

Service Manual

Plasma Television

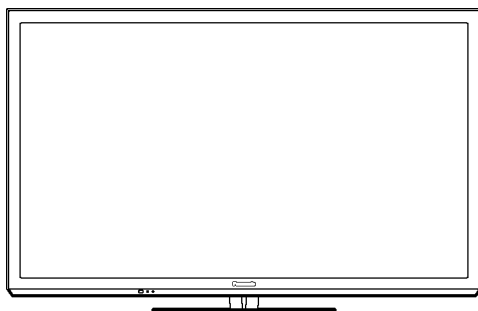
Model No. **TH-P60UT50A**

TH-P60UT50M

TH-P60UT50P

TH-P60UT50Z

GPF15D-A Chassis



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
1 Safety Precautions	3
1.1. General Guidelines	3
1.2. Touch-Current Check	3
2 Warning	4
2.1. Prevention of Electrostatic Discharge (ESD) to Electrostatically Sensitive (ES) Devices	4
2.2. About lead free solder (PbF)	5
3 Service Navigation	6
3.1. PCB Layout	6
3.2. Applicable signals	7
4 Specifications	8
5 Technical Descriptions	10
5.1. Specification of KEY for DTCP-IP, One-to- One, Widevine and Netflix	10
5.2. USB HDD Recording (A/Z only)	10
5.3. Panel-Type setting	10
6 Service Mode	11
6.1. How to enter into Service Mode	11
6.2. Option - Mirror	13
6.3. Service tool mode	13
6.4. DRV Check - USB HDD Check	14
6.5. Hotel mode	14
6.6. Data Copy by SD Card	15
7 Troubleshooting Guide	18
7.1. Check of the IIC bus lines	18
7.2. Power LED Blinking timing chart	19
7.3. No Power	20
7.4. No Picture	21
7.5. Local screen failure	22
8 Service Fixture & Tools	23
8.1. SC jig	23
9 Disassembly and Assembly Instructions	24
9.1. Disassembly Flow Chart for the Unit	24
9.2. Disassembly Procedure for the Unit	25
10 Measurements and Adjustments	31
10.1. Adjustment	31
11 Block Diagram	33
11.1. Main Block Diagram	33
11.2. Block (1/4) Diagram	34
11.3. Block (2/4) Diagram	35
11.4. Block (3/4) Diagram	36
11.5. Block (4/4) Diagram	37
12 Wiring Connection Diagram	39
12.1. Caution statement.	39
12.2. Wiring (1)	39
12.3. Wiring (2)	40
12.4. Wiring (3)	41
12.5. Wiring (4)	42
12.6. Wiring (5)	43
13 Schematic Diagram	
14 Printed Circuit Board	
15 Exploded View	

1 Safety Precautions

1.1. General Guidelines

1. When conducting repairs and servicing, do not attempt to modify the equipment, its parts or its materials.
2. 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.
3. When conducting repairs and servicing, do not twist the Fasten connectors but plug them straight in or unplug them straight out.
4. 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.
5. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
6. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.2. Touch-Current Check

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a measuring network for touch currents 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 Leakage Current Tester (Simpson 228 or equivalent) to measure the potential across the measuring network.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reserve the AC plug in the AC outlet and repeat each of the above measure.
6. The potential at any point (TOUCH CURRENT) expressed as voltage U_1 and U_2 , does not exceed the following values:

For a. c.: $U_1 = 35 \text{ V}$ (peak) and $U_2 = 0.35 \text{ V}$ (peak);

For d. c.: $U_1 = 1.0 \text{ V}$,

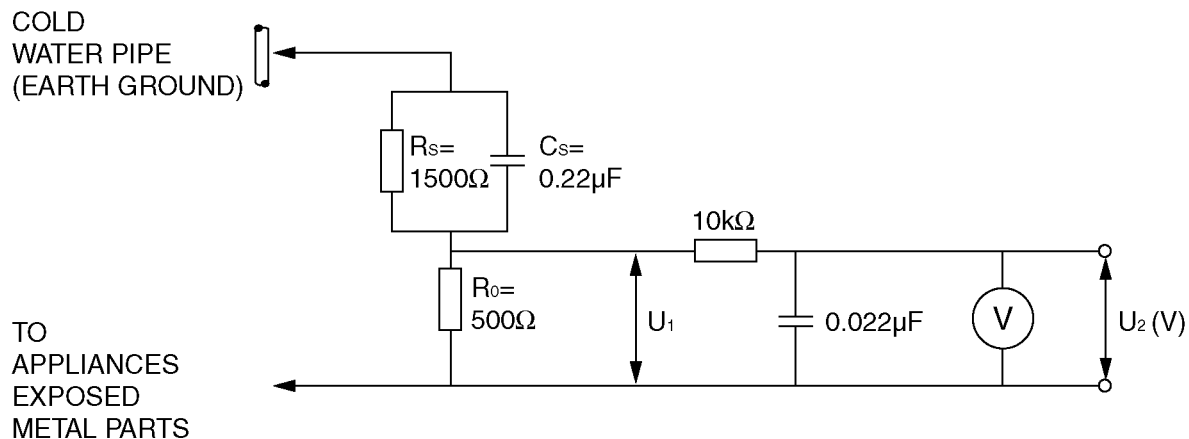
Note:

The limit value of $U_2 = 0.35 \text{ V}$ (peak) for a. c. and $U_1 = 1.0 \text{ V}$ for d. c. correspond to the values 0.7 mA (peak) a. c. and 2.0 mA d. c.

The limit value $U_1 = 35 \text{ V}$ (peak) for a. c. correspond to the value 70 mA (peak) a. c. for frequencies greater than 100 kHz .

7. In case a measurement is out 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.

Measuring network for TOUCH CURRENTS



Resistance values in ohms (Ω)

V: Voltmeter or oscilloscope
(r.m.s. or peak reading)

Input resistance: $\geq 1 \text{ M}\Omega$

Input capacitance: $\leq 200 \text{ pF}$

Frequency range: 15 Hz to 1 MHz and d.c. respectively

NOTE - Appropriate measures should be taken to obtain the correct value in case of non-sinusoidal waveforms.

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).

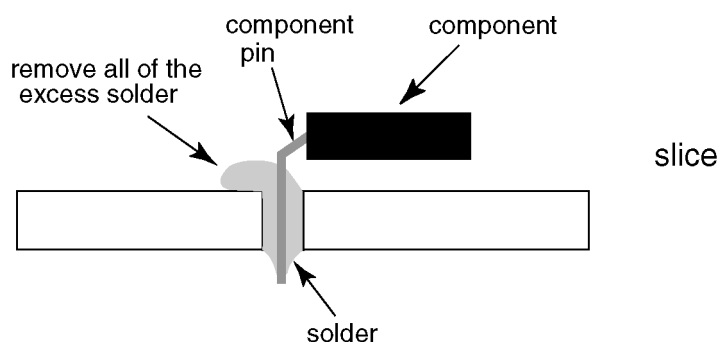
That is Tin (Sn), Silver (Ag) and Copper (Cu) although other types are available.

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.

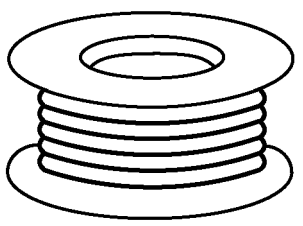
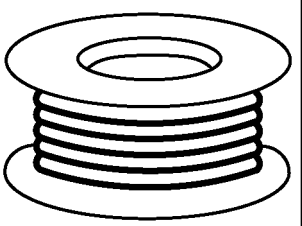
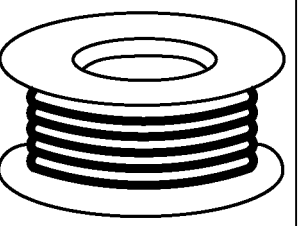
Caution

- 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)



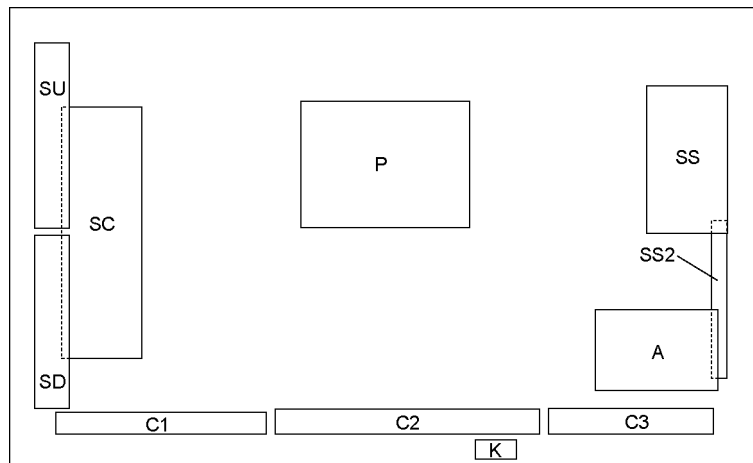
Suggested Pb free solder

There are several kinds of Pb free solder available for purchase. This product uses Sn+Ag+Cu (tin, silver, copper) solder. However, Sn+Cu (tin, copper), Sn+Zn+Bi (tin, zinc, bismuth) solder can also be used.

0.3mm X 100g	0.6mm X 100g	1.0mm X 100g
		

3 Service Navigation

3.1. PCB Layout



Board Name	Function
P	Power Supply Non serviceable. P-Board should be exchanged for service.
A	Main AV input, processing
K	Remote receiver, Power LED, C.A.T.S sensor
C1	Data Driver (Lower Right)
C2	Data Driver (Lower Center)
C3	Data Driver (Lower Left)
SC	Scan Drive
SS	Sustain Drive
SS2	Sustain out (Lower)
SU	Scan out (Upper) Non serviceable. SU-Board should be exchanged for service.
SD	Scan out (Lower) Non serviceable. SD-Board should be exchanged for service.

3.2. Applicable signals

■ COMPONENT (Y, P_B, P_R) (from AV2 terminal), HDMI

Signal name	COMPONENT	HDMI
525 (480) / 60i, 60p	*	*
625 (576) / 50i, 50p	*	*
750 (720) / 60p, 50p	*	*
1,125 (1,080) / 60i, 50i	*	*
1,125 (1,080) / 60p, 50p, 24p		*

* Mark: Applicable input signal

■ PC (from D-sub 15P)

Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)
640 × 480 @60 Hz	31.47	59.94
800 × 600 @60 Hz	37.88	60.32
852 × 480 @60 Hz	31.44	59.89
1,024 × 768 @60 Hz	48.36	60.00
1,280 × 1,024 @60 Hz	63.98	60.02
1,280 × 768 @60 Hz	47.70	60.00
1,366 × 768 @60 Hz	48.39	60.04

Applicable input signal for PC is basically compatible to VESA standard timing.

■ PC (from HDMI terminal)

Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)
640 × 480 @60 Hz	31.47	60.00
1,280 × 720 @60 Hz	45.00	60.00
1,920 × 1,080 @60 Hz	67.50	60.00

Applicable input signal for PC is basically compatible to HDMI standard timing.

Note

- Signals other than above may not be displayed properly.
- The above signals are reformatted for optimal viewing on your display.
- PC signal is magnified or compressed for display, so that it may not show fine detail with sufficient clarity.

4 Specifications

Sound

Speaker	(160 mm × 40 mm) × 2, 8Ω
Audio output	20 W (10 W + 10 W)
Headphones	M3 (3.5 mm) stereo mini Jack × 1

Receiving systems / Band name (A/Z)

PAL B/G	Reception of Off air broadcasts
Digital TV	7 MHz VHF/UHF (Australia) free-to-air TV broadcast reception (A)
	8 MHz UHF (New Zealand) free-to-air TV broadcast reception (Z)
PAL 60 Hz	Playback of NTSC tape from some PAL Video recorders (VCR)
M.NTSC	Playback from M.NTSC Video recorders (VCR)
NTSC	Playback from NTSC Video recorders (VCR)

Receiving systems / Band name (M/P)

17 Systems	Function	17 Systems	Function
1 PAL B, G, H	Reception of broadcast transmissions and Playback from Video Cassette Tape Recorders	8 NTSC 4.43/5.5 MHz	Playback from Special VCR's or DVD
2 PAL I		9 NTSC 4.43/6.0 MHz	
3 PAL D, K		10 NTSC 4.43/6.5 MHz	
4 SECAM B, G		11 NTSC 3.58/5.5 MHz	
5 SECAM D, K		12 NTSC 3.58/6.0 MHz	
6 SECAM K1		13 NTSC 3.58/6.5 MHz	
7 NTSC M (NTSC 3.58/4.5 MHz)		14 SECAM I	
		15 PAL 60 Hz/5.5 MHz	Playback from Special Disc Players and Special VCR's or DVD
		16 PAL 60 Hz/6.0 MHz	
		17 PAL 60 Hz/6.5 MHz	

Receiving Channels (M/P)

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.)

Standard Belling & Lee connector (A)
VHF / UHF (Except A)

Aerial - Rear

Operating Conditions

Temperature:	0 °C - 35 °C (A/Z) 0 °C - 40 °C (M/P)
Humidity:	20 % - 80 % RH (non-condensing)

Connection terminals

AV1 IN

AUDIO L - R	RCA PIN Type × 2	0.5 V [rms]
VIDEO	RCA PIN Type × 1	1.0 V [p-p] (75 Ω)

AUDIO OUT

AUDIO L - R	RCA PIN Type × 2	0.5 V [rms] (high impedance)
--------------------	------------------	------------------------------

AV2 IN

AUDIO L - R	RCA PIN Type × 2	0.5 V [rms]
COMPONENT	Y	1.0 V [p-p] (including synchronization)
	P _B /C _B , P _R /C _R	± 0.35 V [p-p]
VIDEO	RCA PIN Type × 1	1.0 V [p-p] (75 Ω)

HDMI 1 / 2 input

TYPE A Connectors

- This TV supports "HDAVI control 5" function.

PC

HIGH-DENSITY D-SUB 15PIN

R, G, B:	0.7 V [p-p] (75 Ω)
HD, VD:	TTL Level 2.0 - 5.0 V [p-p] (high impedance)
• Applicable input signals:	VGA, SVGA, WVGA, XGA, SXGA, WXGA

SD Card slot × 1

10BASE-T / 100BASE-TX

USB 2.0 TYPE A Connectors DC 5 V, Max. 500 mA

PCM / Dolby Digital / DTS, Fiber optic

Card slot

ETHERNET

USB 1 / 2

DIGITAL AUDIO OUT

Bluetooth wireless technology*1

Standard Compliance	Bluetooth 3.0
Frequency Range	2.402 GHz - 2.480 GHz

*1: Not all the Bluetooth compatible devices are available with this TV.

Power Consumption (A/Z)	
Power rating	AC 220-240 V, 50 / 60 Hz 2.2 A
Normal (Home) mode	180 W
Standby condition	0.4 W
Power Source (M/P)	
	AC 220 - 240 V, 50 / 60 Hz (M)
	AC 110 - 240 V, 50 / 60 Hz (P)
Power Consumption (M/P)	
Power Rating	430 W (M) 435W (P)
Standby condition	0.4 W
Display panel	
Panel system	Plasma panel
Visible screen size (diagonal)	153 cm / 60 inches
Number of pixels	2,073,600 (1,920 (W) × 1,080 (H)), [5,760 × 1,080 dots]
Dimensions (W × H × D)	
	1,401 mm × 883 mm × 387 mm (With Pedestal)
	1,401 mm × 835 mm × 84 mm (TV only)
Mass	
	38.0 kg Net (With Pedestal)
	33.5 kg Net (TV only)
■ 3D Eyewear (A/Z)	
Dimensions (W × H × D)	
	167.7 mm × 42.2 mm × 170.7 mm
Mass	
	Approx. 31 g
Lens type	
	Liquid Crystal Shutter
Usage temperature range	
	0 °C - 40 °C
Battery*	
	Coin-shaped lithium battery CR2025
	Operation time: Approx. 75 hours in continuous use of the battery made by Panasonic
Viewing range*	
	Within 3.2 m from front surface of the TV
Materials	
	Main body: Resin
	Lens section: Liquid crystal glass
Communication system	
	2.4 GHz band FH-SS (Frequency Hopping Spread Spectrum)
* There are differences in the viewing range of the 3D Eyewear among individuals.	
• The 3D Eyewear may not operate correctly at the outside of the viewing range.	

Note

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

5 Technical Descriptions

5.1. Specification of KEY for DTCP-IP, One-to-One, Widevine and Netflix

5.1.1. General information:

1. EEPROM (IC8902) for spare parts has the seed of KEY for each.
2. The final KEY data will be generated by Peaks IC (IC8000) when SELF CHECK was done and are stored in both Peaks IC (IC8000) and EEPROM (IC8902).

Four KEY are not generated for all models.

The necessary KEY are only generated and stored depend on the feature of models.

5.1.2. Replacement of ICs:

When Peaks IC (IC8000) is replaced, EEPROM (IC8902) should be also replaced with new one the same time.

When EEPROM (IC8902) is replaced, Peaks IC (IC8000) is not necessary to be replaced the same time.

After the replacement of IC, SELF CHECK should be done to generate the final KEY data.

How to SELF CHECK: While pressing [VOLUME (-)] button on the main unit, press [MENU] button on the remote control for more than 3 seconds.

TV will be forced to the factory shipment setting after this SELF CHECK.

5.1.3. Model and Keys:

Model No.	Keys			
	One-to-One (For USB Rec.)	DTCP-IP	Widevine	Netflix
TH-P60UT50A/Z	Yes	Yes	Yes	Yes
TH-P60UT50M/P	None	None	Yes	Yes

5.2. USB HDD Recording (A/Z only)

5.2.1. General information:

Digital TV programmes can be recorded in USB HDD.

A One-to-One key generated in A-board by SELF CHECK binds TV and USB-HDD for communication.

That key is only one key for them. If the key is difference, TV can not access USB-HDD.

Caution:

New key will be generated by following SELF CHECK and previous TV programmes recorded in USB HDD will not be viewed.

SELF CHECK: While pressing [VOLUME (-)] button on the main unit, press [MENU] button on the remote control for more than 3 seconds.

5.3. Panel-Type setting

Panel-Type setting is required after exchange the A-board.

A-board for spare parts is common use for different inch size in same series.

Go into Service Mode and confirm/select Panel-Type in OPTION to correct inch size.

6 Service Mode

6.1. How to enter into Service Mode

6.1.1. Purpose

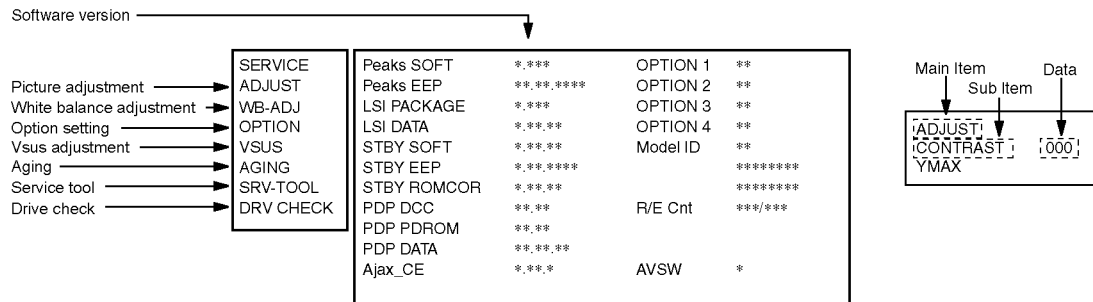
After exchange parts, check and adjust the contents of adjustment mode.

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

Note:

Service Mode can not be entered when 3D signal input.

Input 2D signal to enter Service Mode.



6.1.2. Key command

[1] button...Main items Selection in forward direction

[2] button...Main items Selection in reverse direction

[3] button...Sub items Selection in forward direction

[4] button...Sub items Selection in reverse direction

[RED] button...All Sub items Selection in reverse direction

[GREEN] button...All Sub items Selection in forward direction

[VOL] button...Value of sub items change in forward direction (+), in reverse direction (-)

6.1.3. How to exit

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

6.1.4. 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	Remark
ADJUST	CONTRAST	225	
	COLOR	36	
	TINT	00	
	SUB-BRT	800	
	H-POS	0	
	H-AMP	0	
	V-POS	0	
	V-AMP	0	
WB-ADJ	R-CUT	80	
	G-CUT	80	
	B-CUT	80	
	R-DRV	FA	
	G-DRV	FF	
	B-DRV	C7	
	ALL-CUT	80	
	ALL-DRV	FF	
OPTION	Panel-Type	60FHD	Factory Preset
	Boot	ROM	
	STBY-SET	00	
	EMERGENCY	ON	
	CLK MODE	00	
	CLOCK	000	
	Y/C Delay	0	
	OPT 1	10110000	
	OPT 2	00100010	
	OPT 3	00000001	
	OPT 4	00010010	
	EDID-CLK	MID	
	MIRROR	00 (See Option-Mirror)	
	AMR-SELECT	OFF	
VSUS		LOW	See Vsus selection
AGING	ALL WHITE		Built-in test patterns can be displayed.
	MIDDLE BLUE WITH MAGENTA OUTSIDE FRAME		
	MIDDLE STEP GREEN		
	MIDDLE STEP RED		
	LOW STEP WHITE		
	ALL BLUE		
	ALL GREEN		
	ALL RED		
	WHITE DIAGONAL STRIPE		
	RED DIAGONAL STRIPE		
	GREEN DIAGONAL STRIPE		
	BLUE DIAGONAL STRIPE		
	A-ZONE & B-ZONE		
	1% WINDOW		
	COLOR BAR		
	9 POINTS BRIGHT MEASURE		
	2 DOT OUTSIDE FRAME		
	DOUBLE FIXED 1% WINDOW		
	VERTICAL LINE SCROLL		
	ON/OFF		
	R/G/B/W ROTATION WITH COUNT DISPLAY		
	HALF FIXED ALL WHITE		
	ALL WHITE WITH COUNT DISPLAY		
SRV-TOOL		00	See Service tool mode
DRV CHECK	USBHDD CHECK	00	See DRV Check-USBHDD Check

6.2. Option - Mirror

Picture can be reversed left and right or up and down.

00 : Default (Normal picture is displayed)

01 : Picture is reversed left and right.

02 : Picture is reversed up and down.

00



01



02



Hint : If the defective symptom (e.g. Vertical bar or Horizontal bar) is moved by selection of this mirror, the possible cause is in A-board.

6.3. Service tool mode

6.3.1. 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:0200b108	
Display of Flash ROM maker code →	Flash ROM : 98 - DC	
Display of SOS History →	PTCT : 00 . 00 . 00 . 00 . 00 .	Time 00000:40 Count 0000001

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

6.3.2. 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].

6.3.3. POWER ON TIME/COUNT

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

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

Count : Number of ON times by decimal

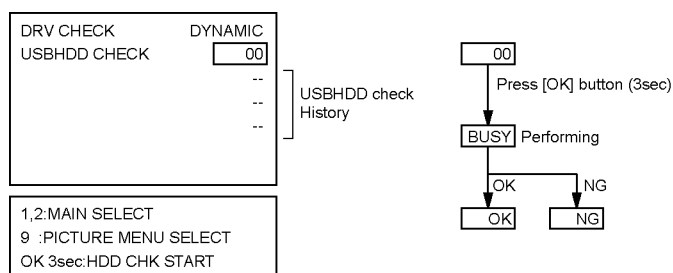
Note : This indication will not be cleared by either of the self-checks or any other command.

6.3.4. Exit

1. Disconnect the AC cord from wall outlet.

6.4. DRV Check - USB HDD Check

1. Select [DRV Check - USBHDD Check] in Service Mode.
2. Press [OK] button on the remote control for more than 3 seconds.



6.5. 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:
While pressing [VOLUME (-)] button of the main unit,
press [AV] button of the remote control three times within
2 seconds.

Then, the Hotel mode setup menu is displayed.

Hotel Mode	
Hotel Mode	Off
Initial INPUT	Off
Initial POS	Off
Initial VOL Level	Off
Maximum VOL Level	100
Button Lock	Off
Remote Lock	Off
Private Information	Keep

Select
Change EXIT
RETURN

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

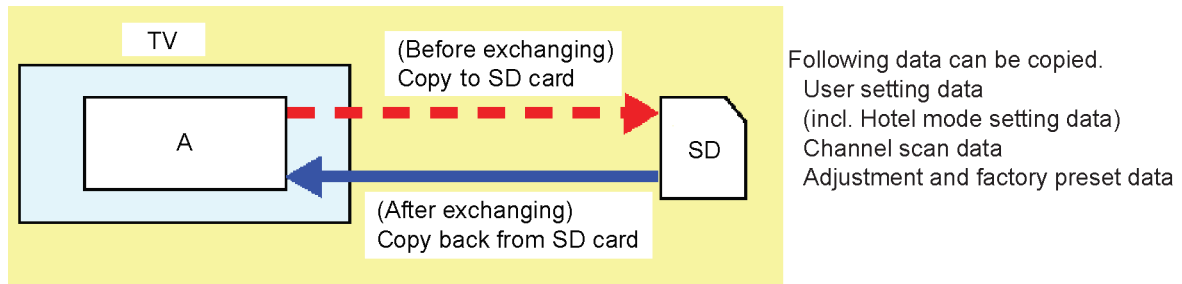
Item	Function
Hotel Mode	Select hotel mode On/Off
Initial INPUT	Select input signal modes. Set the input, when each time power is switched on. Selection : Off, Analogue TV, Digital TV, AV1, AV2, PC, HDMI1, HDMI2 • Off: give priority to a last memory.
Initial POS	Select programme number. Selection : Off/0 to 99 • Off: give priority to a last memory
Initial VOL Level	Adjust the volume when each time power is switched on. Selection/Range : Off/0 to 100 • Off: give priority to a last memory
Maximum VOL Level	Adjust maximum volume. Range : 0 to 100
Button Lock	Select local key conditions. Selection : Off/SETUP/MENU/ALL • Off: altogether valid • SETUP: only F-key is invalid (Tuning guide (menu) can not be selected.) • MENU: only F-key is invalid (only Volume/Mute can be selected.) • ALL: altogether invalid.
Remote Lock	Select remote control key conditions. Selection : Off/SETUP/MENU • Off: altogether valid • SETUP: only Setup menu is invalid • MENU: Picture/Sound/Setup menu are invalid
Private Information	Select private information for VIERA Cast is Keep or Reset if Hotel mode is set to [On] when TV power on. Selection : Keep/Reset • Keep: private information for VIERA Cast is keep • Reset: private information for VIERA Cast is reset

6.6. Data Copy by SD Card

6.6.1. Purpose

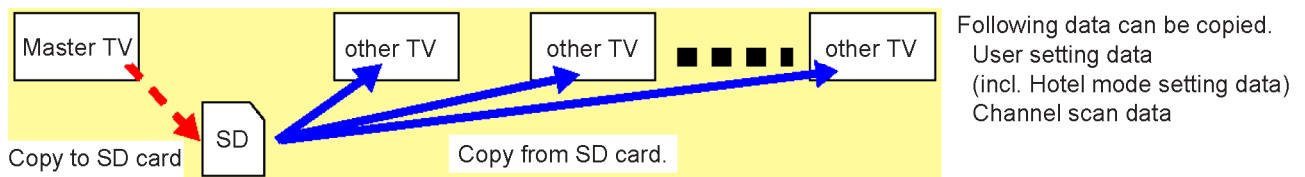
(a) Board replacement (Copy the data when exchanging A-board):

When exchanging A-board, the data in original A-board can be copied to SD card and then copy to new A-board.



(b) Hotel (Copy the data when installing a number of units in hotel or any facility):

When installing a number of units in hotel or any facility, the data in master TV can be copied to SD card and then copy to other TVs.



6.6.2. Preparation

Make pwd file as startup file for (a) or (b) in a empty SD card.

1. Insert a empty SD card to your PC.
2. Right-click a blank area in a SD card window, point to New, and then click text document. A new file is created by default (New Text Document.txt).
3. Right-click the new text document that you just created and select rename, and then change the name and extension of the file to the following file name for (a) or (b) and press ENTER.

File name:

- (a) For Board replacement : boardreplace.pwd
- (b) For Hotel : hotel.pwd

Note:

Please make only one file to prevent the operation error.

No any other file should not be in SD card.

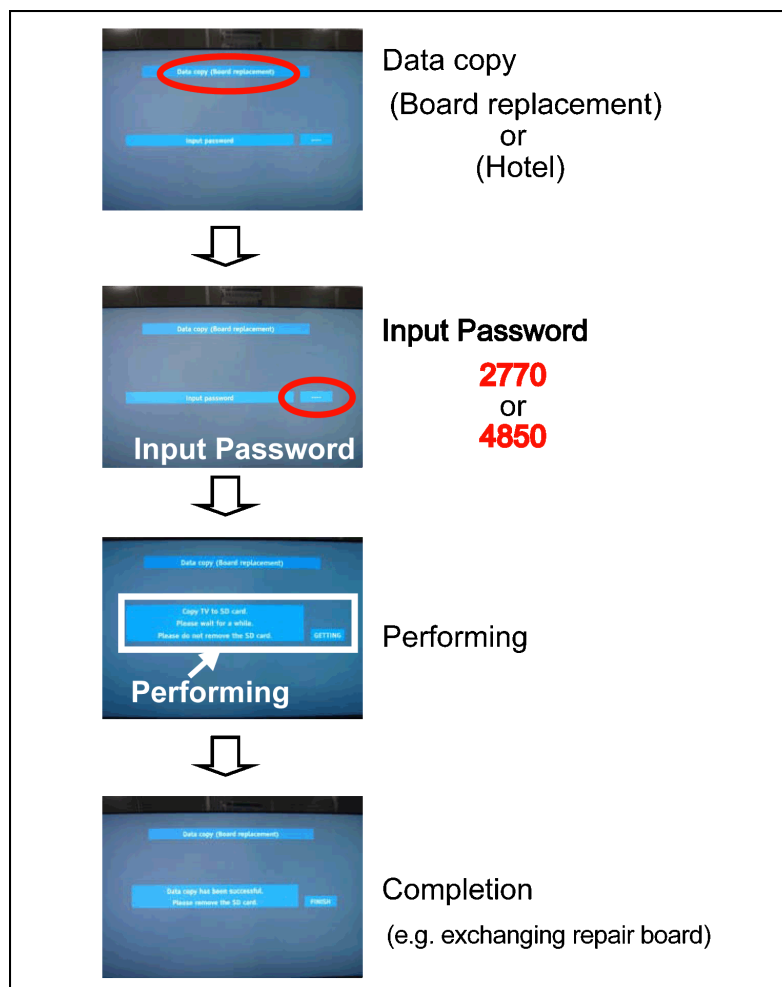
6.6.3. Data copy from TV set to SD Card

1. Turn on the TV set.
2. Insert SD card with a startup file (pwd file) to SD slot.
On-screen Display will be appeared according to the startup file automatically.
3. Input a following password for (a) or (b) by using remote control.
(a) For Board replacement : 2770
(b) For Hotel : 4850
Data will be copied from TV set to SD card.
It takes around 2 to 6 minutes maximum for copying.
4. After the completion of copying to SD card, remove SD card from TV set.
5. Turn off the TV set.

Note:

Following new folder will be created in SD card for data from TV set.

- (a) For Board replacement : user_setup
- (b) For Hotel : hotel

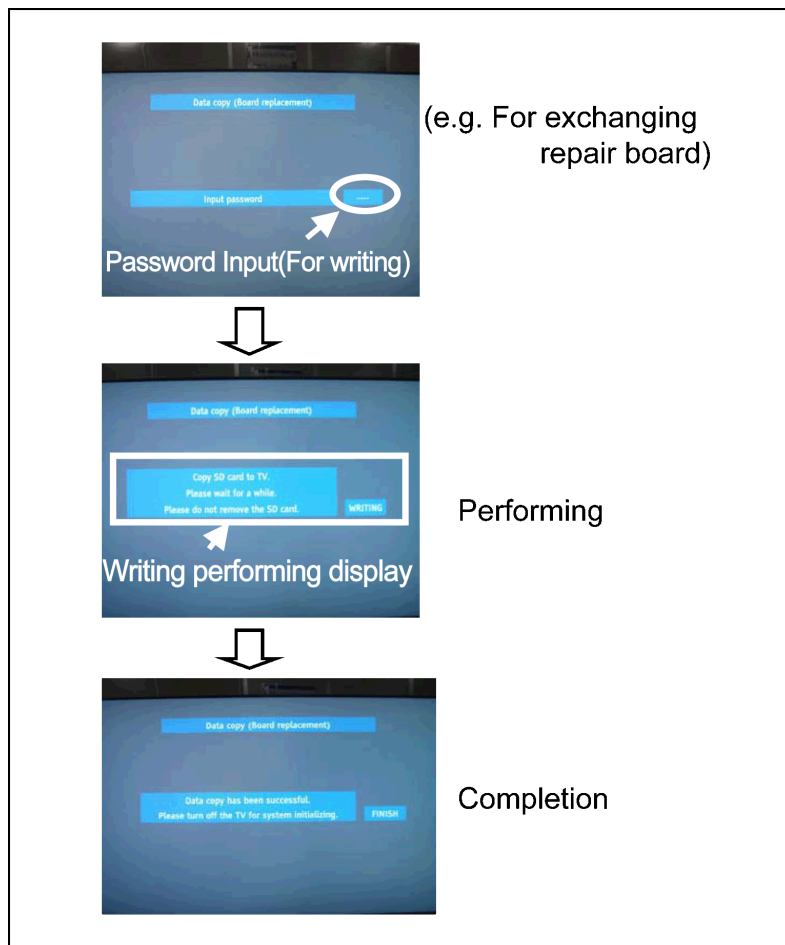


6.6.4. Data copy from SD Card to TV set

1. Turn on the TV set.
2. Insert SD card with Data to SD slot.
On-screen Display will be appeared according to the Data folder automatically.
3. Input a following password for (a) or (b) by using remote control.
(a) For Board replacement : 2771
(b) For Hotel : 4851
Data will be copied from SD card to TV set.
4. After the completion of copying to SD card, remove SD card from TV set.
(a) For Board replacement : Data will be deleted after copying (Limited one copy).
(b) For Hotel : Data will not be deleted and can be used for other TVs.
5. Turn off the TV set.

Note:

1. Depending on the failure of boards, function of Data copy for board replacement does not work.
2. This function can be effective among the same model numbers.



7 Troubleshooting Guide

Use the self-check function to test the unit.

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

7.1. Check of the IIC bus lines

7.1.1. How to access

7.1.1.1. 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.

7.1.1.2. Self-check indication and forced to factory shipment setting:

Caution:

New key will be generated and previous TV programmes recorded in USB HDD will not be viewed. (See USB HDD Recording) (A/Z only)

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.

7.1.2. Screen display

60FHD SET		Panasonic 2012PDP	
		SELF CHECK COMPLETE SYS SELECT : Asia/M.East	
TUN	OK	PEAKS-SOFT	*****
STBY	OK	PEAKS-EEP	*****
MEM1	OK	LSI-PACKAGE	*****
MEM2	OK	LSI-RELEASE	*****
PANEL	OK	STBY-SOFT	*****
TEMP	OK	STBY-EEP	*****
LAN	OK	STBY-ROMCORR	*****
ID	OK	PDP-DCC	*****
ID2	OK	PDP-PDROM	*****
BT	OK	PDP-DATA	*****
		SUM	*****
		MODEL ID	*****

7.1.3. Check Point

Confirm the following parts if NG was displayed.

DISPLAY	Check Ref. No.	Description	Check Point
TUN	TU6705	TUNER	A-BOARD
STBY	IC8000	PEAKS-LD4(STM)	A-BOARD
MEM1	IC8902	PEAKS EEPROM	A-BOARD
MEM2	IC8900	NAND FLASH	A-BOARD
PANEL	IC9300	PD6H	A-BOARD
TEMP	IC2001	TEMP SENSOR	A-BOARD
LAN	IC8650	ETHERPHY	A-BOARD
ID			A-BOARD
ID2			A-BOARD
BT	IC8000, A50	BLUETOOTH	A-BOARD/BLUETOOTH

7.1.4. Exit

Disconnect the AC cord from wall outlet or switch off the power with [Power] button on the main unit.

7.2. Power LED Blinking timing chart

1. Subject

Information of LED Flashing timing chart.

2. Contents

When an abnormality has occurred the unit, the protection circuit operates and reset to the stand by mode. At this time, the defective block can be identified by the number of blinks of the Power LED on the front panel of the unit.

Blinking Times	Contents	Check point
1	Panel information SOS PD Start SOS	-
2	P+15V SOS	A-Board P-Board
3	IROM BOOT PROGRAM SOS	A-Board P-Board
4	Power SOS	P-Board
6	Driver SOS1 (SC Energy recovery circuit) (A-SC FPC DET)	SC-Board A-SC FPC
7	Driver SOS2 (SU/SD Connector DET) (SU/SD Scan and Logic IC)	SU-Board SD-Board *
8	Driver SOS3 (SS FPC DET) (SS Energy recovery circuit)	SS-Board SS2-Board SS FPC SS2 FPC
9	Discharge Control SOS	A-Board
10	Sub 3.3V SOS Tuner power SOS BE SOS	A-Board SC-Board SS-Board P-Board
12	Sound SOS	A-Board Speaker Woofer
13	Emergency SOS	A-Board
20	2nd BOOT PROGRAM SOS (Watchdog timer over flow)	A-Board
21	2nd BOOT PROGRAM SOS (System error)	A-Board
22	2nd BOOT PROGRAM SOS (Main system bus freeze)	A-Board
23	2nd BOOT PROGRAM SOS (Accidental interrupt signal)	A-Board
24	2nd BOOT PROGRAM SOS (NAND Flash memory data transfer error finish)	A-Board
25	2nd BOOT PROGRAM SOS (Unsupported NAND Flash memory)	A-Board

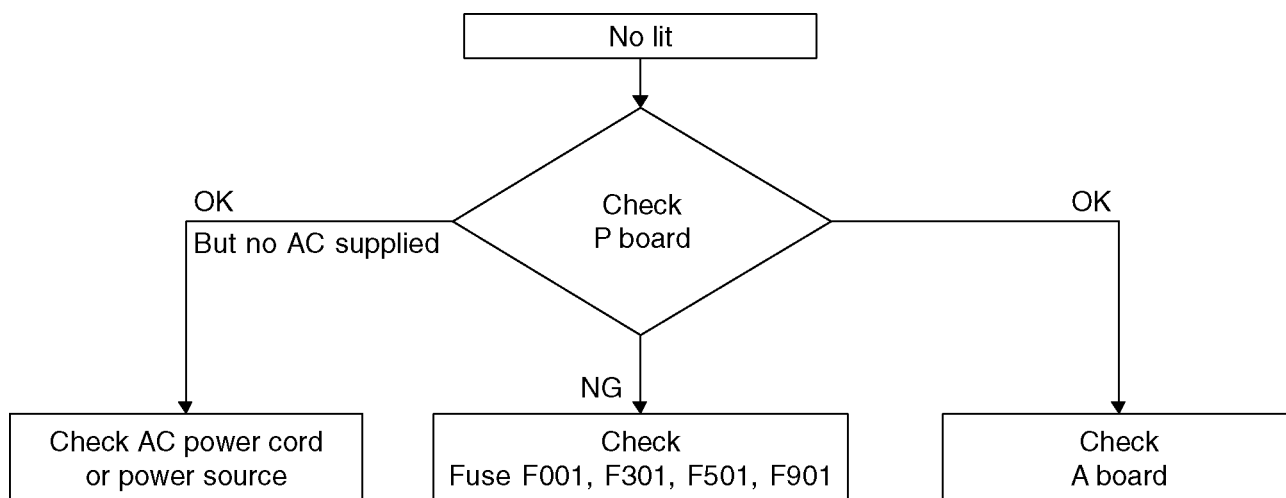
*Use SC jig to isolate the board.

7.3. No Power

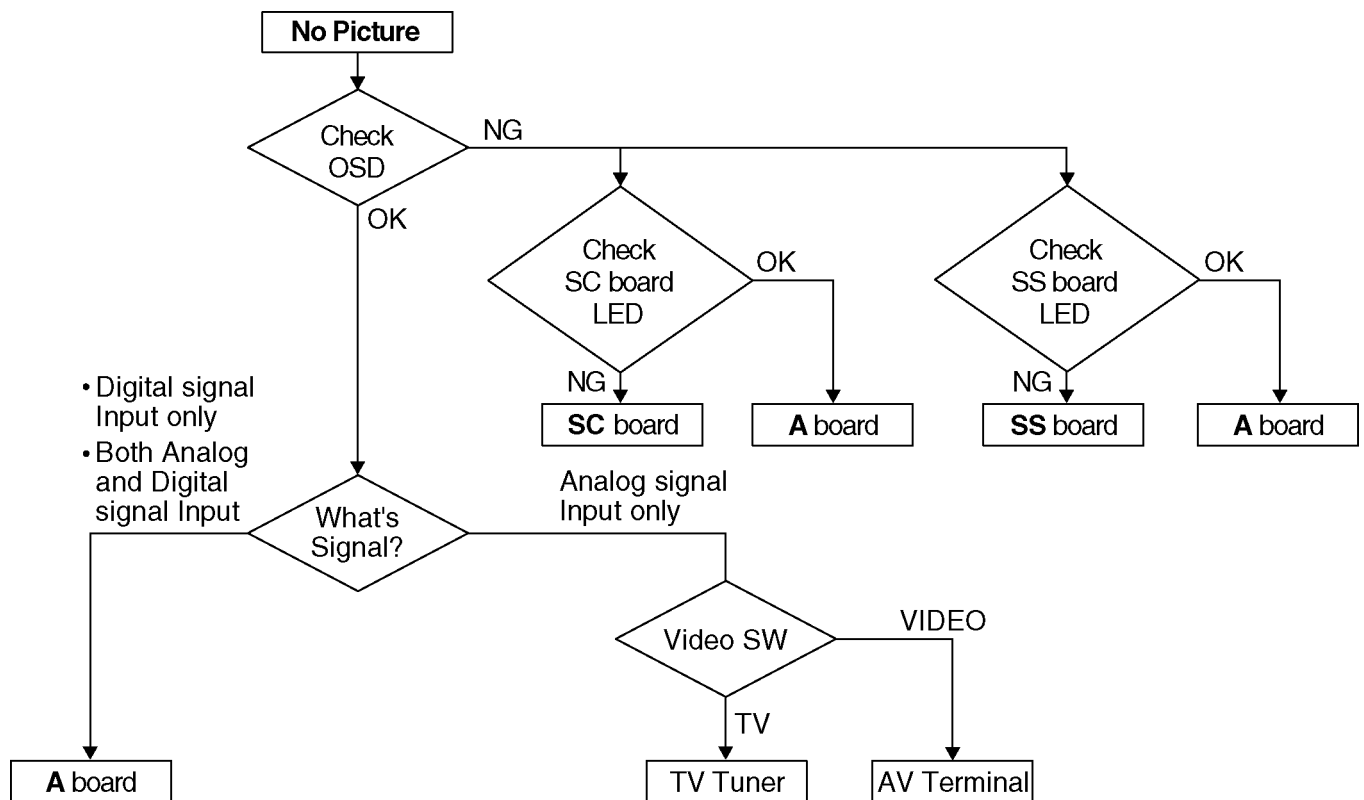
First check point

There are following 3 states of No Power indication by power LED.

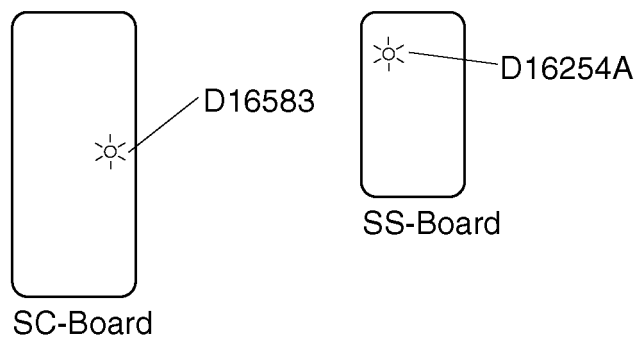
1. No lit
2. Green is lit then turns red blinking a few seconds later. (See Power LED Blinking timing chart)
3. Only red is lit.



7.4. No Picture



Drive circuits LED indicator



7.5. Local screen failure

Plasma display may have local area failure on the screen. Fig-1 is the possible defect P.C.B. for each local area.

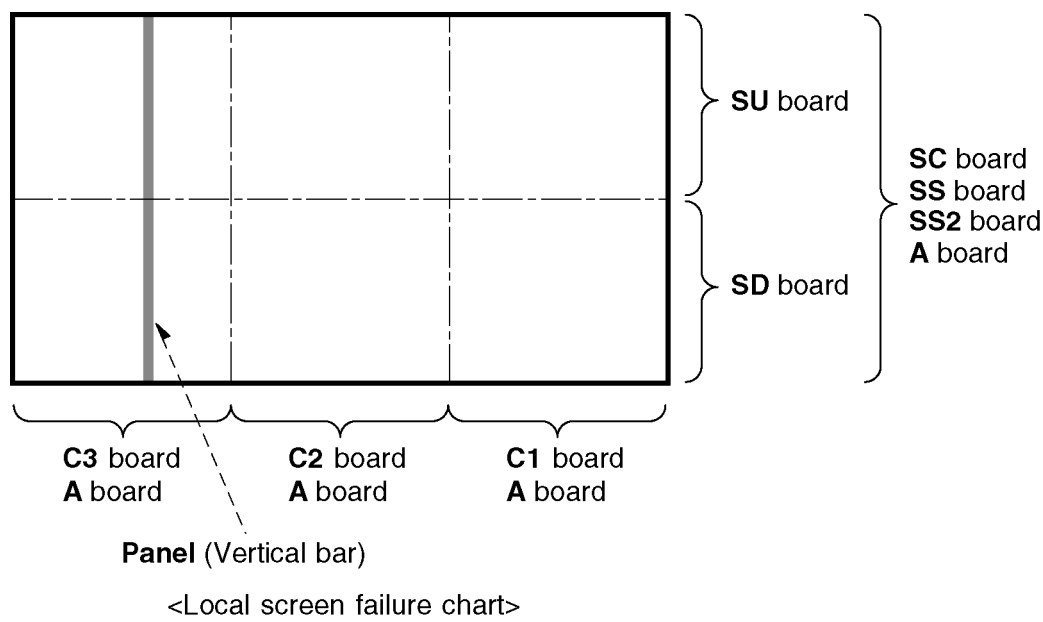


Fig-1

8 Service Fixture & Tools

8.1. SC jig

Purpose:

To find the failure board (SC or SU/SD) when the power LED is blinking 7 times.

SC jig:

Jumper connector to connect to SC50 connector on SC board

Part number:

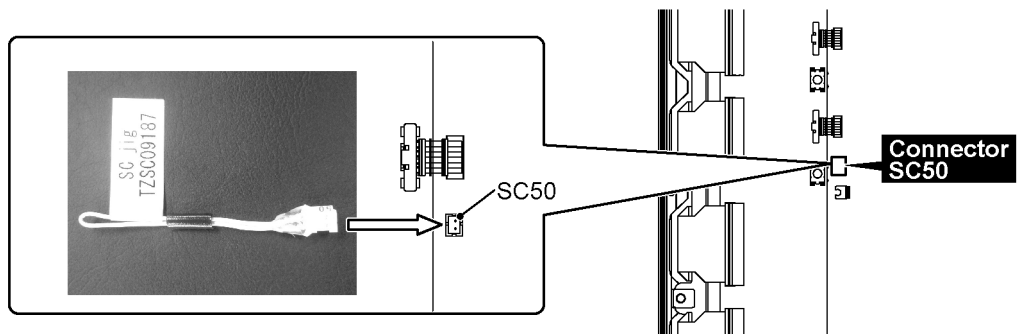
TZSC09187

How to use:

Caution: Remove SC jig from SC board after inspection.

1. Remove all connector between SC board and SU/SD board to isolate SC board from both SU and SD board electrically.
Note: The board will be damaged if all connector is not removed (for example; remove connector only for SU board and stay connecting with SD board. The board will be damaged.)
2. Connect SC jig to connector SC50 at left bottom side of SC board
3. Turn on the TV/Display Unit and confirm the power LED blinking.
LED blinking: Possible cause of failure is in SC board
No LED blinking (Lighting or no lighting): Possible cause of failure is in SU or SD board
4. After inspection, turn off the TV/Display Unit and wait a few minutes to discharge.
5. Remove SC jig from SC board.

Remark: This SC jig can be used for all 2012 Plasma TV and Plasma Display.

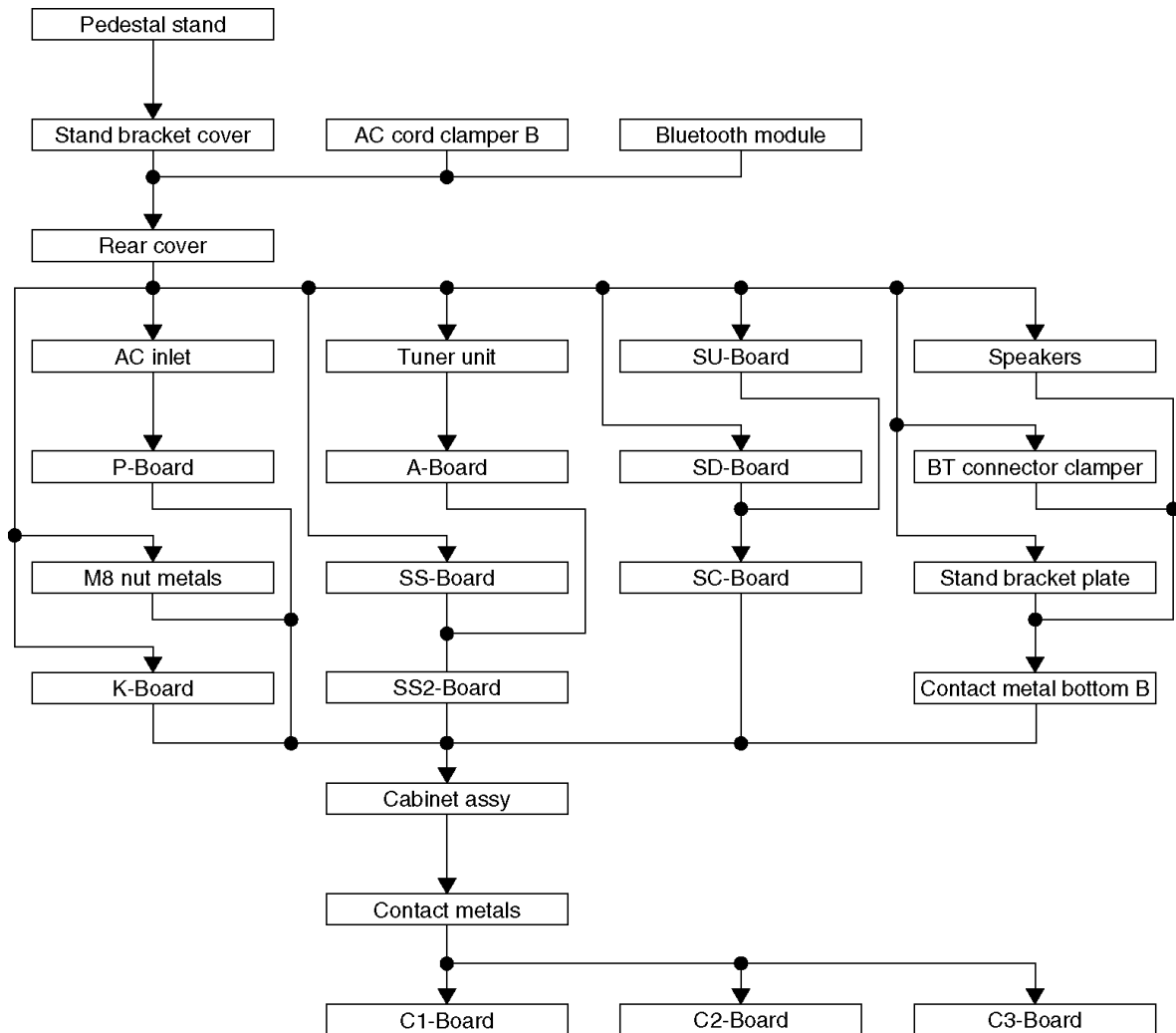


9 Disassembly and Assembly Instructions

9.1. Disassembly Flow Chart for the Unit

This is a disassembly chart.

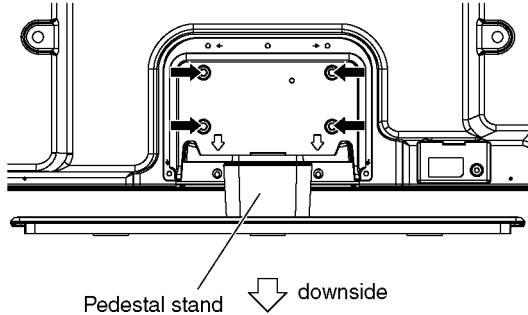
When assembling, perform this chart conversely.



9.2. Disassembly Procedure for the Unit

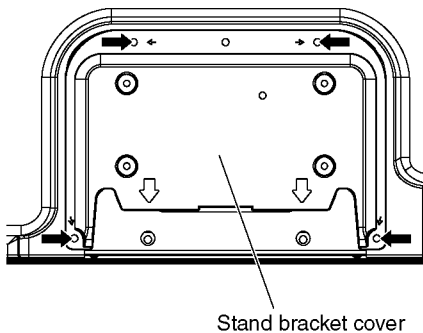
9.2.1. Remove the Pedestal stand

1. Remove the Plasma panel section from the servicing stand and lay on a flat surface such as a table (covered by a soft cloth) with the Plasma panel surface facing downward.
2. Remove the screws (×4 ➡).
3. Slide the Pedestal stand to the downside and remove the Pedestal stand.



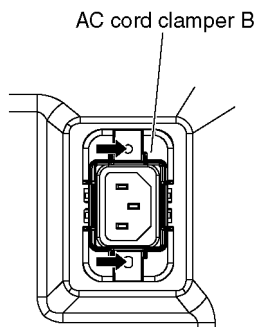
9.2.2. Remove the Stand bracket cover

1. Remove the screws (×4 ➡) and remove the Stand bracket cover.



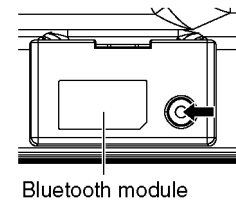
9.2.3. Remove the AC cord clamber B

1. Remove the screws (×2 ➡) and remove the AC cord clamber B.



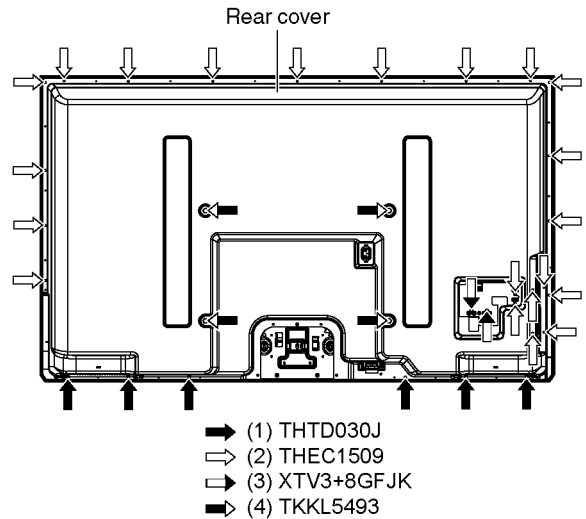
9.2.4. Remove the Bluetooth module

1. Remove the screw (×1 ➡) and remove the Bluetooth module.



9.2.5. Remove the Rear cover

1. Remove the screws (×6 ➡, ×21 ⇨, ×2 ⇨).
2. Remove the M8 caps (×4 ➡).
3. Remove the Rear cover.

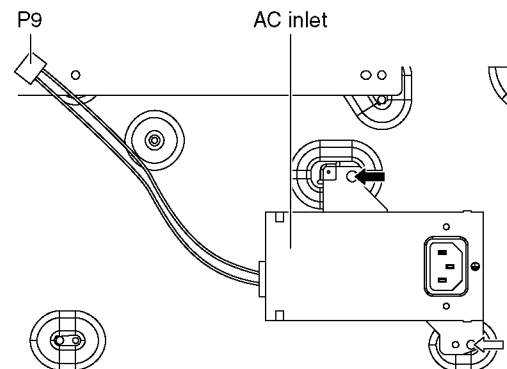


9.2.6. Remove the AC inlet

Caution:

To remove AC inlet wait 1 minute after power was off for discharge from electrolysis capacitors.

1. Disconnect the connector (P9).
2. Remove the screws (×1 ➡, ×1 ⇨) and remove the AC inlet.

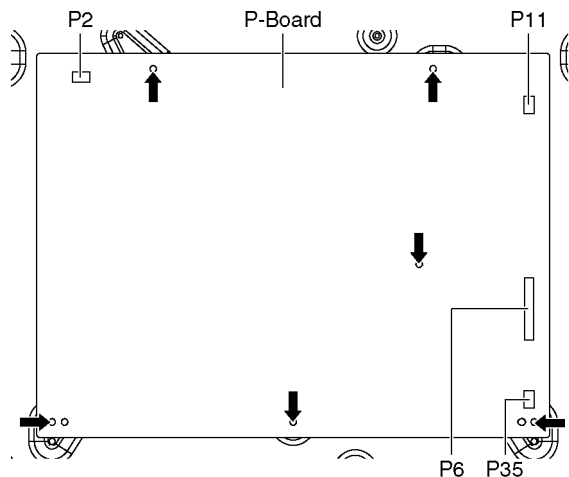


9.2.7. Remove the P-Board

Caution:

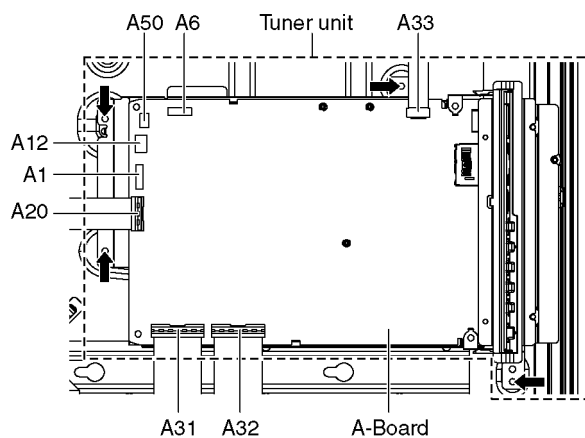
To remove P.C.B. wait 1 minute after power was off for discharge from electrolysis capacitors.

1. Unlock the cable clampers and the tapes to free the cable.
2. Disconnect the connectors (P2, P6, P11 and P35).
3. Remove the screws (×6 ➡) and remove the P-Board.



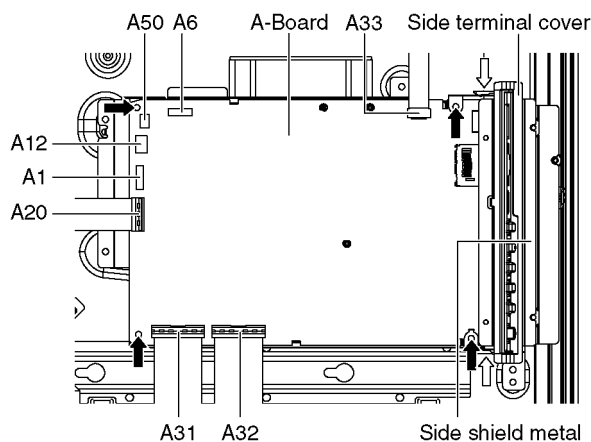
9.2.8. Remove the Tuner unit

1. Unlock the cable clampers and the tapes to free the cables.
2. Disconnect the connectors (A1, A6, A12 and A50).
3. Disconnect the flexible cables (A20, A31, A32 and A33).
4. Remove the screws (×4 ➡) and remove the Tuner unit.



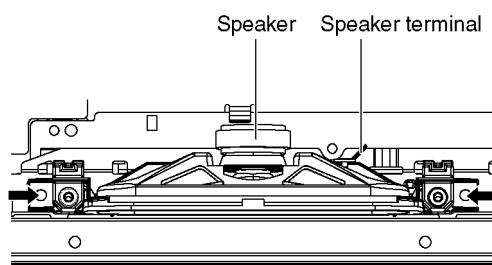
9.2.9. Remove the A-Board

1. Remove the screws (×4 ➡).
2. Remove the claws (×2 ⇔).
3. Remove the Side terminal cover and the Side shield metal.
4. Remove the A-Board.



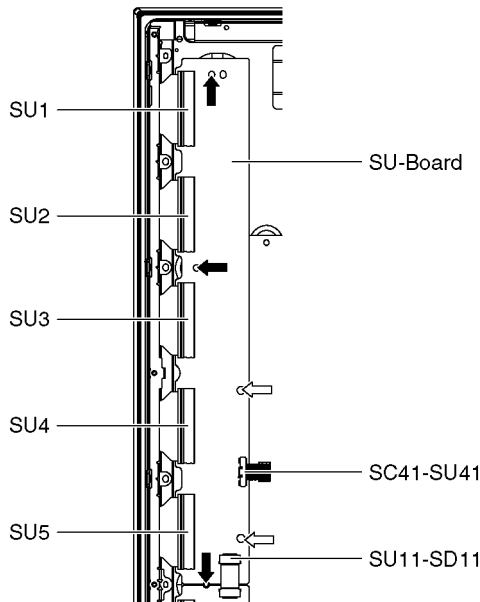
9.2.10. Remove the Speakers

1. Unlock the cable clampers and the tapes to free the cable.
2. Disconnect the Speaker terminal.
3. Remove the screws (×2 ➡ each) and remove the Speakers (L, R).



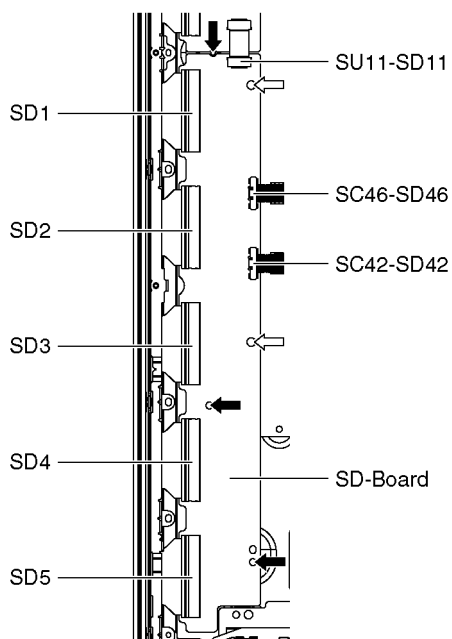
9.2.11. Remove the SU-Board

1. Disconnect the flexible cables (SU1, SU2, SU3, SU4 and SU5) connected to the SU-Board.
2. Disconnect the flexible cable (SU11-SD11) and the bridge connector (SC41-SU41).
3. Remove the screws (×3 ➡, ×2 ⇨) and remove the SU-Board.



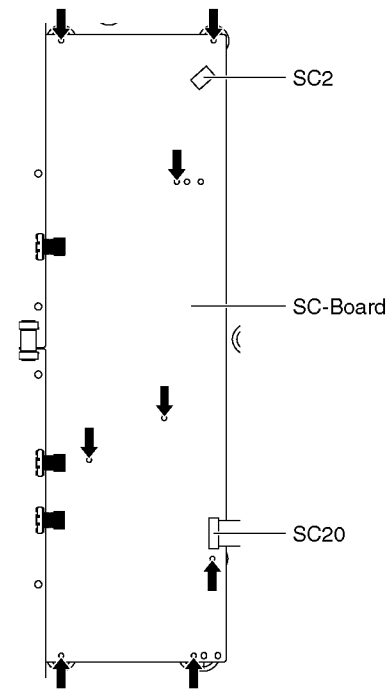
9.2.12. Remove the SD-Board

1. Disconnect the flexible cables (SD1, SD2, SD3, SD4 and SD5) connected to the SD-Board.
2. Disconnect the flexible cable (SU11-SD11) and the bridge connectors (SC42-SD42 and SC46-SD46).
3. Remove the screws (×3 ➡, ×2 ⇨) and remove the SD-Board.



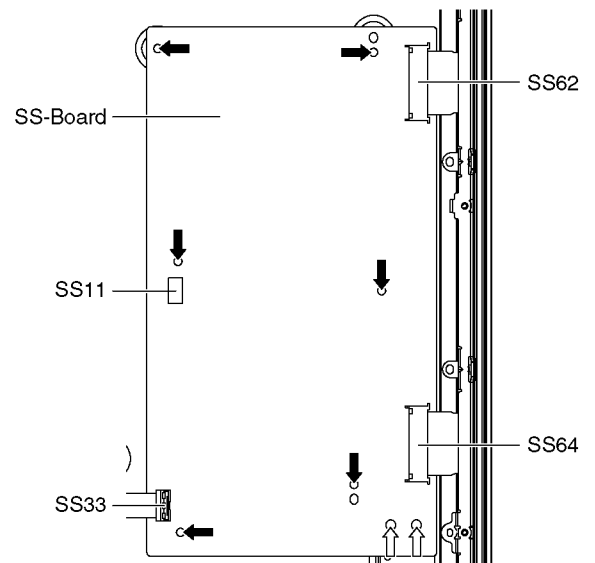
9.2.13. Remove the SC-Board

1. Disconnect the connector (SC2).
2. Disconnect the flexible cable (SC20).
3. Remove the screws (×8 ➡) and remove the SC-Board.



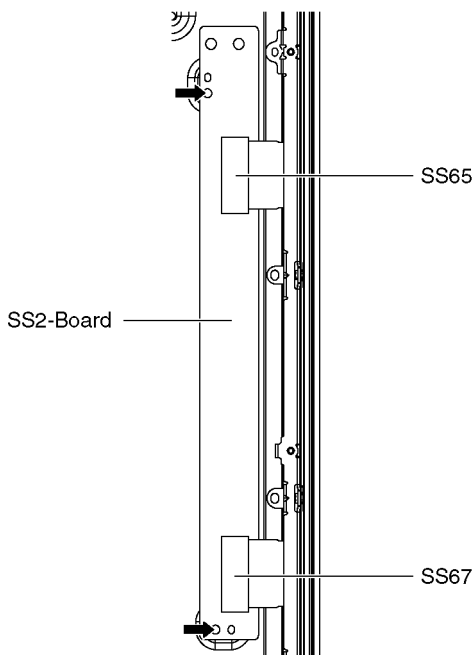
9.2.14. Remove the SS-Board

1. Disconnect the connector (SS11).
2. Disconnect the flexible cable (SS33).
3. Disconnect the flexible cables (SS62 and SS64).
4. Remove the screws (×6 ➡, ×2 ⇨) and remove the SS-Board.



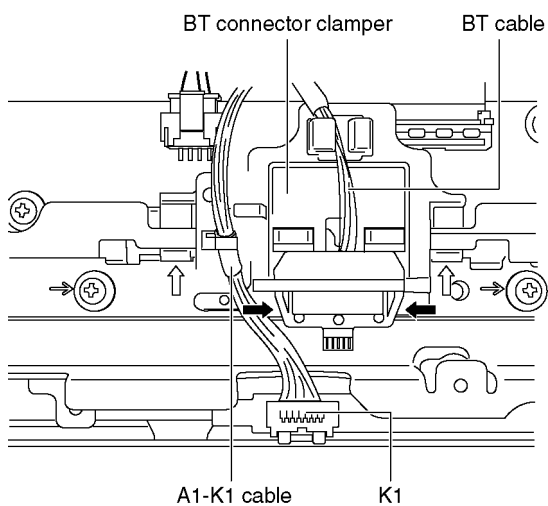
9.2.15. Remove the SS2-Board

1. Disconnect the flexible cables (SS65 and SS67).
2. Remove the screws (×2 ➡) and remove the SS2-Board.



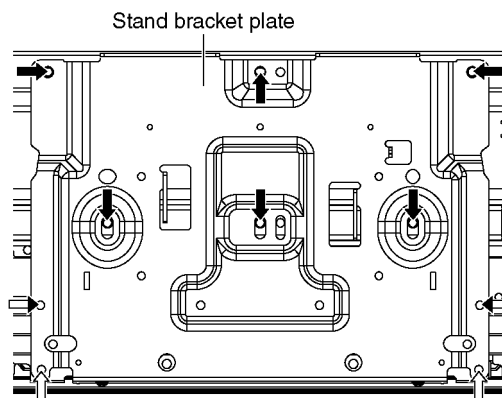
9.2.16. Remove the BT connector clamber

1. Unlock the cable claspers and the tapes to free the cables.
2. Remove the claws (×2 ➡) and remove the BT cable.
3. Disconnect the connector (K1) and remove the A1-K1 cable.
4. Remove the claws (×2 ⇨) and remove the BT connector clamber.



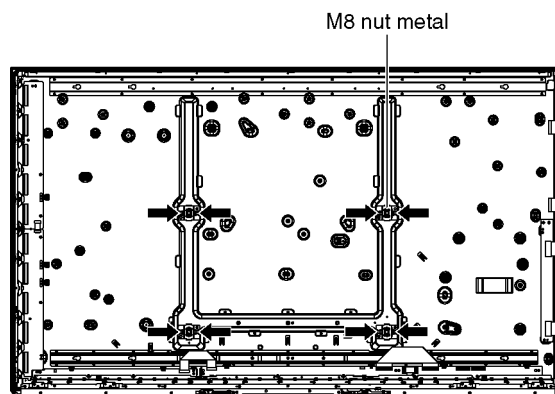
9.2.17. Remove the Stand bracket plate

1. Remove the Stand bracket fastening screws (×6 ➡, ×2 ⇨, ×2 ⇨) and remove the Stand bracket plate.



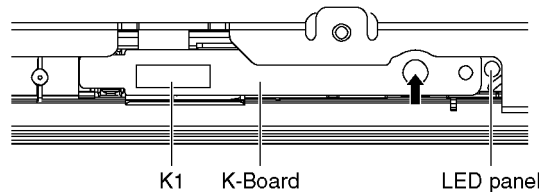
9.2.18. Remove the M8 nut metals

1. Remove the screws (×2 ➡ each) and remove the M8 nut metals.



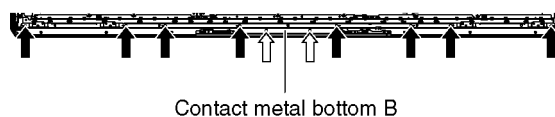
9.2.19. Remove the K-Board

1. Remove the screw (×1 ➡).
2. Disconnect the connector (K1) and remove the K-Board from the LED panel.



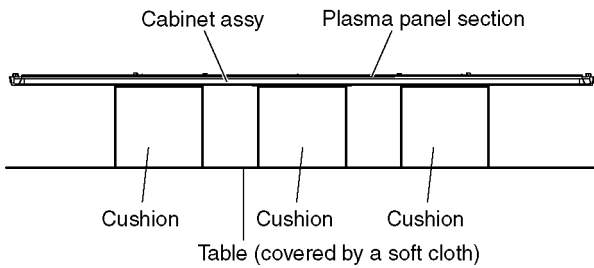
9.2.20. Remove the Contact metal bottom B

1. Remove the screws (×8 ➡, ×2 ⇨).
2. Remove the Contact metal bottom B.

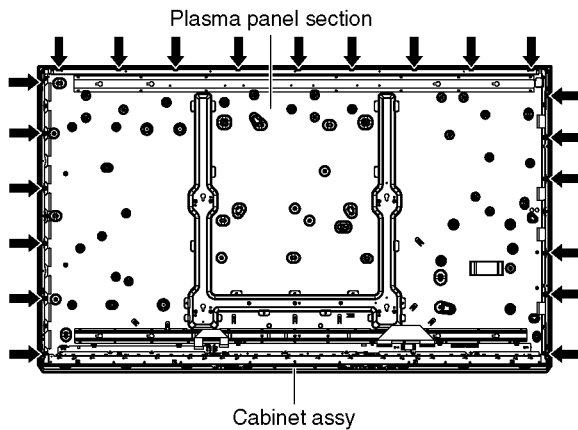


9.2.21. Remove the Cabinet assy from the Plasma panel section

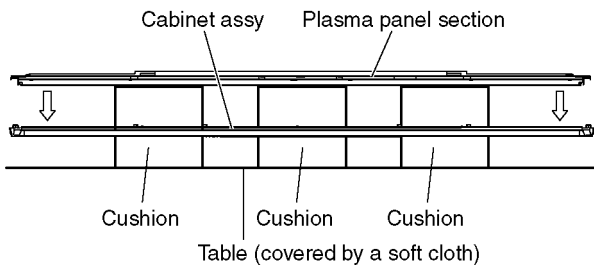
1. Place the Cabinet assy on a flat surface of a table (covered by a soft cloth) and a cushion.



2. Remove the screws (×21 ➡).

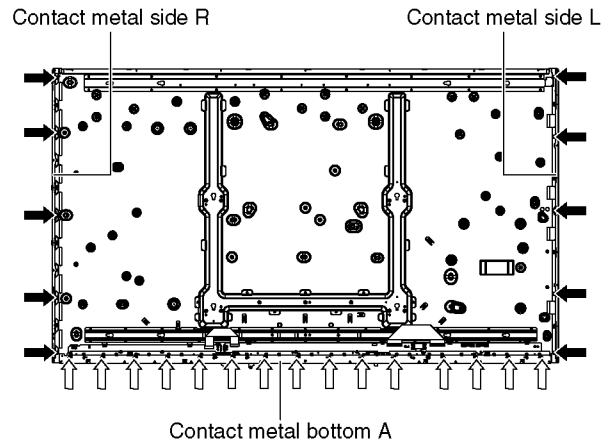


3. Remove the Cabinet assy from the Plasma panel section.



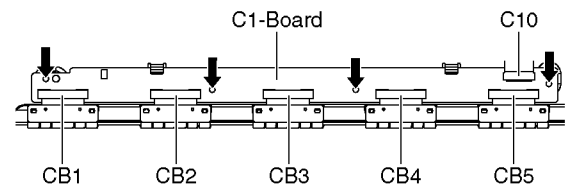
9.2.22. Remove the Contact metals

1. Remove the screws (×10 ➡).
2. Remove the Contact metal side (L, R).
3. Remove the screws (×15 ⇨).
4. Remove the Contact metal bottom A.



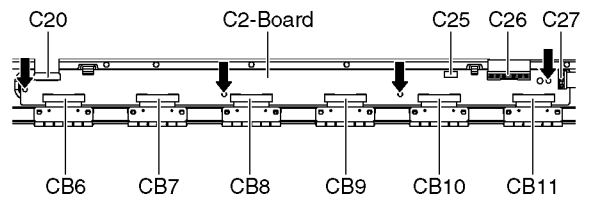
9.2.23. Remove the C1-Board

1. Disconnect the flexible cables (CB1, CB2, CB3, CB4 and CB5).
2. Disconnect the flexible cable (C10).
3. Remove the screws (×4 ➡) and remove the C1-Board.



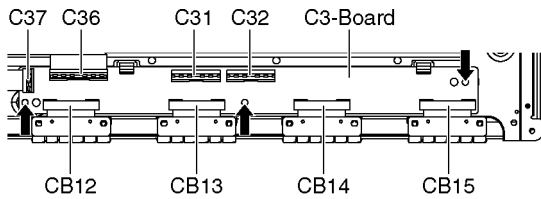
9.2.24. Remove the C2-Board

1. Disconnect the flexible cables (CB6, CB7, CB8, CB9, CB10 and CB11).
2. Disconnect the flexible cables (C20, C26 and C27).
3. Disconnect the connector (C25).
4. Remove the screws (×4 ➡) and remove the C2-Board.



9.2.25. Remove the C3-Board

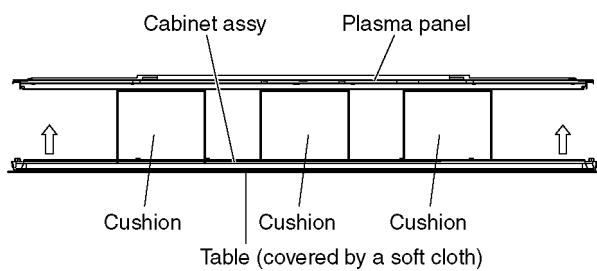
1. Disconnect the flexible cables (CB12, CB13, CB14 and CB15).
2. Disconnect the flexible cables (C31, C32, C36 and C37).
3. Remove the screws (×3 ➡) and remove the C3-Board.



9.2.26. Replace the Plasma panel

Caution:

Place the Plasma panel on a flat surface of a table (covered by a soft cloth) and a cushion.



A new Plasma panel itself without Contact metals is fragile. To avoid the damage to new Plasma panel, carry a new Plasma panel taking hold of the Contact metals.

1. Place a carton box packed a new Plasma panel on the flat surface of the work bench.
2. Open a box and without taking a new Plasma panel.
3. Attach the Cabinet assy and each P.C.Board and so on, to the new Plasma panel.

10 Measurements and Adjustments

10.1. Adjustment

10.1.1. Vsus selection

Caution:

When Plasma panel or A-board is replaced, Vsus should be set to LOW or HIGH.

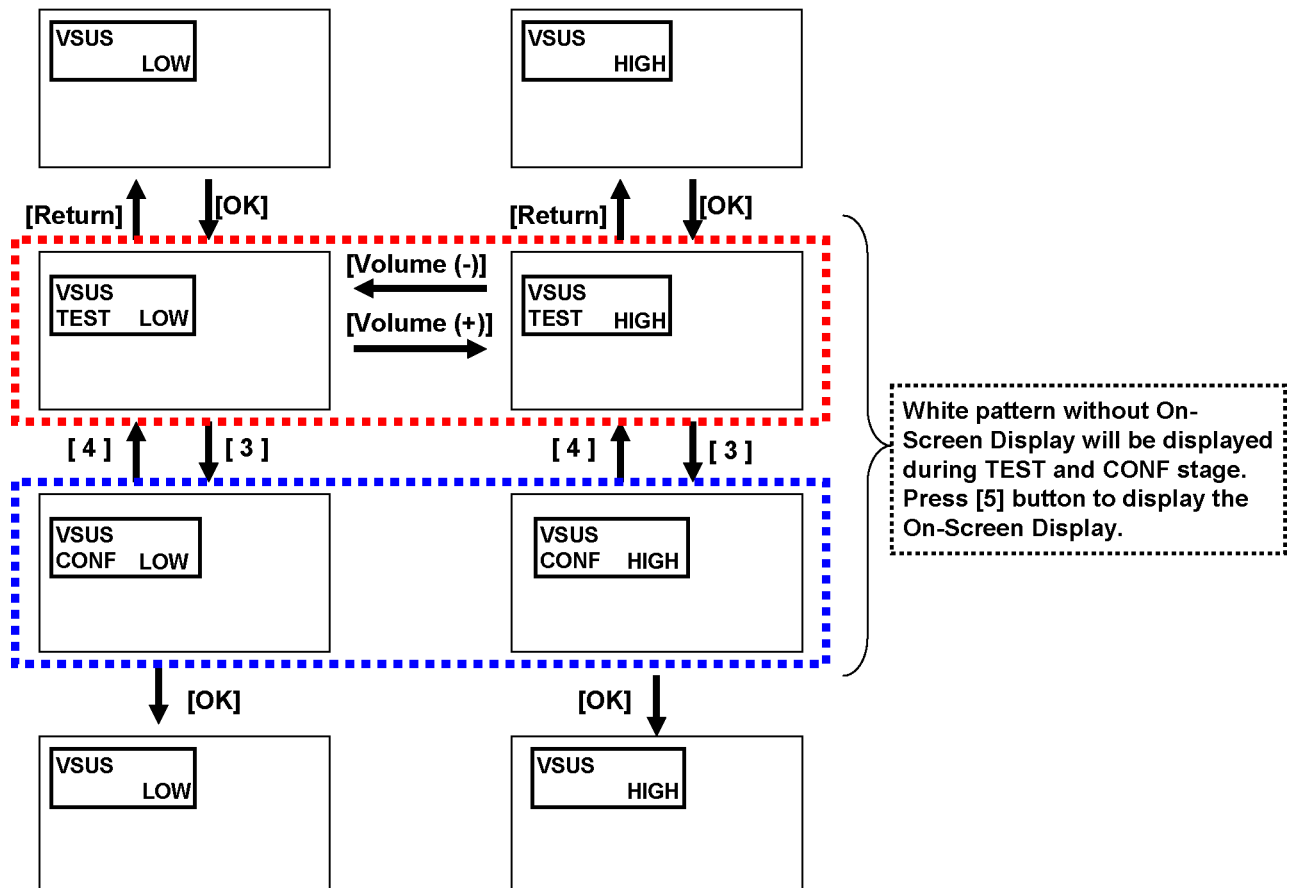
Procedure

1. Go into main item [VSUS] in Service Mode. LOW or HIGH will be displayed.
2. Press [OK] button to go to TEST stage.
White pattern without On-Screen Display will be displayed during TEST and CONF stage. Press [5] button to display the On-Screen Display.
3. Press [VOL (-)] button to set to LOW.
4. In LOW setting
 - a. If no several dead pixel is visible remarkably in white pattern, press [3] button to go to CONF stage.
 - b. If the several dead pixels are visible remarkably in white pattern, Set to HIGH by press [VOL (+)] button. Press [3] button to go to CONF stage if the symptom is improved.
5. Press [OK] button in CONF stage to store LOW or HIGH.
6. Exit Service Mode by pressing [Power] button.

Notes:

Do not overwrite because data is written in Peaks-EEPROM after executing adjustment of V-SUS Voltage.

Vsus selection in Service mode

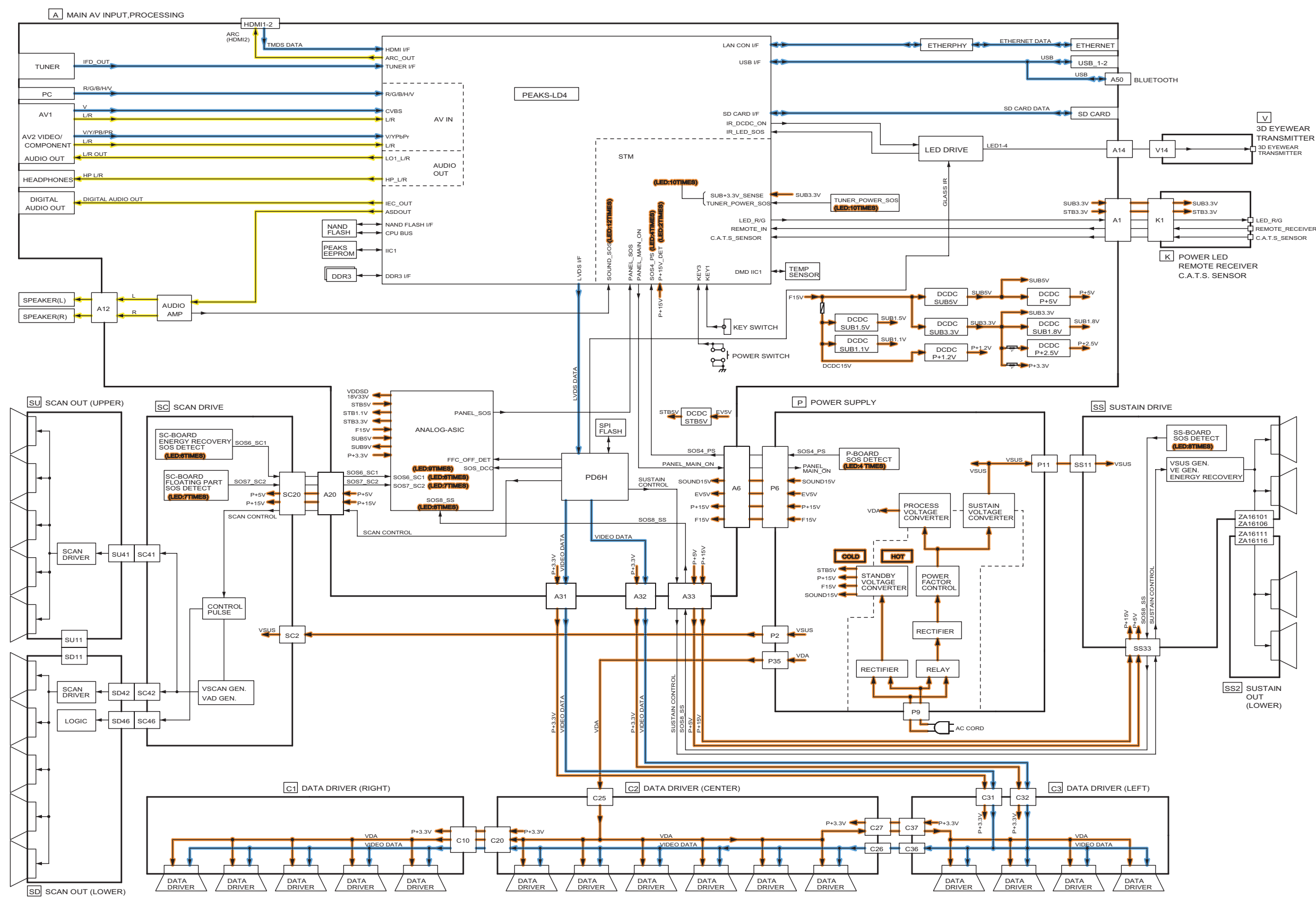


10.1.2. White balance adjustment

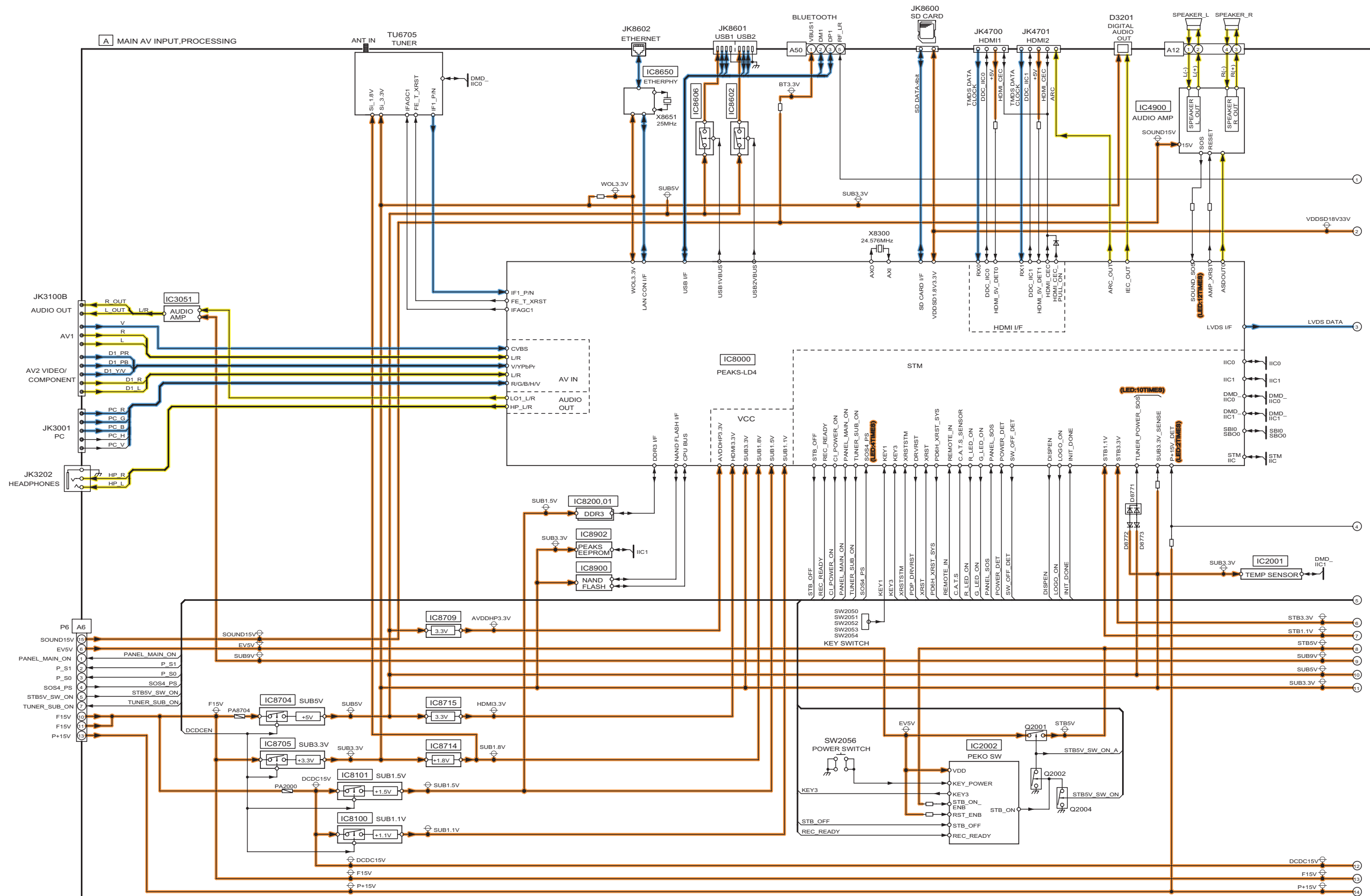
Name of measuring instrument	Remarks																										
Color analyzer (Minolta CS-2000 or equivalent)																											
Procedure	Remarks																										
1. Enter the Service mode. 2. Receive the Analog-RF (except for no signal) or set CVBS/YUV/HDMI (no signal is available). 3. Select [WB-ADJ] by using [1] and [2] key in the remote controller. 4. Check that the colour balance and the viewing mode is the values written in table1 and 2. 5. [INNER PATTERN] is displayed by using [5] key by using [5] key in the remote controller. 6. Select [G-CUTOFF] by using the [3] and [4] key in the remote controller, and set the value to [80] by using the volume [+] and [-] key. Also, [B-CUTOFF] and [R-CUTOFF] set to [80] 7. Set [G-DRIVE] value to the initial data (ex. D0). 8. Set the color analyzer and adjust color point to the values written in table1 by using [B-DRIVE] and [R-DRIVE] 9. Increase RGB-DRIVE value so that the maximum drive value of one of R-DRIVE or G-DRIVE or B-DRIVE should become [FF] ([ALL-DRIVE] set to [FF].) Table 1 : White Balance Target value <table><tr><th colspan="2">COOL</th><th colspan="2">NORMAL</th><th colspan="2">WARM</th></tr><tr><th>x</th><th>y</th><th>x</th><th>y</th><th>x</th><th>y</th></tr><tr><td>0.267</td><td>0.269</td><td>0.288</td><td>0.296</td><td>0.313</td><td>0.326</td></tr></table> Table2 : Setting of Viewing Mode <table><tr><th>Colour Balance</th><th>Viewing Mode</th></tr><tr><td>Cool</td><td>Dynamic</td></tr><tr><td>Normal</td><td>Dynamic</td></tr><tr><td>Warm</td><td>Cinema</td></tr></table>	COOL		NORMAL		WARM		x	y	x	y	x	y	0.267	0.269	0.288	0.296	0.313	0.326	Colour Balance	Viewing Mode	Cool	Dynamic	Normal	Dynamic	Warm	Cinema	
COOL		NORMAL		WARM																							
x	y	x	y	x	y																						
0.267	0.269	0.288	0.296	0.313	0.326																						
Colour Balance	Viewing Mode																										
Cool	Dynamic																										
Normal	Dynamic																										
Warm	Cinema																										

11 Block Diagram

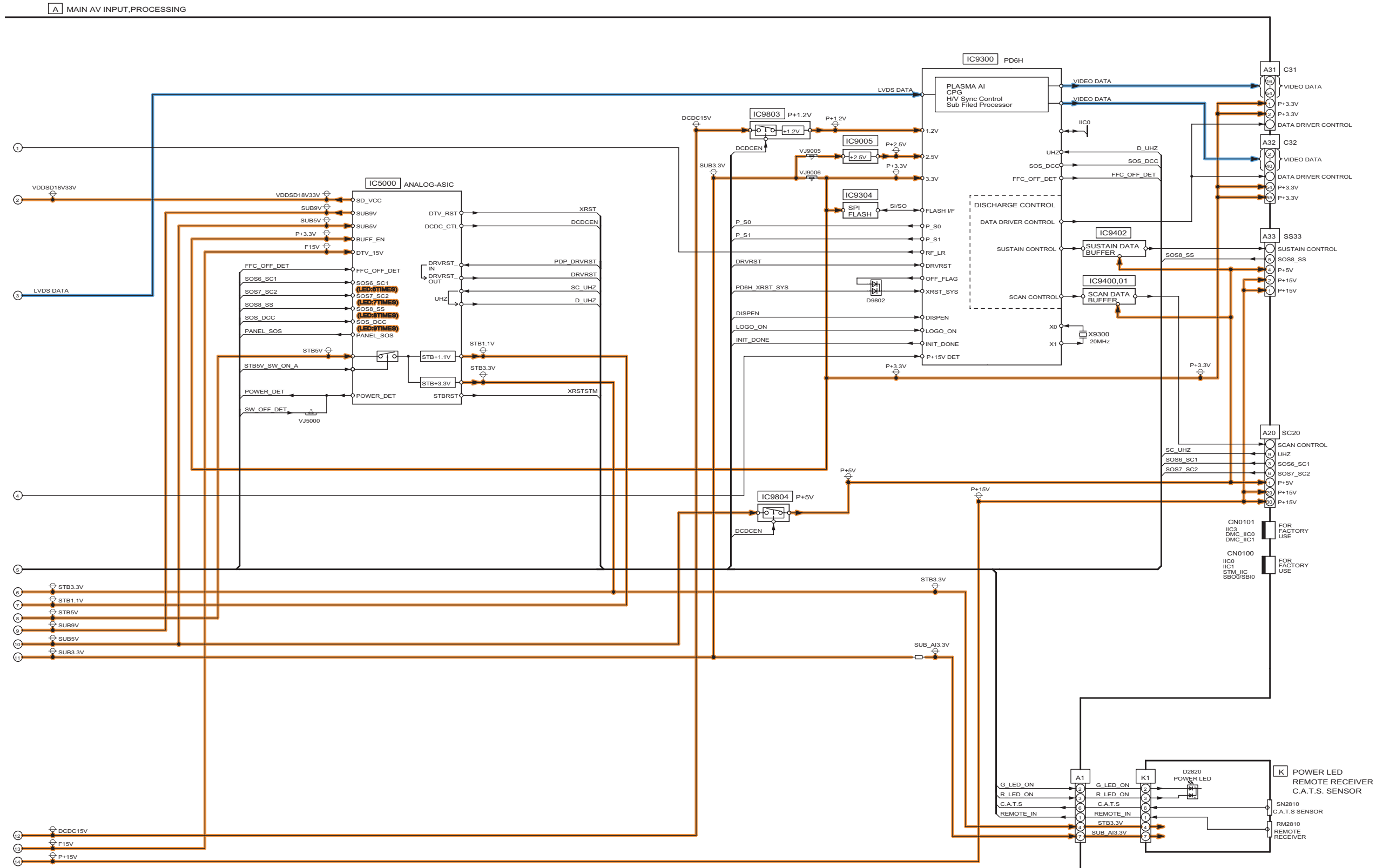
11.1. Main Block Diagram



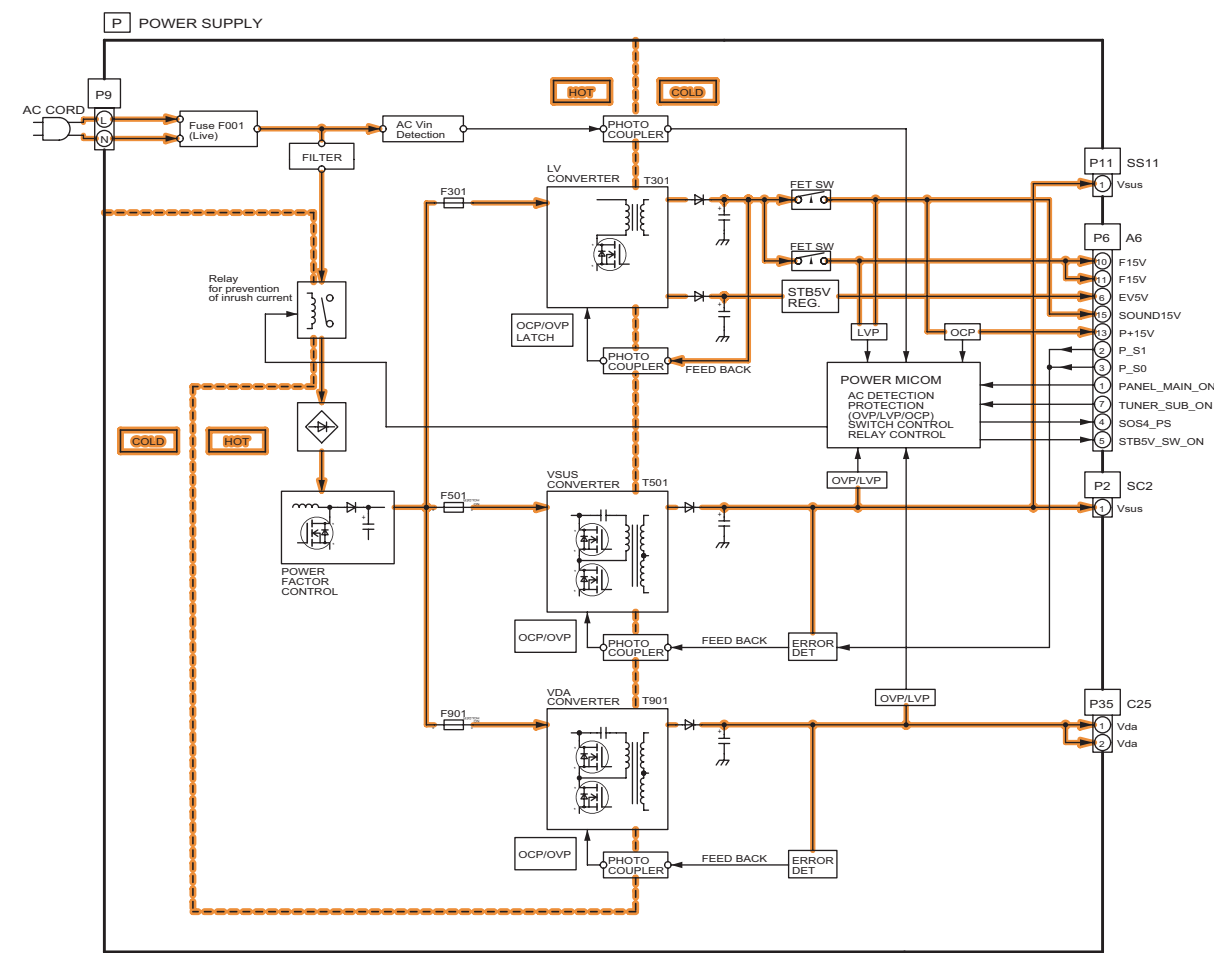
11.2. Block (1/4) Diagram



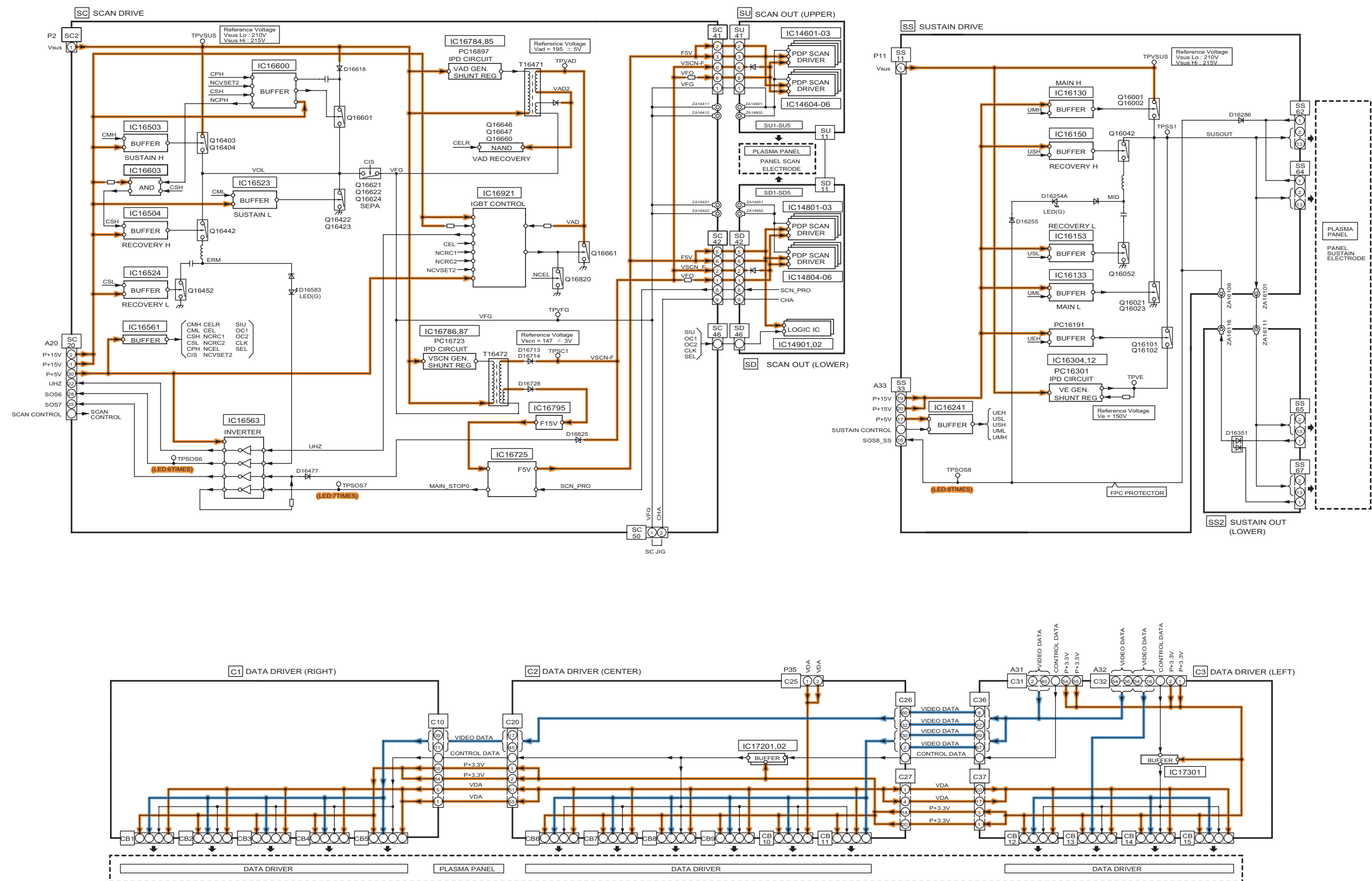
11.3. Block (2/4) Diagram



11.4. Block (3/4) Diagram



11.5. Block (4/4) Diagram



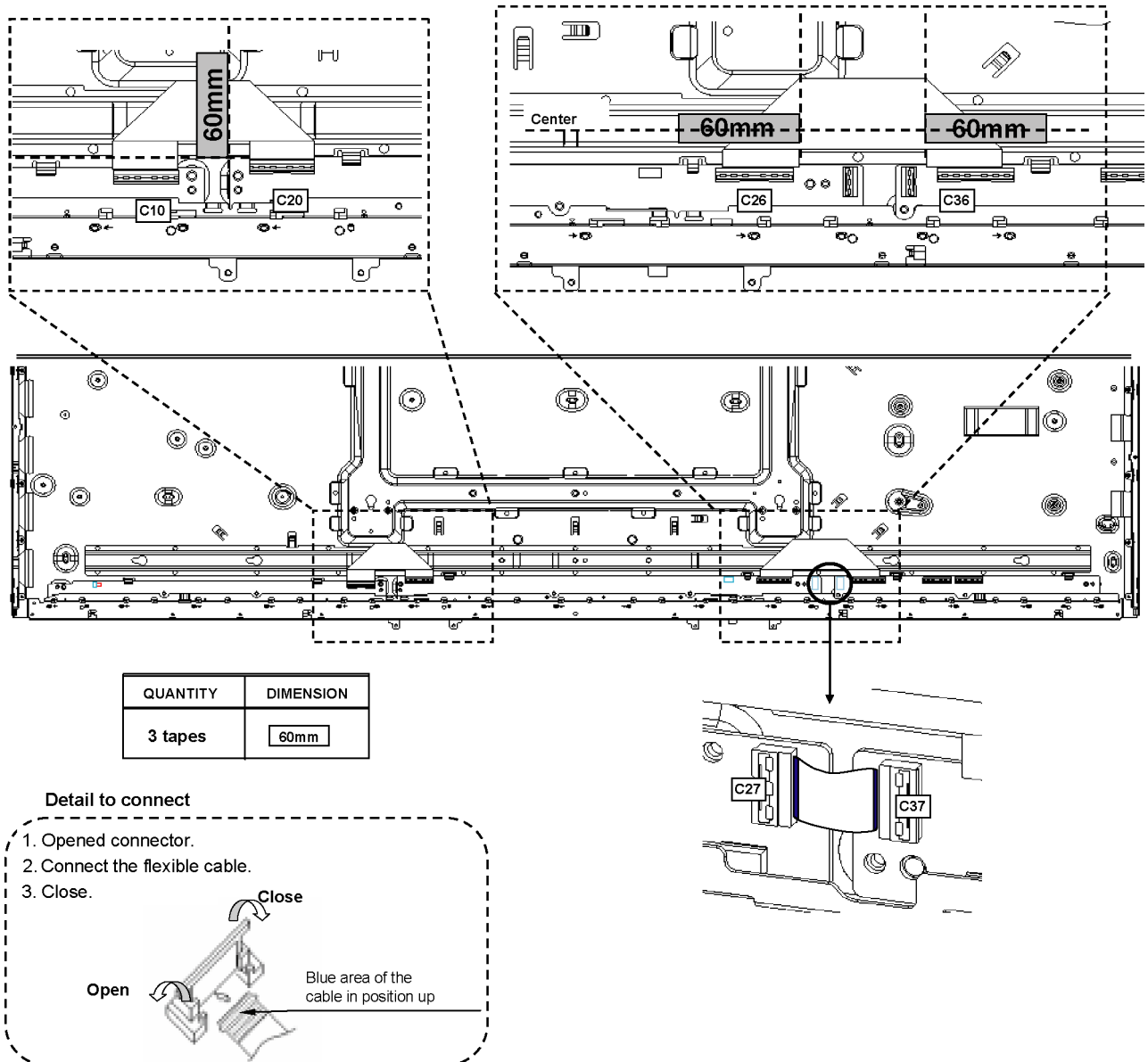
12 Wiring Connection Diagram

12.1. Caution statement.

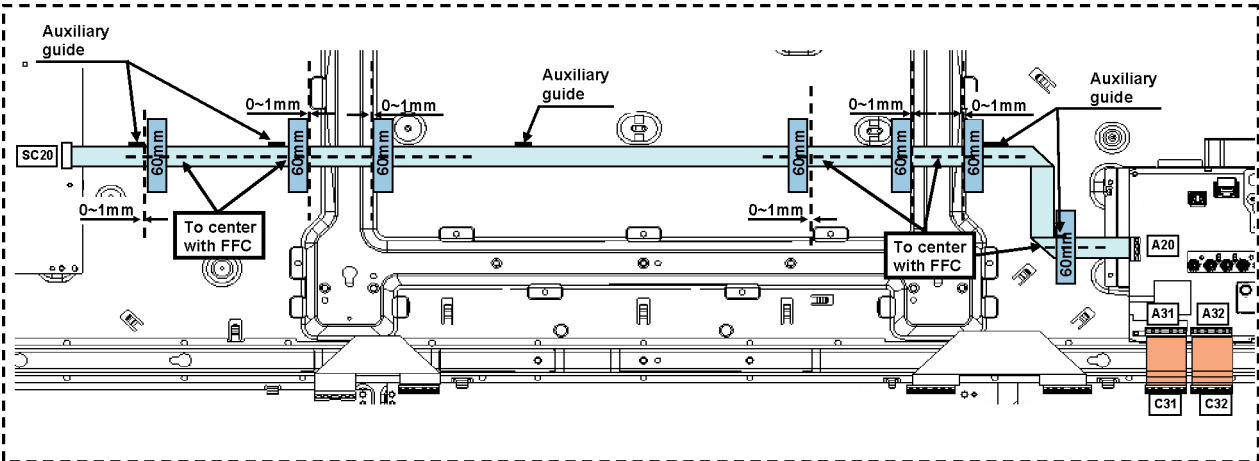
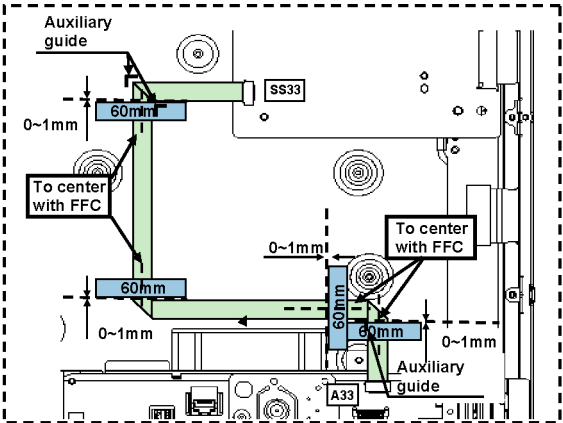
Caution:

Please confirm that all flexible cables are assembled correctly.
Also make sure that they are locked in the connectors.
Verify by giving the flexible cables a very slight pull.

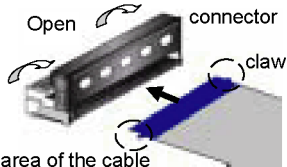
12.2. Wiring (1)



12.3. Wiring (2)

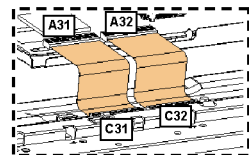


Please open and close the connector by using both hands.



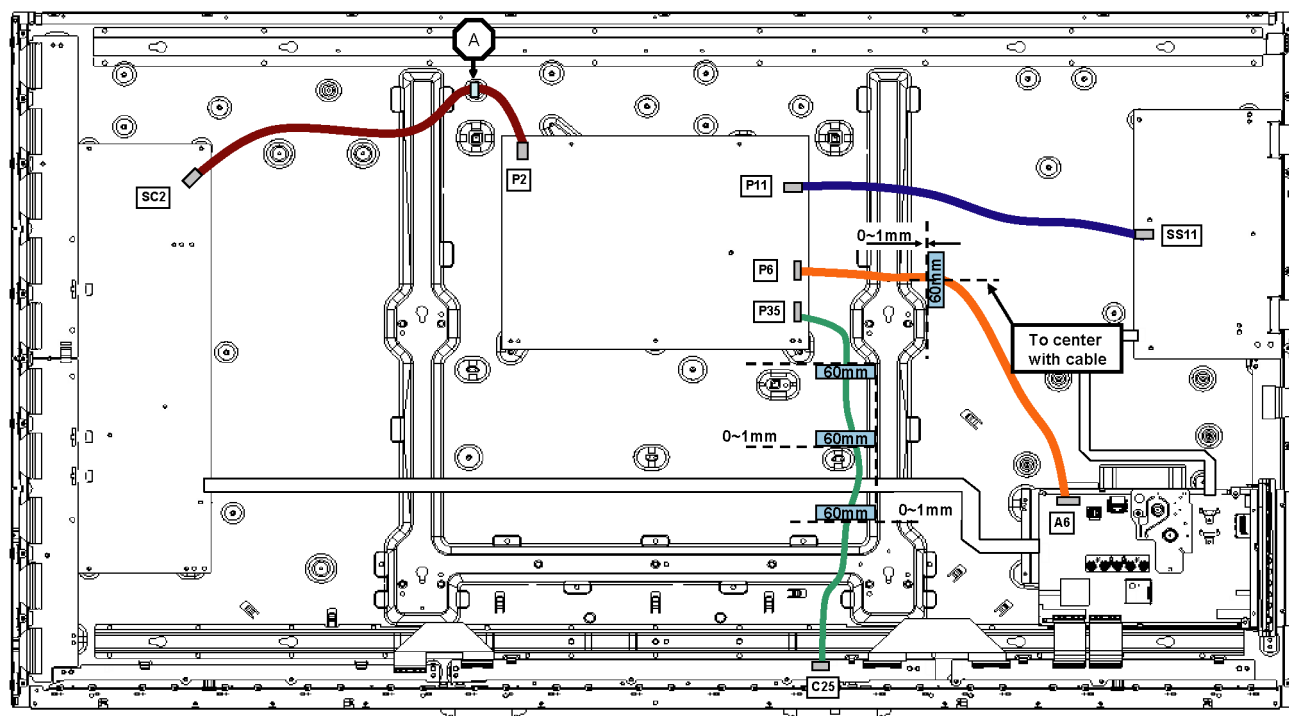
Note: When disconnect the flexible cable, disconnect the flexible cable after removing the connector.

Note: Confirm the flexible cables is firmly connected.



QUANTITY	DIMENSION
11 tapes	60mm

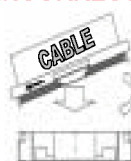
12.4. Wiring (3)



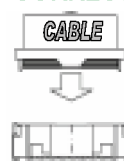
CABLE	A
SC2-P2	●

Note.
Install the cable correctly
please insert the connector straight.

INCORRECT

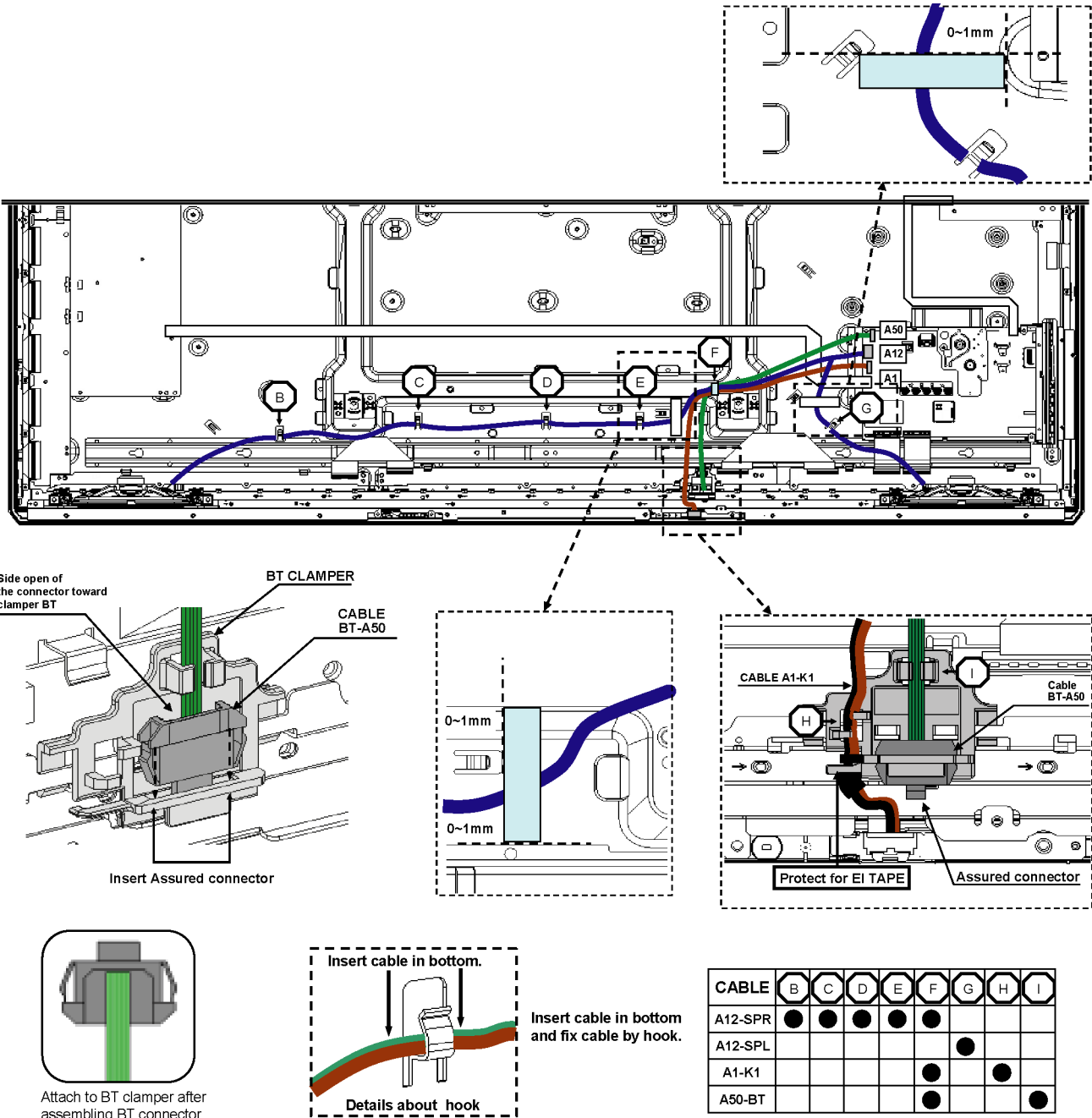


CORRECT

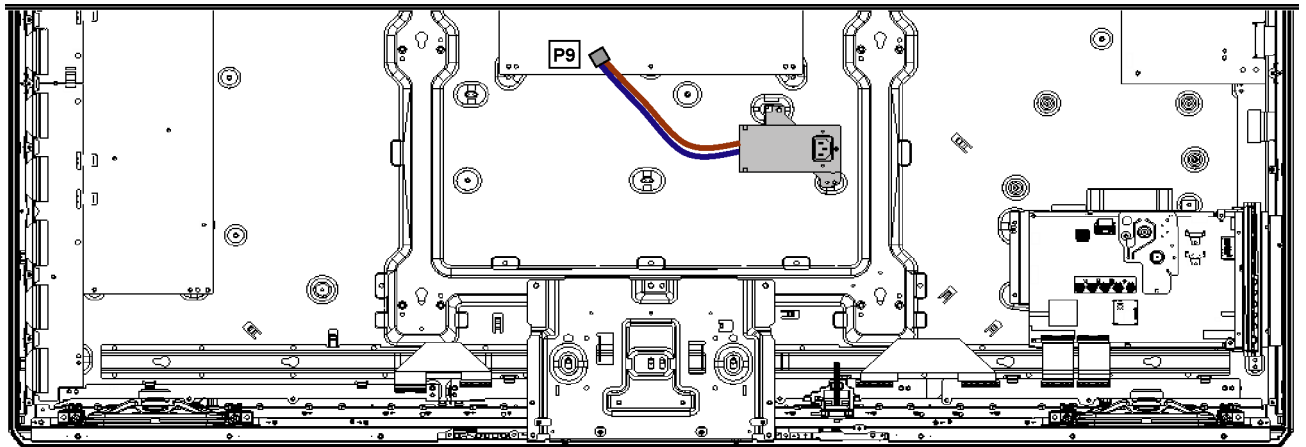


CONNECTOR

12.5. Wiring (4)



12.6. Wiring (5)



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 AC 220-240V, 50/60Hz
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.

Notice: Use the parts number indicated on the Replacement parts List.

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.

Model No. : TH-P60UT50A/M/P/Z Replacement Parts List Note

Note: All parts except parts mentioned [PAVCTH] in the Remarks column are supplied by AVC-CSPC.
Parts mentioned [PAVCTH] are supplied by PAVCTH.

Notice: Be sure to make your orders of replacement parts according to this list.

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

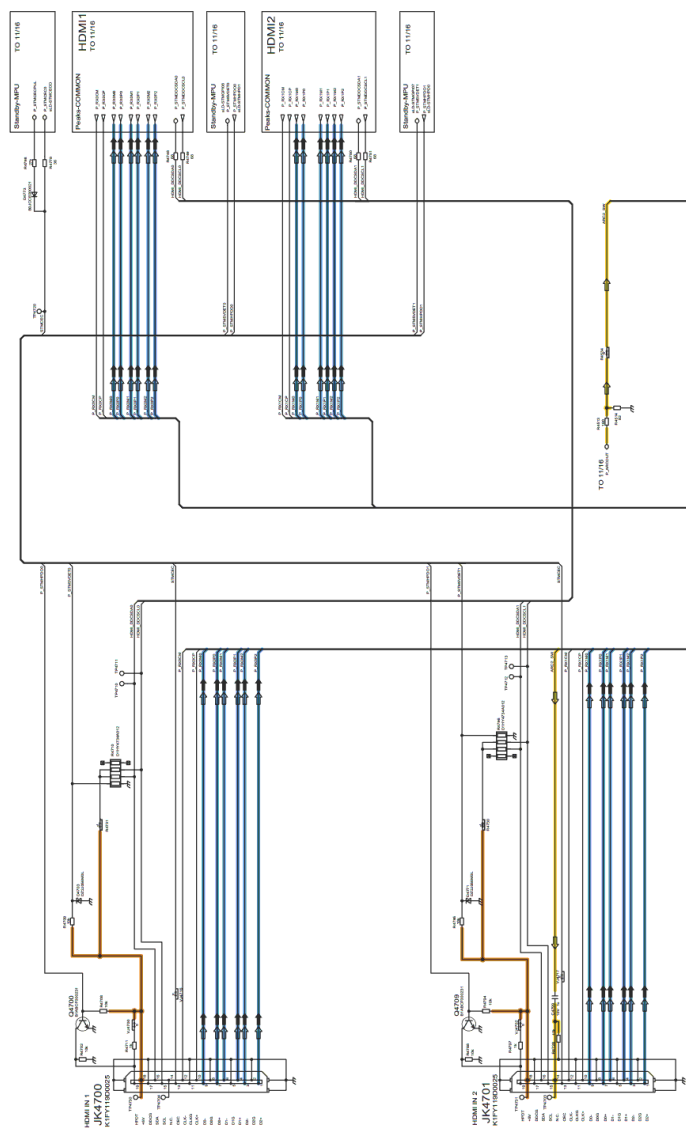
2. Capacitor

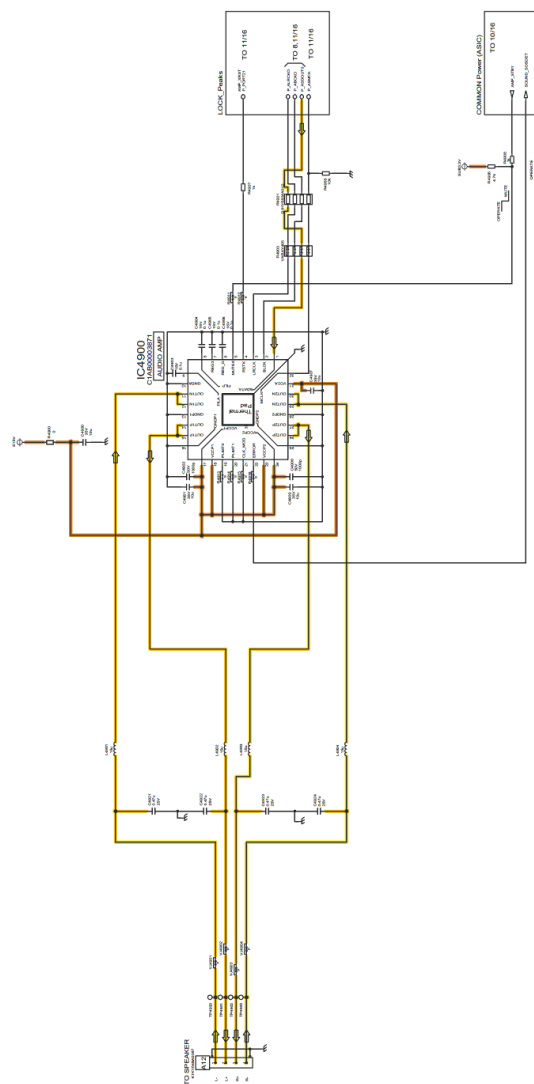
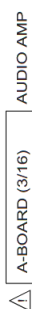
Example:

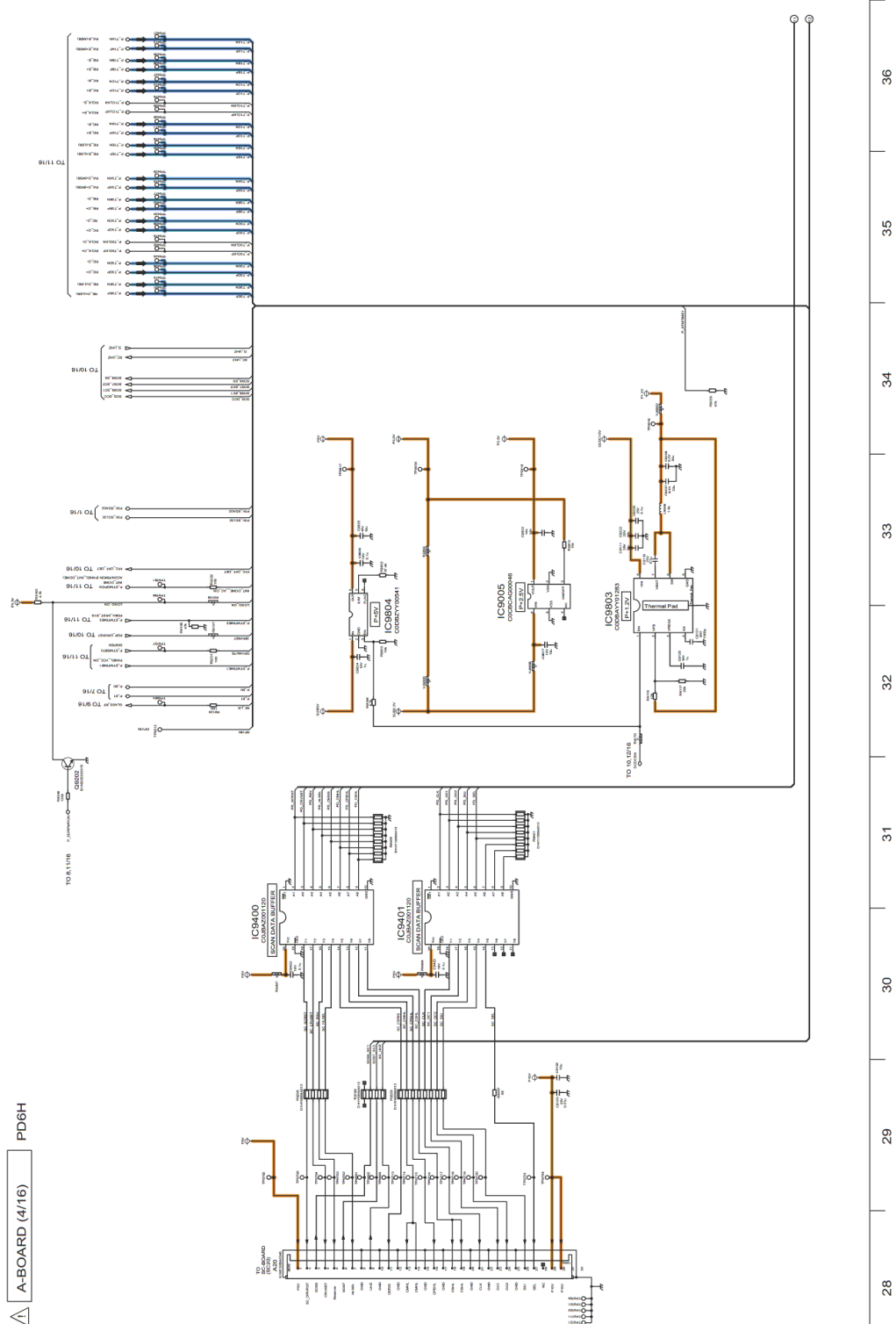
ECKF1H103ZF C 0.01UF, Z, 50V
 Type Allowance

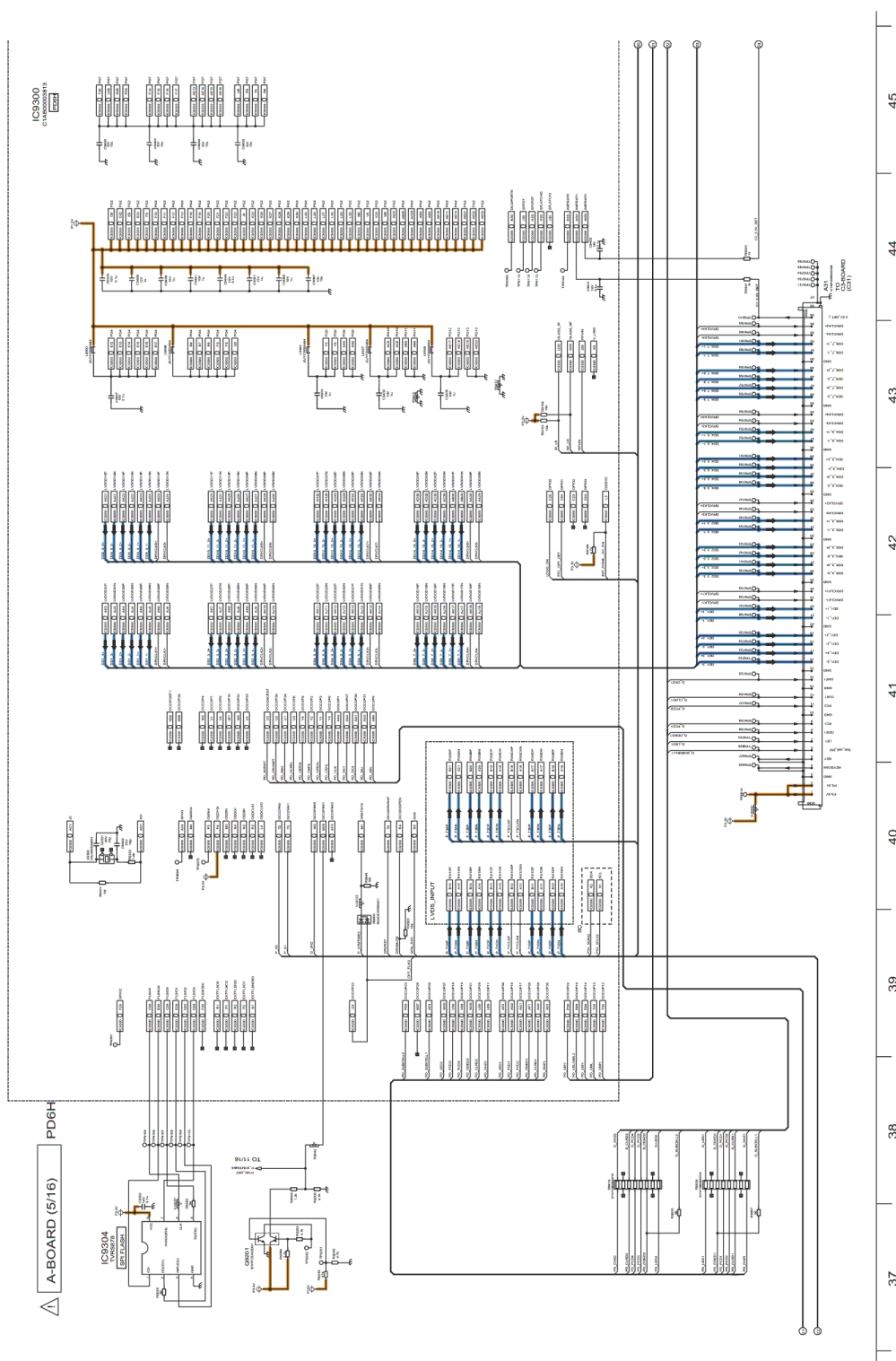
Type	Allowance
C : Carbon	F : $\pm 1\%$
F : Fuse	G : $\pm 2\%$
M : Metal Oxide	J : $\pm 5\%$
Metal Film	K : $\pm 10\%$
S : Solid	M : $\pm 20\%$
W : Wire Wound	

Type	Allowance
C : Ceramic	C : $\pm 0.25\text{pF}$
E : Electrolytic	D : $\pm 0.5\text{pF}$
P : Polyester	F : $\pm 1\text{pF}$
Polypropylene	G : $\pm 3\text{pF}$
T : Tantalum	J : $\pm 5\text{pF}$
	K : $\pm 10\text{pF}$
	L : $\pm 15\text{pF}$
	M : $\pm 20\text{pF}$
	P : +100%, -0%
	Z : +80%, -20%







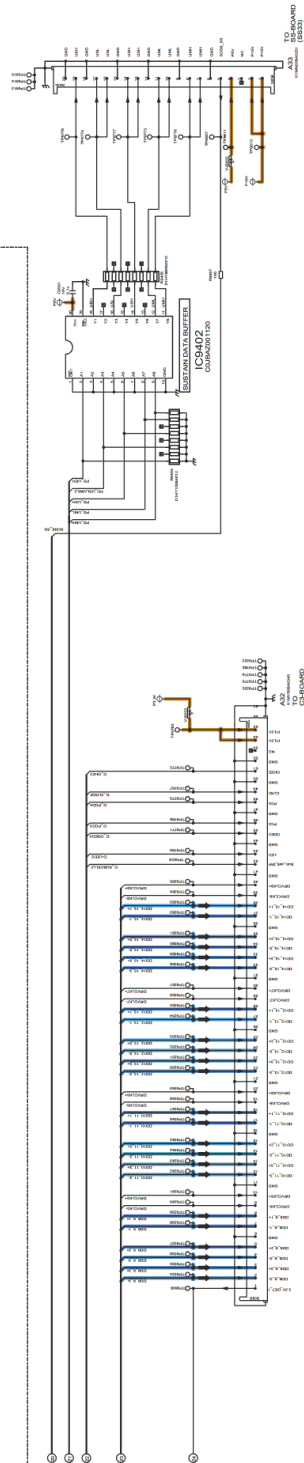
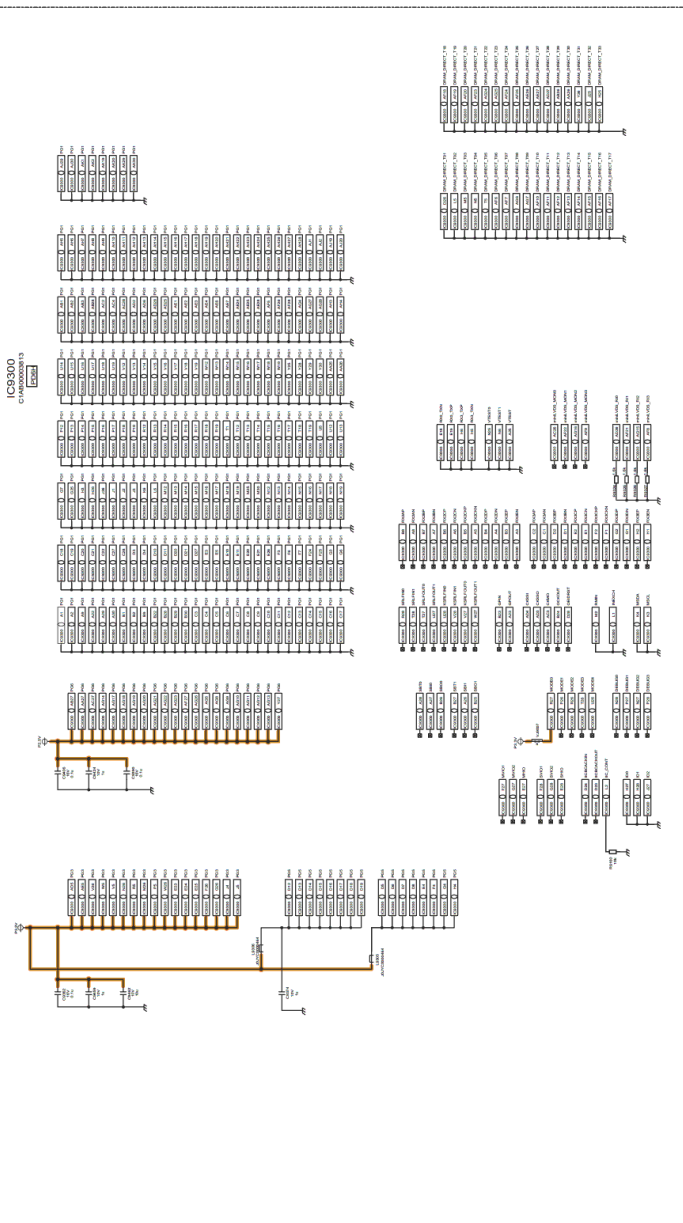


PD6H

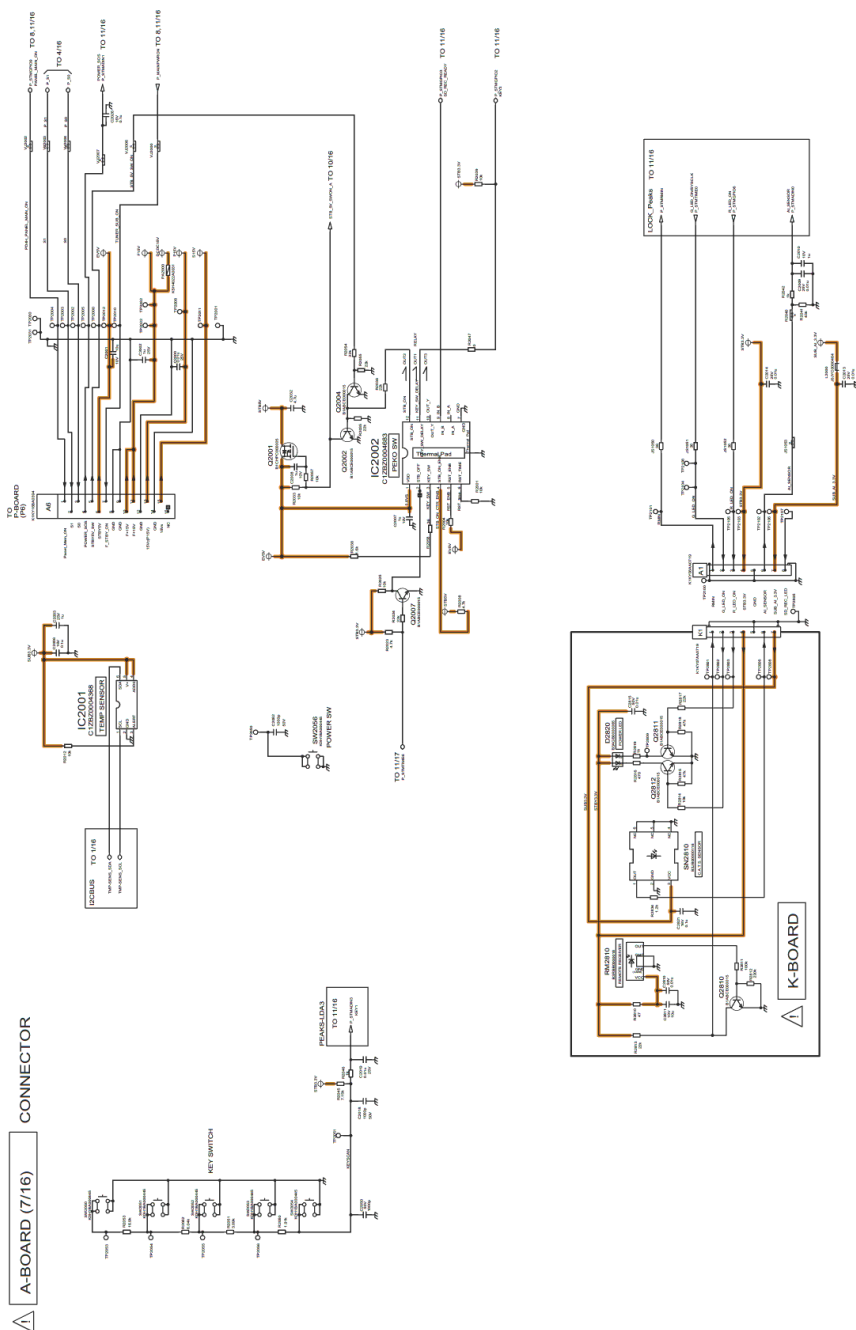
A-BOARD (6/16)

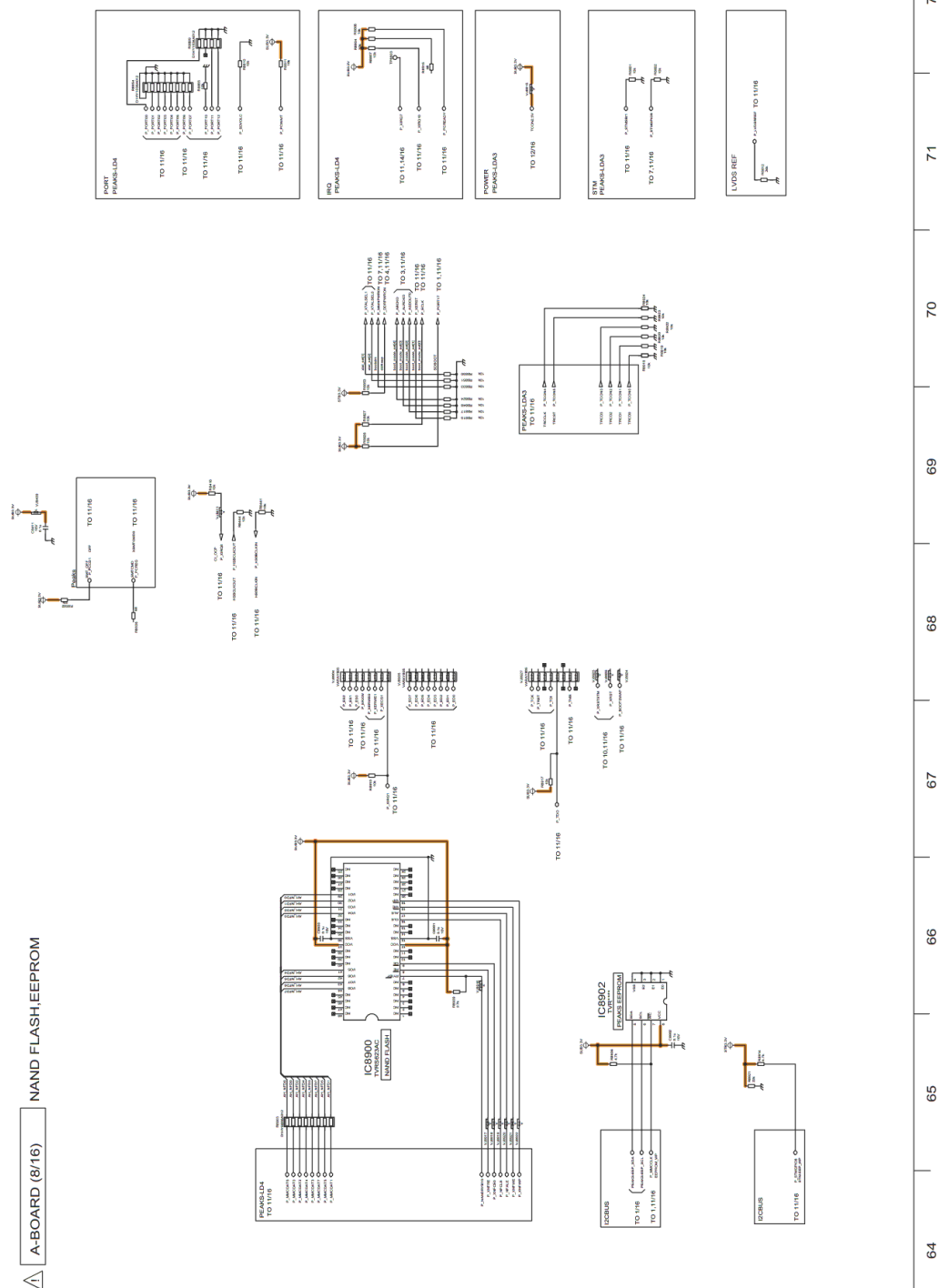


IC9300
CM60000N13

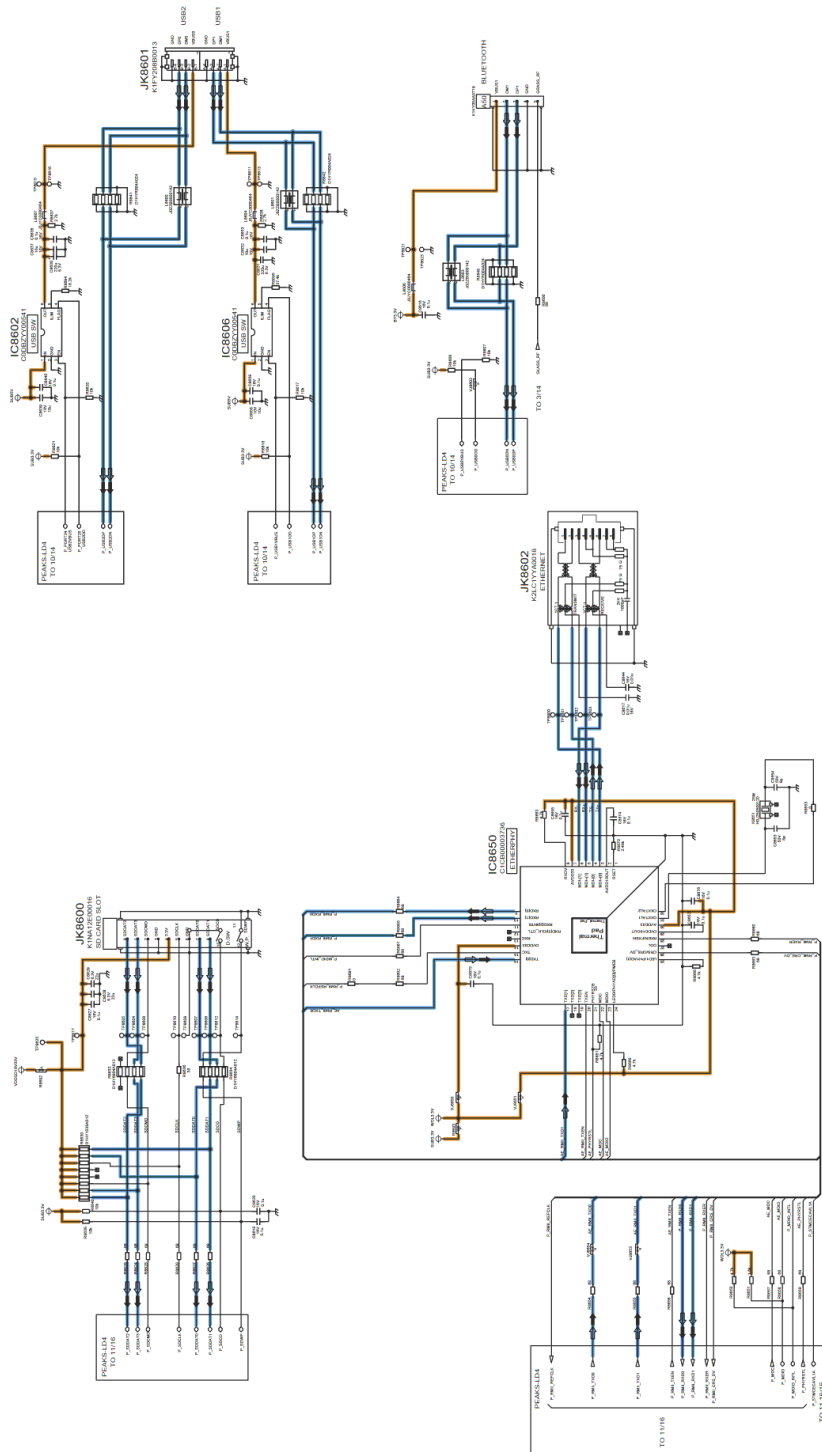


46 47 48 49 50 51 52 53 54

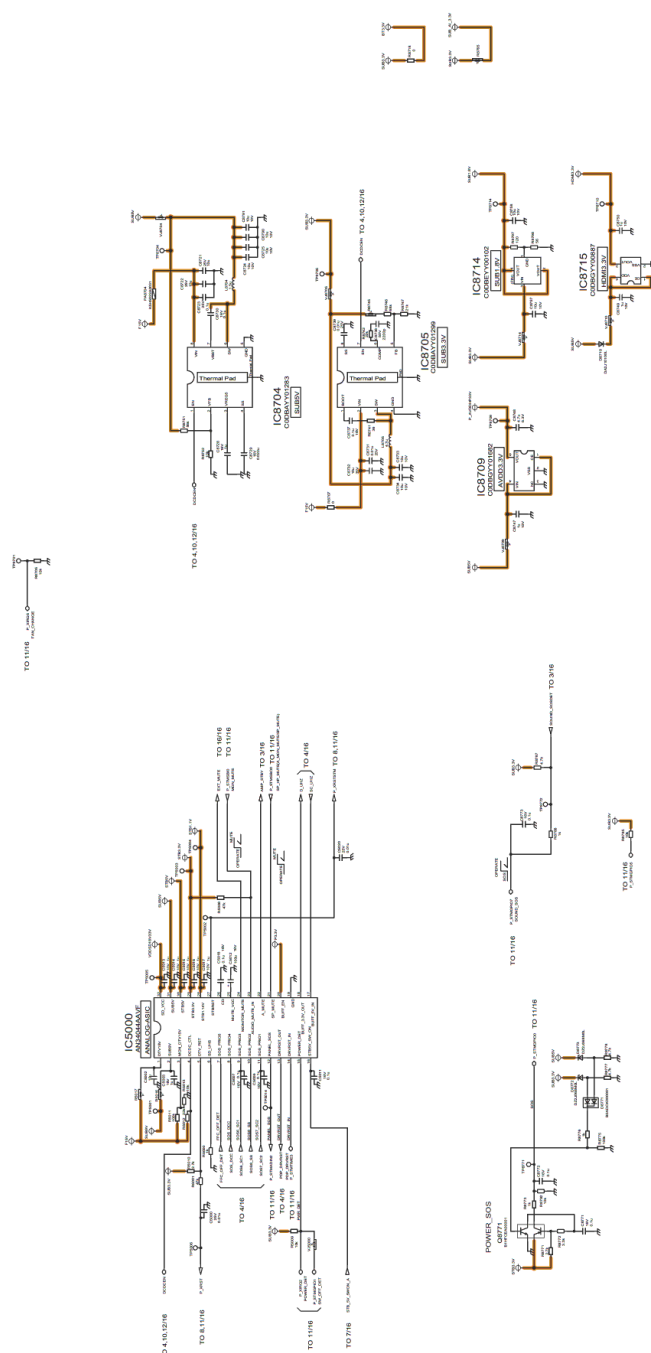




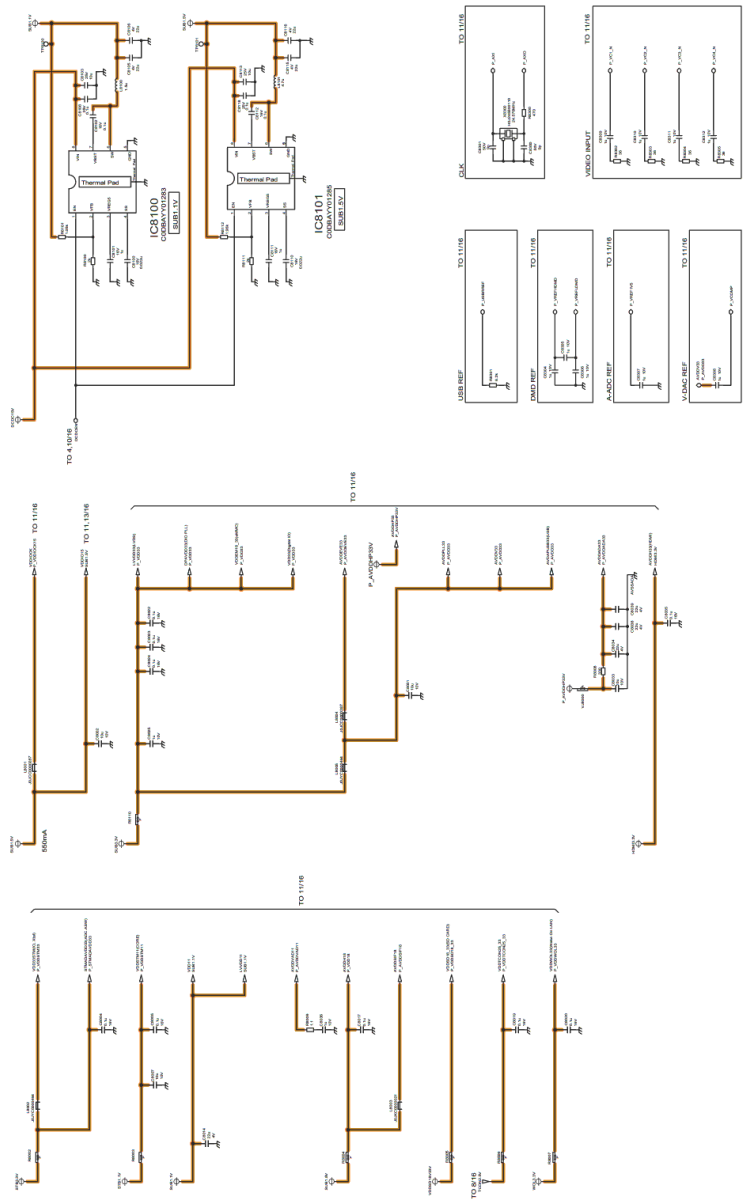
△ A-BOARD (9/16) SD SLOT,ETHERPHY,USB,BLUETOOTH



73 74 75 76 77 78 79 80 81

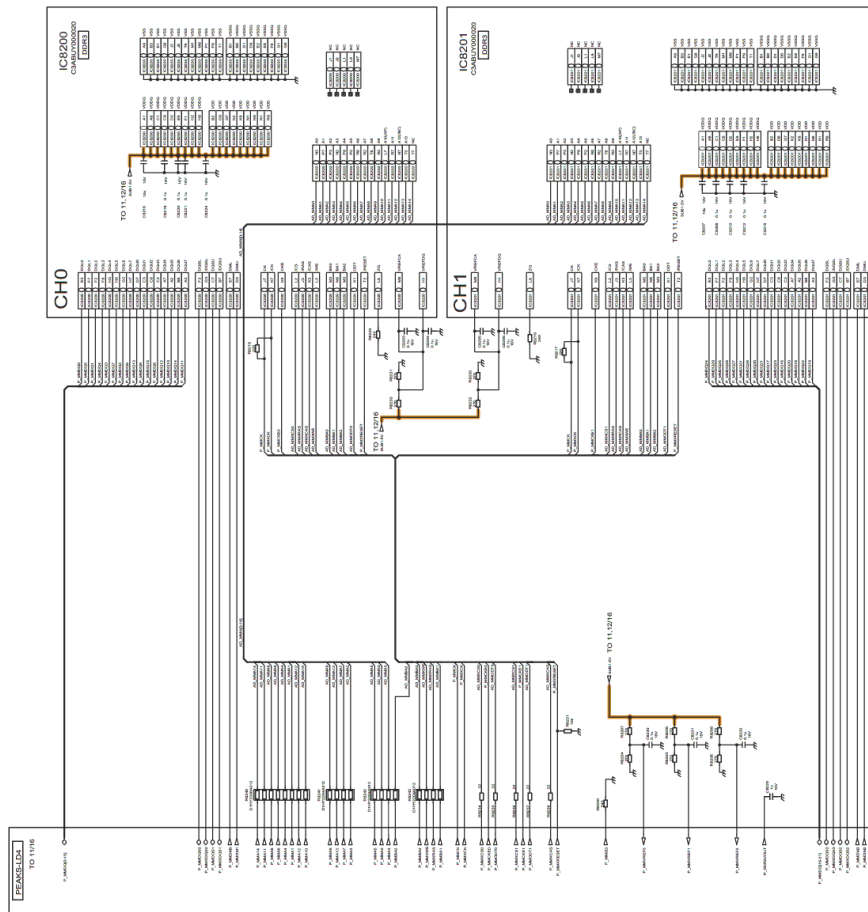


△ A-BOARD (12/16) PEAKS POWER



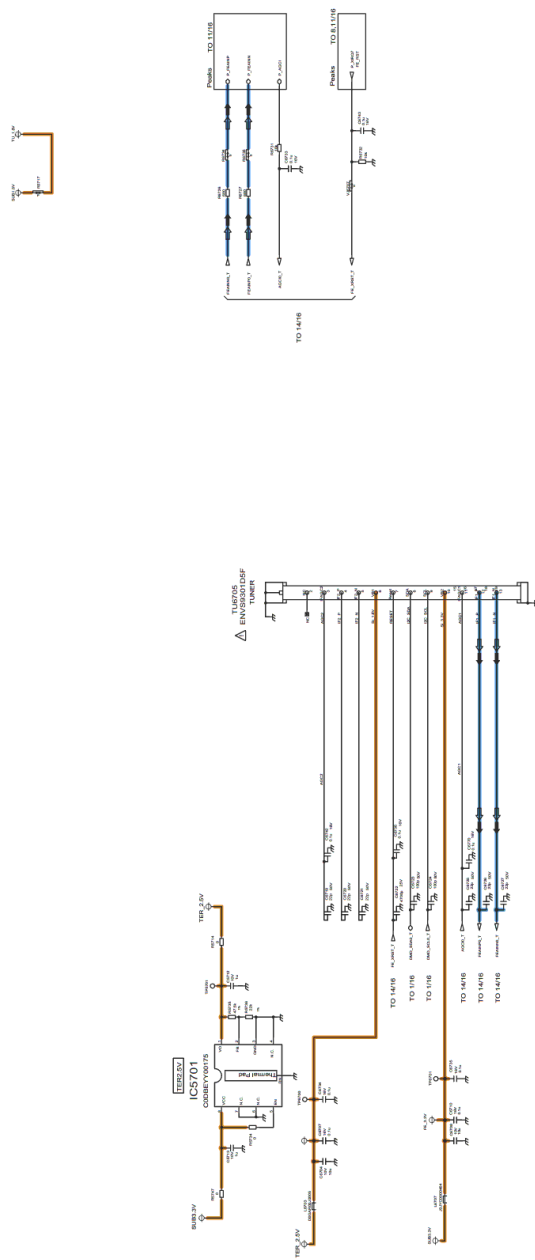
100 101 102 103 104 105 106 107 108

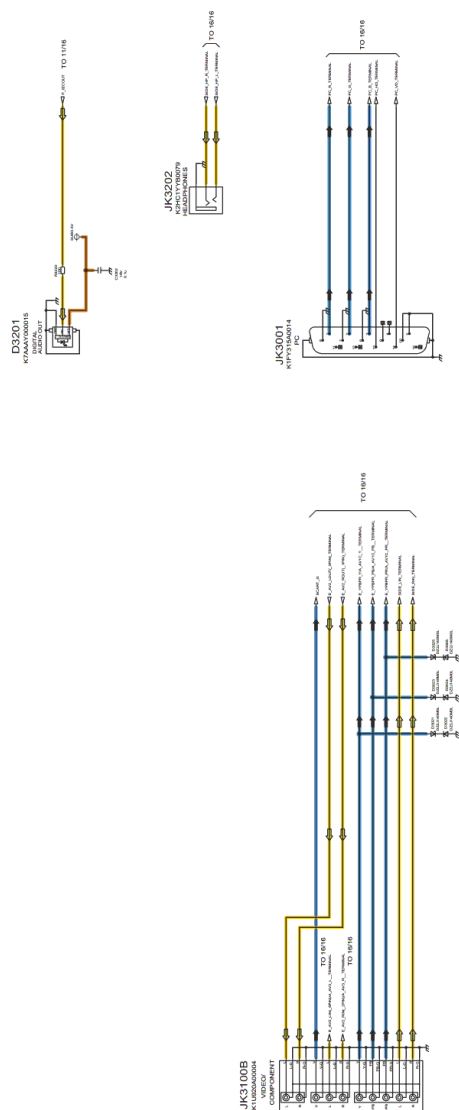
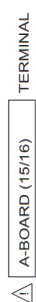
A-BOARD (13/16) DDR3

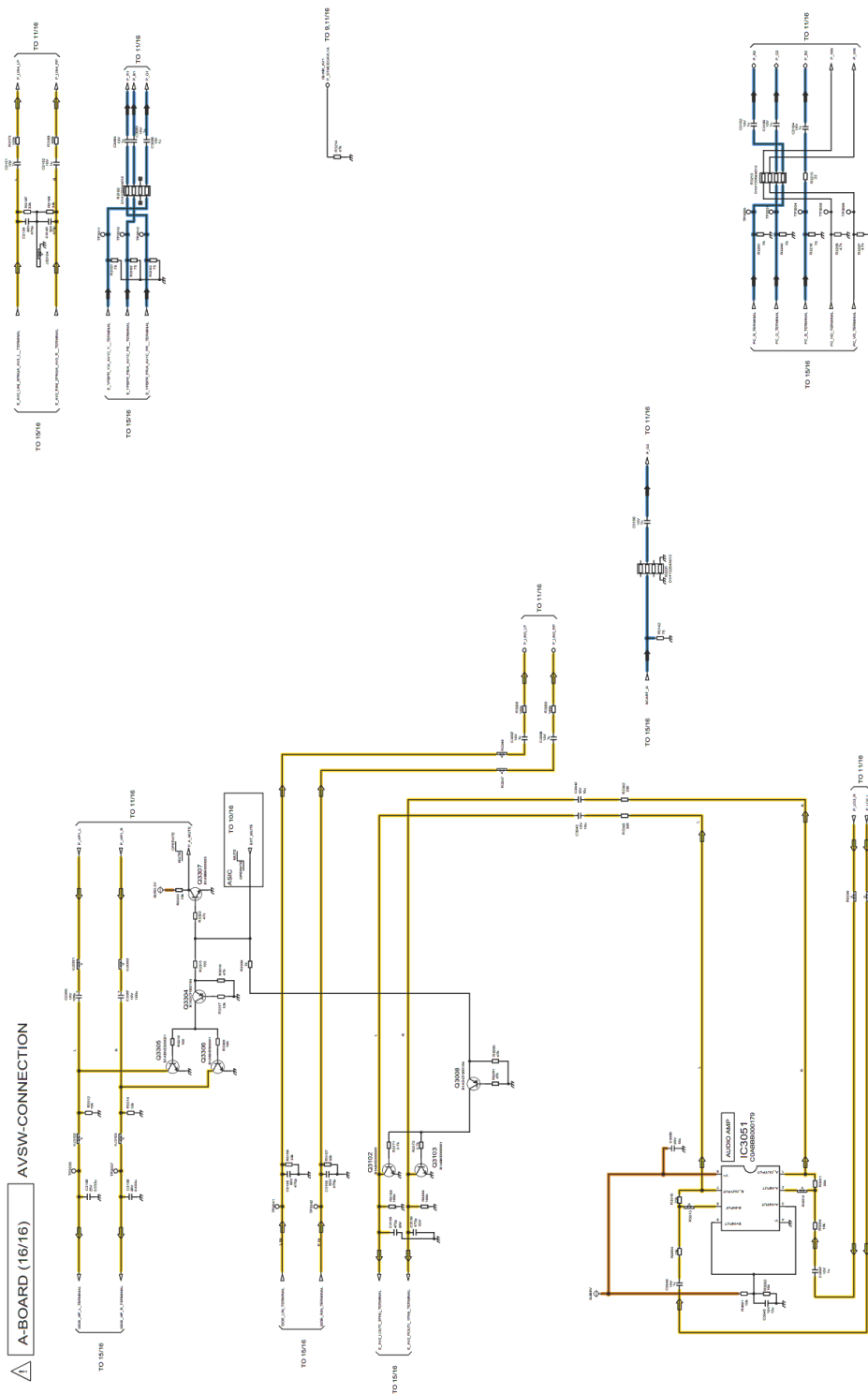


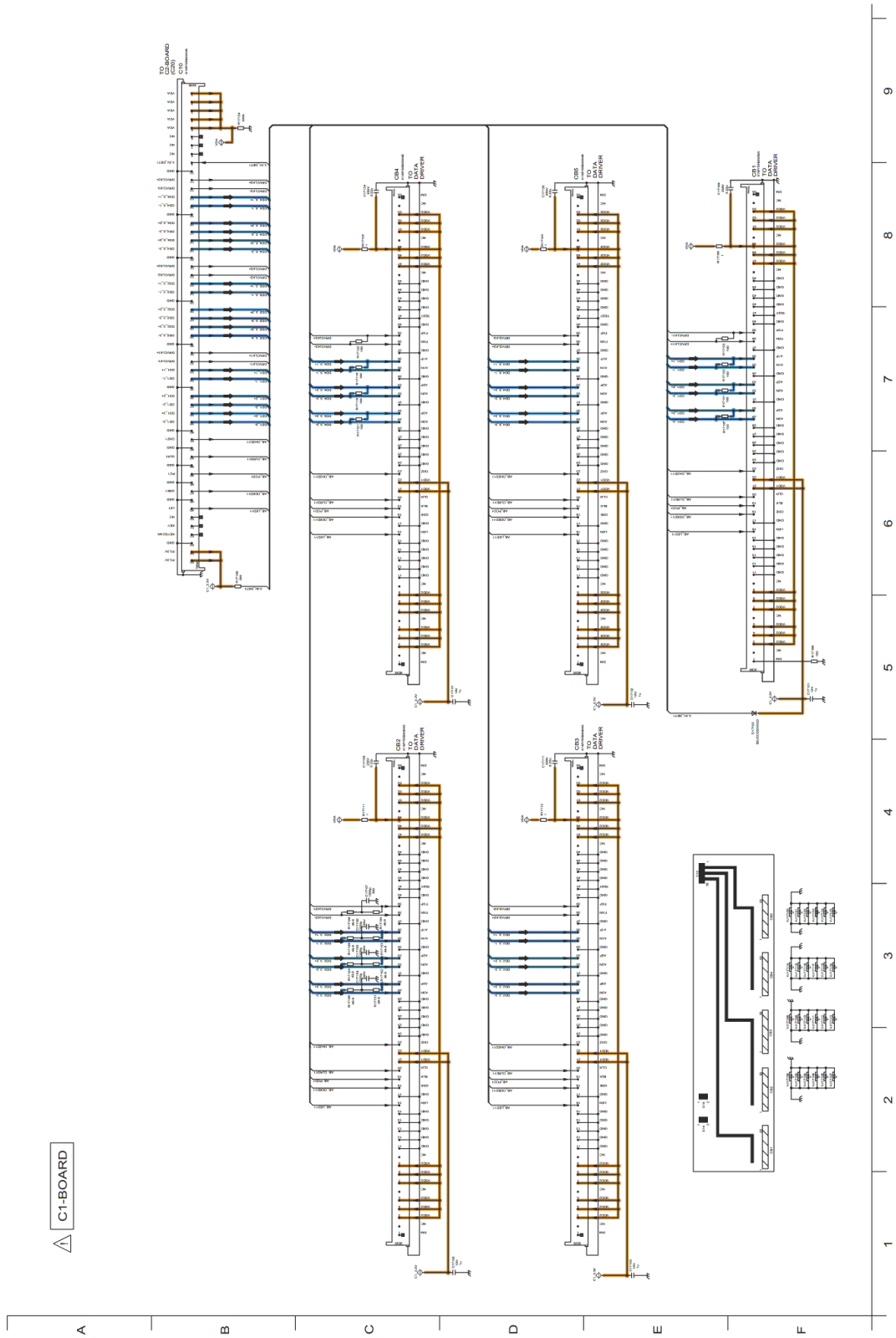
109 110 111 112 113 114 115 116 117

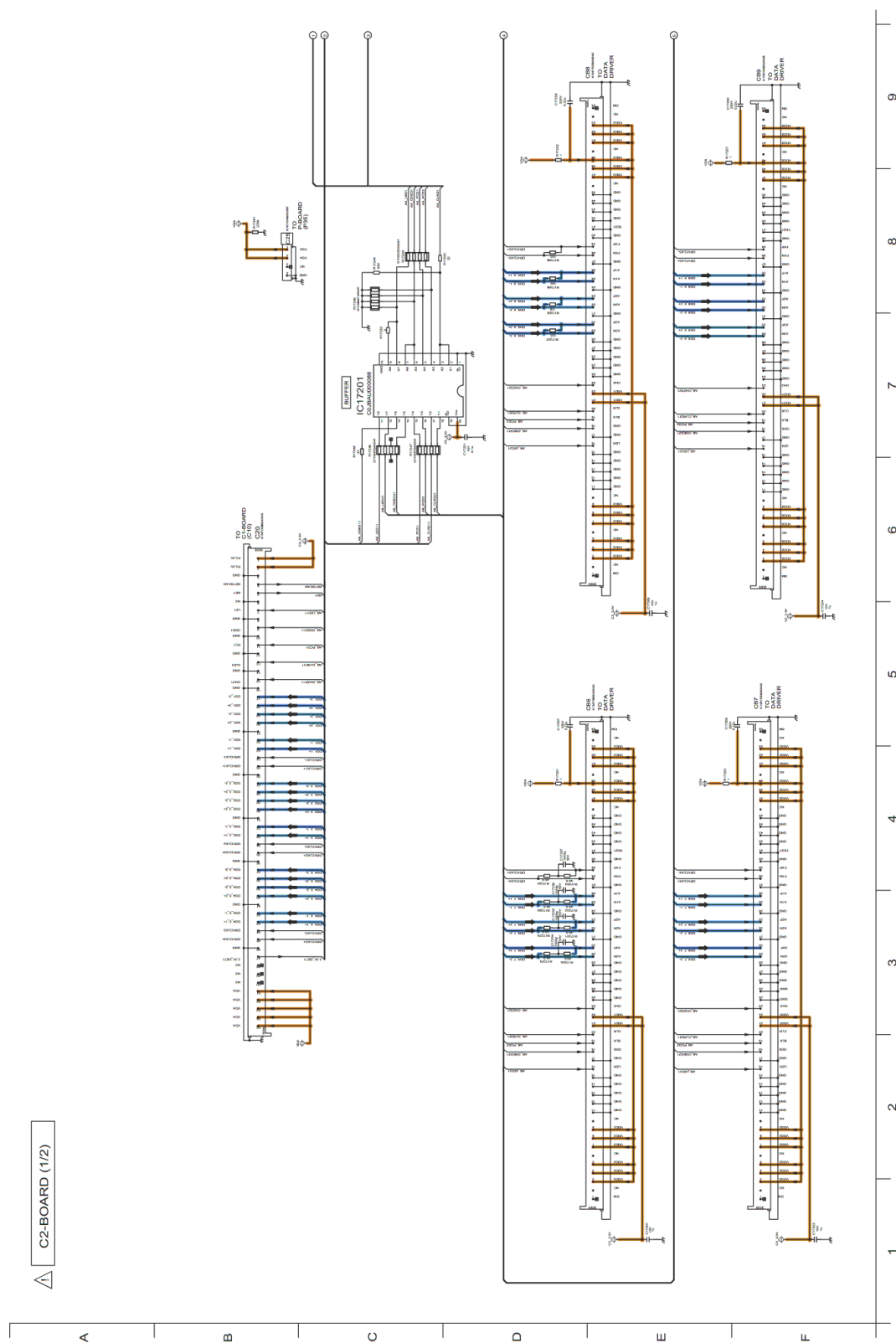
⚠ A-BOARD (14/16) TUNER



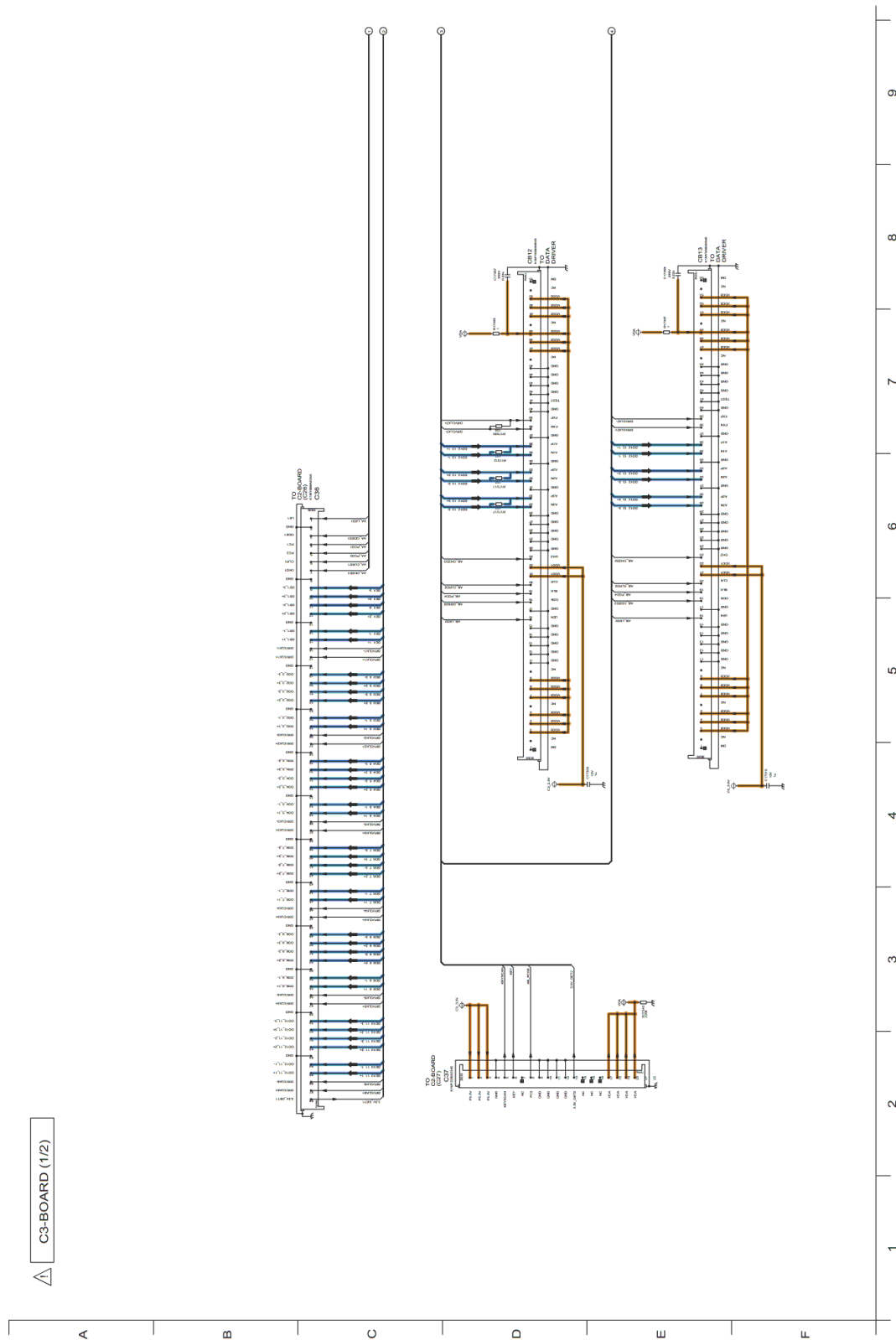




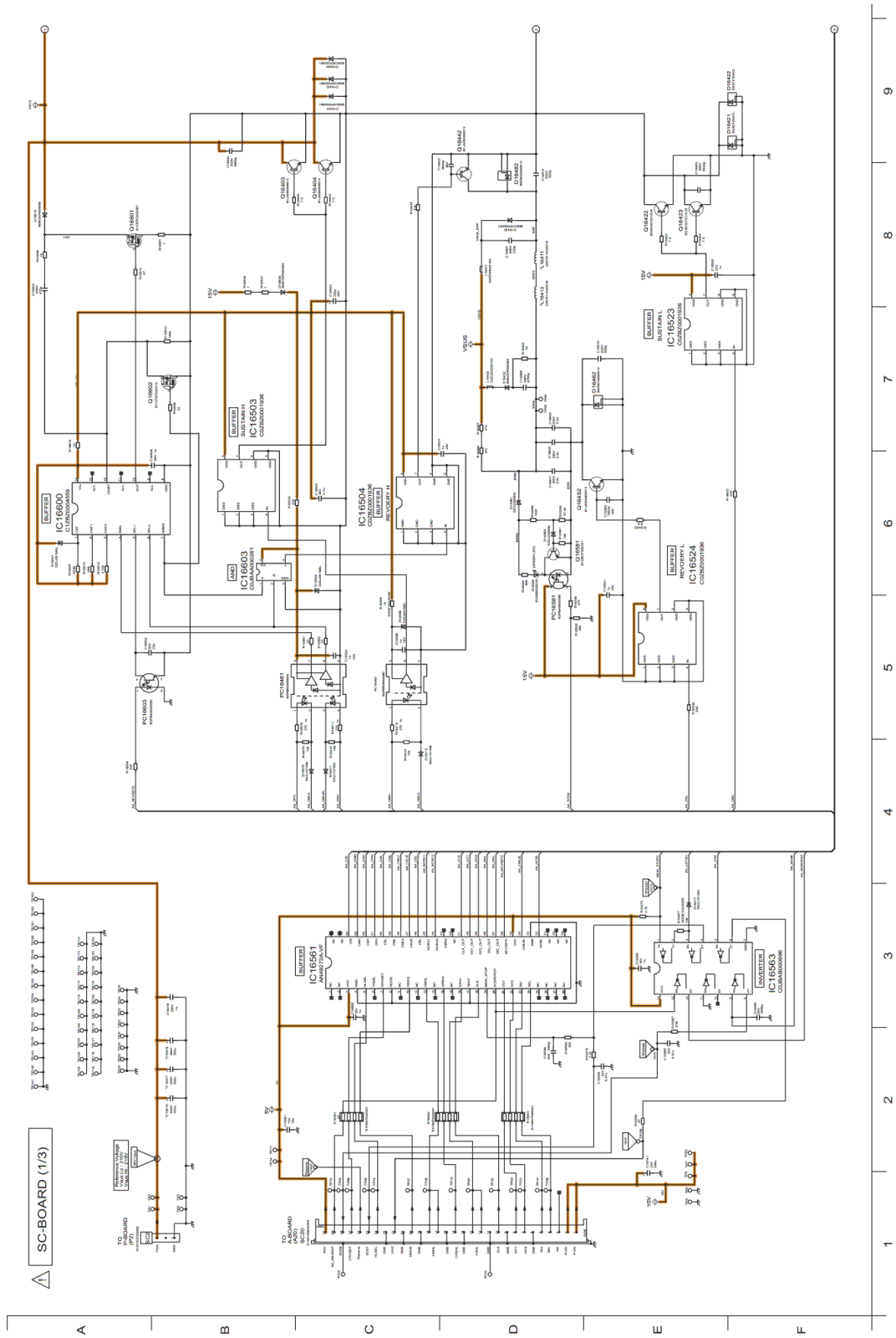


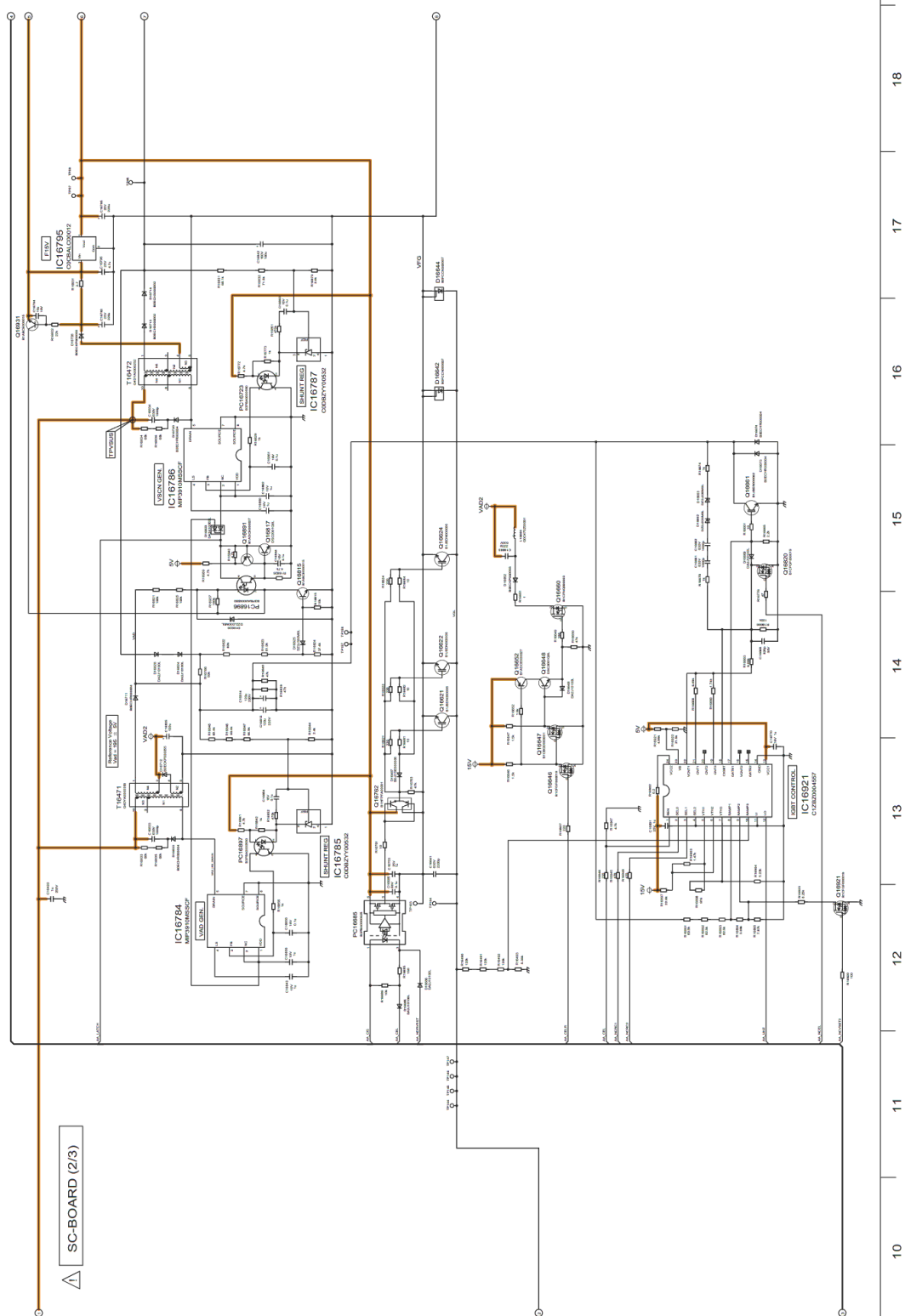
Model No. : TH-P60UT50A/M/P/Z C2-Board (1/2)

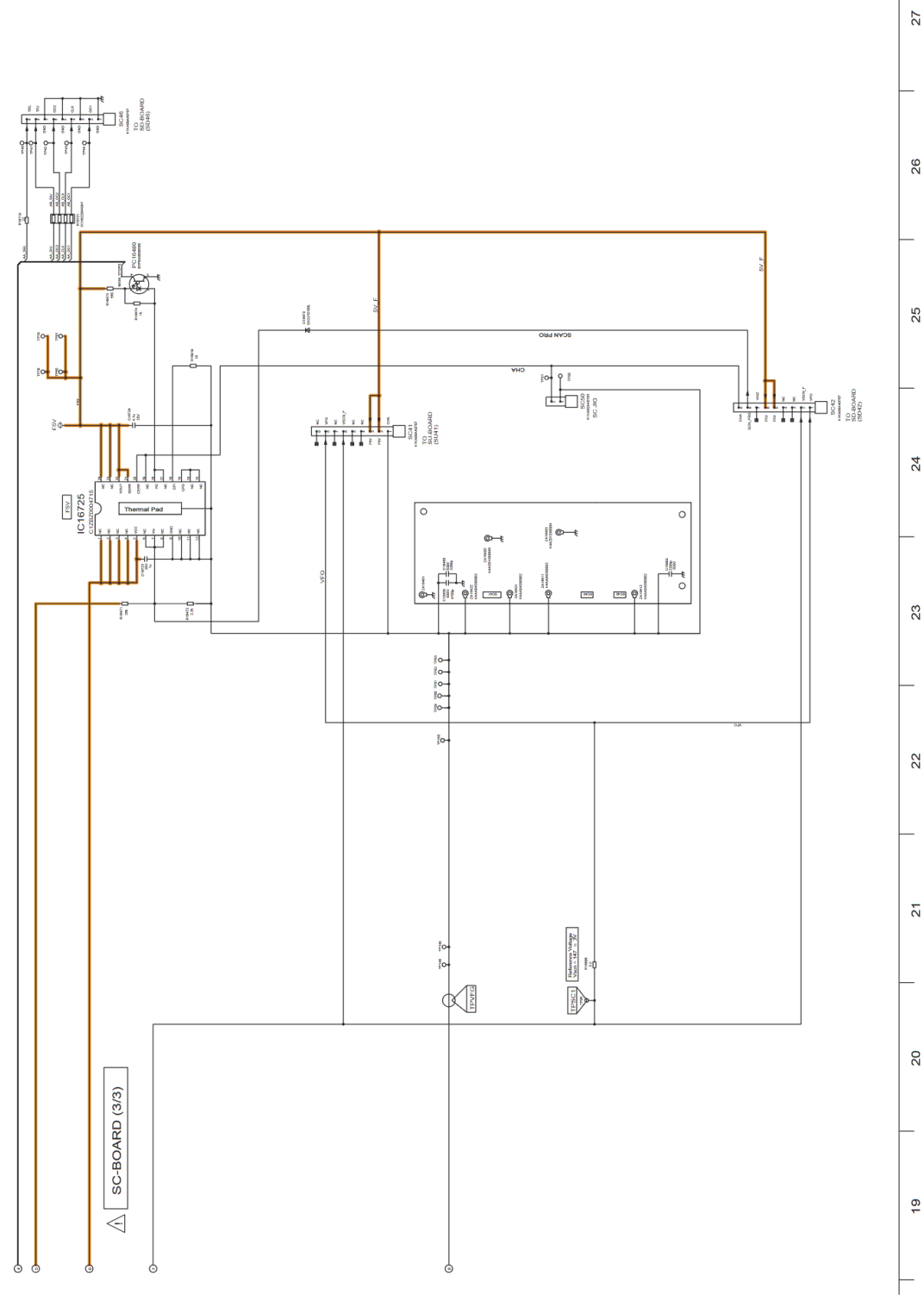




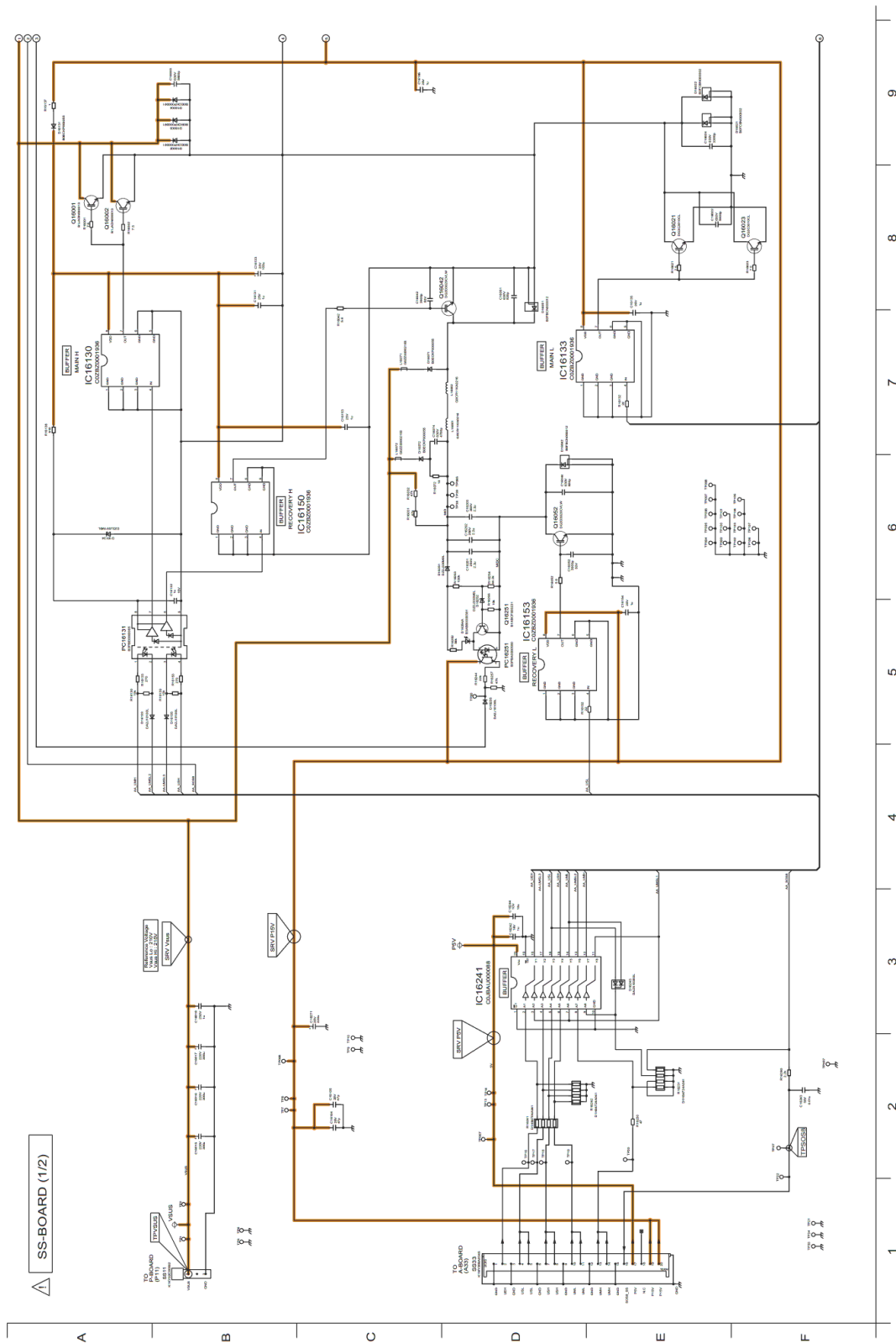


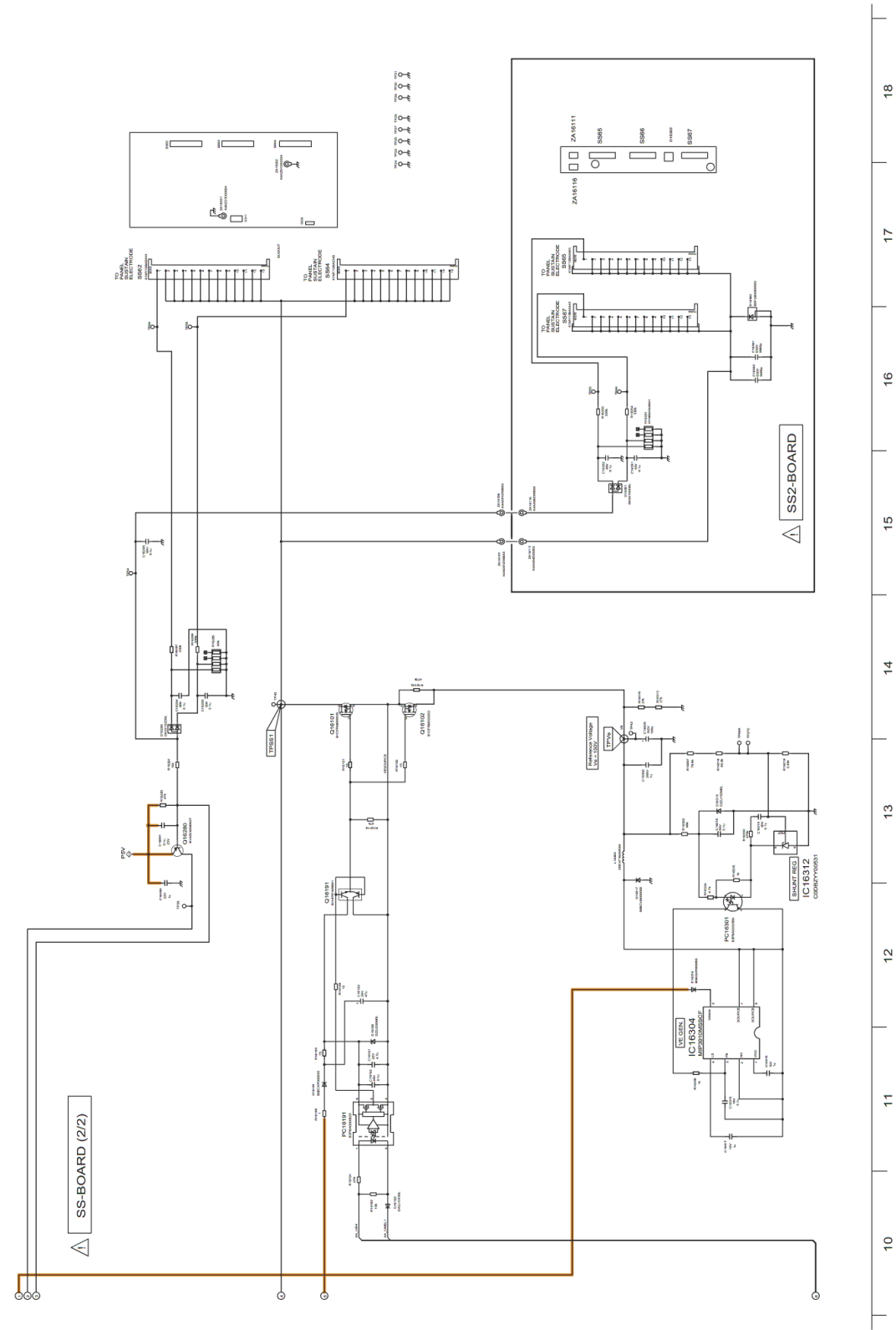


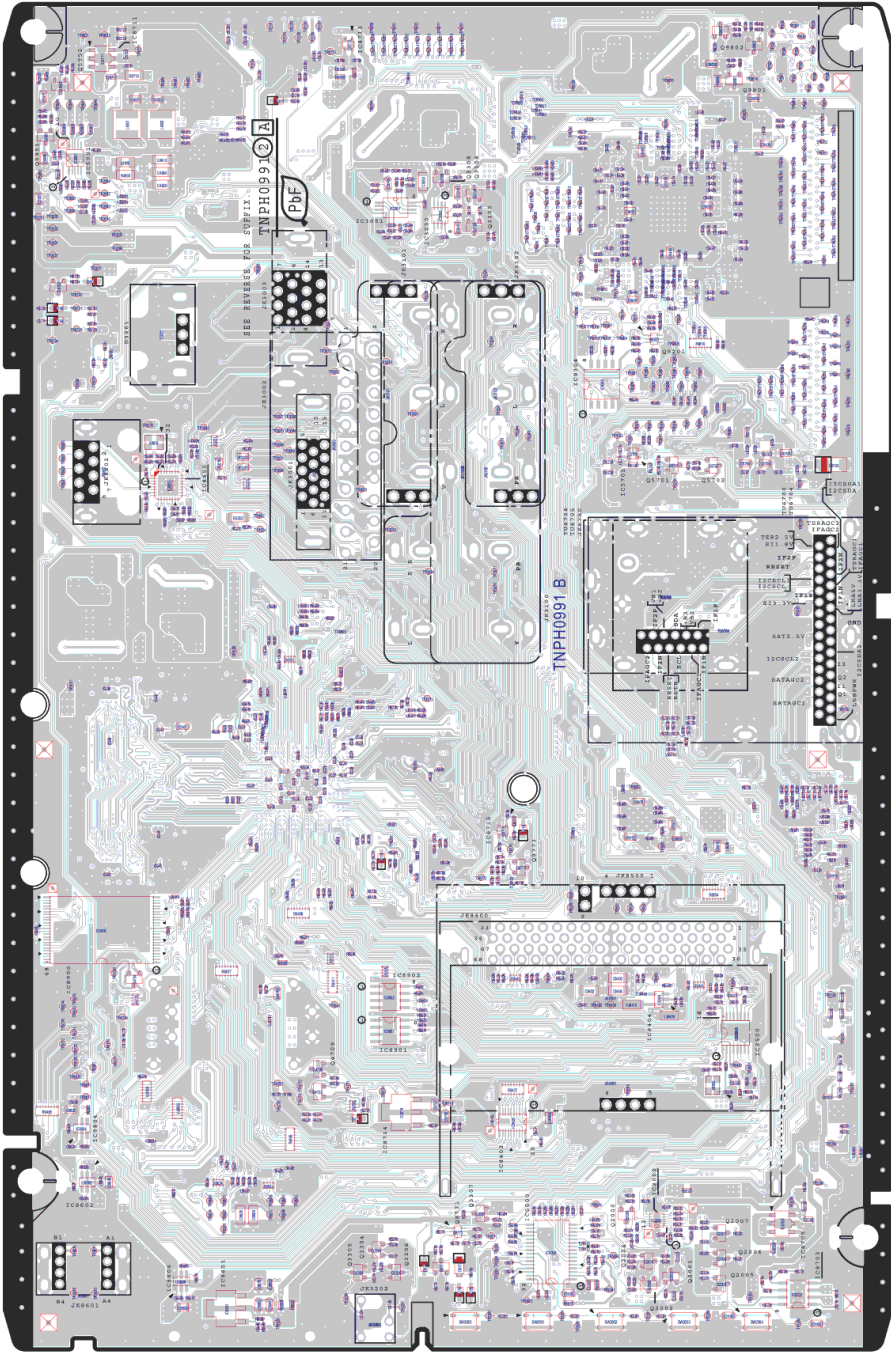


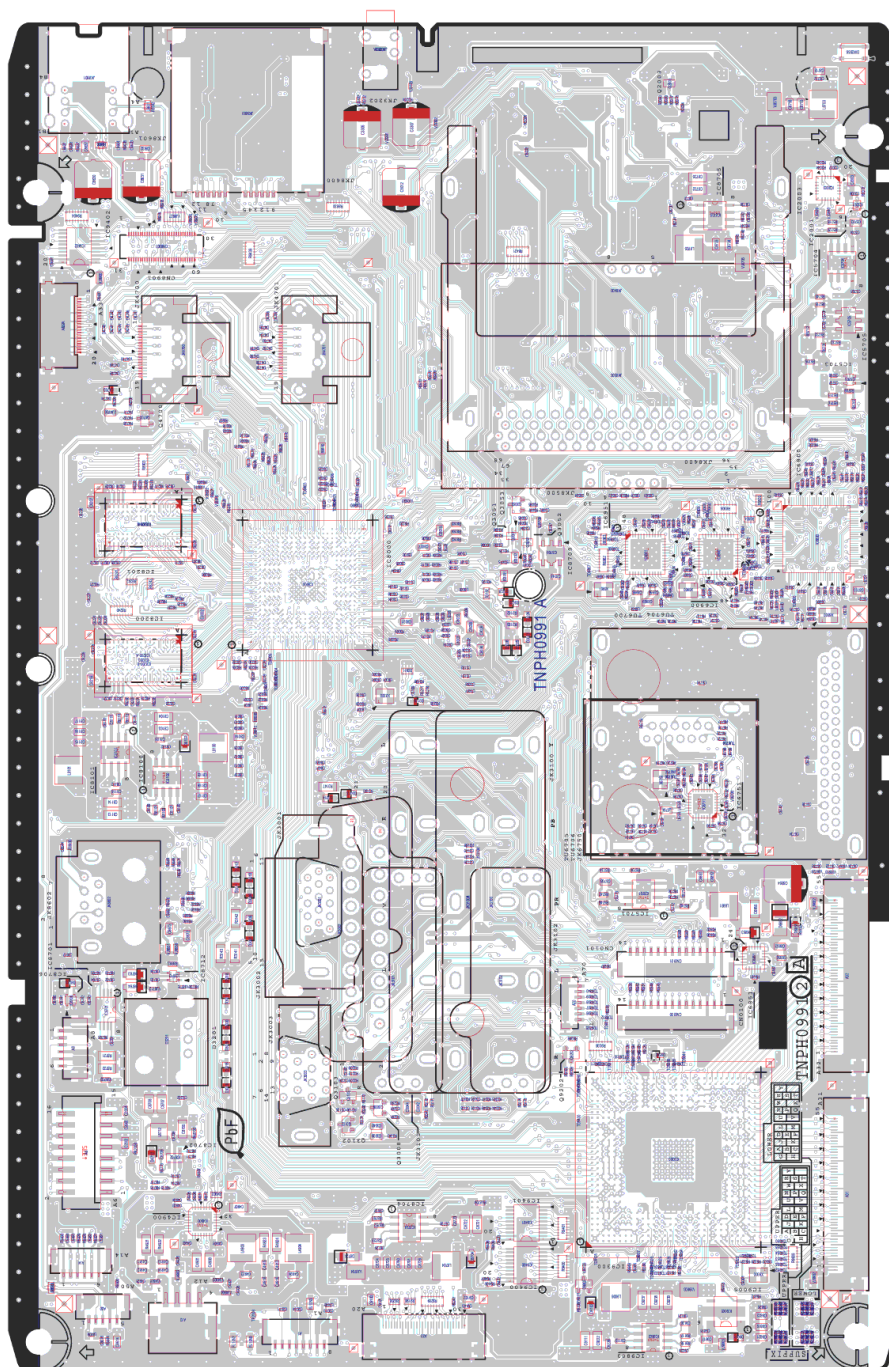


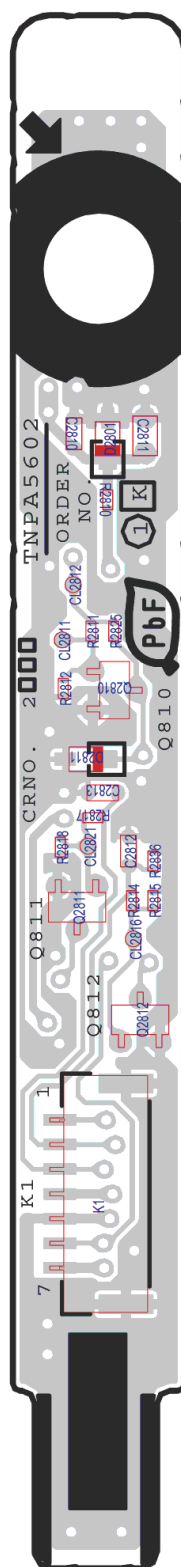
Model No. : TH-P60UT50A/M/P/Z SS-Board (1/2)

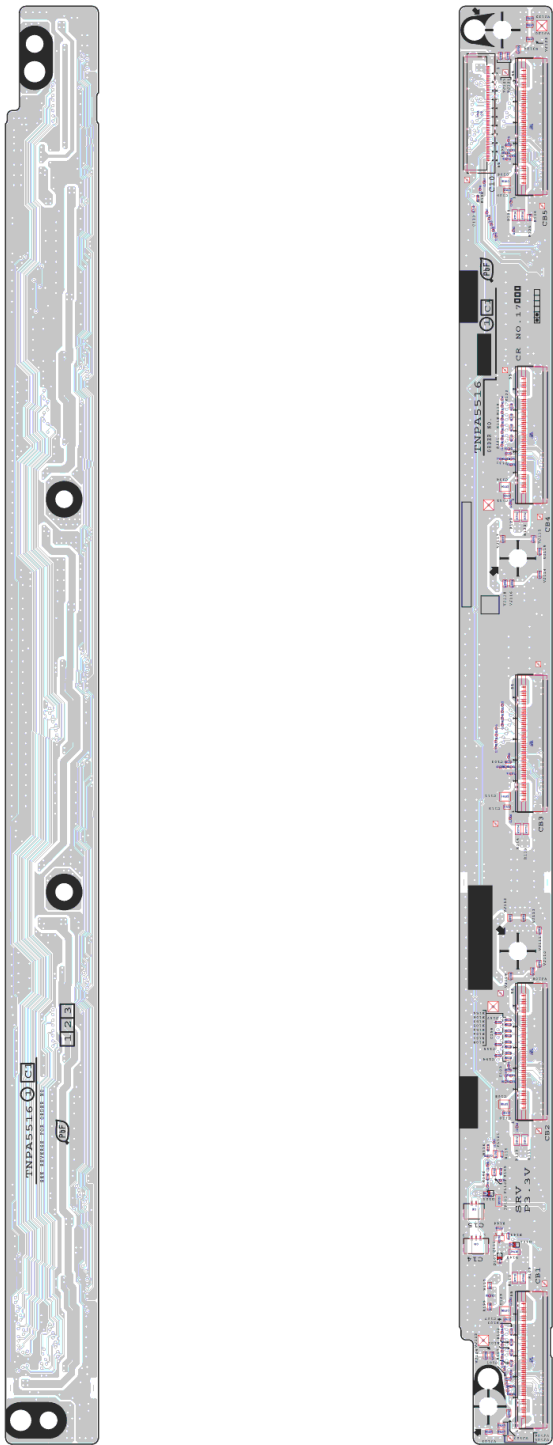


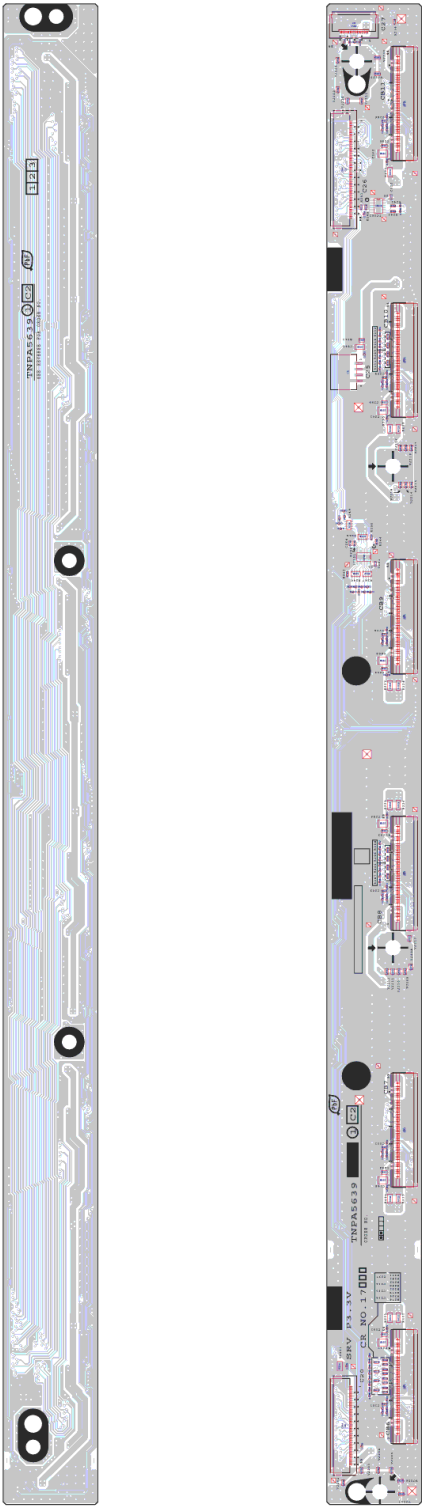


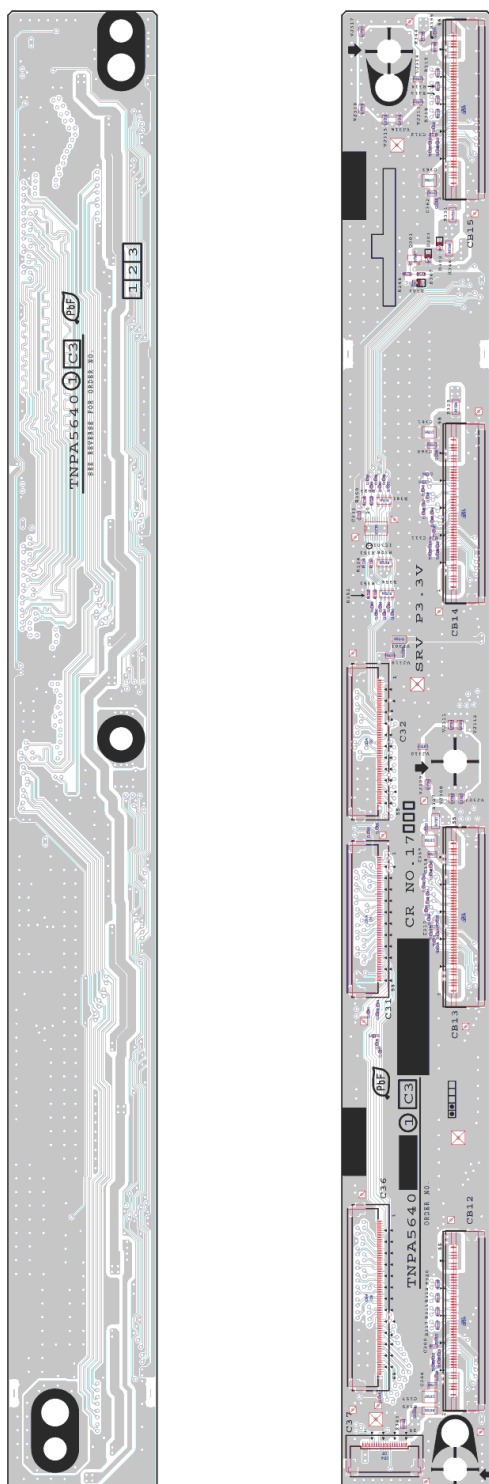


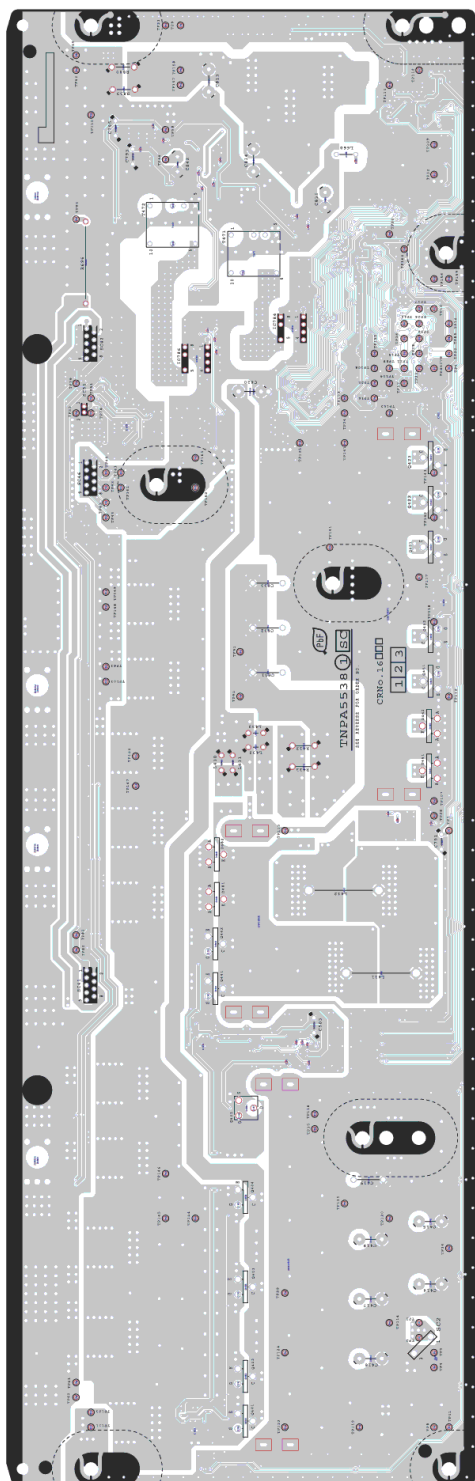


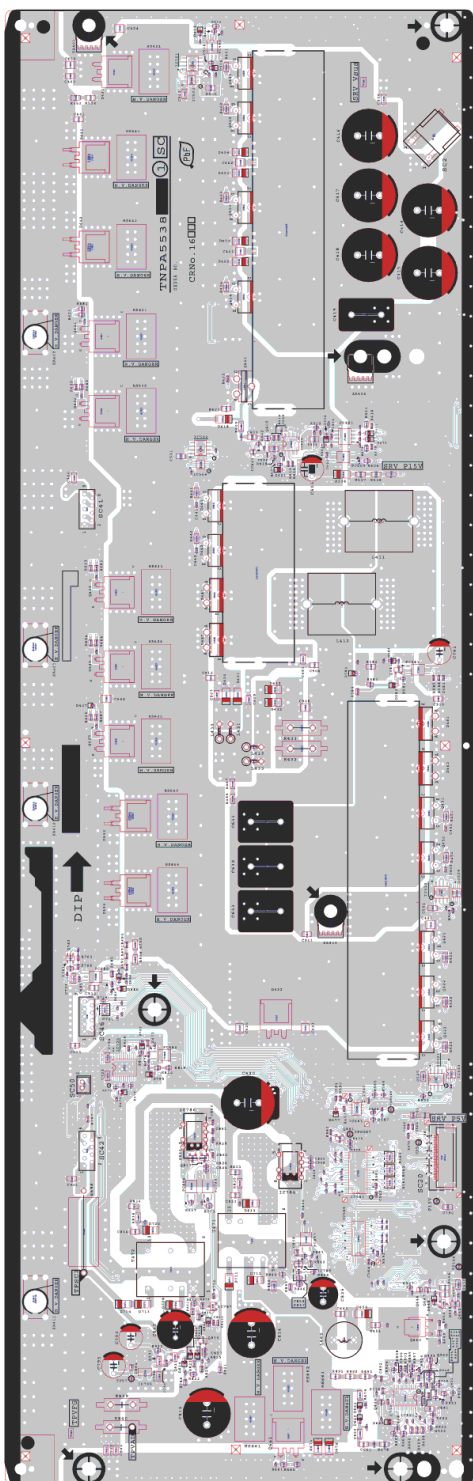


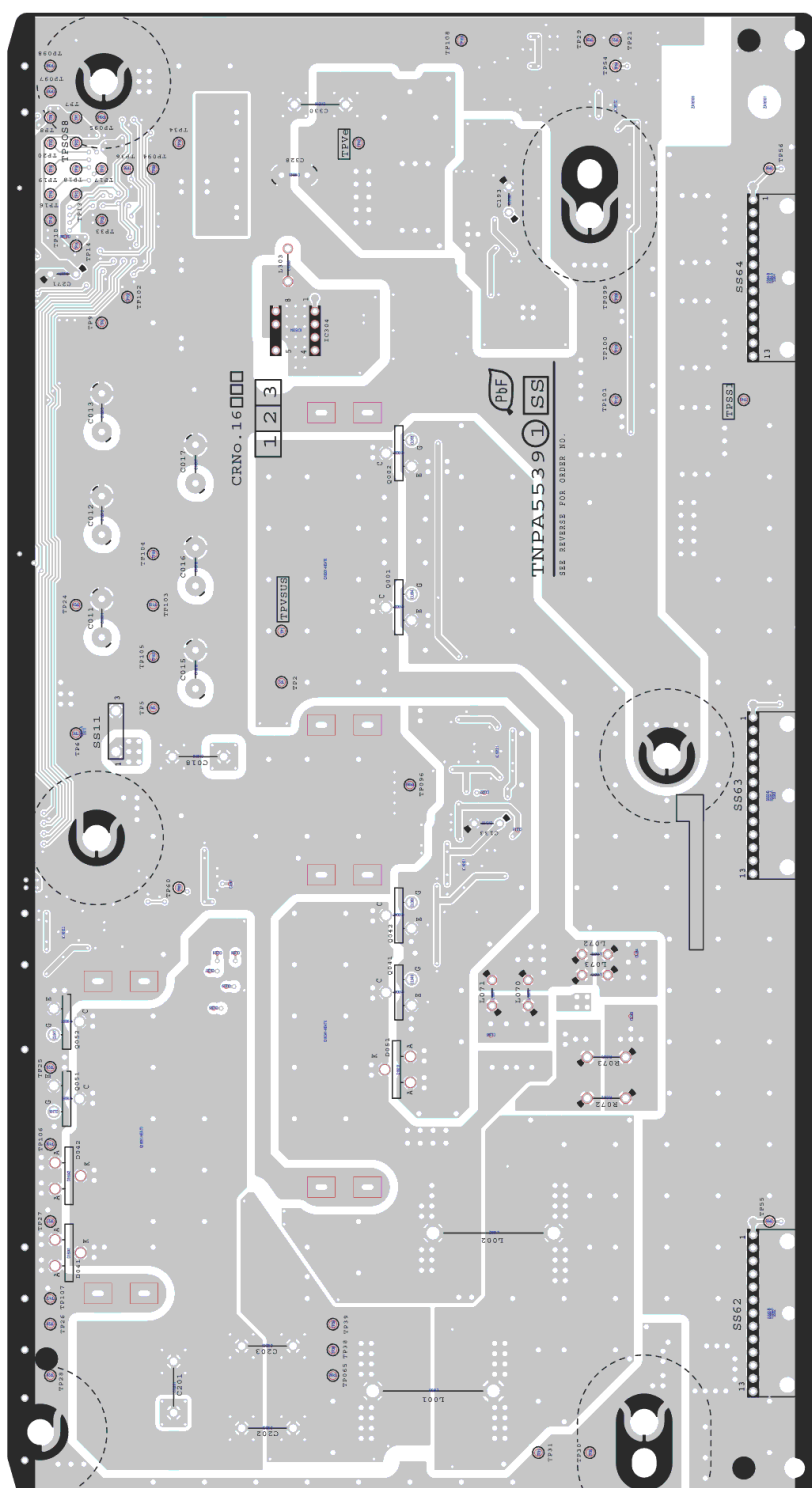


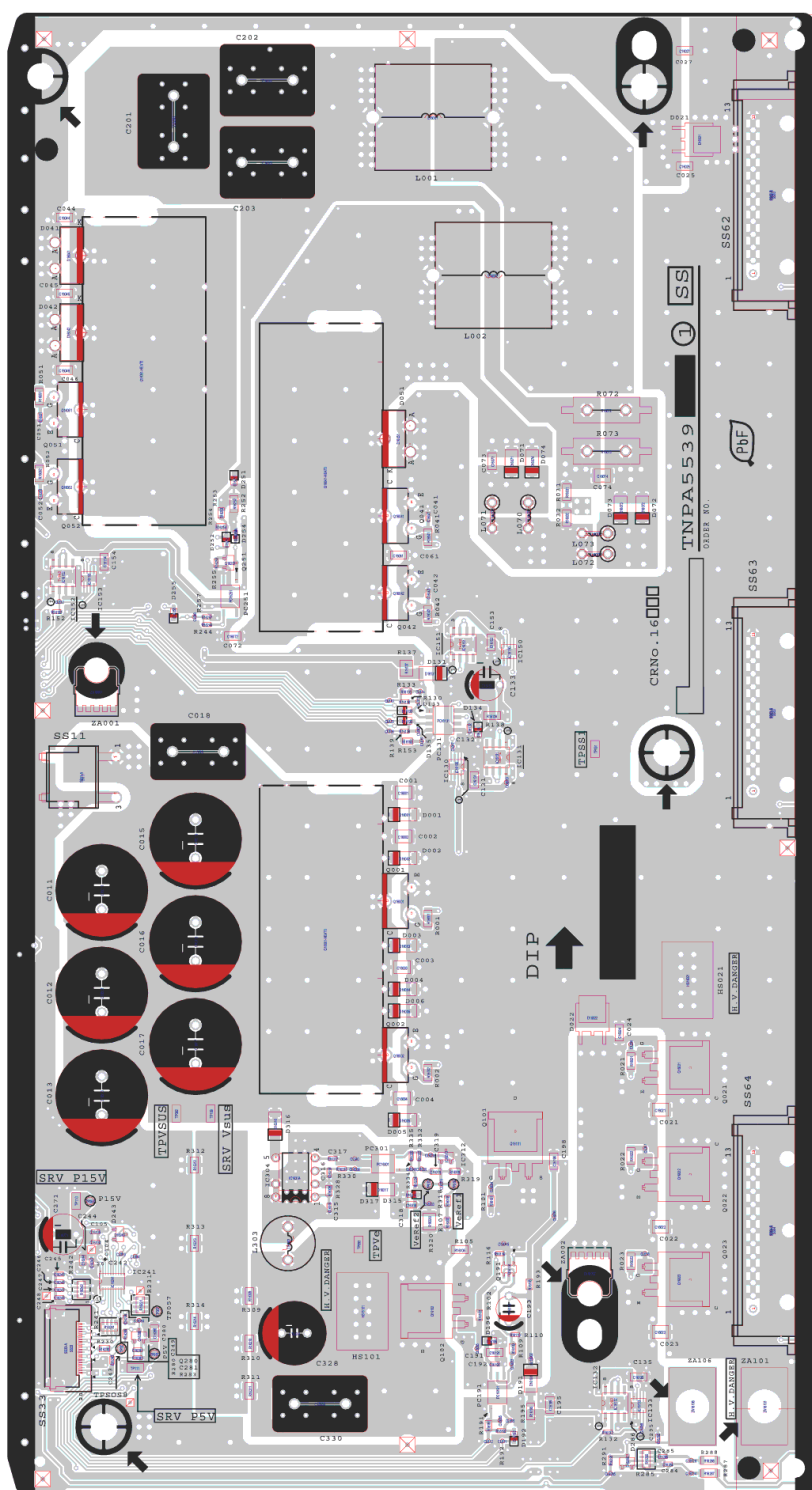


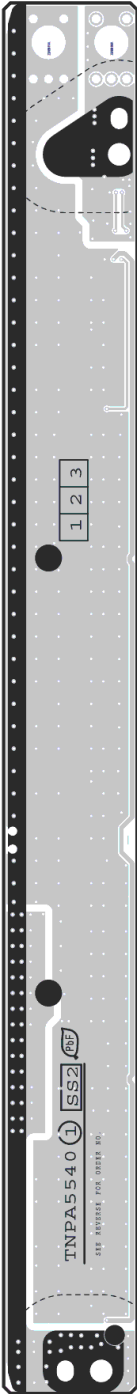












Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	PCB	TZTNP01PTUZ	A-PRINT COMPLETE	1	(Z) (RTL) PAVCTH
	PCB	TZTNP01RCUA	A-PRINT COMPLETE	1	(A) (RTL) PAVCTH
	PCB	TZTNP01PHUM	A-PRINT COMPLETE	1	(M) (RTL) PAVCTH
	PCB	TZTNP01PGUP	A-PRINT COMPLETE	1	(P) (RTL) PAVCTH
	PCB	N0AE6KL00012	POWER SUPPLY UNIT	1	PAVCTH
	PCB	TXNC11SSUU	C1-PRINT COMPLETE	1	(RTL) PAVCTH
	PCB	TXNC21SSUU	C2-PRINT COMPLETE	1	(RTL) PAVCTH
	PCB	TXNC31SSUU	C3-PRINT COMPLETE	1	(RTL) PAVCTH
	PCB	TXNSC1SSUU	SC-PRINT COMPLETE	1	(RTL) PAVCTH
	PCB	TXNSD1SSUU	SD-PRINT COMPLETE	1	PAVCTH
	PCB	TXNSS1SSUU	SS-PRINT COMPLETE	1	(RTL) PAVCTH
	PCB	TXNSS21RDUU	SS2-PRINT COMPLETE	1	(RTL) PAVCTH
	PCB	TXNSU1SSUU	SU-PRINT COMPLETE	1	PAVCTH
	PCB	TXN/K1QTUA	K-PRINT COMPLETE	1	(RTL) PAVCTH
	A1	K1KY08AA0719	8P CONNECTOR	1	
	A6	K1KY16BA0394	16P CONNECTOR	1	PAVCTH
	A12	K1KY04BA0387	4P CONNECTOR	1	PAVCTH
	A20	K1MY30BA0345	30P CONNECTOR	1	
	A31	K1MY55BA0345	55P CONNECTOR	1	
	A32	K1MY55BA0345	55P CONNECTOR	1	
	A33	K1MN20BA0231	20P CONNECTOR	1	
	A50	K1KY05AA0719	5P CONNECTOR	1	
	C10	K1MY55BA0345	55P CONNECTOR	1	
	C20	K1MY55BA0345	55P CONNECTOR	1	
	C25	K1KY04BA0387	4P CONNECTOR	1	PAVCTH
	C26	K1MY68BA0345	68P CONNECTOR	1	
	C27	K1MN20BA0231	20P CONNECTOR	1	
	C31	K1MY55BA0345	55P CONNECTOR	1	
	C32	K1MY55BA0345	55P CONNECTOR	1	
	C36	K1MY68BA0345	68P CONNECTOR	1	
	C37	K1MY20BA0345	20P CONNECTOR	1	
	C0902	FlG1H101A834	C 100PF 50V	1	PAVCTH
	C0903	FlG1H101A834	C 100PF 50V	1	PAVCTH
	C2000	FlG1E1030005	C 0.01UF 25V	1	
	C2001	FlJ1A106A087	C 10UF, 10V	1	
	C2002	FlJ1E105A287	C 1UF, 25V	1	PAVCTH
	C2003	FlJ1E105A287	C 1UF, 25V	1	PAVCTH
	C2005	FlH1H104B047	C 0.1UF, 50V	1	PAVCTH
	C2006	FlG1C104A077	C 0.1UF 16V	1	
	C2007	FlG1A105A047	C 1UF 10V	1	
	C2008	FlG1A105A047	C 1UF 10V	1	
	C2009	FlG1E1030005	C 0.01UF 25V	1	
	C2010	FlG1A105A047	C 1UF 10V	1	
	C2013	FlG1E1030005	C 0.01UF 25V	1	
	C2014	FlG1E1030005	C 0.01UF 25V	1	
	C2018	FlG1H1020008	C 1000PF 50V	1	
	C2019	FlG1E1030005	C 0.01UF 25V	1	
	C2026	FlG1C104A077	C 0.1UF 16V	1	
	C2032	FlH0J4750004	C 4.7UF, 16V	1	
	C2050	FlJ1H102A910	C 1000PF, 50V	1	PAVCTH
	C2052	FlJ1H102A910	C 1000PF, 50V	1	PAVCTH
	C2810	FlH1H103B047	C 0.01UF, 50V	1	PAVCTH
	C2811	FlJ1A106A087	C 10UF, 10V	1	
	C2815	FlH1H103B047	C 0.01UF, 50V	1	PAVCTH
	C2821	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
	C3040	FlJ1A106A087	C 10UF, 10V	1	
	C3042	FlJ1A106A087	C 10UF, 10V	1	
	C3045	FlJ1A106A110	C 10UF, 10V	1	PAVCTH
	C3046	FlG1A105A047	C 1UF 10V	1	

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	C3047	F1G1A105A047	C 1UF 10V	1	
	C3050	F1K1E106A134	C 10UF, 25V	1	
	C3057	F1G1A105A047	C 1UF 10V	1	
	C3058	F1G1A105A047	C 1UF 10V	1	
	C3084	F1G1A105A047	C 1UF 10V	1	
	C3085	F1G1A105A047	C 1UF 10V	1	
	C3086	F1G1A105A047	C 1UF 10V	1	
	C3105	F1G1H471A834	C 470PF, 50V	1	PAVCTH
	C3106	F1G1H471A834	C 470PF, 50V	1	PAVCTH
	C3108	F1G1E333A059	C 0.033UF, 25V	1	PAVCTH
	C3109	F1G1E333A059	C 0.033UF, 25V	1	PAVCTH
	C3135	F1G1H471A834	C 470PF, 50V	1	PAVCTH
	C3136	F1G1H471A834	C 470PF, 50V	1	PAVCTH
	C3139	F1G1H471A834	C 470PF, 50V	1	PAVCTH
	C3140	F1G1H471A834	C 470PF, 50V	1	PAVCTH
	C3151	F1G1A105A047	C 1UF 10V	1	
	C3152	F1G1A105A047	C 1UF 10V	1	
	C3182	F1G1A105A047	C 1UF 10V	1	
	C3183	F1G1A105A047	C 1UF 10V	1	
	C3184	F1G1A105A047	C 1UF 10V	1	
	C3186	F1G1A105A047	C 1UF 10V	1	
	C3202	F1G1C104A077	C 0.1UF 16V	1	
	C3305	F2H1A101A040	C 100UF, 10V	1	
	C3307	F2H1A101A040	C 100UF, 10V	1	
	C4799	F1G1A105A047	C 1UF 10V	1	
	C4900	F1K1V106A010	C 10UF, 25V	1	PAVCTH
	C4901	F1K1V106A010	C 10UF, 25V	1	PAVCTH
	C4902	F1G1H1020008	C 1000PF 50V	1	
	C4903	F1G1C104A077	C 0.1UF 16V	1	
	C4904	F1G1C104A077	C 0.1UF 16V	1	
	C4905	F1G1C104A077	C 0.1UF 16V	1	
	C4906	F1G1C104A077	C 0.1UF 16V	1	
	C4907	F1K1V106A010	C 10UF, 25V	1	PAVCTH
	C4908	F1G1H1020008	C 1000PF 50V	1	
	C4909	F1K1V106A010	C 10UF, 25V	1	PAVCTH
	C4921	F1J1E474A272	C 0.47UF, 25V	1	PAVCTH
	C4922	F1J1E474A272	C 0.47UF, 25V	1	PAVCTH
	C4923	F1J1E474A272	C 0.47UF, 25V	1	PAVCTH
	C4924	F1J1E474A272	C 0.47UF, 25V	1	PAVCTH
	C5000	F1G1E1030005	C 0.01UF 25V	1	
	C5002	F1JZZ1060001	C 10UF, 20V	1	PAVCTH
	C5003	F1H1C105A145	C 1 uF 16 V	1	
	C5007	F1G1C104A077	C 0.1UF 16V	1	
	C5009	F1G1C104A077	C 0.1UF 16V	1	
	C5011	F1G1C104A077	C 0.1UF 16V	1	
	C5012	EEH1B1C101UP	C 100PF, J, 16V	1	
	C5013	F1G1A105A047	C 1UF 10V	1	
	C5014	F1G1A105A047	C 1UF 10V	1	
	C5015	F1G1A105A047	C 1UF 10V	1	
	C5016	F1G1A105A047	C 1UF 10V	1	
	C5017	F1G1A105A047	C 1UF 10V	1	
	C5018	F1G1C104A077	C 0.1UF 16V	1	
	C5020	F1G1E1030005	C 0.01UF 25V	1	
	C5712	F1G1A105A047	C 1UF 10V	1	
	C5713	F1G1A105A047	C 1UF 10V	1	
	C6704	F1J1A106A087	C 10UF, 10V	1	
	C6705	F1J1A106A110	C 10UF, 10V	1	PAVCTH
	C6706	F1G1C104A077	C 0.1UF 16V	1	
	C6707	F1G1C104A077	C 0.1UF 16V	1	
	C6708	F1J1A106A087	C 10UF, 10V	1	
	C6710	F1G1C104A077	C 0.1UF 16V	1	
	C6719	F1G1H220A834	C 22PF, 50V	1	PAVCTH

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	C6720	FlG1H220A834	C 22PF, 50V	1	PAVCTH
	C6721	FlG1H220A834	C 22PF, 50V	1	PAVCTH
	C6722	FlG1E472A144	C 4700pF 25V	1	PAVCTH
	C6723	FlG1H101A834	C 100PF 50V	1	PAVCTH
	C6724	FlG1H101A834	C 100PF 50V	1	PAVCTH
	C6725	FlG1H220A834	C 22PF, 50V	1	PAVCTH
	C6726	FlG1H220A834	C 22PF, 50V	1	PAVCTH
	C6727	FlG1H220A834	C 22PF, 50V	1	PAVCTH
	C6733	FlG1C104A077	C 0.1UF 16V	1	
	C6734	FlG1A105A047	C 1UF 10V	1	
	C6735	FlG1A105A047	C 1UF 10V	1	
	C6736	FlG1C104A077	C 0.1UF 16V	1	
	C6742	FlG1C104A077	C 0.1UF 16V	1	
	C6743	FlG1C104A077	C 0.1UF 16V	1	
	C8002	FlJ1A106A087	C 10UF, 10V	1	
	C8004	FlG1C104A077	C 0.1UF 16V	1	
	C8005	FlG1C104A077	C 0.1UF 16V	1	
	C8007	FlJ1A106A087	C 10UF, 10V	1	
	C8014	FlJ0G2260001	C 22 UF 4 V	1	
	C8017	FlG1C104A077	C 0.1UF 16V	1	
	C8019	FlG1C104A077	C 0.1UF 16V	1	
	C8020	FlG1C104A077	C 0.1UF 16V	1	
	C8022	FlG1C104A077	C 0.1UF 16V	1	
	C8023	FlG1C104A077	C 0.1UF 16V	1	
	C8024	FlG1C104A077	C 0.1UF 16V	1	
	C8025	FlG1A105A047	C 1UF 10V	1	
	C8031	FlJ1A106A087	C 10UF, 10V	1	
	C8033	FlJ1A106A087	C 10UF, 10V	1	
	C8034	FlJ0G2260001	C 22 UF 4 V	1	
	C8035	FlG1C104A077	C 0.1UF 16V	1	
	C8036	FlG1A105A047	C 1UF 10V	1	
	C8038	FlJ0G2260001	C 22 UF 4 V	1	
	C8039	FlJ0G2260001	C 22 UF 4 V	1	
	C8100	FlG1C223A146	C 0.022UF, 16V	1	PAVCTH
	C8101	FlH1C105A145	C 1 uF 16 V	1	
	C8102	FlG1C104A077	C 0.1UF 16V	1	
	C8103	FlK1E106A134	C 10UF, 25V	1	
	C8105	FlJ0G2260001	C 22 UF 4 V	1	
	C8106	FlJ0G2260001	C 22 UF 4 V	1	
	C8108	ECJ1VB1E104K	C 0.1 UF, 25V	1	
	C8110	FlG1C223A146	C 0.022UF, 16V	1	PAVCTH
	C8111	FlH1C105A145	C 1 uF 16 V	1	
	C8112	FlG1C104A077	C 0.1UF 16V	1	
	C8113	FlK1E106A134	C 10UF, 25V	1	
	C8115	FlJ0G2260001	C 22 UF 4 V	1	
	C8116	FlJ0G2260001	C 22 UF 4 V	1	
	C8118	ECJ1VB1E104K	C 0.1 UF, 25V	1	
	C8203	FlG1C104A077	C 0.1UF 16V	1	
	C8204	FlG1C104A077	C 0.1UF 16V	1	
	C8205	FlG1C104A077	C 0.1UF 16V	1	
	C8206	FlG1C104A077	C 0.1UF 16V	1	
	C8207	FlJ1A106A087	C 10UF, 10V	1	
	C8208	FlG1C104A077	C 0.1UF 16V	1	
	C8210	FlG1C104A077	C 0.1UF 16V	1	
	C8212	FlG1C104A077	C 0.1UF 16V	1	
	C8215	FlG1C104A077	C 0.1UF 16V	1	
	C8216	FlJ1A106A087	C 10UF, 10V	1	
	C8218	FlG1C104A077	C 0.1UF 16V	1	
	C8220	FlG1C104A077	C 0.1UF 16V	1	
	C8221	FlG1C104A077	C 0.1UF 16V	1	
	C8224	FlG1C104A077	C 0.1UF 16V	1	
	C8229	FlG1A105A047	C 1UF 10V	1	

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	C8230	FlG1C104A077	C 0.1UF 16V	1	
	C8231	FlG1C104A077	C 0.1UF 16V	1	
	C8232	FlG1C104A077	C 0.1UF 16V	1	
	C8300	FlG1H100A833	C 10PF 50V	1	PAVCTH
	C8301	FlG1H100A833	C 10PF 50V	1	PAVCTH
	C8304	FlG1A105A047	C 1UF 10V	1	
	C8305	FlG1A105A047	C 1UF 10V	1	
	C8306	FlG1A105A047	C 1UF 10V	1	
	C8307	FlG1A105A047	C 1UF 10V	1	
	C8308	FlG1A105A047	C 1UF 10V	1	
	C8309	FlG1A105A047	C 1UF 10V	1	
	C8310	FlG1A105A047	C 1UF 10V	1	
	C8311	FlG1A105A047	C 1UF 10V	1	
	C8312	FlG1A105A047	C 1UF 10V	1	
	C8411	FlG1C104A077	C 0.1UF 16V	1	
	C8616	FlG1C104A077	C 0.1UF 16V	1	
	C8617	FlG1C1030008	C 0.01UF 16V	1	
	C8619	FlG1C104A077	C 0.1UF 16V	1	
	C8620	FlG1C104A077	C 0.1UF 16V	1	
	C8627	FlG1C104A077	C 0.1UF 16V	1	
	C8628	FlK0J226A049	C 22UF, 6.3V	1	
	C8629	FlK0J226A049	C 22UF, 6.3V	1	
	C8630	EEEHB0J221UP	E 220UF, 6.3V	1	
	C8631	EEEHB0J221UP	E 220UF, 6.3V	1	
	C8632	FlJ1A106A087	C 10UF, 10V	1	
	C8633	FlG1C104A077	C 0.1UF 16V	1	
	C8637	FlJ1A106A087	C 10UF, 10V	1	
	C8638	FlG1C104A077	C 0.1UF 16V	1	
	C8639	FlJ1A106A087	C 10UF, 10V	1	
	C8640	FlG1C104A077	C 0.1UF 16V	1	
	C8644	FlG1C1030008	C 0.01UF 16V	1	
	C8652	FlG1C104A077	C 0.1UF 16V	1	
	C8653	FlG1H7R0A833	C 7 PF, 50V	1	PAVCTH
	C8654	FlG1H8R0A831	C 8 PF, 50V	1	PAVCTH
	C8655	FlG1C104A077	C 0.1UF 16V	1	
	C8658	FlJ1A106A087	C 10UF, 10V	1	
	C8659	FlG1C104A077	C 0.1UF 16V	1	
	C8674	FlG1C104A077	C 0.1UF 16V	1	
	C8675	FlG1C104A077	C 0.1UF 16V	1	
	C8676	FlG1C104A077	C 0.1UF 16V	1	
	C8721	FlK1E106A134	C 10UF, 25V	1	
	C8722	FlK1E106A134	C 10UF, 25V	1	
	C8723	ECJ1VB1E104K	C 0.1 UF, 25V	1	
	C8724	FlJ1A106A110	C 10UF, 10V	1	PAVCTH
	C8725	FlJ1A106A110	C 10UF, 10V	1	PAVCTH
	C8728	FlH1C105A145	C 1 uF 16 V	1	
	C8729	FlG1E472A086	C 4700pF 25V	1	
	C8730	FlG1C104A077	C 0.1UF 16V	1	
	C8731	FlG1E1030005	C 0.01UF 25V	1	
	C8732	FlK1V106A010	C 10UF, 25V	1	PAVCTH
	C8733	FlJ1A106A110	C 10UF, 10V	1	PAVCTH
	C8734	FlJ1A106A110	C 10UF, 10V	1	PAVCTH
	C8737	FlG1C104A077	C 0.1UF 16V	1	
	C8738	FlG1H222A830	C 2200PF, 50V	1	PAVCTH
	C8739	FlG1E1030005	C 0.01UF 25V	1	
	C8747	FlG1A105A047	C 1UF 10V	1	
	C8748	FlH0J4750004	C 4.7UF, 16V	1	
	C8749	FlG1A105A047	C 1UF 10V	1	
	C8750	FlG1A105A047	C 1UF 10V	1	
	C8757	FlJ1A106A087	C 10UF, 10V	1	
	C8758	FlJ1A106A087	C 10UF, 10V	1	
	C8771	FlG1C104A077	C 0.1UF 16V	1	

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	C8772	F1G1C104A077	C 0.1UF 16V	1	
	C8773	F1G1C104A077	C 0.1UF 16V	1	
	C8790	F1J1A106A110	C 10UF, 10V	1	PAVCTH
	C8791	F1J1A106A110	C 10UF, 10V	1	PAVCTH
	C8900	F1G1C104A077	C 0.1UF 16V	1	
	C8901	F1G1C104A077	C 0.1UF 16V	1	
	C8902	F1G1C104A077	C 0.1UF 16V	1	
	C9097	F1J1A106A110	C 10UF, 10V	1	PAVCTH
	C9098	F1G1A105A047	C 1UF 10V	1	
	C9102	F1JZZ1060001	C 10UF, 20V	1	PAVCTH
	C9103	F1G1E1030005	C 0.01UF 25V	1	
	C9111	F1K1E106A134	C 10UF, 25V	1	
	C9119	ECJ1VB1E104K	C 0.1 UF, 25V	1	
	C9120	F1H1C105A145	C 1 uF 16 V	1	
	C9121	F1G1H1020008	C 1000PF 50V	1	
	C9222	F1K1E106A134	C 10UF, 25V	1	
	C9235	ECJ1VB1E104K	C 0.1 UF, 25V	1	
	C9237	F1K0J226A049	C 22UF, 6.3V	1	
	C9238	F1K0J226A049	C 22UF, 6.3V	1	
	C9300	F1G1C104A077	C 0.1UF 16V	1	
	C9301	F1G1H180A834	C 18PF, 50V	1	PAVCTH
	C9302	F1G1H180A834	C 18PF, 50V	1	PAVCTH
	C9307	F1G1C104A077	C 0.1UF 16V	1	
	C9328	F1G1C104A077	C 0.1UF 16V	1	
	C9331	F1G1A105A047	C 1UF 10V	1	
	C9362	F1G1C104A077	C 0.1UF 16V	1	
	C9374	F1G1A105A047	C 1UF 10V	1	
	C9390	F1G1C104A077	C 0.1UF 16V	1	
	C9406	F1G1C104A077	C 0.1UF 16V	1	
	C9420	F1G1C104A077	C 0.1UF 16V	1	
	C9421	F1G1C104A077	C 0.1UF 16V	1	
	C9422	F1G1C104A077	C 0.1UF 16V	1	
	C9423	F1G1C104A077	C 0.1UF 16V	1	
	C9424	F1G1A105A047	C 1UF 10V	1	
	C9431	F1G1A105A047	C 1UF 10V	1	
	C9433	F1G1A105A047	C 1UF 10V	1	
	C9435	F1G1A105A047	C 1UF 10V	1	
	C9436	F1G1A105A047	C 1UF 10V	1	
	C9438	F1G1A105A047	C 1UF 10V	1	
	C9441	F1G1A105A047	C 1UF 10V	1	
	C9446	F1G1C104A077	C 0.1UF 16V	1	
	C9450	F1J1A106A110	C 10UF, 10V	1	PAVCTH
	C9453	F1J1A106A110	C 10UF, 10V	1	PAVCTH
	C9456	F1J1A106A110	C 10UF, 10V	1	PAVCTH
	C9458	F1J1A106A110	C 10UF, 10V	1	PAVCTH
	C9459	F1G1A105A047	C 1UF 10V	1	
	C9462	F1J1A106A110	C 10UF, 10V	1	PAVCTH
	C9591	F1G1C104A077	C 0.1UF 16V	1	
	C9817	F1J1A106A087	C 10UF, 10V	1	
	C9822	F1J1A106A087	C 10UF, 10V	1	
	C9824	F1G1A105A047	C 1UF 10V	1	
	C9825	F1J1A106A087	C 10UF, 10V	1	
	C9826	F1G1C104A077	C 0.1UF 16V	1	
	C16003	F1L2J562A021	C 5600PF, 630V	1	PAVCTH
	C16015	F2A2T3010001	E 300UF, 220V	1	PAVCTH
	C16016	F2A2T3010001	E 300UF, 220V	1	PAVCTH
	C16017	F2A2T3010001	E 300UF, 220V	1	PAVCTH
	C16018	F0C2E105A286	C 1 UF 250 V	1	PAVCTH
	C16022	F1L2J562A021	C 5600PF, 630V	1	PAVCTH
	C16024	F1K2J332A024	C 3300PF, 630V	1	PAVCTH
	C16042	ECJ1VB1H392K	C 3900UF, 50V	1	
	C16044	F1K2J821A043	C 820PF, 630V	1	PAVCTH

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	C16052	ECJ1VB1H392K	C 3900UF, 50V	1	
	C16061	F1K2J821A043	C 820PF, 630V	1	PAVCTH
	C16074	F1L2J472A021	C 4700PF, 630V	1	PAVCTH
	C16104	F1H1E470A130	C 47PF, 25V	1	
	C16105	F1H1E470A130	C 47PF, 25V	1	
	C16131	F1K1E105A029	C 1UF, 25V	1	
	C16132	F1H1C105A145	C 1 uF 16 V	1	
	C16133	F2A1E101A089	E 100UF 25V	1	
	C16135	F1K1E105A029	C 1UF, 25V	1	
	C16153	F1K1E105A029	C 1UF, 25V	1	
	C16154	F1K1E105A029	C 1UF, 25V	1	
	C16191	F1K1E475A134	C 4.7UF 25V	1	
	C16192	ECJ1VB1E104K	C 0.1 UF, 25V	1	
	C16193	F2A1E470B725	E 47UF, 25V	1	PAVCTH
	C16195	F1K1E105A029	C 1UF, 25V	1	
	C16201	F0C2E225A286	C 2.2UF, 250V	1	PAVCTH
	C16202	F0C2E225A286	C 2.2UF, 250V	1	PAVCTH
	C16203	F0C2E225A286	C 2.2UF, 250V	1	PAVCTH
	C16242	F1H1C105A145	C 1 uF 16 V	1	
	C16243	ECJ1VB1H103K	C 0.01UF, 50V	1	
	C16244	F1J1A106A087	C 10UF, 10V	1	
	C16271	F2A1E221B726	E 220UF, 25V	1	PAVCTH
	C16280	F1K1E105A029	C 1UF, 25V	1	
	C16281	ECJ1VB1E104K	C 0.1 UF, 25V	1	
	C16284	F1H1H104A913	C 0.1UF, K , 50V	1	
	C16285	F1H1H104A913	C 0.1UF, K , 50V	1	
	C16295	F1H1H104A913	C 0.1UF, K , 50V	1	
	C16315	ECJ1VB1A105K	C 1UF, 10V	1	
	C16316	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
	C16317	ECJ1VB1A105K	C 1UF, 10V	1	
	C16318	F1J1H104A717	C 0.1UF, 50V	1	
	C16319	F1J1H104A717	C 0.1UF, 50V	1	
	C16328	F2A2C1010028	E 100UF, 160V	1	
	C16330	F0C2E105A286	C 1 UF 250 V	1	PAVCTH
	C16351	F1H1H104A970	C 0.1UF, , 50V	1	
	C16352	F1H1H104A970	C 0.1UF, , 50V	1	
	C16361	F1L2J562A021	C 5600PF, 630V	1	PAVCTH
	C16362	F1L2J562A021	C 5600PF, 630V	1	PAVCTH
	C16401	F1L2J562A021	C 5600PF, 630V	1	PAVCTH
	C16416	F2A2T3010001	E 300UF, 220V	1	PAVCTH
	C16417	F2A2T3010001	E 300UF, 220V	1	PAVCTH
	C16418	F2A2T3010001	E 300UF, 220V	1	PAVCTH
	C16419	F0C2E105A286	C 1 UF 250 V	1	PAVCTH
	C16420	F0C2E105A286	C 1 UF 250 V	1	PAVCTH
	C16423	F1L2J562A021	C 5600PF, 630V	1	PAVCTH
	C16442	ECJ1VB1H392K	C 3900UF, 50V	1	
	C16450	F1L2J472A021	C 4700PF, 630V	1	PAVCTH
	C16452	ECJ1VB1H392K	C 3900UF, 50V	1	
	C16460	F1K2J222A024	C 2200PF, 630V	1	PAVCTH
	C16502	F1K1E475A134	C 4.7UF 25V	1	
	C16503	F2A1E221B726	E 220UF, 25V	1	PAVCTH
	C16505	F1K1E105A029	C 1UF, 25V	1	
	C16506	F1H1C105A145	C 1 uF 16 V	1	
	C16508	F1K1E105A029	C 1UF, 25V	1	
	C16531	F1K1E105A029	C 1UF, 25V	1	
	C16534	F1H1C105A145	C 1 uF 16 V	1	
	C16551	F1K1E105A029	C 1UF, 25V	1	
	C16561	F1J1A106A087	C 10UF, 10V	1	
	C16562	F1H1C105A145	C 1 uF 16 V	1	
	C16563	F1H1C105A145	C 1 uF 16 V	1	
	C16565	ECJ1VB1H103K	C 0.01UF, 50V	1	
	C16566	ECJ1VB1H103K	C 0.01UF, 50V	1	

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	C16584	ECJ1VB1H392K	C 3900UF, 50V	1	
	C16593	F1H1H102A831	C 1000PF, 50V	1	PAVCTH
	C16602	F1H1H2200008	C 22PF, 50V	1	
	C16603	F1K2J471A042	C 470PF, 630V	1	PAVCTH
	C16631	F0C2E225A286	C 2.2UF, 250V	1	PAVCTH
	C16632	F0C2E225A286	C 2.2UF, 250V	1	PAVCTH
	C16633	F0C2E225A286	C 2.2UF, 250V	1	PAVCTH
	C16641	F1K2J222A024	C 2200PF, 630V	1	PAVCTH
	C16661	F1K2J1020001	C 1000PF, 630V	1	PAVCTH
	C16662	F1K2J1020001	C 1000PF, 630V	1	PAVCTH
	C16663	F1K2J2210003	C 220PF, 630V	1	PAVCTH
	C16668	F1H1H821A831	C 820 PF, 50V	1	
	C16685	F1H1H104A913	C 0.1UF, K , 50V	1	
	C16723	F1K1E105A029	C 1UF, 25V	1	
	C16724	F1K1E475A134	C 4.7UF 25V	1	
	C16753	F1K1E105A029	C 1UF, 25V	1	
	C16770	F1H1C105A145	C 1 uF 16 V	1	
	C16791	F2A1E221B726	E 220UF, 25V	1	PAVCTH
	C16793	F2A1E221B726	E 220UF, 25V	1	PAVCTH
	C16794	F1J1A106A087	C 10UF, 10V	1	
	C16795	F2A1E221B726	E 220UF, 25V	1	PAVCTH
	C16796	F1K1E475A134	C 4.7UF 25V	1	
	C16813	F2A2T1210001	E 120UF, 220V	1	
	C16814	F2A2T1210001	E 120UF, 220V	1	
	C16833	F1K2J1020001	C 1000PF, 630V	1	PAVCTH
	C16834	F1K2J1020001	C 1000PF, 630V	1	PAVCTH
	C16835	F2AZZ121A033	E 120UF, 80V	1	PAVCTH
	C16842	F2A2C1010028	E 100UF, 160V	1	
	C16843	ECJ1VB1A105K	C 1UF, 10V	1	
	C16844	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
	C16854	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
	C16856	ECJ1VB1A105K	C 1UF, 10V	1	
	C16858	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
	C16860	ECJ1VB1A105K	C 1UF, 10V	1	
	C16861	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
	C16862	ECJ1VB1A105K	C 1UF, 10V	1	
	C16863	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
	C16891	F1K1E105A029	C 1UF, 25V	1	
	C16903	F1K2J222A024	C 2200PF, 630V	1	PAVCTH
	C16907	F1K2J2210003	C 220PF, 630V	1	PAVCTH
	C16908	F1L2J472A021	C 4700PF, 630V	1	PAVCTH
	C16910	F1K2J821A043	C 820PF, 630V	1	PAVCTH
	C16912	F1K2J821A043	C 820PF, 630V	1	PAVCTH
	C17101	F1H1A105A099	C 1UF, 10V	1	PAVCTH
	C17102	F1H1A105A099	C 1UF, 10V	1	PAVCTH
	C17103	F1H1A105A099	C 1UF, 10V	1	PAVCTH
	C17108	F1L2E224A028	C 0.22UF, 250V	1	
	C17109	F1L2E224A028	C 0.22UF, 250V	1	
	C17111	F1L2E224A028	C 0.22UF, 250V	1	
	C17131	F1H1A105A099	C 1UF, 10V	1	PAVCTH
	C17132	F1H1A105A099	C 1UF, 10V	1	PAVCTH
	C17134	F1L2E224A028	C 0.22UF, 250V	1	
	C17136	F1L2E224A028	C 0.22UF, 250V	1	
	C17154	F1H1H102A831	C 1000PF, 50V	1	PAVCTH
	C17155	F1H1H102A831	C 1000PF, 50V	1	PAVCTH
	C17156	F1H1H102A831	C 1000PF, 50V	1	PAVCTH
	C17157	F1H1H102A831	C 1000PF, 50V	1	PAVCTH
	C17201	F1H1A105A099	C 1UF, 10V	1	PAVCTH
	C17202	F1H1A105A099	C 1UF, 10V	1	PAVCTH
	C17203	F1H1A105A099	C 1UF, 10V	1	PAVCTH
	C17204	F1H1A105A099	C 1UF, 10V	1	PAVCTH
	C17205	F1H1A105A099	C 1UF, 10V	1	PAVCTH

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	C17206	F1H1A105A099	C 1UF, 10V	1	PAVCTH
	C17221	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
	C17222	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
	C17234	F1H1H102A831	C 1000PF, 50V	1	PAVCTH
	C17235	F1H1H102A831	C 1000PF, 50V	1	PAVCTH
	C17236	F1H1H102A831	C 1000PF, 50V	1	PAVCTH
	C17237	F1H1H102A831	C 1000PF, 50V	1	PAVCTH
	C17257	F1L2E224A028	C 0.22UF, 250V	1	
	C17258	F1L2E224A028	C 0.22UF, 250V	1	
	C17259	F1L2E224A028	C 0.22UF, 250V	1	
	C17260	F1L2E224A028	C 0.22UF, 250V	1	
	C17261	F1L2E224A028	C 0.22UF, 250V	1	
	C17262	F1L2E224A028	C 0.22UF, 250V	1	
	C17309	F1H1A105A099	C 1UF, 10V	1	PAVCTH
	C17310	F1H1A105A099	C 1UF, 10V	1	PAVCTH
	C17311	F1H1A105A099	C 1UF, 10V	1	PAVCTH
	C17312	F1H1A105A099	C 1UF, 10V	1	PAVCTH
	C17321	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
	C17357	F1L2E224A028	C 0.22UF, 250V	1	
	C17359	F1L2E224A028	C 0.22UF, 250V	1	
	C17361	F1L2E224A028	C 0.22UF, 250V	1	
	C17363	F1L2E224A028	C 0.22UF, 250V	1	
	CB1	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CB2	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CB3	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CB4	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CB5	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CB6	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CB7	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CB8	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CB9	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CB10	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CB11	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CB12	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CB13	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CB14	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CB15	K1MY55B00002	55P CONNECTOR	1	PAVCTH
	CN0100	K1KA14A00248	14P CONNECTOR	1	
	D2820	B3AGB0000065	LED	1	
	D3009	DZ2J140M0L	ZENER DIODE	1	
	D3010	DZ2J140M0L	ZENER DIODE	1	
	D3021	DZ2J140M0L	ZENER DIODE	1	
	D3022	DZ2J140M0L	ZENER DIODE	1	
	D3023	DZ2J140M0L	ZENER DIODE	1	
	D3024	DZ2J140M0L	ZENER DIODE	1	
	D3025	DZ2J140M0L	ZENER DIODE	1	
	D3026	DZ2J140M0L	ZENER DIODE	1	
	D3201	K7AAAY000015	PHOTO LINK	1	PAVCTH
	D4703	DZ2J056M0L	ZENER DIODE	1	
	D4771	DZ2J056M0L	ZENER DIODE	1	
	D4773	B0JCCE000021	DIODE	1	
	D8710	DA2J10100L	DIODE	1	
	D8771	B0ADCK000001	DIODE	1	
	D8772	DZ2J068M0L	ZENER DIODE	1	
	D8773	DZ2J068M0L	ZENER DIODE	1	
	D9802	B0ADCK000001	DIODE	1	
	D16002	B0ECKP000061	DIODE	1	PAVCTH
	D16003	B0ECKP000061	DIODE	1	PAVCTH
	D16004	B0ECKP000061	DIODE	1	PAVCTH

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	D16021	B0FCBN000002	DIODE	1	PAVCTH
	D16022	B0FCBN000002	DIODE	1	PAVCTH
	D16042	B0FCBN000012	DIODE	1	PAVCTH
	D16051	B0FCBN000012	DIODE	1	PAVCTH
	D16071	B0ECKP000055	DIODE	1	
	D16072	B0ECKP000055	DIODE	1	
	D16131	B0ECKP000055	DIODE	1	
	D16133	DA2J10100L	DIODE	1	
	D16134	DZ2J051M0L	ZENER DIODE	1	
	D16135	DA2J10100L	DIODE	1	
	D16191	B0ECKP000055	DIODE	1	
	D16192	DA2J10100L	DIODE	1	
	D16196	DZ2J200M0L	ZENER DIODE	1	
	D16243	DA3X103E0L	DIODE	1	PAVCTH
	D16251	DZ2J330M0L	ZENER DIODE	1	
	D16252	DZ2J330M0L	ZENER DIODE	1	
	D16254A	B3ABB0000381	LED	1	PAVCTH
	D16255	DA2J10100L	DIODE	1	
	D16286	DA3X102D0L	DIODE	1	PAVCTH
	D16315	DZ2J150M0L	ZENER DIODE	1	
	D16316	B0ECKP000055	DIODE	1	
	D16317	B0ECHS000002	DIODE	1	
	D16351	DA3X102D0L	DIODE	1	PAVCTH
	D16362	B0FCBN000002	DIODE	1	PAVCTH
	D16401	B0ECKP000061	DIODE	1	PAVCTH
	D16402	B0ECKP000061	DIODE	1	PAVCTH
	D16403	B0ECKP000061	DIODE	1	PAVCTH
	D16407	B0JCDE000006	DIODE	1	
	D16411	DA2J10100L	DIODE	1	
	D16413	DA2J10100L	DIODE	1	
	D16421	DA3CF30ACL	ZENER DIODE	1	
	D16422	DA3CF30ACL	ZENER DIODE	1	
	D16430	B0ECKP000061	DIODE	1	PAVCTH
	D16432	B0ECKP000055	DIODE	1	
	D16462	B0FCBN000012	DIODE	1	PAVCTH
	D16473	DA2J10100L	DIODE	1	
	D16477	DA2J10100L	DIODE	1	
	D16482	B0FCBN000012	DIODE	1	PAVCTH
	D16506	DZ2J051M0L	ZENER DIODE	1	
	D16534	DZ2J051M0L	ZENER DIODE	1	
	D16536	B0ECKP000055	DIODE	1	
	D16581	DZ2J330M0L	ZENER DIODE	1	
	D16582	DZ2J330M0L	ZENER DIODE	1	
	D16583	B3ABB0000381	LED	1	PAVCTH
	D16601	DZ2J051M0L	ZENER DIODE	1	
	D16618	B0ECKP000055	DIODE	1	
	D16642	B0FCCN000007	DIODE	1	PAVCTH
	D16644	B0FCCN000007	DIODE	1	PAVCTH
	D16648	DA2J10100L	DIODE	1	
	D16652	B0ECKP000055	DIODE	1	
	D16662	DZ2J220M0L	TRANSISTOR	1	
	D16663	DZ2J220M0L	TRANSISTOR	1	
	D16669	DA2J10100L	DIODE	1	
	D16673	B0ECHR000004	DIODE	1	
	D16674	B0ECHR000004	DIODE	1	
	D16676	DA2J10100L	DIODE	1	
	D16685	DA2J10100L	DIODE	1	
	D16686	DA2J10100L	DIODE	1	
	D16711	B0ECHR000004	DIODE	1	
	D16712	B0ECKP000055	DIODE	1	
	D16713	B0ECHS000002	DIODE	1	
	D16714	B0ECHS000002	DIODE	1	

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	D16720	B0ECHR000004	DIODE	1	
	D16728	B0ECKP000055	DIODE	1	
	D16823	DA3X103E0L	DIODE	1	PAVCTH
	D16824	DA2J10100L	DIODE	1	
	D16825	DZ2J330M0L	ZENER DIODE	1	
	D16826	DZ2J330M0L	ZENER DIODE	1	
	D16828	DA2J10100L	DIODE	1	
	D16833	B0ECHR000004	DIODE	1	
	D17103	B0JCCD000020	DIODE	1	
	D17303	B0JCCD000020	DIODE	1	
	IC2001	C1ZBZ0004368	IC	1	
	IC2002	C1ZBZ0004683	IC	1	PAVCTH
	IC3051	C0ABBB000179	IC	1	PAVCTH
	IC4900	C1AB00003871	IC	1	PAVCTH
	IC5000	AN34044AAVF	IC	1	
	IC5701	C0DBEYY00175	IC	1	
	IC8000	MN2WS0250E	IC	1	PAVCTH
	IC8100	C0DBAYY01283	IC	1	PAVCTH
	IC8101	C0DBAYY01285	IC	1	PAVCTH
	IC8200	C3ABUY000020	IC	1	PAVCTH
	IC8201	C3ABUY000020	IC	1	PAVCTH
	IC8602	C0DBZYY00541	IC	1	PAVCTH
	IC8606	C0DBZYY00541	IC	1	PAVCTH
	IC8650	C1CB00003736	IC	1	PAVCTH
	IC8704	C0DBAYY01283	IC	1	PAVCTH
	IC8705	C0DBAYY01299	IC	1	PAVCTH
	IC8709	C0DBGYY01682	IC	1	
	IC8714	C0DBEYY00102	IC	1	PAVCTH
	IC8715	C0DBGYY00887	IC	1	
	IC8900	TVRS623AJ	IC	1	PAVCTH
	IC8902	TVR***A	IC	1	(A) PAVCTH
	IC8902	TVR***Z	IC	1	(Z) PAVCTH
	IC8902	TVR***M	IC	1	(M) PAVCTH
	IC8902	TVR***P	IC	1	(P) PAVCTH
	IC9005	C0CBCAG00046	IC	1	
	IC9300	C1AB00003813	IC	1	PAVCTH
	IC9304	TVRS878	IC	1	PAVCTH
	IC9400	C0JBAZ001120	IC	1	
	IC9401	C0JBAZ001120	IC	1	
	IC9402	C0JBAZ001120	IC	1	
	IC9803	C0DBAYY01283	IC	1	PAVCTH
	IC9804	C0DBZYY00541	IC	1	PAVCTH
	IC16130	C0ZBZ0001936	IC	1	PAVCTH
	IC16133	C0ZBZ0001936	IC	1	PAVCTH
	IC16150	C0ZBZ0001936	IC	1	PAVCTH
	IC16153	C0ZBZ0001936	IC	1	PAVCTH
	IC16241	C0JBAU000088	IC	1	
	IC16304	MIP3910MSSCF	IC	1	
	IC16312	C0DBZYY00531	IC	1	PAVCTH
	IC16503	C0ZBZ0001936	IC	1	PAVCTH
	IC16504	C0ZBZ0001936	IC	1	PAVCTH
	IC16523	C0ZBZ0001936	IC	1	PAVCTH
	IC16524	C0ZBZ0001936	IC	1	PAVCTH
	IC16561	AN49272A-VF	IC	1	PAVCTH
	IC16563	C0JBAB000996	IC	1	
	IC16600	C1ZBZ0004559	IC	1	PAVCTH
	IC16603	C0JBAA000344	IC	1	
	IC16725	C1ZBZ0004715	IC	1	PAVCTH
	IC16784	MIP3910MSSCF	IC	1	
	IC16785	C0DBZYY00532	IC	1	PAVCTH
	IC16786	MIP3910MSSCF	IC	1	

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	IC16787	C0DBZYY00532	IC	1	PAVCTH
	IC16795	C0CBALC00012	IC	1	
	IC16921	C1ZBZ0004557	IC	1	PAVCTH
	IC17201	C0JBAU000088	IC	1	
	IC17202	C0JBAU000088	IC	1	
	IC17301	C0JBAU000088	IC	1	
	JK3001	K1FY315A0014	CONNECTOR	1	PAVCTH
	JK3100B	K1U920A00004	CONNECTOR UNIT	1	PAVCTH
	JK3202	K2HC1YYB0079	JACK	1	PAVCTH
	JK4700	K1FY119D0025	CONNECTOR	1	PAVCTH
	JK4701	K1FY119D0025	CONNECTOR	1	PAVCTH
	JK8600	K1NA12E00016	12P CONNECTOR	1	
	JK8601	K1FY208B0013	CONNECTOR	1	PAVCTH
	JK8602	K2LC1YYA0018	JACK	1	PAVCTH
	JS1050	D0GA360JA023	M 36 OHM, J,1/16W	1	
	JS1051	D0GA360JA023	M 36 OHM, J,1/16W	1	
	JS1052	D0GA360JA023	M 36 OHM, J,1/16W	1	
	K1	K1KY07AA0719	7P CONNECTOR	1	
	L2000	J0JYC0000464	FILTER	1	PAVCTH
	L4901	G1C150MA0533	INDUCTION COIL	1	PAVCTH
	L4902	G1C150MA0533	INDUCTION COIL	1	PAVCTH
	L4903	G1C150MA0533	INDUCTION COIL	1	PAVCTH
	L4904	G1C150MA0533	INDUCTION COIL	1	PAVCTH
	L6703	D0GAR00J0005	M 0 OHM, 1/16W	1	
	L6707	J0JYC0000464	FILTER	1	PAVCTH
	L8001	J0JCC0000287	CHIP INDUCTOR	1	
	L8002	J0JYC0000464	FILTER	1	PAVCTH
	L8003	J0JKC0000021	CHIP INDUCTOR	1	
	L8004	J0JCC0000287	CHIP INDUCTOR	1	
	L8005	J0JYC0000464	FILTER	1	PAVCTH
	L8100	G1C1R5ZA0311	INDUCTION COIL	1	PAVCTH
	L8101	G1C4R7ZA0311	INDUCTION COIL	1	PAVCTH
	L8600	J0ZZB0000142	FILTER	1	(A) (Z)
	L8601	J0ZZB0000142	FILTER	1	(A) (Z)
	L8603	J0ZZB0000142	FILTER	1	(A) (Z)
	L8604	J0JYC0000464	FILTER	1	PAVCTH
	L8606	J0JYC0000464	FILTER	1	PAVCTH
	L8607	J0JYC0000464	FILTER	1	PAVCTH
	L8704	G1C1R5ZA0311	INDUCTION COIL	1	PAVCTH
	L8705	G1C4R7ZA0311	INDUCTION COIL	1	PAVCTH
	L9006	G1C1R5ZA0311	INDUCTION COIL	1	PAVCTH
	L9008	J0JYC0000464	FILTER	1	PAVCTH
	L9300	J0JYC0000464	FILTER	1	PAVCTH
	L9303	J0JYC0000464	FILTER	1	PAVCTH
	L9305	J0JYC0000464	FILTER	1	PAVCTH
	L9306	J0JYC0000464	FILTER	1	PAVCTH
	L9307	J0JYC0000464	FILTER	1	PAVCTH
	L9308	J0JYC0000464	FILTER	1	PAVCTH
	L16001	G0CR11KA0216	PEAKING COIL	1	PAVCTH
	L16002	G0CR11KA0216	PEAKING COIL	1	PAVCTH
	L16071	G0ZZ00002183	PEAKING COIL	1	
	L16072	G0ZZ00002183	PEAKING COIL	1	
	L16303	G0C471MA0049	PEAKING COIL	1	
	L16411	G0CR11KA0216	PEAKING COIL	1	PAVCTH
	L16412	G0CR11KA0216	PEAKING COIL	1	PAVCTH
	L16431	G0ZZ00002183	PEAKING COIL	1	
	L16432	G0ZZ00002183	PEAKING COIL	1	
	L16660	G0C470Z00001	PEAKING COIL	1	PAVCTH

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	PA2000	K5H4022A0031	FUSE	1	
	PA8704	K5H5022A0031	FUSE	1	
	PC16131	B3PBE0000065	IC	1	PAVCTH
	PC16191	B3PBA0000625	IC	1	PAVCTH
	PC16251	B3PBA0000580	IC	1	
	PC16301	B3PBA0000580	IC	1	
	PC16461	B3PBE0000065	IC	1	PAVCTH
	PC16462	B3PBE0000060	IC	1	
	PC16480	B3PBA0000580	IC	1	
	PC16581	B3PBA0000580	IC	1	
	PC16603	B3PBA0000580	IC	1	
	PC16685	B3PBA0000625	IC	1	PAVCTH
	PC16723	B3PBA0000580	IC	1	
	PC16896	B3PBA0000580	IC	1	
	PC16897	B3PBA0000580	IC	1	
	Q2001	B1CHPC000005	FET	1	PAVCTH
	Q2002	B1ABCE000015	TRANSISTOR	1	
	Q2003	B1CBGD000001	FET	1	
	Q2004	B1ABCE000015	TRANSISTOR	1	
	Q2007	B1ABCE000015	TRANSISTOR	1	
	Q2810	B1ABCE000015	TRANSISTOR	1	
	Q2811	B1ABCE000015	TRANSISTOR	1	
	Q2812	B1ABCE000015	TRANSISTOR	1	
	Q3008	B1ADCF000194	TRANSISTOR	1	
	Q3102	B1ABKE000001	TRANSISTOR	1	PAVCTH
	Q3103	B1ABKE000001	TRANSISTOR	1	PAVCTH
	Q3304	B1ADCF000194	TRANSISTOR	1	
	Q3305	B1ABKE000001	TRANSISTOR	1	PAVCTH
	Q3306	B1ABKE000001	TRANSISTOR	1	PAVCTH
	Q3307	B1ABBE000003	TRANSISTOR	1	
	Q4700	B1ABCF000231	TRANSISTOR	1	
	Q4709	B1ABCF000231	TRANSISTOR	1	
	Q8771	B1HFCEA00001	TRANSISTOR	1	
	Q9201	B1HFCEA00001	TRANSISTOR	1	
	Q9202	B1ABCE000015	TRANSISTOR	1	
	Q16001	B1JADN000013	TRANSISTOR	1	PAVCTH
	Q16002	B1JADN000013	TRANSISTOR	1	PAVCTH
	Q16021	DG3C3010CL	TRANSISTOR	1	
	Q16023	DG3C3010CL	TRANSISTOR	1	
	Q16042	DG3D3020CVLW	TRANSISTOR	1	PAVCTH
	Q16052	DG3D3020CVLW	TRANSISTOR	1	PAVCTH
	Q16101	B1CFRM000033	FET	1	PAVCTH
	Q16102	B1CFRM000033	FET	1	PAVCTH
	Q16191	B1HFPPA00001	TRANSISTOR	1	
	Q16251	B1ABCF000231	TRANSISTOR	1	
	Q16280	B1ADCE000027	TRANSISTOR	1	
	Q16403	B1JADN000013	TRANSISTOR	1	PAVCTH
	Q16404	B1JADN000013	TRANSISTOR	1	PAVCTH
	Q16422	DG3D3010CVLW	TRANSISTOR	1	PAVCTH
	Q16423	DG3D3010CVLW	TRANSISTOR	1	PAVCTH
	Q16442	B1JADN000013	TRANSISTOR	1	PAVCTH
	Q16452	B1JADN000013	TRANSISTOR	1	PAVCTH
	Q16581	B1ABCF000231	TRANSISTOR	1	
	Q16601	B1CERQ000061	FET	1	
	Q16602	B1CFGF000019	FET	1	PAVCTH
	Q16621	B1JBDN000006	TRANSISTOR	1	PAVCTH
	Q16622	B1JBDN000006	TRANSISTOR	1	PAVCTH
	Q16624	B1JBDN000006	TRANSISTOR	1	PAVCTH
	Q16646	B1CFGF000019	FET	1	PAVCTH

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	Q16647	B1CBGD000001	FET	1	
	Q16648	DSC2001Q0L	TRANSISTOR	1	
	Q16652	BIADCE000027	TRANSISTOR	1	
	Q16660	B1CFNQ000003	FET	1	PAVCTH
	Q16661	B1JBER000002	TRANSISTOR	1	
	Q16762	B1HFFFA00001	TRANSISTOR	1	
	Q16815	B1ABCE000015	TRANSISTOR	1	
	Q16817	DSC2001Q0L	TRANSISTOR	1	
	Q16820	B1CFGF000019	FET	1	PAVCTH
	Q16891	BIADCE000027	TRANSISTOR	1	
	Q16921	B1CFGF000019	FET	1	PAVCTH
	Q16931	B1ABCE000015	TRANSISTOR	1	
	R050	D0GAR00J0005	M 0 OHM, 1/16W	1	(A) (Z)
	R061	D0GAR00J0005	M 0 OHM, 1/16W	1	(M) (P)
	R079	D0GAR00J0005	M 0 OHM, 1/16W	1	
	R0902	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R0903	D0GA272JA023	M 2.7KOHM, J,1/16W	1	
	R0904	D0GA272JA023	M 2.7KOHM, J,1/16W	1	
	R0905	D0GA272JA023	M 2.7KOHM, J,1/16W	1	
	R0906	D0GA272JA023	M 2.7KOHM, J,1/16W	1	
	R0909	D0GA272JA023	M 2.7KOHM, J,1/16W	1	
	R0910	D0GA272JA023	M 2.7KOHM, J,1/16W	1	
	R0911	D1HY3324A012	NETWORK RESISTER	1	PAVCTH
	R0912	D0GA101JA023	M 100 OHM, J,1/16W	1	
	R0913	D0GA101JA023	M 100 OHM, J,1/16W	1	
	R0936	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R0937	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R0941	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R0942	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R0943	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R0944	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R0945	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R0946	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R0949	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R0950	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R0952	D0GA102JA023	M1KOHM, J,1/16 W	1	
	R0953	D0GA101JA023	M 100 OHM, J,1/16W	1	
	R0954	D0GA101JA023	M 100 OHM, J,1/16W	1	
	R2001	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R2002	D0GA273JA023	M 27K OHM J ,1/16W	1	
	R2004	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R2008	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R2012	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R2015	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R2016	D0GA104JA023	M100KOHM, J,1/16 W	1	
	R2017	D0GA102JA023	M1KOHM, J,1/16 W	1	
	R2018	D0GA102JA023	M1KOHM, J,1/16 W	1	
	R2023	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R2024	D0GA223JA023	M 22K OHM J 1/16W	1	
	R2025	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R2033	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R2035	D0GA223JA023	M 22K OHM J 1/16W	1	
	R2036	D0GA223JA023	M 22K OHM J 1/16W	1	
	R2038	D0GA162JA023	M 1.6KOHM, J,1/16W	1	PAVCTH
	R2039	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R2041	D0GA433JA023	M 43KOHM, J,1/16W	1	PAVCTH
	R2042	D0GA102JA023	M1KOHM, J,1/16 W	1	
	R2045	D1BA7151A023	M 7.15KOHM, F 1/16 W	1	PAVCTH
	R2046	D0GA102JA023	M1KOHM, J,1/16 W	1	
	R2047	D0GAR00J0005	M 0 OHM, 1/16W	1	
	R2050	ERJ2RKF1911X	M 1.91KOHM, J. 1/16W	1	PAVCTH

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	R2051	ERJ2RKF3091X	M 3.09KOHM, J. 1/16W	1	PAVCTH
	R2052	D1BA6041A023	M 6.04KOHM, F.1/16 W	1	PAVCTH
	R2053	D1BA1692A023	M 16.9KOHM, F.1/16 W	1	PAVCTH
	R2054	D0GA223JA023	M 22K OHM J 1/16W	1	
	R2055	D0GA223JA023	M 22K OHM J 1/16W	1	
	R2057	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R2058	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R2059	D0GA102JA023	M1KOHM, J.1/16 W	1	
	R2060	D0GA102JA023	M1KOHM, J.1/16 W	1	
	R2810	D0GA470JA023	M 47 OHM, J,1/16W	1	
	R2811	D0GA104JA023	M100KOHM, J.1/16 W	1	
	R2812	D0GA224JA023	M 220KOHM J 1/16W	1	
	R2813	D0GA223JA023	M 22K OHM J 1/16W	1	
	R2814	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R2815	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R2816	D0GA471JA023	M 470OHM, J,1/16W	1	
	R2817	D0GA223JA023	M 22K OHM J 1/16W	1	
	R2818	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R2819	D0GA102JA023	M1KOHM, J.1/16 W	1	
	R2834	D0GA122JA023	M 1.2KOHM, J,1/16W	1	
	R3001	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R3002	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R3003	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R3004	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R3008	D1BA1003A023	M 100KOHM, F,1/16W	1	PAVCTH
	R3009	D1BA1003A023	M 100KOHM, F,1/16W	1	PAVCTH
	R3010	D0GA203JA023	M 20K OHM J.1/16W	1	
	R3011	D0GA203JA023	M 20K OHM J.1/16W	1	
	R3106	D0GA333JA023	M 33KOHM, J,1/16W	1	
	R3107	D0GA333JA023	M 33KOHM, J,1/16W	1	
	R3142	D1BF75R0A073	M 75.0 OHM, F.1/4 W	1	PAVCTH
	R3167	D0GA333JA023	M 33KOHM, J,1/16W	1	
	R3168	D0GA333JA023	M 33KOHM, J,1/16W	1	
	R3171	D0GA272JA023	M 2.7KOHM, J.1/16W	1	
	R3172	D0GA272JA023	M 2.7KOHM, J.1/16W	1	
	R3173	D1BA1003A023	M 100KOHM, F,1/16W	1	PAVCTH
	R3181	D1BD75R0A066	M 75.0 OHM, F.1/8 W	1	
	R3182	D1BD75R0A066	M 75.0 OHM, F.1/8 W	1	
	R3183	D1BD75R0A066	M 75.0 OHM, F.1/8 W	1	
	R3188	D1BA1003A023	M 100KOHM, F,1/16W	1	PAVCTH
	R3192	D1HY2204A012	NETWORK RESISTER	1	PAVCTH
	R3199	D0GA104JA023	M100KOHM, J.1/16 W	1	
	R3200	D0GA104JA023	M100KOHM, J.1/16 W	1	
	R3201	D1BD75R0A066	M 75.0 OHM, F.1/8 W	1	
	R3203	D1BD75R0A066	M 75.0 OHM, F.1/8 W	1	
	R3207	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R3209	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R3210	D1HY2204A012	NETWORK RESISTER	1	PAVCTH
	R3213	D0GA220JA023	M22 OHM, J.1/16 W	1	
	R3214	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R3216	D1BD75R0A066	M 75.0 OHM, F.1/8 W	1	
	R3220	D0GA101JA023	M 100 OHM, J,1/16W	1	
	R3221	D1HY2204A012	NETWORK RESISTER	1	PAVCTH
	R3290	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R3291	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R3312	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R3314	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R3315	D0GA101JA023	M 100 OHM, J,1/16W	1	
	R3316	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R3317	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R3319	D0GA101JA023	M 100 OHM, J,1/16W	1	
	R3320	D0GA101JA023	M 100 OHM, J,1/16W	1	

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	R3322	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R3323	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R3324	D0GA102JA023	M1KOHM, J.1/16 W	1	
	R3342	D0GA331JA023	M 330 OHM, J,1/16W	1	
	R3343	D0GA331JA023	M 330 OHM, J,1/16W	1	
	R4513	D1BA1600A023	M 160 OHM,F.1/16 W	1	PAVCTH
	R4514	D1BA82R0A014	M 82 OHM,F.1/16 W	1	PAVCTH
	R4702	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R4708	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R4709	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R4710	D1HY4734A012	NETWORK RESISTER	1	PAVCTH
	R4711	D0GA102JA023	M1KOHM, J.1/16 W	1	
	R4728	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R4748	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R4749	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R4750	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R4751	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R4779	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R4788	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R4794	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R4795	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R4796	D1HY4734A012	NETWORK RESISTER	1	PAVCTH
	R4797	D0GA102JA023	M1KOHM, J.1/16 W	1	
	R4798	D0GA273JA023	M 27K OHM J ,1/16W	1	
	R4900	D0GFR00J0005	M 0 OHM,J,1/3W	1	
	R4901	D1HY6804A012	NETWORK RESISTER	1	PAVCTH
	R4906	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R4907	D0GA102JA023	M1KOHM, J.1/16 W	1	
	R4908	D0GA102JA023	M1KOHM, J.1/16 W	1	
	R4958	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R5000	D0GA102JA023	M1KOHM, J.1/16 W	1	
	R5001	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R5008	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R5009	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R5010	D0GA272JA023	M 2.7KOHM, J.1/16W	1	
	R5011	D0GA104JA023	M100KOHM, J.1/16 W	1	
	R5012	D0GA223JA023	M 22K OHM J 1/16W	1	
	R5013	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R5014	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R5714	D0GBR00J0004	M 0 OHM J 1/10W	1	
	R5734	D0GBR00J0004	M 0 OHM J 1/10W	1	
	R5735	D1BA1302A023	M 13KOHM,F,1/16W	1	PAVCTH
	R5736	D1BA1002A023	M 10KOHM,F,1/16W	1	PAVCTH
	R5747	D0GBR00J0004	M 0 OHM J 1/10W	1	
	R5932	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R6703	D0GBR00J0004	M 0 OHM J 1/10W	1	
	R6726	D0GA681JA023	M680 OHM, J,1/16W	1	
	R6727	D0GA681JA023	M680 OHM, J,1/16W	1	
	R6731	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R6732	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8008	D0GA331JA023	M 330 OHM, J,1/16W	1	
	R8009	D0GA1R1JA023	M 1.1OHM, J,1/16W	1	PAVCTH
	R8100	D1BB2001A197	M 2 KOHM,F.1/10 W	1	PAVCTH
	R8101	D1BB1051A087	M 1.05 KOHM,F.1/10 W	1	PAVCTH
	R8111	D1BB2001A197	M 2 KOHM,F.1/10 W	1	PAVCTH
	R8112	D1BB1961A087	M 1.96 KOHM,F.1/10 W	1	PAVCTH
	R8200	D1BA2400A023	M 240 OHM,F.1/16 W	1	PAVCTH
	R8203	D1BA2700A023	M 270 OHM,F.1/16 W	1	PAVCTH
	R8204	D1BA2700A023	M 270 OHM,F.1/16 W	1	PAVCTH
	R8205	D1BA2700A023	M 270 OHM,F.1/16 W	1	PAVCTH
	R8206	D1BA2700A023	M 270 OHM,F.1/16 W	1	PAVCTH
	R8207	D1BA2700A023	M 270 OHM,F.1/16 W	1	PAVCTH

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	R8208	D1BA2700A023	M 270 OHM, F.1/16 W	1	PAVCTH
	R8217	D0GA221JA023	M220 OHM, J.1/16 W	1	
	R8218	D0GA221JA023	M220 OHM, J.1/16 W	1	
	R8219	D1BA2400A023	M 240 OHM, F.1/16 W	1	PAVCTH
	R8220	D1BA2400A023	M 240 OHM, F.1/16 W	1	PAVCTH
	R8221	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8230	D1BA2700A023	M 270 OHM, F.1/16 W	1	PAVCTH
	R8231	D1BA2700A023	M 270 OHM, F.1/16 W	1	PAVCTH
	R8232	D1BA2700A023	M 270 OHM, F.1/16 W	1	PAVCTH
	R8233	D1BA2700A023	M 270 OHM, F.1/16 W	1	PAVCTH
	R8234	D0GA220JA023	M22 OHM, J.1/16 W	1	
	R8235	D0GA220JA023	M22 OHM, J.1/16 W	1	
	R8236	D0GA220JA023	M22 OHM, J.1/16 W	1	
	R8237	D0GA220JA023	M22 OHM, J.1/16 W	1	
	R8238	D0GA220JA023	M22 OHM, J.1/16 W	1	
	R8240	D1HY2208A012	NETWORK RESISTER	1	PAVCTH
	R8241	D1HY2204A012	NETWORK RESISTER	1	PAVCTH
	R8242	D1HY2204A012	NETWORK RESISTER	1	PAVCTH
	R8243	D1HY2204A012	NETWORK RESISTER	1	PAVCTH
	R8300	D0GA471JA023	M 470OHM, J,1/16W	1	
	R8301	D1BA6201A023	M 6.2 KOHM, F.1/16 W	1	PAVCTH
	R8302	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R8303	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R8304	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R8305	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R8418	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8441	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8444	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8502	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8506	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8515	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8600	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8607	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8608	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8617	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8618	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8620	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8621	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8624	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8625	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8626	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8627	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8628	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8629	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8630	EXB2HV103JV	M 10 KOHM 1/16 W	1	
	R8632	D1HY6804A012	NETWORK RESISTER	1	PAVCTH
	R8634	D1HY6804A012	NETWORK RESISTER	1	PAVCTH
	R8636	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R8637	D0GA272JA023	M 2.7KOHM, J.1/16W	1	
	R8638	D0GA272JA023	M 2.7KOHM, J.1/16W	1	
	R8639	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8640	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8641	D1HYR004A024	NETWORK RESISTER	1	(M) (P) PAVCTH
	R8642	D1HYR004A024	NETWORK RESISTER	1	(M) (P) PAVCTH
	R8648	D1HYR004A024	NETWORK RESISTER	1	(M) (P) PAVCTH
	R8650	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R8651	D0GA152JA023	M 1.5KOHM, J,1/16W	1	
	R8653	D0GAR00J0005	M 0 OHM, 1/16W	1	
	R8654	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8655	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8656	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8657	D0GA680JA023	M 68 OHM, J,1/16W	1	

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	R8658	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8659	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8660	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8661	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8662	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8663	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8664	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8665	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R8666	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R8668	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R8670	D1BA2491A023	M 2.49KOHM, F,1/16W	1	PAVCTH
	R8681	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R8683	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R8691	D0GAR00J0005	M 0 OHM, 1/16W	1	
	R8694	D1BA1822A023	M 18.2KOHM, F,1/16 W	1	PAVCTH
	R8695	D1BA3742A023	M 37.4 KOHM, F,1/16 W	1	PAVCTH
	R8705	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8707	D0GBR00J0004	M 0 OHM J 1/10W	1	
	R8718	D0GBR00J0004	M 0 OHM J 1/10W	1	
	R8741	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R8742	D0GA223JA023	M 22K OHM J 1/16W	1	
	R8746	D1BA6802A023	M 68 KOHM, F,1/16 W	1	PAVCTH
	R8747	D1BA2102A023	M 21KOHM, F,1/16W	1	PAVCTH
	R8751	D0GB563ZA038	M 56KOHM, J,1/10W	1	PAVCTH
	R8752	D0GB103ZA038	M 10K OHM J 1/10W	1	PAVCTH
	R8771	D0GA272JA023	M 2.7KOHM, J,1/16W	1	
	R8772	D0GA332JA023	M 3.3KOHM, J,1/16W	1	
	R8773	D0GA102JA023	M1KOHM, J,1/16 W	1	
	R8775	D0GA104JA023	M100KOHM, J,1/16 W	1	
	R8776	D0GA102JA023	M1KOHM, J,1/16 W	1	
	R8777	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R8778	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R8785	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8787	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R8788	D0GA102JA023	M1KOHM, J,1/16 W	1	
	R8792	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8797	D1BA1200A023	M 120 OHM, F,1/16 W	1	PAVCTH
	R8798	D1BA56R0A023	M 56 OHM, F,1/16 W	1	PAVCTH
	R8801	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8802	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8804	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8806	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8807	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8809	D1HY1034A012	NETWORK RESISTER	1	PAVCTH
	R8810	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8811	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8812	D0GA243JA023	M 24K OHM J 0.063W	1	
	R8815	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8817	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8824	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8826	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8827	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8833	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8848	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8850	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8851	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8853	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8854	D1HY1038A012	NETWORK RESISTER	1	PAVCTH
	R8855	D0GA103JA023	M10KOHM, J,1/16 W	1	
	R8903	D1HY6808A012	NETWORK RESISTER	1	PAVCTH
	R8906	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R8909	D0GA272JA023	M 2.7KOHM, J,1/16W	1	

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	R8910	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8914	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R8917	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8918	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8919	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8920	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8921	D0GA223JA023	M 22K OHM J 1/16W	1	
	R8922	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8923	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R8924	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R9039	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R9105	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R9117	D0GB203ZA038	M 20KOHM J 1/10W	1	PAVCTH
	R9118	D0GB123ZA038	M 12KOHM,J.1/10W	1	PAVCTH
	R9126	D0GA101JA023	M 100 OHM, J,1/16W	1	
	R9160	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R9163	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R9164	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R9165	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R9168	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R9198	D1HY6804A012	NETWORK RESISTER	1	PAVCTH
	R9199	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R9205	D0GA122JA023	M 1.2KOHM, J,1/16W	1	
	R9206	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R9208	D1HY6804A012	NETWORK RESISTER	1	PAVCTH
	R9209	D1HY6808A012	NETWORK RESISTER	1	PAVCTH
	R9231	D0GA101JA023	M 100 OHM, J,1/16W	1	
	R9232	D0GA101JA023	M 100 OHM, J,1/16W	1	
	R9246	D0GA104JA023	M100KOHM, J.1/16 W	1	
	R9247	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R9248	D0GA473JA023	M 47KOHM, J,1/16W	1	
	R9249	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R9250	D0GA472JA023	M 4.7KOHM, J,1/16W	1	
	R9252	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R9255	D0GA360JA023	M 36 OHM, J,1/16W	1	
	R9256	D0GA272JA023	M 2.7KOHM, J.1/16W	1	
	R9320	D0GA182JA023	M 1.8KOHM, J,0.063W	1	
	R9321	D0GA105JA023	M 1M OHM, J,1/16W	1	
	R9324	D0GA162JA023	M 1.6KOHM, J,1/16W	1	PAVCTH
	R9325	D0GA162JA023	M 1.6KOHM, J,1/16W	1	PAVCTH
	R9326	D0GA162JA023	M 1.6KOHM, J,1/16W	1	PAVCTH
	R9327	D0GA162JA023	M 1.6KOHM, J,1/16W	1	PAVCTH
	R9400	D1HY1038A012	NETWORK RESISTER	1	PAVCTH
	R9401	D1HY1038A012	NETWORK RESISTER	1	PAVCTH
	R9404	D1HY1038A012	NETWORK RESISTER	1	PAVCTH
	R9405	D1HY6808A012	NETWORK RESISTER	1	PAVCTH
	R9503	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R9608	D1HY2208A012	NETWORK RESISTER	1	PAVCTH
	R9610	D1HY2208A012	NETWORK RESISTER	1	PAVCTH
	R9802	D1BA3742A023	M 37.4 KOHM,F.1/16 W	1	PAVCTH
	R9803	F1G1A105A047	C 1UF 10V	1	
	R9813	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R9907	D0GA101JA023	M 100 OHM, J,1/16W	1	
	R9935	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R9937	D0GA680JA023	M 68 OHM, J,1/16W	1	
	R9941	D0GA102JA023	M1KOHM, J.1/16 W	1	
	R9943	D0GA102JA023	M1KOHM, J.1/16 W	1	
	R9946	D0GA103JA023	M10KOHM, J.1/16 W	1	
	R16001	D0GF7R5JA047	M 7.5 OHM,J, 1/3W	1	
	R16002	D0GF7R5JA047	M 7.5 OHM,J, 1/3W	1	
	R16021	D0GF7R5JA047	M 7.5 OHM,J, 1/3W	1	
	R16023	D0GF7R5JA047	M 7.5 OHM,J, 1/3W	1	

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	R16031	D0GF473JA048	M 47KOHM, J, 1/3W	1	
	R16032	D0GF473JA048	M 47KOHM, J, 1/3W	1	
	R16042	D0GF5R6JA047	M 5.6 OHM, J, 1/3W	1	
	R16052	D0GF5R6JA047	M 5.6 OHM, J, 1/3W	1	
	R16072	D0D2100JA038	W 100 OHM, 2W	1	PAVCTH
	R16101	D0GD150JA059	M 15 OHM, J, 1/4W	1	
	R16102	D0GD150JA059	M 15 OHM, J, 1/4W	1	
	R16105	D0GF474JA048	M 470KOHM, J, 1/3W	1	
	R16109	D0GD100JA059	M 10 OHM, J, 1/4W	1	
	R16116	D0GB473JA065	M 47KOHM J. 1/10W	1	
	R16130	D0GB103JA065	M 10K OHM J 1/10W	1	
	R16132	D0GB220JA065	M 22 OHM J 1/10W	1	
	R16133	D1BD2700A066	M 270KOHM, F.1/8W	1	PAVCTH
	R16137	D0GZ1R0JA020	M 1 OHM, J, 1/2W	1	
	R16138	D0GF911JA048	M 910 OHM, J, 1/4W	1	PAVCTH
	R16139	D0GB103JA065	M 10K OHM J 1/10W	1	
	R16152	D0GB220JA065	M 22 OHM J 1/10W	1	
	R16153	D1BD2700A066	M 270KOHM, F.1/8W	1	PAVCTH
	R16191	D1BD2700A066	M 270KOHM, F.1/8W	1	PAVCTH
	R16192	D0GB103JA065	M 10K OHM J 1/10W	1	
	R16193	D0GD750JA052	M 75 OHM, J, 1/8W	1	
	R16195	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R16230	D0GD470JA052	M 47 OHM, J, 1/8W	1	
	R16231	D1H84724A041	NETWORK RESISTER	1	PAVCTH
	R16241	D1H84704A041	NETWORK RESISTER	1	PAVCTH
	R16242	D1H84724A041	NETWORK RESISTER	1	PAVCTH
	R16244	D0GB223JA065	M 22KOHM, J, 1/10W	1	
	R16252	D0GF563JA048	M 56 KOHM, J, 1/3W	1	
	R16253	D1BD1003A066	M 100KOHM, F.1/8 W	1	
	R16254	D1BD4422A066	M 44.2KOHM, F.1/8W	1	PAVCTH
	R16255	D0GB103JA065	M 10K OHM J 1/10W	1	
	R16257	D0GB473JA065	M 47KOHM J. 1/10W	1	
	R16280	D0GB222JA065	M 2.2KOHM, J, 1/10W	1	
	R16283	D0GB473JA065	M 47KOHM J. 1/10W	1	
	R16285	D1H86234A041	NETWORK RESISTER	1	PAVCTH
	R16287	D0GF334JA047	M 330KOHMJ, 1/3W	1	
	R16288	D0GF334JA047	M 330KOHMJ, 1/3W	1	
	R16291	D0GB103JA065	M 10K OHM J 1/10W	1	
	R16307	D1BD7682A147	M76.8KOHM, D.1/10W	1	PAVCTH
	R16310	D0GF273JA054	M 27 KOHM. 1/2W	1	PAVCTH
	R16313	D0GF273JA054	M 27 KOHM. 1/2W	1	PAVCTH
	R16318	D1BD6982A147	M69.8KOHM, D.1/10W	1	PAVCTH
	R16319	D1BD2491A147	M 2.49KOHM, F.1/8W	1	PAVCTH
	R16320	ERJ14YJ683	M 68KOHM, J. 1/4W	1	
	R16330	D0GB102JA065	M 1KOHM, J, 1/10W	1	
	R16332	D0GB474JA065	M 470KOHM, J, 1/10W	1	
	R16334	D0GB472JA065	M 4.7KOHM, J, 1/10W	1	
	R16335	D0GB102JA065	M 1KOHM, J, 1/10W	1	
	R16351	D1H86234A041	NETWORK RESISTER	1	PAVCTH
	R16354	D0GF334JA047	M 330KOHMJ, 1/3W	1	
	R16355	D0GF334JA047	M 330KOHMJ, 1/3W	1	
	R16403	D0GF7R5JA047	M 7.5 OHM, J, 1/3W	1	
	R16404	D0GF7R5JA047	M 7.5 OHM, J, 1/3W	1	
	R16411	D1BD2700A066	M 270KOHM, F.1/8W	1	PAVCTH
	R16412	D1BD2700A066	M 270KOHM, F.1/8W	1	PAVCTH
	R16414	D0GB103JA065	M 10K OHM J 1/10W	1	
	R16416	D0GB103JA065	M 10K OHM J 1/10W	1	
	R16422	D0GF7R5JA047	M 7.5 OHM, J, 1/3W	1	
	R16423	D0GF7R5JA047	M 7.5 OHM, J, 1/3W	1	
	R16432	D0D2100JA038	W 100 OHM, 2W	1	PAVCTH
	R16442	D0GF5R6JA047	M 5.6 OHM, J, 1/3W	1	
	R16452	D0GF5R6JA047	M 5.6 OHM, J, 1/3W	1	

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	R16466	D0GF473JA048	M 47KOHM, J, 1/3W	1	
	R16467	D0GF473JA048	M 47KOHM, J, 1/3W	1	
	R16471	D0GB203JA065	M 20KOHM J 1/10W	1	
	R16472	D0GB222JA065	M 2.2KOHM, J, 1/10W	1	
	R16473	D0GD561JA052	M 560 OHM, J, 1/8W	1	
	R16474	D0GB102JA065	M 1KOHM, J, 1/10W	1	
	R16475	D0GB472JA065	M 4.7KOHM, J, 1/10W	1	
	R16476	D0GB222JA065	M 2.2KOHM, J, 1/10W	1	
	R16477	D0GB103JA065	M 10K OHM J 1/10W	1	
	R16490	D1BD1203A147	M 120KOHM, F. 1/8 W	1	PAVCTH
	R16491	D1BD1203A147	M 120KOHM, F. 1/8 W	1	PAVCTH
	R16492	D1BD1203A147	M 120KOHM, F. 1/8 W	1	PAVCTH
	R16493	D1BD5361A147	M 5.36KOHM, F. 1/8W	1	PAVCTH
	R16501	D0GB220JA065	M 22 OHM J 1/10W	1	
	R16502	D0GB220JA065	M 22 OHM J 1/10W	1	
	R16505	D0GF102JA048	M 1.0 KOHM, J, 1/3W	1	
	R16508	D0GB221JA065	M 220 OHM J 1/10W	1	
	R16522	D0GB221JA065	M 220 OHM J 1/10W	1	
	R16534	D0GF911JA048	M 910 OHM, J, 1/4W	1	PAVCTH
	R16536	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R16537	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R16561	D1H84704A041	NETWORK RESISTER	1	PAVCTH
	R16562	D1H84704A041	NETWORK RESISTER	1	PAVCTH
	R16563	D1H84704A041	NETWORK RESISTER	1	PAVCTH
	R16564	D0GB470JA065	M 47 OHM, J, 1/10W	1	
	R16581	D0GB103JA065	M 10K OHM J 1/10W	1	
	R16582	D0GF563JA048	M 56 KOHM, J, 1/3W	1	
	R16583	D1BD1003A066	M 100KOHM, F. 1/8 W	1	
	R16584	D1BD3742A066	M 37.4KOHM, F. 1/8W	1	PAVCTH
	R16585	D0GB473JA065	M 47KOHM J. 1/10W	1	
	R16587	D0GB222JA065	M 2.2KOHM, J, 1/10W	1	
	R16588	D0GB223JA065	M 22KOHM, J, 1/10W	1	
	R16590	D0GB221JA065	M 220 OHM J 1/10W	1	
	R16601	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R16602	D0GB220JA065	M 22 OHM J 1/10W	1	
	R16604	D0GD331JA052	M 330 OHM, J, 1/8W	1	
	R16607	D1BB2262A073	M 22.6KOHM, F. 1/10W	1	PAVCTH
	R16609	D0GF102JA047	M 1.0 KOHM, J, 1/3W	1	
	R16610	D0GB104JA065	M 100KOHM J 1/10W	1	
	R16612	D0GD470JA059	M 47 OHM, J, 1/4W	1	
	R16615	D1BB4990A073	M 499 OHM, F. 1/10W	1	PAVCTH
	R16616	D1BB4321A073	M 4.32KOHM, F. 1/10W	1	PAVCTH
	R16618	D0GB100JA065	M 10 OHM J 1/10W	1	
	R16621	D0GD221JA052	M 220 OHM, J 1/8W	1	
	R16622	D0GD221JA052	M 220 OHM, J 1/8W	1	
	R16624	D0GD221JA052	M 220 OHM, J 1/8W	1	
	R16646	D0GF152JA048	M 1.5 KOHM, J, 1/4W	1	PAVCTH
	R16647	D0GF152JA048	M 1.5 KOHM, J, 1/4W	1	PAVCTH
	R16649	D0GD101JA059	M 100 OHM, J, 1/4W	1	
	R16650	D0GB473JA065	M 47KOHM J. 1/10W	1	
	R16651	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R16652	D0GF152JA048	M 1.5 KOHM, J, 1/4W	1	PAVCTH
	R16658	D1BD6491A147	M 6.49KOHM, F. 1/8W	1	PAVCTH
	R16660	D1BD1741A066	M 17.4KOHM, F. 1/8W	1	
	R16661	D0GD100JA059	M 10 OHM, J, 1/4W	1	
	R16663	D1BD9091A147	M 9.09KOHM, F. 1/8W	1	PAVCTH
	R16665	D0GD222JA052	M 2.2KOHM, J, 1/8W	1	
	R16666	D1BB1003A074	M 100 KOHM, F. 1/10 W	1	PAVCTH
	R16674	D0GF102JA047	M 1.0 KOHM, J, 1/3W	1	
	R16675	D0GB103JA065	M 10K OHM J 1/10W	1	
	R16676	D1BD2700A066	M 270KOHM, F. 1/8W	1	PAVCTH
	R16678	D0GF102JA047	M 1.0 KOHM, J, 1/3W	1	

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	R16681	D0GD100JA059	M 10 OHM, J, 1/4W	1	
	R16682	D0GD100JA059	M 10 OHM, J, 1/4W	1	
	R16684	D0GD100JA059	M 10 OHM, J, 1/4W	1	
	R16685	D1BD1500A066	M 150 OHM, F, 1/8 W	1	PAVCTH
	R16686	D0GB103JA065	M 10K OHM J 1/10W	1	
	R16696	D0D52R2KA038	W 2.2OHM, K, 5W	1	PAVCTH
	R16719	D0GB220JA065	M 22 OHM J 1/10W	1	
	R16721	D1H82204A041	NETWORK RESISTER	1	PAVCTH
	R16761	D0GD100JA059	M 10 OHM, J, 1/4W	1	
	R16763	D0GB473JA065	M 47KOHM J. 1/10W	1	
	R16772	D0GB472JA065	M 4.7KOHM, J, 1/10W	1	
	R16773	D0GD102JA052	M 1.0KOHM, J, 1/8W	1	
	R16776	D0GD470JA052	M 47 OHM, J, 1/8W	1	
	R16786	D1BD5902A066	M 59 KOHM, F, 1/8W	1	PAVCTH
	R16815	D0GB103JA065	M 10K OHM J 1/10W	1	
	R16821	D0GD104JA052	M 100KOHM, J, 1/8W	1	
	R16822	D1BD8202A066	M 750KOHM, F, 1/8W	1	PAVCTH
	R16823	D1BD6192A066	M 61.9KOHM, F, 1/8W	1	PAVCTH
	R16824	D1BD3742A066	M 37.4KOHM, F, 1/8W	1	PAVCTH
	R16825	D0GD104JA052	M 100KOHM, J, 1/8W	1	
	R16826	D0GB472JA065	M 4.7KOHM, J, 1/10W	1	
	R16829	D0GB102JA065	M 1KOHM, J, 1/10W	1	
	R16831	D1BD6812A147	M 68.1KOHM, F, 1/8W	1	PAVCTH
	R16832	D1BD7152A147	M 71.5KOHM, F, 1/8W	1	PAVCTH
	R16833	D0GF683JA048	M 68 KOHM, J, 1/4W	1	PAVCTH
	R16834	D0GF683JA048	M 68 KOHM, J, 1/4W	1	PAVCTH
	R16835	D0GF683JA048	M 68 KOHM, J, 1/4W	1	PAVCTH
	R16836	D0GF683JA048	M 68 KOHM, J, 1/4W	1	PAVCTH
	R16839	ERG2FJS473D	M 47KOHM, J, 2W	1	
	R16840	ERG2FJS473D	M 47KOHM, J, 2W	1	
	R16841	D0GB472JA065	M 4.7KOHM, J, 1/10W	1	
	R16842	D0GD102JA052	M 1.0KOHM, J, 1/8W	1	
	R16844	ERA6YEB242	M 2.4KOHM, B 1/10W	1	
	R16845	D1BD6042A147	M60.4KOHM, D, 1/10W	1	PAVCTH
	R16846	D1BD6042A147	M60.4KOHM, D, 1/10W	1	PAVCTH
	R16847	D1BD6492A147	M 64.9KOHM, F, 1/8W	1	PAVCTH
	R16851	D0GB474JA065	M 470KOHM, J, 1/10W	1	
	R16852	D0GB474JA065	M 470KOHM, J, 1/10W	1	
	R16856	D0GB102JA065	M 1KOHM, J, 1/10W	1	
	R16873	ERA6YEB242	M 2.4KOHM, B 1/10W	1	
	R16891	D1BF6982A098	M 69.8 KOHM, F, 1/4W	1	PAVCTH
	R16892	D1BF8252A098	M 82.5 KOHM, F, 1/4W	1	PAVCTH
	R16893	D1BF8252A098	M 82.5 KOHM, F, 1/4W	1	PAVCTH
	R16894	D1BB3091A074	M 3.09KOHM, F, 1/10W	1	PAVCTH
	R16895	D1BB7871A074	M 7.87 KOHM, F, 1/10W	1	PAVCTH
	R16897	D1BB2262A073	M 22.6KOHM, F, 1/10W	1	PAVCTH
	R16898	D1BB9760A073	M 976 OHM, F, 1/10W	1	PAVCTH
	R16902	D0GB6R2JA065	M 6.2 OHM J 1/10W	1	
	R16903	D1BB1471A073	M 1.47 KOHM, F, 1/10 W	1	PAVCTH
	R16904	D1BB5231A073	M 5.23 KOHM, F, 1/10W	1	PAVCTH
	R16919	D0GB100JA065	M 10 OHM J 1/10W	1	
	R16920	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R16921	D1BB4991A073	M 4.99 KOHM, F, 1/10W	1	PAVCTH
	R16922	D1BB2152A073	M 21.5 KOHM, F, 1/10 W	1	PAVCTH
	R16923	D1BB8251A073	M 8.25 KOHM, F, 1/10W	1	PAVCTH
	R16927	D0GB221JA065	M 220 OHM J 1/10W	1	
	R16931	D1BF2R70A073	M 2.7 OHM, F, 1/8W	1	PAVCTH
	R16932	D0GD223JA052	M 22KOHM, J, 1/8W	1	
	R16937	D0GB184JA065	M 180KOHM J 1/10W	1	
	R16939	D0GB472JA065	M 4.7KOHM, J, 1/10W	1	
	R16940	D0GB472JA065	M 4.7KOHM, J, 1/10W	1	
	R16945	D0GB471JA065	M 470 OHM, J, 1/10W	1	

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	R16946	D0GB221JA065	M 220 OHM J 1/10W	1	
	R16947	D0GB472JA065	M 4.7KOHM, J, 1/10W	1	
	R16948	D0GB471JA065	M 470 OHM, J, 1/10W	1	
	R17101	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17102	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17103	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17104	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17105	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17106	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17107	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17108	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17109	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R17111	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R17113	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R17118	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17119	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17120	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17121	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17122	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R17124	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R17134	D0GD224JA052	M 220KOHM, J, 1/8W	1	
	R17151	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17152	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17153	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17154	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17196	D0GB331JA065	M330 OHM J 1/10W	1	
	R17199	D0GD151JA059	M 150 OHM, J, 1/4W	1	
	R17201	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17202	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17203	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17204	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17205	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17206	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17207	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17208	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17209	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17210	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17211	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17212	D0GB101JA065	M 100 OHM, J, 1/10W	1	
	R17221	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R17223	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R17225	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R17227	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R17229	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R17231	D0GF1R0JA047	M 1 OHM, J, 1/3W	1	
	R17241	D0GB470JA065	M 47 OHM, J, 1/10W	1	
	R17242	D0GB470JA065	M 47 OHM, J, 1/10W	1	
	R17243	D0GB470JA065	M 47 OHM, J, 1/10W	1	
	R17244	D0GB681JA065	M 680 OHM, J, 1/10W	1	
	R17245	D0GB681JA065	M 680 OHM, J, 1/10W	1	
	R17246	D1H84704A041	NETWORK RESISTER	1	PAVCTH
	R17247	D1H84704A041	NETWORK RESISTER	1	PAVCTH
	R17248	D1H86814A041	NETWORK RESISTER	1	PAVCTH
	R17249	D1H82204A041	NETWORK RESISTER	1	PAVCTH
	R17250	D0GB220JA065	M 22 OHM J 1/10W	1	
	R17251	D0GB220JA065	M 22 OHM J 1/10W	1	
	R17252	D0GBR00J0004	M 0 OHM J 1/10W	1	
	R17261	D0GD224JA052	M 220KOHM, J, 1/8W	1	
	R17278	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17279	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17280	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH
	R17281	D1BB49R9A073	M 49.9 OHM, F.1/10W	1	PAVCTH

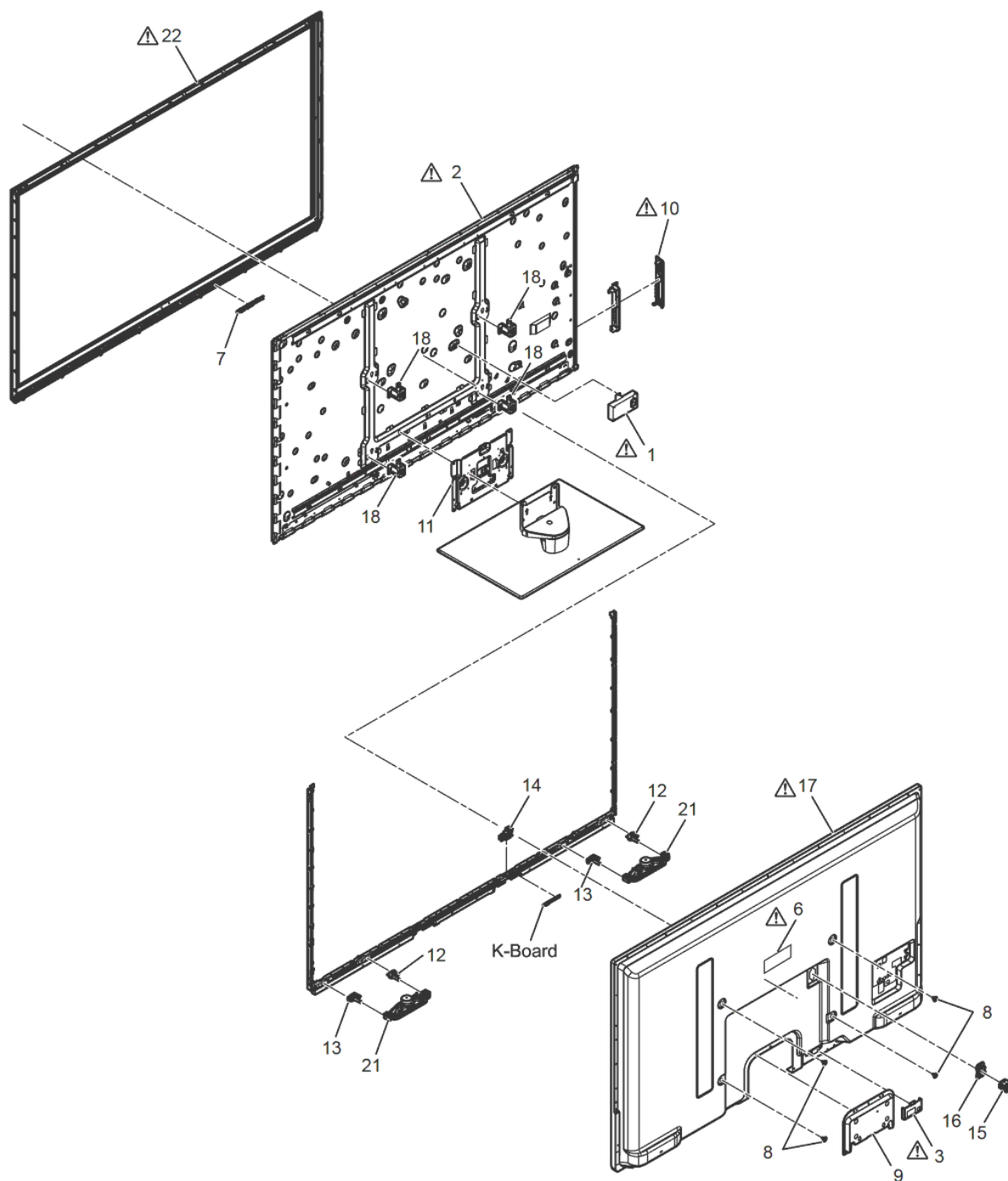
Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	R17296	D0GB331JA065	M330 OHM J 1/10W	1	
	R17311	D0GB101JA065	M 100 OHM,J,1/10W	1	
	R17312	D0GB101JA065	M 100 OHM,J,1/10W	1	
	R17313	D0GB101JA065	M 100 OHM,J,1/10W	1	
	R17314	D0GB101JA065	M 100 OHM,J,1/10W	1	
	R17315	D0GB101JA065	M 100 OHM,J,1/10W	1	
	R17317	D0GB101JA065	M 100 OHM,J,1/10W	1	
	R17318	D0GB101JA065	M 100 OHM,J,1/10W	1	
	R17320	D0GB101JA065	M 100 OHM,J,1/10W	1	
	R17323	D0GB470JA065	M 47 OHM,J,1/10W	1	
	R17324	D0GB681JA065	M 680 OHM,J,1/10W	1	
	R17325	D0GF1R0JA047	M 1 OHM,J,1/3W	1	
	R17327	D0GF1R0JA047	M 1 OHM,J,1/3W	1	
	R17328	D1H86814A041	NETWORK RESISTER	1	PAVCTH
	R17329	D0GF1R0JA047	M 1 OHM,J,1/3W	1	
	R17331	D0GF1R0JA047	M 1 OHM,J,1/3W	1	
	R17341	D1H84704A041	NETWORK RESISTER	1	PAVCTH
	R17343	D0GD224JA052	M 220KOHM,J,1/8W	1	
	R17350	D0GB470JA065	M 47 OHM,J,1/10W	1	
	R17351	D0GB681JA065	M 680 OHM,J,1/10W	1	
	R17352	D0GB220JA065	M 22 OHM J 1/10W	1	
	R17353	D0GB220JA065	M 22 OHM J 1/10W	1	
	R17354	D1H82204A041	NETWORK RESISTER	1	PAVCTH
	R17395	D0GD151JA059	M 150 OHM,J,1/4W	1	
	RM2810	B3RBB00000018	REMOTE SENSOR	1	
	SC2	K1KY02C000002	2P CONNECTOR	1	PAVCTH
	SC20	K1MY30BA0345	30P CONNECTOR	1	
	SC41	K1KA09AA0707	9P CONNECTOR	1	
	SC42	K1KA09AA0707	9P CONNECTOR	1	
	SC46	K1KA09AA0707	9P CONNECTOR	1	
	SC50	K1KA02AA0193	2P CONNECTOR	1	
	SN2810	B3JB000000116	IC	1	
	SS11	K1KY02C000002	2P CONNECTOR	1	PAVCTH
	SS33	K1MY20BA0345	20P CONNECTOR	1	
	SS62	K1MY13BA0343	13P CONNECTOR	1	
	SS64	K1MY13BA0343	13P CONNECTOR	1	
	SS65	K1MY13BA0443	13P CONNECTOR	1	
	SS67	K1MY13BA0443	13P CONNECTOR	1	
	SW2050	K0H1BA0000445	SWITCH	1	
	SW2051	K0H1BA0000445	SWITCH	1	
	SW2052	K0H1BA0000445	SWITCH	1	
	SW2053	K0H1BA0000445	SWITCH	1	
	SW2054	K0H1BA0000445	SWITCH	1	
	SW2056	K0H1BA0000445	SWITCH	1	
	T16471	G4DYA0000358	SWITCHING TRANS	1	PAVCTH
	T16472	G4DYA0000252	SWITCHING TRANS	1	
	TU6705	ENV59301D5F	TUNER	1	PAVCTH
	X8300	H0J245500110	CRYSTAL	1	
	X8651	H0J250500120	CRYSTAL	1	PAVCTH
	X9300	H0J200500091	CRYSTAL	1	
	ZA16001	K4AZ01D000004	TERMINAL	1	
	ZA16002	K4AZ01D000004	TERMINAL	1	
	ZA16101	K4AD01Z000003	TERMINAL	1	

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	ZA16106	K4AD01Z00003	TERMINAL	1	
	ZA16111	K4AA04D00002	TERMINAL	1	
	ZA16116	K4AA04D00002	TERMINAL	1	
	ZA16401	K4AZ01D00004	TERMINAL	1	
	ZA16402	K4AZ01D00004	TERMINAL	1	
	ZA16403	K4AZ01D00004	TERMINAL	1	
	ZA16411	K4AA04D00002	TERMINAL	1	
	ZA16412	K4AA04D00002	TERMINAL	1	
	ZA16421	K4AA04D00002	TERMINAL	1	
	ZA16422	K4AA04D00002	TERMINAL	1	

Model No. : TH-P60UT50A/M/P/Z Exploded View 1



Assembly screws
23 
size (M4 x 10)
24 
size (M5 x 16)

4 Bracket (1)



20 Neck (1)

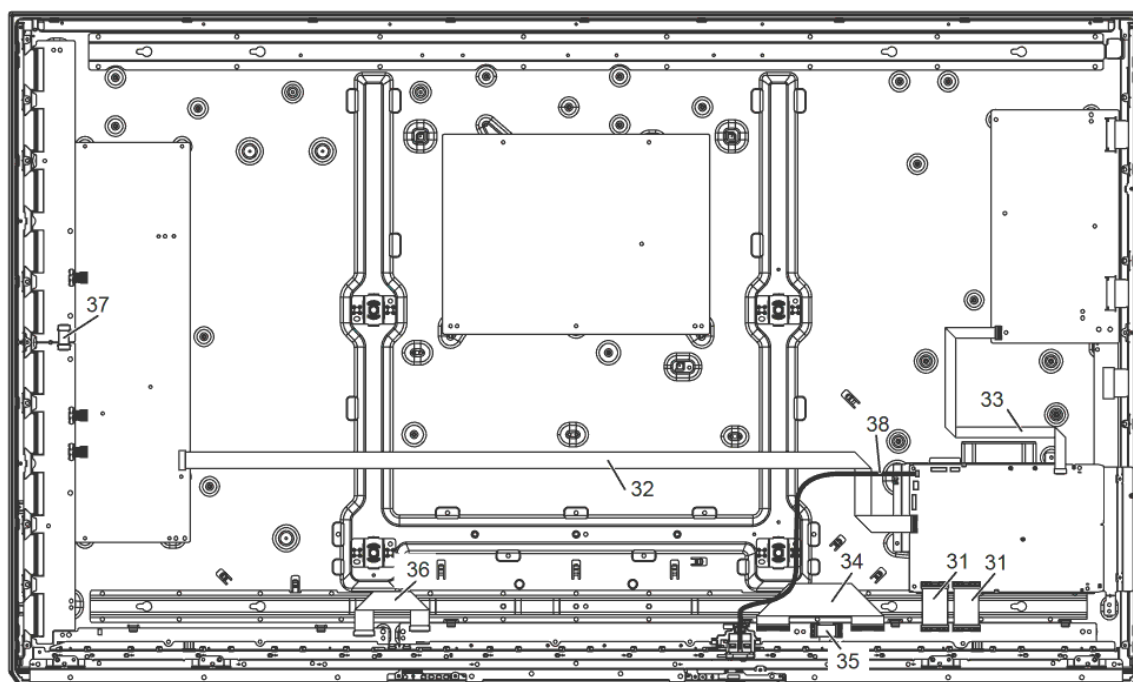


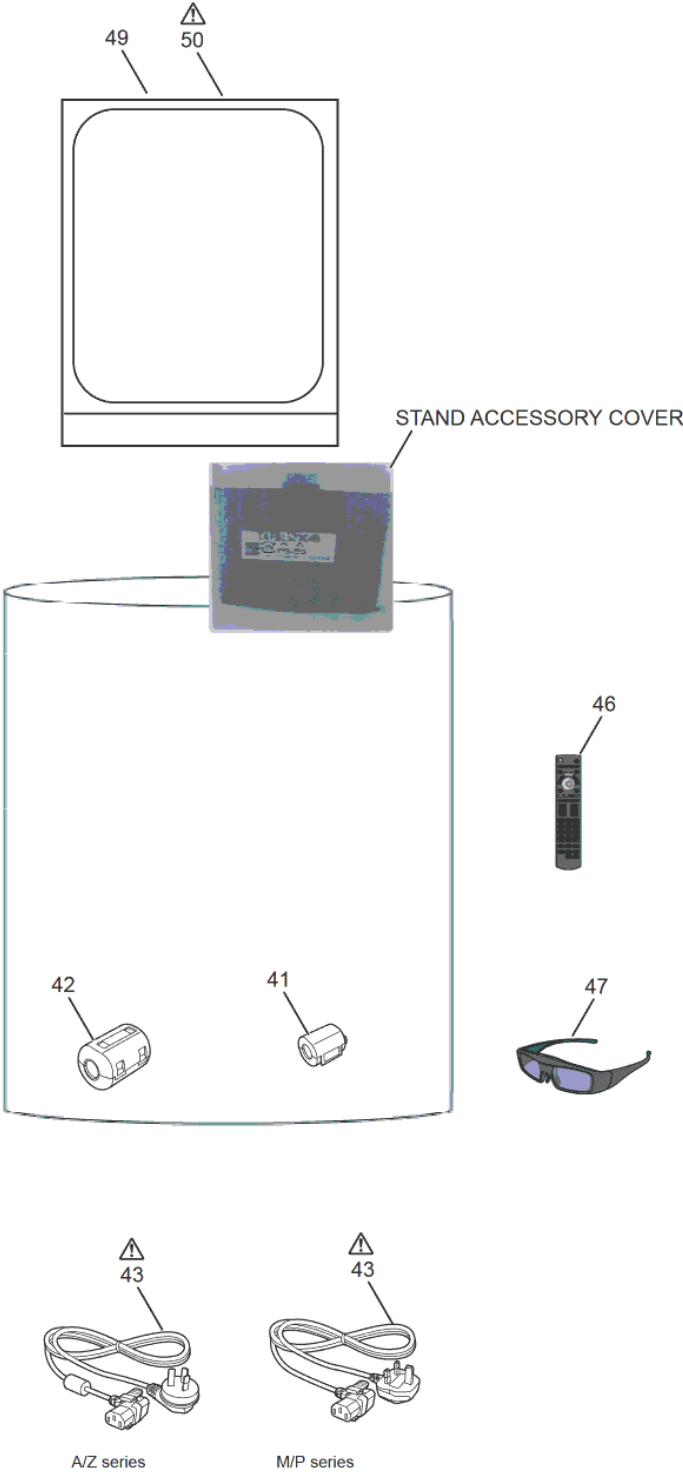
19 Cover (1)

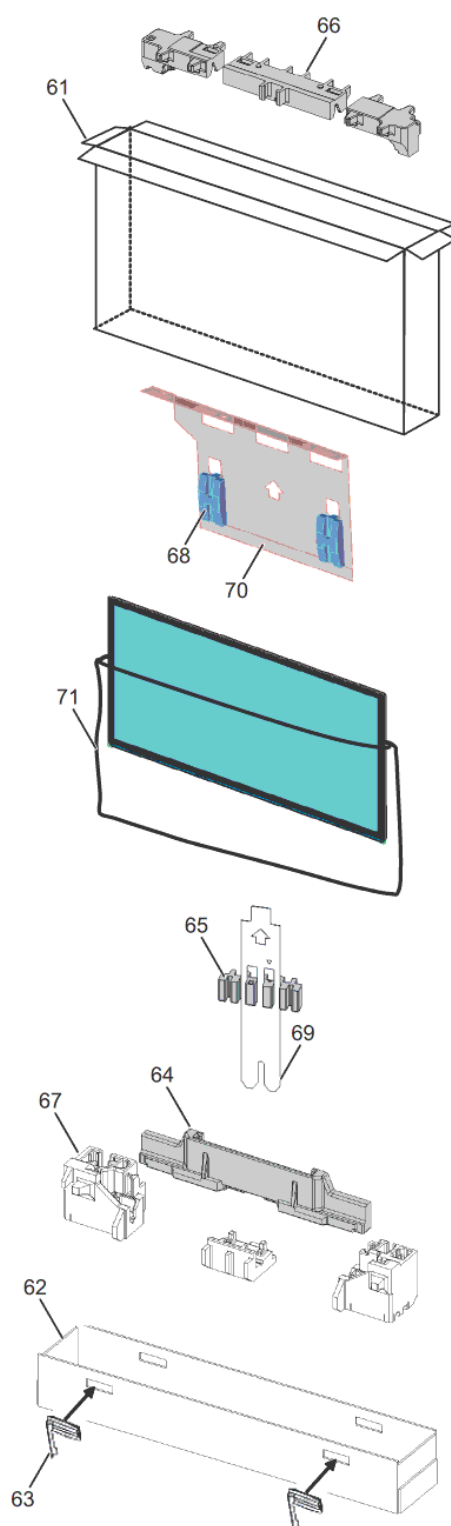


5 Base (1)









Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	41	J0KG00000011	FERRITE CORE	1	(A) (Z)
	42	J0KG00000146	FERRITE CORE PACK FOR LAN CABLE	1	(A) (Z)
	1	K2AHYH000057	AC-INLET WITH CABLE	1	PAVCTH
	43	K2CK3YY00061	AC CORD	1	(A) (Z) PAVCTH
	43	K2CT3YY00058	AC CORD	1	(M) PAVCTH
	43	K2CT3YY00059	AC CORD	1	(P) PAVCTH
	2	MD60F15A3J	PLASMA DISPLAY PANEL	1	
	46	N2QAYB000747	REMOTE CONTROL	1	(A) (Z) PAVCTH
	46	N2QAYB000750	REMOTE CONTROL	1	(M) (P) PAVCTH
	3	N5HZZ0000122	BLUETOOTH DONGLE	1	PAVCTH
	47	N5ZZ00000268	3D EYEWEAR	1	(A) (Z) PAVCTH
		T4FP1505Q	TAPE	1	PAVCTH
	4	TBL5ZA3200	STAND METAL	1	PAVCTH
	5	TBL5ZX0421	PEDESTAL STAND	1	PAVCTH
	6	TBM4TC4291	NAME PLATE	1	(A) PAVCTH
	6	TBM4TC4301	NAME PLATE	1	(Z) PAVCTH
	6	TBM4TC4311	NAME PLATE	1	(M) PAVCTH
	6	TBM4TC4321	NAME PLATE	1	(P) PAVCTH
		TBM4TU0861	SIDE TERMINAL SHEET	1	PAVCTH
		THEC141J	SCREW(MODULE-CABINET:21)	21	
		THEC1509	SCR(BC:15 HDMI:2 TU SH:4 PEDE_CO:4 BT:1)	26	
		THEJ036J	SCREW(K:1 CON_A-B:8 STA_BRA:4)	13	
		THEL0239	SCREW(AC_BRA:2)	2	
		THEL052Z	SCREW	4	
		THTD030J	SCREW(BC:6 STA_BRA:2 CONT_MET_B:2)	10	
	7	TKK5ZC50251	LED PANEL	1	PAVCTH
	8	TKKL5493	M8 CAP	4	
	9	TKP5ZA12901	STAND BRACKET COVER	1	PAVCTH
	10	TKP5ZA23401	SIDE TERMINAL COVER	1	PAVCTH
	11	TKZ5ZX50021	STAND BRACKET PLATE	1	PAVCTH
		TMKK496	RUBBER(IC8000)	1	PAVCTH
		TMKK498	RUBBER(IC9300)	1	PAVCTH
		TMME268	CLAMPER	1	
		TMME415	SPACER	3	PAVCTH
	12	TMW4TX001	SP BRACKET L	2	
	13	TMW4TX002	SP BRACKET R	2	
	14	TMX5ZJ0021	BT CONNECTOR CLAMPER	1	PAVCTH
	15	TMXX073	AC CORD CLAMPER A	1	PAVCTH
	16	TMXX074	AC CORD CLAMPER B	1	PAVCTH
	61	TPC4TA11101	CARTON BOX TOP	1	PAVCTH
	62	TPC4TA11201	CARTON BOX BOTTOM	1	PAVCTH
	63	TPD169487	JOINT	4	
	64	TPD4TA01711	PEDESTAL CUSHION	1	PAVCTH
	65	TPD4TA02011	FRONT CUSHION	1	PAVCTH
	66	TPD4TA02121	TOP CUSHION	1	PAVCTH
	67	TPD4TA02131	BOTTOM CUSHION	1	PAVCTH
	68	TPD4TA02381	REAR CUSHION	2	PAVCTH
	69	TPD4TF00501	FRONT CUSHION PAD	1	PAVCTH
	70	TPD4TF00801	REAR CUSHION PAD	1	PAVCTH
		TPE3DB028	BAG (STAND ACCESSORY NECK)	1	PAVCTH
		TPE3DB029	BAG (STAND METAL)	1	PAVCTH
		TPE3DB030	BAG (STAND METAL COVER)	1	PAVCTH
		TPE3DB041	BAG (PEDESTAL STAND)	1	PAVCTH
	71	TPE4TH025-1	SET BAG	1	PAVCTH
	49	TPE4TP001	BAG (INSTRUCTION BOOK)	1	PAVCTH
		TPE4TP002	BAG FOR AC CORD	1	PAVCTH
	50	TQB4TC0322	INSTRUCTION BOOK(ENGLISH)	1	(A) (Z) PAVCTH
	50	TQB4TC0301	INSTRUCTION BOOK(ENGLISH)	1	(M) (P) PAVCTH
	50	TQB4TC0302	INSTRUCTION BOOK(ARABIC)	1	(M) (P) PAVCTH
		TQD4TI19015	FLYER FOR PEDESTAL	1	PAVCTH
	31	TSCKZ0010024	CABLE (A31-C31) / (A32-C32)	2	PAVCTH

Model No. : TH-P60UT50A/M/P/Z Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	32	TSCKZ0010027	CABLE (A20-SC20)	1	PAVCTH
	33	TSCKZ0010030	CABLE (A33-SS33)	1	PAVCTH
	34	TSCLZ0010024	CABLE (C26-C36)	1	PAVCTH
	35	TSCLZ0010025	CABLE (C27-C37)	1	PAVCTH
	36	TSCLZ0010026	CABLE (C10-C20)	1	PAVCTH
	37	TSXM217	CABLE (SU11-SD11)	1	
	17	TTU4TA0336	REAR COVER	1	(A) PAVCTH
	17	TTU4TA0419	REAR COVER	1	(Z) PAVCTH
	17	TTU4TA0420	REAR COVER	1	(M) PAVCTH
	17	TTU4TA0421	REAR COVER	1	(P) PAVCTH
	18	TUX5ZA0151	M8 NUT METAL	4	PAVCTH
	19	TXFBL5Z0056	STAND ACCESSORY COVER ASSY	1	PAVCTH
	20	TXFBL5Z0085	STAND ACCESSORY NECK ASSY	1	PAVCTH
	21	TXFEA01QTUA	SPEAKER L/R ASSY	2	PAVCTH
		TXFKL5Z0007	TIP-PREVENTION PARTS ASSY	1	(A) (Z) PAVCTH
	22	TXFKY5Z0344	CABINET ASSY	1	PAVCTH
		TXFQZ02PTUZ	CARTON LABEL ASSY	1	(Z) PAVCTH
		TXFQZ02RCUA	CARTON LABEL ASSY	1	(A) PAVCTH
		TXFQZ02PHUM	CARTON LABEL ASSY	1	(M) PAVCTH
		TXFQZ02PGUP	CARTON LABEL ASSY	1	(P) PAVCTH
		TXJA12SSUU	SPEAKER LEAD (A12-SPR/SPL)	1	PAVCTH
	38	TXJA50SSUU	WIRE (BT-A50)	1	PAVCTH
		XTV3+8GFJK	SCREW	2	
		XYN3+J10FJ	SCREW	3	
		XYN4+E6FJ	SCREW (INLET:1)	1	
	23	XYN4+F10FNK	SCREW M4X10	1	PAVCTH
		XYN4+F8FJ	SCREW (SC-SUSD:4 SS-SS2:2)	6	
		XYN5+F12FJ	SCREW (M8_MTL:8)	8	
	24	XYN5+F16FN	SCREW M5X16	12	PAVCTH