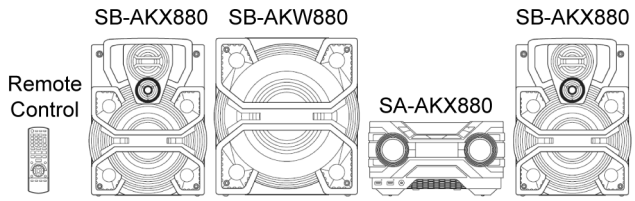
PSG1603002CE

Service Manual

CD Stereo System

Model No. SA-AKX660PN
SA-AKX660PS
SA-AKX880PN
SA-AKX880PS

This illustration shows SC-AKX880.



Product Color: (K)...Black Type

Please refer to the original service manual for:
- **CD Mechanism Unit, (BRS12C) Order No. PSG1303059AE**
- **Speaker system SB-AKX880PNK Order No. PSG1603003CE**

⚠ 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.

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Panasonic®

1 Safety Precautions

1.1. General Guidelines

1. **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 Layout, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent X-RADIATION, shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.
2. An Isolation Transformer should always be used during the servicing of AC Adaptor whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks. It will also protect AC Adaptor from being damaged by accidental shorting that may occur during servicing.
3. 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.
4. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
5. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.1.1. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1MΩ and 5.2MΩ.
   When the exposed metal does not have a return path to the chassis, the reading must be ∞

1.1.2. Leakage Current Hot Check

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

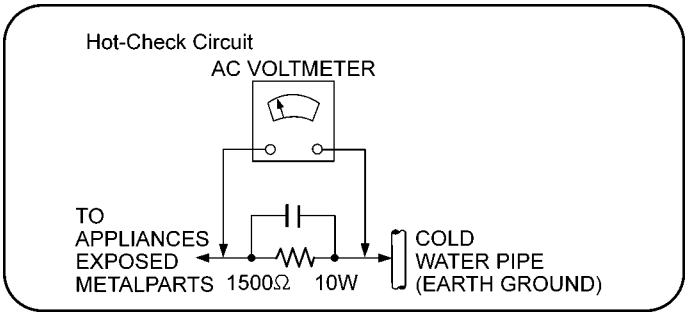

Figure 1-1

1.2. Before Repair and Adjustment

Disconnect AC power to discharge AC capacitor (in SMPS P.C.B.) as indicate below diagram through a 10 Ω, 10 W resistor to ground.

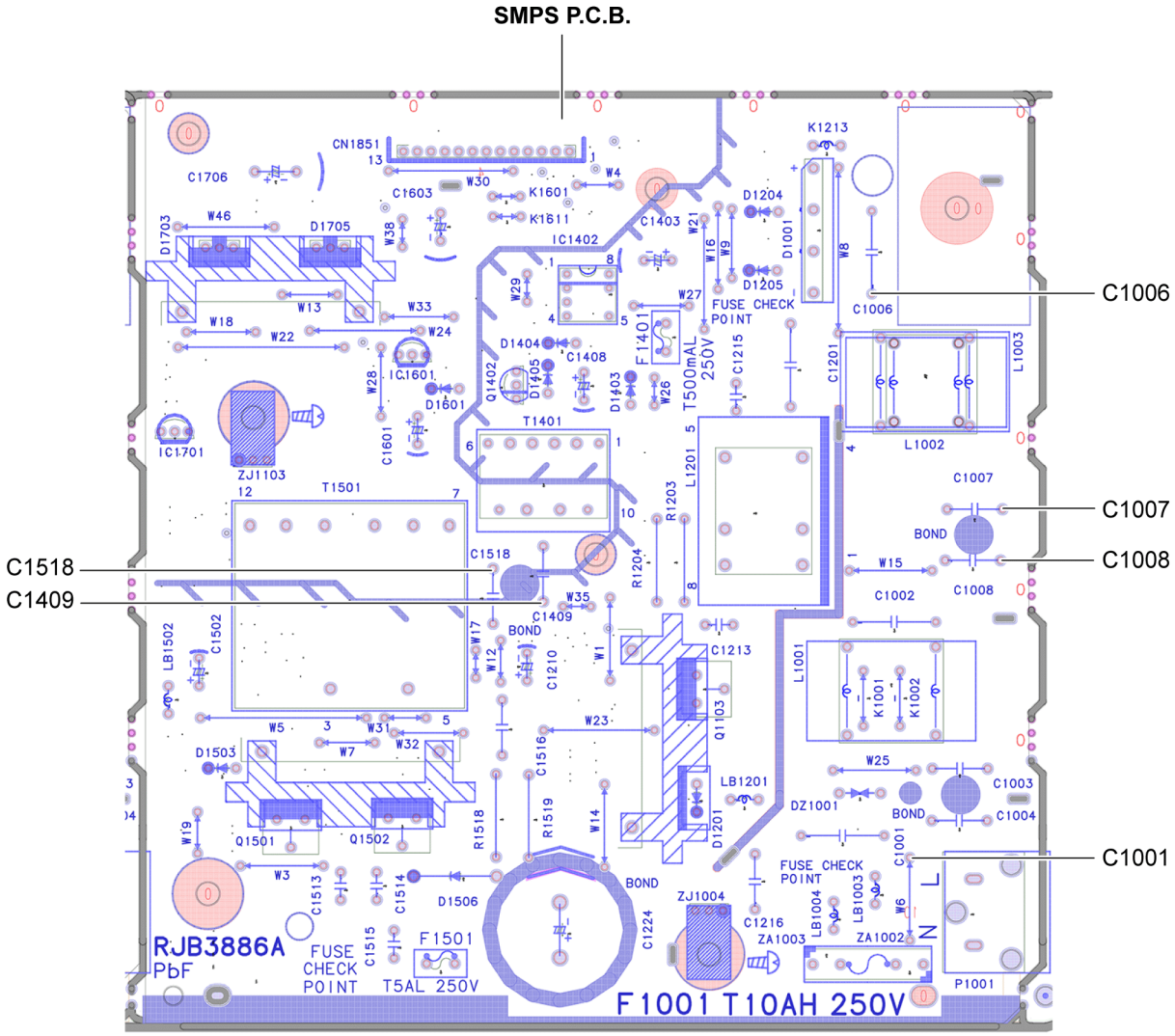

Figure 1-2

Caution:

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.

After repairs are completed, restore power gradually using a variac to avoid overcurrent.

Current consumption at AC 120 V, 60 Hz in Power ON, FM Tuner at volume minimal mode should be ~ 750 mA (PN).

Current consumption at AC 220~240 V, 50/60 Hz in Power ON, FM Tuner at volume minimal mode should be ~ 750 mA (PS).

1.3. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are “shorted”, or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note:

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

1.4. Safety Parts Information

Safety Parts List:

There are special components used in this equipment which are important for safety.

These parts are marked by ⚠ in the Schematic Diagrams, Exploded View & 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.

Safety	Ref No.	Part No.	Part Name & Description	Remarks
⚠	12	RGR0473D-AA	REAR PANEL	AKX660PN
⚠	12	RGR0473D-BA	REAR PANEL	AKX660PS
⚠	12	RGR0473E-AA	REAR PANEL	AKX880PN
⚠	12	RGR0473E-BA	REAR PANEL	AKX880PS
⚠	20	RKM0764A-K	TOP CABINET	
⚠	301	RAE1050Z-V	TRAVERSE ASS'Y	(E.S.D)
⚠	A2	K2CB2CB00022	AC CORD	PN
⚠	A2	K2CQ2YY00119	AC CORD	PS
⚠	A3	RQT0A60-1M	O/I BOOK (Sp)	
⚠	A3	RQT0A61-1B	O/I BOOK (En)	
⚠	PCB7	REP5304A	SMPS P.C.B	(RTL) PN
⚠	PCB7	REP5304B	SMPS P.C.B	(RTL) PS
⚠	Q1403	B3PBA0000579	PHOTO COUPLER	(E.S.D)
⚠	Q1404	B3PBA0000579	PHOTO COUPLER	(E.S.D)
⚠	Q1405	B3PBA0000579	PHOTO COUPLER	(E.S.D)
⚠	Q1505	B3PBA0000579	PHOTO COUPLER	(E.S.D)
⚠	Q1701	B3PBA0000579	PHOTO COUPLER	(E.S.D)
⚠	DZ1001	D4EAY511A127	DIODE	(E.S.D)
⚠	L1002	G0B502J00005	LINE FILTER	
⚠	T1401	G4DYA0000592	SWITCHING TRANSFORMER	
⚠	T1501	G4DYA0000778	SWITCHING TRANSFORMER	
⚠	F1001	K5D103BNA005	FUSE	
⚠	F1401	K5G501YA0081	FUSE	
⚠	F1501	K5G502Y00006	FUSE	
⚠	P1001	K2AA2B000011	AC INLET	PS
⚠	P1001	K2AB2B000007	AC INLET	PN
⚠	R1001	D0GF105JA048	1M 1/4W	
⚠	R1002	D0GF105JA048	1M 1/4W	
⚠	R1003	D0GF105JA048	1M 1/4W	
⚠	C1001	F0CAF104A105	0.1uF	
⚠	C1006	F0CAF224A105	0.22uF	
⚠	C1007	F1BAF471A215	470pF	
⚠	C1008	F1BAF471A215	470pF	
⚠	C1409	F1BAF471A215	470pF	
⚠	C1518	F1BAF471A215	470pF	

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 IC (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 harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

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2.2. Precaution of Laser Diode

CAUTION:
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

Caution:

This product utilizes a laser diode with the unit turned “on”, invisible laser radiation is emitted from the pickup lens.
Wavelength: 790 nm (CD)
Maximum output radiation power from pickup: 100 μW/VDE
Laser radiation from the pickup unit is safety level, but be sure the followings:

1. Do not disassemble the pickup unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pickup lens for a long time.

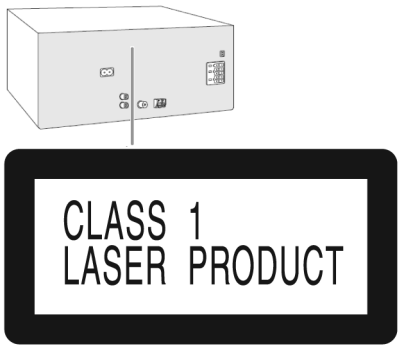


Figure 2-1

2.3. General description about Lead Free Solder (PbF)

The lead free solder has been used in the mounting process of all electrical components on the printed circuit boards used for this equipment in considering the globally environmental conservation.

The normal solder is the alloy of tin (Sn) and lead (Pb). On the other hand, the lead free solder is the alloy mainly consists of tin (Sn), silver (Ag) and Copper (Cu), and the melting point of the lead free solder is higher approx.30 degrees C (86°F) more than that of the normal solder.

Definition of PCB Lead Free Solder being used

The letter of “PbF” is printed either foil side or components side on the PCB using the lead free solder. (See right figure)	PbF

Service caution for repair work using Lead Free Solder (PbF)

- The lead free solder has to be used when repairing the equipment for which the lead free solder is used.
  (Definition: The letter of “PbF” is printed on the PCB using the lead free solder.)
- To put lead free solder, it should be well molten and mixed with the original lead free solder.
- Remove the remaining lead free solder on the PCB cleanly for soldering of the new IC.
- Since the melting point of the lead free solder is higher than that of the normal lead solder, it takes the longer time to melt the lead free solder.
- Use the soldering iron (more than 70W) equipped with the temperature control after setting the temperature at 350±30 degrees C (662±86°F).

Recommended Lead Free Solder (Service Parts Route.)

- The following 3 types of lead free solder are available through the service parts route.
  RFKZ03D01K----------(0.3mm 100g Reel)
  RFKZ06D01K----------(0.6mm 100g Reel)
  RFKZ10D01K----------(1.0mm 100g Reel)

Note

* Ingredient: tin (Sn), 96.5%, silver (Ag) 3.0%, Copper (Cu) 0.5%, Cobalt (Co) / Germanium (Ge) 0.1 to 0.3%

2.4. Handling Precautions for Traverse Unit

The laser diode in the optical pickup unit may break down due to static electricity of clothes or human body. Special care must be taken avoid caution to electrostatic breakdown when servicing and handling the laser diode in the traverse unit.

2.4.1. Cautions to Be Taken in Handling the Optical Pickup Unit

The laser diode in the optical pickup unit may be damaged due to electrostatic discharge generating from clothes or human body. Special care must be taken avoid caution to electrostatic discharge damage when servicing the laser diode.

1. Do not give a considerable shock to the optical pickup unit as it has an extremely high-precise structure.
2. To prevent the laser diode from the electrostatic discharge damage, the flexible cable of the optical pickup unit removed should be short-circuited with a short pin or a clip.
3. The flexible cable may be cut off if an excessive force is applied to it. Use caution when handling the flexible cable.
4. The antistatic FFC is connected to the new optical pickup unit. After replacing the optical pickup unit and connecting the flexi-

ble cable, cut off the antistatic FFC.

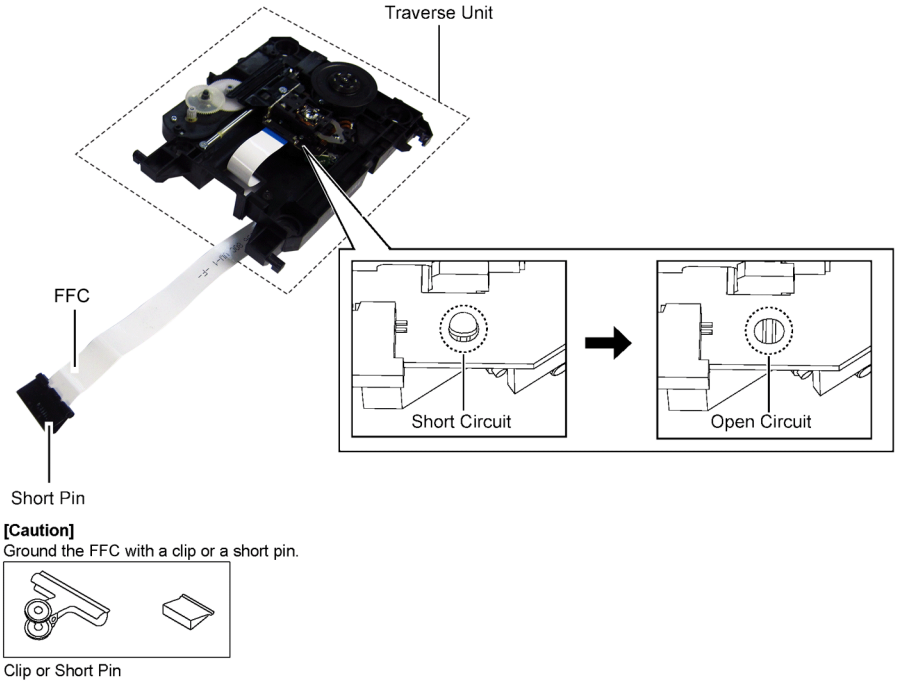


Figure 2-2

2.5. Grounding for electrostatic breakdown prevention

- As for parts that use optical pick-up (laser diode), the optical pick-up is destroyed by the static electricity of the working environment.
  Repair in the working environment that is grounded.

2.5.1. Worktable grounding

- Put a conductive material (sheet) or iron sheet on the area where the optical pickup is placed and ground the sheet.

2.5.2. Human body grounding

- Use the anti-static wrist strap to discharge the static electricity form your body (Figure 2-3).

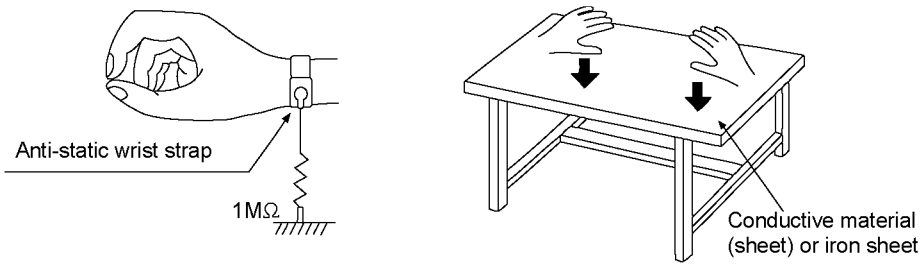


Figure 2-3

3 Service Navigation

3.1. Service Information

This service manual contains technical information which will allow service personnel's to understand and service this model.
Please place orders using the parts list and not the drawing reference numbers.
If the circuit is changed or modified, this information will be followed by supplement service manual to be filed with original service manual.

3.1.1. Software Update Procedure

UPDATE PROCEDURE

Perform the following steps.
- Step 1: Preparing USB device
- Step 2: Software Update

Step 1: Preparing USB device

Before start creating the update USB, it is nessesary to check the update file.
It is important to use the correct file otherwise USB version up process will not working.

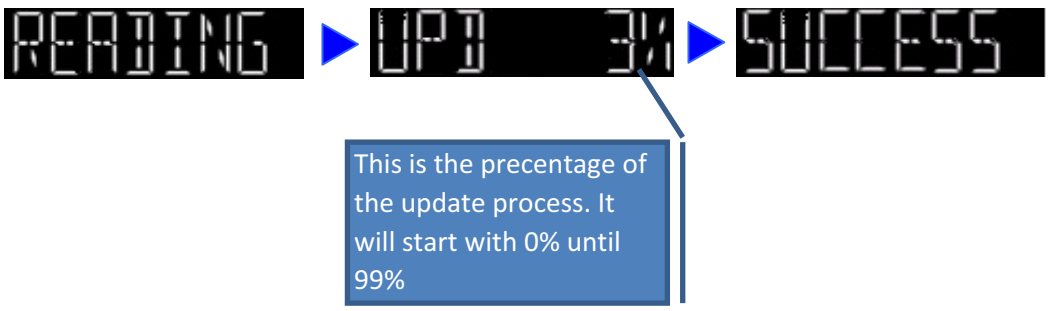
Note: Please do not rename the file as the updating process will look for above naming. If different name, version up process will not work.

To create USB update, copy the desired FRM file (depends on model) into USB device.
Please make sure there is no other files inside the USB device.

Step 2: Software Update

<Caution>
► During the update process, do not disconnect the AC power supply cord.
► Do not press any buttons, except as instructed. Failure to do so may result in the set becoming unresponsive which will require repair.

Step:
► Set need to be turn ON in order to support USB update process.
► Go to USB selector until the display show "NODEVICE".
1. Insert USB device (With FRM file inside)
2. During the update process, the below message will shown on the display.



3. When "SUCCESS" display appear, unplug USB then ac out supply. Firmware updation process completed.

4 Specifications

■ Amplifier section

RMS output power stereo mode

Front Hi (both ch driven)	350 W per channel (3 Ω), 1 kHz, 30% THD (for AKX660) 350 W per channel (3 Ω), 1 kHz, 30% THD (for AKX880)
Front Lo (both ch driven)	500 W per channel (2 Ω), 100 Hz, 30% THD (for AKX660) 500 W per channel (2 Ω), 100 Hz, 30% THD (for AKX880)
Subwoofer Ch (for AKX880)	500 W per channel (2 Ω), 100 Hz, 30% THD
Total RMS stereo mode power	1700 W (for AKX660) 2200 W (for AKX880)

■ Tuner, terminals section

Preset memory	FM 30 stations AM 15 stations
Frequency modulation (FM)	
Frequency range	87.5 MHz to 108.0 MHz (100 kHz step) (for PN) 87.9 MHz to 107.9 MHz (200 kHz step) (for PN) 87.50 MHz to 108.00 MHz (50 kHz step) (for PS)
Antenna terminals	75 Ω (unbalanced)
Amplitude modulation (AM)	
Frequency range	520 kHz to 1710 kHz (10 kHz step) (for PN) 522 kHz to 1629 kHz (9 kHz step) (for PS) 520 kHz to 1630 kHz (10 kHz step) (for PS)
AUX 1	
Audio input	Pin jack (1 system)
AUX 2	
Sensitivity	100 mV, 4.7 k Ω

■ Disc section

Discs played (8 cm or 12 cm)	CD, CD-R/RW (CD-DA, MP3*)

* MPEG-1 Layer 3

Pick up	
Wavelength	790 nm (CD)

■ USB section

USB Port	
USB standard	USB 2.0 full speed
Media file format support	MP3 (*.mp3)
USB device file system	FAT12, FAT16, FAT32
USB recording	
Bit rate	128 kbps
USB recording speed	1x, 3x (CD only)
Recording file format	MP3 (*.mp3)

■ Internal memory section

Memory	
Memory size	4 GB
Media file format support	MP3 (*.mp3)
Memory recording	
Bit rate	128 kbps
Memory recording speed	1x, 3x (CD only)
Recording file format	MP3 (*. Mp3)

■ Bluetooth® section

Version	Bluetooth® Ver.2.1 + EDR
Class	Class 2
Supported profiles	A2DP, AVRCP, SPP OPP, FTP
Operating frequency	2.4 GHz band, FH-SS
Operating distance	10 m line of sight

■ General

Power supply	AC 120 V, 60 Hz (for PN) AC 220 to 240 V, 50/60 Hz (for PS)
Power consumption	173 W
Dimensions (W x H x D)	348 mm x 193 mm x 251 mm
Mass	3.6 kg
Operating temperature range	0 °C to +40 °C
Operating humidity range	35% to 80% RH (no condensation)
Power Consumption in standby mode (approximate)	0.3 W (for PN) 0.4 W (for PS)
Power Consumption in standby mode (approximate) (With "BLUETOOTH STANDBY" set to "ON")	0.4 W (for PN) 0.6 W (for PS)

Note:

1. Specifications are subject to change without notice. Mass and dimension are appropriate
2. Total harmonic distortion is measured by the digital spectrum analyzer.

■ System: SC-AKX660PNK

Main Unit: SA-AKX660PNK
Speakers: SB-AKX880PNK

■ System: SC-AKX660PSK

Main Unit: SA-AKX660PSK
Speakers: SB-AKX880PNK

■ System: SC-AKX880PNK

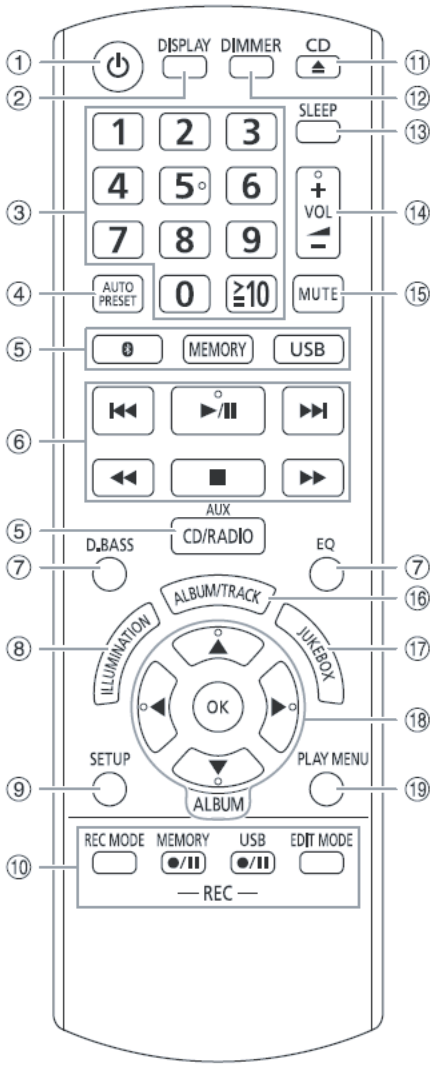
Main Unit: SA-AKX880PNK
Speakers: SB-AKX880PNK
Subwoofer: SB-AKW880PNK

■ System: SC-AKX880PSK

Main Unit: SA-AKX880PSK
Speakers: SB-AKX880PNK
Subwoofer: SB-AKW880PNK

5 Location of Controls and Components

5.1. Remote Control Key Button Operation



① **Standby/on switch [⏻], [⏻/I]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

② View the content information

③ **Numeric buttons**
To select a 2-digit number
Example: 16: [≧10]→[1]→[6]

④ Auto preset the radio station

⑤ **Select the audio source**
On the main unit:
To start Bluetooth® pairing, press and hold [–PAIRING].

⑥ Basic playback control

⑦ Select the sound effects

⑧ Select the illumination effects

⑨ View the setup menu

⑩ Recording operation control

⑪ Open or close the disc tray

⑫ **Decrease the brightness of the display panel**
To cancel, press the button again.

⑬ Set the sleep timer

⑭ Adjust the volume level

⑮ **Mute the sound**
To cancel, press the button again.
"MUTE" is also canceled when you adjust the volume or when you switch off the system.

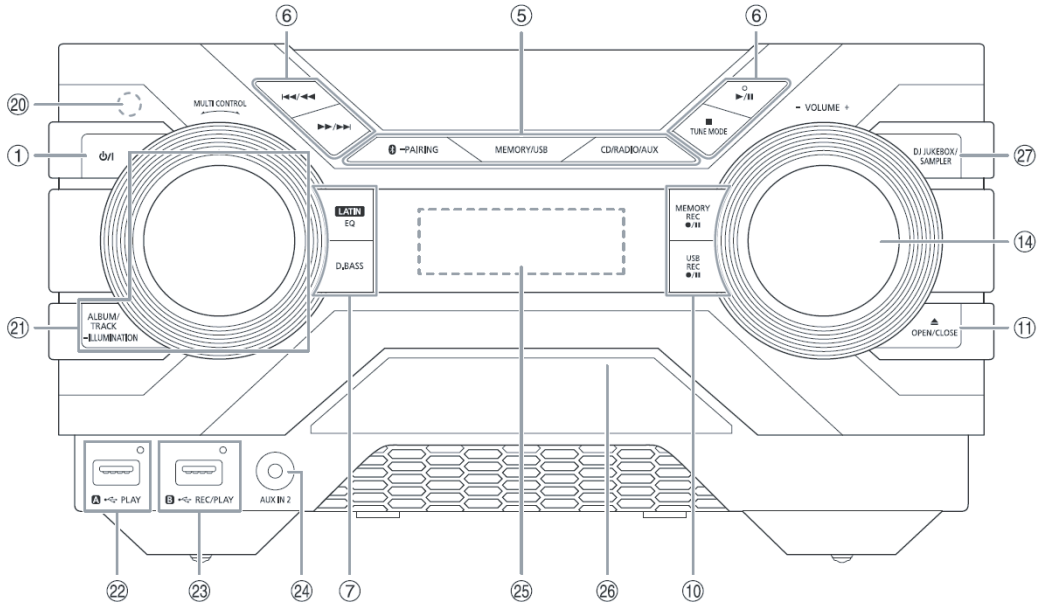
⑯ Select MP3 album or track

⑰ Select DJ jukebox

⑱ Select or confirm the option

⑲ View the play menu

5.2. Main Unit Key Button Operation



① **Standby/on switch [⏻], [⏻/I]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

⑤ **Select the audio source**
On the main unit:
To start Bluetooth® pairing, press and hold [–PAIRING].

⑥ Basic playback control

⑦ Select the sound effects

⑩ Recording operation control

⑪ Open or close the disc tray

⑭ Adjust the volume level

⑳ **Remote control sensor**
Distance: Within approximately 7 m
Angle: Approximately 20° up and down, 30° left and right

㉑ **Select MP3 album or track**
Press [ALBUM/TRACK] to select album or track.
Browse tracks or albums
Turn [MULTI CONTROL] to browse.
To start playback from the selection, press [▶/❚❚].
Select the illumination effects
Press and hold [–ILLUMINATION] and then turn [MULTI CONTROL] to select the setting.

㉒ **USB A**
USB port (•⇠)
USB status indicator
Play MP3 tracks.

㉓ **USB B**
USB port (•⇠)
USB status indicator
Play MP3 tracks.
Record sound or music tracks.

㉔ AUX IN 2 jack

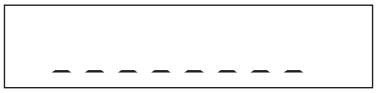
㉕ Display panel

㉖ Disc tray

㉗ Select the DJ functions

6 Service Mode

6.1. Cold-Start

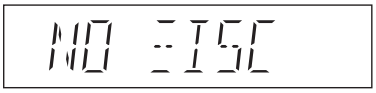
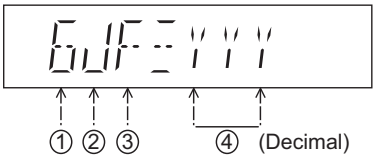
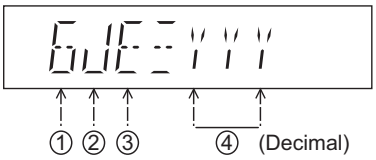
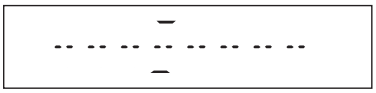
Item		FL Display	Key Operation
Mode Name	Description		Front Key
Cold Start	To carry out cold-start or initialize to shipping mode		1. Unplug AC power cord. 2. Press & hold [POWER] button. 3. Plug in AC power cord while [POWER] button being pressed. 4. Release [POWER] button.

6.2. Sales Demonstration Lock Function

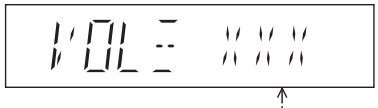
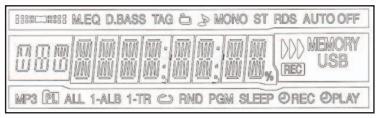
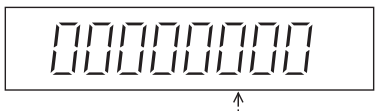
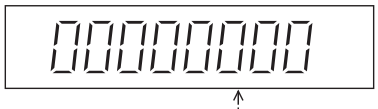
Item		FL Display	Key Operation
Mode Name	Description		Front Key
Entering into Sales Demonstration Lock Mode	To enter into sales demonstration lock mode.		1. Turn on the unit. 2. Select to any mode function. 3. Press and hold [▲OPEN/CLOSE] and [CD/RADIO/AUX] keys for 5 sec or more. The display will show upon entering into this mode for 2 sec. Note: [▲OPEN/CLOSE] button is invalid and the main unit displays "LOCKED" while the lock function mode is entered.
Cancellation of Sales Demonstration Lock Mode	To cancel sales demonstration lock mode.		1. Turn on the unit. 2. Select to CD mode function. 3. Set volume to Vol 19. 4. Press and hold [▲OPEN/CLOSE] and [CD/RADIO/AUX] keys for 5 sec or more. The display will show upon entering into this mode for 2 sec.

6.3. Doctor Mode Table

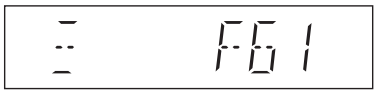
6.3.1. Doctor Mode Table 1

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Doctor Mode	To enter into Doctor Mode		In CD Mode: 1. Press [■] button on main unit follow by [4] and [7] on remote control. 2. To exit, press [SLEEP] button on remote control or, press [POWER,⏻/I] button on Main Unit
EEPROM checksum check	Displaying of 1. Year Develop. 2. Model Type. 3. ROM Type. 4. Firmware Version.	(For AKX660)  (For AKX880)  Version No. (001 ~ 999) → specific for each firmware	In CD mode: 1. Enter into Doctor Mode
Cold Start	To active cold start upon next AC power up when reset start is execute the next time.		In Doctor Mode: 1. Press [4] button on the remote control.

6.3.2. Doctor Mode Table 2

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Volume Setting Check	To check volume setting of the main unit.	 Press [7]: VOL50 Press [8]: VOL35 Press [9]: VOL0 Volume	In Doctor Mode: 1. Press [7], [8], [9] button on the remote control.
FL Display Check	To check FL segment display. All segments will light up while all LED blink at 0.5s intervals.		In Doctor mode: 1. Press [1] button on the remote control. 2. To cancel this mode, press [0] button on the remote control.
Traverse Test	To determine traverse unit operation for inner & outer access track. In this mode, ensure the CD is in the main unit.	 The counter will increment by one. When reach 99999999 will change to 00000000 Cancellation Display 	In Doctor Mode: 1. Press [10]→[1]→[2] button on the remote control. 2. To cancel this mode, press [0] button on the remote control.
Reliability Test (Combination)	To determine traverse unit operation & open/close operation of the mechanism. In this mode, ensure the CD is in the main unit.	 The counter will increment by one. When reach 99999999 will change to 00000000 Cancellation Display 	In Doctor Mode: 1. Press [10]→[1]→[5] button on the remote control. 2. To cancel this mode, press [0] button on the remote control.
Loading Test	To determine open & close operation of the CD Mechanism Unit. In this mode, the tray will open & close automatically.	 The counter will increment by one. When reach 99999999 will change to 00000000 Cancellation Display 	In Doctor Mode: 1. Press [10]→[2]→[1] button on the remote control. 2. To cancel this mode, press [0] button on the remote control.

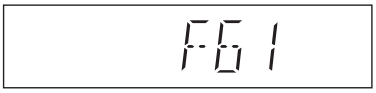
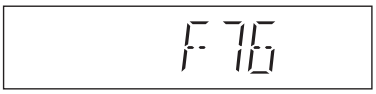
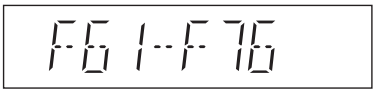
6.4. Self-Diagnostic Mode

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Self Diagnostic Mode	To enter into self diagnostic checking		Step 1: Select CD mode (Ensure no disc is inserted). Step 2: Press & hold [■] button follow by [▶▶/▶▶|] on main unit for 2 seconds.
Error Code Information	System will perform a check on any unusual/error code from the memory	Example: 	Step 1: In self diagnostic mode, Press [■] on main unit. To exit, press [⏻/I] on main unit or remote control.
Delete error code	To clear the stored in memory (EEPROM IC)		Step 1: In self diagnostic mode, Press [OK] on remote control for 5 seconds. To exit, press [⏻/I] on main unit or remote control.

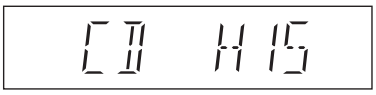
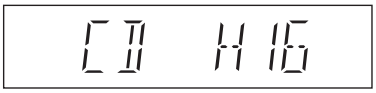
6.5. Self-Diagnostic Error Code Table

Self-Diagnostic Function provides information on any problems occurring for the unit and its respective components by displaying the error codes. These error code such as U**, H** and F** are stored in memory and held unless it is cleared.
The error code is automatically display after entering into self-diagnostic mode.

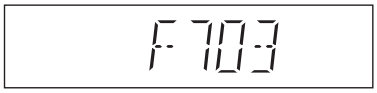
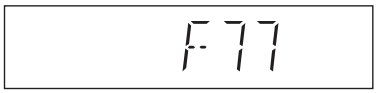
6.5.1. Power Supply Error Code Table

Item		FL Display	Key Operation	Solution (PCB exchange repair)
Mode Name	Description		Front Key	
Error Code F61	Diagnosis Contents: Power Amp IC output abnormal. Upon power on, PCONT=HIGH, DC_DET_AMP after checking LSI.		Press [■] on main unit for next error.	Check main (IC6000).
Error Code F76	Diagnosis Contents: Power Amp IC output abnormal. DC_DET_PWR.		Press [■] on main unit for next error.	Check SMPS P.C.B. (Main IC1002 / IC1003).
Error Code F61-76	Diagnosis Contents: Power Amp IC output abnormal. Both DCDET (NG).		Press [■] on main unit for next error.	DAMP and power supply abnormal.

6.5.2. CD Mechanism Error Code Table

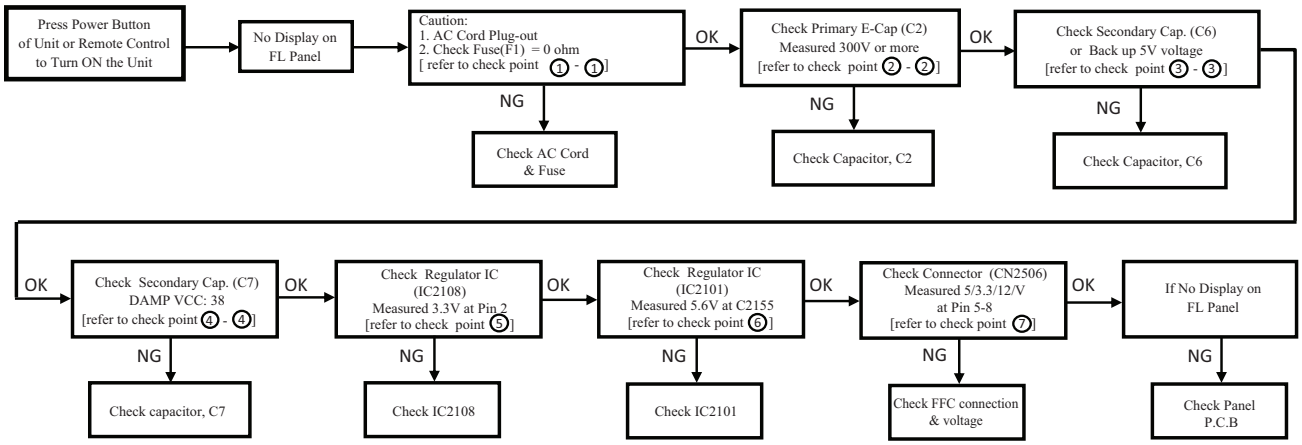
Item		FL Display	Key Operation	Solution (PCB exchange repair)
Mode Name	Description		Front Key	
Error Code CD H15	Diagnosis Contents: CD Open Abnormal. During operation POS_SW_R On fail to be detected within 4 sec. Error No. shall be clear by force or during cold start.		Press [■] on main unit for next error.	Check following: 1. CD Interface P.C.B. (Pin 3, 4, 6) 2. SOC IC (IC1001)
Error Code CD H16	Diagnosis Contents: CD Closing Abnormal. During operation POS_SW_CEN On fail to be detected within 4 sec. Error No. shall be clear by force		Press [■] on main unit for next error.	Check following: 1. CD Interface P.C.B. (Pin 6, 3, 4) 2. SOC IC (IC1001)

6.5.3. Bluetooth Error Code Table

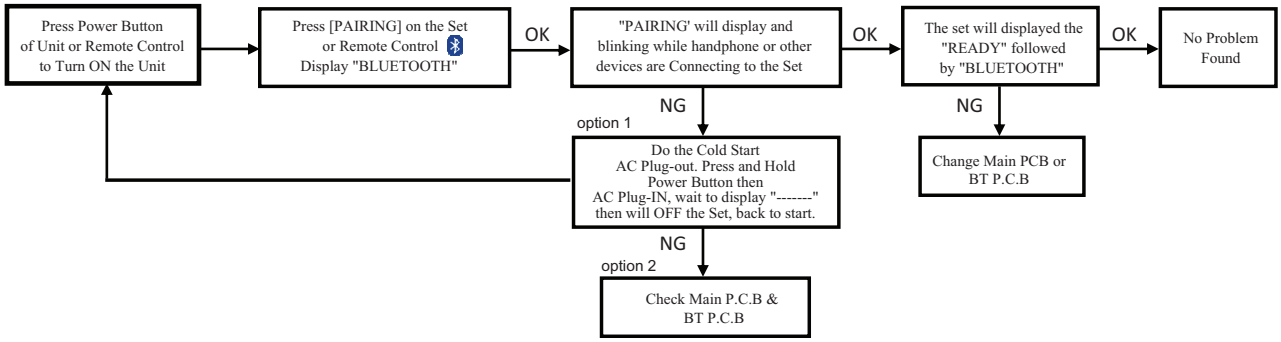
Item		FL Display	Key Operation	Solution (PCB exchange repair)
Mode Name	Description		Front Key	
Error Code F703	Diagnosis Contents: Bluetooth Communication. Communication between Bluetooth module and micro-p abnormal.		Press [■] on main unit for next error.	Check following: 1. Bluetooth P.C.B. 2. SOC IC on Main P.C.B.
Error Code F77	Diagnosis Contents: Bluetooth Address Error If there is no valid Bluetooth address stored in the EEPROM IC.		Press [■] on main unit for next error.	Check following: 1. EEPROM IC (IC1004) on Main P.C.B.

7 Troubleshooting Guide

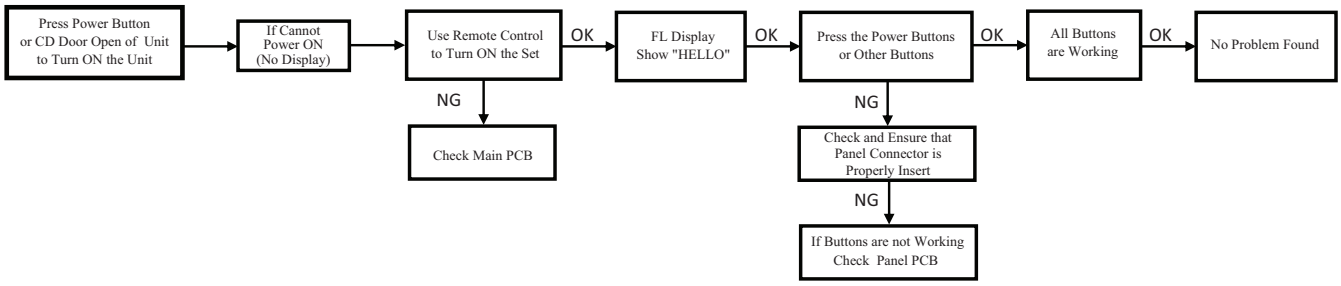
7.1. No Power or No Display



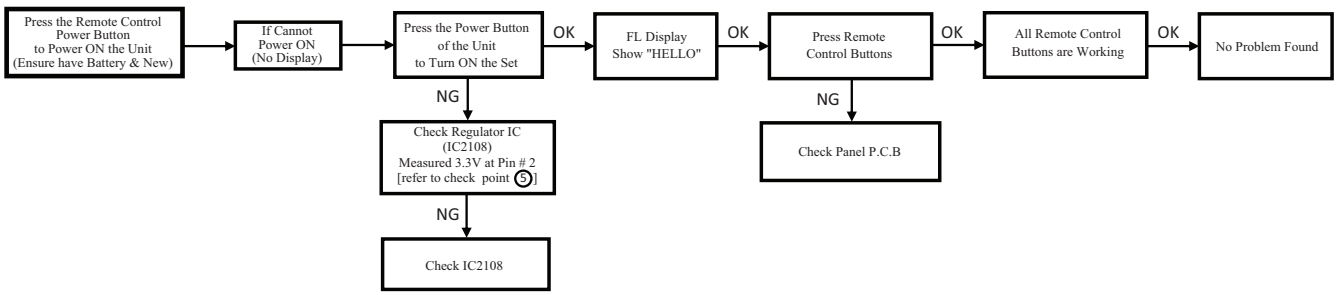
7.2. Bluetooth® Pairing Failure



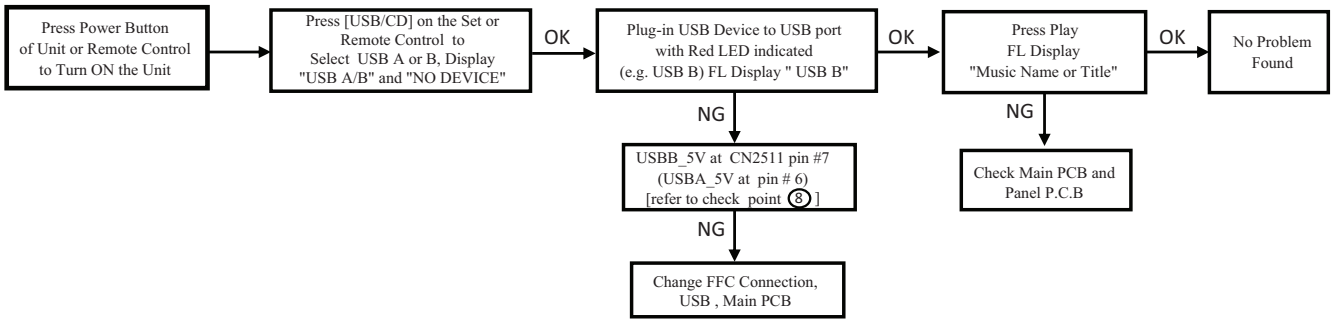
7.3. No Key Function



7.4. No Remote Control Function

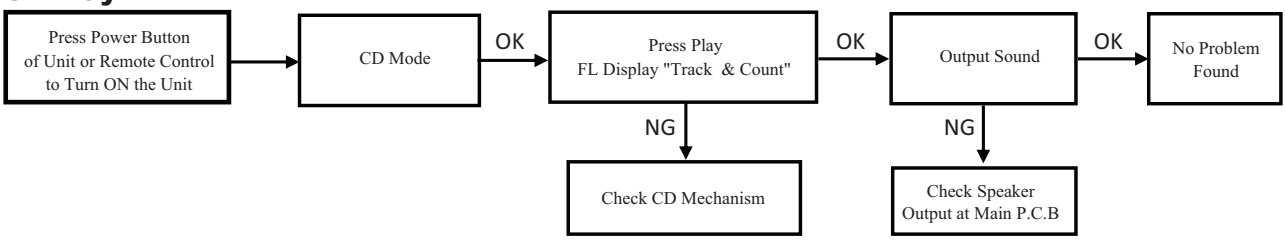


7.5. USB Device Cannot Detect

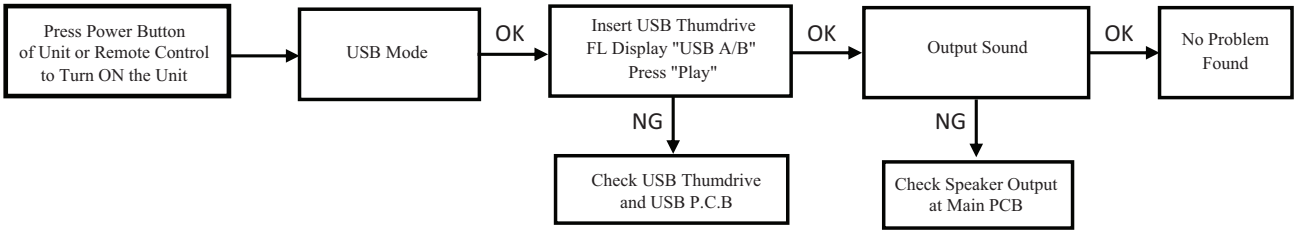


7.6. No Output Sound

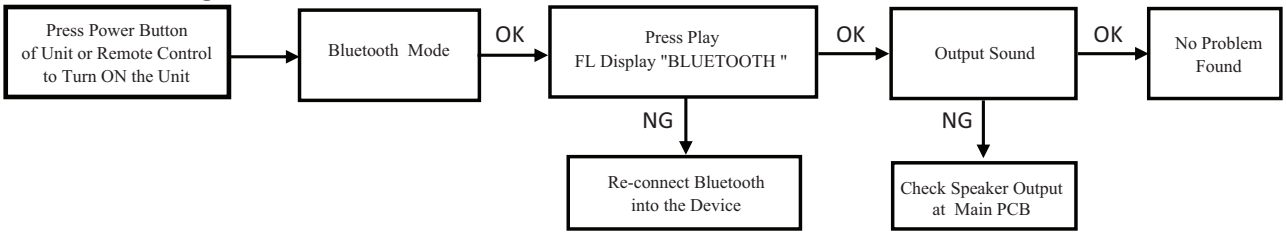
CD Play



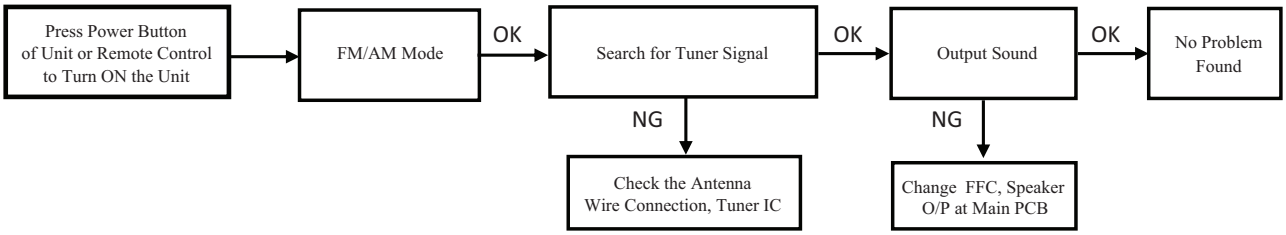
USB Play



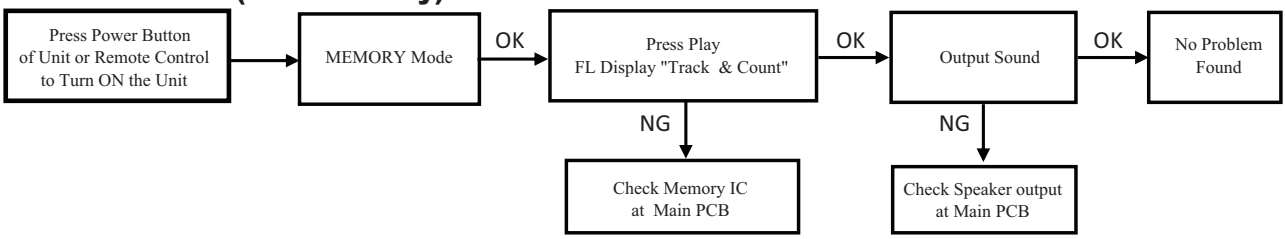
Bluetooth Play



Tuner Mode

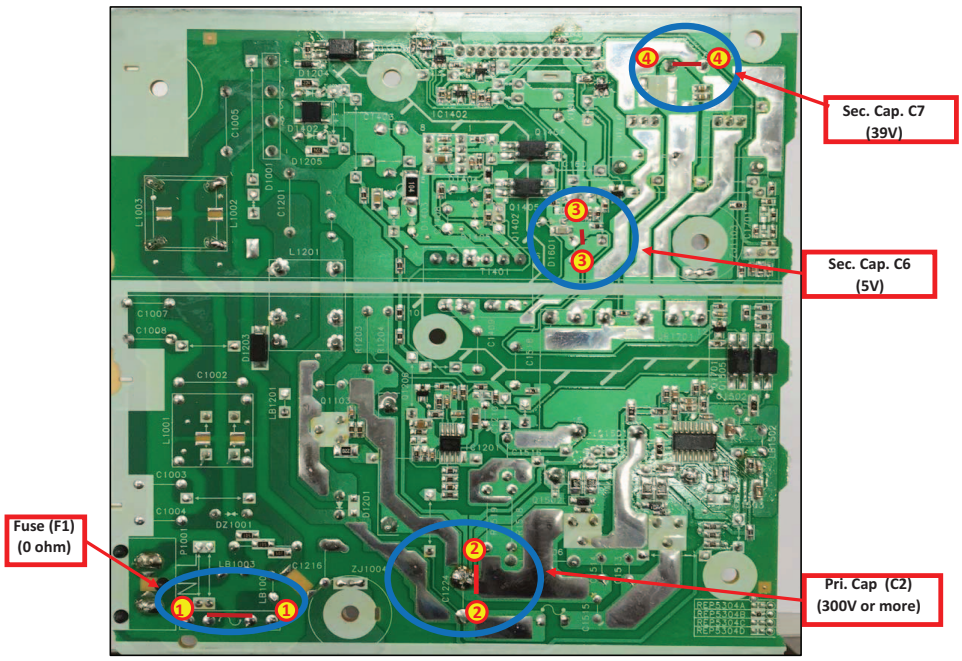


MEMORY Mode (AKX660 only)

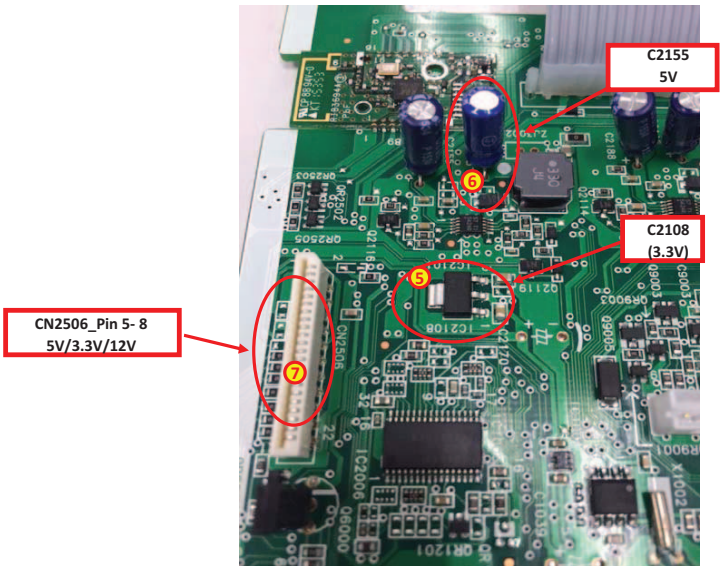


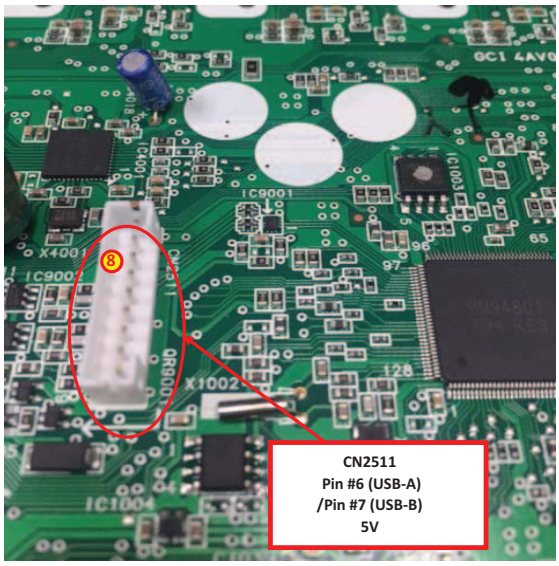
7.7. Check Point

7.7.1. SMPS P.C.B.



7.7.2. Main P.C.B.





8 Disassembly and Assembly Instructions

- **Illustration is based on SA-AKX880PN/PS.**

Caution Note:

- **This section describes the disassembly and/or assembly procedures for all major printed circuit boards & main components for the unit. (You may refer to the section of "Main components and P.C.B Locations" as described in the service manual)**
- **Before carrying out the disassembly process, please ensure all the safety precautions & procedures are followed.**
- **During the disassembly and/or assembly process, please handle with care as there may be chassis components with sharp edges.**
- **Avoid touching heatsinks due to its high temperature after prolong use. (See caution as described below)**

CAUTION: HOT!!
PLEASE DO NOT
TOUCH THE HEAT SINK

- **During disassembly and assembly, please ensure proper service tools, equipments or jigs is being used.**
- **During replacement of component parts, please refer to the section of "Replacement Parts List" as described in the service manual.**
- **Select items from the following indexes when disassembly or replacement are required.**
- Disassembly of Top Cabinet
- Disassembly of Front Panel Unit
- Disassembly of Panel P.C.B.
- Disassembly of USB P.C.B.
- Disassembly of Music Port P.C.B.
- Disassembly of Rear Panel
- Disassembly of Main P.C.B.
- Disassembly of CD Mechanism Unit
- Disassembly of CD Interface P.C.B.
- Disassembly of Tuner P.C.B.
- Disassembly of SMPS P.C.B.

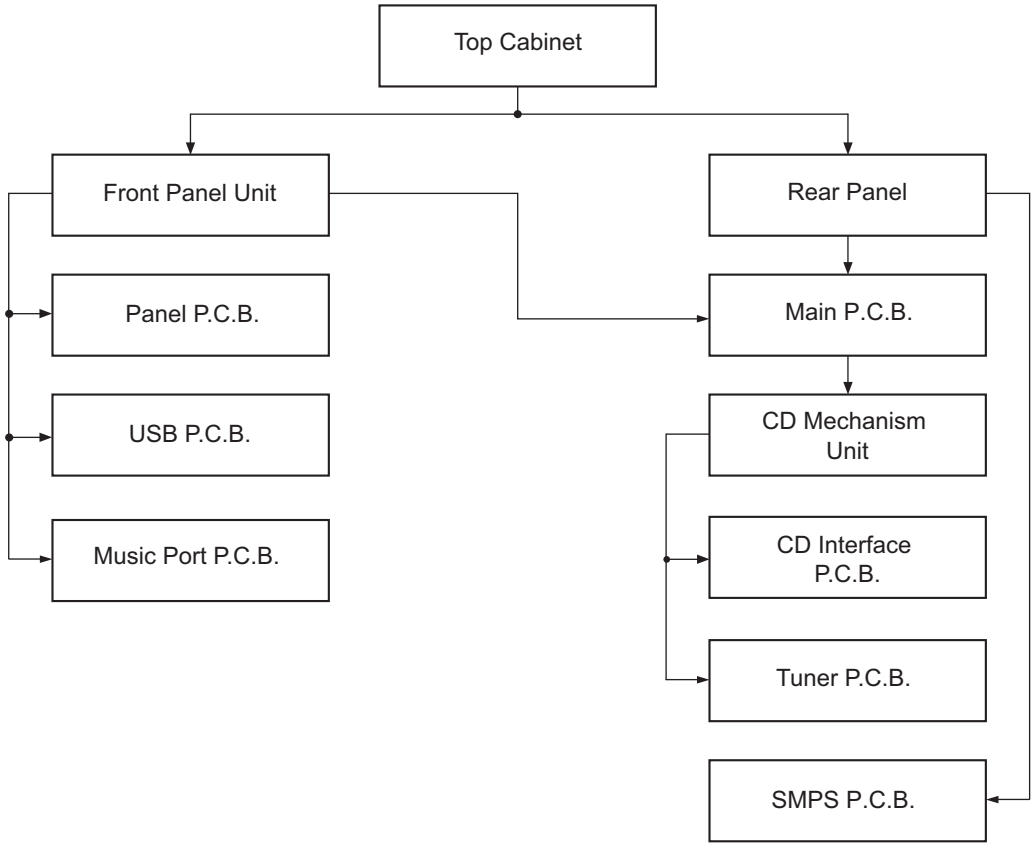
8.1. Types of Screws

CAUTION NOTE:
Please use original screw and at correct locations.

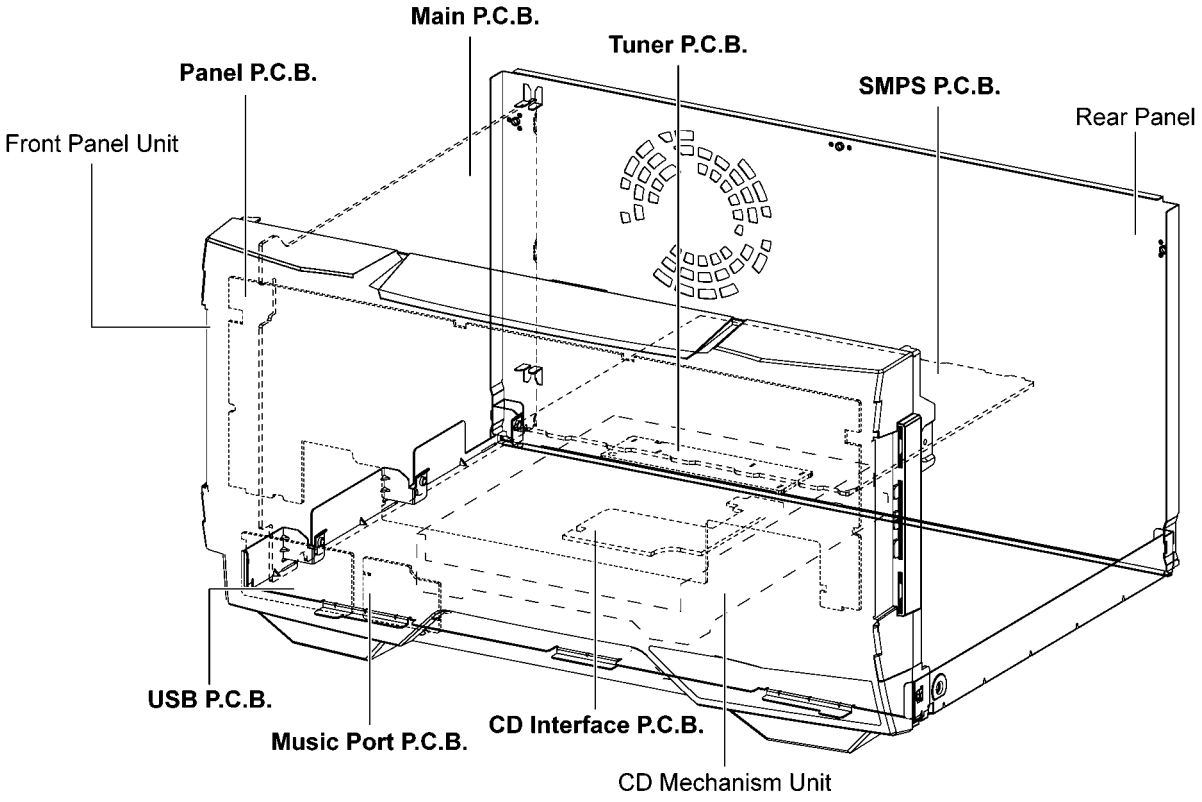
Below shown is part no. of different screw types used:

ⓐ :RHD30007-K2J	ⓓ :RHD30111-31
ⓑ :RHD30119-S	ⓔ :RHDX031008
ⓒ :RHD26046-L	ⓕ :XTN2+6GFJ

8.2. Disassembly Flow Chart

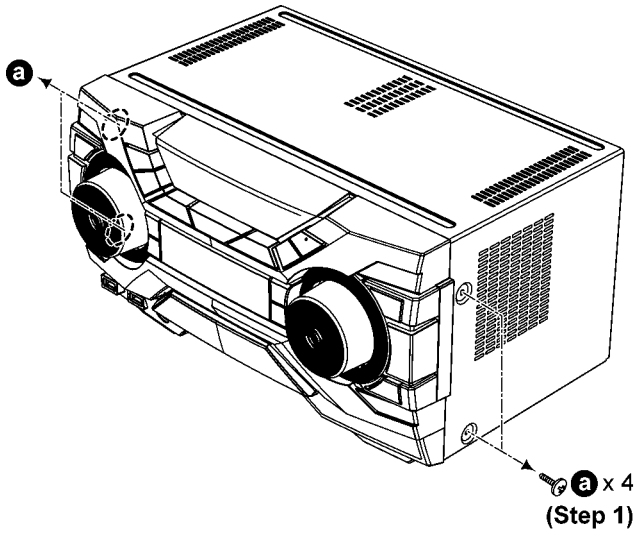


8.3. Main Components and P.C.B. Locations

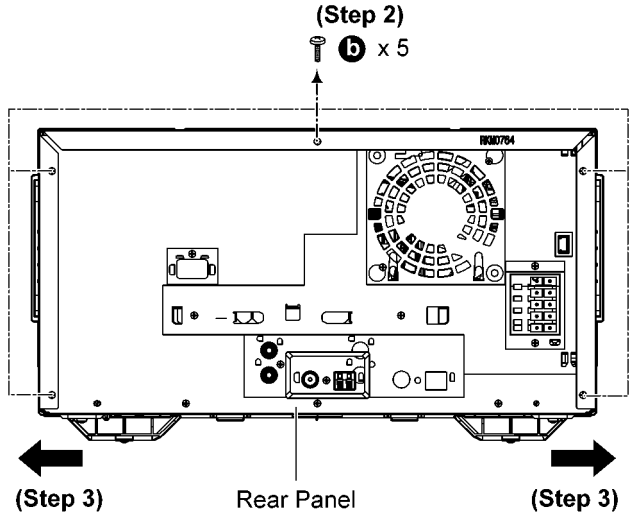


8.4. Disassembly of Top Cabinet

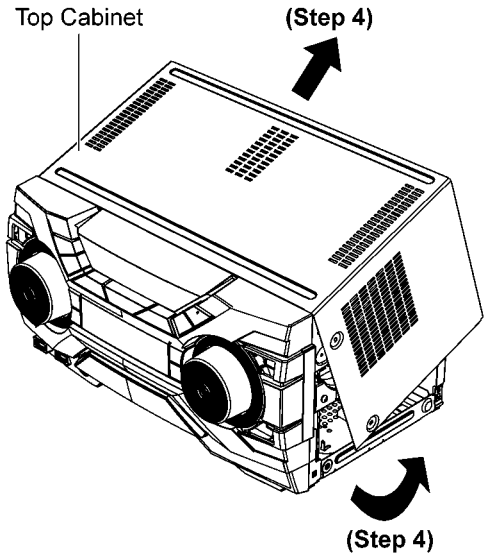
Step 1 Remove 4 screws.



Step 2 Remove 5 screws.
Step 3 Slightly release both sides of Top Cabinet.



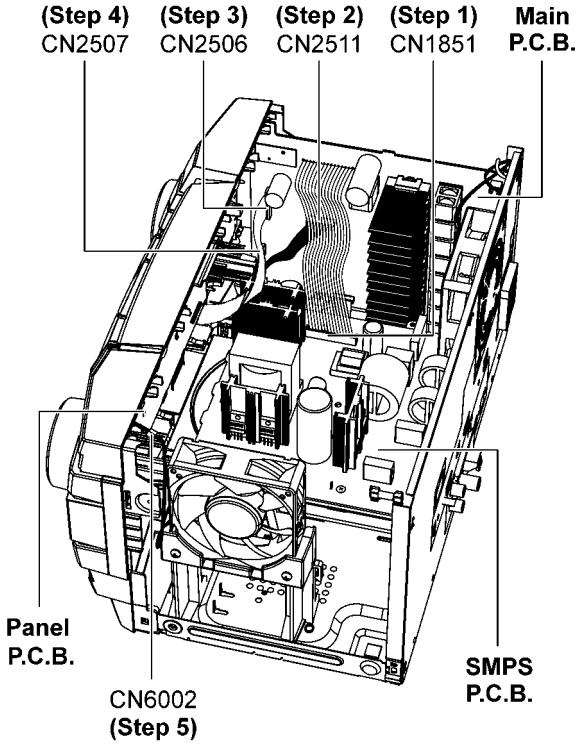
Step 4 Slightly lift up to remove Top Cabinet.



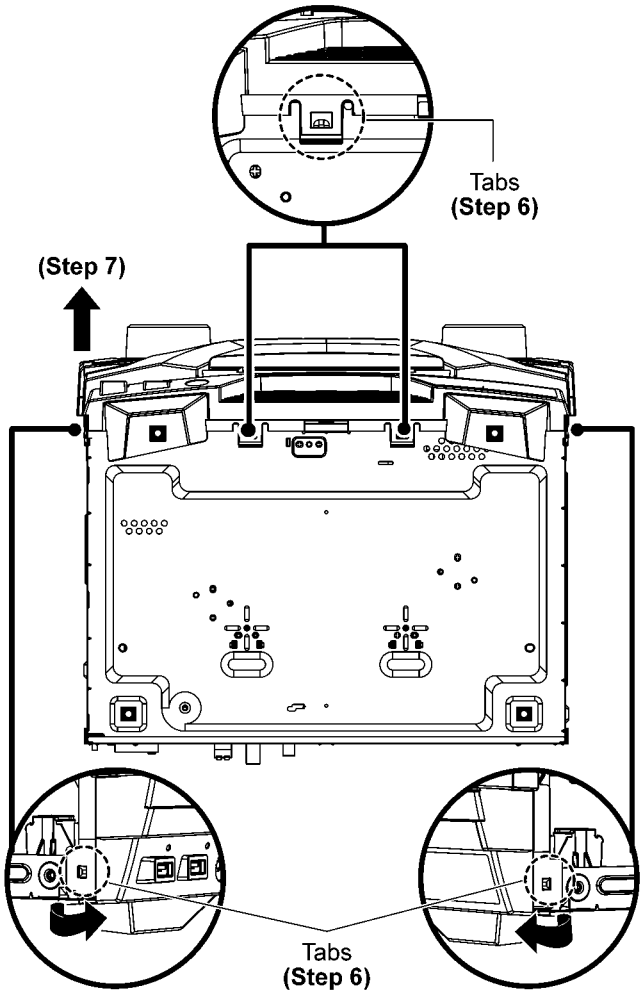
8.5. Disassembly of Front Panel Unit

- **Refer to "Disassembly of Top Cabinet".**

Step 1 Detach 13P Cable at connector (CN1851) on SMPS P.C.B..
Step 2 Detach 9P Cable at connector (CN2511) on Main P.C.B..
Step 3 Detach 22P FFC at connector (CN2506) on Main P.C.B..
Step 4 Detach 4P Cable at connector (CN2507) on Main P.C.B..
Step 5 Detach 2P Cable at connector (CN6002) on Panel P.C.B..



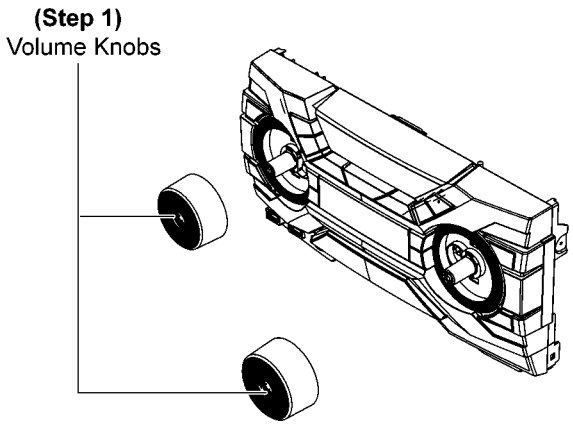
Step 6 Release tabs on both sides of Front Panel Unit and at bottom of unit.
Step 7 Detach to remove Front Panel Unit.



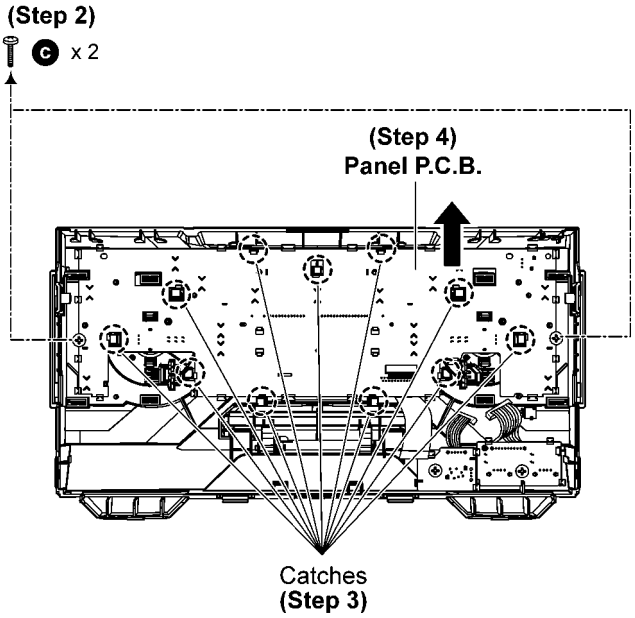
8.6. Disassembly of Panel P.C.B.

- **Refer to “Disassembly of Top Cabinet”.**
- **Refer to “Disassembly of Front Panel Unit”.**

Step 1 Remove Volume Knobs.



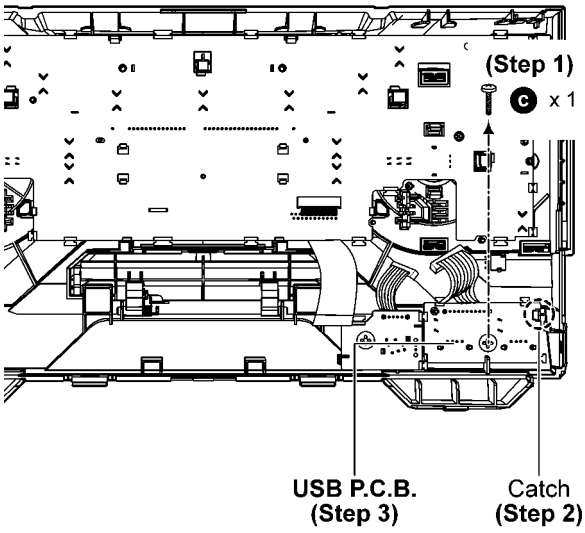
Step 2 Remove 2 screws.
Step 3 Release catches.
Step 4 Lift up to remove Panel P.C.B..



8.7. Disassembly of USB P.C.B.

- **Refer to “Disassembly of Top Cabinet”.**
- **Refer to “Disassembly of Front Panel Unit”.**

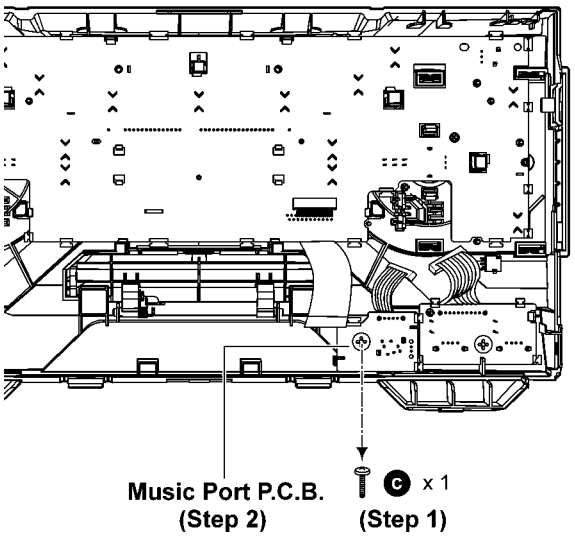
Step 1 Remove screw.
Step 2 Release catch.
Step 3 Lift up to remove USB P.C.B..



8.8. Disassembly of Music Port P.C.B.

- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Front Panel Unit".**

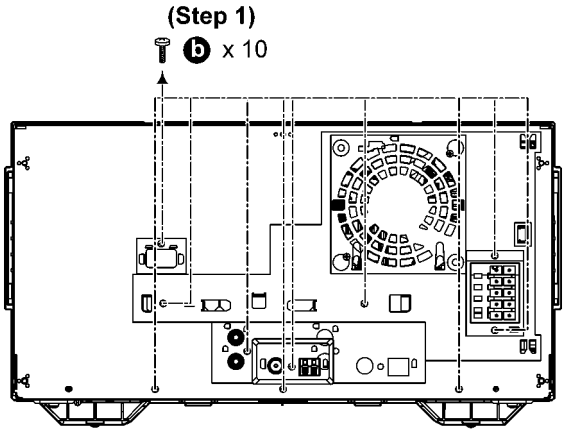
Step 1 Remove screw.
Step 2 Lift up to remove Music Port P.C.B..



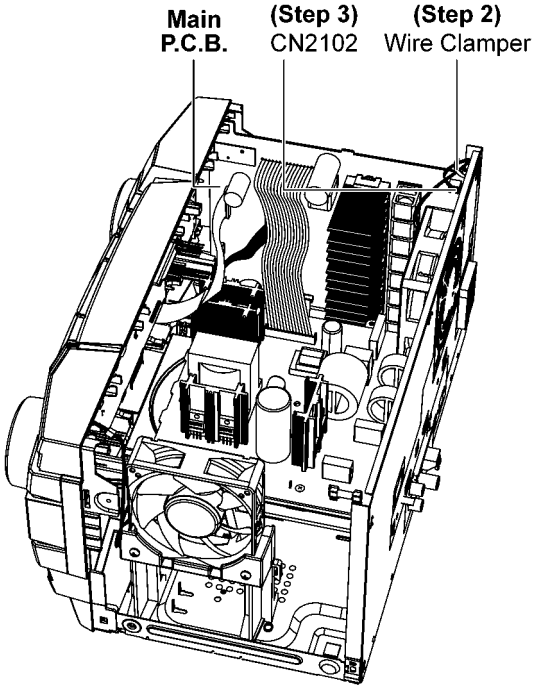
8.9. Disassembly of Rear Panel

- **Refer to "Disassembly of Top Cabinet".**

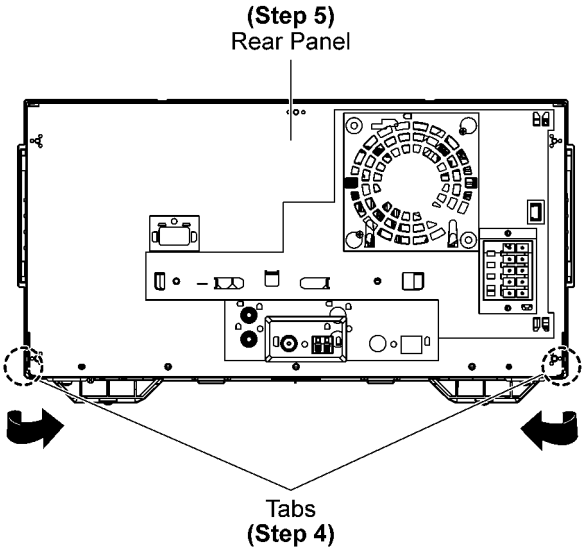
Step 1 Remove 10 screws.



Step 2 Lift up Wire Clamper.
Step 3 Detach 2P Cable at connector (CN2102) on Main P.C.B..



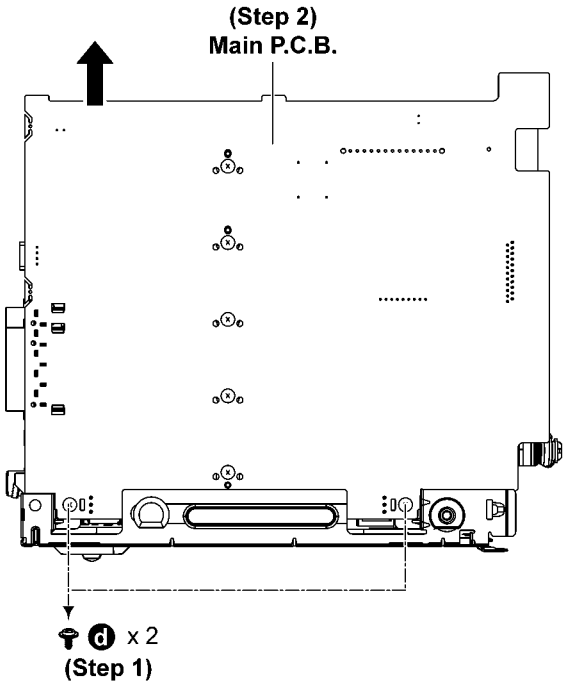
Step 4 Release tabs.
Step 5 Remove Rear Panel.



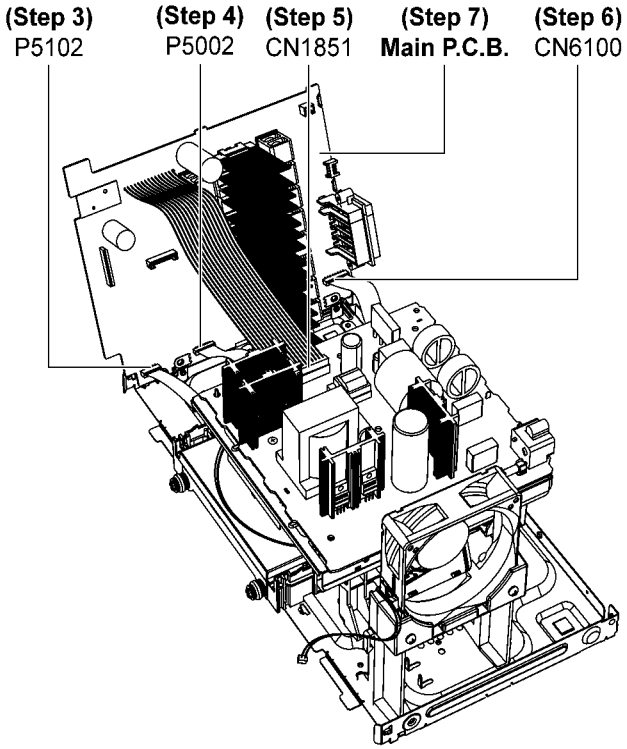
8.10. Disassembly of Main P.C.B.

- **Refer to “Disassembly of Top Cabinet”.**
- **Refer to “Disassembly of Front Panel Unit”.**
- **Refer to “Disassembly of Rear Panel”.**

Step 1 Remove 2 screws.
Step 2 Lift up to detach Main P.C.B..



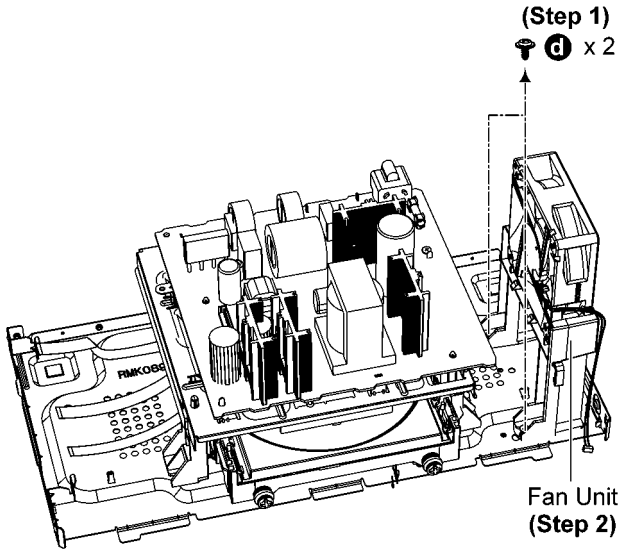
Step 3 Detach 10P FFC at connector (P5102) on Main P.C.B..
Step 4 Detach 24P FFC at connector (P5002) on Main P.C.B..
Step 5 Detach 13P Cable at connector (CN1851) on SMPS P.C.B..
Step 6 Detach 15P FFC at connector (CN6100) on Main P.C.B..
Step 7 Remove Main P.C.B..



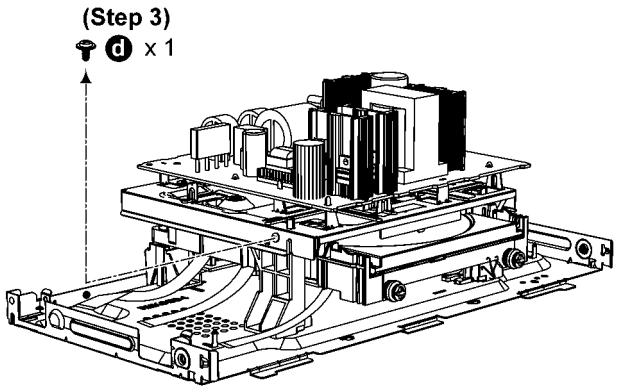
8.11. Disassembly of CD Mechanism Unit

- **Refer to “Disassembly of Top Cabinet”.**
- **Refer to “Disassembly of Front Panel Unit”.**
- **Refer to “Disassembly of Rear Panel”.**
- **Refer to “Disassembly of Main P.C.B.”.**

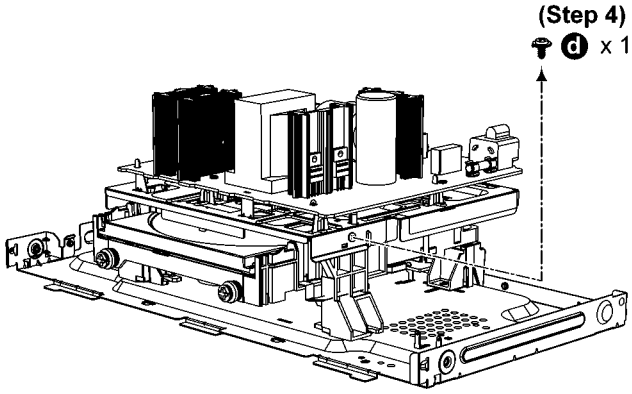
Step 1 Remove 2 screws.
Step 2 Remove Fan Unit.



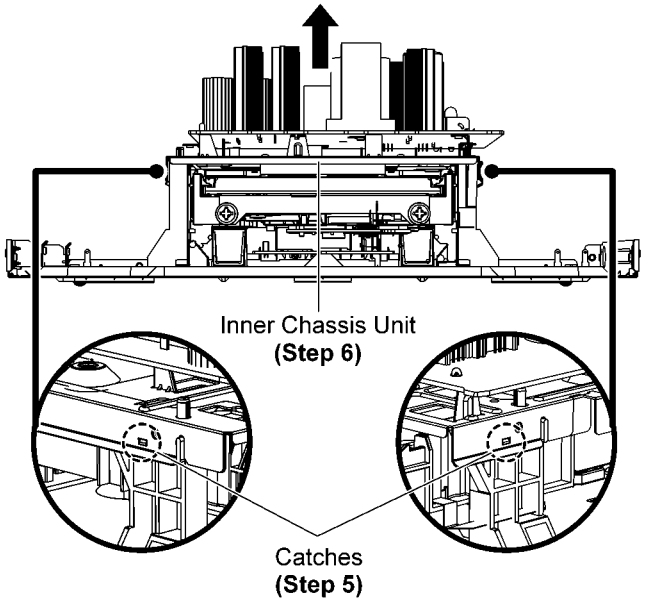
Step 3 Remove screw.



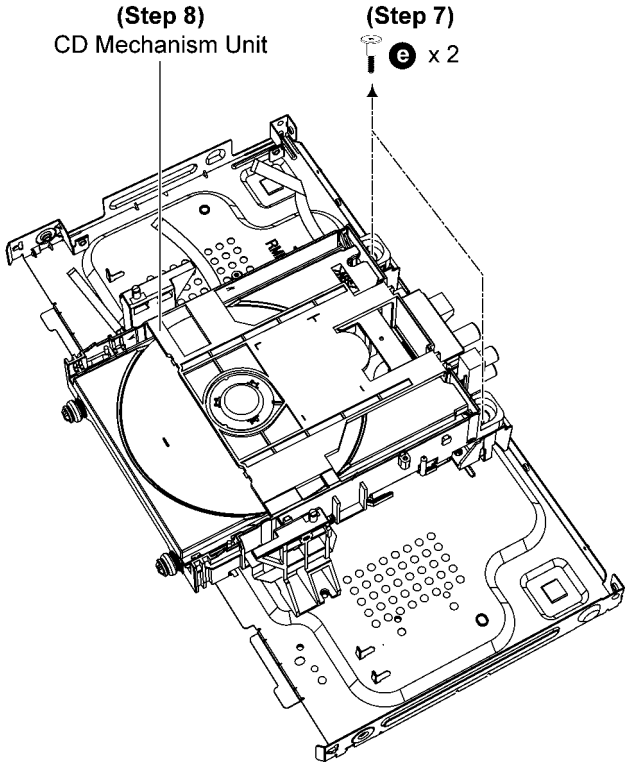
Step 4 Remove screw.



Step 5 Release catches.
Step 6 Lift up to remove Inner Chassis Unit.



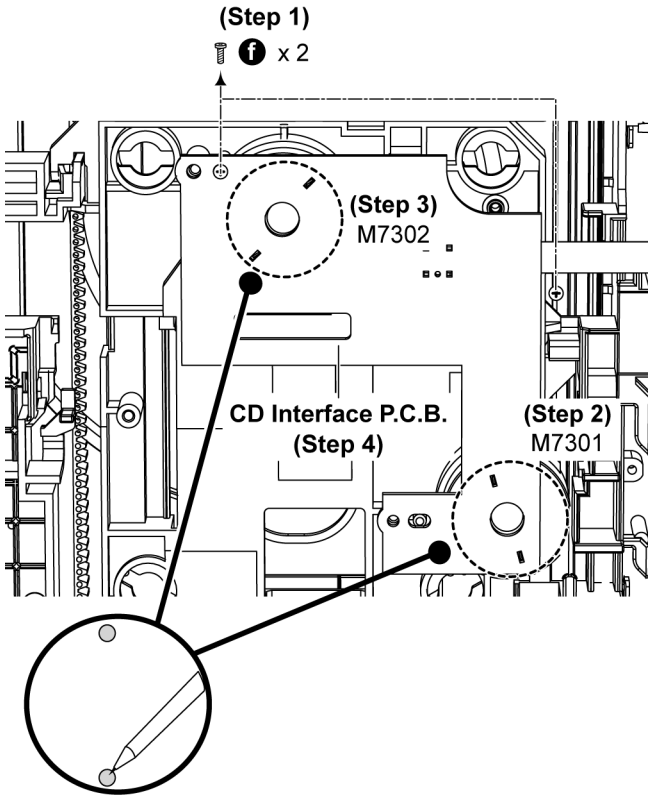
Step 7 Remove 2 screws.
Step 8 Remove CD Mechanism Unit.



8.12. Disassembly of CD Interface P.C.B.

- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Front Panel Unit".**
- **Refer to "Disassembly of Rear Panel".**
- **Refer to "Disassembly of Main P.C.B.".**
- **Refer to "Disassembly of CD Mechanism Unit".**

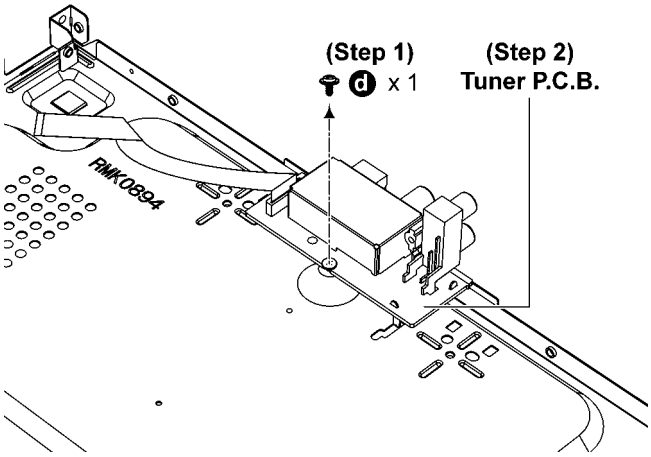
Step 1 Remove 2 screws.
Step 2 Desolder pins of motor (M7301).
Step 3 Desolder pins of motor (M7302).
Step 4 Remove CD Interface P.C.B..



8.13. Disassembly of Tuner P.C.B.

- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Front Panel Unit".**
- **Refer to "Disassembly of Rear Panel".**
- **Refer to "Disassembly of Main P.C.B.".**
- **Refer to "Disassembly of CD Mechanism Unit".**

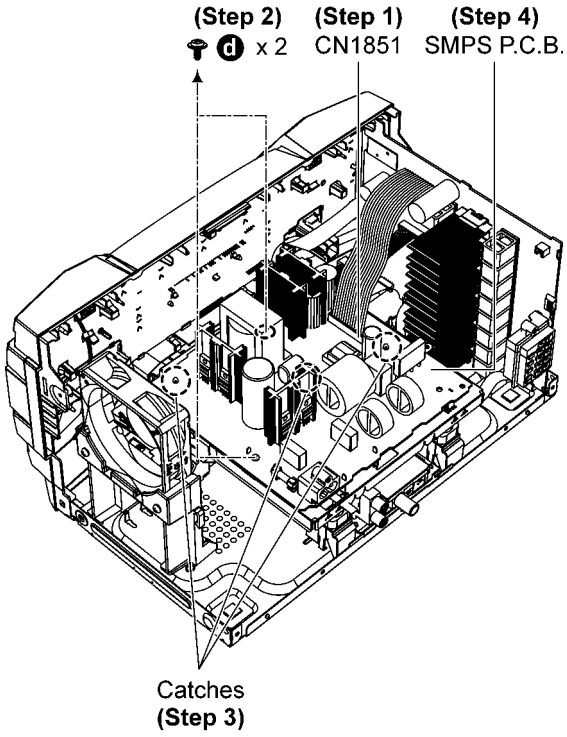
Step 1 Remove screw.
Step 2 Remove Tuner P.C.B..



8.14. Disassembly of SMPS P.C.B.

- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Rear Panel".**

Step 1 Detach 13P Cable at connector (CN1851) on SMPS P.C.B..
Step 2 Remove 2 screws.
Step 3 Release catches.
Step 4 Remove SMPS P.C.B..

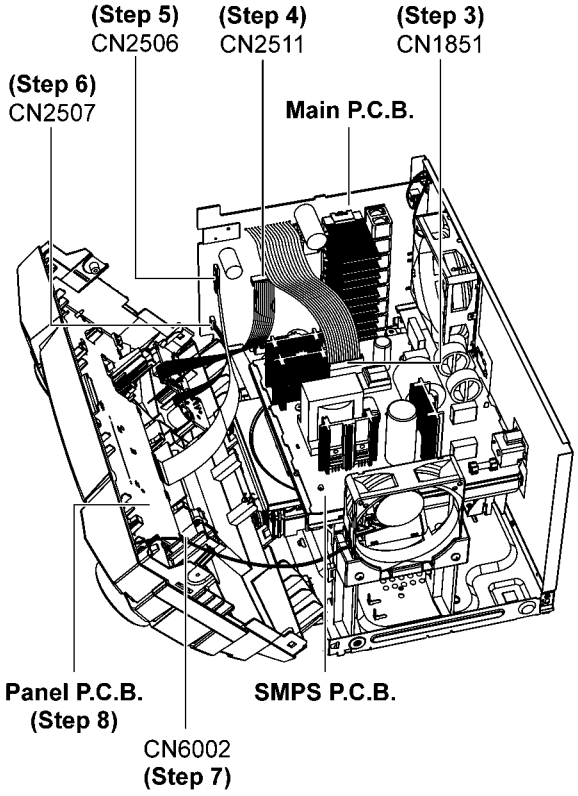


9 Service Position

Note: For description of the disassembly procedures, see the Section 8.

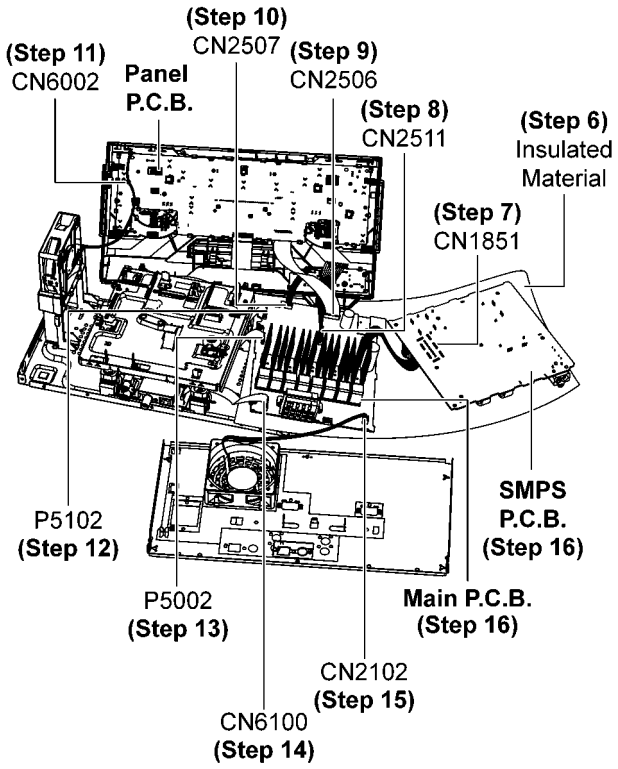
9.1. Checking of Panel P.C.B.

Step 1 Remove Top Cabinet.
Step 2 Detach Front Panel Unit.
Step 3 Attach 13P Cable at connector (CN1851) on SMPS P.C.B..
Step 4 Attach 9P Cable at connector (CN2511) on Main P.C.B..
Step 5 Attach 22P FFC at connector (CN2506) on Main P.C.B..
Step 6 Attach 4P Cable at connector (CN2507) on Main P.C.B..
Step 7 Attach 2P Cable at connector (CN6002) on Fan unit.
Step 8 Panel P.C.B. can be checked as diagram shown.



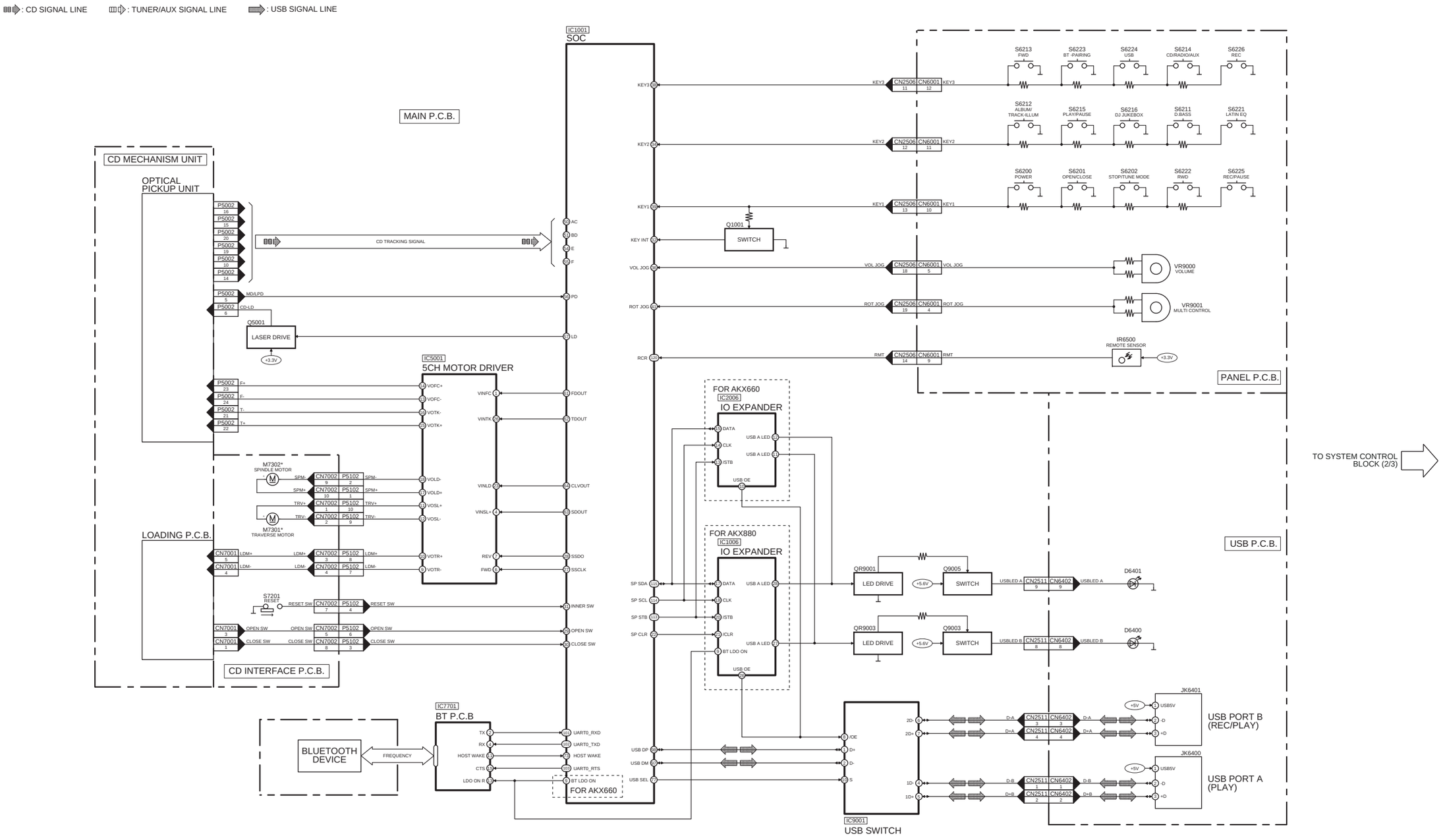
9.2. Checking of Main P.C.B. and SMPS P.C.B.

Step 1 Remove Top Cabinet.
Step 2 Detach Front Panel Unit.
Step 3 Remove Rear Panel.
Step 4 Remove Main P.C.B..
Step 5 Remove SMPS P.C.B..
Step 6 Place Main P.C.B. and SMPS P.C.B. on the insulated material.
Step 7 Attach 13P Cable at connector (CN1851) on SMPS P.C.B..
Step 8 Attach 9P Cable at connector (CN2511) on Main P.C.B..
Step 9 Attach 22P FFC at connector (CN2506) on Main P.C.B..
Step 10 Attach 4P Cable at connector (CN2507) on Main P.C.B..
Step 11 Attach 2P Cable at connector (CN6002) on Fan unit.
Step 12 Attach 10P FFC at connector (P5102) on Main P.C.B..
Step 13 Attach 24P FFC at connector (P5002) on Main P.C.B..
Step 14 Attach 15P FFC at connector (CN6100) on Main P.C.B..
Step 15 Attach 2P Cable at connector (CN2102) on Main P.C.B..
Step 16 Main P.C.B. and SMPS P.C.B. can be checked as diagram shown.



10 Block Diagram

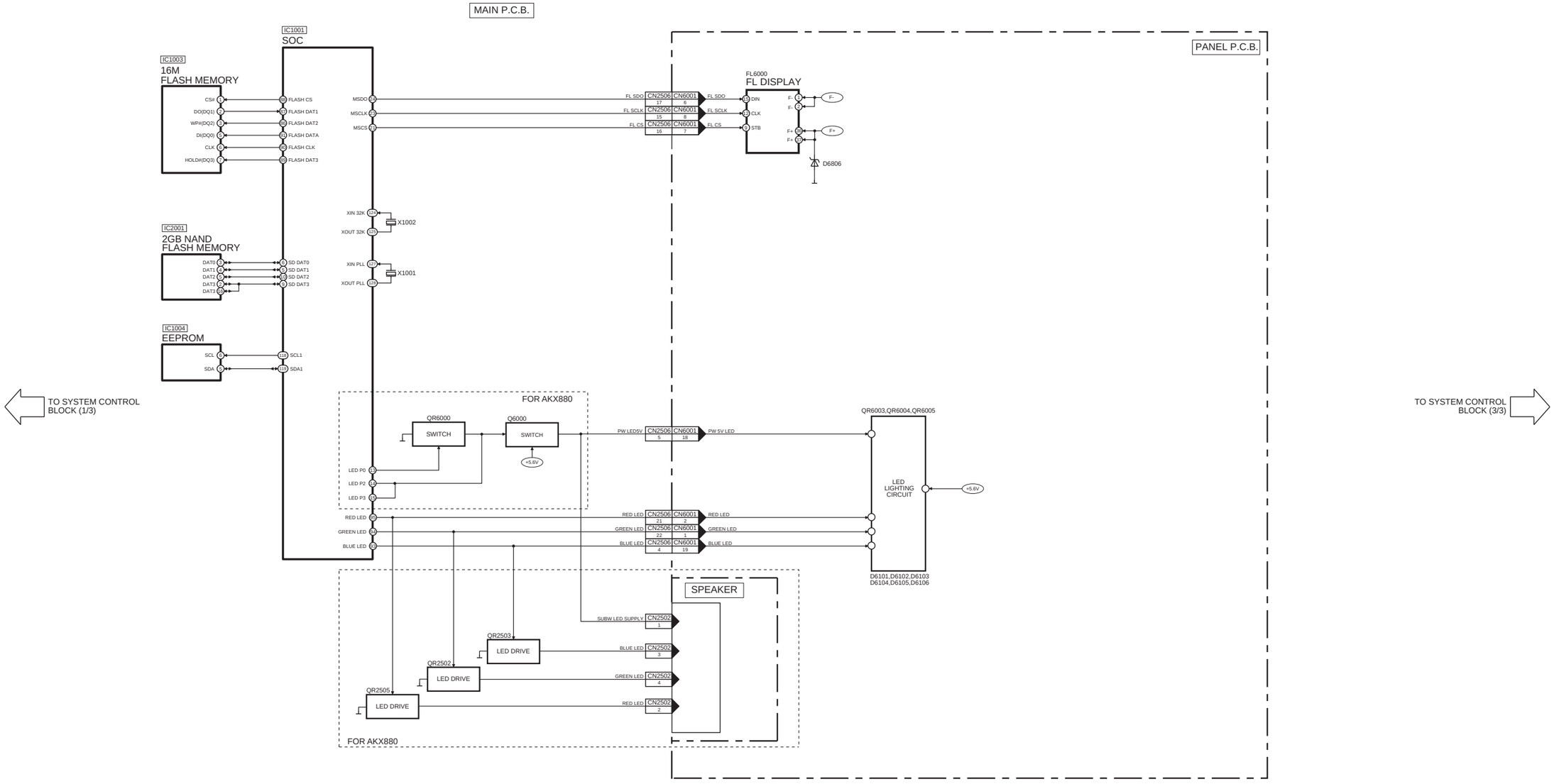
10.1. System Control



NOTE: “ * ” REF IS FOR INDICATION ONLY

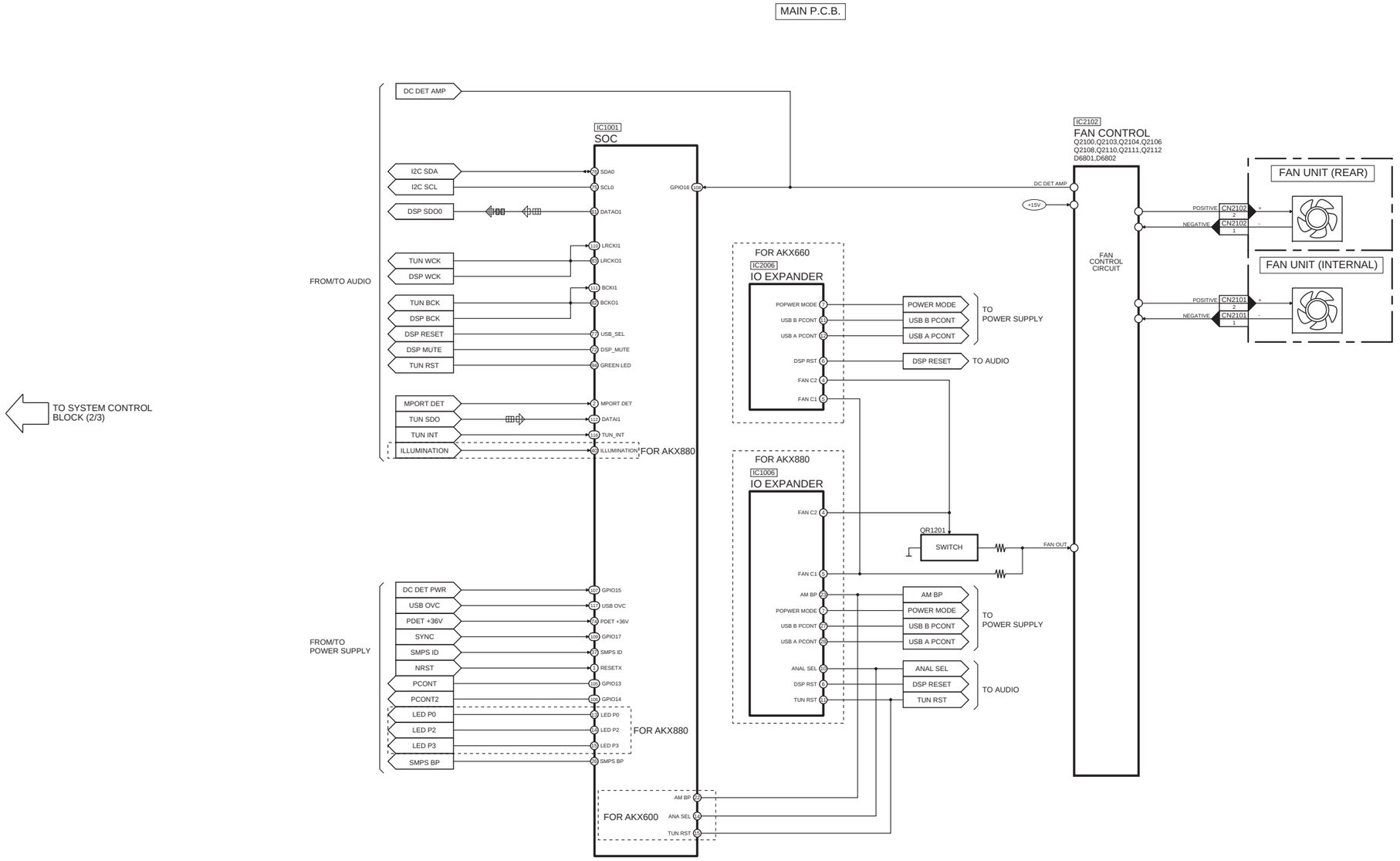
SA-AKX660PN/PS,SA-AKX880PN/PS SYSTEM CONTROL (1/3) BLOCK DIAGRAM

: CD SIGNAL LINE : TUNER/AUX SIGNAL LINE : USB SIGNAL LINE



SA-AKX660PN/PS,SA-AKX880PN/PS SYSTEM CONTROL (2/3) BLOCK DIAGRAM

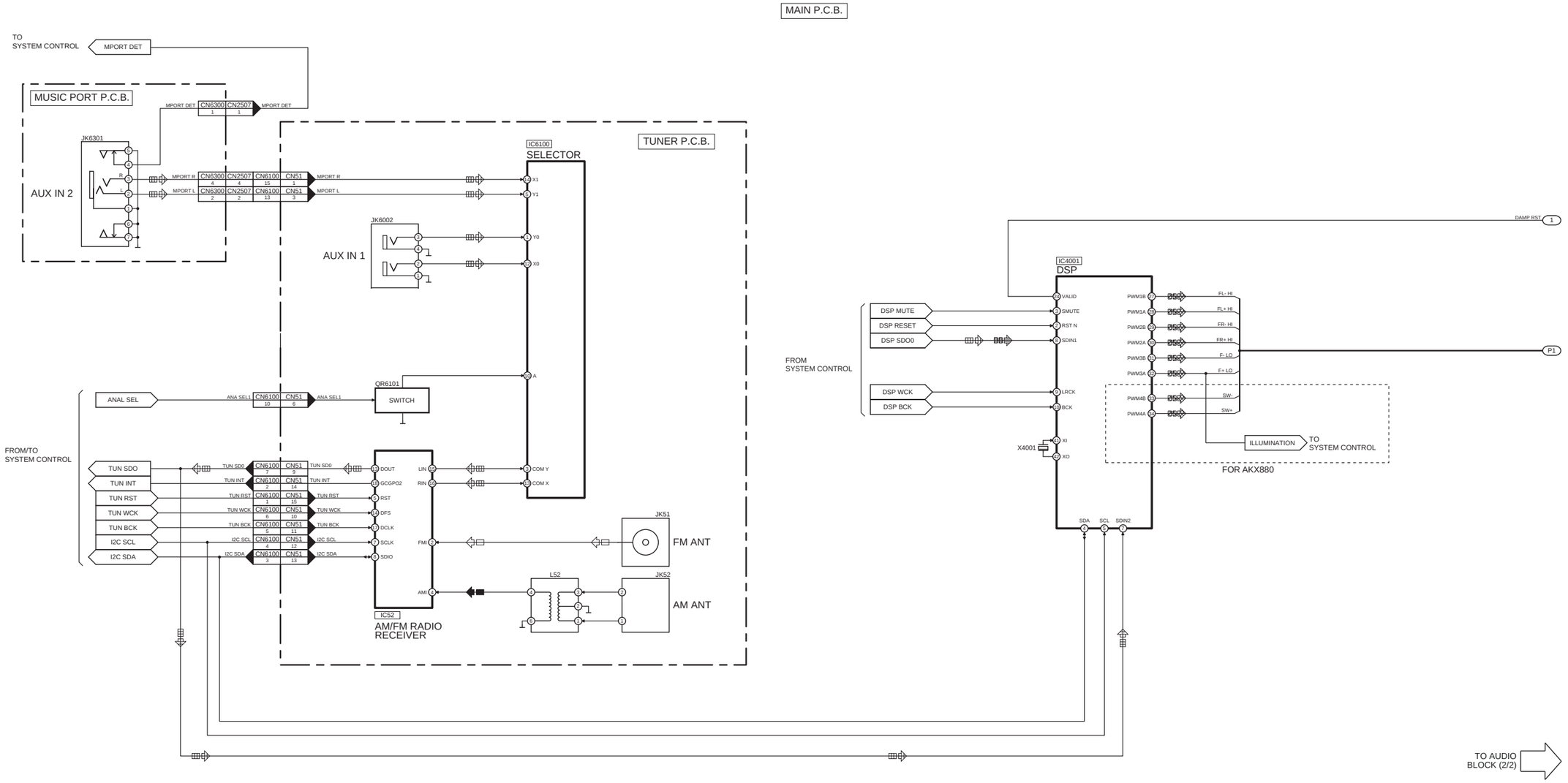
: CD SIGNAL LINE : TUNER/AUX SIGNAL LINE : USB SIGNAL LINE



SA-AKX660PN/PS,SA-AKX880PN/PS SYSTEM CONTROL (3/3) BLOCK DIAGRAM

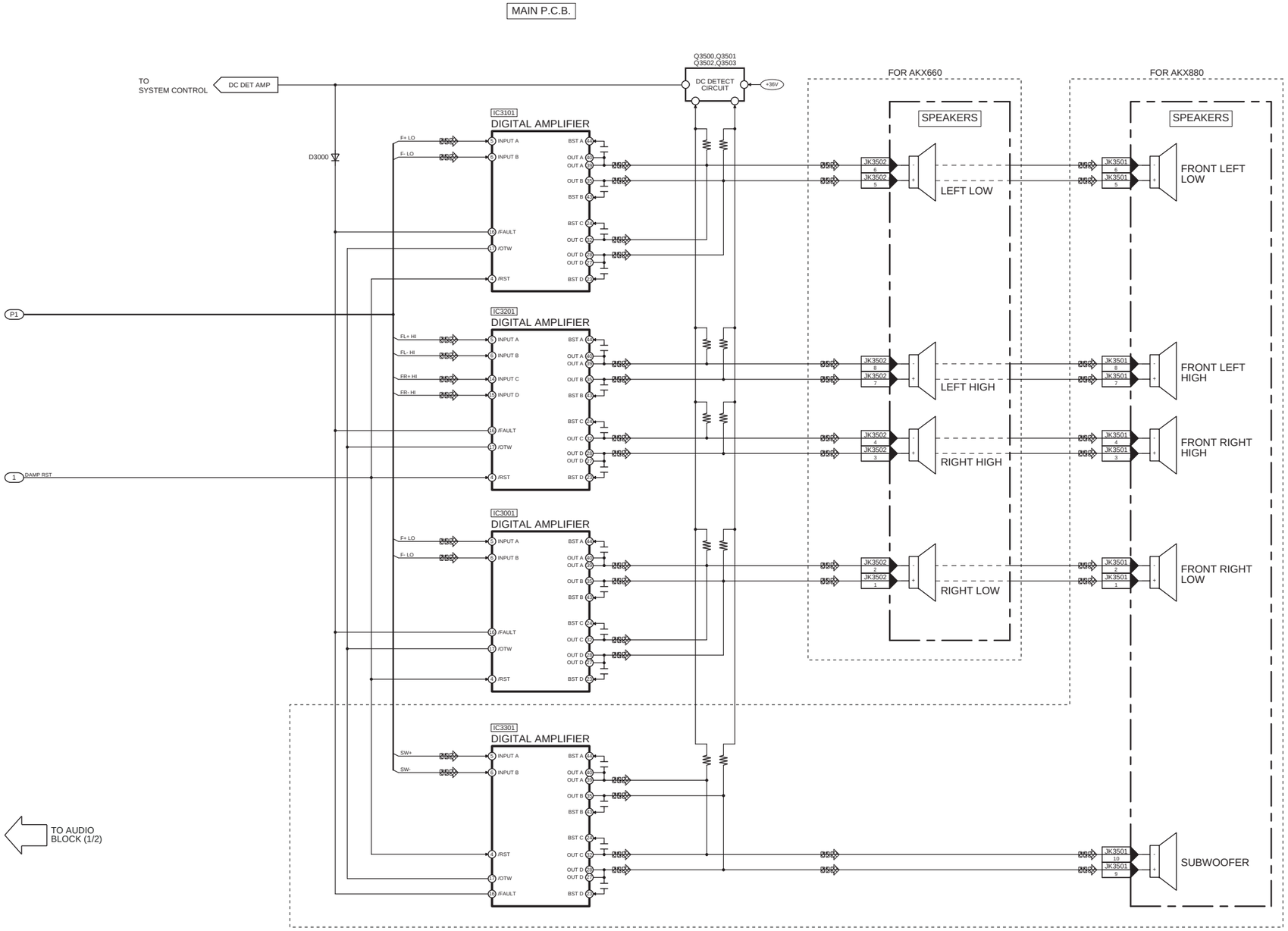
10.2. Audio

: CD SIGNAL LINE : TUNER/AUX SIGNAL LINE : AUDIO SIGNAL LINE : AM SIGNAL LINE : FM SIGNAL LINE



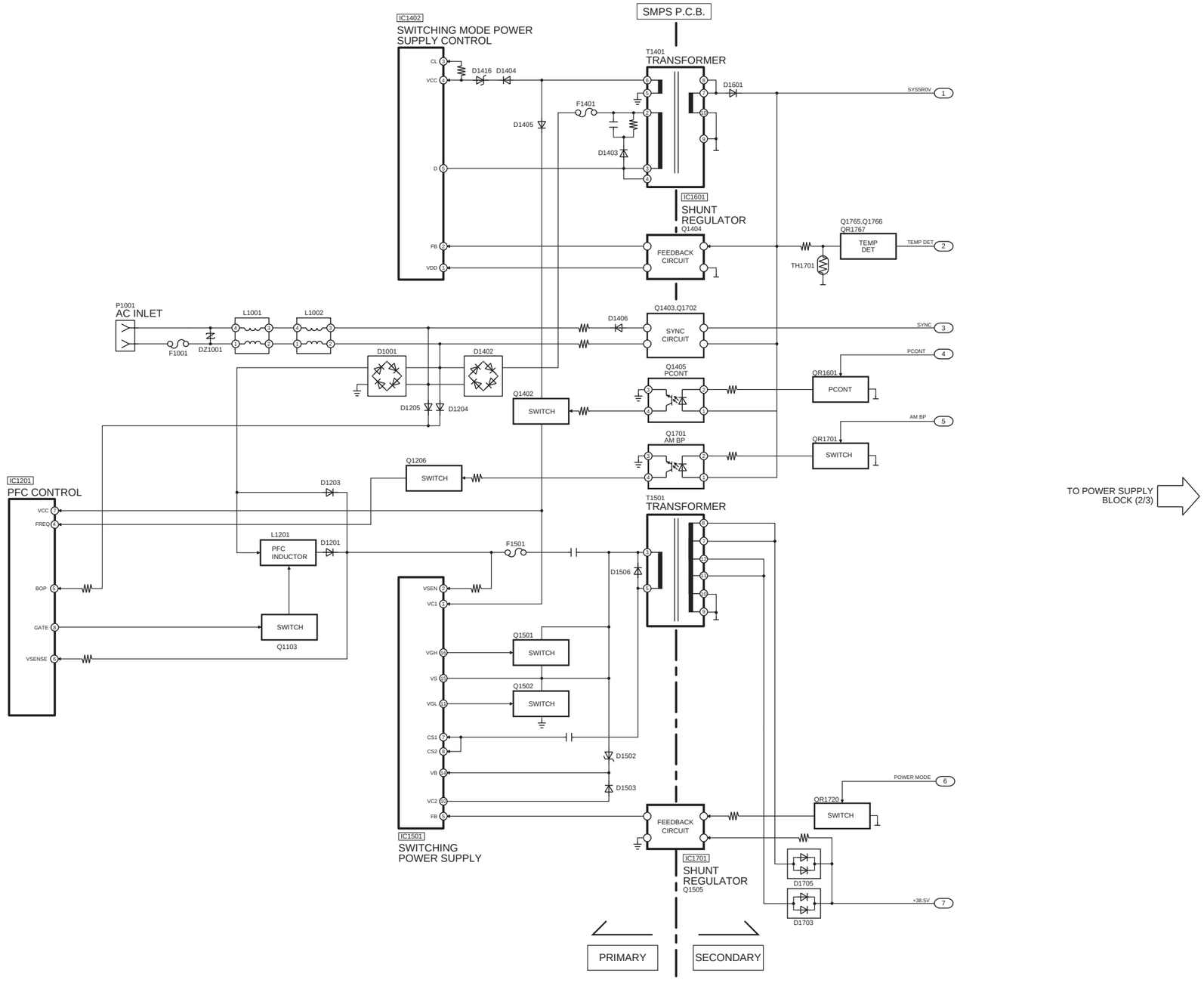
SA-AKX660PN/PS,SA-AKX880PN/PS AUDIO (1/2) BLOCK DIAGRAM

: CD SIGNAL LINE : TUNER/AUX SIGNAL LINE : AUDIO SIGNAL LINE : AM SIGNAL LINE : FM SIGNAL LINE

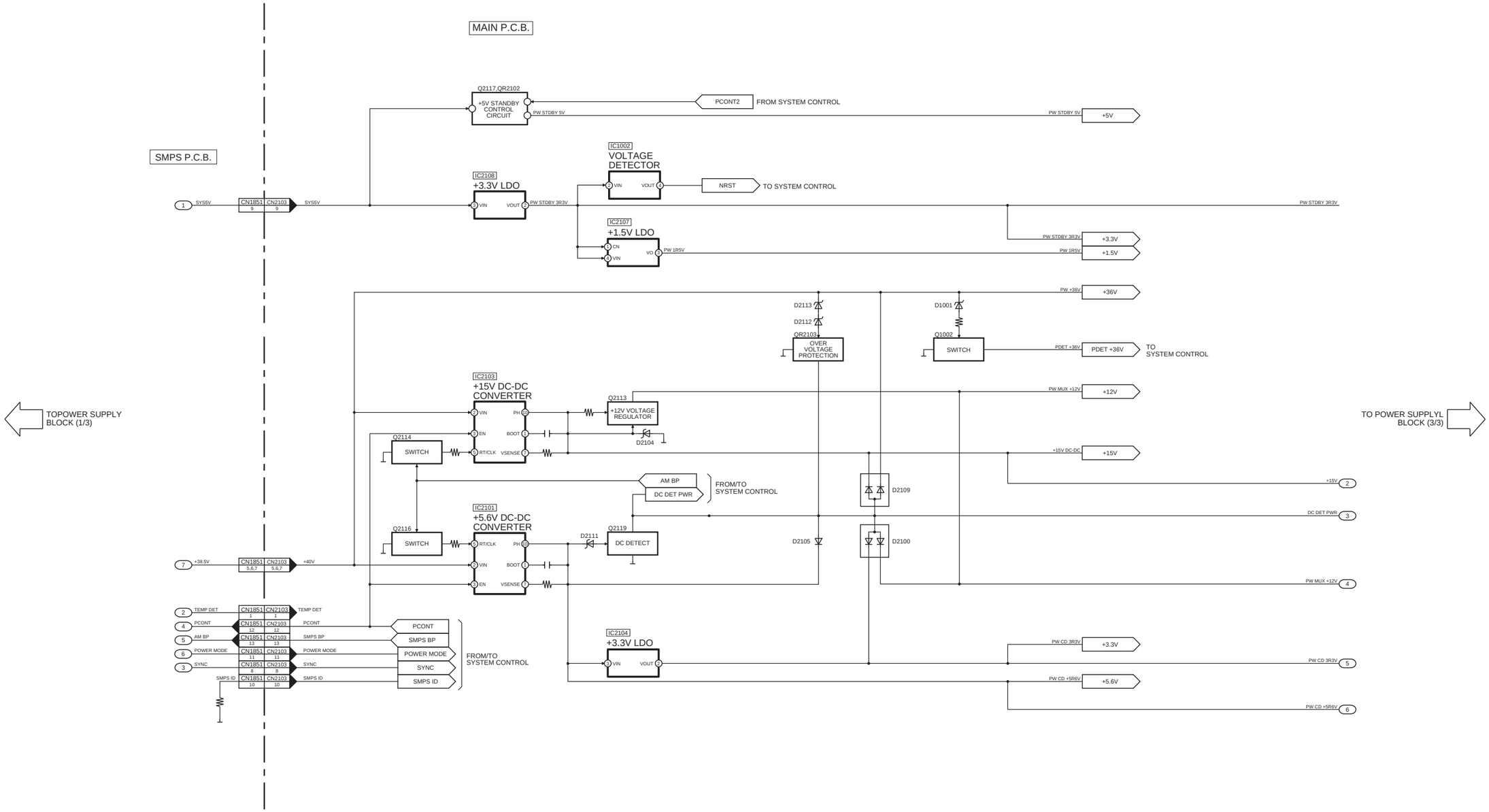


SA-AKX660PN/PS,SA-AKX880PN/PS AUDIO (2/2) BLOCK DIAGRAM

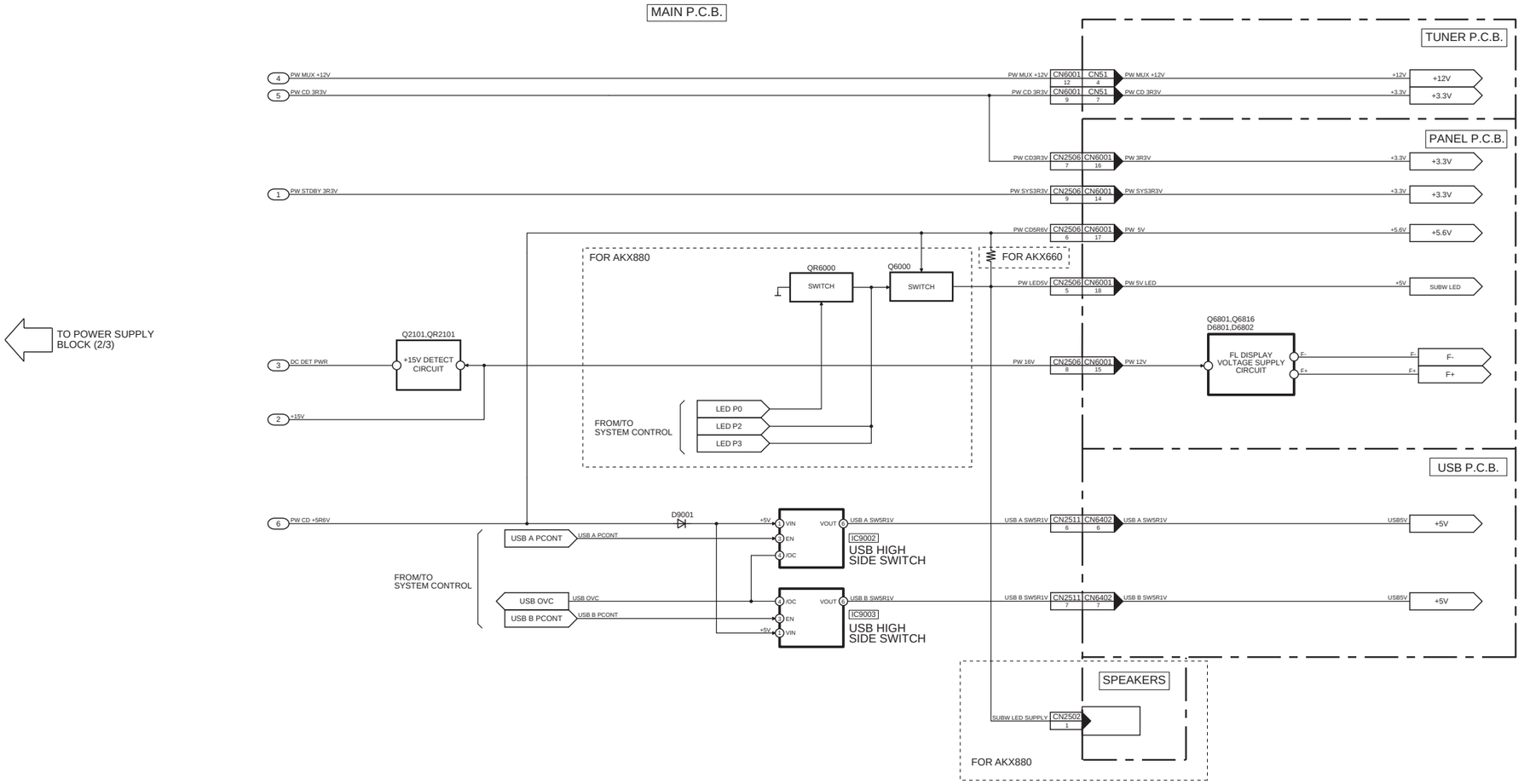
10.3. Power Supply



SA-AKX660PN/PS,SA-AKX880PN/PS POWER SUPPLY (1/3) BLOCK DIAGRAM

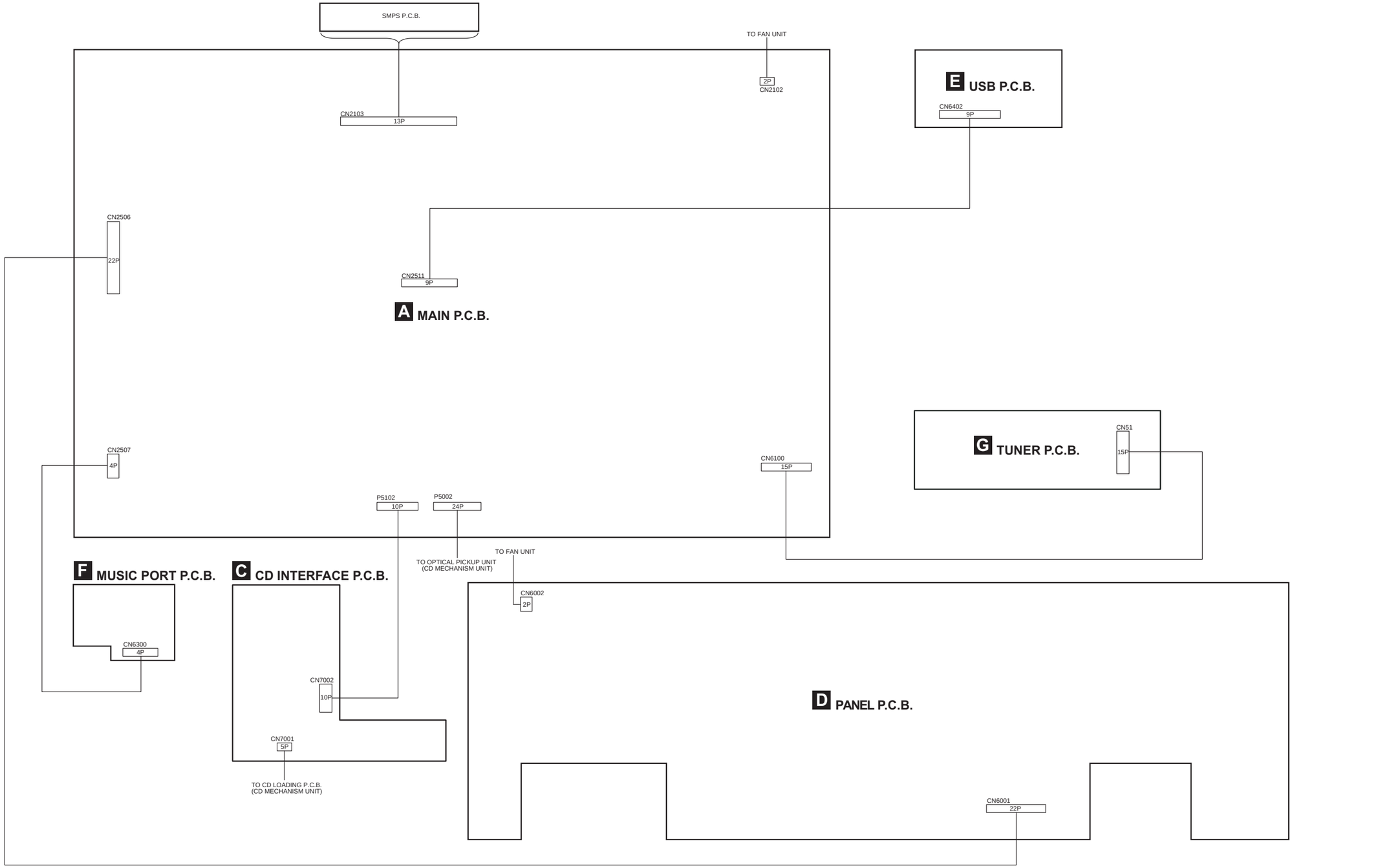


SA-AKX660PN/PS,SA-AKX880PN/PS POWER SUPPLY (2/3) BLOCK DIAGRAM



SA-AKX660PN/PS,SA-AKX880PN/PS POWER SUPPLY (3/3) BLOCK DIAGRAM

11 Wiring Connection Diagram



SA-AKX660PN/PS, SA-AKX880PN/PS WIRING CONNECTION DIAGRAM

12 Schematic Diagram

12.1. Schematic Diagram Notes

• **This schematic diagram may be modified at any time with the development of new technology.**

Notes:

S6200:	Power switch (⏻/|).
S6201:	Open/Close switch (⏏).
S6202:	Stop/Tune Mode (■) switch.
S6211:	D.Bass switch.
S6212:	Album/Track/-Illumination switch.
S6213:	Forward (▶▶/▶▶|) switch.
S6214:	CD/Radio/AUX switch.
S6215:	Play/Pause (▶/▮▮) switch.
S6216:	DJ Jukebox switch.
S6221:	Latin/EQ switch.
S6222:	Rewind (|◀◀/◀◀) switch.
S6223:	Bluetooth/-Pairing switch.
S6224:	USB switch.
S6225:	USB Rec/Pause switch.
S6226:	Rec switch.
S7201:	Reset switch
VR9000:	Volume Jog.
VR9001:	Multi Control.

• Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high quality sound (capacitors), low-noise (resistors), etc are used.
When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

• **Resistor**
Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).

• **Capacitor**
Unit of capacitance is μF, unless otherwise noted. F=Farads, pF=pico-Farad.

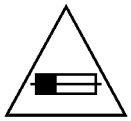
• **Coil**
Unit of inductance is H, unless otherwise noted.

• *****
REF IS FOR INDICATION ONLY.

• Voltage and signal line

: +B signal line
: -B signal line
: CD signal line
: Tuner/AUX signal line
: Audio signal line
: USB signal line
: FM signal line
: AM signal line

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME
TYPE F1001 T10AH 250V FUSE
TYPE F1401 T500mA 250V FUSE
TYPE F1501 T5A 250V FUSE



RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION

These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection againts fire harzard, replace with the same type fuse. fro rating, refer to the marking adjacent to the symbol.

12.1. Main (CD Motor Driver) Circuit

SCHEMATIC DIAGRAM - 1

A MAIN (CD MOTOR DRIVER) CIRCUIT

—— : +B SIGNAL LINE ▮▮▮▶ : CD SIGNAL LINE

TO **C** CD INTERFACE CIRCUIT (CN7002) IN SCHEMATIC DIAGRAM - 14

P5102: TRV+ 10, TRV- 9, LDM+ 8, LDM- 7, OPEN_SW 6, DGND 5, RESET_SW 4, CLOSE_SW 3, SPM- 2, SPM+ 1

P5002: F- 24, F+ 23, T+ 22, T- 21, C 20, D 19, CD/DVD SWD 18, RF 17, A 16, B 15, F 14, PD GND 13, VREF 12, VCC(5V) 11, E 10, NC 9, GND 8, NC 7, CD-LD 6, MD/LPD 5, NC 4, NC 3, DVD-LD 2, GND-LD 1

TO OPTICAL PICKUP UNIT

IC5001 C0GBY0000213 5CH MOTOR DRIVER

Q5001 B1ADCF000001 LASER DRIVE

RX5001 D1H81034A042

D5001 DB2J31400L

ZJ1002 CHASIS GND

LB5003 J0JHC0000045

LB5004 J0JYC0000045

LB5005 J0JBC0000134

LB5001 J0JBC0000134

LB5103 J0JBC0000656

LB5006–LB5009 J0JBC0000010

LB5010 J0JBC0000010

LB5011 J0JBC0000010

LB5015–LB5018 J0JBC0000010

OPEN_SW, INNER_SW, CLOSE_SW, PW_CD_+5R6V, LD_CCW, LD_CW, TRVDRV, FODRV, TRDRV, SPDRV, PW_CD_3R3V, CDMOTOR_GND, AC, BD, F, VBIAS, E, LDO, MD, AGND1

CD: MAIN (CD MOTOR DRIVER): SCHEMATIC DIAGRAM - 1
US: MAIN (USB EMMC): SCHEMATIC DIAGRAM - 2
SO: MAIN (SOC IO EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5 ~ 6
CN: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 7
DS: MAIN (DSP): SCHEMATIC DIAGRAM - 8
VR: MAIN (VOLTAGE REGULATOR): SCHEMATIC DIAGRAM - 9 ~ 10

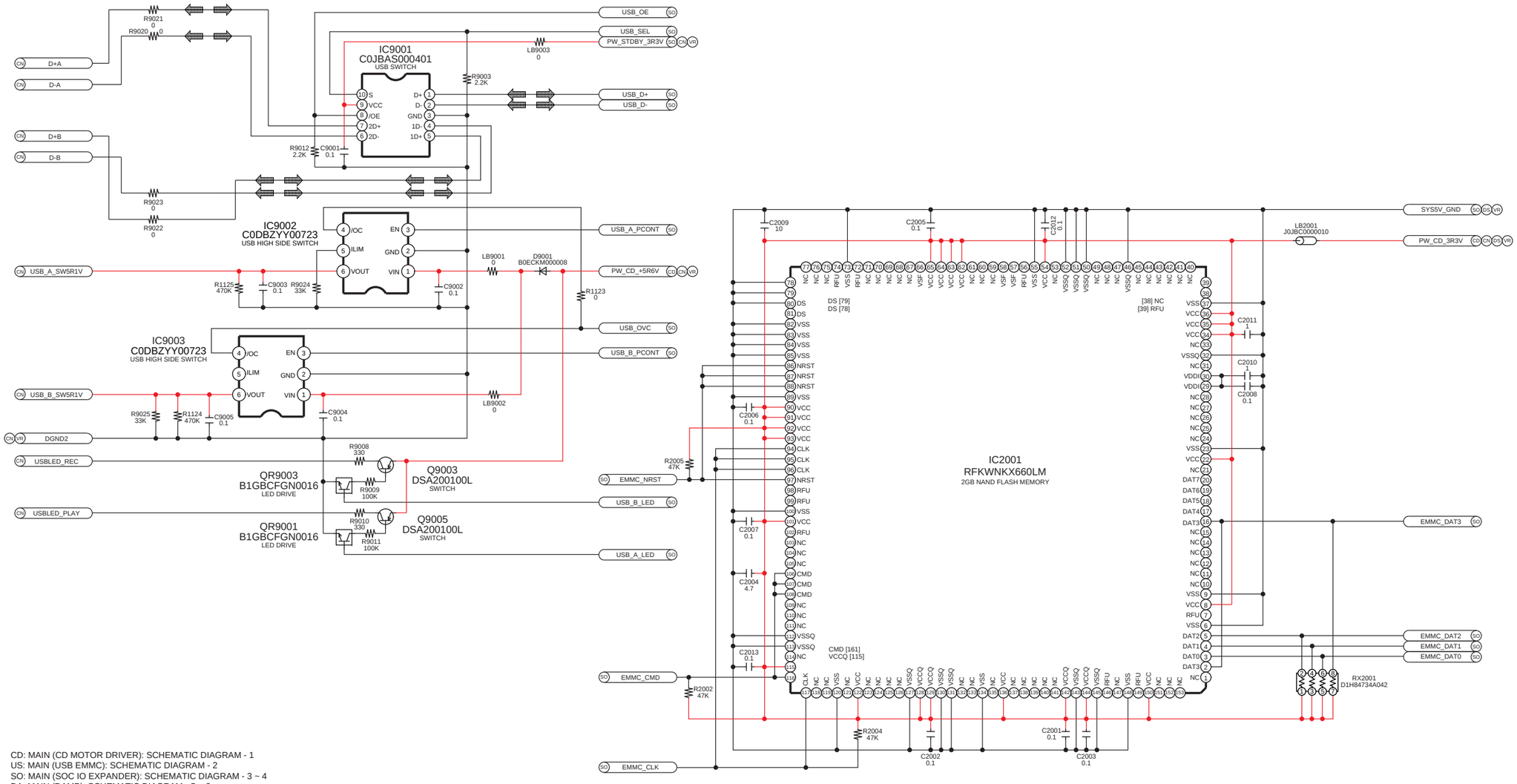
SA-AKX660PN/PS,SA-AKX880PN/PS MAIN (CD MOTOR DRIVER) CIRCUIT

12.2. Main (USB EMMC) Circuit

SCHEMATIC DIAGRAM - 2

A MAIN (USB EMMC) CIRCUIT

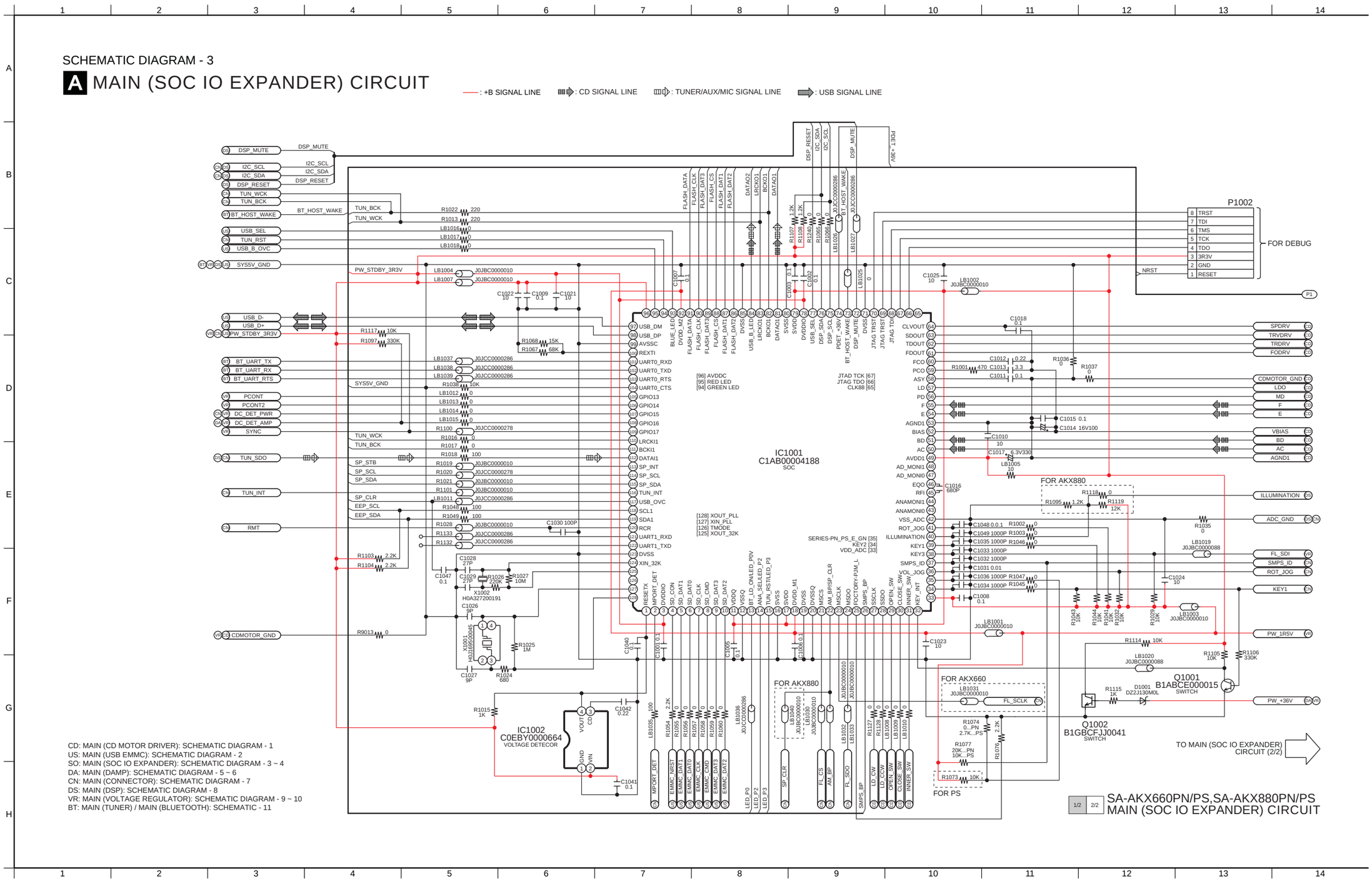
—— : +B SIGNAL LINE ▭ : USB SIGNAL LINE



CD: MAIN (CD MOTOR DRIVER): SCHEMATIC DIAGRAM - 1
US: MAIN (USB EMMC): SCHEMATIC DIAGRAM - 2
SO: MAIN (SOC IO EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5 ~ 6
CN: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 7
DS: MAIN (DSP): SCHEMATIC DIAGRAM - 8
VR: MAIN (VOLTAGE REGULATOR): SCHEMATIC DIAGRAM - 9 ~ 10

SA-AKX660PN/PS,SA-AKX880PN/PS MAIN (USB EMMC) CIRCUIT

12.3. Main (SOC IO Expander) Circuit (1/2)

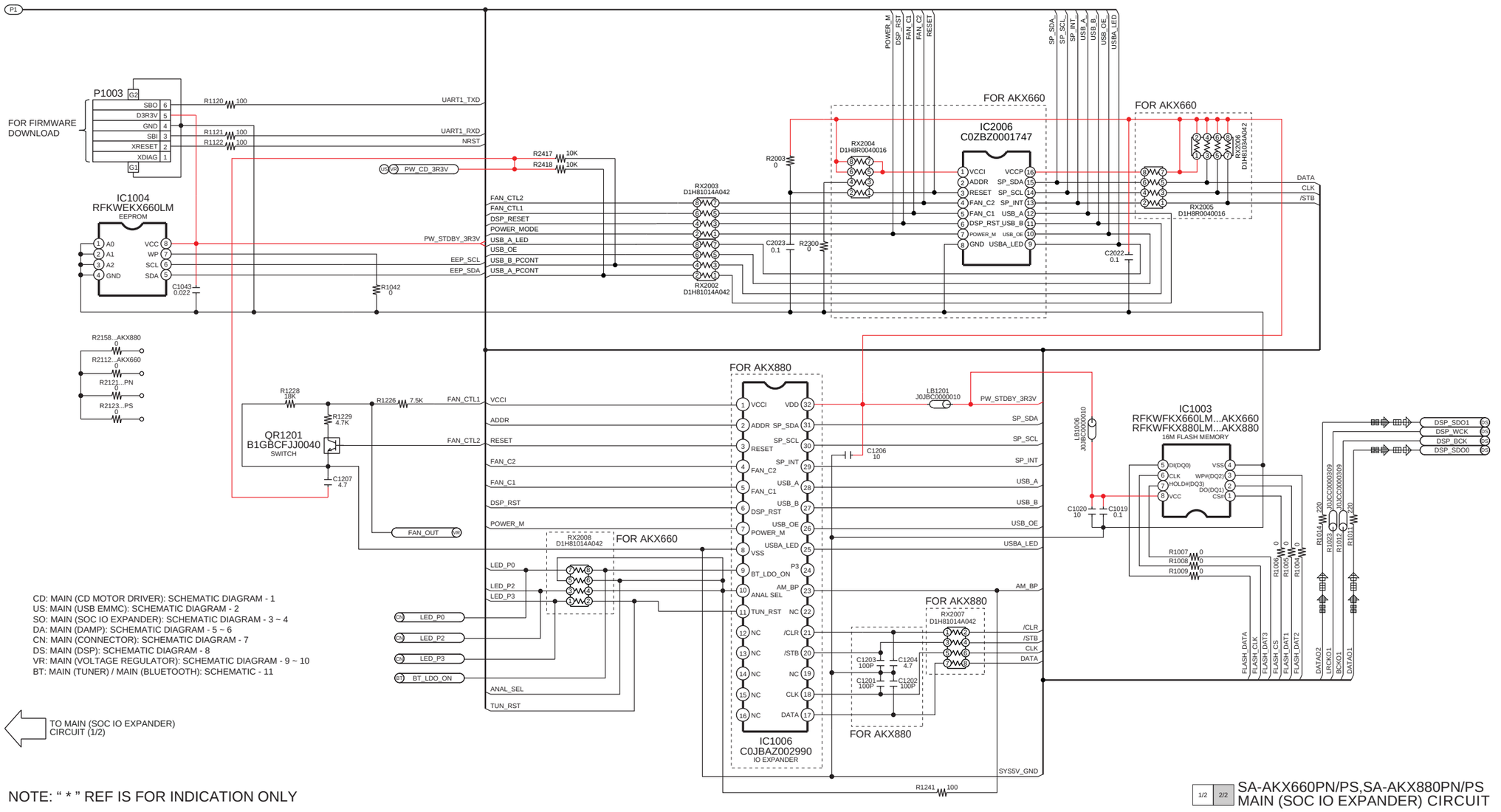


12.4. Main (SOC IO Expander) Circuit (2/2)

SCHEMATIC DIAGRAM - 4

A MAIN (SOC IO EXPANDER) CIRCUIT

: +B SIGNAL LINE : CD SIGNAL LINE : TUNER/AUX/MIC SIGNAL LINE : USB SIGNAL LINE



CD: MAIN (CD MOTOR DRIVER): SCHEMATIC DIAGRAM - 1
US: MAIN (USB EMMC): SCHEMATIC DIAGRAM - 2
SO: MAIN (SOC IO EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5 ~ 6
CN: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 7
DS: MAIN (DSP): SCHEMATIC DIAGRAM - 8
VR: MAIN (VOLTAGE REGULATOR): SCHEMATIC DIAGRAM - 9 ~ 10
BT: MAIN (TUNER) / MAIN (BLUETOOTH): SCHEMATIC - 11

TO MAIN (SOC IO EXPANDER) CIRCUIT (1/2)

NOTE: " * " REF IS FOR INDICATION ONLY

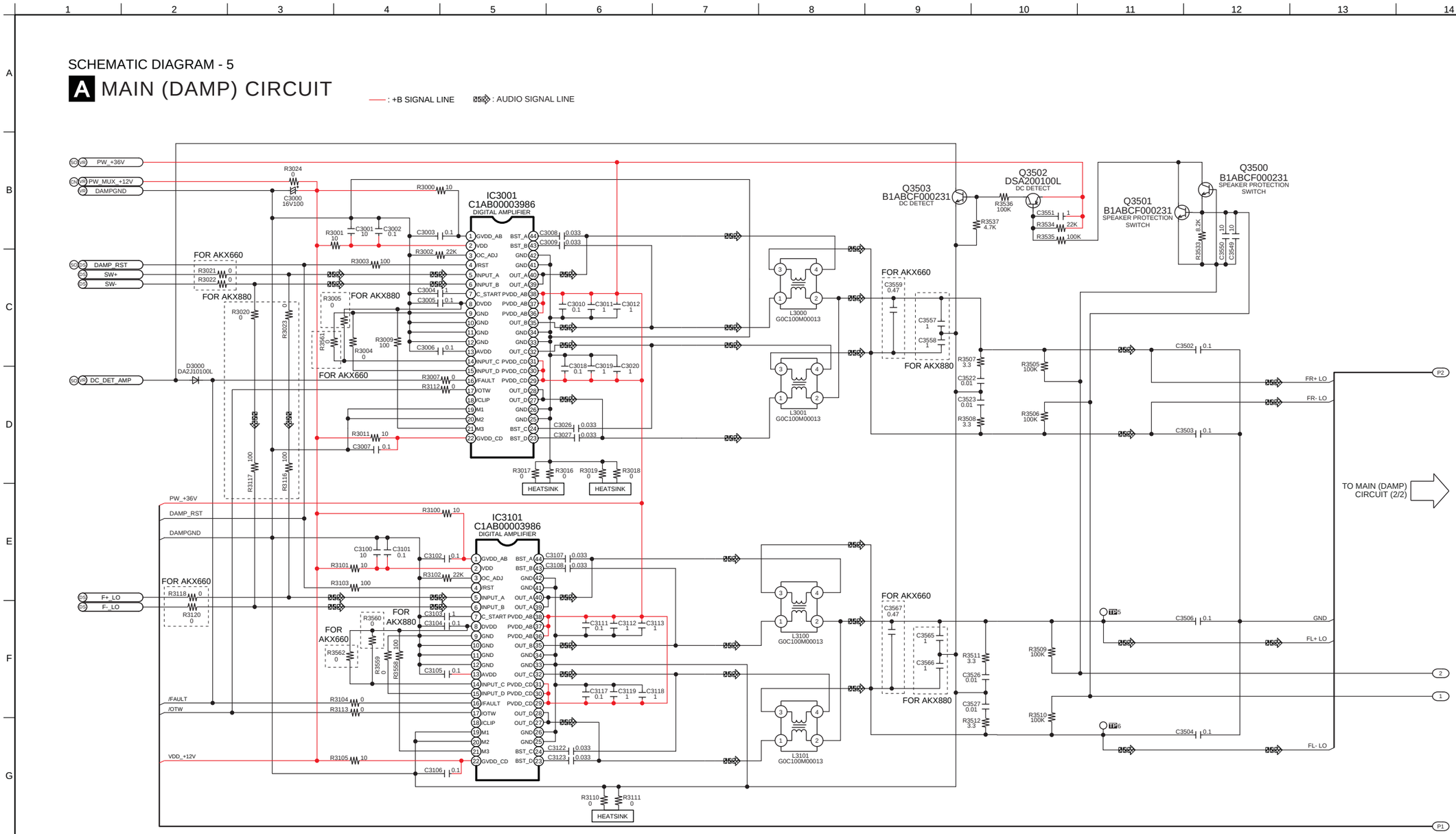
1/2 2/2 SA-AKX660PN/PS,SA-AKX880PN/PS MAIN (SOC IO EXPANDER) CIRCUIT

12.5. Main (Damp) Circuit (1/2)

SCHEMATIC DIAGRAM - 5

A MAIN (DAMP) CIRCUIT

—— : +B SIGNAL LINE ▷▷ : AUDIO SIGNAL LINE



CD: MAIN (CD MOTOR DRIVER): SCHEMATIC DIAGRAM - 1
US: MAIN (USB EMMC): SCHEMATIC DIAGRAM - 2
SO: MAIN (SOC IO EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5 ~ 6
CN: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 7
DS: MAIN (DSP): SCHEMATIC DIAGRAM - 8
VR: MAIN (VOLTAGE REGULATOR): SCHEMATIC DIAGRAM - 9 ~ 10

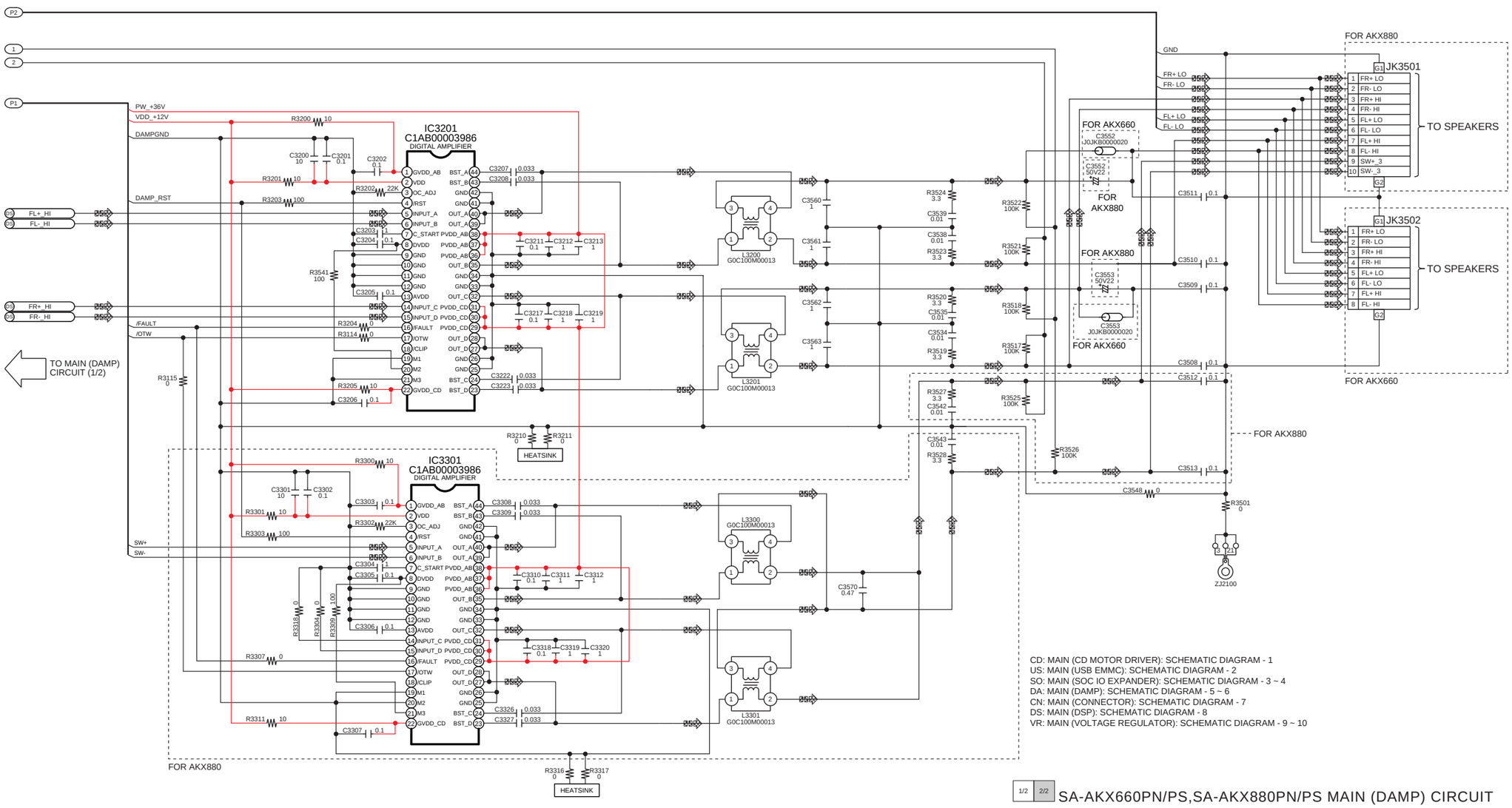
1/2 2/2 SA-AKX660PN/PS,SA-AKX880PN/PS MAIN (DAMP) CIRCUIT

12.6. Main (Damp) Circuit (2/2)

SCHEMATIC DIAGRAM - 6

A MAIN (DAMP) CIRCUIT

—— : +B SIGNAL LINE ⋙ : AUDIO SIGNAL LINE



CD: MAIN (CD MOTOR DRIVER): SCHEMATIC DIAGRAM - 1
US: MAIN (USB EMMC): SCHEMATIC DIAGRAM - 2
SO: MAIN (SOC IO EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5 ~ 6
CN: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 7
DS: MAIN (DSP): SCHEMATIC DIAGRAM - 8
VR: MAIN (VOLTAGE REGULATOR): SCHEMATIC DIAGRAM - 9 ~ 10

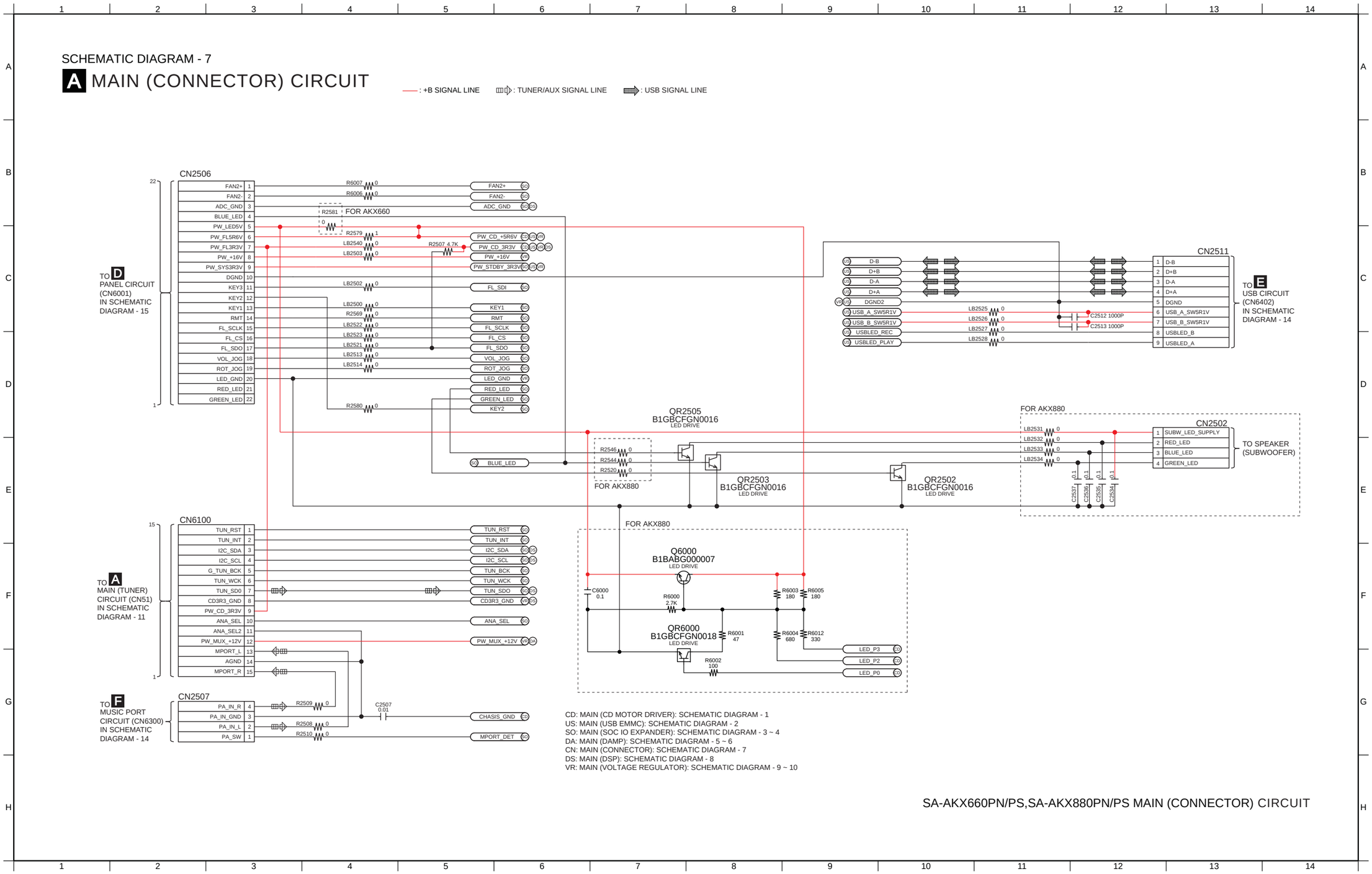
1/2 2/2 SA-AKX660PN/PS,SA-AKX880PN/PS MAIN (DAMP) CIRCUIT

12.7. Main (Connector) Circuit

SCHEMATIC DIAGRAM - 7

A MAIN (CONNECTOR) CIRCUIT

—— : +B SIGNAL LINE : TUNER/AUX SIGNAL LINE : USB SIGNAL LINE



CD: MAIN (CD MOTOR DRIVER): SCHEMATIC DIAGRAM - 1
US: MAIN (USB EMMC): SCHEMATIC DIAGRAM - 2
SO: MAIN (SOC IO EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5 ~ 6
CN: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 7
DS: MAIN (DSP): SCHEMATIC DIAGRAM - 8
VR: MAIN (VOLTAGE REGULATOR): SCHEMATIC DIAGRAM - 9 ~ 10

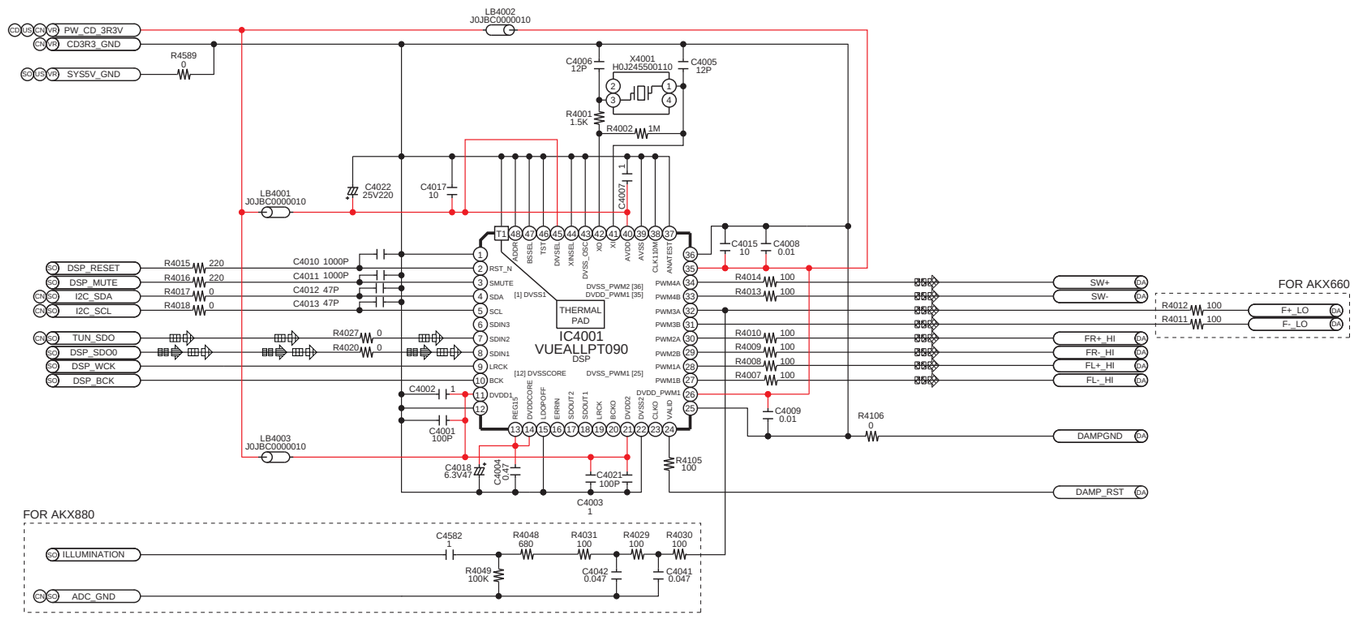
SA-AKX660PN/PS,SA-AKX880PN/PS MAIN (CONNECTOR) CIRCUIT

12.8. Main (DSP) Circuit

SCHEMATIC DIAGRAM - 8

A MAIN (DSP) CIRCUIT

—— : +B SIGNAL LINE : CD SIGNAL LINE : TUNER/AUX SIGNAL LINE : AUDIO SIGNAL LINE



CD: MAIN (CD MOTOR DRIVER): SCHEMATIC DIAGRAM - 1
US: MAIN (USB EMMC): SCHEMATIC DIAGRAM - 2
SO: MAIN (SOC IO EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5 ~ 6
CN: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 7
DS: MAIN (DSP): SCHEMATIC DIAGRAM - 8
VR: MAIN (VOLTAGE REGULATOR): SCHEMATIC DIAGRAM - 9 ~ 10

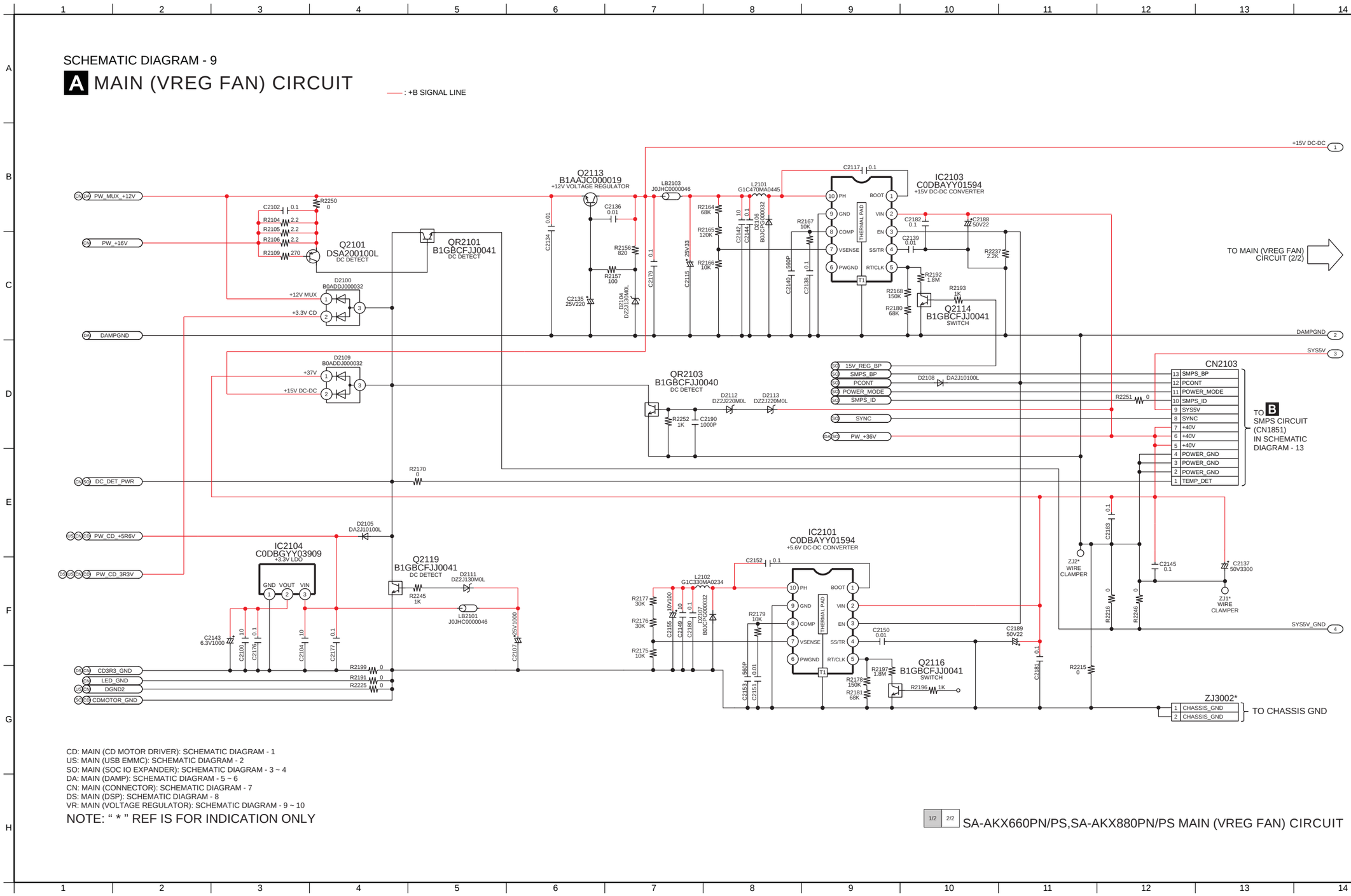
SA-AKX660PN/PS,SA-AKX880PN/PS MAIN (DSP) CIRCUIT

12.9. Main (VREG Fan) Circuit (1/2)

SCHEMATIC DIAGRAM - 9

A MAIN (VREG FAN) CIRCUIT

—— : +B SIGNAL LINE



CD: MAIN (CD MOTOR DRIVER): SCHEMATIC DIAGRAM - 1
US: MAIN (USB EMMC): SCHEMATIC DIAGRAM - 2
SO: MAIN (SOC IO EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5 ~ 6
CN: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 7
DS: MAIN (DSP): SCHEMATIC DIAGRAM - 8
VR: MAIN (VOLTAGE REGULATOR): SCHEMATIC DIAGRAM - 9 ~ 10

NOTE: " * " REF IS FOR INDICATION ONLY

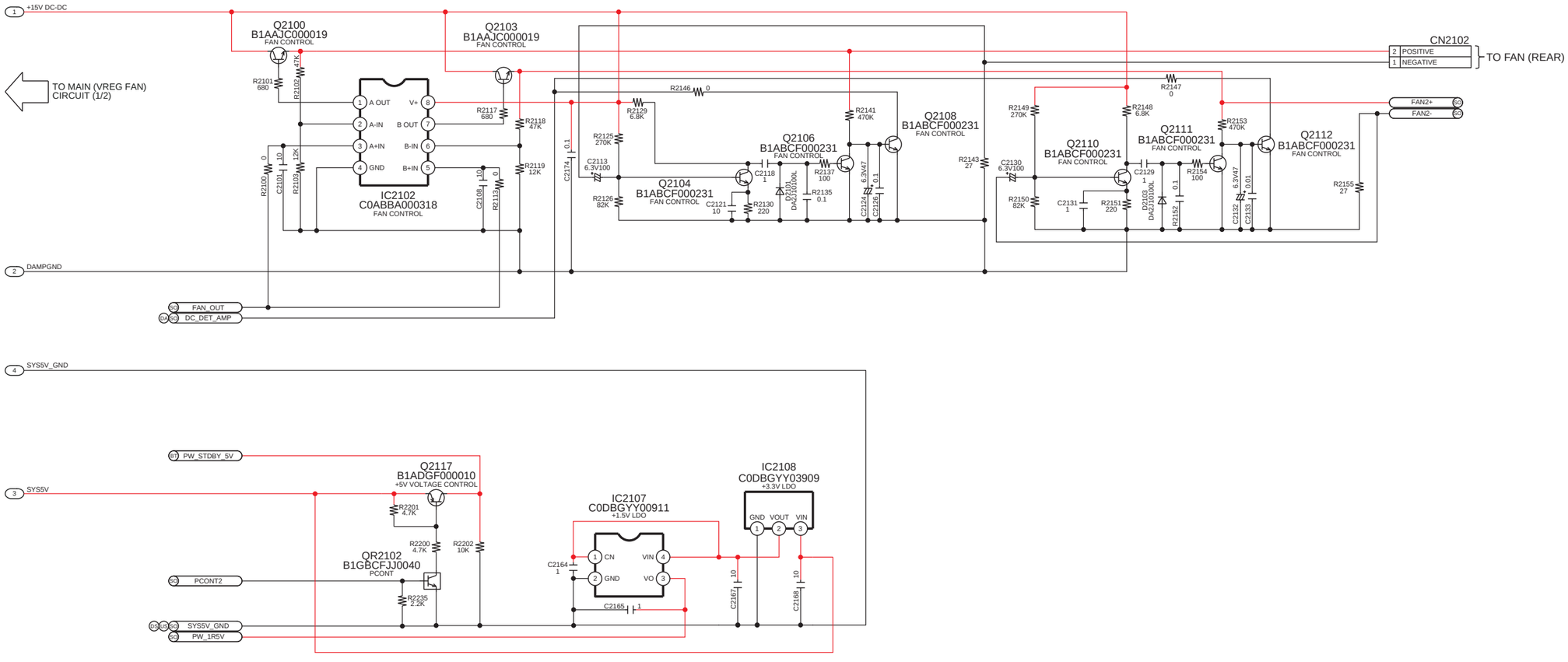
1/2 2/2 SA-AKX660PN/PS,SA-AKX880PN/PS MAIN (VREG FAN) CIRCUIT

12.10. Main (VREG Fan) Circuit (2/2)

SCHEMATIC DIAGRAM - 10

A MAIN (VREG FAN) CIRCUIT

—— : +B SIGNAL LINE



CD: MAIN (CD MOTOR DRIVER): SCHEMATIC DIAGRAM - 1
US: MAIN (USB EMMC): SCHEMATIC DIAGRAM - 2
SO: MAIN (SOC IO EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5 ~ 6
CN: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 7
DS: MAIN (DSP): SCHEMATIC DIAGRAM - 8
VR: MAIN (VOLTAGE REGULATOR): SCHEMATIC DIAGRAM - 9 ~ 10
BT: MAIN (TUNER) / MAIN (BLUETOOTH): SCHEMATIC - 11

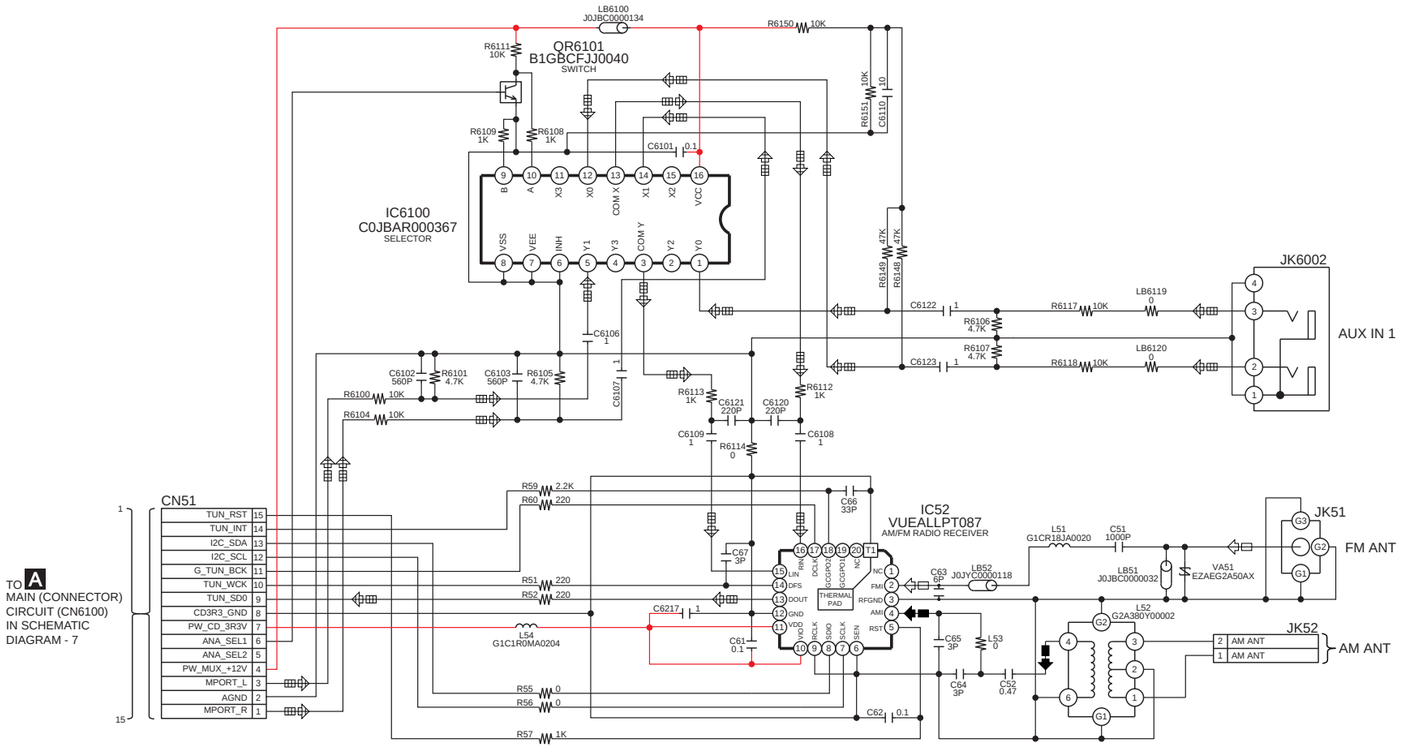
1/2 2/2 SA-AKX660PN/PS,SA-AKX880PN/PS MAIN (VREG FAN) CIRCUIT

12.11. Main (Tuner) Circuit

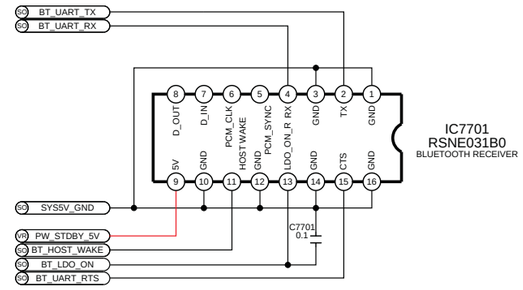
SCHEMATIC DIAGRAM - 11

A MAIN (TUNER) CIRCUIT

—— : +B SIGNAL LINE : TUNER/AUX SIGNAL LINE : AM SIGNAL LINE : FM SIGNAL LINE



A MAIN (BLUETOOTH) CIRCUIT



SO: MAIN (SOC IO EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
VR: MAIN (VOLTAGE REGULATOR): SCHEMATIC DIAGRAM - 9 ~ 10

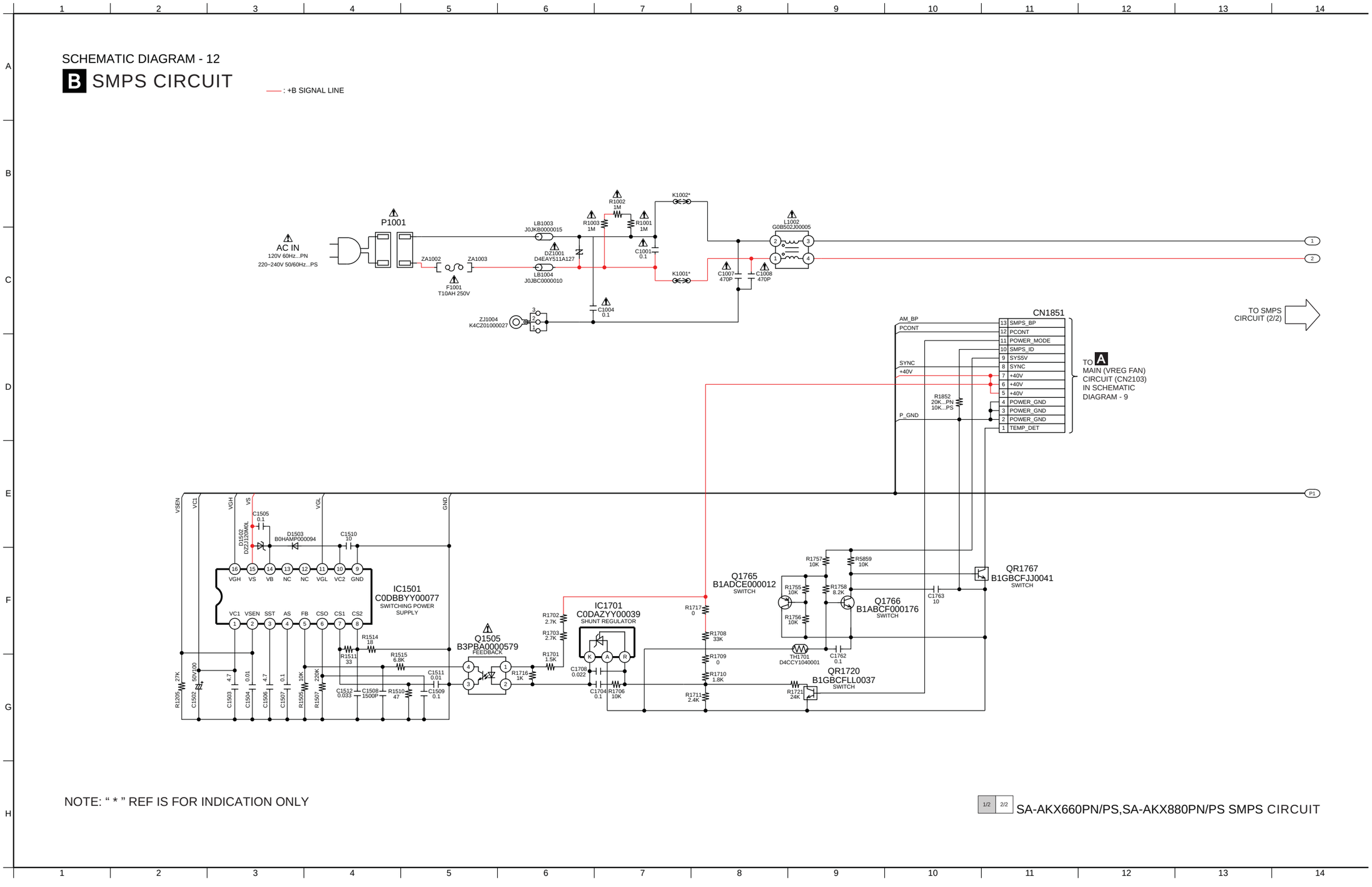
SA-AKX660PN/PS,SA-AKX880PN/PS MAIN (TUNER) / MAIN (BLUETOOTH) CIRCUIT

12.12. SMPS Circuit (1/2)

SCHEMATIC DIAGRAM - 12

B SMPS CIRCUIT

—— : +B SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

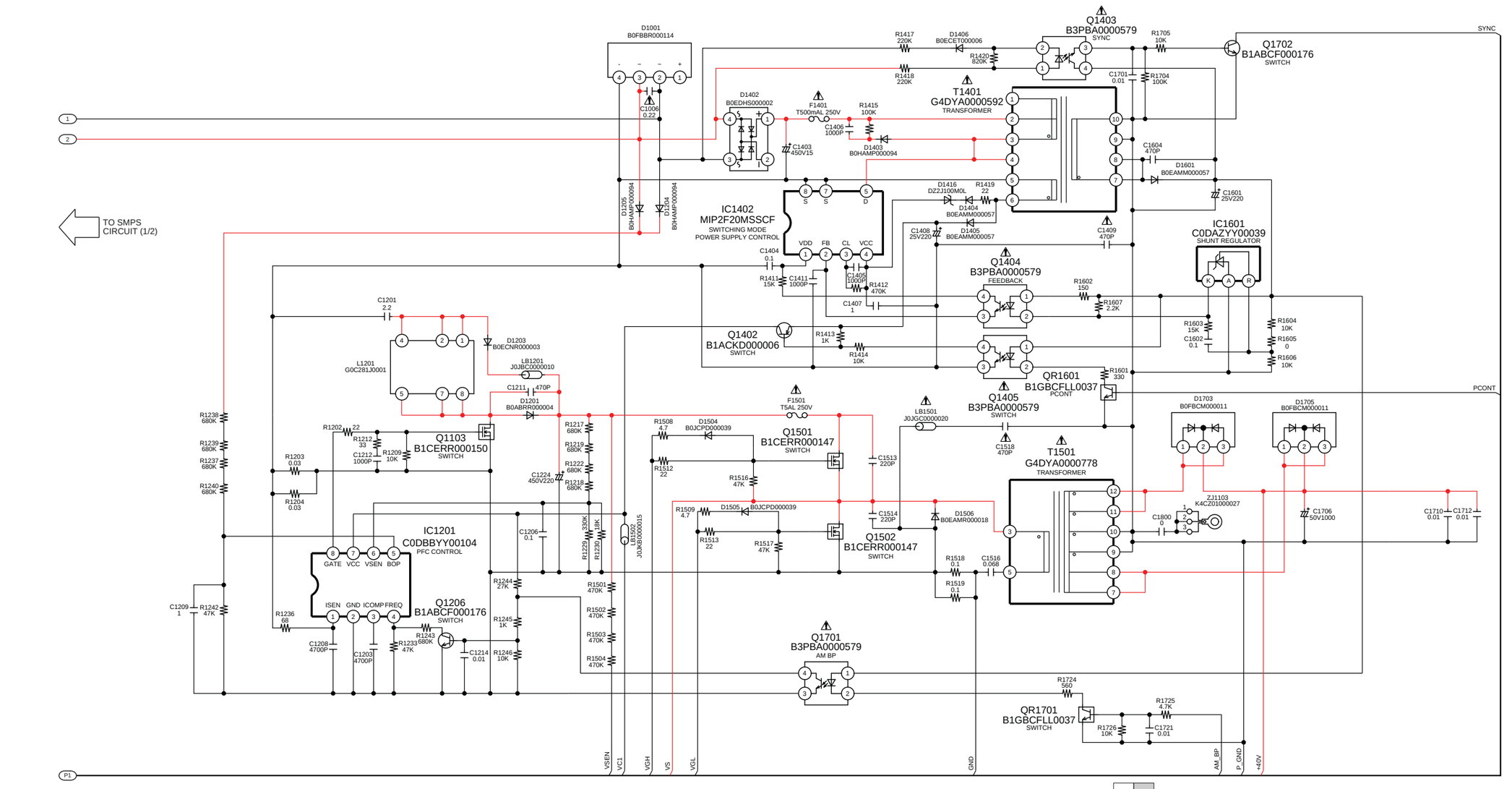
1/2 2/2 SA-AKX660PN/PS,SA-AKX880PN/PS SMPS CIRCUIT

12.13. SMPS Circuit (2/2)

SCHEMATIC DIAGRAM - 13

B SMPS CIRCUIT

—— : +B SIGNAL LINE

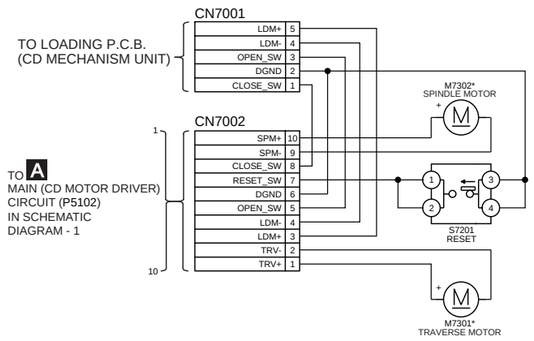


1/2 2/2 SA-AKX660PN/PS,SA-AKX880PN/PS SMPS CIRCUIT

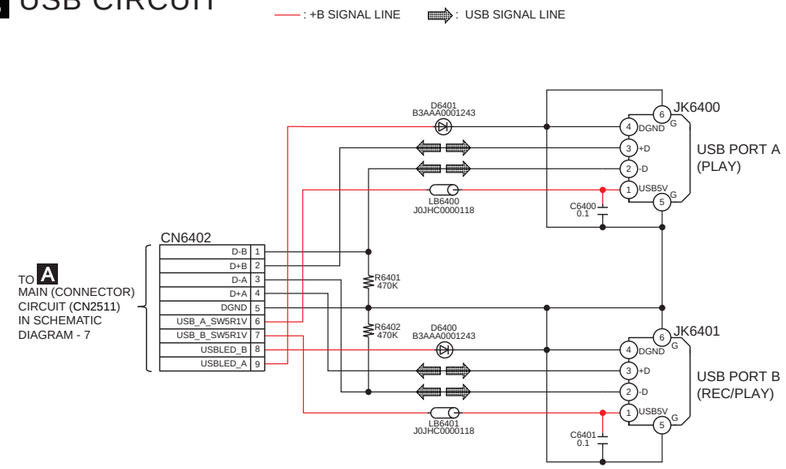
12.14. CD Interface, USB and Music Port Circuit

SCHEMATIC DIAGRAM - 14

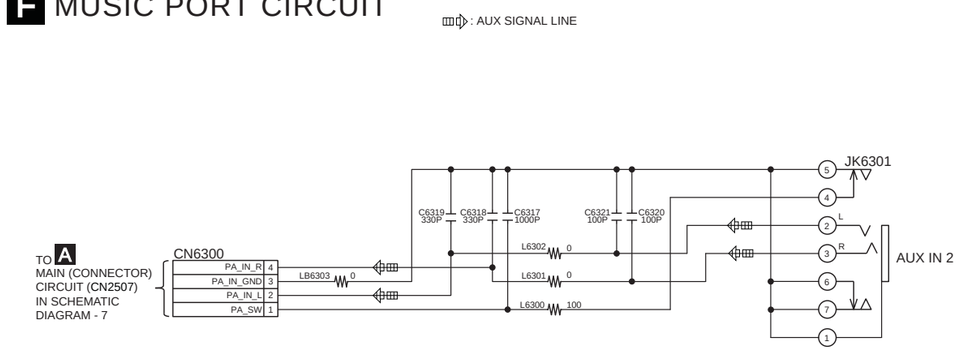
C CD INTERFACE CIRCUIT



E USB CIRCUIT



F MUSIC PORT CIRCUIT



NOTE: “ * ” REF IS FOR INDICATION ONLY

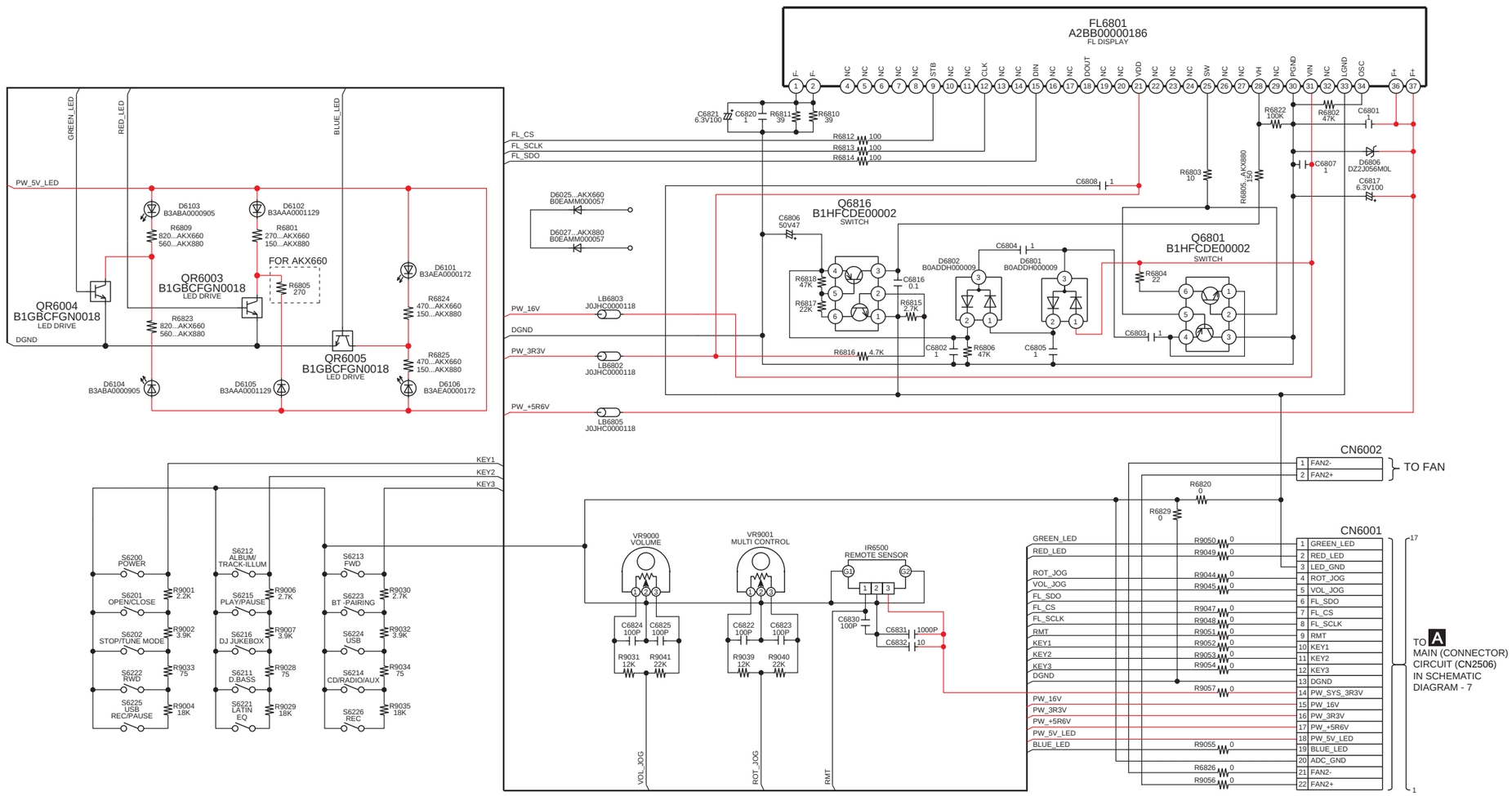
SA-AKX660PN/PS,SA-AKX880PN/PS CD INTERFACE / USB / MUSIC PORT CIRCUIT

12.15. Panel Circuit

SCHEMATIC DIAGRAM - 15

D PANEL CIRCUIT

—— : +B SIGNAL LINE

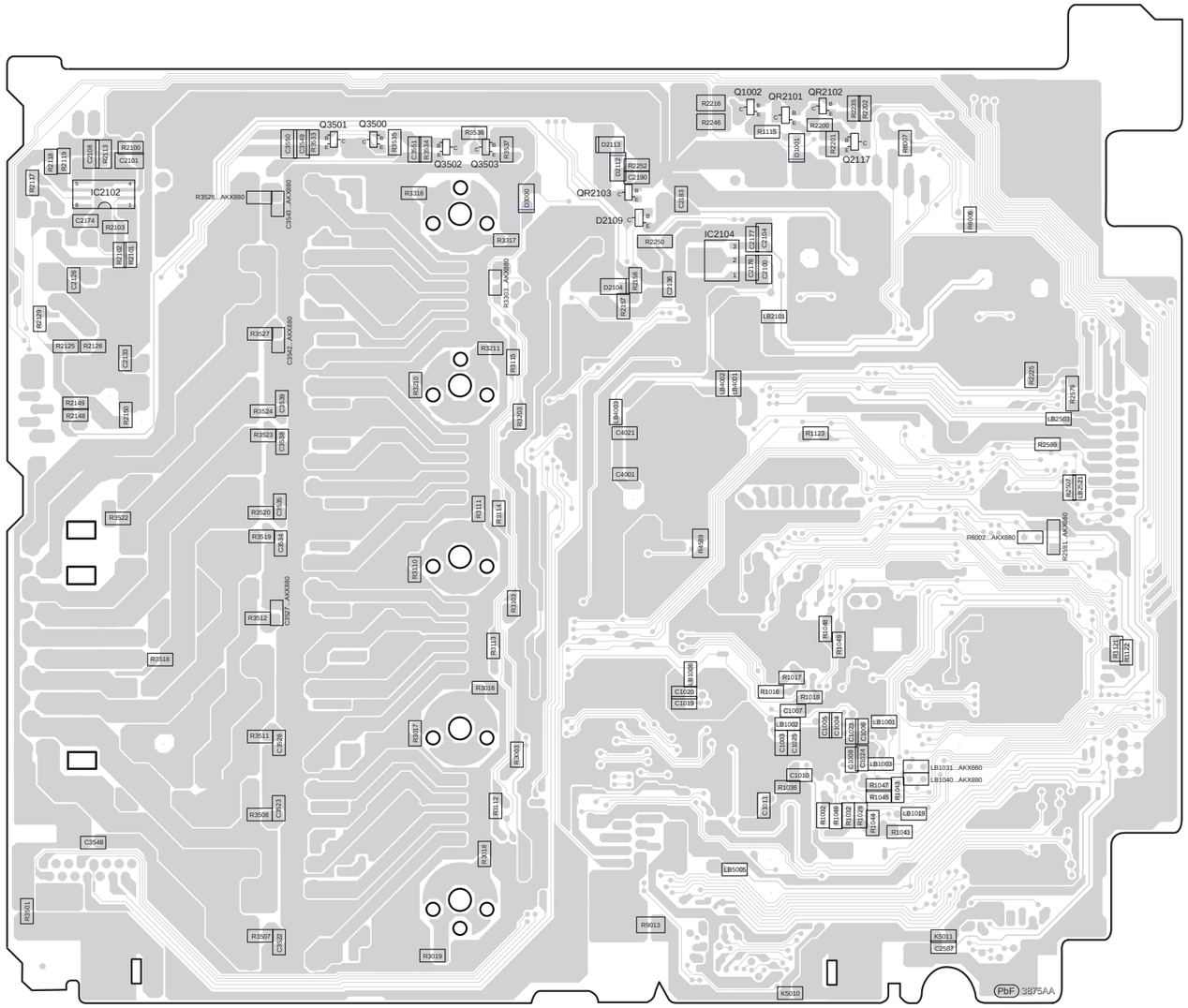


SA-AKX660PN/PS,SA-AKX880PN/PS PANEL CIRCUIT

13 Printed Circuit Board

13.1. Main P.C.B. (Side A)

A MAIN P.C.B. (RFKB5297EA...AKX660PN) (RFKB5297AA...AKX880PN)
(RFKB5297FA...AKX660PS) (RFKB5297BA...AKX880PS)

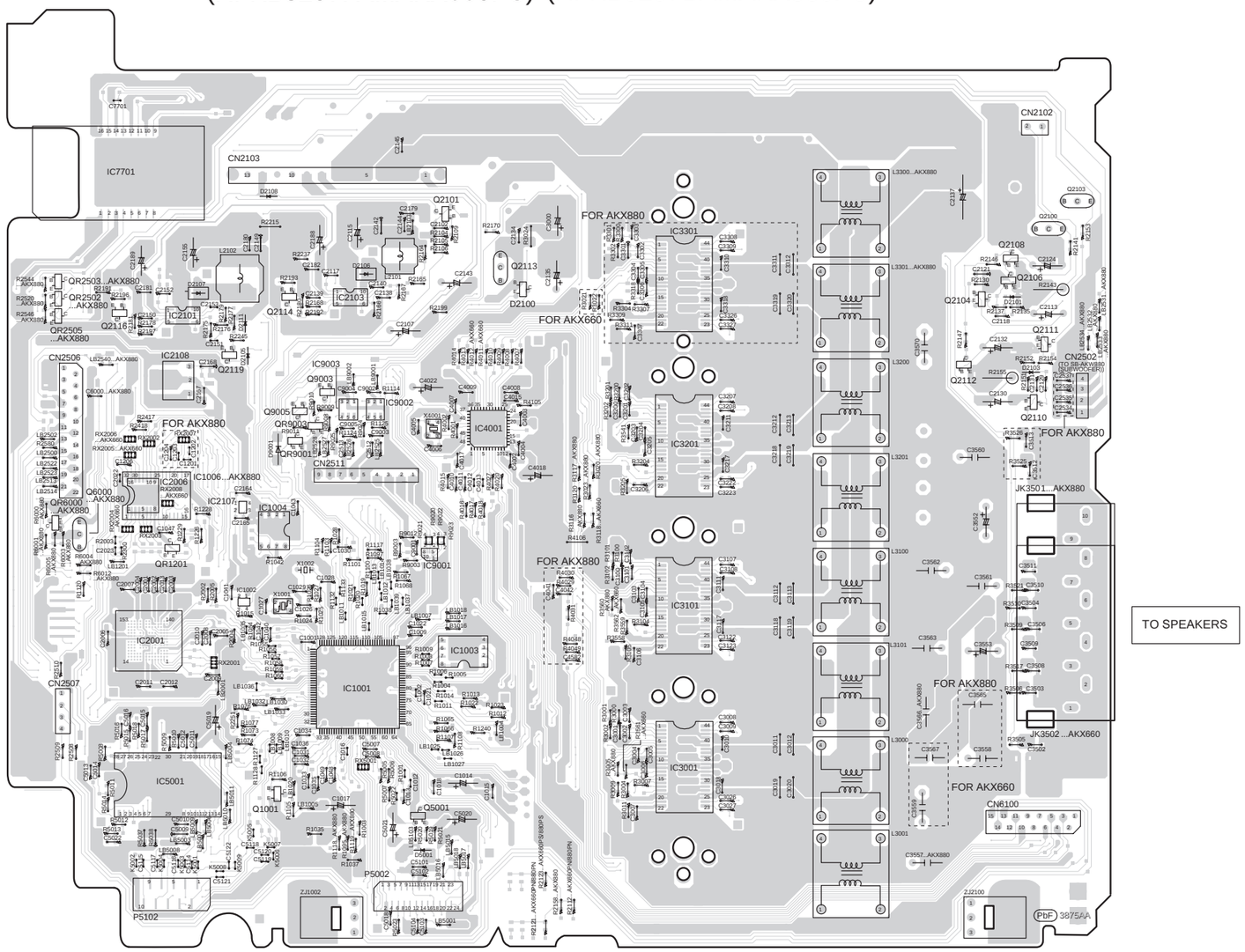


(SIDE A)

SA-AKX660PN/PS,SA-AKX880PN/PS
MAIN P.C.B.

13.2. Main P.C.B. (Side B)

A MAIN P.C.B. (RFKB5297EA...AKX660PN) (RFKB5297AA...AKX880PN)
(RFKB5297FA...AKX660PS) (RFKB5297BA...AKX880PS)

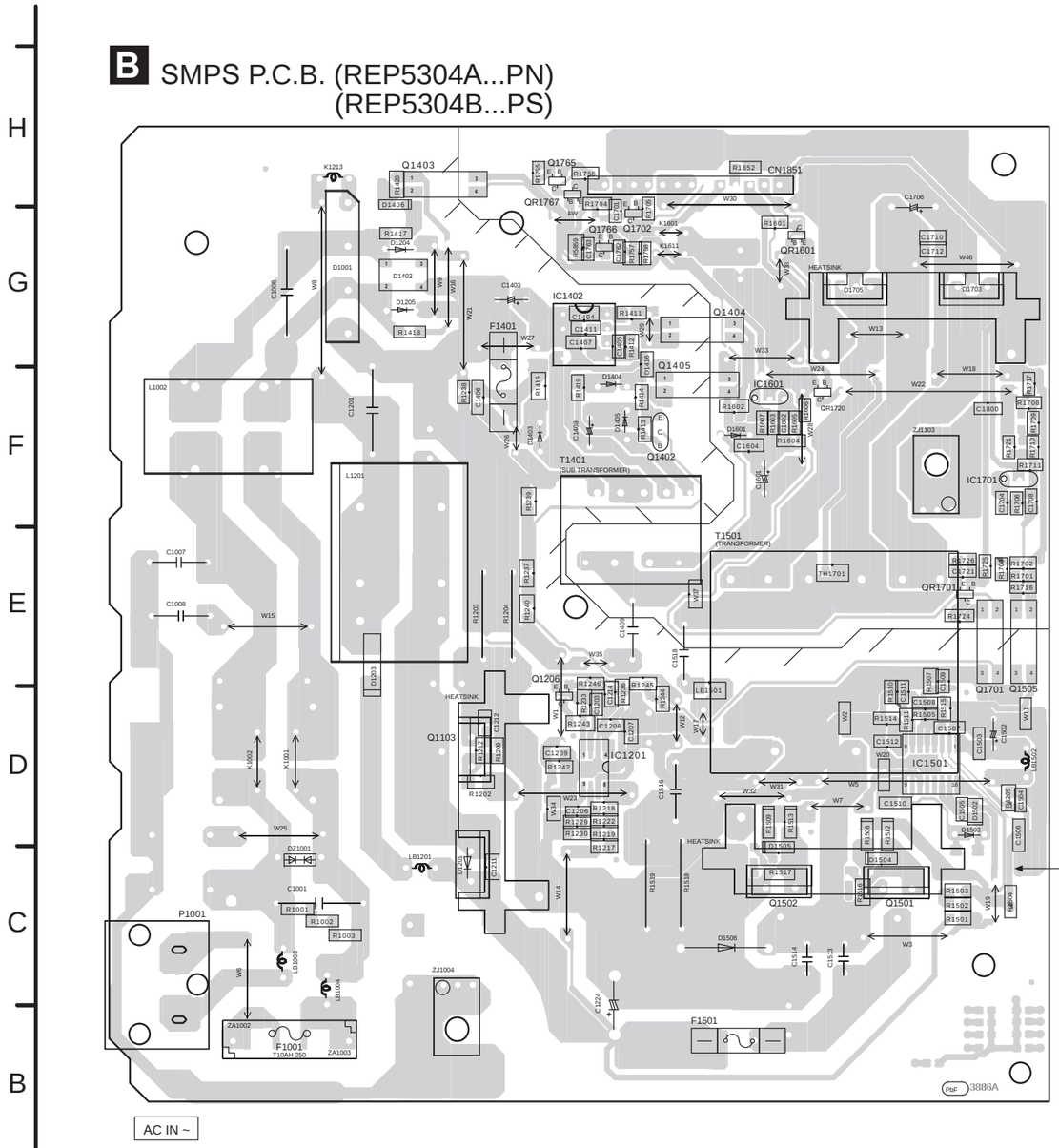


(SIDE B)

SA-AKX660PN/PS,SA-AKX880PN/PS
MAIN P.C.B.

13.3. SMPS P.C.B.

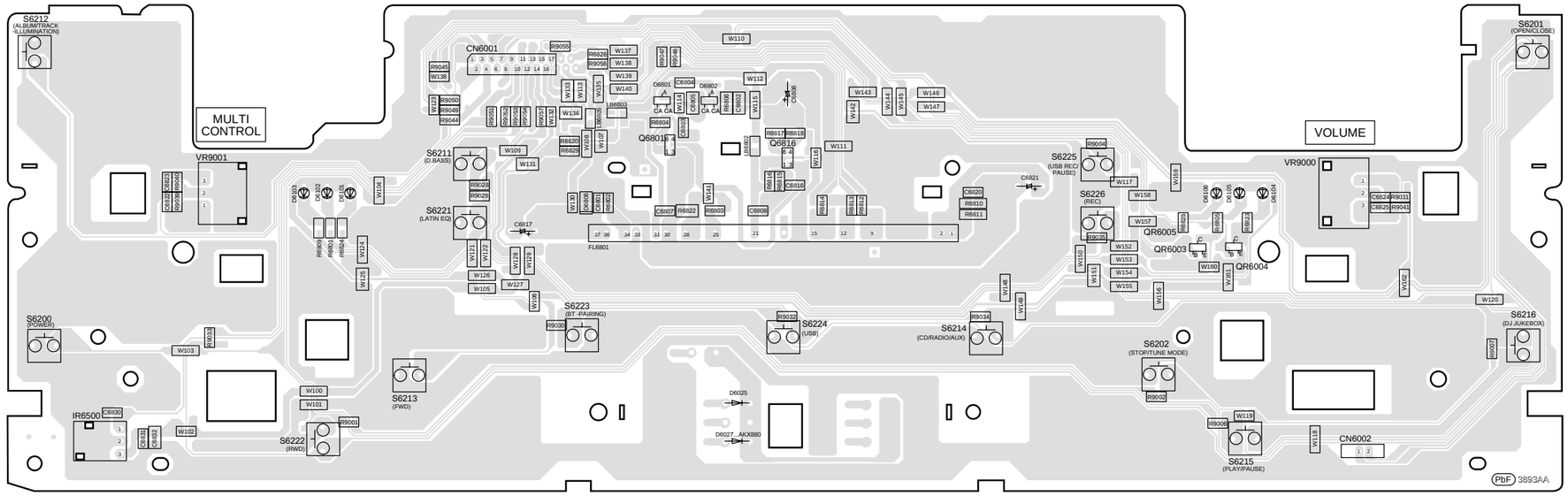
B SMPS P.C.B. (REP5304A...PN)
(REP5304B...PS)



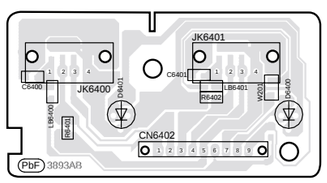
SA-AKX660PN/PS,SA-AKX880PN/PS
SMPS P.C.B.

13.4. Panel, USB, CD Interface and Music Port P.C.B.

D PANEL P.C.B. (REP5144HA...AKX660)
(REP5144KA...AKX880)



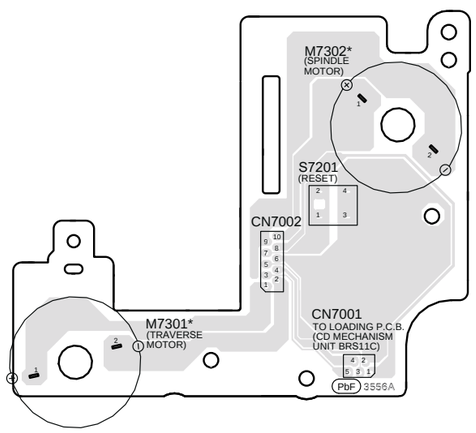
E USB P.C.B. (REP5144HB...AKX660)
(REP5144KB...AKX880)



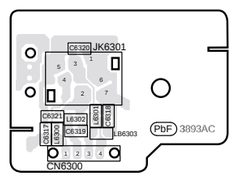
USB PORT A
(PLAY)

USB PORT B
(REC/PLAY)

C CD INTERFACE P.C.B. (REP4945B)



F MUSIC PORT P.C.B. (REP5144HC...AKX660)
(REP5144KC...AKX880)



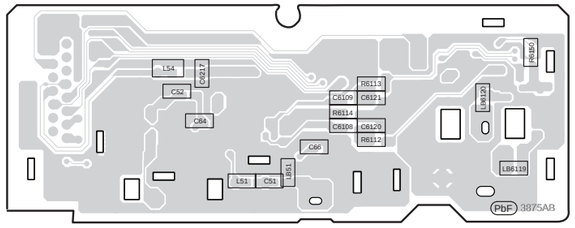
AUX IN 2

NOTE: " * " REF IS FOR INDICATION ONLY

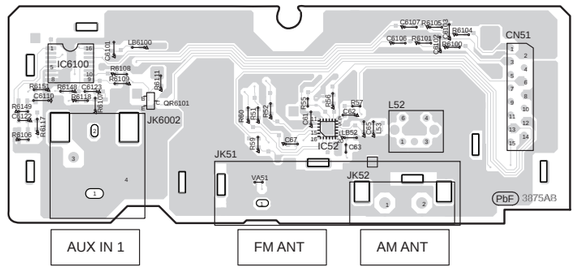
SA-AKX660PN/PS,SA-AKX880PN/PS
PANEL / USB / CD INTERFACE / MUSIC PORT P.C.B.

13.5. Tuner P.C.B.

G TUNER P.C.B. (REP5297EB...AKX660PN) (REP5297AB...AKX880PN)
(REP5297FB...AKX660PS) (REP5297BB...AKX880PS)



(SIDE A)



(SIDE B)

14 Voltage and Waveform Measurement

14.1. Voltage Measurement

Note:

- Indication Voltage Values are in standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard.
  Therefore, there may exist some errors in voltage values, depending on the internal impedance of the DC circuit tester.
- Circuit voltage and waveform described herein shall be regarded as reference information when probing defect point because it may differ from actual measuring value due to difference of Measuring instrument and its measuring condition and product itself.

14.1.1. Main P.C.B. (1/3)

REF NO.	IC1002																			
MODE	1	2	3	4																
PLAY	0	3.3	1.7	3.3																
STANDBY	0	3.3	1.7	3.3																

REF NO.	IC1006																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	0	0	3.3	3.3	0	0	0	0	3.3	3.3	0	0	0	0	0	0	0	3.3	0	3.3
STANDBY	0	0	3.3	3.3	0	0	0	0	3.3	3.3	0	0	0	0	0	0	0	3.3	0	3.3

REF NO.	IC1006																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
PLAY	3.3	0	0	0	0	0	0	0	0	0	0	3.3								
STANDBY	3.3	0	0	0	0	0	0	0	0	0	0	3.3								

REF NO.	IC2006																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
PLAY	3.2	0	3.2	0	3.2	0	0	0	0	0	0	0	3.2	3.2	3.2	3.2				
STANDBY	3.2	0	3.2	0	3.2	0	0	0	0	0	0	0	3.2	3.2	3.2	3.2				

REF NO.	IC2101																			
MODE	1	2	3	4	5	6	7	8	9	10										
PLAY	10.9	39.5	3.1	2.1	0.5	0	0.8	0.7	0	5.6										
STANDBY	10.9	39.5	3.1	2.1	0.5	0	0.8	0.7	0	5.6										

REF NO.	IC2102																			
MODE	1	2	3	4	5	6	7	8												
PLAY	8.6	1.6	1.6	0	1.6	1.6	8.6	15.3												
STANDBY	8.6	1.6	1.6	0	1.6	1.6	8.6	15.3												

REF NO.	IC2103																			
MODE	1	2	3	4	5	6	7	8	9	10										
PLAY	21.3	39.5	3.1	2.1	0.5	0	0.8	0.7	0	15.2										
STANDBY	21.3	39.5	3.1	2.1	0.5	0	0.8	0.7	0	15.2										

REF NO.	IC2104																			
MODE	1	2	3																	
PLAY	0	3.3	5.5																	
STANDBY	0	3.3	5.5																	

REF NO.	IC2107																			
MODE	1	2	3	4																
PLAY	3.3	0	1.6	3.3																
STANDBY	3.3	0	1.6	3.3																

REF NO.	IC2108																			
MODE	1	2	3																	
PLAY	0	3.3	5																	
STANDBY	0	3.3	5																	

SA-AKX660PN/PS, SA-AKX880PN/PS MAIN P.C.B

14.1.2. Main P.C.B. (2/3)

REF NO.	IC3001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	12.2	12.1	1.2	0	1.7	1.7	3.3	0	0	0	0	0	7.8	3.3	0	3.3	3.3	0	0	0
STANDBY	12.2	12.1	1.2	0	1.7	1.7	3.3	0	0	0	0	0	7.8	3.3	0	3.3	3.3	0	0	0

REF NO.	IC3001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY	3.3	12	30.1	30.1	0	0	19	19	39.5	39.5	39.5	19	0	0	19	39.5	39.5	39.5	19	19
STANDBY	3.3	12	30.1	30.1	0	0	19	19	39.5	39.5	39.5	19	0	0	19	39.5	39.5	39.5	19	19

REF NO.	IC3001																			
MODE	41	42	43	44																
PLAY	0	0	30.1	30																
STANDBY	0	0	30.1	30																

REF NO.	IC3101																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	12.2	12.1	1.2	0	1.7	1.7	3.3	0	0	0	0	0	7.8	3.3	0	3.3	3.3	0	0	0
STANDBY	12.2	12.1	1.2	0	1.7	1.7	3.3	0	0	0	0	0	7.8	3.3	0	3.3	3.3	0	0	0

REF NO.	IC3101																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY	3.3	12	30.1	30.1	0	0	19	19	39.5	39.5	39.5	19	0	0	19	39.5	39.5	39.5	19	19
STANDBY	3.3	12	30.1	30.1	0	0	19	19	39.5	39.5	39.5	19	0	0	19	39.5	39.5	39.5	19	19

REF NO.	IC3101																			
MODE	41	42	43	44																
PLAY	0	0	30.1	30																
STANDBY	0	0	30.1	30																

REF NO.	IC3201																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	12.2	12.1	1.2	0	1.7	1.7	3.3	0	0	0	0	0	7.8	3.3	0	3.3	3.3	0	0	0
STANDBY	12.2	12.1	1.2	0	1.7	1.7	3.3	0	0	0	0	0	7.8	3.3	0	3.3	3.3	0	0	0

REF NO.	IC3201																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY	3.3	12	30.1	30.1	0	0	19	19	39.5	39.5	39.5	19	0	0	19	39.5	39.5	39.5	19	19
STANDBY	3.3	12	30.1	30.1	0	0	19	19	39.5	39.5	39.5	19	0	0	19	39.5	39.5	39.5	19	19

REF NO.	IC3201																			
MODE	41	42	43	44																
PLAY	0	0	30.1	30																
STANDBY	0	0	30.1	30																

REF NO.	IC3301																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	12.2	12.1	1.2	0	1.7	1.7	3.3	0	0	0	0	0	7.8	3.3	0	3.3	3.3	0	0	0
STANDBY	12.2	12.1	1.2	0	1.7	1.7	3.3	0	0	0	0	0	7.8	3.3	0	3.3	3.3	0	0	0

REF NO.	IC3301																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY	3.3	12	30.1	30.1	0	0	19	19	39.5	39.5	39.5	19	0	0	19	39.5	39.5	39.5	19	19
STANDBY	3.3	12	30.1	30.1	0	0	19	19	39.5	39.5	39.5	19	0	0	19	39.5	39.5	39.5	19	19

REF NO.	IC3301																			
MODE	41	42	43	44																
PLAY	0	0	30.1	30																
STANDBY	0	0	30.1	30																

SA-AKX660PN/PS, SA-AKX880PN/PS MAIN P.C.B

14.1.3. Main P.C.B. (3/3)

REF NO.	IC5001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	0	1.6	5.4	3	1.6	0	0	5.4	0	0	2.9	2.6	2.6	2.9	2.9	2.7	3.3	2.2	5.4	0
STANDBY	0	1.6	5.4	3	1.6	0	0	5.4	0	0	2.9	2.6	2.6	2.9	2.9	2.7	3.3	2.2	5.4	0

REF NO.	IC5001																			
MODE	21	22	23	24	25	26	27	28	29	30										
PLAY	1.5	0	1.8	0	5.4	1.6	1.6	3.3	0	0										
STANDBY	1.5	0	1.8	0	5.4	1.6	1.6	3.3	0	0										

REF NO.	IC6100																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
PLAY	0	0	0	0	0	0	0	0	12.5	12.5	0	0	0	0	0	12.5				
STANDBY	0	0	0	0	0	0	0	0	12.5	12.5	0	0	0	0	0	12.5				

REF NO.	IC9001																			
MODE	1	2	3	4	5	6	7	8	9	10										
PLAY	0	0	0	0	0	1	1.4	0	3.3	0										
STANDBY	0	0	0	0	0	1	1.4	0	3.3	0										

REF NO.	IC9002																			
MODE	1	2	3	4	5	6														
PLAY	0	0	3.3	0	5.1	0														
STANDBY	0	0	3.3	0	5.1	0														

REF NO.	IC9003																			
MODE	1	2	3	4	5	6														
PLAY	5.1	0	3.3	3.3	5.1	5.1														
STANDBY	5.1	0	3.3	3.3	5.1	5.1														

REF NO.	Q1001				Q1002				Q2100				Q2101				Q2103			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY	0	0	0.6		0	0	23.9		7.9	15.3	8.5		15.3	0	15.3		7.8	15.3	8.4	
STANDBY	0	0	0.6		0	0	23.9		7.9	15.3	8.5		15.3	0	15.3		7.8	15.3	8.4	

REF NO.	Q2104				Q2106				Q2108				Q2110				Q2111			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY	0.2	11.1	0.2		0	0	0.7		0	3.2	0		0.4	5.1	1		0	0	0.3	
STANDBY	0.2	11.1	0.2		0	0	0.7		0	3.2	0		0.4	5.1	1		0	0	0.3	

REF NO.	Q2112				Q2113				Q2116				Q2117				Q2119			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY	0	3.2	0		12.5	15.3	13.1		0	0.4	0		5	5	0		0	3.3	0	
STANDBY	0	3.2	0		12.5	15.3	13.1		0	0.4	0		5	5	0		0	3.3	0	

REF NO.	Q3500				Q3501				Q3502				Q3503				Q5001			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY	19.7	39	19.7		19.7	39	19.7		39.5	0	39.4		0	3.2	0		2.9	1.9	2.2	
STANDBY	19.7	39	19.7		19.7	39	19.7		39.5	0	39.4		0	3.2	0		2.9	1.9	2.2	

REF NO.	Q9003				Q9005				QR1201				QR2101				QR2102			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY	5.5	0	5.1		5.5	0	5.1		0	0	3.3		0	3.3	0		0	0	3.1	
STANDBY	5.5	0	5.1		5.5	0	5.1		0	0	3.3		0	3.3	0		0	0	3.1	

REF NO.	QR2103				QR2502				QR2503				QR2505				QR6101			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY	0	3.3	0		0	0	3.3		0	0	1.2		0	1	0		0	1.2	0	
STANDBY	0	3.3	0		0	0	3.3		0	0	1.2		0	1	0		0	1.2	0	

14.1.4. Panel P.C.B.

REF NO.	Q6000				QR6000				QR6003				QR6004				QR6005			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY	0	3.3	0		0	3.3	0		0	0	3.2		0	4.3	0		0	0	1.2	
STANDBY	0	3.3	0		0	3.3	0		0	0	3.2		0	4.3	0		0	0	1.2	

SA-AKX660PN/PS, SA-AKX880PN/PS PANEL P.C.B

14.1.5. SMPS P.C.B.

REF NO.	IC1201																			
MODE	1	2	3	4	5	6	7	8												
PLAY	0	0	0	0	0	196.8	17.6	0												
STANDBY	0	0	0	0	0	196.8	17.6	0												

REF NO.	IC1402																			
MODE	1	2	3	4	5	6	7	8												
PLAY	6	1	2.4	17.4	324	-	0	0												
STANDBY	6	1	2.4	17.4	324	-	0	0												

REF NO.	IC1501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
PLAY	17.6	5.5	2.2	2.5	4.2	0.9	0	0	0	10.2	4.4	0	0	206.4	196.7	204.8				
STANDBY	17.6	5.5	2.2	2.5	4.2	0.9	0	0	0	10.2	4.4	0	0	206.4	196.7	204.8				

REF NO.	IC1601																			
MODE	K	A	R																	
PLAY	2.3	0	2.4																	
STANDBY	2.3	0	2.4																	

REF NO.	IC1701																			
MODE	K	A	R																	
PLAY	-28	-40.1	-36.9																	
STANDBY	-28	-40.1	-36.9																	

from MAX9000 Q1201

REF NO.	Q1103				Q1206				Q1402				Q1403							
MODE	E	C	B		E	C	B		E	C	B		1	2	3	4				
PLAY	196.8	196.8	0		0	0	17.6		17.6	17.6	16.9		0	0	0.3	0				
STANDBY	196.8	196.8	0		0	0	17.6		17.6	17.6	16.9		0	0	0.3	0				

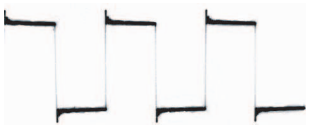
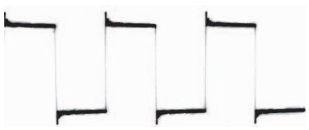
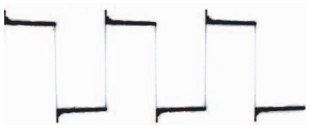
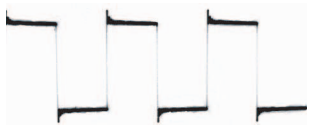
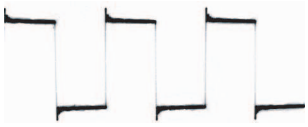
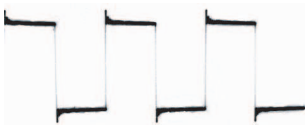
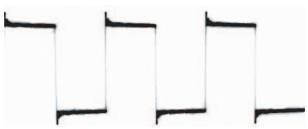
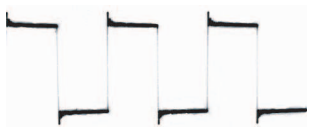
REF NO.	Q1404					Q1405					Q1501				Q1502					
MODE	1	2	3	4		1	2	3	4		E	C	B		E	C	B			
PLAY	0	2.3	1.0	6.0		0	0.1	0	16.9		196.8	400	204		0	196.8	4.2			
STANDBY	0	2.3	1.0	6.0		0	0.1	0	16.9		196.8	400	204		0	196.8	4.2			

REF NO.	Q1505					Q1701					Q1702				Q1765					
MODE	1	2	3	4		1	2	3	4		E	C	B		E	C	B			
PLAY	-28.0	-28.0	0	4.2		0	0	0	17.6		0	1.7	0.3		5.0	-40.1	5.0			
STANDBY	-28.0	-28.0	0	4.2		0	0	0	17.6		0	1.7	0.3		5.0	-40.1	5.0			

REF NO.	Q1766				QR1601				QR1701				QR1720				QR1767			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY	-40.1	5.0	5.0		0	0.1	3.1		0	0	3.2		-40.1	-36.9	0		-40.1	3.3	5.0	
STANDBY	-40.1	5.0	5.0		0	0.1	3.1		0	0	3.2		-40.1	-36.9	0		-40.1	3.3	5.0	

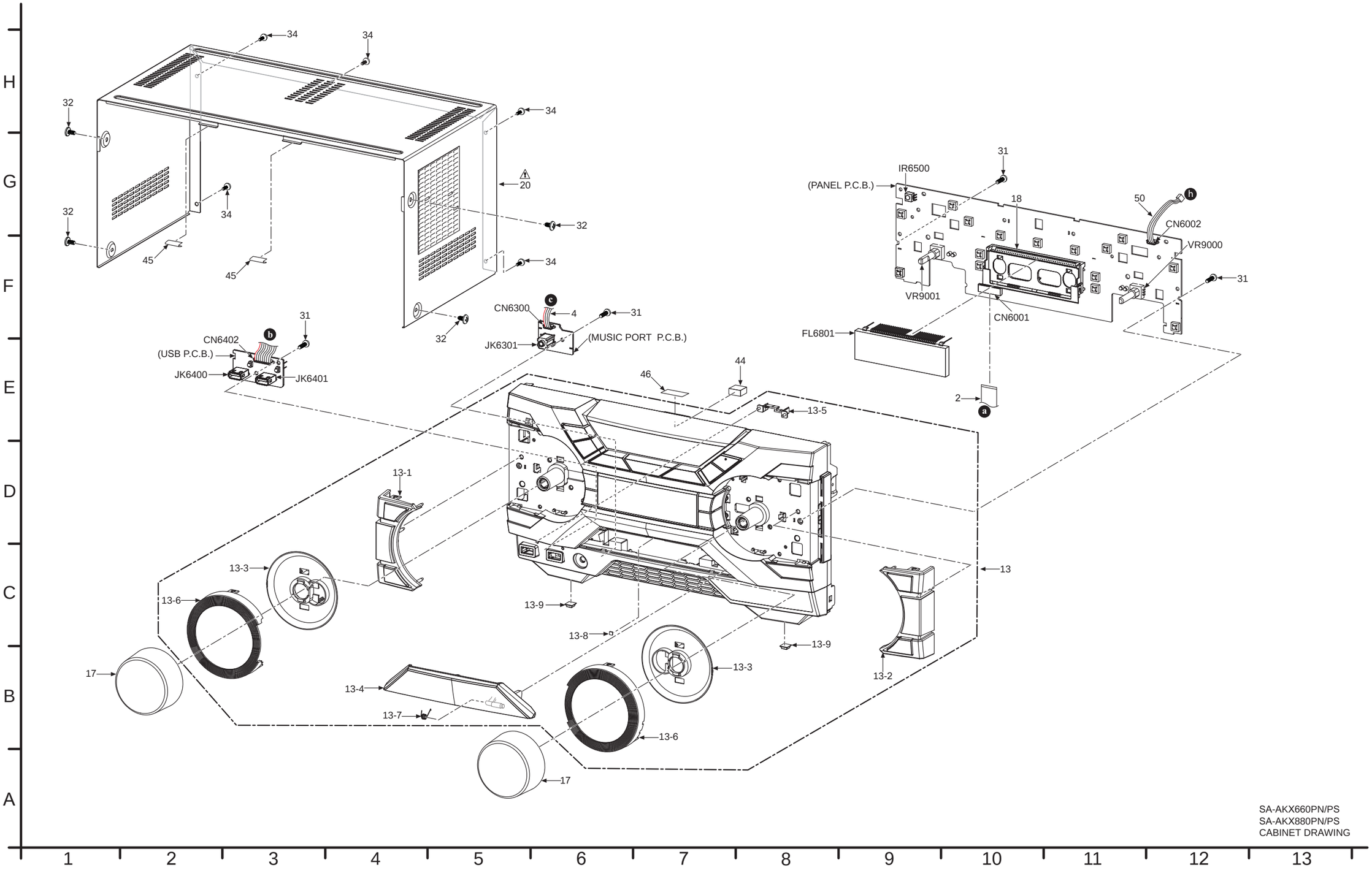
SA-AKX660PN/PS, SA-AKX880PN/PS SMPS P.C.B.

14.2. Waveform Chart

WF No. IC3001-5,6 (PLAY)  4.4Vp-p(1usec/div)	WF No. IC3001-27,32,35,39 (PLAY)  75Vp-p(1usec/div)	WF No. IC3101-5,6 (PLAY)  4.4Vp-p(1usec/div)	WF No. IC3101-27,32,35,39 (PLAY)  75Vp-p(1usec/div)
WF No. IC3201-5,6,14,15 (PLAY)  4.4Vp-p(1usec/div)	WF No. IC3201-27,32,35,39 (PLAY)  75Vp-p(1usec/div)	WF No. IC3301-5,6 (PLAY)  4.4Vp-p(1usec/div)	WF No. IC3301-27,32,35,39 (PLAY)  75Vp-p(1usec/div)

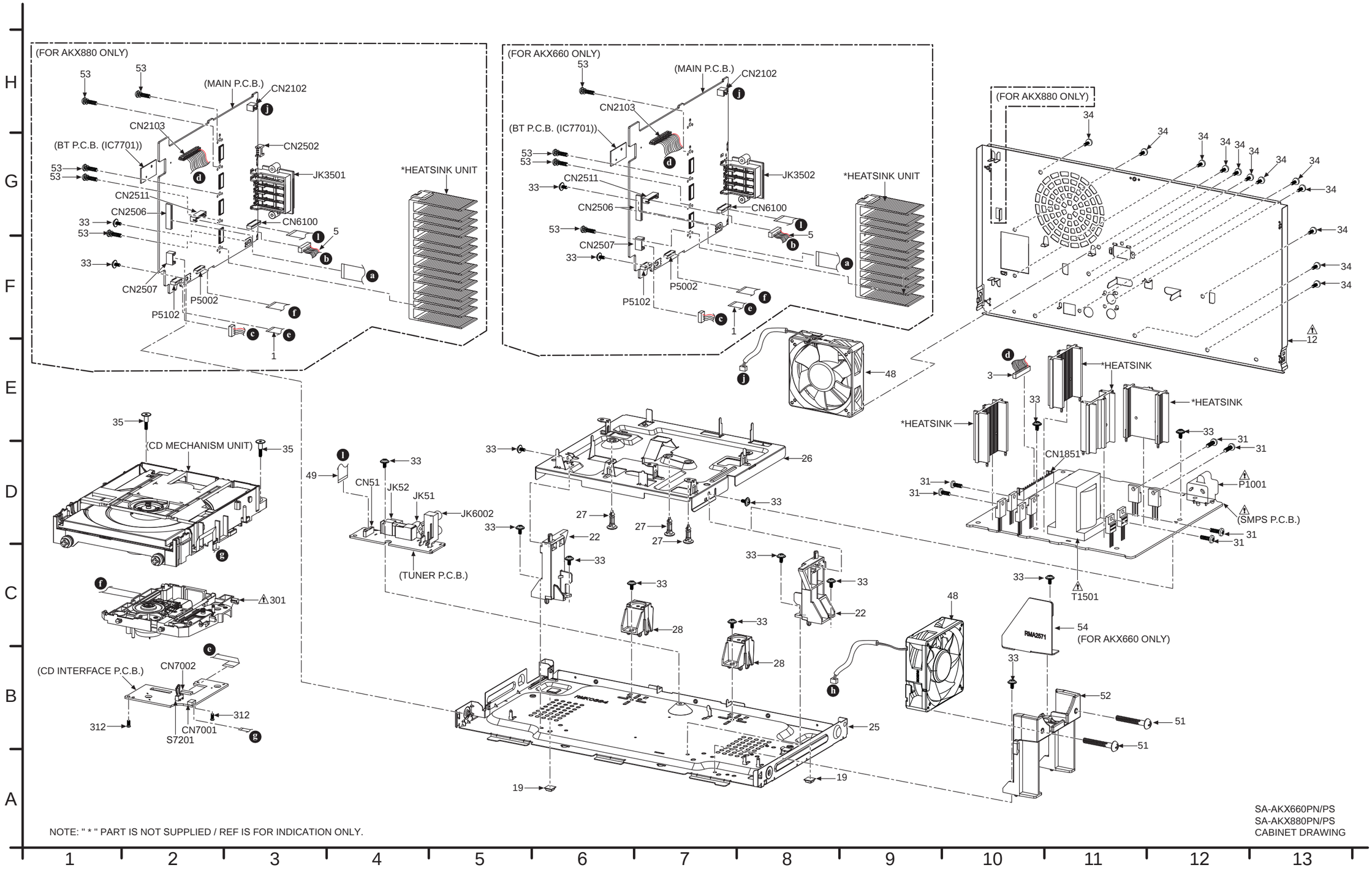
15 Exploded View and Replacement Parts List

15.1. Cabinet Parts Location 1



SA-AKX660PN/PS
SA-AKX880PN/PS
CABINET DRAWING

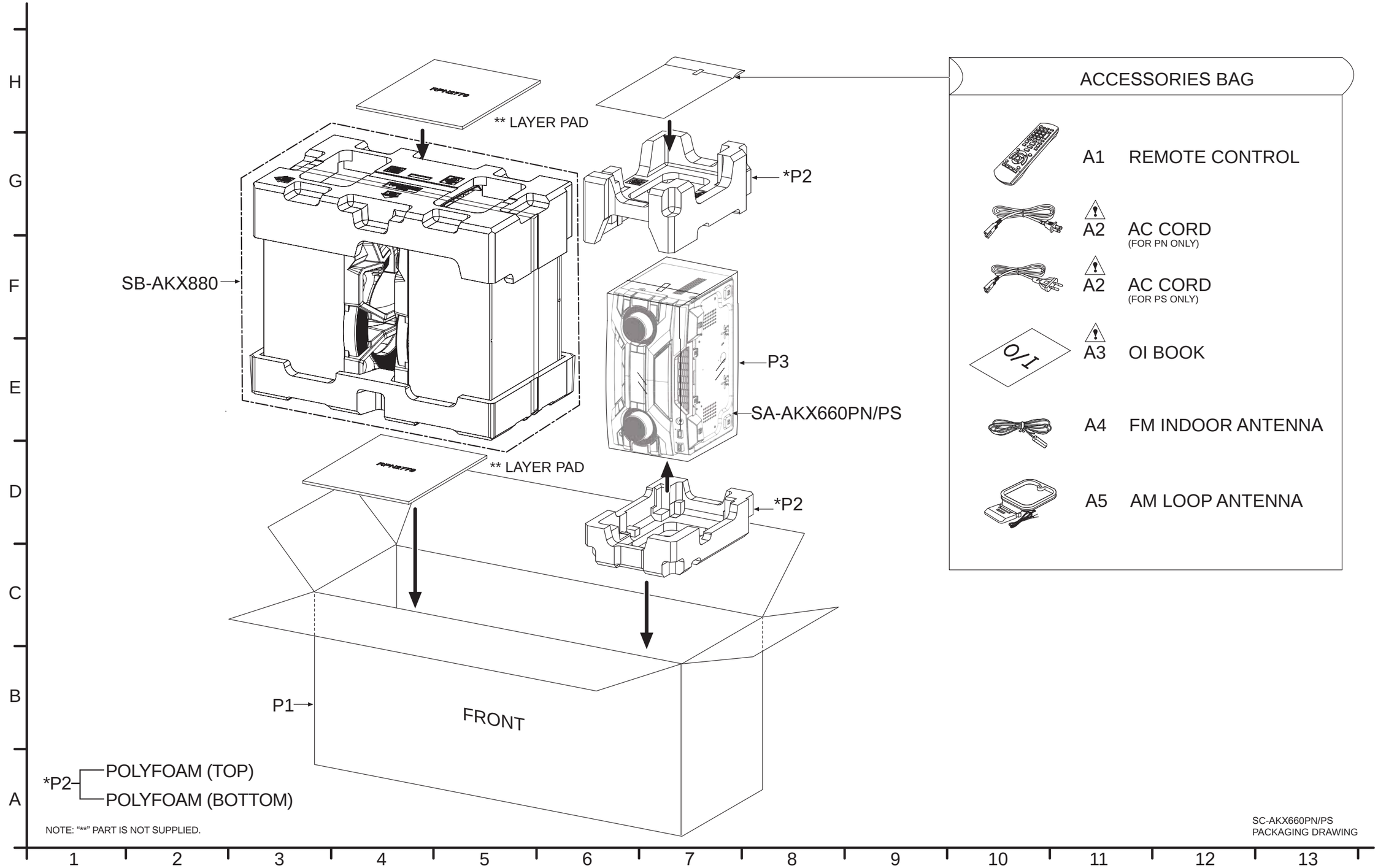
15.2. Cabinet Parts Location 2



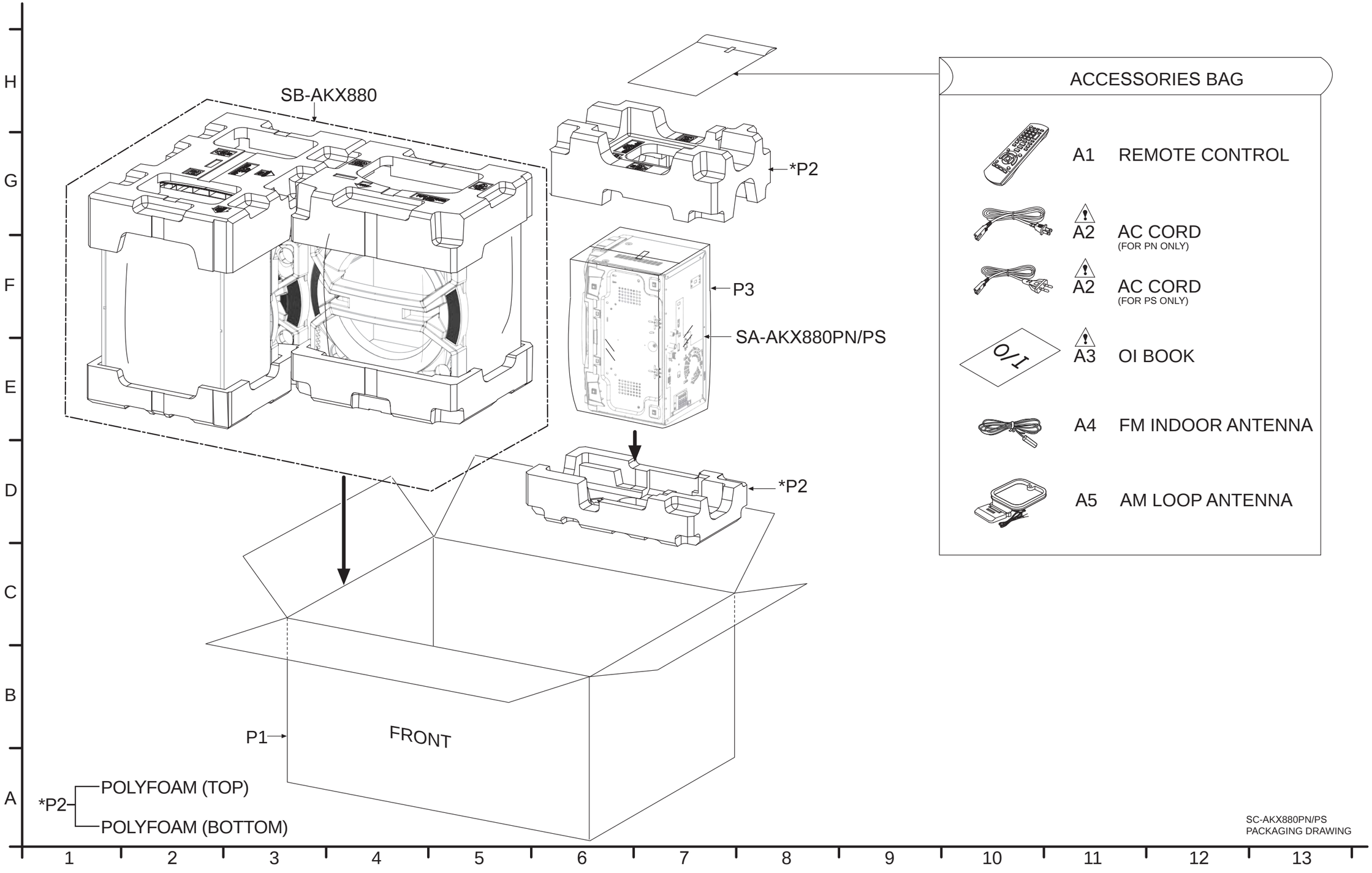
NOTE: " * " PART IS NOT SUPPLIED / REF IS FOR INDICATION ONLY.

SA-AKX660PN/PS
SA-AKX880PN/PS
CABINET DRAWING

15.3. Packaging (For SC-AKX660PN/PS)



15.4. Packaging (For SC-AKX880PN/PS)



15.5. Mechanical Replacement Part List

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

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.

Note:

- When replacing any of these components, be sure to use only manufacturer's specified parts shown in the replacement part list.
- The parenthesized indications on the Remarks column specify the destination & product color (Refer to the cover page for the information).
- Parts without these indications shall be used for all areas.
- This product uses a laser diode. Refer to "Precaution of Laser Diode".
- All parts mentioned are supplied by PAVCJM unless indicated likewise.
- Reference for O/I book languages are as follows:

Ar:	Arabic	Du:	Dutch	It:	Italian	Sp:	Spanish
Cf:	Canadian French	En:	English	Ko:	Korean	Sw:	Swedish
Cz:	Czech	Fr:	French	Po:	Polish	Co:	Traditional Chinese
Da:	Danish	Ge:	German	Ru:	Russian	Cn:	Simplified Chinese
Pe:	Persian	Ur:	Ukraine	Pr:	Portuguese	Fi:	Finnish

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			CABINET AND CHASSIS		
	1	REE2129	10P FFC (MAIN-CD INTERFACE)	1	
	2	REE2035	22P FFC (PANEL-MAIN)	1	
	3	REX1687	13P WIRE (MAIN-SMPS)	1	
	4	REX1840	4P WIRE (MPORT-MAIN)	1	
	5	REX1896	9P WIRE (USB-MAIN)	1	
⚠	12	RGR0473D-AA	REAR PANEL	1	AKX660PN
⚠	12	RGR0473D-BA	REAR PANEL	1	AKX660PS
⚠	12	RGR0473E-AA	REAR PANEL	1	AKX880PN
⚠	12	RGR0473E-BA	REAR PANEL	1	AKX880PS
	13	RFKGAKX660LK	FRONT PANEL ASS'Y	1	AKX660
	13	RFKGAKX880LK	FRONT PANEL ASS'Y	1	AKX880
	13-1	RYQ1608-S	LEFT ORNAMENT UNIT	1	
	13-2	RYQ1609-S	RIGHT ORNAMENT UNIT	1	
	13-3	RGC0053-W	VOLUME LIGHT REFLECTOR	2	
	13-4	RGK2602B-K	CD LID	1	
	13-5	RGL0816-Q	USB REC LIGHT PIECE	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	13-6	RGL0817-Q	VOLUME LIGHT RING	2	
	13-7	RMB0995	CD LID SPRING	1	
	13-8	RMGX0033A-K	CD LID CUSHION	1	
	13-9	RKAX0042-K	LEG CUSHION	2	
	17	RGW0457-1S	VOLUME KNOB	2	
	18	RMN1049-1	FL HOLDER	1	
	19	RKAX0042-K	LEG CUSHION	2	
⚠	20	RKM0764A-K	TOP CABINET	1	
	22	RMA2442-3	CHASSIS SUPPORT	2	
	25	RMK0894A	BOTTOM CHASSIS	1	
	26	RMK0909A	INNER CHASSIS	1	
	27	RMNX0298	PCB SPACER	3	
	28	RMQ2134	MECHA SUPPORT	2	
	31	RHD26046-L	SCREW	10	
	32	RHD30007-K2J	SCREW	4	
	33	RHD30111-31	SCREW	15	
	34	RHD30119-S	SCREW	17	
	35	RHDX031008	SCREW	2	
	44	RMF0770-1	PCB CUSHION	1	
	45	RMF0771	HIMELON	2	
	46	RMF0772	HIMELON	1	
	48	L6FAYYYH0352	FAN MOTOR	2	
	49	REE2131	15P FFC (TUNER-MAIN)	1	
	50	REX1903	2P WIRE (PANEL-FAN)	1	
	51	XTW3+12TFJK	SCREW	2	
	52	RMN1128	FAN HOLDER	1	
	53	RHD26078	SCREW	5	AKX880
	53	RHD26078	SCREW	4	AKX660

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	54	RMA2571	SUPPORT PLATE	1	AKX660
			TRAVERSE DECK		
⚠	301	RAE1050Z-V	TRAVERSE ASS'Y	1	(E.S.D)
	312	XTN2+6GFJ	SCREW	2	
			PACKING MATERI-ALS		
	P1	RPG0R88	PACKING CASE	1	AKX660PN
	P1	RPG0R89	PACKING CASE	1	AKX660PS
	P1	RPG0R91	PACKING CASE	1	AKX880PN
	P1	RPG0R92	PACKING CASE	1	AKX880PS
	P2	RPN2762	POLYFOAM	1	AKX660
	P2	RPN2768	POLYFOAM	1	AKX880
	P3	RPH0332	MIRAMAT SHEET	1	
			ACCESSORIES		
	A1	N2QAYB001022	REMOTE CONTROL	1	
⚠	A2	K2CB2CB00022	AC CORD	1	PN
⚠	A2	K2CQ2YY00119	AC CORD	1	PS
⚠	A3	RQT0A60-1M	O/I BOOK (Sp)	1	
⚠	A3	RQT0A61-1B	O/I BOOK (En)	1	
	A4	RSAX0002	FM INDOOR ANTENNA	1	
	A5	N1DYYYY00011	AM LOOP ANTENNA	1	

15.6. Electrical Replacement Parts List

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

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.

Note:

- When replacing any of these components, be sure to use only manufacturer's specified parts shown in the replacement part list.
- The parenthesized indications on the Remarks column specify the destination & product color (Refer to the cover page for the information).
- Parts without these indications shall be used for all areas.
- This product uses a laser diode. Refer to "Precaution of Laser Diode".
- Capacitor value are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF), F=Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1000 (OHM).
- All parts mentioned are supplied by PAVCJM unless indicated likewise.
- Parts mentioned [SPG] in the Remarks column are supplied by JAPAN.

E.S.D. standards for Electrostatically Sensitive Devices, refer to "PREVENTION OF ELECTROSTATIC DISCHARGE (ESD) TO ELECTROSTATIC SENSITIVE (ES) DEVICES" section.

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			PRINTED CIRCUIT BOARDS		
	PCB1	RFKB5297EA	MAIN P.C.B W/DATA	1	(RTL) AKX660PN
	PCB1	RFKB5297FA	MAIN P.C.B W/DATA	1	(RTL) AKX660PS
	PCB1	RFKB5297AA	MAIN P.C.B W/DATA	1	(RTL) AKX880PN
	PCB1	RFKB5297BA	MAIN P.C.B W/DATA	1	(RTL) AKX880PS
	PCB2	REP5297EB	TUNER P.C.B	1	(RTL) AKX660PN
	PCB2	REP5297FB	TUNER P.C.B	1	(RTL) AKX660PS
	PCB2	REP5297AB	TUNER P.C.B	1	(RTL) AKX880PN
	PCB2	REP5297BB	TUNER P.C.B	1	(RTL) AKX880PS
	PCB3	REP5144HA	PANEL P.C.B	1	(RTL) AKX660
	PCB3	REP5144KA	PANEL P.C.B	1	(RTL) AKX880
	PCB4	REP5144HB	USB P.C.B	1	(RTL) AKX660
	PCB4	REP5144KB	USB P.C.B	1	(RTL) AKX880
	PCB5	REP5144HC	MUSIC PORT P.C.B	1	(RTL) AKX660
	PCB5	REP5144KC	MUSIC PORT P.C.B	1	(RTL) AKX880
⚠	PCB7	REP5304A	SMPS P.C.B	1	(RTL) PN
⚠	PCB7	REP5304B	SMPS P.C.B	1	(RTL) PS
	PCB8	REP4945B	CD INTERFACE P.C.B	1	(RTL)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			INTEGRATED CIRCUITS		
	IC52	VUEALLPT087	IC	1	(E.S.D) [SPG]
	IC1001	C1AB00004188	IC	1	(E.S.D)
	IC1002	C0EBY0000664	IC	1	(E.S.D)
	IC1003	RFKWFKX660LM	IC	1	(E.S.D) AKX660
	IC1003	RFKWFKX880LM	IC	1	(E.S.D) AKX880
	IC1004	RFKWEKX660LM	IC	1	(E.S.D)
	IC1006	C0JBAZ002990	IC	1	(E.S.D) AKX880
	IC1201	C0DBBYY00104	IC	1	(E.S.D)
	IC1402	MIP2F20MSSCF	IC	1	(E.S.D)
	IC1501	C0DBBYY00077	IC	1	(E.S.D)
	IC1601	C0DAZYY00039	IC	1	(E.S.D)
	IC1701	C0DAZYY00039	IC	1	(E.S.D)
	IC2001	RFKWNKX660LM	IC	1	(E.S.D)
	IC2006	C0ZBZ0001747	IC	1	(E.S.D)
	IC2101	C0DBAYY01594	IC	1	(E.S.D)
	IC2102	C0ABBA000318	IC	1	(E.S.D)
	IC2103	C0DBAYY01594	IC	1	(E.S.D)
	IC2104	C0DBGYY03909	IC	1	(E.S.D)
	IC2107	C0DBGYY00911	IC	1	(E.S.D)
	IC2108	C0DBGYY03909	IC	1	(E.S.D)
	IC3001	C1AB00003986	IC	1	(E.S.D)
	IC3101	C1AB00003986	IC	1	(E.S.D)
	IC3201	C1AB00003986	IC	1	(E.S.D)
	IC3301	C1AB00003986	IC	1	(E.S.D) AKX880
	IC4001	VUEALLPT090	IC	1	(E.S.D)
	IC5001	C0GBY0000213	IC	1	(E.S.D)
	IC6100	C0JBAR000367	IC	1	(E.S.D)
	IC7701	RSNE031B0	IC / BT MODULE	1	(E.S.D)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	IC9001	C0JBAS000401	IC	1	(E.S.D)
	IC9002	C0DBZYY00723	IC	1	(E.S.D)
	IC9003	C0DBZYY00723	IC	1	(E.S.D)
			TRANSISTORS		
	Q1001	B1ABCE000015	TRANSISTOR	1	(E.S.D)
	Q1002	B1GBCFJJ0041	TRANSISTOR	1	(E.S.D)
	Q1103	B1CERR000150	TRANSISTOR	1	(E.S.D)
	Q1206	B1ABCF000176	TRANSISTOR	1	(E.S.D)
	Q1402	B1ACKD000006	TRANSISTOR	1	(E.S.D)
⚠	Q1403	B3PBA0000579	PHOTO COUPLER	1	(E.S.D)
⚠	Q1404	B3PBA0000579	PHOTO COUPLER	1	(E.S.D)
⚠	Q1405	B3PBA0000579	PHOTO COUPLER	1	(E.S.D)
	Q1501	B1CERR000147	TRANSISTOR	1	(E.S.D)
	Q1502	B1CERR000147	TRANSISTOR	1	(E.S.D)
⚠	Q1505	B3PBA0000579	PHOTO COUPLER	1	(E.S.D)
⚠	Q1701	B3PBA0000579	PHOTO COUPLER	1	(E.S.D)
	Q1702	B1ABCF000176	TRANSISTOR	1	(E.S.D)
	Q1765	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q1766	B1ABCF000176	TRANSISTOR	1	(E.S.D)
	Q2100	B1AAJC000019	TRANSISTOR	1	(E.S.D)
	Q2101	DSA200100L	TRANSISTOR	1	(E.S.D)
	Q2103	B1AAJC000019	TRANSISTOR	1	(E.S.D)
	Q2104	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q2106	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q2108	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q2110	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q2111	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q2112	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q2113	B1AAJC000019	TRANSISTOR	1	(E.S.D)
	Q2114	B1GBCFJJ0041	TRANSISTOR	1	(E.S.D)
	Q2116	B1GBCFJJ0041	TRANSISTOR	1	(E.S.D)
	Q2117	B1ADGF000010	TRANSISTOR	1	(E.S.D)
	Q2119	B1GBCFJJ0041	TRANSISTOR	1	(E.S.D)
	Q3500	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q3501	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q3502	DSA200100L	TRANSISTOR	1	(E.S.D)
	Q3503	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q5001	B1ADCF000001	TRANSISTOR	1	(E.S.D)
	Q6000	B1BABG000007	TRANSISTOR	1	(E.S.D) AKX880
	Q6801	B1HFCDE00002	TRANSISTOR	1	(E.S.D)
	Q6816	B1HFCDE00002	TRANSISTOR	1	(E.S.D)
	Q9003	DSA200100L	TRANSISTOR	1	(E.S.D)
	Q9005	DSA200100L	TRANSISTOR	1	(E.S.D)
	QR1201	B1GBCFJJ0040	TRANSISTOR	1	(E.S.D)
	QR1601	B1GBCFLL0037	TRANSISTOR	1	(E.S.D)
	QR1701	B1GBCFLL0037	TRANSISTOR	1	(E.S.D)
	QR1720	B1GBCFLL0037	TRANSISTOR	1	(E.S.D)
	QR1767	B1GBCFJJ0041	TRANSISTOR	1	(E.S.D)
	QR2101	B1GBCFJJ0041	TRANSISTOR	1	(E.S.D)
	QR2102	B1GBCFJJ0040	TRANSISTOR	1	(E.S.D)
	QR2103	B1GBCFJJ0040	TRANSISTOR	1	(E.S.D)
	QR2502	B1GBCFGN0016	TRANSISTOR	1	(E.S.D) AKX880
	QR2503	B1GBCFGN0016	TRANSISTOR	1	(E.S.D) AKX880
	QR2505	B1GBCFGN0016	TRANSISTOR	1	(E.S.D) AKX880
	QR6000	B1GBCFGN0018	TRANSISTOR	1	(E.S.D) AKX880
	QR6003	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
	QR6004	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
	QR6005	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
	QR6101	B1GBCFJJ0040	TRANSISTOR	1	(E.S.D)
	QR9001	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
	QR9003	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
			DIODES		
	D1001	B0FBBR000114	DIODE	1	(E.S.D)
	D1001	DZ2J130M0L	DIODE	1	(E.S.D)
	D1201	B0ABRR000004	DIODE	1	(E.S.D)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	D1203	B0ECNR000003	DIODE	1	(E.S.D)
	D1204	B0HAMP000094	DIODE	1	(E.S.D)
	D1205	B0HAMP000094	DIODE	1	(E.S.D)
	D1402	B0EDHS000002	DIODE	1	(E.S.D)
	D1403	B0HAMP000094	DIODE	1	(E.S.D)
	D1404	B0EAMM000057	DIODE	1	(E.S.D)
	D1405	B0EAMM000057	DIODE	1	(E.S.D)
	D1406	B0ECET000006	DIODE	1	(E.S.D)
	D1416	DZ2J100M0L	DIODE	1	(E.S.D)
	D1502	DZ2J120M0L	DIODE	1	(E.S.D)
	D1503	B0HAMP000094	DIODE	1	(E.S.D)
	D1504	B0JCPD000039	DIODE	1	(E.S.D)
	D1505	B0JCPD000039	DIODE	1	(E.S.D)
	D1506	B0EAMR000018	DIODE	1	(E.S.D)
	D1601	B0EAMM000057	DIODE	1	(E.S.D)
	D1703	B0FBCM000011	DIODE	1	(E.S.D)
	D1705	B0FBCM000011	DIODE	1	(E.S.D)
	D2100	B0ADDJ000032	DIODE	1	(E.S.D)
	D2101	DA2J10100L	DIODE	1	(E.S.D)
	D2103	DA2J10100L	DIODE	1	(E.S.D)
	D2104	DZ2J130M0L	DIODE	1	(E.S.D)
	D2105	DA2J10100L	DIODE	1	(E.S.D)
	D2106	B0JCPG000032	DIODE	1	(E.S.D)
	D2107	B0JCPG000032	DIODE	1	(E.S.D)
	D2108	DA2J10100L	DIODE	1	(E.S.D)
	D2109	B0ADDJ000032	DIODE	1	(E.S.D)
	D2111	DZ2J130M0L	DIODE	1	(E.S.D)
	D2112	DZ2J220M0L	DIODE	1	(E.S.D)
	D2113	DZ2J220M0L	DIODE	1	(E.S.D)
	D3000	DA2J10100L	DIODE	1	(E.S.D)
	D5001	DB2J31400L	DIODE	1	(E.S.D)
	D6025	B0EAMM000057	DIODE	1	(E.S.D) AKX660
	D6027	B0EAMM000057	DIODE	1	(E.S.D) AKX880
	D6101	B3AEA0000172	DIODE	1	(E.S.D)
	D6102	B3AAA0001129	DIODE	1	(E.S.D)
	D6103	B3ABA0000905	DIODE	1	(E.S.D)
	D6104	B3ABA0000905	DIODE	1	(E.S.D)
	D6105	B3AAA0001129	DIODE	1	(E.S.D)
	D6106	B3AEA0000172	DIODE	1	(E.S.D)
	D6400	B3AAA0001243	DIODE	1	(E.S.D)
	D6401	B3AAA0001243	DIODE	1	(E.S.D)
	D6801	B0ADDH000009	DIODE	1	(E.S.D)
	D6802	B0ADDH000009	DIODE	1	(E.S.D)
	D6806	DZ2J056M0L	DIODE	1	(E.S.D)
	D9001	B0ECKM000008	DIODE	1	(E.S.D)
⚠	DZ1001	D4EAY511A127	DIODE	1	(E.S.D)
			VARIABLE RESISTORS		
	VR9000	EVEKE2F3524B	VOLUME JOG	1	
	VR9001	EVEKE2F3524B	ENCODER	1	
			ESD SUPRESSOR		
	VA51	EZAEG2A50AX	ESD SUPRESSOR	1	
			SWITCHES		
	S6200	EVQ21405RJ	SW POWER	1	
	S6201	EVQ21405RJ	SW OPEN/CLOSE	1	
	S6202	EVQ21405RJ	SW STOP/TUNE MODE	1	
	S6211	EVQ21405RJ	SW D.BASS	1	
	S6212	EVQ21405RJ	SW ALBUM/TRACK/-ILLUM	1	
	S6213	EVQ21405RJ	SW FWD	1	
	S6214	EVQ21405RJ	SW CD/RADIO/AUX	1	
	S6215	EVQ21405RJ	SW PLAY/PAUSE	1	
	S6216	EVQ21405RJ	SW DJ JUKEBOX/SAMPLER	1	
	S6221	EVQ21405RJ	SW LATIN EQ	1	
	S6222	EVQ21405RJ	SW RWD	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	S6223	EVQ21405RJ	SW BT-PAIRING	1	
	S6224	EVQ21405RJ	SW MEM/USB	1	
	S6225	EVQ21405RJ	SW USB REC	1	
	S6226	EVQ21405RJ	SW MEM REC	1	
	S7201	K0L1BA000158	SW RESET	1	
			CONNECTORS		
	CN51	K1MN15A00007	15P CONNECTOR	1	
	CN1851	K1KA13AA0181	13P CONNECTOR	1	
	CN2102	K1KA02AA0186	2P CONNECTOR	1	
	CN2103	K1YZ13000002	13P CONNECTOR	1	
	CN2502	K1KA04BA0061	4P CONNECTOR	1	AKX880
	CN2506	K1MN22A00012	22P CONNECTOR	1	
	CN2507	K1KA04AA0193	4P CONNECTOR	1	
	CN2511	K1KA09AA0193	9P CONNECTOR	1	
	CN6001	K1MN22B00014	22P CONNECTOR	1	
	CN6002	K1ZZ00001238	CONNECTOR	1	
	CN6100	K1MN15A00007	15P CONNECTOR	1	
	CN6300	K1ZZ00000832	CONNECTOR	1	
	CN6402	K1YA09000001	9P CONNECTOR	1	
	CN7001	K1MY05BA0565	5P CONNECTOR	1	
	CN7002	K1MN10B00016	10P CONNECTOR	1	
	P5002	K1MY24A00001	24P CONNECTOR	1	
	P5102	K1MN10AA0076	10P CONNECTOR	1	
			COILS AND INDUCTORS		
	L51	G1CR18JA0020	INDUCTOR	1	
	L52	G2A380Y00002	ANTENNA COIL	1	
	L54	G1C1R0MA0204	INDUCTOR	1	
⚠	L1002	G0B502J00005	LINE FILTER	1	
	L1201	G0C281J00001	INDUCTOR	1	
	L2101	G1C470MA0445	INDUCTOR	1	
	L2102	G1C330MA0234	INDUCTOR	1	
	L3000	G0C100M00013	INDUCTOR	1	
	L3001	G0C100M00013	INDUCTOR	1	
	L3100	G0C100M00013	INDUCTOR	1	
	L3101	G0C100M00013	INDUCTOR	1	
	L3200	G0C100M00013	INDUCTOR	1	
	L3201	G0C100M00013	INDUCTOR	1	
	L3300	G0C100M00013	INDUCTOR	1	AKX880
	L3301	G0C100M00013	INDUCTOR	1	AKX880
	LB51	J0JYC0000656	INDUCTOR	1	
	LB52	J0JYC0000118	INDUCTOR	1	
	LB1001	J0JBC0000010	INDUCTOR	1	
	LB1002	J0JBC0000010	INDUCTOR	1	
	LB1003	J0JBC0000010	INDUCTOR	1	
	LB1003	J0JKB0000015	INDUCTOR	1	
	LB1004	J0JBC0000010	INDUCTOR	1	
	LB1004	J0JKB0000015	INDUCTOR	1	
	LB1006	J0JBC0000010	INDUCTOR	1	
	LB1007	J0JBC0000010	INDUCTOR	1	
	LB1011	J0JCC0000286	INDUCTOR	1	
	LB1019	J0JBC0000088	INDUCTOR	1	
	LB1020	J0JBC0000088	INDUCTOR	1	
	LB1026	J0JCC0000286	INDUCTOR	1	
	LB1027	J0JCC0000286	INDUCTOR	1	
	LB1030	J0JBC0000010	INDUCTOR	1	
	LB1031	J0JBC0000010	INDUCTOR	1	AKX660
	LB1032	J0JBC0000010	INDUCTOR	1	
	LB1033	J0JBC0000010	INDUCTOR	1	
	LB1036	J0JCC0000286	INDUCTOR	1	
	LB1037	J0JCC0000286	INDUCTOR	1	
	LB1038	J0JCC0000286	INDUCTOR	1	
	LB1039	J0JCC0000286	INDUCTOR	1	
	LB1040	J0JBC0000010	INDUCTOR	1	AKX880
	LB1201	J0JBC0000010	INDUCTOR	1	
	LB1501	J0JGC0000020	INDUCTOR	1	
	LB1502	J0JKB0000015	INDUCTOR	1	
	LB2001	J0JBC0000010	INDUCTOR	1	
	LB2101	J0JHC0000046	INDUCTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	LB2103	J0JHC0000046	INDUCTOR	1	
	LB4001	J0JBC0000010	INDUCTOR	1	
	LB4002	J0JBC0000010	INDUCTOR	1	
	LB4003	J0JBC0000010	INDUCTOR	1	
	LB5001	J0JBC0000134	INDUCTOR	1	
	LB5003	J0JHC0000045	INDUCTOR	1	
	LB5004	J0JHC0000045	INDUCTOR	1	
	LB5005	J0JBC0000134	INDUCTOR	1	
	LB5006	J0JBC0000010	INDUCTOR	1	
	LB5007	J0JBC0000010	INDUCTOR	1	
	LB5008	J0JBC0000010	INDUCTOR	1	
	LB5009	J0JBC0000010	INDUCTOR	1	
	LB5010	J0JBC0000010	INDUCTOR	1	
	LB5011	J0JBC0000010	INDUCTOR	1	
	LB5015	J0JBC0000010	INDUCTOR	1	
	LB5016	J0JBC0000010	INDUCTOR	1	
	LB5017	J0JBC0000010	INDUCTOR	1	
	LB5018	J0JBC0000010	INDUCTOR	1	
	LB5103	J0JYC0000656	INDUCTOR	1	
	LB6100	J0JBC0000134	INDUCTOR	1	
	LB6400	J0JHC0000118	INDUCTOR	1	
	LB6401	J0JHC0000118	INDUCTOR	1	
	LB6802	J0JHC0000118	INDUCTOR	1	
	LB6803	J0JHC0000118	INDUCTOR	1	
	LB6805	J0JHC0000118	INDUCTOR	1	
			TRANSFORMERS		
⚠	T1401	G4DYA0000592	SWITCHING TRANSFORMER	1	
⚠	T1501	G4DYA0000778	SWITCHING TRANSFORMER	1	
			TERMINALS		
	ZJ1002	K9ZZ00001279	EARTH PLATE	1	
	ZJ1004	K4CZ01000027	TERMINAL	1	
	ZJ1103	K4CZ01000027	TERMINAL	1	
	ZJ2100	K9ZZ00001279	EARTH PLATE	1	
			OSCILLATORS		
	X1001	H0J169500045	OSCILLATOR	1	
	X1002	H0A327200191	OSCILLATOR	1	
	X4001	H0J245500110	OSCILLATOR	1	
			FL DISPLAY		
	FL6801	A2BB00000186	FL DISPLAY	1	
			FUSES		
⚠	F1001	K5D103BNA005	FUSE	1	
⚠	F1401	K5G501YA0081	FUSE	1	
⚠	F1501	K5G502Y00006	FUSE	1	
			FUSE HOLDERS		
	ZA1002	K3GE1ZZ00001	FUSE HOLDER	1	
	ZA1003	K3GE1ZZ00001	FUSE HOLDER	1	
			THERMISTOR		
	TH1701	D4CCY1040001	THERMISTOR	1	
			JACKS		
	JK51	K4ZZ02000103	JK FM ANT	1	
	JK52	K4AC02B00042	JK SPEAKER	1	
	JK3501	K4AZ10A00005	JK SPEAKER	1	AKX880
	JK3502	K4AZ08A00004	JK SPEAKER	1	AKX660
	JK6002	K2HA2YYA0009	JK RCA PIN	1	
	JK6301	K2HC103A0031	JK HEADPHONE	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	JK6400	K1FY104A0034	CONNECTOR	1	
	JK6401	K1FY104A0034	CONNECTOR	1	
⚠	P1001	K2AA2B000011	AC INLET	1	PS
⚠	P1001	K2AB2B000007	AC INLET	1	PN
			CHIP JUMPERS		
	L53	D0GBR00J0004	0 1/10W	1	
	L6301	D0GBR00J0004	0 1/10W	1	
	L6302	D0GBR00J0004	0 1/10W	1	
	LB1005	D0GB100JA065	10 1/10W	1	
	LB1008	D0GAR00J0005	0 1/16W	1	
	LB1009	D0GAR00J0005	0 1/16W	1	
	LB1010	D0GAR00J0005	0 1/16W	1	
	LB1012	D0GAR00J0005	0 1/16W	1	
	LB1013	D0GAR00J0005	0 1/16W	1	
	LB1014	D0GAR00J0005	0 1/16W	1	
	LB1015	D0GAR00J0005	0 1/16W	1	
	LB1016	D0GBR00J0004	0 1/10W	1	
	LB1017	D0GBR00J0004	0 1/10W	1	
	LB1018	D0GBR00J0004	0 1/10W	1	
	LB1025	D0GAR00J0005	0 1/16W	1	
	LB2500	D0GBR00J0004	0 1/10W	1	
	LB2502	D0GBR00J0004	0 1/10W	1	
	LB2503	D0GBR00J0004	0 1/10W	1	
	LB2513	D0GBR00J0004	0 1/10W	1	
	LB2514	D0GBR00J0004	0 1/10W	1	
	LB2521	D0GBR00J0004	0 1/10W	1	
	LB2522	D0GBR00J0004	0 1/10W	1	
	LB2523	D0GBR00J0004	0 1/10W	1	
	LB2525	D0GBR00J0004	0 1/10W	1	
	LB2526	D0GBR00J0004	0 1/10W	1	
	LB2527	D0GBR00J0004	0 1/10W	1	
	LB2528	D0GBR00J0004	0 1/10W	1	
	LB2531	D0GBR00J0004	0 1/10W	1	AKX880
	LB2532	D0GBR00J0004	0 1/10W	1	AKX880
	LB2533	D0GBR00J0004	0 1/10W	1	AKX880
	LB2534	D0GBR00J0004	0 1/10W	1	AKX880
	LB2540	D0GBR00J0004	0 1/10W	1	
	LB6119	D0GBR00J0004	0 1/10W	1	
	LB6120	D0GBR00J0004	0 1/10W	1	
	LB6303	D0GBR00J0004	0 1/10W	1	
	LB9001	D0GBR00J0004	0 1/10W	1	
	LB9002	D0GBR00J0004	0 1/10W	1	
	LB9003	D0GBR00J0004	0 1/10W	1	
	W2	D0GFR00J0005	0 1/4W	1	
	W11	D0GFR00J0005	0 1/4W	1	
	W34	D0GFR00J0005	0 1/4W	1	
	W37	D0GFR00J0005	0 1/4W	1	
	W20	D0GFR00J0005	0 1/4W	1	
	W100	D0GFR00J0005	0 1/4W	1	
	W101	D0GFR00J0005	0 1/4W	1	
	W102	D0GBR00J0004	0 1/10W	1	
	W103	D0GFR00J0005	0 1/4W	1	
	W104	D0GFR00J0005	0 1/4W	1	
	W105	D0GFR00J0005	0 1/4W	1	
	W106	D0GBR00J0004	0 1/10W	1	
	W107	D0GDR00J0004	0 1/8W	1	
	W108	D0GFR00J0005	0 1/4W	1	
	W109	D0GFR00J0005	0 1/4W	1	
	W110	D0GFR00J0005	0 1/4W	1	
	W111	D0GFR00J0005	0 1/4W	1	
	W112	D0GDR00J0004	0 1/8W	1	
	W113	D0GDR00J0004	0 1/8W	1	
	W114	D0GBR00J0004	0 1/10W	1	
	W115	D0GFR00J0005	0 1/4W	1	
	W116	D0GBR00J0004	0 1/10W	1	
	W117	D0GFR00J0005	0 1/4W	1	
	W118	D0GFR00J0005	0 1/4W	1	
	W119	D0GBR00J0004	0 1/10W	1	
	W120	D0GFR00J0005	0 1/4W	1	
	W121	D0GFR00J0005	0 1/4W	1	
	W122	D0GFR00J0005	0 1/4W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	W123	D0GBR00J0004	0 1/10W	1	
	W124	D0GFR00J0005	0 1/4W	1	
	W125	D0GDR00J0004	0 1/8W	1	
	W126	D0GFR00J0005	0 1/4W	1	
	W127	D0GFR00J0005	0 1/4W	1	
	W128	D0GFR00J0005	0 1/4W	1	
	W129	D0GFR00J0005	0 1/4W	1	
	W130	D0GBR00J0004	0 1/10W	1	
	W131	D0GDR00J0004	0 1/8W	1	
	W132	D0GBR00J0004	0 1/10W	1	
	W133	D0GDR00J0004	0 1/8W	1	
	W134	D0GDR00J0004	0 1/8W	1	
	W135	D0GFR00J0005	0 1/4W	1	
	W136	D0GBR00J0004	0 1/10W	1	
	W137	D0GFR00J0005	0 1/4W	1	
	W138	D0GFR00J0005	0 1/4W	1	
	W139	D0GFR00J0005	0 1/4W	1	
	W140	D0GFR00J0005	0 1/4W	1	
	W141	D0GBR00J0004	0 1/10W	1	
	W142	D0GDR00J0004	0 1/8W	1	
	W143	D0GFR00J0005	0 1/4W	1	
	W144	D0GFR00J0005	0 1/4W	1	
	W145	D0GFR00J0005	0 1/4W	1	
	W146	D0GFR00J0005	0 1/4W	1	
	W147	D0GFR00J0005	0 1/4W	1	
	W148	D0GFR00J0005	0 1/4W	1	
	W149	D0GFR00J0005	0 1/4W	1	
	W150	D0GFR00J0005	0 1/4W	1	
	W151	D0GDR00J0004	0 1/8W	1	
	W152	D0GFR00J0005	0 1/4W	1	
	W153	D0GFR00J0005	0 1/4W	1	
	W154	D0GFR00J0005	0 1/4W	1	
	W155	D0GFR00J0005	0 1/4W	1	
	W156	D0GFR00J0005	0 1/4W	1	
	W157	D0GFR00J0005	0 1/4W	1	
	W158	D0GFR00J0005	0 1/4W	1	
	W159	D0GFR00J0005	0 1/4W	1	
	W160	D0GBR00J0004	0 1/10W	1	
	W161	D0GFR00J0005	0 1/4W	1	
	W162	D0GFR00J0005	0 1/4W	1	
	W201	D0GDR00J0004	0 1/8W	1	
	K5001	D0GAR00J0005	0 1/16W	1	
	K5002	D0GAR00J0005	0 1/16W	1	
	K5003	D0GAR00J0005	0 1/16W	1	
	K5004	D0GAR00J0005	0 1/16W	1	
	K5005	D0GAR00J0005	0 1/16W	1	
	K5006	D0GAR00J0005	0 1/16W	1	
	K5007	D0GAR00J0005	0 1/16W	1	
	K5008	D0GAR00J0005	0 1/16W	1	
	K5009	D0GAR00J0005	0 1/16W	1	
	K5010	D0GBR00J0004	0 1/10W	1	
	K5011	D0GBR00J0004	0 1/10W	1	
			REMOTE SENSOR		
	IR6500	B3RAD0000222	REMOTE SENSOR	1	
			RESISTORS		
	R51	D0GB221JA065	220 1/10W	1	
	R52	D0GB221JA065	220 1/10W	1	
	R55	D0GAR00J0005	0 1/16W	1	
	R56	D0GBR00J0004	0 1/10W	1	
	R57	D0GA102JA023	1K 1/16W	1	
	R59	D0GB222JA065	2.2K 1/10W	1	
	R60	D0GB221JA065	220 1/10W	1	
	L6300	D0GB101JA065	100 1/10W	1	
	LB1035	D0GA101JA023	100 1/16W	1	
	R1001	D0GA471JA023	470 1/16W	1	
⚠	R1001	D0GF105JA048	1M 1/4W	1	
	R1002	D0GBR00J0004	0 1/10W	1	
⚠	R1002	D0GF105JA048	1M 1/4W	1	
	R1003	D0GBR00J0004	0 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
⚠	R1003	D0GF105JA048	1M 1/4W	1	
	R1004	D0GAR00J0005	0 1/16W	1	
	R1005	D0GAR00J0005	0 1/16W	1	
	R1006	D0GAR00J0005	0 1/16W	1	
	R1007	D0GAR00J0005	0 1/16W	1	
	R1008	D0GAR00J0005	0 1/16W	1	
	R1009	D0GAR00J0005	0 1/16W	1	
	R1011	D0GA221JA023	220 1/16W	1	
	R1012	J0JCC0000309	INDUCTOR	1	
	R1013	D0GB221JA065	220 1/10W	1	
	R1014	D0GA221JA023	220 1/16W	1	
	R1015	D0GB102JA065	1K 1/10W	1	
	R1016	D0GBR00J0004	0 1/10W	1	
	R1017	D0GBR00J0004	0 1/10W	1	
	R1018	D0GB101JA065	100 1/10W	1	
	R1019	J0JBC0000010	INDUCTOR	1	
	R1020	J0JCC0000278	INDUCTOR	1	
	R1021	J0JBC0000010	INDUCTOR	1	
	R1022	D0GB221JA065	220 1/10W	1	
	R1023	J0JCC0000309	INDUCTOR	1	
	R1024	D0GB681JA065	680 1/10W	1	
	R1025	D0GB105JA065	1M 1/10W	1	
	R1026	D0GB224JA065	220K 1/10W	1	
	R1027	D0GB106JA065	10M 1/10W	1	
	R1028	J0JBC0000010	INDUCTOR	1	
	R1029	D0GB103JA065	10K 1/10W	1	
	R1032	D0GB103JA065	10K 1/10W	1	
	R1035	D0GBR00J0004	0 1/10W	1	
	R1036	D0GBR00J0004	0 1/10W	1	
	R1037	D0GBR00J0004	0 1/10W	1	
	R1038	D0GA103JA023	10K 1/16W	1	
	R1041	D0GB103JA065	10K 1/10W	1	
	R1042	D0GBR00J0004	0 1/10W	1	
	R1043	D0GB103JA065	10K 1/10W	1	
	R1044	D0GB103JA065	10K 1/10W	1	
	R1045	D0GBR00J0004	0 1/10W	1	
	R1046	D0GBR00J0004	0 1/10W	1	
	R1047	D0GBR00J0004	0 1/10W	1	
	R1048	D0GB101JA065	100 1/10W	1	
	R1049	D0GB101JA065	100 1/10W	1	
	R1054	D0GB222JA065	2.2K 1/10W	1	
	R1055	D0GAR00J0005	0 1/16W	1	
	R1056	D0GAR00J0005	0 1/16W	1	
	R1057	D0GAR00J0005	0 1/16W	1	
	R1058	D0GAR00J0005	0 1/16W	1	
	R1059	D0GAR00J0005	0 1/16W	1	
	R1060	D0GAR00J0005	0 1/16W	1	
	R1065	D0GBR00J0004	0 1/10W	1	
	R1066	D0GBR00J0004	0 1/10W	1	
	R1067	D1BB6802A074	68K 1/10W	1	
	R1068	D1BB1502A074	15K 1/10W	1	
	R1073	D0GB103JA065	10K 1/10W	1	PS
	R1074	D0GB272JA065	2.7K 1/10W	1	PS
	R1074	D0GBR00J0004	0 1/10W	1	PN
	R1076	D0GB222JA065	2.2K 1/10W	1	
	R1077	D0GB103JA065	10K 1/10W	1	PS
	R1077	D0GB203JA065	20K 1/10W	1	
	R1095	D0GB122JA065	1.2K 1/10W	1	AKX880
	R1097	D0GB334JA065	330K 1/10W	1	
	R1100	J0JCC0000278	INDUCTOR	1	
	R1101	J0JBC0000010	INDUCTOR	1	
	R1103	D0GB222JA065	2.2K 1/10W	1	
	R1104	D0GB222JA065	2.2K 1/10W	1	
	R1105	D0GB103JA065	10K 1/10W	1	
	R1106	D0GB334JA065	330K 1/10W	1	
	R1107	D0GB122JA065	1.2K 1/10W	1	
	R1108	D0GB122JA065	1.2K 1/10W	1	
	R1114	D0GB103JA065	10K 1/10W	1	
	R1115	D0GB102JA065	1K 1/10W	1	
	R1117	D0GB103JA065	10K 1/10W	1	
	R1118	D0GBR00J0004	0 1/10W	1	AKX880
	R1119	D0GB123JA065	12K 1/10W	1	AKX880
	R1120	D0GB101JA065	100 1/10W	1	
	R1121	D0GB101JA065	100 1/10W	1	
	R1122	D0GB101JA065	100 1/10W	1	
	R1123	D0GBR00J0004	0 1/10W	1	
	R1124	D0GB474JA065	470K 1/10W	1	
	R1125	D0GB474JA065	470K 1/10W	1	
	R1127	D0GAR00J0005	0 1/16W	1	
	R1128	D0GAR00J0005	0 1/16W	1	
	R1132	J0JCC0000286	INDUCTOR	1	
	R1133	J0JCC0000286	INDUCTOR	1	
	R1202	ERJ14YJ220U	22 1/2W	1	
	R1203	ERX2LJ39MP	0.03 2W	1	
	R1204	ERX2LJ39MP	0.03 2W	1	
	R1205	D0GD273JA052	27K 1/8W	1	
	R1209	D0GD103JA052	10K 1/8W	1	
	R1212	D0GD330JA052	33 1/8W	1	
	R1217	D1BD6803A066	680K 1/8W	1	
	R1218	D1BD6803A066	680K 1/8W	1	
	R1219	D1BD6803A066	680K 1/8W	1	
	R1222	D1BD6803A066	680K 1/8W	1	
	R1226	D0GB752JA065	7.5K 1/10W	1	
	R1228	D0GB183JA065	18K 1/10W	1	
	R1229	D0GB472JA065	4.7K 1/10W	1	
	R1229	D1BD3303A066	330K 1/8W	1	
	R1230	D1BD1802A066	18K 1/8W	1	
	R1233	D1BD4702A066	47K 1/8W	1	
	R1236	D0GD680JA052	68 1/8W	1	
	R1237	D1BD6803A066	680K 1/8W	1	
	R1238	D1BD6803A066	680K 1/8W	1	
	R1239	D1BD6803A066	680K 1/8W	1	
	R1240	D0GBR00J0004	0 1/10W	1	
	R1240	D1BD6803A066	680K 1/8W	1	
	R1242	D1BD4702A066	47K 1/8W	1	
	R1243	D1BD6803A066	680K 1/8W	1	
	R1244	D1BB2702A074	27K 1/10W	1	
	R1245	D0GB102JA065	1K 1/10W	1	
	R1246	D0GB103JA065	10K 1/10W	1	
	R1411	D0GB153JA065	15K 1/10W	1	
	R1412	D0GD474JA052	470K 1/8W	1	
	R1413	D0GD102JA052	1K 1/8W	1	
	R1414	D0GD103JA052	10K 1/8W	1	
	R1415	D0GZ104JA012	100K 1W	1	
	R1417	D0GF224JA048	220K 1/4W	1	
	R1418	D0GF224JA048	220K 1/4W	1	
	R1419	D0GD220JA052	22 1/8W	1	
	R1420	D0GD824JA052	820K 1/8W	1	
	R1501	D1BD4703A066	470K 1/8W	1	
	R1502	D1BD4703A066	470K 1/8W	1	
	R1503	D1BD4703A066	470K 1/8W	1	
	R1504	D1BD4703A066	470K 1/8W	1	
	R1505	D0GD103JA052	10K 1/8W	1	
	R1507	D0GD224JA052	220K 1/8W	1	
	R1508	ERJ14YJ4R7U	4.7 1/2W	1	
	R1509	ERJ14YJ4R7U	4.7 1/2W	1	
	R1510	D0GD470JA052	47 1/8W	1	
	R1511	D0GD330JA052	33 1/8W	1	
	R1512	ERJ14YJ220U	22 1/2W	1	
	R1513	ERJ14YJ220U	22 1/2W	1	
	R1514	D0GD180JA052	18 1/8W	1	
	R1515	D0GD682JA052	6.8K 1/8W	1	
	R1516	D0GD473JA052	47K 1/8W	1	
	R1517	D0GD473JA052	47K 1/8W	1	
	R1518	ERX2SZJR10P	0.1 2W	1	
	R1519	ERX2SZJR10P	0.1 2W	1	
	R1601	D0GD331JA052	330 1/8W	1	
	R1602	D0GB151JA065	150 1/10W	1	
	R1603	D0GB153JA065	15K 1/10W	1	
	R1604	D1BB1002A074	10K 1/10W	1	
	R1605	D0GBR00J0004	0 1/10W	1	
	R1606	D1BB1002A074	10K 1/10W	1	
	R1607	D0GB222JA065	2.2K 1/10W	1	
	R1701	D0GD152JA052	1.5K 1/8W	1	
	R1702	D0GD272JA052	2.7K 1/8W	1	
	R1703	D0GD272JA052	2.7K 1/8W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R1704	D0GB104JA065	100K 1/10W	1	
	R1705	D0GB103JA065	10K 1/10W	1	
	R1706	D0GD103JA052	10K 1/8W	1	
	R1708	D1BB3302A074	33K 1/10W	1	
	R1709	D0GBR00J0004	0 1/10W	1	
	R1710	D1BB1801A074	1.8K 1/10W	1	
	R1711	D1BB2401A074	2.4K 1/10W	1	
	R1716	D0GD102JA052	1K 1/8W	1	
	R1717	D0GBR00J0004	0 1/10W	1	
	R1721	D1BB2402A074	24K 1/10W	1	
	R1724	D0GD561JA052	560 1/8W	1	
	R1725	D0GB472JA065	4.7K 1/10W	1	
	R1726	D0GB103JA065	10K 1/10W	1	
	R1755	D1BB1002A073	10K 1/10W	1	
	R1756	D1BB1002A073	10K 1/10W	1	
	R1757	D0GD103JA052	10K 1/8W	1	
	R1758	D1BB8201A074	8.2K 1/10W	1	
	R1852	D0GB103JA065	10K 1/10W	1	PS
	R1852	D0GB203JA065	20K 1/10W	1	PN
	R2002	D0GB473JA065	47K 1/10W	1	
	R2003	D0GAR00J0005	0 1/16W	1	
	R2004	D0GB473JA065	47K 1/10W	1	
	R2005	D0GB473JA065	47K 1/10W	1	
	R2100	D0GBR00J0004	0 1/10W	1	
	R2101	D0GB681JA065	680 1/10W	1	
	R2102	D0GB473JA065	47K 1/10W	1	
	R2103	D0GB123JA065	12K 1/10W	1	
	R2104	D0GB2R2JA065	2.2 1/10W	1	
	R2105	D0GB2R2JA065	2.2 1/10W	1	
	R2106	D0GB2R2JA065	2.2 1/10W	1	
	R2109	D0GB271JA065	270 1/10W	1	
	R2112	D0GBR00J0004	0 1/10W	1	AKX660
	R2113	D0GDR00J0004	0 1/8W	1	
	R2117	D0GB681JA065	680 1/10W	1	
	R2118	D0GB473JA065	47K 1/10W	1	
	R2119	D0GB123JA065	12K 1/10W	1	
	R2121	D0GBR00J0004	0 1/10W	1	PN
	R2123	D0GBR00J0004	0 1/10W	1	PS
	R2125	D0GB274JA065	270K 1/10W	1	
	R2126	D0GB823JA065	82K 1/10W	1	
	R2129	D0GB682JA065	6.8K 1/10W	1	
	R2130	D0GB221JA065	220 1/10W	1	
	R2135	F1H1H104B047	0.1uF 50V	1	
	R2137	D0GB101JA065	100 1/10W	1	
	R2141	D0GB474JA065	470K 1/10W	1	
	R2143	D0AF270JA039	27 1/2W	1	
	R2146	D0GBR00J0004	0 1/10W	1	
	R2147	D0GBR00J0004	0 1/10W	1	
	R2148	D0GB682JA065	6.8K 1/10W	1	
	R2149	D0GB274JA065	270K 1/10W	1	
	R2150	D0GB823JA065	82K 1/10W	1	
	R2151	D0GB221JA065	220 1/10W	1	
	R2152	F1H1H104B047	0.1uF 50V	1	
	R2153	D0GB474JA065	470K 1/10W	1	
	R2154	D0GB101JA065	100 1/10W	1	
	R2155	D0AF270JA039	27 1/2W	1	
	R2156	D0GB821JA065	820 1/10W	1	
	R2157	D0GB101JA065	100 1/10W	1	
	R2158	D0GBR00J0004	0 1/10W	1	AKX880
	R2164	D1BB6802A074	68K 1/10W	1	
	R2165	D1BB1203A074	120K 1/10W	1	
	R2166	D1BB1002A074	10K 1/10W	1	
	R2167	D0GB103JA065	10K 1/10W	1	
	R2168	D1BB1503A074	150K 1/10W	1	
	R2170	D0GBR00J0004	0 1/10W	1	
	R2175	D1BB1002A074	10K 1/10W	1	
	R2176	D1BB3002A074	30K 1/10W	1	
	R2177	D1BB3002A074	30K 1/10W	1	
	R2178	D1BB1503A074	150K 1/10W	1	
	R2179	D0GB103JA065	10K 1/10W	1	
	R2180	D1BB6802A074	68K 1/10W	1	
	R2181	D1BB6802A074	68K 1/10W	1	
	R2191	D0GBR00J0004	0 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R2192	D0GB185JA065	1.8M 1/10W	1	
	R2193	D0GB102JA065	1K 1/10W	1	
	R2196	D0GB102JA065	1K 1/10W	1	
	R2197	D0GB185JA065	1.8M 1/10W	1	
	R2199	D0GBR00J0004	0 1/10W	1	
	R2200	D0GB472JA065	4.7K 1/10W	1	
	R2201	D0GB472JA065	4.7K 1/10W	1	
	R2202	D0GB103JA065	10K 1/10W	1	
	R2215	D0GFR00J0005	0 1/4W	1	
	R2216	D0GDR00J0004	0 1/8W	1	
	R2225	D0GBR00J0004	0 1/10W	1	
	R2235	D0GB222JA065	2.2K 1/10W	1	
	R2237	D0GB222JA065	2.2K 1/10W	1	
	R2245	D0GB102JA065	1K 1/10W	1	
	R2246	D0GDR00J0004	0 1/8W	1	
	R2250	D0GFR00J0005	0 1/4W	1	
	R2251	D0GBR00J0004	0 1/10W	1	
	R2252	D0GB102JA065	1K 1/10W	1	
	R2300	D0GAR00J0005	0 1/16W	1	
	R2417	D0GB103JA065	10K 1/10W	1	
	R2418	D0GB103JA065	10K 1/10W	1	
	R2507	D0GB472JA065	4.7K 1/10W	1	
	R2508	D0GBR00J0004	0 1/10W	1	
	R2509	D0GBR00J0004	0 1/10W	1	
	R2510	D0GBR00J0004	0 1/10W	1	
	R2520	D0GBR00J0004	0 1/10W	1	AKX880
	R2544	D0GBR00J0004	0 1/10W	1	AKX880
	R2546	D0GBR00J0004	0 1/10W	1	AKX880
	R2569	D0GBR00J0004	0 1/10W	1	
	R2579	D0GF1R0JA048	1 1/4W	1	
	R2580	D0GBR00J0004	0 1/10W	1	
	R2581	D0GF1R0JA048	1.0 1/4W	1	AKX660
	R3000	D0GB100JA065	10 1/10W	1	
	R3001	D0GB100JA065	10 1/10W	1	
	R3002	D0GB223JA065	22K 1/10W	1	
	R3003	D0GB101JA065	100 1/10W	1	
	R3004	D0GBR00J0004	0 1/10W	1	
	R3005	D0GBR00J0004	0 1/10W	1	AKX880
	R3007	D0GBR00J0004	0 1/10W	1	
	R3009	D0GB101JA065	100 1/10W	1	
	R3011	D0GB100JA065	10 1/10W	1	
	R3016	D0GBR00J0004	0 1/10W	1	
	R3017	D0GBR00J0004	0 1/10W	1	
	R3018	D0GBR00J0004	0 1/10W	1	
	R3019	D0GBR00J0004	0 1/10W	1	
	R3020	D0GBR00J0004	0 1/10W	1	AKX880
	R3021	D0GBR00J0004	0 1/10W	1	AKX660
	R3022	D0GBR00J0004	0 1/10W	1	AKX660
	R3023	D0GBR00J0004	0 1/10W	1	AKX880
	R3024	D0GFR00J0005	0 1/4W	1	
	R3100	D0GB100JA065	10 1/10W	1	
	R3101	D0GB100JA065	10 1/10W	1	
	R3102	D0GB223JA065	22K 1/10W	1	
	R3103	D0GB101JA065	100 1/10W	1	
	R3104	D0GBR00J0004	0 1/10W	1	
	R3105	D0GB100JA065	10 1/10W	1	
	R3110	D0GBR00J0004	0 1/10W	1	
	R3111	D0GBR00J0004	0 1/10W	1	
	R3112	D0GBR00J0004	0 1/10W	1	
	R3113	D0GBR00J0004	0 1/10W	1	
	R3114	D0GBR00J0004	0 1/10W	1	
	R3115	D0GBR00J0004	0 1/10W	1	
	R3116	D0GBR00J0004	0 1/10W	1	AKX880
	R3117	D0GBR00J0004	0 1/10W	1	AKX880
	R3118	D0GBR00J0004	0 1/10W	1	AKX660
	R3120	D0GBR00J0004	0 1/10W	1	AKX660
	R3200	D0GB100JA065	10 1/10W	1	
	R3201	D0GB100JA065	10 1/10W	1	
	R3202	D0GB223JA065	22K 1/10W	1	
	R3203	D0GB101JA065	100 1/10W	1	
	R3204	D0GBR00J0004	0 1/10W	1	
	R3205	D0GB100JA065	10 1/10W	1	
	R3210	D0GBR00J0004	0 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description		Qty	Remarks
	R3211	D0GBR00J0004	0	1/10W	1	
	R3300	D0GB100JA065	10	1/10W	1	AKX880
	R3301	D0GB100JA065	10	1/10W	1	AKX880
	R3302	D0GB223JA065	22K	1/10W	1	AKX880
	R3303	D0GB101JA065	100	1/10W	1	AKX880
	R3304	D0GBR00J0004	0	1/10W	1	AKX880
	R3307	D0GBR00J0004	0	1/10W	1	AKX880
	R3309	D0GB101JA065	100	1/10W	1	AKX880
	R3311	D0GB100JA065	10	1/10W	1	AKX880
	R3316	D0GBR00J0004	0	1/10W	1	
	R3317	D0GBR00J0004	0	1/10W	1	
	R3318	D0GBR00J0004	0	1/10W	1	AKX880
	R3501	D0GBR00J0004	0	1/10W	1	
	R3505	D0GB104JA065	100K	1/10W	1	
	R3506	D0GB104JA065	100K	1/10W	1	
	R3507	D0GB3R3JA065	3.3	1/10W	1	
	R3508	D0GB3R3JA065	3.3	1/10W	1	
	R3509	D0GB104JA065	100K	1/10W	1	
	R3510	D0GB104JA065	100K	1/10W	1	
	R3511	D0GB3R3JA065	3.3	1/10W	1	
	R3512	D0GB3R3JA065	3.3	1/10W	1	
	R3517	D0GB104JA065	100K	1/10W	1	
	R3518	D0GB104JA065	100K	1/10W	1	
	R3519	D0GB3R3JA065	3.3	1/10W	1	
	R3520	D0GB3R3JA065	3.3	1/10W	1	
	R3521	D0GB104JA065	100K	1/10W	1	
	R3522	D0GB104JA065	100K	1/10W	1	
	R3523	D0GB3R3JA065	3.3	1/10W	1	
	R3524	D0GB3R3JA065	3.3	1/10W	1	
	R3525	D0GB104JA065	100K	1/10W	1	AKX880
	R3526	D0GB104JA065	100K	1/10W	1	AKX880
	R3527	D0GB3R3JA065	3.3	1/10W	1	AKX880
	R3528	D0GB3R3JA065	3.3	1/10W	1	AKX880
	R3533	D0GB822JA065	8.2K	1/10W	1	
	R3534	D0GB223JA065	22K	1/10W	1	
	R3535	D0GB104JA065	100K	1/10W	1	
	R3536	D0GB104JA065	100K	1/10W	1	
	R3537	D0GB472JA065	4.7K	1/10W	1	
	R3541	D0GB101JA065	100	1/10W	1	
	R3558	D0GB101JA065	100	1/10W	1	
	R3559	D0GBR00J0004	0	1/10W	1	
	R3560	D0GBR00J0004	0	1/10W	1	AKX880
	R3561	D0GBR00J0004	0	1/10W	1	AKX660
	R3562	D0GBR00J0004	0	1/10W	1	AKX660
	R4001	D0GB152JA065	1.5K	1/10W	1	
	R4002	D0GB105JA065	1M	1/10W	1	
	R4007	D0GB101JA065	100	1/10W	1	
	R4008	D0GB101JA065	100	1/10W	1	
	R4009	D0GB101JA065	100	1/10W	1	
	R4010	D0GB101JA065	100	1/10W	1	
	R4011	D0GB101JA065	100	1/10W	1	AKX660
	R4012	D0GB101JA065	100	1/10W	1	AKX660
	R4013	D0GB101JA065	100	1/10W	1	
	R4014	D0GB101JA065	100	1/10W	1	
	R4015	D0GB221JA065	220	1/10W	1	
	R4016	D0GB221JA065	220	1/10W	1	
	R4017	D0GBR00J0004	0	1/10W	1	
	R4018	D0GBR00J0004	0	1/10W	1	
	R4020	D0GBR00J0004	0	1/10W	1	
	R4027	D0GBR00J0004	0	1/10W	1	
	R4029	D0GB101JA065	100	1/10W	1	AKX880
	R4030	D0GB101JA065	100	1/10W	1	AKX880
	R4031	D0GB101JA065	100	1/10W	1	AKX880
	R4048	D0GB681JA065	680	1/10W	1	AKX880
	R4049	D0GB104JA065	100K	1/10W	1	AKX880
	R4105	D0GB101JA065	100	1/10W	1	
	R4106	D0GFR00J0005	0	1/4W	1	
	R4589	D0GDR00J0004	0	1/8W	1	
	R5005	D0GB683JA065	68K	1/10W	1	
	R5006	D0GB683JA065	68K	1/10W	1	
	R5007	D0GBR00J0004	0	1/10W	1	
	R5008	D0GB101JA065	100	1/10W	1	
	R5009	D0GB122JA065	1.2K	1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description		Qty	Remarks
	R5010	D0GB102JA065	1K	1/10W	1	
	R5011	D0GB682JA065	6.8K	1/10W	1	
	R5012	D0GBR00J0004	0	1/10W	1	
	R5013	D0GB473JA065	47K	1/10W	1	
	R5014	D0GBR00J0004	0	1/10W	1	
	R5015	D0GBR00J0004	0	1/10W	1	
	R5016	D0GB104JA065	100K	1/10W	1	
	R5017	D0GBR00J0004	0	1/10W	1	
	R5018	D0GB153JA065	15K	1/10W	1	
	R5019	D0GB4R7JA065	4.7	1/10W	1	
	R5020	D0GB104JA065	100K	1/10W	1	
	R5021	D0GB4R7JA065	4.7	1/10W	1	
	R5022	D0GA102JA023	1K	1/16W	1	
	R5023	D0GBR00J0004	0	1/10W	1	
	R5037	D0GDR00J0004	0	1/8W	1	
	R5038	D0GDR00J0004	0	1/8W	1	
	R5859	D0GD103JA052	10K	1/8W	1	
	R6000	D0GB272JA065	2.7K	1/10W	1	AKX880
	R6001	D0GB470JA065	47	1/10W	1	AKX880
	R6002	D0GB101JA065	100	1/10W	1	AKX880
	R6003	D0GB181JA065	180	1/10W	1	AKX880
	R6004	D0GB681JA065	680	1/10W	1	AKX880
	R6005	D0GB181JA065	180	1/10W	1	AKX880
	R6006	D0GBR00J0004	0	1/10W	1	
	R6007	D0GBR00J0004	0	1/10W	1	
	R6012	D0GB331JA065	330	1/10W	1	AKX880
	R6100	D0GB103JA065	10K	1/10W	1	
	R6101	D0GB472JA065	4.7K	1/10W	1	
	R6104	D0GB103JA065	10K	1/10W	1	
	R6105	D0GB472JA065	4.7K	1/10W	1	
	R6106	D0GB472JA065	4.7K	1/10W	1	
	R6107	D0GB472JA065	4.7K	1/10W	1	
	R6108	D0GB102JA065	1K	1/10W	1	
	R6109	D0GB102JA065	1K	1/10W	1	
	R6111	D0GB103JA065	10K	1/10W	1	
	R6112	D0GB102JA065	1K	1/10W	1	
	R6113	D0GB102JA065	1K	1/10W	1	
	R6114	D0GBR00J0004	0	1/10W	1	
	R6117	D0GB103JA065	10K	1/10W	1	
	R6118	D0GB103JA065	10K	1/10W	1	
	R6148	D0GB473JA065	47K	1/10W	1	
	R6149	D0GB473JA065	47K	1/10W	1	
	R6150	D0GB103JA065	10K	1/10W	1	
	R6151	D0GB103JA065	10K	1/10W	1	
	R6401	D0GB474JA065	470K	1/10W	1	
	R6402	D0GB474JA065	470K	1/10W	1	
	R6801	D0GB151JA065	150	1/10W	1	AKX880
	R6801	D0GB271JA065	270	1/10W	1	AKX660
	R6802	D0GB473JA065	47K	1/10W	1	
	R6803	D0GB100JA065	10	1/10W	1	
	R6804	D0GB220JA065	22	1/10W	1	
	R6805	D0GB151JA065	150	1/10W	1	
	R6805	D0GB271JA065	270	1/10W	1	AKX660
	R6806	D0GD473JA052	47K	1/8W	1	
	R6809	D0GB561JA065	560	1/10W	1	AKX880
	R6809	D0GB821JA065	820	1/10W	1	AKX660
	R6810	D0GF390JA048	39	1/4W	1	
	R6811	D0GF390JA048	39	1/4W	1	
	R6812	D0GB101JA065	100	1/10W	1	
	R6813	D0GB101JA065	100	1/10W	1	
	R6814	D0GB101JA065	100	1/10W	1	
	R6815	D0GB272JA065	2.7K	1/10W	1	
	R6816	D0GB472JA065	4.7K	1/10W	1	
	R6817	D0GB223JA065	22K	1/10W	1	
	R6818	D0GB473JA065	47K	1/10W	1	
	R6820	D0GBR00J0004	0	1/10W	1	
	R6822	D0GD104JA052	100K	1/8W	1	
	R6823	D0GB561JA065	560	1/10W	1	AKX880
	R6823	D0GB821JA065	820	1/10W	1	AKX660
	R6824	D0GB151JA065	150	1/10W	1	AKX880
	R6824	D0GB471JA065	470	1/10W	1	AKX660
	R6825	D0GB151JA065	150	1/10W	1	AKX880
	R6825	D0GB471JA065	470	1/10W	1	AKX660

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R6826	D0GBR00J0004	0 1/10W	1	
	R6829	D0GBR00J0004	0 1/10W	1	
	R9001	D0GB222JA065	2.2K 1/10W	1	
	R9002	D0GB392JA065	3.9K 1/10W	1	
	R9003	D0GB222JA065	2.2K 1/10W	1	
	R9004	D0GB183JA065	18K 1/10W	1	
	R9006	D0GB272JA065	2.7K 1/10W	1	
	R9007	D0GB392JA065	3.9K 1/10W	1	
	R9008	D0GB331JA065	330 1/10W	1	
	R9009	D0GB104JA065	100K 1/10W	1	
	R9010	D0GB331JA065	330 1/10W	1	
	R9011	D0GB104JA065	100K 1/10W	1	
	R9012	D0GB222JA065	2.2K 1/10W	1	
	R9013	D0GDR00J0004	0 1/8W	1	
	R9020	D0GAR00J0005	0 1/16W	1	
	R9021	D0GAR00J0005	0 1/16W	1	
	R9022	D0GAR00J0005	0 1/16W	1	
	R9023	D0GAR00J0005	0 1/16W	1	
	R9024	D0GB333JA065	33K 1/10W	1	
	R9025	D0GB333JA065	33K 1/10W	1	
	R9028	D1BB7501A074	7.5K 1/10W	1	
	R9029	D0GB183JA065	18K 1/10W	1	
	R9030	D0GB272JA065	2.7K 1/10W	1	
	R9031	D0GB123JA065	12K 1/10W	1	
	R9032	D0GB392JA065	3.9K 1/10W	1	
	R9033	D1BB7501A074	7.5K 1/10W	1	
	R9034	D1BB7501A074	7.5K 1/10W	1	
	R9035	D0GB183JA065	18K 1/10W	1	
	R9039	D0GB123JA065	12K 1/10W	1	
	R9040	D0GB223JA065	22K 1/10W	1	
	R9041	D0GB223JA065	22K 1/10W	1	
	R9044	D0GBR00J0004	0 1/10W	1	
	R9045	D0GBR00J0004	0 1/10W	1	
	R9047	D0GBR00J0004	0 1/10W	1	
	R9048	D0GBR00J0004	0 1/10W	1	
	R9049	D0GBR00J0004	0 1/10W	1	
	R9050	D0GBR00J0004	0 1/10W	1	
	R9051	D0GBR00J0004	0 1/10W	1	
	R9052	D0GBR00J0004	0 1/10W	1	
	R9053	D0GBR00J0004	0 1/10W	1	
	R9054	D0GBR00J0004	0 1/10W	1	
	R9055	D0GBR00J0004	0 1/10W	1	
	R9056	D0GBR00J0004	0 1/10W	1	
	R9057	D0GBR00J0004	0 1/10W	1	
			RESISTOR NETWORKS		
	RX2001	D1H84734A042	RESISTOR NETWORK	1	
	RX2002	D1H81014A042	RESISTOR NETWORK	1	
	RX2003	D1H81014A042	RESISTOR NETWORK	1	
	RX2004	D1H8R0040016	RESISTOR NETWORK	1	AKX660
	RX2005	D1H8R0040016	RESISTOR NETWORK	1	AKX660
	RX2006	D1H81034A042	RESISTOR NETWORK	1	AKX660
	RX2007	D1H81014A042	RESISTOR NETWORK	1	AKX880
	RX2008	D1H81014A042	RESISTOR NETWORK	1	AKX660
	RX5001	D1H81034A042	RESISTOR NETWORK	1	
			CAPACITORS		
	C51	F1H1H102B047	1000pF 50V	1	
	C52	F1H1A474A107	0.47uF 10V	1	
	C61	F1H1H104B047	0.1uF 50V	1	
	C62	F1H1H104B047	0.1uF 50V	1	
	C63	F1H1H6R0B050	6.0pF 50V	1	
	C64	F1H1H3R0B050	3.0pF 50V	1	
	C65	F1H1H3R0B050	3.0pF 50V	1	
	C66	F1H1H330B052	33pF 50V	1	
	C67	F1H1H3R0B050	3.0pF 50V	1	
⚠	C1001	F0CAF104A105	0.1uF	1	
	C1001	F1H1C104A178	0.1uF 16V	1	
	C1002	F1G1C104A146	0.1uF 16V	1	
	C1003	F1H1C104A178	0.1uF 16V	1	
	C1004	F1H1C104A178	0.1uF 16V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C1005	F1H1C104A178	0.1uF 16V	1	
⚠	C1006	F0CAF224A105	0.22uF	1	
	C1006	F1H1C104A178	0.1uF 16V	1	
⚠	C1007	F1BAF471A215	470pF	1	
	C1007	F1H1C104A178	0.1uF 16V	1	
⚠	C1008	F1BAF471A215	470pF	1	
	C1008	F1H1C104A178	0.1uF 16V	1	
	C1009	F1H1C104A178	0.1uF 16V	1	
	C1010	F1H0J1060003	10uF 6.3V	1	
	C1011	F1H1C104A178	0.1uF 16V	1	
	C1012	F1G1A224A070	0.22uF 10V	1	
	C1013	F1H1A3350001	3.3uF 10V	1	
	C1014	F2A1C101A243	100uF 16V	1	
	C1015	F1H1C104A178	0.1uF 16V	1	
	C1016	F1G1H681A830	680pF 50V	1	
	C1017	F2A0J331B035	330uF 6.3V	1	
	C1018	F1H1C104A178	0.1uF 16V	1	
	C1019	F1H1C104A178	0.1uF 16V	1	
	C1020	F1H0J1060003	10uF 6.3V	1	
	C1021	F1H0J1060003	10uF 6.3V	1	
	C1022	F1H0J1060003	10uF 6.3V	1	
	C1023	F1H0J1060003	10uF 6.3V	1	
	C1024	F1H0J1060003	10uF 6.3V	1	
	C1025	F1H0J1060003	10uF 6.3V	1	
	C1026	F1H1H9R0A920	9.0pF 50V	1	
	C1027	F1H1H9R0A920	9.0pF 50V	1	
	C1028	F1H1H270B052	27pF 50V	1	
	C1029	F1H1H270B052	27pF 50V	1	
	C1030	F1H1H101B052	100pF 50V	1	
	C1031	F1H1H103B047	0.01uF 50V	1	
	C1032	F1H1H102B047	1000pF 50V	1	
	C1033	F1H1H102B047	1000pF 50V	1	
	C1034	F1H1H102B047	1000pF 50V	1	
	C1035	F1H1H102B047	1000pF 50V	1	
	C1036	F1H1H102B047	1000pF 50V	1	
	C1040	F1H1C104A178	0.1uF 16V	1	
	C1041	F1H1C104A178	0.1uF 16V	1	
	C1042	F1H1C224A178	0.22uF 16V	1	
	C1043	F1H1E223A161	0.022uF 25V	1	
	C1047	F1H1C104A178	0.1uF 16V	1	
	C1048	F1H1H103B047	0.01uF 50V	1	
	C1049	F1H1H102B047	1000pF 50V	1	
	C1201	F0CZZ225A172	2.2uF	1	
	C1201	F1G1H101A834	100pF 50V	1	AKX880
	C1202	F1G1H101A834	100pF 50V	1	AKX880
	C1203	F1G1H101A834	100pF 50V	1	AKX880
	C1203	F1H1H472B047	4700pF 50V	1	
	C1204	F1H0J4750004	4.7uF 6.3V	1	AKX880
	C1206	F1H0J1060003	10uF 6.3V	1	
	C1206	F1H1H103A219	0.01uF 50V	1	
	C1207	F1K1H475A234	4.7uF 50V	1	
	C1208	F1H1H472B047	4700pF 50V	1	
	C1209	F1K1H105A251	1uF 50V	1	
	C1211	F1K2J471A014	470pF 630V		
	C1212	F1H1H102B047	1000pF 50V	1	
	C1214	F1H1H103B047	0.01uF 50V	1	
	C1224	F2B2W2210030	220uF 450V	1	
	C1403	F2A2W150A189	15uF 450V	1	
	C1404	F1H1H104B047	0.1uF 50V	1	
	C1405	F1H1H102B047	1000pF 50V	1	
	C1406	F1K2J102A014	1000pF 630V	1	
	C1407	F1K1H105A251	1uF 50V	1	
	C1408	F2A1H221B436	220uF 25V	1	
⚠	C1409	F1BAF471A215	470pF	1	
	C1411	F1H1H102B047	1000pF 50V	1	
	C1502	F2A1H101A147	100uF 50V	1	
	C1503	F1K1H475A234	4.7uF 25V	1	
	C1504	F1H1H103B047	0.01uF 50V	1	
	C1505	F1H1H104B047	0.1uF 50V	1	
	C1506	F1K1C4750023	4.7uF 16V	1	
	C1507	F1H1H104B047	0.1uF 50V	1	
	C1508	F1J1H152A623	1500pF 50V	1	
	C1509	F1H1H104B047	0.1uF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C1510	F1K1C1060001	10uF 16V	1	
	C1511	F1J1H103A702	0.01uF 50V	1	
	C1512	F1H1H333B047	0.033uF 50V	1	
	C1513	F1B3D221A132	220pF 2000V	1	
	C1514	F1B3D221A132	220pF 2000V	1	
	C1516	F0C2K683A053	0.068uF 800V	1	
⚠	C1518	F1BAF471A215	470pF	1	
	C1601	F2A1E221B422	220uF 25V	1	
	C1602	F1H1H104B047	0.1uF 50V	1	
	C1604	F1K2J471A014	470pF 630V	1	
	C1701	F1H1H103B047	0.01uF 50V	1	
	C1704	F1H1H104A913	0.1uF 50V	1	
	C1706	F2A1H1020067	1000uF 50V	1	
	C1708	F1H1H223B047	0.022uF 50V	1	
	C1710	F1J2E1030004	0.01uF 250V	1	
	C1712	F1J2E1030004	0.01uF 250V	1	
	C1721	F1H1H103B047	0.01uF 50V	1	
	C1762	F1H1H104B047	0.1uF 50V	1	
	C1763	F1H0J1060006	10uF 6.3V	1	
	C1800	D0GDR00J0004	0 1/8W	1	
	C2001	F1H1C104A178	0.1uF 16V	1	
	C2002	F1H1C104A178	0.1uF 16V	1	
	C2003	F1H1C104A178	0.1uF 16V	1	
	C2004	F1H0J4750004	4.7uF 6.3V	1	
	C2005	F1H1C104A178	0.1uF 16V	1	
	C2006	F1H1C104A178	0.1uF 16V	1	
	C2007	F1H1C104A178	0.1uF 16V	1	
	C2008	F1H1C104A178	0.1uF 16V	1	
	C2009	F1H0J1060003	10uF 6.3V	1	
	C2010	F1H1A105A113	1uF 10V	1	
	C2011	F1H1A105A113	1uF 10V	1	
	C2012	F1H1C104A178	0.1uF 16V	1	
	C2013	F1H1C104A178	0.1uF 16V	1	
	C2022	F1G1C104A146	0.1uF 16V	1	
	C2023	F1G1C104A146	0.1uF 16V	1	
	C2100	F1J1A106A043	10uF 10V	1	
	C2101	F1J1A106A043	10uF 10V	1	
	C2102	F1H1H104B047	0.1uF 50V	1	
	C2104	F1J1A106A043	10uF 10V	1	
	C2107	F2A1E102B396	1000uF 25V	1	
	C2108	F1J1A106A043	10uF 10V	1	
	C2113	F2A0J101B034	100uF 6.3V	1	
	C2115	F2A1E330B389	33uF 25V	1	
	C2117	F1H1H104B047	0.1uF 50V	1	
	C2118	F1H1E105A153	1uF 25V	1	
	C2121	F1J1A106A043	10uF 10V	1	
	C2124	F2A0J470A013	47uF 6.3V	1	
	C2126	F1H1H104B047	0.1uF 50V	1	
	C2129	F1H1E105A153	1uF 25V	1	
	C2130	F2A0J101B034	100uF 6.3V	1	
	C2131	F1H1E105A153	1uF 25V	1	
	C2132	F2A0J470A013	47uF 6.3V	1	
	C2133	F1H1H103B047	0.01uF 50V	1	
	C2134	F1H1H103B047	0.01uF 50V	1	
	C2135	F2A1E221B422	220uF 25V	1	
	C2136	F1H1H103B047	0.01uF 50V	1	
	C2137	F2A1H3320022	3300uF 50V	1	
	C2138	F1H1H104B047	0.1uF 50V	1	
	C2139	F1H1H103B047	0.01uF 50V	1	
	C2140	F1H1H561B052	560pF 50V	1	
	C2142	F1J1E1060005	10uF 25V	1	
	C2143	F2A0J102A247	1000uF 6.3V	1	
	C2144	F1H1H104B047	0.1uF 50V	1	
	C2145	F1H1H104B047	0.1uF 50V	1	
	C2149	F1J1E1060005	10uF 25V	1	
	C2150	F1H1H103B047	0.01uF 50V	1	
	C2151	F1G1H103A835	0.01uF 50V	1	
	C2152	F1H1H104B047	0.1uF 50V	1	
	C2153	F1G1H561A541	560pF 50V	1	
	C2155	F2A1A1010024	100uF 10V	1	
	C2164	F1H1A105A113	1uF 10V	1	
	C2165	F1H1A105A113	1uF 10V	1	
	C2167	F1J1A106A043	10uF 10V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C2168	F1J1A106A043	10uF 10V	1	
	C2174	F1H1H104B047	0.1uF 50V	1	
	C2176	F1H1H104B047	0.1uF 50V	1	
	C2177	F1H1H104B047	0.1uF 50V	1	
	C2179	F1H1H104B047	0.1uF 50V	1	
	C2180	F1H1H104B047	0.1uF 50V	1	
	C2181	F1H1H104B047	0.1uF 50V	1	
	C2182	F1H1H104B047	0.1uF 50V	1	
	C2183	F1H1H104B047	0.1uF 50V	1	
	C2188	F2A1H220B411	22uF 50V	1	
	C2189	F2A1H220B411	22uF 50V	1	
	C2190	F1H1H102B047	1000pF 50V	1	
	C2507	F1H1H103B047	0.01uF 50V	1	
	C2512	F1H1H102A831	1000pF 50V	1	
	C2513	F1H1H102A831	1000pF 50V	1	
	C2534	F1H1C104A178	0.1uF 16V	1	AKX880
	C2535	F1H1C104A178	0.1uF 16V	1	AKX880
	C2536	F1H1C104A178	0.1uF 16V	1	AKX880
	C2537	F1H1C104A178	0.1uF 16V	1	AKX880
	C3000	F2A1C101A243	100uF 16V	1	
	C3001	F1J1C106A224	10uF 16V	1	
	C3002	F1H1H104B047	0.1uF 50V	1	
	C3003	F1H1H104B047	0.1uF 50V	1	
	C3004	F1H1H105B027	1uF 50V	1	
	C3005	F1H1H104B047	0.1uF 50V	1	
	C3006	F1H1H104B047	0.1uF 50V	1	
	C3007	F1H1H104B047	0.1uF 50V	1	
	C3008	F1H1H333B047	0.033uF 50V	1	
	C3009	F1H1H333B047	0.033uF 50V	1	
	C3010	F1H1H104B047	0.1uF 50V	1	
	C3011	F1K1H105A250	1uF 50V	1	
	C3012	F1K1H105A250	1uF 50V	1	
	C3018	F1H1H104B047	0.1uF 50V	1	
	C3019	F1K1H105A250	1uF 50V	1	
	C3020	F1K1H105A250	1uF 50V	1	
	C3026	F1H1H333B047	0.033uF 50V	1	
	C3027	F1H1H333B047	0.033uF 50V	1	
	C3100	F1J1C1060006	10uF 16V	1	
	C3101	F1H1H104B047	0.1uF 50V	1	
	C3102	F1H1H104B047	0.1uF 50V	1	
	C3103	F1H1H105B027	1uF 50V	1	
	C3104	F1H1H104B047	0.1uF 50V	1	
	C3105	F1H1H104B047	0.1uF 50V	1	
	C3106	F1H1H104B047	0.1uF 50V	1	
	C3107	F1H1H333B047	0.033uF 50V	1	
	C3108	F1H1H333B047	0.033uF 50V	1	
	C3111	F1H1H104B047	0.1uF 50V	1	
	C3112	F1K1H105A250	1uF 50V	1	
	C3113	F1K1H105A250	1uF 50V	1	
	C3117	F1H1H104B047	0.1uF 50V	1	
	C3118	F1K1H105A250	1uF 50V	1	
	C3119	F1K1H105A250	1uF 50V	1	
	C3122	F1H1H333B047	0.033uF 50V	1	
	C3123	F1H1H333B047	0.033uF 50V	1	
	C3200	F1J1C1060006	10uF 16V	1	
	C3201	F1H1H104B047	0.1uF 50V	1	
	C3202	F1H1H104B047	0.1uF 50V	1	
	C3203	F1H1H105B027	1uF 50V	1	
	C3204	F1H1H104B047	0.1uF 50V	1	
	C3205	F1H1H104B047	0.1uF 50V	1	
	C3206	F1H1H104B047	0.1uF 50V	1	
	C3207	F1H1H333B047	0.033uF 50V	1	
	C3208	F1H1H333B047	0.033uF 50V	1	
	C3211	F1H1H104B047	0.1uF 50V	1	
	C3212	F1K1H105A250	1uF 50V	1	
	C3213	F1K1H105A250	1uF 50V	1	
	C3217	F1H1H104B047	0.1uF 50V	1	
	C3218	F1K1H105A250	1uF 50V	1	
	C3219	F1K1H105A250	1uF 50V	1	
	C3222	F1H1H333B047	0.033uF 50V	1	
	C3223	F1H1H333B047	0.033uF 50V	1	
	C3301	F1J1C106A059	10uF 16V	1	AKX880
	C3302	F1H1H104B047	0.1uF 50V	1	AKX880

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C3303	F1H1H104B047	0.1uF 50V	1	AKX880
	C3304	F1H1H105B027	1uF 50V	1	AKX880
	C3305	F1H1H104B047	0.1uF 50V	1	AKX880
	C3306	F1H1H104B047	0.1uF 50V	1	AKX880
	C3307	F1H1H104B047	0.1uF 50V	1	AKX880
	C3308	F1H1H333B055	0.033uF 50V	1	AKX880
	C3309	F1H1H333B055	0.033uF 50V	1	AKX880
	C3310	F1H1H104B047	0.1uF 50V	1	AKX880
	C3311	F1K1H105A250	1uF 50V	1	AKX880
	C3312	F1K1H105A250	1uF 50V	1	AKX880
	C3318	F1H1H104B047	0.1uF 50V	1	AKX880
	C3319	F1K1H105A250	1uF 50V	1	AKX880
	C3320	F1K1H105A250	1uF 50V	1	AKX880
	C3326	F1H1H333B055	0.033uF 50V	1	AKX880
	C3327	F1H1H333B055	0.033uF 50V	1	AKX880
	C3502	F1H1H104B047	0.1uF 50V	1	
	C3503	F1H1H104B047	0.1uF 50V	1	
	C3504	F1H1H104B047	0.1uF 50V	1	
	C3506	F1H1H104B047	0.1uF 50V	1	
	C3508	F1H1H104B047	0.1uF 50V	1	
	C3509	F1H1H104B047	0.1uF 50V	1	
	C3510	F1H1H104B047	0.1uF 50V	1	
	C3511	F1H1H104B047	0.1uF 50V	1	
	C3512	F1H1H104B047	0.1uF 50V	1	AKX880
	C3513	F1H1H104B047	0.1uF 50V	1	AKX880
	C3522	F1H1H103B047	0.01uF 50V	1	
	C3523	F1H1H103B047	0.01uF 50V	1	
	C3526	F1H1H103B047	0.01uF 50V	1	
	C3527	F1H1H103B047	0.01uF 50V	1	
	C3534	F1H1H103B047	0.01uF 50V	1	
	C3535	F1H1H103B047	0.01uF 50V	1	
	C3538	F1H1H103B047	0.01uF 50V	1	
	C3539	F1H1H103B047	0.01uF 50V	1	
	C3542	F1H1H103B047	0.01uF 50V	1	AKX880
	C3543	F1H1H103B047	0.01uF 50V	1	AKX880
	C3548	D0GBR00J0004	0 1/10W	1	
	C3549	F1J1A106A043	10uF 10V	1	
	C3550	F1J1A106A043	10uF 10V	1	
	C3551	F1H1E105A153	1uF 25V	1	
	C3552	F2A1H220C309	22uF 50V	1	AKX880
	C3552	J0JKB0000020	INDUCTOR	1	AKX660
	C3553	F2A1H220C309	22uF 50V	1	AKX880
	C3553	J0JKB0000020	INDUCTOR	1	AKX660
	C3557	F0A1H105A095	1uF 50V	1	AKX880
	C3558	F0A1H105A095	1uF 50V	1	AKX880
	C3559	F0A1H474A095	0.47uF 50V	1	AKX660
	C3560	F0A1H105A095	1uF 50V	1	
	C3561	F0A1H105A095	1uF 50V	1	
	C3562	F0A1H105A095	1uF 50V	1	
	C3563	F0A1H105A095	1uF 50V	1	
	C3565	F0A1H105A095	1uF 50V	1	AKX880
	C3566	F0A1H105A095	1uF 50V	1	AKX880
	C3567	F0A1H474A095	0.47uF 50V	1	AKX660
	C3570	F0A1H474A095	0.47uF 50V	1	AKX880
	C4001	F1H1H101B052	100pF 50V	1	
	C4002	F1H0J105A051	1uF 6.3V	1	
	C4003	F1H0J105A051	1uF 6.3V	1	
	C4004	F1H1C474A178	0.47uF 16V	1	
	C4005	F1H1H120B052	12pF 50V	1	
	C4006	F1H1H120B052	12pF 50V	1	
	C4007	F1H0J105A051	1uF 6.3V	1	
	C4008	F1H1H103B047	0.01uF 50V	1	
	C4009	F1H1H103B047	0.01uF 50V	1	
	C4010	F1H1H102B047	1000pF 50V	1	
	C4011	F1H1H102B047	1000pF 50V	1	
	C4012	F1G1H470A834	47pF 50V	1	
	C4013	F1G1H470A834	47pF 50V	1	
	C4015	F1H0J1060012	10uF 6.3V	1	
	C4017	F1H0J1060012	10uF 6.3V	1	
	C4018	F2A0J470A013	47uF 6.3V	1	
	C4021	F1H1H101B052	100pF 50V	1	
	C4022	F2A1E221B422	220uF 25V	1	
	C4041	F1H1H473A748	0.047uF 50V	1	AKX880

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C4042	F1H1H473A748	0.047uF 50V	1	AKX880
	C4582	F1H1A105A113	1uF 10V	1	AKX880
	C5007	F1H1H222A219	2200pF 50V	1	
	C5008	F1H1H222A219	2200pF 50V	1	
	C5009	F1J1A106A043	10uF 10V	1	
	C5010	F1H1H103B047	0.01uF 50V	1	
	C5011	F1H1C104A178	0.1uF 16V	1	
	C5012	F1H1H102B047	1000pF 50V	1	
	C5013	F1H1H101B052	100pF 50V	1	
	C5014	F1H1H100B051	10pF 50V	1	
	C5015	F1H1H100B051	10pF 50V	1	
	C5016	F1H1H100B051	10pF 50V	1	
	C5018	F1H1H103B047	0.01uF 50V	1	
	C5019	F2A1A1010024	100uF 10V	1	
	C5020	F2A0J101A208	100uF 6.3V	1	
	C5021	F2A0J101A208	100uF 6.3V	1	
	C5022	F1H1H680B052	68pF 50V	1	
	C5101	F1H1C104A008	0.1uF 16V	1	
	C5102	F1H1C104A008	0.1uF 16V	1	
	C5103	F1H1C104A008	0.1uF 16V	1	
	C5104	F1H1C104A008	0.1uF 16V	1	
	C5114	F1G1H101A834	100pF 50V	1	
	C5115	F1G1H101A834	100pF 50V	1	
	C5116	F1G1H101A834	100pF 50V	1	
	C5117	F1G1H102A830	1000pF 50V	1	
	C5118	F1G1H101A834	100pF 50V	1	
	C5119	F1G1H102A830	1000pF 50V	1	
	C5120	F1G1H102A830	1000pF 50V	1	
	C5121	F1G1H101A834	100pF 50V	1	
	C5122	F1G1H101A834	100pF 50V	1	
	C6000	F1H1H104B047	0.1uF 50V	1	AKX880
	C6101	F1H1C104A178	0.1uF 16V	1	
	C6102	F1H1H561B052	560pF 50V	1	
	C6103	F1H1H561B052	560pF 50V	1	
	C6106	F1H1A105A113	1uF 10V	1	
	C6107	F1H1A105A113	1uF 10V	1	
	C6108	F1H1A105A113	1uF 10V	1	
	C6109	F1H1A105A113	1uF 10V	1	
	C6110	F1J1C1060006	10uF 16V	1	
	C6120	F1H1H221B047	220pF 50V	1	
	C6121	F1H1H221B047	220pF 50V	1	
	C6122	F1H1A105A113	1uF 10V	1	
	C6123	F1H1A105A113	1uF 10V	1	
	C6217	F1H1A105A113	1uF 10V	1	
	C6317	F1H1H102B047	1000pF 50V	1	
	C6318	F1H1H331B052	330pF 50V	1	
	C6319	F1H1H331B052	330pF 50V	1	
	C6320	F1H1H101B052	100pF 50V	1	
	C6321	F1H1H101B052	100pF 50V	1	
	C6400	F1H1H104B047	0.1uF 50V	1	
	C6401	F1H1H104B047	0.1uF 50V	1	
	C6801	F1H1A105A113	1uF 10V	1	
	C6802	F1J1H105A918	1uF 50V	1	
	C6803	F1H1E105A153	1uF 25V	1	
	C6804	F1H1E105A153	1uF 25V	1	
	C6805	F1J1E105A287	1uF 25V	1	AKX660
	C6806	F2A1H470B412	47uF 50V	1	
	C6807	F1H1E105A153	1uF 25V	1	
	C6808	F1H1E105A153	1uF 25V	1	
	C6816	F1H1H104B047	0.1uF 50V	1	
	C6817	F2A0J101A208	100uF 6.3V	1	
	C6820	F1H1A105A113	1uF 10V	1	
	C6821	F2A0J101A208	100uF 6.3V	1	
	C6822	F1H1H101B052	100pF 50V	1	
	C6823	F1H1H101B052	100pF 50V	1	
	C6824	F1H1H101B052	100pF 50V	1	
	C6825	F1H1H101B052	100pF 50V	1	
	C6830	F1H1H101B052	100pF 50V	1	
	C6831	F1H1H102B047	1000pF 50V	1	
	C6832	F1J1A106A043	10uF 10V	1	
	C7701	F1G1C104A146	0.1uF 16V	1	
	C9001	F1H1C104A178	0.1uF 16V	1	
	C9002	F1H1C104A178	0.1uF 16V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C9003	F1H1C104A178	0.1uF 16V	1	
	C9004	F1H1C104A178	0.1uF 16V	1	
	C9005	F1H1C104A178	0.1uF 16V	1	