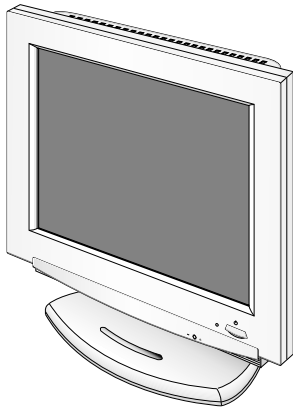


COLOR MONITOR SERVICE MANUAL

MODEL: Gateway FPD 1500

CAUTION

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



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SPECIFICATIONS	2	TROUBLE SHOOTING GUIDE	9
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SPECIFICATIONS

1. LCD CHARACTERISTICS

Type	: Color Active Matrix TFT LCD
Size	: 15.1inch (38.35cm)
Pixel Pitch	: 0.3mm x 0.3mm
Pixel Format	: 1024 x 768 pixels (XGA) RGB Stripe Arrangement
Color Depth	: 8-bit, 16 million colors
Active Video Area	: 307mm x 230mm
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., 55° min.
Right	: 60° typ., 55° min.
Top	: 45° typ., 40° min.
Bottom	: 45° typ., 40° min.

2-2. Luminance	: 200 cd/m ² typ.
----------------	------------------------------

2-3. Angle at Half Luminance

Left	: 50° min.
Right	: 50° min.
Top	: 40° min.
Bottom	: 30° min.

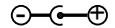
2-4. Contrast Ratio	: 250:1 typical
---------------------	-----------------

3. SIGNAL (Refer to the Timing Chart)

3-1. Type	: TMDS Digital
3-2. Voltage Level	: 3.3V
3-3. Input Impedance	: 50 Ω
3-4. Operating Frequency	
Horizontal	: 48.363kHz
Vertical	: 60Hz

4. POWER SUPPLY

4-1. Power Adaptor

Input	: AC 100~240V, 50/60Hz 1.2A
Output	: DC 24V 1.9A 

4-2. Power Consumption

MODE	SIGNAL	VIDEO	POWER CONSUMPTION	LED COLOR
POWER ON (NORMAL)	ON	ACTIVE	less than 30 W	GREEN
DPM	OFF	OFF	less than 5 W	ORANGE
POWER OFF	-	-	less than 5 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	: 389.2mm (15.32")
Depth	: 182.4mm (7.18")
Height	: 361.6mm (14.24")

7. WEIGHT (with TILT/SWIVEL)

Net. Weight	: 5.3kg (11.68 lbs)
Gross Weight	: 7.2kg (15.87 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 Gateway2000 Inc. 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

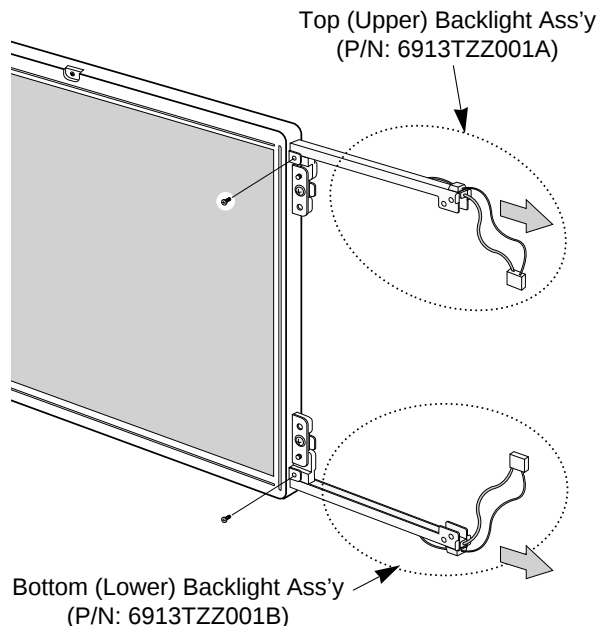
BE CAREFUL ELECTRIC SHOCK !

- If you want to replace with the new backlight (CCFL) or inverter circuit, must turn off the power button or 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.

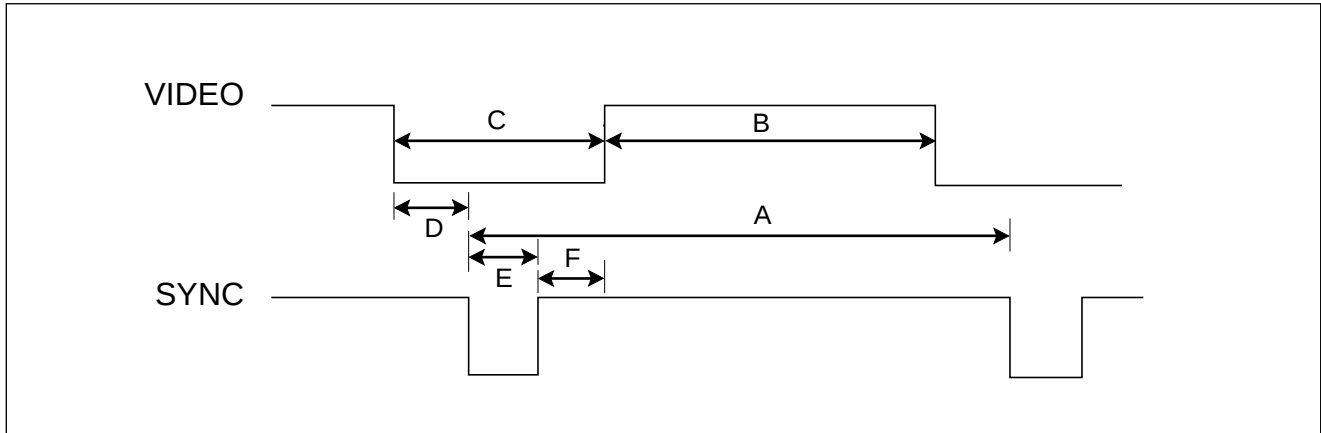
⚠ CAUTION

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 10,000 hours.

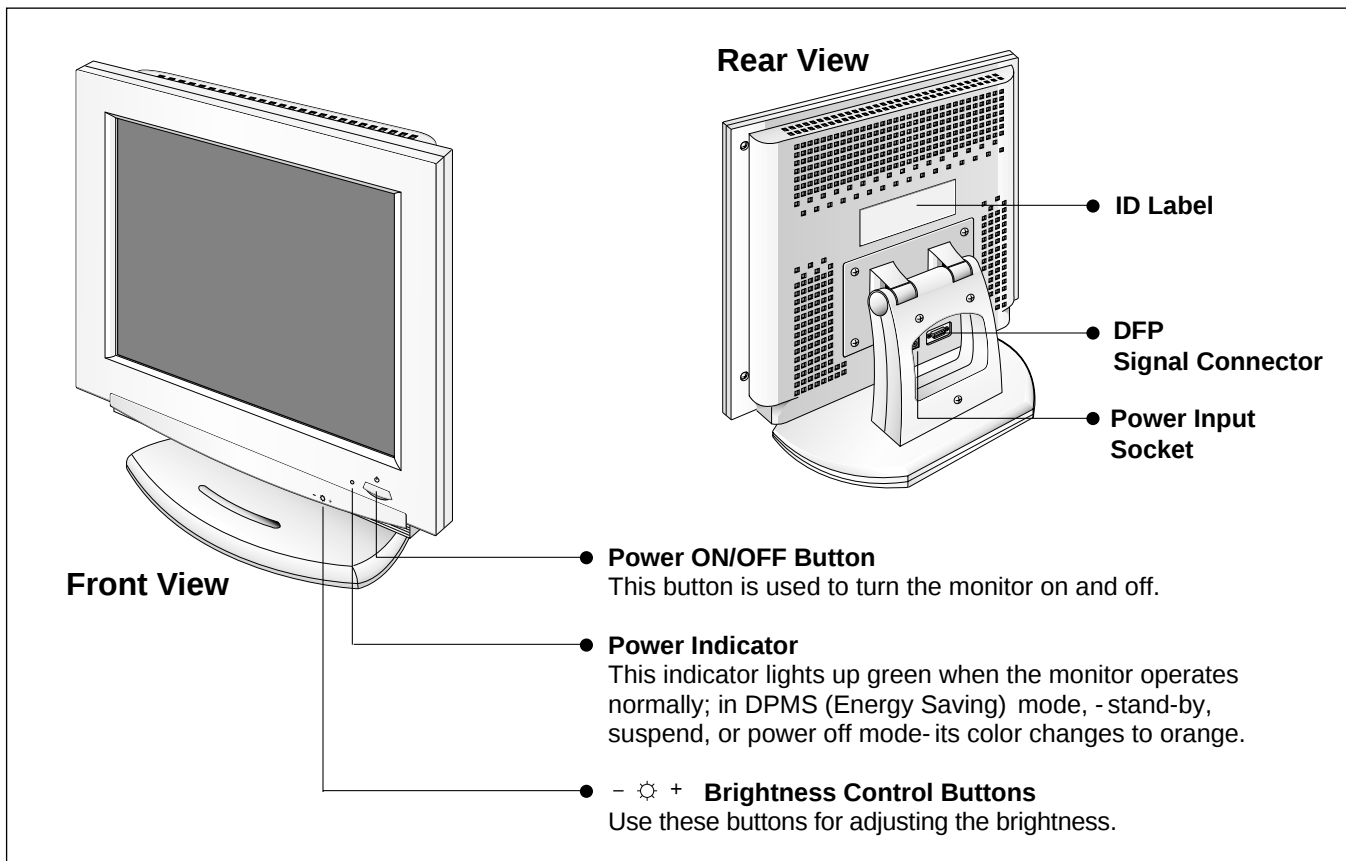


TIMING CHART

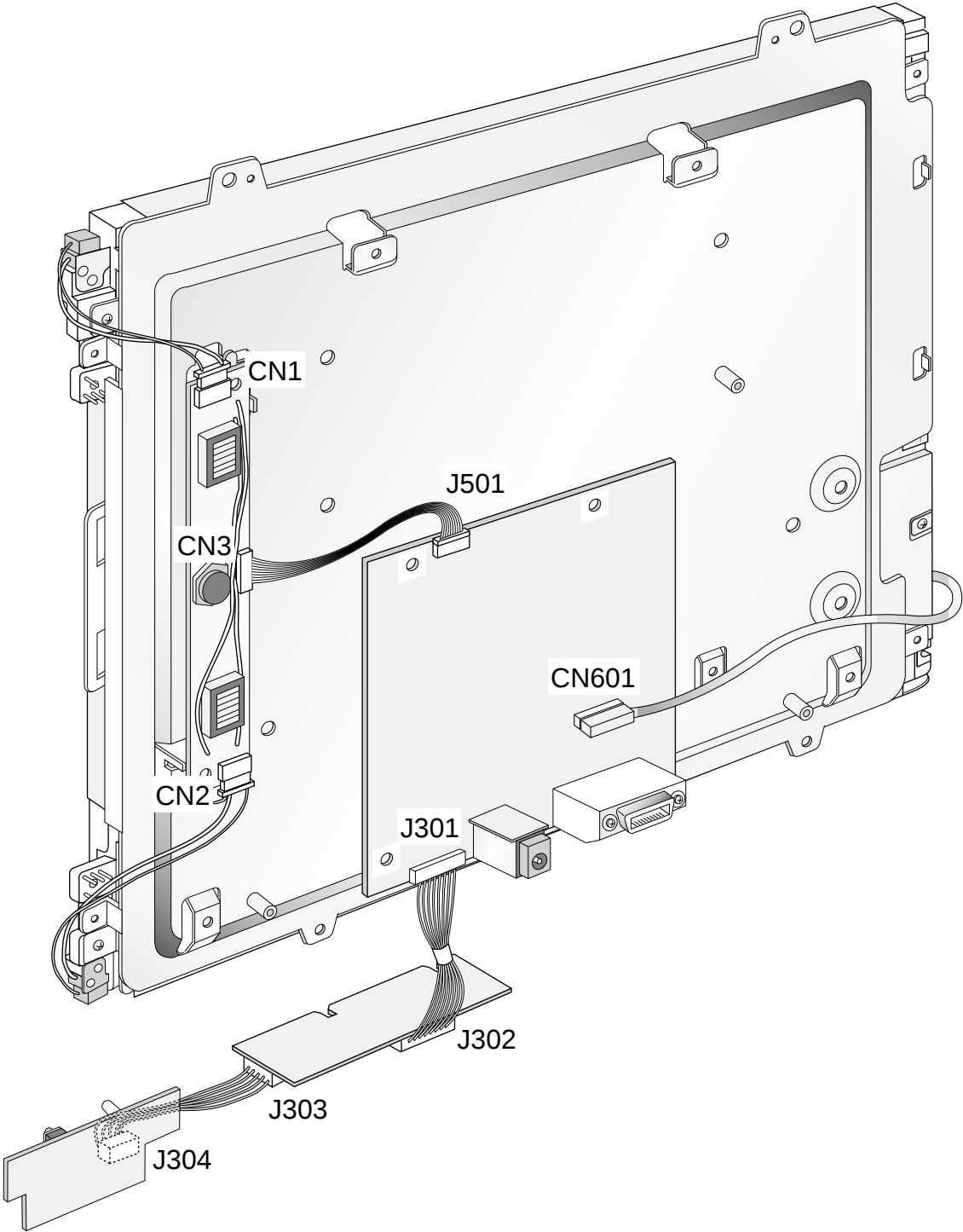


MODE		Sync Polarity	Dot Clock	Frequency	Total Period (A)	Video Active Time (B)	Blanking Time (C)	Front Porch (D)	Sync Duration (E)	Back Porch (F)	Resolution
1	H (Pixels)	—	65MHz	48.363KHz	1344	1024	320	24	136	160	1024 X 768
	V (Lines)	—		60.0Hz	806	768	38	3	6	29	

OPERATING INSTRUCTIONS



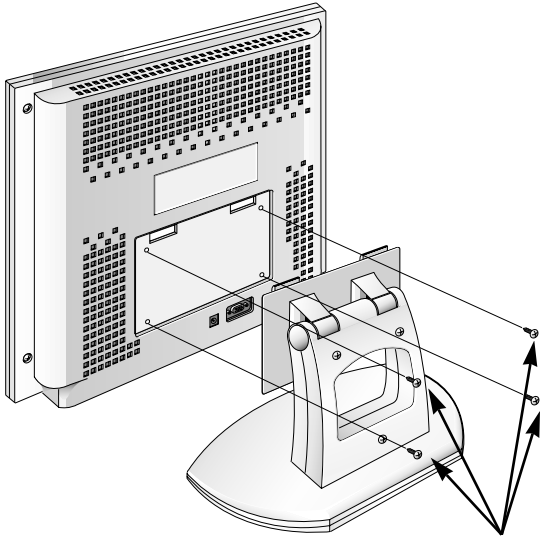
WIRING DIAGRAM



DISASSEMBLY

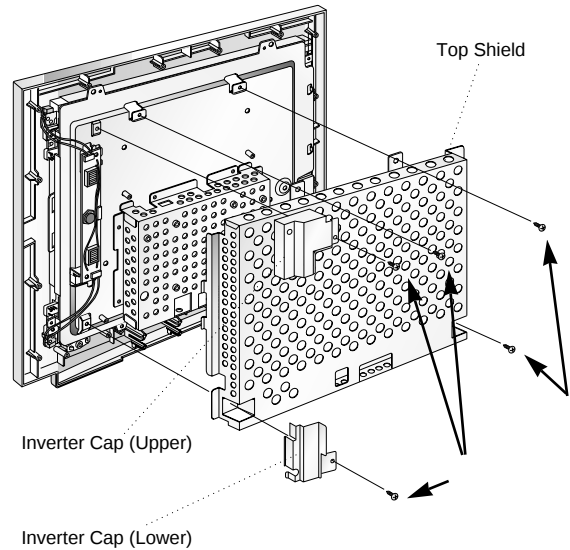
1. TILT/SWIVEL REMOVAL

Remove four screws .
Remove the Tilt/swivel.



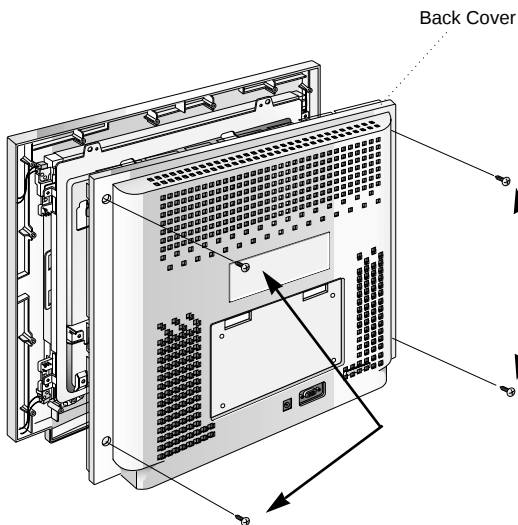
3. INVERTER CAPS & TOP SHIELD REMOVAL

Remove five screws .
Remove two Inverter Caps (Upper, Lower).
Remove the Top Shield.



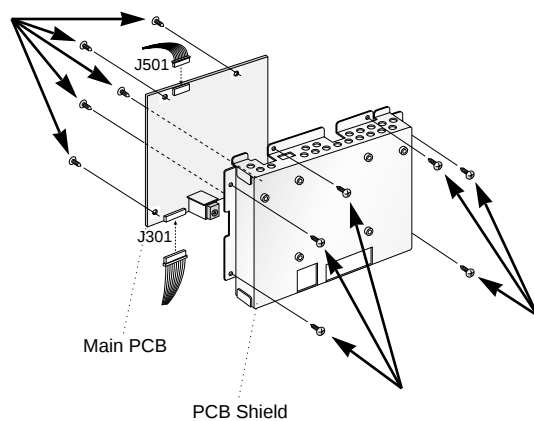
2. BACK COVER REMOVAL

Remove four screws from the Back Cover.
Remove the Back Cover.



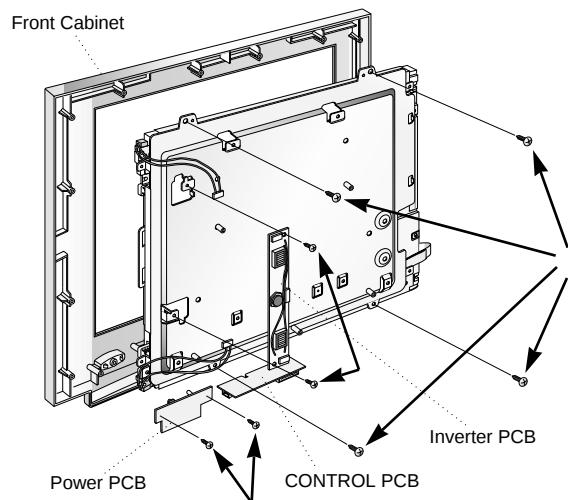
4. MAIN PCB ASSEMBLY REMOVAL

Remove six screws .
Disconnect J301 and J501 from the Main PCB.
Remove the PCB Shield.
Remove five screws .
Remove the Main PCB from the PCB Shield.



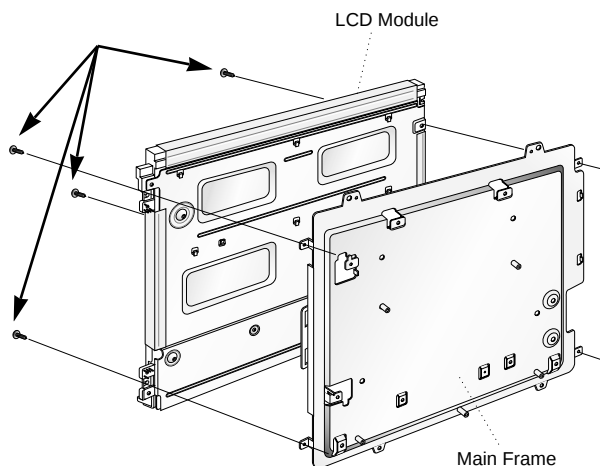
5. INVERTER, POWER, CONTROL PCB AND MAIN FRAME REMOVAL

Remove two screws .
Disconnect CN1 and CN2.
Remove Inverter PCB.
Remove two screws .
Remove the Power and the CONTROL PCB.
Remove four screws .
Remove the Front Cabinet.



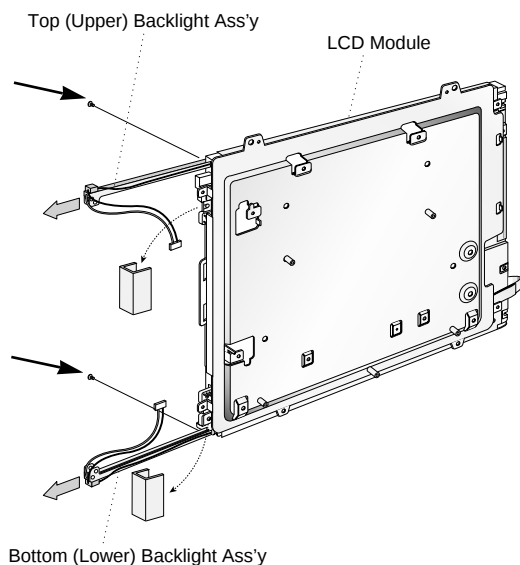
7. LCD MODULE REMOVAL

Remove four screws .
Divide the LCD Module and the Main Frame.

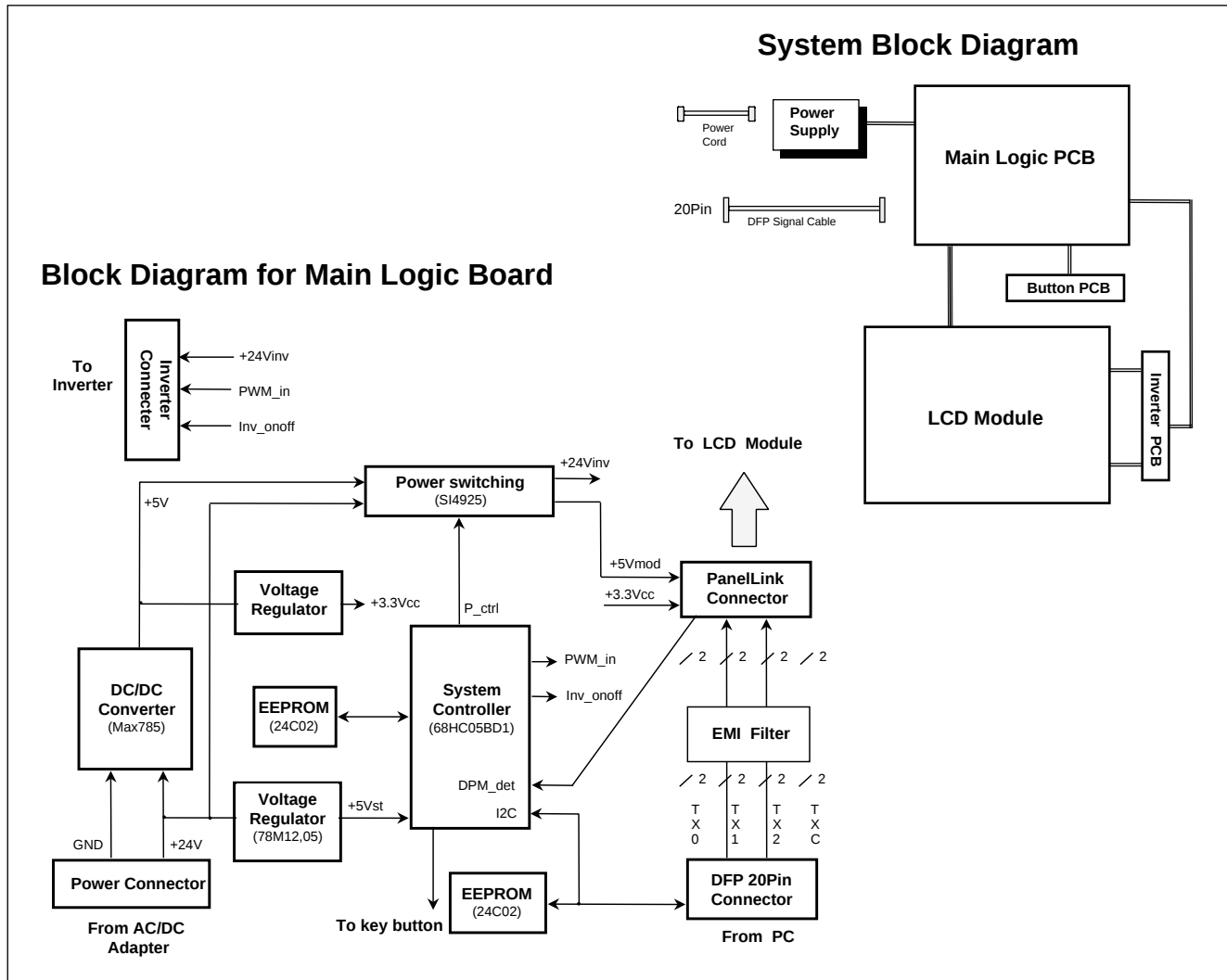


6. BACKLIGHT REMOVAL

Remove two screws .
Remove two Sponge Tapes.
Remove the Backlight from the LCD Module.



BLOCK DIAGRAM



Description of Block Diagram

1. DC/DC Converter

This circuit supplies stand-by 5V(+5Vst) and regular 5V(+5V) for using MAX785 from AC/DC adapter(+24V). The +5V voltage supply to power switching IC(SI4925) and 3.3V voltage regulator. The state of power down makes all voltage except +5Vst down using SHDN pin from system controller (68HC05BD1).

2. System Controller

This circuit consists of two EEPROM IC(24C02) which stores the control data for system and communicates DDC(Display Data Channel) and oscillator(X201). The operating procedures of system controller and its associated circuit are as follows:

- 1) The system controller detects frequency of vertical sync through DFP(Digital Flat Panel) 20 pin connector.

This controller controls the power switching IC(SI4925) by the detection of verticalsync(HVsync).

- 2) The system controller controls the brightness of inverter by using the key control button and store the data to EEPROM(24C02).

3. Power Switching Circuit

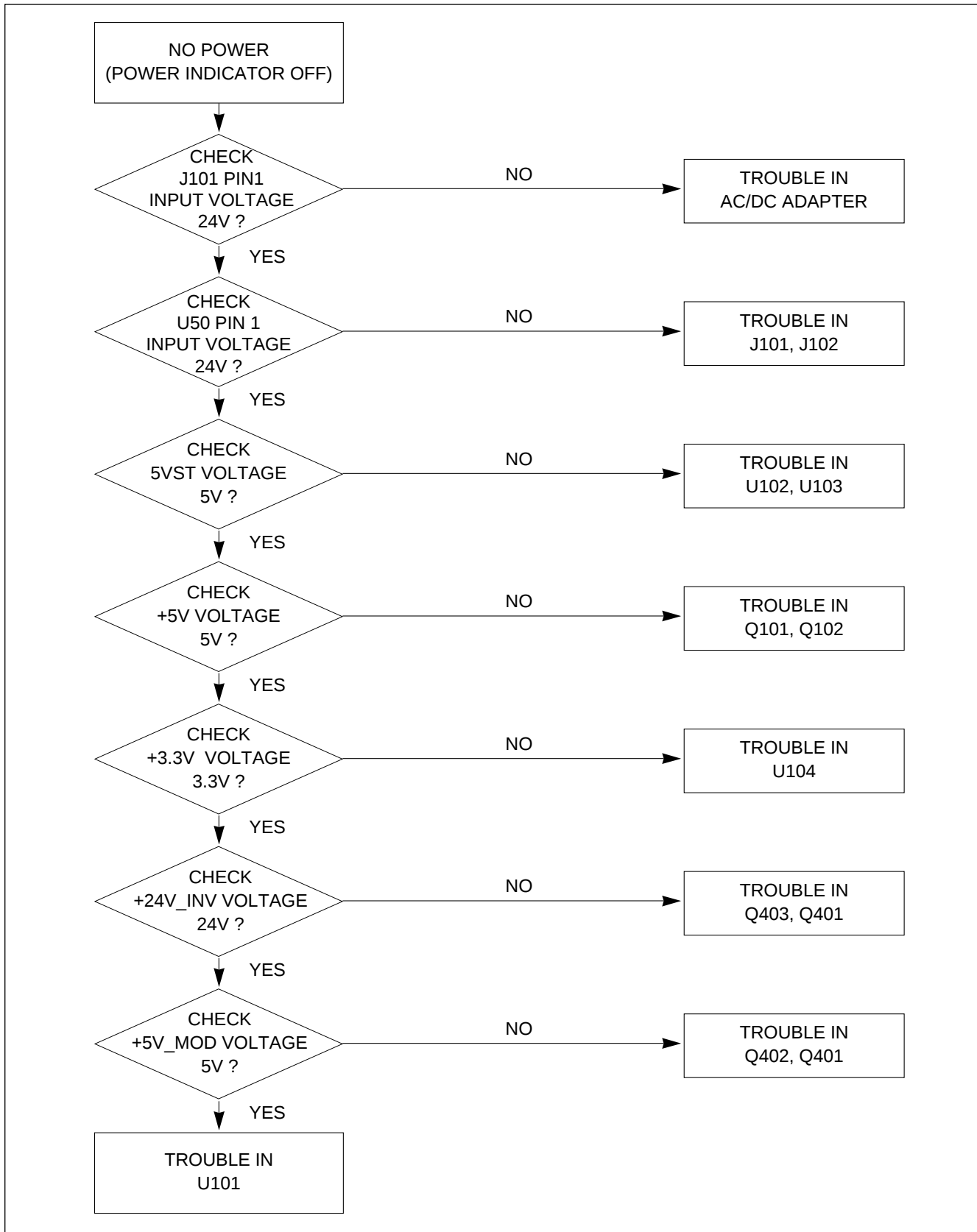
This block supplies +24V(+24Vin) to the inverter for the backlight voltage of the LCD module and +5V (+5Vmod) for data control of the LCD module.

4. Signal Transmission

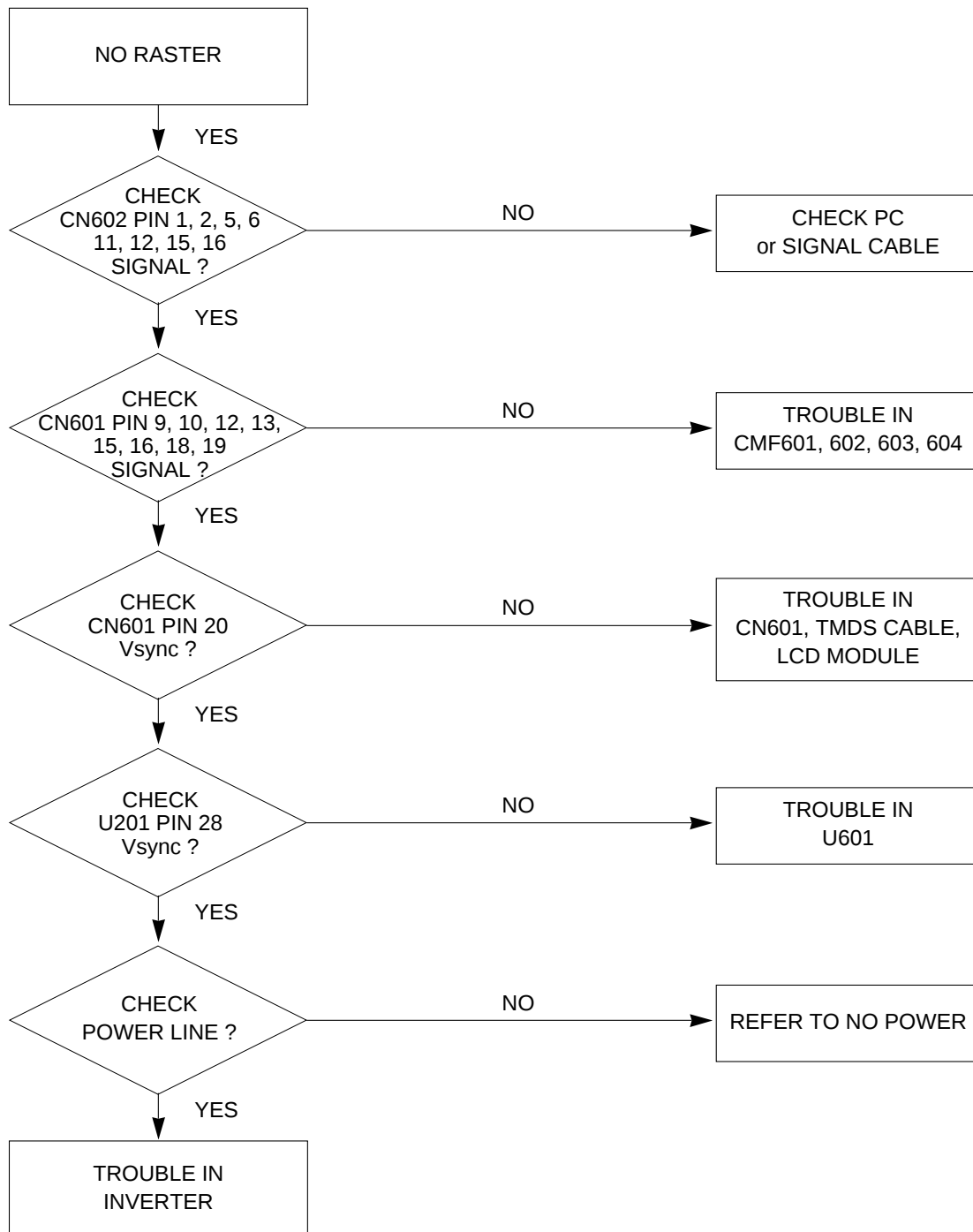
The digital video signals(R,G,B) and clock signals(CLK) by differential signals(Tx0,Tx1,Tx2,Txc), are transmitted to LCD module through EMI filter from PC system which has digital video card.

TROUBLE-SHOOTING GUIDE

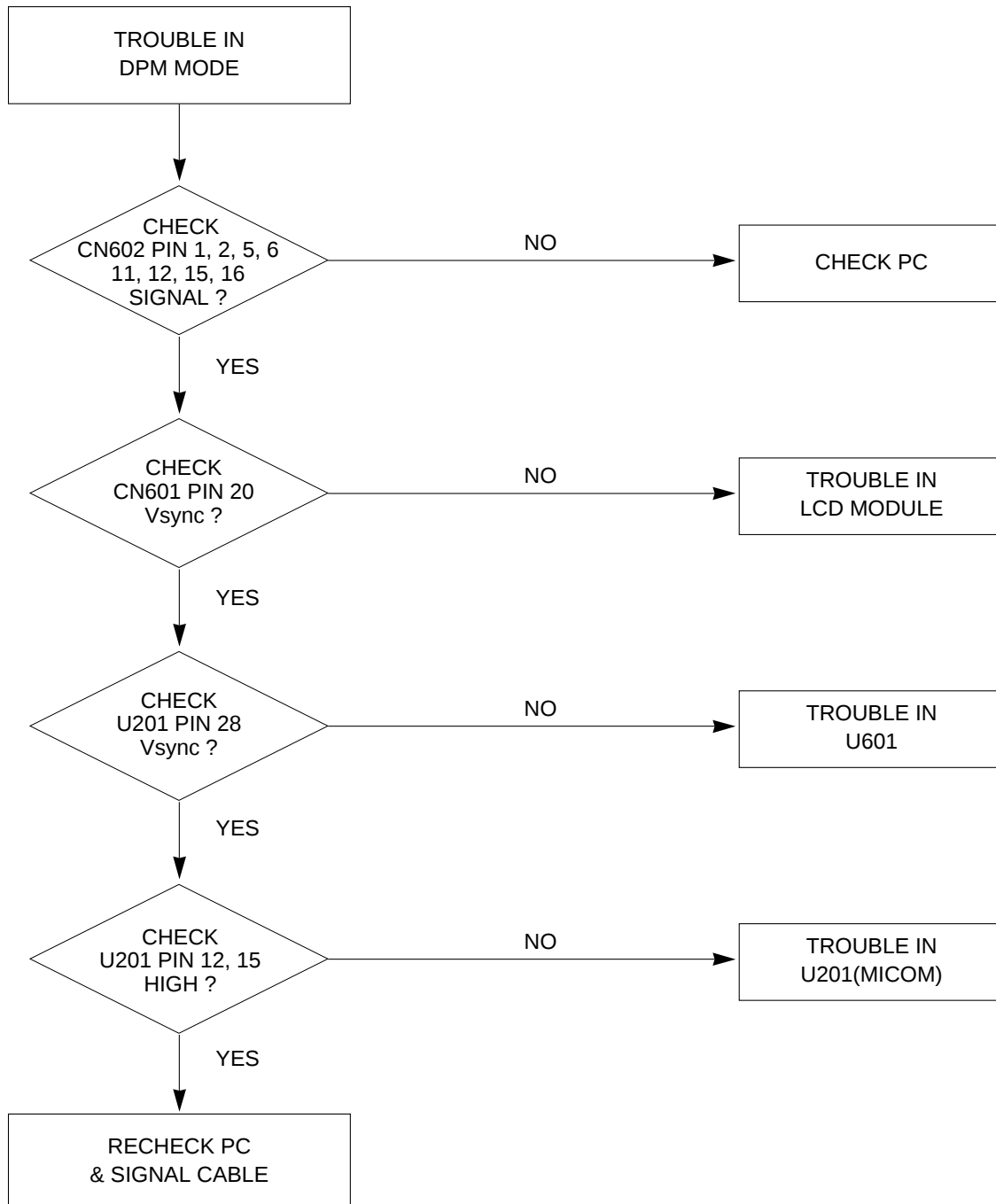
1. NO POWER



2. NO RASTER

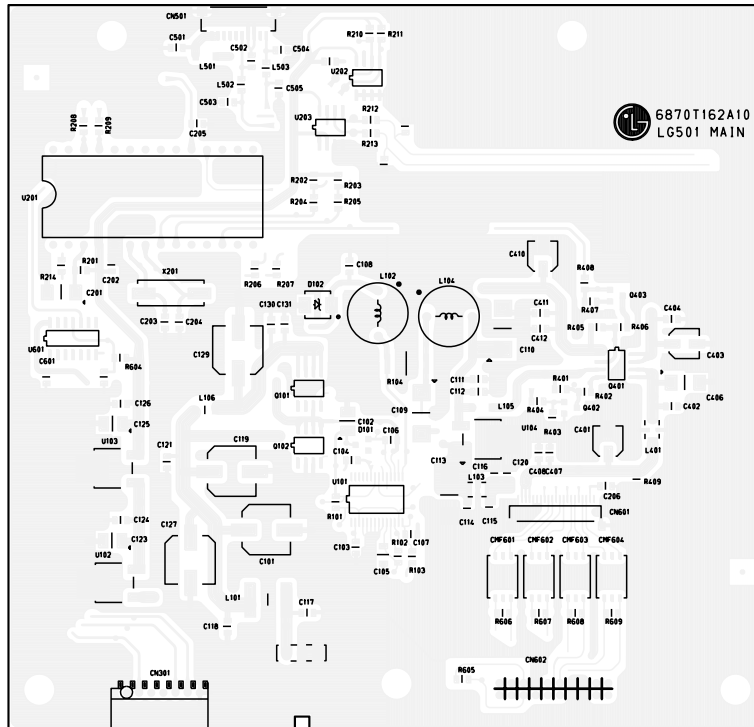


3. TROUBLE IN DPM

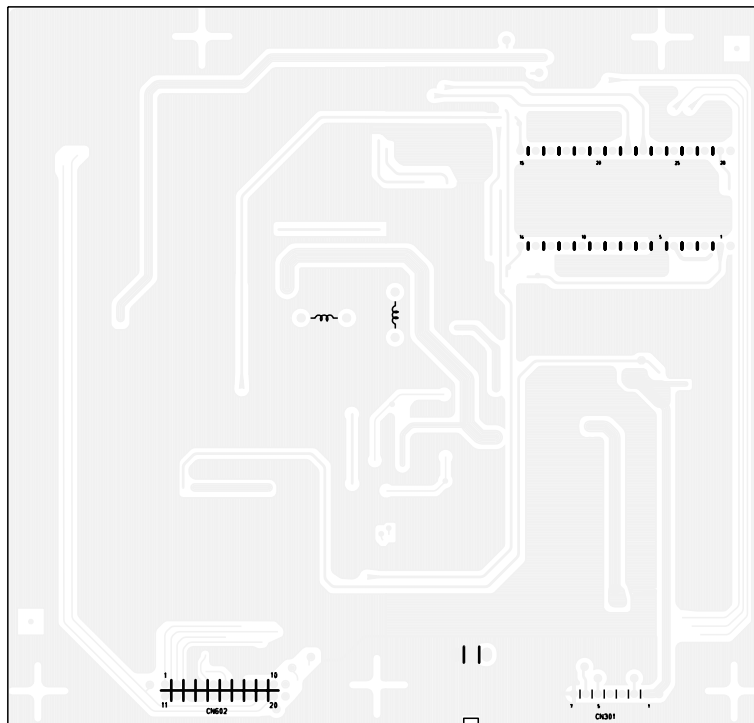


PRINTED CIRCUIT BOARD

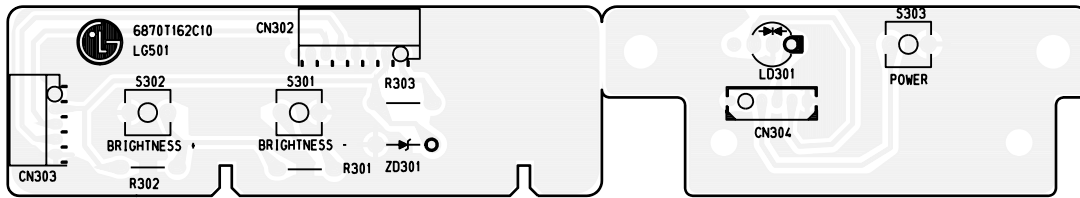
1. MAIN BOARD (Component Side)



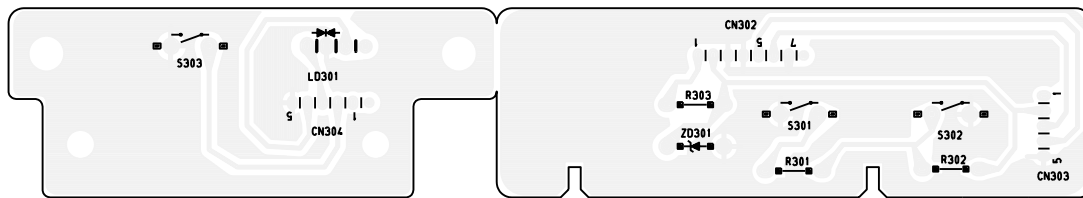
2. MAIN BOARD (Solder Side)



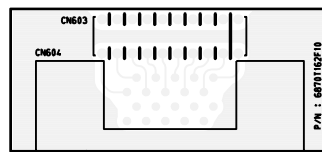
3. CONTROL BOARD (Component Side)



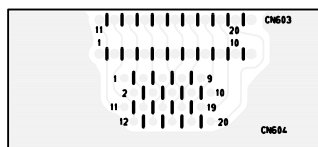
4. CONTROL BOARD (Solder Side)

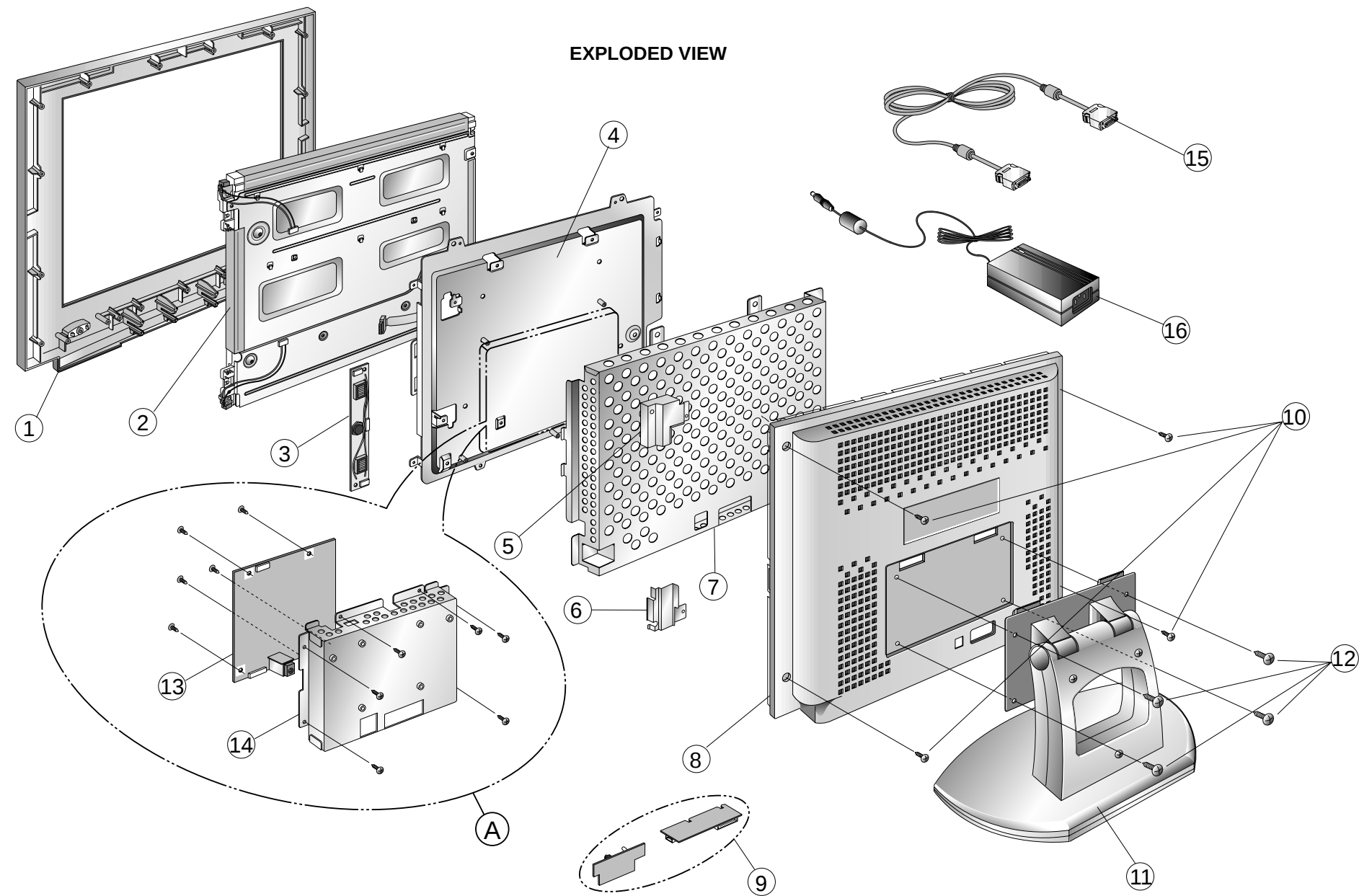


5. INTERFACE BOARD (Component Side)



6. INTERFACE BOARD (Solder Side)





EXPLODED VIEW PARTS LIST

Ref. No.	Part No.	Description	Q'ty	Material
1	3091TKL005A	CABINET ASS'Y, LG501, NO BRAND	1	LGC LUPOY GN5001TF
2	6304TLT151B	LCD MODULE, LGE TFT LCD LM151X1-G 15.1"	1	
3	6633TZA003A	INVERTER PCB ASS'Y	1	
4	4950TKS072D	MAIN FRAME	1	
5	4950TKK060A	INVERT CAP (UP)	1	
6	4950TKK061A	INVERT CAP (DOWN)	1	
7	4950TKK047A	MAIN SHIELD	1	
8	3809TKL005A	BACK COVER ASS'Y	1	LGC LUPOY GN5001TF
9	6871TST085A	CONTROL BUTTON PCB ASS'Y	1	
10	332-095C	SCREW, PZP+3x12	4	
11	3043TKK023D	TILT SWIVEL ASS'Y	1	LGC HIPS 60HR
12	332-105F	SCREW, PVS+4x10	4	
13	6871TMT078A	MAIN PCB ASS'Y	1	
14	4950TKK048B	PCB SHIELD	1	
15	6866TDM001A	SIGNAL CABLE	1	
16	6634TBZ004A	ADAPTER, AC-DC	1	
A	3313TL5004A	MAIN TOTAL ASS'Y	1	

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: Gateway FPD 1500				DATE: 1998 . 9. 20.	
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
MAIN BOARD					
CAPACITORS					
		C101	0CH8107J611	CAPACITOR, CHIP[AL. ELECTROLYTIC], 100UF 35V M 85STD	
		C102	0CH7106F621	CAPACITOR, CHIP[TANTALUM], 10UF 16V M 3528MM TP(-)	
		C103	0CH3103K516	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 10000PF 50V K B	
		C104	0CH3104K566	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 0.1UF 50V K X	
		C105	0CH3224K944	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 0.22UF 50V Z F	
		C106	0CH3104K566	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 0.1UF 50V K X	
		C107	0CH3103K516	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 10000PF 50V K B	
		C108	0CH6102K406	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 1000PF 50V J SL	
		C109	0CH7227C661	CAPACITOR, CHIP[TANTALUM], 220UF 6.3V M 7343 TP(-)	
		C110	0CH7107F661	CAPACITOR, CHIP[TANTALUM], 100UF 16V M 7343 TP(-)	
		C111	0CH3104K566	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 0.1UF 50V K X	
		C112	0CH3103K516	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 10000PF 50V K B	
		C113	0CH7476F661	CAPACITOR, CHIP[TANTALUM], 47UF 16V M 7343 TP(-)	
		C114	0CH3104K566	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 0.1UF 50V K X	
		C115	0CH3103K516	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 10000PF 50V K B	
		C116	0CH6102K406	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 1000PF 50V J SL	
		C117	0CH6221K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 220PF 50V J NP0	
		C118	0CH6221K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 220PF 50V J NP0	
		C119	0CH8107J611	CAPACITOR, CHIP[AL. ELECTROLYTIC], 100UF 35V M 85STD	
		C120	0CH6101K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 100PF 50V J NP0	
		C121	0CH3104K566	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 0.1UF 50V K X	
		C123	0CH7106F621	CAPACITOR, CHIP[TANTALUM], 10UF 16V M 3528MM TP(-)	
		C124	0CH3103K516	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 10000PF 50V K B	
		C125	0CH7106F621	CAPACITOR, CHIP[TANTALUM], 10UF 16V M 3528MM TP(-)	
		C126	0CH3103K516	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 10000PF 50V K B	
		C127	0CH8107J611	CAPACITOR, CHIP[AL. ELECTROLYTIC], 100UF 35V M 85STD	
		C129	0CH8107J611	CAPACITOR, CHIP[AL. ELECTROLYTIC], 100UF 35V M 85STD	
		C130	0CH3104K566	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 0.1UF 50V K X	
		C131	0CH3103K516	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 10000PF 50V K B	
		C201	0CH7226F651	CAPACITOR, CHIP[TANTALUM], 22UF 16V M 6032 TP(-)	
		C202	0CH3104K566	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 0.1UF 50V K X	
		C203	0CH6220K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 22PF 50V J NP0	
		C204	0CH6220K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 22PF 50V J NP0	
		C205	0CH3104K566	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 0.1UF 50V K X	
		C206	0CH3103K516	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 10000PF 50V K B	
		C401	0CH8106J611	CAPACITOR, CHIP[AL. ELECTROLYTIC], 10UF 35V M 85STD	
		C402	0CH3104K566	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 0.1UF 50V K X 2012	

MODEL: Gateway FPD 1500				DATE: 1998 . 9. 20.	
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		C403	0CH8106J611	CAPACITOR, CHIP[AL. ELECTROLYTIC], 10UF 35V M 85STD	
		C404	0CH3104K566	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 0.1UF 50V K X	
		C406	0CH7226F651	CAPACITOR, CHIP[TANTALUM], 22UF 16V M 6032 TP(-)	
		C407	0CH3103K516	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 10000PF 50V K B	
		C408	0CH6101K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 100PF 50V J NP0	
		C410	0CH8106J611	CAPACITOR, CHIP[AL. ELECTROLYTIC], 10UF 35V M 85STD	
		C411	0CH3104K566	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 0.1UF 50V K X	
		C412	0CH3103K516	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 10000PF 50V K B	
		C501	0CH6221K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 220PF 50V J NP0	
		C502	0CH6221K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 220PF 50V J NP0	
		C503	0CH6221K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 220PF 50V J NP0	
		C504	0CH6221K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 220PF 50V J NP0	
		C505	0CH6221K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 220PF 50V J NP0	
		C601	0CH3104K566	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 0.1UF 50V K X	
		CMF601	6140TBZ007C	COIL, CHOKE, COMMON-MODE CHOKE,ZCYS51R5-2PAT(TDK)	
		CMF602	6140TBZ007C	COIL, CHOKE, COMMON-MODE CHOKE,ZCYS51R5-2PAT(TDK)	
		CMF603	6140TBZ007C	COIL, CHOKE, COMMON-MODE CHOKE,ZCYS51R5-2PAT(TDK)	
		CMF604	6140TBZ007C	COIL, CHOKE, COMMON-MODE CHOKE,ZCYS51R5-2PAT(TDK)	
		CN301	366-184F	WAFER, 53015-0710 MOLEX 2.0mm R/A	
		CN501	6602T10001D	WAFER, SM10B-SRSS-TB JST 1.0mm R/A	
		CN601	6602T11001A	WAFER, FI-TWE21P-VF JAE 1.0mm S/T	
		CN602	6602T20007B	WAFER, 87089-2016 MOLEX 2.0MM BOARD	
DIODEs					
		D101	0DS181009AA	DIODE, SWITCHING, KDS181 TP KEC SOT-23 80V 300MA 2A	
		D102	0DR190309AA	DIODE, RECTIFIER, MBRS190T3 TP MOTOROLA 403A-03 90V	
COILs & COREs					
		L101	6210TCT002C	CORE (CIRC), BEAD, HF50ACC575018-T TDK , CHIP BEAD,LCD	
		L102	6140TBZ016A	COIL, CHOKE, DR10*5 22UH 0.45MM 20.5T LG501	
		L103	6200TEZ007A	FILTER(CIRC), CAPACITOR, STC-B SERIES(104B) NIIGATA(FILMAC)	
		L104	6140TBZ016A	COIL, CHOKE, DR10*5 22UH 0.45MM 20.5T LG501	
		L105	6210TCE001G	CORE (CIRC), BEAD, HH-1M3216-501 CERATEC 3216MM R/TP	
		L106	6210TCE001G	CORE (CIRC), BEAD, HH-1M3216-501 CERATEC 3216MM R/TP	
		L401	6200TEZ007A	FILTER(CIRC), CAPACITOR, STC-B SERIES(104B) NIIGATA(FILMAC)	
		L501	6210TCE001C	CORE (CIRC), BEAD, HB-1T3216-500JT CERATEC , CHIP-BEAD	
		L502	6210TCT002B	CORE (CIRC), BEAD, ACB2012M-300-T TDK , CHIP BEAD,LCD	
		L503	6210TCT002B	CORE (CIRC), BEAD, ACB2012M-300-T TDK , CHIP BEAD,LCD	
ICs					
		U101	0IMX785000B	IC, MAXIM, MAX785CAI 28P,SSOP TP DUAL OUTPWRSUPPLY	
		U102	0ISS781200J	IC, SAMSUNG ELECTRONICS,KA78M12R 3P,D-PAK TP VOL.	
		U103	0ISS780500H	IC, SAMSUNG ELECTRONICS, KA78M05-R 3P,D-PAK TP 5V 0.5A	
		U104	0IRH033200A	IC, ROHM, BA033FP-E2 MOLD-3 TP REGULATOR	
		U201	0IZZTSZ011A	IC [HYBRID], 28P DIP BK, MC68HC705BD1A, LG501	

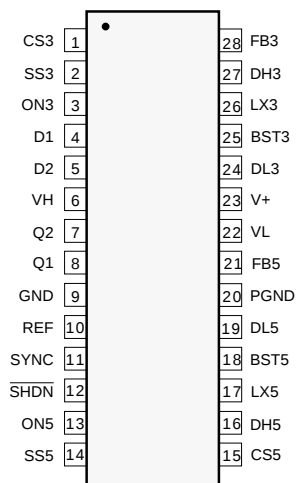
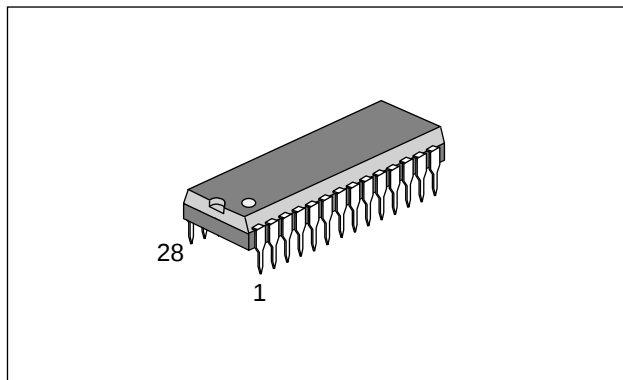
MODEL: Gateway FPD 1500					DATE: 1998 . 9. 20.
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		U202	0IMP240200A	IC, MICRO CHIP TECHNOLOGY, 24LC02BT/SN 3.3K/ TP	
		U203	0IMP240200A	IC, MICRO CHIP TECHNOLOGY, 24LC02BT/SN 3.3K/ TP	
		U601	0IMO741420B	IC, MOTOROLA, MC74HCT14ADR2 14P,SOIC TP LEVEL	
TRANAITORs					
		Q101	0TF993609AA	FET, SI9936DY TP TEMIC 30V 5A SO-8	
		Q102	0TF941009AA	FET, SI9410DY TP TEMIC 30V 7A SO-8	
		Q401	0TF492509AA	FET, SI4925DY TP TEMIC 30V 6.1A SO-8	
		Q402	0TR162309CA	TRANSISTOR, KSC1623 TP SAMSUNG SOT23 NPN EPI	
		Q403	0TR162309CA	TRANSISTOR, KSC1623 TP SAMSUNG SOT23 NPN EP	
RESISTORS					
		R101	0RH1003D422	RESISTOR, CHIP, 100K 1/10W 1% D R/TP	
		R102	0RH0000D622	RESISTOR, CHIP, 0 1/10W P-TYPE TAPPING	
		R103	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R104	0RHZTJZ001B	RESISTOR, CHIP, 0.025 OHM 1 W 2% 2512 R/TP ,IRC	
		R201	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R202	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R203	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R204	0RH0000D622	RESISTOR, CHIP, 0 1/10W P-TYPE TAPPING	
		R205	0RH0000D622	RESISTOR, CHIP, 0 1/10W P-TYPE TAPPING	
		R206	0RH0000D622	RESISTOR, CHIP, 0 1/10W P-TYPE TAPPING	
		R207	0RH0000D622	RESISTOR, CHIP, 0 1/10W P-TYPE TAPPING	
		R208	0RH3300D622	RESISTOR, CHIP, 330 1/10W 5 D.R/TP	
		R209	0RH3300D622	RESISTOR, CHIP, 330 1/10W 5 D.R/TP	
		R210	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R211	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R212	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R213	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R214	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R401	0RH6802D622	RESISTOR, CHIP, 68K 1/10W 5 D.R/TP	
		R402	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R403	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R404	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R405	0RH6802D622	RESISTOR, CHIP, 68K 1/10W 5 D.R/TP	
		R406	0RH6802D622	RESISTOR, CHIP, 68K 1/10W 5 D.R/TP	
		R407	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R408	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R603	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R604	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R605	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R606	0RH5100D622	RESISTOR, CHIP, 510 1/10W 5 D.R/TP	
		R607	0RH5100D622	RESISTOR, CHIP, 510 1/10W 5 D.R/TP	
		R608	0RH5100D622	RESISTOR, CHIP, 510 1/10W 5 D.R/TP	
		R609	0RH5100D622	RESISTOR, CHIP, 510 1/10W 5 D.R/TP	

MODEL: Gateway FPD 1500				DATE: 1998 . 9. 20.	
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
OTHERs					
		X201	6202TST001B	CRYSTAL, SX-1 SUNNY ,SMD, 4.0MHZ ,30PPM, 18PF, TP	
CONTROL BOARD					
		CN302	366-184F	WAFER, 53015-0710 MOLEX 2.0mm R/A	
		CN303	366-184D	WAFER, 53015-0510 MOLEX 2.0mm R/A	
		CN304	366-183D	WAFER, 53014-0510 MOLEX 2.0mm S/T	
		LD301	0DL571300AA	LED, SPR571MVW3 TP ROHM GREEN/RED 10,10MCD	
		R301	0RD1801Q609	RESISTOR, FIXED CARBON FILM, 1.80K 1/4W(3 5% TA52	
		R302	0RD4700Q609	RESISTOR, FIXED CARBON FILM, 470 OHM 1/4 W (3.4) 5%	
		R303	0RD1001Q609	RESISTOR, FIXED CARBON FILM, 1K 1/4W(3 5% TA52	
		S301	140-058E	SWITCH, TACT, SKHV10910B LGEC NON 12V 20A HORIZONTAL	
		S302	140-058E	SWITCH, TACT, SKHV10910B LGEC NON 12V 20A HORIZONTAL	
		S303	140-058E	SWITCH, TACT, SKHV10910B LGEC NON 12V 20A HORIZONTAL	
		ZD301	0DZ560009CE	DIODE, ZENER, MTZJ5.6B TP ROHM-K DO34 500MW 5.6V 5MA	
INTERFACE BOARD					
		J101	6612TAH002A	JACK,AC/DC POWER, DC-001 UNITOP DC-001 2.0MM (UNITOP)	
		J102	6602T25007A	WAFER, GC250-3P-LS-SO LGC 2.5mm R/A	
		J603	6602T20007A	WAFER, 87264-2050 MOLEX 2.0MM BOARD	
		J604	6630TGA002A	CONNECTOR (CIRC), D-SUB, 10220-55F3JL 3M 20PIN 1.27MM	
MISCELLANEOUS					
⚠		LCD	6304TLT151B	LCD, LGE TFT LCD LM151X1-G 15.1" 1024X768	
⚠		ADAPTER	6634TBZ004A	ADAPTER,AC-DC, PSCV450106A SAMSUNG 100V 24V 1.875A	
⚠		INVERTER	6633TZA003A	INVERTER ASSY, SAMSUNG LG1501 FOR 15.1" LCD MNT	
⚠	or	INVERTER	6633TZA001A	INVERTER ASSY, AMBIT REV.1, (UO4.32.C.00) LCD	
⚠		P/CORD	174-206F	POWER CORD, UL/CSA 1830MM WALL IVORY	
⚠	or	P/CORD	174-240A & 174-240A	POWER CORD, WALL OUT, 6FT, BK, FOR JAPAN ONLY	
		S/CABLE	6866TDM001A	SIGNAL CABLE, UL20276 DT 2000MM COOL GRAY 3C	
		M-INVERTER	6631T10001C	CONNECTOR ASSY, 10P H-H 130MM UL 1571 28	
		M-MODULE	6631T11006C	CONNECTOR ASSY, 21P H-H 220MM UL20276SB10P+2C	
		M-CTRL	6631T20005E	CONNECTOR ASSY, 7P H-H 60MM UL1061 AWG 26 TW	
		C-POWER	6631T20005B	CONNECTOR ASSY, 5P,H-H,L60,UL1061 26	

PIN CONFIGURATION

MAX785

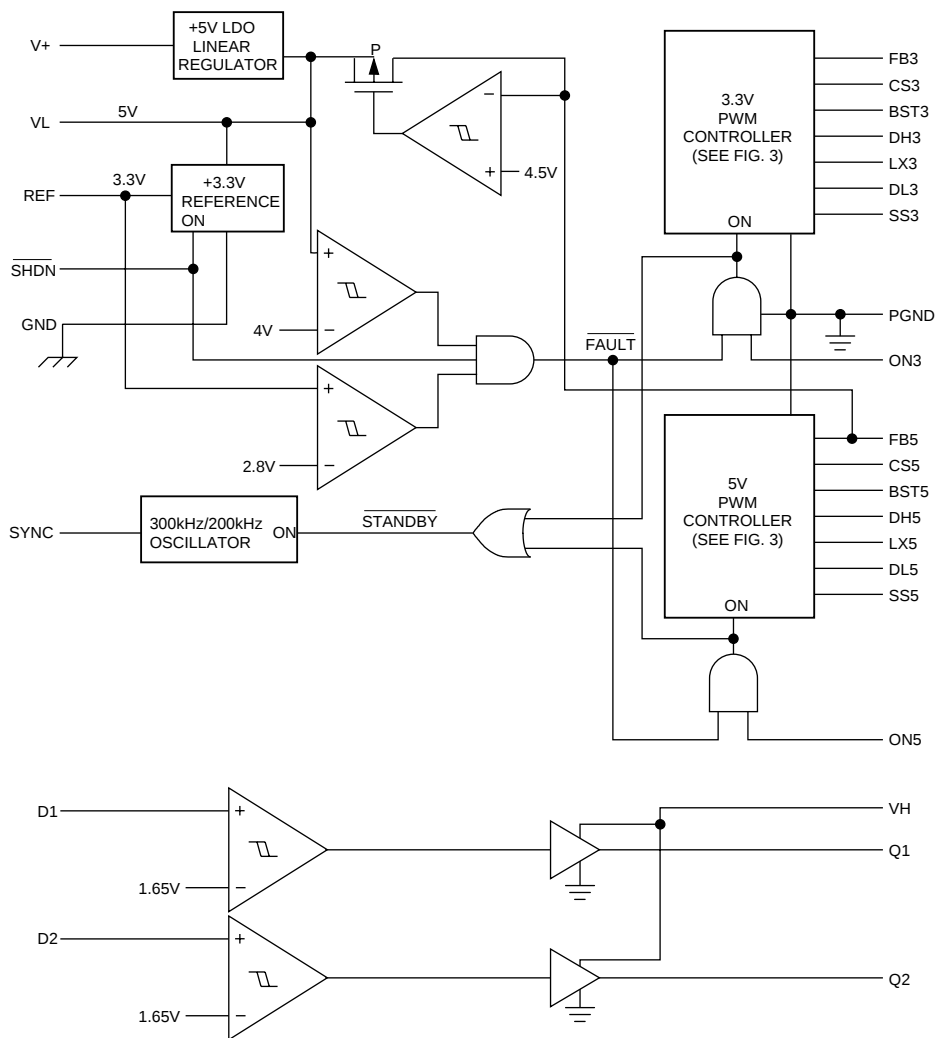
Dual-Output Power-Supply Controller

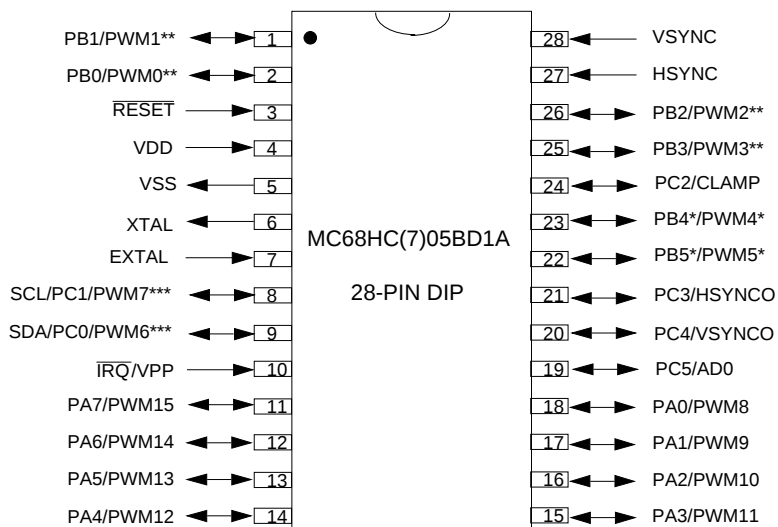
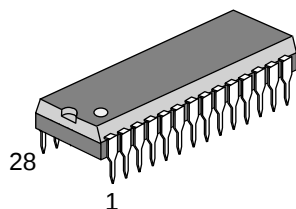


PIN CONFIGURATION

PIN	NAME	FUNCTION
1	CS3	Current-sense input for +3.3V; +100mV = current limit level referenced to FB3.
2	SS3	Soft-start input for +3.3V. Ramp time to full current limit is 1ms/nF of capacitance to GND.
3	ON3	ON/OFF control input disables the +3.3V PWM. Tie directly to VL for automatic start-up.
4	D1	#1 level-translator/comparator noninverting input, threshold = +1.650V. Controls Q1. Tie to GND if unused.
5	D2	#2 level-translator/comparator noninverting input (see D1)
6	VH	External positive supply-voltage input for the level translators/comparators
7	Q2	#2 level-translator/comparator output. Sources 20μA from VH when D2 is high. Sinks 500μA to GND when D2 is low, even with VH = 0V.
8	Q1	#1 level translator/comparator output (see Q2)
9	GND	Low-current analog ground
10	REF	3.3V reference output. Sources up to 5mA for external loads. Bypass to GND with 1μF/mA of load or 0.22μF minimum.
11	SYNC	Oscillator control/synchronization input. Connect to VL or GND for 200kHz; connect to REF for 300kHz. For external clock synchronization in the 240kHz to 350kHz range, a high-to-low transition causes a new cycle to start.
12	$\overline{\text{SHDN}}$	Shutdown control input, active low. Tie to VL for automatic start-up. The 5V VL supply stays active in shutdown, but all other circuitry is disabled. Do not force $\overline{\text{SHDN}}$ higher than VL + 0.3V.
13	ON5	ON/OFF control input disables the +5V PWM supply. Tie to VL for automatic start-up.
14	SS5	Soft-start control input for +5V. Ramp time to full current limit is 1ms/nF of capacitance to GND.
15	CS5	Current-sense input for +5V; +100mV = current-limit level referenced to FB5.
16	DH5	Gate-drive output for the +5V high-side MOSFET
17	LX5	Inductor connection for the +5V supply
18	BST5	Boost capacitor connection for the +5V supply (0.1μF)
19	DL5	Gate-drive output for the +5V low-side MOSFET
20	PGND	Power ground
21	FB5	Feedback and current-sense input for the +5V PWM
22	VL	5V logic supply voltage for internal circuitry. VL is always on and can source 5mA for external loads.
23	V+	Supply voltage input from battery, 5.5V to 30V
24	DL3	Gate-drive output for the +3.3V low-side MOSFET
25	BST3	Boost capacitor connection for the +3.3V supply (0.1μF)
26	LX3	Inductor connection for the +3.3V supply
27	DH3	Gate-drive output for the +3.3V high-side MOSFET
28	FB3	Feedback and current-sense input for the +5V PWM

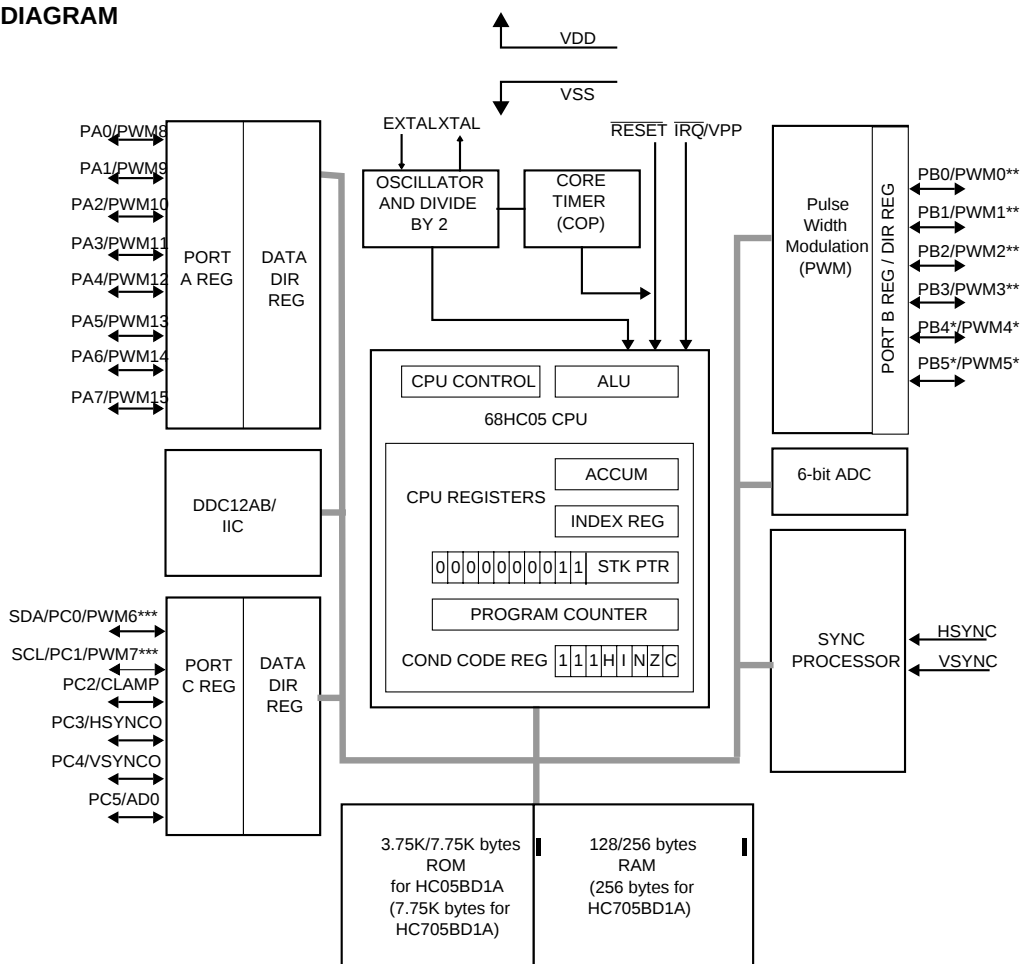
BLOCK DIAGRAM FOR MAX785





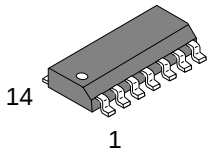
PIN CONFIGURATION

BLOCK DIAGRAM

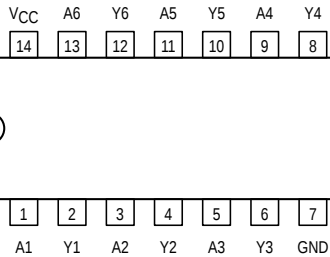


FUNCTION TABLE

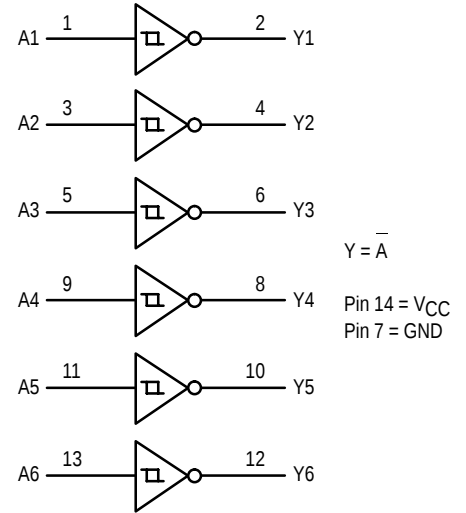
Inputs	Outputs
A	Y
L	H
H	L



1



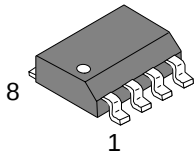
PIN CONFIGURATION



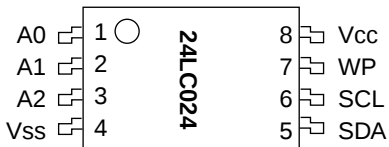
BLOCK DIAGRAM

24LC02

2K 2.5V I²C™ Serial EEPROM

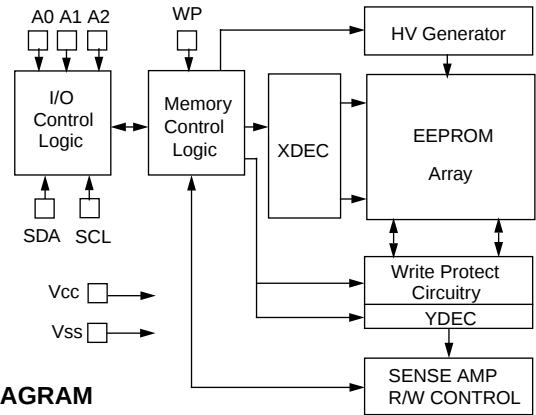


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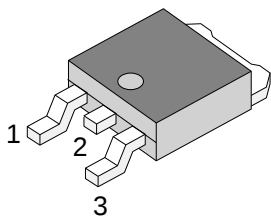
PIN CONFIGURATION

BLOCK DIAGRAM

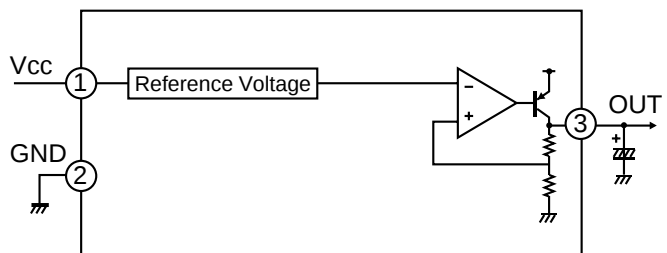


BA033FP

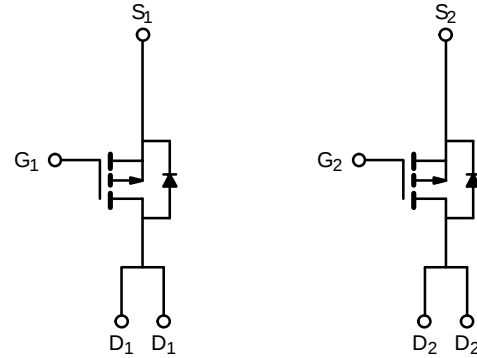
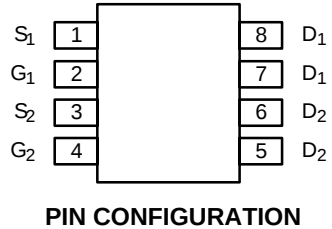
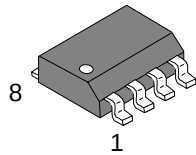
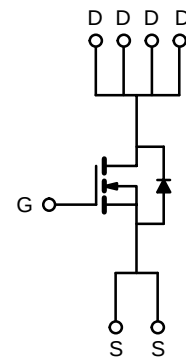
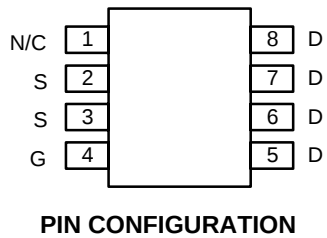
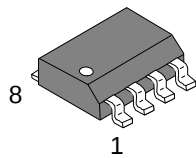
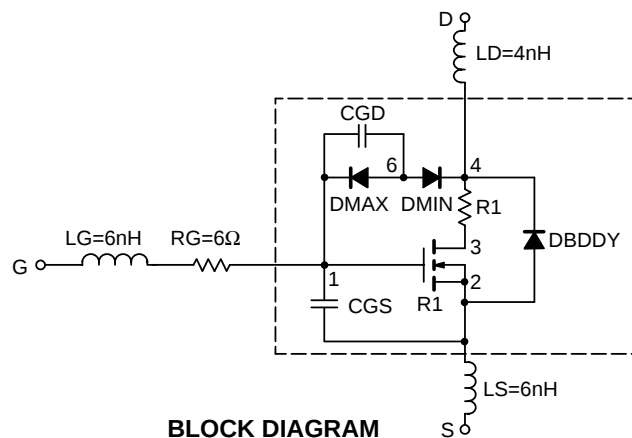
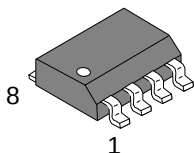
Low Saturation Voltage type 3-terminal Regulator

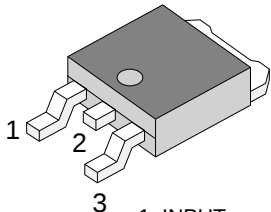
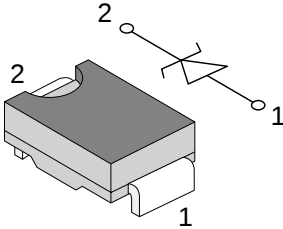
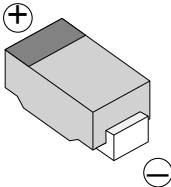
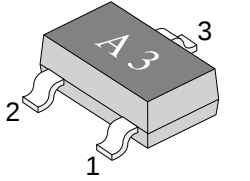
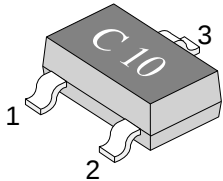


1. Vcc
2. GND
3. OUTPUT



BLOCK DIAGRAM

SI4925DY**Dual P-Channel 30-V (D-S) Rated MOSFET****SI9410DY****N-Channel Enhancement-Mode MOSFET****SI9936DY****N-Channel Enhancement-Mode MOSFET**

TYPE	PARTS	TYPE	PARTS
 1. INPUT 2. GND 3. OUTPUT	Regulator		Schottky Diode
	KA78M05R KA78M12R		MBRS190T3
	Tantalum Capacitor	 1. CATHODE 1 2. CATHODE 2 3. ANODE	Diode
	0CH7106F621 10uF/16V 0CH7107F661 100uF/10V 0CH7226F651 22uF/16V 0CH7227F661 220uF/6.3V 0CH7476F661 47uF/10V		KDS181
		 1. BASE 2. EMITTER 3. COLLECTOR	Transistor
			KSC1623

TITLE		LG501(Digital Interface LCD MNT)	
1	98.05.26	S.T LIM	Draft
2	98.06.04	S.T LIM	Change the DC/DC
3	98.06.09	S.T LIM	Add EMI Solution
4	98.06.16	S.T LIM	Change the DC/DC

2. MAX785 --> ADP3050
4. ADP3050 --> MAX785

