

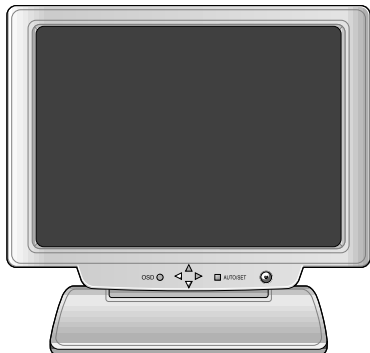
COLOR MONITOR SERVICE MANUAL

CHASSIS NO. : CL-18

MODEL: FPD1570, LB680A

CAUTION

BEFORE SERVICING THE UNIT,
READ THE **SAFETY PRECAUTIONS** IN THIS MANUAL.



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SPECIFICATIONS

1. LCD CHARACTERISTICS

Type : TFT Color LCD Module
 Size : 335.0(H) x 273.5(V) x 11.2(D)
 Pixel Pitch : 0.243mm x 0.243mm
 Color Depth : 8-bit, 16,777,216 colors
 Active Video Area : 15.7inch (39.88cm)
 (39.832diagonal 311mm x 284.8mm)
 Surface Treatment : Anti-Glare, Hard Coating (3H)
 Backlight Unit : Two-CCFL (Cold Cathode
 Fluorescent Lamp)

2. OPTICAL CHARACTERISTICS

2-1. Viewing Angle by Contrast Ratio ≥ 10

Left : 60° typ., 60° min.
 Right : 60° typ., 60° min.
 Top : 45° typ., 45° min.
 Bottom : 45° typ., 45° min.

2-2. Luminance : 200 cd/m² typ.

2-3. Angle at Half Luminance

Left : 45° min.
 Right : 45° min.
 Top : 45° min.
 Bottom : 45° min.

2-4. Contrast Ratio : 250 typ.

3. SIGNAL (Refer to the Timing Chart)

3-1. Sync Signal

- 1) Type : Separate Sync. (Horizontal & Vertical)
- 2) Input Voltage Level: Low=0~0.8V, High=2.1~5.5V
- 3) Sync Polarity : Positive or Negative

3-2. Video Input Signal

- 1) Type : R, G, B Analog
- 2) Voltage Level : 0~0.714 V
 - a) Color 0, 0 : 0 Vp-p
 - b) Color 7, 0 : 0.467 Vp-p
 - c) Color 15, 0 : 0.714 Vp-p
- 3) Input Impedance : 75 Ω

3-3. Operating Frequency

Horizontal : 30 ~ 80kHz
 Vertical : 56 ~ 85Hz

4. POWER SUPPLY

4-1. Power Adaptor

Input : AC 100~240V, 50/60Hz 1.2A
 Output : DC 24V 1.2A \ominus \oplus

4-2. Power Consumption

MODE	H/V SYNC	VIDEO	POWER CONSUMPTION	LED COLOR
POWER ON (NORMAL)	ON/ON	ACTIVE	less than 36 W	GREEN
STAND-BY	OFF/ON	OFF	less than 3 W	AMBER
SUSPEND	ON/OFF	OFF	less than 3 W	AMBER
DPM OFF	OFF/OFF	OFF	less than 3 W	AMBER
POWER OFF	-	-	less than 3 W	OFF

5. ENVIRONMENT

5-1. Operating Temperature: 10°C~35°C (50°F~95°F)
 (Ambient)

5-2. Relative Humidity : 10%~80%
 (Non-condensing)

5-3. Altitude : 0~10,000ft (3,030m)

6. DIMENSIONS (with TILT/SWIVEL)


Width : 370.2mm (14.57")
 Depth : 134.0mm (5.27")
 Height : 387.7mm (15.26")

7. WEIGHT (with TILT/SWIVEL)

Net. Weight : 4.5kg (9.92 lbs)
 Gross Weight : 6.8kg (14.99 lbs)

PRECAUTION

WARNING FOR THE SAFETY-RELATED COMPONENT.

- There are some special components used in LCD monitor that are important for safety. These parts are marked  on the schematic diagram and the replacement parts list. It is essential that these critical parts should be replaced with the manufacturer's specified parts to prevent electric shock, fire or other hazard.
- Do not modify original design without obtaining written permission from Gate Way. or you will void the original parts and labor guarantee.

TAKE CARE DURING HANDLING THE LCD MODULE WITH BACKLIGHT UNIT.

- Must mount the module using mounting holes arranged in four corners.
- Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
- Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
- Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
- Make certain that treatment person's body are grounded through wrist band.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- The module not be exposed to the direct sunlight.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel become dirty, please wipe it off with a softmaterial. (Cleaning with a dirty or rough cloth may damage the panel.)

CAUTION

Please use only a plastic screwdriver to protect yourself from shock hazard during service operation.

WARNING

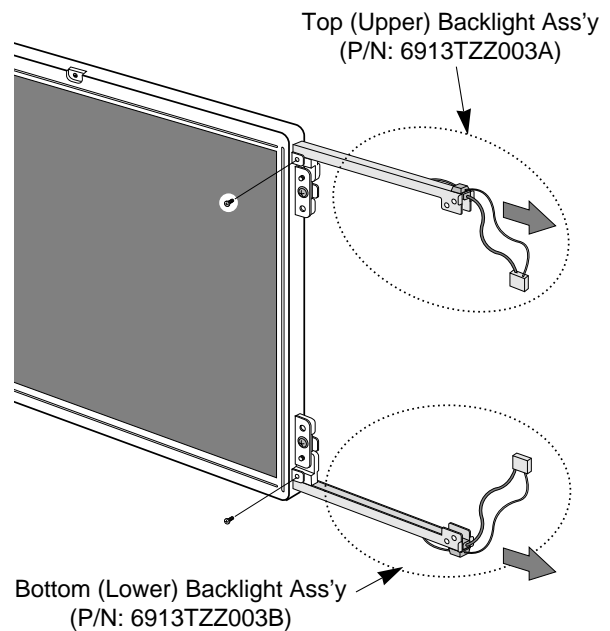
BE CAREFUL ELECTRIC SHOCK !

- If you want to replace with the new backlight (CCFL) or inverter circuit, must disconnect the AC adapter because high voltage appears at inverter circuit about 650Vrms.
- Handle with care wires or connectors of the inverter circuit. If the wires are pressed cause short and may burn or take fire.

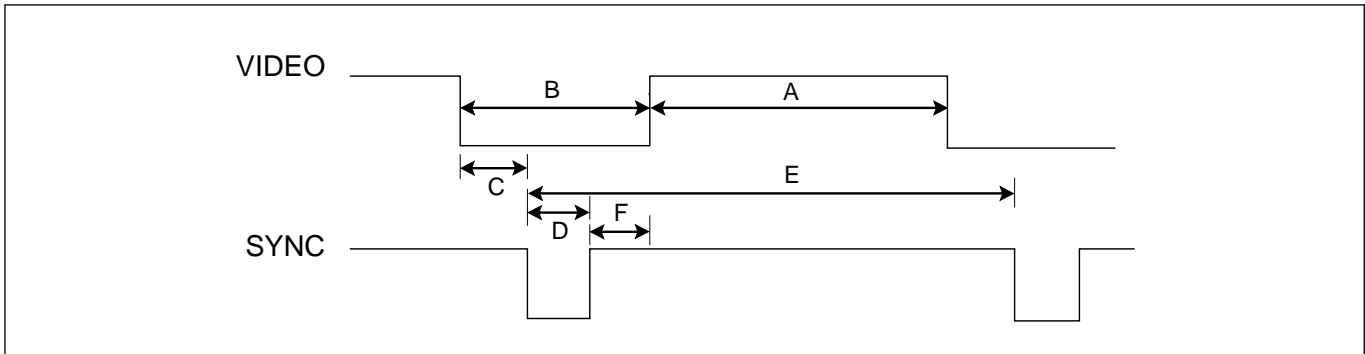
CAUTION

IF BRIGHTNESS OF THE LCD MODULE DARKEN, REPLACE THE BACKLIGHT ONE OR ALL.

- There is two backlight, must distinguish between the top (upper) and the bottom (lower), and be careful of treatment it.
- MTBF (Mean Time Between Failure) of a backlight is about 25,000 hours.



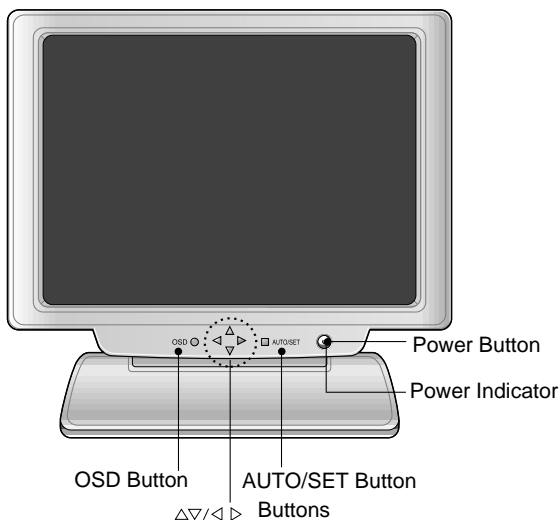
TIMING CHART



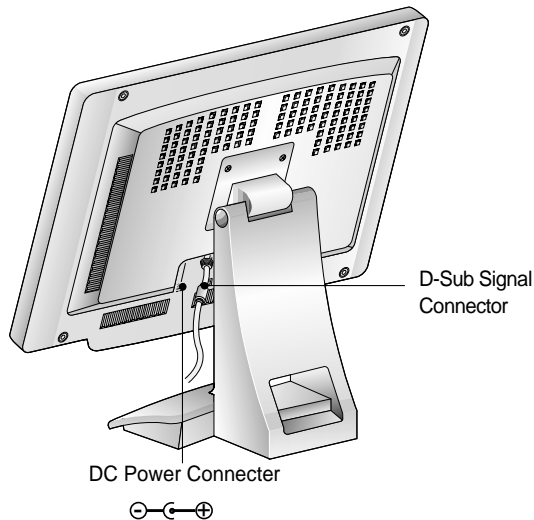
MODE	H / V	Sync Polarity	Dot Clock	Frequency	Total Period (E)	Video Active Time (A)	Blanking Time (B)	Sync Duration (D)	Back Porch (F)	Front Porch (C)	Resolution
1	H (Pixels)	+	25.175	31.469 KHz	800	640	160	96	48	16	640 x 350
	V (Lines)	-		70.8 Hz	449	350	99	2	59	38	
2	H (Pixels)	-	28.321	31.468 KHz	900	720	180	108	54	18	720 x 400
	V (Lines)	+		70.8 Hz	449	400	49	2	35	12	
3	H (Pixels)	-	25.175	31.469 KHz	800	640	160	96	48	16	640 x 480
	V (Lines)	-		59.94 Hz	525	480	45	2	33	10	
4	H (Pixels)	-	31.5	37.5 KHz	840	640	200	64	120	16	640 x 480
	V (Lines)	-		75 Hz	500	480	20	3	16	1	
5	H (Pixels)	-	36.0	43.269 KHz	832	640	192	56	80	56	640 x 480
	V (Lines)	-		85.0 Hz	509	480	29	3	25	1	
6	H (Pixels)	+	40.0	37.879 KHz	1056	800	256	128	88	40	800 x 600
	V (Lines)	+		60.317 Hz	628	600	28	4	23	1	
7	H (Pixels)	+	49.5	46.875 KHz	1056	800	256	80	160	16	800 x 600
	V (Lines)	+		75.0 Hz	625	600	25	3	21	1	
8	H (Pixels)	+	56.25	53.674 KHz	1048	800	248	64	152	32	800 x 600
	V (Lines)	+		85.061 Hz	631	600	31	3	27	1	
9	H (Pixels)	+/-	57.283	49.725 KHz	1152	832	320	64	224	32	832 x 624
	V (Lines)	+/-		74.55 Hz	667	624	43	3	39	1	
10	H (Pixels)	-	65.0	48.363 KHz	1344	1024	320	136	160	24	1024 x 768
	V (Lines)	-		60.0 Hz	806	768	38	6	29	3	
11	H (Pixels)	-	78.75	60.123 KHz	1312	1024	288	96	176	16	1024 x 768
	V (Lines)	-		75.029 Hz	800	768	32	3	28	1	
12	H (Pixels)	+	94.5	68.677 KHz	1376	1024	352	96	208	48	1024 x 768
	V (Lines)	+		84.997 Hz	808	768	40	3	36	1	
13	H (Pixels)	+/-	100.0	68.681 KHz	1456	1152	304	128	144	32	1152 x 870
	V (Lines)	+/-		75.062 Hz	915	870	45	3	39	3	
14	H (Pixels)	+/-	92.978	61.805 KHz	1504	1152	352	134	200	18	1152 x 900
	V (Lines)	+/-		65.96 Hz	937	900	37	4	31	2	
15	H (Pixels)	+	108.0	63.981 KHz	1688	1280	308	12	248	48	1280 x 1024
	V (Lines)	+		60.02 Hz	1066	1024	42	3	38	1	
16	H (Pixels)	+	135.0	79.976 KHz	1688	1280	408	144	248	16	1280 x 1024
	V (Lines)	+		75.035 Hz	1066	1024	42	3	38	1	

OPERATING INSTRUCTIONS

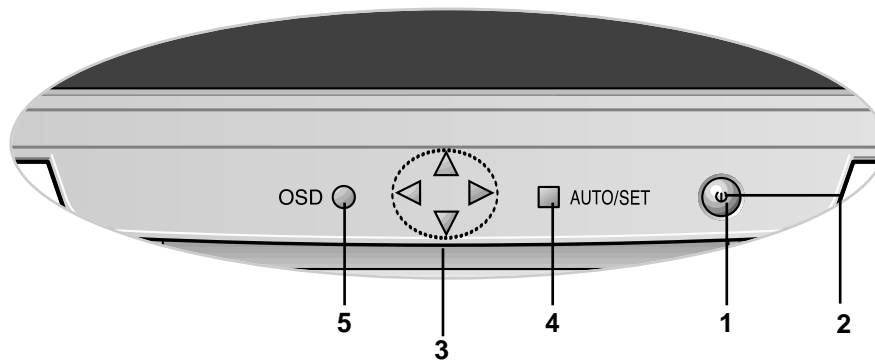
FRONT VIEW



REAR VIEW



Front Control Panel



1. Power ON/OFF Button

Use this button to turn the monitor on or off.

2. Power Indicator

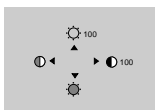
This indicator lights up green when the monitor operates normally; in DPMS (Energy Saving) mode, - stand-by, suspend, or power off mode - its color changes to orange.

3. $\Delta \nabla / \triangleleft \triangleright$ Button

Use these buttons to choose or adjust items in the on screen display.

<Shortcut Keys>

- Brightness and Contrast can be adjusted directly without entering the On Screen Display (OSD) system. Touch the $\Delta \nabla / \triangleleft \triangleright$ buttons to adjust the settings and then the **OSD button** to save all changes. The Brightness and Contrast functions are also available in the On Screen Display (OSD) menu.



4. AUTO/SET Button

Use this button to enter a selection in the on screen display.



* AUTO adjustment function

Touch the **AUTO/SET** button before using OSD menu. This button is for the automatic adjustment of the screen position, clock and phase.

Note: Some signal from some graphics boards may not function properly. **If the results are unsatisfactory**, adjust your monitor's Position, Clock and Phase manually.

5. OSD Button

Use this button to enter or exit the on screen display.

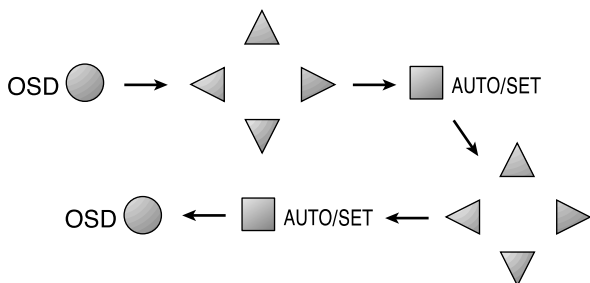
On-Screen-Display (OSD) Control

To adjust an image size, position, and operating parameters are quick and easy with the On-Screen-Display control system, using the OSD button and the Adjustment control button. A quick example is given below to familiarize you with use of the controls.

Example;

Note: Allow the monitor to stabilize for at least 30 minutes before making image adjustment.

To make adjustments in the On Screen Display, follow these steps:



1. Press the OSD Button, then the main menu of the OSD appears.
2. To access a control, use the \triangle or ∇ Buttons. When the icon you want becomes highlighted, press the AUTO/SET Button.
3. Use the $\triangle/\nabla/\leftarrow/\rightarrow$ Buttons to adjust the item to the desired level.
4. Accept the changes by pressing the AUTO/SET Button.
5. Exit the OSD by Pressing the OSD Button.

Listed below are icons, icon names, and icon descriptions of the OSD menu.

BRIGHTNESS CONTRAST

Brightness
Used to adjust the brightness of the screen.

Contrast
Adjust the display to the contrast desired.

RGB COLOR

PRESET 9300K/ 6500K
To appear the displays color temperature.

- 9300K:Slightly bluish white.
- 6500K:Slightly reddish white.

RED To set your own color levels.

GREEN To set your own color levels.

BLUE To set your own color levels.

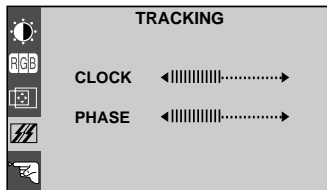
POSITION

Vertical Position
To move image up and down.

Horizontal Position
To move picture image left and right.



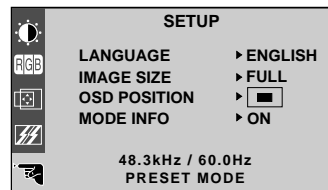
TRACKING



- CLOCK** To minimize any vertical bars or stripes visible on the screen background. The horizontal screen size will also change.
- PHASE** To adjust the focus of the display. This item allows you to remove any horizontal noise and clear or sharpen the image of characters.

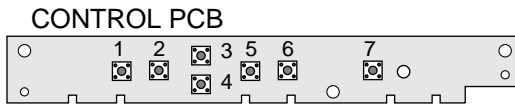
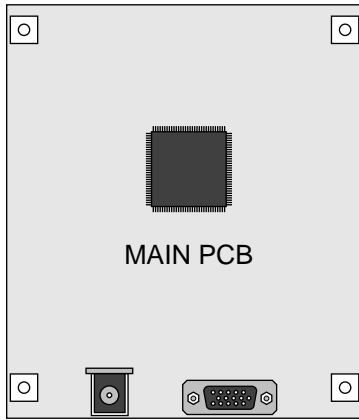


SETUP



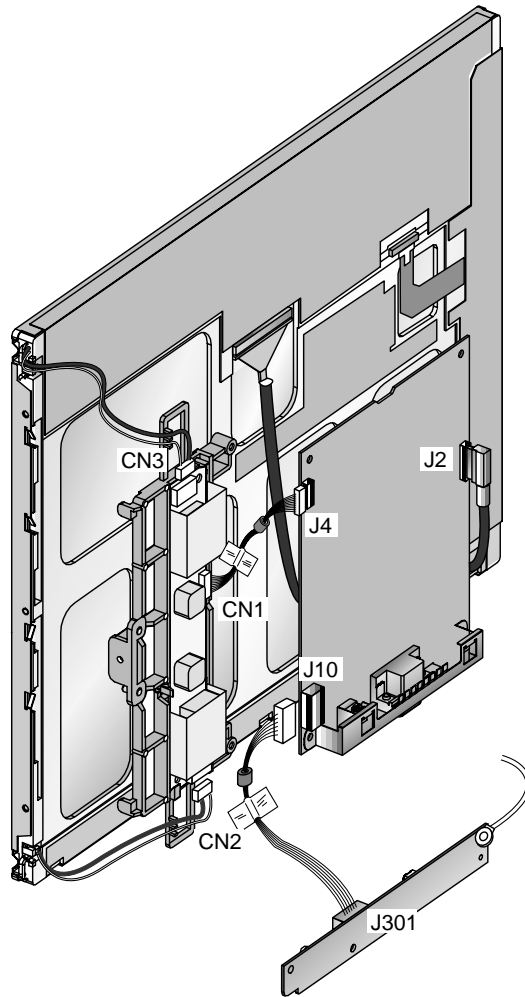
- LANGUAGE** To choose the language in which the control names are displayed.
- IMAGE SIZE** This function displays the image in its original size or enlarged size so as to fit in the full screen of the LCD panel.
- OSD POSITION** To adjust position of the OSD window on the screen.
- MODE INFO** There is information of video modes- preset and user modes.

CONTROL LOCATIONS



NO.	Ref. No.	Control Function
1	SW301	OSD BUTTON
2	SW304	ADJUST LEFT
3	SW303	ADJUST UP
4	SW306	ADJUST DOWN
5	SW302	ADJUST RIGHT
6	SW307	AUTO/SET
7	SW305	POWER SWITCH

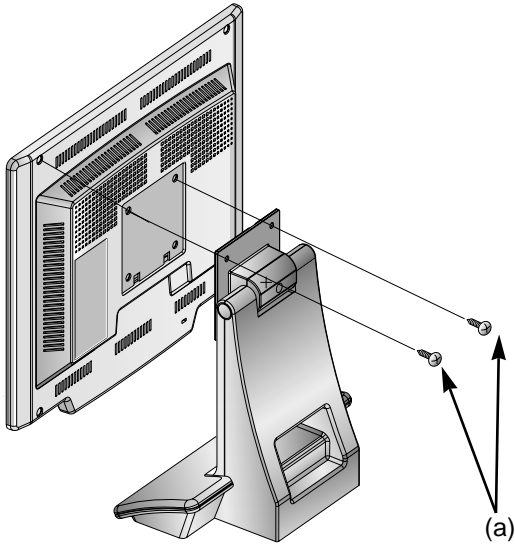
WIRING DIAGRAM



DISASSEMBLY

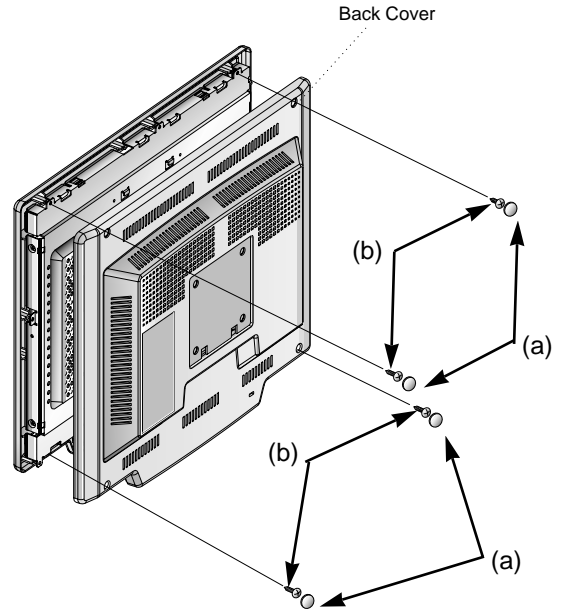
1. TILT/SWIVEL REMOVAL

- (1) Remove two screws (a).
- (2) Remove the Tilt/swivel.



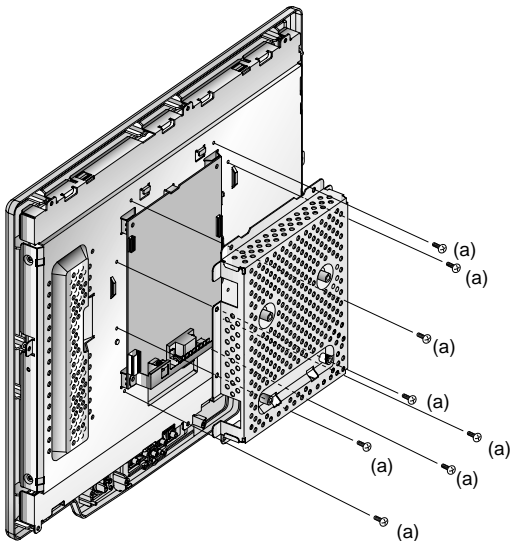
2. BACK COVER REMOVAL

- (1) Remove four sheet (a) from Back Cover.
- (2) Remove four screws (b) from the Back Cover.
- (3) Remove the Back Cover.



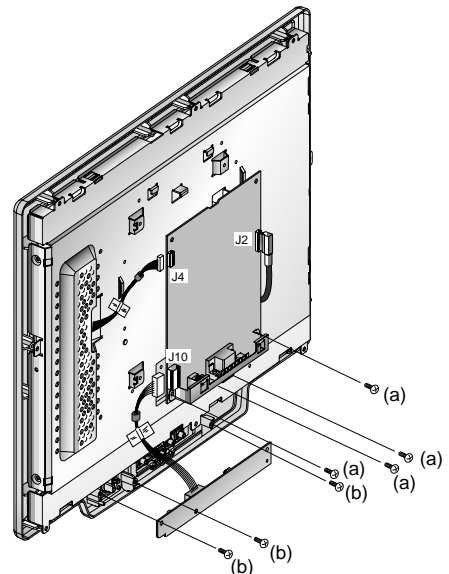
3. METAL REAR ASSEMBLY REMOVAL

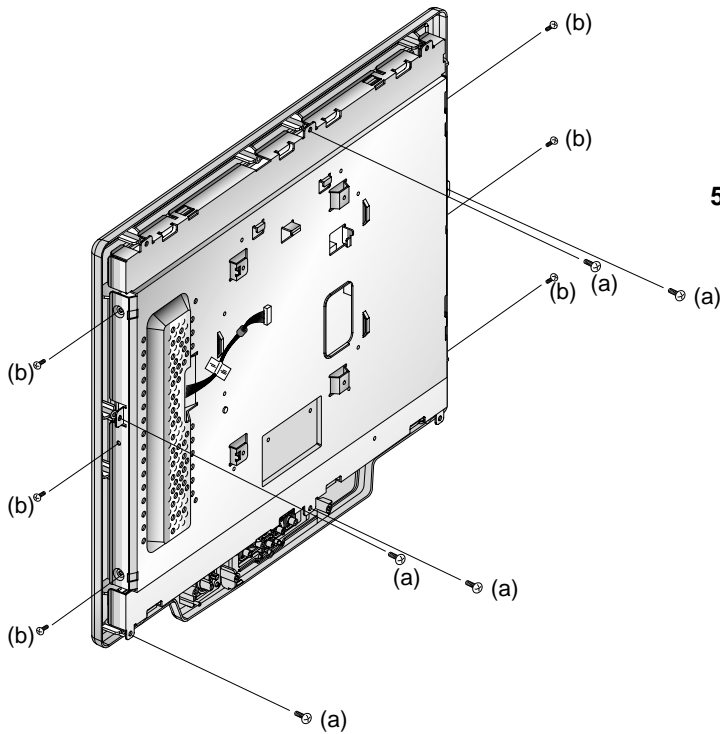
- (1) Remove eight screws (a).
- (2) Remove the Metal rear Ass'y.



4. CONTROL, MAIN PCB ASSEMBLY REMOVAL

- (1) Disconnect J2, J4 and J10.
- (2) Remove four screws (a).
- (3) Remove the Main PCB Ass'y.
- (4) Remove three screws (b).
- (5) Remove the Control PCB Ass'y.



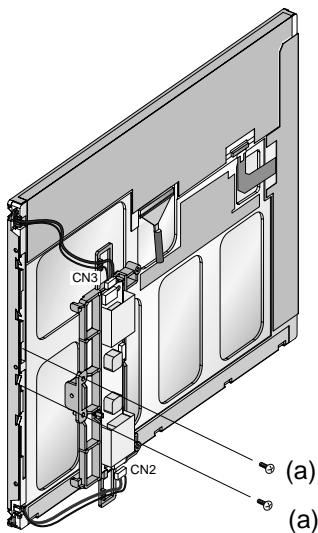


5. METAL FRAME ASSEMBLY REMOVAL

- (1) Remove five screws (a).
- (2) Remove six screws (b).
- (3) Remove the Metal Frame Ass'y

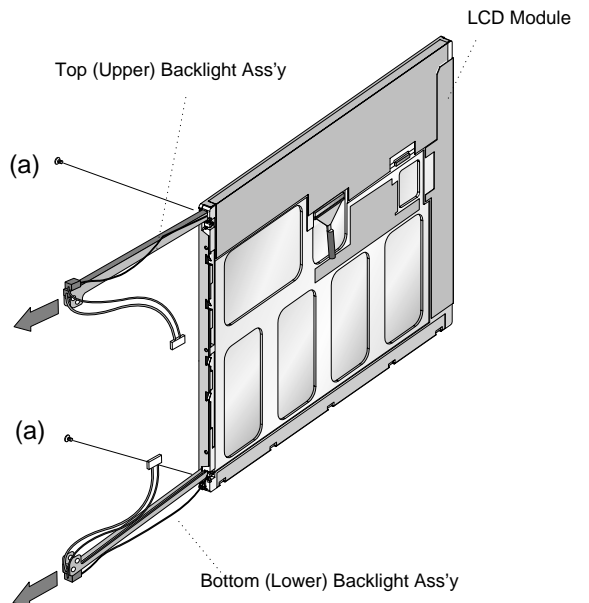
5. INVERTER REMOVAL

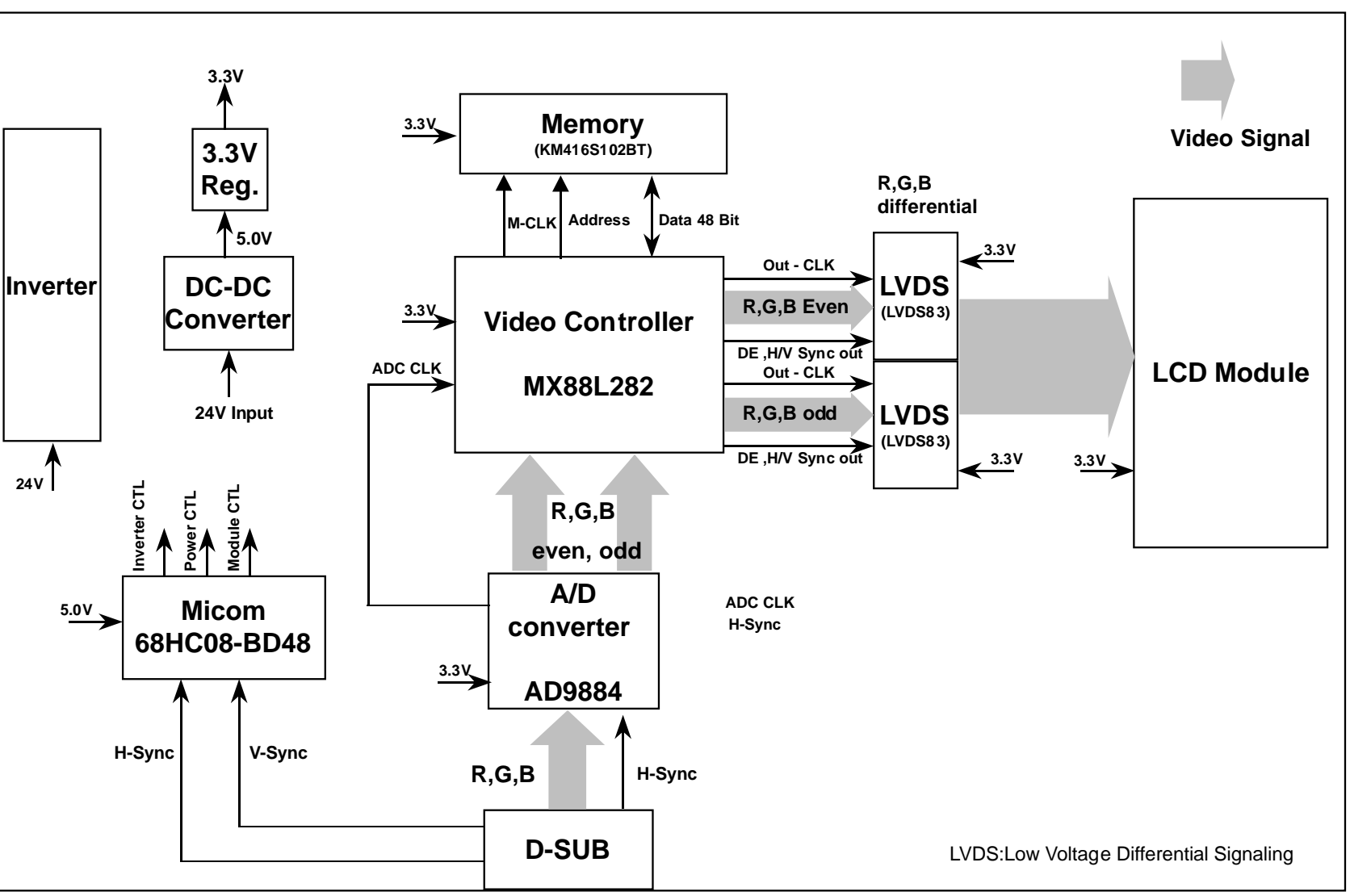
- (1) Disconnect CN2, CN3 .
- (1) Remove two screws (a).
- (2) Remove the Inverter.



6. BACKLIGHT REMOVAL

- (1) Remove two screws (a).
- (2) Remove the Backlight from the LCD Module.





LVDS:Low Voltage Differential Signaling

DESCRIPTION OF BLOCK DIAGRAM

1. Pre-amp/ ADC / PLL Part.

This part amplifies the level of video signal for the digital conversion and converts from the analog video signal to the digital video signal using a pixel clock.

The pixel clock for each mode is generated by the PLL.

The range of the pixel clock is from 25MHz to 135MHz.

2. Video Controller Part.

This part consists of the Scaler and frame buffers which converts frame rate of input signal to 60Hz frame rate.

The Scaler gets the video signal converted analog to digital, interpolates input to 1280 X 1024 resolution signal and outputs 8-bit R, G, B signal to transmitter.

3. Display Data Transmitter Part.

This part transmit digital signal from the Scaler to the receiver of module.

4. Power Part.

This part consists of the DC/DC converter and several 3.3V regulators .

The DC/DC converter converts 24V to be entered power adapter to 5V.

5V, output of DC/DC converter, supply to the micom and 3.3V regulators.

The output voltage of 3.3V regulator supply to IC of each part.

5. MICOM Part.

This part consists of EEPROM IC which stores control data, Reset IC and the Micom.

The Micom distinguishes polarity and frequency of the H/V sync are supplied from signal cable.

The controlled data of each mode is stored in EEPROM.

6. Inverter

The inverter converts from 24V to AC 700Vrms and drive back-light lamp of module.

ADJUSTMENT

All adjustment are thoroughly checked and corrected when the monitor leaves the factory, but sometimes several minor adjustment may be required. Adjustment should be following procedure and after warming up for a minimum of 10 minutes. Alignment appliances and tools.

- IBM Compatible PC
- Programmable Signal Generator.
(eg. VG-819 made by Astrodesign Co.)
- E(E)PROM with each mode data saved.
- Alignment Adapter and Software.

1. Adjustment for Factory Preset Mode

- 1) Run alignment program for FPD1570 on the IBM compatible PC.
- 2) Select EEPROM all clear command and Enter.
- 3) Display cross hatch pattern at Mode 1.
- 4) Select COMMAND PRESET START command.
- 5) Select FOS DEFAULT command and Enter.
- 6) Press "Y" key, it will automatically save all FOS data to EEPROM.

2. Adjustment for White Balance

- 1) Display color 0,0 pattern at Mode 13.
- 2) Set External Bright to MAX position and Contrast to MAX Position.
- 3) Select PRESET START → BIAS CAL command and Enter.
- 4) No attempt to manually adjust, BIAS data is automatically adjusted and saved to the EEPROM.
- 5) Display color 15,0 pattern at Mode 13.
- 6) Select DRIVE CAL command and Enter.
- 7) Color 1 (9300K) and Color 2 (6500K) are automatically adjusted and saved to the EEPROM.
- 8) Select PRESET EXIT command and Enter.

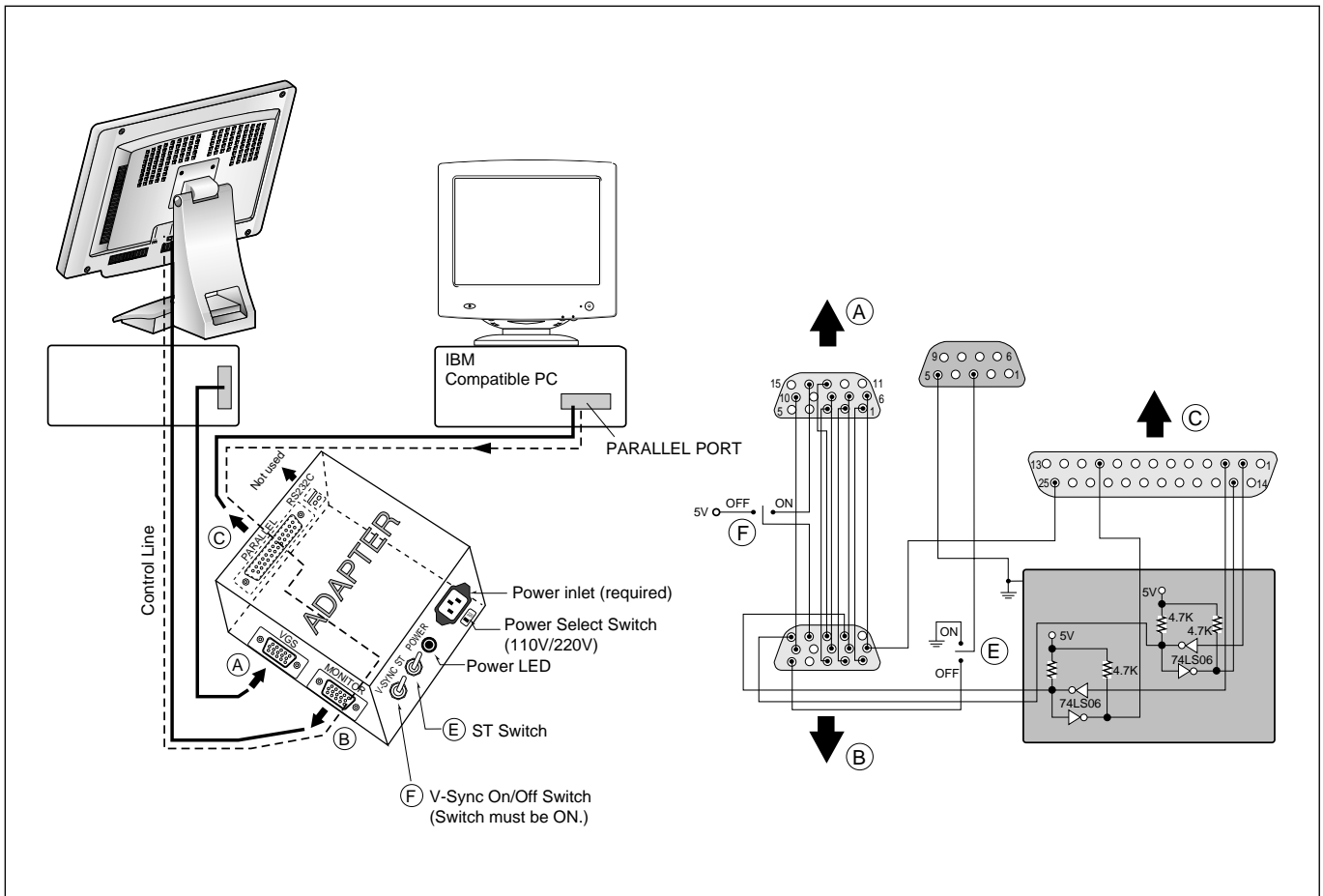
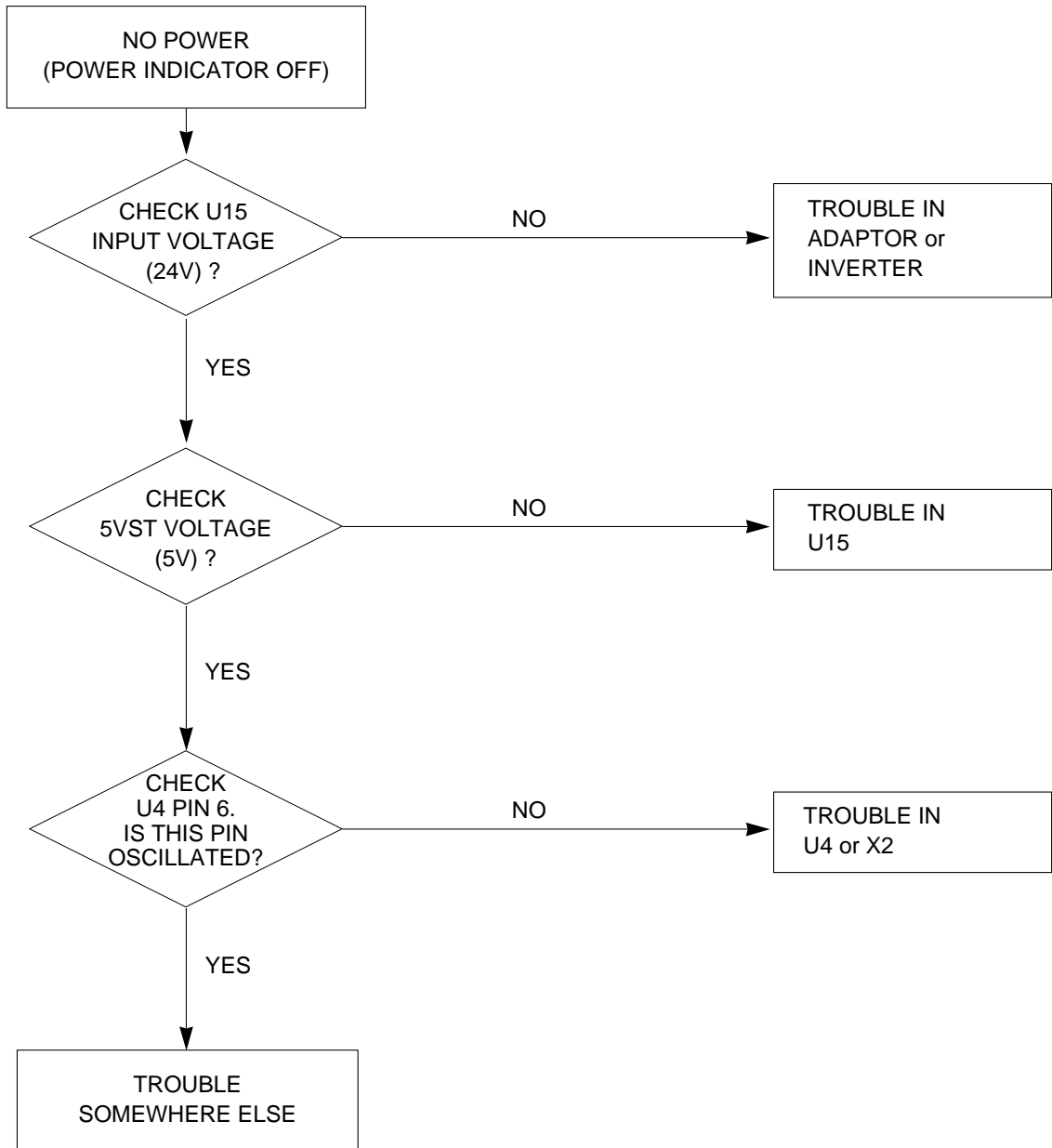


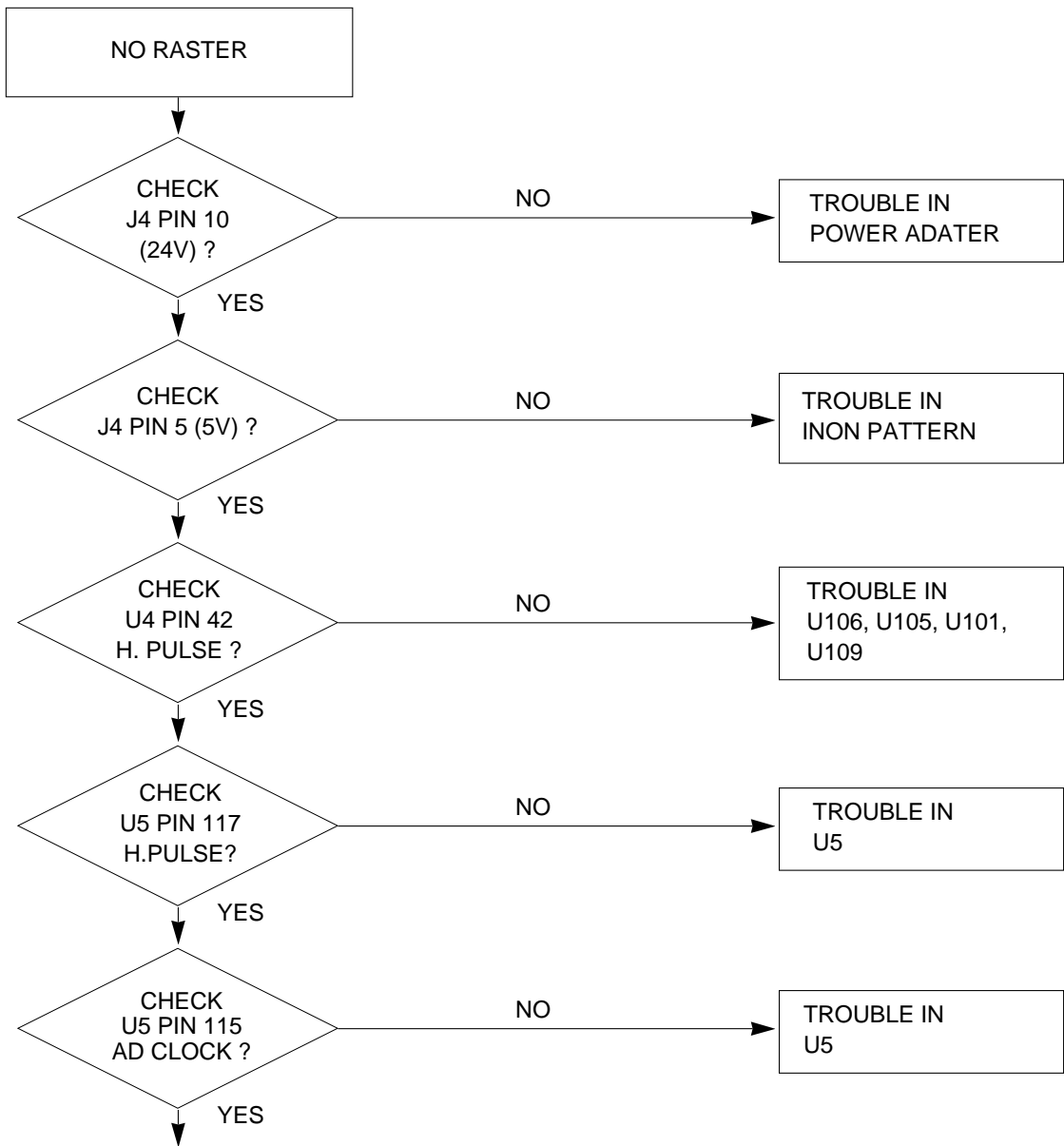
Figure 1. Cable Connection

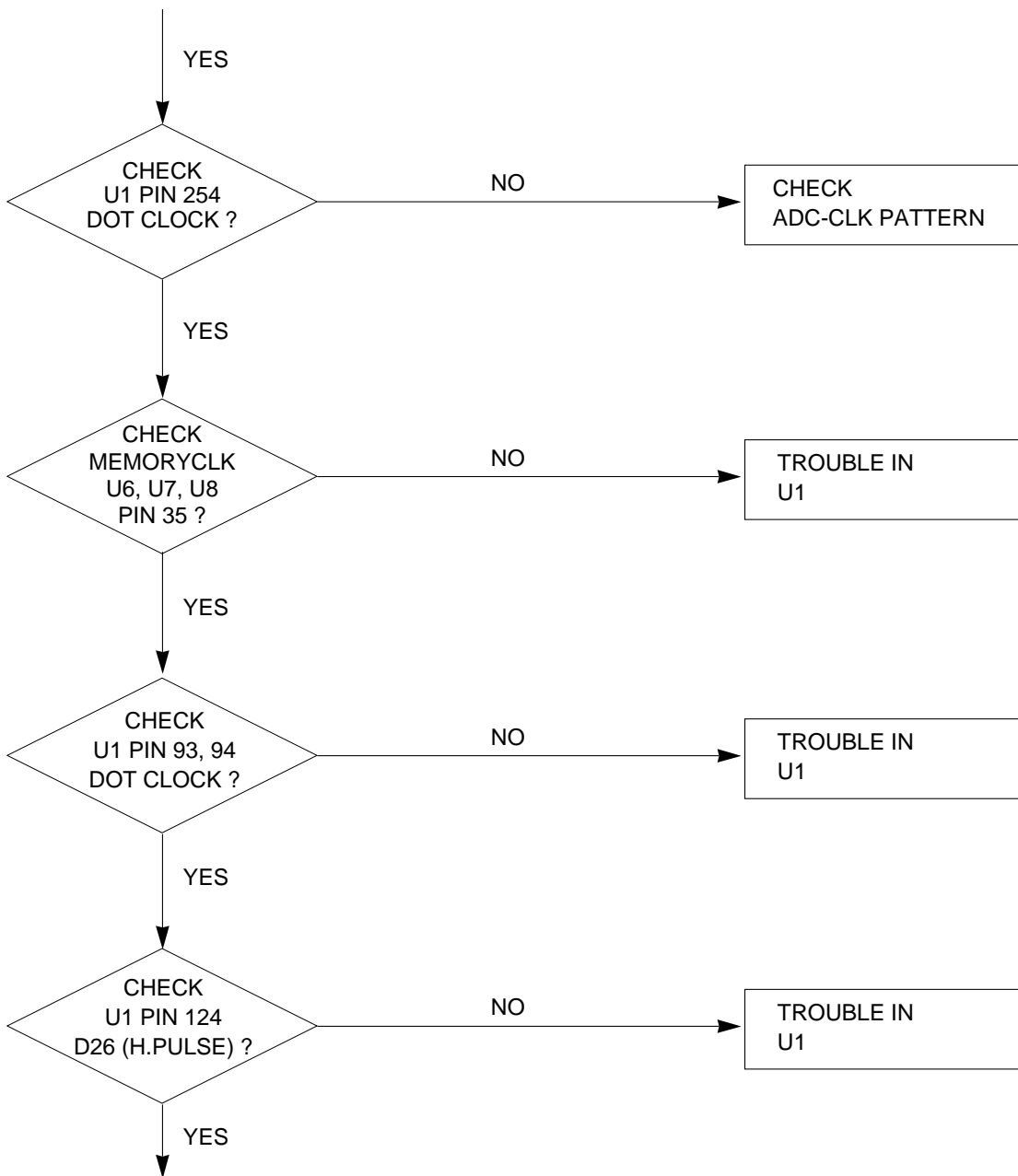
TROUBLESHOOTING GUIDE

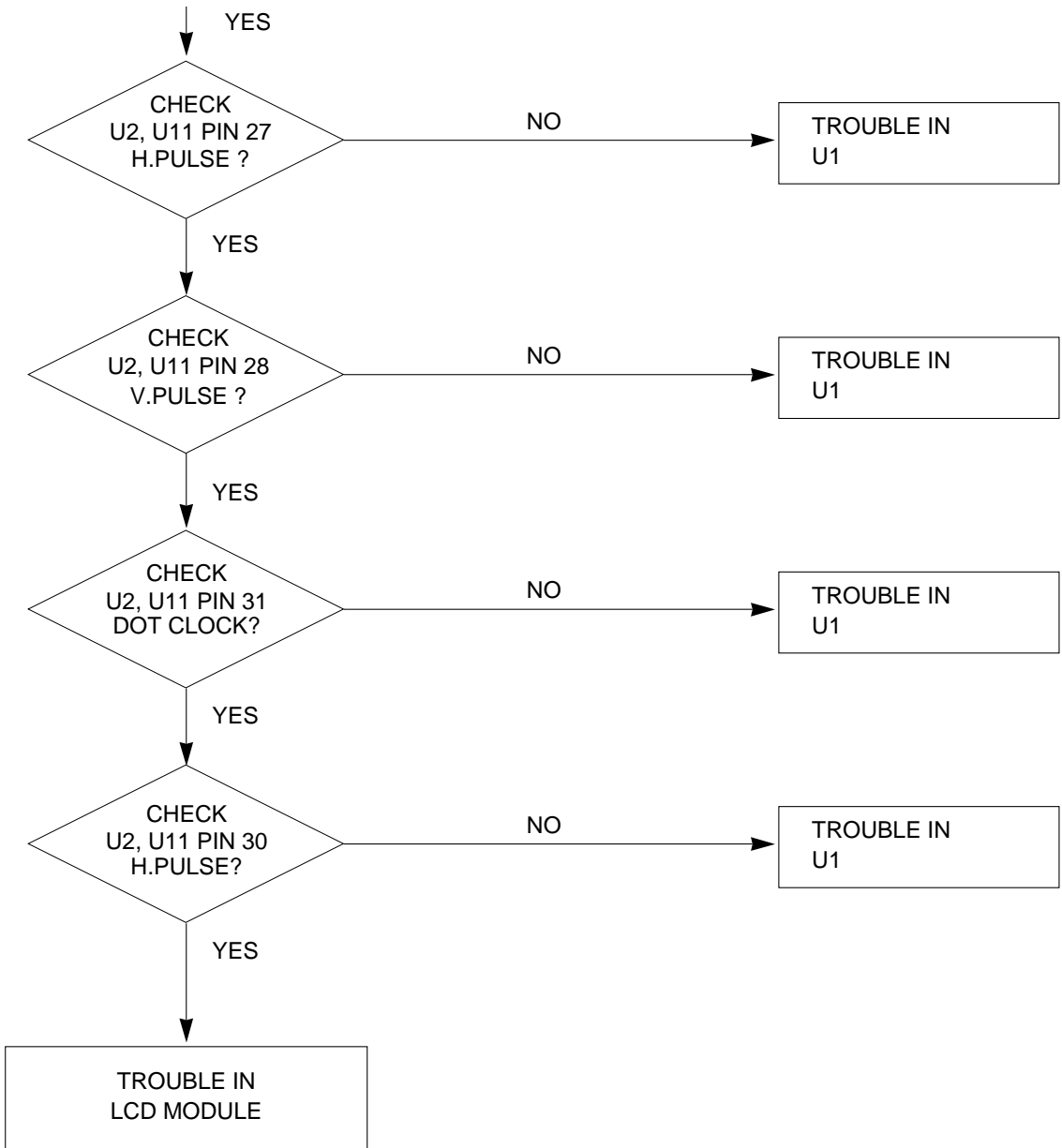
1. NO POWER



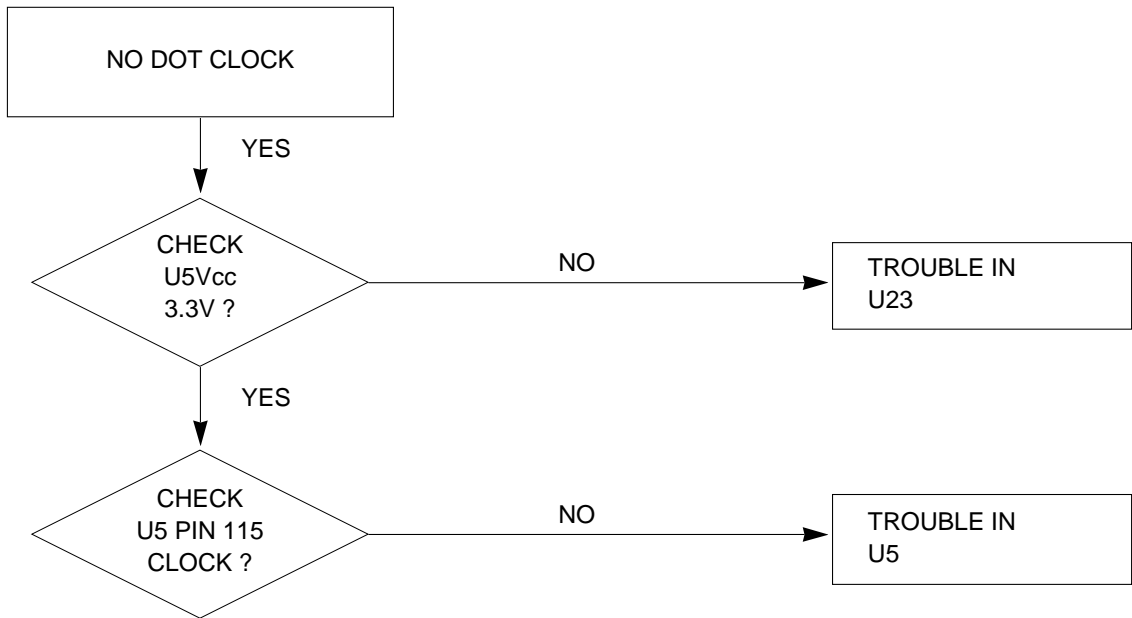
2. NO RASTER



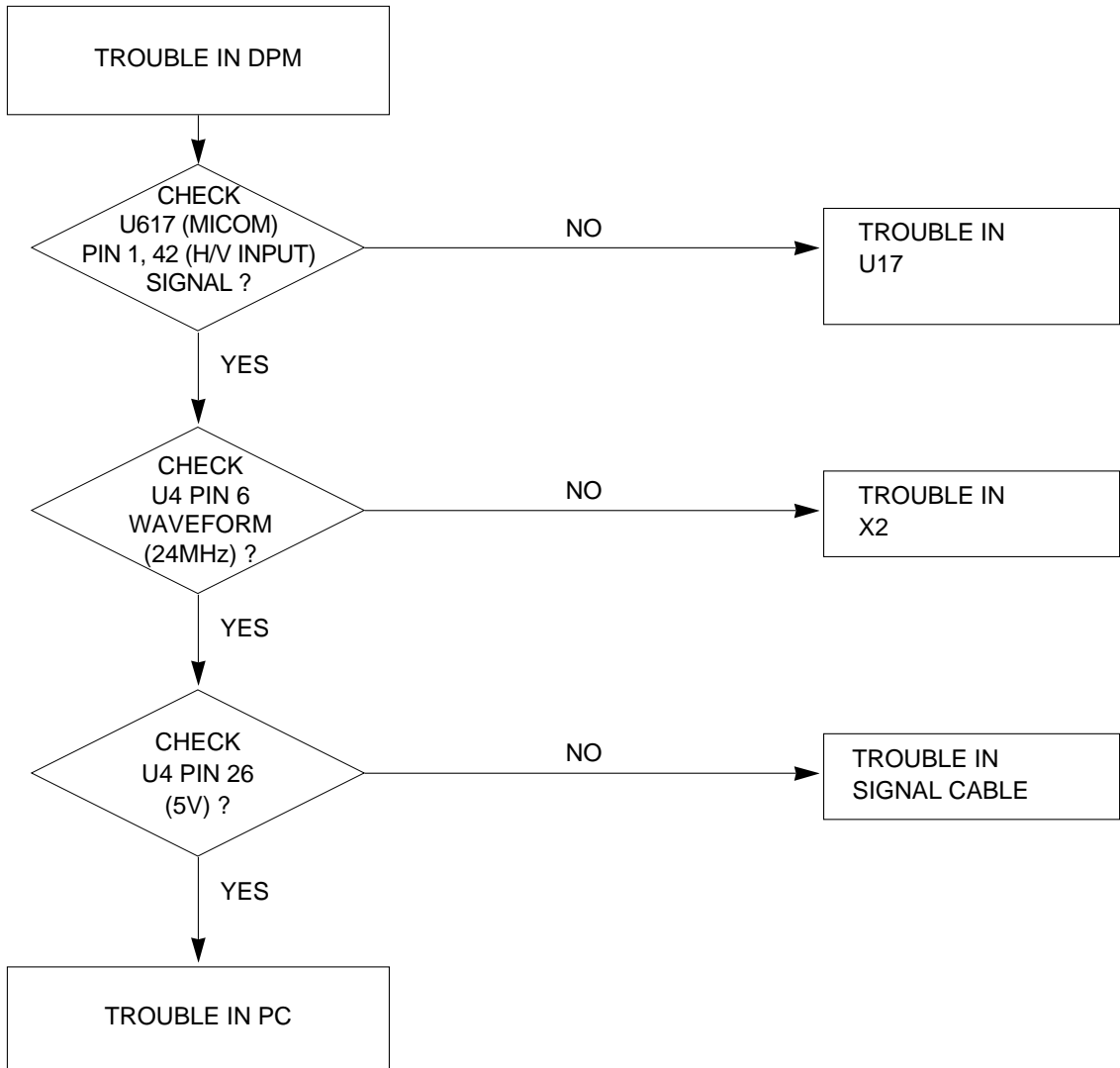




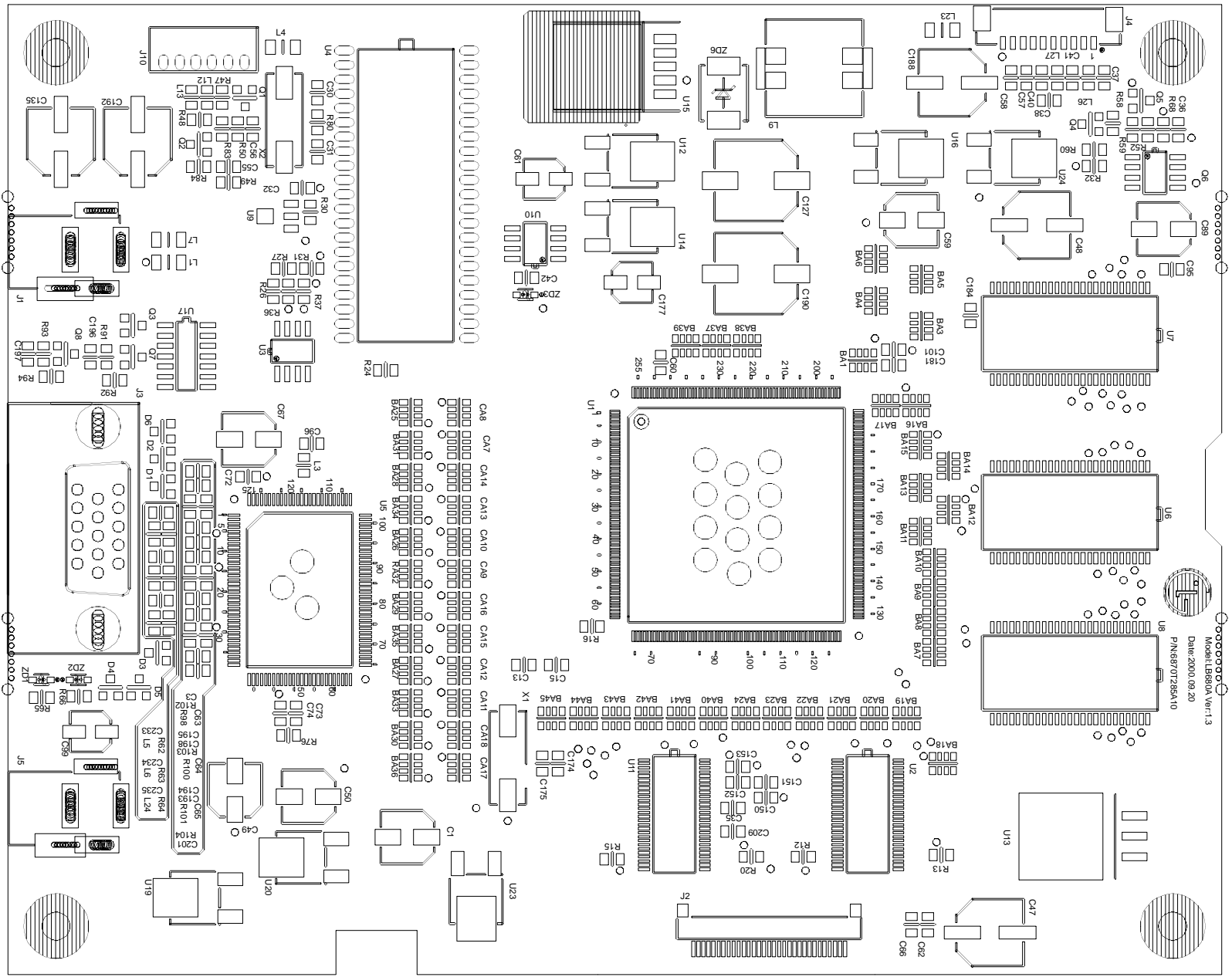
3. NO CLOCK (CLOCK GENERATOR)



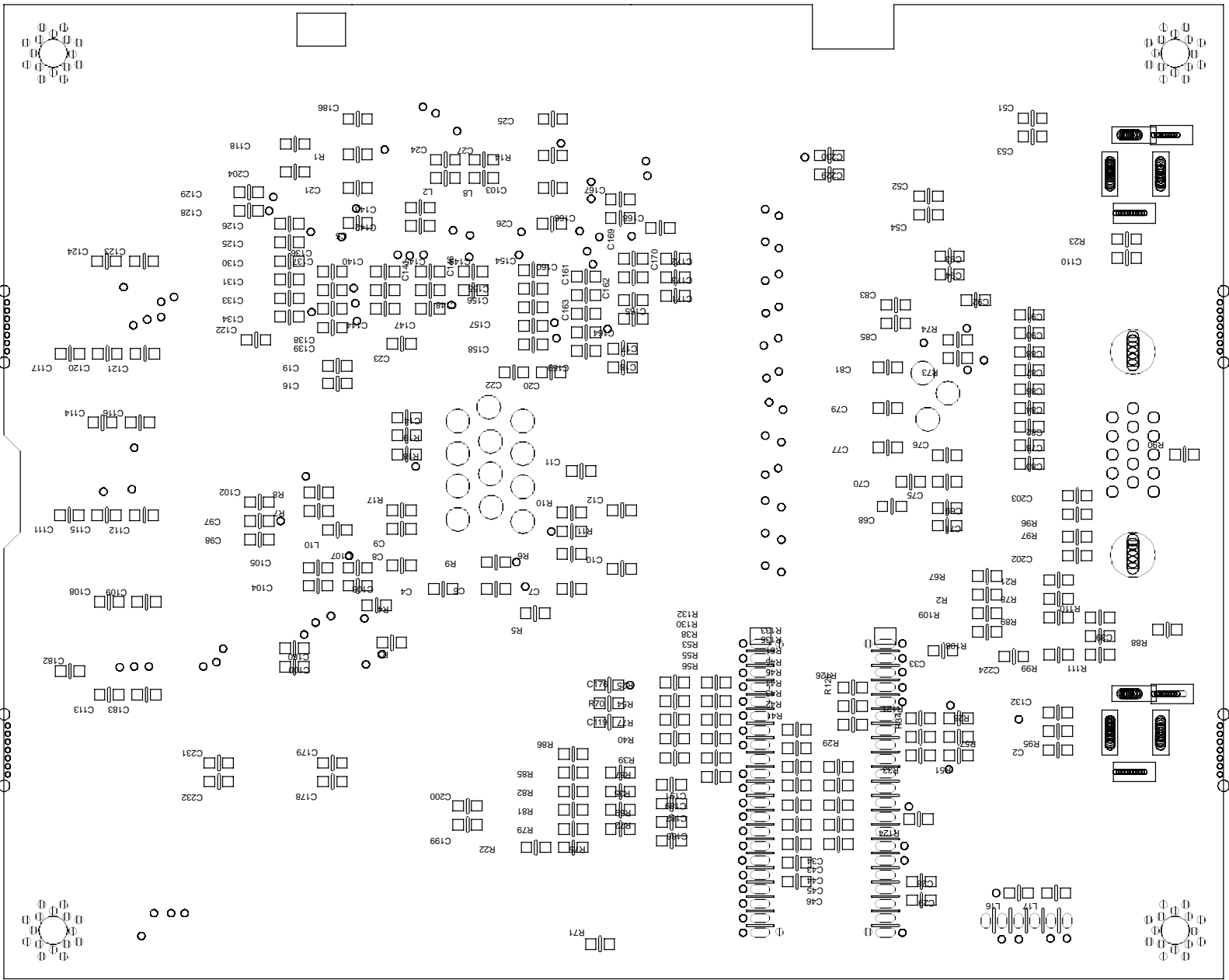
4. TROUBLE IN DPM



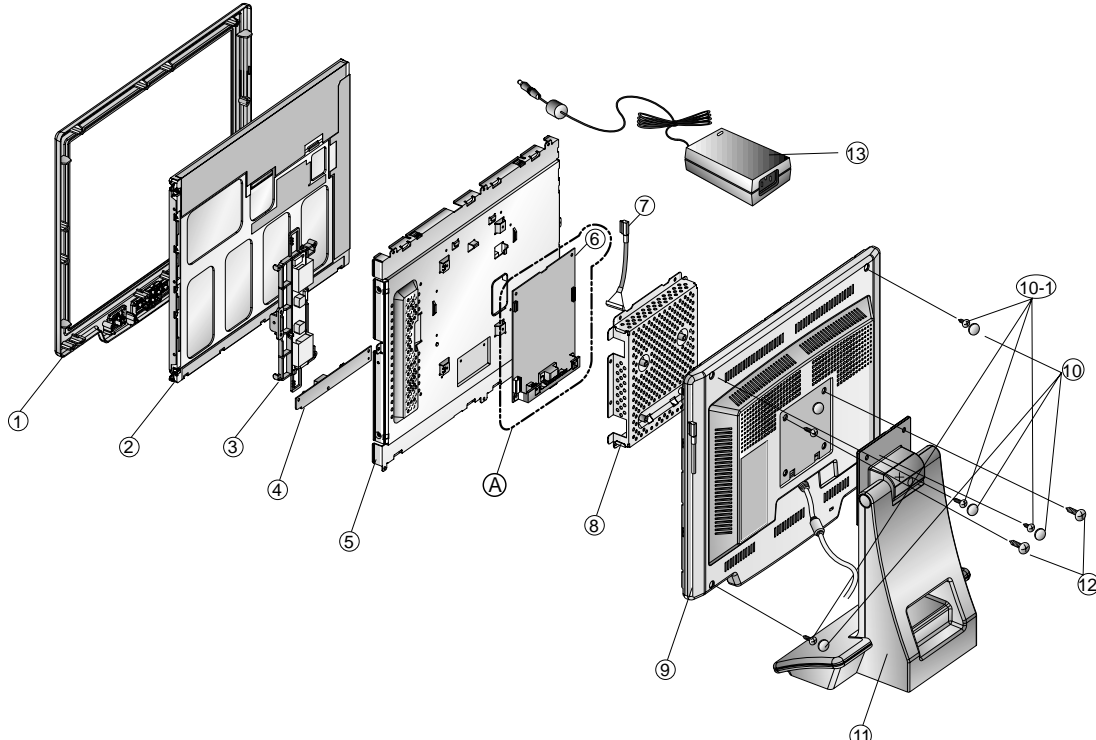
1. MAIN BOARD (Component Side)



2. MAIN BOARD (Solder Side)



EXPLODED VIEW




EXPLODED VIEW PARTS LIST

Ref. No.	Part No.	Description
1	3091TKL021C	CABINET ASS'Y, LB680A G/WAY 3090TKL019A PC+ABS, 12446B
2	6304TLT157A	LCD , LGPHILIPS TFT LCD LM157E2-A2, 15.7" 1280x1024 W/O I
3	6632Z-1502D	INVERTER, NMC1502 15.1"
4	6871TST198A	PWB(PCB)ASS'Y, SUB LB680A XAGT BRAND CONTROL
5	4951TKS062A	METAL ASS'Y, FRAME LB680A
6	6871TMT213A	PWB(PCB)ASS'Y, MAIN LB680A XGWC G/WAY CL-18 TOTAL
7	6631T11010E	CONNECTOR ASS'Y, 30P H-H 140MM UL-20276 LB680A
8	4951TKK044A	METAL ASS'Y, REAR LB680A
9	3809TKL016C	BACK COVER ASS'Y, LB680A 017A G-WAY, 12446B
10	5410TKK020B	INSULATION, PVC SHEET LB680
10-1	332-113F	SCREW, PVP+3x12(MSWR/FZMY)
11	3043TKK070B	TILT SWIVEL ASS'Y, LG680, (G/WAY, 12446B)
12	332-105F	SCREW, PVS+4x10(MSWR/FZMW)
13	6634TBZ009E	ADAPTER, AC-DC, PSCV360107 SAMSUNG 100-240V 24V 1.5A FOR G/WAY
A	3313TL5022A	MAIN TOTAL ASS'Y, LB680A G/WAY CL-18

REPLACEMENT PARTS LIST

CAUTION: BEFORE REPLACING ANY OF THESE COMPONENTS,
READ CAREFULLY THE **SAFETY PRECAUTIONS** IN THIS MANUAL.

* NOTE : **S** SAFETY Mark 
AL ALTERNATIVE PARTS

MODEL: FPD1570			DATE: 2000. 10. 11.		
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
MAIN BOARD					
CAPACITORS					
		C1	0CH8107F611	CAPACITOR, CHIP, [AL. ELECTROLYTIC], 100UF 16V M 85STD(CYL) R/TP	
		C2	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C3	0CH6150K416	CAPACITOR, CHIP, [CERAMIC LD-LESS TC], 15PF 50V J NP0 2012 R/TP	
		C4	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C5	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C6	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C7	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C8	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C9	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C10	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C11	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C12	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C13	0CH6150K416	CAPACITOR, CHIP, [CERAMIC LD-LESS TC], 15PF 50V J NP0 2012 R/TP	
		C14	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C15	0CH6150K416	CAPACITOR, CHIP, [CERAMIC LD-LESS TC], 15PF 50V J NP0 2012 R/TP	
		C16	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C17	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C18	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C19	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C20	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C21	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C22	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C23	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C24	0CH6560K416	CAPACITOR, CHIP, [CERAMIC LD-LESS TC], 56PF 50V J NP0 2012 R/TP	
		C25	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C26	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C27	0CH6560K416	CAPACITOR, CHIP, [CERAMIC LD-LESS TC], 56PF 50V J NP0 2012 R/TP	
		C28	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C29	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C30	0CH6100K116	CAPACITOR, CHIP, [CERAMIC LD-LESS TC], 10PF 50V D NP0 2012 R/TP	
		C31	0CH6100K116	CAPACITOR, CHIP, [CERAMIC LD-LESS TC], 10PF 50V D NP0 2012 R/TP	
		C32	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C33	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C34	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C35	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C36	0CH3103K516	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 10000PF 50V K B 2012 R/TP	
		C37	0CH3103K516	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 10000PF 50V K B 2012 R/TP	
		C38	0CH3103K516	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 10000PF 50V K B 2012 R/TP	
		C39	0CH6101K416	CAPACITOR, CHIP, [CERAMIC LD-LESS TC], 100PF 50V J NP0 2012 R/TP	
		C40	0CH3103K516	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 10000PF 50V K B 2012 R/TP	
		C41	0CH3103K516	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 10000PF 50V K B 2012 R/TP	
		C42	0CH3103K516	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 10000PF 50V K B 2012 R/TP	
		C43	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C44	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C45	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C46	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C47	0CZZTAT002B	CAPACITOR, SVP, SANYO 10V 47UF M REEL OS-CON	
		C48	0CZZTAT002B	CAPACITOR, SVP, SANYO 10V 47UF M REEL OS-CON	
		C49	0CZZTAT002B	CAPACITOR, SVP, SANYO 10V 47UF M REEL OS-CON	
		C50	0CH8107F611	CAPACITOR, CHIP, [AL. ELECTROLYTIC], 100UF 16V M 85STD(CYL) R/TP	
		C51	0CH3103K516	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 10000PF 50V K B 2012 R/TP	
		C52	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C53	0CH3103K516	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 10000PF 50V K B 2012 R/TP	
		C55	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C56	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C57	0CH6221K416	CAPACITOR, CHIP, [CERAMIC LD-LESS TC], 220PF 50V J NP0 2012 R/TP	
		C58	0CH6221K416	CAPACITOR, CHIP, [CERAMIC LD-LESS TC], 220PF 50V J NP0 2012 R/TP	
		C59	0CZZTAT002B	CAPACITOR, SVP, SANYO 10V 47UF M REEL OS-CON	
		C60	0CH6100K116	CAPACITOR, CHIP, [CERAMIC LD-LESS TC], 10PF 50V D NP0 2012 R/TP	

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		C202	0CH6680K416	CAPACITOR, CHIP, [CERAMIC LD-LESS TC], 68PF 50V J NP0 2012 R/TP	
		C203	0CH6680K416	CAPACITOR, CHIP, [CERAMIC LD-LESS TC], 68PF 50V J NP0 2012 R/TP	
		C204	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C209	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C224	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C229	0CH3103K516	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 10000PF 50V K B 2012 R/TP	
		C230	0CH3103K516	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 10000PF 50V K B 2012 R/TP	
		C231	0CH3104K566	CAPACITOR, CHIP, [CERAMIC LD-LESS HD], 0.1UF 50V K X 2012 R/TP	
		C232	0CH6102K406	CAPACITOR, CHIP, [CERAMIC LD-LESS TC], 1000PF 50V J SL 2012 R/TP	
		CA7	0CHZTTA001A	CAPACITOR, CHIP, 10F 50V F 3216 4ARRAY REEL TDK	
		CA8	0CHZTTA001A	CAPACITOR, CHIP, 10F 50V F 3216 4ARRAY REEL TDK	
		CA9	0CHZTTA001A	CAPACITOR, CHIP, 10F 50V F 3216 4ARRAY REEL TDK	
		CA10	0CHZTTA001A	CAPACITOR, CHIP, 10F 50V F 3216 4ARRAY REEL TDK	
		CA11	0CHZTTA001A	CAPACITOR, CHIP, 10F 50V F 3216 4ARRAY REEL TDK	
		CA12	0CHZTTA001A	CAPACITOR, CHIP, 10F 50V F 3216 4ARRAY REEL TDK	
		CA13	0CHZTTA001A	CAPACITOR, CHIP, 10F 50V F 3216 4ARRAY REEL TDK	
		CA14	0CHZTTA001A	CAPACITOR, CHIP, 10F 50V F 3216 4ARRAY REEL TDK	
		CA15	0CHZTTA001A	CAPACITOR, CHIP, 10F 50V F 3216 4ARRAY REEL TDK	
		CA16	0CHZTTA001A	CAPACITOR, CHIP, 10F 50V F 3216 4ARRAY REEL TDK	
		CA17	0CHZTTA001A	CAPACITOR, CHIP, 10F 50V F 3216 4ARRAY REEL TDK	
		CA18	0CHZTTA001A	CAPACITOR, CHIP, 10F 50V F 3216 4ARRAY REEL TDK	
DIODEs					
		D1	0DS226009AA	DIODE, SWITCHING, KDS226 TP KEC SOT-23 80V 300MA 2A 4NS 0.5UA	
		D2	0DS226009AA	DIODE, SWITCHING, KDS226 TP KEC SOT-23 80V 300MA 2A 4NS 0.5UA	
		D3	0DS226009AA	DIODE, SWITCHING, KDS226 TP KEC SOT-23 80V 300MA 2A 4NS 0.5UA	
		D4	0DS226009AA	DIODE, SWITCHING, KDS226 TP KEC SOT-23 80V 300MA 2A 4NS 0.5UA	
		D5	0DS226009AA	DIODE, SWITCHING, KDS226 TP KEC SOT-23 80V 300MA 2A 4NS 0.5UA	
		D6	0DS226009AA	DIODE, SWITCHING, KDS226 TP KEC SOT-23 80V 300MA 2A 4NS 0.5UA	
		ZD1	0DZ560009DA	DIODE, ZENER, UDZ S 5.6B TP ROHM-K SOD323 200MW 5.6V 5MA .PF	
		ZD2	0DZ560009DA	DIODE, ZENER, UDZ S 5.6B TP ROHM-K SOD323 200MW 5.6V 5MA .PF	
		ZD3	0DZ560009DA	DIODE, ZENER, UDZ S 5.6B TP ROHM-K SOD323 200MW 5.6V 5MA .PF	
		ZD6	0DR340009AA	DIODE, RECTIFIER, MBRS340 TP FAIRCHILD NON 40V 3A 80A .SEC 2MA	
ICs					
		U1	0IMR882820B	IC, MACRONIX , MX88L282FC 256PQFP BK SXGA LCD INTEGRATION	
		U2	0ITH638300A	IC, THINE MICROSYSTEMS, THC63LVDM83A, LVDS(THINE)	
		U3	0IMP240800A	IC, MICRO CHIP TECHNOLOGY, 24LC08BT/SN 8P SOIC TP EEPROM	
		U4	0IZZT5109A	IC, DRAWING, MC68HC08BD48 42PIN, SDIP BK MCFU(BD48) FLASH ROM	
		U5	0IAD988414A	IC, ANALOG DEVICE, AD9884AKS-140 128P MQFP ST ANALOG DEVICES	
		U6	0IEB121616A	IC, ELITE MEMORY TECHNOLOGY, M12L16161A-7T 50P TSOP ST	
		U7	0IEB121616A	IC, ELITE MEMORY TECHNOLOGY, M12L16161A-7T 50P TSOP ST	
		U8	0IEB121616A	IC, ELITE MEMORY TECHNOLOGY, M12L16161A-7T 50P TSOP ST	
		U9	0IKE704200J	IC, KEC, KIA7042AF SOT-89 TP 4.2V VOLTAGE DETECTOR	
		U11	0ITH638300A	IC, THINE MICROSYSTEMS, THC63LVDM83A, LVDS(THINE)	
		U12	0ISS781200J	IC, SAMSUNG ELECTRONICS, KA78M12R 3P, D-PAK TP VOL. REGULATOR	
		U13	0IPMGSJ001A	IC, POWER MANAGEMENT, EZ1086CM-3.3 SEMTECH TO-263 R/TP 1.5A	
		U14	0ISS780500H	IC, SAMSUNG ELECTRONICS, KA78M05-R 3P, D-PAK TP 5V 0.5A	
		U15	0INS259650A	IC, NATIONAL SEMICONDUCTOR, LM2596-5V 5LEAD, TO263(S) TP 3A 5V S/D	
		U16	0IRH033200A	IC, ROHM, BA033FP-E2 MOLD-3 TP REGULATOR	
		U17	0IMO741420B	IC, MOTOROLA, MC74HCT14ADR2 14P, SOIC TP LEVEL CONVERTER	
		U19	0IRH033200A	IC, ROHM, BA033FP-E2 MOLD-3 TP REGULATOR	
		U20	0IRH033200A	IC, ROHM, BA033FP-E2 MOLD-3 TP REGULATOR	
		U23	0IRH033200A	IC, ROHM, BA033FP-E2 MOLD-3 TP REGULATOR	
		U24	0IRH033200A	IC, ROHM, BA033FP-E2 MOLD-3 TP REGULATOR	
COILS & CORES					
		L1	6210TCE001C	CORE (CIRC), BEAD, HB-1T3216-500JT CERATEC 3216MM CHIP-BEAD	
		L2	6210TCE001E	CORE (CIRC), BEAD, HB-1M2012-800JT CERATEC 2012MM R/TP	
		L3	6210TCE001K	CORE (CIRC), BEAD, HB-1H2012-260JT CERATEC 2012MM R/TP	
		L4	6210TCE001G	CORE (CIRC), BEAD, HH-1M3216-501 CERATEC 3216MM R/TP	
		L5	6210TCE001K	CORE (CIRC), BEAD, HB-1H2012-260JT CERATEC 2012MM R/TP	
		L6	6210TCE001K	CORE (CIRC), BEAD, HB-1H2012-260JT CERATEC 2012MM R/TP	
		L7	6210TCE001C	CORE (CIRC), BEAD, HB-1T3216-500JT CERATEC 3216MM CHIP-BEAD	
		L8	6210TCE001E	CORE (CIRC), BEAD, HB-1M2012-800JT CERATEC 2012MM R/TP	
		L9	6200TEZ003D	FILTER(CIRC), CAPACITOR, TPRH1207-330M BOAM 33UH, SMD CHOKE	

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		L10	6210TCE001R	CORE (CIRC), BEAD, HB-1S2012-400JT CERATECH 2012MM R/TP	
		L12	6210TCE001D	CORE (CIRC), BEAD, HB-1M2012-601JT CERATEC 2012MM R/TP	
		L13	6210TCE001D	CORE (CIRC), BEAD, HB-1M2012-601JT CERATEC 2012MM R/TP	
		L16	6210TCE001D	CORE (CIRC), BEAD, HB-1M2012-601JT CERATEC 2012MM R/TP	
		L17	6210TCE001D	CORE (CIRC), BEAD, HB-1M2012-601JT CERATEC 2012MM R/TP	
		L23	6210TCE001G	CORE (CIRC), BEAD, HH-1M3216-501 CERATEC 3216MM R/TP	
		L24	6210TCE001K	CORE (CIRC), BEAD, HB-1H2012-260JT CERATEC 2012MM R/TP	
		L26	6210TCE001D	CORE (CIRC), BEAD, HB-1M2012-601JT CERATEC 2012MM R/TP	
		L27	6210TCE001D	CORE (CIRC), BEAD, HB-1M2012-601JT CERATEC 2012MM R/TP	
TRANSISTORS					
		Q1	0TR162309CA	TRANSISTOR, KSC1623 TP SAMSUNG SOT23 NPN EPI. SILICON TR	
		Q2	0TR162309CA	TRANSISTOR, KSC1623 TP SAMSUNG SOT23 NPN EPI. SILICON TR	
		Q3	0TR162309CA	TRANSISTOR, KSC1623 TP SAMSUNG SOT23 NPN EPI. SILICON TR	
		Q5	0TR162309CA	TRANSISTOR, KSC1623 TP SAMSUNG SOT23 NPN EPI. SILICON TR	
		Q6	0TF492509AA	FET, SI4925DY TP TEMIC 30V 6.1A SO-8	
		Q7	0TR390409AE	TRANSISTOR, KST3904-MTF TP SAMSUNG SOT23 GEN. PURPOSE TR	
		Q8	0TR390409AE	TRANSISTOR, KST3904-MTF TP SAMSUNG SOT23 GEN. PURPOSE TR	
RESISTORS					
		R1	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R2	0RH2201D622	RESISTOR, CHIP, 2.2K 1/10W P-TYPE TAPPING	
		R3	0RH0222D622	RESISTOR, CHIP, 22 1/10W 5 D.R/TP	
		R4	0RH0222D622	RESISTOR, CHIP, 22 1/10W 5 D.R/TP	
		R5	0RH1500D622	RESISTOR, CHIP, 150 1/10W 5 D.R/TP	
		R6	0RH1500D622	RESISTOR, CHIP, 150 1/10W 5 D.R/TP	
		R7	0RH0472D622	RESISTOR, CHIP, 47 1/10W 5 D.R/TP	
		R8	0RH1500D622	RESISTOR, CHIP, 150 1/10W 5 D.R/TP	
		R9	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R11	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R12	0RH0222D622	RESISTOR, CHIP, 22 1/10W 5 D.R/TP	
		R13	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R14	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R15	0RH0222D622	RESISTOR, CHIP, 22 1/10W 5 D.R/TP	
		R16	0RH1004D622	RESISTOR, CHIP, 1.0M 1/10W 5 D.R/TP	
		R17	0RH0222D622	RESISTOR, CHIP, 22 1/10W 5 D.R/TP	
		R18	0RH0222D622	RESISTOR, CHIP, 22 1/10W 5 D.R/TP	
		R19	0RH0222D622	RESISTOR, CHIP, 22 1/10W 5 D.R/TP	
		R20	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R21	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R22	0RH1003D622	RESISTOR, CHIP, 100K 1/10W 5 D.R/TP	
		R24	0RH0000D622	RESISTOR, CHIP, 0 1/10W P-TYPE TAPPING	
		R25	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R26	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R27	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R28	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R29	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R30	0RH3302D622	RESISTOR, CHIP, 33K 1/10W 5 D.R/TP	
		R31	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R33	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R34	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R35	0RH1201D622	RESISTOR, CHIP, 1.2K 1/10W 5 D.R/TP	
		R36	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R37	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R38	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R39	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R40	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R41	0RH4700D622	RESISTOR, CHIP, 470 1/10W 5 D.R/TP	
		R42	0RH4700D622	RESISTOR, CHIP, 470 1/10W 5 D.R/TP	
		R43	0RH4700D622	RESISTOR, CHIP, 470 1/10W 5 D.R/TP	
		R44	0RH4700D622	RESISTOR, CHIP, 470 1/10W 5 D.R/TP	
		R45	0RH4700D622	RESISTOR, CHIP, 470 1/10W 5 D.R/TP	
		R46	0RH4700D622	RESISTOR, CHIP, 470 1/10W 5 D.R/TP	
		R47	0RH2700D622	RESISTOR, CHIP, 270 1/10W 5 D.R/TP	
		R48	0RH2700D622	RESISTOR, CHIP, 270 1/10W 5 D.R/TP	
		R49	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R50	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		R51	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R52	0RH6802D622	RESISTOR, CHIP, 68K 1/10W 5 D.R/TP	
		R53	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R54	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R55	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R56	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R57	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R59	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R61	0RH4700D622	RESISTOR, CHIP, 470 1/10W 5 D.R/TP	
		R62	0RH0752D622	RESISTOR, CHIP, 75 1/10W 5 D.R/TP	
		R63	0RH0752D622	RESISTOR, CHIP, 75 1/10W 5 D.R/TP	
		R64	0RH0752D622	RESISTOR, CHIP, 75 1/10W 5 D.R/TP	
		R65	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R66	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R67	0RH4700D622	RESISTOR, CHIP, 470 1/10W 5 D.R/TP	
		R68	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R69	0RH1201D622	RESISTOR, CHIP, 1.2K 1/10W 5 D.R/TP	
		R70	0RH1003D622	RESISTOR, CHIP, 100K 1/10W 5 D.R/TP	
		R71	0RH1500D622	RESISTOR, CHIP, 150 1/10W 5 D.R/TP	
		R72	0RH1201D622	RESISTOR, CHIP, 1.2K 1/10W 5 D.R/TP	
		R73	0RH1500D622	RESISTOR, CHIP, 150 1/10W 5 D.R/TP	
		R74	0RH1500D622	RESISTOR, CHIP, 150 1/10W 5 D.R/TP	
		R75	0RH1201D622	RESISTOR, CHIP, 1.2K 1/10W 5 D.R/TP	
		R76	0RH1501D622	RESISTOR, CHIP, 1.5K 1/10W 5 D.R/TP	
		R77	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R78	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R79	0RH1201D622	RESISTOR, CHIP, 1.2K 1/10W 5 D.R/TP	
		R80	0RH1004D622	RESISTOR, CHIP, 1.0M 1/10W 5 D.R/TP	
		R81	0RH1201D622	RESISTOR, CHIP, 1.2K 1/10W 5 D.R/TP	
		R82	0RH1201D622	RESISTOR, CHIP, 1.2K 1/10W 5 D.R/TP	
		R85	0RH1201D622	RESISTOR, CHIP, 1.2K 1/10W 5 D.R/TP	
		R86	0RH1201D622	RESISTOR, CHIP, 1.2K 1/10W 5 D.R/TP	
		R87	0RH1201D622	RESISTOR, CHIP, 1.2K 1/10W 5 D.R/TP	
		R88	0RH1501D622	RESISTOR, CHIP, 1.5K 1/10W 5 D.R/TP	
		R89	0RH1501D622	RESISTOR, CHIP, 1.5K 1/10W 5 D.R/TP	
		R90	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R91	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R92	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R93	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R94	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R95	0RH1003D622	RESISTOR, CHIP, 100K 1/10W 5 D.R/TP	
		R96	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R97	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R98	0RH0102D622	RESISTOR, CHIP, 10 1/10W 5 D.R/TP	
		R99	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R100	0RH0102D622	RESISTOR, CHIP, 10 1/10W 5 D.R/TP	
		R101	0RH0102D622	RESISTOR, CHIP, 10 1/10W 5 D.R/TP	
		R102	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R103	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R104	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R108	0RH4700D622	RESISTOR, CHIP, 470 1/10W 5 D.R/TP	
		R109	0RH2201D622	RESISTOR, CHIP, 2.2K 1/10W P-TYPE TAPPING	
		R110	0RH4702D622	RESISTOR, CHIP, 47K 1/10W 5 D.R/TP	
		R111	0RH2702D622	RESISTOR, CHIP, 27K 1/10W 5 D.R/TP	
		R121	0RH1003D622	RESISTOR, CHIP, 100K 1/10W 5 D.R/TP	
		R124	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R125	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R126	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R130	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R132	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R133	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R135	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	

OTHERS

		J1	6612TAH002A	JACK, AC/DC POWER DC-001 UNITOP DC-001 2.0MM (UNITOP)	
		X1	6202TST001A	CRYSTAL, SX-1 SUNNY ,SMS, 14.31818MHZ ,30PPM, 18PF, TP	
		X2	6202TST001E	CRYSTAL, SX-1 SUNNY CHIP 24MHZ 30PPM 20PF BK	
		RA32	6210TCE002C	CORE (CIRC), BEAD, HB-4T3216-201JT CERATECH 3216MM R/TP	

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMAR
CONTROL BOARD					
		R301	0RD1001Q609	RESISTOR, FIXED CARBON FILM, 1K 1/4W(3 5% TA52	
		R302	0RD1001Q609	RESISTOR, FIXED CARBON FILM, 1K 1/4W(3 5% TA52	
		R303	0RD1601Q609	RESISTOR, FIXED CARBON FILM, 1.60K 1/4W(3 5% TA52	
		R304	0RD1601Q609	RESISTOR, FIXED CARBON FILM, 1.60K 1/4W(3 5% TA52	
		R305	0RD3001Q609	RESISTOR, FIXED CARBON FILM, 3K 1/4W(3 5% TA52	
		R306	0RD3001Q609	RESISTOR, FIXED CARBON FILM, 3K 1/4W(3 5% TA52	
		S301	140-058E	SWITCH, TACT, SKHV10910B LGEC NON 12V 20A HORIZONTAL 160G	
		S302	140-058E	SWITCH, TACT, SKHV10910B LGEC NON 12V 20A HORIZONTAL 160G	
		S303	140-058E	SWITCH, TACT, SKHV10910B LGEC NON 12V 20A HORIZONTAL 160G	
		S304	140-058E	SWITCH, TACT, SKHV10910B LGEC NON 12V 20A HORIZONTAL 160G	
		S305	140-058E	SWITCH, TACT, SKHV10910B LGEC NON 12V 20A HORIZONTAL 160G	
		S306	140-058E	SWITCH, TACT, SKHV10910B LGEC NON 12V 20A HORIZONTAL 160G	
		S307	140-058E	SWITCH, TACT, SKHV10910B LGEC NON 12V 20A HORIZONTAL 160G	
		ZD301	0DZ560009CE	DIODE, ZENER, MTZJ5.6B TP ROHM-K DO34 500MW 5.6V 5MA 26MM	
		ZD302	0DZ560009CE	DIODE, ZENER, MTZJ5.6B TP ROHM-K DO34 500MW 5.6V 5MA 26MM	
		LED301	0DL571300AA	LED "SPR571MVW3 TP ROHM GREEN/RED ""10,10MCD"""	
MISCELLANEOUS					
△		LCD	6304TLT157A	LCD(LIQUID CRYSTAL DISPLAY) "LGPHILIPS TFT LCD LM157E2-A2 15.7""	
△		P/CORD	6410TEW003C	POWER CORD SP023+IS14 I-SHENG VDE/SEMKO 1870MM WALL 85964	
△		INVERTER	6632Z-1502D	INVERTER "NMC1502 15.1"" (CHOI JEONG GYU)"	
△		ADAPTER	6634TBZ009E	ADAPTER AC-DC, PSCV360107A SAMSUNG 100-240V 24V 1.5A FOR G/WAY	
		S/CABLE	6866TD9001L	SIGNAL CABLE UL 2990-9C(7.5) DT 1870MM COOL GRAY 3C LB680A DM	

Pin Configurations

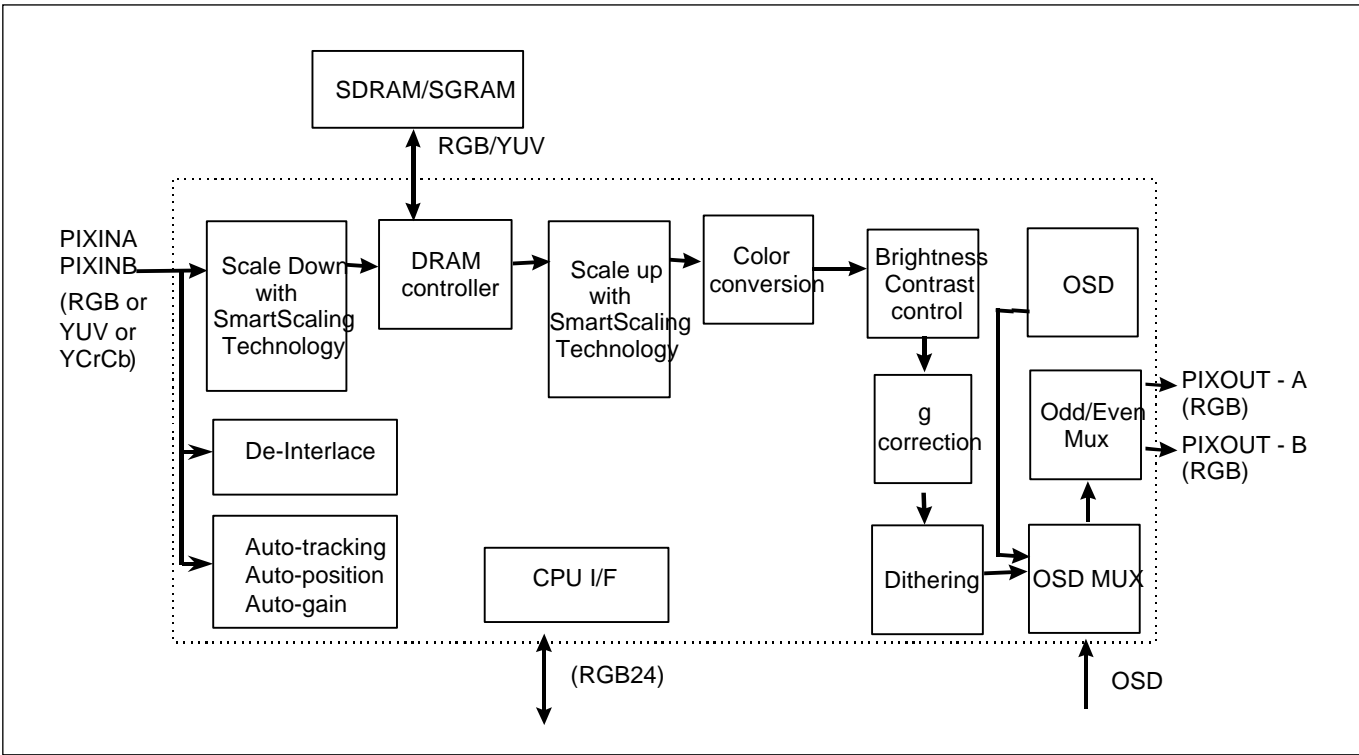
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 191 MA0
 190 MA1
 189 MA2
 188 MA3
 187 MA4
 186 MA5
 185 MA6
 184 MA7
 183 MA8
 182 MA9
 181 GNDP
 180 MCLK
 179 VDDP3V
 178 CE
 177 MD16
 176 MD17
 175 MD18
 174 MD19
 173 MD20
 172 MD21
 171 MD22
 170 MD23
 169 CS0#
 168 GND
 167 MD24
 166 MD25
 165 MD26
 164 MD27
 163 MD28
 162 MD29
 161 MD30
 160 MD31
 159 GNDP
 158 MD32
 157 MD33
 156 MD34
 155 MD35
 154 MD36
 153 MD37
 152 MD38
 151 MD39
 150 MD40
 149 DM3
 148 DM2
 147 VDDP3V
 146 MD41
 145 MD42
 144 MD43
 143 MD44
 142 MD45
 141 MD46
 140 MD47
 139 GNDP
 138 OSDBLINK
 137 OSDB1
 136 OSDG1
 135 OSDR1
 134 OSDCS#
 133 OSDCLK
 132 OSDATA
 131 GOUT4/OSDINT
 130 VDD
 129 VDDP



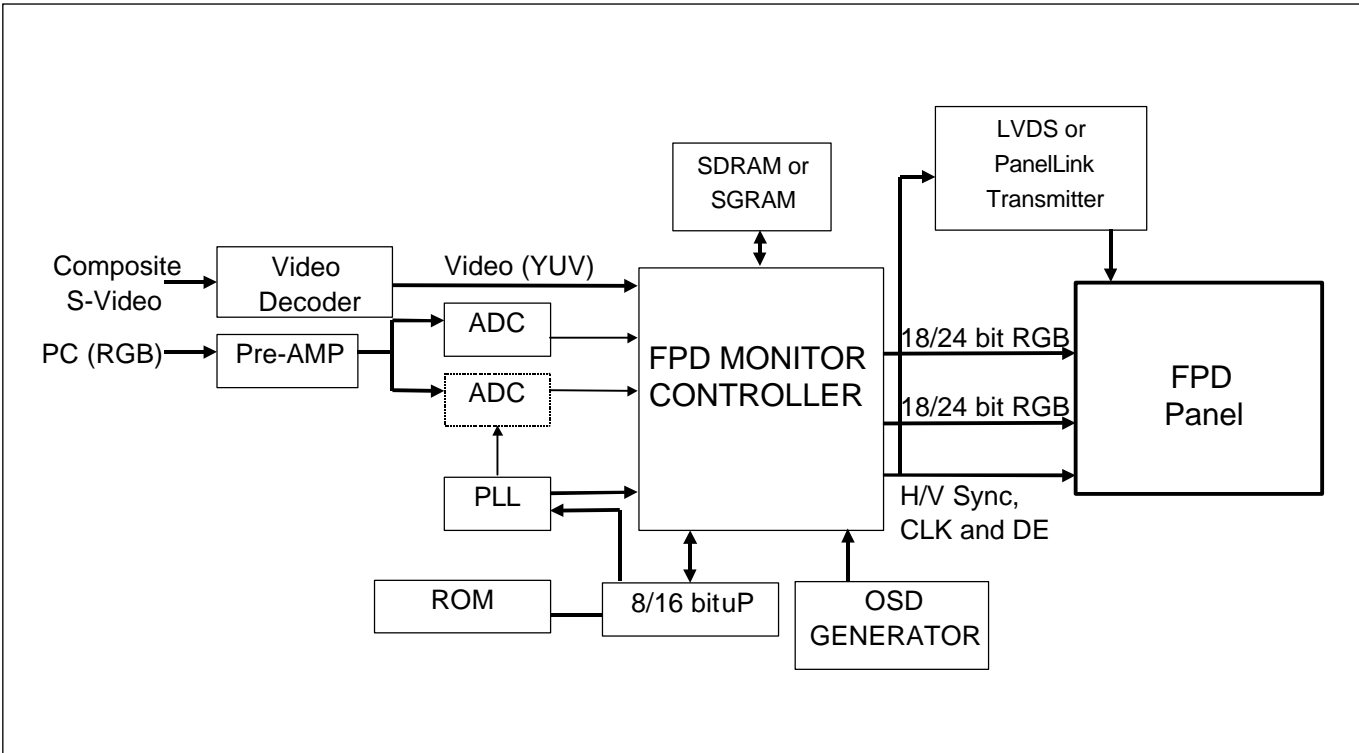
128 GNDP
 127 GNDP
 126 GOUT1/OSDGO
 125 GOUT0/OSDB0
 124 LDTG
 123 LVSYNCP
 122 LHSYNCP
 121 VDDP
 120 RA0
 119 RA1
 118 RA2
 117 RA3
 116 RA4
 115 RA5
 114 RA6
 113 RA7
 112 GND
 111 GA0
 110 SA1
 109 GA2
 108 GA3
 107 GA4
 106 GA5
 105 GA6
 104 GA7
 103 BA0
 102 BA1
 101 SA2
 100 BA3
 99 BA4
 98 BA5
 97 BA6
 96 BA7
 95 GNDP
 94 LCKA
 93 LCKB
 92 VDDP
 91 RB0
 90 RB1
 89 RB2
 88 RB3
 87 RB4
 86 RB5
 85 RB6
 84 RB7
 83 VDD
 82 GB0
 81 GB1
 80 GB2
 79 GB3
 78 GB4
 77 GB5
 76 GB6
 75 GB7
 74 BB0
 73 BB1
 72 BB2
 71 BB3
 70 BB4
 69 BB5
 68 BB6
 67 BB7
 66 GNDP
 65 GNDP

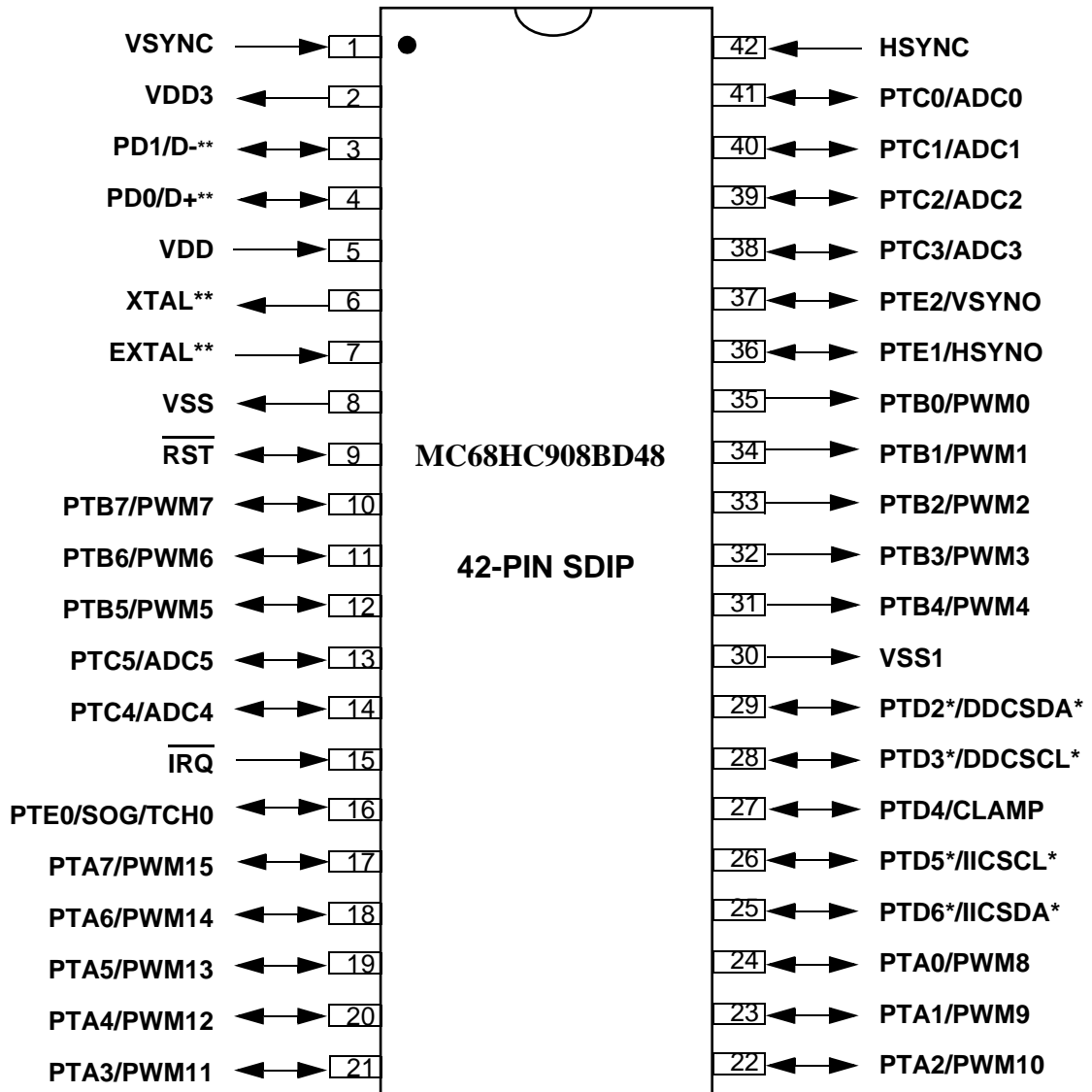
64 VDDP
 63 AVDD
 62 AVDD
 61 XI
 60 XO
 59 AGND
 58 AGND
 57 GNDP
 56 PIXINB16
 55 PIXINB17
 54 PIXINB18
 53 PIXINB19
 52 PIXINB20
 51 PIXINB21
 50 PIXINB22
 49 PIXINB23
 48 GND
 47 PIXINB8
 46 PIXINB9
 45 PIXINB10
 44 PIXINB11
 43 PIXINB12
 42 PIXINB13
 41 PIXINB14
 40 PIXINB15
 39 PIXINB0
 38 PIXINB1
 37 PIXINB2
 36 PIXINB3
 35 PIXINB4
 34 PIXINB5
 33 PIXINB6
 32 PIXINB7
 31 VDDP
 30 ADCCLK2/DE
 29 ADCCLK1
 28 GNDP
 27 PIXINA16
 26 PIXINA17
 25 PIXINA18
 24 PIXINA19
 23 PIXINA20
 22 PIXINA21
 21 PIXINA22
 20 PIXINA23
 19 VDD
 18 PIXINA8
 17 PIXINA9
 16 PIXINA10
 15 PIXINA11
 14 PIXINA12
 13 PIXINA13
 12 PIXINA14
 11 PIXINA15
 10 GND
 9 PIXINA0
 8 PIXINA1
 7 PIXINA2
 6 PIXINA3
 5 PIXINA4
 4 PIXINA5
 3 PIXINA6
 2 PIXINA7
 1 VDDP

Chip Block Diagram



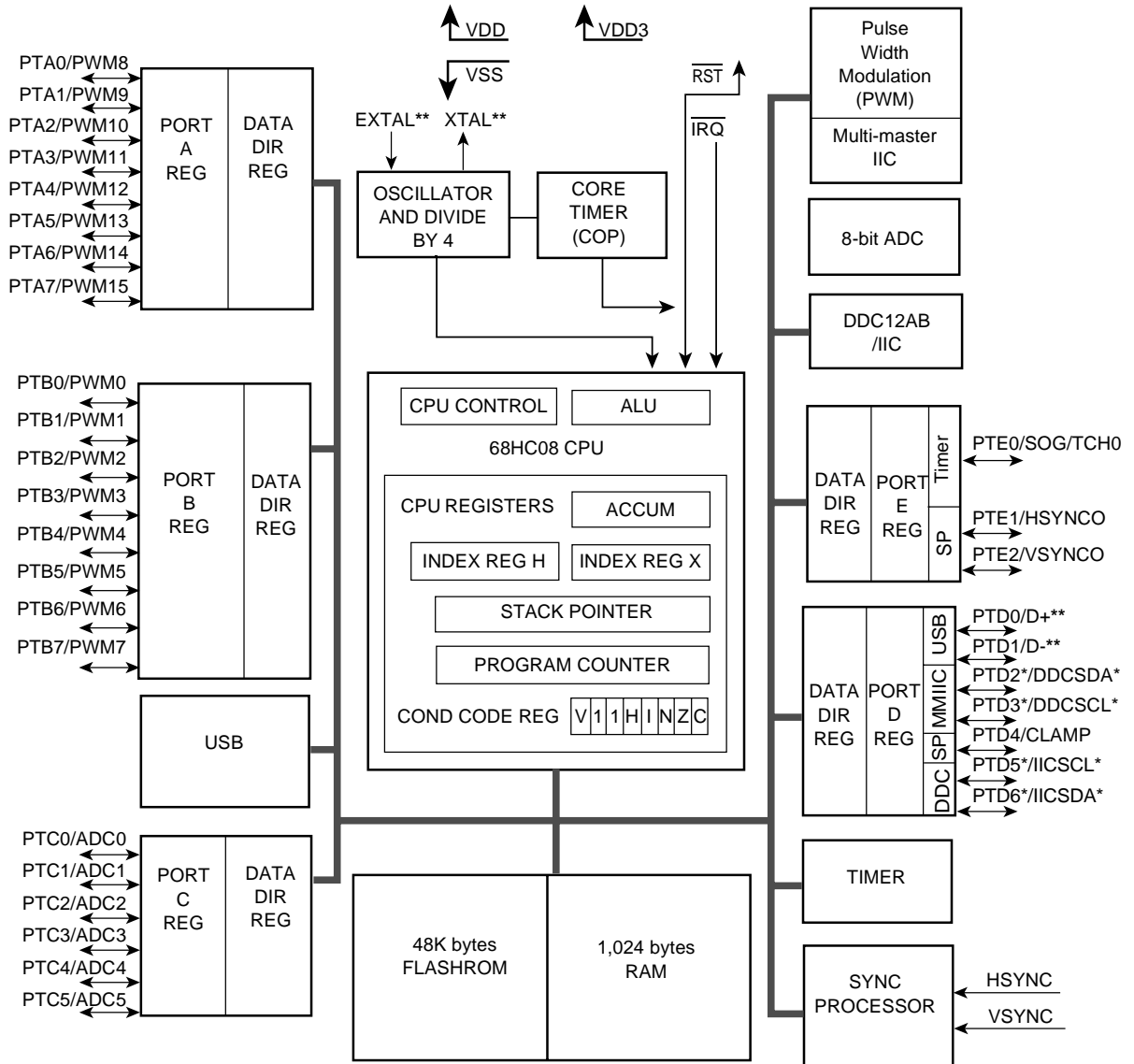
System Block Diagram for LCD monitor





*: +5V open-drain
 **: +3.3V port
 else: +5V port

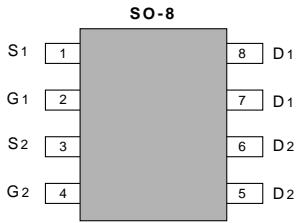
BLOCK DIAGRAM FOR MC68HC908BD



*: +5V open-drain
 **: +3.3V port
 else: +5V port

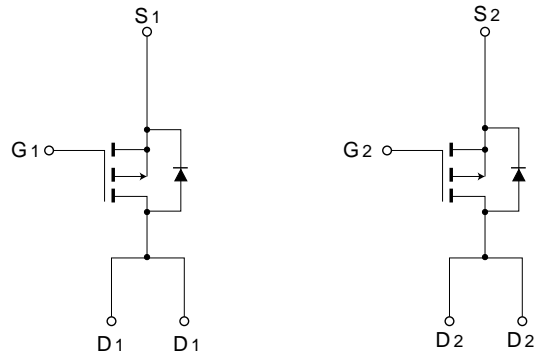
SI4925DY

Dual P-Channel 30-V (D-S) Rated MOSFET



Pin Configuration

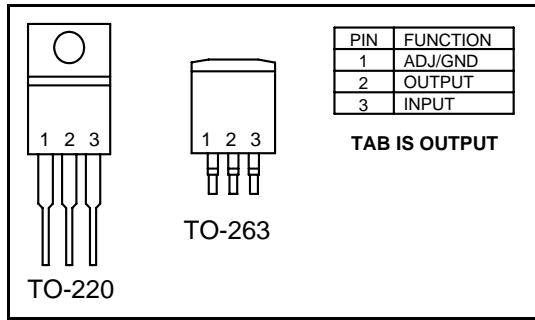
P-Channel MOSFET



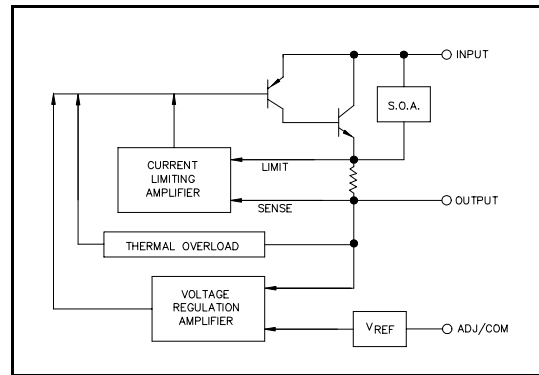
EZ1086

1.5AMP POSITIVE VOLTAGE REGULATOR

Pin Configuration



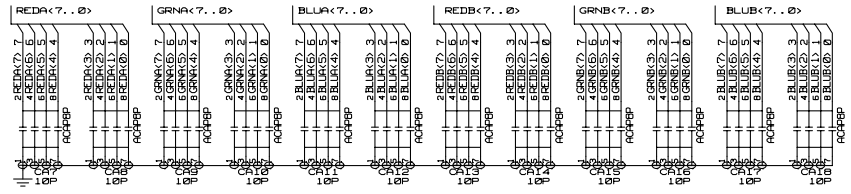
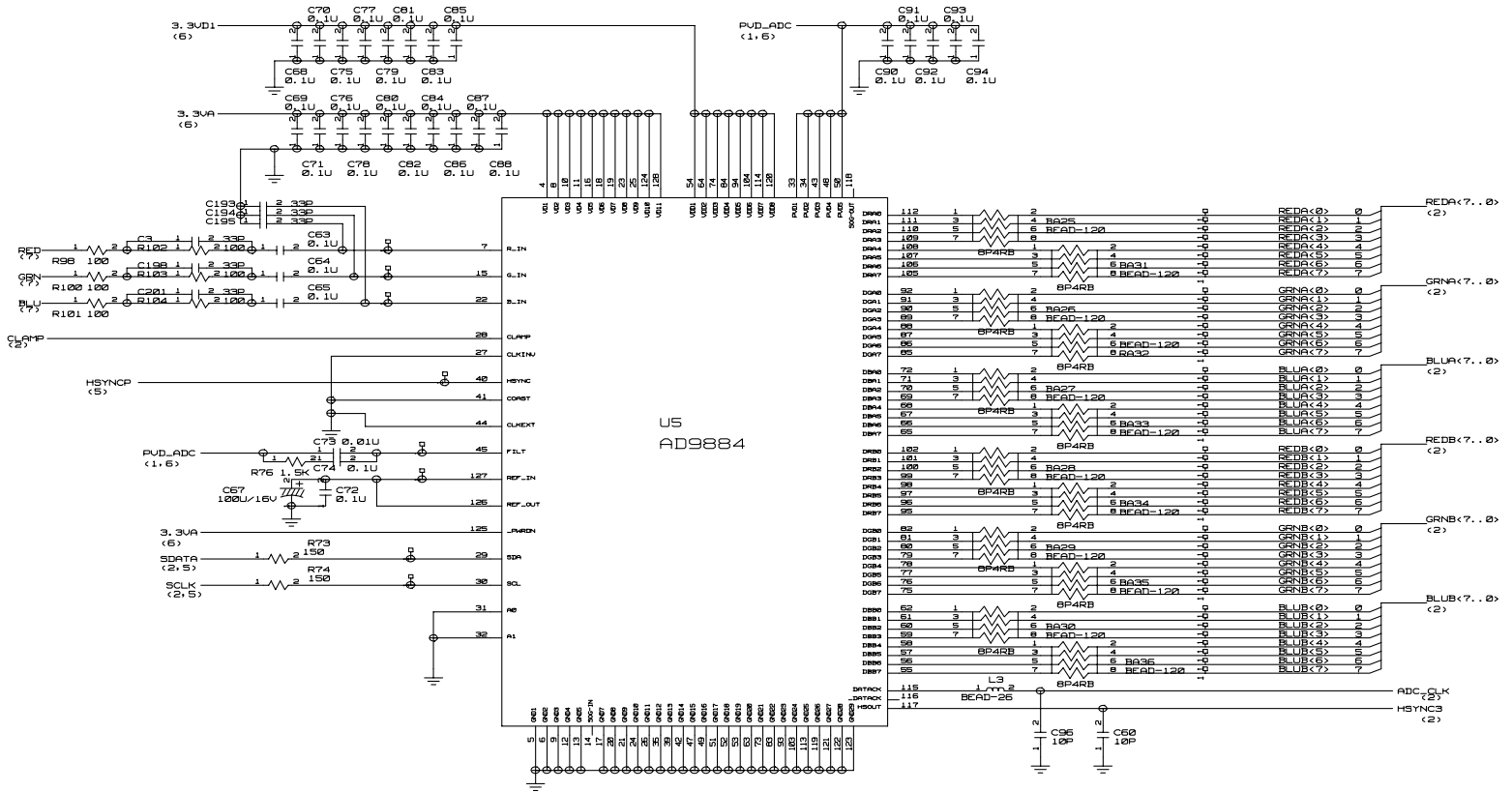
BLOCK DIAGRAM



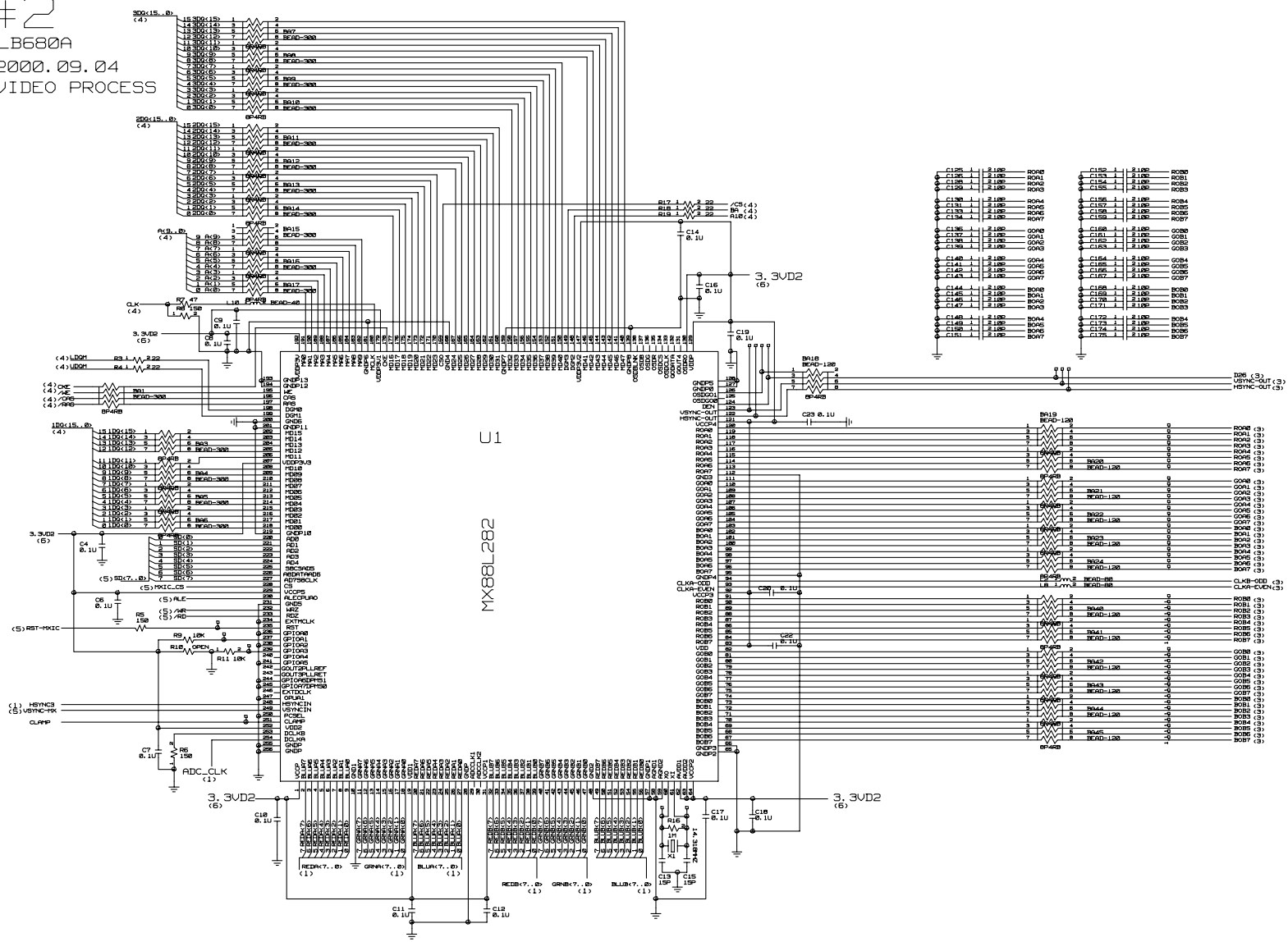
TYPE	PARTS	TYPE	PARTS
<p>1 2 3 1. INPUT 2. GND 3. OUTPUT</p>	<p>Regulator</p> <p>KA78M05R KA78M12R</p>	<p>1 2 3 1. BASE 2. EMITTER 3. COLLECTOR</p>	<p>Transistor</p> <p>KSC1623</p>
	<p>1 2 3 1. Vcc 2. GND 3. OUT</p>		<p>BA033FP</p>

1 2000.09.04
LB680A

AD9884 (PRE-AMP/PLL/ADC)



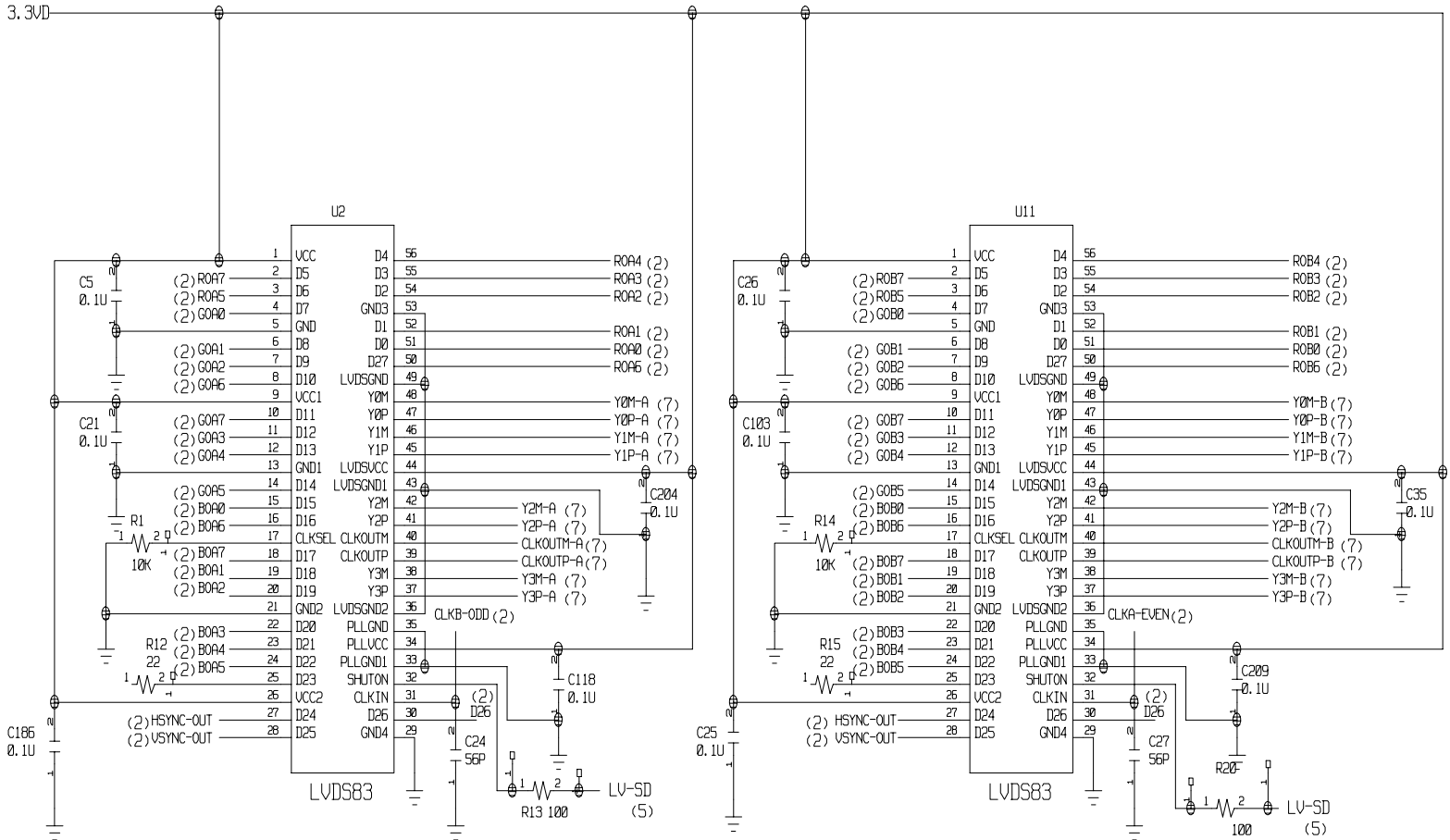
#2
 LB680A
 2000.09.04
 VIDEO PROCESS



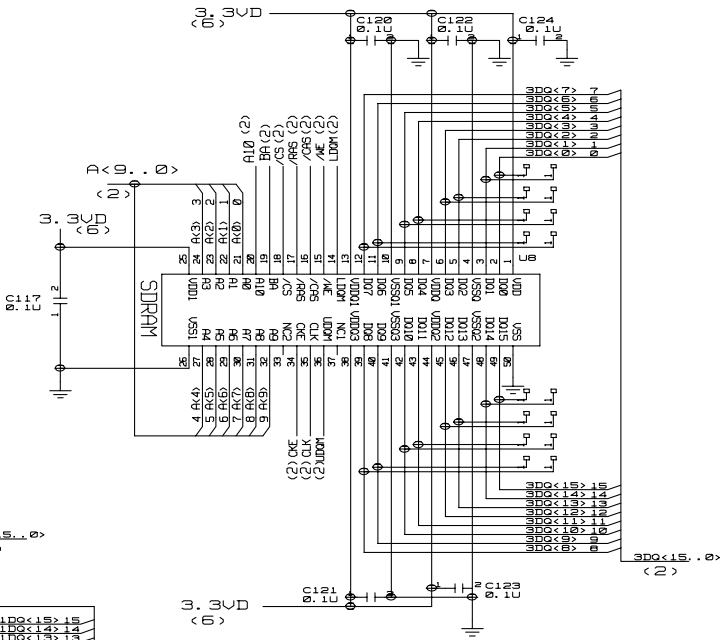
2. VIDEO PROCESS

#3 LVDS

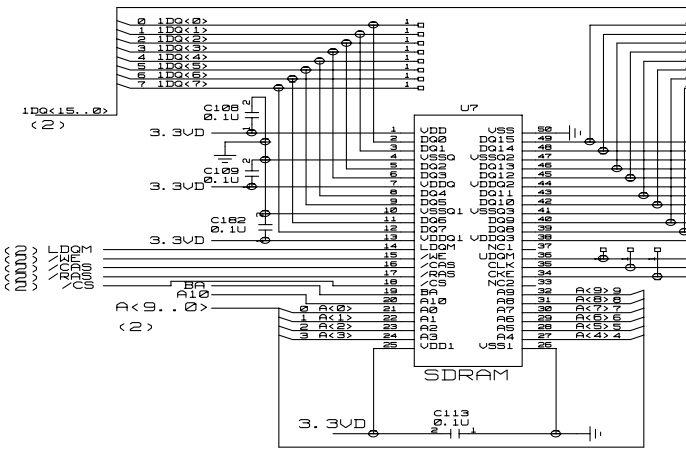
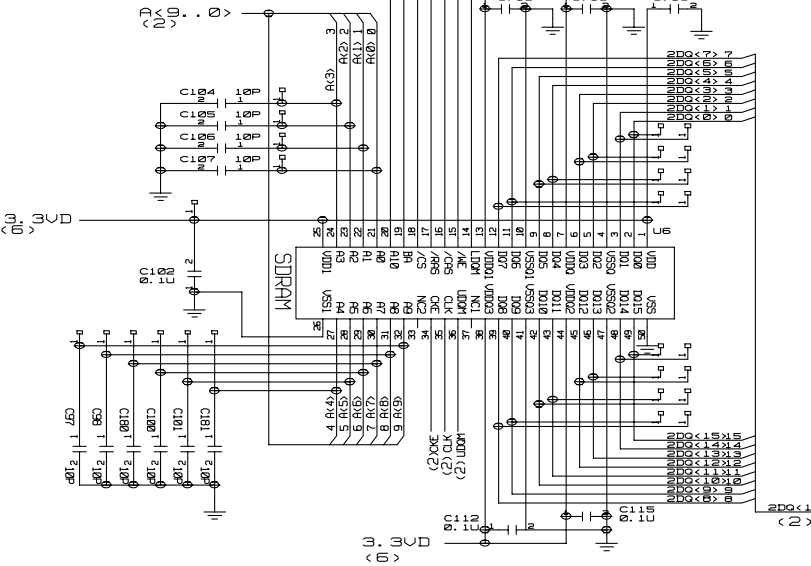
LB680A
2000.09.04



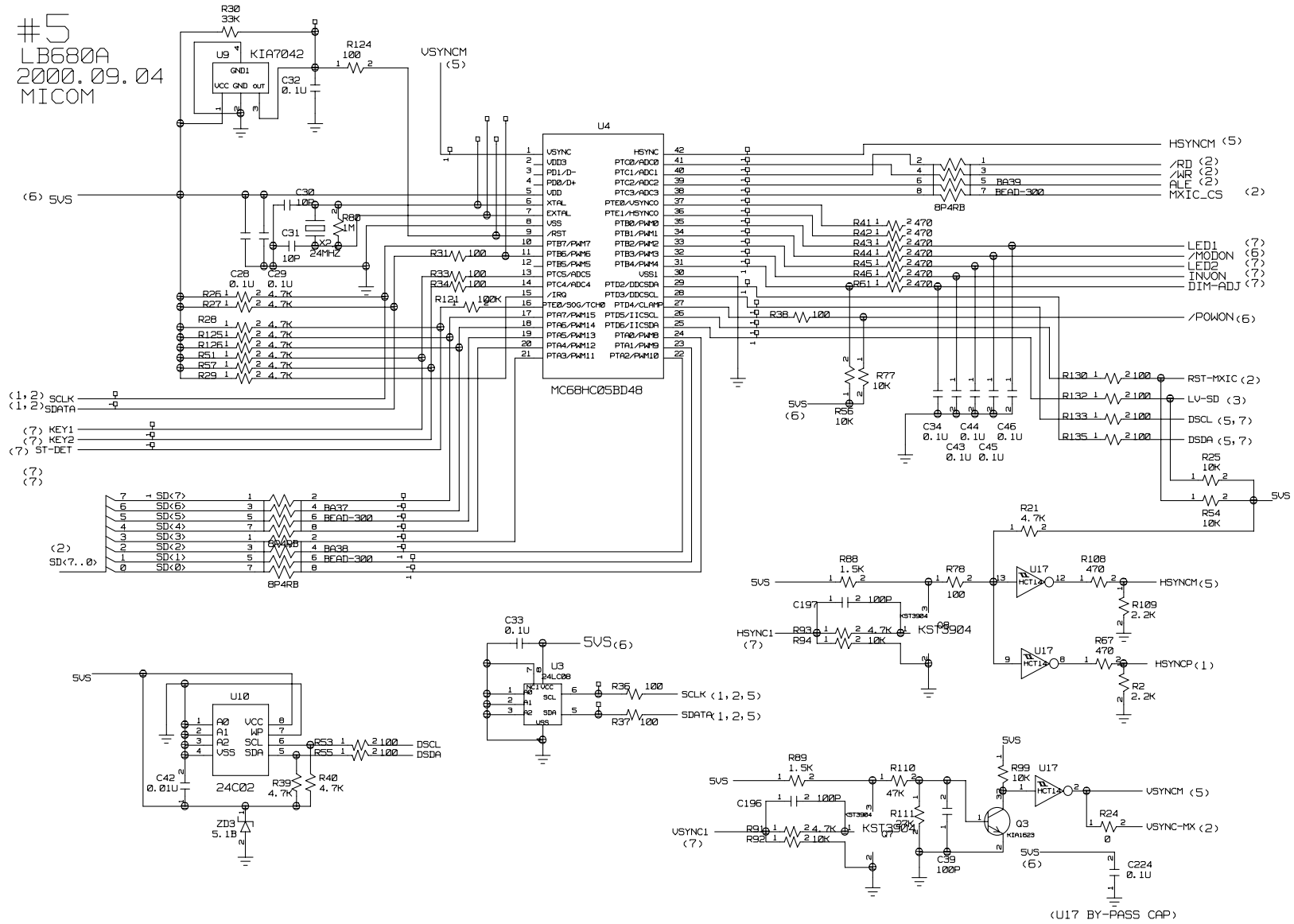
4. MEMORY



#4
 LB6007
 MEMORY 0.04

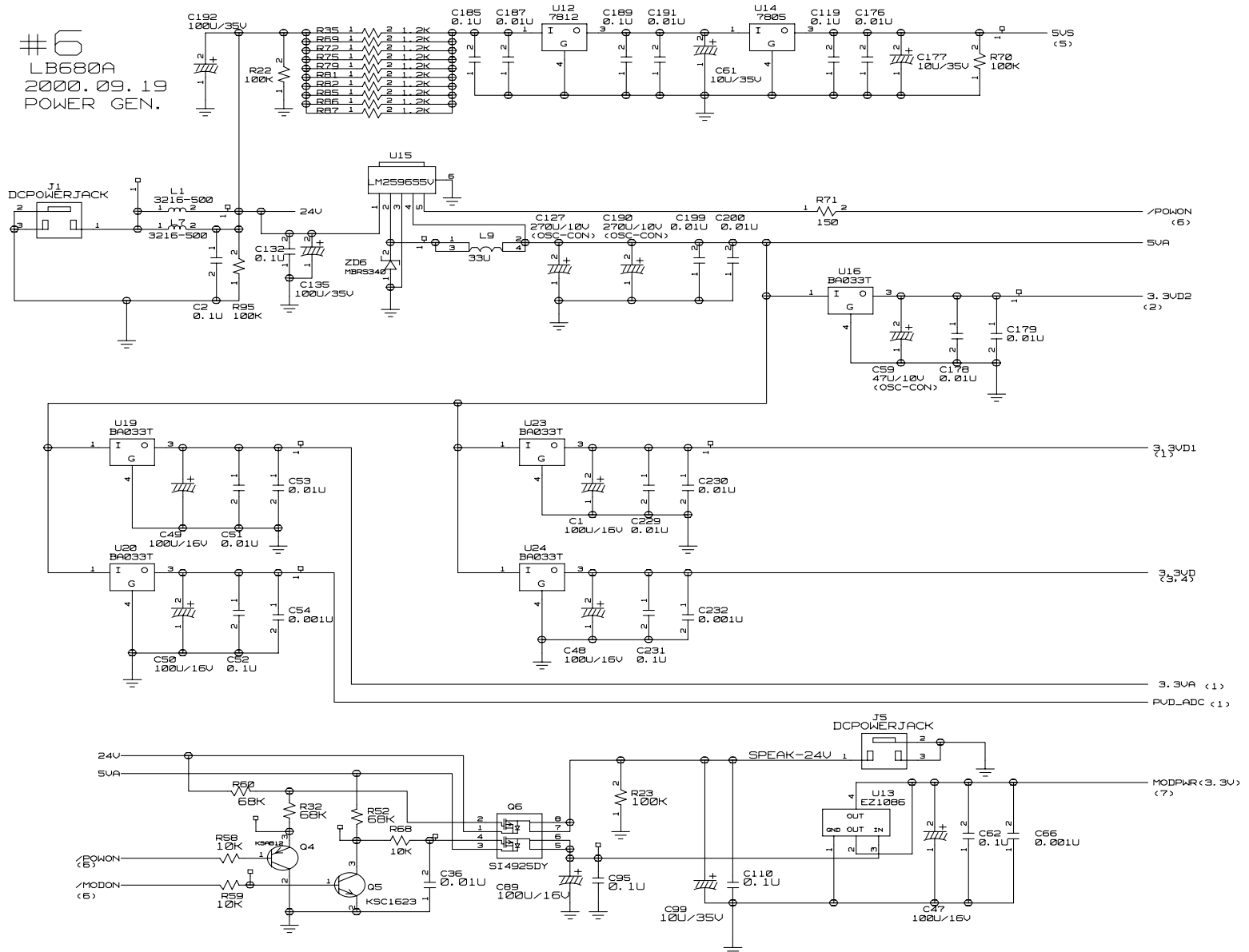


#5
LB680A
2000.09.04
MICOM



(U17 BY-PASS CAP)

#6
LB580A
2000.09.19
POWER GEN.



7

LB680A
2000.09.19
CONNECTOR & JACKS

