COLOR MONITOR
SERVICE MANUAL

CHASSIS NO. : CL-74

MODEL: 2005FPW

CAUTION

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

CONTENTS

SPECIFICATIONS

1. LCD CHARACTERISTICS

Type	: TFT WSXGA LCD
Size	: 20.1inch
Pixel Pitch	: 0.258(H) x 0.258(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 : 88°(Typ) / **Right** : 88°(Typ)
Top : 88°(Typ) / **Bottom** : 88°(Typ)

2-2. Luminance : 220(min), 300(Typ)

2-3. Contrast Ratio : 400(min), 600(Typ)

3. SIGNAL (Refer to the Timing Chart)

3-1. Sync Signal
- Type : Separate, SOG (Sync On Green) Digital

3-2. Video Input Signal

1) Type	: R, G, B Analog
2) Voltage Level	: 0~0.7 V
3) Input Impedance	: 75 Ω

3-3. Operating Frequency

Horizontal	: 30 ~ 81kHz
Vertical	: 56 ~ 75Hz

4. RESOLUTION

MAX/Recommend : 1680 x 1050 @60Hz

5. POWER SUPPLY

5-1. Power Adaptor(Built-in Power)
Input : AC 100-240V, 50/60Hz , 1.6A

5-2. Power Consumption

MODE		H/V SYNC	VIDEO	POWER CONSUMPTION	LED COLOR
Power s/w on	NORMAL	ON/ON	ACTIVE	less than 75 W	GREEN
Power s/w On (Audio, USB Detach)	STAND-BY	OFF/ON	OFF	less than 3 W	AMBER
	SUSPEND	ON/OFF	OFF	less than 3 W	AMBER
	DPMS OFF	OFF/OFF	OFF	less than 3 W	AMBER
Power S/W Off (Audio, USB Detach)		-	-	less than 1 W@110VAC	-

6. ENVIRONMENT

6-1. Operating Temperature:	5°C~35°C (50°F~95°F) (Ambient)
6-2. Relative Humidity	: 10%~80% (Non-condensing)
6-3. MTBF	: 70,000 Hours(Min),
Lamp Life	: 40,000 Hours(Min)

7. DIMENSIONS (with TILT/SWIVEL)

Width	: 398.6 mm (15.61")
Depth	: 224.6 mm (9.33")
Height	: 537.8 mm (16.81")

8. WEIGHT (with TILT/SWIVEL)

Net. Weight	: 7.8kg (17.19 lbs)
Gross Weight	: 10.0kg (22.05 lbs)

9. USB

Upstream : 1 port, Downstream : 4 port
Speed : Full-12Mbps, Low-1.5Mbps
High Speed : 480Mbps(USB 2.0)

10. Dot Specification

1) Bright Dot
Bright Dot is defined as Dots (sub-pixels) which appeared brightly in the screen when the LCM Displayed with dark pattern.
- Total amount of Bright dots ·····1
- Partial bright dot(in 30°± distance, Full Black) ·····8

2) Dark Dot
Dark Dot is defined as Dots(sub-pixels) which appeared darkly in the screen when the LCM displayed with bright pattern.
- Total amount of Dark dot ·····4

3) Total amount of Dot Defects ·····5

∗ Brightness guarantee within warranty period (15 months)
: More than 70% of minimum specification

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 LG 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

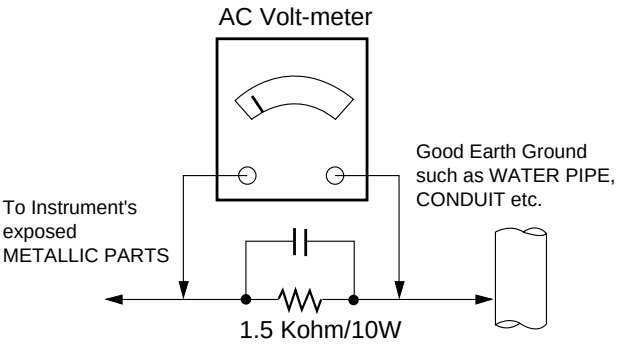
Please use only a plastic screwdriver to protect yourself from shock hazard during service operation.

⚠ 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.

Leakage Current Hot Check Circuit



SERVICING PRECAUTIONS

CAUTION: Before servicing receivers covered by this service manual and its supplements and addenda, read and follow the ***SAFETY PRECAUTIONS*** on page 3 of this publication.

NOTE: If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions on page 3 of this publication, always follow the safety precautions. Remember: Safety First.

General Servicing Precautions

1. Always unplug the receiver AC power cord from the AC power source before;
   a. Removing or reinstalling any component, circuit board module or any other receiver assembly.
   b. Disconnecting or reconnecting any receiver electrical plug or other electrical connection.
   c. Connecting a test substitute in parallel with an electrolytic capacitor in the receiver.
      CAUTION: A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.
   d. Discharging the picture tube anode.
2. Test high voltage only by measuring it with an appropriate high voltage meter or other voltage measuring device (DVM, FETVOM, etc) equipped with a suitable high voltage probe.
   Do not test high voltage by "drawing an arc".
3. Discharge the picture tube anode only by (a) first connecting one end of an insulated clip lead to the degaussing or kine aquadag grounding system shield at the point where the picture tube socket ground lead is connected, and then (b) touch the other end of the insulated clip lead to the picture tube anode button, using an insulating handle to avoid personal contact with high voltage.
4. Do not spray chemicals on or near this receiver or any of its assemblies.
5. Unless specified otherwise in this service manual, clean electrical contacts only by applying the following mixture to the contacts with a pipe cleaner, cotton-tipped stick or comparable non-abrasive applicator; 10% (by volume) Acetone and 90% (by volume) isopropyl alcohol (90%-99% strength)
   CAUTION: This is a flammable mixture.
   Unless specified otherwise in this service manual, lubrication of contacts in not required.
6. Do not defeat any plug/socket B+ voltage interlocks with which receivers covered by this service manual might be equipped.
7. Do not apply AC power to this instrument and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
8. Always connect the test receiver ground lead to the receiver chassis ground before connecting the test receiver positive lead.
   Always remove the test receiver ground lead last.
9. *Use with this receiver only the test fixtures specified in this service manual.*
   CAUTION: Do not connect the test fixture ground strap to any heat sink in this receiver.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid-state) devices can be damaged easily by static electricity. Such components commonly are called *Electrostatically Sensitive (ES) Devices.* Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed to prevent potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static type solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

General Soldering Guidelines

1. Use a grounded-tip, low-wattage soldering iron and appropriate tip size and shape that will maintain tip temperature within the range or 500˚F to 600˚F.
2. Use an appropriate gauge of RMA resin-core solder composed of 60 parts tin/40 parts lead.
3. Keep the soldering iron tip clean and well tinned.
4. Thoroughly clean the surfaces to be soldered. Use a mall wire-bristle (0.5 inch, or 1.25cm) brush with a metal handle.
   Do not use freon-propelled spray-on cleaners.
5. Use the following unsoldering technique
   a. Allow the soldering iron tip to reach normal temperature.
      (500˚F to 600˚F)
   b. Heat the component lead until the solder melts.
   c. Quickly draw the melted solder with an anti-static, suction-type solder removal device or with solder braid.
      CAUTION: Work quickly to avoid overheating the circuitboard printed foil.
6. Use the following soldering technique.
   a. Allow the soldering iron tip to reach a normal temperature (500˚F to 600˚F)
   b. First, hold the soldering iron tip and solder the strand against the component lead until the solder melts.
   c. Quickly move the soldering iron tip to the junction of the component lead and the printed circuit foil, and hold it there only until the solder flows onto and around both the component lead and the foil.
      CAUTION: Work quickly to avoid overheating the circuit board printed foil.
   d. Closely inspect the solder area and remove any excess or splashed solder with a small wire-bristle brush.

IC Remove/Replacement

Some chassis circuit boards have slotted holes (oblong) through which the IC leads are inserted and then bent flat against the circuit foil. When holes are the slotted type, the following technique should be used to remove and replace the IC. When working with boards using the familiar round hole, use the standard technique as outlined in paragraphs 5 and 6 above.

Removal

1. Desolder and straighten each IC lead in one operation by gently prying up on the lead with the soldering iron tip as the solder melts.
2. Draw away the melted solder with an anti-static suction-type solder removal device (or with solder braid) before removing the IC.

Replacement

1. Carefully insert the replacement IC in the circuit board.
2. Carefully bend each IC lead against the circuit foil pad and solder it.
3. Clean the soldered areas with a small wire-bristle brush. (It is not necessary to reapply acrylic coating to the areas).

"Small-Signal" Discrete Transistor Removal/Replacement

1. Remove the defective transistor by clipping its leads as close as possible to the component body.
2. Bend into a "U" shape the end of each of three leads remaining on the circuit board.
3. Bend into a "U" shape the replacement transistor leads.
4. Connect the replacement transistor leads to the corresponding leads extending from the circuit board and crimp the "U" with long nose pliers to insure metal to metal contact then solder each connection.

Power Output, Transistor Device Removal/Replacement

1. Heat and remove all solder from around the transistor leads.
2. Remove the heat sink mounting screw (if so equipped).
3. Carefully remove the transistor from the heat sink of the circuit board.
4. Insert new transistor in the circuit board.
5. Solder each transistor lead, and clip off excess lead.
6. Replace heat sink.

Diode Removal/Replacement

1. Remove defective diode by clipping its leads as close as possible to diode body.
2. Bend the two remaining leads perpendicular y to the circuit board.
3. Observing diode polarity, wrap each lead of the new diode around the corresponding lead on the circuit board.
4. Securely crimp each connection and solder it.
5. Inspect (on the circuit board copper side) the solder joints of the two "original" leads. If they are not shiny, reheat them and if necessary, apply additional solder.

Fuse and Conventional Resistor Removal/Replacement

1. Clip each fuse or resistor lead at top of the circuit board hollow stake.
2. Securely crimp the leads of replacement component around notch at stake top.
3. Solder the connections.
   CAUTION: Maintain original spacing between the replaced component and adjacent components and the circuit board to prevent excessive component temperatures.

Circuit Board Foil Repair

Excessive heat applied to the copper foil of any printed circuit board will weaken the adhesive that bonds the foil to the circuit board causing the foil to separate from or "lift-off" the board. The following guidelines and procedures should be followed whenever this condition is encountered.

At IC Connections

To repair a defective copper pattern at IC connections use the following procedure to install a jumper wire on the copper pattern side of the circuit board. (Use this technique only on IC connections).

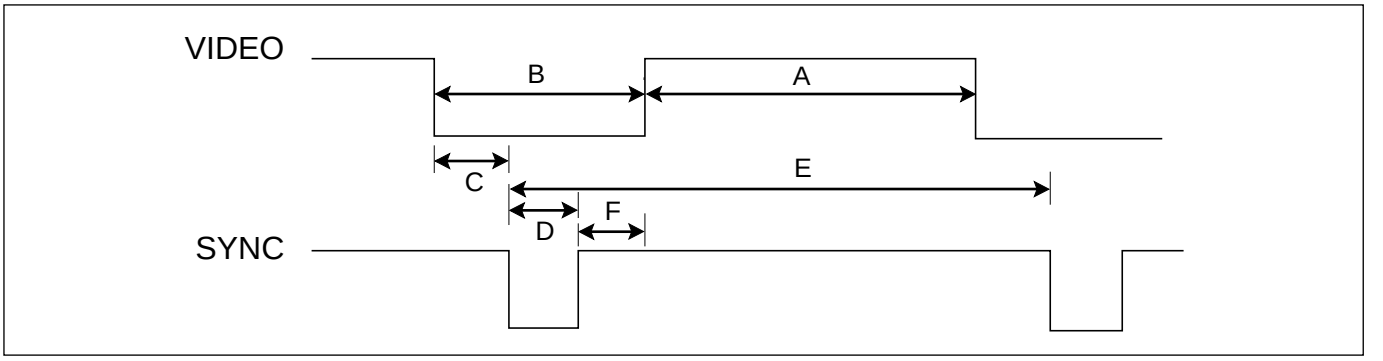
1. Carefully remove the damaged copper pattern with a sharp knife. (Remove only as much copper as absolutely necessary).
2. carefully scratch away the solder resist and acrylic coating (if used) from the end of the remaining copper pattern.
3. Bend a small "U" in one end of a small gauge jumper wire and carefully crimp it around the IC pin. Solder the IC connection.
4. Route the jumper wire along the path of the out-away copper pattern and let it overlap the previously scraped end of the good copper pattern. Solder the overlapped area and clip off any excess jumper wire.

At Other Connections

Use the following technique to repair the defective copper pattern at connections other than IC Pins. This technique involves the installation of a jumper wire on the component side of the circuit board.

1. Remove the defective copper pattern with a sharp knife.
   Remove at least 1/4 inch of copper, to ensure that a hazardous condition will not exist if the jumper wire opens.
2. Trace along the copper pattern from both sides of the pattern break and locate the nearest component that is directly connected to the affected copper pattern.
3. Connect insulated 20-gauge jumper wire from the lead of the nearest component on one side of the pattern break to the lead of the nearest component on the other side.
   Carefully crimp and solder the connections.
   CAUTION: Be sure the insulated jumper wire is dressed so the it does not touch components or sharp edges.

TIMING CHART



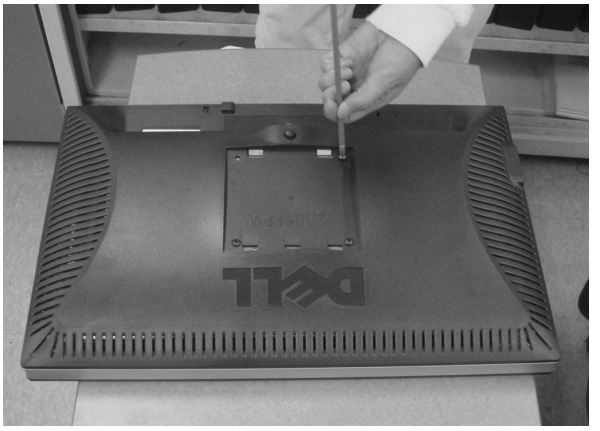
<< Dot Clock **(MHz),** Horizontal Frequency **(kHz)**, Vertical Frequency **(Hz)**, Horizontal etc... **(µs)**, Vertical etc... **(ms) >>**

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	–	28.321	31.468	900	720	18	108	54	**720x400 70Hz**
	V	+		70.08	449	400	12	2	35	
2	H	–	25.175	31.469	800	640	16	96	48	**640x480 60Hz**
	V	–		59.94	525	480	10	2	33	
3	H	–	31.5	37.5	840	640	16	64	120	**640x480 75Hz**
	V	–		75	500	480	1	3	16	
4	H	+	40.0	37.879	1056	800	40	128	88	**800x600 60Hz**
	V	+		60.317	628	600	1	4	23	
5	H	+	49.5	46.875	1056	800	16	80	160	**800x600 75Hz**
	V	+		75.0	625	600	1	3	21	
6	H	–	65.0	48.363	1344	1024	24	136	160	**1024x768 60Hz**
	V	–		60.0	806	768	3	6	29	
7	H	–	78.75	60.123	1312	1024	16	96	176	**1024x768 75Hz**
	V	–		75.029	800	768	1	3	28	
8	H	+/–	108.0	67.500	1600	1152	64	128	256	**1152x864 75Hz**
	V	+/–		75.000	900	864	1	3	32	
9	H	+	108.0	63.981	1688	1280	48	112	248	**1280x1024 60Hz**
	V	+		60.02	1066	1024	1	3	38	
10	H	+	135.0	79.976	1688	1280	16	144	248	**1280x1024 75Hz**
	V	+		75.035	1066	1024	1	3	38	
11	H	–	146.25	65.920	2240	1680	104	176	280	**1680x1050 60Hz**
	V	+		59.954	1089	1050	3	6	30	

DISASSEMBLY

REAR CABINET REMOVEL.

1) Remove the screws.

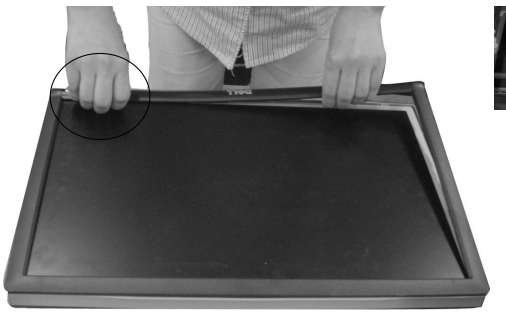


2) Please lift central inside edge of Cabinet upward with fingertip then latch will be departed.
(This time take care so that do not give damage on the module surface.)

3) Progress to left and lifts cabinet furtively and extracts latch.

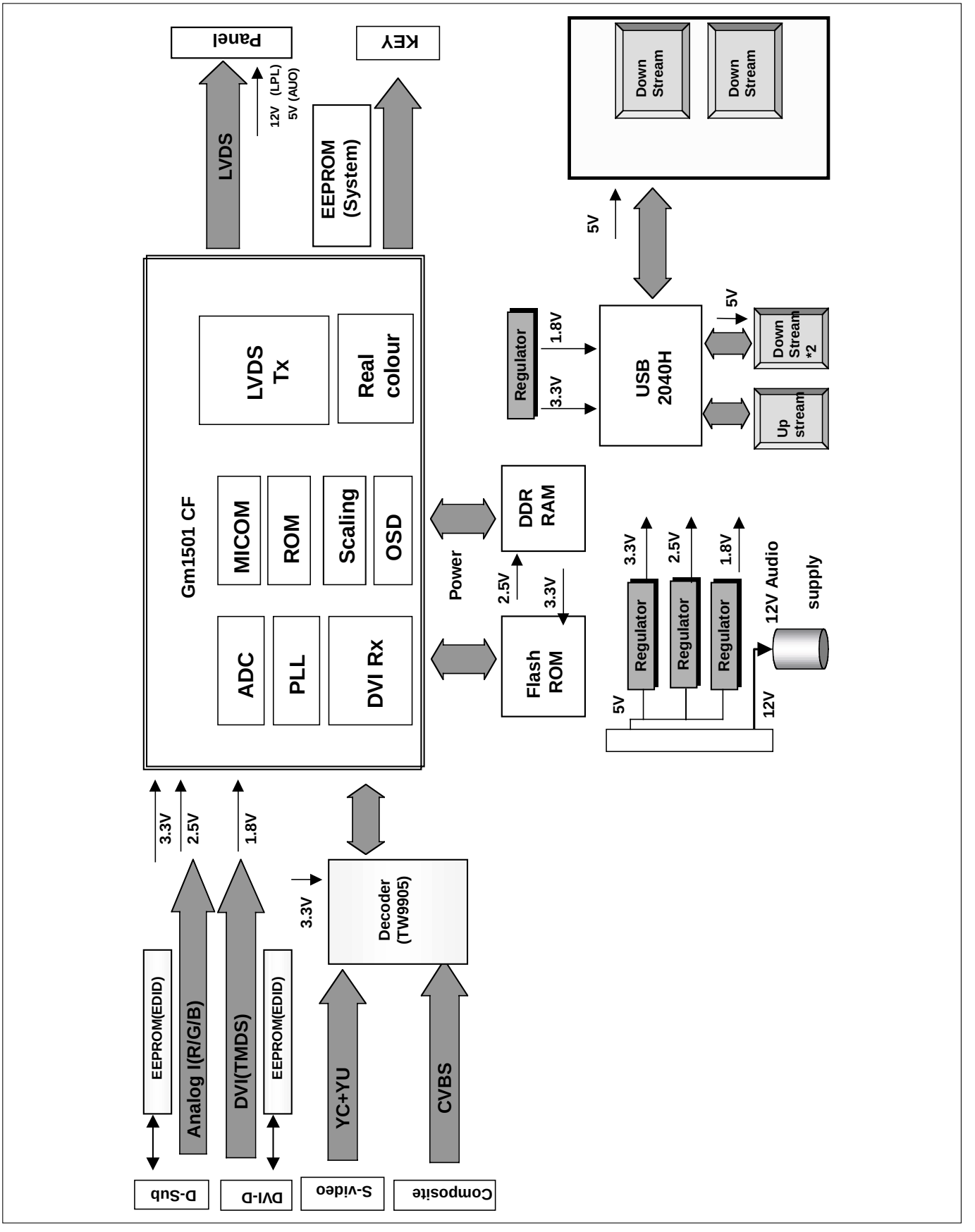
4) Progress to right and extracts cabinet side latch by same method.

5) Progress to bottom.
Warning : if you lift cabinet up, power connector lead may be disconnected or damaged.)
Refer to the small picture.



6) Turn upside down then lift the back cover ass'y up.

BLOCK DIAGRAM



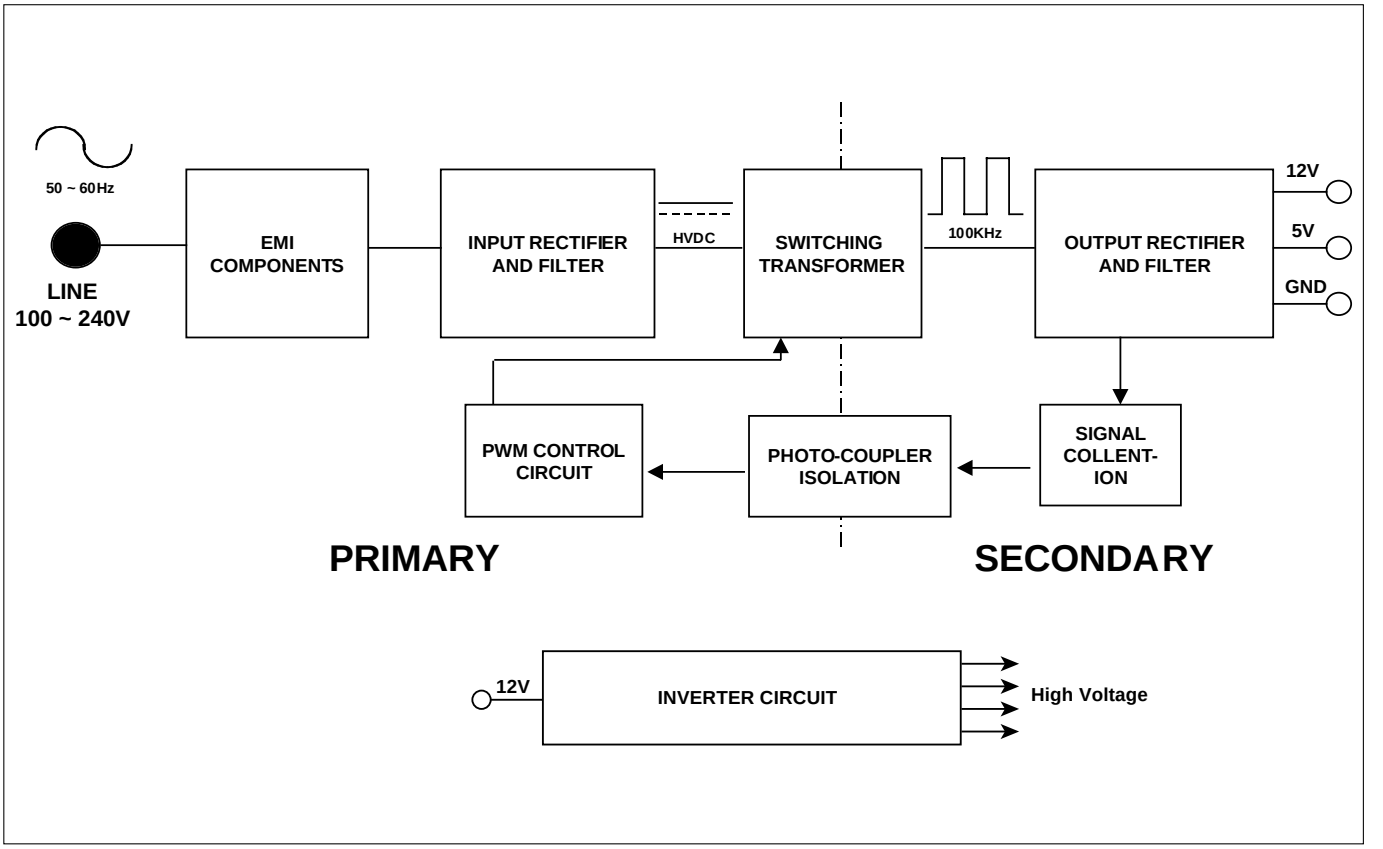
DESCRIPTION OF BLOCK DIAGRAM

1. Video Controller Part & Display Data Transmitter 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 147MHz.
This part consists of the Scaler, Flash-ROM IC which stores program data, Reset IC.
The Scaler gets the video signal converted analog to digital, interpolates input to 1680 x1050 resolution signal and outputs 8-bit R, G, B signal to transmitter.
Especially pre-amp / ADC / Video controller/ Transmitter are merged to one chip "Gm1501" by Genesis.
This part transmit digital signal from the Scaler to the receiver of module.s

2. Power Part

This part consists of the two 3.3V and one 2.5V and one 1.8Vregulators to convert power which is provided
12V in Power Board V is provided for LCD Panel.(Only LPL)
5V in Power Board V is provided for LCD Panel.(Only AUO)
12V in Power Board V is provided for Inverter Part.
Also, 5V is converted 3.3V and 2.5V and 1.8V by regulator. Converted power is provided for IC in the main board.



Operation description_Power

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

7. Inverter

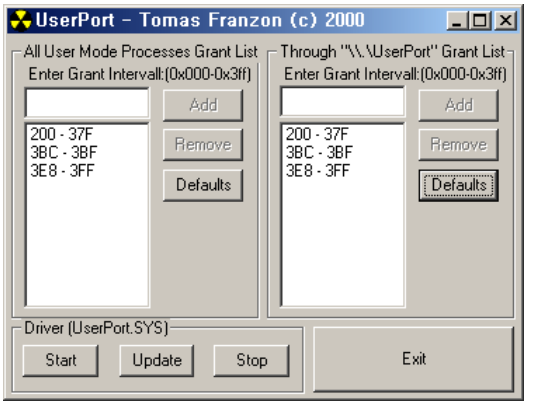
The inverter converts from DC12V to AC 840Vrms and operate back-light lamp of module.

ADJUSTMENT

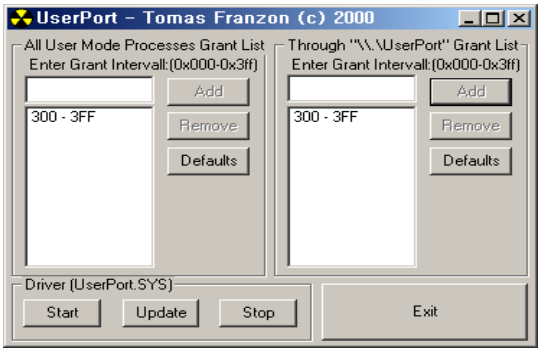
Windows EDID V1.0 User Manual

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

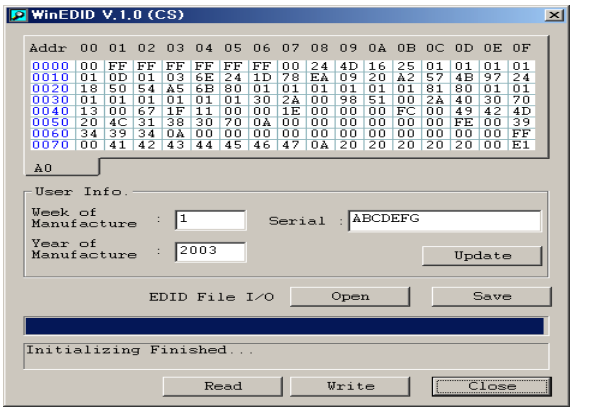


   c) Remove all default number
   d) Add 300-3FF

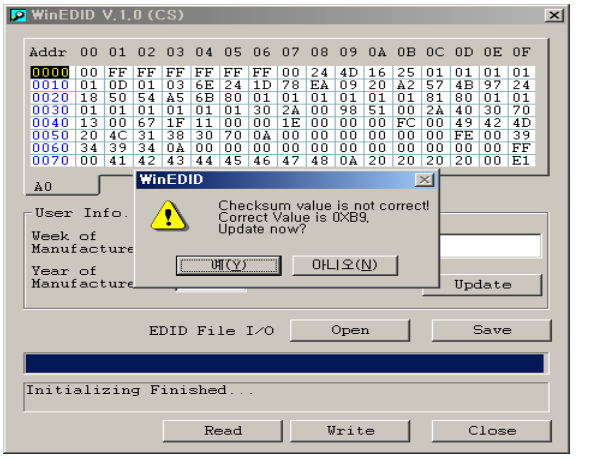


   e) Click Start button.
   f) Click Exit button.

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 the display.

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

3) The SVC OSD menu contains additional menus that the User OSD menu as described below.

a)WB Adjust : To adjust ADC cutoff/gain.
Use Black pattern for cutoff adjustment and press Menu. If the number change to 1, cutoff adjustment is ok.
Use Full white pattern for gain adjustment and press Menu. If the number change to 2, gain adjustment is ok.
b)NVRAM Init : EEPROM initialize(24c16.
c)Reset Time : Reset elapsed time.
d)Aging : Select Aging mode (On/Off).
e)WProtect : To enable write protection.(24c02)
f)Blue : Allows you to set the R/G/B - 9300K value manually
g)Red : Allows you to set the R/G/B - 5700K value manually
h)Normal : Allows you to set the R/G/B - 6500K value manually

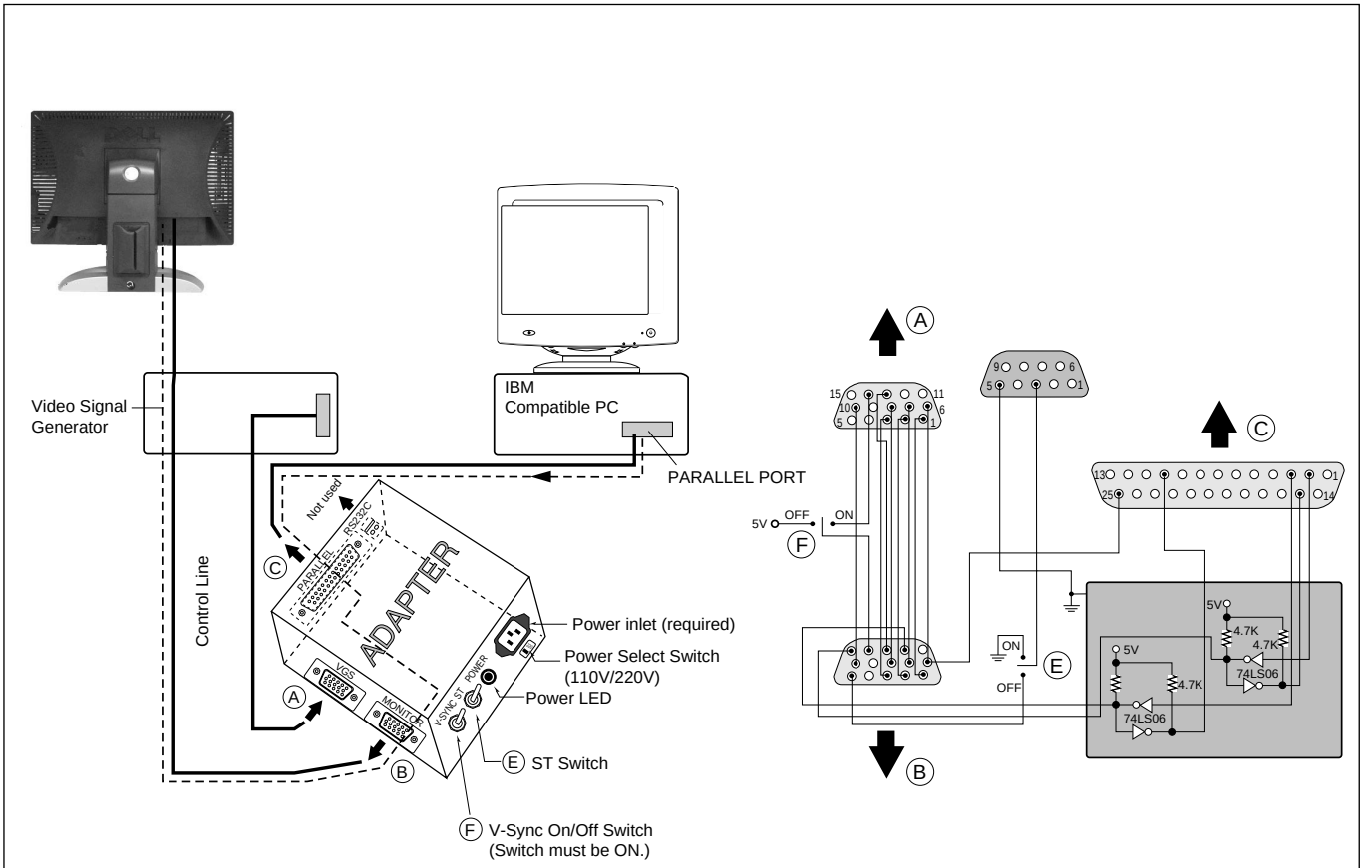
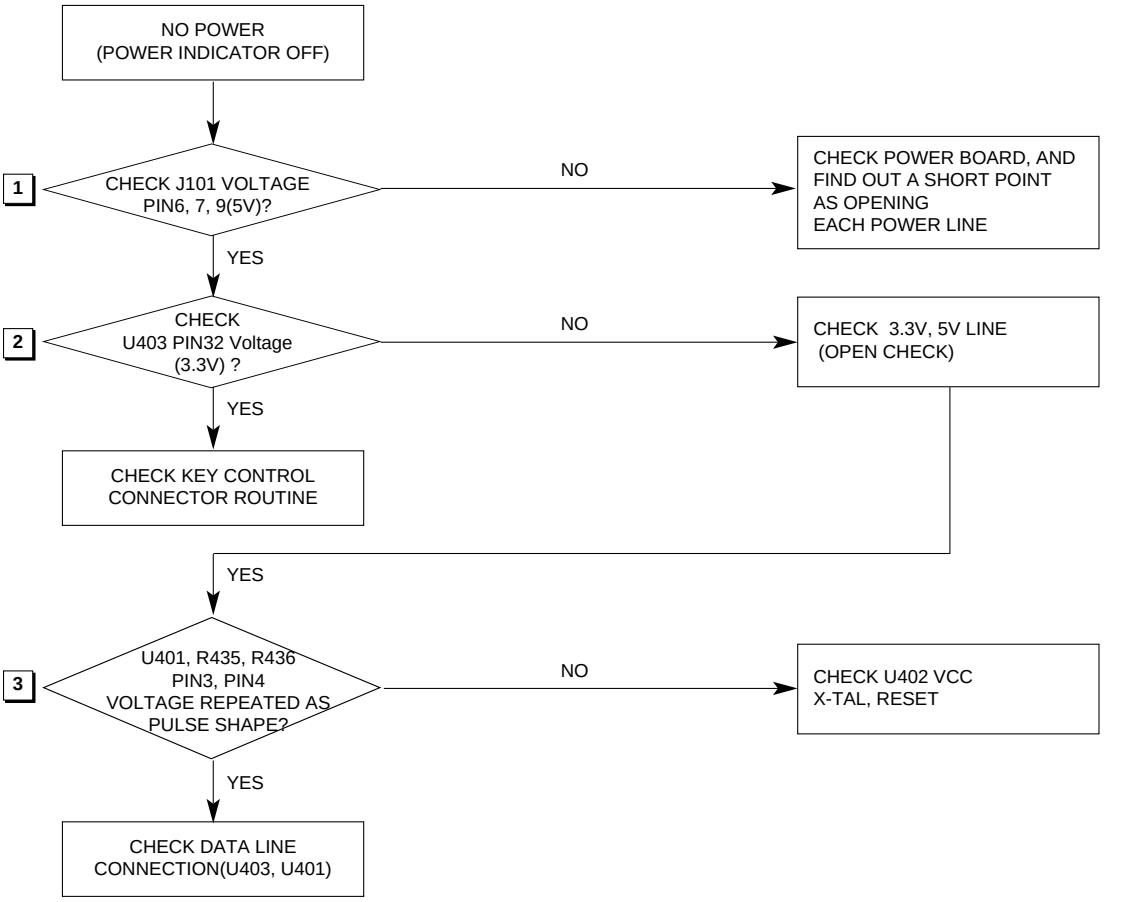


Figure 1. Cable Connection

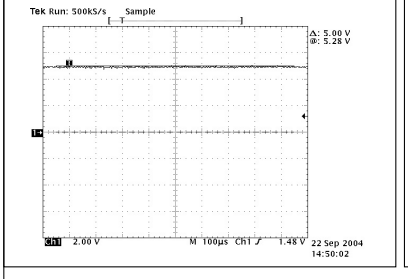
TROUBLESHOOTING GUIDE

1. NO POWER

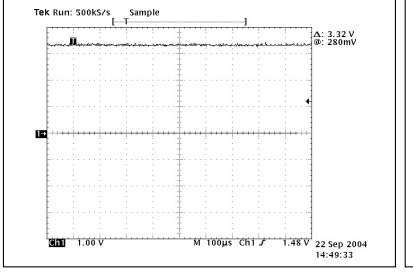


Waveforms

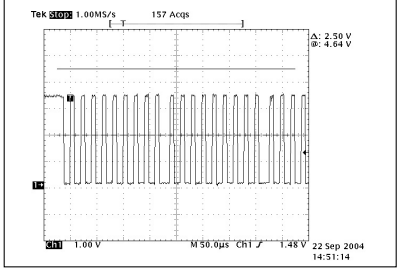
1 J101-#6,7,9(5V)



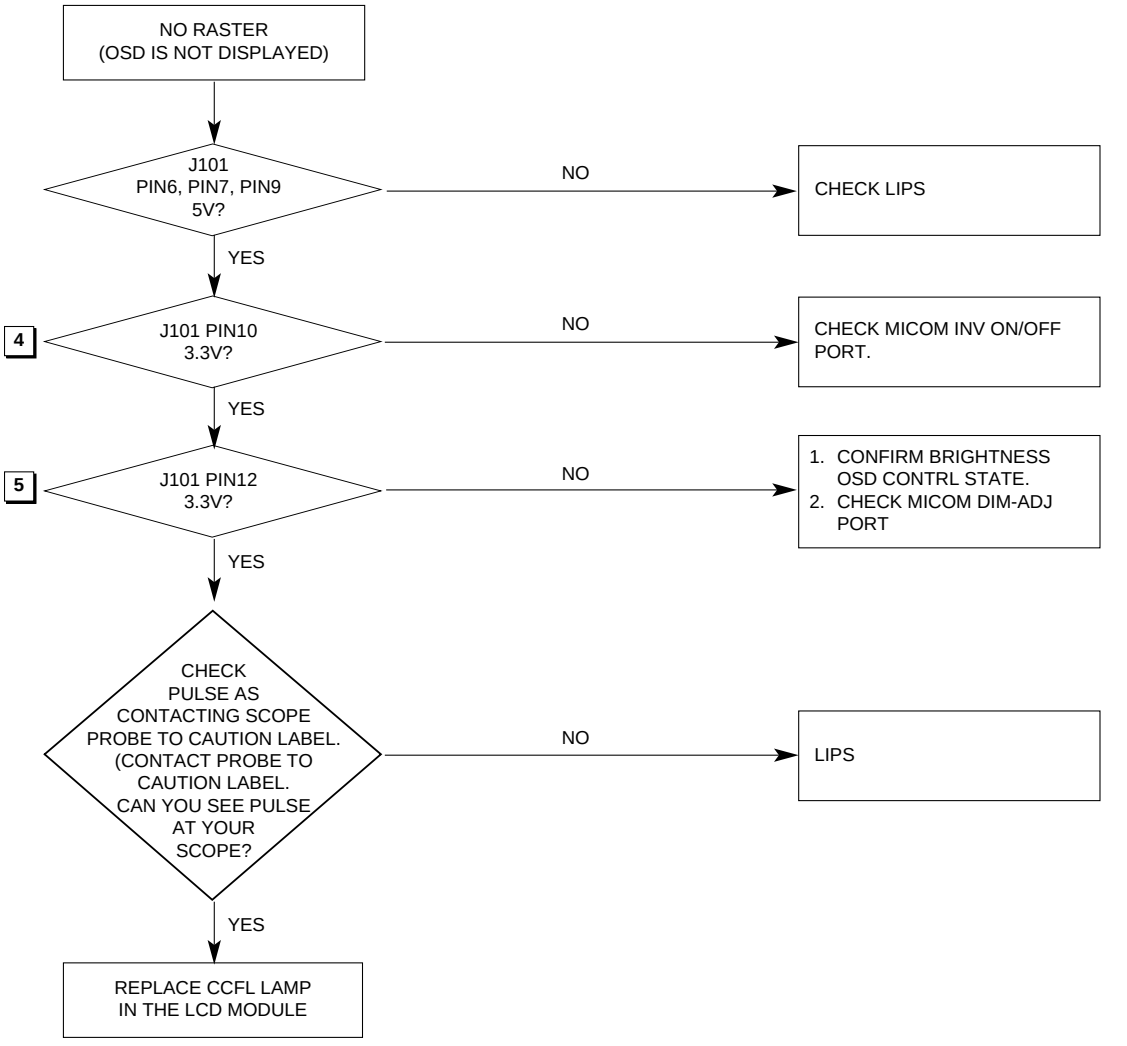
2 U403-#32(3.3V)



3 U401, R435, R436-#3, 4

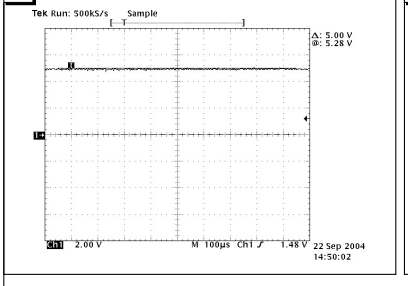


2. NO RASTER (OSD IS NOT DISPLAYED) – LIPS

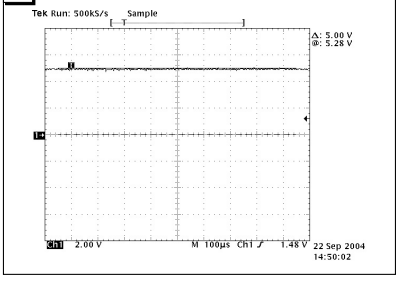


Waveforms

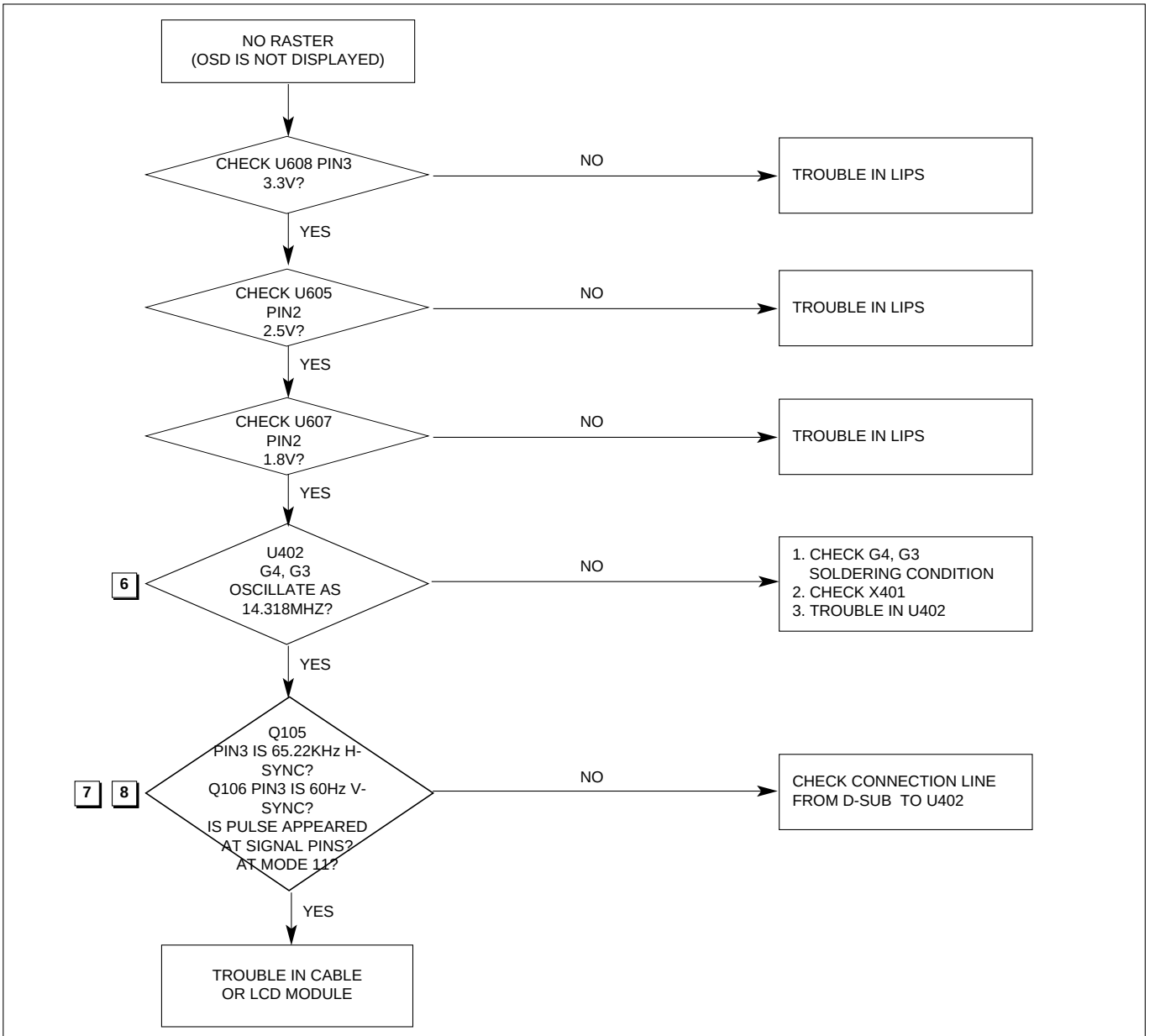
4 J101-#10(3.3V)



5 J101-#12(3.3V)

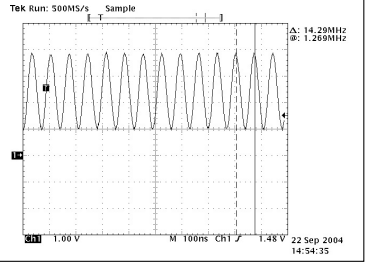


3. NO RASTER (OSD IS NOT DISPLAYED) – GM1501CF

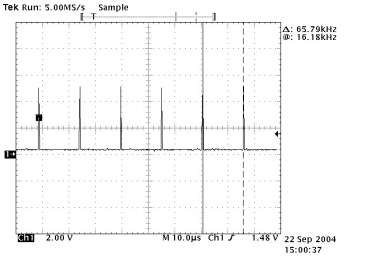


Waveforms

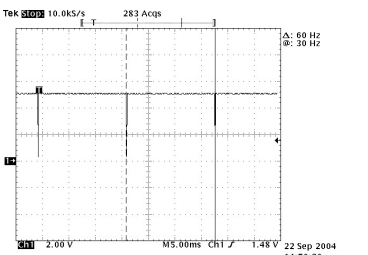
6 U402-G4, G43(14.318V)



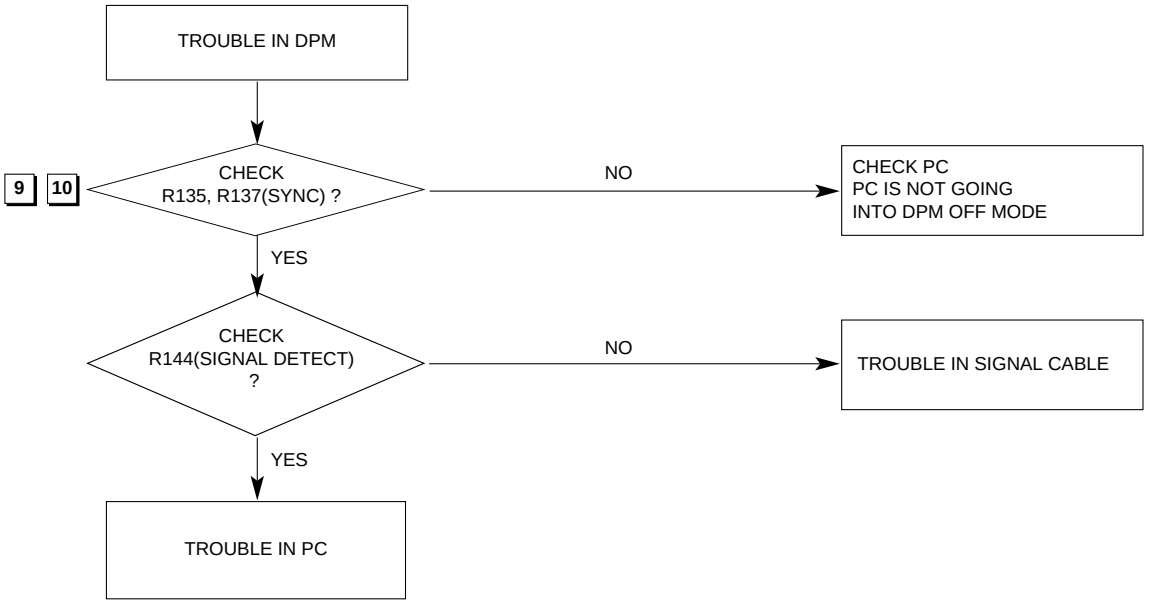
7 Q105-#3



8 Q106-#3

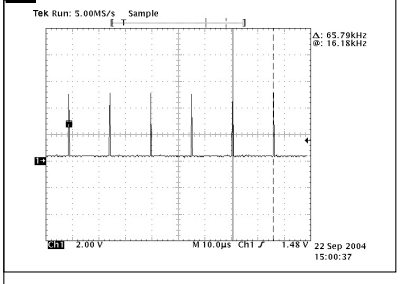


4. TROUBLE IN DPM

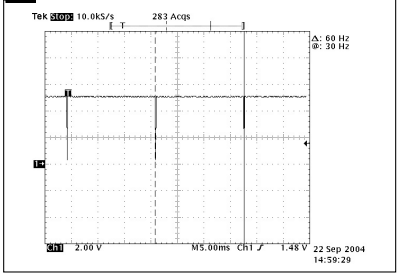


Waveforms

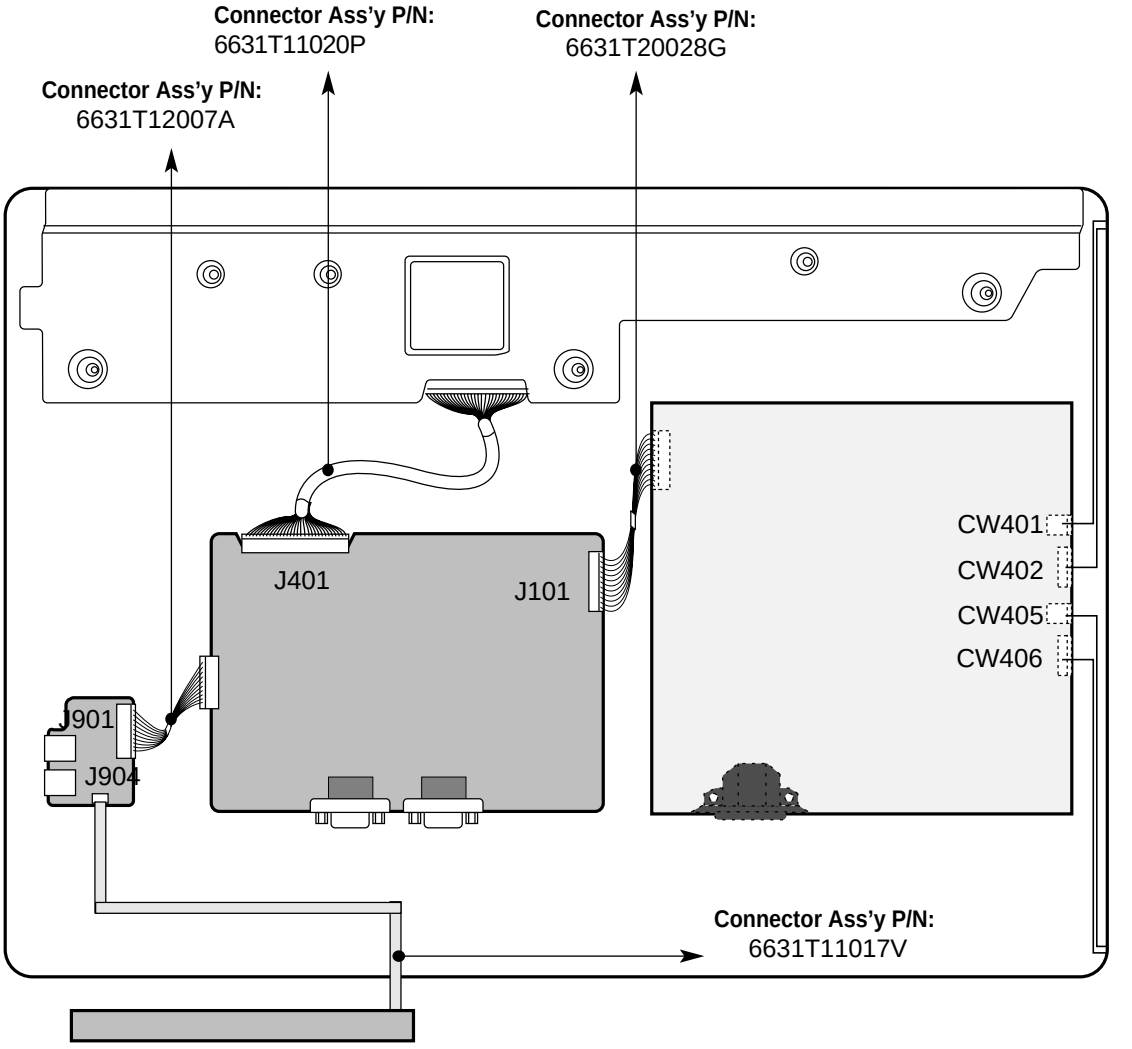
9 R135,R137-V-SYNC



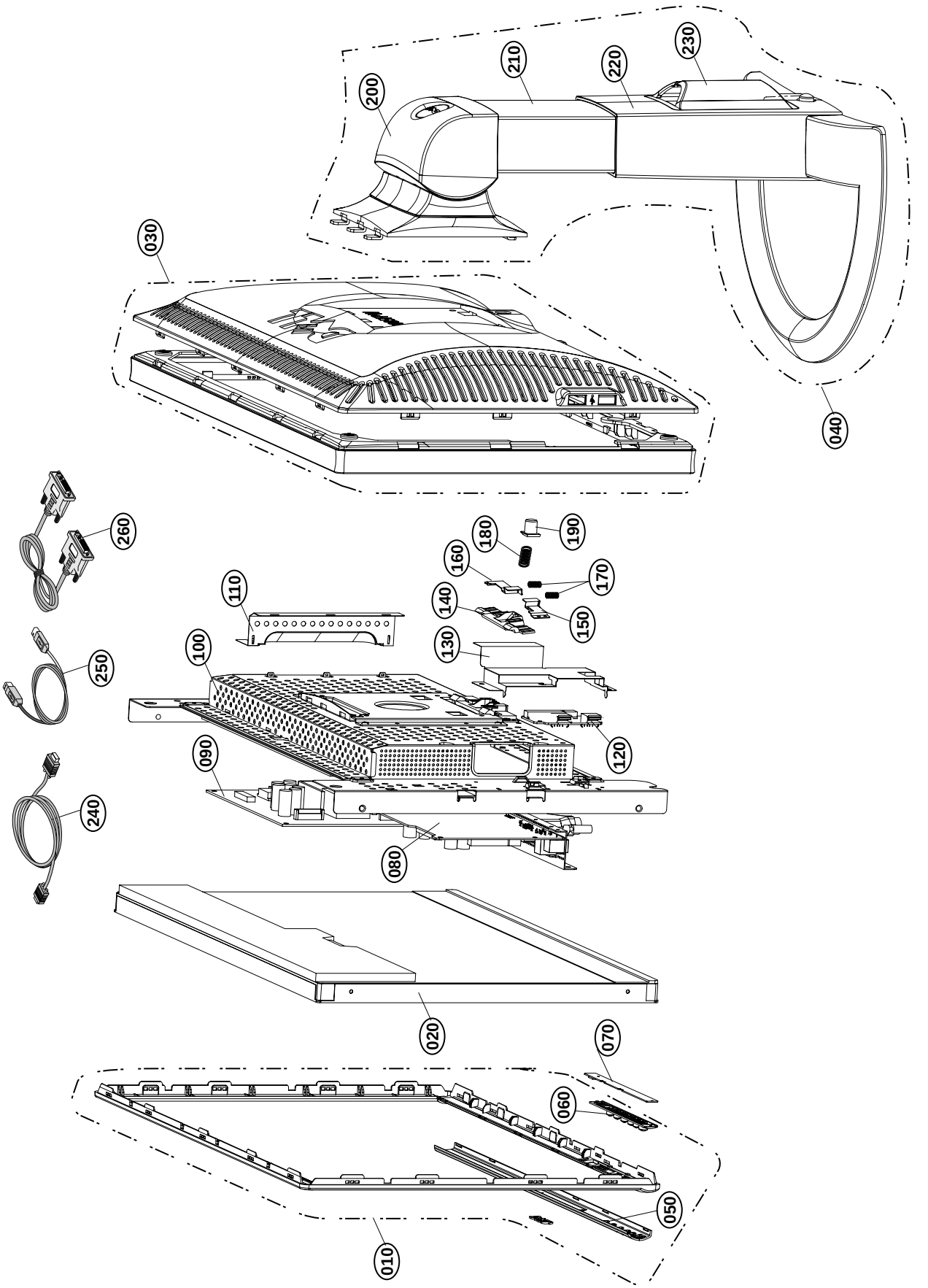
10 R135,R137-H-SYNC



WIRING DIAGRAM



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

Ref. No.	Part No.	Description
010	3091TKL126B	CABINET ASSEMBLY, LD20FPWM DELL L111A PC+ABS FOR P.P
020	6304FLP161A	LCD(LIQUID CRYSTAL DISPLAY), LM201W01-B5 LG PHILPS TFT COLOR 300NITS,16MS,NEC SOURCE D- IC,LVDS
	6304FLP164A	LCD(LIQUID CRYSTAL DISPLAY), LM201W01-B5K1 LG PHILPS TFT COLOR 300NITS,16MS,TI SOURCE D-IC,LVDS
030	3809TKL087A	BACK COVER ASSEMBLY, LD20FPWM L090A PC+ABS
040	3043TKK205B	TILT SWIVEL ASSEMBLY, LD20FPWM . 20.1"" FOR PP
050	3550TKK684A	COVER, LD20FPWM FRONT ACCENT DELL[20.1""]
060	4940TKP165A	KNOB, POWER KNOB DELL[20.1""]
070	6871TST735A	PWB(PCB) ASSEMBLY, SUB, LD20FPWM SUB TOTAL DELL 20.1WSXGA
080	3313TL2025A	MAIN TOTAL ASSEMBLY, LD2005FPWM DELL CL-74
090	6871TPT295A	PWB(PCB) ASSEMBLY,POWER, YUYANG POWER TOTAL DELL 20.1"" FOR LPL"
	6871TPT295B	PWB(PCB) ASSEMBLY,POWER, DELL 20.1"" POWER TOTAL SSE FOR LPL"
100	4951TKS176B	METAL ASSEMBLY, FRAME MAIN ASSEMBLY-LOCAL
110	4814TKK296A	SHIELD, INVERTER DELL[20.1""]
120	6871TUT041A	PWB(PCB) ASSEMBLY,USB LD20FPWM SUB TOTAL DELL USB TOTAL
130	4814TKK295A	SHIELD, USB DELL[20.1""]
140	4950TKK681A	METAL, STAND LOCK DELL 18.1"
150	4950TKK667A	METAL, FIX VESA LOCK LEFT DELL 18.1""
160	4950TKK668A	METAL, FIX VESA LOCK RIGHT DELL 18.1""
170	320-160T	SPRING, COIL D4.0 FOR STAND L1801
180	4940TKT198A	KNOB, SELF RETURN STAND RELEASE BUTTON DELL 18.1"""
190	320-160U	SPRING, COIL D5.0 FOR STAND L1801
200	3550TKK685A	COVER, LD20FPWM BASE TOP DELL[20.1""]
210	3550TKK687A	COVER, LD20FPWM STAND MID INNER DELL[20.1""]"
220	3550TKK686A	COVER, LD20FPWM STAND BODY OUTER DELL[20.1""]"
230	3550TKK691A	COVER, LD20FPWM CABLE CLIP_DELL[20.1""]"
240	6850TD9007D	CABLE,D-SUB, UL20276-9C(5.8MM) DT L1800,CORE POS400,,S/HEAD 1.8MM BLACK(9930) DELL 20.1 DM
250	6850TDU002A	CABLE,D-SUB, UL2725AWG28 TWI DT L1870MM BLACK(9930) USB2.0, LD20FPWM DM
260	6866TDV004U	CABLE,DVI, UL20276(7.5MM) DT 2000MM BLACK(9930) LD20FPWM,DELL,S/HEAD DM

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. 10. 05.

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		MAIN BOARD		
		CAPACITORS		
		C101	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C102	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C103	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C104	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C105	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C111	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C112	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C113	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C114	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C115	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C116	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C117	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C118	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C125	0CC680CK41A	68PF 1608 50V 5% R/TP NP0
		C126	0CC680CK41A	68PF 1608 50V 5% R/TP NP0
		C127	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C129	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C130	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C131	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C132	0CK105CF94A	"1UF 1608 16V 80%,-20% R/TP F"
		C142	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C143	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C144	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C145	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C149	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C150	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C151	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C152	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C157	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C160	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C166	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C167	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C168	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C169	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C170	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C171	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C172	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C173	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C174	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C201	0CH3103K516	10000PF 50V 10% B(Y5P) 2012
		C202	0CE476WF6DC	47UF MVK 16V 20% R/TP(SMD) S
		C203	0CH3103K516	10000PF 50V 10% B(Y5P) 2012
		C204	0CE476WF6DC	47UF MVK 16V 20% R/TP(SMD) S
		C205	0CC220CK41A	22PF 1608 50V 5% R/TP NP0
		C206	0CC220CK41A	22PF 1608 50V 5% R/TP NP0
		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	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C211	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C212	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C213	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		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
		C224	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
		C229	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C230	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C231	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C232	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C233	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C234	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C237	0CH3103K516	10000PF 50V 10% B(Y5P) 2012
		C238	0CE476WF6DC	47UF MVK 16V 20% R/TP(SMD) S
		C369	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C370	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C401	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C402	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C403	0CK102CK56A	1000PF 1608 50V 0.1 R/TP X7R
		C404	0CK102CK56A	1000PF 1608 50V 0.1 R/TP X7R
		C405	0CK102CK56A	1000PF 1608 50V 0.1 R/TP X7R
		C406	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C407	0CE226BH638	22U KME 25V M FM5 TP5
		C408	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C409	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C410	0CC330CK41A	33PF 1608 50V 5% R/TP NP0
		C414	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C415	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C416	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C417	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C418	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C420	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C424	0CC220CK41A	22PF 1608 50V 5% R/TP NP0
		C425	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C430	0CE335VK6DC	3.3UF MV 50V 20% R/TP(SMD) S
		C435	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C459	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C460	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C461	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C462	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C464	0CC220CK41A	22PF 1608 50V 5% R/TP NP0
		C468	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C469	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C470	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C471	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C472	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C473	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C474	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C475	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C476	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C477	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C478	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C479	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C480	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C481	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C482	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C483	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C484	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C487	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C488	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C489	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C490	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C491	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C492	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C493	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C494	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C495	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C496	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C497	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C498	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C499	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C504	0CK105CF94A	"1UF 1608 16V 80%,-20% R/TP F"
		C505	0CK102CK56A	1000PF 1608 50V 0.1 R/TP X7R
		C506	0CH3103K516	10000PF 50V 10% B(Y5P) 2012
		C507	0CE107EF628	"100UF KMG,RD 16V 20% FM2.5 T"
		C509	0CE106BF618	10UF KME 16V M FL TP5
		C510	0CH3103K516	10000PF 50V 10% B(Y5P) 2012
		C511	0CH3103K516	10000PF 50V 10% B(Y5P) 2012
		C512	0CC330CK41A	33PF 1608 50V 5% R/TP NP0
		C513	0CC330CK41A	33PF 1608 50V 5% R/TP NP0
		C514	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C515	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C516	0CH3103K516	10000PF 50V 10% B(Y5P) 2012
		C517	0CH3103K516	10000PF 50V 10% B(Y5P) 2012
		C518	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C519	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C520	0CE106BF618	10UF KME 16V M FL TP5
		C521	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C523	0CK475CC94A	"4.7UF 1608 6.3V 80%,-20% F(Y"
		C524	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C525	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C526	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C527	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C528	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C529	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C530	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C531	0CE107EF628	"100UF KMG,RD 16V 20% FM2.5 T"
		C532	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C533	0CH3472K516	4700PF 50V K B 2012 R/TP
		C534	0CE107EF628	"100UF KMG,RD 16V 20% FM2.5 T"
		C535	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C536	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C537	0CK105CF94A	"1UF 1608 16V 80%,-20% R/TP F"
		C538	0CK105CF94A	"1UF 1608 16V 80%,-20% R/TP F"
		C539	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C540	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C607	0CE107EF628	"100UF KMG,RD 16V 20% FM2.5 T"
		C608	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y

DATE: 2004. 10. 05.

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C611	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C613	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C614	0CZZTAT005C	RJ4-25V101MX ELNA 25V 100UF
		C615	0CE227BF638	220U KME 16V M FM5 TP5
		C616	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C623	0CK102CK56A	1000PF 1608 50V 0.1 R/TP X7R
		C624	0CE227BF638	220U KME 16V M FM5 TP5
		C625	0CK105CF94A	"1UF 1608 16V 80%,-20% R/TP F"
		C626	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C627	0CE107EF628	"100UF KMG,RD 16V 20% FM2.5 T"
		C628	0CK105CF94A	"1UF 1608 16V 80%,-20% R/TP F"
		C631	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C632	0CE226BH638	22U KME 25V M FM5 TP5
		C634	0CK102CK56A	1000PF 1608 50V 0.1 R/TP X7R
		C635	0CE477EF638	470UF KMG 16V M FM5 TP 5
		C637	0CE477EF638	470UF KMG 16V M FM5 TP 5
		C640	0CE107EF638	100UF KMG 16V M FM5 TP 5
		C641	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C642	0CE107EF628	"100UF KMG,RD 16V 20% FM2.5 T"
		C648	0CE226BH638	22U KME 25V M FM5 TP5
		C649	0CE107EF628	"100UF KMG,RD 16V 20% FM2.5 T"
		C654	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C655	0CE107EF628	"100UF KMG,RD 16V 20% FM2.5 T"
		C657	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C658	0CK105CF94A	"1UF 1608 16V 80%,-20% R/TP F"
		C659	0CK102CK56A	1000PF 1608 50V 0.1 R/TP X7R
		C660	0CH3103K516	10000PF 50V 10% B(Y5P) 2012
		C661	0CE477EH618	470UF KMG 25V M FL TP 5
		C662	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C663	0CK105CF94A	"1UF 1608 16V 80%,-20% R/TP F"
		C664	0CK102CK56A	1000PF 1608 50V 0.1 R/TP X7R
		C665	0CZZTAT005C	RJ4-25V101MX ELNA 25V 100UF
		C666	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C667	0CH3103K516	10000PF 50V 10% B(Y5P) 2012
		C670	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C672	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C673	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP

DIODEs

		D101	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D102	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D103	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D104	0DD184009AA	KDS184 TP KEC - 85V - - - 30
		D105	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D106	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D107	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D108	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D109	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D110	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D111	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D112	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D114	0DD184009AA	KDS184 TP KEC - 85V - - - 30
		D115	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D116	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D117	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D118	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D119	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D120	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D121	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D122	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D123	0DS301109AA	MMBD301LT1 TP MOTOROLA SOT23

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		D124	0DS301109AA	MMBD301LT1 TP MOTOROLA SOT23
		D501	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D502	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D503	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D504	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D505	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D506	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		ZD101	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ZD102	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ZD103	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ZD104	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ZD105	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ZD106	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ZD107	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ZD108	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ZD110	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ZD111	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ZD112	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ZD113	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ZD114	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ZD401	0DZ910009FE	UDZS 9.1B TP ROHM - - 9.1V -
		ZD501	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ZD502	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323
		ICs		
		U105	0IMMRSG036A	"M24C02-WMN6T SGS-THOMSON 8P,"
		U119	0IMMRSG036A	"M24C02-WMN6T SGS-THOMSON 8P,"
		U203	0IPRPTW001A	"TW9905C TECHWELL 100P,LQFP T"
		U401	0IMMRHY051A	"HY5DU283222AQ-4 HYNIX 100P,L"
		U402	0IPRPGN011C	GM1501-CF(ESD ENHANCEMENT)DE
		U403	0IZZTSZ525B	"DELL 20.1"" LD20FPWM MICOM"
		U404	0IMMRSS040C	S524A60X51(SCT0) SAMSUNG ELE
		U405	0IKE704200H	KIA7042AP TO-92 TP 4.2 VOLT
		U502	0IPMGSG019A	LD1117S18TR STM SOT223 R/TP
		U503	0ITI204200B	TPS2042ADR TEXAS INSTRUMENT
		U504	0ITI204200B	TPS2042ADR TEXAS INSTRUMENT
		U505	0IPRPSMS01A	"USB20H04JD SMSC 64P,QFP TRAY"
		U506	0IFA111733A	RC1117S-33 SOT-223 TP 1A 3.3
		U605	0IPMGFA003B	RC1117S-2.5 FAIRCHILD SOT-22
		U606	0IRH033200A	BA033FP-E2 MOLD-3 TP REGULAT
		U607	0IPMGFA003D	FAN1117AS-1.8 FAIRCHILD 4P S
		U608	0IRH033200A	BA033FP-E2 MOLD-3 TP REGULAT
		U610	0IFA111733A	RC1117S-33 SOT-223 TP 1A 3.3
		CORE & CORE & INDUCT & FILTER		
		L205	6210TCE001S	HU-1M2012-121 CERATECH 2012M
		L206	6210TCE001S	HU-1M2012-121 CERATECH 2012M
		L210	0LC0233002A	3.3UH CERATECH R/TP
		L211	0LC0233002A	3.3UH CERATECH R/TP
		L212	0LC0233002A	3.3UH CERATECH R/TP
		L213	6210TCE001S	HU-1M2012-121 CERATECH 2012M
		L409	6210TCE001H	HB-1T2012-301JT CERATEC 2012
		L501	6210TCE001S	HU-1M2012-121 CERATECH 2012M
		L502	6210TCE001S	HU-1M2012-121 CERATECH 2012M
		L503	6210TCE001S	HU-1M2012-121 CERATECH 2012M
		L504	6210TCE001Z	HH-1M2012-600JT CERATEC R/TP
		L505	6210TCE001Z	HH-1M2012-600JT CERATEC R/TP
		L604	6210TCE001Z	HH-1M2012-600JT CERATEC R/TP
		L605	6210TCE001Z	HH-1M2012-600JT CERATEC R/TP
		L606	6210TCE001Z	HH-1M2012-600JT CERATEC R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		L607	6210TCE001Z	HH-1M2012-600JT CERATEC R/TP
		L615	6210TCE001Z	HH-1M2012-600JT CERATEC R/TP
		L616	6210TCE001Z	HH-1M2012-600JT CERATEC R/TP
		L617	6210TCE001Z	HH-1M2012-600JT CERATEC R/TP
		L618	6210TCE001Z	HH-1M2012-600JT CERATEC R/TP
		L619	6210TCE001Z	HH-1M2012-600JT CERATEC R/TP
		L620	6210TCE001Z	HH-1M2012-600JT CERATEC R/TP
		L621	6210TCE001Z	HH-1M2012-600JT CERATEC R/TP
		L622	6210TCE001Z	HH-1M2012-600JT CERATEC R/TP
		TRANSISTOR		
		U501	0TFVI80023A	VISHAY SI3865DV R/TP TSOP-6
		U602	0TFFC80009A	FAIRCHILD FDC6326L R/TP SOT-
		U603	0TFVI80023A	VISHAY SI3865DV R/TP TSOP-6
		U611	0TFFC80009A	FAIRCHILD FDC6326L R/TP SOT-
		U612	0TFVI80023A	VISHAY SI3865DV R/TP TSOP-6
		Q101	0TR390609FA	KST3906-MTF TP SAMSUNG SOT2
		Q102	0TR390609FA	KST3906-MTF TP SAMSUNG SOT2
		Q103	0TR390609FA	KST3906-MTF TP SAMSUNG SOT2
		Q104	0TR390609FA	KST3906-MTF TP SAMSUNG SOT2
		Q105	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q106	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q107	0TR390609FA	KST3906-MTF TP SAMSUNG SOT2
		Q108	0TR390609FA	KST3906-MTF TP SAMSUNG SOT2
		Q109	0TR390609FA	KST3906-MTF TP SAMSUNG SOT2
		Q110	0TR390609FA	KST3906-MTF TP SAMSUNG SOT2
		Q111	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q112	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q401	0TR162309CA	KSC1623 TP SAMSUNG SOT23 NP
		Q403	0TR162309CA	KSC1623 TP SAMSUNG SOT23 NP
		RESISTORs		
		R101	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R102	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R103	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R104	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R105	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R106	0RH4700D622	470 1/10W 5 D.R/TP
		R107	0RH4700D622	470 1/10W 5 D.R/TP
		R110	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R111	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R112	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R113	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R114	0RJ8200D677	820 OHM 1/10 W 5% 1608 R/TP
		R115	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R116	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R117	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R118	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R119	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R120	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R121	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R122	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R123	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R124	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R125	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R130	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R131	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R132	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R133	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R134	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R135	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R136	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R137	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R144	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R145	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R146	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP
		R147	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R149	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R150	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R152	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R153	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R154	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R155	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R156	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R157	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R158	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R159	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R160	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R167	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R168	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R169	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R170	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R171	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R172	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R173	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R174	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R175	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R176	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R177	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R178	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R179	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R180	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R181	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R182	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R183	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R184	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R185	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R186	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R187	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R188	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R191	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R192	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R195	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R196	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R197	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R198	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R199	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R201	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R203	0RJ1004D477	1M OHM 1/10 W 1% 1608 R/TP
		R204	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R210	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R243	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R248	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R284	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R285	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R287	0RH0000D622	0 OHM 1 / 10 W 2012 5.00% D
		R288	0RH0000D622	0 OHM 1 / 10 W 2012 5.00% D
		R401	0RH1002D422	10K OHM 1/10 W 1% 2012 R/TP
		R402	0RH1002D422	10K OHM 1/10 W 1% 2012 R/TP
		R403	0RH1500D622	150 1/10W 5 D.R/TP
		R405	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R408	0RH0000D622	0 OHM 1 / 10 W 2012 5.00% D

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R409	0RH0000D622	0 OHM 1 / 10 W 2012 5.00% D
		R410	0RJ2700D477	270 OHM 1/10 W 1% 1608 R/TP
		R411	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R412	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R413	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R414	0RH0472D622	47 1/10W 5 D.R/TP
		R415	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R418	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R419	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R420	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R421	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R422	0RH0472D622	47 1/10W 5 D.R/TP
		R423	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R424	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R426	0RH1000D622	100 1/10W 5 D.R/TP
		R427	0RH0000D622	0 OHM 1 / 10 W 2012 5.00% D
		R428	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R430	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R431	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R434	0RH0000D622	0 OHM 1 / 10 W 2012 5.00% D
		R435	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP
		R436	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP
		R440	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R441	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R443	0RH0000D622	0 OHM 1 / 10 W 2012 5.00% D
		R446	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/TP
		R447	0RJ4702D677	47000 OHM 1/10 W 5% 1608 R/T
		R448	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R451	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R452	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R453	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R457	0RJ3302D677	33K OHM 1/10 W 5% 1608 R/TP
		R458	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R463	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R464	0RH0000D622	0 OHM 1 / 10 W 2012 5.00% D
		R465	0RH0000D622	0 OHM 1 / 10 W 2012 5.00% D
		R466	0RH0000D622	0 OHM 1 / 10 W 2012 5.00% D
		R469	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R473	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R474	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R475	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R478	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R479	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R480	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R488	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R494	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R495	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R496	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R497	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R500	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R501	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R502	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/TP
		R503	0RJ5600D677	560 OHM 1/10 W 5% 1608 R/TP
		R504	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R505	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R506	0RJ1004D477	1M OHM 1/10 W 1% 1608 R/TP
		R507	0RJ2200D677	220 OHM 1/10 W 5% 1608 R/TP
		R508	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R509	0RJ3302D677	33K OHM 1/10 W 5% 1608 R/TP
		R515	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R517	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R518	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R521	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R522	0RJ1052D477	10.5K OHM 1/10 W 1% 1608 R/T
		R528	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/TP
		R529	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/TP
		R530	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/TP
		R531	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/TP
		R532	0RH1004D622	1.0M 1/10W 5 D.R/TP
		R533	0RJ1003D677	100K OHM 1/10 W 5% 1608 R/TP
		R575	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R579	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R581	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R583	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R585	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R586	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R588	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R592	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R593	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R595	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R597	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R601	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/TP
		R604	0RJ5600D677	560 OHM 1/10 W 5% 1608 R/TP
		R606	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/TP
		R607	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R611	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/TP
		R612	0RJ5600D677	560 OHM 1/10 W 5% 1608 R/TP
		R613	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/TP
		R614	0RJ5600D677	560 OHM 1/10 W 5% 1608 R/TP
		R615	0RJ5600D677	560 OHM 1/10 W 5% 1608 R/TP
		R617	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R618	0RJ1003D677	100K OHM 1/10 W 5% 1608 R/TP
		R620	0RH0000D622	0 OHM 1 / 10 W 2012 5.00% D
		R621	0RH0000D622	0 OHM 1 / 10 W 2012 5.00% D
		R622	0RH0471D622	4.7 1/10W 5 D.R/TP
		R623	0RH0471D622	4.7 1/10W 5 D.R/TP
		R624	0RH0471D622	4.7 1/10W 5 D.R/TP
		R625	0RH0471D622	4.7 1/10W 5 D.R/TP
		R626	0RH0471D622	4.7 1/10W 5 D.R/TP
		R627	0RH0471D622	4.7 1/10W 5 D.R/TP
		R628	0RH0471D622	4.7 1/10W 5 D.R/TP
		R629	0RH0471D622	4.7 1/10W 5 D.R/TP
		R630	0RH0471D622	4.7 1/10W 5 D.R/TP
		R631	0RH0471D622	4.7 1/10W 5 D.R/TP
		RA201	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		RA202	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		RA203	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		RA204	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		RA401	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		RA402	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		RA403	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		RA404	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		RA405	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		RA406	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		RA407	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		RA408	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		RA409	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		RA410	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		RA411	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/1
		OTHERs		
		J104	6612J10001C	"PPJ203-01 PARK ELEC. R/A,1P,"
		J106	6612B00017B	"KJA-DN-0-0022 KSD S-VHS,4P,R"

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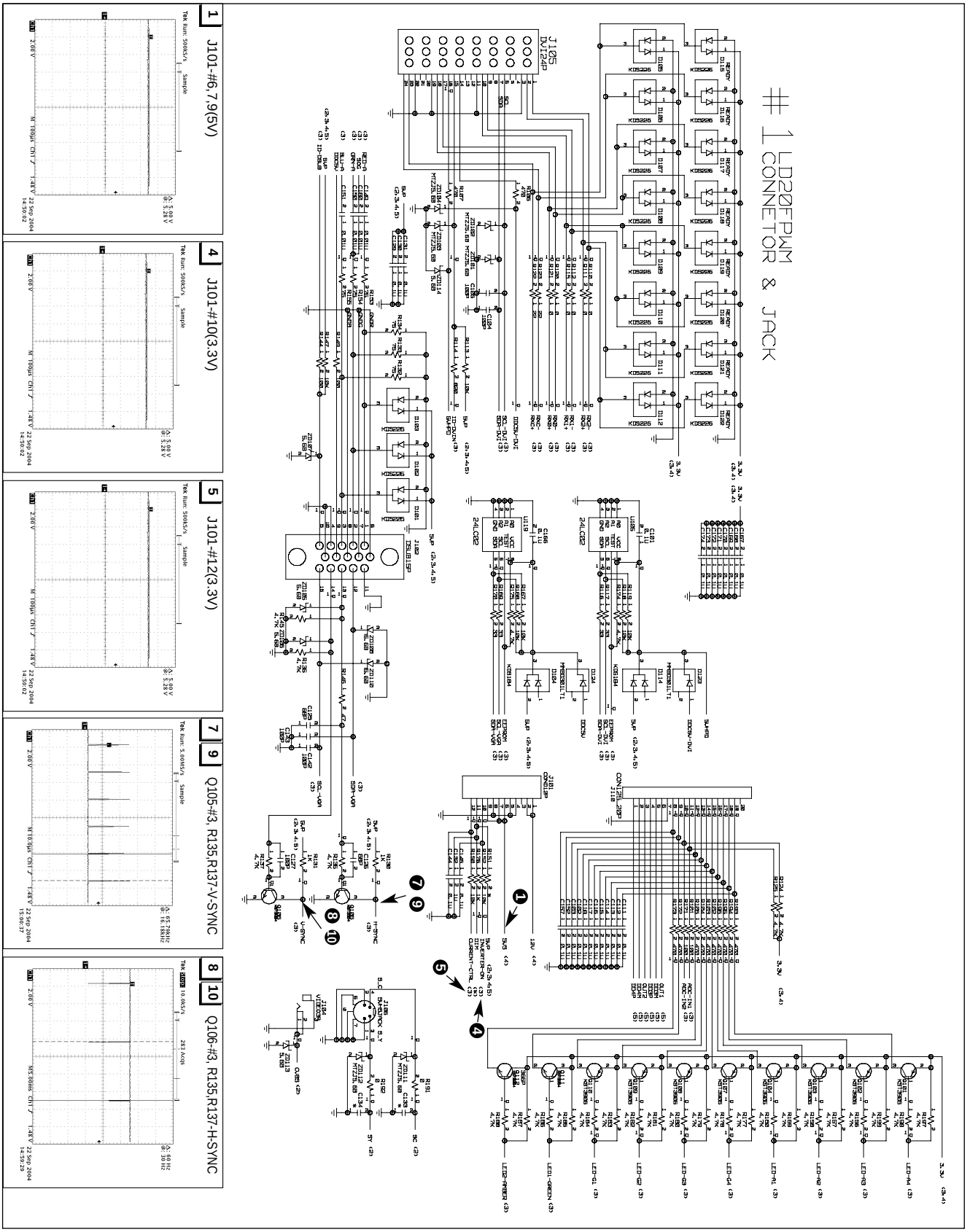
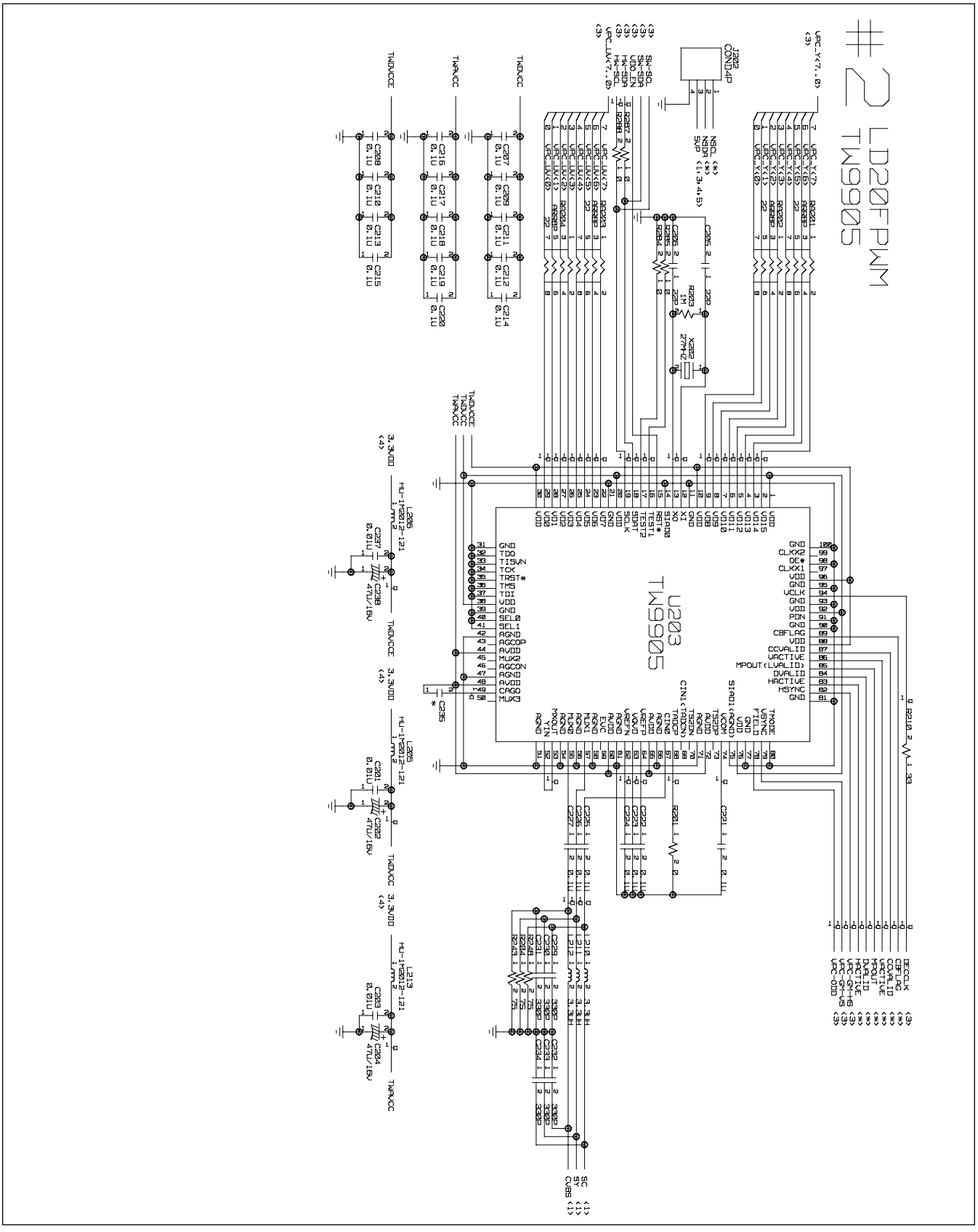
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		J601	6612TAH002A	DC-001 UNITOP DC-001 2.0MM (
		X202	6202TST001H	SX-1 SUNNY 27MHZ +/- 30 PPM
		X401	6202TST001A	"SX-1 SUNNY ,SMS, 14.31818MHZ"
		X501	6202TST001E	SX-1 SUNNY CHIP 24MHZ 30PPM
		CONTROL BOARD		
		LED701	0DLLT0208AA	LITEON LTST-C155KGJSKT R/TP
		LED702	0DLLT0208AA	LITEON LTST-C155KGJSKT R/TP
		LED703	0DLLT0208AA	LITEON LTST-C155KGJSKT R/TP
		LED704	0DLLT0208AA	LITEON LTST-C155KGJSKT R/TP
		LED705	0DLLT0208AA	LITEON LTST-C155KGJSKT R/TP
		R701	0RJ2701D677	2.7K OHM 1/10 W 5% 1608 R/TP
		R702	0RJ2701D677	2.7K OHM 1/10 W 5% 1608 R/TP
		R703	0RJ7501D677	7.5K OHM 1/10 W 5% 1608 R/TP
		R704	0RJ7501D677	7.5K OHM 1/10 W 5% 1608 R/TP
		SW701	6600TR1002A	SKQGACE010 J-ALPS NON 12V 50
		SW702	6600TR1002A	SKQGACE010 J-ALPS NON 12V 50
		SW703	6600TR1002A	SKQGACE010 J-ALPS NON 12V 50
		SW704	6600TR1002A	SKQGACE010 J-ALPS NON 12V 50
		SW705	6600TR1002A	SKQGACE010 J-ALPS NON 12V 50
		SW706	6600TR1002A	SKQGACE010 J-ALPS NON 12V 50
		USB BOARD		
		C901	0CE107WF6DC	100UF MVK 16V 20% R/TP(SMD)
		C902	0CE107WF6DC	100UF MVK 16V 20% R/TP(SMD)
		C903	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C904	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C905	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C906	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C907	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C908	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		D901	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D902	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D903	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D904	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		L901	6210TCE001B	HH-1H3216-500JT CERATEC 3216
		L904	6210TCE001B	HH-1H3216-500JT CERATEC 3216
		ZD901	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD32
		ZD904	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD32

SCHEMATIC DIAGRAM

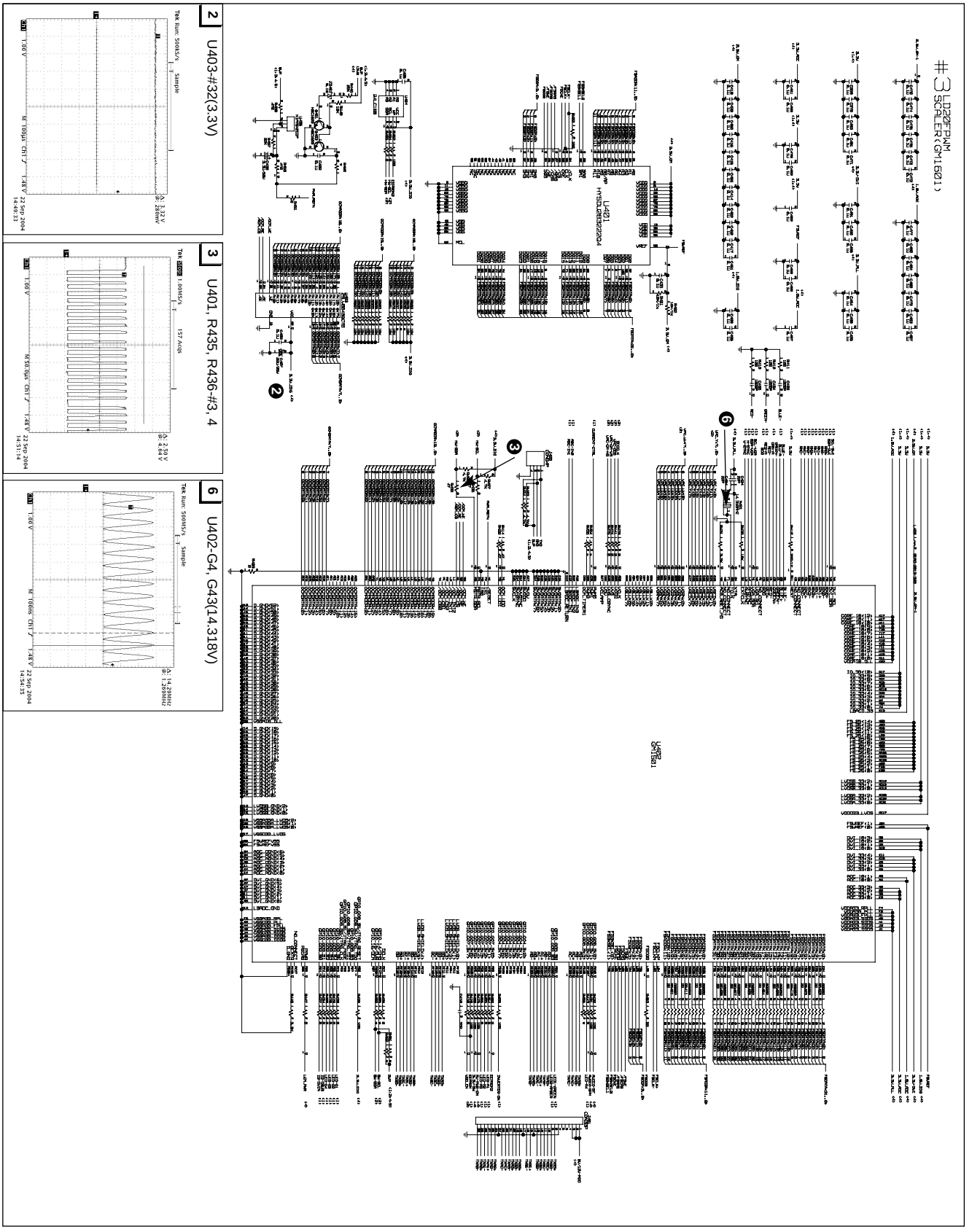
1. CONNECTOR & JACK



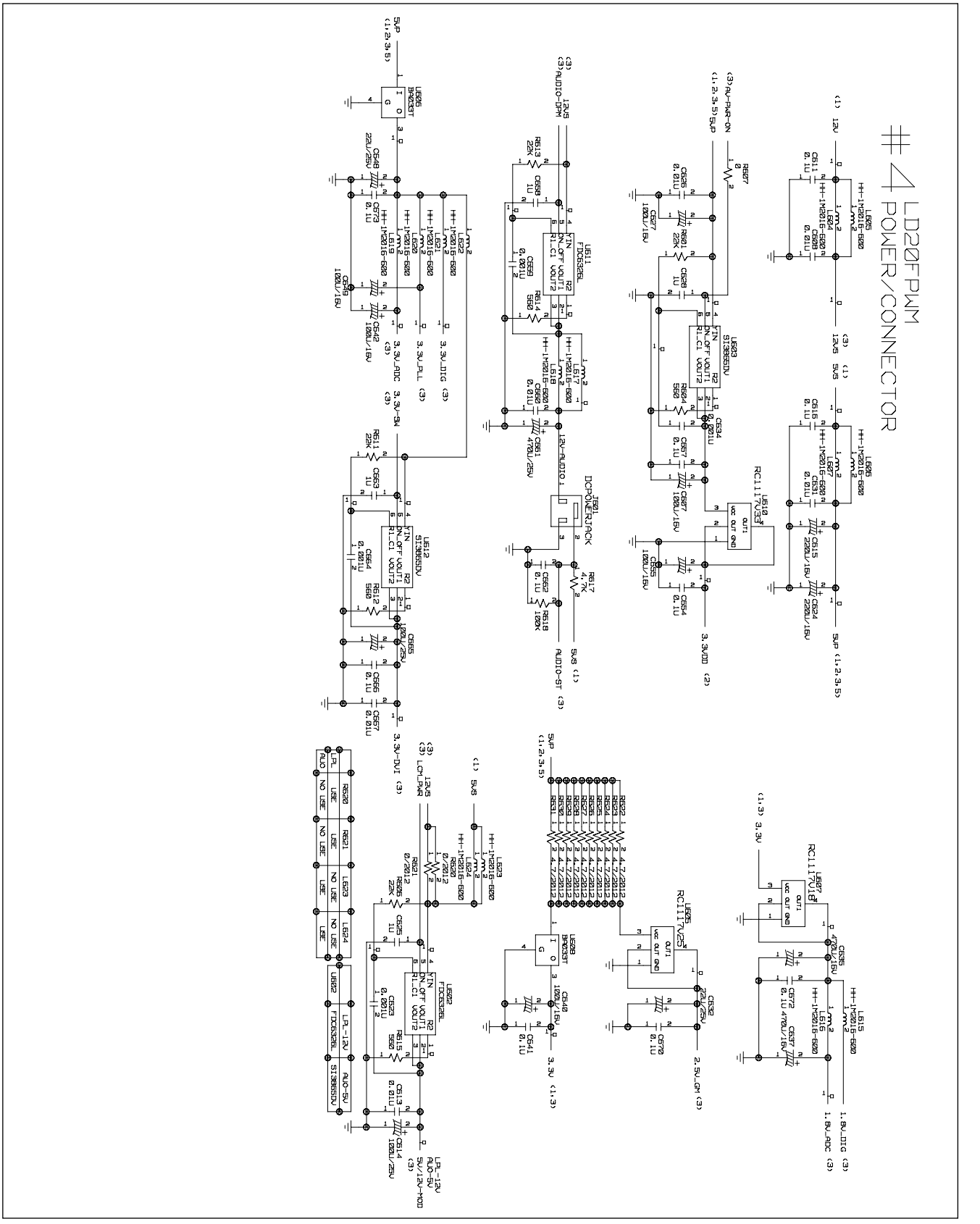
2. TW9905



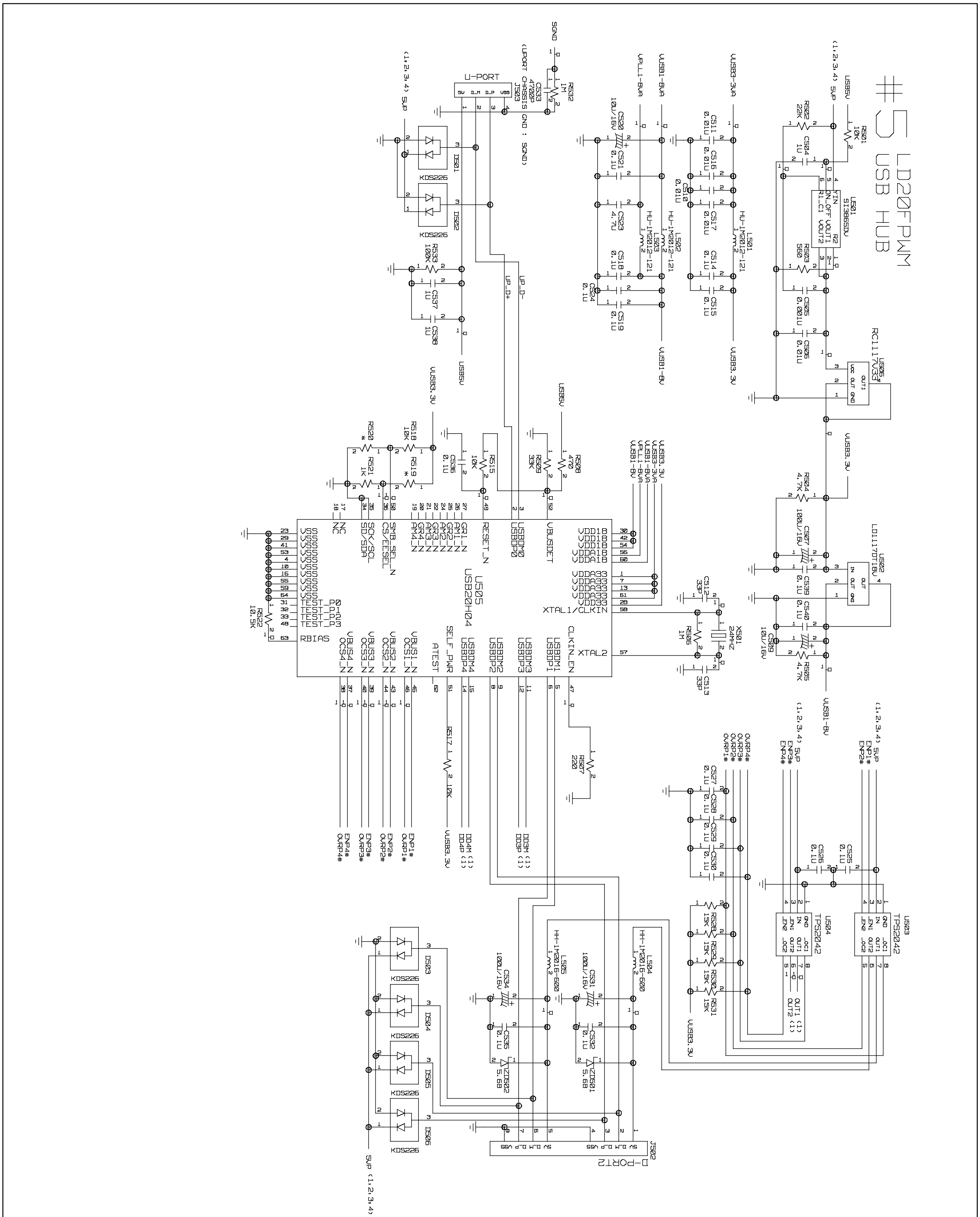
3. SCALLER(GM1601)



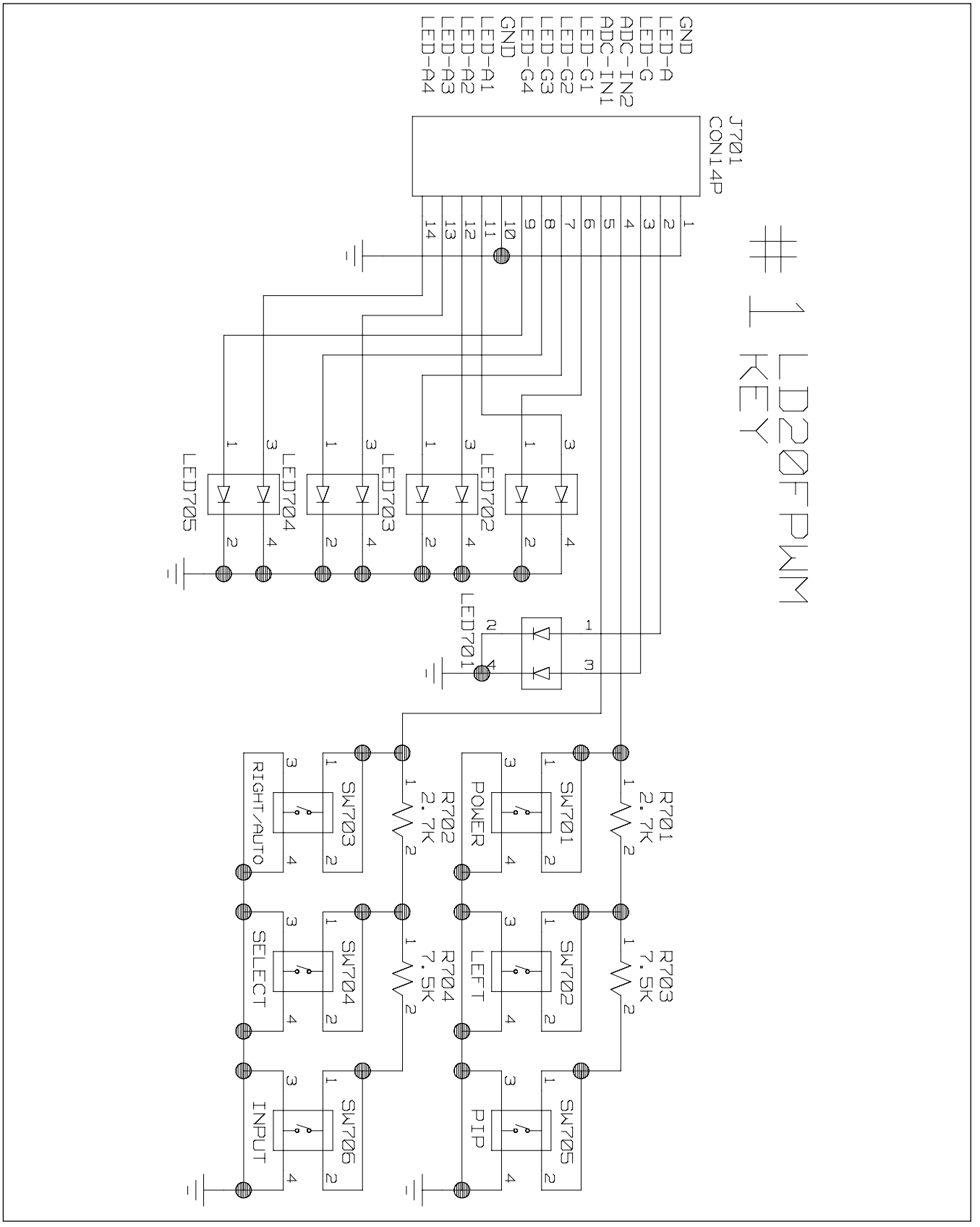
4. POWER/CONNECTOR



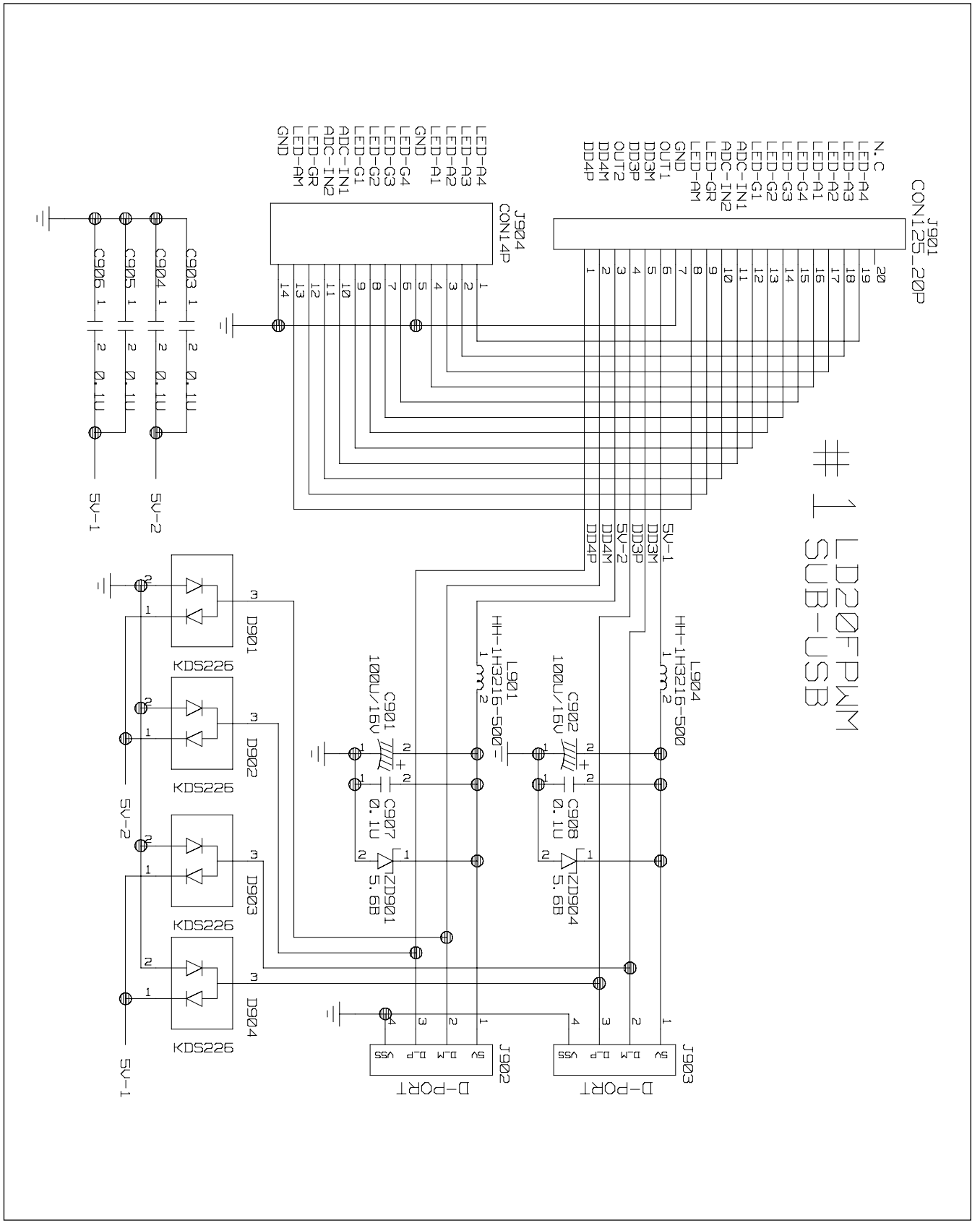
5. USB HUB


#5 LD20FPWM USB HUB
USB20H04
U505
TPS2042
U503
U504
D-PORT2
U-PORT
KDS226
SI3865DV
RC1117-33
LD1117DT18V

6. KEY


#1 LD20F PWM KEY
J701
CON14P
GND
LED-A
LED-G
ADC-IN2
ADC-IN1
LED-G1
LED-G2
LED-G3
LED-G4
GND
LED-A1
LED-A2
LED-A3
LED-A4
LED701
LED702
LED703
LED704
LED705
SW701
SW702
SW703
SW704
SW705
SW706
POWER
LEFT
RIGHT/AUTO
SELECT
PIP
INPUT
R701 2.7K
R702 2.7K
R703 7.5K
R704 7.5K

7. USB


#1 LD20FPWM SUB-USB
J901 CON125_20P
J904 CON14P
J902 D-PORT
J903 D-PORT
D901 KDS226
D902 KDS226
D903 KDS226
D904 KDS226
L901 HH-LH3216-500
L904 HH-LH3216-500
C901 100U/16V
C902 100U/16V
C903 0.1U
C904 0.1U
C905 0.1U
C906 0.1U
C907 0.1U
C908 0.1U
ZD901 5.6B
ZD904 5.6B
5V-1
5V-2

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