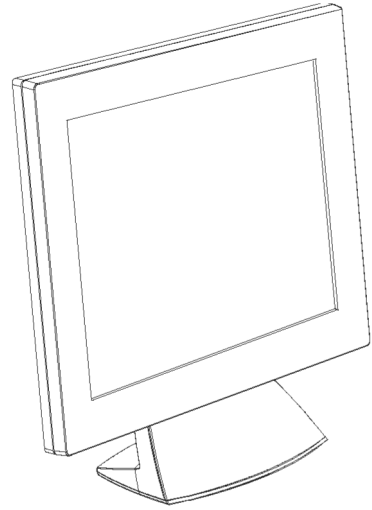
AOC LM800

18.1 inch TFT LCD Monitor

Service Manual

by Envision Peripherals, Inc.
www.aocmonitor.com

monitor-man



1. SPECIFICATIONS FOR LCD MONITOR

1-1 General specifications

1. LCD-PANEL:

Active display area	18.1 inches diagonal
Pixel pitch	0.2805mm x 0.2805 mm
Pixel format	1280 x 1024 RGB vertical stripe arrangement

2. Display Color:
   8-bit, 16.7 million colors

3. External Controls :
   Power On/Off, Auto key, Left key, Right key (for 4-key)
   OSD menu Controls
   Contrast, Brightness, Focus, Clock ,H-position, V-position, Auto Level, Language, OSD Position, Recall-7800, Recall-6500, Reset, Red, Green, Blue, Selected Dos-resolution

4. Input Video Signal :
   Analog-signal 0.7Vpp
   Video signal termination impedance 75 OHM

5. Scanning Frequencies :

Horizontal:	29 KHz - 80 KHz
Vertical:	55 Hz – 75 Hz
Pixel clock:	135 MHz

6. Factory Preset Timing : 18
   User Timings : 19
   Input signal tolerance : H tolerance ± 1 K, V tolerance ± 1 Hz

7. Power Source :
   Switching Mode Power Supply
   AC 100 – 240 V, 50/60 Hz Universal Type

8. Operating Temperature : +5℃ ~ 50℃ Ambient
   Non-operating Temperature : -20℃ ~ 60℃

9. Humidity :
   Operating : 20% to 80% RH (non-condensing)
   Non Operating : 5% to 95%RH (38.7℃ maximum wet bulb temperature)

10. Weight :
    5.5 kg
11. External Connection : 15Pin D-type Connector, AC power-Cord

12. View Angle : x-axis right/left = 80, y-axis up/down = 80 ,60

13. Outside dimension : Width x Height x Thickness = 422x 449 x 215 mm

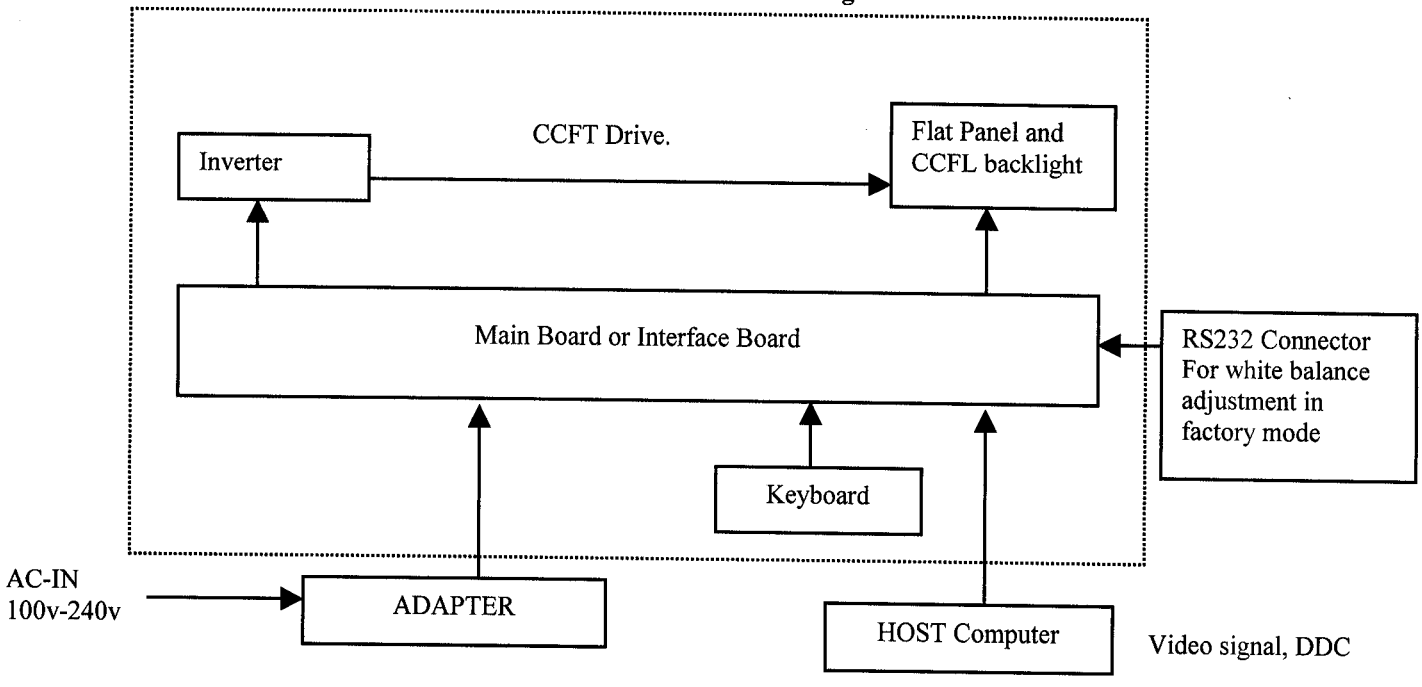
14. Plug and Play : VESA DDC1/DDC2B

15. Power saving : VESA DPMS

1-2 LCD MONITOR DESCRIPTION

The LCD MONITOR will contain an main board, an Inverter module, keyboard and External Adapter which house the flat panel control logic, brightness control logic, DDC and DC-DC conversion
The Inverter module will drive the backlight of panel .
The Adapter will provides the 12V DC-power 5 Amp to Main-board and Inverter module .

Monitor Block Diagram



1-3 Interface Connectors

(A) AC-Power Cable
(B) Video Signal Connectors and Cable
(C) 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 do not change variable resistance settings in MAIN-BOARD, they are adjusted to the most suitable value. If they are changed, it might happen LUMINANCE does not satisfy the white balance spec.
(3) Please consider that LCD backlight takes longer time to become stable of radiation characteristic in low temperature than in room temperature.
(4) Please pay attention to displaying the same pattern for very long-time. 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 0℃-40℃ without the exposure of sunlight and to keep the humidity less than 90% 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

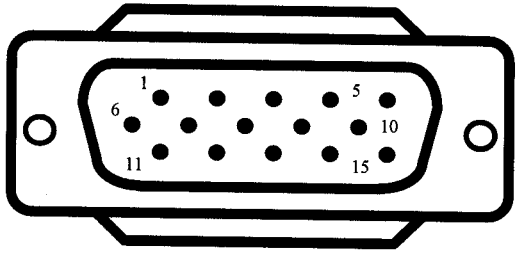
The high voltage was only generated by INVERTER module, if carelessly contacted the transformer on this module, can cause a serious shock. (the lamp voltage after stable around 600V, with lamp current around 8mA, and the lamp starting voltage was around 1500V, at Ta=25℃)

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.	GND
3.	BLUE	11.	SYNC. GND
4.	GND	12.	SDA
5.	DDC-Return	13.	HORIZ. SYNC
6.	GND-R	14.	VERT. SYNC
7.	GND-G	15.	SCL
8.	GND-B		

3. Apply power to the display by turning the power switch to the "ON" position and allow about thirty seconds for Panel warm-up. The Power-On indicator lights when the display is on.
4. 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 best picture-quality.
5. This monitor has power saving function following the VESA DPMS. Be sure to connect the signal cable to the PC.
6. If your LCD monitor requires service, it must be returned with the power cord & Adapter.

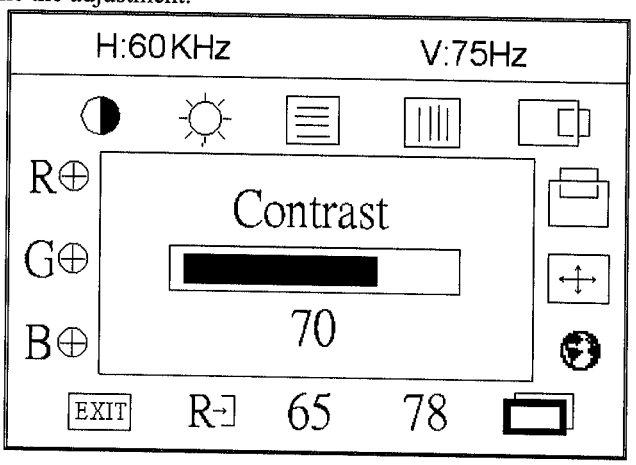
4. ADJUSTMENT

4-1 ADJUSTMENT CONDITIONS AND PRECAUTIONS

Adjustments should be undertaken only on following function : contrast, brightness focus, clock, h-position, v-position, red, green, blue since 6500 color & 7800 color.

4-2 ADJUSTMENT METHOD

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. 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 to 7800** color and **MEM. channel to 6500** color, (our 7800 parameter is x = 296 ± 10, y = 311 ± 10, Y = 180 ± 5cd/m2 and 6500 parameter is x = 313 ± 10, y = 329 ± 10, Y = 180 ± 5 cd/m^2)

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

Following is the procedure to do white-balance adjust

Press MENU button during 2 seconds along with plug in the DC-power cord will activate the factory mode, and the OSD screen will located at **left top of panel**.

I. Bias (Low luminance) adjustment :

1. Press " AUTO" button , and wait for message " Pass" ,check the Black level value on OSD should be large than 30, if less than 30 that means the offset calculation FAIL, please manual adjust the black level to value 43
2. set the contrast and brightness on OSD window to **maximal** value , RGB to "**50**"
3. adjust the **VR501** on INTERFACE board until chroma 7120 measurement reach the value Y=240 cd/m^2 ± 5 cd/m^2

II. Gain adjustment :

a. adjust 7800 color-temperature

4. Set the Contrast of OSD function to 50, Brightness to 50
5. Switch the chroma-7120 to **RGB-mode** (with press "MODE" button)
6. switch the MEM .channel to Channel 7800 (with up or down arrow on chroma 7120)
7. The lcd-indicator on chroma 7120 will show x = 296 ± 10, y = 311 ± 10, Y = 180 ± 5 cd/m^2
8. Adjust the RED on OSD window until chroma 7120 indicator reached the value R=100
9. adjust the GREEN on OSD, until chroma 7120 indicator reached G=100

10. adjust the BLUE on OSD, until chroma 7120 indicator reached B=100
11. repeat above procedure (item 8,9,10) until chroma 7120 RGB value meet the tolerance =100± 2
12. Press 78 on OSD window to save the adjustment result
13. switch the chroma-7120 to **xyY mode** With press "MODE" button

b. adjust 6500 color-temperature

1 Set the Contrast of OSD function to 50, Brightness to 50
2 Switch the chroma-7120 to **RGB-mode** (with press "MODE" button)
3 switch the MEM .channel to Channel 6500 (with up or down arrow on chroma 7120)
4 The lcd-indicator on chroma 7120 will show x = 313 ± 10, y = 329 ± 10, Y = 180 ± 5 cd/m^2
5 Adjust the RED on OSD window until chroma 7120 indicator reached the value R=100
6 adjust the GREEN on OSD, until chroma 7120 indicator reached G=100
7 adjust the BLUE on OSD, until chroma 7120 indicator reached B=100
8 repeat above procedure (item 5,6,7) until chroma 7120 RGB value meet the tolerance =100 ± 2
9 Press 65 on OSD window to save the adjustment result
10 switch the chroma-7120 to **xyY mode** With press "MODE" button

Turn the POWER-button off to on to quit from factory mode (in USER-mode, the OSD window location was placed at middle of screen)

2. Clock adjustment
Set the Chroma at pattern 63 (cross-talk pattern) or WIN98/95 shut-down 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)

3. 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 adjust 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 cross talk pattern or dot pattern , other pattern the affect is very light

4. 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 edge until all four-edges are visible at the edge of screen.

5. Auto-Level Function
Automatically Adjust Contrast & RGB to appropriate value according to INPUT RGB level

6. OSD-Position Function
there is 5 location selectable for OSD-position.

7. MULTI-LANGUAGE function
There have 5 language for selection, press "MENU" to selected and confirm , press " LEFT" or " RIGHT" to change the kind of language (English , Deutch , Francais, Espanol, Italian)

8. Reset function
Clear each old status of auto-configuration and re-do auto-configuration (for all mode)
This function also recall 7800 color-temperature , if the monitor status was in " Factory-mode" this reset function will clear Power-on counter (backlight counter) too.

9. View Power-on counter and reset the Power-on counter(if not necessary , no suggest to entry factory mode)
The Power-on counter was used to record how long the backlight of panel already working, the backlight life time was guarantee minimal 25000 hours, the maintainer can check the record only in factory mode.
Press MENU button for 2 seconds along with plug-in DC power cord will be in factory mode, and the OSD screen will located at **left top of panel** but take cautions don't press icon "78" & "65", if you press 78/65 , your white-balance data will overlap with the new-one, and you must perform the white-balance process again.
The result of counter was place at top of OSD, the maximal of record memory was 65000 hours, if exceed 65000 hours the counter will keep in 65000 hours until press " RESET" at osd-menu in factory mode.
The " RESET" function in factory mode will execute following function:
1. clear the Power-on counter to zero hours
2. clear old auto-configuration status for all mode , so the monitor will automatically re-do auto-config when change to next mode or power on-off

4-3 FRONT PANEL CONTROL KNOBS

Power button : Press to switch on or switch off the monitor.
Auto button : to perform the automatic adjustment from CLOCK, FOCUS, H/V POSITION, but no affect the color-temperature
Left/Right button : select function or do an adjustment.
MENU button : to activate the OSD window or to confirm the desired function

5. CIRCUIT-DESCRIPTION

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 , and view the Backlight counter (this counter is use to record the panel activate hours ,for convenient the maintainer to check the panel backlight life time)
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.

OSD-INDEX EXPLANATION

1. **INPUT NOT SUPPORT**:
   a. INPUT frequency out of range: H > 81kHz, v > 75Hz or H < 28kHz, v < 55Hz
   b. INPUT frequency out of VESA-spec. (out of tolerance too far)

2. **UNSUPPORT mode, try different Video-card Setting**:
   Input frequency out of tolerance, but still can catch-up by our system (if this message show, that means, this is new-user mode, AUTO-CONFIG will disable)

5-2 THE Different on MAINBOARD or other ACCESSORY when using different PANEL type

1). The **MCU software** should be change
example : for CHI-MEI panel , the MCU part-number is 56A-1125-61-M2

and the other ACCESSORY when use different panel type should be change as following:
1). The **INVERTER** module for CHI-MEI panel part-number is 79AL18-1-E
2). The **cable to Panel side** for CHI-MEI panel part number is 95A8018-30-4
3). The **D-sub cable** for CHI-MEI is 89A-174C-8AF-GLF,
4). The **Mechanical accessory** is change or adding as follow;

	CHI-MEI PANEL M180E1
MAIN-FRAME	15A5684-1-A
Panel	750ALM80-E01

5-3 SIMPLE-INTRODUCTION about chipset

1. GMZAN1 (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. M6759 (ALI- 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. 24LC21 (MicroChip IC) :
   EePROM type , 1K ROM-SIZE, for saving DDC-CONTENT.

4. 24C04 (ATMEL IC) :
   EePROM type, 4K ROM-SIZE, for saving AUTO-config data, White-balance data, and Power-key status and Back light-counter data.

5. LM2569S(NS brand switching regulator 12V to 5V with 3A load current) .

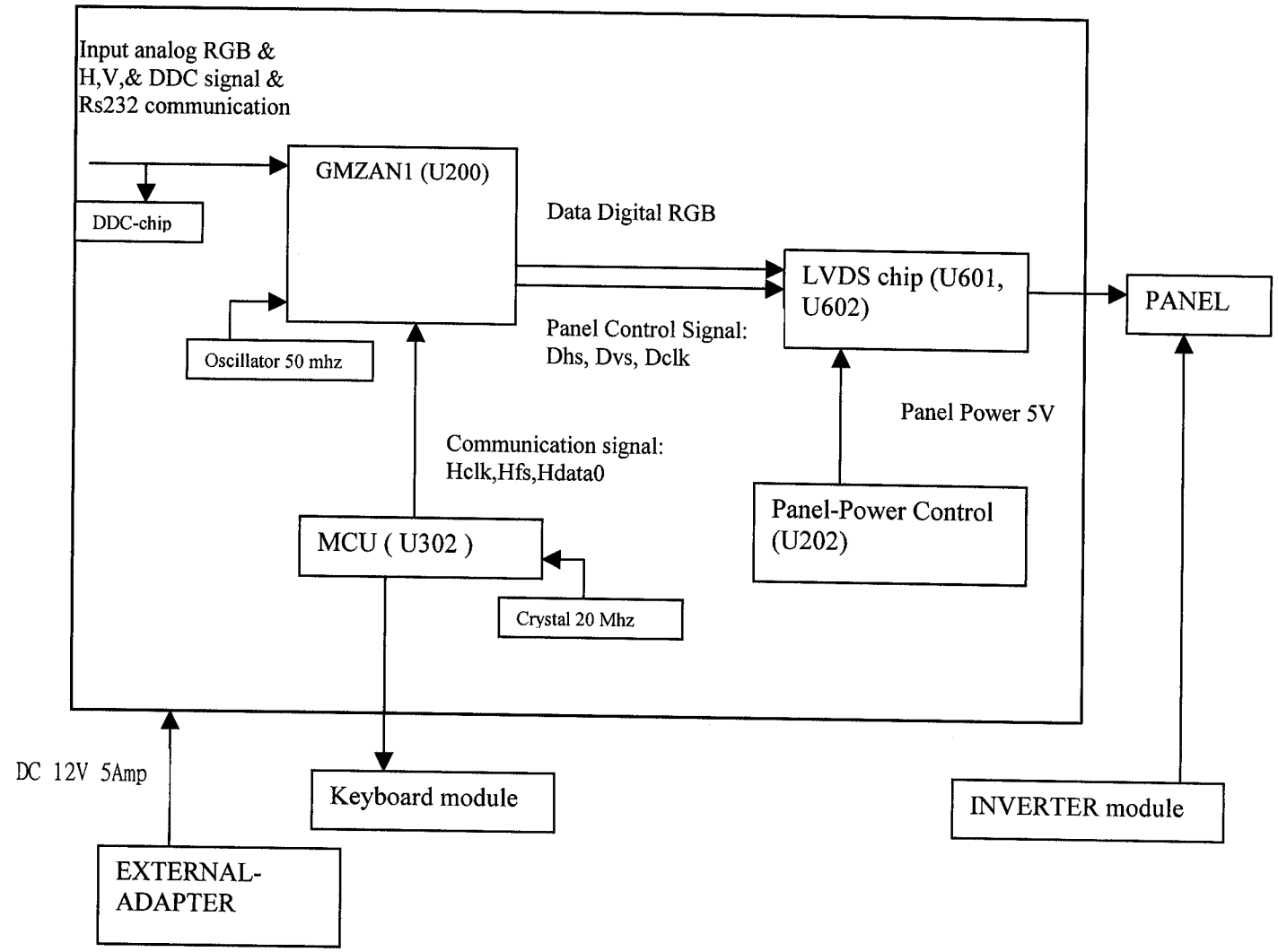
6. AIC 1084-33CM (AIC brand linear regulator 5V to 3.3V)

7. 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

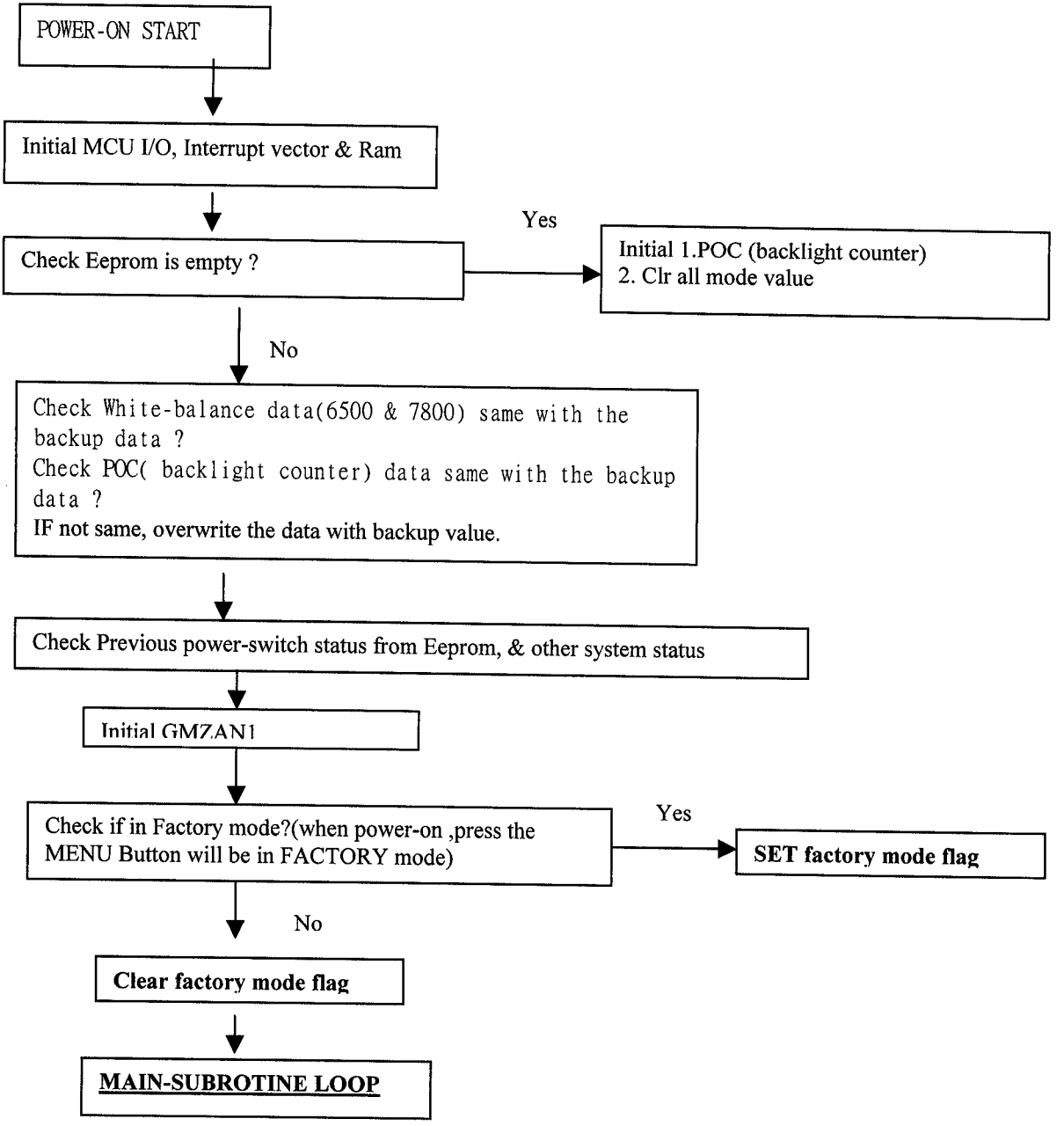
MODULE-TPYE COMPONENT :

1. ADAPTER : CONVERSION-module to convert AC 110V-240V to 12VDC, with 5.0 AMP
2. INVERTER : CONVERSION-module to convert DC 12V to High-Voltage around 1600V, with frequency 30K-80Khz, 7ma-9ma

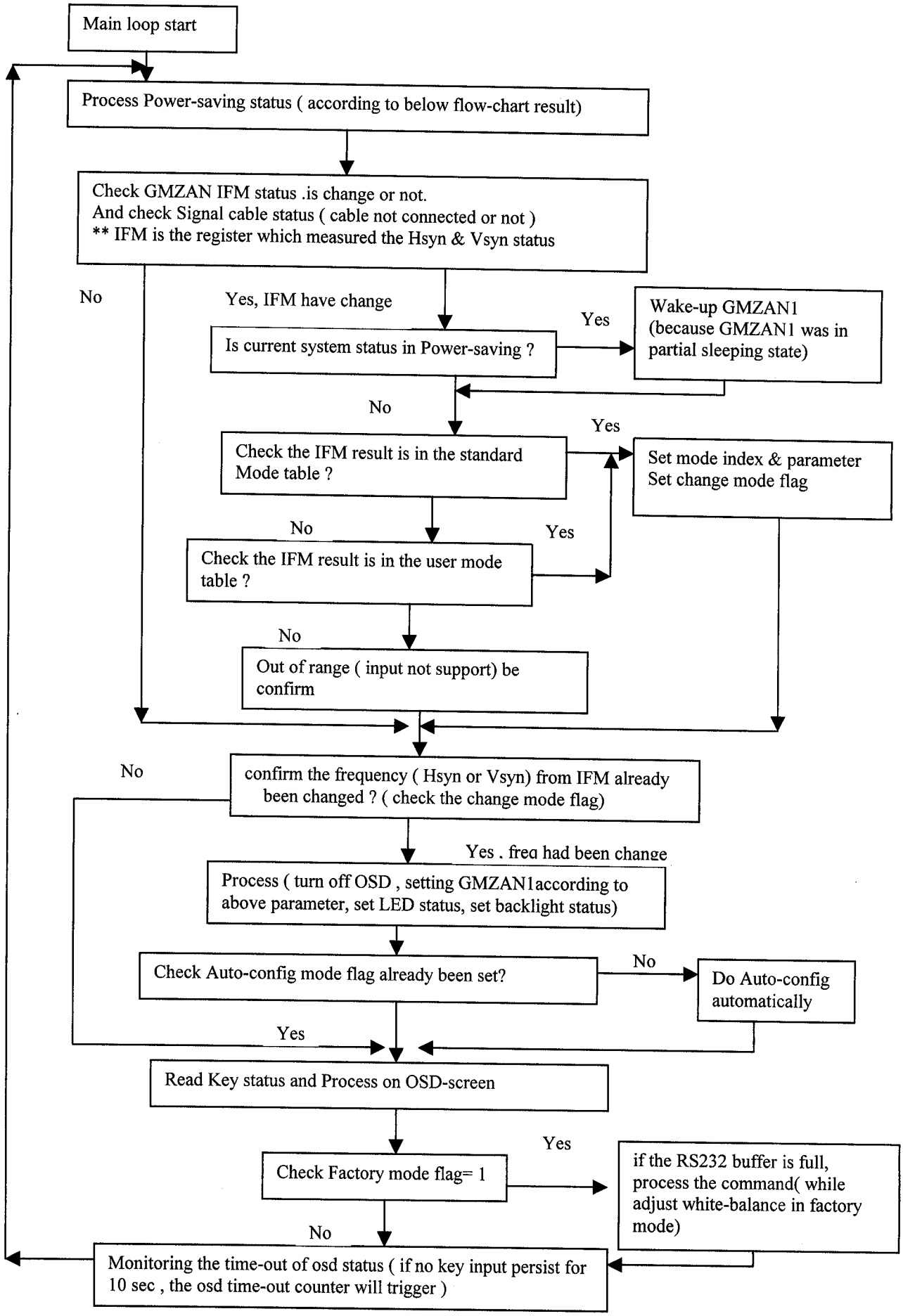
Main-board Block diagram



I. Power-On Subroutine CHART



II. MAIN SUBROTINE LOOP

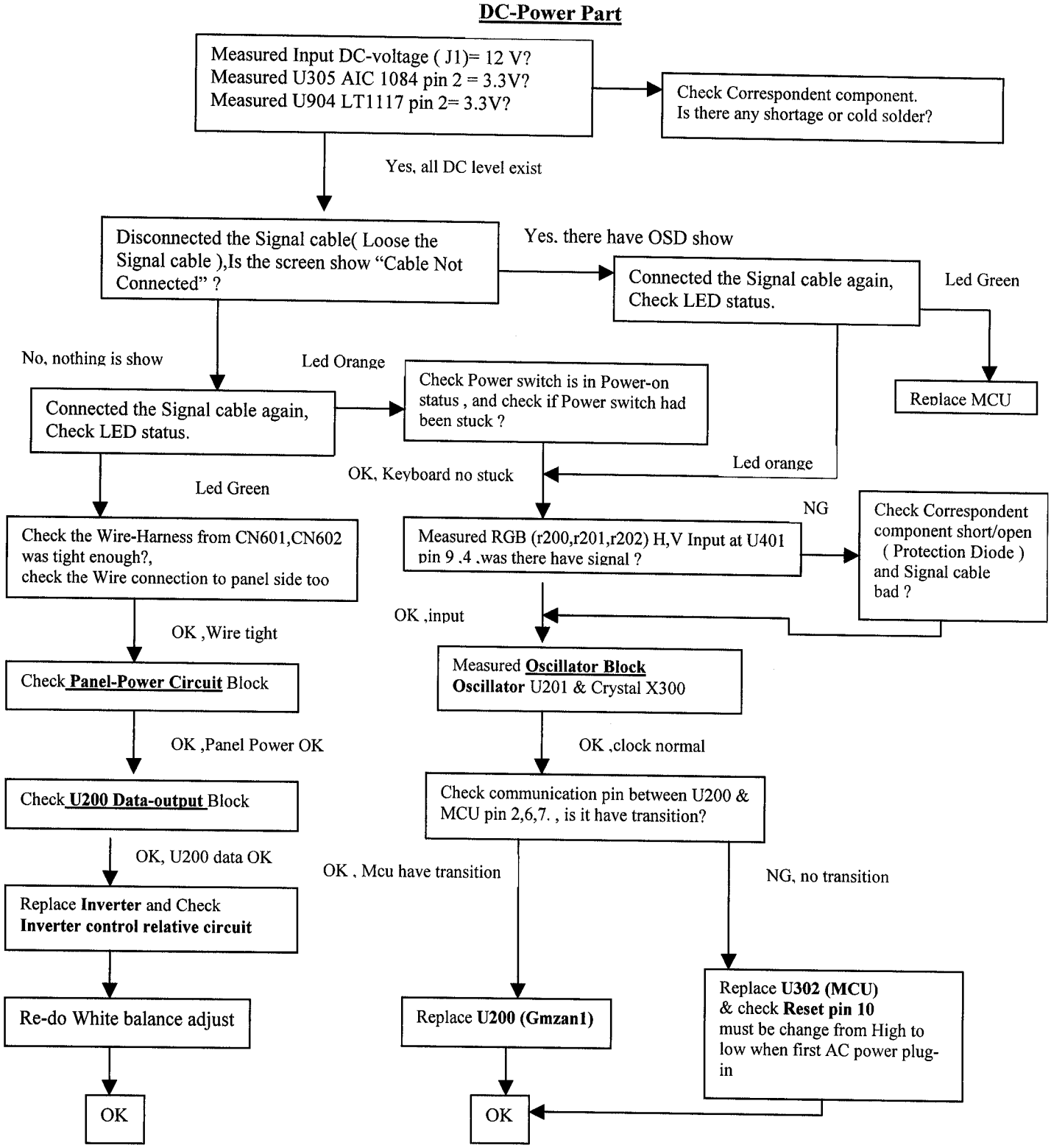


6. TROUBLE SHOOTING CHART

A). INTERFACE BOARD

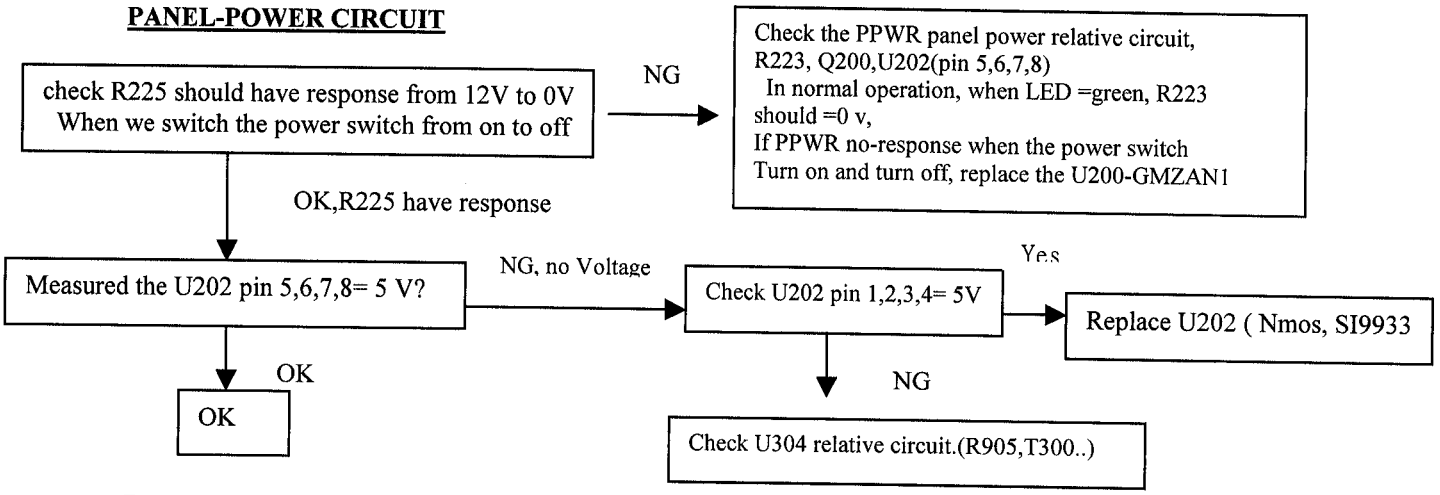
***Use the PC Win 98 white pattern, with some icon on it, and Change the Resolution to 640x480 60 Hz / 31 KHz**
****NOTICE: The free-running freq. of our system is 48 KHz / 60 Hz, so we recommend to use another resolution to do trouble shooting, this trouble shooting is proceed with 640x480 @60Hz 31Khz**

I. NO SCREEN APPEAR

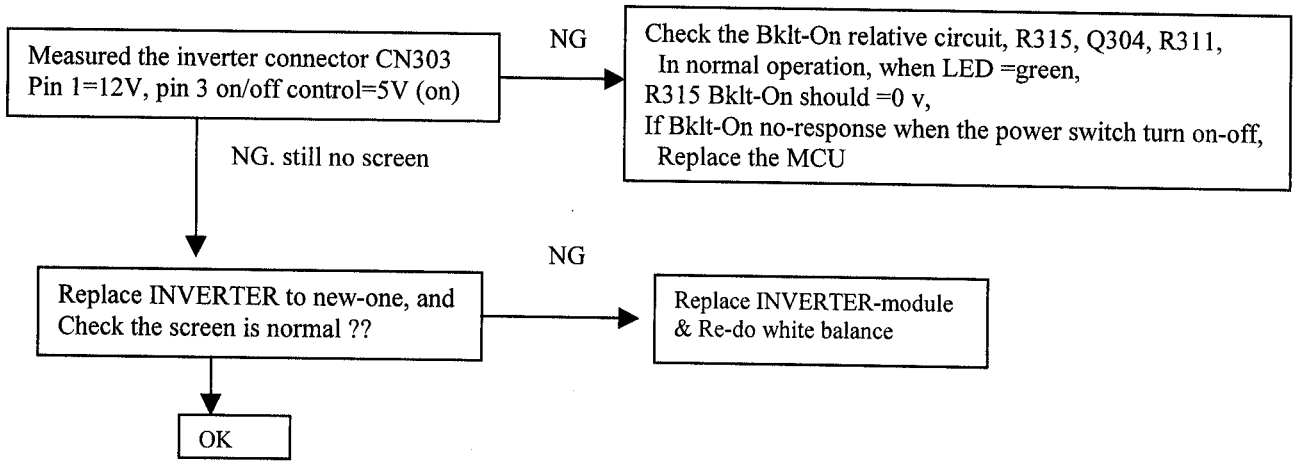


Note: 1. if Replace "**MAIN-BOARD**", Please re-do "DDC-content" programmed & "WHITE-Balance".
2. if Replace " **INVERTER**" only, Please re-do " WHITE-Balance"

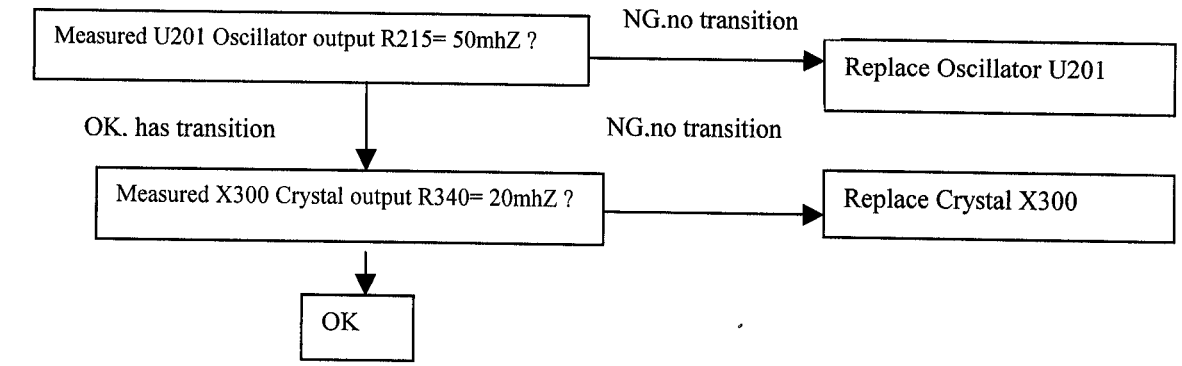
PANEL-POWER CIRCUIT



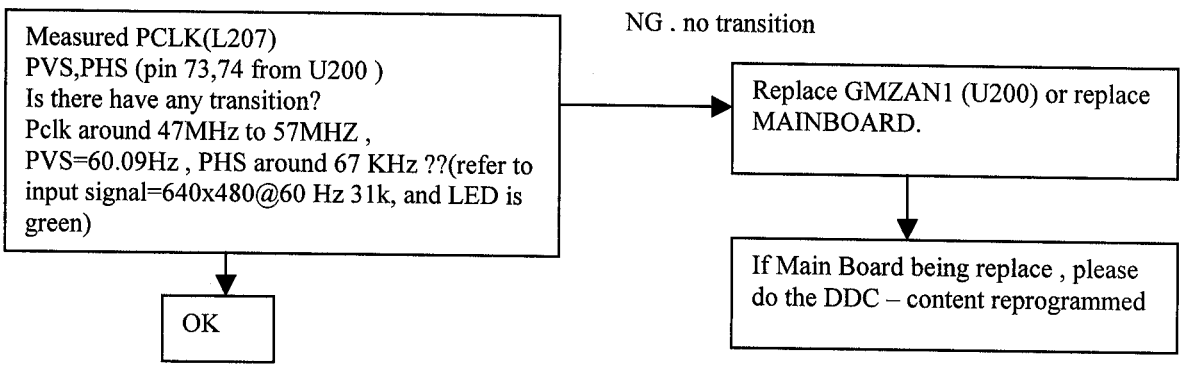
INVERTER Control Relative Circuit



OSCILLATOR BLOCK

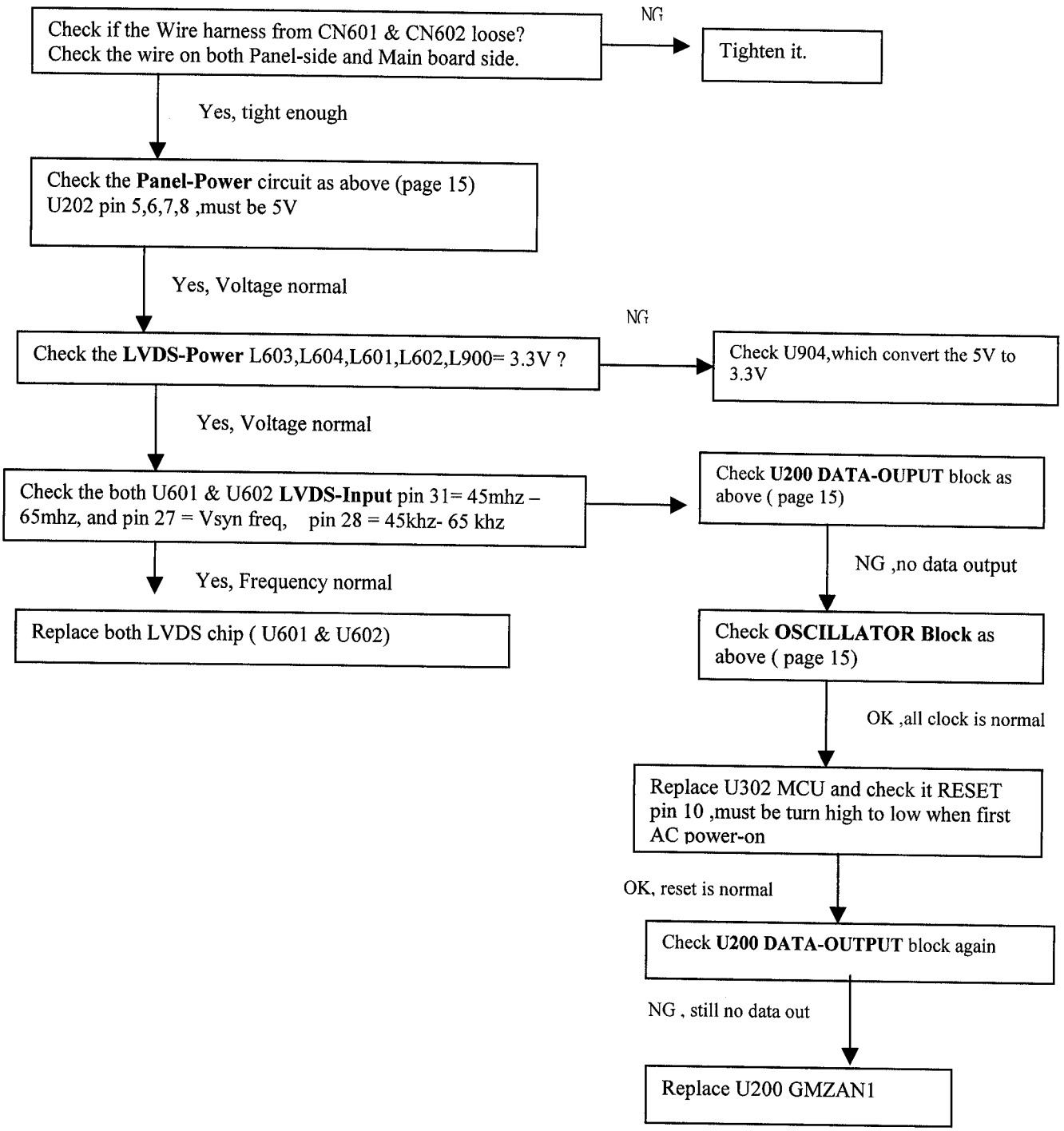


U200-DATA OUTPUT



II (a) THE SCREEN is Abnormal, stuck at white screen, OSD window can't appear, but keyboard & LED was normal operation.

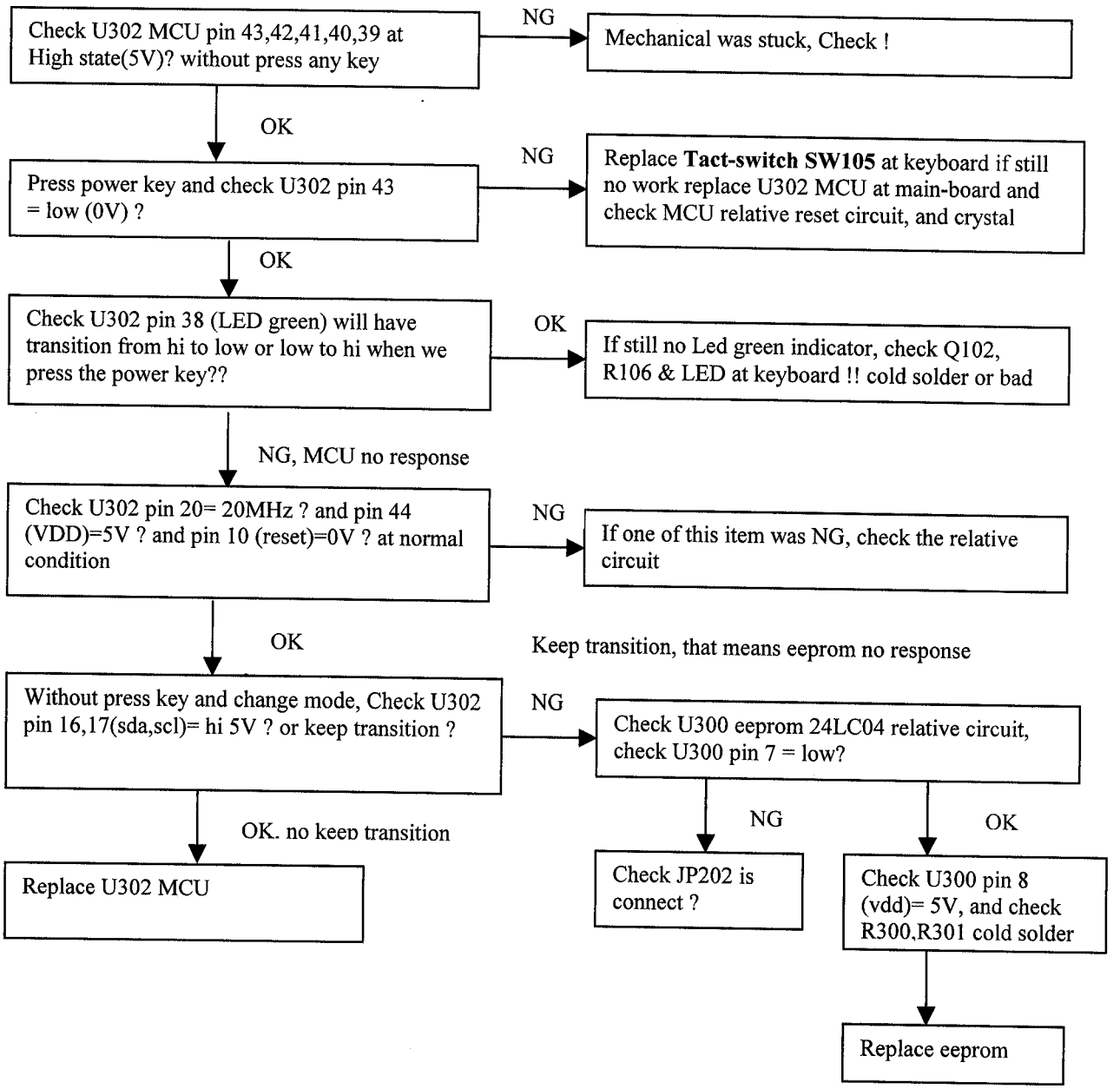
At general, this symptom is cause by missing panel data or panel power, so we must check our wire-harness, which connected to panel or the panel power controller (U202)



II. (b) The screen had the Vertical Straight Line, might be stuck in Red, Green, Blue

That symptom is cause by bad Panel issue (might be the Source IC from Panel is cold solder or open loop) so REPLACE THE PANEL TO NEW ONE.

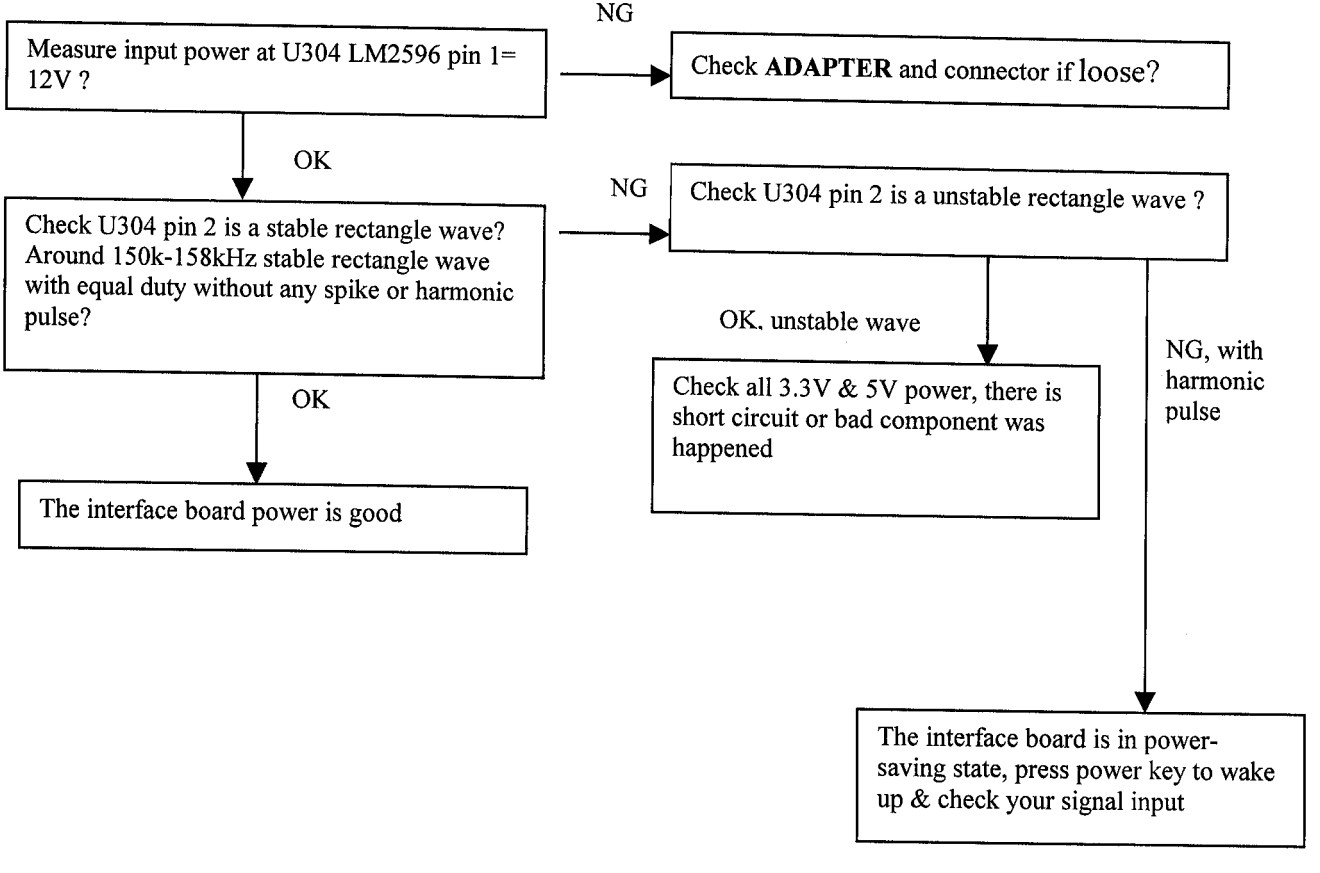
KEYBOARD BLOCK check



POWER-BLOCK check

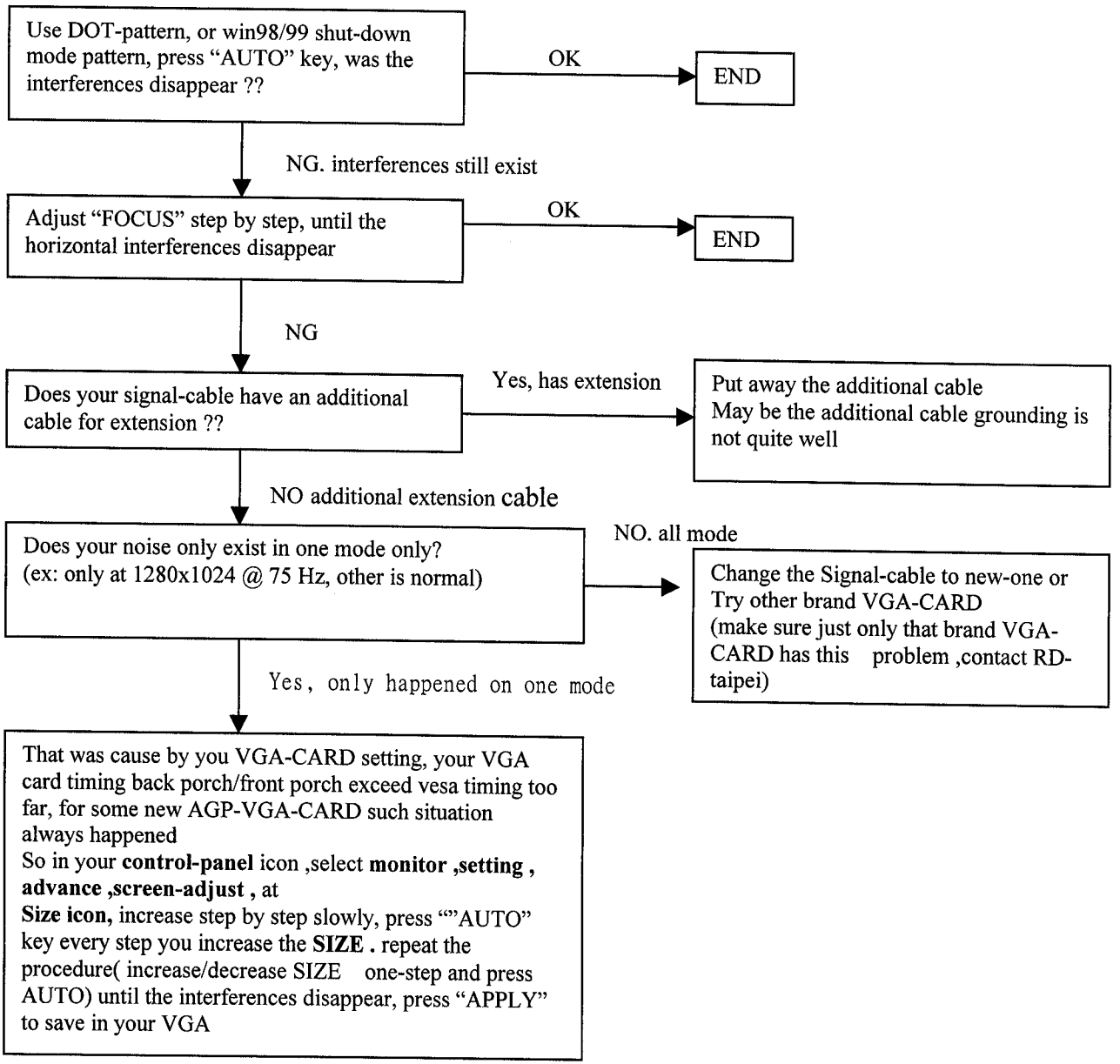
**Note: the Waveform of U304 pin 2 can determined the power situation

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, U200 **Gmzan1** was shut-down, and only U302 **MCU** still working, that means the monitor is in power saving status, all power system is working well .



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

** **NOTE:** There is so many kind of interferences, 1). One is cause by some VGA-CARD that not meet VESA spec or power grounding too bad that influence our circuit
2). Other is cause by external interferences, move the monitor far from electronic equipment. (rarely happened)



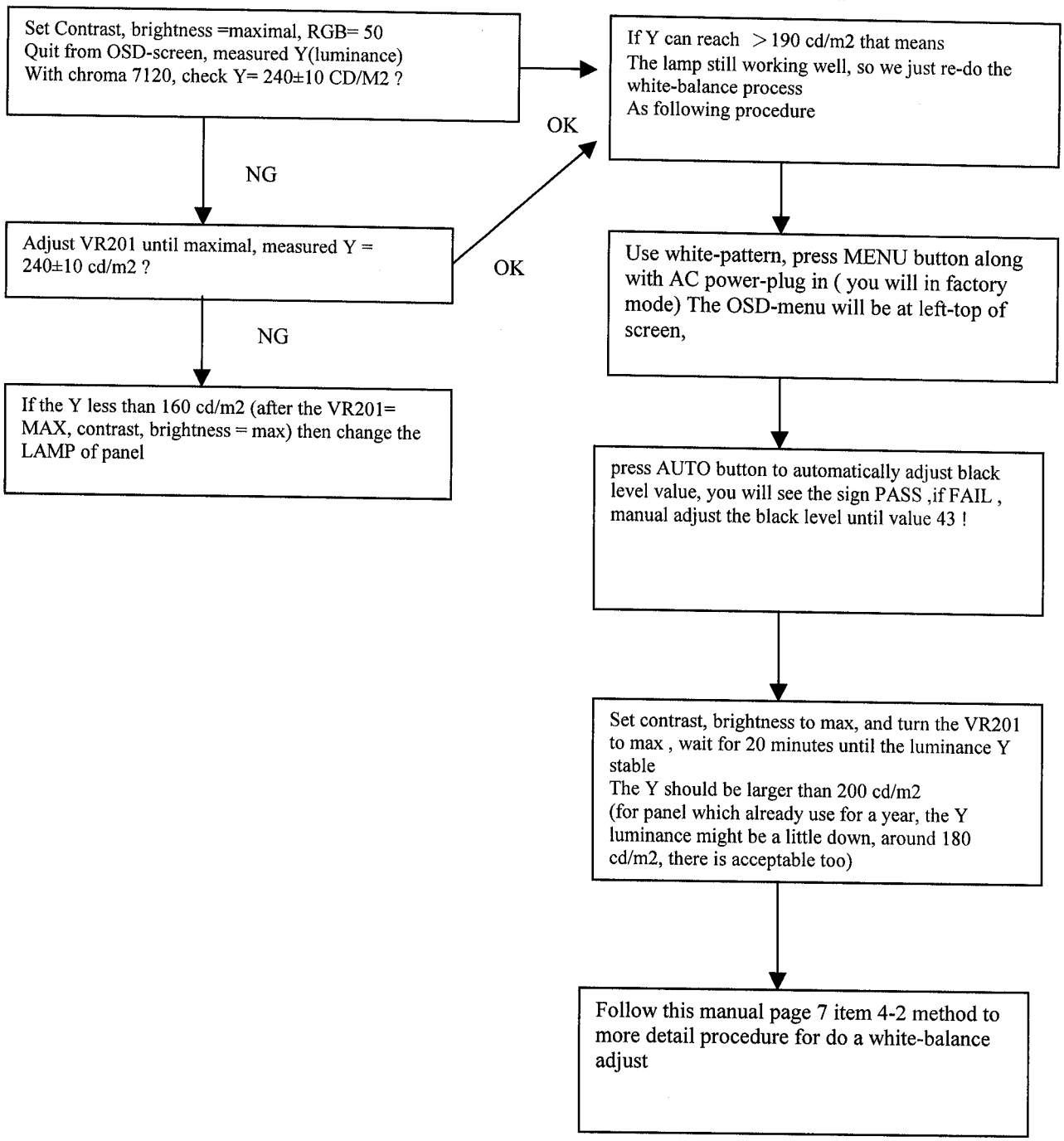
There is an interferences in **DOS MODE**

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"

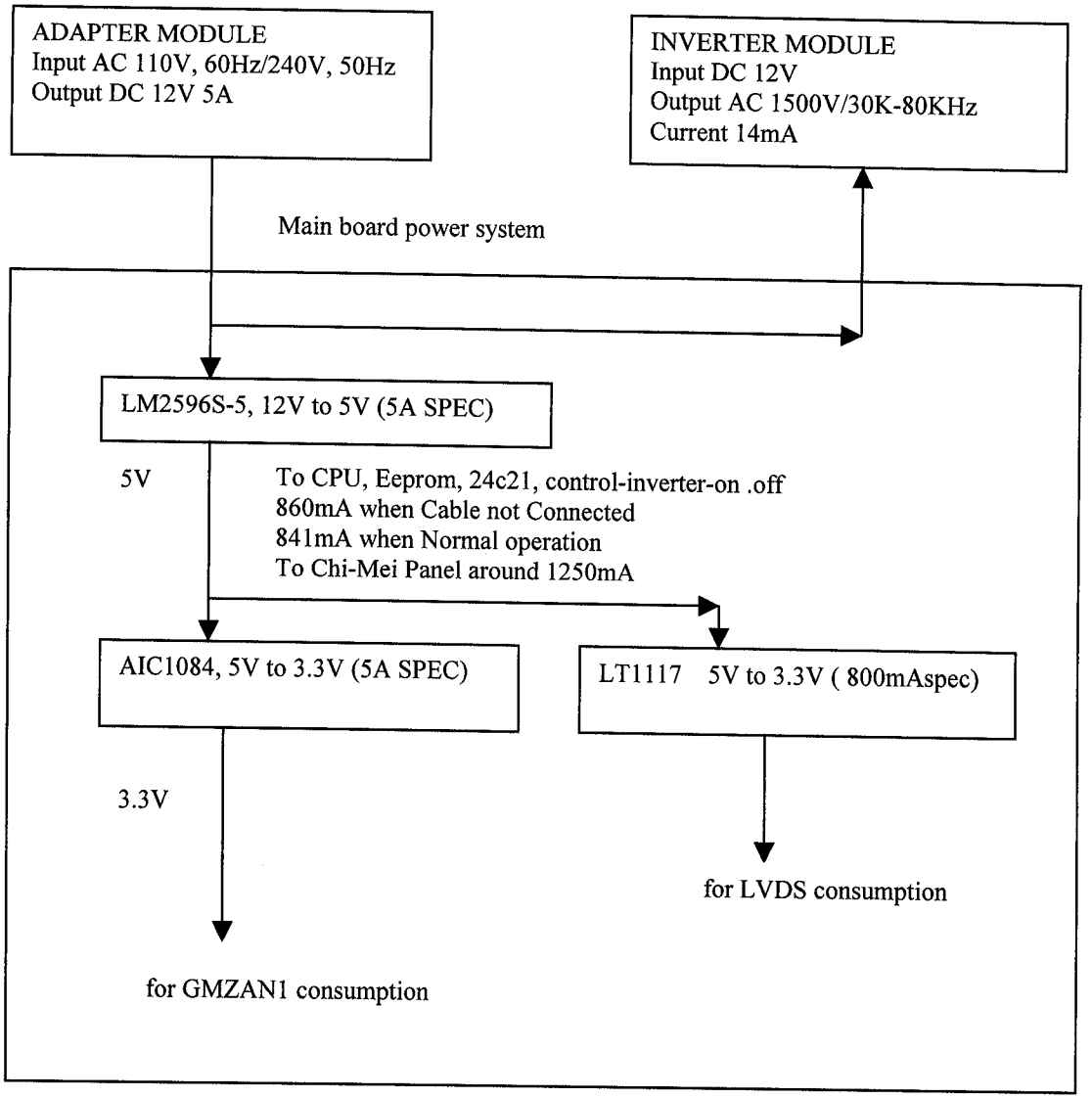
Or you can use "DOS1.EXE" which attached in your Driver disk to optimize DOS mode performance

V.THE PANEL LUMINANCE WAS DOWN

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



POWER SYSTEM AND CONSUMPTION CURRENT



B). INVERTER –MODULE SPEC

Inverter is made by PART NO.: 79AL18-1-E

I. CONNECTOR PIN ASSIGMENT:

A) CON1: INPUT

MODEL NO.: W20R-6PIN-90

PIN	SYMBOL
1	Vin
2	Vin
3	Brite ON/OFF
4	Brite ADJ
5	GND
	GND

B) CON2,CON3: OUTPUT

MODEL NO.: SM04 (4.0)B-BHS-1-TB

PIN	SYMBOL
1	HV OUTPUT
2	RETURN

C) FUNCTION SPECIFICATIONS:

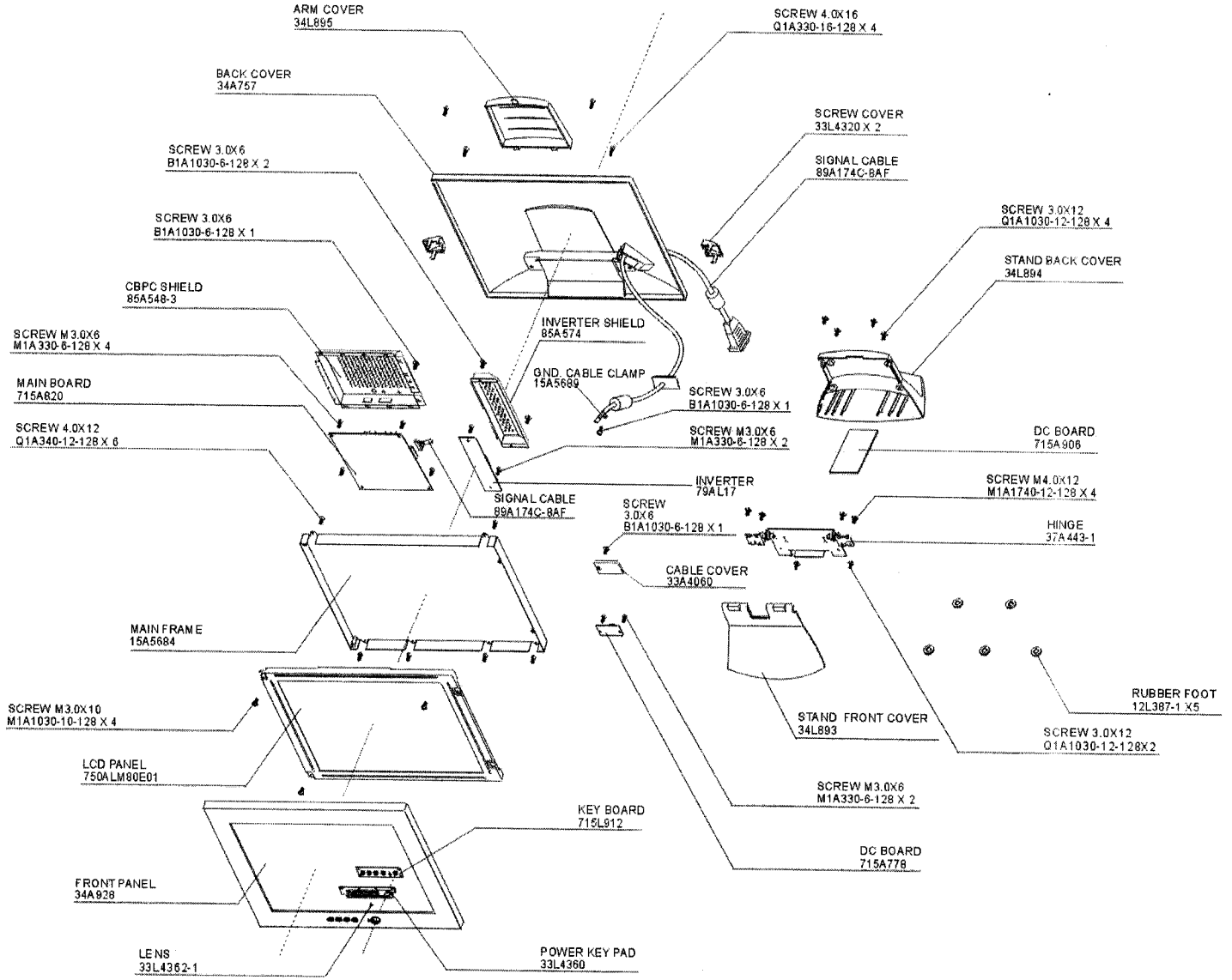
The data test with the set of EMAX, and the test circuit is as below.

INPUT Brt. ADJ=0V

PARAMETER	SYMBOL	MIN.	NOM.	MAX.	UNIT	REMARK
INPUT VOLTAGE	Vin	11	12	13	V	
INPUT CURRENT	Iin	2250	2680	3030	mA	RL=100Kohm*6 Vin=12V
LAMP FREQUENCY	FL	33	38	43	KHz	Vrmt=0V
OUTPUT CURRENT (18P)	Iout	6.4	6.9	7.4	mA	Vrmt=0V
OUTPUT CURRENT (15P)	Iout	5.5	6.0	6.5	mA	Vrmt=0V
OPEN OUTPUT VOLTAGE	Vs	1400	1570	1720	Vrms	
OUTPUT VOLTAGE	Vout	620	670	720	Vrms	Vrmt=0V

INPUT Brt. ADJ=5V

PARAMETER	SYMBOL	MIN.	NOM.	MAX.	UNIT	REMARK
INPUT VOLTAGE	Vin	11	12	13	V	
INPUT CURRENT	Iin	230	340	510	mA	RL=100Kohm*6 Vin=12V
LAMP FREQUENCY	FL	33	38	43	KHz	Vrmt=0V
OUTPUT CURRENT (18P)	Iout	1.9	2.4	2.9	mA	Vrmt=0V
OUTPUT CURRENT (15P)	Iout	1.6	2.1	2.6	mA	Vrmt=0V
OUTPUT VOLTAGE	Vout	180	230	280	Vrms	Vrmt=0V


ARM COVER
34L895
SCREW 4.0X16
Q1A330-16-128 X 4
BACK COVER
34A757
SCREW COVER
33L4320 X 2
SCREW 3.0X6
B1A1030-6-128 X 2
SIGNAL CABLE
89A174C-8AF
SCREW 3.0X6
B1A1030-6-128 X 1
SCREW 3.0X12
Q1A1030-12-128 X 4
STAND BACK COVER
34L894
CBPC SHIELD
85A548-3
INVERTER SHIELD
85A574
SCREW M3.0X6
M1A330-6-128 X 4
GND CABLE CLAMP
15A5689
MAIN BOARD
715A820
SCREW 3.0X6
B1A1030-6-128 X 1
SCREW 4.0X12
Q1A340-12-128 X 6
SCREW M3.0X6
M1A330-6-128 X 2
DC BOARD
715A906
INVERTER
79AL17
SCREW M4.0X12
M1A1740-12-128 X 4
SIGNAL CABLE
89A174C-8AF
SCREW
3.0X6
B1A1030-6-128 X 1
HINGE
37A443-1
CABLE COVER
33A4060
MAIN FRAME
15A5684
RUBBER FOOT
12L387-1 X5
SCREW M3.0X10
M1A1030-10-128 X 4
STAND FRONT COVER
34L893
SCREW 3.0X12
Q1A1030-12-128X2
LCD PANEL
750ALM80E01
SCREW M3.0X6
M1A330-6-128 X 2
KEY BOARD
715L912
DC BOARD
715A778
FRONT PANEL
34A928
LENS
33L4362-1
POWER KEY PAD
33L4360

8. PARTS LIST OF CABINET

LOCATION	T880KYGHBAA0N			SPECIFICATION
	CBPC880KYGAC			CONVERSION BOARD
	DCPC780A5			DC POWER BOARD
	KEPC880KY1			KEY BOARD
	12L 387-	500		RUBBER FOOT
	15L 5684-	3		BRACKET
	15L 5689-	1 -	A	GND LUG
	15L 5689-	2 -	A	GND CLAMP
	15L 5708	1		BASE PLATE
	26L 800-	504 -	7	BAR-CODE
	33L 4060-	U0 -	L	CABLE COVER
	33L 4063-	U0 -	L	SCREW COVER
	33L 4360-	U2 -	1L	POWER KEY PAD
	33L 4362-	1		LENS
	34L 893-	U0 -	B	SUPPORT BACK
	34L 894-	U0 -	B	BACK
	34L 757-	U0 -	2B	BACK COVER
	34L 895-	U0 -	B	ARM COVER
	34L 928-	AD7 -	2B	FRONT PANEL
	37L 443-	1		LCD HINGE
	40L 152-	509		RECYCLE LABEL
	40L 152-	512		RECYCLE LABEL
⚠	40L 180-	615 -	2B	ID LABEL
	40L 581-	26 -	704	LABEL
	40L 581-	624 -	5A	TCO'99 LABEL
	41L 68-	508 -	A	CORD
	41L 68-	615 -	4B	TCO'99 CARD
	41L 7800-	615 -	2A	SETUP GUIDE
	44L 3213-	13		EVA WASHER
	44L 3231-	501		EVA WASHER
	44L 3231-	502		EVA WASHER
	44L 3231-	506		EVA WASHER
	44L 3231-	508		EVA WASHER
	44L 3234-	615 -	6CW	CARTON
	44L 3701-	1		EPS (L)
	44L 3701-	2		EPS (R)
	44L 6000-	4 -	6B	SPACE PAPER
	44L 9003-	9		CORNER PAPER
	45L 76-	28 -	RN	PE BAG
	45L 77-	500		BARCODE RIBBON
	45L 77-	501		BARCODE RIBBON
	45L 88-	544		OUT PE BAG
	45L 88-	545		OUT PE BAG
⚠	45L 88-	607		PE BAG
	45L 88-	609 -	B	EPE COVER
	70L L18-	1 -	AOC	DRIVE DISK
	70L 1600-	615 -	1A	CD MANUAL
	79L L18-	2 -	E	INVERTER BY SAMPO
	80L L17-	503 -	CH	ADAPTOR
	89L 404A-	18N -	IS	POWER CORD UL/CSA
	85L 548-	3		SHIELD MAIN
	85L 574-	1		SHIELD MAIN
	89L 174-	L17 -	4	SIGNAL CABLE
	95L 8014-	6 -	7	HARNESS
	95L 8018-	30 -	5	HARNESS
	B1L 1030-	5 -	128	SCREW
	B1L 1030-	8 -	128	SCREW
	M1L 330-	6 -	128	SCREW
	M1L 1740-	12 -	128	SCREW
	Q1L 340-	12 -	128	SCREW
	Q1L 340-	16 -	128	SCREW
⚠	Q1L 1030-	12 -	128	SCREW
	Q1L 1830-	10 -	120	SCREW
	750L LY81-	N02		LCD 18" PANEL SANYO

PARTS LIST OF INTERFACE BOARD

LOCATION	CBPC880KYGAC	SPECIFICATION
CN303	33L 3802- 6H	WAFER 6P PLUG RIGHT ANELE
CN302	33L 3802- 9H	WAFER 9P PLUG RIGHT ANELE
R319	33L 8009- 2	2P MIN.JUMOER
JP201	33L 8009- 3	3P MIN.JUMOER
JP303	33L 8009- 3	3P MIN.JUMOER
	33L 8010- 2 - L	2P MIN.JUMOER
CN200	33L 8013- 14 - H	14P PLUG
CN603	33L 8017- 24A - H	PIN HEADER 24P
	40L 457- 624 - 1A	CPU LABEL
	40L 581- 624 - 2B	CHASSIS LABEL
	44L 3231- 8 - A	EVA WASHER
U302	56L 1125- 61 - Y5	M6795A1F PLCC44
C307	67L 305- 331 - 6	330UF +-20% 35V
C309	67L 305- 331 - 6	330UF +-20% 35V
C310	67L 305- 331 - 6	330UF +-20% 35V
C312	67L 305- 331 - 6	330UF +-20% 35V
C927	67L 305- 331 - 6	330UF +-20% 35V
C928	67L 305- 331 - 6	330UF +-20% 35V
C945	67L 309- 471 - 3T	470UF +-20% 16V
FB301	71L 55- 28	BEAD TECST
T300	73L 253- 108 - LI	CHOKE
L905	73L 259- 4	200UH +-5%
VR501	75L 335- 103	CDVR 10K OHM +-20%
	90L 372- 2	HEAT SINK
X300	93L 22- 55	CRYSTAL 20MHz HC-49US
U201	93L 22- 57	OSCILATOR 50MHz
J1	93L 900- 16A	HARNESS

PARTS LIST OF INTERFACE BOARD AUTO INSERTION

LOCATION	AI880KYG1	SPECIFICATION
U601	56L 561- 5	NT7181F
U602	56L 561- 5	NT7181F
U200	56L 562- 8	GMZAN1 SMT
U304	56L 563- 1	LM2596S-5
U305	56L 563- 7	AIC1084-33M
U202	56L 566- 6	SI9953DY-T1
U904	56L 585- 4	AIC1117-33CY
U401	56L 74F- 14 - P	N74F14D SMT
U203	56L 1133- 16	24LC21A
U300	56L 1133- 17	AT24C04N
Q200	57L 417- 4	PMBS3904
Q304	57L 417- 4	PMBS3904
RP300	61L 125- 103 - 8	CHIP ARRAY 10K OHM 1/16W 8P4R
L207	61L 0603- 000	CHIP 0 OHM 1/16W
R200	61L 0603- 000	CHIP 0 OHM 1/16W
R201	61L 0603- 000	CHIP 0 OHM 1/16W
R202	61L 0603- 000	CHIP 0 OHM 1/16W
R203	61L 0603- 000	CHIP 0 OHM 1/16W
R207	61L 0603- 000	CHIP 0 OHM 1/16W
R208	61L 0603- 000	CHIP 0 OHM 1/16W
R229	61L 0603- 000	CHIP 0 OHM 1/16W
R317	61L 0603- 000	CHIP 0 OHM 1/16W
R340	61L 0603- 000	CHIP 0 OHM 1/16W
R603	61L 0603- 000	CHIP 0 OHM 1/16W
R905	61L 0603- 000	CHIP 0 OHM 1/16W
R218	61L 0603- 101	CHIP 100 OHM 1/16W
R219	61L 0603- 101	CHIP 100 OHM 1/16W
R220	61L 0603- 101	CHIP 100 OHM 1/16W

LOCATION	AI880KYG1				SPECIFICATION
R227	61L	0603-	101		CHIP 100 OHM 1/16W
R213	61L	0603-	102		CHIP 1K OHM 1/16W
R214	61L	0603-	102		CHIP 1K OHM 1/16W
R216	61L	0603-	103		CHIP 10K OHM 1/16W
R217	61L	0603-	103		CHIP 10K OHM 1/16W
R223	61L	0603-	103		CHIP 10K OHM 1/16W
R224	61L	0603-	103		CHIP 10K OHM 1/16W
R225	61L	0603-	103		CHIP 10K OHM 1/16W
R300	61L	0603-	103		CHIP 10K OHM 1/16W
R301	61L	0603-	103		CHIP 10K OHM 1/16W
R311	61L	0603-	103		CHIP 10K OHM 1/16W
R313	61L	0603-	103		CHIP 10K OHM 1/16W
R315	61L	0603-	103		CHIP 10K OHM 1/16W
R326	61L	0603-	103		CHIP 10K OHM 1/16W
R327	61L	0603-	103		CHIP 10K OHM 1/16W
R328	61L	0603-	103		CHIP 10K OHM 1/16W
R329	61L	0603-	103		CHIP 10K OHM 1/16W
R209	61L	0603-	202		CHIP 2K OHM 1/16W
R210	61L	0603-	202		CHIP 2K OHM 1/16W
R204	61L	0603-	750		CHIP 75 OHM 1/16W
R205	61L	0603-	750		CHIP 75 OHM 1/16W
R206	61L	0603-	750		CHIP 75 OHM 1/16W
C229	65L	0603-	103 -	32	CHIP 0.01UF 50V
C230	65L	0603-	103 -	32	CHIP 0.01UF 50V
C231	65L	0603-	103 -	32	CHIP 0.01UF 50V
C232	65L	0603-	103 -	32	CHIP 0.01UF 50V
C233	65L	0603-	103 -	32	CHIP 0.01UF 50V
C234	65L	0603-	103 -	32	CHIP 0.01UF 50V
C251	65L	0603-	103 -	32	CHIP 0.01UF 50V
C606	65L	0603-	103 -	32	CHIP 0.01UF 50V
C608	65L	0603-	103 -	32	CHIP 0.01UF 50V
C614	65L	0603-	103 -	32	CHIP 0.01UF 50V
C616	65L	0603-	103 -	32	CHIP 0.01UF 50V
C201	65L	0603-	104 -	12	CHIP 0.1UF 16V
C202	65L	0603-	104 -	12	CHIP 0.1UF 16V
C204	65L	0603-	104 -	12	CHIP 0.1UF 16V
C205	65L	0603-	104 -	12	CHIP 0.1UF 16V
C207	65L	0603-	104 -	12	CHIP 0.1UF 16V
C208	65L	0603-	104 -	12	CHIP 0.1UF 16V
C209	65L	0603-	104 -	12	CHIP 0.1UF 16V
C210	65L	0603-	104 -	12	CHIP 0.1UF 16V
C211	65L	0603-	104 -	12	CHIP 0.1UF 16V
C212	65L	0603-	104 -	12	CHIP 0.1UF 16V
C213	65L	0603-	104 -	12	CHIP 0.1UF 16V
C215	65L	0603-	104 -	12	CHIP 0.1UF 16V
C217	65L	0603-	104 -	12	CHIP 0.1UF 16V
C218	65L	0603-	104 -	12	CHIP 0.1UF 16V
C219	65L	0603-	104 -	12	CHIP 0.1UF 16V
C220	65L	0603-	104 -	12	CHIP 0.1UF 16V
C221	65L	0603-	104 -	12	CHIP 0.1UF 16V
C222	65L	0603-	104 -	12	CHIP 0.1UF 16V
C223	65L	0603-	104 -	12	CHIP 0.1UF 16V
C225	65L	0603-	104 -	12	CHIP 0.1UF 16V
C226	65L	0603-	104 -	12	CHIP 0.1UF 16V
C227	65L	0603-	104 -	12	CHIP 0.1UF 16V
C228	65L	0603-	104 -	12	CHIP 0.1UF 16V
C237	65L	0603-	104 -	12	CHIP 0.1UF 16V
C244	65L	0603-	104 -	12	CHIP 0.1UF 16V
C245	65L	0603-	104 -	12	CHIP 0.1UF 16V
C246	65L	0603-	104 -	12	CHIP 0.1UF 16V
C300	65L	0603-	104 -	12	CHIP 0.1UF 16V
C304	65L	0603-	104 -	12	CHIP 0.1UF 16V
C308	65L	0603-	104 -	12	CHIP 0.1UF 16V
C311	65L	0603-	104 -	12	CHIP 0.1UF 16V

LOCATION	AI880KYG1				SPECIFICATION
C405	65L	0603-	104 -	12	CHIP 0.1UF 16V
C601	65L	0603-	104 -	12	CHIP 0.1UF 16V
C602	65L	0603-	104 -	12	CHIP 0.1UF 16V
C604	65L	0603-	104 -	12	CHIP 0.1UF 16V
C618	65L	0603-	104 -	12	CHIP 0.1UF 16V
C619	65L	0603-	104 -	12	CHIP 0.1UF 16V
C939	65L	0603-	104 -	12	CHIP 0.1UF 16V
C940	65L	0603-	104 -	12	CHIP 0.1UF 16V
C941	65L	0603-	104 -	12	CHIP 0.1UF 16V
C942	65L	0603-	104 -	12	CHIP 0.1UF 16V
C944	65L	0603-	104 -	12	CHIP 0.1UF 16V
C250	65L	0603-	330 -	31	33PF 50V NPO
C303	65L	0603-	330 -	31	33PF 50V NPO
C306	65L	0603-	330 -	31	33PF 50V NPO
CP301	65L	600M-	102 -	8T	1000PF +-20% 50V 8P X7R
CP302	65L	600M-	102 -	8T	1000PF +-20% 50V 8P X7R
C605	67L	312-	100 -	3	SMD 10uF +-20% 16V
C607	67L	312-	100 -	3	SMD 10uF +-20% 16V
C613	67L	312-	100 -	3	SMD 10uF +-20% 16V
C615	67L	312-	100 -	3	SMD 10uF +-20% 16V
C620	67L	312-	100 -	3	SMD 10uF +-20% 16V
C200	67L	312-	101 -	3	SMD 100uF +-20% 16V
C203	67L	312-	101 -	3	SMD 100uF +-20% 16V
C206	67L	312-	101 -	3	SMD 100uF +-20% 16V
C214	67L	312-	101 -	3	SMD 100uF +-20% 16V
C216	67L	312-	101 -	3	SMD 100uF +-20% 16V
C224	67L	312-	101 -	3	SMD 100uF +-20% 16V
C305	67L	312-	101 -	3	SMD 100uF +-20% 16V
C403	67L	312-	101 -	3	SMD 100uF +-20% 16V
C603	67L	312-	101 -	3	SMD 100uF +-20% 16V
C943	67L	312-	101 -	3	SMD 100uF +-20% 16V
C313	67L	312-	220 -	3	SMD EC 22uF 16V 85CC SIZE
C314	67L	312-	220 -	3	SMD EC 22uF 16V 85CC SIZE
L200	71L	57G-	601		T13216JIG601-T17A
L201	71L	57G-	601		T13216JIG601-T17A
L202	71L	57G-	601		T13216JIG601-T17A
L203	71L	57G-	601		T13216JIG601-T17A
L300	71L	57G-	601		T13216JIG601-T17A
L900	71L	57G-	601		T13216JIG601-T17A
L601	71L	59B-	121 -	B	FCM1608C-121T03 SMD
L602	71L	59B-	121 -	B	FCM1608C-121T03 SMD
L603	71L	59B-	121 -	B	FCM1608C-121T03 SMD
L604	71L	59B-	121 -	B	FCM1608C-121T03 SMD
R215	71L	59B-	121 -	B	FCM1608C-121T03 SMD
U30	87L	202-	44		PLCC SMT
D200	93L	39-	147		TZMC5V6-GS08 SMT
D201	93L	39-	147		TZMC5V6-GS08 SMT
D208	93L	39-	147		TZMC5V6-GS08 SMT
D209	93L	39-	147		TZMC5V6-GS08 SMT
D210	93L	39-	147		TZMC5V6-GS08 SMT
D300	93L	60-	211		SMB340
D303	93L	60-	220		BAT54C-GS08 SMT
D202	93L	64-	32V		LL4148-GS08 SMT
D203	93L	64-	32V		LL4148-GS08 SMT
D204	93L	64-	32V		LL4148-GS08 SMT
D205	93L	64-	32V		LL4148-GS08 SMT
D206	93L	64-	32V		LL4148-GS08 SMT
D207	93L	64-	32V		LL4148-GS08 SMT
D301	93L	64-	32V		LL4148-GS08 SMT
D302	93L	64-	32V		LL4148-GS08 SMT
	715L	914-	1		LCD MAIN BOARD

PARTS LIST OF DC POWER

LOCATION	DCPC780A5				SPECIFICATION
C71	67L	305L-	331 -	6	330uF +-20% 35V
JP2	88L	304-	1C		POWER JACK
	89L	171-	28		DC POWER CORD
	715L	906-	1		DC POWER BOARD

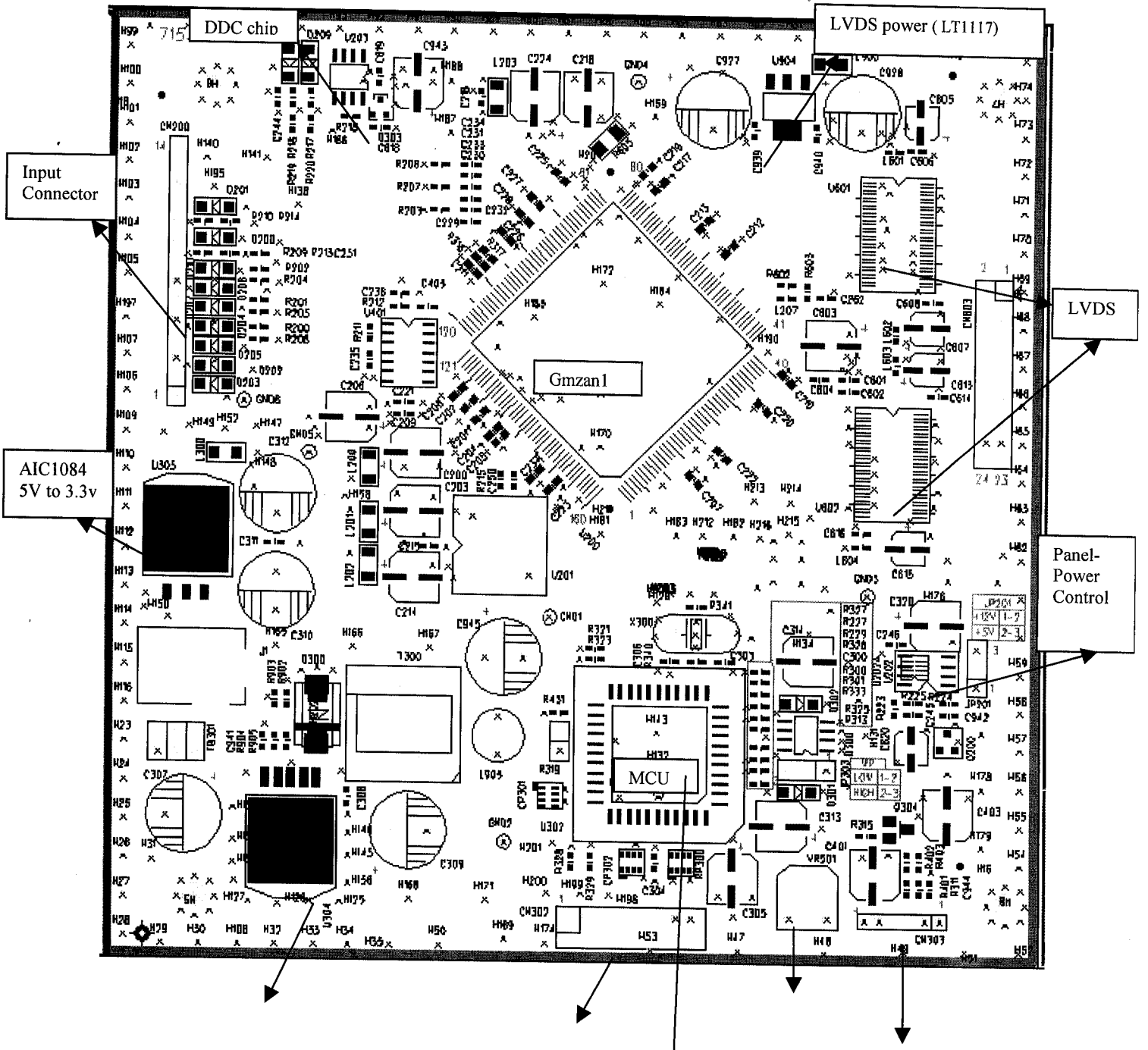
PARTS LIST OF KEY BOARD

LOCATION	KEPC880KY1				SPECIFICATION
J7	33L	3252-	3 -	H	WAFER 3P
SW101	77L	602-	1 -	GHJ	WITH GROUND
SW102	77L	602-	1 -	GHJ	WITH GROUND
SW103	77L	602-	1 -	GHJ	WITH GROUND
SW104	77L	602-	1 -	GHJ	WITH GROUND
SW105	77L	602-	1 -	GHJ	WITH GROUND
LED1	81L	12-	1C -	BH	3MM LED
JP2	88L	304-	1S		DC POWER JACK
	95L	8014-	9 -	9	HARNESS

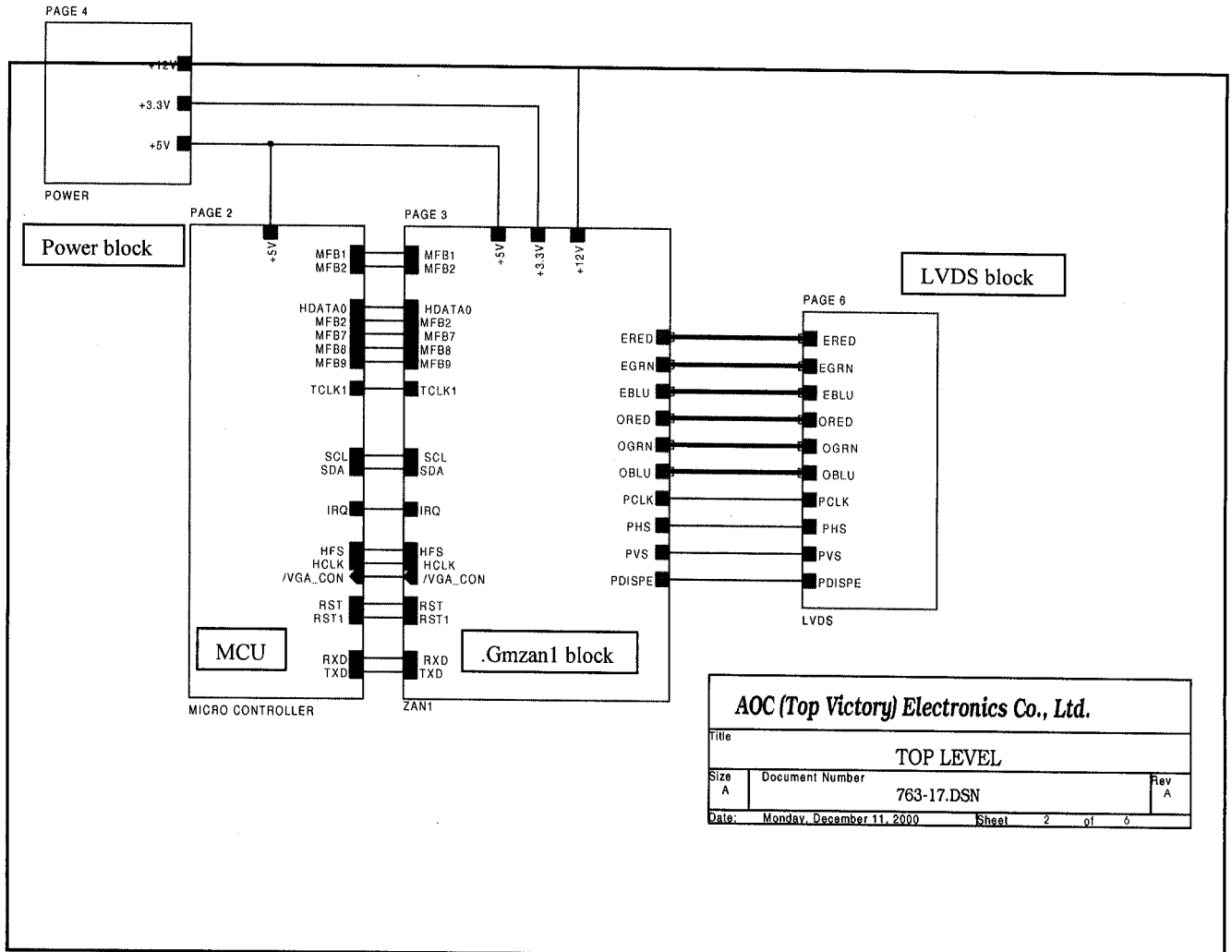
PARTS LIST OF KEY PC BOARD AUTO INSERTION

LOCATION	AIK880KY1				SPECIFICATION
Q101	57L	419-	PP -	T	2PC915P
Q102	57L	417-	PP -	T	2PC915P
J101	61L	602-	102 -	52T	CFR 1K 0HM +-5% 1/6W
R101	61L	602-	103 -	52T	10K OHM +-5% 1/6W
R102	61L	602-	103 -	52T	10K OHM +-5% 1/6W
R103	61L	602-	103 -	52T	10K OHM +-5% 1/6W
R104	61L	602-	103 -	52T	10K OHM +-5% 1/6W
R105	61L	602-	103 -	52T	10K OHM +-5% 1/6W
R106	61L	602-	103 -	52T	10K OHM +-5% 1/6W
R107	61L	602-	103 -	52T	10K OHM +-5% 1/6W
R108	61L	602-	221 -	52T	220 OHM +-5% 1/6W
C101	65L	450-	104 -	7T	CHIP 0.1UF 50V Y5V
J102	95L	90-	23		TIN COATED
	715L	912-	1		KEY BOARD

INTERFACE BOARD



I). TOP-LEVEL FLOW



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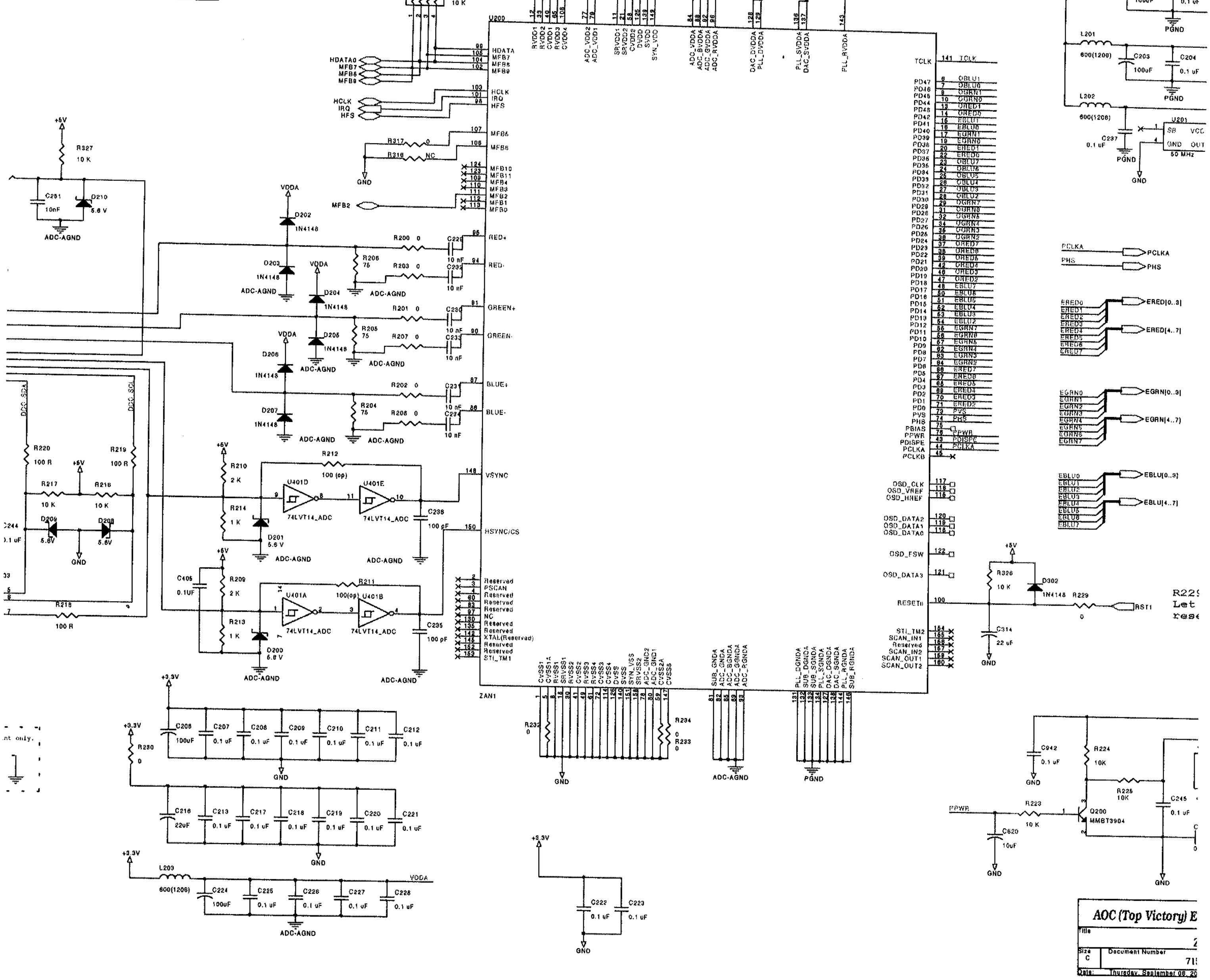

U200
ZAN1
RP300
10 K
HDATA0
MFB7
MFB8
MFB9
HCLK
IRQ
HFS
MFB2
RED+
RED-
GREEN+
GREEN-
BLUE+
BLUE-
VSYNC
HSYNC/CS
74LVT14_ADC
ADC-AGND
GND
PGND
VDDA
TCLK
RESETn
OSD_CLK
OSD_VREF
OSD_HREF
OSD_DATA2
OSD_DATA1
OSD_DATA0
OSD_FSW
OSD_DATA3
PCLKA
PHS
ERED[0..3]
ERED[4..7]
EGRN[0..3]
EGRN[4..7]
EBLU[0..3]
EBLU[4..7]
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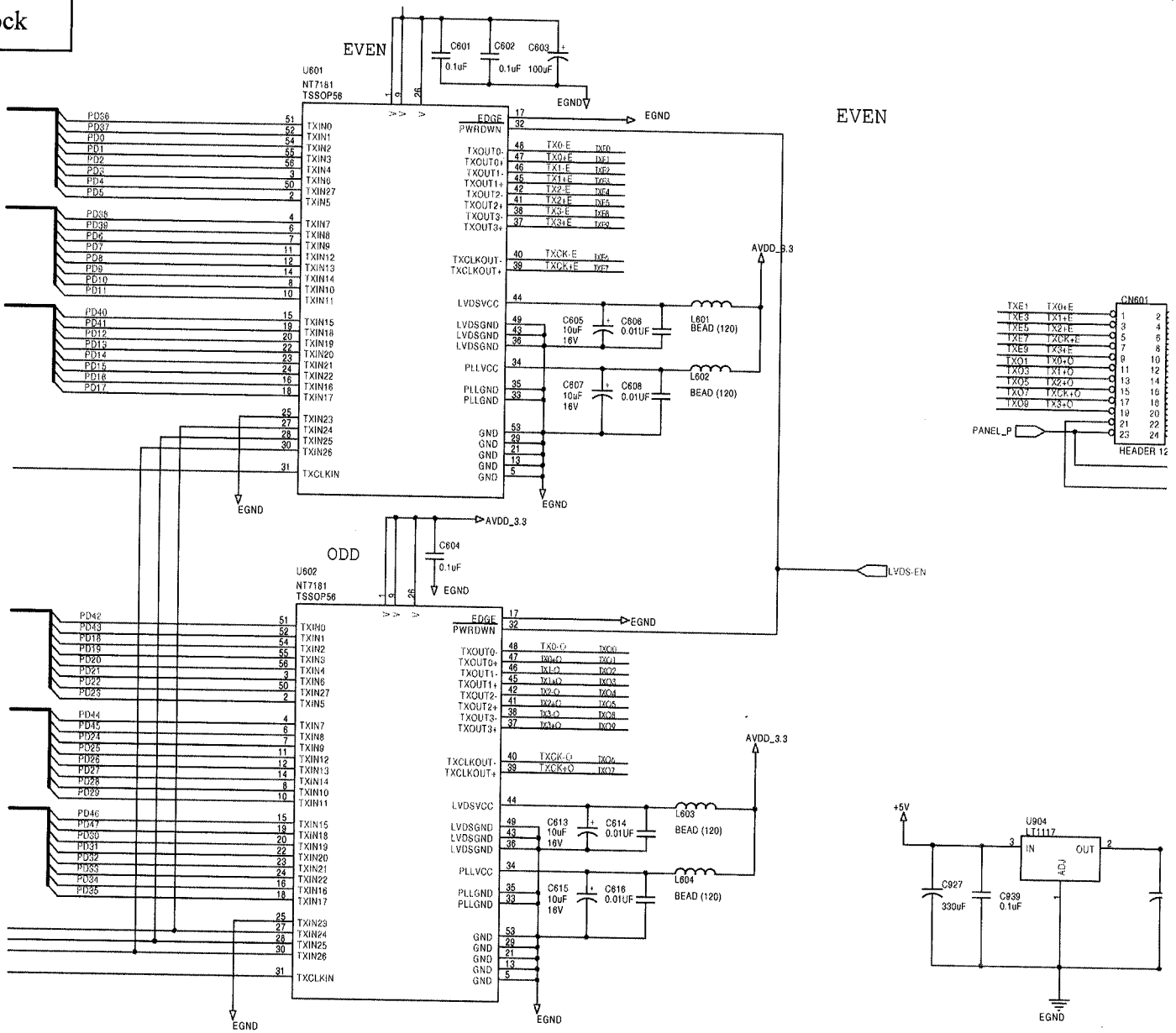
50 MHz
MMBT3904
PPWR
AOC (Top Victory) E
Title
Size
C
Document Number
Date
Thursday, September 08, 20

VDS Block



AOC (Top Victory) Electr

Title: LVDS

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Date: Wednesday, November 07, 2001

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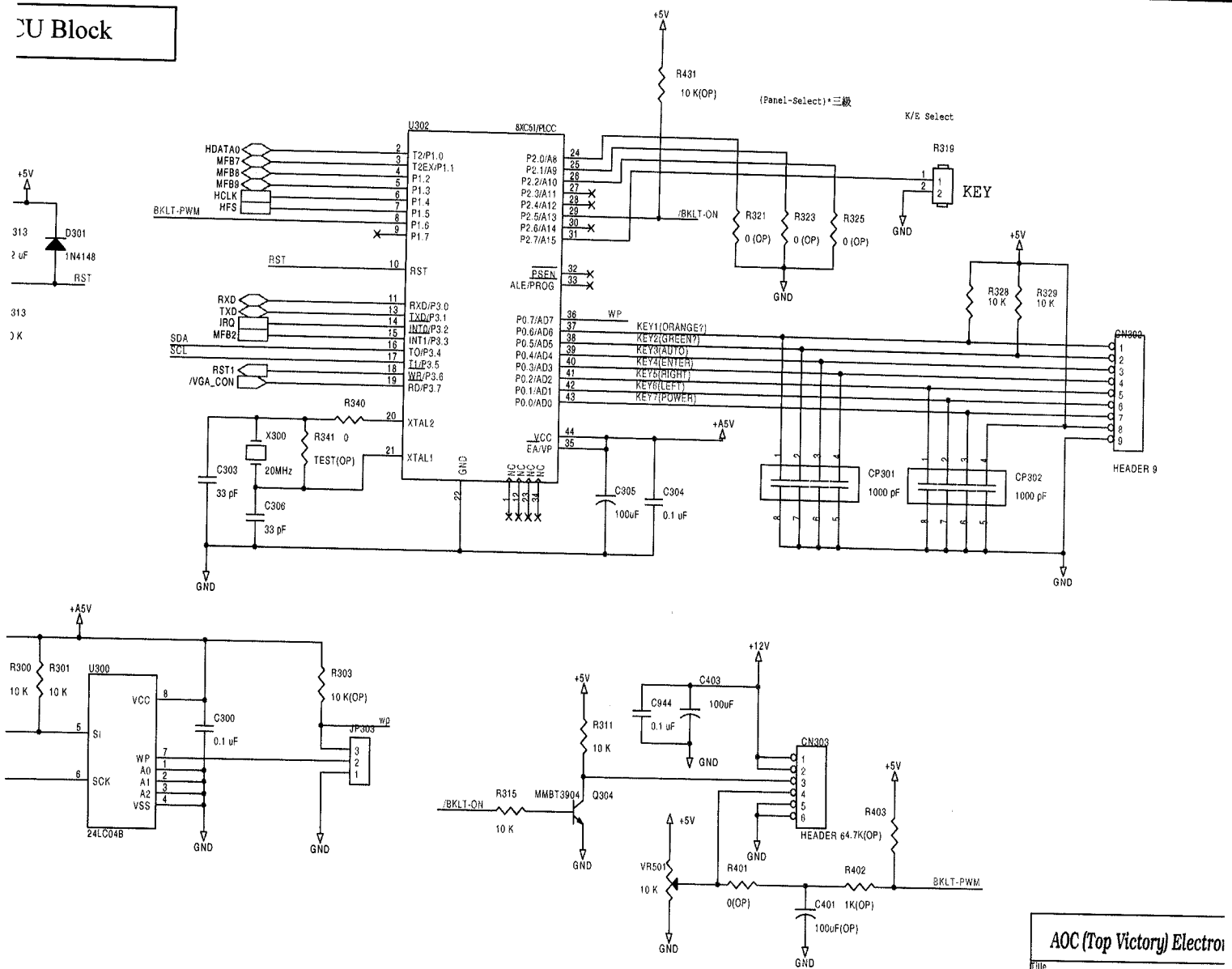

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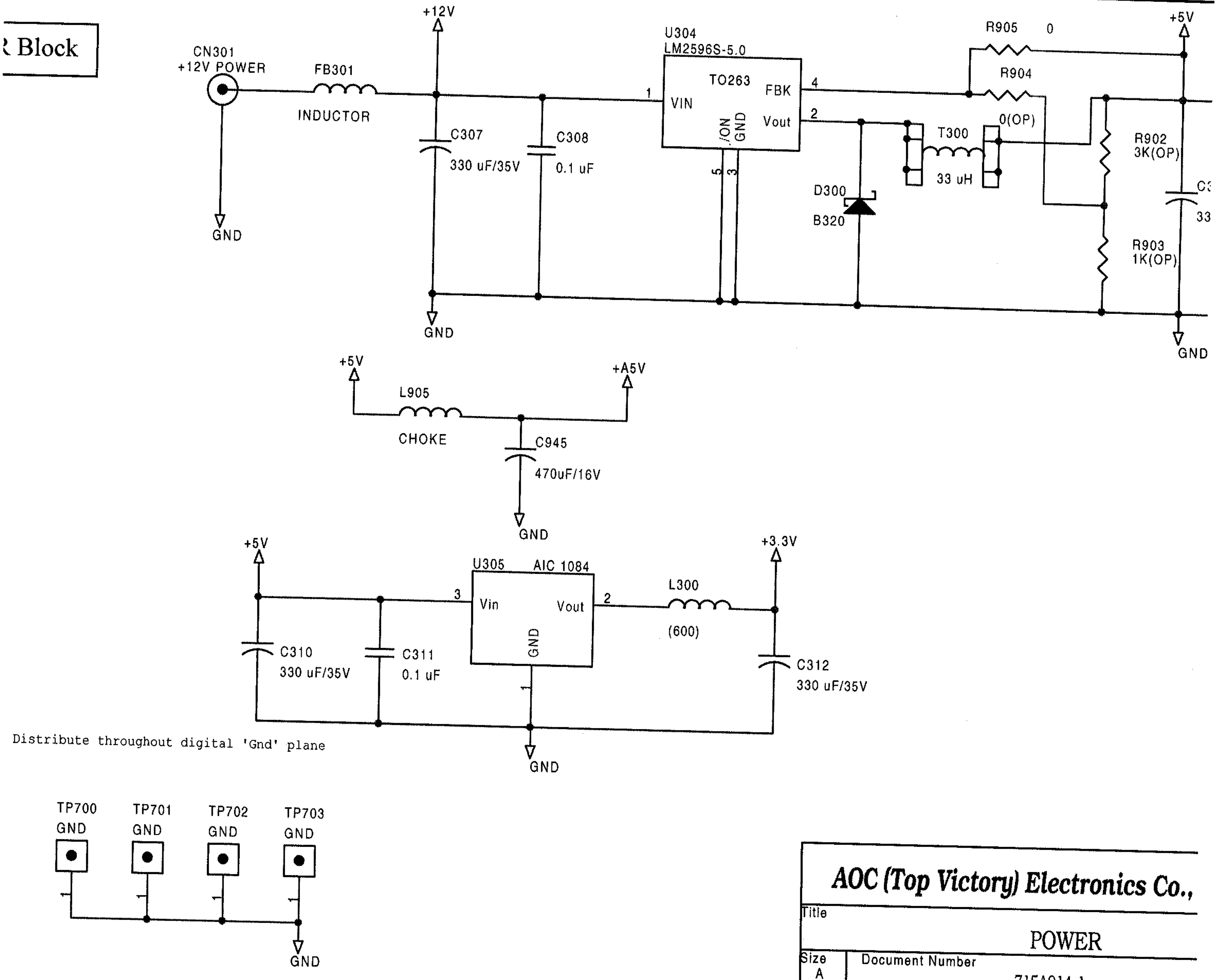

AOC (Top Victory) Electronics Co.,

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