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

COLOR MONITOR
SERVICE MANUAL

CHASSIS NO. : CL-82

MODEL: FLATRON L1719S (L1719S-*FS.A*EP)**

FLATRON L1919S (L1919S-*FS.A*EP)**

( ) **Same model for Service

CAUTION

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

*To apply the **MSTAR Chip**.

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SPECIFICATIONS

1. LCD CHARACTERISTICS

Type	: TFT Color LCD Module
Active Display Area	: 17 inch **- L1719S**
	: 19 inch **- L1919S**
Pixel Pitch	: 0.264 (H) x 0.264 (V) **- L1719S**
	: 0.294 (H) x 0.294 (V) **- L1919S**
Color Depth	: 8bits, 16.2M colors
Size	: 358.5 (H) x 296.5 (V) x 17.0(D) **- L1719S**
	: 396 (H) x 324 (V) x 17.5(D) **- L1919S**
Electrical Interface	: LVDS
Surface Treatment	: Hard-coating(3H), Anti-Glare
Operating Mode	: Normally White, Transmissive mode
Backlight Unit	: 4-CCFL

2. OPTICAL CHARACTERISTICS

2-1. Viewing Angle by Contrast Ratio ≥ 10

Left : -60° min., -70°(Typ) Right : +60° min., +70°(Typ)
Top :+60° min., +75°(Typ) Bottom : -50° min., -65°(Typ)

2-2. Luminance : 230(min), 300(Typ) (Full White pattern, 0.70V) **-6500K**
: 150(min) (Full White pattern, 0.70V) **-9300K**
75%(min)

2-3. Contrast Ratio : 2000:1 (DFC)

3. SIGNAL (Refer to the Timing Chart)

3-1. Sync Signal
• Type : Separate Sync, SOG

3-2. Video Input Signal
1) Type : R, G, B Analog
2) Voltage Level : 0~0.71 V
a) Color 0, 0 : 0 Vp-p
b) Color 7, 0 : 0.467Vp-p
c) Color 15, 0 : 0.714Vp-p
3) Input Impedance : 75Ω

3-3. Operating Frequency
Horizontal : 30 ~ 83kHz
Vertical : 56 ~ 75Hz

4. Max. Resolution

D-sub Analog : 1280 x 1024@75Hz

5. POWER SUPPLY

5-1. Power : AC 100~240V, 50/60Hz , 0.6A

5-2. Power Consumption

MODE	H/V SYNC	VIDEO	POWER CONSUMPTION	LED COLOR
POWER ON (NORMAL)	ON/ON	ACTIVE	less than 34 W **-L1719S**	or GREEN
			less than 38 W **-L1919S**	
STAND-BY	OFF/ON	OFF	less than 1 W	AMBER
SUSPEND	ON/OFF	OFF	less than 1 W	AMBER
DPMS OFF	OFF/OFF	OFF	less than 1 W	AMBER
POWER S/W Off	-	-	less than 1 W	OFF

6. 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 : 50,000 HRS with 90% Confidence
Lamp Life : 50,000 Hours(Min)

7. DIMENSIONS (with TILT/SWIVEL)

L1719S
Width : 364.0 mm (14.33')
Depth : 180 mm (7.09")
Height : 378.0 mm (14.88")

L1919S
Width : 418 mm (16.46")
Depth : 180 mm (7.09")
Height : 412.7 mm (16.25")

8. WEIGHT (with TILT/SWIVEL)

L1719S
Net. Weight : 3.45 kg (7.61 lbs)
Gross Weight : 4.4 kg (9.70 lbs)

L1919S
Net. Weight : 4.3 kg (9.26 lbs)
Gross Weight : 5.4 kg (11.91 lbs)

PRECAUTION

WARNING FOR THE SAFETY-RELATED COMPONENT.

- There are some special components used in LCD monitor that are important for safety. ***These parts are marked ⚠ on the schematic diagram and the replacement parts list.*** It is essential that these critical parts should be replaced with the manufacturer's specified parts to prevent electric shock, fire or other hazard.
- Do not modify original design without obtaining written permission from manufacturer or you will void the original parts and labor guarantee.

TAKE CARE DURING HANDLING THE LCD MODULE WITH BACKLIGHT UNIT.

- Must mount the module using mounting holes arranged in four corners.
- Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
- Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
- Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
- Make certain that treatment person's body are grounded through wrist band.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- The module not be exposed to the direct sunlight.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel become dirty, please wipe it off with a softmaterial. (Cleaning with a dirty or rough cloth may damage the panel.)

⚠ CAUTION

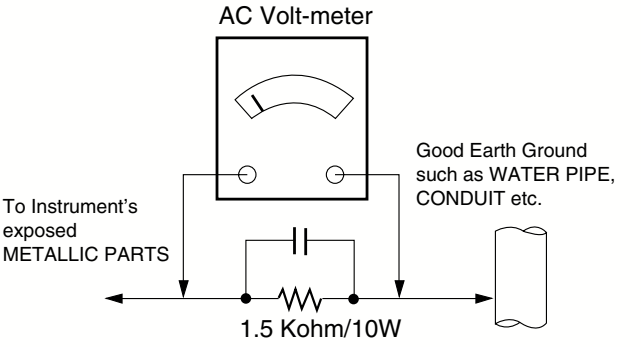
Please use only a plastic screwdriver to protect yourself from shock hazard during service operation.

⚠ WARNING

BE CAREFUL ELECTRIC SHOCK !

- If you want to replace with the new backlight (CCFL) or inverter circuit, must disconnect the AC adapter because high voltage appears at inverter circuit about 650Vrms.
- Handle with care wires or connectors of the inverter circuit. If the wires are pressed cause short and may burn or take fire.

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).

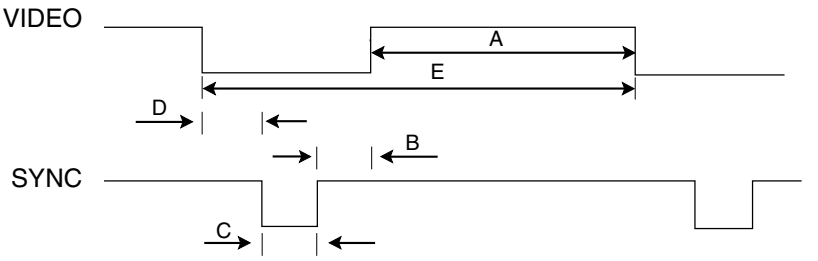
1. Carefully remove the damaged copper pattern with a sharp knife. (Remove only as much copper as absolutely necessary).
2. carefully scratch away the solder resist and acrylic coating (if used) from the end of the remaining copper pattern.
3. Bend a small "U" in one end of a small gauge jumper wire 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



MODE	H / V	Sync Polarity	Dot Clock	Frequency	Total Period (E)	Video Active Time (A)	Sync Duration (D)	Front Porch (C)	Blanking Time (B)	Resolution
1	H(Pixels)	+	25.175	31.469	800	640	16	96	48	640 x 350
	V(Lines)	-		70.09	449	350	37	2	60	
2	H(Pixels)	-	28.321	31.468	900	720	18	108	54	720 X 400
	V(Lines)	+		70.08	449	400	12	2	35	
3	H(Pixels)	-	25.175	31.469	800	640	16	96	48	640 x 480
	V(Lines)	-		59.94	525	480	10	2	33	
4	H(Pixels)	-	31.5	37.5	840	640	16	64	120	640 x 480
	V(Lines)	-		75	500	480	1	3	16	
5	H(Pixels)	+	40.0	37.879	1056	800	40	128	88	800 x 600
	V(Lines)	+		60.317	628	600	1	4	23	
6	H(Pixels)	+	49.5	46.875	1056	800	16	80	160	800 x 600
	V(Lines)	+		75.0	625	600	1	3	21	
7	H(Pixels)	+/-	57.283	49.725	1152	832	32	64	224	832 x 624
	V(Lines)	+/-		74.55	667	624	1	3	39	
8	H(Pixels)	-	65.0	48.363	1344	1024	24	136	160	1024 x 768
	V(Lines)	-		60.0	806	768	3	6	29	
9	H(Pixels)	-	78.75	60.123	1312	1024	16	96	176	1024 x 768
	V(Lines)	-		75.029	800	768	1	3	28	
10	H(Pixels)	+/-	100.0	68.681	1456	1152	32	128	144	1152 x 870
	V(Lines)	+/-		75.062	915	870	3	3	39	
11	H(Pixels)	+/-	92.978	61.805	1504	1152	18	134	200	1152 x 900
	V(Lines)	+/-		65.96	937	900	2	4	31	
12	H(Pixels)	+	108.0	63.981	1688	1280	48	112	248	1280 x 1024
	V(Lines)	+		60.02	1066	1024	1	3	38	
13	H(Pixels)	+	135.0	79.976	1688	1280	16	144	248	1280 x 1024
	V(Lines)	+		75.035	1066	1024	1	3	38	

DISASSEMBLY-Set

 # 1

Disassembly Like a picture.

 # 2

Remove the screws.

 # 3-1

 # 3-2

1. Pull the front cover upward.
2. Then, let the all latches are separated.(#3-1~3-2)
3. Put the front face down.

 # 4

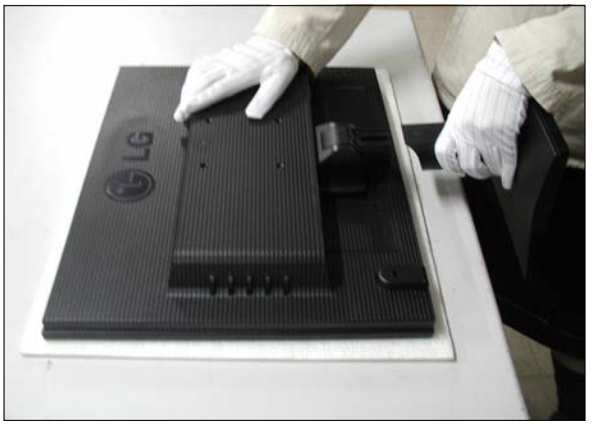
Disassemble back cover.

DISASSEMBLY-Stand [TYPE A]

 # 1

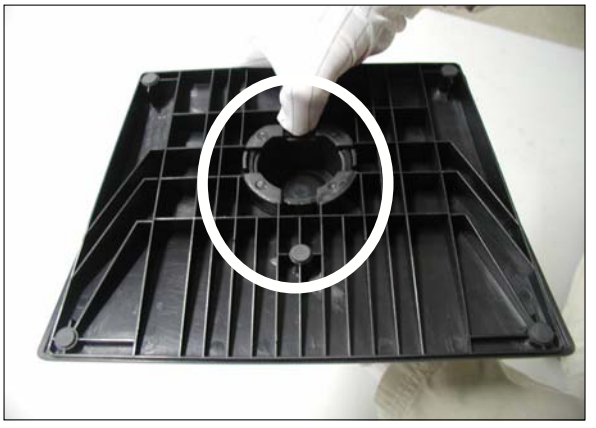
1. In assembly state, Twist Stand Body to Right side.

 # 2



2. Pull Stand and Separate Stand from Monitor set.

 # 3-1



3. Push the four latches on the bottom to the outside and Separate Stand Body & Base. (Reference the #3-2)

 # 3-2

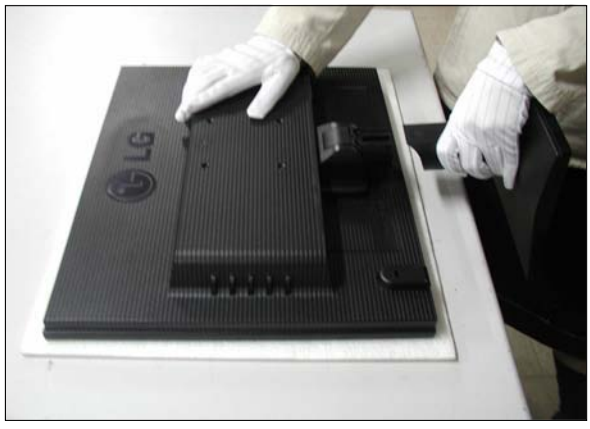
 # 4

DISASSEMBLY-Stand [TYPE B]

 # 1

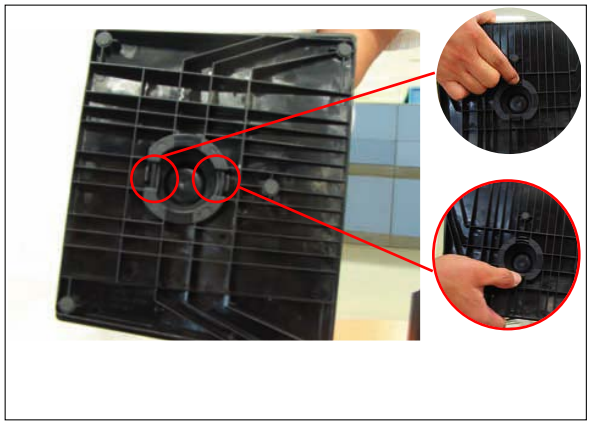
1. In assembly state, Twist Stand Body to Right side.

 # 2



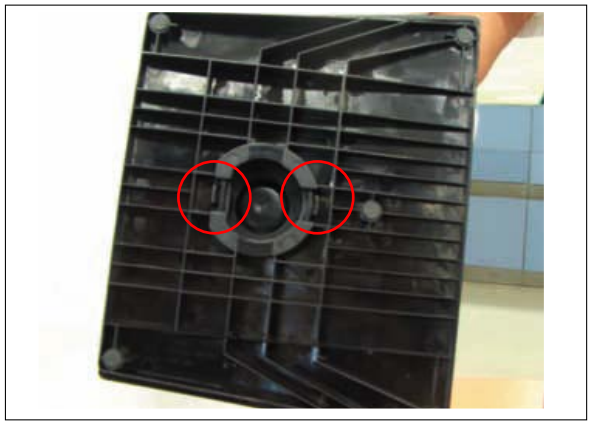
2. Pull Stand and Separate Stand from Monitor set.

 # 3-1



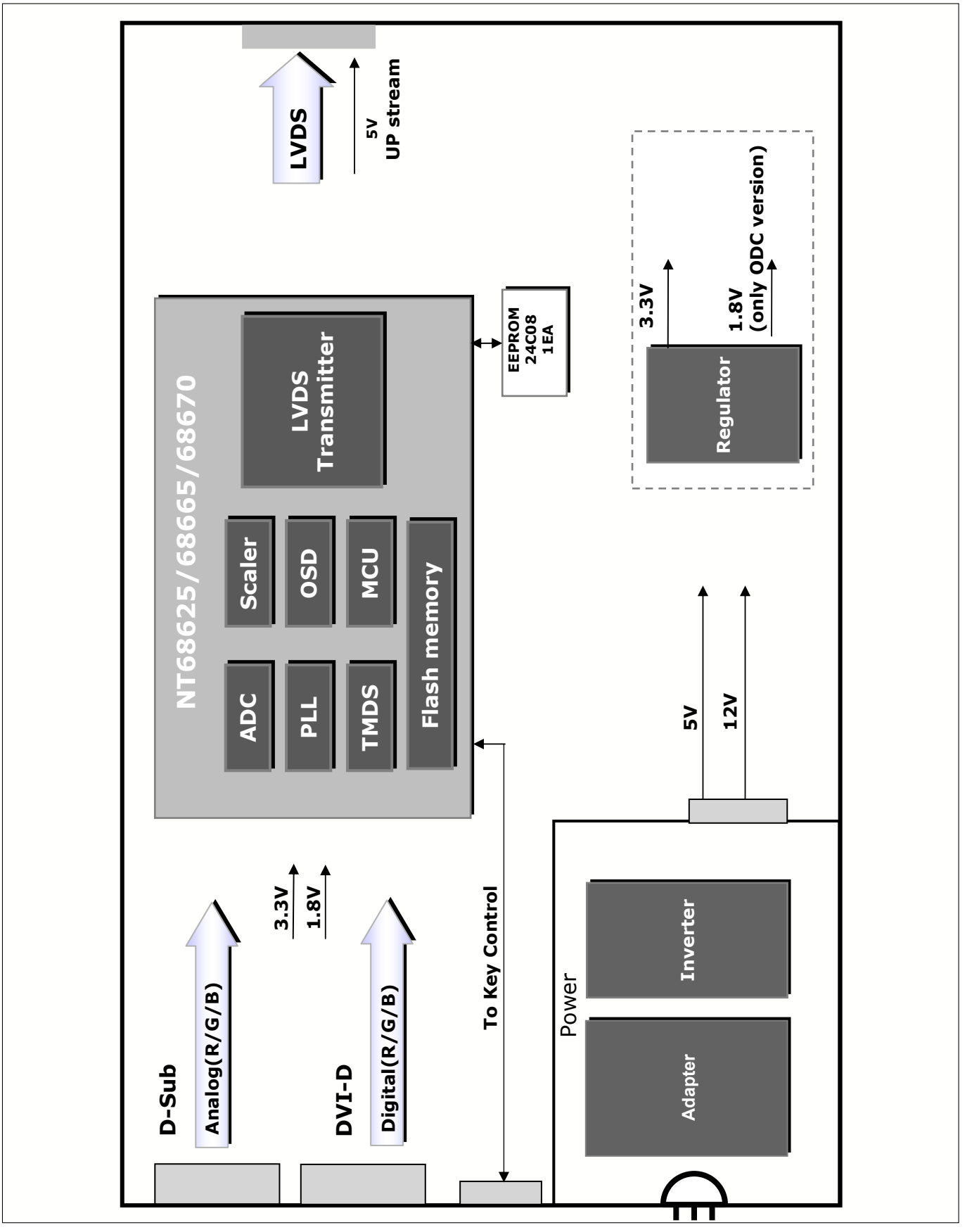
3. Push the four latches on the bottom to the outside and Separate Stand Body & Base. (Reference the #3-2)

 # 3-2

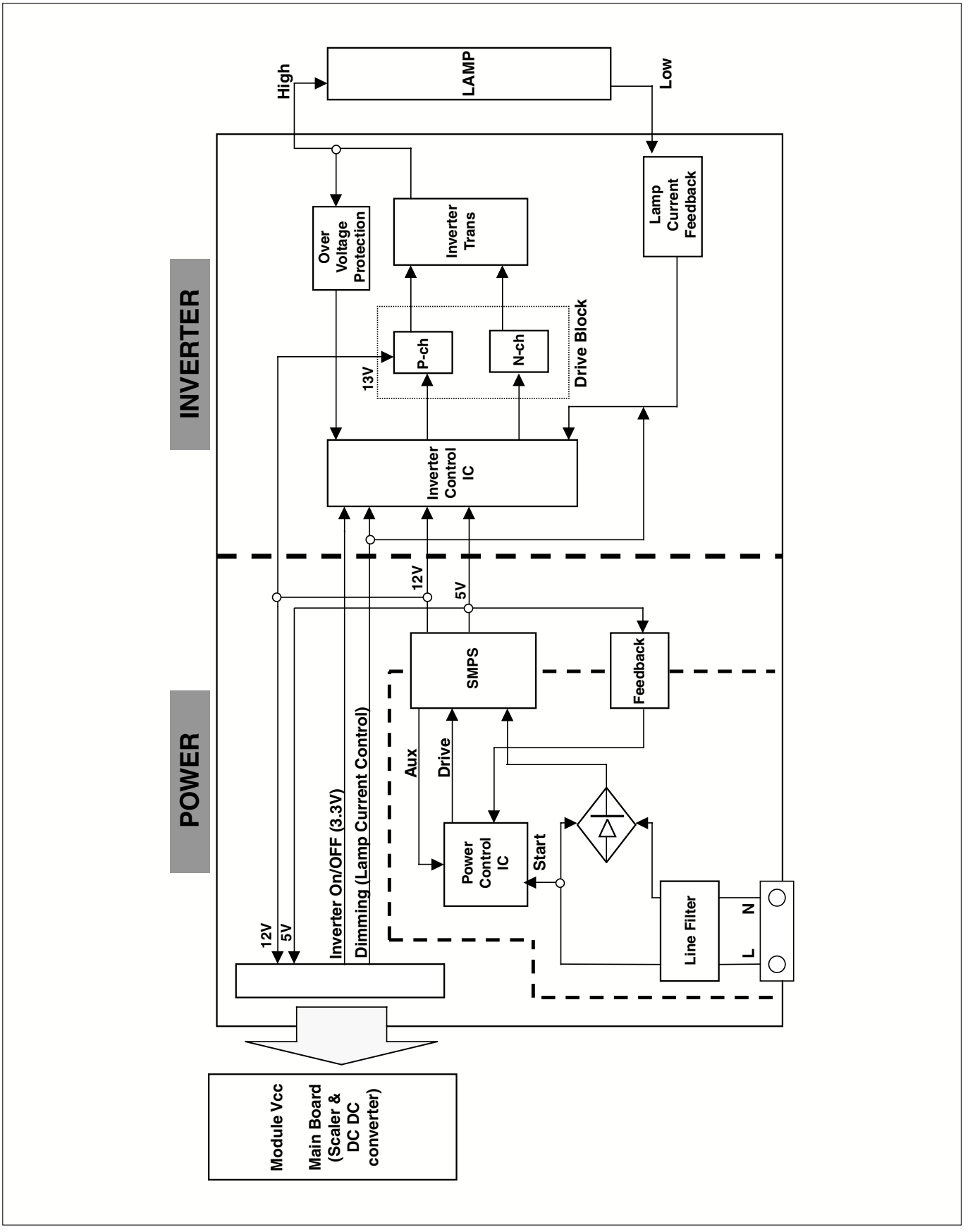


 # 4

BLOCK DIAGRAM



BLOCK DIAGRAM-POWER



DESCRIPTION OF BLOCK DIAGRAM

1. Video Controller Part.

This part amplifies the level of video signal for the digital conversion and converts from the analog video signal to the digital video signal using a pixel clock.
The pixel clock for each mode is generated by the PLL.
The range of the pixel clock is from 25MHz to 135MHz.
This part consists of the Scaler, ADC convertor, TMDS receiver and LVDS transmitter.
The Scaler gets the video signal converted analog to digital, interpolates input to 1280 X 1024 resolution signal and outputs 8-bit R, G, B signal to transmitter.

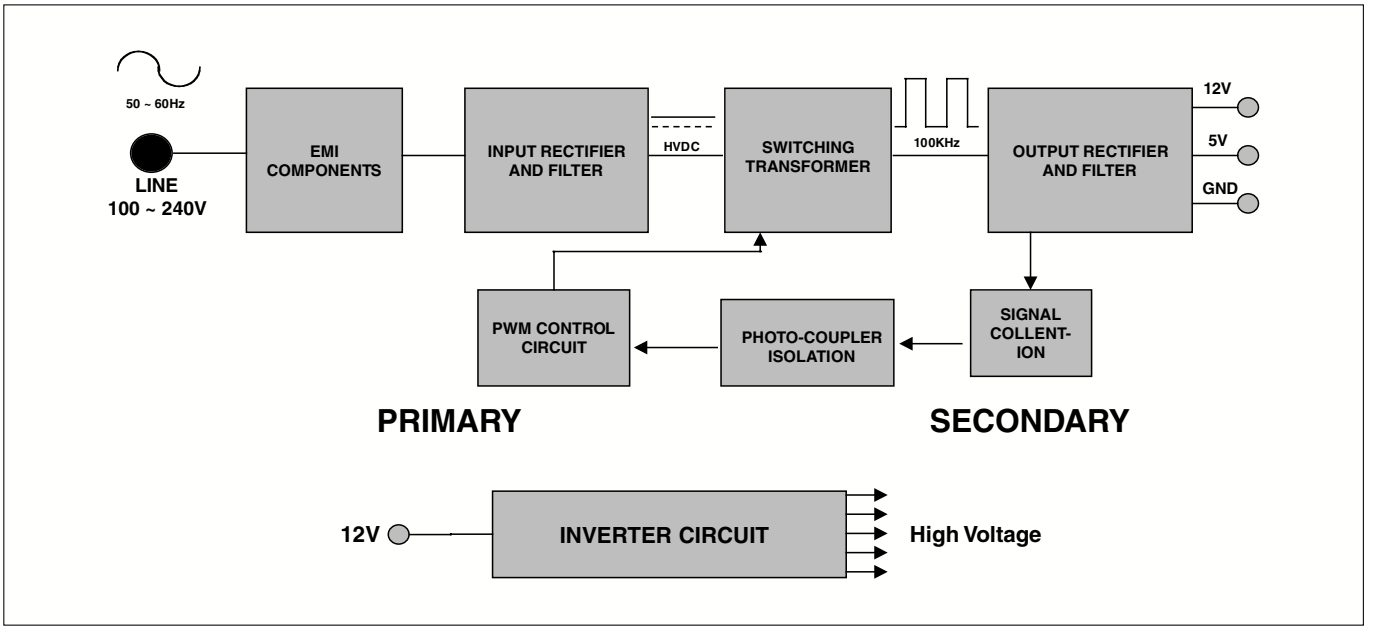
2. Power Part.

This part consists of the one 3.3V, and one 1.8V regulators to convert power which is provided 5V in Power board.
12V is provided for inverter, 5V is provided for LCD panel.
Also, 5V is converted 3.3V and 1.8V by regulator. Converted power is provided for IC in the main board.
The inverter converts from DC12V to AC 700Vrms and operates back-light lamps of module.

3. MICOM Part.

This part is include video controller part. And this part consists of EEPROM IC which stores control data, Reset IC and the Micom.
The Micom distinguishes polarity and frequency of the H/V sync are supplied from signal cable.
The controlled data of each modes is stored in EEPROM.

LIPS Board Block Diagram



Operation description_LIPS

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

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

3. Energy Transfer.
   This part function is for transfer the primary energy to secondary through a power transformer.

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

5. Photo-Coupler isolation.
   This part function is to feed back the DC output changing status through a photo transistor to primary controller to achieve the stabilized DC output voltage.

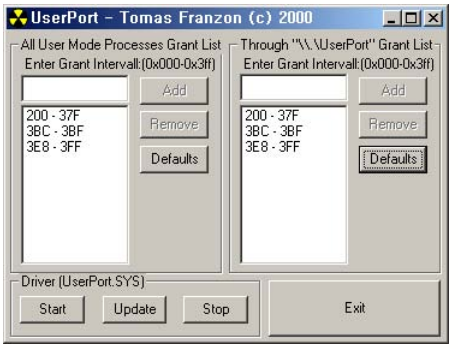
6. Signal collection.
   This part function is to collect the any change from the DC output and feed back to the primary through photo transistor.

ADJUSTMENT

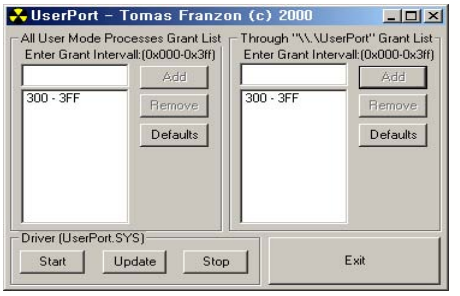
Windows EDID V1.0 User Manual

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

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

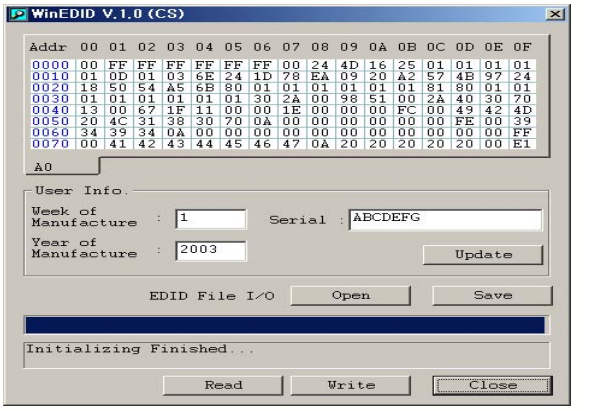


   c) Remove all default number
   d) Add 300-3FF

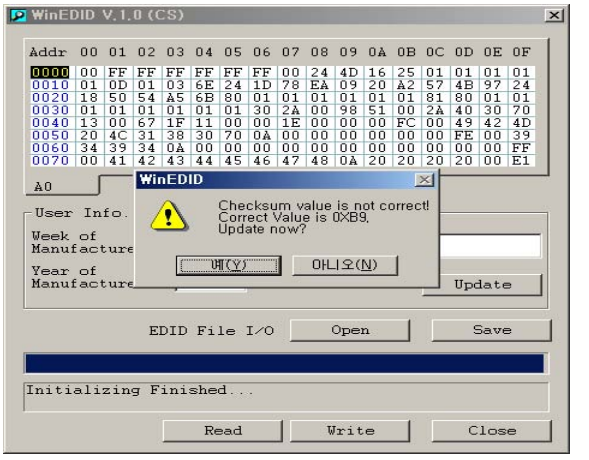


   e) Click Start button.
   f) Click Exit button.

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



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



SERVICE OSD

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

2) Wait for about 5 seconds and press MENU, POWER switch with 1 second interval.

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

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

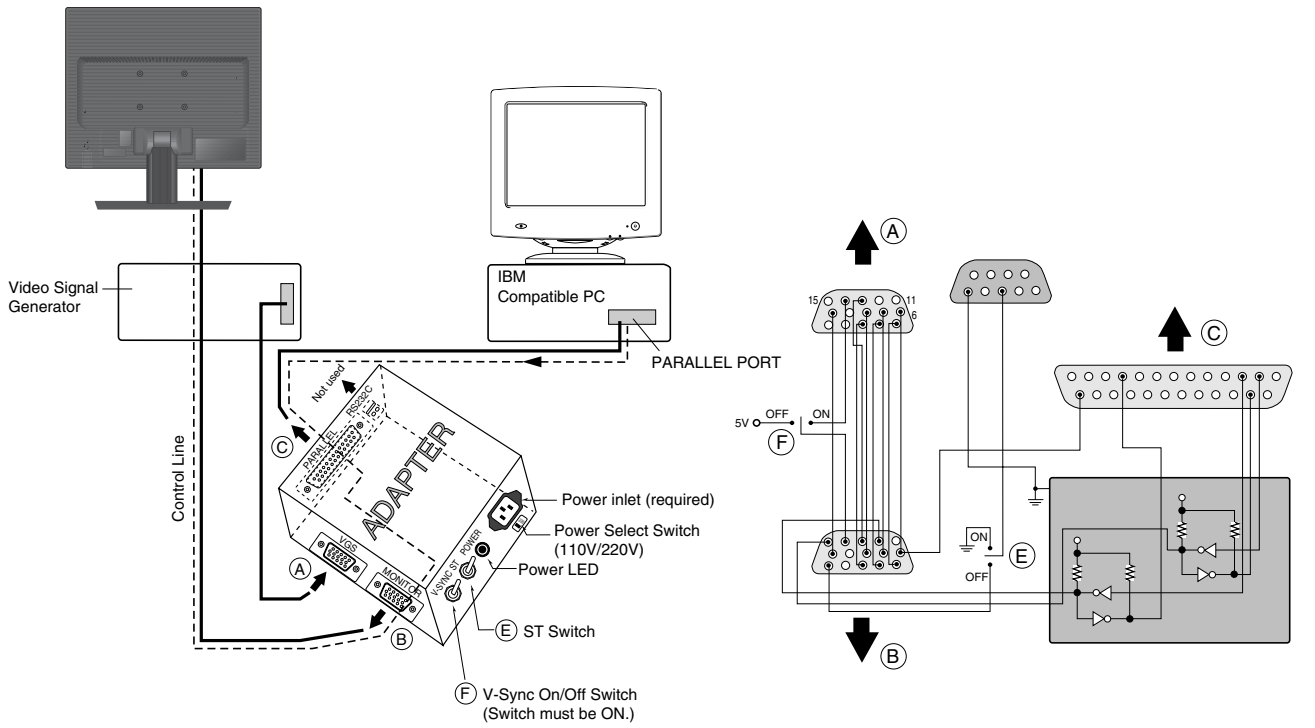
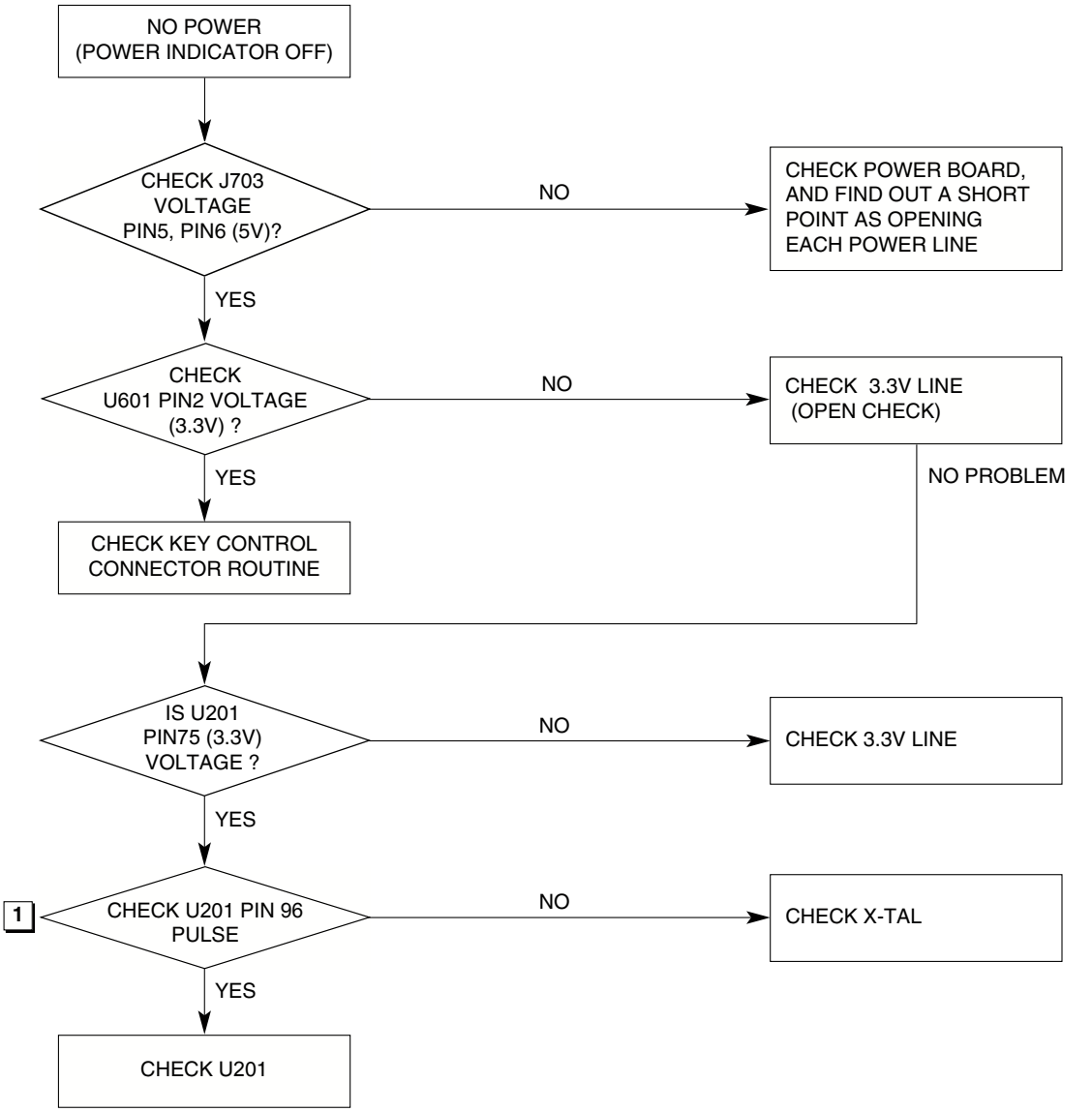


Figure 1. Cable Connection

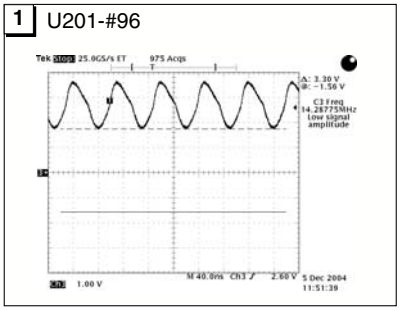
TROUBLESHOOTING GUIDE

1. NO POWER

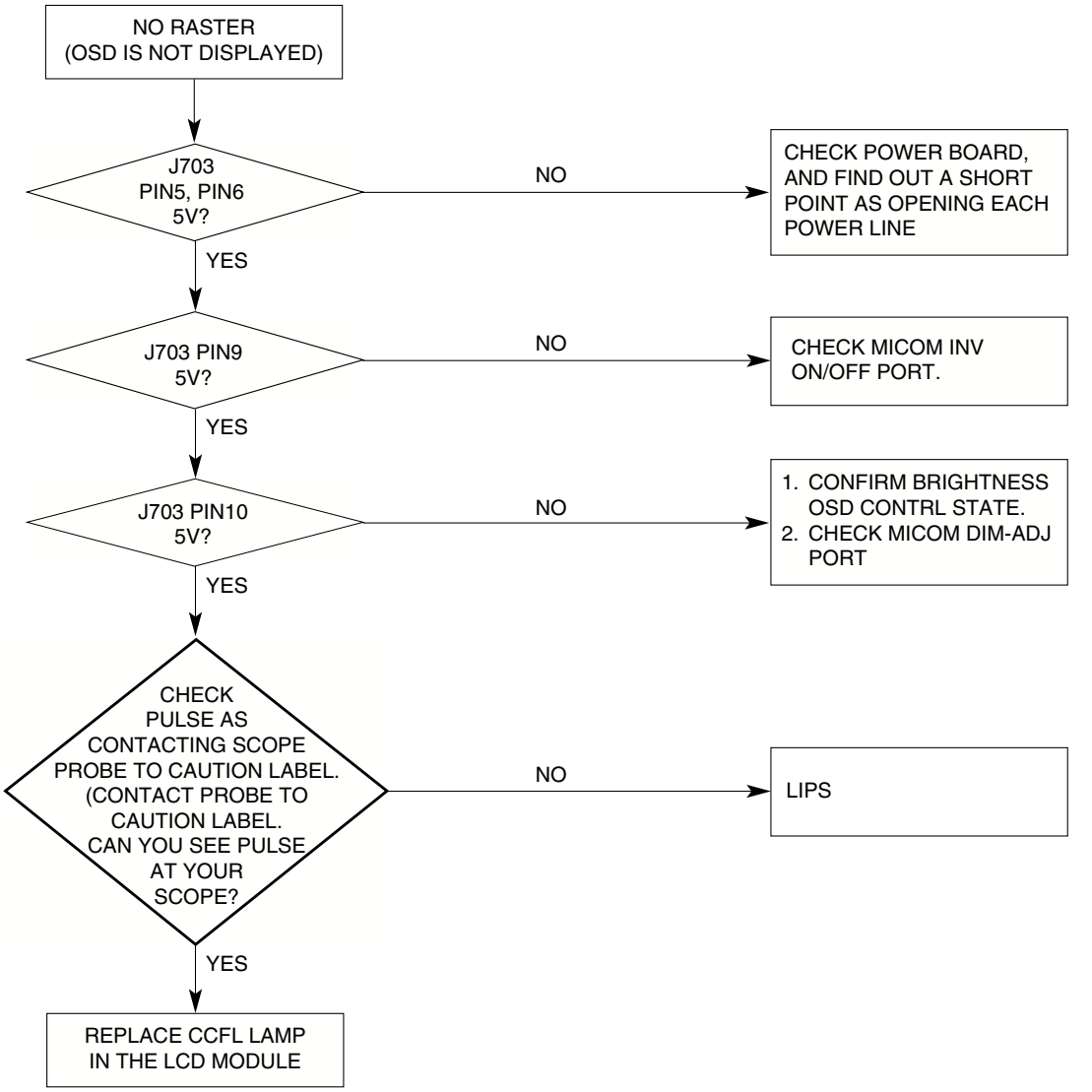


Waveforms

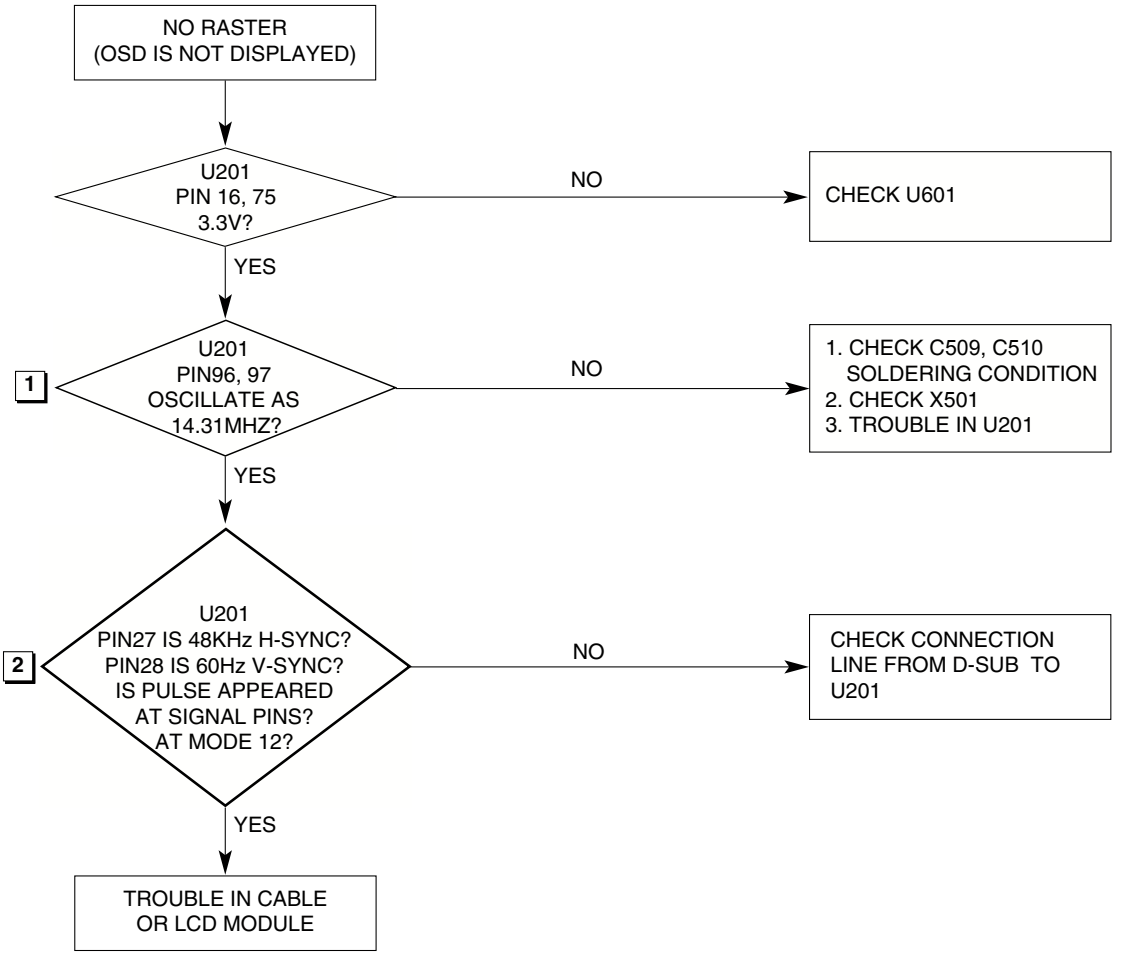
1 U201-#96



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

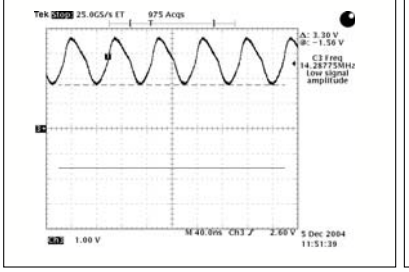


3. NO RASTER (OSD IS NOT DISPLAYED) – MSTAR

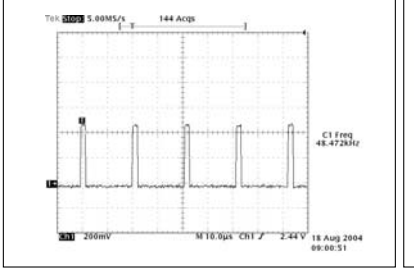


Waveforms

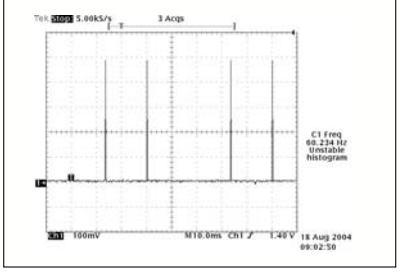
1 U201-#96, 97



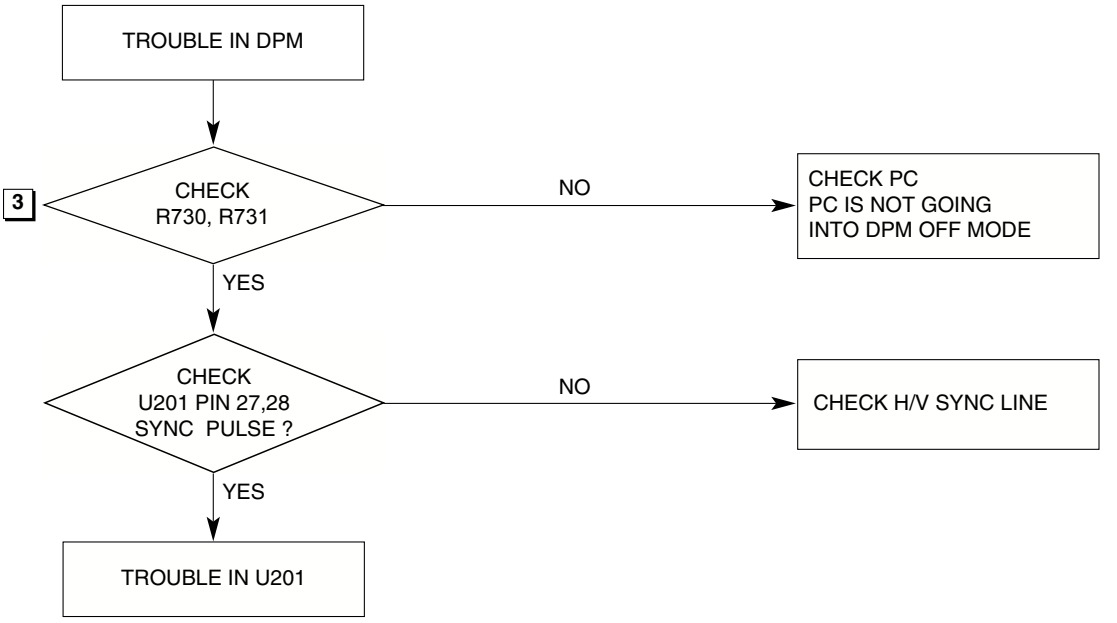
2 U201-#27 H-SYNC



2 U201-#28 V-SYNC

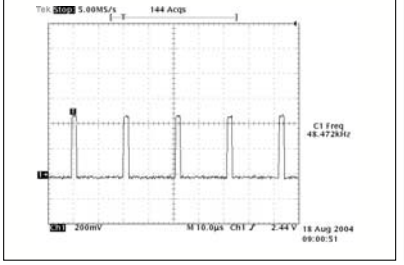


4. TROUBLE IN DPM

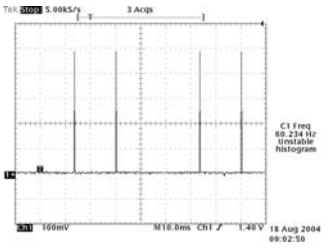


Waveforms

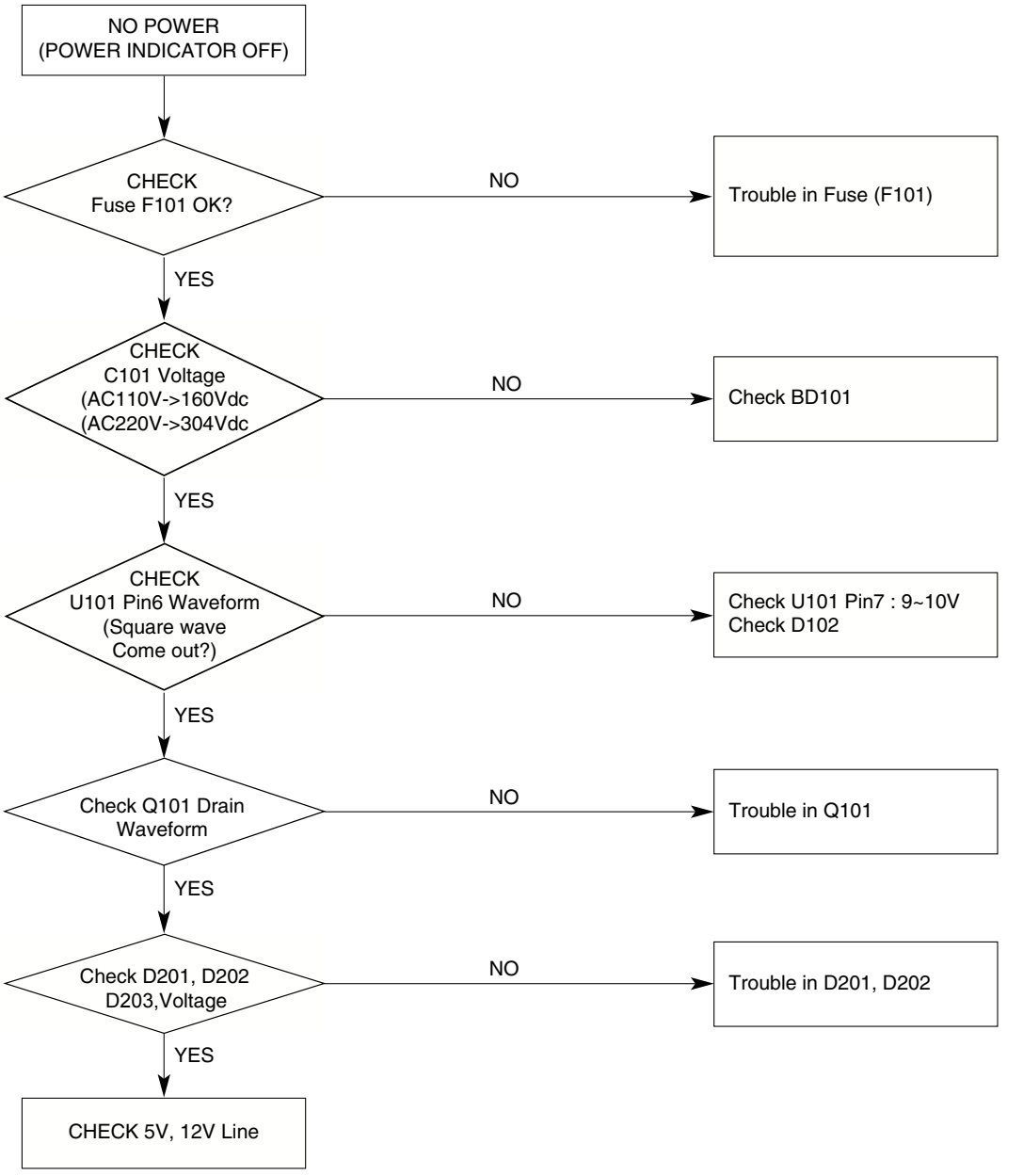
3 R442 H-Sync



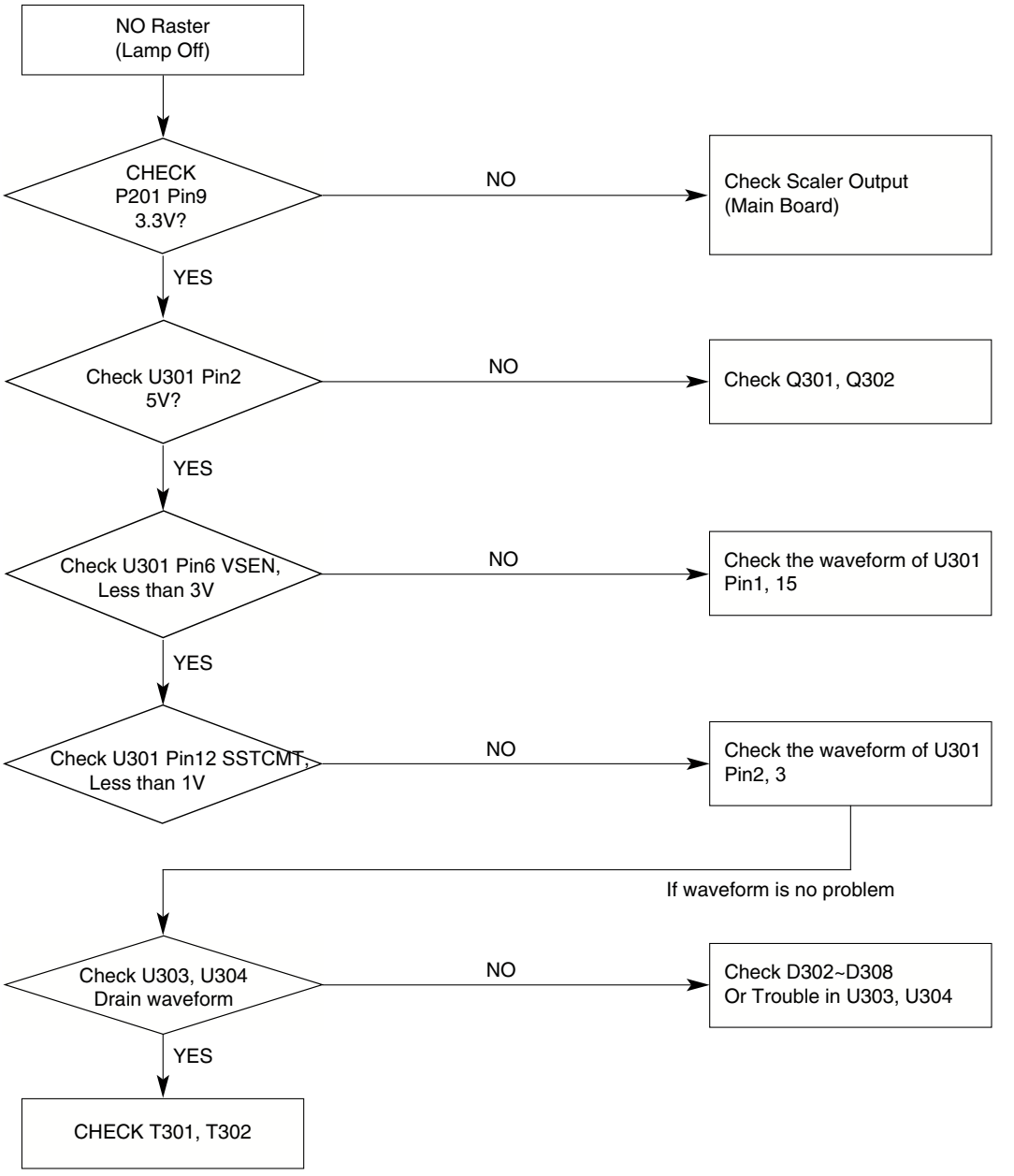
3 R443 V-Sync



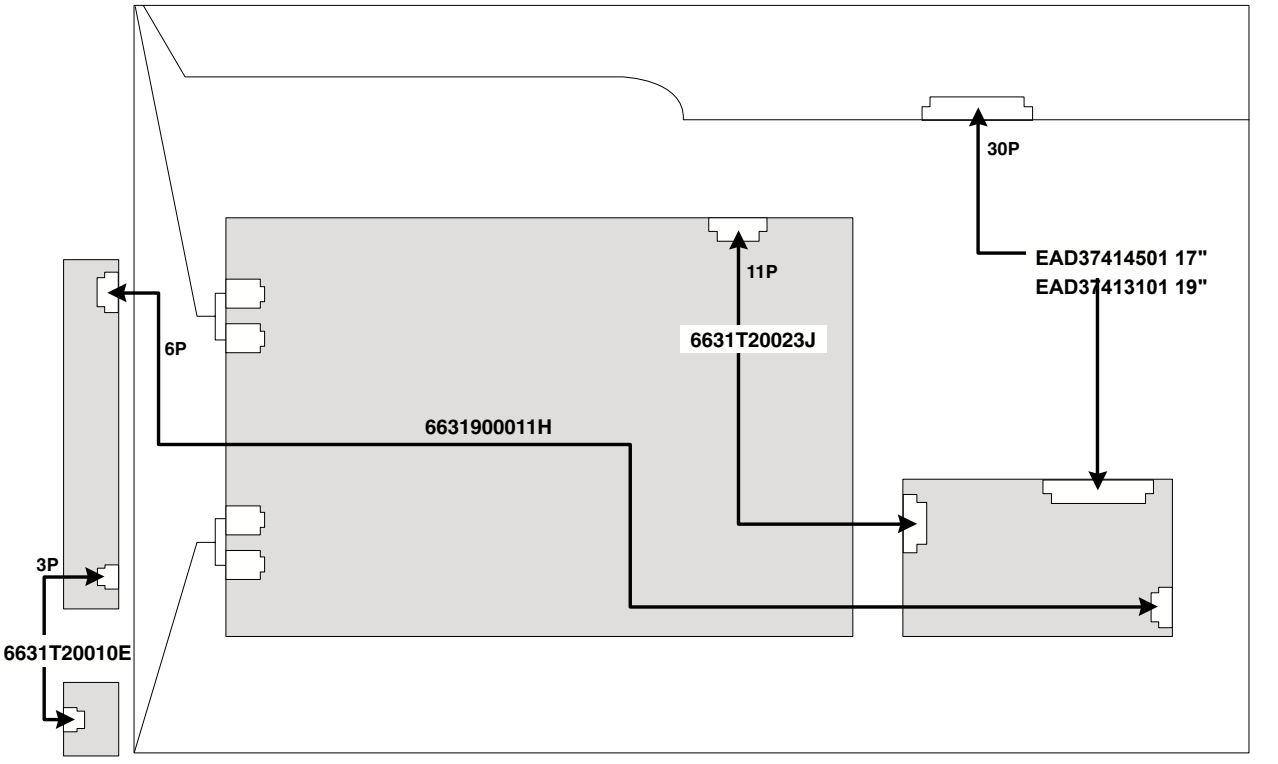
5. POWER


NO POWER
(POWER INDICATOR OFF)
CHECK
Fuse F101 OK?
NO
Trouble in Fuse (F101)
YES
CHECK
C101 Voltage
(AC110V->160Vdc
(AC220V->304Vdc
NO
Check BD101
YES
CHECK
U101 Pin6 Waveform
(Square wave
Come out?)
NO
Check U101 Pin7 : 9~10V
Check D102
YES
Check Q101 Drain
Waveform
NO
Trouble in Q101
YES
Check D201, D202
D203,Voltage
NO
Trouble in D201, D202
YES
CHECK 5V, 12V Line

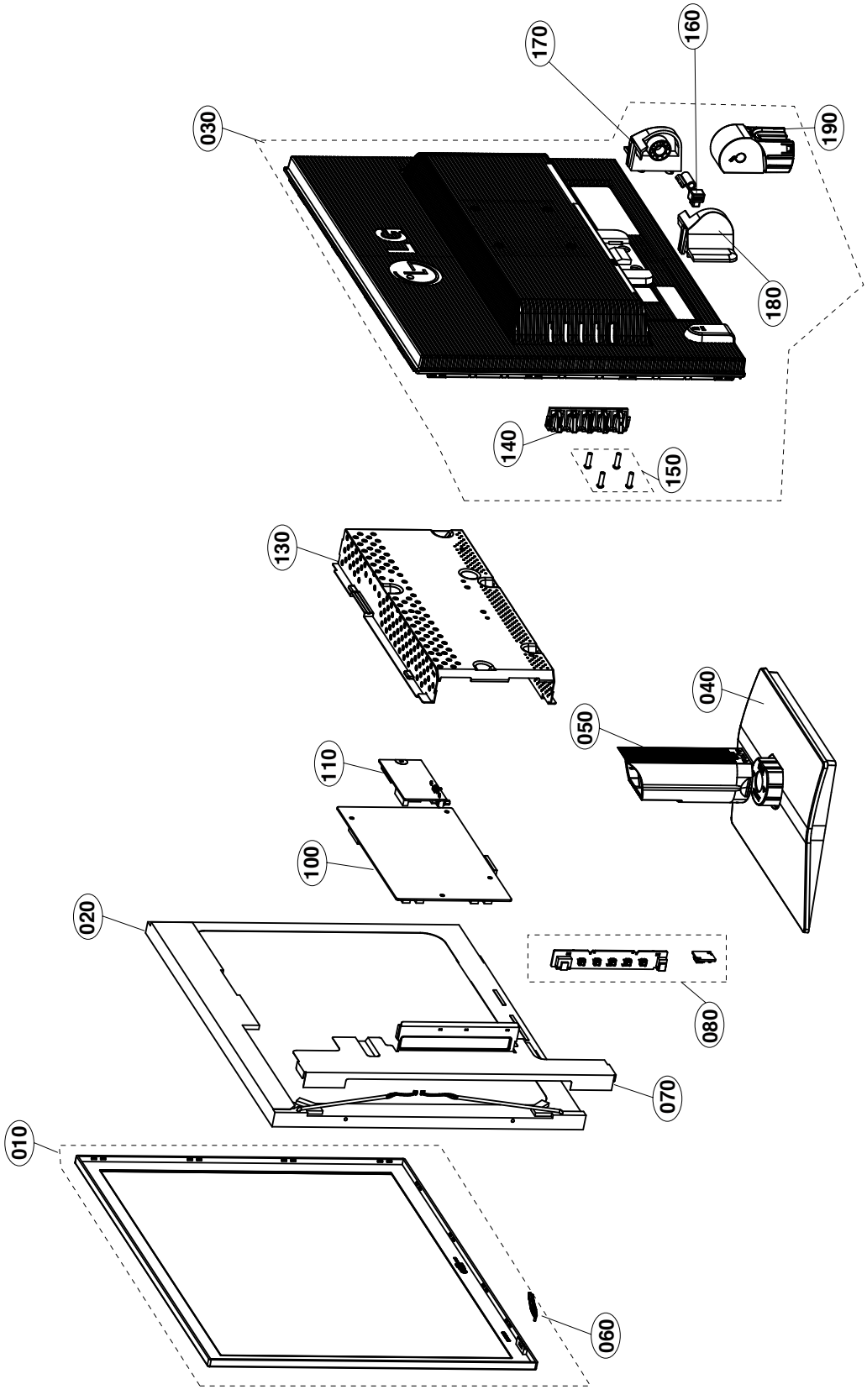
6. Raster


NO Raster
(Lamp Off)
CHECK
P201 Pin9
3.3V?
NO
Check Scaler Output
(Main Board)
YES
Check U301 Pin2
5V?
NO
Check Q301, Q302
YES
Check U301 Pin6 VSEN,
Less than 3V
NO
Check the waveform of U301
Pin1, 15
YES
Check U301 Pin12 SSTCMT,
Less than 1V
NO
Check the waveform of U301
Pin2, 3
If waveform is no problem
Check U303, U304
Drain waveform
NO
Check D302~D308
Or Trouble in U303, U304
YES
CHECK T301, T302

WIRING DIAGRAM



EXPLODED VIEW



EXPLODED VIEW PARTS LIST(L1719S)

*** Note:** Safety mark . !

Ref.No		Part No	Decription
010	!	30919C0021D	L1719 . 17" L1719 BRAND 30909C0009 CABINET ASSY ANALOG (BK)
		30919C0021A	L1719 BRAND 30909C0009 CABINET ASSY ANALOG SILVER
020	!	EAJ32176801	M170EG01-VD ZBD DRIVER 17.0INCH 1280X1024 300CD COLOR 72% 5/4 800:1 5MS, 160/160, 2CH-LVDS, 4LAMP AU OPTRONICS CORP
		EAJ34858001	HT170E01-300 ZBD DRIVER 17.0INCH 1280X1024 300CD COLOR 72% 5/4 800:1 4MASK, 5ms, 160/160 BOE HYDIS TECHNOLOGY
		EAJ36378001	LM170E03-TLL1 DRIVER 17.0INCH 1280X1024 300CD COLOR 72% 4/3 800:1 P5, 5ms, 160/160, TLI T-con, Lusem/Toshba(Source/Gate), Diffuser*2+Prism*1,lamp wir
		EAJ36379501	LM170E03-TLL2 DRIVER 17.0INCH 1280X1024 300CD COLOR 72% 4/3 800:1 P6, 5ms, 160/160, TLI T-con, Lusem/Toshiba(Source/Gate), Diffuser x2+Prism x1, lamp
		EAJ36380701	LM170E03-TLL3 DRIVER 17.0INCH 1280X1024 300CD COLOR 72% 4/3 800:1 P5, 5ms, 160/160, TLI T-con, Magna/Toshiba(Source/Gate), Diffuser x2+Prism x1, lamp
		EAJ36720101	CLAA170EA07P ZBD DRIVER 17INCH 1280X1024 300CD COLOR 72% 4/3 700:1 5ms, 16.7M color depth, 160/160, lamp wire length 150mm CHUNGHWA PICTURE TUBES, LT
030	!	ACQ33172001	BACK COVER ASSY (ANALOG) FOR LPL CI TLL1/2/3
		ACQ33172002	BACK COVER ASSY (ANALOG) FOR AUO-5ms
		ACQ33172003	BACK COVER ASSY (ANALOG) FOR HYDIS
		ACQ33172005	BACK COVER ASSY (ANALOG) FOR CPT
040	!	3043900045F	BASE L1x19 MB03CD L1x19 STAND BASE ASSY / ND-LOCAL
050	!	35509K0267A	L1719 STAND BODY COVER
060		3520900044A	LED LX19 PC NON LENS
070		49509K0266A	SHIELD LX52 LAMP
		MGJ37924303	PRESS SPTE 0.3 LAMP SPTE SHIELD L1753 FOR LPL/AUO CI MODULE ND LOCCAL
080	!	EBR37001401	CONTROL T.T LM72A BAIKAL II 17-INCH GREEN RD 19 SERIAL
		EBR36269401	POWER T.T LM-57C BAIKAL II - -
100		EAY36304901	baikal 2 FREE L1952/L1752 LCD LG INNOTEK, LIEN CHANG Baikal 2 lips ,4 lamp LG INNOTEK CO., LTD(Oversea)
110		EBU36999401	BAIKAL II MSTAR ANALOG BRAND LM72B
130		49509S0034A	PRESS H-GI 0.8MM REAR HGI SHIELD LX52/ LX19 SERIES
		MGJ37924107	PRESS SBHG 0.8 REAR SECC SHIELD LX53 FOR LPL/AUO CI MODULE Analog ND local
140		4940900023A	MAIN/SMPS 5 KEY LX19 CONTROL KNOB
150		FAB30006308	332-102L TH + P 4MM 14MM MSWR10 FZB
160		49519K0137A	ASSY STAND HINGE ASSY FOR LX53S/T & LX19
170		35509K0263A	LX19 HINGE COVER R
180		35509K0264A	LX19 HINGE COVER L
190		35509K0265A	LX19 HINGE BODY

EXPLODED VIEW PARTS LIST(L1919S)

*** Note:** Safety mark ⚠

Ref.No		Part No	Decription
010	!	30919C0022K	L1919 . 19" L1919_CABINET ASSY ANALOG BK (OTHERS)
		30919C0022G	L1919S . 19" L1919 CABINET ASSY ANALOG SILVER (OTHERS) NT - LOCAL
020	!	EAJ32176101	M190EG02-V4 ZBD DRIVER 19.0INCH 1280X1024 300CD COLOR 72% 5/4 800 VS 1 5MS, 160/160, 2CH-LVDS, 4LAMP AU OPTRONICS CORP
		EAJ36380801	LM190E08-TLL1 DRIVER 19.0INCH 1280X1024 300CD COLOR 72% 4/3 800:1 P4, 5ms, 160/160, TLI T-con, Lusem/Toshiba(Source/Gate), lamp:Heesung, Diffuser x2+L
		EAJ36380901	LM190E08-TLL2 DRIVER 19.0INCH 1280X1024 300CD COLOR 72% 4/3 800:1 P7, 5ms, 160/160, TLI T-con, Lusem/Toshiba(Source/Gate), lamp Heesung, Diffuser x2+P
		EAJ36381001	LM190E08-TLL3 DRIVER 19.0INCH 1280X1024 300CD COLOR 72% 4/3 800:1 P4, 5ms, 160/160, TLI T-con, Magna/Toshiba(Source/Gate), lamp Heesung, Diffuser x2+L
		6304FHS014B	HSD190ME13-D10(700VS1) DRIVER 19INCH 1280X1024 300CD COLOR 72% 4/3 700:1 - HANNSTAR DISPLAY CORPORATION
030	!	ACQ33163601	BACK COVER ASSY (ANALOG) FOR LPL CI TLL1/2/3
		ACQ33163602	BACK COVER ASSY (ANALOG) FOR AUO-5ms
		ACQ33163604	BACK COVER ASSY (ANALOG) FOR HSD
040	!	3043900045F	BASE L1x19 MB03CD L1x19 STAND BASE ASSY / ND-LOCAL
050	!	35509K0268A	L1919 STAND BODY COVER
060		3520900044A	LED LX19 PC NON LENS
070		49509K0267F	PRESS SPTE-C 0.3 LAMP SPTE SHI
		MGJ37924403	PRESS SPTE 0.3 LAMP SPTE SHIELD 19" FOR LPL CI MODULE ND LOCAL
080		EBR37001701	CONTROL T.T LM72A BAIKAL II 19-INCH GREEN RD 19 SERIAL
		EBR37001702	CONTROL T.T LM72A BAIKAL II 19-INCH GREEN RD 19 SERIAL (Oversea)
100	!	EBR36269401	POWER T.T LM-57C BAIKAL II - -
		EAY36304901	baikal 2 FREE L1952/L1752 LCD LG INNOTEK, LIEN CHANG Baikal 2 lips ,4 lamp LG INNOTEK CO., LTD(Oversea)
110		EBU36999405	BAIKAL II MSTAR ANALOG BRAND LM72B
		EBU36999403	BAIKAL II MSTAR ANALOG BRAND LM72B(Oversea) SKD
130		49509S0034A	PRESS H-GI 0.8MM REAR HGI SHIELD LX52/ LX19 SERIES
		MGJ37924107	PRESS SBHG 0.8 REAR SECC SHIELD LX53 FOR LPL/AUO CI MODULE Analog ND local
140		4940900023A	MAIN/SMPS 5 KEY LX19 CONTROL KNOB
150		FAB30006308	332-102L TH + P 4MM 14MM MSWR10 FZB
160		49519K0137A	ASSY STAND HINGE ASSY FOR LX53S/T & LX19
170		35509K0263A	LX19 HINGE COVER R
180		35509K0264A	LX19 HINGE COVER L
190		35509K0265A	LX19 HINGE BODY

REPLACEMENT PARTS LIST

CAUTION : BEFORE REPLACING ANY OF THESE COMPONENTS,
READ CAREFULLY THESAFETY PRECAUTIONS IN THIS MANUAL.
*** NOTE : S** SAFETY Mark ⚠
AL ALTERNATIVE PARTS

L1*19S-BFS.K***EPN DATE: 2007-4-2

*S	*AL	LOC.NO.	PART NO.	DESCRIPTION / SPECIFICATION
Main Board				
CAPACITORS				
		C501	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C502	0CK473CK56A	C1608X7R1H473KT 47nF 10% 50V X7R -55TO+125C 1608 TP TDK
		C503	0CK473CK56A	C1608X7R1H473KT 47nF 10% 50V X7R -55TO+125C 1608 TP TDK
		C504	0CK473CK56A	C1608X7R1H473KT 47nF 10% 50V X7R -55TO+125C 1608 TP TDK
		C505	0CK473CK56A	C1608X7R1H473KT 47nF 10% 50V X7R -55TO+125C 1608 TP TDK
		C506	0CC102CK41A	C1608C0G1H102JT 1nF 5% 50V C0G -55TO+125C 1608 TP TDK
		C507	0CK473CK56A	C1608X7R1H473KT 47nF 10% 50V X7R -55TO+125C 1608 TP TDK
		C508	0CK473CK56A	C1608X7R1H473KT 47nF 10% 50V X7R -55TO+125C 1608 TP TDK
		C509	0CC220CK41A	C1608C0G1H220JT 22pF 5% 50V C0G -55TO+125C 1608 TP TDK
		C510	0CC220CK41A	C1608C0G1H220JT 22pF 5% 50V C0G -55TO+125C 1608 TP TDK
		C511	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C512	0CE106CF638	SHL5.0TP16VB10M 10uF 20% 16V 0A -40TO+85C GP 2000HR 5X11MM 5MM FORMING TP SAMYOUNG ELECTRONICS
		C513	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C514	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C515	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C516	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C517	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C518	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C519	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C520	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C521	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C522	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C523	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C524	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C525	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C526	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C527	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C601	0CE107EF610	KMG16VB100M 100uF 20% 16V 125MA -55TO+105C WT 1000HR 5X11MM 2MM STRAIGHT BK
		C602	0CK103CK51A	0603B103K500CT 10nF 10% 50V Y5P -30TO+85C 1608 TP PILKOR ELECTRONICS
		C603	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C604	0CE107EF610	KMG16VB100M 100uF 20% 16V 125MA -55TO+105C WT 1000HR 5X11MM 2MM STRAIGHT BK
		C605	0CE477EF638	KMG5.0TP16VB470M 470uF 20% 16V 366MA -55TO+105C WT 2000HR 8X11.5MM 5MM FORMING TP SAMYOUNG ELECTRONICS
		C702	0CK103CK51A	0603B103K500CT 10nF 10% 50V Y5P -30TO+85C 1608 TP

DATE: 2007-4-2

*S	*AL	LOC.NO.	PART NO.	DESCRIPTION / SPECIFICATION
				PILKOR ELECTRONICS
		C703	0CK103CK51A	0603B103K500CT 10nF 10% 50V Y5P -30TO+85C 1608 TP PILKOR ELECTRONICS
		C704	0CK104CK56A	0603B104K500CT 100nF 10% 50V X7R -55TO+125C 1608 TP PILKOR ELECTRONICS
		C705	0CK105CD56A	C1608X7R1A105KT 1uF 10% 10V X7R -55TO+125C 1608 TP TDK
		C706	0CC101CK41A	C1608C0G1H101JT 100pF 5% 50V C0G -55TO+125C 1608 TP TDK
		C720	0CC680CK41A	C1608C0G1H680JT 68pF 5% 50V C0G -55TO+125C 1608 TP TDK
		C721	0CC680CK41A	C1608C0G1H680JT 68pF 5% 50V C0G -55TO+125C 1608 TP TDK
		C722	0CC680CK41A	C1608C0G1H680JT 68pF 5% 50V C0G -55TO+125C 1608 TP TDK
		C723	0CC680CK41A	C1608C0G1H680JT 68pF 5% 50V C0G -55TO+125C 1608 TP TDK
DIODEs				
		D711	0DSIH00018A	ENKMC2837-T112 1.2V 85V 300MA 2A 4NSEC 150MW TO236 R/TP 3P 2 ISAHAYA ELECTRONICS
		D712	0DSIH00018A	ENKMC2837-T112 1.2V 85V 300MA 2A 4NSEC 150MW TO236 R/TP 3P 2 ISAHAYA ELECTRONICS
		D713	0DSIH00018A	ENKMC2837-T112 1.2V 85V 300MA 2A 4NSEC 150MW TO236 R/TP 3P 2 ISAHAYA ELECTRONICS
		ZD705	0DZ560009GB	BZT52C5V6S-(F) 5.6V 5.2TO6V 40OHM 200MW SOD323 R/TP 2P 1 DIODES
		ZD706	0DZ560009GB	BZT52C5V6S-(F) 5.6V 5.2TO6V 40OHM 200MW SOD323 R/TP 2P 1 DIODES
		ZD707	0DZ560009GB	BZT52C5V6S-(F) 5.6V 5.2TO6V 40OHM 200MW SOD323 R/TP 2P 1 DIODES
		ZD709	0DZ560009GB	BZT52C5V6S-(F) 5.6V 5.2TO6V 40OHM 200MW SOD323 R/TP 2P 1 DIODES
		ZD710	0DZ560009GB	BZT52C5V6S-(F) 5.6V 5.2TO6V 40OHM 200MW SOD323 R/TP 2P 1 DIODES
ICs				
		U201	0IPRP00704A	FE211M-LF(TSUM16AWL) 3VTO3.6V,1.5VTO1.98V 14.318MHZ 1.1W 0.000000000005F PQFP TR 100P MSTAR SEMICONDUCTOR
		U502	EAN37157001	W25X20VSNIG 2MBIT 256Kbit X 1 2.7VTO3.6V 15NSEC UNIFORM SECTOR SOIC(JEDEC) ST 8P WINBOND ELECTRONICS

DATE: 2007-4-2

*S	*AL	LOC.NO.	PART NO.	DESCRIPTION / SPECIFICATION
		U503	0IMMR00203A	FM24C08 8KBIT 1KX8BIT 2.7VTO5.5V 100NSEC SOIC R/TP 8P FAIRCHILD SEMICONDUCTOR CORP
		U601	0IPMGA0010A	AZ1117H-3.3 4.75TO10V 3.3V 0W SOT223 R/TP 3P ADVANCED ANALOG CIRCUITS
		U602	0IPMG00049A	AZ1117H-1.8TR/E1[H13A] 3.2TO10V 1.8V 0W SOT223 R/TP 3P ADVANCED ANALOG CIRCUITS
TRANSISTORs				
		Q501	0TRKE80046A	2N3904S NPN 6V 60V 40V 200MA 50NA 100TO300 350MW SOT23 R/TP 3P KEC CORPERATION
		Q601	0TRKE80046A	2N3904S NPN 6V 60V 40V 200MA 50NA 100TO300 350MW SOT23 R/TP 3P KEC CORPERATION
		Q602	0TR127309AA	KTA1273 PNP -5V -30V -30V -2A -0.0000001A 100TO320 1W TO92L TP 3P KEC CORPERATION
		Q701	0TR390609DC	2N3906S-RTK PNP -5V -40V -40V -0.2A -0.00000005A 100TO300 350MW SOT23 R/TP 3P KEC CORPERATION
		Q702	0TR390609DC	2N3906S-RTK PNP -5V -40V -40V -0.2A -0.00000005A 100TO300 350MW SOT23 R/TP 3P KEC CORPERATION
RESISTORs				
		R501	0RJ0562D677	MCR03EZPJ560 56OHM 5% 1/10W 1608 R/TP ROHM
		R502	0RJ0562D677	MCR03EZPJ560 56OHM 5% 1/10W 1608 R/TP ROHM
		R503	0RJ0562D677	MCR03EZPJ560 56OHM 5% 1/10W 1608 R/TP ROHM
		R504	0RJ0562D677	MCR03EZPJ560 56OHM 5% 1/10W 1608 R/TP ROHM
		R505	0RJ1001D677	MCR03EZPJ102 1KOHM 5% 1/10W 1608 R/TP ROHM
		R506	0RJ0562D677	MCR03EZPJ560 56OHM 5% 1/10W 1608 R/TP ROHM
		R507	0RJ0562D677	MCR03EZPJ560 56OHM 5% 1/10W 1608 R/TP ROHM
		R508	0RJ1002D677	MCR03EZPJ103 10KOHM 5% 1/10W 1608 R/TP ROHM
		R509	0RJ3900D677	MCR03EZPJ391 390OHM 5% 1/10W 1608 R/TP ROHM
		R510	0RJ4700D677	MCR03EZPJ471 470OHM 5% 1/10W 1608 R/TP ROHM
		R511	0RJ2002D677	MCR03EZPJ203. 20KOHM 5% 1/10W 1608 R/TP ROHM
		R512	0RJ1002D677	MCR03EZPJ103 10KOHM 5% 1/10W 1608 R/TP ROHM
		R513	0RJ1002D677	MCR03EZPJ103 10KOHM 5% 1/10W

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*S	*AL	LOC.NO.	PART NO.	DESCRIPTION / SPECIFICATION
				1608 R/TP ROHM
		R514	0RJ1002D677	MCR03EZPJ103 10KOHM 5% 1/10W 1608 R/TP ROHM
		R515	0RJ1002D677	MCR03EZPJ103 10KOHM 5% 1/10W 1608 R/TP ROHM
		R516	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10W 1608 R/TP ROHM
		R517	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10W 1608 R/TP ROHM
		R518	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W 1608 R/TP ROHM
		R519	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10W 1608 R/TP ROHM
		R520	0RJ0332D677	MCR03EZPJ330 33OHM 5% 1/10W 1608 R/TP ROHM
		R521	0RJ0332D677	MCR03EZPJ330 33OHM 5% 1/10W 1608 R/TP ROHM
		R522	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10W 1608 R/TP ROHM
		R524	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1608 R/TP ROHM
		R525	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1608 R/TP ROHM
		R601	0RJ1002D677	MCR03EZPJ103 10KOHM 5% 1/10W 1608 R/TP ROHM
		R602	0RJ2000D677	MCR03EZPJ201 200OHM 5% 1/10W 1608 R/TP ROHM
		R603	0RJ2000D677	MCR03EZPJ201 200OHM 5% 1/10W 1608 R/TP ROHM
		R604	0RJ1002D677	MCR03EZPJ103 10KOHM 5% 1/10W 1608 R/TP ROHM
		R605	0RX0681K668	RSD02F36R80J 6.8OHM 5% 2W 12.0X4.0MM 15.0MM FORMING BK
		R606	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1608 R/TP ROHM
		R607	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W 2012 R/TP . ROHM
		R608	0RJ1002D677	MCR03EZPJ103 10KOHM 5% 1/10W 1608 R/TP ROHM
		R701	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1608 R/TP ROHM
		R702	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10W 1608 R/TP ROHM
		R703	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10W 1608 R/TP ROHM
		R704	0RJ1200D677	MCR03EZPJ121 120OHM 5% 1/10W 1608 R/TP ROHM
		R705	0RJ1200D677	MCR03EZPJ121 120OHM 5% 1/10W 1608 R/TP ROHM
		R706	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W 1608 R/TP ROHM
		R707	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W 1608 R/TP ROHM
		R708	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W 1608 R/TP ROHM

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*S	*AL	LOC.NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R709	0RJ2001D677	MCR03EZPJ202 2KOHM 5% 1/10W 1608 R/TP ROHM
		R710	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10W 1608 R/TP ROHM
		R711	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10W 1608 R/TP ROHM
		R726	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10W 1608 R/TP ROHM
		R727	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10W 1608 R/TP ROHM
		R728	0RJ0332D677	MCR03EZPJ330 33OHM 5% 1/10W 1608 R/TP ROHM
		R729	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1608 R/TP ROHM
		R730	0RJ0682D677	MCR03EZPJ680 68OHM 5% 1/10W 1608 R/TP ROHM
		R731	0RJ0682D677	MCR03EZPJ680 68OHM 5% 1/10W 1608 R/TP ROHM
		R732	0RJ0332D677	MCR03EZPJ330 33OHM 5% 1/10W 1608 R/TP ROHM
		R733	0RJ0752D677	MCR03EZPJ750 75OHM 5% 1/10W 1608 R/TP ROHM
		R734	0RJ0752D677	MCR03EZPJ750 75OHM 5% 1/10W 1608 R/TP ROHM
		R736	0RJ0752D677	MCR03EZPJ750 75OHM 5% 1/10W 1608 R/TP ROHM
	Other s			
		J404	6630V90220E	TJC2004-6A 6P 2.0MM 1R STRAIGHT DIP BK WHITE CWB CWB GROUP
		J701	6630TGA004F	KCN-DS-3-0062 D-SUB 15P 2.29MM ANGLE FEMALE DIP TR LOCKING - KSD CO., LTD
		J703	6630V90220K	TJC2004-11A 11P 2.0MM 1R STRAIGHT DIP BK WHITE CWB CWB GROUP
		J707	EAG37060101	10031HR-30 30P 1.0MM FFC/FPC ANGLE BOTTOM SMD TP LOCKING LGEND BAIKAL 2 USE IT YEONHO SPEC.10031HR-30 1.0MM 30P SMD YEONHO ELECTRONICS
		X501	6212AA2001G	HLX-U-F-14.31818M-18 14.31818MHZ 30PPM 18pF,7pF HC-49U DIP BK NAN JING HUA LIAN XING ELECTRONICS CO., LTD
	Control Boards			
		R1	0RD7501Q609	RDM94T1J7K50 7.5KOHM 5% 1/4W 3.2X1.8MM - AXIAL TA52
		R2	0RD7501Q609	RDM94T1J7K50 7.5KOHM 5% 1/4W 3.2X1.8MM - AXIAL TA52
		R3	0RD1801Q609	RDM94T1J1K80 1.8KOHM 5% 1/4W 3.2X1.8MM - AXIAL TA52
		R4	0RD1201Q609	RDM94T1J1K20 1.2KOHM 5% 1/4W 3.2X1.8MM 26.0MM AXIAL TA52

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*S	*AL	LOC.NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R5	0RD1201Q609	RDM94T1J1K20 1.2KOHM 5% 1/4W 3.2X1.8MM 26.0MM AXIAL TA52
		SW1	6600R000133	JTP1280A6 1C1P 12VDC 0.05A HORIZONTAL 160GF TP
		SW2	6600R000133	JTP1280A6 1C1P 12VDC 0.05A HORIZONTAL 160GF TP
		SW3	6600R000133	JTP1280A6 1C1P 12VDC 0.05A HORIZONTAL 160GF TP
		SW4	6600R000133	JTP1280A6 1C1P 12VDC 0.05A HORIZONTAL 160GF TP
		SW5	6600R000133	JTP1280A6 1C1P 12VDC 0.05A HORIZONTAL 160GF TP
		ZD1	0DZ560009AG	GDZJ5.6B 5.6V 5.45TO5.73V 60OHM 500MW DO34 TP 2P 1
		ZD2	0DZ560009AG	GDZJ5.6B 5.6V 5.45TO5.73V 60OHM 500MW DO34 TP 2P 1
		LED1	0DLLT0089AA	LTL-1BEDJ-0C2 ROUND 3MM YELLOW/GREEN WHITE DIFFUSED 2.6V 20mA 30mA 19mCD - 2.54MM TP 3P LITE-ON

Power Board

CAPACITORS

		C101	0CZZ9ST017A	EKM107M2WL35P6 100uF 20% 450V 750MA -25TO+105C GP 2000HR 18X35.5MM 12.5MM STRAIGHT BK
		C102	0CKZTTA002Q	DCH222M46YRN65L0A0 2200pF 20% 1000V Y5R -25TO+125C 11.5X4MM 10MM BK HONGMING ELECTRONIC CERAMIC
		C103	0CZZ9ST014A	EGF336R1HE11TCSA 33uF 20% 50V 105MA -25TO+105C GP 2000HR 6.3X11MM 5MM FORMING TP
		C104	0CH5271K416	0805N271J500LT 270pF 5% 50V C0G -55TO+125C 2012 TP PILKOR ELECTRONICS
		C105	0CZZ9ST013A	EKM474M1HD11TC 470nF 20% 50V 7MA -25TO+105C GP 2000HR 5X11MM 5MM FORMING TP
		C106	0CK222DK4DA	UMK212CG222JG-T 2.2nF 5% 50V C0G -55TO+125C 2012 TP
		C107	0CK1040K945	DCS104Z30Y5VF6FJ5A 100nF -20TO+80% 50V Y5V -25TO+85C 8X3MM 7.5MM TP
		C201	0CKZTTA002E	DG3AHR102K959 1nF 10% 1000V Y5R -25TO+85C 9.5X4.5MM 5MM TP
		C202	0CZZ9ST021A	EGF108M1EG20TCSA 1000uF 20% 25V 1.4A -40TO+105C GP 2000HR 10X20MM 5MM STRAIGHT TP
		C203	0CZZ9ST020A	EGF687M1EG20TCSA 680uF 20% 25V 1.4A -40TO+105C GP 2000HR 10X20MM 5MM STRAIGHT TP
		C204	0CZZ9ST018A	0CZZ9ST018A(LGE) 1000uF 20% 16V 1.4A -40TO+105C GP 2000HR 10X20MM 5MM STRAIGHT TP

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*S	*AL	LOC.NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C205	0CZZ9ST018A	0CZZ9ST018A(LGE) 1000uF 20% 16V 1.4A -40TO+105C GP 2000HR 10X20MM 5MM STRAIGHT TP
		C206	0CZZ9ST021A	EGF108M1EG20TCSA 1000uF 20% 25V 1.4A -40TO+105C GP 2000HR 10X20MM 5MM STRAIGHT TP
		C207	0CZZ9ST019A	EGF477M1EG16TCSA 470uF 20% 25V 1.21A -40TO+105C GP 2000HR 10X16MM 5MM STRAIGHT TP
		C208	0CKZTTA002B	DG3AHR331K959 330pF 10% 1000V Y5R -25TO+85C 7.5X4.5MM 5MM TP
		C208	0CKZTTA002E	DG3AHR102K959 1nF 10% 1000V Y5R -25TO+85C 9.5X4.5MM 5MM TP
		C210	0CH3104K566	0805B104K500CT 100nF 10% 50V X7R -55TO+125C 2012 TP PILKOR ELECTRONICS
		C301	0CZZTCT006D	C3216X7R1E225M 2.2uF 20% 25V X7R -55TO+125C 3216 TP
		C302	0CZZTCT006D	C3216X7R1E225M 2.2uF 20% 25V X7R -55TO+125C 3216 TP
		C303	0CK225DD66A	LMK212JB225MG-T 2.2uF 20% 10V X7R -55TO+125C 2012 TP
		C304	0CK225DD66A	LMK212JB225MG-T 2.2uF 20% 10V X7R -55TO+125C 2012 TP
		C305	0CK224DH56A	0805B224K250CT 220nF 10% 25V X7R -55TO+125C 2012 TP PILKOR ELECTRONICS
		C306	0CH2102K566	C2012X7R1H102KT 1nF 10% 50V X7R -55TO+125C 2012 TP TDK
		C307	0CH2102K566	C2012X7R1H102KT 1nF 10% 50V X7R -55TO+125C 2012 TP TDK
		C308	0CH2102K566	C2012X7R1H102KT 1nF 10% 50V X7R -55TO+125C 2012 TP TDK
		C309	0CK473DK56A	C2012X7R1H473KT 47nF 10% 50V X7R -55TO+125C 2012 TP
		C310	0CH5181K416	0805N181J500LT 180pF 5% 50V C0G -55TO+125C 2012 TP PILKOR ELECTRONICS
		C312	0CH3103K516	C2012Y5P1H103KT 10nF 10% 50V Y5P -30TO+85C 2012 TP TDK
		C313	0CZZTCT006D	C3216X7R1E225M 2.2uF 20% 25V X7R -55TO+125C 3216 TP
		C314	0CZZTCT006D	C3216X7R1E225M 2.2uF 20% 25V X7R -55TO+125C 3216 TP
		C315	0CZZTCT006D	C3216X7R1E225M 2.2uF 20% 25V X7R -55TO+125C 3216 TP
		C316	0CK473DK56A	C2012X7R1H473KT 47nF 10% 50V X7R -55TO+125C 2012 TP
		C317	0CH2222K516	0805B222K500CT 2.2nF 10% 50V Y5P -30TO+85C 2012 TP PILKOR ELECTRONICS
		C318	0CH2222K516	0805B222K500CT 2.2nF 10% 50V Y5P -30TO+85C 2012 TP PILKOR ELECTRONICS

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*S	*AL	LOC.NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C319	0CH2102K566	C2012X7R1H102KT 1nF 10% 50V X7R -55TO+125C 2012 TP TDK
		C320	0CK473DK56A	C2012X7R1H473KT 47nF 10% 50V X7R -55TO+125C 2012 TP
		C321	0CH2102K566	C2012X7R1H102KT 1nF 10% 50V X7R -55TO+125C 2012 TP TDK
		C322	0CH3103K516	C2012Y5P1H103KT 10nF 10% 50V Y5P -30TO+85C 2012 TP TDK
		C323	0CH5151K416	0805N151J500LT 150pF 5% 50V C0G -55TO+125C 2012 TP PILKOR ELECTRONICS
		C401	EAE36975601	DCG150J26SLV65L0A 15pF 5% 6KV SL -25TO+85C 6.5X5MM 10MM BK DONG GUAN HONG MING
		C402	EAE36975601	DCG150J26SLV65L0A 15pF 5% 6KV SL -25TO+85C 6.5X5MM 10MM BK DONG GUAN HONG MING
		C403	EAE36975601	DCG150J26SLV65L0A 15pF 5% 6KV SL -25TO+85C 6.5X5MM 10MM BK DONG GUAN HONG MING
		C404	EAE36975601	DCG150J26SLV65L0A 15pF 5% 6KV SL -25TO+85C 6.5X5MM 10MM BK DONG GUAN HONG MING
		C407	0CK22201510	DCH222K43Y5PN6DK0A 2.2nF 10% 1000V Y5P -25TO+85C 10X5MM 11MM BK
		C408	0CK22201510	DCH222K43Y5PN6DK0A 2.2nF 10% 1000V Y5P -25TO+85C 10X5MM 11MM BK
		C409	0CK22201510	DCH222K43Y5PN6DK0A 2.2nF 10% 1000V Y5P -25TO+85C 10X5MM 11MM BK
		C410	0CK22201510	DCH222K43Y5PN6DK0A 2.2nF 10% 1000V Y5P -25TO+85C 10X5MM 11MM BK
		C411	0CH6152K406	C2012S2L1H152JT 1.5nF 5% 50V S2L -55TO+125C 2012 TP
		C412	0CH6152K406	C2012S2L1H152JT 1.5nF 5% 50V S2L -55TO+125C 2012 TP
		C413	0CH6152K406	C2012S2L1H152JT 1.5nF 5% 50V S2L -55TO+125C 2012 TP
		C414	0CH6152K406	C2012S2L1H152JT 1.5nF 5% 50V S2L -55TO+125C 2012 TP
		C415	0CH2393K516	0805B393K500CT 39nF 10% 50V Y5P -30TO+85C 2012 TP PILKOR ELECTRONICS
		C416	0CH2393K516	0805B393K500CT 39nF 10% 50V Y5P -30TO+85C 2012 TP PILKOR ELECTRONICS
		CX101	0CZZ9ST025A	PCX233712474 470nF 10% 275V PE -40TO+100C NON-IND 11X18.5X18MM 15MM BK
		CY101	0CZZ9ST024A	DCF101K26Y5PG63L0E0 100pF 10% 250V Y5P -25TO+85C 6.5X5MM 10MM TP

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*S	*AL	LOC.NO.	PART NO.	DESCRIPTION / SPECIFICATION
		CY102	0CZZ9ST024A	DCF101K26Y5PG63L0E0 100pF 10% 250V Y5P -25TO+85C 6.5X5MM 10MM TP
		CY104	0CZZ9ST023A	DCF472M46Y5VG63L0E0 4.7nF 20% 250V Y5V -25TO+85C 11.5X5MM 10MM TP
DIODEs				
		D101	0DRDI00234A	PR1007 1KV 1.3V 5UA 30A 500NSEC DO41 TA52 2P 1
		D102	0DRDI00244A	IN4007/L 1KV 1V 5UA 30A 500NSEC DO41 TA52 2P 1
		D103	0DSGF00019A	1N4148 1V 100V 150MA 500MA 4NSEC 500MW DO35 TP 2P 1 GULF SEMICONDUCTOR
		D104	0DRTW00274A	2A05 600V 1V 50UA 60A 1MSEC DO34 TA52 2P 1 TAIWAN SEMICONDUCTOR
		D105	0DRTW00274A	2A05 600V 1V 50UA 60A 1MSEC DO34 TA52 2P 1 TAIWAN SEMICONDUCTOR
		D106	0DRTW00274A	2A05 600V 1V 50UA 60A 1MSEC DO34 TA52 2P 1 TAIWAN SEMICONDUCTOR
		D107	0DRTW00274A	2A05 600V 1V 50UA 60A 1MSEC DO34 TA52 2P 1 TAIWAN SEMICONDUCTOR
		D201	0DRTW00280A	MBRF10200CT 200V 990MV 150UA 150A 1MSEC ITO220 BK 2P 1 TAIWAN SEMICONDUCTOR
		D202	EAH36977701	SR306 TSC 60V 700MV 500UA 80A 10NSEC DO201AD BK 2P 1 SHANGHAI EVERWELL ELECTRONICS TRADING CO,LTD
		D203	EAH36977701	SR306 TSC 60V 700MV 500UA 80A 10NSEC DO201AD BK 2P 1 SHANGHAI EVERWELL ELECTRONICS TRADING CO,LTD
		D301	0DSGD00048A	MM4148 1V 75V 150MA 500MA 4NSEC 500MW LL34 R/TP 2P 1 SUZHOU GRANDE ELECTRONICS
		D302	0DSDI00038A	BAV99-(F) 1.25V 100V 300MA 2A 4NSEC 350MW SOT23 R/TP 3P 2
		D303	0DSDI00038A	BAV99-(F) 1.25V 100V 300MA 2A 4NSEC 350MW SOT23 R/TP 3P 2
		D304	0DSGD00048A	MM4148 1V 75V 150MA 500MA 4NSEC 500MW LL34 R/TP 2P 1 SUZHOU GRANDE ELECTRONICS
		D401	0DSDI00068A	BAV70-(F) 1.25V 100V 300MA 2A 4NSEC 350MW SOT23 R/TP 3P 2
		D402	0DSDI00068A	BAV70-(F) 1.25V 100V 300MA 2A 4NSEC 350MW SOT23 R/TP 3P 2
		D403	0DSDI00038A	BAV99-(F) 1.25V 100V 300MA 2A 4NSEC 350MW SOT23 R/TP 3P 2
		D404	0DSDI00038A	BAV99-(F) 1.25V 100V 300MA 2A

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*S	*AL	LOC.NO.	PART NO.	DESCRIPTION / SPECIFICATION
				4NSEC 350MW SOT23 R/TP 3P 2
		D405	0DSGD00048A	MM4148 1V 75V 150MA 500MA 4NSEC 500MW LL34 R/TP 2P 1 SUZHOU GRANDE ELECTRONICS
		D406	0DSGD00048A	MM4148 1V 75V 150MA 500MA 4NSEC 500MW LL34 R/TP 2P 1 SUZHOU GRANDE ELECTRONICS
		ZD101	0DZ330009CC	MTZJ3.3B 3.3V 3.32TO3.5V120OHM 500MW DO34 TP 2P 1 ROHM
		ZD301	EAH36968501	ZMM5232B(Grande) 5.6V 5.32TO5.88V 11OHM 500MW LL34 R/TP 2P 1 SUZHOU GRANDE ELETRONICS CO.,LTD
		ZD302	EAH36968501	ZMM5232B(Grande) 5.6V 5.32TO5.88V 11OHM 500MW LL34 R/TP 2P 1 SUZHOU GRANDE ELETRONICS CO.,LTD
		ZD303	EAH36968501	ZMM5232B(Grande),5.6V 5.32TO5.88V 11OHM 500MW LL34 R/TP 2P 1 SUZHOU GRANDE ELETRONICS CO.,LTD
		L202	61409B0009A	HL-1520S(7UH) 7.0uH 5V 2A 8X15.5MM LEAD L1752 LIPS NAMYANG ELECTRONICS
	ICs			
		U101	0IPMG78425A	FAN7601 20V 5V 1W DIP BK 8P
		U201	0IPMG78424A	AZ431-A 20V_40V 2.5V 1W TO-92 TP 3P
		U301	EAN36961401	OZ9938GN 4.5VTO5.5V 5V 500MW SOIC R/TP 16P 02 MICRO INTERNATIONAL LIMITED
		PC201	0IPMG78432A	LTV-817M-V(C) 6V 6V 200MW DIP BK 4P
	RESISTORs			
		R101	0RJ4703G676	MCR18EZHJ474 470KOHM 5% 1/4W 3216 R/TP
		R102	0RJ6801E472	RC98TRF6K80 6.8KOHM 1% 1/8W 2012 R/TP
		R103	0RH1004D622	MCR10EZHJ105 1MOHM 5% 1/8W 2012 R/TP ROHM
		R104	0RH1001D622	MCR10EZHJ102 1KOHM 5% 1/8W 2012 R/TP ROHM
		R105	0RD0912Q609	RDM94T1J91R0 91OHM 5% 1/4W 3.2X1.8MM 35.0MM AXIAL TA52 SMART ELECTRONICS
		R106	0RH2201D622	MCR10EZHJ222 2.2KOHM 5% 1/8W 2012 R/TP ROHM
		R107	0RD8203A609	RDM92T1J820K 820KOHM 5% 1/2W 6.5X2.3MM - AXIAL TA52
		R108	0RD4702A609	RDM92T1J47K0 47KOHM 5% 1/2W 6.5X2.3MM NONE AXIAL TA52 SMART ELECTRONICS
		R109	0RX0560J609	RSD01T1JR560 0.56OHM 5% 1W 9.0X3.0MM NONE AXIAL TA52 SMART ELECTRONICS
		R110	0RX1003K607	RSD02T3J100K 100KOHM 5% 2W 12.0X4.0MM - AXIAL TA62
		R111	0RD0471Q609	RDM94T1J4R70 4.7OHM 5% 1/4W 3.2X1.8MM NONE AXIAL TA52 SMART ELECTRONICS
		R112	0RJ1302E472	MCR10EZHF 1302 13KOHM 1% 1/8W 2012 R/TP
		R115	0RJ4703G676	MCR18EZHJ474 470KOHM 5% 1/4W 3216 R/TP
		R116	0RJ4703G676	MCR18EZHJ474 470KOHM 5% 1/4W 3216 R/TP
		R117	0RH2403D622	MCR10EZHJ244 240KOHM 5% 1/8W 2012 R/TP ROHM
		R118	0RH2403D622	MCR10EZHJ244 240KOHM 5% 1/8W 2012 R/TP ROHM
		R122	0RH0122D622	MCR10EZHJ120 12OHM 5% 1/8W 2012 R/TP ROHM
		R201	0RX0102K665	RSD02F4J10R0 10OHM 5% 2W 12.0X4.0MM 25.0MM FORMING BK SMART ELECTRONICS
		R202	0RX0242K665	RSD02F4J24R0 24OHM 5% 2W 12.0X4.0MM 5.0MM FORMING BK SMART ELECTRONICS INC.
		R204	0RN3002F409	RN-96T1F30K0 30KOHM 1% 1/6W 3.2X1.8MM 5.0MM AXIAL TA52
		R204	0RN6802F409	RN-96T1F68K0 68KOHM 1% 1/6W 3.2X1.8MM NONE AXIAL TA52 SMART ELECTRONICS INC.
		R205	0RN2201F409	RN-96T1F2K20 2.2KOHM 1% 1/6W 3.2X1.8MM NONE AXIAL TA52 SMART ELECTRONICS
		R207	0RH1001D622	MCR10EZHJ102 1KOHM 5% 1/8W 2012 R/TP ROHM
		R208	0RH6800D622	MCR10EZHJ681 680OHM 5% 1/8W 2012 R/TP ROHM
		R209	0RH1001D622	MCR10EZHJ102 1KOHM 5% 1/8W 2012 R/TP ROHM
		R211	0RJ1001G476	MCR18EZHF1001 1KOHM 1% 1/4W 3216 R/TP
		R301	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W 2012 R/TP ROHM
		R301	0RD1001Q609	RDM94T1J1K00 1KOHM 5% 1/4W 3.2X1.8MM - AXIAL TA52
		R302	0RD0222Q609	RDM94T1J22R0 22OHM 5% 1/4W 3.2X1.8MM NONE AXIAL TA52 SMART ELECTRONICS
		R303	0RH1000D422	MCR10EZHF101 100OHM 1% 1/8W 2012 R/TP
		R304	0RD1002Q609	RDM94T1J10K0 10KOHM 5% 1/4W 3.2X1.8MM NONE AXIAL TA52 SMART ELECTRONICS
		R306	0RH1002D422	MCR10EZHF103 10KOHM 1% 1/8W 2012 R/TP ROHM

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*S	*AL	LOC.NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R309	0RH1002D422	MCR10EZHF103 10KOHM 1% 1/8W 2012 R/TP ROHM
		R309	0RN1502F409	RN-96T1F15K0 15KOHM 1% 1/6W 3.2X1.8MM 5.0MM AXIAL TA52
		R310	0RH1004D622	MCR10EZHJ105 1MOHM 5% 1/8W 2012 R/TP ROHM
		R311	0RH5602D422	0805S8F5602T5E 56KOHM 1% 1/8W 2012 R/TP - UNIOHM (UNIROYAL ELECTRONICS INDUSTRY CO. LTD.)
		R312	0RH0512D622	MCR10EZHJ510 51OHM 5% 1/8W 2012 R/TP ROHM
		R313	0RH0512D622	MCR10EZHJ510 51OHM 5% 1/8W 2012 R/TP ROHM
		R314	0RH0512D622	MCR10EZHJ510 51OHM 5% 1/8W 2012 R/TP ROHM
		R319	0RH1004D622	MCR10EZHJ105 1MOHM 5% 1/8W 2012 R/TP ROHM
		R320	0RH3002D422	MCR10EZHF303 30KOHM 1% 1/8W 2012 R/TP - ROHM
		R321	0RH1803D422	MCR10EZHF184 180KOHM 1% 1/8W 2012 R/TP - ROHM
		R322	0RH5101D422	MCR10EZHF512 5.1KOHM 1% 1/8W 2012 R/TP
		R324	0RH1002D422	MCR10EZHF103 10KOHM 1% 1/8W 2012 R/TP ROHM
		R325	0RH2202D622	MCR10EZHJ223 22KOHM 5% 1/8W 2012 R/TP ROHM
		R326	0RH1002D422	MCR10EZHF103 10KOHM 1% 1/8W 2012 R/TP ROHM
		R327	0RH2202D622	MCR10EZHJ223 22KOHM 5% 1/8W 2012 R/TP ROHM
		R328	0RH0512D622	MCR10EZHJ510 51OHM 5% 1/8W 2012 R/TP ROHM
		R329	0RH5101D422	MCR10EZHF512 5.1KOHM 1% 1/8W 2012 R/TP
		R330	0RH1002D422	MCR10EZHF103 10KOHM 1% 1/8W 2012 R/TP ROHM
		R331	0RH1002D422	MCR10EZHF103 10KOHM 1% 1/8W 2012 R/TP ROHM
		R332	0RJ2001E472	MCR10EZHF202 2KOHM 1% 1/8W 2012 R/TP ROHM
		R333	0RH1004D622	MCR10EZHJ105 1MOHM 5% 1/8W 2012 R/TP ROHM
		R401	0RH5101D422	MCR10EZHF512 5.1KOHM 1% 1/8W 2012 R/TP
		R402	0RH5101D422	MCR10EZHF512 5.1KOHM 1% 1/8W 2012 R/TP
		R403	0RJ3000E472	MCR10EZHF3000 300OHM 1% 1/8W 2012 R/TP - ROHM
		R404	0RJ3000E472	MCR10EZHF3000 300OHM 1% 1/8W 2012 R/TP - ROHM
		R406	0RH1802D422	MCR10EZHF183 18KOHM 1% 1/8W 2012 R/TP - ROHM
		R408	0RH1802D422	MCR10EZHF183 18KOHM 1% 1/8W

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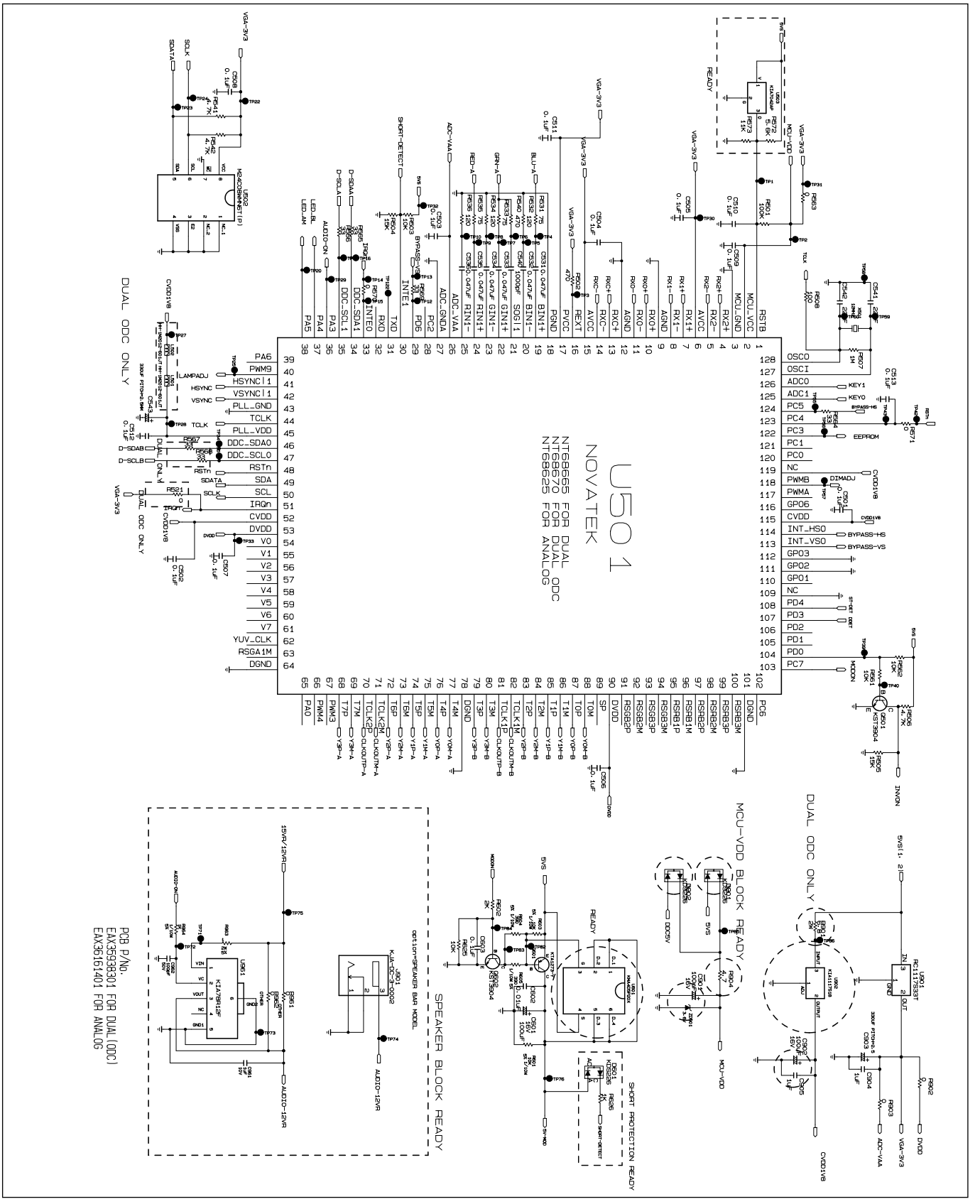
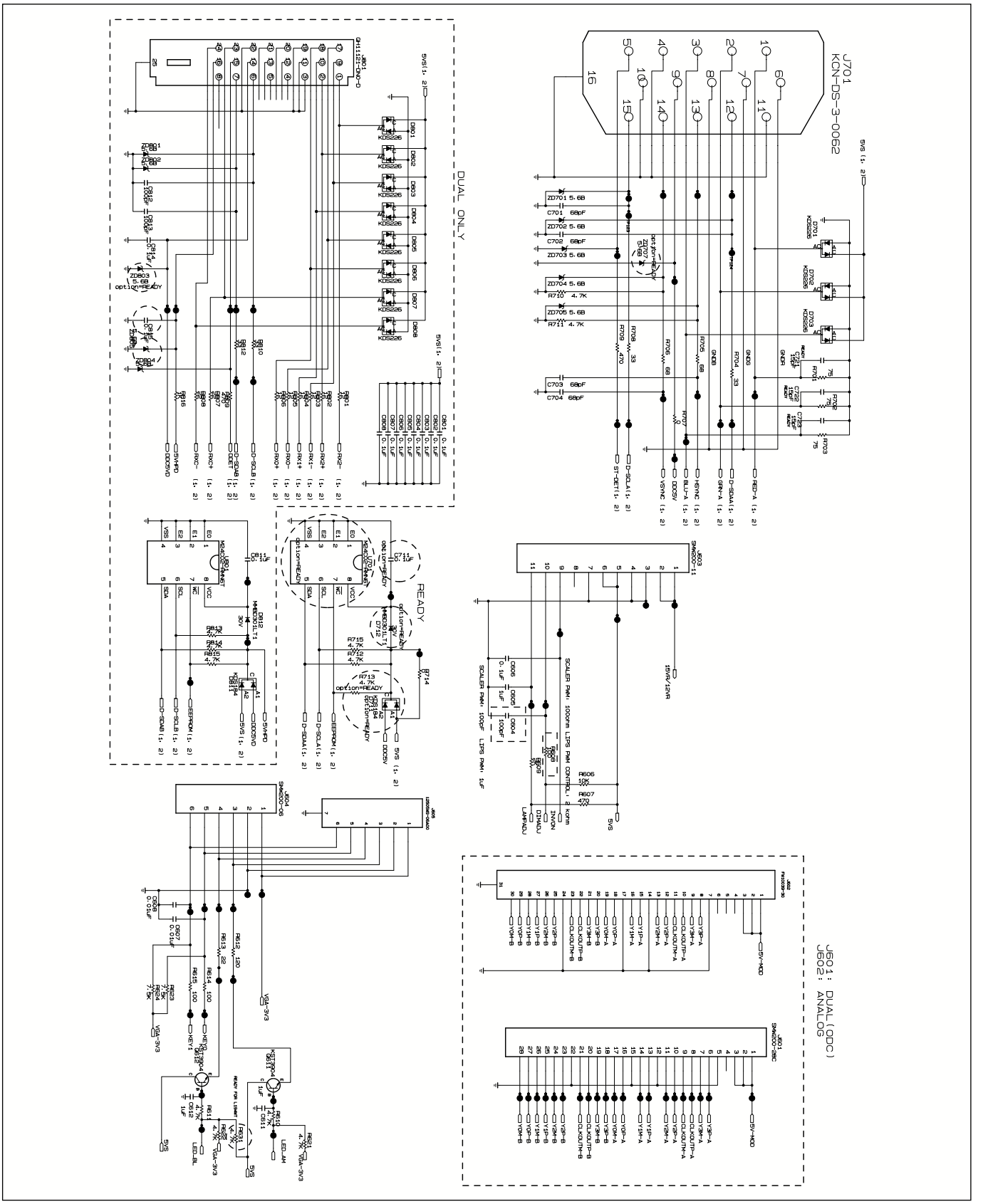
*S	*AL	LOC.NO.	PART NO.	DESCRIPTION / SPECIFICATION
				2012 R/TP - ROHM
		R410	0RH1802D422	MCR10EZHF183 18KOHM 1% 1/8W 2012 R/TP - ROHM
		R412	0RH1802D422	MCR10EZHF183 18KOHM 1% 1/8W 2012 R/TP - ROHM
		SC101	620K00020A	A-4S-320 ANGLE DIP BK AC 10.0A 250.0V UL/CSA L1752 LIPS
		Transformers		
		T101	EBJ36896301	TF-2820 EE28M 460uH 28.6uH 5.7uH 3.3uH 190mOHM 125mOHM 12.0mOHM 10.0mOHM FU JIAN FU RI DIAN ZI PEI JIAN CO.,LCD
		T301	EBJ36896701	EEL-22 EEL22A 117uH 1.5H 95mOHM 1kOHM FU JIAN FU RI DIAN ZI PEI JIAN CO.,LCD
		OTHERs		
		F101	0FZZTTH001E	0215 3.15MXE CERAMIC 250V 3150MA SEMKO/VDE/UL/CSA/CCCE TUBE BK
		FB101	6210TCE003G	BRS3550T0 55TO100OHM 7.25X3.5X7.5MM RADIAL TP
		HS4	4920900032A	PLATE 20.5 *10.5 *12.0
		LF101	6200J000154	13.0*710*23680 20MH 13X10X23mM SM100 SQ 2014 RADIAL BK
		PG1	302-987A	PRESS SPTE-C T0.3 INTERFACE -
		PG2	302-987A	PRESS SPTE-C T0.3 INTERFACE -
		Q101	0TFFC10017A	FQPF8N60CYDTU(FORMING) N-CHANNEL MOSFET 600V +-30V 7.5A 1.2OHM 48W TO220F ST 3P FAIRCHILD SEMICONDUCTOR CORP
		Q301	0TR390609DC	2N3906S-RTK PNP -5V -40V -40V -0.2A -0.00000005A 100TO300 350MW SOT23 R/TP 3P KEC CORPERATION
		Q302	0TRKE80046A	2N3904S NPN 6V 60V 40V 200MA 50NA 100TO300 350MW SOT23 R/TP 3P KEC CORPERATION
		Q303	0TRKE80046A	2N3904S NPN 6V 60V 40V 200MA 50NA 100TO300 350MW SOT23 R/TP 3P KEC CORPERATION
		TH101	6322A00035A	10D2-07 10OHM 15% 275V 2.3A 2.8KK FORMING BK SEMITEC ELECTRONICS GUANGDONG

SCHEMATIC DIAGRAM

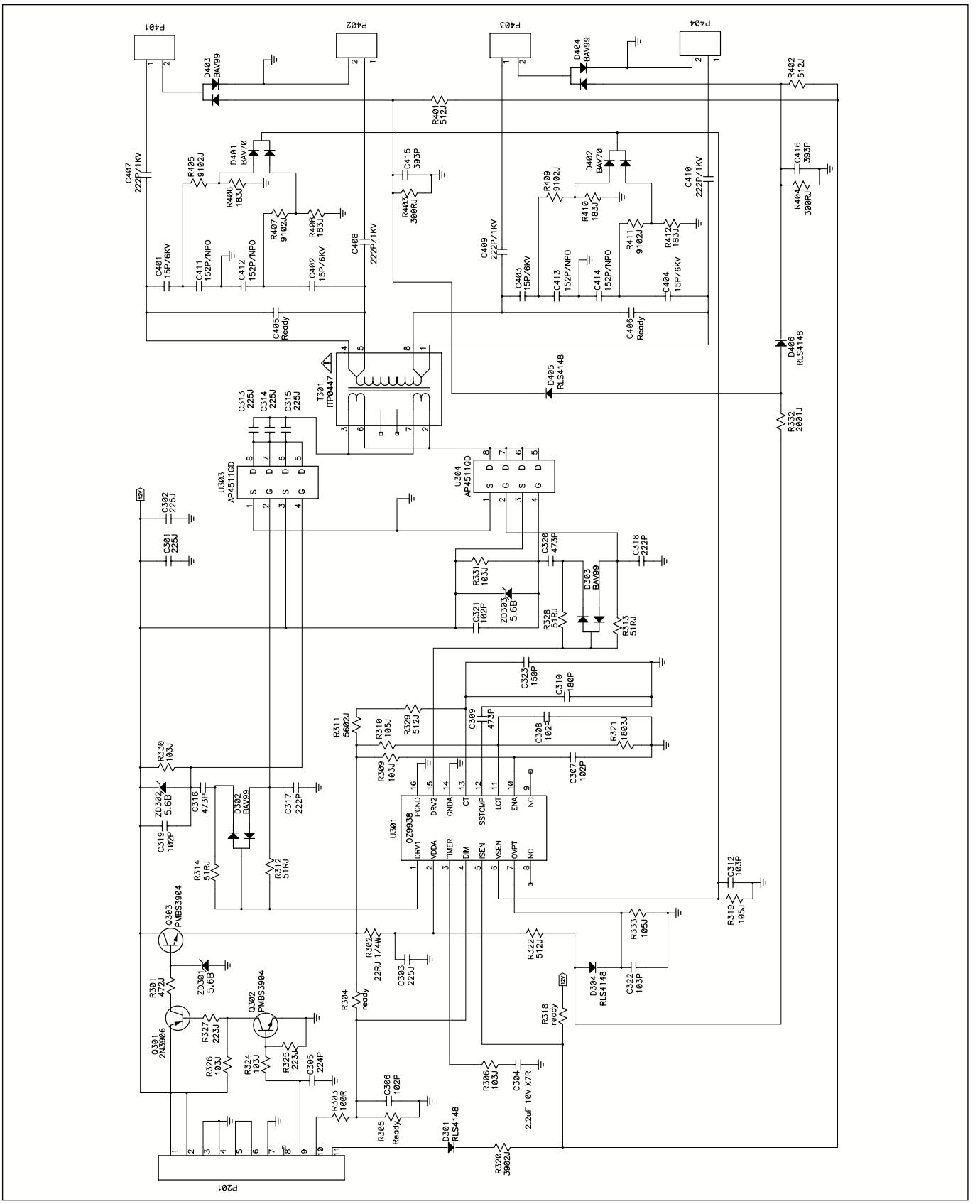
1. SCALER



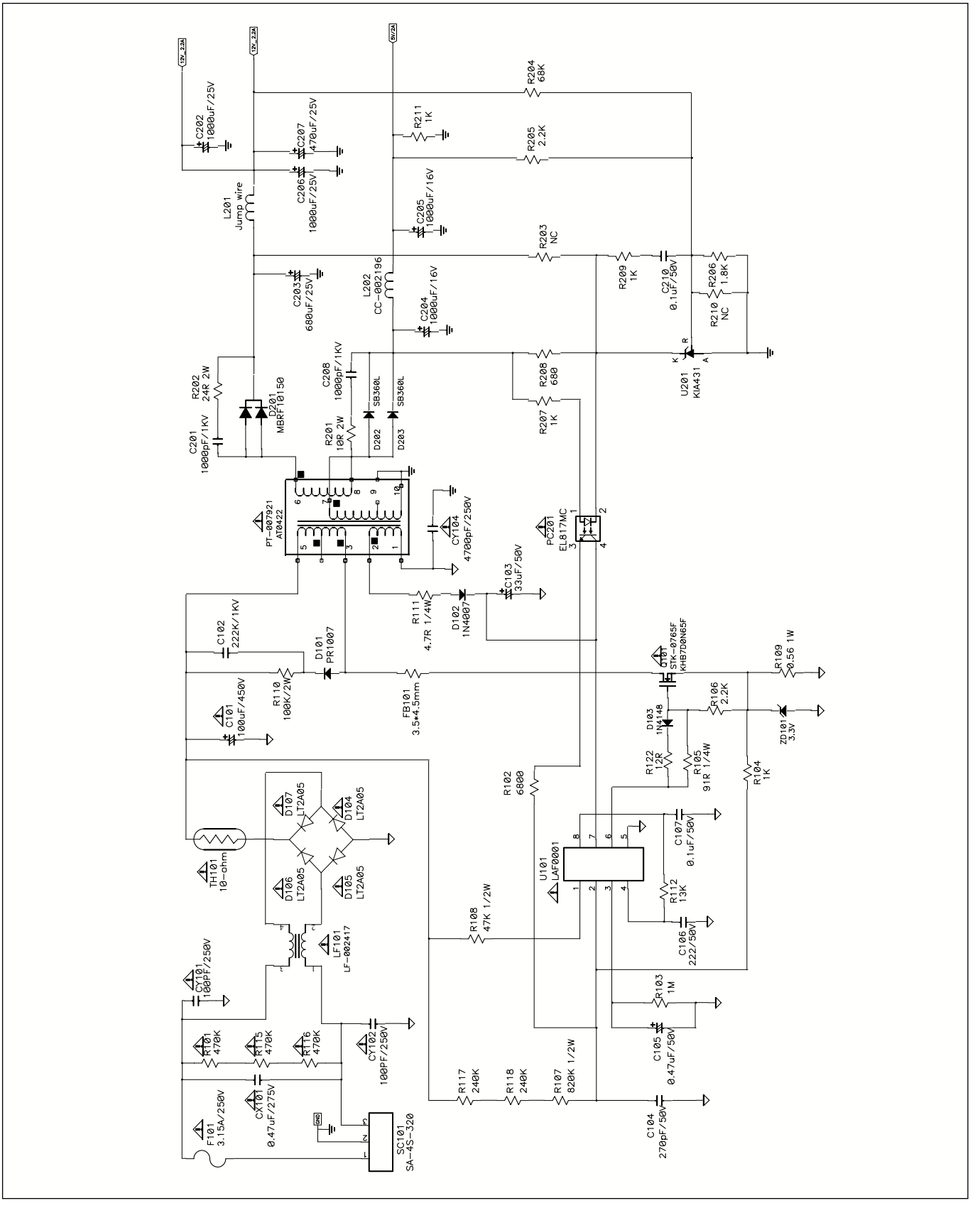
2. POWER & WAFER



3. INVERTER


P401
P402
P403
P404
P201
U301 OZ9938
U303 AP4511GD
U304 AP4511GD
T301 ITP0447
Q301 2N3906
Q302 PMBS3904
Q303 PMBS3904
D301 RLS4148
D302 BAV99
D303 BAV99
D304 RLS4148
D401 BAV70
D402 BAV70
D403 BAV99
D404 BAV99
D405 RLS4148
D406 RLS4148
ZD301 5.6B
ZD302 5.6B
ZD303 5.6B
C301 225J
C302 225J
C303 225J
C304 2.2uF 10V X7R
C305 224P
C306 102P
C307 102P
C308 102P
C309 473P
C310 180P
C312 103P
C313 225J
C314 225J
C315 225J
C316 473P
C317 222P
C318 222P
C319 102P
C320 473P
C321 102P
C322 103P
C323 150P
C401 15P/6KV
C402 15P/6KV
C403 15P/6KV
C404 15P/6KV
C405 Ready
C406 Ready
C407 222P/1KV
C408 222P/1KV
C409 222P/1KV
C410 222P/1KV
C411 152P/NPO
C412 152P/NPO
C413 152P/NPO
C414 152P/NPO
C415 393P
C416 393P
R301 472J
R302 22RJ 1/4W
R303 100R
R304 ready
R305 Ready
R306 103J
R309 103J
R310 105J
R311 5602J
R312 51RJ
R313 51RJ
R314 51RJ
R318 ready
R319 105J
R320 3902J
R321 1803J
R322 512J
R324 103J
R325 223J
R326 103J
R327 223J
R328 51RJ
R329 512J
R330 103J
R331 103J
R332 2001J
R333 105J
R401 512J
R402 512J
R403 300RJ
R404 300RJ
R405 9102J
R406 183J
R407 9102J
R408 183J
R409 9102J
R410 183J
R411 9102J
R412 183J
12V

4. POWER


C202 1000uF/25V
C207 470uF/25V
C206 1000uF/25V
L201 Jump wire
C203 680uF/25V
L202 CC-002196
C204 1000uF/16V
C205 1000uF/16V
R204 68K
R211 1K
R205 2.2K
R203 NC
R209 1K
C210 0.1uF/50V
R206 1.8K
R210 NC
U201 KIA431
R202 24R 2W
C201 1000pF/1KV
D201 MBRF10150
C208 1000pF/1KV
SB360L
D202
D203
R201 10R 2W
R208 680
R207 1K
PT-007921 AT0422
CY104 4700pF/250V
PC201 EL817MC
C103 33uF/50V
R111 4.7R 1/4W
D102 1N4007
C102 222K/1KV
D101 PR1007
R110 100K/2W
C101 100uF/450V
FB101 3.5*4.5mm
Q101 STK-0765F KHB7D0N65F
R109 0.56 1W
R106 2.2K
D103 1N4148
ZD101 3.3V
R122 12R
R105 91R 1/4W
R104 1K
R102 6800
U101 LAF0001
C107 0.1uF/50V
R112 13K
C106 222/50V
TH101 10-ohm
D107 LT2A05
D104 LT2A05
D106 LT2A05
D105 LT2A05
LF101 LF-002417
R108 47K 1/2W
CY101 100PF/250V
R103 1M
C105 0.47uF/50V
R101 470K
R115 470K
R116 470K
CY102 100PF/250V
R117 240K
R118 240K
R107 820K 1/2W
C104 270pF/50V
F101 3.15A/250V
CX101 0.47uF/275V
SC101 SA-4S-320

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