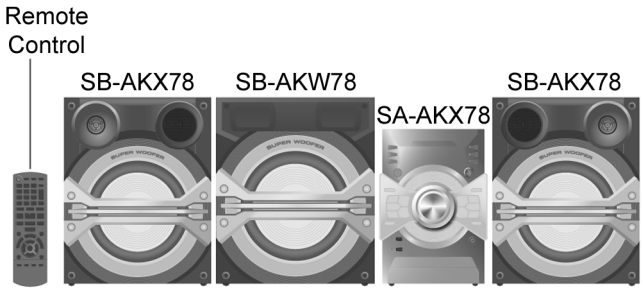
PSG1403011CE

Service Manual

CD Stereo System

Model No. SA-AKX58PH
SA-AKX58PN
SA-AKX58GN
SA-AKX78PH
SA-AKX78PN

The illustration shows SC-AKX78.



Product Color: (K)...Black Type

Please refer to the original service manual for:
- **CD Mechanism Unit, Order No. PSG1303059AE**
- **Speaker system SB-AKX78PN-K, Order No. PSG1403012CE**
- **Speaker system SB-AKW78PN-K, Order No. PSG1403012CE (For AKX78)**

⚠ WARNING

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

IMPORTANT SAFETY NOTICE

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

TABLE OF CONTENTS

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.

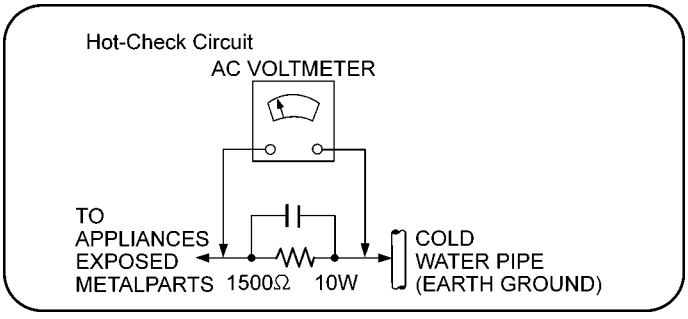


Figure 1-1

1.2. Before Use (For PH only)

Be sure to disconnect the mains cord before adjusting the voltage selector as shown in Figure 1-2.
Use a minus(-) screwdriver to set the voltage selector (on the rear panel) to the voltage setting for the area in which the unit will be used.
Note that this unit will be seriously damaged if this setting is not made correctly. (There is no voltage selector for some countries, the correct voltage is already set.)

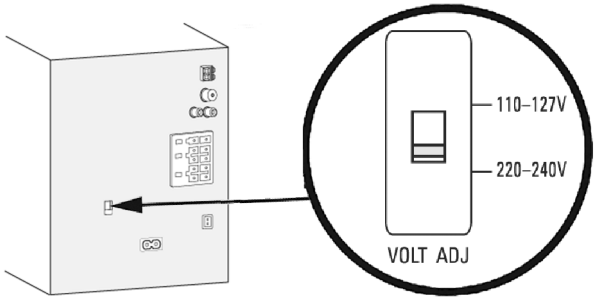


Figure 1-2

1.3. Before Repair and Adjustment

Disconnect AC power to discharge AC capacitor as indicate below diagram through a 10 Ω, 10 W resistor to ground.

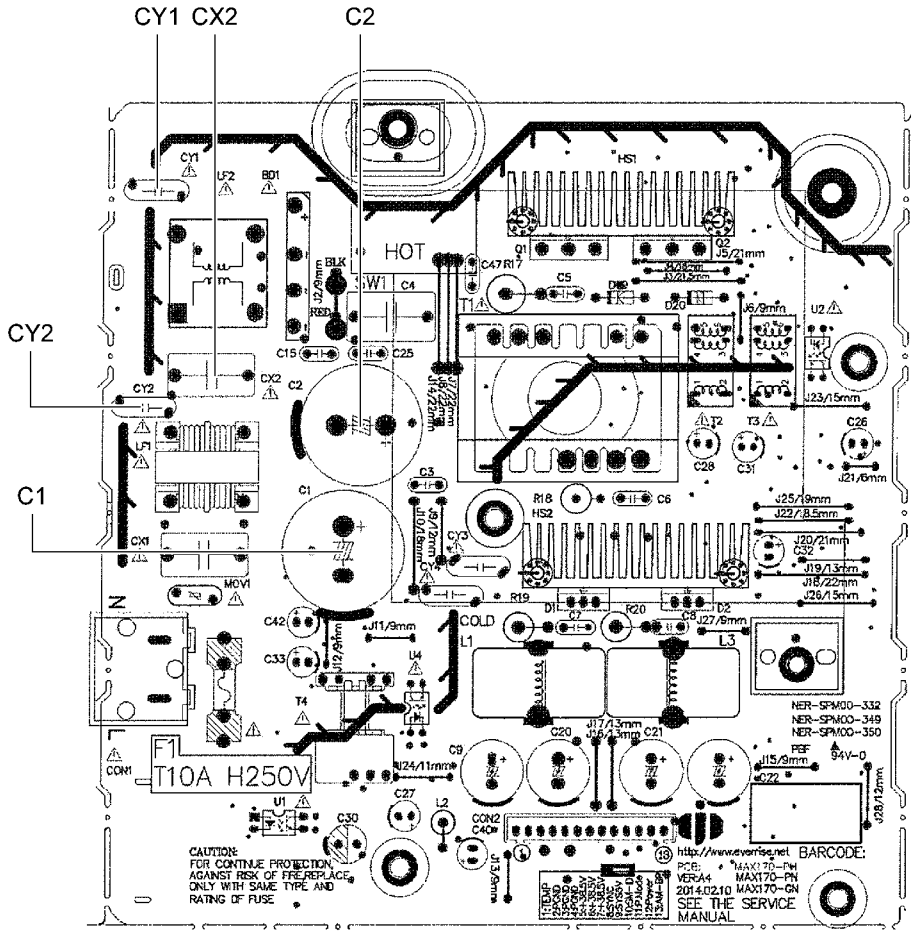


Figure 1-3

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 110~127 V / 220~240 V, 50/60 Hz during Power ON, in FM mode at volume minimal should be ~ 750 mA (PH).
Current consumption at AC 120 V, 60 Hz during Power ON, in FM mode at volume minimal should be ~ 750 mA (PN).
Current consumption at AC 220~240 V, 50 Hz during Power ON, in FM mode at volume minimal should be ~ 750 mA (GN).

1.4. 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.

1.5. Power Supply using SMPS

This model uses Switching Mode Power Supply (SMPS) to provide the power supply to the unit. Here is the supplied part no. for the SMPS Module
1) N0AB2GP00001 (For PN)
2) N0AD2GP00001 (For PH)
3) N0AC2GP00001 (For GN)

1.5.1. For PN

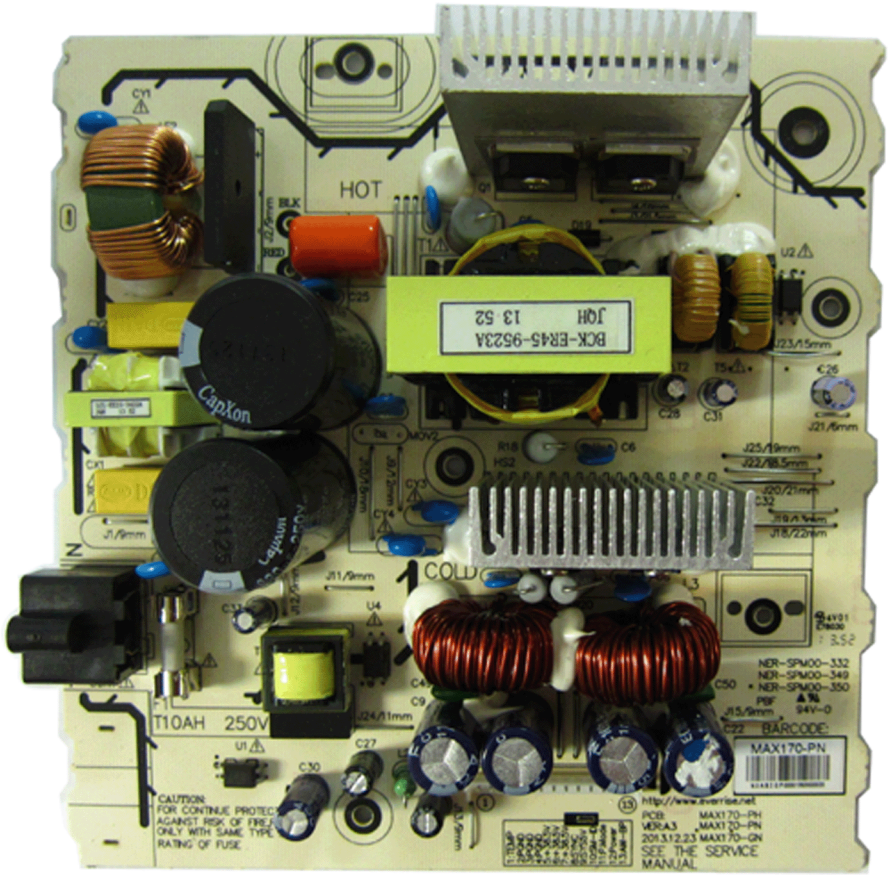


Figure 1-4

1.5.2. For PH

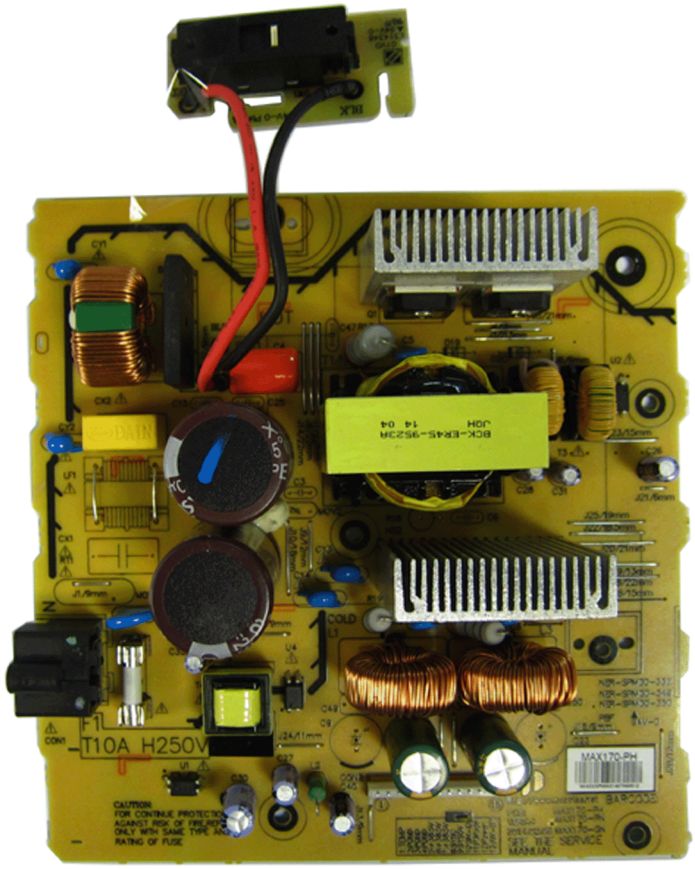


Figure 1-5

1.5.3. For GN

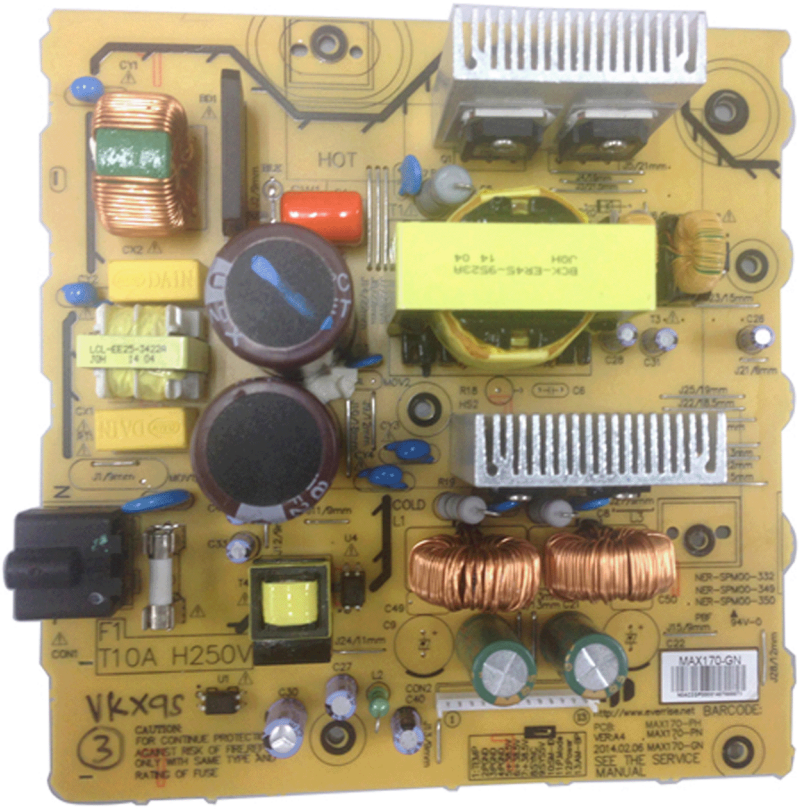


Figure 1-6

1.6. 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
⚠	13	RGR0443E-D1A	REAR PANEL	AKX78PN
⚠	13	RGR0443R-AA	REAR PANEL	AKX58PH
⚠	13	RGR0443S-AA	REAR PANEL	AKX78PH
⚠	13	RGR0443U-A1A	REAR PANEL	AKX58PN
⚠	13	RGR0443U-BA	REAR PANEL	AKX58GN
⚠	25	RKM0713-K1	TOP CABINET	
⚠	301	RAE1044Z-V	TRAVERSE UNIT	
⚠	A2	K2CB2CB00022	AC CORD	AKX58PN, AKX78PN
⚠	A2	K2CJ2YY00093	AC CORD	AKX58GN
⚠	A2	K2CQ2YY00119	AC CORD	AKX58PH, AKX78PH
⚠	A3	RQT9895-2M	O/I BOOK (En/Sp)	AKX58PH/PN, AKX78PH/PN
⚠	A3	RQT9898-L	O/I BOOK (En)	AKX58GN
⚠	A3	RQT9958-1B	O/I BOOK (En)	AKX58PH/PN, AKX78PH/PN
⚠	PCB7	N0AB2GP00001	SMPS MODULE	AKX58PN, AKX78PN
⚠	PCB7	N0AC2GP00001	SMPS MODULE	AKX58GN
⚠	PCB7	N0AD2GP00001	SMPS MODULE	AKX58PH, AKX78PH

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).

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.

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.

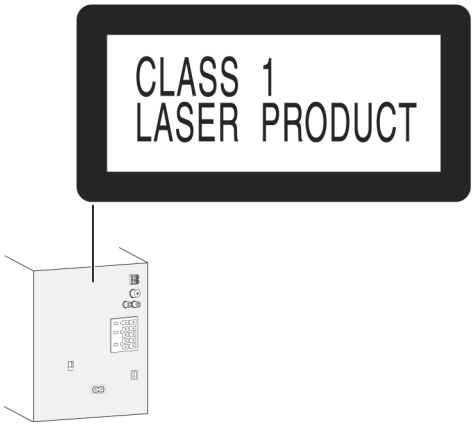


Figure 2-1

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.

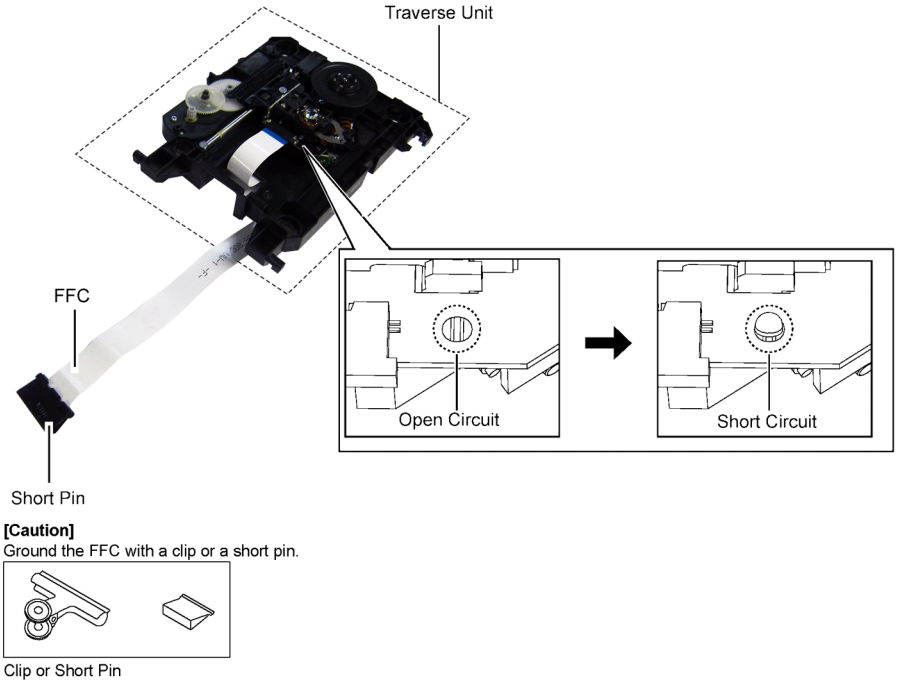


Figure 2-2

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.

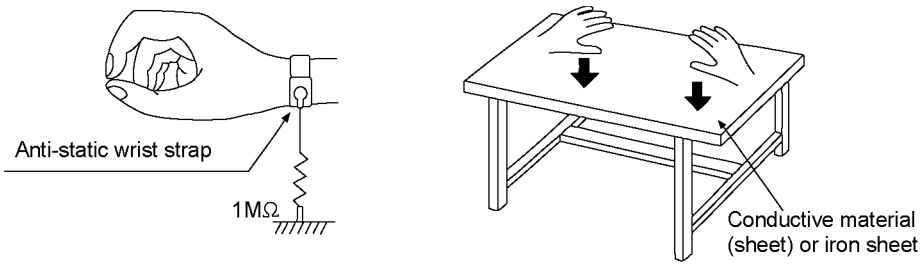


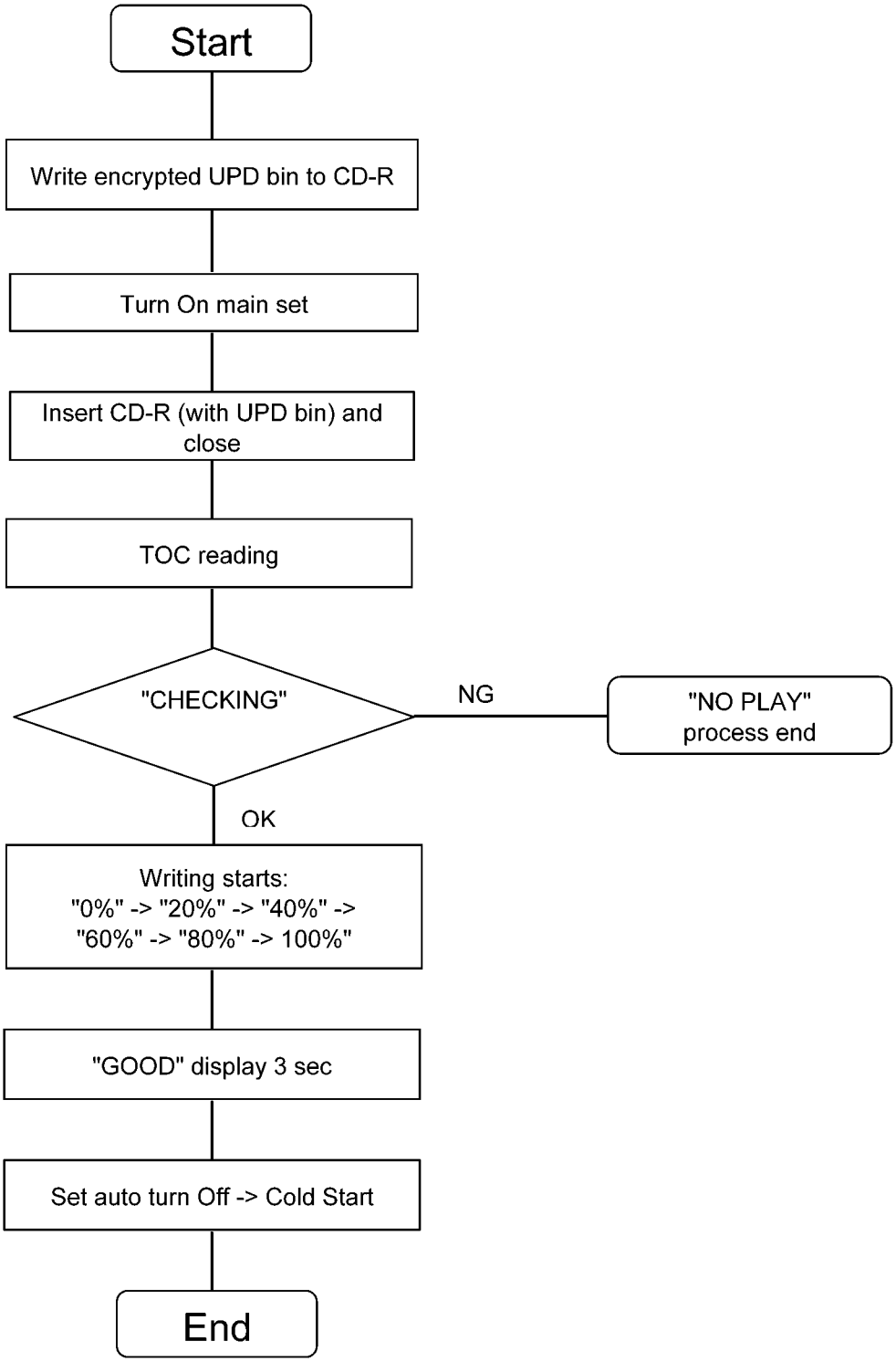
Figure 2-3

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. Firmware Update Procedure



4 Specifications

■ Amplifier section

RMS output power stereo mode

Front Ch (high)	270 W per channel (3 Ω), 1 kHz, 30% THD (SA-AKX78)
	300 W per channel (3 Ω), 1 kHz, 30% THD (SA-AKX58)
Front Ch (low)	420 W per channel (2 Ω), 100 Hz, 30% THD (SA-AKX78)
	450 W per channel (2 Ω), 100 Hz, 30% THD (SA-AKX58)
Subwoofer channel	420 W per channel (2 Ω), 100 Hz, 30% THD (SA-AKX78)
Total RMS stereo mode power	
	1800 W (30% THD) (SA-AKX78)
	1500 W (30% THD) (SA-AKX58)

■ Tuner, terminals section

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

■ Disc section

Discs played (8 cm or 12 cm)	CD, CD-R/RW(CD-DA, MP3*)
Pick up	
Wavelength	790 nm(CD)

* MPEG-1 Layer 3

■ 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 port power	500 mA (max.)

USB recording

Bit rate	128 kbps
USB recording speed	1x, 3x max. (CD only)
Recording file format	MP3 (*.mp3)

■ Internal Memory section

Memory

Memory Size	2 GB
File format support media	MP3 (*.mp3)

Recording internal memory

Bit rate	128 kbps
Write Speed Memory	1x, 3x max. (CD only)
Recording File Format	MP3 (*. Mp3)

■ Bluetooth section

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

■ General

Power supply	AC 110 to 127 V/220 V to 240 V, 50/60 Hz (for PH)
	AC 120 V, 60 Hz (for PN)
Power consumption	138 W (SA-AKX78)
	115 W (SA-AKX58)
Dimensions (W x H x D)	230 mm x 335 mm x 252 mm
Mass	3.7 kg (SA-AKX78)
	3.5 kg (SA-AKX58)
Operating temperature range	0 °C to +40 °C
Operating humidity range	35% to 80% RH (no condensation)
Power Consumption in standby mode	0.4 W (approximate) (for PH)
	0.3 W (approximate) (for PN)
Power Consumption in standby mode (With "STANDBY BLUE-TOOTH" set to "ON")	0.6 W (approximate)

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-AKX58PN-K

Main Unit: SA-AKX58PN-K
Front Speakers: SB-AKX78PN-K

■ System: SC-AKX58PH-K

Main Unit: SA-AKX58PH-K
Front Speakers: SB-AKX78PN-K

■ System: SC-AKX58GN-K

Main Unit: SA-AKX58GN-K
Front Speakers: SB-AKX78PN-K

■ System: SC-AKX78PN-K

Main Unit: SA-AKX78PN-K
Front Speakers: SB-AKX78PN-K
Subwoofer: SB-AKW78PN-K

■ System: SC-AKX78PH-K

Main Unit: SA-AKX78PH-K
Front Speakers: SB-AKX78PN-K
Subwoofer: SB-AKW78PN-K

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 Alphanumeric buttons
To select a 2-digit number
Example: 16: [≧10]→[1]→[6]
To set a character
Example: B: [2]→[2]

③ Delete a programmed track
Delete a selected track in a playlist

④ Select audio source
On the main unit:
To start to pair your Bluetooth®, press and hold [/ MEMORY, –PAIRING] when is a Bluetooth® source.

⑤ Basic playback control

⑥ Select the sound effects
Select the effect of super woofer
On the main unit:
Press and hold [-SUPER WOOFER].
Press [I◄◄/◄◄] or [►►/►►I] to select the configuration.

⑦ Start the title search for internal memory

⑧ View content information
Decrease the brightness of the display panel
Press and hold the button to use this function.
To cancel, press and hold the button again.

⑨ Recording operation control

⑩ Set the play timer and record timer

⑪ Set the clock and timer

⑫ Set the sleep timer
Automatically switch off the system
The auto shut off the system (except when in radio source) if not in use for approximately 20 minutes.
Press and hold the button to use this function.
To cancel, press and hold the button again.

⑬ Set the program function

⑭ Adjust the volume of the system

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

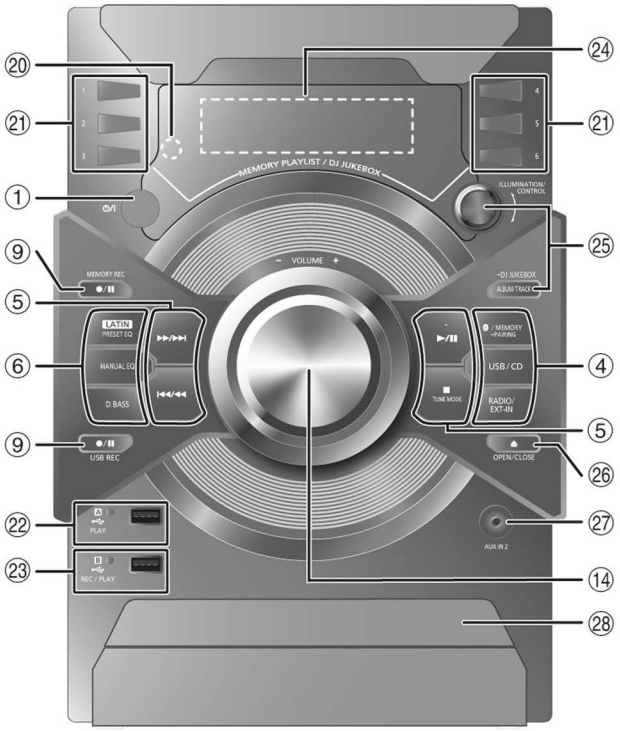
⑯ Set the play menu item

⑰ Internal memory playlist operation

⑱ Select the option

⑲ Set the edit mode to USB B and internal memory

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.

④ Select audio source
On the main unit:
To start to pair your Bluetooth®, press and hold [/ MEMORY, –PAIRING] when is a Bluetooth® source.

⑤ Basic playback control

⑥ Select the sound effects
Select the effect of super woofer
On the main unit:
Press and hold [-SUPER WOOFER].
Press [⏮/◀◀] or [▶▶/⏭] to select the configuration.

⑨ Recording operation control

⑭ Adjust the volume of the system

⑳ **Remote control sensor**
Distance: about 7 m
Angle: About 20 ° upwards and down,
30 ° left and right

㉑ Select the effect of DJ jukebox
Direct buttons playlist internal memory
Click to add track to the playlist number.
Press to select the playlist.

㉒ USB A
USB port (•⇠)
USB status indicator
Play MP3 tracks.
Record MP3 tracks on USB B or internal memory.

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

㉔ Display Panel

㉕ **Select MP3 album or track**
Press [ALBUM / TRACK] to select album or track.
Search track or album
Rotate [CONTROL] to search.
To start playing the selection, press [▶/⏸].
DJ jukebox
Press and hold to select
DJ jukebox.
Illumination
Turn [ILLUMINATION] to select the configuration.

㉖ Open or close the disc tray

㉗ AUX IN 2

㉘ Disc Tray

6 Service Mode

6.1. Cold-Start

Here is the procedure to carry out cold-start or initialize to shipping mode.

1. Unplug AC power cord
2. Press & hold [POWER] button
3. Plug AC power cord while [POWER] button being pressed
   FL Display will show "_ _ _ _ _ _ _ _"
4. Release [POWER] button

6.2. Sales Demonstration Lock Function

6.2.1. Entering into Sales demonstration lock mode

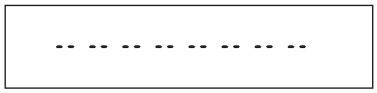
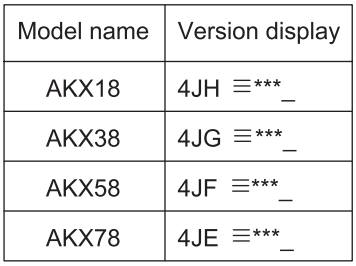
Here is the procedures to enter into the Sales demonstration lock mode.
Step 1: Turn on the unit.
Step 2: Select to any mode function.
Step 3: Press and hold [⏏OPEN/CLOSE] and [CD] keys for 5 sec or more.
The display will show upon entering into this mode for 2 sec..

Note: [⏏OPEN/CLOSE] button is invalid and the main unit displays "LOCKED" while the lock function mode is entered.

6.2.2. Cancellation of Sales demonstration lock mode

Step 1: Turn on the unit.
Step 2: Select to any mode function.
Step 3: Set volume to Vol 19.
Step 4: Press and hold [⏏OPEN/CLOSE] and [CD] keys for 5 sec or more.
The display will show upon entering into this mode for 2 sec..

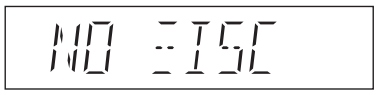
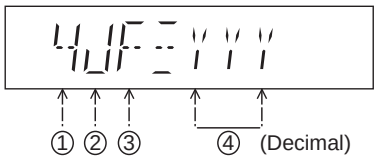
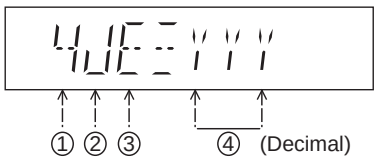
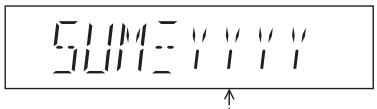
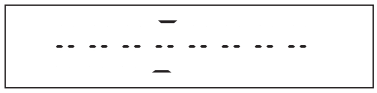
6.3. Service Mode Table

Item		FL display	Key operation
Mode name	**Description**		
Service Mode	To enter into Service Mode checking.		Step 1 : Select CD mode (Ensure no disc is inserted). Step 2 : Press and hold [■] 2 seconds 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 service 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 service mode, Press [0] on remote control more than 5 seconds. To exit, press [⏻/I] on main unit or remote control.
Cold Start	To activate cold start upon next power up. (Backup date are initialized)		Step 1 : In service mode, Press [3] on the remote control. To exit, press [⏻/I] on main unit or remote control.
Opecon Version	Opecon version display	Opecon Version: 	Step 1 : Enter Service Mode, Press [Display] on remote control. To exit, press [⏻/I] on main unit or remote control.

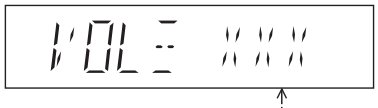
Model name	Version display
AKX18	4JH ☰***_
AKX38	4JG ☰***_
AKX58	4JF ☰***_
AKX78	4JE ☰***_

6.4. Doctor Mode Table

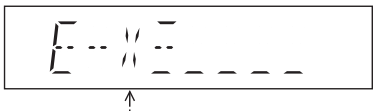
6.4.1. Doctor Mode Table 1

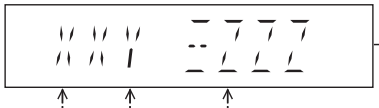
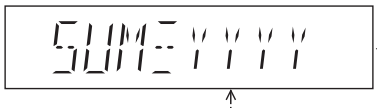
Item		FL Display	Key Operation
Mode Name	Description		Front Key
Doctor Mode	To enter into Doctor Mode		In CD Mode: 1. Press [■] button on main unit follow by [4] and [7] on remote control. 2. To exit, press [DELETE] button on remote control or, press [POWER,⏻/I] button on Main Unit
EEPROM checksum check	Displaying of 1. Year Develop. 2. Model Type. 3. ROM Type. 4. Firmware Version.	(Display 1) (For AKX58)  ① ② ③ ④ (Decimal) (Display 1) (For AKX78)  ① ② ③ ④ (Decimal) Version No. (001 ~ 999) → specific for each firmware (Display 2)  Checksum (Hex)	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 [SLEEP] button on the remote control.

6.4.2. Doctor Mode Table 2

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Volume Setting Check	To check the 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 the 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 the 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 the 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 the 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.

6.4.3. Doctor Mode Table 3

<table>
<tr><th colspan="2">Item</th><th rowspan="2">FL Display</th><th>Key Operation</th></tr>
<tr><th>Mode Name</th><th>Description</th><th>Front Key</th></tr>
<tr><td>CD
Self- Adjustment Test</td><td>To display result of self-adjustment for CD operation.</td><td> 
Display of auto adjustment result
Reference table:
<table>
<tr><th>ERROR Code / Status Condition</th><th>0</th><th>1</th><th>2</th><th>4</th><th>6</th><th>8</th><th>A</th><th>C</th><th>E</th><th>F</th></tr>
<tr><td>AOC1/AOC2</td><td>O</td><td>※</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>-</td></tr>
<tr><td>ABC2/ABC1</td><td>O</td><td>-</td><td>X</td><td>O</td><td>X</td><td>O</td><td>X</td><td>O</td><td>X</td><td>-</td></tr>
<tr><td>2nd AOC1</td><td>O</td><td>-</td><td>O</td><td>X</td><td>X</td><td>O</td><td>O</td><td>X</td><td>X</td><td>-</td></tr>
<tr><td>FAGC/TAGC</td><td>O</td><td>-</td><td>O</td><td>O</td><td>O</td><td>X</td><td>X</td><td>X</td><td>X</td><td>-</td></tr>
<tr><td>AGC2</td><td>O</td><td>-</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>△</td></tr>
</table>
O : OK;
X : NG (In case that time out happens.)
※: Either one of FO AOC, TR AOC and FO coarse AGC is NG.
△: If the AGC is NG (ignore others).</td><td>In Doctor Mode:
1. Press [10]→[1]→[4] button on the remote control.

To cancel this mode, press [0] button on the remote control.</td></tr>
<tr><td>CD LSI Version Check</td><td>To check the CD LSI Version and its checksum.</td><td>(Display 1)
 
ROM Type
Version (Decimal)
Year Develop
after 2 sec
(Display 2)
 
Checksum (Hex)</td><td>In Doctor Mode:
1. Press [4] button on the remote control.

To cancel this mode, press [0] button on the remote control.</td></tr>
<tr><td>Bluetooth Version Check</td><td>Bluetooth module will need some time to power up and read the version display.
Meanwhile [_BT_II----_] will show before the ver. numbers appear.
2s display count should start after flash version number appear.</td><td>  (2 sec)
↓
  (2 sec)
v = flash version (0~7),
w = flash sub version (0~F),
x = control version (0~F),
yyy = EEPROM version (0~255),
zz = EEPROM sub version (0~99),</td><td>1. Go to Bluetooth selector and enter Doctor Mode.
2. Press [10]→[2]→[4] and display will show.</td></tr>
<tr><td>Bluetooth Check</td><td>1. Bluetooth device will start pairing.
2. Once connected it wll autoplay for 5 sec and auto disconect.</td><td></td><td>1. Go to Bluetooth selector and enter Doctor Mode.
2. Press USB[O/II] on remote control.
3. Device will display
SC-MAX250-X,
SC-MAX150-X.
(X = region number)</td></tr>
</table>

6.5. 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 [▶▶/▶▶I] 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 [0] on remote control. To exit, press [⏻/I] on main unit or remote control.

6.6. 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.

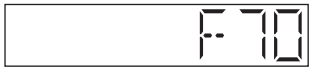
6.6.1. Power Supply Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F61	Power Amp IC output abnormal	Upon power on, PCONT=HIGH, DC_DET_AMP after checking LSI.		Press [■] on main unit for next error.
F76		DC_DET_PWR		
F61-76		Both DCDET (NG)		

6.6.2. CD Mechanism Error Code Table

Error Code	Diagnostic Contents	Description of error	Automatic FL Display	Remarks
CD H15	CD Open Abnormal	During operation POS_SW_R On fail to be detected with 4 sec. Error No. shall be clear by force or during cold start.		Press [■] on main unit for next error.
CD H16	CD Closing Abnormal	During operation POS_SW_CEN On fail to be detected with 4 sec. Error No. shall be clear by force or during cold start.		Press [ ] on main unit for next error.
F26	Communication between CD servo LSI and micro-p abnormal.	During switch to CD function, if SENSE = “L” within failsafe time of 20ms.		Press [ ] on main unit for next error.

6.6.3. Bluetooth Error Code Table

Error Code	Diagnostic Contents	Description of error	Automatic FL Display	Remarks
F70	Bluetooth Communication	Communication between Bluetooth module and micro-p abnormal		Press [■] on main unit for next error.
F77	Bluetooth Address Error	If there is no valid Bluetooth address stored in the EEPROM IC		Press [■] on main unit for next error.

7 Troubleshooting Guide

“Contents for this section is not available at time of issue”

8 Disassembly and Assembly Instructions

- **Illustration is based on SA-AKX78PH-K.**
- **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 this 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.**
- **Be sure to use proper service tools, equipments or jigs during repair.**
- **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. and Music Port P.C.B.
- Disassembly of Bluetooth P.C.B.
- Disassembly of USB P.C.B.
- Disassembly of Rear Panel
- Disassembly of Main P.C.B.
- Disassembly of SMPS P.C.B. and Voltage Selector P.C.B.
- Disassembly of CD Mechanism Unit
- Disassembly of CD Interface P.C.B.

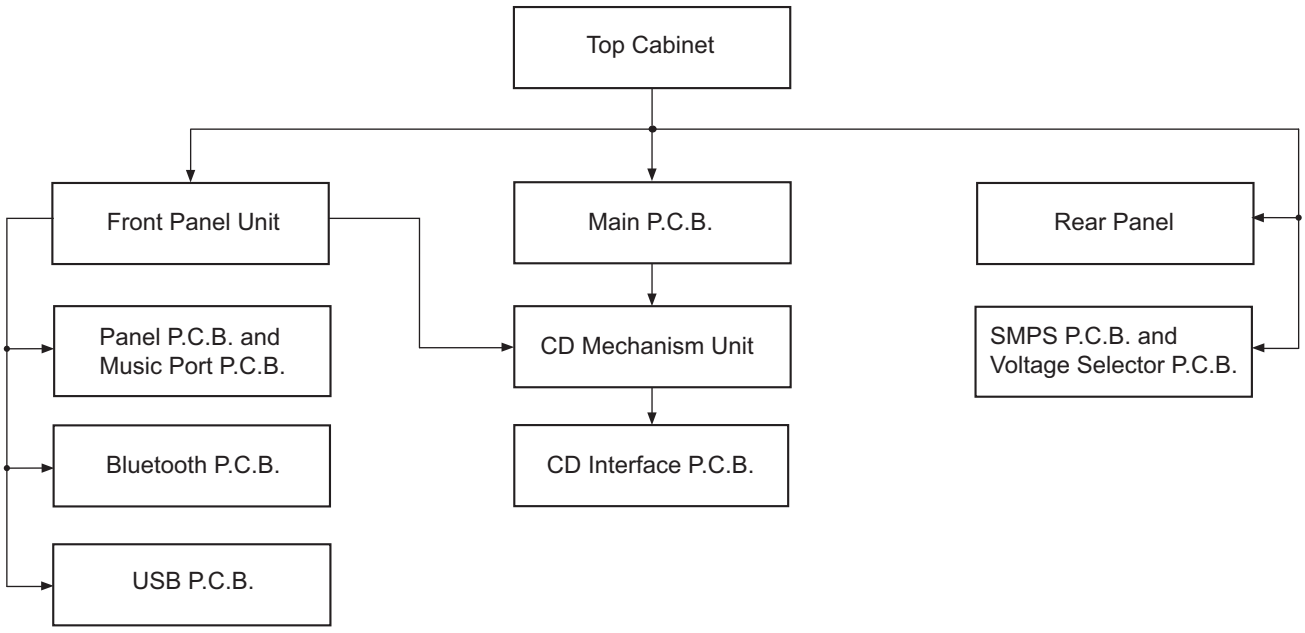
8.1. Type of Screws

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

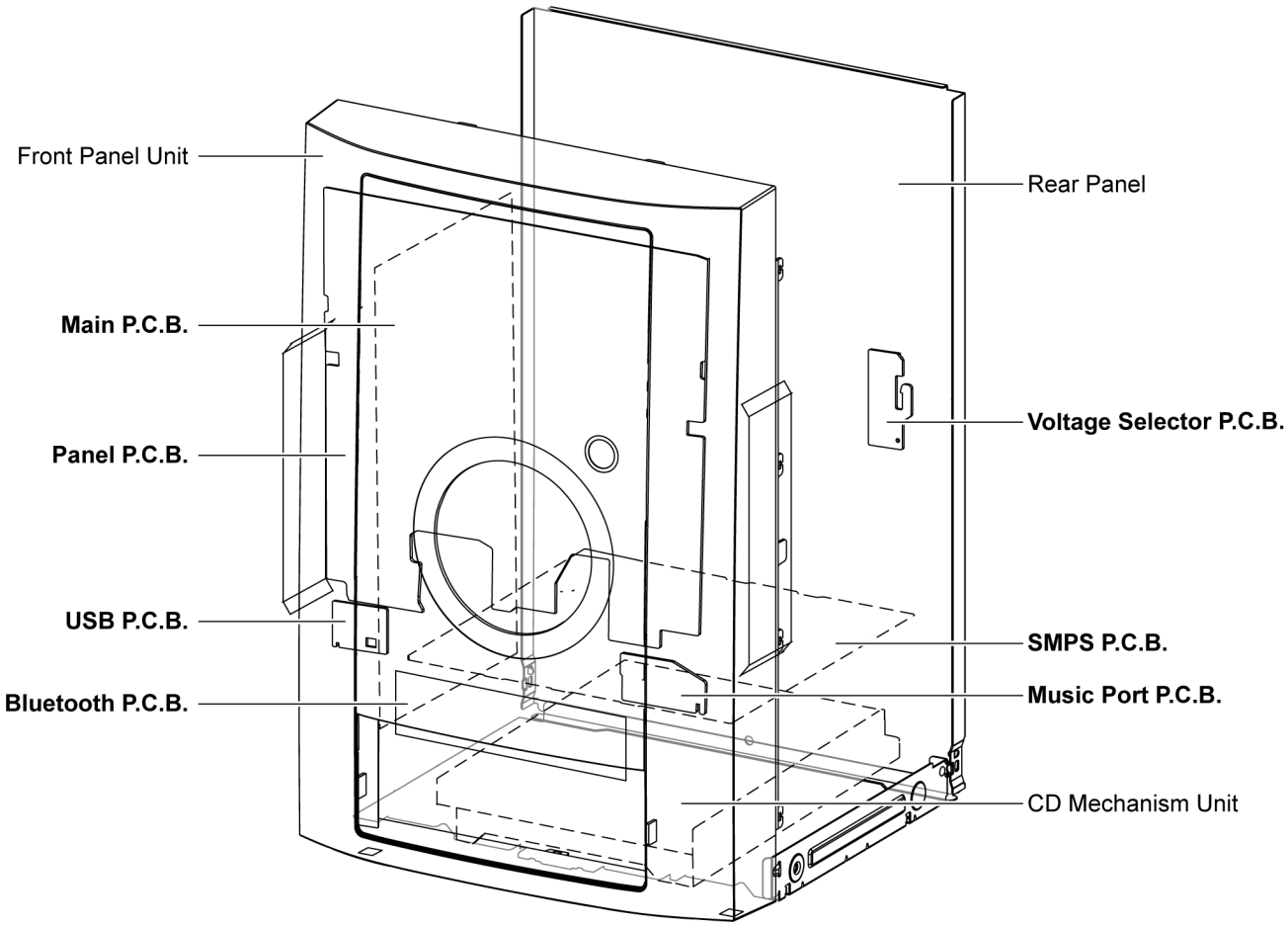
Below shown is part no. of different screw types used:

ⓐ :RHD30007-K2J
ⓑ :RHD30119-S
ⓒ :RHD26046-L
ⓓ :RHD30111-31
ⓔ :RHD26043-1
ⓕ :RHDX031008
ⓖ :XTN2+6GFJ

8.2. Disassembly Flow Chart

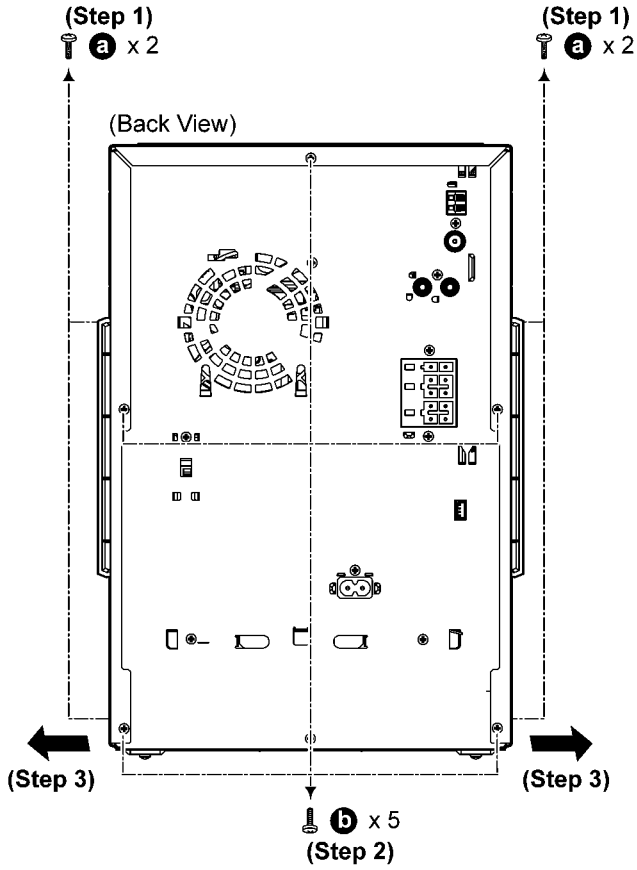


8.3. Main Components and P.C.B. Locations

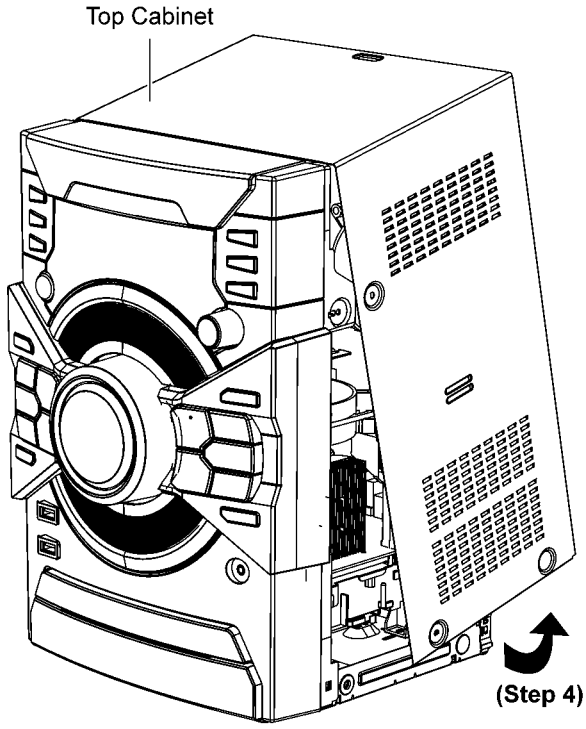


8.4. Disassembly of Top Cabinet

Step 1 Remove 4 screws.
Step 2 Remove 5 screws.
Step 3 Release both sides of Top Cabinet outwards as arrow shown.



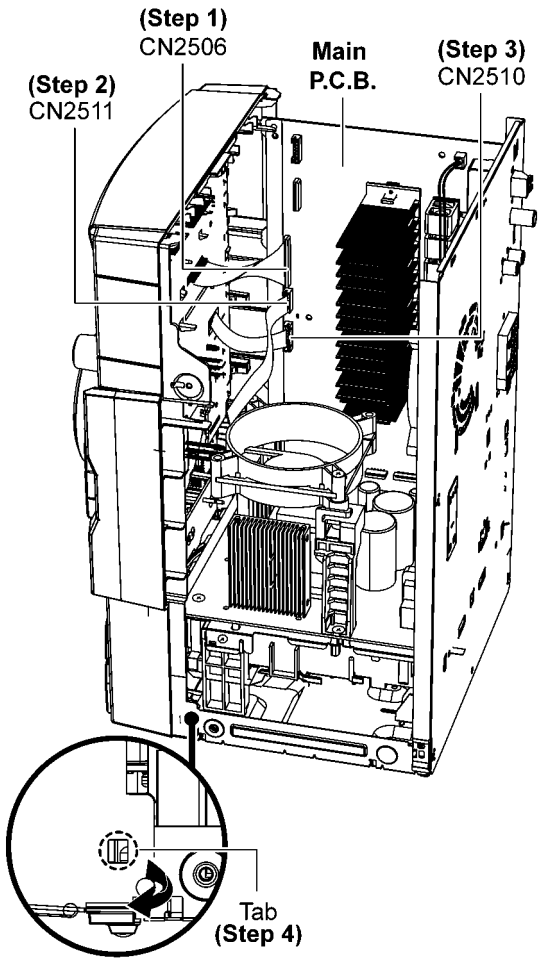
Step 4 Slightly lift up to remove Top Cabinet.



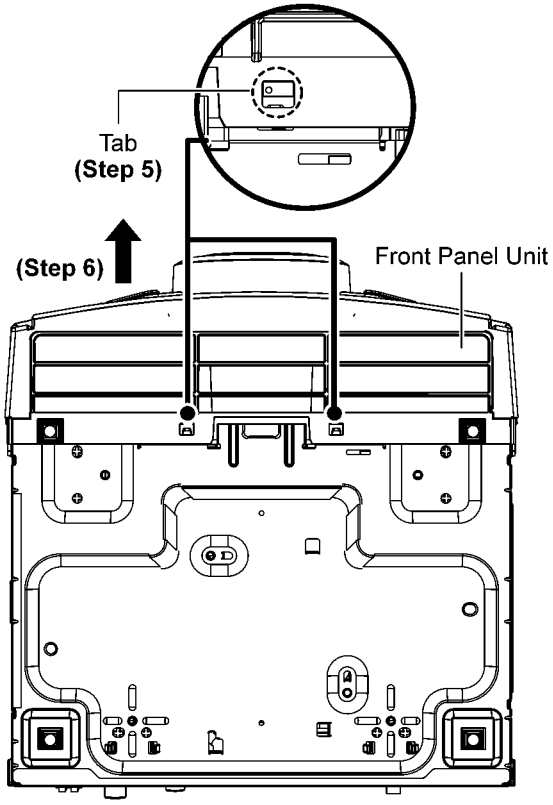
8.5. Disassembly of Front Panel Unit

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

Step 1 Detach 30P FFC at the connector (CN2506) on Main P.C.B..
Step 2 Detach 8P Cable at the connector (CN2511) on Main P.C.B..
Step 3 Detach 4P Cable at the connector (CN2510) on Main P.C.B..
Step 4 Release tabs on both side of Front Panel Unit.



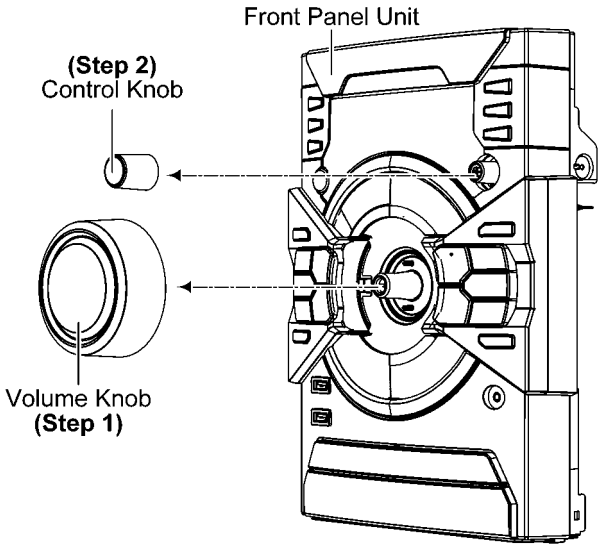
Step 5 Release tabs at bottom of unit.
Step 6 Detach to remove Front Panel Unit



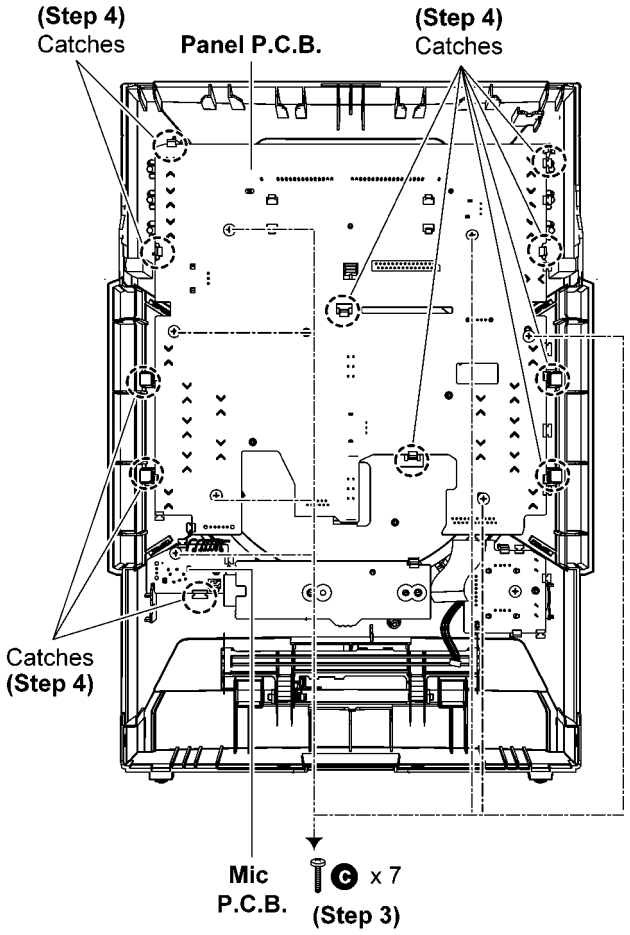
8.6. Disassembly of Panel P.C.B. and Music Port P.C.B.

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

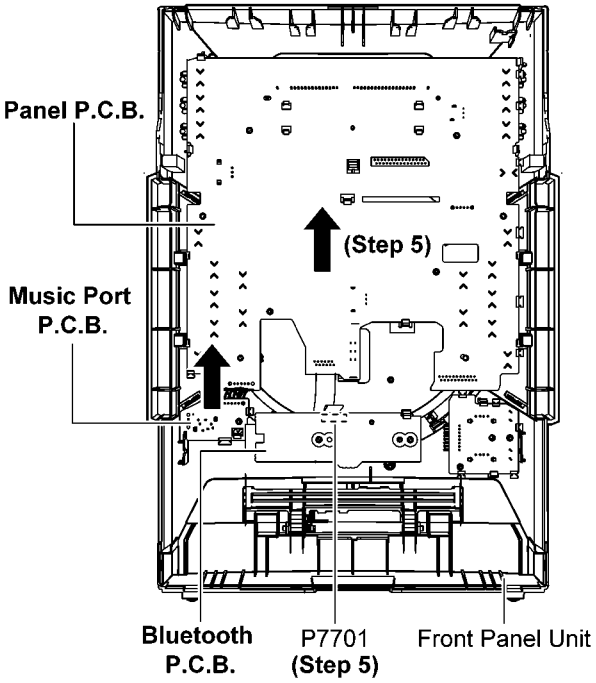
Step 1 Remove Volume Knob.
Step 2 Remove Control Knob.



Step 3 Remove 7 screws.
Step 4 Release catches.



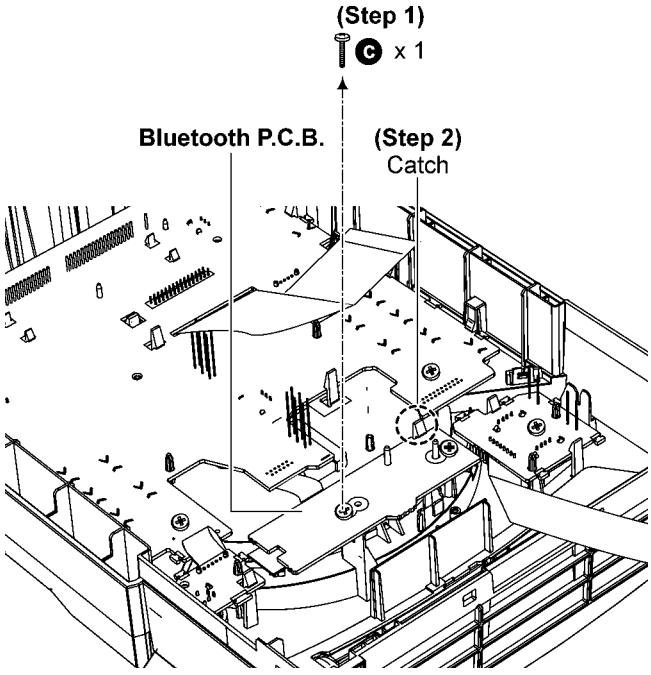
Step 5 Detach 12P FFC at the connector (P7701) on Bluetooth P.C.B..
Step 6 Remove Panel P.C.B. and Music Port P.C.B..



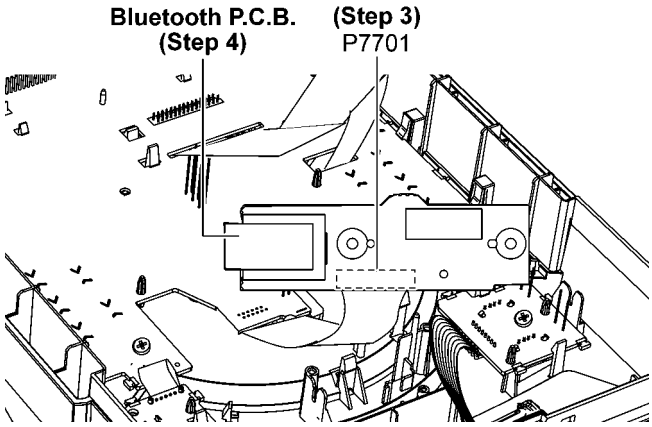
8.7. Disassembly of Bluetooth P.C.B.

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

Step 1 Remove 1 screw.
Step 2 Release catch.



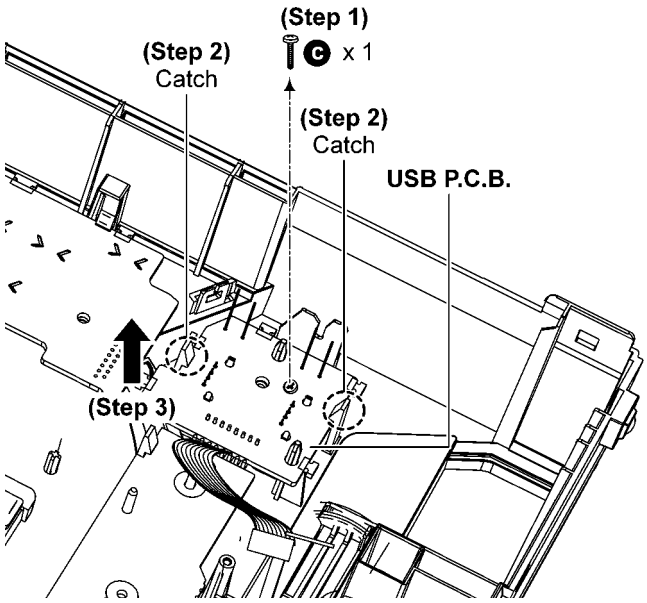
Step 3 Detach 12P FFC at the connector (P7701) on Bluetooth P.C.B..
Step 4 Remove Bluetooth P.C.B..



8.8. Disassembly of USB P.C.B.

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

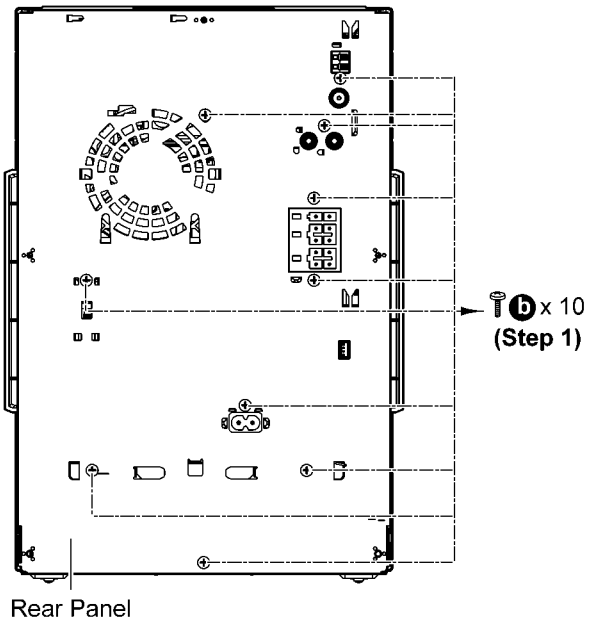
Step 1 Remove 1 screw.
Step 2 Remove catches.
Step 3 Remove USB P.C.B..



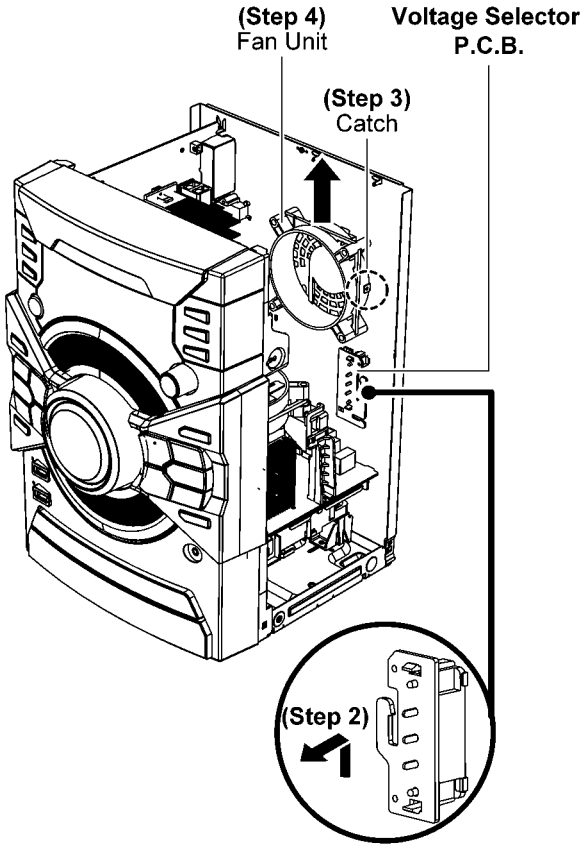
8.9. Disassembly of Rear Panel.

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

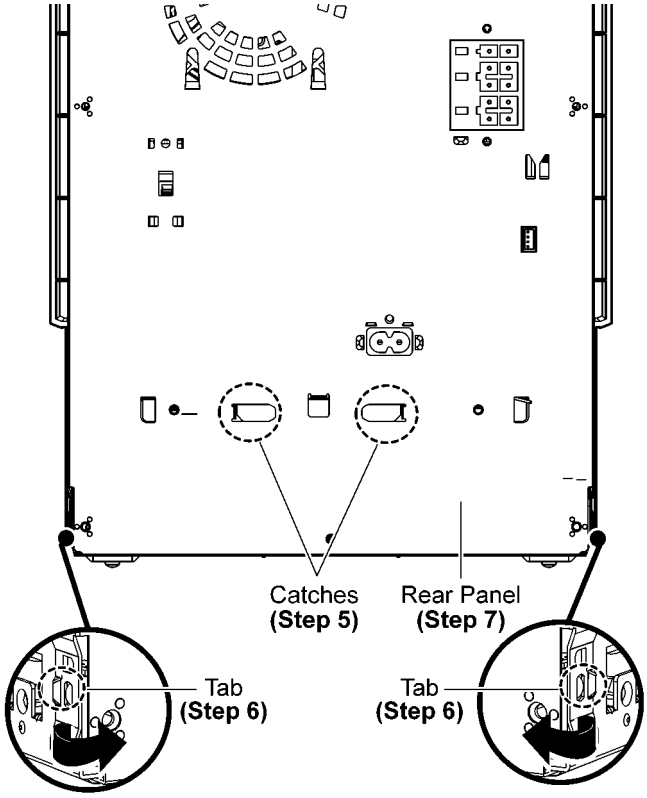
Step 1 Remove 10 screws.



Step 2 Detach Voltage Selector P.C.B..
Step 3 Release catch.
Step 4 Remove fan unit.



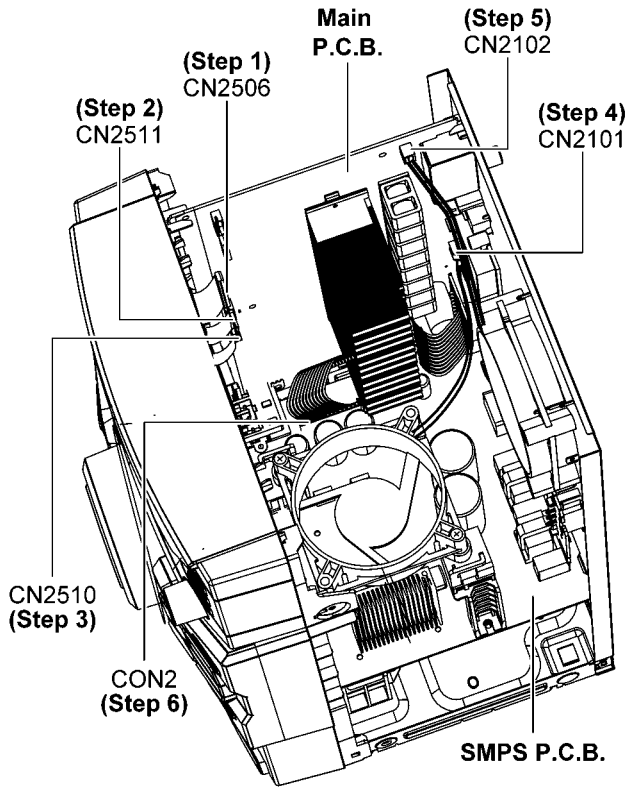
Step 5 Lift up to remove Inner Chassis Unit.
Step 6 Release tabs.
Step 7 Release to remove Rear Panel.



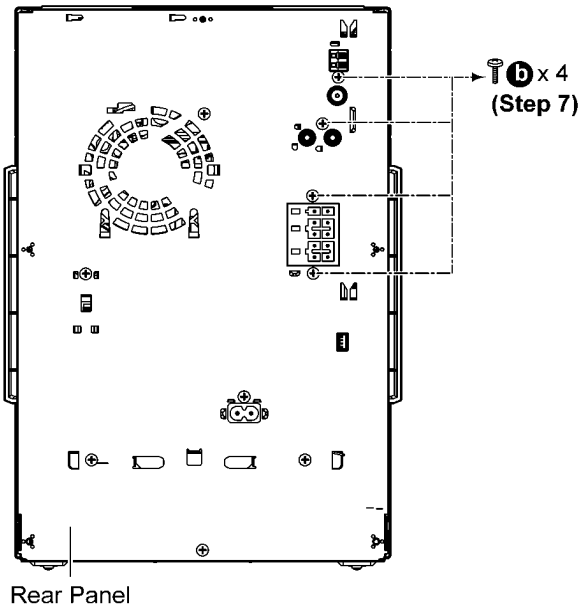
8.10. Disassembly of Main P.C.B.

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

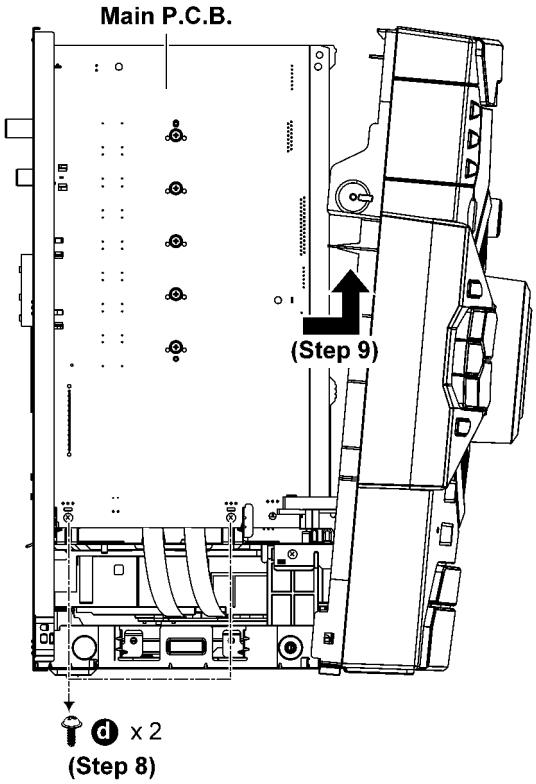
Step 1 Detach 30P FFC at the connector (CN2506) on Main P.C.B..
Step 2 Detach 8P Cable at the connector (CN2511) on Main P.C.B..
Step 3 Detach 4P Cable at the connector (CN2510) on Main P.C.B..
Step 4 Detach 2P Wire at the connector (CN2101) on Main P.C.B..
Step 5 Detach 2P Wire at the connector (CN2102) on Main P.C.B..
Step 6 Detach 13P Cable at the connector (CON2) on SMPS P.C.B..



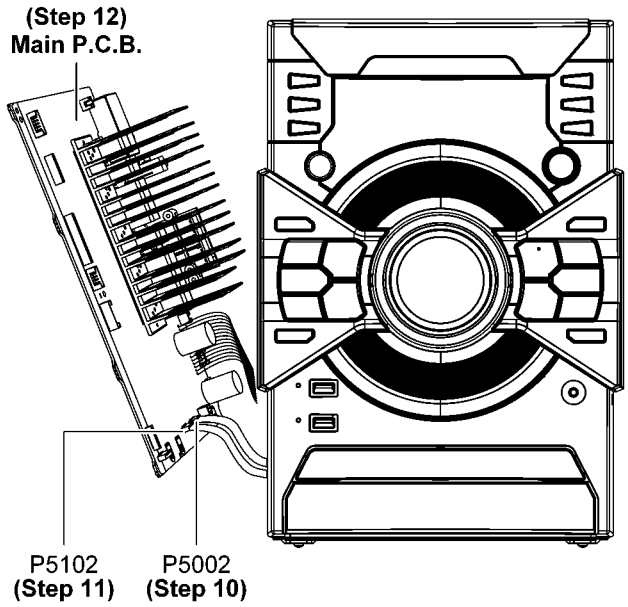
Step 7 Remove 4 screws.



Step 8 Remove 2 screws.
Step 9 Detach Main P.C.B..



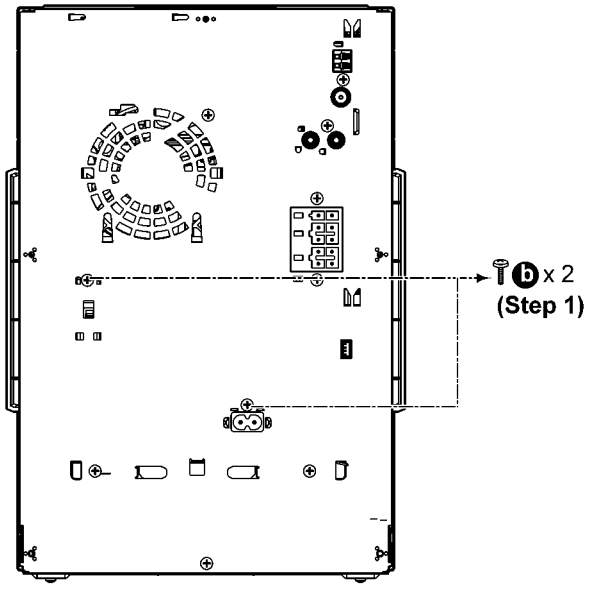
Step 10 Detach 24P FFC at the connector (P5002) on Main P.C.B..
Step 11 Detach 10P FFC at the connector (P5102) on Main P.C.B..
Step 12 Remove Main P.C.B..



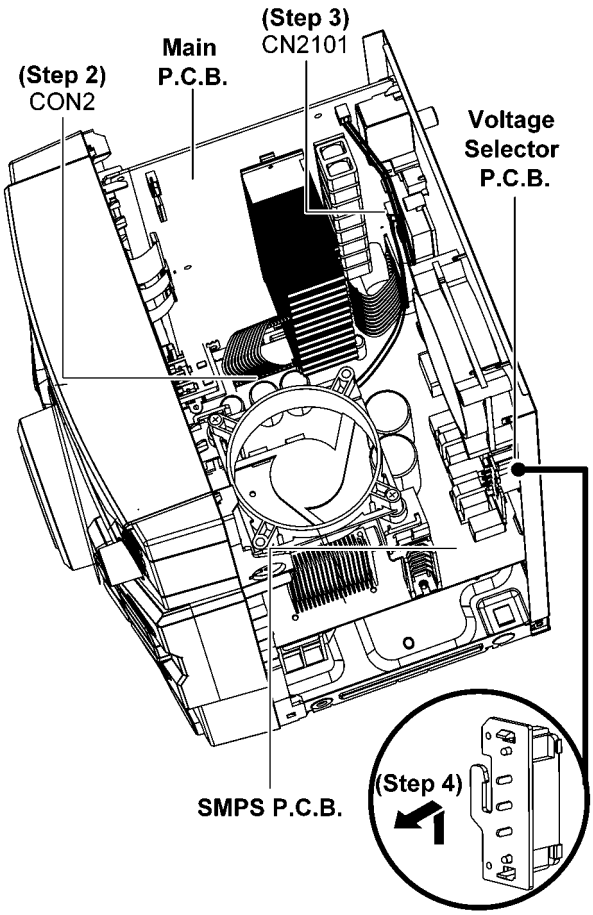
8.11. Disassembly of SMPS P.C.B. and Voltage Selector P.C.B.

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

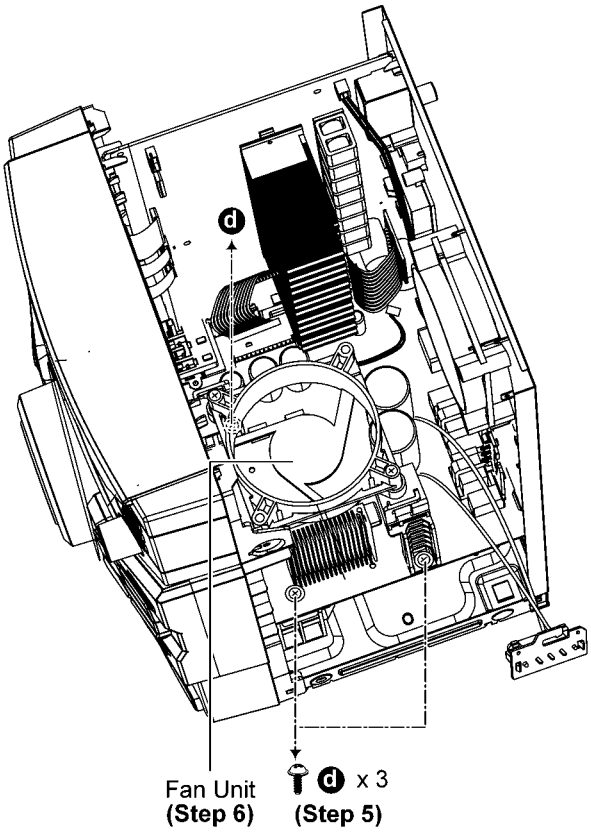
Step 1 Remove 2 screws.



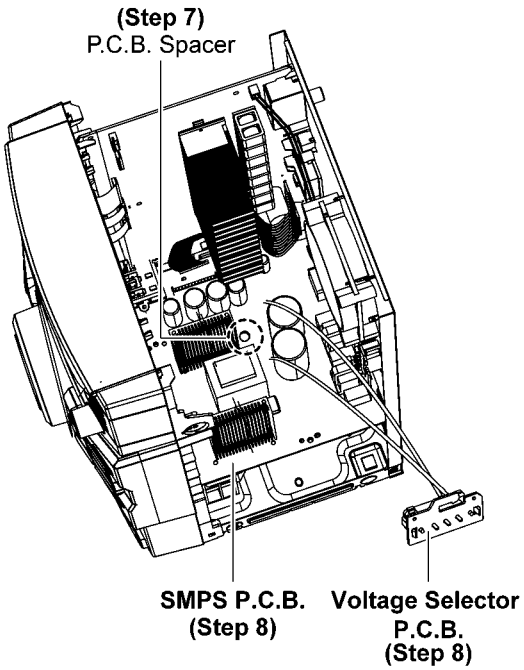
Step 2 Detach 13P Cable at the connector (CON2) on SMPS P.C.B..
Step 3 Detach 2P Wire at the connector (CN2101) on Main P.C.B..
Step 4 Detach Voltage Selector P.C.B..



Step 5 Remove 3 screws.
Step 6 Remove fan unit.



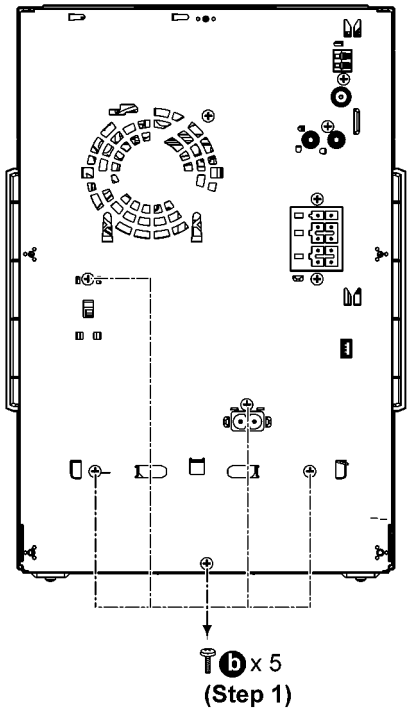
Step 7 Release P.C.B. Spacer.
Step 8 Remove SMPS P.C.B. and Voltage Selector P.C.B..



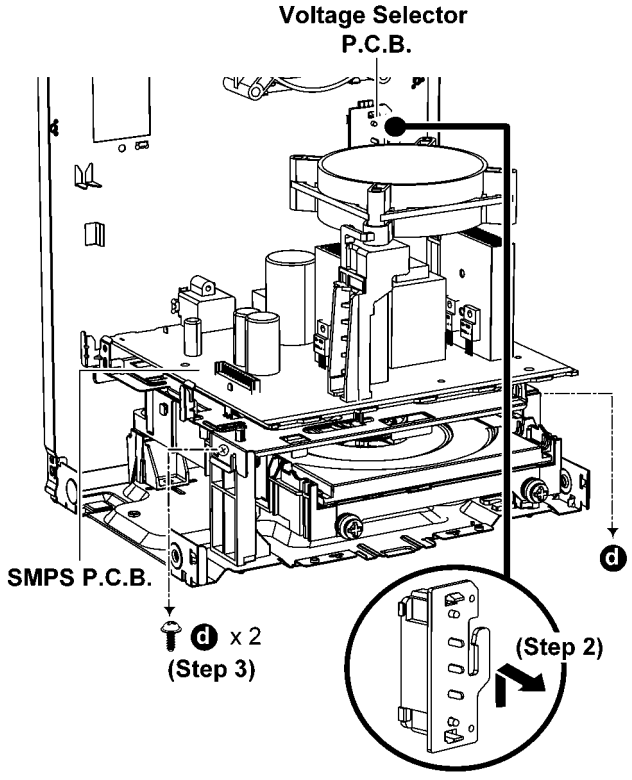
8.12. Disassembly of CD Mechanism Unit

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

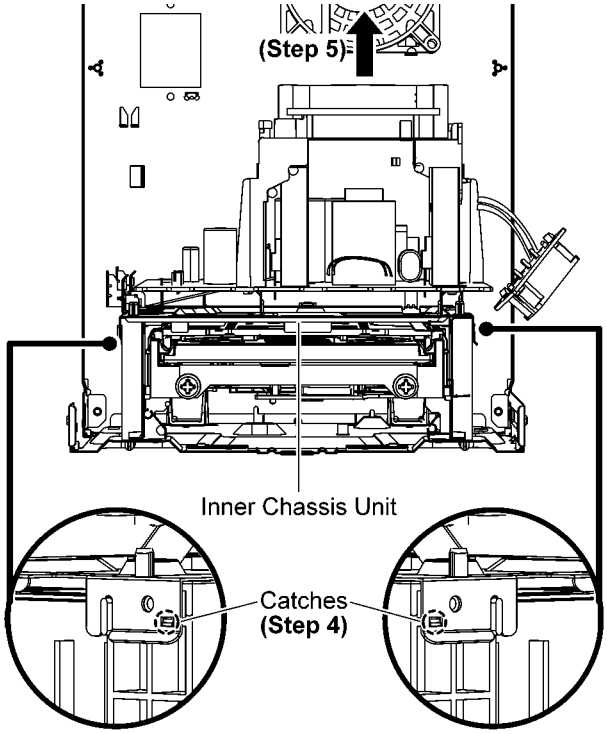
Step 1 Remove 5 screws.



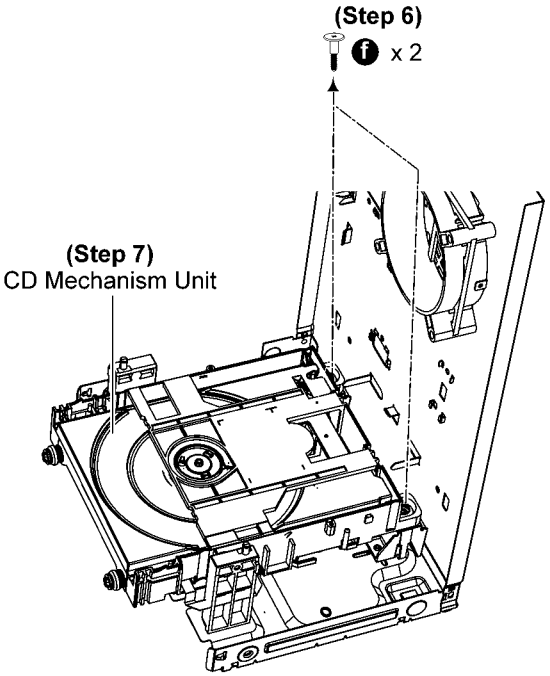
Step 2 Detach Voltage Selector P.C.B..
Step 3 Remove 2 screws.



Step 4 Release catches.
Step 5 Lift up and remove Inner Chassis Unit.



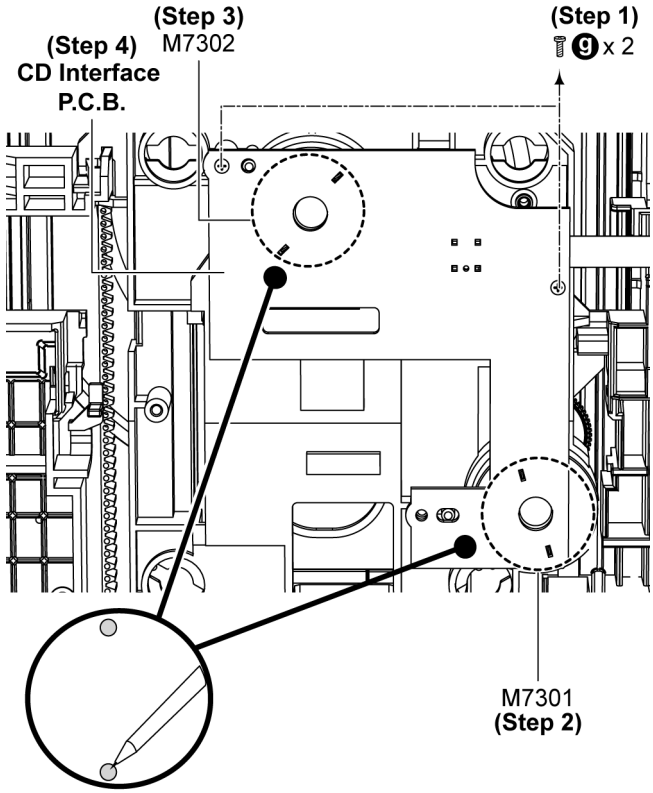
Step 6 Remove 2 screws.
Step 7 Remove CD Mechanism Unit.



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

- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Front Panel Unit".**
- **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 the motor (M7301).
Step 3 Desolder pins of the motor (M7302).
Step 4 Remove CD Interface P.C.B..

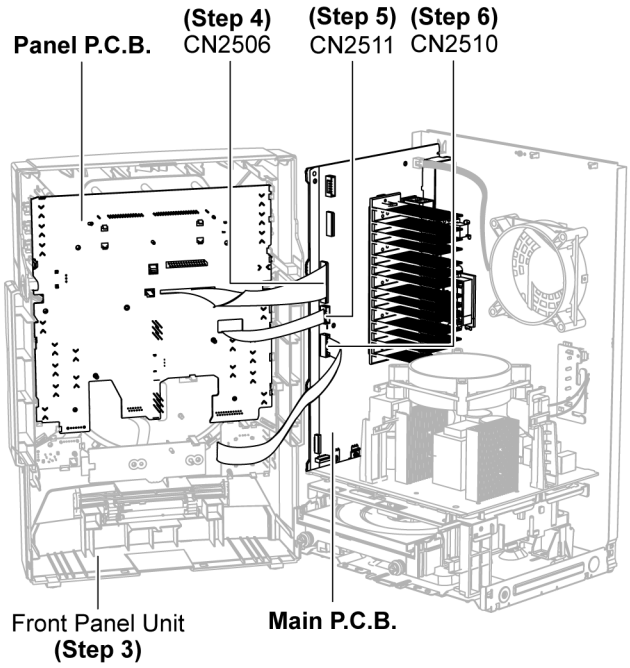


9 Service Position

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

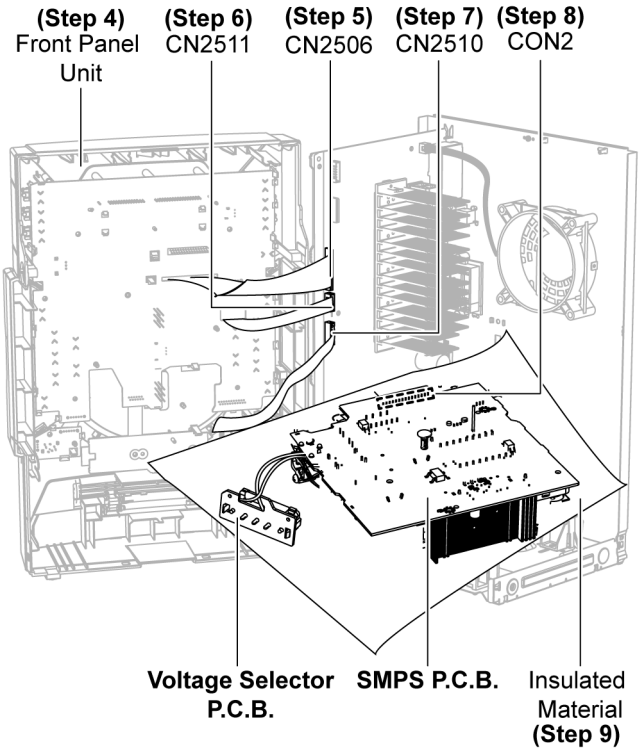
9.1. Checking of Panel P.C.B. and Main P.C.B.

Step 1 Remove Top Cabinet.
Step 2 Remove Front Panel Unit.
Step 3 Positioned the Front Panel Unit as shown.
Step 4 Attach 30P FFC at the connector (CN2506) on Main P.C.B..
Step 5 Attach 8P Cable at the connector (CN2511) on Main P.C.B..
Step 6 Attach 4P Cable at the connector (CN2510) on Main P.C.B..
Step 7 Panel P.C.B. and Main P.C.B. can be checked as diagram shown.



9.2. Checking of SMPS P.C.B. and Voltage Selector P.C.B.

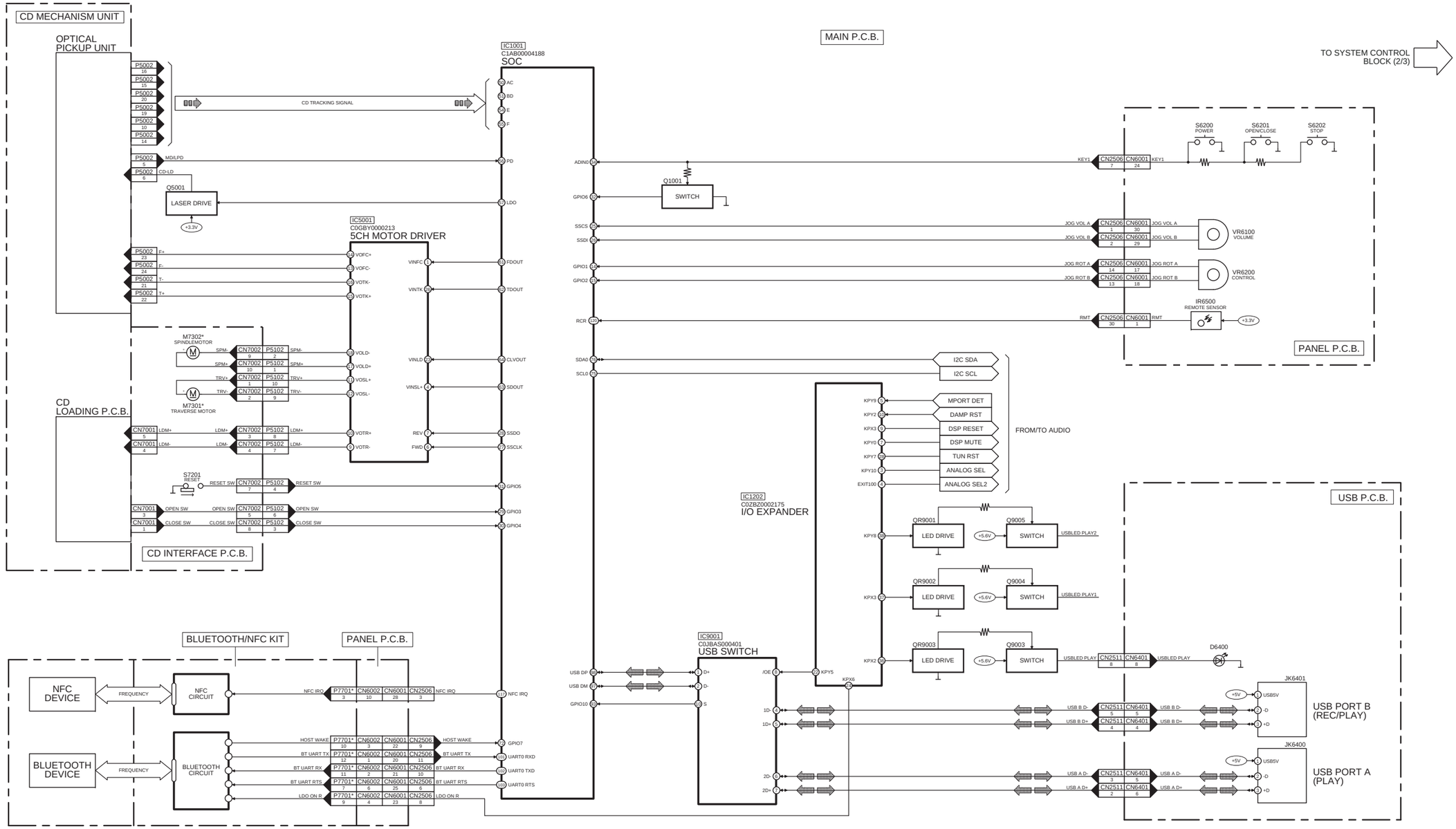
Step 1 Remove Top Cabinet.
Step 2 Remove Front Panel Unit.
Step 3 Remove SMPS P.C.B..
Step 4 Positioned the Front Panel Unit as shown.
Step 5 Attach 30P FFC at the connector (CN2506) on Main P.C.B..
Step 6 Attach 8P Cable at the connector (CN2511) on Main P.C.B..
Step 7 Attach 4P Cable at the connector (CN2510) on Main P.C.B..
Step 8 Attach 13P Cable at the connector (CON2) on SMPS P.C.B..
Step 9 Place the SMPS P.C.B. and Voltage Selector P.C.B. on the insulated material.
Step 10 SMPS P.C.B. and Voltage Selector P.C.B. can be checked as diagram shown.



10 Block Diagram

10.1. System Control

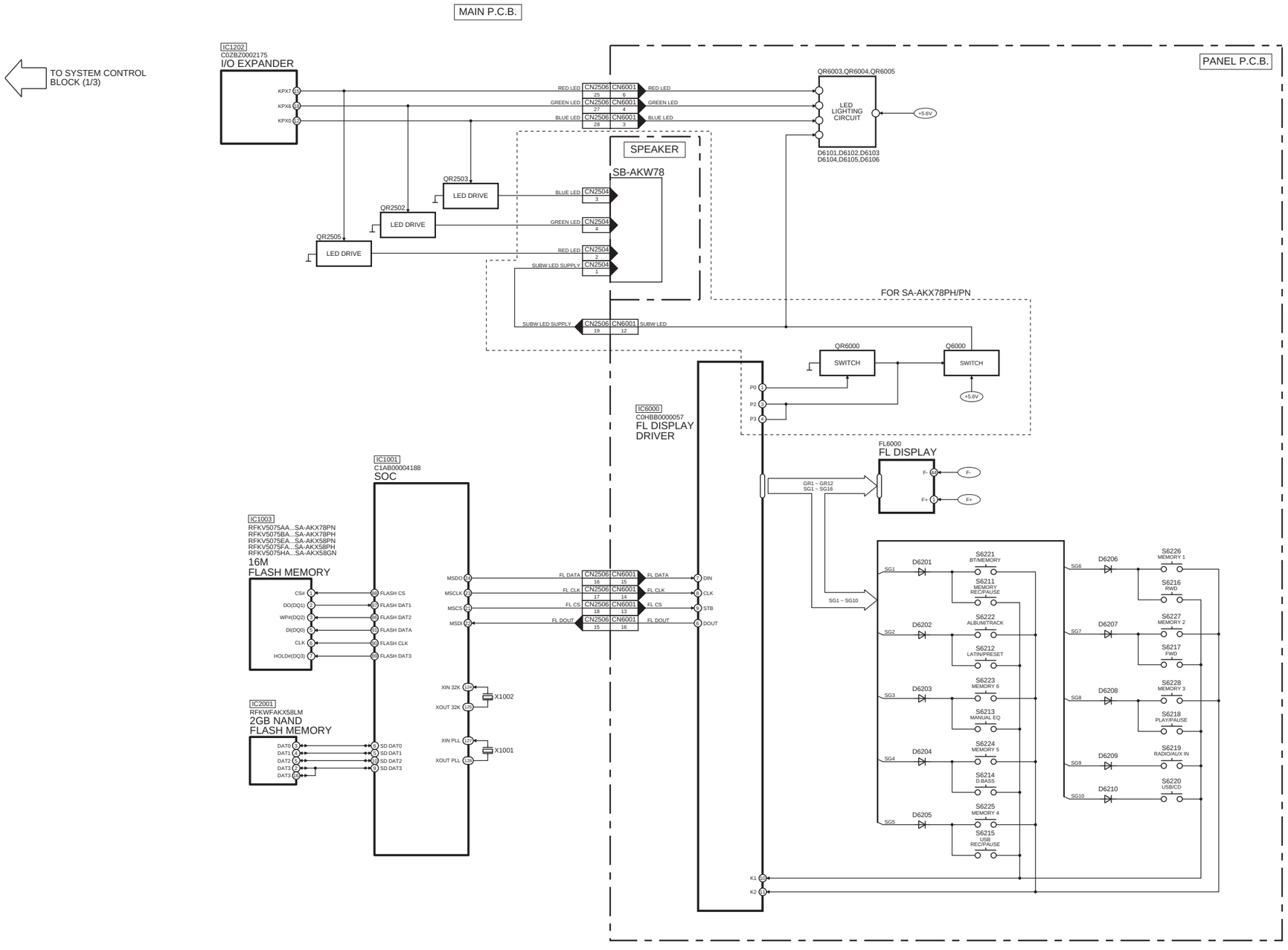
: CD AUDIO INPUT SIGNAL LINE : TUNER/AUX AUDIO INPUT SIGNAL LINE : USB SIGNAL LINE



NOTE: “ * ” REF IS FOR INDICATION ONLY

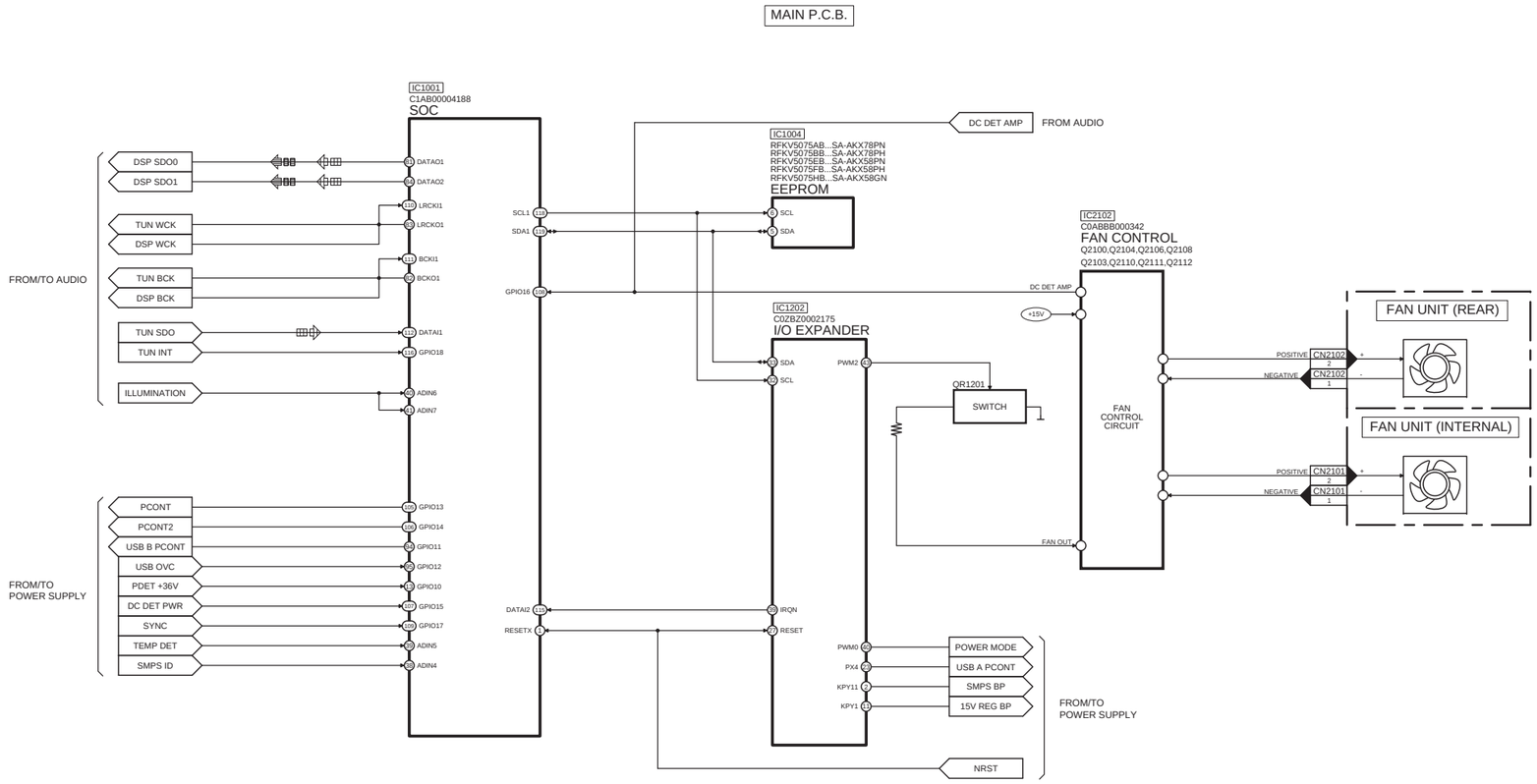
SA-AKX58GN/PH/PN,SA-AKX78PH/PN SYSTEM CONTROL (1/3) BLOCK DIAGRAM

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



SA-AKX58GN/PH/PN,SA-AKX78PH/PN SYSTEM CONTROL (2/3) BLOCK DIAGRAM

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

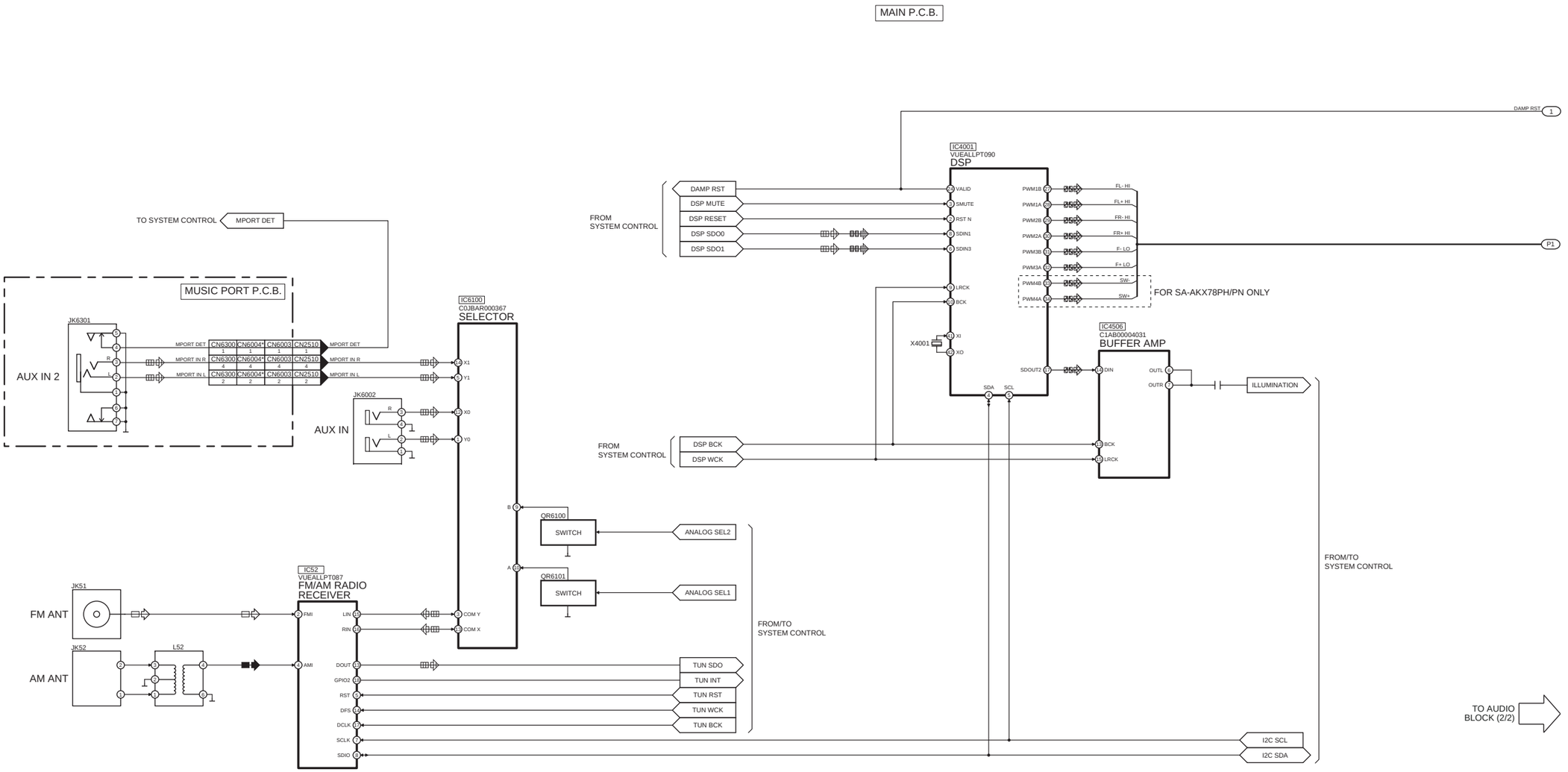


TO SYSTEM CONTROL BLOCK (2/3)

SA-AKX58GN/PH/PN,SA-AKX78PH/PN SYSTEM CONTROL (3/3) BLOCK DIAGRAM

10.2. Audio

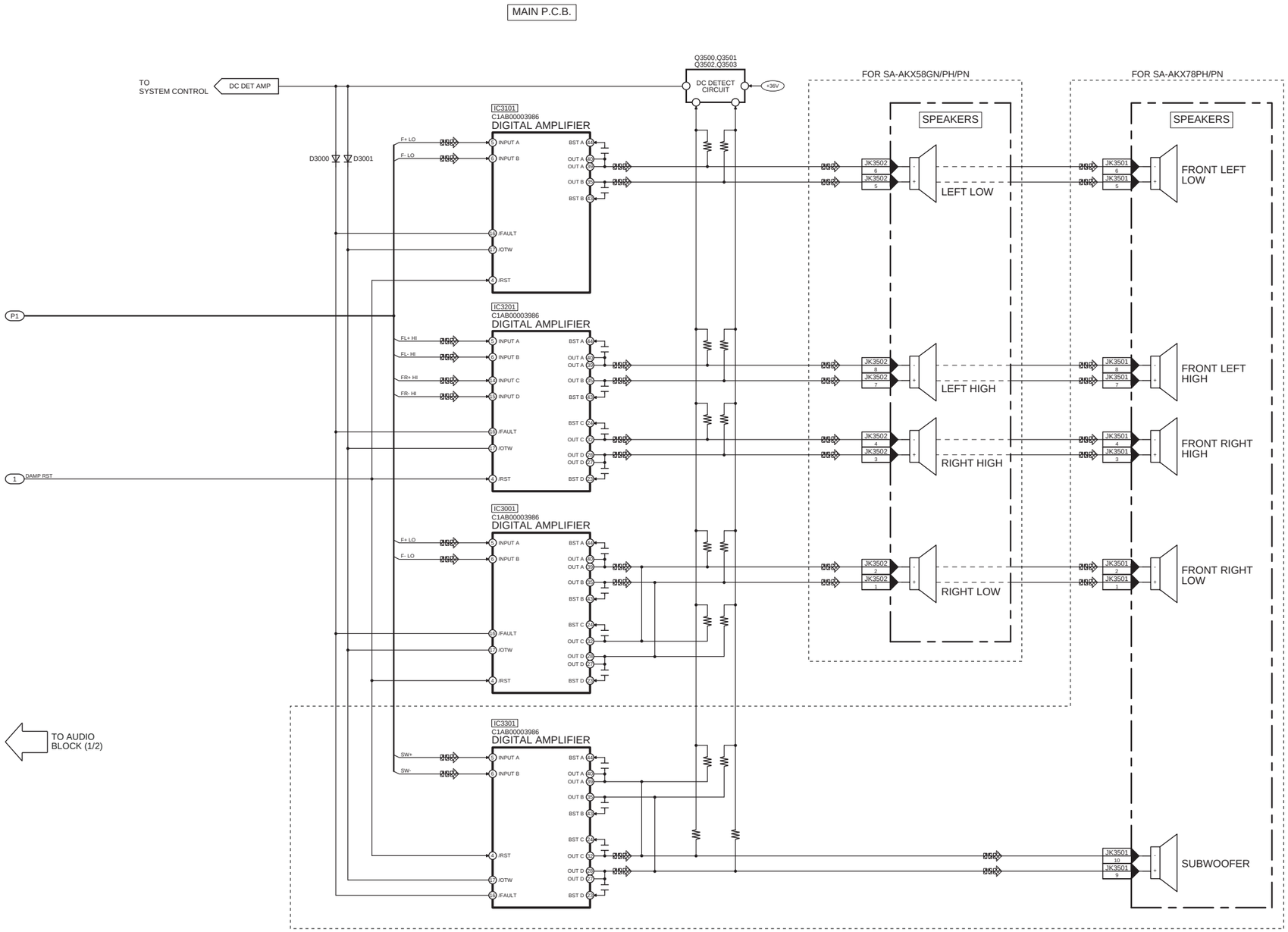
: CD AUDIO INPUT SIGNAL LINE : TUNER/AUX AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE : AM SIGNAL LINE : FM SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

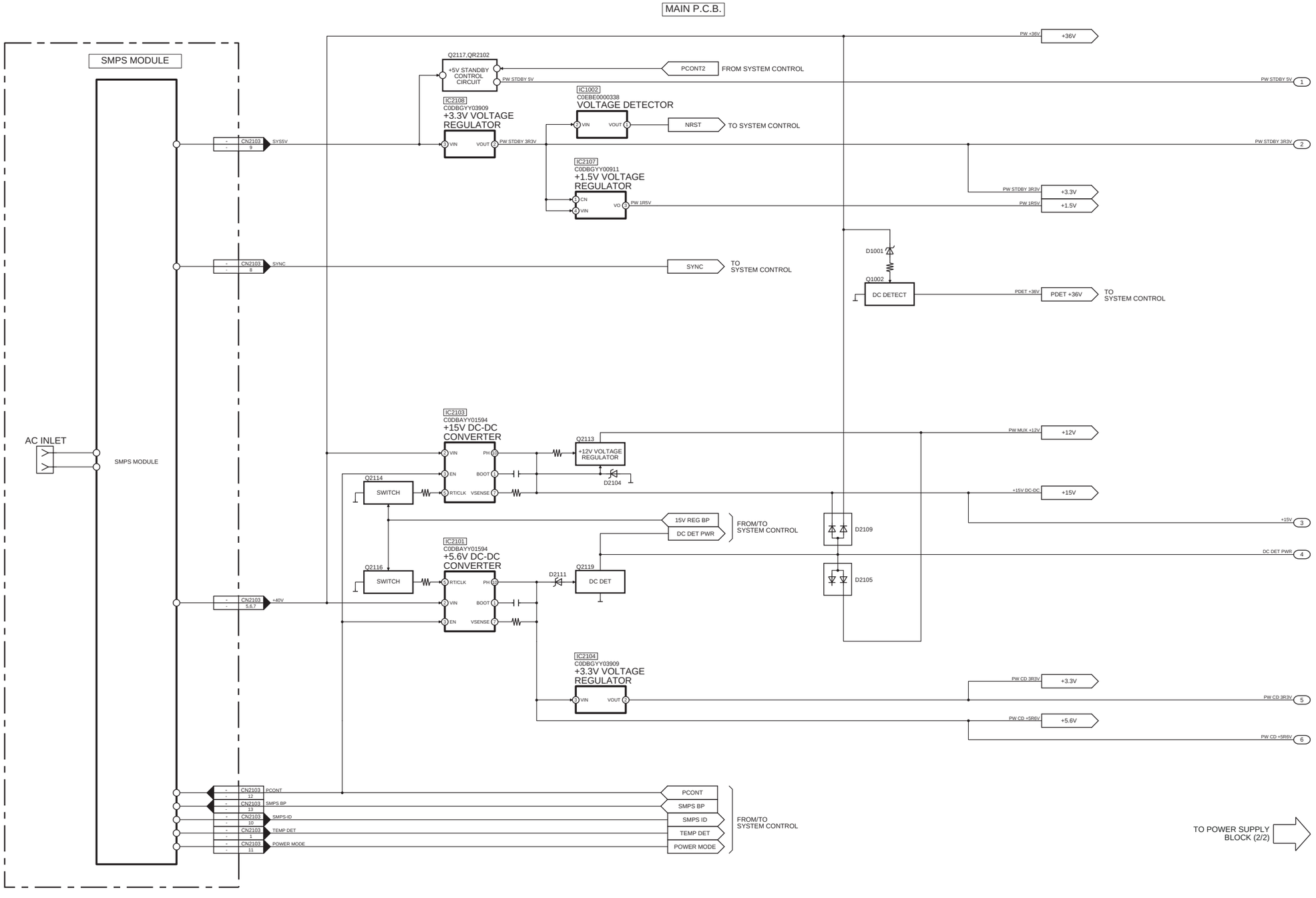
SA-AKX58GN/PH/PN,SA-AKX78PH/PN AUDIO (1/2) BLOCK DIAGRAM

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

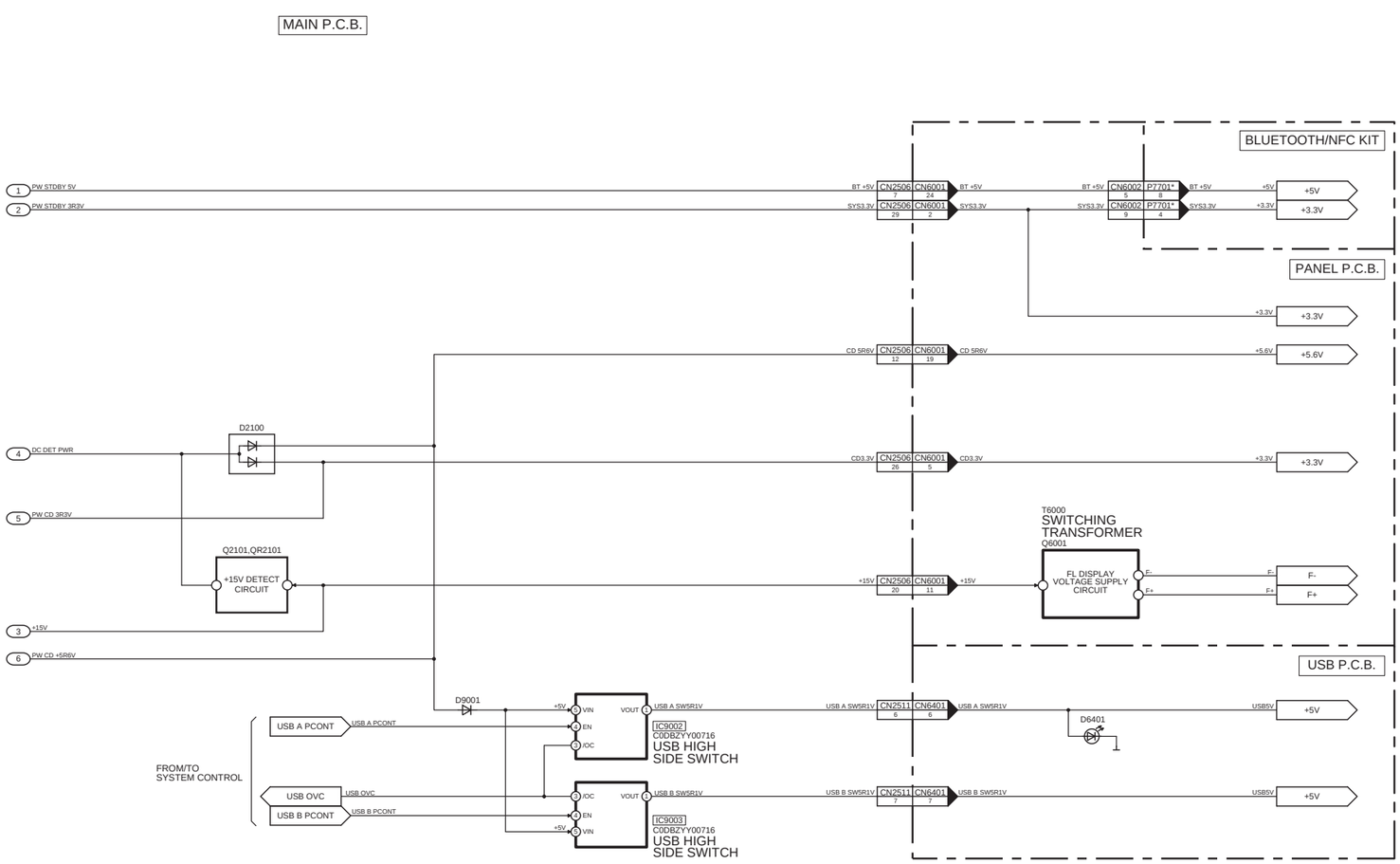


SA-AKX58GN/PH/PN,SA-AKX78PH/PN AUDIO (2/2) BLOCK DIAGRAM

10.3. Power Supply



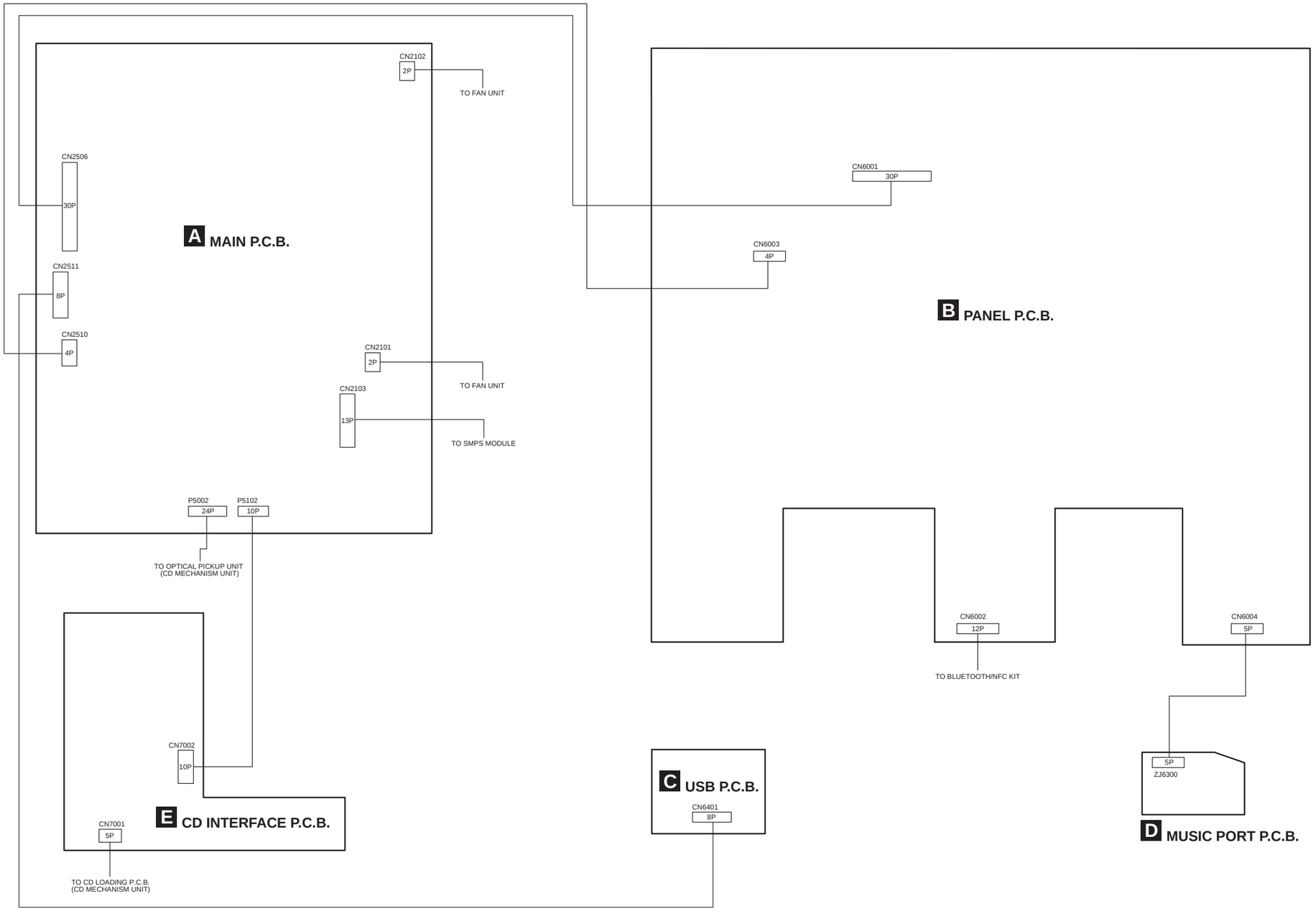
SA-AKX58GN/PH/PN,SA-AKX78PH/PN POWER SUPPLY (1/2) BLOCK DIAGRAM



NOTE: “ * ” REF IS FOR INDICATION ONLY

SA-AKX58GN/PH/PN,SA-AKX78PH/PN POWER SUPPLY (2/2) BLOCK DIAGRAM

11 Wiring Connection Diagram



SA-AKX58GN/PH/PN, SA-AKX78PH/PN 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 (■) switch.
S6211:	Memory Rec switch.
S6212:	Latin / Preset switch.
S6213:	Manual EQ switch.
S6214:	D.BASS switch.
S6215:	USB REC switch.
S6216:	Rewind (|◀◀/◀◀) switch.
S6217:	Forward (▶▶/▶▶|) switch.
S6218:	Play/Pause (▶/❚❚) switch.
S6219:	RADIO / AUX switch.
S6220:	USB / CD switch.
S6221:	Bluetooth / Memory switch.
S6222:	Album / Track switch.
S6223:	Memory 6 switch.
S6224:	Memory 5 switch.
S6225:	Memory 4 switch.
S6226:	Memory 1 switch.
S6227:	Memory 2 switch.
S6228:	Memory 3 switch.
S7201:	Reset switch
VR6100:	Volume Jog.
VR6200:	Control Jog.

- 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

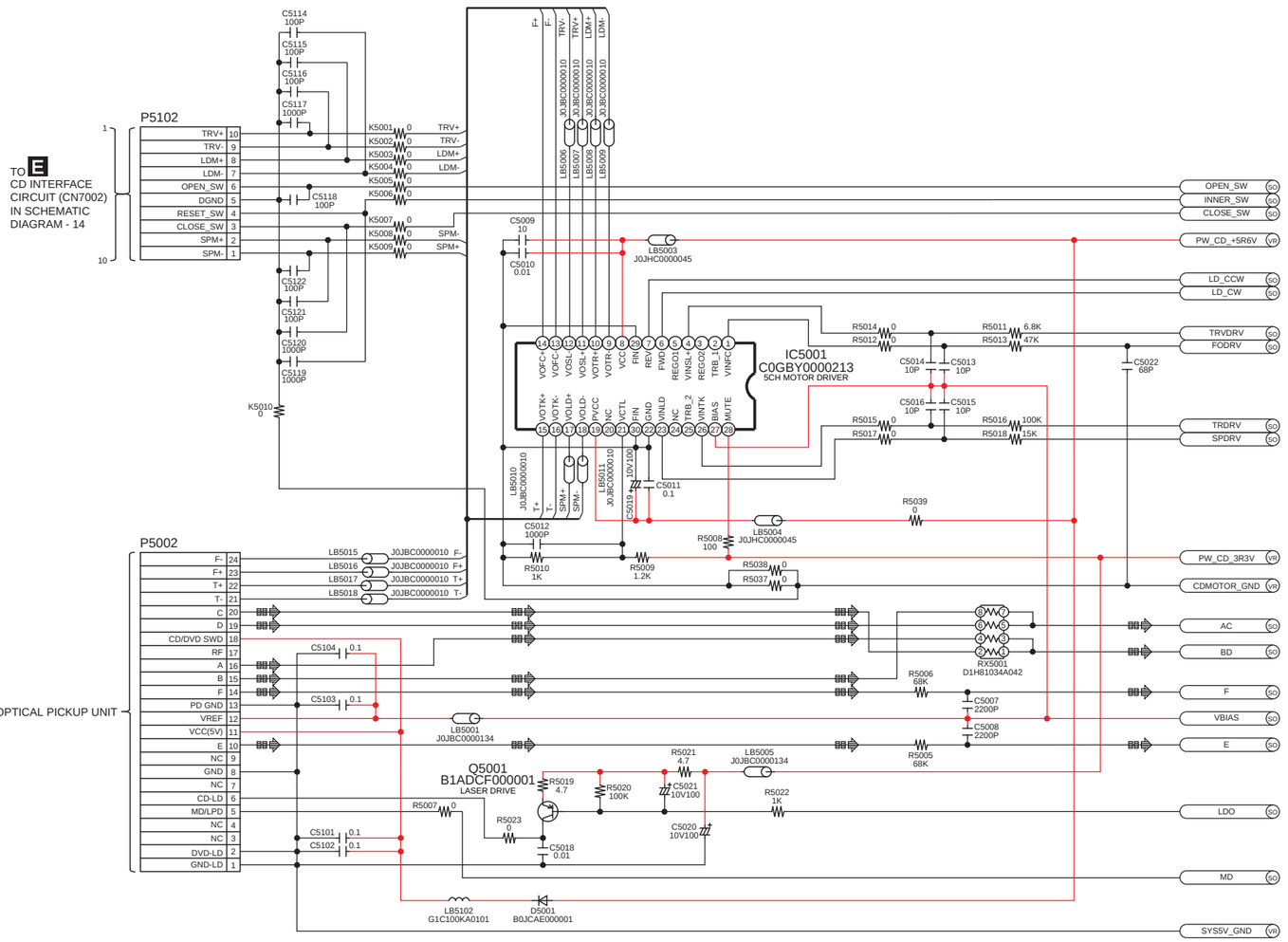
  : +B signal line
  : -B signal line
  : CD Audio input signal line
  : AUX/Tuner/Mic Audio input signal line
  : Audio output signal line
  : USB signal line
  : AM signal line
  : FM signal line

12.2. Main (CD Motor Driver) Circuit

SCHEMATIC DIAGRAM - 1

A MAIN (CD MOTOR DRIVER) CIRCUIT

—— : +B SIGNAL LINE ⇒ : CD AUDIO INPUT SIGNAL LINE



SO: MAIN (SOC I/O EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
VR: MAIN (VREG FAN): SCHEMATIC DIAGRAM - 10 ~ 12

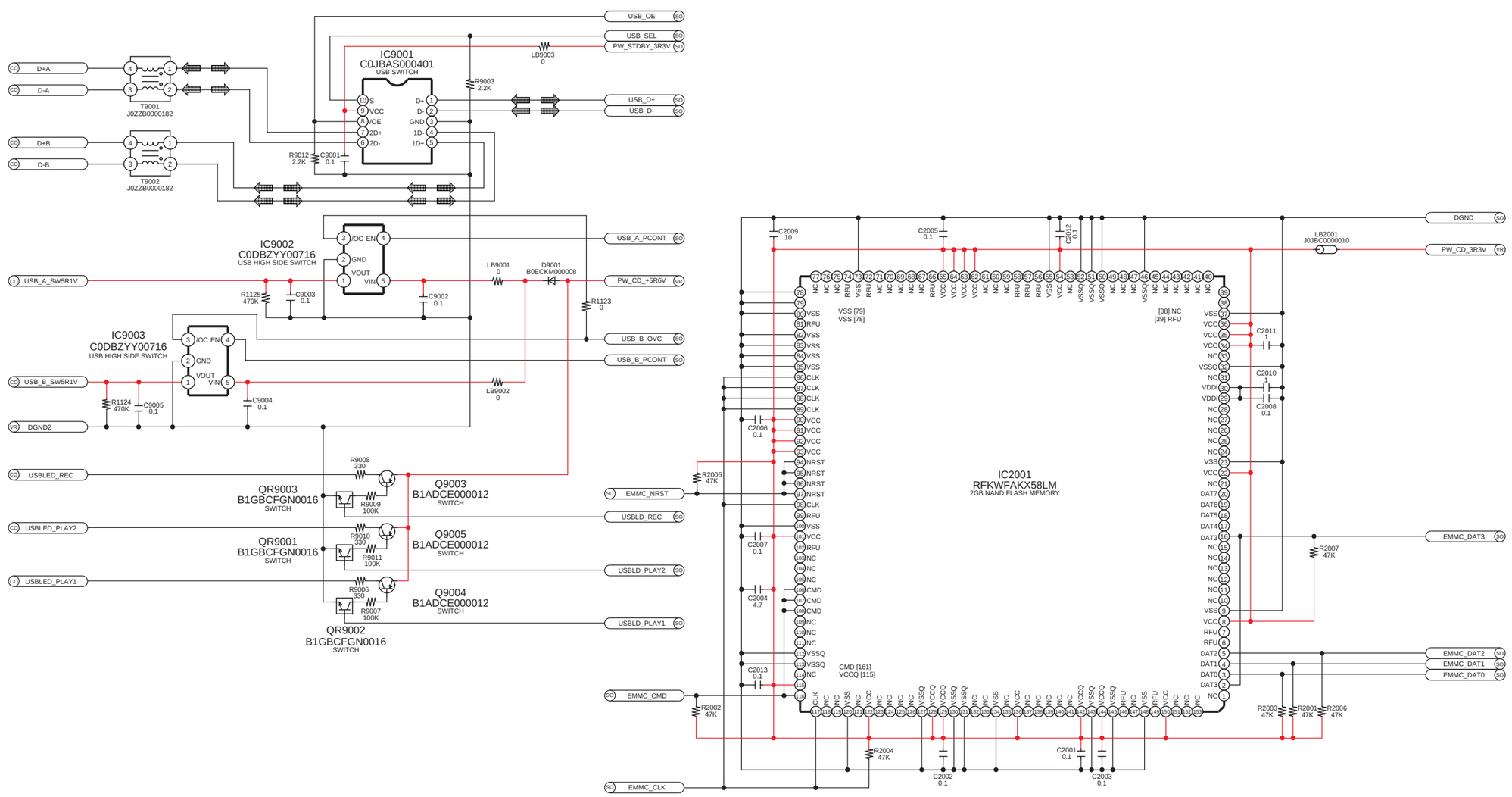
SA-AKX58GN/PH/PN,SA-AKX78PH/PN MAIN (CD MOTOR DRIVER) CIRCUIT

12.3. Main (USB EMMC) Circuit

SCHEMATIC DIAGRAM - 2

A MAIN (USB EMMC) CIRCUIT

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



SO: MAIN (SOC I/O EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
CO: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 7
VR: MAIN (VREG FAN): SCHEMATIC DIAGRAM - 10 ~ 12

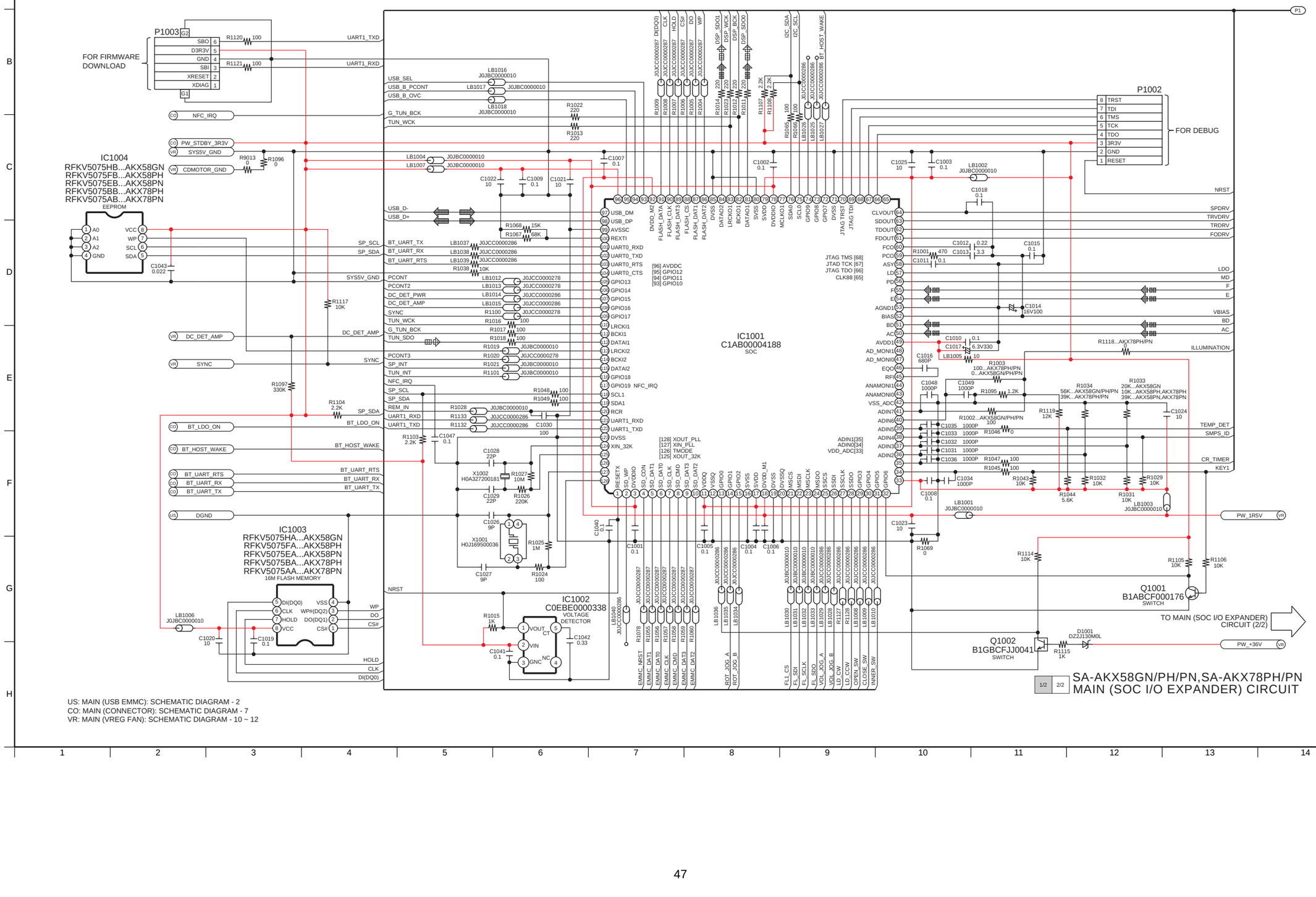
SA-AKX58GN/PH/PN,SA-AKX78PH/PN MAIN (USB EMMC) CIRCUIT

12.4. Main (SOC I/O Expander) Circuit

SCHEMATIC DIAGRAM - 3

A MAIN (SOC I/O EXPANDER) CIRCUIT

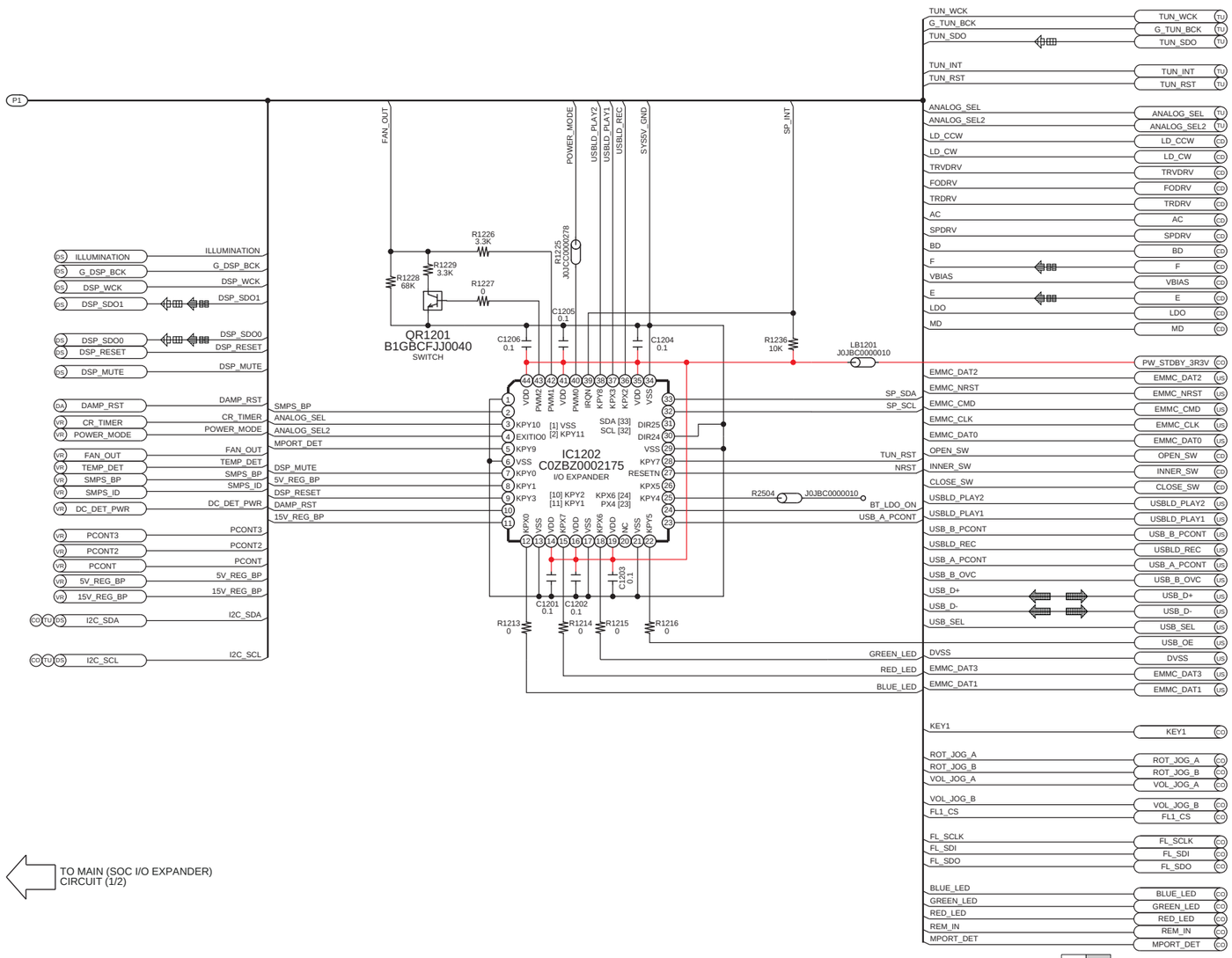
—— : +B SIGNAL LINE : CD AUDIO INPUT SIGNAL LINE : TUNER/AUX/MIC AUDIO INPUT SIGNAL LINE : USB SIGNAL LINE



SCHEMATIC DIAGRAM - 4

A MAIN (SOC I/O EXPANDER) CIRCUIT

—— : +B SIGNAL LINE : CD AUDIO INPUT SIGNAL LINE : TUNER/AUX/MIC AUDIO INPUT SIGNAL LINE : USB SIGNAL LINE

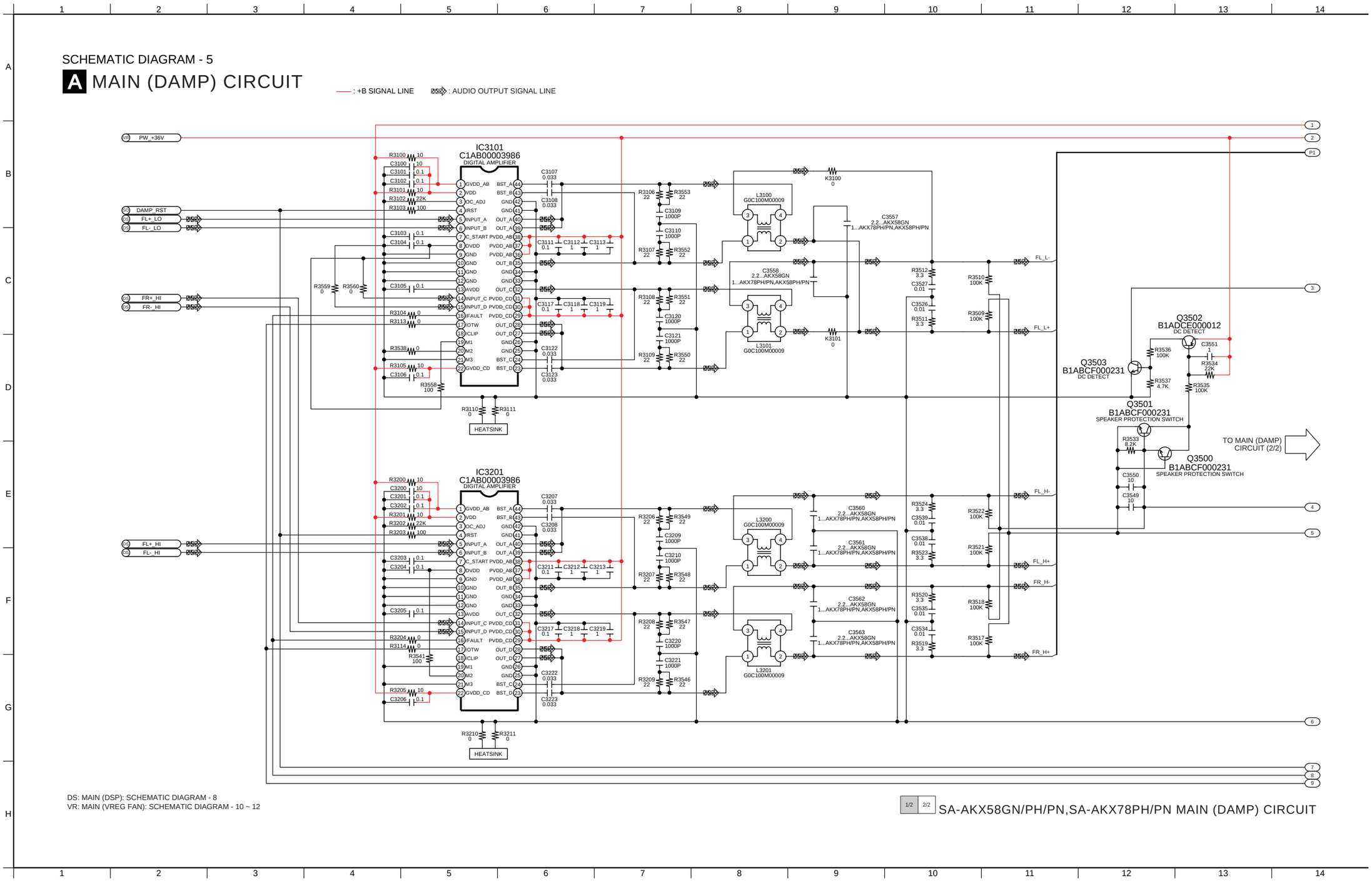


TO MAIN (SOC I/O EXPANDER) CIRCUIT (1/2)

CD: MAIN (CD MOTOR DRIVER): SCHEMATIC DIAGRAM - 1
US: MAIN (USB EMMC): SCHEMATIC DIAGRAM - 2
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5 ~ 6
CO: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 7
DS: MAIN (DSP): SCHEMATIC DIAGRAM - 8
TU: MAIN (TUNER AUX): SCHEMATIC DIAGRAM - 9
VR: MAIN (VREG FAN): SCHEMATIC DIAGRAM - 10 ~ 12

1/2 2/2 SA-AKX58GN/PH/PN,SA-AKX78PH/PN MAIN (SOC I/O EXPANDER) CIRCUIT

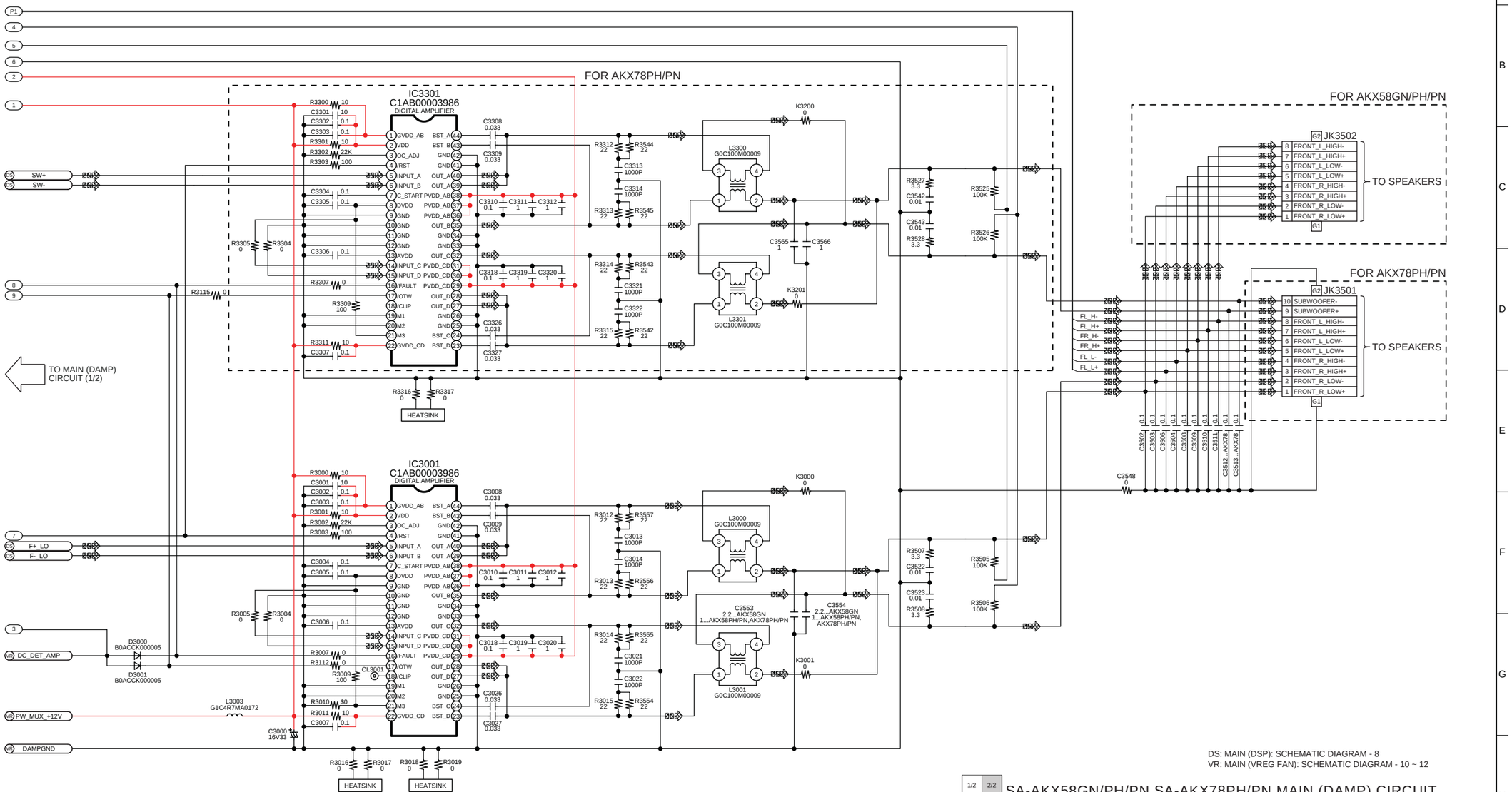
12.5. Main (Damp) Circuit



SCHEMATIC DIAGRAM - 6

A MAIN (DAMP) CIRCUIT

—— : +B SIGNAL LINE ⊠ : AUDIO OUTPUT SIGNAL LINE



DS: MAIN (DSP): SCHEMATIC DIAGRAM - 8
VR: MAIN (VREG FAN): SCHEMATIC DIAGRAM - 10 ~ 12

1/2 2/2 SA-AKX58GN/PH/PN,SA-AKX78PH/PN MAIN (DAMP) CIRCUIT

12.6. Main (Connector) Circuit

SCHEMATIC DIAGRAM - 7

A MAIN (CONNECTOR) CIRCUIT

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

FOR AKX78PH/PN

CN2504

TO SPEAKER (SUBWOOFER)

SUBW_LED_SUPPLY 1
RED_LED 2
BLUE_LED 3
GREEN_LED 4

LB2531 J0JBC0000010
LB2532 J0JBC0000010
LB2533 J0JBC0000010
LB2534 J0JBC0000010

C2533 0.1 C2532 0.1 C2531 0.1
C2534 0.1

CDMOTOR_GND (VR)

R2555 0
R2546 0 RED_LED (SO)
R2544 0 BLUE_LED (SO)
R2520 0 GREEN_LED (SO)

QR2505 B1GBCFGN0016 LED DRIVE
QR2503 B1GBCFGN0016 LED DRIVE
QR2502 B1GBCFGN0016 LED DRIVE

C2529 1000P

R2500 J0JBC0000010 MPORT_IN_R (TU)
AGND (TU)
R2501 J0JBC0000010 MPORT_IN_L (TU)
R2505 J0JBC0000010 MPORT_DET (TU)

TO **B** PANEL CIRCUIT (CN6003) IN SCHEMATIC DIAGRAM - 13

CN2510

MPORT_IN_R 4
MPORT_GND 3
MPORT_IN_L 2
MPORT_DET 1

DGND2 (VR)
D+A (US)
D-A (US)
D+B (US)
D-B (US)

C2513 1000P C2512 1000P C2511 1000P C2510 1000P C2509 1000P

USBLED_REC (US)
USBLED_PLAY2 (US)
USBLED_PLAY1 (US)
USB_A_SW5R1V (US)
USB_B_SW5R1V (US)

LB2525 J0JGC0000070
LB2526 J0JGC0000070

CN2511

USBLED_PLAY1 8
USB_B_SW5R1V 7
USB_A_SW5R1V 6
D-B 5
D+B 4
D-A 3
D+A 2
DGND 1

R2566 0
R2567 0
R2568 0

TO **C** USB CIRCUIT (CN6401) IN SCHEMATIC DIAGRAM - 14

BLUE_LED (SO)
GREEN_LED (SO)
RED_LED (SO)
PW_+15V_1 (VR)
REM_IN (SO)
PW_STDBY_3R3V (US SO)
PW_CD_3R3V (VR)
FL_GND (VR)
FL2_CS (SO)
PW_FL_+12V (VR)
PW_CD_+5R6V (VR)
FL1_CS (SO)
FL_SCLK (SO)
FL_SDO (SO)
FL_SDI (SO)
BT_UART_TX (SO)
BT_UART_RX (SO)
BT_HOST_WAKE (SO)
BT_LDO_ON (SO)
PW_STDBY_5V (VR)
BT_UART_RTS (SO)
NFC_IRQ (SO)
DGND2 (VR)

R2558 0
R2559 0
R2562 0
R2560 0
R2561 0
CK2502
R2569 J0JBC0000010
R2507 4.7K
R2508 0

LB2523 J0JBC0000010
LB2522 J0JBC0000010
LB2521 J0JBC0000010
LB2520 J0JBC0000010
LB2519 J0JBC0000010
LB2518 J0JBC0000010
LB2517 J0JBC0000010
LB2516 J0JBC0000010
LB2515 J0JBC0000010
LB2527 J0JBC0000010
LB2528 J0JBC0000010

C2530 1000P
C2539 1000P

CN2506

30 RMT
29 SYS3.3V
28 BLUE_LED
27 GREEN_LED
26 CD3.3V
25 RED_LED
24 KEY1
23 FL_GND
22 FL_GND
21 VP_DET
20 +15V
19 SUBW_LED_SUPPLY
18 FL_CS
17 FL_CLK
16 FL_DATA
15 FL_DOUT
14 JOG_ROT_A
13 JOG_ROT_B
12 CD_5R6V
11 BT_UART_TX
10 BT_UART_RX
9 HOST_WAKE
8 LDO_ON_R
7 BLUETOOTH5V
6 BT_UART_RTS
5 DGND
4 DGND
3 NFC_IRQ
2 JOG_VOL_B
1 JOG_VOL_A

1
30

TO **B** PANEL CIRCUIT (CN6001) IN SCHEMATIC DIAGRAM - 13

R2585 0 R2581 0 R2582 0 R2583 0 R2584 0

VOL_JOG_A (SO)
VOL_JOG_B (SO)
ROT_JOG_A (SO)
ROT_JOG_B (SO)

LB2514 J0JBC0000010
LB2513 J0JBC0000010
LB2512 J0JBC0000010
LB2511 J0JBC0000010

KEY1 (SO)
LB2500 J0JBC0000010

US: MAIN (USB EMMC): SCHEMATIC DIAGRAM - 2
SO: MAIN (SOC I/O EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
DS: MAIN (DSP): SCHEMATIC DIAGRAM - 8
TU: MAIN (TUNER AUX): SCHEMATIC DIAGRAM - 9
VR: MAIN (VREG FAN): SCHEMATIC DIAGRAM - 10 ~ 12

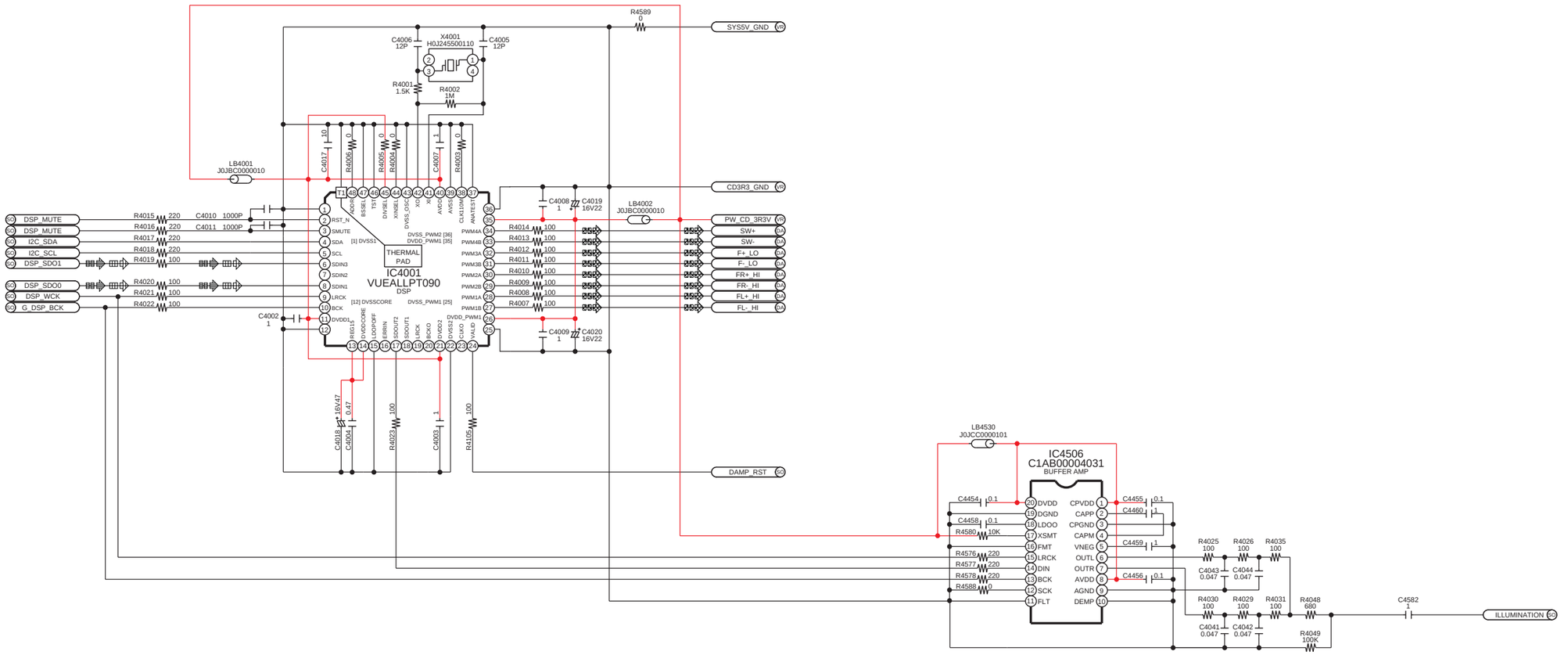
SA-AKX58GN/PH/PN,SA-AKX78PH/PN MAIN (CONNECTOR) CIRCUIT

12.7. Main (DSP) Circuit

SCHEMATIC DIAGRAM - 8

A MAIN (DSP) CIRCUIT

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



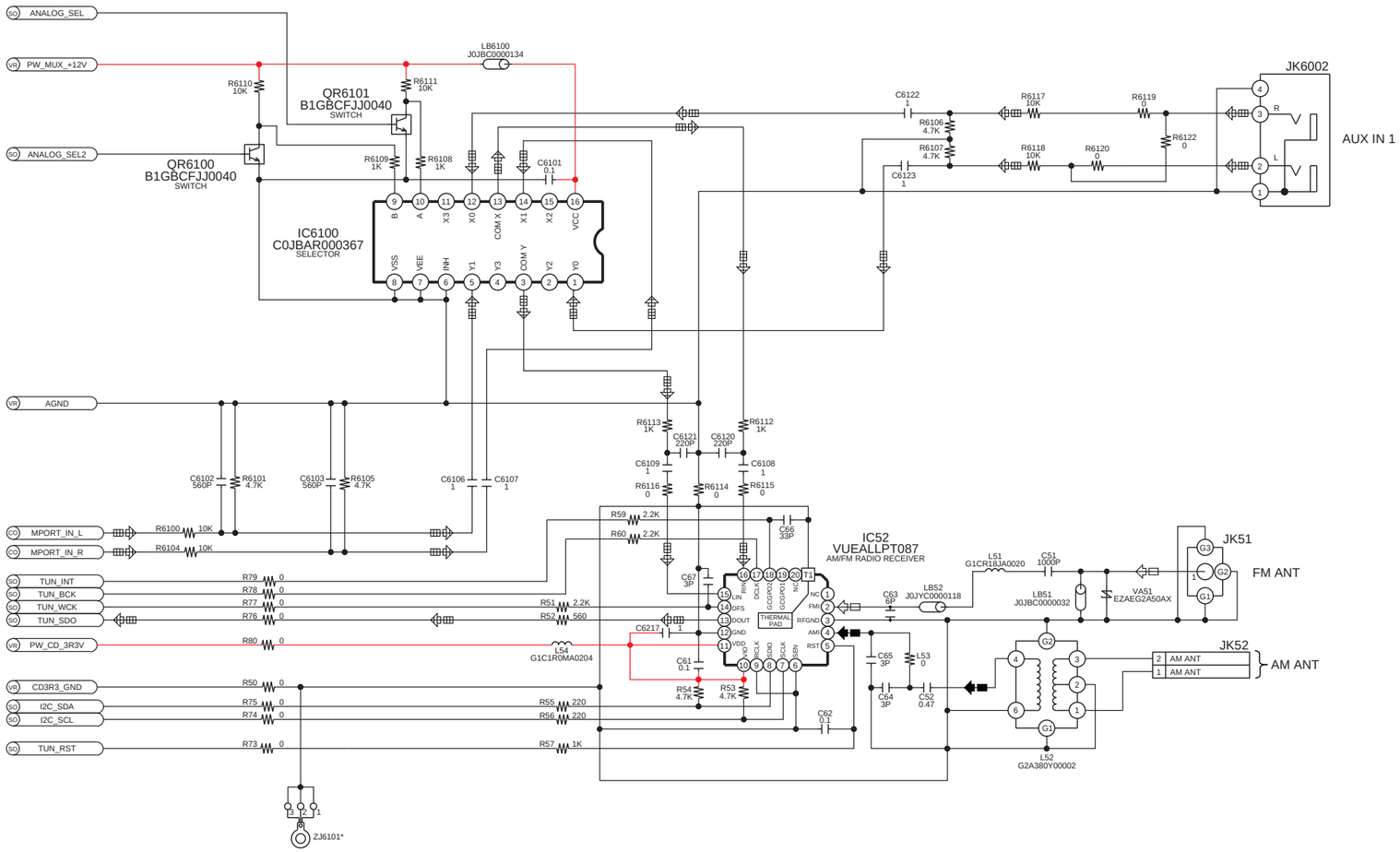
SA-AKX58GN/PH/PN,SA-AKX78PH/PN MAIN (DSP) CIRCUIT

12.8. Main (Tuner AUX) Circuit

SCHEMATIC DIAGRAM - 9

A MAIN (TUNER AUX) CIRCUIT

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



SO: MAIN (SOC I/O EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
CO: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 7
VR: MAIN (VREG FAN): SCHEMATIC DIAGRAM - 10 ~ 12

NOTE: " * " REF IS FOR INDICATION ONLY

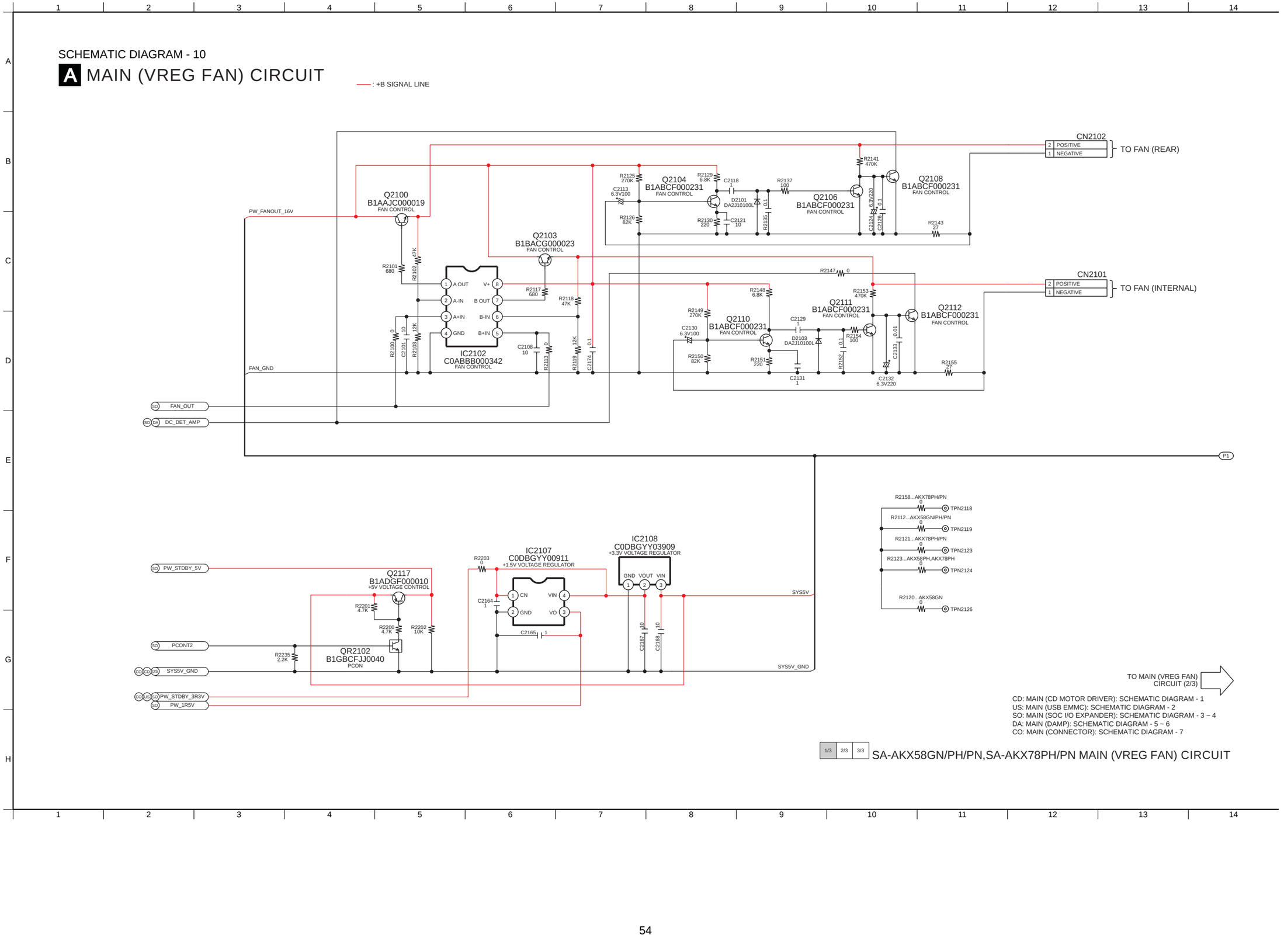
SA-AKX58GN/PH/PN,SA-AKX78PH/PN MAIN (TUNER AUX) CIRCUIT

12.9. Main (VREG Fan) Circuit

SCHEMATIC DIAGRAM - 10

A MAIN (VREG FAN) CIRCUIT

—— : +B SIGNAL LINE



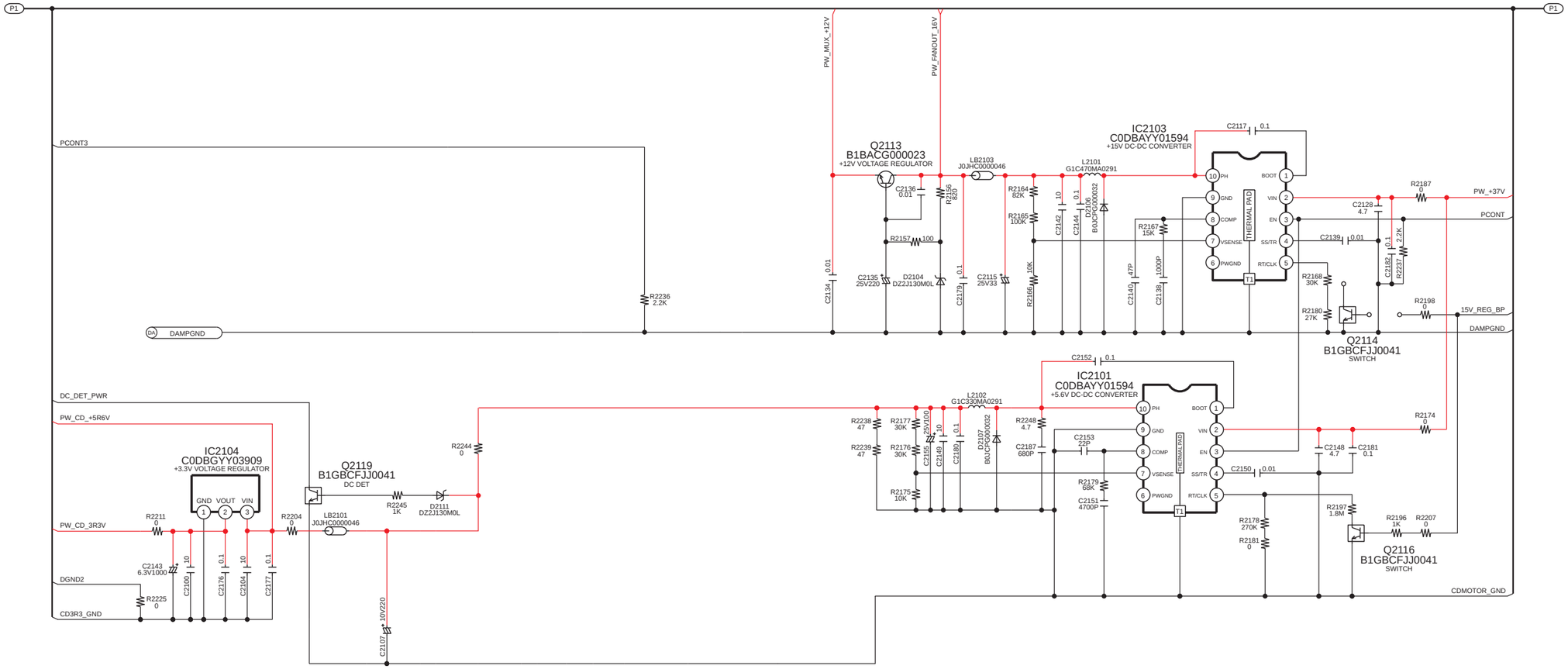
1/3 | 2/3 | 3/3

SA-AKX58GN/PH/PN,SA-AKX78PH/PN MAIN (VREG FAN) CIRCUIT

SCHEMATIC DIAGRAM - 11

A MAIN (VREG FAN) CIRCUIT

—— : +B SIGNAL LINE



TO MAIN (VREG FAN) CIRCUIT (1/3)

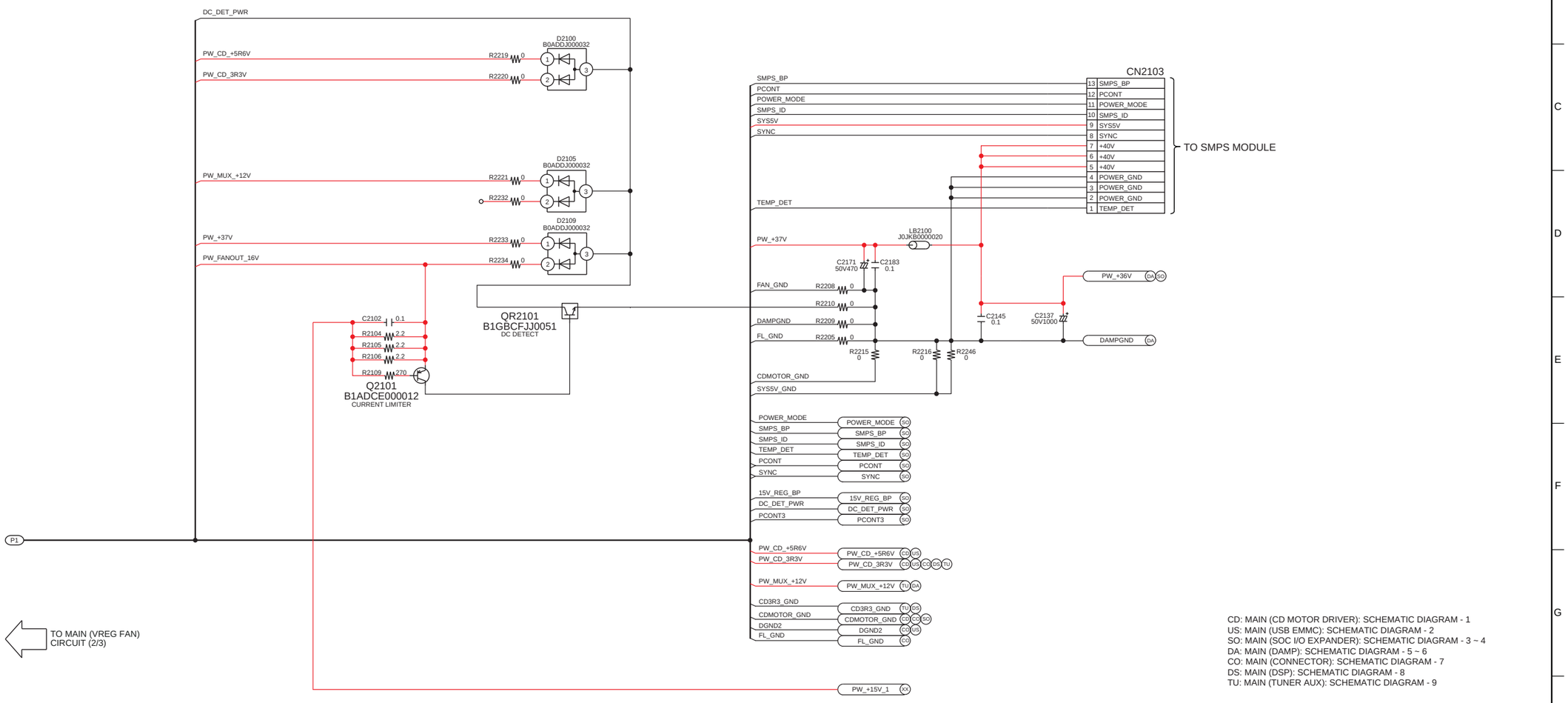
TO MAIN (VREG FAN) CIRCUIT (3/3)

DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5 ~ 6

SCHEMATIC DIAGRAM - 12

A MAIN (VREG FAN) CIRCUIT

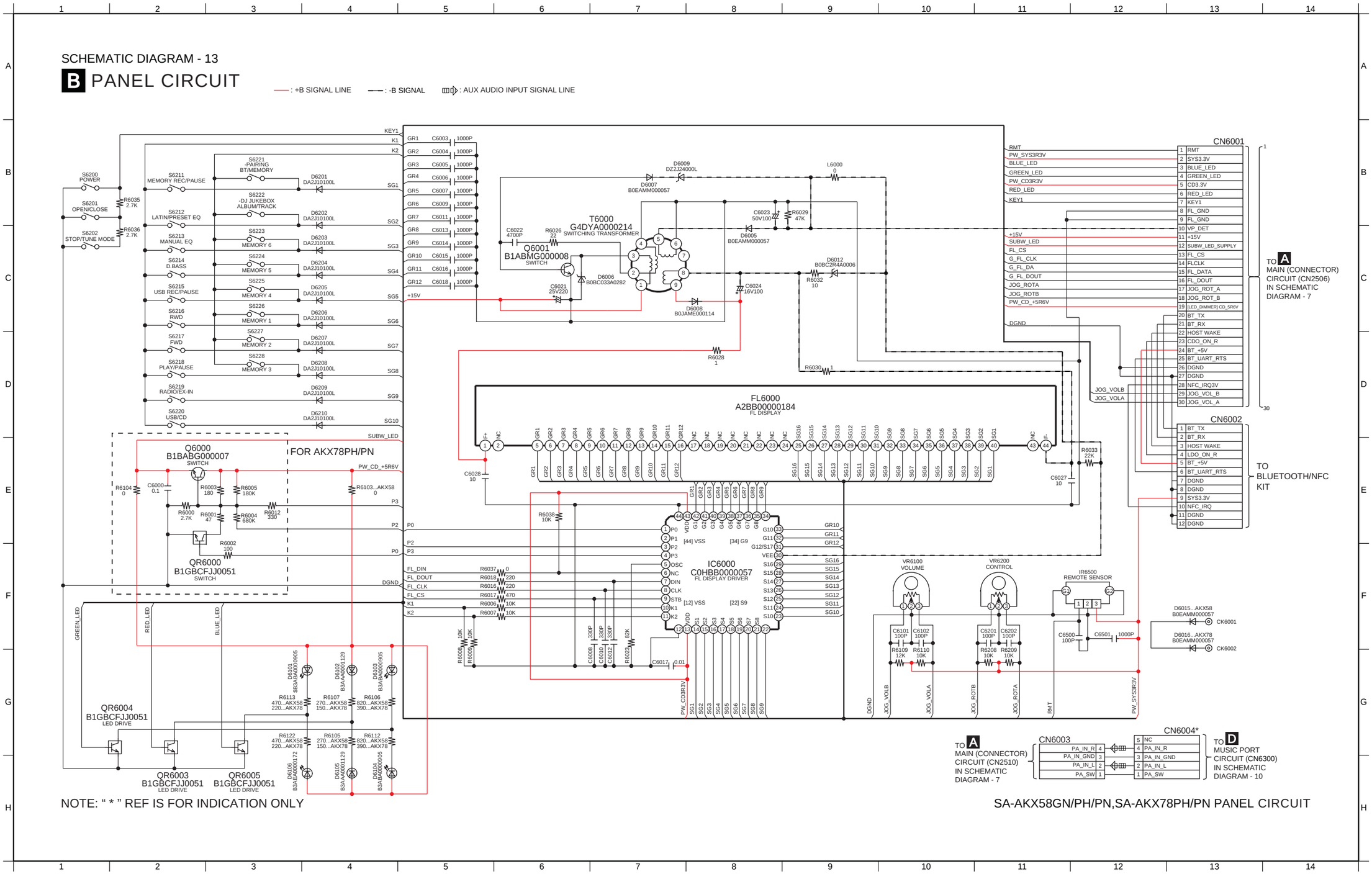
—— : +B SIGNAL LINE



CD: MAIN (CD MOTOR DRIVER): SCHEMATIC DIAGRAM - 1
US: MAIN (USB EMMC): SCHEMATIC DIAGRAM - 2
SO: MAIN (SOC I/O EXPANDER): SCHEMATIC DIAGRAM - 3 ~ 4
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5 ~ 6
CO: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 7
DS: MAIN (DSP): SCHEMATIC DIAGRAM - 8
TU: MAIN (TUNER AUX): SCHEMATIC DIAGRAM - 9

1/3 2/3 3/3 SA-AKX58GN/PH/PN,SA-AKX78PH/PN MAIN (VREG FAN) CIRCUIT

12.10. Panel Circuit

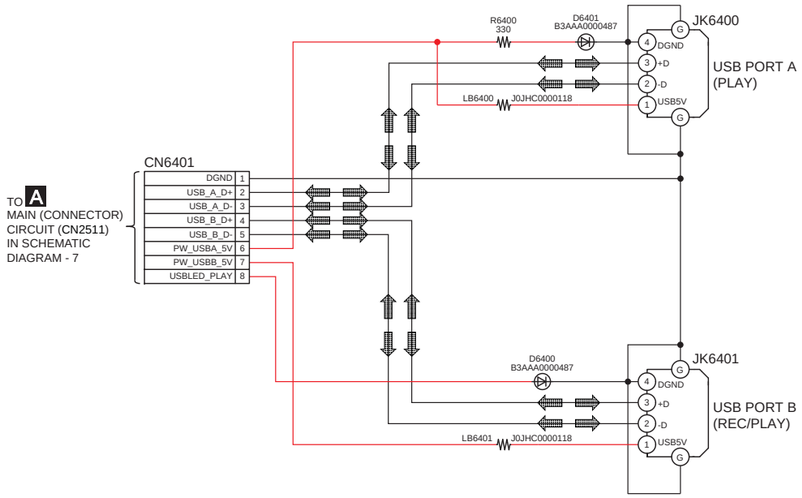


12.11. USB, Music Port & CD Interface Circuit

SCHEMATIC DIAGRAM - 14

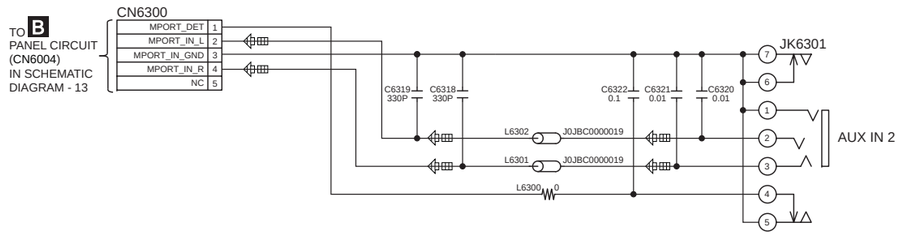
C USB CIRCUIT

: +B SIGNAL LINE : USB SIGNAL LINE

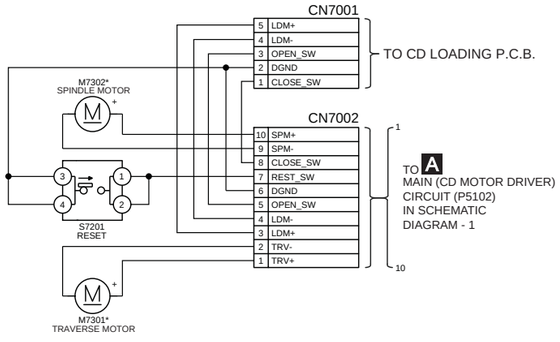


D MUSIC PORT CIRCUIT

: +B SIGNAL LINE : AUX AUDIO INPUT SIGNAL LINE



E CD INTERFACE CIRCUIT



NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX58GN/PH/PN,SA-AKX78PH/PN USB / MUSIC PORT / CD INTERFACE CIRCUIT

13 Printed Circuit Board

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

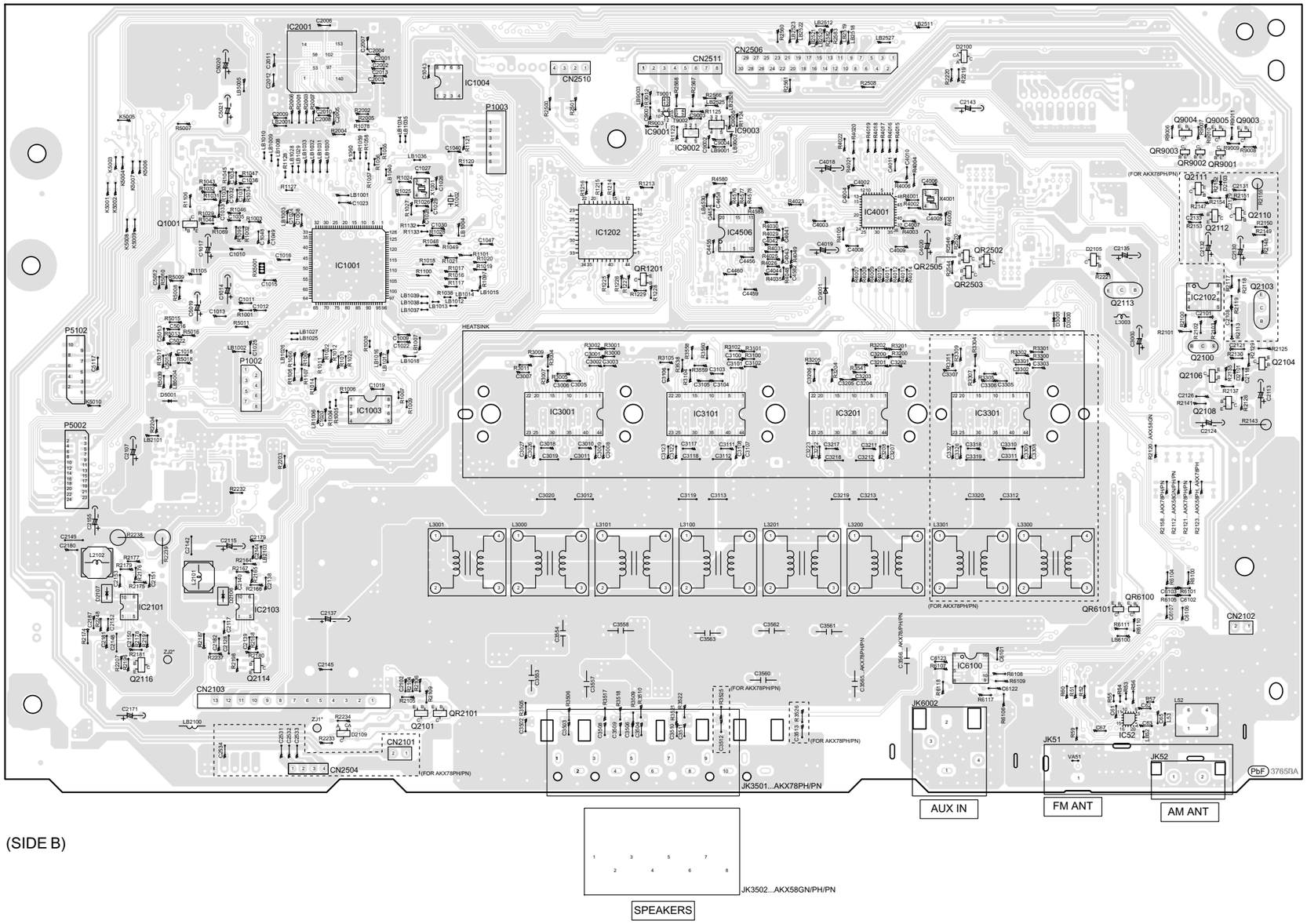
A MAIN P.C.B. (RFKV5075AA...AKX78PN) (RFKV5075FA...AKX58PH)
(RFKV5075BA...AKX78PH) (RFKV5075HA...AKX58GN)
(RFKV5075EA...AKX58PN)

(SIDE A)

SA-AKX58GN/PH/PN,SA-AKX78PH/PN
MAIN P.C.B.

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

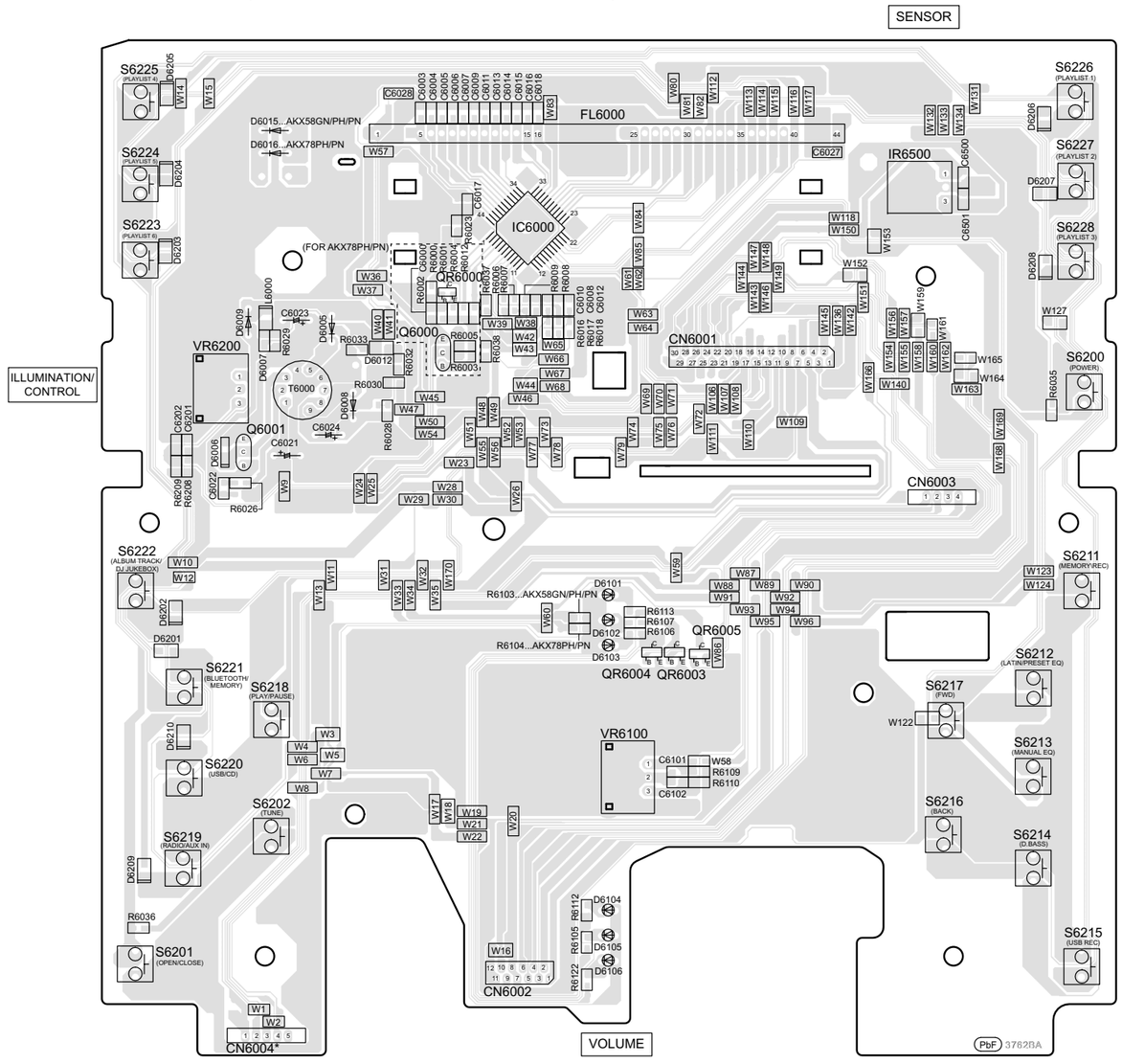
A MAIN P.C.B. (RFKV5075AA...AKX78PN) (RFKV5075FA...AKX58PH)
(RFKV5075BA...AKX78PH) (RFKV5075HA...AKX58GN)
(RFKV5075EA...AKX58PN)



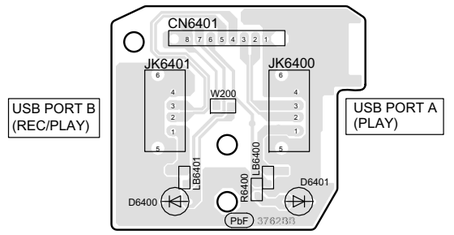
SA-AKX58GN/PH/PN,SA-AKX78PH/PN
MAIN P.C.B.

13.3. Panel, USB & Music Port P.C.B.

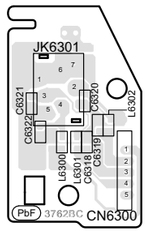
B PANEL P.C.B. (REP5063BA...AKX58GN/PH/PN)
(REP5063CA...AKX78PH/PN)



C USB P.C.B. (REP5063BB...AKX58GN/PH/PN)
(REP5063CB...AKX78PH/PN)



D MUSIC PORT P.C.B. (REP5063BC...AKX58GN/PH/PN)
(REP5063CC...AKX78PH/PN)

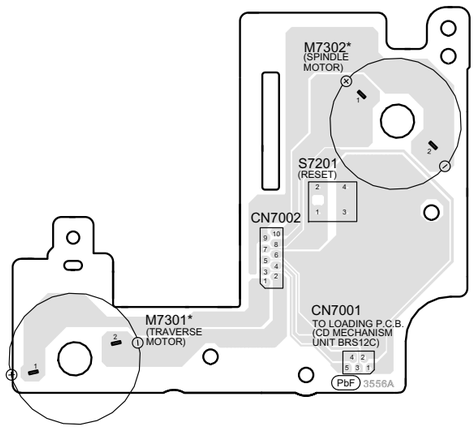


NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX58GN/PH/PN,SA-AKX78PH/PN
PANEL / USB / MUSIC PORT P.C.B.

13.4. CD Interface P.C.B.

E CD INTERFACE P.C.B. (REP4945A)



NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX58GN/PH/PN,SA-AKX78PH/PN
CD INTERFACE P.C.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. (1/5)

REF NO.	IC1001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	3.3	3.1	3.3	3.3	3.3	3.3	1.6	3.3	3.3	3.3	3.3	0	0	3.3	0	3.3	3.3	1.6	0	0
STANDBY	3.3	3.1	3.3	3.3	3.3	3.3	1.6	3.3	3.3	3.3	3.3	0	0	3.3	0	3.3	3.3	1.6	0	0

REF NO.	IC1001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY	3.1	3.3	0.2	2.9	3.3	0	0	0	3.3	0	3.3	0	1.6	1.1	0.8	0.4	0.8	0.8	1.5	0.8
STANDBY	3.1	3.3	0.2	2.9	3.3	0	0	0	3.3	0	3.3	0	1.6	1.1	0.8	0.4	0.8	0.8	1.5	0.8

REF NO.	IC1001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
PLAY	0.8	0	1.6	1.6	1.6	2.1	0	0	3.2	1.7	1.7	1.6	0	1.6	1.6	0.7	1.6	1.6	1.6	1.7
STANDBY	0.8	0	1.6	1.6	1.6	2.1	0	0	3.2	1.7	1.7	1.6	0	1.6	1.6	0.7	1.6	1.6	1.6	1.7

REF NO.	IC1001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
PLAY	1.7	1.6	2	2	1.7	0	1	1	1	1	0	0	3.3	3.3	3.3	3.3	1.7	3.3	3.3	0
STANDBY	1.7	1.6	2	2	1.7	0	1	1	1	1	0	0	3.3	3.3	3.3	3.3	1.7	3.3	3.3	0

REF NO.	IC1001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
PLAY	0.8	1.7	1.7	0.9	0	3.3	1.1	3.3	3.3	0	0	1.6	0	3.3	3.3	3.3	0	0	0	0
STANDBY	0.8	1.7	1.7	0.9	0	3.3	1.1	3.3	3.3	0	0	1.6	0	3.3	3.3	3.3	0	0	0	0

REF NO.	IC1001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
PLAY	3.1	3.3	0	0	3.1	3.1	3.3	3.2	1.9	1.7	1.7	1.1	3.3	3.2	0	1	3.3	3.3	3.3	3.3
STANDBY	3.1	3.3	0	0	3.1	3.1	3.3	3.2	1.9	1.7	1.7	1.1	3.3	3.2	0	1	3.3	3.3	3.3	3.3

REF NO.	IC1001																			
MODE	121	122	123	124	125	126	127	128												
PLAY	1	3.3	0	1	1.4	0	1.4	1.5												
STANDBY	1	3.3	0	1	1.4	0	1.4	1.5												

REF NO.	IC1002																			
MODE	1	2	3	4	5															
PLAY	3.3	3.3	0	0	1.9															
STANDBY	3.3	3.3	0	0	1.9															

REF NO.	IC1003																			
MODE	1	2	3	4	5	6	7	8												
PLAY	3.2	1.5	3.3	0	0	0	3.3	3.3												
STANDBY	3.2	1.5	3.3	0	0	0	3.3	3.3												

REF NO.	IC1202																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	0	0	0	0	3.3	0	3.3	0	3.3	3.3	0	3.3	0	3.3	0	3.3	0	3.3	3.3	0
STANDBY	0	0	0	0	3.3	0	3.3	0	3.3	3.3	0	3.3	0	3.3	0	3.3	0	3.3	3.3	0

SA-AKX58GN/PH/PN,AKX78PH/PN MAIN P.C.B.

14.1.2. Main P.C.B. (2/5)

REF NO.	IC1202																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY	0	0	0	3.3	3.3	3.3	3.3	3.3	0	0	0	3.3	3.3	0	3.3	0	0	0	0	0
STANDBY	0	0	0	3.3	3.3	3.3	3.3	3.3	0	0	0	3.3	3.3	0	3.3	0	0	0	0	0

REF NO.	IC1202																			
MODE	41	42	43	44																
PLAY	3.3	3.3	3.3	3.3																
STANDBY	3.3	3.3	3.3	3.3																

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	4.7										
STANDBY	10.9	39.5	3.1	2.1	0.5	0	0.8	0.7	0	4.7										

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																	

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	12.0	30.1	30.1	0	0	19.0	19	39.5	39.5	39.5	19	0	0	19.0	39.5	39.5	39.5	19.0	19.0
STANDBY	3.3	12.0	30.1	30.1	0	0	19.0	19	39.5	39.5	39.5	19	0	0	19.0	39.5	39.5	39.5	19.0	19.0

REF NO.	IC3001																			
MODE	41	42	43	44																
PLAY	0	0	30.1	30.0																
STANDBY	0	0	30.1	30.0																

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

14.1.3. Main P.C.B. (3/5)

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	12.0	30.1	30.1	0	0	19.0	19	39.5	39.5	39.5	19	0	0	19.0	39.5	39.5	39.5	19.0	19.0
STANDBY	3.3	12.0	30.1	30.1	0	0	19.0	19	39.5	39.5	39.5	19	0	0	19.0	39.5	39.5	39.5	19.0	19.0

REF NO.	IC3101																			
MODE	41	42	43	44																
PLAY	0	0	30.1	30.0																
STANDBY	0	0	30.1	30.0																

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	12.0	30.1	30.1	0	0	19.0	19	39.5	39.5	39.5	19	0	0	19.0	39.5	39.5	39.5	19.0	19.0
STANDBY	3.3	12.0	30.1	30.1	0	0	19.0	19	39.5	39.5	39.5	19	0	0	19.0	39.5	39.5	39.5	19.0	19.0

REF NO.	IC3201																			
MODE	41	42	43	44																
PLAY	0	0	30.1	30.0																
STANDBY	0	0	30.1	30.0																

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	12.0	30.1	30.1	0	0	19.0	19	39.5	39.5	39.5	19	0	0	19.0	39.5	39.5	39.5	19.0	19.0
STANDBY	3.3	12.0	30.1	30.1	0	0	19.0	19	39.5	39.5	39.5	19	0	0	19.0	39.5	39.5	39.5	19.0	19.0

REF NO.	IC3301																			
MODE	41	42	43	44																
PLAY	0	0	30.1	30.0																
STANDBY	0	0	30.1	30.0																

REF NO.	IC4001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	3.3	3.3	3.3	3.3	3.3	1.3	0	0.8	1.7	1.6	3.3	0	1.5	1.5	0	0	1.3	0	1.7	1.7
STANDBY	3.3	3.3	3.3	3.3	3.3	1.3	0	0.8	1.7	1.6	3.3	0	1.5	1.5	0	0	1.3	0	1.7	1.7

REF NO.	IC4001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY	3.3	0	1.5	3.3	0	3.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.3	0	0	0	0	3.3
STANDBY	3.3	0	1.5	3.3	0	3.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.3	0	0	0	0	3.3

REF NO.	IC4001																			
MODE	41	42	43	44	45	46	47	48												
PLAY	0	1.4	0	0	3.3	0	0	48												
STANDBY	0	1.4	0	0	3.3	0	0	48												

REF NO.	IC4506																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	3.3	1.7	0	-1.6	-3.2	0	0	3.3	0	0	0	0	1.6	1.3	1.7	0	3.3	1.9	0	3.3
STANDBY	3.3	1.7	0	-1.6	-3.2	0	0	3.3	0	0	0	0	1.6	1.3	1.7	0	3.3	1.9	0	3.3

14.1.4. Main P.C.B. (4/5)

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	1.6	5.5	0	1.6	2.9	0	0	5.6	0	0	2.9	2.8	2.8	2.9	2.9	2.9	3.3	2.4	5.5	2.2
STANDBY	1.6	5.5	0	1.6	2.9	0	0	5.6	0	0	2.9	2.8	2.8	2.9	2.9	2.9	3.3	2.4	5.5	2.2

REF NO.	IC5001																			
MODE	21	22	23	24	25	26	27	28	29	30										
PLAY	1.5	0	1.8	5.5	5.5	1.6	1.6	3.3	0	0										
STANDBY	1.5	0	1.8	5.5	5.5	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															
PLAY	0	0	3.3	0	5.1															
STANDBY	0	0	3.3	0	5.1															

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

REF NO.	Q1001				Q1002				Q2100				Q2103				Q2104			
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		7.8	15.3	8.4		0.2	11.1	0.2	
STANDBY	0	0	0.6		0	0	23.9		7.9	15.3	8.5		7.8	15.3	8.4		0.2	11.1	0.2	

REF NO.	Q2106				Q2108				Q2110				Q2111				Q2112			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY	0	0	0.7		0	3.2	0		0.4	5.1	1		0	0	0.3		0	3.2	0	
STANDBY	0	0	0.7		0	3.2	0		0.4	5.1	1		0	0	0.3		0	3.2	0	

REF NO.	Q2113				Q2114				Q2116				Q2117				Q2119			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY	12.5	15.3	13.1		0	1.7	0		0	0.4	0		5	4.9	4.3		0	3.3	0	
STANDBY	12.5	15.3	13.1		0	1.7	0		0	0.4	0		5	4.9	4.3		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				Q9004				Q9005				QR1201							
MODE	E	C	B		E	C	B		E	C	B		E	C	B					
PLAY	5.5	0	5.1		5.5	0	5.1		5.5	0	5.1		0	0	3.3					
STANDBY	5.5	0	5.1		5.5	0	5.1		5.5	0	5.1		0	0	3.3					

SA-AKX58GN/PH/PN,AKX78PH/PN MAIN P.C.B.

14.1.5. Main P.C.B. (5/5) & Panel P.C.B.

REF NO.	QR2101				QR2102				QR2502				QR2503				QR2505			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY	0	3.3	0		0	0	3.1		0	0	3.3		0	0	1.2		0	1.0	0	
STANDBY	0	3.3	0		0	0	3.1		0	0	3.3		0	0	1.2		0	1.0	0	

SA-AKX58GN/PH/PN,AKX78PH/PN MAIN P.C.B.

REF NO.	IC6000																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
POWER	0	0	0	0	1.9	3.3	1.3	0	2.9	0	0	0	3.3	-15.9	-15.9	-19.6	-23.3	-21.4	-23.3	-21.4
STANDBY	0	0	0	0	1.9	3.3	1.3	0	2.9	0	0	0	3.3	-15.9	-15.9	-19.6	-23.3	-21.4	-23.3	-21.4

REF NO.	IC6000																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
POWER	-23.3	-23.3	-21.4	-23.3	-15.9	-19.6	-15.9	-21.4	-23.3	-23.7	-22	-21.6	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4
STANDBY	-23.3	-23.3	-21.4	-23.3	-15.9	-19.6	-15.9	-21.4	-23.3	-23.7	-22	-21.6	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4

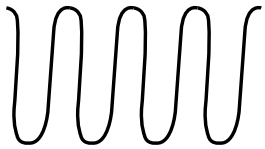
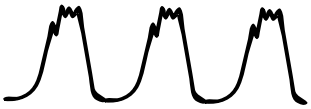
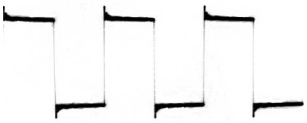
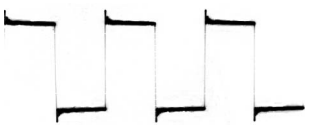
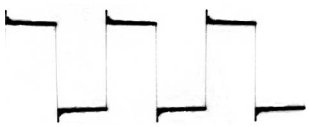
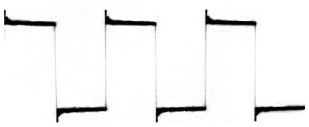
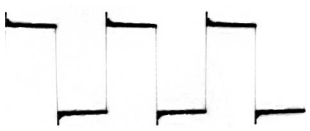
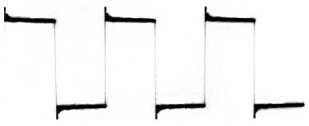
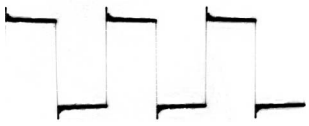
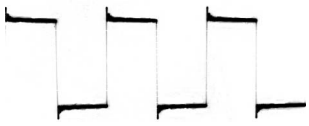
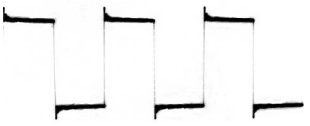
REF NO.	IC6000																			
POWER	41	42	43	44																
CD PLAY	-21.5	-21.8	3.3	0																
STANDBY	-21.5	-21.8	3.3	0																

REF NO.	Q6000				Q6001				QR6000				QR6003				QR6004			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY	1.7	4.8	2.1		0	15.5	-0.2		0	0.4	3.3		0	0	3.2		0	4.3	0	
STANDBY	1.7	4.8	2.1		0	15.5	-0.2		0	0.4	3.3		0	0	3.2		0	4.3	0	

REF NO.	QR6005																			
MODE	E	C	B																	
PLAY	0	0	1.2																	
STANDBY	0	0	1.2																	

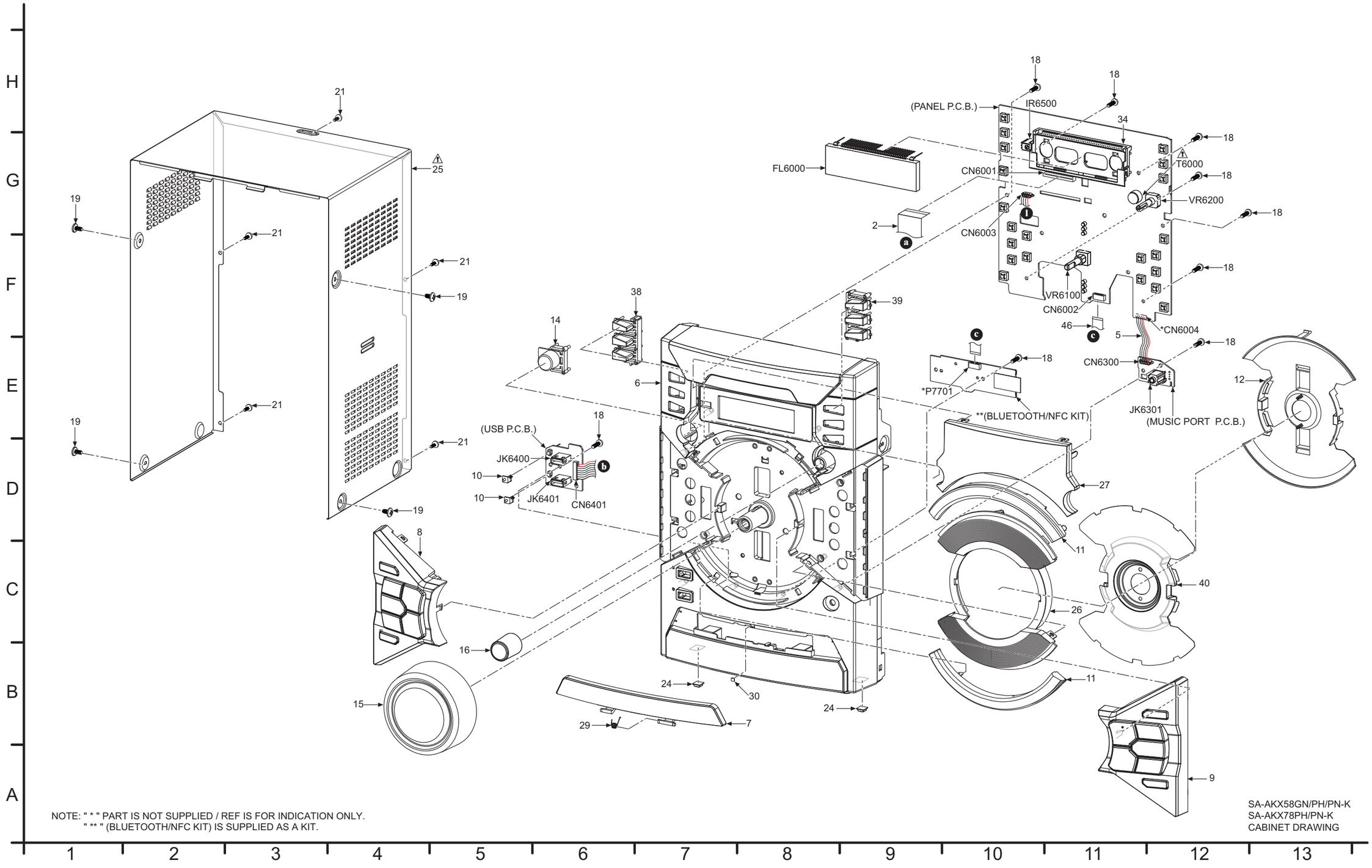
SA-AKX58GN/PH/PN,AKX78PH/PN PANEL P.C.B.

14.2. Waveform Chart

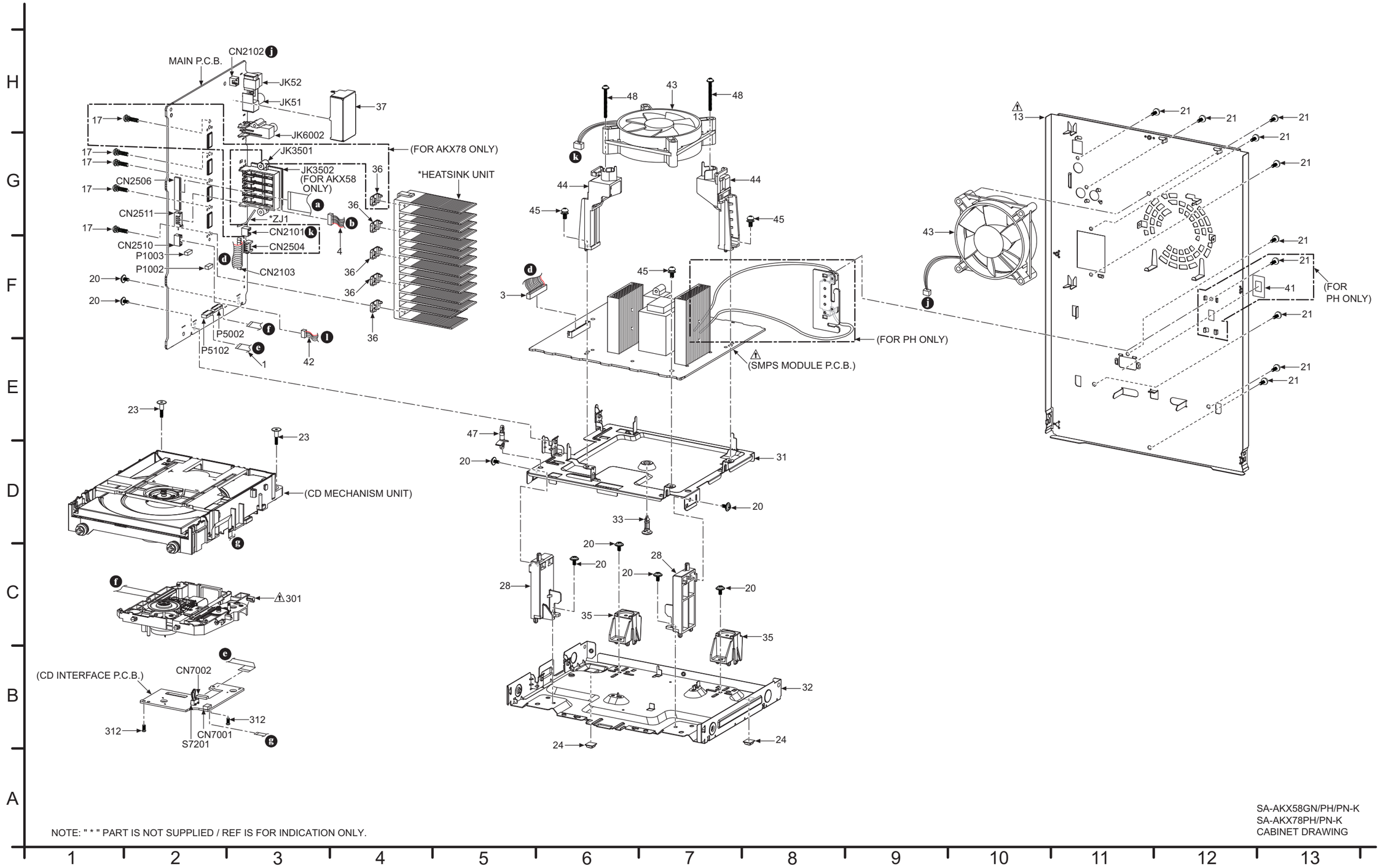
WF No. IC1001-124 (PLAY)  4Vp-p(10msec/div)	WF No. IC1001-125 (PLAY)  3.5Vp-p(20usec/div)	WF No. IC1001-128 (PLAY)  480mVp-p(10usec/div)	WF No. IC3001-5,6 (PLAY)  4.4Vp-p(1usec/div)
WF No. IC3001-27,32,35,39 (PLAY)  75Vp-p(1usec/div)	WF No. IC3101-5,6 (PLAY)  4.4Vp-p(1usec/div)	WF No. IC3101-27,32,35,39 (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)	WF No. IC4001-27,34 (PLAY)  5.2Vp-p(1usec/div)
WF No. IC4001-41 (PLAY)  900mVp-p(10msec/div)	WF No. IC4001-42 (PLAY)  1.2Vp-p(20nsec/div)		

15 Exploded View and Replacement Parts List

15.1. Cabinet Parts Location 1



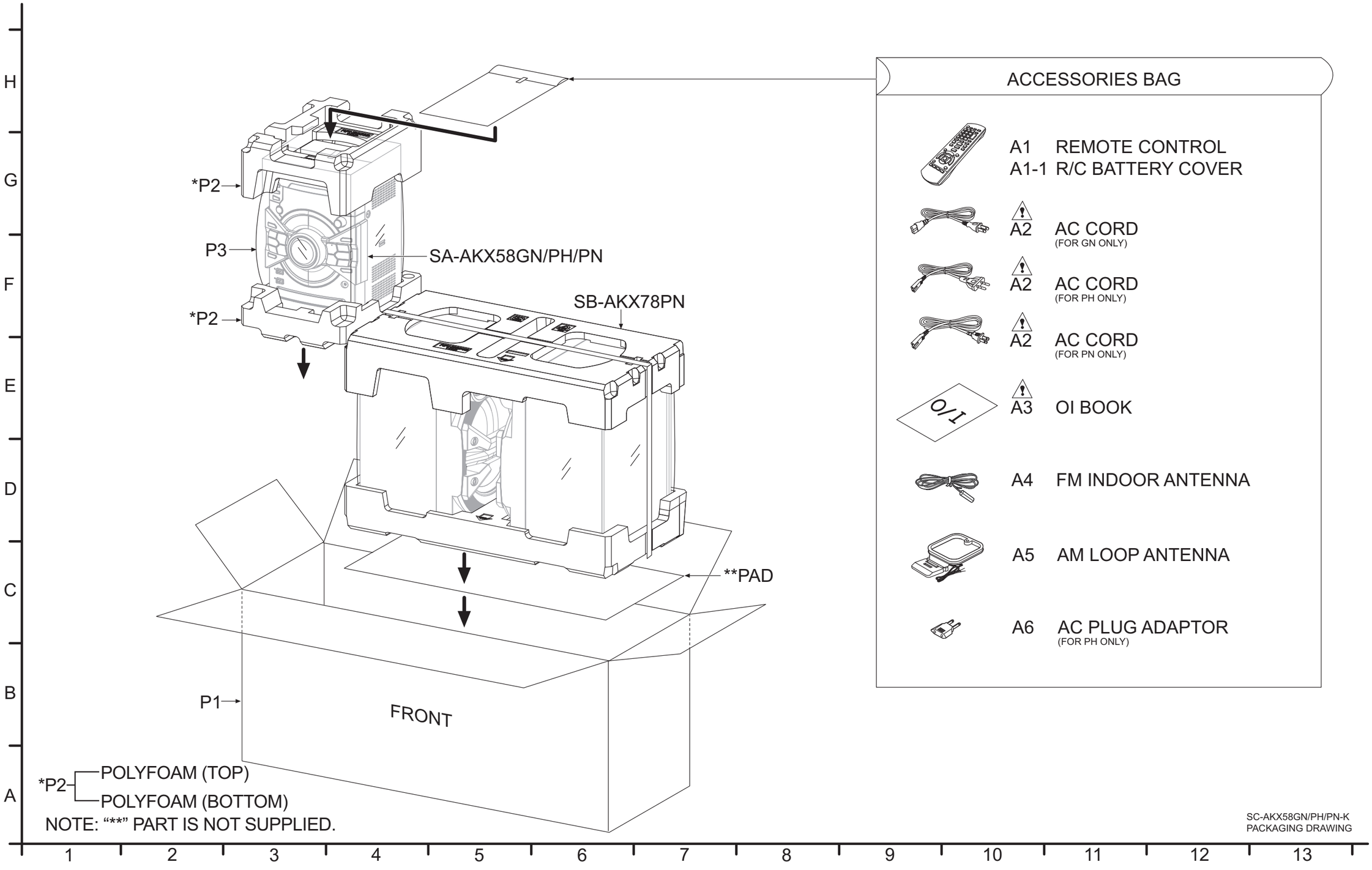
15.2. Cabinet Parts Location 2



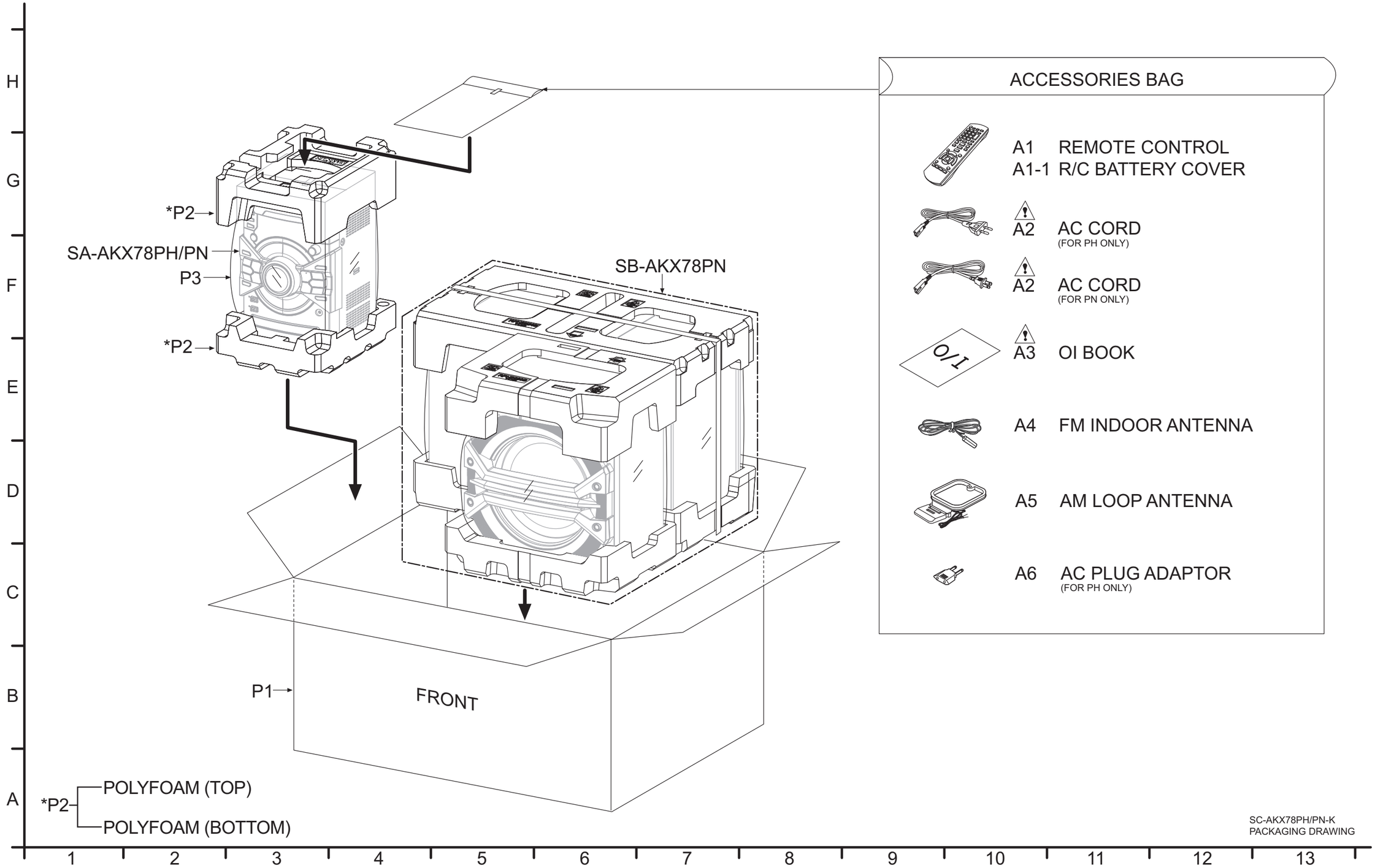
NOTE: " * " PART IS NOT SUPPLIED / REF IS FOR INDICATION ONLY.

SA-AKX58GN/PH/PN-K
SA-AKX78PH/PN-K
CABINET DRAWING

15.3. Packaging (SC-AKX58GN/PH/PN-K)



15.4. Packaging (SC-AKX78PH/PN-K)



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	REE1730	10P FFC (MAIN-CD INTERFACE)	1	
	2	REE1942	30P FFC (MAIN-PANEL)	1	
	3	REX1687	13P WIRE (SMPS-MAIN)	1	
	4	REX1698	8P WIRE (USB-MAIN)	1	
	5	REX1734	5P WIRE (MUSIC PORT-PANEL)	1	
	6	RGP1692A-K	FRONT PANEL	1	AKX58GN /PH/PN
	6	RGP1692B-K	FRONT PANEL	1	AKX78PH /PN
	7	RGK2544-K	CD LID	1	
	8	RFKNAKX58PNL	LEFT BUTTON ORNAMENT ASS'Y	1	AKX58GN
	8	RFKNAKX78PNL	LEFT BUTTON ORNAMENT ASS'Y	1	AKX58PH /PN, AKX78PH /PN
	9	RFKNAKX78PNR	RIGHT BUTTON ORNAMENT ASS'Y	1	
	10	RGL0800-Q	USB REC LIGHT PIECE	2	
	11	RGK2449-1S	RING ORNAMENT	2	AKX78PH /PN

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	11	RGK2449-K	RING ORNAMENT	2	AKX58GN /PH/PN
	12	RGC0050-W1	VOLUME LIGHT REFLECTOR	1	
⚠	13	RGR0443E-D1A	REAR PANEL	1	AKX78PN
⚠	13	RGR0443R-AA	REAR PANEL	1	AKX58PH
⚠	13	RGR0443S-AA	REAR PANEL	1	AKX78PH
⚠	13	RGR0443U-A1A	REAR PANEL	1	AKX58PN
⚠	13	RGR0443U-BA	REAR PANEL	1	AKX58GN
	14	RGU2948-K	POWER BUTTON	1	
	15	RGW0446-S	VOLUME KNOB	1	
	16	RGW0435-K	SKIP KNOB	1	
	17	RHD26043-1	SCREW	4	AKX58GN /PH/PN
	17	RHD26043-1	SCREW	5	AKX78PH /PN
	18	RHD26046-L	SCREW	9	
	19	RHD30007-K2J	SCREW	4	
	20	RHD30111-31	SCREW	8	
	21	RHD30119-S	SCREW	14	AKX58GN /PN, AKX78PN
	21	RHD30119-S	SCREW	15	AKX58PH , AKX78PH
	23	RHDX031008	SCREW	2	
	24	RKAX0042-K	LEG CUSHION	4	
⚠	25	RKM0713-K1	TOP CABINET	1	
	26	RKW1027-Q	CENTER ORNAMENT	1	
	27	RKW1063A-Q	FL WINDOW	1	
	28	RMA2442	CHASSIS SUPPORT	2	
	29	RMB0930	CD LID SPRING	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	30	RMGX0033A-K	CD LID CUSHION	1	
	31	RMK0841-1	INNER CHASSIS	1	
	32	RMKX1031A-1	BOTTOM CHASSIS	1	
	33	RMNX0298	PCB SPACER	1	
	34	RMNV0079-1	FL HOLDER	1	
	35	RMQ2134	MECHA HOLDER	2	
	36	RMZX1022-1	PCB SPACER	4	AKX58GN /PH/PN
	36	RMZX1022-1	PCB SPACER	5	AKX78PH /PN
	37	RSC1230	TUNER SHIELD	1	
	38	RGU2949-K	LEFT PLAYLIST BUTTON	1	
	39	RGU2950-K	RIGHT PLAYLIST BUTTON	1	
	40	RFKNAKX38PHK	VOULME LIGHT DIFFUSER ASS'Y	1	
	41	RMN1079	VOLTAGE SELECTOR COVER SHEET	1	AKX58PH , AKX78PH
	42	REX1695	4P WIRE (PANEL-MAIN)	1	
	43	L6FALEFH0030	FAN UNIT	2	
	44	RMKX1016-4	FAN FIXTURE	2	
	45	RHDX30005-J	SCREW	3	
	46	REE1743	12P FFC (PANEL-BLUETOOTH/NFC)	1	
	47	RMX0510	PCB SPACER	1	
	48	XTW3+30TFJ	SCREW	2	
			TRAVERSE DECK		
⚠	301	RAE1044Z-V	TRAVERSE UNIT	1	
	312	XTN2+6GFJ	SCREW	2	
			PACKING MATERIALS		
	P1	RPG0K69	PACKING CASE	1	AKX58PN
	P1	RPG0K70	PACKING CASE	1	AKX58PH
	P1	RPG0K71	PACKING CASE	1	AKX58GN
	P1	RPG0L30	PACKING CASE	1	AKX78PN
	P1	RPG0L31	PACKING CASE	1	AKX78PH
	P2	RPN2653	POLYFOAM	1	AKX58GN /PH/PN
	P2	RPN2658	POLYFOAM	1	AKX78PH /PN
	P3	RPFX0198-1	MIRAMAT	1	
			ACCESSORIES		
	A1	N2QAYB000915	REMOTE CONTROL	1	
	A1-1	RKK-AKX18PHK	R/C BATTERY COVER	1	
⚠	A2	K2CB2CB00022	AC CORD	1	AKX58PN , AKX78PN
⚠	A2	K2CJ2YY00093	AC CORD	1	AKX58GN
⚠	A2	K2CQ2YY00119	AC CORD	1	AKX58PH , AKX78PH
⚠	A3	RQT9895-2M	O/I BOOK (En/Sp)	1	AKX58PH /PN, AKX78PH /PN
⚠	A3	RQT9898-L	O/I BOOK (En)	1	AKX58GN
⚠	A3	RQT9958-1B	O/I BOOK (En)	1	AKX58PH /PN, AKX78PH /PN
	A4	RSAX0002	FM INDOOR ANTENNA	1	
	A5	N1DYYYY00011	AM LOOP ANTENNA	1	
	A6	K2DAYYY00002	AC PLUG ADAPTOR	1	AKX58PH , AKX78PH

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	RFKV5075AA	MAIN P.C.B.	1	(RTL) AKX78PN
	PCB1	RFKV5075BA	MAIN P.C.B.	1	(RTL) AKX78PH
	PCB1	RFKV5075EA	MAIN P.C.B.	1	(RTL) AKX58PN
	PCB1	RFKV5075FA	MAIN P.C.B.	1	(RTL) AKX58PH
	PCB1	RFKV5075HA	MAIN P.C.B.	1	(RTL) AKX58GN
	PCB2	RFKV5075AB	BLUETOOTH/NFC KIT	1	AKX78PN
	PCB2	RFKV5075BB	BLUETOOTH/NFC KIT	1	AKX78PH
	PCB2	RFKV5075EB	BLUETOOTH/NFC KIT	1	AKX58PN
	PCB2	RFKV5075FB	BLUETOOTH/NFC KIT	1	AKX58PH
	PCB2	RFKV5075HB	BLUETOOTH/NFC KIT	1	AKX 58GN
	PCB3	REP5063BA	PANEL P.C.B.	1	(RTL) AKX58GN /PH/PN
	PCB3	REP5063CA	PANEL P.C.B.	1	(RTL) AKX78PH /PN
	PCB4	REP5063BB	USB P.C.B.	1	(RTL) AKX58GN /PH/PN
	PCB4	REP5063CB	USB P.C.B.	1	(RTL) AKX78PH /PN
	PCB5	REP5063BC	MUSIC PORT P.C.B.	1	(RTL) AKX58GN /PH/PN
	PCB5	REP5063CC	MUSIC PORT P.C.B.	1	(RTL) AKX78PH /PN
	PCB6	REP4945A	CD INTERFACE P.C.B.	1	(RTL)
⚠	PCB7	N0AB2GP00001	SMPS MODULE	1	AKX58PN , AKX78PN
⚠	PCB7	N0AC2GP00001	SMPS MODULE	1	AKX58GN
⚠	PCB7	N0AD2GP00001	SMPS MODULE	1	AKX58PH ,AKX78PH
			INTEGRATED CIRCUITS		
	IC52	VUEALLPT087	IC	1	(E.S.D)
	IC1001	C1AB00004188	IC	1	(E.S.D)
	IC1002	C0EBE0000338	IC	1	(E.S.D)
	IC1003	RFKV5075AA	MAIN P.C.B. KIT	1	(RTL) AKX78PN
	IC1003	RFKV5075BA	MAIN P.C.B. KIT	1	(RTL) AKX78PH
	IC1003	RFKV5075EA	MAIN P.C.B. KIT	1	(RTL) AKX58PN
	IC1003	RFKV5075FA	MAIN P.C.B. KIT	1	(RTL) AKX58PH
	IC1003	RFKV5075HA	MAIN P.C.B. KIT	1	(RTL) AKX58GN
	IC1004	RFKV5075AB	NFC KIT ASS'Y	1	AKX78PN
	IC1004	RFKV5075BB	NFC KIT ASS'Y	1	AKX78PH
	IC1004	RFKV5075EB	NFC KIT ASS'Y	1	AKX58PN
	IC1004	RFKV5075FB	NFC KIT ASS'Y	1	AKX58PH
	IC1004	RFKV5075HB	NFC KIT ASS'Y	1	AKX 58GN

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	IC1202	C0ZBZ0002175	IC	1	(E.S.D)
	IC2001	RFKWFAKX58LM	IC	1	(E.S.D)
	IC2101	C0DBAYY01594	IC	1	(E.S.D)
	IC2102	C0ABBB000342	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) AKX78PH /PN
	IC4001	VUEALLPT090	IC	1	(E.S.D)
	IC4506	C1AB00004031	IC	1	(E.S.D)
	IC5001	C0GBY0000213	IC	1	(E.S.D)
	IC6000	C0HBB0000057	IC	1	(E.S.D)
	IC6100	C0JBAR000367	IC	1	(E.S.D)
	IC9001	C0JBAS000401	IC	1	(E.S.D)
	IC9002	C0DBZYY00716	IC	1	(E.S.D)
	IC9003	C0DBZYY00716	IC	1	(E.S.D)
			TRANSISTORS		
	Q1001	B1ABCF000176	TRANSISTOR	1	(E.S.D)
	Q1002	B1GBCFJJ0041	TRANSISTOR	1	(E.S.D)
	Q2100	B1AAJC000019	TRANSISTOR	1	(E.S.D)
	Q2101	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q2103	B1BACG000023	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	B1BACG000023	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	B1ADCE000012	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) AKX78PH /PN
	Q6001	B1ABMG000008	TRANSISTOR	1	(E.S.D)
	Q9003	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q9004	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q9005	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	QR1201	B1GBCFJJ0040	TRANSISTOR	1	(E.S.D)
	QR2101	B1GBCFJJ0051	TRANSISTOR	1	(E.S.D)
	QR2102	B1GBCFJJ0040	TRANSISTOR	1	(E.S.D)
	QR2502	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
	QR2503	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
	QR2505	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
	QR6000	B1GBCFJJ0051	TRANSISTOR	1	(E.S.D) AKX78PH /PN
	QR6003	B1GBCFJJ0051	TRANSISTOR	1	(E.S.D)
	QR6004	B1GBCFJJ0051	TRANSISTOR	1	(E.S.D)
	QR6005	B1GBCFJJ0051	TRANSISTOR	1	(E.S.D)
	QR6100	B1GBCFJJ0040	TRANSISTOR	1	(E.S.D)
	QR6101	B1GBCFJJ0040	TRANSISTOR	1	(E.S.D)
	QR9001	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
	QR9002	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
	QR9003	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
			DIODES		
	D1001	DZ2J130M0L	DIODE	1	(E.S.D)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	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	B0ADDJ000032	DIODE	1	(E.S.D)
	D2106	B0JCPG000032	DIODE	1	(E.S.D)
	D2107	B0JCPG000032	DIODE	1	(E.S.D)
	D2109	B0ADDJ000032	DIODE	1	(E.S.D)
	D2111	DZ2J130M0L	DIODE	1	(E.S.D)
	D3000	B0ACCK000005	DIODE	1	(E.S.D)
	D3001	B0ACCK000005	DIODE	1	(E.S.D)
	D5001	B0JCAE000001	DIODE	1	(E.S.D)
	D6005	B0EAMM000057	DIODE	1	(E.S.D)
	D6006	B0BC033A0282	DIODE	1	(E.S.D)
	D6007	B0EAMM000057	DIODE	1	(E.S.D)
	D6008	B0JAME000114	DIODE	1	(E.S.D)
	D6009	DZ2J24000L	DIODE	1	(E.S.D)
	D6012	B0BC2R4A0006	DIODE	1	(E.S.D)
	D6015	B0EAMM000057	DIODE	1	(E.S.D) AKX58GN /PH/PN
	D6016	B0EAMM000057	DIODE	1	(E.S.D) AKX78PH /PN
	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)
	D6201	DA2J10100L	DIODE	1	(E.S.D)
	D6202	DA2J10100L	DIODE	1	(E.S.D)
	D6203	DA2J10100L	DIODE	1	(E.S.D)
	D6204	DA2J10100L	DIODE	1	(E.S.D)
	D6205	DA2J10100L	DIODE	1	(E.S.D)
	D6206	DA2J10100L	DIODE	1	(E.S.D)
	D6207	DA2J10100L	DIODE	1	(E.S.D)
	D6208	DA2J10100L	DIODE	1	(E.S.D)
	D6209	DA2J10100L	DIODE	1	(E.S.D)
	D6210	DA2J10100L	DIODE	1	(E.S.D)
	D6400	B3AAA0000487	DIODE	1	(E.S.D)
	D6401	B3AAA0000487	DIODE	1	(E.S.D)
	D9001	B0ECKM000008	DIODE	1	(E.S.D)
			VARIABLE RESISTORS		
	VR6100	EVEKE2F3524B	VOLUME JOG	1	
	VR6200	K9AA012Y0012	CONTROL JOG	1	
			VARISTORS		
	VA51	EZAEG2A50AX	ESD SUPRESSOR	1	
			SWITCHES		
	S6200	EVQ21405RJ	SW POWER	1	
	S6201	EVQ21405RJ	SW OPEN/CLOSE	1	
	S6202	EVQ21405RJ	SW TUNE MODE	1	
	S6211	EVQ21405RJ	SW MEMORY REC	1	
	S6212	EVQ21405RJ	SW LATIN/PRESET	1	
	S6213	EVQ21405RJ	SW MANUAL EQ	1	
	S6214	EVQ21405RJ	SW D BASS	1	
	S6215	EVQ21405RJ	SW USB REC	1	
	S6216	EVQ21405RJ	SW RWD	1	
	S6217	EVQ21405RJ	SW FWD	1	
	S6218	EVQ21405RJ	SW PLAY/PAUSE	1	
	S6219	EVQ21405RJ	SW RADIO/AUX IN	1	
	S6220	EVQ21405RJ	SW USB/CD	1	
	S6221	EVQ21405RJ	SW BT/MEMORY	1	
	S6222	EVQ21405RJ	SW ALBUM/TRACK	1	
	S6223	EVQ21405RJ	SW MEMORY 6	1	
	S6224	EVQ21405RJ	SW MEMORY 5	1	
	S6225	EVQ21405RJ	SW MEMORY 4	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	S6226	EVQ21405RJ	SW MEMORY 1	1	
	S6227	EVQ21405RJ	SW MEMORY 2	1	
	S6228	EVQ21405RJ	SW MEMORY 3	1	
	S7201	K0L1BA000158	SW RESET	1	
			CONNECTORS		
	CN2101	K1KA02AA0186	2P CONNECTOR	1	
	CN2102	K1KA02AA0186	2P CONNECTOR	1	
	CN2103	K1YZ13000002	13P CONNECTOR	1	
	CN2504	K1KA04BA0061	4P CONNECTOR	1	AKX78PH /PN
	CN2506	K1MN30A00019	30P CONNECTOR	1	
	CN2510	K1KA04AA0193	4P CONNECTOR	1	
	CN2511	K1KA08AA0193	8P CONNECTOR	1	
	CN6001	K1MY30AA0124	30P CONNECTOR	1	
	CN6002	K1MN12B00014	12P CONNECTOR	1	
	CN6003	K1ZZ00000832	4P CONNECTOR	1	
	CN6300	K1YF05000001	5P CONNECTOR	1	
	CN6401	K1YF08000002	8P CONNECTOR	1	
	CN7001	K1MY05BA0539	5P CONNECTOR	1	
	CN7002	K1MN10B00016	10P CONNECTOR	1	
	P1002	K1MN08A00048	8P CONNECTOR	1	
	P1003	K1KA06AA0083	6P CONNECTOR	1	
	P5002	K1MY24A00001	24P CONNECTOR	1	
	P5102	K1MN10AA0076	10P CONNECTOR	1	
			COILS AND INDUC-TORS		
	L51	G1CR18JA0020	INDUCTOR	1	
	L52	G2A380Y00002	ANTENNA COIL	1	
	L54	G1C1R0MA0204	INDUCTOR	1	
	L2101	G1C470MA0291	INDUCTOR	1	
	L2102	G1C330MA0291	INDUCTOR	1	
	L3000	G0C100M00009	INDUCTOR	1	
	L3001	G0C100M00009	INDUCTOR	1	
	L3003	G1C4R7MA0172	INDUCTOR	1	
	L3100	G0C100M00009	INDUCTOR	1	
	L3101	G0C100M00009	INDUCTOR	1	
	L3200	G0C100M00009	INDUCTOR	1	
	L3201	G0C100M00009	INDUCTOR	1	
	L3300	G0C100M00009	INDUCTOR	1	AKX78PH /PN
	L3301	G0C100M00009	INDUCTOR	1	AKX78PH /PN
	L6301	J0JBC0000019	INDUCTOR	1	
	L6302	J0JBC0000019	INDUCTOR	1	
	LB51	J0JBC0000032	INDUCTOR	1	
	LB52	J0JYC0000118	INDUCTOR	1	
	LB1001	J0JBC0000010	INDUCTOR	1	
	LB1002	J0JBC0000010	INDUCTOR	1	
	LB1003	J0JBC0000010	INDUCTOR	1	
	LB1004	J0JBC0000010	INDUCTOR	1	
	LB1006	J0JBC0000010	INDUCTOR	1	
	LB1007	J0JBC0000010	INDUCTOR	1	
	LB1008	J0JCC0000286	INDUCTOR	1	
	LB1009	J0JCC0000286	INDUCTOR	1	
	LB1010	J0JCC0000286	INDUCTOR	1	
	LB1012	J0JCC0000278	INDUCTOR	1	
	LB1013	J0JCC0000278	INDUCTOR	1	
	LB1014	J0JCC0000286	INDUCTOR	1	
	LB1015	J0JCC0000286	INDUCTOR	1	
	LB1016	J0JBC0000010	INDUCTOR	1	
	LB1017	J0JBC0000010	INDUCTOR	1	
	LB1018	J0JBC0000010	INDUCTOR	1	
	LB1025	J0JCC0000286	INDUCTOR	1	
	LB1026	J0JCC0000286	INDUCTOR	1	
	LB1027	J0JCC0000286	INDUCTOR	1	
	LB1028	J0JCC0000286	INDUCTOR	1	
	LB1029	J0JCC0000286	INDUCTOR	1	
	LB1030	J0JBC0000010	INDUCTOR	1	
	LB1031	J0JBC0000010	INDUCTOR	1	
	LB1032	J0JBC0000010	INDUCTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	LB1033	J0JBC0000010	INDUCTOR	1	
	LB1034	J0JCC0000286	INDUCTOR	1	
	LB1035	J0JCC0000286	INDUCTOR	1	
	LB1036	J0JCC0000286	INDUCTOR	1	
	LB1037	J0JCC0000286	INDUCTOR	1	
	LB1038	J0JCC0000286	INDUCTOR	1	
	LB1039	J0JCC0000286	INDUCTOR	1	
	LB1040	J0JCC0000286	INDUCTOR	1	
	LB1201	J0JBC0000010	INDUCTOR	1	
	LB2001	J0JBC0000010	INDUCTOR	1	
	LB2100	J0JKB0000020	INDUCTOR	1	
	LB2101	J0JHC0000046	INDUCTOR	1	
	LB2103	J0JHC0000046	INDUCTOR	1	
	LB2500	J0JBC0000010	INDUCTOR	1	
	LB2511	J0JBC0000010	INDUCTOR	1	
	LB2512	J0JBC0000010	INDUCTOR	1	
	LB2513	J0JBC0000010	INDUCTOR	1	
	LB2514	J0JBC0000010	INDUCTOR	1	
	LB2515	J0JBC0000010	INDUCTOR	1	
	LB2516	J0JBC0000010	INDUCTOR	1	
	LB2517	J0JBC0000010	INDUCTOR	1	
	LB2518	J0JBC0000010	INDUCTOR	1	
	LB2519	J0JBC0000010	INDUCTOR	1	
	LB2520	J0JBC0000010	INDUCTOR	1	
	LB2521	J0JBC0000010	INDUCTOR	1	
	LB2522	J0JBC0000010	INDUCTOR	1	
	LB2523	J0JBC0000010	INDUCTOR	1	
	LB2525	J0JGC0000070	INDUCTOR	1	
	LB2526	J0JGC0000070	INDUCTOR	1	
	LB2527	J0JBC0000010	INDUCTOR	1	
	LB2528	J0JBC0000010	INDUCTOR	1	
	LB2531	J0JBC0000010	INDUCTOR	1	AKX78PH /PN
	LB2532	J0JBC0000010	INDUCTOR	1	AKX78PH /PN
	LB2533	J0JBC0000010	INDUCTOR	1	AKX78PH /PN
	LB2534	J0JBC0000010	INDUCTOR	1	AKX78PH /PN
	LB4001	J0JBC0000010	INDUCTOR	1	
	LB4002	J0JBC0000010	INDUCTOR	1	
	LB4530	J0JCC0000101	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	
	LB5102	G1C100KA0101	INDUCTOR	1	
	LB6100	J0JBC0000134	INDUCTOR	1	
	R1004	J0JCC0000287	INDUCTOR	1	
	R1005	J0JCC0000287	INDUCTOR	1	
	R1006	J0JCC0000287	INDUCTOR	1	
	R1007	J0JCC0000287	INDUCTOR	1	
	R1008	J0JCC0000287	INDUCTOR	1	
	R1009	J0JCC0000287	INDUCTOR	1	
	R1019	J0JBC0000010	INDUCTOR	1	
	R1020	J0JCC0000278	INDUCTOR	1	
	R1021	J0JBC0000010	INDUCTOR	1	
	R1028	J0JBC0000010	INDUCTOR	1	
	R1055	J0JCC0000278	INDUCTOR	1	
	R1056	J0JCC0000278	INDUCTOR	1	
	R1057	J0JCC0000278	INDUCTOR	1	
	R1058	J0JCC0000278	INDUCTOR	1	
	R1059	J0JCC0000278	INDUCTOR	1	
	R1060	J0JCC0000278	INDUCTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R1078	J0JCC0000278	INDUCTOR	1	
	R1100	J0JCC0000278	INDUCTOR	1	
	R1101	J0JBC0000010	INDUCTOR	1	
	R1127	J0JCC0000286	INDUCTOR	1	
	R1128	J0JCC0000286	INDUCTOR	1	
	R1132	J0JCC0000286	INDUCTOR	1	
	R1133	J0JCC0000286	INDUCTOR	1	
	R1225	J0JCC0000278	INDUCTOR	1	
	R2500	J0JBC0000010	INDUCTOR	1	
	R2501	J0JBC0000010	INDUCTOR	1	
	R2504	J0JBC0000010	INDUCTOR	1	
	R2505	J0JBC0000010	INDUCTOR	1	
	R2569	J0JBC0000010	INDUCTOR	1	
			TRANSFORMER		
	T6000	G4DYA0000214	TRANSFORMER	1	
			FILTERS		
	T9001	J0ZZB0000182	FILTER	1	
	T9002	J0ZZB0000182	FILTER	1	
			OSCILLATORS		
	X1001	H0J169500036	OSCILLATOR	1	
	X1002	H0A327200181	OSCILLATOR	1	
	X4001	H0J245500110	OSCILLATOR	1	
			REMOTE SENSOR		
	IR6500	B3RAD0000204	REMOTE SENSOR	1	
			FL DISPLAY		
	FL6000	A2BB00000184	LCD DISPLAY	1	
			JACKS		
	JK51	K4ZZ02000103	JK FM ANTENNA	1	
	JK52	K4AC02B00042	JK AM ANTENNA	1	
	JK3501	K4AZ10A00004	JK SPEAKER	1	AKX78PH /PN
	JK3502	K4AZ08A00007	JK SPEAKER	1	AKX58GN /PH/PN
	JK6002	K2HA204B0153	JK AUX IN	1	
	JK6301	K2HC103A0031	JK MUSIC PORT	1	
	JK6400	K1FY104A0034	USB PORT A	1	
	JK6401	K1FY104A0034	USB PORT B	1	
			CHIP JUMPERS		
	K3000	D0YRR0000001	0 31.5W	1	
	K3001	D0YRR0000001	0 31.5W	1	
	K3100	D0YRR0000001	0 31.5W	1	
	K3101	D0YRR0000001	0 31.5W	1	
	K3200	D0YRR0000001	0 31.5W	1	AKX78PH /PN
	K3201	D0YRR0000001	0 31.5W	1	AKX78PH /PN
	K5001	D0GBR00J0004	0 1/10W	1	
	K5002	D0GBR00J0004	0 1/10W	1	
	K5003	D0GBR00J0004	0 1/10W	1	
	K5004	D0GBR00J0004	0 1/10W	1	
	K5005	D0GBR00J0004	0 1/10W	1	
	K5006	D0GBR00J0004	0 1/10W	1	
	K5007	D0GBR00J0004	0 1/10W	1	
	K5008	D0GBR00J0004	0 1/10W	1	
	K5009	D0GBR00J0004	0 1/10W	1	
	K5010	D0GBR00J0004	0 1/10W	1	
	L53	D0GBR00J0004	0 1/10W	1	
	L6000	D0GBR00J0004	0 1/10W	1	
	L6300	D0GBR00J0004	0 1/10W	1	
	LB6400	D0GBR00J0004	0 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	LB6401	D0GBR00J0004	0 1/10W	1	
	LB9001	D0GBR00J0004	0 1/10W	1	
	LB9002	D0GBR00J0004	0 1/10W	1	
	LB9003	D0GBR00J0004	0 1/10W	1	
	W1	D0GBR00JA008	0 1/10W	1	
	W2	D0GBR00JA008	0 1/10W	1	
	W3	D0GDR00JA017	0 1/8W	1	
	W4	D0GFR00JA017	0 1/4W	1	
	W5	D0GDR00JA017	0 1/8W	1	
	W6	D0GFR00JA017	0 1/4W	1	
	W7	D0GFR00JA017	0 1/4W	1	
	W8	D0GFR00JA017	0 1/4W	1	
	W9	D0GFR00JA017	0 1/4W	1	
	W10	D0GFR00JA017	0 1/4W	1	
	W11	D0GFR00JA017	0 1/4W	1	
	W12	D0GBR00JA008	0 1/10W	1	
	W13	D0GFR00JA017	0 1/4W	1	
	W14	D0GFR00JA017	0 1/4W	1	
	W15	D0GFR00JA017	0 1/4W	1	
	W16	D0GDR00JA017	0 1/8W	1	
	W17	D0GFR00JA017	0 1/4W	1	
	W18	D0GDR00JA017	0 1/8W	1	
	W19	D0GFR00JA017	0 1/4W	1	
	W20	D0GFR00JA017	0 1/4W	1	
	W21	D0GFR00JA017	0 1/4W	1	
	W22	D0GFR00JA017	0 1/4W	1	
	W23	D0GFR00JA017	0 1/4W	1	
	W24	D0GFR00JA017	0 1/4W	1	
	W25	D0GFR00JA017	0 1/4W	1	
	W26	D0GFR00JA017	0 1/4W	1	
	W28	D0GFR00JA017	0 1/4W	1	
	W29	D0GFR00JA017	0 1/4W	1	
	W30	D0GFR00JA017	0 1/4W	1	
	W31	D0GFR00JA017	0 1/4W	1	
	W32	D0GFR00JA017	0 1/4W	1	
	W33	D0GFR00JA017	0 1/4W	1	
	W34	D0GFR00JA017	0 1/4W	1	
	W35	D0GFR00JA017	0 1/4W	1	
	W36	D0GFR00JA017	0 1/4W	1	
	W37	D0GFR00JA017	0 1/4W	1	
	W38	D0GBR00JA008	0 1/10W	1	
	W39	D0GFR00JA017	0 1/4W	1	
	W40	D0GFR00JA017	0 1/4W	1	
	W41	D0GFR00JA017	0 1/4W	1	
	W42	D0GDR00JA017	0 1/8W	1	
	W43	D0GDR00JA017	0 1/8W	1	
	W44	D0GDR00JA017	0 1/8W	1	
	W45	D0GFR00JA017	0 1/4W	1	
	W46	D0GFR00JA017	0 1/4W	1	
	W47	D0GFR00JA017	0 1/4W	1	
	W48	D0GFR00JA017	0 1/4W	1	
	W49	D0GFR00JA017	0 1/4W	1	
	W50	D0GFR00JA017	0 1/4W	1	
	W51	D0GFR00JA017	0 1/4W	1	
	W52	D0GFR00JA017	0 1/4W	1	
	W53	D0GFR00JA017	0 1/4W	1	
	W54	D0GFR00JA017	0 1/4W	1	
	W55	D0GFR00JA017	0 1/4W	1	
	W56	D0GFR00JA017	0 1/4W	1	
	W57	D0GFR00JA017	0 1/4W	1	
	W58	D0GBR00JA008	0 1/10W	1	
	W59	D0GFR00JA017	0 1/4W	1	
	W60	D0GFR00JA017	0 1/4W	1	
	W61	D0GBR00JA008	0 1/10W	1	
	W62	D0GBR00JA008	0 1/10W	1	
	W63	D0GFR00JA017	0 1/4W	1	
	W64	D0GFR00JA017	0 1/4W	1	
	W65	D0GBR00JA008	0 1/10W	1	
	W66	D0GFR00JA017	0 1/4W	1	
	W67	D0GFR00JA017	0 1/4W	1	
	W68	D0GFR00JA017	0 1/4W	1	
	W69	D0GFR00JA017	0 1/4W	1	
	W70	D0GFR00JA017	0 1/4W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	W71	D0GFR00JA017	0 1/4W	1	
	W72	D0GFR00JA017	0 1/4W	1	
	W73	D0GFR00JA017	0 1/4W	1	
	W74	D0GFR00JA017	0 1/4W	1	
	W75	D0GFR00JA017	0 1/4W	1	
	W76	D0GFR00JA017	0 1/4W	1	
	W77	D0GFR00JA017	0 1/4W	1	
	W78	D0GFR00JA017	0 1/4W	1	
	W79	D0GFR00JA017	0 1/4W	1	
	W80	D0GFR00JA017	0 1/4W	1	
	W81	D0GDR00JA017	0 1/8W	1	
	W82	D0GDR00JA017	0 1/8W	1	
	W83	D0GDR00JA017	0 1/8W	1	
	W84	D0GFR00JA017	0 1/4W	1	
	W85	D0GFR00JA017	0 1/4W	1	
	W86	D0GFR00JA017	0 1/4W	1	
	W87	D0GFR00JA017	0 1/4W	1	
	W88	D0GFR00JA017	0 1/4W	1	
	W89	D0GFR00JA017	0 1/4W	1	
	W90	D0GFR00JA017	0 1/4W	1	
	W91	D0GFR00JA017	0 1/4W	1	
	W92	D0GFR00JA017	0 1/4W	1	
	W93	D0GFR00JA017	0 1/4W	1	
	W94	D0GFR00JA017	0 1/4W	1	
	W95	D0GFR00JA017	0 1/4W	1	
	W96	D0GFR00JA017	0 1/4W	1	
	W106	D0GFR00JA017	0 1/4W	1	
	W107	D0GFR00JA017	0 1/4W	1	
	W108	D0GFR00JA017	0 1/4W	1	
	W109	D0GFR00JA017	0 1/4W	1	
	W110	D0GFR00JA017	0 1/4W	1	
	W111	D0GFR00JA017	0 1/4W	1	
	W112	D0GFR00JA017	0 1/4W	1	
	W113	D0GFR00JA017	0 1/4W	1	
	W114	D0GFR00JA017	0 1/4W	1	
	W115	D0GFR00JA017	0 1/4W	1	
	W116	D0GFR00JA017	0 1/4W	1	
	W117	D0GFR00JA017	0 1/4W	1	
	W118	D0GFR00JA017	0 1/4W	1	
	W122	D0GDR00JA017	0 1/8W	1	
	W123	D0GFR00JA017	0 1/4W	1	
	W124	D0GFR00JA017	0 1/4W	1	
	W127	D0GDR00JA017	0 1/8W	1	
	W131	D0GFR00JA017	0 1/4W	1	
	W132	D0GFR00JA017	0 1/4W	1	
	W133	D0GFR00JA017	0 1/4W	1	
	W134	D0GFR00JA017	0 1/4W	1	
	W136	ERJ8GEY0R00V	0 1/4W	1	
	W140	ERJ8GEY0R00V	0 1/4W	1	
	W142	ERJ8GEY0R00V	0 1/4W	1	
	W143	ERJ8GEY0R00V	0 1/4W	1	
	W144	ERJ8GEY0R00V	0 1/4W	1	
	W145	ERJ8GEY0R00V	0 1/4W	1	
	W146	ERJ8GEY0R00V	0 1/4W	1	
	W147	ERJ8GEY0R00V	0 1/4W	1	
	W148	ERJ8GEY0R00V	0 1/4W	1	
	W149	ERJ8GEY0R00V	0 1/4W	1	
	W150	ERJ8GEY0R00V	0 1/4W	1	
	W151	ERJ8GEY0R00V	0 1/4W	1	
	W152	ERJ6GEY0R00V	0 1/8W	1	
	W153	ERJ6GEY0R00V	0 1/8W	1	
	W154	ERJ8GEY0R00V	0 1/4W	1	
	W155	ERJ8GEY0R00V	0 1/4W	1	
	W156	ERJ8GEY0R00V	0 1/4W	1	
	W157	ERJ8GEY0R00V	0 1/4W	1	
	W158	ERJ8GEY0R00V	0 1/4W	1	
	W159	ERJ6GEY0R00V	0 1/8W	1	
	W160	ERJ8GEY0R00V	0 1/4W	1	
	W161	ERJ3GEY0R00V	0 1/10W	1	
	W162	ERJ8GEY0R00V	0 1/4W	1	
	W163	ERJ8GEY0R00V	0 1/4W	1	
	W164	ERJ6GEY0R00V	0 1/8W	1	
	W165	ERJ3GEY0R00V	0 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	W166	ERJ8GEY0R00V	0 1/4W	1	
	W168	ERJ8GEY0R00V	0 1/4W	1	
	W169	ERJ8GEY0R00V	0 1/4W	1	
	W170	ERJ8GEY0R00V	0 1/4W	1	
	W200	ERJ6GEY0R00V	0 1/8W	1	
			RESISTORS		
	LB1005	D0GB100JA065	10 1/10W	1	
	R50	D0GDR00J0004	0 1/8W	1	
	R51	D0GB222JA065	2.2K 1/10W	1	
	R52	D0GB561JA065	560 1/10W	1	
	R53	D0GA472JA023	4.7K 1/16W	1	
	R54	D0GA472JA023	4.7K 1/16W	1	
	R55	D0GA221JA023	220 1/16W	1	
	R56	D0GB221JA065	220 1/10W	1	
	R57	D0GA102JA023	1K 1/16W	1	
	R59	D0GB222JA065	2.2K 1/10W	1	
	R60	D0GB222JA065	2.2K 1/10W	1	
	R73	D0GBR00J0004	0 1/10W	1	
	R74	D0GBR00J0004	0 1/10W	1	
	R75	D0GBR00J0004	0 1/10W	1	
	R76	D0GBR00J0004	0 1/10W	1	
	R77	D0GBR00J0004	0 1/10W	1	
	R78	D0GBR00J0004	0 1/10W	1	
	R79	D0GBR00J0004	0 1/10W	1	
	R80	D0GBR00J0004	0 1/10W	1	
	R1001	D0GB471JA065	470 1/10W	1	
	R1002	D0GB101JA065	100 1/10W	1	AKX58GN /PH/PN
	R1003	D0GBR00J0004	0 1/10W	1	AKX58GN /PH/PN
	R1003	D0GB101JA065	100 1/10W	1	AKX78PH /PN
	R1011	D0GB221JA065	220 1/10W	1	
	R1012	D0GB221JA065	220 1/10W	1	
	R1013	D0GB221JA065	220 1/10W	1	
	R1014	D0GB221JA065	220 1/10W	1	
	R1015	D0GB102JA065	1K 1/10W	1	
	R1016	D0GB101JA065	100 1/10W	1	
	R1017	D0GB101JA065	100 1/10W	1	
	R1018	D0GB101JA065	100 1/10W	1	
	R1022	D0GB221JA065	220 1/10W	1	
	R1023	D0GB221JA065	220 1/10W	1	
	R1024	D0GB101JA065	100 1/10W	1	
	R1025	D0GB105JA065	1M 1/10W	1	
	R1026	D0GB224JA065	220K 1/10W	1	
	R1027	D0GB106JA065	10M 1/10W	1	
	R1029	D0GB103JA065	10K 1/10W	1	
	R1031	D0GB103JA065	10K 1/10W	1	
	R1032	D0GB103JA065	10K 1/10W	1	
	R1033	D0GB103JA065	10K 1/10W	1	AKX58PH , AKX78PH
	R1033	D0GB203JA065	20K 1/10W	1	AKX58GN
	R1033	D0GB393JA065	39K 1/10W	1	AKX58PN , AKX78PN
	R1034	D0GB393JA065	39K 1/10W	1	AKX78PH /PN
	R1034	D0GB562JA065	5.6K 1/10W	1	AKX58GN /PH/PN
	R1038	D0GA103JA023	10K 1/16W	1	
	R1043	D0GB103JA065	10K 1/10W	1	
	R1044	D0GB562JA065	5.6K 1/10W	1	
	R1045	D0GB101JA065	100 1/10W	1	
	R1046	D0GBR00J0004	0 1/10W	1	
	R1047	D0GB101JA065	100 1/10W	1	
	R1048	D0GB101JA065	100 1/10W	1	
	R1049	D0GB101JA065	100 1/10W	1	
	R1065	D0GB101JA065	100 1/10W	1	
	R1066	D0GB101JA065	100 1/10W	1	
	R1067	ERJ3RBD683V	68K 1/16W	1	
	R1068	ERJ3RBD153V	15K 1/16W	1	
	R1069	D0GBR00J0004	0 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description		Qty	Remarks
	R1095	D0GB122JA065	1.2K	1/10W	1	
	R1096	D0GDR00J0004	0	1/8W	1	
	R1097	D0GB334JA065	330K	1/10W	1	
	R1103	D0GB222JA065	2.2K	1/10W	1	
	R1104	D0GB222JA065	2.2K	1/10W	1	
	R1105	D0GB103JA065	10K	1/10W	1	
	R1106	D0GB103JA065	10K	1/10W	1	
	R1107	D0GB222JA065	2.2K	1/10W	1	
	R1108	D0GB222JA065	2.2K	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	AKX78PH /PN
	R1119	D0GB123JA065	12K	1/10W	1	
	R1120	D0GB101JA065	100	1/10W	1	
	R1121	D0GB101JA065	100	1/10W	1	
	R1123	D0GBR00J0004	0	1/10W	1	
	R1124	D0GB474JA065	470K	1/10W	1	
	R1125	D0GB474JA065	470K	1/10W	1	
	R1213	D0GBR00J0004	0	1/10W	1	
	R1214	D0GBR00J0004	0	1/10W	1	
	R1215	D0GBR00J0004	0	1/10W	1	
	R1216	D0GBR00J0004	0	1/10W	1	
	R1226	D0GB332JA065	3.3K	1/10W	1	
	R1227	D0GBR00J0004	0	1/10W	1	
	R1228	D0GB683JA065	68K	1/10W	1	
	R1229	D0GB332JA065	3.3K	1/10W	1	
	R1236	D0GB103JA065	10K	1/10W	1	
	R2001	D0GB473JA065	47K	1/10W	1	
	R2002	D0GB473JA065	47K	1/10W	1	
	R2003	D0GB473JA065	47K	1/10W	1	
	R2004	D0GB473JA065	47K	1/10W	1	
	R2005	D0GB473JA065	47K	1/10W	1	
	R2006	D0GB473JA065	47K	1/10W	1	
	R2007	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	AKX58GN /PH/PN
	R2113	D0GDR00J0004	0	1/8W	1	
	R2117	D0GB681JA065	680	1/10W	1	
	R2118	D0GB473JA065	47K	1/10W	1	
	R2119	D0GB123JA065	12K	1/10W	1	
	R2120	D0GBR00J0004	0	1/10W	1	AKX58GN
	R2121	D0GBR00J0004	0	1/10W	1	AKX78PH /PN
	R2123	D0GBR00J0004	0	1/10W	1	AKX58PH , AKX78PH
	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	1/4W	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	1/4W	1	
	R2156	D0GB821JA065	820	1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description		Qty	Remarks
	R2157	D0GB101JA065	100	1/10W	1	
	R2158	D0GBR00J0004	0	1/10W	1	AKX78PH /PN
	R2164	D1BB8202A074	82K	1/10W	1	
	R2165	D1BB1003A074	100K	1/10W	1	
	R2166	D1BB1002A074	10K	1/10W	1	
	R2167	D0GB153JA065	15K	1/10W	1	
	R2168	D1BB3002A074	30K	1/10W	1	
	R2174	D0GDR00J0004	0	1/8W	1	
	R2175	D1BB1002A074	10K	1/10W	1	
	R2176	D1BB3002A074	30K	1/10W	1	
	R2177	D1BB3002A074	30K	1/10W	1	
	R2178	D0GB274JA065	270K	1/10W	1	
	R2179	D0GB683JA065	68K	1/10W	1	
	R2180	D1BB2702A074	27K	1/10W	1	
	R2181	D0GBR00J0004	0	1/10W	1	
	R2187	D0GDR00J0004	0	1/8W	1	
	R2196	D0GB102JA065	1K	1/10W	1	
	R2197	D0GB185JA065	1.8M	1/10W	1	
	R2198	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	
	R2203	D0GBR00J0004	0	1/10W	1	
	R2204	D0GBR00J0004	0	1/10W	1	
	R2205	D0GBR00J0004	0	1/10W	1	
	R2207	D0GBR00J0004	0	1/10W	1	
	R2208	D0GBR00J0004	0	1/10W	1	
	R2209	D0GBR00J0004	0	1/10W	1	
	R2210	D0GBR00J0004	0	1/10W	1	
	R2211	D0GBR00J0004	0	1/10W	1	
	R2215	D0GBR00J0004	0	1/10W	1	
	R2216	D0GDR00J0004	0	1/8W	1	
	R2219	D0GBR00J0004	0	1/10W	1	
	R2220	D0GBR00J0004	0	1/10W	1	
	R2221	D0GBR00J0004	0	1/10W	1	
	R2225	D0GBR00J0004	0	1/10W	1	
	R2232	D0GBR00J0004	0	1/10W	1	
	R2233	D0GBR00J0004	0	1/10W	1	
	R2234	D0GBR00J0004	0	1/10W	1	
	R2235	D0GB222JA065	2.2K	1/10W	1	
	R2236	D0GB222JA065	2.2K	1/10W	1	
	R2237	D0GB222JA065	2.2K	1/10W	1	
	R2238	ERG2SJ470E	47	2W	1	
	R2239	ERG2SJ470E	47	2W	1	
	R2244	D0GDR00J0004	0	1/8W	1	
	R2245	D0GB102JA065	1K	1/10W	1	
	R2246	D0GDR00J0004	0	1/8W	1	
	R2248	D0GB4R7JA065	4.7	1/10W	1	
	R2507	D0GB472JA065	4.7K	1/10W	1	
	R2508	D0GBR00J0004	0	1/10W	1	
	R2520	D0GBR00J0004	0	1/10W	1	
	R2544	D0GBR00J0004	0	1/10W	1	
	R2546	D0GBR00J0004	0	1/10W	1	
	R2555	D0GBR00J0004	0	1/10W	1	
	R2558	D0GBR00J0004	0	1/10W	1	
	R2559	D0GBR00J0004	0	1/10W	1	
	R2560	D0GBR00J0004	0	1/10W	1	
	R2561	D0GBR00J0004	0	1/10W	1	
	R2562	D0GBR00J0004	0	1/10W	1	
	R2566	D0GBR00J0004	0	1/10W	1	
	R2567	D0GBR00J0004	0	1/10W	1	
	R2568	D0GBR00J0004	0	1/10W	1	
	R2581	D0GBR00J0004	0	1/10W	1	
	R2582	D0GBR00J0004	0	1/10W	1	
	R2583	D0GBR00J0004	0	1/10W	1	
	R2584	D0GBR00J0004	0	1/10W	1	
	R2585	D0GBR00J0004	0	1/10W	1	
	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	

Safety	Ref. No.	Part No.	Part Name & Description		Qty	Remarks
	R3005	D0GBR00J0004	0	1/10W	1	
	R3007	D0GBR00J0004	0	1/10W	1	
	R3009	D0GB101JA065	100	1/10W	1	
	R3011	D0GB100JA065	10	1/10W	1	
	R3012	D0GD220JA052	22	1/8W	1	
	R3013	D0GD220JA052	22	1/8W	1	
	R3014	D0GD220JA052	22	1/8W	1	
	R3015	D0GD220JA052	22	1/8W	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	
	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	
	R3106	D0GD220JA052	22	1/8W	1	
	R3107	D0GD220JA052	22	1/8W	1	
	R3108	D0GD220JA052	22	1/8W	1	
	R3109	D0GD220JA052	22	1/8W	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	
	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	
	R3206	D0GD220JA052	22	1/8W	1	
	R3207	D0GD220JA052	22	1/8W	1	
	R3208	D0GD220JA052	22	1/8W	1	
	R3209	D0GD220JA052	22	1/8W	1	
	R3210	D0GBR00J0004	0	1/10W	1	
	R3211	D0GBR00J0004	0	1/10W	1	
	R3300	D0GB100JA065	10	1/10W	1	AKX78PH /PN
	R3301	D0GB100JA065	10	1/10W	1	AKX78PH /PN
	R3302	D0GB223JA065	22K	1/10W	1	AKX78PH /PN
	R3303	D0GB101JA065	100	1/10W	1	AKX78PH /PN
	R3304	D0GBR00J0004	0	1/10W	1	AKX78PH /PN
	R3305	D0GBR00J0004	0	1/10W	1	AKX78PH /PN
	R3307	D0GBR00J0004	0	1/10W	1	AKX78PH /PN
	R3309	D0GB101JA065	100	1/10W	1	AKX78PH /PN
	R3311	D0GB100JA065	10	1/10W	1	AKX78PH /PN
	R3312	D0GD220JA052	22	1/8W	1	AKX78PH /PN
	R3313	D0GD220JA052	22	1/8W	1	AKX78PH /PN
	R3314	D0GD220JA052	22	1/8W	1	AKX78PH /PN
	R3315	D0GD220JA052	22	1/8W	1	AKX78PH /PN
	R3316	D0GBR00J0004	0	1/10W	1	
	R3317	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	

Safety	Ref. No.	Part No.	Part Name & Description		Qty	Remarks
	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	AKX78PH /PN
	R3526	D0GB104JA065	100K	1/10W	1	AKX78PH /PN
	R3527	D0GB3R3JA065	3.3	1/10W	1	AKX78PH /PN
	R3528	D0GB3R3JA065	3.3	1/10W	1	AKX78PH /PN
	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	
	R3538	D0GBR00J0004	0	1/10W	1	
	R3541	D0GB101JA065	100	1/10W	1	
	R3542	D0GD220JA052	22	1/8W	1	AKX78PH /PN
	R3543	D0GD220JA052	22	1/8W	1	AKX78PH /PN
	R3544	D0GD220JA052	22	1/8W	1	AKX78PH /PN
	R3545	D0GD220JA052	22	1/8W	1	AKX78PH /PN
	R3546	D0GD220JA052	22	1/8W	1	
	R3547	D0GD220JA052	22	1/8W	1	
	R3548	D0GD220JA052	22	1/8W	1	
	R3549	D0GD220JA052	22	1/8W	1	
	R3550	D0GD220JA052	22	1/8W	1	
	R3551	D0GD220JA052	22	1/8W	1	
	R3552	D0GD220JA052	22	1/8W	1	
	R3553	D0GD220JA052	22	1/8W	1	
	R3554	D0GD220JA052	22	1/8W	1	
	R3555	D0GD220JA052	22	1/8W	1	
	R3556	D0GD220JA052	22	1/8W	1	
	R3557	D0GD220JA052	22	1/8W	1	
	R3558	D0GB101JA065	100	1/10W	1	
	R3559	D0GBR00J0004	0	1/10W	1	
	R3560	D0GBR00J0004	0	1/10W	1	
	R4001	D0GB152JA065	1.5K	1/10W	1	
	R4002	D0GB105JA065	1M	1/10W	1	
	R4003	D0GBR00J0004	0	1/10W	1	
	R4004	D0GBR00J0004	0	1/10W	1	
	R4005	D0GBR00J0004	0	1/10W	1	
	R4006	D0GBR00J0004	0	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	
	R4012	D0GB101JA065	100	1/10W	1	
	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	D0GB221JA065	220	1/10W	1	
	R4018	D0GB221JA065	220	1/10W	1	
	R4019	D0GB101JA065	100	1/10W	1	
	R4020	D0GB101JA065	100	1/10W	1	
	R4021	D0GB101JA065	100	1/10W	1	
	R4022	D0GB101JA065	100	1/10W	1	
	R4023	D0GB101JA065	100	1/10W	1	
	R4025	D0GB101JA065	100	1/10W	1	
	R4026	D0GB101JA065	100	1/10W	1	
	R4029	D0GB101JA065	100	1/10W	1	
	R4030	D0GB101JA065	100	1/10W	1	
	R4031	D0GB101JA065	100	1/10W	1	
	R4035	D0GB101JA065	100	1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R4048	D0GB681JA065	680 1/10W	1	
	R4049	D0GB104JA065	100K 1/10W	1	
	R4105	D0GB101JA065	100 1/10W	1	
	R4576	D0GB221JA065	220 1/10W	1	
	R4577	D0GB221JA065	220 1/10W	1	
	R4578	D0GB221JA065	220 1/10W	1	
	R4580	D0GB103JA065	10K 1/10W	1	
	R4588	D0GBR00J0004	0 1/10W	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	
	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	D0GB102JA065	1K 1/10W	1	
	R5023	D0GBR00J0004	0 1/10W	1	
	R5037	D0GDR00J0004	0 1/8W	1	
	R5038	D0GDR00J0004	0 1/8W	1	
	R5039	D0GBR00J0004	0 1/10W	1	
	R6000	D0GB272JA065	2.7K 1/10W	1	AKX78PH /PN
	R6001	D0GB470JA065	47 1/10W	1	AKX78PH /PN
	R6002	D0GB101JA065	100 1/10W	1	AKX78PH /PN
	R6003	D0GB181JA065	180 1/10W	1	AKX78PH /PN
	R6004	D0GB681JA065	680 1/10W	1	AKX78PH /PN
	R6005	D0GB181JA065	180 1/10W	1	AKX78PH /PN
	R6006	D0GB103JA065	10K 1/10W	1	
	R6007	D0GB103JA065	10K 1/10W	1	
	R6008	D0GB103JA065	10K 1/10W	1	
	R6009	D0GB103JA065	10K 1/10W	1	
	R6012	D0GB331JA065	330 1/10W	1	AKX78PH /PN
	R6016	D0GB221JA065	220 1/10W	1	
	R6017	D0GB471JA065	470 1/10W	1	
	R6018	D0GB221JA065	220 1/10W	1	
	R6023	D0GB823JA065	82K 1/10W	1	
	R6026	D0GB220JA065	22 1/10W	1	
	R6028	D0GB1R0JA065	1 1/10W	1	
	R6029	D0GB473JA065	47K 1/10W	1	
	R6030	D0GB1R0JA065	1 1/10W	1	
	R6032	D0GB100JA065	10 1/10W	1	
	R6033	D0GB223JA065	22K 1/10W	1	
	R6035	D0GB272JA065	2.7K 1/10W	1	
	R6036	D0GB272JA065	2.7K 1/10W	1	
	R6037	D0GBR00J0004	0 1/10W	1	
	R6038	D0GB103JA065	10K 1/10W	1	
	R6100	D0GB103JA065	10K 1/10W	1	
	R6101	D0GB472JA065	4.7K 1/10W	1	
	R6103	D0GBR00J0004	0 1/10W	1	AKX58GN /PH/PN
	R6104	D0GB103JA065	10K 1/10W	1	
	R6104	D0GBR00J0004	0 1/10W	1	AKX78PH /PN
	R6105	D0GB151JA065	150 1/10W	1	AKX78PH /PN
	R6105	D0GB271JA065	270 1/10W	1	AKX58GN /PH/PN
	R6105	D0GB472JA065	4.7K 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R6106	D0GB391JA065	390 1/10W	1	AKX78PH /PN
	R6106	D0GB472JA065	4.7K 1/10W	1	
	R6106	D0GB821JA065	820 1/10W	1	AKX58GN /PH/PN
	R6107	D0GB151JA065	150 1/10W	1	AKX78PH /PN
	R6107	D0GB271JA065	270 1/10W	1	AKX58GN /PH/PN
	R6107	D0GB472JA065	4.7K 1/10W	1	
	R6108	D0GB102JA065	1K 1/10W	1	
	R6109	D0GB102JA065	1K 1/10W	1	
	R6109	D0GB103JA065	10K 1/10W	1	
	R6110	D0GB103JA065	10K 1/10W	2	
	R6111	D0GB103JA065	10K 1/10W	1	
	R6112	D0GB102JA065	1K 1/10W	1	
	R6112	D0GB391JA065	390 1/10W	1	AKX78PH /PN
	R6112	D0GB821JA065	820 1/10W	1	AKX58GN /PH/PN
	R6113	D0GB102JA065	1K 1/10W	1	
	R6113	D0GB221JA065	220 1/10W	1	AKX78PH /PN
	R6113	D0GB471JA065	470 1/10W	1	AKX58GN /PH/PN
	R6114	D0GBR00J0004	0 1/10W	1	
	R6115	D0GBR00J0004	0 1/10W	1	
	R6116	D0GBR00J0004	0 1/10W	1	
	R6117	D0GB103JA065	10K 1/10W	1	
	R6118	D0GB103JA065	10K 1/10W	1	
	R6119	D0GBR00J0004	0 1/10W	1	
	R6120	D0GBR00J0004	0 1/10W	1	
	R6122	D0GB221JA065	220 1/10W	1	AKX78PH /PN
	R6122	D0GB471JA065	470 1/10W	1	AKX58GN /PH/PN
	R6208	D0GB103JA065	10K 1/10W	1	
	R6209	D0GB103JA065	10K 1/10W	1	
	R6400	D0GB331JA065	330 1/10W	1	
	R9003	D0GB222JA065	2.2K 1/10W	1	
	R9006	D0GB331JA065	330 1/10W	1	
	R9007	D0GB104JA065	100K 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	
			RESISTOR NETWORKS		
	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	6pF 50V	1	
	C64	F1H1H3R0B050	3pF 50V	1	
	C65	F1H1H3R0B050	3pF 50V	1	
	C66	F1H1H330B052	33pF 50V	1	
	C67	F1H1H3R0B050	3pF 50V	1	
	C1001	F1H1C104A178	0.1uF 16V	1	
	C1002	F1H1C104A178	0.1uF 16V	1	
	C1003	F1H1C104A178	0.1uF 16V	1	
	C1004	F1H1C104A178	0.1uF 16V	1	
	C1005	F1H1C104A178	0.1uF 16V	1	
	C1006	F1H1C104A178	0.1uF 16V	1	
	C1007	F1H1C104A178	0.1uF 16V	1	
	C1008	F1H1C104A178	0.1uF 16V	1	
	C1009	F1H1C104A178	0.1uF 16V	1	
	C1010	F1H1C104A178	0.1uF 16V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C1011	F1H1C104A178	0.1uF 16V	1	
	C1012	F1H1C224A178	0.22uF 16V	1	
	C1013	F1H1A335A083	3.3uF 10V	1	
	C1014	F2A1C101A243	100uF 16V	1	
	C1015	F1H1C104A178	0.1uF 16V	1	
	C1016	F1H1H681B052	680pF 50V	1	
	C1017	F2A0J331A183	330uF 6.3V	1	
	C1018	F1H1C104A178	0.1uF 16V	1	
	C1019	F1H1C104A178	0.1uF 16V	1	
	C1020	F1H0J1060006	10uF 6.3V	1	
	C1021	F1H0J1060006	10uF 6.3V	1	
	C1022	F1H0J1060006	10uF 6.3V	1	
	C1023	F1H0J1060006	10uF 6.3V	1	
	C1024	F1H0J1060006	10uF 6.3V	1	
	C1025	F1H0J1060012	10uF 6.3V	1	
	C1026	F1H1H9R0A920	9pF 50V	1	
	C1027	F1H1H9R0A920	9pF 50V	1	
	C1028	F1H1H220B052	22pF 50V	1	
	C1029	F1H1H220B052	22pF 50V	1	
	C1030	F1H1H101B052	100pF 50V	1	
	C1031	F1H1H102B047	1000pF 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	F1H1A334A036	0.33uF 10V	1	
	C1043	F1H1E223A161	0.022uF 25V	1	
	C1047	F1H1C104A178	0.1uF 16V	1	
	C1048	F1H1H102B047	1000pF 50V	1	
	C1049	F1H1H102B047	1000pF 50V	1	
	C1201	F1H1C104A178	0.1uF 16V	1	
	C1202	F1H1C104A178	0.1uF 16V	1	
	C1203	F1H1C104A178	0.1uF 16V	1	
	C1204	F1H1C104A178	0.1uF 16V	1	
	C1205	F1H1C104A178	0.1uF 16V	1	
	C1206	F1H1C104A178	0.1uF 16V	1	
	C2001	F1H1C104A178	0.1uF 16V	1	
	C2002	F1H1C104A178	0.1uF 16V	1	
	C2003	F1H1C104A178	0.1uF 16V	1	
	C2004	F1H0J4750005	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	F1H0J1060012	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	
	C2100	F1J1A106A024	10uF 10V	1	
	C2101	F1J1A106A024	10uF 10V	1	
	C2102	F1H1H104B047	0.1uF 50V	1	
	C2104	F1J1A106A024	10uF 10V	1	
	C2107	F2A1A221B161	220uF 10V	1	
	C2108	F1J1A106A024	10uF 10V	1	
	C2113	F2A0J101A181	100uF 6.3V	1	
	C2115	F2A1E330B389	33uF 25V	1	
	C2117	F1H1H104B047	0.1uF 50V	1	
	C2118	F1H1E105A153	1uF 25V	1	
	C2121	F1J1A106A024	10uF 10V	1	
	C2124	F2A0J221B034	220uF 6.3V	1	
	C2126	F1H1H104B047	0.1uF 50V	1	
	C2128	F1K1H475A256	4.7uF 50V	1	
	C2129	F1H1E105A153	1uF 25V	1	
	C2130	F2A0J101B034	100uF 6.3V	1	
	C2131	F1H1E105A153	1uF 25V	1	
	C2132	F2A0J221B034	220uF 6.3V	1	
	C2133	F1H1H103B047	0.01uF 50V	1	
	C2134	F1H1H103B047	0.01uF 50V	1	
	C2135	F2A1E221B422	220uF 25V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C2136	F1H1H103B047	0.01uF 50V	1	
	C2137	F2A1H1020067	1000uF 50V	1	
	C2138	F1H1H102B047	1000pF 50V	1	
	C2139	F1H1H103B047	0.01uF 50V	1	
	C2140	F1H1H470B052	47pF 50V	1	
	C2142	F1K1E1060009	10uF 25V	1	
	C2143	F2A0J102A247	1000uF 6.3V	1	
	C2144	F1H1H104B047	0.1uF 50V	1	
	C2145	F1H1H104B047	0.1uF 50V	1	
	C2148	F1K1H475A256	4.7uF 50V	1	
	C2149	F1K1E1060009	10uF 25V	1	
	C2150	F1H1H103B047	0.01uF 50V	1	
	C2151	F1H1H472B047	4700pF 50V	1	
	C2152	F1H1H104B047	0.1uF 50V	1	
	C2153	F1H1H220B052	22pF 50V	1	
	C2155	F2A1E101B416	100uF 25V	1	
	C2164	F1H1A105A113	1uF 10V	1	
	C2165	F1H1A105A113	1uF 10V	1	
	C2167	F1J1A106A024	10uF 10V	1	
	C2168	F1J1A106A024	10uF 10V	1	
	C2171	F2A1H4710072	470uF 50V	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	
	C2187	F1H1H681B052	680pF 50V	1	
	C2509	F1H1H102A831	1000pF 50V	1	
	C2510	F1H1H102A831	1000pF 50V	1	
	C2511	F1H1H102A831	1000pF 50V	1	
	C2512	F1H1H102A831	1000pF 50V	1	
	C2513	F1H1H102A831	1000pF 50V	1	
	C2529	F1H1H102B047	1000pF 50V	1	
	C2530	F1H1H102B047	1000pF 50V	1	
	C2531	F1H1C104A178	0.1uF 16V	1	AKX78PH /PN
	C2532	F1H1C104A178	0.1uF 16V	1	AKX78PH /PN
	C2533	F1H1C104A178	0.1uF 16V	1	AKX78PH /PN
	C2534	F1H1C104A178	0.1uF 16V	1	AKX78PH /PN
	C2539	F1H1H102B047	1000pF 50V	1	
	C3000	F2A1C330B453	33uF 16V	1	
	C3001	F1J1C106A059	10uF 16V	1	
	C3002	F1H1H104B047	0.1uF 50V	1	
	C3003	F1H1H104B047	0.1uF 50V	1	
	C3004	F1H1H104B047	0.1uF 50V	1	
	C3005	F1H1H104B047	0.1uF 50V	1	
	C3006	F1H1H104B047	0.1uF 50V	1	
	C3007	F1H1H104B047	0.1uF 50V	1	
	C3008	F1H1H333B055	0.033uF 50V	1	
	C3009	F1H1H333B055	0.033uF 50V	1	
	C3010	F1H1H104B047	0.1uF 50V	1	
	C3011	F1K1H105A250	1uF 50V	1	
	C3012	F1K1H105A250	1uF 50V	1	
	C3013	F1H1H102B047	1000pF 50V	1	
	C3014	F1H1H102B047	1000pF 50V	1	
	C3018	F1H1H104B047	0.1uF 50V	1	
	C3019	F1K1H105A250	1uF 50V	1	
	C3020	F1K1H105A250	1uF 50V	1	
	C3021	F1H1H102B047	1000pF 50V	1	
	C3022	F1H1H102B047	1000pF 50V	1	
	C3026	F1H1H333B055	0.033uF 50V	1	
	C3027	F1H1H333B055	0.033uF 50V	1	
	C3100	F1J1C1060006	10uF 16V	1	
	C3101	F1H1H104B047	0.1uF 50V	1	
	C3102	F1H1H104B047	0.1uF 50V	1	
	C3103	F1H1H104B047	0.1uF 50V	1	
	C3104	F1H1H104B047	0.1uF 50V	1	
	C3105	F1H1H104B047	0.1uF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C3106	F1H1H104B047	0.1uF 50V	1	
	C3107	F1H1H333B055	0.033uF 50V	1	
	C3108	F1H1H333B055	0.033uF 50V	1	
	C3109	F1H1H102B047	1000pF 50V	1	
	C3110	F1H1H102B047	1000pF 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	
	C3120	F1H1H102B047	1000pF 50V	1	
	C3121	F1H1H102B047	1000pF 50V	1	
	C3122	F1H1H333B055	0.033uF 50V	1	
	C3123	F1H1H333B055	0.033uF 50V	1	
	C3200	F1J1C1060006	10uF 16V	1	
	C3201	F1H1H104B047	0.1uF 50V	1	
	C3202	F1H1H104B047	0.1uF 50V	1	
	C3203	F1H1H104B047	0.1uF 50V	1	
	C3204	F1H1H104B047	0.1uF 50V	1	
	C3205	F1H1H104B047	0.1uF 50V	1	
	C3206	F1H1H104B047	0.1uF 50V	1	
	C3207	F1H1H333B055	0.033uF 50V	1	
	C3208	F1H1H333B055	0.033uF 50V	1	
	C3209	F1H1H102B047	1000pF 50V	1	
	C3210	F1H1H102B047	1000pF 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	
	C3220	F1H1H102B047	1000pF 50V	1	
	C3221	F1H1H102B047	1000pF 50V	1	
	C3222	F1H1H333B055	0.033uF 50V	1	
	C3223	F1H1H333B055	0.033uF 50V	1	
	C3301	F1J1C106A059	10uF 16V	1	AKX78PH /PN
	C3302	F1H1H104B047	0.1uF 50V	1	AKX78PH /PN
	C3303	F1H1H104B047	0.1uF 50V	1	AKX78PH /PN
	C3304	F1H1H104B047	0.1uF 50V	1	AKX78PH /PN
	C3305	F1H1H104B047	0.1uF 50V	1	AKX78PH /PN
	C3306	F1H1H104B047	0.1uF 50V	1	AKX78PH /PN
	C3307	F1H1H104B047	0.1uF 50V	1	AKX78PH /PN
	C3308	F1H1H333B055	0.033uF 50V	1	AKX78PH /PN
	C3309	F1H1H333B055	0.033uF 50V	1	AKX78PH /PN
	C3310	F1H1H104B047	0.1uF 50V	1	AKX78PH /PN
	C3311	F1K1H105A250	1uF 50V	1	AKX78PH /PN
	C3312	F1K1H105A250	1uF 50V	1	AKX78PH /PN
	C3313	F1H1H102B047	1000pF 50V	1	AKX78PH /PN
	C3314	F1H1H102B047	1000pF 50V	1	AKX78PH /PN
	C3318	F1H1H104B047	0.1uF 50V	1	AKX78PH /PN
	C3319	F1K1H105A250	1uF 50V	1	AKX78PH /PN
	C3320	F1K1H105A250	1uF 50V	1	AKX78PH /PN
	C3321	F1H1H102B047	1000pF 50V	1	AKX78PH /PN
	C3322	F1H1H102B047	1000pF 50V	1	AKX78PH /PN
	C3326	F1H1H333B055	0.033uF 50V	1	AKX78PH /PN

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C3327	F1H1H333B055	0.033uF 50V	1	AKX78PH /PN
	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	AKX78PH /PN
	C3513	F1H1H104B047	0.1uF 50V	1	AKX78PH /PN
	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	AKX78PH /PN
	C3543	F1H1H103B047	0.01uF 50V	1	AKX78PH /PN
	C3548	D0GBR00J0004	0 1/10W	1	
	C3549	F1J1A106A043	10uF 10V	1	
	C3550	F1J1A106A043	10uF 10V	1	
	C3551	F1H1E105A153	1uF 25V	1	
	C3553	ECQV1H105JL3	1uF 50V	1	AKX58PN /PH, AKX78PH /PN
	C3553	ECQV1H225JL3	2.2uF 50V	1	AKX58GN
	C3554	ECQV1H105JL3	1uF 50V	1	AKX58PN /PH, AKX78PH /PN
	C3554	ECQV1H225JL3	2.2uF 50V	1	AKX58GN
	C3557	ECQV1H105JL3	1uF 50V	1	AKX58PN /PH, AKX78PH /PN
	C3557	ECQV1H225JL3	2.2uF 50V	1	AKX58GN
	C3558	ECQV1H105JL3	1uF 50V	1	AKX58PN /PH, AKX78PH /PN
	C3558	ECQV1H225JL3	2.2uF 50V	1	AKX58GN
	C3560	ECQV1H105JL3	1uF 50V	1	AKX58PN /PH, AKX78PH /PN
	C3560	ECQV1H225JL3	2.2uF 50V	1	AKX58GN
	C3561	ECQV1H105JL3	1uF 50V	1	AKX58PN /PH, AKX78PH /PN
	C3561	ECQV1H225JL3	2.2uF 50V	1	AKX58GN
	C3562	ECQV1H105JL3	1uF 50V	1	AKX58PN /PH, AKX78PH /PN
	C3562	ECQV1H225JL3	2.2uF 50V	1	AKX58GN
	C3563	ECQV1H105JL3	1uF 50V	1	AKX58PN /PH, AKX78PH /PN
	C3563	ECQV1H225JL3	2.2uF 50V	1	AKX58GN
	C3565	ECQV1H105JL3	1uF 50V	1	AKX78PH /PN
	C3566	ECQV1H105JL3	1uF 50V	1	AKX78PH /PN
	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	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C4007	F1H0J105A051	1uF 6.3V	1	
	C4008	F1H0J105A051	1uF 6.3V	1	
	C4009	F1H0J105A051	1uF 6.3V	1	
	C4010	F1H1H102B047	1000pF 50V	1	
	C4011	F1H1H102B047	1000pF 50V	1	
	C4017	F1H0J1060012	10uF 6.3V	1	
	C4018	F2A1C470A155	47uF 16V	1	
	C4019	F2A1C220A243	22uF 16V	1	
	C4020	F2A1C220A243	22uF 16V	1	
	C4041	F1H1H473A748	0.047uF 50V	1	
	C4042	F1H1H473A748	0.047uF 50V	1	
	C4043	F1H1H473A748	0.047uF 50V	1	
	C4044	F1H1H473A748	0.047uF 50V	1	
	C4454	F1H1H104B047	0.1uF 50V	1	
	C4455	F1H1H104B047	0.1uF 50V	1	
	C4456	F1H1H104B047	0.1uF 50V	1	
	C4458	F1H1H104B047	0.1uF 50V	1	
	C4459	F1H1A105A113	1uF 10V	1	
	C4460	F1H1A105A113	1uF 10V	1	
	C4582	F1H1A105A113	1uF 10V	1	
	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	F1H1H100B051	10pF 50V	1	
	C5014	F1H1H100B051	10pF 50V	1	
	C5015	F1H1H100B051	10pF 50V	1	
	C5016	F1H1H100B051	10pF 50V	1	
	C5018	F1H1H103B047	0.01uF 50V	1	
	C5019	F2A1A1010072	100uF 10V	1	
	C5020	F2A1A1010072	100uF 10V	1	
	C5021	F2A1A1010072	100uF 10V	1	
	C5022	F1H1H680A831	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	F1H1H101B052	100pF 50V	1	
	C5115	F1H1H101B052	100pF 50V	1	
	C5116	F1H1H101B052	100pF 50V	1	
	C5117	F1H1H102B047	1000pF 50V	1	
	C5118	F1H1H101B052	100pF 50V	1	
	C5119	F1H1H102B047	1000pF 50V	1	
	C5120	F1H1H102B047	1000pF 50V	1	
	C5121	F1H1H101B052	100pF 50V	1	
	C5122	F1H1H101B052	100pF 50V	1	
	C6000	F1H1H104B047	0.1uF 50V	1	AKX78PH /PN
	C6003	F1H1H102B047	1000pF 50V	1	
	C6004	F1H1H102B047	1000pF 50V	1	
	C6005	F1H1H102B047	1000pF 50V	1	
	C6006	F1H1H102B047	1000pF 50V	1	
	C6007	F1H1H102B047	1000pF 50V	1	
	C6008	F1H1H331B052	330pF 50V	1	
	C6009	F1H1H102B047	1000pF 50V	1	
	C6010	F1H1H331B052	330pF 50V	1	
	C6011	F1H1H102A219	1000pF 50V	1	
	C6012	F1H1H331B052	330pF 50V	1	
	C6013	F1H1H102B047	1000pF 50V	1	
	C6014	F1H1H102B047	1000pF 50V	1	
	C6015	F1H1H102B047	1000pF 50V	1	
	C6016	F1H1H102B047	1000pF 50V	1	
	C6017	F1H1H103A219	0.01uF 50V	1	
	C6018	F1H1H102B047	1000pF 50V	1	
	C6021	F2A1E221B422	220uF 25V	1	
	C6022	F1H1H472A219	4700pF 50V	1	
	C6023	F2A1H101A147	100uF 50V	1	
	C6024	F2A1C101A115	100uF 16V	1	
	C6027	F1K1E1060009	10uF 25V	1	
	C6028	F1K1E1060009	10uF 25V	1	
	C6101	F1H1C104A178	0.1uF 16V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C6101	F1H1H101B052	100pF 50V	1	
	C6102	F1H1H101B052	100pF 50V	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	
	C6120	F1H1H221B047	220pF 50V	1	
	C6121	F1H1H221B047	220pF 50V	1	
	C6122	F1H1A105A113	1uF 10V	1	
	C6123	F1H1A105A113	1uF 10V	1	
	C6201	F1H1H101B052	100pF 50V	1	
	C6202	F1H1H101B052	100pF 50V	1	
	C6217	F1H1A105A113	1uF 10V	1	
	C6318	F1H1H331B052	330pF 50V	1	
	C6319	F1H1H331B052	330pF 50V	1	
	C6320	F1H1H103B047	0.01uF 50V	1	
	C6321	F1H1H103B047	0.01uF 50V	1	
	C6322	F1H1H103B047	0.01uF 50V	1	
	C6500	F1H1H101B052	100pF 50V	1	
	C6501	F1H1H102A219	1000pF 50V	1	
	C9001	F1H1C104A178	0.1uF 16V	1	
	C9002	F1H1C104A178	0.1uF 16V	1	
	C9003	F1H1C104A178	0.1uF 16V	1	
	C9004	F1H1C104A178	0.1uF 16V	1	
	C9005	F1H1C104A178	0.1uF 16V	1	