



COLOR MONITOR

SERVICE MANUAL

CHASSIS NO. : CL-36

FACTORY MODEL: LM805L

MODEL: FLATRON L1810T (LM805L-WL)
FLATRON L1810A (LM805L-WL)

CAUTION

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



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SPECIFICATIONS

1. LCD CHARACTERISTICS

Type	: TFT Color LCD Module
Size	: 18.1inch
Pixel Pitch	: 0.2805(H) x 0.2805(V)
Color Depth	: 8-bit, 16,777,216 colors
Electrical Interface	: LVDS
Surface Treatment	: Anti-Glare, Hard Coating(3H)
Operating Mode	: Normally Black
Backlight Unit	: Six-CCFL (Cold Cathode Fluorescent Lamp)

2. OPTICAL CHARACTERISTICS

2-1. Viewing Angle by Contrast Ratio ≥ 10

Left	: -60° min., -80°(Typ)
Right	: +60° min., +80°(Typ)
Top	: +60° min., +80°(Typ)
Bottom	: -60° min., -80°(Typ)

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

2-3. Contrast Ratio : 200(min), 300(Typ)

3. SIGNAL (Refer to the Timing Chart)

3-1. Video Input

- 1)Signal Input : 15pin D-sub Connector/
DVI-D Connector
- 2)Input Form : Separate, RGB Analog, 0.7Vp-p/
75 Ω , Positive Digital
- 3) Resolution(max) : Analog -1280 x 1024@75Hz
Digital -1280 x 1024@60Hz

3-2. Audio Signal

- 1) Input: PC : 700mVrms
VCR : 400mVrms
- 2) Audio Output and its ratio: PC : 1W+1W/ 3%
VCR : 1W+1W/ 3%
- 3) Speaker Impedance : 8 Ω

3-3. Sync Input

Horizontal	: 30 ~ 83kHz
Vertical	: 56 ~ 85Hz
Input Form	: Separate, TTL, Positive/Negative Digital

4. POWER SUPPLY

4-1. Power Adaptor

Input	: AC 100~240V, 50/60Hz , 1.5A
Output	: DC 12V 5A

4-2. Power Consumption

MODE	H/V SYNC	VIDEO	POWER CONSUMPTION	LED COLOR
POWER ON (NORMAL)	ON/ON	ACTIVE	less than 60 W	GREEN
STAND-BY	OFF/ON	OFF	less than 5 W	AMBER
SUSPEND	ON/OFF	OFF	less than 5 W	AMBER
DPM OFF	OFF/OFF	OFF	less than 5 W	AMBER
POWER OFF	-	-	less than 5 W	OFF

5. ENVIRONMENT

- 6-1. Operating Temperature: 10°C~35°C (50°F~95°F)
(Ambient)
- 6-2. Relative Humidity : 10%~80%
(Non-condensing)
- 6-3. MTBF : 30,000 Hours(Typ.)

6. DIMENSIONS (with TILT/SWIVEL)

Width	: 406 mm (15.98")
Depth	: 223 mm (8.78")
Height	: 431 mm (16.97")

7. WEIGHT (with TILT/SWIVEL)

Net. Weight	: 8.0kg (17.64 lbs)
Gross Weight	: 10.5kg (23.15 lbs)

8. USB

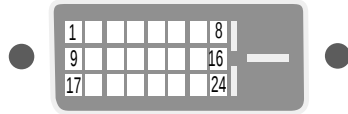
USB standard	: Rev.1.0compliedSelf-poweredhub
Downstream power supply	: 500mA for each(MAX)
Communication speed	: Full-12Mbps, Low-1.5Mbps
USB port	: 1 Upstream port 2Downstream ports

9. Audio

RMS Audio Output	: 1W + 1W(R+L)/10%
Input Sensitivity	: 0.700Vrms
Speaker Impedance	: 8 Ω

Signal Connector Pin Assignment

• DVI-D Connector (Digital)



Pin	Signal (DVI-D)
1	T. M. D. S. Data2-
2	T. M. D. S. Data2+
3	T. M. D. S. Data2/4 Shield
4	T. M. D. S. Data4-
5	T. M. D. S. Data4+
6	DDC Clock
7	DDC Data
8	Analog Vertical Sync.
9	T. M. D. S. Data1-
10	T. M. D. S. Data1+
11	T. M. D. S. Data1/3 Shield
12	T. M. D. S. Data3-
13	T. M. D. S. Data3+
14	+5V Power
15	Ground (return for +5V, H. Sync. and V. Sync.)

Pin	Signal (DVI-D)
16	Hot Plug Detect
17	T. M. D. S. Data0-
18	T. M. D. S. Data0+
19	T. M. D. S. Data0/5 Shield
20	T. M. D. S. Data5-
21	T. M. D. S. Data5+
22	T. M. D. S. Clock Shield
23	T. M. D. S. Clock+
24	T. M. D. S. Clock-

T. M. D. S. (Transition Minimized Differential Signaling)

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.

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.

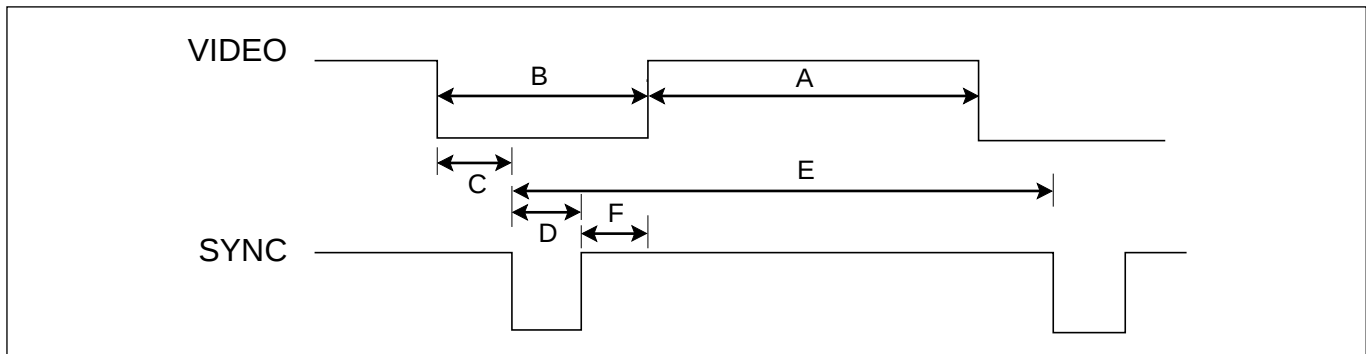
TAKE CARE DURING HANDLING THE LCD MODULE WITH BACKLIGHT UNIT.

- 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.

TIMING CHART



<< Dot Clock (MHz), Horizontal Frequency (kHz), Vertical Frequency (Hz), Horizontal etc... (μs), Vertical etc... (ms) >>

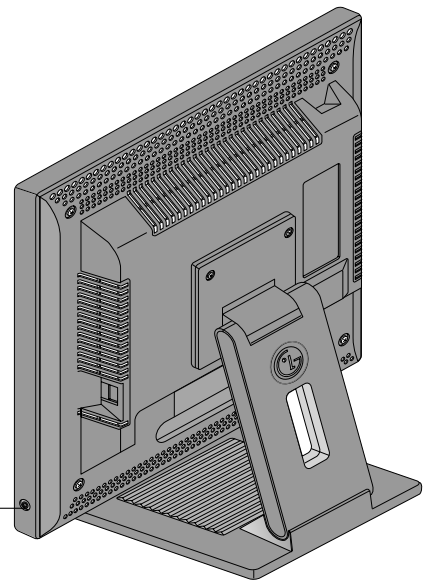
Mode	H/V Sort	Sync Polarity	Dot Clock	Frequency	Total Period (E)	Video Active Time (A)	Front Porch (C)	Sync Duration (D)	Back Porch (F)	Resolution
1	H	+	25.175	31.469	800	640	16	96	48	640x350 70Hz
	V	-		70.8	449	350	37	2	60	
2	H	-	28.321	31.468	900	720	18	108	54	720x400 70Hz
	V	+		70.8	449	400	12	2	35	
3	H	-	25.175	31.469	800	640	16	96	48	640x480 60Hz
	V	-		59.94	525	480	10	2	33	
4	H	-	31.5	37.5	840	640	16	64	120	640x480 75Hz
	V	-		75	500	480	1	3	16	
5	H	-	36.0	43.269	832	640	56	56	80	640x480 85Hz
	V	-		85.0	509	480	1	3	25	
6	H	+	40.0	37.879	1056	800	40	128	88	800x600 60Hz
	V	+		60.317	628	600	1	4	23	
7	H	+	49.5	46.875	1056	800	16	80	160	800x600 75Hz
	V	+		75.0	625	600	1	3	21	
8	H	+	56.25	53.674	1048	800	32	64	152	800x600 85Hz
	V	+		85.061	631	600	1	3	27	
9	H	+/-	57.283	49.725	1152	832	32	64	224	832x624 75Hz
	V	+/-		74.55	667	624	1	3	39	
10	H	-	65.0	48.363	1344	1024	24	136	160	1024x768 60Hz
	V	-		60.0	806	768	3	6	29	
11	H	-	78.75	60.123	1312	1024	16	96	176	1024x768 75Hz
	V	-		75.029	800	768	1	3	28	
12	H	+	94.5	68.677	1376	1024	48	96	208	1024x768 85Hz
	V	+		84.997	808	768	1	3	36	
13	H	+/-	100.0	68.681	1456	1152	32	128	144	1152x870 75Hz
	V	+/-		75.062	915	870	3	3	39	
14	H	+/-	92.978	61.805	1504	1125	18	134	200	1152x900 65Hz
	V	+/-		65.96	937	900	2	4	31	
15	H	+	108.0	63.981	1688	1280	48	112	248	1280x1024 60Hz
	V	+		60.02	1066	1024	1	3	38	
16	H	+	135.0	79.976	1688	1280	16	144	248	1280x1024 75Hz
	V	+		75.035	1066	1024	1	3	38	

FRONT VIEW



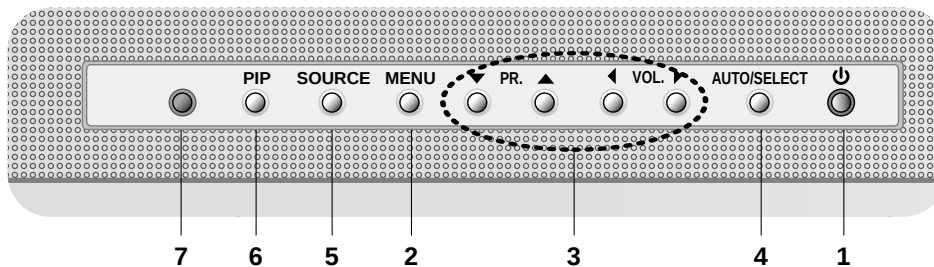
Front Control Panel

SIDE VIEW



Headphone/
Earphone Input

Front Control Panel



1. Power Button

Use this button to turn the display on or off.

<Power (DPMS) Indicator>

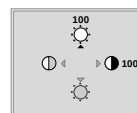
This Indicator lights up green when the display operates normally. If the display is in DPM (Energy Saving) mode, this indicator color changes to amber.

2. Menu Button

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

3. ▼▲◀▶ Button

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



- Bring up Contrast and Brightness adjustment.

- Use these buttons to go up and down the programmed channel when the TV source is available.



Volume: ◀▶

Use these buttons to decrease or increase the volume level.

OPERATING INSTRUCTIONS

Front Control Panel

4. AUTO/SELECT Button

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

AUTO IN PROGRESS

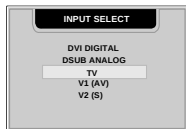
AUTO adjustment function

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 **1280x1024**.

5. Source Selection Button

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



* When the TV source is available.

INPUT → ▼▲ → AUTO/SELECT

Use this button to select an input signal.

- DVI DIGITAL: DVI digital signal
- DSUB ANALOG: 15-pin D-sub analog signal
- TV: TV
- V1(AV): Composite video
- V2(S): S video

6. PIP(Picture in Picture) function



This PIP (Picture-in-Picture) function allows the image from the TV (HDTV), VCR or DVD to be displayed on a sub-screen while you are using a computer.

The sub-screen is changed in the order shown below.

: SMALL -> LARGE -> OFF

7. Remote Control Sensor

CONTROLS LOCKED/UNLOCKED

: MENU and ► Button

CONTROLS LOCKED

This function allows you to secure the current control settings, so that they cannot be inadvertently changed.

CONTROLS UNLOCKED

Press and hold the MENU button and

► button for 3 seconds: the message **“CONTROLS LOCKED”** appears.

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

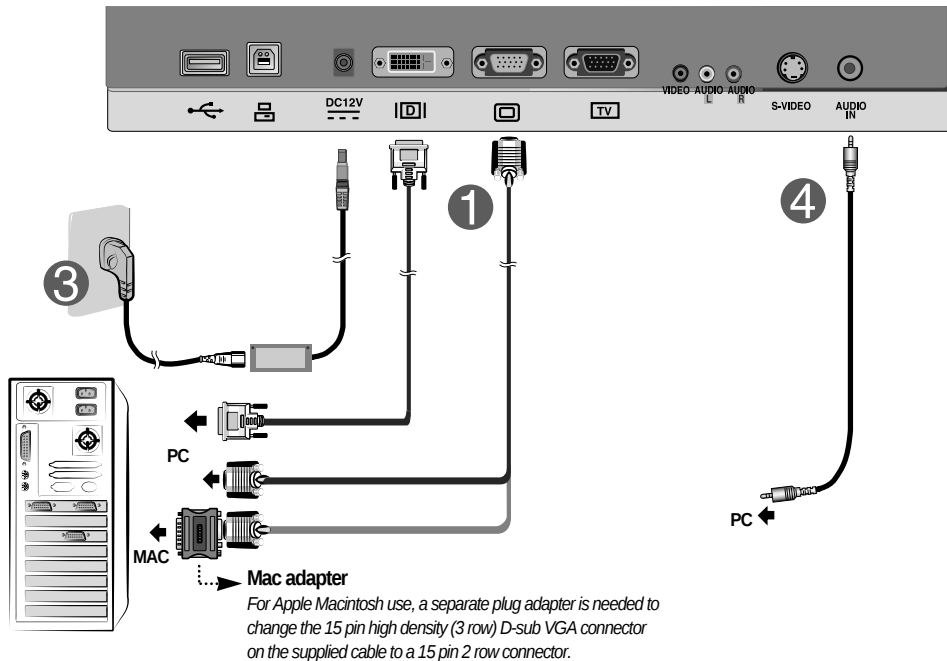
Connecting the Display

- Before setting up the monitor, ensure that the power to the monitor, the computer system, and other attached devices is turned off.

Using the Computer

1. Connect the signal cable. When attached, tighten the thumbscrews to secure the connection.
2. Connect the plug from the AC adapter into the back of the monitor.
3. Connect the power cord into a proper power outlet that is easily accessible and close to the display.
4. Connect the audio cable to the *LINE OUT jack of the PC sound card.

REAR VIEW(Bottom)



NOTE

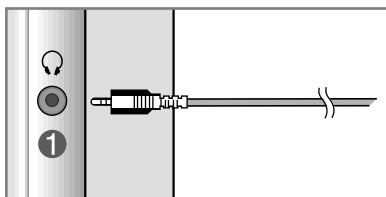
- This is a simplified representation of the rear view.
- This rear view represents a general model; your display may differ from the view as shown.

*LINE OUT

A terminal used to connect to the speaker including a built-in amplifier (Amp). Make sure that the connecting terminal of the PC sound card is checked before connecting. If the Audio Out of PC sound card has only Speaker Out, reduce the PC volume.

If the Audio Out of the PC sound card supports both Speaker Out and Line Out, convert to Line Out using the card jumper of the program (Refer to the Sound Card Manual).

SIDE JACK



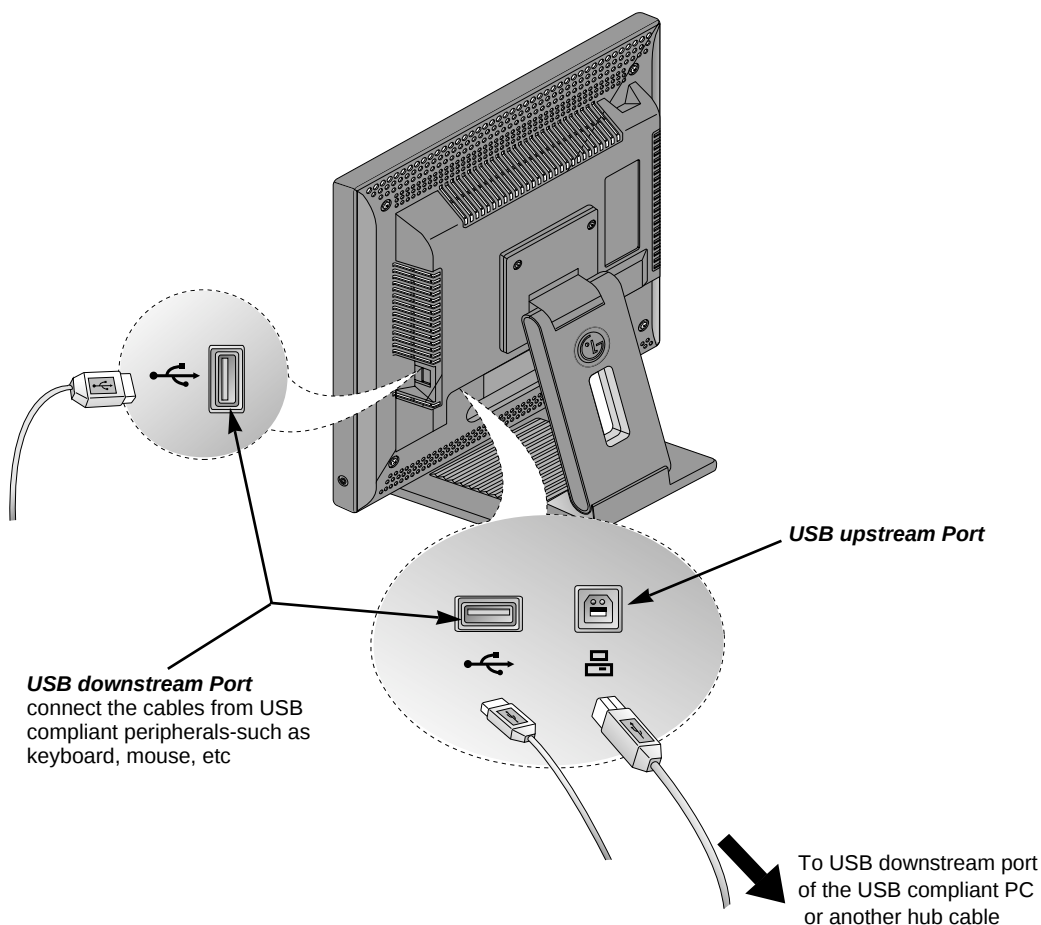
- 1 **Headphone/Earphone Input**
Automatically mutes the speaker volume when the headphones are plugged in.

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.

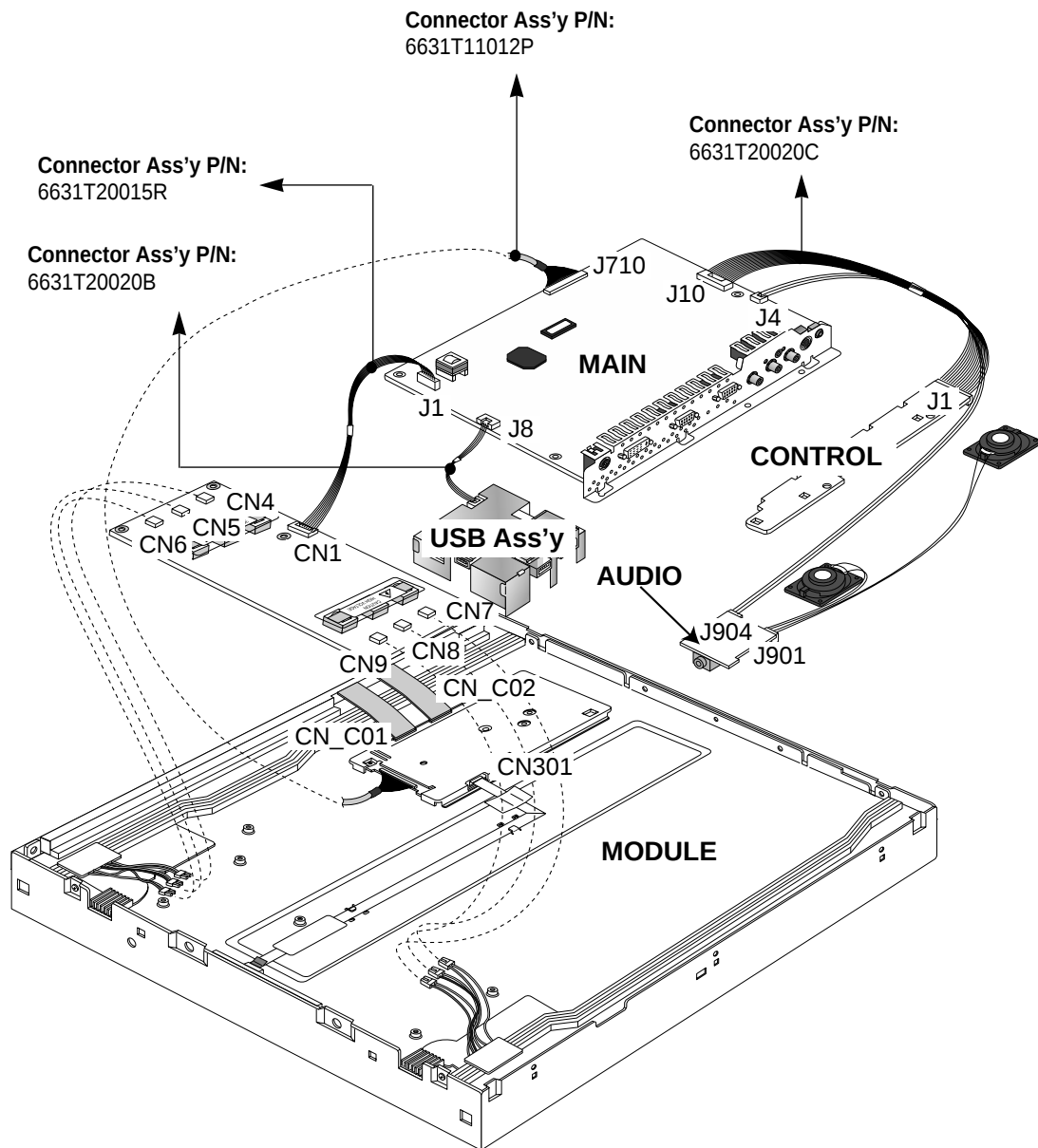
USB connection

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.



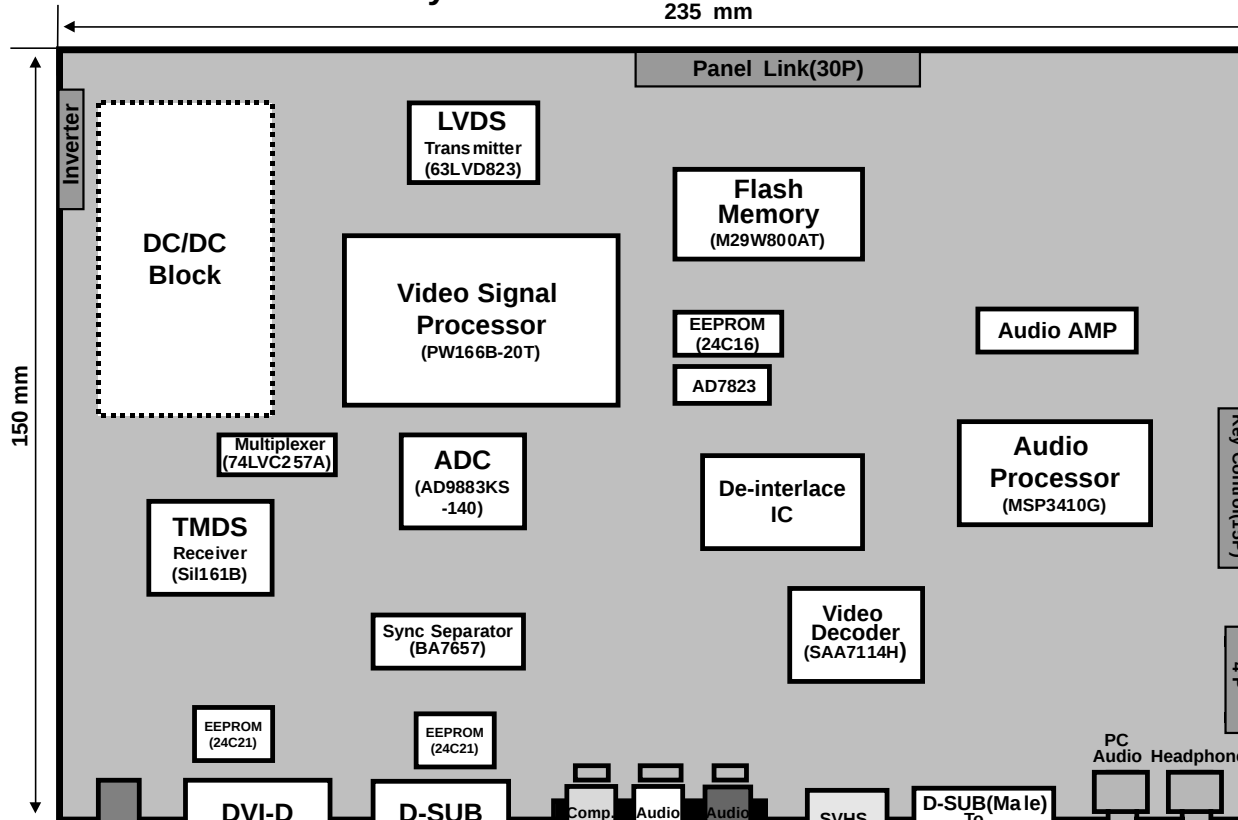
NOTE

- 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.

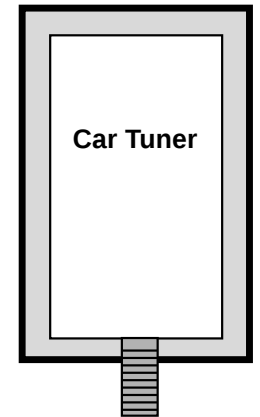


Main Assy

235 mm



Tuner Assy



DC JACK
12V/ 5A

AV

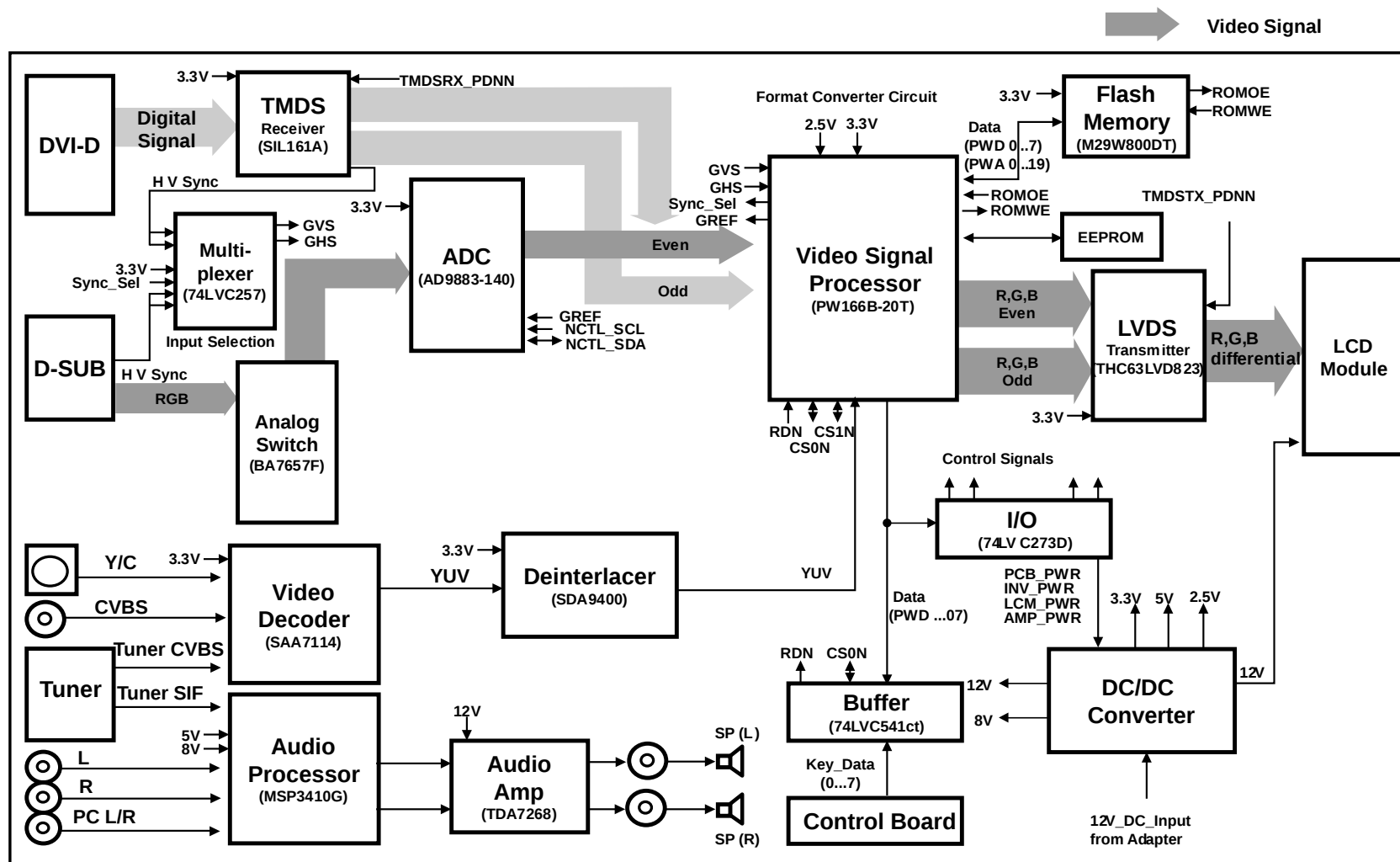
PIP Source Menu

CONTROL

15pin control

Set LED

POWER



DESCRIPTION OF BLOCK DIAGRAM

1. Input Selection Circuit

This block is composed of 74LVC257(U5) and peripheral devices.

There are two inputs, Analog and Digital H/V Sync. LVC257 IC chooses one input and outputs selected input through sync selection pin (Pin 1).

2. A/D Converter

This block is composed of AD9883 (U4) and peripheral devices.

AD9883 includes A/D converter, Pre-amp, and PLL.

The basic RGB signal (0.7Vp-p) is input to R,G,B pin of AD9883(U4).

Input video signal is amplified, Phase locked , A/D converted to 8bits digital signal by this IC(U4)

And send the Digital video signal to PW166B-20T.

U4 makes clock for PW166B-20T

3. TMDS Receiver

This Block is composed of Sil161B (U201) and peripheral devices.

This IC decodes Composite Input signal from DVI-D Pin (J18) and make 8bit digital signal to send Digital EVEN/ODD signal to PW166B-20T.

4. DDC controller

This block is composed of PW166B-20T(U8) and peripheral devices.

PW166B-20T controls peripheral devices through IIC line.

Major functions are (1) to control Flash memory through DDC-SCLA, DDC-SDAA of D-sub

And (2) to store EDID data in the EEPROM (U17, U30)

5. Video Decoder

This block is composed of SAA7114H (U7) and peripheral devices.

PW166B-20T controls this IC through IIC Line.

This IC analyzes input signal of CVBS, Y/C and output analyzed signal (8bit interlace signal) to De-interlace block.

Analyzed signal has video control signals like Contrast, Brightness, Sharpness, Color, tint signals

Including Adaptive Comb Filter.

6. Audio Decoder

This block is composed of MSP3420G (U49) and peripheral devices.

PW166B-20T controls this IC through IIC Line.

This IC analyzes Audio input signal through A/V Jack and PC audio.

And output the analyzed signals to Audio Amplifier (TDA7268).

7. Audio Amplifier

This block is composed of TDA7268 (U39) and peripheral devices.

It amplifies audio signal input from Audio Decoder and output amplified audio signal to Speaker, Audio Output Jack.

The output signal form is BTL.

8. De-interlacer

This block is composed of SDA9400 (U16) and peripheral devices.

PW166B-20T (U7) controls this IC through IIC Line.

And this IC convert 8 Bit Interlace Y/UV signal to De-interlace signal.

It output converted signal to Format Converter (PW166B-20T).

9. Format Converter

This block is composed of PW166B-20T (U8), M29W800DT (U19) and peripheral devices.

MICOM in PW166B-20T (U7) processes outputs of A/D Converter and TMDS Receiver,

De-interlace output and output processed 48 Bit Digital signal to TMDS Transmitter.

PW166B-20T is Format Converter IC that receive Digital signal and output proper frame signal to LCD Module(1280x1024).

10. Panel-Link Circuit

TMDS Transmitter (THC63LVD273, U23) is the IC that receives output digital signal of PW166B-20T (U8) and output to LCD Module.

The signal format is Panel-link.

LCD Module has Panel-link receiver that is same output of PW166B-20T.

This is the best for reduction EMI problem and the number of pin connector.

11. DC/DC Converter block

DC/DC Converters convert the input 12V to proper 2.5V, 3.3V, 5V, 8V for main board.

For shooting heat trouble, we use the DC/DC converting IC.

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 30 minutes.

- Alignment appliances and tools.
 - IBM compatible PC
 - Programmable Signal Generator.
(eg. VG-819 made by Astrodesign Co.)
 - Oscilloscope.
 - White Balance Meter. (CA-110)

1. Adjustment for Factory Preset Mode

No read to adjust FOS data for Factory Preset Mode.

2. Adjustment for White Balance

- 1) Set External Bright to MAX position and Contrast to MAX position.
- 2) Display Color 0,0 pattern at Mode 15.
- 3) Press Menu key, Vp key, Right key of Remote controller or Menu Buttons in sequence.
- 4) Select "WHITE BALANCE ADJUST" and Press SET key.
- 5) After "INPUT WHITE PATTERN" message, Display Color 15, 0 pattern at Mode 15.

- 6) No attempt to manually adjust, BIAS and Drive data is automatically adjustde and saved to the EEPROM.
- 7) After "OK" message, Press SET KEY.
- 8) Select "SERVICE MODE EXIT" and Press SET KEY.

3. DDC Data Write Procedure-Analog

- 1) Use this procedure only when there is some problem on Analog EDID data.
- 2) Run alignment program for LM805L on the IBM compatible PC.
- 3) Select EEPROM → Analog EDID write command and Enter.
- 4) This will write the Analog EDID data to EEPROM.

4. DDC Data Write Procedure-Digital

- 1) Use this procedure only when there is some problem on Digital EDID data.
- 2) Run alignment program for LM805L on the IBM compatible PC.
- 3) Select EEPROM → Digital EDID write command and Enter.
- 4) This will write the Digital EDID data to EEPROM.

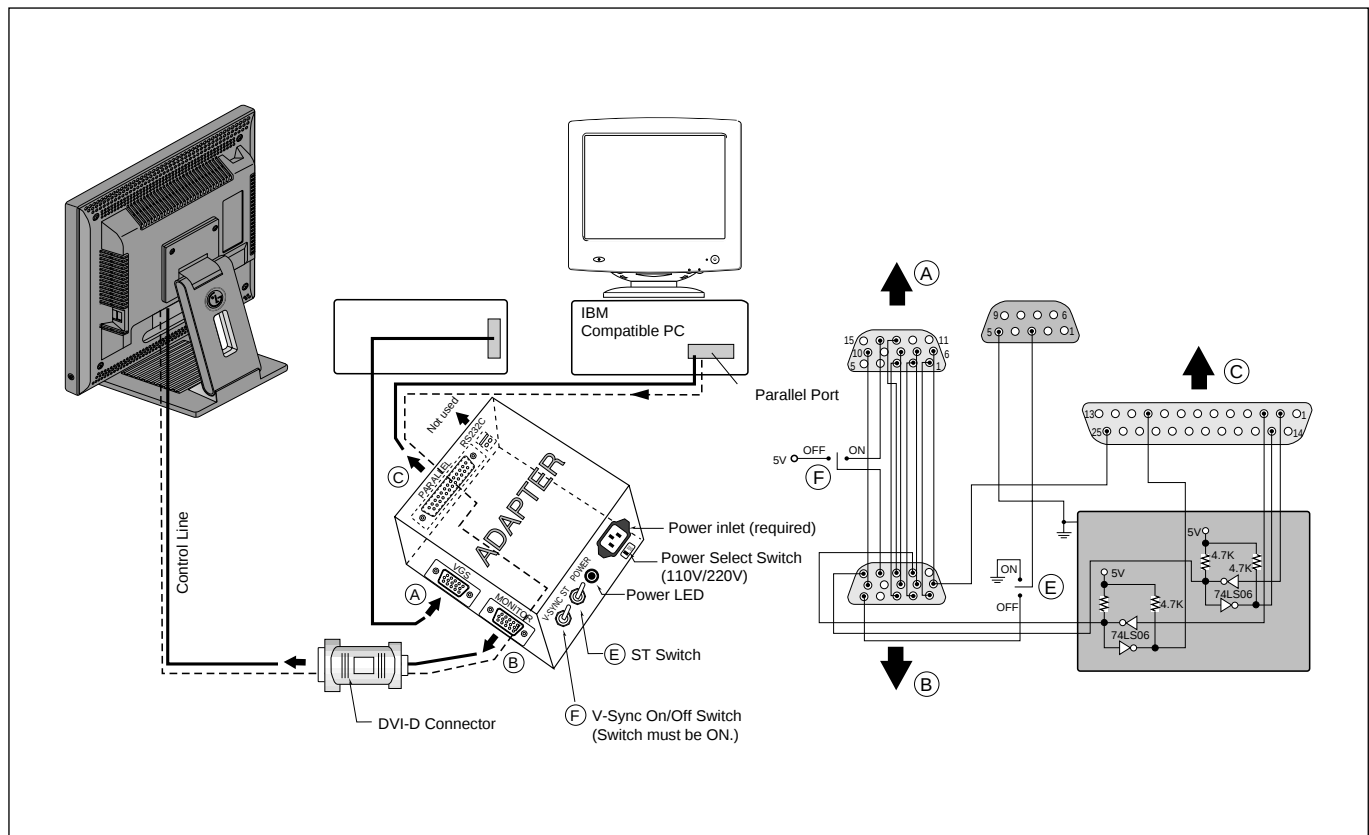
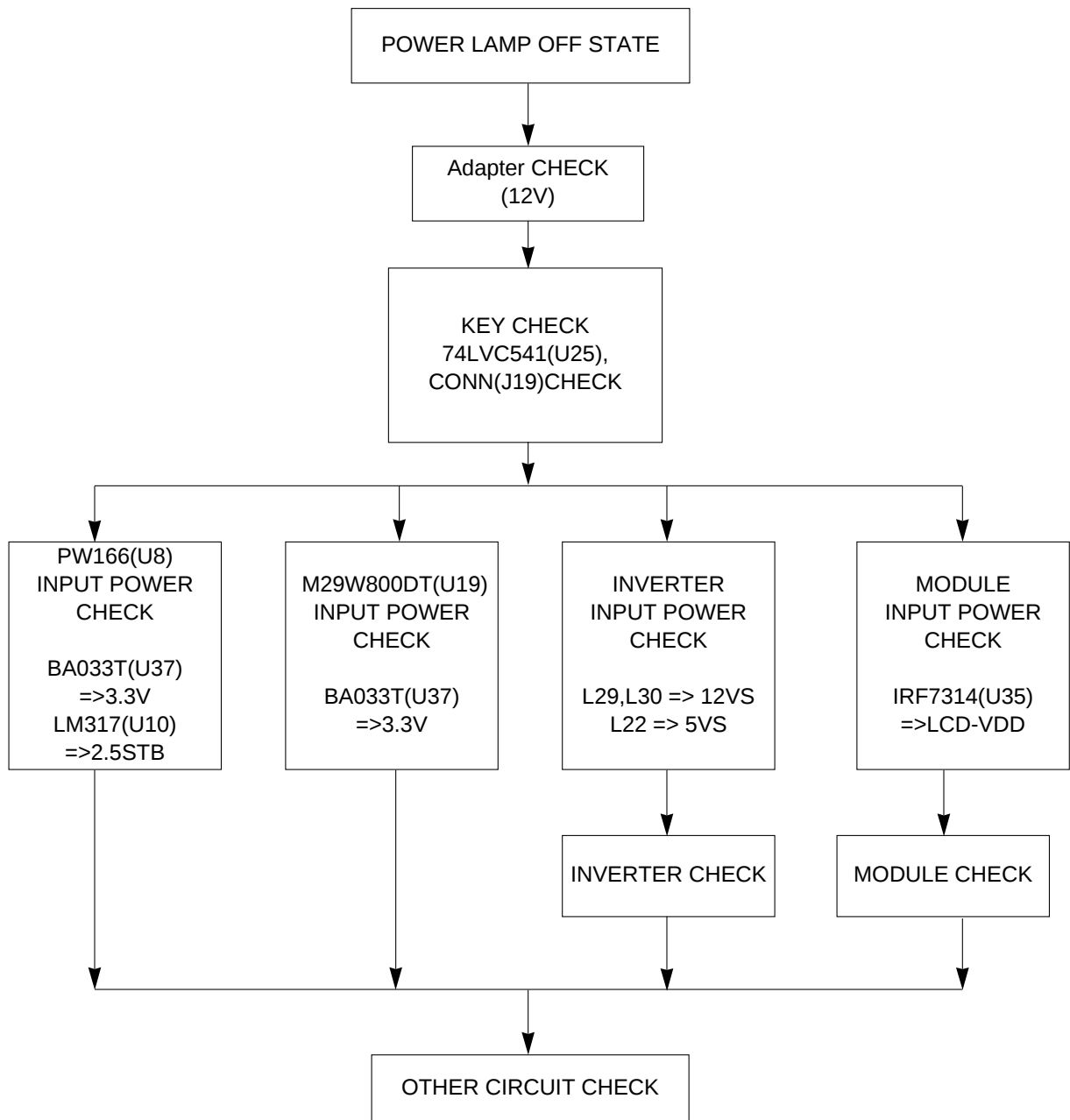


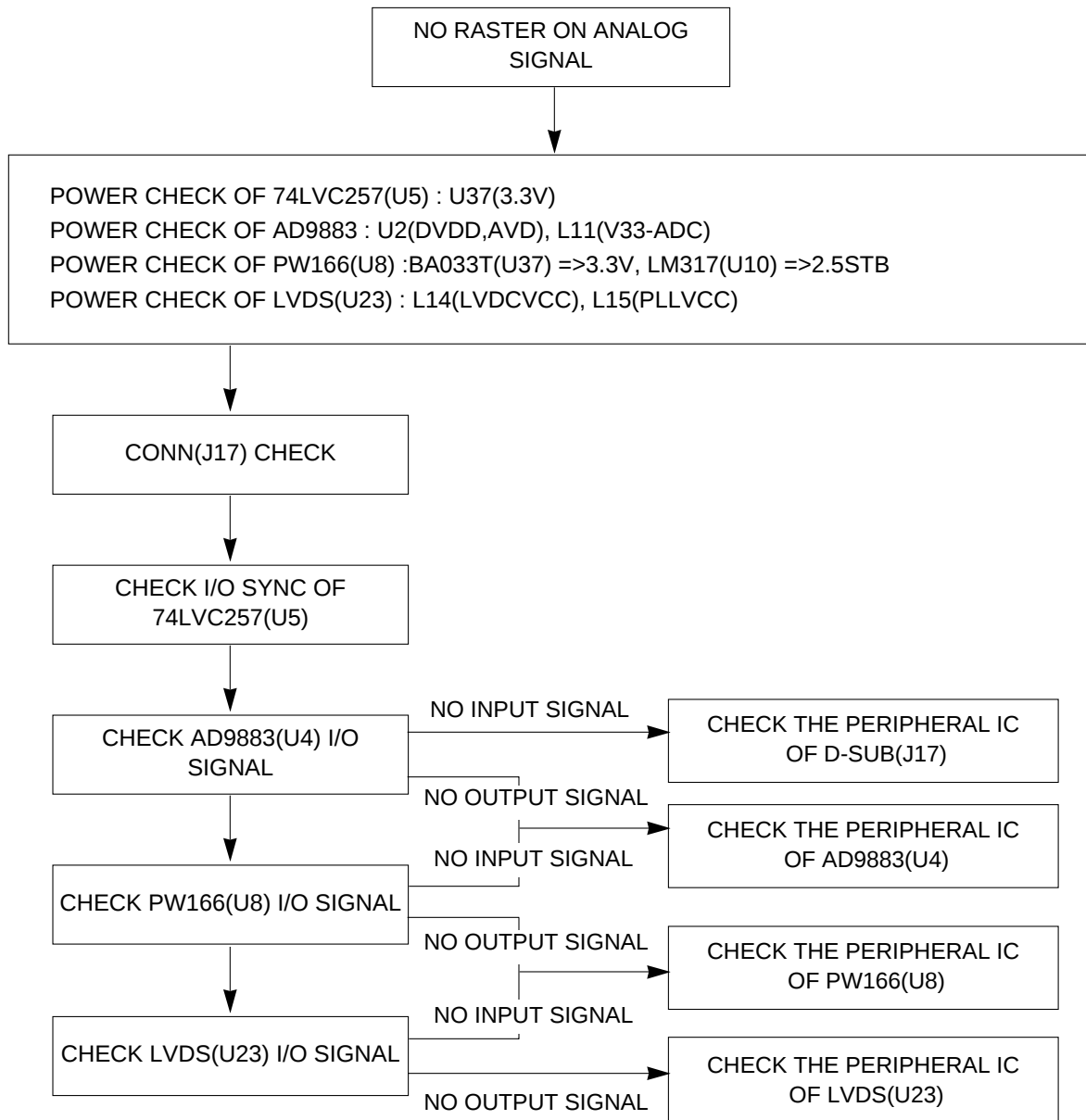
Figure 1. Cable Connection

TROUBLESHOOTING GUIDE

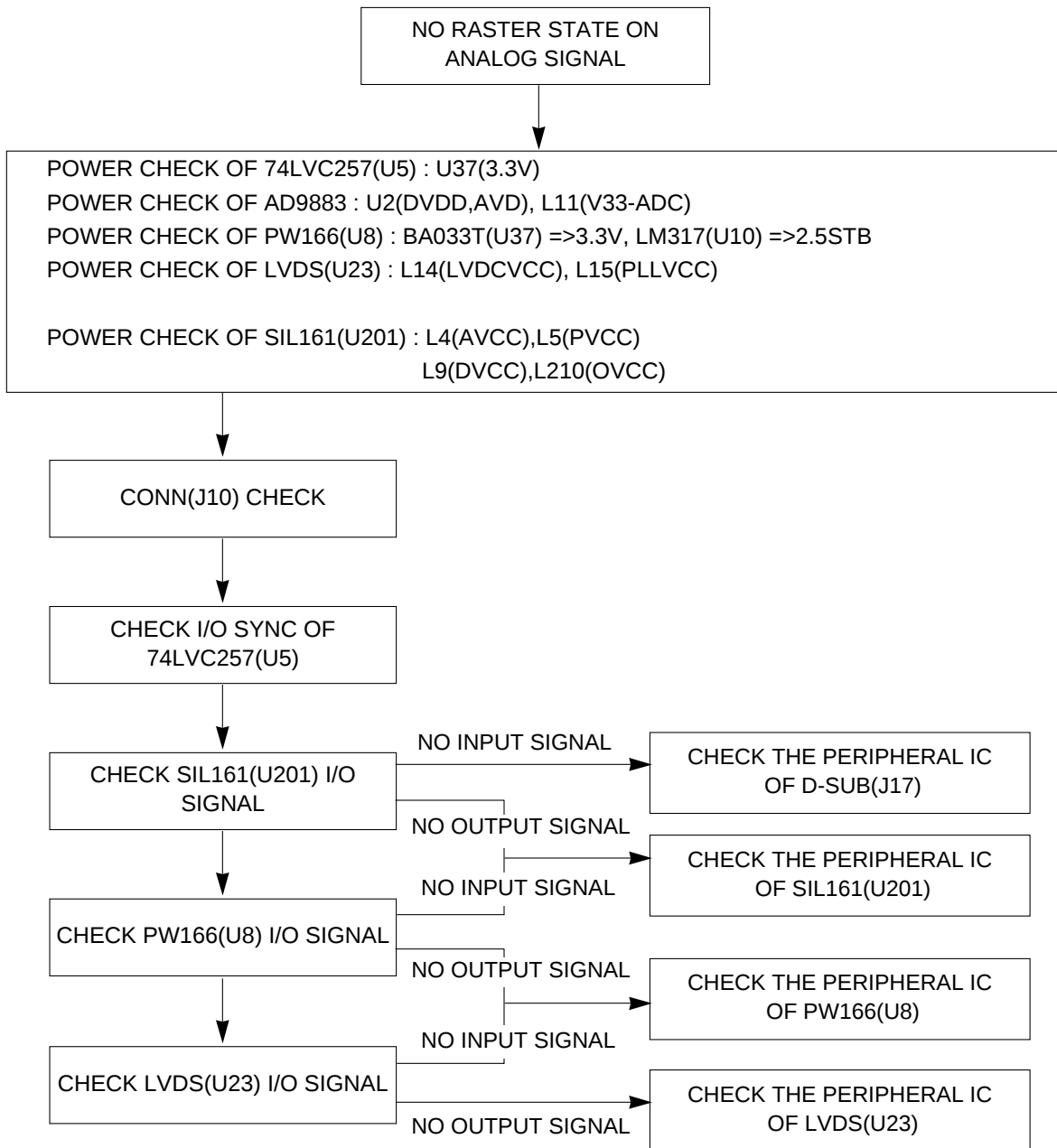
1. OUT OF ORDER ON POWER



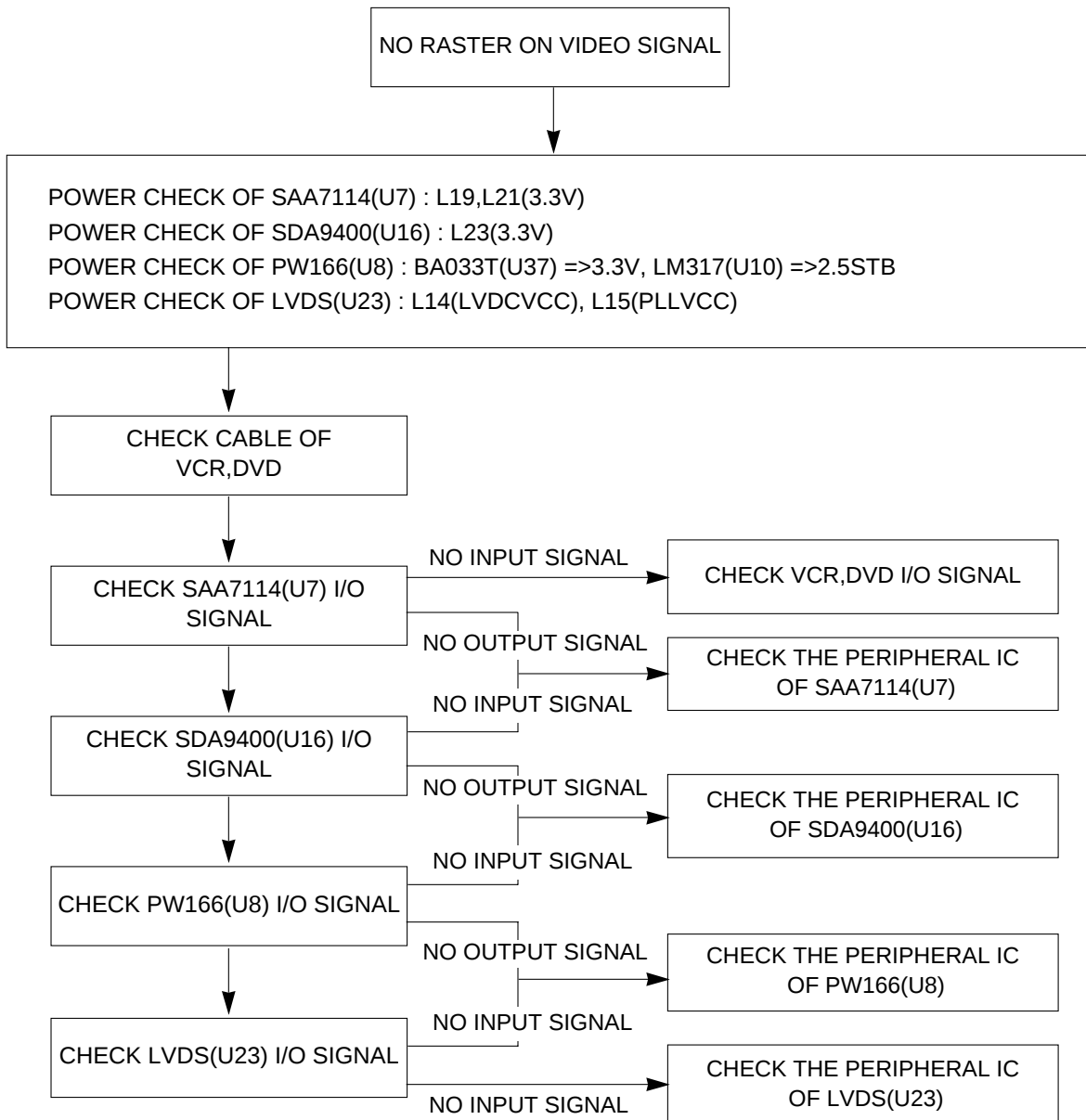
2.NO RASTER STATE ON ANALOG SIGNAL



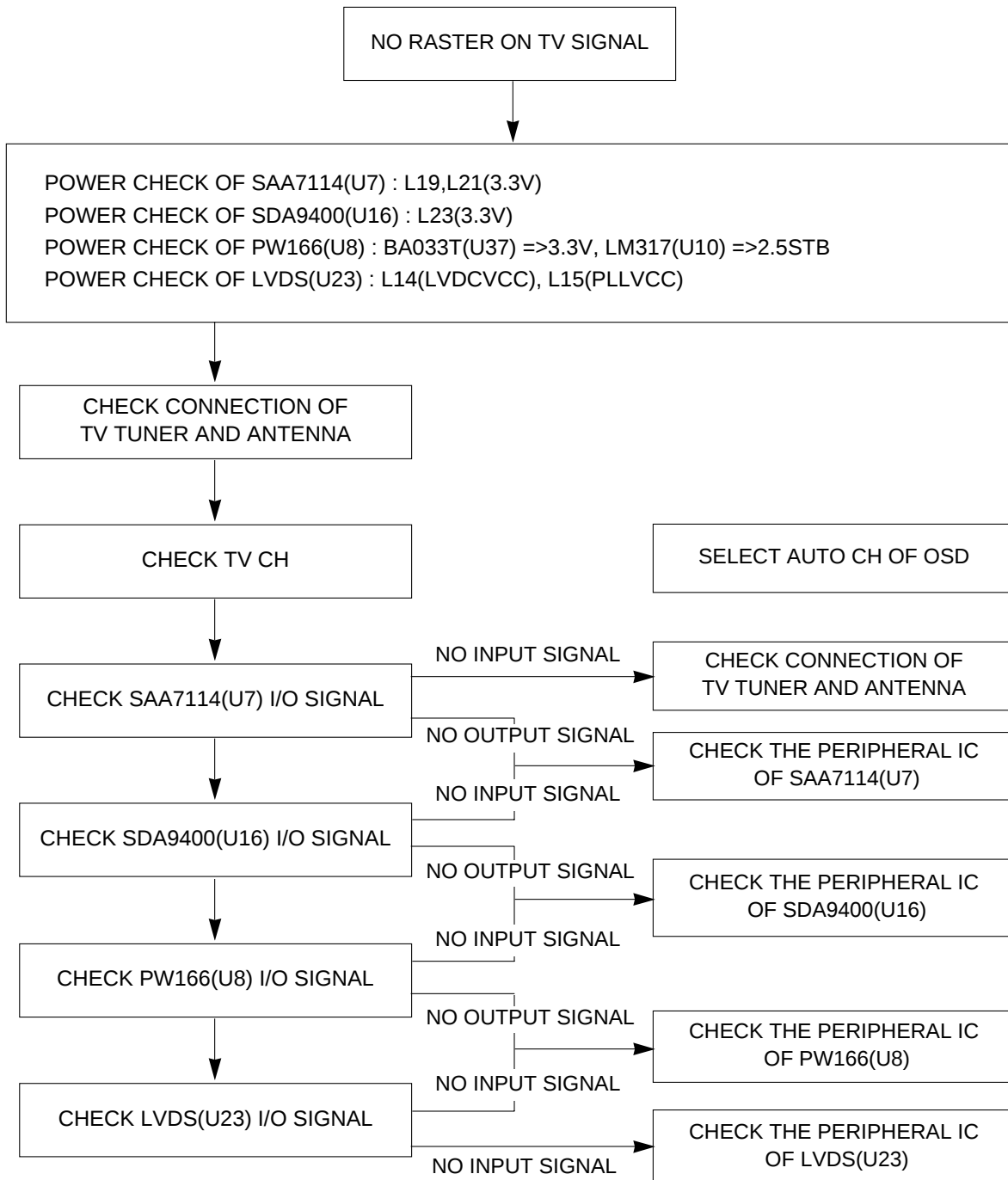
3. NO RASTER STATE ON DIGITAL SIGNAL



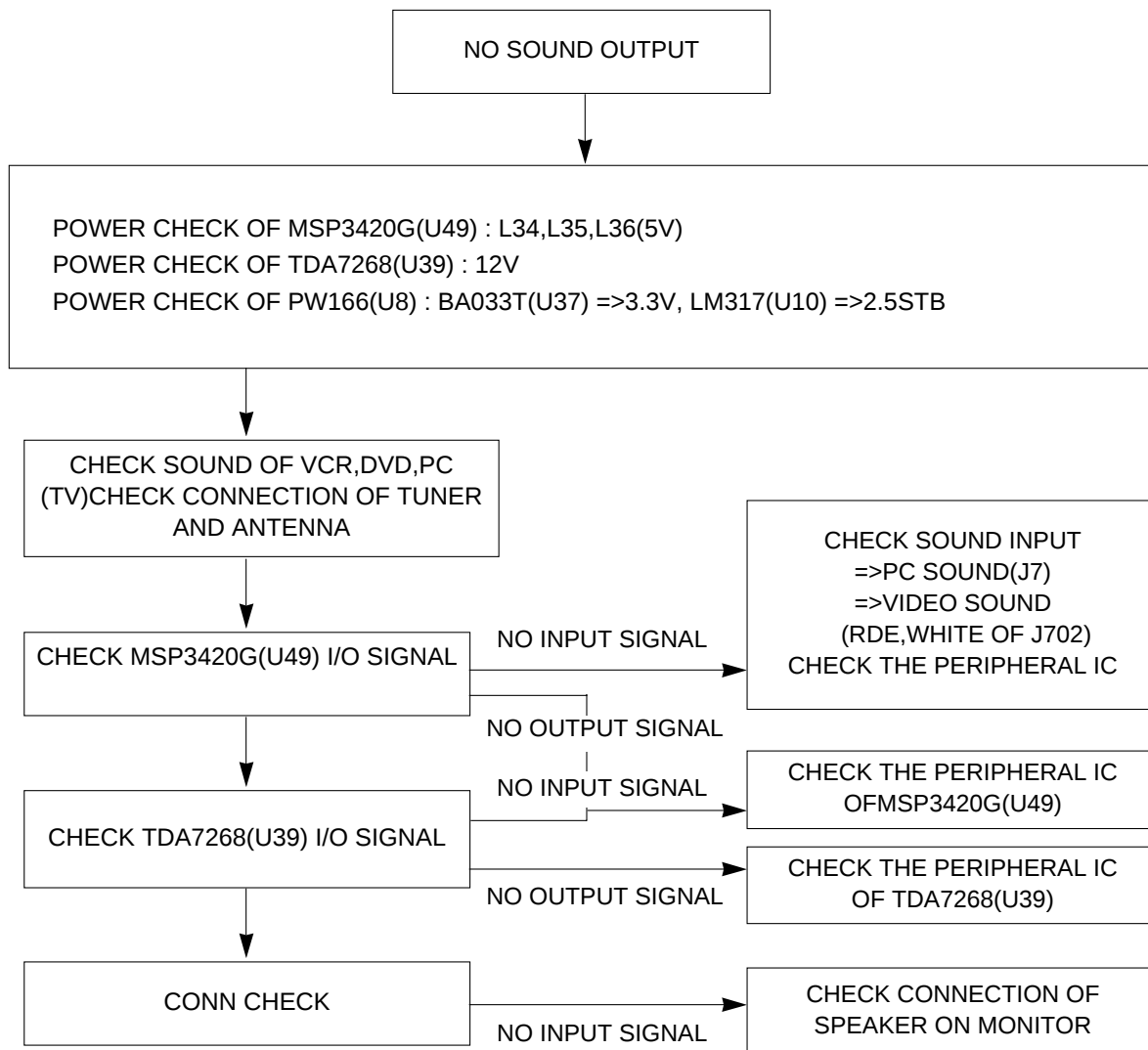
4. NO RASTER ON VIDEO SIGNAL INPUT



5. NO RASTER ON TV SIGNAL



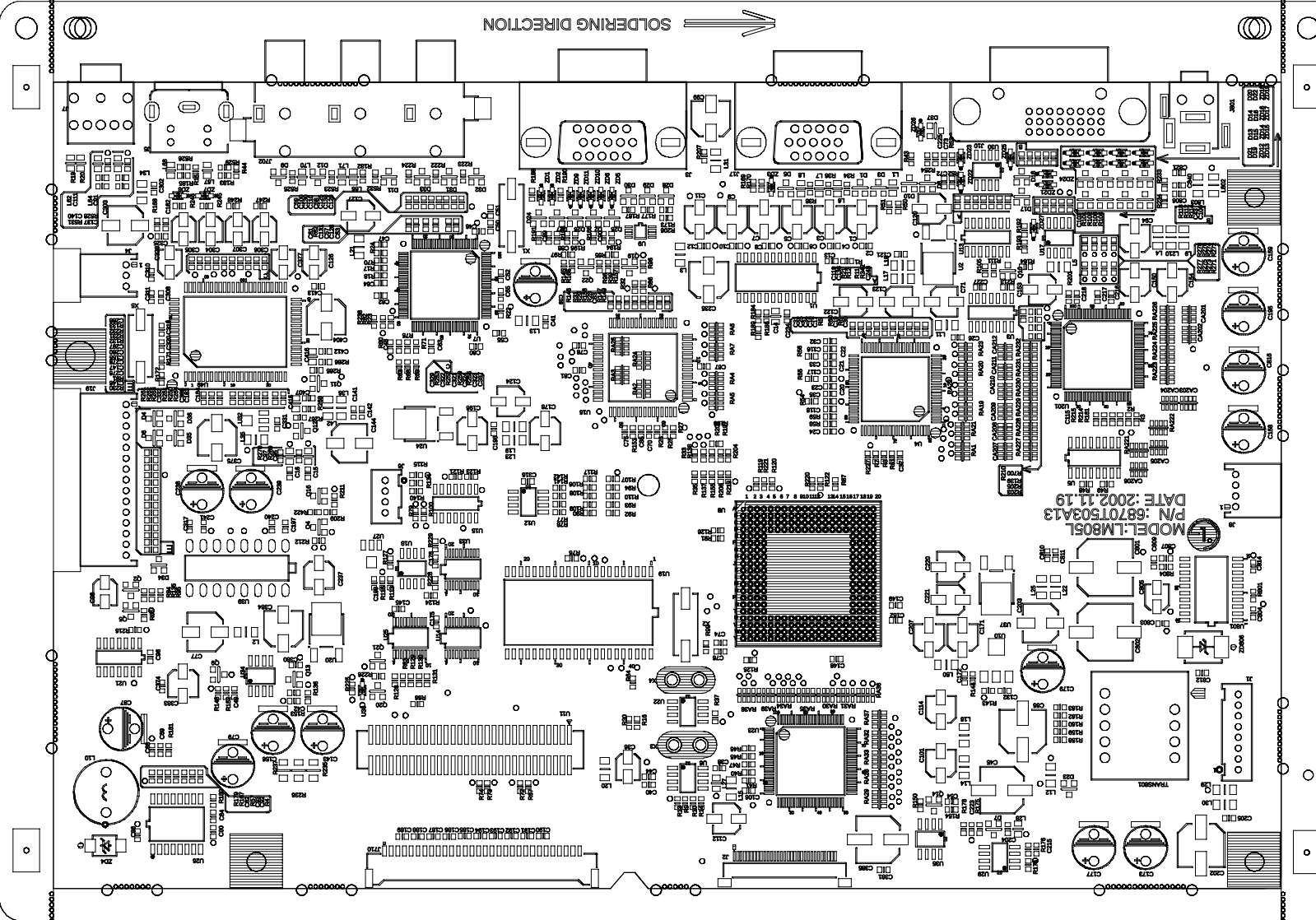
6. SOUND TROUBLE SHOOTING

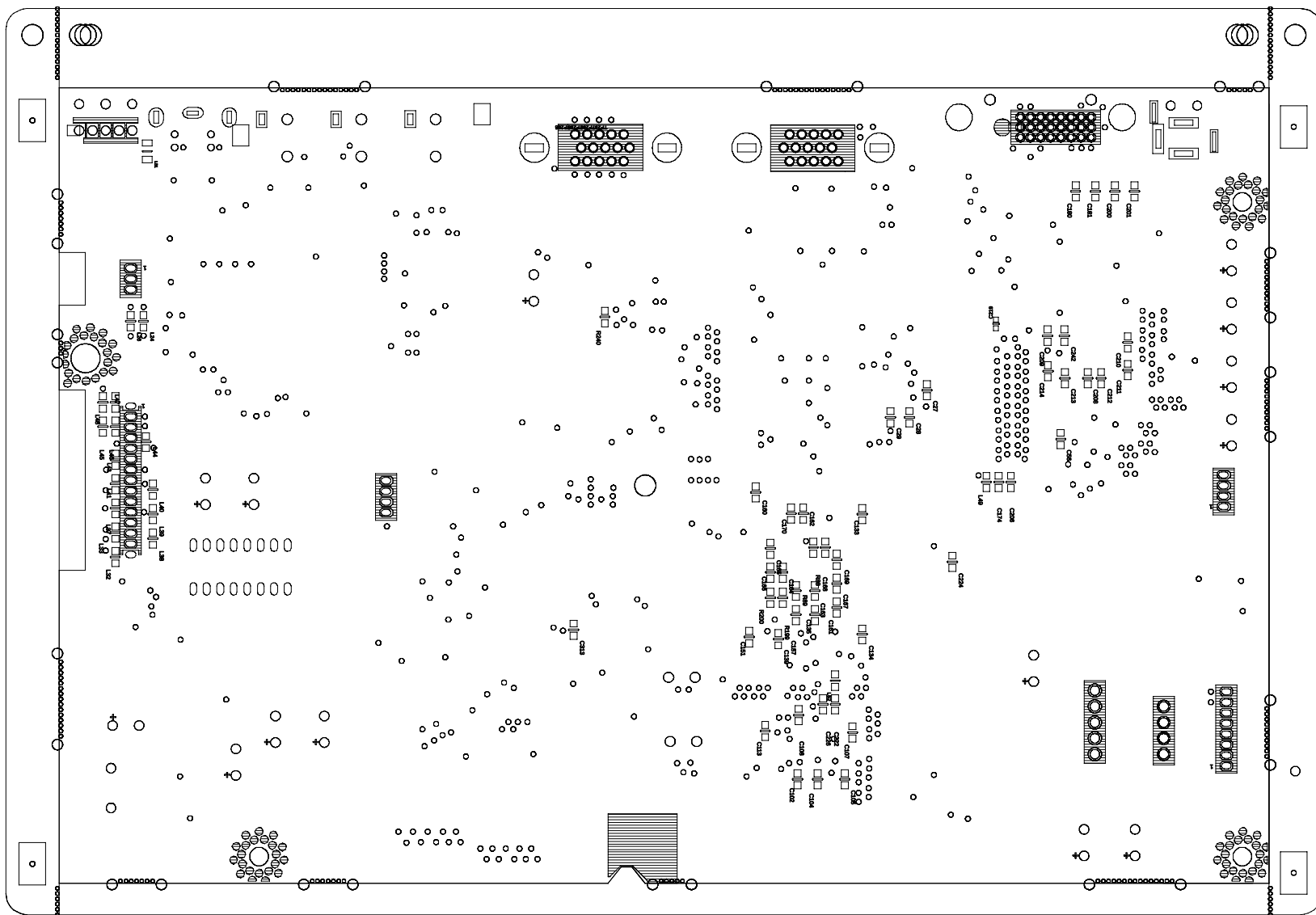


SOLDERING DIRECTION

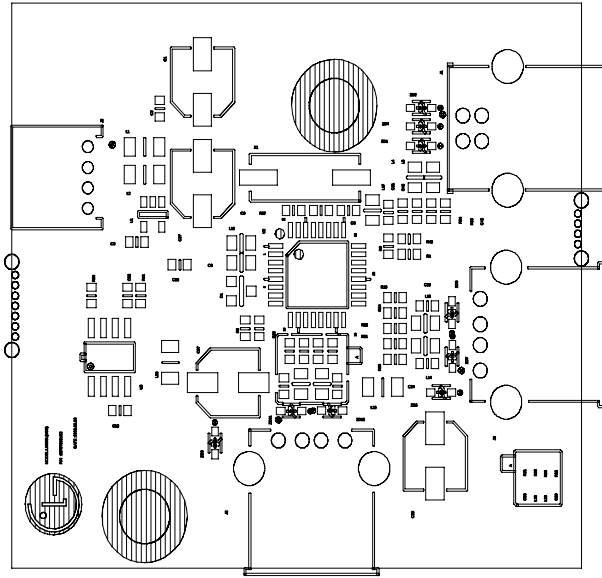


MODEL:LM805L
P/N :6870T503A13
DATE :2002.11.19

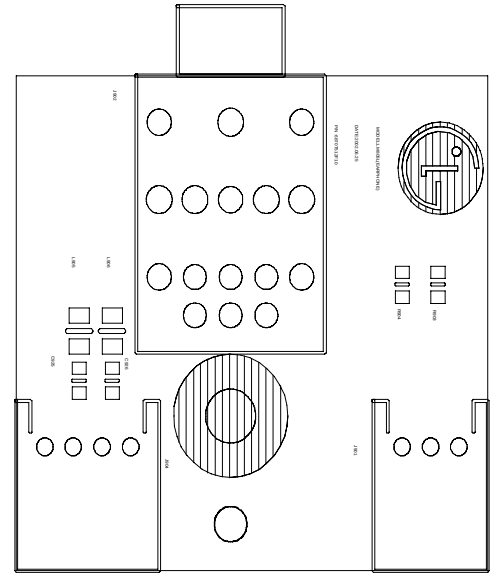




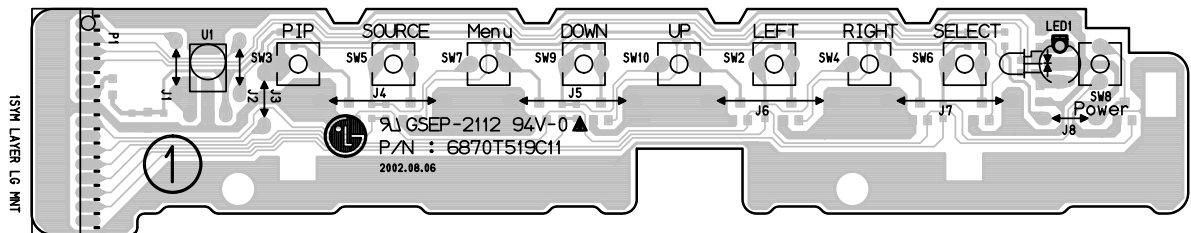
3. USB BOARD



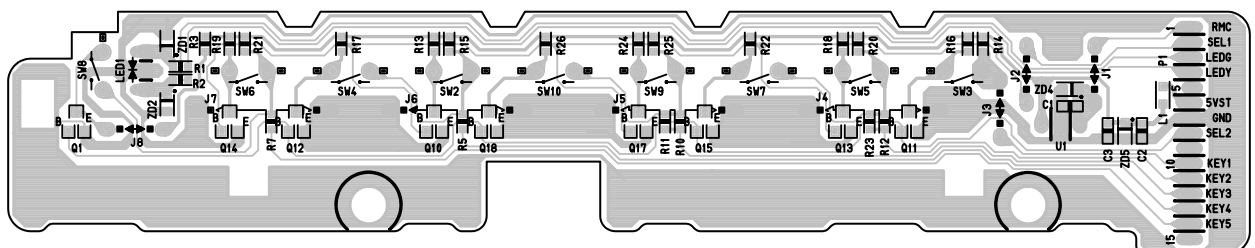
4. EARPHONE BOARD



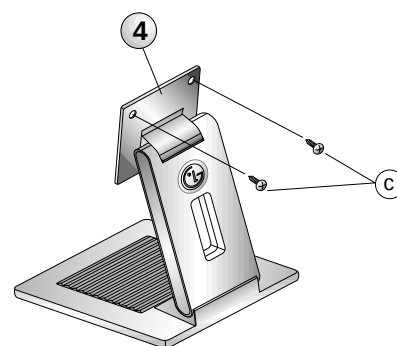
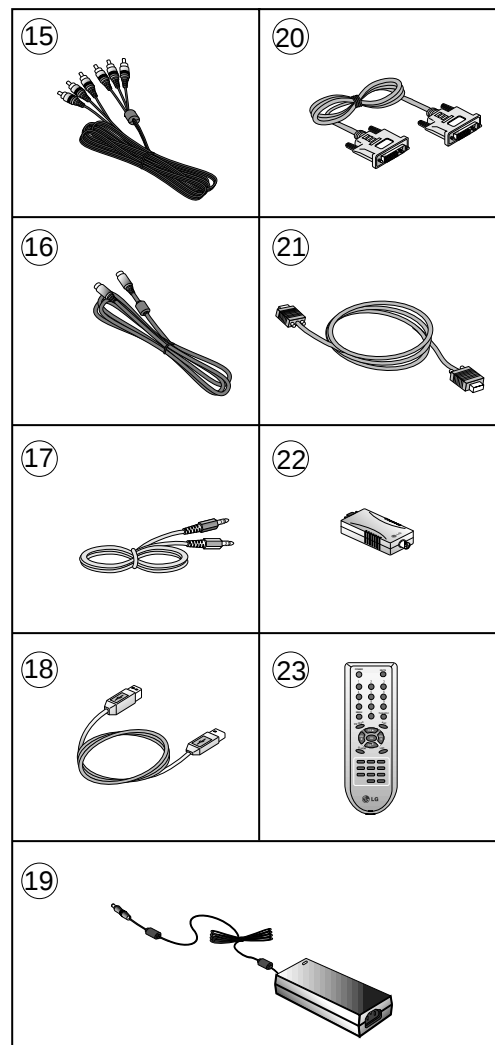
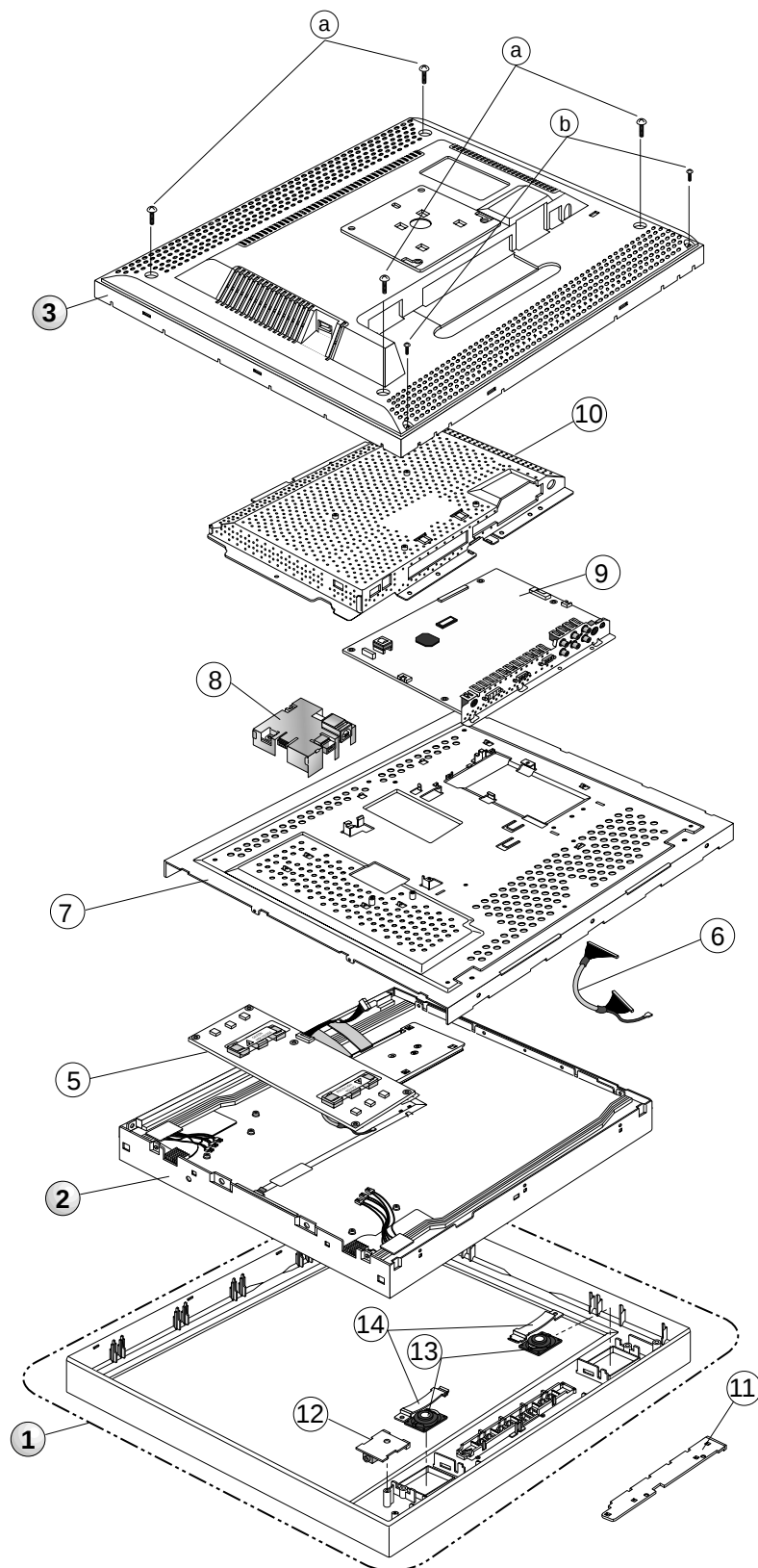
5. CONTROL BOARD (Component Side)



6. CONTROL BOARD (Solder Side)



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

Ref. No.	Part No.	Description
1	3091TKL048G	CABINET ASSEMBLY, LM805L BRAND , TV, PAL- FLATRON L1810T
	3091TKL048F	CABINET ASSEMBLY, LM805L BRAND 3090TKL050A AV - FLATRON L1810A
2	6304FLP034A	LCD(LIQUID CRYSTAL DISPLAY), LM181E06-A4M1 LG PHILIPS TFT COLOR SXGA 18.1" LVDS SMM
3	3809TKL030A	BACK COVER ASSEMBLY, LM805L 3808TKL036A AV
4	3043TKK091E	TILT SWIVEL ASSEMBLY, LM805L -HIPS NO USB
5	6633TZA008C	INVERTER ASSEMBLY, ALPS KUBNKM045A 6-LAMPS,18" DELL
6	6631T11012P	CONNECTOR ASSEMBLY, 30P H-H 100MM UL20276 PANEL LINK LB886F
7	4951TKS078E	METAL ASSEMBLY, FRAME MAIN E05_LM805L
8	6871TUT023A	PWB(PCB) ASSEMBLY, USB, LM805L USB INTERFACE TOTAL BRAND CL-36
9	3313TL8019B	MAIN TOTAL ASSEMBLY, LM805L BRAND CL-36 - FLATRON L1810T
	3313TL8019A	MAIN TOTAL ASSEMBLY, LM805L ALRDW BRAND CL-36 - FLATRON L1810A
10	4951TKS087A	METAL ASSEMBLY, REAR SHIELD LM805 AV
11	6871TST308A	PWB(PCB) ASSEMBLY, SUB, LM805L CONTROL TOTAL BRAND CL-36
12	6871TST304A	PWB(PCB) ASSEMBLY, SUB, LM805L SOUND TOTAL BRAND CL-36
13	6401TZZ020B	SPEAKER ASSEMBLY, LM805L T401S01K1450 8 OHM 1W
14	4950TKK337A	METAL, FIX SPEAKER (LM568E)
15	6852TAZ006B	CORD, AV, RCA CABLE UL 2863 #25 3000MM BLACK(9930) DH-3P-N300C LM295B
16	6852TAZ006D	CORD, AV, DIN CABLE UL 2990-9C(5.5) 1560MM BLACK(9930) DH-150DIN LM295B
17	6852TAZ006F	CORD, AV, AV DH-1560SP-BL UL 2851 #28 1560MM GRAY(85964) L/BUE-LIME KSD LM568E
18	6866TDU002D	CABLE, D-SUB, UL20276SB10P+2C AWG#30 DT 1870MM GRAY(85964) BRAND DM
19	6634B00049B	ADAPTER, AC-DC, LSE0111B1260 12V 5.0A FOR LG
20	6866TDV004C	CABLE, DVI, UL20276 DT 2000MM GRAY(85964) LB885C DM
21	6850TD9001J	CABLE, D-SUB, UL 2990-9C(7.5) DT 1870MM PEARL WH T541K DM
22	6700NF0007D	TUNER, TALN-M200T LG PAL FS NEW TUNNER PACK ASSY FOR LM805L - Only FLATRON L1810T
23	6710T00004B	REMOTE CONTROLLER, LM505F ALEUA(PAL,VE) REMOTE CONTROLLER - FLATRON L1810T
	6710T00001A	REMOTE CONTROLLER, LM285A XAGT 30 OH/S(SILVER) - FLATRON L1810A
a	1SZZTER001H	SCREW, DRAWING, D3.0 L10.0 MSWR/BK .
b	332-113S	SCREW, DRAWING, D3.0 L12.0 MSWR/BK .
c	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: 2002. 12. 13.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
MAIN BOARD				
CAPACITORS				
		C1	0CE476VC6DC	47UF MV 6.3V 20% R/TP(SMD)
		C2	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C3	0CE476VC6DC	47UF MV 6.3V 20% R/TP(SMD)
		C4	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C5	0CE476VC6DC	47UF MV 6.3V 20% R/TP(SMD)
		C6	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C7	0CE476VC6DC	47UF MV 6.3V 20% R/TP(SMD)
		C8	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C9	0CE476VC6DC	47UF MV 6.3V 20% R/TP(SMD)
		C10	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C11	0CE476VC6DC	47UF MV 6.3V 20% R/TP(SMD)
		C12	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C13	0CC471CK41A	470PF 1608 50V 5% R/TP NP0
		C14	0CH3474H946	0.47UF 25V 80%,-20% F(Y5V)
		C15	0CK152CK51A	1500PF 1608 50V 10% R/TP B
		C16	0CK152CK51A	1500PF 1608 50V 10% R/TP B
		C17	0CK823CK56A	82NF 1608 50V 10% R/TP X7R
		C18	0CK822CK56A	8200PF 1608 50V 10% X7R R/
		C20	0CK473CK56A	47000PF 1608 50V 10% R/TP
		C21	0CK473CK56A	47000PF 1608 50V 10% R/TP
		C22	0CK473CK56A	47000PF 1608 50V 10% R/TP
		C23	0CC102CK41A	1000PF 1608 50V 5% R/TP NP
		C24	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C25	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C26	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C27	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C28	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C30	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C31	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C32	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C33	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C34	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C35	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C36	0CH8106F611	10UF 16V M 85STD(CYL) R/TP
		C38	0CC330CK41A	33PF 1608 50V 5% R/TP NP0
		C39	0CE477CF618	470UF SHL 16V M FL TP5
		C40	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C41	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C42	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C43	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C44	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C45	0CH8476K611	47UF 50V 20% 85STD (CYL) R
		C46	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C47	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C48	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C49	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C50	0CC390CK41A	39PF 1608 50V 5% R/TP NP0
		C51	0CC390CK41A	39PF 1608 50V 5% R/TP NP0
		C52	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C53	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C54	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C55	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C56	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C57	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C58	0CK473CK56A	47000PF 1608 50V 10% R/TP
		C59	0CK473CK56A	47000PF 1608 50V 10% R/TP
		C60	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C61	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C62	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C63	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C64	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C65	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C66	0CH8476K611	47UF 50V 20% 85STD (CYL) R
		C67	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C68	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C69	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C70	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C71	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C72	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C73	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C75	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C77	0CH8107F611	100UF 16V M 85STD(CYL) R/T
		C78	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C79	0CE477CF618	470UF SHL 16V M FL TP5
		C80	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C81	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C82	0CK223CK51A	0.022UF 1608 50V 10% R/TP
		C83	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C84	0CK152CK51A	1500PF 1608 50V 10% R/TP B
		C85	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C86	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C87	0CE477CF618	470UF SHL 16V M FL TP5
		C88	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C89	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C90	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C92	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C93	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C94	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C95	0CH3474H946	0.47UF 25V 80%,-20% F(Y5V)
		C96	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C97	0CH3474H946	0.47UF 25V 80%,-20% F(Y5V)
		C98	0CH8106F611	10UF 16V M 85STD(CYL) R/TP
		C99	0CE106VK6DC	10UF MV 50V 20% R/TP(SMD)
		C100	0CC100CK41A	10PF 1608 50V 5% R/TP NP0
		C101	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C102	0CH3103K516	10000PF 50V K B 2012 R/TP
		C103	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C104	0CH3103K516	10000PF 50V K B 2012 R/TP
		C105	0CH3103K516	10000PF 50V K B 2012 R/TP
		C106	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C107	0CH3103K516	10000PF 50V K B 2012 R/TP
		C108	0CH3103K516	10000PF 50V K B 2012 R/TP
		C109	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C110	0CC100CK41A	10PF 1608 50V 5% R/TP NP0
		C112	0CH8226F611	22UF 16V M 85STD(CYL) R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C113	0CH3103K516	10000PF 50V K B 2012 R/TP
		C114	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C119	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C120	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C121	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C122	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C123	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C124	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C125	0CC100CK41A	10PF 1608 50V 5% R/TP NP0
		C126	0CH8106F611	10UF 16V M 85STD(CYL) R/TP
		C127	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C128	0CK473CK56A	47000PF 1608 50V 10% R/TP
		C129	0CK473CK56A	47000PF 1608 50V 10% R/TP
		C130	0CK473CK56A	47000PF 1608 50V 10% R/TP
		C131	0CK473CK56A	47000PF 1608 50V 10% R/TP
		C132	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C133	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C134	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C135	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C136	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C137	0CC471CK41A	470PF 1608 50V 5% R/TP NP0
		C138	0CC100CK41A	10PF 1608 50V 5% R/TP NP0
		C139	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C140	0CC471CK41A	470PF 1608 50V 5% R/TP NP0
		C141	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C142	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C143	0CE477CF618	470UF SHL 16V M FL TP5
		C144	0CH8107F611	100UF 16V M 85STD(CYL) R/T
		C145	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C146	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C147	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C148	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C149	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C150	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C151	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C152	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C153	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C154	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C155	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C156	0CE477CF618	470UF SHL 16V M FL TP5
		C157	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C158	0CE477CF618	470UF SHL 16V M FL TP5
		C159	0CE477CF618	470UF SHL 16V M FL TP5
		C160	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C161	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C162	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C163	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C164	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C165	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C166	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C167	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C168	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C169	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C170	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C171	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C172	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C173	0CE477EF638	470UF KMG 16V M FM5 TP 5
		C175	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C176	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C177	0CE477EF638	470UF KMG 16V M FM5 TP 5
		C178	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C179	0CE477EF638	470UF KMG 16V M FM5 TP 5

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C180	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C181	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C182	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C183	0CC102CK41A	1000PF 1608 50V 5% R/TP NP
		C184	0CC102CK41A	1000PF 1608 50V 5% R/TP NP
		C195	0CE477CF618	470UF SHL 16V M FL TP5
		C196	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C197	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C198	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C199	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C200	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C201	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C202	0CH8107H611	100UF 25V M 85STD(CYL) R/T
		C203	0CH8107F611	100UF 16V M 85STD(CYL) R/T
		C204	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C205	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C208	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C209	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C210	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C211	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C212	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C213	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C214	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C215	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C216	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C217	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C218	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C219	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C220	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C221	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C223	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C224	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C227	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C234	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C235	0CH8476F611	47UF 16V 20% 85STD (CYL) R
		C237	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C238	0CE477CF618	470UF SHL 16V M FL TP5
		C239	0CE477CF618	470UF SHL 16V M FL TP5
		C240	0CC102CK41A	1000PF 1608 50V 5% R/TP NP
		C241	0CC102CK41A	1000PF 1608 50V 5% R/TP NP
		C242	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C248	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C276	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C278	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C280	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C287	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C288	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C302	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C303	0CH8476F611	47UF 16V 20% 85STD (CYL) R
		C304	0CH8474K611	0.47UF 50V 20% 85STD (CYL)
		C305	0CH8474K611	0.47UF 50V 20% 85STD (CYL)
		C306	0CH8474K611	0.47UF 50V 20% 85STD (CYL)
		C307	0CH8474K611	0.47UF 50V 20% 85STD (CYL)
		C308	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C310	0CC560CK41A	56PF 1608 50V 5% R/TP NP0
		C311	0CC560CK41A	56PF 1608 50V 5% R/TP NP0
		C313	0CH3104K946	100000PF 50V Z F 2012 R/TP
		C316	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C317	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C319	0CC3R3CK01A	3.3PF 1608 50V 0.25 PF R/T
		C320	0CC3R3CK01A	3.3PF 1608 50V 0.25 PF R/T
		C321	0CK222CK51A	2200PF 1608 50V 10% R/TP B

DATE: 2002. 12. 13.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C322	0CK222CK51A	2200PF 1608 50V 10% R/TP B
		C325	0CC560CK41A	56PF 1608 50V 5% R/TP NP0
		C328	0CH8106F611	10UF 16V M 85STD(CYL) R/TP
		C329	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C331	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C332	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C374	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C375	0CH8476F611	47UF 16V 20% 85STD (CYL) R
		C377	0CH8475J611	4.7UF 35V M 85STD(CYL) R/T
		C380	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C381	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C383	0CH8226F611	22UF 16V M 85STD(CYL) R/TP
		C384	0CH8107F611	100UF 16V M 85STD(CYL) R/T
		C385	0CH8227F611	220UF 16V 20% 85STD (CYL)
		C387	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C388	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C404	0CH8476F611	47UF 16V 20% 85STD (CYL) R
		C407	0CK472CK51A	4700PF 1608 50V 10% R/TP B
		C412	0CK472CK51A	4700PF 1608 50V 10% R/TP B
		C413	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C415	0CH3474H946	0.47UF 25V 80%,-20% F(Y5V)
		C416	0CH3474H946	0.47UF 25V 80%,-20% F(Y5V)
		C801	0CZZTAT002D	SVP SANYO 10V 270UF M REEL
		C802	0CZZTAT002D	SVP SANYO 10V 270UF M REEL
		C803	0CC221CK41A	220PF 1608 50V 5% R/TP NP0
		C804	0CC821CK41A	820PF 1608 50V 5% R/TP NP0
		C805	0CH8106F611	10UF 16V M 85STD(CYL) R/TP
		C806	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C807	0CC221CK41A	220PF 1608 50V 5% R/TP NP0
		C809	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C810	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C811	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C812	0CC102CK41A	1000PF 1608 50V 5% R/TP NP
		C814	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C816	0CE477CF618	470UF SHL 16V M FL TP5
		C821	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C840	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
DIODES				
		D1	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D2	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D3	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D4	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D5	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D6	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D7	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D8	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D9	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D10	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D11	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D12	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D13	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D14	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D15	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D16	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D17	0DS301109AA	MMBD301LT1 TP MOTOROLA SOT
		D18	0DS301109AA	MMBD301LT1 TP MOTOROLA SOT
		D19	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D20	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D21	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D22	0DS226009AA	KDS226 TP KEC SOT-23 80V

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		D23	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D24	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D25	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D26	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D27	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D28	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D29	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D30	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D31	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D32	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D33	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D34	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D35	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D36	0DS226009AA	KDS226 TP KEC SOT-23 80V
		D37	0DS301109AA	MMBD301LT1 TP MOTOROLA SOT
		ZD1	0DZ510009EE	UDZ S 5.1B TP ROHM-K SOD32
		ZD2	0DZ510009EE	UDZ S 5.1B TP ROHM-K SOD32
		ZD3	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD32
		ZD4	0DR190309AA	MBRS190T3 TP MOTOROLA 40
		ZD7	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD32
		ZD8	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD32
		ZD21	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD32
		ZD22	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD32
		ZD23	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD32
		ZD24	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD32
		ZD25	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD32
		ZD26	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD32
		ZD27	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD32
		ZD806	0DR340009AA	MBRS340 TP FAIRCHILD NON 4
ICs				
		U1	0IRH765700B	BA7657F 24P,SOP TP INPUT S
		U2	0IRH033200A	BA033FP-E2 MOLD-3 TP REGUL
		U3	0ISTLFA058A	74F14SCX FAIRCHILD 14P,SOI
		U4	0IPRPAD008C	AD9883AKST-140 ANALOG DEVI
		U5	0ISTLPH002A	74LVC257A PHILIPS SO16 R/T
		U6	0IIC501000A	ICS 501MT 8P,SOP TP PLL CL
		U7	0ILNRPH003A	SAA7114H PHILIPS 100 LQFP
		U8	0IPRPPW002A	PW166B-20T PIXELWORKS 256P
		U10	0INS317000E	LM317EMPX SOT-223 TP REGUL
		U12	0IMMRSS040C	S524A60X51(SCT0) SAMSUNG E
		U13	0IMO140662A	MC14066BDR2 14P,SOIC TP BI
		U14	0ISTLPH004B	74LVC273(PW) PHILIPS 16P,T
		U15	0ITI743200P	SN74HC32DR 14P,SOIC TP QUA
		U16	0ISM940000A	SDA9400 64P MQFP BK DRAM -
		U17	0ISS524202B	S524A40X21(SCT0) SAMSUNG E
		U18	0IDS170800A	DS1708S 8P SOIC ST MICROMO
		U19	0IZZTSZ206B	LM805L 44PIN PSOP TRAY -FLATRON L1810T
		U19	0IZZTSZ206A	LM805L V1.0 44PIN PSOP TRA -FLATRON L1810A
		U20	0ISS780800J	KA78M08R 3P,D-PAK TP VOL.
		U21	0ITI741400T	SN74AC14DR 14,SOP R/TP HEX
		U22	0IIC502000A	ICS502MIT 8P SOIC ST PLL C
		U23	0ILNRTH001A	THC63LVD823 THINE MICROSYS
		U24	0IRH033200A	BA033FP-E2 MOLD-3 TP REGUL
		U25	0ISTLPH003B	74LVC541A(PW) PHILIPS 16P,
		U26	0IPMSGG008A	L4978D SGS-THOMSON 16P,SOI
		U27	0IKE704200J	KIA7042AF SOT-89 TP 4.2V V
		U29	0ISS358000D	KA358D-TF OP AMP SMD REEL:
		U30	0ISS524202B	S524A40X21(SCT0) SAMSUNG E
		U32	0IKE704200J	KIA7042AF SOT-89 TP 4.2V V
		U33	0ISTLPH004B	74LVC273(PW) PHILIPS 16P,T

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		U34	0TFIR80009A	INTERNATIONAL RECTIFIER IR
		U35	0TFIR80009A	INTERNATIONAL RECTIFIER IR
		U36	0DZ910009FE	UDZS 9.1B TP ROHM - - 9.1V
		U37	0IRH033200A	BA033FP-E2 MOLD-3 TP REGUL
		U39	0IPRPSG013A	TDA7268 SGS-THOMSON 16P,DI
		U49	0IMCRMN011D	MSP3410G QA B8 V3 MICRONAS - FLATRON L1810T
		U49	0IPRPMN001A	MSP3420G MICRONAS 80 - FLATRON L1810A
		U201	0IS5161000B	SIL161BCT100 SILICON IMAGE
		U801	0ISG497351A	L4973D5.1 SO20 TP 3.5A S/D
COILs & COREs				
		L1	6210TCE001A	HB-1S2012-080JT CERATEC 20
		L2	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L3	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L4	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L5	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L6	6210TCE001Y	HB-1H2012-320JT CERATEC 20
		L8	6210TCE001Y	HB-1H2012-320JT CERATEC 20
		L7	6210TCE001Y	HB-1H2012-320JT CERATEC 20
		L9	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L10	6140TBZ016E	LX31 GET DR10*7,0.45*37TS,
		L11	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L12	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L13	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L14	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L15	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L16	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L17	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L18	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L19	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L20	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L21	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L22	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L23	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L24	6210TCE001L	HB-1T2012-102JT CERATECH 2
		L25	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L26	6210TCE001L	HB-1T2012-102JT CERATECH 2
		L27	6210TCE001P	HB-1S2012-121JT CERATECH 2
		L28	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L29	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L30	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L31	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L32	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L33	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L34	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L35	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L36	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L37	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L38	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L39	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L40	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L41	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L42	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L43	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L44	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L45	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L46	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L47	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L48	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L49	0RH0000D622	0 1/10W P-TYPE TAPPING
		L50	6210TCE001G	HH-1M3216-501 CERATEC 3216

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		L51	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L52	0RH0000D622	0 1/10W P-TYPE TAPPING
		L62	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L64	6210TCE001H	HB-1T2012-301JT CERATEC 20
		L66	6210TCE001L	HB-1T2012-102JT CERATECH 2
		L67	6210TCE001L	HB-1T2012-102JT CERATECH 2
		L68	6210TCE001L	HB-1T2012-102JT CERATECH 2
		L70	6210TCE001P	HB-1S2012-121JT CERATECH 2
		L71	6210TCE001P	HB-1S2012-121JT CERATECH 2
		L210	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L802	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L803	6210TCE001G	HH-1M3216-501 CERATEC 3216
TRANSISTOR				
		Q2	0TR162309CA	KSC1623 TP SAMSUNG SOT23
		Q4	0TR162309CA	KSC1623 TP SAMSUNG SOT23
		Q5	0TR162309CA	KSC1623 TP SAMSUNG SOT23
		Q9	0TR162309CA	KSC1623 TP SAMSUNG SOT23
		Q10	0TR162309CA	KSC1623 TP SAMSUNG SOT23
		Q11	0TR162309CA	KSC1623 TP SAMSUNG SOT23
		Q12	0TR162309CA	KSC1623 TP SAMSUNG SOT23
		Q13	0TR162309CA	KSC1623 TP SAMSUNG SOT23
		Q14	0TR162309CA	KSC1623 TP SAMSUNG SOT23
		Q16	0TR162309CA	KSC1623 TP SAMSUNG SOT23
		Q19	0TR162309CA	KSC1623 TP SAMSUNG SOT23
		Q20	0TR162309CA	KSC1623 TP SAMSUNG SOT23
		Q21	0TR162309CA	KSC1623 TP SAMSUNG SOT23
		Q22	0TR162309CA	KSC1623 TP SAMSUNG SOT23
RESISTORS				
		R1	0RJ4703D677	470K OHM 1/10 W 5% 1608 R/
		R2	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R3	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R4	0RJ1003D677	100K OHM 1/10 W 5% 1608 R/
		R5	0RJ2701D677	2.7K OHM 1/10 W 5% 1608 R/
		R6	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R7	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R8	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP
		R10	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R11	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R12	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R14	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R15	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R16	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP
		R17	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R18	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R19	0RH0000D622	0 1/10W P-TYPE TAPPING
		R20	0RH0000D622	0 1/10W P-TYPE TAPPING
		R21	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R22	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R23	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R24	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R25	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R26	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R27	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R28	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R29	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R30	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R31	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R32	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R33	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R34	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R35	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R36	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R37	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP
		R38	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R39	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/
		R40	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R41	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R43	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R44	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R46	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R47	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R48	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP
		R49	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP
		R50	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R51	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R52	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R53	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R54	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/T
		R55	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/T
		R56	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/T
		R57	0RJ9101D677	9.1K OHM 1/10 W 5% 1608 R/
		R58	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R59	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R61	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP
		R62	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R64	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R65	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R66	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R67	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R71	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R72	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R73	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R74	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R75	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R76	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R77	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R78	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R79	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/T
		R80	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R81	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R83	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R84	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R85	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R87	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R88	0RH1002D622	10K OHM 1 / 10 W 2012 5.00
		R89	0RH0272D622	27 1/10W 5 D.R/TP
		R90	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/T
		R91	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R93	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R94	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R95	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R96	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R97	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R98	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R100	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/T
		R101	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R102	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R103	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R104	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R105	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R106	0RJ2200D677	220 OHM 1/10 W 5% 1608 R/T
		R107	0RJ2200D677	220 OHM 1/10 W 5% 1608 R/T
		R108	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R110	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R111	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R112	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R113	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R114	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R115	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R116	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/T
		R117	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R118	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/
		R119	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/
		R120	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/
		R121	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/T
		R122	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R123	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R124	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R125	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/
		R126	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R127	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R128	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R129	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R130	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R131	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R132	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R133	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R134	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R136	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R137	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R138	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R139	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R140	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R141	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R142	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R143	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/T
		R144	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/T
		R145	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/
		R146	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R147	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R148	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R149	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R150	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R151	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R152	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R153	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R154	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R155	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R156	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R157	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/
		R158	0RJ1202D677	12K OHM 1/10 W 5% 1608 R/T
		R159	0RJ1202D677	12K OHM 1/10 W 5% 1608 R/T
		R160	0RJ1202D677	12K OHM 1/10 W 5% 1608 R/T
		R161	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R162	0RJ1202D677	12K OHM 1/10 W 5% 1608 R/T
		R163	0RJ1202D677	12K OHM 1/10 W 5% 1608 R/T
		R164	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R165	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/
		R166	0RJ2200D677	220 OHM 1/10 W 5% 1608 R/T
		R167	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/
		R168	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R169	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP

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		R170	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R171	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R172	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R173	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R174	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R175	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R176	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R177	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R178	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R179	0RJ2701D677	2.7K OHM 1/10 W 5% 1608 R/
		R180	0RJ2002D677	20000 OHM 1/10 W 5% 1608 R
		R181	0RJ1003D677	100K OHM 1/10 W 5% 1608 R/
		R182	0RJ0182D677	18 OHM 1/10 W 5% 1608 R/TP
		R183	0RJ0182D677	18 OHM 1/10 W 5% 1608 R/TP
		R184	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R185	0RJ0182D677	18 OHM 1/10 W 5% 1608 R/TP
		R186	0RJ6802D677	68K OHM 1/10 W 5% 1608 R/T
		R187	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R188	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R189	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R190	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R191	0RJ2200D677	220 OHM 1/10 W 5% 1608 R/T
		R192	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R193	0RJ8200D677	820 OHM 1/10 W 5% 1608 R/T
		R194	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R195	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R196	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R197	0RJ2201D677	2200 OHM 1/10 W 5% 1608 R/
		R198	0RJ2201D677	2200 OHM 1/10 W 5% 1608 R/
		R200	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R201	0RJ3900D677	390 OHM 1/10 W 5% 1608 R/T
		R202	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R203	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R204	0RJ2201D677	2200 OHM 1/10 W 5% 1608 R/
		R205	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R207	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/T
		R208	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R209	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R210	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R211	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/
		R212	0RJ2201D677	2200 OHM 1/10 W 5% 1608 R/
		R214	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R215	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R216	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R219	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R222	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R223	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R224	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R225	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/T
		R226	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R227	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R228	0RJ2701D677	2.7K OHM 1/10 W 5% 1608 R/
		R229	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R230	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R232	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R233	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R235	0RJ0101G676	1 OHM 1/4 W 5% 3216 R/TP
		R236	0RJ0101G676	1 OHM 1/4 W 5% 3216 R/TP
		R237	0RJ0101G676	1 OHM 1/4 W 5% 3216 R/TP
		R245	0RJ4703D677	470K OHM 1/10 W 5% 1608 R/
		R246	0RJ4703D677	470K OHM 1/10 W 5% 1608 R/
		R247	0RJ4703D677	470K OHM 1/10 W 5% 1608 R/

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R248	0RJ4703D677	470K OHM 1/10 W 5% 1608 R/
		R250	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R251	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R252	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R253	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R254	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/
		R255	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R259	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R264	0RJ2702D677	27K OHM 1/10 W 5% 1608 R/T
		R265	0RJ3302D677	33K OHM 1/10 W 5% 1608 R/T
		R266	0RJ2002D677	20000 OHM 1/10 W 5% 1608 R
		R267	0RJ3302D677	33K OHM 1/10 W 5% 1608 R/T
		R268	0RJ2002D677	20000 OHM 1/10 W 5% 1608 R
		R269	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R270	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R271	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R272	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R273	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R274	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R275	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R276	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R277	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R278	0RJ0102D677	10 OHM 1/10 W 5% 1608 R/TP
		R342	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R422	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R523	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/T
		R525	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/T
		R526	0RJ0562D677	56 OHM 1/10 W 5% 1608 R/TP
		R528	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R529	0RJ0562D677	56 OHM 1/10 W 5% 1608 R/TP
		R531	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R532	0RJ0562D677	56 OHM 1/10 W 5% 1608 R/TP
		R700	0RJ3900D677	390 OHM 1/10 W 5% 1608 R/T
		R801	0RJ2402D677	24K OHM 1/10 W 5% 1608 R/T
		R804	0RJ9101D677	9.1K OHM 1/10 W 5% 1608 R/
		RA1	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA4	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA5	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA6	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA7	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA19	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA20	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA21	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA22	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA23	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA28	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA29	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA30	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA31	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA32	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA33	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA34	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA35	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA36	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA37	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA38	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA39	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/T
		RA221	0RHZTCZ001C	220 OHM 1/16 W 5% 3215 R/T
		RA222	0RHZTCZ001C	220 OHM 1/16 W 5% 3215 R/T
		RA223	0RHZTCZ001C	220 OHM 1/16 W 5% 3215 R/T
		RA224	0RHZTCZ001C	220 OHM 1/16 W 5% 3215 R/T
		RA225	0RHZTCZ001C	220 OHM 1/16 W 5% 3215 R/T

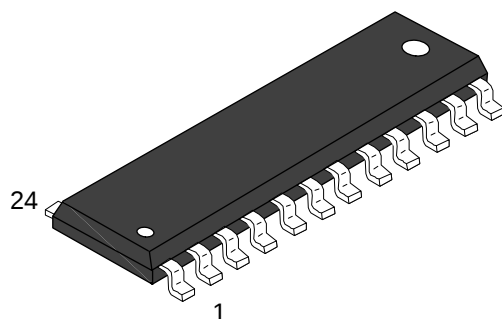
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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		RA226	0RHZTCZ001C	220 OHM 1/16 W 5% 3215 R/T
		RA227	0RHZTCZ001C	220 OHM 1/16 W 5% 3215 R/T
		RA228	0RHZTCZ001C	220 OHM 1/16 W 5% 3215 R/T
		RA229	0RHZTCZ001C	220 OHM 1/16 W 5% 3215 R/T
		RA230	0RHZTCZ001C	220 OHM 1/16 W 5% 3215 R/T
		RA231	0RHZTCZ001C	220 OHM 1/16 W 5% 3215 R/T
		RA232	0RHZTCZ001C	220 OHM 1/16 W 5% 3215 R/T
OTHERS				
		J5	6612F00024A	PSJ007A PARK ELEC. LM805L
		J7	6612F00001C	DJ-S360LB KSD STERO R/A LI
		J702	6612F00025A	PPJ122DA PARK ELEC. LM805L
		J801	6612TAH003A	DJ-023 KSD R/ANGLE LB563B
		X1	6202TST003G	HC-49/SM5H KONY 24.576MHZ
		X3	6202TTB004F	HC-49/U KONY RADIAL 26MHZ
		X4	6202TTB004F	HC-49/U KONY RADIAL 26MHZ
		X5	6202TST003B	HC-49/SM5H KONY CHIP 18.43
CONTROL BOARD				
		SW2	140-058E	SKHV10910B LGEC NON 12V 20
		SW3	140-058E	SKHV10910B LGEC NON 12V 20
		SW4	140-058E	SKHV10910B LGEC NON 12V 20
		SW5	140-058E	SKHV10910B LGEC NON 12V 20
		SW6	140-058E	SKHV10910B LGEC NON 12V 20
		SW7	140-058E	SKHV10910B LGEC NON 12V 20
		SW8	140-058E	SKHV10910B LGEC NON 12V 20
		SW9	140-058E	SKHV10910B LGEC NON 12V 20
		SW10	140-058E	SKHV10910B LGEC NON 12V 20
		C2	0CH3105F946	1UF 16V Z F 2012 R/TP
		C3	0CH3105F946	1UF 16V Z F 2012 R/TP
		L1	6210TCE001H	HB-1T2012-301JT CERATEC 20
		Q1	0TR102009AJ	KRC102S NPN SOT-23 TP KEC
		Q10	0TR102009AJ	KRC102S NPN SOT-23 TP KEC
		Q11	0TR102009AJ	KRC102S NPN SOT-23 TP KEC
		Q12	0TR102009AJ	KRC102S NPN SOT-23 TP KEC
		Q13	0TR102009AJ	KRC102S NPN SOT-23 TP KEC
		Q14	0TR102009AJ	KRC102S NPN SOT-23 TP KEC
		Q15	0TR102009AJ	KRC102S NPN SOT-23 TP KEC
		Q17	0TR102009AJ	KRC102S NPN SOT-23 TP KEC
		Q18	0TR102009AJ	KRC102S NPN SOT-23 TP KEC
		R1	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R2	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/T
		R3	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R5	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R7	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R10	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R11	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R12	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R13	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R14	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R15	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R16	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R17	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R18	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R19	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R20	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R21	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R22	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R23	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R24	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP

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		R25	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R26	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		ZD1	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD32
		ZD2	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD32
		ZD4	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD32
		ZD5	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD32
		LED1	0DLLT0089AA	LITEON LTL-1BEDJ-0C2 TP GR
		U1	6726TV0001A	TSOP4838ON1 TEMIC 38.0KHZ
SOUND BOARD				
		J902	6612F00005D	DJ-SW3P-LM KSD STERO R/A L
		C925	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C926	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		L905	6210TCE001L	HB-1T2012-102JT CERATECH 2
		L906	6210TCE001L	HB-1T2012-102JT CERATECH 2
		R903	0RJ3300D677	330 OHM 1/10 W 5% 1608 R/T
		R904	0RJ3300D677	330 OHM 1/10 W 5% 1608 R/T
USB BOARD				
		C1	0CH8107F611	100UF 16V M 85STD(CYL) R/T
		C2	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C3	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		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 X7
		C23	0CH8107F611	100UF 16V M 85STD(CYL) R/T
		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/T
		C28	0CK103CK51A	0.01UF 1608 50V 10% R/TP B
		C31	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C32	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7
		C37	0CH8107F611	100UF 16V M 85STD(CYL) R/T
		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
		L1	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L2	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L4	6210TCE001P	HB-1S2012-121JT CERATECH 2
		L5	6210TCE001P	HB-1S2012-121JT CERATECH 2
		L13	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L14	6210TCE001P	HB-1S2012-121JT CERATECH 2
		L15	6210TCE001P	HB-1S2012-121JT CERATECH 2
		L16	6210TCE001P	HB-1S2012-121JT CERATECH 2
		L17	6210TCE001P	HB-1S2012-121JT CERATECH 2
		L18	6210TCE001G	HH-1M3216-501 CERATEC 3216
		L19	6210TCE001P	HB-1S2012-121JT CERATECH 2
		L20	6210TCE001P	HB-1S2012-121JT CERATECH 2
		R1	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R8	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R9	0RJ1501D677	1.5K OHM 1/10 W 5% 1608 R/
		R19	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/T
		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/T
		R24	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/T
		R25	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R26	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/T
		R28	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP

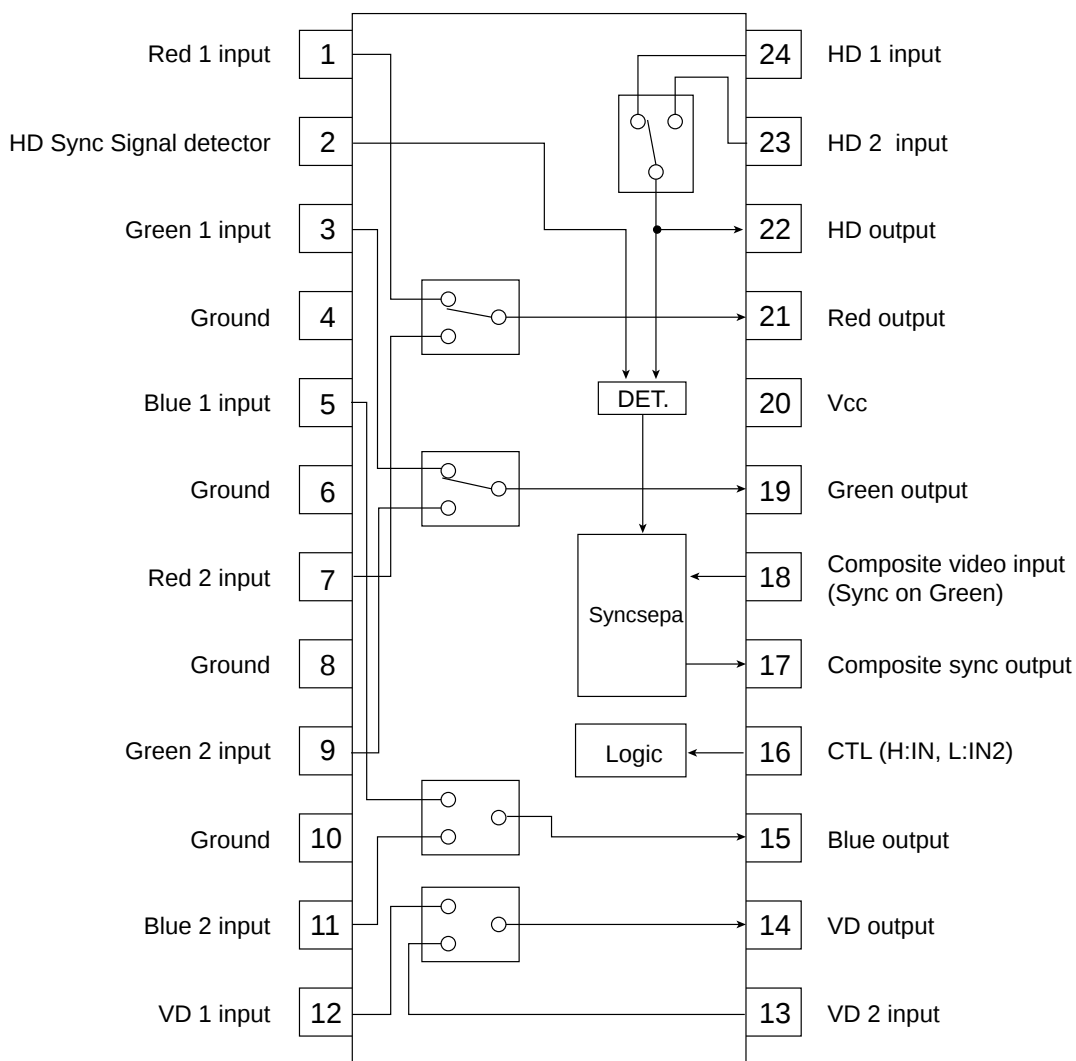
PIN CONFIGURATION

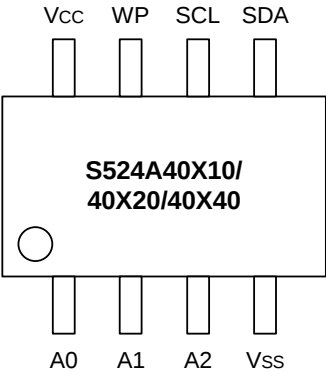
BA7657

Multimedia ICs



BLOCK DIAGRAM





NOTE: The S524A40X10/40X20/40X40 is available in 8-pin DIP, SOP, and TSSOP package.

Figure 2-2. Pin Assignment Diagram

Table 2-1. S524A40X10/40X20/40X40 Pin Descriptions

Name	Type	Description	Circuit Type
A0, A1, A2	Input	Input pins for device address selection. To configure a device address, these pins should be connected to the V_{CC} or V_{SS} of the device. These pins are internally pulled down to V_{SS} .	1
V_{SS}	—	Ground pin.	—
SDA	I/O	Bi-directional data pin for the I ² C-bus serial data interface. Schmitt trigger input and open-drain output. An external pull-up resistor must be connected to V_{CC} . Typical values for this pull-up resistor are 4.7 k Ω (100 kHz) and 1 k Ω (400 kHz).	3
SCL	Input	Schmitt trigger input pin for serial clock input.	2
WP	Input	Input pin for hardware write protection control. If you tie this pin to V_{CC} , the write function is disabled to protect previously written data in the entire memory; if you tie it to V_{SS} the write function is enabled. This pin is internally pulled down to V_{SS} .	1
V_{CC}	—	Single power supply.	—

NOTE: See the following page for diagrams of pin circuit types 1, 2, and 3.

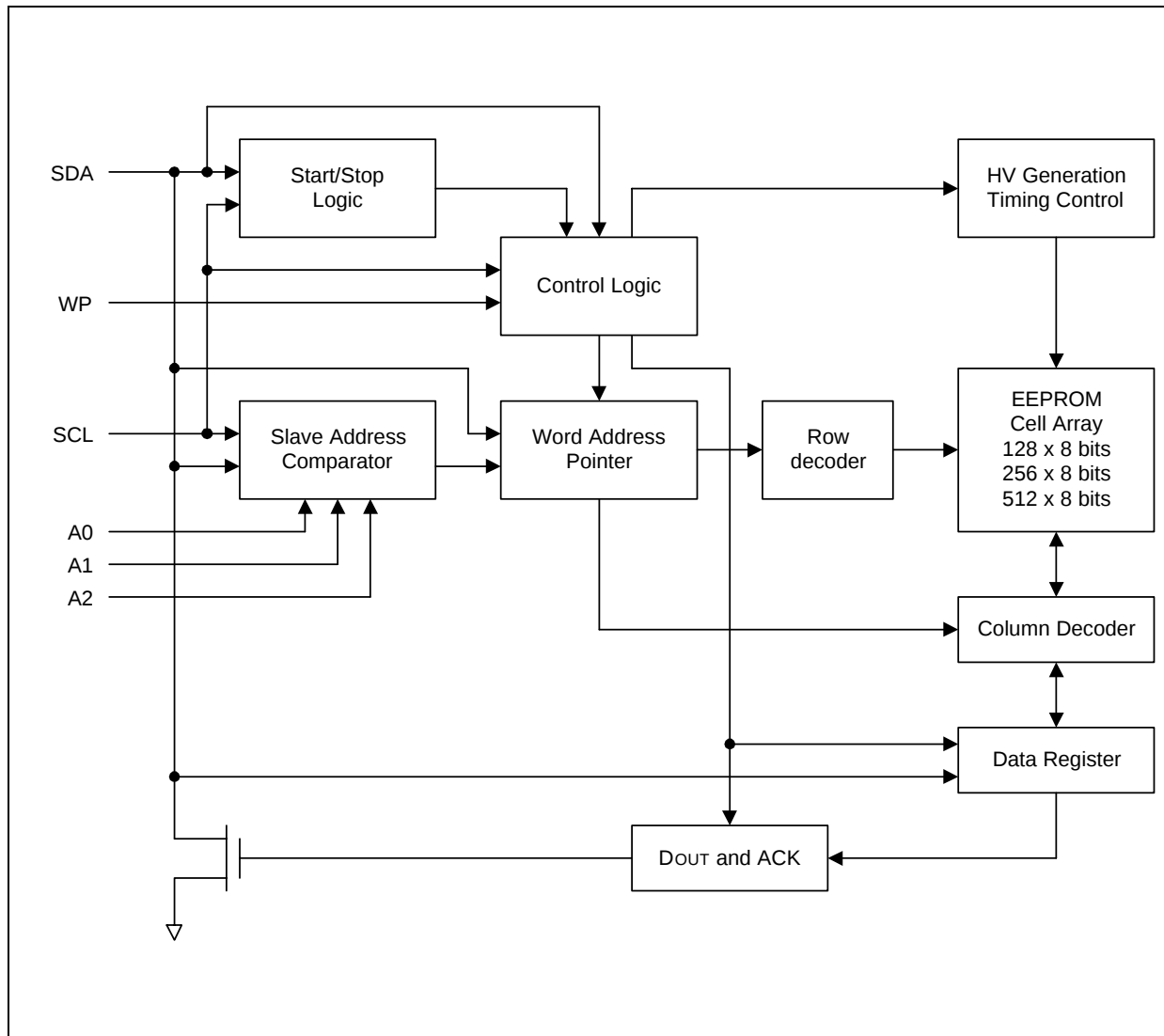
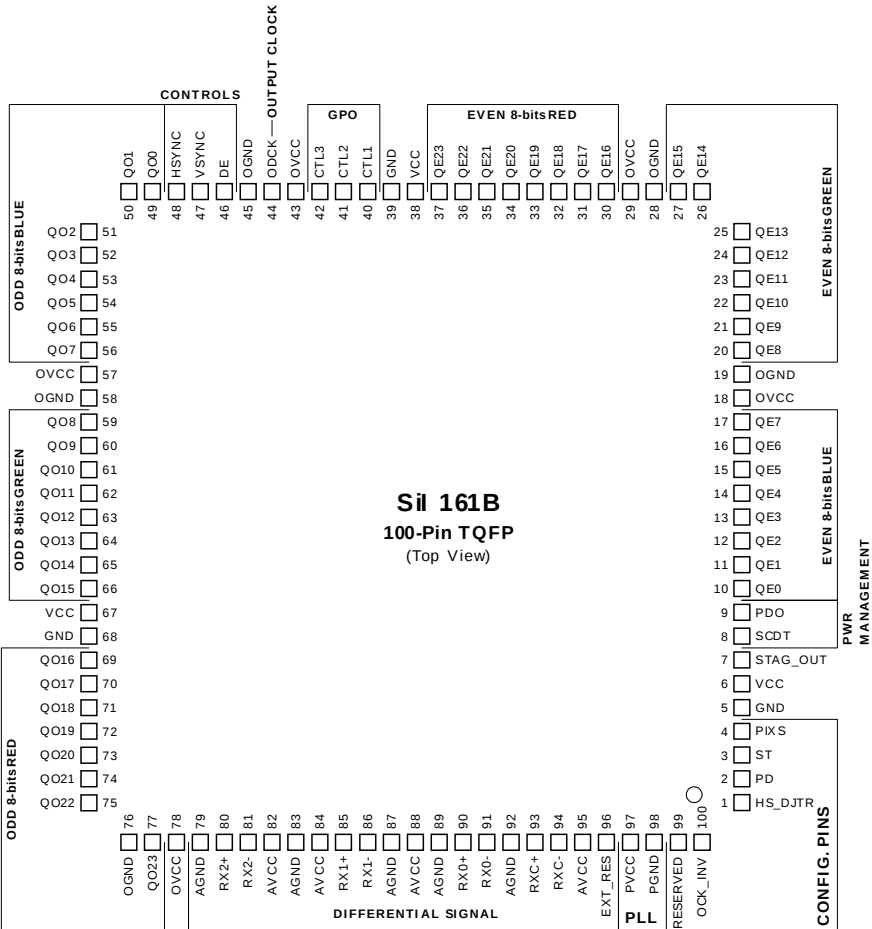
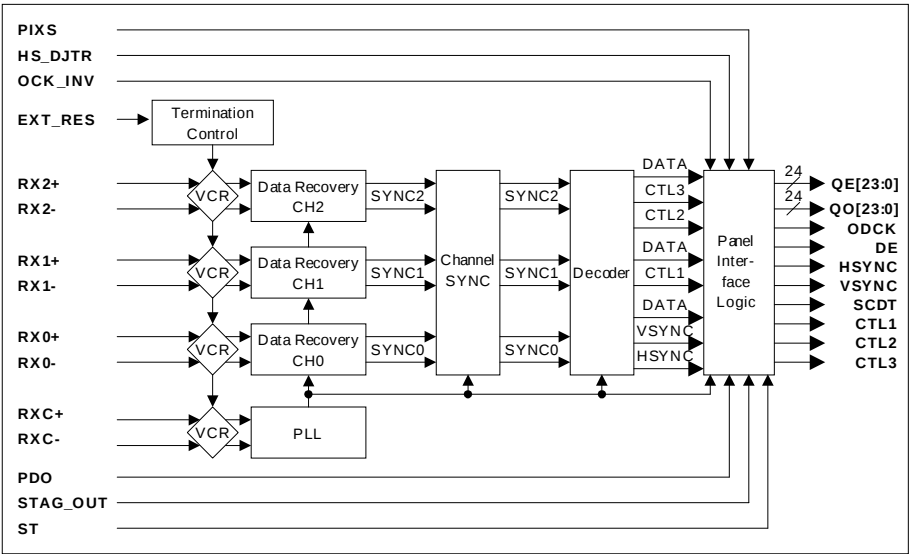


Figure 2-1. S524A40X10/40X20/40X40 Block Diagram

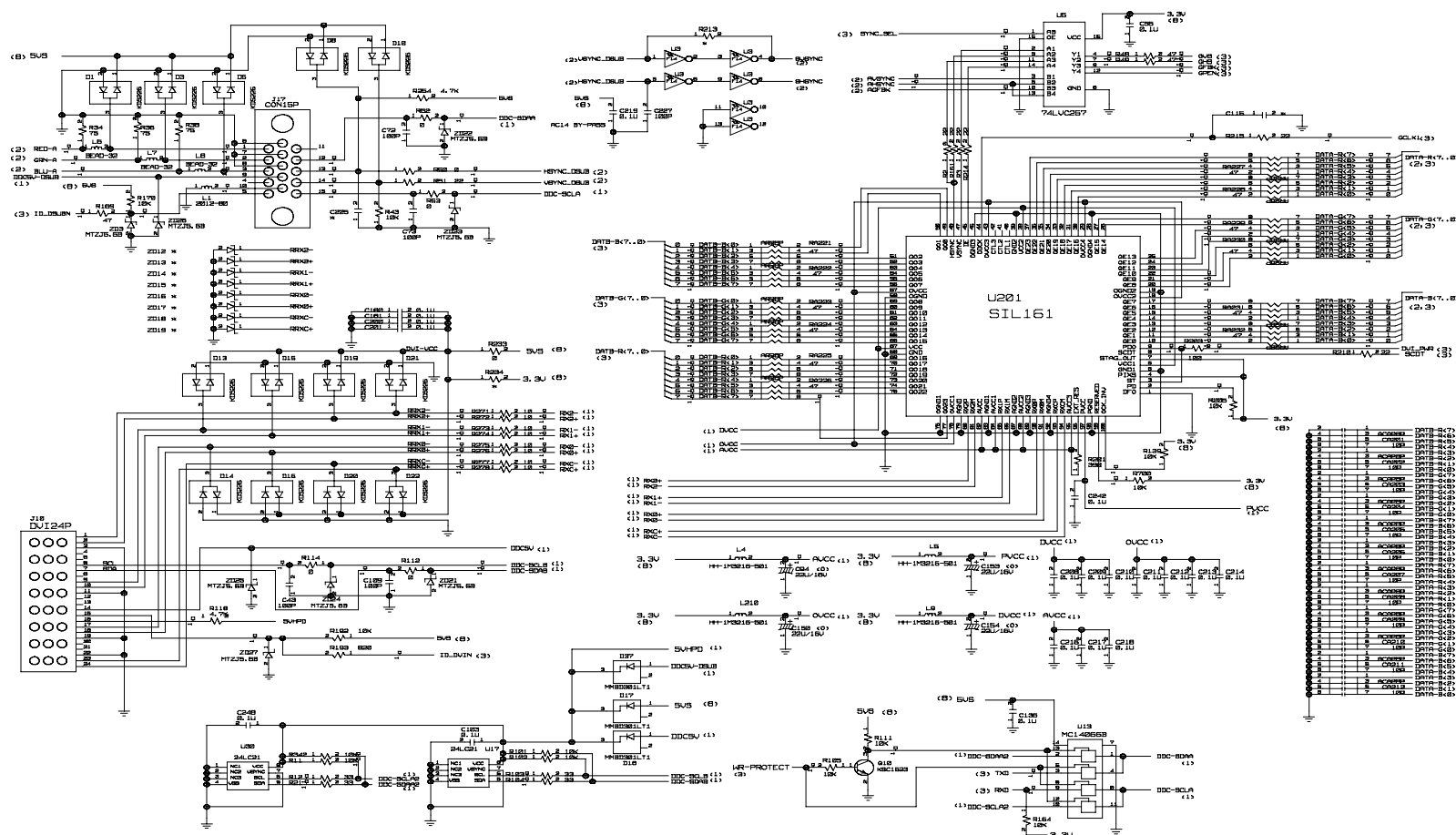


PIN CONFIGURATION

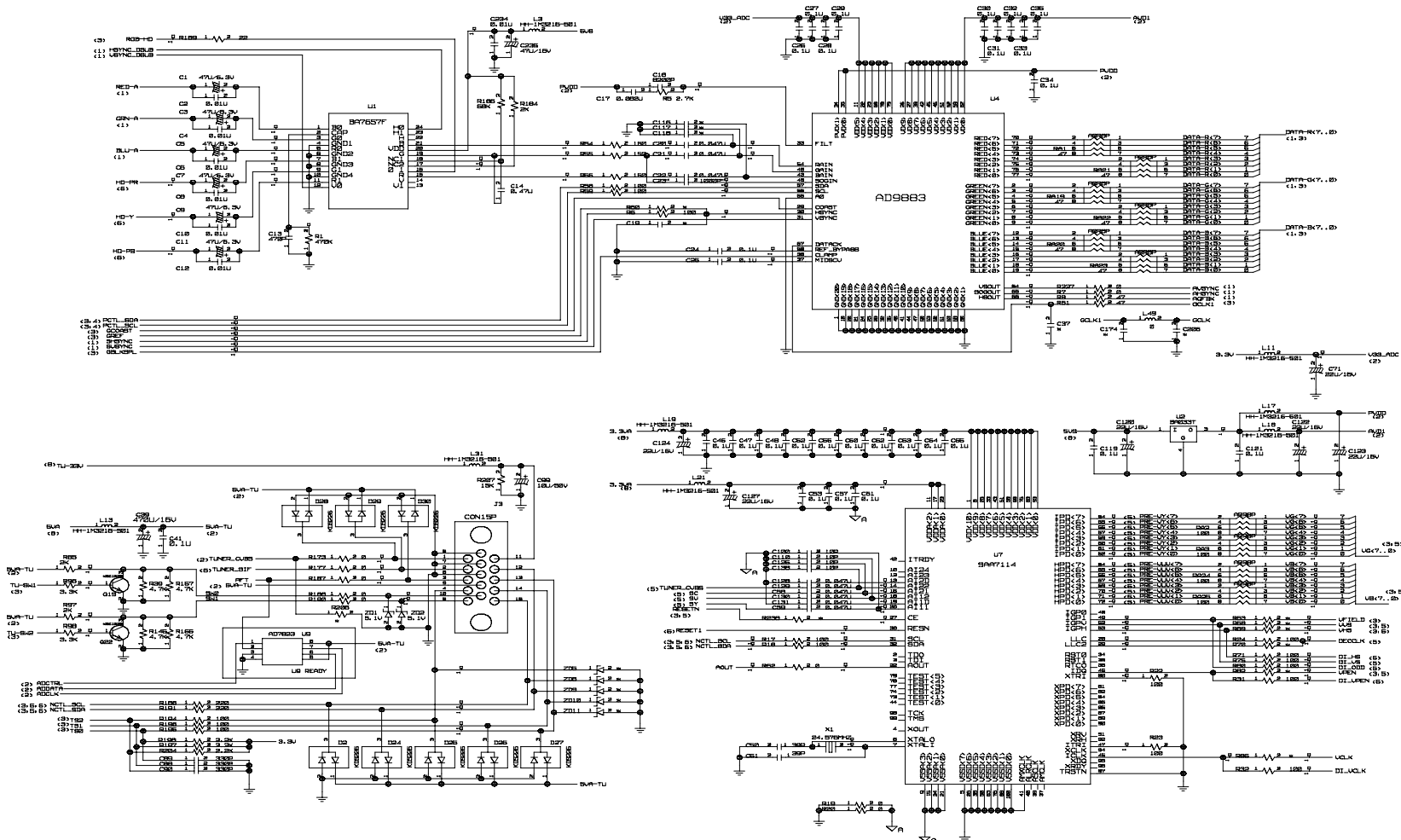


BLOCK DIAGRAM

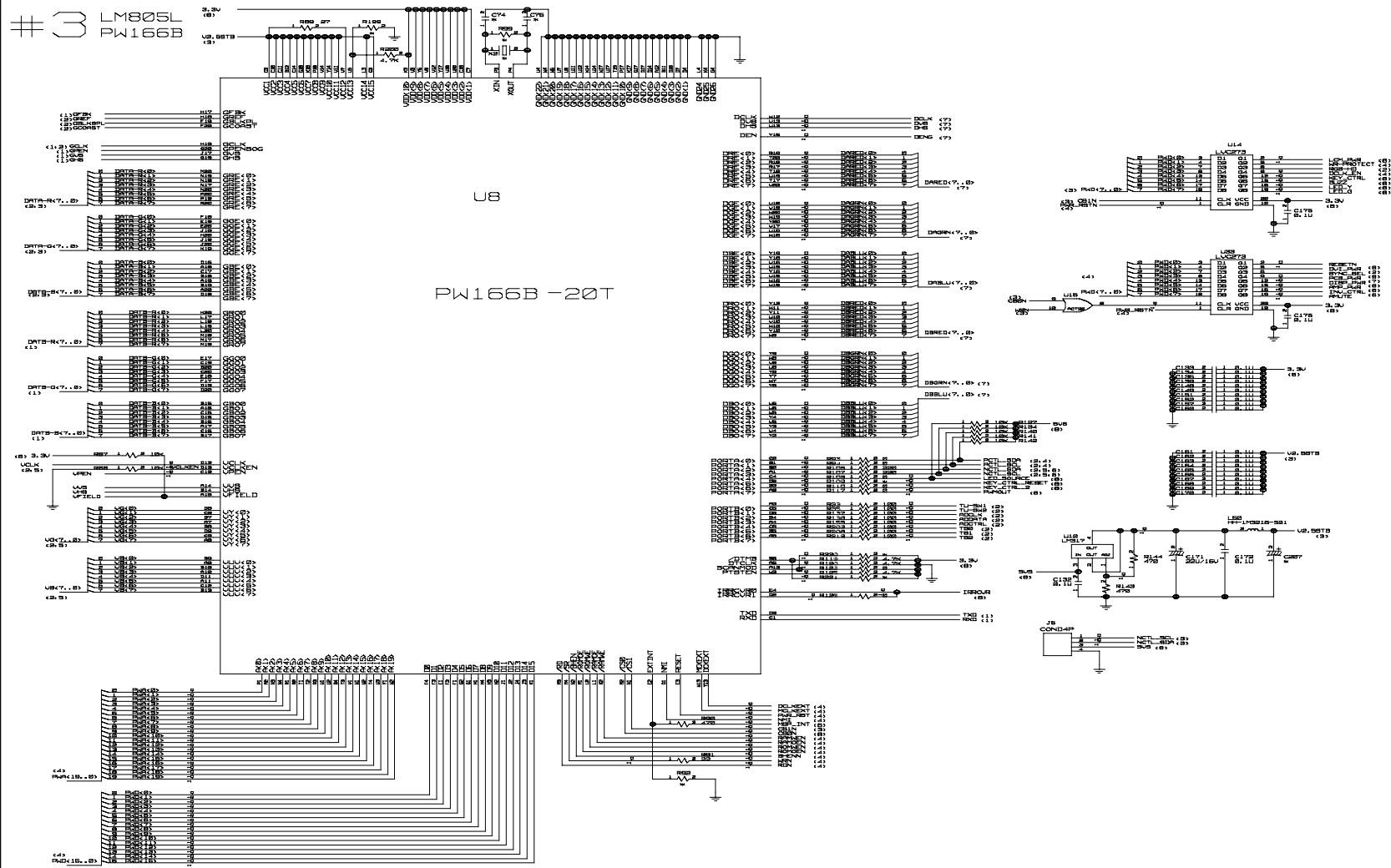
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DSUB/DVI/SIL161



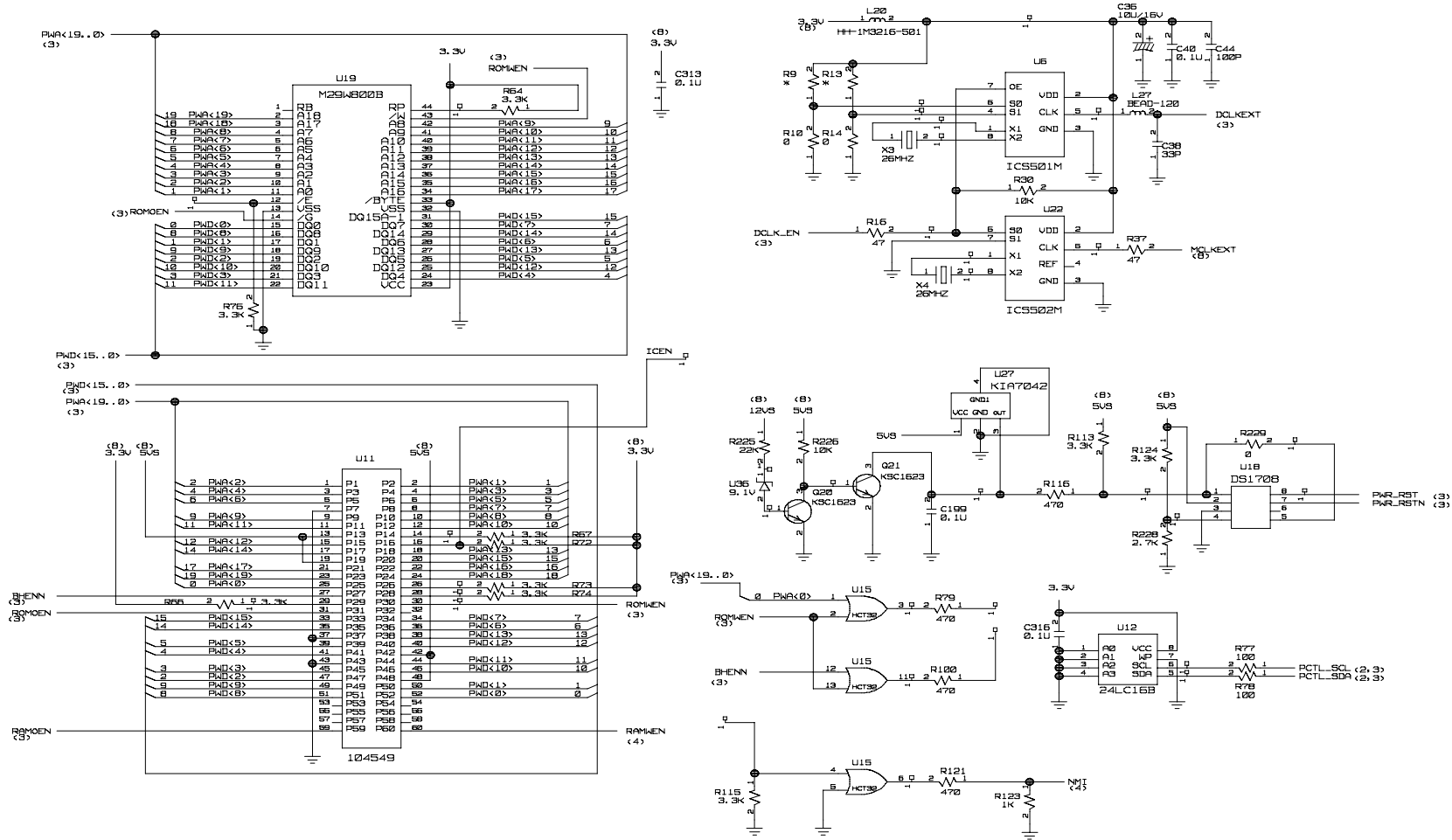
#2 LM805L BA7657/AD9883/SA7114/TUNER



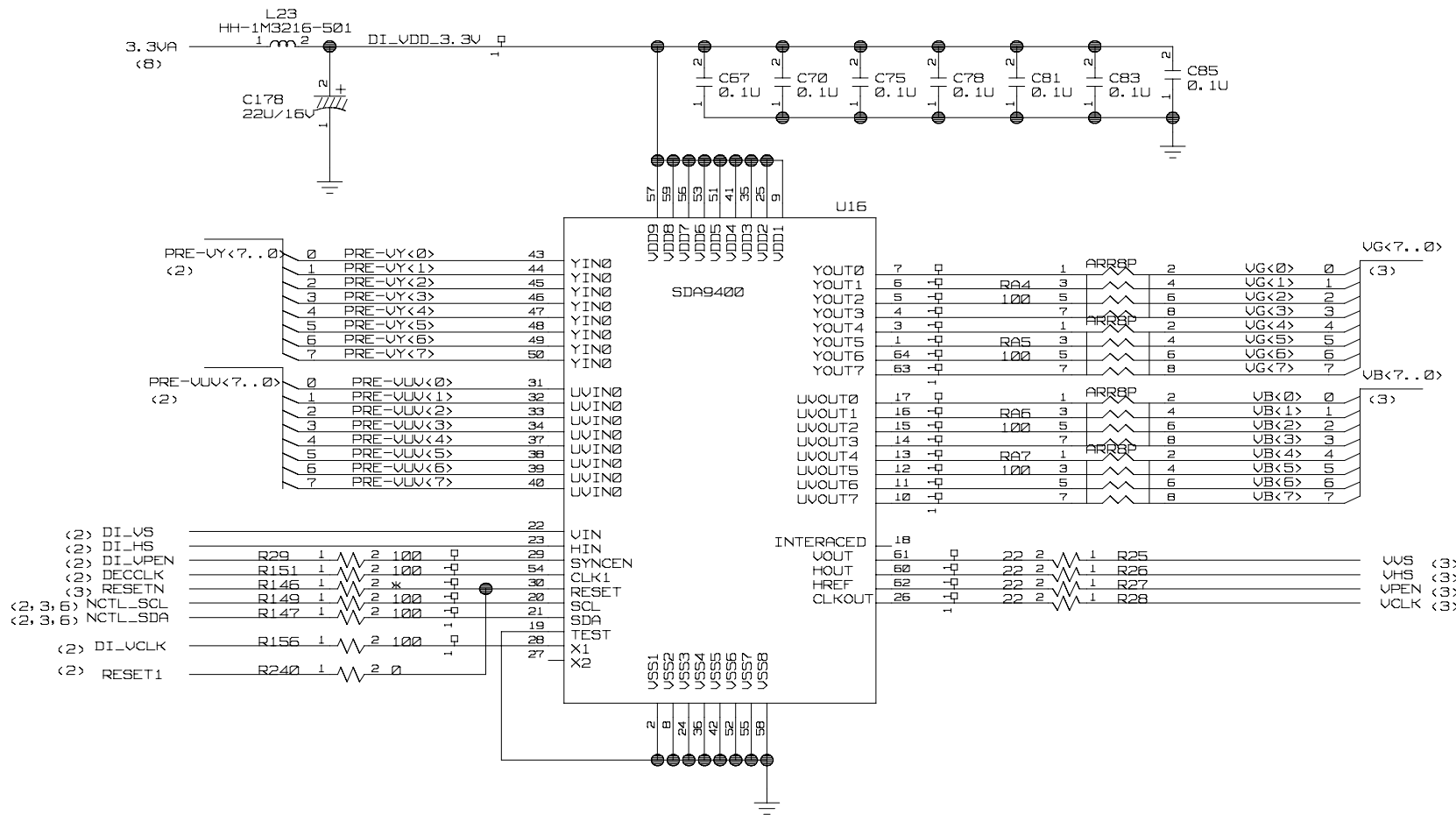
3. SCALER(PW166B)



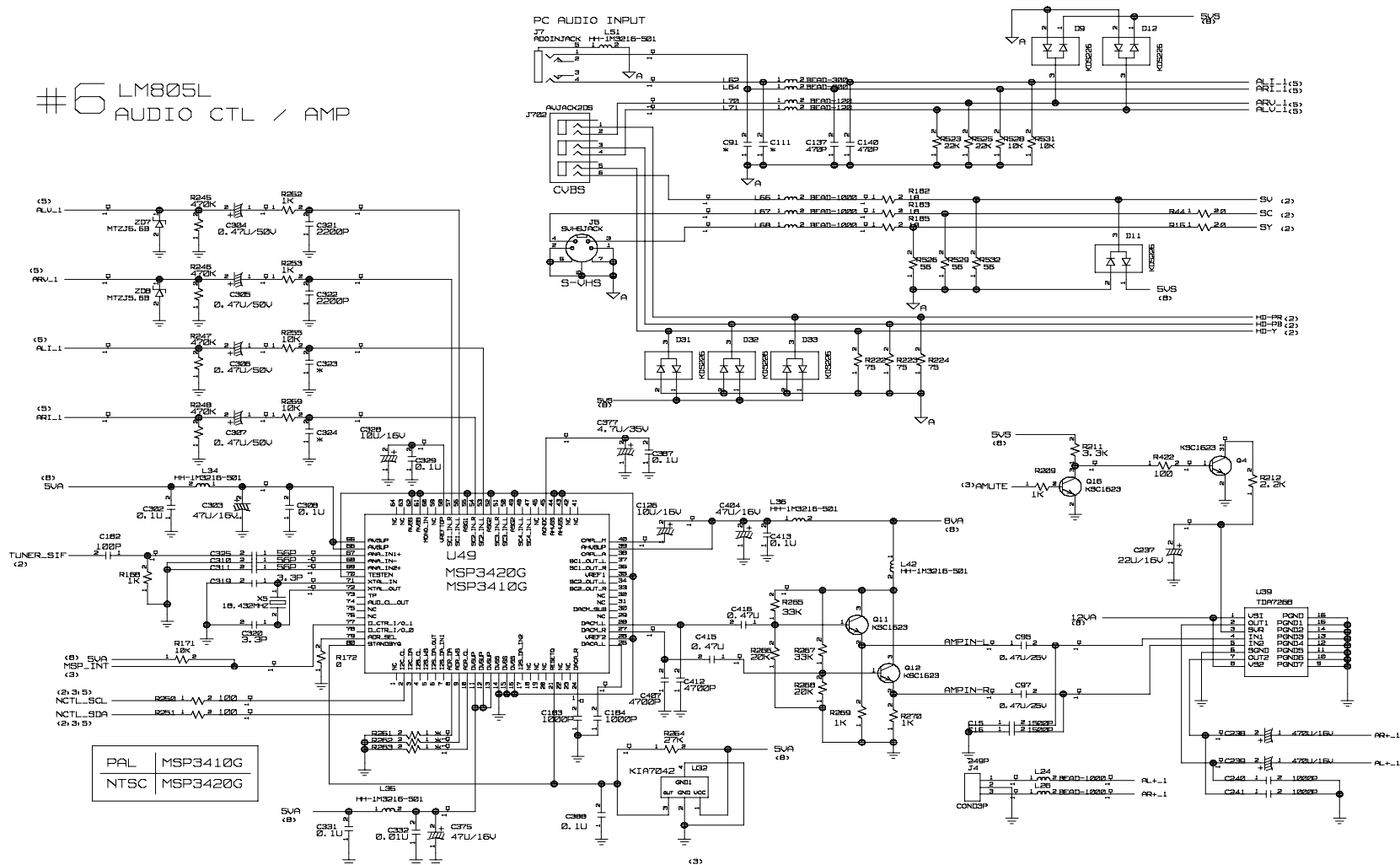
#4 LM805L TEST CON. / FLASH MEMORY



#5 LM805L
DEINTERLACER<SDA9400>

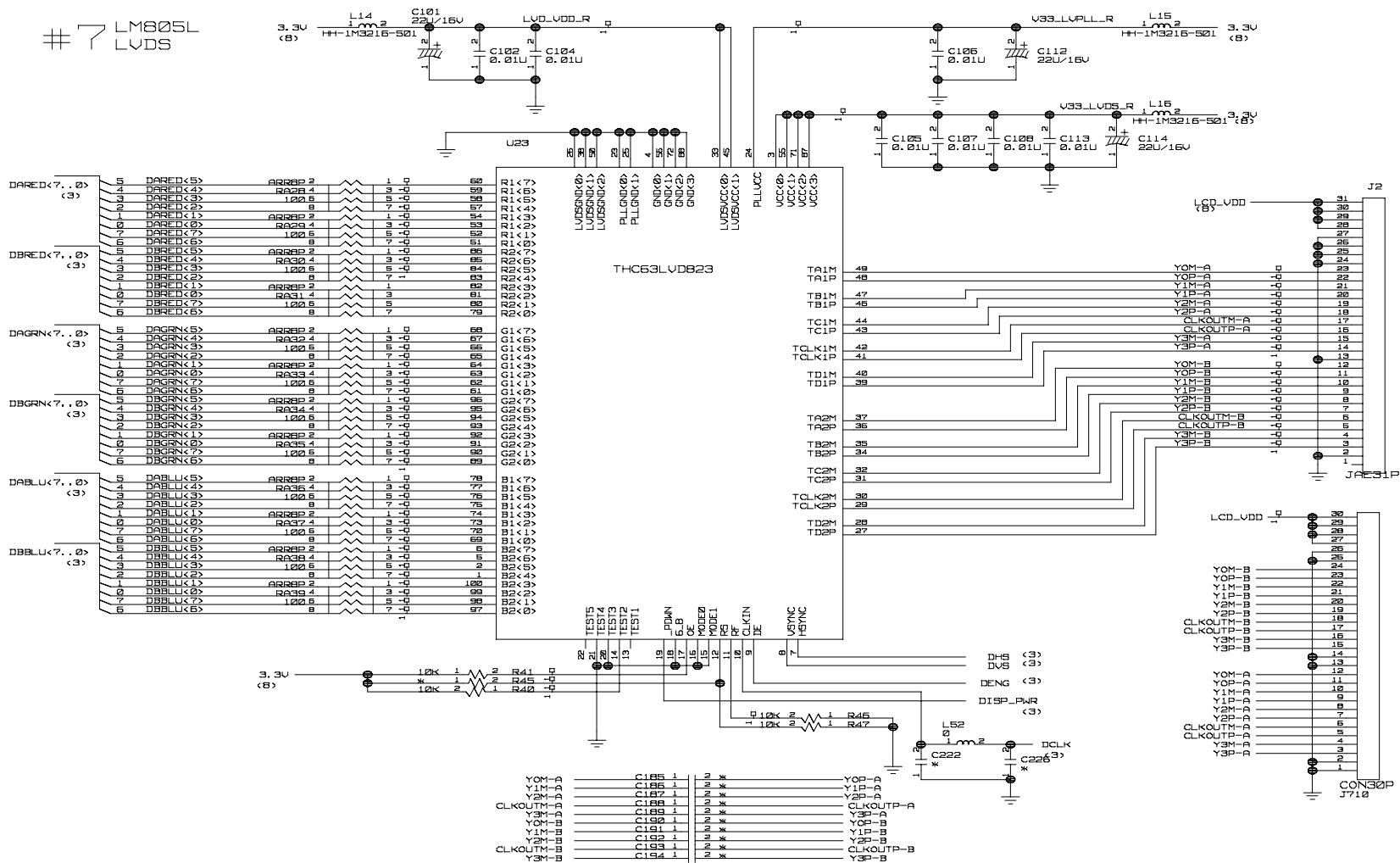


#6 LM805L
AUDIO CTL / AMP

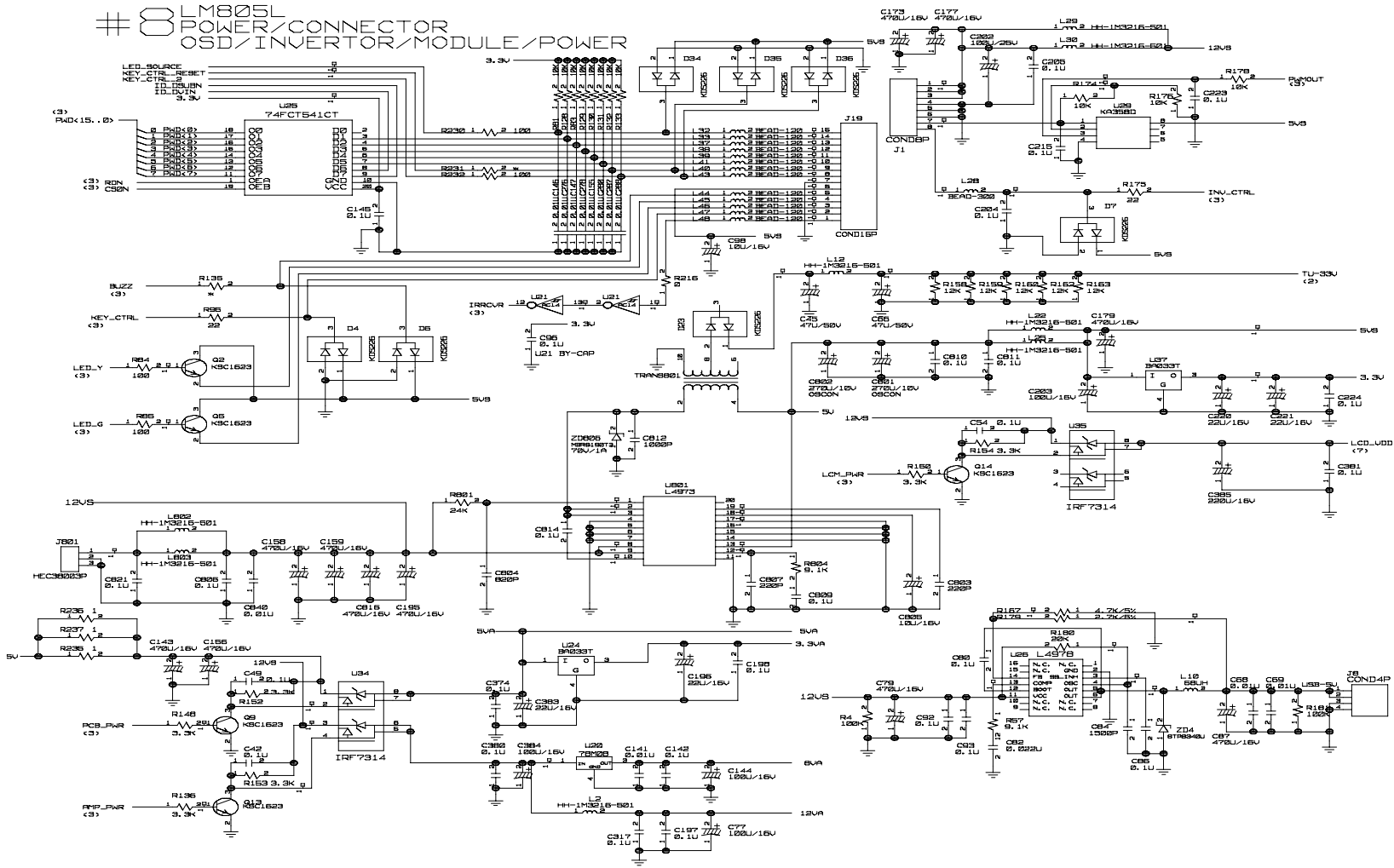


7. LVDS

#7 LM805L
LVDS

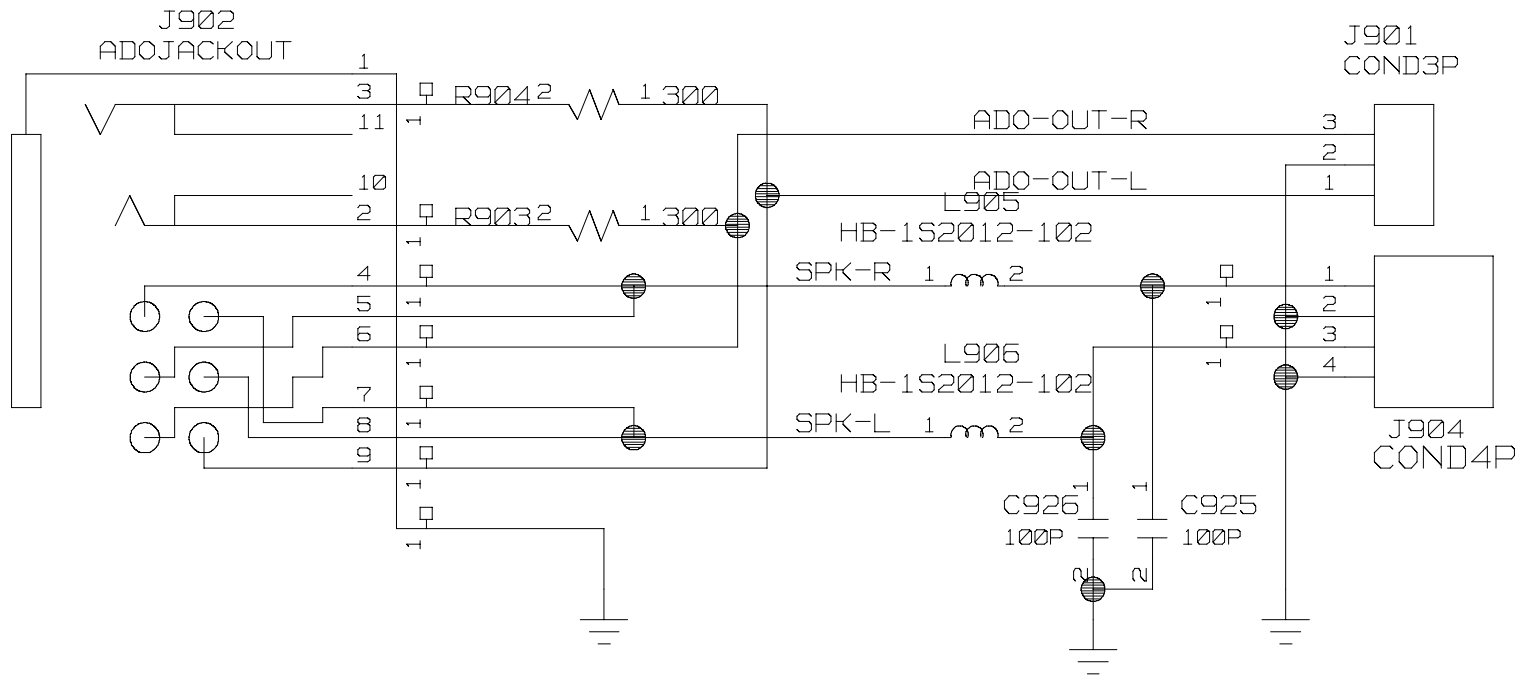


#8 LM805L POWER/CONNECTOR OSD/INVERTOR/MODULE/POWER



LM805 AUDIO

GREEN/BLACK



1 LM805L KEY CONTROL

