206159	CHIP1.5OHM 5% 1/4W	1	PCS
R919	61L1206159	CHIP1.5OHM 5% 1/4W	1	PCS
R920	61L1206159	CHIP1.5OHM 5% 1/4W	1	PCS
R921	61L1206159	CHIP1.5OHM 5% 1/4W	1	PCS
R935	61L1206159	CHIP1.5OHM 5% 1/4W	1	PCS
R905	61L1206204	CHIP 200KOHM 1/4W	1	PCS
R906	61L1206204	CHIP 200KOHM 1/4W	1	PCS
R907	61L1206204	CHIP 200KOHM 1/4W	1	PCS
R908	61L1206204	CHIP 200KOHM 1/4W	1	PCS
R922	61L1206470	CHIP 47OHM 5% 1/4W	1	PCS
R923	61L1206470	CHIP 47OHM 5% 1/4W	1	PCS
R925	61L1206472	CHIP 4.7KOHM 5% 1/4W	1	PCS
R909	61L1206519	CHIPR 510OHM +-5% 1/4W	1	PCS
R903	61L1206624	CHIP 620K 5% 1/4W	1	PCS
R904	61L1206624	CHIP 620K 5% 1/4W	1	PCS
C915	65L0805103 22	CHIP 0.01uF 25V X7R 080	1	PCS
C909	65L0805104 22	0.1UF +-10% 25V X7R 080	1	PCS
C914	65L0805104 22	0.1UF +-10% 25V X7R 080	1	PCS

C921	65L0805104 22	0.1UF +-10% 25V X7R 080	1	PCS
C917	65L0805105 12	1UF +-10% 16V X7R	1	PCS
C916	65L0805221 21	CHIP 220PF 25V NPO	1	PCS
C907	65L0805474 27	CHIP 0.47UF 25V Y5V	1	PCS
C908	65L0805474 27	CHIP 0.47UF 25V Y5V	1	PCS
C923	65L1206101 71	100PF 500V 1/8W	1	PCS
C922	65L1206102 32	CHIP 1000PF/X7R +-5%	1	PCS
C910	65L1206102 72	CHIP 1000PF 500V X7R	1	PCS
D906	93L 64 38 P	BAW56	1	PCS
D906	93L 64 38 R	BAW56T-116	0	PCS
D903	93L 6432V	LL4148-GS08	1	PCS
D907	93L 6432V	LL4148-GS08	1	PCS
ZD902	93L 39S 3 T	BZT52-C11	1	PCS
ZD902	93L 39S 8 T	ZD RLZ11B ROHM	0	PCS
ZD901	93L 39S 12 T	RLZ20B BY ROHM	1	PCS
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PARENT	NO: 705L 990 57 01	Q901 ASS'Y		
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	51L 200 1	散热油	2	G
Q901	57L 724 8	2SK2843	1	PCS
Q901	57L 768 1	2SK3451 TO-220 FUJI	0	PCS
	90L6062 1	HEAT SINK	1	PCS
	M1L1030 5128	SCREW	1	PCS
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PARENT	NO: CBPC990KAAE5	CONVERSION BOARD FOR T 90		
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	AIC990KAAE5	MAIN BOARD FOR T990K*	1	PCS
CN501	33L3802 9H	WAFER 9P RIGHT ANELE PI	1	PCS
CN201	33L801724A H	PIN HEADER 24P 2.0mm	1	PCS
CN502	33L8022 12 H	PIN HEADER FEMALE 2*6 9	1	PCS
	40L 457624 1B	CPU LABEL	1	PCS
	40L 45762412B	CBPC LABEL	1	PCS
	44L3231508512	导电泡棉	1	PCS
	44L3231508513	导电泡棉	1	PCS
	49L 51 1A	去渍油	0.05	ML
	51L 6 4500	RTV 胶	0	G
	51L 6 4502	RTV 胶	0	G
	51L 6 4503	RTV 胶	3	G
	52L6026 1	网版纸	20	MM
	52L6026 2	网版纸	20	MM
	55L 100600 A	防溅焊锡	0.3	G
	55L 100600 B	锡丝	0.3	G
	55L 100605	锡丝	9.1	G
U502	56L1125137 R9	W78E65P-40	1	PCS
C512	67L 309471 3T	470UF +-20% 16V	1	PCS

C922	67L 309471 3T	470UF +-20% 16V	1	PCS
C925	67L 309471 3T	470UF +-20% 16V	1	PCS
C901	67L305L331 6	330UF +-20% 35V	1	PCS
C904	67L305L331 6	330UF +-20% 35V	1	PCS
C905	67L305L331 6	330UF +-20% 35V	1	PCS
LP901	71L 55 28	FERRITE BEAD 7.62*5.08*	1	PCS
L901	73L 253127 L	CC-010730	1	PCS
L502	73L 259 4	200UH +/-5%	1	PCS
CN901	88L 3041CE	DC JACK	1	PCS
CN301	88L 35315FHAS	D-SUB 15PIN	1	PCS
CN302	88L 35424F HS	DVID CONN 24P	1	PCS
X501	93L 22 45 J	24MHZ/30PF/49US	1	PCS
X600	93L 22 45 J	24MHZ/30PF/49US	1	PCS
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PARENT	NO: AIC990KAAE5	MAIN BOARD FOR T990K*		
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	55L 23520	IPA	0.06	ML
	55L 100600 A	防溅焊锡	0.3	G
	55L 100600 B	锡丝	0.3	G
	55L 100602 6461	锡膏	0.85	G
	55L 100602 6657	锡膏	0	G
U201	56L 561 5	NT7181F	0	PCS
U202	56L 561 5	NT7181F	0	PCS
U201	56L 561 8	THC63LVDM83R	1	PCS
U202	56L 561 8	THC63LVDM83R	1	PCS
U600	56L 562 9	GM5020BE	1	PCS
U904	56L 563 7	AIC1084-33CM	1	PCS
U905	56L 563 9	AIC1084CM	0	PCS
U901	56L 563 11	SI-8050SD	1	PCS
U905	56L 563 9A	PA1084KA	1	PCS
U203	56L 566 6	SI9953DY-T1	1	PCS
U906	56L 566 6	SI9953DY-T1	1	PCS
U903	56L 585 4	AIC1117-33CY	1	PCS
U902	56L 585 5	RT9164-25CG	0	PCS
U902	56L 585 5A	AP1117E25A	1	PCS
U801	56L 615 5	IS42S16100A1	1	PCS
U802	56L 615 5	IS42S16100A1	1	PCS
U803	56L 615 5	IS42S16100A1	1	PCS
U302	56L1133 16	24LC21A/SN	1	PCS
U301	56L1133 20	AT24C02N-10SC	1	PCS
U501	56L1133 33	M24C16-MN6T	1	PCS
U301	56L1133 34	M24C02-WMN6T SMT	0	PCS
Q201	57L 417 4	PMBS3904/PHILIPS-SMT (04	1	PCS
Q501	57L 417 4	PMBS3904/PHILIPS-SMT (04	1	PCS
Q502	57L 417 4	PMBS3904/PHILIPS-SMT (04	1	PCS
Q503	57L 417 4	PMBS3904/PHILIPS-SMT (04	1	PCS

Q901	57L 417 4	PMBS3904/PHILIPS-SMT (04	1	PCS
Q902	57L 417 4	PMBS3904/PHILIPS-SMT (04	1	PCS
RP502	61L 125103 8	CHIP AR 8P4R 10KOHM +-5	1	PCS
RP503	61L 125103 8	CHIP AR 8P4R 10KOHM +-5	1	PCS
RP506	61L 125103 8	CHIP AR 8P4R 10KOHM +-5	1	PCS
RP507	61L 125103 8	CHIP AR 8P4R 10KOHM +-5	1	PCS
RP801	61L 125103 8	CHIP AR 8P4R 10KOHM +-5	1	PCS
RP802	61L 125103 8	CHIP AR 8P4R 10KOHM +-5	1	PCS
RP803	61L 125103 8	CHIP AR 8P4R 10KOHM +-5	1	PCS
RP804	61L 125103 8	CHIP AR 8P4R 10KOHM +-5	1	PCS
RP501	61L 125330 8	CHIP AR 894R 33OHM +-5%	1	PCS
RP504	61L 125331 8	1/16W, 8P4R, 330OHM	1	PCS
RP505	61L 125331 8	1/16W, 8P4R, 330OHM	1	PCS
JP202	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
JP802	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
JP804	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
JP806	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
JP808	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
JP810	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
JP812	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
JP814	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
JP818	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
JP820	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
JP822	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
JP824	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
JP826	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
R325	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
R327	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
R329	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
R330	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
R332	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
R334	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
R527	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
R909	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
R910	61L0603000	CHIPR 0OHM +-5% 1/10W	1	PCS
R302	61L0603101	CHIPR 100 OHM +-5% 1/10	1	PCS
R303	61L0603101	CHIPR 100 OHM +-5% 1/10	1	PCS
R304	61L0603101	CHIPR 100 OHM +-5% 1/10	1	PCS
R305	61L0603101	CHIPR 100 OHM +-5% 1/10	1	PCS
R306	61L0603101	CHIPR 100 OHM +-5% 1/10	1	PCS
R307	61L0603101	CHIPR 100 OHM +-5% 1/10	1	PCS
R313	61L0603101	CHIPR 100 OHM +-5% 1/10	1	PCS
R314	61L0603101	CHIPR 100 OHM +-5% 1/10	1	PCS
R315	61L0603101	CHIPR 100 OHM +-5% 1/10	1	PCS
R316	61L0603101	CHIPR 100 OHM +-5% 1/10	1	PCS
R319	61L0603101	CHIPR 100 OHM +-5% 1/10	1	PCS

R320	61L0603101	CHIPR 100 OHM +-5% 1/10	1	PCS
R323	61L0603101	CHIPR 100 OHM +-5% 1/10	1	PCS
R337	61L0603102	CHIPR 1K OHM +-5% 1/10W	1	PCS
R521	61L0603102	CHIPR 1K OHM +-5% 1/10W	1	PCS
R601	61L0603102	CHIPR 1K OHM +-5% 1/10W	1	PCS
JP801	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
JP803	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
JP805	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
JP807	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
JP809	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
JP815	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
JP817	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
JP819	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
JP821	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
JP825	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
JP827	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R201	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R301	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R326	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R338	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R501	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R502	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R503	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R504	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R509	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R510	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R514	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R515	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R516	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R519	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R532	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R603	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R904	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R905	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R906	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R902	61L0603151	CHIPR 150 OHM +-5% 1/10	1	PCS
R903	61L0603151	CHIPR 150 OHM +-5% 1/10	1	PCS
R531	61L0603221	CHIPR 220 OHM+-5% 1/10W	1	PCS
R505	61L0603330	CHIPR 33 OHM +-5% 1/10W	1	PCS
R506	61L0603330	CHIPR 33 OHM +-5% 1/10W	1	PCS
R507	61L0603470	CHIPR 47 OHM +-5% 1/10W	1	PCS
R508	61L0603470	CHIPR 47 OHM +-5% 1/10W	1	PCS
R202	61L0603472	CHIPR 4.7K OHM +-5% 1/1	1	PCS
R520	61L0603472	CHIPR 4.7K OHM +-5% 1/1	1	PCS
R907	61L0603472	CHIPR 4.7K OHM +-5% 1/1	1	PCS
R311	61L0603473	CHIP 47K OHM 1/10W	1	PCS

R312	61L0603473	CHIP 47K OHM 1/10W	1	PCS
R321	61L0603473	CHIP 47K OHM 1/10W	1	PCS
R322	61L0603473	CHIP 47K OHM 1/10W	1	PCS
R317	61L0603511	CHIPR 510 OHM+-5% 1/10W	1	PCS
R318	61L0603511	CHIPR 510 OHM+-5% 1/10W	1	PCS
R522	61L0603621	CHIPR 620 OHM+-5% 1/10W	1	PCS
R308	61L0603750	CHIPR 75 OHM+-5% 1/10W	1	PCS
R309	61L0603750	CHIPR 75 OHM+-5% 1/10W	1	PCS
R310	61L0603750	CHIPR 75 OHM+-5% 1/10W	1	PCS
R801	61L0603750	CHIPR 75 OHM+-5% 1/10W	1	PCS
C312	65L0603101 32	100PF +-10% 50V X7R	1	PCS
C313	65L0603101 32	100PF +-10% 50V X7R	1	PCS
C514	65L0603101 32	100PF +-10% 50V X7R	1	PCS
C515	65L0603101 32	100PF +-10% 50V X7R	1	PCS
C220	65L0603102 32	1000PF +-10% 50V X7R	1	PCS
C221	65L0603102 32	1000PF +-10% 50V X7R	1	PCS
C311	65L0603102 32	1000PF +-10% 50V X7R	1	PCS
C522	65L0603102 32	1000PF +-10% 50V X7R	1	PCS
C523	65L0603102 32	1000PF +-10% 50V X7R	1	PCS
C927	65L0603102 32	1000PF +-10% 50V X7R	1	PCS
C928	65L0603102 32	1000PF +-10% 50V X7R	1	PCS
C301	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C302	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C303	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C304	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C305	65L0603103 32	0.01UF+-10% 50V X7R	1	PCS
C306	65L0603103 32	0.01UF+-10% 50V 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
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
C211	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
C215	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C216	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C218	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C307	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C308	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C314	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C502	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C509	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS

C649	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C650	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C651	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C652	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C653	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C654	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C655	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C656	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C658	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C659	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C660	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C661	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C662	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C663	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C664	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C665	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C802	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C803	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C804	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C805	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C806	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C807	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C809	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C810	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C811	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C812	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C813	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C814	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C816	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C817	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C818	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C819	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C820	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C821	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C902	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C903	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C906	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C907	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C909	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C911	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C913	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C915	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C917	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C919	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C921	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C923	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS

C924	65L0603104 12	0.1UF +-10% 16V X7R	1	PCS
C503	65L0603220 31	CHIP 22PF 50V NPO	1	PCS
C504	65L0603220 31	CHIP 22PF 50V NPO	1	PCS
C671	65L0603220 31	CHIP 22PF 50V NPO	1	PCS
C672	65L0603220 31	CHIP 22PF 50V NPO	1	PCS
C309	65L0603470 31	CHIP 47PF 50V NPO	1	PCS
C310	65L0603470 31	CHIP 47PF 50V NPO	1	PCS
C822	65L0603470 31	CHIP 47PF 50V NPO	1	PCS
CP501	65L600M102 8T	1000PF+-20% 50V 8P X7R	1	PCS
CP502	65L600M102 8T	1000PF+-20% 50V 8P X7R	1	PCS
C201	67L 312101 3	SMD 100UF +-20% 16V	1	PCS
C219	67L 312101 3	SMD 100UF +-20% 16V	1	PCS
C510	67L 312101 3	SMD 100UF +-20% 16V	1	PCS
C908	67L 312101 3	SMD 100UF +-20% 16V	1	PCS
C910	67L 312101 3	SMD 100UF +-20% 16V	1	PCS
C912	67L 312101 3	SMD 100UF +-20% 16V	1	PCS
C914	67L 312101 3	SMD 100UF +-20% 16V	1	PCS
C916	67L 312101 3	SMD 100UF +-20% 16V	1	PCS
C918	67L 312101 3	SMD 100UF +-20% 16V	1	PCS
C920	67L 312101 3	SMD 100UF +-20% 16V	1	PCS
C207	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C214	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C217	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C501	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C505	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C508	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C619	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C620	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C666	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C667	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C668	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C801	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C808	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C815	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
C926	67L 312220 3	SMD 22UF +-20% 16V	1	PCS
L201	71L 57G601	TI3216JIG601-T17A	1	PCS
L206	71L 57G601	TI3216JIG601-T17A	1	PCS
L801	71L 57G601	TI3216JIG601-T17A	1	PCS
L902	71L 57G601	TI3216JIG601-T17A	1	PCS
L903	71L 57G601	TI3216JIG601-T17A	1	PCS
L904	71L 57G601	TI3216JIG601-T17A	1	PCS
L905	71L 57G601	TI3216JIG601-T17A	1	PCS
L201	71L 57G601 N	CHIP BEAD	0	PCS
L206	71L 57G601 N	CHIP BEAD	0	PCS
L801	71L 57G601 N	CHIP BEAD	0	PCS
L902	71L 57G601 N	CHIP BEAD	0	PCS

L903	71L 57G601 N	CHIP BEAD	0	PCS
L904	71L 57G601 N	CHIP BEAD	0	PCS
L905	71L 57G601 N	CHIP BEAD	0	PCS
L202	71L 59C121 B	FCM1608C-121T03 SMD	1	PCS
L203	71L 59C121 B	FCM1608C-121T03 SMD	1	PCS
L204	71L 59C121 B	FCM1608C-121T03 SMD	1	PCS
L205	71L 59C121 B	FCM1608C-121T03 SMD	1	PCS
U502	87L 202 44	PLCC SMT CONN PD41C-441	1	PCS
D303	93L 39147	TZMC5V6-GS08	1	PCS
D304	93L 39147	TZMC5V6-GS08	1	PCS
D305	93L 39147	TZMC5V6-GS08	1	PCS
D306	93L 39147	TZMC5V6-GS08	1	PCS
D307	93L 39147	TZMC5V6-GS08	1	PCS
D308	93L 39147	TZMC5V6-GS08	1	PCS
D309	93L 39147	TZMC5V6-GS08	1	PCS
D901	93L 60211	SMB340 BY FULL POWER	1	PCS
D301	93L 60220	BAT54C-GS08	0	PCS
D302	93L 60220	BAT54C-GS08	0	PCS
D301	93L 60230	BAT54C (L43)	1	PCS
D302	93L 60230	BAT54C (L43)	1	PCS
D501	93L 6432V	LL4148-GS08	1	PCS
D310	93L 6433P	BAV99	1	PCS
D311	93L 6433P	BAV99	1	PCS
D312	93L 6433P	BAV99	1	PCS
	715L 974 1 S	LCD 19"SANGSUNG PANEL M	1	PCS
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PARENT	NO:INPC9425A4	DC TOAC INV OF SAMSUNG 19		
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	INPC9425A4SMT	DC TOAC INV OF SAMSUNG	1	PCS
CON1	33L800912G H	2*6 PIN DUAL ROW RIGHT	1	PCS
CON2	33L8021 2D E	WAFER	0	PCS
CON3	33L8021 2D E	WAFER	0	PCS
CON4	33L8021 2D E	WAFER	0	PCS
CON5	33L8021 2D E	WAFER	0	PCS
CON2	33L8021 2D U	CONN.2P DIP R/A LM401-0	0	PCS
CON3	33L8021 2D U	CONN.2P DIP R/A LM401-0	0	PCS
CON4	33L8021 2D U	CONN.2P DIP R/A LM401-0	0	PCS
CON5	33L8021 2D U	CONN.2P DIP R/A LM401-0	0	PCS
CON2	33L8021 2D AC	CONN.2P R/A 87210-0236	1	PCS
CON3	33L8021 2D AC	CONN.2P R/A 87210-0236	1	PCS
CON4	33L8021 2D AC	CONN.2P R/A 87210-0236	1	PCS
CON5	33L8021 2D AC	CONN.2P R/A 87210-0236	1	PCS
LABEL	40L 45762412B	CBPC LABEL	1.03	PCS
	51L 6 4500	RTV 胶	0	G
	51L 6 4502	RTV 胶	0	G
	51L 6 4503	RTV 胶	1	G

	52L6025 11707	绝缘片	1	PCS
	52L6025 11708	绝缘片	1	PCS
C19	64L179J1841AT	MKT CAP. 0.18UF+-5% 100	1	PCS
C5	64L179J1841AT	MKT CAP. 0.18UF+-5% 100	1	PCS
C20	65L 3J2206ET	22PF 5% 3KV TDK	1	PCS
C21	65L 3J2206ET	22PF 5% 3KV TDK	1	PCS
C6	65L 3J2206ET	22PF 5% 3KV TDK	1	PCS
C7	65L 3J2206ET	22PF 5% 3KV TDK	1	PCS
C1	67L215C151 4H	LOW ESR 150UF 25V 8*7MM	1	PCS
C2	67L215C151 4H	LOW ESR 150UF 25V 8*7MM	1	PCS
L1	73L 253138 H	CHOKE 150uH 1.5AH	1	PCS
L2	73L 253138 H	CHOKE 150uH 1.5AH	1	PCS
L1	73L 253138 S	CHOKE 150UH 1.5A TC	0	PCS
L2	73L 253138 S	CHOKE 150UH 1.5A TC	0	PCS
L1	73L 253505 W	CHOKE 150UH 1.5A WH	0	PCS
L2	73L 253505 W	CHOKE 150UH 1.5A WH	0	PCS
T1	80LL19T500 W1	TRANS EPC19 WEI HWA	1	PCS
T2	80LL19T500 W1	TRANS EPC19 WEI HWA	1	PCS
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PARENT	NO:INPC9425A4SMT	DC TOAC INV OF SAMSUNG 19		
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Q5	56L 566 10	SI4431DY-T1-SMT	0	PCS
Q8	56L 566 10	SI4431DY-T1-SMT	0	PCS
IC1	56L 622 1	BA9741F-SMT	1	PCS
Q3	57L 417 4	PMBS3904/PHILIPS-SMT (04	1	PCS
Q9	57L 417 4	PMBS3904/PHILIPS-SMT (04	1	PCS
Q10	57L 417 6	PMBS3906/PHILIPS-SMT (06	1	PCS
Q4	57L 417 6	PMBS3906/PHILIPS-SMT (06	1	PCS
Q2	57L 760 1	FN1L4L	0	PCS
Q1	57L 760 2	FA1L4L	0	PCS
Q2	57L 760 4	DTA144WKA BY ROHM SMT (7	1	PCS
Q1	57L 760 5	DTC144WKA BY ROHM SMT (8	1	PCS
Q11	57L 761 2	2SC5706-TL-SMT	1	PCS
Q12	57L 761 2	2SC5706-TL-SMT	1	PCS
Q6	57L 761 2	2SC5706-TL-SMT	1	PCS
Q7	57L 761 2	2SC5706-TL-SMT	1	PCS
Q5	57L 763 3	AO4411 SO-8 BY AOS SMT	1	PCS
Q8	57L 763 3	AO4411 SO-8 BY AOS SMT	1	PCS
R17	61L0603102	CHIPR 1K OHM +-5% 1/10W	1	PCS
R8	61L0603102	CHIPR 1K OHM +-5% 1/10W	1	PCS
R7	61L0603103	CHIPR 10K OHM +-5% 1/10	1	PCS
R39	61L0603104	CHIPR 100K OHM +-5% 1/1	1	PCS
R12	61L0603123	CHIP 12K OHM 1/10W	1	PCS
R16	61L0603123	CHIP 12K OHM 1/10W	1	PCS
R18	61L0603123	CHIP 12K OHM 1/10W	1	PCS
R35	61L0603123	CHIP 12K OHM 1/10W	1	PCS

R20	61L0603153	CHIPR 15KOHM+-5% 1/10W	1	PCS
R22	61L0603153	CHIPR 15KOHM+-5% 1/10W	1	PCS
R30	61L0603183	CHIP 18K OHM 1/10W	1	PCS
R4	61L0603183	CHIP 18K OHM 1/10W	1	PCS
R2	61L0603221	CHIPR 220 OHM+-5% 1/10W	1	PCS
R28	61L0603221	CHIPR 220 OHM+-5% 1/10W	1	PCS
R1	61L0603392	CHIP 3.9K OHM 1/10W	1	PCS
R27	61L0603392	CHIP 3.9K OHM 1/10W	1	PCS
R29	61L0603392	CHIP 3.9K OHM 1/10W	1	PCS
R3	61L0603392	CHIP 3.9K OHM 1/10W	1	PCS
R10	61L0603471	CHIPR 470 OHM+-5% 1/10W	1	PCS
R14	61L0603471	CHIPR 470 OHM+-5% 1/10W	1	PCS
R26	61L0603471	CHIPR 470 OHM+-5% 1/10W	1	PCS
R37	61L0603471	CHIPR 470 OHM+-5% 1/10W	1	PCS
R19	61L0603473	CHIP 47K OHM 1/10W	1	PCS
R21	61L0603473	CHIP 47K OHM 1/10W	1	PCS
R23	61L0603511	CHIPR 510 OHM+-5% 1/10W	1	PCS
R9	61L0603511	CHIPR 510 OHM+-5% 1/10W	1	PCS
R11	61L0603513	CHIP 51K OHM 1/10W	1	PCS
R34	61L0603513	CHIP 51K OHM 1/10W	1	PCS
R13	61L0603561	CHIP 560 OHM 1/10W	1	PCS
R36	61L0603561	CHIP 560 OHM 1/10W	1	PCS
R25	61L0603562	CHIP 5.6K OHM 1/10W	1	PCS
R15	61L1206102	CHIP 1K OHM 5% 1/4W	1	PCS
R33	61L1206102	CHIP 1K OHM 5% 1/4W	1	PCS
R31	61L1206202	CHIP 2K 5% 1/4W	1	PCS
R32	61L1206202	CHIP 2K 5% 1/4W	1	PCS
R40	61L1206202	CHIP 2K 5% 1/4W	1	PCS
R41	61L1206202	CHIP 2K 5% 1/4W	1	PCS
R42	61L1206202	CHIP 2K 5% 1/4W	1	PCS
R43	61L1206202	CHIP 2K 5% 1/4W	1	PCS
R5	61L1206202	CHIP 2K 5% 1/4W	1	PCS
R6	61L1206202	CHIP 2K 5% 1/4W	1	PCS
C12	65L0603104 22	CAP: CER 0.1UF 10% 25V S	0	PCS
C13	65L0603104 22	CAP: CER 0.1UF 10% 25V S	0	PCS
C17	65L0603104 22	CAP: CER 0.1UF 10% 25V S	0	PCS
C12	65L0603104 32	CHIP 0.1UF 50V X7R	1	PCS
C13	65L0603104 32	CHIP 0.1UF 50V X7R	1	PCS
C17	65L0603104 32	CHIP 0.1UF 50V X7R	1	PCS
C11	65L0603105 17	1UF 16V Y5V	1	PCS
C15	65L0603105 17	1UF 16V Y5V	1	PCS
C18	65L0603105 17	1UF 16V Y5V	1	PCS
C24	65L0603105 17	1UF 16V Y5V	1	PCS
C4	65L0603105 17	1UF 16V Y5V	1	PCS
C8	65L0603105 17	1UF 16V Y5V	1	PCS
C9	65L0603105 17	1UF 16V Y5V	1	PCS

C10	65L0603474 17	CHIP CAP.CER 0.47UF -20	1	PCS
C23	65L0603474 17	CHIP CAP.CER 0.47UF -20	1	PCS
C16	65L0805102 32	CHIP 1000P 50VX7R 0805	1	PCS
C3	65L0805104 22	0.1UF +-10% 25V X7R 080	0	PCS
C3	65L0805104 32	CHIP 0.1UF 50V X7R	1	PCS
C14	67L 312229 7	SMD 2.2UF +-20% 50V	1	PCS
D7	93L 6432U	MLL4148 SMD	0	PCS
D8	93L 6432U	MLL4148 SMD	0	PCS
D7	93L 6432V	LL4148-GS08	1	PCS
D8	93L 6432V	LL4148-GS08	1	PCS
D5	93L 6433G	BAV99-SMT	0	PCS
D6	93L 6433G	BAV99-SMT	0	PCS
D5	93L 6433P	BAV99	1	PCS
D6	93L 6433P	BAV99	1	PCS
D3	93L 39S 1 T	TZMC11-GS08	0	PCS
D4	93L 39S 1 T	TZMC11-GS08	0	PCS
D3	93L 39S 3 T	BZT52-C11	1	PCS
D4	93L 39S 3 T	BZT52-C11	1	PCS
D3	93L 39S 8 T	ZD RLZ11B ROHM	0	PCS
D4	93L 39S 8 T	ZD RLZ11B ROHM	0	PCS
D1	93L2004 1	SMAL240LVXRO-SMT	0	PCS
D2	93L2004 1	SMAL240LVXRO-SMT	0	PCS
D1	93L2004 2A	SM240A	0	PCS
D2	93L2004 2A	SM240A	0	PCS
D1	93L3004 1	SMAL340XXXRO 3A 40V SMA	0	PCS
D2	93L3004 1	SMAL340XXXRO 3A 40V SMA	0	PCS
D1	93L3004 2	SR34 PAN JIT	1	PCS
D2	93L3004 2	SR34 PAN JIT	1	PCS
PCB	715L1044 1B	INVERTER PCB	1	PCS
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PARENT	NO: KEPC991KA1	KEY BOARD		
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	AIK991KA1SMT	KEY BOARD FOR AI	1	PCS
	44L3231 20	EVA (50X10X4.5T)	1	PCS
	95L8014 9 25	HARNESS	1	PCS
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PARENT	NO: AIK991KA1SMT	KEY BOARD FOR AI		
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SW101	77L 604 1 CJ	SWITCH	0	PCS
SW102	77L 604 1 CJ	SWITCH	0	PCS
SW103	77L 604 1 CJ	SWITCH	0	PCS
SW104	77L 604 1 CJ	SWITCH	0	PCS
SW105	77L 604 1 CJ	SWITCH	0	PCS
SW101	77L 604 1 TO	CHIP TACT SW	1	PCS
SW102	77L 604 1 TO	CHIP TACT SW	1	PCS
SW103	77L 604 1 TO	CHIP TACT SW	1	PCS

SW104	77L 604 1 TO	CHIP TACT SW	1	PCS
SW105	77L 604 1 TO	CHIP TACT SW	1	PCS
DP101	81L 14 2 BH	BL-HY0G034B-TR	1	PCS
	715L 981 1	"L901 19" LCD KEY BOARD	1	PCS
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PARENT	NO: 705L990KB34005	LCD 后壳 ASS'Y		
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	33L4499 1	LENS	1	PCS
	34L1019DD5 2L	FRONT PANEL	1	PCS
	34L1023 U2 L	STAND B	1	PCS
	34L1024 U2 L	BASE	1	PCS
	34L1025 U2 L	STAND-F	1	PCS
	37L 461 1	"19""LCD HINGE"	1	PCS
	Q1L 340 12128	SCREW	4	PCS
	Q1L 930 16120	SCREW (3X16)	4	PCS
	W33L4497 D5 L	SIDE COVER (KEY)	1	PCS
	W33L4498 D5 L	SIDE COVER	1	PCS

