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COLOR MONITOR SERVICE MANUAL

CHASSIS NO. : CL-48

MODEL: FLATRON L1510P (L1510PL-ALR)**

***()**Same model for Service**

CAUTION

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



***To apply the Mstar Chip.**

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SPECIFICATIONS

1. LCD CHARACTERISTICS

Type : TFT XGA LCD Module
 Size : 352.0(H) x 263.5(V) x 14.0(T)
 Pixel Pitch : 0.297mm x 0.297mm
 Color Depth : 6Bits + FRC/ 16,194,277 colors
 Active Video Area : 15.0 inch
 (304.128 x 228.096)
 Surface Treatment : Anti-Glare, Hard Coating (3H)
 Backlight Unit : Top/Bottom edge side 2CCFL
 Electrical Interface : LVDS Interface

2. OPTICAL CHARACTERISTICS

2-1. Viewing Angle by Contrast Ratio ≥ 10

Left : 55° min., 60° typ
 Right : 55° min., 60° typ
 Top : 40° min., 45° typ
 Bottom : 40° min., 45° typ

2-2. Luminance : 200(min.), 250(typ.)

2-3. Contrast Ratio : 250(min.), 350(typ.)

3. SIGNAL (Refer to the Timing Chart)

3-1. Analog Video Input

- 1) Video Input Range : 0~0.7V \pm 5%
- 2) Video Termination Impedance : 75 Ω \pm 5%
- 3) Sync Type : Separate, Composite
 SOG(Sync On Green), Digital
- 4) Sync Level : TTL Low \leq 0.8V, High \geq 2.0V

3-2. Digital Video Input

DDWG DVI Standard 1.0

3-3. Operating Frequency

Horizontal : 30 ~ 63kHz
 Vertical : 56 ~ 75Hz

4. POWER SUPPLY

4-1. Power

100~240V, 50/60Hz 0.6A

4-2. Power Consumption

MODE	H/V SYNC	VIDEO	POWER CONSUMPTION	LED COLOR
POWER ON (NORMAL)	ON/ON	ACTIVE	less than 25 W	GREEN
STAND-BY	OFF/ON	OFF	less than 3 W	AMBER
SUSPEND	ON/OFF	OFF	less than 3 W	AMBER
DPMS OFF	OFF/OFF	OFF	less than 3 W	AMBER
POWER OFF			less than 3 W (@120VAC)	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. MTBF : 40,000 Hours (Min.)
 Lamp Life : 40,000 Hours (min.)

6. DIMENSIONS (with TILT/SWIVEL)

Width : 356mm (14.01")
 Depth : 229mm (9.01")
 Height : 380mm (14.96")



Width : 356mm (14.01")
 Depth : 291.4mm (11.47")
 Height : 103.3mm (4.06")



7. WEIGHT (with TILT/SWIVEL)

Net. Weight : 5.1kg (11.24 lbs)
 Gross Weight : 6.6kg (14.55 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 \triangle 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 manufacturer 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.)

\triangle CAUTION

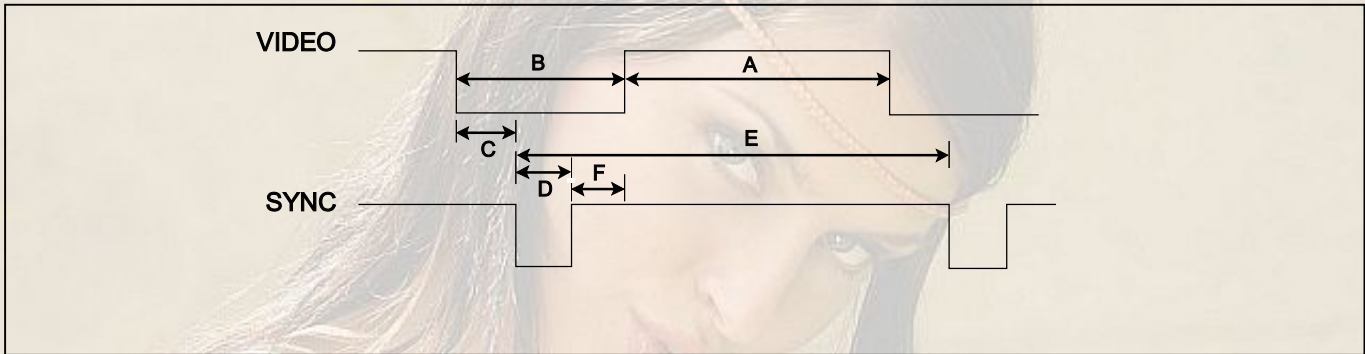
Please use only a plastic screwdriver to protect yourself from shock hazard during service operation.

\triangle 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.

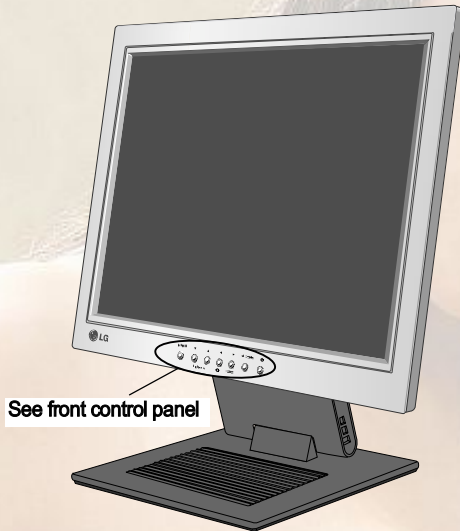
TIMING CHART



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	31.468 KHz	800	640	160	96	48	16	640 x 350
	V (Lines)	-		70.0 Hz	449	350	99	2	60	37	
2	H (Pixels)	-	28.322	31.468 KHz	900	720	180	108	55	17	720 x 400 (TEXT)
	V (Lines)	+		70.0 Hz	449	400	49	2	34	13	
3	H (Pixels)	-	25.175	31.469 KHz	800	640	160	96	48	16	640 x 480
	V (Lines)	-		60.0 Hz	525	480	45	2	33	10	
4	H (Pixels)	-	30.24	35.0 KHz	864	640	224	64	96	64	640 x 480
	V (Lines)	-		66.67 Hz	525	480	45	3	39	3	
5	H (Pixels)	-	31.5	37.861 KHz	832	640	192	40	128	24	640 x 480
	V (Lines)	-		72.8 Hz	520	480	40	3	28	9	
6	H (Pixels)	-	31.5	37.50 KHz	840	640	200	64	120	16	640 x 480
	V (Lines)	-		75 Hz	500	480	20	3	16	1	
7	H (Pixels)	+	36.0	35.156KHz	1024	800	224	72	128	24	800 x 600
	V (Lines)	+		56.25 Hz	625	600	25	2	22	1	
8	H (Pixels)	+	40.0	37.879 KHz	1056	800	256	128	88	40	800 x 600
	V (Lines)	+		60.3 Hz	628	600	28	4	23	1	
9	H (Pixels)	+	50.0	48.077 KHz	1040	800	240	120	64	56	800 x 600
	V (Lines)	+		72.188 Hz	666	600	66	6	23	37	
10	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	
11	H (Pixels)	-	57.2832	49.725 KHz	1152	832	320	64	224	32	832 x 624 (MAC)
	V (Lines)	-		74.55 Hz	667	624	43	3	39	1	
12	H (Pixels)	-	65	48.363 KHz	1344	1024	320	136	160	24	1024 x 768
	V (Lines)	-		60.0 Hz	806	768	38	6	29	3	
13	H (Pixels)	-	75	56.476 KHz	1328	1024	304	136	144	24	1024 x 768
	V (Lines)	-		70.0 Hz	806	768	38	6	29	3	
14	H (Pixels)	+	78.75	60.023 KHz	1312	1024	288	96	176	16	1024 x 768
	V (Lines)	+		75.0 Hz	800	768	32	3	28	1	

OPERATING INSTRUCTIONS

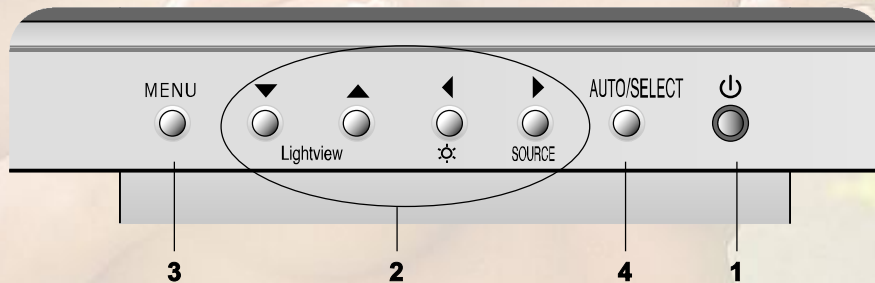
FRONT VIEW



REAR VIEW



Front Control Panel



1. Power Button

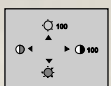
Use this button to turn the display on or off.

<Power (DPMS) Indicator>

This Indicator lights up green when the display operates normally. If the display is in DPM (Energy Saving) mode, this indicator color changes to amber.

2. ▲▼/◀▶ Button

Use these buttons to choose or adjust items in the On Screen Display.



This function optimizes the brightness, contrast or color value to the surrounding conditions and settings and enables you to enjoy the most suitable picture by adjusting the surroundings (DAY/NIGHT/USER MODE).

- TEXT: For viewing letters
- MOVIE: For viewing movies
- PHOTO: For viewing pictures or the photographs
- USER MODE: This function memorizes the manual adjustment -Brightness, Contrast and Color value on the On Screen Display.

Bring up Contrast and Brightness adjustment.

◀ ▶ ▲ ▼ ⬅ ➡ ⬅ ➡ ⬅ ➡ MENU

▶ SOURCE Use this button to make Dsub or DVI connector active. This feature is used when two computers are connected to the display. The default setting is Dsub.

3. Menu Button

Use this button to enter or exit the On Screen Display.

4. AUTO/SELECT Button

Use this button to enter a selection in the On Screen Display.

PROCESSING
AUTO CONFIGURATION

When adjusting your display settings, always press the **AUTO/SELECT** button before entering the On Screen Display(OSD). This will automatically adjust your display image to the ideal settings for the current screen resolution size (display mode).

The best display mode is **1024x768/60Hz**.

6. Control Lock(Menu button, ► button)

Press the hold the MENU button and ► button for 3 seconds: the message "CONTROLS LOCKED" appears.

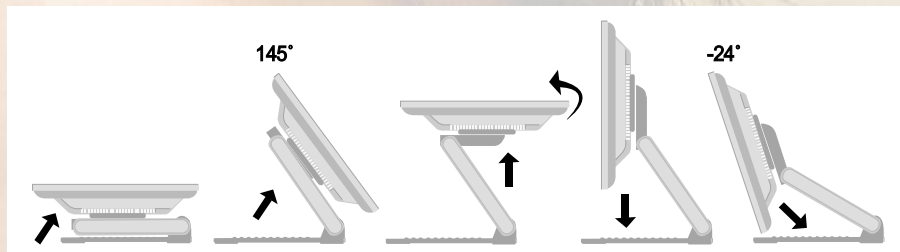
CONTROLS LOCKED

You can unlock the OSD controls at any time by pushing the MENU, ► button for 3 seconds: the message "CONTROLS UNLOCKED" will appear.

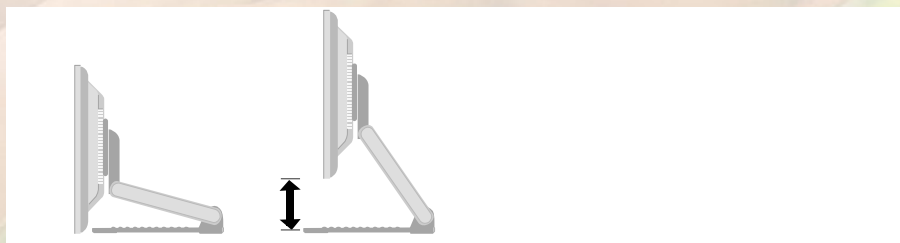
CONTROLS UNLOCKED

Positioning your display

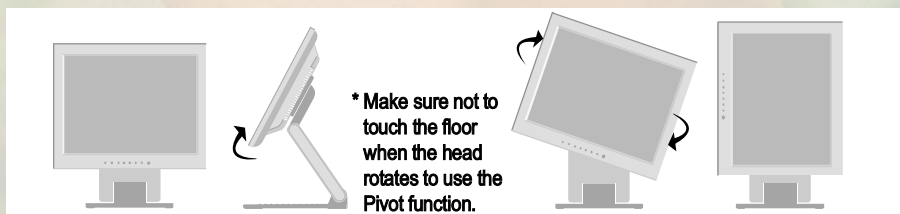
- Adjust the position of the panel in various ways for maximum comfort.
 - Tilt Range : -24°~145°



- Height Range : maximum 3.39inch (86.1mm)



- Landscape & Portrait : You can rotate the panel 90° clockwise.
(* For detailed information, please refer to the Pivot Software CD provided.)



Ergonomic

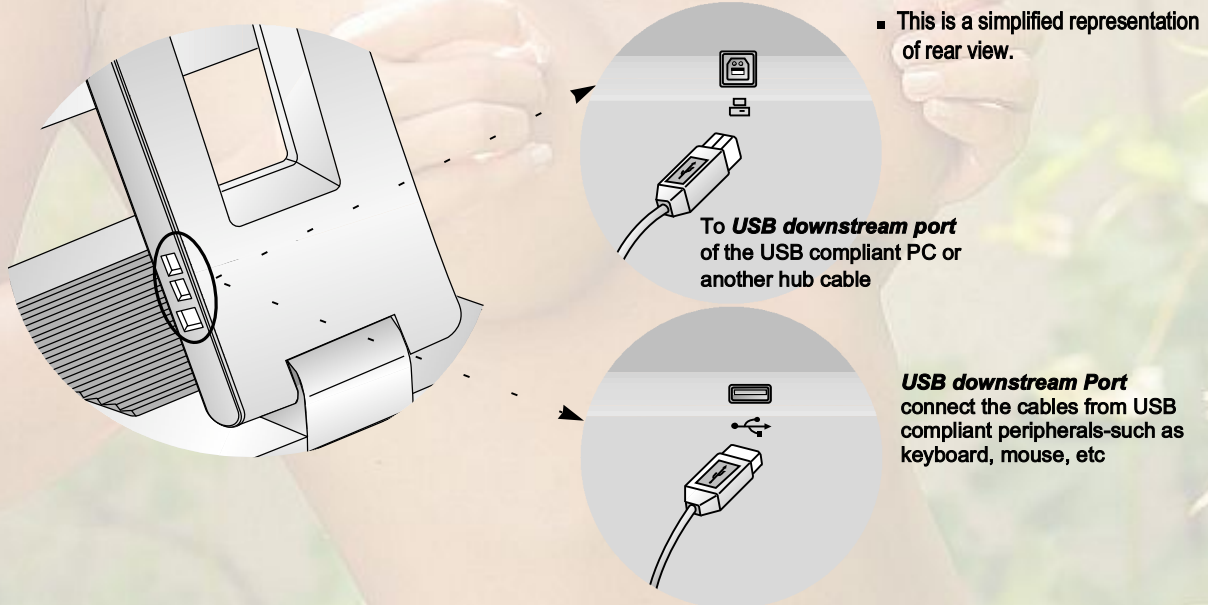
It is recommended that in order to maintain an ergonomic and comfortable viewing position, the forward tilt angle of the monitor should not exceed 5 degrees.

Making use of USB (Universal Serial Bus)*

USB (Universal Serial Bus) is an innovation in connecting your different desktop peripherals conveniently to your computer. By using the USB, you will be able to connect your mouse, keyboard, and other to your monitor instead of having to connect them to your computer. This will give you greater flexibility in setting up your system. USB allows you to connect chain up to 120 devices on a single USB port, and you can “hot” plug (attach them while the computer is running) or unplug them while maintaining Plug and Play auto detection and configuration. This monitor has an integrated BUS-powered USB hub, allowing up to 2 other USB devices to be attached it.

USB connection

1. Connect the upstream port of the Display to the downstream port of the USB compliant PC or another hub using the USB cable. (Computer must have a USB port)
2. Connect the USB compliant peripherals to the downstream ports of the monitor.

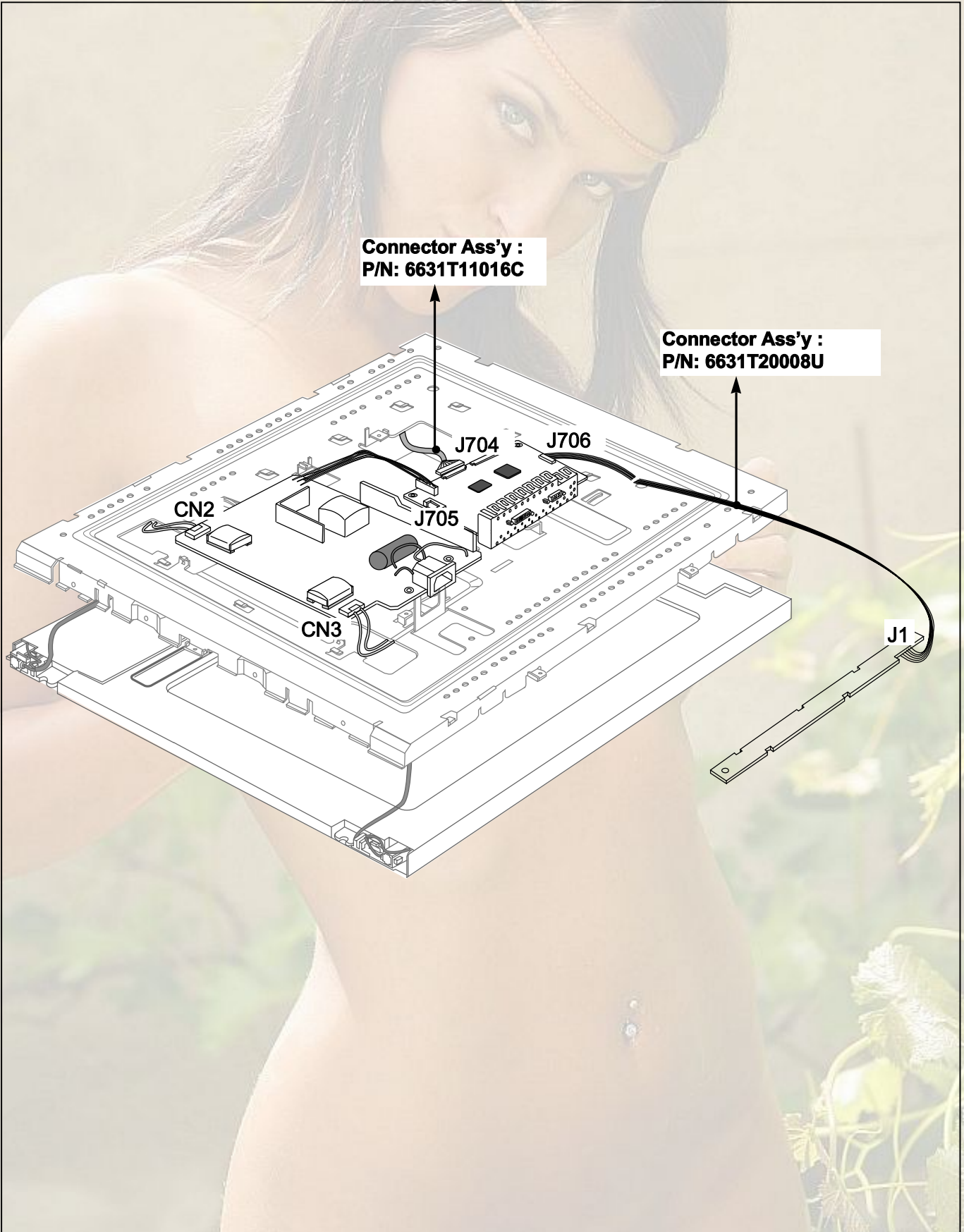


NOTE

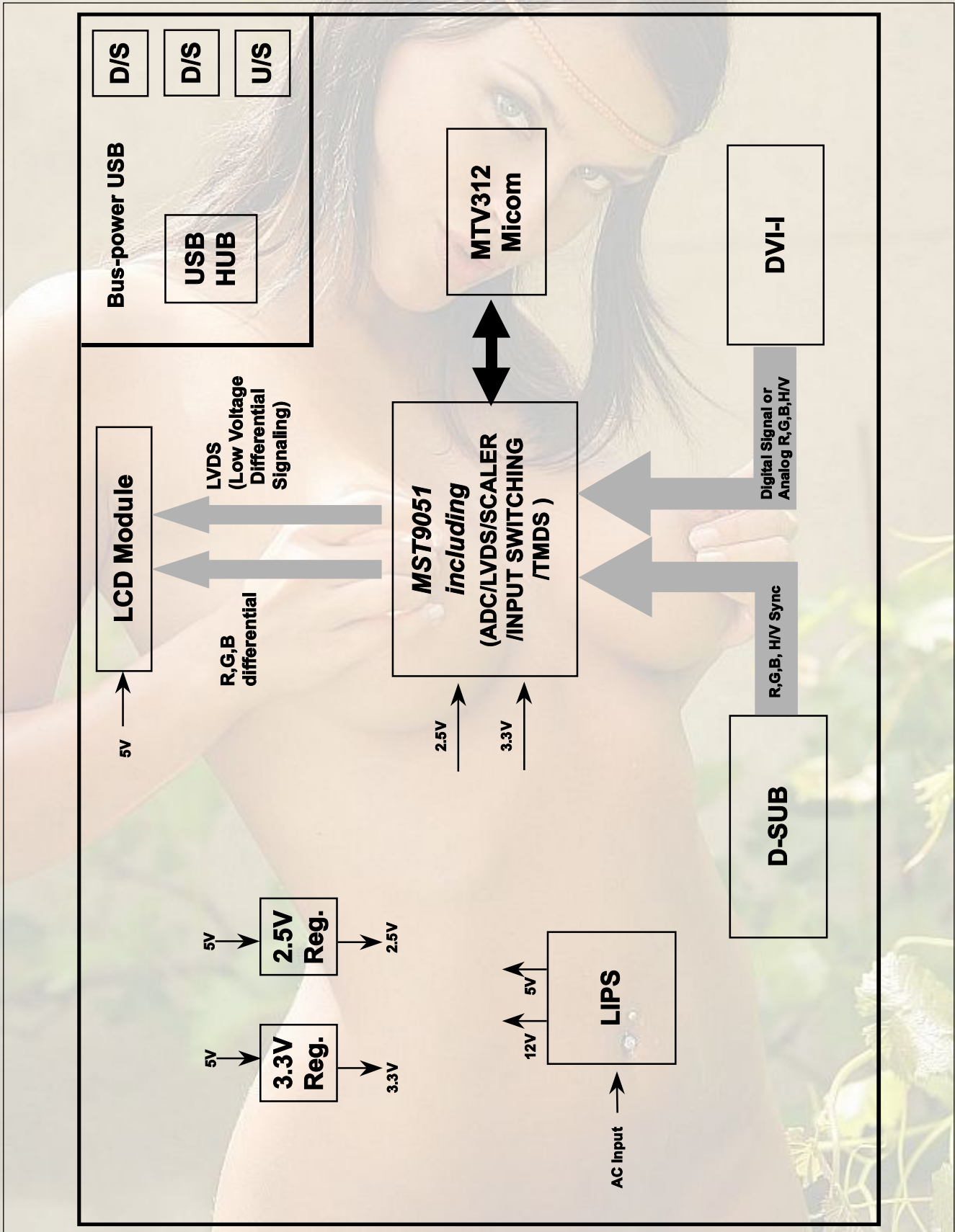
- To activate the USB hub function, the monitor must be connected to a USB compliant PC(OS) or another hub with the USB cable(enclosed).
- When connecting the USB cable, check that the shape of the connector at the cable side matches the shape at the connecting side.
- Even if the monitor is in a power saving mode, USB compliant devices will function when they are connected the USB ports(both the upstream and downstream) of the monitor.

IMPORTANT: These USB connectors are not designed for use with high-power USB devices such as a video camera, scanner, etc. LGE recommends connecting high-power USB devices directly to the computer.

WIRING DIAGRAM



BLOCK DIAGRAM(MAIN)



DESCRIPTION OF BLOCK DIAGRAM

1. Video Controller 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 80MHz.

This part consists of the Scaler, ADC, TMDS receiver and LVDS transmitter .

The Scaler gets the video signal converted analog to digital, interpolates input to 1024 X 768 resolution signal and outputs 8-bit R, G, B signal to transmitter.

2. Power Part.

This part consists of the one 5V, two 3.3V, and one 2.5V regulators to convert power which is provided 12V, 5V in Power board.

3.3V is provided for LCD panel and inverter, 5V is provided for micom.

Also, 5V is converted 3.3V and 2.5V by regulator. Converted power is provided for IC in the main board.

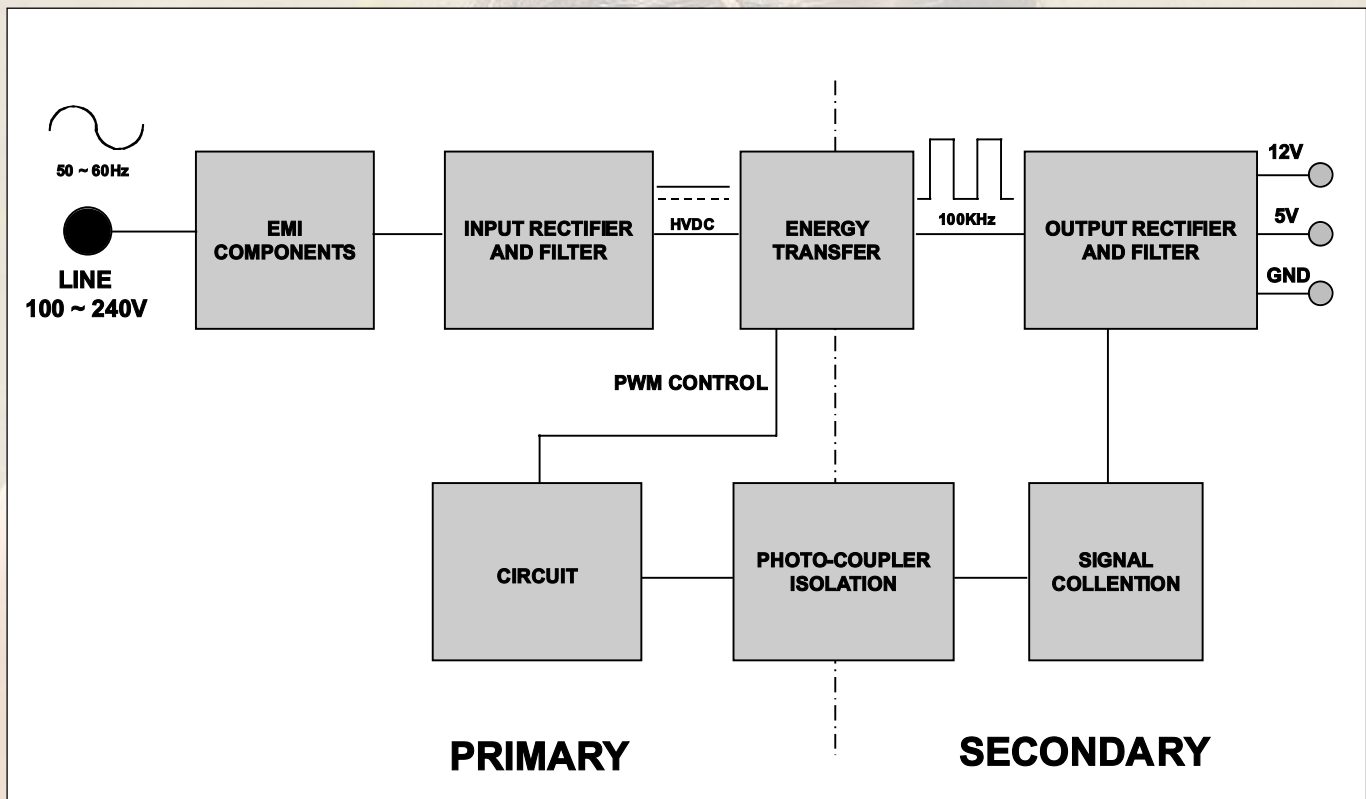
3. MICOM Part.

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 modes is stored in EEPROM.

POWER BLOCK DIAGRAM



DESCRIPTION OF BLOCK DIAGRAM

1. EMI components.

This part contains of EMI components to comply with global marketing EMI standards like FCC, VCCI CISPR, the circuit included a line-filter, across line capacitor and of course the primary protection fuse.

2. Input rectifier and filter.

This part function is for transfer the input AC voltage to a DC voltage through a bridge rectifier and a bulk capacitor.

3. Energy Transfer.

This part function is transfer the primary energy to secondary through a power transformer.

4. Output rectifier and filter.

This part function is to make a pulse width modulation control and to provide the driver signal to power switch, to adjust the duty cycle during different AC input and output loading condition to achive the dc output stablize, and also the over power protection is also monitor by this part.

5. Photo-Coupler isolation.

This part function is to feed back the dc output changing status through a photo transistor to primary controller to achive the stablized dc output voltage.

6. Signal collection.

This part function is to collect the any change from the dc output and feed back to the primary through photo transistor

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 L1510PL on the IBM compatible PC.
- 2) Select EEPROM All Init. command and Enter.
- 3) Display cross hatch pattern at Mode 1.
- 4) Select EDID WRITE command and Enter.

2. Adjustment for White Balance

- 1) Display color 0,0 pattern at Mode 12.
- 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.

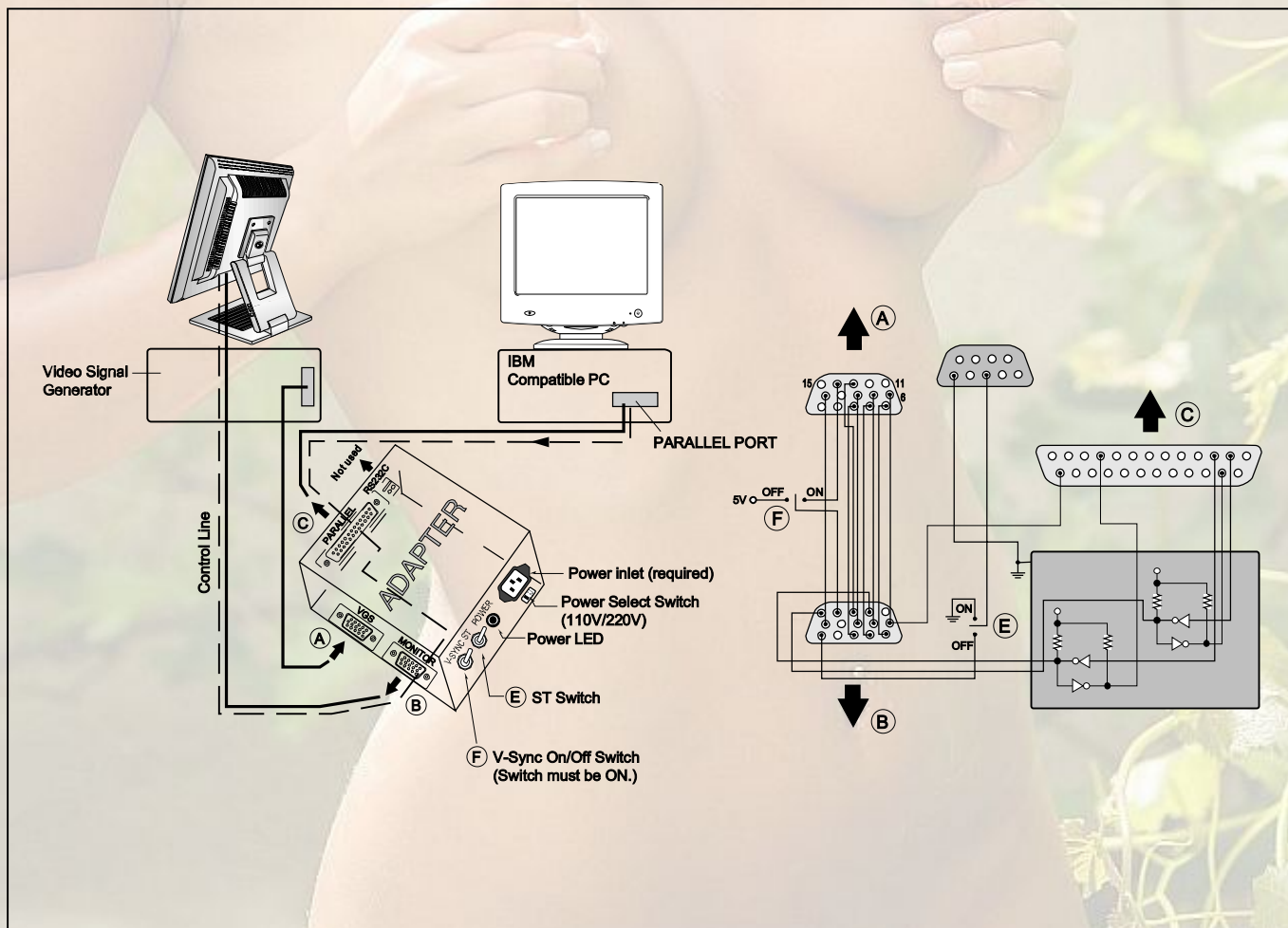
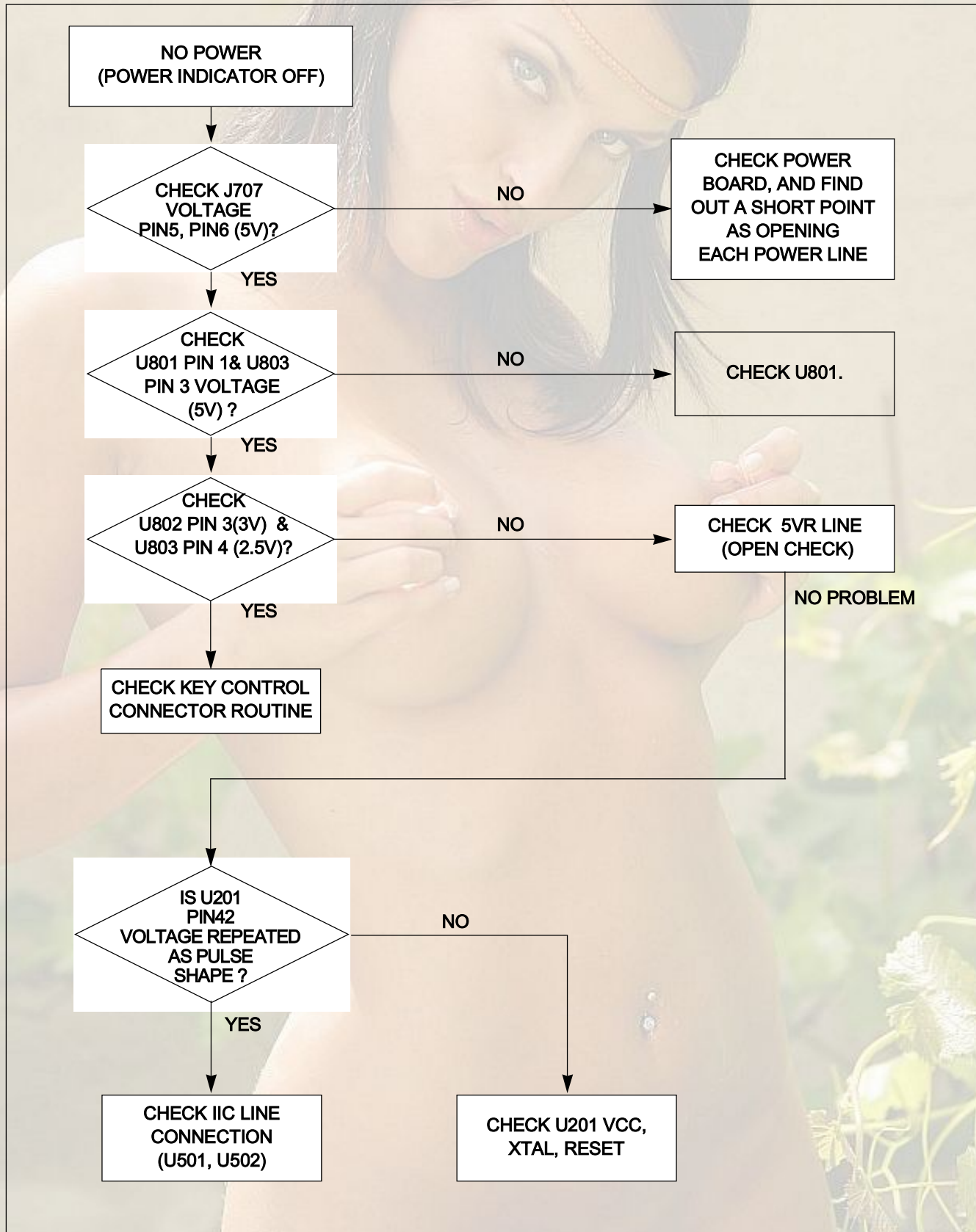


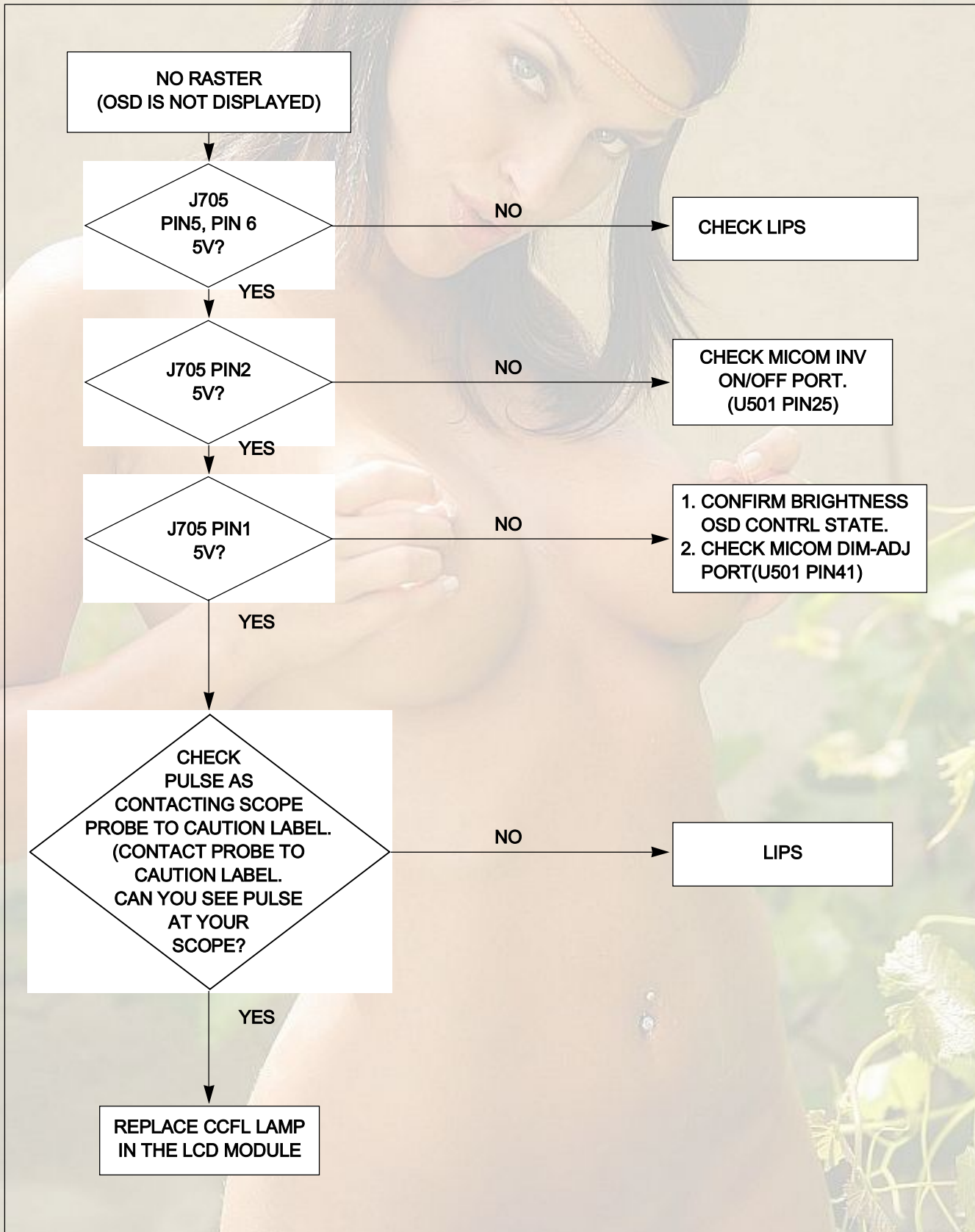
Figure 1. Cable Connection

TROUBLESHOOTING GUIDE

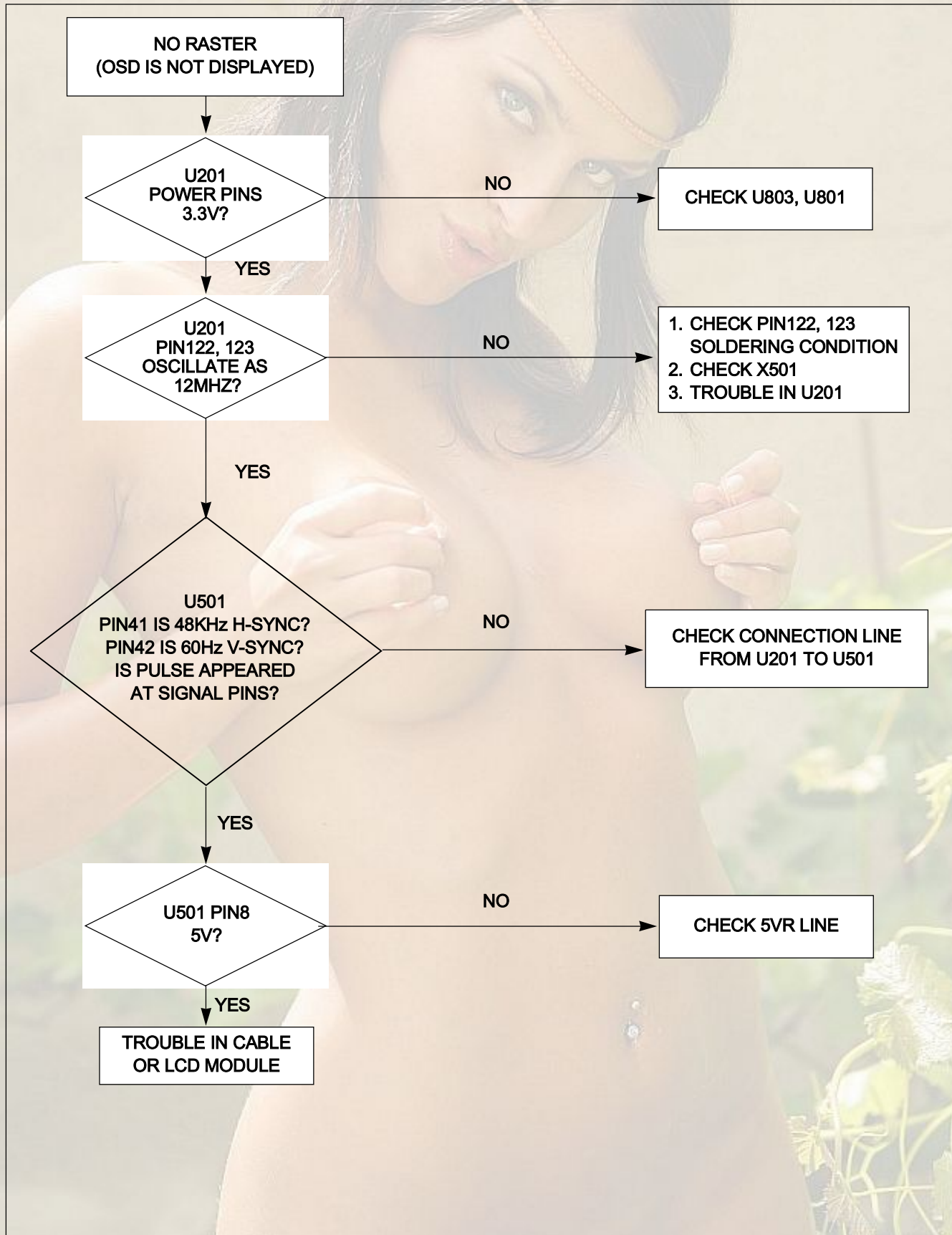
1. NO POWER



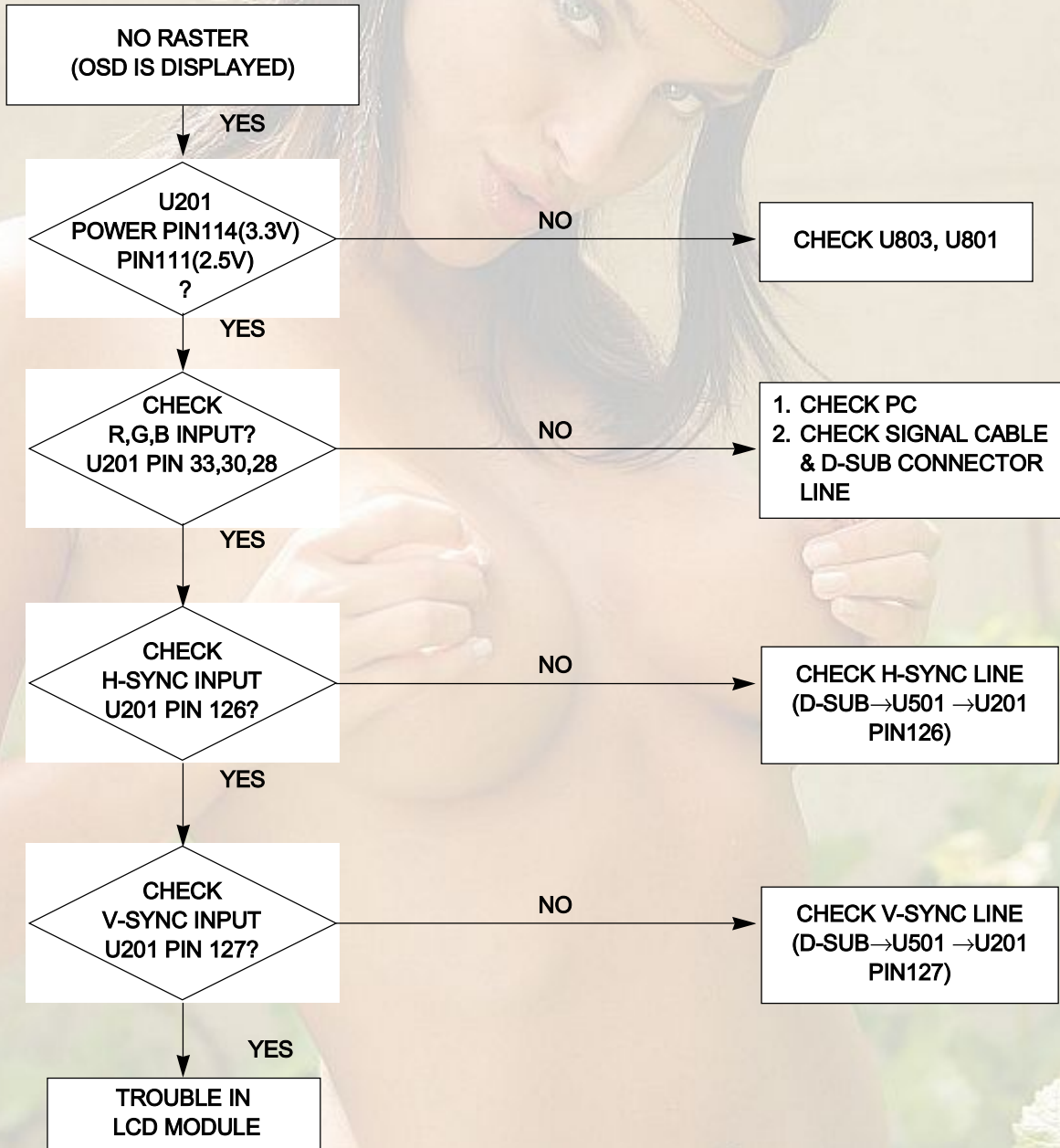
2. NO RASTER (OSD IS NOT DISPLAYED) – LIPS



3. NO RASTER (OSD IS NOT DISPLAYED) – MST9011

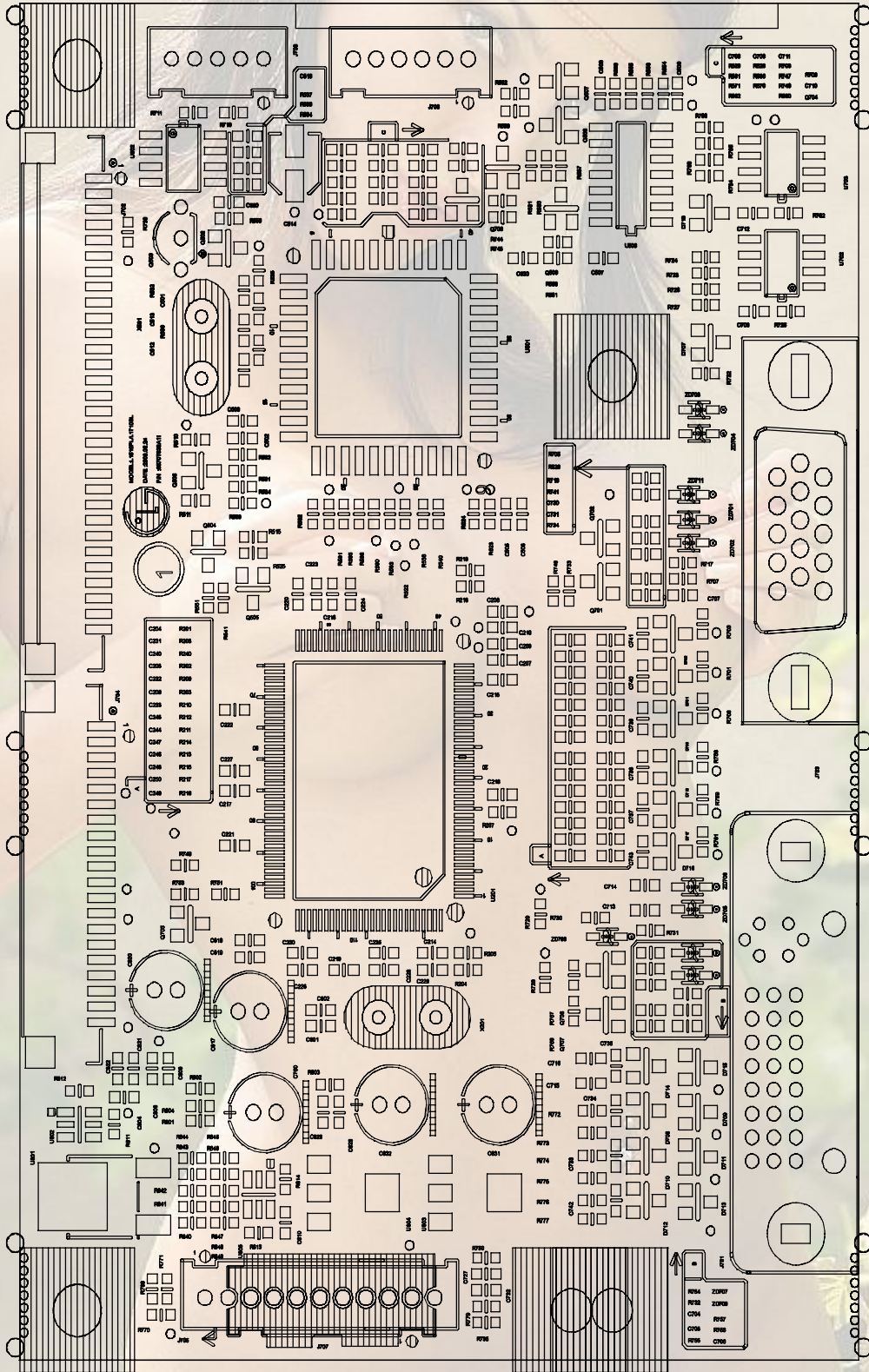


4. NO RASTER (OSD IS DISPLAYED) – MST9011

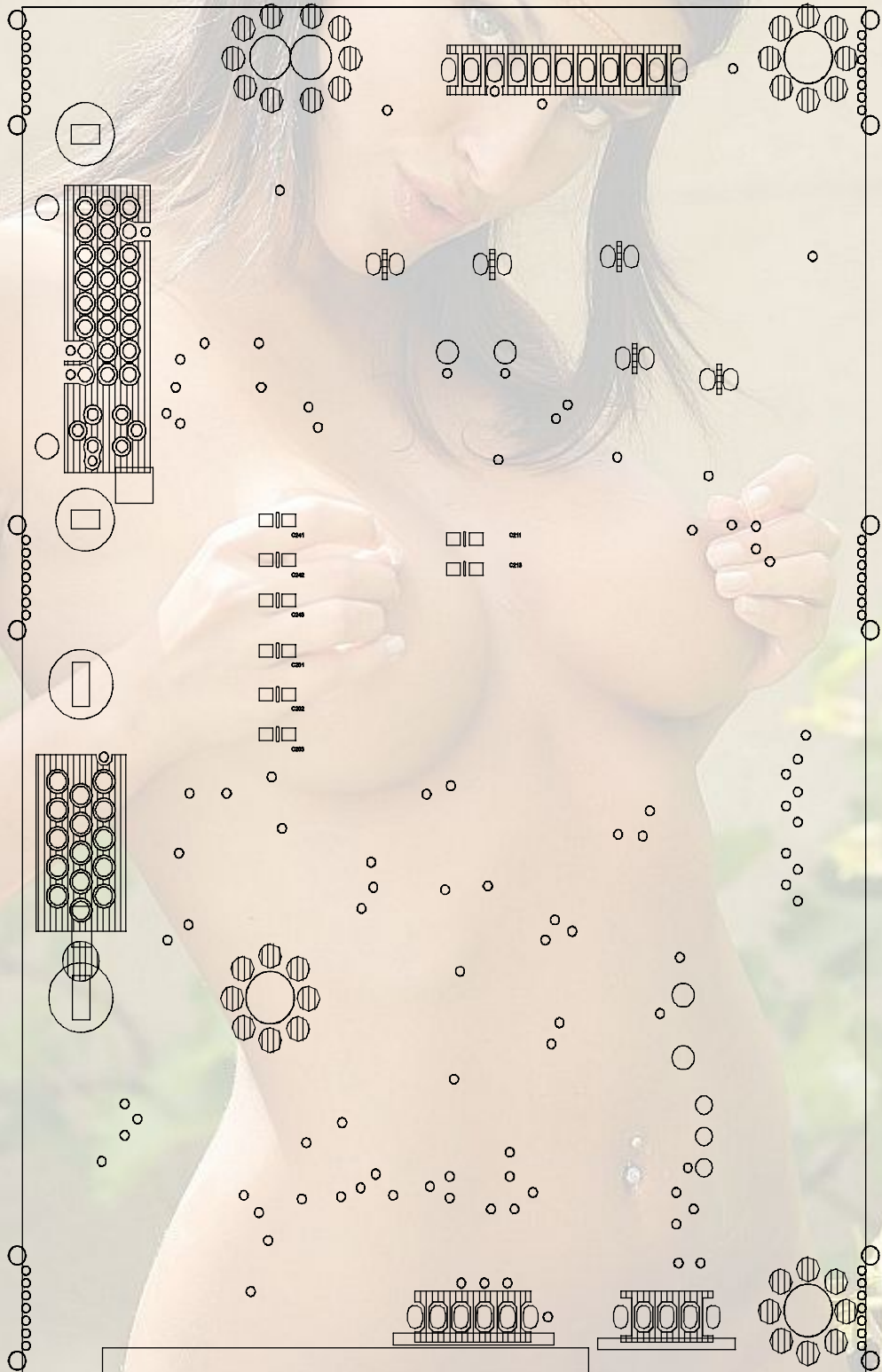


PRINTED CIRCUIT BOARD

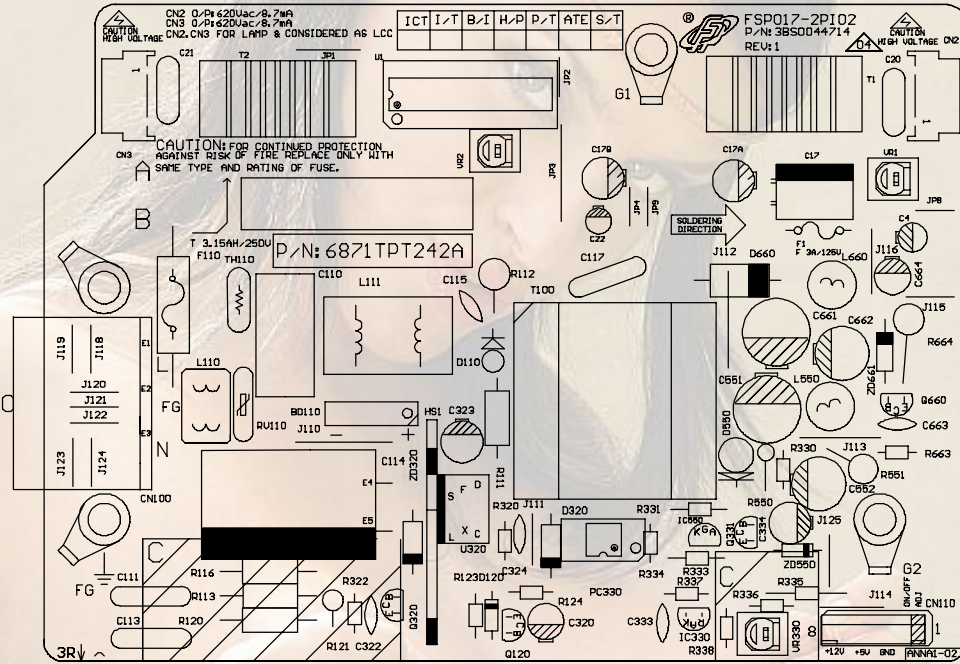
1. MAIN BOARD(Component Side)



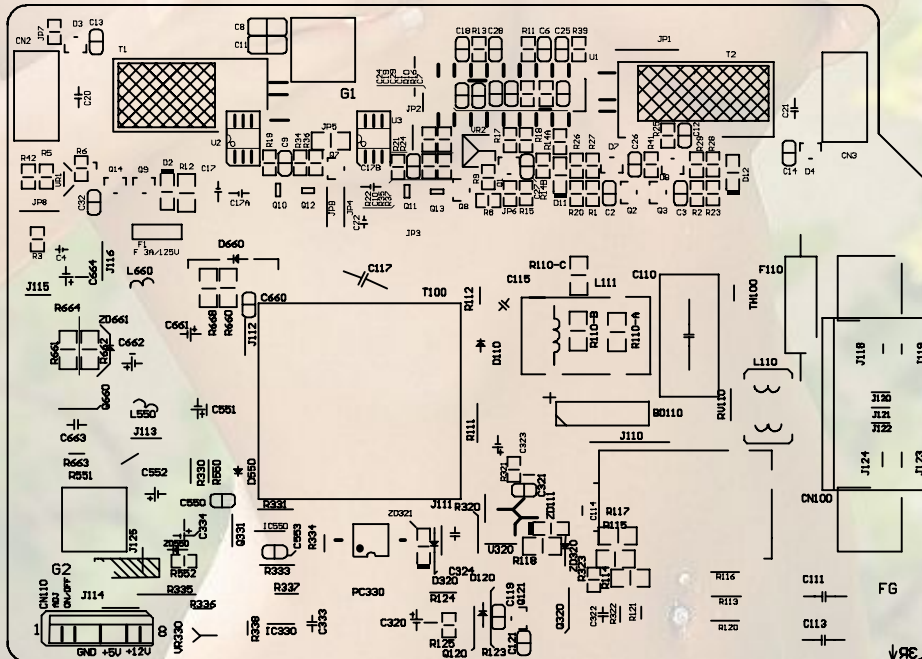
2. MAIN BOARD (Solder Side)



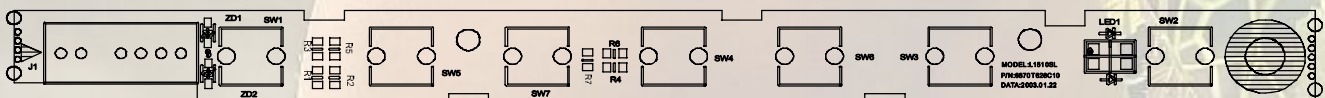
3. POWER BOARD (Component Side)



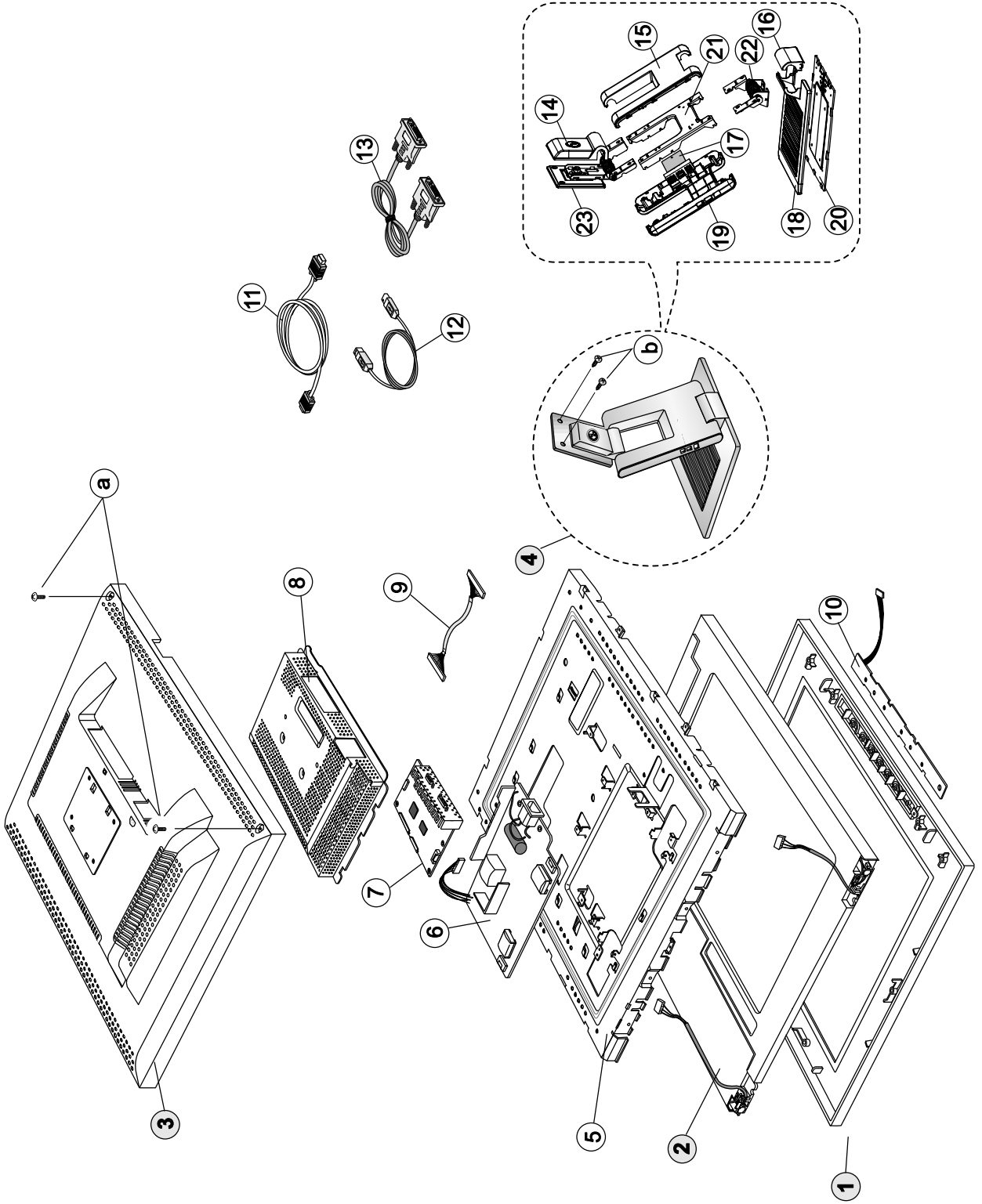
4. POWER BOARD (Solder Side)



5. CONTROL BOARD



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

Ref. No.	Part No.	Description
1	3091TKL055T	CABINET ASSEMBLY, L1510PL BRAND 3090TKL038 .
2	6304FLP025A	LCD(LIQUID CRYSTAL DISPLAY), LM150X06-A3M1 LG PHILIPS TFT COLOR 15.0 INCH XGA LVDS SMM
3	3809TKL026Z	BACK COVER ASSEMBLY, L1510PL 3808TKL029
4	3043TKK095A	TILT SWIVEL ASSEMBLY LB504J . PIVOT&2-HINGE
5	4951TKS091S	METAL ASSEMBLY, FRAME MAIN (L1510PL,LPL P4)
6	6871TPT242B	PWB(PCB) ASSEMBLY, POWER, 15" LPL(L1510SL) POWER TOTAL SPI FSP017-2PI02
	or 6871TPT236B	PWB(PCB) ASSEMBLY, POWER, ADP-30EP POWER TOTAL DELTA L1510SL LIPS
	or 6871TPT234D	PWB(PCB) ASSEMBLY, POWER, L1510SL POWER TOTAL POWERNET PW1510LG 12V/1.2A 5V/1A LIPS FOR L-CHASSIS LPL
	or 6871TPT235B	PWB(PCB) ASSEMBLY, POWER, L1510SL POWER TOTAL SANKEN 3L038WK
7	3313TL5062A	MAIN TOTAL ASSEMBLY, L1510PL BRAND CL-48
8	4950TKK424F	METAL, SHIELD REAR(LB504N)
9	6631T11016C	CONNECTOR ASSEMBLY, 20P H-H 100MM UL20276 I/FACE CABLE LB500K
10	6871TST385A	PWB(PCB) ASSEMBLY, SUB, L1510PL CONTROL TOTAL BRAND CL-48
11	6850TD9004D	CABLE, D-SUB, UL20276-9C(5.8MM) DT 1560MM GRAY(85964) LB500L DM
12	6866TDU002D	CABLE, D-SUB, UL20276SB10P+2C AWG#30 DT 1870MM GRAY(85964) BRAND DM
13	6866TDV004C	CABLE, DVI, UL20276 DT 2000MM GRAY(85964) LB885C DM
14	3550TKK264A	COVER, LB504J HINGE ROTATE
15	3550TKK266A	COVER, LB504J STAND REAR
16	3550TKK268A	COVER, LB504J HINGE BASE
17	6871TUT015A	PWB(PCB) ASSEMBLY, USB, LB886F SUB TOTAL BRAND CL-29
18	3550TKK267A	COVER, LB504J BASE TOP
19	3550TKK265A	COVER, LB504J STAND FRONT WITH USB
20	4950TKK444A	METAL BASE LB504J
21	4950TKK443A	METAL STAND LB504J
22	4951TKK089A	METAL ASSEMBLY, TILT UNIT BASE HINGE
23	4951TKK088A	METAL ASSEMBLY, TILT UNIT PORTRAIT & UPPER HINGE
a	332-068U	SCREW, PPB+3*8 (MSWR/FZMW1)
b	332-105G	SCREW, DRAWING, PVS+4*10(MSWR/BK)

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

DATE: 2003. 3. 3.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
MAIN BOARD				
CAPACITORS				
		C204	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C205	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C206	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C207	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C208	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C209	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C210	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C214	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C215	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C216	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C217	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C218	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C219	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C220	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C221	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C222	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C223	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C224	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C225	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C226	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C227	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C230	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C231	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C232	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C233	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C240	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C244	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C245	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C246	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C247	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C248	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C249	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C250	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C501	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C502	OCC101CK41A	100PF 1608 50V 5% R/TP NP0
		C503	OCC101CK41A	100PF 1608 50V 5% R/TP NP0
		C505	OCC101CK41A	100PF 1608 50V 5% R/TP NP0
		C506	OCC101CK41A	100PF 1608 50V 5% R/TP NP0
		C507	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C508	OCC101CK41A	100PF 1608 50V 5% R/TP NP0
		C509	OCC101CK41A	100PF 1608 50V 5% R/TP NP0
		C512	OCC180CK41A	18PF 1608 50V 5% R/TP NP0
		C513	OCC030CK01A	3PF 1608 50V 0.25 PF R/TP NP0
		C514	OCH8106F811	10UF 16V M 85STD(CYL) R/TP
		C516	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C530	OCK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5)
		C550	OCC102CK41A	1000PF 1608 50V 5% R/TP NP0
		C703	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C704	OCC101CK41A	100PF 1608 50V 5% R/TP NP0
		C705	OCC680CK41A	68PF 1608 50V 5% R/TP NP0
		C706	OCC680CK41A	68PF 1608 50V 5% R/TP NP0
		C707	OCC680CK41A	68PF 1608 50V 5% R/TP NP0

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		C708	OCK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5)
		C709	OCK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5)
		C710	OCK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5)
		C711	OCK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5)
		C712	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C713	OCC101CK41A	100PF 1608 50V 5% R/TP NP0
		C714	OCC101CK41A	100PF 1608 50V 5% R/TP NP0
		C727	OCK105CD56A	1UF 1608 10V 10% R/TP X7R
		C730	OCC101CK41A	100PF 1608 50V 5% R/TP NP0
		C731	OCC680CK41A	68PF 1608 50V 5% R/TP NP0
		C732	OCK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5)
		C733	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C734	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C735	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C737	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C738	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C739	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C740	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C741	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C742	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C743	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C760	OCE107EF610	"100UF KMG,RD 16V 20% FL BULK"
		C801	OCK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5)
		C802	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C803	OCK105CD56A	1UF 1608 10V 10% R/TP X7R
		C804	OCC102CK41A	1000PF 1608 50V 5% R/TP NP0
		C809	OCK105CD56A	1UF 1608 10V 10% R/TP X7R
		C810	OCC102CK41A	1000PF 1608 50V 5% R/TP NP0
		C817	OCE107EF610	"100UF KMG,RD 16V 20% FL BULK"
		C818	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C819	OCK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5)
		C820	OCE107EF610	"100UF KMG,RD 16V 20% FL BULK"
		C821	OCK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5)
		C822	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C828	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C829	OCK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5)
		C831	OCE107EF610	"100UF KMG,RD 16V 20% FL BULK"
		C832	OCE107EF610	"100UF KMG,RD 16V 20% FL BULK"
DIODEs				
		D701	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D702	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D706	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D707	0DD184009AA	KDS184 TP KEC - 85V --- 300
		D708	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D709	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D710	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D711	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D712	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D713	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D714	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D715	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D716	0DS226009AA	KDS226 TP KEC SOT-23 80V 300

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		D717	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D718	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D719	ODD184009AA	KDS184 TP KEC - 85V --- 300
		ZD701	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD323
		ZD702	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD323
		ZD703	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD323
		ZD704	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD323
		ZD705	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD323
		ZD706	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD323
		ZD707	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD323
		ZD708	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD323
		ZD709	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD323
		ZD711	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD323
ICs				
		U201	0IPRPM3005A	MST9051 DUAL MSTAR 128P LQFP
		U501	0IZZTSZ256B	MYSON 44P PLCC ST OTP L1510PL
		U502	0ISG240860B	M24C08W6 SGS-THOMSON 8SOP R/T
		U503	0IPH740800H	"74F08D 14P,SOIC TP QUAD 2-INP"
		U702	0ICS240213A	CAT24WC02J-TE13 8P SOP TP 2K
		U703	0ICS240213A	CAT24WC02J-TE13 8P SOP TP 2K
		U801	0IPMGKE011A	KIA78D33F KEC DPAK R/TP 3.3V
		U802	0TFV180023A	VISHAY SI3865DV R/TP TSOP-6 8
		U803	0IPMGNS001D	LM1117MPX-2.5 NATIONAL SEMICO
		U805	0TFV180023A	VISHAY SI3865DV R/TP TSOP-6 8
TRANSISTOR				
		Q502	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q503	0IKE704200H	KIA7042AP TO-92 TP 4.2 VOLT.
		Q504	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q505	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q506	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q507	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q508	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q509	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q701	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q702	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q703	0TR390609FA	KST3906-MTF TP SAMSUNG SOT23
		Q704	0TR390609FA	KST3906-MTF TP SAMSUNG SOT23
		Q705	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q706	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q707	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
RESISTORS				
		R201	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R202	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R203	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R204	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R205	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R207	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R208	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R209	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R210	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R211	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R212	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R213	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R214	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R215	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R216	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R217	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R240	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R501	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R502	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R504	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R509	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R510	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R511	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R515	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R520	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R522	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R523	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R524	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R525	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R528	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R529	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R530	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R531	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R532	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R533	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R534	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R535	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R537	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R538	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R540	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R541	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R551	0RJ4702D677	4700 OHM 1/10 W 5% 1608 R/TP
		R552	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R553	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R554	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R555	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R556	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R557	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R558	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R559	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R560	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R561	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R562	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R571	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R581	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R590	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R591	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R592	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R593	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R595	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R596	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R701	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R703	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R705	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R706	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R707	0RJ0272D677	27 OHM 1/10 W 5% 1608 R/TP
		R708	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R709	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R716	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R717	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R722	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R723	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R724	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R725	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R726	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R727	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R728	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R729	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R730	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R731	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R732	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R733	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R734	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R735	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R740	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R741	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R744	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R745	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R747	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R748	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R749	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R750	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R751	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R753	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R754	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R755	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R756	0RJ0272D677	27 OHM 1/10 W 5% 1608 R/TP
		R757	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R758	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R759	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R761	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R762	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R763	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R764	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R765	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R766	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R767	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R768	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R771	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R772	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R773	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R774	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R775	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R776	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R777	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R779	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R802	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R803	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R811	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/TP
		R812	0RJ5600D677	560 OHM 1/10 W 5% 1608 R/TP
		R813	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/TP
		R814	0RJ5600D677	560 OHM 1/10 W 5% 1608 R/TP
		R840	0RJ0471D677	4.7 OHM 1/10 W 5% 1608 R/TP
		R841	0RJ0471D677	4.7 OHM 1/10 W 5% 1608 R/TP
		R842	0RJ0471D677	4.7 OHM 1/10 W 5% 1608 R/TP
		R843	0RJ0471D677	4.7 OHM 1/10 W 5% 1608 R/TP
		R844	0RJ0471D677	4.7 OHM 1/10 W 5% 1608 R/TP
		R845	0RJ0471D677	4.7 OHM 1/10 W 5% 1608 R/TP
		R846	0RJ0471D677	4.7 OHM 1/10 W 5% 1608 R/TP
		R847	0RJ0471D677	4.7 OHM 1/10 W 5% 1608 R/TP
		R848	0RJ0471D677	4.7 OHM 1/10 W 5% 1608 R/TP
		R849	0RJ0471D677	4.7 OHM 1/10 W 5% 1608 R/TP
OTHERS				
		X501	6212AA2004A	HC-49U TXC 12.0MHZ +/- 30 PPM

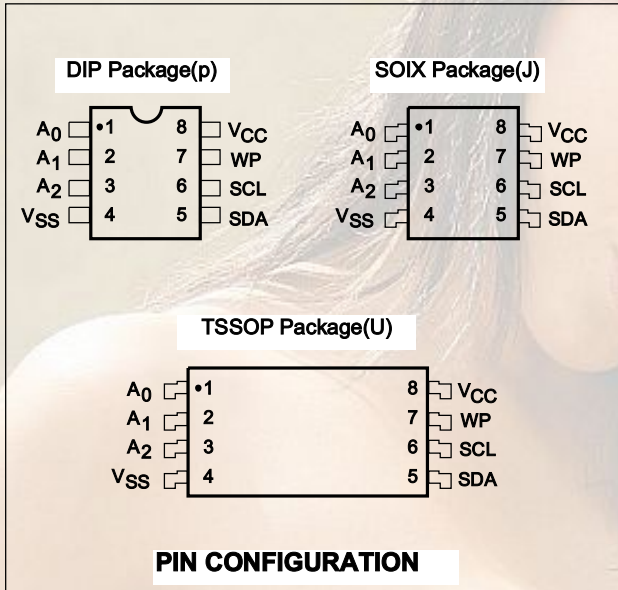
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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
CONTROL BOARD				
		LED1	0DLBE0028AA	BRIGHT LED ELECTRONICS BL-HKB
		R1	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R2	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R3	0RJ1501D677	1.5K OHM 1/10 W 5% 1608 R/TP
		R4	0RJ1501D677	1.5K OHM 1/10 W 5% 1608 R/TP
		R5	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R6	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R7	0RJ9101D677	9.1K OHM 1/10 W 5% 1608 R/TP
		SW1	140-058E	SKHV10910B LGEC NON 12V 20A H
		SW2	140-058E	SKHV10910B LGEC NON 12V 20A H
		SW3	140-058E	SKHV10910B LGEC NON 12V 20A H
		SW4	140-058E	SKHV10910B LGEC NON 12V 20A H
		SW5	140-058E	SKHV10910B LGEC NON 12V 20A H
		SW6	140-058E	SKHV10910B LGEC NON 12V 20A H
		SW7	140-058E	SKHV10910B LGEC NON 12V 20A H
		ZD1	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD323
		ZD2	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD323
USB BOARD				
		C1	0CH8107F611	100UF 16V M 85STD(CYL) R/TP
		C2	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C6	0CH3105F946	1UF 16V Z F 2012 R/TP
		C8	0CC150CK41A	15PF 1608 50V 5% R/TP NP0
		C9	0CC150CK41A	15PF 1608 50V 5% R/TP NP0
		C18	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C23	0CH8107F611	100UF 16V M 85STD(CYL) R/TP
		C24	0CC470CK41A	47PF 1608 50V 5% R/TP NP0
		C25	0CC470CK41A	47PF 1608 50V 5% R/TP NP0
		C27	0CH8107F611	100UF 16V M 85STD(CYL) R/TP
		C28	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C31	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C32	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C37	0CH8107F611	100UF 16V M 85STD(CYL) R/TP
		C38	0CC470CK41A	47PF 1608 50V 5% R/TP NP0
		C39	0CC470CK41A	47PF 1608 50V 5% R/TP NP0
		D1	0DS181009AA	KDS181 TP KEC SOT-23 80V 30
		L4	6210TCE001P	HB-1S2012-121JT CERATECH 2012
		L5	6210TCE001P	HB-1S2012-121JT CERATECH 2012
		L13	6210TCE001B	HH-1H3216-500JT CERATEC 3216M
		L14	6210TCE001P	HB-1S2012-121JT CERATECH 2012
		L15	6210TCE001P	HB-1S2012-121JT CERATECH 2012
		L16	6210TCE001P	HB-1S2012-121JT CERATECH 2012
		L17	6210TCE001P	HB-1S2012-121JT CERATECH 2012
		L18	6210TCE001B	HH-1H3216-500JT CERATEC 3216M
		L19	6210TCE001P	HB-1S2012-121JT CERATECH 2012
		L20	6210TCE001P	HB-1S2012-121JT CERATECH 2012
		R1	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R2	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R8	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R9	0RJ1501D677	1.5K OHM 1/10 W 5% 1608 R/TP
		R19	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/TP
		R21	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R22	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R23	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/TP
		R24	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/TP
		R25	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R26	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R28	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R30	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R31	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/TP

DATE: 2003. 3. 3.

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R32	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/TP
		R34	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R35	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R37	0RJ1501D677	1.5K OHM 1/10 W 5% 1608 R/TP
		R40	0RJ1501D677	1.5K OHM 1/10 W 5% 1608 R/TP
		R41	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		U1	0IRH033200A	BA033FP-E2 MOLD-3 TP REGULATO
		U2	0IPRPT1007A	TUSB2036 TEXAS INSTRUMENT 32P
		U3	0ITI204200B	TPS2042ADR TEXAS INSTRUMENT 8
		X1	6202TST001C	"SX-1, SUNNY SMD, 6.0MHZ ,50PP"
		ZD1	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD4	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD7	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD8	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD11	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD12	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2

PIN CONFIGURATION

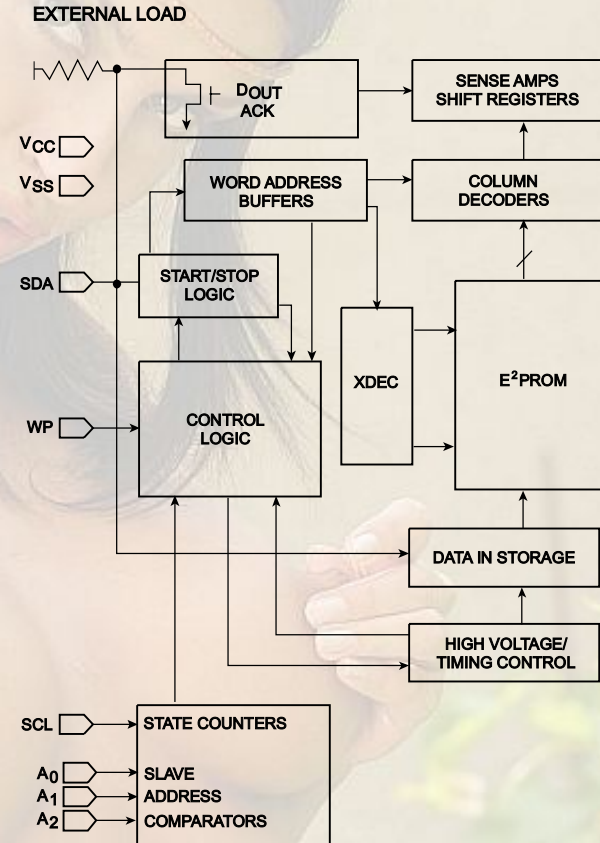
CAT24WC02J-TE13 8P



PIN FUNCTION

Pin Name	Function
A ₀ , A ₁ , A ₂	Device Address Inputs
SDA	Serial Data/Address
SCL	Serial Clock
WP	Write Protect
V _{cc}	+1.8V to + 6.0V power Supply
V _{ss}	Ground

BLOCK DIAGRAM



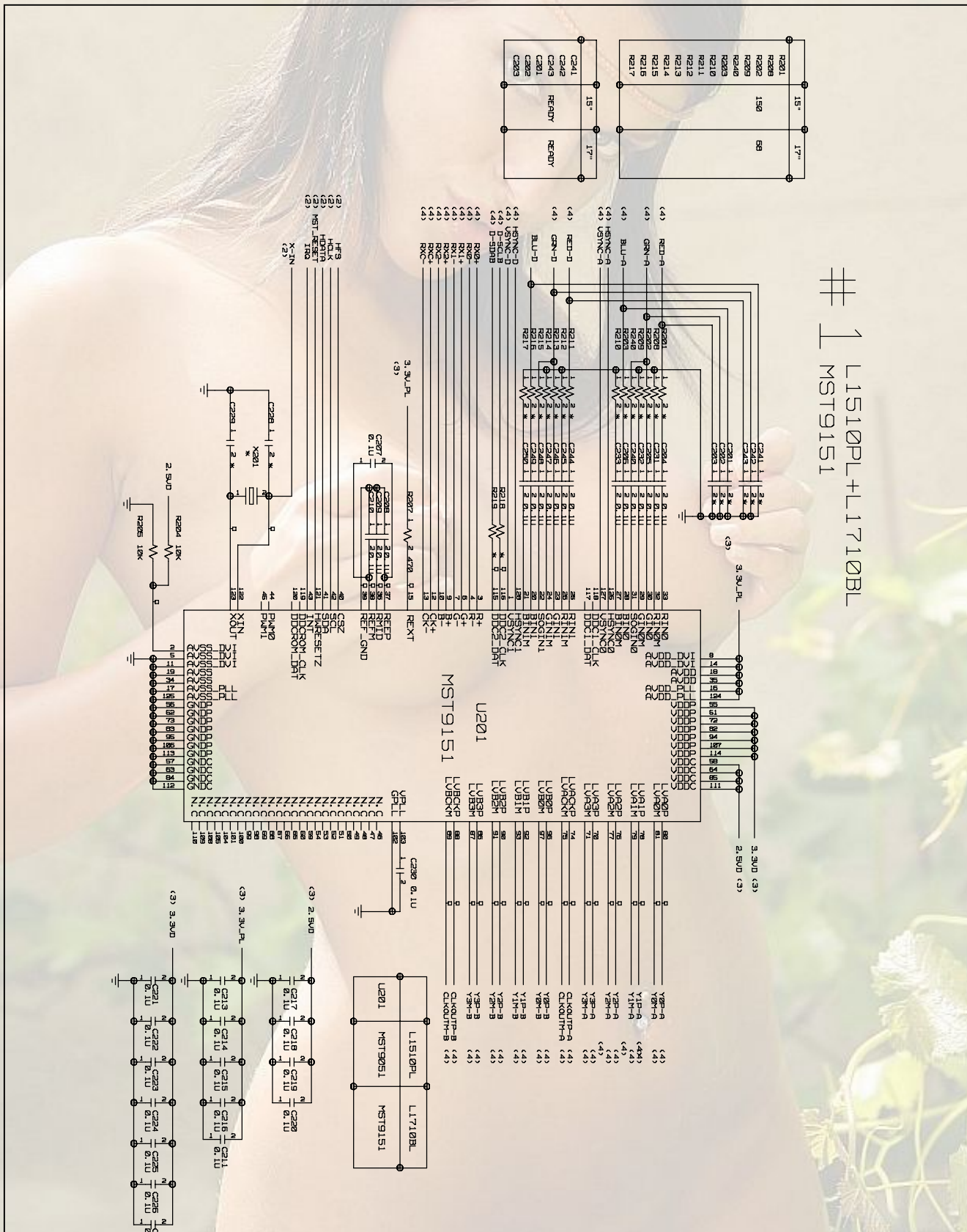
MST9051 DUAL MSTAR 128P



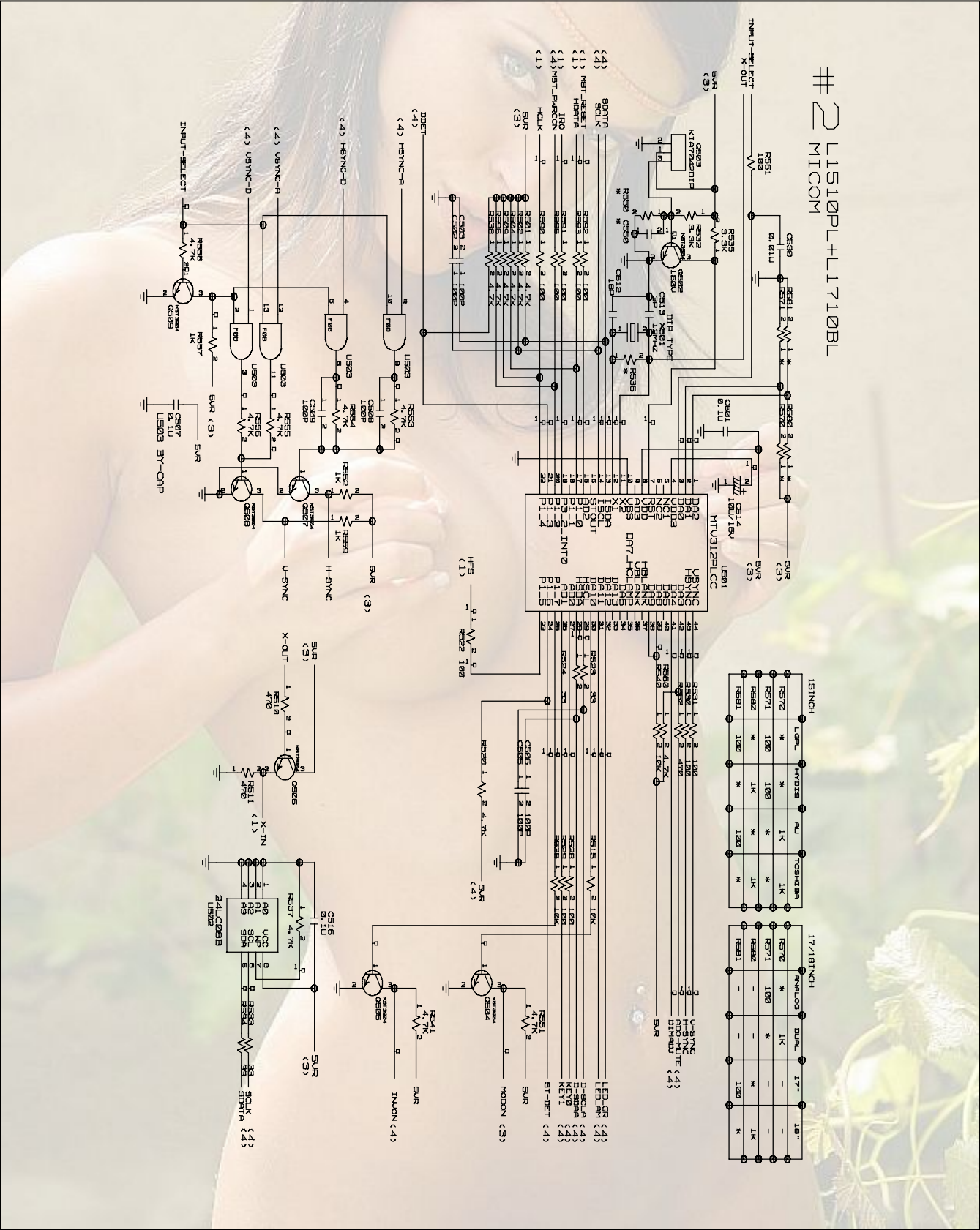
M
MST9051
VC646960210F

SCHEMATIC DIAGRAM

1. H/V SYNC DETECT

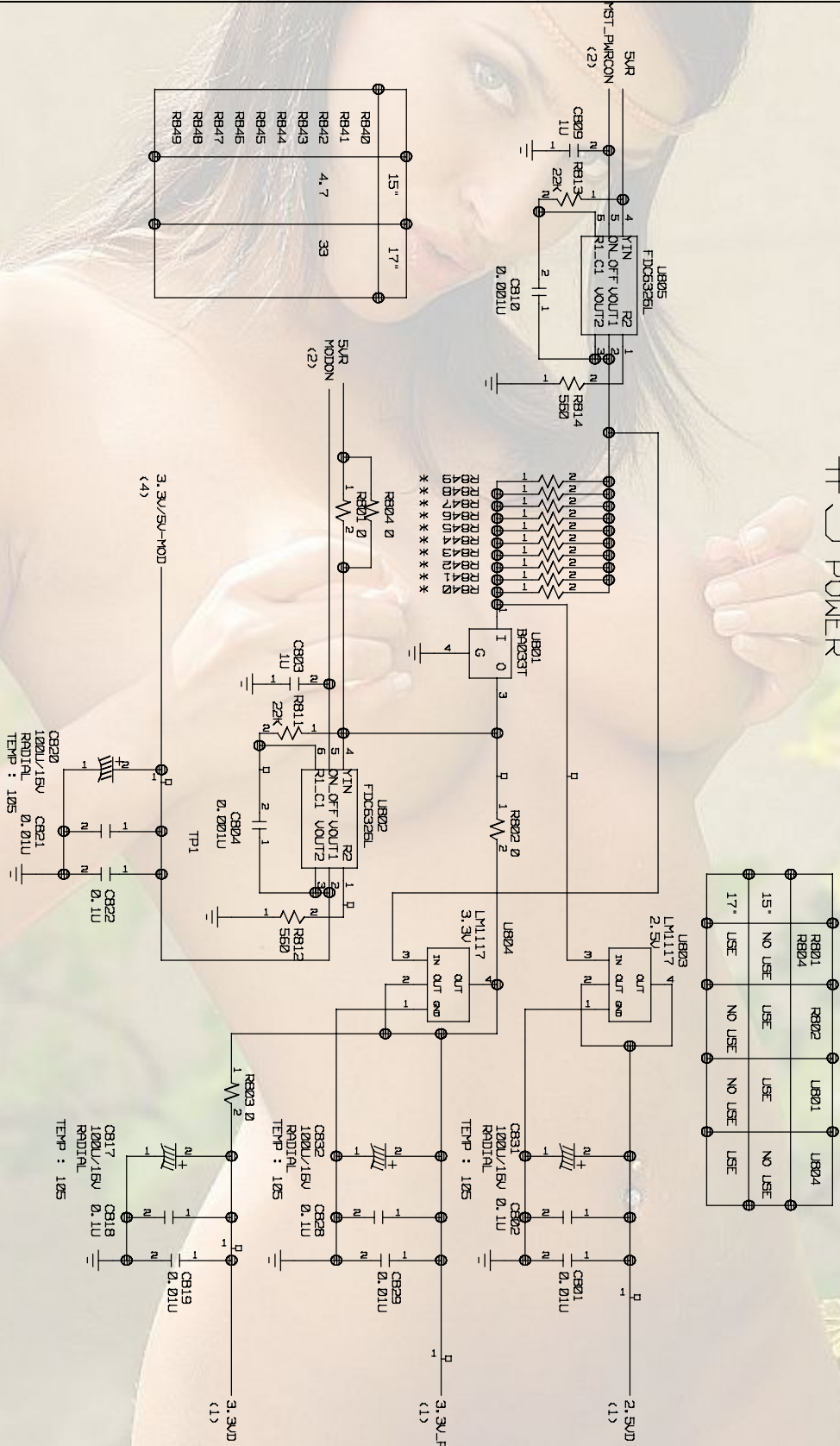


2. AMP/TMDS



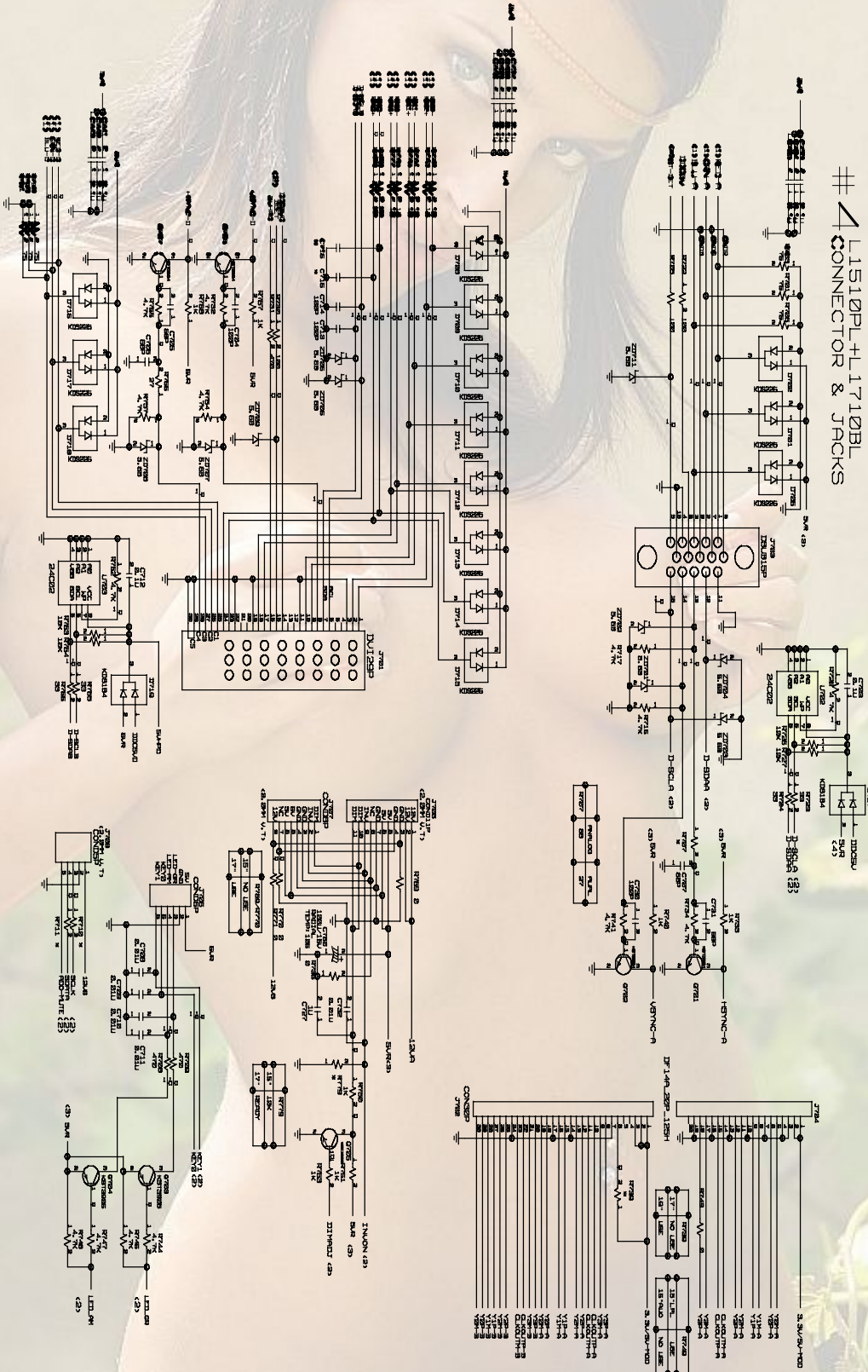
3. VIDEO PROCESSOR

3 L1510PL+1710BL
POWER

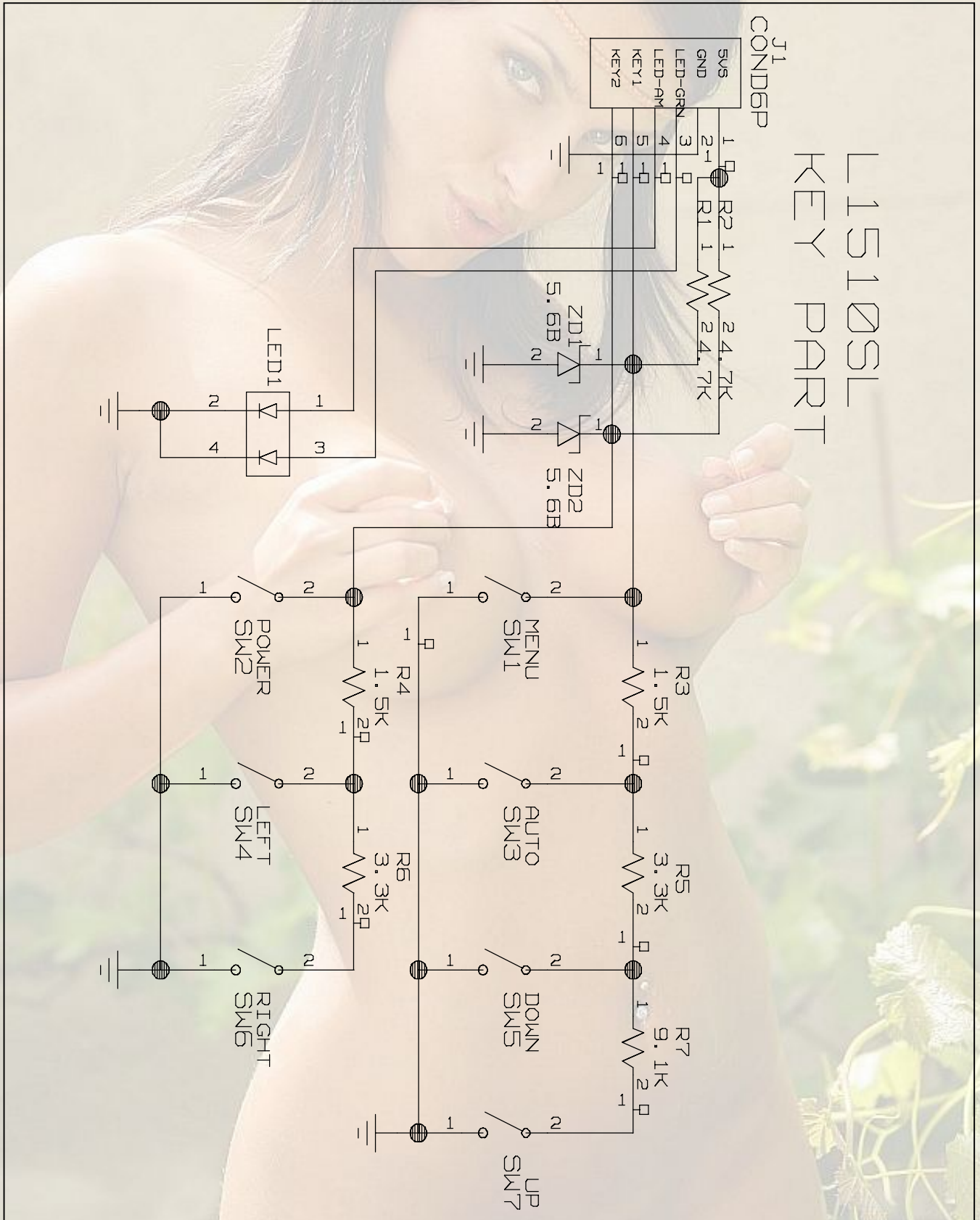


4. OUT/PUT

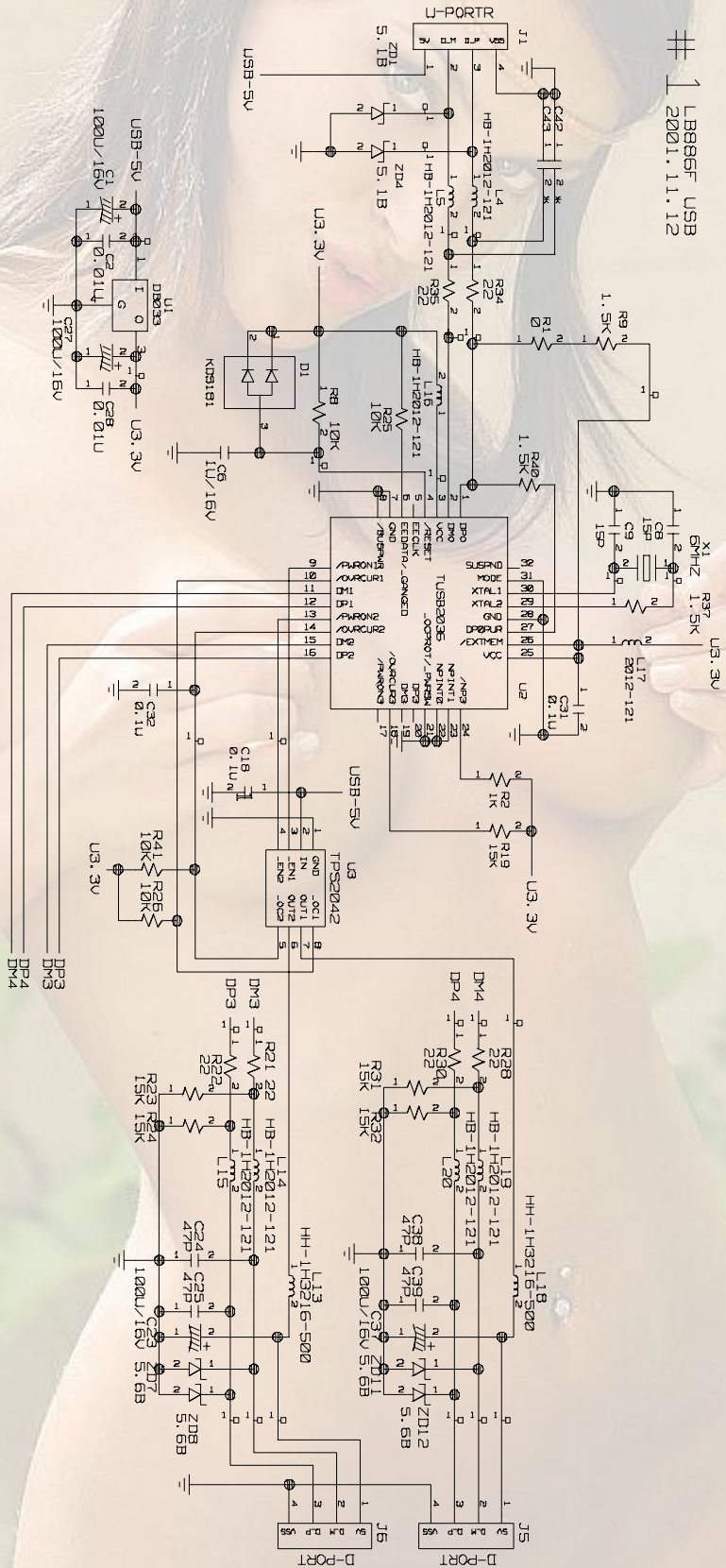
#4 L1510PL+L1710BL
CONNECTOR & JACKS



5. KEY PART



6. USB





P/NO : 3828TSL083R

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