

Service Manual

LCD TV



Model No. TH-L32E30R

Chassis: LA18

Destination: IRAN

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by  in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

TABLE OF CONTENTS

	PAGE		PAGE
1 Safety Precautions -----	3	5.2.3. POWER ON TIME/COUNT-----	10
1.1. General Guidelines-----	3	5.2.4. Exit-----	10
1.1.1. Leakage Current Cold Check-----	3	5.2.5. Self Check Mode-----	11
1.1.2. Leakage Current Hot Check (See Figure		5.2.6. Hotel Mode Adjustment-----	11
1.)-----	3	5.2.7. Hotel Mode-----	11
2 Warning -----	4	6 Troubleshooting Guide -----	12
2.1. Prevention of Electrostatic Discharge (ESD)		6.1. Check of the IIC bus lines-----	12
to Electrostatically Sensitive (ES) Devices-----	4	6.1.1. How to access-----	12
2.2. About lead free solder (PbF)-----	5	6.1.2. Exit-----	12
3 Service Navigation -----	6	6.1.3. Screen display-----	12
3.1. Service Hint-----	6	6.2. Power LED Blinking timing chart-----	13
4 Specifications -----	7	6.3. No Power-----	13
5 Service Mode -----	9	7 Disassembly and Assembly Instructions -----	14
5.1. How to enter into Service Mode-----	9	7.1. AC Cord Dressing-----	14
5.1.1. Contents of adjustment mode-----	9	7.2. Control Panel Assembly & Side AV Installation---	15
5.1.2. How to exit-----	9	7.3. Speaker and Bottom Cover Installation-----	16
5.2. SRV-TOOL-----	10	7.4. LCD Panel Fixing & Handling Method-----	17
5.2.1. How to access-----	10	7.5. LED Panel Installation-----	18
5.2.2. Display of SOS History-----	10	7.6. Install and Screw PCB-----	19

7.7. Small Part Install, Screw and Sponge Sticking ---	20	12.1. A-BOARD-----	70
7.8. Back Cover Screw -----	21	12.2. KA-BOARD-----	72
7.9. Stand MTG Assembly & Accessories Assembly-----	22	12.3. LD-BOARD-----	73
8 Measurements and Adjustments -----	23	12.4. P-BOARD-----	75
8.1. Voltage chart of A-board-----	23	13 Exploded View and Replacement Parts List-----	77
8.2. Voltage chart of P-board-----	23	13.1. Exploded View and Mechanical Replacement Parts List-----	77
8.3. P Board-----	24	13.2. Electrical Replacement Parts List -----	77
9 Block Diagram -----	25	13.2.1. Replacement Parts List Notes-----	77
9.1. Main Block Diagram-----	25	13.2.2. Electrical Replacement Parts List-----	78
9.2. Detailed Block Diagram (1/2)-----	26		
9.3. Detailed Block Diagram (2/2)-----	27		
10 Wiring Connection Diagram -----	28		
10.1. Wire Dressing-----	28		
11 Schematic Diagram-----	29		
11.1. Schematic Diagram Notes-----	29		
11.2. A Board-----	30		
11.2.1. A Board - Sheet : 002 (1 / 2)-----	30		
11.2.2. A Board - Sheet : 002 (2 / 2)-----	31		
11.2.3. A Board - Sheet : 003 (1 / 5)-----	32		
11.2.4. A Board - Sheet : 003 (2 / 5)-----	33		
11.2.5. A Board - Sheet : 003 (3 / 5)-----	34		
11.2.6. A Board - Sheet : 003 (4 / 5)-----	35		
11.2.7. A Board - Sheet : 003 (5 / 5)-----	36		
11.2.8. A Board - Sheet : 004 (1 / 2)-----	37		
11.2.9. A Board - Sheet : 004 (2 / 2)-----	38		
11.2.10. A Board - Sheet : 005 (1 / 2)-----	39		
11.2.11. A Board - Sheet : 005 (2 / 2)-----	40		
11.2.12. A Board - Sheet : 006 (1 / 1)-----	41		
11.2.13. A Board - Sheet : 008 (1 / 1)-----	42		
11.2.14. A Board - Sheet : 009 (1 / 1)-----	43		
11.2.15. A Board - Sheet : 010 (1 / 1)-----	44		
11.2.16. A Board - Sheet : 100 (1 / 3)-----	45		
11.2.17. A Board - Sheet : 100 (2 / 3)-----	46		
11.2.18. A Board - Sheet : 100 (3 / 3)-----	47		
11.2.19. A Board - Sheet : 101 (1 / 3)-----	48		
11.2.20. A Board - Sheet : 101 (2 / 3)-----	49		
11.2.21. A Board - Sheet : 101 (3 / 3)-----	50		
11.2.22. A Board - Sheet : 300 (1 / 1)-----	51		
11.2.23. A Board - Sheet : 301 (1 / 2)-----	52		
11.2.24. A Board - Sheet : 301 (2 / 2)-----	53		
11.2.25. A Board - Sheet : 302 (1 / 1)-----	54		
11.2.26. A Board - Sheet : 700 (1 / 2)-----	55		
11.2.27. A Board - Sheet : 700 (2 / 2)-----	56		
11.2.28. A Board - Sheet : 701 (1 / 2)-----	57		
11.2.29. A Board - Sheet : 701 (2 / 2)-----	58		
11.2.30. A Board - Sheet : 702 (1 / 1)-----	59		
11.2.31. A Board - Sheet : 703 (1 / 1)-----	60		
11.2.32. A Board - Sheet : 704 (1 / 1)-----	61		
11.2.33. A Board - Sheet : 708 (1 / 1)-----	62		
11.3. KA Board -----	63		
11.3.1. KA Board (1 / 2)-----	63		
11.3.2. KA Board (2 / 2)-----	64		
11.4. LD Board -----	65		
11.4.1. LD Board (1 / 2)-----	65		
11.4.2. LD Board (2 / 2)-----	66		
11.5. P Board -----	67		
11.5.1. P Board (1 / 3)-----	67		
11.5.2. P Board (2 / 3)-----	68		
11.5.3. P Board (3 / 3)-----	69		
12 Printed Circuit Board -----	70		

1 Safety Precautions

1.1. General Guidelines

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.
4. When conducting repairs and servicing, do not attempt to modify the equipment, its parts or its materials.
5. When wiring units (with cables, flexible cables or lead wires) are supplied as repair parts and only one wire or some of the wires have been broken or disconnected, do not attempt to repair or re-wire the units. Replace the entire wiring unit instead.
6. When conducting repairs and servicing, do not twist the Faston connectors but plug them straight in or unplug them straight out.

1.1.1. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be 100 Mohm and over. When the exposed metal does not have a return path to the chassis, the reading must be ∞ .

1.1.2. Leakage Current Hot Check (See Figure 1.)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kohm, 10 watts resistor, in parallel with a 0.15 μ F capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

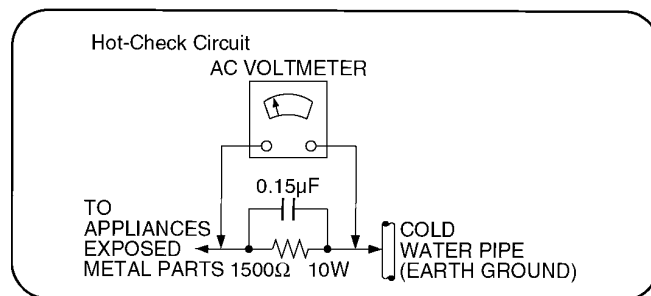


Figure 1

2 Warning

2.1. Prevention of Electrostatic Discharge (ESD) to 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 electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for 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 solder removal device. Some solder removal devices not classified as [anti-static (ESD protected)] can generate electrical charge 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 ham less motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

2.2. About lead free solder (PbF)

Note: Lead is listed as (Pb) in the periodic table of elements.

In the information below, Pb will refer to Lead solder, and PbF will refer to Lead Free Solder.

The Lead Free Solder used in our manufacturing process and discussed below is (Sn+Ag+Cu).

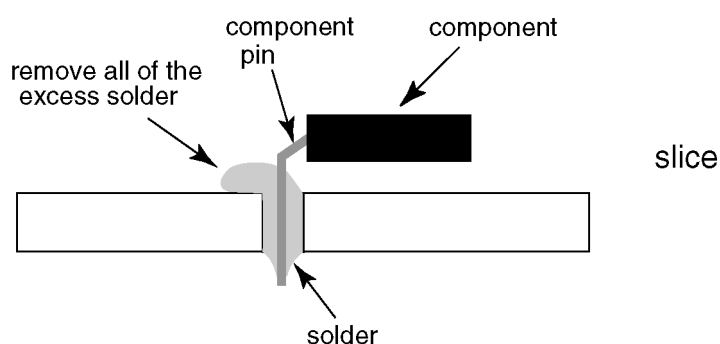
That is Tin (Sn), Silver (Ag) and Copper (Cu) although other types are available.

This model uses Pb Free solder in it's manufacture due to environmental conservation issues. For service and repair work, we'd suggest the use of Pb free solder as well, although Pb solder may be used.

PCBs manufactured using lead free solder will have the PbF within a leaf Symbol **PbF** stamped on the back of PCB.

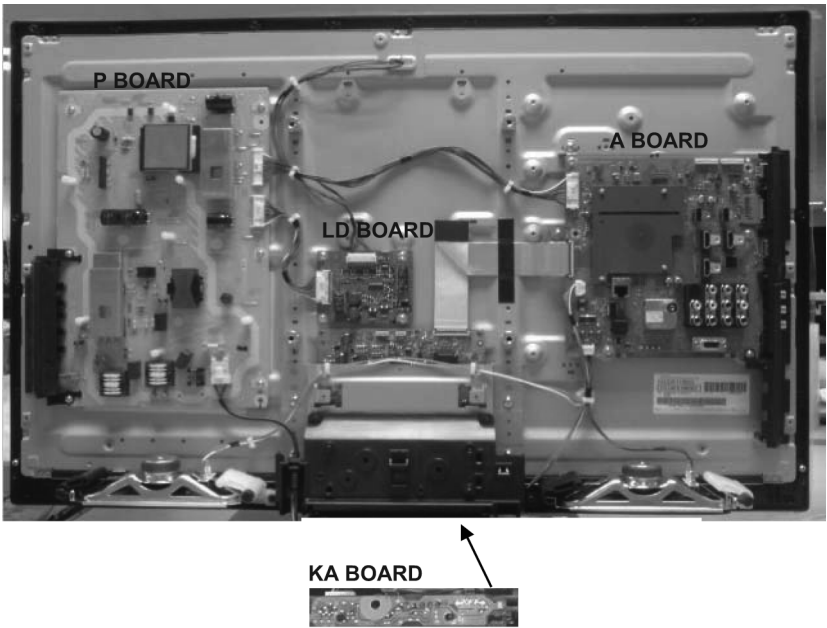
Caution

- Pb free solder has a higher melting point than standard solder. Typically the melting point is 50 ~ 70 °F (30~40 °C) higher. Please use a high temperature soldering iron and set it to 700 ± 20 °F (370 ± 10 °C).
- Pb free solder will tend to splash when heated too high (about 1100 °F or 600 °C).
If you must use Pb solder, please completely remove all of the Pb free solder on the pins or solder area before applying Pb solder. If this is not practical, be sure to heat the Pb free solder until it melts, before applying Pb solder.
- After applying PbF solder to double layered boards, please check the component side for excess solder which may flow onto the opposite side. (see figure below)



3 Service Navigation

3.1. Service Hint



Board Name	Main Device	Remarks
A BOARD	TUN, OFDM, ADV, LDA3, STBY EEP	Repairable
P BOARD	Power Supply	Repairable
KA BOARD	Remote, LED, Luminunce Sensor	Repairable
LD BOARD	LED Driver	Repairable

4 Specifications

Power Source	AC 220 - 240 V, 50 / 60 Hz
Power Consumption	
Power Rating	76 W
Standby Condition	0.3 W
Display panel	
Aspect Ratio	16:9
Visible screen size	80 cm (diagonal) 698 mm (W) × 393 mm (H)
Number of pixels	2,073,600 (1,920 (W) × 1,080 (H))
Sound	
Speaker	(160 mm × 42 mm) × 2, 8 Ω
Audio Output	20 W (10 W + 10 W)
Headphones	M3 (3.5 mm) stereo mini Jack × 1
PC signals	VGA, SVGA, WVGA, XGA SXGA, WXGA (compressed) Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz

Receiving Systems / Band name	17 SYSTEMS	FUNCTIONS
	1 PAL B, G, H 2 PAL I 3 PAL D, K 4 SECAM B, G 5 SECAM D, K 6 SECAM K1 7 NTSC M (NTSC 3.58 / 4.5MHz)	Reception of broadcast transmission and playback from video cassette tape recorders.
	8 NTSC 4.43 / 5.5 MHz 9 NTSC 4.43 / 6.0 MHz 10 NTSC 4.43 / 6.5 MHz 11 NTSC 3.58 / 5.5 MHz 12 NTSC 3.58 / 6.0 MHz 13 NTSC 3.58 / 6.5 MHz 14 SECAM I	Playback from special VCR's or DVD.
	15 PAL 60 Hz / 5.5 MHz 16 PAL 60 Hz / 6.0 MHz 17 PAL 60 Hz / 6.5 MHz	Playback from Special Disc Players and Special VCR's or DVD.

Receiving Channels (Analogue TV)	
VHF BAND	2 - 12 (PAL / SECAM B, K1) 0 - 12 (PAL B AUST.) 1 - 9 (PAL B N.Z.) 1 - 12 (PAL / SECAM D) 1 - 12 (NTSC M JAPAN) 2 - 13 (NTSC M USA)
UHF BAND	21 - 69 (PAL G, H, I / SECAM G, K, K1) 28 - 69 (PAL B AUST.) 13 - 57 (PAL D, K) 13 - 62 (NTSC M JAPAN) 14 - 69 (NTSC M USA)
CATV	S1 - S20 (OSCAR) 1 - 125 (USA CATV) C13 - C49 (JAPAN) S21 - S41 (HYPER) Z1 - Z37 (CHINA) 5A, 9A (AUST.)

Aerial - Rear	VHF / UHF
Operating Conditions	Temperature : 0°C - 40°C Humidity : 20 % - 80 % RH (non-condensing)

Connection Terminals		Humidity : 20 % ~ 80 % RH (non-condensing)	
AV1 Input	AUDIO L-R	RCA PIN Type × 2	0.5 V [rms]
	VIDEO	RCA PIN Type × 1	1.0 V [p-p] (75 Ω)
	COMPONENT	Y	1.0 V [p-p] (including synchronization)
		P _B /C _B , P _R /C _R	± 0.35 V [p-p]
AV2 Input	AUDIO L-R	RCA PIN Type × 2	0.5 V [rms]
	VIDEO	RCA PIN Type × 1	1.0 V [p-p] (75 Ω)
AV3 Input	AUDIO L-R	RCA PIN Type × 2	0.5 V [rms]
	VIDEO	RCA PIN Type × 1	1.0 V [p-p] (75 Ω)

Audio Output Others	AUDIO L-R	RCA PIN Type × 2	0.5 V [rms] (high impedance)
	HDMI 1 - 4 Input	TYPE A Connectors	• This TV supports 'HDAVI Control 5' function.
	PC Input	HIGH-DENSITY D-SUB 15 PIN	R / G / B: 0.7 V[p-p] (75 Ω)
			HD / VD: TTL LEVEL 2.0-5.0 V [p-p] (high impedance)
	DIGITAL AUDIO OUT	PCM / Dolby Digital, Fiber optic	
	Card Slot	SD Card slot × 1	
	USB 1/2/3	USB 2.0 TYPE A Connectors	DC 5 V, Max. 500 mA
	ETHERNET	10BASE-T / 100BASE-TX	
Dimension (W x H x D)		769 mm × 514 mm × 207 mm (With Pedestal)	
		769 mm × 480 mm × 75 mm (TV only)	
Mass		11.0 kg Net (With Pedestal)	
		9.5 kg Net (TV only)	

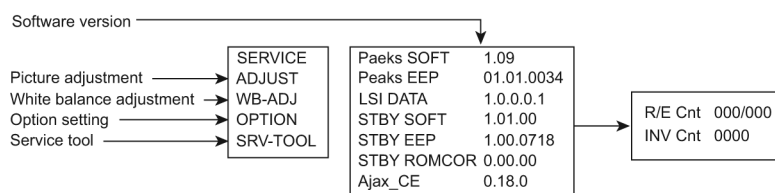
Note

- Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.

5 Service Mode

5.1. How to enter into Service Mode

While pressing [VOLUME (-)] button of the main unit, press [INFO] button of the remote control three times within 2 seconds.



5.1.1. Contents of adjustment mode

- Value is shown as a hexadecimal number.
- Preset value differs depending on models.
- After entering the adjustment mode, take note of the value in each item before starting adjustment.

Main item	Sub item	Sample Data
ADJUST	CONTRAST	000
	COLOR	59
	TINT	FE
	SUB-BRT	800
	BACKLGT	20D
	B-Y-G	40
	R-Y-A	0
	VCOM	189
WB-ADJ	R-GAIN	75
	G-GAIN	80
	B-GAIN	65
	R-CENT	80
	G-CENT	80
	B-CENT	9B
OPTION	Boot	ROM
	STBY-SET	00
	EMERGENCY	ON
	CLK MODE	00
	CLOCK	FC7
	EDID-CLK	HIGH
SRV-TOOL		00

5.1.2. How to exit

Switch off the power with the [POWER] button on the main unit or the [POWER] button on the remote control.

5.2. SRV-TOOL

5.2.1. How to access

1. Select [SRV-TOOL] in Service Mode.
2. Press [OK] button on the remote control.

	SRV-TOOL	
Display of TD2Microcode version →	TD2Microcode:0075004	
Display of Flash ROM maker code →	Flash ROM : AD-F1	
Display of SOS History →	PTCT : 00 . 00 . 00 . 00 . 00	Time 00016.46 Count 0000024

POWER ON TIME/COUNT
Press [MUTE] button (3sec)

5.2.2. Display of SOS History

SOS History (Number of LED blinking) indication.

From left side; Last SOS, before Last, three occurrence before, 2nd occurrence after shipment, 1st occurrence after shipment.

This indication except 2nd and 1st occurrence after shipment will be cleared by [Self-check indication and forced to factory shipment setting].

5.2.3. POWER ON TIME/COUNT

Note : To display TIME/COUNT menu, highlight position, then press MUTE for 3sec.

Time : Cumulative power on time, indicated hour : minute by decimal

Count : Number of ON times by decimal

Note : This indication will not be cleared by either of the self-checks or any other command.

5.2.4. Exit

1. Disconnect the AC cord from wall outlet.

5.2.5. Self Check Mode

1. Press the 'MENU' button (on the remote control) and the 'VOL DOWN' button on the LCD panel.
2. Press ON/OFF button on the panel to Exit.

5.2.6. Hotel Mode Adjustment

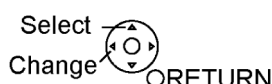
1. Press the 'VOLUME DOWN' button on the TV panel and simultaneously press the AV button on the remote control 3 times to enter Hotel Mode.
2. Set Hotel mode 'on/off', then press 'EXIT' to come out.

5.2.7. Hotel Mode

1. Purpose
Restrict a function for hotels.
2. Access command to the Hotel mode setup menu.
In order to display the Hotel mode setup menu, please enter the following command (**within 2 second**).
[TV] : Vol [Down] + [REMOTE] : INPUT (3 times).

Then, the Hotel mode setup menu is displayed.

Hotel Mode	
Mode	Off
Input	-
Channel	-
Volume	+ 25
Vol. Max	+ 100
OSD Ctrl	Off
FP Ctrl	Off
Pow Ctrl	Off



3. To exit the Hotel mode setup menu
Disconnect AC power cord from wall outlet.
4. Explain the Hotel mode setup menu

Item	Function
Mode	Select hotel mode ON/OFF
Input	Select input signal modes. Set the input, when each time power is switched on. Selection : -/RF/HDMI1/HDMI2/HDMI3/Component/Video/PC • Off: give priority to a last memory.
Channel	Select channel when input signal is RF. Set the channel, each time power is switched on. Selection : Any channel number or [-]. [-] means the channel when turns off.
Volume	Adjust the volume when each time power is switched on. Range : 0 to 100
Vol. Max	Adjust maximum volume. Range : 0 to 100
OSD Ctrl	Restrict the OSD. Selection : OFF/PATTERN1 • OFF: No restriction • PATTERN1: restriction
FP Ctrl	Select front key conditions. Selection : OFF/PATTERN1/ALL • OFF: altogether valid. • PATTERN1: only input key is valid. • ALL: altogether invalid.
Pow Ctrl	Select POWER-ON/OFF condition when AC power cord is disconnected and then connected. OFF: The same condition when AC power cord is disconnected. ON: Forced power ON condition.

6 Troubleshooting Guide

Use the self-check function to test the unit.

- 1. Checking the IIC bus lines
- 2. Power LED Blinking timing

6.1. Check of the IIC bus lines

6.1.1. How to access

Self-check indication only:
Produce TV reception screen, and while pressing [VOLUME (-)] button on the main unit, press [OK] button on the remote control for more than 3 seconds.

Self-check indication and forced to factory shipment setting:
Produce TV reception screen, and while pressing [VOLUME (-)] button on the main unit, press [MENU] button on the remote control for more than 3 seconds.

6.1.2. Exit

Disconnect the AC cord from wall outlet.

6.1.3. Screen display

SELF CHECK

---- . XXXXXX - XXXXXX

PEAKS	OK
TUN	OK
AVSW	OK
STBY	OK
MEM1	OK
MEM2	OK
MEM3	OK
DCDC	OK
DAC	OK
ID	OK

Copyright Panasonic Corporation 2011.

6.2. Power LED Blinking timing chart

1. Subject

Information of LED Flashing timing chart.

2. Contents

When an abnormality occurs, the protection circuit will operate and reset the unit to stand by mode. During this time, the defective block can be identified by the number of blinking times of the Power LED on the front panel of the unit as follow:

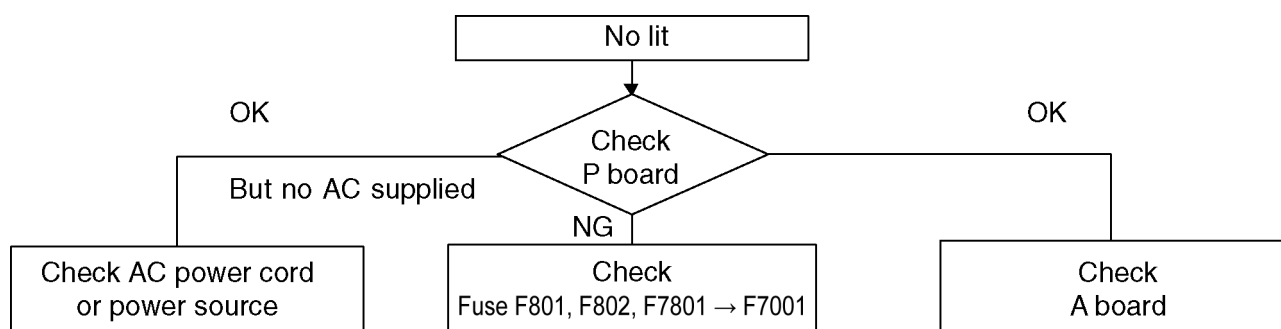
LCD		Notes
Times	SOS	
1	BackLight_SOS	A Board
2	FAN_SOS	P Board
3	SOS (Tuner Vcc down)	A Board
4	SUB12V_SENSE_SOS	A Board
7	SUB3.3V_SENSE_SOS	A Board
9	SOUND_SOS	A Board P Board
10	ZWEI2_SOS	A Board LCD Panel
12	BE(sLD)_SOS	A Board
13	EMERGENCY_SOS	A Board
14	IROM_SOS	A Board

6.3. No Power

First check point

There are following 2 states of No Power indication by power LED.

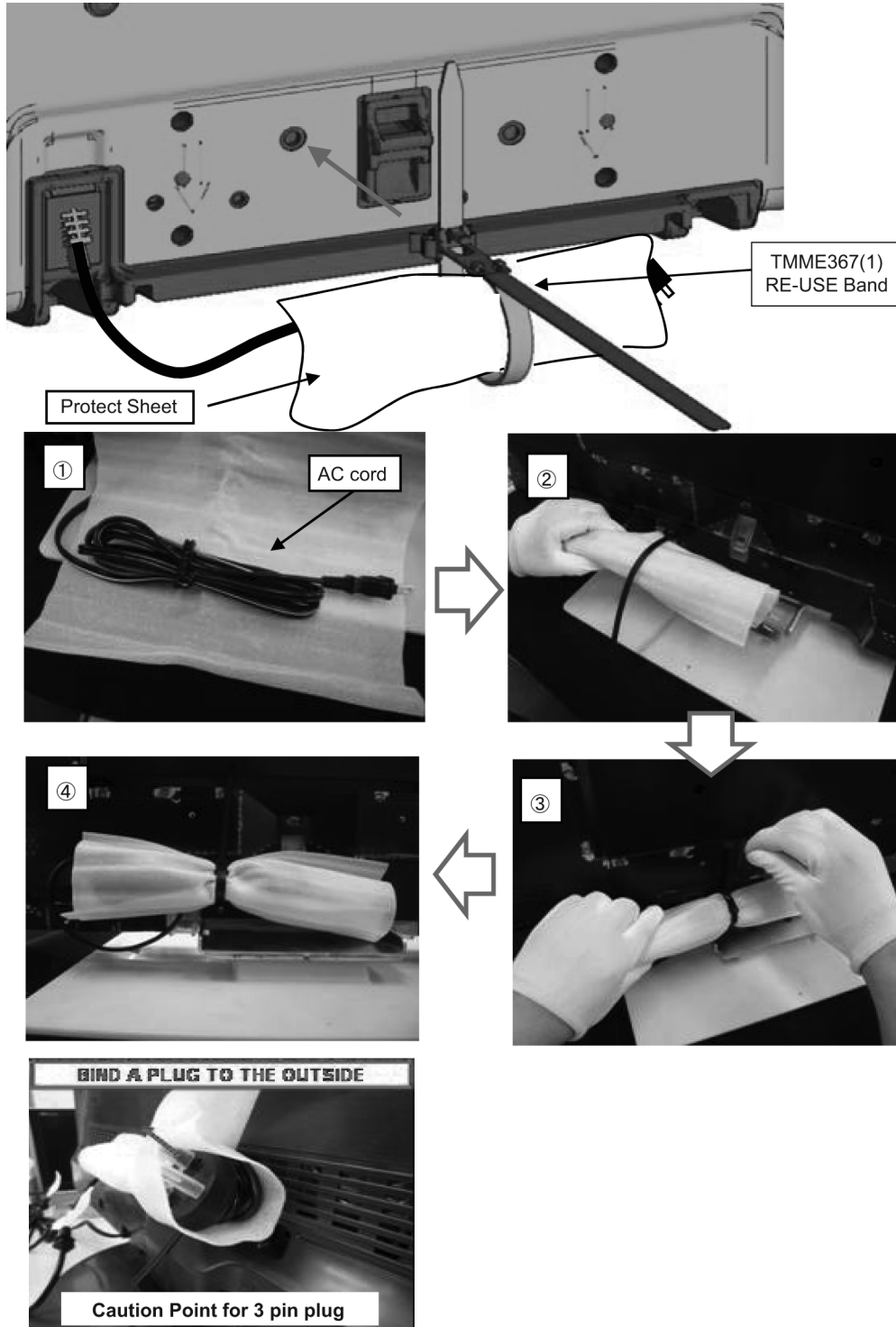
1. No lit
2. Red is lit then turns red blinking a few seconds later. (See 6.2.)



7 Disassembly and Assembly Instructions

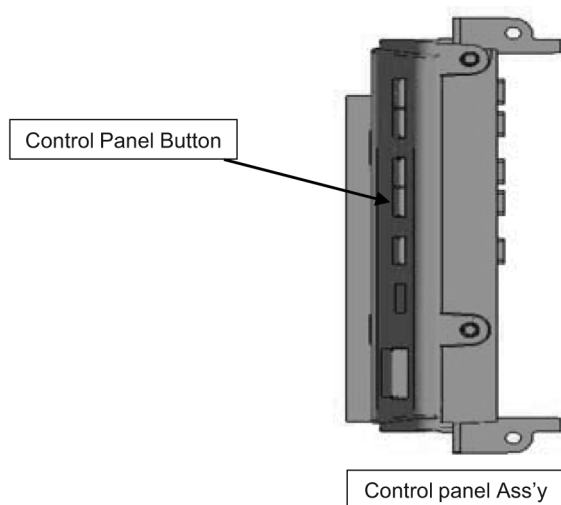
7.1. AC Cord Dressing

1. Fix Re-Use band at bottom bracket.
 2. Cover AC cord with protect sheet and dressing with re-use band.
- (follow sequence 1→2→3→4)

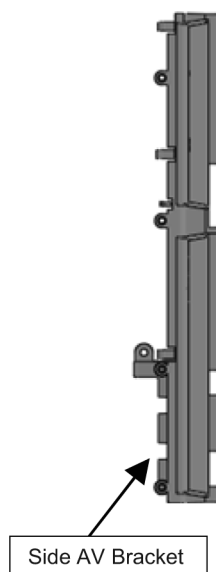


7.2. Control Panel Assembly & Side AV Installation

Control panel button into control panel bracket.

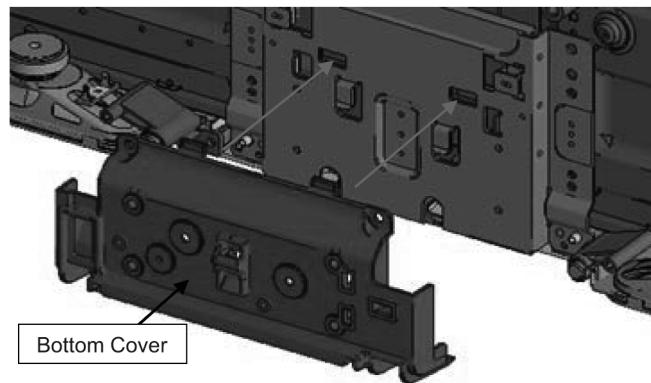
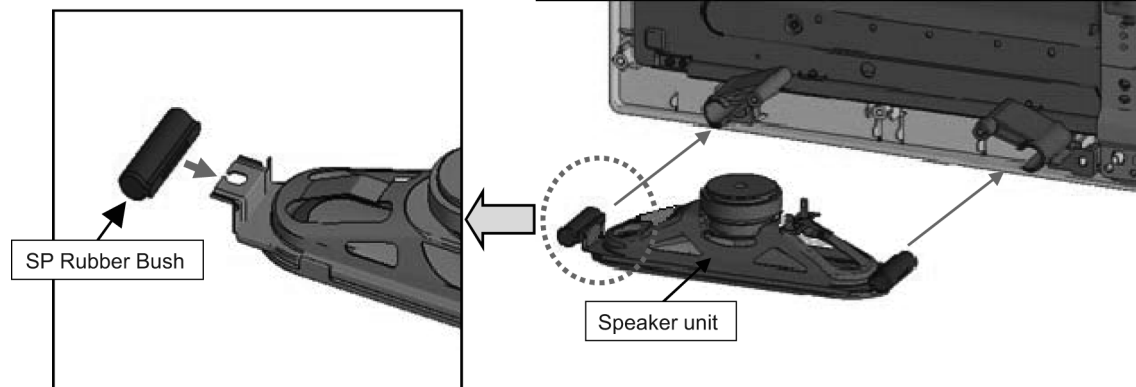


Side AV Bracket



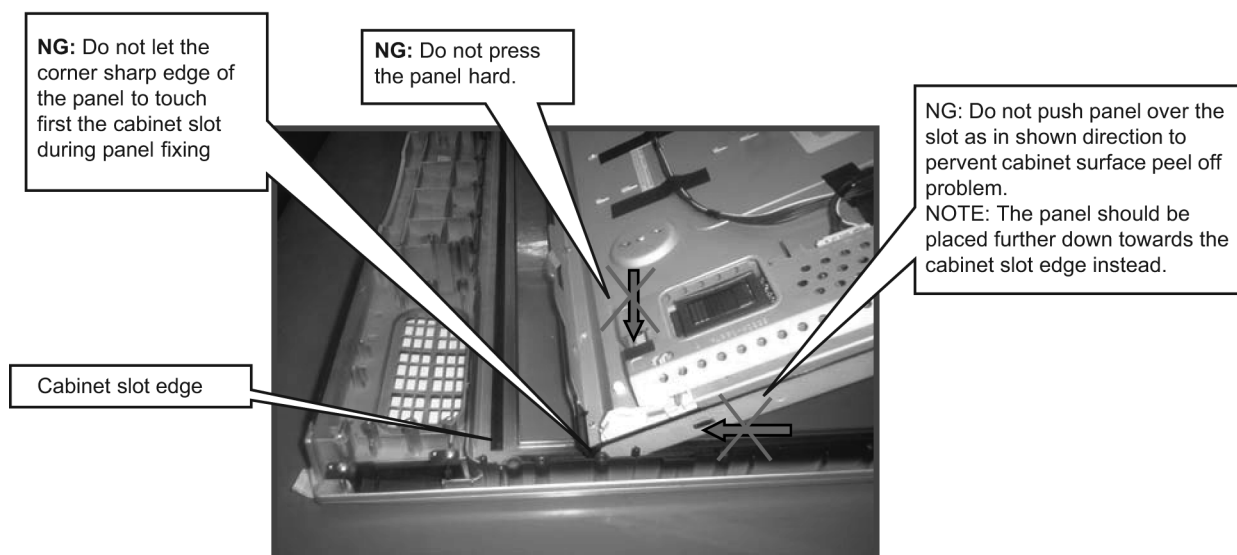
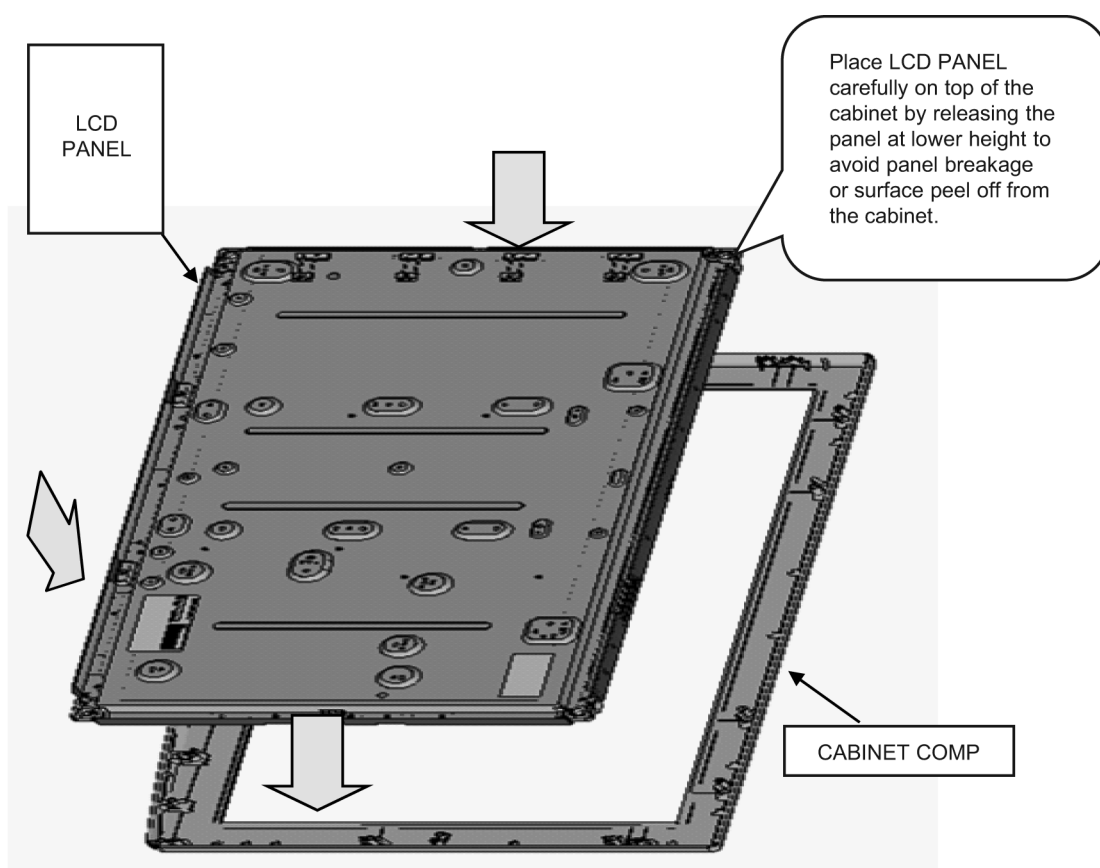
7.3. Speaker and Bottom Cover Installation

1. Fix SP Rubber Bush at SP unit (L & R).
2. Install SP unit L and SP unit R.
3. Install bottom bracket.



7.4. LCD Panel Fixing & Handling Method

1. Place down the cabinet as shown below.
2. Fix LCD panel into the cabinet by taking below precautions.

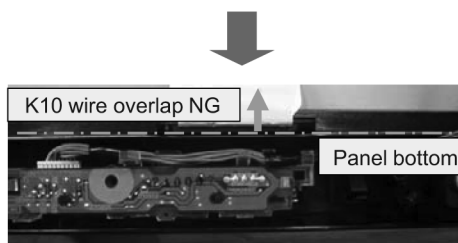
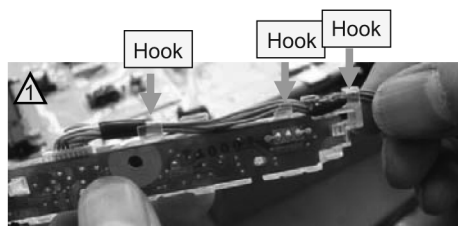
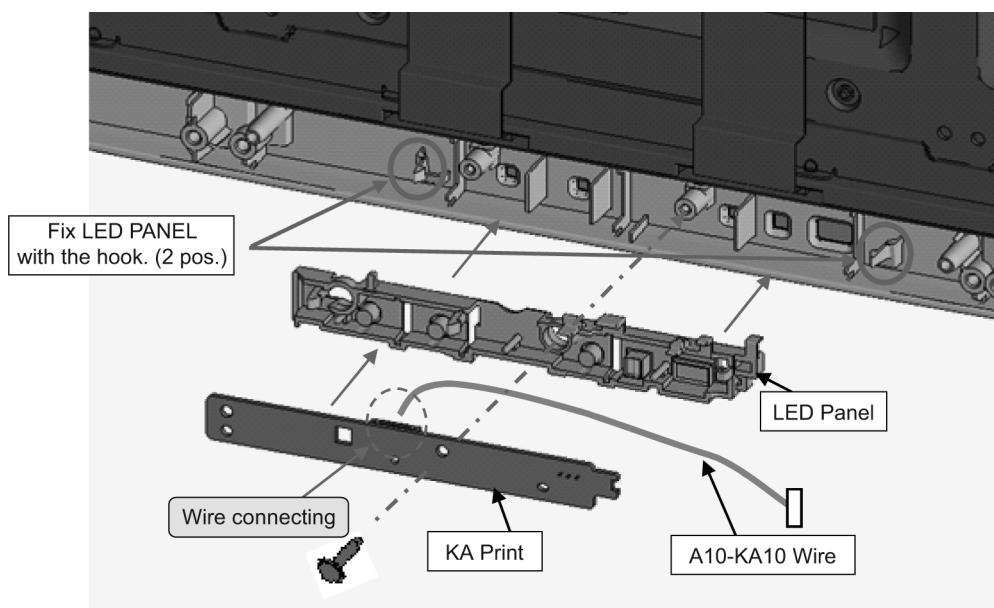


Other general precautions

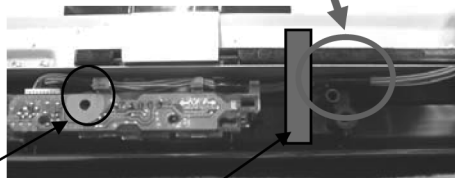
1. Do not press panel surface to avoid blue spot on the panel display.
2. Do not use hard cloth or rub the surface too hard. This may cause scratches on the surface.
3. Take care not to subject the TV's surface to water or detergent. Any liquid (including pets urine) if enters the product could lead to TV failure.
4. Take care not to subject the surface to insect repellent, solvent, thinner or other volatile substances. This may degrade surface quality or cause peeling of the paint.
5. The surface of the display panel is specially treated and may be easily damaged. Take care not to tap or scratch with your fingernail or other hard objects.

7.5. LED Panel Installation

1. Fix LED PANEL on CABINET.
2. Insert an A10-KA10 lead connector in KA-Print.
3. Put KA-Print on LED PANEL.
4. Fix LED PANEL assy with SCREW.



Slot A10-KA10 wire at cabinet rib for avoid stuck with bottom metal



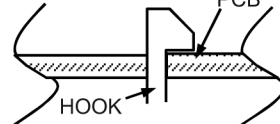
CAUTION POINT :
Please keep wire A10~KA10 distance from screw hole to avoid from wire stuck at screw.

FELT (HB)
TMK4GA060



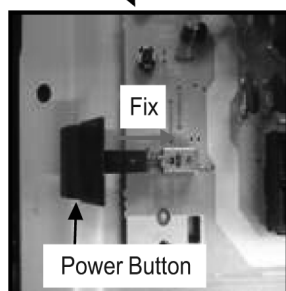
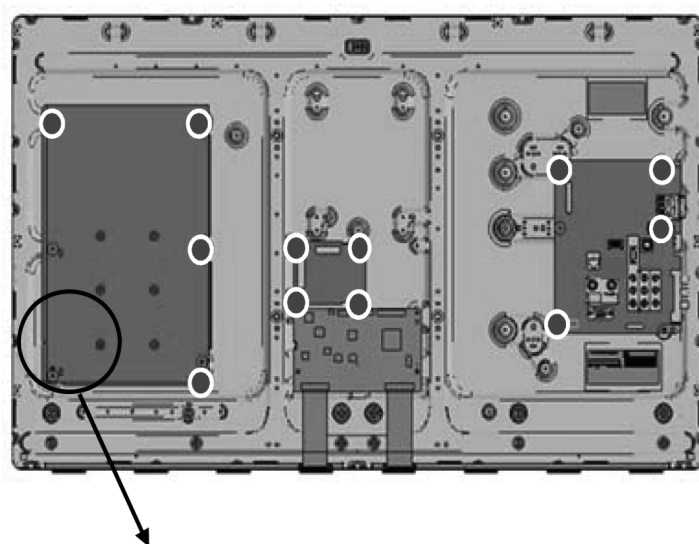
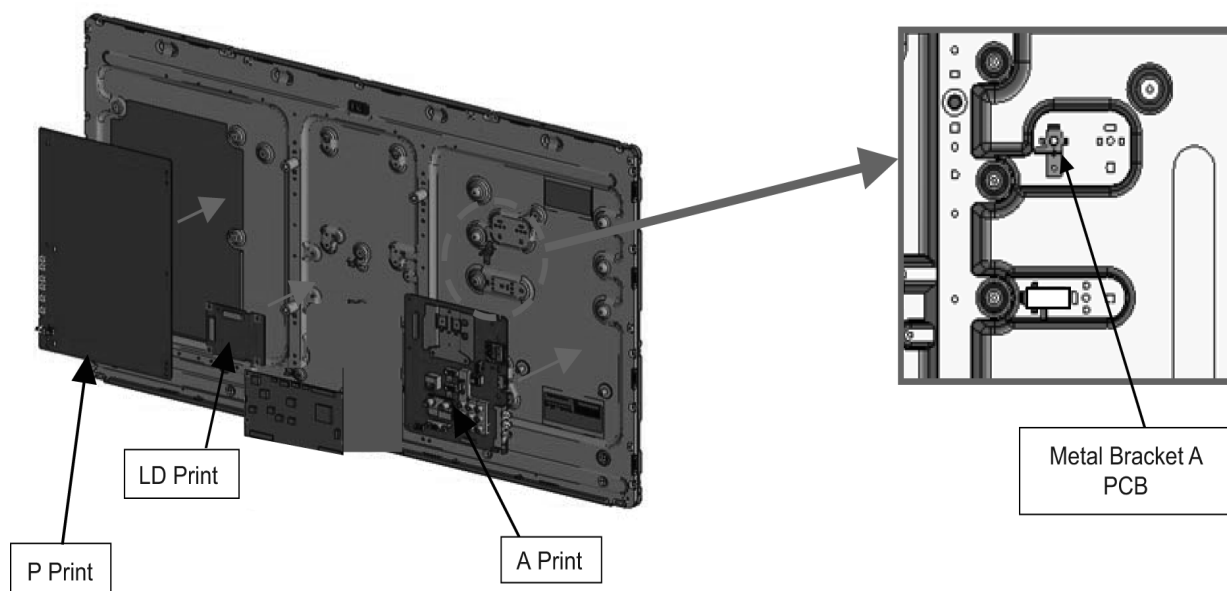
Screw : XTW3+10TFJ (1)
[60±10 N•cm / 6±1Kgfc]

CAUTION POINT :
ENSURE HOOK PROPERLY
LOCK ON THE PCB



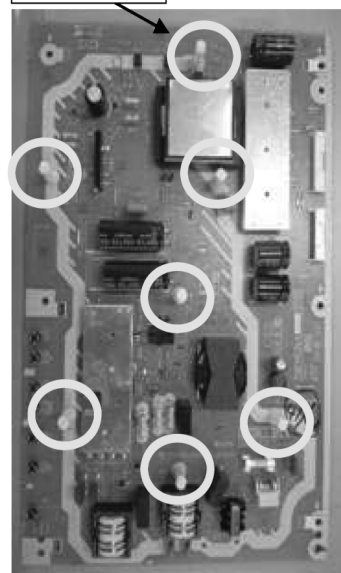
7.6. Install and Screw PCB

1. Install P-print on LCD panel fix with screw.
2. Install A-print on LCD panel fix with screw.
3. Install LD-print on LCD panel and fix with screw.
4. Install Metal Bracket PCB A on LCD panel.
5. Fix power button into P Print first before control panel.
6. Fix spacer in to P Print.



● THEJ036J (12 pcs)
[60±10[N•cm]
(6 ± 1 Kgf.cm)

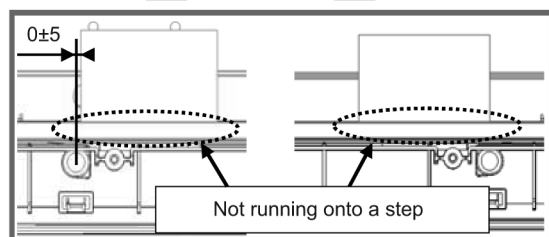
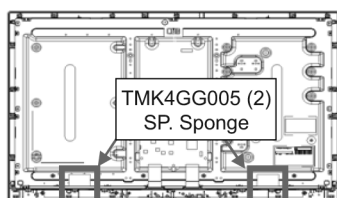
TMME398(7)
Spacer



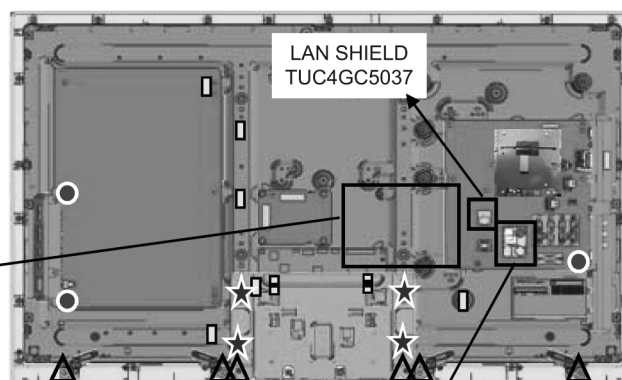
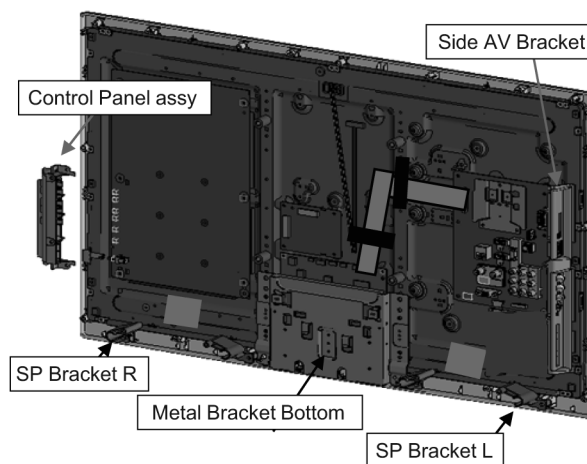
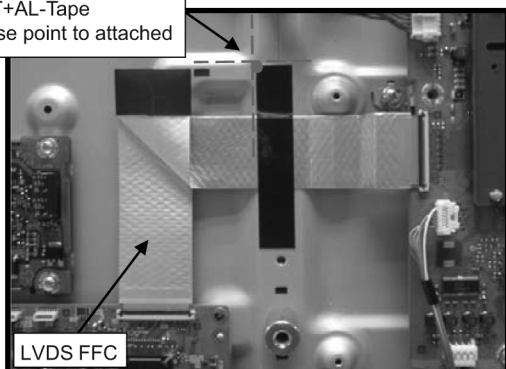
Explanatory note:
Confirm that the spacers are
inserted assuredly.

7.7. Small Part Install, Screw and Sponge Sticking

1. Install Control Panel
2. Install side AV bracket.
3. Install Speaker Bracket (4).
4. Install Metal Bracket Bottom.
5. Screw Control Panel to P-board.
6. Screw Side AV bracket.
7. Screw Metal Bracket Bottom.
8. Screw Speaker bracket.
9. Fix clumper into LCD Panel.
10. Slot in LVDS cable and Stick AL Pet+tape.



PET+AL-Tape
*Base point to attached



<Attention>
Don't overlap with
tuner label

Gasket : TEWB733 (t3 x W7 x L10)
X direction: left edge of tuner(-3mm/+3mm)
Y direction: Top edge of terminal(-3mm/+3mm)

★ THE4GJ001J (4 pcs)
[120 ± 20[N•cm]
(12 ± 1 Kgf.cm)

Clamper(6 pcs)
TMME268

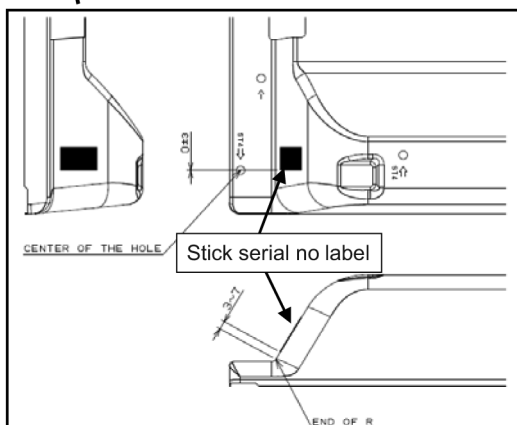
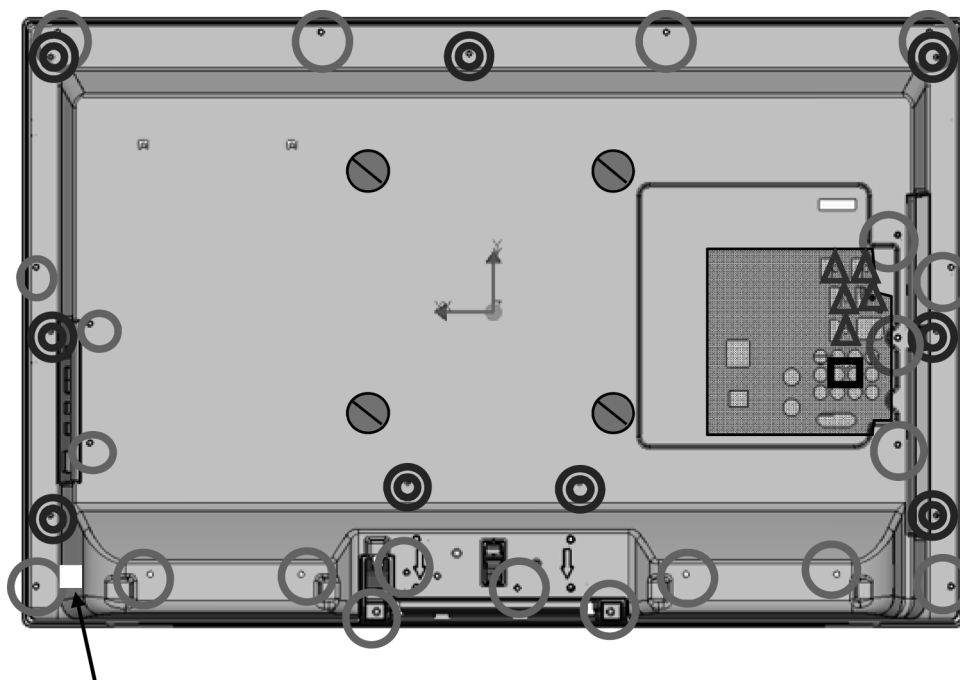
△ XTB4+15JFJ (6 pcs)
[120 ± 20[N•cm]
(12 ± 2 Kgf.cm)

Clamper (2 pcs)
TMME260

● THEJ036J (3 pcs)
[60 ± 10[N•cm]
(6 ± 1 Kgf.cm)

7.8. Back Cover Screw

1. Screw back cover.
2. Stick model name plate, rear av indication sheet at back cover.
3. Fix adjustment sheet at back cover.
4. Stick serial no label at back cover.



THEJ0389 (9 pcs)
【60±10 N•cm/6±1Kgfc.m】

THTD029J (21pcs)
【100±20 N•cm/10±2Kgfc.m】

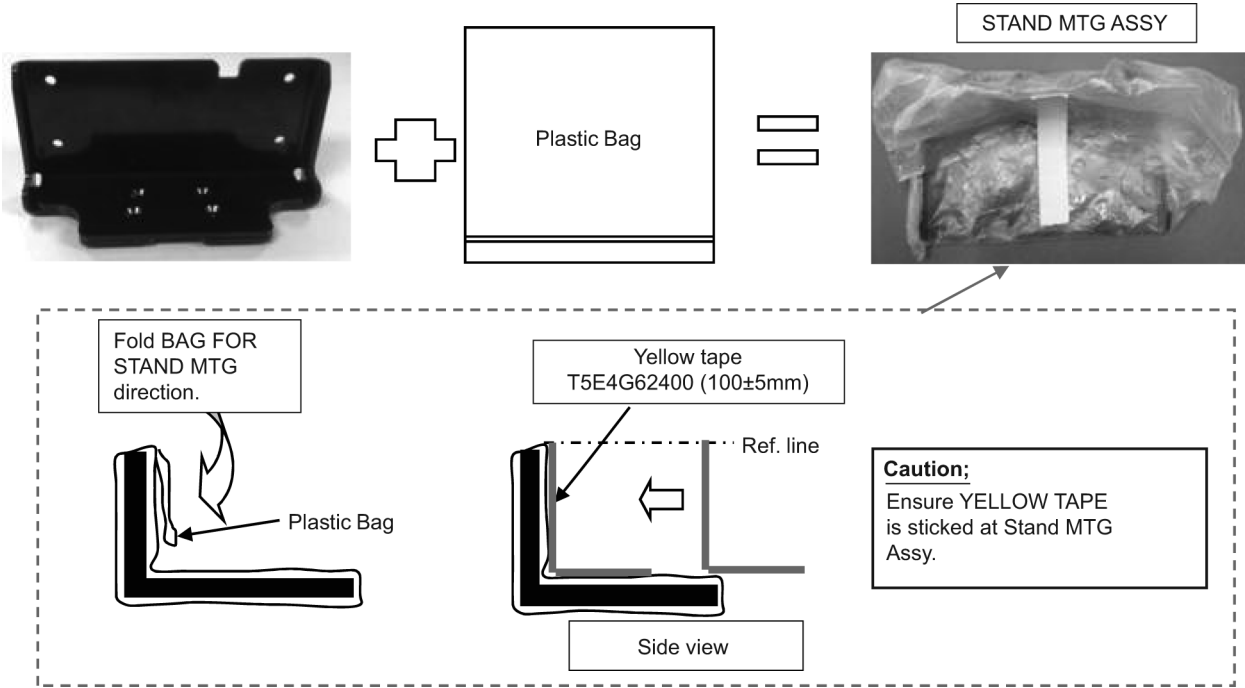
THEJ0389 (5pcs)
【25 ~ 30 N•cm/2.5 ~ 3.0Kgfc.m】

XTV3+10GFJK (1pcs)
【60±10 N•cm/6±1Kgfc.m】

M6 Cap (4 pcs)

7.9. Stand MTG Assembly & Accessories Assembly

Put all screw inside plastic bag.



8 Measurements and Adjustments

8.1. Voltage chart of A-board

Set A-Board to a dummy set and check the satisfaction with the specified voltage as following table.

VOLTAGE	TEST POINT	SPECIFICATION
SUB1.2V	TP8100	1.24 - 1.31 V
SUB1.5V	TP8101	1.47 - 1.55 V
SUB3.3V	TP5400	3.17 ± 3.43 V
SUB5V	TP5420	4.94 - 5.31 V
USB5V	TP5440	4.94 - 5.31 V
PNL12V	TP4056 or TP4062	11.5 - 12.5 V

8.2. Voltage chart of P-board

Set P-Board to a dummy load and check the satisfaction with the specified voltage as following table.

Ouput	TEST POINT	Step 1	Step 2	
24V (PANEL)	TP7514 or TP7515	< 1V	24 ± 1.2V	
16V	TP7503 or TP7504	< 1V	16.1V ± 0.7V	
TUNER5V8	TP7501 or TP7502	5.7 ± 0.3V	5.7 ± 0.3V	
PFC	TP7201 or TP7202	< 340V	400 ± 15V	* HOT

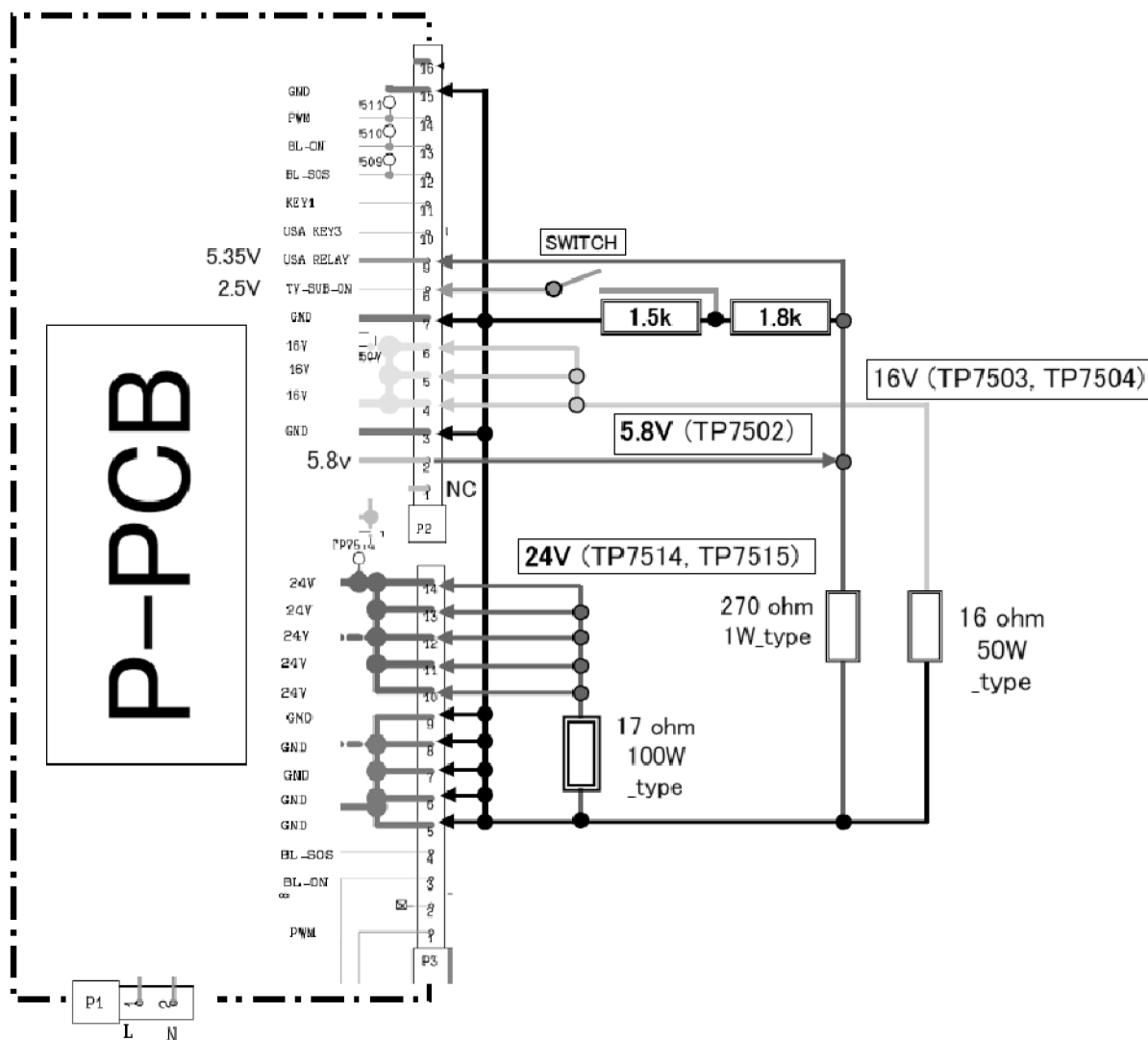
Step 1 Supply AC 230V to P1 connector in the P-Board. Main power button is OFF.

Step 2 TV_SUB_ON P2 connector - pin 8 (TP7505) DC2.5V ON.
Supply DC 2.5V to TV_SUB_ON P2 connector - pin 8 (TP7505), displayed as SWITCH.

Refer to the next page about dummy load in detail.

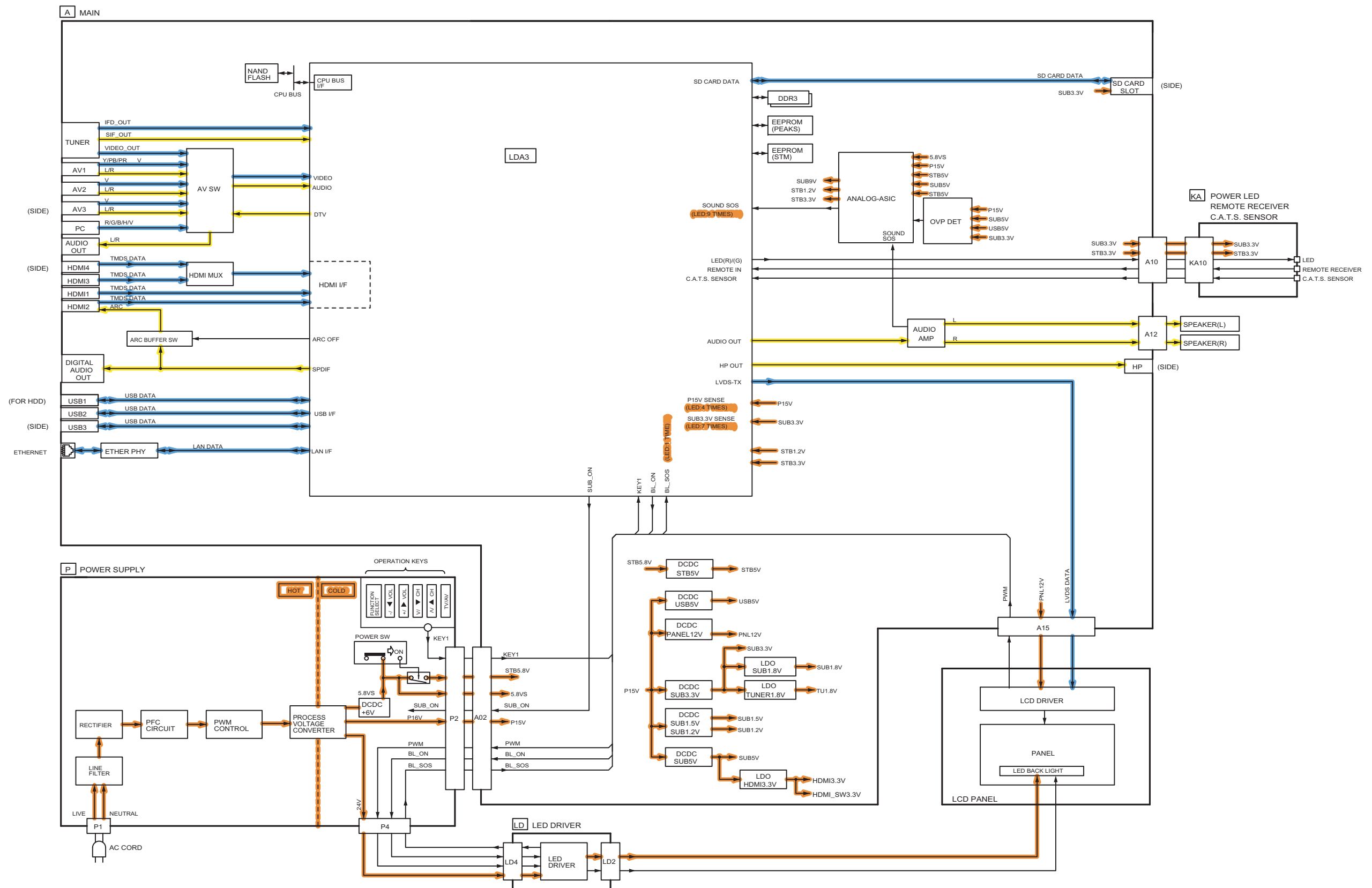
8.3. P Board

Dummy jig for P-PCB (TNPA5364) checking - Schematic:

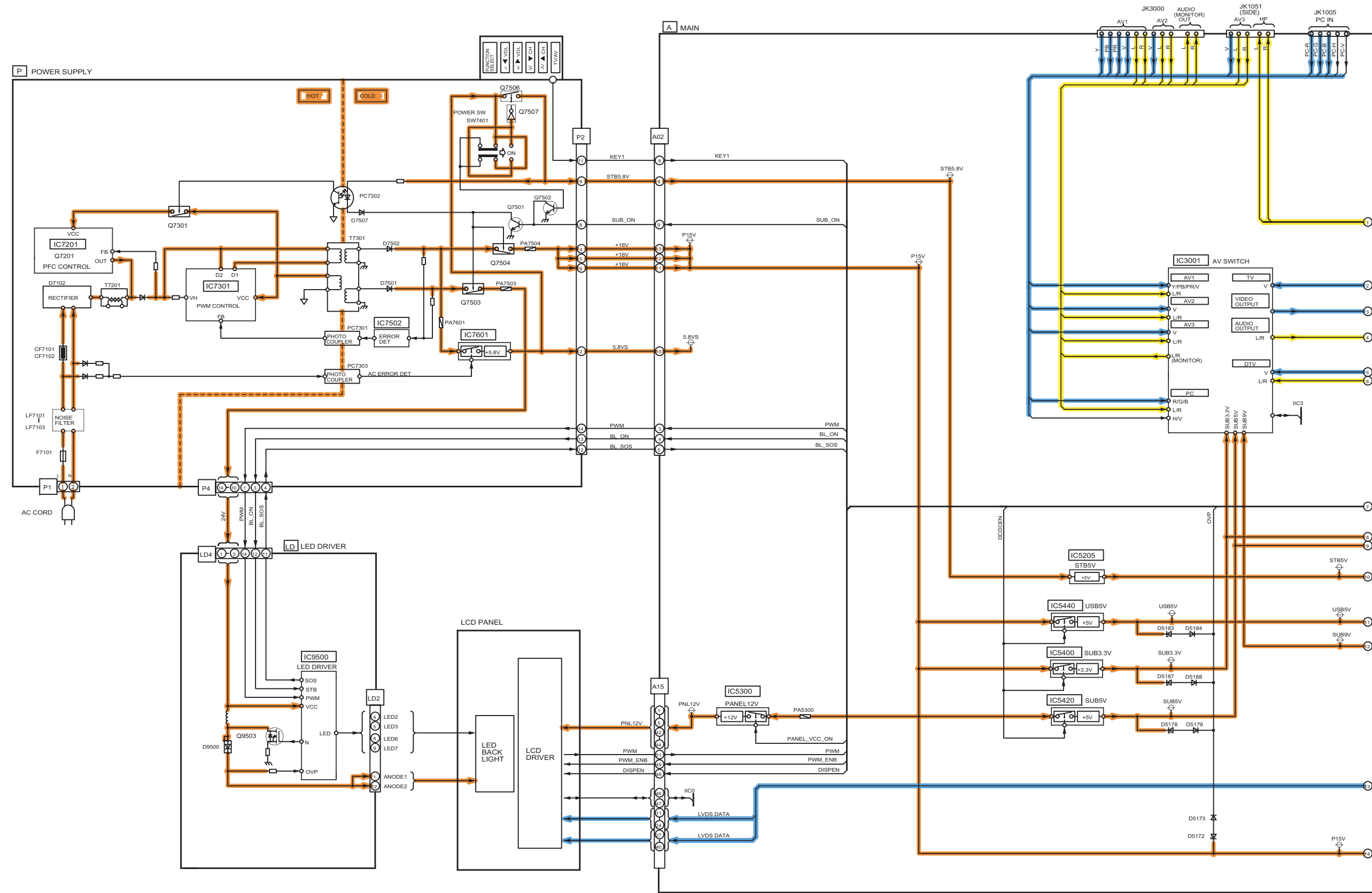


9 Block Diagram

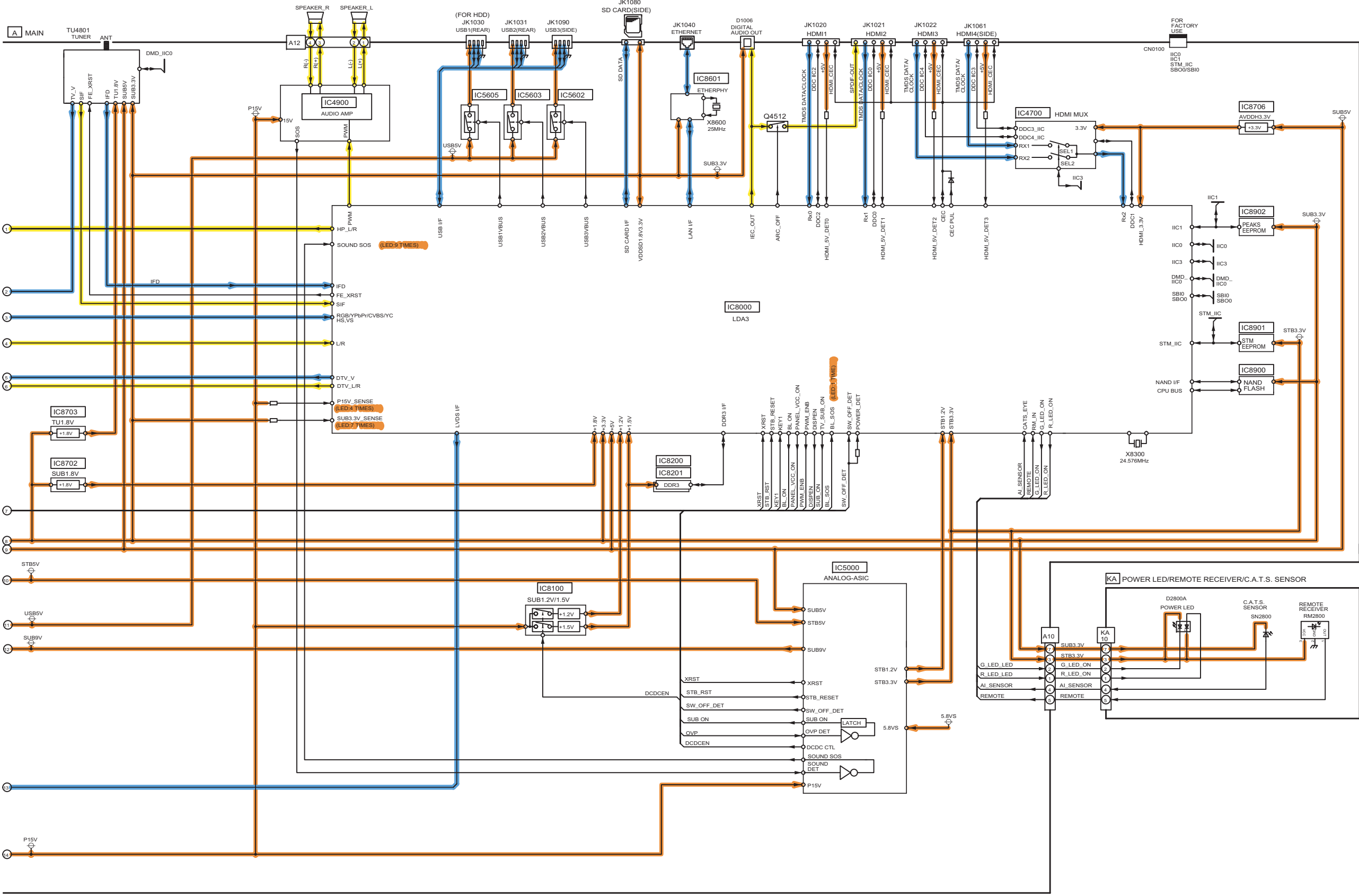
9.1. Main Block Diagram



9.2. Detailed Block Diagram 1/2



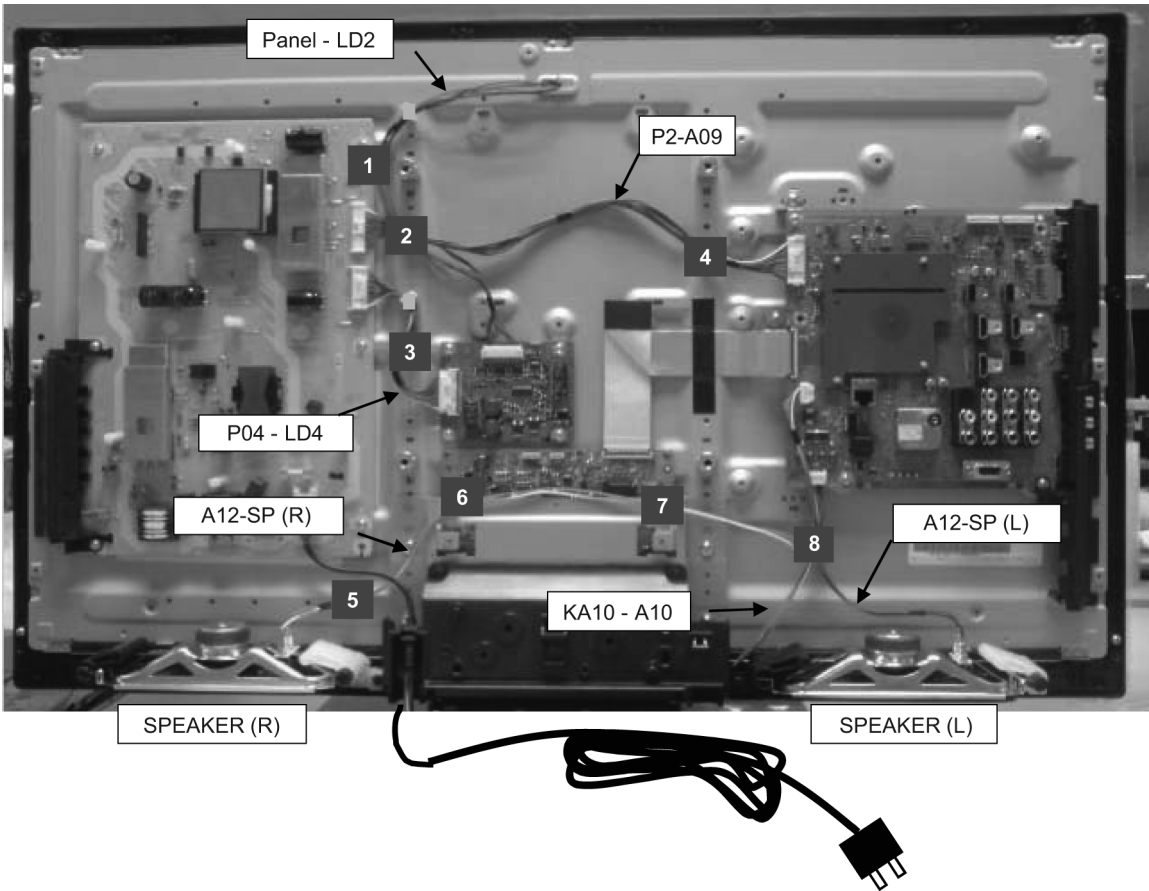
9.3. Detailed Block Diagram 2/2



10 Wiring Connection Diagram

10.1. Wire Dressing

- 1. Connect all wire connector to connector.
- 2. Dressing wire follow diagram.



Wire		Clamper							
		1	2	3	4	5	6	7	8
No.1	A09 - P2		●		●				
No.2	Panel - LD2	●	●						
No.3	P4 - LD4			●					
No.4	A10 - KA10								●
No.5	A11 - SP (L)								●
No.6	A11 - SP (R)					●	●	●	●

11 Schematic Diagram

11.1. Schematic Diagram Notes

Notes:

1. **Resistor**
Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).
2. **Capacitor**
Unit of capacitance is μ F, unless otherwise noted.
3. **Coil**
Unit of inductance is H, unless otherwise noted.
4. **Test Point**
 : Test Point position
5. **Earth Symbol**
 : Chassis Earth (Cold)  : Line Earth (Hot)
6. **Voltage Measurement**
Voltage is measured by a DC voltmeter.
Conditions of the measurement are the following:

Power Source	AC110-127V, 60Hz
Receiving Signal	Colour Bar signal (RF)
All customer's controls	Maximum positions
7. When arrow mark () is found, connection is easily found from the direction of arrow.
8. Indicates the major signal flow. : Video  Audio 
9. This schematic diagram is the latest at the time of printing and subject to change without notice.

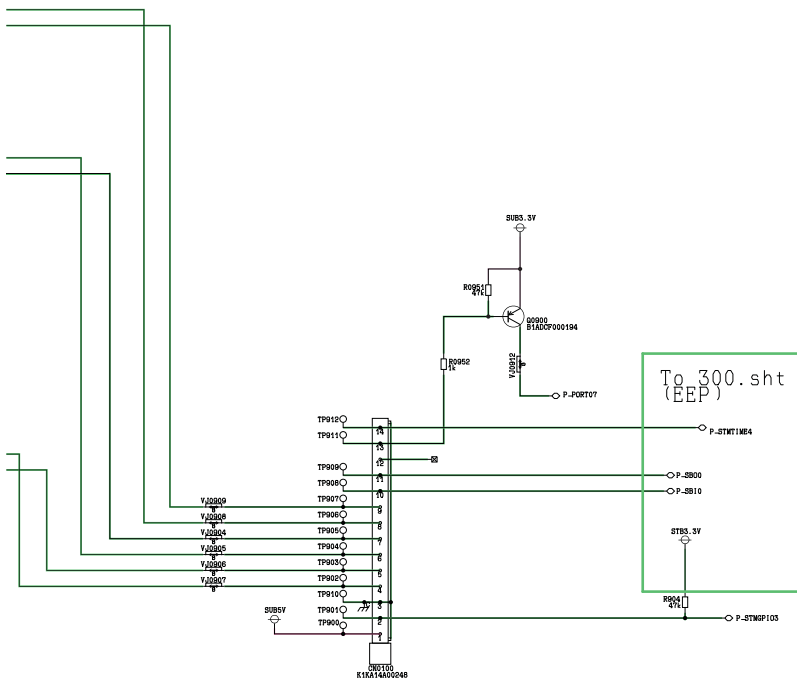
Remarks:

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection.
The circuit is defined by HOT and COLD indications in the schematic diagram. Take the following precautions.
All circuits, except the Power Circuit, are cold.
Precautions
 - a. Do not touch the hot part or the hot and cold parts at the same time or you may be shocked.
 - b. Do not short- circuit the hot and cold circuits or a fuse may blow and parts may break.
 - c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously or a fuse may blow.
Connect the earth of instruments to the earth connection of the circuit being measured.
 - d. Make sure to disconnect the power plug before removing the chassis.

11.2.2. A Board - Sheet : 002 (2 / 2)

<1A>

<2A>

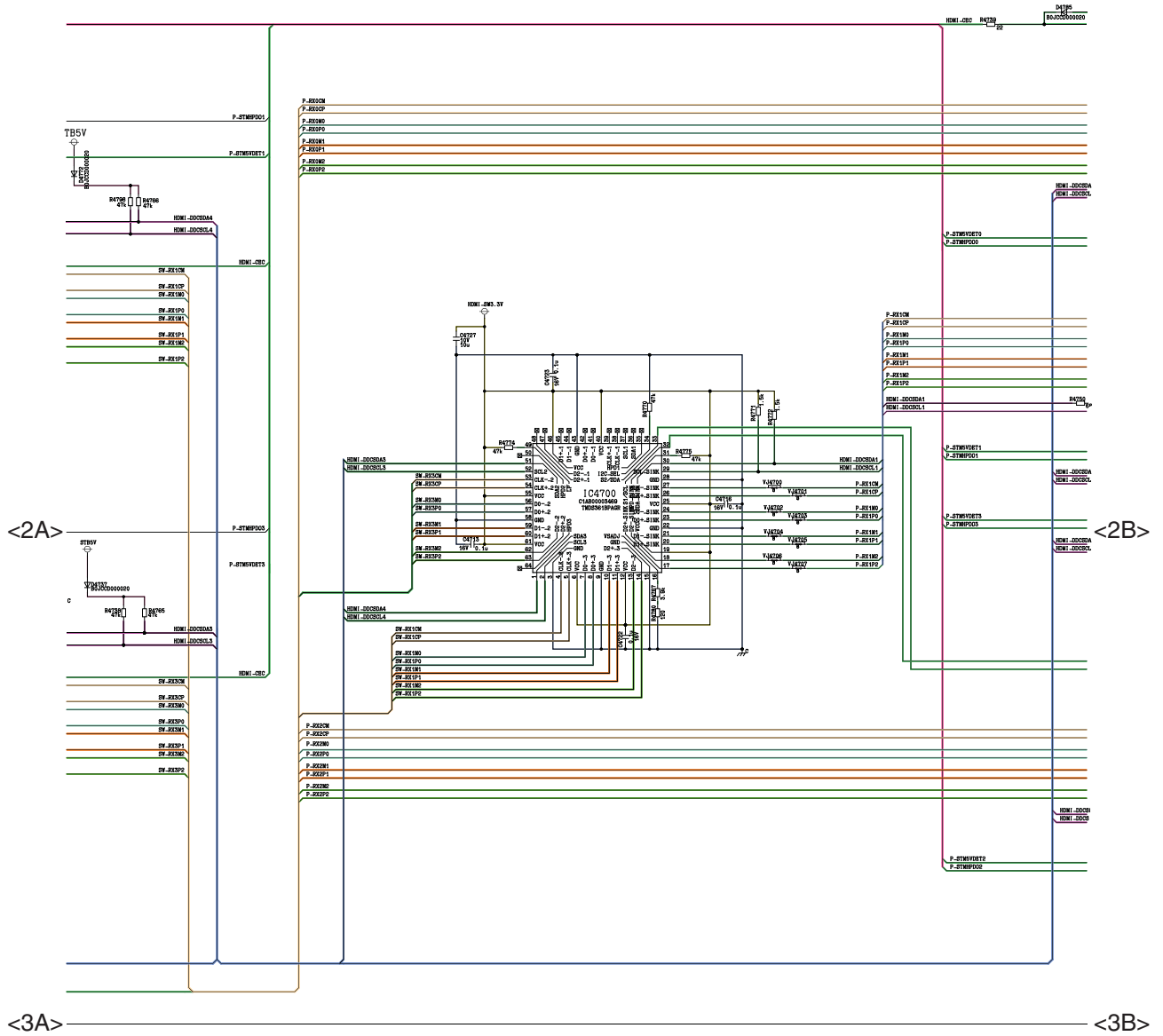


<3A>

11.2.4. A Board - Sheet : 003 (2 / 5)

<1A>

<1B>

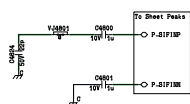
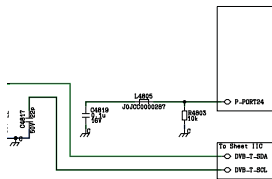


11.2.6. A Board - Sheet : 003 (4 / 5)

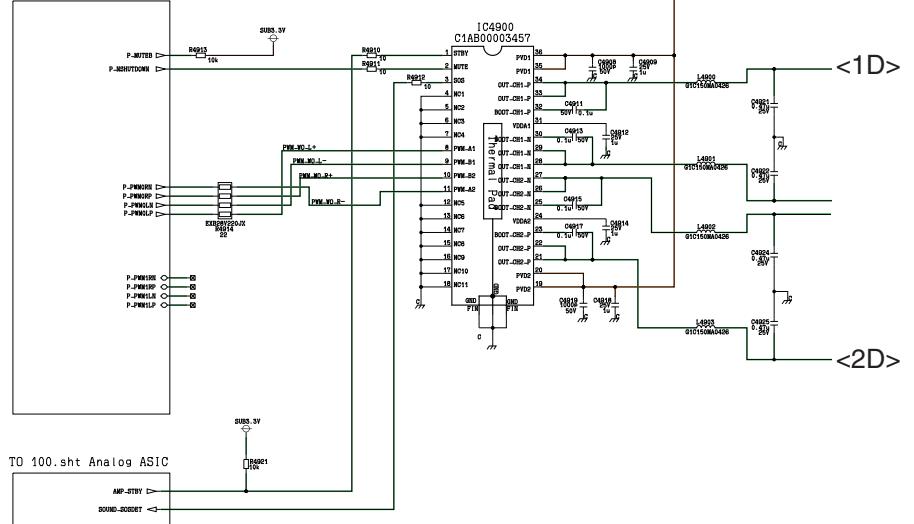
<1C>

No Use Control Signal

10 — P-PORT13
 11 — P-PORT14
 12 — P-PORT15



TO sht.700 LOCK Peaks



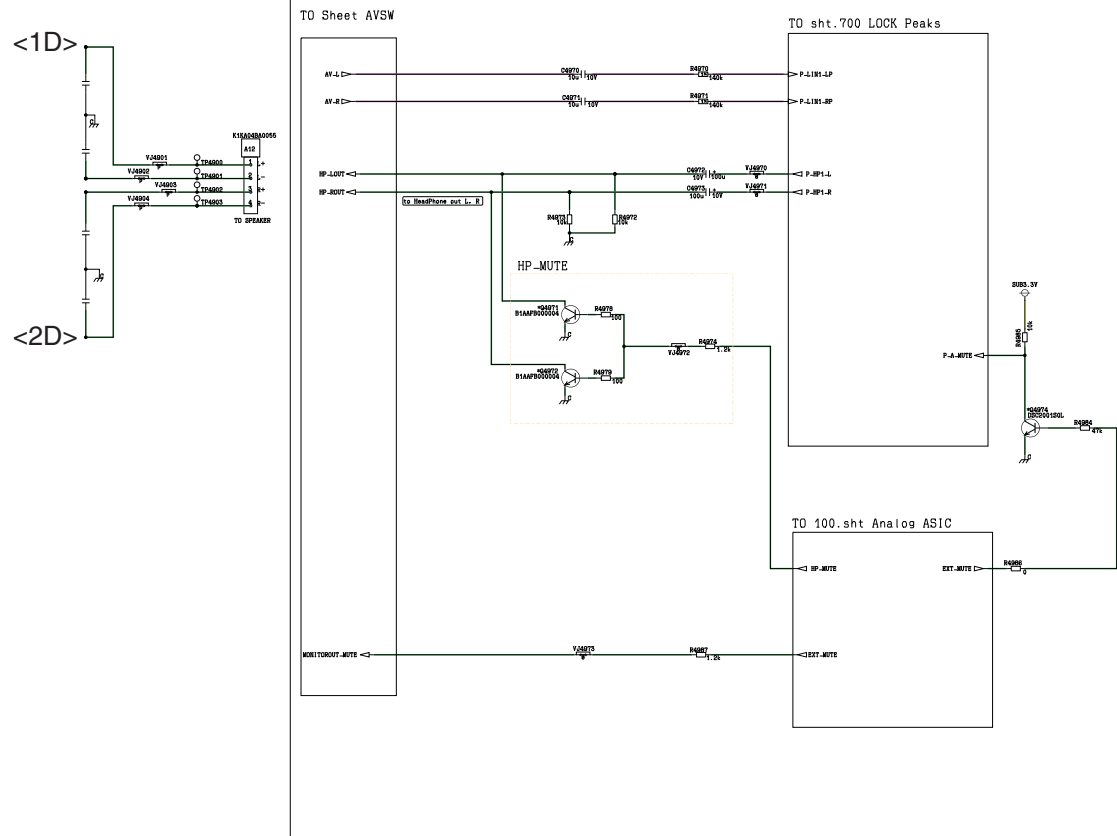
TO 100.sht Analog ASIC

AMP-STBY

SOUND-SIGNAL

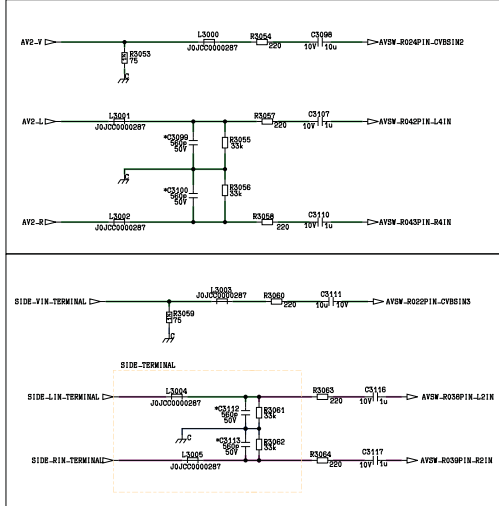
11.2.7. A Board - Sheet : 003 (5 / 5)

SHEET 003

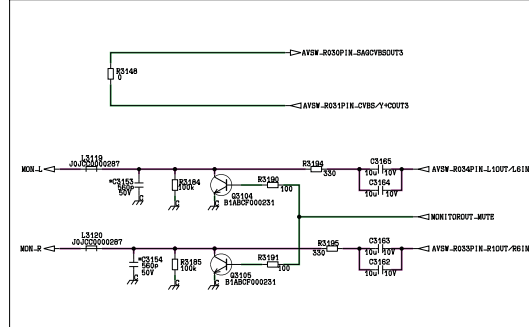


11.2.8. A Board - Sheet : 004 (1 / 2)

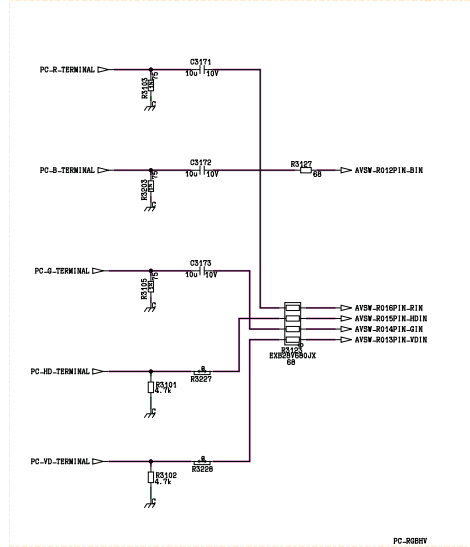
VIDEO/AUDIO IN



MONITOR OUT

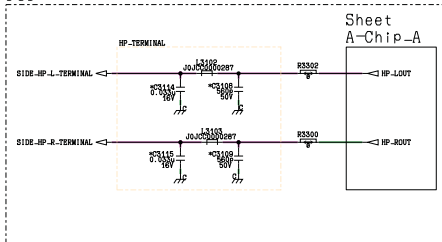


PC

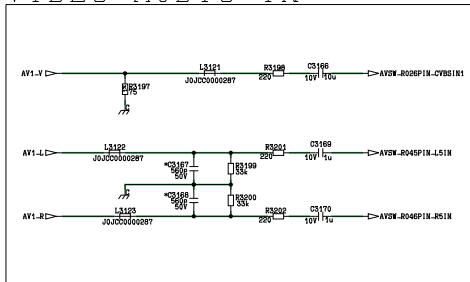


<1A>

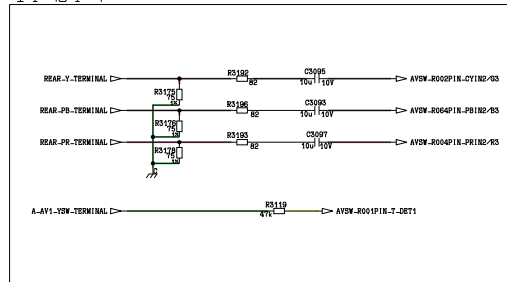
HP

Sheet
A-Chip-A

VIDEO/AUDIO IN



YPbPr



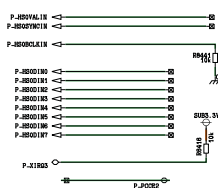
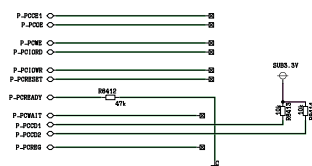
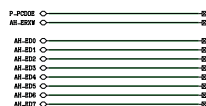
<2A>

SHEET 005



CI

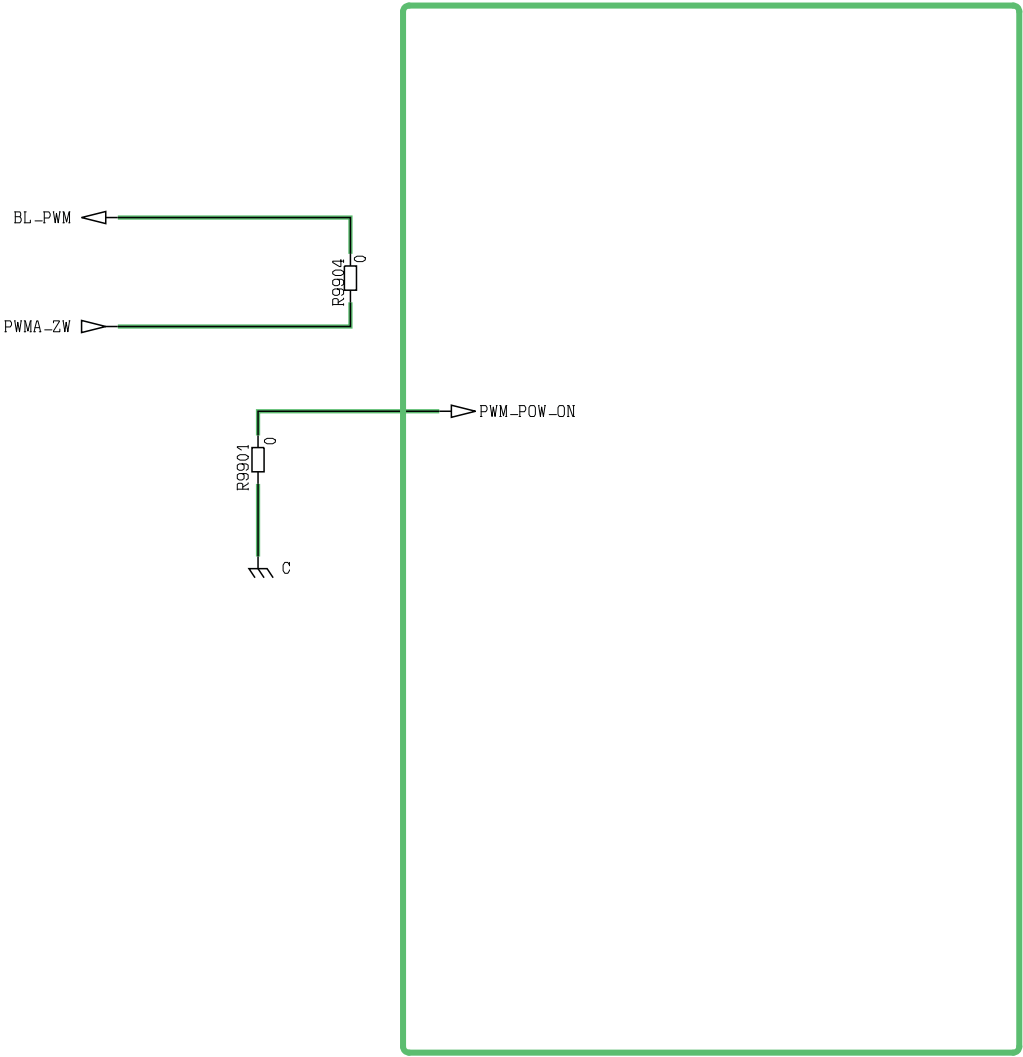
Peaks-sLD2



11.2.13. A Board - Sheet : 008 (1 / 1)

SHEET 008

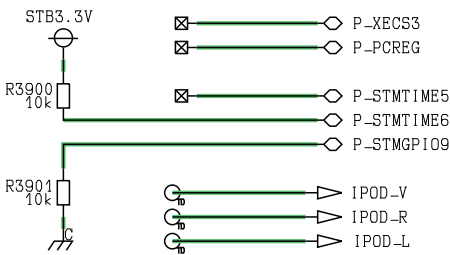
IC5000
AN34043A
Analog ASIC



11.2.15. A Board - Sheet : 010 (1 / 1)

SHEET 010

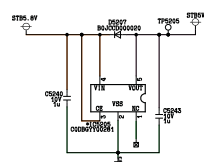
iPod



11.2.16. A Board - Sheet : 100 (1 / 3)

LCD

STB5V CRNo.5200~5229

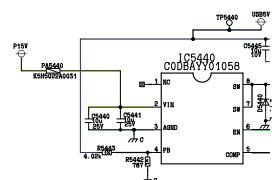


SUB-A1_3.3V



USB5V

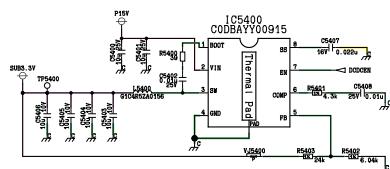
CRNo.5



<1A>

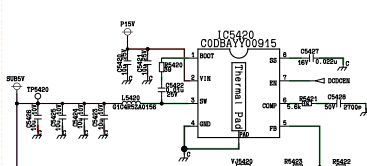
SUB3.3V

CRNo.5400~5419



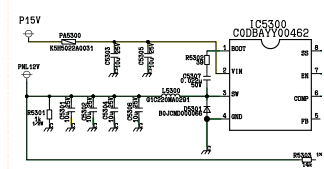
SUB5V

CRNo.5420~5439



PNL12V

CRNo.5



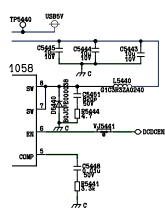
<2A>

<3A>

11.2.17. A Board - Sheet : 100 (2 / 3)

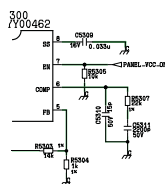
<1A>

RNo. 5440~5459

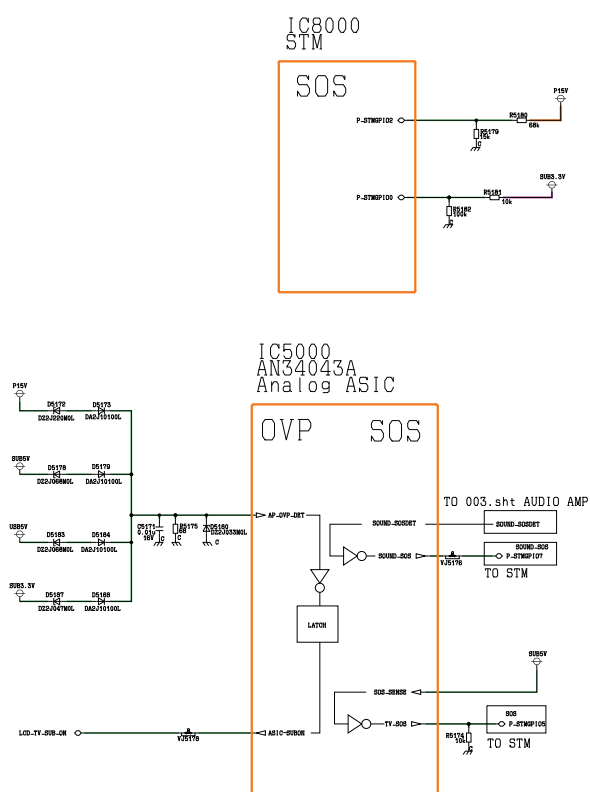


<2A>

RNo. 5300~5349



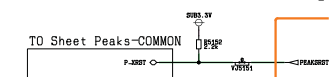
<3A>



Peaks RESET

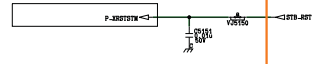
IC5000
AN3404
Analog

<1B>



STM RESET

TO STM



SW-OFF-DET

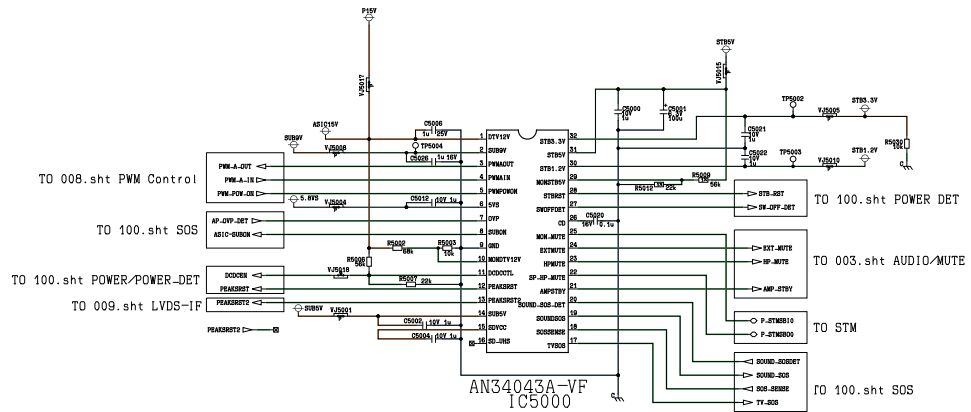
TO Sheet Peaks-COMMON



<2B>

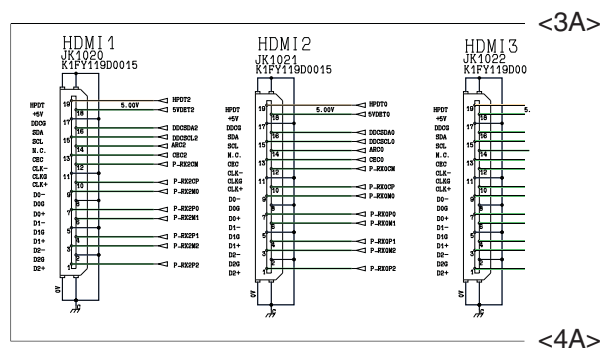
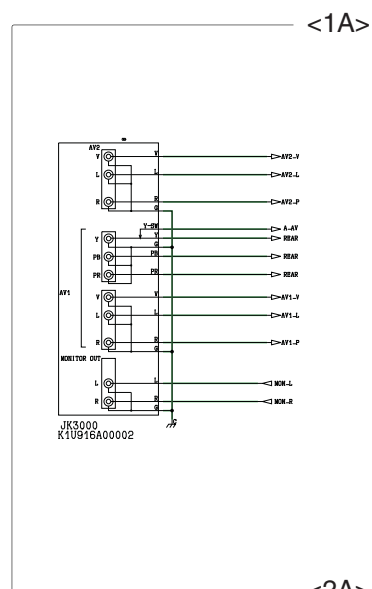
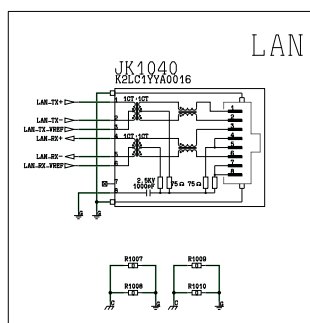
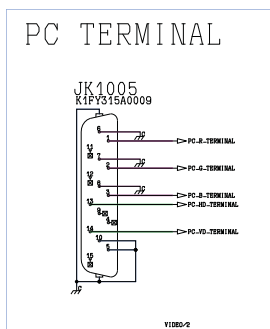
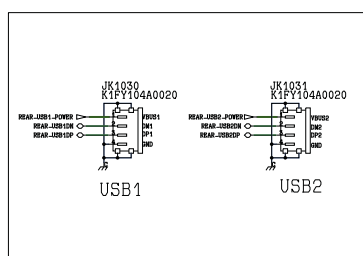
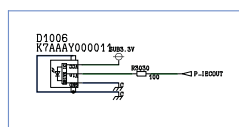
11.2.18. A Board - Sheet : 100 (3 / 3)

SHEET 100

3A
ASIC
<1B>

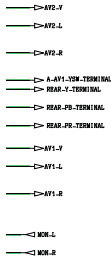
<2B>

11.2.19. A Board - Sheet : 101 (1 / 3)

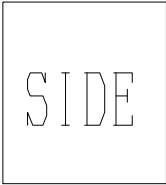


11.2.20. A Board - Sheet : 101 (2 / 3)

<1A>

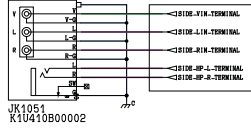


<2A>

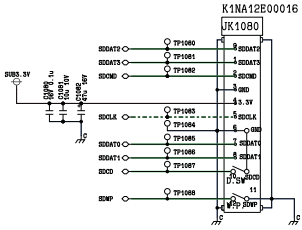


REF No. 1050 - 1099

SIDE AV Terminal



SD Slot



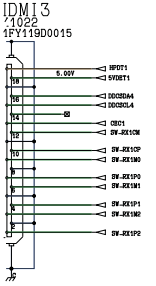
<1B>

Stan

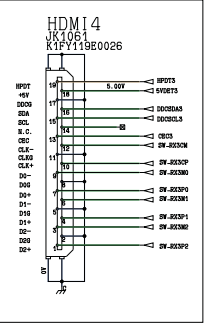
P-5H

<2B>

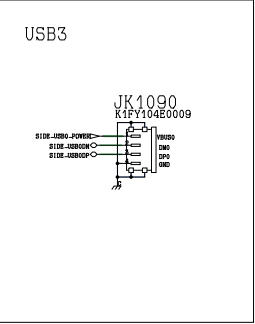
<3A>



<4A>

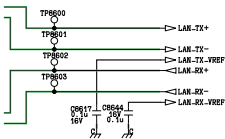


USB3



11.2.24. A Board - Sheet : 301 (2 / 2)

<1A>

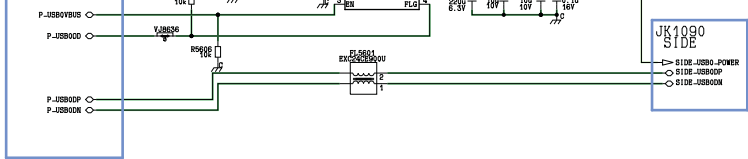


<2A>

USB0

Side

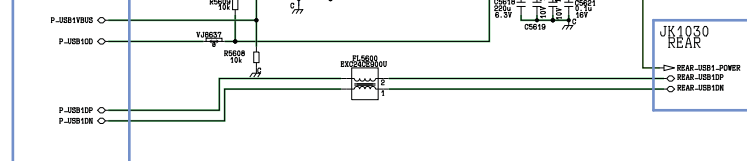
PEAKS-LDA3



USB1

Top

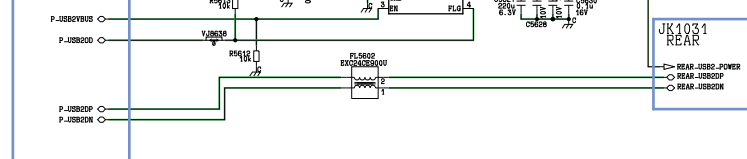
PEAKS-LDA3



USB2

Top

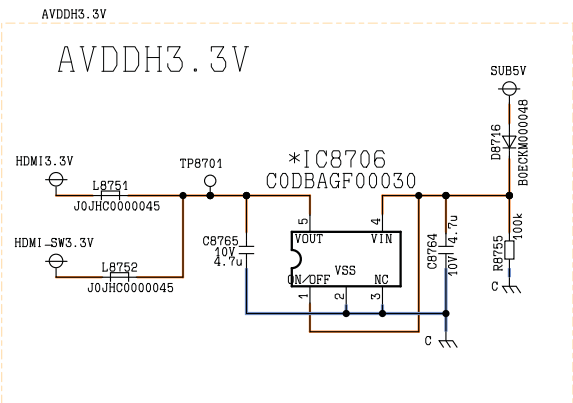
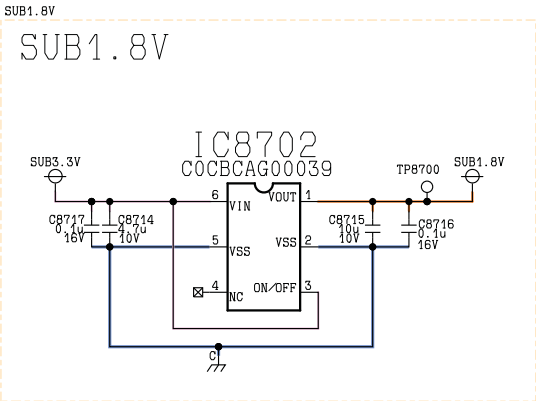
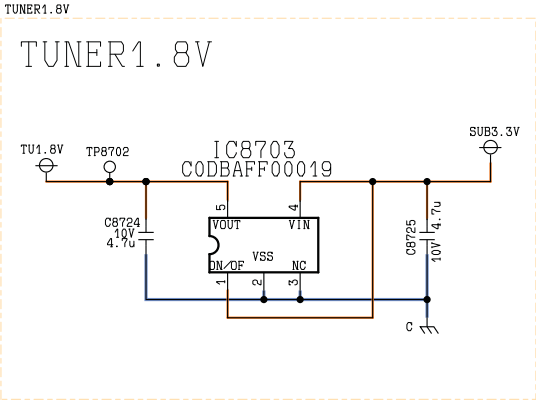
PEAKS-LDA3



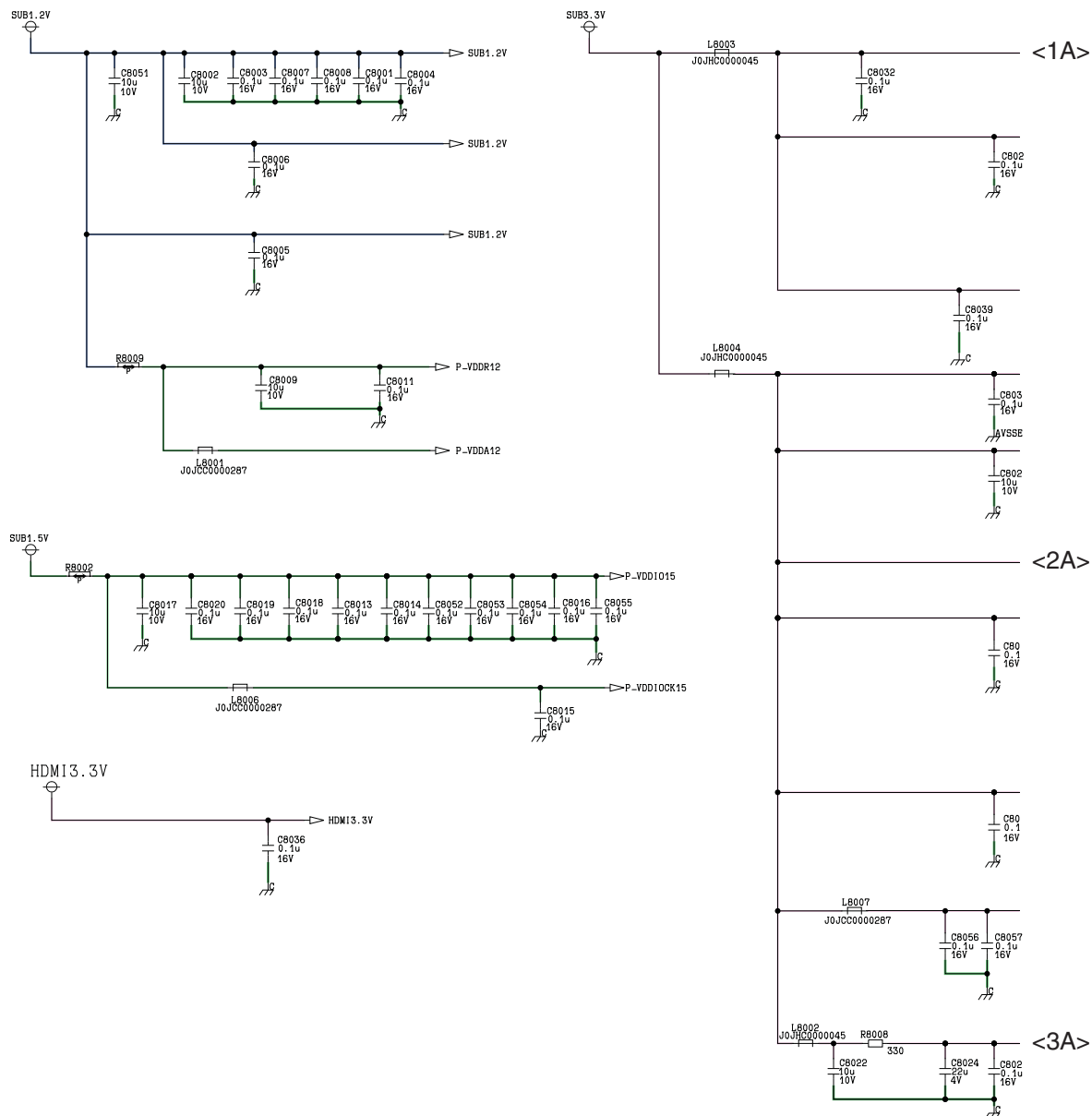
SHEET 301

11.2.25. A Board - Sheet : 302 (1 / 1)

SHEET 302



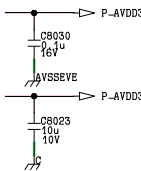
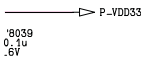
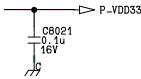
11.2.28. A Board - Sheet : 701 (1 / 2)



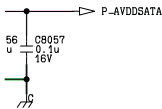
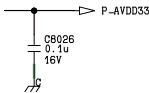
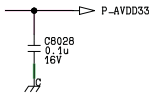
SHEET 701
LOCK-Peaks-POWER

11.2.29. A Board - Sheet : 701 (2 / 2)

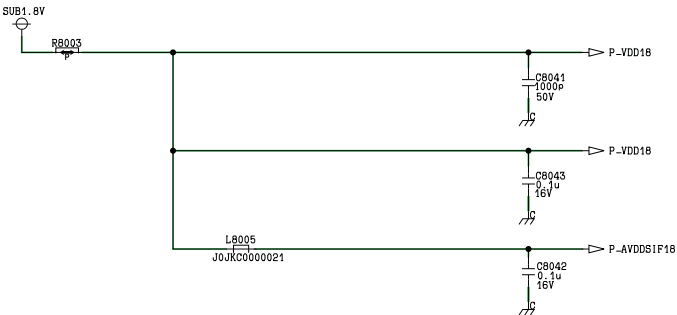
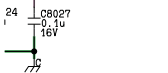
<1A> → P_VDD33



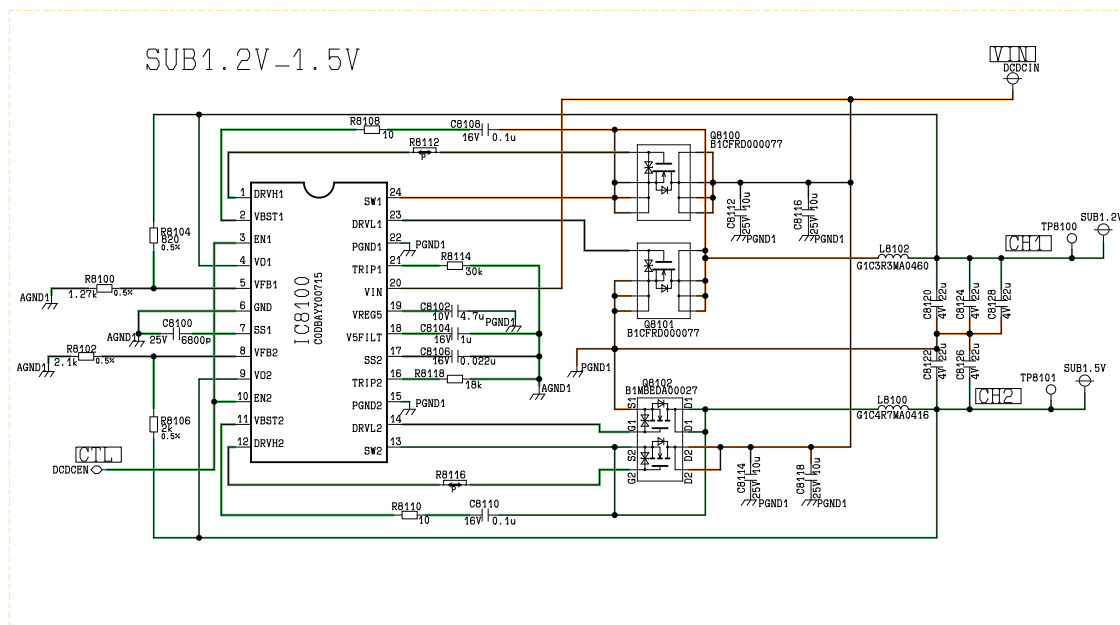
<2A> → P_AVDD33



<3A> → P_AVDDA33

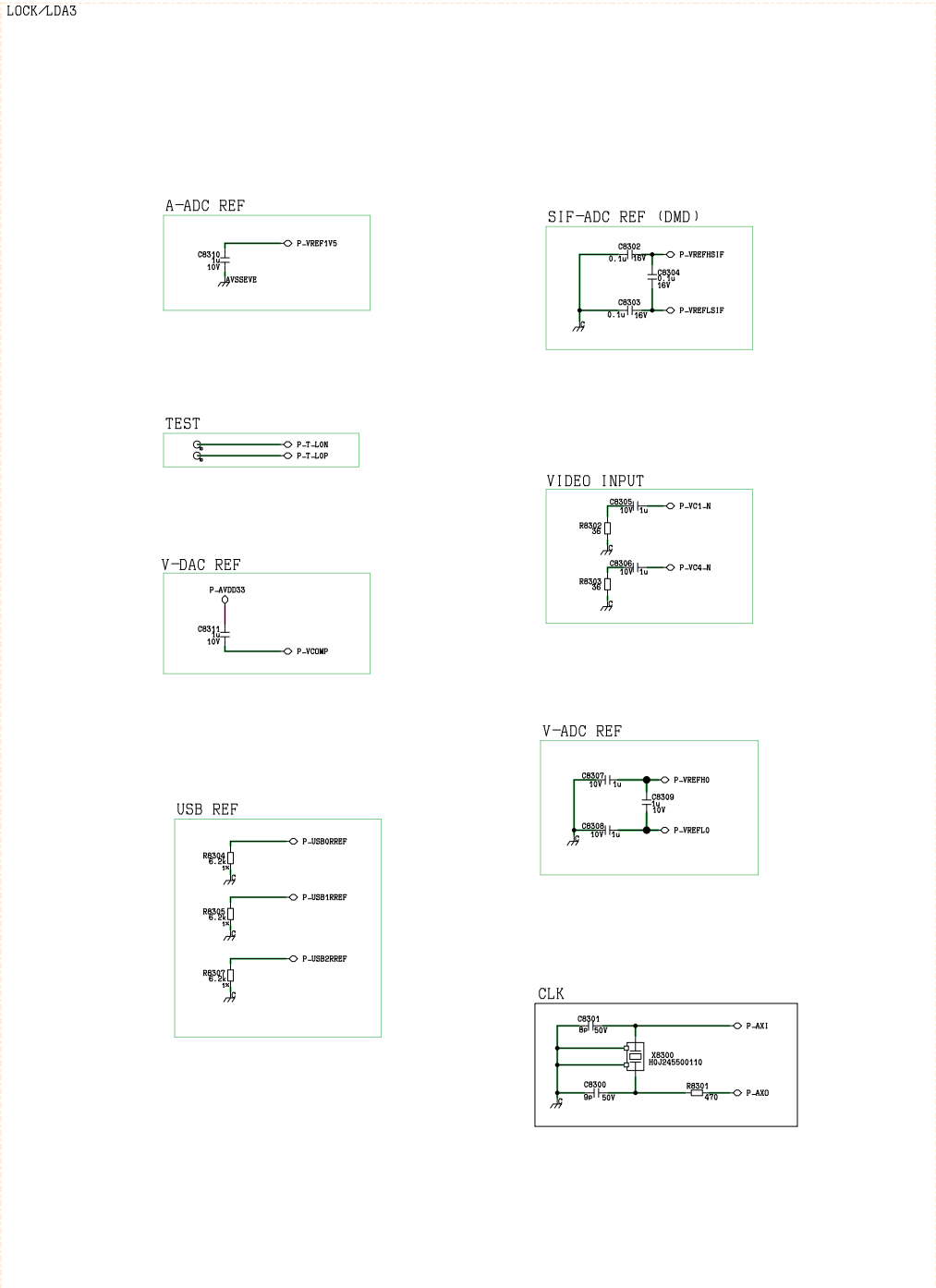


11.2.30. A Board - Sheet : 702 (1 / 1)



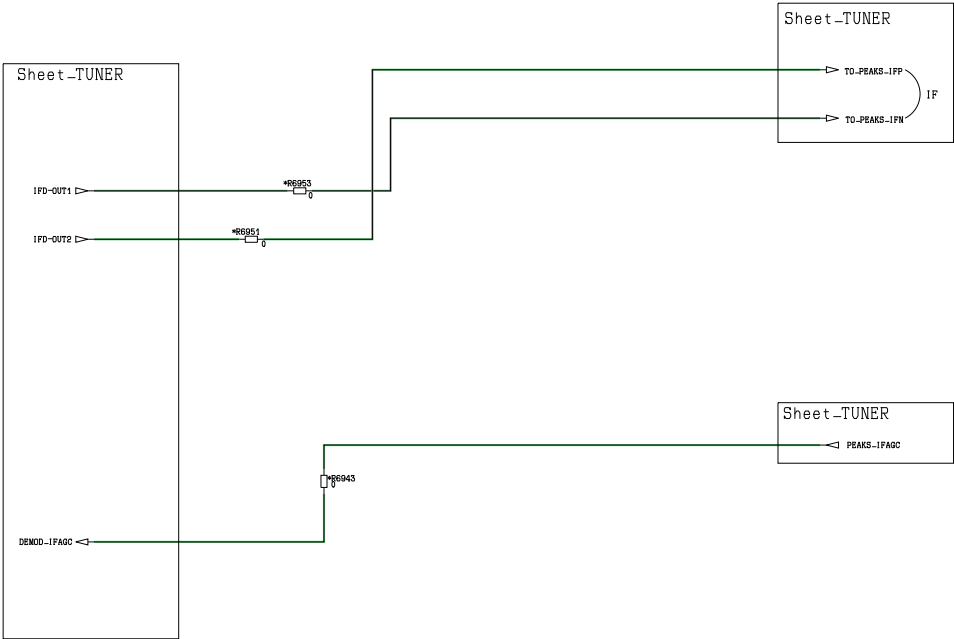
SHEET 702
LOCK-Peaks-DCDC

11.2.32. A Board - Sheet : 704 (1 / 1)



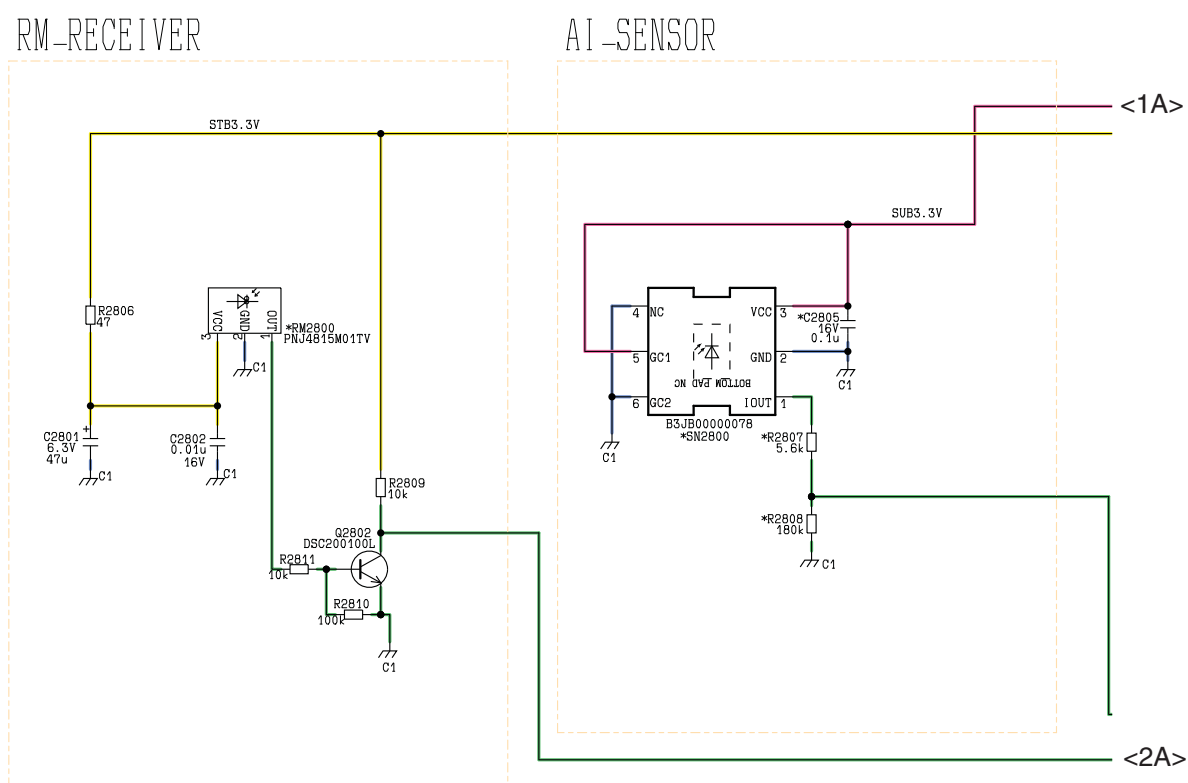
11.2.33. A Board - Sheet : 708 (1 / 1)

SHEET 708



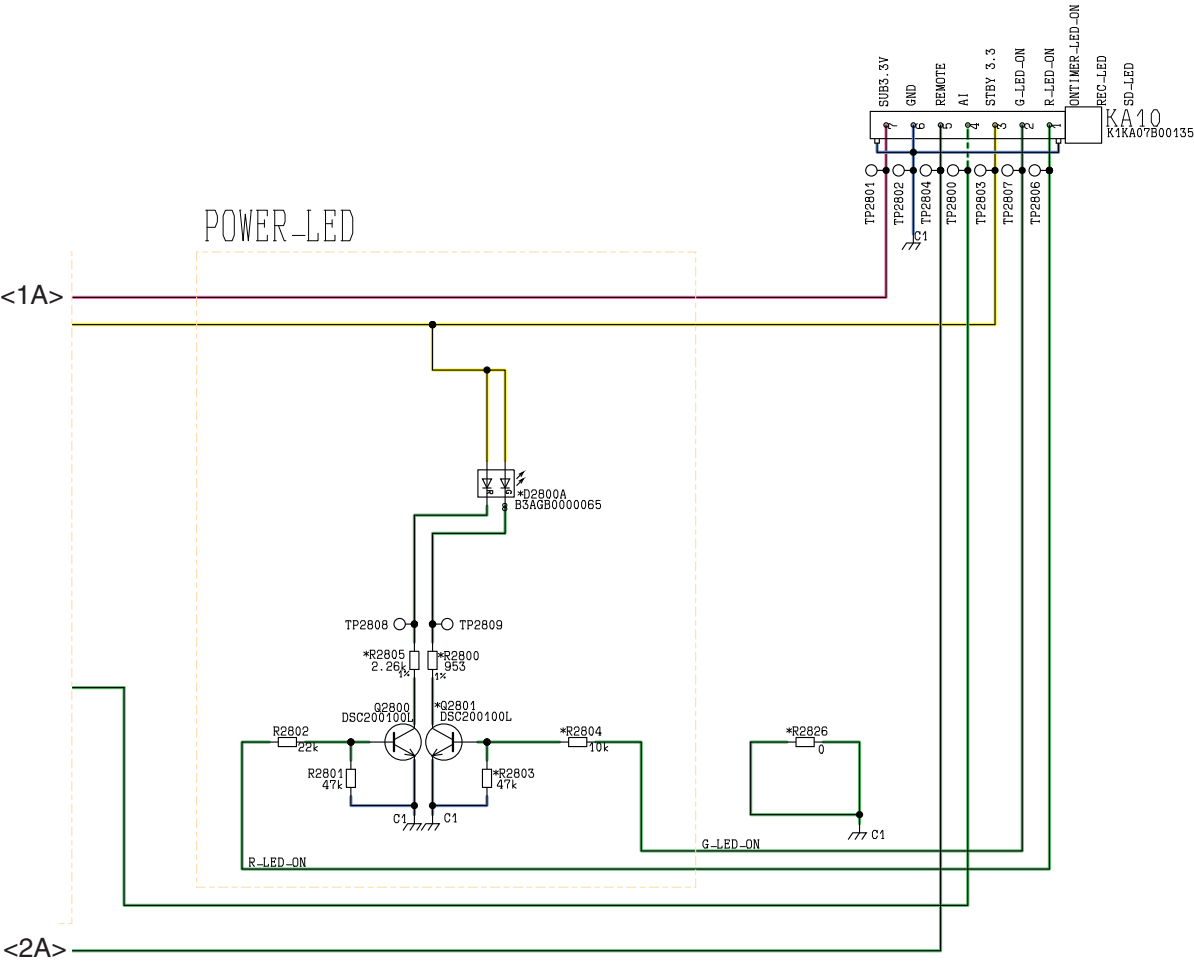
11.3. KA Board

11.3.1. KA Board (1 / 2)



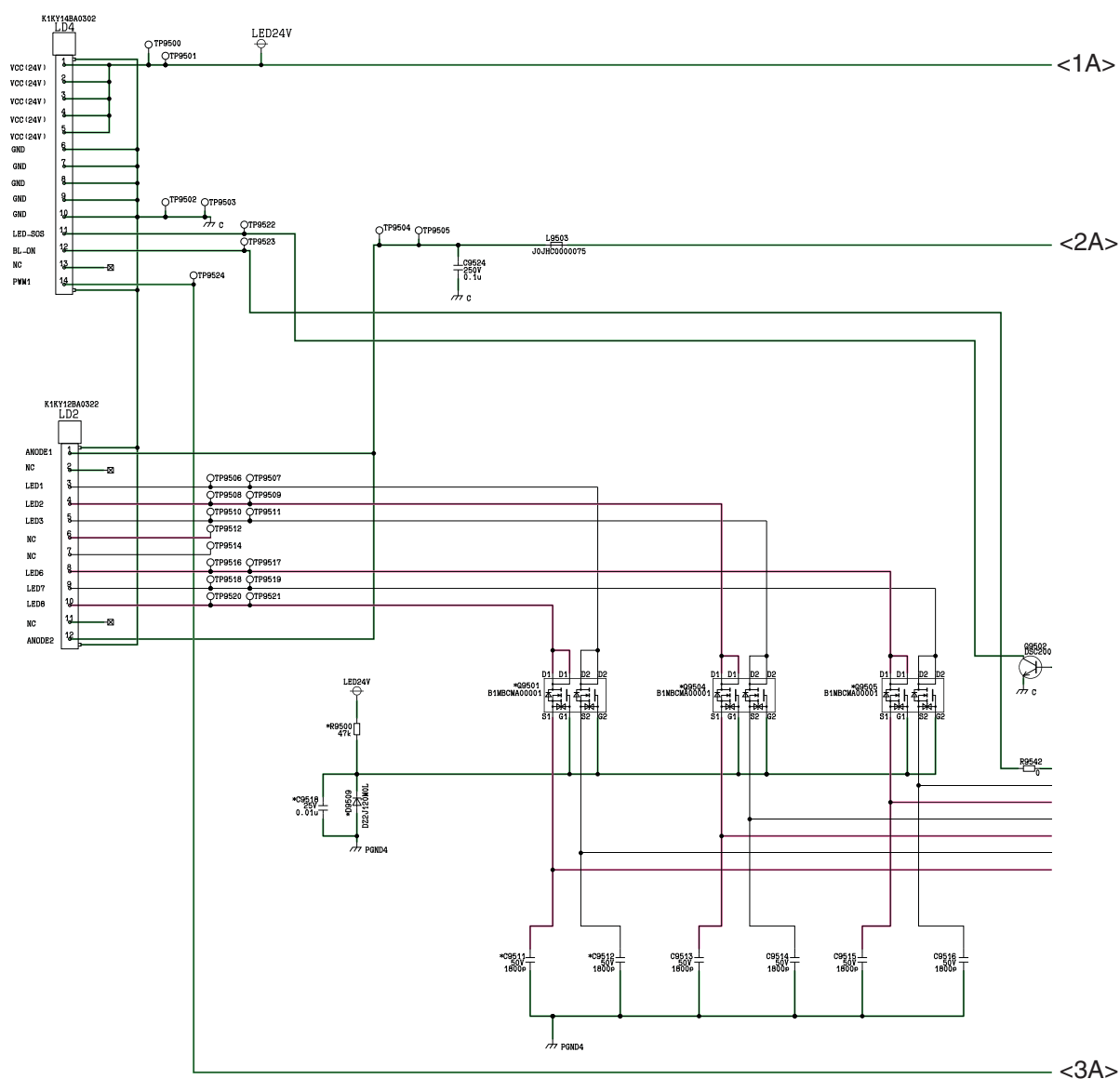
11.3.2. KA Board (2 / 2)

TNPA5378AB
KA BOARD



11.4. LD Board

11.4.1. LD Board (1 / 2)

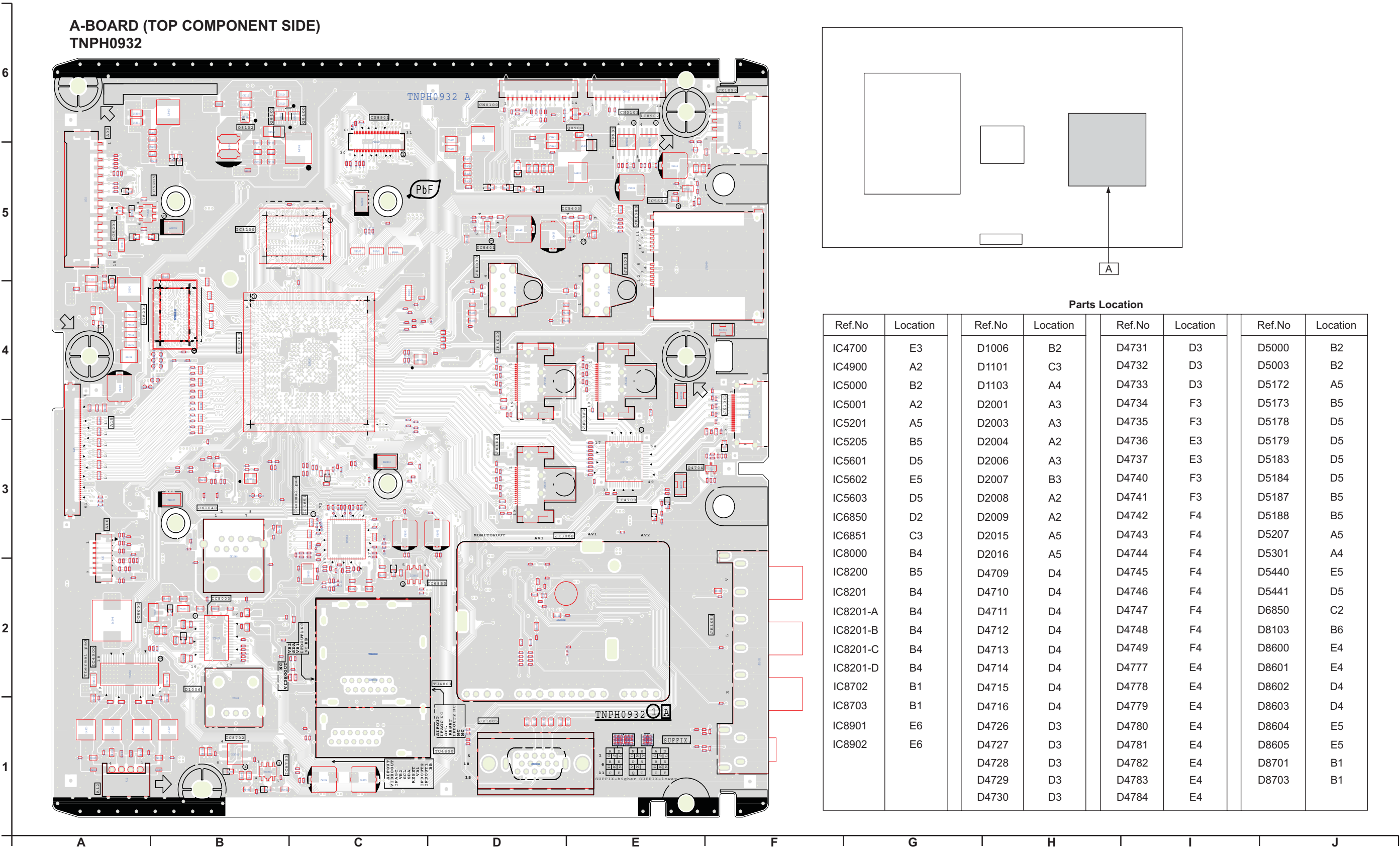


TNPA5377AB
LD BOARD

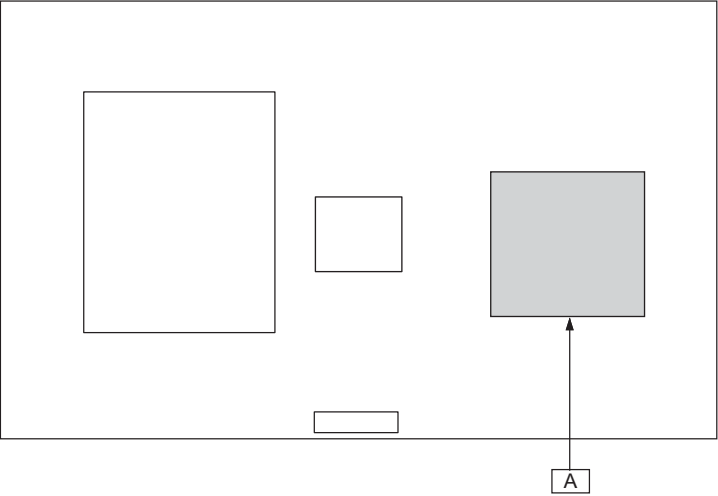
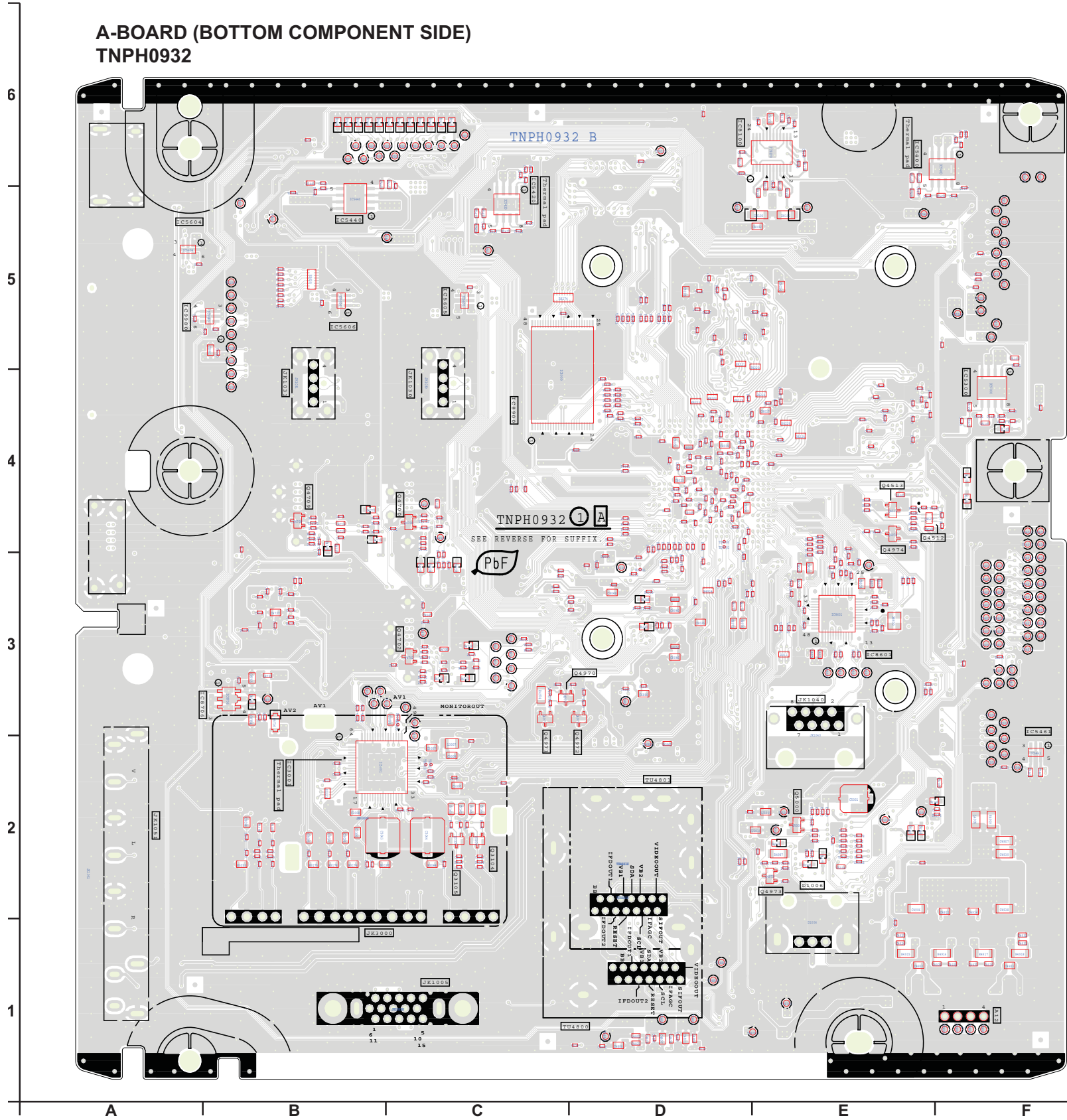


12 Printed Circuit Board

12.1. A-BOARD

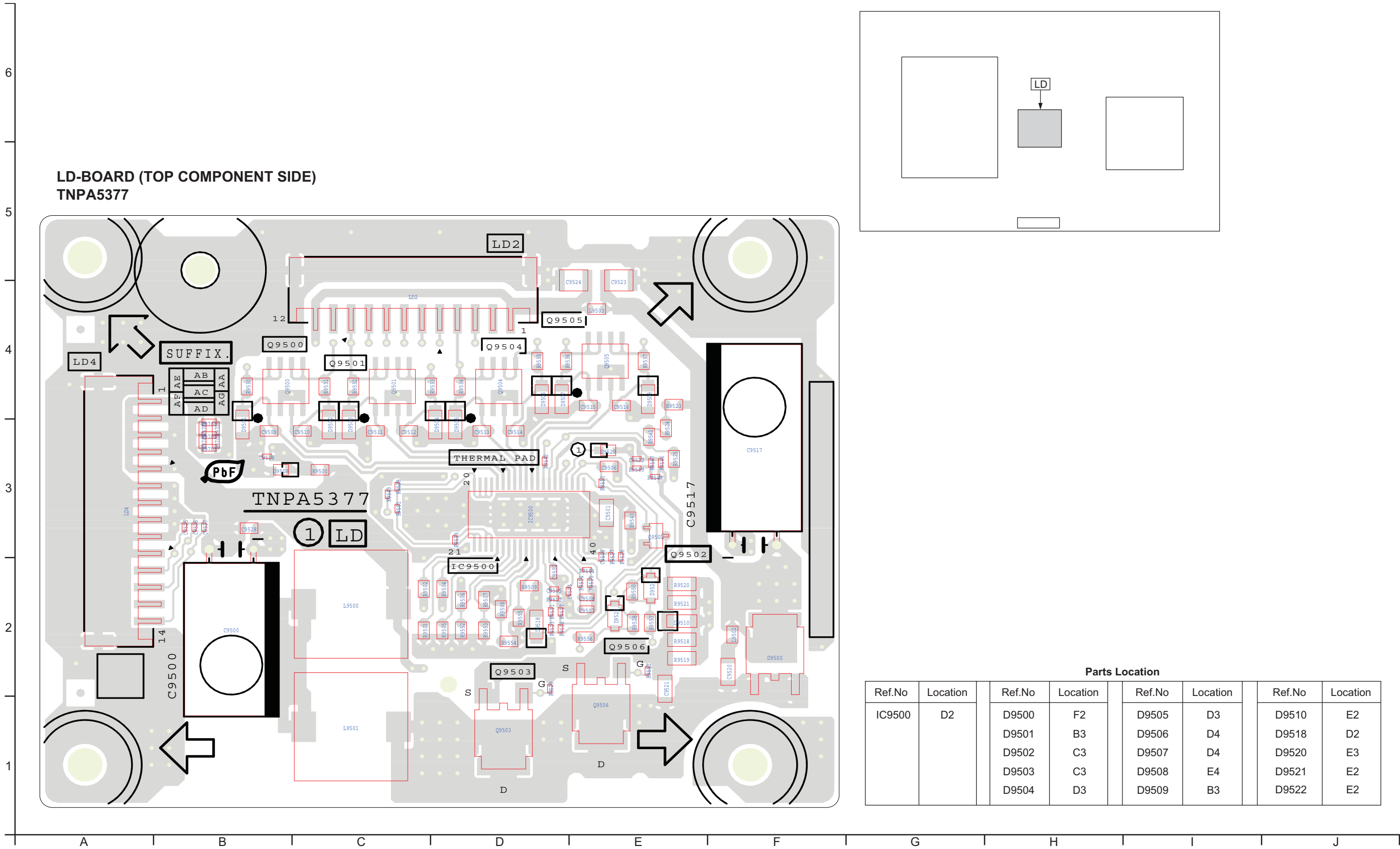


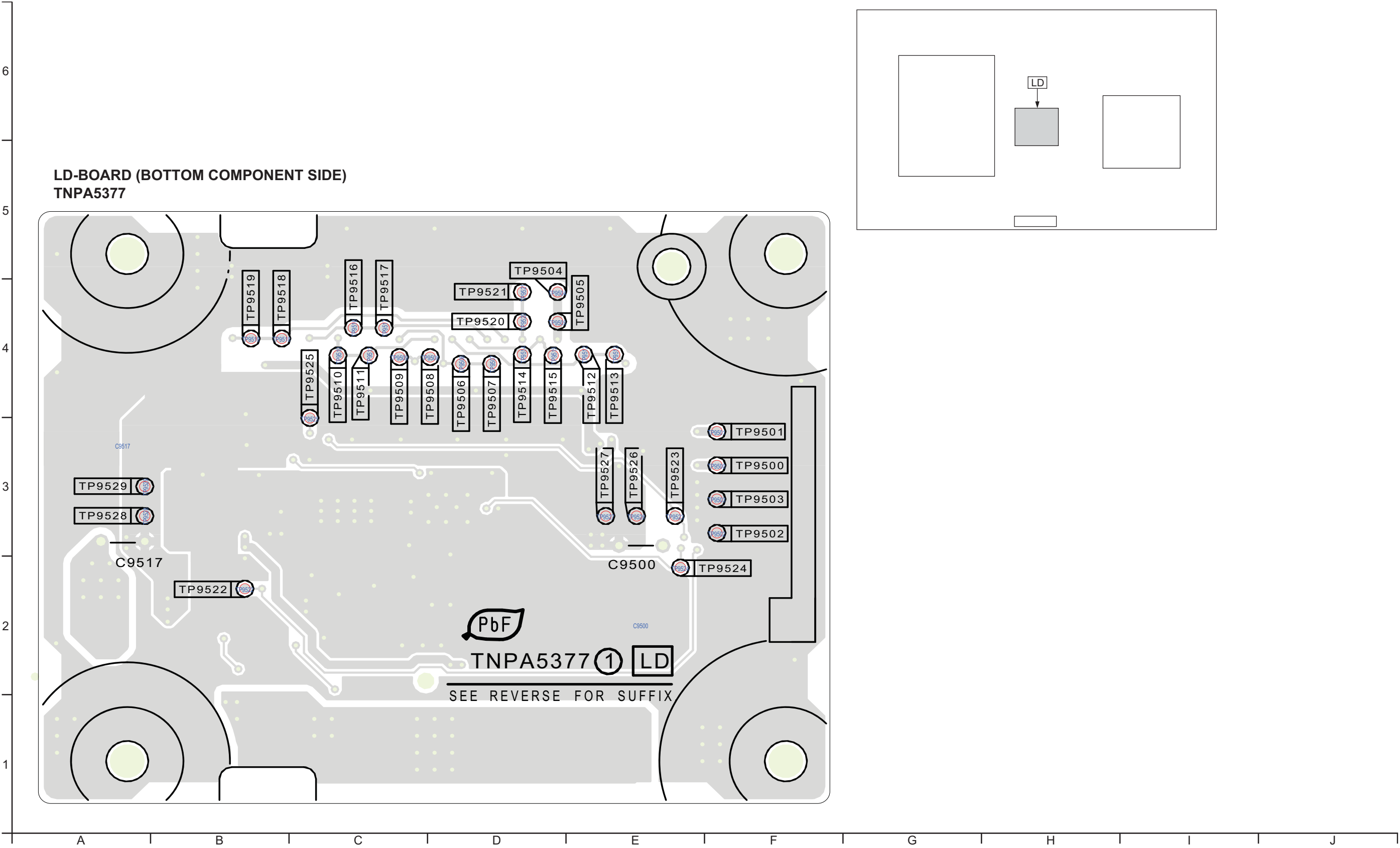
A-BOARD (BOTTOM COMPONENT SIDE)
TNPH0932



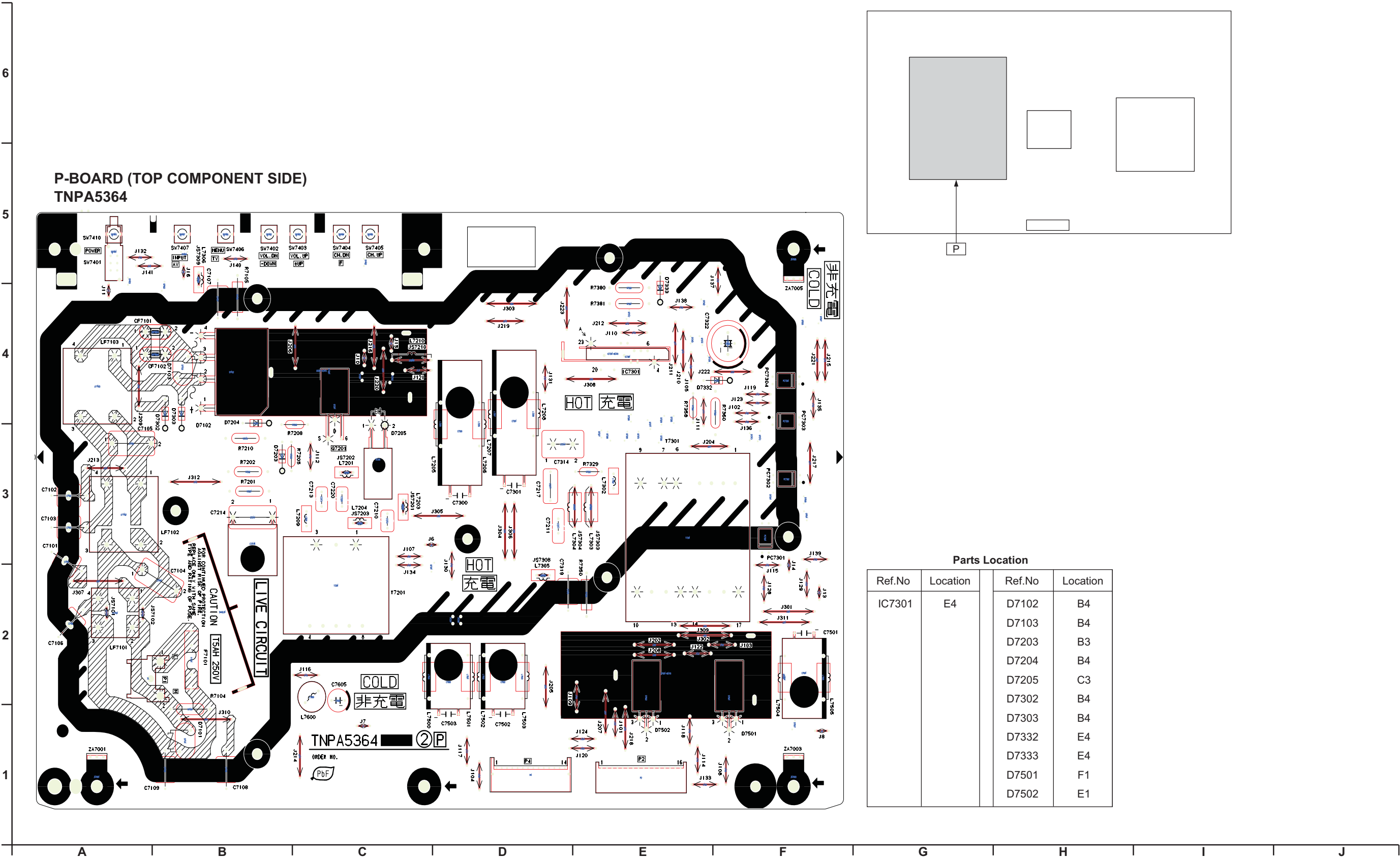
Parts Location							
Ref.No	Location	Ref.No	Location	Ref.No	Location	Ref.No	Location
IC3001	B2	D900	C6	D4703	C3	D4776	B4
IC5300	F4	D901	C6	D4704	C3	D4785	D3
IC5400	E6	D902	C6	D4707	C4	D5004	E2
IC5604	A5	D903	C6	D4708	C4	D5170	E2
IC5605	C5	D904	C6	D4718	C3	D5171	E2
IC5606	B5	D905	C6	D4719	C3	D5176	F4
IC5420	C5	D906	B6	D4720	C3	D5177	F4
IC5440	B5	D907	B6	D4721	C3	D5180	F2
IC5461	F2	D908	B6	D4724	C3	D5181	D3
IC8100	D6	D909	B6	D4725	C3	D5182	E2
IC8601	E3	D910	C6	D4750	D3	D5185	E2
IC8706	B3	D911	C6	D4769	B4	D5186	E2
IC8900	C4	D1006	E2	D4770	B4	D8100	D5
IC9980	A5	D1102	F4	D4771	B4	D8102	E5
		D4701	C3	D4772	B4	D8702	B3
		D4702	C3	D4775	B4	D8716	B3

12.3. LD-BOARD

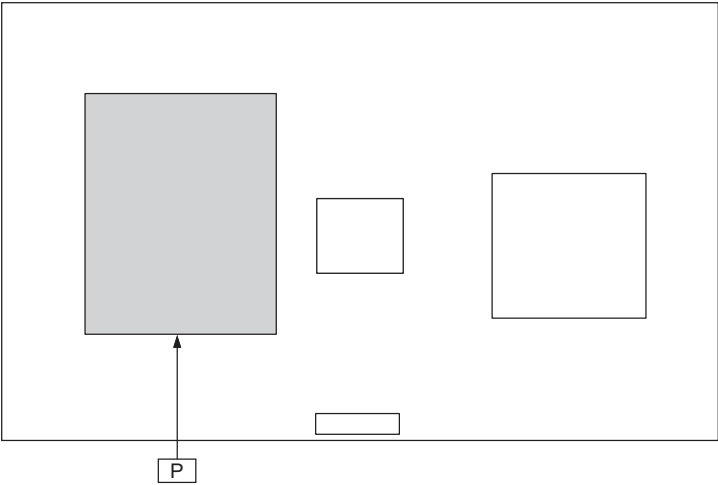
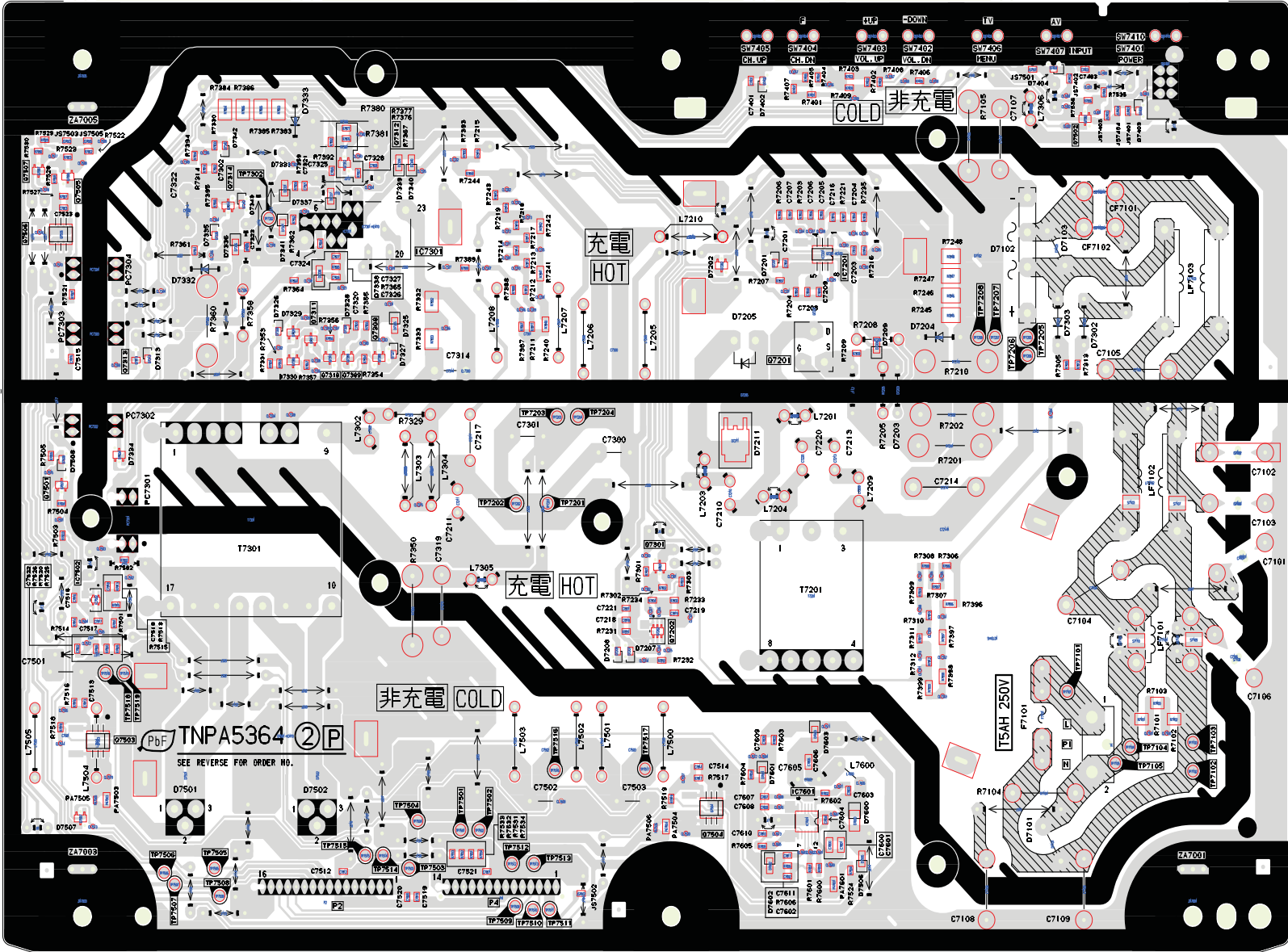




12.4. P-BOARD



P-BOARD (BOTTOM COMPONENT SIDE)
TNPA5364



Parts Location

Ref.No	Location	Ref.No	Location	Ref.No	Location	Ref.No	Location
IC7201	D4	D7101	E1	D7326	B4	D7341	B4
IC7301	B4	D7102	E4	D7327	B3	D7342	B4
IC7502	A2	D7103	E4	D7328	B4	D7343	B4
IC7601	D1	D7201	D4	D7329	B4	D7402	D5
		D7202	D4	D7330	B3	D7403	F5
		D7203	E3	D7331	B4	D7404	E5
		D7204	E3	D7332	B4	D7501	A1
		D7205	D3	D7333	B4	D7502	B1
		D7207	C2	D7334	A3	D7506	E1
		D7208	C2	D7335	B4	D7507	A1
		D7209	E3	D7336	B4	D7508	A3
		D7211	D3	D7337	B4	D7600	D1
		D7302	F4	D7338	B4	D7601	D2
		D7303	E4	D7339	B4	D7602	D1
		D7313	A3	D7339	B4	D7603	D2
		D7325	B6	D7340	B4		

13 Exploded View and Replacement Parts List

13.1. Exploded View and Mechanical Replacement Parts List

Please click the radio button for 'Diagrams II/Parts List' on the menu bar.

13.2. Electrical Replacement Parts List

13.2.1. Replacement Parts List Notes

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item.

After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention.

After the end of this period, the assembly will no longer be available.

Abbreviation of part name and description

1. Resistor

Example:

ERD25TJ104 C 100KOHM, J 1/4W
 Type Allowance

2. Capacitor

Example:

ECKF1H103ZF C 0.01UF, Z 50V
 Type Allowance

Type	Allowance
C : Carbon	F : ±1%
F : Fuse	G : ±2%
M : Metal Oxide	J : ±5%
Metal Film	K : ±10%
S : Solid	M : ±20%
W : Wire Wound	

Type	Allowance
C : Ceramic	C : ±0.25pF
E : Electrolytic	D : ±0.5pF
P : Polyester	F : ±1pF
Polyprop	G : ±3pF
lene	J : ±5pF
T : Tantalum	K : ±10pF
	L : ±15pF
	M : ±20pF
	P : +100%, -0%
	Z : +80%, -20%

13.2.2. Electrical Replacement Parts List

Note: All part will be supplied by PAVCKM.

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
		CAPACITORS		
	C1080	F1G1C104A077	C 0.1UF , 16V	
	C1081	F1J1A106A087	C 10UF , 10V	
	C1082	F2G1C470A022	C 47UF , 16V	
	C1101	F1G1E1030005	C 0.01UF , 25V	
	C1103	F1J1E4740001	C 0.47UF , 25V	
	C2000	F1G1C104A077	C 0.1UF , 16V	
	C2001	F1G1H1020008	C 1000PF , 50V	
	C2003	F1G1H1020008	C 1000PF , 50V	
	C2004	F1G1H1020008	C 1000PF , 50V	
	C2005	F1G1H1020008	C 1000PF , 50V	
	C2014	F1K1E106A136	C 10UF , 25V	
	C2023	F1G1C104A077	C 0.1UF , 16V	
	C2801	F2G0J470A019	E 47UF , 6.3V	
	C2802	F1G1C1030008	C 0.01UF , 16V	
	C2805	F1H1C104A041	C 0.1UF , 16V	
	C3008	F1J1A106A043	C 10UF , 10V	
	C3009	F1J1A106A087	C 10UF , 10V	
	C3024	F1G1C104A077	C 0.1UF , 16V	
	C3036	F1G1C104A077	C 0.1UF , 16V	
	C3045	F1G1C104A077	C 0.1UF , 16V	
	C3057	F1J1A106A043	C 10UF , 10V	
	C3058	F1G1A105A047	C 1UF , 10V	
	C3059	F1G1A105A047	C 1UF , 10V	
	C3077	F1J1A106A043	C 10UF , 10V	
	C3080	F1G1C104A077	C 0.1UF , 16V	
	C3093	F1J1A106A087	C 10UF , 10V	
	C3095	F1J1A106A087	C 10UF , 10V	
	C3097	F1J1A106A087	C 10UF , 10V	
	C3098	F1J1A106A087	C 10UF , 10V	
	C3099	F1G1H5610004	C 560PF , 50V	
	C3100	F1G1H5610004	C 560PF , 50V	
	C3107	F1H1A105A025	C 1UF , 10V	
	C3108	F1G1H5610004	C 560PF , 50V	
	C3109	F1G1H5610004	C 560PF , 50V	
	C3110	F1H1A105A025	C 1UF , 10V	
	C3111	F1J1A106A087	C 10UF , 10V	
	C3112	F1G1H5610004	C 560PF , 50V	
	C3113	F1G1H5610004	C 560PF , 50V	
	C3114	F1G1C333A081	C 0.033UF , 16V	
	C3115	F1G1C333A081	C 0.033UF , 16V	
	C3116	F1H1A105A025	C 1UF , 10V	
	C3117	F1H1A105A025	C 1UF , 10V	
	C3146	F1G1C104A077	C 0.1UF , 16V	
	C3153	F1G1H5610004	C 560PF , 50V	
	C3154	F1G1H5610004	C 560PF , 50V	
	C3158	F1G1C104A077	C 0.1UF , 16V	
	C3159	F1G1A105A047	C 1UF , 10V	
	C3160	F1G1A105A047	C 1UF , 10V	
	C3161	F1G1A105A047	C 1UF , 10V	
	C3162	F1J1A106A087	C 10UF , 10V	
	C3163	F1J1A106A087	C 10UF , 10V	
	C3164	F1J1A106A087	C 10UF , 10V	
	C3165	F1J1A106A087	C 10UF , 10V	
	C3166	F1J1A106A087	C 10UF , 10V	
	C3167	F1G1H5610004	C 560PF , 50V	
	C3168	F1G1H5610004	C 560PF , 50V	
	C3169	F1H1A105A025	C 1UF , 10V	
	C3170	F1H1A105A025	C 1UF , 10V	
	C3171	F1J1A106A087	C 10UF , 10V	
	C3172	F1J1A106A087	C 10UF , 10V	
	C3173	F1J1A106A087	C 10UF , 10V	
	C4003	F1H1H103A219	C 0.01UF , 50V	
	C4004	F1H1H103A219	C 0.01UF , 50V	
	C4546	F1H0J1050013	C 1UF , 6.3V	
	C4547	F1H0J1050013	C 1UF , 6.3V	
	C4701	F1G1C104A077	C 0.1UF , 16V	

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	C4704	F1G1C104A077	C 0.1UF , 16V	
	C4707	F1G1C104A077	C 0.1UF , 16V	
	C4713	F1G1C104A077	C 0.1UF , 16V	
	C4716	F1G1C104A077	C 0.1UF , 16V	
	C4722	F1G1C104A077	C 0.1UF , 16V	
	C4723	F1G1C104A077	C 0.1UF , 16V	
	C4727	F1J1A106A087	C 10UF , 10V	
	C4730	F1G1C104A077	C 0.1UF , 16V	
	C4800	F1G1A105A047	C 1UF , 10V	
	C4801	F1G1A105A047	C 1UF , 10V	
	C4802	F1G1H220A565	C 22PF , 50V	
	C4804	F1G1C104A077	C 0.1UF , 16V	
	C4805	F1G1C104A077	C 0.1UF , 16V	
	C4806	F1G1C104A077	C 0.1UF , 16V	
	C4807	F1J1A106A043	C 10UF , 10V	
	C4809	F1J1A106A043	C 10UF , 10V	
	C4811	F1J1A106A043	C 10UF , 10V	
	C4812	F1G1C104A077	C 0.1UF , 16V	
	C4816	F1G1H220A565	C 22PF , 50V	
	C4817	F1G1H220A565	C 22PF , 50V	
	C4819	F1G1C104A077	C 0.1UF , 16V	
	C4824	F1G1H220A565	C 22PF , 50V	
	C4906	F1K1E106A136	C 10UF , 25V	
	C4907	F1K1E106A136	C 10UF , 25V	
	C4908	F1G1H1020008	C 1000PF , 50V	
	C4909	F1J1E105A231	C 1UF , 25V	
	C4911	F1H1H104A970	C 0.1UF , 16V	
	C4912	F1J1E105A231	C 1UF , 25V	
	C4913	F1H1H104A970	C 0.1UF , 16V	
	C4914	F1J1E105A231	C 1UF , 25V	
	C4915	F1H1H104A970	C 0.1UF , 16V	
	C4917	F1H1H104A970	C 0.1UF , 16V	
	C4918	F1J1E105A231	C 1UF , 25V	
	C4919	F1G1H1020008	C 1000PF , 50V	
	C4921	F1J1E4740001	C 0.47UF , 25V	
	C4922	F1J1E4740001	C 0.47UF , 25V	
	C4924	F1J1E4740001	C 0.47UF , 25V	
	C4925	F1J1E4740001	C 0.47UF , 25V	
	C4926	F1H1H222A219	C 2200PF , 50V	
	C4927	F1H1H222A219	C 2200PF , 50V	
	C4928	F1H1H222A219	C 2200PF , 50V	
	C4929	F1H1H222A219	C 2200PF , 50V	
	C4930	F1H1H222A219	C 2200PF , 50V	
	C4931	F1H1H222A219	C 2200PF , 50V	
	C4932	F1H1H222A219	C 2200PF , 50V	
	C4933	F1H1H222A219	C 2200PF , 50V	
	C4938	F1K1E106A136	C 10UF , 25V	
	C4939	F1K1E106A136	C 10UF , 25V	
	C4970	F1J1A106A087	C 10UF , 10V	
	C4971	F1J1A106A087	C 10UF , 10V	
	C4972	F2H1A101A040	E 100UF , 10V	
	C4973	F2H1A101A040	E 100UF , 10V	
	C5000	F1H1A105A025	C 1UF , 10V	
	C5001	F2H0J1010009	C 100UF , 6.3V	
	C5002	F1H1A105A025	C 1UF , 10V	
	C5004	F1H1A105A025	C 1UF , 10V	
	C5006	F1J1E105A231	C 1UF , 25V	
	C5012	F1H1A105A025	C 1UF , 10V	
	C5020	F1G1C104A077	C 0.1UF , 16V	
	C5021	F1G1A105A047	C 1UF , 10V	
	C5022	F1G1A105A047	C 1UF , 10V	
	C5026	F1H1C105A145	C 1UF , 16V	
	C5151	F1H1H103A219	C 0.01UF , 50V	
	C5171	F1G1C1030008	C 0.01UF , 16V	
	C5240	F1H1A105A025	C 1UF , 10V	
	C5243	F1H1A105A025	C 1UF , 10V	
	C5301	F1K1E106A136	C 10UF , 25V	
	C5302	F1K1E106A136	C 10UF , 25V	
	C5303	F1K1E106A136	C 10UF , 25V	

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	C5304	FlK1E106A136	C 10UF , 25V	
	C5305	FlK1E106A136	C 10UF , 25V	
	C5306	FlK1E106A136	C 10UF , 25V	
	C5307	FlH1H223A219	C 0.022UF , 50V	
	C5309	FlG1C333A116	C 0.033UF , 16V	
	C5310	FlG1H150A731	C 15PF , 50V	
	C5311	FlG1H222A571	C 2200PF , 50V	
	C5400	FlK1E106A136	C 10UF , 25V	
	C5401	FlK1E106A136	C 10UF , 25V	
	C5402	FlG1E1030005	C 0.01UF , 25V	
	C5403	FlJ1A106A087	C 10UF , 10V	
	C5404	FlJ1A106A087	C 10UF , 10V	
	C5405	FlJ1A106A087	C 10UF , 10V	
	C5406	FlJ1A106A087	C 10UF , 10V	
	C5407	FlG1C223A081	C 0.022UF , 16V	
	C5408	FlG1E1030005	C 0.01UF , 25V	
	C5420	FlK1E106A136	C 10UF , 25V	
	C5421	FlK1E106A136	C 10UF , 25V	
	C5422	FlG1E1030005	C 0.01UF , 25V	
	C5423	FlJ1A106A087	C 10UF , 10V	
	C5424	FlJ1A106A087	C 10UF , 10V	
	C5425	FlJ1A106A087	C 10UF , 10V	
	C5426	FlJ1A106A087	C 10UF , 10V	
	C5427	FlG1C223A081	C 0.022UF , 16V	
	C5428	FlG1H272A571	C 2700PF , 50V	
	C5440	FlK1E106A136	C 10UF , 25V	
	C5441	FlK1E106A136	C 10UF , 25V	
	C5443	FlJ1A106A043	C 10UF , 10V	
	C5444	FlJ1A106A043	C 10UF , 10V	
	C5445	FlJ1A106A043	C 10UF , 10V	
	C5448	FlG1H103A509	C 0.01UF , 50V	
	C5451	FlG1H821A459	C 820PF , 50V	
	C5613	EEHBOJ221UP	C 220UF , 6.3V	
	C5614	FlJ1A106A087	C 10UF , 10V	
	C5615	FlJ1A106A087	C 10UF , 10V	
	C5616	FlG1C104A077	C 0.1UF , 16V	
	C5618	EEHBOJ221UP	C 220UF , 6.3V	
	C5619	FlJ1A106A087	C 10UF , 10V	
	C5620	FlJ1A106A087	C 10UF , 10V	
	C5621	FlG1C104A077	C 0.1UF , 16V	
	C5622	FlJ1A106A087	C 10UF , 10V	
	C5623	FlG1C104A077	C 0.1UF , 16V	
	C5624	FlJ1A106A087	C 10UF , 10V	
	C5625	FlG1C104A077	C 0.1UF , 16V	
	C5627	EEHBOJ221UP	C 220UF , 6.3V	
	C5628	FlJ1A106A087	C 10UF , 10V	
	C5629	FlJ1A106A087	C 10UF , 10V	
	C5630	FlG1C104A077	C 0.1UF , 16V	
	C5631	FlJ1A106A087	C 10UF , 10V	
	C5632	FlG1C104A077	C 0.1UF , 16V	
⚠	C7102	FlA2E471A003	C 470PF , 250V	
⚠	C7103	FlA2E471A003	C 470PF , 250V	
⚠	C7104	FOCAF224A124	F 0.22UF , 250V	
⚠	C7105	FOCAF224A124	F 0.22UF , 250V	
⚠	C7107	FlA2E471A003	C 470PF , 250V	
	C7201	FlJ1H222A721	C 2200PF , 50V	
	C7203	FlJ1H102A721	C 2200PF , 50V	
	C7204	FlJ1H104A717	C 0.1UF , 50V	
	C7205	FlJ1E224A136	C 0.22UF , 25V	
	C7206	FlJ1H1030007	C 0.01UF , 50V	
	C7207	FlJ1H1030007	C 0.01UF , 50V	
	C7208	FlJ1H474A757	C 0.47UF , 50V	
	C7209	FlJ1H104A717	C 0.1UF , 50V	
	C7213	FlA3A471A060	C 220PF , 1kV	
	C7214	FOCZZ1050007	C 1UF , 250V	
	C7218	FlJ1H103A834	C 0.01UF , 50V	
	C7219	FlJ1H2240009	C 0.22UF , 50V	
	C7220	FlA3A471A060	C 220PF , 1kV	
	C7221	FlJ1H102A721	C 1000PF , 50V	
	C7301	F2A2W8200011	C 820UF , 450V	
	C7302	FlJ1H102A721	C 1000PF , 50V	
	C7314	FOC2K273A046	C 0.027UF , 800V	
	C7320	FlJ1E223A226	C 0.022UF , 25V	

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	C7321	FlJ1H221A709	C 220PF , 50V	
	C7322	F2A1V4710023	C 470UF , 35V	
	C7323	FlJ1H104A717	C 0.1UF , 50V	
	C7324	FlJ1H221A709	C 220PF , 50V	
	C7325	FlJ1E105A231	C 1UF , 25V	
	C7326	FlJ1H104A717	C 0.1UF , 50V	
	C7327	FlJ1E223A226	C 0.022UF , 25V	
	C7328	FlJ1E105A231	C 1UF , 25V	
	C7501	F2A1V1820032	C 1800UF , 35V	
	C7502	F2A1E1820027	C 1800UF , 25V	
	C7513	FlJ1C475A217	C 4.7UF , 16V	
	C7514	FlJ1E105A231	C 1UF , 25V	
	C7516	FlJ1H104A717	C 0.1UF , 50V	
	C7521	FlJ1H104A717	C 0.1UF , 50V	
	C7523	FlJ1E105A231	C 1UF , 25V	
	C7600	FlK1E106A136	C 10UF , 25V	
	C7601	FlK1E106A136	C 10UF , 25V	
	C7602	FlJ1E224A136	C 0.22UF , 25V	
	C7604	FlJ1E105A231	C 1UF , 25V	
	C7606	FlK1E106A136	C 10UF , 25V	
	C7607	FlJ1E223A226	C 0.022UF , 25V	
	C7608	FlJ1H222A721	C 2200PF , 50V	
	C7610	FlJ1H472A834	C 4700PF , 50V	
	C7611	FlJ1E105A231	C 1UF , 25V	
	C8001	FlG1C104A077	C 0.1UF , 16V	
	C8002	FlJ1A106A087	C 10UF , 10V	
	C8003	FlG1C104A077	C 0.1UF , 16V	
	C8004	FlG1C104A077	C 0.1UF , 16V	
	C8005	FlG1C104A077	C 0.1UF , 16V	
	C8006	FlG1C104A077	C 0.1UF , 16V	
	C8007	FlG1C104A077	C 0.1UF , 16V	
	C8008	FlG1C104A077	C 0.1UF , 16V	
	C8009	FlJ1A106A087	C 10UF , 10V	
	C8011	FlG1C104A077	C 0.1UF , 16V	
	C8013	FlG1C104A077	C 0.1UF , 16V	
	C8014	FlG1C104A077	C 0.1UF , 16V	
	C8015	FlG1C104A077	C 0.1UF , 16V	
	C8016	FlG1C104A077	C 0.1UF , 16V	
	C8017	FlJ1A106A087	C 10UF , 10V	
	C8018	FlG1C104A077	C 0.1UF , 16V	
	C8019	FlG1C104A077	C 0.1UF , 16V	
	C8020	FlG1C104A077	C 0.1UF , 16V	
	C8021	FlG1C104A077	C 0.1UF , 16V	
	C8022	FlJ1A106A087	C 10UF , 10V	
	C8023	FlJ1A106A087	C 10UF , 10V	
	C8024	FlJOG2260001	C 22UF , 4V	
	C8026	FlG1C104A077	C 0.1UF , 16V	
	C8027	FlG1C104A077	C 0.1UF , 16V	
	C8028	FlG1C104A077	C 0.1UF , 16V	
	C8030	FlG1C104A077	C 0.1UF , 16V	
	C8032	FlG1C104A077	C 0.1UF , 16V	
	C8036	FlG1C104A077	C 0.1UF , 16V	
	C8039	FlG1C104A077	C 0.1UF , 16V	
	C8041	FlG1H1020008	C 1000PF , 50V	
	C8042	FlG1C104A077	C 0.1UF , 16V	
	C8043	FlG1C104A077	C 0.1UF , 16V	
	C8044	FlG1C104A077	C 0.1UF , 16V	
	C8045	FlG1C104A077	C 0.1UF , 16V	
	C8047	FlG1C104A077	C 0.1UF , 16V	
	C8048	FlG1C104A077	C 0.1UF , 16V	
	C8049	FlJ1A106A087	C 10UF , 10V	
	C8050	FlG1C104A077	C 0.1UF , 16V	
	C8051	FlJ1A106A087	C 10UF , 10V	
	C8052	FlG1C104A077	C 0.1UF , 16V	
	C8053	FlG1C104A077	C 0.1UF , 16V	
	C8054	FlG1C104A077	C 0.1UF , 16V	
	C8055	FlG1C104A077	C 0.1UF , 16V	
	C8056	FlG1C104A077	C 0.1UF , 16V	
	C8057	FlG1C104A077	C 0.1UF , 16V	
	C8100	FlG1E682A123	C 6800PF , 25V	
	C8102	FlJ1A475A087	C 4.7UF , 10V	
	C8104	FlH1C105A145	C 1UF , 16V	
	C8106	FlG1C223A081	C 0.022UF , 16V	

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	C8108	F1G1C104A077	C 0.1UF , 16V	
	C8110	F1G1C104A077	C 0.1UF , 16V	
	C8112	F1K1E106A136	C 10UF , 25V	
	C8114	F1K1E106A136	C 10UF , 25V	
	C8116	F1K1E106A136	C 10UF , 25V	
	C8118	F1K1E106A136	C 10UF , 25V	
	C8120	F1J0G2260001	C 22UF , 4V	
	C8122	F1J0G2260001	C 22UF , 4V	
	C8124	F1J0G2260001	C 22UF , 4V	
	C8126	F1J0G2260001	C 22UF , 4V	
	C8128	F1J0G2260001	C 22UF , 4V	
	C8200	F1G1C104A077	C 0.1UF , 16V	
	C8201	F1G1C104A077	C 0.1UF , 16V	
	C8202	F1G1C104A077	C 0.1UF , 16V	
	C8203	F1G1C104A077	C 0.1UF , 16V	
	C8204	F1G1C104A077	C 0.1UF , 16V	
	C8205	F1J1A106A087	C 10UF , 10V	
	C8206	F1G1C104A077	C 0.1UF , 16V	
	C8208	F1G1C104A077	C 0.1UF , 16V	
	C8210	F1G1C104A077	C 0.1UF , 16V	
	C8213	F1G1C104A077	C 0.1UF , 16V	
	C8214	F1J1A106A087	C 10UF , 10V	
	C8216	F1G1C104A077	C 0.1UF , 16V	
	C8218	F1G1C104A077	C 0.1UF , 16V	
	C8219	F1G1C104A077	C 0.1UF , 16V	
	C8222	F1G1C104A077	C 0.1UF , 16V	
	C8223	F1G1C104A077	C 0.1UF , 16V	
	C8224	F1G1C104A077	C 0.1UF , 16V	
	C8225	F1G1C104A077	C 0.1UF , 16V	
	C8226	F1G1C104A077	C 0.1UF , 16V	
	C8227	F1G1C104A077	C 0.1UF , 16V	
	C8300	F1G1H9R0A732	C 9PF , 50V	
	C8301	F1G1H8R0A564	C 8PF , 50V	
	C8302	F1G1C104A077	C 0.1UF , 16V	
	C8303	F1G1C104A077	C 0.1UF , 16V	
	C8304	F1G1C104A077	C 0.1UF , 16V	
	C8305	F1G1A105A047	C 1UF , 10V	
	C8306	F1G1A105A047	C 1UF , 10V	
	C8307	F1G1A105A047	C 1UF , 10V	
	C8308	F1G1A105A047	C 1UF , 10V	
	C8309	F1G1A105A047	C 1UF , 10V	
	C8310	F1G1A105A047	C 1UF , 10V	
	C8311	F1G1A105A047	C 1UF , 10V	
	C8602	F1G1H390A565	C 39PF , 50V	
	C8603	F1J1A106A087	C 10UF , 10V	
	C8604	F1G1C104A077	C 0.1UF , 16V	
	C8605	F1G1C104A077	C 0.1UF , 16V	
	C8607	F1G1H100A565	C 10PF , 50V	
	C8608	F1G1H100A565	C 10PF , 50V	
	C8609	F1G1C104A077	C 0.1UF , 16V	
	C8611	F1G1C104A077	C 0.1UF , 16V	
	C8615	F1J1A106A087	C 10UF , 10V	
	C8616	F1J1A106A087	C 10UF , 10V	
	C8617	F1G1C104A077	C 0.1UF , 16V	
	C8619	F1G1C104A077	C 0.1UF , 16V	
	C8620	F1G1H100A565	C 10PF , 50V	
	C8621	F1G1H100A565	C 10PF , 50V	
	C8622	F1G1C104A077	C 0.1UF , 16V	
	C8624	F1G1H100A565	C 10PF , 50V	
	C8625	F1G1H100A565	C 10PF , 50V	
	C8626	F1G1H100A565	C 10PF , 50V	
	C8629	F1G1H390A565	C 39PF , 50V	
	C8630	F1G1H220A565	C 22PF , 50V	
	C8644	F1G1C104A077	C 0.1UF , 16V	
	C8714	F1J1A475A087	C 4.7UF , 10V	
	C8715	F1J1A106A087	C 10UF , 10V	
	C8716	F1G1C104A077	C 0.1UF , 16V	
	C8717	F1G1C104A077	C 0.1UF , 16V	
	C8724	F1J1A475A087	C 4.7UF , 10V	
	C8725	F1J1A475A087	C 4.7UF , 10V	
	C8764	F1J1A475A087	C 4.7UF , 10V	
	C8765	F1J1A475A087	C 4.7UF , 10V	
	C8900	F1G1C104A077	C 0.1UF , 16V	

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	C8901	F1G1C104A077	C 0.1UF , 16V	
	C8902	F1G1C104A077	C 0.1UF , 16V	
	C8903	F1G1C104A077	C 0.1UF , 16V	
	C9500	F2A1V471B560	C 470UF , 35V	
	C9501	F1K1H225A118	C 2.2UF , 50V	
	C9502	F1H1C474A143	C 0.47UF , 16V	
	C9503	F1G1E1030005	C 0.01UF , 25V	
	C9505	F1G1E1030005	C 0.01UF , 25V	
	C9506	F1J1A475A087	C 4.7UF , 10V	
	C9507	F1H1C474A143	C 0.47UF , 16V	
	C9511	F1J1H182A721	C 1800PF , 50V	
	C9512	F1J1H182A721	C 1800PF , 50V	
	C9513	F1J1H182A721	C 1800PF , 50V	
	C9514	F1J1H182A721	C 1800PF , 50V	
	C9515	F1J1H182A721	C 1800PF , 50V	
	C9516	F1J1H182A721	C 1800PF , 50V	
	C9517	F2A2C470A209	C 56UF , 160V	
	C9518	F1G1E1030005	C 0.01UF , 25V	
	C9524	F1L2E1040002	C 0.1UF , 250V	
		DIODES		
	D1006	K7AAAY000011	OPTICAL DIODE	
	D1101	B0JCCD000020	DIODE	
	D2016	EZJZ0V120JA	VARISTOR	
	D2800A	B3AGB0000065	LED	
	D4702	DA2J10100L	DIODE	
	D4704	B0JCCD000020	DIODE	
	D4719	DA2J10100L	DIODE	
	D4721	B0JCCD000020	DIODE	
	D4735	DA2J10100L	DIODE	
	D4737	B0JCCD000020	DIODE	
	D4770	DA2J10100L	DIODE	
	D4772	B0JCCD000020	DIODE	
	D4785	B0JCCD000020	DIODE	
	D5172	DZ2J220M0L	DIODE	
	D5173	DA2J10100L	DIODE	
	D5178	DZ2J068M0L	DIODE	
	D5179	DA2J10100L	DIODE	
	D5180	DZ2J033M0L	DIODE	
	D5183	DZ2J068M0L	DIODE	
	D5184	DA2J10100L	DIODE	
	D5187	DZ2J047M0L	DIODE	
	D5188	DA2J10100L	DIODE	
	D5207	B0JCCD000020	DIODE	
	D5301	B0JCMD000066	DIODE	
	D5440	B0JCPE000038	DIODE	
⚠	D7101	ERZV10V621C2	VARISTOR	
	D7102	B0FBAT000018	DIODE	
	D7202	B0ADCK000001	DIODE	
	D7203	B0JAME000091	DIODE	
	D7204	B0JAME000091	DIODE	
	D7205	B0HASR000018	DIODE	
	D7207	DZ2J068M0L	DIODE	
	D7208	DA2J10100L	DIODE	
	D7209	B0BC02500002	DIODE	
	D7302	B0HAGQ000001	DIODE	
	D7303	B0HAGQ000001	DIODE	
	D7313	DZ2J068M0L	DIODE	
	D7325	B0BC02500002	DIODE	
	D7326	DA2J10100L	DIODE	
	D7327	DA2J10100L	DIODE	
	D7328	DA2J10100L	DIODE	
	D7329	DA3X101F0L	DIODE	
	D7330	DA3X101F0L	DIODE	
	D7331	B0BC4R000002	DIODE	
	D7332	B0HAGQ000001	DIODE	
	D7333	B0JAME000126	DIODE	
	D7334	B0ADCK000001	DIODE	
	D7335	DZ2J180M0L	DIODE	
	D7336	B0BC03300012	DIODE	
	D7337	B0BC02500002	DIODE	
	D7338	B0BC02500002	DIODE	
	D7339	B0BC02500002	DIODE	
	D7341	B0BC02500002	DIODE	

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	D7342	DA2J10100L	DIODE	
	D7343	DA2J10100L	DIODE	
	D7501	B0JBSL000047	DIODE	
	D7502	B0JBSL000047	DIODE	
	D7507	B0ADCK000001	DIODE	
	D7508	DA2J10100L	DIODE	
	D7600	B0JCEP000038	DIODE	
	D8716	B0ECKM000053	DIODE	
	D9500	B0FCAM000001	DIODE	
	D9509	DZ2J120M0L	DIODE	
	D9510	B0BC6R600005	DIODE	
	D9520	DB2J41100L	DIODE	
	D9521	B0ECKM000053	DIODE	
	D9522	B0ECKM000053	DIODE	
		INTEGRATED CIRCUITS		
	IC3001	C1AB00003385	IC	
	IC4700	C1AB00003469	IC	
	IC4900	C1AB00003705	IC	
	IC5000	AN34043A-VF	IC	
	IC5205	C0DBGYY00281	IC	
	IC5300	C0DBAYY00462	IC	
	IC5400	C0DBAYY00915	IC	
	IC5420	C0DBAYY00915	IC	
	IC5440	C0DBAYY01058	IC	
	IC5602	C0DBZYY00368	IC	
	IC5603	C0DBZYY00368	IC	
	IC5605	C0DBZYY00450	IC	
	IC7201	C0DBBY000033	IC	
	IC7301	C5HAZYY00014	IC	
	IC7502	C0DBZYY00486	IC	
	IC7601	C0DBAYY00922	IC	
	IC8000	MN2WS0200LD	IC	
	IC8100	C0DBAYY00715	IC	
	IC8200	C3ABUY000009	IC	
	IC8201	C3ABTY0000026	IC	
	IC8601	C1CB00003491	IC	
	IC8702	C0CBCAG00039	IC	
	IC8703	C0DBAFF00019	IC	
	IC8706	C0DBAGF00030	IC	
	IC8900	TVRS081AC	ROM IC (C3FBUY000008)	
	IC8901	C3EBGC000056	IC	
	IC8902	C3EBHC000035	IC	
	IC9500	C0ZBZ0001816	IC	
		COILS		
	L3000	J0JCC0000287	COIL	
	L3001	J0JCC0000287	COIL	
	L3002	J0JCC0000287	COIL	
	L3003	J0JCC0000287	COIL	
	L3004	J0JCC0000287	COIL	
	L3005	J0JCC0000287	COIL	
	L3007	G1C100MA0072	COIL	
	L3102	J0JCC0000287	COIL	
	L3103	J0JCC0000287	COIL	
	L3119	J0JCC0000287	COIL	
	L3120	J0JCC0000287	COIL	
	L3121	J0JCC0000287	COIL	
	L3122	J0JCC0000287	COIL	
	L3123	J0JCC0000287	COIL	
	L4700	J0JYC0000068	COIL	
	L4701	J0JYC0000068	COIL	
	L4702	J0JYC0000068	COIL	
	L4703	J0JYC0000068	COIL	
	L4704	J0JYC0000068	COIL	
	L4705	J0JYC0000068	COIL	
	L4706	J0JYC0000068	COIL	
	L4707	J0JYC0000068	COIL	
	L4708	J0JYC0000068	COIL	
	L4715	J0JYC0000068	COIL	
	L4716	J0JYC0000068	COIL	
	L4717	J0JYC0000068	COIL	
	L4800	G1CR39J00009	COIL	
	L4801	G1CR39J00009	COIL	

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	L4802	J0JGC0000020	CHIP BEADS	
	L4803	J0JGC0000020	CHIP BEADS	
	L4804	J0JGC0000020	CHIP BEADS	
	L4805	J0JCC00000287	COIL	
	L4900	G1C150MA0426	INDUCTOR	
	L4901	G1C150MA0426	INDUCTOR	
	L4902	G1C150MA0426	INDUCTOR	
	L4903	G1C150MA0426	INDUCTOR	
	L4905	J0JHC0000042	COIL	
	L5300	G1C220MA0291	COIL	
	L5400	G1C4R5ZA0156	INDUCTOR	
	L5420	G1C4R5ZA0156	INDUCTOR	
	L5440	G1C3R3ZA0240	INDUCTOR	
	L5601	J0JHC0000045	COIL	
	L5602	J0JHC0000045	COIL	
	L5603	J0JHC0000045	COIL	
	L7201	J0JKB0000034	EMI FILTER	
	L7209	J0JKB0000034	EMI FILTER	
	L7302	J0JKB0000034	EMI FILTER	
	L7306	J0JKB0000034	EMI FILTER	
	L7502	J0JKA0000024	EMI FILTER	
	L7503	J0JKA0000024	EMI FILTER	
	L7504	J0JKA0000024	EMI FILTER	
	L7505	J0JKA0000024	EMI FILTER	
	L7600	G0C270MA0049	INDUCTOR	
	L8001	J0JCC00000287	COIL	
	L8002	J0JHC0000045	COIL	
	L8003	J0JHC0000045	COIL	
	L8004	J0JHC0000045	COIL	
	L8005	J0JCK0000021	BEAD CORE	
	L8006	J0JCC00000287	COIL	
	L8007	J0JCC00000287	COIL	
	L8100	G1C4R7MA0416	INDUCTOR	
	L8102	G1C3R3MA0460	INDUCTOR	
	L8250	J0JHC0000045	COIL	
	L8600	J0JHC0000045	COIL	
	L8603	J0JBC0000115	BEAD CORE	
	L8604	J0JBC0000115	BEAD CORE	
	L8751	J0JHC0000045	COIL	
	L8752	J0JHC0000045	COIL	
	L9500	G1C470MA0490	INDUCTOR	
	L9501	G1C470MA0490	INDUCTOR	
	L9503	J0JHC0000075	BEAD COIL	
		TRANSISTORS		
	Q0900	B1ADCF000194	TRANSISTOR	
	Q2800	B1ABCE000015	TRANSISTOR	
	Q2801	B1ABCE000015	TRANSISTOR	
	Q2802	B1ABCE000015	TRANSISTOR	
	Q3104	B1ABCF000231	TRANSISTOR	
	Q3105	B1ABCF000231	TRANSISTOR	
	Q4512	B1HFCFA00026	TRANSISTOR	
	Q4513	B1ADCE000022	TRANSISTOR	
	Q4700	B1ABCF000231	TRANSISTOR	
	Q4702	B1ABCF000231	TRANSISTOR	
	Q4704	B1ABCF000231	TRANSISTOR	
	Q4709	B1ABCF000231	TRANSISTOR	
	Q4971	B1AAF0000004	TRANSISTOR	
	Q4972	B1AAF0000004	TRANSISTOR	
	Q4974	B1ABBE000003	TRANSISTOR	
	Q7201	B1CERR000057	TRANSISTOR	
	Q7202	B1HFCFA00020	TRANSISTOR	
	Q7301	B1ADCE000022	TRANSISTOR	
	Q7308	B1ADGJ000008	TRANSISTOR	
	Q7309	B1ABGF000019	TRANSISTOR	
	Q7310	B1ABCF000231	TRANSISTOR	
	Q7311	B1ABCF000231	TRANSISTOR	
	Q7312	B1ADCE000022	TRANSISTOR	
	Q7313	B1CBGD000001	TRANSISTOR	
	Q7314	B1ABCF000231	TRANSISTOR	
	Q7501	B1ABCF000231	TRANSISTOR	
	Q7502	B1ABCF000231	TRANSISTOR	
	Q7503	B1CHRE000008	TRANSISTOR	
	Q7504	B1CHRE000008	TRANSISTOR	

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	Q7506	B1CHRE000008	TRANSISTOR	
	Q7507	B1ABCF000231	TRANSISTOR	
	Q8100	FK8V03050L	TRANSISTOR	
	Q8101	FK8V03050L	TRANSISTOR	
	Q8102	B1MBEDA00027	TRANSISTOR	
	Q9501	B1MBCMA00001	TRANSISTOR	
	Q9502	DSC200100L	TRANSISTOR	
	Q9503	B1CFRM000024	TRANSISTOR	
	Q9504	B1MBCMA00001	TRANSISTOR	
	Q9505	B1MBCMA00001	TRANSISTOR	
	Q9506	B1CFRM000024	TRANSISTOR	
		RESISTORS		
	R0951	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R0952	D0GA102JA023	C 1KOHM ,J, 1/16W	
	R1007	D0GAR00J0005	C 00HM ,J, 1/16W	
	R1008	D0GAR00J0005	C 00HM ,J, 1/16W	
	R1009	D0GAR00J0005	C 00HM ,J, 1/16W	
	R1010	D0GAR00J0005	C 00HM ,J, 1/16W	
	R1101	D0GA331JA023	C 330OHM ,J, 1/16W	
	R1102	D1BB7151A073	7.15KOHM ,1/10W	
	R1105	D0GA102JA023	C 1KOHM ,J, 1/16W	
	R1106	D0GA182JA023	C 1.8KOHM ,J, 1/16W	
	R1108	D0GAR00J0005	C 00HM ,J, 1/16W	
	R1111	D0GA332JA023	3.3KOHM ,J, 1/8W	
	R1300	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R1301	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R1302	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R1304	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R2001	D0GAR00J0005	C 00HM ,J, 1/16W	
	R2002	D0GAR00J0005	C 00HM ,J, 1/16W	
	R2004	D0GA101JA023	C 100OHM ,J, 1/16W	
	R2008	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R2013	D0GA101JA023	C 100OHM ,J, 1/16W	
	R2014	D0GA101JA023	C 100OHM ,J, 1/16W	
	R2015	D0GAR00J0005	C 00HM ,J, 1/16W	
	R2016	D0GAR00J0005	C 00HM ,J, 1/16W	
	R2017	D0GAR00J0005	C 00HM ,J, 1/16W	
	R2018	D0GAR00J0005	C 00HM ,J, 1/16W	
	R2049	D0GA101JA023	C 100OHM ,J, 1/16W	
	R2052	D0GAR00J0005	C 00HM ,J, 1/16W	
	R2800	D1BA9530A014	C 953OHM , 1/16W	
	R2801	D0GA473JA015	C 47KOHM ,J, 1/16W	
	R2802	D0GA223JA023	C 22KOHM ,J, 1/16W	
	R2803	D0GA473JA015	C 47KOHM ,J, 1/16W	
	R2804	D0GA103JA015	C 10KOHM ,J, 1/16W	
	R2805	D1BA2261A014	C 2.26KOHM , 1/16W	
	R2806	D0GA470JA023	C 470HM ,J, 1/16W	
	R2807	D0GA562JA023	C 5.6KOHM ,J, 1/16W	
	R2808	D0GA184JA023	C 180KOHM ,J, 1/8W	
	R2809	D0GA103JA015	C 10KOHM ,J, 1/16W	
	R2810	D0GA104JA023	C 100KOHM ,J, 1/16W	
	R2811	D0GA103JA015	C 10KOHM ,J, 1/16W	
	R2826	D0GAR00J0005	C 00HM ,J, 1/16W	
	R3013	D0GA221JA023	C 220OHM ,J, 1/16W	
	R3030	D0GA101JA023	C 100OHM ,J, 1/16W	
	R3053	D1BD75R0A066	C 75OHM , 1/8W	
	R3054	D0GA221JA023	C 220OHM ,J, 1/16W	
	R3055	D0GA333JA023	C 33KOHM ,J, 1/16W	
	R3056	D0GA333JA023	C 33KOHM ,J, 1/16W	
	R3057	D0GA221JA023	C 220OHM ,J, 1/16W	
	R3058	D0GA221JA023	C 220OHM ,J, 1/16W	
	R3059	D1BD75R0A066	C 75OHM , 1/8W	
	R3060	D0GA221JA023	C 220OHM ,J, 1/16W	
	R3061	D0GA333JA023	C 33KOHM ,J, 1/16W	
	R3062	D0GA333JA023	C 33KOHM ,J, 1/16W	
	R3063	D0GA221JA023	C 220OHM ,J, 1/16W	
	R3064	D0GA221JA023	C 220OHM ,J, 1/16W	
	R3101	D0GA472JA023	C 4.7KOHM ,J, 1/16W	
	R3102	D0GA472JA023	C 4.7KOHM ,J, 1/16W	
	R3103	D1BD75R0A066	C 75OHM , 1/8W	
	R3105	D1BD75R0A066	C 75OHM , 1/8W	
	R3119	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R3123	EXB28V680JX	68OHM ,J, 1/10W	

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	R3127	D0GA680JA023	C 68OHM ,J, 1/16W	
	R3148	D0GAR00J0005	C 00HM ,J, 1/16W	
	R3175	D1BD75R0A066	C 75OHM , 1/8W	
	R3176	D1BD75R0A066	C 75OHM , 1/8W	
	R3178	D1BD75R0A066	C 75OHM , 1/8W	
	R3184	D0GA104JA023	C 100KOHM ,J, 1/16W	
	R3185	D0GA104JA023	C 100KOHM ,J, 1/16W	
	R3190	D0GA101JA023	C 100OHM ,J, 1/16W	
	R3191	D0GA101JA023	C 100OHM ,J, 1/16W	
	R3192	D0GA820JA023	82OHM ,J, 1/16W	
	R3193	D0GA820JA023	82OHM ,J, 1/16W	
	R3194	D0GA331JA023	C 330OHM ,J, 1/16W	
	R3195	D0GA331JA023	C 330OHM ,J, 1/16W	
	R3196	D0GA820JA023	82OHM ,J, 1/16W	
	R3197	D1BD75R0A066	C 75OHM , 1/8W	
	R3198	D0GA221JA023	C 220OHM ,J, 1/16W	
	R3199	D0GA333JA023	C 33KOHM ,J, 1/16W	
	R3200	D0GA333JA023	C 33KOHM ,J, 1/16W	
	R3201	D0GA221JA023	C 220OHM ,J, 1/16W	
	R3202	D0GA221JA023	C 220OHM ,J, 1/16W	
	R3203	D1BD75R0A066	C 75OHM , 1/8W	
	R3361	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R3900	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R3901	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4081	D0GA101JA023	C 100OHM ,J, 1/16W	
	R4082	D0GA101JA023	C 100OHM ,J, 1/16W	
	R4107	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4548	D0GA220JA023	C 22OHM ,J, 1/16W	
	R4549	D0GA151JA023	C 150OHM ,J, 1/16W	
	R4550	D0GA151JA023	C 150OHM ,J, 1/16W	
	R4551	D0GA151JA023	C 150OHM ,J, 1/16W	
	R4552	D0GA560JA023	C 56OHM ,J, 1/16W	
	R4553	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4554	D0GA102JA023	C 1KOHM ,J, 1/16W	
	R4556	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4557	D0GAR00J0005	C 00HM ,J, 1/16W	
	R4560	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4702	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4703	D0GA330JA023	33OHM ,J, 1/8W	
	R4708	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4709	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4710	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4711	D0GA102JA023	C 1KOHM ,J, 1/16W	
	R4712	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4715	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4716	D0GA330JA023	33OHM ,J, 1/8W	
	R4721	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4722	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4723	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4724	D0GA102JA023	C 1KOHM ,J, 1/16W	
	R4725	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4728	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4729	D0GA330JA023	33OHM ,J, 1/8W	
	R4734	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4735	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4736	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4737	D0GA102JA023	C 1KOHM ,J, 1/16W	
	R4738	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4739	D0GA220JA023	C 22OHM ,J, 1/16W	
	R4744	D0GA680JA023	C 68OHM ,J, 1/16W	
	R4745	D0GA680JA023	C 68OHM ,J, 1/16W	
	R4746	D0GA680JA023	C 68OHM ,J, 1/16W	
	R4747	D0GA680JA023	C 68OHM ,J, 1/16W	
	R4748	D0GA680JA023	C 68OHM ,J, 1/16W	
	R4749	D0GA680JA023	C 68OHM ,J, 1/16W	
	R4750	D0GA680JA023	C 68OHM ,J, 1/16W	
	R4751	D0GA680JA023	C 68OHM ,J, 1/16W	
	R4763	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4764	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4765	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4766	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4767	D0GA392JA023	C 3.9KOHM ,J, 1/8W	
	R4770	D0GA473JA023	C 47KOHM ,J, 1/16W	

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	R4771	D0GA152JA023	C 1.5KOHM ,J, 1/8W	
	R4772	D0GA152JA023	C 1.5KOHM ,J, 1/8W	
	R4774	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4775	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4776	D0GA680JA023	C 68OHM ,J, 1/16W	
	R4777	D0GA680JA023	C 68OHM ,J, 1/16W	
	R4780	D0GA121JA023	C 120OHM ,J 1/8W	
	R4788	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4789	D0GA330JA023	330HM ,J, 1/8W	
	R4794	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4795	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4796	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4797	D0GA102JA023	C 1KOHM ,J, 1/16W	
	R4798	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4799	D0GA273JA023	C 27KOHM ,J, 1/16W	
	R4800	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4803	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4910	D0GA100JA023	C 10OHM ,J, 1/16W	
	R4911	D0GA100JA023	C 10OHM ,J, 1/16W	
	R4912	D0GA100JA023	C 10OHM ,J, 1/16W	
	R4913	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4914	EXB28V220JX	220HM ,J, 1/2W	
	R4915	D0GF5R6JA020	C 5.6OHM ,J, 1/16W	
	R4916	D0GF5R6JA020	C 5.6OHM ,J, 1/16W	
	R4917	D0GF5R6JA020	C 5.6OHM ,J, 1/16W	
	R4918	D0GF5R6JA020	C 5.6OHM ,J, 1/16W	
	R4921	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4970	D1BB1403A073	140KOHM ,J, 1/16W	
	R4971	D1BB1403A073	140KOHM ,J, 1/16W	
	R4972	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4973	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4974	D0GF122JA048	C 1.2KOHM ,J, 1/16W	
	R4978	D0GA101JA023	C 100OHM ,J, 1/16W	
	R4979	D0GA101JA023	C 100OHM ,J, 1/16W	
	R4984	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R4985	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R4986	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R4987	D0GF122JA048	C 1.2KOHM ,J, 1/16W	
	R5002	D0GA683JA023	C 68KOHM ,J, 1/16W	
	R5003	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R5006	D0GA563JA023	56KOHM ,J, 1/16W	
	R5007	D0GA223JA023	C 22KOHM ,J, 1/16W	
	R5009	D1BA5602A023	C 56KOHM ,J, 1/16W	
	R5012	D1BA2202A023	C 22KOHM ,J, 1/16W	
	R5030	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R5100	D0GA101JA023	C 100OHM ,J, 1/16W	
	R5104	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R5152	D0GA222JA023	C 2.2KOHM ,J, 1/16W	
	R5174	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R5175	D0GA680JA023	C 68OHM ,J, 1/16W	
	R5179	D0GA153JA023	C 15KOHM ,J, 1/10W	
	R5180	D0GA683JA023	C 68KOHM ,J, 1/16W	
	R5181	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R5182	D0GA104JA023	C 100KOHM ,J, 1/16W	
	R5301	ERJ12YJ102U	1KOHM ,J, 1/2W	
	R5302	D0GA390JA023	330HM ,J, 1/8W	
	R5303	D1BB1402A055	C 14KOHM , 1/8W	
	R5304	D1BB1001A055	C 1KOHM , 1/8W	
	R5305	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R5307	D1BB2202A055	C 22KOHM , 1/8W	
	R5400	D0GA390JA023	330HM ,J, 1/8W	
	R5401	D1BB4301A055	C 4.3KOHM , 1/8W	
	R5402	D1BB6041A055	C 6.04KOHM , 1/8W	
	R5403	D1BB2402A055	C 24KOHM , 1/16W	
	R5420	D0GA390JA023	330HM ,J, 1/8W	
	R5421	D1BB5601A055	C 5.6KOHM , 1/16W	
	R5422	D1BB3001A055	C 3KOHM , 1/8W	
	R5423	D1BB2002A055	C 20KOHM , 1/8W	
	R5441	D0GB332JA065	C 3.3KOHM ,J, 1/8W	
	R5442	D1BB7870A055	787OHM , 1/8W	
	R5443	D1BB4021A055	C 4.02KOHM , 1/8W	
	R5444	D0GD4R7JA059	C 4.7OHM ,J, 1/8W	
	R5606	D0GA103JA023	C 10KOHM ,J, 1/16W	

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	R5607	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R5608	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R5609	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R5612	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R5613	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R5910	D0GA472JA023	C 4.7KOHM ,J, 1/16W	
	R6943	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R6951	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R6953	D0GAR00J0005	C 0OHM ,J, 1/16W	
△	R7101	ERJ14YJ105U	C 1MOHM ,J, 1/2W	
△	R7102	ERJ14YJ105U	C 1MOHM ,J, 1/2W	
△	R7103	ERJ14YJ105U	C 1MOHM ,J, 1/2W	
	R7105	DOB1106JA033	10MOHM ,J, 1W	
	R7201	ERX1SJR22	0.22OHM ,J, 1W	
	R7202	ERX1SJR22	0.22OHM ,J, 1W	
	R7203	D0GD683JA052	C 68KOHM ,J, 1/8W	
	R7205	D0AF391JA112	390OHM ,J, 1/2W	
	R7206	D0GD393JA052	C 39KOHM ,J, 1/8W	
	R7207	D0GD470JA052	47OHM ,J, 1/8W	
	R7208	D0AF220JA112	22OHM ,J, 1/2W	
	R7209	D0GD104JA052	C 100KOHM ,J, 1/8W	
	R7210	ERX1SJR22	0.22OHM ,J, 1W	
	R7215	D1BD1202A066	C 1KOHM ,J, 1/8W	
	R7216	D1BD3302A066	C 33KOHM ,J, 1/8W	
	R7219	D1BD7503A066	C 750KOHM , 1/8W	
	R7221	D0GD683JA052	C 68KOHM ,J, 1/8W	
	R7231	D0GD104JA052	C 22KOHM ,J, 1/8W	
	R7232	D0GD472JA052	C 4.7KOHM ,J, 1/8W	
	R7233	D0GD103JA052	C 10KOHM ,J, 1/8W	
	R7234	D0GD103JA052	C 10KOHM ,J, 1/8W	
	R7235	D1BD4701A066	C 4.7KOHM ,J, 1/8W	
	R7240	ERJ8ENF1504	C 1.5MOHM ,J, 1/4W	
	R7241	ERJ8ENF1504	C 1.5MOHM ,J, 1/4W	
	R7242	ERJ8ENF1504	C 1.5MOHM ,J, 1/4W	
	R7243	D1BD6803A066	C 680KOHM ,J, 1/8W	
	R7244	D1BD5102A066	C 5.1KOHM ,J, 1/8W	
	R7301	D0GD223JA052	C 22KOHM ,J, 1/8W	
	R7302	D0GD103JA052	C 10KOHM ,J, 1/8W	
	R7303	D0GD470JA052	47OHM ,J, 1/8W	
	R7305	D1BD1803A066	C 180KOHM ,J, 1/8W	
	R7313	D1BD1803A066	C 180KOHM ,J, 1/8W	
	R7314	D1BD1203A066	C 120KOHM ,J 1/8W	
	R7330	D0GDR00J0004	C 0OHM ,J, 1/8W	
	R7331	D0GD301JA052	C 300OHM ,J, 1/8W	
	R7332	ERJ12YJ474U	470KOHM ,J, 1/2W	
	R7333	ERJ12YJ474U	470KOHM ,J, 1/2W	
	R7353	D0GD301JA052	C 300OHM ,J, 1/8W	
	R7354	D0GD113JA052	C 11KOHM ,J, 1/8W	
	R7355	D0GD100JA052	C 10OHM ,J, 1/8W	
	R7356	D0GD301JA052	C 300OHM ,J, 1/8W	
	R7357	D0GD104JA052	C 100KOHM ,J, 1/8W	
	R7358	D0AF222JA112	2.2KOHM ,J, 1/2W	
	R7359	D0GD104JA052	C 100KOHM ,J, 1/8W	
	R7360	ERX1SJR0	1OHM ,J, 1W	
	R7361	D0GD105JA052	C 1MOHM ,J, 1/8W	
	R7362	D0GD821JA052	C 820OHM ,J, 1/8W	
	R7364	D0GD103JA052	C 10KOHM ,J, 1/8W	
	R7365	D0GD103JA052	C 10KOHM ,J, 1/8W	
	R7367	D0GD152JA052	C 1.5KOHM ,J, 1/8W	
	R7376	D0GD223JA052	C 22KOHM ,J, 1/8W	
	R7377	D0GD103JA052	C 10KOHM ,J, 1/8W	
	R7380	ERX1SJR22	0.22OHM ,J, 1W	
	R7381	ERX1SJR22	0.22OHM ,J, 1W	
	R7387	D0GD152JA052	C 1.5KOHM ,J, 1/8W	
	R7388	D0GD162JA052	C 1.6KOHM ,J, 1/8W	
	R7389	D0GD162JA052	C 1.6KOHM ,J, 1/8W	
	R7392	D0GD392JA052	C 3.9KOHM ,J, 1/8W	
	R7393	D0GD101JA052	C 100OHM ,J, 1/8W	
	R7394	D0GD101JA052	C 100OHM ,J, 1/8W	
	R7395	D0GD103JA052	C 10KOHM ,J, 1/8W	
	R7396	ERJ8ENF2204V	C 2.2MOHM ,J, 1/4W	
	R7397	ERJ8ENF2204V	C 2.2MOHM ,J, 1/4W	
	R7398	ERJ8ENF2204V	C 2.2MOHM ,J, 1/4W	

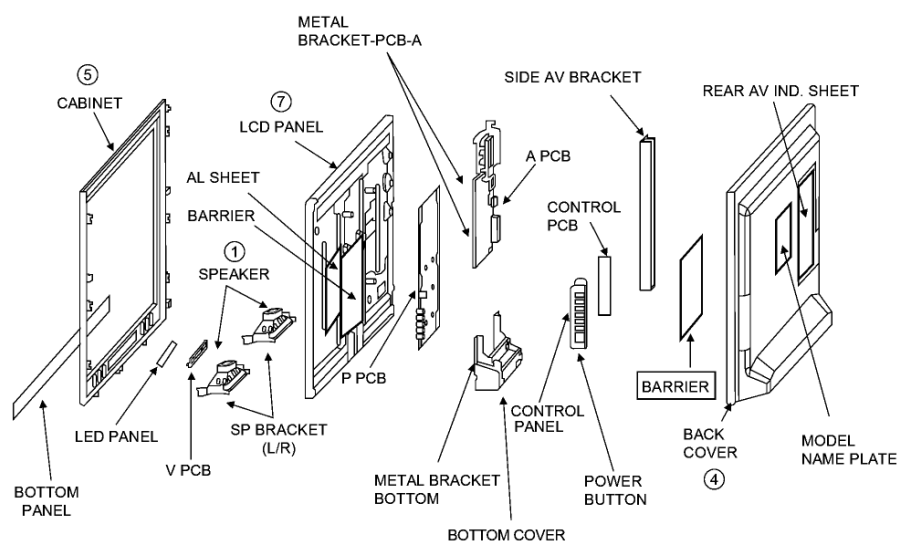
Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	R7399	ERJ8ENF2204V	C 2.2MOHM ,J, 1/4W	
	R7402	D1BD6651A066	C 6.65KOHM , 1/8W	
	R7406	D1BD1741A066	C 1.74KOHM , 1/8W	
	R7407	D0GDR00J0004	C 0OHM ,J, 1/10W	
	R7408	D1BD7151A066	C 7.15KOHM , 1/8W	
	R7409	D1BD1432A066	C 1.43KOHM , 1/8W	
	R7501	D0GD102JA052	C 1KOHM ,J, 1/16W	
	R7502	D0GD102JA052	C 1KOHM ,J, 1/16W	
	R7503	D0GD472JA052	C 4.7KOHM ,J, 1/8W	
	R7504	D0GD103JA052	C 10KOHM ,J, 1/8W	
	R7505	D0GD222JA052	C 2.2KOHM ,J, 1/8W	
	R7513	D1BD3321A066	C 3.32KOHM ,J, 1/8W	
	R7514	D0GD103JA052	C 10KOHM ,J, 1/8W	
	R7515	D1BD1822A066	C 18.2KOHM , 1/8W	
	R7516	D0GD153JA052	15KOHM ,J, 1/8W	
	R7517	D0GD153JA052	15KOHM ,J, 1/8W	
	R7518	D0GD153JA052	15KOHM ,J, 1/8W	
	R7519	D0GD153JA052	15KOHM ,J, 1/8W	
	R7524	D0GD473JA052	C 47KOHM ,J, 1/8W	
	R7527	D0GD153JA052	15KOHM ,J, 1/8W	
	R7528	D0GD153JA052	15KOHM ,J, 1/8W	
	R7529	D0GD472JA052	C 4.7KOHM ,J, 1/8W	
	R7530	D0GD103JA052	C 10KOHM ,J, 1/8W	
	R7531	D0GD103JA052	C 10KOHM ,J, 1/8W	
	R7532	D0GD103JA052	C 10KOHM ,J, 1/8W	
	R7535	D0GD473JA052	C 47KOHM ,J, 1/8W	
	R7600	D0GD473JA052	C 47KOHM ,J, 1/8W	
	R7601	D0GD105JA052	C 1MOHM ,J, 1/8W	
	R7603	D1BD7872A066	78.7KOHM , 1/8W	
	R7604	D1BD2212A066	C 22.1KOHM , 1/8W	
	R7605	D0GD473JA052	C 47KOHM ,J, 1/8W	
	R7606	D0GD683JA052	C 68KOHM ,J, 1/8W	
	R8008	D0GA331JA023	C 330OHM ,J, 1/16W	
	R8100	D1BB1271A087	C 1.27OHM , 1/8W	
	R8102	D1BB2101A087	C 2.1KOHM , 1/8W	
	R8104	D1BB8200A087	C 820OHM , 1/8W	
	R8106	D1BB2001A087	C 2KOHM , 1/8W	
	R8108	D0GB100JA065	C 10OHM ,J, 1/10W	
	R8110	D0GB100JA065	C 10OHM ,J, 1/10W	
	R8114	D0GA303JA023	C 30KOHM ,J, 1/8W	
	R8118	D0GA183JA023	C 18KOHM ,J, 1/16W	
	R8200	D1BA2400A014	C 240OHM , 1/8W	
	R8201	D1BA1001A014	C 1KOHM , 1/8W	
	R8202	D1BA1001A014	C 1KOHM , 1/8W	
	R8203	D1BA1001A014	C 1KOHM , 1/8W	
	R8204	D1BA1001A014	C 1KOHM , 1/8W	
	R8205	D1BA1001A014	C 1KOHM , 1/8W	
	R8206	D1BA1001A014	C 1KOHM , 1/8W	
	R8207	D1BA1001A014	C 1KOHM , 1/8W	
	R8208	D1BA1001A014	C 1KOHM , 1/8W	
	R8209	D0GA111JA023	110OHM ,J, 1/8W	
	R8210	D0GA111JA023	110OHM ,J, 1/8W	
	R8211	D1BA2400A014	C 240OHM , 1/8W	
	R8212	D1BA2400A014	C 240OHM , 1/8W	
	R8213	D0GA103JA015	C 10KOHM ,J, 1/8W	
	R8214	D0GA103JA015	C 10KOHM ,J, 1/8W	
	R8215	D1BA2400A014	C 240OHM , 1/8W	
	R8216	D1BA1001A014	C 1KOHM , 1/8W	
	R8217	D1BA1001A014	C 1KOHM , 1/8W	
	R8218	EXB28V220JX	22OHM , J, 1/8W	
	R8219	EXB28V220JX	22OHM , J, 1/8W	
	R8220	EXB28V220JX	22OHM , J, 1/8W	
	R8221	EXB28V220JX	22OHM , J, 1/8W	
	R8222	EXB28V220JX	22OHM , J, 1/8W	
	R8223	EXB28V220JX	22OHM , J, 1/8W	
	R8224	EXB28V220JX	22OHM , J, 1/8W	
	R8225	EXB28V220JX	22OHM , J, 1/8W	
	R8226	EXB28V220JX	22OHM , J, 1/8W	
	R8227	EXB28V220JX	22OHM , J, 1/8W	
	R8228	EXB28V220JX	22OHM , J, 1/8W	
	R8229	EXB28V220JX	22OHM , J, 1/8W	
	R8230	D0GA220JA023	C 22OHM ,J, 1/16W	
	R8231	D0GA220JA023	C 22OHM ,J, 1/16W	

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	R8232	D0GA220JA023	C 22OHM ,J, 1/16W	
	R8265	EXB2HVR000V	0OHM , J , 1/8W	
	R8268	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R8269	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R8270	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R8271	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R8272	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R8273	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R8274	EXB2HVR000V	0OHM , J , 1/8W	
	R8301	D0GA471JA023	C 470OHM ,J, 1/16W	
	R8302	D0GA360JA023	C 360OHM ,J, 1/16W	
	R8303	D0GA360JA023	C 360OHM ,J, 1/16W	
	R8304	D1BA6201A014	C 6.2KOHM ,J, 1/16W	
	R8305	D1BA6201A014	C 6.2KOHM ,J, 1/16W	
	R8307	D1BA6201A014	C 6.2KOHM ,J, 1/16W	
	R8412	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R8413	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8414	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8418	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8441	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8606	D0GA472JA023	C 4.7KOHM ,J, 1/16W	
	R8607	D0GA472JA023	C 4.7KOHM ,J, 1/16W	
	R8608	D0GA102JA023	C 1KOHM ,J, 1/16W	
	R8609	D1BA6491A023	C 6.49KOHM ,J, 1/16W	
	R8610	D0GA221JA023	C 220OHM ,J, 1/16W	
	R8615	D0GA105JA023	C 1MOHM ,J, 1/16W	
	R8624	D0GA560JA023	C 56OHM ,J, 1/16W	
	R8625	D0GA560JA023	C 56OHM ,J, 1/16W	
	R8626	D0GA560JA023	C 56OHM ,J, 1/16W	
	R8627	D0GA560JA023	C 56OHM ,J, 1/16W	
	R8628	D0GA560JA023	C 56OHM ,J, 1/16W	
	R8629	D0GA820JA023	C 820OHM ,J, 1/16W	
	R8630	D1HG1038A002	F 10KOHM , 1/16W	
	R8634	EXB28V560JX	C 56OHM ,J, 1/16W	
	R8636	D0GA220JA023	C 22OHM ,J, 1/16W	
	R8641	J0JBC0000115	BEAD CORE	
	R8648	D0GA273JA023	C 27KOHM ,J, 1/16W	
	R8649	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8650	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8651	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8652	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8653	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8654	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8655	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8656	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R8657	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8658	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8659	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8660	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8661	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8662	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8663	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8664	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8665	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8666	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8667	D0GA101JA023	C 100OHM ,J, 1/16W	
	R8670	D0GA560JA023	C 56OHM ,J, 1/16W	
	R8671	D0GA560JA023	C 56OHM ,J, 1/16W	
	R8672	D0GA560JA023	C 56OHM ,J, 1/16W	
	R8755	D0GA104JA023	C 100KOHM ,J, 1/16W	
	R8811	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8816	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8818	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8819	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8821	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R8824	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8830	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8831	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8835	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8849	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8852	D0GA243JA023	C 24KOHM ,J, 1/16W	
	R8856	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8909	D0GA222JA023	C 2.2KOHM ,J, 1/16W	

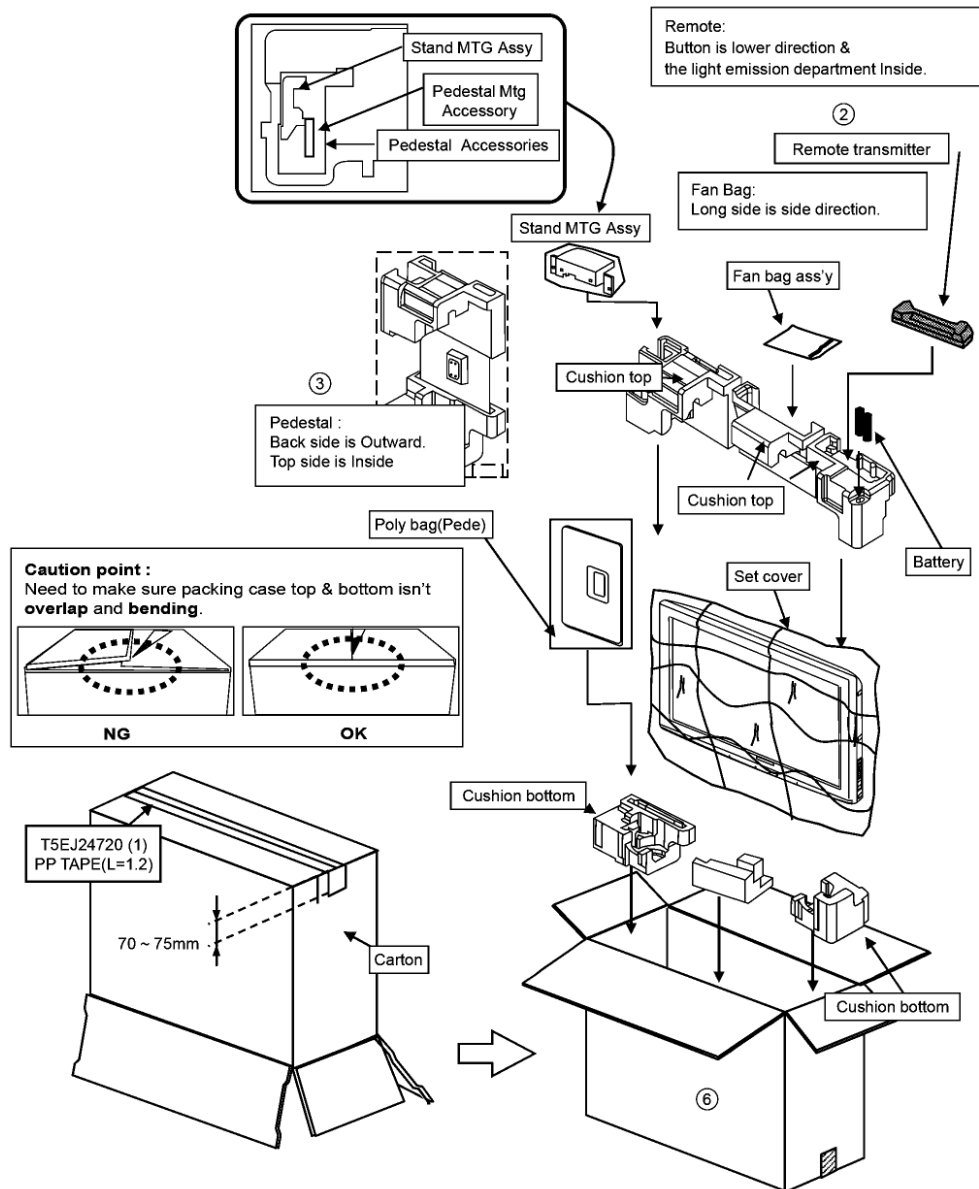
Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	R8910	D0GA103JA023	C 10KOHM ,J, 1/16W	
	R8914	D0GA472JA023	C 4.7KOHM ,J, 1/16W	
	R8964	D0GA472JA023	C 4.7KOHM ,J, 1/16W	
	R900	D0GA220JA023	C 22OHM ,J, 1/16W	
	R901	D0GA220JA023	C 22OHM ,J, 1/16W	
	R904	D0GA473JA023	C 47KOHM ,J, 1/16W	
	R905	D0GA272JA023	C 2.7KOHM ,J, 1/8W	
	R906	D0GA272JA023	C 2.7KOHM ,J, 1/8W	
	R907	D0GA272JA023	C 2.7KOHM ,J, 1/8W	
	R908	D0GA272JA023	C 2.7KOHM ,J, 1/8W	
	R909	D0GA272JA023	C 2.7KOHM ,J, 1/8W	
	R910	D0GA272JA023	C 2.7KOHM ,J, 1/8W	
	R911	D0GA272JA023	C 2.7KOHM ,J, 1/8W	
	R912	D0GA272JA023	C 2.7KOHM ,J, 1/8W	
	R913	EXB28V332JX	3.3KOHM ,J, 1/8W	
	R916	D0GA220JA023	C 22OHM ,J, 1/16W	
	R917	D0GA220JA023	C 22OHM ,J, 1/16W	
	R918	D0GA220JA023	C 22OHM ,J, 1/16W	
	R919	D0GA220JA023	C 22OHM ,J, 1/16W	
	R920	D0GA220JA023	C 22OHM ,J, 1/16W	
	R921	D0GA220JA023	C 22OHM ,J, 1/16W	
	R932	D0GA220JA023	C 22OHM ,J, 1/16W	
	R933	D0GA220JA023	C 22OHM ,J, 1/16W	
	R934	D0GA220JA023	C 22OHM ,J, 1/16W	
	R935	D0GA220JA023	C 22OHM ,J, 1/16W	
	R9500	D0GD473JA052	C 4.7KOHM ,J, 1/8W	
	R9501	D0GAR00J0005	C 0OHM ,J, 1/10W	
	R9502	D0GDR00J0004	C 3.3OHM , 1/8W	
	R9503	D0GDR00J0004	C 3.3OHM , 1/8W	
	R9504	D1BD3R30A066	C 3.3OHM , 1/8W	
	R9505	D1BD3R30A066	C 3.3OHM , 1/8W	
	R9506	D1BD3R30A066	C 3.3OHM , 1/8W	
	R9507	D1BD3R30A066	C 3.3OHM , 1/8W	
	R9508	D1BD3R30A066	C 3.3OHM , 1/8W	
	R9509	D1BD3R30A066	C 3.3OHM , 1/8W	
	R9510	D0GA473JA015	C 47KOHM ,J, 1/16W	
	R9511	D1BA2152A014	C 21.5KOHM , 1/16W	
	R9512	D1BA1102A014	C 11KOHM , 1/16W	
	R9513	D1BA2322A014	C 23.2KOHM , 1/16W	
	R9514	D0GA331JA023	C 330OHM ,J, 1/16W	
	R9515	D1BA4703A014	C 470KOHM , 1/16W	
	R9516	D0GA473JA015	C 47KOHM ,J, 1/16W	
	R9517	D0GA203JA023	20KOHM ,J, 1/16W	
	R9519	D0GFR20JA020	C 0.2OHM ,J, 1/4W	
	R9520	D0GFR20JA020	C 0.2OHM ,J, 1/4W	
	R9521	D0GFR20JA020	C 0.2OHM ,J, 1/4W	
	R9523	D0GD304JA052	C 300OHM ,J, 1/8W	
	R9524	D0GD244JA052	C 240KOHM ,J, 1/8W	
	R9525	D0GD203JA052	C 20KOHM ,J, 1/8W	
	R9526	D0GA134JA023	C 130KOHM ,J, 1/16W	
	R9527	D0GA203JA023	20KOHM ,J, 1/16W	
	R9528	D0GD220JA059	C 22OHM ,J, 1/4W	
	R9529	D0GA473JA015	C 47KOHM ,J, 1/16W	
	R9540	D0GD1R0JA052	C 1OHM ,J, 1/8W	
	R9541	D0GD244JA052	C 240KOHM ,J, 1/8W	
	R9542	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R9543	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R9544	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R9547	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R9548	D0GA101JA015	C 100OHM ,J, 1/16W	
	R9549	D0GA101JA015	C 100OHM ,J, 1/16W	
	R9550	D0GD220JA059	C 22OHM ,J, 1/4W	
	R9551	D0GA473JA015	C 47KOHM ,J, 1/16W	
	R9556	D0GD100JA059	C 2.2OHM ,J, 1/16W	
	R9557	D0GD100JA059	C 2.2OHM ,J, 1/16W	
	R9701	D0GBR00J0004	C 0OHM ,J, 1/16W	
	R9901	D0GAR00J0005	C 0OHM ,J, 1/16W	
	R9904	D0GAR00J0005	C 0OHM ,J, 1/16W	
		TRANSFORMERS		
△	T7201	G4DYA0000289	TRANSFORMER	
△	T7301	G4DYA0000284	TRANSFORMER	
		OTHERS		
	A02	K1KY15BA0324	CONNECTOR	

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	A10	K1KY07AA0719	CONNECTOR	
	A12	K1KA04BA0055	CONNECTOR	
	A15	K1MY51B00004	CONNECTOR	
△	CF7101	D4CAY8R20001	THERMISTOR	
	CF7102	D4CAY8R20001	THERMISTOR	
	CN0100	K1KA14A00248	CONNECTOR	
	F7101-1	K3GE1ZZ00001	FUSE HOLDER	
	F7101-2	K3GE1ZZ00001	FUSE HOLDER	
	FL4000	EXC28CE201U	CHOKE COIL	
	FL4001	EXC28CE201U	CHOKE COIL	
	FL4002	EXC28CE201U	CHOKE COIL	
	FL4003	EXC28CE201U	CHOKE COIL	
	FL4004	EXC28CE201U	CHOKE COIL	
	FL4005	EXC28CE201U	CHOKE COIL	
	FL5600	EXC24CE900U	NOISE FILTER	
	FL5601	EXC24CE900U	NOISE FILTER	
	FL5602	EXC24CE900U	NOISE FILTER	
	JK1005	K1FY315A0009	TERMINAL	
	JK1020	K1FY119D0015	CONNECTOR	
	JK1021	K1FY119D0015	CONNECTOR	
	JK1022	K1FY119D0015	CONNECTOR	
	JK1030	K1FY104A0020	TERMINAL	
	JK1031	K1FY104A0020	TERMINAL	
	JK1040	K2LC1YYA0016	TERMINAL	
	JK1051	K1U410B00002	TERMINAL	
	JK1061	K1FY119E0026	CONNECTOR	
	JK1080	K1NA12E00016	CONNECTOR	
	JK1090	K1FY104E0009	USB CONNECTOR	
	JK3000	K1U916A00002	TERMINAL	
	JS0053	D0GAR00J0005	CHIP RESISTOR	
	JS0055	D0GAR00J0005	CHIP RESISTOR	
	JS7402	D0GDR00J0004	CHIP RESISTOR	
	JS7404	D0GDR00J0004	CHIP RESISTOR	
	JS7502	D0GDR00J0004	CHIP RESISTOR	
	KA10	K1KA07B00135	CONNECTOR	
	LD2	K1KY12BA0322	CONNECTOR	
	LD4	K1KY14BA0302	CONNECTOR	
	LF7101	G0B650H00002	CHOKE COIL	
△	LF7102	G0B103H00013	LINE FILTER	
△	LF7103	G0B103H00013	LINE FILTER	
	P1	K1KA02B00295	CONNECTOR	
	P2	K1KY16BA0311	CONNECTOR	
	P4	K1KA14BA0311	CONNECTOR	
△	PA5300	K5H5022A0031	FUSE	
△	PA5440	K5H5022A0031	FUSE	
△	PA7503	K5H502YA0063	FUSE	
△	PA7504	K5H502YA0063	FUSE	
△	PA7601	K5H502YA0063	FUSE	
	PC7301	B3PAA0000363	PHOTO COUPLER	
	PC7302	B3PAA0000363	PHOTO COUPLER	
	PC7303	B3PAA0000363	PHOTO COUPLER	
	RM2800	PNJ4815M01TV	REMOCON SENSOR	
	SN2800	B3JB00000078	PHOTO DETECTOR	
△	SW7401	K0F122A00203	SWITCH	
	SW7402	EVQ11G05R	SWITCH	
	SW7403	EVQ11G05R	SWITCH	
	SW7404	EVQ11G05R	SWITCH	
	SW7406	EVQ11G05R	SWITCH	
	SW7407	EVQ11G05R	SWITCH	
△	TU4801	ENG57302D5F	TUNER	
	X8300	H0J245500110	CRYSTAL RESONATOR	
	X8600	H0J250500109	CRYSTAL RESONATOR	
	ZA7001	K4AD01A00003	TERMINAL	
	ZA7003	K4AD01A00003	TERMINAL	

Model No. : TH-L32E30R Parts Location



Model No. : TH-L32E30R Packing Exploded View



Model No. : TH-L32E30R Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		K2CQ2YY00085	AC CORD		
		K5D502BNA005	FUSE		
	1	L0AA16C00010	SPEAKER		
	2	N2QAYB000585	REMOTE TRANSFORMER		
	3	TBL5ZX0111	PEDESTAL ASSY		
		TBL5ZX0187	STAND MOUNTING ASSY		
		TBM4GC711	MODEL NAME PLATE		
		TBX4GA02101	POWER BUTTON		
		TBX4GA02701	CONTROL BUTTON		
		THE4GJ001J	SCREW		
		THEJ036J	SCREW		
		THEJ0389	SCREW		
		TKP4GA06402	SIDE AV BRACKET		
		TKP4GA06701	CONTROL PANEL		
		TKP4GA06901	LED PANEL		
		TKX4GA04901	SP BRACKET		
		TKX4GA05001	SP BRACKET		
		TPD4GA0220	BOTTOM CUSHION		
		TPD4GA0221	TOP CUSHION		
		TPE4GH031	SET COVER		
		TQZ4GB403	FAN BAG ASSY		
		TSXM425	LVDS CABLE		
	4	TTU4GA0622	BACK COVER ASSY		
	5	TXFKY5Z0100	CABINET ASSY		
	6	TXFPC01MMUR	PACKING CASE ASSY		
	7	VVX32F115B00	LCD PANEL		
		XSS4+16FJK	SCREW		
		XTB4+15JFJ	SCREW		
		XTB4+15JFJK	SCREW		
		XTV3+10GFJK	SCREW		
		XTV3+8JFJ	SCREW		
		XTW3+10TFJ	SCREW		
		XYN3+C8FJ	SCREW		
		XYN4+F30FJK	SCREW		
Electrical Replacement Part List					
	RTL	TZT/A10MMUR	A PRINT ASSY		
	RTL	TZRNPO1LVUH	P BOARD		
	RTL	TNPA5377AB	LD PRINT		
	RTL	TNPA5378AB	KA PRINT		