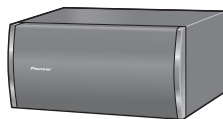


Pioneer

Service Manual



HTP-SB300

ORDER NO.
RRV4007

SOUND BAR SURROUND SYSTEM

HTP-SB300

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	Remarks
HTP-SB300	SVYXCN5	AC 220 V to 240 V	
HTP-SB300	CMXCN	AC 120 V	

Ask user to bring the Main unit and the Wireless subwoofer pair set together when servicing.



For details, refer to "Important Check Points for good servicing".

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T-ZZK DEC. 2009 Printed in Japan

SAFETY INFORMATION



This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product may contain a chemical known to the State of California to cause cancer, or birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 - Proposition 65

NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

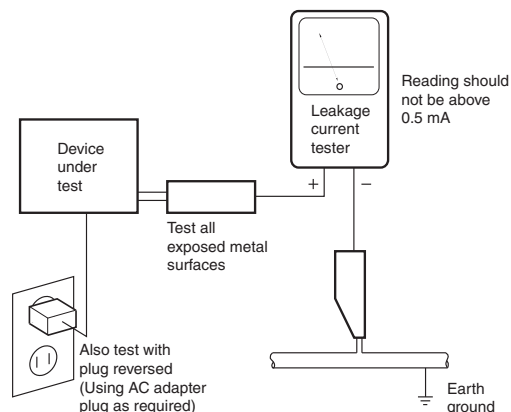
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a Δ on the schematics and on the parts list in this Service Manual. The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol. Please be sure to confirm and follow these procedures.

1. Product safety



Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

- ① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

- ② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification (addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

- ③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris. Soldering should be finished with the proper quantity. (Refer to the example)

- ④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

- ⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

- ⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs. In addition, be sure that there are no pinched wires, etc.

- ⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

- ⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages. If you find a damaged power cord, please exchange it with a suitable one.

- ⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

- ⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries. Please pay attention to your surroundings and repair safely.

2. Adjustments



To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification. Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts



Use grease and adhesives that are equal to the specified substance. Make sure the proper amount is applied.

4. Cleaning



For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws



To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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1. SERVICE PRECAUTIONS

1.1 NOTES ON SOLDERING

- For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit.
Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.
- Compared with conventional eutectic solders, lead-free solders have higher melting points, by approximately 40 °C.
Therefore, for lead-free soldering, the tip temperature of a soldering iron must be set to around 373 °C in general, although the temperature depends on the heat capacity of the PC board on which reworking is required and the weight of the tip of the soldering iron.

Do NOT use a soldering iron whose tip temperature cannot be controlled.

Compared with eutectic solders, lead-free solders have higher bond strengths but slower wetting times and higher melting temperatures (hard to melt/easy to harden).

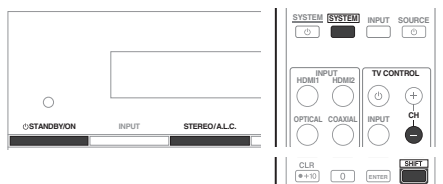
The following lead-free solders are available as service parts:

- Parts numbers of lead-free solder:
GYP1006 1.0 in dia.
GYP1007 0.6 in dia.
GYP1008 0.3 in dia.

1.2 CAUTION

After replacement of the WIRELESS AUDIO ASSY (TX or RX), perform pairing between the main unit and subwoofer.

Pairing main unit and subwoofer



1 After you've finished making the AC adapter and power cord connections, press **STANDBY/ON** on the main unit (see above).

2 Press **SYSTEM** on remote control.

3 While holding the main unit's **STEREO/A.L.C.** button depressed, simultaneously press the remote control's **SHIFT** and **TV CONTROL CH-** buttons.

The indicator of the subwoofer light green, and the pairing of main unit and subwoofer is completed.

2. SPECIFICATIONS

2.1 SPECIFICATIONS

Main unit

•Amplifier section

Rated power output

Front.50 W per channel (1 kHz, 6 Ω, 10 %)
Center50 W (1 kHz, 6 Ω, 10 %)

•Input/Output section

HDMI terminal:

Input.19-pin x2
Output19-pin (5 V, 100 mA)
Audio inputCoaxial x1, Optical x1 (Digital)

•Speaker section

Front speakers

Enclosure.Closed-box type
(magnetically shielded)
System.7.7 cm 1-way system
Speakers7.7 cm cone type
Impedance6 Ω
Frequency range200 Hz to 20 kHz
Maximum input power.100 W

Center speaker

Enclosure.Closed-box type
(magnetically shielded)
System.7.7 cm 1-way system
Speakers7.7 cm cone type x2
Impedance12 Ω
Frequency range200 Hz to 20 kHz
Maximum input power.100W

•Miscellaneous

Power Requirements

.AC 220 V to 240 V, 50 Hz/60 Hz (SVYXCN5)
.AC 120 V/60 Hz (CMXCN)
Power Consumption40 W
In standby.1 W
Dimensions
.900 mm (W) x 108 mm (H) x 95 mm (D)
Weight (without package).2.8 kg

•Accessories

Remote control1
Dry cell batteries (AAA size IEC R03).2
AC adapter1
Power cords.(SVYXCN5) 4
.(CMXCN) 2
Brackets (for main unit)2
Wall mounting template.1
Non-skid pads (for subwoofer).4
Warranty card1
Operating instructions

Wireless subwoofer

•Amplifier section

Rated power output

Subwoofer100 W (100 Hz, 4 Ω, 10 %)

•Speaker section

EnclosureBass-reflex type
System16 cm 1-way system
Speakers.16 cm cone type x1
Impedance4 Ω
Frequency range40 Hz to 1 000 Hz
Maximum input power.100W

•Miscellaneous

Power Requirements

.AC 220 V to 240 V, 50 Hz/60 Hz (SVYXCN5)
.AC 120 V/60 Hz (CMXCN)
Power Consumption25 W
In standby.1 W
Dimensions
.411 mm (W) x 181 mm (H) x 215 mm (D)
Weight (without package).4.3 kg



Note

•The specifications are applicable when the power supply is 230 V.

•Accessories

Power cord
(for subwoofer) x1
(CMXCN:8952SB3003980-IL)

(SVYXCN5:
8952SB3004330-IL)
(SVYXCN5:
8952SB3003900-IL)
Power cords
(for subwoofer) x2

Dry cell batteries
(AAA size IEC R03) x2

Remote control
(SVYXCN5: (AXD7576)
8952SB3002630-IL)
(CMXCN: (AXD7578)
8952SB3002740-IL)

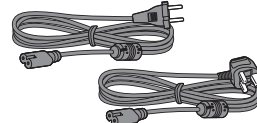
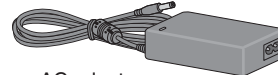
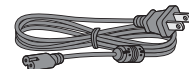
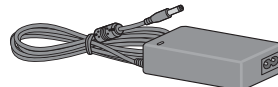
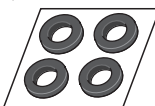
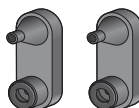
Brackets
(for main unit) x2
(8952SB3000130-IL)

Non-skid pads
(for subwoofer) x4
(8952SB3003090-IL)

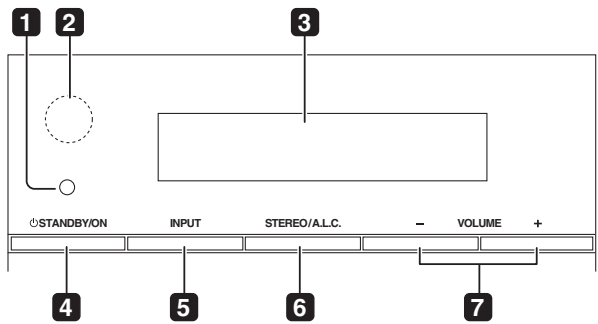
AC adapter
(CMXCN:8952SB3002770-IL)
Power cord
(for AC adapter) x1

AC adapter
(SVYXCN5:8952SB3002670-IL)
Power cords
(for AC adapter) x2

Wall mounting template



Front panel



- 1

Wireless indicator
Lights red or green, depending on status of unit.
Standby mode: Lights red
Power on, without wireless transmission (subwoofer operation): Lights red
Power on, with wireless transmission (subwoofer operation): Lights green

- 2

IR remote sensor
- 3

Front panel display
See Display below for details.
- 4

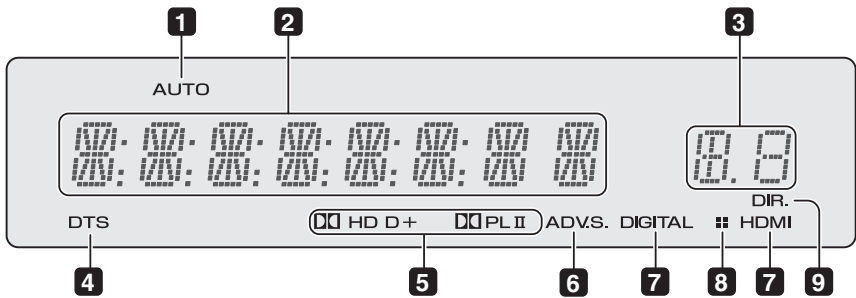
STANDBY/ON
Switches the system on or into standby.
- 5

INPUT
Selects an input source.
- 6

STEREO/A.L.C.
Switches between stereo playback, Auto level control stereo mode and Front Stage Surround Advance modes.
- 7

VOLUME +/-
Adjusts the volume.

Display



- 1

AUTO
Lights when the Auto Surround feature is switched on.
- 2

Character display
Displays various system information.
- 3

Sound Delay indicator
Displays the Audio Parameter sound delay status.
- 4

DTS indicators
Lights when a source with DTS encoded audio signals is detected.

A

5 **Dolby Digital indicators**

DD D

Lights when a Dolby Digital encoded signal is detected.

DD D+

Lights when a source with Dolby Digital Plus encoded audio signals is detected.

DD HD

Lights when a source with Dolby TrueHD encoded audio signals is detected.

B

DD PLII

Lights to indicate **DD** Pro Logic II decoding (see Listening in surround sound for more on this).

6 **ADV.S.**

Lights when one of the Advanced Surround modes has been selected (see Using the Advanced surround effects for more on this).

7 **SIGNAL SELECT indicators**

DIGITAL

Lights when a digital audio signal is selected.
Blinks when a digital audio signal is not selected.

HDMI

Lights when an HDMI signal is selected.
Blinks when an HDMI signal is not selected.

8 **Dimmer indicator**

Lights when DIMMER is set to off.

9 **DIR.**

Lights when the **DIRECT** or **PURE DIRECT** mode is switched on.

D

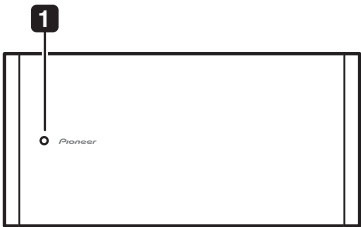
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■

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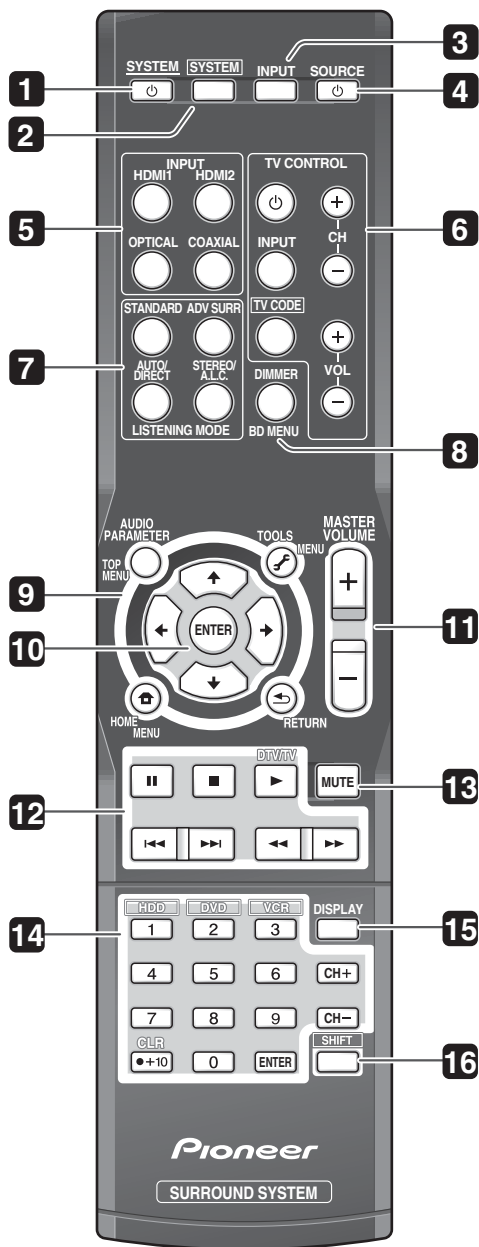
Subwoofer



1 **Wireless indicator**

Standby mode: Lights red
During subwoofer operation: Lights green

Remote control



1 SYSTEM

Switches the system between standby and on.

2 **SYSTEM**

Switches the remote to control the system. Also use to adjust the Audio parameters.

3 **INPUT SELECT**

Use to select the input source.

4 **SOURCE**

Press to turn on/off other components connected to the system.

5 **INPUT SELECT buttons**

Use to select the input source. Switch the remote control to operate any other components allocated to the selected buttons (see Controlling the rest of your system).

6 **TV CONTROL buttons**

These buttons are dedicated to control the TV assigned to the **TV CODE** button. Thus if you only have one TV to hook up to this system assign it to the **TV CODE** button.



Use to turn on/off the power of the TV.

INPUT

Use to select the TV input signal.

TV CODE

Press to select control of TV. Also use to input a preset code allocated to the **TV CONTROL** button.

CH +/-

Use to select channels.

VOL +/-

Use to adjust the volume on your TV.

7 **Listening mode buttons**

AUTO/DIRECT

Switches between Auto surround mode (Auto playback on page20) and Stream Direct playback. Stream Direct playback bypasses the tone controls for the most accurate reproduction of a source.

STEREO/A.L.C.

Switches between stereo playback, Auto level control stereo mode and Front Stage Surround Advance modes.

STANDARD

Press for Standard decoding and to switch between  Pro Logic II options.

ADV SURR

Switches between the various surround modes.

8 DIMMER

Dims or brightens the display. The brightness can be controlled in four steps.

First use **INPUT SELECT** button to select the input for the desired connected Blu-ray disc player, then access the following:

BD MENU

Displays the disc menu of Blu-ray Discs.

9 System and component control buttons

Press  first to access:

AUDIO PARAMETER

Use to access the Audio options.

RETURN

Confirm and exit the current menu screen.

First use **INPUT SELECT** button to select the input for the desired connected component, then access the following:

TOP MENU

Displays the disc 'top' menu of a BD/DVD.

HOME MENU

Displays the HOME MENU screen.

RETURN

Confirm and exit the current menu screen.

MENU

Displays the TOOLS menu screen of Blu-ray Disc player.

10 , ENTER

Use the arrow buttons when setting up your surround sound system. Also used to control BD/DVD menus/options.

11 MASTER VOLUME +/-

Use to set the listening volume.

12 Component control buttons

The main buttons (, , etc.) are used to control a component after you have selected it using the input source buttons.

The controls above these buttons can be accessed after you have selected the corresponding input source button. These buttons also function as described below.

Press  first to access:

DTV/TV (SVYXCN5)

Switches between the DTV and analog TV input modes for Pioneer flat screen TVs.

ANT (CMXC�)

Use to select the VHF/UHF antennas or Cable TV.

13 MUTE

Mutes/unmutes the sound.

14 Number buttons and other component controls

Use the number buttons to directly select the tracks on a CD, DVD, etc.

HDD*, DVD*, VCR*

These buttons switch between the hard disk, DVD and VCR controls for HDD/DVD/VCR recorders.

15 DISPLAY

Switches the display of this unit. The input name, listening mode or sound volume can be checked by selecting an input source.

16 SHIFT

Press to access the 'boxed' commands (above the buttons) on the remote. These buttons are marked with an asterisk (*) in this section.

3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

Items to be checked after servicing

To keep the product quality after servicing, confirm recommended check points shown below.

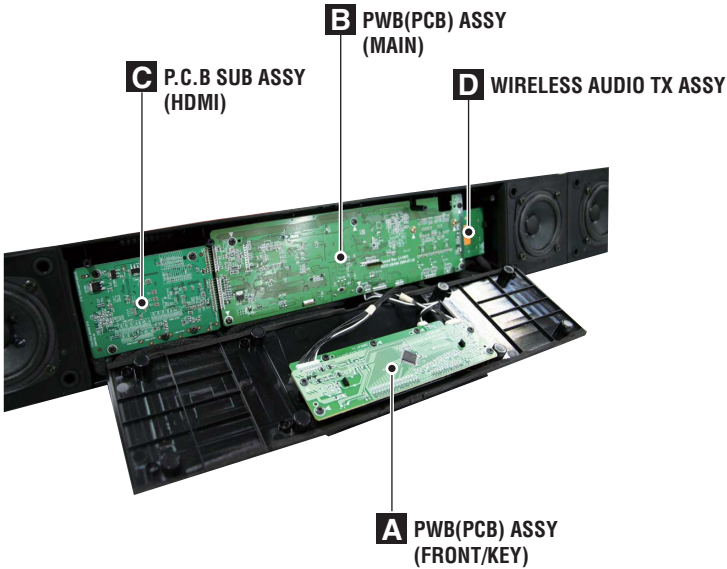
No.	Procedures	Check points
1	Confirm whether the customer complain has been solved. If the customer complain occurs with the particular source, such as Dolby Digital, DTS, AAC, DVD-A and HDMI, input it for the operation check.	The customer complain must not be reappeared. Video, Audio and operations must be normal.
2	Check the digital audio playback. (Make the digital connections with a DVD player.)	Each channel audio and operations must be normal.
3	Check surround playback. (Select Surround mode and check the multichannel operations via the DSP circuit.)	Each channel audio and operations must be normal.
4	Check the video outputs. (Connect with a DVD player.)	Video and operations must be normal.
5	Check the appearance of the product.	No scratches or dirt on its appearance after receiving it for service.

See the table below for the items to be checked regarding video and audio.

Item to be checked regarding video	Item to be checked regarding audio
Block noise	Distortion
Horizontal noise	Noise
Flicker	Volume too low
Disturbed image (video jumpiness)	Volume too high
Too dark	Volume fluctuating
Too bright	Sound interrupted
Mottled color	

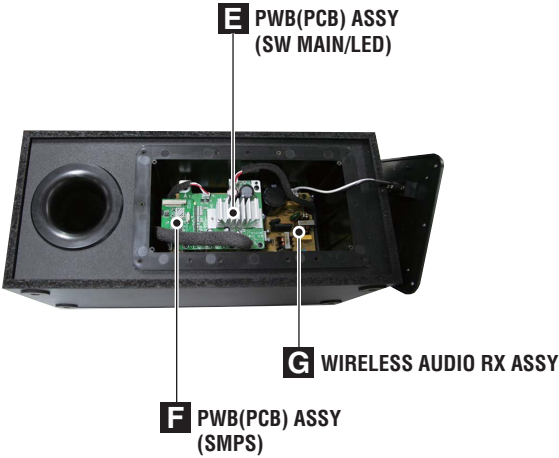
3.2 PCB LOCATIONS

A



B

C



D

Mark	No.	Description	Part No.
------	-----	-------------	----------

LIST OF ASSEMBLIES

E

	1..PWB(PCB) ASSY (FRONT/KEY)	8952SB3000490-IL
	1..PWB(PCB) ASSY (MAIN)	8952SB3004380-IL
NSP	1..PWB(PCB)ASSY (HDMI)	7025HZ0902010-IL
	2..P.C.B SUB ASSY (HDMI)	7028068701010-IL
	1..WIRELESS AUDIO TX ASSY	8952SB3002510-IL
	1..PWB(PCB) ASSY (SW MAIN/LED)	8952SB3004270-IL
	1..PWB(PCB) ASSY (SMPS)	8952SB3003790-IL
	1..WIRELESS AUDIO RX ASSY	8952SB3003750-IL

F

3.3 JIGS LIST

Jigs list

Name	Jig No.	Remarks
RS-232C Interface jig	GGF1642	Firmware update
SB update tool	GGF1644	Firmware update
Adhesive	GYL-014	
Silicon grease	GEM1057	

4. BLOCK DIAGRAM

4.1 OVERALL WIRING DIAGRAM

A

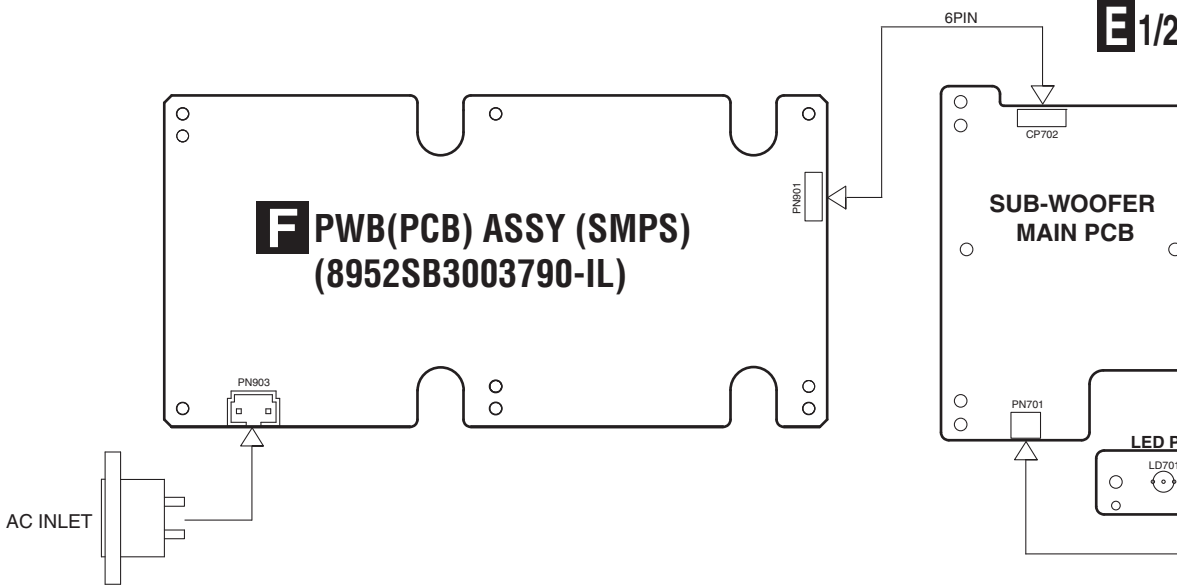
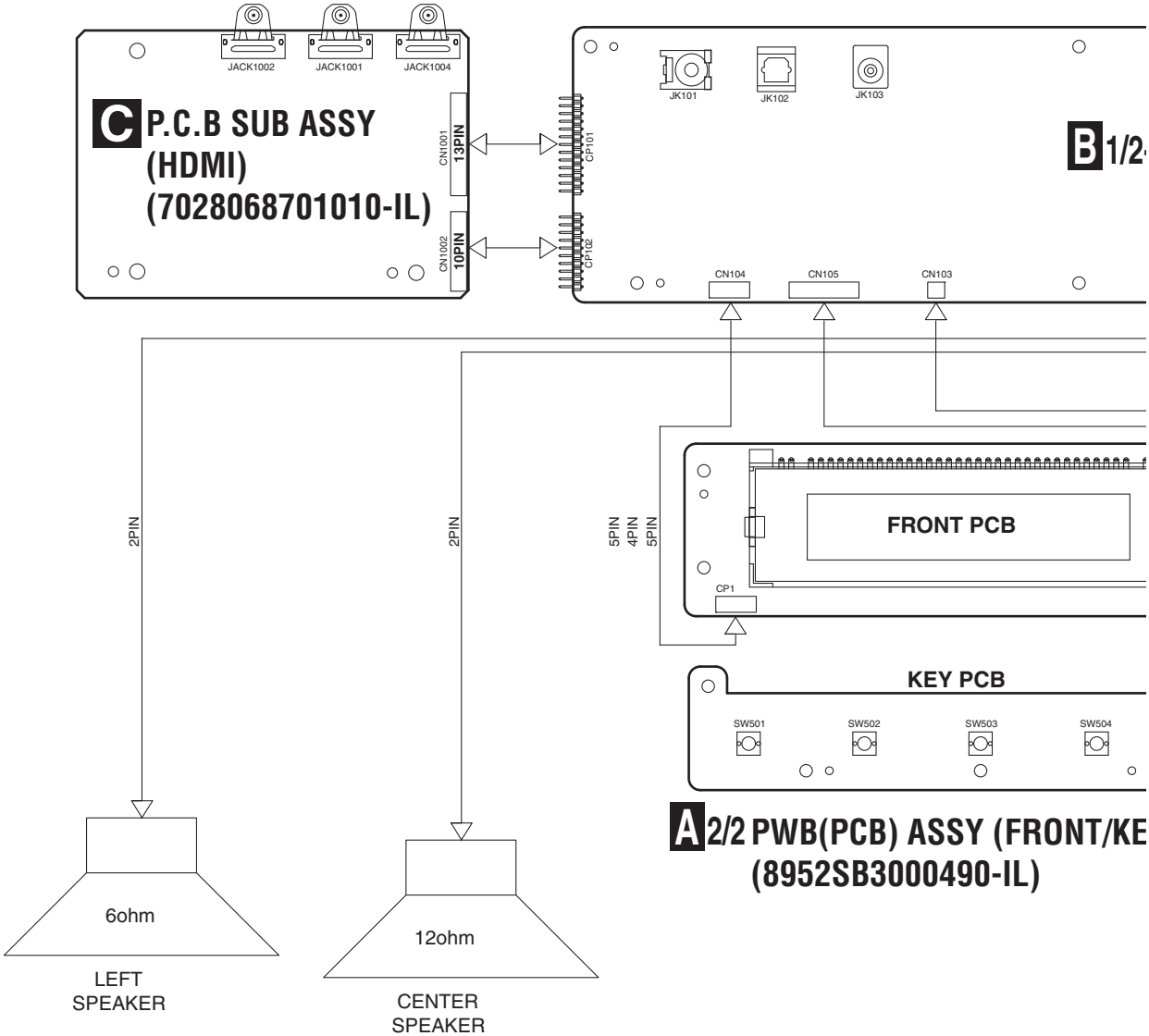
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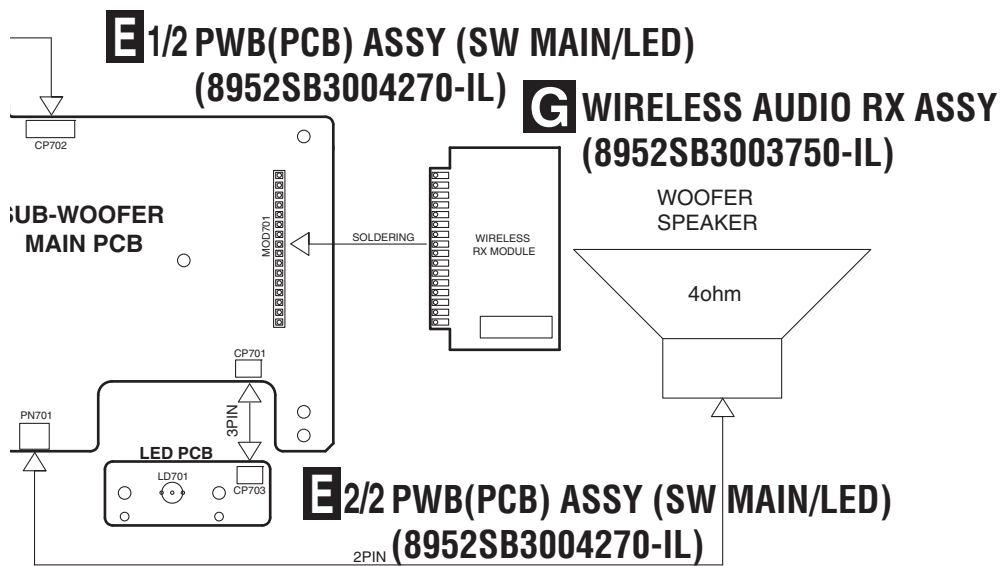
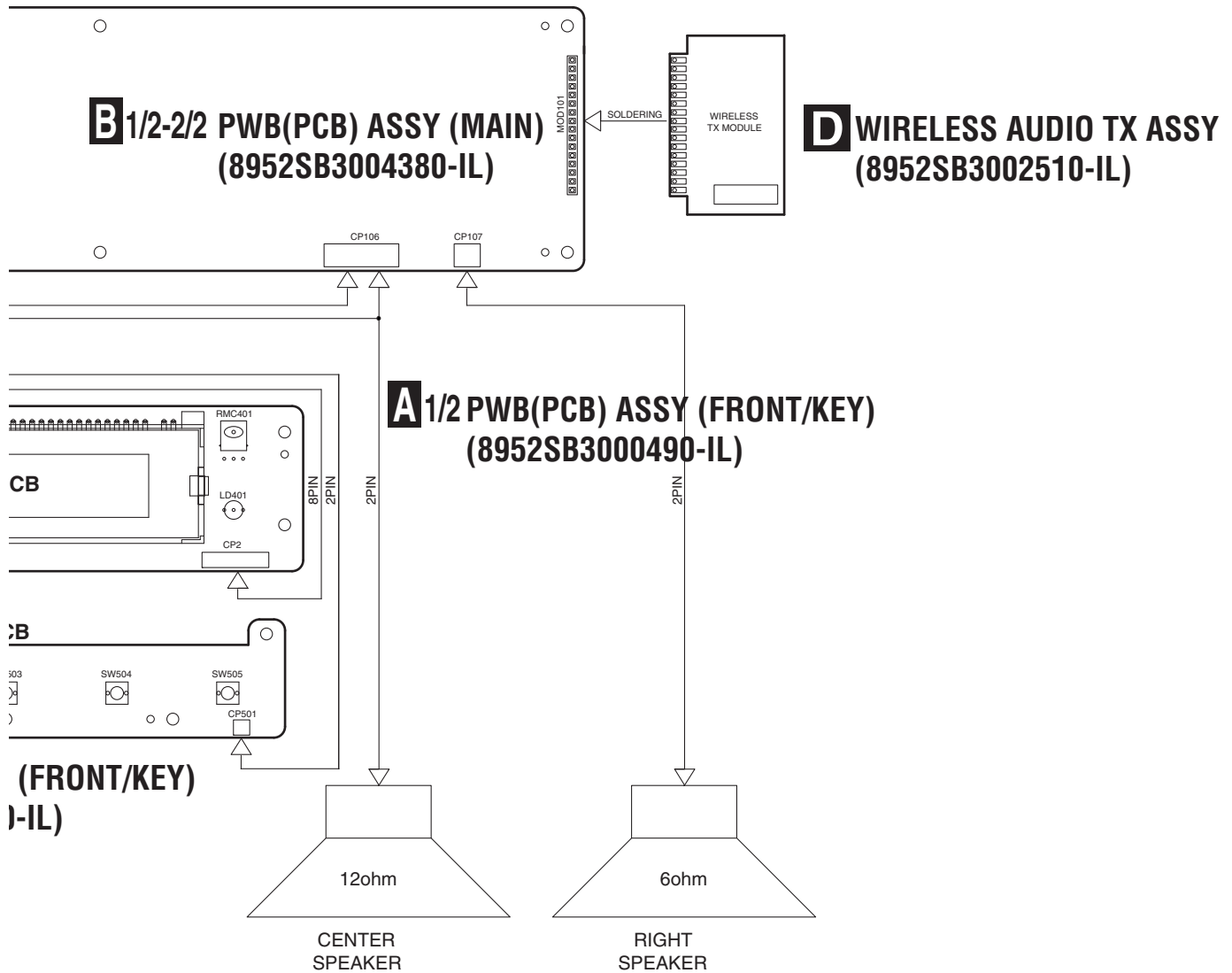
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D

E

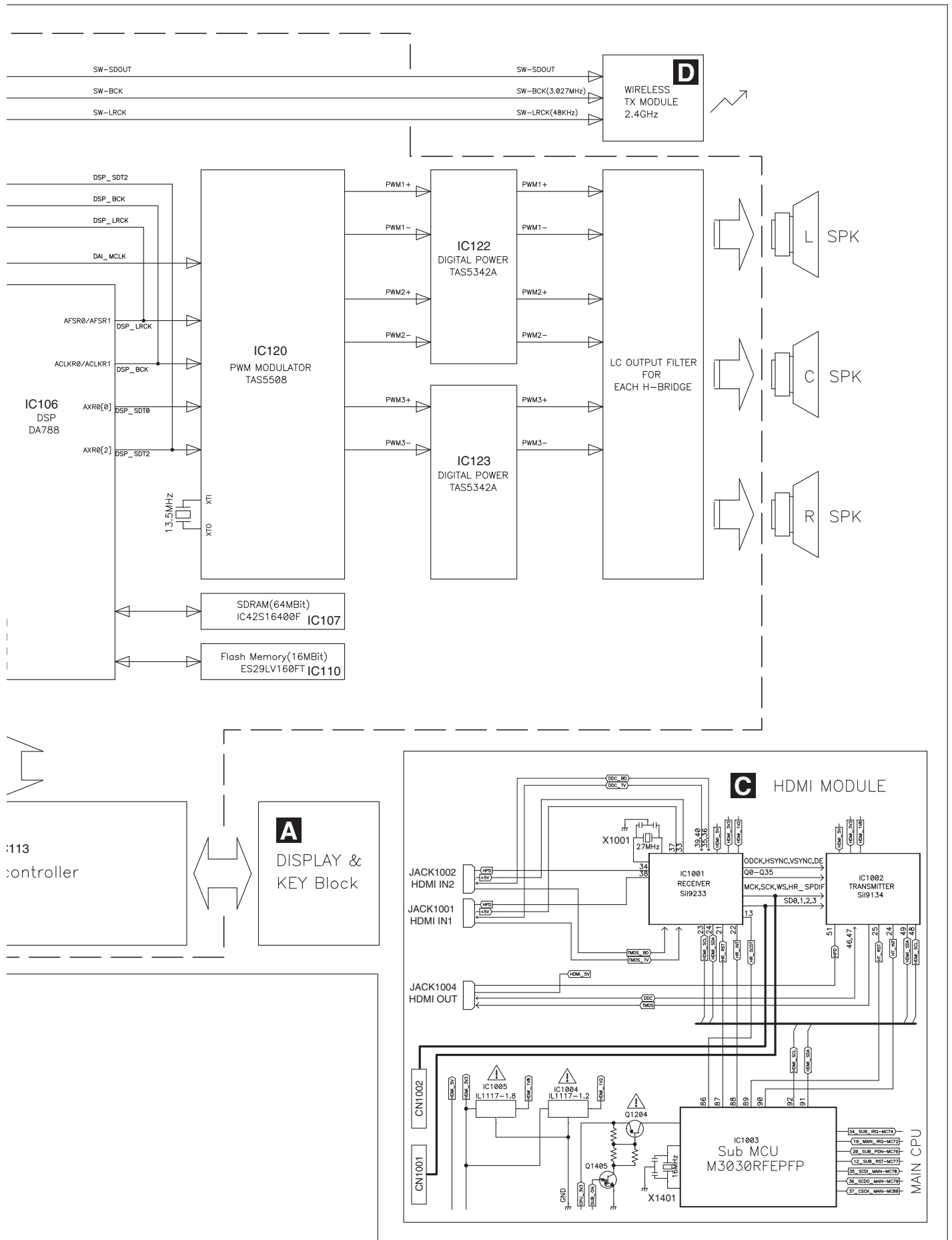
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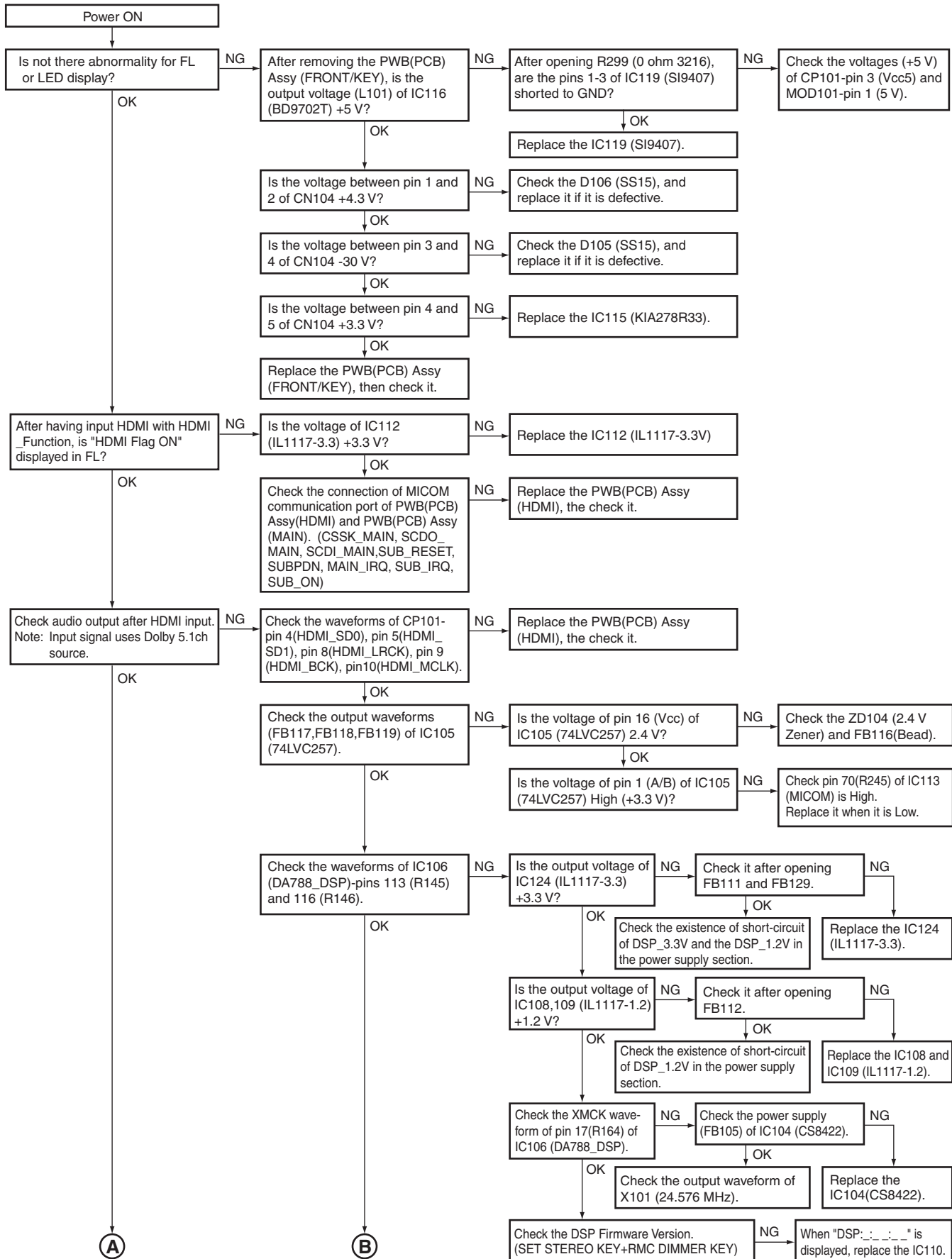


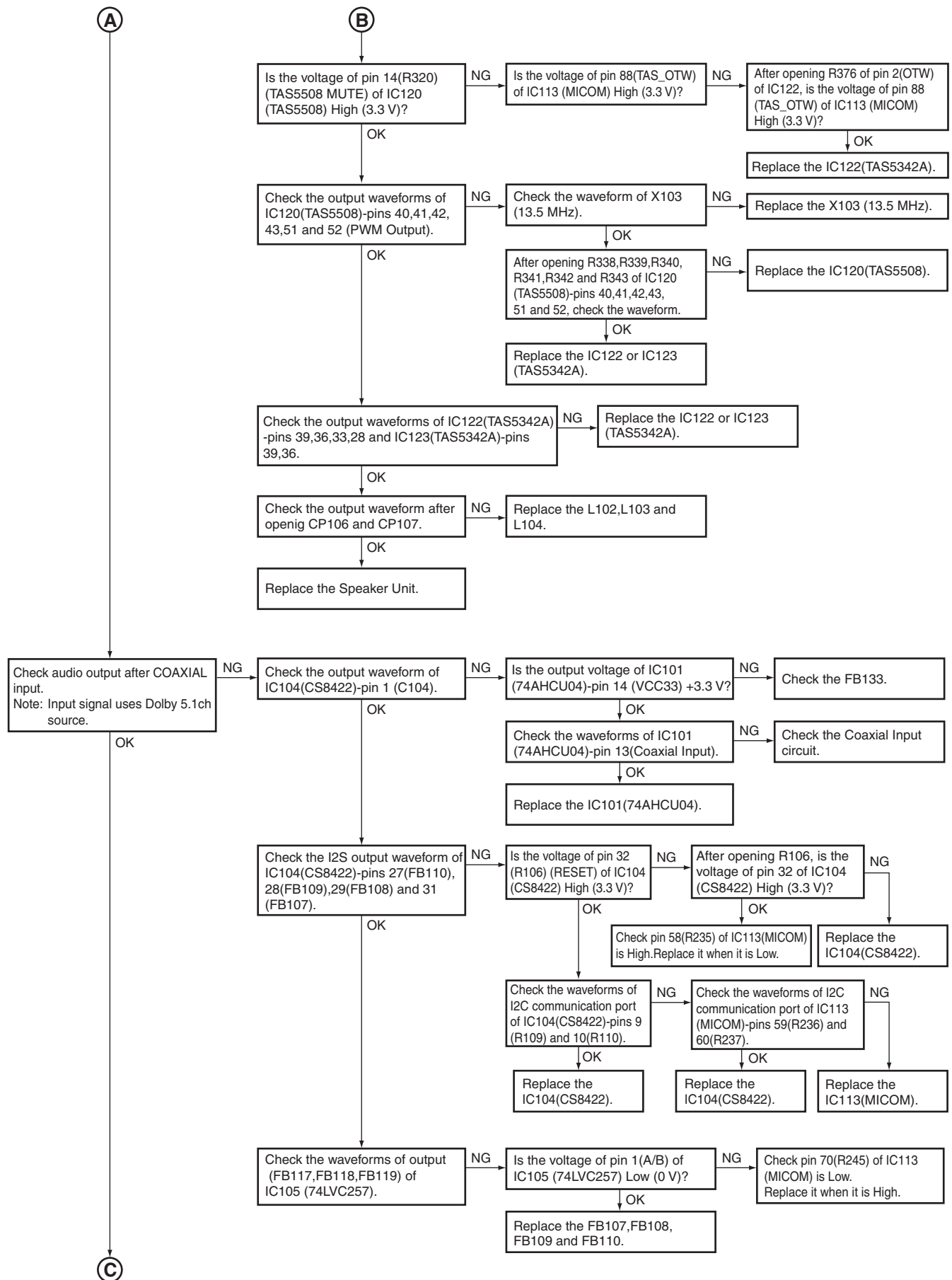


5. DIAGNOSIS

5.1 DIAGNOSIS FLOWCHART

■ TROUBLESHOOTING





A

C

Check audio output after OPTICAL input.
Note: Input signal uses Dolby 5.1ch source.

NG

Check the waveform of SPDIF output of JK102-pin 3(input).

NG

Replace the JK102 Optical Jack.

OK

Check the waveform of IC104 (CS8422)-pin 2(C105).

NG

Replace the IC104(CS8422).

OK

Do LEDs of Wireless Subwoofer and PWB (PCB) Assy (FRONT/KEY) light in GREEN?

NG

After Re-pairing operation (press the STEREO key (main unit), SHIFT key (remote control unit), then TV CH- key (remote control unit) after pressing the SYSTEM key (remote control unit)), does GREEN LED of FRONT blink at intervals of 250 msec?

NG

Replace the MOD101 Wireless TX Module.

OK

After turned OFF the power supply of Subwoofer and then ON, check the GREEN LED lights.

NG

Check the voltages of CP702-pin 1 (+5 V) and CP702-pin 6(+31 V) of PWB(PCB) Assy (SW MAIN/LED).

NG

Replace the PWB(PCB) Assy (SMPS).

OK

Is the voltage of MOD701-pin 2 (+5 V) 5 V?

NG

Check the FB711.

OK

Is the voltage of MOD701-pin 9 (MOD_RESET) High (3.3 V)?

NG

Is the voltage of IC703(KIA7027) -pin 1(3.3 V) 3.3 V?

OK

NG

Replace the IC703(KIA7027).

Replace the IC701(IL1117-3.3).

OK

Is the voltage of MOD701-pin 3 (GREEN_LED) High (3.3 V)?

NG

Replace the MOD701 Wireless RX Module.

OK

Is the voltage of CP701-pin 3 (GREEN) High (3.3 V)?

NG

Replace the Q702(2SC2412K).

OK

Is the voltage of CP703-pin 3 (GREEN) High (3.3 V)?

NG

Replace the Connector Assy of 3 Pin LED PCB.

OK

Replace the LD701 (RED/GREEN Dual LED).

C

D

Check the subwoofer audio output after OPTICAL input.
Note: Input signal uses Dolby 5.1ch source.

NG

Check the I2S waveforms of MOD101 -pins 7(I2S_DATA), 8(I2S_LRCK) and 12(I2S_BCK).

NG

Check the waveforms of IC104(CS8422) -pins 23(R120), 24(R121) and 25(R122).

NG

Replace the IC104(CS8422).

OK

Replace the R120, R121, R122 and R307, R308, R309.

Check the I2S output waveforms of MOD701-pins 8(MCLK), 12(SDATA), 13(LRCK) and 14(BCK) of Subwoofer.

NG

After opening R706, R708, R709 and R710, check the I2S output waveform of MOD701-pins 8, 12, 13 and 14.

NG

Replace the MOD701 Wireless RX Module.

OK

Check the waveforms of I2C communication port of MOD701-pins 15 and 16.

NG

Replace the MOD701 Wireless RX Module.

OK

Replace the IC702(STA326).

Check the output waveforms of IC702 (STA326)-pins 3 and 16(PWM Output).

NG

Replace the IC702(STA326).

OK

After opening PN701, check the output waveform.

NG

Replace the L701.

OK

Replace the Speaker Unit.

E

F

After initialization (press the STEREO key and HDMI1 key (main unit)), turn the AC POWER OFF.

5.2 DESCRIPTION OF WIRELESS PAIRING OPERATIONS

Descriptions of Wireless Modes

1. Factory Mode

- Factory-set initial status
- The LED indications are as follows:

LED COLOR	TX (Sound Bar)	RX (Sub Woofer)
RED	500 ms Toggle Blinking	500 ms Toggle Blinking
GREEN		

•To enter Factory Mode

TX (Sound Bar block)

1. Set TX to Power ON status then press the MUTE Key on the remote control while holding the STEREO Key on the main unit pressed.
2. The FL display shows "FACTORY MODE."
3. The red and green LEDs blink alternately at intervals of 500 ms.

RX (Subwoofer block)

1. Operate TX and RX in Normal Mode.
2. When you set TX to Factory Mode from the state of 1 above, RX also automatically enters Factory Mode.

• How to shift from Factory Mode to Normal Mode

1. After Factory Mode is entered, once turn the power off (setting TX to Standby status and RX to AC OFF status).
2. When you turn TX and RX back on, they enter Auto Pairing Mode then shift to Normal Mode after several seconds.

2. Normal Mode

- Normal operation status
- The LED indications are as follows:

LED COLOR	TX (Sound Bar)	RX (Sub Woofer)
RED	OFF	OFF
GREEN	ON	ON

• This mode can be entered in the following conditions:

1. When TX and RX are turned on in Factory Mode (The ID of RX is changed to that of TX.)
2. When TX and RX are turned on with the same ID.

3. Standby Mode

- Status where TX and RX are searching for each other
- The LED indications are as follows:

LED COLOR	TX (Sound Bar)	RX (Sub Woofer)
RED	ON	ON
GREEN	OFF	OFF

• This mode can be entered in the following conditions:

1. When only TX is in Power ON status while RX is in Power OFF status
2. When only RX is in Power ON status while TX is in Standby status
3. When TX and RX differ in ID although both are in Power ON status

4. Re-Pairing (Manual Pairing) Mode

- Mode to normally operate TX and RX differing in ID. (Use this mode if any module replacement has occurred in servicing, etc.)
- The LED indications are as follows:

LED COLOR	TX (Sound Bar)	RX (Sub Woofer)
RED	OFF	OFF
GREEN	250 ms Blink	500 ms Blink

•To enter the mode

TX (Sound Bar block)

1. With TX in Power ON status, simultaneously press the SHIFT key and the CH- key for TV CONTROL on the remote control.

2. The green LED blinks at intervals of 250 ms.

RX (Subwoofer block)

1. RX starts Re-Pairing operation upon power on and continues it for 15 seconds at maximum. The method of Pairing with TX is as follows:

2. After the above-mentioned TX enters Re-Pairing Mode (green LED blinking) with the Power Cord of RX disconnected, connect the AC power to RX.

-> If pairing with TX fails: RX enters Standby Mode 15 seconds after it is turned on (red LED ON).

-> When pairing with TX is successful: RX immediately enters Normal Mode (green LED ON).

• If Re-Pairing is started for TX in Factory Mode

1. The green LED blinks at intervals of 250 ms.
2. Re-Pairing Mode is maintained for 60 seconds at maximum. The mode changes to Standby Mode after 60 seconds (red LED ON).

5. Sleep Mode (Power Save Mode)

- Standby Mode is entered if no audio signal of a subwoofer channel is sent from TX to RX for 10 minutes.
- The LED indications are as follows:

LED COLOR	TX (Sound Bar)	RX (Sub Woofer)
RED	ON	ON
GREEN	OFF	OFF

- If any audio signal of a subwoofer channel is sent to TX in Sleep Mode, the mode automatically changes to Normal Play Mode.

A ■ Pairing Methods in Various Conditions

Condition 1

In a case where both TX and RX stay in Factory Mode (not yet having entered Normal Mode after factory delivery)



-> Regardless of the order of power ON, pairing is enabled.

B

Condition 2

In a case where TX enters Standby Mode after pairing with RX has once been established and RX is in Factory Mode



-> Pairing is not possible in this state.

-> Methods for Re-Pairing

Method 1) Set TX to Factory Mode.

Method 2) Disconnect the AC power to RX then connect it again after setting TX to Re-Pairing Mode.

C

Condition 3

In a case where the module of TX or RX has been repaired or replaced



-> The procedure of Re-Pairing in a case where TX and RX have different IDs because of repair or replacement is as follows:

1. Set TX to Re-Pairing Mode. The green LED of TX blinks at intervals of 250 ms for 1 minute.
2. Disconnect the power to RX then connect it again. The green LED of RX blinks at intervals of 500 ms. When pairing with the above-mentioned TX in Re-Pairing Mode is established successfully, the green LED lights.
3. Re-Pairing Mode of TX is canceled immediately when pairing with RX is established.
4. RX of ID:B obtains the same ID as that of TX after pairing with TX.

E

F

5.3 SPECIFICATIONS FOR THE PROTECTION CIRCUITS

Protection Activation Conditions for the Sound Bar Adapter

The DC output from the adapter will be shut off if the 24-V DC output load becomes 6.4 A (max. current limitation) or higher (based on 90-V AC power).

On the Protection Functions of the Sound Bar

1. Protection Activation Conditions for the TAS5342A

- Max. current limitation: 7.1 A or higher
- /OTW: If the temperature becomes 125 °C or higher, the Over Temperature Protection function will be activated.
- /SD: In a case of undervoltage or overload, the Shutdown Protection will be activated.

$\overline{SD}$	$\overline{OTW}$	Description
0	0	Over temperature (OTE) or overload (OLP) or under voltage (UVP)
0	1	Overload (OLP) or under voltage (UVP)
1	0	Junction temperature higher than 125 °C (over temperature warning)
1	1	Junction temperature lower than 100 °C and no OLP or UVP faults (normal operation)

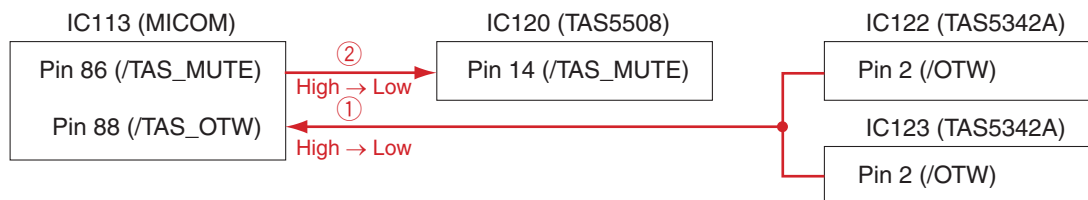
2. Over Temperature Protection (MICOM Pin 88)

- In Normal Operation mode: High

In a case where the temperature of the AMP IC (IC122 or IC123) becomes 125 °C or higher: Low

The signal from Pin 14 of IC120 (TAS5508) is set to low in order to mute the PWM output.

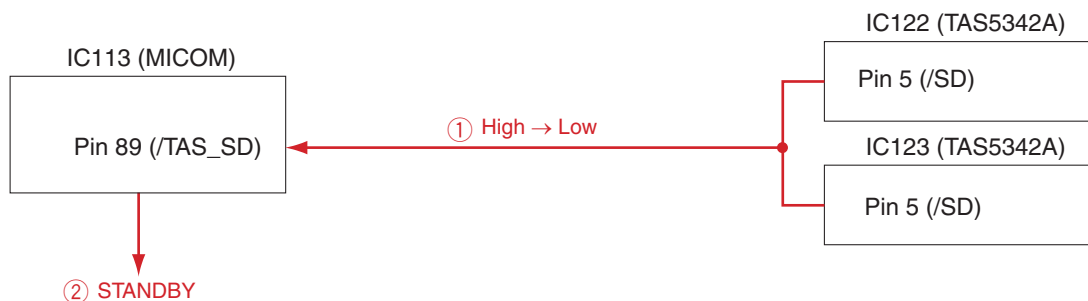
Muting of the PWM output is canceled when /OTW is returned to high.



3. On the AMP Shutdown Protection Function (AMP IC [IC122, IC123] Pin 5) (/SD)

- In Normal Operation mode: High
- In a case of undervoltage or overload: Low

When this signal is input to the MICOM, the audio signal will be muted and the system will enter STANDBY mode.



On the Protection Functions of the Subwoofer

In a case of excess current or excess temperature at the AMP IC (IC702: STA326), the protection function will be activated then deactivated in the AMP IC, according to the internally set programmable recovery time (100 ms), as shown below:

- 1) After a shutdown, the PWM output will be OFF for 100 msec (the set recovery time).
- 2) The system will enter Normal mode to detect operating conditions.
- 3) If the condition that caused the shutdown still remains, the protection function will be reactivated, according to the set recovery time.

No LED display nor power-off operation will be activated in the subwoofer while the protection function is activated. Therefore, if no sound is output even if the LED is lit in green, the protection function may have been activated.

6. SERVICE MODE

There is no information to be shown in this chapter.

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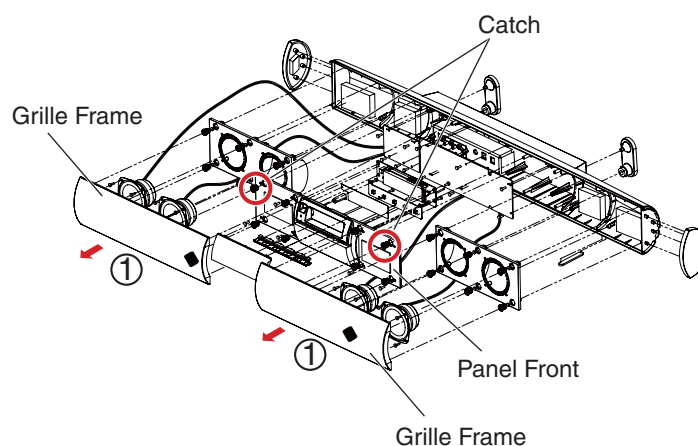
F

7. DISASSEMBLY

[1] Front and Center speaker (Main unit)

(1) Remove the Grille frame.

Note: The catch and front panel and the catch and boss are bonded with adhesive (2 places).
See the figure at right.



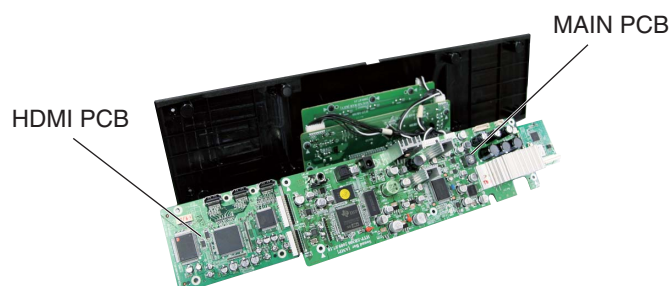
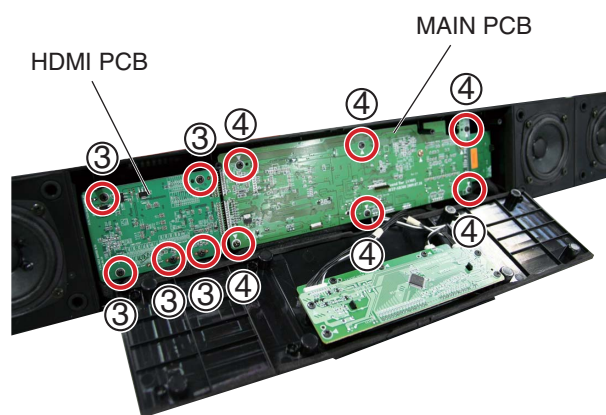
(2) Remove the eight screws.



(3) Remove the five screws on the HDMI PCB.

(4) Remove the six screws on the MAIN PCB.

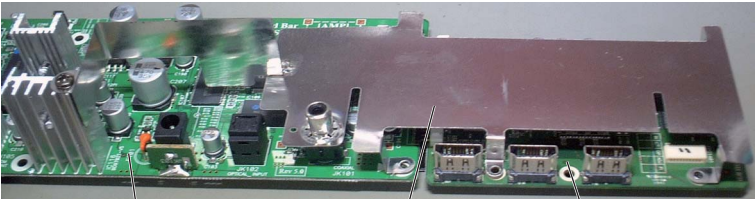
Note: The photo shows the state with the shield plate removed.



A **<Note on servicing>**
If the shield plate is removed for part replacement

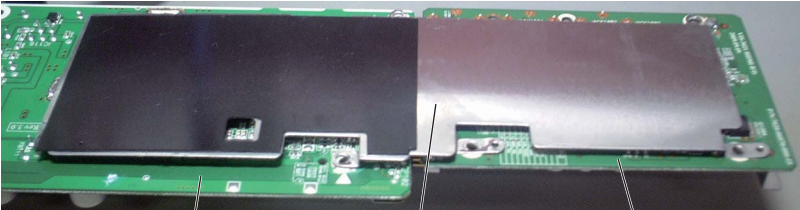
A spacer (fixed with double-back tape) is used between the shield plate and the board on side B. If the spacer is damaged when removing the plate, replace it with a new one.

SIDE A



MAIN PCB Shield Plate HDMI PCB

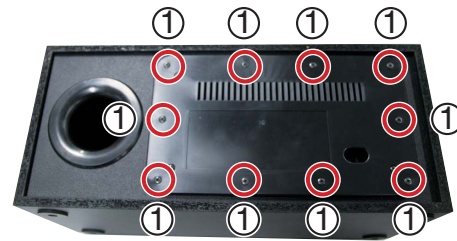
SIDE B



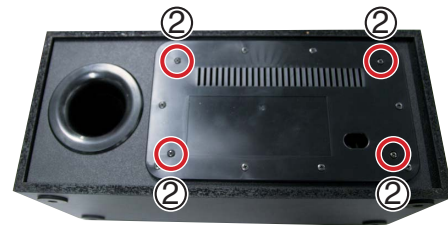
MAIN PCB Shield Plate HDMI PCB

[2] SUBWOOFER

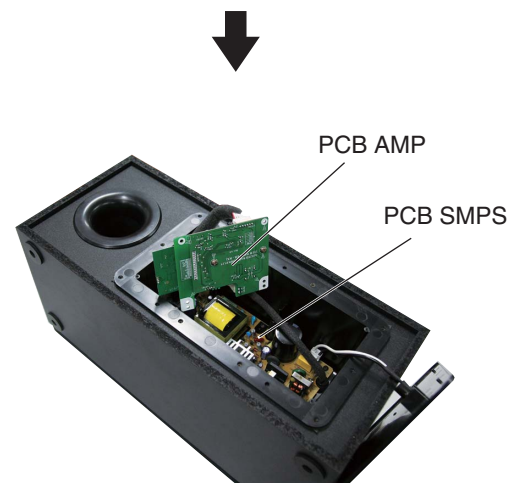
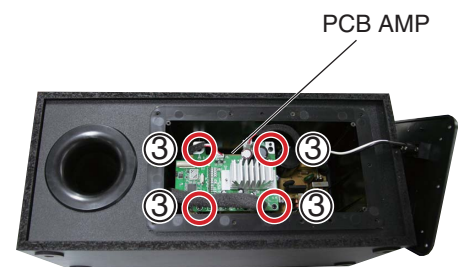
(1) Remove the ten screws.



(2) Remove the four screws.



(3) Remove the four screws on the PCB AMP.



8. EACH SETTING AND ADJUSTMENT

8.1 HOW TO UPDATE THE FIRMWARE

A

■ Version Indication

[Purpose]

The version of software for each microcomputer is indicated.

[How to enter/exit]

To enter this mode, during Normal Display mode simultaneously press the [STEREO/A.L.C.] key on the main unit and the [Dimmer] key on the remote control unit supplied with the HTP-SB300 or the AV amp.
The display will return to the normal indication when no key operation is performed for 10 seconds.
If any other key is pressed during the version or FL TEST MODE display, Normal Display mode is entered.

B

[Basic operations]

Key Operation	FL Display	Time (sec.)	Description of Indications
(Normal display) [STEREO/A.L.C.] + Remote Control [Dimmer]	HDMI 1 *1		
(Initial display) [VOLUME - (Down)]	MJ091023	10 (-> normal) *2	The version of Main microcomputer
↓ [VOLUME - (Down)]	SUB: V1.07	10 (-> normal) *2	The version of Sub microcomputer
↓ [VOLUME - (Down)]	DSP:8:03.11	10 (-> normal) *2	The version of DSP microcomputer
↓ [VOLUME - (Down)]	*3 FL Test mode	10 (-> normal) *2	FL Test mode
↓ (Initial display)			

*1 Indication when the HDMI1 function is selected

*2 “10 (-> normal)” denotes that the display will return to the normal indication when no key operation is performed for 10 seconds.

*3 During FL Test mode, all segments are lit then unlit repeatedly at intervals of 500 ms.

■ MAIN and SUB microcomputer

[Purpose]

Refer to this section when updating the firmware of each microcomputer is required by the service information, etc.

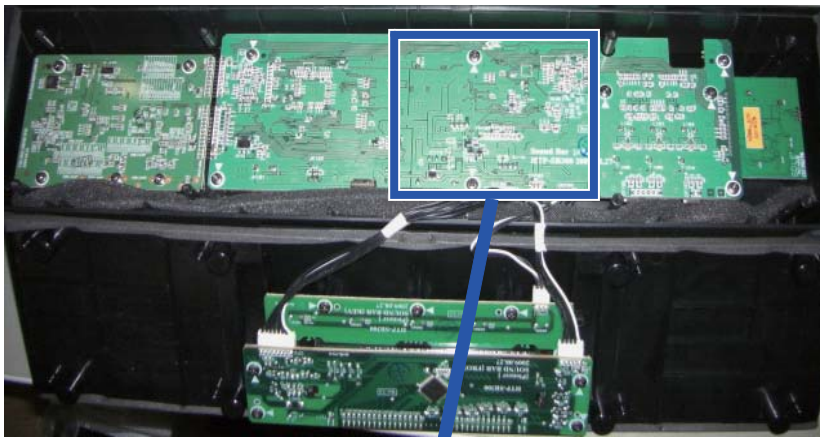
[Necessary Tools]

- PC with RS232C port
- RS-232C straight cable (9pin female ↔ 25pin male)
- RS-232C Interface jig : GGF1642
- SB update tool : GGF1644
- Updating program : FlashSta.exe
- Firmware file : “ .mot” file

[Connections]

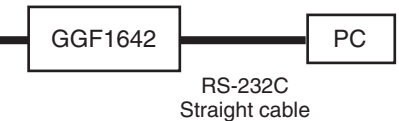
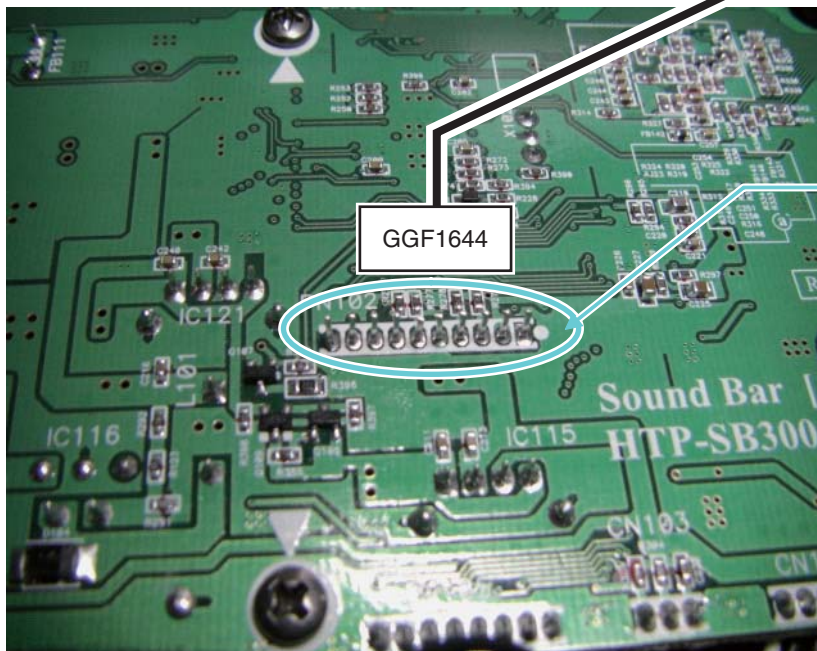
Update terminals of the main microcomputer

Connect the connector of the RS-232C interface special tool to the Update terminals of the main microcomputer, as shown below:



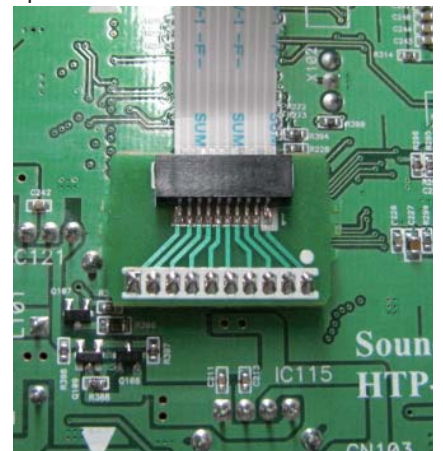
Remove the front panel to expose the board behind the MAIN board.

Enlarged view



Align the pin (indicated in the figure by a white dot) just to the right of the Update terminals of the MAIN microcomputer with the pin (indicated in the figure by a white dot) of the SB update tool (GGF1644) then push the connector in.

The photo shows the state with the SB update tool connected.



A

B

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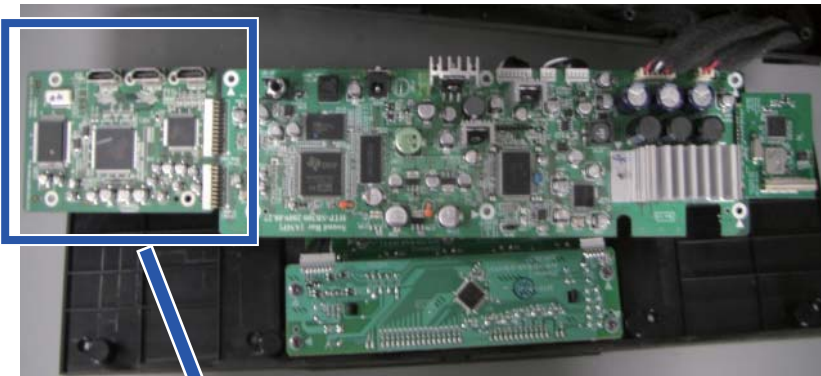
D

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F

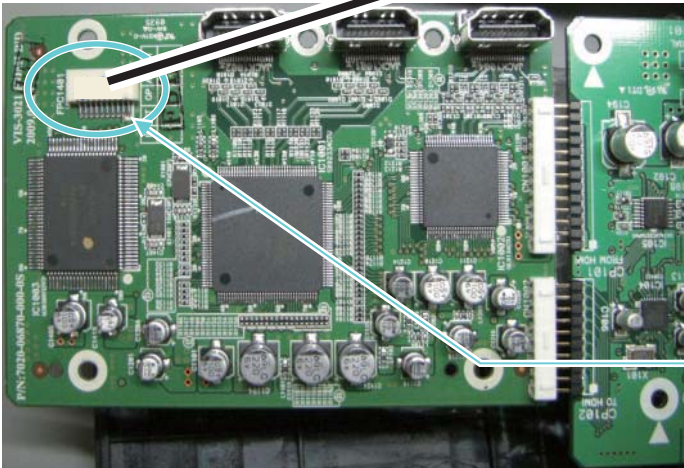
[Connections]

Update terminals of the sub microcomputer
Connect as shown in the figure below.



Remove the HDMI and MAIN PCBs.

Enlarged view



GGF1642

PC

RS-232C
Straight cable

Update terminals of the submicrocomputer
Connect the connector of the FFC cable of
the special tool to the Update terminals on
the HDMI PCB.

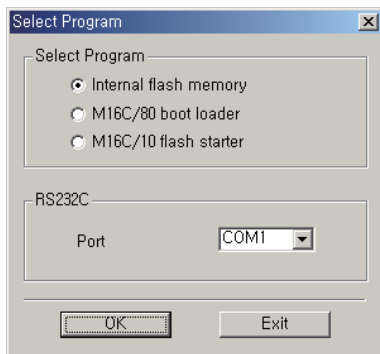
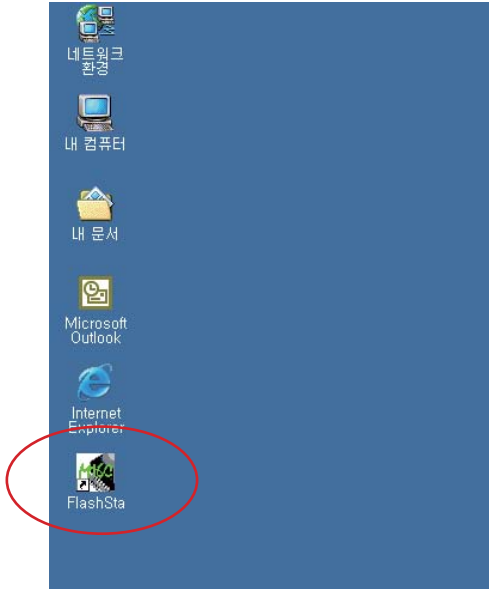
[Note]

Do NOT disconnect the AC power cords of this unit and the PC during a downloading.

[Procedures]

1. Connect the PC and the unit as shown in "Connections".

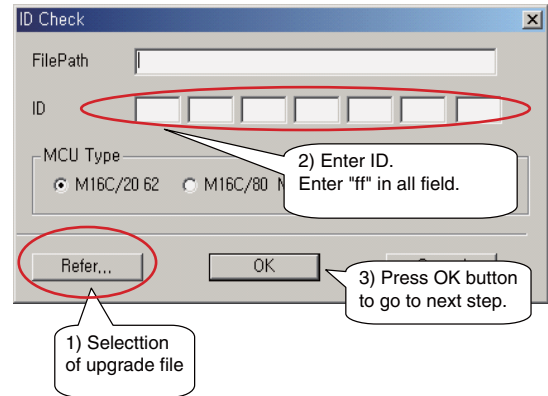
2. Double-click the "FlashSta.exe".



3. Connect the AC power cord of the unit.
In a case of the submicrocomputer, turn the main unit on.

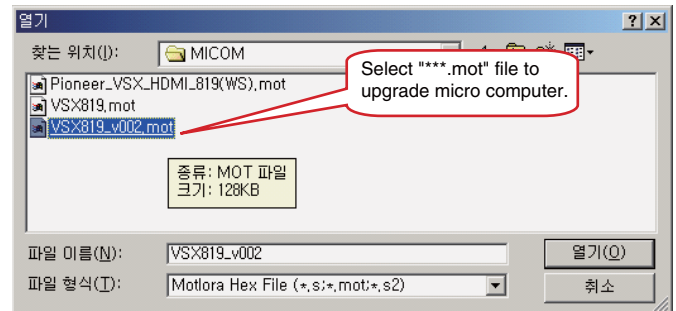
4. Click the "OK" button.

5. Select the firmware file (*.mot file) for updating each ucom and enter ID

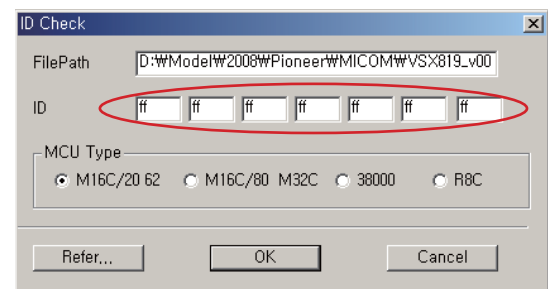


1) Selection of upgrade file

Note: Do NOT download the firmware file for other ucom.

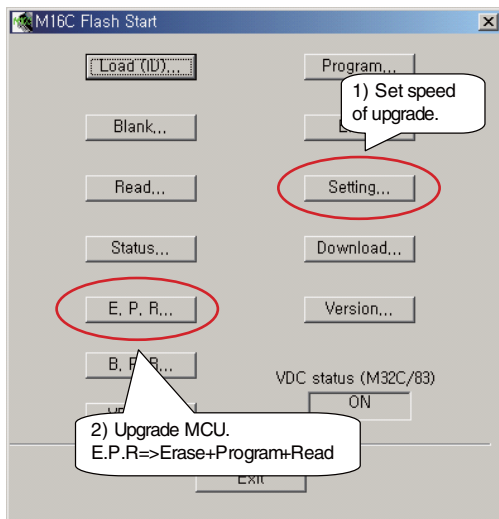


2) Enter ID. (Enter "ff" in all field.)

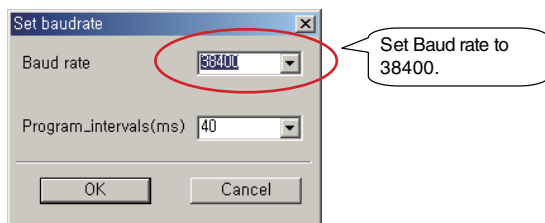


3) Click the "OK" button to go to next step.

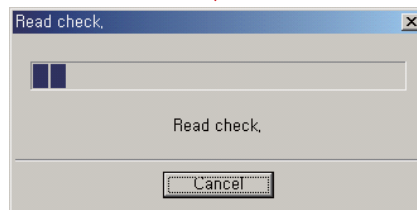
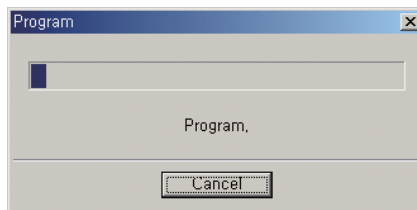
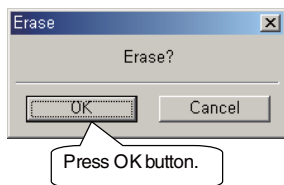
6. Select the communication speed and upgrade MCU.



1) Set speed of upgrade. (Baud rate: 38400)



2) Upgrade MCU : Check the "E.P.R" button.



7. Finished



8. Unplug the AC cord.

9. Disconnect the RS-232C interface special tool.

10. Plug in the AC cord.

11. Initialize the main unit.

Resetting the main unit

Use this procedure to reset all the system's settings to the factory default. Use the front panel controls to do this.

1 Switch the system on.

2 While holding down the STEREO/A.L.C. button on the front panel, press and hold the HDMI1 button on remote control for about two seconds.

3 Unplug the power cord.

The system has been reset to the factory settings.

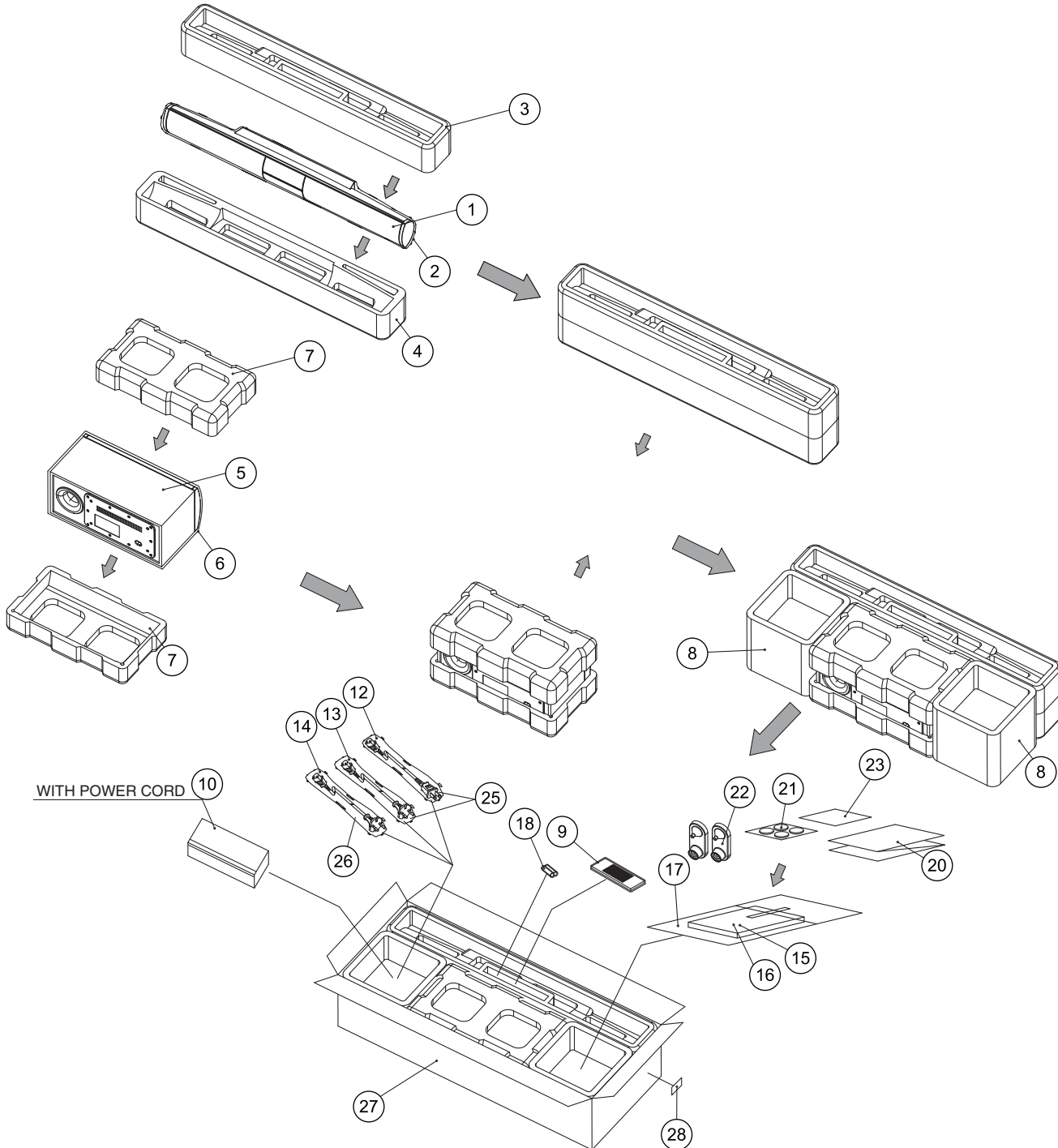
THE FACTORY DEFAULT SETTINGS

Setting	Default
S. DELAY (Sound Delay)	0.0 frames
MIDNIGHT	OFF
LOUDNESS	
S. RTV (Sound Retriever)	OFF
DUAL MONO	CH1
DRC (Dynamic Range Control)	AUTO
LFE ATT (LFE Attenuate)	0 dB
HDMI (HDMI Audio)	AMP
A. DLY (Auto Delay)	OFF
C. WIDTH (Center Width)	3
DIMEN. (Dimension)	0
PNRM. (Panorama)	OFF
Others	
INPUT SELECT	HDMI 1
LISTENING MODE	AUTO SURROUND
DIMMER (Dims or brightens the display)	BRIGHTENS THE DISPLAY

9. EXPLODED VIEWS AND PARTS LIST

- NOTES:
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
 - The $\triangle$ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
 - Screws adjacent to ∇ mark on product are used for disassembly.
 - For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions, apply as you think it appropriate.)

9.1 PACKING



		5		6		7		8	
PACKING SECTION PARTS LIST									
	<u>Mark</u>	<u>No.</u>	<u>Description</u>	<u>Part No.</u>		<u>Mark</u>	<u>No.</u>	<u>Description</u>	<u>Part No.</u>
	NSP	1	Sound Bar SPK				16	Operating instructions	See Contrast table (2)
		2	Polyethylene Bag	8952SB3000420-IL			17	Polyethylene Bag	8952SB3000410-IL
		3	Packing	8952SB3000430-IL	NSP	18	Dry Cell Batteries (AAA/R03)	G670001R50210-IL	A
		4	Packing	8952SB3000440-IL			19		
	NSP	5	Subwoofer		NSP	20	Wall mounting template	8952SB3002570-IL	
		6	Polyethylene Bag	8952SB3003220-IL			21	Non-skid Pads (for subwoofer)	8952SB3003090-IL
		7	Packing	8952SB3003230-IL			22	Brackets (for main unit)	8952SB3000130-IL
		8	Packing Space	8952SB3003240-IL	NSP	23	Warranty Card	See Contrast table (2)	
		9	Remote Control	See Contrast table (2)			24		
	⚠	10	AC Adapter	See Contrast table (2)			25	Pe Bag P Cord	8952SB3004230-IL
		11					26	Poly Bag	8952SB3004240-IL
	⚠	12	Power Cord A (for subwoofer)	See Contrast table (2)			27	Carton Box	See Contrast table (2)
	⚠	13	Power Cord E (for subwoofer)	See Contrast table (2)	NSP	28	Serial Label S	VRW2017	B
	⚠	14	Power Cord UK (for subwoofer)	See Contrast table (2)					
		15	Operating instructions	See Contrast table (2)					

(2) CONTRAST TABLE
 HTP-SB300/SVYXCN5 and HTP-SB300/CMXCN are constructed the same except for the following:

Mark	No.	Symbol and Description	HTP-SB300/SVYXCN5	HTP-SB300/CMXCN
	9	Remote Control (AXD7576)	8952SB3002630-IL	Not used
	9	Remote Control (AXD7578)	Not used	8952SB3002740-IL
⚠	10	AC Adapter	8952SB3002670-IL	8952SB3002770-IL
⚠	12	Power Cord (America) (for subwoofer)	Not used	8952SB3003980-IL
⚠	13	Power Cord (Europe) (for subwoofer)	8952SB3004330-IL	Not used
⚠	14	Power Cord (UK) (for subwoofer)	8952SB3003900-IL	Not used
	15	Operating instructions(En/Fr/Ru)	8952SB3002641-IL	Not used
	15	Operating instructions(En/Frca)	Not used	8952SB3002751-IL
	16	Operating instructions(It/Nl/Es/De)	8952SB3002651-IL	Not used
NSP	23	Warranty Card	ARY7127	Not used
	26	Poly Bag	8952SB3004240-IL	Not used
	27	Carton Box	8952SB3002850-IL	8952SB3002860-IL

A

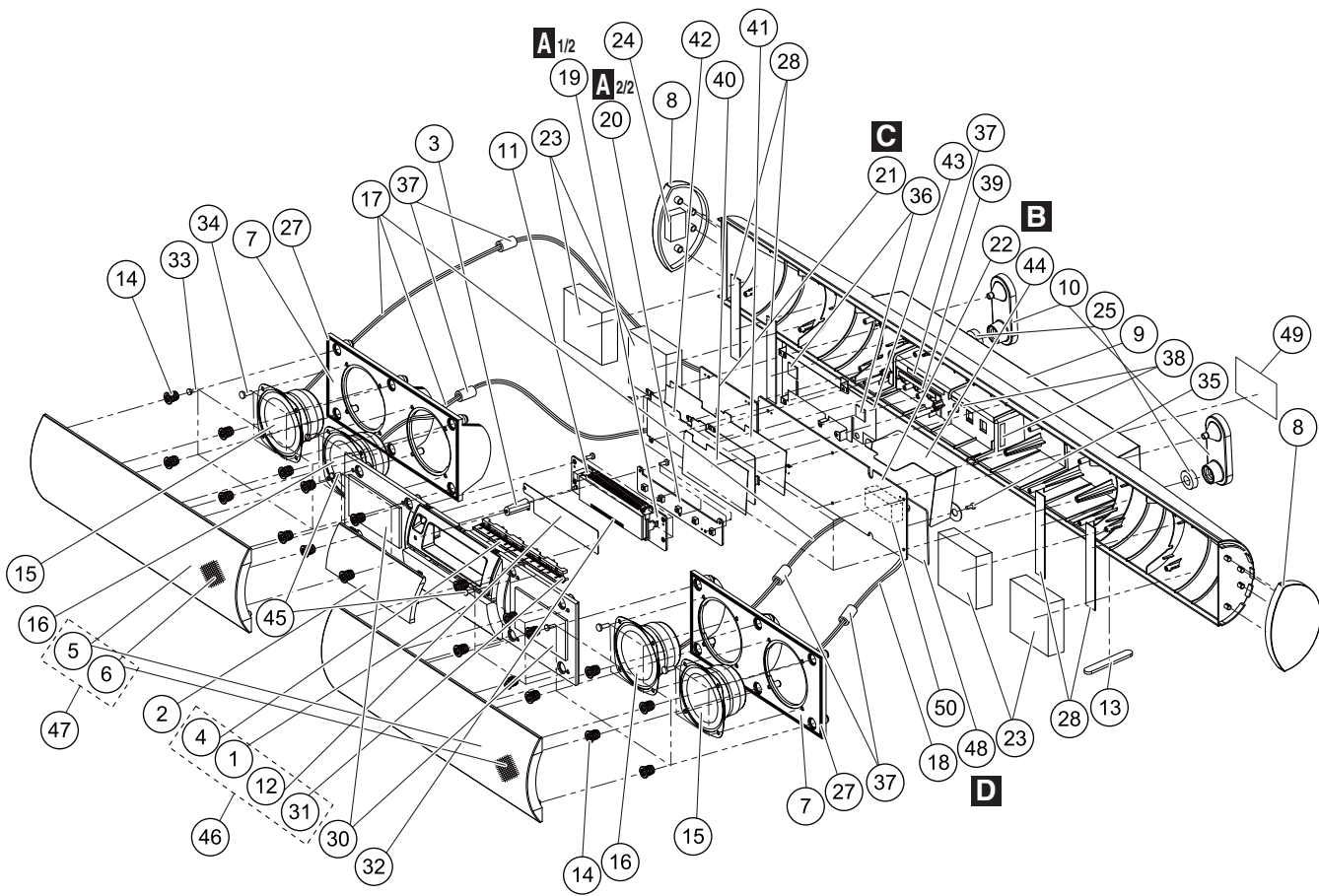
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EXTERIOR SECTION (Main unit) SECTION PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
NSP	1	Panel Front	See Contrast table (2)	26	•••••		
	2	Window Display	8952SB3000040-IL	27	Felt		8952SB3000230-IL
	3	Lens LED	8952SB3000050-IL	28	Felt		8952SB3000240-IL
NSP	4	Knob Button	8952SB3000060-IL	29	Felt		8952SB3000250-IL
NSP	5	Frame Net	8952SB3000080-IL	30	Felt		8952SB3000270-IL
NSP	6	Jersey Net	8952SB3000090-IL	NSP	31	Felt	8952SB3002870-IL
	7	Baffle Front	See Contrast table (2)	32	Felt		8952SB3002880-IL
	8	Cap Deco Side	8952SB3000110-IL	33	Screw		BBZ30P100FTB
	9	Case Rear	See Contrast table (2)	34	Screw		BBZ40P100FTB
	10	Bracket Wall	8952SB3000130-IL	35	Screw		BBZ30P060FTB
NSP	11	HOLDER FL	•••••	36	Felt		8952SB3002970-IL
NSP	12	Filter FL	8952SB3000150-IL	37	Felt		8952SB3004020-IL
	13	Foot Rubber	8952SB3000160-IL	38	Felt (Shiled B)		8952SB3004010-IL
	14	Holder Rubber	8952SB3000170-IL	39	Felt (Shiled A)		8952SB3002990-IL
	15	Unit Woofer (Shield)	8952SB3000180-IL	40	Sheet		8952SB3002960-IL
	16	Unit Center (Shield)	8952SB3000190-IL	41	Sheet		8952SB3002950-IL
	17	Cinnector Assy	8952SB3000210-IL	42	Palte Top		8952SB3002930-IL
	18	Connector Assy	8952SB3000200-IL	43	Palte Bottom		8952SB3002940-IL
	19	PWB (PCB) ASSY (FRONT/KEY)	8952SB3000490-IL	44	Plate Sub		8952SB3002980-IL
NSP	20	KEY PCB	•••••	45	Screw TORX		8952SB3002910-IL
	21	P.C.B SUB ASSY (HDMI)	7028068701010-IL	46	Panel Front Assy		See Contrast table (2)
	22	PWB (PCB) ASSY (MAIN)	8952SB3004380-IL	47	Net Frame Ass'y		8952SB3000070-IL
	23	Cashmere	8952SB3000290-IL	48	Wireless Audio TX		8952SB3002510-IL
	24	Cashmere	8952SB3000300-IL	NSP	49	Label Main	See Contrast table (2)
	25	Felt	8952SB3000260-IL	50	Heat Sink		8952SB3002530-IL

(2) CONTRAST TABLE
 HTP-SB300/SVYXC�5 and HTP-SB300/CMXC� are constructed the same except for the following:

Mark	No.	Symbol and Description	HTP-SB300/SVYXC�5	HTP-SB300/CMXC�
NSP	1	Panel Front	8952SB3000030-IL	8952SB3002700-IL
	7	Baffle Front	8952SB3000100-IL	8952SB3002710-IL
	9	Case Rear	8952SB3002600-IL	8952SB3002720-IL
NSP	46	Panel Front Assy	8952SB3004340-IL	8952SB3004350-IL
	49	Label Main	8952SB3002610-IL	8952SB3002730-IL

A

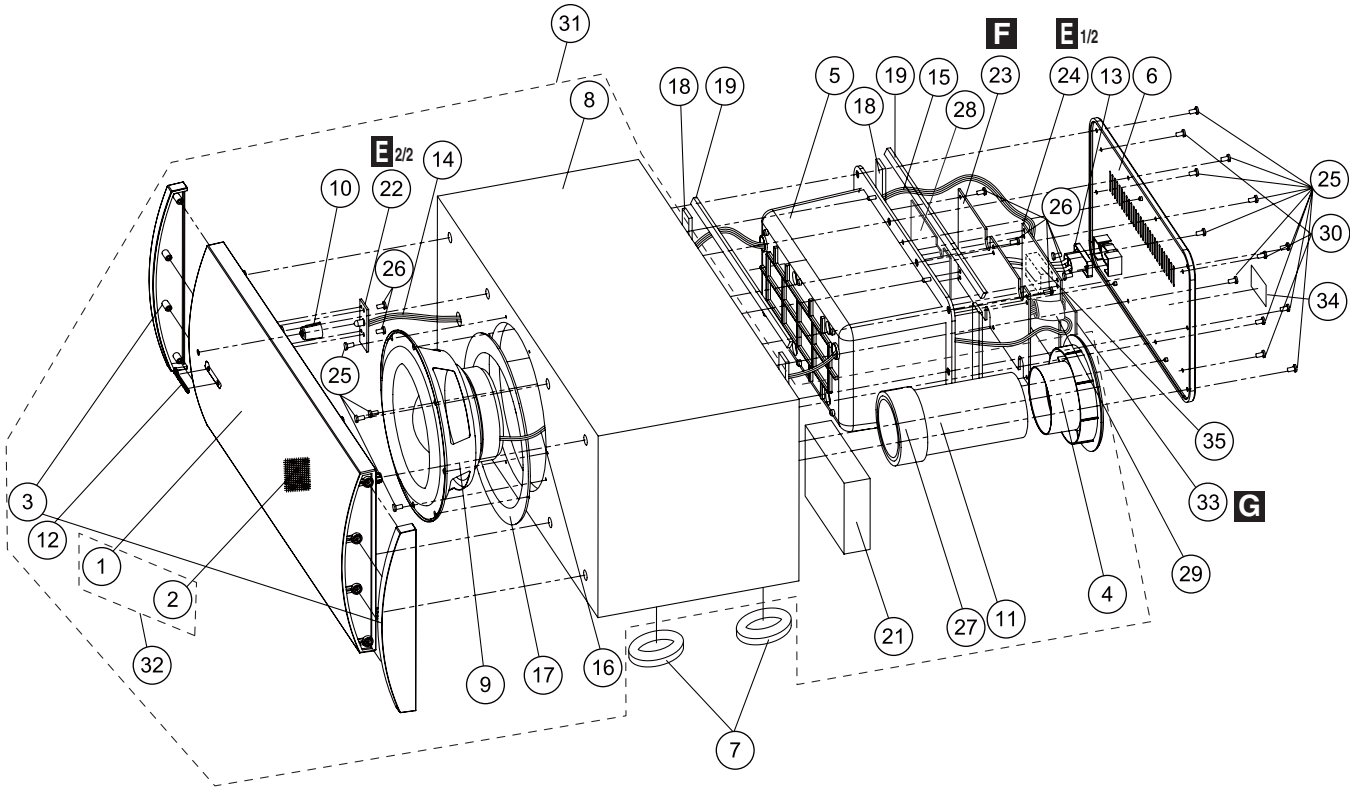
B

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F



EXTERIOR SECTION (Wireless subwoofer) SECTION PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
NSP	1	Frame Net	8952SB3003030-IL		21	Cashmere	8952SB3003170-IL
NSP	2	Jersey Net	8952SB3003040-IL	NSP	22	Hand Ins PWB(PCB)	8952SB3003320-IL
NSP	3	Cap Deco Side	8952SB3003050-IL	⚠	23	PWB (PCB) (SMPS)	8952SB3003790-IL
	4	Duct	8952SB3003060-IL		24	PWB (PCB) ASSY (SW MAIN/LED)	8952SB3004270-IL
	5	Case Amp	See Contrast table (2)		25	Screw	8952SB3004210-IL
	6	Panel Back	See Contrast table (2)		26	Screw (Bind Head)	8952SB3003180-IL
	7	Foot Rubber	8952SB3003090-IL		27	Felt	8952SB3003840-IL
NSP	8	Cabinet Assy	8952SB3003830-IL	NSP	28	Sheet	See Contrast table (2)
NSP	9	Unit Woofer	8952SB3003110-IL		29	Sponge	8952SB3004260-IL
NSP	10	Lens LED	8952SB3003990-IL		30	Screw TORX	8952SB3002910-IL
NSP	11	Duct Paper	8952SB3003820-IL		31	Cabinet Wood Assy	8952SB3004370-IL
NSP	12	Badge 37	SAM1507		32	Net Frame Assy	8952SB3003020-IL
	13	Connector (AC Inlet)	8952SB3003270-IL	NSP	33	Wireless Audio RX	8952SB3003750-IL
NSP	14	Connector (to LED)	8952SB3003280-IL		34	Label Main	See Contrast table (2)
	15	Connector (to Main)	8952SB3003290-IL	NSP	35	Heat Sink	8952SB3003760-IL
	16	Connector Assembly	8952SB3003300-IL				
NSP	17	Felt	8952SB3003130-IL				
	18	Felt	8952SB3003140-IL				
	19	Felt	8952SB3003150-IL				
	20	•••••					

(2) CONTRAST TABLE

HTP-SB300/SVYXCN5 and HTP-SB300/CMXC� are constructed the same except for the following:

Mark	No.	Symbol and Description	HTP-SB300/SVYXC�5	HTP-SB300/CMXC�
	5	Case Amp	8952SB3003070-IL	8952SB3003930-IL
	6	Panel Back	8952SB3003080-IL	8952SB3003940-IL
	28	Sheet	8952SB3003850-IL	Not used
NSP	34	Label Main	8952SB3003880-IL	8952SB3003970-IL

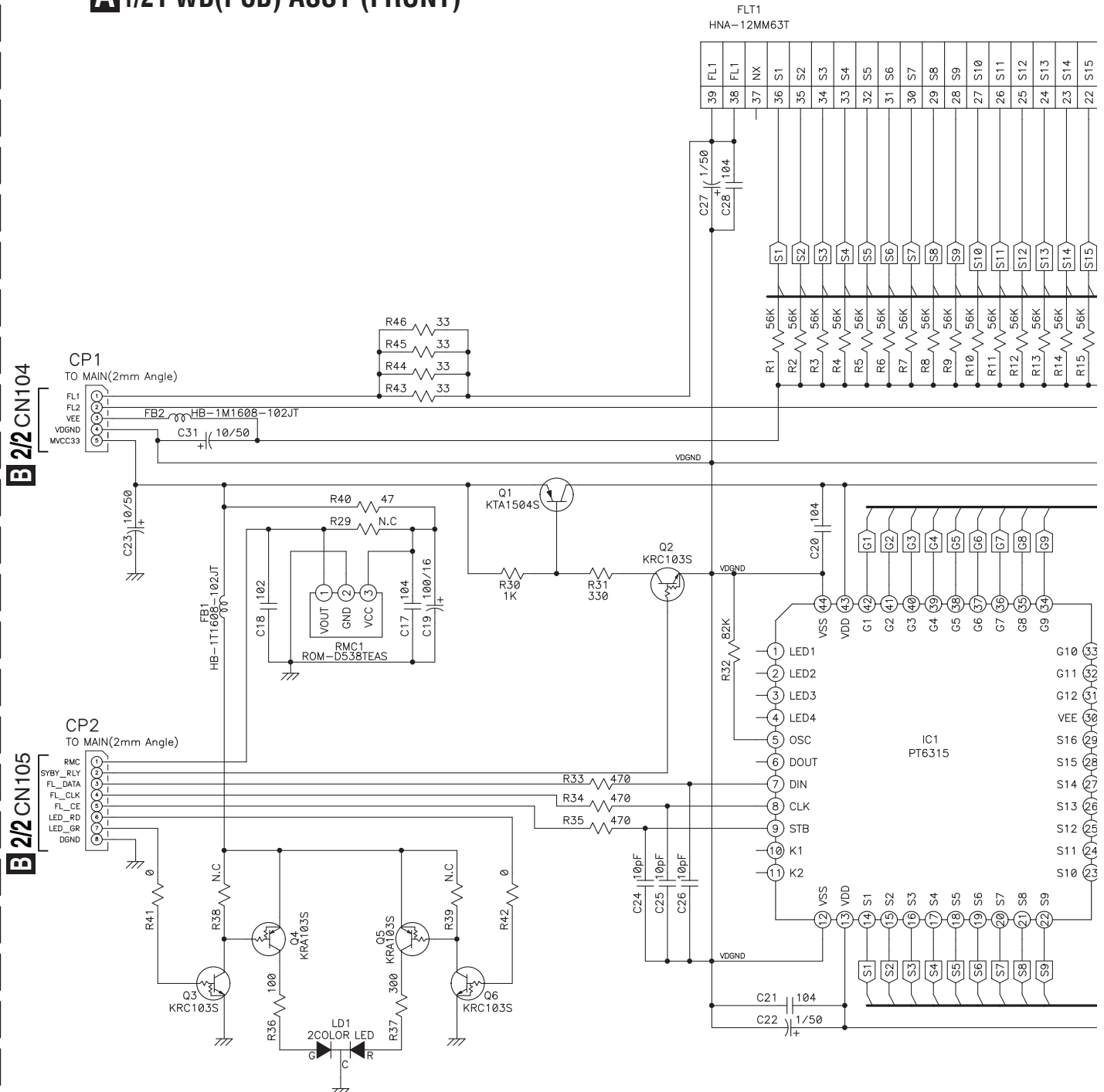
10. SCHEMATIC DIAGRAM

10.1 PWB(PCB) ASSY (FRONT/KEY)

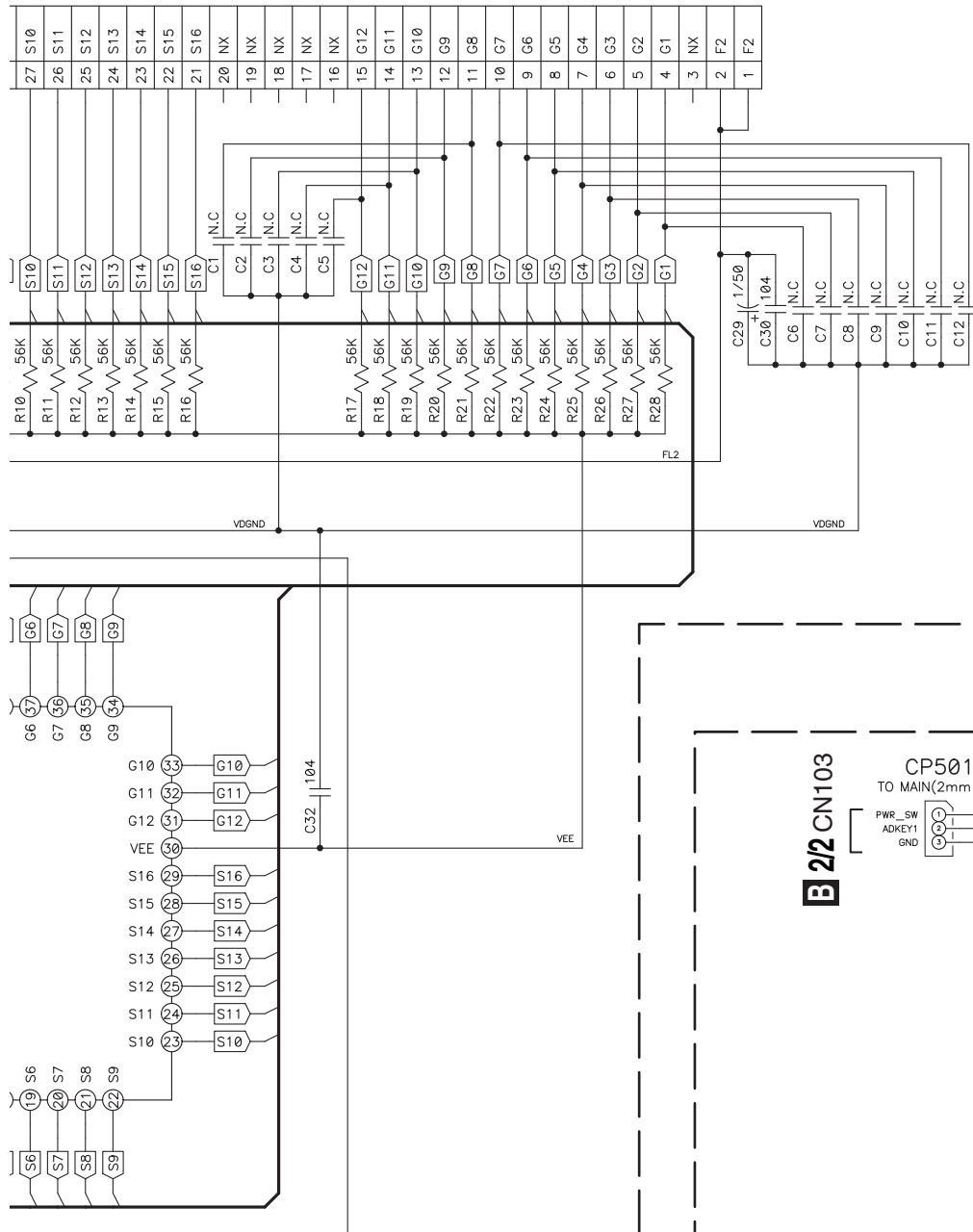
A PWB(PCB) ASSY (FRONT/KEY) (8952SB3000490-IL)

DISPLAY SECTION

A 1/2 PWB(PCB) ASSY (FRONT)



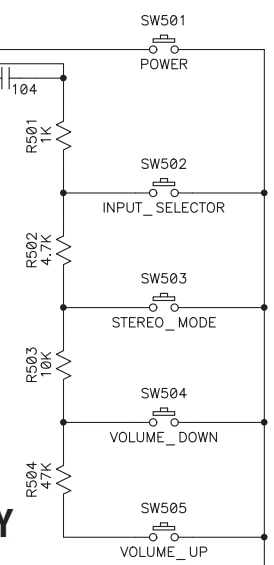
- When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".
- The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
-  : The power supply is shown with the marked box.



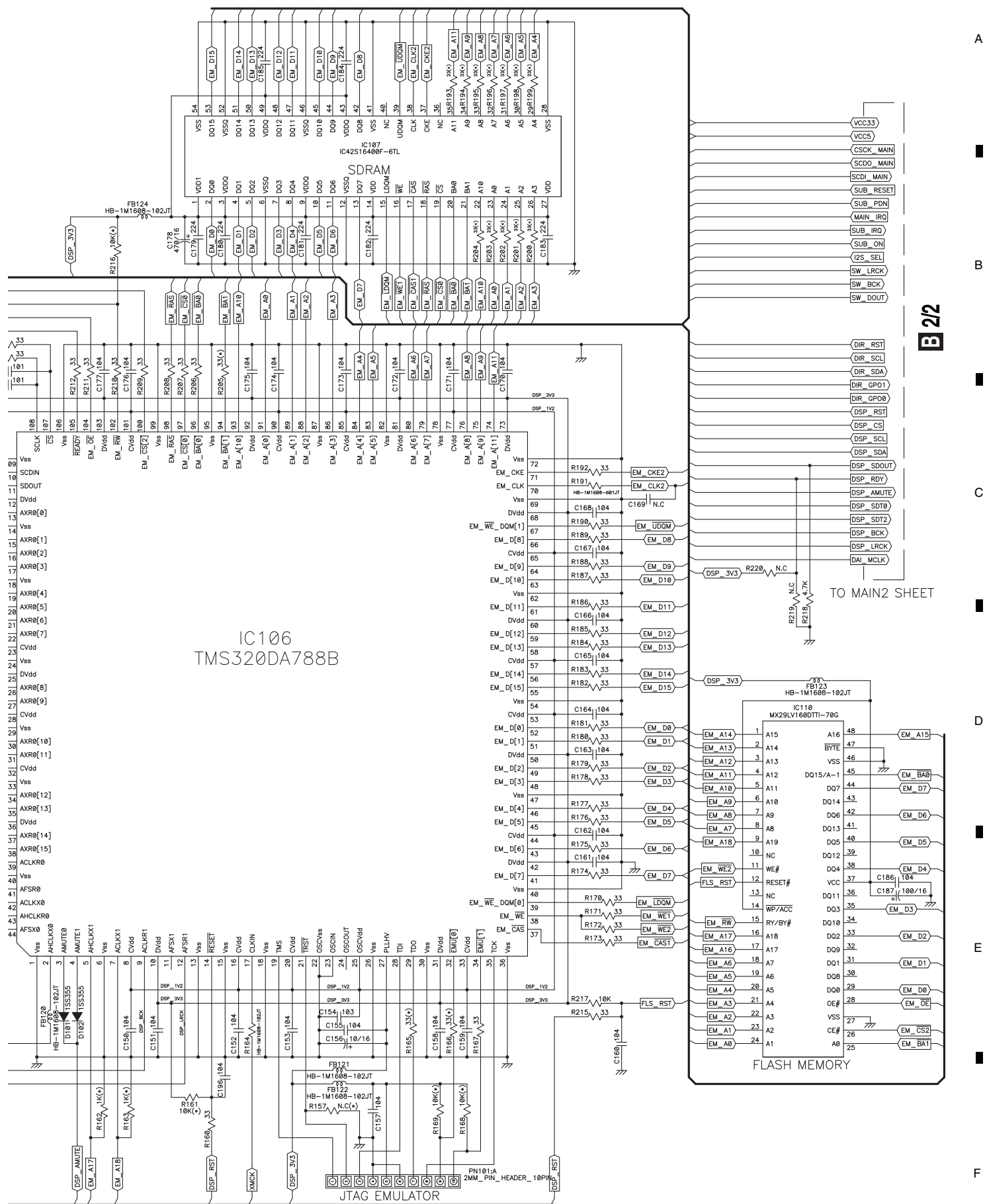
A 2/2 PWB(PCB) ASSY
(KEY)

B 2/2 CN103

CP501
TO MAIN(2mm Angle)
PWR_SW
ADKEY1
GND



4



△

A

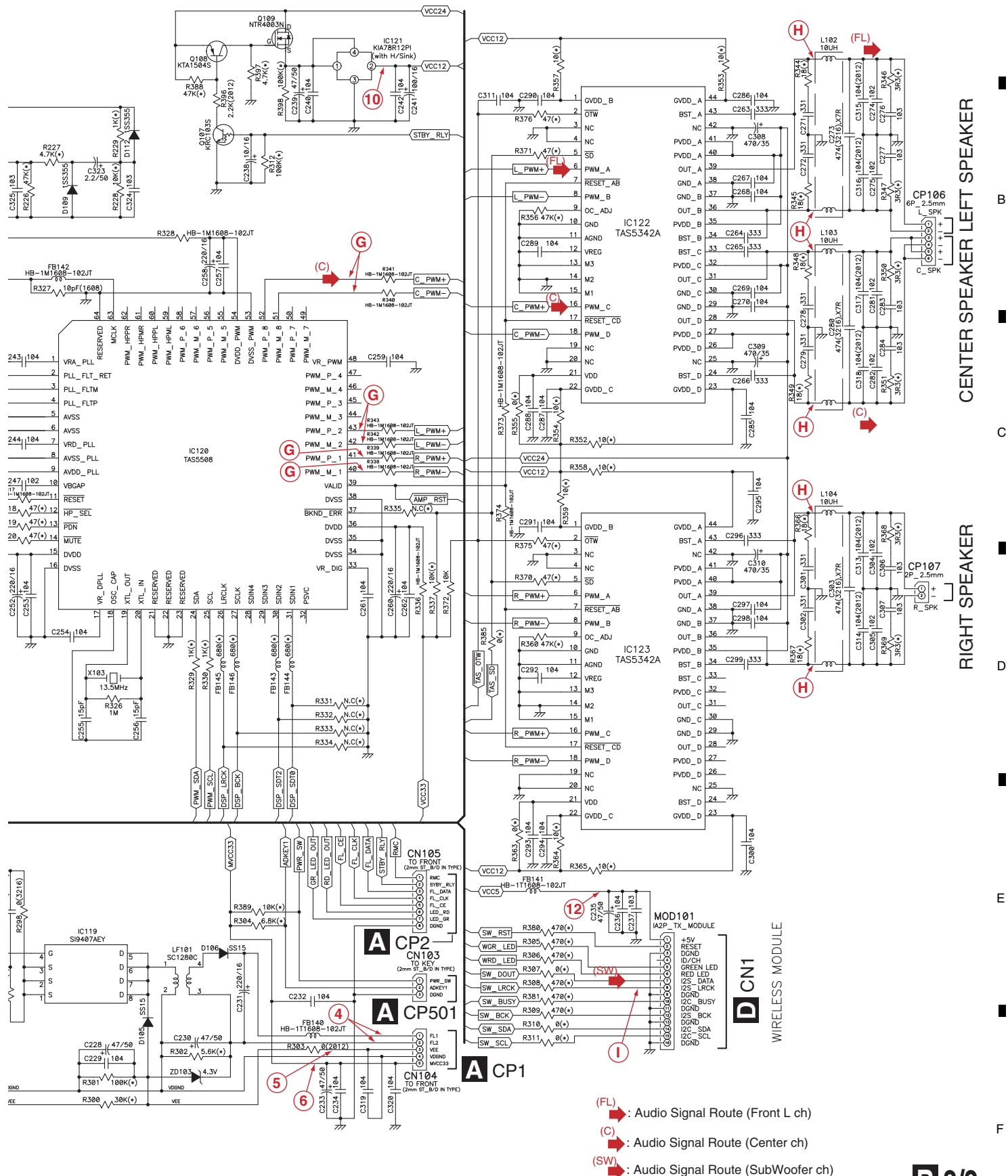


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E

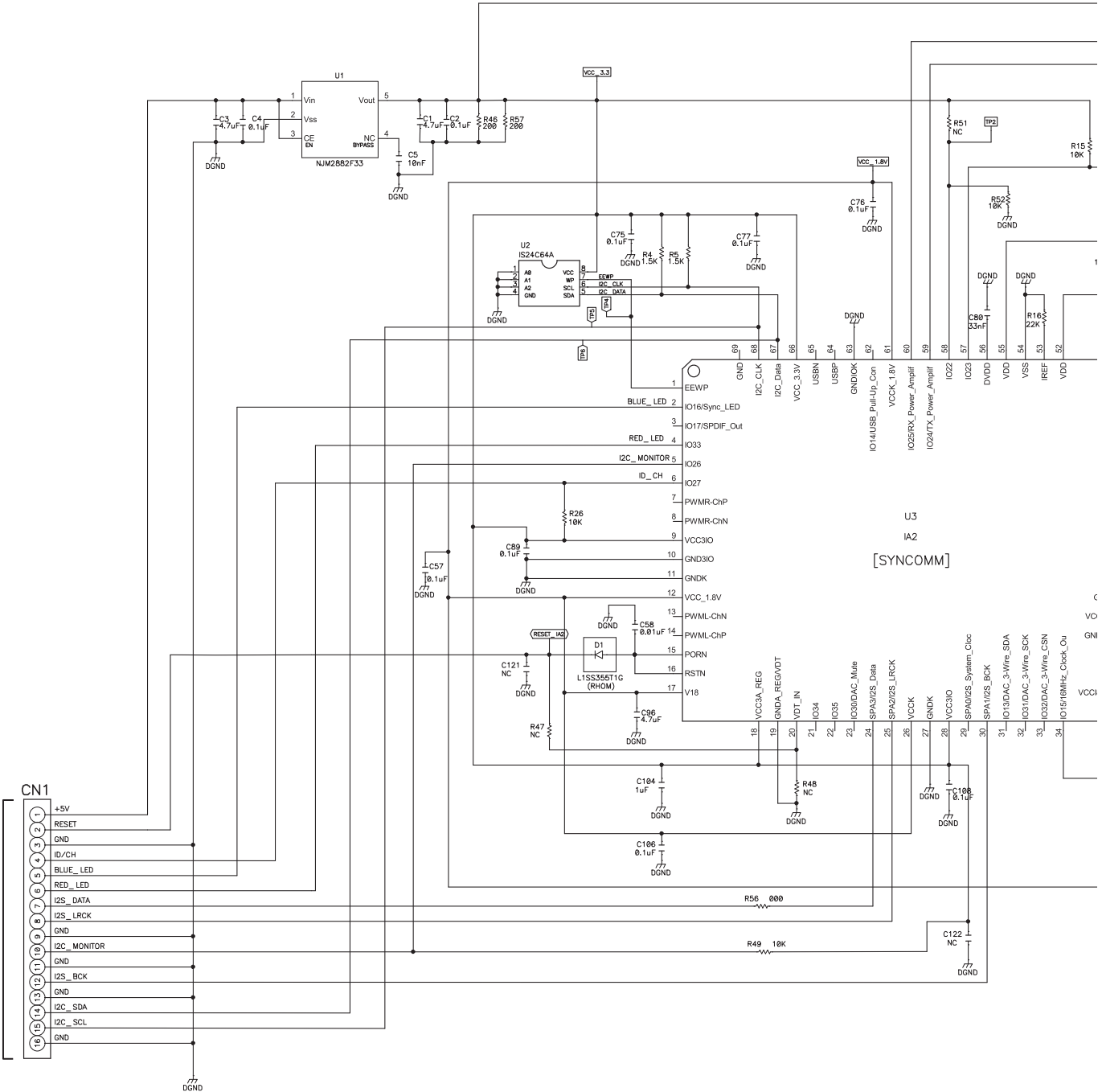
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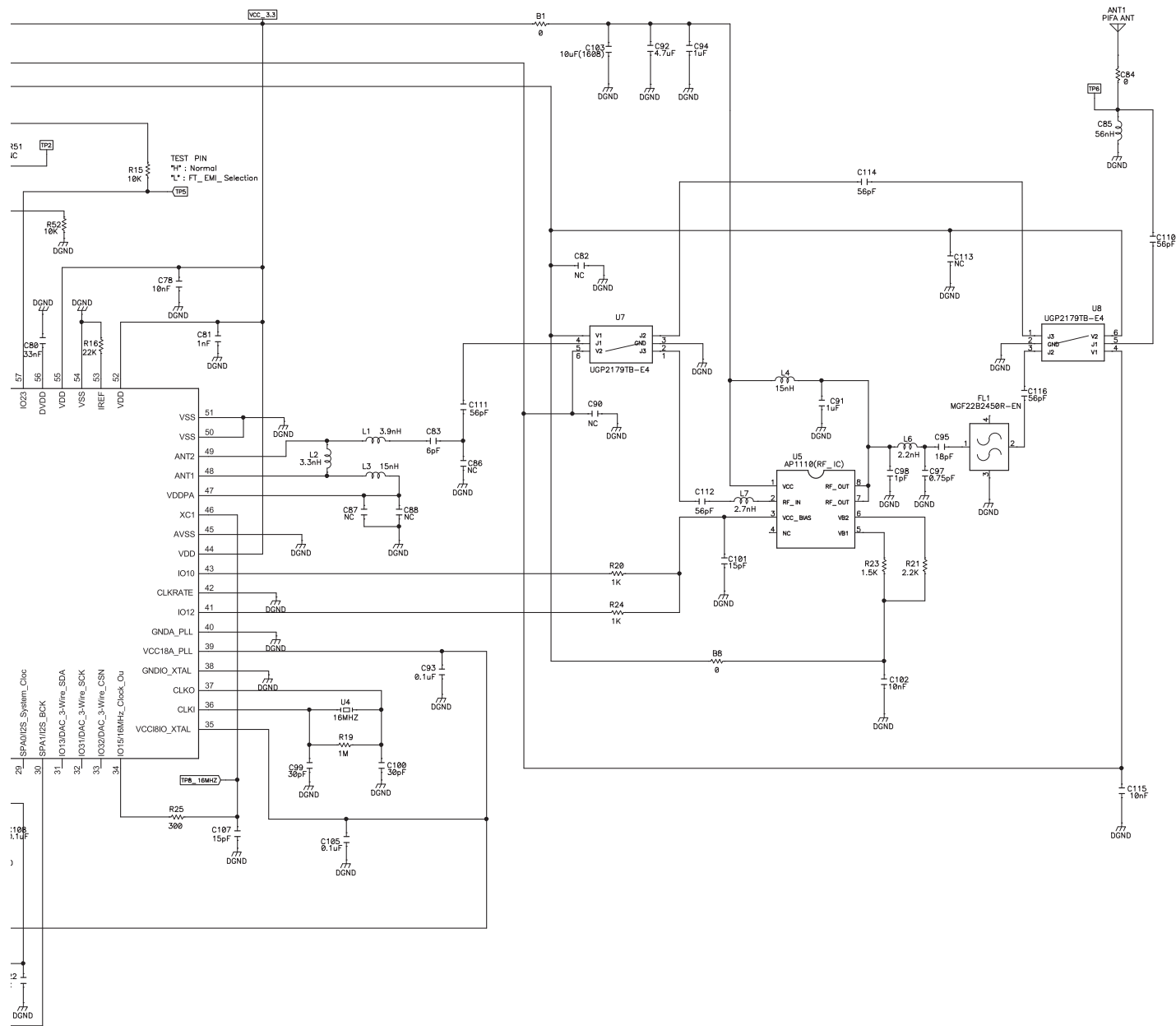


10.4 WIRELESS AUDIO TX ASSY

WIRELESS AUDIO TX ASSY
(8952SB3002510-IL)

B 2/2 MOD101

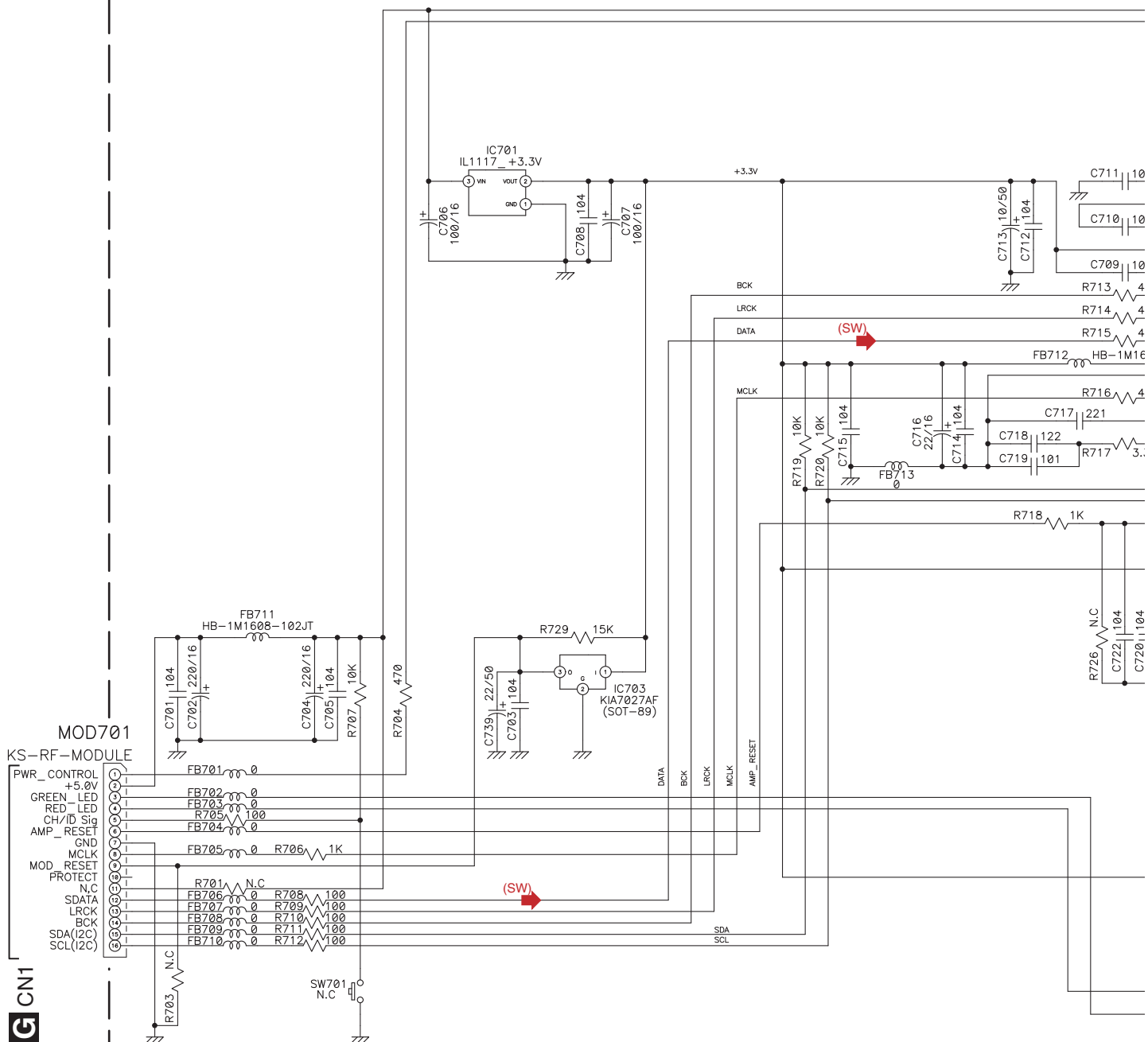




10.5 PWB(PCB) ASSY (SW MAIN/LED)

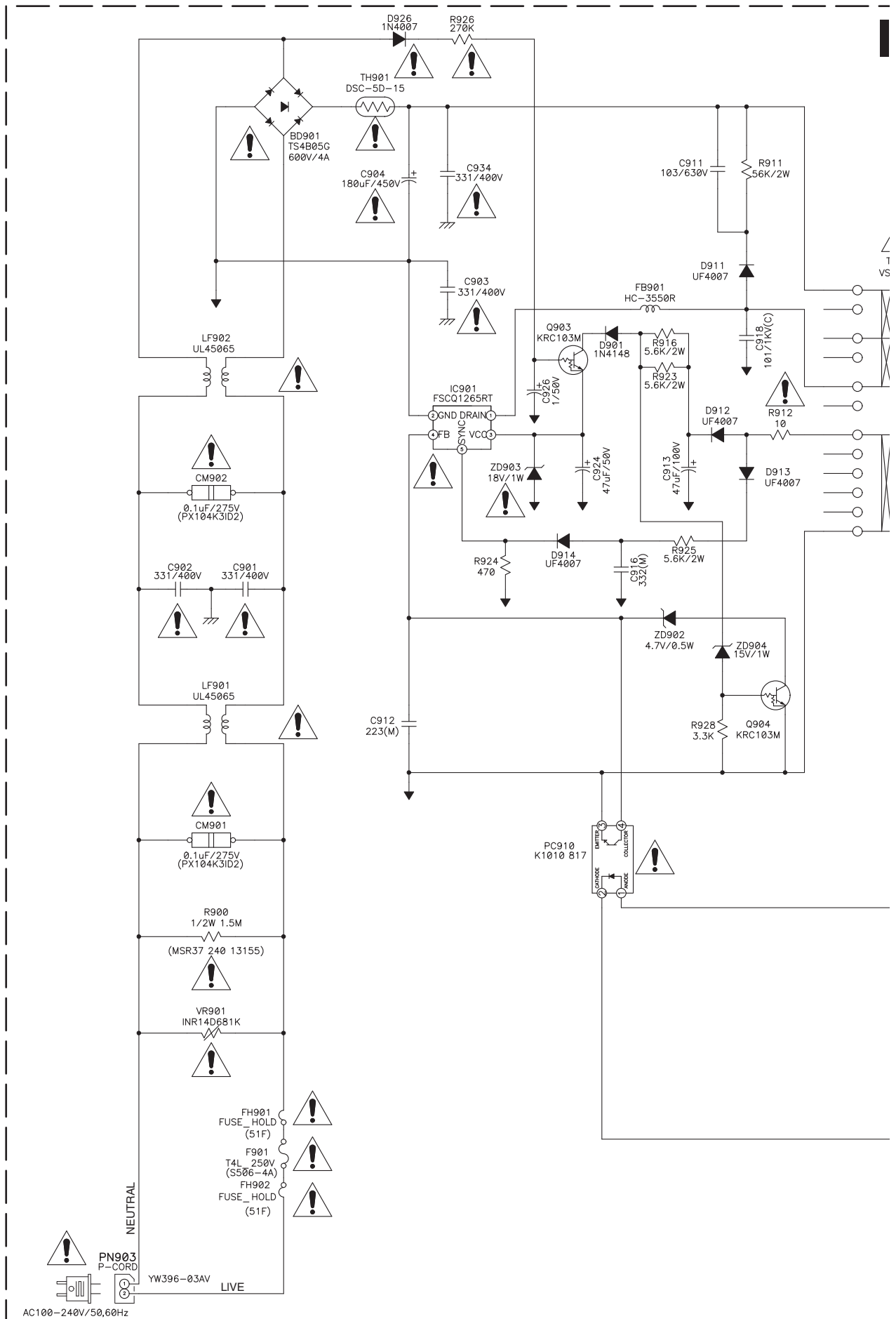
PWB(PCB) ASSY (SW MAIN/LED) (8952SB3004270-IL)

1/2 PWB(PCB) ASSY (SW MAIN)





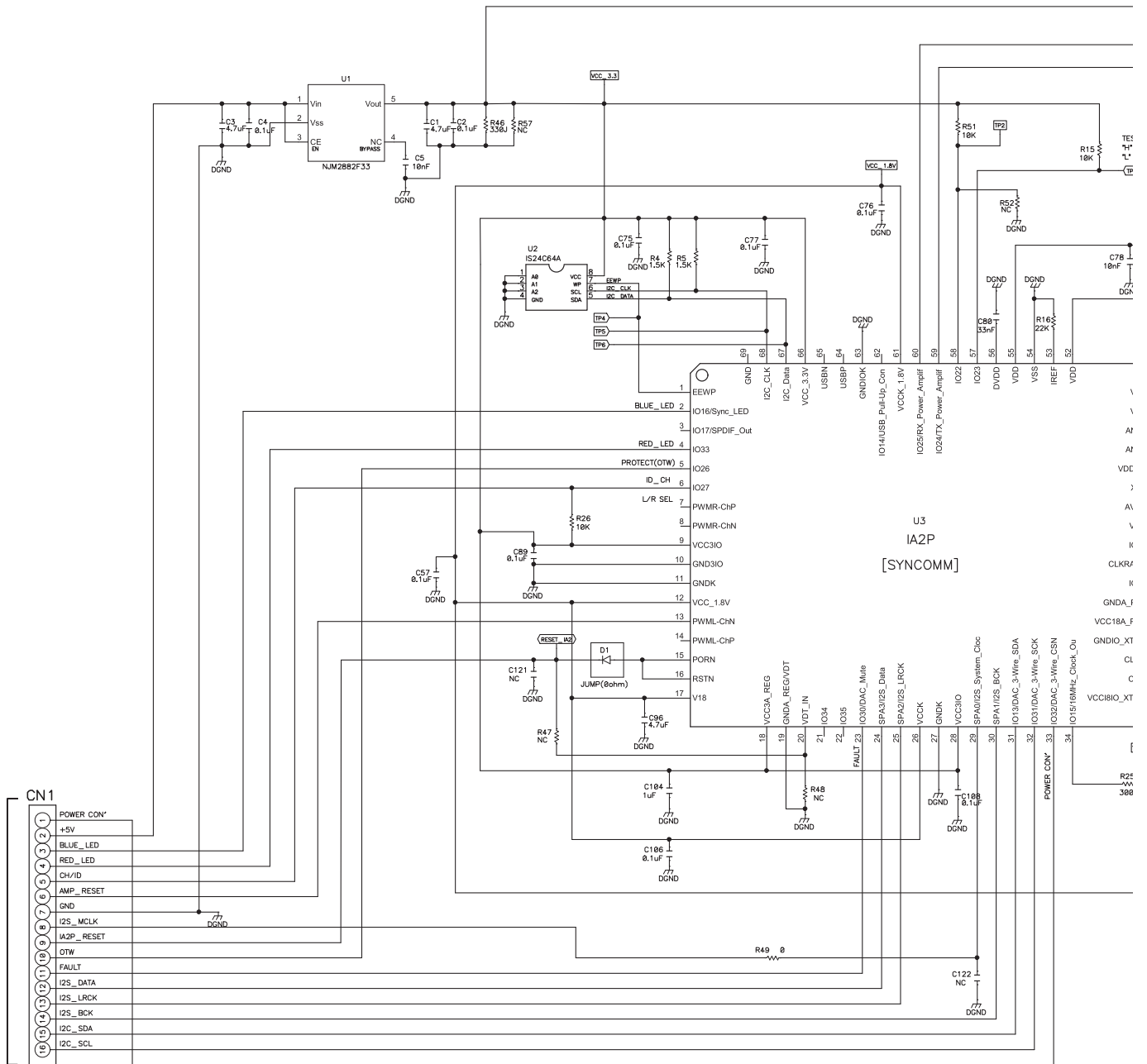
10.6 PWB(PCB) ASSY (SMPS)

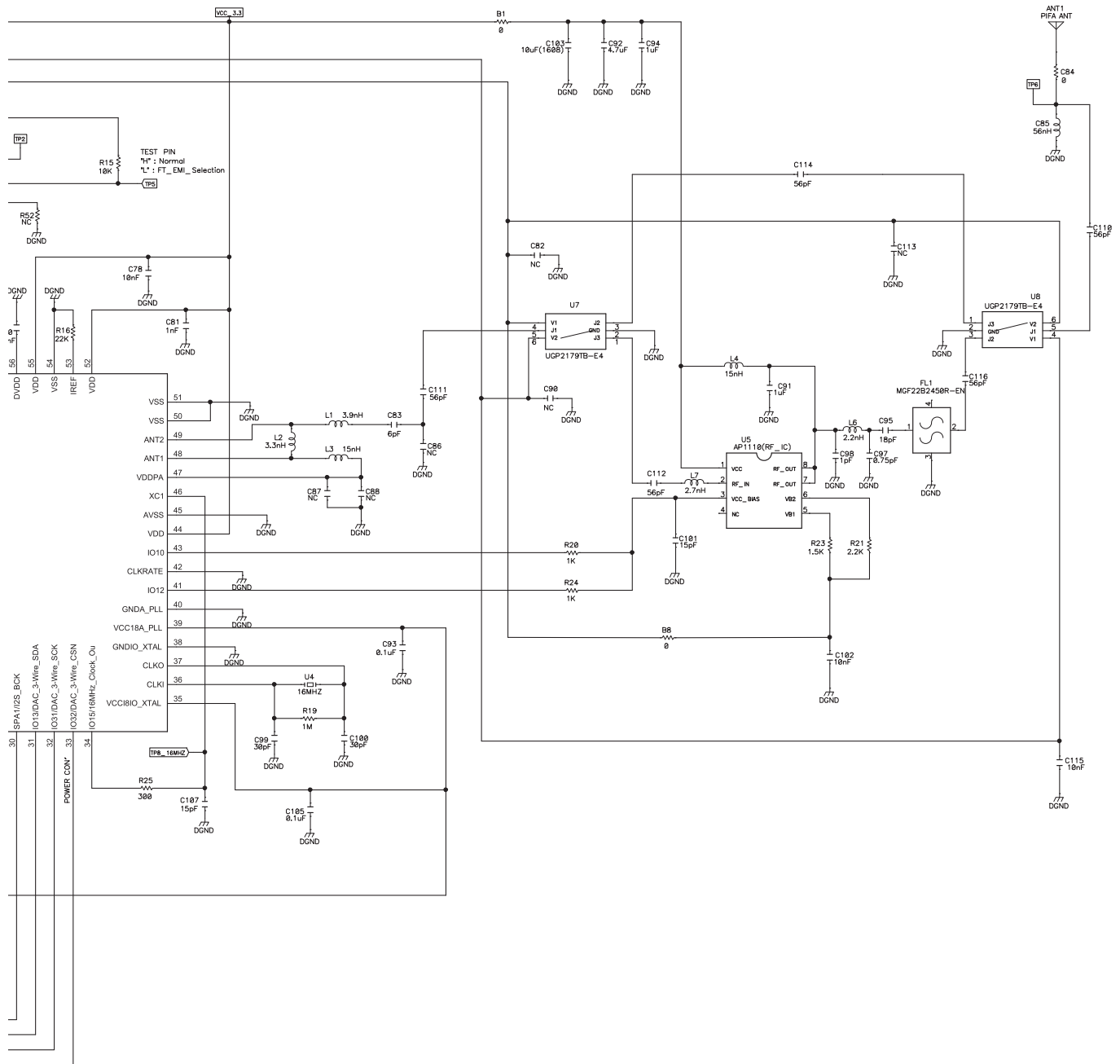


10.7 WIRELESS AUDIO RX ASSY

WIRELESS AUDIO RX ASSY (8952SB3003750-IL)

MOD701





10.8 VOLTAGES and WAVEFORMS

Note : The encircled numbers denote measuring point in the schematic diagram.

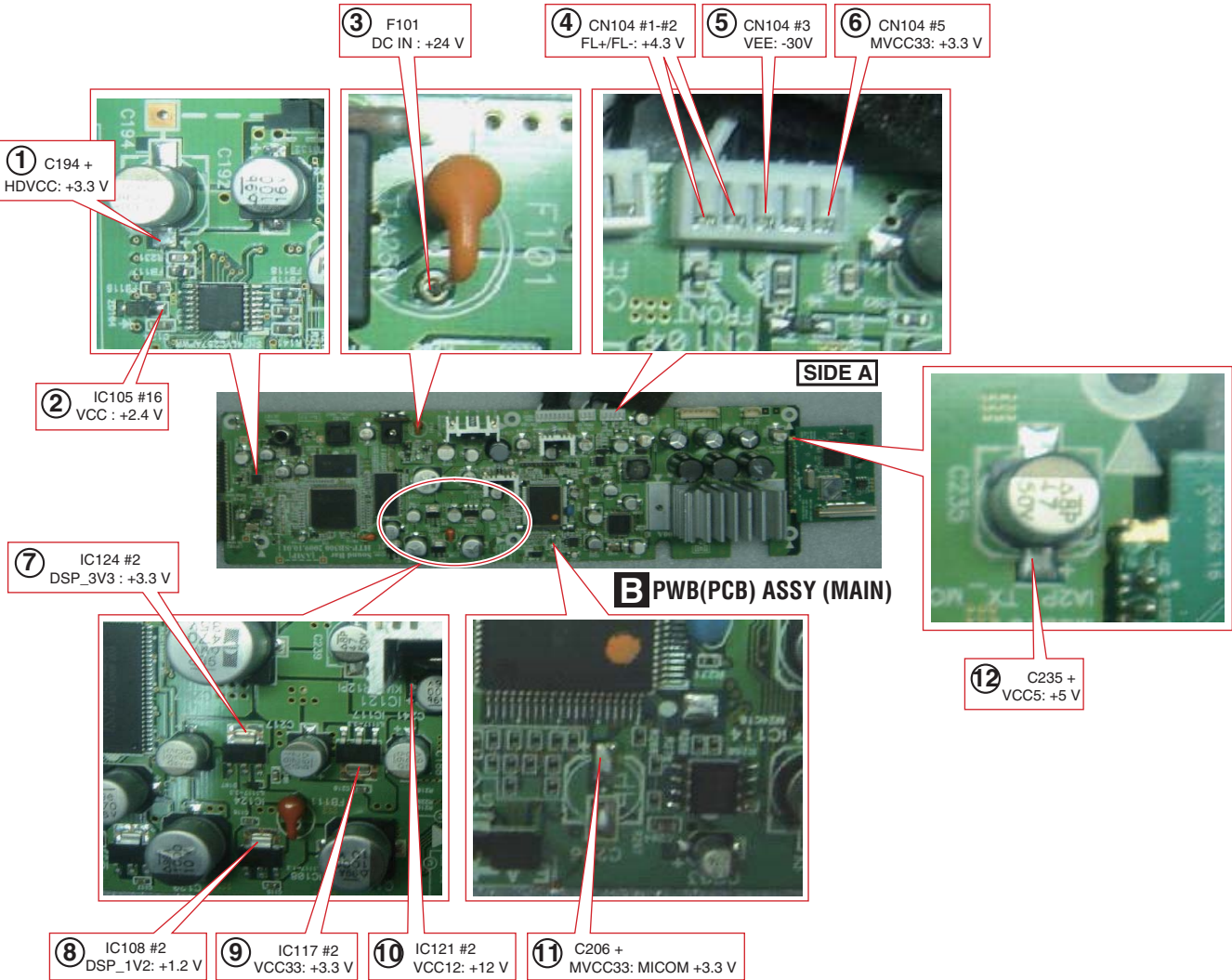
A

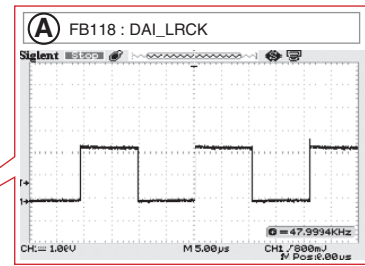
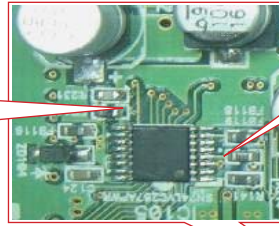
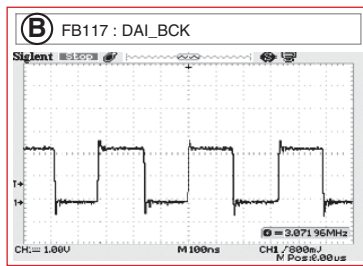
B

C

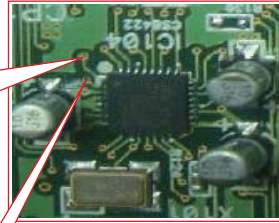
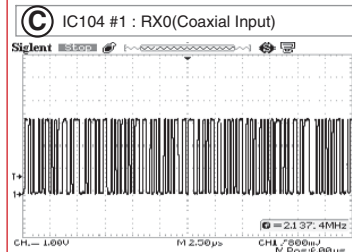
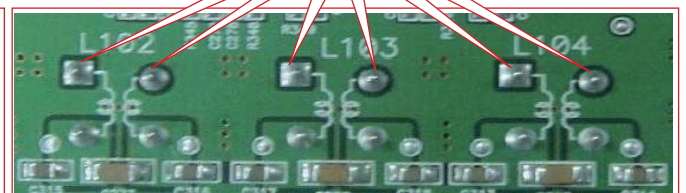
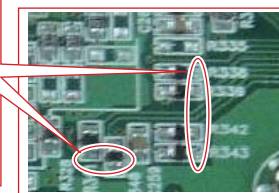
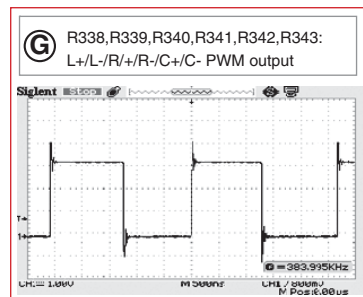
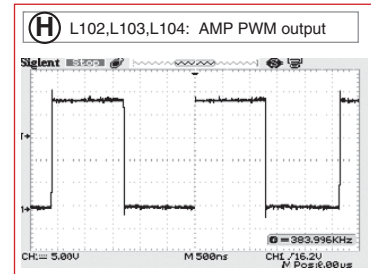
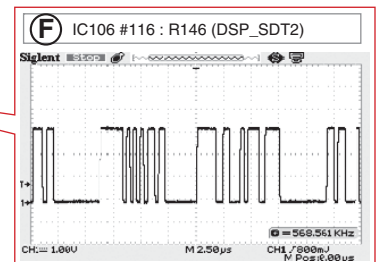
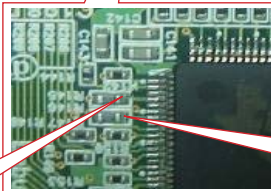
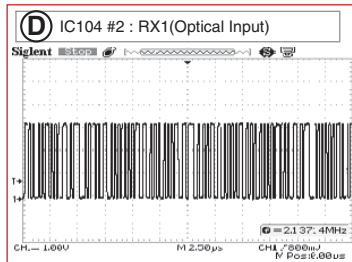
D

F

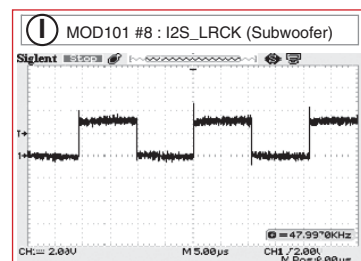




SIDE A

**B** PWB(PCB) ASSY (MAIN)

SIDE B

**B** PWB(PCB) ASSY (MAIN)

11. PCB CONNECTION DIAGRAM

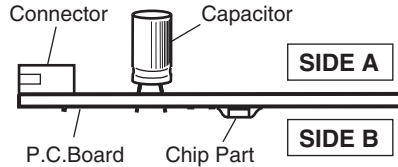
11.1 P.C.B SUB ASSY (INPUT)

SIDE A

NOTE FOR PCB DIAGRAMS :

1. The parts mounted on this PCB include all necessary parts for several destinations. For further information for respective destinations, be sure to check with the schematic diagram.

2. View point of PCB diagrams.

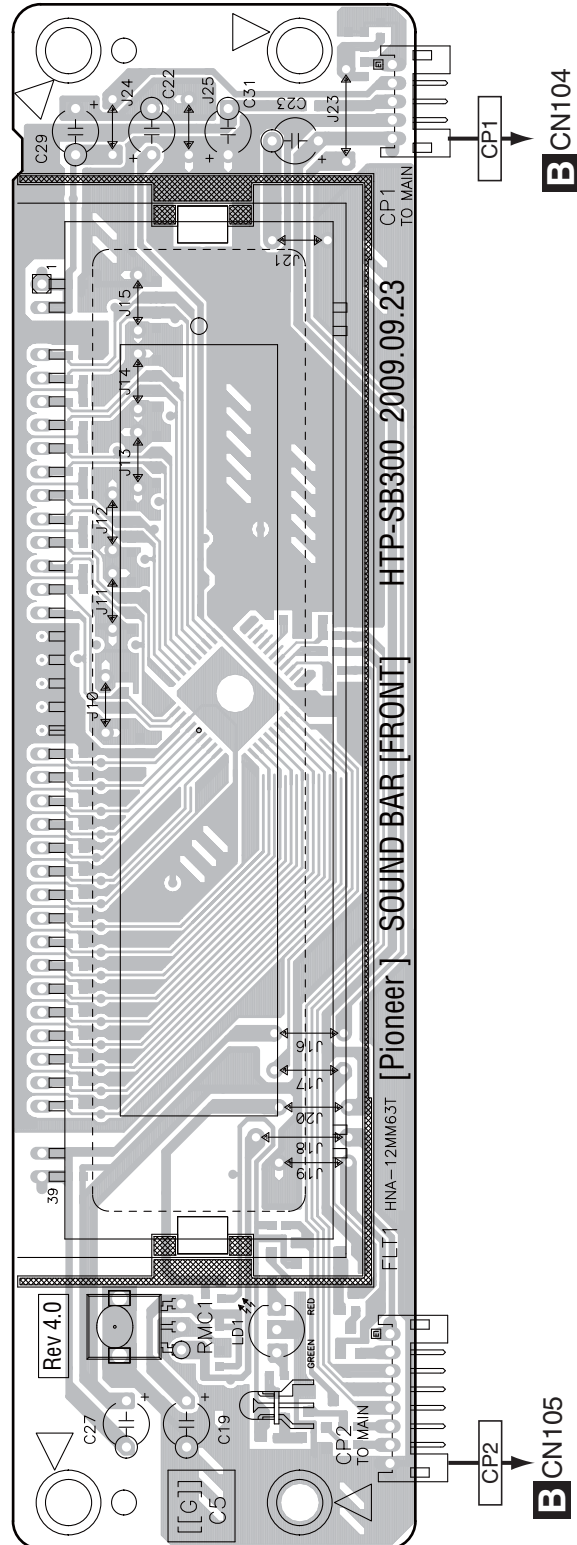
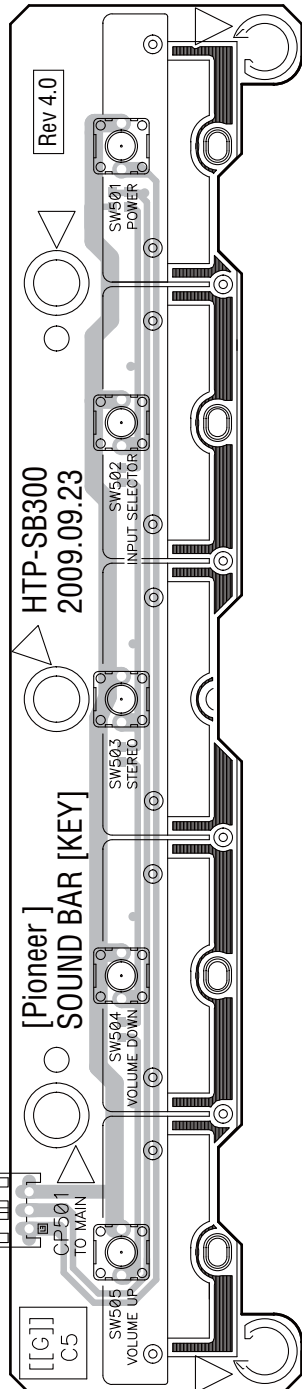


SIDE A

A 1/2 PWB(PCB) ASSY (FRONT)

A PWB(PCB) ASSY (FRONT/KEY)

A 2/2 PWB(PCB) ASSY (KEY)

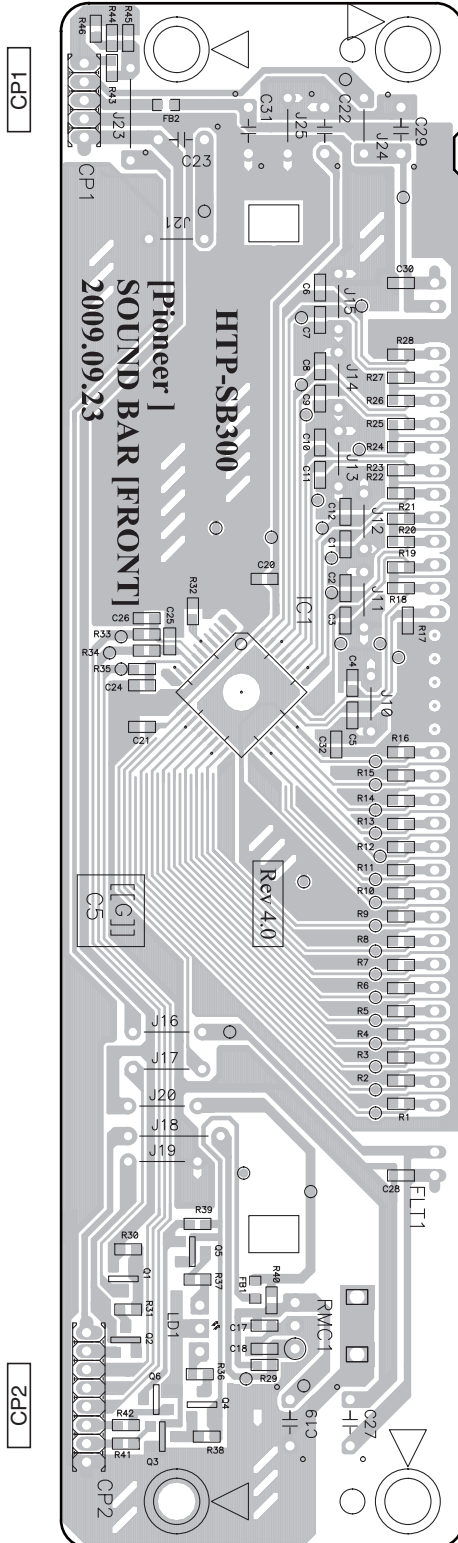


SIDE B

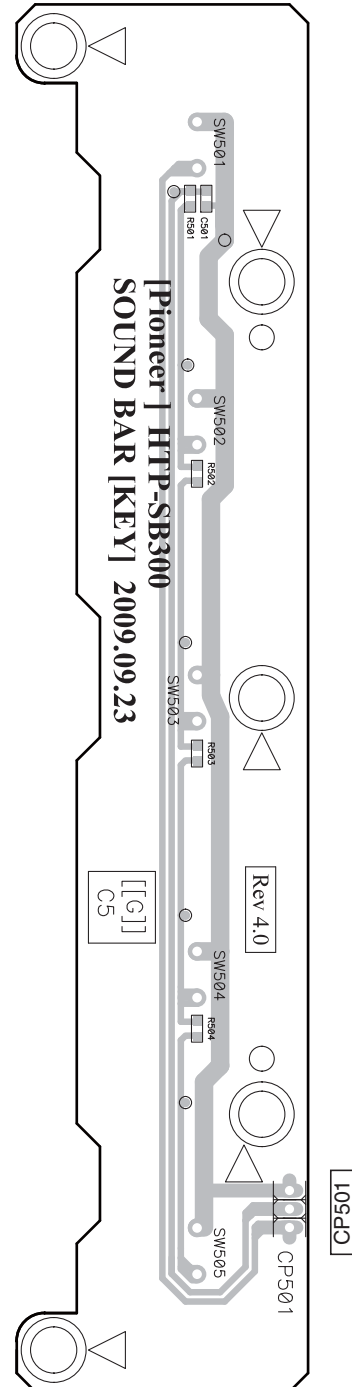
SIDE B

A PWB(PCB) ASSY (FRONT/KEY)

A 1/2 PWB(PCB) ASSY (FRONT)



A 2/2 PWB(PCB) ASSY (KEY)



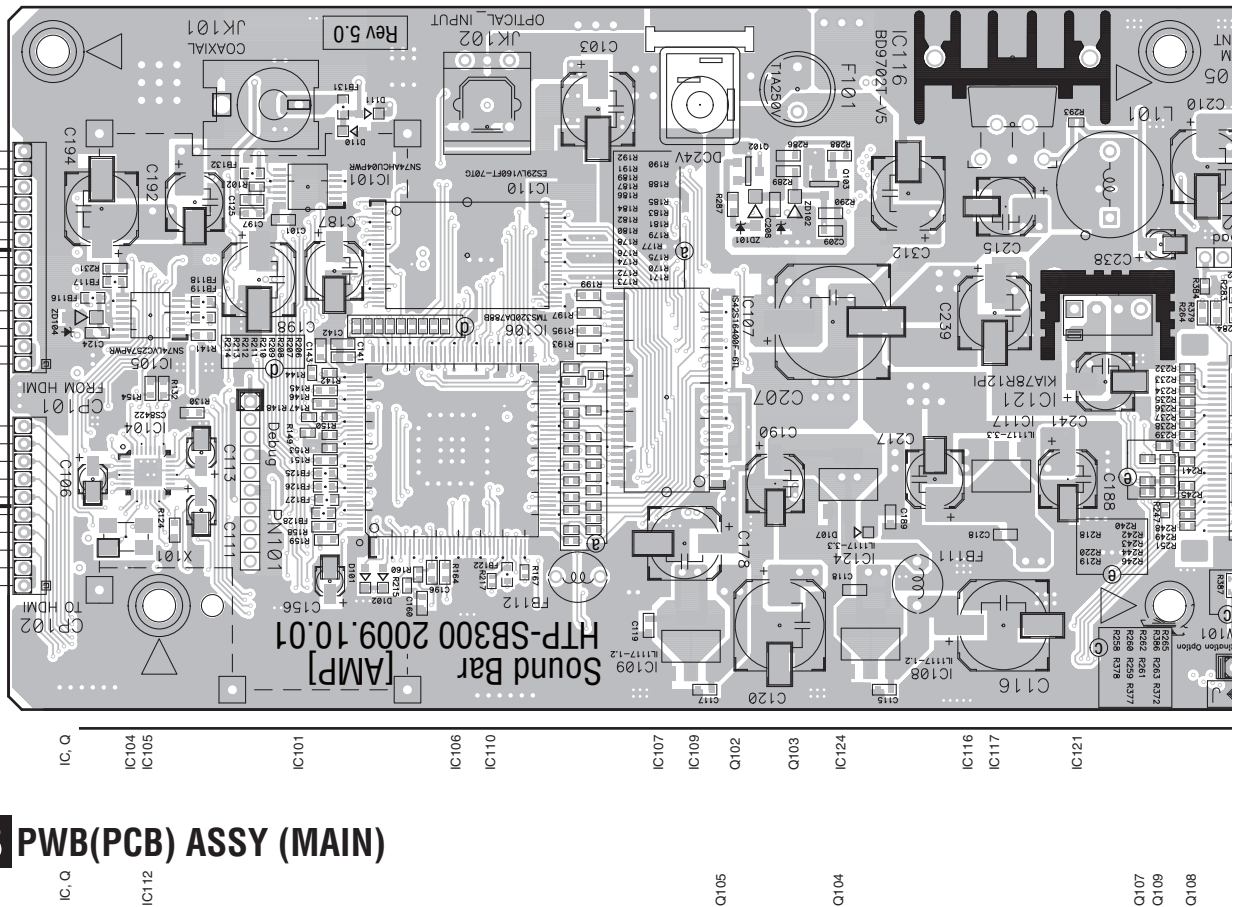
A

A

11.2 PWB(PCB) ASSY (MAIN)

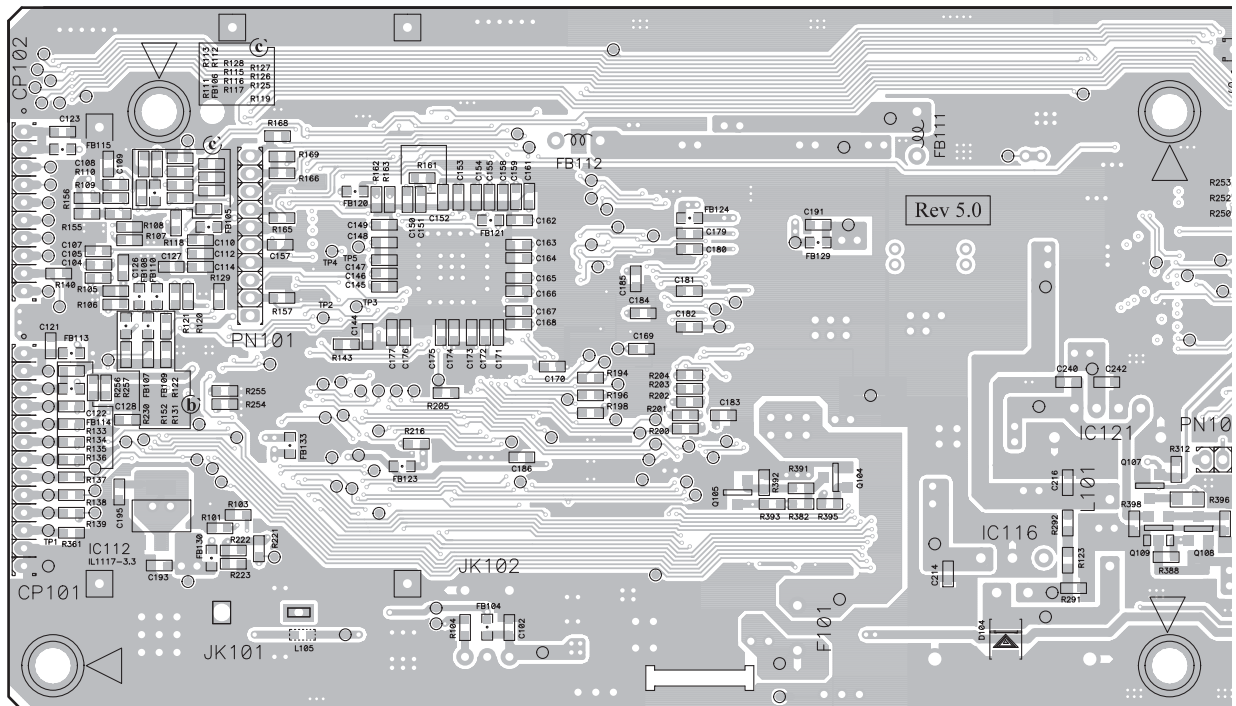
SIDE A

B PWB(PCB) ASSY (MAIN)



SIDE B

B PWB(PCB) ASSY (MAIN)



B

A

C

D

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59



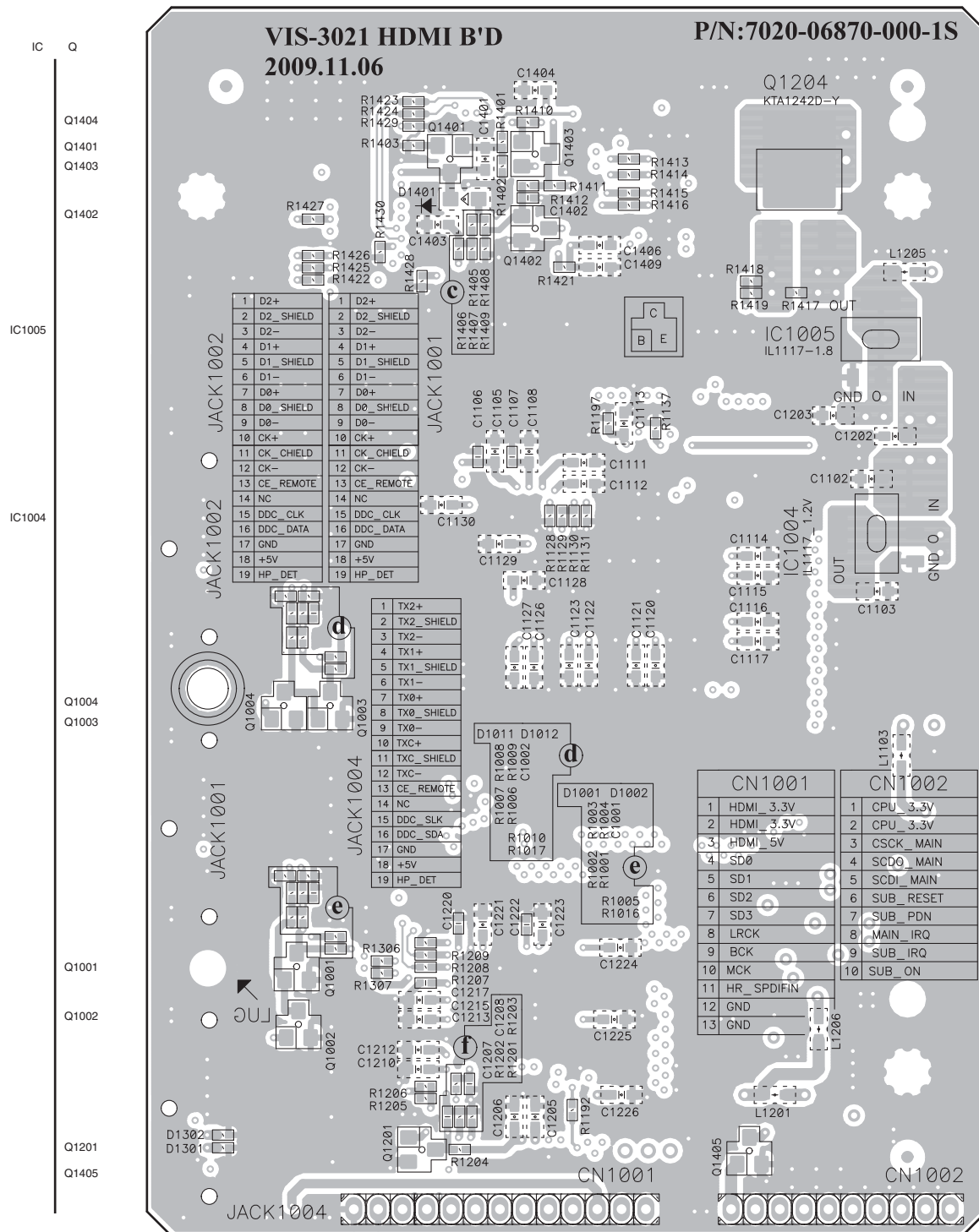
SIDE A

SIDE A**B**CP102**B**CP101

HTP-SB300

SIDE B

SIDE B

C P.C.B SUB ASSY (HDMI)

11.4 PWB(PCB) ASSY (SW MAIN/LED)

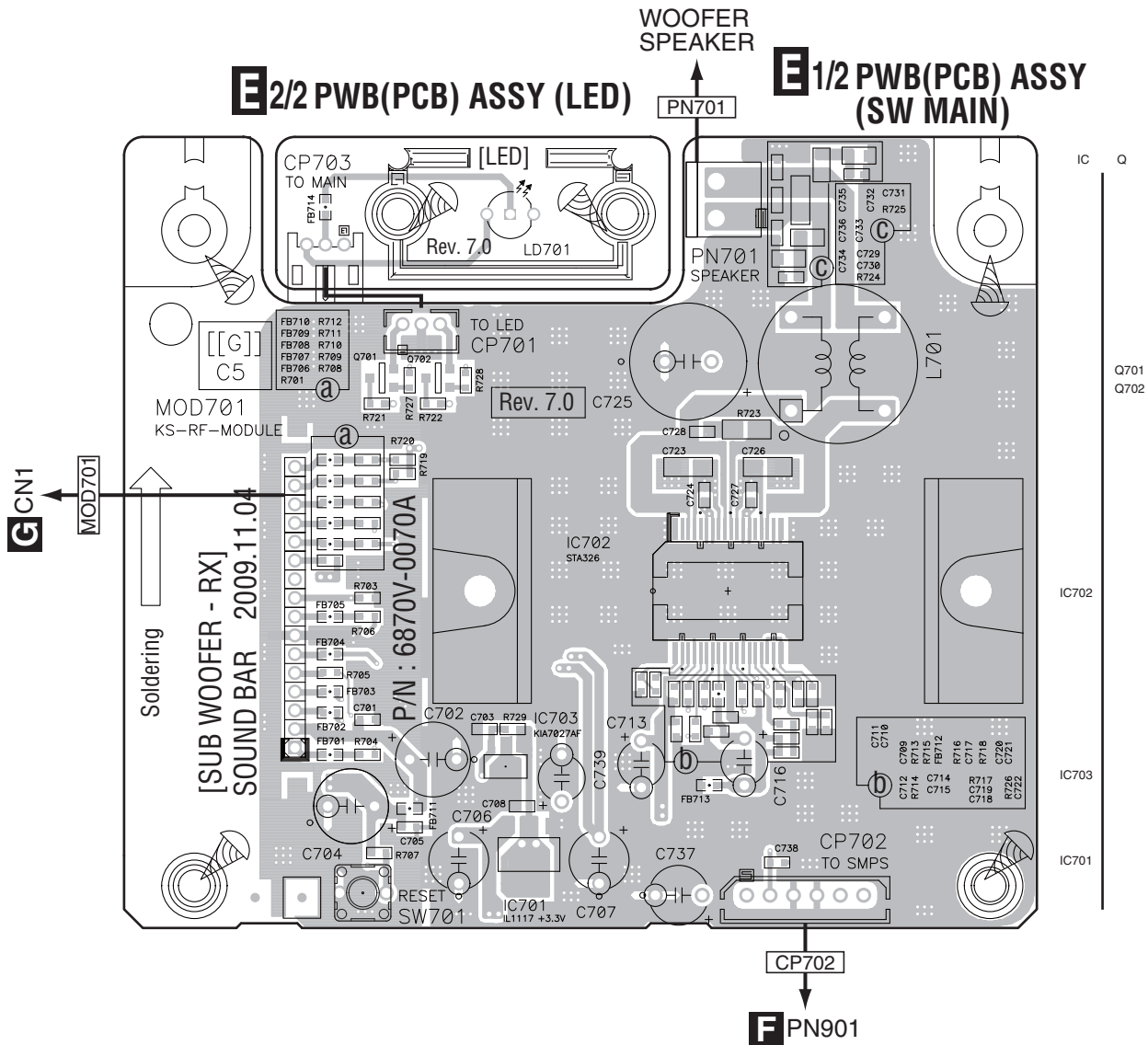
SIDE A

SIDE A

PWB(PCB) ASSY (SW MAIN/LED)

2/2 PWB(PCB) ASSY (LED)

1/2 PWB(PCB) ASSY (SW MAIN)



E

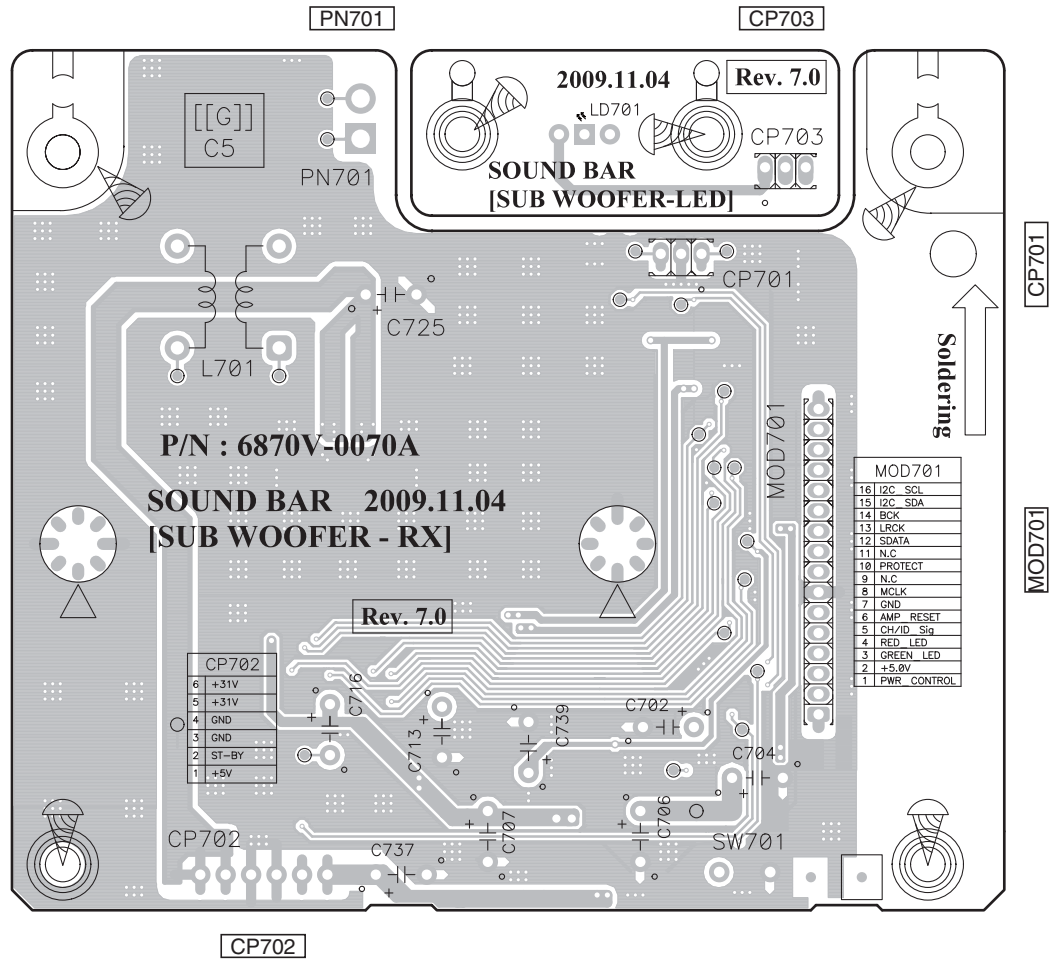
E

SIDE B

SIDE B

PWB(PCB) ASSY (SW MAIN/LED)

1/2 PWB(PCB) ASSY (SW MAIN) 2/2 PWB(PCB) ASSY (LED)

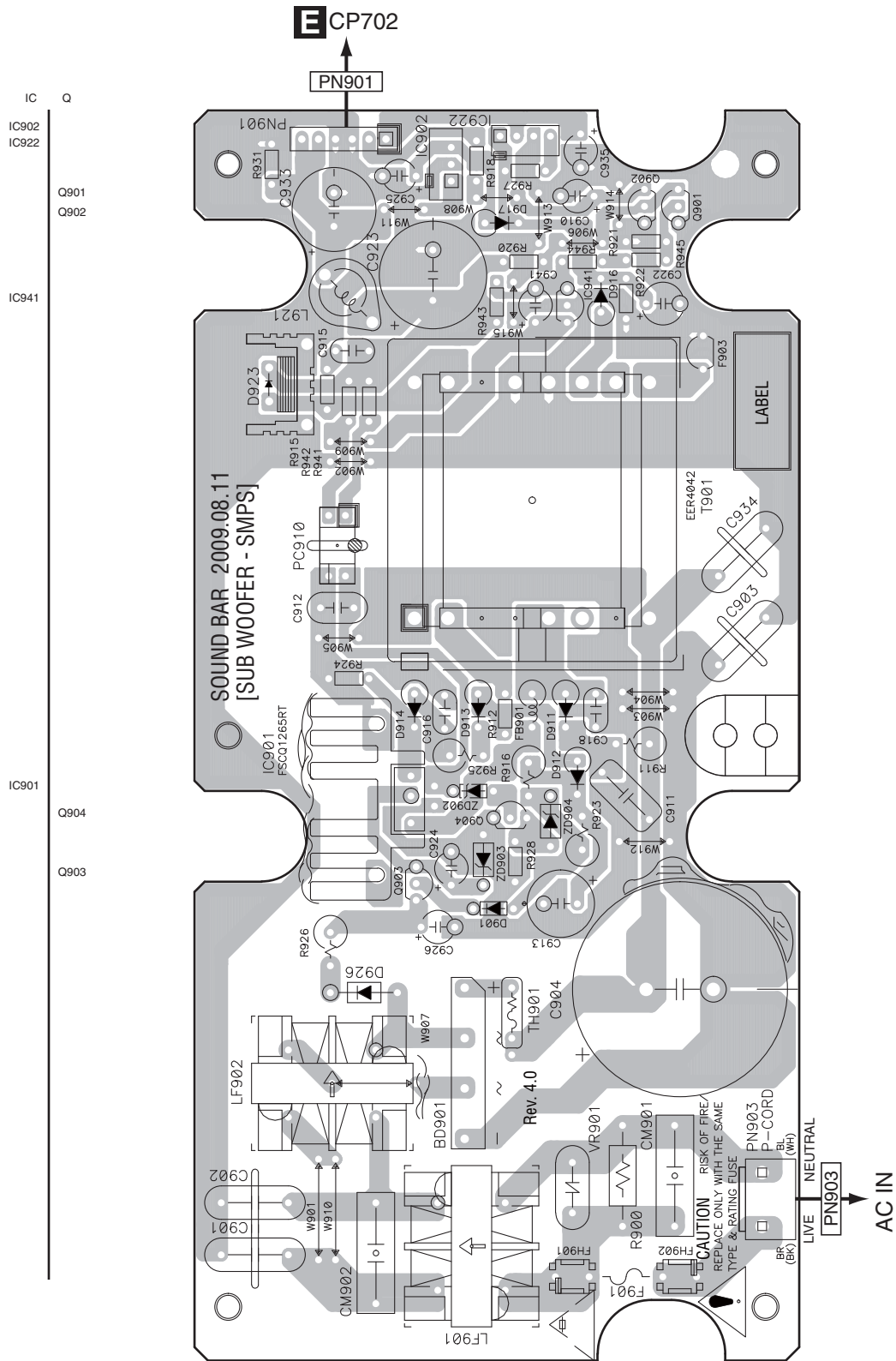


11.5 PWB(PCB) ASSY (SMPS)

SIDE A

SIDE A

PWB(PCB) ASSY (SMPS)



SIDE B

SIDE B

A

E

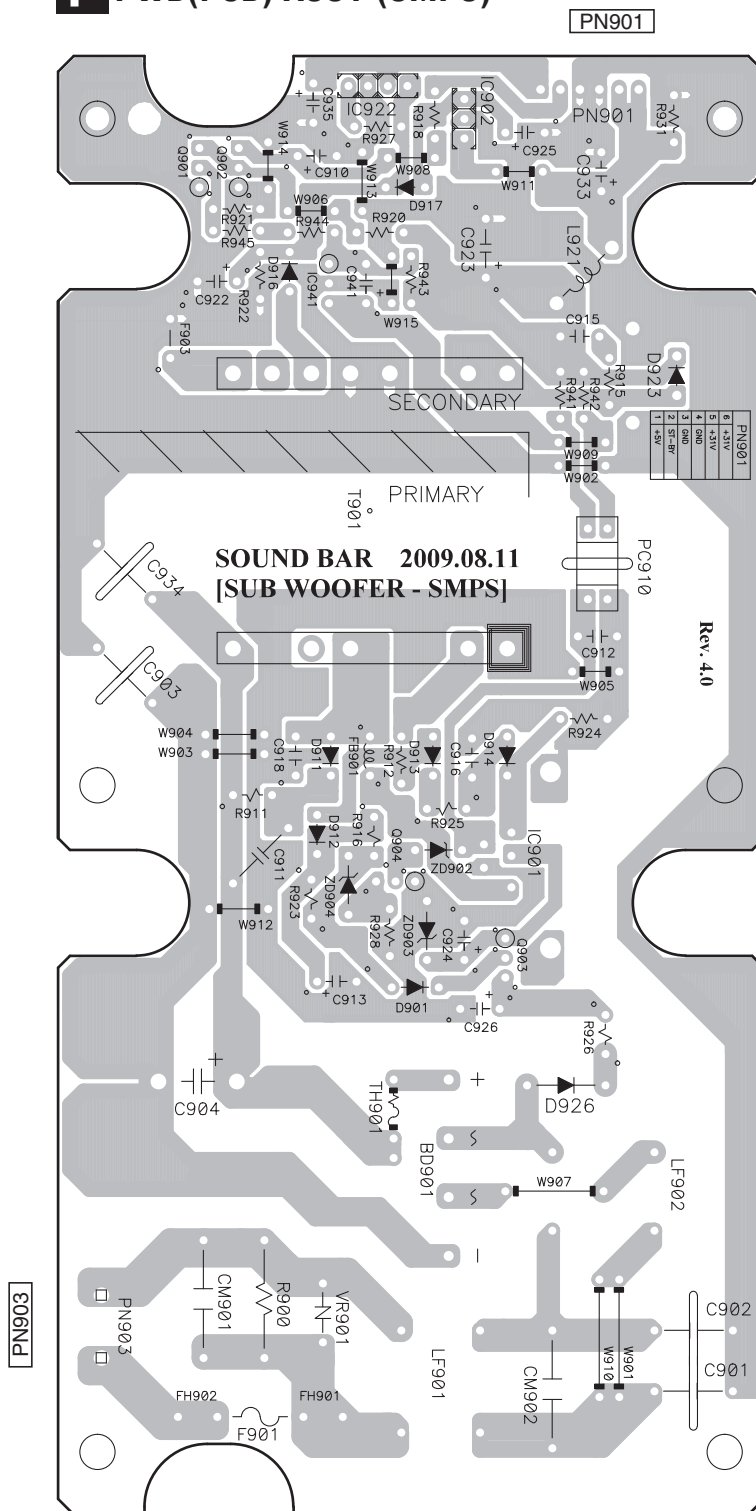
9

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F

F PWB(PCB) ASSY (SMPS)

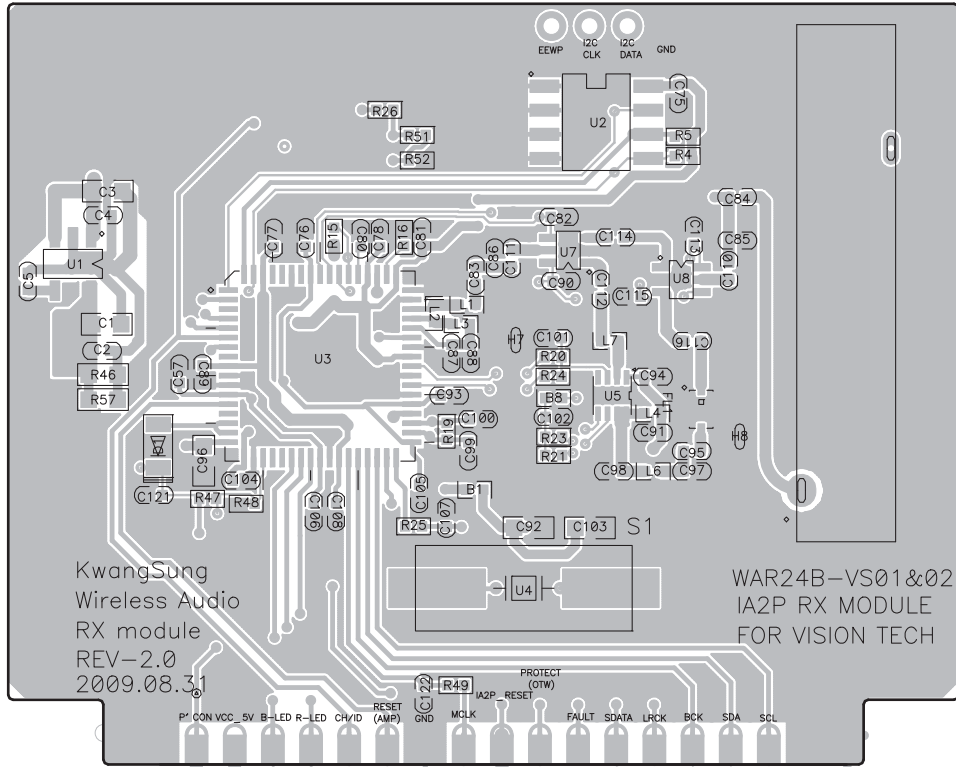


11.6 WIRELESS AUDIO RX ASSY

SIDE A

G WIRELESS AUDIO RX ASSY

SIDE A

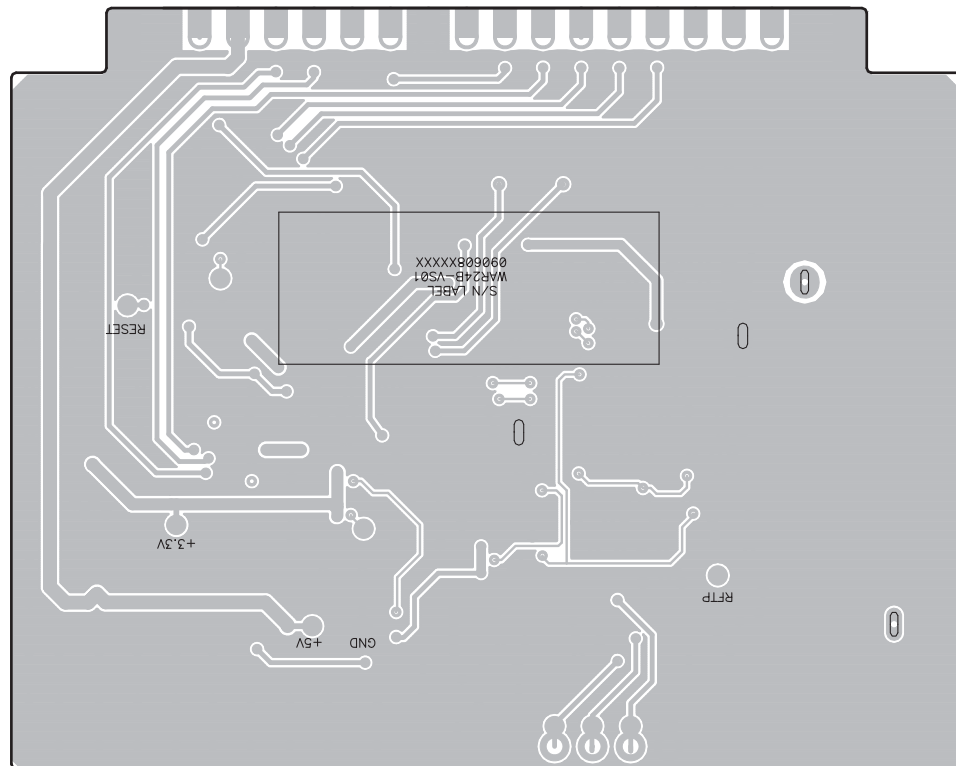


CN1
MOD701

SIDE B

G WIRELESS AUDIO RX ASSY

SIDE B



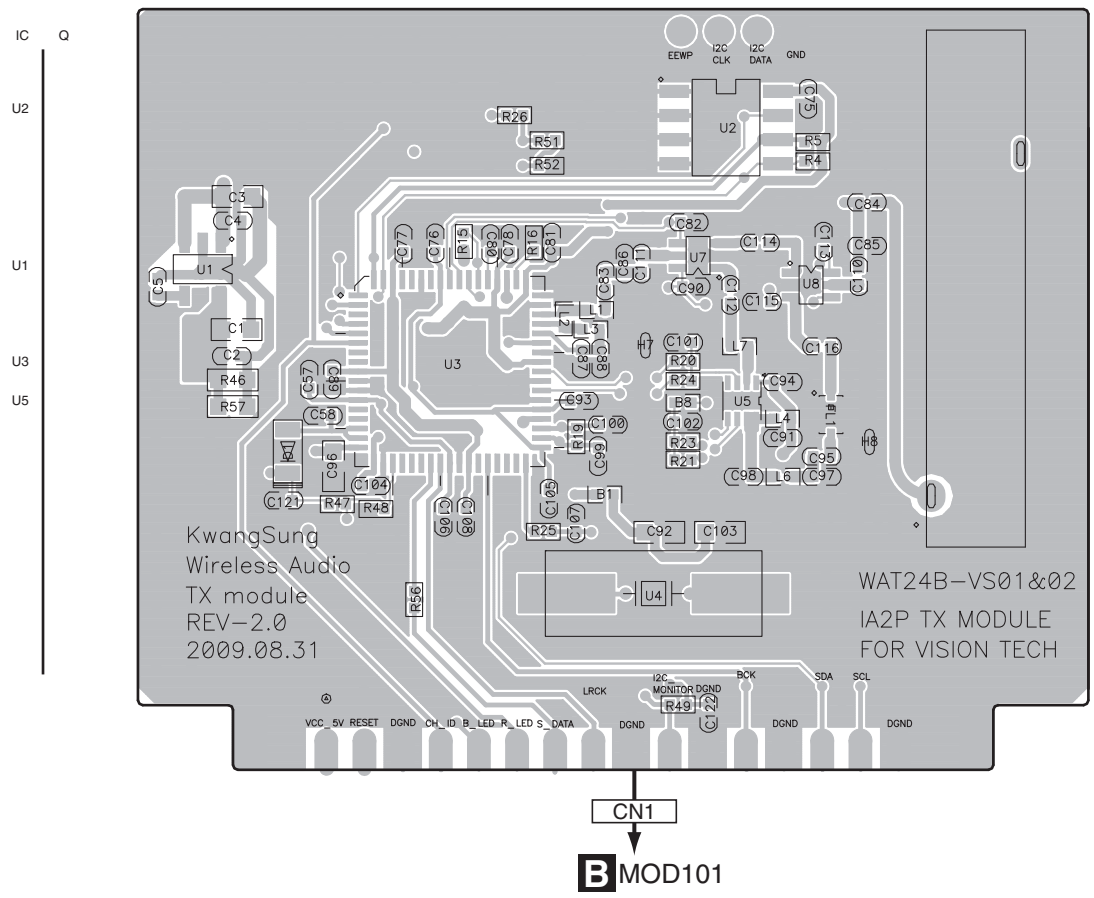
G

G

11.7 WIRELESS AUDIO TX ASSY

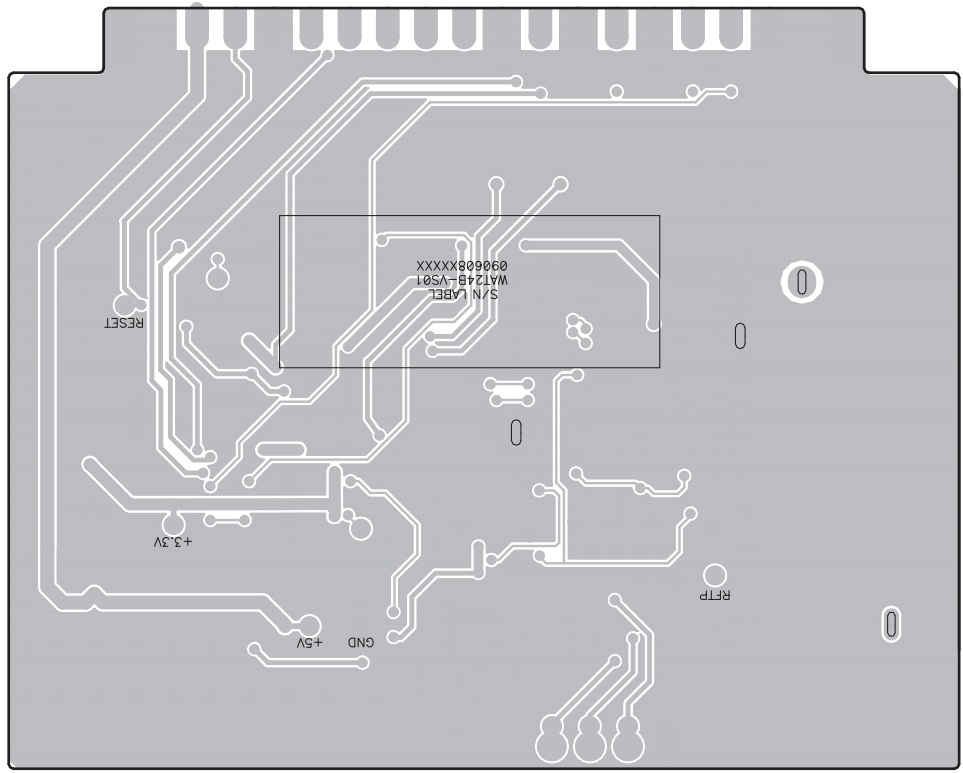
SIDE A SIDE A

D WIRELESS AUDIO TX ASSY



SIDE B SIDE B

D WIRELESS AUDIO TX ASSY



D D

12. PCB PARTS LIST

- NOTES: ● Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.
- Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47 k ohm (tolerance is shown by J = 5%, and K = 10%).
- 560 Ω $\rightarrow$ 56 $\times 10^1$ $\rightarrow$ 561.....RD1/4PU 5 6 1 J
- 47 k Ω $\rightarrow$ 47 $\times 10^3$ $\rightarrow$ 473.....RD1/4PU 4 7 3 J
- 0.5 Ω $\rightarrow$ R50.....RN2H R 5 0 K
- 1 Ω $\rightarrow$ 1R0.....RS1P 1 R 0 K
- Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).
- 5.62 k Ω $\rightarrow$ 562 $\times 10^1$ $\rightarrow$ 5621.....RN1/4PC 5 6 2 1 F
- Meaning of the figures and others in the parentheses in the parts list.
- Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.
- IC 301 (A, 91, 111) IC NJM2068V

- PCB PARTS LIST
- JA*** JACK***, JK***
- RY*** RLY***
- T*** PT***
- X*** XTAL***, RES*** (CERAMIC)
- FU*** F***
- V*** FLT***
- S*** SW***, VEC*** (ENCODER)
- L*** FB***
- CN*** CP***, PN***
- SCHEMATIC DIAGRAM and PCB CONNECTION DIAGRAM

Mark	No.	Description	Part No.
LIST OF ASSEMBLIES			

	1..PWB(PCB) ASSY (FRONT/KEY)	8952SB3000490-IL
	1..PWB(PCB) ASSY (MAIN)	8952SB3004380-IL
NSP	1..PWB(PCB)ASSY (HDMI)	7025HZ0902010-IL
	2..P.C.B SUB ASSY (HDMI)	7028068701010-IL
D	1..WIRELESS AUDIO TX ASSY	8952SB3002510-IL
	1..PWB(PCB) ASSY (SW MAIN/LED)	8952SB3004270-IL
	1..PWB(PCB) ASSY (SMPS)	8952SB3003790-IL
	1..WIRELESS AUDIO RX ASSY	8952SB3003750-IL

Mark	No.	Description	Part No.
------	-----	-------------	----------

A PWB(PCB) ASSY (FRONT/KEY)

SEMICONDUCTORS

IC 1	8952SB3000690-IL
IC 9001 (RMC1)	8952SB3000560-IL
Q 1	8952SB3000860-IL
Q 2,3,6	8952SB3000850-IL
Q 4,5	8952SB3000840-IL
D 1 (LD1)	8952SB3000590-IL

MISCELLANEOUS

L 1 FILTER(CIRC) EMC	8952SB3000830-IL
L 2 (FB2) FILTER(CIRC) EMC	8952SB3000830-IL
S 501-505 SWITCH TACT	8952SB3000920-IL
CN1 CONNECTOR	8952SB3000600-IL

Mark	No.	Description	Part No.
------	-----	-------------	----------

CN2	CONNECTOR	8952SB3000610-IL
CN501	CONNECTOR	8952SB3000890-IL
V 1 (FLT1)		8952SB3000550-IL

B PWB(PCB) ASSY (MAIN)

SEMICONDUCTORS

IC 101	8952SB3001440-IL
IC 104	8952SB3001460-IL
IC 105	8952SB3001450-IL
IC 106	8952SB3001510-IL
IC 107	8952SB3001480-IL
IC 108	8952SB3001550-IL
IC 110	8952SB3001470-IL
IC 112	8952SB3002020-IL
IC 113	8952SB3001500-IL
IC 114	8952SB3001490-IL

IC 115	8952SB3001120-IL
IC 116	8952SB3001220-IL
IC 117,124	8952SB3001560-IL
IC 118	8952SB3001520-IL
IC 119	8952SB3001420-IL

IC 120	8952SB3001540-IL
IC 121	8952SB3001170-IL
IC 122,123	8952SB3001530-IL
Q 102,103,106	8952SB3001960-IL
Q 104,105	8952SB3002440-IL

Q 107	8952SB3002450-IL
Q 108	8952SB3002460-IL
Q 109	8952SB3002470-IL
D 101,102,107,109	8952SB3001410-IL
D 9103	8952SB3001970-IL

D 104	8952SB3002010-IL
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8

Mark	No.	Description	Part No.
	D	105,106	8952SB3001950-IL
	D	112	8952SB3002000-IL
	D	9104 (ZD104)	8952SB3004130-IL
MISCELLANEOUS			
	L	101 CHOKE COIL	8952SB3001060-IL
	L	102,103,9104 (L104) CHOKE COIL RF	8952SB3001020-IL
	L	104,114 FILTER(CIRC) EMC	8952SB3002430-IL
	L	105	8952SB3004190-IL
	L	106,107,109,120 FILTER(CIRC) EMC	8952SB3002420-IL
	L	111,112 FILTER(CIRC) EMC	8952SB3001340-IL
	L	115 FILTER(CIRC) EMC	8952SB3002430-IL
	L	116,140 FILTER(CIRC) EMC	8952SB3001940-IL
	L	118,122 FILTER(CIRC) EMC	8952SB3001930-IL
	L	121,142 FILTER(CIRC) EMC	8952SB3002420-IL
	L	130,141 FILTER(CIRC) EMC	8952SB3002430-IL
	L	131 FILTER(CIRC) EMC	8952SB3001930-IL
	L	7101 (F101) FILTER(CIRC) EMC	8952SB3001340-IL
	L	8101 (LF101)	8952SB3001431-IL
	L	9117 (FB117)	8952SB3004120-IL
	L	9105,9123,9124,9129 (FB105,123,124,129)	8952SB3002420-IL
	L	9133 (FB133)	8952SB3002430-IL
	R	151,191 CHIP BEAD	8952SB3004110-IL
	R	141,158,159,164 CHIP BEAD	8952SB3001930-IL
	R	106,109,110,115-122,138,273,313,317	8952SB3002420-IL
	R	325,328,336,338-343,373,374 CHIP BEAD	8952SB3002420-IL
	JA	101 JACK RCA	8952SB3001050-IL
	JA	102 JACK OPTICAL	8952SB3001040-IL
	JA	103 JACK DC POWER	8952SB3001030-IL
	X	101 X-TAL (24.576 MHz)	8952SB3001390-IL
	X	102 RESONATOR CERAMIC (16 MHz)	8952SB3001070-IL
	X	103 X-TAL (13.5 MHz)	8952SB3001400-IL
	CN	101 WAFER(PIN HEADER)	8952SB3001260-IL
	CN	102 WAFER(PIN HEADER)	8952SB3001250-IL
	CN	103 CONNECTOR	8952SB3001280-IL
	CN	104 CONNECTOR	8952SB3001290-IL
	CN	105 CONNECTOR	8952SB3001300-IL
	CN	106 WAFER	8952SB3001320-IL
	CN	107 WAFER	8952SB3001310-IL
	CN	201 CONNECTOR	8952SB3001350-IL
	CN	202 CONNECTOR	8952SB3001360-IL
	CN	9101 (MOD101) CONNECTOR	8952SB3001240-IL
	CN	9102 (PN102) CONNECTOR	8952SB3001230-IL
		CONNECTOR	8952SB3000450-IL
		CONNECTOR	8952SB3000460-IL

Mark	No.	Description	Part No.
	X	1001 27 MHz	E80527R000010-IL
	CN	1002	L101100031010-IL
	CN	1001	L101100031310-IL
		JA1001,1002,1004 (JACK1001,1002,1004)	L109100190060-IL

D

WIRELESS AUDIO TX ASSY

WIRELESS AUDIO TX ASSY has no service part.

E

PWB(PCB) ASSY (SW MAIN/LED)

SEMICONDUCTORS

IC	701	8952SB3003500-IL
IC	702	8952SB3003490-IL
IC	703	8952SB3003510-IL
Q	701,702	8952SB3003520-IL
D	701	8952SB3003330-IL

MISCELLANEOUS

L	701 COIL	8952SB3003360-IL
L	711-713 FILTER(CIRC) EMC	8952SB3003530-IL
L	9714 (FB714)	8952SB3004300-IL
CN	701 CONNECTOR	8952SB3003370-IL
CN	702 WAFER	8952SB3003380-IL
CN	703 CONNECTOR	8952SB3003340-IL
CN	8701 (PN701) CONNECTOR	8952SB3003400-IL
CN	9701 (MOD701) CONNECTOR	8952SB3003390-IL

F

PWB(PCB) ASSY (SMPS)

PWB(PCB) ASSY (SMPS) has no service part.

G

WIRELESS AUDIO RX ASSY

WIRELESS AUDIO RX ASSY has no service part.

C

P.C.B SUB ASSY (HDMI)

SEMICONDUCTORS

IC	1003	J020303020030-IL	
IC	1002	J040913400030-IL	
IC	1001	J040923300030-IL	
⚠	IC	1005	J126111710011-IL
⚠	IC	1004	J126111712040-IL
⚠	Q	1204	J500124200010-IL
	Q	1405	J522010200210-IL
	Q	1201	J522104S00210-IL
	D	9201 (ZD1201)	K06605R14P400-IL
	D	1001-1020,1301-1310	K067020500010-IL

MISCELLANEOUS

X	1401 16 MHz	E80516R000010-IL
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HTP-SB300

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7

8

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