LG

Website:http://biz.LGservice.com
E-mail:http://www.LGEservice.com/techsup.html

COLOR MONITOR
SERVICE MANUAL

CHASSIS NO. : CL-61

MODEL: FLATRON L1530S (L1530SM-AL**R)
FLATRON L1530S (L1530SSNTM-AL**R)

( ) **Same model for Service

CAUTION

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

CONTENTS

SPECIFICATIONS

1. LCD CHARACTERISTICS

Type : TFT XGA LCD Module
Size : 326.5(H) x 253.5(V) x 11.2(D)
Pixel Pitch : 0.297mm x 0.297mm
Color Depth : 6bits(with FRC)/ 16M colors
Active Video Area : 15.0inch
(304.128 x 228.096)
Surface Treatment : Anti-Glare, Hard Coating (3H)
Backlight Unit : 2CCFL
Opraating Mode : Transmissive mode, Normally white
Electrical Interface : LVDS interface

2. OPTICAL CHARACTERISTICS

2-1. Viewing Angle by Contrast Ratio ≥ 10

(L1530SM / L1530SSNTM)

• LPL Module

Left : 55° min. 55° typ. Right: 55° min. 65° typ.
Top : 40° min. 45° typ. Bottom: 50° min. 55° typ.

(L1530SM)

• HannStar Module

Left : 50° min. 65° typ. Right: 50° min. 60° typ.
Top : 30° min. 45° typ. Bottom: 40° min. 55° typ.

• AUO Module

Left : -50° min. -60° typ. Right: +50° min. +60° typ.
Top : +30° min. +40° typ. Bottom: -50° min. -60° typ

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

2-3. Contrast Ratio :
(L1530SM) 300(min.), 400(typ.) **-LPL, AUO Module**
400(min.), 500(typ.) **-Hann Star Module**
(L1530SSNTM) 300(min.), 400(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 : 0~0.7 V
a) Color 0, 0 : 0 Vp-p
b) Color 7, 0 : 0.35 Vp-p
c) Color 15, 0 : 0.7 Vp-p
3) Input Impedance : 75 Ω

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 1 W	AMBER
SUSPEND	ON/OFF	OFF	less than 1 W	AMBER
DPM OFF	OFF	OFF	less than 1 W	AMBER
POWER S/W OFF	-	-	less than 1 W	OFF

5. ENVIRONMENT

5-1. Operating Temperature: 10°C~35°C (50°F~95°F)
5-2. Operating Humidity : 10%~80%
5-3. MTBF : 50,000 HRS (Min.)
Lamp Life : 40,000 Hours (Min.)

6. DIMENSIONS (with TILT / with Base)

Width : 368mm (14.48") / 368mm
Depth : 355mm (13.97") / 190mm
Height : 105mm (4.13") / 367mm

7. WEIGHT (with TILT)

Net. Weight : 3.6kg (7.93 lbs)
Gross Weight : 5.0kg (11.02 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 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.)

⚠ CAUTION

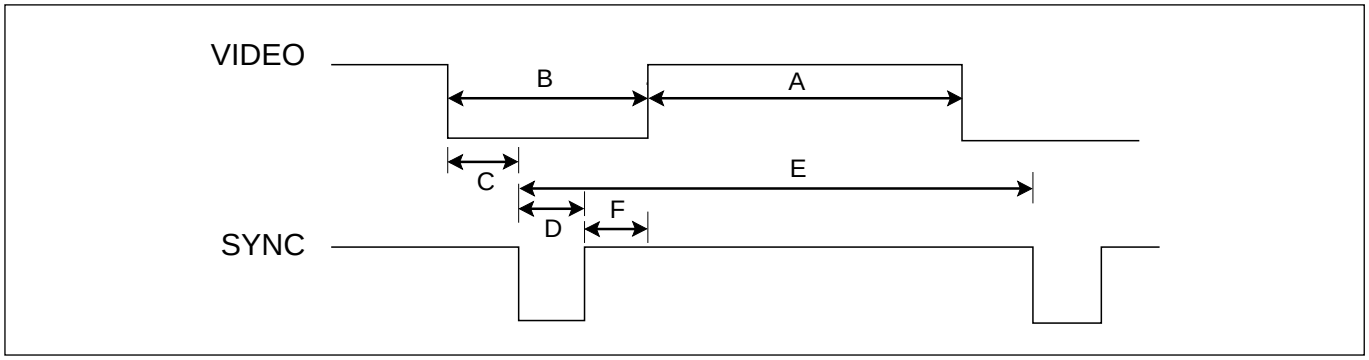
Please use only a plastic screwdriver to protect yourself from shock hazard during service operation.

⚠ 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.

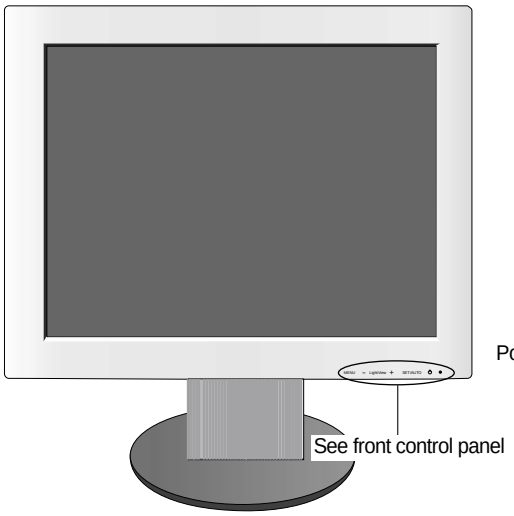
TIMING CHART



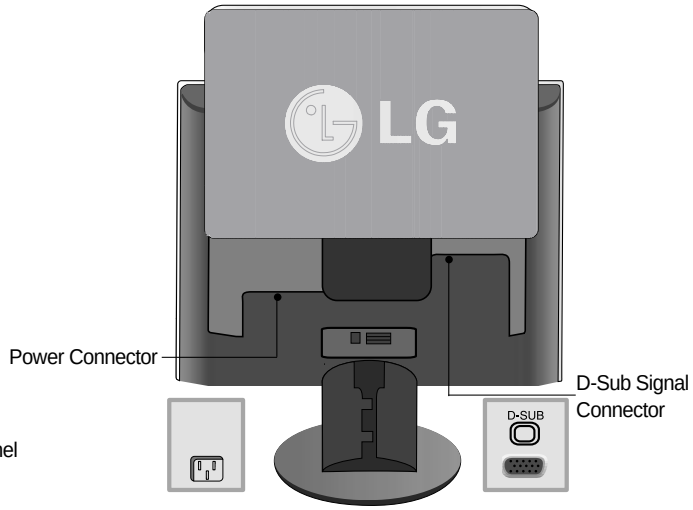
MODE	H / V	Sync Polarity	Dot Clock	Frequency	Total Period (E)	Video Active Time (A)	Blanking Time (B)	Sync Duration (D)	Back Porch (F)	Front Porch (C)	Resolution
1	H (Pixels)	+	25.175	31.468 KHz	800	640	160	96	48	16	640 x 350
	V (Lines)	–		70.0 Hz	449	350	99	2	60	37	
2	H (Pixels)	–	28.322	31.468 KHz	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	35.00 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)	–		75.0 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

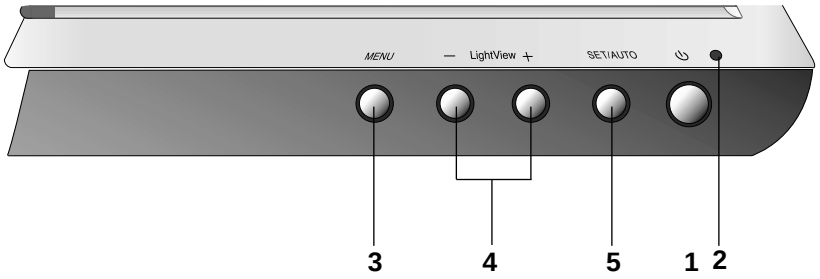
FRONT VIEW



REAR VIEW



Front Control Panel



1. Power Button

Use this button to turn the display on or off.

2. Power 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.

3. MENU Button

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

OSD LOCKED/UNLOCKED

This function allows you to lock the current control settings, so that they cannot be inadvertently changed. Press and hold the **MENU button** for 5 seconds. The message **"OSD LOCKED"** should appear.

You can unlock the OSD controls at any time by pushing the **MENU button** for 5 seconds. The message **"OSD UNLOCKED"** should appear.

4. -, + Buttons

Use these buttons to select or adjust functions in the On Screen Display.

- **-, + Button**

LightView hot key

For more information, refer to page A13

5. SET/AUTO Button

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

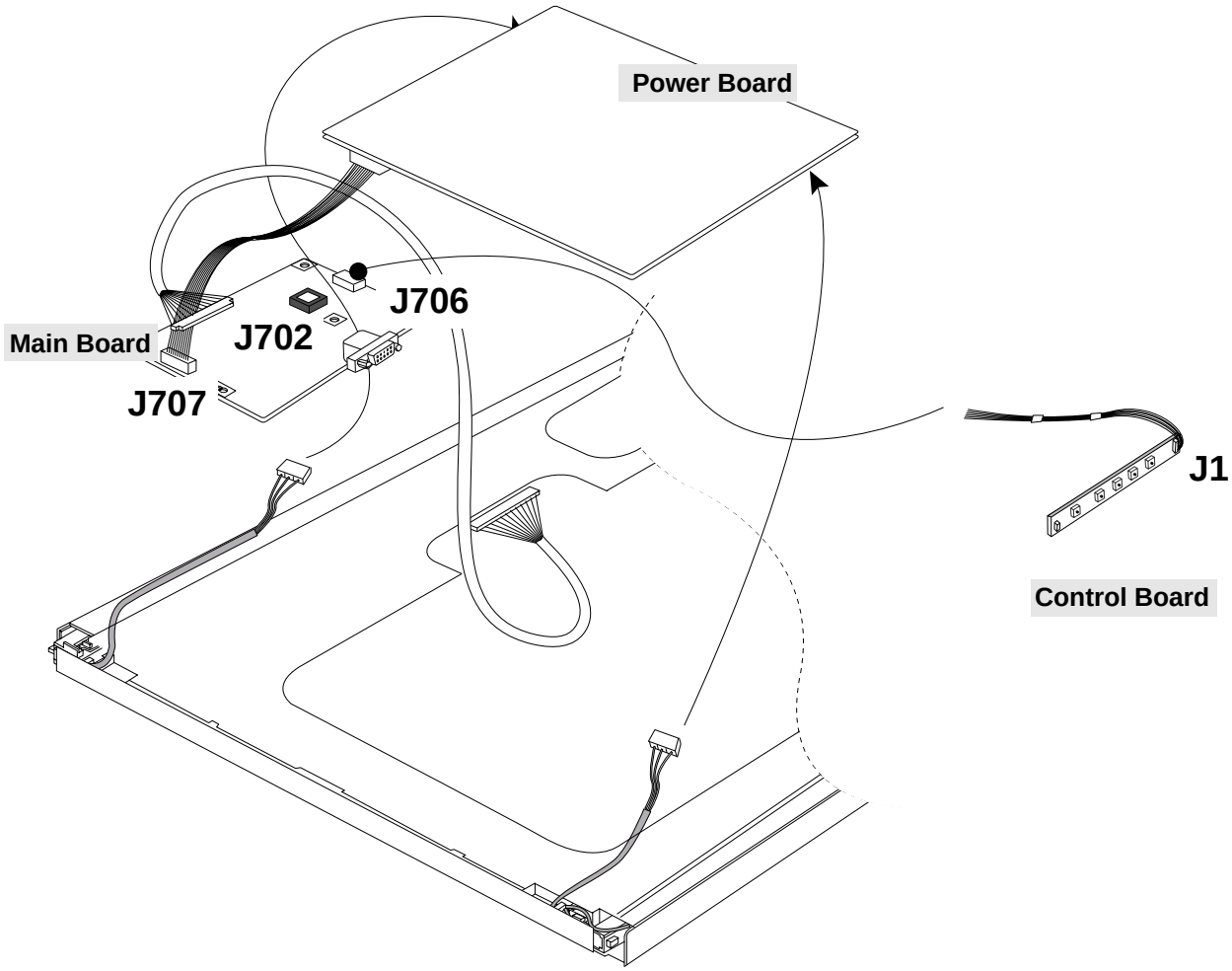
AUTO IMAGE ADJUSTMENT

When adjusting your display settings, always press the **SET/AUTO** 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

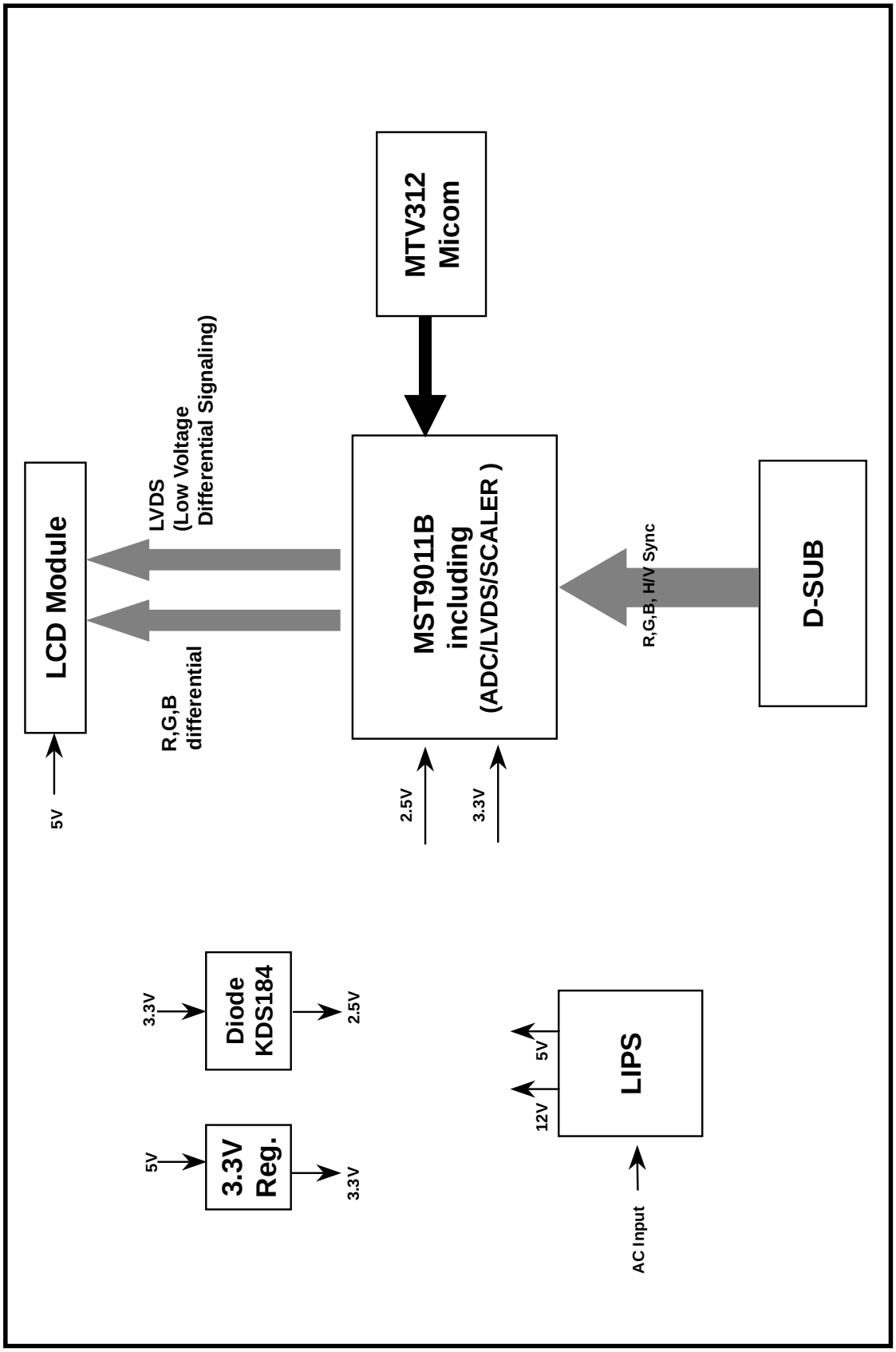
15 inch monitor : **1024x768**

17 inch monitor : **1280x1024**

WIRING DIAGRAM



BLOCK DIAGRAM



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 135MHz.
This part consists of the Scaler, ADC, LVDS transmitter.
The Scaler gets the video signal converted analog to digital, interpolates input to 1280 X 768 resolution signal and outputs 8-bit R, G, B signal to transmitter.

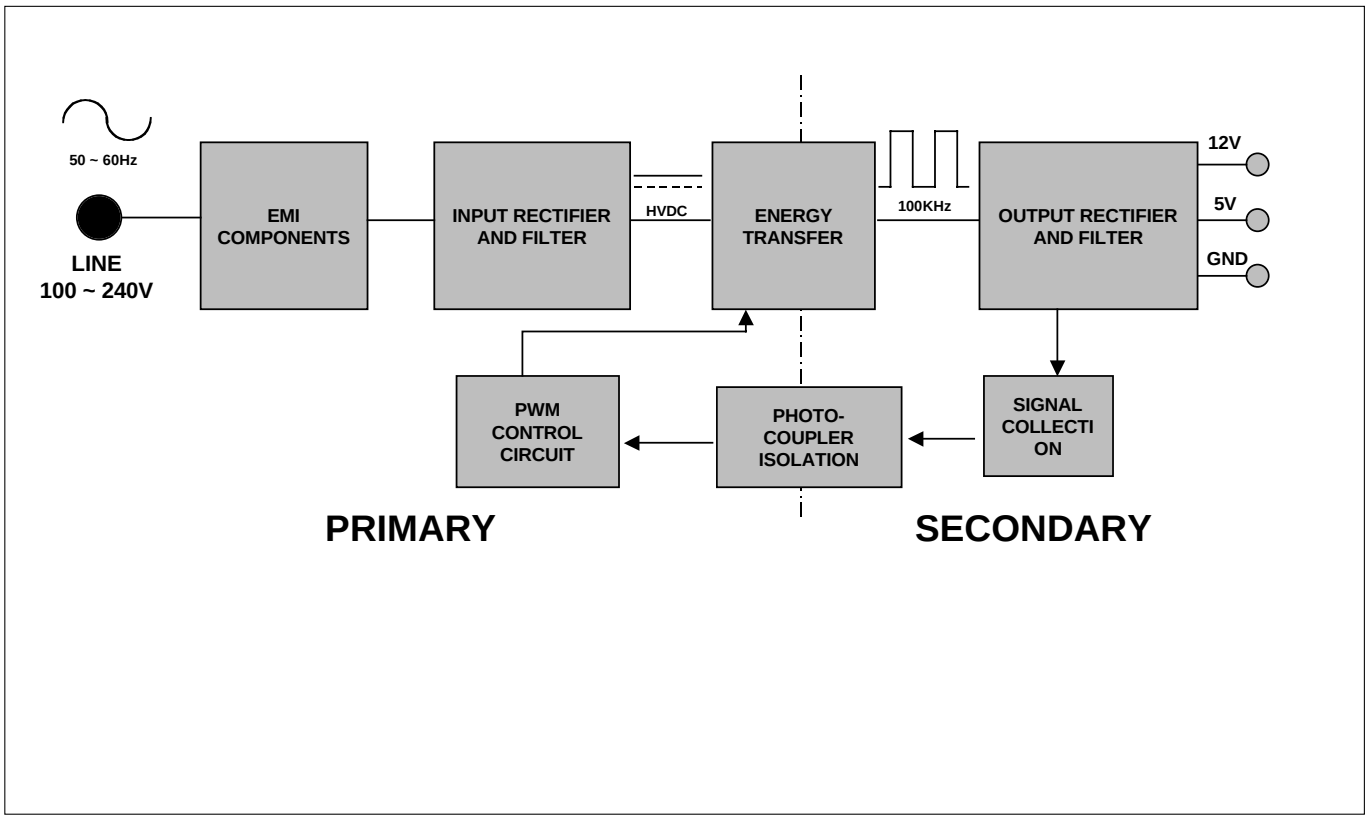
2. Power Part.

This part consists of the one 3.3V regulator, and two 2.5V drop diodes to convert power which is provided 12V, 5V in Power board.
5V is provided for LCD panel and Micom.
Also, 5V is converted 3.3V by regulator and 3.3V is converted 2.5V by drop diode.
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.

LIPS Board Block Diagram



Operation description_LIPS

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 for 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 achieve the dc output stabilized, 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 achieve the stabilized dc output voltage.

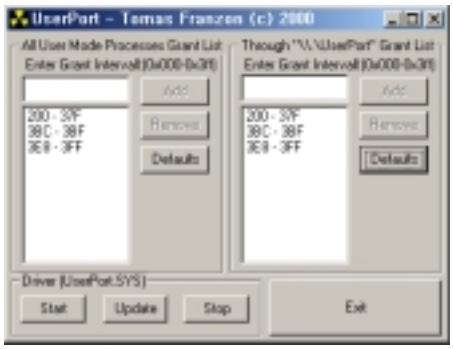
6. Signal collection.
This part function is to collect the any change from the dc output and feed back to the primary through photo transistor

ADJUSTMENT

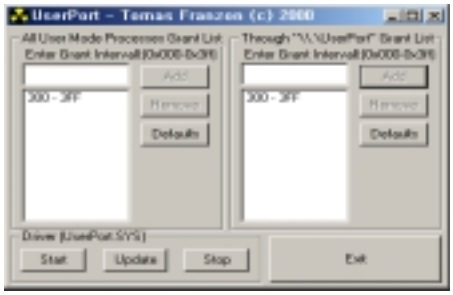
Windows EDID V1.0 User Manual

Operating System: MS Windows 98, 2000, XP
Port Setup: Windows 98 => Don't need setup
Windows 2000, XP => Need to Port Setup.
This program is available to LCD Monitor only.

1. Port Setup
   a) Copy "UserPort.sys" file to "c:\WINNT\system32\drivers" folder
   b) Run Userport.exe

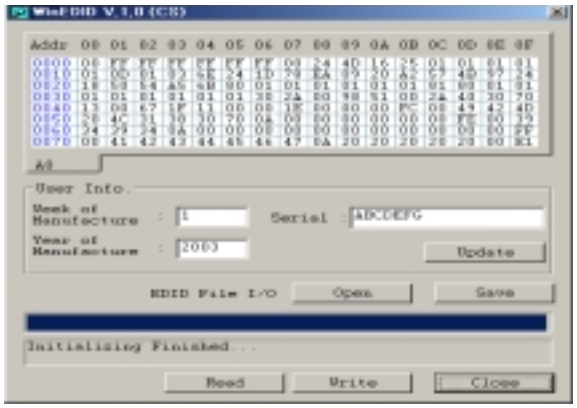


   c) Remove all default number
   d) Add 300-3FF

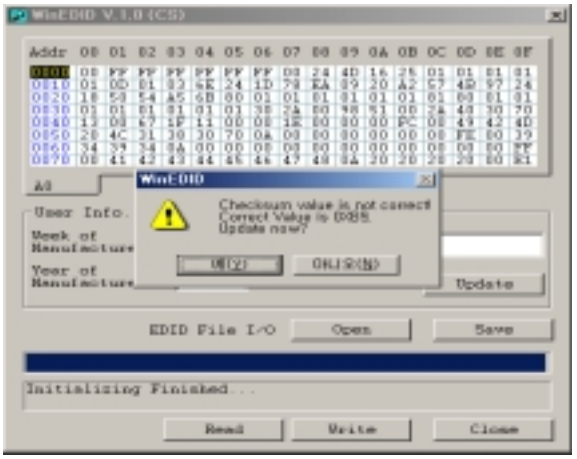


   e) Click Start button.
   f) Click Exit button.

2. EDID Read & Write
   1) Run WinEDID.exe



   2) Edit Week of Manufacture, Year of Manufacture, Serial Number
      a) Input User Info Data
      b) Click "Update" button
      c) Click " Write" button



SERVICE OSD

1)Turn off the power switch at the front side of display.

2)Wait for about 5 seconds and press MENU,POWER key.

3)Shows the service OSD menu.

4)The service OSD menu contains additional menus that the User OSD menu as described below.

a) CLEAR ETI : To initialize using time.
b) AUTO COLOR : W/B balance and Automatically sets the gain and offset value.
c) AGING :Select Aging mode(on/off).
d) PANEL : Select using panel.
e) NVRAM INIT : EEPROM initialize(24C08).
f) 9300 : Allows you to set the R/G/B.-9300K value manually.
g) 6500 :Allows you to set the R/G/B.-6500K value manually.
h) OFFSET : Allows you to set the R/G/B.-Offset value manually.(Analog Only)
i) GAIN : Allows you to set the R/G/B.-Gain value manually.(Analog Only)

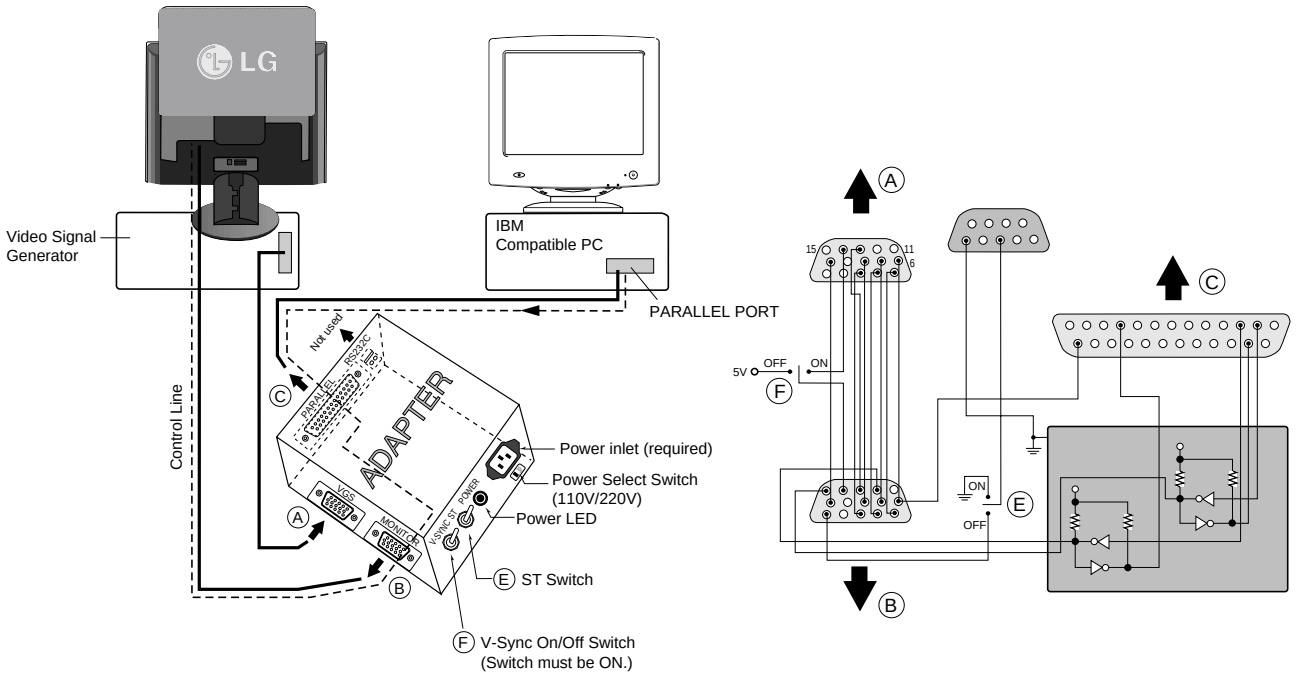
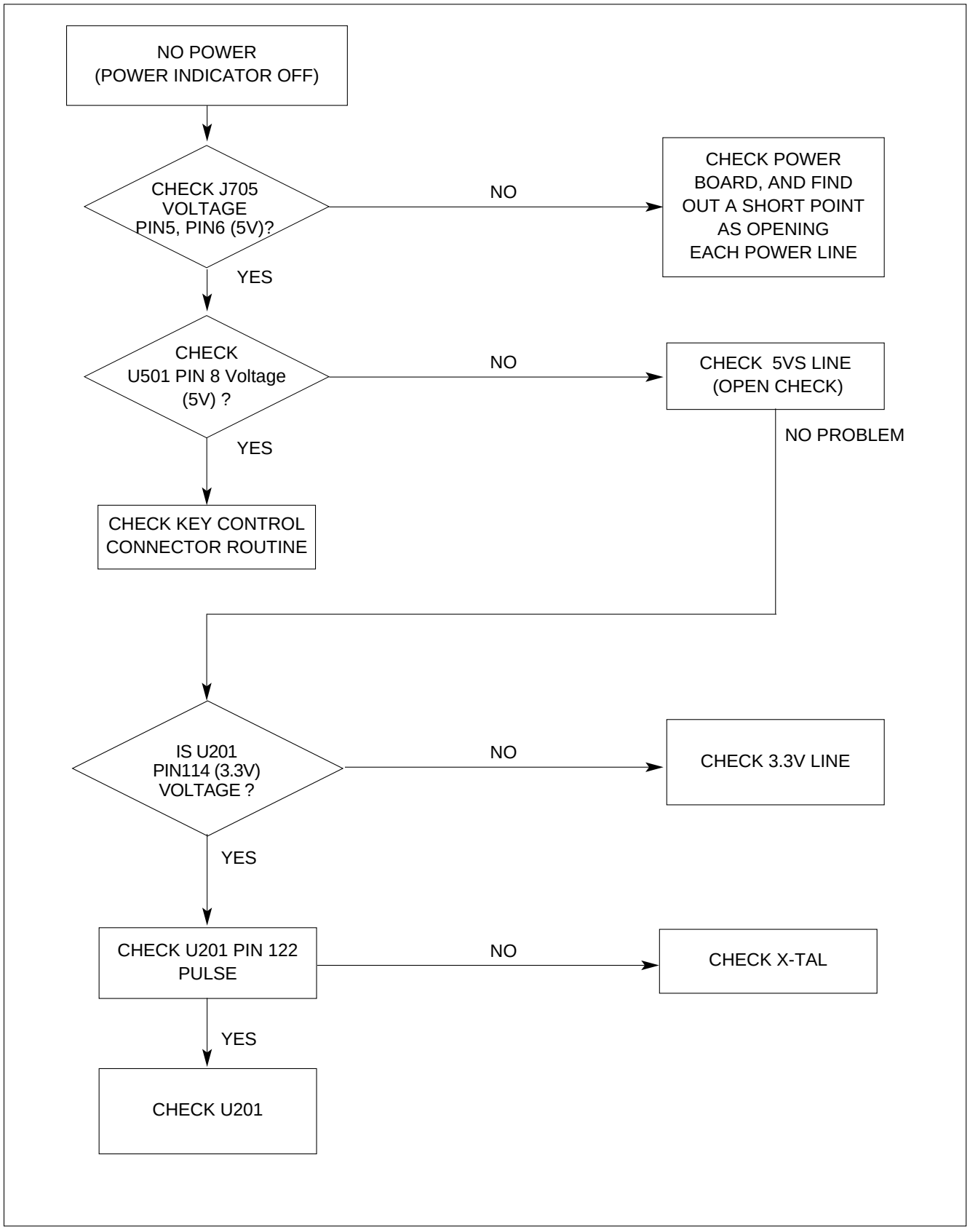


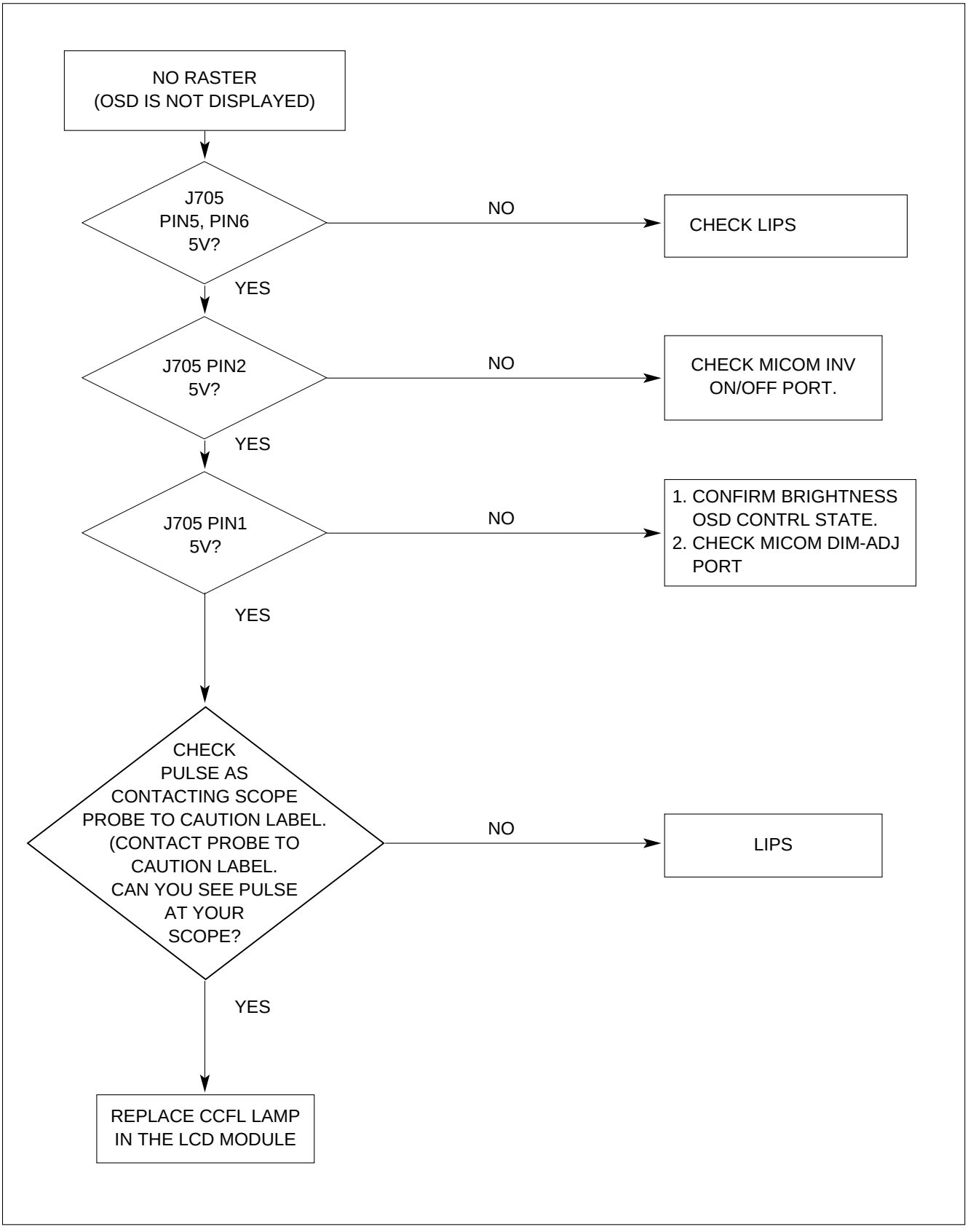
Figure 1. Cable Connection

TROUBLESHOOTING GUIDE

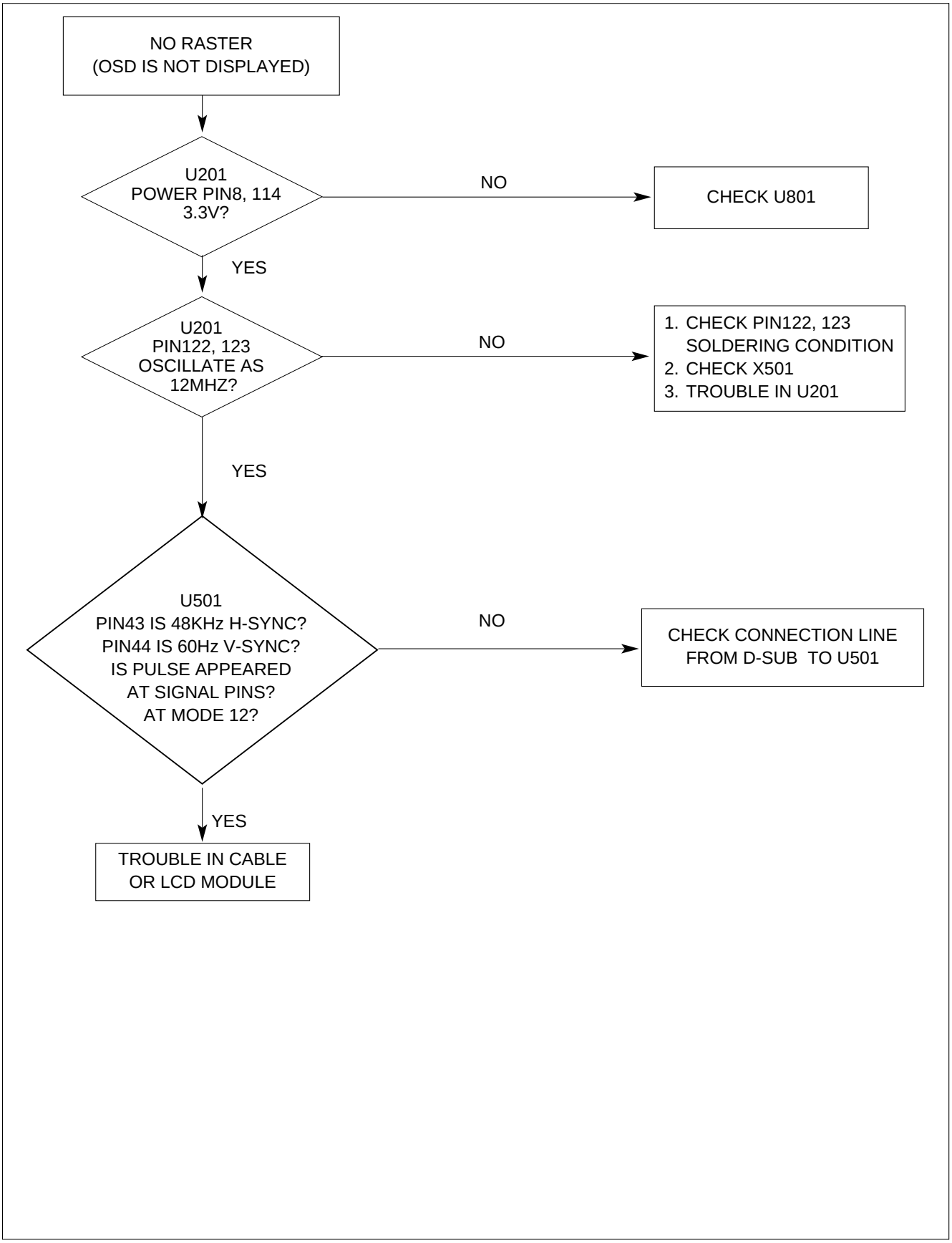
1. NO POWER



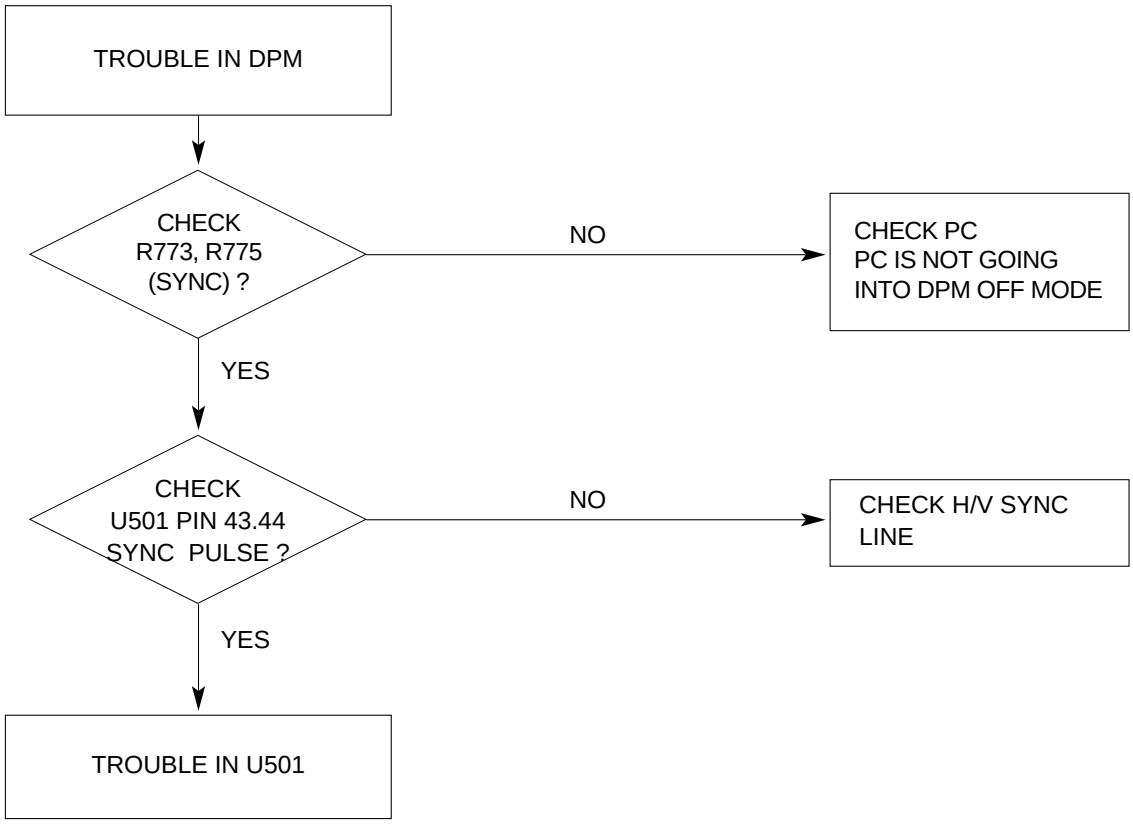
2. NO RASTER (OSD IS NOT DISPLAYED) – LIPS



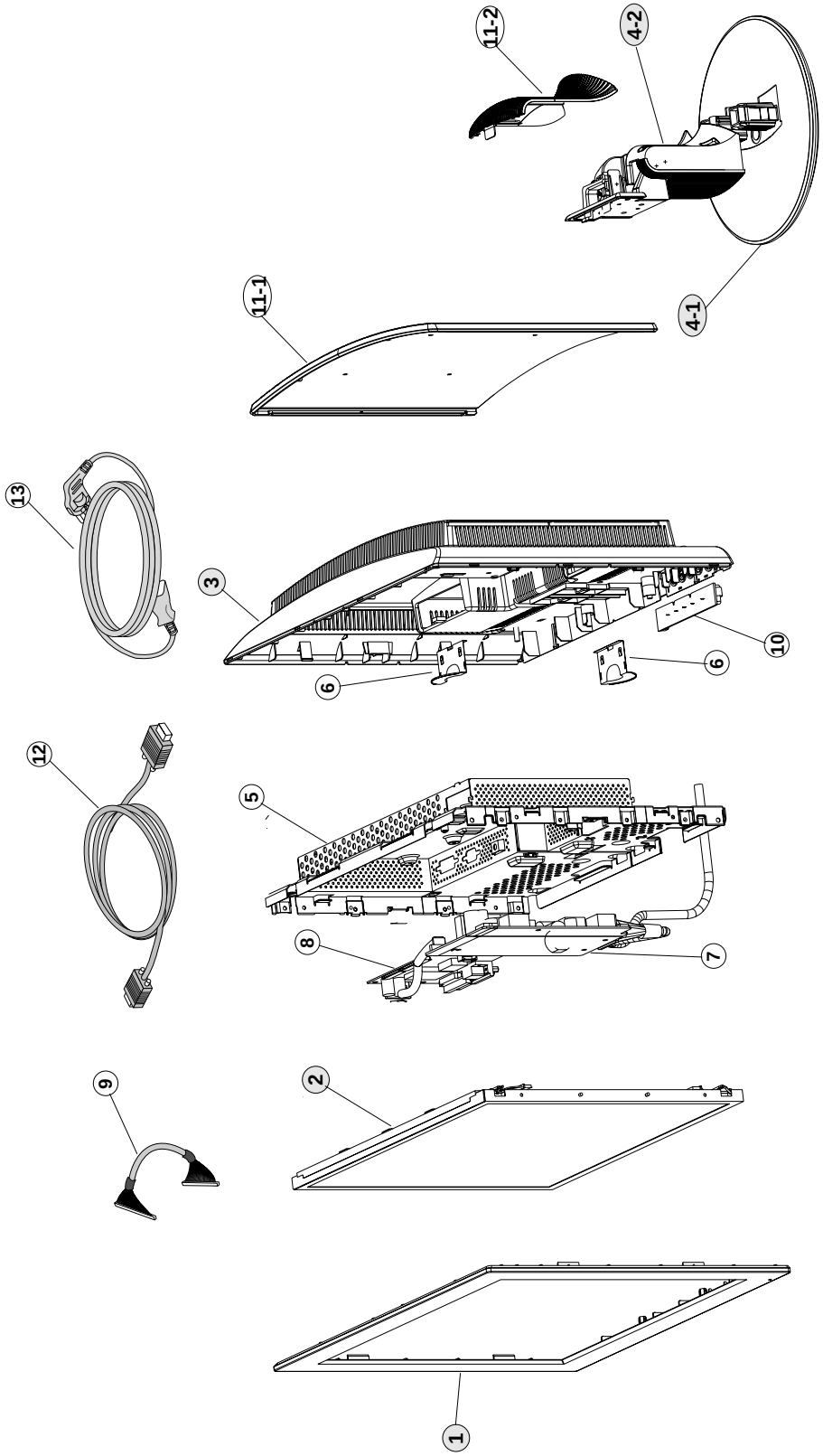
3. NO RASTER (OSD IS NOT DISPLAYED) – MST9011B



4. TROUBLE IN DPM



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

Ref. No.	Part No.	Description
1	3091TKL097B	CABINET ASSEMBLY, L1530 BRAND 3090TKL088 "S" TYPE_SLIVER ***- L1530S***
	3091TKL097K	CABINET ASSEMBLY, L1530 BRAND 3090TKL088 "B"-CKD ***- L1530S(SNT)***
2	6304FLP113A	LCD(LIQUID CRYSTAL DISPLAY), LM150X08-A4K3 ***LG PHILPS TFT COLOR*** PSWG,LVDS,16MS,HYNIX/HITACHI
	6304FHS006B	LCD(LIQUID CRYSTAL DISPLAY), HSD150MX15 ***HANNSTAR TN COLOR*** DELL LVDS 250 NITS
	6304FAU007B	LCD(LIQUID CRYSTAL DISPLAY), M150XN07 ***AU TFT COLOR*** LVDS,TN,250NITS,16MS,PSWG
3	3809TKL067A	BACK COVER ASSEMBLY, L1530 3808TKL072 (D/GRAY)_"S"TYPE ***- L1530S***
	3809TKL067C	BACK COVER ASSEMBLY, L1530 3808TKL072 "A"-CKD ***- L1530S(SNT)***
4-1	3043TKK146A	TILT SWIVEL ASSEMBLY, L1530 .. STAND BASE_"S"TYPE ***- L1530S***
	3043TKK146B	TILT SWIVEL ASSEMBLY, L1530 .. "A"-CKD ***- L1530S(SNT)***
4-2	3043TKK145D	TILT SWIVEL ASSEMBLY, L1530 .. "S"TYPE_SPRAY ***- L1530S***
	3043TKK145K	TILT SWIVEL ASSEMBLY, L1530 .. "D"-CKD ***- L1530S(SNT)***
5	4951TKS136A	METAL ASSEMBLY, FRAME (L1530)_***LPL***_ANALOG ***-AUO, L1530S***
	4951TKS136B	METAL ASSEMBLY, FRAME L1530_***HANSTAR***_ANALOG ***- L1530S***
	4951TKS136J	METAL ASSEMBLY, FRAME "A"-CKD ***- L1530S(SNT)***
6	4814TKK263A	SHIELD, INVERTER CAP(L1530)
7	6871TPT271N	PWB(PCB) ASSEMBLY,POWER, M-CHASSIS 15INCH POWER TOTAL LIEN CHANG C306 68PF ***- LPL, HannStar***
	6871TPT271A	PWB(PCB) ASSEMBLY,POWER, 15" M-CHASSIS POWER TOTAL LIEN CHANG "A INTEGRATED LIPS"***- AUO***
8	3313TL5090A	MAIN TOTAL ASSEMBLY, L1530SM BRAND CL-61 ***- L1530S***
	3313TL5090C	MAIN TOTAL ASSEMBLY, L1530SM WA CKD BRAND CL-61 ***- L1530S(SNT)***
9	6631T11012R	CONNECTOR ASSEMBLY, 20P H-H 140MM UL20276 PANEL LINK CABLE LM567D
10	6871TST541A	PWB(PCB) ASSEMBLY,SUB, L1730BM CONTROL TOTAL BRAND CONTROL ***- L1530S***
	6871TST541B	PWB(PCB) ASSEMBLY,SUB, L1730BM CONTROL TOTAL BRAND CL-62 ***- L1530S(SNT)***
11-1	3550TKK446B	COVER, L1530 BACK DOOR_"S"TYPE_SILVER
11-2	3550TKK452B	COVER, LXX30 STAND REAR (350U)_SILVER
12	6850TD9004G	CABLE,D-SUB, UL20276-9C(5.8MM) DT 1800MM BLACK(9930) SONY DM
	6850TD9004H	CABLE,D-SUB, UL2990-9C(5.8MM) DT 1500MM GLAY 20 MODEL DM ***- AUO***
13	6410TEW003C	POWER CORD, SP023+IS14 I-SHENG VDE/SEMKO 1870MM WALL 85964 GRA

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: 2004. 3. 23.

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
MAIN BOARD				
CAPACITORS				
		C204	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C205	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C206	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C207	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C208	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C209	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C210	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C211	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C214	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C215	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C216	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C217	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C218	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C219	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C220	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C221	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C222	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C223	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C225	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C226	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C227	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C230	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C231	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C232	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C233	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C251	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C501	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C502	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C503	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C504	0CH8106F611	10UF 16V M 85STD(CYL) R/TP
		C506	0CC030CK01A	3PF 1608 50V 0.25 PF R/TP NP0
		C507	0CC180CK41A	18PF 1608 50V 5% R/TP NP0
		C508	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C701	0CK105CD56A	1UF 1608 10V 10% R/TP X7R
		C703	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C708	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C709	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C710	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C711	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C717	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C718	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C719	0CC680CK41A	68PF 1608 50V 5% R/TP NP0
		C720	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C721	0CC680CK41A	68PF 1608 50V 5% R/TP NP0
		C727	0CK105CD56A	1UF 1608 10V 10% R/TP X7R
		C732	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C733	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C734	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C735	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C760	0CE107EF610	"100UF KMG,RD 16V 20% FL BULK"
		C801	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C803	0CE107EF610	"100UF KMG,RD 16V 20% FL BULK"

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C804	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C805	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C806	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C807	0CE107EF610	"100UF KMG,RD 16V 20% FL BULK"
		C808	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C809	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C810	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C812	0CE107EF610	"100UF KMG,RD 16V 20% FL BULK"
		C814	0CE107EF610	"100UF KMG,RD 16V 20% FL BULK"
		C815	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C816	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
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
		D804	0DD184009AA	KDS184 TP KEC - 85V - - - 300
		D805	0DD184009AA	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
		ZD711	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD323
ICs				
		U201	0IPRPM3007B	"MST9011B(ANALOG) MSTAR 128P,L"
		U501	0IZZTSZ347A	MYSON MTV312 L1530SM - E
		U502	0ISG240860B	M24C08W6 SGS-THOMSON 8SOP R/T
		U801	0IPMGKE011A	KIA78D33F KEC DPAK R/TP 3.3V
		U803	0IPMGK2001B	AIC1117A-33CYTR(BS33) AIC SOT
TRANSISTOR				
		Q502	0IKE704200H	KIA7042AP TO-92 TP 4.2 VOLT.
		Q503	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q504	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q505	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q703	0TR390609FA	KST3906-MTF TP SAMSUNG SOT23
		Q704	0TR390609FA	KST3906-MTF TP SAMSUNG SOT23
		Q706	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q707	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q801	0TR127309AA	KTA1273-Y(KTA966A) TP KEC TO9
		Q802	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
		R207	0RJ3900D677	390 OHM 1/10 W 5% 1608 R/TP
		R208	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R209	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R210	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R213	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R214	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R220	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R506	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R508	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R512	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R513	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R514	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R515	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R516	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R518	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R519	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R520	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R521	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R522	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R523	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R524	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R525	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R526	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R527	0RJ1000D677	100 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
		R531	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R532	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R534	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R535	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R537	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R541	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R542	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R543	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R544	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R545	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R546	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R547	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R548	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R549	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R555	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R556	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R557	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R560	0RJ1501D677	1.5K OHM 1/10 W 5% 1608 R/TP
		R561	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R563	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R564	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R565	0RJ1000D677	100 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
		R706	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R708	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R709	0RJ1001D677	1K 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
		R726	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R727	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R728	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/TP
		R735	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R737	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R744	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP

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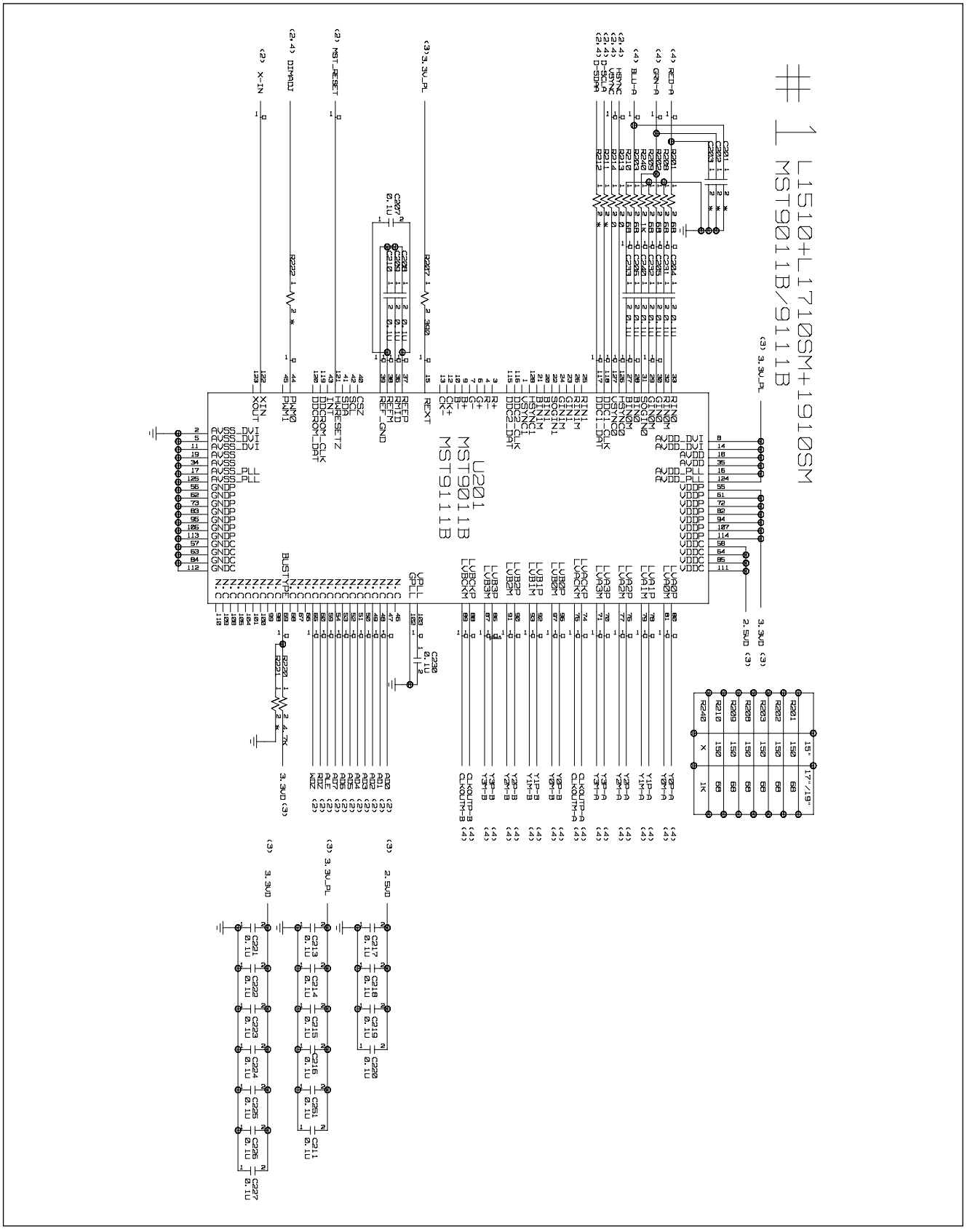
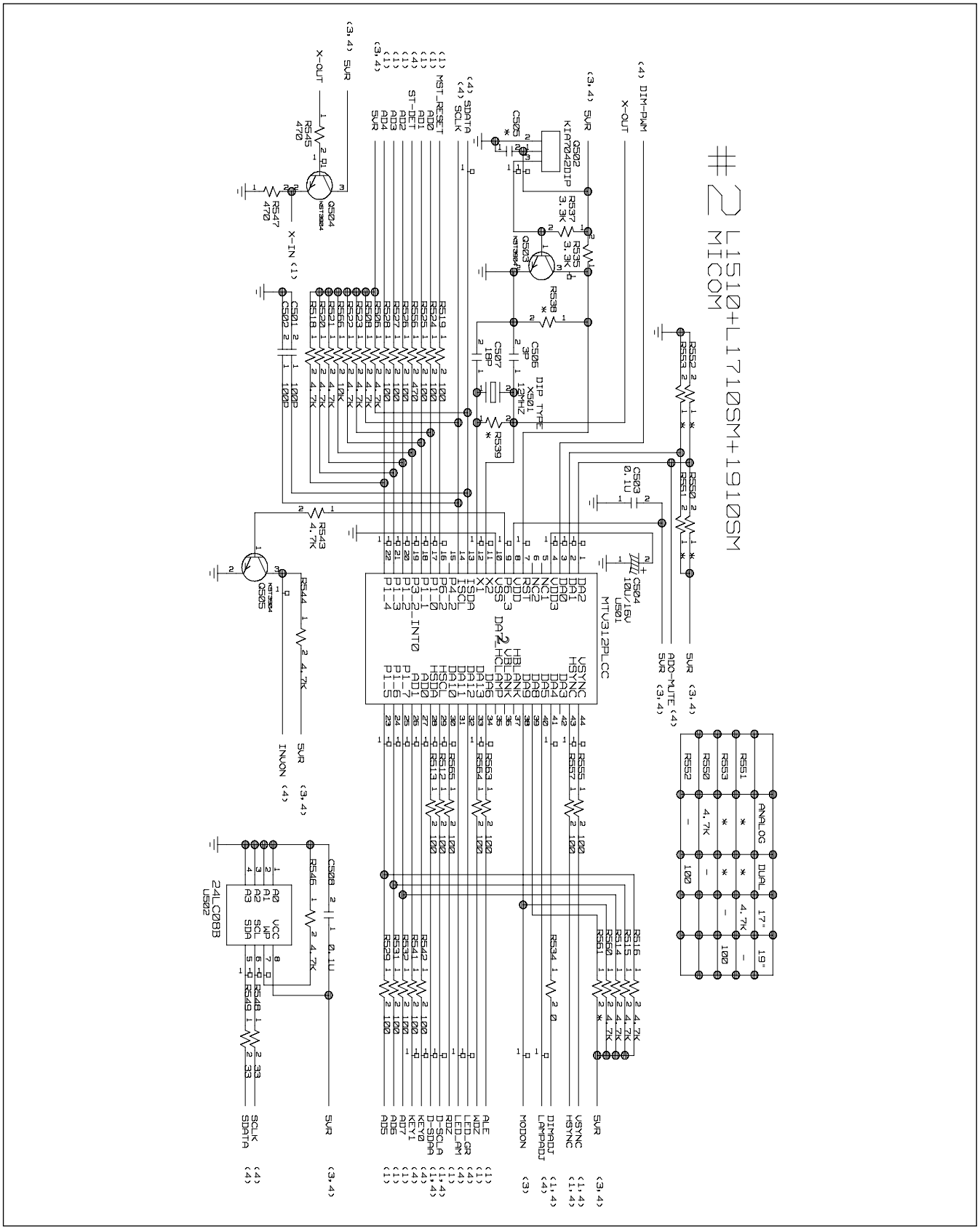
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R745	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R747	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R748	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R749	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R770	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R771	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R772	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R773	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R774	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R775	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R779	0RJ0682D677	68 OHM 1/10 W 5% 1608 R/TP
		R780	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R781	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R782	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R783	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R802	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R804	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R805	0RJ2000D677	200 OHM 1/10 W 5% 1608 R/TP
		R806	0RJ2000D677	200 OHM 1/10 W 5% 1608 R/TP
		R807	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R808	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R825	0RX0470J609	0.47 OHM 1 W 5% TA52
		OTHERs		
		X501	6212AA2004A	HC-49U TXC 12.0MHZ +/- 30 PPM
		CONTROL BOARD		
		C1	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C2	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		LED1	0DLLT0340AA	LITEON LTL-14CDJNHBP1 BK GREE
		Q1	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q2	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		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	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R4	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R5	0RJ5101D677	5.1K OHM 1/10 W 5% 1608 R/TP
		R7	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R8	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		SW2	140-058E	SKHV10910B LGEC NON 12V 20A H
		SW3	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
		SW8	140-058E	SKHV10910B LGEC NON 12V 20A H

SCHEMATIC DIAGRAM

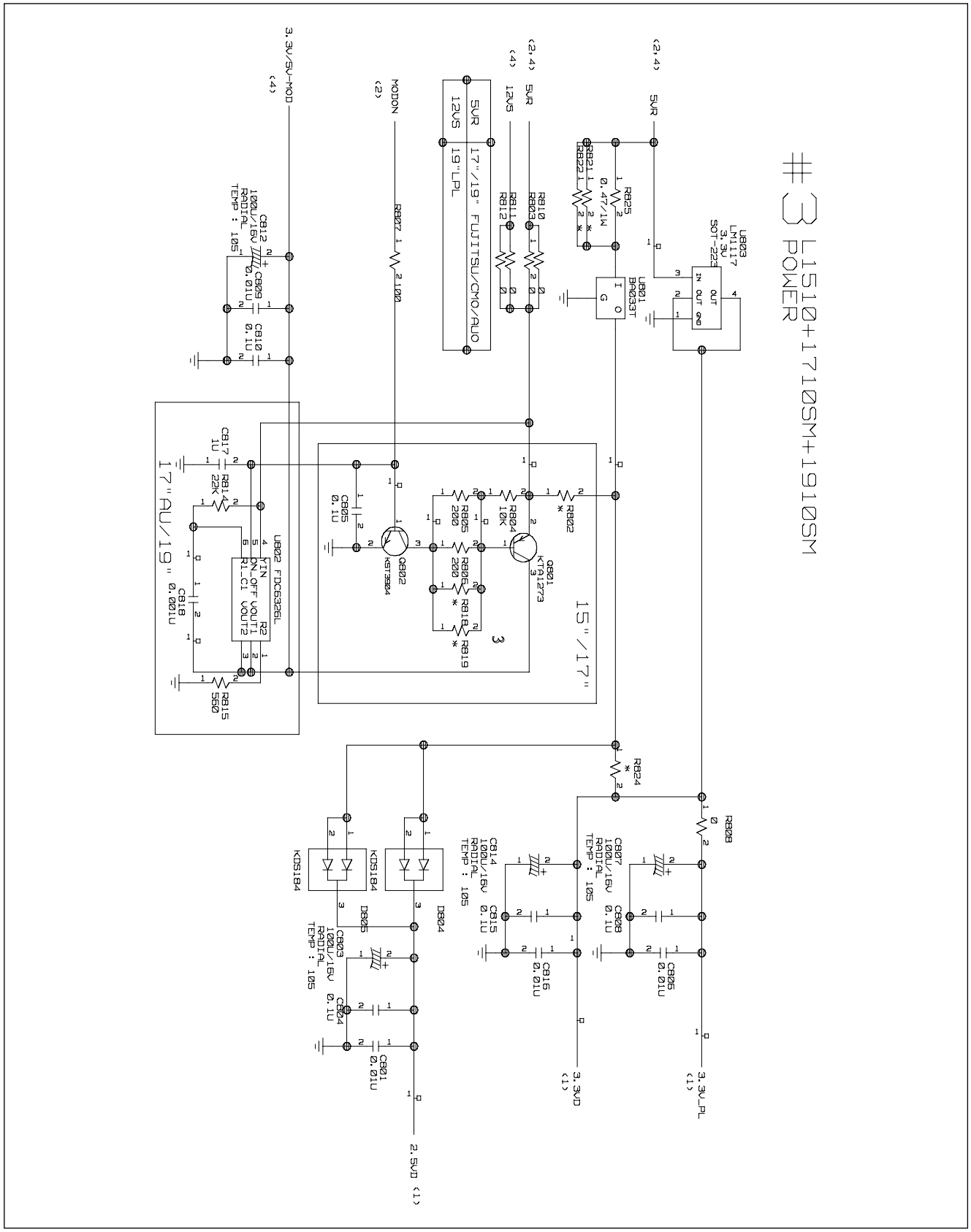
1. H/V SYNC DETECT



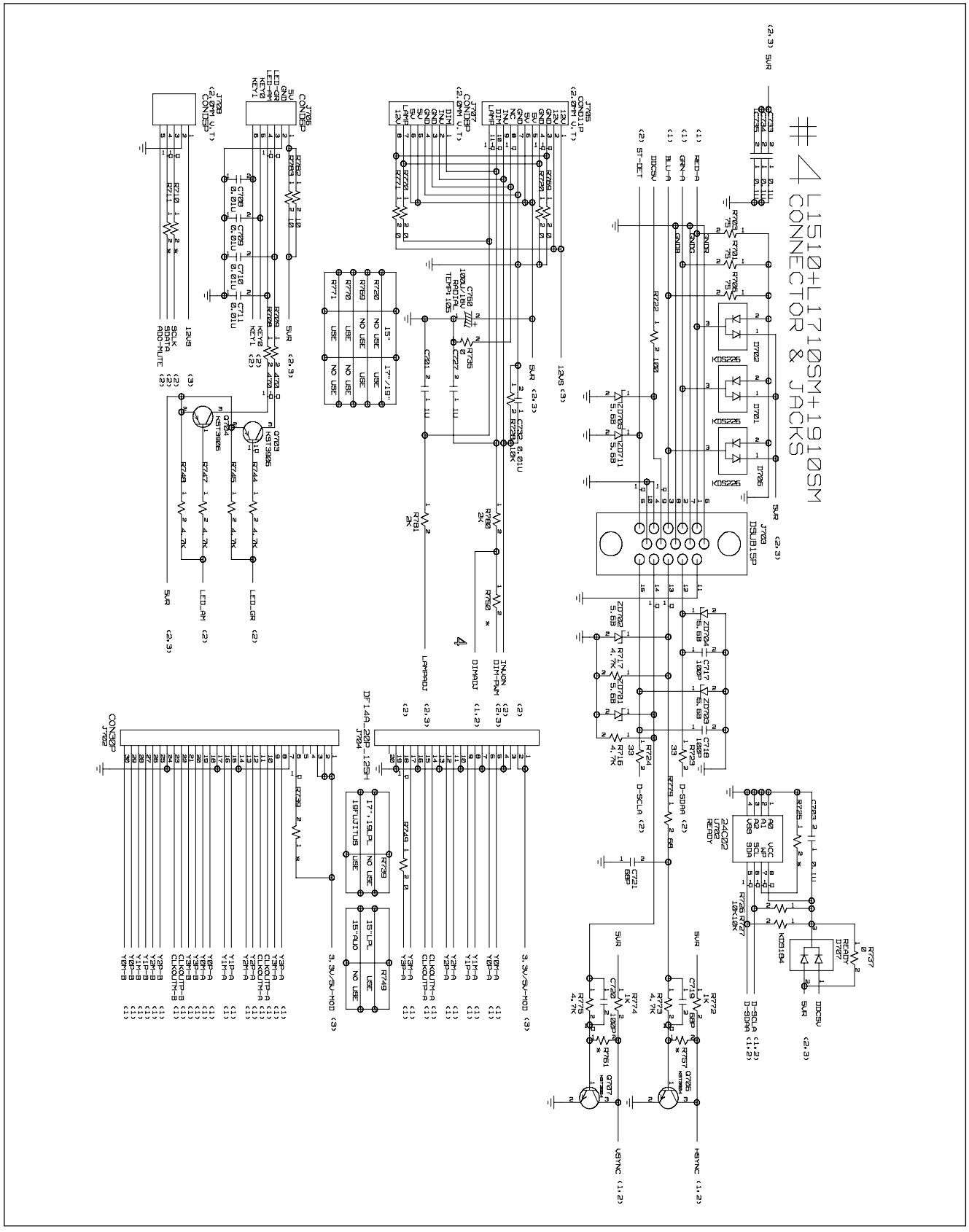
2. AMP/TMDS


#2 L1510+L1710SM+1910SM
MICOM
MTV312PLCC
U501
24LC08B
U502
DIP TYPE
XS01
12MHZ
KIA7042DIP
Q502
Q503
Q504
Q505
ANALOG
DUAL
17"
19"
R551
R553
R550
R552
4.7K
100
X-OUT
X-IN (1)
INVON (4)
ADC-MUTE (4)
5VR (3,4)
DIM-PWM (4)
MST_RESET (1)
ST-DET (4)
SDATA (4)
SCLK (4)
VSYNC (1,4)
HSYNC (1,4)
DIMADJ (1,4)
LAMPADJ (4)
MODON (3)
ALE (1)
WDZ (1)
LED_GR (4)
LED_AM (4)
RDZ (1)
D-SCLA (1,4)
D-SDAA (1,4)
KEY0 (4)
KEY1 (4)
AD7 (1)
AD6 (1)
AD5 (1)
SCLK (4)
SDATA (4)

3. VIDEO PROCESSOR



4. OUT/PUT



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