

SHARP SERVICE MANUAL

No. S8232HTSB60HE

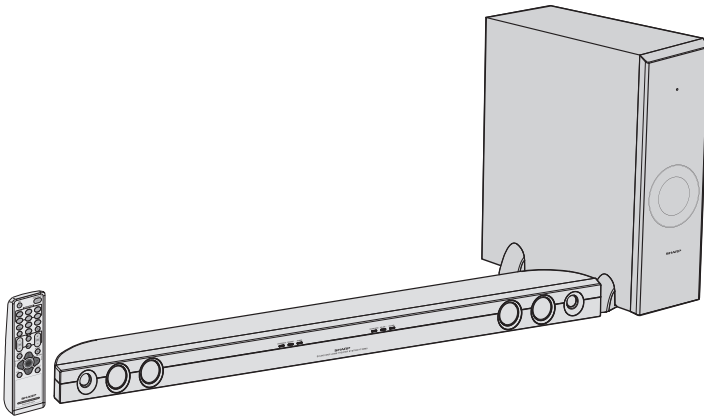
SOUND BAR HOME THEATER SYSTEM

MODEL HT-SB60

[For Europe, U.K.]

HT-SB60 Sound Bar Home Theater system consisting of HT-SB60 (sound bar system) and CP-SW60 (active subwoofer system).

• In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.



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PARTS GUIDE

Parts marked with " " are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

PRECAUTIONS FOR USING LEAD-FREE SOLDER**1. Employing lead-free solder**

"MAIN/AMPLIFIER, DISPLAY, SUBWOOFER, REGULATOR, SMPS (AMPLIFIER), SMPS (SUBWOOFER), HDMI, TRANSMIT, RECEIVE PWB" of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWB and service manuals.

The alphabetical character following LF shows the type of lead-free solder.

Example:

LFa

Sn-Ag-Cu Indicates lead-free solder of tin, silver and copper.

2. Using lead-free wire solder

When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.

As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40°C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service branch in your area.

3. Soldering

As the melting point of lead-free solder (Sn-Ag-Cu) is about 220°C which is higher than the conventional lead solder by 40°C, and as it has poor solder wet ability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, since the land may be peeled off for the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.

Lead-free solder contains more tin, and the end of the soldering bit may be easily corrected. Make sure to turn on and off the power of the bit as required. If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.

When the tip of the soldering bit is blackened during use, file it with steel wool or fine sand paper.

Be careful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing

Ref. No.	Parts No.	Description
PWB-A	92LPWB8696MANS	MAIN/AMPLIFIER (A1), DISPLAY (A2), SUBWOOFER (A3), REGULATOR (A4)
PWB-B	RUIZA069AWZZ	SMPS (AMPLIFIER)
PWB-C	RUIZA070AWZZ	SMPS (SUBWOOFER)
PWB-D	92LPWB8695HDMS	HDMI
PWB-E	RUIZA082AWZZ	TRANSMIT
PWB-F	RUIZA078AWZZ	RECEIVE

CHAPTER 1. GENERAL DESCRIPTION

[1] Safety Precaution For Service Manual

■ WARNING

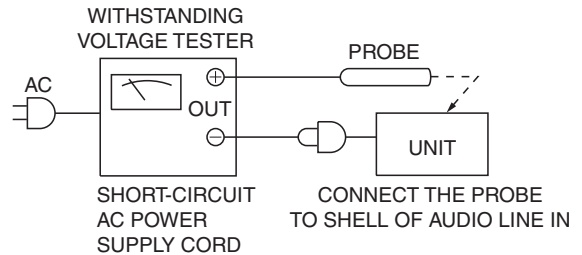
This unit contains no user serviceable parts. Never remove covers unless qualified to do so.
 This unit contains dangerous voltages, always remove mains plug from the socket before any service operation and when not in use for a long period.

[2] Important Service Notes (for U.K. only)

Before returning the unit to the customer after completion of a repair or adjustment it is necessary for the following withstand voltage test to be applied to ensure the unit is safe for the customer to use.

Setting of Withstanding Voltage Tester and set.

Set name	set value
Withstanding Voltage Tester	
Test voltage	4,240 VPEAK 3,000 VRMS
Set time	6 secs
Set current (Cutoff current)	4 mA
Unit	
Judgment	
OK: The "GOOD" lamp lights.	
NG: The "NG" lamp lights and the buzzer sounds.	



[3] Specifications

■ Sound Bar

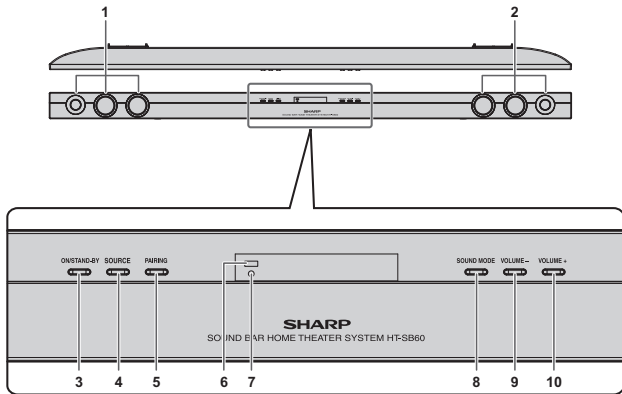
Power source	AC 220 - 240 V ~ 50/60 Hz
Power consumption	Power on: 38 W Power standby: 0.4 W (*)
Dimension	Width: 1385 mm (54 - 1/2") Height: 73 mm (2 - 7/8") Depth: 68 mm (2 - 11/16")
Weight	3.6 kg (7.92 lbs.)
Output power	RMS: Total 160 watts RMS: 160 W (80 W + 80 W) (10% T.H.D.) RMS: 120 W (60 W + 60 W) (1% T.H.D.)
Output terminal	HDMI™ (audio/video support up to 1080p) x 1
Input terminal	analogue input (AUDIO IN): x 1 500 mV / 47 kohms Optical digital input (OPTICAL): Square type x 1 HDMI input: (audio/video support up to 1080p) x 2
Type	2 Way speaker system 5.7 cm (2 - 1/4") woofer 2.5 cm (1") Soft Dome
Maximum input power	160 W
Rated input power	80 W
Impedance	4 ohms

(*) This power consumption value is obtained when the sound bar is in low power consumption mode. (Demo indicator turns off).

■ Subwoofer

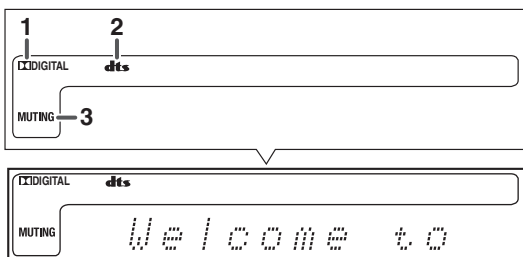
Power source	AC 220 - 240 V ~ 50/60 Hz
Power consumption	33 W
Output power	RMS: 150 W (10% T.H.D.) RMS: 120 W (1% T.H.D.)
Type	Subwoofer system 16 cm (6 - 5/16") woofer
Maximum input power	300 W
Rated input power	150 W
Impedance	3 ohms
Dimensions	Width: 144 mm (5 - 11/16") Height: 430 mm (16 - 15/16") Depth: 306 mm (12 - 1/16")
Weight	6.1 kg (13.42 lbs.)

[4] Names Of Parts



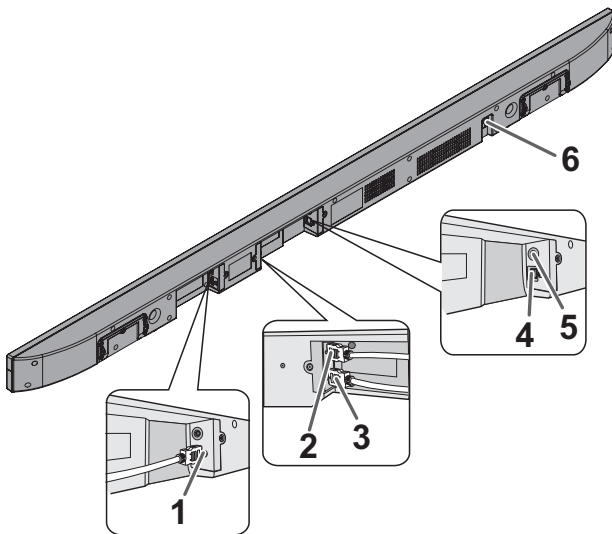
■ Sound Bar Front Panel

1. Left Channel Speakers
2. Right Channel Speakers
3. On/Stand-by Button
4. SOURCE Button
5. Pairing Button
6. Remote Sensor
7. Demo Indicator
8. Sound Mode Button
9. Volume Down Button
10. Volume Up Button



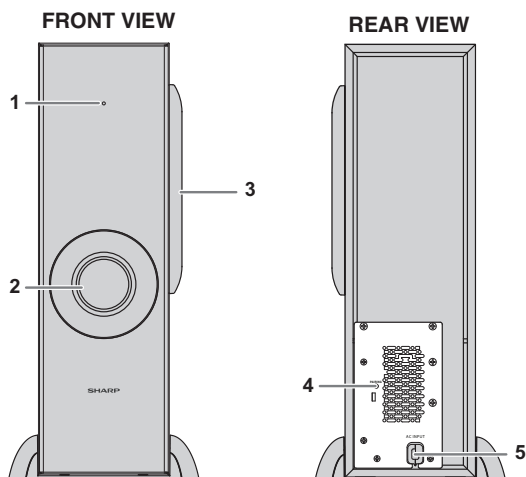
■ Display

1. Dolby Digital Indicator
2. DTS Indicator
3. Muting Indicator



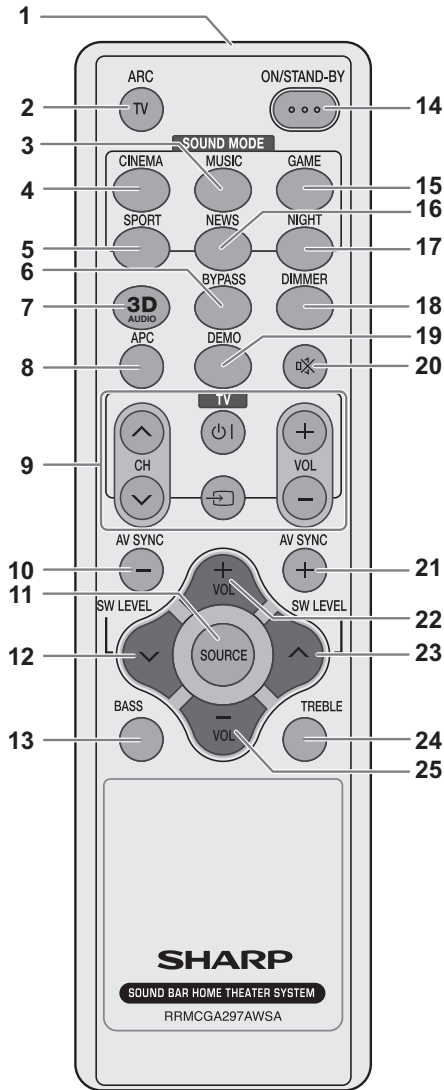
■ Sound Bar Rear Panel

1. HDMI OUT (TV ARC) Socket
2. HDMI IN 1 Socket
3. HDMI IN 2 Socket
4. Optical IN Socket
5. Audio IN Terminal
6. AC Power Lead







■ Subwoofer

1. Power/Pairing Indicator
2. Bass Reflect Duct
3. Woofer
4. Pairing Button
5. AC Power Lead



■ Remote Control

1. Remote Control Transmitter
2. TV ARC Button
3. Music (Sound Mode) Button
4. Cinema (Sound Mode) Button
5. Sport (Sound Mode) Button
6. BYPASS Button
7. 3D AUDIO Button
8. APC Button
9. TV Operation Button
10. AV SYNC Down Button
11. Source Button
12. Subwoofer Level Down Button
13. Bass Button
14. On/Stand-by Button
15. Game (Sound Mode) Button
16. News (Sound Mode) Button
17. Night (Sound Mode) Button
18. Dimmer Button
19. Demo Button
20. MUTE/Speaker Output Selection Button
21. AV SYNC Up Button
22. Volume Up Button
23. Subwoofer Level Up Button
24. Treble Button
25. Volume Down Button

TV Operation Buttons (Only SHARP TV):			
On/Stand-by Button 	Sets the TV power to "ON" or "STAND-BY".	Input Select Button (TV) 	Press the button to switch the input source.
Channel Up and Down Buttons 	Switch up/down the TV channels.	Volume Up and Down Buttons 	Turn up/down the TV volume.

Note:
Some models of SHARP TV may not be operable.

CHAPTER 2. ADJUSTMENTS

[1] Test Mode

1. Enter the Test Mode version display

While pressing down ON/STANDBY and SOURCE button, ON AC supply.

Version will be displayed as below :-

SB60 XXXX --> DHHHHHHH --> TX Ver : XXXX --> RX Ver : XXXX -->

Press SOUND MODE key at main unit to toggle between display.

SB60 = Model name, SB60

XXXX = version no

D = Destination

HHHHHHH = HDMI Firm Ware Version

TX Ver : XXXX = Wireless module Firmware version (sound bar wireless module)

RX Ver : XXXX = Wireless module Firmware version (subwoofer wireless module)

2. Enter Key and Display Test Mode

After enter Test Mode version display, Press VOL UP / DOWN button.

Select "KEY TEST". Press SOUND MODE button to execute.

1. TIMER LED will light ON
2. LCD display will light on. If press button as below :

Key	Display
VOL UP	KEY 01
VOL DOWN	KEY 02
SOUND MODE	KEY 03
PAIRING	KEY 04
SOURCE	KEY 05

3. Exit the Test Mode

While in Test Mode function, Press ON/STANDBY button to exit.

4. Error Code Description.

Display	Explanation	Solution
E1	Communication error between Micom and CS8416 / CS5346	> Unplug AC cord and turn power ON again > Check line connected between
E2	Communication error between Micom and CS4953xx	
E3	Communication error between Micom and TAS5508B	
E4	Communication error between Micom and HDMI	

[2] Abnormal detection distinction at DEMO indicator (LED_red)

It has a case that need to Power OFF immediately after detected an abnormal condition without display any error indication due to safety matter. In such case, a trouble point can be judged by a distinction indication at DEMO indicator which current is being supplied during Power off.

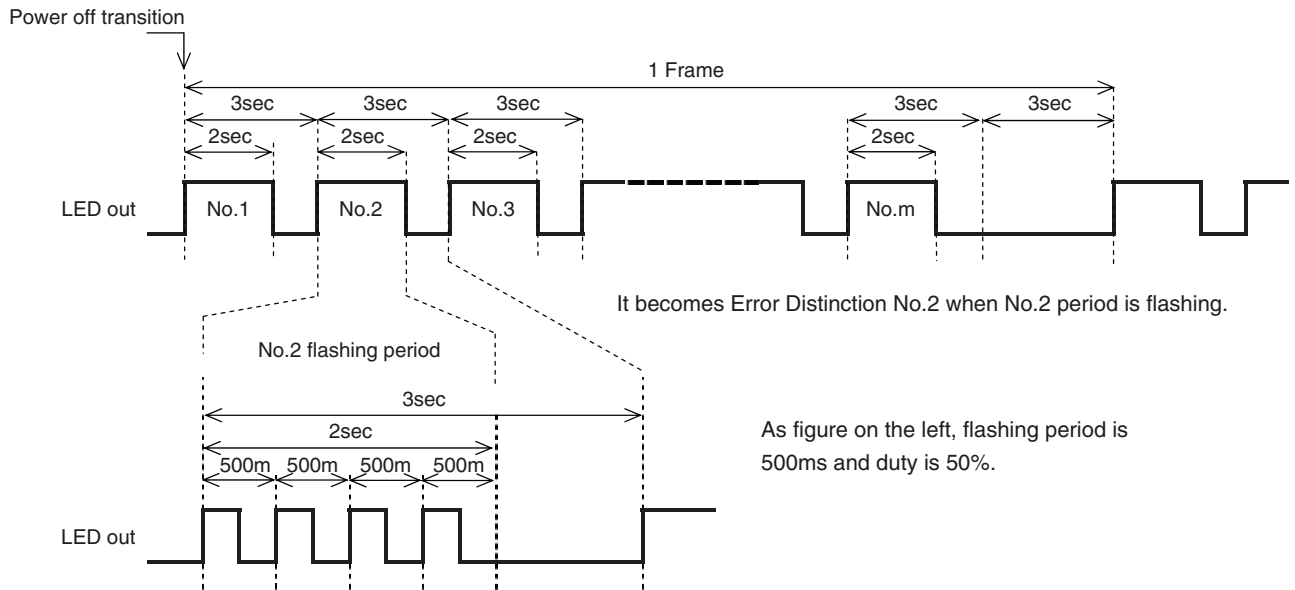
Basically, it is decided to be distinguished which input port of the system microcomputer was detected or which communication information was detected. Moreover, two kinds of over-voltage and drop-voltage are decided to be distinguished, and contents of indication are decided to be changed when it is detected in the range of the A/D value in the A/D input port, for example the over-voltage, the normality voltage, the drop-voltage of the power supply line are being monitored.

1. DEMO indicator Distinction Display Format

A lighting period (or flashing period) and a lights-off period are controlled as the bottom figure after the abnormal detection and the Power off transition. It will repeat and control 1 frame of the bottom figure. (A lighting period or flash period is mentioned on the "H" side.) 1 frame is set up as 2 sec lighting period in every 3 sec or flashing period, repeat m time, and then the last period only (m+1) should turn off the lights. (To recognize the head position.)

m is $2 \leq m \leq 10$, it can be set up in every model freely as long as "'Distinction No.' and the Abnormal Detection Table" mentioned in two clauses are protected.

A flashing period is set to one place only of No. 1 - No. m, and others are lighting period. The 'Error Distinction No.' is made at which part is flashing. In other words, it is set as the 'Distinction No.' by looking at which number is flashing from the head of 1 frame.



Note: It can set up freely in every model the repetition period 3sec, the lighting or flash period 2sec, a flashing periodic 500ms etc. as long as it can be recognized.

2. Distinction No. and Abnormal Detection Table

It defines the abnormal detection contents that correspond to the 'Distinction No.' as the bottom table in order to put in together between the models.

Distinction No.	Abnormal Detection Name	Reference
1	System Protect	Abnormal supply detection
2	Reserved	-
3	AMP Shutdown	AMP protection

Note: It is desirable to indicate it with small 'Distinction No.' when it is being monitored two and more abnormal detection in one line together using 1 port. In other words, when it is being monitored by compound 1 input. For example, it is set to Distinction No. 1 when System Protect and AMP Protect are being monitored in 1 port.

3. For this model, abnormal detection (Power Off without error display) as the following.

	Abnormal Detect	< Process >
(1)	SYSTEM PROTECT	Power OFF and indicate at POWER LED 'Distinction No.1'
(2)	Reserved	-
(3)	AMP_Shutdown	Power OFF and indicate at POWER LED 'Distinction No.3'

Reference: This case, m = 3 and 1 frame period is 12 sec.

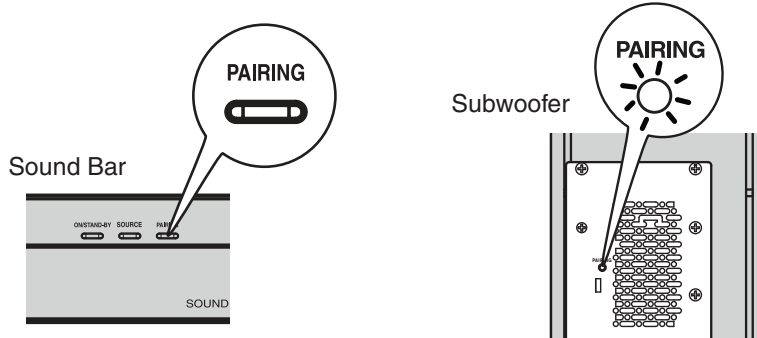
4. As for subwoofer Abnormal Detection, there are 3 types of detection.
The detection is by simple RED LED flashing indicating Abnormal Status.

No	Abnormal Detect	< Process >
(1)	Repeated Bus Error	Red LED blinking for 2 times and pause cycle.
(2)	System Protect	Red LED blinking for 4 times and pause cycle.
(3)	AMP Shutdown	Red LED blinking for 5 times and pause cycle.

[3] Manual pairing between the Amplifier and Subwoofer.

After changing the TX or RX Wireless Modules, the Sound bar and Subwoofer must establish a link. Set the connection by the following method.

- 1 Press and hold the PAIRING button on the sound bar for more than 3 seconds.
 - 2 Within 2 minutes, press and hold the PAIRING button on the subwoofer for more than 3 seconds.
- During pairing process:
 - On sound bar : "PAIRING" will blink.
 - On subwoofer : indicator will blink in blue.
 - When pairing is successful:
 - On sound bar : "PAIRING" disappears.
 - On subwoofer : indicator turns blue.



CHAPTER 3. MECHANICAL DESCRIPTION

[1] Disassembly

Caution On Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

SOUND BAR SYSTEM

STEP	REMOVAL	PROCEDURE	FIGURE
1	Back Cabinet	1. Screw.....(A1) x 23	1
		2. Cover A.....(A2) x 1	1
		3. Cover B.....(A3) x 1	1
		4. Cover C.....(A4) x 1	1
		5. Socket.....(A5) x 1	2
2	SMPS (Amplifier) PWB	1. Screw.....(B1) x 2	2
		2. Screw.....(B2) x 2	2
3	HDMI PWB	1. Screw.....(C1) x 2	2
		2. Screw.....(C2) x 3	
		3. Socket.....(C3) x 1	

STEP	REMOVAL	PROCEDURE	FIGURE
4	Regulator PWB	1. Screw.....(D1) x 1	2
5	Main/Amplifier PWB	1. Screw.....(E1) x 2	2
		2. Screw.....(E2) x 1	
		3. Socket.....(E3) x 2	
		4. Flat Cable.....(E4) x 2	
6	Display PWB	1. Screw.....(F1) x 4	3
7	Transmit PWB	1. Screw.....(G1) x 1	3
8	Woofer	1. Screw.....(H1) x 16	3
9	Soft Dome Tweeter	1. Screw.....(J1) x 8	3

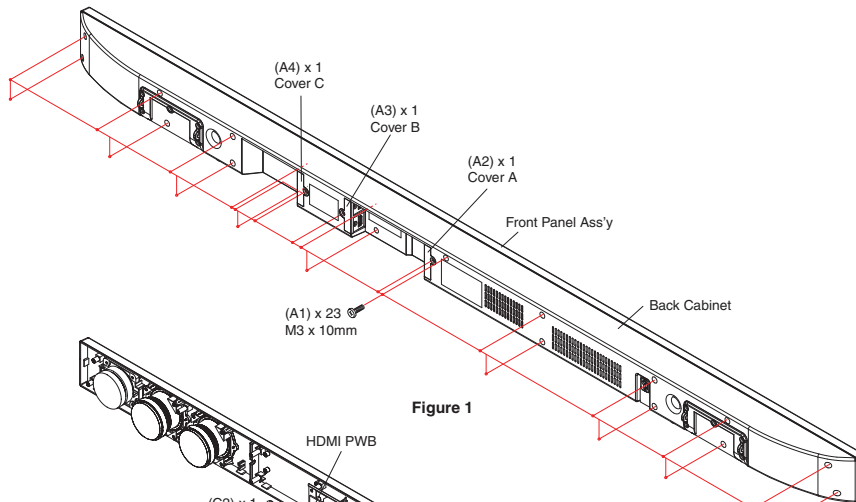


Figure 1

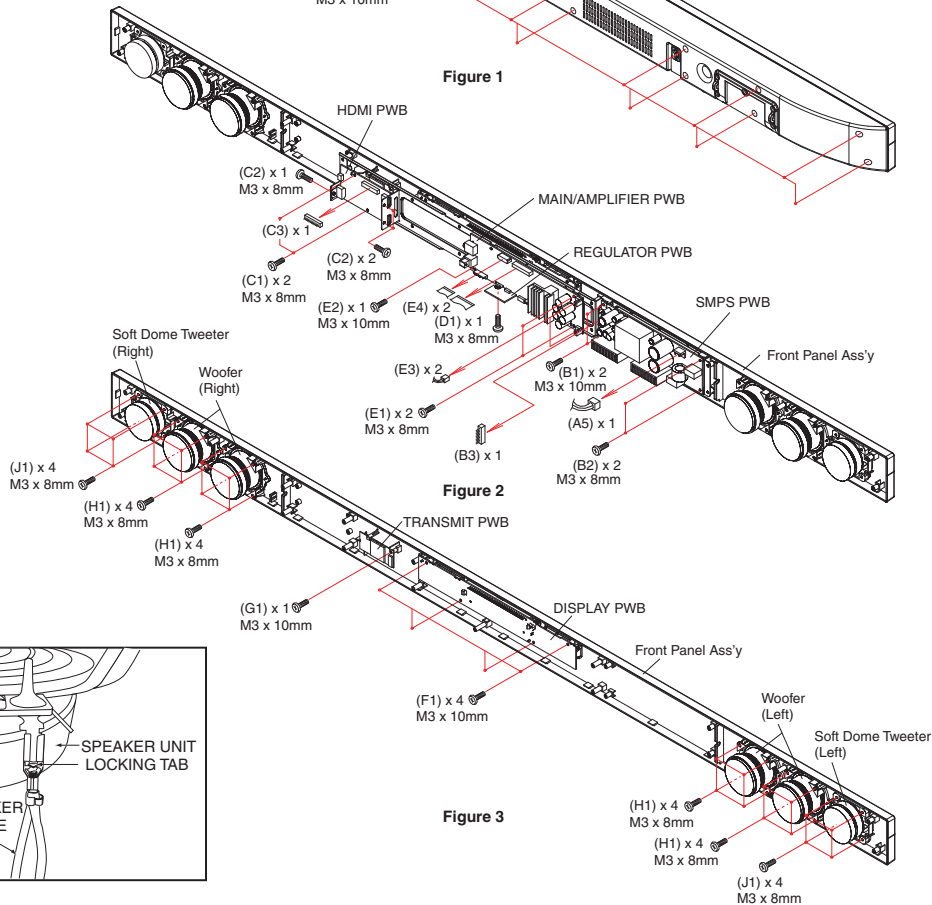
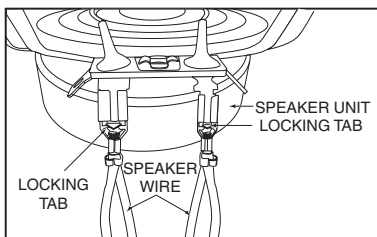


Figure 2

Figure 3



CAUTION:
TO REMOVE SPEAKER UNIT, PRESS THESE LOCKING TABS TO RELEASE SPEAKER WIRES.

ACTIVE SUBWOOFER SYSTEM			
STEP	REMOVAL	PROCEDURE	FIGURE
1	Main Chassis	1. Screw.....(A1) x 4	4
		2. Screw.....(A2) x 4	4
		3. Screw.....(A3) x 4	4
		4. Rear Panel.....(A4) x 1	4
		5. Socket(A5) x 2	5
2	Subwoofer PWB	1. Screw.....(B1) x 4	5
		2. Socket(B2) x 1	
		3. Flat Cable(B3) x 1	
3	Receive PWB	1. Screw.....(C1) x 1	5
4	SMPS (Subwoofer) PWB	1. Screw.....(D1) x 4	6
		2. Socket(D2) x 1	
5	Subwoofer	1. Net Frame Ass'y..(E1) x 1 2. Screw.....(E2) x 4	7

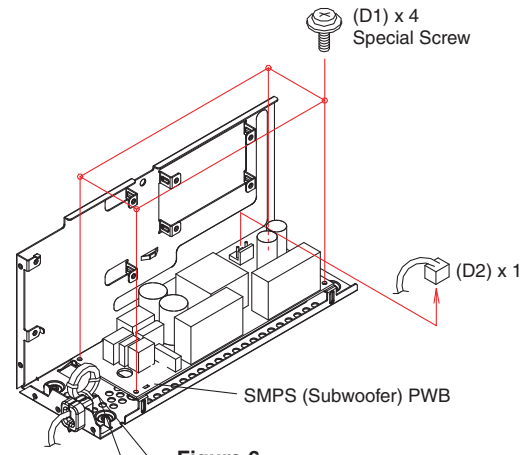
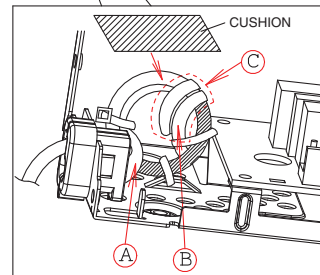


Figure 6



CAUTION:
TIE AC CORD WITH NYLON BAND AS SHOWN IN DIAGRAM.
1. (A) MUST NOT TOUCH (B).
2. PUSH (C) TO RIGHT SIDE THEN WRAP WITH CUSHION.
2. MAKE SURE LAST TURN WIRE (B) AT THE RIGHT SIDE.

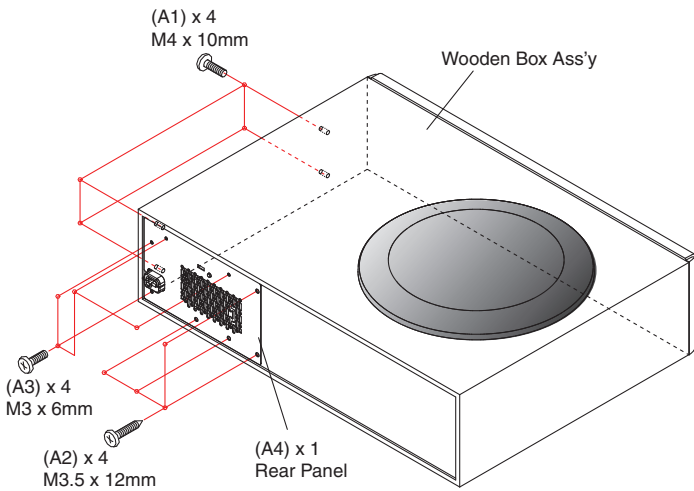


Figure 4

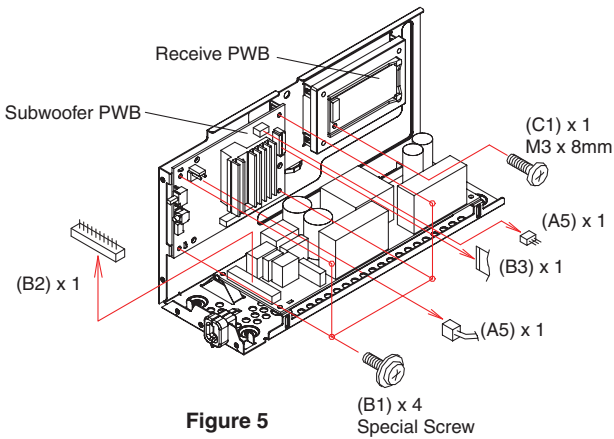


Figure 5

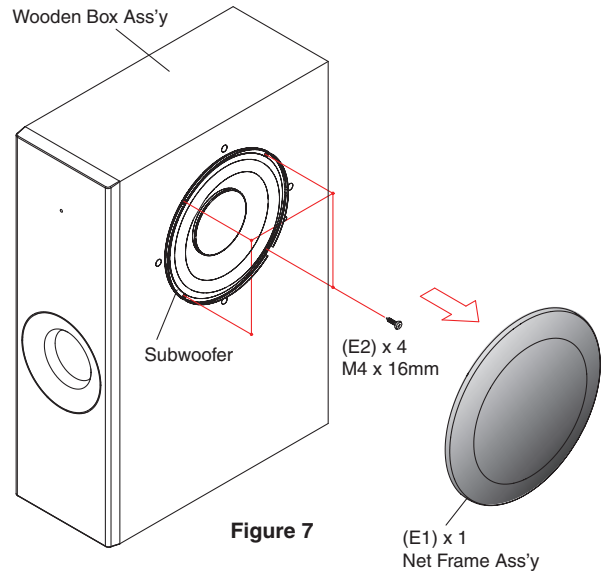
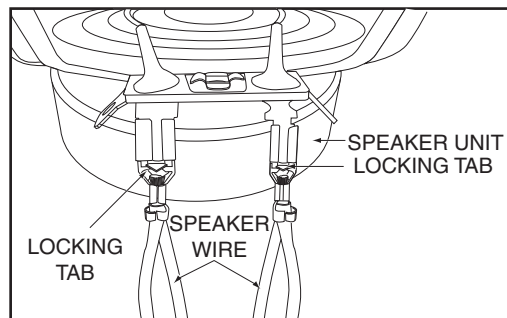


Figure 7



CAUTION:
TO REMOVE SPEAKER UNIT, PRESS THESE LOCKING TABS TO RELEASE SPEAKER WIRES.

CHAPTER 4. CIRCUIT DESCRIPTION

[1] Waveform Of Wireless Transmission

During AUDIO IN function

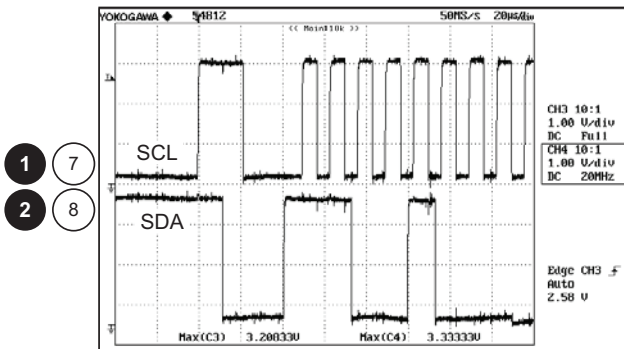
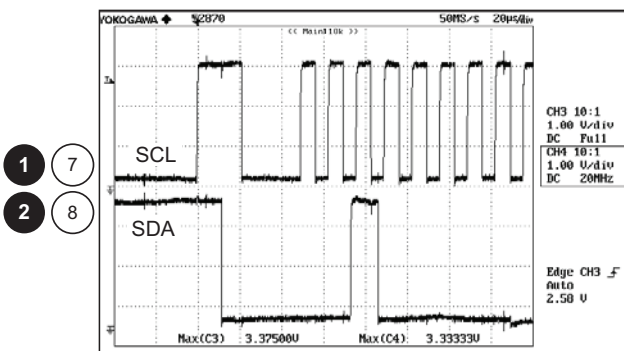
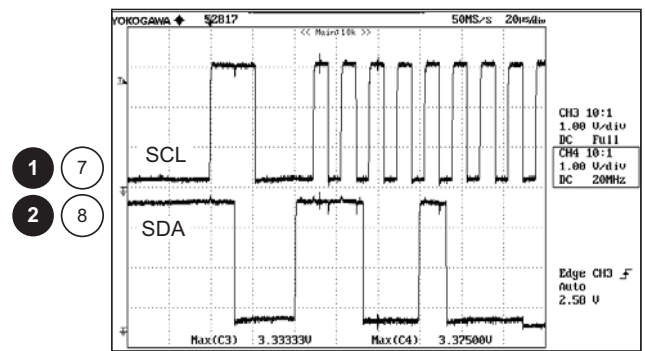


Fig. 1

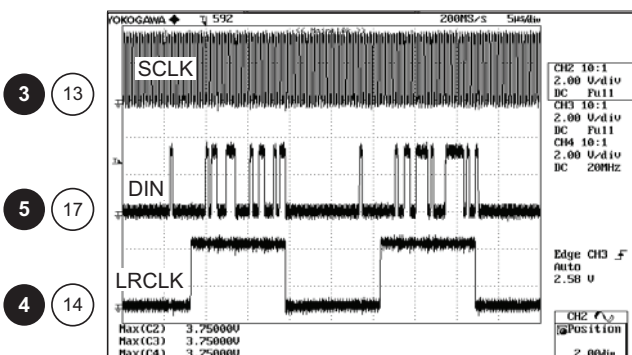
During HDMI 1 function



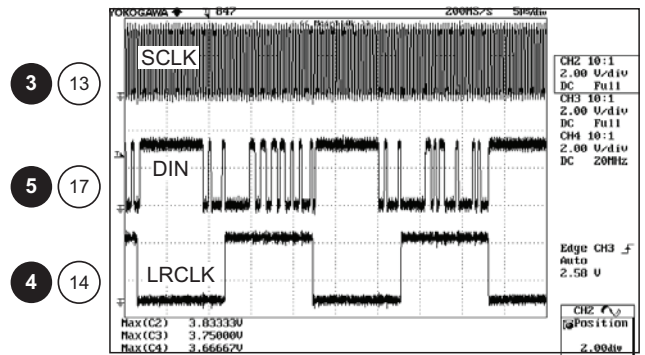
During HDMI 2 function



During HDMI function



During AUDIO IN function



Note : All waveforms are tapped from CNP502 (MAIN / AMPLIFIER PWB-A1)

[2] Voltage

Main PWB (Tx)

IC500									
Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	7.50m	21	3.30	41	2.10m	61	3.70m	81	3.30m
2	7.20m	22	7.10m	42	6.10m	62	3.30	82	1.29
3	8.70m	23	7.20m	43	3.20	63	3.30	83	2.34
4	7.70m	24	1.32	44	3.30	64	1.90m	84	4.40m
5	7.80m	25	1.32	45	3.30	65	4.10m	85	3.80m
6	7.00m	26	7.60m	46	3.30	66	3.70m	86	3.80m
7	3.30	27	7.50m	47	5.30m	67	3.90m	87	3.30
8	5.70m	28	7.80m	48	3.28	68	3.80m	88	3.28
9	0.94	29	3.10	49	3.28	69	3.90m	89	3.24
10	0.00	30	3.13	50	5.40m	70	4.00m	90	3.30
11	0.59	31	6.30m	51	5.60m	71	4.00m	91	3.30
12	3.28	32	3.30	52	5.40m	72	4.10m	92	3.90m
13	1.63	33	3.30	53	5.50m	73	4.00m	93	1.30m
14	5.70m	34	3.30	54	5.30m	74	3.30	94	1.30m
15	1.38	35	3.28	55	4.40m	75	4.10m	95	1.30m
16	3.30	36	3.28	56	3.28	76	3.90m	96	3.10m
17	3.30	37	3.30	57	1.70m	77	4.00m	97	6.50m
18	3.19	38	3.28	58	3.30	78	4.20m	98	3.31
19	3.31	39	6.20m	59	3.90m	79	4.10m	99	3.30
20	2.80	40	3.28	60	3.70m	80	4.00m	100	5.90m

IC501	
Pin No.	Voltage (V)
1	3.31
2	3.31
3	0.00
4	0.80m

IC502			
Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	4.25	5	0.62
2	1.26	6	0.63
3	1.24	7	4.38
4	-1.30m	8	5.03

IC801	
Pin No.	Voltage (V)
1	5.02
2	0.00
3	5.02
4	0.00
5	3.30

IC802			
Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	11.50	5	0.79
2	11.80	6	1.07
3	7.80	7	2.97
4	-2.50m	8	3.62

IC803			
Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	12.02	5	1.34
2	-0.30m	6	12.03
3	0.74	7	12.02
4	-0.40m	8	11.85

IC804	
Pin No.	Voltage (V)
1	-3.60 m
2	3.31
3	5.07

IC901							
Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	12.01	12	3.29	23	12.00	34	31.00
2	3.28	13	-0.20m	24	31.00	35	27.46
3	-0.30m	14	-0.20m	25	-0.70m	36	22.00
4	-0.30m	15	-0.20m	26	27.46	37	-1.70m
5	3.29	16	2.70m	27	27.46	38	-1.80m
6	2.50m	17	3.10m	28	22.00	39	22.00
7	3.20m	18	3.90m	29	-1.70m	40	27.46
8	3.50m	19	0.30m	30	-1.80m	41	27.46
9	1.18	20	0.20m	31	22	42	-1.20m
10	0.20m	21	12.03	32	27.46	43	31.00
11	-0.10m	22	12.01	33	31.00	44	11.99

IC805	
Pin No.	Voltage (V)
1	3.29
2	-0.40m
3	3.29
4	0.00
5	1.80

IC806	
Pin No.	Voltage (V)
1	1.70m
2	3.29
3	5.00

IC808	
Pin No.	Voltage (V)
1	4.96
2	-0.40m
3	4.96
4	0.00
5	3.92

IC809	
Pin No.	Voltage (V)
1	5.02
2	-0.40m
3	5.02
4	0.00
5	4.02

IC601															
Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	1.77	9	3.17	17	1.88	25	3.34	33	1.86	41	2.30	49	2.30	57	1.30
2	23.00m	10	1.23	18	20.80m	26	1.65	34	7.50m	42	2.30	50	2.30	58	1.30
3	0.75	11	3.30	19	0.76	27	1.64	35	7.60m	43	2.30	51	2.3	59	1.41
4	28.20m	12	3.24	20	0.89	28	6.30m	36	3.24	44	9.40m	52	2.3	60	1.41
5	6.70m	13	3.30	21	7.60m	29	6.30m	37	38.00m	45	43.10m	53	7.60m	61	1.41
6	7.70m	14	3.24	22	7.60m	30	6.30m	38	7.60m	46	48.00m	54	3.24	62	3.41
7	1.83	15	3.24	23	7.60m	31	2.20	39	3.30	47	0.00	55	1.3	63	1.60
8	7.80m	16	7.60m	24	3.30	32	18.60m	40	2.30	48	1.88	56	1.30	64	7.70m

IC100															
Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	3.28	17	0.74	33	1.60	49	3.28	65	2.62	81	3.27	97	3.10m	113	4.80m
2	3.28	18	1.30	34	1.60	50	3.30	66	3.28	82	1.70	98	4.80m	114	4.70m
3	3.27	19	0.20m	35	17.40m	51	1.64	67	1.00m	83	1.70	99	3.60m	115	3.70m
4	3.28	20	1.55	36	1.30m	52	1.70m	68	3.27	84	3.28	100	3.28	116	3.28
5	3.28	21	3.28	37	3.28	53	0.00	69	3.27	85	4.80m	101	4.80m	117	3.28
6	3.27	22	1.80	38	1.30m	54	1.77	70	3.27	86	4.60m	102	2.10m	118	3.30
7	3.27	23	3.27	39	4.00m	55	3.20	71	3.27	87	2.80m	103	5.30m	119	3.20m
8	3.28	24	3.27	40	1.62	56	0.00	72	3.25	88	4.20m	104	4.20m	120	3.27
9	3.27	25	0.10m	41	1.30m	57	3.27	73	3.20	89	3.20	105	4.70m	121	3.28
10	3.28	26	3.27	42	1.77	58	3.27	74	3.25	90	3.28	106	4.10m	122	0
11	3.28	27	1.31	43	4.10m	59	3.27	75	3.27	91	3.60m	107	3.28	123	3.27
12	1.77	28	3.28	44	1.64	60	3.27	76	0.00	92	3.70m	108	3.27	124	3.28
13	3.27	29	1.64	45	1.70	61	3.28	77	3.28	93	2.50m	109	3.27	125	1.77
14	3.27	30	1.64	46	1.64	62	3.27	78	4.30m	94	3.50m	110	3.27	126	3.28
15	0.70m	31	0.00	47	13.00m	63	3.27	79	4.00m	95	1.77	111	3.28	127	3.00m
16	1.63	32	1.64	48	13.70m	64	3.27	80	1.90m	96	3.40m	112	1.77	128	3.28

IC102									
Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	3.29	11	3.28	21	0.40m	31	3.10	41	1.40m
2	3.27	12	3.28	22	0.40m	32	4.20m	42	3.21
3	3.28	13	3.30	23	0.30m	33	0.70m	43	3.26
4	0.00	14	3.29	24	0.30m	34	3.28	44	3.30
5	3.28	15	3.29	25	3.30	35	1.71	45	3.27
6	3.28	16	3.29	26	0.50m	36	3.28	46	3.27
7	3.30	17	3.29	27	0.30m	37	1.10m	47	1.90
8	3.28	18	3.29	28	0.20m	38	3.26	48	2.00m
9	3.28	19	0.50m	29	2.50m	39	3.25	49	3.27
10	0.00	20	0.40m	30	2.70m	40	3.25	50	2.20m

Display

IC700															
Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	5.78	9	3.83	17	5.75	25	3.83	33	1.89	41	1.89	49	8.70m	57	3.28
2	3.83	10	8.90m	18	8.80m	26	5.78	34	1.90	42	1.90	50	1.03	58	3.28
3	0.91	11	5.79	19	5.77	27	3.83	35	1.90	43	1.89	51	9.70m	59	7.64
4	3.83	12	5.77	20	8.90m	28	1.92	36	1.90	44	1.89	52	3.30	60	9.40m
5	0.92	13	1.92	21	5.78	29	5.76	37	1.89	45	1.89	53	2.28	61	3.83
6	5.78	14	7.67	22	3.83	30	3.83	38	1.89	46	1.89	54	3.00	62	3.83
7	5.76	15	1.92	23	3.83	31	5.78	39	1.90	47	1.85	55	5.76	63	5.77
8	8.80m	16	5.78	24	3.83	32	1.90	40	1.89	48	1.85	56	3.30	64	5.76

Subwoofer (Rx)

ICX601							
Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	1.79	17	1.91	33	1.87	49	2.30
2	49.90m	18	10.90m	34	38.10m	50	2.30
3	0.77	19	1.07	35	39.80m	51	2.30
4	0.85	20	1.07	36	3.23	52	2.30
5	26.40m	21	37.40m	37	38.10m	53	37.60m
6	35.10m	22	37.40m	38	39.90m	54	3.30
7	1.82	23	37.40m	39	3.30	55	0.46
8	0.00	24	3.34	40	2.30	56	1.33
9	3.26	25	3.34	41	2.30	57	1.32
10	3.26	26	2.30	42	2.30	58	1.33
11	3.34	27	2.10	43	2.30	59	0.92
12	3.34	28	37.80m	44	0.00	60	0.90
13	3.25	29	37.80m	45	0.00	61	0.92
14	3.24	30	37.80m	46	0.00	62	0.94
15	3.24	31	2.28	47	0.00	63	2.10
16	37.80m	32	12.90m	48	1.89	64	37.60m

ICX901							
Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	11.98	12	3.20	23	12.03	34	31.00
2	3.21	13	2.40m	24	31.00	35	30.90
3	2.10m	14	3.20	25	0.00	36	22.00
4	2.10m	15	3.20	26	30.90	37	0.00
5	3.20	16	2.50m	27	30.90	38	0.00
6	1.67	17	3.31	28	22.00	39	22.00
7	3.31	18	3.20	29	0.00	40	30.89
8	1.67	19	2.50m	30	0.00	41	30.89
9	1.12	20	2.50m	31	22.00	42	0.00
10	2.50m	21	12.03	32	30.90	43	31.00
11	2.40m	22	11.97	33	31.00	44	12.03

ICX801	
Pin No.	Voltage (V)
1	8.21
2	12.05
3	3.36
4	0.60m
5	0.65
6	0.94
7	3.00
8	3.56

CHAPTER 5. FLOWCHART

[1] Troubleshooting

1. When unable to “pair” or “link” between the sound bar unit and subwoofer.

(1) Transmitting and receiving check.

1. Is the TX and RX module supply + UN_SW5V ok?

NO → Check incoming supply.
(Rx - CNP600X Pin no. 1 and 2)
(Tx - CNP502 Pin no. 1 and 2)

YES ↓

2. Is the communication signal (I²C) ok ?
(Fig. 1 - During AUDIO IN function)
(Fig. 2a & 2b - During HDMI 1 / 2 function)

NO → Is the module FFC loose ?

During AUDIO IN function

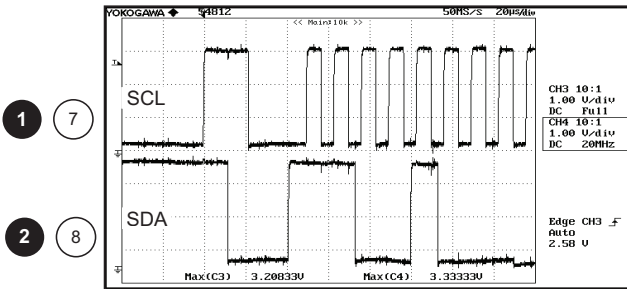


Fig. 1 : AUDIO IN function waveform

During HDMI 1 / 2 function

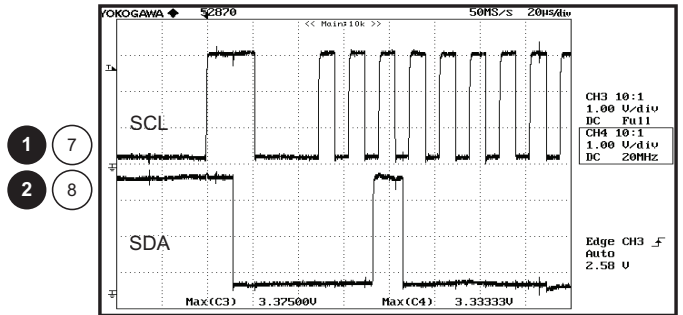


Fig. 2a : HDMI 1 function waveform

(2) Audio does not operate normally

No sound is produced at the subwoofer.

1. Is the Tx and Rx module supply + UN_SW5V ok?

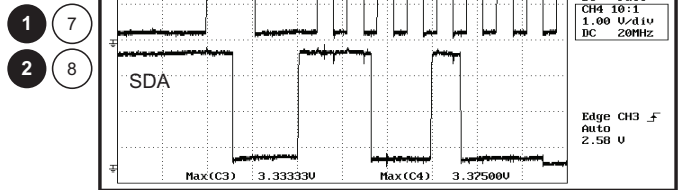


Fig. 2b : HDMI 2 function waveform

YES ↓

2. Is the communication signal (I²S) ok ?
(Figure 3a and 3b - for normal operation)
Check :
Tx - CNP502 Pin no. 13, 14 and 17.
Rx - CNP600X Pin no. 22, 23.

NO → Is the module FFC loose ?

During HDMI function

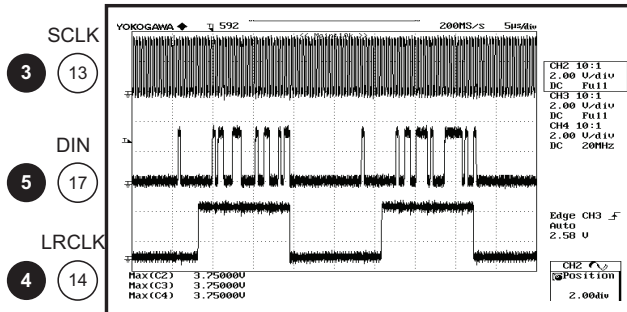


Fig. 3a : I²S Signal waveform

During AUDIO IN function

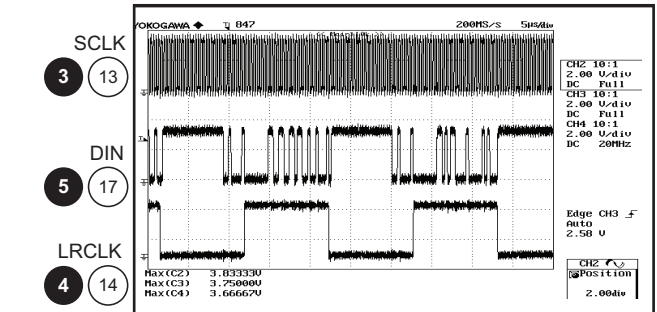


Fig. 3b : I²S Signal waveform

NOTE : All waveforms are tapped from CNP502 (MAIN / AMPLIFIER PWB-A1)

CHAPTER 6. MAJOR PART DRAWING**[1] Function Table Of IC****IC500 RH-IXA348AW00 : SYSTEM MICROCONTROLLER (IXA348AW) (1/5)**

Pin No.	NAME	INPUT/OUTPUT	FORM	SOFT PULL-UP	EXT. PULL UP	FUNCTION OUTLINE
	PORT_TYPE					
1	NO USE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Fix "L"
	P96/ANEX1					
2	NO USE	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Fix "L"
	P95/ANEX0					
3	NO USE	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Fix "L"
	P94					
4	NO USE	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Fix "L"
	P93					
5	NO USE	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Fix "L"
	P92/TB2IN					
6	NO USE	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Fix "L"
	P91/TB1IN					
7	WMDL_RESET	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	WIRELESS MODULE RESET CONTROL. Pull to ground for active reset. P.OFF : H P.ON : L
	P90/TB1IN					
8	BYTE	INPUT	Schmitt Input	-	NO	Connect to VSS (GND)
	BYTE					
9	CNVSS	INPUT	Schmitt Input	-	NO	Pull down connect to VSS (GND)
	CNVSS					
10	XCIN	INPUT	CMOS INPUT/OUTPUT	OFF	NO	Sub-clock 32.768kHz
	P87/XCIN					
11	XCOU	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Sub-clock 32.768kHz
	P86/XCOU					
12	RESET	INPUT	Schmitt Input	-	YES	Micom RESET
	RESET					
13	X_OUT	OUTPUT	CMOS OUTPUT	-	NO	Main clock 9.8MHz
	XOUT					
14	GND	-	-	-	-	Connect to VSS (GND)
	VSS					
15	X_IN	INPUT	CMOS INPUT	-	NO	Main clock 9.8MHz
	XIN					
16	VCC	-	-	-	-	Micom supply 3.3V Back up supply
	VCC1					
17	NMI	INPUT	CMOS INPUT (Schmitt Input)	-	YES	Pull up connect to VCC
	P85/NMI					
18	RX_IN	INPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Remote control input
	P84/INT2					
19	SYS_STOP	INPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	[INT1]AC Power Fail Detection.
	P83/INT1					
20	HDMI_INT	INPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	[INT0]CEC Port interrupt from the microcontroller. L-->H at POWER ON
	P82/INT0					
21	HDMI_RST	INPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	HDMI Sub MCU RESET. H : NORMAL , L : RESET
	P81					
22	NO USE	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Fix "L"
	P80					
23	NO USE	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Fix "L"
	P77					
24	NO USE	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Fix "L"
	P76					
25	NO USE	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Fix "L"
	P75/TA2IN					
26	NO USE	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Fix "L"
	P74/TA2OUT					

IC500 RH-IXA348AW00 : SYSTEM MICROCONTROLLER (IXA348AW) (2/5)

Pin No.	NAME	INPUT/OUTPUT	FORM	SOFT PULL-UP	EXT. PULL UP	FUNCTION OUTLINE
	PORT_TYPE					
27	NO USE	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Fix "L"
	P73/CTS2/RTS2/TA1IN					
28	NO USE	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Fix "L"
	P72/CLK2/TA1OUT					
29	SCL	OUTPUT	Nch open (Schmitt Input)	-	YES	[I2Cbus]DIR/WIRELESSSS_MODULE/TI_DAP/HDMI Micom IF clock (*1)Nch open drain
	P71/RXD2/SCL2/TA0IN					
30	SDA	INPUT/OUTPUT	Nch open (Schmitt Input)	-	YES	[I2Cbus]DIR/WIRELESSSS_MODULE/TI_DAP/HDMI Micom IF data I/O (*1)Nch open drain
	P70/TXD2/SDA2/TA0OUT					
31	FL_SDATA/FLASH_TXD	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	FL DRIVER DATA OUTPUT FLASH WRITER Data Output
	P67/TXD1/SDA1					
32	FL_CS/FLASH_RXD	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	FL DRIVER CHIP SELECT OUTPUT FLASH Writer Data input
	P66/RXD1/SCL1					
33	FL_SCK/FLASH_SCLK	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	FL DRIVER CLOCK OUTPUT FLASH Writer Clock Input
	P65/CLK1					
34	FL_RESET/FLASH_BUSY	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	FL DRIVER RESET FLASH Writer Busy output. BUSY: 'H'
	P64/CTS1/RTS1/CTS0/CLKS1					
35	DB_SDA	INPUT/OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	[I2Cbus]DOLBY IC IF data I/O
	P63/TXD0/SDA0					
36	DB_SCL	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	[I2Cbus]DOLBY IC IF clock
	P62/RXD0/SCL0					
37	DB_RESET	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Dolby RESET. Active "L"
	P61/CLK0					
38	DB_SCP_IRQ	INPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	DOLBY IC (OPTION)
	P60/CTS0/RTS0					
39	NO USE	OUTPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Fix "L"
	P57/CLKOUT					
40	DB_SCP_BSY	INPUT	CMOS INPUT/OUTPUT	OFF	NO	DOLBY IC (OPTION)
	P56					
41	FLASH_EPM	INPUT	CMOS INPUT/OUTPUT (Schmitt Input)	OFF	NO	Pull down connect to VSS (GND)+G55
	P55					
42	NO USE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Fix "L"
	P54					
43	DAP_MUTE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	TI_DAP MUTE CONTROL
	P53					
44	DAP_PWDN	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Audio Processor Power Down
	P52					
45	DAP_RESET	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Audio Processor Reset. In reset mode by setting the RESET terminal low.
	P51					
46	FLASH_CE	INPUT	CMOS INPUT/OUTPUT	OFF	YES	Pull up connect to VCC
	P50					
47	NO USE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Fix "L"
	P47					
48	AMP_SD/BKND_ERR	INPUT	CMOS INPUT/OUTPUT	OFF	NO	AMP POWER Control
	P46					
49	AMP_OTW	INPUT	CMOS INPUT/OUTPUT	OFF	NO	FAULT -TH-WARN when FAULT CONDITIONS
	P45					
50	NO USE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Fix "L"
	P44					

HT-SB60
IC500 RH-IXA348AW00 : SYSTEM MICROCONTROLLER (IXA348AW) (3/5)

Pin No.	NAME	INPUT/OUTPUT	FORM	SOFT PULL-UP	EXT. PULL UP	FUNCTION OUTLINE
	PORT_TYPE					
51	NO USE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Fix "L"
	P43					
52	NO USE	OUTPUT	CMOS INPUT/OUTPUT			
	P42					
53	NO USE	OUTPUT	CMOS INPUT/OUTPUT			
	P41					
54	NO USE	OUTPUT	CMOS INPUT/OUTPUT			
	P40					
55	NO USE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Fix "L"
	P37					
56	DIR_GPO0	INPUT	CMOS INPUT/OUTPUT	OFF	NO	Dir General Purpose Port 0
	P36					
57	DIR_GPO1	INPUT	CMOS INPUT/OUTPUT	OFF	NO	Dir General Purpose Port 1
	P35					
58	DIR_RST	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	DIR Reset+G149 Reset="L"
	P34					
59	NO USE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Fix "L"
	P33					
60	NO USE	OUTPUT	CMOS INPUT/OUTPUT			
	P32					
61	NO USE	OUTPUT	CMOS INPUT/OUTPUT			
	P31					
62	VCC	-	-	-	-	Micom supply 3.3V Back up supply
	VCC2					
63	NO USE	OUTPUT	CMOS INPUT/OUTPUT	-	NO	Fix "L"
	P30					
64	GND	-	-	-	-	Connect to VSS (GND)
	VSS					
65	NO USE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Fix "L"
	P27					
66	NO USE	OUTPUT	CMOS INPUT/OUTPUT			
	P26					
67	NO USE	OUTPUT	CMOS INPUT/OUTPUT			
	P25					
68	NO USE	OUTPUT	CMOS INPUT/OUTPUT			
	P24					
69	NO USE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Fix "L"
	P23					
70	NO USE	OUTPUT	CMOS INPUT/OUTPUT			
	P22					
71	NO USE	OUTPUT	CMOS INPUT/OUTPUT			
	P21					
72	NO USE	OUTPUT	CMOS INPUT/OUTPUT			
	P20					
73	NO USE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Fix "L"
	P17					
74	DEMO_LED	OUTPUT	CMOS INPUT/OUTPUT			
	P16/INT4					
75	NO_USE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	DEMO LED CONTROL DEMO ON/OFF : On ECO: Of+G55f
	P15/INT3					
76	NO USE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Fix "L"
	P14					

IC500 RH-IXA348AW00 : SYSTEM MICROCONTROLLER (IXA348AW) (4/5)

Pin No.	NAME	INPUT/OUTPUT	FORM	SOFT PULL-UP	EXT. PULL UP	FUNCTION OUTLINE			
	PORT_TYPE								
77	NO USE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Fix "L"			
	P13								
78	NO USE	OUTPUT	CMOS INPUT/OUTPUT						
	P12								
79	NO USE	OUTPUT	CMOS INPUT/OUTPUT						
	P11								
80	NO USE	OUTPUT	CMOS INPUT/OUTPUT						
	P10								
81	LVL_DETECT	INPUT ANA-LOG/DIGITAL	CMOS INPUT/OUTPUT	OFF	NO	LEVEL DETECT			
	P07/AN07								
82	AVCK1	INPUT ANA-LOG/DIGITAL	CMOS INPUT/OUTPUT				YES	[AD]D1.8V Abnormal voltage detection	
	P06/AN06								
83	AVCK2	INPUT ANA-LOG/DIGITAL	CMOS INPUT/OUTPUT	YES	[AD]A3.3V Abnormal voltage detection				
	P05/AN05								
84	NO USE	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	Fix "L"			
	P04/AN04								
85	NO USE	OUTPUT ANA-LOG/DIGITAL	CMOS INPUT/OUTPUT						
	P03/AN03								
86	NO USE	OUTPUT	CMOS INPUT/OUTPUT						
	P02/AN02								
87	CE_0	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	HDMI Module Supply Control 3.3V During ECO: Off During DEMO/P ON: On			
	P01/AN01								
88	CE_1	OUTPUT	CMOS INPUT/OUTPUT						
	P00/AN00								
89	CE_2	OUTPUT	CMOS INPUT/OUTPUT	OFF	NO	HDMI Module Supply Control 5.0V During ECO: Off During DEMO/P ON: On			
	P107/AN7/KI3								
90	POWER (DC RELAY)	OUTPUT	CMOS INPUT/OUTPUT				NO	(DC_RELAY) MAIN POWER CONTROL output H:FPOWER ON L:FPOWER OFF	
	P106/AN6/KI2								
91	SYS-PROTECT	INPUT ANA-LOG/DIGITAL	CMOS INPUT/OUTPUT	OFF	YES	System supply abnormal detection			
	P105/AN5/KI1								
92	KEY_1(POWER)	INPUT	CMOS INPUT/OUTPUT				YES	POWER KEY INPUT	
	P104/AN4/KI0								
93	KEY_2	INPUT ANA-LOG/DIGITAL	CMOS INPUT/OUTPUT	OFF	YES	A/D KEY INPUT			
	P103/AN3								
94	NO USE	OUTPUT	CMOS INPUT/OUTPUT				OFF	NO	Fix "L"
	P102/AN2								
95	AREA	INPUT ANA-LOG/DIGITAL	CMOS INPUT/OUTPUT	YES	Destination				
	P101/AN1								
96	GND	-	-	-	-	VSS A/D reference port. Connect to VSS (GND)			
	AVSS								
97	NO USE	OUTPUT	CMOS INPUT/OUTPUT	-	NO	Fix "L"			
	P100/AN0								
98	VREF	-	-				-	-	Voltage A/D reference port. Connect to VCC
	VREF								
99	AVCC	-	-	-	-	Supply A/D reference port. Connect to VCC			
	AVCC								
100	NO USE	OUTPUT	CMOS INPUT/OUTPUT	-	NO	Fix "L"			
	P97/ADTRG								

**HT-SB60
IC500 RH-IXA348AW00 : SYSTEM MICROCONTROLLER (IXA348AW) (5/5)**

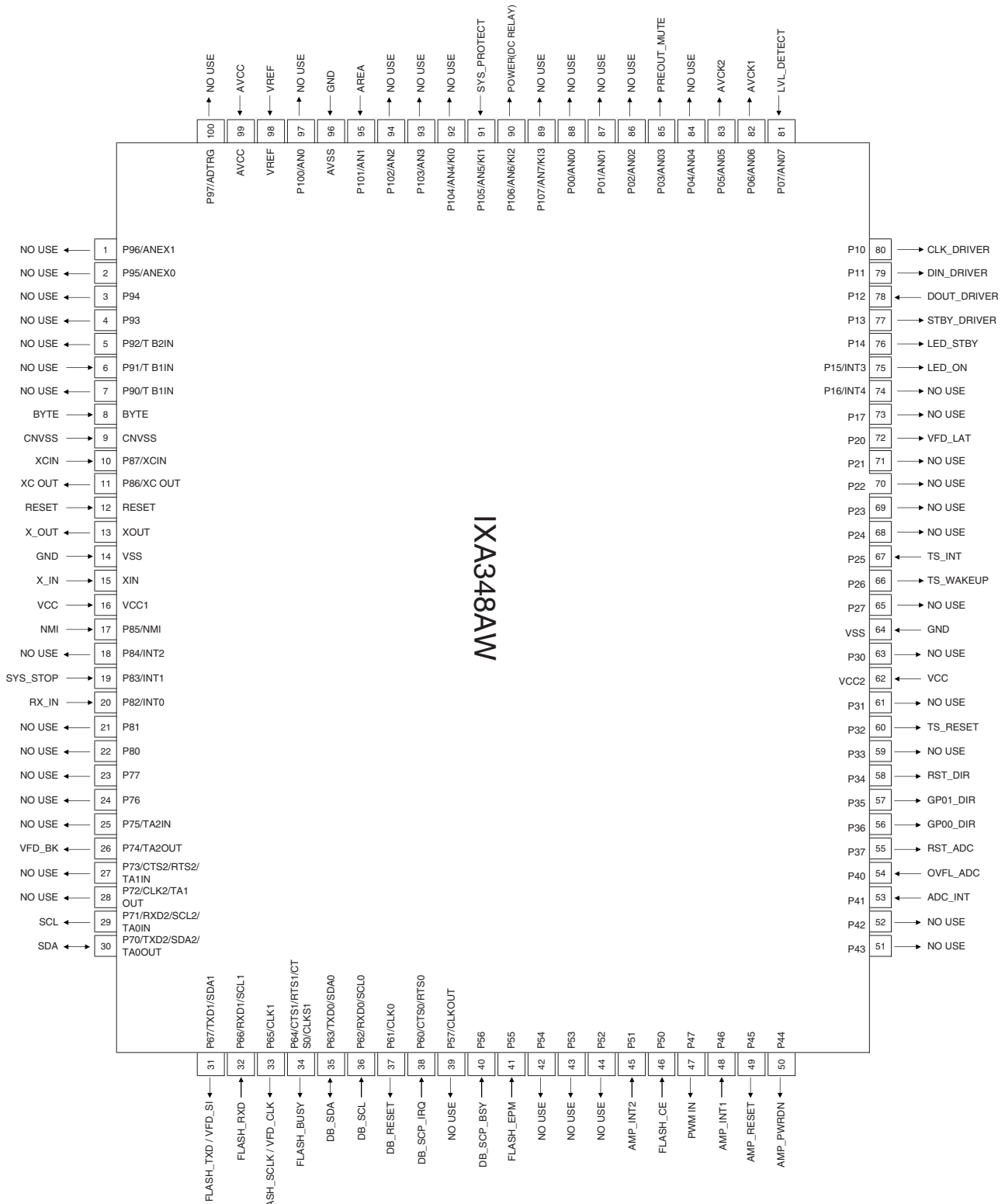


Figure 6-1 BLOCK DIAGRAM OF IC

IC1 VHiEP92A2E : HDMI IC (EP92A2E) (1/4)

Unless otherwise stated, unused input pins must be tied to ground, and unused output pins left open.

HDMI Input Ports

Name	In/Out	Description
RXC0-	IN	Differential Clock Input Pair for HDMI Input Port 0
RXC0+	IN	Differential Clock Input Pair for HDMI Input Port 0
RX00-	IN	Differential Data Input Pair0 for HDMI Input Port 0
RX00+	IN	Differential Data Input Pair0 for HDMI Input Port 0
RX10-	IN	Differential Data Input Pair1 for HDMI Input Port 0
RX10+	IN	Differential Data Input Pair1 for HDMI Input Port 0
RX20-	IN	Differential Data Input Pair2 for HDMI Input Port 0
RX20+	IN	Differential Data Input Pair2 for HDMI Input Port 0
RXC1-	IN	Differential Clock Input Pair for HDMI Input Port 1
RXC1+	IN	Differential Clock Input Pair for HDMI Input Port 1
RX01-	IN	Differential Data Input Pair0 for HDMI Input Port 1
RX01+	IN	Differential Data Input Pair0 for HDMI Input Port 1
RX11-	IN	Differential Data Input Pair1 for HDMI Input Port 1
RX11+	IN	Differential Data Input Pair1 for HDMI Input Port 1
RX21-	IN	Differential Data Input Pair2 for HDMI Input Port 1
RX21+	IN	Differential Data Input Pair2 for HDMI Input Port 1
RXC2-	IN	Differential Clock Input Pair for HDMI Input Port 2
RXC2+	IN	Differential Clock Input Pair for HDMI Input Port 2
RX02-	IN	Differential Data Input Pair0 for HDMI Input Port 2
RX02+	IN	Differential Data Input Pair0 for HDMI Input Port 2
RX12-	IN	Differential Data Input Pair1 for HDMI Input Port 2
RX12+	IN	Differential Data Input Pair1 for HDMI Input Port 2
RX22-	IN	Differential Data Input Pair2 for HDMI Input Port 2
RX22+	IN	Differential Data Input Pair2 for HDMI Input Port 2
EXT_RES	IN	External Termination Resistor for all HDMI Input Ports. A resistor should tie this pin to AVDD33. 470Ω is recommended.

HDMI Output Ports

Name	In/Out	Description
TXC-	OUT	Differential Clock Output Pair for HDMI Output
TXC+	OUT	Differential Clock Output Pair for HDMI Output
TX0-	OUT	Differential Data Output Pair0 for HDMI Output
TX0+	OUT	Differential Data Output Pair0 for HDMI Output
TX1-	OUT	Differential Data Output Pair1 for HDMI Output
TX1+	OUT	Differential Data Output Pair1 for HDMI Output
TX2-	OUT	Differential Data Output Pair2 for HDMI Output
TX2+	OUT	Differential Data Output Pair2 for HDMI Output
SWING	Analog	Voltage Swing Adjust for HDMI Output. A resistor should tie this pin to PVDD18. This resistance determines the amplitude of the voltage swing. 390Ω is recommended.
COMR	Analog	Common ground for pull-down resistors of HDMI Data Output

ARC RX Pins

Name	In/Out	Description
ARC+/-	IN/OUT	AC coupled ARC input pins

Audio Inputs/Outputs

Name	In/Out	Description
MCLK	OUT	System Clock output for audio DAC (128/256/384/512 * F _{Sampling_Clock} . Connecting a pull-up (logic 1) or pull-down (logic 0) resistor at this pin defines bit 4 of the slave IIC Address
IIS_SCK	OUT	IIS SCK output for IIS audio port. Sampling clock output for DSD.
IIS_WS	OUT	IIS WS output for all IIS audio ports. DSD audio output port 0 (Right Channel).
IIS_SD0	OUT	IIS SD output for audio port 0 or HBR audio output. DSD audio output port 0 (Left Channel).
IIS_SD1	OUT	IIS SD output for audio port 1 or HBR audio output. DSD audio output port 1 (Right Channel).
IIS_SD2	OUT	IIS SD output for audio port 2 or HBR audio output. DSD audio output port 1 (Left Channel).
IIS_SD3	OUT	IIS SD output for audio port 3 or HBR audio output. DSD audio output port 2 (Right Channel).
SPDIF	OUT	SPDIF output. DSD audio output port 2 (Left Channel).
IIS_SCK_IN	IN	IIS SCK input for regenerated IIS audio.
IIS_WS_IN	IN	IIS WS input for regenerated IIS audio.
IIS_SD_IN	IN	IIS SD input for regenerated IIS audio.

DDC/IIC/MCU/EEPROM

Name	In/Out	Description
INTb	OUT	Interrupt signal. Asserted when interrupt requests occur. This pin is open drain output when programmed as active low and external pull-up resistor is needed. This pin is push-pull when programmed as active high. Connect this pin to the GPIO pin of the HDMI controller externally.
SCL2/SCL3	IO	SCL signal for HDMI and HDCP Control Logic. Connect this pin to the GPIO pin of the HDMI controller with pull up resistor externally.
SDA2/SDA3	IO	SDA signal for HDMI and HDCP Control Logic. Connect this pin to the GPIO pin of the HDMI controller with pull up resistor externally.
DDC0_SCL	IN	IIC SCL signal for HDMI Receiver DDC Port 0
DDC0_SDA	IO	IIC SDA signal for HDMI Receiver DDC Port 0
DDC1_SCL	IN	IIC SCL signal for HDMI Receiver DDC Port 1
DDC1_SDA	IO	IIC SDA signal for HDMI Receiver DDC Port 1
DDC2_SCL	IN	IIC SCL signal for HDMI Receiver DDC Port 2
DDC2_SDA	IO	IIC SDA signal for HDMI Receiver DDC Port 2
DDCR_SCL	IN	IIC SCL signal for Repeater DDC Port
DDCR_SDA	IO	IIC SDA signal for Repeater DDC Port
DDCT_SCL	OUT	IIC SCL signal for HDMI Output DDC Port
DDCT_SDA	IO	IIC SDA signal for HDMI Output DDC Port

Misc. Pins

Name	In/Out	Description
X_IN	Analog	External Crystal Input, 18.432 Mhz. Connect this pin to the GPIO pin of the HDMI controller externally.
PLL_XFC_A	Analog	For connecting a capacitor to ground for on-chip PLL
EXT_RSTb	IN	External Reset input (Active Low) with internal weak pull-up. Connect this pin to the GPIO pin of the HDMI controller externally.
REG_VIN	PWR	5V input to on-chip Power Regulator
REG_VO1	OUT	Programmable voltage output from on-chip Power Regulator. The selectable output voltage are 2.8V, 3.0V, 3.2V and 3.4V
REG_VO2	OUT	Programmable voltage output from on-chip Power Regulator. The selectable output voltage are 1.5V, 1.6V, 1.7V and 1.8V

IC1 VHIEP92A2E : HDMI IC (EP92A2E) (3/4)**HDMI Controller Pins¹**

Name	In/Out	Description
MCU_RSTb	IN	External Reset (active low) with on-chip pull-up. When this pin is asserted low, the HDMI controller is totally reset.
MCU_OP	IN	HDMI Controller operation mode. 0: Normal mode 1: ICP (In Circuit Flash Programming) mode
MCU_XIN	IN	External Crystal Input, 18.432 Mhz
MCU_XOUT	OUT	External Crystal Output, 18.432 Mhz.
P2[7:0]	IN/OUT	GPIO port 2 with programmable Open Drain capability.
P1[4:0]	IN/OUT	GPIO port 1 or Keyboard Interrupt inputs with internal 20K Ω pull-up to VDD
P3[7:4, 1:0]	OD IN/OUT	Open Drain I/O port 3. P3 shared with IIC.
P4[5, 1:0]	IN/OUT	GPIO port 4 or External Interrupt inputs
P7[1:0]	IN/OUT	Open Drain I/O port 7. P7[1:0] shared with Serial Port.

NOTES:

1. Customer shall follow the pre-defined I/O pins application which shown in reference circuit for the correct operation of this chip.

Power Pins

Name	In/Out	Description
AVDD	PWR	HDMI Receiver Analog Power (1.8V)
PVDD	PWR	HDMI Receiver PLL Analog Power (1.8V)
AVDD33	PWR	HDMI Termination Power (3.3V)
AVDD18	PWR	HDMI Transmitter Analog Power (1.8V)
PVDD18	PWR	HDMI Transmitter PLL Analog Power (1.8V)
AVSS, PVSS	GND	Analog Ground
VDDE	PWR	I/O Power (3.3V)
VSSE	GND	I/O Ground
VDD	PWR	Internal Logic Power (1.8V)
VSS	GND	Logic Ground
VDD_PLL	GND	Audio PLL Power (3.3V)
VSS_PLL	GND	Audio PLL Ground
MCU_VDD	GND	HDMI Controller Power (3.3V)

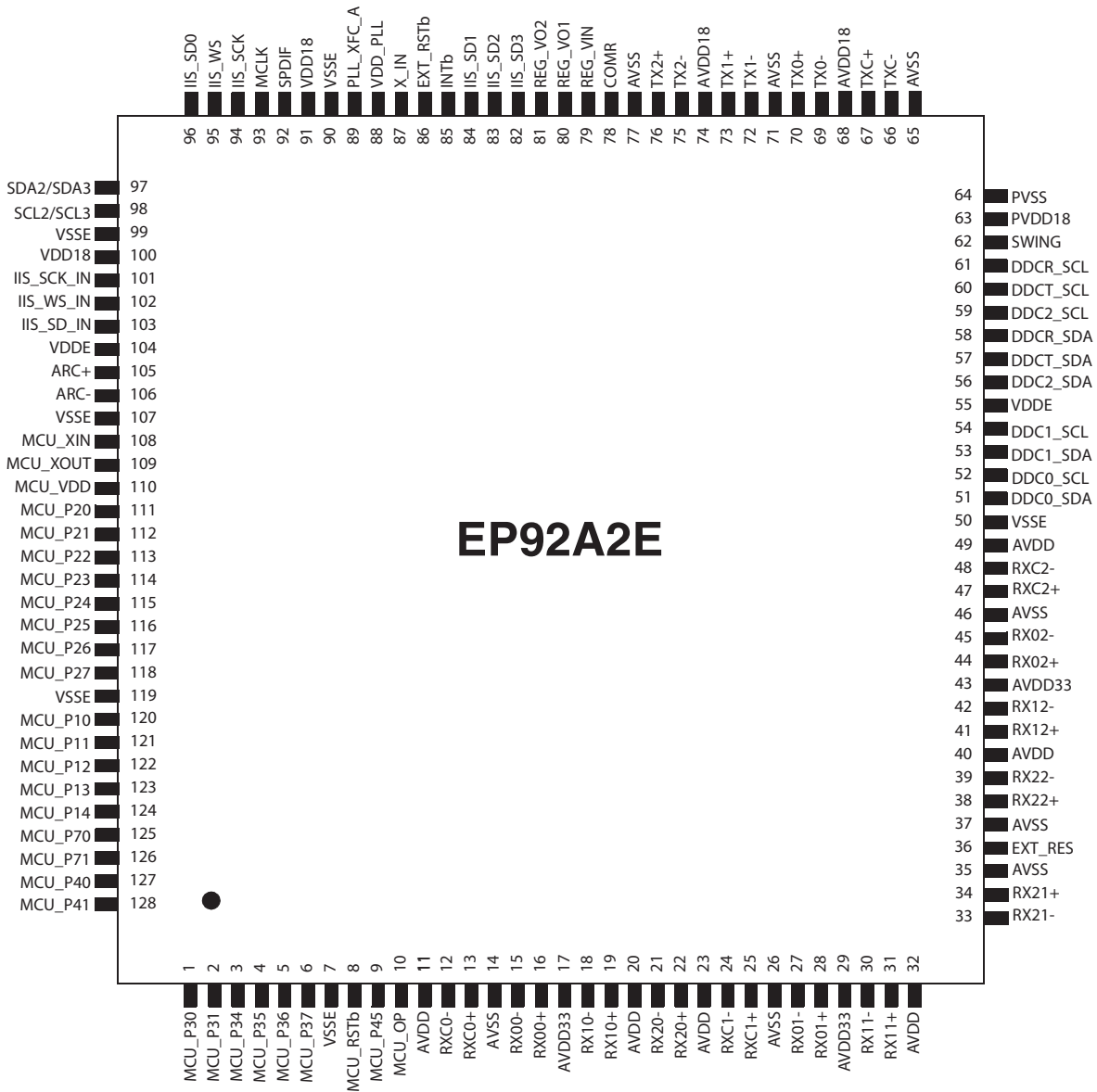
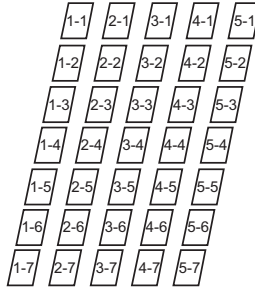
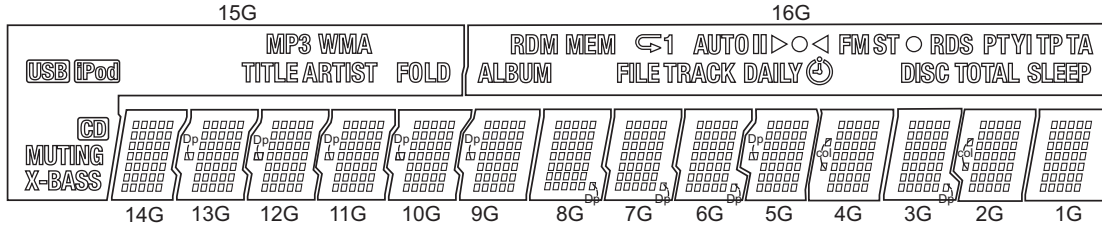


Figure 6-2 BLOCK DIAGRAM OF IC

[2] FL Display

FL700 VVKNA16SM21-1

GRID ASSIGNMENT



ANODE CONNECTION

	16G	15G	14G	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	⊙		1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1
P2	DAILY		2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1
P3	TRACK		3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1
P4	AUTO		4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1
P5	FILE		5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1
P6	B		1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2
P7	1 (upper)		2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2
P8	A		3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2
P9	CHAP		4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2
P10	MEM		5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2
P11	ALBUM		1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3
P12	RDM		2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3
P13	MEM		3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3
P14	II	FOLD	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3
P15	II	FOLD	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3
P16	▷	1	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
P17	◁ (left)	S.BASS	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4
P18	◁	ARTIST	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4
P19	1 (lower)	WMA	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4
P20	2	TITLE	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4
P21	3	MP3	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5
P22	4	AAC	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5
P23	FM	cts	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5
P24	ST	+	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5
P25	◦ (right)	DAB	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5
P26	DISC	COPLI	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6
P27	RDS	DIGITAL	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6
P28	TOTAL	Pod	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6
P29	PTYI	USB	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6
P30	SLEEP	DVD	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6
P31	TP	SD	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7
P32	TA	CD	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7
P33		(DivX)	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7
P34		MUTING	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7
P35		X-BASS	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7
P36				Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	col	Dp	col		

OUTER DIMENSIONS



PIN CONNECTION

PIN NO.	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34
CONNECTION	F2	NP	F2	NP	NP	16G	15G	P35	P34	P33	P32	P31	P30	P29	P28	P27	P26	P25	P24	NC	P23	P22	P21	P20	P19	P18	P17	NC	P16	NC	P15	P14	P13
	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
	P12	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	P36	NC	14G	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NP	NP	F1	NP	F1

Note

- 1) Fn : Filament Pin
- 2) NP : No pin
- 3) Pn : Anode pin
- 4) NG : Grid pin
- 5) NC : No connected pin

CHAPTER 7. DIAGRAMS

[1] Main (Tx) & Subwoofer (Rx) Block Diagram

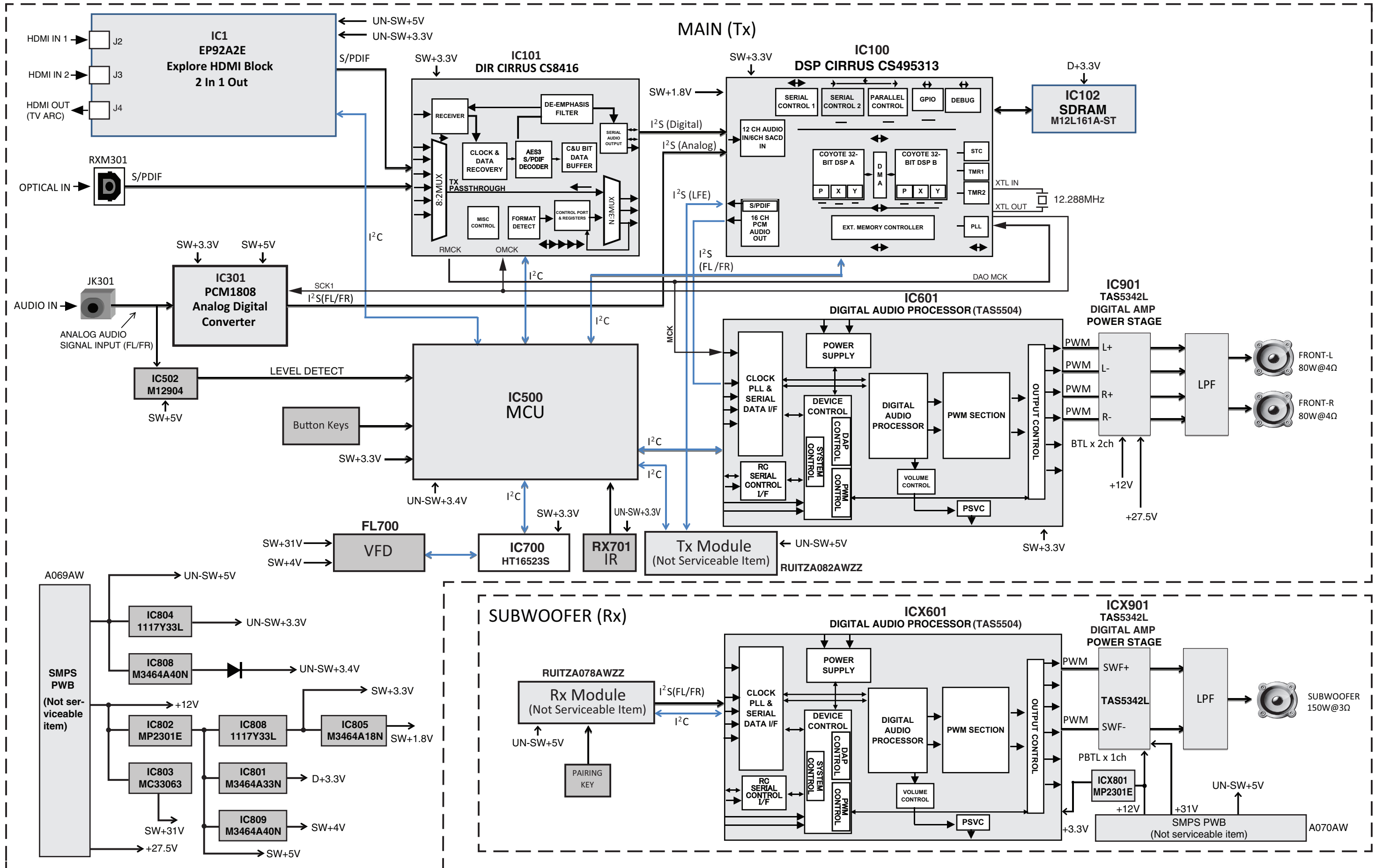


Figure 7-1: MAIN (Tx) & SUBWOOFER (Rx) BLOCK DIAGRAM

CHAPTER 8. CIRCUIT SCHEMATICS AND PARTS LAYOUT

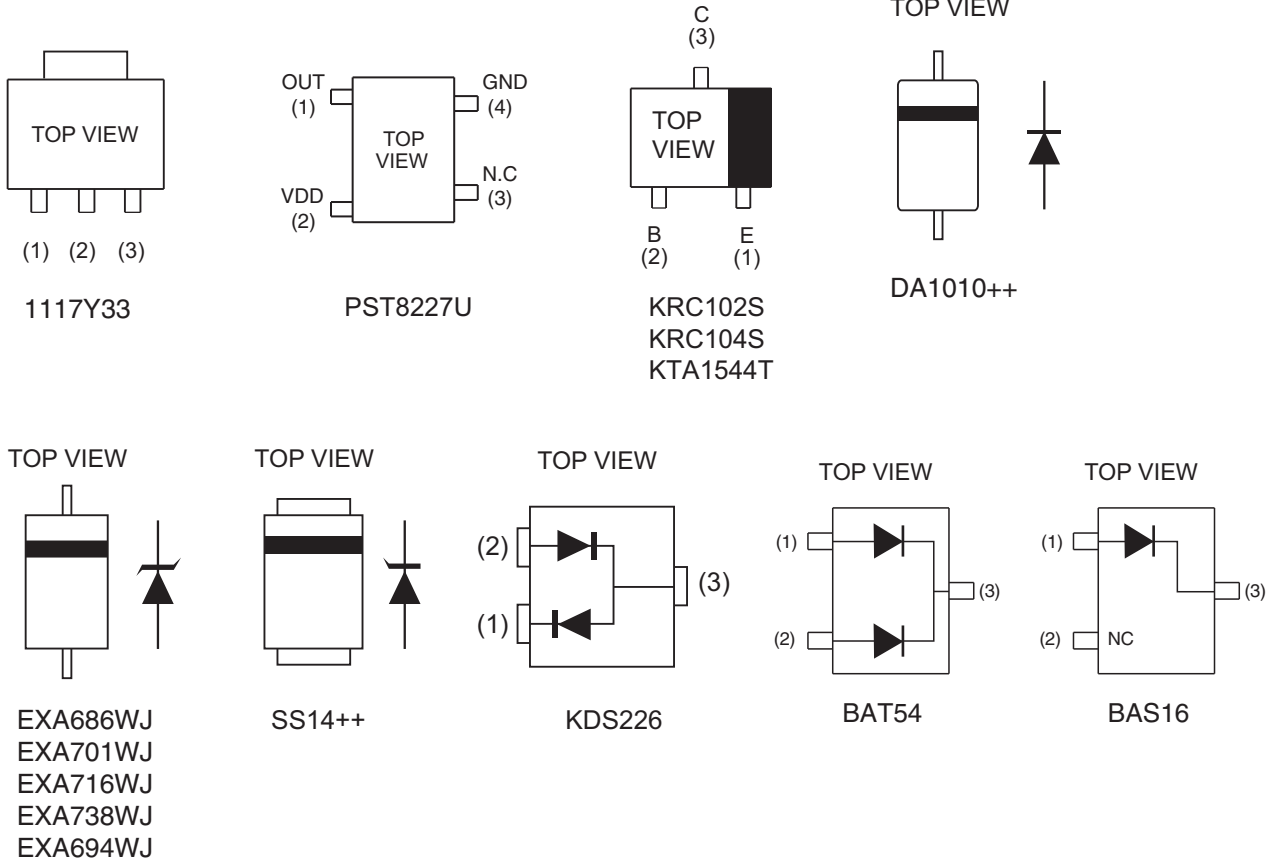
[1] Notes On Schematic Diagram

- Resistor:
To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with "Fusible" is a fuse type.
- Capacitor:
To indicate the unit of capacitor, a symbol P is used: this symbol P means pico-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression "capacitance/withstand voltage" is used.
(CH), (TH), (RH), (UJ): Temperature compensation
(ML): Mylar type
(P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
- Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

PWB Switch Location

REF. NO	DESCRIPTION	POSITION
SW701	ON/STAND-BY	ON -- OFF
SW702	SOURCE	ON -- ON
SW703	PAIRING	ON -- ON
SW704	EQ	ON -- ON
SW705	VOLUME (-)	MAX -- MIN
SW706	VOLUME (+)	MAX -- MIN

[2] Types Of Transistor And LED



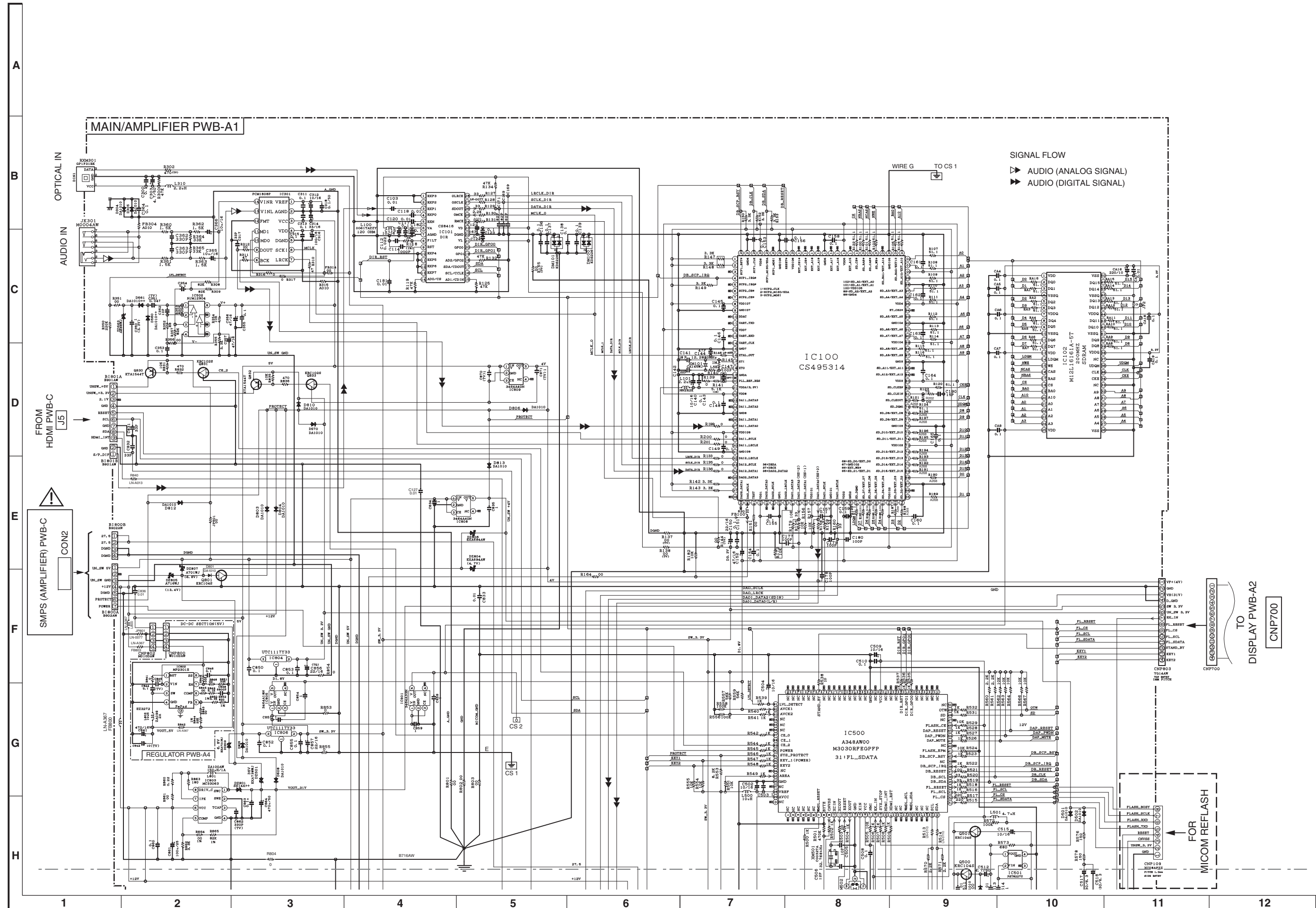


Figure 8-1: MAIN (TX) SECTION SCHEMATIC DIAGRAM (1/2)

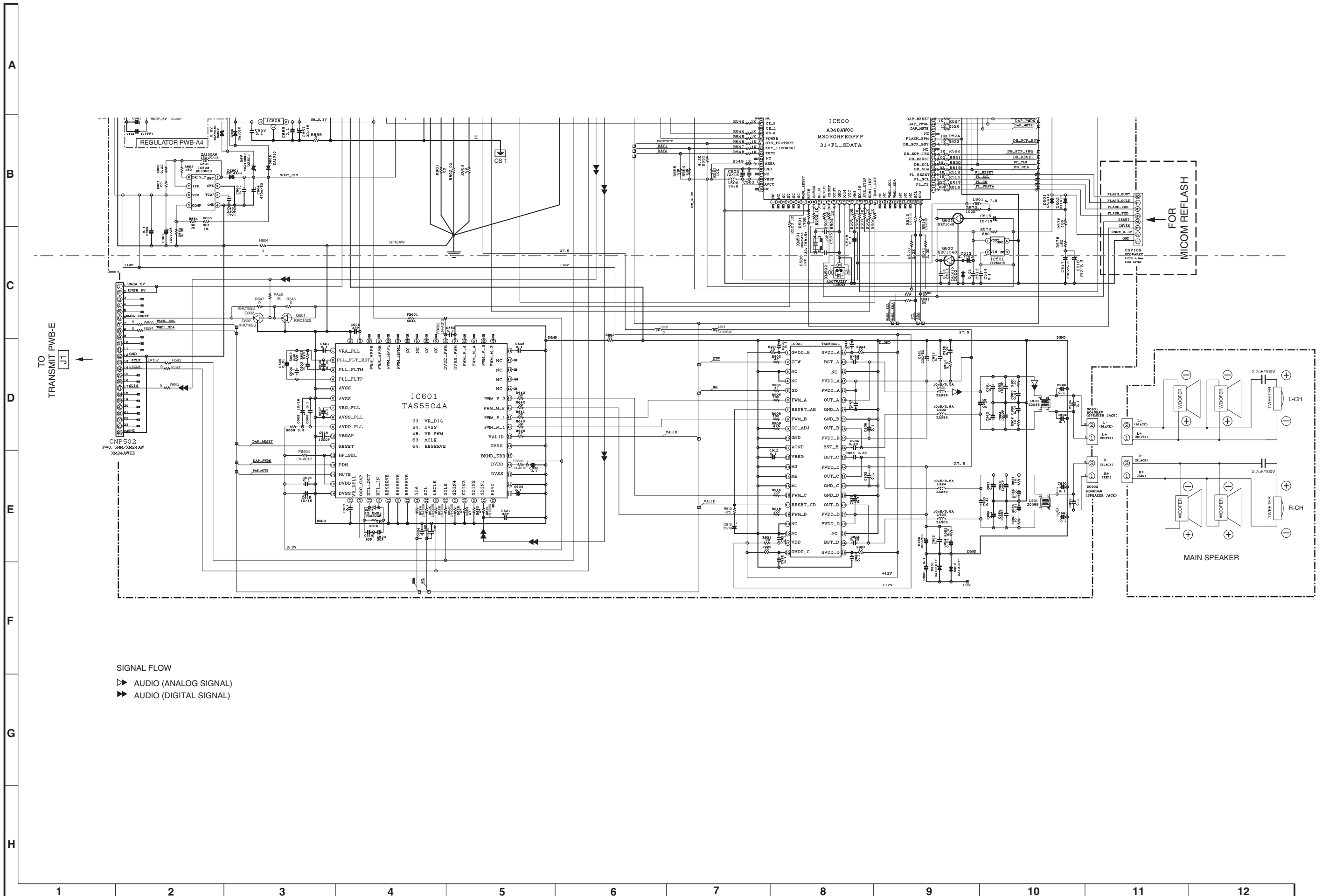


Figure 8-2: MAIN (TX) SECTION SCHEMATIC DIAGRAM (2/2)

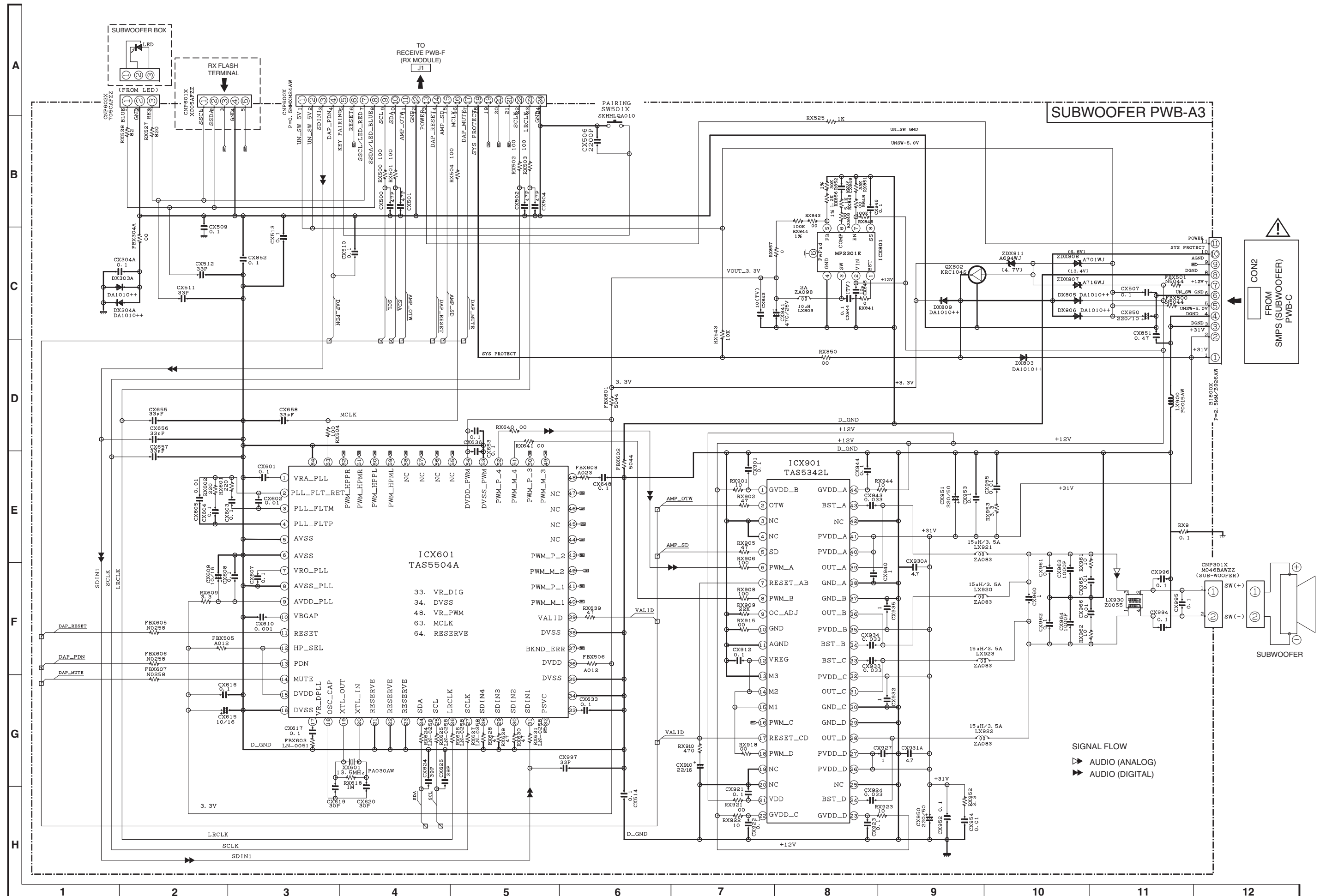


Figure 8-3: SUBWOOFER (RX) SECTION SCHEMATIC DIAGRAM

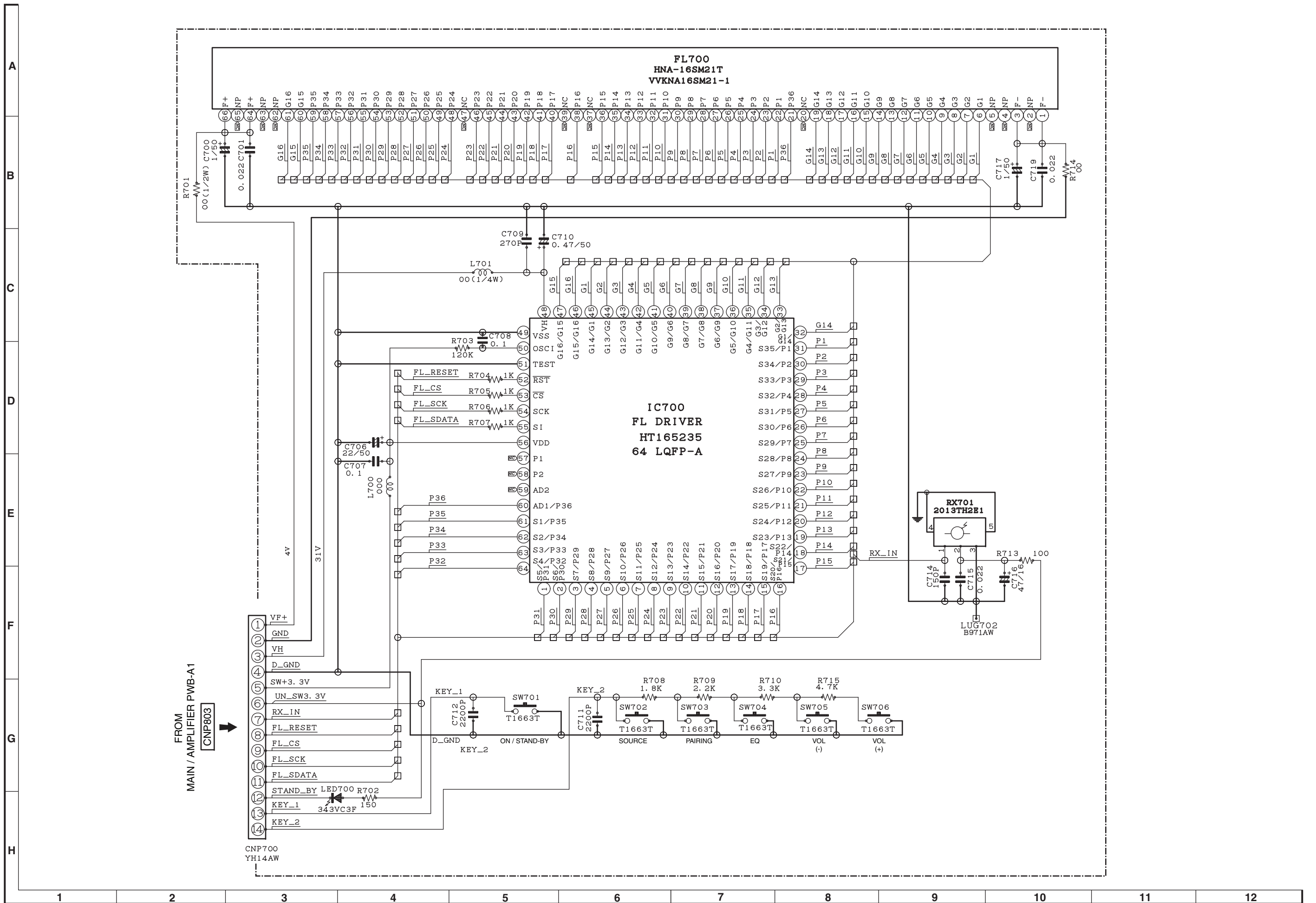
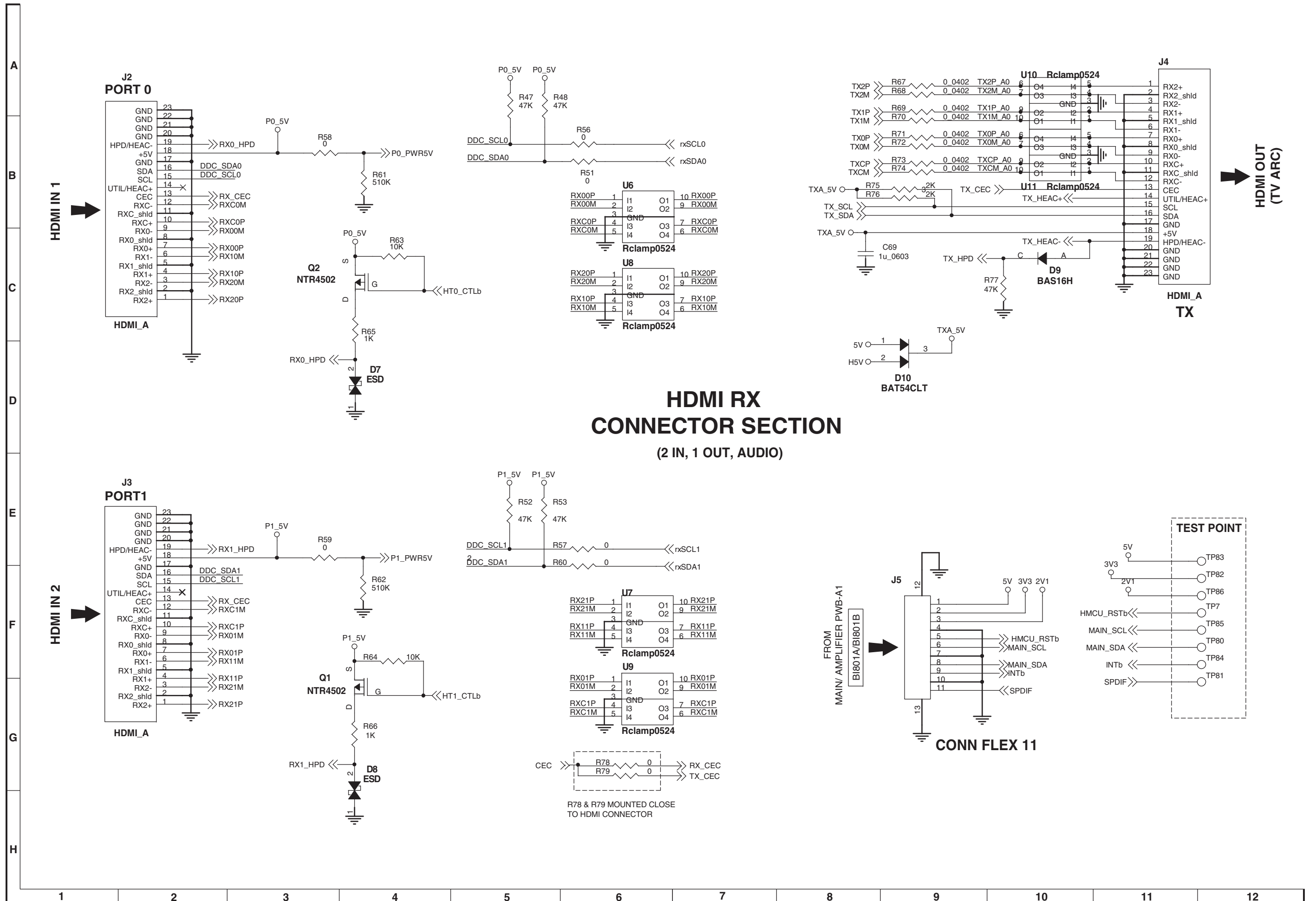


Figure 8-4: DISPLAY SCHEMATIC DIAGRAM



HDMI RX CONNECTOR SECTION
(2 IN, 1 OUT, AUDIO)

Figure 8-6: HDMI (RX CONNECTOR SECTION) SCHEMATIC DIAGRAM

[4] Chart Of Connecting Wires

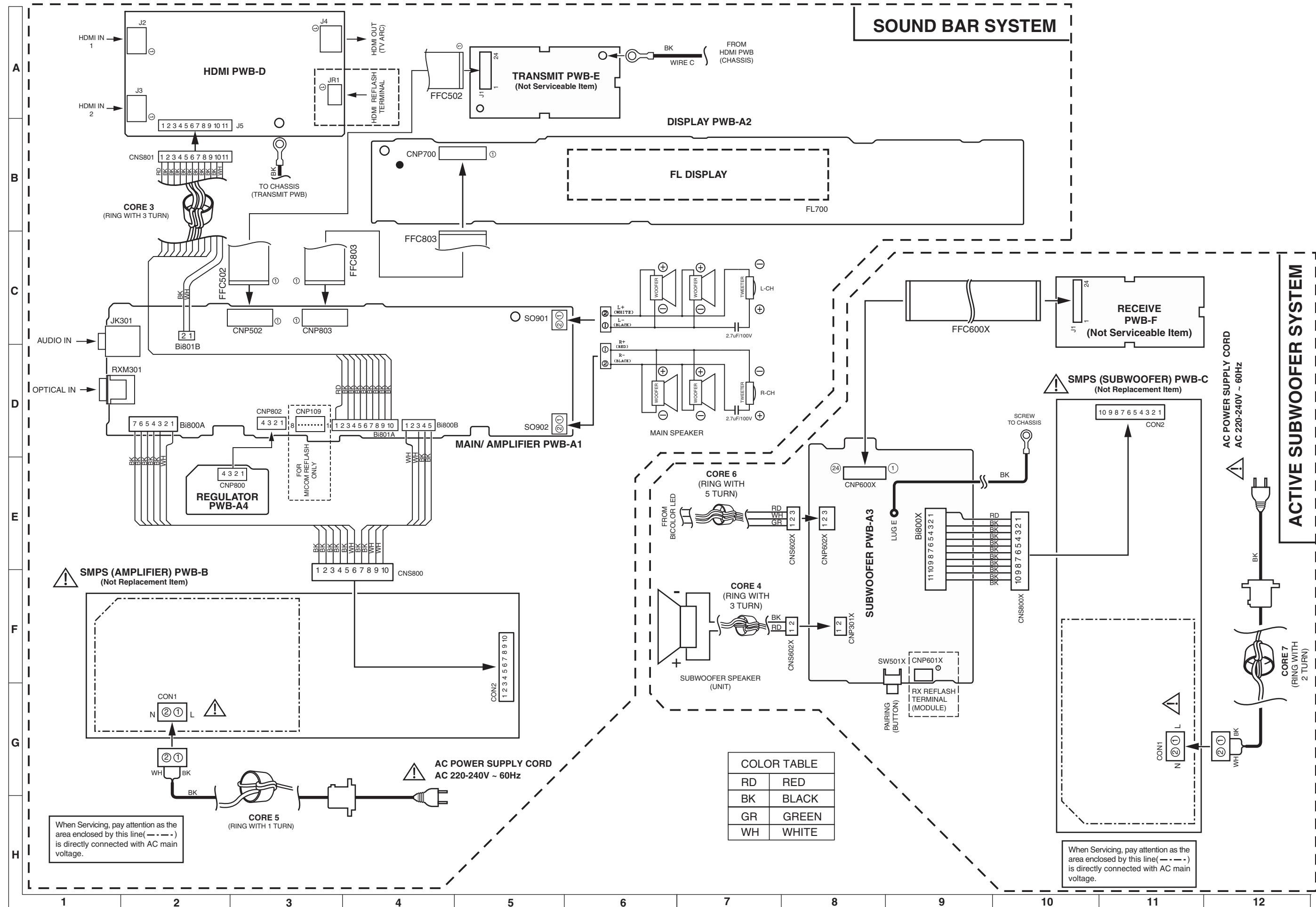


Figure 8-7: WIRING CONNECTION

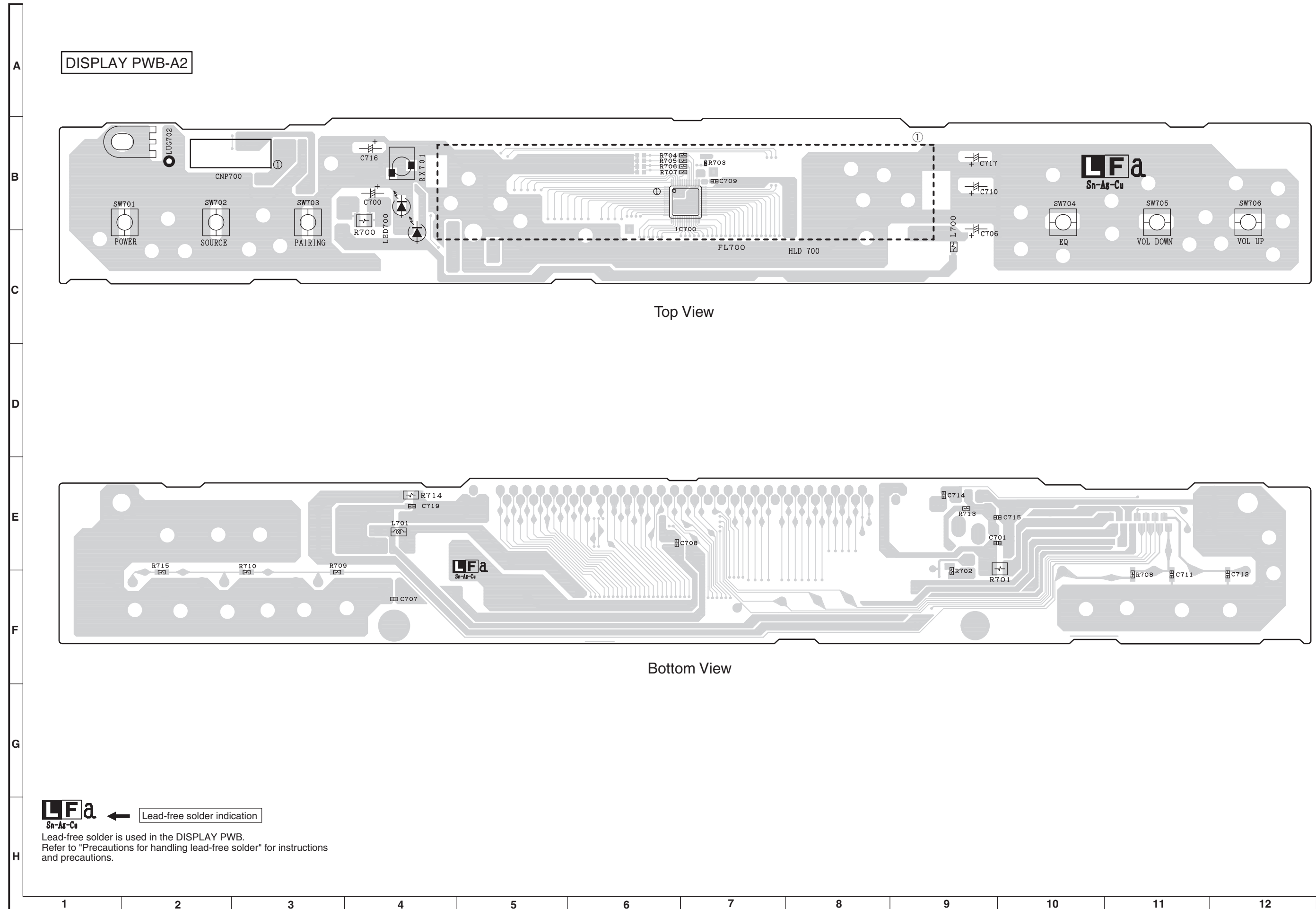


Figure 8-9: WIRING SIDE OF DISPLAY PWB

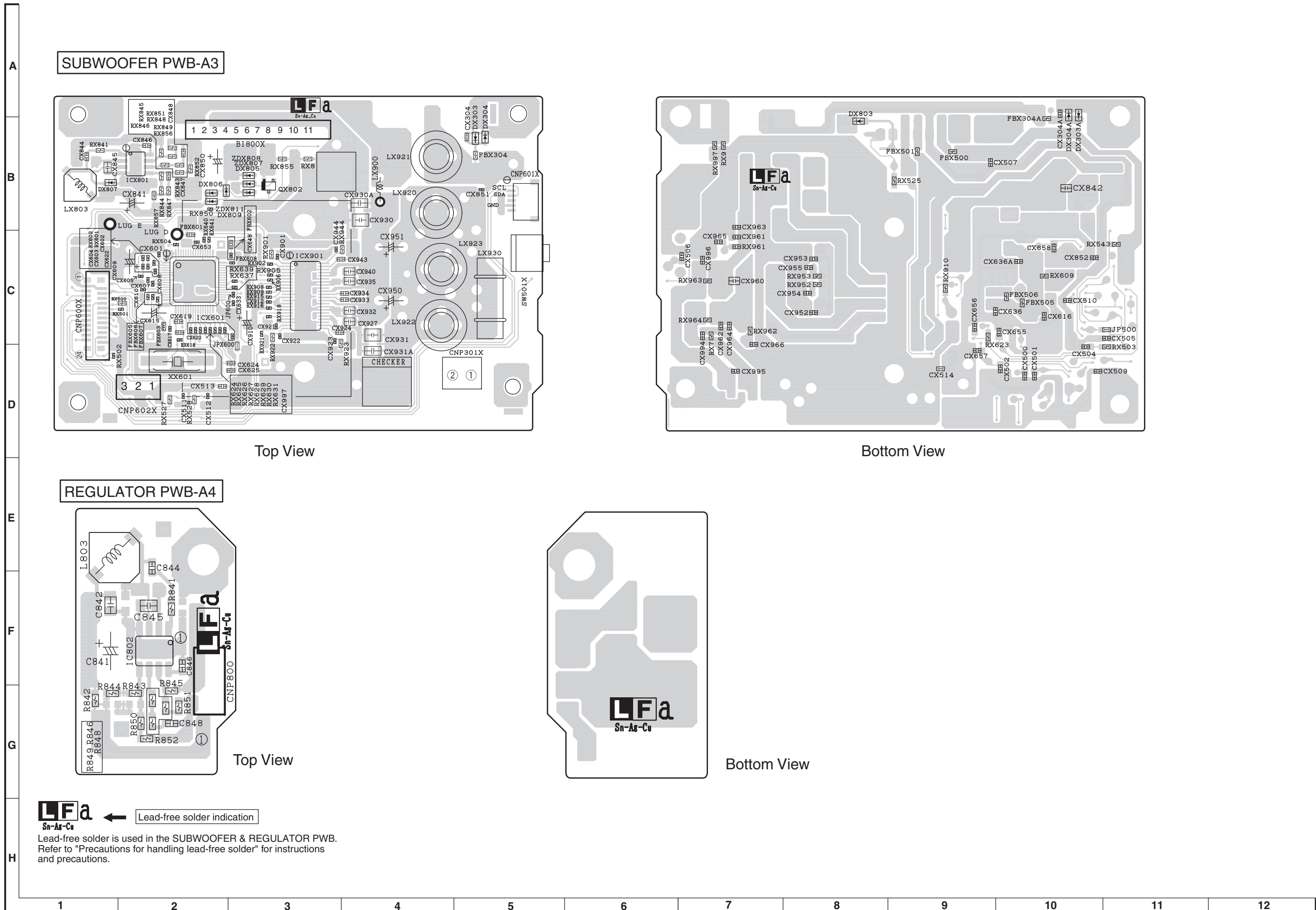


Figure 8-10: WIRING SIDE OF SUBWOOFER & REGULATOR PWB

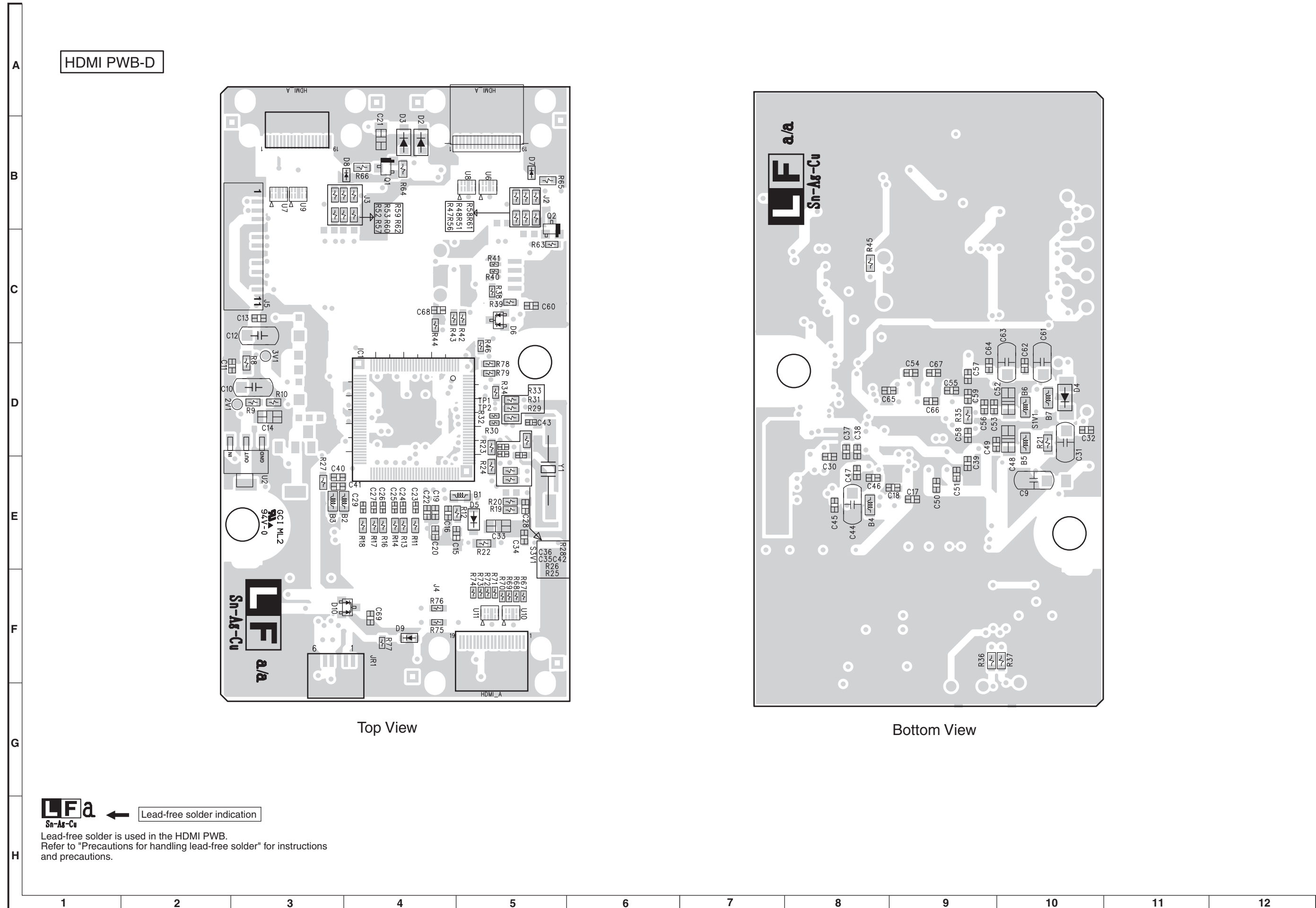


Figure 8-11: WIRING SIDE OF HDMI PWB

SHARP PARTS GUIDE

SOUND BAR HOME THEATER SYSTEM

MODEL **HT-SB60**

[For Europe, U.K.]

HT-SB60 Sound Bar Home Theater system consisting of HT-SB60 (sound bar system) and CP-SW60 (active subwoofer system).

CONTENTS

- | | |
|--------------------------|----------------------------------|
| [1] INTEGRATED CIRCUITS | [7] RESISTORS |
| [2] TRANSISTORS | [8] OTHER CIRCUITRY PARTS |
| [3] DIODES | [9] SOUND BAR PARTS |
| [4] COILS | [10] ACTIVE SUBWOOFER PARTS |
| [5] CRYSTALS / VIBRATORS | [11] ACCESSORIES / PACKING PARTS |
| [6] CAPACITORS | [12] P.W.B. ASSEMBLY |

Explanation of capacitors/resistors parts codes

Capacitors

VCC	Ceramic type
VCK	Ceramic type
VCT	Semiconductor type
VC •• MF	Cylindrical type (without lead wire)
VC •• MN	Cylindrical type (without lead wire)
VC •• TV	Square type (without lead wire)
VC •• TQ	Square type (without lead wire)
VC •• CY	Square type (without lead wire)
VC •• CZ	Square type (without lead wire)
VC •••••••• J ..	The 13th character represents capacity difference. ("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%, "C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD	Carbon-film type
VRS	Carbon-film type
VRN	Metal-film type
VR •• MF	Cylindrical type (without lead wire)
VR •• MN	Cylindrical type (without lead wire)
VR •• TV	Square type (without lead wire)
VR •• TQ	Square type (without lead wire)
VR •• CY	Square type (without lead wire)
VR •• CZ	Square type (without lead wire)
VR •••••••• J ..	The 13th character represents error. ("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

Explanation of PWB Assembly parts code category

- S Category -- Repair (Component parts of PWB can be replace and repair, PWB no supply)
- X Category -- Replacement (PWB can not be repair. Component parts no supply)
- S.X Category -- Repair and Replacement (PWB can repair and replace)
- KG Category -- Revolve repair by Business Center (Return to Business Center and repair by manufacturer. Component parts no supply)

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

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The contents are subject to change without notice.

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[1] INTEGRATED CIRCUITS					
iC1	VHiEP92A2E+-1	BA			HDMI IC
iC100	VHiCS495314-1	BB			Display IC
iC101	VHiCS8416CN-1	AR			DIR, CS8416CN
iC102	RH-iXA365AWZZ	AL			SDRAM 16MB IC
iC301	VHiPCM1808P-1	AH			Single Ended Analog
iC500	RH-iXA348AW00	AV			System Microcomputer, iXA348AW
iC501	VHiPST8227U-1	AC			Reset IC, 2.7V
iC502	VHiNJM12904-1	AE			Operational Amplifier
iC601	VHiTAS5504A-1	AR			Digital Audio PWM
iC700	VHiHT165235-1	AM			FL Driver
iC801	VHi3464A33N-1	AC			Voltage Regulator, 3.3V
iC802	VHiMP2301E+-1	AG			DC-DC Converter, MP2301E
iC803	VHiMC33063A-1	AE			DC-DC Converter, 18V
iC804	VHiUTC1117Y33	AD			Voltage Regulator, 3.3V
iC805	VHi3464A18N-1	AC			Voltage Regulator
iC806	VHiUTC1117Y33	AD			Voltage Regulator, 3.3V
iC808	VHi3464A40N-1	AC			Voltage Regulator, 4V
iC809	VHi3464A40N-1	AC			Voltage Regulator, 4V
iC901	VHiTAS5342L-1	AR			Digital Amplifier
iCX601	VHiTAS5504A-1	AR			Digital Audio PWM
iCX801	VHiMP2301E+-1	AG			DC-DC Converter, MP2301E
iCX901	VHiTAS5342L-1	AR			Digital Amplifier
U2	VHiUTC1117YA1	AD			Voltage Regulator, 7V
[2] TRANSISTORS					
Q1	VSKMB3DP30S-1	AD			Switching Transistor
Q2	VSKMB3DP30S-1	AD			Switching Transistor
Q500	VSKRC104S//-1	AC			Digital, PNP, KRC104S
Q501	VSKRC104S//-1	AC			Digital, PNP, KRC104S
Q601	VSKRC102S//-1	AB			Digital, PNP, KRC102S
Q602	VSKRC102S//-1	AB			Digital, PNP, KRC102S
Q801	VSKRC104S//-1	AC			Digital, PNP, KRC104S
Q830	VSKTA1544T/-1	AD			Silicon, PNP, KTA1544 T
Q831	VSKRC102S//-1	AB			Digital, PNP, KRC102S
Q832	VSKTA1544T/-1	AB			Silicon, PNP, KTA1544 T
Q833	VSKRC102S//-1	AB			Digital, PNP, KRC102S
QX802	VSKRC104S//-1	AB			Digital, PNP, KRC104S
[3] DIODES					
D2	VHDBAT54H+-1	AB			Schottky Barrier
D3	VHDBAT54H+-1	AB			Schottky Barrier
D4	VHDRB056L40-1	AC			Schottky Barrier
D5	VHDBAT54H+-1	AB			Schottky Barrier
D6	VHDSBAT54C/-1	AB			Schottky Barrier
D7	RH-VXA005AFZZ	AC			Array Diode
D8	RH-VXA005AFZZ	AC			Array Diode
D9	VHDBAS16H+-1	AB			Switching Diode
D10	VHDSBAT54C/-1	AB			Schottky Barrier
D304	VHDDA1010+-1	AB			Silicon, DA1010
D305	VHDDA1010+-1	AB			Silicon, DA1010
D500	VHDDA1010+-1	AB			Silicon, DA1010
D501	VHDDA1010+-1	AB			Silicon, DA1010
D502	VHDDA1010+-1	AB			Silicon, DA1010
D508	VHDDA1010+-1	AB			Silicon, DA1010
D560	VHDDA1010+-1	AB			Silicon, DA1010
D561	VHDDA1010+-1	AB			Silicon, DA1010
D570	VHDDA1010+-1	AB			Silicon, DA1010
D801	VHDDA1010+-1	AB			Silicon, DA1010
D803	VHDDA1010+-1	AB			Silicon, DA1010
D804	VHDDA1010+-1	AB			Silicon, DA1010
D805	VHDDA1010+-1	AB			Silicon, DA1010
D806	VHDDA1010+-1	AB			Silicon, DA1010
D810	VHDDA1010+-1	AB			Silicon, DA1010
D812	VHDDA1010+-1	AB			Silicon, DA1010
D813	VHDDA1010+-1	AB			Silicon, DA1010
D900	VHDDA1010+-1	AB			Silicon, DA1010
D901	VHDDA1010+-1	AB			Silicon, DA1010
DM100	VHDKDS226//-1	AB			Silicon, KDS226
DM101	VHDKDS226//-1	AB			Silicon, KDS226
DX303A	VHDDA1010+-1	AB			Silicon, DA1010
DX304A	VHDDA1010+-1	AB			Silicon, DA1010
DX803	VHDDA1010+-1	AB			Silicon, DA1010
DX805	VHDDA1010+-1	AB			Silicon, DA1010
DX806	VHDDA1010+-1	AB			Silicon, DA1010
DX809	VHDDA1010+-1	AB			Silicon, DA1010
DZ501	RH-EXA738WJQZ	AB			Zener
DZ801	VHDSS14A+-1	AC			Silicon, SS14A
DZ803	RH-EXA701WJQZ	AB			Zener, 6.8V
DZ804	RH-EXA694WJQZ	AB			Silicon,SS14A
DZ805	RH-EXA716WJQZ	AB			Zener
DZ806	RH-EXA694WJQZ	AB			Silicon,SS14A
DZ807	RH-EXA701WJQZ	AB			Zener, 6.8V
LED700	VHPSLR343VC3F	AC			LED, Red
U6	RH-VXA003AWZZ	AE			Array
U7	RH-VXA003AWZZ	AE			Array
U8	RH-VXA003AWZZ	AE			Array
U9	RH-VXA003AWZZ	AE			Array

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[3] DIODES					
U10	RH-VXA003AWZZ	AE			Array
U11	RH-VXA003AWZZ	AE			Array
ZD563	RH-EXA686WJQZ	AB			Zener, 3.3V
ZDX807	RH-EXA716WJQZ	AB			Zener
ZDX808	RH-EXA701WJQZ	AB			Zener, 6.8V
ZDX811	RH-EXA694WJQZ	AB			Silicon,SS14A
[4] COILS					
B1	RBLN-A009AWZZ	AA			Ferrite Bead, 300ohms
B2	RBLN-A009AWZZ	AA			Ferrite Bead, 300ohms
B3	RBLN-A009AWZZ	AA			Ferrite Bead, 300ohms
B4	RBLN-A009AWZZ	AA			Ferrite Bead, 300ohms
B5	RBLN-A009AWZZ	AA			Ferrite Bead, 300ohms
B6	RBLN-A009AWZZ	AA			Ferrite Bead, 300ohms
B7	RBLN-A009AWZZ	AA			Ferrite Bead, 300ohms
CORE1	RCORFA015AWZZ	AD			Ferrite Core, Ring
CORE2	RCORFA015AWZZ	AD			Ferrite Core, Ring
CORE3	RCORFA015AWZZ	AD			Ferrite Core, Ring
CORE4	RCORFA015AWZZ	AD			Ferrite Core, Ring
CORE5	RCORFA025AWZZ	AF			Ferrite Core, Ring
CORE6	RCORFA027AWZZ	AD			Ferrite Core, Ring
CORE7	RCORFA033AWZZ	AG			Ferrite Core, Ring
FB304	RBLN-A010AWZZ	AA			Ferrite Bead, 1 kohms
FB601	RFiLN5044NCPZ	AB			Ferrite Bead
FB602	RBLN-A012AWZZ	AB			Ferrite Bead
FB603	RBLN-A012AWZZ	AB			Ferrite Bead
FB604	RBLN-A012AWZZ	AB			Ferrite Bead
FB800	RBLN-A367WJQZ	AB			Chip Ferrite Bead
FB803	RBLN-A367WJQZ	AB			Chip Ferrite Bead
FBX500	RFiLN5044NCPZ	AB			Ferrite Bead
FBX501	RFiLN5044NCPZ	AB			Ferrite Bead
FBX505	RBLN-A012AWZZ	AB			Ferrite Bead
FBX506	RBLN-A012AWZZ	AB			Ferrite Bead
FBX601	RFiLN5044NCPZ	AB			Ferrite Bead
FBX602	RFiLN5044NCPZ	AB			Ferrite Bead
FBX603	RBLN-0051TAZZ	AA			Chip Ferrite Bead
FBX605	RBLN-0258TAZZ	AA			Coil
FBX606	RBLN-0258TAZZ	AA			Coil
FBX607	RBLN-0258TAZZ	AA			Coil
FBX608	RFiLNA023AFZZ	AB			Ferrite Bead
JP801	RBLN-0077TAZZ	AB			Balun
L100	RBLN-0061TAZZ	AB			Balun
L101	VPBNN2R2K0000	AC			Peaking Coill, 2.2 µH
L310	VPBNN2R2K0000	AC			Peaking Coill, 2.2 µH
L500	VPBNN100K0000	AC			Peaking Coill, 10 µH
L501	VPBNN4R7K0000	AC			Peaking Coill, 4.7 µH
L800	RBLN-A367WJQZ	AB			Chip Ferrite Bead
L801	RCiLZA100AWZZ	AF			Coil, 150 µH
L803	RCiLZA098AWZZ	AE			Coil, 10 µH
L901	RCORF0015AWZZ	AB			Coil, 10 µH
L921	RCiLZA089AWZZ	AF			Coil, 10µH
L922	RCiLZA089AWZZ	AF			Coil, 10µH
L923	RCiLZA089AWZZ	AF			Coil, 10µH
L924	RCiLZA089AWZZ	AF			Coil, 10µH
L930	RCiLZ0055AWZZ	AH			Coil
L931	RCiLZ0055AWZZ	AH			Coil
LX803	RCiLZA098AWZZ	AE			Coil, 10 µH
LX900	RCORF0015AWZZ	AB			Coil, 10 µH
LX920	RCiLZA083AWZZ	AF			Coil, 15µH
LX921	RCiLZA083AWZZ	AF			Coil, 15µH
LX922	RCiLZA083AWZZ	AF			Coil, 15µH
LX923	RCiLZA083AWZZ	AF			Coil, 15µH
LX930	RCiLZ0055AWZZ	AH			Coil
R121	RBLN-A268WJZZ	AB			Balun
R126	RBLN-A268WJZZ	AB			Balun
R128	RBLN-0077TAZZ	AB			Balun
R131	RFiLNA023AFZZ	AB			Ferrite Bead
R146	RFiLNA023AFZZ	AB			Ferrite Bead
R183	RBLN-A268WJZZ	AB			Balun
R184	RBLN-A268WJZZ	AB			Balun
R185	RBLN-A268WJZZ	AB			Balun
R186	RBLN-A268WJZZ	AB			Balun
R187	RBLN-A268WJZZ	AB			Balun
R188	RBLN-A268WJZZ	AB			Balun
R189	RBLN-A268WJZZ	AB			Balun
R190	RBLN-A268WJZZ	AB			Balun
R191	RBLN-A268WJZZ	AB			Balun
R192	RBLN-A268WJZZ	AB			Balun
R193	RBLN-A268WJZZ	AB			Balun
R194	RBLN-A268WJZZ	AB			Balun
R195	RBLN-A268WJZZ	AB			Balun
R196	RBLN-A268WJZZ	AB			Balun
R197	RBLN-A268WJZZ	AB			Balun
R315	RBLN-A010AWZZ	AA			Ferrite Bead, 1 kohms
R513	RBLN-0110TAZZ	AA			Ferrite Bead
R514	RBLN-0110TAZZ	AA			Ferrite Bead
R592	RCiLZA152AFZZ	AB			Coil
R624	RBLN-0006TAZZ	AA			Balun

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[4] COILS					
R625	RBLN-0006TAZZ	AA			Balun
R626	RBLN-0006TAZZ	AA			Balun
R627	RBLN-0006TAZZ	AA			Balun
R631	RBLN-0006TAZZ	AA			Balun
R840	RBLN-A013AWZZ	AC			Ferrite Bead
R842	RBLN-A367WJQZ	AB			Chip Ferrite Bead
RX624	RBLN-0258TAZZ	AA			Coil
RX625	RBLN-0258TAZZ	AA			Coil
RX626	RBLN-0258TAZZ	AA			Coil
RX627	RBLN-0258TAZZ	AA			Coil
RX631	RBLN-0258TAZZ	AA			Coil
[5] CRYSTALS / VIBRATORS					
X601	RCRSPA030AWZZ	AD			Crystal, 13.50 MHz
XM101	RCRSCA145WJZZ	AF			Crystal, 12.2880 MHz
XM501	RCRSC0032TAZZ	AE			Crystal, 32.768 KHz
XM502	RFILZA007WJZZ	AE			Resonator, 12MHz
XX601	RCRSPA030AWZZ	AD			Crystal, 13.50 MHz
Y1	RCRSPA031AWZZ	AE			Crystal, 18.432 MHz
[6] CAPACITORS					
C9	RC-KZA110WJZZ	AD			10 μ F, 25V
C10	RC-KZ3035AWZZ	AE			47 μ F, 10V, Electrolytic
C11	VCKYCY1HB104K	AD			0.1 μ F, 50V
C12	RC-KZ3035AWZZ	AE			47 μ F, 10V, Electrolytic
C13	VCKYCY1HB104K	AD			0.1 μ F, 50V
C14	RC-KZA110WJZZ	AD			10 μ F, 25V
C15	RC-KZA211WJZZ	AB			2.2 μ F, 25V
C16	VCKYCY1HB472K	AA			4700 pF, 50V
C17	RC-KZA114WJZZ	AB			1 μ F, 25V
C18	RC-KZA114WJZZ	AB			1 μ F, 25V
C19	RC-KZA114WJZZ	AB			1 μ F, 25V
C20	VCKYCY1HB104K	AD			0.1 μ F, 50V
C21	RC-KZA110WJZZ	AD			10 μ F, 25V
C22	RC-KZA114WJZZ	AB			1 μ F, 25V
C23	VCKYCZ1CB104K	AA			0.1 μ F, 16V
C24	VCKYCZ1CB104K	AA			0.1 μ F, 16V
C25	VCKYCZ1CB104K	AA			0.1 μ F, 16V
C26	VCKYCZ1CB104K	AA			0.1 μ F, 16V
C27	VCKYCZ1CB104K	AA			0.1 μ F, 16V
C28	VCCCCZ1HH101J	AB			100 pF (CH), 50V
C29	VCKYCZ1CB104K	AA			0.1 μ F, 16V
C30	VCKYCY1HB104K	AD			0.1 μ F, 50V
C31	RC-KZ3035AWZZ	AE			47 μ F, 10V, Electrolytic
C32	VCKYCY1HB104K	AD			0.1 μ F, 50V
C33	RC-KZA110WJZZ	AD			10 μ F, 25V
C34	VCKYCY1HB104K	AD			0.1 μ F, 50V
C35	VCKYCZ1AB105K	AA			1 μ F, 10V
C36	VCKYCZ1AB105K	AA			1 μ F, 10V
C37	VCKYCY1HB104K	AD			0.1 μ F, 50V
C38	VCKYCY1HB104K	AD			0.1 μ F, 50V
C39	VCKYCY1HB104K	AD			0.1 μ F, 50V
C40	VCKYCY1HB104K	AD			0.1 μ F, 50V
C41	VCKYCY1EB105K	AB			1 μ F, 25V
C42	VCCCCY1HH150J	AA			15 pF (CH), 50V
C43	VCCCCY1HH150J	AA			15 pF (CH), 50V
C44	RC-KZ3035AWZZ	AE			47 μ F, 10V, Electrolytic
C45	VCKYCY1HB104K	AD			0.1 μ F, 50V
C46	VCKYCY1HB104K	AD			0.1 μ F, 50V
C47	VCKYCY1HB104K	AD			0.1 μ F, 50V
C48	RC-KZ3028AWZZ	AE			22 μ F, 16V, Electrolytic
C49	VCKYCY1HB104K	AD			0.1 μ F, 50V
C50	VCKYCY1HB104K	AD			0.1 μ F, 50V
C51	VCKYCY1HB104K	AD			0.1 μ F, 50V
C52	RC-KZ3028AWZZ	AE			22 μ F, 16V, Electrolytic
C53	VCKYCY1HB104K	AD			0.1 μ F, 50V
C54	VCKYCY1HB104K	AD			0.1 μ F, 50V
C55	VCKYCY1HB104K	AD			0.1 μ F, 50V
C56	VCKYCY1HB104K	AD			0.1 μ F, 50V
C57	VCKYCY1HB104K	AD			0.1 μ F, 50V
C58	VCKYCY1HB104K	AD			0.1 μ F, 50V
C59	VCKYCY1HB104K	AD			0.1 μ F, 50V
C60	VCKYCY1HB104K	AD			0.1 μ F, 50V
C61	RC-KZ3035AWZZ	AE			47 μ F, 10V, Electrolytic
C62	VCKYCY1HB104K	AD			0.1 μ F, 50V
C63	RC-KZ3035AWZZ	AE			47 μ F, 10V, Electrolytic
C64	VCKYCY1HB104K	AD			0.1 μ F, 50V
C65	VCKYCY1HB104K	AD			0.1 μ F, 50V
C66	VCKYCY1HB104K	AD			0.1 μ F, 50V
C67	VCKYCY1HB104K	AD			0.1 μ F, 50V
C68	VCKYCZ1AB105K	AA			1 μ F, 10V
C69	RC-KZA114WJZZ	AB			1 μ F, 25V
C103	VCKYCZ1EB103K	AA			0.01 μ F, 25V
C112	VCKYCZ1CB223K	AB			0.022 μ F, 16V
C114	VCKYCZ1HB102K	AB			1000 pF, 50V
C115	VCEAZA1CW106M	AC			10 μ F, 16V, Electrolytic
C117	VCKYCZ1EF104Z	AA			0.1 μ F, 25V
C118	VCKYCZ1EB103K	AA			0.01 μ F, 25V

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[6] CAPACITORS					
C120	VCKYCZ1EB103K	AA			0.01 µF, 25V
C121	VCCCCZ1HH560J	AB			56 pF (CH), 50V
C123	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C124	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C127	VCKYCY1HB103K	AA			0.01 µF, 50V
C136	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C137	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C138	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C139	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C140	VCEAEA1CW106M	AB			10 µF, 16V, Electrolytic
C141	VCCCCZ1HH180J	AA			18 pF (CH), 50V
C142	VCCCCZ1HH220J	AA			22 pF (CH), 50V
C143	VCKYCY1HB104K	AD			0.1 µF, 50V
C144	VCCCCZ1HH470J	AB			47 pF (CH), 50V
C145	VCKYCY1HB104K	AD			0.1 µF, 50V
C146	VCKYCY1HB104K	AD			0.1 µF, 50V
C147	VCCCCZ1HH101J	AB			100 pF (CH), 50V
C148	VCKYCY1HB104K	AD			0.1 µF, 50V
C149	VCKYCY1HB104K	AD			0.1 µF, 50V
C150	VCEAZA1HW226M	AB			22 µF, 50V, Electrolytic
C151	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C152	VCEAZA1CW476M	AB			47 µF, 16V, Electrolytic
C153	VCKYCY1HB104K	AD			0.1 µF, 50V
C154	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C155	VCKYCY1HB104K	AD			0.1 µF, 50V
C156	VCKYCY1HB104K	AD			0.1 µF, 50V
C157	VCKYCY1HB104K	AD			0.1 µF, 50V
C158	VCKYCY1HB104K	AD			0.1 µF, 50V
C159	VCKYCY1HB104K	AD			0.1 µF, 50V
C160	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C161	VCKYCY1HB104K	AD			0.1 µF, 50V
C162	VCKYCY1HB104K	AD			0.1 µF, 50V
C163	VCKYCY1HB104K	AD			0.1 µF, 50V
C164	VCKYCY1HB104K	AD			0.1 µF, 50V
C165	VCKYCY1HB104K	AD			0.1 µF, 50V
C169	VCCCCZ1HH820J	AB			82 pF (CH), 50V
C170	VCCCCZ1HH820J	AB			82 pF (CH), 50V
C171	VCCCCZ1HH820J	AB			82 pF (CH), 50V
C177	VCCCCZ1HH101J	AB			100 pF (CH), 50V
C178	VCCCCZ1HH101J	AB			100 pF (CH), 50V
C179	VCCCCZ1HH330J	AB			33 pF (CH), 50V
C180	VCCCCZ1HH101J	AB			100 pF (CH), 50V
C181	VCKYCZ1EB103K	AA			0.01 µF, 25V
C182	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C190	VCCCCY1HH150J	AA			15 pF (CH), 50V
C300	VCKYCY1HB104K	AD			0.1 µF, 50V
C303	VCEAZA1HW475M	AB			4.7 µF, 50V, Electrolytic
C311	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C312	VCEAZA1CW106M	AC			10 µF, 16V, Electrolytic
C313	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C314	VCEAZA1CW336M	AB			33 µF, 16V, Electrolytic
C315	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C316	VCEAZA1CW107M	AC			100 µF, 16V, Electrolytic
C318	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C350	VCKYCZ1AB105K	AA			1 µF, 10V
C351	VCKYCY1HB473K	AB			0.047 µF, 50V
C352	VCCCCZ1HH100D	AA			10 pF (CH), 50V
C353	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C354	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C355	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C356	VCEAZA1CW476M	AB			47 µF, 16V, Electrolytic
C357	VCEAZA1CW476M	AB			47 µF, 16V, Electrolytic
C362	VCKYCY1HB331K	AA			330 pF, 50V
C363	VCKYCY1HB331K	AA			330 pF, 50V
C364	VCKYCY1HB104K	AD			0.1 µF, 50V
C365	VCEAZA1CW106M	AC			10 µF, 16V, Electrolytic
C366	VCEAZA1CW106M	AC			10 µF, 16V, Electrolytic
C502	RC-EZD106AF1C	AB			10 µF, 16V, Electrolytic
C503	VCKYCY1CF105Z	AB			1 µF, 16V
C504	RC-EZD106AF1C	AB			10 µF, 16V, Electrolytic
C505	VCCCCZ1HH100D	AA			10 pF (CH), 50V
C506	VCCCCZ1HH120J	AA			12 pF (CH), 50V
C508	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C509	VCEAZA1AW477M	AC			470 µF, 10V, Electrolytic
C510	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C511	VCKYCZ1EB103K	AA			0.01 µF, 25V
C512	VCEAZA1HW475M	AB			4.7 µF, 50V, Electrolytic
C513	VCKYCZ1EB103K	AA			0.01 µF, 25V
C514	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C515	VCEAEA1CW106M	AB			10 µF, 16V, Electrolytic
C517	VCEAZA1AW337M	AC			330 µF, 10V, Electrolytic
C518	VCEAZA1AW337M	AC			330 µF, 10V, Electrolytic
C601	VCKYCY1HB104K	AD			0.1 µF, 50V
C602	VCKYCY1HB103K	AA			0.01 µF, 50V
C603	VCKYCY1HB104K	AD			0.1 µF, 50V
C604	VCKYCY1HB104K	AD			0.1 µF, 50V
C605	VCKYCY1HB103K	AA			0.01 µF, 50V
C606	VCCCCY1HH330J	AA			33 pF (CH), 50V
C607	VCKYCY1HB104K	AD			0.1 µF, 50V

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[6] CAPACITORS					
C608	VCKYCY1HB104K	AD			0.1 µF,50V
C609	VCEAZA1CW106M	AC			10 µF, 16V, Electrolytic
C610	VCKYCY1HB102K	AA			1000 pF, 50V
C615	VCEAZA1CW106M	AC			10 µF, 16V, Electrolytic
C616	VCKYCY1HB104K	AD			0.1 µF,50V
C617	VCKYCY1HB104K	AD			0.1 µF,50V
C619	VCCCCZ1HH300J	AB			30 pF (CH), 50V
C620	VCCCCZ1HH300J	AB			30 pF (CH), 50V
C624	VCCCCY1HH390J	AA			39 pF (CH), 50V
C625	VCCCCY1HH390J	AA			39 pF (CH), 50V
C631	VCCCCY1HH330J	AA			33 pF (CH), 50V
C633	VCKYCY1HB104K	AD			0.1 µF,50V
C636	VCKYCY1HB104K	AD			0.1 µF,50V
C648	VCKYCY1HB104K	AD			0.1 µF,50V
C653	VCKYCY1HB104K	AD			0.1 µF,50V
C700	RC-EZY105AF1H	AB			1 µF, 50V
C701	VCKYCY1HB223K	AA			0.022 µF, 50V
C706	RC-EZY226AF1H	AB			22 µF, 50V, Electrolytic
C707	VCKYCY1HB104K	AD			0.1 µF,50V
C708	VCKYCY1HB104K	AD			0.1 µF,50V
C709	VCKYCY1HB271K	AA			270 pF (CH), 50V
C710	RC-EZY474AF1H	AB			0.47 µF, 50V
C711	VCCCCY1HH222J	AB			2200 pF, 50V
C712	VCCCCY1HH222J	AB			2200 pF, 50V
C714	VCCCCY1HH151J	AA			150 pF (CH), 50V
C715	VCKYCY1HB223K	AA			0.022 µF, 50V
C716	RC-EZD476AF1C	AC			47 µF, 16V, Electrolytic
C717	RC-EZY105AF1H	AB			1 µF, 50V
C719	VCKYCY1HB223K	AA			0.022 µF, 50V
C831	VCCCCY1HH330J	AA			33 pF (CH), 50V
C832	VCCCCY1HH330J	AA			33 pF (CH), 50V
C833	VCKYCY1HB103K	AA			0.01 µF, 50V
C834	VCKYCZ1AB105K	AA			1 µF, 10V
C835	VCKYCZ1AB105K	AA			1 µF, 10V
C836	VCKYCY1HB103K	AA			0.01 µF, 50V
C841	VCEAZA1CW477M	AC			470 µF, 16V, Electrolytic
C842	VCKYTV1EB106K	AC			10 µF, 50V
C844	VCKYCY1HB104K	AD			0.1 µF,50V
C845	VCKYTV1EB106K	AC			10 µF, 50V
C846	VCKYCY1HB104K	AD			0.1 µF,50V
C848	VCKYCY1HB821K	AA			820 pF (CH), 50V
C850	VCKYCY1HB104K	AD			0.1 µF,50V
C851	VCKYCZ1AB105K	AA			1 µF, 10V
C852	VCKYCY1HB104K	AD			0.1 µF,50V
C853	VCKYCY1HB104K	AD			0.1 µF,50V
C854	VCKYCZ1AB105K	AA			1 µF, 10V
C855	VCKYCY1HB104K	AD			0.1 µF,50V
C856	VCEAZA1CW226M	AC			22 µF, 16V, Electrolytic
C857	VCEAZA1HW226M	AB			22 µF, 50V, Electrolytic
C858	VCKYCY1CF105Z	AB			1 µF, 16V
C859	VCKYCY1CF105Z	AB			1 µF, 16V
C860	VCKYCY1HB104K	AD			0.1 µF,50V
C861	VCEAZA1EW107M	AB			100 µF, 25V, Electrolytic
C862	VCKYTV1HB331K	AA			330 pF (CH), 50V
C863	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C864	VCEAZA1HW477M	AC			470 µF, 50V, Electrolytic
C870	VCKYCY1CF105Z	AB			1 µF, 16V
C871	VCKYCY1CF105Z	AB			1 µF, 16V
C900	VCKYCY1HB104K	AD			0.1 µF,50V
C901	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C910	RC-EZD226AF1C	AB			22 µF, 16V, Electrolytic
C912	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C921	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C922	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C923	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C924	VCKYCY1CF334Z	AA			0.33 µF, 16V
C927	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C932	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C933	VCKYCY1CF334Z	AA			0.33 µF, 16V
C934	VCKYCY1CF334Z	AA			0.33 µF, 16V
C935	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C940	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C943	VCKYCY1CF334Z	AA			0.33 µF, 16V
C944	VCKYCZ1EF104Z	AA			0.1 µF, 25V
C950	VCEAZA1JW227M	AD			220 µF, 63V, Electrolytic
C951	VCEAZA1JW227M	AD			220 µF, 63V, Electrolytic
C952	VCKYCY1HB104K	AD			0.1 µF,50V
C953	VCKYCY1HB104K	AD			0.1 µF,50V
C954	VCKYCY1HB103K	AA			0.01 µF, 50V
C955	VCKYCY1HB103K	AA			0.01 µF, 50V
C960	VCKYCY1EF474Z	AA			0.47 µF, 25V
C961	VCKYCY1HB104K	AD			0.1 µF,50V
C962	VCKYCY1HB104K	AD			0.1 µF,50V
C963	VCKYCY1HB102K	AA			1000 pF, 50V
C964	VCKYCY1HB102K	AA			1000 pF, 50V
C965	VCKYCY1HB103K	AA			0.01 µF, 50V
C966	VCKYCY1HB103K	AA			0.01 µF, 50V
C980	VCKYCY1EF474Z	AA			0.47 µF, 25V
C981	VCKYCY1HB104K	AD			0.1 µF,50V

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[6] CAPACITORS					
C982	VCKYCY1HB104K	AD			0.1 µF,50V
C983	VCKYCY1HB102K	AA			1000 pF, 50V
C984	VCKYCY1HB102K	AA			1000 pF, 50V
C985	VCKYCY1HB103K	AA			0.01 µF, 50V
C986	VCKYCY1HB103K	AA			0.01 µF, 50V
C990	VCKYCY1HB104K	AD			0.1 µF,50V
C991	VCKYCY1HB104K	AD			0.1 µF,50V
C992	VCKYCY1HB104K	AD			0.1 µF,50V
C994	VCKYCY1HB104K	AD			0.1 µF,50V
C995	VCKYCY1HB104K	AD			0.1 µF,50V
C996	VCKYCY1HB104K	AD			0.1 µF,50V
CA16	VCEAZA1AW227M	AC			220 µF, 10V, Electrolytic
CA17	VCKYCY1HB103K	AA			0.01 µF, 50V
CA18	VCKYCY1HB104K	AD			0.1 µF,50V
CA19	VCKYCY1HB104K	AD			0.1 µF,50V
CA4	VCKYCY1HB104K	AD			0.1 µF,50V
CA5	VCKYCY1HB104K	AD			0.1 µF,50V
CA6	VCKYCY1HB104K	AD			0.1 µF,50V
CA7	VCKYCY1HB104K	AD			0.1 µF,50V
CA8	VCKYCY1HB104K	AD			0.1 µF,50V
CX304A	VCKYCY1HB104K	AD			0.1 µF,50V
CX500	VCCCCY1HH470J	AA			47 pF(CH), 50V
CX501	VCCCCY1HH470J	AA			47 pF(CH), 50V
CX502	VCCCCY1HH470J	AA			47 pF(CH), 50V
CX504	VCCCCY1HH470J	AA			47 pF(CH), 50V
CX506	VCCCCY1HH220J	AA			22 pF (CH), 50V
CX507	VCKYCY1HB104K	AD			0.1 µF,50V
CX509	VCKYCY1HB104K	AD			0.1 µF,50V
CX510	VCKYCY1HB104K	AD			0.1 µF,50V
CX511	VCCCCZ1HH330J	AB			33 pF (CH), 50V
CX512	VCCCCZ1HH330J	AB			33 pF (CH), 50V
CX513	VCKYCY1HB104K	AD			0.1 µF,50V
CX514	VCKYCY1HB104K	AD			0.1 µF,50V
CX601	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX602	VCKYCZ1EB103K	AA			0.01 µF, 25V
CX603	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX604	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX605	VCKYCZ1EB103K	AA			0.01 µF, 25V
CX607	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX608	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX609	VCEAZA1CW106M	AC			10 µF, 16V, Electrolytic
CX610	VCKYCZ1HB102K	AB			1000 pF, 50V
CX615	VCEAZA1CW106M	AC			10 µF, 16V, Electrolytic
CX616	VCKYCY1HB104K	AD			0.1 µF,50V
CX617	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX619	VCCCCY1HH300J	AA			30 pF (CH), 50V
CX620	VCCCCY1HH300J	AA			30 pF (CH), 50V
CX624	VCCCCY1HH390J	AA			39 pF (CH), 50V
CX625	VCCCCY1HH390J	AA			39 pF (CH), 50V
CX633	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX636	VCKYCY1HB104K	AD			0.1 µF,50V
CX648	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX653	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX655	VCCCCY1HH330J	AA			33 pF (CH), 50V
CX656	VCCCCY1HH330J	AA			33 pF (CH), 50V
CX657	VCCCCY1HH330J	AA			33 pF (CH), 50V
CX658	VCCCCY1HH330J	AA			33 pF (CH), 50V
CX841	VCEAZA1CW477M	AC			470 µF, 16V, Electrolytic
CX842	VCKYTV1EB106K	AC			10 µF, 50V
CX844	VCKYCY1HB104K	AD			0.1 µF,50V
CX845	VCKYTV1EB106K	AC			10 µF, 50V
CX846	VCKYCY1HB104K	AD			0.1 µF,50V
CX848	VCKYCY1HB821K	AA			820 pF (CH), 50V
CX850	VCEAZA1AW227M	AC			220 µF, 10V, Electrolytic
CX851	VCKYCZ1AB474K	AA			0.47 µF, 10V
CX852	VCKYCY1HB104K	AD			0.1 µF,50V
CX901	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX910	RC-EZD226AF1C	AB			22 µF, 16V, Electrolytic
CX912	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX921	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX922	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX923	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX924	VCKYCY1HB333K	AB			0.033 µF, 50V
CX927	RC-KZA733WJZZ	AC			0.1 µF, 50V
CX930A	RC-KZA815WJQZ	AD			4.7 µF, 50V
CX931A	RC-KZA815WJQZ	AD			4.7 µF, 50V
CX932	RC-KZA733WJZZ	AC			0.1 µF, 50V
CX933	VCKYCY1HB333K	AB			0.033 µF, 50V
CX934	VCKYCY1HB333K	AB			0.033 µF, 50V
CX935	RC-KZA733WJZZ	AC			0.1 µF, 50V
CX940	RC-KZA733WJZZ	AC			0.1 µF, 50V
CX943	VCKYCY1HB333K	AB			0.033 µF, 50V
CX944	VCKYCZ1EF104Z	AA			0.1 µF, 25V
CX950	VCEAZA1JW227M	AD			220 µF, 63V, Electrolytic
CX951	VCEAZA1JW227M	AD			220 µF, 63V, Electrolytic
CX952	VCKYCY1HB104K	AD			0.1 µF,50V
CX953	VCKYCY1HB104K	AD			0.1 µF,50V
CX954	VCKYCY1HB103K	AA			0.01 µF, 50V
CX955	VCKYCY1HB103K	AA			0.01 µF, 50V

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[6] CAPACITORS					
CX960	RC-KZA733WJZZ	AC			0.1 µF, 50V
CX961	VCKYCY1HB104K	AD			0.1 µF,50V
CX962	VCKYCY1HB104K	AD			0.1 µF,50V
CX963	VCKYCY1HB102K	AA			1000 pF, 50V
CX964	VCKYCY1HB102K	AA			1000 pF, 50V
CX965	VCKYCY1HB103K	AA			0.01 µF, 50V
CX966	VCKYCY1HB103K	AA			0.01 µF, 50V
CX994	VCKYCY1HB104K	AD			0.1 µF,50V
CX995	VCKYCY1HB104K	AD			0.1 µF,50V
CX996	VCKYCY1HB104K	AD			0.1 µF,50V
CX997	VCCCCZ1HH330J	AB			33 pF (CH), 50V
RX9	VCKYCY1HB104K	AD			0.1 µF,50V
[7] RESISTORS					
FB100	VRS-CY1JB821J	AA			820 ohm, 1/16W
FB314	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
FBX304A	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
JP2	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
JP5	VRS-TQ2EF000J	AA			0 ohm, Jumper
JP6	VRS-TQ2EF000J	AA			0 ohm, Jumper
JP7	VRS-TQ2EF000J	AA			0 ohm, Jumper
JP8	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
JP10	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
JP500	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
JP501	VRS-CZ1JB000J	AB			0 ohm, Jumper
JP800	VRS-TQ2EF000J	AA			0 ohm, Jumper
JM2	VRS-CZ1JB000J	AB			0 ohm, Jumper
L700	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
L701	VRS-TQ2EF000J	AA			0 ohm, Jumper
L900	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
R8	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
R9	VRS-CY1JB471J	AA			470 ohm, 1/16W
R10	VRS-CY1JB331J	AA			330 ohm, 1/16W
R11	VRSCY1JB4990F	AA			499 ohm, 1/16W
R12	VRS-CY1JF202F	AA			2 kohm, 1/16W
R13	VRSCY1JB4990F	AA			499 ohm, 1/16W
R14	VRSCY1JB4990F	AA			499 ohm, 1/16W
R16	VRSCY1JB4990F	AA			499 ohm, 1/16W
R17	VRSCY1JB4990F	AA			499 ohm, 1/16W
R18	VRSCY1JB4990F	AA			499 ohm, 1/16W
R19	VRS-CY1JB680J	AA			68 ohm, 1/16W
R20	VRS-CY1JB103F	AA			10 kohm,1/16W
R21	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
R22	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
R23	VRSCY1JB49R9F	AA			49.9 ohm, 1/16W
R24	VRSCY1JB49R9F	AA			49.9 ohm, 1/16W
R25	VRS-CY1JB202J	AA			2 kohm, 1/16W
R26	VRS-CY1JB202J	AA			2 kohm, 1/16W
R27	VRS-CY1JB331J	AA			330 ohm, 1/16W
R28	VRS-CY1JB105J	AA			1 Mohm, 1/16W
R29	VRS-CY1JB103F	AA			10 kohm,1/16W
R30	VRS-CZ1JB000J	AB			0 ohm, Jumper
R31	VRS-CY1JB103F	AA			10 kohm,1/16W
R32	VRS-CZ1JB000J	AB			0 ohm, Jumper
R33	VRS-CY1JB103F	AA			10 kohm,1/16W
R34	VRS-CY1JB103F	AA			10 kohm,1/16W
R35	VRS-CY1JB471J	AA			470 ohm, 1/16W
R36	VRS-CY1JB103F	AA			10 kohm,1/16W
R37	VRS-CY1JB103F	AA			10 kohm,1/16W
R38	VRS-CY1JB202J	AA			2 kohm, 1/16W
R39	VRS-CY1JB202J	AA			2 kohm, 1/16W
R40	VRS-CZ1JB000J	AB			0 ohm, Jumper
R41	VRS-CZ1JB000J	AB			0 ohm, Jumper
R42	VRS-CY1JB202J	AA			2 kohm, 1/16W
R43	VRS-CY1JB202J	AA			2 kohm, 1/16W
R44	VRS-CY1JB102F	AA			1 kohm, 1/16W
R45	VRS-CY1JB103F	AA			10 kohm,1/16W
R46	VRS-CY1JB273F	AA			27 kohm,1/16W
R47	VRS-CY1JB473J	AA			47 kohm, 1/16W
R48	VRS-CY1JB473J	AA			47 kohm, 1/16W
R51	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R52	VRS-CY1JB473J	AA			47 kohm, 1/16W
R53	VRS-CY1JB473J	AA			47 kohm, 1/16W
R56	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R57	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R58	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R59	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R60	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R61	VRS-CY1JF514J	AA			510 kohm, 1/16W
R62	VRS-CY1JF514J	AA			510 kohm, 1/16W
R63	VRS-CY1JB103F	AA			10 kohm,1/16W
R64	VRS-CY1JB103F	AA			10 kohm,1/16W
R65	VRS-CY1JB102F	AA			1 kohm, 1/16W
R66	VRS-CY1JB102F	AA			1 kohm, 1/16W
R67	VRS-CZ1JB000J	AB			0 ohm, Jumper
R68	VRS-CZ1JB000J	AB			0 ohm, Jumper
R69	VRS-CZ1JB000J	AB			0 ohm, Jumper
R70	VRS-CZ1JB000J	AB			0 ohm, Jumper

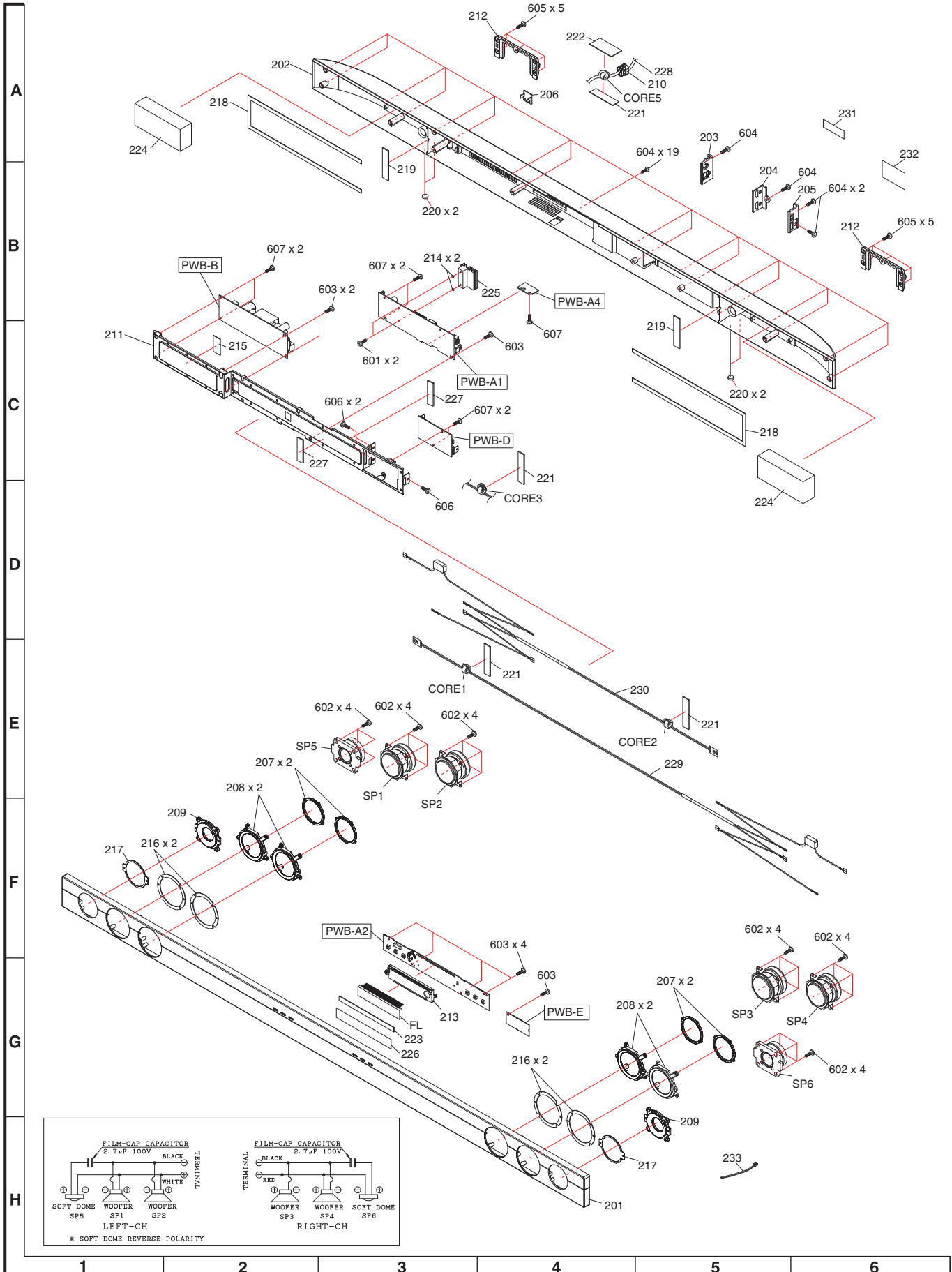
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[7] RESISTORS					
R71	VRS-CZ1JB000J	AB			0 ohm, Jumper
R72	VRS-CZ1JB000J	AB			0 ohm, Jumper
R73	VRS-CZ1JB000J	AB			0 ohm, Jumper
R74	VRS-CZ1JB000J	AB			0 ohm, Jumper
R75	VRS-CY1JB202J	AA			2 kohm, 1/16W
R76	VRS-CY1JB202J	AA			2 kohm, 1/16W
R77	VRS-CY1JB473J	AA			47 kohm, 1/16W
R78	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R79	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R100	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R101	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R102	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R105	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R106	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R107	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R108	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R109	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R110	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R111	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R112	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R113	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R114	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R115	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R116	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R118	VRS-CZ1JB302J	AA			3 kohm, 1/16W
R119	VRS-CZ1JF473J	AA			47 kohm, 1/16W
R120	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R122	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R123	VRS-CY1JB750F	AA			75 ohm, 1/16W
R124	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
R125	VRS-CZ1JF473J	AA			47 kohm, 1/16W
R127	VRS-CY1JB330J	AA			33 ohm, 1/16W
R129	VRS-CY1JB330J	AA			33 ohm, 1/16W
R130	VRS-CY1JB222J	AA			2.2 kohm, 1/16W
R132	VRS-CZ1JF473J	AA			47 kohm, 1/16W
R133	VRS-CZ1JB000J	AB			0 ohm, Jumper
R134	VRS-CZ1JF473J	AA			47 kohm, 1/16W
R135	VRS-CZ1JB000J	AB			0 ohm, Jumper
R136	VRS-CZ1JB000J	AB			0 ohm, Jumper
R137	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
R138	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
R139	VRS-CZ1JB000J	AB			0 ohm, Jumper
R140	VRS-CZ1JF152J	AA			1.5 kohm, 1/16W
R141	VRS-CZ1JF512F	AA			5.1 kohm, 1/16W
R142	VRS-CZ1JF332J	AA			3.3 kohm, 1/16W
R143	VRS-CZ1JF332J	AA			3.3 kohm, 1/16W
R144	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
R145	VRS-CZ1JB105J	AB			1 Mohm, 1/16W
R147	VRS-CZ1JF332J	AA			3.3 kohm, 1/16W
R148	VRS-CZ1JF332J	AA			3.3 kohm, 1/16W
R149	VRS-CZ1JF332J	AA			3.3 kohm, 1/16W
R150	VRS-CZ1JF332J	AA			3.3 kohm, 1/16W
R151	VRS-CZ1JB000J	AB			0 ohm, Jumper
R152	VRS-CZ1JF332J	AA			3.3 kohm, 1/16W
R153	VRS-CZ1JF332J	AA			3.3 kohm, 1/16W
R155	VRS-CZ1JF330J	AA			33 ohm, 1/16W
R156	VRS-CZ1JF103J	AA			10 kohm, 1/16W
R157	VRS-CZ1JF103J	AA			10 kohm, 1/16W
R158	VRS-CZ1JF330J	AA			33 ohm, 1/16W
R159	VRS-CZ1JF330J	AA			33 ohm, 1/16W
R160	VRS-CZ1JF330J	AA			33 ohm, 1/16W
R164	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R165	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
R172	VRS-CZ1JF103J	AA			10 kohm, 1/16W
R179	VRS-CZ1JF103J	AA			10 kohm, 1/16W
R182	VRS-CY1JB103J	AA			10 kohm, 1/16W
R198	VRS-CZ1JF330J	AA			33 ohm, 1/16W
R199	VRS-CZ1JB000J	AB			0 ohm, Jumper
R200	VRS-CZ1JB000J	AB			0 ohm, Jumper
R201	VRS-CZ1JB000J	AB			0 ohm, Jumper
R202	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R300	VRS-CY1JB473J	AA			47 kohm, 1/16W
R302	VRS-TV2AB471J	AA			470 ohm, 1/10W
R308	VRS-CY1JB823J	AA			82 kohm, 1/16W
R309	VRS-CY1JB823J	AA			82 kohm, 1/16W
R310	VRS-CZ1JB470J	AB			47 ohm, 1/16W
R311	VRS-CZ1JB470J	AB			47 ohm, 1/16W
R312	VRS-CZ1JB000J	AB			0 ohm, Jumper
R316	VRS-CZ1JB000J	AB			0 ohm, Jumper
R317	VRS-CZ1JB000J	AB			0 ohm, Jumper
R350	VRS-CZ1JB224J	AA			220 kohm, 1/16W
R351	VRS-CZ1JB000J	AB			0 ohm, Jumper
R352	VRS-CZ1JF680J	AA			68 ohm, 1/16W
R353	VRS-CZ1JB824J	AA			820 kohm, 1/16W
R354	VRS-CZ1JF103J	AA			10 kohm, 1/16W
R355	VRS-CZ1JF332J	AA			3.3 kohm, 1/16W
R356	VRS-CZ1JB000J	AB			0 ohm, Jumper
R357	VRS-CZ1JB823J	AB			82 kohm, 1/16W
R360	VRS-CY1JB152J	AA			1.5 kohm, 1/16W

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[7] RESISTORS					
R361	VRS-CY1 JB152J	AA			1.5 kohm, 1/16W
R362	VRS-CY1 JB152J	AA			1.5 kohm, 1/16W
R363	VRS-CY1 JB152J	AA			1.5 kohm, 1/16W
R364	VRS-CY1 JB333J	AA			33 kohm, 1/16W
R365	VRS-CY1 JB333J	AA			33 kohm, 1/16W
R500	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R501	VRS-CZ1 JF474J	AA			470 kohm, 1/16W
R502	VRS-CY1 JB102F	AA			1 kohm, 1/16W
R503	VRS-CZ1 JB000J	AB			0 ohm, Jumper
R504	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R505	VRS-CZ1 JF103J	AA			10 kohm, 1/16W
R506	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R507	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R508	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R509	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R515	VRS-CZ1 JF221J	AA			220 ohm, 1/16W
R516	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R517	VRS-CY1 JB221J	AA			220 ohm, 1/16W
R518	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R519	VRS-CZ1 JF330J	AA			33 ohm, 1/16W
R520	VRS-CZ1 JF330J	AA			33 ohm, 1/16W
R521	VRS-CZ1 JB101J	AB			100 ohm, 1/16W
R522	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R523	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R524	VRS-CZ1 JF103J	AA			10 kohm, 1/16W
R526	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R527	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R528	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R529	VRS-CZ1 JF103J	AA			10 kohm, 1/16W
R531	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R532	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R535	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R536	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R537	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R538	VRS-CZ1 JB100J	AB			10 ohm, 1/16W
R539	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R540	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R541	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R542	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R544	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R545	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R546	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R547	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R548	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R549	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R551	VRS-CZ1 JF103J	AA			10 kohm, 1/16W
R553	VRS-CZ1 JF822J	AA			8.2 kohm, 1/16W
R554	VRS-CZ1 JF103J	AA			10 kohm, 1/16W
R555	VRS-CZ1 JF103J	AA			10 kohm, 1/16W
R556	VRS-CZ1 JB104J	AA			100 kohm, 1/16W
R557	VRS-CZ1 JF393J	AA			39 kohm, 1/16W
R558	VRS-CZ1 JB104J	AA			100 kohm, 1/16W
R559	VRS-CZ1 JF393J	AA			39 kohm, 1/16W
R560	VRS-CZ1 JF222J	AA			2.2 kohm, 1/16W
R561	VRS-CZ1 JF222J	AA			2.2 kohm, 1/16W
R562	VRS-CZ1 JF103J	AA			10 kohm, 1/16W
R563	VRS-CZ1 JF103J	AA			10 kohm, 1/16W
R564	VRS-CZ1 JF103J	AA			10 kohm, 1/16W
R566	VRS-CY1 JB103J	AA			10 kohm, 1/16W
R567	VRS-CZ1 JF103J	AA			10 kohm, 1/16W
R570	VRS-CZ1 JF222J	AA			2.2 kohm, 1/16W
R571	VRS-CZ1 JF222J	AA			2.2 kohm, 1/16W
R572	VRS-CZ1 JB104J	AA			100 kohm, 1/16W
R573	VRS-CZ1 JF681J	AA			680 ohm, 1/16W
R576	VRS-CY1 JB151J	AA			150 ohm, 1/16W
R578	VRS-CY1 JB151J	AA			150 ohm, 1/16W
R580	VRS-CY1 JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R581	VRS-CZ1 JB000J	AB			0 ohm, Jumper
R590	VRS-CZ1 JB000J	AB			0 ohm, Jumper
R591	VRS-CZ1 JB000J	AB			0 ohm, Jumper
R593	VRS-CZ1 JB000J	AB			0 ohm, Jumper
R594	VRS-CZ1 JB000J	AB			0 ohm, Jumper
R602	VRS-CY1 JB221J	AA			220 ohm, 1/16W
R603	VRS-CY1 JB221J	AA			220 ohm, 1/16W
R609	VRS-CY1 JB3R3J	AA			3.3 ohm, 1/16W
R618	VRS-CY1 JB105J	AA			1 Mohm, 1/16W
R628	VRS-CY1 JB470J	AA			47 ohm, 1/16W
R629	VRS-CY1 JB470J	AA			47 ohm, 1/16W
R630	VRS-CY1 JB470J	AA			47 ohm, 1/16W
R639	VRS-CY1 JB470J	AA			47 ohm, 1/16W
R640	VRS-CY1 JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R641	VRS-CY1 JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R642	VRS-CY1 JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R643	VRS-CY1 JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R646	VRS-CZ1 JF102J	AA			1 kohm, 1/16W
R701	VRS-TW2HF000J	AB			0 ohm, Jumper, 1/2W
R702	VRS-CY1 JB151J	AA			150 ohm, 1/16W
R703	VRS-CZ1 JF124F	AA			120 kohm, 1/16W
R704	VRS-CY1 JB102F	AA			1 kohm, 1/16W

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[7] RESISTORS					
R705	VRS-CY1JB102F	AA			1 kohm, 1/16W
R706	VRS-CY1JB102F	AA			1 kohm, 1/16W
R707	VRS-CY1JB102F	AA			1 kohm, 1/16W
R708	VRS-CY1JB182J	AA			1.8 kohm, 1/16W
R709	VRS-CY1JB222J	AA			2.2 kohm, 1/16W
R710	VRS-CY1JB332J	AA			3.3 kohm, 1/16W
R713	VRS-CY1JB101J	AA			100 ohm, 1/16W
R714	VRS-TQ2EF000J	AA			0 ohm, Jumper
R715	VRS-CY1JB472J	AA			4.7 kohm, 1/16W
R801	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
R802	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
R803	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
R804	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
R831	VRS-CZ1JF103J	AA			10 kohm, 1/16W
R832	VRS-CZ1JB471J	AA			470 ohm, 1/16W
R835	VRS-CZ1JF103J	AA			10 kohm, 1/16W
R836	VRS-CZ1JB471J	AA			470 ohm, 1/16W
R841	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R843	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R844	VRS-CY1JB223F	AA			22 kohm, 1/16W
R845	VRS-CY1JB104F	AA			100 kohm, 1/16W
R846	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R848	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R849	VRS-CY1JB512J	AA			5.1 kohm, 1/16W
R850	VRS-CY1JB332J	AA			3.3 kohm, 1/16W
R851	VRS-CY1JB333J	AA			33 kohm, 1/16W
R852	VRS-CY1JB821J	AA			820 ohm, 1/16W
R853	VRS-TV2AB000J	AA			0 ohm, Jumper, 1.25x2mm
R854	VRS-TQ2EF000J	AA			0 ohm, Jumper
R855	VRS-TQ2EF000J	AA			0 ohm, Jumper
R860	VRS-CY1JBR22J	AB			0.22 ohm, 1/16W
R861	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
R862	VRS-CZ1JF332J	AA			3.3 kohm, 1/16W
R863	VRS-CY1JB181J	AA			180 ohm, 1/16W
R864	VRS-CZ1JB000J	AB			0 ohm, Jumper
R865	VRS-CZ1JB823J	AB			82 kohm, 1/16W
R901	VRS-CY1JB100J	AA			10 ohm, 1/16W
R902	VRS-CZ1JB470J	AB			47 ohm, 1/16W
R905	VRS-CZ1JB470J	AB			47 ohm, 1/16W
R906	VRS-CZ1JB101J	AB			100 ohm, 1/16W
R908	VRS-CZ1JB101J	AB			100 ohm, 1/16W
R909	VRS-CZ1JB273J	AA			27 kohm, 1/16W
R910	VRS-CY1JB471J	AA			470 ohm, 1/16W
R916	VRS-CZ1JB101J	AB			100 ohm, 1/16W
R918	VRS-CZ1JB101J	AB			100 ohm, 1/16W
R921	VRS-CZ1JB000J	AB			0 ohm, Jumper
R922	VRS-CY1JB100J	AA			10 ohm, 1/16W
R923	VRS-CY1JB100J	AA			10 ohm, 1/16W
R944	VRS-CY1JB100J	AA			10 ohm, 1/16W
R952	VRS-CY1JB3R3J	AA			3.3 ohm, 1/16W
R953	VRS-CY1JB3R3J	AA			3.3 ohm, 1/16W
R961	VRS-CY1JB100J	AA			10 ohm, 1/16W
R962	VRS-CY1JB100J	AA			10 ohm, 1/16W
R981	VRS-CY1JB100J	AA			10 ohm, 1/16W
R982	VRS-CY1JB100J	AA			10 ohm, 1/16W
RA1	VRSCY1JB51R1F	AA			51.1 ohm, 1/16W
RA2	VRSCY1JB51R1F	AA			51.1 ohm, 1/16W
RA3	VRSCY1JB51R1F	AA			51.1 ohm, 1/16W
RA4	VRSCY1JB51R1F	AA			51.1 ohm, 1/16W
RA5	VRSCY1JB51R1F	AA			51.1 ohm, 1/16W
RA6	VRSCY1JB51R1F	AA			51.1 ohm, 1/16W
RA7	VRSCY1JB51R1F	AA			51.1 ohm, 1/16W
RA8	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
RA9	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
RA10	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
RA11	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
RA12	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
RA13	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
RA14	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
RA15	VRSCZ1JB51R1F	AA			51.1 ohm, 1/16W
RA16	VRSCY1JB51R1F	AA			51.1 ohm, 1/16W
RX500	VRS-CY1JB101J	AA			100 ohm, 1/16W
RX501	VRS-CZ1JB101J	AB			100 ohm, 1/16W
RX502	VRS-CZ1JB101J	AB			100 ohm, 1/16W
RX503	VRS-CY1JB101J	AA			100 ohm, 1/16W
RX504	VRS-CZ1JB101J	AB			100 ohm, 1/16W
RX525	VRS-CY1JB102J	AA			1 kohm, 1/16W
RX527	VRS-CY1JB821J	AA			820 ohm, 1/16W
RX528	VRS-CY1JB820J	AA			82 ohm, 1/16W
RX543	VRS-CY1JB103J	AA			10 kohm, 1/16W
RX601	VRS-CZ1JF221J	AA			220 ohm, 1/16W
RX602	VRS-CZ1JF221J	AA			220 ohm, 1/16W
RX609	VRS-CY1JB3R3J	AA			3.3 ohm, 1/16W
RX618	VRS-CZ1JB105J	AB			1 Mohm, 1/16W
RX628	VRS-CZ1JB470J	AB			47 ohm, 1/16W
RX629	VRS-CZ1JB470J	AB			47 ohm, 1/16W
RX630	VRS-CZ1JB470J	AB			47 ohm, 1/16W
RX639	VRS-CZ1JB470J	AB			47 ohm, 1/16W
RX640	VRS-CZ1JB000J	AB			0 ohm, Jumper

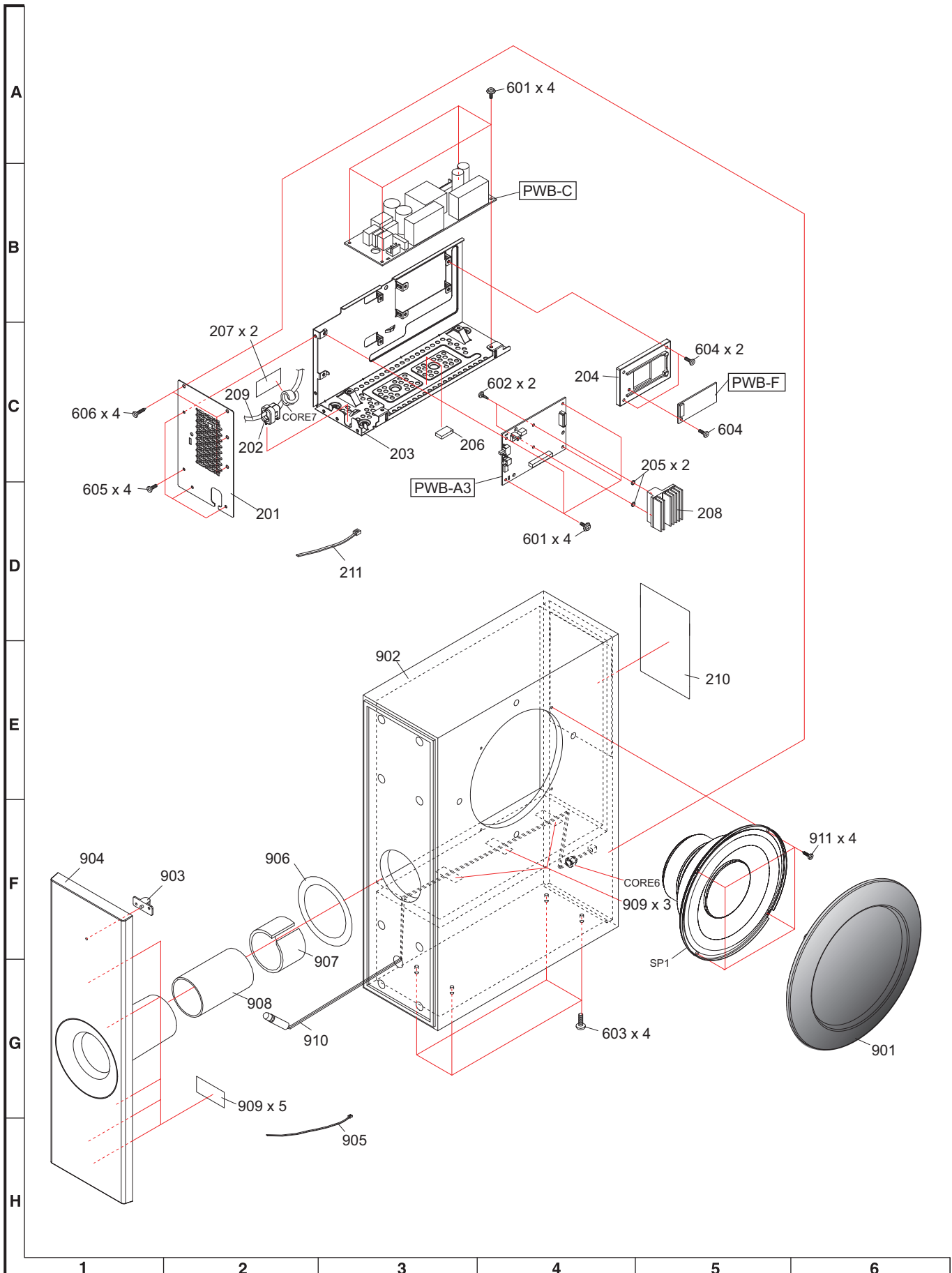
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[7] RESISTORS					
RX641	VRS-CZ1JB000J	AB			0 ohm, Jumper
RX841	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
RX843	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
RX844	VRS-CY1JB104F	AA			100 kohm, 1/16W
RX845	VRS-CY1JB104F	AA			100 kohm, 1/16W
RX846	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
RX848	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
RX849	VRS-CY1JB512J	AA			5.1 kohm, 1/16W
RX850	VRS-CZ1JB000J	AB			0 ohm, Jumper
RX851	VRS-CY1JB333J	AA			33 kohm, 1/16W
RX852	VRS-CY1JB303D	AA			30 kohm, 1/16W
RX856	VRS-CY1JB102F	AA			1 kohm, 1/16W
RX857	VRS-CY1JB000J	AA			0 ohm, Jumper, 0.8X1.55mm
RX901	VRS-CY1JB100J	AA			10 ohm, 1/16W
RX902	VRS-CZ1JB470J	AB			47 ohm, 1/16W
RX905	VRS-CZ1JB470J	AB			47 ohm, 1/16W
RX906	VRS-CZ1JB101J	AB			100 ohm, 1/16W
RX908	VRS-CZ1JB101J	AB			100 ohm, 1/16W
RX909	VRS-CZ1JB223J	AB			22 kohm, 1/16W
RX910	VRS-CY1JB471J	AA			470 ohm, 1/16W
RX915	VRS-CZ1JB000J	AB			0 ohm, Jumper
RX918	VRS-CZ1JB000J	AB			0 ohm, Jumper
RX921	VRS-CZ1JB000J	AB			0 ohm, Jumper
RX922	VRS-CY1JB100J	AA			10 ohm, 1/16W
RX923	VRS-CY1JB100J	AA			10 ohm, 1/16W
RX944	VRS-CY1JB100J	AA			10 ohm, 1/16W
RX952	VRS-CY1JB3R3J	AA			3.3 ohm, 1/16W
RX953	VRS-CY1JB3R3J	AA			3.3 ohm, 1/16W
RX961	VRS-CY1JB100J	AA			10 ohm, 1/16W
RX962	VRS-CY1JB100J	AA			10 ohm, 1/16W
[8] OTHER CIRCUITRY PARTS					
B800	QCWNWB902AWPZ	AL			Connector Ass'y, 12 / 10 Pin [with CNS800] [Use in MAIN PWB-A1]
Bi800X	QCWNWB926AWPZ	AL			Connector Ass'y, 11 / 10 Pin [with CNS800X] [Use in SUBWOOFER PWB-A3]
Bi801A_B	QCWNWB901AWPZ	AN			Connector Ass'y, 12 / 11 Pin [with CNS801] [Use in MAIN PWB-A1]
CNP109	QCNCWXC08AFZZ	AE			Connector, 8 Pin [Use in MAIN PWB-A1]
CNP301X	QCNCM046BAWZZ	AC			Connector, 2 Pin [Use in SUBWOOFER PWB-A3]
CNP502	QCNCWXM24AWZZ	AG			Connector, 24 Pin [Use in MAIN PWB-A1]
CNP600X	QCNCWXM24AWZZ	AG			Connector, 24 Pin [Use in SUBWOOFER PWB-A3]
CNP601X	QCNCWXC05AFZZ	AC			Connector, 5 Pin [Use in SUBWOOFER PWB-A3]
CNP602X	QCNCM705CAFZZ	AA			Connector, 3 Pin [Use in SUBWOOFER PWB-A3]
CNP700	QCNCWYH14AWZZ	AD			Connector, 30 Pin [Use in DISPLAY PWB-A2]
CNP800	QCNCW010DAWZZ	AA			Connector, 4 Pin [Use in REGULATOR PWB-A4]
CNP802	QCNCM010DAWZZ	AA			Connector, 4 Pin [Use in MAIN PWB-A1]
CNP803	QCNCWYG14AWZZ	AD			Connector, 30 Pin [Use in MAIN PWB-A1]
FFC502	QCWNWB927AWPZ	AE			Flat cable, 24 Pin [Connect CNP502 and J1]
FFC600X	QCWNWB847AWPZ	AC			Flat cable, 24 Pin [Connect CNP600X and J1]
FFC803	QCWNWB950AWPZ	AD			Flat cable, 30 Pin [Connect CNP803 and CNP700]
FL700	VVKNA16SM21-1	AQ			FL Display
J2	QSOCZA035AWZZ	AF			Jack, HDMI (IN)
J3	QSOCZA035AWZZ	AF			Jack, HDMI (IN)
J4	QSOCZA035AWZZ	AF			Jack, HDMI (OUT)
J5	QPLGNA345WJZZ	AD			Connector, 11 Pin
JK301	QJAKMA029AWZZ	AE			Jack, Audio In
JR1	QCNCWXC05AFZZ	AC			Connector, 5 Pin [Use in HDMI PWB-D]
LUG_E	QCWNWB709AWPZ	AD			Lug Wire, 85mm [Use in SUBWOOFER PWB-A3]
RX701	VHLK2013TH2E1	AG			Remote Sensor
RXM301	VHPGP1F31RK-1	AL			Jack, Digital In / Optical
CS1	PSHEZA312AWZZ	AF			Sheet, Copper
CS2	PSHEZA313AWZZ	AF			Sheet, Copper
SO901	QCNCM046BAWZZ	AC			Connector, 2 Pin [Use in MAIN PWB-A1]
SO902	QCNCM046BAWZZ	AC			Connector, 2 Pin [Use in MAIN PWB-A1]
SW501X	QSW-QA002AWZZ	AC			Switch, Push Type
SW701	92LSWiCHT1663T	AC			Switch, Key Type
SW702	92LSWiCHT1663T	AC			Switch, Key Type
SW703	92LSWiCHT1663T	AC			Switch, Key Type
SW704	92LSWiCHT1663T	AC			Switch, Key Type
SW705	92LSWiCHT1663T	AC			Switch, Key Type
SW706	92LSWiCHT1663T	AC			Switch, Key Type
WIRES_A	QCWNWB716AWPZ	AD			Single Wire
WIRES_B	QCWNWB970AWPZ	AC			Single Wire
WIRES_C	QCWNWB972AWPZ	AD			Lug Wire, 60mm
WIRES_C-C'	QCWNWB719AWPZ	AD			Lug Wire, Blue, 30mm
WIRES_D-D'	QCWNWB719AWPZ	AD			Lug Wire, Blue, 30mm
WIRES_E	QCWNWC002AWPZ	AC			Single Wire
WIRES_F	QCWNWC002AWPZ	AC			Single Wire
WIRES_G	QCWNWB974AWPZ	AC			Single Wire

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NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[9] SOUND BAR PARTS					
201	CPNLSA136AW01	BR			Front Cabinet Ass'y
202	GCAB-A125AWSA	BM			Back Cabinet
203	GCOVAA366AWSA	AE			Cover, Back Cabinet, A
204	GCOVAA367AWSA	AE			Cover, Back Cabinet, B
205	GCOVAA368AWSA	AE			Cover, Back Cabinet, C
206	GCOVAA369AWSA	AD			Cover, Cord
207	HDECQA637AWSB	AN			Woofers Decoration Ring
208	HDECQA638AWSA	AL			Woofers Ring
209	HDECQA639AWSA	AM			Soft Dome Ring
210	LBSHC0002AWZZ	AD			Bushing, AC Power Supply Cord
211	LCHSMA129AWFW	AR			Chassis, Main
212	LHLDZA214AWSA	AF			Bracket, Wall Mount
213	LHLDZA295AWSA	AE			Holder, FL
214	PCUSGA182AWZZ	AD			Cushion, Heat Sink
215	PCUSGA210AWZZ	AF			Cushion, Stand
216	PCUSSA240AWZZ	AD			Cushion, Woofers Ring
217	PCUSSA241AWZZ	AC			Cushion, Soft Dome Ring
218	PCUSSA242AWZZ	AD			Cushion, Speaker Sealed, A
219	PCUSSA243AWZZ	AB			Cushion, Sealed Speaker, B
220	PCUSSA245AWZZ	AC			Cushion, Leg
221	PCUSSA255AWZZ	AB			Cushion, Ring Core
222	PCUSSA258AWZZ	AC			Cushion, Ring Core
223	PFLT-A181AWZZ	AD			Felt, Display
224	PKYU-A050AWZZ	AD			Wool, White
225	PRDARA241AWFW	AK			Heat Sink, IC
226	PSHEPA150AWSA	AF			Sheet, FL
227	PSHEZA314AWZZ	AE			Sheet, Copper
228	QACCCA008AW00	AX			AC Power Supply Cord [For U.K.]
228	QACCEA001AW00	AP			AC Power Supply Cord [For Europe]
229	QCNWNB943AWPZ	AQ			Speaker Wire Assy (Right)
230	QCNWNB944AWPZ	AQ			Speaker Wire Assy (Left)
231	TLABZC131AWZZ	AD			Label, DOLBY / DTS
232	TSPC-B735AWZZ	AD			Label, Specification [For Europe]
232	TSPC-B740AWZZ	AD			Label, Specification [For U.K.]
233	92LNBAND1318A	AA			Nylon Band
SP 1~4	RSP-ZA393AWZZ	AT			Woofers
SP 5, 6	RSP-ZA394AWZZ	AU			Soft Dome
601	LX-JZ0044AWF8	AB			Screw, Special
602	XEBY730P08000	AA			Screw, M3 X 8mm
603	XEBY730P10000	AA			Screw, M3 X 10mm
604	XEBY830P10000	AB			Screw, M3 X 10mm
605	XEBY835P10000	AB			Screw, M3.5 X 10mm
606	XHBY830P08000	AB			Screw, M3 X 8mm
607	XJBY730P08000	AA			Screw, M3 X 8mm

[10] ACTIVE SUBWOOFER PARTS



NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[10] ACTIVE SUBWOOFER PARTS					
201	GiTARA979AWSA	AH			Rear Panel
202	LBSHC0002AWZZ	AD			Bushing, AC Power Supply Cord
203	LCHSMA131AWFW	AP			Chassis, Main
204	LHLDZA290AWZZ	AE			Holder, Receive PWB
205	PCUSGA182AWZZ	AD			Cushion, Heat Sink
206	PCUSGA210AWZZ	AF			Cushion, Stand
207	PCUSSA258AWZZ	AC			Cushion, Ring Core
208	PRDARA224AWFW	AN			Heat Sink, IC
209	QACCBAA008AW00	AX			AC Power Supply Cord [For U.K.]
209	QACCEAA001AW00	AP			AC Power Supply Cord [For Europe]
210	TSPC-B778AWZZ	AE			Label, Specification [For Europe]
210	TSPC-B779AWZZ	AE			Label, Specification [For U.K.]
211	92LNBAND1318A	AA			Nylon Band
601	LX-JZ0010AFF7	AB			Screw, Special
602	LX-JZ0044AWF8	AB			Screw, Special
603	XHBY740P10000	AB			Screw, M4 x 10mm
604	XJBY730P08000	AA			Screw, M3 X 8mm
605	XJBY830P06000	AB			Screw, M3 X 6mm
606	XMBY835P12000	AC			Screw, M3.5 x 12mm
901	CWAKPA028AW01	AR			Net Frame Ass'y
902	GBOXSA345AW01	BM			Wooden Box Ass'y
903	GCOVAA293AWSA	AH			LED Indicator
904	HPNLSA137AWSA	BA			Front Panel
905	LBNDA001AWZZ	AE			Cable Tie
906	PCUSSA229AWZZ	AE			Cushion, Port
907	PCUSSA193AWZZ	AF			Sound Absorber
908	PDUC-A124AWSA	AN			Paper Duct
909	PFLT-A171AWZZ	AE			Felt
910	QCNWNB567AWPZ	AS			Lead Wire Ass'y
911	XMBY840P16000	AC			Screw, M4 x 16mm
SP1	RSP-ZA391AWZZ	BE			Woofers

[11] ACCESSORIES / PACKING PARTS					
1	GiTAUA022AW01	AL			Subwoofer Stand Ass'y
2	LANGKA167AW01	AP			Wall Mount Angle Ass'y (2pcs/pack)
2-1	LANGKA167AWFW	AK			Wall Mount Angle
3	QCNWGA077AWPZ	AV			HDMI Cable
4	QCNWGA080AW01	AT			Audio Cable Ass'y
5	RRMCGA297AW01	AU			Remote Control Ass'y
6	SPAKAA444AWZZ	AH			Packing Add, Top (SoundBar)
7	SPAKAA445AWZZ	AK			Packing Add, Bottom (SoundBar)
8	SPAKAA446AWZZ	AH			Packing Add, Bottom (Subwoofer)
9	SPAKAA447AWZZ	AK			Packing Add, Top (Subwoofer)
10	SPAKAA448AWZZ	AK			Packing Add, Protection
11	SPAKCB033AWZZ	AZ			Packing Case
12	SSAKAA011AWZZ	AB			Polyethylene Bag, Accessories
13	SSAKHA256AWZZ	AF			Polyethylene Bag, SoundBar
14	SSAKHA257AWZZ	AE			Polyethylene Bag, Subwoofer
15	SSAKHA258AWZZ	AB			Polyethylene Bag, AC Cord [For U.K. only]
16	TCAUHA031AWZZ	AG			Paper Pattern
17	TGAN-3170UMZZ	AE			Warranty Card [For U.K. only]
18	TiNSEA419AWZZ	AE			Operation Manual [For U.K.]
18	TiNSZB413AWZZ	AP			Operation Manual [For Europe]
19	TiNSEA410AWZZ	AC			Quick Guide [For U.K. Only]
20	TLABZA756AWZZ	AC			Label, Green Dot Mark [For Europe Only]
21	TLABZA991AWZZ	AB			Label, Saving Energy
22	TLABZC141AWSA	AF			Label, Pop (Subwoofer)
23	TLABZC142AWSA	AK			Label, Pop (SoundBar)
24	-----	-			Battery (Not Replacement Item)

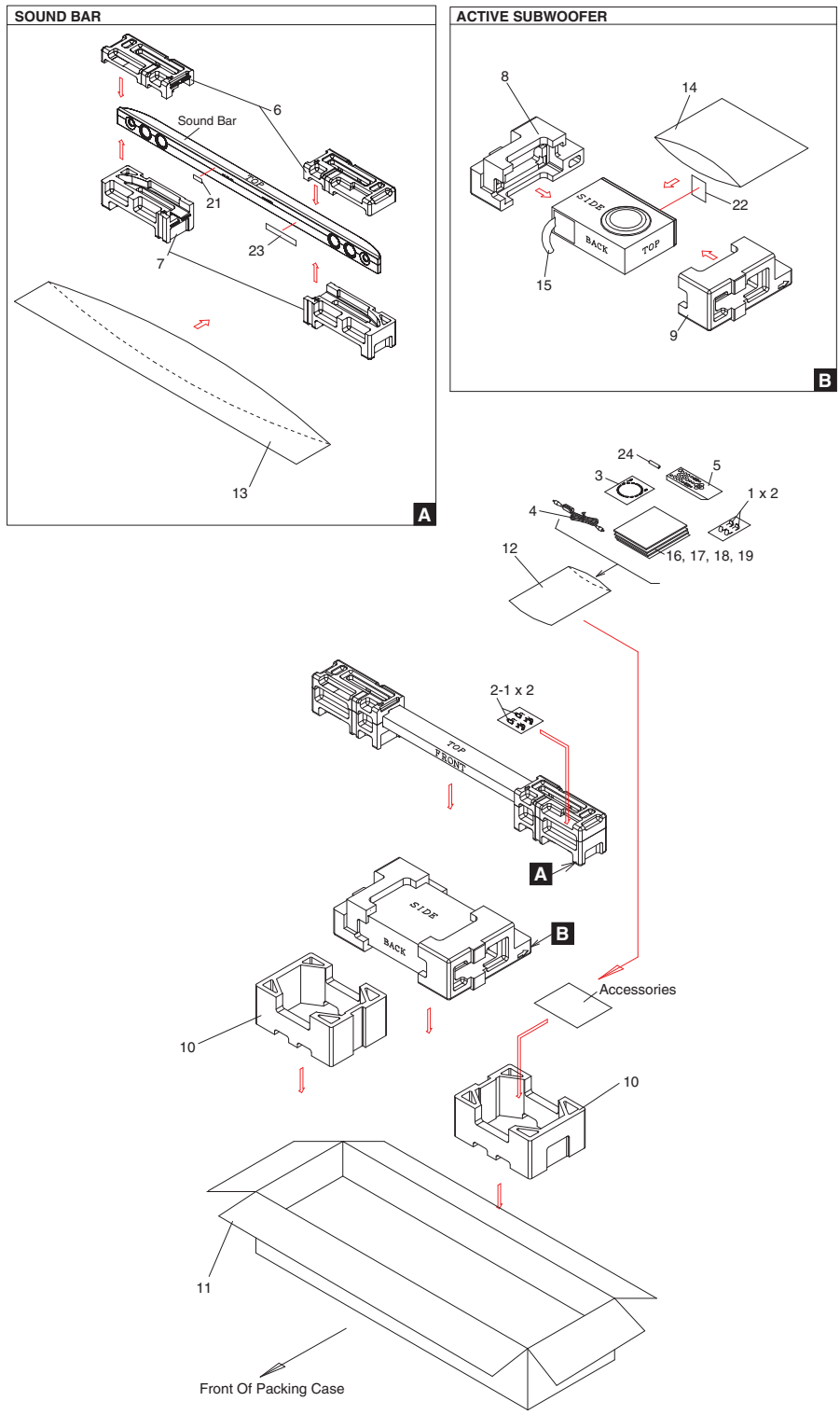
[12] P.W.B. ASSEMBLY						
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	REMARK (interchangeable)	DESCRIPTION
PWB-A	92LPWB8696MANS	-			S Category	Main(A1) / Display(A2) / Subwoofer(A3) / Regulator(A4)
PWB-B	RUiTZA069AWZZ	BL			X Category	SMPS (Amplifier)
PWB-C	RUiTZA070AWZZ	BK			X Category	SMPS (Subwoofer)
PWB-D	92LPWB8695HDMS	-			S Category	HDMI
PWB-E	RUiTZA082AWZZ	BD			X Category	Transmit
PWB-F	RUiTZA078AWZZ	BD			X Category	Receive

**NOTE: FOR AMPLIFIER PARTS, ITEM NO. ARE 2XX AND 6XX
FOR SUBWOOFER PARTS, ITEM NO. ARE 9XX**

[11] ACCESSORIES / PACKING PARTS

PACKING METHOD (FOR U.K. ONLY)

1 Subwoofer Stand Ass'y	GITAU022AW01	13 Polyethylene Bag, SoundBar	SSAKHA256AWZZ
2 Wall Mount Angle Ass'y (2pcs/pack)	LANGKA167AW01	14 Polyethylene Bag, Subwoofer	SSAKHA257AWZZ
2-1 Wall Mount Angle	LANGKA167AWFW	15 Polyethylene Bag, AC Cord	SSAKHA258AWZZ
3 HDMI Cable	QCNWGA077AWPZ	16 Paper Pattern	TCAUHA031AWZZ
4 Audio Cable Ass'y	QCNWGA080AW01	17 Warranty Card	TGAN-3170UMZZ
5 Remote Control Ass'y	RRMCGA297AW01	18 Operation Manual	TiNSEA419AWZZ
6 Packing Add, Top (SoundBar)	SPAKAA444AWZZ	19 Quick Guide	TiNSEA410AWZZ
7 Packing Add, Bottom (SoundBar)	SPAKAA445AWZZ	21 Label, Saving Energy	TLABZA991AWZZ
8 Packing Add, Bottom (Subwoofer)	SPAKAA446AWZZ	22 Label, Pop (Subwoofer)	TLABZC141AWSA
9 Packing Add, Top (Subwoofer)	SPAKAA447AWZZ	23 Label, Pop (SoundBar)	TLABZC142AWSA
10 Packing Add, Protection	SPAKAA448AWZZ	24 Battery (Not Replacement Item)	-----
11 Packing Case	SPAKCB033AWZZ		
12 Polyethylene Bag, Accessories	SSAKAA011AWZZ		



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